

Data File : VL033188.D
Acq On : 13 Feb 2019 15:49
Operator : SY/AP
Sample : K1408-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AB-IA

Quant Time: Feb 14 04:26:59 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL020519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 06 09:13:11 2019
QLast Update : Wed Feb 06 09:13:11 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	902553	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2328680	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2300874	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.58 95 1834784 10.35 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 103.50%

Target Compounds					Qvalue	
2) Dichlorodifluoromethane	3.08	85	29237	0.169	ppbv	96
3) Chlorodifluoromethane	3.01	51	65167	0.600	ppbv #	84
4) Chloromethane	3.17	50	52259	0.911	ppbv	93
9) Propene	3.24	41	67156	1.279	ppbv	87
11) Trichlorofluoromethane	4.00	101	311229	2.228	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.55	101	6373	0.066	ppbv	96
13) Ethanol	3.65	45	2676369	152.883	ppbv	97
15) Acetone	3.90	43	584691	5.750	ppbv	99
16) 1,3-Butadiene	3.39	39	471030	9.759	ppbv #	7
17) tert-Butyl alcohol	4.37	59	18379	0.948	ppbv #	80
19) Isopropyl Alcohol	4.03	45	258582	3.749	ppbv #	97
20) Methylene Chloride	4.41	84	79998	1.978	ppbv	93
23) Vinyl Acetate	5.15	43	43032	0.244	ppbv #	75
25) Ethyl Acetate	5.78	43	240459	1.052	ppbv #	80
26) Hexane	5.78	57	315075	2.936	ppbv #	45
29) Chloroform	5.84	83	7682	0.047	ppbv	87
34) 2-Butanone	5.33	43	218121	1.477	ppbv	100
36) Benzene	7.00	78	60333	0.256	ppbv	96
37) 1,2-Dichloroethane	6.41	62	3969	0.030	ppbv #	82
39) 1,2-Dichloropropane	7.29	63	612979	6.577	ppbv #	25
41) Tetrahydrofuran	5.78	42	115363	1.262	ppbv #	50
44) 2,2,4-Trimethylpentane	7.99	57	27709	0.069	ppbv #	64
53) Toluene	9.95	91	510295	1.826	ppbv	98
58) Ethyl Benzene	12.87	91	1091615	2.931	ppbv	99
59) m/p-Xylene	13.12	91	3317707	10.676	ppbv #	100
60) o-Xylene	13.85	91	995155	3.293	ppbv	98
74) 1,2,4-Trimethylbenzene	16.93	105	32146	0.093	ppbv #	75
80) Naphthalene,2-methyl-	25.12	142	6577	0.035	ppbv #	80

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

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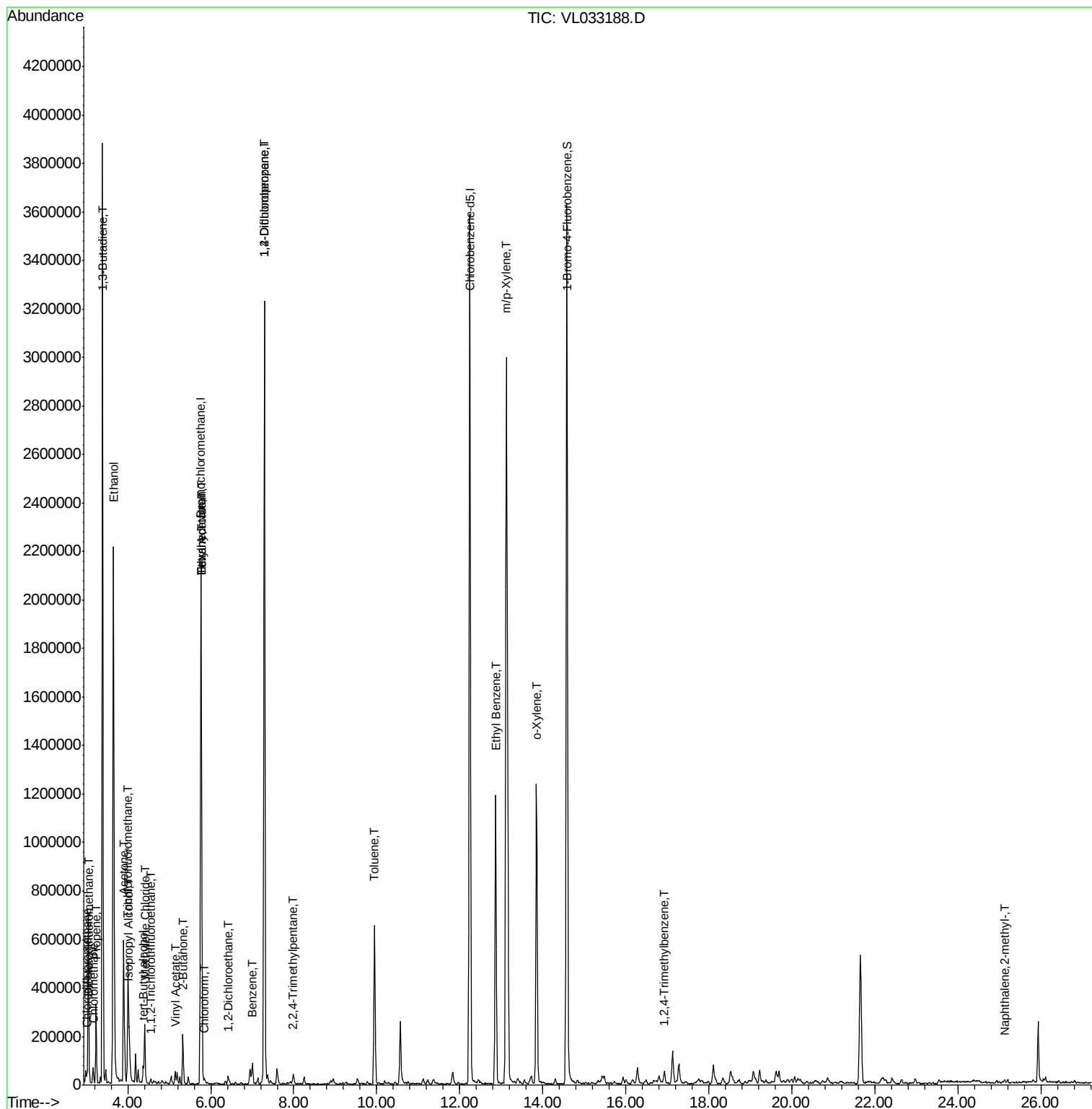
Quant Time: Feb 14 04:26:59 2019

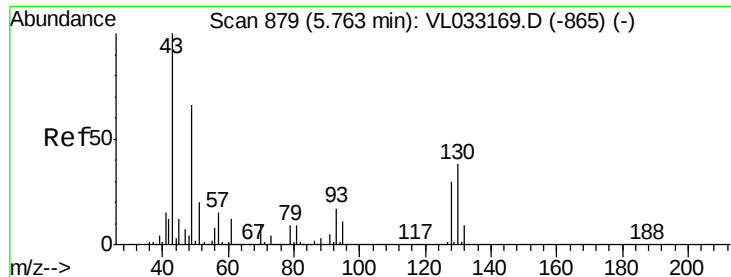
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL020519AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LWed Feb 06 09:13:11 2019

QLast Update : Wed Feb 06 09:13:11 2019

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.00 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

Instrument :

MSVOA_L

ClientSampleId :

AB-IA

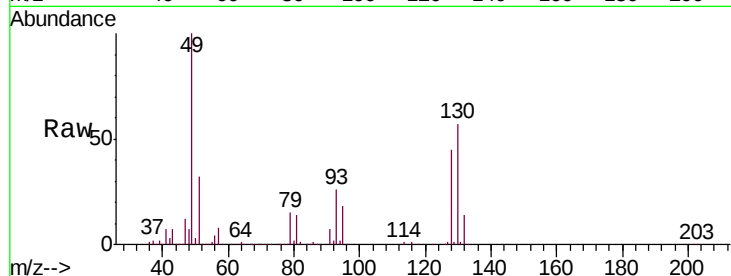
Tgt Ion: 49 Resp: 902553

Ion Ratio Lower Upper

49 100

128 45.8 23.6 71.0

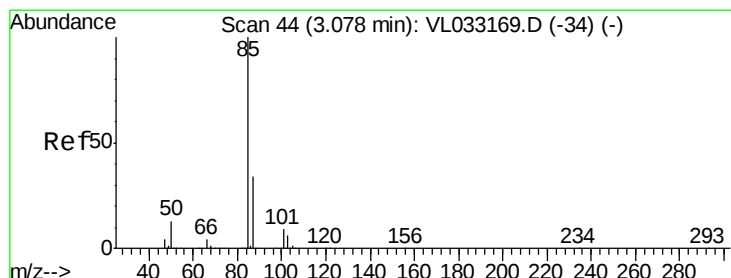
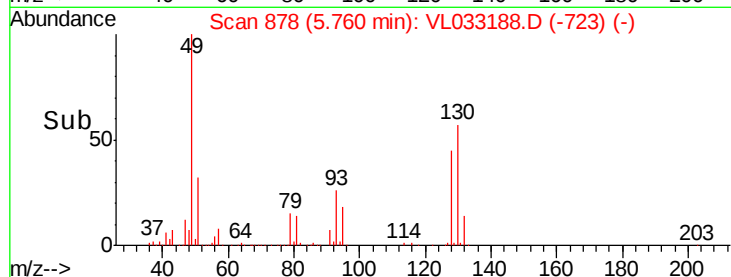
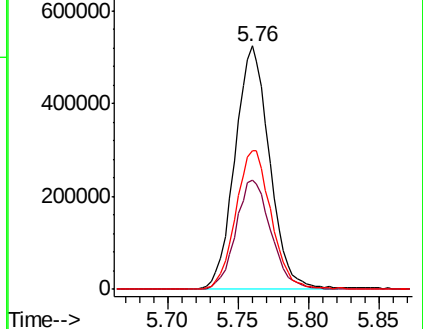
130 59.0 30.3 91.0



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.169 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033188.D

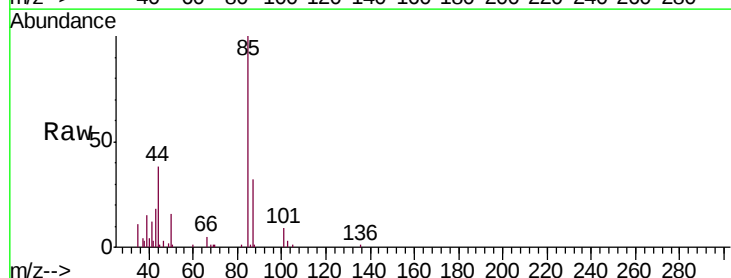
Acq: 13 Feb 2019 15:49

Tgt Ion: 85 Resp: 29237

Ion Ratio Lower Upper

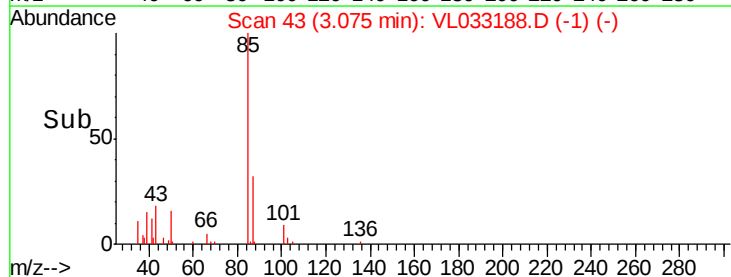
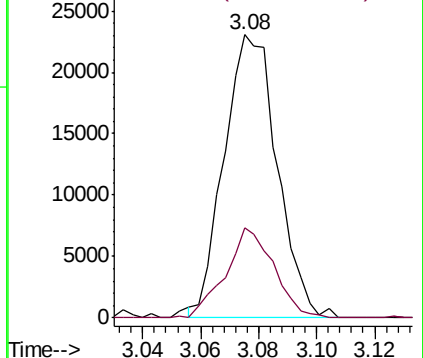
85 100

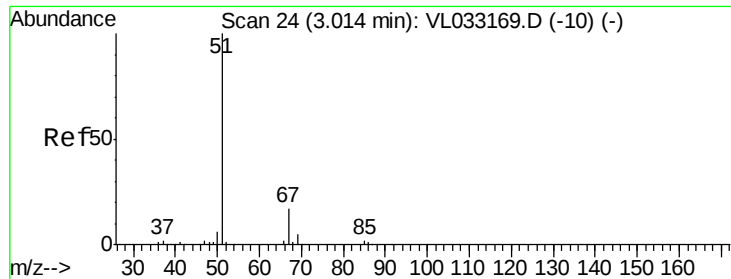
87 31.9 27.4 41.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

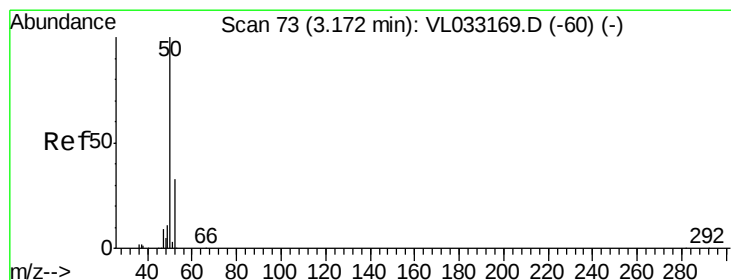
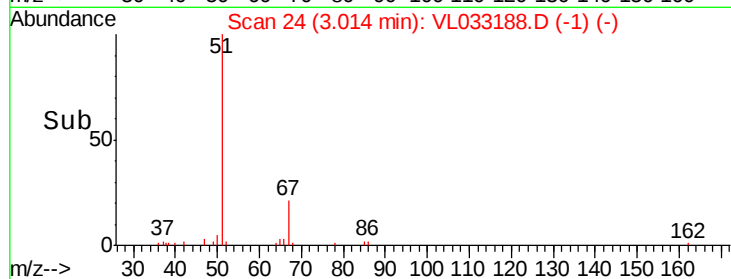
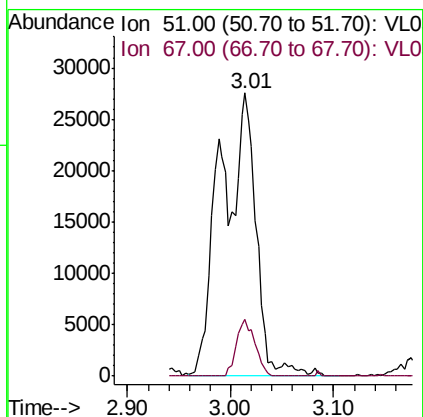
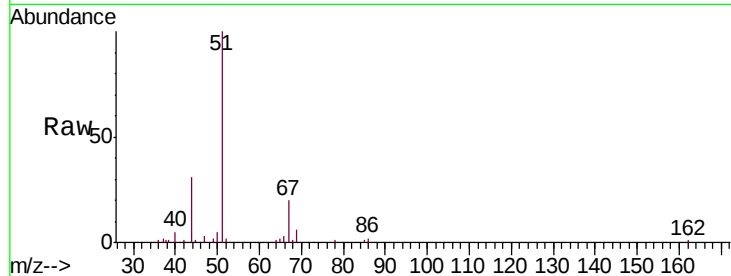




#3
 Chlorodifluoromethane
 Concen: 0.600 ppbv
 RT: 3.01 min Scan# 24
 Delta R.T. 0.00 min
 Lab File: VL033188.D
 Acq: 13 Feb 2019 15:49

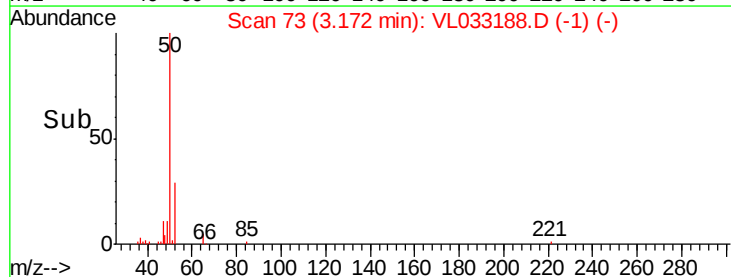
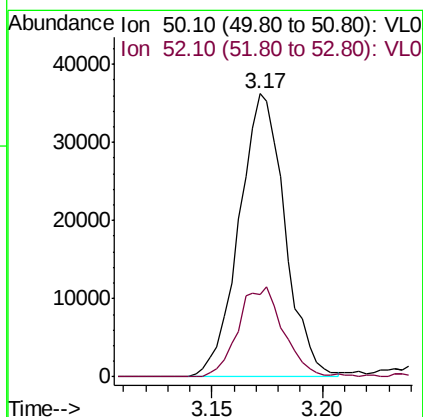
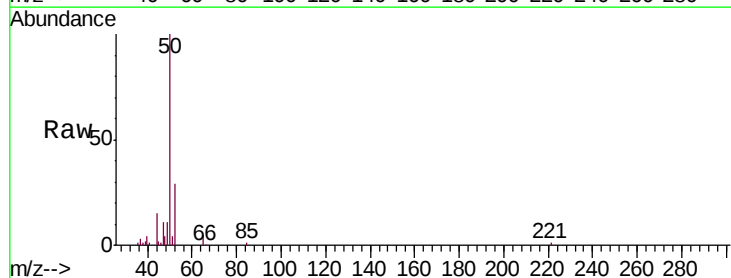
Instrument :
 MSVOA_L
 ClientSampleId :
 AB-IA

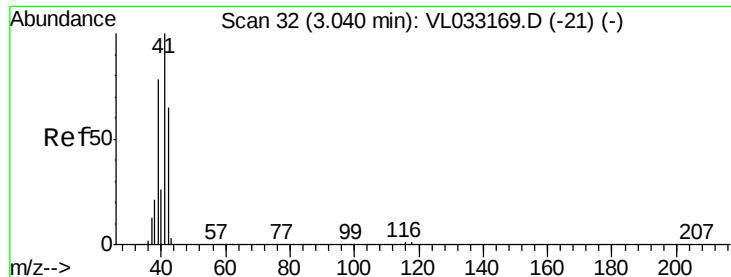
Tgt Ion: 51 Resp: 65167
 Ion Ratio Lower Upper
 51 100
 67 10.6 14.0 21.0#



#4
 Chloromethane
 Concen: 0.911 ppbv
 RT: 3.17 min Scan# 73
 Delta R.T. 0.00 min
 Lab File: VL033188.D
 Acq: 13 Feb 2019 15:49

Tgt Ion: 50 Resp: 52259
 Ion Ratio Lower Upper
 50 100
 52 29.3 26.5 39.7





#9

Propene

Concen: 1.279 ppbv

RT: 3.24 min Scan# 94

Delta R.T. 0.20 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

Instrument :

MSVOA_L

ClientSampleId :

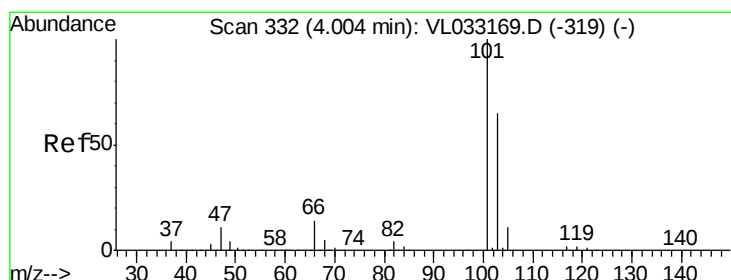
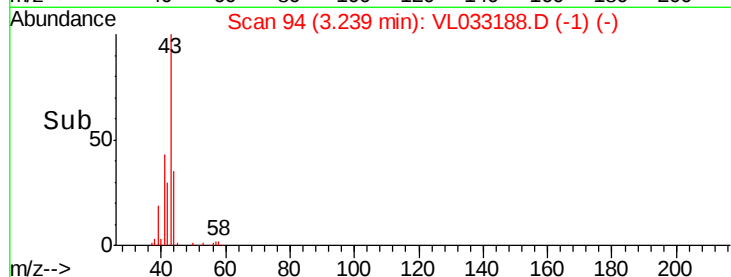
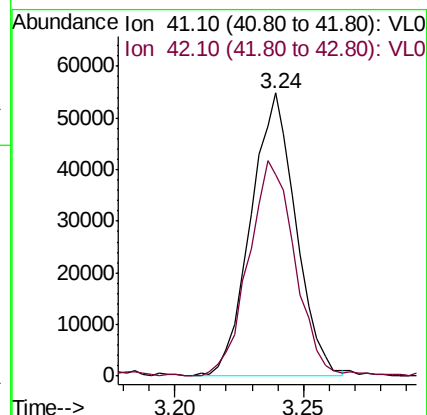
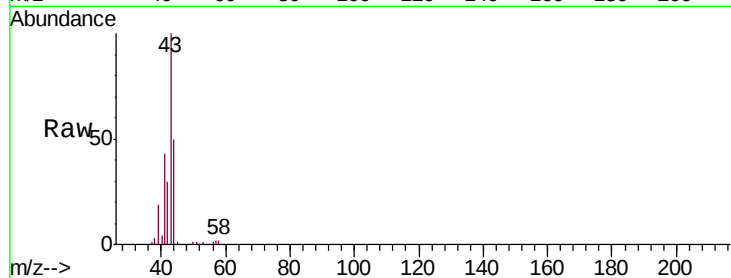
AB-IA

Tgt Ion: 41 Resp: 67156

Ion Ratio Lower Upper

41 100

42 79.3 55.0 82.6



#11

Trichlorofluoromethane

Concen: 2.228 ppbv

RT: 4.00 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL033188.D

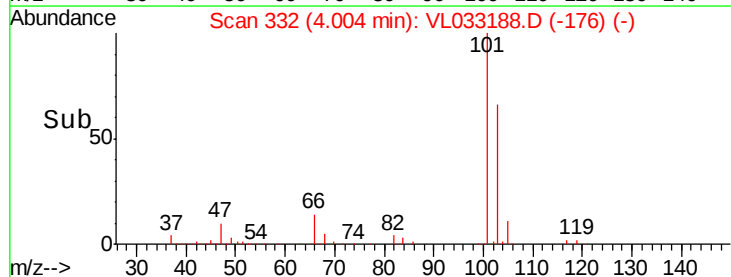
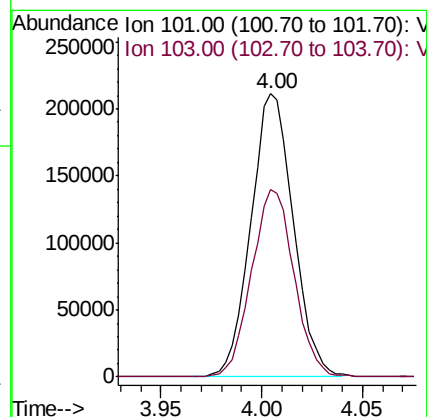
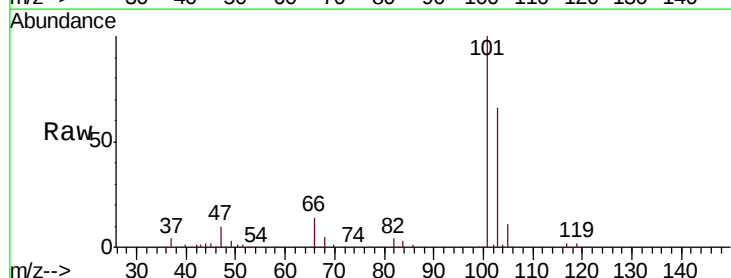
Acq: 13 Feb 2019 15:49

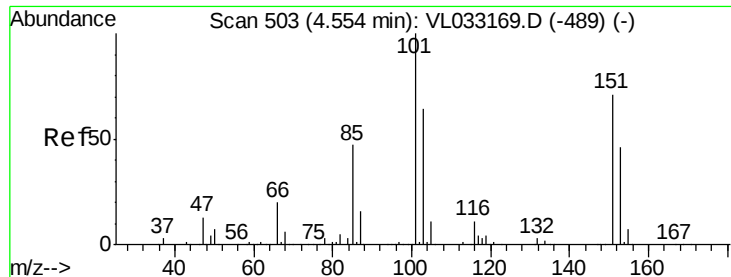
Tgt Ion: 101 Resp: 311229

Ion Ratio Lower Upper

101 100

103 66.2 51.7 77.5





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.066 ppbv

RT: 4.55 min Scan# 503

Delta R.T. 0.00 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

Instrument :

MSVOA_L

ClientSampleId :

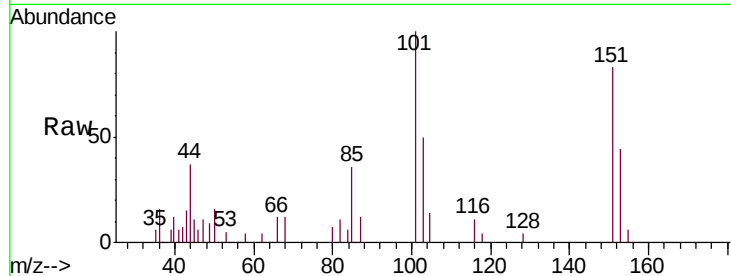
AB-IA

Tgt Ion: 101 Resp: 6373

Ion Ratio Lower Upper

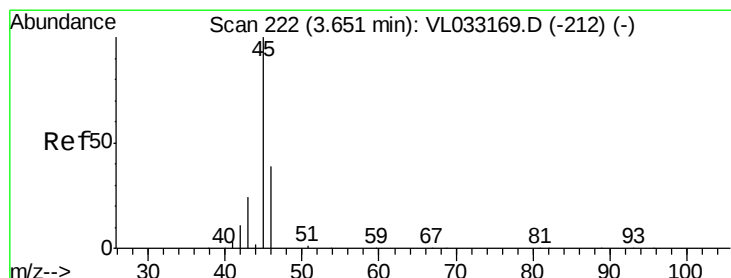
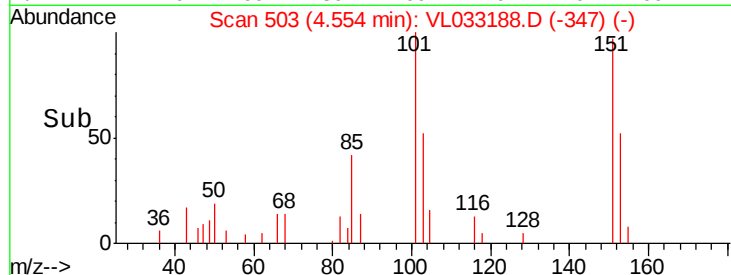
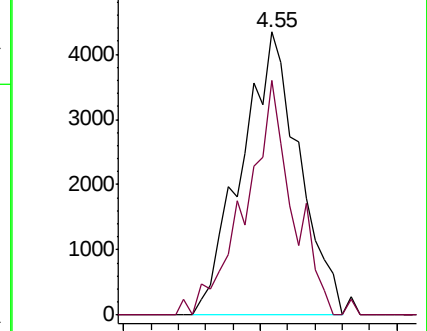
101 100

151 68.3 57.4 86.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 152.883 ppbv

RT: 3.65 min Scan# 223

Delta R.T. 0.00 min

Lab File: VL033188.D

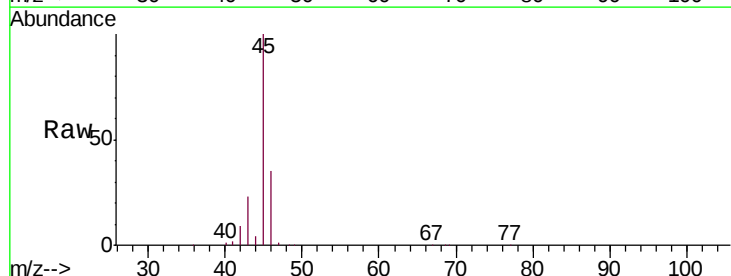
Acq: 13 Feb 2019 15:49

Tgt Ion: 45 Resp: 2676369

Ion Ratio Lower Upper

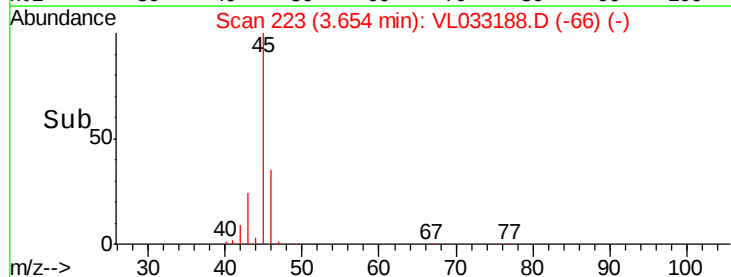
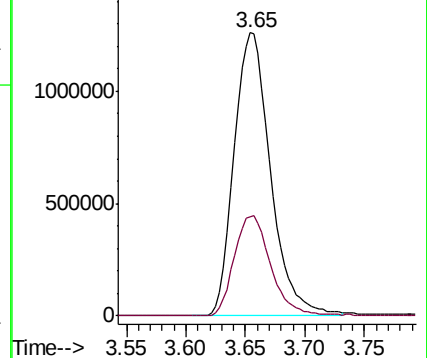
45 100

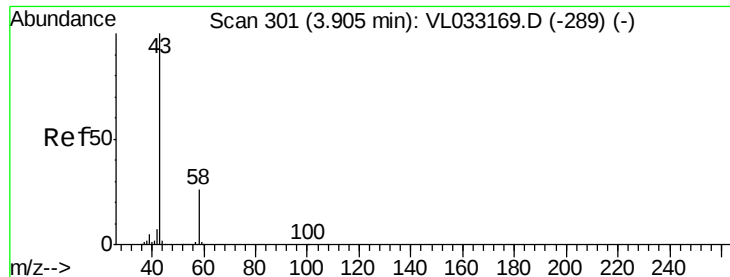
46 36.0 15.0 60.2



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 5.750 ppbv

RT: 3.90 min Scan# 300

Delta R.T. -0.00 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

Instrument :

MSVOA_L

ClientSampleId :

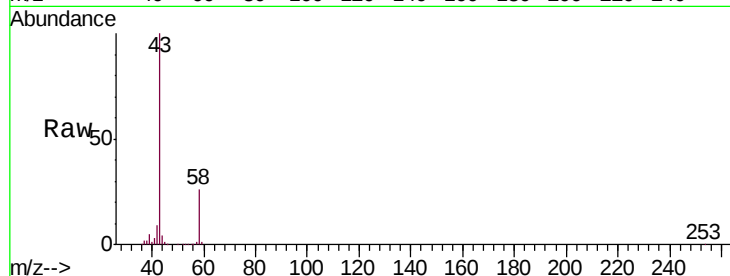
AB-IA

Tgt Ion: 43 Resp: 584691

Ion Ratio Lower Upper

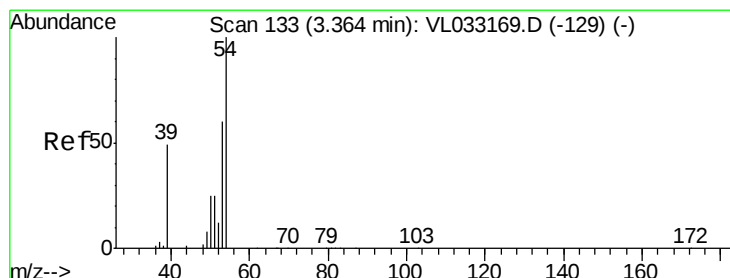
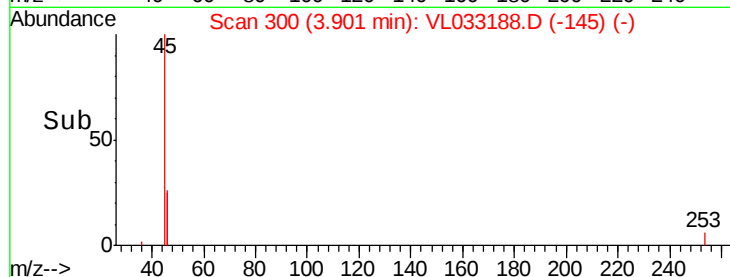
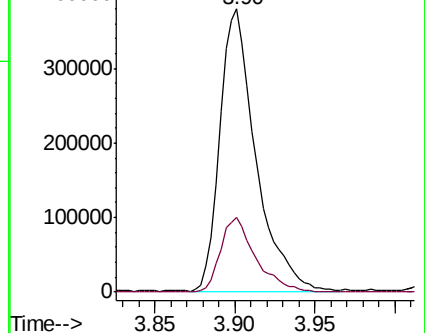
43 100

58 26.0 21.1 31.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 9.759 ppbv

RT: 3.39 min Scan# 142

Delta R.T. 0.03 min

Lab File: VL033188.D

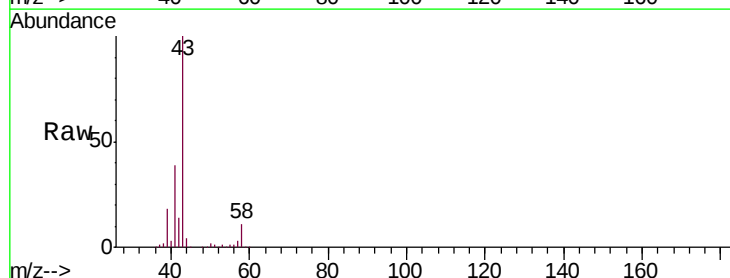
Acq: 13 Feb 2019 15:49

Tgt Ion: 39 Resp: 471030

Ion Ratio Lower Upper

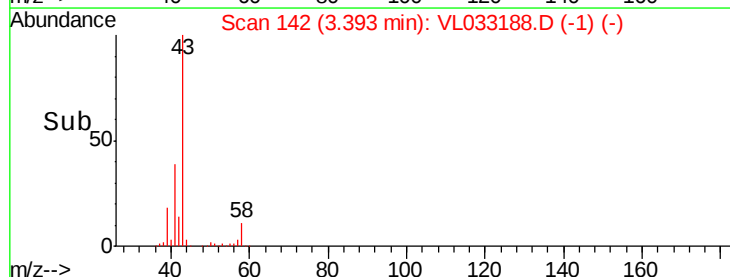
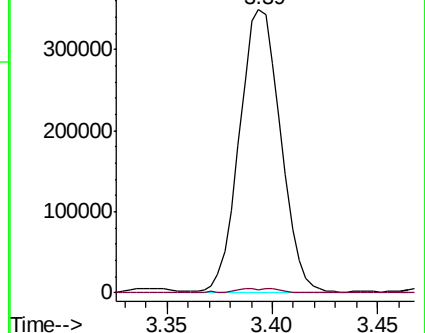
39 100

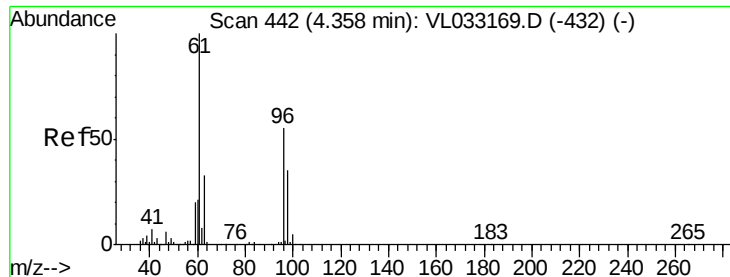
54 1.9 71.3 106.9#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0



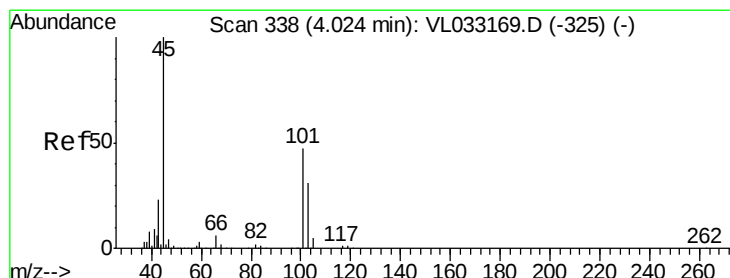
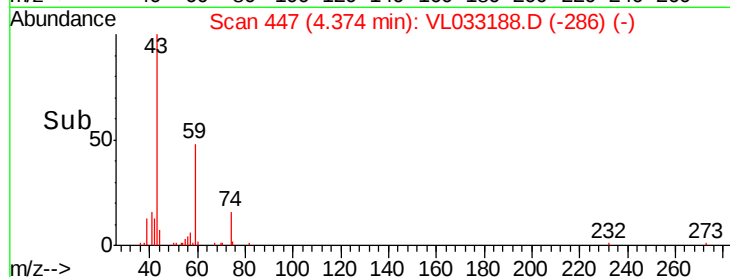
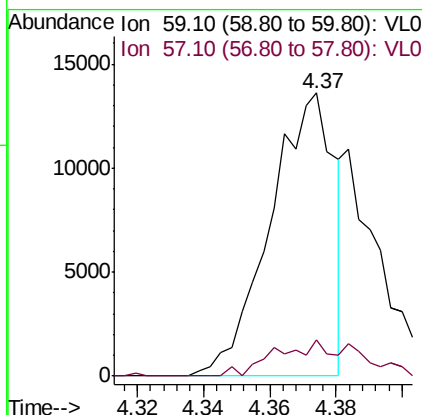
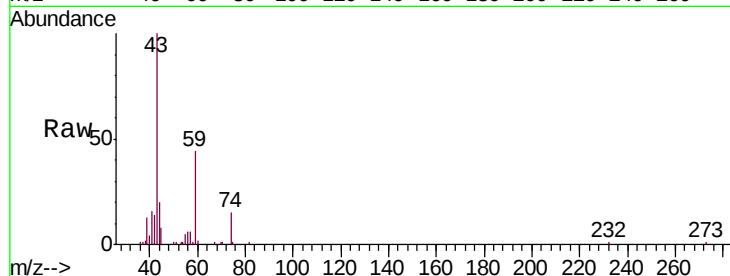


#17

tert-Butyl alcohol
Concen: 0.948 ppbv
RT: 4.37 min Scan# 447
Delta R.T. 0.02 min
Lab File: VL033188.D
Acq: 13 Feb 2019 15:49

Instrument :
MSVOA_L
ClientSampled :
AB-IA

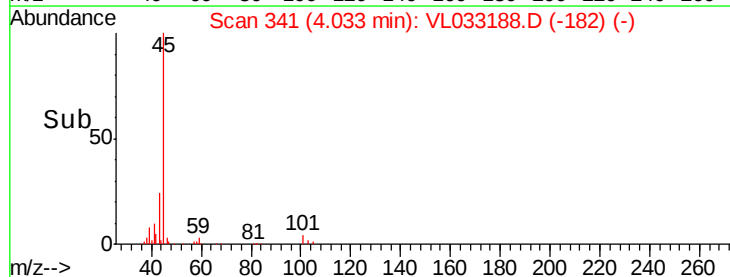
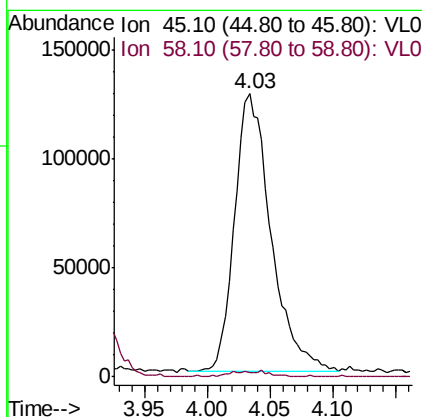
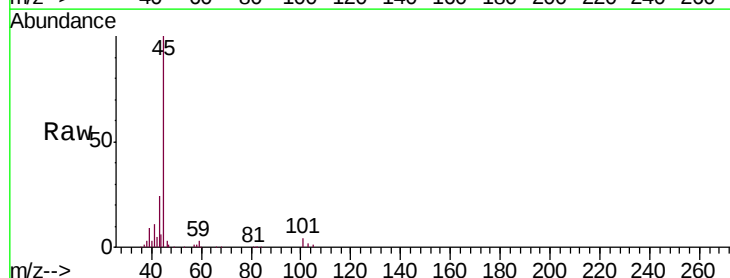
Tgt Ion: 59 Resp: 18379
Ion Ratio Lower Upper
59 100
57 16.7 7.6 11.4#

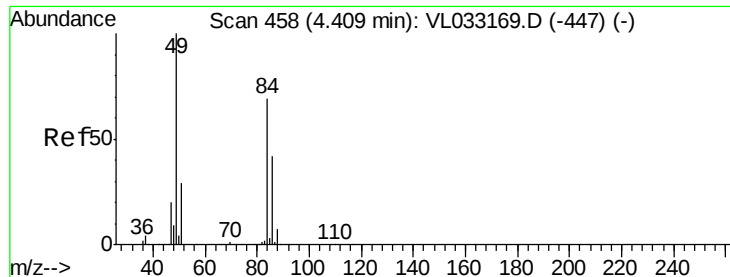


#19

Isopropyl Alcohol
Concen: 3.749 ppbv
RT: 4.03 min Scan# 341
Delta R.T. 0.01 min
Lab File: VL033188.D
Acq: 13 Feb 2019 15:49

Tgt Ion: 45 Resp: 258582
Ion Ratio Lower Upper
45 100
58 2.8 1.5 2.3#

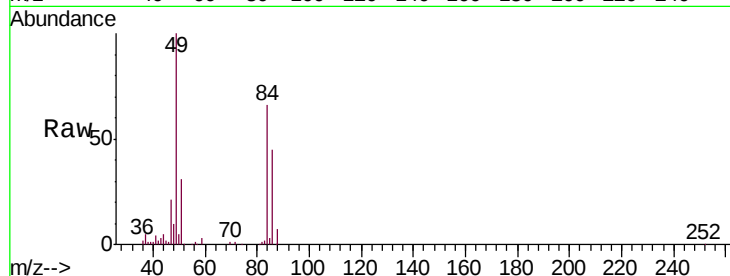




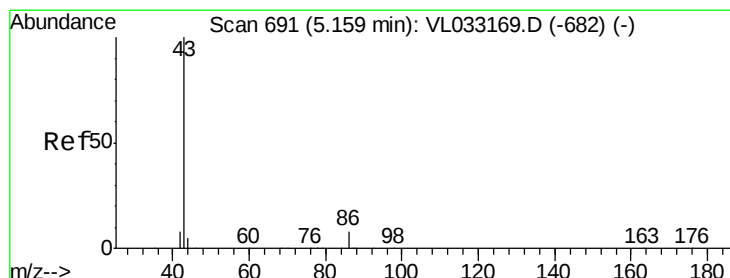
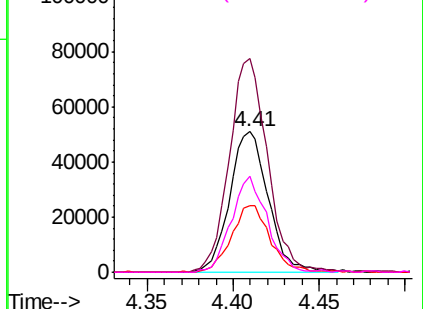
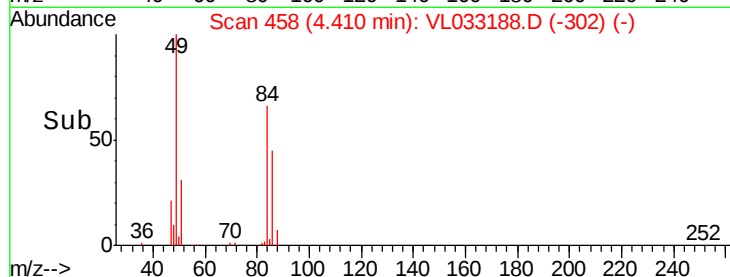
#20
Methylene Chloride
Concen: 1.978 ppbv
RT: 4.41 min Scan# 458
Delta R.T. 0.00 min
Lab File: VL033188.D
Acq: 13 Feb 2019 15:49

Instrument :
MSVOA_L
ClientSampleId :
AB-IA

Tgt Ion: 84 Resp: 79998
Ion Ratio Lower Upper
84 100
49 152.0 115.8 173.8
51 46.9 33.0 49.6
86 68.0 48.2 72.2

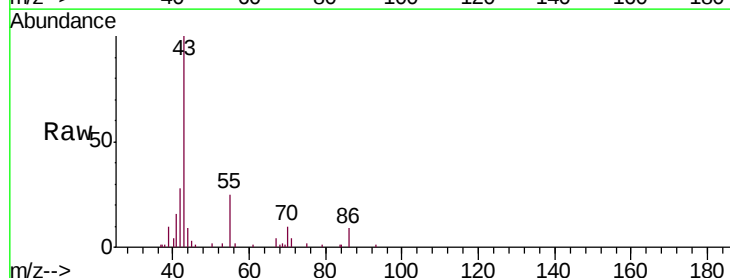


Abundance Ion 84.00 (83.70 to 84.70): VL0
120000 Ion 49.10 (48.80 to 49.80): VL0
100000 Ion 51.10 (50.80 to 51.80): VL0
80000 Ion 86.00 (85.70 to 86.70): VL0

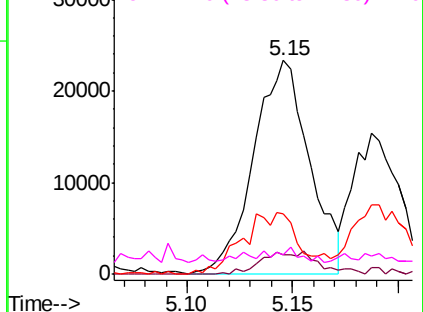
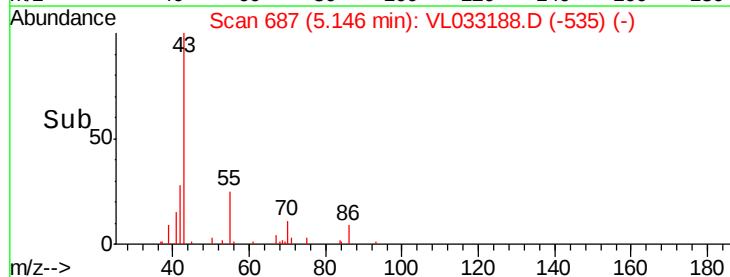


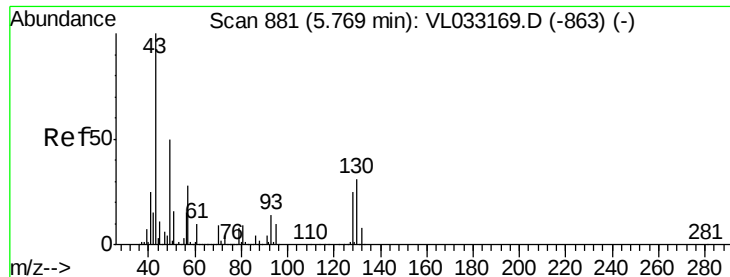
#23
Vinyl Acetate
Concen: 0.244 ppbv
RT: 5.15 min Scan# 687
Delta R.T. -0.01 min
Lab File: VL033188.D
Acq: 13 Feb 2019 15:49

Tgt Ion: 43 Resp: 43032
Ion Ratio Lower Upper
43 100
86 8.7 5.8 8.8
42 28.0 7.4 11.0#
44 3.7 3.7 5.5#



Abundance Ion 43.10 (42.80 to 43.80): VL0
30000 Ion 86.10 (85.80 to 86.80): VL0
20000 Ion 42.10 (41.80 to 42.80): VL0
10000 Ion 44.10 (43.80 to 44.80): VL0

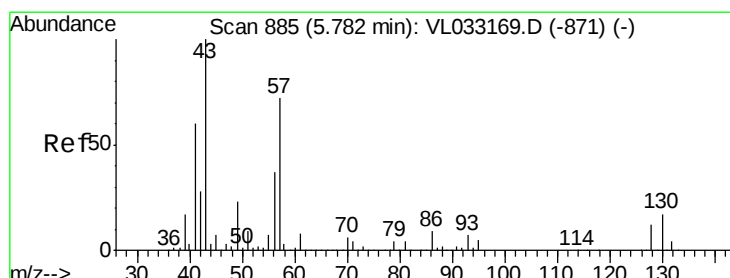
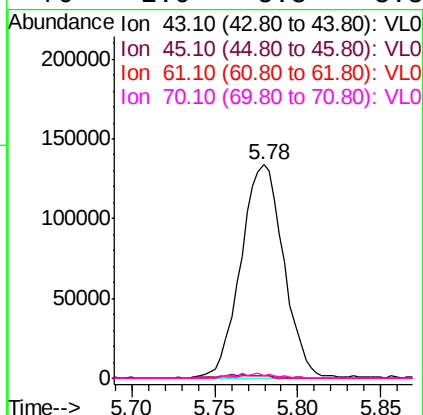
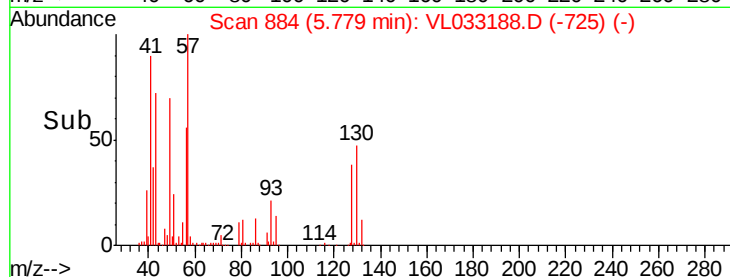
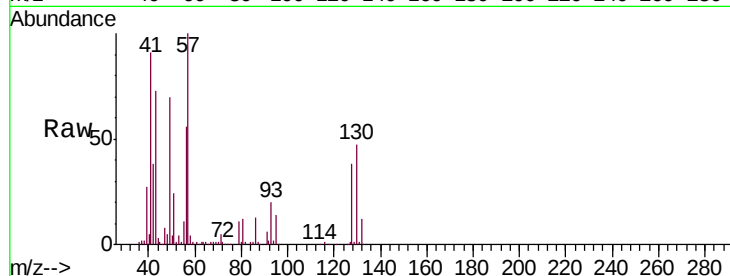




#25
Ethyl Acetate
Concen: 1.052 ppbv
RT: 5.78 min Scan# 884
Delta R.T. 0.01 min
Lab File: VL033188.D
Acq: 13 Feb 2019 15:49

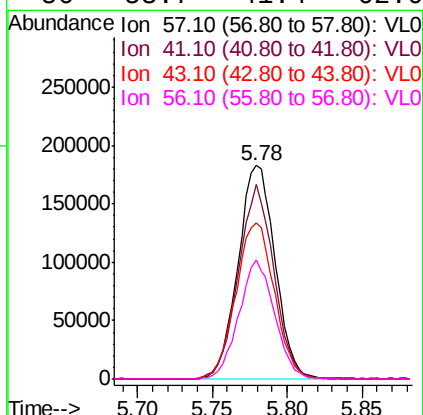
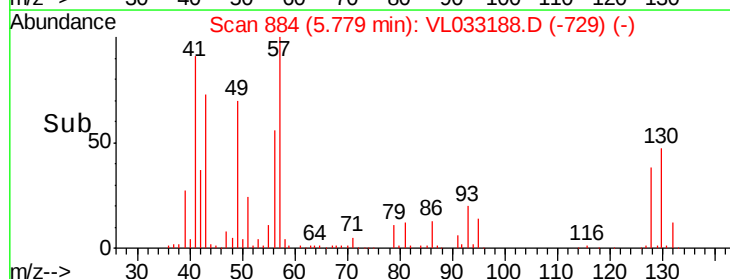
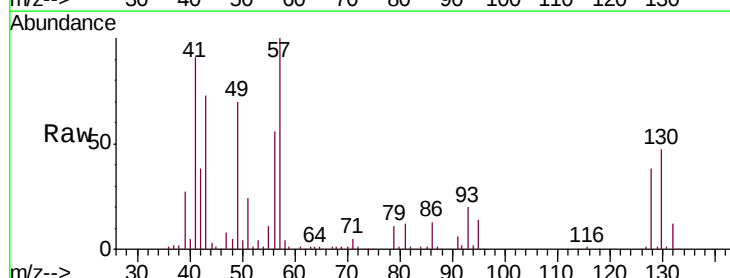
Instrument :
MSVOA_L
ClientSampleId :
AB-IA

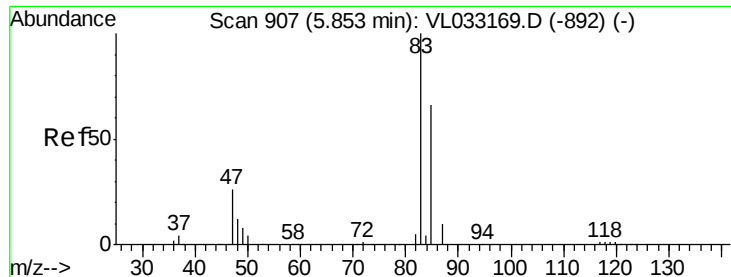
Tgt Ion:	43	Resp:	240459
Ion	Ratio	Lower	Upper
43	100		
45	2.2	7.9	11.9#
61	1.2	7.5	11.3#
70	2.0	5.8	8.8#



#26
Hexane
Concen: 2.936 ppbv
RT: 5.78 min Scan# 884
Delta R.T. -0.00 min
Lab File: VL033188.D
Acq: 13 Feb 2019 15:49

Tgt Ion:	57	Resp:	315075
Ion	Ratio	Lower	Upper
57	100		
41	87.3	69.4	104.2
43	76.9	176.7	265.1#
56	53.7	41.4	62.0

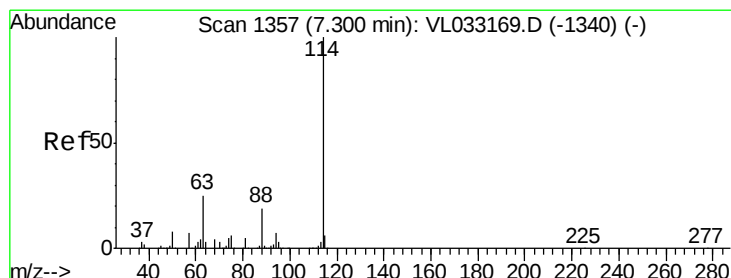
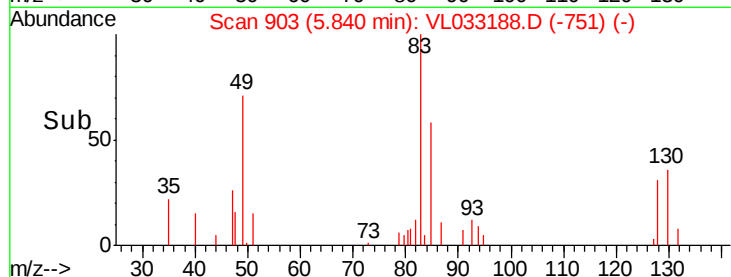
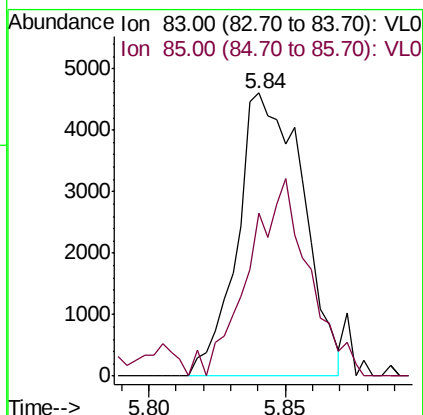
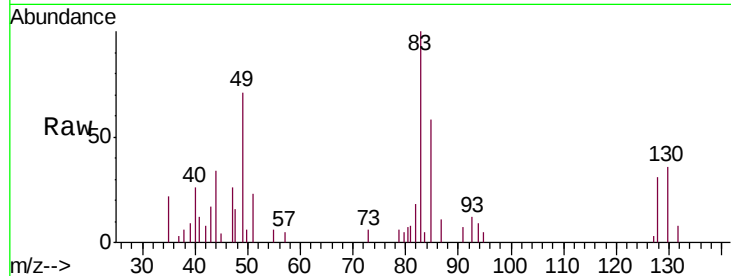




#29
Chloroform
Concen: 0.047 ppbv
RT: 5.84 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL033188.D
Acq: 13 Feb 2019 15:49

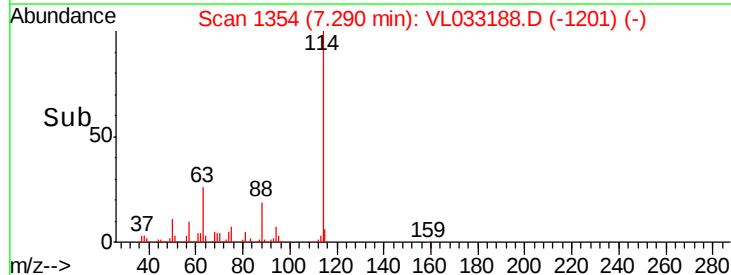
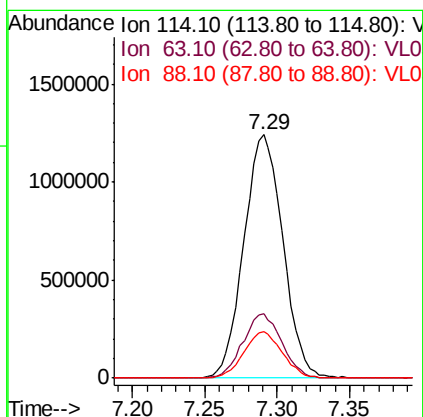
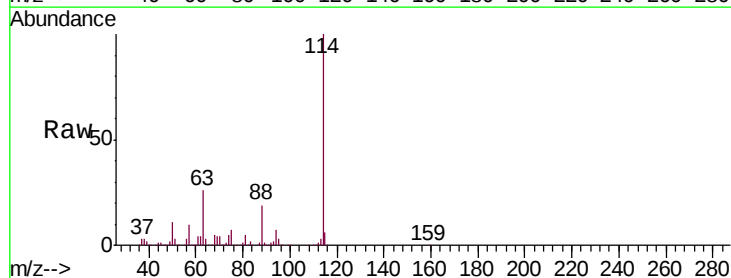
Instrument :
MSVOA_L
ClientSampleId :
AB-IA

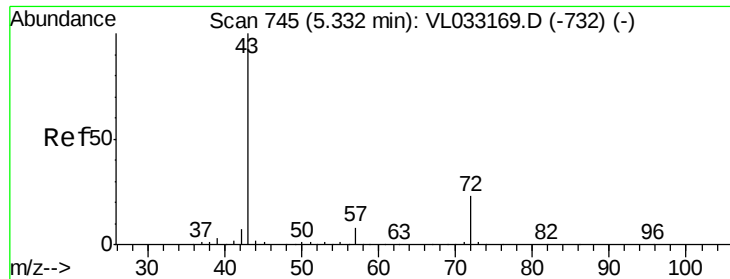
Tgt Ion: 83 Resp: 7682
Ion Ratio Lower Upper
83 100
85 55.2 52.6 78.8



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1354
Delta R.T. -0.01 min
Lab File: VL033188.D
Acq: 13 Feb 2019 15:49

Tgt Ion: 114 Resp: 2328680
Ion Ratio Lower Upper
114 100
63 26.4 20.8 31.2
88 18.7 14.6 22.0

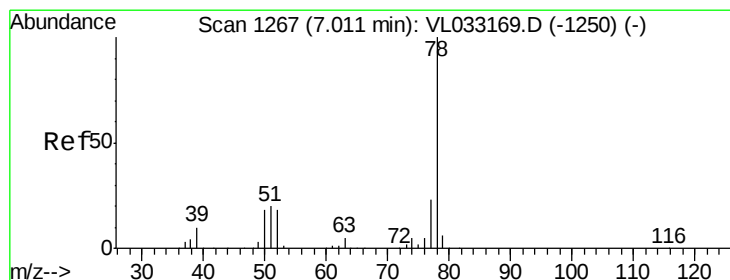
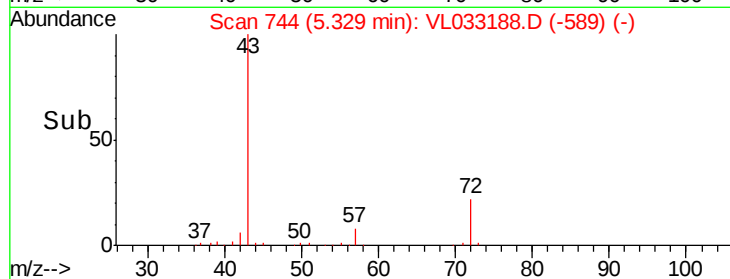
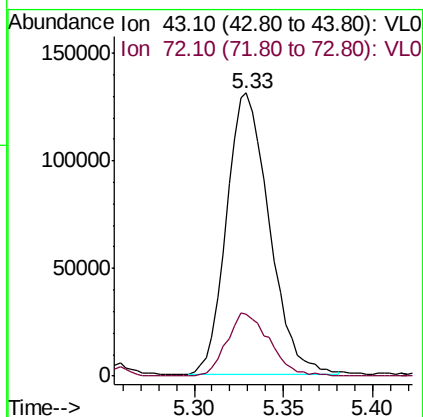
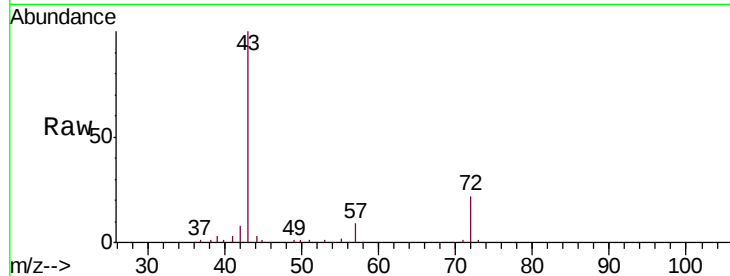




#34
 2-Butanone
 Concen: 1.477 ppbv
 RT: 5.33 min Scan# 744
 Delta R.T. -0.00 min
 Lab File: VL033188.D
 Acq: 13 Feb 2019 15:49

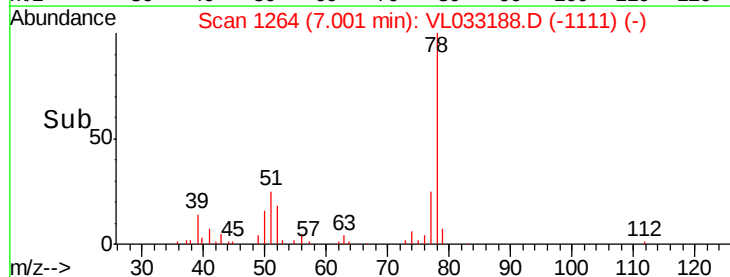
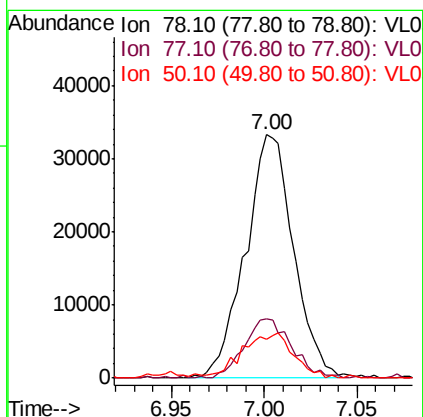
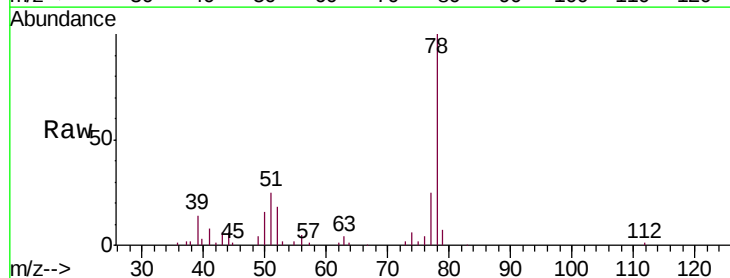
Instrument :
 MSVOA_L
 ClientSampled :
 AB-IA

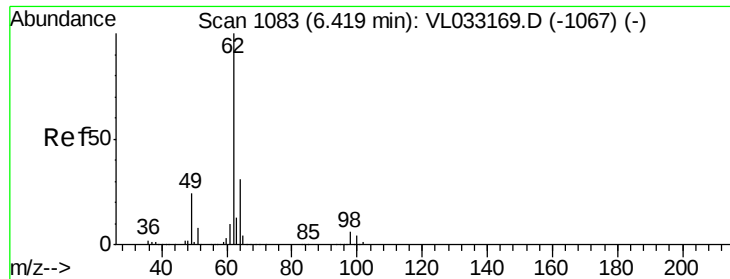
Tgt Ion: 43 Resp: 218121
 Ion Ratio Lower Upper
 43 100
 72 22.4 17.8 26.6



#36
 Benzene
 Concen: 0.256 ppbv
 RT: 7.00 min Scan# 1264
 Delta R.T. -0.01 min
 Lab File: VL033188.D
 Acq: 13 Feb 2019 15:49

Tgt Ion: 78 Resp: 60333
 Ion Ratio Lower Upper
 78 100
 77 24.6 18.0 27.0
 50 15.8 14.2 21.2





#37

1,2-Dichloroethane

Concen: 0.030 ppbv

RT: 6.41 min Scan# 1081

Delta R.T. -0.01 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

Instrument :

MSVOA_L

ClientSampleId :

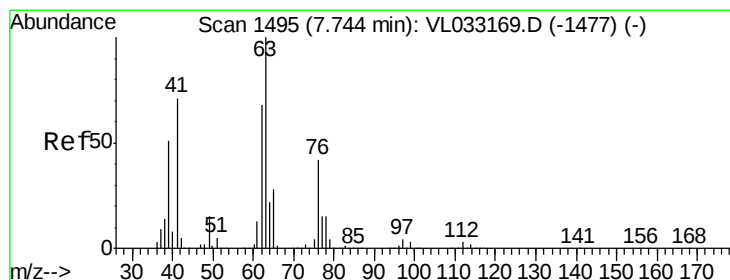
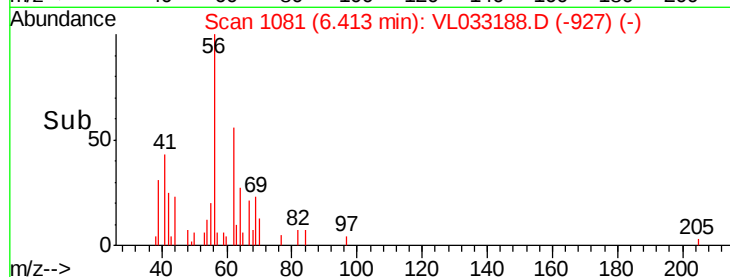
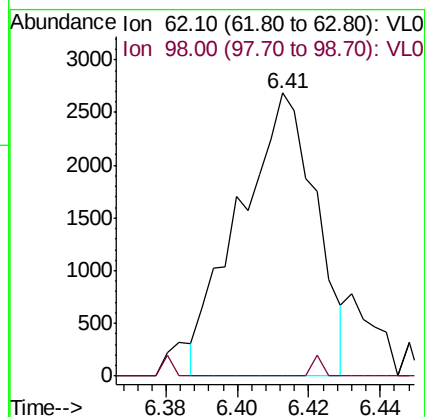
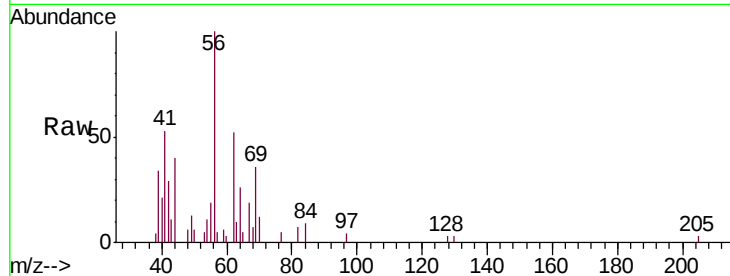
AB-IA

Tgt Ion: 62 Resp: 3969

Ion Ratio Lower Upper

62 100

98 0.0 4.7 7.1#



#39

1,2-Dichloropropane

Concen: 6.577 ppbv

RT: 7.29 min Scan# 1354

Delta R.T. -0.45 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

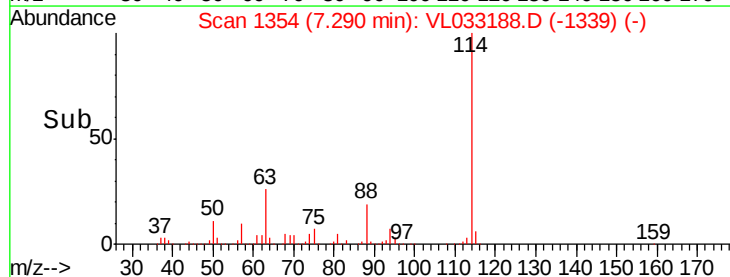
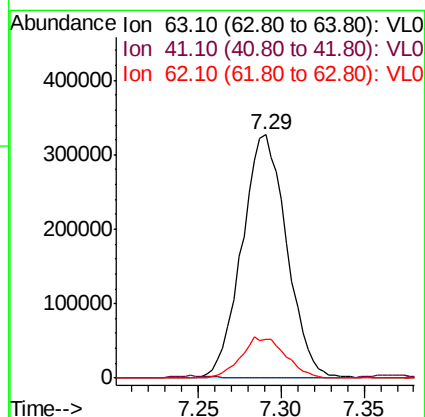
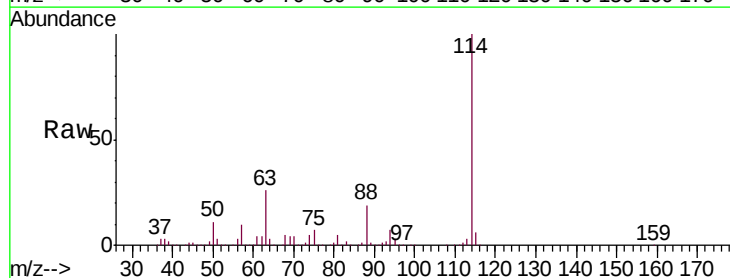
Tgt Ion: 63 Resp: 612979

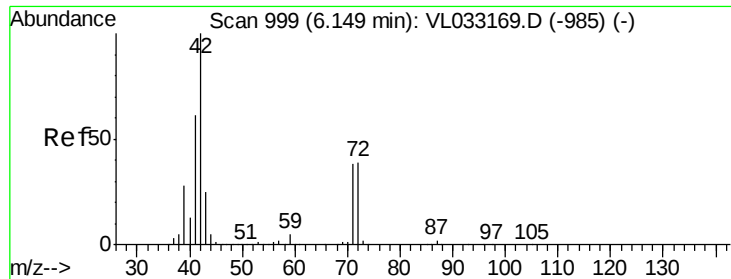
Ion Ratio Lower Upper

63 100

41 0.0 56.4 84.6#

62 15.7 54.2 81.4#





#41

Tetrahydrofuran

Concen: 1.262 ppbv

RT: 5.78 min Scan# 884

Delta R.T. -0.37 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

Instrument :

MSVOA_L

ClientSampled :

AB-IA

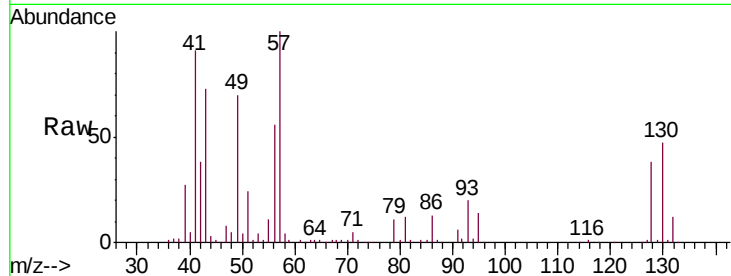
Tgt Ion: 42 Resp: 115363

Ion Ratio Lower Upper

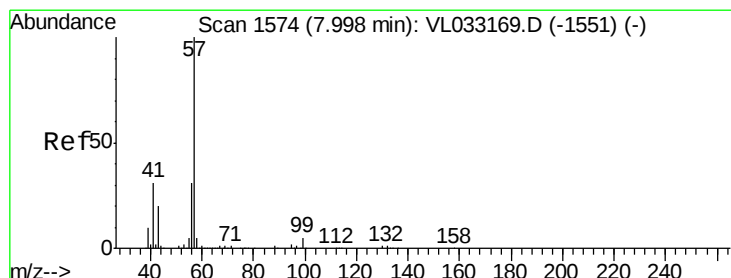
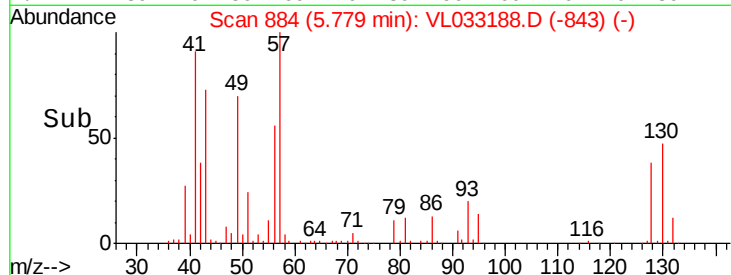
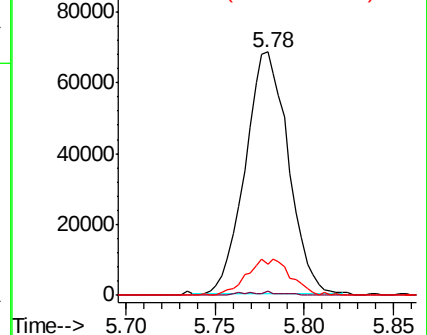
42 100

72 1.2 31.6 47.4#

71 15.4 30.3 45.5#



Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0



#44

2,2,4-Trimethylpentane

Concen: 0.069 ppbv

RT: 7.99 min Scan# 1572

Delta R.T. -0.01 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

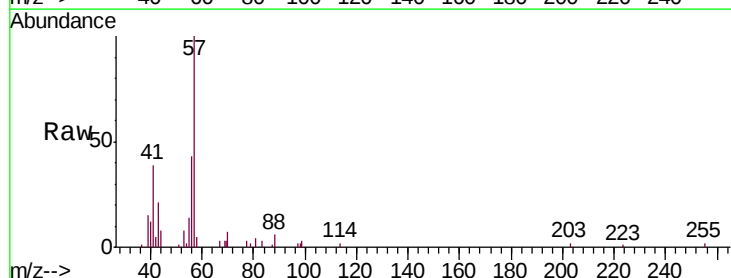
Tgt Ion: 57 Resp: 27709

Ion Ratio Lower Upper

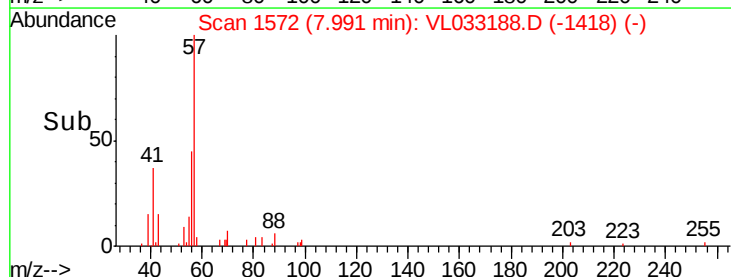
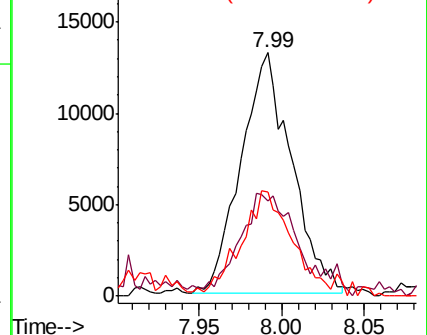
57 100

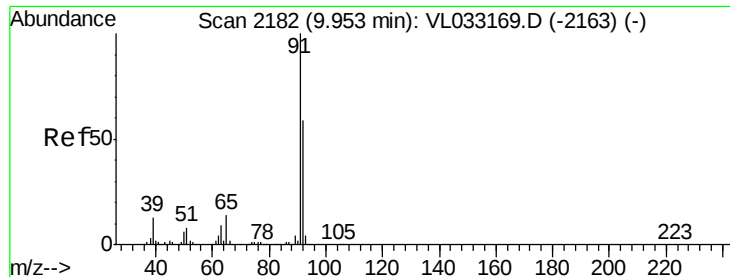
41 53.4 25.1 37.7#

56 47.8 24.5 36.7#



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





#53

Toluene

Concen: 1.826 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. -0.01 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

Instrument :

MSVOA_L

ClientSampleId :

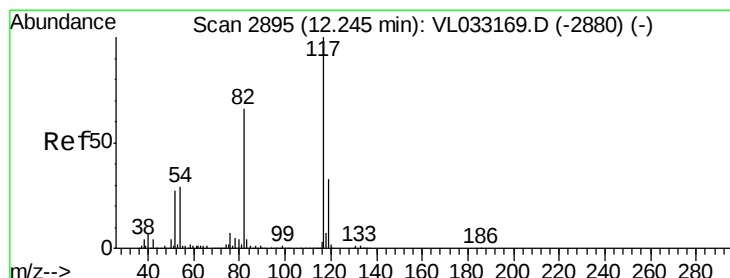
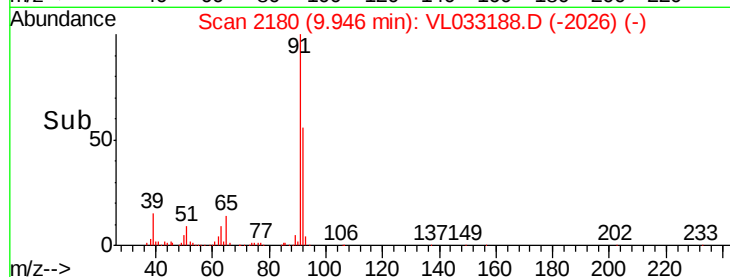
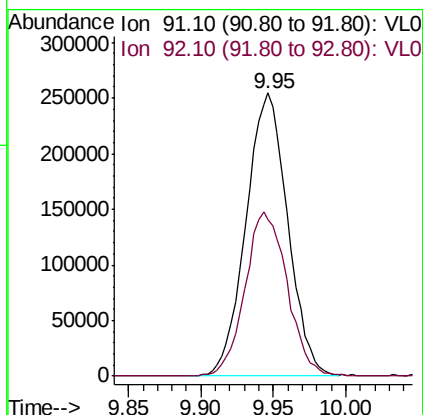
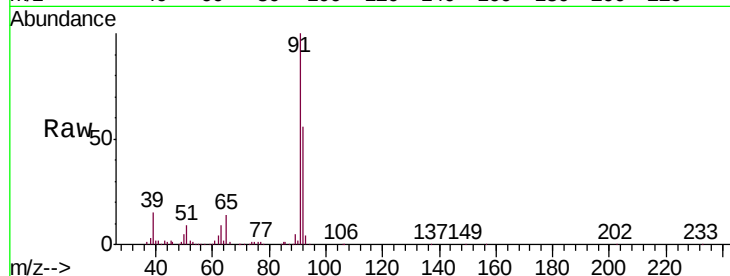
AB-IA

Tgt Ion: 91 Resp: 510295

Ion Ratio Lower Upper

91 100

92 58.7 48.0 72.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2893

Delta R.T. -0.01 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

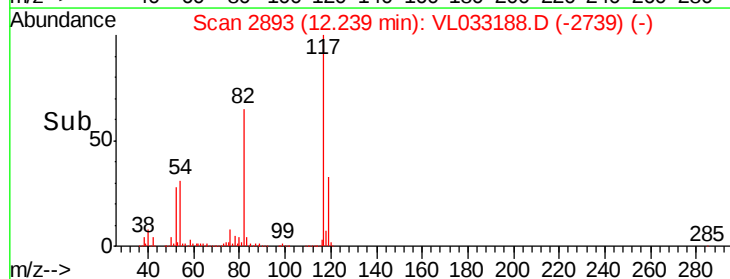
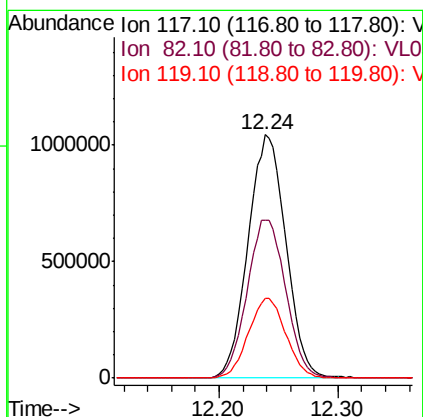
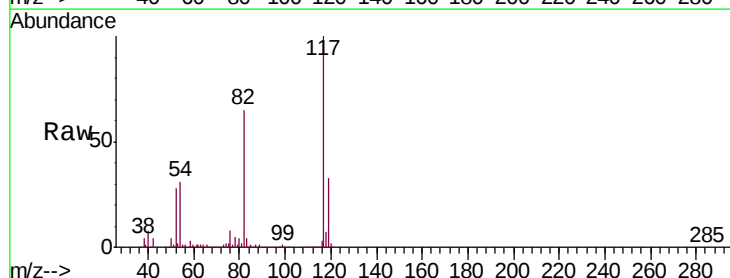
Tgt Ion: 117 Resp: 2300874

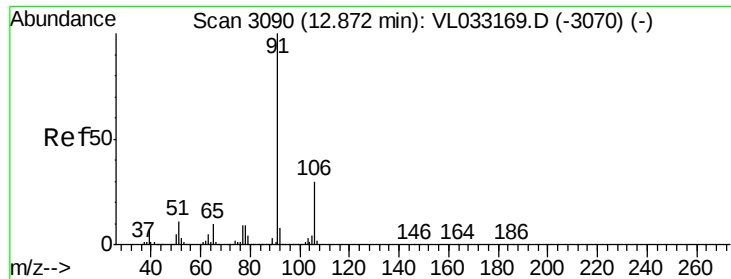
Ion Ratio Lower Upper

117 100

82 66.5 49.5 74.3

119 32.6 24.4 36.6





#58

Ethyl Benzene

Concen: 2.931 ppbv

RT: 12.87 min Scan# 3088

Delta R.T. -0.01 min

Lab File: VL033188.D

Acq: 13 Feb 2019 15:49

Instrument :

MSVOA_L

ClientSampleId :

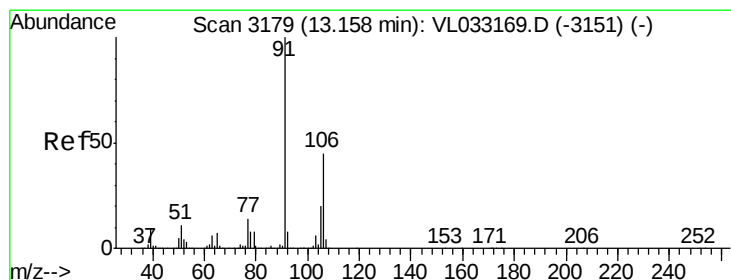
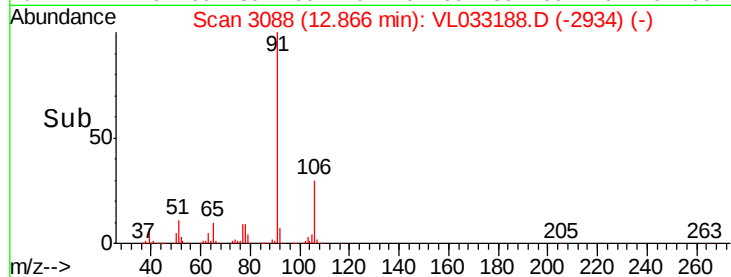
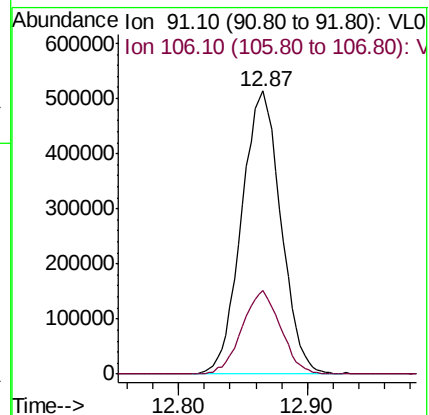
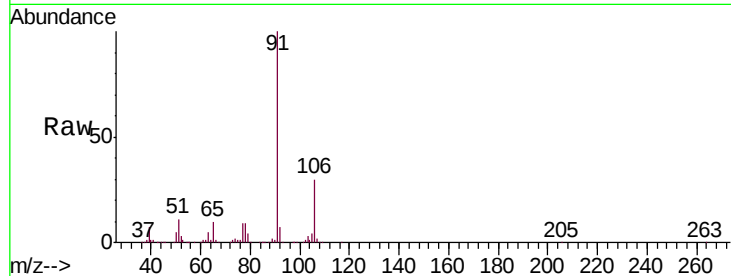
AB-IA

Tgt Ion: 91 Resp: 1091615

Ion Ratio Lower Upper

91 100

106 29.5 23.8 35.8



#59

m/p-Xylene

Concen: 10.676 ppbv

RT: 13.12 min Scan# 3167

Delta R.T. -0.04 min

Lab File: VL033188.D

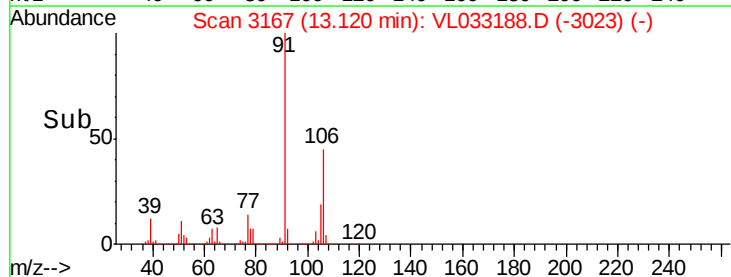
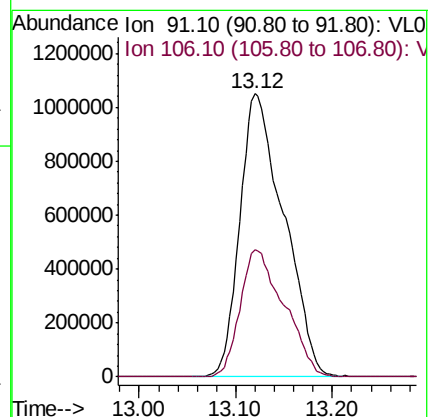
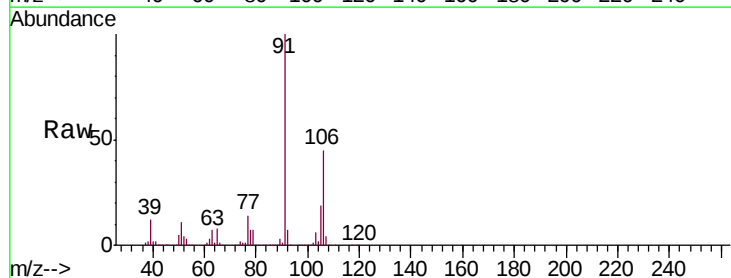
Acq: 13 Feb 2019 15:49

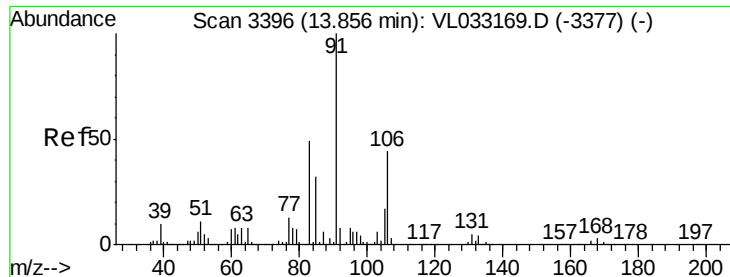
Tgt Ion: 91 Resp: 3317707

Ion Ratio Lower Upper

91 100

106 45.1 0.0 0.0#

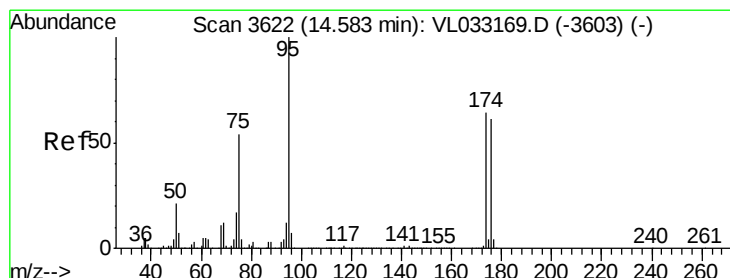
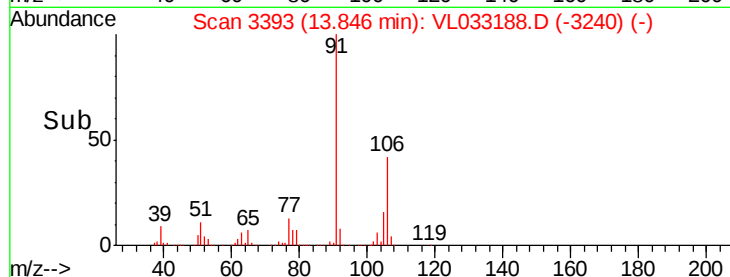
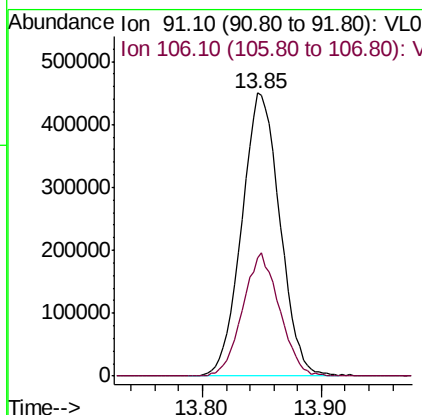
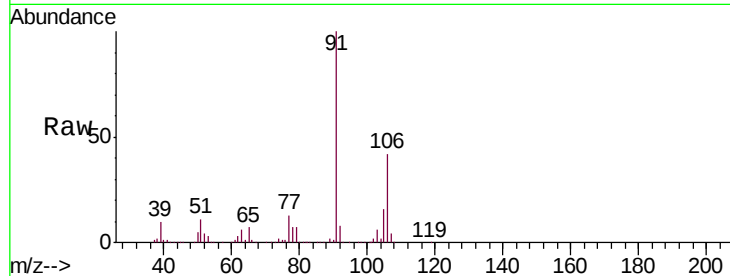




#60
o-Xylene
Concen: 3.293 ppbv
RT: 13.85 min Scan# 3393
Delta R.T. -0.01 min
Lab File: VL033188.D
Acq: 13 Feb 2019 15:49

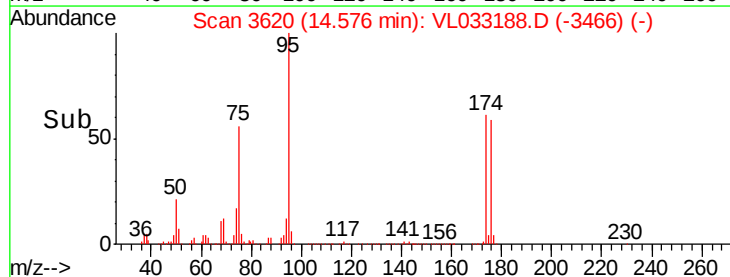
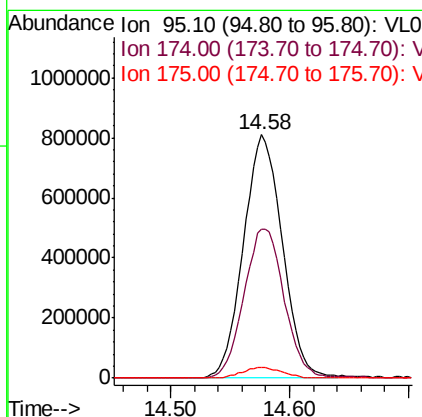
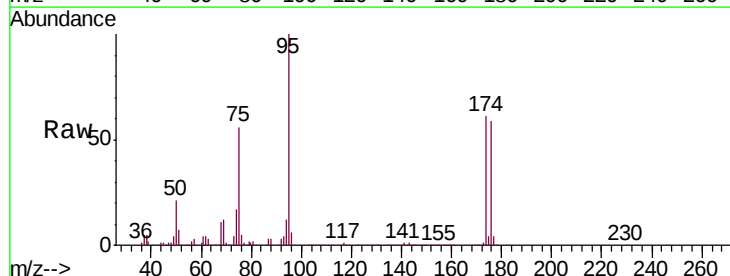
Instrument :
MSVOA_L
ClientSampled :
AB-IA

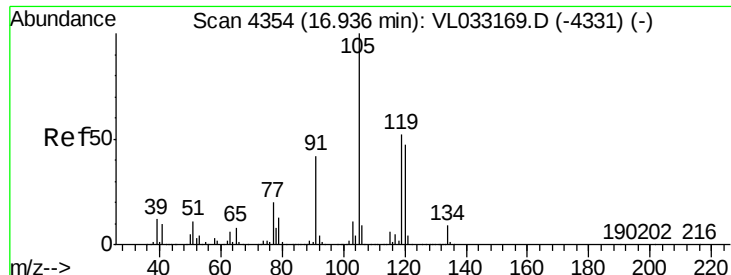
Tgt Ion: 91 Resp: 995155
Ion Ratio Lower Upper
91 100
106 42.4 21.8 65.3



#68
1-Bromo-4-Fluorobenzene
Concen: 10.354 ppbv
RT: 14.58 min Scan# 3620
Delta R.T. -0.01 min
Lab File: VL033188.D
Acq: 13 Feb 2019 15:49

Tgt Ion: 95 Resp: 1834784
Ion Ratio Lower Upper
95 100
174 64.1 51.2 76.8
175 4.5 3.8 5.6

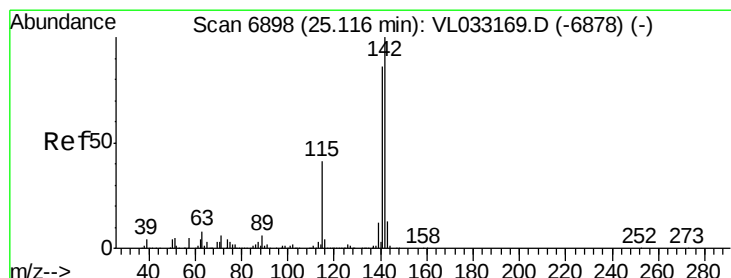
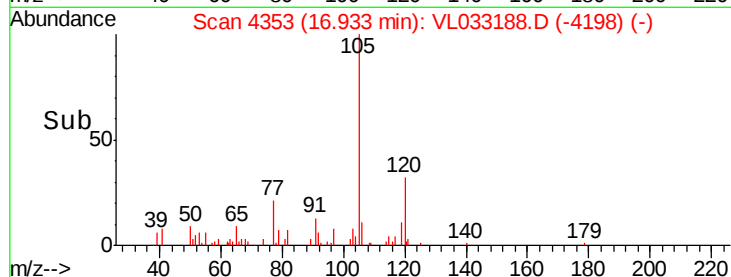
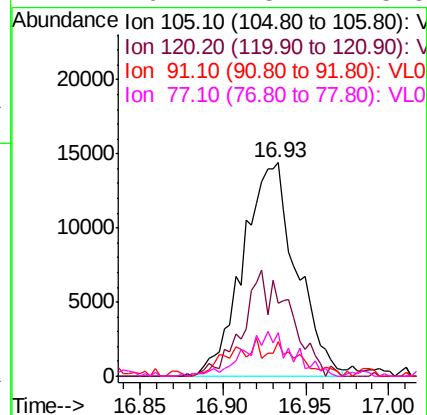
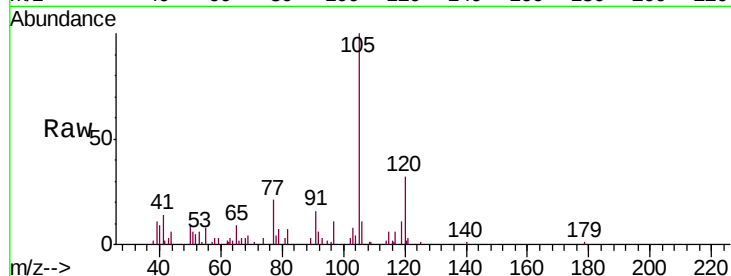




#74
 1,2,4-Trimethylbenzene
 Concen: 0.093 ppbv
 RT: 16.93 min Scan# 4353
 Delta R.T. -0.00 min
 Lab File: VL033188.D
 Acq: 13 Feb 2019 15:49

Instrument :
 MSVOA_L
 ClientSampleId :
 AB-IA

Tgt Ion	Ratio	Lower	Upper
105	100		
120	34.2	37.9	56.9#
91	16.1	34.0	51.0#
77	20.7	15.7	23.5



#80
 Naphthalene, 2-methyl-
 Concen: 0.035 ppbv
 RT: 25.12 min Scan# 6899
 Delta R.T. 0.00 min
 Lab File: VL033188.D
 Acq: 13 Feb 2019 15:49

Tgt Ion	Ratio	Lower	Upper
142	100		
141	101.7	67.7	101.5#
115	54.4	32.7	49.1#

