

Data File : VL033373.D
Acq On : 19 Mar 2019 00:39
Operator : SY/AP
Sample : K1952-04
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
L1HA-IA2

Quant Time: Mar 19 06:57:32 2019
Quant Method : Z:\VOASRV\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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	796939	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1793461	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.24	117	1700187	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.58 95 1321041 10.49 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 104.90%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.08	85	62578	0.447	ppbv	93
3) Chlorodifluoromethane	2.99	51	90450	0.989	ppbv #	75
4) Chloromethane	3.17	50	27903	0.563	ppbv	94
9) Propene	3.05	41	33990	0.832	ppbv #	76
10) Heptane	8.24	43	7813	0.077	ppbv #	33
11) Trichlorofluoromethane	4.00	101	32410	0.232	ppbv	91
12) 1,1,2-Trichlorotrifluoroet	4.55	101	3492	0.038	ppbv #	14
13) Ethanol	3.71	45	26761789	1374.801	ppbv	97
15) Acetone	3.90	43	1424868	11.502	ppbv	90
16) 1,3-Butadiene	3.34	39	7686	0.191	ppbv #	6
17) tert-Butyl alcohol	4.41	59	51896	2.977	ppbv #	74
19) Isopropyl Alcohol	3.71	45	26761789	454.142	ppbv #	98
20) Methylene Chloride	4.41	84	42457	1.051	ppbv	97
21) Allyl Chloride	4.44	41	20320	0.338	ppbv #	1
23) Vinyl Acetate	5.14	43	57765	0.403	ppbv #	76
25) Ethyl Acetate	5.77	43	105460	0.586	ppbv #	95
26) Hexane	5.78	57	52623	0.654	ppbv	87
31) cis-1,2-Dichloroethene	5.77	61	9598	0.119	ppbv #	38
34) 2-Butanone	5.33	43	42427	0.360	ppbv	99
35) Carbon Tetrachloride	7.13	117	5167	0.041	ppbv #	52
36) Benzene	7.00	78	38809	0.242	ppbv	98
39) 1,2-Dichloropropane	7.29	63	483517	8.044	ppbv #	25
44) 2,2,4-Trimethylpentane	7.99	57	15758	0.059	ppbv #	21
52) Tetrachloroethene	11.38	164	10731	0.160	ppbv	94
53) Toluene	9.94	91	828669	4.544	ppbv	99
58) Ethyl Benzene	12.86	91	10695	0.044	ppbv #	81
59) m/p-Xylene	13.13	91	10463	0.051	ppbv #	100
60) o-Xylene	13.85	91	7002	0.035	ppbv #	33
74) 1,2,4-Trimethylbenzene	16.93	105	15914	0.067	ppbv #	69

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

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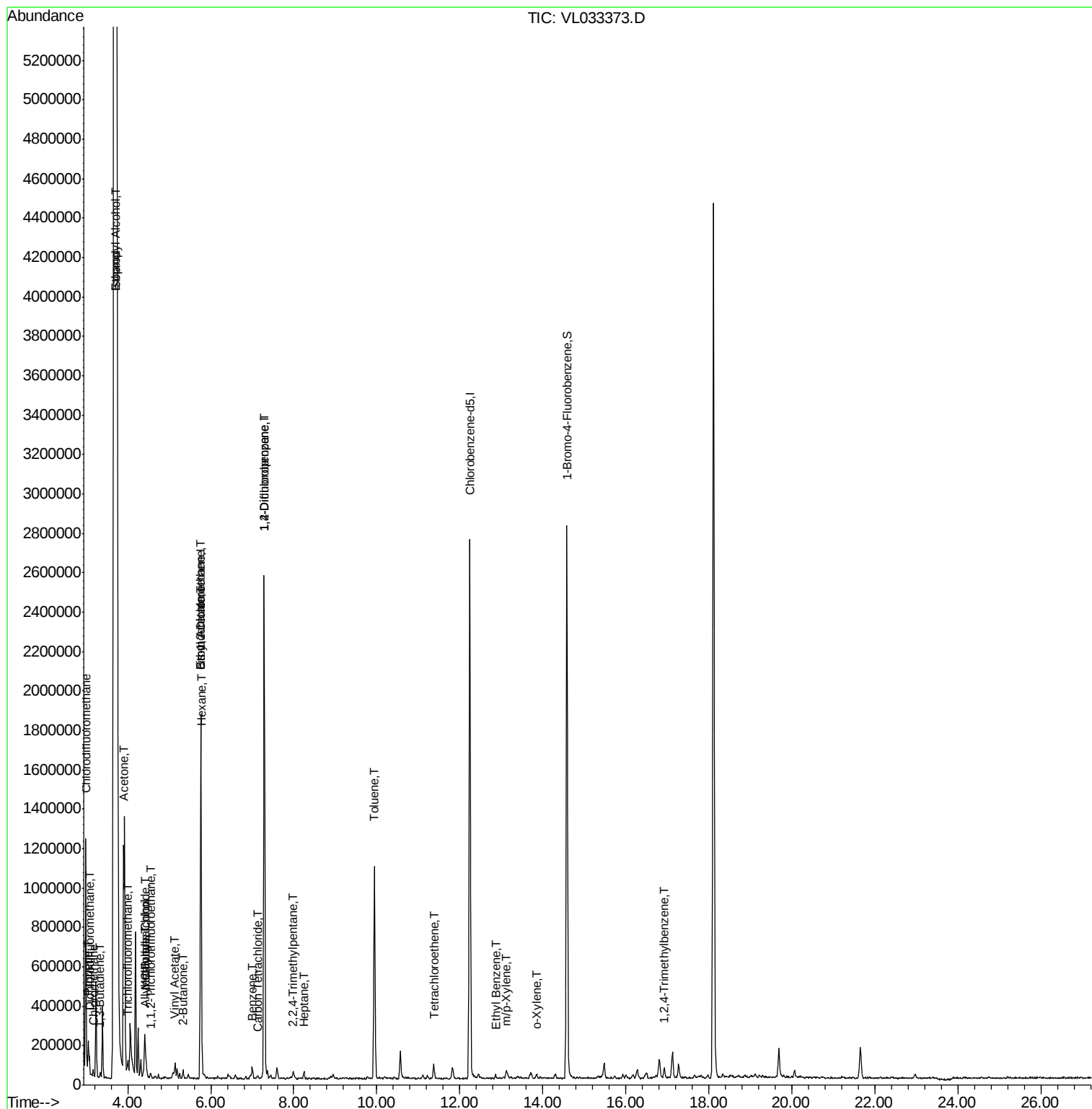
Quant Time: Mar 19 06:57:32 2019

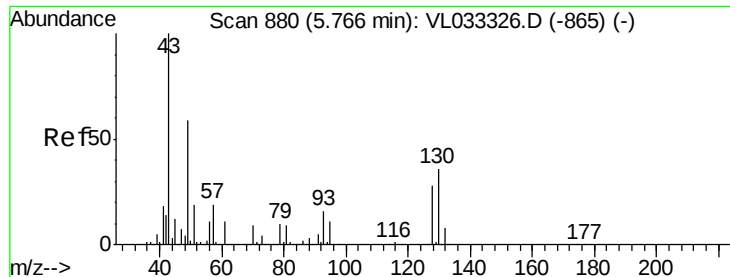
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL031519AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LFri 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: VL033373.D

Acq: 19 Mar 2019 00:39

Instrument :

MSVOA_L

ClientSampleId :

L1HA-IA2

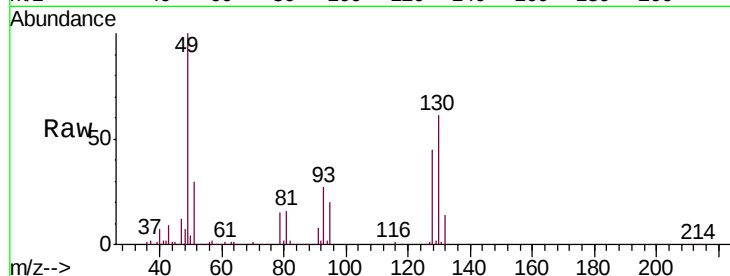
Tgt Ion: 49 Resp: 796939

Ion Ratio Lower Upper

49 100

128 46.7 23.5 70.6

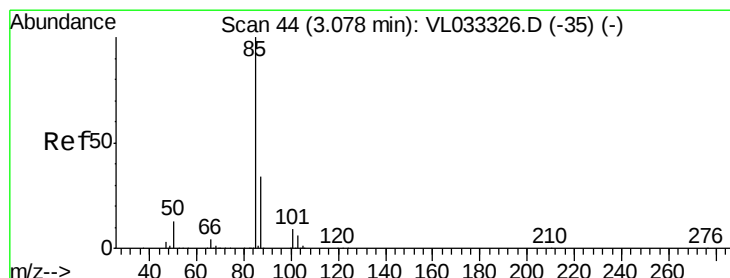
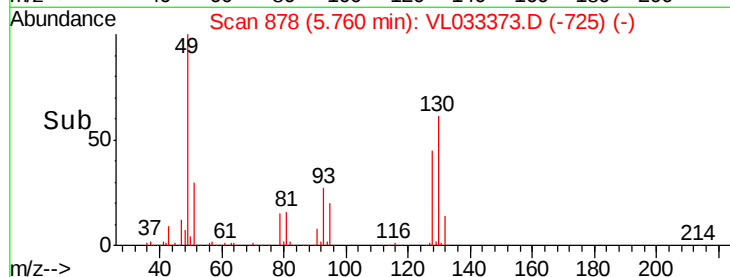
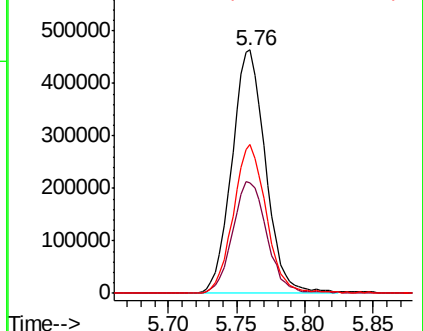
130 59.8 30.1 90.3



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



#2

Dichlorodifluoromethane

Concen: 0.447 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033373.D

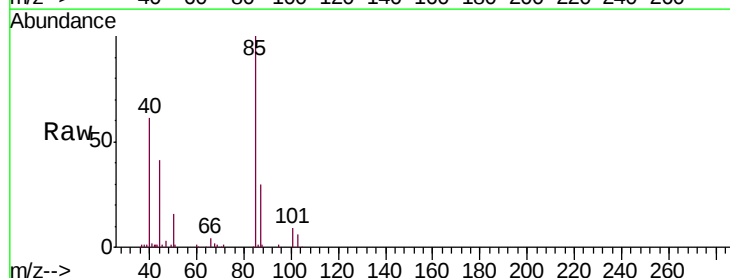
Acq: 19 Mar 2019 00:39

Tgt Ion: 85 Resp: 62578

Ion Ratio Lower Upper

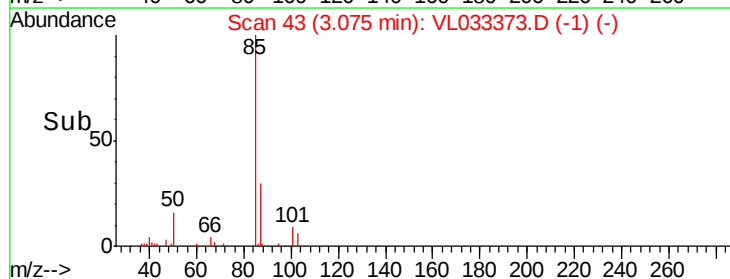
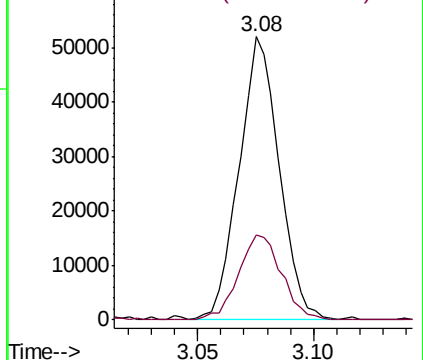
85 100

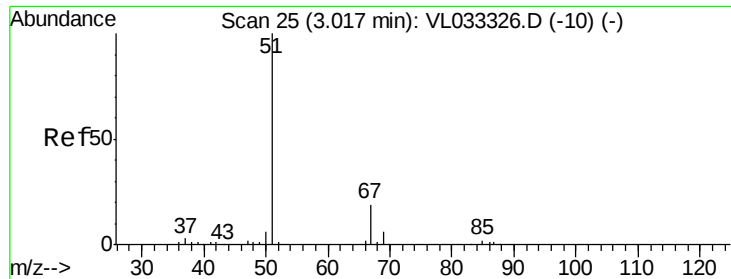
87 29.9 26.9 40.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.989 ppbv

RT: 2.99 min Scan# 16

Delta R.T. -0.03 min

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Acq: 19 Mar 2019 00:39

Instrument :

MSVOA_L

ClientSampleId :

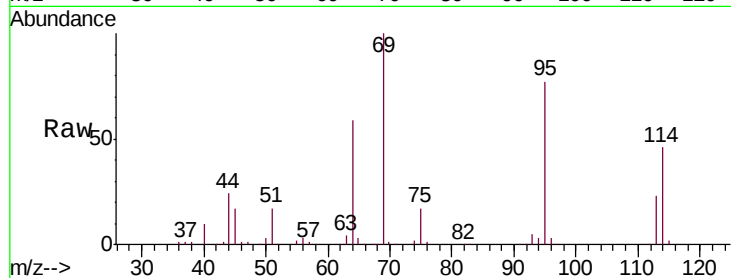
L1HA-IA2

Tgt Ion: 51 Resp: 90450

Ion Ratio Lower Upper

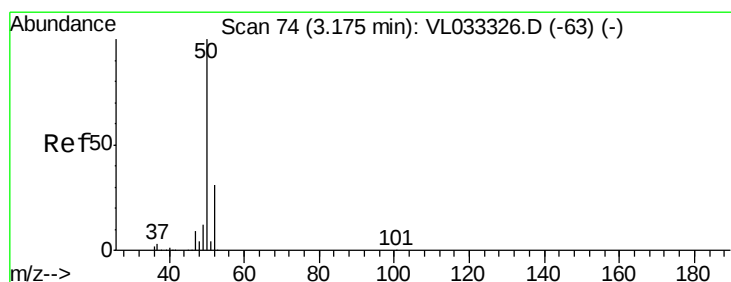
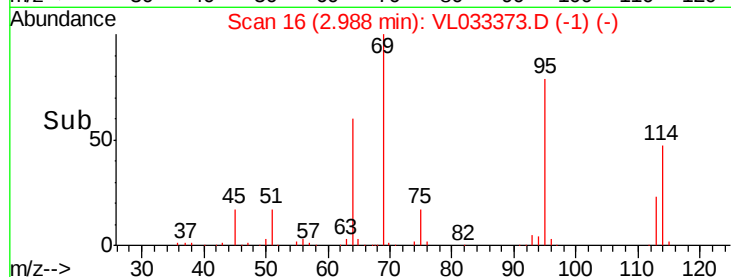
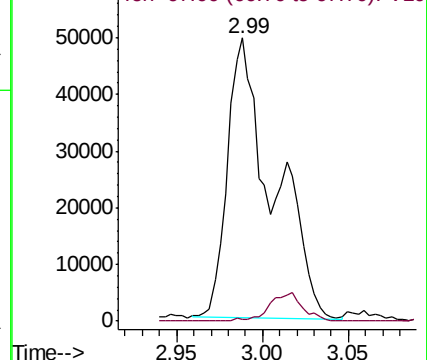
51 100

67 7.5 14.9 22.3#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.563 ppbv

RT: 3.17 min Scan# 72

Delta R.T. -0.01 min

Lab File: VL033373.D

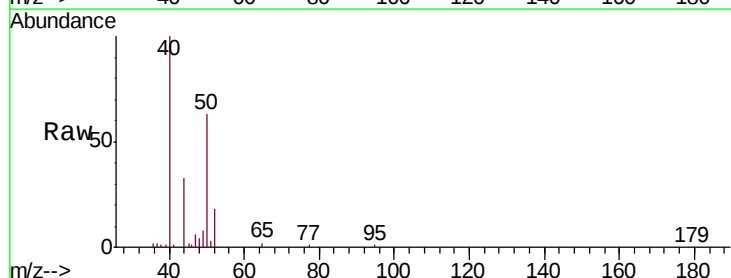
Acq: 19 Mar 2019 00:39

Tgt Ion: 50 Resp: 27903

Ion Ratio Lower Upper

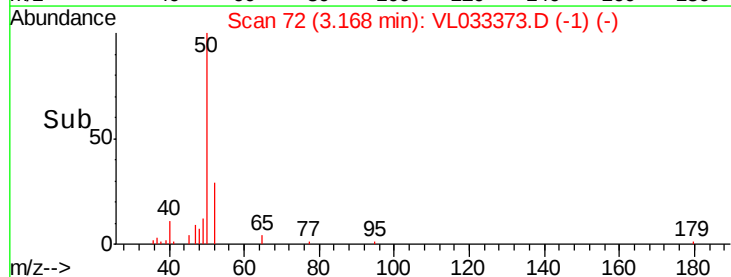
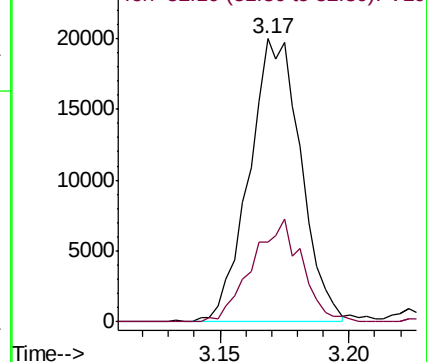
50 100

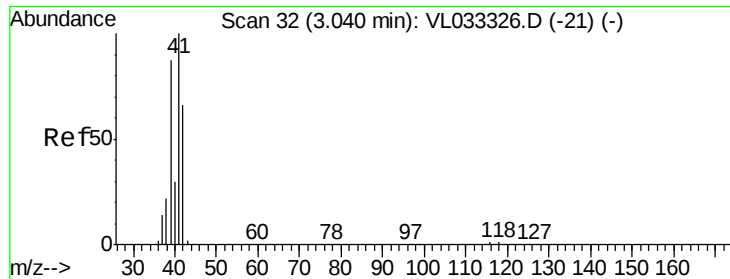
52 28.2 25.0 37.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.832 ppbv

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL033373.D

Acq: 19 Mar 2019 00:39

Instrument :

MSVOA_L

ClientSampleId :

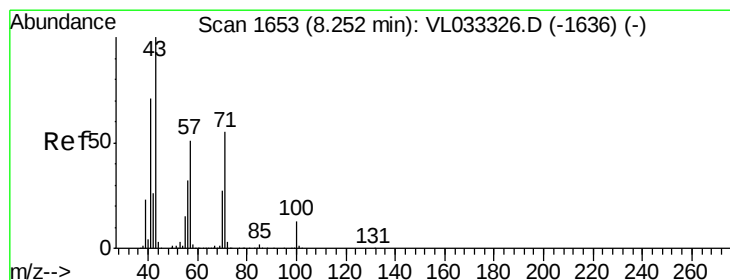
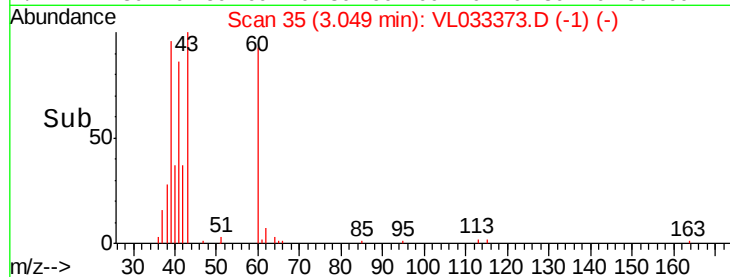
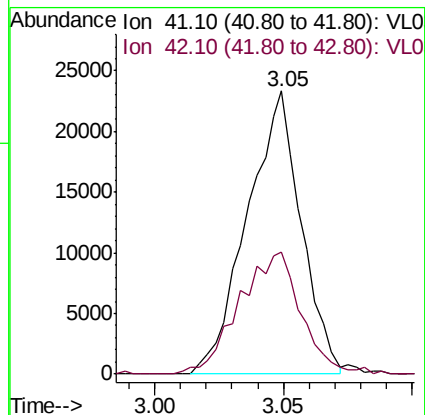
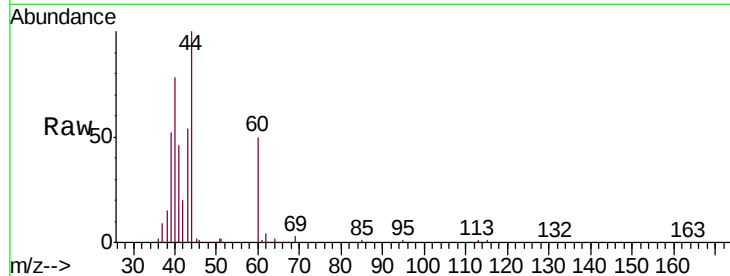
L1HA-IA2

Tgt Ion: 41 Resp: 33990

Ion Ratio Lower Upper

41 100

42 49.6 55.2 82.8#



#10

Heptane

Concen: 0.077 ppbv

RT: 8.24 min Scan# 1650

Delta R.T. -0.01 min

Lab File: VL033373.D

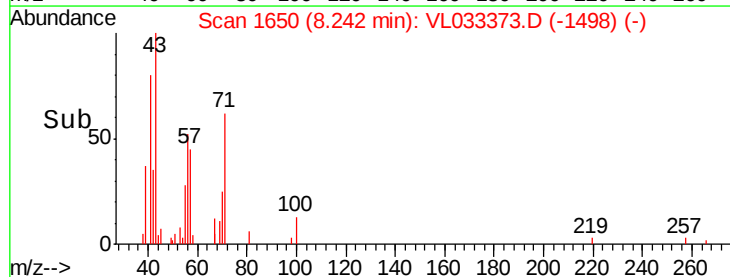
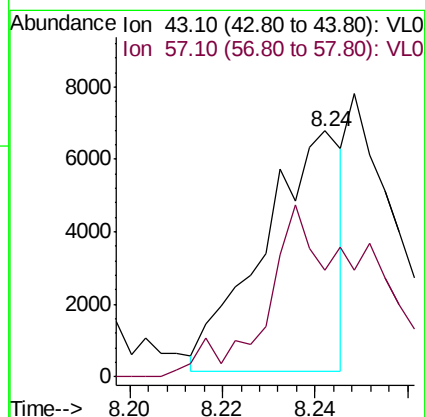
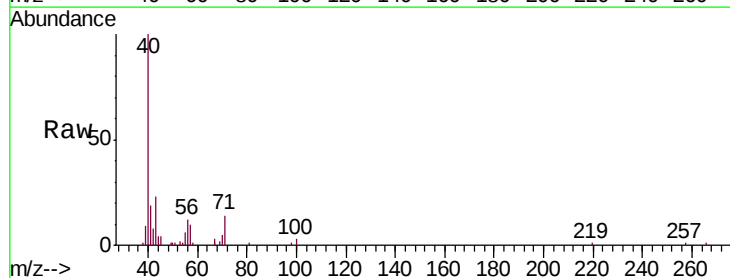
Acq: 19 Mar 2019 00:39

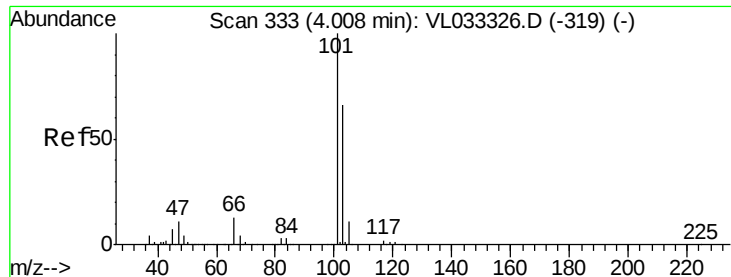
Tgt Ion: 43 Resp: 7813

Ion Ratio Lower Upper

43 100

57 96.5 40.4 60.6#

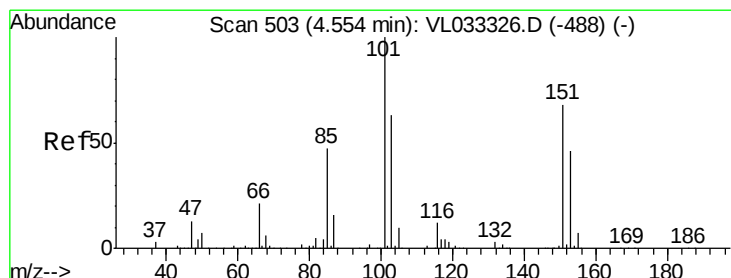
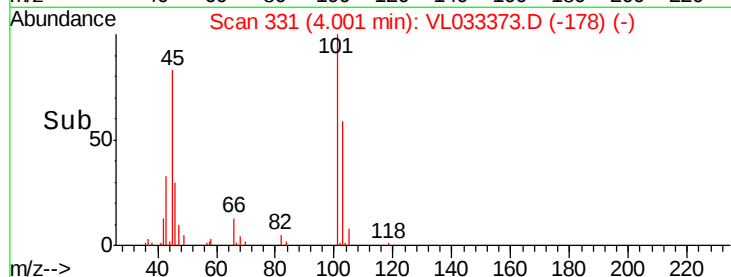
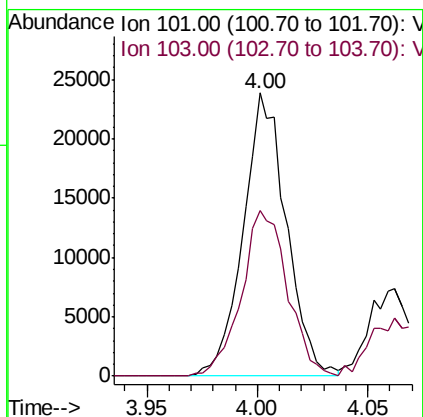
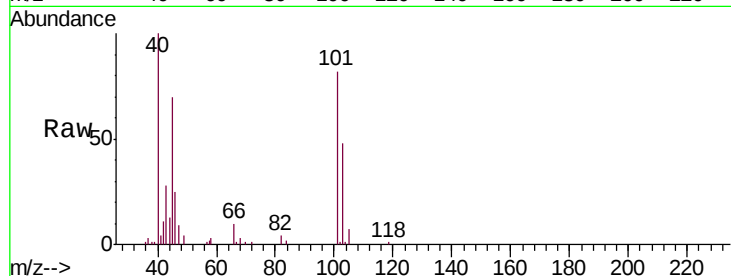




#11
 Trichlorofluoromethane
 Concen: 0.232 ppbv
 RT: 4.00 min Scan# 331
 Delta R.T. -0.01 min
 Lab File: VL033373.D
 Acq: 19 Mar 2019 00:39

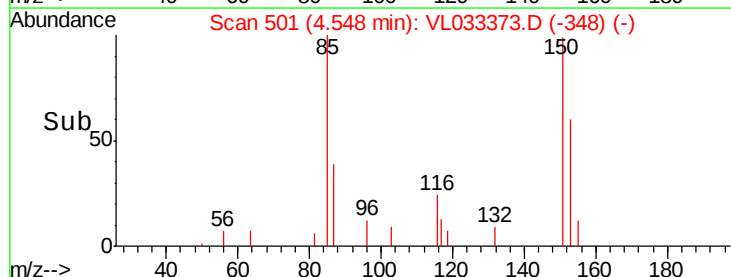
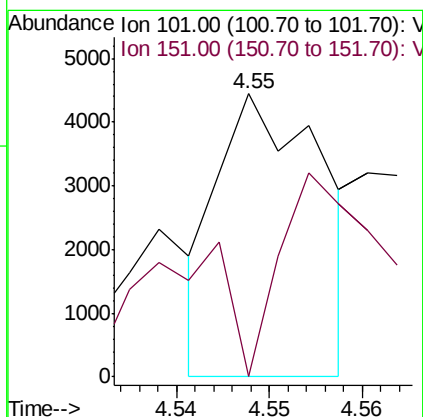
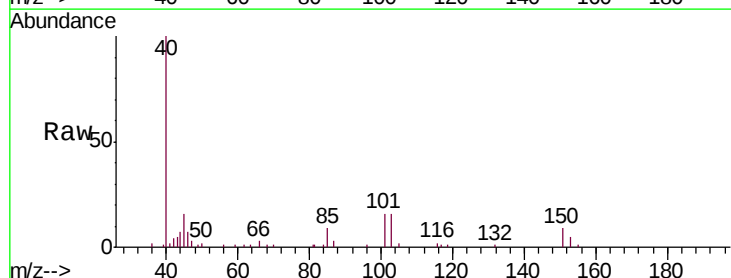
Instrument :
 MSVOA_L
 ClientSampleId :
 L1HA-IA2

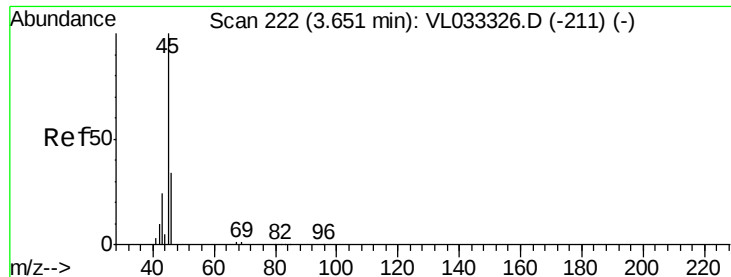
Tgt Ion:101 Resp: 32410
 Ion Ratio Lower Upper
 101 100
 103 58.7 52.9 79.3



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.038 ppbv
 RT: 4.55 min Scan# 501
 Delta R.T. -0.01 min
 Lab File: VL033373.D
 Acq: 19 Mar 2019 00:39

Tgt Ion:101 Resp: 3492
 Ion Ratio Lower Upper
 101 100
 151 0.0 56.3 84.5#

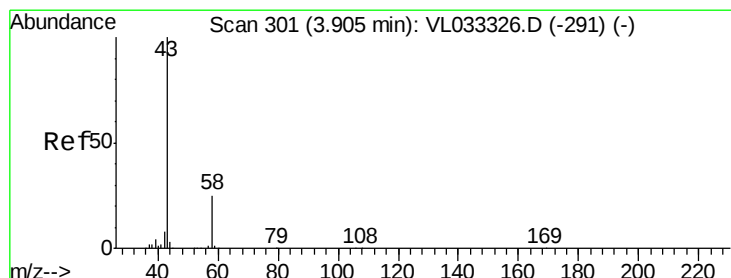
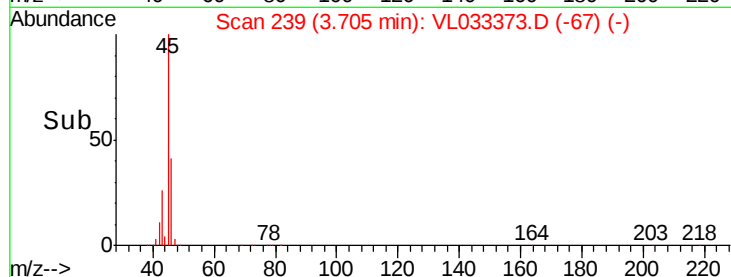
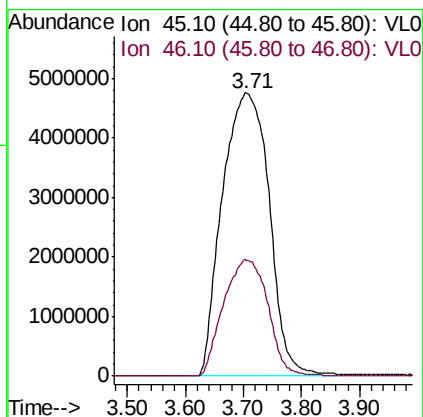
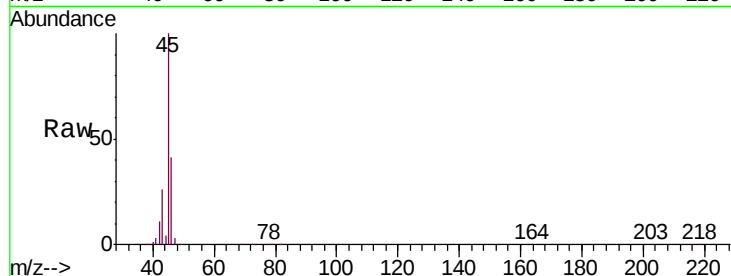




#13
Ethanol
Concen: 1374.801 ppbv
RT: 3.71 min Scan# 239
Delta R.T. 0.05 min
Lab File: VL033373.D
Acq: 19 Mar 2019 00:39

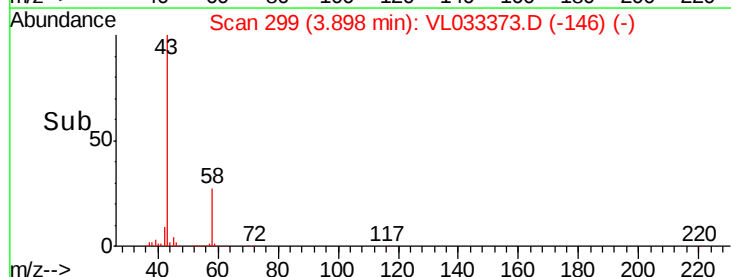
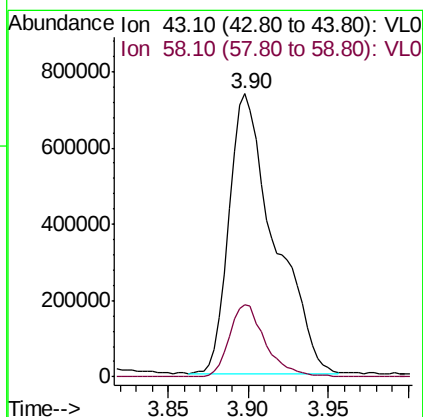
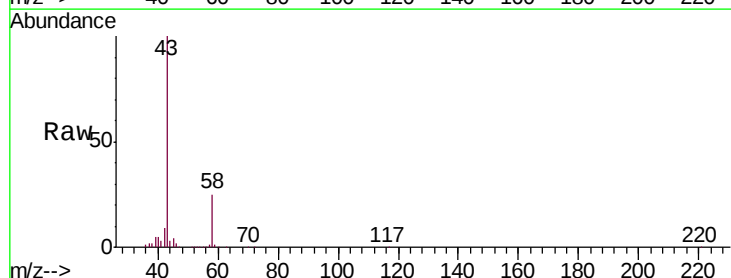
Instrument :
MSVOA_L
ClientSampleId :
L1HA-IA2

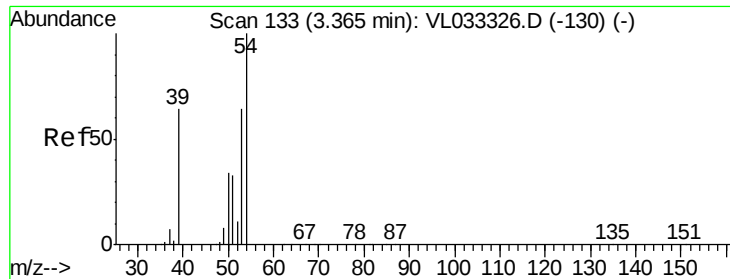
Tgt Ion: 45 Resp: 26761789
Ion Ratio Lower Upper
45 100
46 39.2 14.9 59.7



#15
Acetone
Concen: 11.502 ppbv
RT: 3.90 min Scan# 299
Delta R.T. -0.01 min
Lab File: VL033373.D
Acq: 19 Mar 2019 00:39

Tgt Ion: 43 Resp: 1424868
Ion Ratio Lower Upper
43 100
58 20.5 20.4 30.6

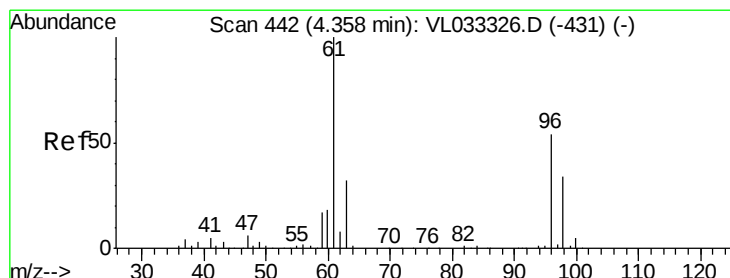
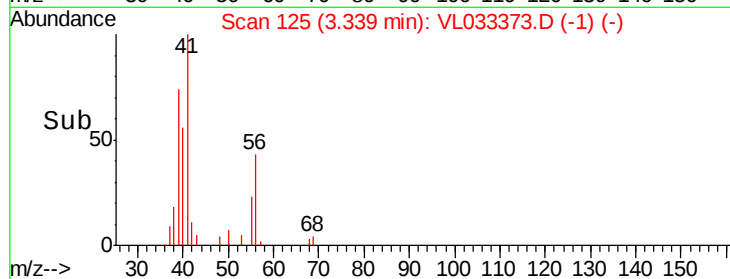
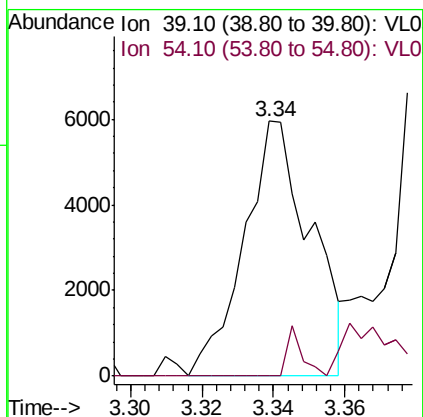
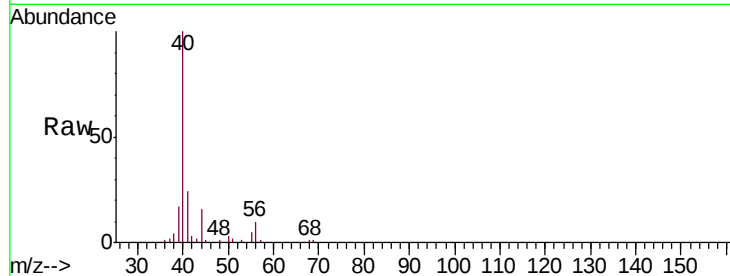




#16
1,3-Butadiene
Concen: 0.191 ppbv
RT: 3.34 min Scan# 125
Delta R.T. -0.03 min
Lab File: VL033373.D
Acq: 19 Mar 2019 00:39

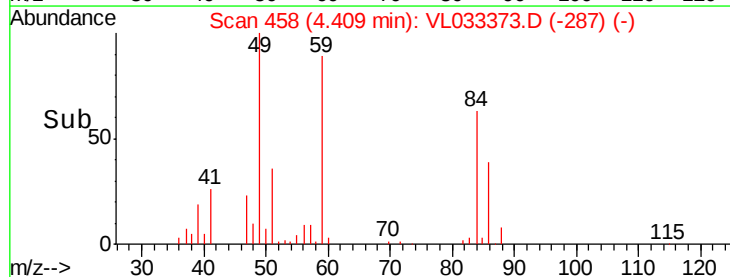
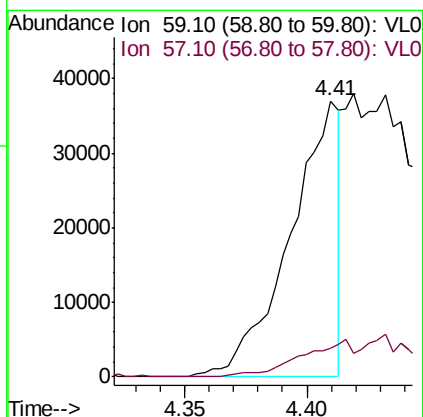
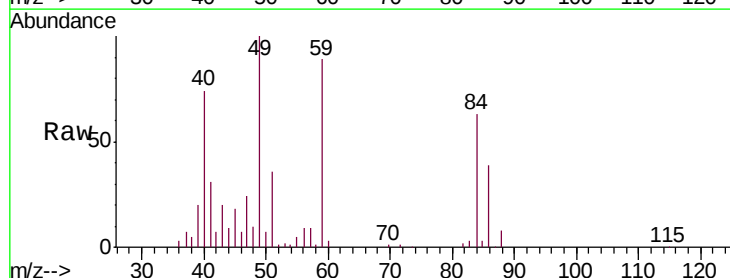
Instrument :
MSVOA_L
ClientSampleId :
L1HA-IA2

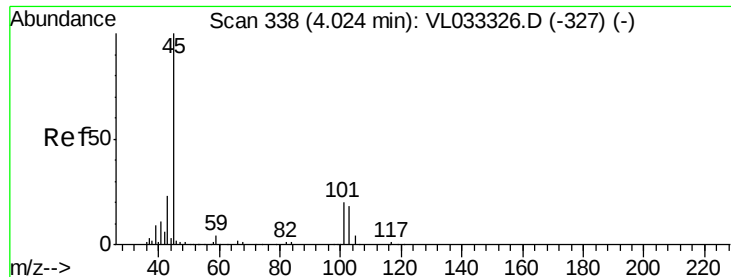
Tgt Ion: 39 Resp: 7686
Ion Ratio Lower Upper
39 100
54 4.3 76.8 115.2#



#17
tert-Butyl alcohol
Concen: 2.977 ppbv
RT: 4.41 min Scan# 458
Delta R.T. 0.05 min
Lab File: VL033373.D
Acq: 19 Mar 2019 00:39

Tgt Ion: 59 Resp: 51896
Ion Ratio Lower Upper
59 100
57 0.0 7.7 11.5#



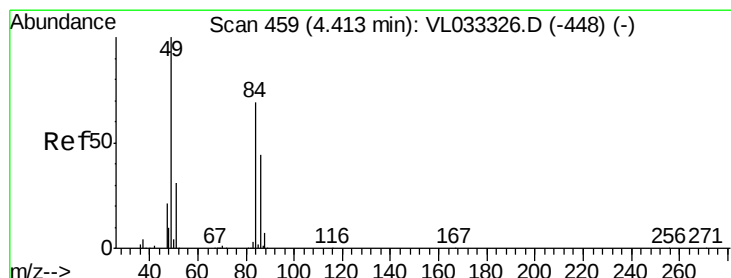
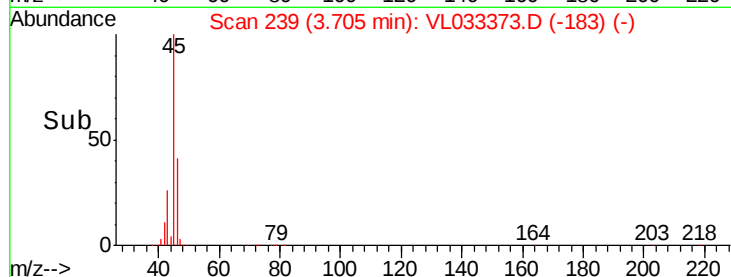
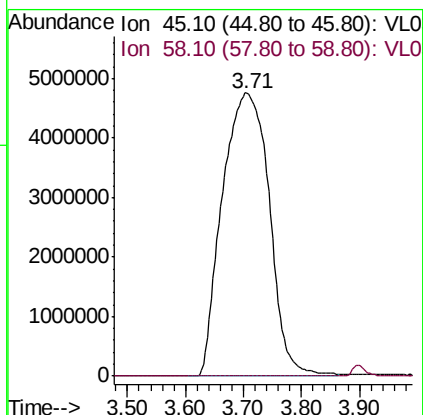
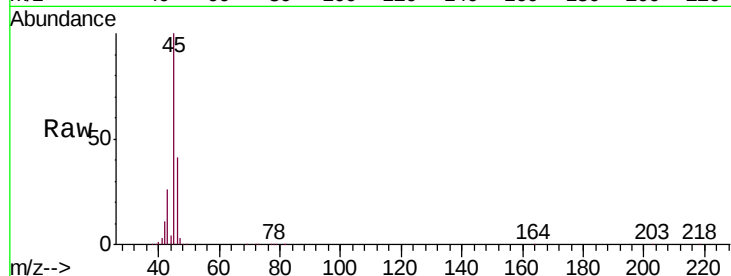


#19

Isopropyl Alcohol
 Concen: 454.142 ppbv
 RT: 3.71 min Scan# 239
 Delta R.T. -0.32 min
 Lab File: VL033373.D
 Acq: 19 Mar 2019 00:39

Instrument :
 MSVOA_L
 ClientSampleId :
 L1HA-IA2

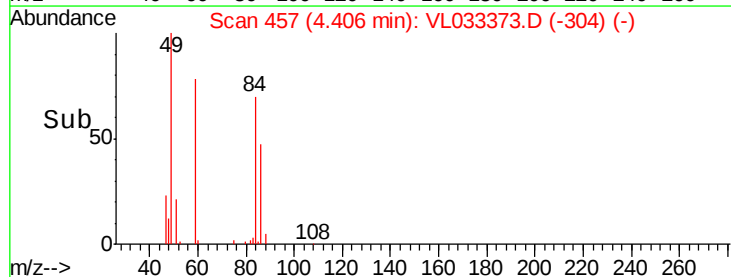
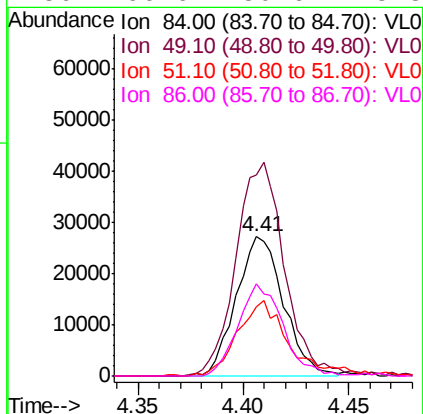
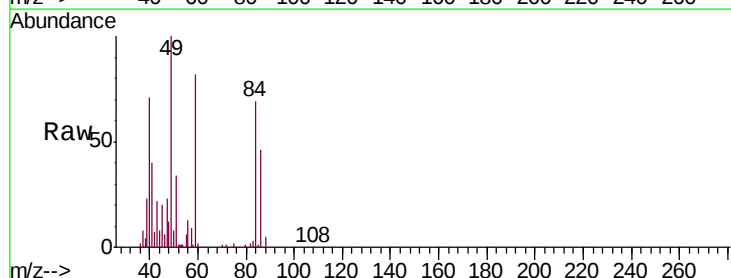
Tgt Ion: 45 Resp: 26761789
 Ion Ratio Lower Upper
 45 100
 58 1.1 1.5 2.3#

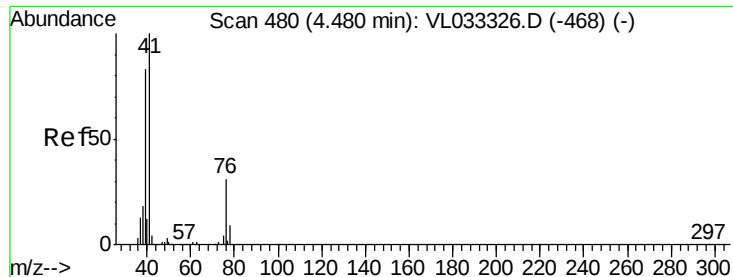


#20

Methylene Chloride
 Concen: 1.051 ppbv
 RT: 4.41 min Scan# 457
 Delta R.T. -0.01 min
 Lab File: VL033373.D
 Acq: 19 Mar 2019 00:39

Tgt Ion: 84 Resp: 42457
 Ion Ratio Lower Upper
 84 100
 49 143.3 115.4 173.0
 51 49.3 35.8 53.6
 86 66.6 50.6 75.8

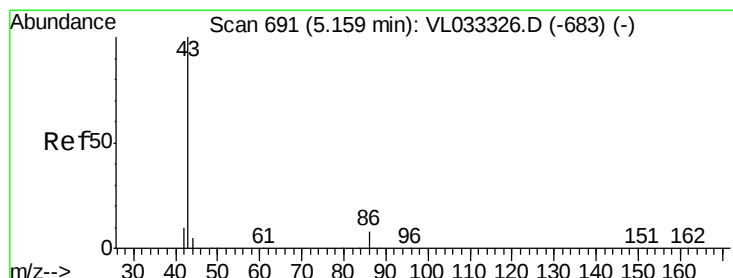
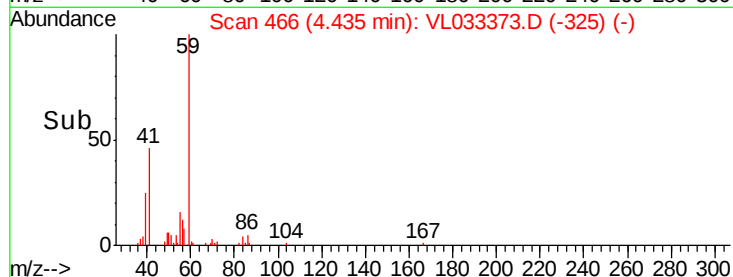
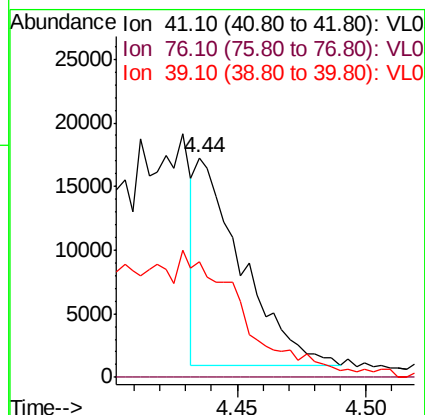
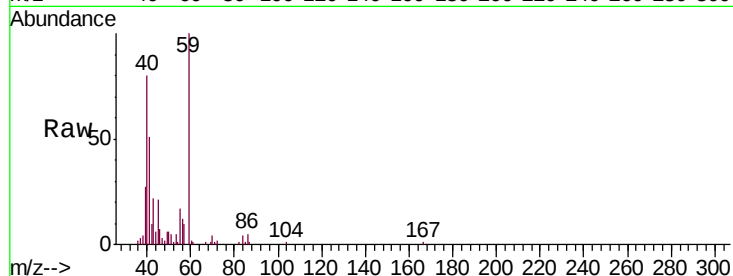




#21
 Allyl Chloride
 Concen: 0.338 ppbv
 RT: 4.44 min Scan# 466
 Delta R.T. -0.05 min
 Lab File: VL033373.D
 Acq: 19 Mar 2019 00:39

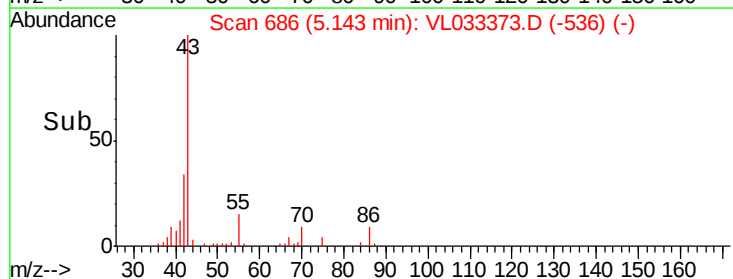
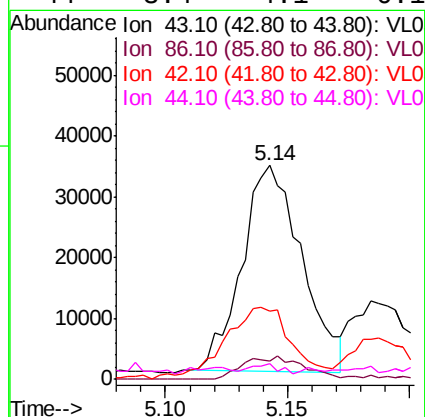
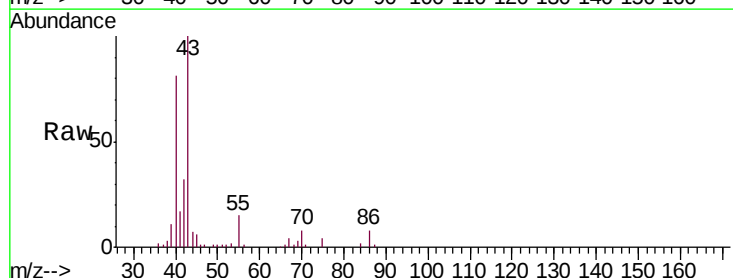
Instrument :
 MSVOA_L
 ClientSampleId :
 L1HA-IA2

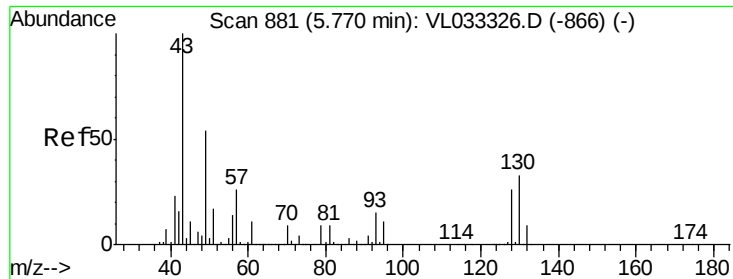
Tgt Ion	Ratio	Lower	Upper
41	100		
76	0.0	25.0	37.4#
39	185.2	65.9	98.9#



#23
 Vinyl Acetate
 Concen: 0.403 ppbv
 RT: 5.14 min Scan# 686
 Delta R.T. -0.02 min
 Lab File: VL033373.D
 Acq: 19 Mar 2019 00:39

Tgt Ion	Ratio	Lower	Upper
43	100		
86	8.5	6.2	9.2
42	28.6	8.1	12.1#
44	3.4	4.1	6.1#





#25

Ethyl Acetate

Concen: 0.586 ppbv

RT: 5.77 min Scan# 880

Delta R.T. -0.00 min

Lab File: VL033373.D

Acq: 19 Mar 2019 00:39

Instrument :

MSVOA_L

ClientSampleId :

L1HA-IA2

Tgt Ion: 43 Resp: 105460

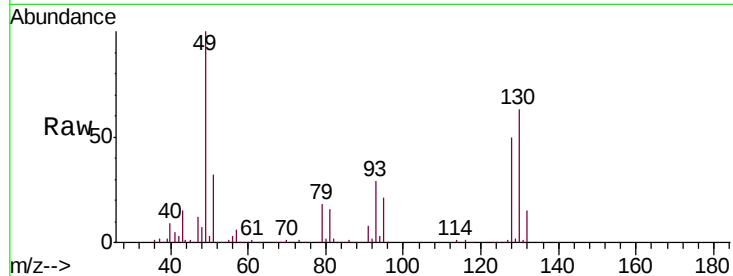
Ion Ratio Lower Upper

43 100

45 14.3 7.9 11.9#

61 9.1 7.4 11.2

70 7.0 5.7 8.5



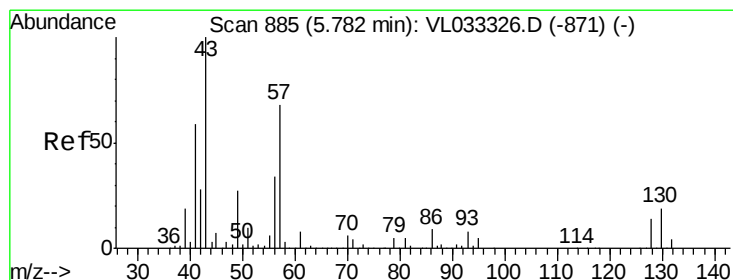
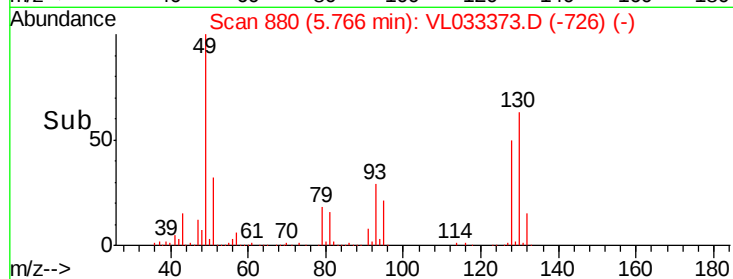
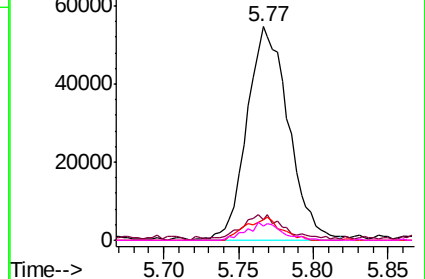
Abundance

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: 0.654 ppbv

RT: 5.78 min Scan# 883

Delta R.T. -0.01 min

Lab File: VL033373.D

Acq: 19 Mar 2019 00:39

Tgt Ion: 57 Resp: 52623

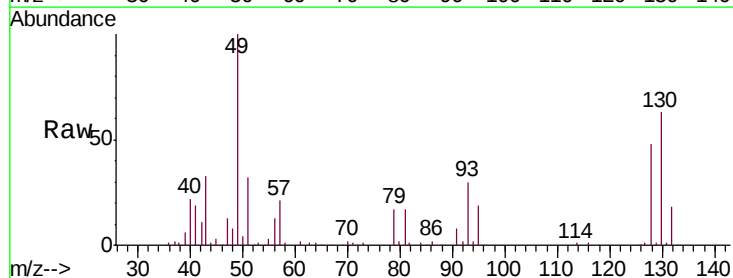
Ion Ratio Lower Upper

57 100

41 98.3 70.5 105.7

43 202.9 181.8 272.8

56 56.3 42.2 63.2



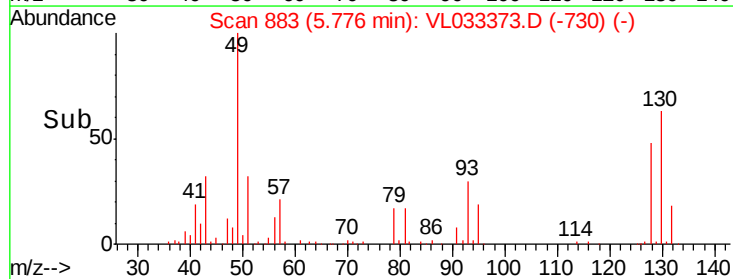
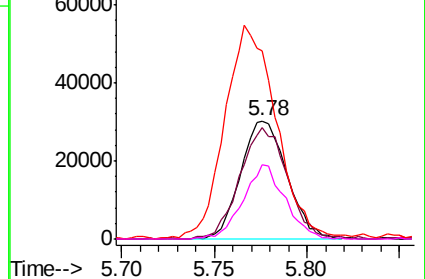
Abundance

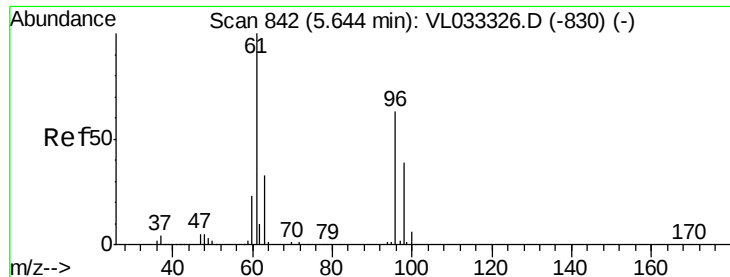
Ion 57.10 (56.80 to 57.80): VL0

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



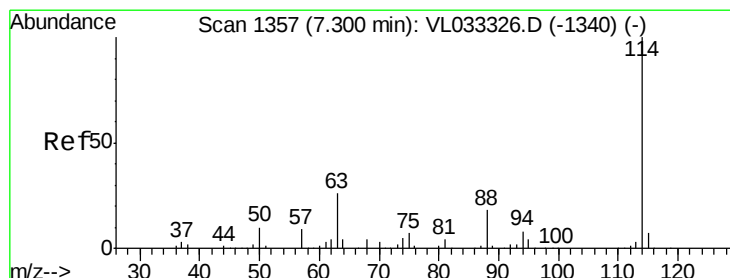
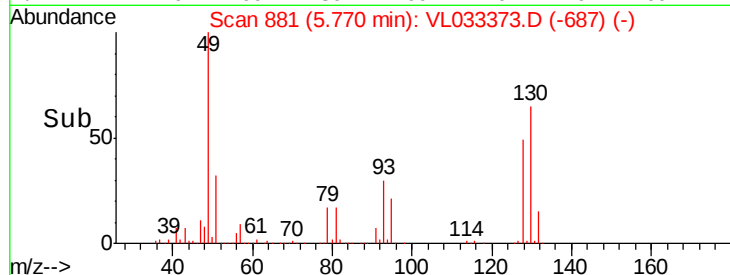
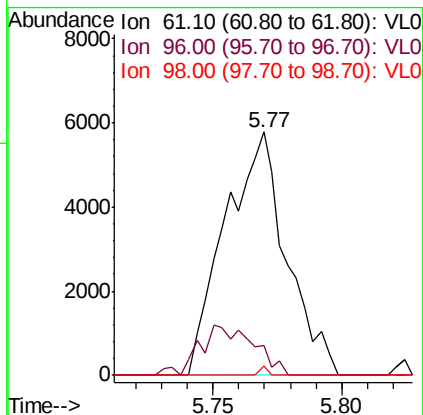
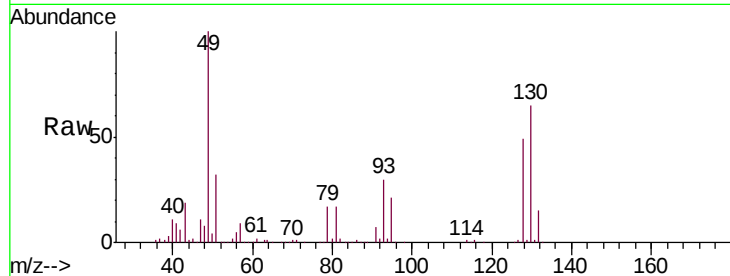


#31

cis-1,2-Dichloroethene
Concen: 0.119 ppbv
RT: 5.77 min Scan# 881
Delta R.T. 0.13 min
Lab File: VL033373.D
Acq: 19 Mar 2019 00:39

Instrument :
MSVOA_L
ClientSampleId :
L1HA-IA2

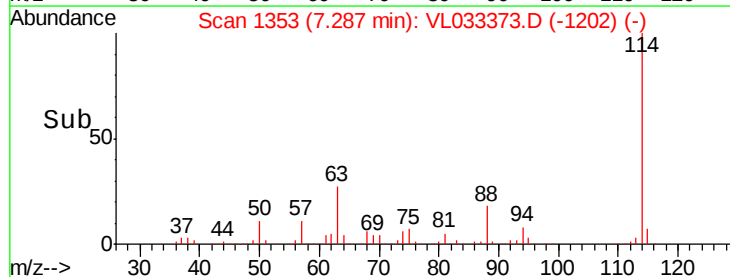
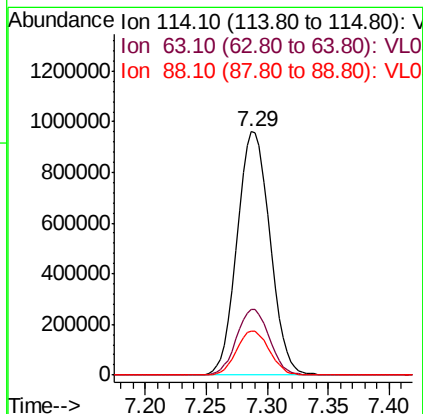
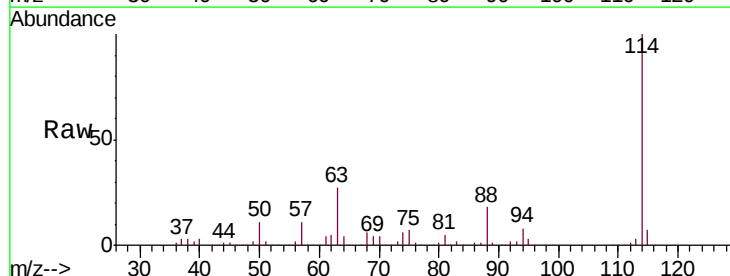
Tgt Ion: 61 Resp: 9598
Ion Ratio Lower Upper
61 100
96 12.4 50.3 75.5#
98 3.7 31.5 47.3#

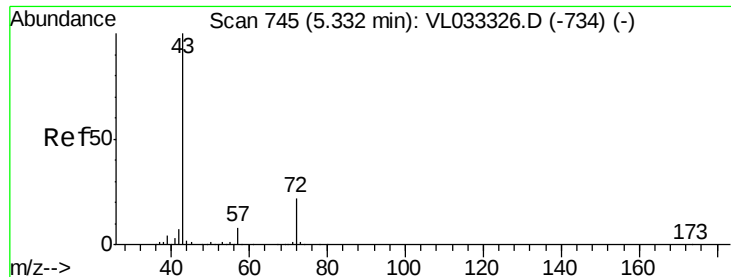


#33

1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1353
Delta R.T. -0.01 min
Lab File: VL033373.D
Acq: 19 Mar 2019 00:39

Tgt Ion: 114 Resp: 1793461
Ion Ratio Lower Upper
114 100
63 27.1 21.4 32.2
88 18.1 14.5 21.7





#34

2-Butanone

Concen: 0.360 ppbv

RT: 5.33 min Scan# 744

Delta R.T. -0.00 min

Lab File: VL033373.D

Acq: 19 Mar 2019 00:39

Instrument :

MSVOA_L

ClientSampleId :

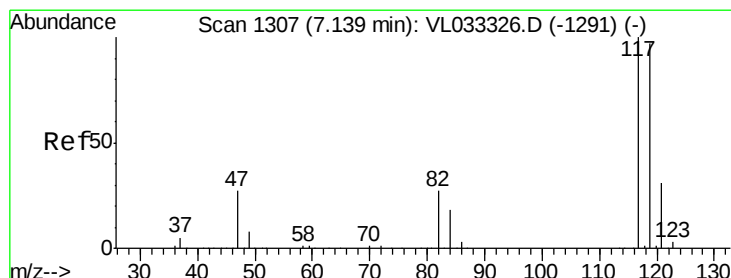
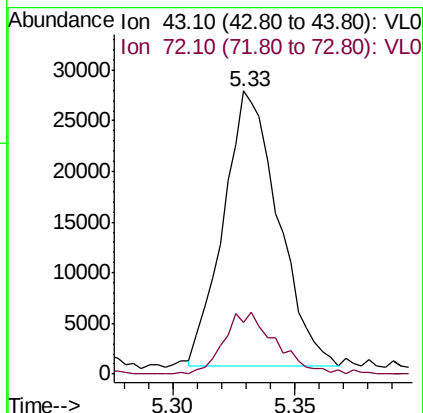
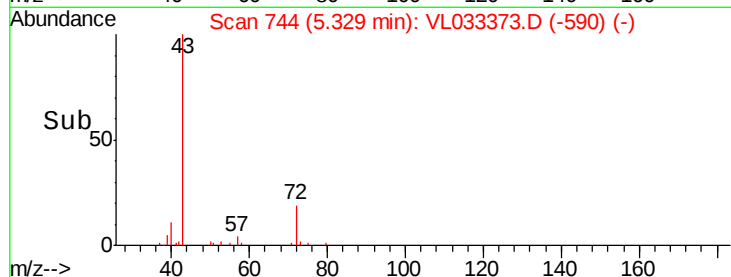
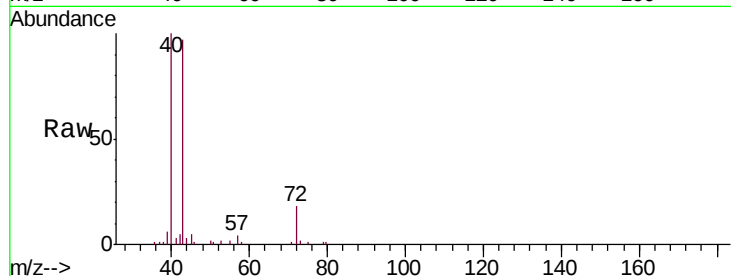
L1HA-IA2

Tgt Ion: 43 Resp: 42427

Ion Ratio Lower Upper

43 100

72 21.7 17.7 26.5



#35

Carbon Tetrachloride

Concen: 0.041 ppbv

RT: 7.13 min Scan# 1303

Delta R.T. -0.01 min

Lab File: VL033373.D

Acq: 19 Mar 2019 00:39

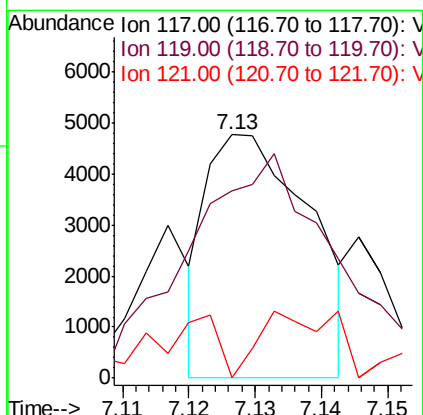
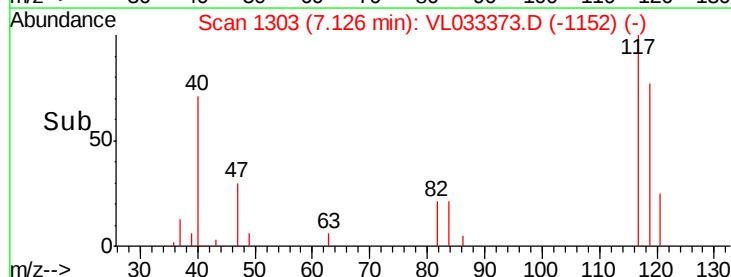
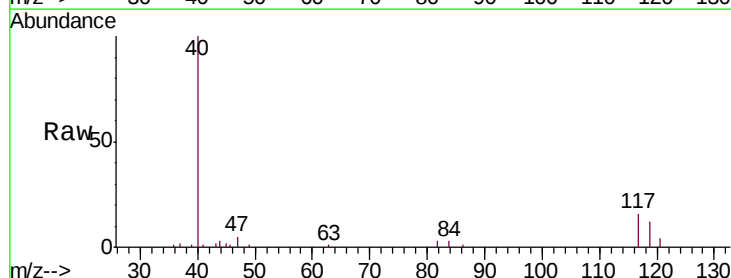
Tgt Ion: 117 Resp: 5167

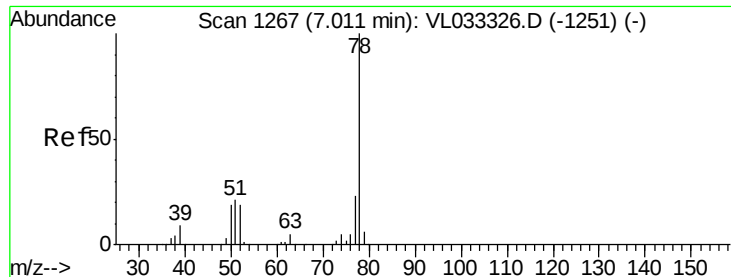
Ion Ratio Lower Upper

117 100

119 52.1 77.4 116.0#

121 0.0 24.9 37.3#

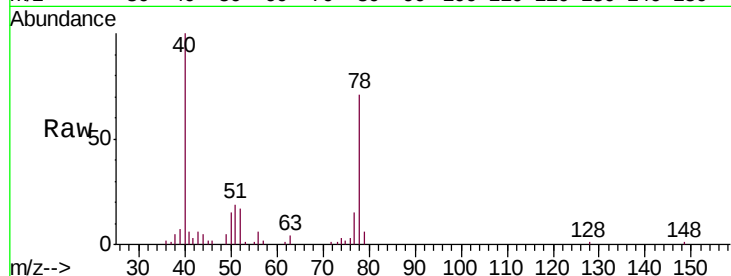




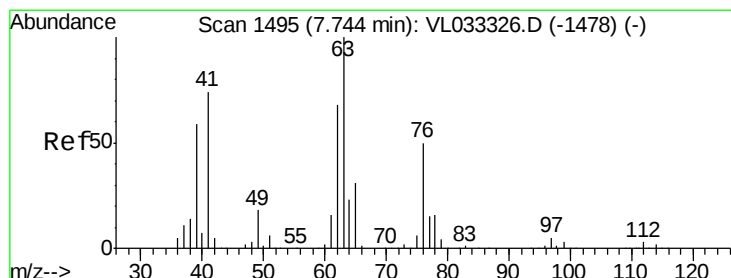
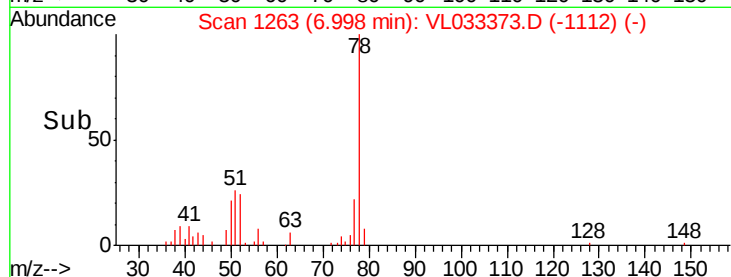
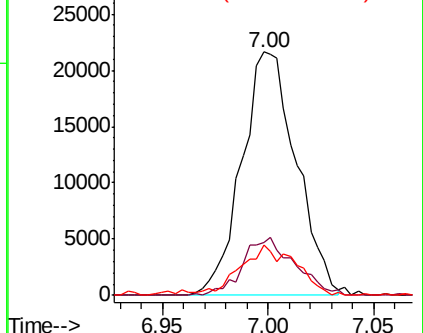
#36
Benzene
Concen: 0.242 ppbv
RT: 7.00 min Scan# 1263
Delta R.T. -0.01 min
Lab File: VL033373.D
Acq: 19 Mar 2019 00:39

Instrument :
MSVOA_L
ClientSampled :
L1HA-IA2

Tgt Ion: 78 Resp: 38809
Ion Ratio Lower Upper
78 100
77 21.7 18.1 27.1
50 19.6 15.2 22.8

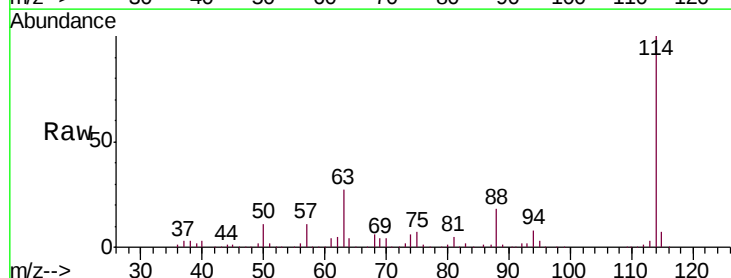


Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

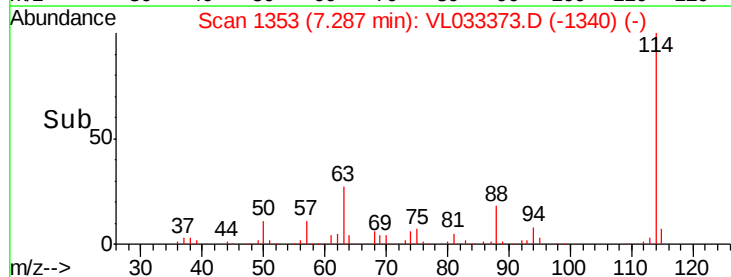
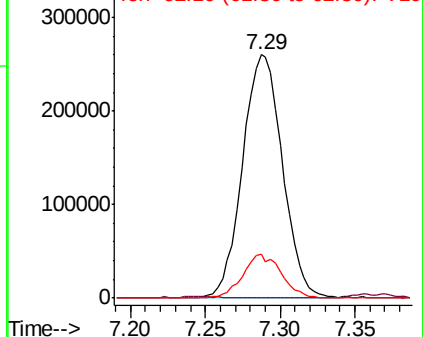


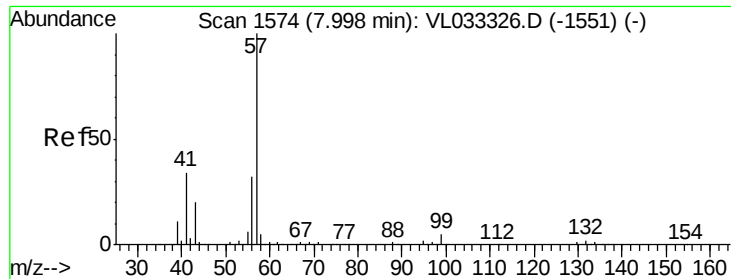
#39
1,2-Dichloropropane
Concen: 8.044 ppbv
RT: 7.29 min Scan# 1353
Delta R.T. -0.46 min
Lab File: VL033373.D
Acq: 19 Mar 2019 00:39

Tgt Ion: 63 Resp: 483517
Ion Ratio Lower Upper
63 100
41 0.0 59.5 89.3#
62 18.1 54.7 82.1#



Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 62.10 (61.80 to 62.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 0.059 ppbv

RT: 7.99 min Scan# 1571

Delta R.T. -0.01 min

Lab File: VL033373.D

Acq: 19 Mar 2019 00:39

Instrument :

MSVOA_L

ClientSampleId :

L1HA-IA2

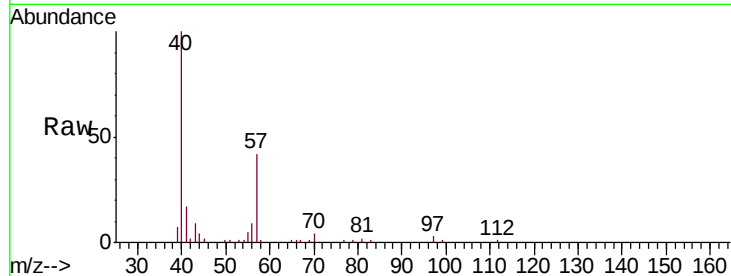
Tgt Ion: 57 Resp: 15758

Ion Ratio Lower Upper

57 100

41 79.0 26.0 39.0#

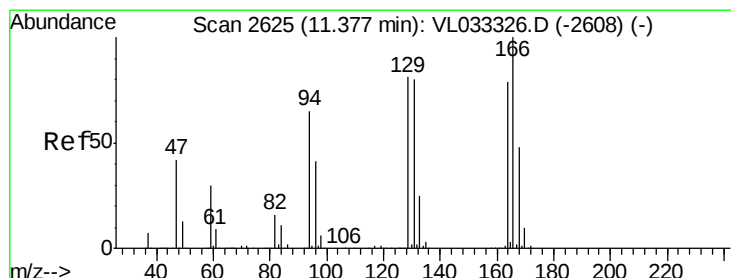
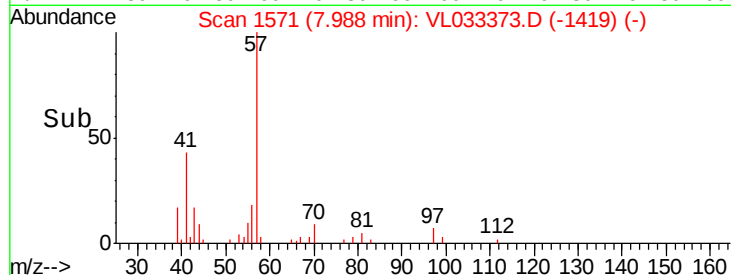
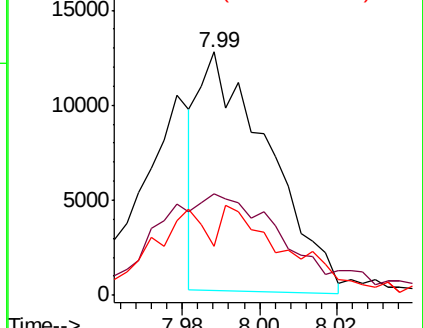
56 71.3 24.6 36.8#



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



#52

Tetrachloroethene

Concen: 0.160 ppbv

RT: 11.38 min Scan# 2625

Delta R.T. -0.00 min

Lab File: VL033373.D

Acq: 19 Mar 2019 00:39

Tgt Ion: 164 Resp: 10731

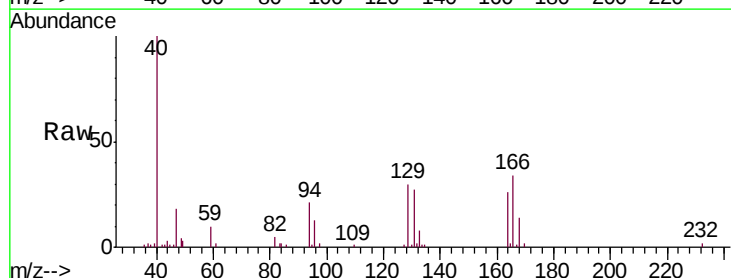
Ion Ratio Lower Upper

164 100

166 113.8 101.5 152.3

129 102.1 82.2 123.2

131 96.5 81.1 121.7

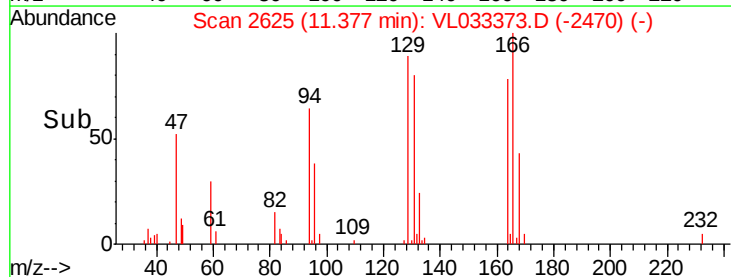
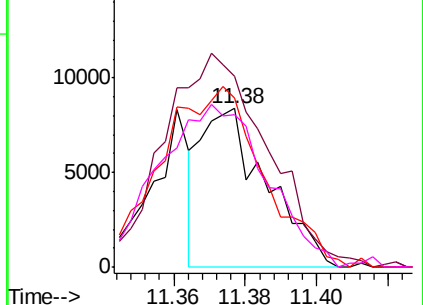


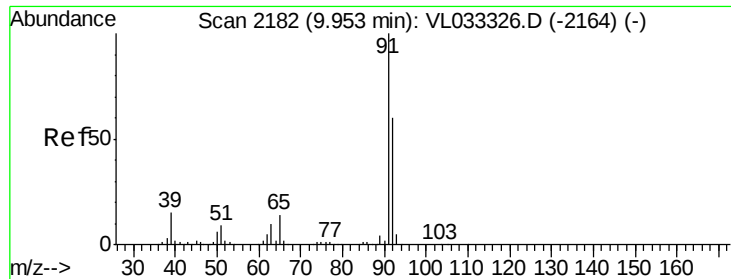
Abundance Ion 163.90 (163.60 to 164.60): V

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: 4.544 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.01 min

Lab File: VL033373.D

Acq: 19 Mar 2019 00:39

Instrument :

MSVOA_L

ClientSampleId :

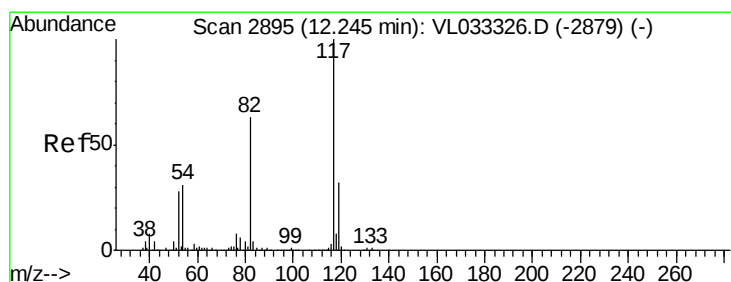
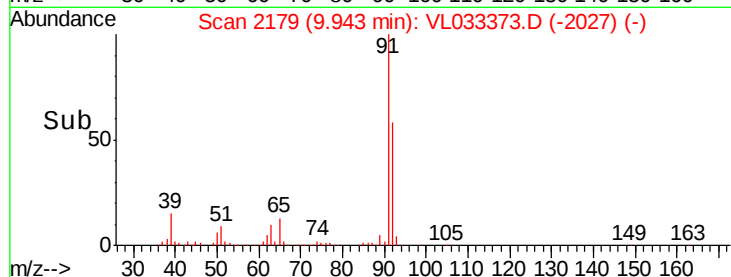
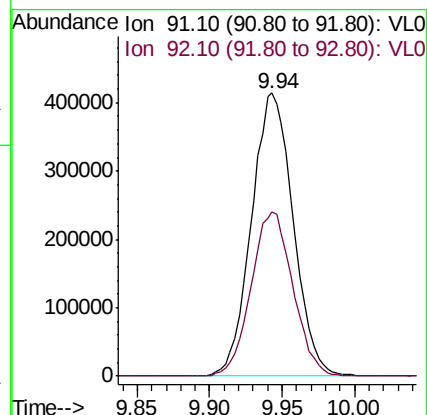
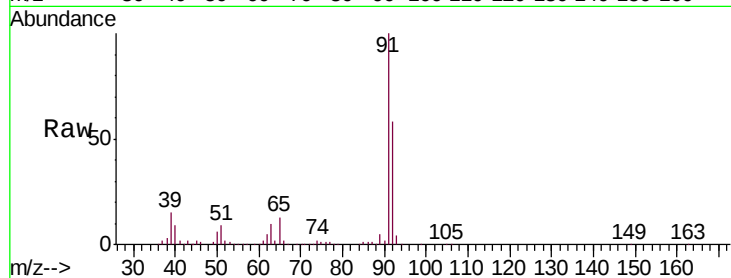
L1HA-IA2

Tgt Ion: 91 Resp: 828669

Ion Ratio Lower Upper

91 100

92 58.2 47.4 71.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2894

Delta R.T. -0.00 min

Lab File: VL033373.D

Acq: 19 Mar 2019 00:39

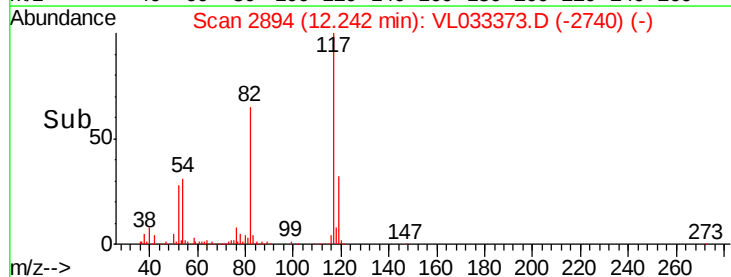
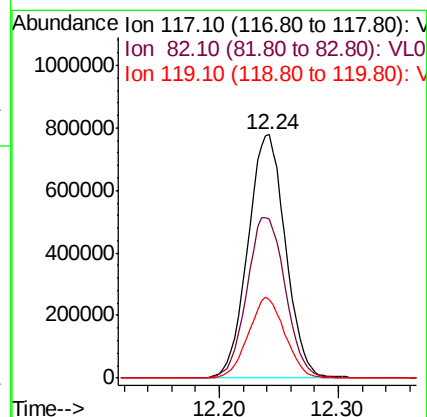
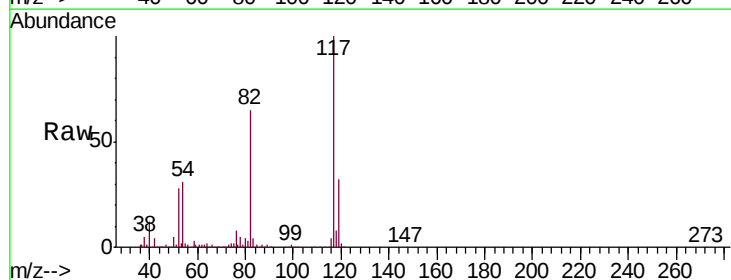
Tgt Ion: 117 Resp: 1700187

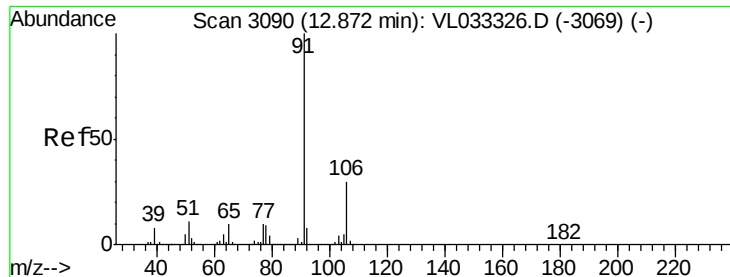
Ion Ratio Lower Upper

117 100

82 67.9 53.4 80.2

119 32.4 27.3 40.9





#58

Ethyl Benzene

Concen: 0.044 ppbv

RT: 12.86 min Scan# 3086

Delta R.T. -0.01 min

Lab File: VL033373.D

Acq: 19 Mar 2019 00:39

Instrument :

MSVOA_L

ClientSampled :

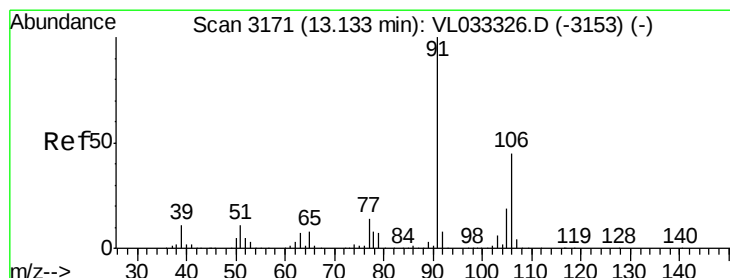
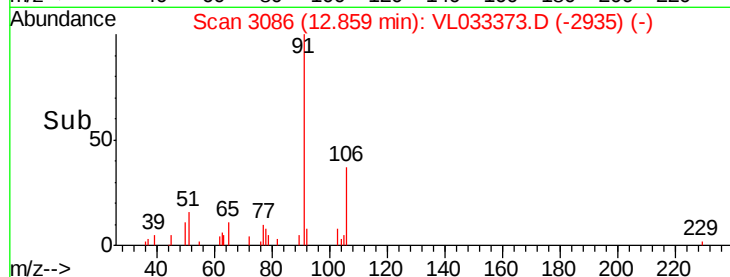
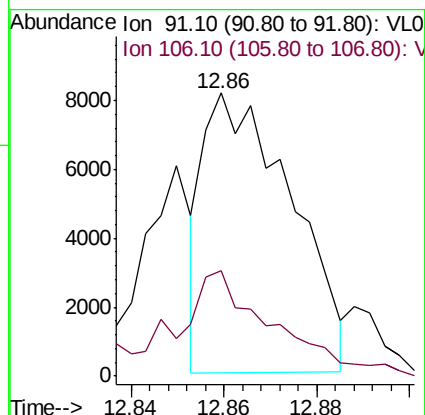
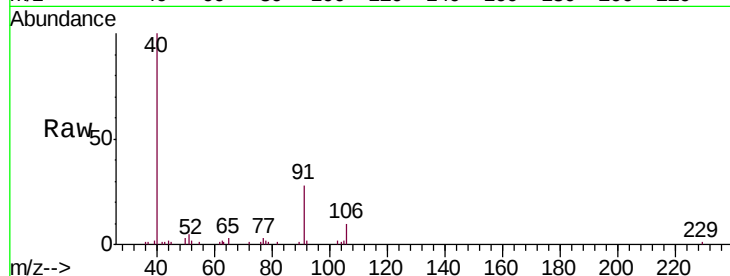
L1HA-IA2

Tgt Ion: 91 Resp: 10695

Ion Ratio Lower Upper

91 100

106 40.6 24.2 36.2#



#59

m/p-Xylene

Concen: 0.051 ppbv

RT: 13.13 min Scan# 3169

Delta R.T. -0.01 min

Lab File: VL033373.D

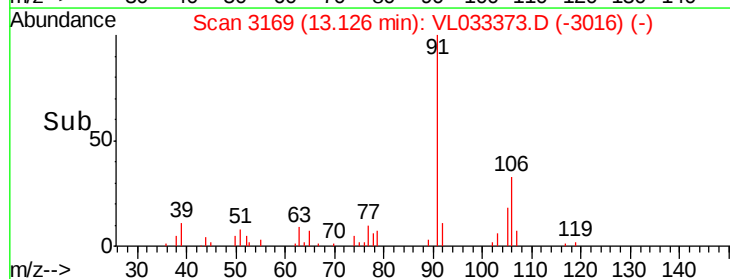
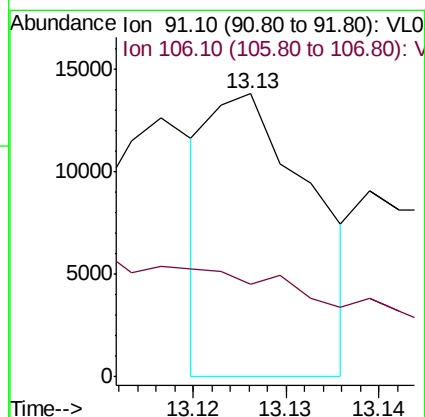
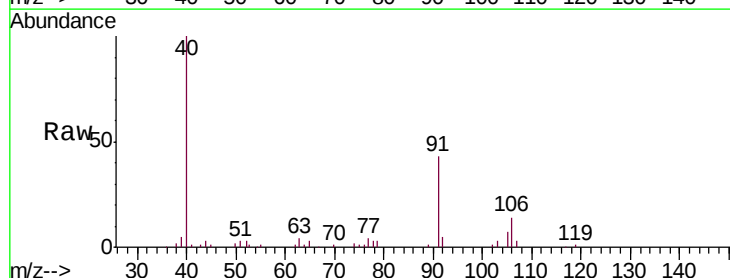
Acq: 19 Mar 2019 00:39

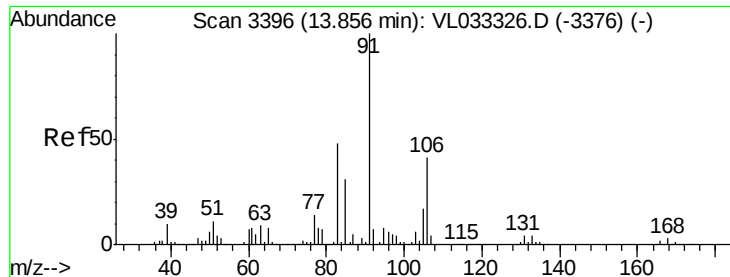
Tgt Ion: 91 Resp: 10463

Ion Ratio Lower Upper

91 100

106 0.0 0.0 0.0

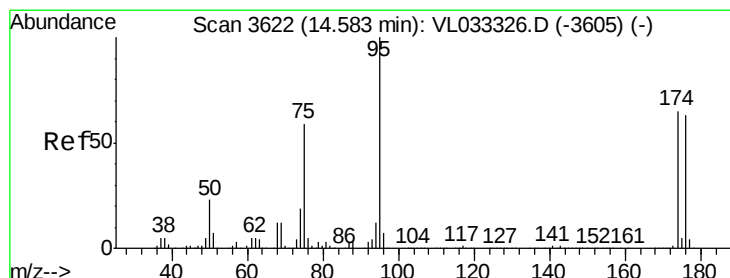
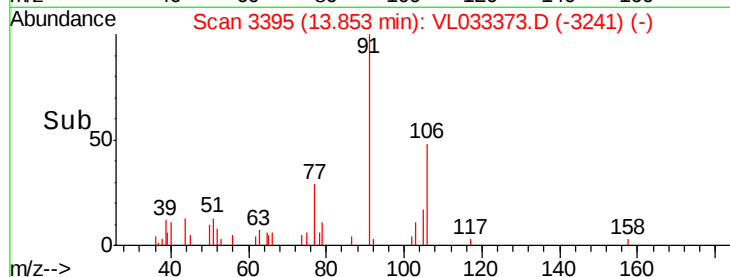
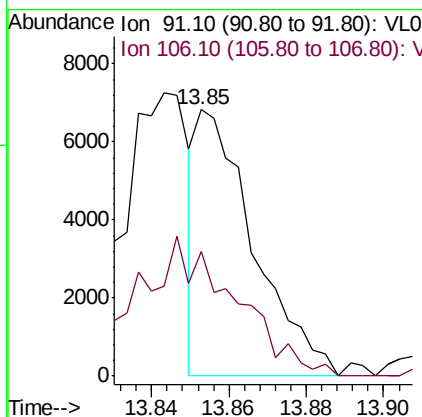
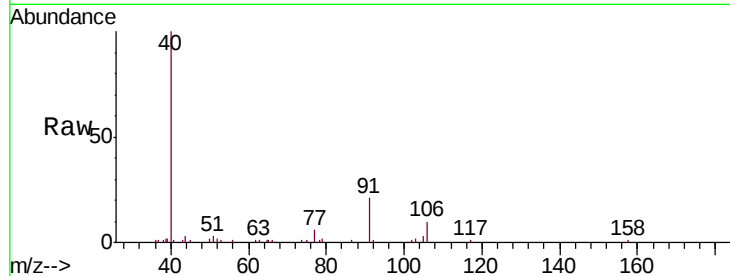




#60
o-Xylene
Concen: 0.035 ppbv
RT: 13.85 min Scan# 3395
Delta R.T. -0.00 min
Lab File: VL033373.D
Acq: 19 Mar 2019 00:39

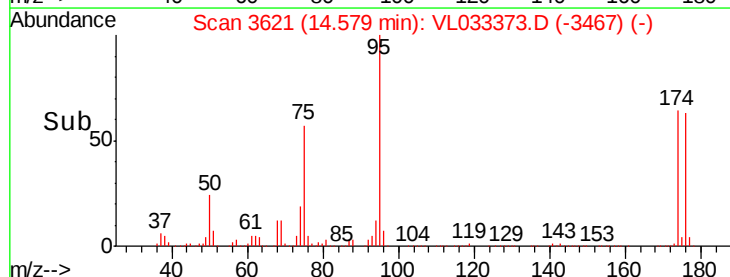
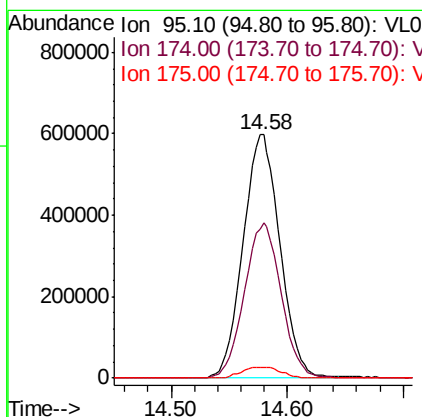
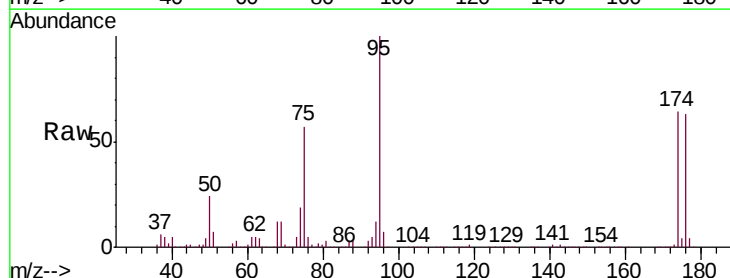
Instrument :
MSVOA_L
ClientSampleId :
L1HA-IA2

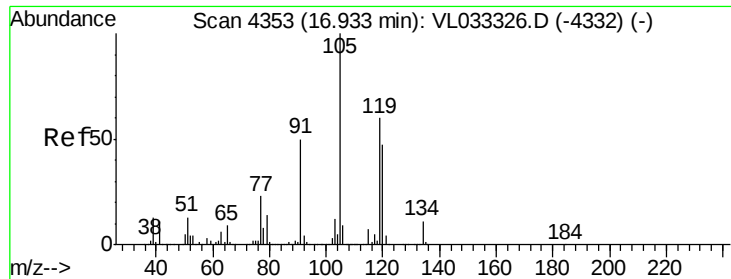
Tgt Ion: 91 Resp: 7002
Ion Ratio Lower Upper
91 100
106 0.0 21.3 63.9#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.486 ppbv
RT: 14.58 min Scan# 3621
Delta R.T. -0.00 min
Lab File: VL033373.D
Acq: 19 Mar 2019 00:39

Tgt Ion: 95 Resp: 1321041
Ion Ratio Lower Upper
95 100
174 64.3 51.5 77.3
175 4.8 3.8 5.6





#74
 1,2,4-Trimethylbenzene
 Concen: 0.067 ppbv
 RT: 16.93 min Scan# 4351
 Delta R.T. -0.01 min
 Lab File: VL033373.D
 Acq: 19 Mar 2019 00:39

Instrument :
 MSVOA_L
 ClientSampleId :
 L1HA-IA2

Tgt Ion:	105	Resp:	15914
Ion	Ratio	Lower	Upper
105	100		
120	39.2	37.4	56.2
91	11.4	41.0	61.4#
77	16.2	18.5	27.7#

