

Data File : VL033370.D
Acq On : 18 Mar 2019 22:40
Operator : SY/AP
Sample : K1952-01DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
L1HA-IA1

Quant Time: Mar 19 06:56:31 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	717495	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1582450	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.24	117	1488625	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	1182426	10.72	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	107.20%

Target Compounds

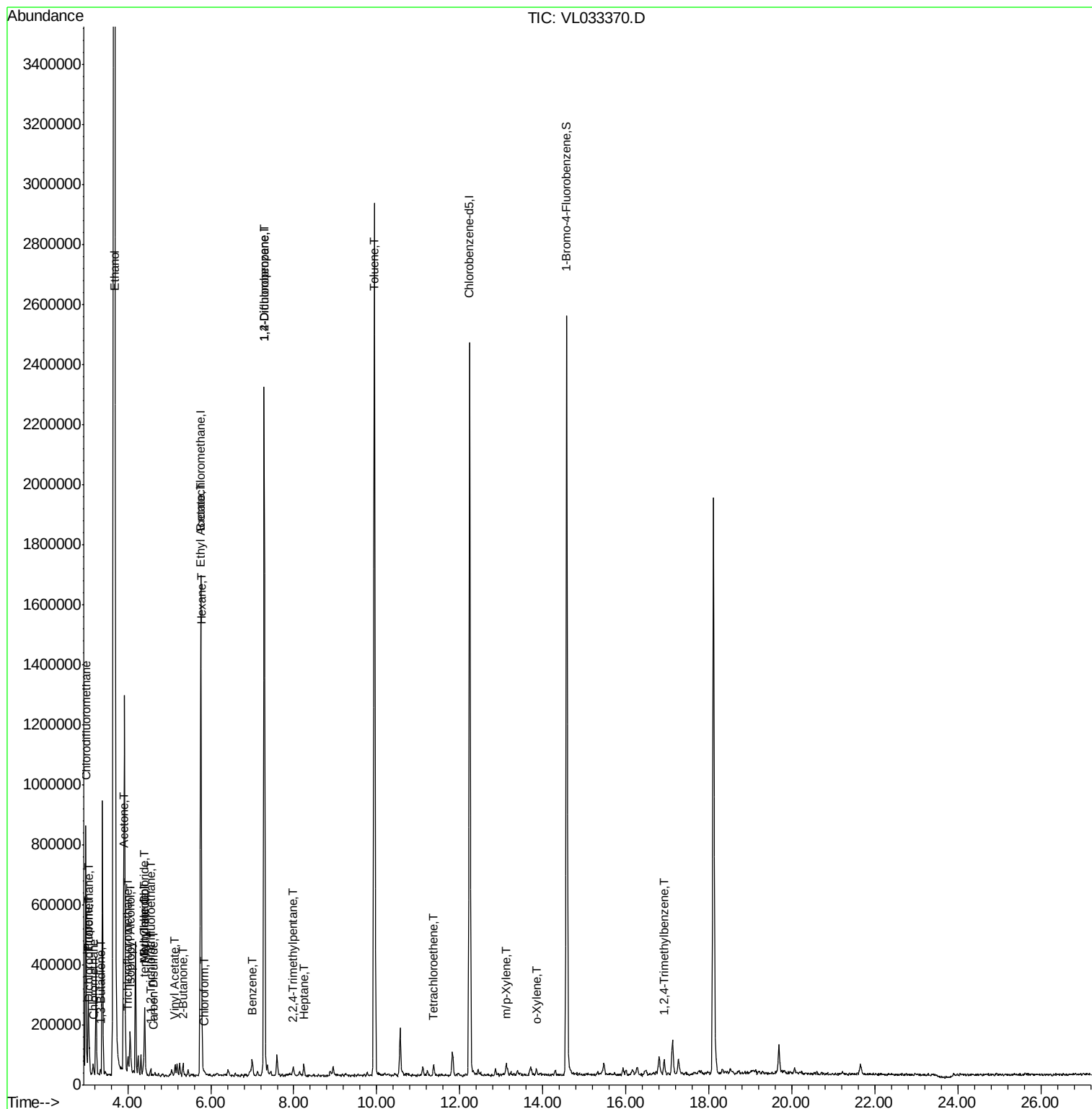
						Qvalue
2) Dichlorodifluoromethane	3.08	85	59184	0.469	ppbv	96
3) Chlorodifluoromethane	2.99	51	72445	0.880	ppbv #	75
4) Chloromethane	3.17	50	24784	0.556	ppbv	89
9) Propene	3.05	41	45308	1.232	ppbv #	72
10) Heptane	8.24	43	13253	0.145	ppbv	98
11) Trichlorofluoromethane	4.00	101	31779	0.253	ppbv	95
12) 1,1,2-Trichlorotrifluoroet	4.55	101	3355	0.040	ppbv #	14
13) Ethanol	3.68	45	9442979	538.815	ppbv	100
15) Acetone	3.90	43	494013	4.429	ppbv	94
16) 1,3-Butadiene	3.34	39	6542	0.181	ppbv #	22
17) tert-Butyl alcohol	4.39	59	26370	1.680	ppbv #	74
19) Isopropyl Alcohol	4.05	45	124287	2.343	ppbv #	95
20) Methylene Chloride	4.41	84	66328	1.823	ppbv	92
21) Allyl Chloride	4.41	41	1889	0.035	ppbv #	18
23) Vinyl Acetate	5.14	43	25579	0.198	ppbv #	75
25) Ethyl Acetate	5.77	43	99383	0.613	ppbv #	93
26) Hexane	5.78	57	77178	1.065	ppbv #	60
27) Carbon Disulfide	4.62	76	2537	0.030	ppbv #	81
29) Chloroform	5.85	83	5182	0.044	ppbv	92
34) 2-Butanone	5.33	43	41185	0.396	ppbv	96
36) Benzene	7.00	78	22090	0.156	ppbv	97
39) 1,2-Dichloropropane	7.29	63	427787	8.066	ppbv #	24
44) 2,2,4-Trimethylpentane	7.99	57	21383	0.091	ppbv #	72
52) Tetrachloroethene	11.37	164	4169	0.071	ppbv #	76
53) Toluene	9.94	91	2291474	14.240	ppbv	99
59) m/p-Xylene	13.13	91	5836	0.032	ppbv #	100
60) o-Xylene	13.85	91	6174	0.035	ppbv #	7
74) 1,2,4-Trimethylbenzene	16.93	105	30731	0.149	ppbv #	73

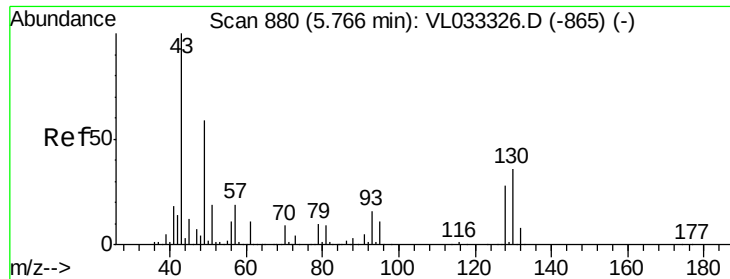
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033370.D

Acq: 18 Mar 2019 22:40

Instrument :

MSVOA_L

ClientSampleId :

L1HA-IA1

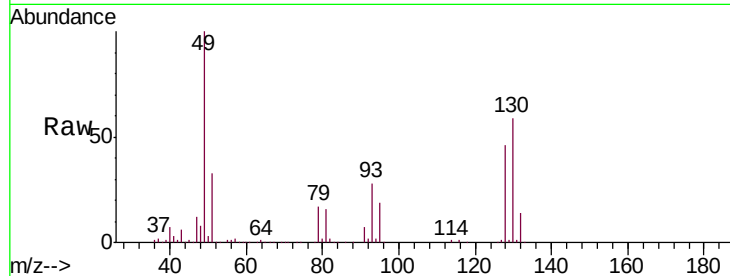
Tgt Ion: 49 Resp: 717495

Ion Ratio Lower Upper

49 100

128 46.6 23.5 70.6

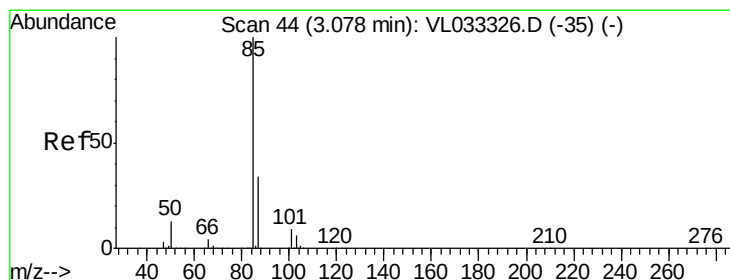
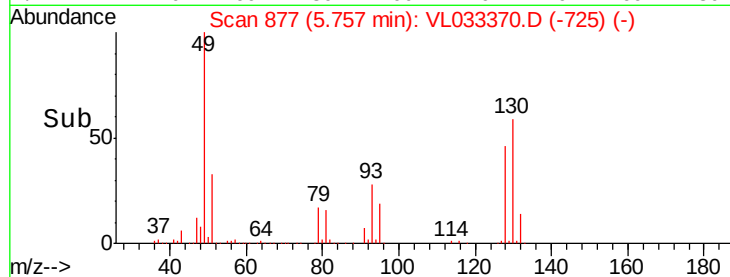
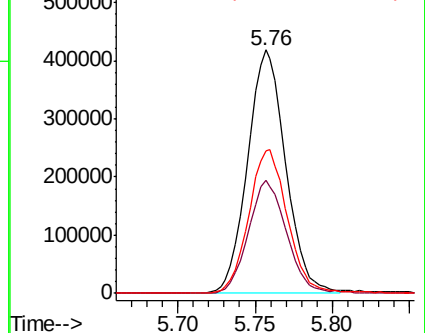
130 60.5 30.1 90.3



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: 0.469 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033370.D

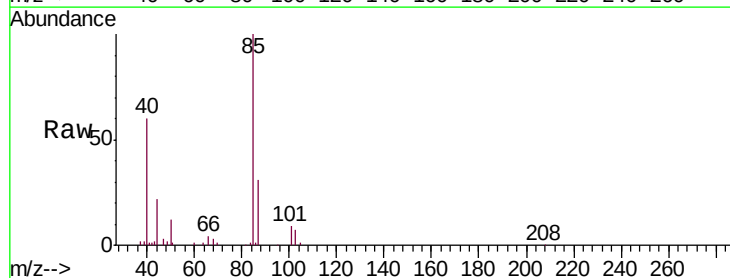
Acq: 18 Mar 2019 22:40

Tgt Ion: 85 Resp: 59184

Ion Ratio Lower Upper

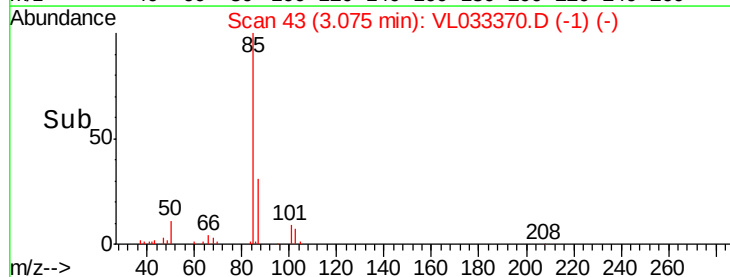
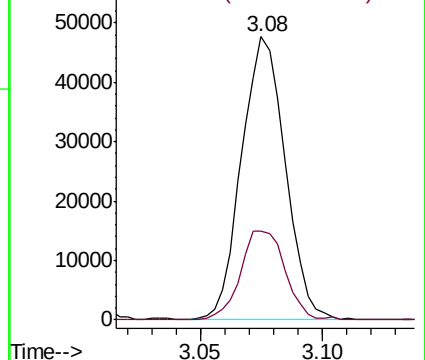
85 100

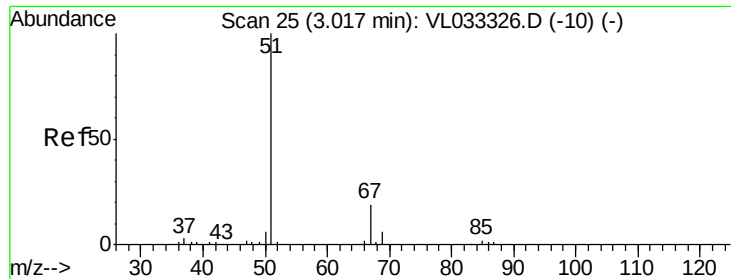
87 31.3 26.9 40.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

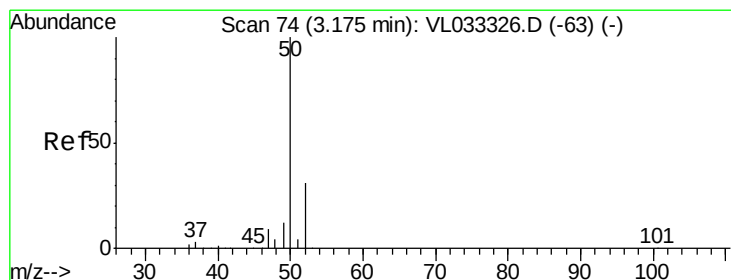
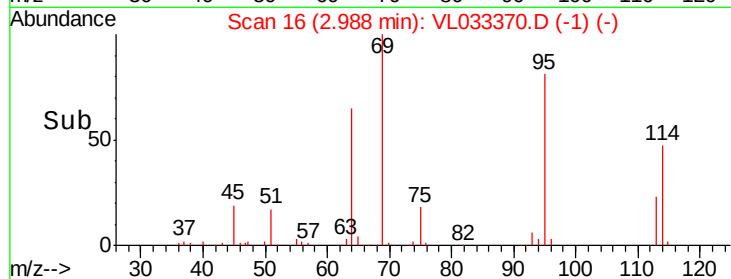
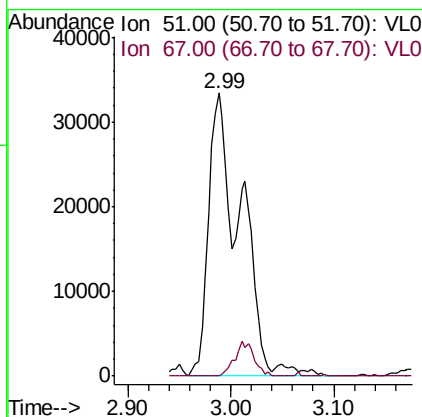
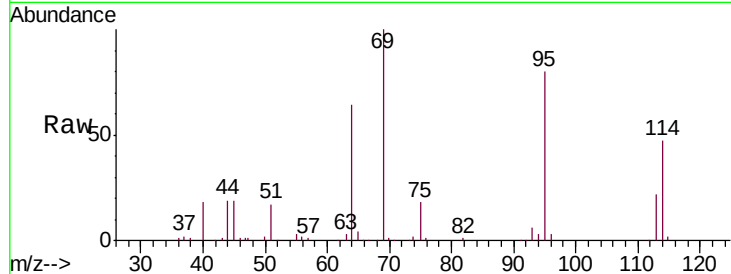




#3
 Chlorodifluoromethane
 Concen: 0.880 ppbv
 RT: 2.99 min Scan# 16
 Delta R.T. -0.03 min
 Lab File: VL033370.D
 Acq: 18 Mar 2019 22:40

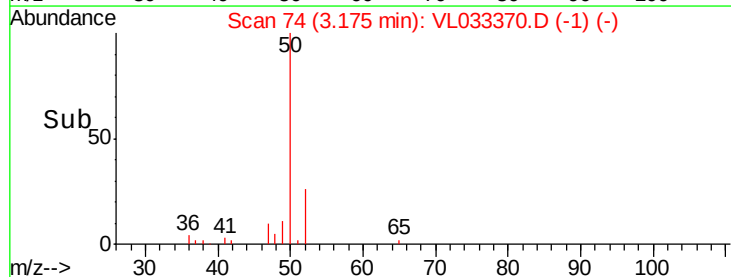
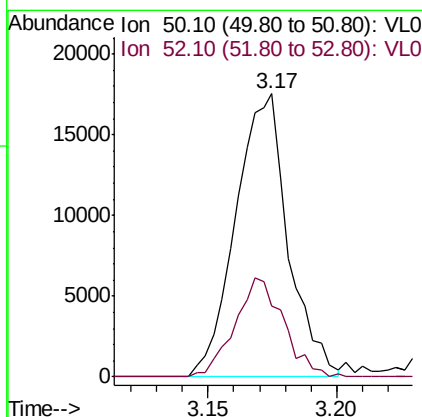
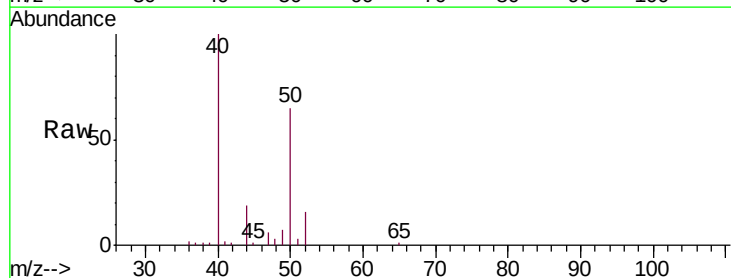
Instrument :
 MSVOA_L
 ClientSampleId :
 L1HA-IA1

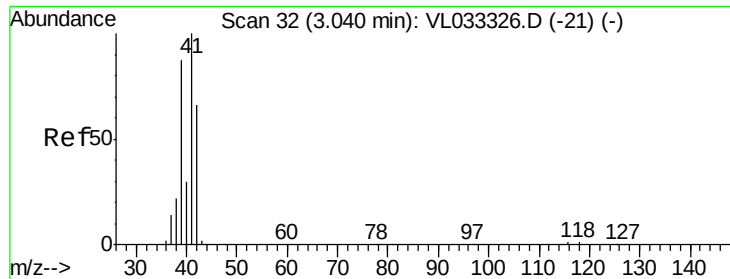
Tgt Ion: 51 Resp: 72445
 Ion Ratio Lower Upper
 51 100
 67 7.3 14.9 22.3#



#4
 Chloromethane
 Concen: 0.556 ppbv
 RT: 3.17 min Scan# 74
 Delta R.T. -0.00 min
 Lab File: VL033370.D
 Acq: 18 Mar 2019 22:40

Tgt Ion: 50 Resp: 24784
 Ion Ratio Lower Upper
 50 100
 52 25.1 25.0 37.6





#9

Propene

Concen: 1.232 ppbv

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL033370.D

Acq: 18 Mar 2019 22:40

Instrument :

MSVOA_L

ClientSampleId :

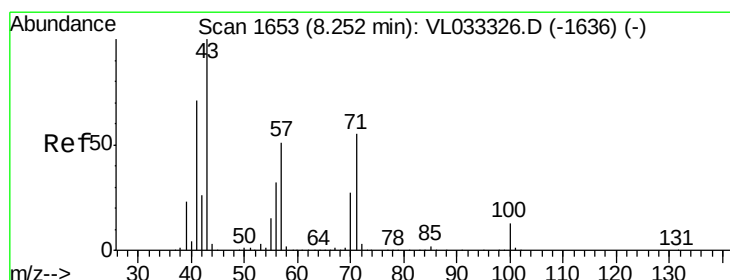
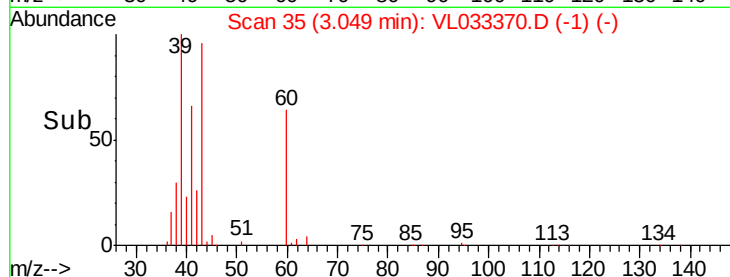
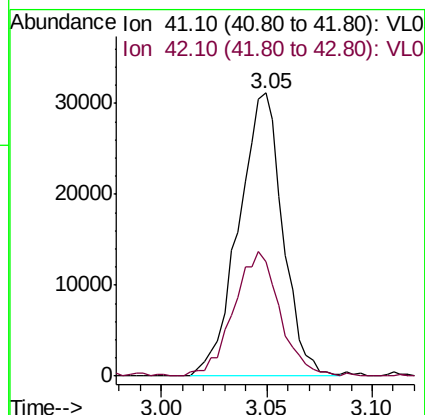
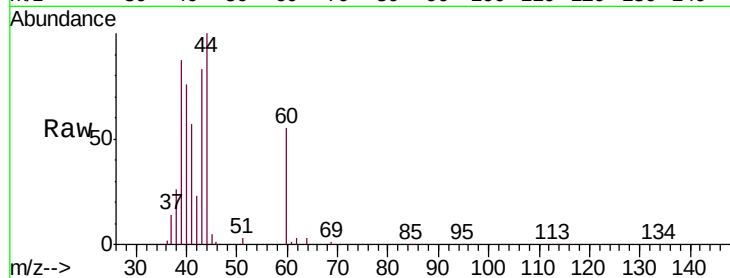
L1HA-IA1

Tgt Ion: 41 Resp: 45308

Ion Ratio Lower Upper

41 100

42 46.1 55.2 82.8#



#10

Heptane

Concen: 0.145 ppbv

RT: 8.24 min Scan# 1650

Delta R.T. -0.01 min

Lab File: VL033370.D

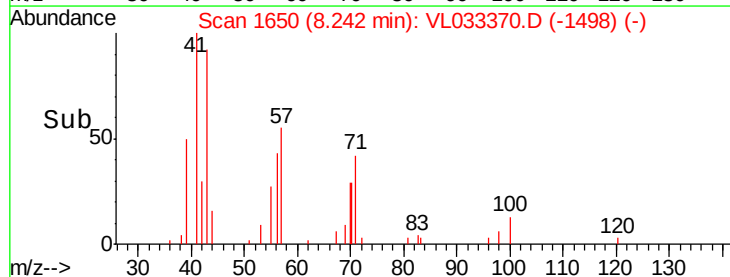
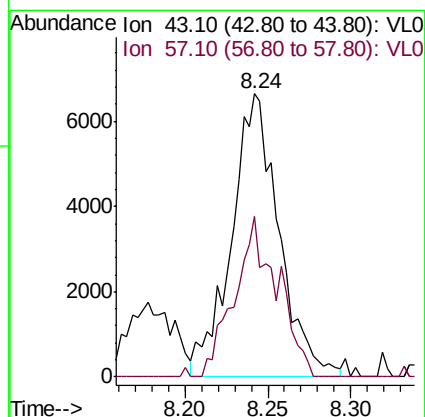
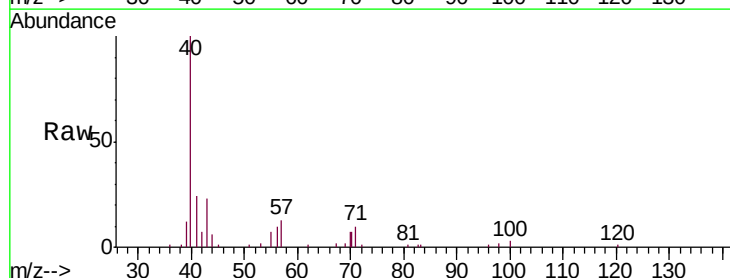
Acq: 18 Mar 2019 22:40

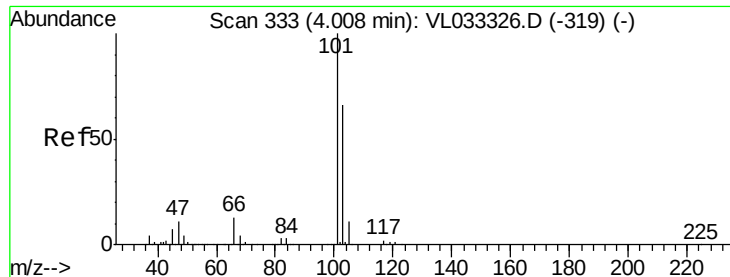
Tgt Ion: 43 Resp: 13253

Ion Ratio Lower Upper

43 100

57 51.6 40.4 60.6

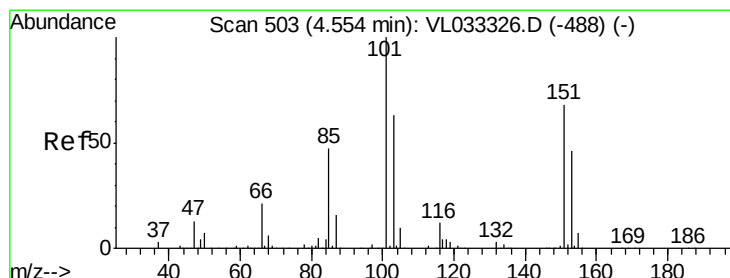
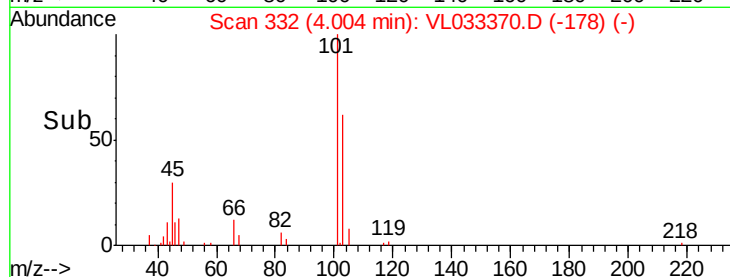
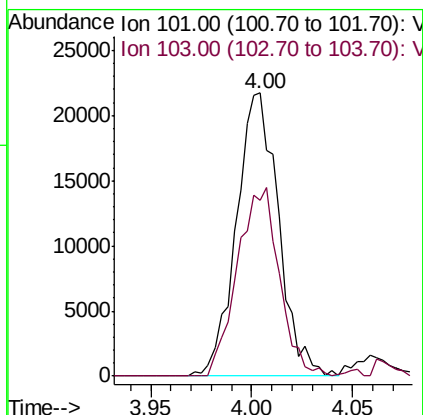
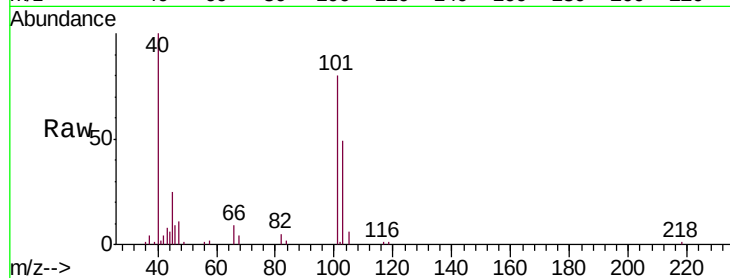




#11
 Trichlorofluoromethane
 Concen: 0.253 ppbv
 RT: 4.00 min Scan# 332
 Delta R.T. -0.00 min
 Lab File: VL033370.D
 Acq: 18 Mar 2019 22:40

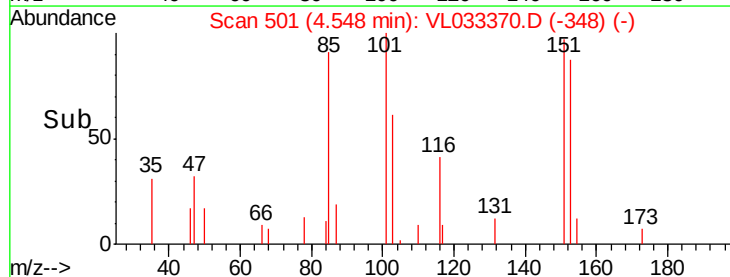
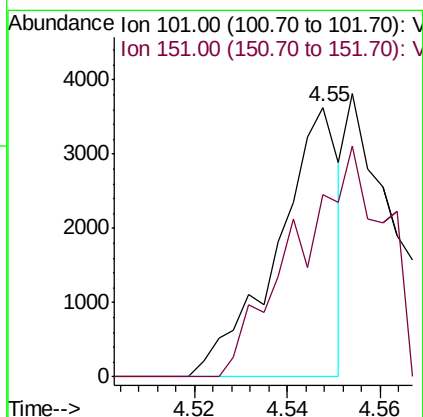
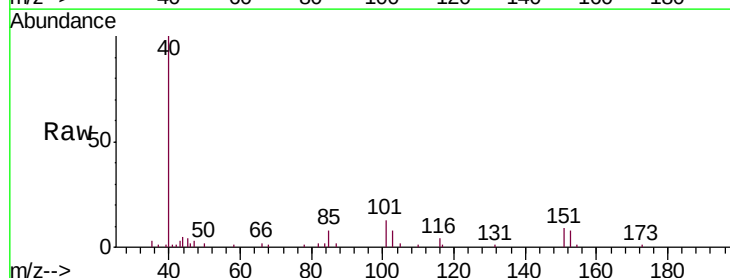
Instrument :
 MSVOA_L
 ClientSampleId :
 L1HA-IA1

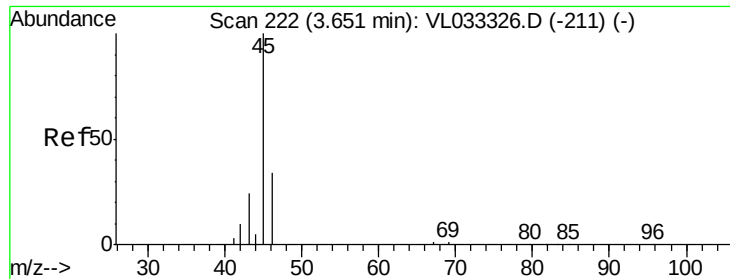
Tgt Ion:101 Resp: 31779
 Ion Ratio Lower Upper
 101 100
 103 61.9 52.9 79.3



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.040 ppbv
 RT: 4.55 min Scan# 501
 Delta R.T. -0.01 min
 Lab File: VL033370.D
 Acq: 18 Mar 2019 22:40

Tgt Ion:101 Resp: 3355
 Ion Ratio Lower Upper
 101 100
 151 0.0 56.3 84.5#





#13

Ethanol

Concen: 538.815 ppbv

RT: 3.68 min Scan# 230

Delta R.T. 0.03 min

Lab File: VL033370.D

Acq: 18 Mar 2019 22:40

Instrument :

MSVOA_L

ClientSampleId :

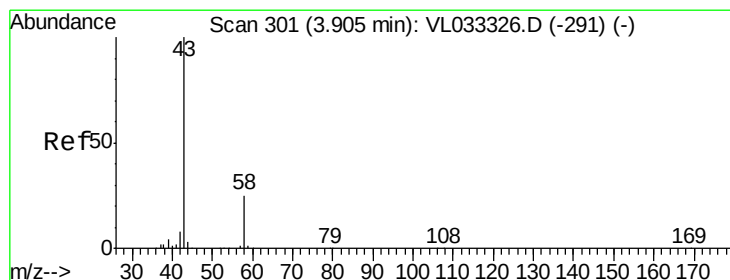
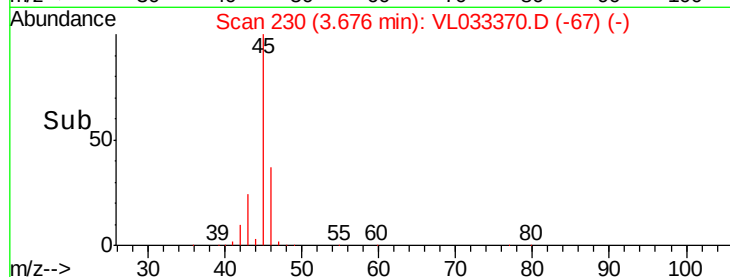
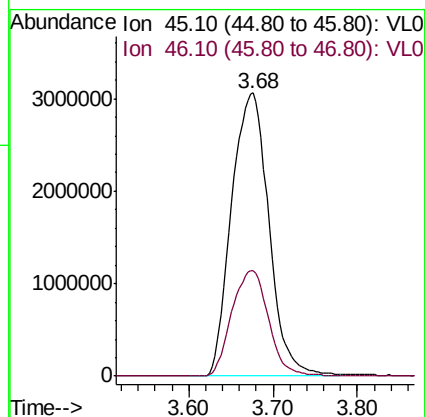
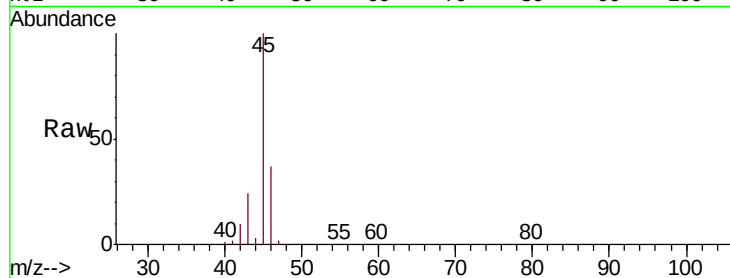
L1HA-IA1

Tgt Ion: 45 Resp: 9442979

Ion Ratio Lower Upper

45 100

46 37.0 14.9 59.7



#15

Acetone

Concen: 4.429 ppbv

RT: 3.90 min Scan# 299

Delta R.T. -0.01 min

Lab File: VL033370.D

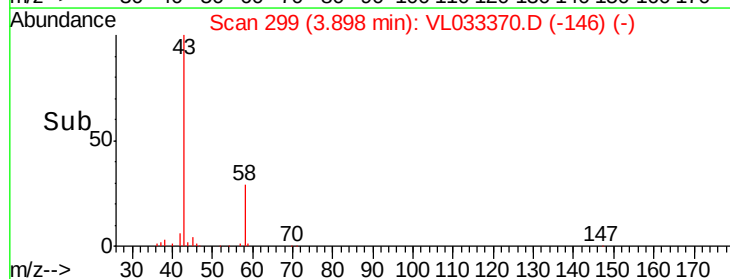
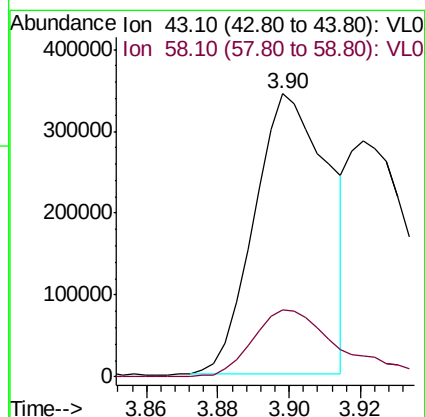
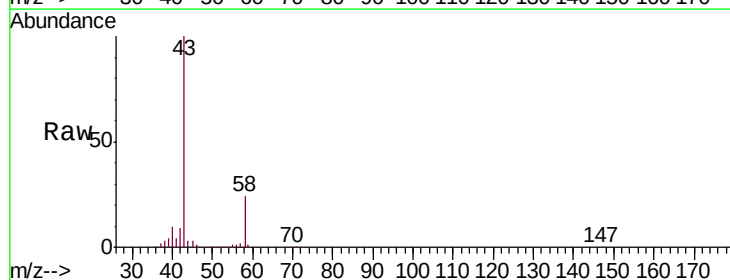
Acq: 18 Mar 2019 22:40

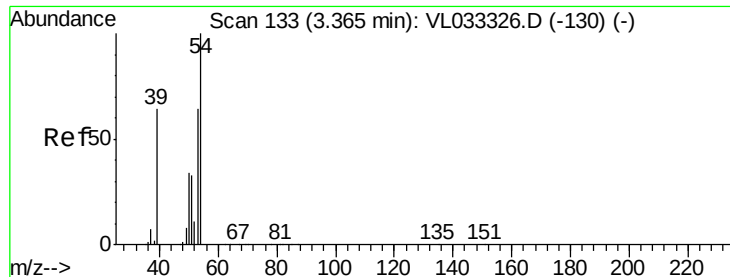
Tgt Ion: 43 Resp: 494013

Ion Ratio Lower Upper

43 100

58 28.5 20.4 30.6

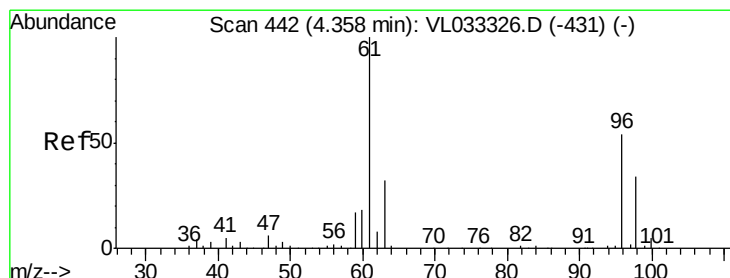
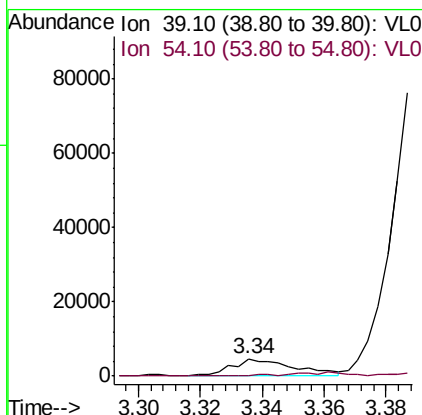
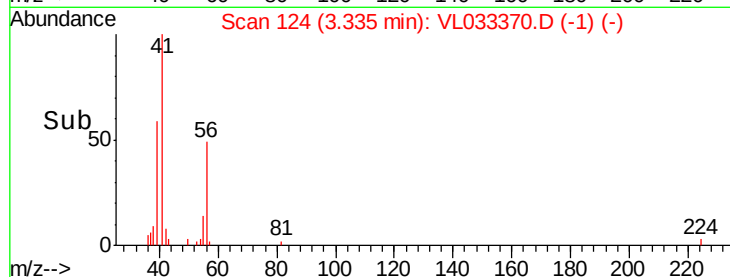
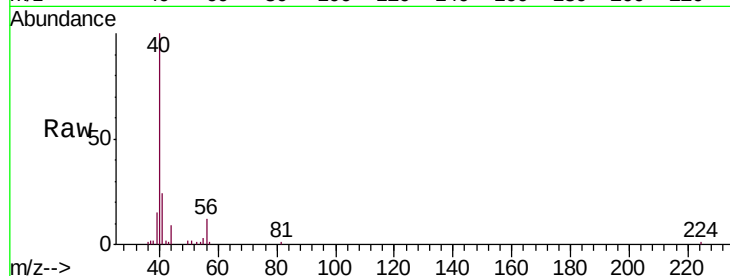




#16
1,3-Butadiene
Concen: 0.181 ppbv
RT: 3.34 min Scan# 124
Delta R.T. -0.03 min
Lab File: VL033370.D
Acq: 18 Mar 2019 22:40

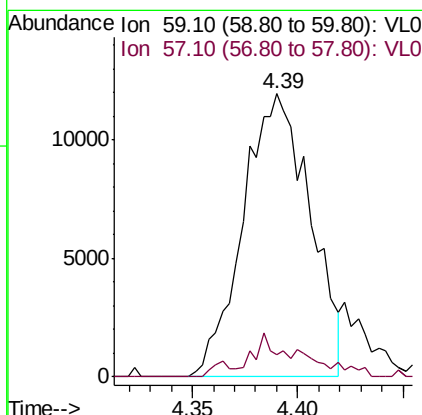
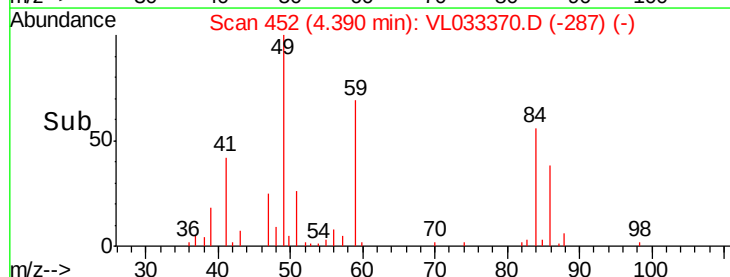
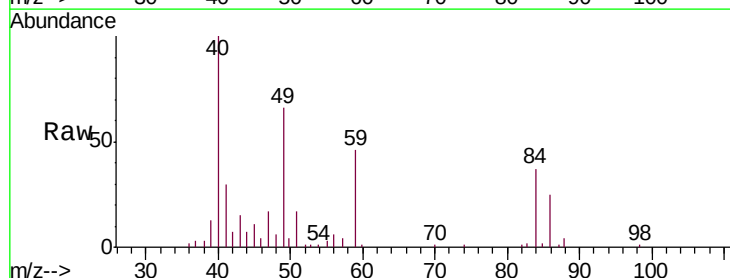
Instrument :
MSVOA_L
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L1HA-IA1

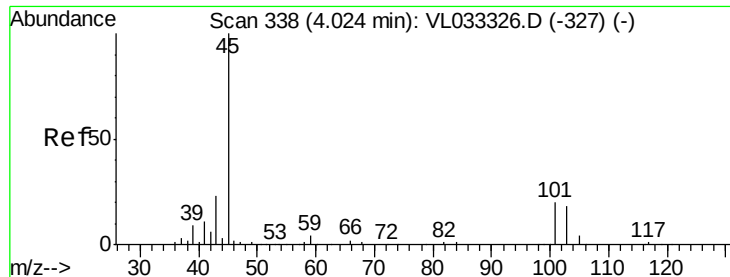
Tgt Ion: 39 Resp: 6542
Ion Ratio Lower Upper
39 100
54 19.6 76.8 115.2#



#17
tert-Butyl alcohol
Concen: 1.680 ppbv
RT: 4.39 min Scan# 452
Delta R.T. 0.03 min
Lab File: VL033370.D
Acq: 18 Mar 2019 22:40

Tgt Ion: 59 Resp: 26370
Ion Ratio Lower Upper
59 100
57 0.0 7.7 11.5#





#19

Isopropyl Alcohol

Concen: 2.343 ppbv

RT: 4.05 min Scan# 347

Delta R.T. 0.03 min

Lab File: VL033370.D

Acq: 18 Mar 2019 22:40

Instrument :

MSVOA_L

ClientSampleId :

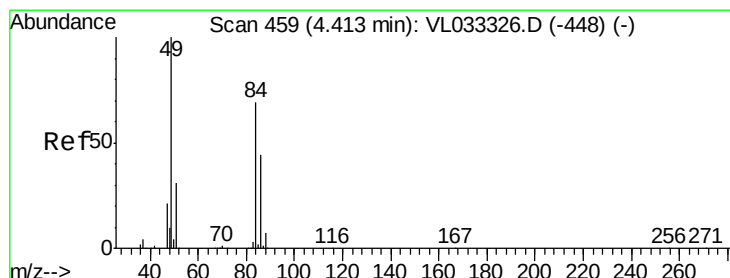
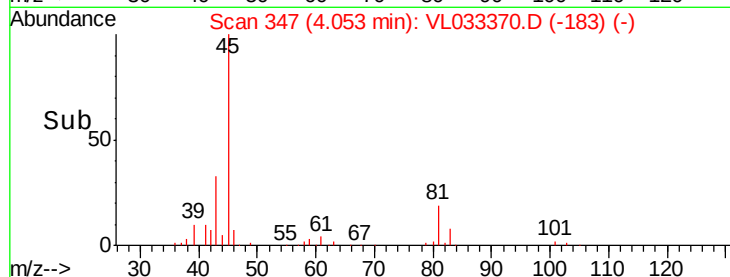
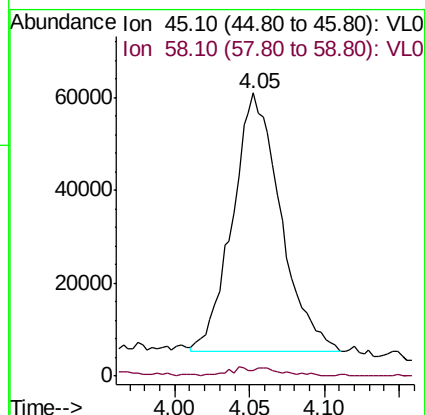
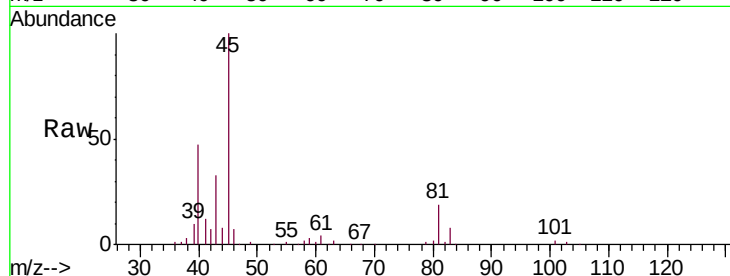
L1HA-IA1

Tgt Ion: 45 Resp: 124287

Ion Ratio Lower Upper

45 100

58 3.9 1.5 2.3#



#20

Methylene Chloride

Concen: 1.823 ppbv

RT: 4.41 min Scan# 457

Delta R.T. -0.01 min

Lab File: VL033370.D

Acq: 18 Mar 2019 22:40

Tgt Ion: 84 Resp: 66328

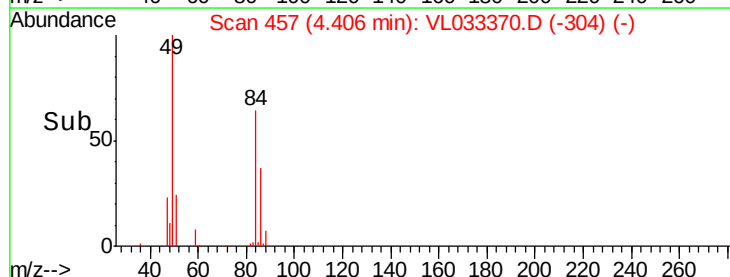
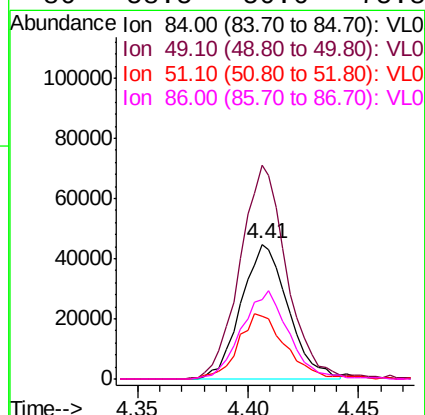
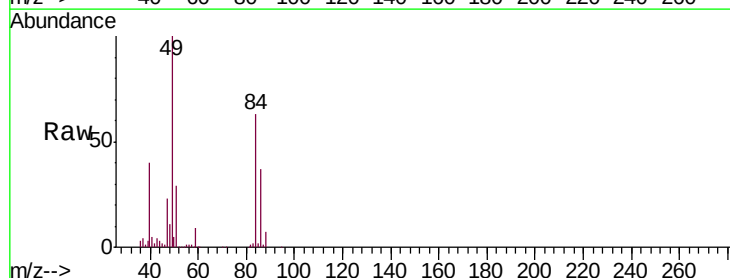
Ion Ratio Lower Upper

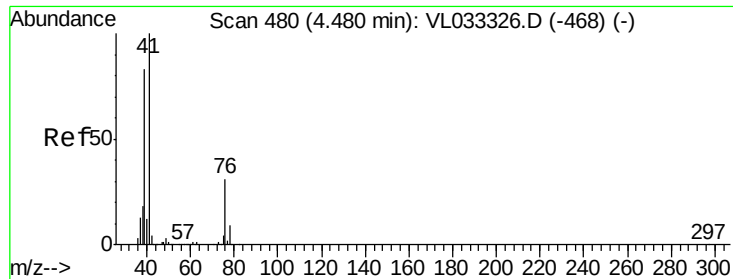
84 100

49 157.8 115.4 173.0

51 46.2 35.8 53.6

86 58.5 50.6 75.8

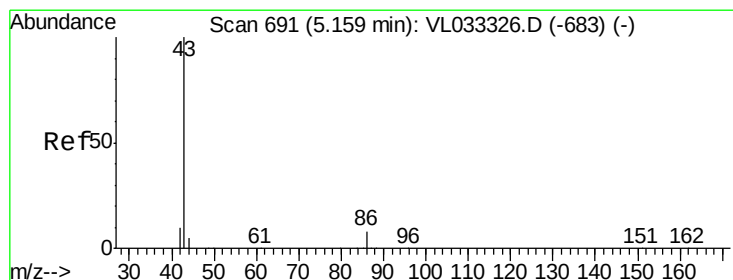
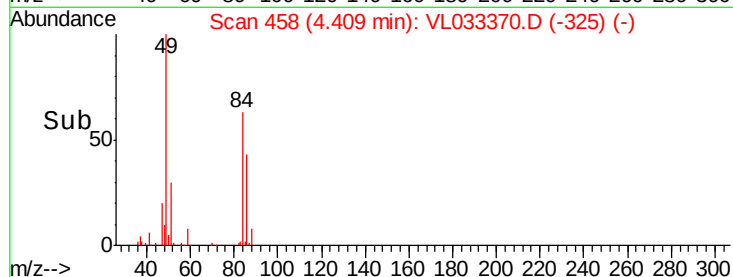
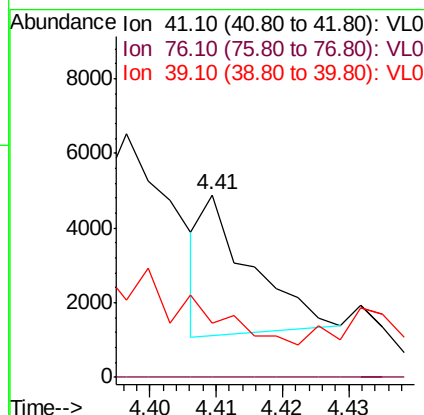
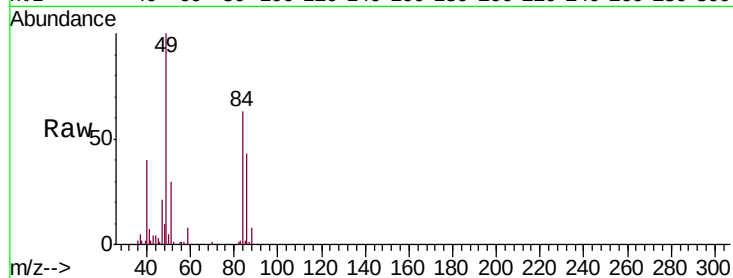




#21
 Allyl Chloride
 Concen: 0.035 ppbv
 RT: 4.41 min Scan# 458
 Delta R.T. -0.07 min
 Lab File: VL033370.D
 Acq: 18 Mar 2019 22:40

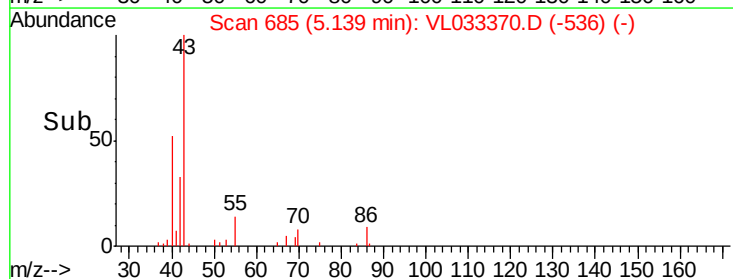
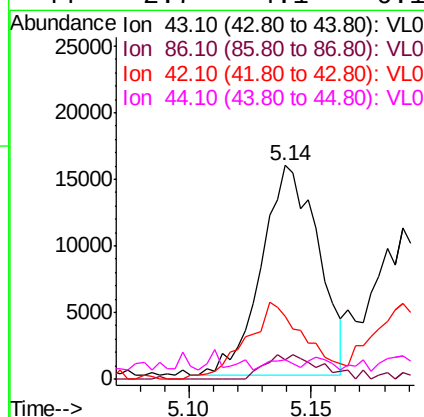
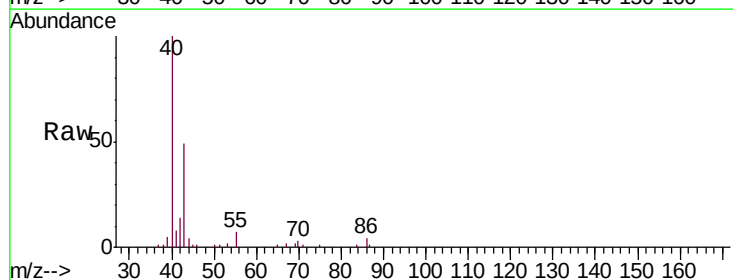
Instrument :
 MSVOA_L
 ClientSampleId :
 L1HA-IA1

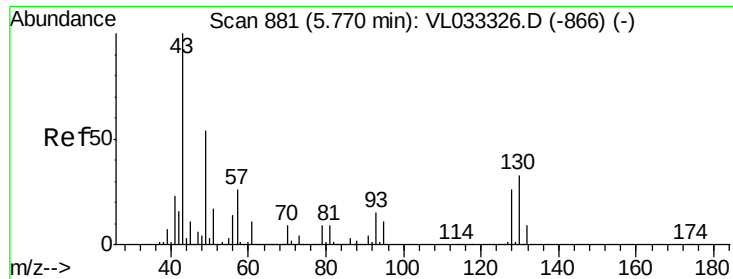
Tgt Ion: 41 Resp: 1889
 Ion Ratio Lower Upper
 41 100
 76 0.0 25.0 37.4#
 39 0.0 65.9 98.9#



#23
 Vinyl Acetate
 Concen: 0.198 ppbv
 RT: 5.14 min Scan# 685
 Delta R.T. -0.02 min
 Lab File: VL033370.D
 Acq: 18 Mar 2019 22:40

Tgt Ion: 43 Resp: 25579
 Ion Ratio Lower Upper
 43 100
 86 9.0 6.2 9.2
 42 28.5 8.1 12.1#
 44 2.7 4.1 6.1#

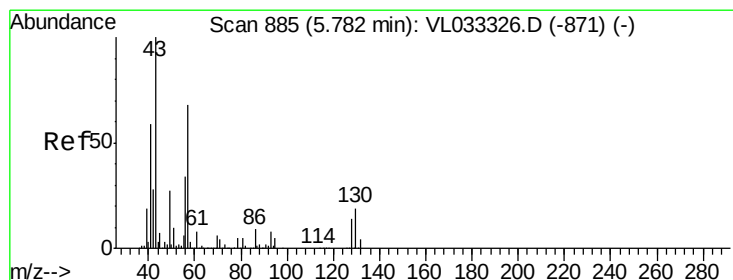
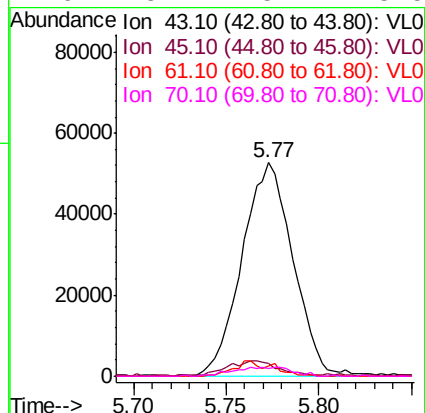
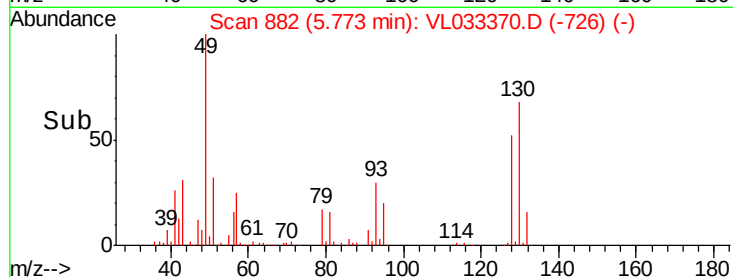
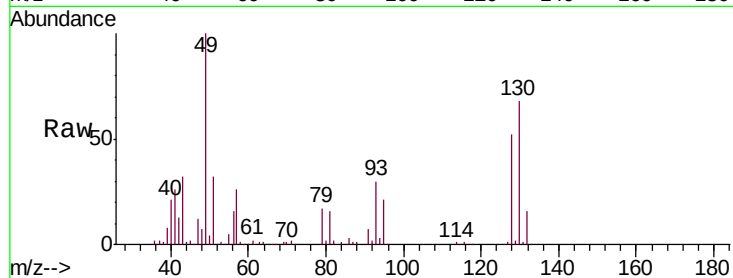




#25
Ethyl Acetate
Concen: 0.613 ppbv
RT: 5.77 min Scan# 882
Delta R.T. 0.00 min
Lab File: VL033370.D
Acq: 18 Mar 2019 22:40

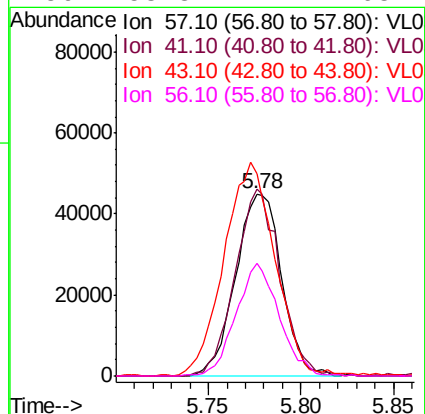
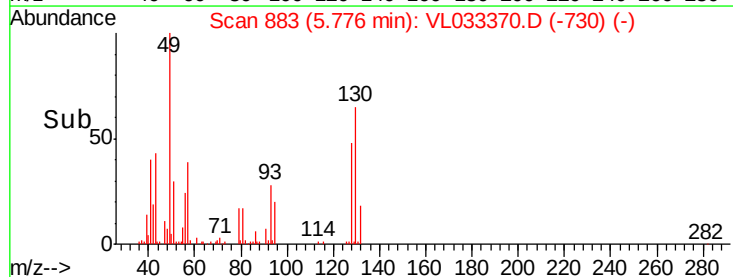
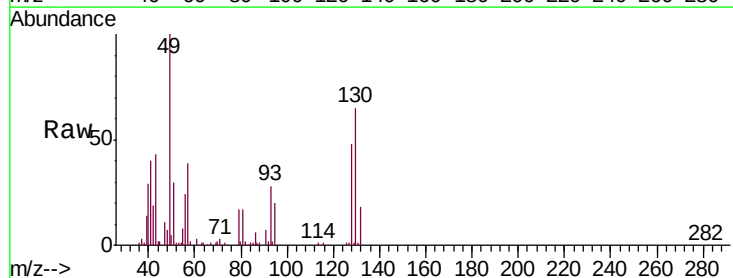
Instrument :
MSVOA_L
ClientSampleId :
L1HA-IA1

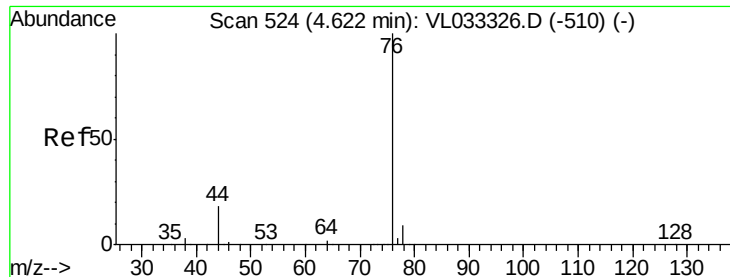
Tgt Ion:	43	Resp:	99383
Ion	Ratio	Lower	Upper
43	100		
45	8.2	7.9	11.9
61	5.6	7.4	11.2#
70	5.2	5.7	8.5#



#26
Hexane
Concen: 1.065 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.01 min
Lab File: VL033370.D
Acq: 18 Mar 2019 22:40

Tgt Ion:	57	Resp:	77178
Ion	Ratio	Lower	Upper
57	100		
41	100.0	70.5	105.7
43	132.8	181.8	272.8#
56	58.3	42.2	63.2





#27

Carbon Disulfide

Concen: 0.030 ppbv

RT: 4.62 min Scan# 523

Delta R.T. -0.00 min

Lab File: VL033370.D

Acq: 18 Mar 2019 22:40

Instrument :

MSVOA_L

ClientSampleId :

L1HA-IA1

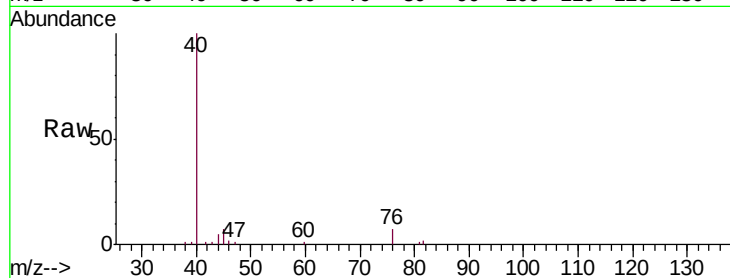
Tgt Ion: 76 Resp: 2537

Ion Ratio Lower Upper

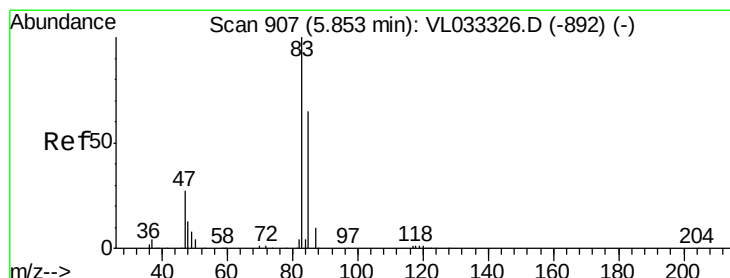
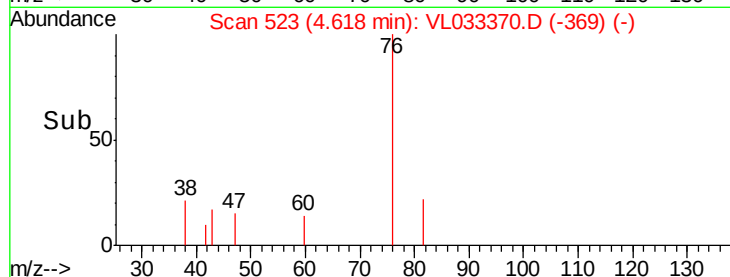
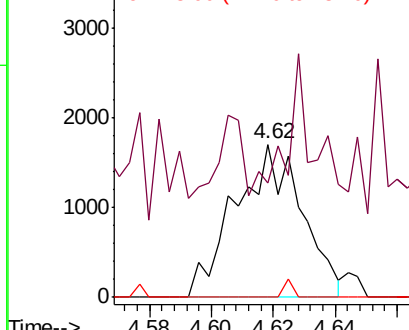
76 100

44 27.4 15.2 22.8#

78 1.6 7.2 10.8#



Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0



#29

Chloroform

Concen: 0.044 ppbv

RT: 5.85 min Scan# 905

Delta R.T. -0.01 min

Lab File: VL033370.D

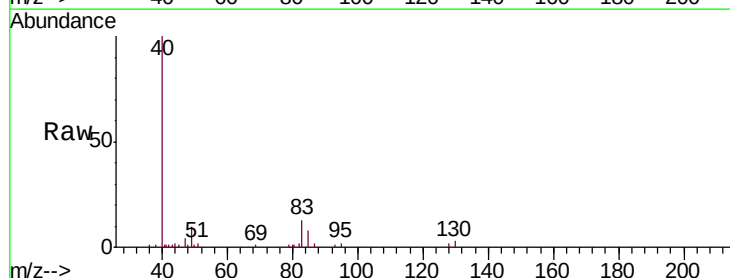
Acq: 18 Mar 2019 22:40

Tgt Ion: 83 Resp: 5182

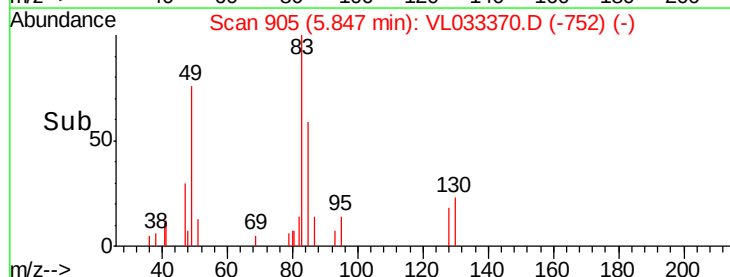
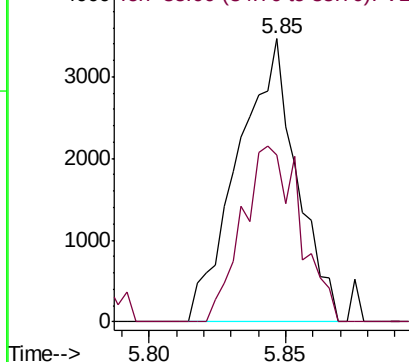
Ion Ratio Lower Upper

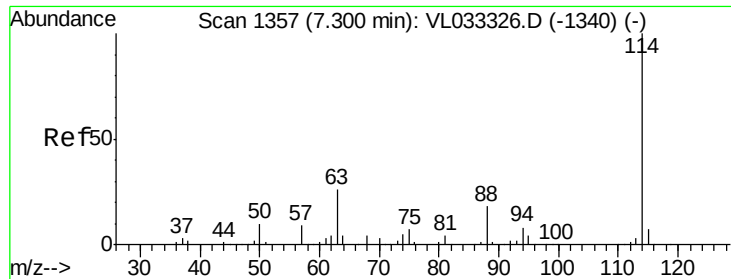
83 100

85 58.8 52.0 78.0



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0

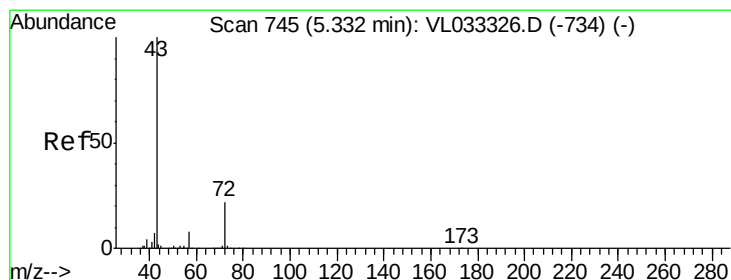
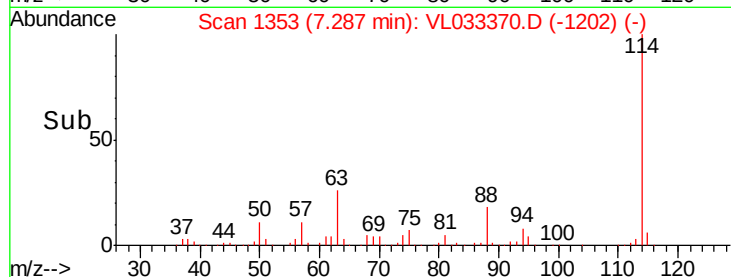
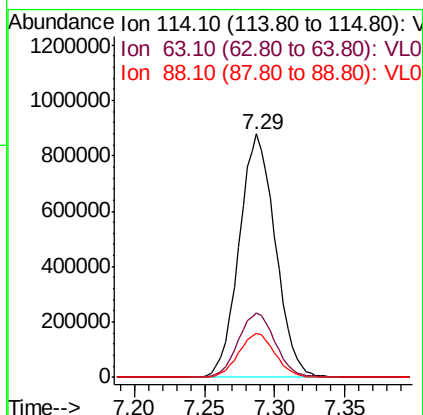
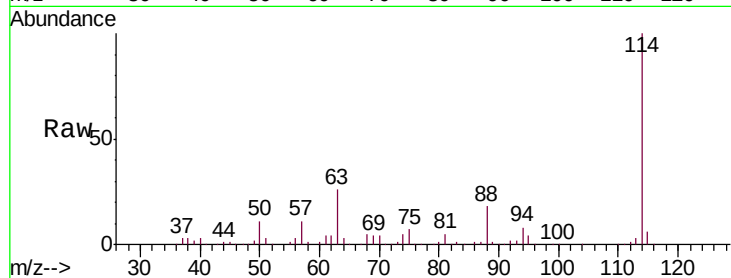




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1353
 Delta R.T. -0.01 min
 Lab File: VL033370.D
 Acq: 18 Mar 2019 22:40

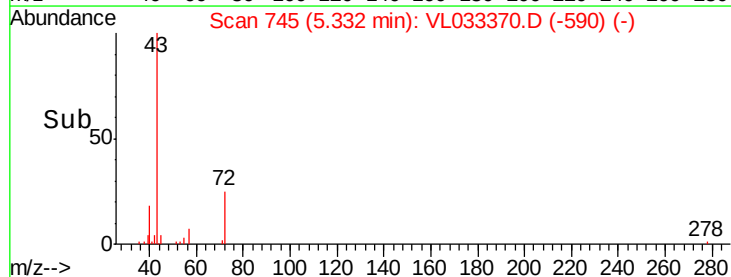
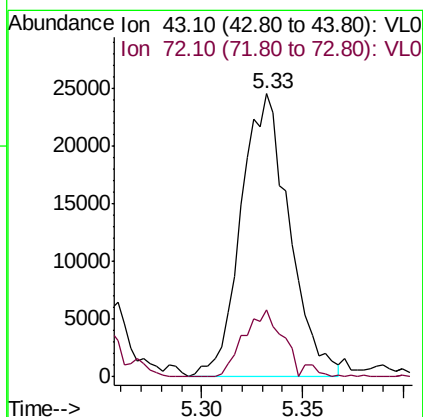
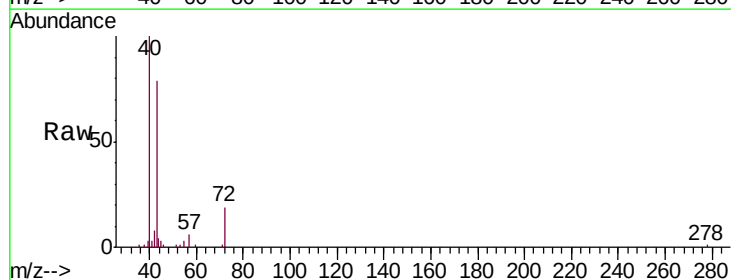
Instrument :
 MSVOA_L
 ClientSampleId :
 L1HA-IA1

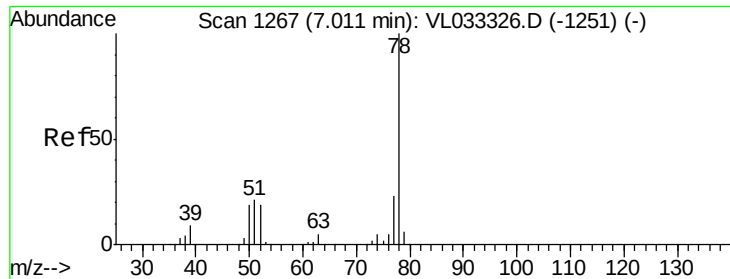
Tgt Ion: 114 Resp: 1582450
 Ion Ratio Lower Upper
 114 100
 63 27.2 21.4 32.2
 88 18.1 14.5 21.7



#34
 2-Butanone
 Concen: 0.396 ppbv
 RT: 5.33 min Scan# 745
 Delta R.T. -0.00 min
 Lab File: VL033370.D
 Acq: 18 Mar 2019 22:40

Tgt Ion: 43 Resp: 41185
 Ion Ratio Lower Upper
 43 100
 72 20.2 17.7 26.5

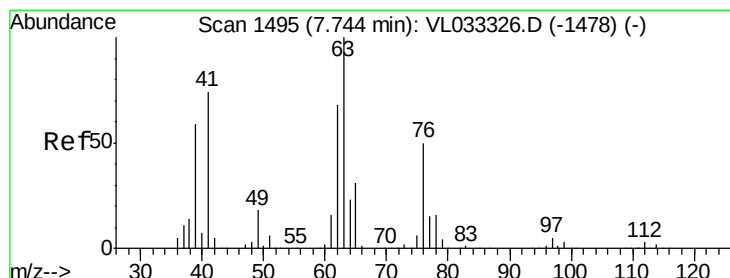
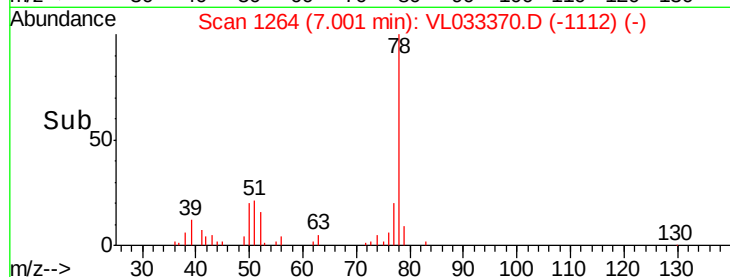
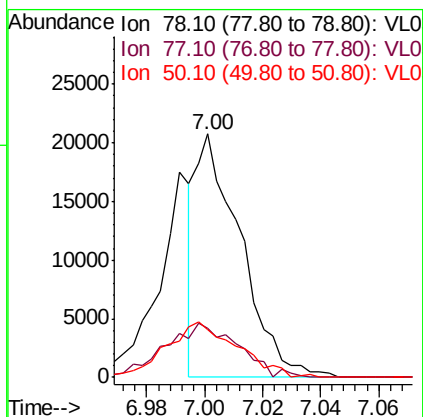
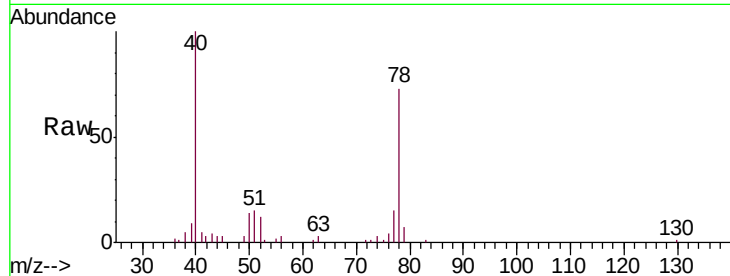




#36
Benzene
Concen: 0.156 ppbv
RT: 7.00 min Scan# 1264
Delta R.T. -0.01 min
Lab File: VL033370.D
Acq: 18 Mar 2019 22:40

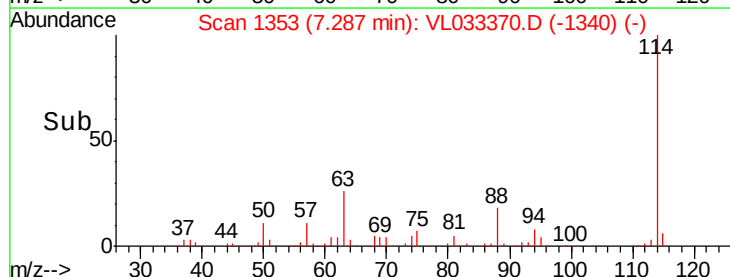
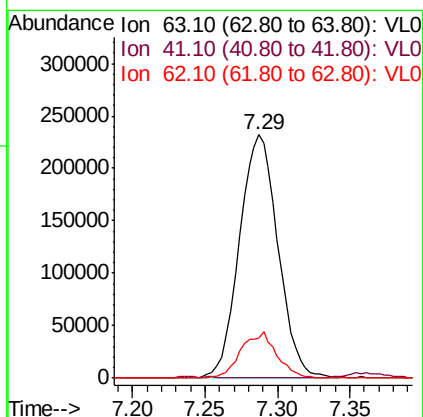
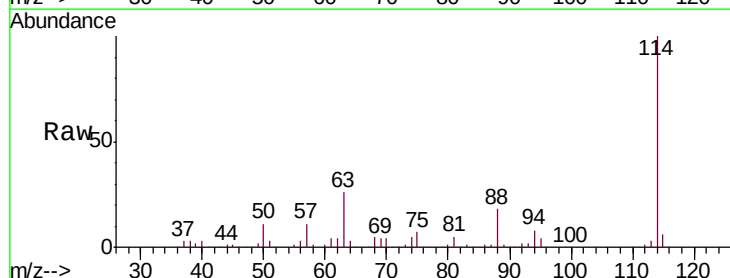
Instrument :
MSVOA_L
ClientSampleId :
L1HA-IA1

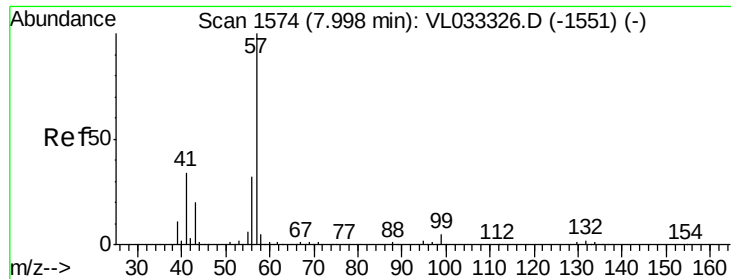
Tgt Ion: 78 Resp: 22090
Ion Ratio Lower Upper
78 100
77 20.0 18.1 27.1
50 19.5 15.2 22.8



#39
1,2-Dichloropropane
Concen: 8.066 ppbv
RT: 7.29 min Scan# 1353
Delta R.T. -0.46 min
Lab File: VL033370.D
Acq: 18 Mar 2019 22:40

Tgt Ion: 63 Resp: 427787
Ion Ratio Lower Upper
63 100
41 0.0 59.5 89.3#
62 16.7 54.7 82.1#





#44

2,2,4-Trimethylpentane

Concen: 0.091 ppbv

RT: 7.99 min Scan# 1572

Delta R.T. -0.01 min

Lab File: VL033370.D

Acq: 18 Mar 2019 22:40

Instrument :

MSVOA_L

ClientSampleId :

L1HA-IA1

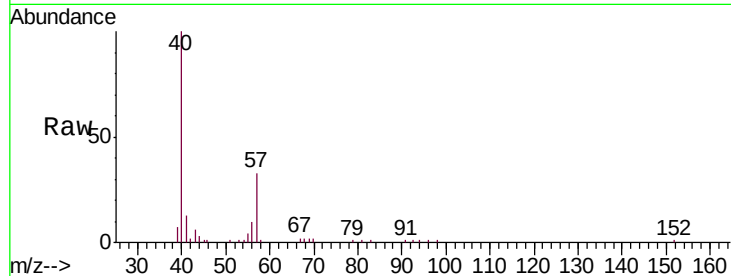
Tgt Ion: 57 Resp: 21383

Ion Ratio Lower Upper

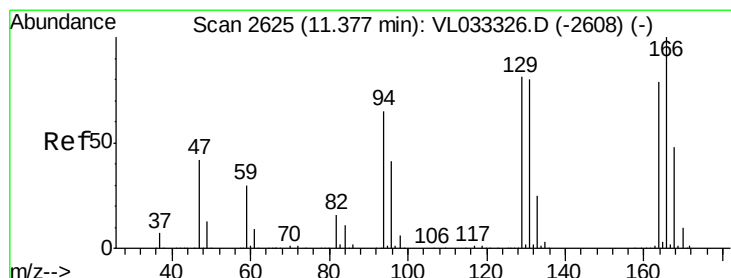
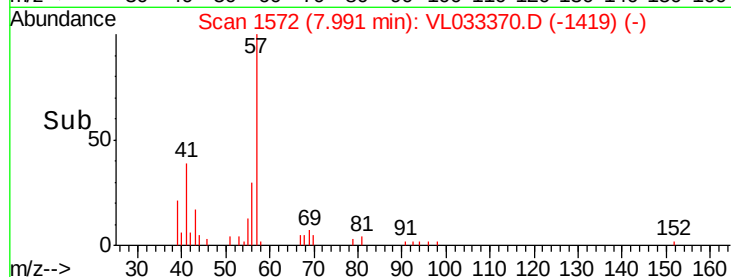
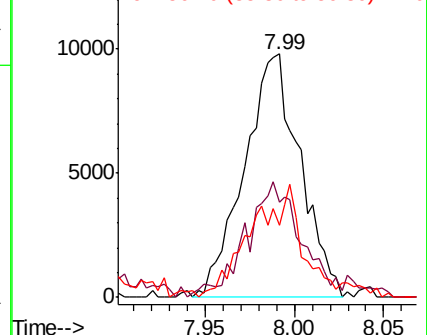
57 100

41 49.4 26.0 39.0#

56 44.7 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: 0.071 ppbv

RT: 11.37 min Scan# 2622

Delta R.T. -0.01 min

Lab File: VL033370.D

Acq: 18 Mar 2019 22:40

Tgt Ion:164 Resp: 4169

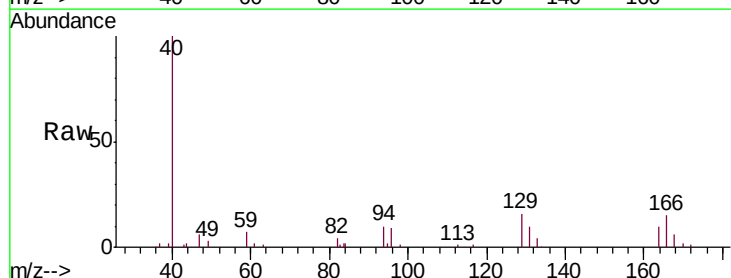
Ion Ratio Lower Upper

164 100

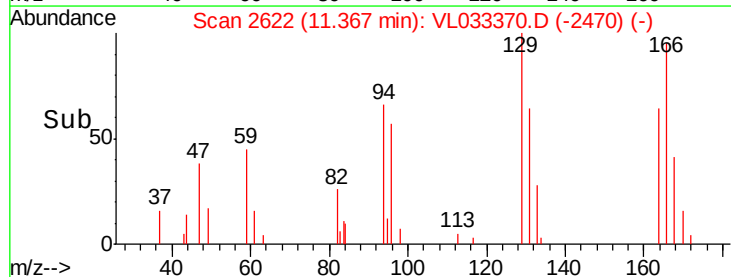
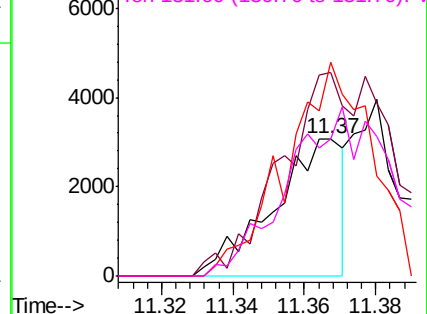
166 147.9 101.5 152.3

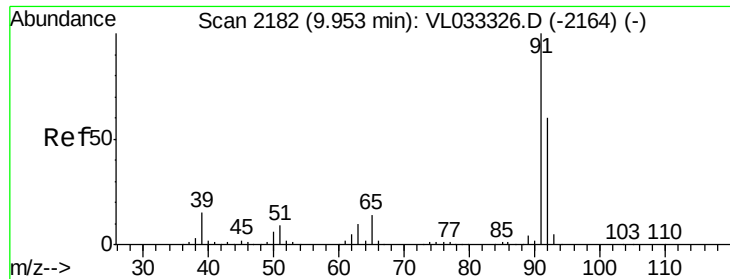
129 155.3 82.2 123.2#

131 99.4 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: 14.240 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.01 min

Lab File: VL033370.D

Acq: 18 Mar 2019 22:40

Instrument :

MSVOA_L

ClientSampleId :

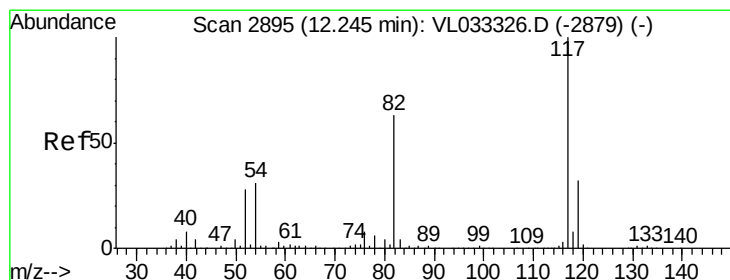
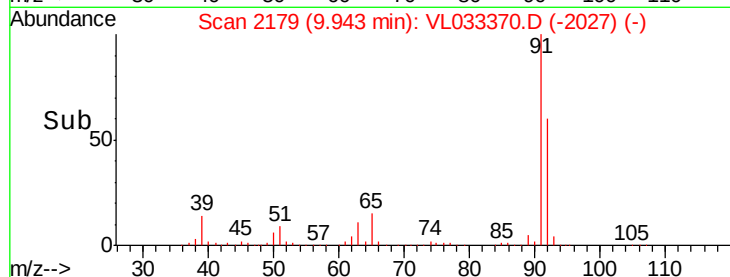
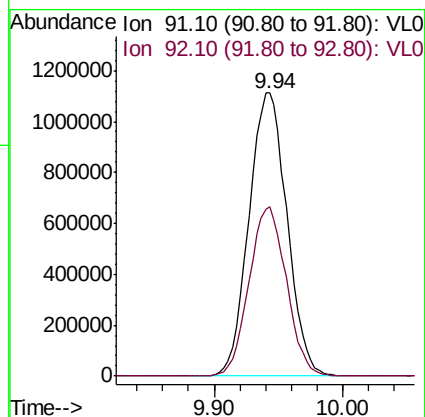
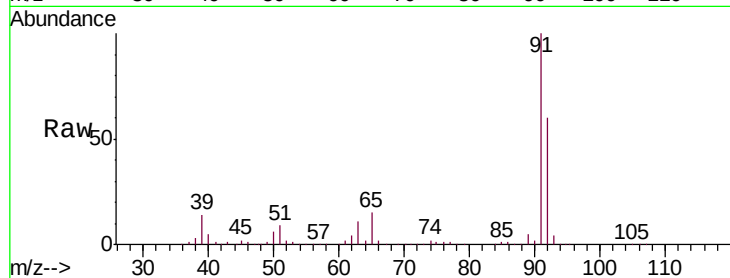
L1HA-IA1

Tgt Ion: 91 Resp: 2291474

Ion Ratio Lower Upper

91 100

92 58.7 47.4 71.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL033370.D

Acq: 18 Mar 2019 22:40

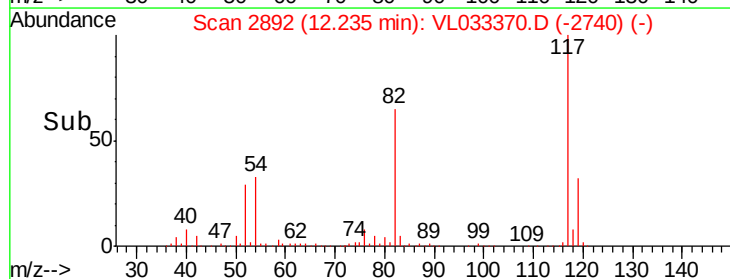
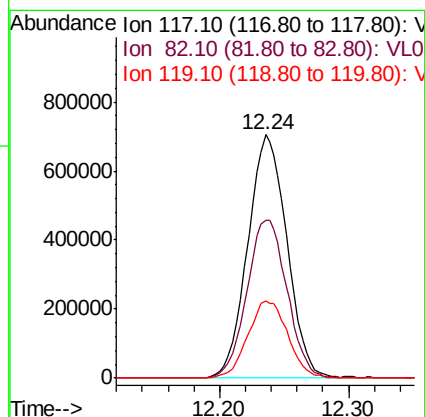
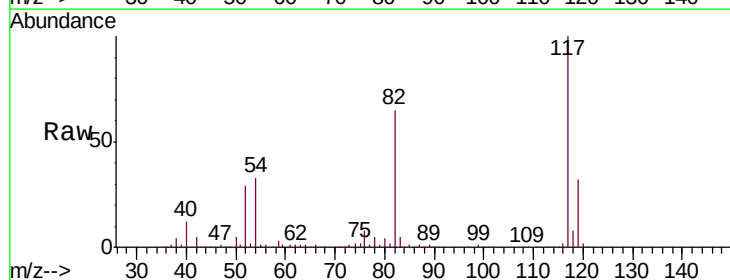
Tgt Ion: 117 Resp: 1488625

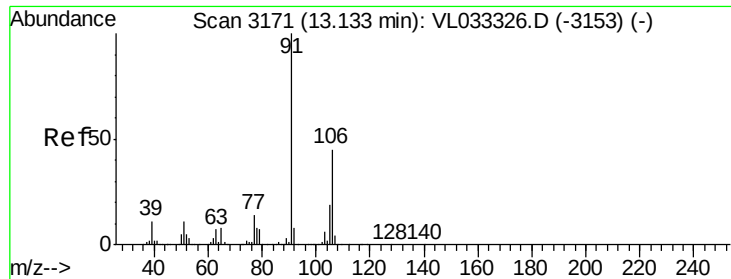
Ion Ratio Lower Upper

117 100

82 67.5 53.4 80.2

119 32.4 27.3 40.9

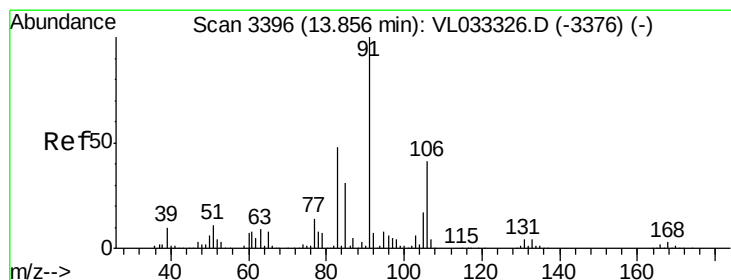
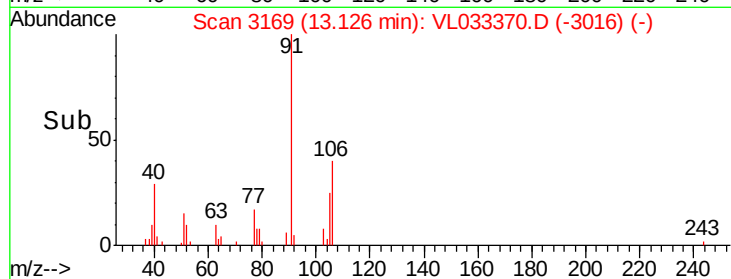
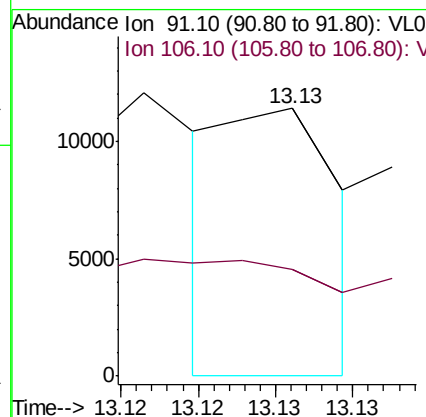
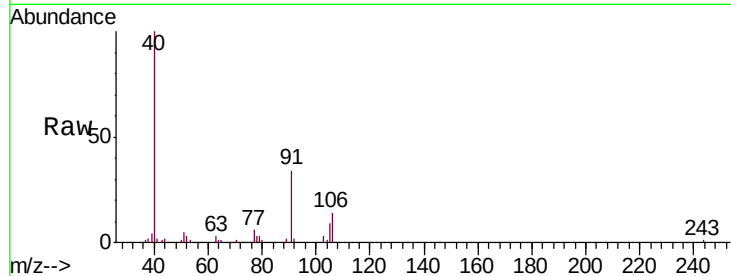




#59
m/p-Xylene
Concen: 0.032 ppbv
RT: 13.13 min Scan# 3169
Delta R.T. -0.01 min
Lab File: VL033370.D
Acq: 18 Mar 2019 22:40

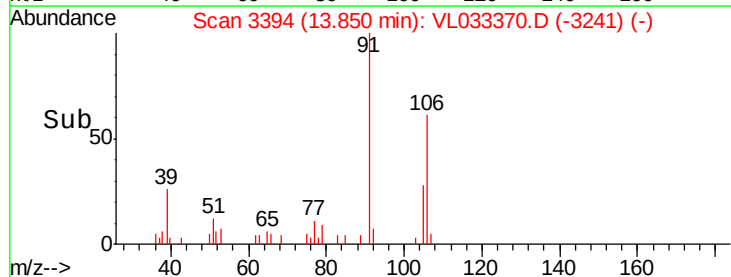
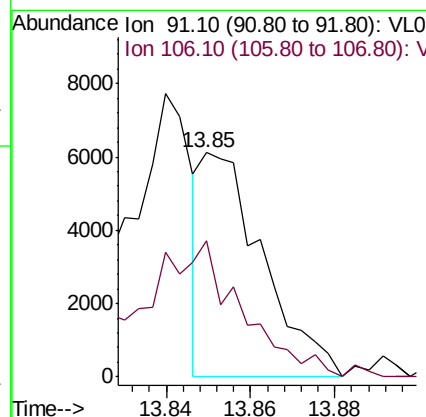
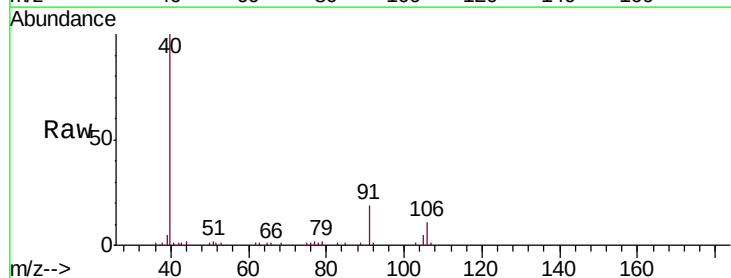
Instrument :
MSVOA_L
ClientSampleId :
L1HA-IA1

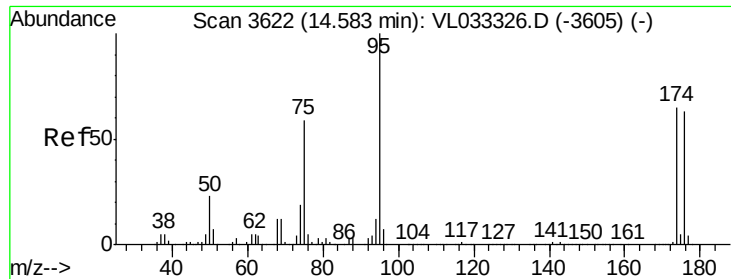
Tgt Ion: 91 Resp: 5836
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0



#60
o-Xylene
Concen: 0.035 ppbv
RT: 13.85 min Scan# 3394
Delta R.T. -0.01 min
Lab File: VL033370.D
Acq: 18 Mar 2019 22:40

Tgt Ion: 91 Resp: 6174
Ion Ratio Lower Upper
91 100
106 101.5 21.3 63.9#

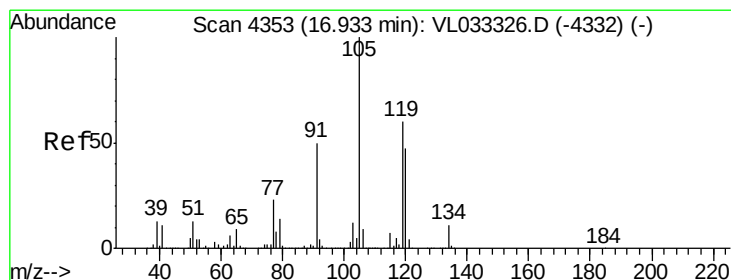
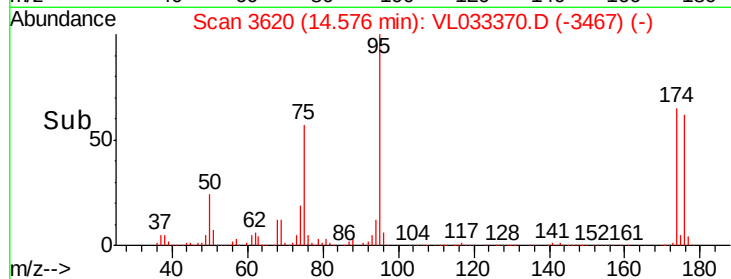
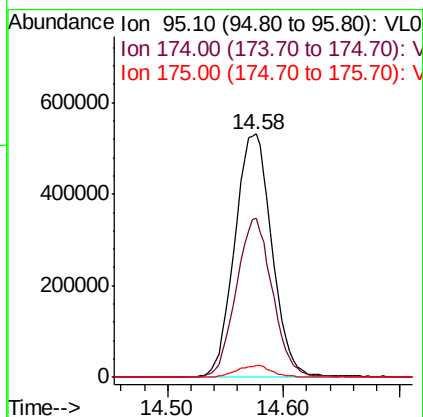
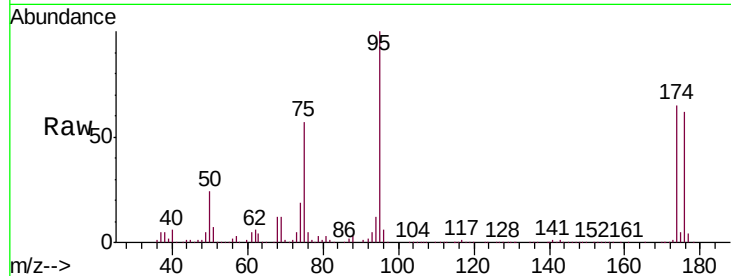




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.719 ppbv
 RT: 14.58 min Scan# 3620
 Delta R.T. -0.01 min
 Lab File: VL033370.D
 Acq: 18 Mar 2019 22:40

Instrument :
 MSVOA_L
 ClientSampleId :
 L1HA-IA1

Tgt Ion: 95 Resp: 1182426
 Ion Ratio Lower Upper
 95 100
 174 64.0 51.5 77.3
 175 4.7 3.8 5.6



#74
 1,2,4-Trimethylbenzene
 Concen: 0.149 ppbv
 RT: 16.93 min Scan# 4351
 Delta R.T. -0.01 min
 Lab File: VL033370.D
 Acq: 18 Mar 2019 22:40

Tgt Ion: 105 Resp: 30731
 Ion Ratio Lower Upper
 105 100
 120 37.4 37.4 56.2#
 91 17.1 41.0 61.4#
 77 20.5 18.5 27.7

