

Data File : VL033368.D
Acq On : 18 Mar 2019 21:22
Operator : SY/AP
Sample : K1952-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
A-10

Quant Time: Mar 19 06:55:51 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	706710	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1584432	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.24	117	1630347	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.57 95 1312341 10.86 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 108.60%

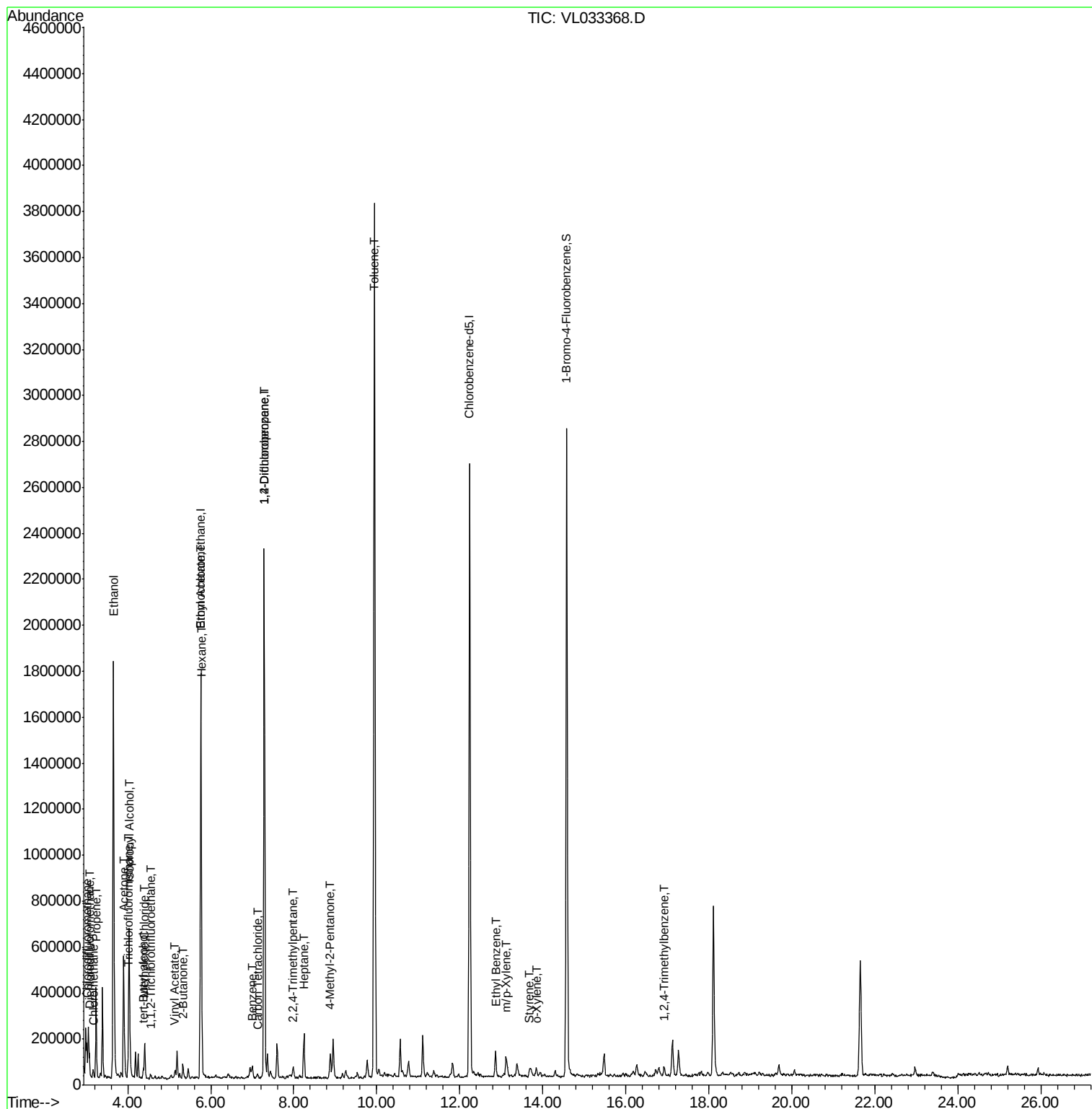
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.08	85	65802	0.529	ppbv	92
3) Chlorodifluoromethane	3.01	51	242620	2.991	ppbv #	81
4) Chloromethane	3.17	50	23439	0.534	ppbv	95
9) Propene	3.24	41	91219	2.519	ppbv	94
10) Heptane	8.24	43	77143	0.859	ppbv	100
11) Trichlorofluoromethane	4.01	101	32159	0.260	ppbv	87
12) 1,1,2-Trichlorotrifluoroet	4.55	101	4408	0.054	ppbv #	58
13) Ethanol	3.65	45	2005896	116.203	ppbv	98
15) Acetone	3.90	43	533096	4.853	ppbv	99
17) tert-Butyl alcohol	4.38	59	11060	0.715	ppbv	98
19) Isopropyl Alcohol	4.03	45	720232	13.783	ppbv	100
20) Methylene Chloride	4.41	84	27579	0.770	ppbv	95
23) Vinyl Acetate	5.14	43	13246	0.104	ppbv #	60
25) Ethyl Acetate	5.77	43	207123	1.297	ppbv	97
26) Hexane	5.78	57	108831	1.524	ppbv	83
34) 2-Butanone	5.33	43	66128	0.636	ppbv	97
35) Carbon Tetrachloride	7.13	117	8346	0.075	ppbv #	75
36) Benzene	7.00	78	36459	0.257	ppbv #	91
39) 1,2-Dichloropropane	7.29	63	428424	8.068	ppbv #	23
44) 2,2,4-Trimethylpentane	7.99	57	28010	0.119	ppbv #	61
50) 4-Methyl-2-Pentanone	8.88	43	77370	0.526	ppbv	97
53) Toluene	9.94	91	2899133	17.993	ppbv	100
58) Ethyl Benzene	12.86	91	52142	0.226	ppbv	99
59) m/p-Xylene	13.12	91	20778	0.105	ppbv #	100
60) o-Xylene	13.85	91	27487	0.142	ppbv	92
61) Styrene	13.68	104	13148	0.097	ppbv #	80
74) 1,2,4-Trimethylbenzene	16.92	105	16068	0.071	ppbv #	67

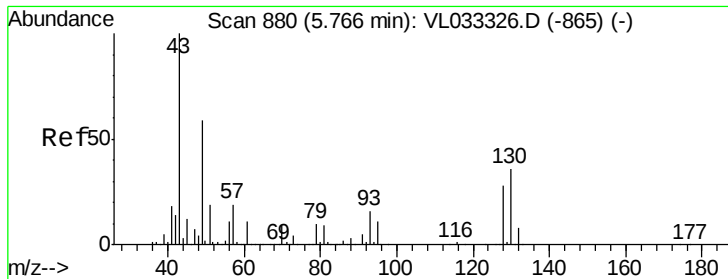
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.01 min

Lab File: VL033368.D

Acq: 18 Mar 2019 21:22

Instrument :

MSVOA_L

ClientSampleId :

A-10

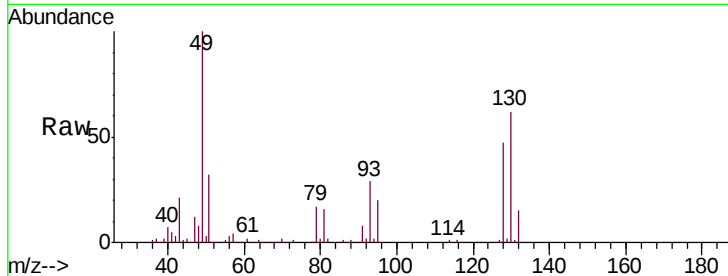
Tgt Ion: 49 Resp: 706710

Ion Ratio Lower Upper

49 100

128 46.4 23.5 70.6

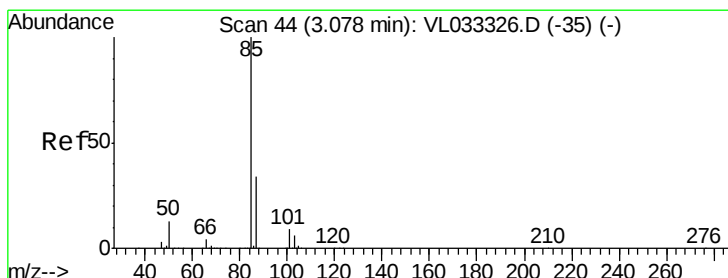
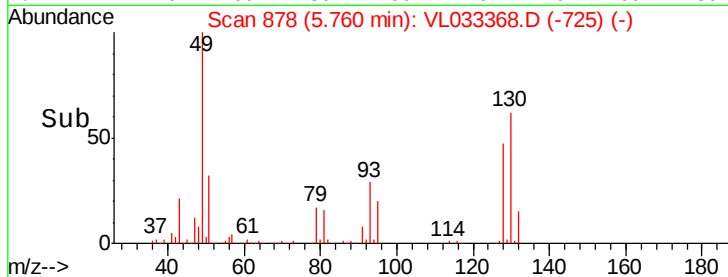
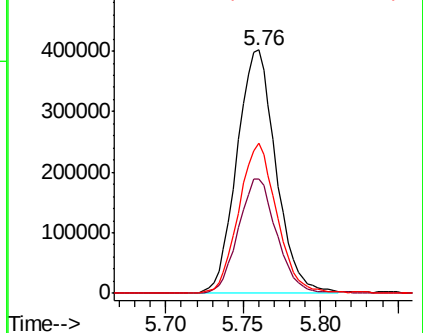
130 60.6 30.1 90.3



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: 0.529 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033368.D

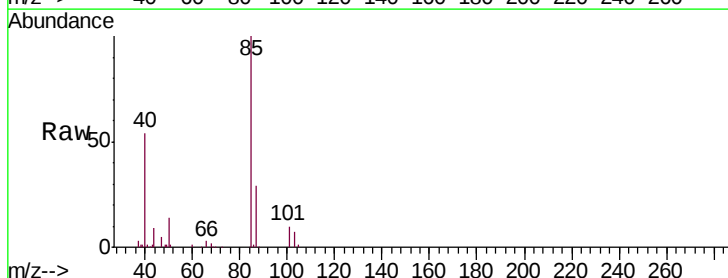
Acq: 18 Mar 2019 21:22

Tgt Ion: 85 Resp: 65802

Ion Ratio Lower Upper

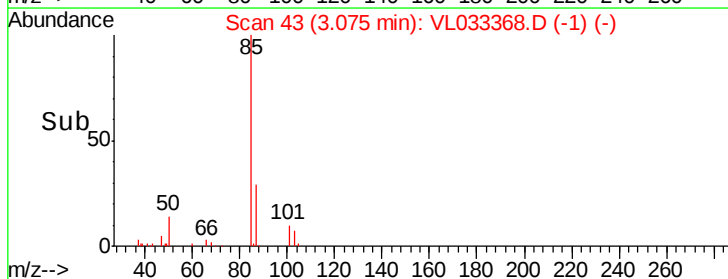
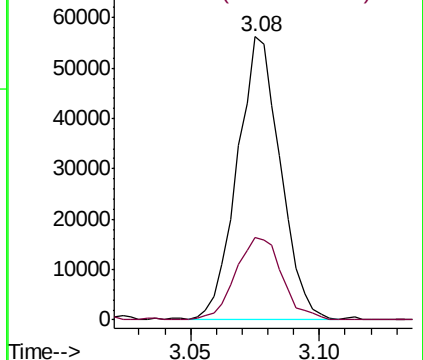
85 100

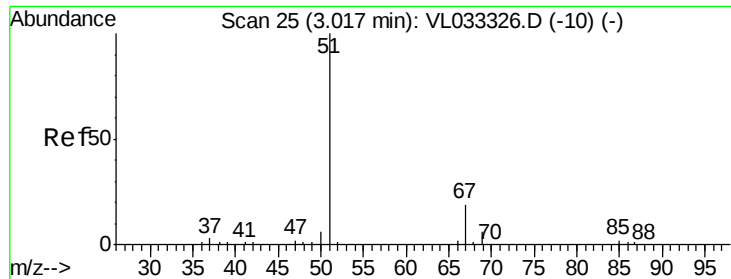
87 29.1 26.9 40.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

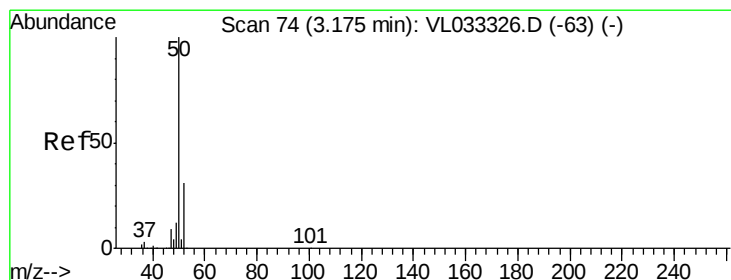
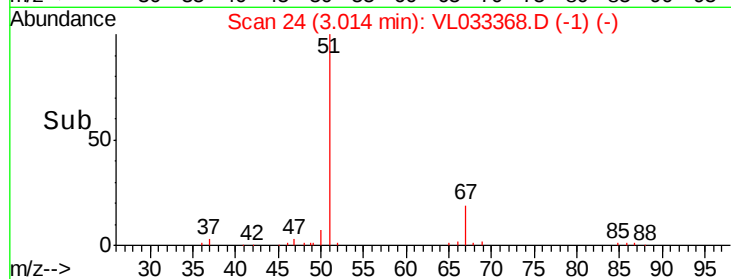
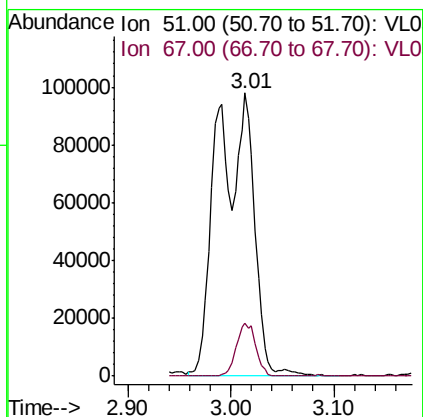
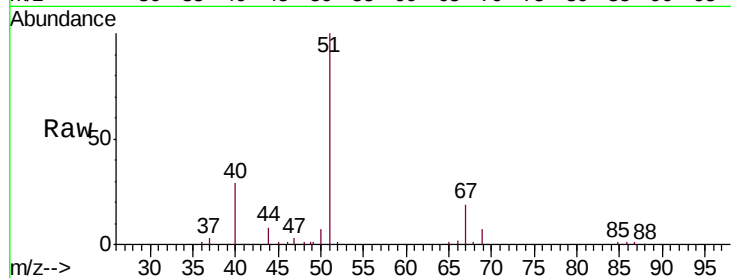




#3
 Chlorodifluoromethane
 Concen: 2.991 ppbv
 RT: 3.01 min Scan# 24
 Delta R.T. -0.00 min
 Lab File: VL033368.D
 Acq: 18 Mar 2019 21:22

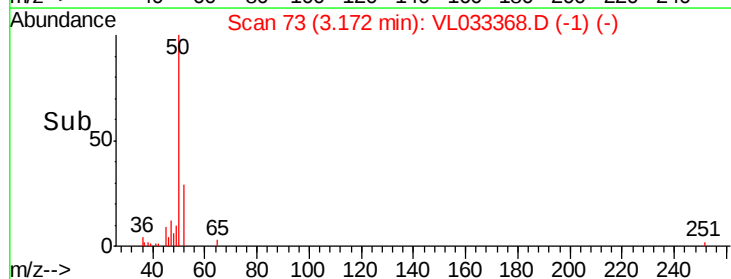
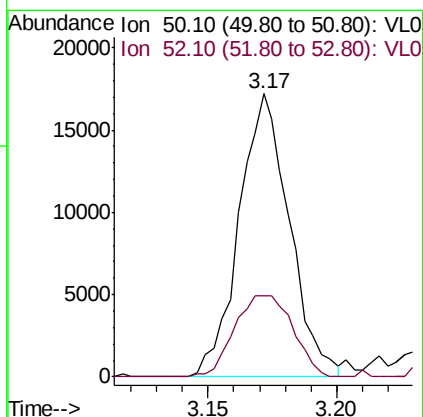
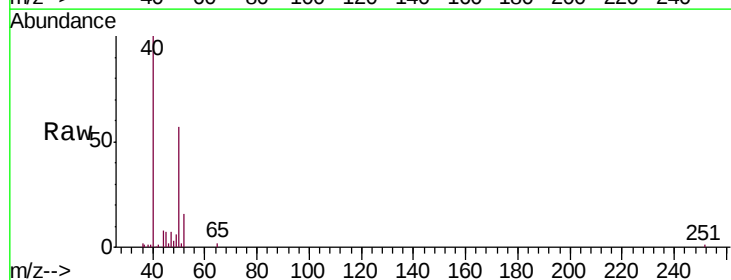
Instrument :
 MSVOA_L
 ClientSampled :
 A-10

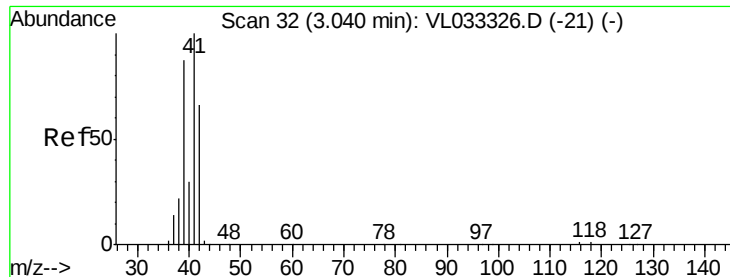
Tgt Ion: 51 Resp: 242620
 Ion Ratio Lower Upper
 51 100
 67 10.0 14.9 22.3#



#4
 Chloromethane
 Concen: 0.534 ppbv
 RT: 3.17 min Scan# 73
 Delta R.T. -0.00 min
 Lab File: VL033368.D
 Acq: 18 Mar 2019 21:22

Tgt Ion: 50 Resp: 23439
 Ion Ratio Lower Upper
 50 100
 52 28.7 25.0 37.6





#9

Propene

Concen: 2.519 ppbv

RT: 3.24 min Scan# 93

Delta R.T. 0.20 min

Lab File: VL033368.D

Acq: 18 Mar 2019 21:22

Instrument :

MSVOA_L

ClientSampleId :

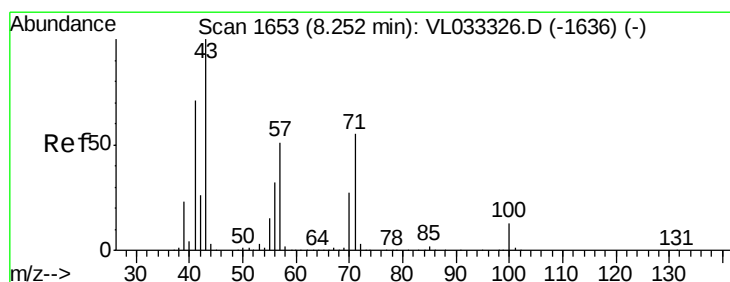
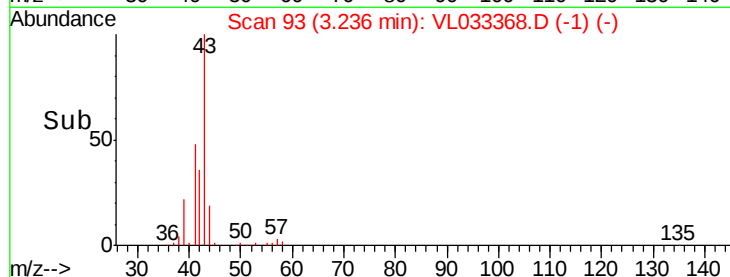
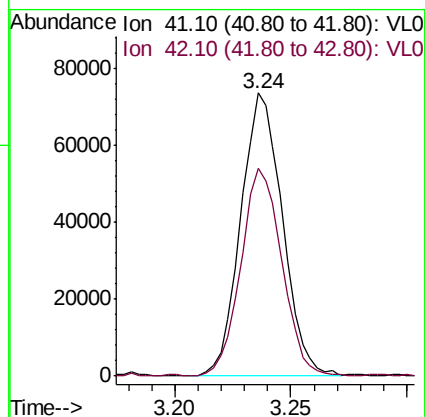
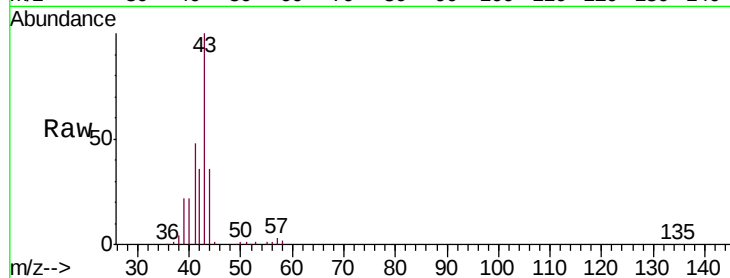
A-10

Tgt Ion: 41 Resp: 91219

Ion Ratio Lower Upper

41 100

42 73.7 55.2 82.8



#10

Heptane

Concen: 0.859 ppbv

RT: 8.24 min Scan# 1650

Delta R.T. -0.01 min

Lab File: VL033368.D

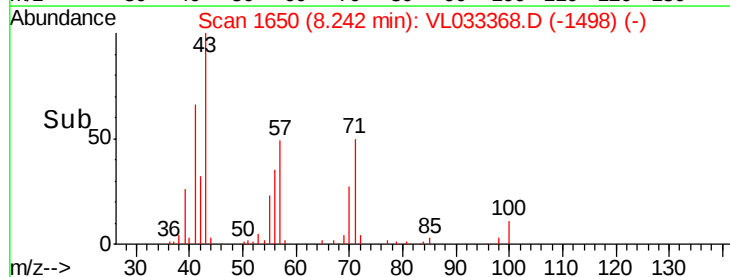
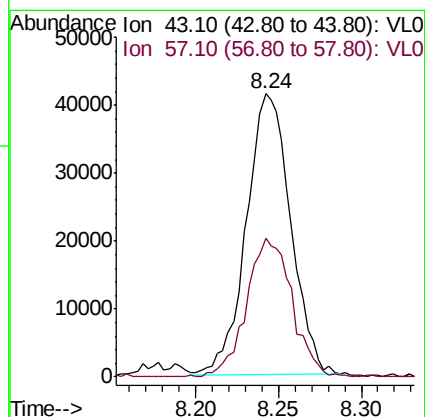
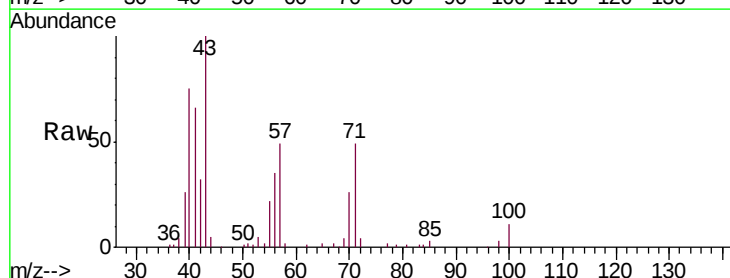
Acq: 18 Mar 2019 21:22

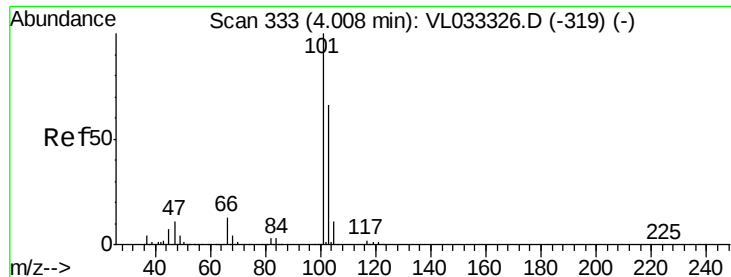
Tgt Ion: 43 Resp: 77143

Ion Ratio Lower Upper

43 100

57 50.8 40.4 60.6

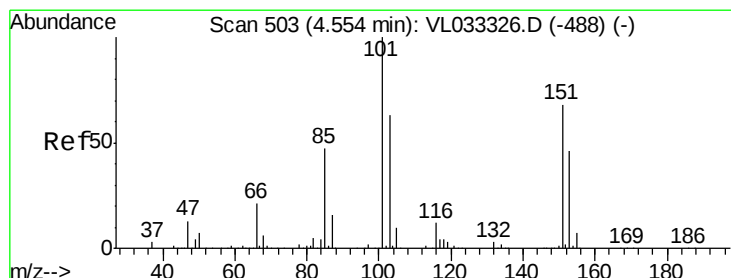
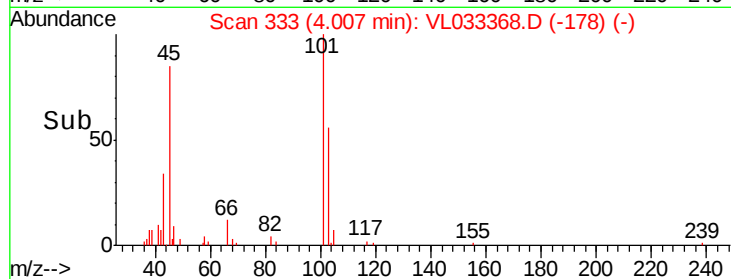
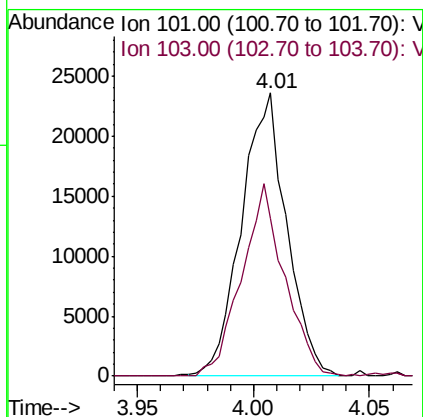
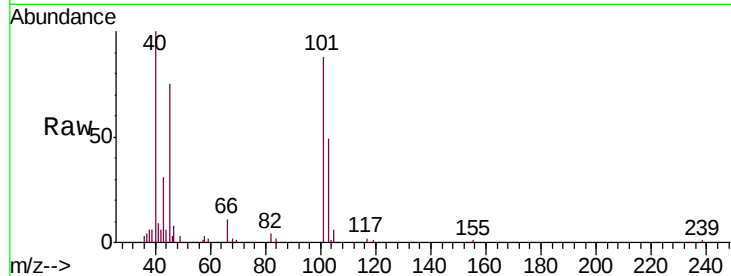




#11
 Trichlorofluoromethane
 Concen: 0.260 ppbv
 RT: 4.01 min Scan# 333
 Delta R.T. -0.00 min
 Lab File: VL033368.D
 Acq: 18 Mar 2019 21:22

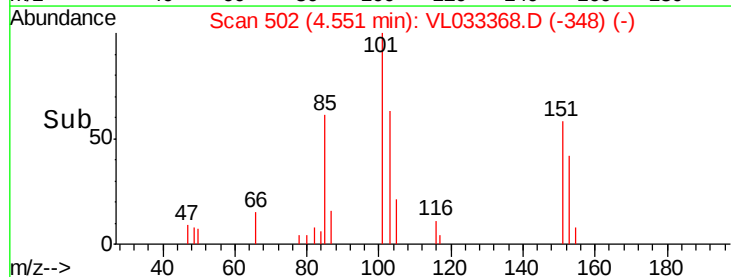
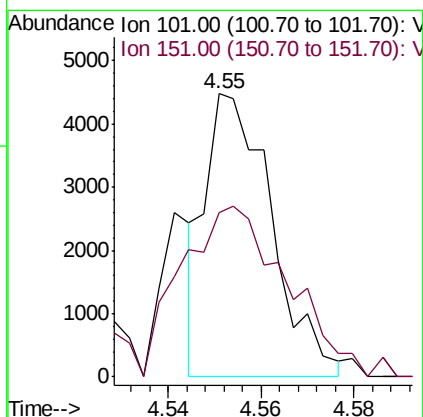
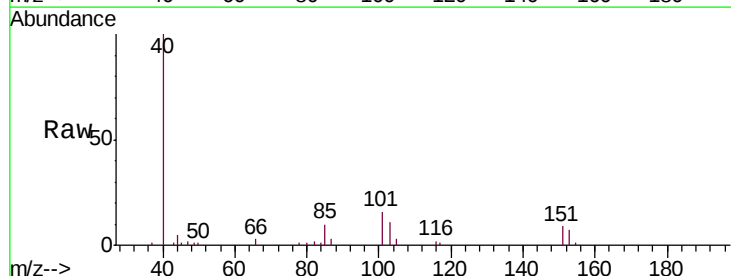
Instrument :
 MSVOA_L
 ClientSampleId :
 A-10

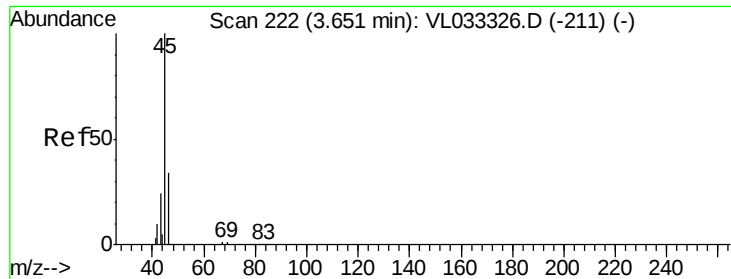
Tgt Ion:101 Resp: 32159
 Ion Ratio Lower Upper
 101 100
 103 55.8 52.9 79.3



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.054 ppbv
 RT: 4.55 min Scan# 502
 Delta R.T. -0.00 min
 Lab File: VL033368.D
 Acq: 18 Mar 2019 21:22

Tgt Ion:101 Resp: 4408
 Ion Ratio Lower Upper
 101 100
 151 105.3 56.3 84.5#





#13

Ethanol

Concen: 116.203 ppbv

RT: 3.65 min Scan# 223

Delta R.T. 0.00 min

Lab File: VL033368.D

Acq: 18 Mar 2019 21:22

Instrument :

MSVOA_L

ClientSampleId :

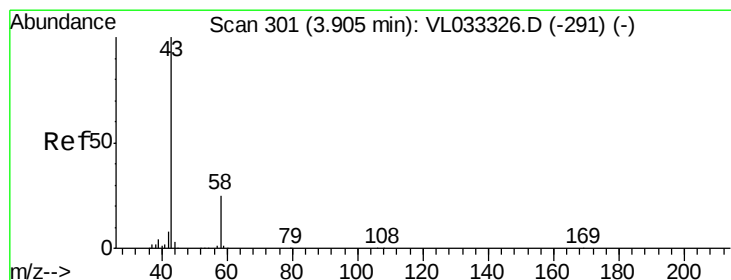
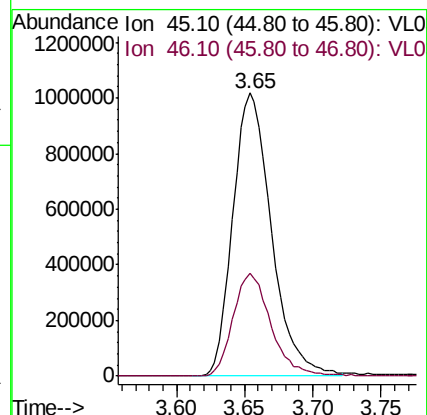
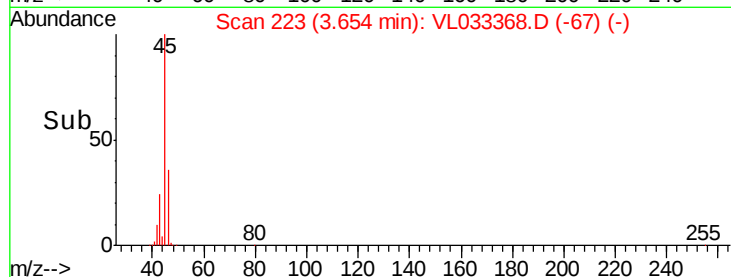
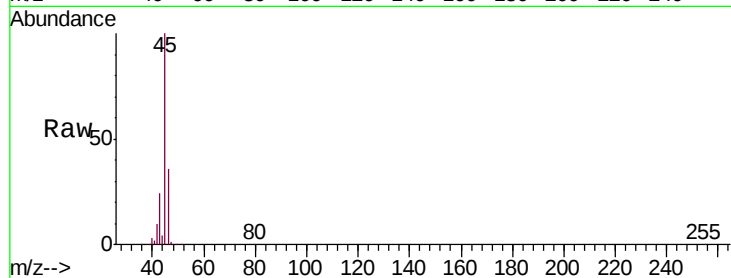
A-10

Tgt Ion: 45 Resp: 2005896

Ion Ratio Lower Upper

45 100

46 36.1 14.9 59.7



#15

Acetone

Concen: 4.853 ppbv

RT: 3.90 min Scan# 300

Delta R.T. -0.00 min

Lab File: VL033368.D

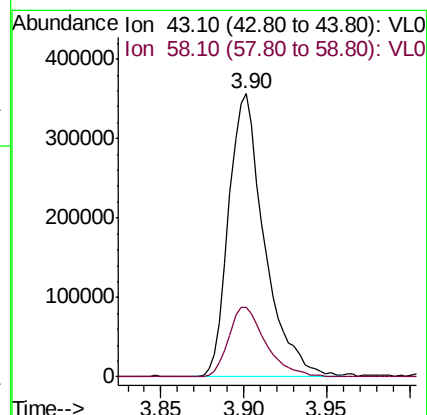
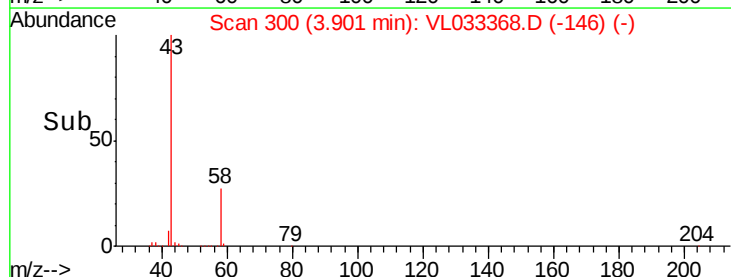
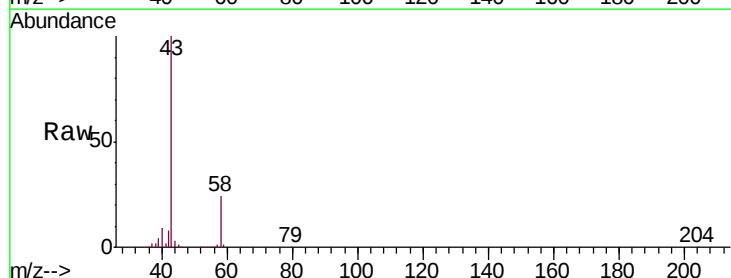
Acq: 18 Mar 2019 21:22

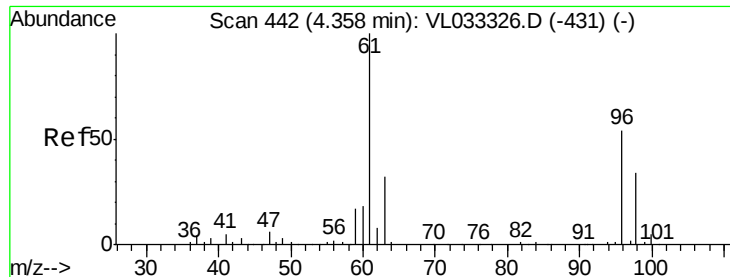
Tgt Ion: 43 Resp: 533096

Ion Ratio Lower Upper

43 100

58 25.9 20.4 30.6

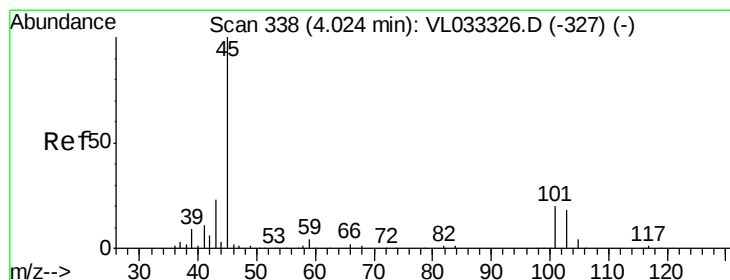
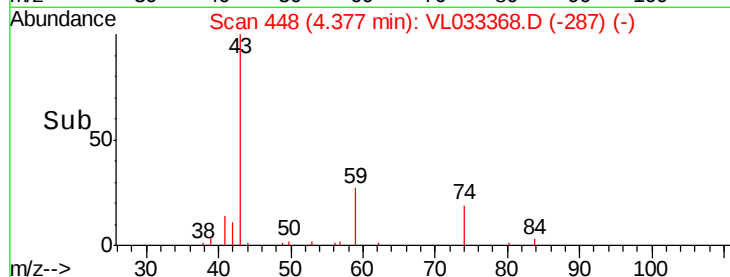
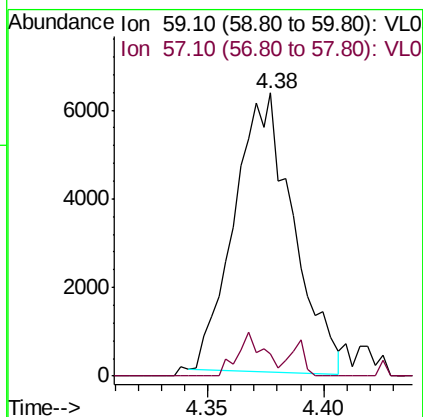
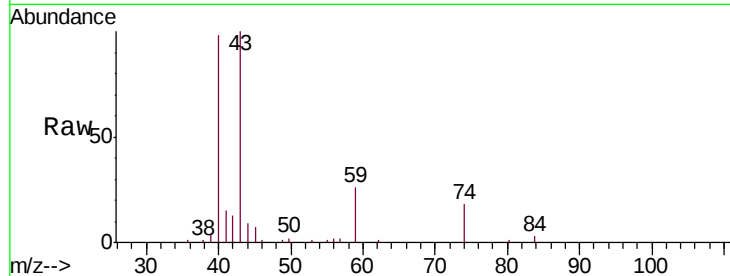




#17
tert-Butyl alcohol
Concen: 0.715 ppbv
RT: 4.38 min Scan# 448
Delta R.T. 0.02 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

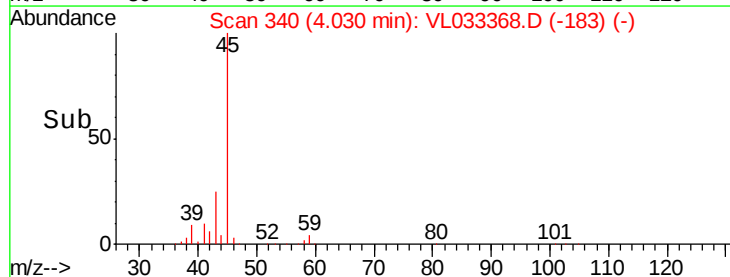
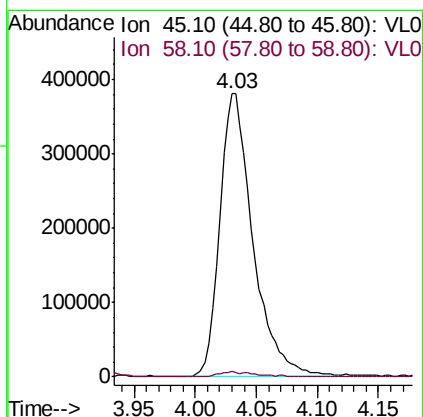
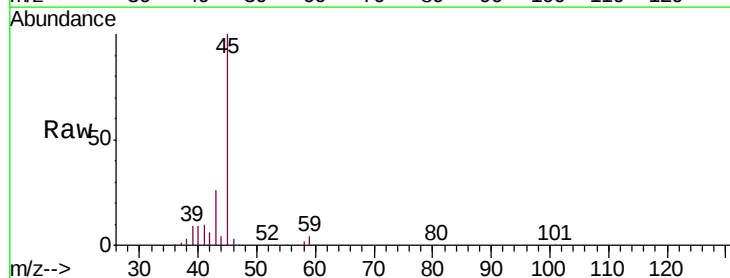
Instrument :
MSVOA_L
ClientSampleId :
A-10

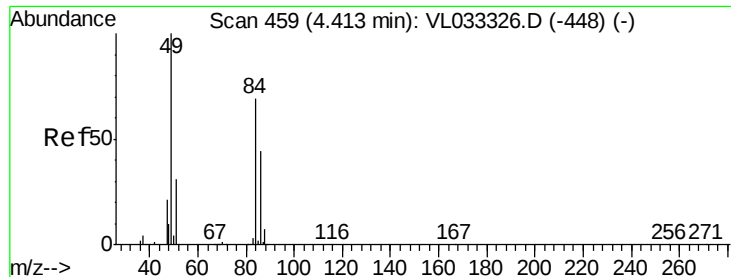
Tgt Ion: 59 Resp: 11060
Ion Ratio Lower Upper
59 100
57 10.4 7.7 11.5



#19
Isopropyl Alcohol
Concen: 13.783 ppbv
RT: 4.03 min Scan# 340
Delta R.T. 0.01 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

Tgt Ion: 45 Resp: 720232
Ion Ratio Lower Upper
45 100
58 2.0 1.5 2.3

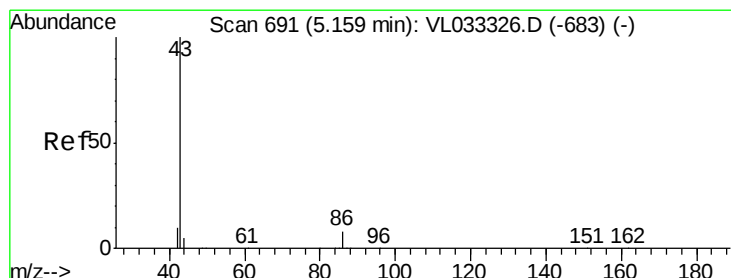
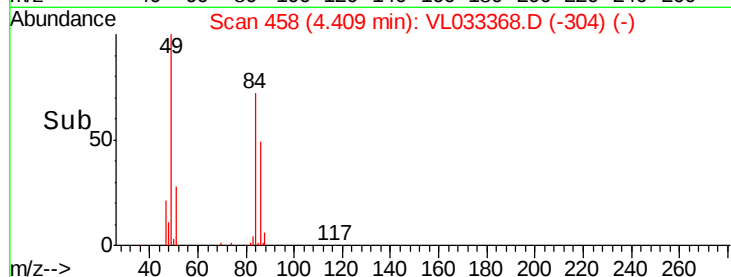
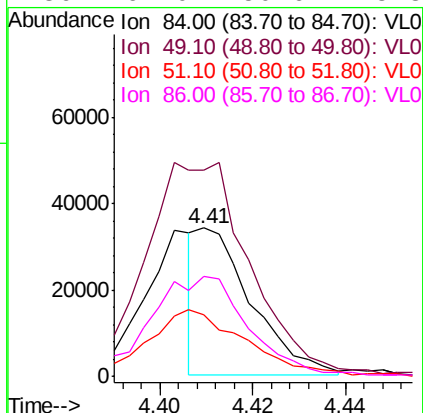
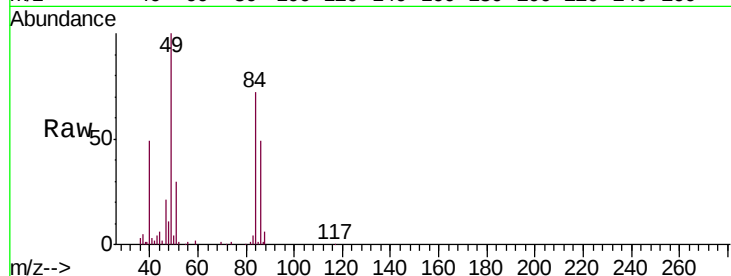




#20
Methylene Chloride
Concen: 0.770 ppbv
RT: 4.41 min Scan# 458
Delta R.T. -0.00 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

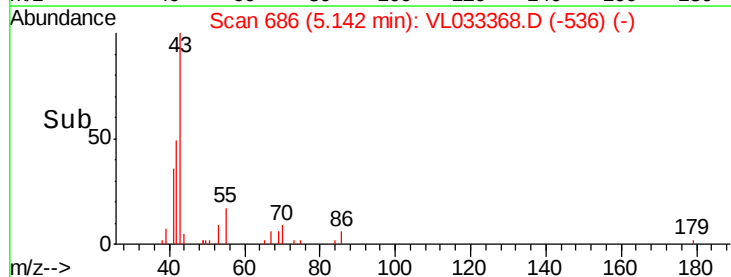
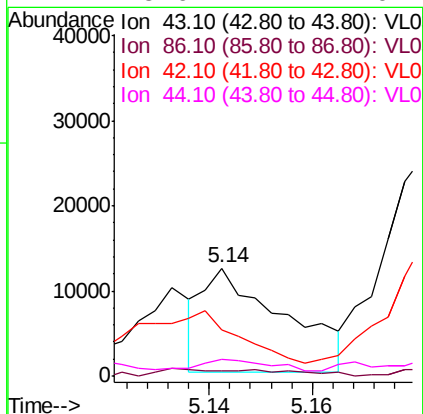
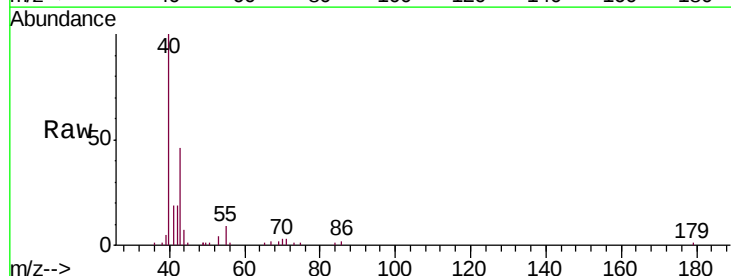
Instrument :
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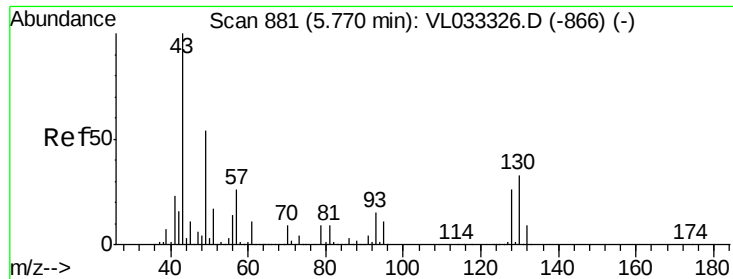
Tgt Ion:	84	Resp:	27579
Ion	Ratio	Lower	Upper
84	100		
49	138.9	115.4	173.0
51	40.4	35.8	53.6
86	67.0	50.6	75.8



#23
Vinyl Acetate
Concen: 0.104 ppbv
RT: 5.14 min Scan# 686
Delta R.T. -0.02 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

Tgt Ion:	43	Resp:	13246
Ion	Ratio	Lower	Upper
43	100		
86	2.2	6.2	9.2#
42	38.9	8.1	12.1#
44	5.6	4.1	6.1

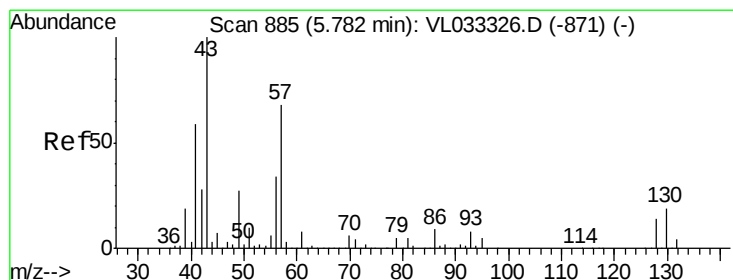
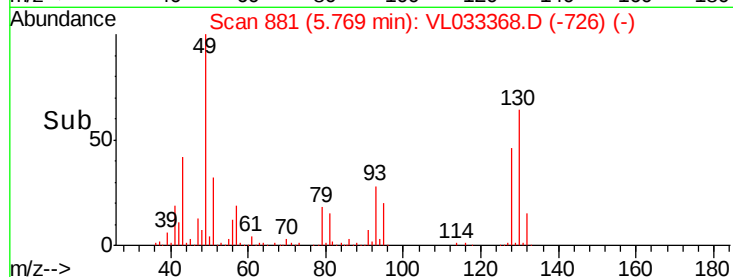
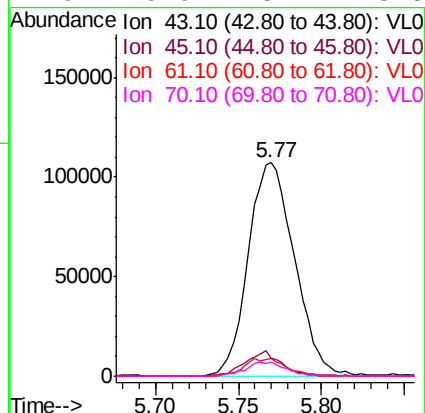
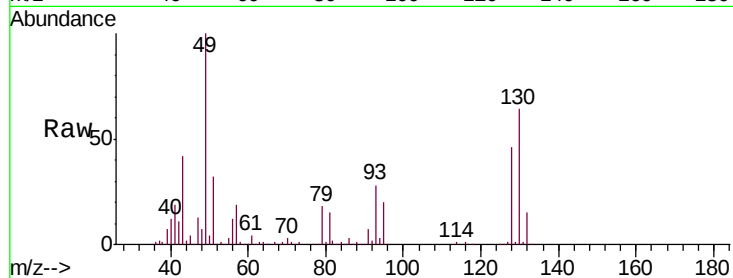




#25
Ethyl Acetate
Concen: 1.297 ppbv
RT: 5.77 min Scan# 881
Delta R.T. -0.00 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

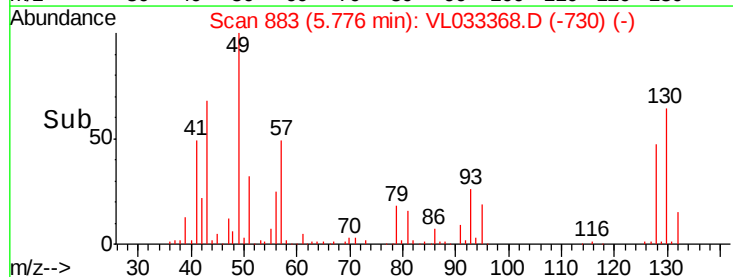
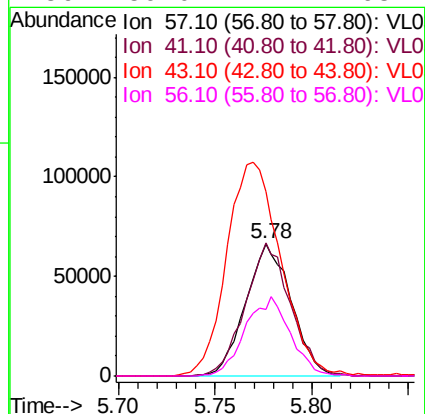
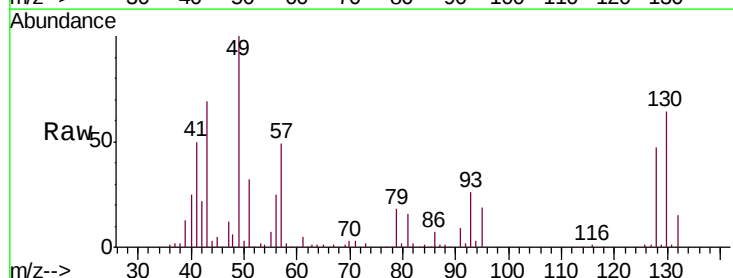
Instrument :
MSVOA_L
ClientSampleId :
A-10

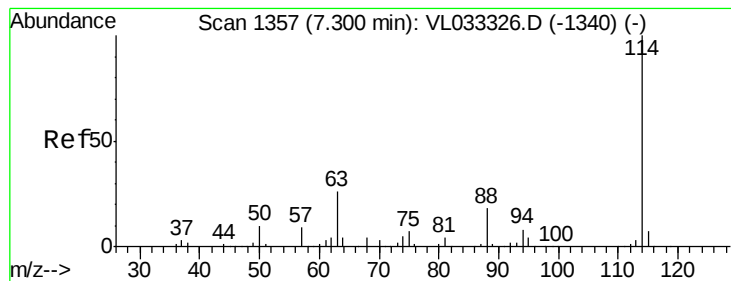
Tgt Ion:	43	Resp:	207123
Ion	Ratio	Lower	Upper
43	100		
45	9.6	7.9	11.9
61	7.7	7.4	11.2
70	6.0	5.7	8.5



#26
Hexane
Concen: 1.524 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.01 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

Tgt Ion:	57	Resp:	108831
Ion	Ratio	Lower	Upper
57	100		
41	100.1	70.5	105.7
43	193.1	181.8	272.8
56	59.0	42.2	63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.01 min

Lab File: VL033368.D

Acq: 18 Mar 2019 21:22

Instrument :

MSVOA_L

ClientSampleId :

A-10

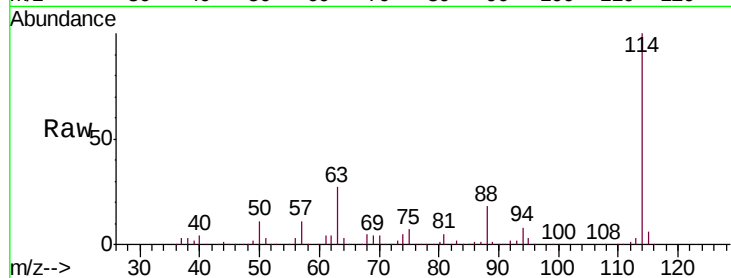
Tgt Ion: 114 Resp: 1584432

Ion Ratio Lower Upper

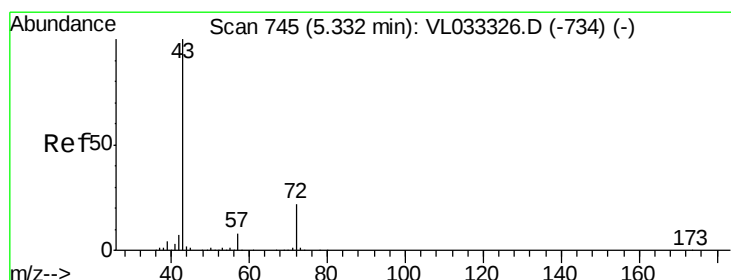
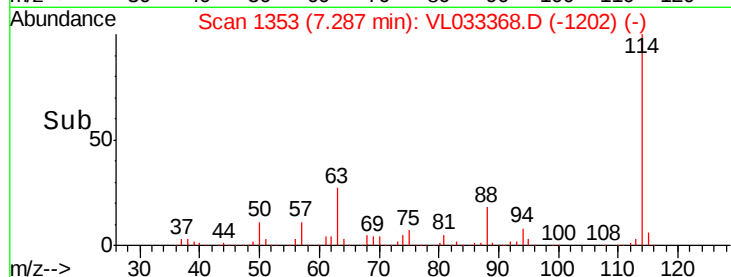
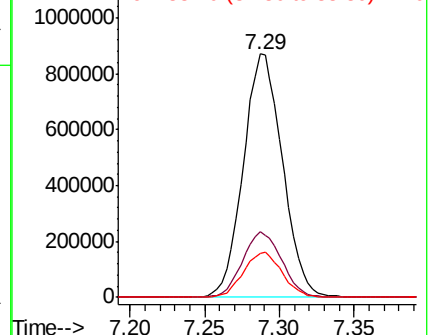
114 100

63 27.1 21.4 32.2

88 18.4 14.5 21.7



Abundance Ion 114.10 (113.80 to 114.80): VL0
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.636 ppbv

RT: 5.33 min Scan# 744

Delta R.T. -0.00 min

Lab File: VL033368.D

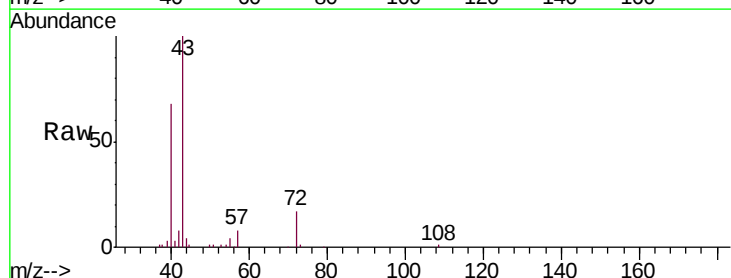
Acq: 18 Mar 2019 21:22

Tgt Ion: 43 Resp: 66128

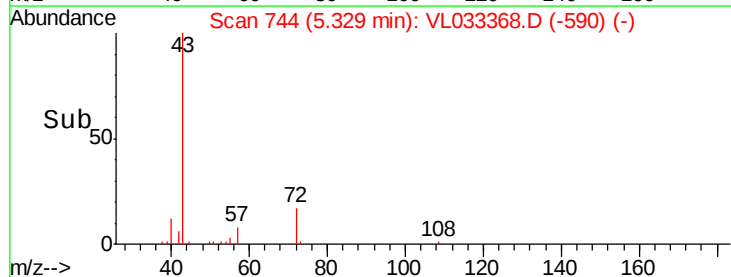
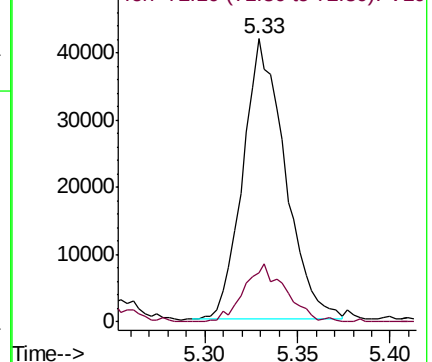
Ion Ratio Lower Upper

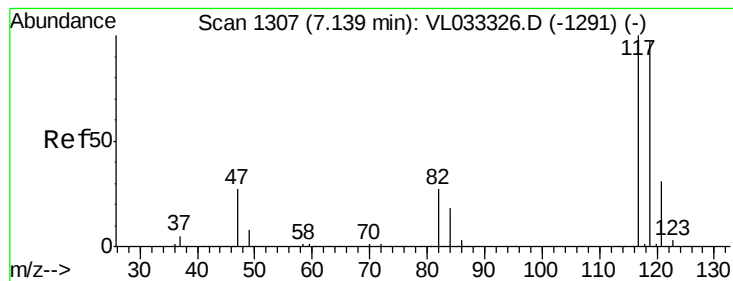
43 100

72 20.8 17.7 26.5



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.075 ppbv

RT: 7.13 min Scan# 1305

Delta R.T. -0.01 min

Lab File: VL033368.D

Acq: 18 Mar 2019 21:22

Instrument :

MSVOA_L

ClientSampleId :

A-10

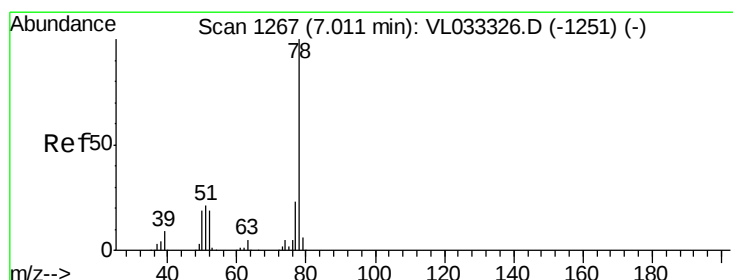
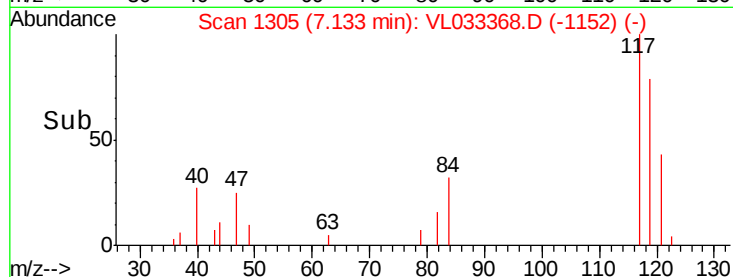
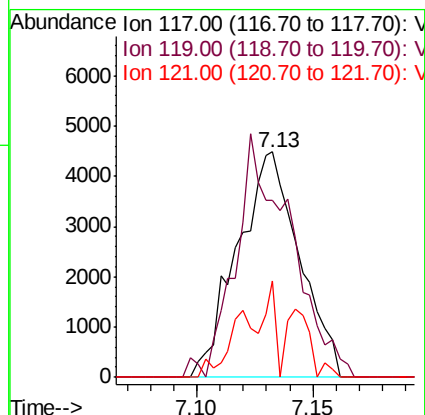
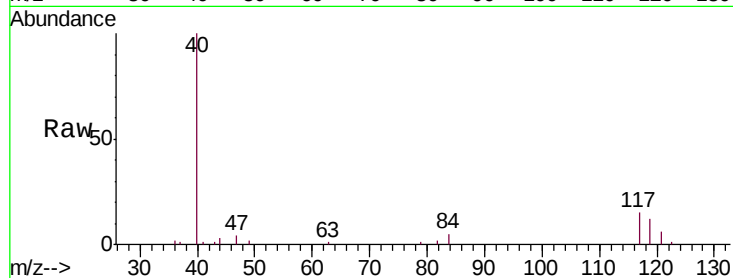
Tgt Ion: 117 Resp: 8346

Ion Ratio Lower Upper

117 100

119 70.6 77.4 116.0#

121 42.6 24.9 37.3#



#36

Benzene

Concen: 0.257 ppbv

RT: 7.00 min Scan# 1263

Delta R.T. -0.01 min

Lab File: VL033368.D

Acq: 18 Mar 2019 21:22

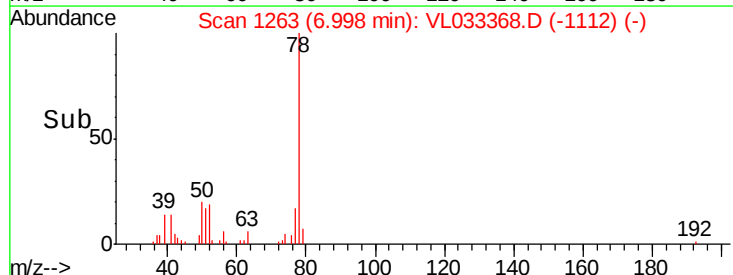
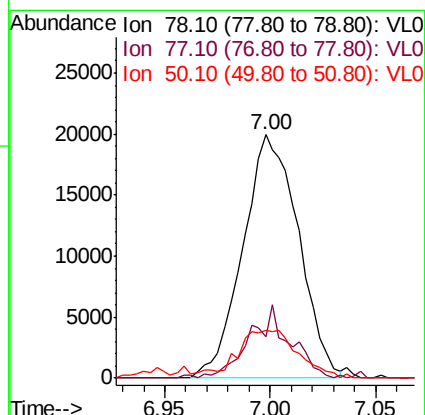
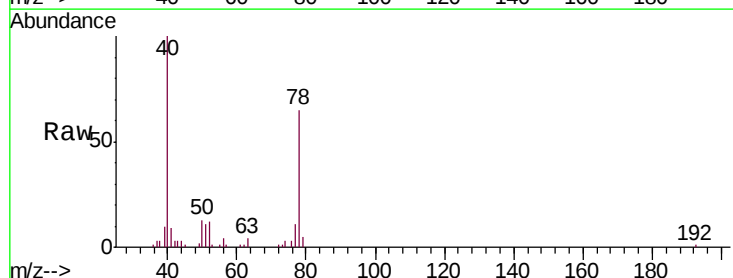
Tgt Ion: 78 Resp: 36459

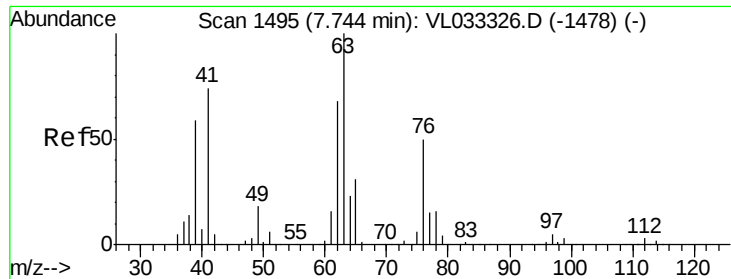
Ion Ratio Lower Upper

78 100

77 15.4 18.1 27.1#

50 19.6 15.2 22.8





#39

1,2-Dichloropropane

Concen: 8.068 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.46 min

Lab File: VL033368.D

Acq: 18 Mar 2019 21:22

Instrument :

MSVOA_L

ClientSampleId :

A-10

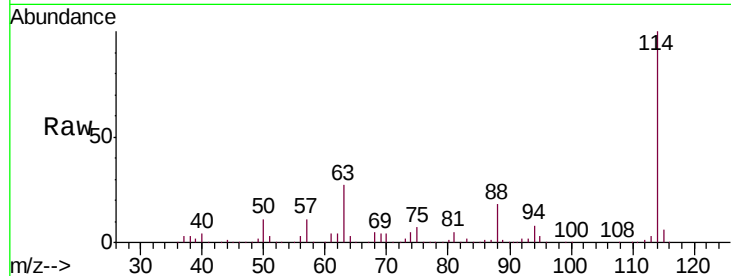
Tgt Ion: 63 Resp: 428424

Ion Ratio Lower Upper

63 100

41 0.0 59.5 89.3#

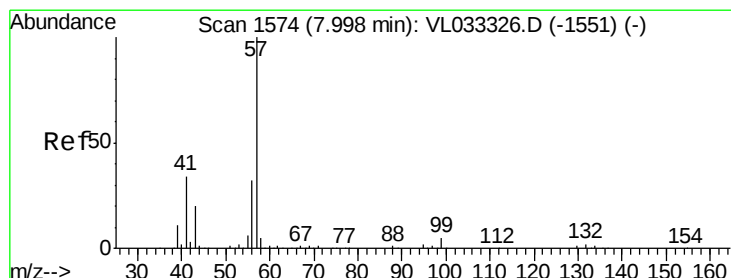
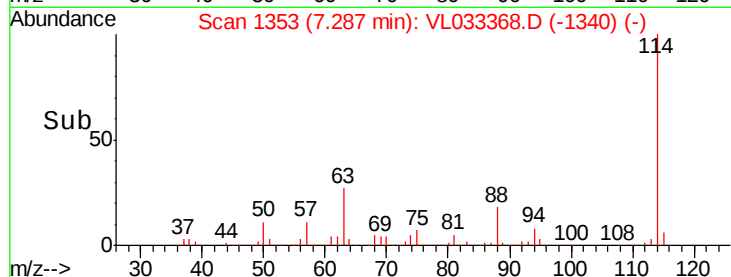
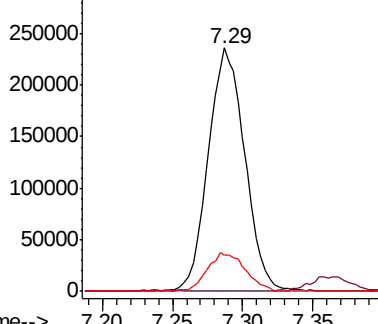
62 14.7 54.7 82.1#



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: 0.119 ppbv

RT: 7.99 min Scan# 1571

Delta R.T. -0.01 min

Lab File: VL033368.D

Acq: 18 Mar 2019 21:22

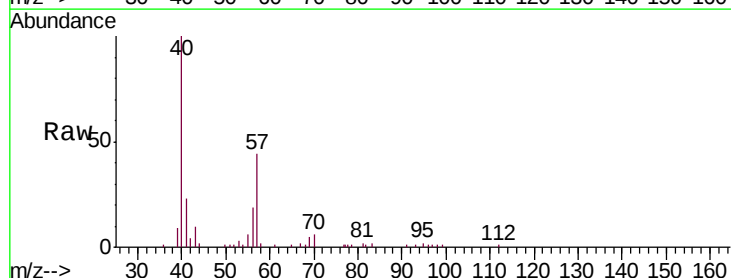
Tgt Ion: 57 Resp: 28010

Ion Ratio Lower Upper

57 100

41 57.3 26.0 39.0#

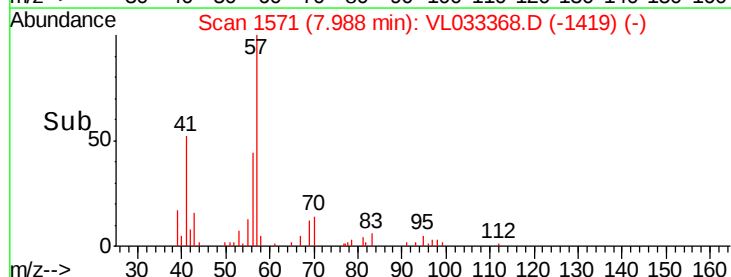
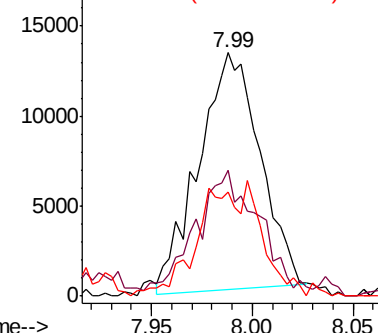
56 49.3 24.6 36.8#

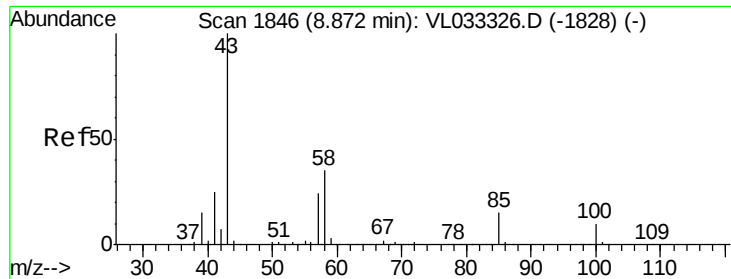


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0

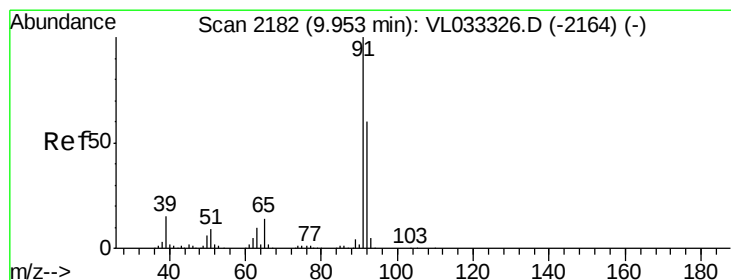
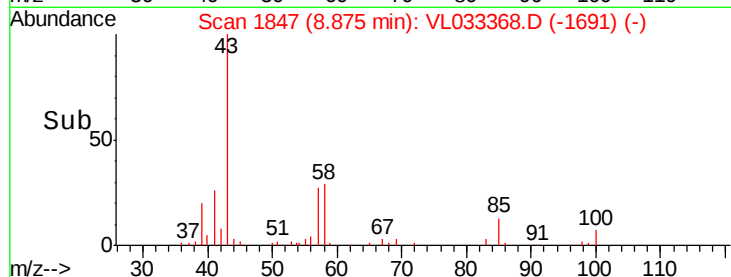
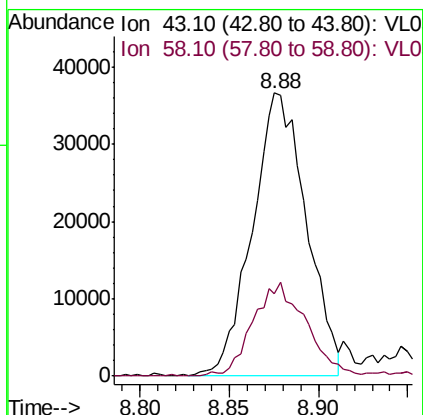
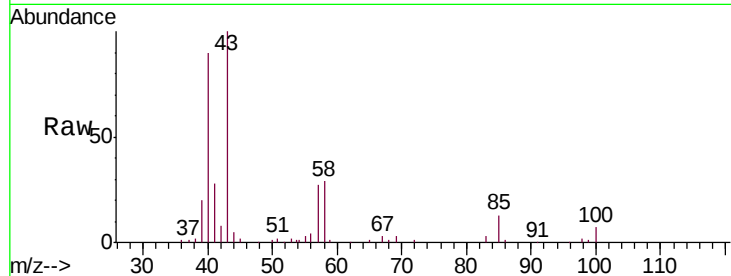




#50
4-Methyl-2-Pentanone
Concen: 0.526 ppbv
RT: 8.88 min Scan# 1847
Delta R.T. 0.00 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

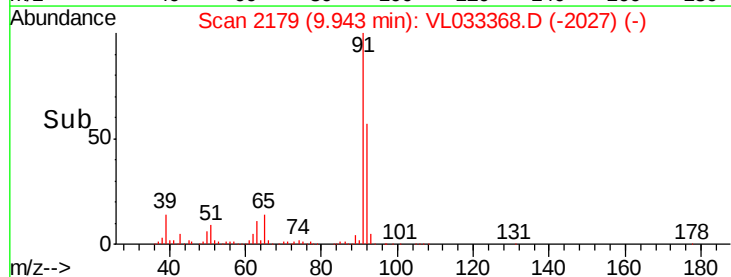
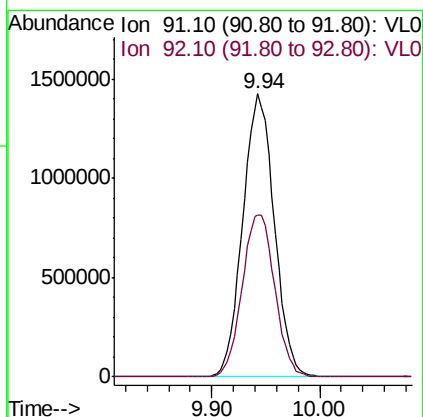
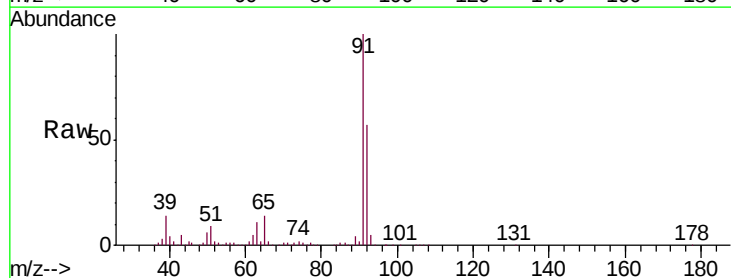
Instrument :
MSVOA_L
ClientSampleId :
A-10

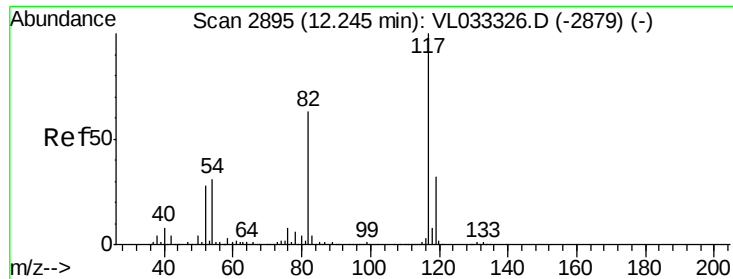
Tgt Ion: 43 Resp: 77370
Ion Ratio Lower Upper
43 100
58 33.5 28.4 42.6



#53
Toluene
Concen: 17.993 ppbv
RT: 9.94 min Scan# 2179
Delta R.T. -0.01 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

Tgt Ion: 91 Resp: 2899133
Ion Ratio Lower Upper
91 100
92 59.2 47.4 71.0

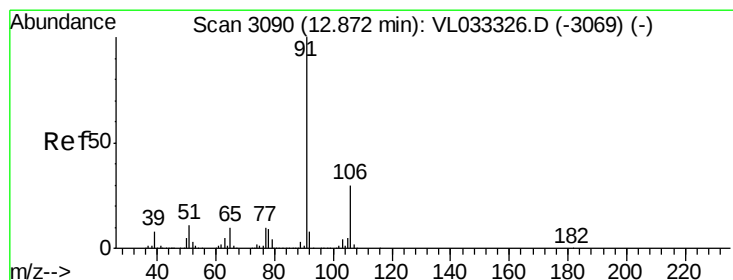
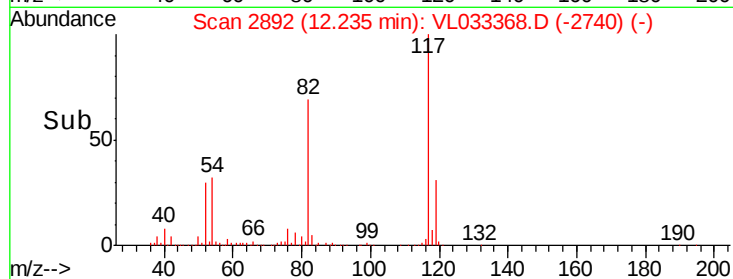
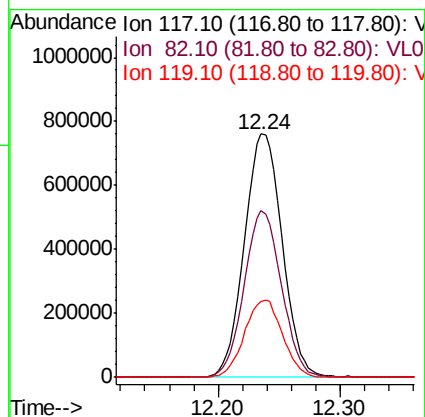
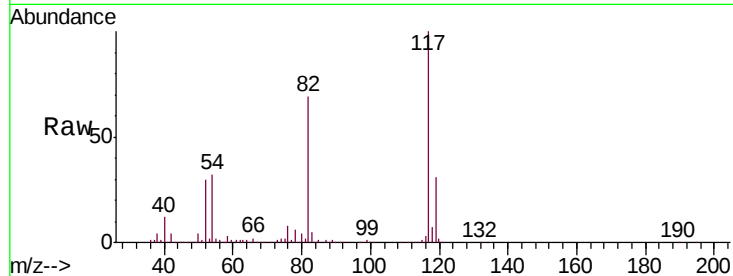




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2892
Delta R.T. -0.01 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

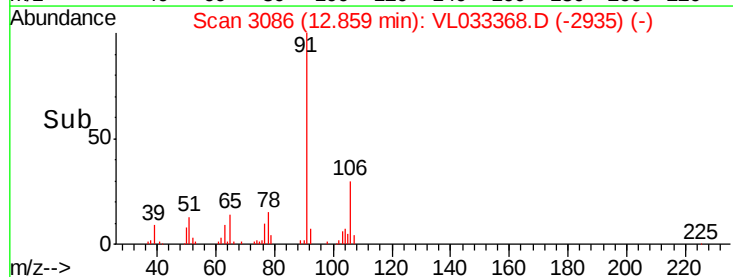
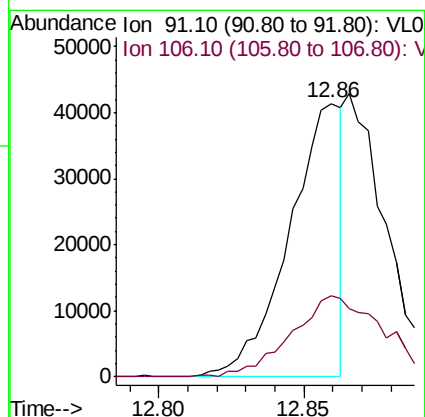
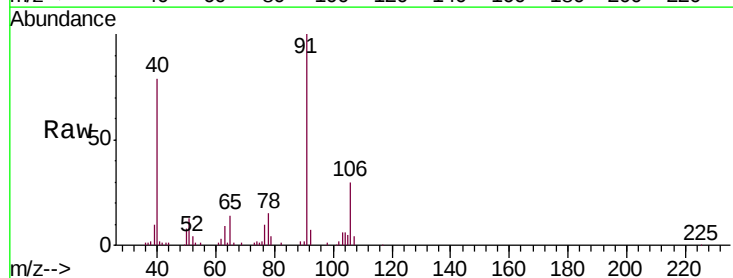
Instrument :
MSVOA_L
ClientSampleId :
A-10

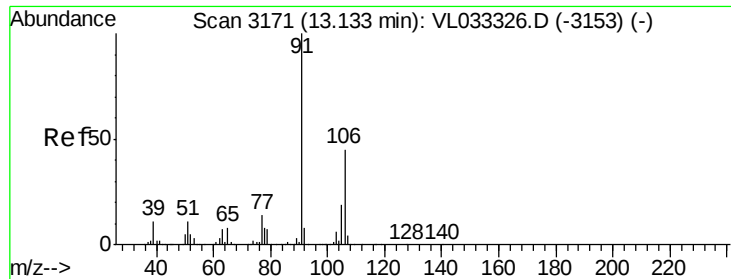
Tgt Ion:117 Resp: 1630347
Ion Ratio Lower Upper
117 100
82 67.8 53.4 80.2
119 32.1 27.3 40.9



#58
Ethyl Benzene
Concen: 0.226 ppbv
RT: 12.86 min Scan# 3086
Delta R.T. -0.01 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

Tgt Ion: 91 Resp: 52142
Ion Ratio Lower Upper
91 100
106 29.7 24.2 36.2

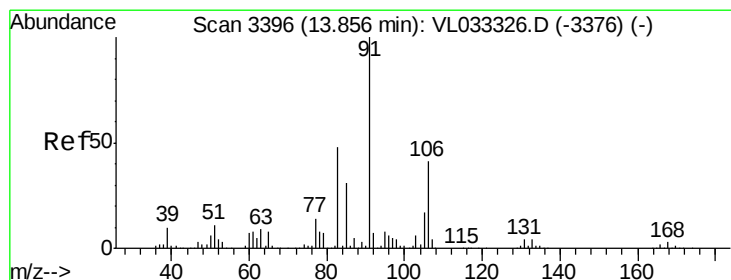
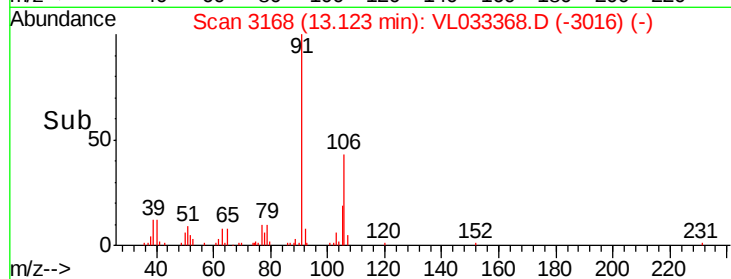
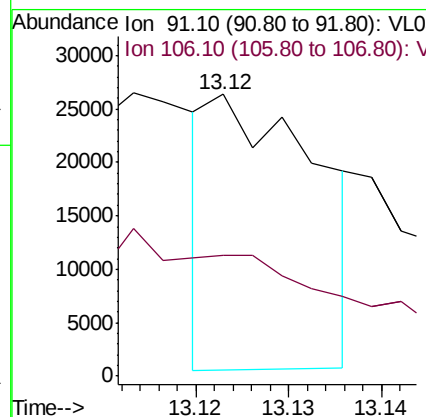
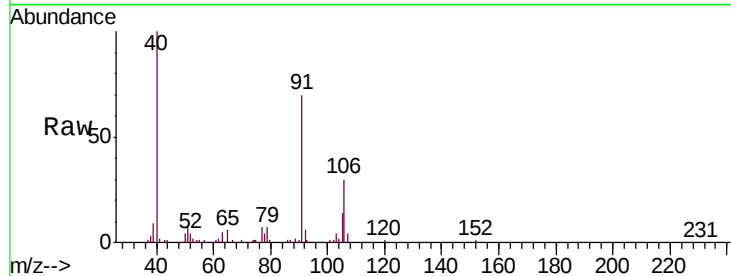




#59
m/p-Xylene
Concen: 0.105 ppbv
RT: 13.12 min Scan# 3168
Delta R.T. -0.01 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

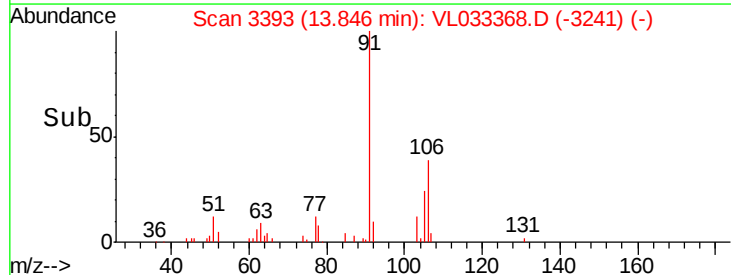
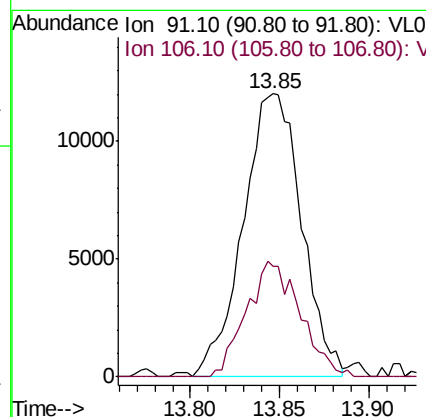
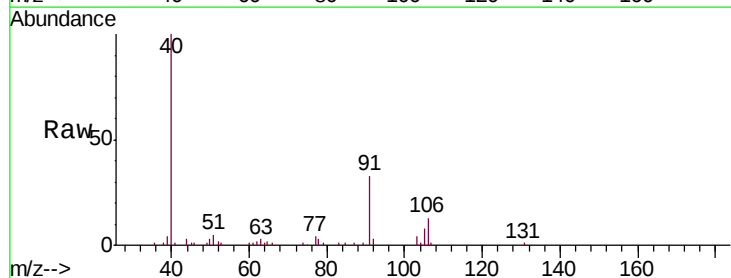
Instrument :
MSVOA_L
ClientSampleId :
A-10

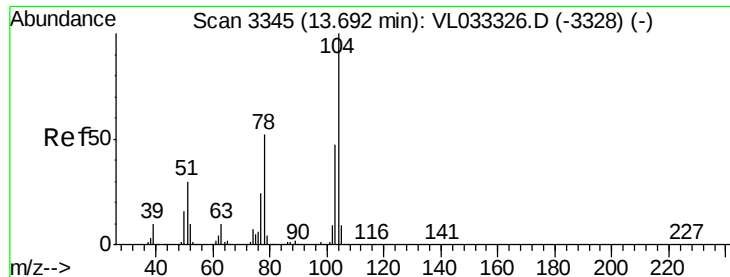
Tgt Ion: 91 Resp: 20778
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0



#60
o-Xylene
Concen: 0.142 ppbv
RT: 13.85 min Scan# 3393
Delta R.T. -0.01 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

Tgt Ion: 91 Resp: 27487
Ion Ratio Lower Upper
91 100
106 37.7 21.3 63.9

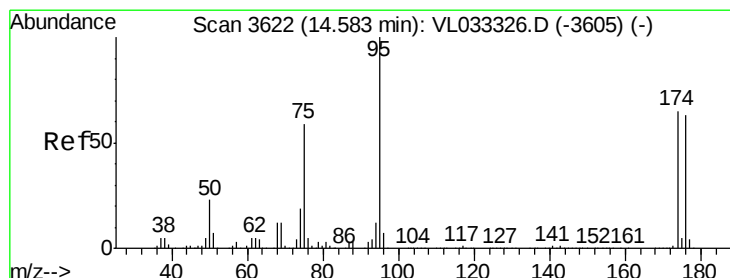
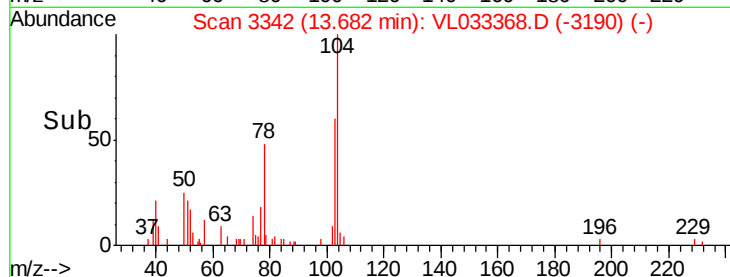
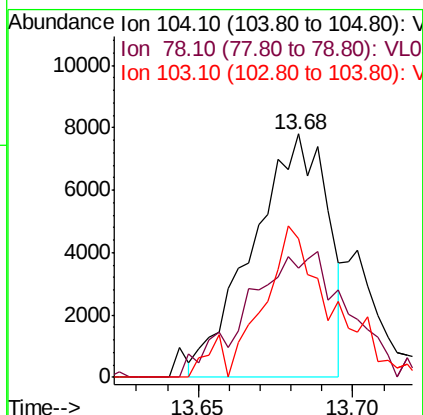
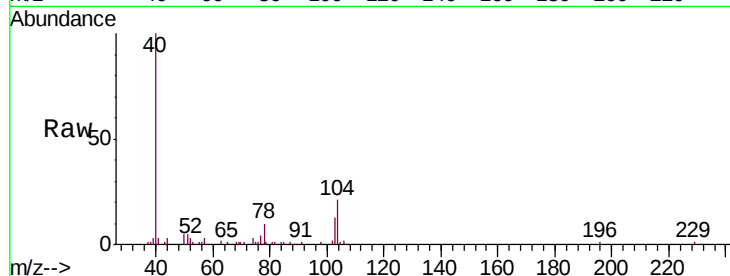




#61
Styrene
Concen: 0.097 ppbv
RT: 13.68 min Scan# 3342
Delta R.T. -0.01 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

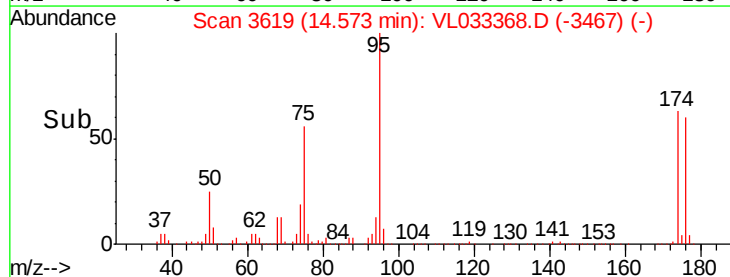
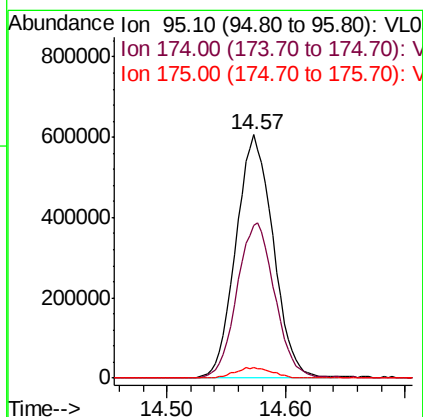
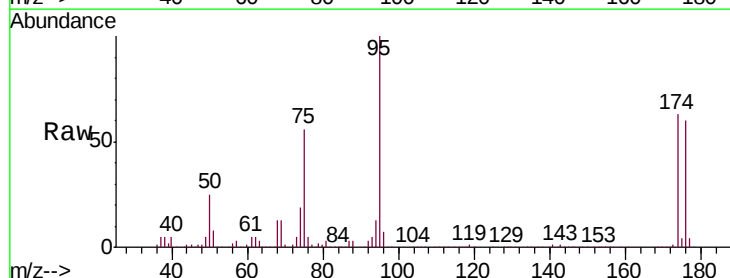
Instrument :
MSVOA_L
ClientSampled :
A-10

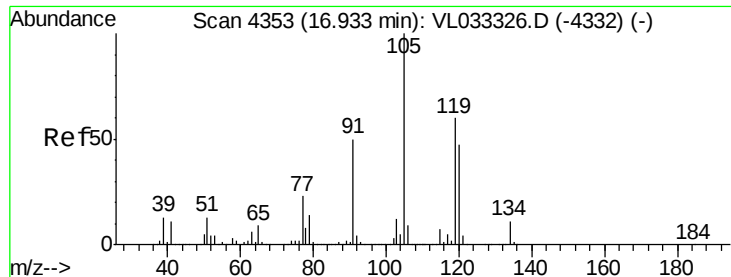
Tgt Ion: 104 Resp: 13148
Ion Ratio Lower Upper
104 100
78 69.2 42.7 64.1#
103 59.1 38.0 57.0#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.863 ppbv
RT: 14.57 min Scan# 3619
Delta R.T. -0.01 min
Lab File: VL033368.D
Acq: 18 Mar 2019 21:22

Tgt Ion: 95 Resp: 1312341
Ion Ratio Lower Upper
95 100
174 64.9 51.5 77.3
175 4.5 3.8 5.6





#74
 1,2,4-Trimethylbenzene
 Concen: 0.071 ppbv
 RT: 16.92 min Scan# 4350
 Delta R.T. -0.01 min
 Lab File: VL033368.D
 Acq: 18 Mar 2019 21:22

Instrument :
 MSVOA_L
 ClientSampleId :
 A-10

Tgt Ion:	105	Resp:	16068
Ion	Ratio	Lower	Upper
105	100		
120	35.9	37.4	56.2#
91	10.4	41.0	61.4#
77	18.0	18.5	27.7#

