

Data File : VL034653.D
Acq On : 19 Feb 2020 20:18
Operator : SY/AP
Sample : L1553-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-1

Quant Time: Feb 20 06:50:57 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL013020AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan 30 17:16:44 2020
QLast Update : Thu Jan 30 17:16:44 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	818498	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.17	114	1726972	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.11	117	1696782	10.00	ppbv	0.00

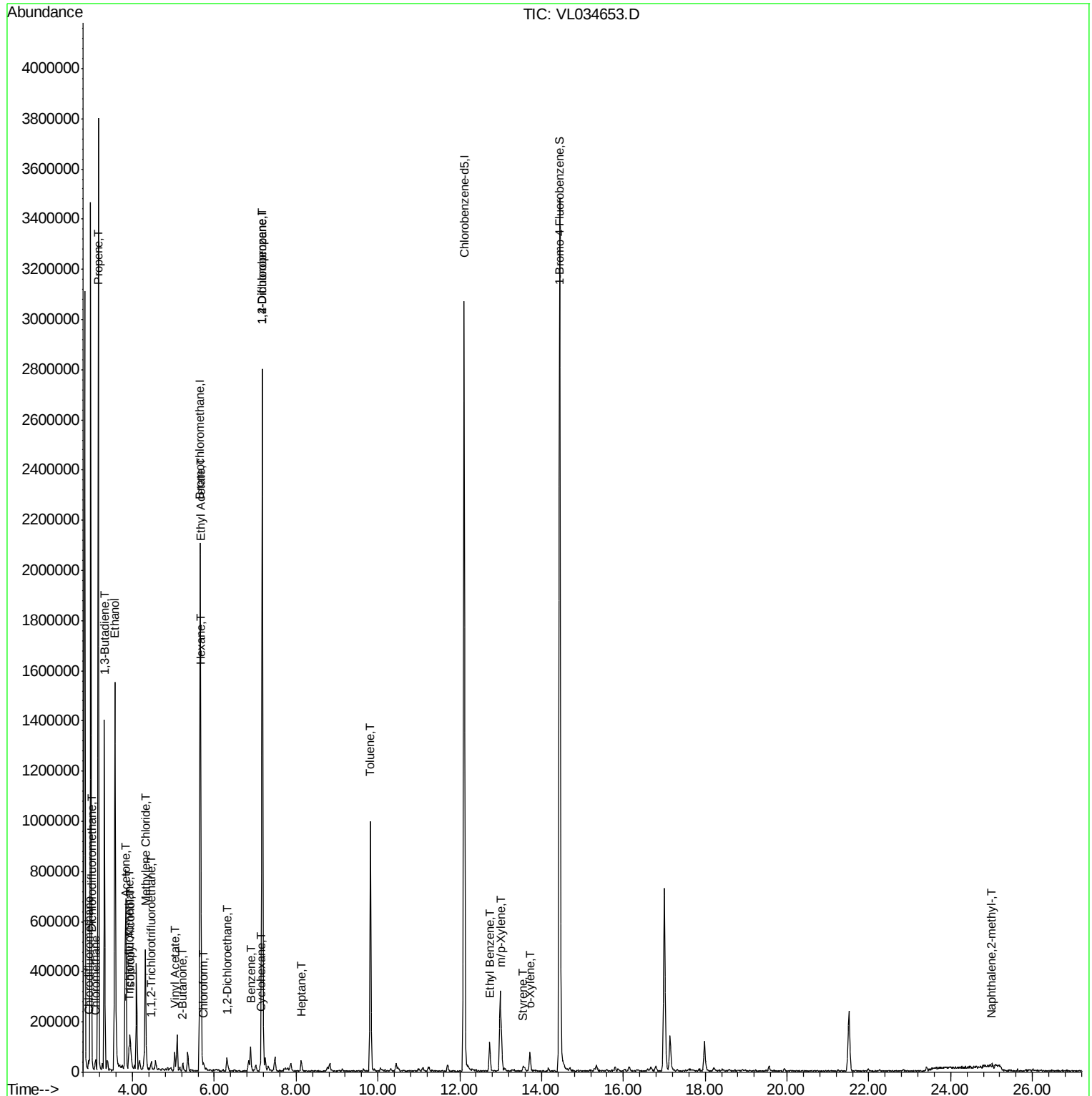
System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.44 95 1509975 10.53 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 105.30%

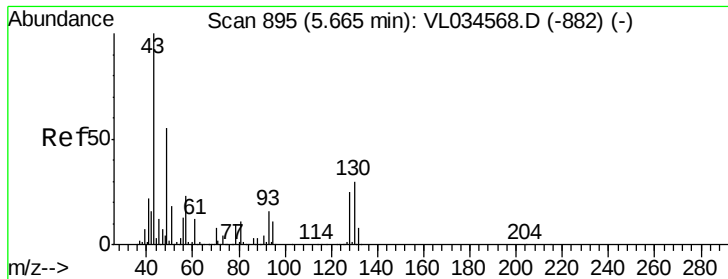
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.01	85	37291	0.207	ppbv	96
3) Chlorodifluoromethane	2.94	51	49228	0.498	ppbv #	86
4) Chloromethane	3.10	50	27271	0.451	ppbv	99
9) Propene	3.16	41	1065106	27.660	ppbv	86
10) Heptane	8.12	43	8820	0.091	ppbv #	74
11) Trichlorofluoromethane	3.92	101	47832	0.292	ppbv	90
12) 1,1,2-Trichlorotrifluoroet	4.45	101	5832	0.055	ppbv #	35
13) Ethanol	3.57	45	1612504	156.332	ppbv	99
15) Acetone	3.82	43	602155	5.006	ppbv #	89
16) 1,3-Butadiene	3.31	39	181801	3.806	ppbv #	11
19) Isopropyl Alcohol	3.94	45	128580	1.832	ppbv #	91
20) Methylene Chloride	4.31	84	155693	3.399	ppbv	94
23) Vinyl Acetate	5.04	43	25814	0.188	ppbv #	1
25) Ethyl Acetate	5.67	43	142614	0.732	ppbv #	82
26) Hexane	5.67	57	175733	2.154	ppbv #	42
29) Chloroform	5.74	83	13466	0.093	ppbv	85
30) Cyclohexane	7.13	84	3366	0.056	ppbv #	1
34) 2-Butanone	5.23	43	28315	0.226	ppbv	96
36) Benzene	6.89	78	65202	0.425	ppbv #	89
37) 1,2-Dichloroethane	6.29	62	6466	0.050	ppbv #	86
39) 1,2-Dichloropropane	7.17	63	506882	7.962	ppbv #	19
53) Toluene	9.82	91	662633	3.928	ppbv	97
58) Ethyl Benzene	12.74	91	40988	0.181	ppbv	99
59) m/p-Xylene	13.01	91	76122	0.379	ppbv #	32
60) o-Xylene	13.72	91	30355	0.151	ppbv #	48
61) Styrene	13.55	104	6456	0.048	ppbv #	52
80) Naphthalene,2-methyl-	25.01	142	3649	0.050	ppbv #	84

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.01 min

Lab File: VL034653.D

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ClientSampleId :

IA-1

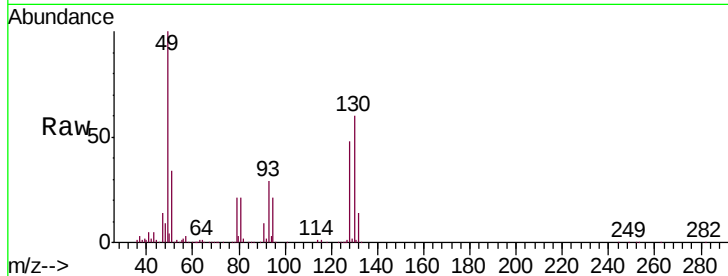
Tgt Ion: 49 Resp: 818498

Ion Ratio Lower Upper

49 100

128 46.7 22.7 68.1

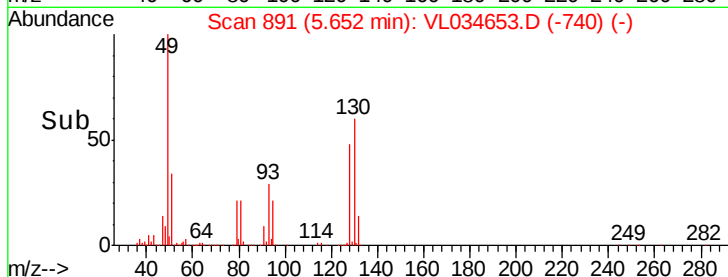
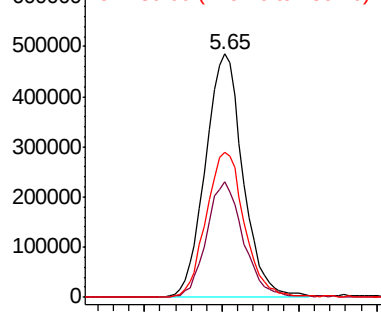
130 61.3 28.6 85.8



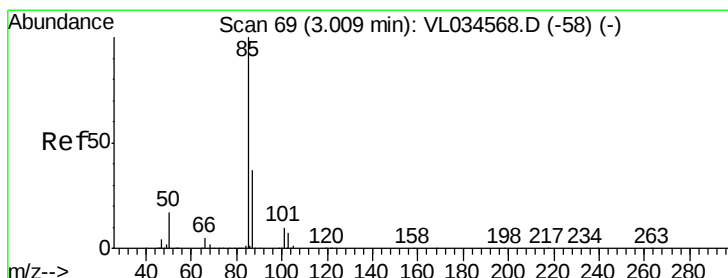
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



Time-->



#2

Dichlorodifluoromethane

Concen: 0.207 ppbv

RT: 3.01 min Scan# 68

Delta R.T. -0.00 min

Lab File: VL034653.D

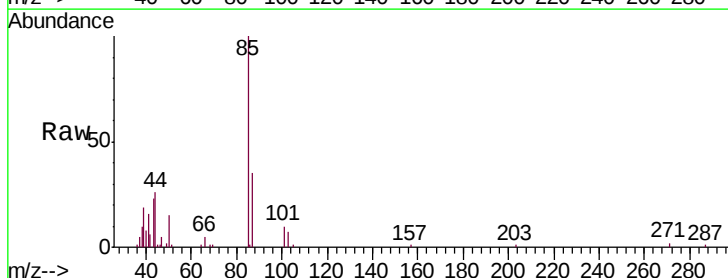
Acq: 19 Feb 2020 20:18

Tgt Ion: 85 Resp: 37291

Ion Ratio Lower Upper

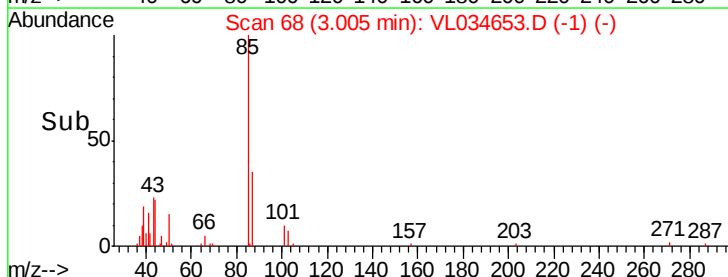
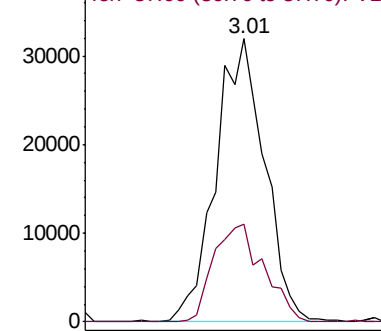
85 100

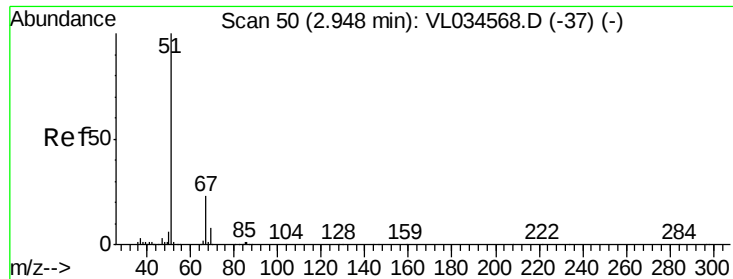
87 34.7 29.5 44.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.498 ppbv

RT: 2.94 min Scan# 48

Delta R.T. -0.01 min

Lab File: VL034653.D

Acq: 19 Feb 2020 20:18

Instrument :

MSVOA_L

ClientSampleId :

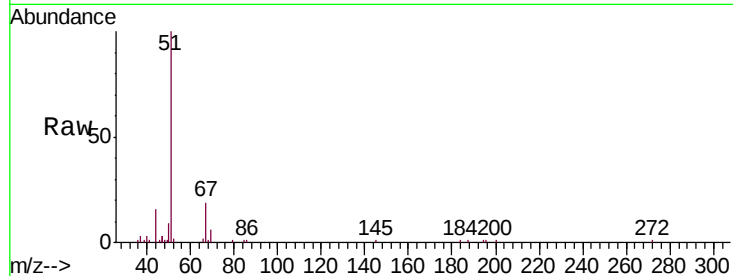
IA-1

Tgt Ion: 51 Resp: 49228

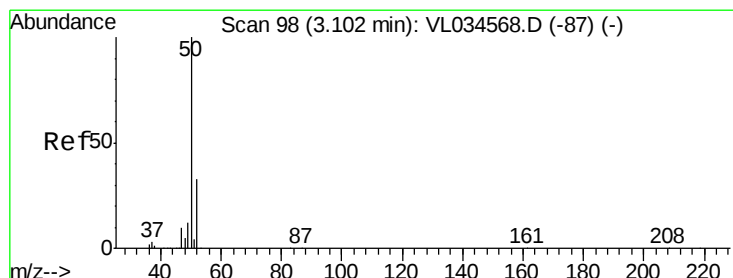
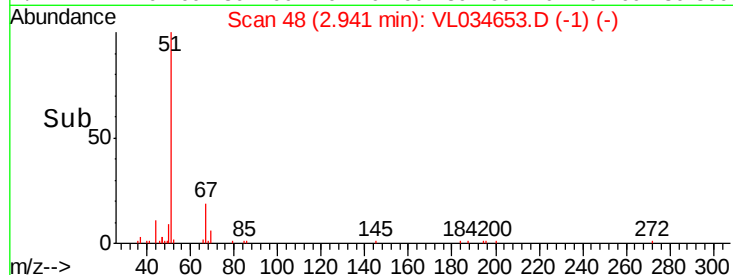
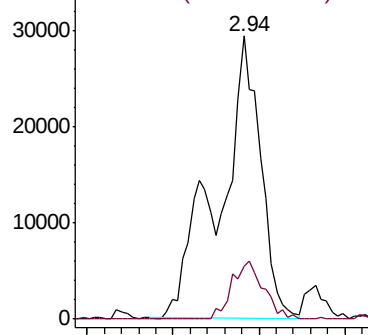
Ion Ratio Lower Upper

51 100

67 15.7 17.8 26.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0
Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.451 ppbv

RT: 3.10 min Scan# 97

Delta R.T. -0.00 min

Lab File: VL034653.D

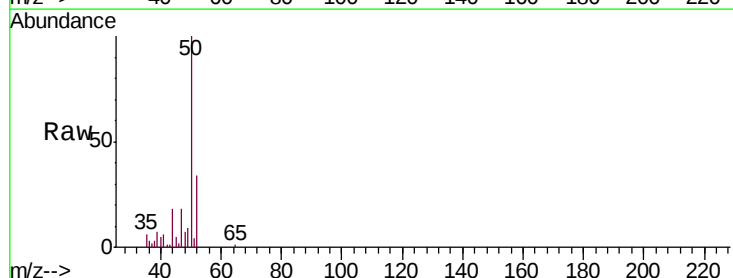
Acq: 19 Feb 2020 20:18

Tgt Ion: 50 Resp: 27271

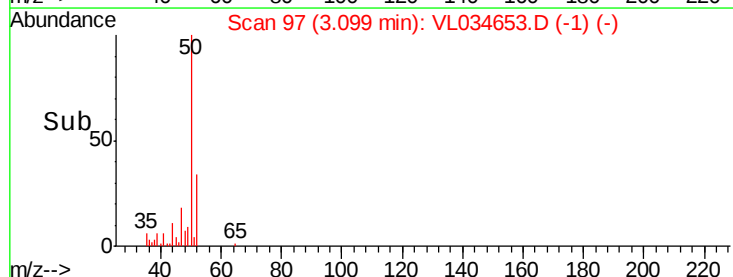
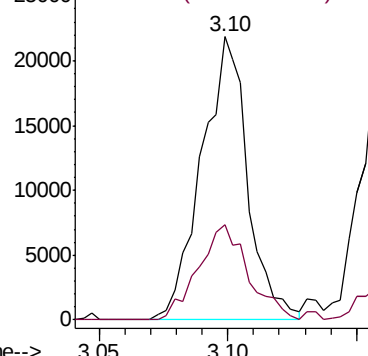
Ion Ratio Lower Upper

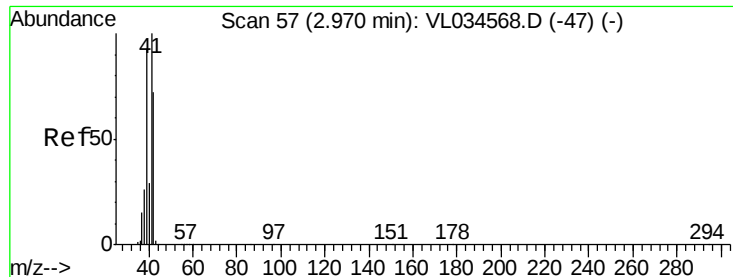
50 100

52 33.8 26.6 39.8



Abundance Ion 50.10 (49.80 to 50.80): VL0
Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 27.660 ppbv

RT: 3.16 min Scan# 117

Delta R.T. 0.19 min

Lab File: VL034653.D

Acq: 19 Feb 2020 20:18

Instrument :

MSVOA_L

ClientSampleId :

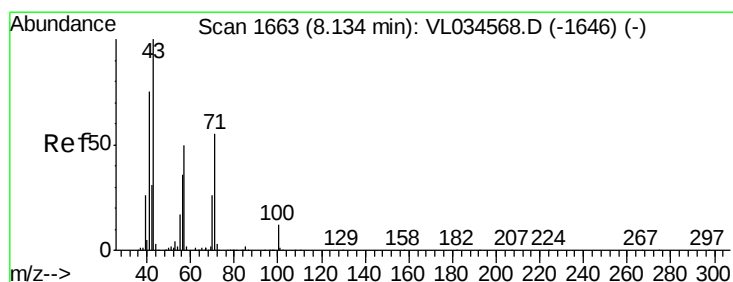
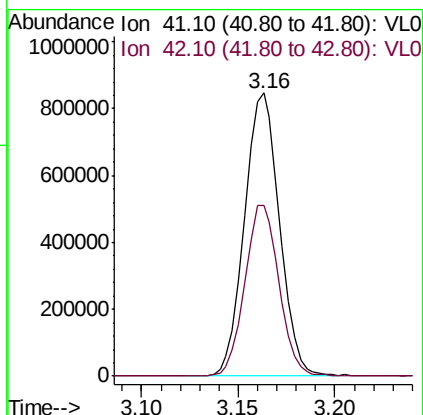
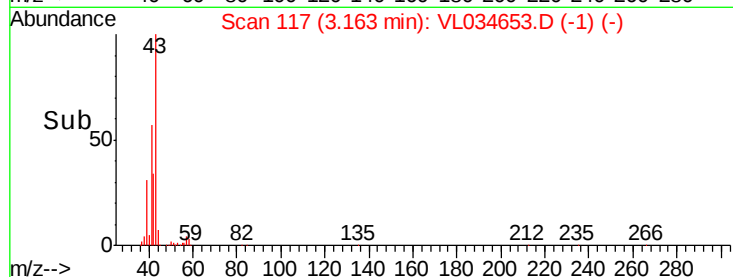
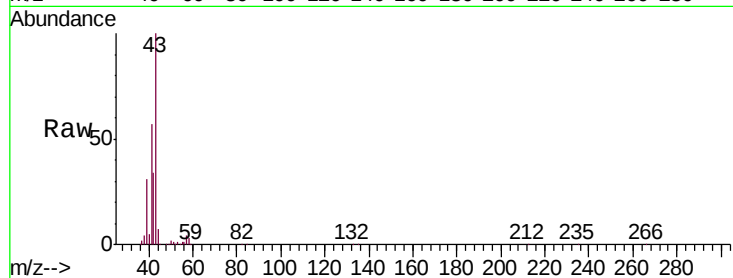
IA-1

Tgt Ion: 41 Resp: 1065106

Ion Ratio Lower Upper

41 100

42 59.4 57.0 85.4



#10

Heptane

Concen: 0.091 ppbv

RT: 8.12 min Scan# 1660

Delta R.T. -0.01 min

Lab File: VL034653.D

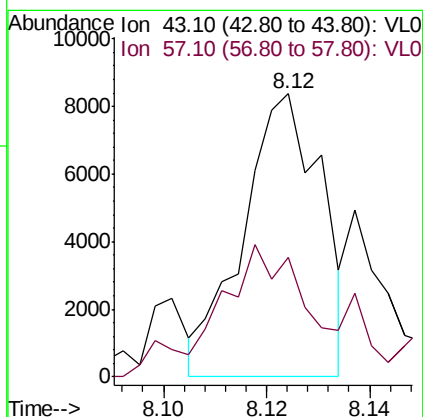
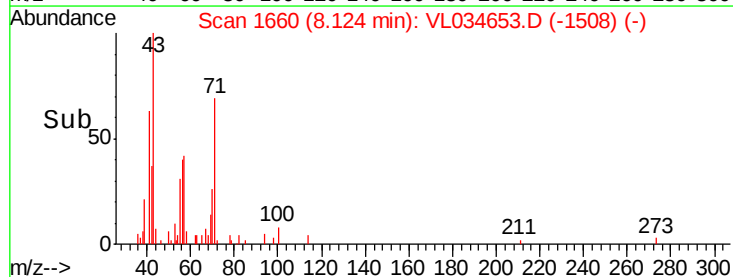
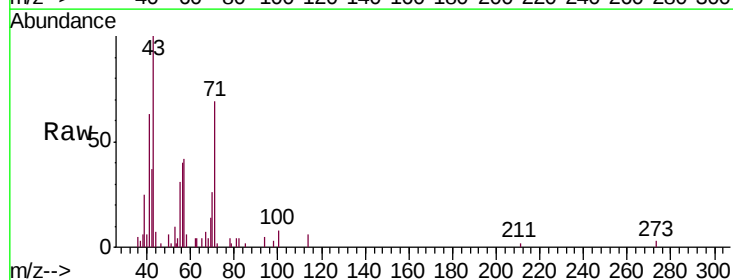
Acq: 19 Feb 2020 20:18

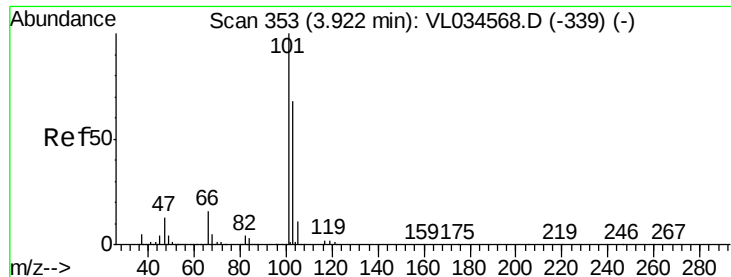
Tgt Ion: 43 Resp: 8820

Ion Ratio Lower Upper

43 100

57 69.5 41.2 61.8#





#11

Trichlorofluoromethane

Concen: 0.292 ppbv

RT: 3.92 min Scan# 351

Delta R.T. -0.01 min

Lab File: VL034653.D

Acq: 19 Feb 2020 20:18

Instrument :

MSVOA_L

ClientSampled :

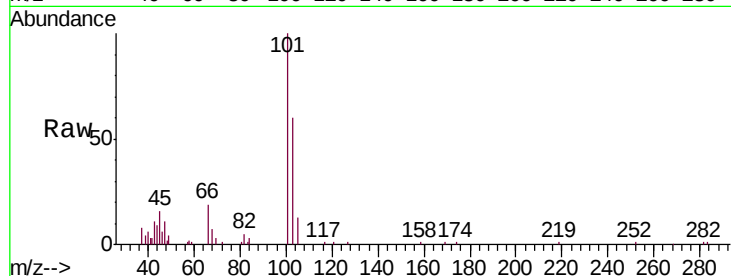
IA-1

Tgt Ion:101 Resp: 47832

Ion Ratio Lower Upper

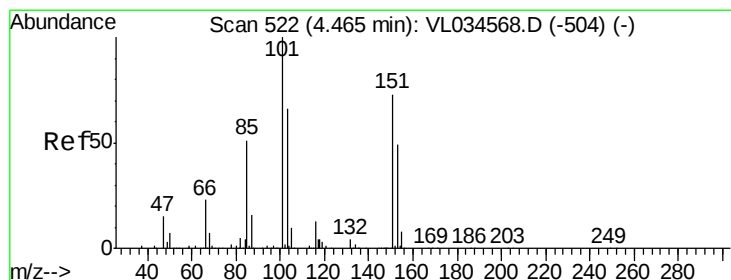
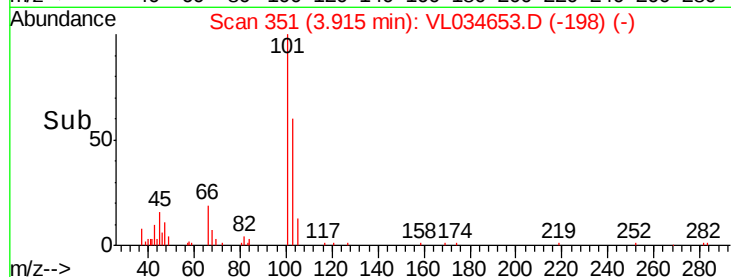
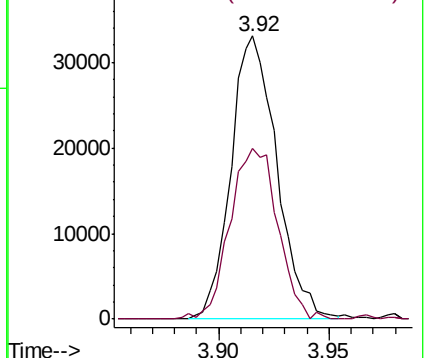
101 100

103 60.2 54.4 81.6



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.055 ppbv

RT: 4.45 min Scan# 518

Delta R.T. -0.01 min

Lab File: VL034653.D

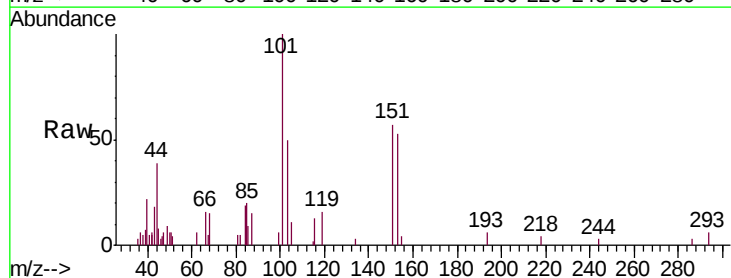
Acq: 19 Feb 2020 20:18

Tgt Ion:101 Resp: 5832

Ion Ratio Lower Upper

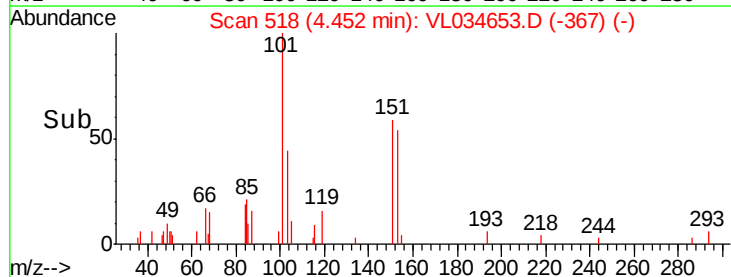
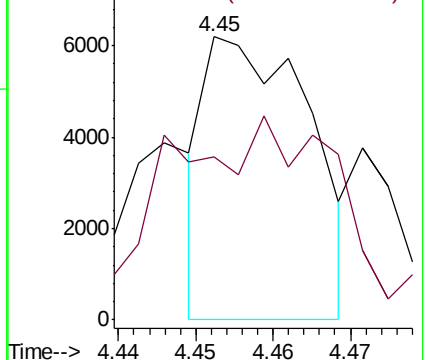
101 100

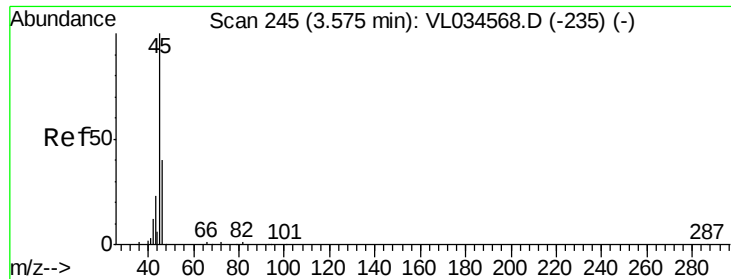
151 125.2 57.0 85.6#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 156.332 ppbv

RT: 3.57 min Scan# 243

Delta R.T. -0.01 min

Lab File: VL034653.D

Acq: 19 Feb 2020 20:18

Instrument :

MSVOA_L

ClientSampleId :

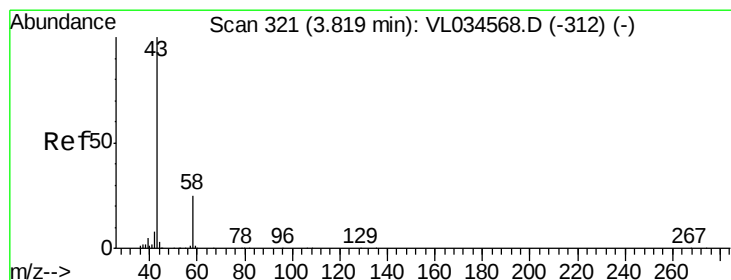
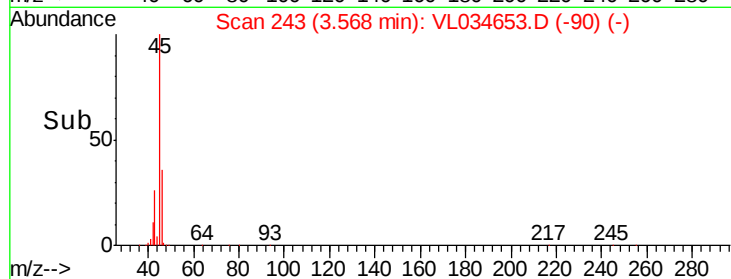
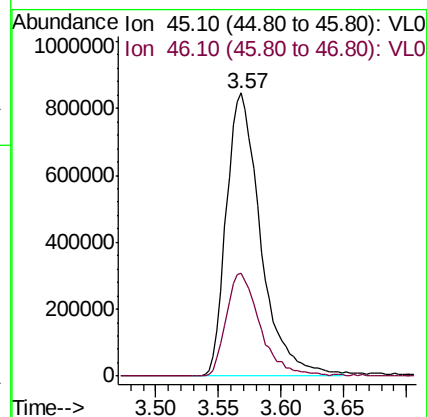
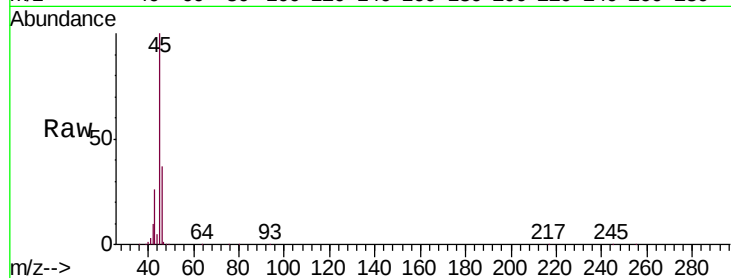
IA-1

Tgt Ion: 45 Resp: 1612504

Ion Ratio Lower Upper

45 100

46 36.4 14.8 59.2



#15

Acetone

Concen: 5.006 ppbv

RT: 3.82 min Scan# 320

Delta R.T. -0.00 min

Lab File: VL034653.D

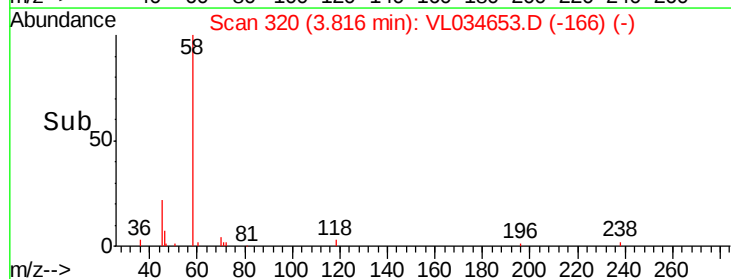
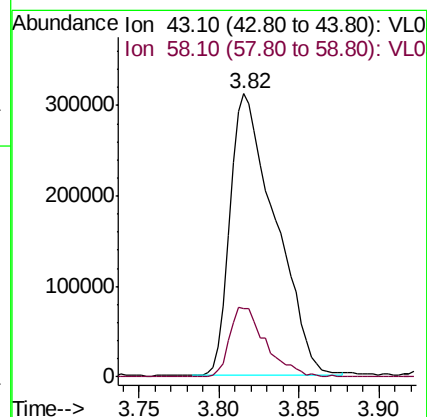
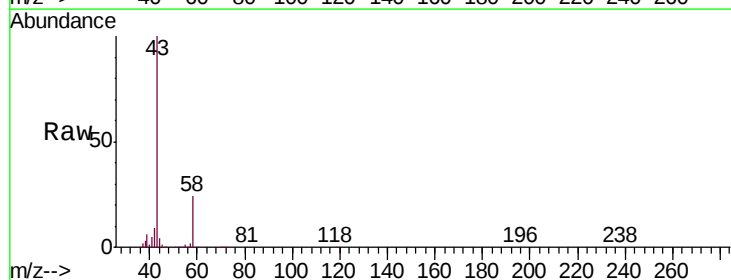
Acq: 19 Feb 2020 20:18

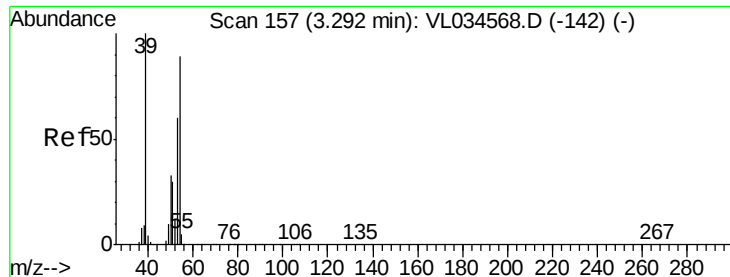
Tgt Ion: 43 Resp: 602155

Ion Ratio Lower Upper

43 100

58 19.8 20.3 30.5#





#16

1,3-Butadiene

Concen: 3.806 ppbv

RT: 3.31 min Scan# 164

Delta R.T. 0.02 min

Lab File: VL034653.D

Acq: 19 Feb 2020 20:18

Instrument :

MSVOA_L

ClientSampleId :

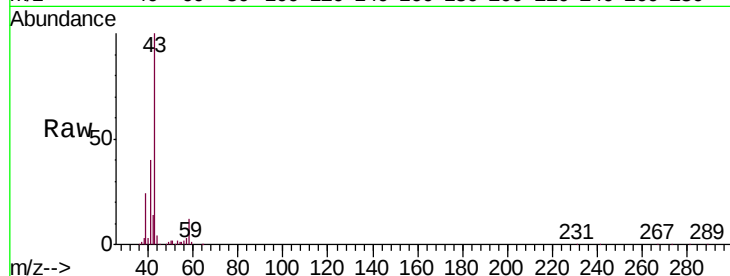
IA-1

Tgt Ion: 39 Resp: 181801

Ion Ratio Lower Upper

39 100

54 2.7 66.7 100.1#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

3.31

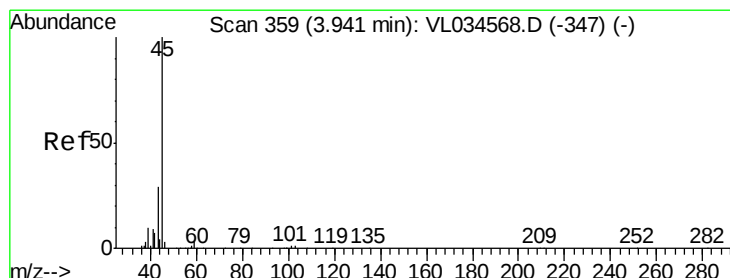
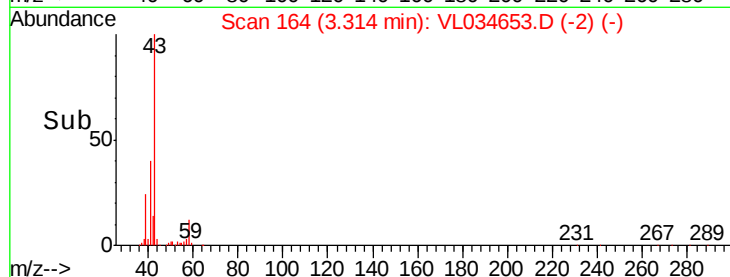
150000

100000

50000

0

Time--> 3.25 3.30 3.35



#19

Isopropyl Alcohol

Concen: 1.832 ppbv

RT: 3.94 min Scan# 358

Delta R.T. -0.00 min

Lab File: VL034653.D

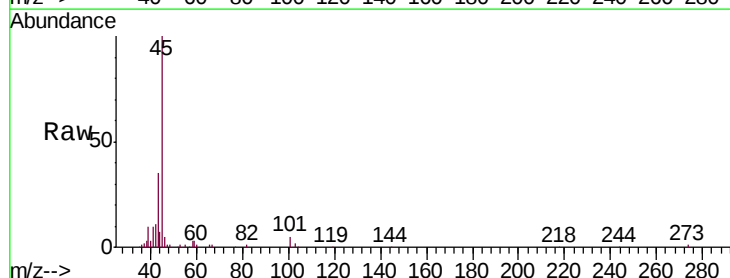
Acq: 19 Feb 2020 20:18

Tgt Ion: 45 Resp: 128580

Ion Ratio Lower Upper

45 100

58 5.4 1.7 2.5#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.94

80000

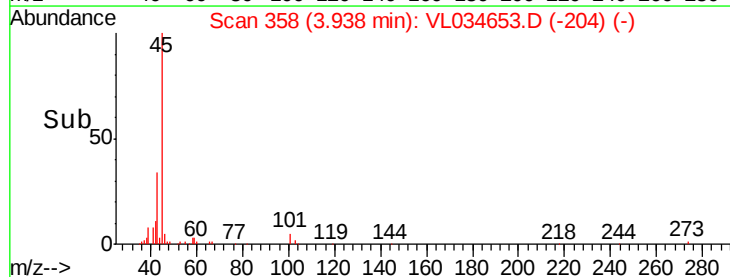
60000

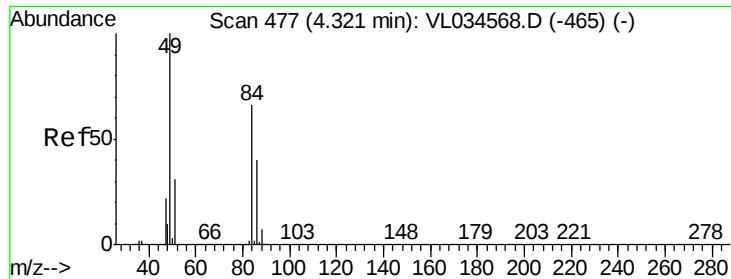
40000

20000

0

Time--> 3.90 3.95 4.00

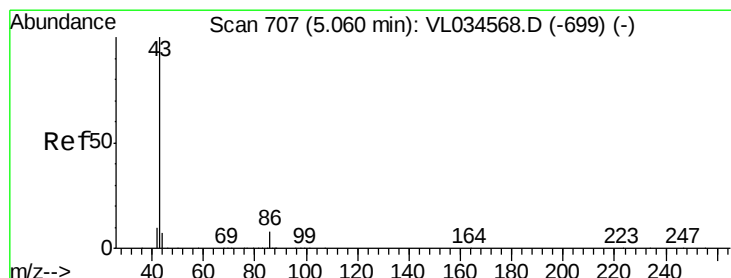
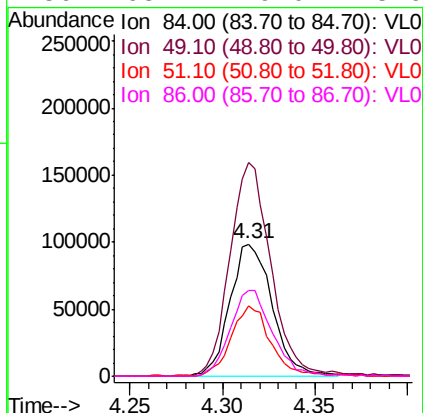
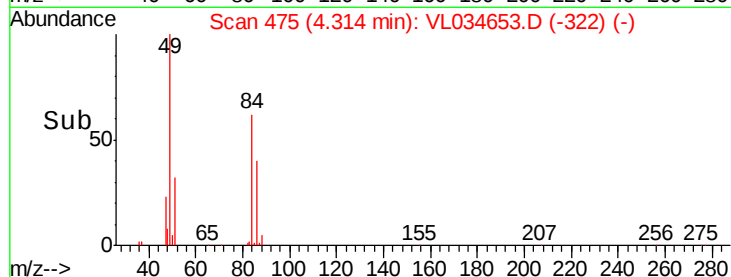
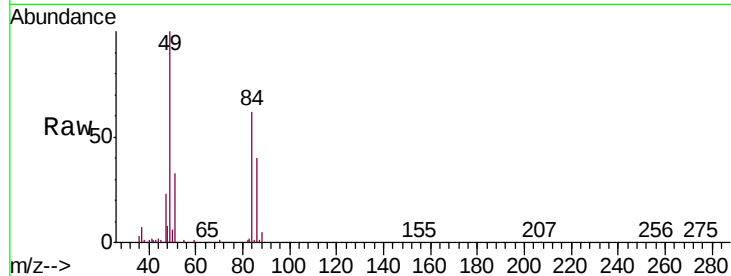




#20
Methylene Chloride
Concen: 3.399 ppbv
RT: 4.31 min Scan# 475
Delta R.T. -0.01 min
Lab File: VL034653.D
Acq: 19 Feb 2020 20:18

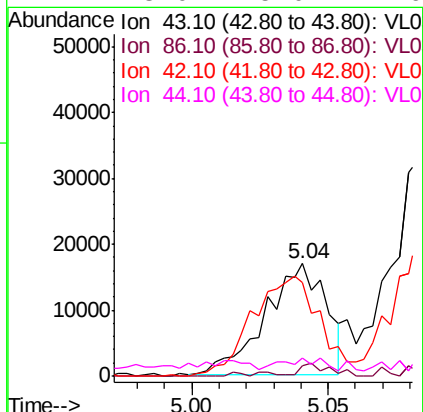
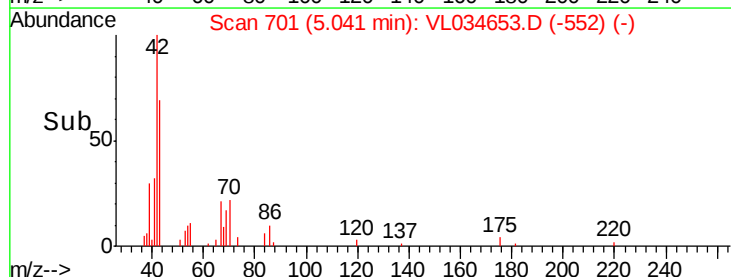
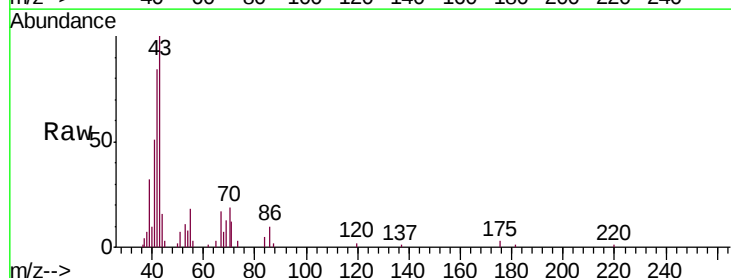
Instrument :
MSVOA_L
ClientSampleID :
IA-1

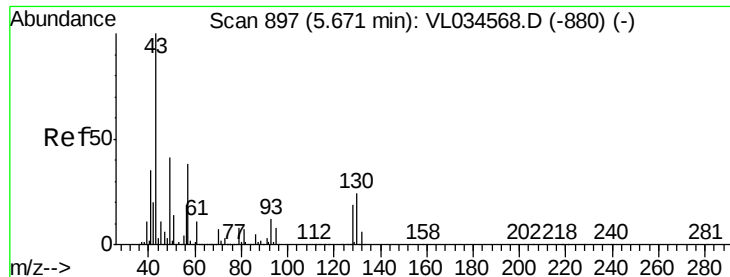
Tgt Ion:	84	Resp:	155693
Ion	Ratio	Lower	Upper
84	100		
49	161.0	122.4	183.6
51	52.5	38.6	57.8
86	65.1	49.0	73.6



#23
Vinyl Acetate
Concen: 0.188 ppbv
RT: 5.04 min Scan# 701
Delta R.T. -0.02 min
Lab File: VL034653.D
Acq: 19 Feb 2020 20:18

Tgt Ion:	43	Resp:	25814
Ion	Ratio	Lower	Upper
43	100		
86	10.9	5.9	8.9#
42	96.1	8.8	13.2#
44	13.0	5.0	7.6#

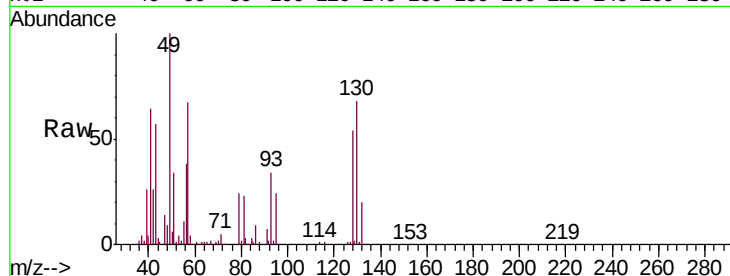




#25
Ethyl Acetate
Concen: 0.732 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.00 min
Lab File: VL034653.D
Acq: 19 Feb 2020 20:18

Instrument :
MSVOA_L
ClientSampleId :
IA-1

Tgt Ion:	43	Resp:	142614
Ion	Ratio	Lower	Upper
43	100		
45	3.0	8.5	12.7#
61	2.5	7.8	11.6#
70	3.0	5.8	8.8#



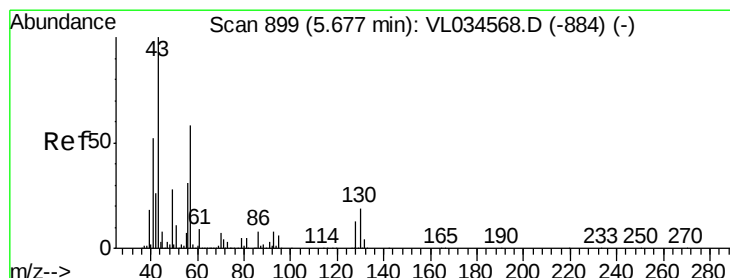
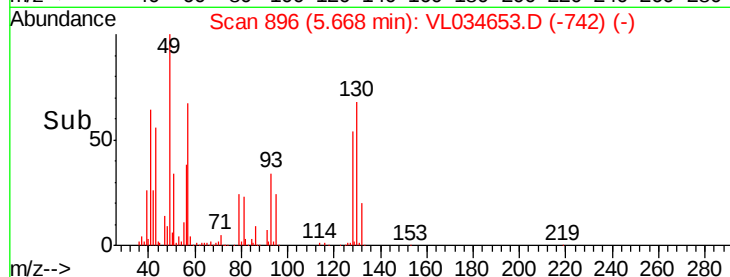
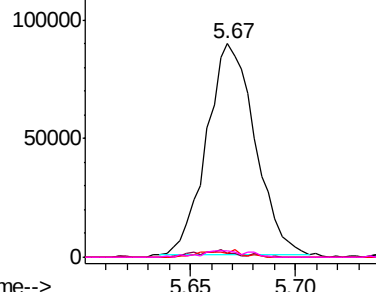
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

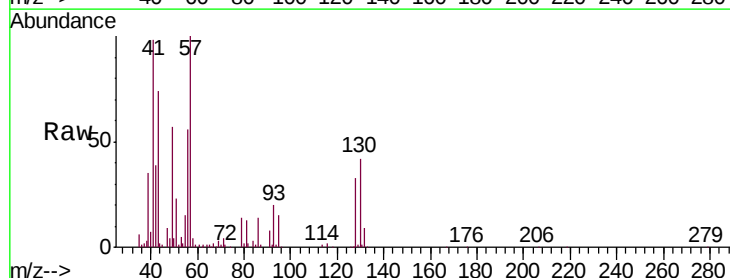
Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26
Hexane
Concen: 2.154 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.00 min
Lab File: VL034653.D
Acq: 19 Feb 2020 20:18

Tgt Ion:	57	Resp:	175733
Ion	Ratio	Lower	Upper
57	100		
41	102.5	76.2	114.2
43	83.6	189.9	284.9#
56	57.6	43.6	65.4



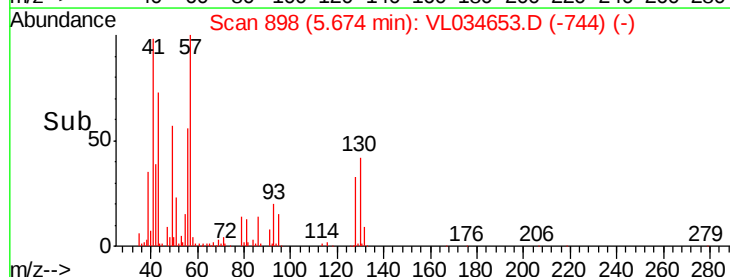
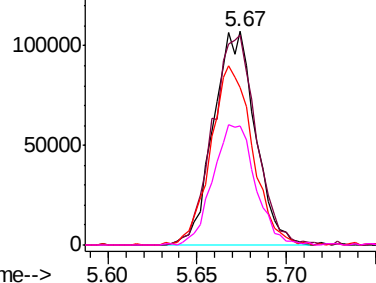
Abundance

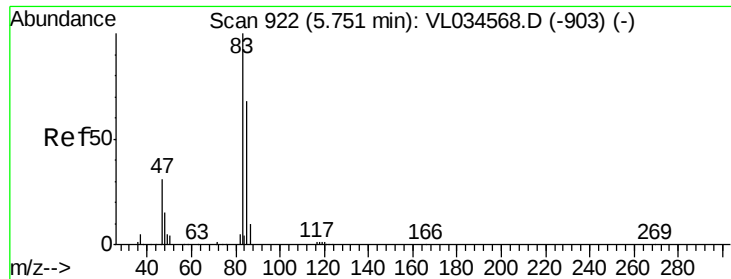
Ion 57.10 (56.80 to 57.80): VL0

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

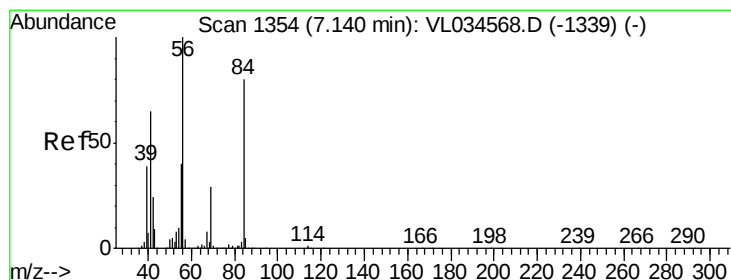
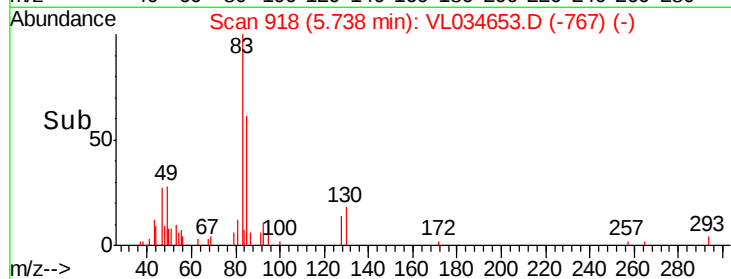
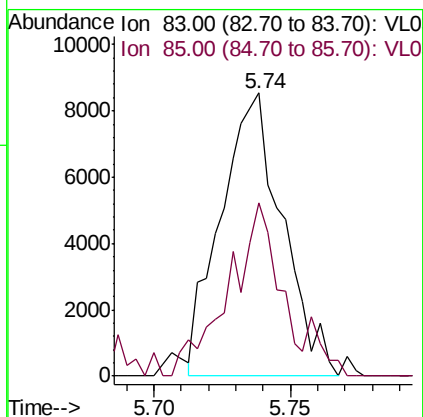
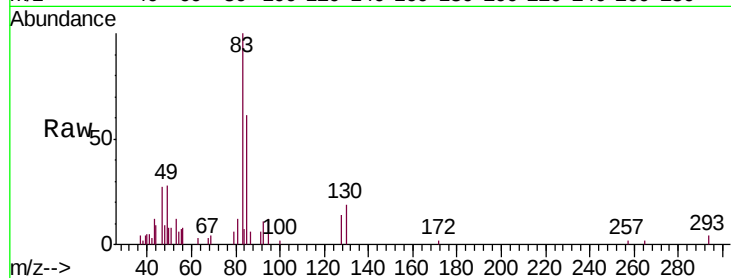




#29
Chloroform
Concen: 0.093 ppbv
RT: 5.74 min Scan# 918
Delta R.T. -0.01 min
Lab File: VL034653.D
Acq: 19 Feb 2020 20:18

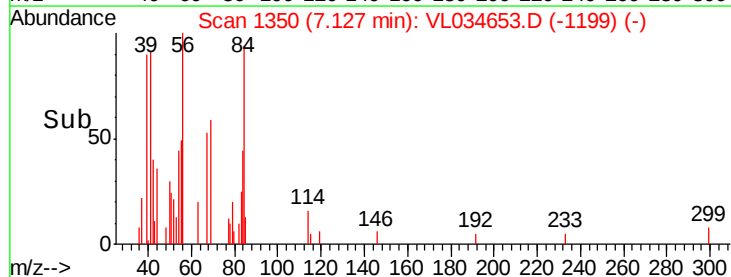
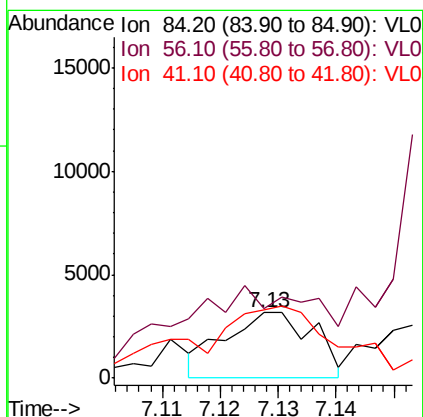
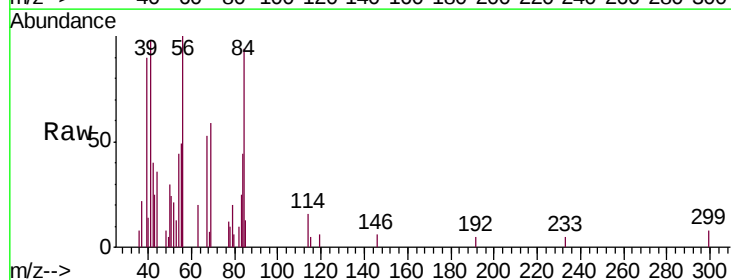
Instrument :
MSVOA_L
ClientSampled :
IA-1

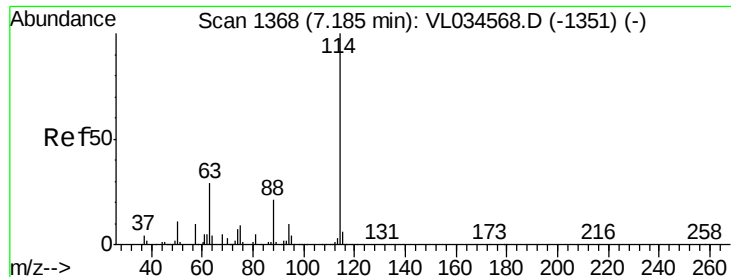
Tgt Ion: 83 Resp: 13466
Ion Ratio Lower Upper
83 100
85 55.5 54.0 81.0



#30
Cyclohexane
Concen: 0.056 ppbv
RT: 7.13 min Scan# 1350
Delta R.T. -0.01 min
Lab File: VL034653.D
Acq: 19 Feb 2020 20:18

Tgt Ion: 84 Resp: 3366
Ion Ratio Lower Upper
84 100
56 0.0 110.5 165.7#
41 234.9 71.9 107.9#

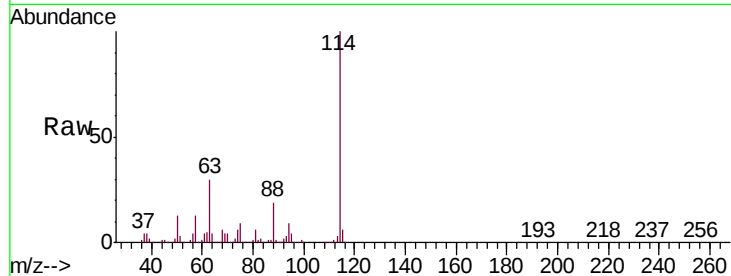




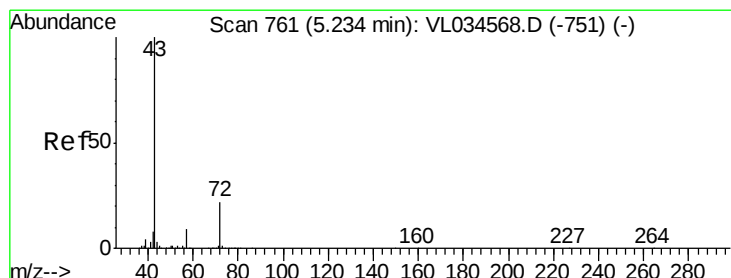
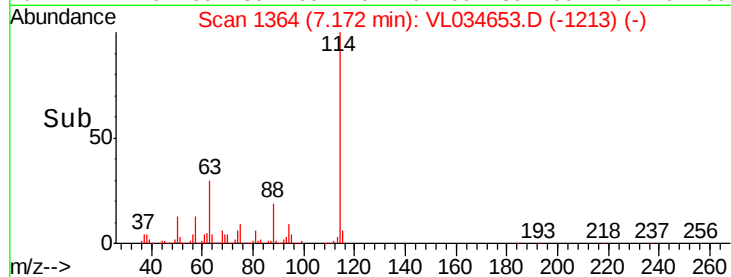
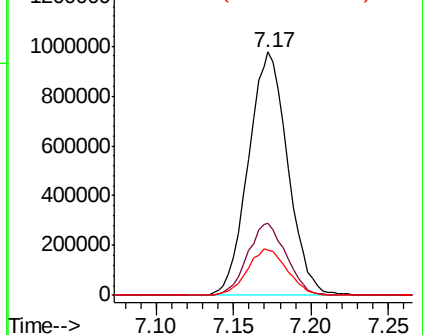
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1364
 Delta R.T. -0.01 min
 Lab File: VL034653.D
 Acq: 19 Feb 2020 20:18

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Tgt Ion:114 Resp: 1726972
 Ion Ratio Lower Upper
 114 100
 63 29.4 24.1 36.1
 88 19.3 15.9 23.9

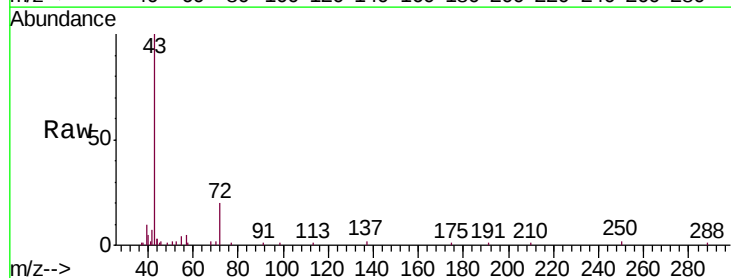


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

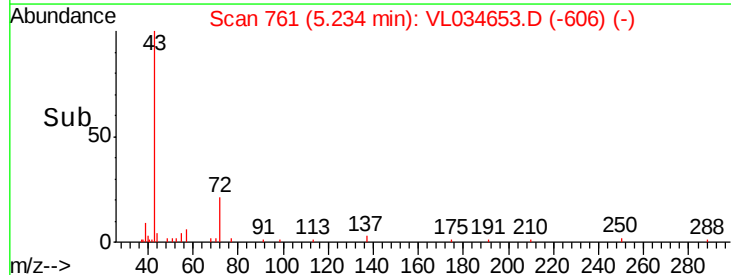
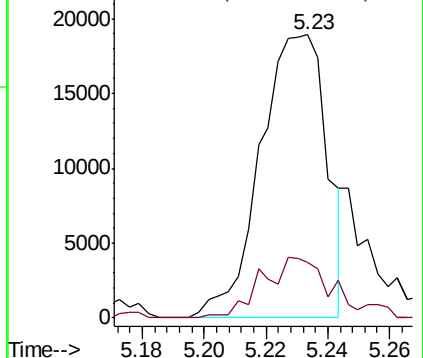


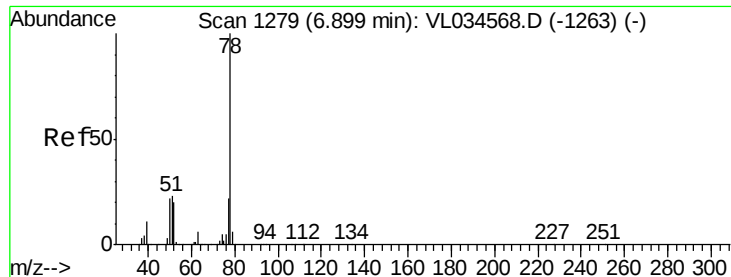
#34
 2-Butanone
 Concen: 0.226 ppbv
 RT: 5.23 min Scan# 761
 Delta R.T. -0.00 min
 Lab File: VL034653.D
 Acq: 19 Feb 2020 20:18

Tgt Ion: 43 Resp: 28315
 Ion Ratio Lower Upper
 43 100
 72 23.3 17.2 25.8



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





#36

Benzene

Concen: 0.425 ppbv

RT: 6.89 min Scan# 1275

Delta R.T. -0.01 min

Lab File: VL034653.D

Acq: 19 Feb 2020 20:18

Instrument :

MSVOA_L

ClientSampleId :

IA-1

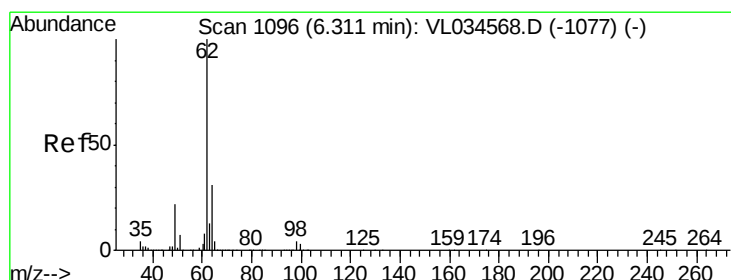
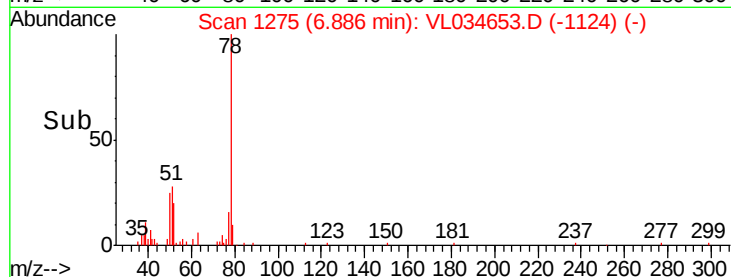
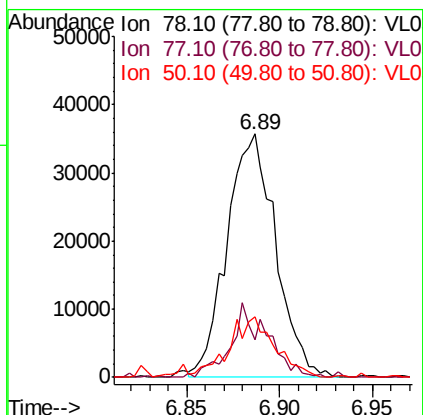
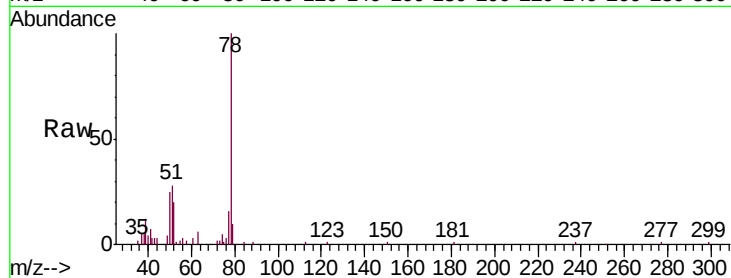
Tgt Ion: 78 Resp: 65202

Ion Ratio Lower Upper

78 100

77 14.0 17.3 25.9#

50 24.2 17.4 26.2



#37

1,2-Dichloroethane

Concen: 0.050 ppbv

RT: 6.29 min Scan# 1091

Delta R.T. -0.02 min

Lab File: VL034653.D

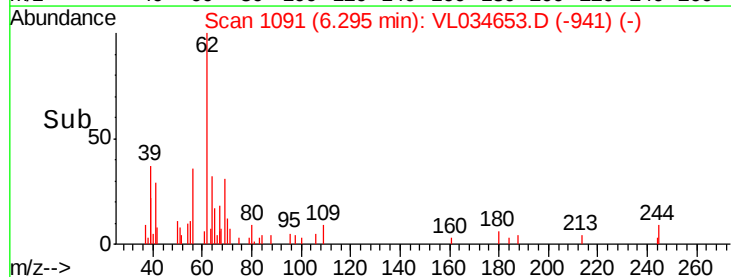
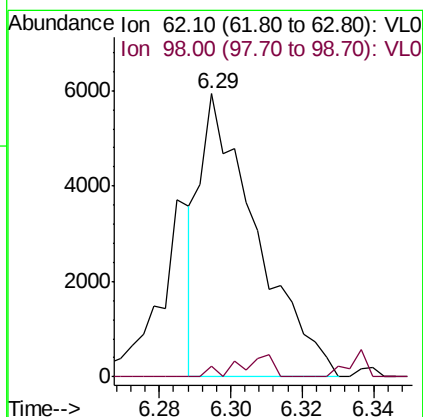
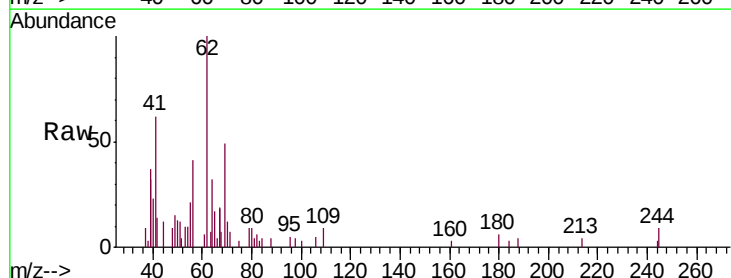
Acq: 19 Feb 2020 20:18

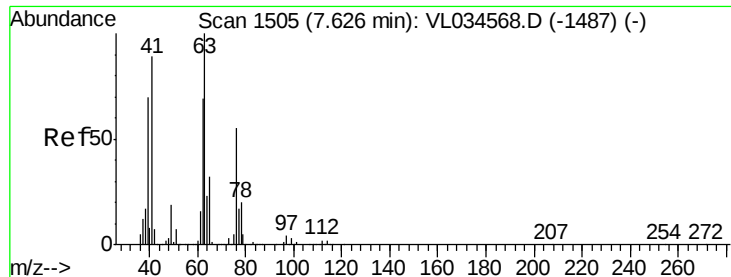
Tgt Ion: 62 Resp: 6466

Ion Ratio Lower Upper

62 100

98 0.0 3.7 5.5#

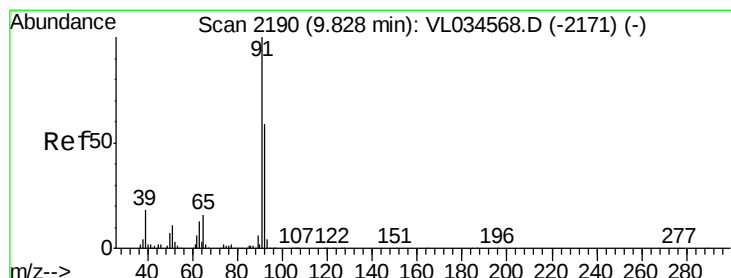
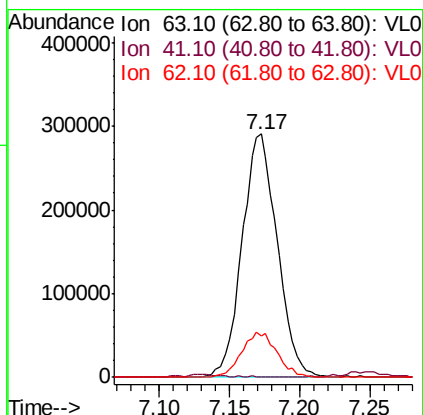
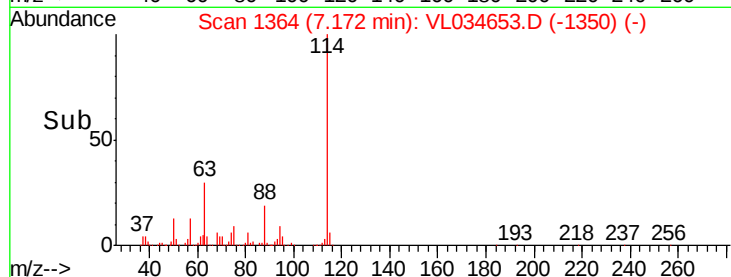
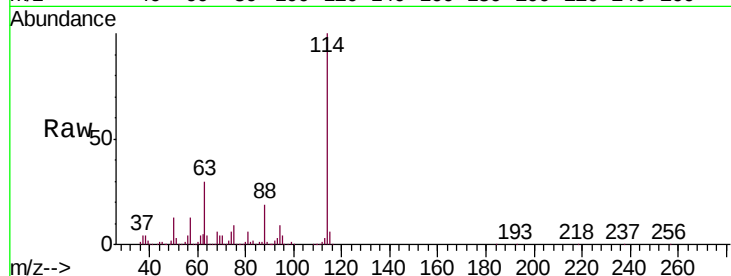




#39
 1,2-Dichloropropane
 Concen: 7.962 ppbv
 RT: 7.17 min Scan# 1364
 Delta R.T. -0.45 min
 Lab File: VL034653.D
 Acq: 19 Feb 2020 20:18

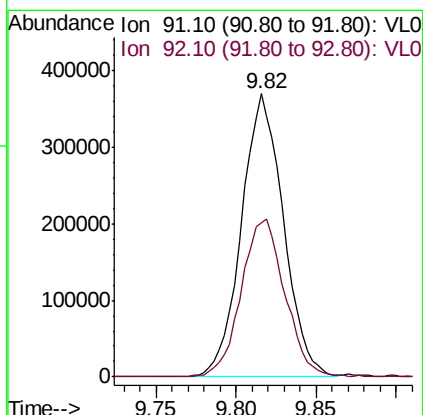
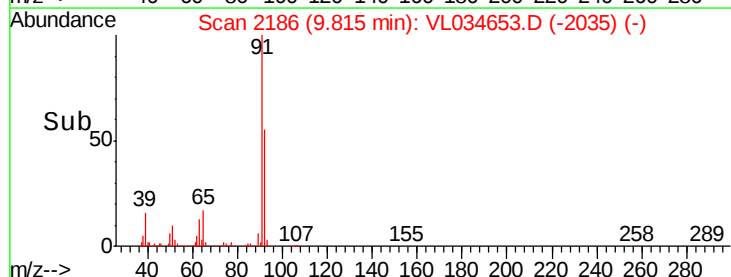
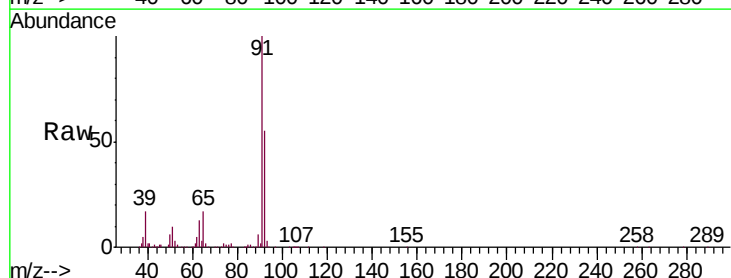
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

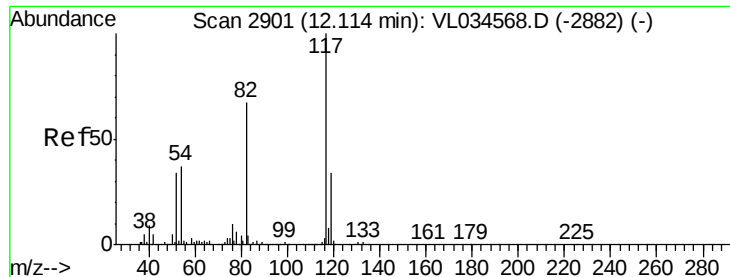
Tgt Ion: 63 Resp: 506882
 Ion Ratio Lower Upper
 63 100
 41 0.0 71.0 106.4#
 62 16.9 55.4 83.0#



#53
 Toluene
 Concen: 3.928 ppbv
 RT: 9.82 min Scan# 2186
 Delta R.T. -0.01 min
 Lab File: VL034653.D
 Acq: 19 Feb 2020 20:18

Tgt Ion: 91 Resp: 662633
 Ion Ratio Lower Upper
 91 100
 92 58.2 48.2 72.2

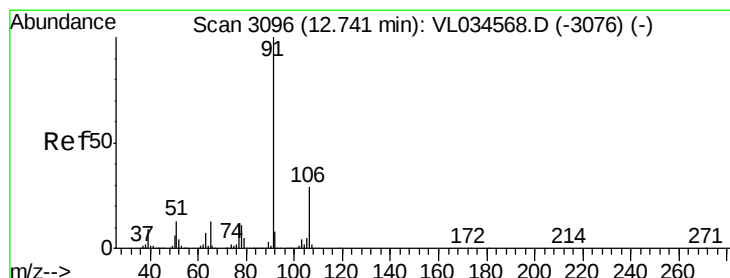
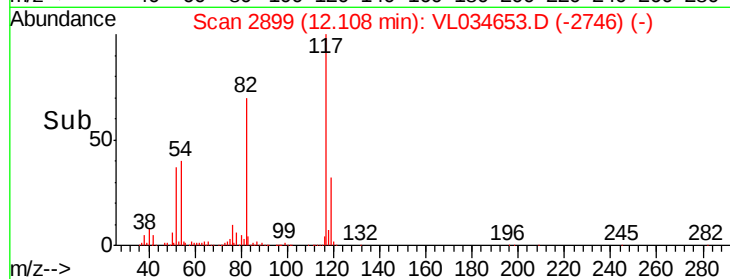
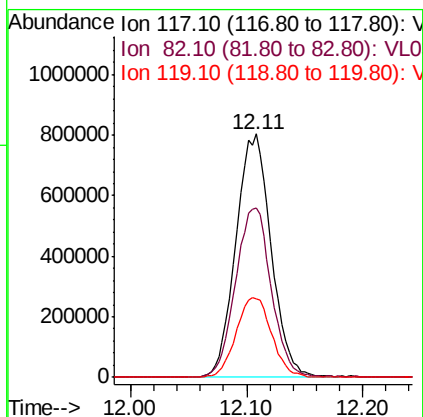
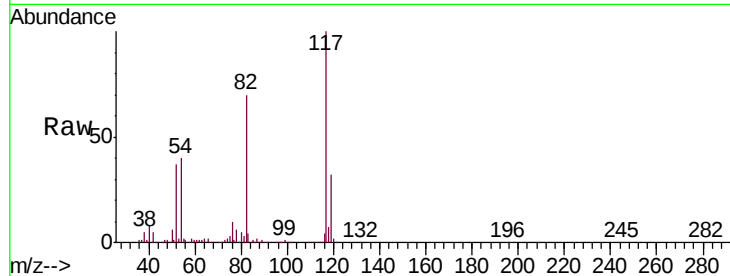




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2899
Delta R.T. -0.01 min
Lab File: VL034653.D
Acq: 19 Feb 2020 20:18

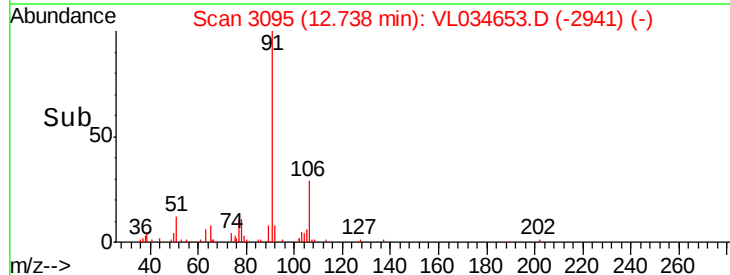
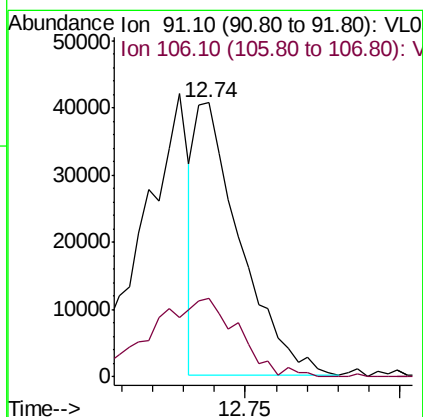
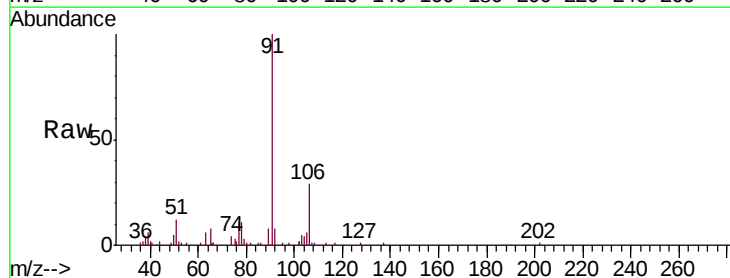
Instrument :
MSVOA_L
ClientSampleId :
IA-1

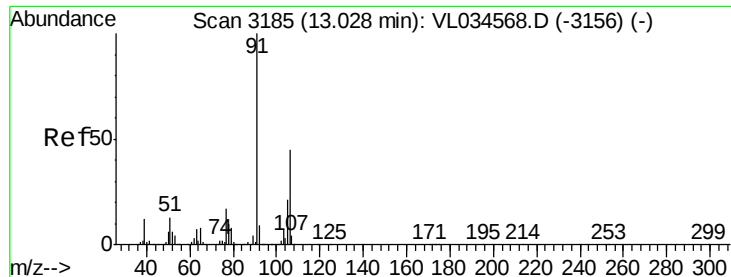
Tgt Ion: 117 Resp: 1696782
Ion Ratio Lower Upper
117 100
82 70.9 54.2 81.4
119 33.2 26.1 39.1



#58
Ethyl Benzene
Concen: 0.181 ppbv
RT: 12.74 min Scan# 3095
Delta R.T. -0.00 min
Lab File: VL034653.D
Acq: 19 Feb 2020 20:18

Tgt Ion: 91 Resp: 40988
Ion Ratio Lower Upper
91 100
106 28.8 23.3 34.9

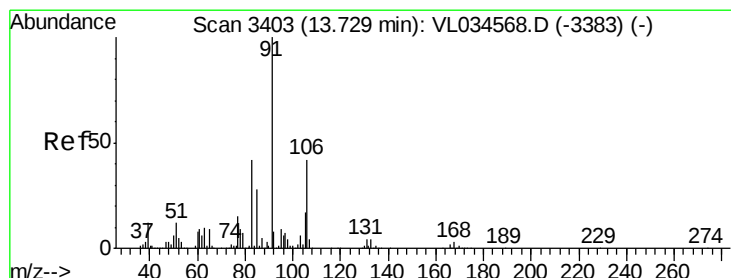
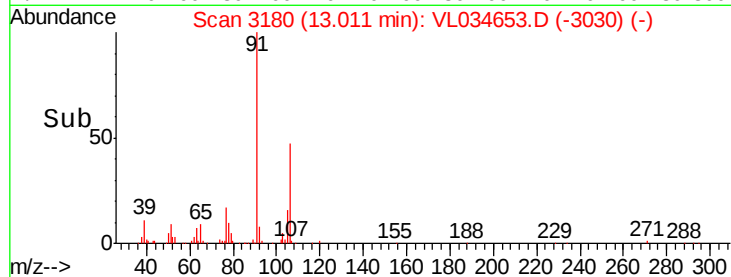
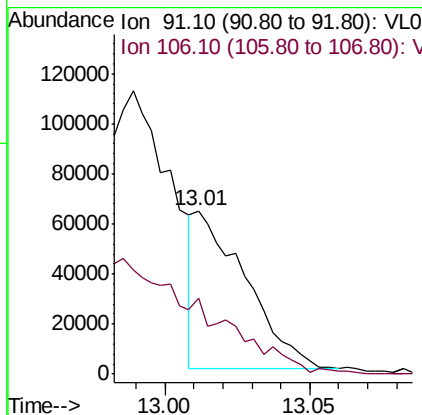
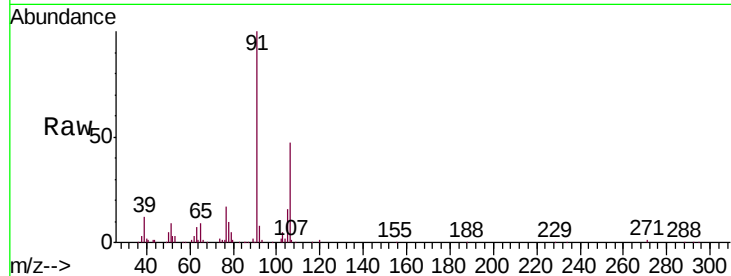




#59
m/p-Xylene
Concen: 0.379 ppbv
RT: 13.01 min Scan# 3180
Delta R.T. -0.02 min
Lab File: VL034653.D
Acq: 19 Feb 2020 20:18

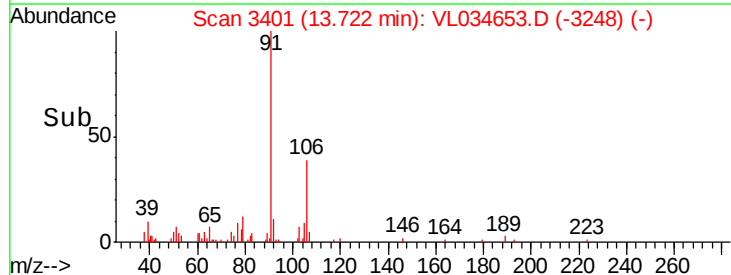
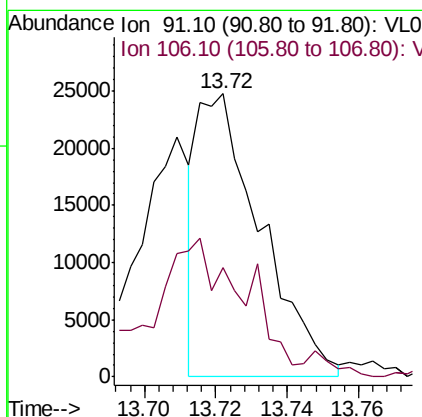
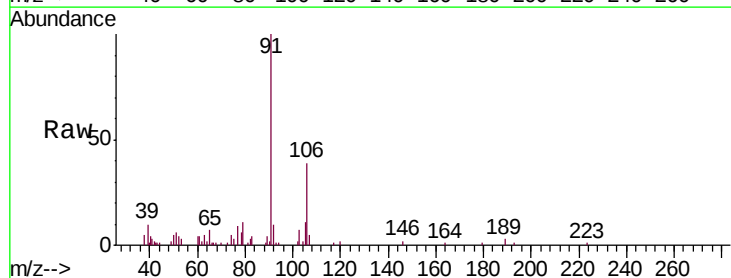
Instrument :
MSVOA_L
ClientSampleId :
IA-1

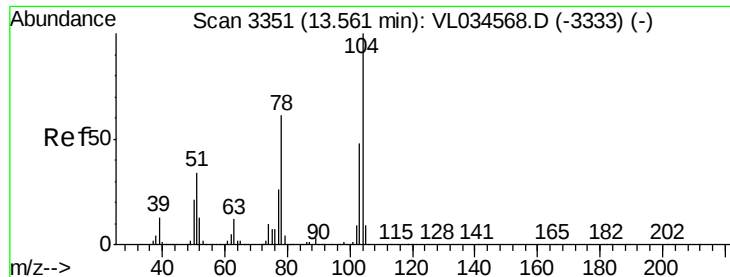
Tgt Ion: 91 Resp: 76122
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#



#60
o-Xylene
Concen: 0.151 ppbv
RT: 13.72 min Scan# 3401
Delta R.T. -0.01 min
Lab File: VL034653.D
Acq: 19 Feb 2020 20:18

Tgt Ion: 91 Resp: 30355
Ion Ratio Lower Upper
91 100
106 76.6 21.6 65.0#





#61

Styrene

Concen: 0.048 ppbv

RT: 13.55 min Scan# 3348

Delta R.T. -0.01 min

Lab File: VL034653.D

Acq: 19 Feb 2020 20:18

Instrument :

MSVOA_L

ClientSampleId :

IA-1

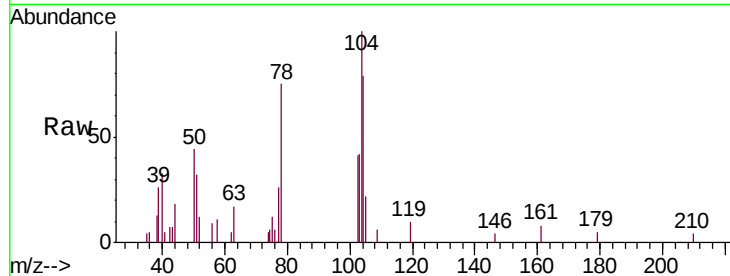
Tgt Ion: 104 Resp: 6456

Ion Ratio Lower Upper

104 100

78 98.3 47.0 70.6#

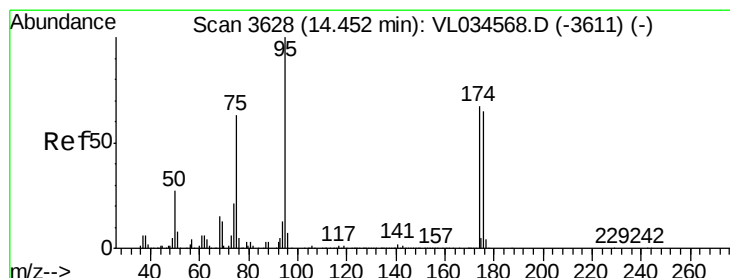
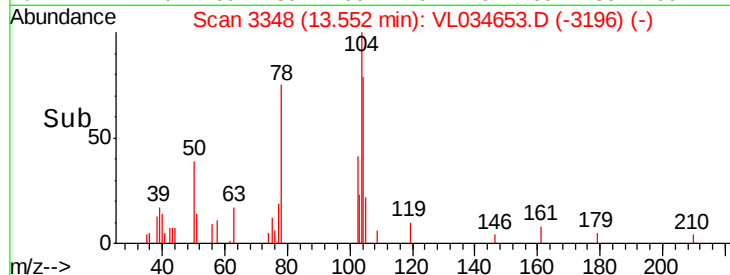
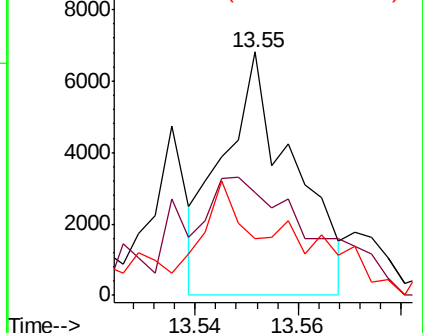
103 76.7 38.5 57.7#



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.530 ppbv

RT: 14.44 min Scan# 3625

Delta R.T. -0.01 min

Lab File: VL034653.D

Acq: 19 Feb 2020 20:18

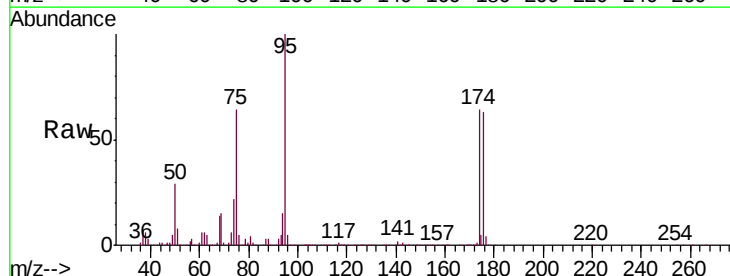
Tgt Ion: 95 Resp: 1509975

Ion Ratio Lower Upper

95 100

174 64.4 52.3 78.5

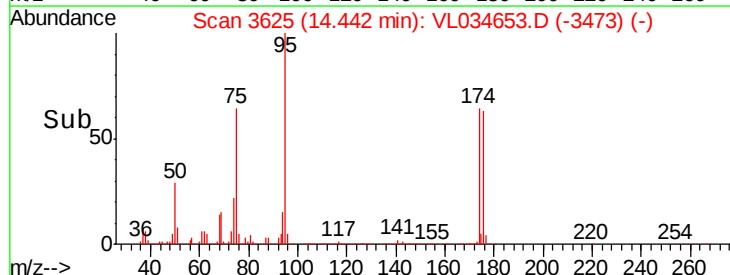
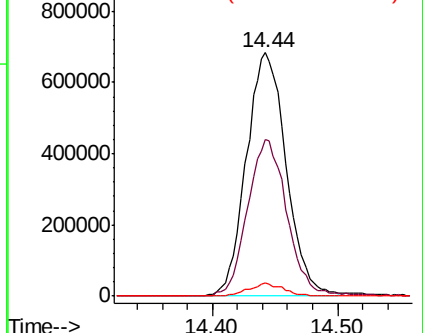
175 4.7 3.8 5.6

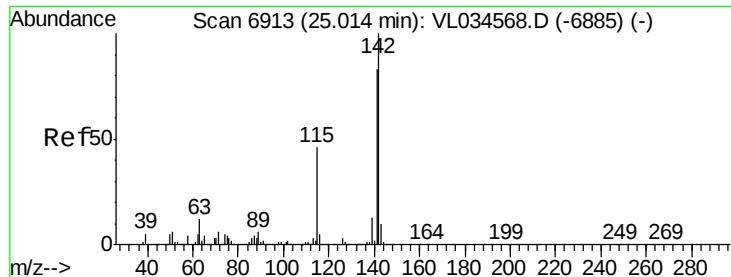


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

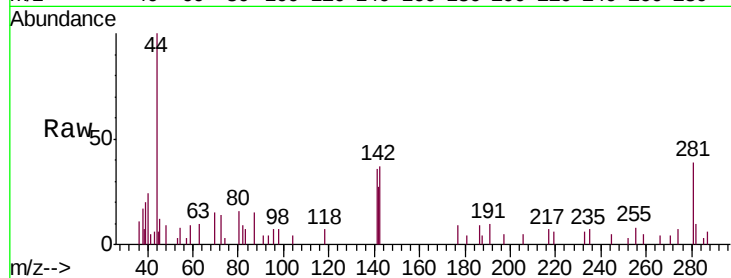




#80
 Naphthalene, 2-methyl-
 Concen: 0.050 ppbv
 RT: 25.01 min Scan# 6911
 Delta R.T. -0.01 min
 Lab File: VL034653.D
 Acq: 19 Feb 2020 20:18

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Tgt Ion	Ratio	Lower	Upper
142	100		
141	90.5	67.0	100.4
115	29.3	39.5	59.3



Abundance Ion 142.00 (141.70 to 142.70): V
 Ion 141.00 (140.70 to 141.70): V
 Ion 115.00 (114.70 to 115.70): V

