

Data File : VL034742.D
Acq On : 28 Feb 2020 18:27
Operator : SY/AP
Sample : L1704-01DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-2-4DL

Quant Time: Mar 02 04:34:22 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 28 01:15:02 2020
QLast Update : Fri Feb 28 01:15:02 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1077306	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2236729	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	2170873	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.46 95 1848505 10.38 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 103.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.01	85	11140	0.066	ppbv	100
3) Chlorodifluoromethane	2.93	51	21411	0.184	ppbv #	71
4) Chloromethane	3.11	50	3291	0.051	ppbv	89
9) Propene	2.99	41	24020	0.494	ppbv	83
10) Heptane	8.14	43	991726	7.928	ppbv	99
13) Ethanol	3.59	45	71129	4.633	ppbv	99
15) Acetone	3.82	43	10166872	82.819	ppbv #	66
16) 1,3-Butadiene	3.30	39	1338	0.024	ppbv #	75
17) tert-Butyl alcohol	4.30	59	2612	0.028	ppbv #	1
20) Methylene Chloride	4.34	84	17203	0.377	ppbv #	76
23) Vinyl Acetate	5.07	43	61609	0.369	ppbv #	86
25) Ethyl Acetate	5.68	43	81729	0.376	ppbv #	86
26) Hexane	5.68	57	88611	0.885	ppbv #	48
30) Cyclohexane	7.15	84	18580	0.239	ppbv #	1
34) 2-Butanone	5.25	43	16053	0.114	ppbv #	53
39) 1,2-Dichloropropane	7.19	63	642718	8.362	ppbv #	22
42) Bromodichloromethane	7.81	83	12376	0.078	ppbv #	27
43) Methyl Methacrylate	8.12	69	9435	0.116	ppbv #	1
44) 2,2,4-Trimethylpentane	7.89	57	30504	0.090	ppbv #	1
53) Toluene	9.83	91	5081112	24.729	ppbv	96
58) Ethyl Benzene	13.04	91	12179	0.046	ppbv	96
59) m/p-Xylene	13.04	91	12179	0.053	ppbv #	32
60) o-Xylene	13.74	91	10273	0.045	ppbv #	32

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

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ClientSampleId :

IA-2-4DL

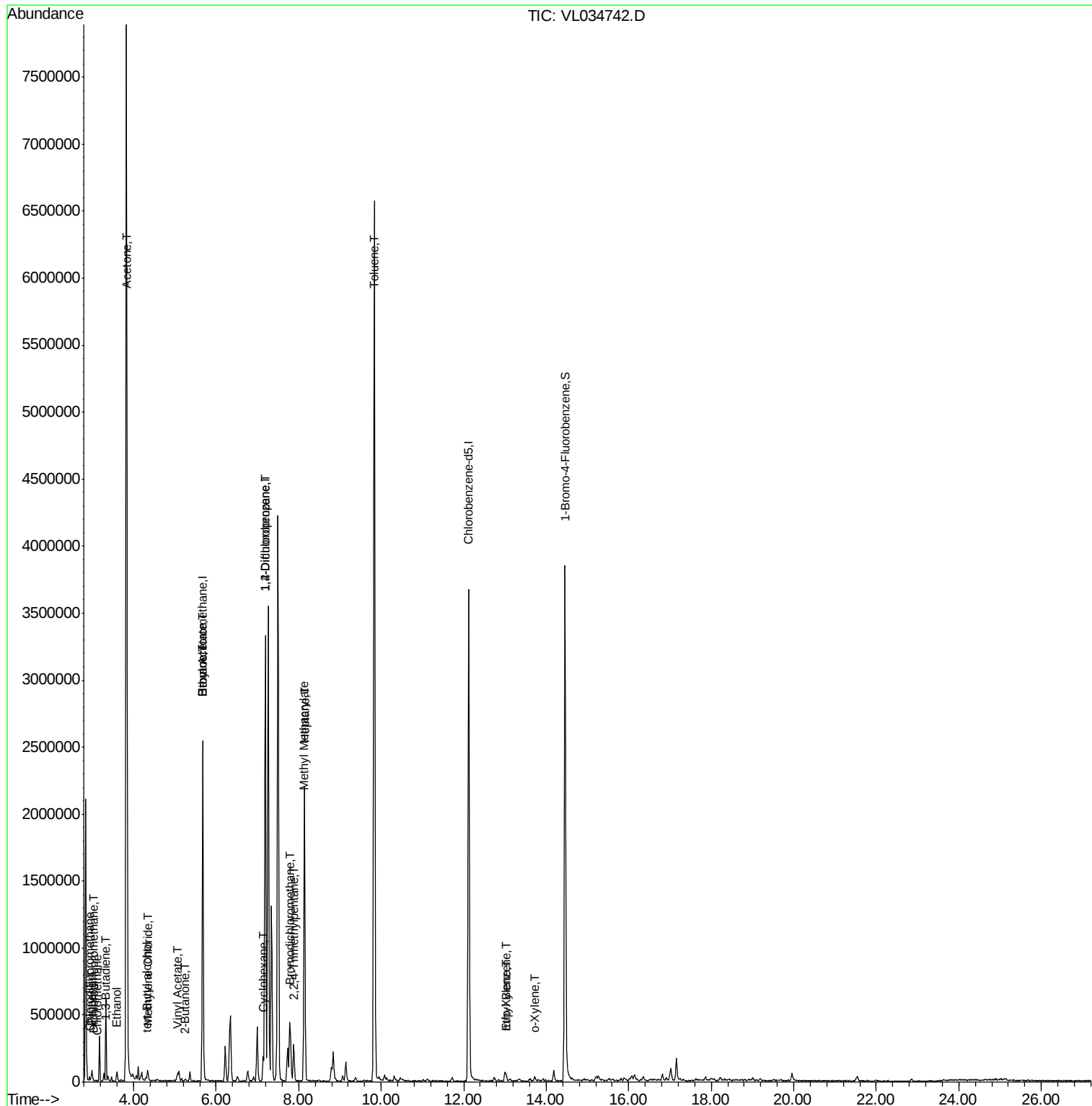
Quant Time: Mar 02 04:34:22 2020

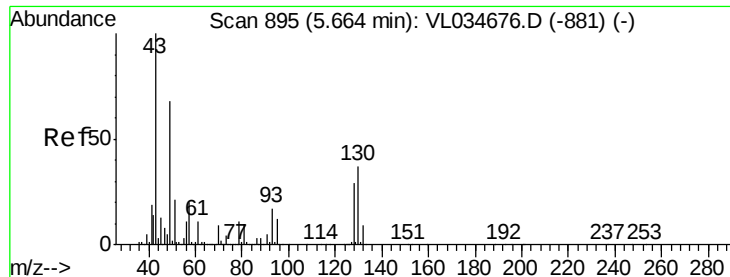
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022620AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 28 01:15:02 2020

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 897

Delta R.T. 0.01 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

Instrument :

MSVOA_L

ClientSampleId :

IA-2-4DL

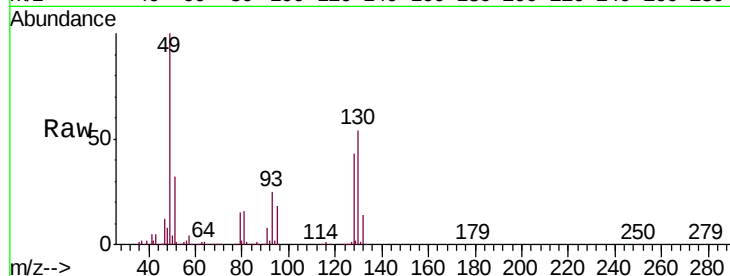
Tgt Ion: 49 Resp: 1077306

Ion Ratio Lower Upper

49 100

128 43.6 21.6 65.0

130 56.1 27.7 83.1



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

800000

600000

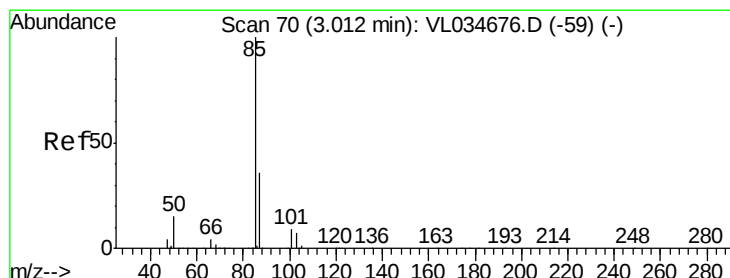
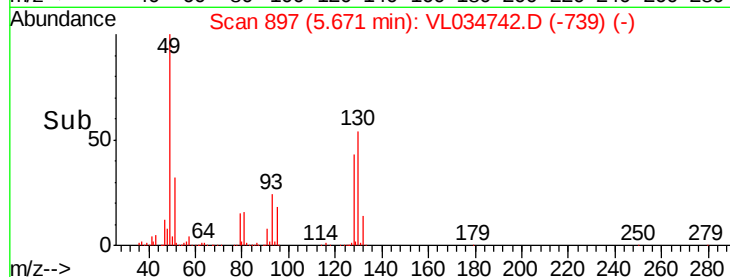
400000

200000

0

5.60 5.65 5.70

Time-->



#2

Dichlorodifluoromethane

Concen: 0.066 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.00 min

Lab File: VL034742.D

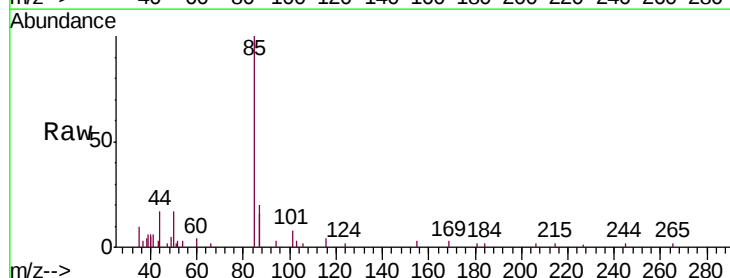
Acq: 28 Feb 2020 18:27

Tgt Ion: 85 Resp: 11140

Ion Ratio Lower Upper

85 100

87 36.8 29.2 43.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

12000

10000

8000

6000

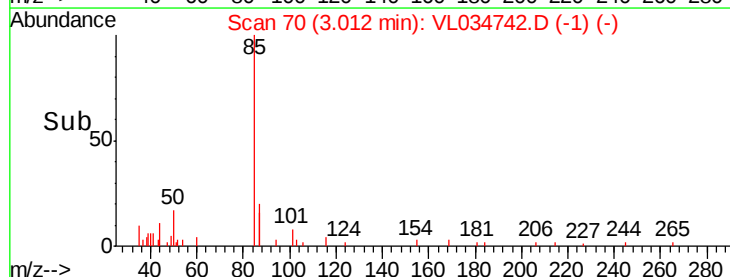
4000

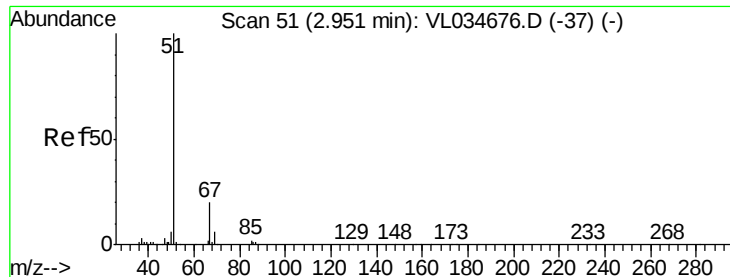
2000

0

2.98 3.00 3.02 3.04

Time-->





#3

Chlorodifluoromethane

Concen: 0.184 ppbv

RT: 2.93 min Scan# 45

Delta R.T. -0.02 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

Instrument :

MSVOA_L

ClientSampleId :

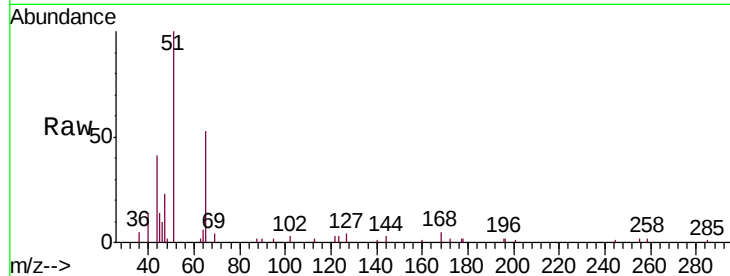
IA-2-4DL

Tgt Ion: 51 Resp: 21411

Ion Ratio Lower Upper

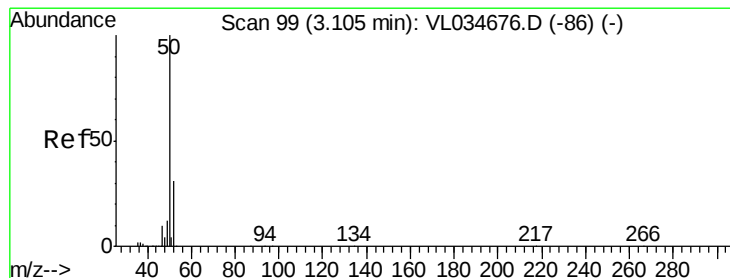
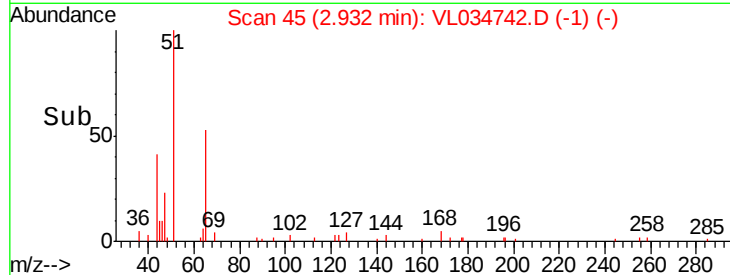
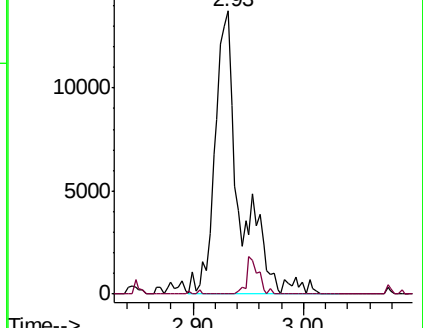
51 100

67 6.1 15.5 23.3#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.051 ppbv

RT: 3.11 min Scan# 100

Delta R.T. 0.00 min

Lab File: VL034742.D

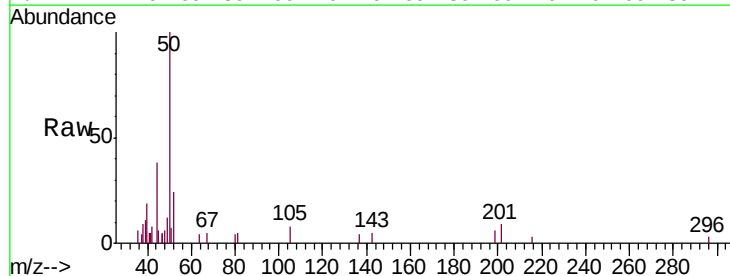
Acq: 28 Feb 2020 18:27

Tgt Ion: 50 Resp: 3291

Ion Ratio Lower Upper

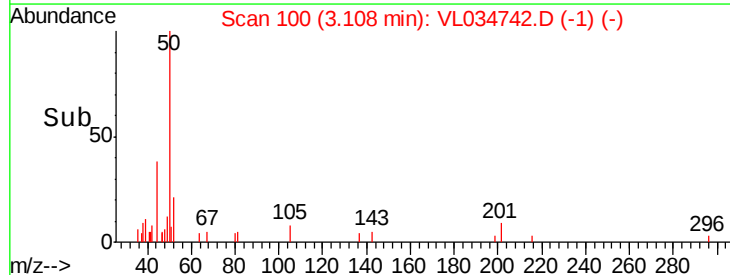
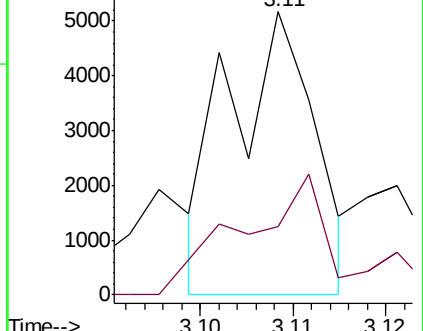
50 100

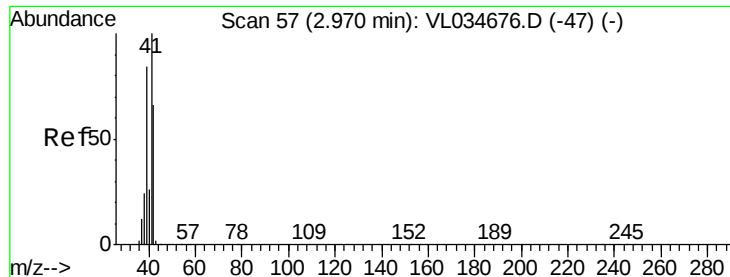
52 25.4 25.0 37.4



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.494 ppbv

RT: 2.99 min Scan# 62

Delta R.T. 0.02 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

Instrument :

MSVOA_L

ClientSampleId :

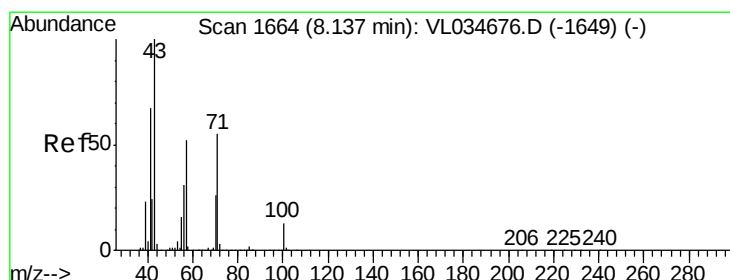
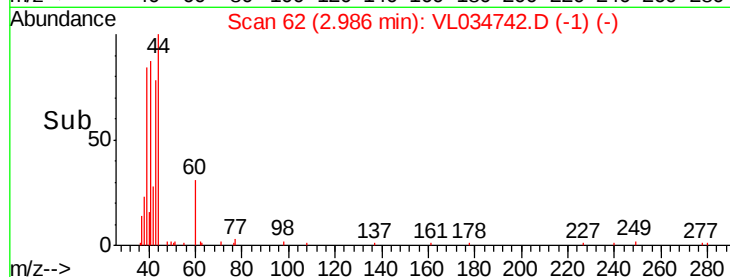
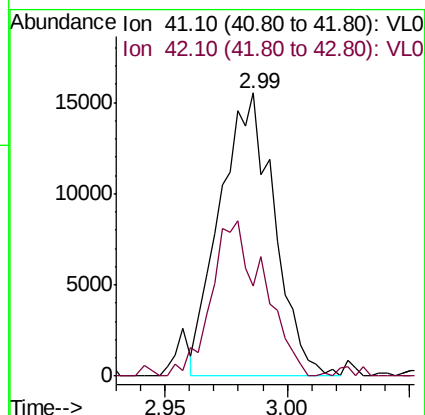
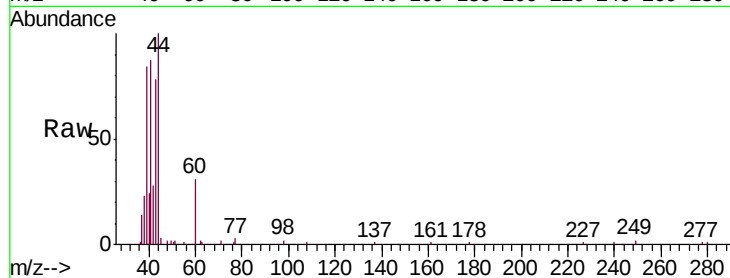
IA-2-4DL

Tgt Ion: 41 Resp: 24020

Ion Ratio Lower Upper

41 100

42 55.1 54.9 82.3



#10

Heptane

Concen: 7.928 ppbv

RT: 8.14 min Scan# 1664

Delta R.T. 0.00 min

Lab File: VL034742.D

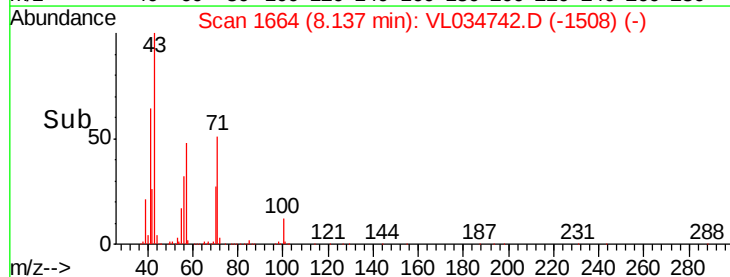
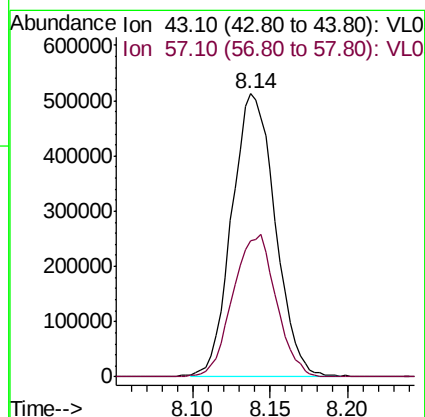
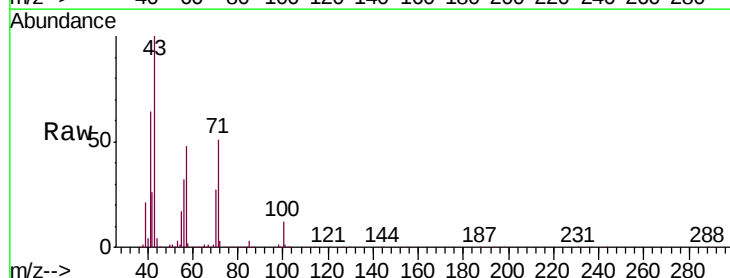
Acq: 28 Feb 2020 18:27

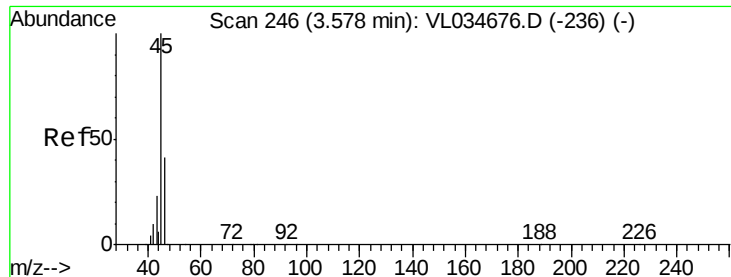
Tgt Ion: 43 Resp: 991726

Ion Ratio Lower Upper

43 100

57 50.6 41.0 61.6





#13

Ethanol

Concen: 4.633 ppbv

RT: 3.59 min Scan# 250

Delta R.T. 0.01 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

Instrument :

MSVOA_L

ClientSampleId :

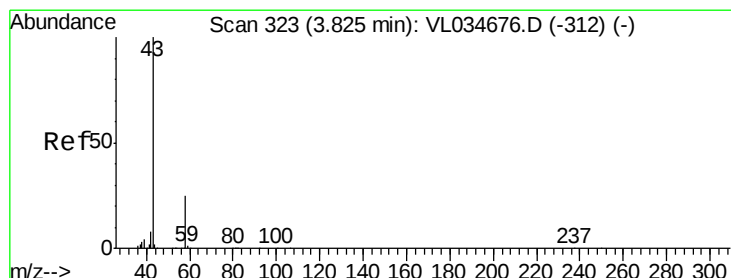
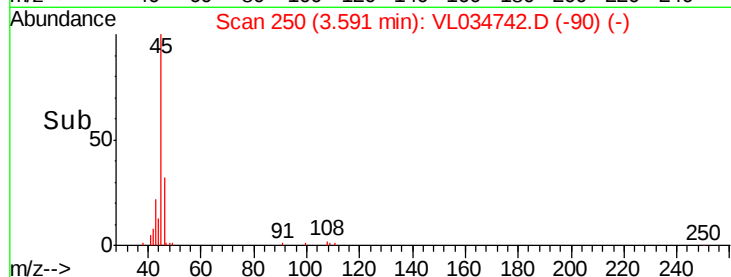
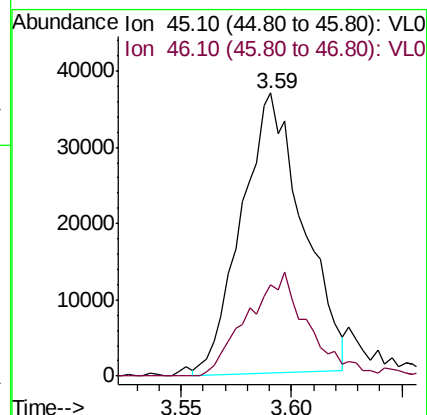
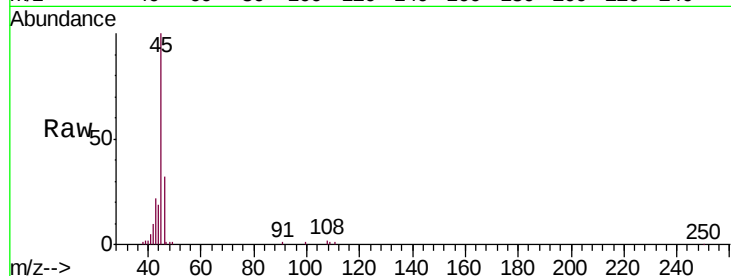
IA-2-4DL

Tgt Ion: 45 Resp: 71129

Ion Ratio Lower Upper

45 100

46 37.7 15.4 61.4



#15

Acetone

Concen: 82.819 ppbv

RT: 3.82 min Scan# 322

Delta R.T. -0.00 min

Lab File: VL034742.D

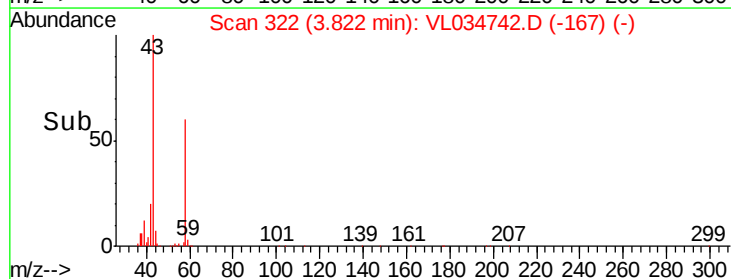
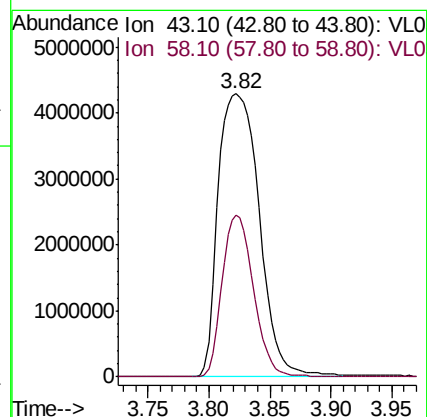
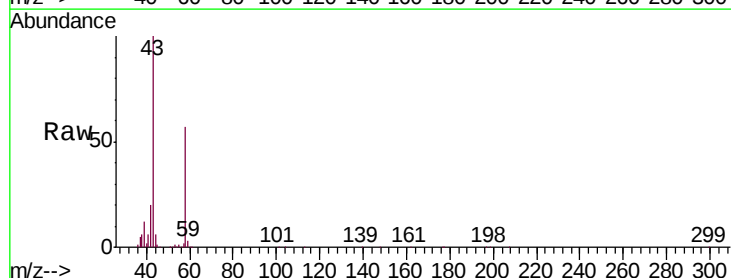
Acq: 28 Feb 2020 18:27

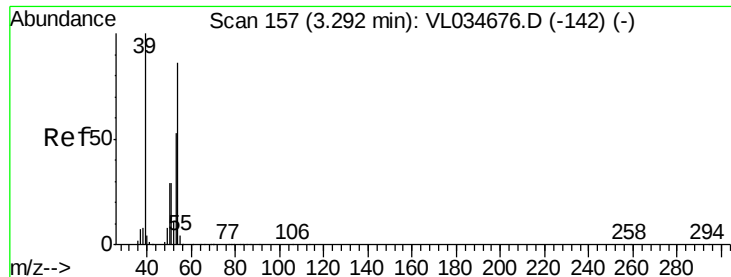
Tgt Ion: 43 Resp:10166872

Ion Ratio Lower Upper

43 100

58 44.1 21.4 32.0#





#16

1,3-Butadiene

Concen: 0.024 ppbv

RT: 3.30 min Scan# 160

Delta R.T. 0.01 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

Instrument :

MSVOA_L

ClientSampleId :

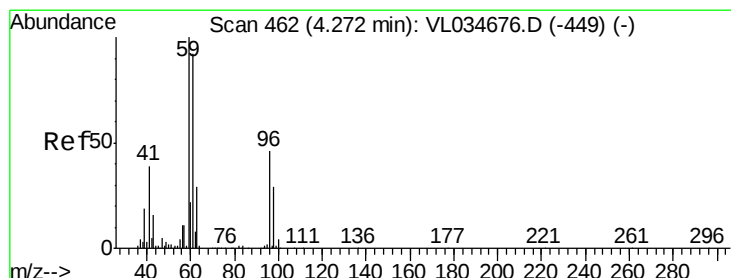
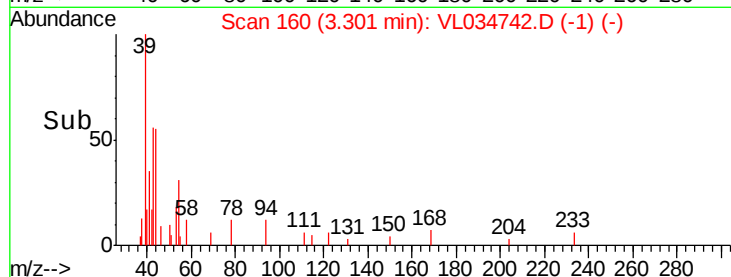
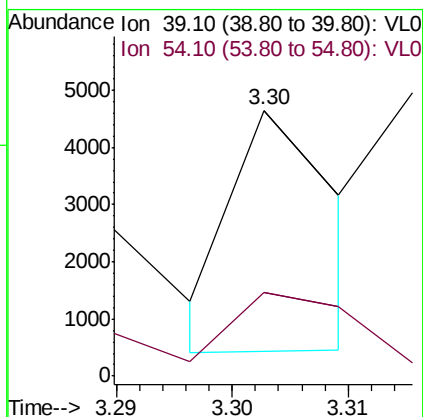
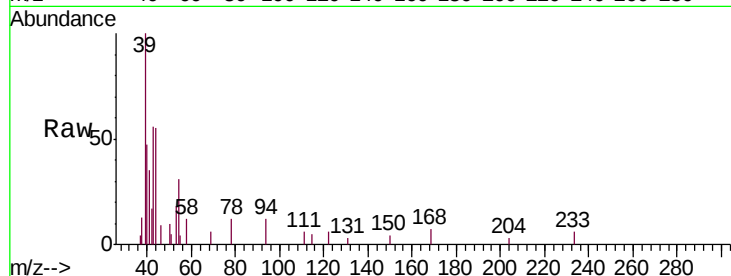
IA-2-4DL

Tgt Ion: 39 Resp: 1338

Ion Ratio Lower Upper

39 100

54 106.8 67.0 100.6#



#17

tert-Butyl alcohol

Concen: 0.028 ppbv

RT: 4.30 min Scan# 472

Delta R.T. 0.03 min

Lab File: VL034742.D

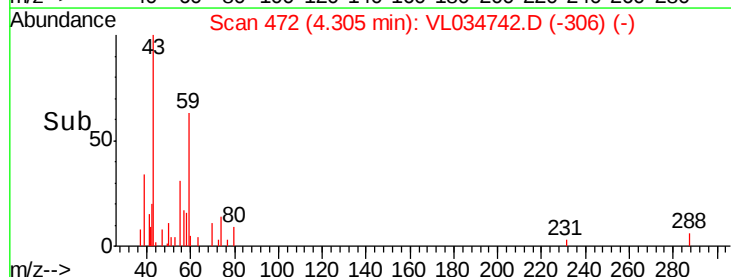
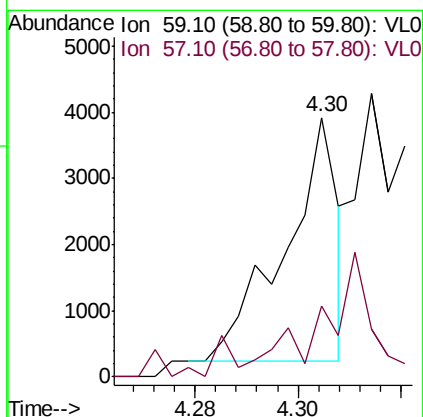
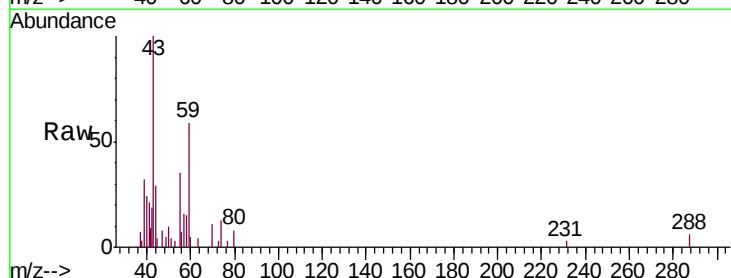
Acq: 28 Feb 2020 18:27

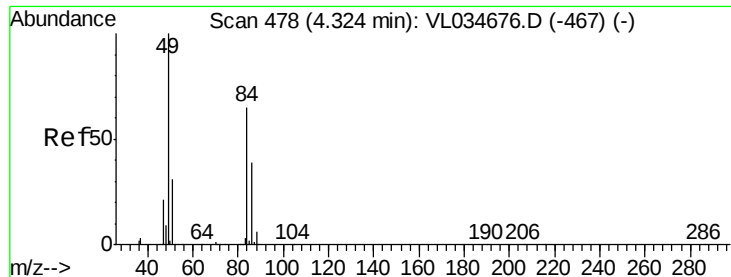
Tgt Ion: 59 Resp: 2612

Ion Ratio Lower Upper

59 100

57 243.3 8.8 13.2#

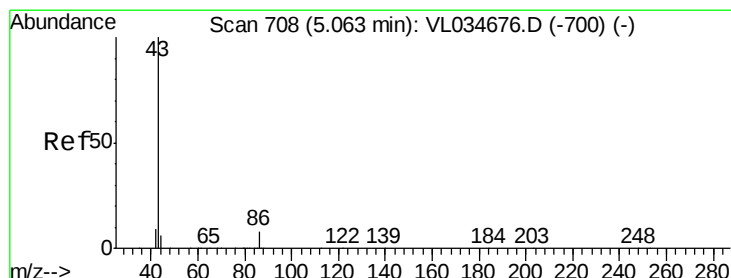
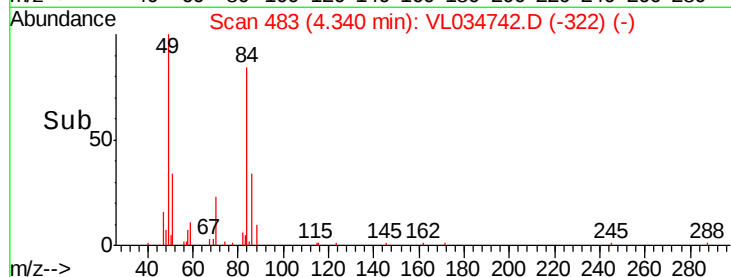
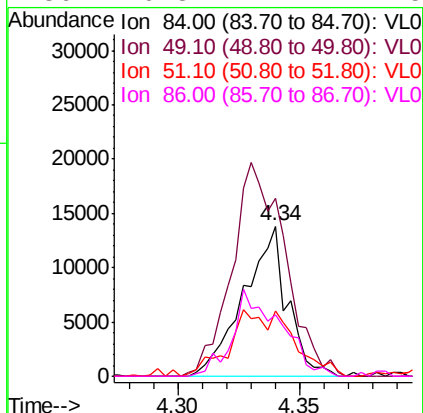
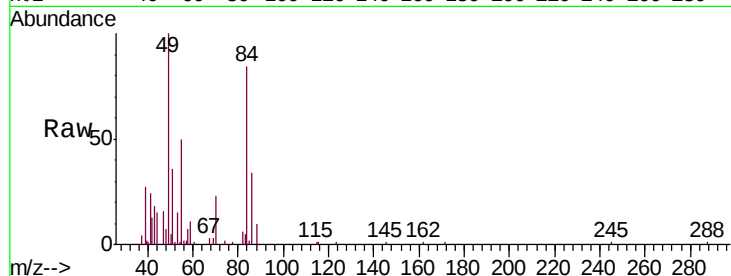




#20
Methylene Chloride
Concen: 0.377 ppbv
RT: 4.34 min Scan# 483
Delta R.T. 0.02 min
Lab File: VL034742.D
Acq: 28 Feb 2020 18:27

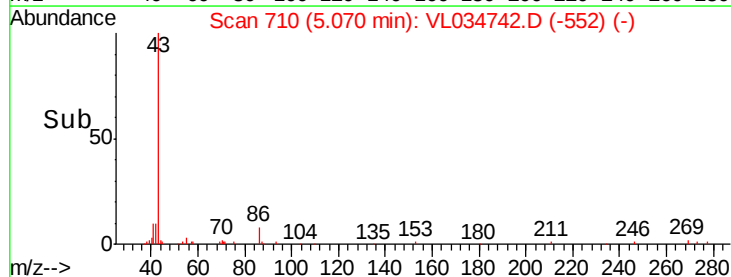
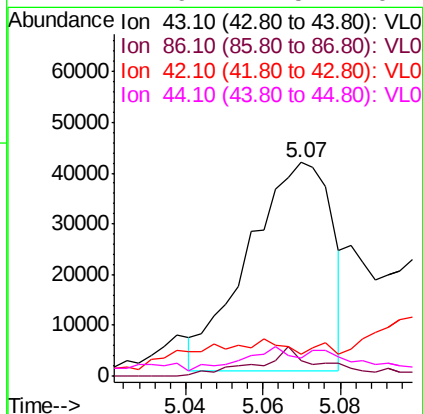
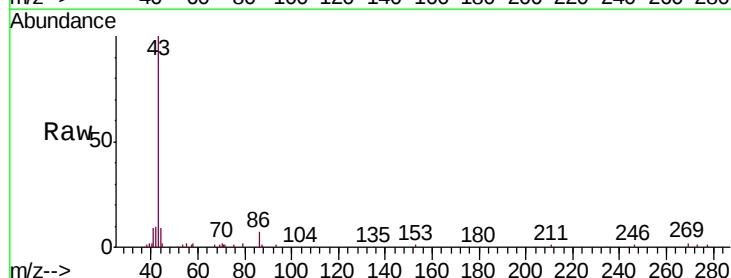
Instrument :
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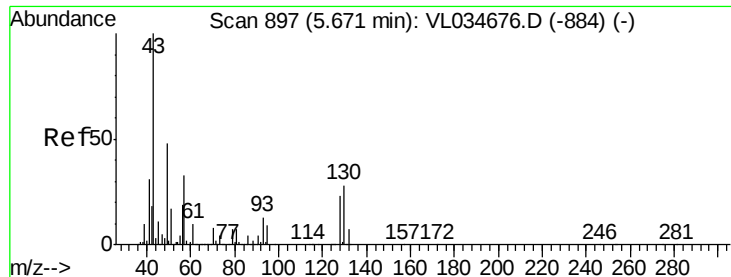
Tgt Ion: 84 Resp: 17203
Ion Ratio Lower Upper
84 100
49 116.6 122.8 184.2#
51 41.6 38.6 58.0
86 40.8 47.7 71.5#



#23
Vinyl Acetate
Concen: 0.369 ppbv
RT: 5.07 min Scan# 710
Delta R.T. 0.01 min
Lab File: VL034742.D
Acq: 28 Feb 2020 18:27

Tgt Ion: 43 Resp: 61609
Ion Ratio Lower Upper
43 100
86 8.5 6.0 9.0
42 0.2 8.0 12.0#
44 7.9 4.5 6.7#





#25

Ethyl Acetate

Concen: 0.376 ppbv

RT: 5.68 min Scan# 899

Delta R.T. 0.01 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

Instrument :

MSVOA_L

ClientSampleId :

IA-2-4DL

Tgt Ion: 43 Resp: 81729

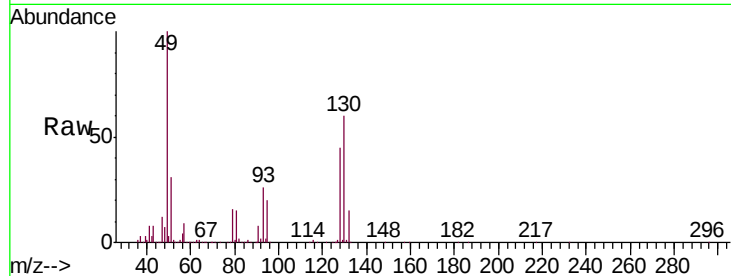
Ion Ratio Lower Upper

43 100

45 4.7 8.2 12.4#

61 4.0 7.8 11.6#

70 4.2 6.1 9.1#

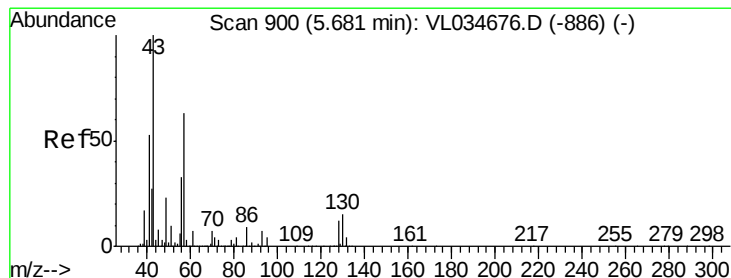
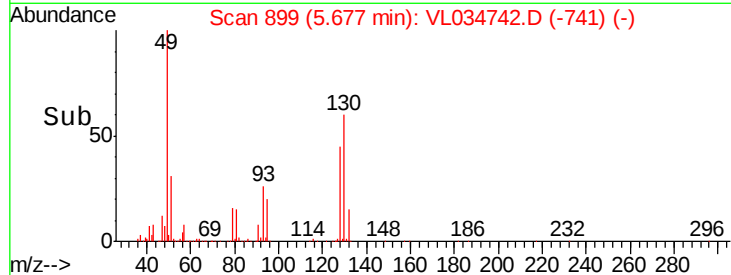
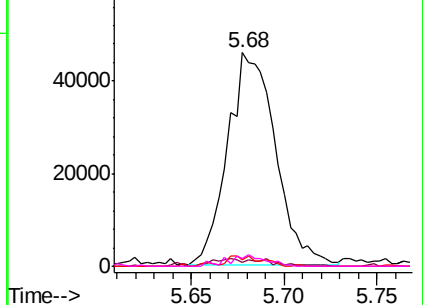


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 0.885 ppbv

RT: 5.68 min Scan# 900

Delta R.T. 0.00 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

Tgt Ion: 57 Resp: 88611

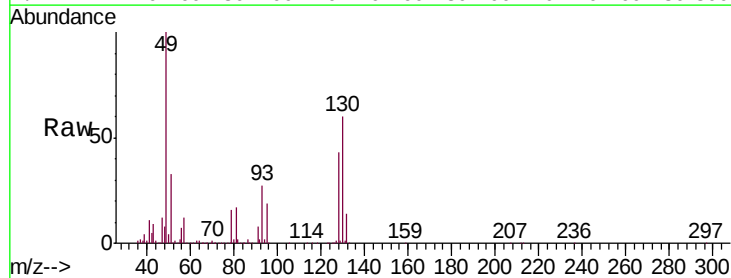
Ion Ratio Lower Upper

57 100

41 98.8 70.3 105.5

43 91.9 177.0 265.4#

56 56.2 42.6 64.0

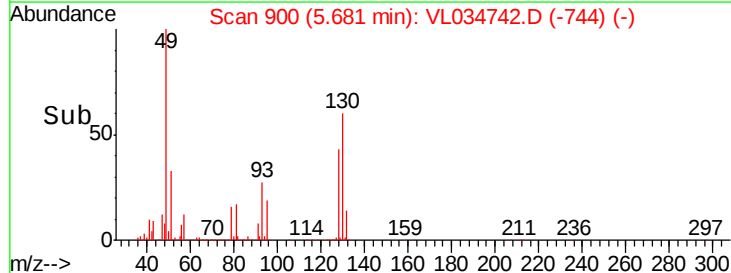
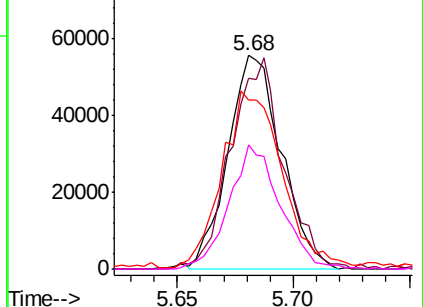


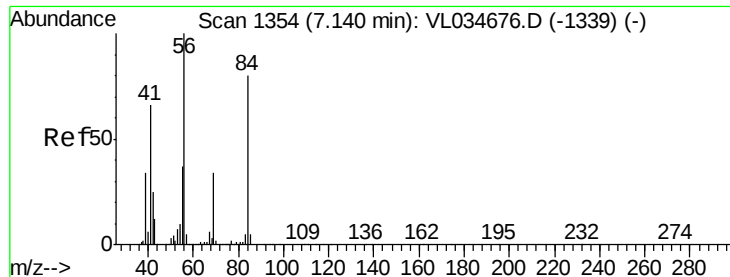
Abundance Ion 57.10 (56.80 to 57.80): VL0

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

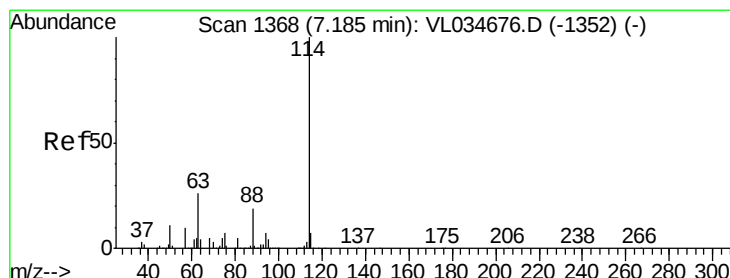
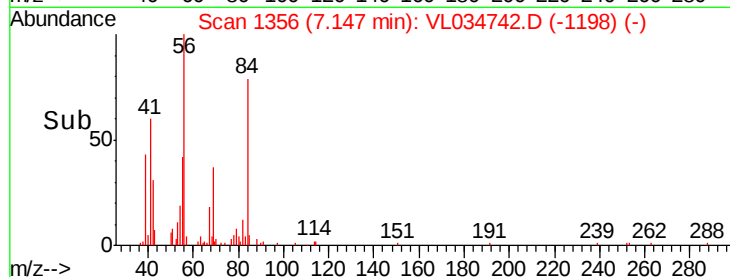
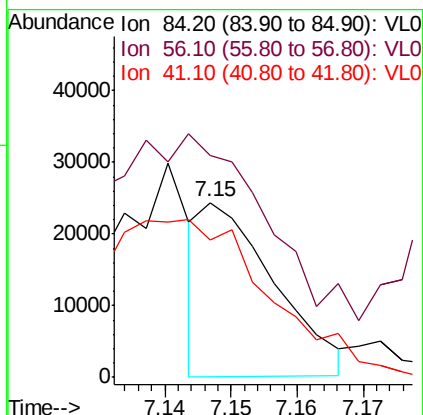
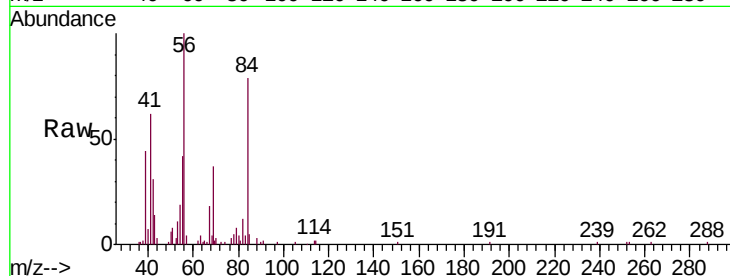




#30
Cyclohexane
Concen: 0.239 ppbv
RT: 7.15 min Scan# 1356
Delta R.T. 0.01 min
Lab File: VL034742.D
Acq: 28 Feb 2020 18:27

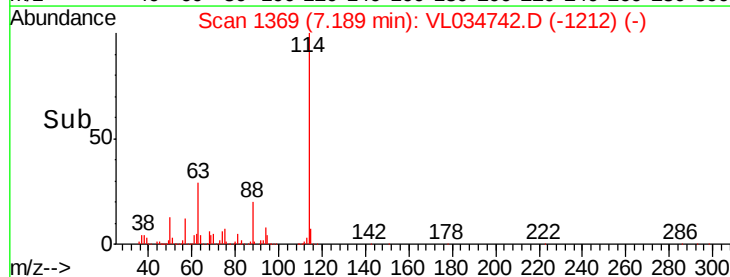
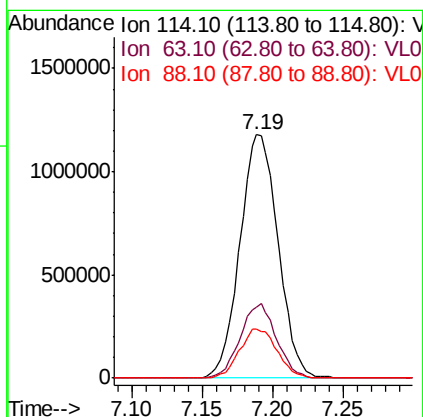
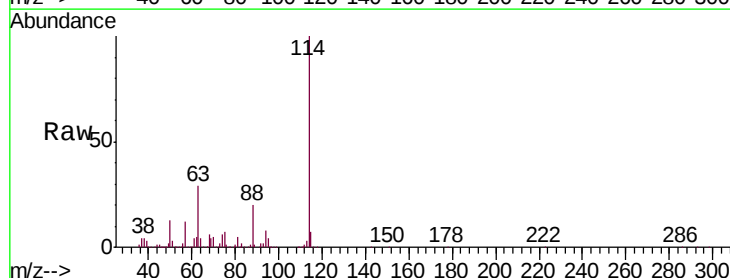
Instrument :
MSVOA_L
ClientSampleId :
IA-2-4DL

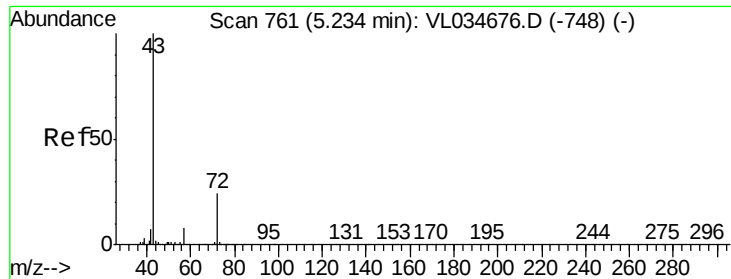
Tgt Ion: 84 Resp: 18580
Ion Ratio Lower Upper
84 100
56 381.7 113.4 170.2#
41 258.2 68.2 102.4#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1369
Delta R.T. 0.00 min
Lab File: VL034742.D
Acq: 28 Feb 2020 18:27

Tgt Ion: 114 Resp: 2236729
Ion Ratio Lower Upper
114 100
63 29.1 22.9 34.3
88 20.0 15.8 23.6





#34

2-Butanone

Concen: 0.114 ppbv

RT: 5.25 min Scan# 765

Delta R.T. 0.01 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

Instrument :

MSVOA_L

ClientSampleId :

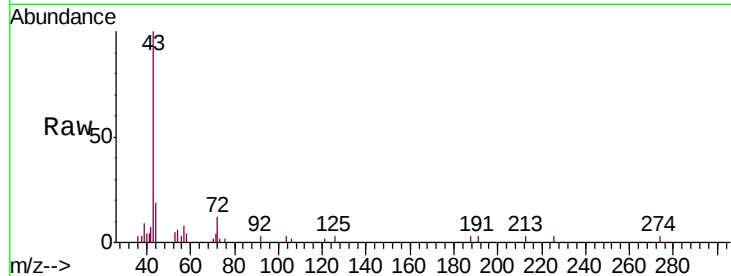
IA-2-4DL

Tgt Ion: 43 Resp: 16053

Ion Ratio Lower Upper

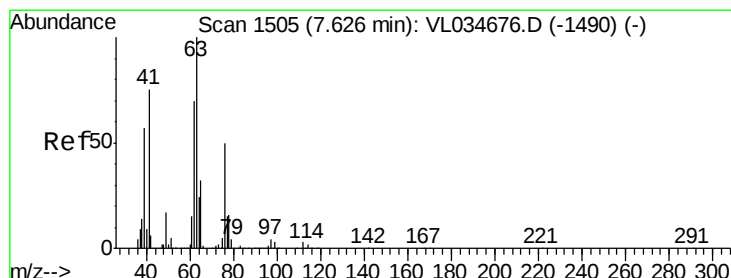
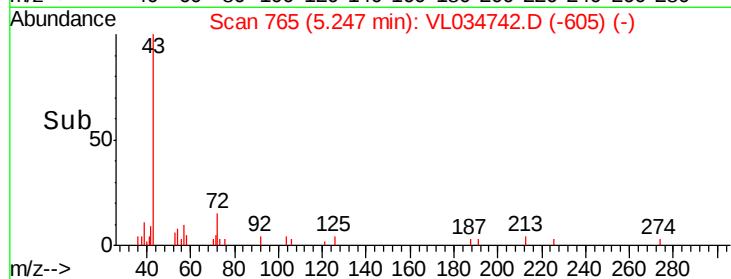
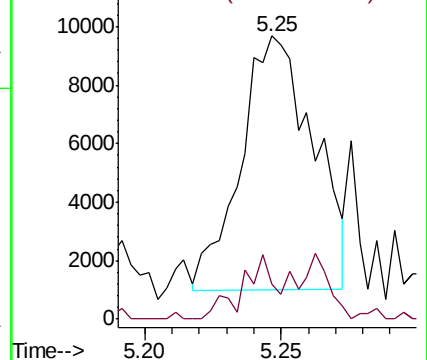
43 100

72 0.0 18.2 27.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#39

1,2-Dichloropropane

Concen: 8.362 ppbv

RT: 7.19 min Scan# 1370

Delta R.T. -0.43 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

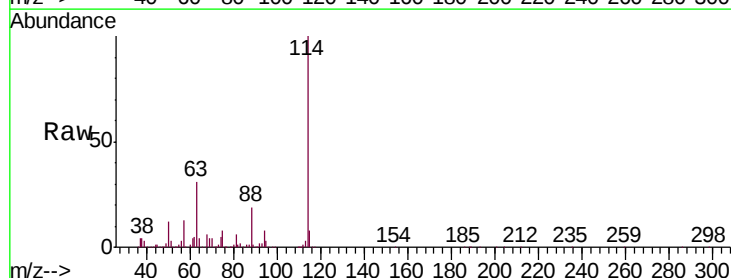
Tgt Ion: 63 Resp: 642718

Ion Ratio Lower Upper

63 100

41 0.0 60.2 90.4#

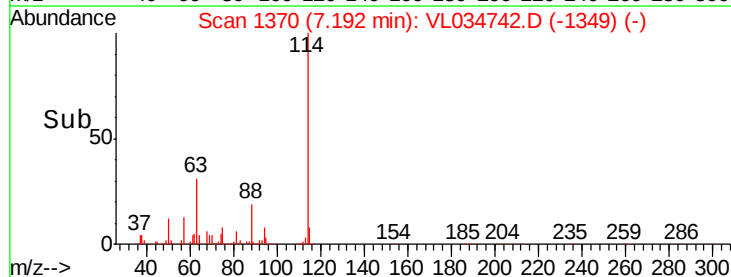
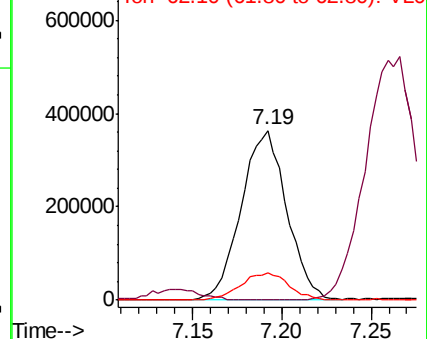
62 15.4 56.3 84.5#

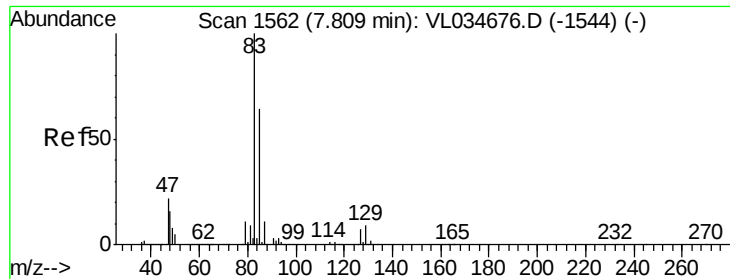


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#42

Bromodichloromethane

Concen: 0.078 ppbv

RT: 7.81 min Scan# 1562

Delta R.T. 0.00 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

Instrument :

MSVOA_L

ClientSampleId :

IA-2-4DL

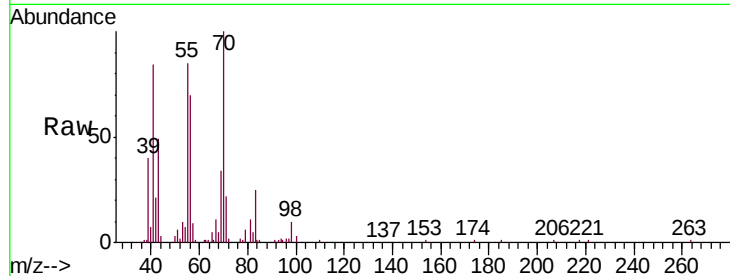
Tgt Ion: 83 Resp: 12376

Ion Ratio Lower Upper

83 100

85 2.4 51.1 76.7#

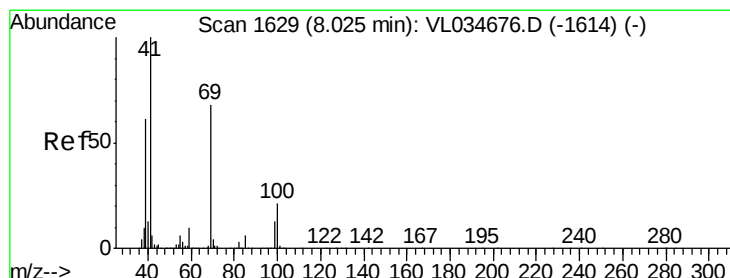
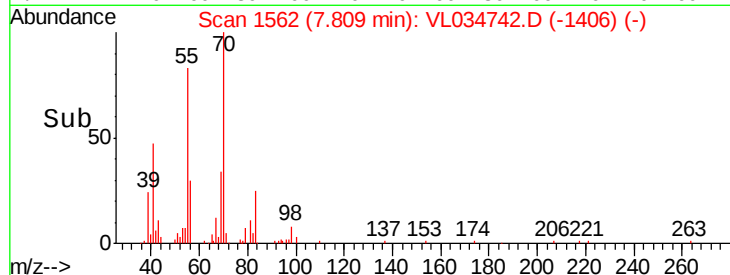
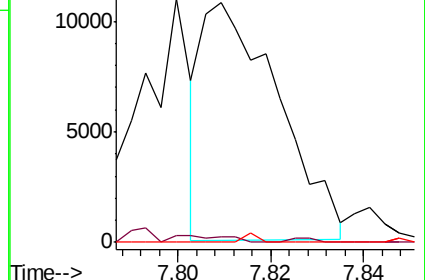
127 0.0 5.8 8.8#



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): VL0



#43

Methyl Methacrylate

Concen: 0.116 ppbv

RT: 8.12 min Scan# 1659

Delta R.T. 0.10 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

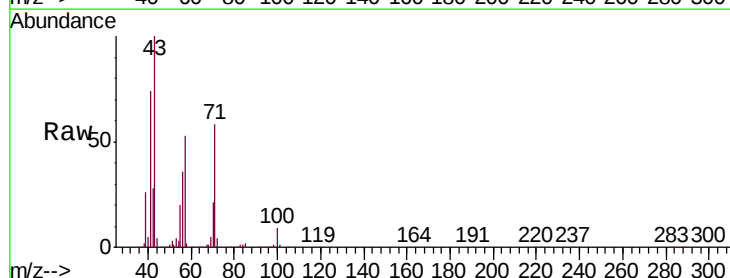
Tgt Ion: 69 Resp: 9435

Ion Ratio Lower Upper

69 100

41 0.0 118.2 177.2#

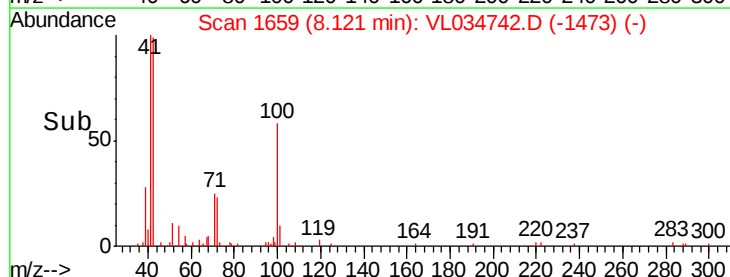
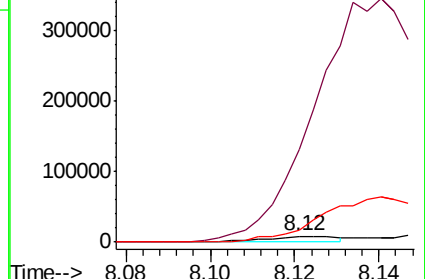
100 0.0 24.2 36.2#

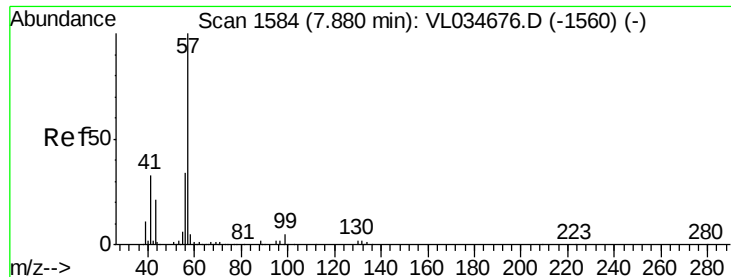


Abundance Ion 69.10 (68.80 to 69.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 100.10 (99.80 to 100.80): VL0

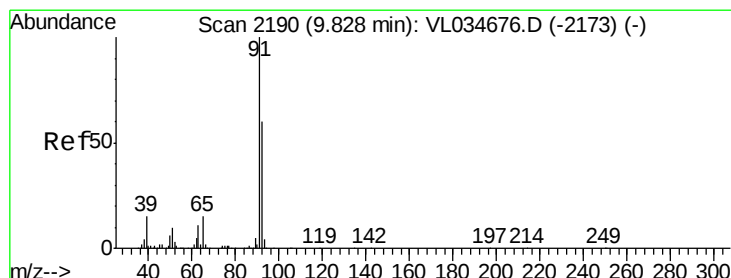
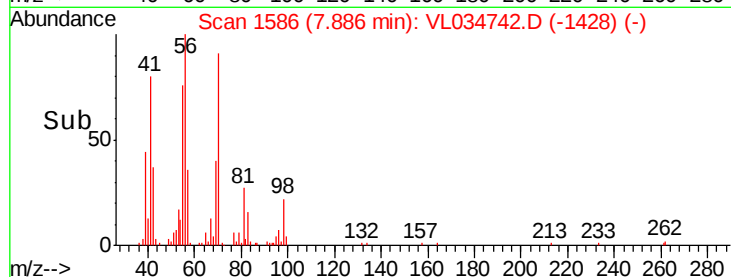
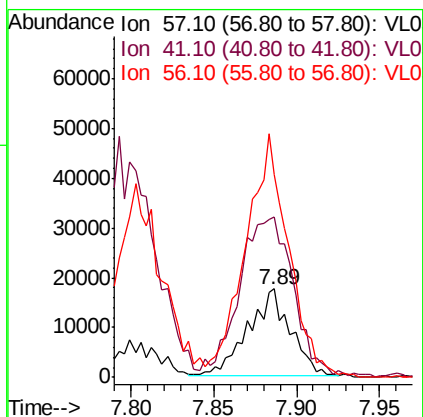
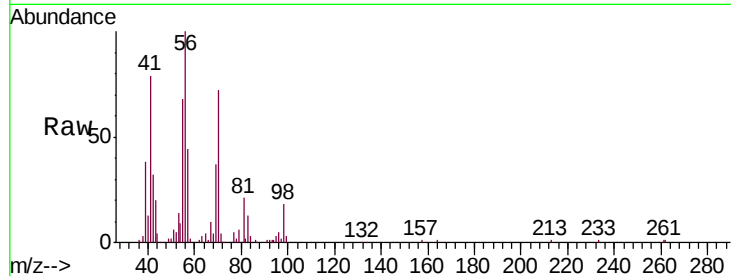




#44
 2,2,4-Trimethylpentane
 Concen: 0.090 ppbv
 RT: 7.89 min Scan# 1586
 Delta R.T. 0.01 min
 Lab File: VL034742.D
 Acq: 28 Feb 2020 18:27

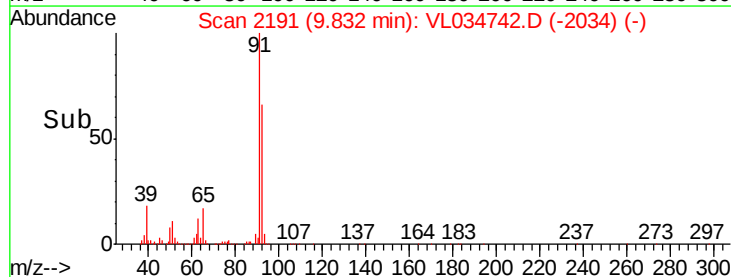
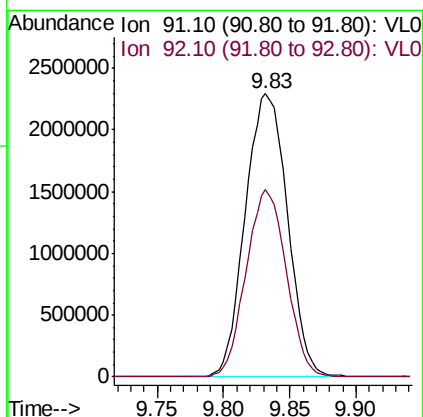
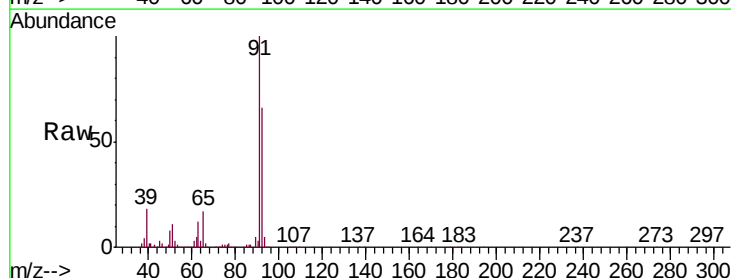
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2-4DL

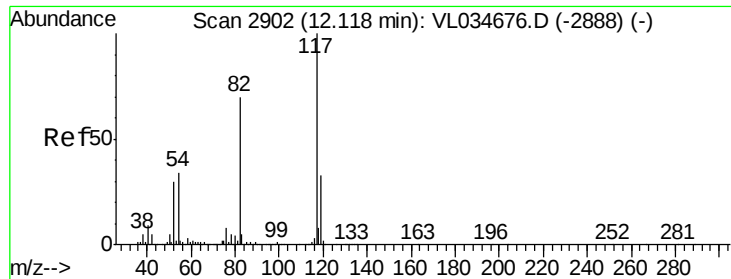
Tgt Ion: 57 Resp: 30504
 Ion Ratio Lower Upper
 57 100
 41 235.9 26.0 39.0#
 56 294.0 25.6 38.4#



#53
 Toluene
 Concen: 24.729 ppbv
 RT: 9.83 min Scan# 2191
 Delta R.T. 0.00 min
 Lab File: VL034742.D
 Acq: 28 Feb 2020 18:27

Tgt Ion: 91 Resp: 5081112
 Ion Ratio Lower Upper
 91 100
 92 63.4 48.5 72.7

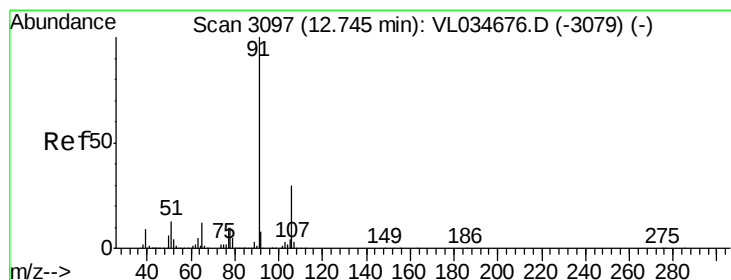
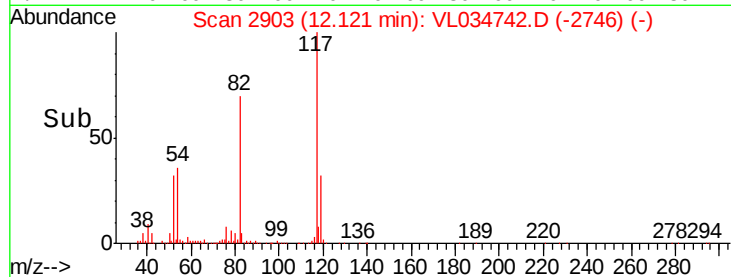
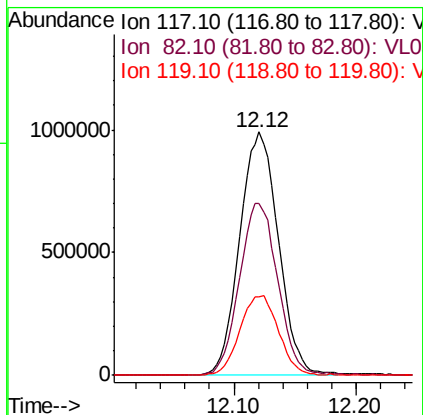
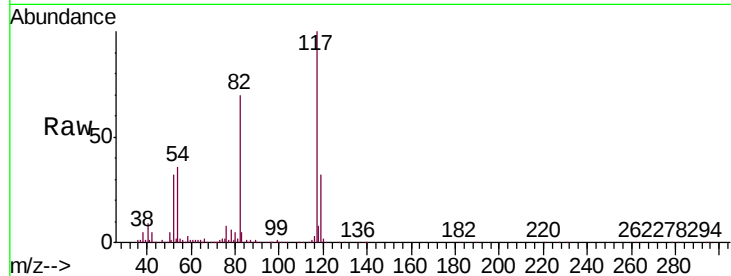




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.12 min Scan# 2903
Delta R.T. 0.00 min
Lab File: VL034742.D
Acq: 28 Feb 2020 18:27

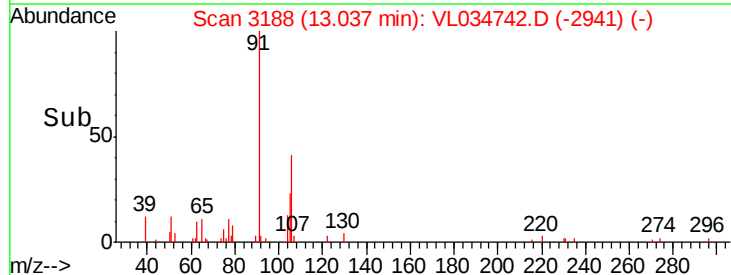
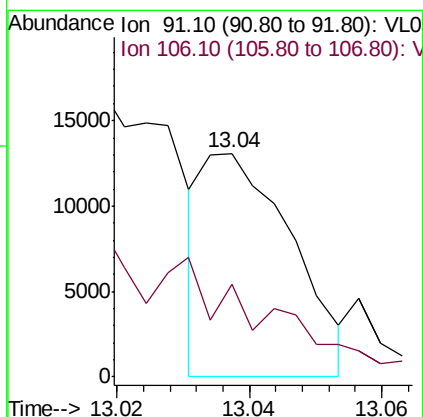
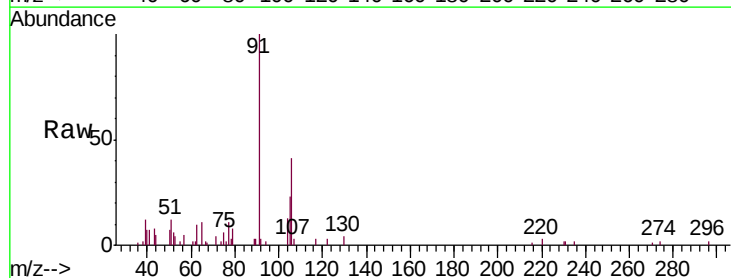
Instrument :
MSVOA_L
ClientSampled :
IA-2-4DL

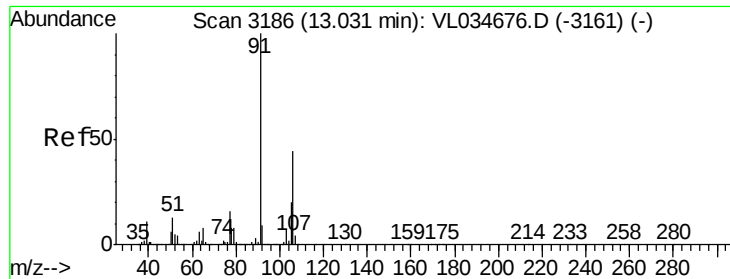
Tgt Ion: 117 Resp: 2170873
Ion Ratio Lower Upper
117 100
82 70.7 54.1 81.1
119 33.3 27.6 41.4



#58
Ethyl Benzene
Concen: 0.046 ppbv
RT: 13.04 min Scan# 3188
Delta R.T. 0.29 min
Lab File: VL034742.D
Acq: 28 Feb 2020 18:27

Tgt Ion: 91 Resp: 12179
Ion Ratio Lower Upper
91 100
106 32.1 24.0 36.0

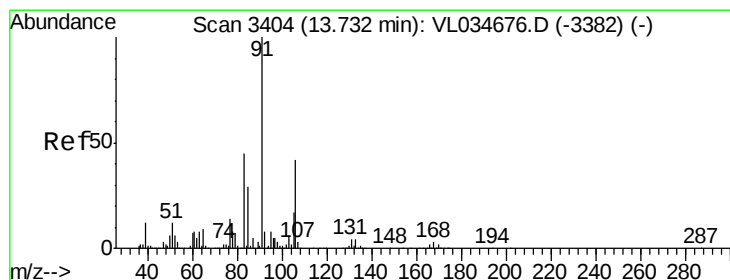
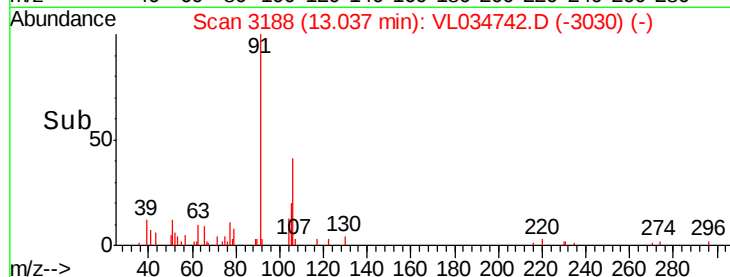
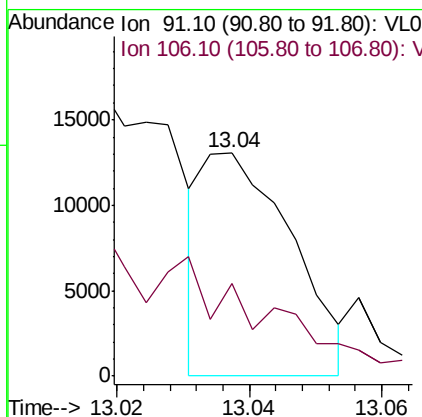
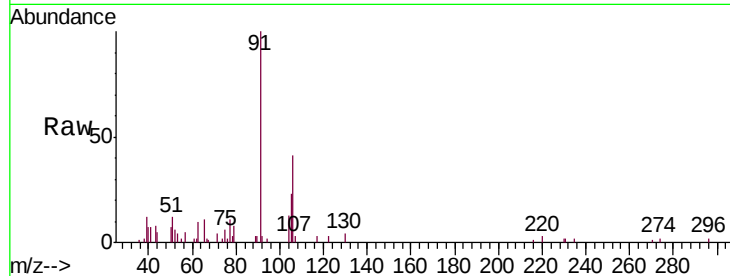




#59
m/p-Xylene
Concen: 0.053 ppbv
RT: 13.04 min Scan# 3188
Delta R.T. 0.01 min
Lab File: VL034742.D
Acq: 28 Feb 2020 18:27

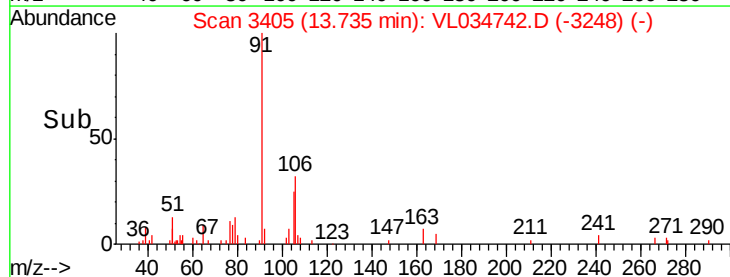
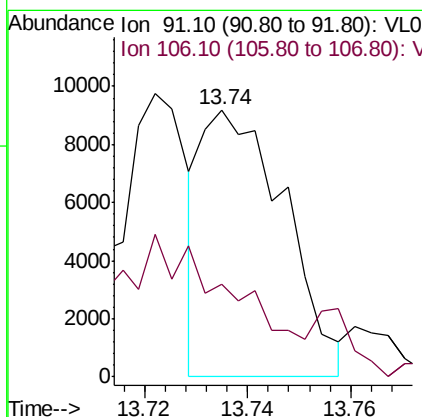
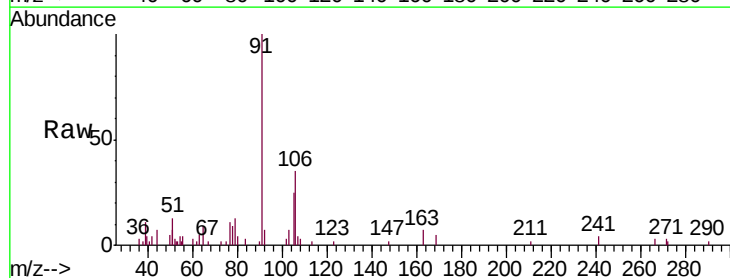
Instrument :
MSVOA_L
ClientSampleId :
IA-2-4DL

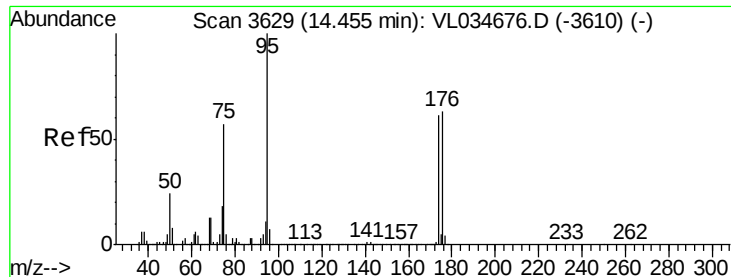
Tgt Ion: 91 Resp: 12179
Ion Ratio Lower Upper
91 100
106 0.0 35.6 53.4#



#60
o-Xylene
Concen: 0.045 ppbv
RT: 13.74 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VL034742.D
Acq: 28 Feb 2020 18:27

Tgt Ion: 91 Resp: 10273
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.5#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.385 ppbv

RT: 14.46 min Scan# 3629

Delta R.T. 0.00 min

Lab File: VL034742.D

Acq: 28 Feb 2020 18:27

Instrument :

MSVOA_L

ClientSampleId :

IA-2-4DL

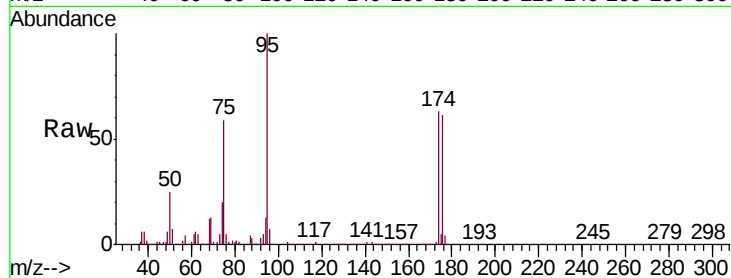
Tgt Ion: 95 Resp: 1848505

Ion Ratio Lower Upper

95 100

174 62.5 50.7 76.1

175 4.8 3.9 5.9



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

