

Data File : VL034658.D
Acq On : 19 Feb 2020 23:41
Operator : SY/AP
Sample : L1553-05
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-2

Quant Time: Feb 20 06:52:20 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL013020AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LThu 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	767354	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.17	114	1607223	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.10	117	1624780	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.44 95 1392914 10.14 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 101.40%

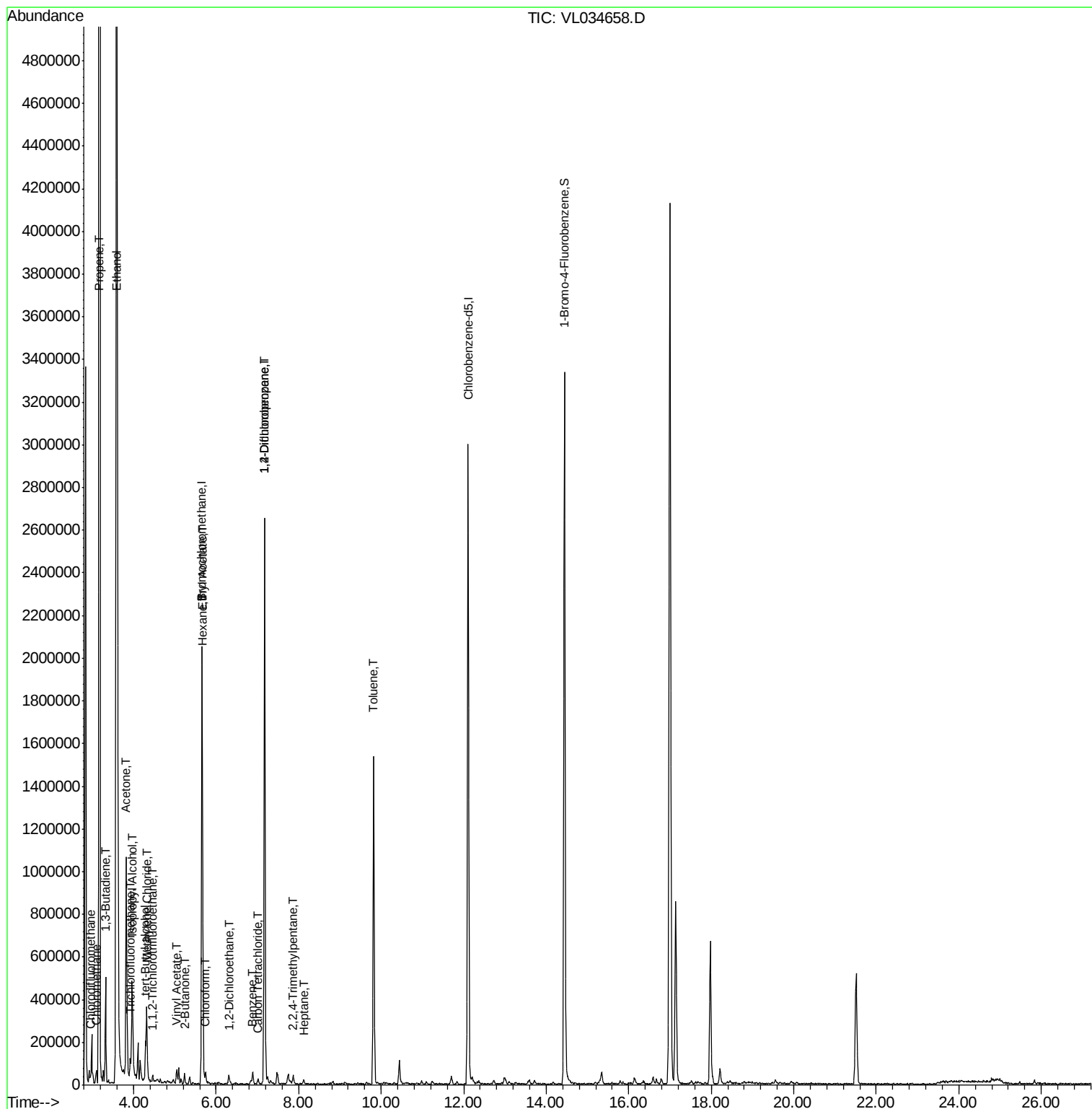
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	2.95	51	59197	0.638	ppbv #	81
4) Chloromethane	3.10	50	37462	0.660	ppbv	98
9) Propene	3.17	41	3697542	102.421	ppbv	94
10) Heptane	8.12	43	3301	0.036	ppbv #	1
11) Trichlorofluoromethane	3.92	101	47794	0.311	ppbv #	81
12) 1,1,2-Trichlorotrifluoroet	4.46	101	5538	0.055	ppbv #	42
13) Ethanol	3.59	45	8496692	878.655	ppbv	91
15) Acetone	3.82	43	1020647	9.050	ppbv	100
16) 1,3-Butadiene	3.32	39	63184	1.411	ppbv #	15
17) tert-Butyl alcohol	4.29	59	27769	0.335	ppbv #	67
19) Isopropyl Alcohol	3.96	45	552574	8.396	ppbv #	97
20) Methylene Chloride	4.32	84	105085	2.447	ppbv	97
23) Vinyl Acetate	5.04	43	60637	0.471	ppbv #	83
25) Ethyl Acetate	5.67	43	158926	0.870	ppbv #	86
26) Hexane	5.67	57	181583	2.374	ppbv #	43
29) Chloroform	5.74	83	21589	0.160	ppbv	87
34) 2-Butanone	5.23	43	33301	0.285	ppbv #	80
35) Carbon Tetrachloride	7.01	117	6180	0.040	ppbv #	55
36) Benzene	6.88	78	25398	0.178	ppbv #	84
37) 1,2-Dichloroethane	6.29	62	22122	0.186	ppbv	99
39) 1,2-Dichloropropane	7.17	63	480971	8.117	ppbv #	19
44) 2,2,4-Trimethylpentane	7.87	57	18405	0.071	ppbv #	50
53) Toluene	9.82	91	1076804	6.858	ppbv	99

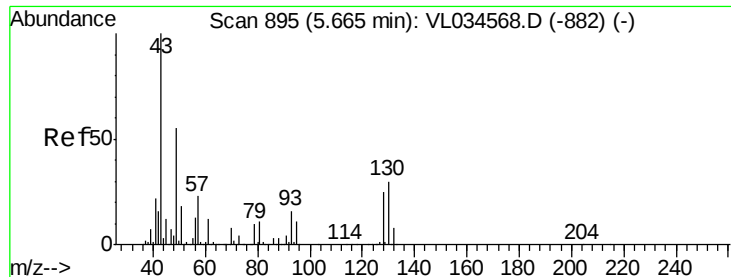
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : VL034658.D
Acq On : 19 Feb 2020 23:41
Operator : SY/AP
Sample : L1553-05
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-2

Quant Time: Feb 20 06:52:20 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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.01 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Instrument :

MSVOA_L

ClientSampleId :

IA-2

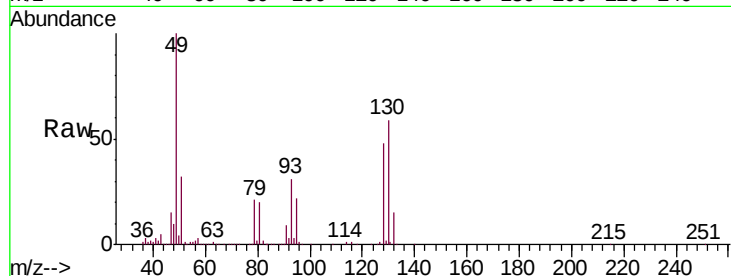
Tgt Ion: 49 Resp: 767354

Ion Ratio Lower Upper

49 100

128 48.4 22.7 68.1

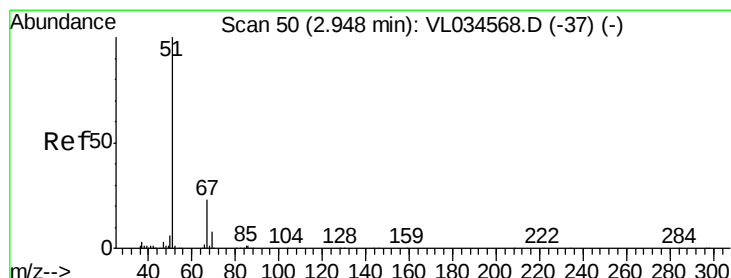
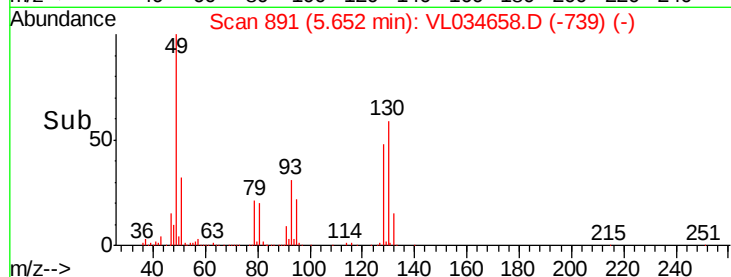
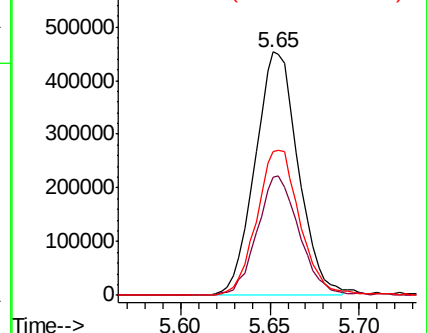
130 60.4 28.6 85.8



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



#3

Chlorodifluoromethane

Concen: 0.638 ppbv

RT: 2.95 min Scan# 50

Delta R.T. 0.00 min

Lab File: VL034658.D

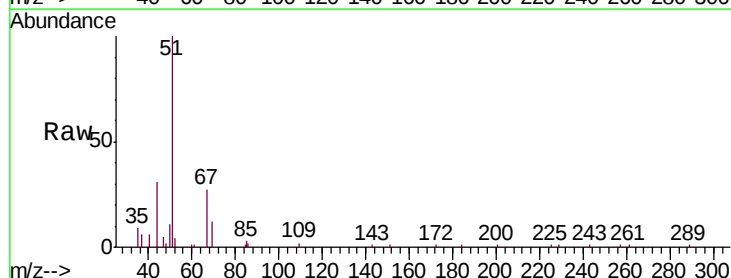
Acq: 19 Feb 2020 23:41

Tgt Ion: 51 Resp: 59197

Ion Ratio Lower Upper

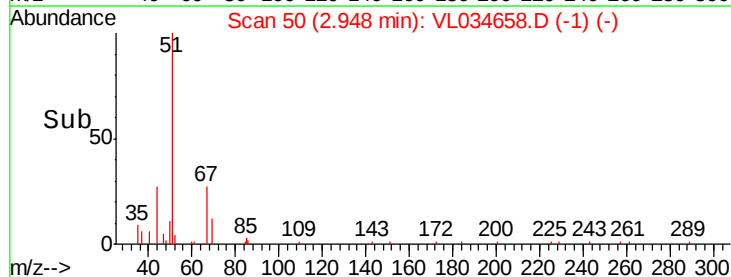
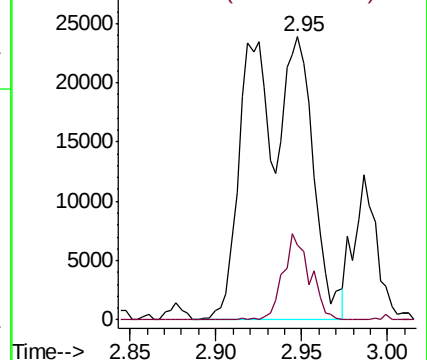
51 100

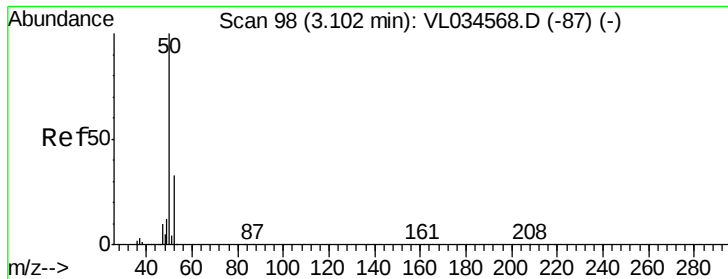
67 13.2 17.8 26.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.660 ppbv

RT: 3.10 min Scan# 98

Delta R.T. 0.00 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Instrument :

MSVOA_L

ClientSampleId :

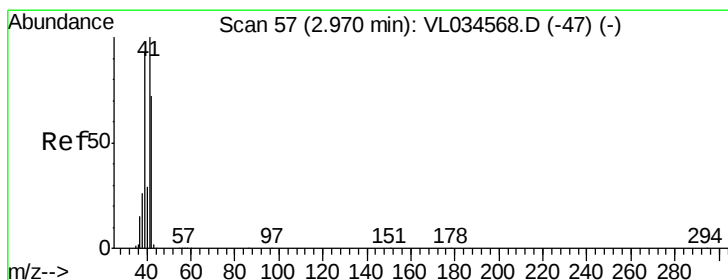
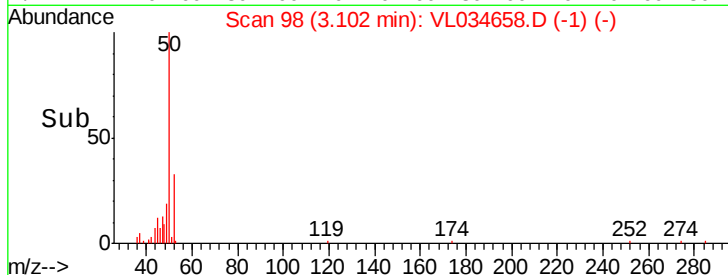
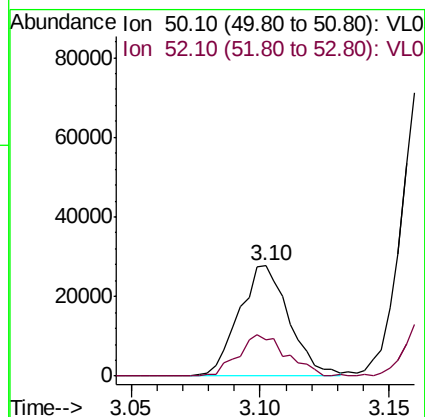
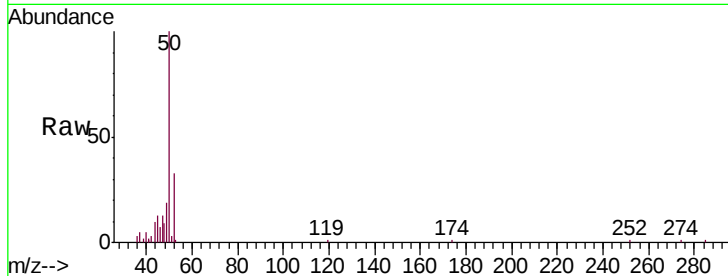
IA-2

Tgt Ion: 50 Resp: 37462

Ion Ratio Lower Upper

50 100

52 34.2 26.6 39.8



#9

Propene

Concen: 102.421 ppbv

RT: 3.17 min Scan# 118

Delta R.T. 0.20 min

Lab File: VL034658.D

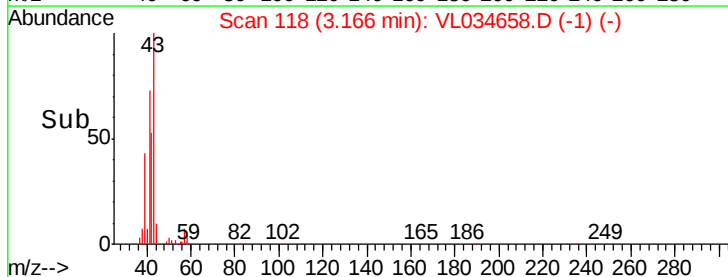
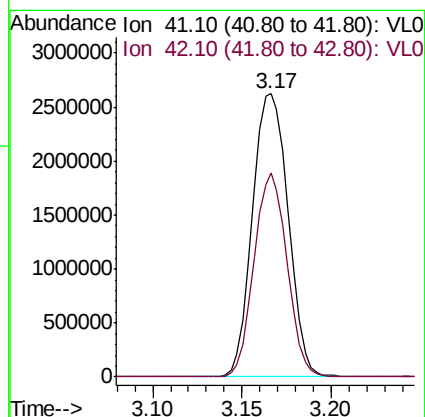
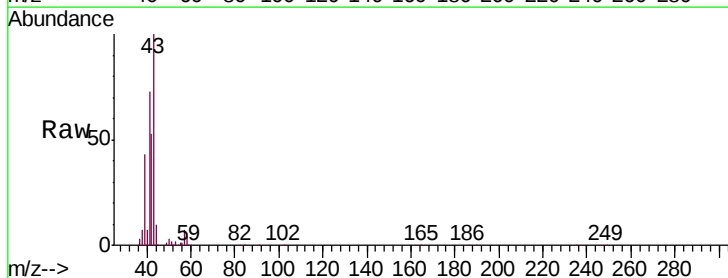
Acq: 19 Feb 2020 23:41

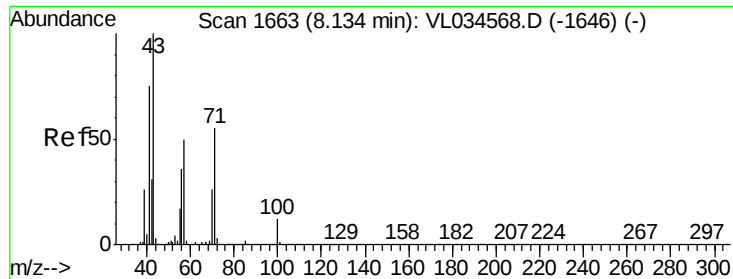
Tgt Ion: 41 Resp: 3697542

Ion Ratio Lower Upper

41 100

42 66.5 57.0 85.4

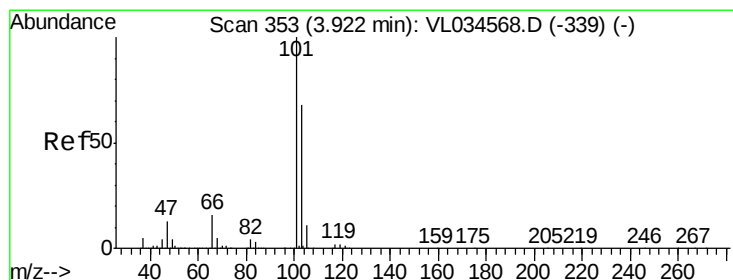
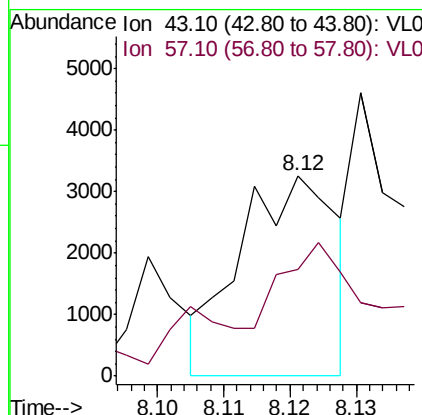
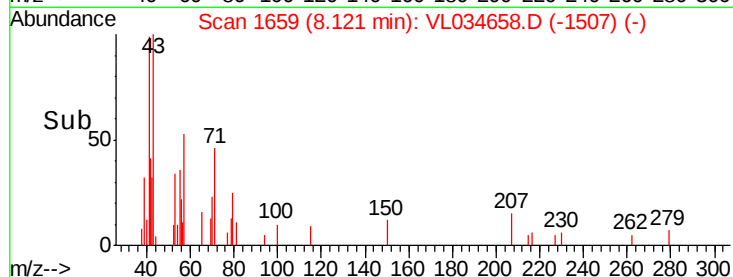
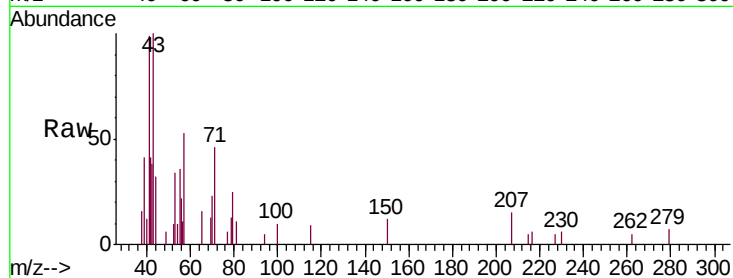




#10
Heptane
Concen: 0.036 ppbv
RT: 8.12 min Scan# 1659
Delta R.T. -0.01 min
Lab File: VL034658.D
Acq: 19 Feb 2020 23:41

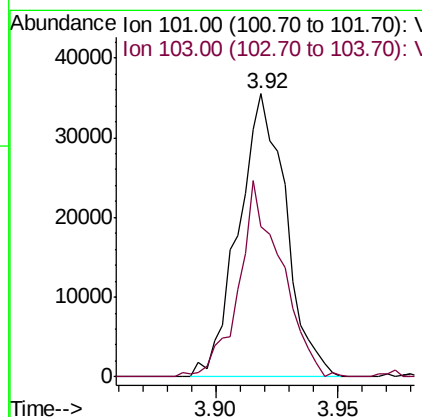
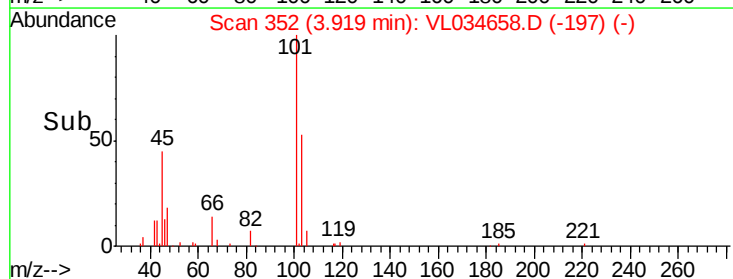
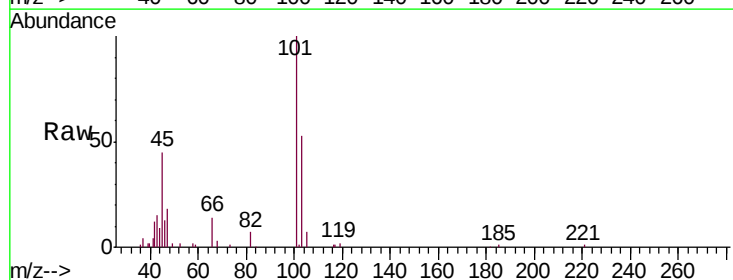
Instrument :
MSVOA_L
ClientSampleId :
IA-2

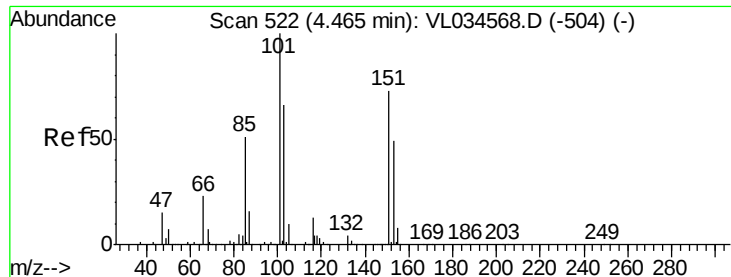
Tgt Ion: 43 Resp: 3301
Ion Ratio Lower Upper
43 100
57 122.8 41.2 61.8#



#11
Trichlorofluoromethane
Concen: 0.311 ppbv
RT: 3.92 min Scan# 352
Delta R.T. -0.00 min
Lab File: VL034658.D
Acq: 19 Feb 2020 23:41

Tgt Ion: 101 Resp: 47794
Ion Ratio Lower Upper
101 100
103 52.5 54.4 81.6#





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.055 ppbv

RT: 4.46 min Scan# 519

Delta R.T. -0.01 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Instrument :

MSVOA_L

ClientSampleId :

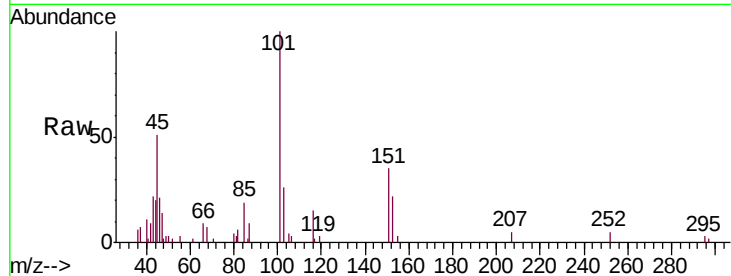
IA-2

Tgt Ion:101 Resp: 5538

Ion Ratio Lower Upper

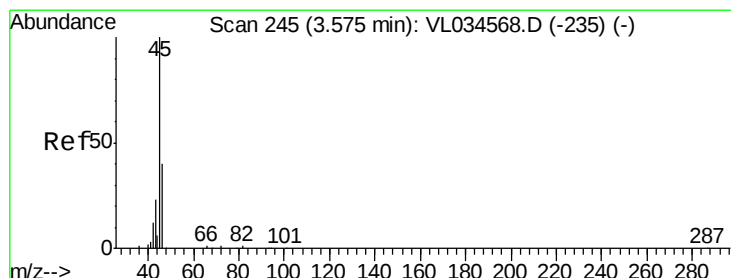
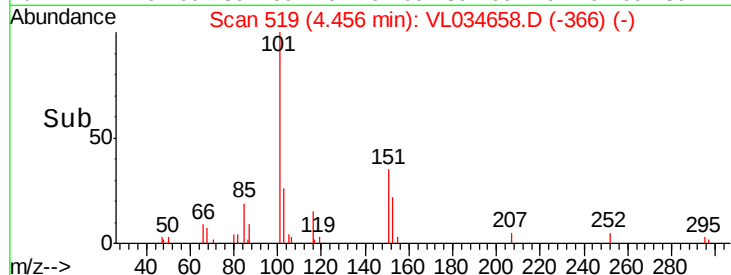
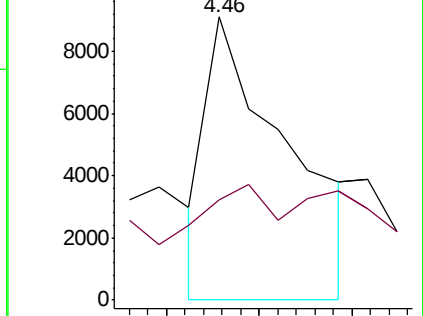
101 100

151 119.5 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: 878.655 ppbv

RT: 3.59 min Scan# 249

Delta R.T. 0.01 min

Lab File: VL034658.D

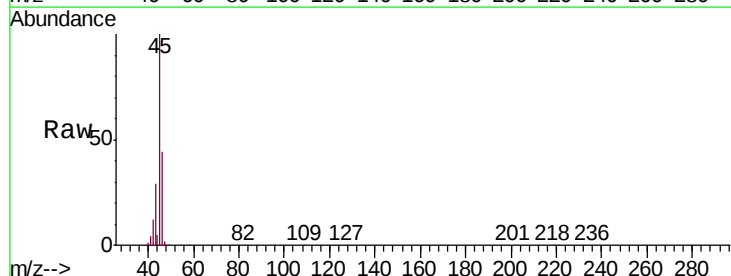
Acq: 19 Feb 2020 23:41

Tgt Ion: 45 Resp: 8496692

Ion Ratio Lower Upper

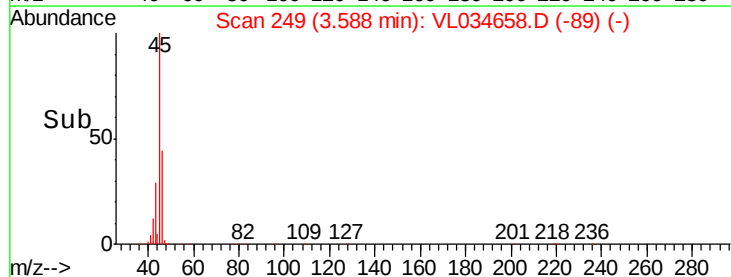
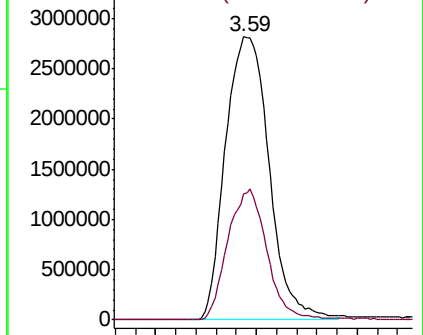
45 100

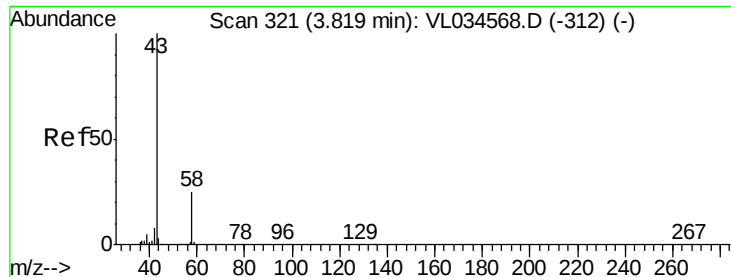
46 42.1 14.8 59.2



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 9.050 ppbv

RT: 3.82 min Scan# 321

Delta R.T. 0.00 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Instrument :

MSVOA_L

ClientSampleId :

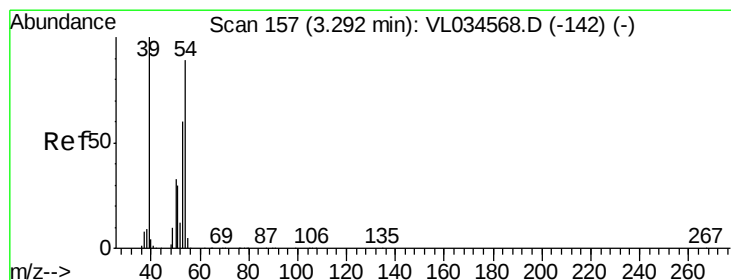
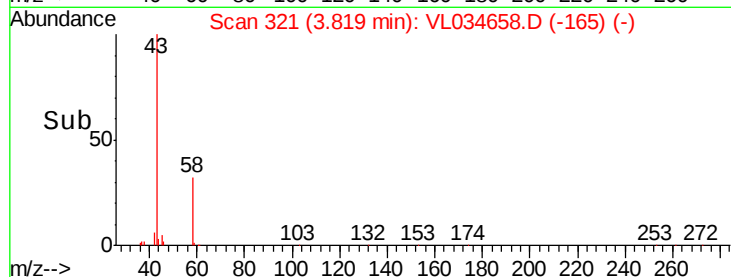
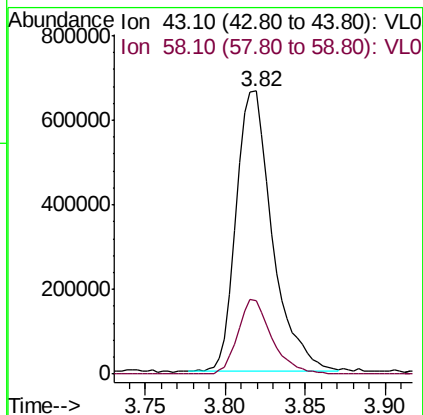
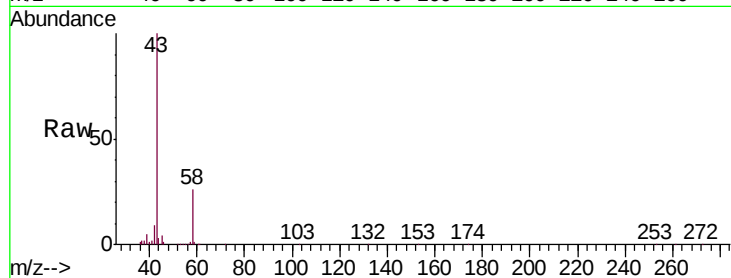
IA-2

Tgt Ion: 43 Resp: 1020647

Ion Ratio Lower Upper

43 100

58 25.3 20.3 30.5



#16

1,3-Butadiene

Concen: 1.411 ppbv

RT: 3.32 min Scan# 165

Delta R.T. 0.03 min

Lab File: VL034658.D

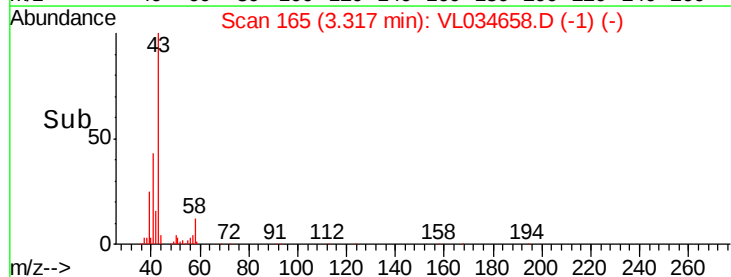
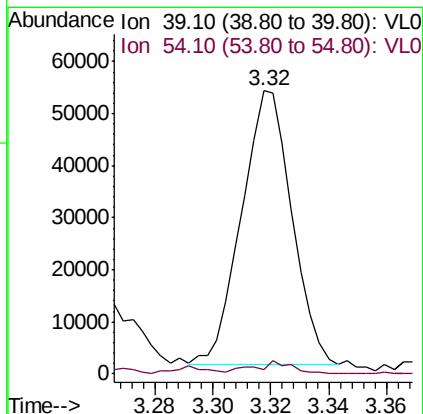
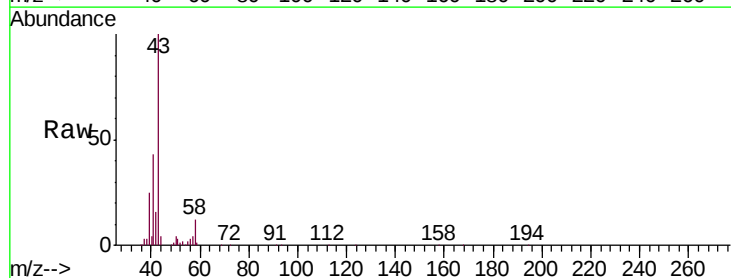
Acq: 19 Feb 2020 23:41

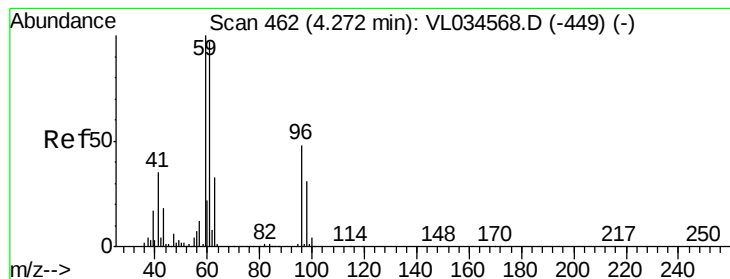
Tgt Ion: 39 Resp: 63184

Ion Ratio Lower Upper

39 100

54 6.9 66.7 100.1#



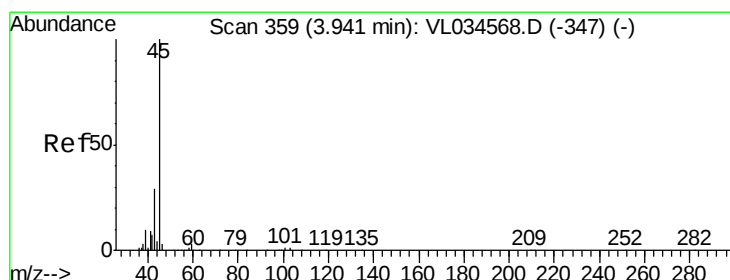
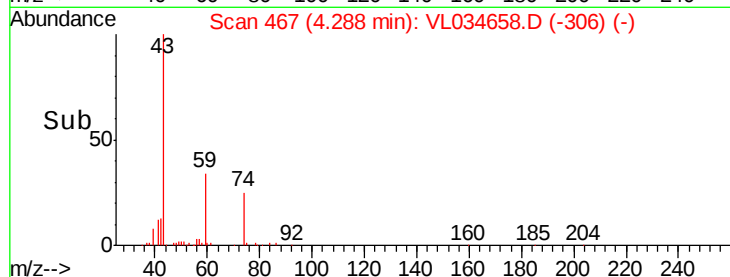
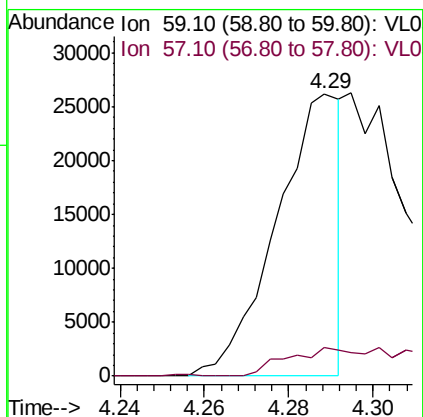
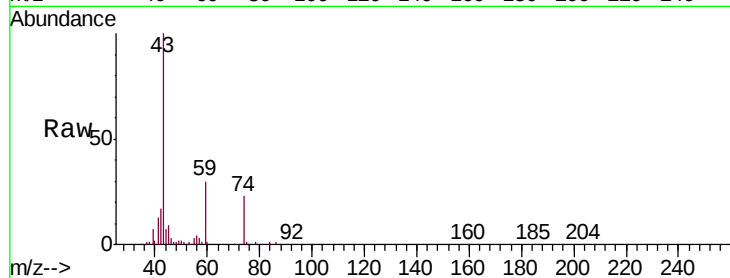


#17

tert-Butyl alcohol
Concen: 0.335 ppbv
RT: 4.29 min Scan# 467
Delta R.T. 0.02 min
Lab File: VL034658.D
Acq: 19 Feb 2020 23:41

Instrument :
MSVOA_L
ClientSampleId :
IA-2

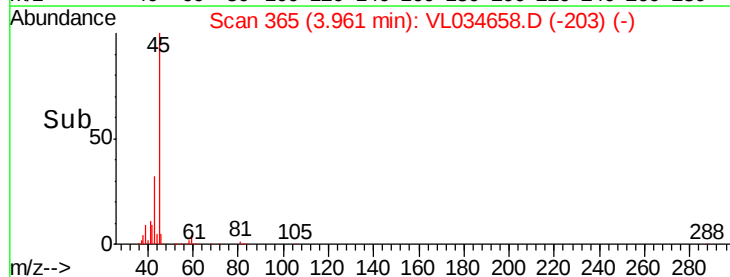
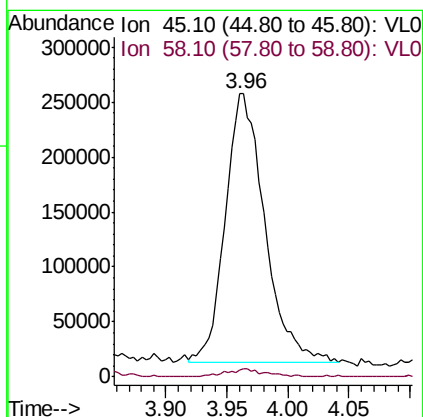
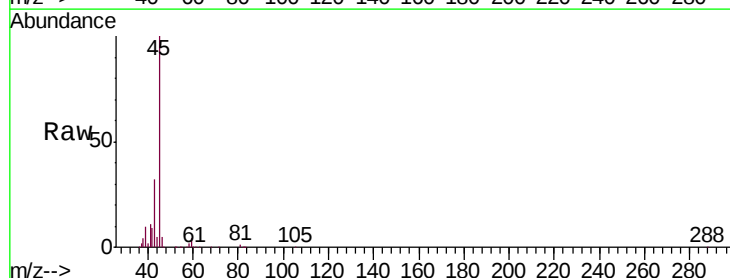
Tgt Ion: 59 Resp: 27769
Ion Ratio Lower Upper
59 100
57 23.5 8.7 13.1#

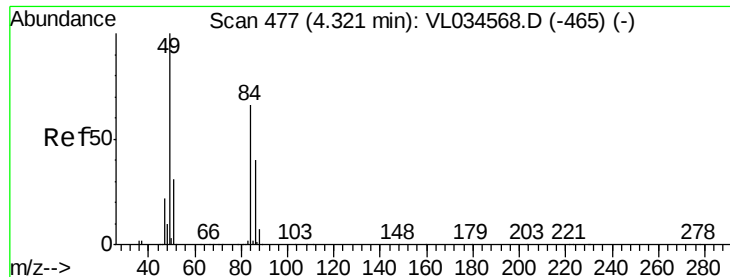


#19

Isopropyl Alcohol
Concen: 8.396 ppbv
RT: 3.96 min Scan# 365
Delta R.T. 0.02 min
Lab File: VL034658.D
Acq: 19 Feb 2020 23:41

Tgt Ion: 45 Resp: 552574
Ion Ratio Lower Upper
45 100
58 3.1 1.7 2.5#

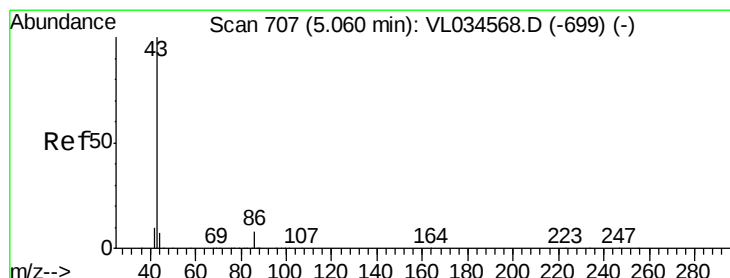
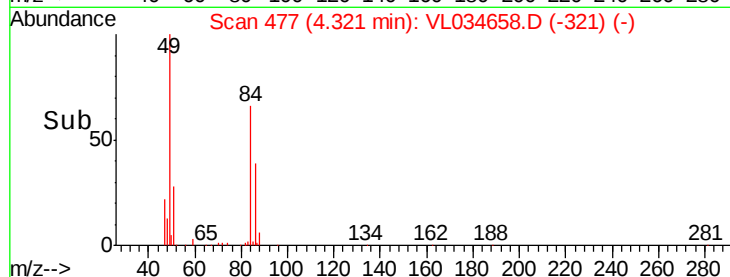
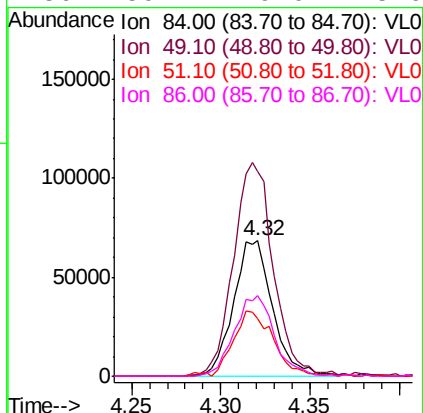
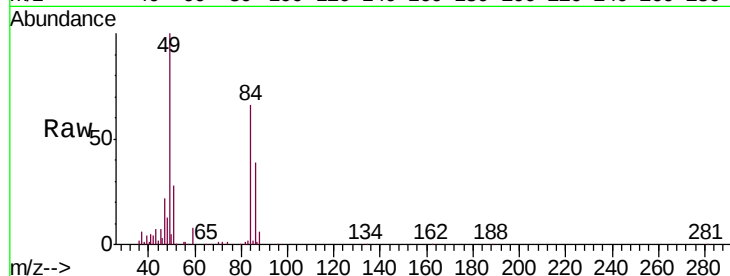




#20
Methylene Chloride
Concen: 2.447 ppbv
RT: 4.32 min Scan# 477
Delta R.T. 0.00 min
Lab File: VL034658.D
Acq: 19 Feb 2020 23:41

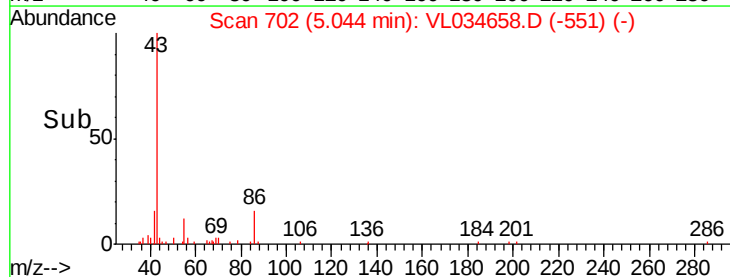
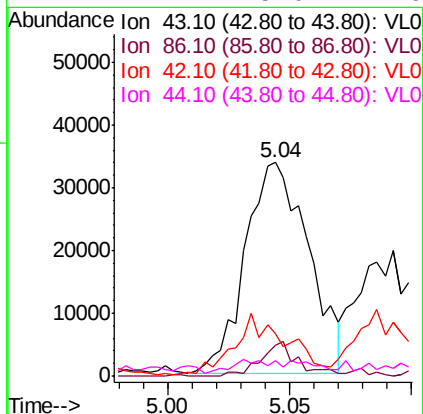
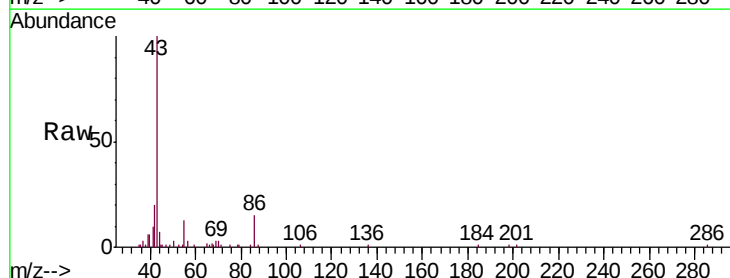
Instrument :
MSVOA_L
ClientSampleId :
IA-2

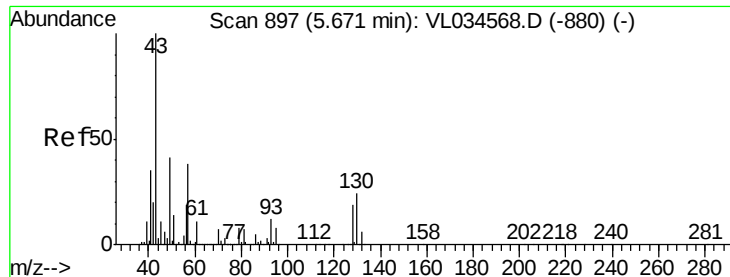
Tgt Ion:	84	Resp:	105085
Ion	Ratio	Lower	Upper
84	100		
49	150.7	122.4	183.6
51	43.1	38.6	57.8
86	59.4	49.0	73.6



#23
Vinyl Acetate
Concen: 0.471 ppbv
RT: 5.04 min Scan# 702
Delta R.T. -0.02 min
Lab File: VL034658.D
Acq: 19 Feb 2020 23:41

Tgt Ion:	43	Resp:	60637
Ion	Ratio	Lower	Upper
43	100		
86	14.9	5.9	8.9#
42	18.3	8.8	13.2#
44	4.1	5.0	7.6#





#25

Ethyl Acetate

Concen: 0.870 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.00 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Instrument :

MSVOA_L

ClientSampleId :

IA-2

Tgt Ion: 43 Resp: 158926

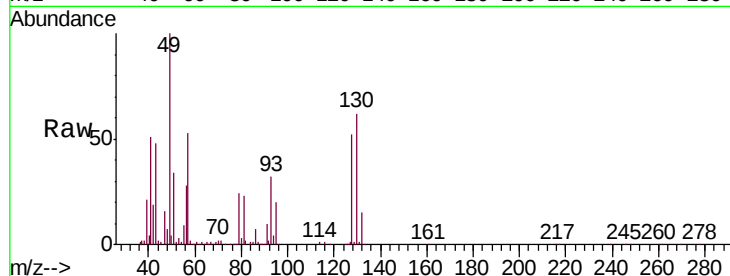
Ion Ratio Lower Upper

43 100

45 4.2 8.5 12.7#

61 3.7 7.8 11.6#

70 4.5 5.8 8.8#



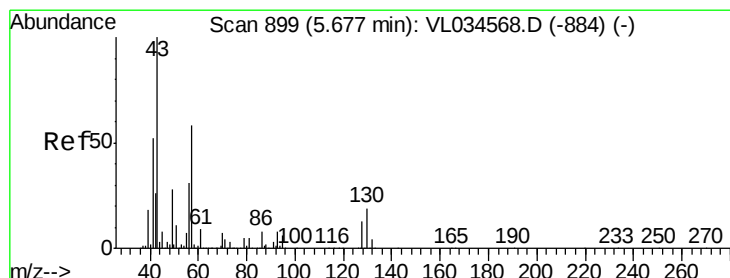
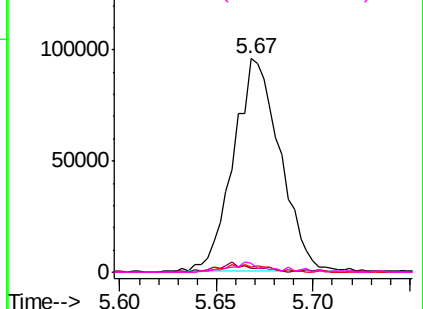
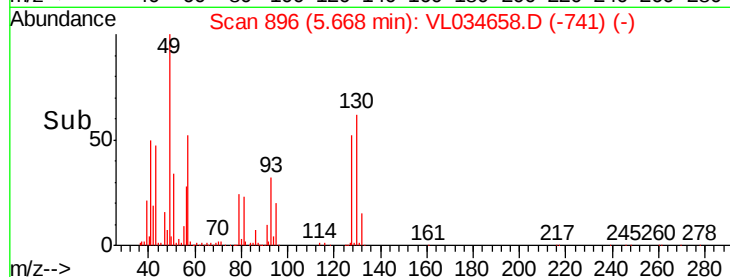
Abundance

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: 2.374 ppbv

RT: 5.67 min Scan# 897

Delta R.T. -0.01 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Tgt Ion: 57 Resp: 181583

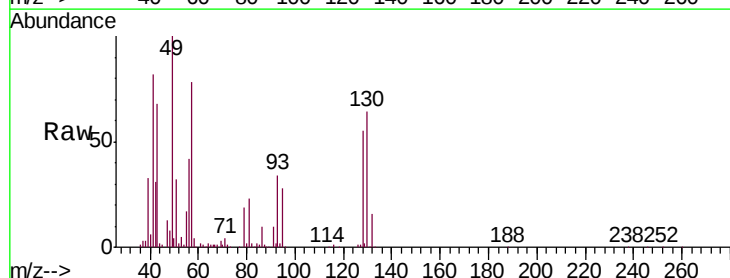
Ion Ratio Lower Upper

57 100

41 104.3 76.2 114.2

43 89.5 189.9 284.9#

56 57.5 43.6 65.4



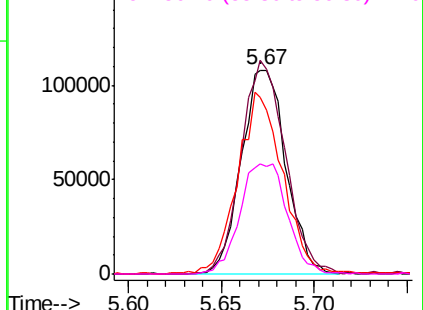
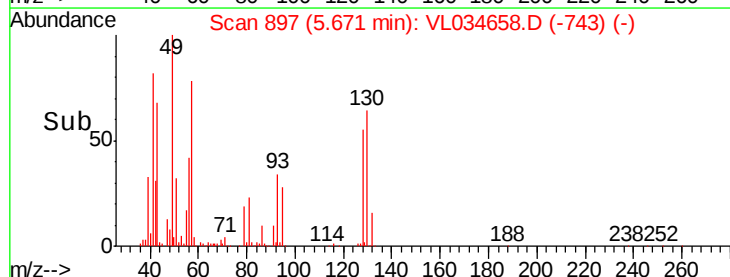
Abundance

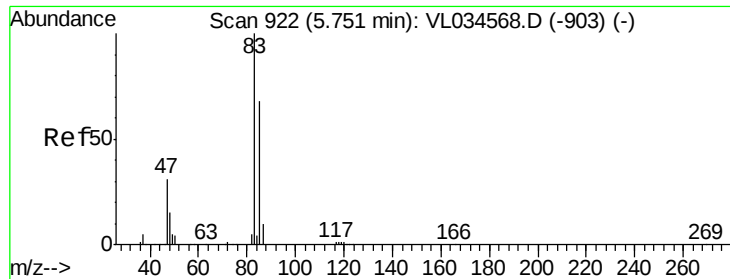
Ion 57.10 (56.80 to 57.80): VL0

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

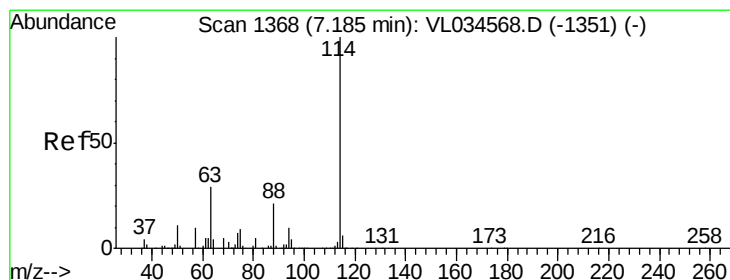
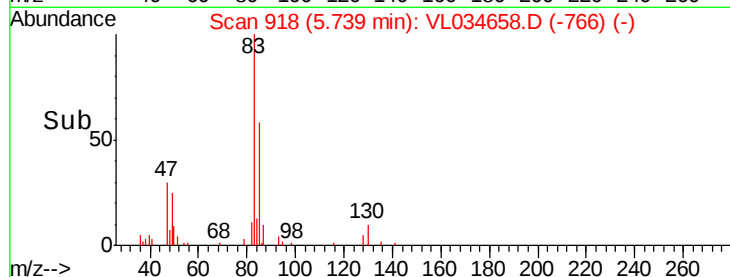
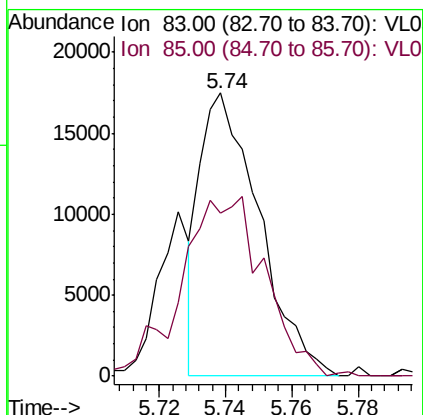
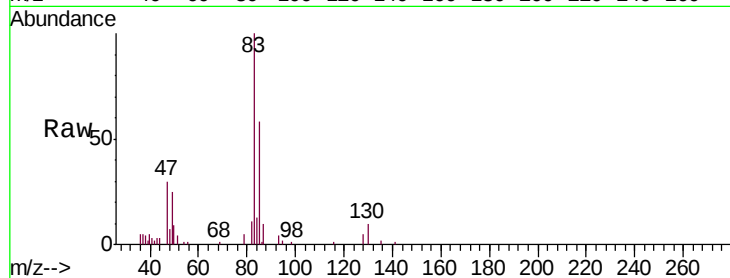




#29
Chloroform
Concen: 0.160 ppbv
RT: 5.74 min Scan# 918
Delta R.T. -0.01 min
Lab File: VL034658.D
Acq: 19 Feb 2020 23:41

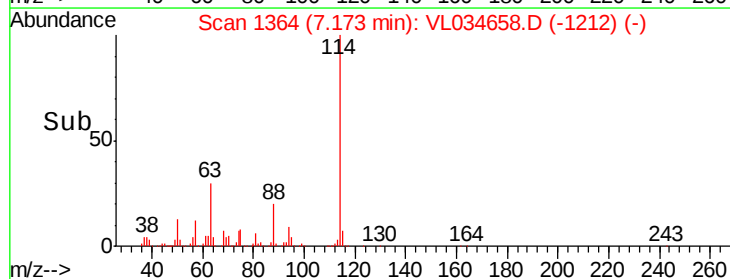
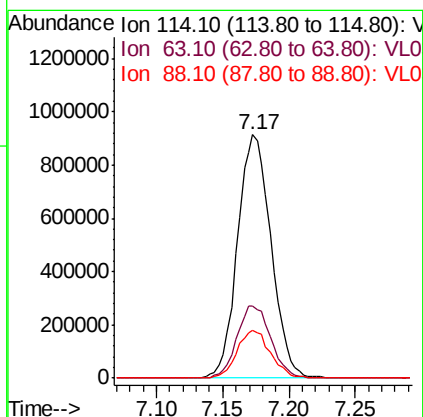
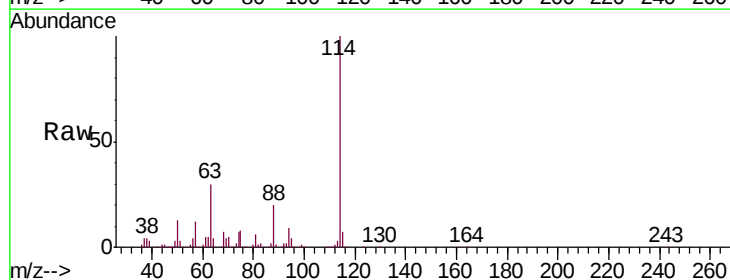
Instrument :
MSVOA_L
ClientSampled :
IA-2

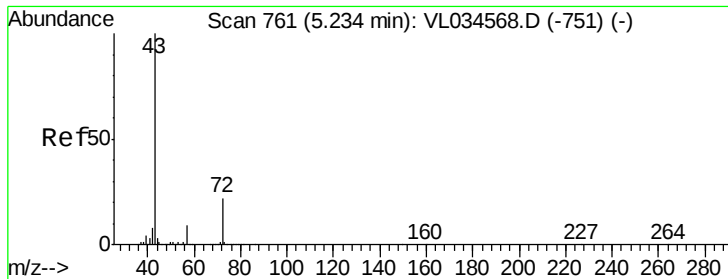
Tgt Ion: 83 Resp: 21589
Ion Ratio Lower Upper
83 100
85 56.7 54.0 81.0



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.01 min
Lab File: VL034658.D
Acq: 19 Feb 2020 23:41

Tgt Ion: 114 Resp: 1607223
Ion Ratio Lower Upper
114 100
63 30.0 24.1 36.1
88 19.4 15.9 23.9





#34

2-Butanone

Concen: 0.285 ppbv

RT: 5.23 min Scan# 760

Delta R.T. -0.00 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Instrument :

MSVOA_L

ClientSampleId :

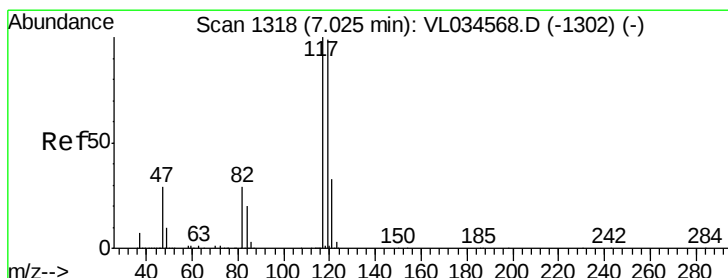
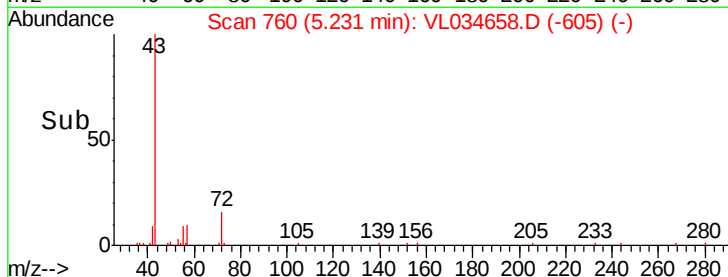
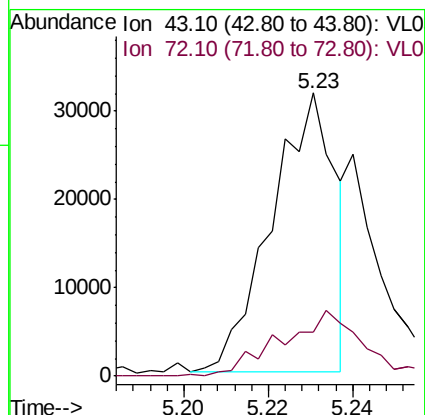
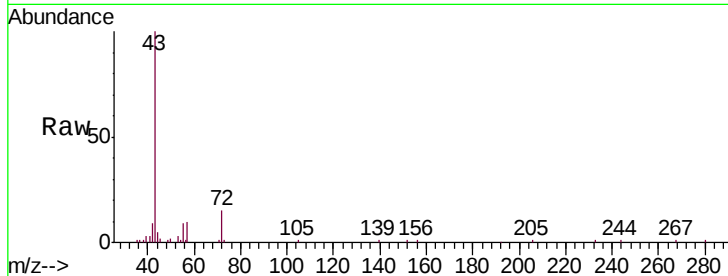
IA-2

Tgt Ion: 43 Resp: 33301

Ion Ratio Lower Upper

43 100

72 31.1 17.2 25.8#



#35

Carbon Tetrachloride

Concen: 0.040 ppbv

RT: 7.01 min Scan# 1313

Delta R.T. -0.02 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

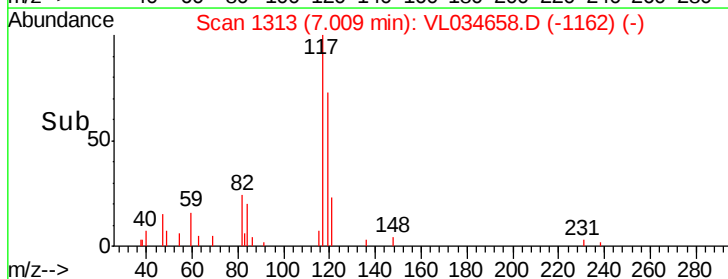
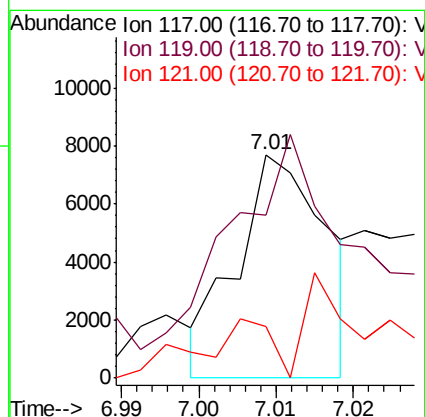
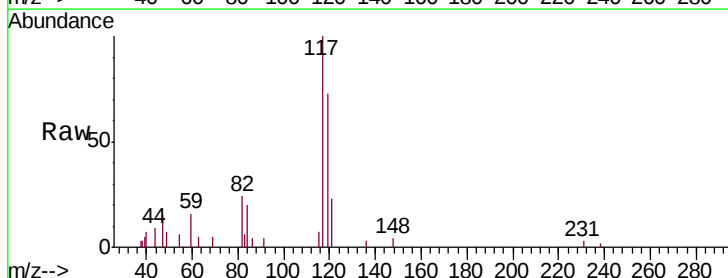
Tgt Ion: 117 Resp: 6180

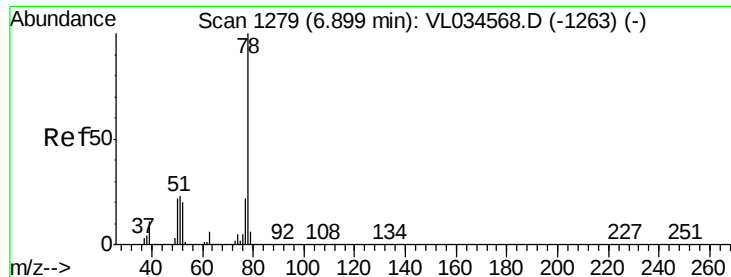
Ion Ratio Lower Upper

117 100

119 50.6 79.5 119.3#

121 15.1 26.2 39.2#





#36

Benzene

Concen: 0.178 ppbv

RT: 6.88 min Scan# 1274

Delta R.T. -0.02 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Instrument :

MSVOA_L

ClientSampleId :

IA-2

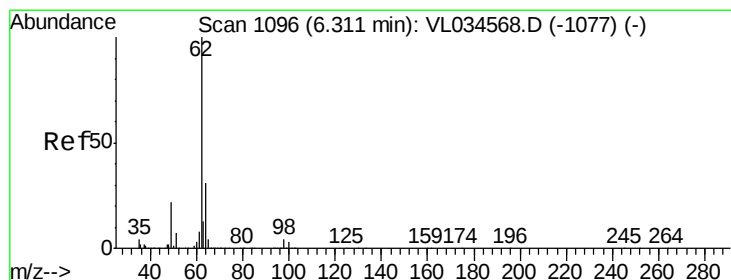
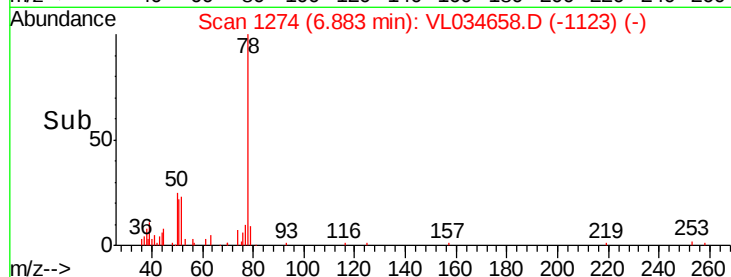
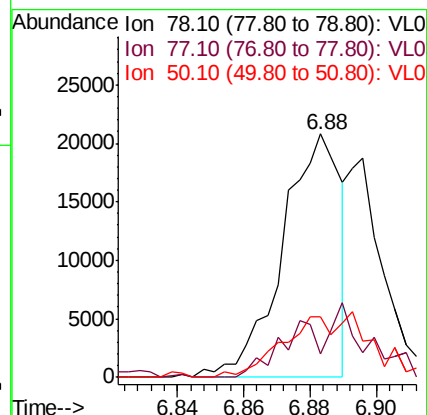
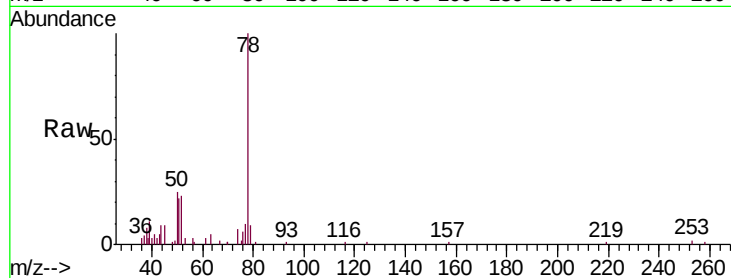
Tgt Ion: 78 Resp: 25398

Ion Ratio Lower Upper

78 100

77 9.7 17.3 25.9#

50 25.1 17.4 26.2



#37

1,2-Dichloroethane

Concen: 0.186 ppbv

RT: 6.29 min Scan# 1091

Delta R.T. -0.02 min

Lab File: VL034658.D

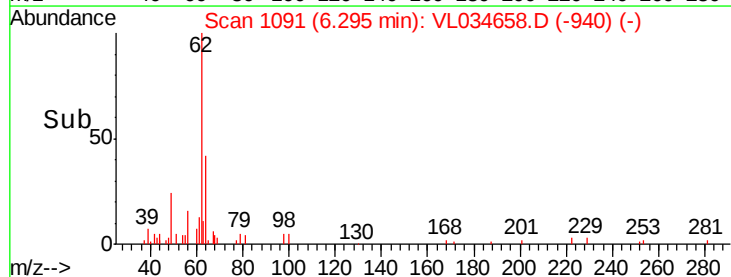
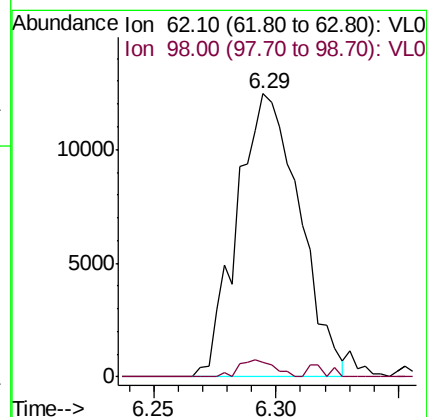
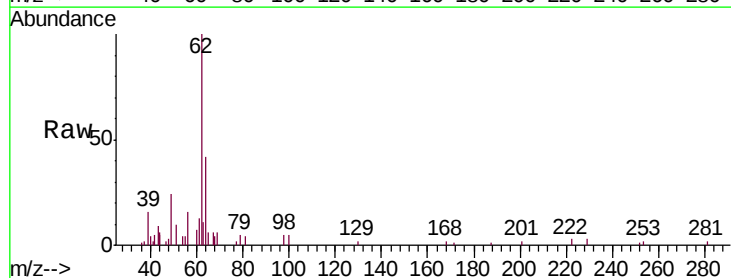
Acq: 19 Feb 2020 23:41

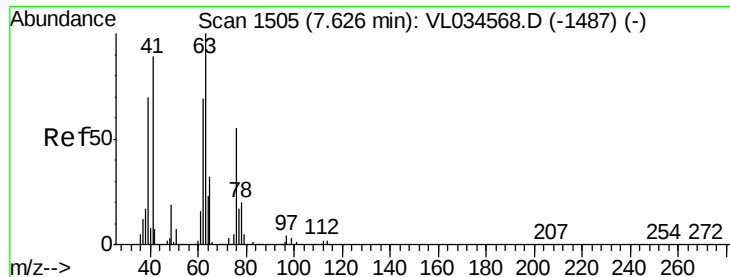
Tgt Ion: 62 Resp: 22122

Ion Ratio Lower Upper

62 100

98 4.3 3.7 5.5





#39

1,2-Dichloropropane

Concen: 8.117 ppbv

RT: 7.17 min Scan# 1364

Delta R.T. -0.45 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Instrument :

MSVOA_L

ClientSampleId :

IA-2

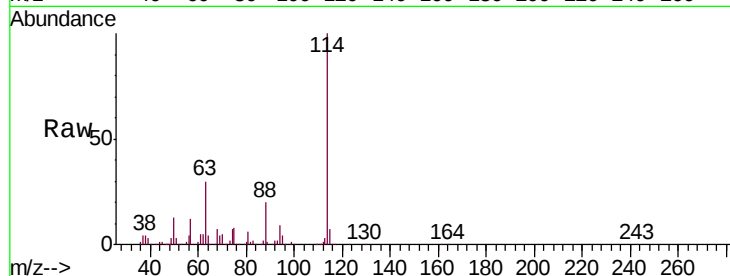
Tgt Ion: 63 Resp: 480971

Ion Ratio Lower Upper

63 100

41 0.0 71.0 106.4#

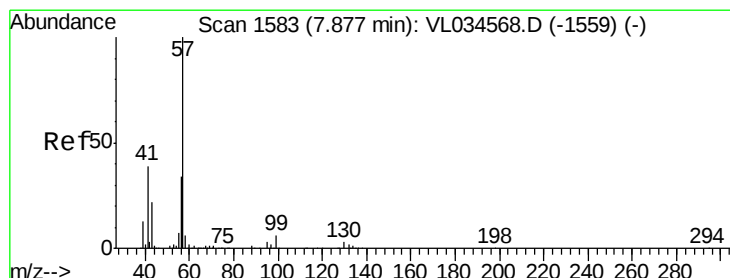
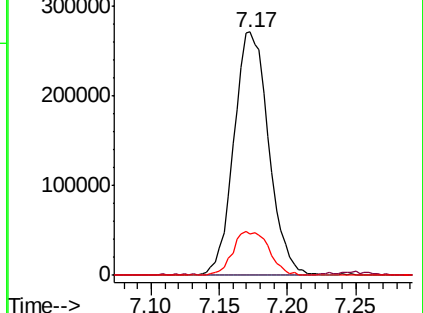
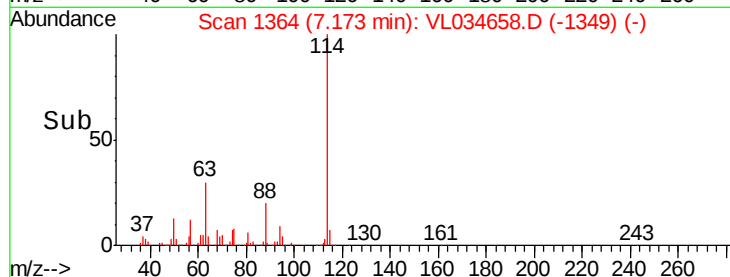
62 16.8 55.4 83.0#



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: 0.071 ppbv

RT: 7.87 min Scan# 1581

Delta R.T. -0.01 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

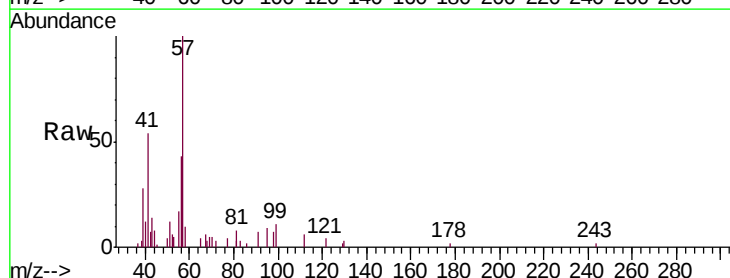
Tgt Ion: 57 Resp: 18405

Ion Ratio Lower Upper

57 100

41 69.5 28.9 43.3#

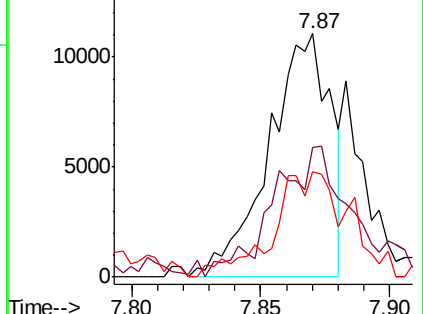
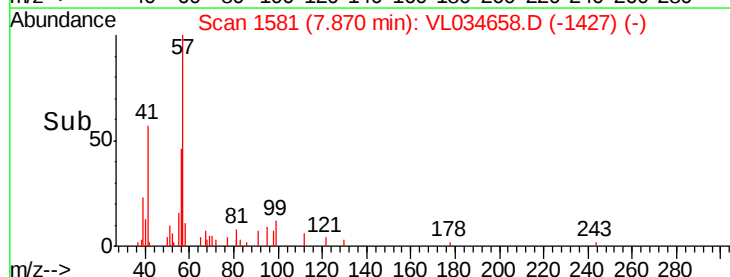
56 55.1 25.5 38.3#

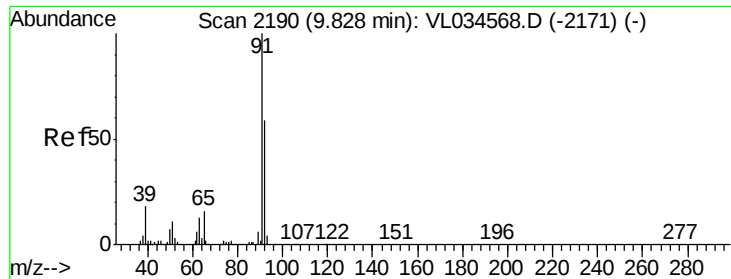


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#53

Toluene

Concen: 6.858 ppbv

RT: 9.82 min Scan# 2186

Delta R.T. -0.01 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Instrument :

MSVOA_L

ClientSampleId :

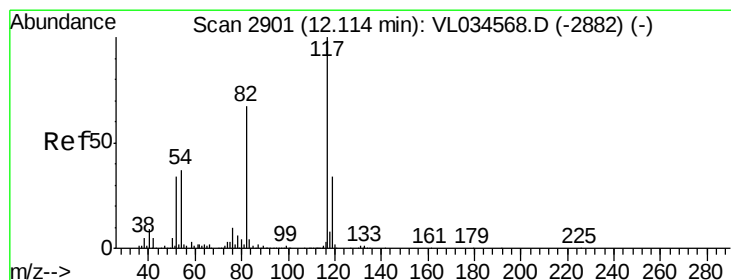
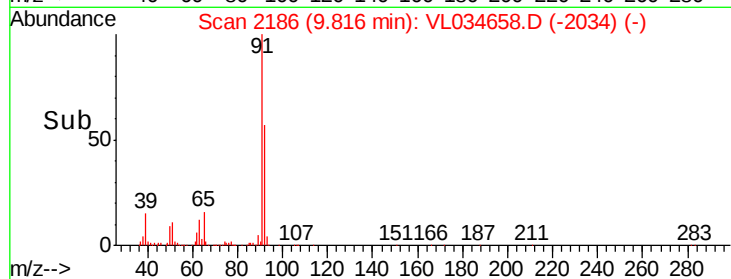
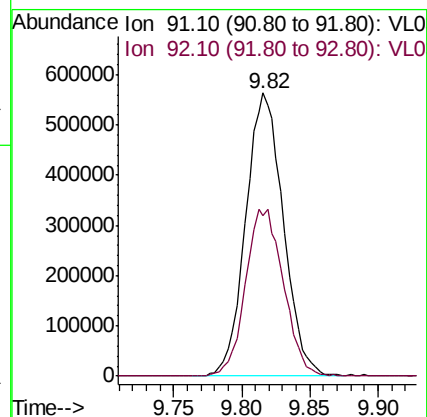
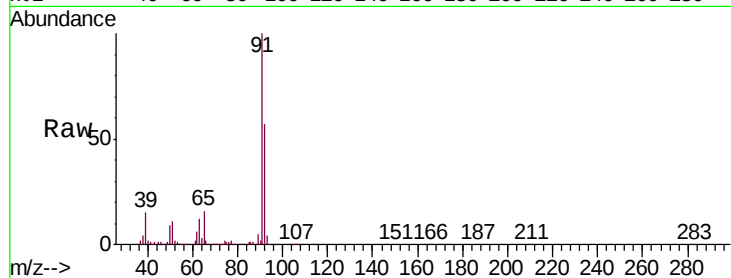
IA-2

Tgt Ion: 91 Resp: 1076804

Ion Ratio Lower Upper

91 100

92 59.5 48.2 72.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2898

Delta R.T. -0.01 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

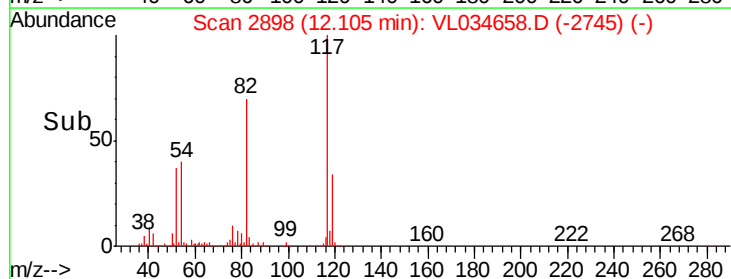
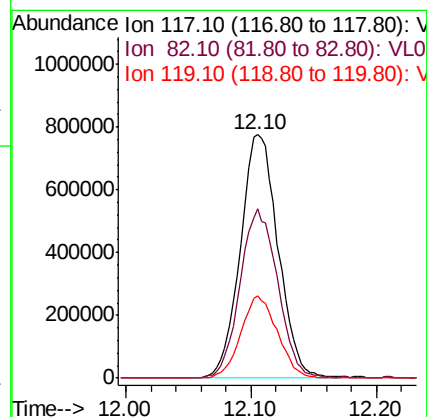
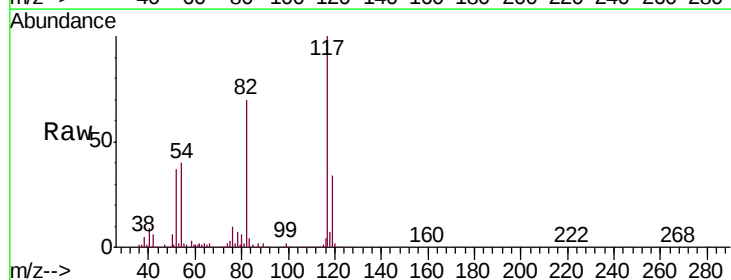
Tgt Ion: 117 Resp: 1624780

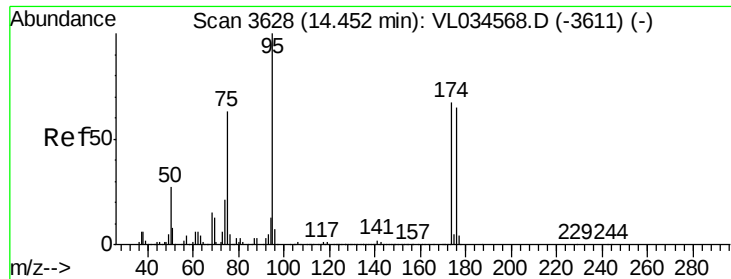
Ion Ratio Lower Upper

117 100

82 69.4 54.2 81.4

119 33.0 26.1 39.1





#68

1-Bromo-4-Fluorobenzene

Concen: 10.144 ppbv

RT: 14.44 min Scan# 3625

Delta R.T. -0.01 min

Lab File: VL034658.D

Acq: 19 Feb 2020 23:41

Instrument :

MSVOA_L

ClientSampleId :

IA-2

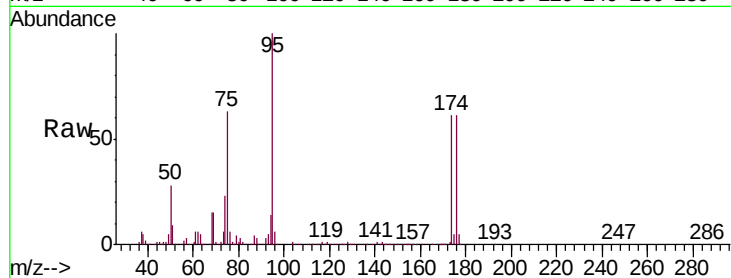
Tgt Ion: 95 Resp: 1392914

Ion Ratio Lower Upper

95 100

174 65.7 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

