

Data File : VL033695.D
Acq On : 14 May 2019 17:37
Operator : SY/AP
Sample : K2730-02DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS02DL

Quant Time: May 15 02:36:13 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL050619AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon May 06 15:19:01 2019
QLast Update : Mon May 06 15:19:01 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	972036	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2550163	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.23	117	2501389	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.57	95	1969969	9.61	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.10%

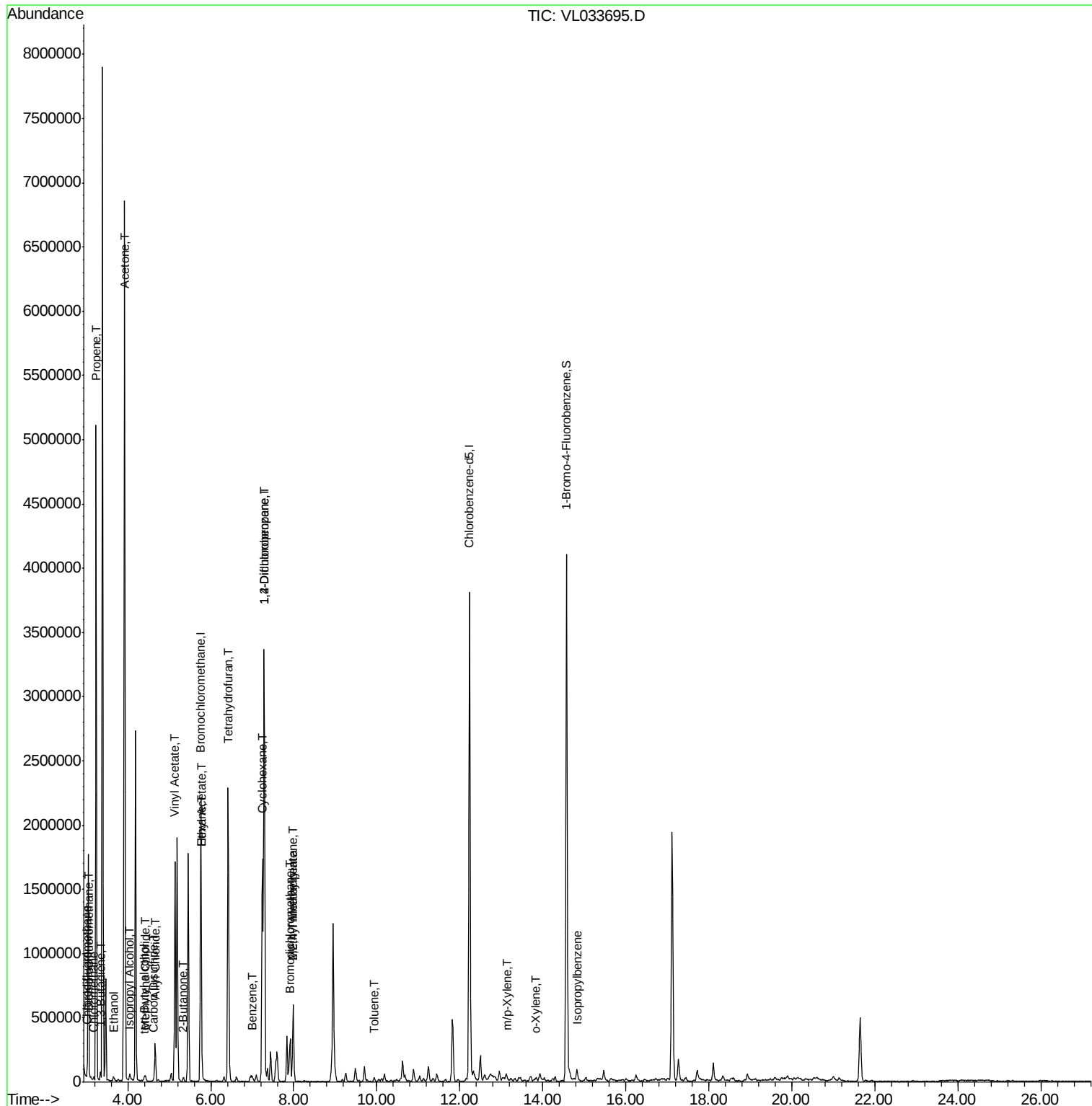
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.08	85	11815	0.052	ppbv	95
3) Chlorodifluoromethane	3.01	51	5443	0.039	ppbv #	75
4) Chloromethane	3.17	50	1121	0.015	ppbv	97
9) Propene	3.24	41	1440973	26.926	ppbv	95
13) Ethanol	3.66	45	33371	2.077	ppbv	94
15) Acetone	3.92	43	3079114	21.293	ppbv #	68
16) 1,3-Butadiene	3.34	39	17162	0.277	ppbv #	7
17) tert-Butyl alcohol	4.38	59	4954	0.045	ppbv #	72
19) Isopropyl Alcohol	4.04	45	56625	0.637	ppbv #	93
20) Methylene Chloride	4.41	84	12342	0.225	ppbv #	87
21) Allyl Chloride	4.66	41	67459	0.771	ppbv #	60
23) Vinyl Acetate	5.14	43	241604	1.286	ppbv #	1
25) Ethyl Acetate	5.78	43	45579	0.194	ppbv #	79
26) Hexane	5.78	57	64953	0.642	ppbv #	41
27) Carbon Disulfide	4.62	76	6434	0.047	ppbv #	1
30) Cyclohexane	7.25	84	621305	7.316	ppbv	98
34) 2-Butanone	5.34	43	36829	0.226	ppbv	98
36) Benzene	7.00	78	20957	0.092	ppbv	97
39) 1,2-Dichloropropane	7.29	63	612082	7.182	ppbv #	23
41) Tetrahydrofuran	6.42	42	292370	3.465	ppbv #	36
42) Bromodichloromethane	7.91	83	17607	0.085	ppbv #	27
43) Methyl Methacrylate	7.99	69	28164	0.327	ppbv #	1
44) 2,2,4-Trimethylpentane	7.98	57	29735	0.076	ppbv #	1
53) Toluene	9.94	91	12641	0.051	ppbv #	66
59) m/p-Xylene	13.14	91	5901	0.021	ppbv #	31
60) o-Xylene	13.84	91	8558	0.029	ppbv #	32
62) Isopropylbenzene	14.82	105	75370	0.190	ppbv	99

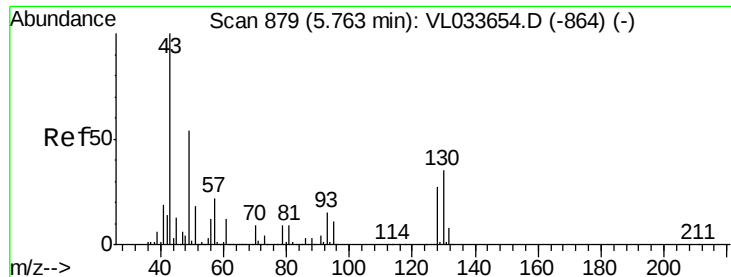
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : VL033695.D
Acq On : 14 May 2019 17:37
Operator : SY/AP
Sample : K2730-02DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS02DL

Quant Time: May 15 02:36:13 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL050619AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon May 06 15:19:01 2019
QLast Update : Mon May 06 15:19:01 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

SS02DL

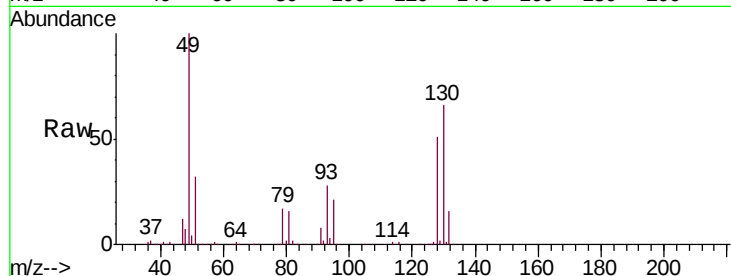
Tgt Ion: 49 Resp: 972036

Ion Ratio Lower Upper

49 100

128 52.0 24.8 74.3

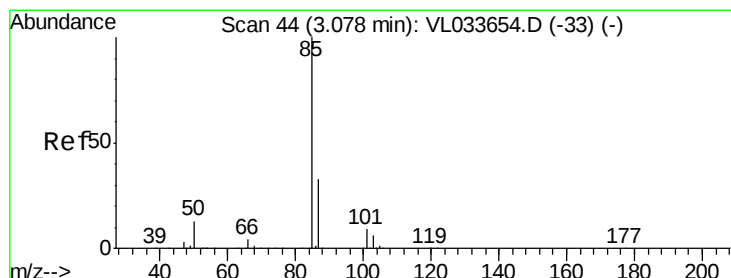
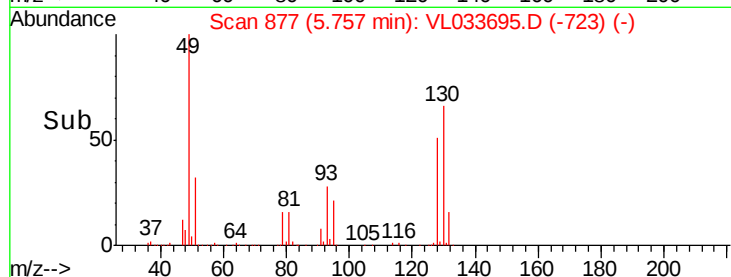
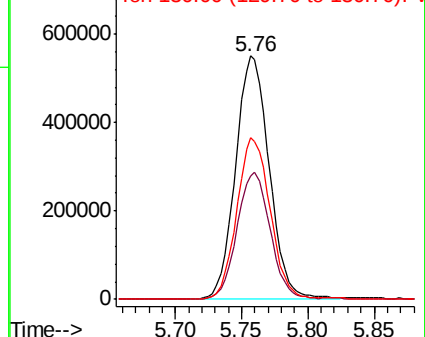
130 66.7 32.1 96.5



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.052 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033695.D

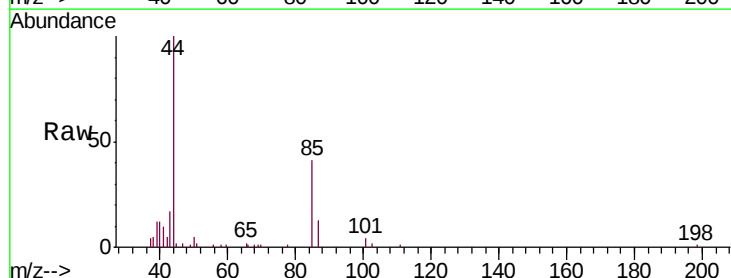
Acq: 14 May 2019 17:37

Tgt Ion: 85 Resp: 11815

Ion Ratio Lower Upper

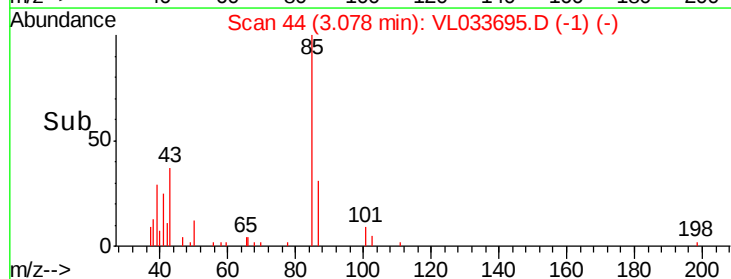
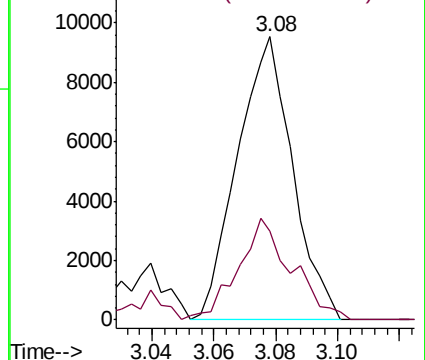
85 100

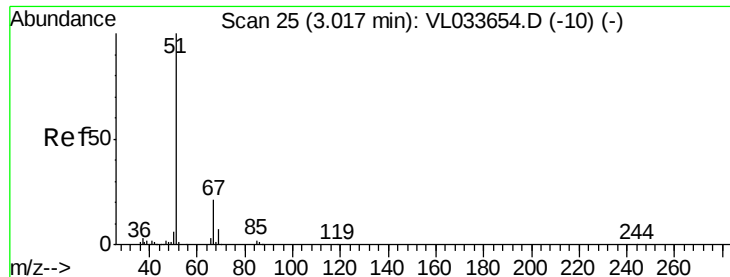
87 29.8 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.039 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

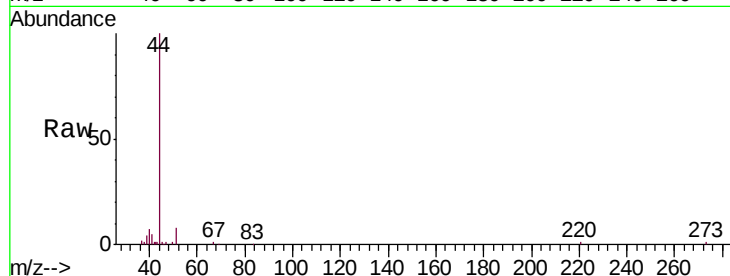
SS02DL

Tgt Ion: 51 Resp: 5443

Ion Ratio Lower Upper

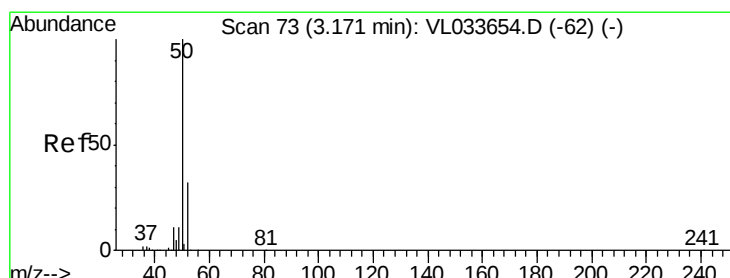
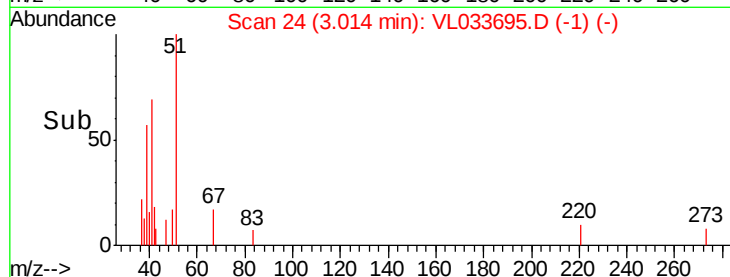
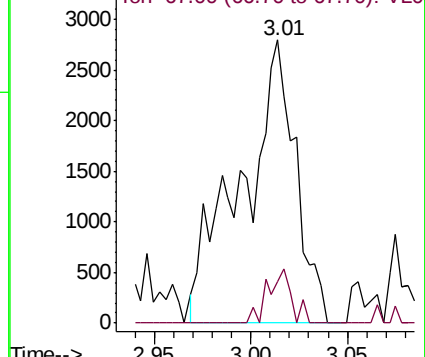
51 100

67 8.4 15.7 23.5#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.015 ppbv

RT: 3.17 min Scan# 71

Delta R.T. -0.01 min

Lab File: VL033695.D

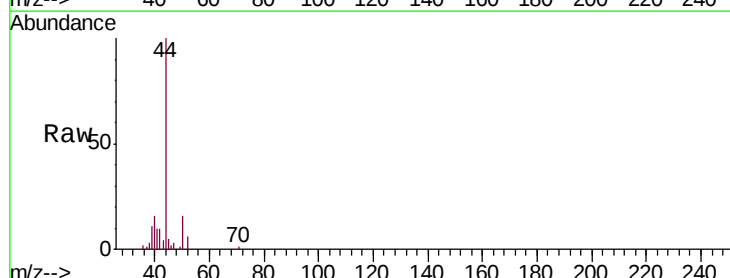
Acq: 14 May 2019 17:37

Tgt Ion: 50 Resp: 1121

Ion Ratio Lower Upper

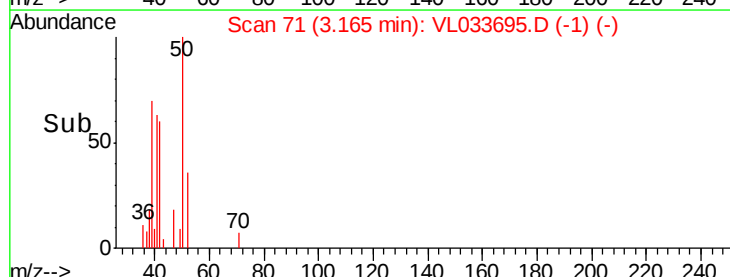
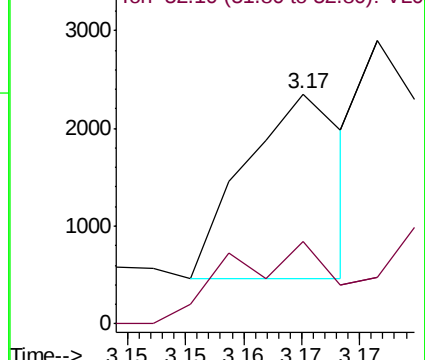
50 100

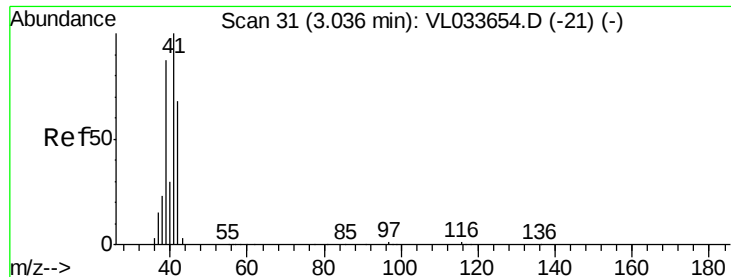
52 34.1 25.8 38.8



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 26.926 ppbv

RT: 3.24 min Scan# 93

Delta R.T. 0.20 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

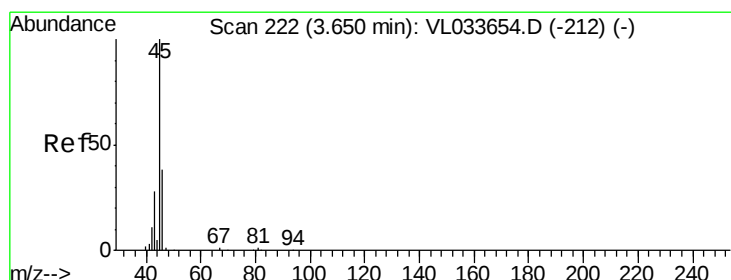
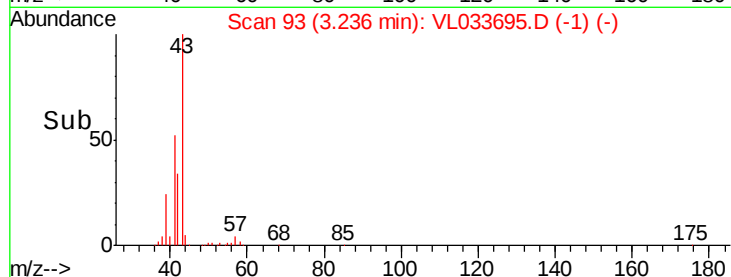
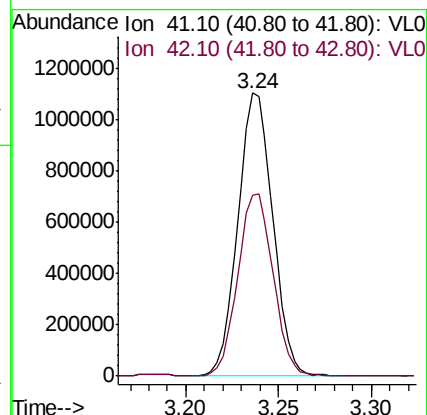
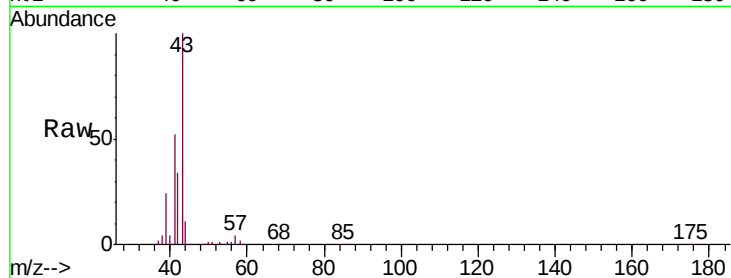
SS02DL

Tgt Ion: 41 Resp: 1440973

Ion Ratio Lower Upper

41 100

42 65.4 55.6 83.4



#13

Ethanol

Concen: 2.077 ppbv

RT: 3.66 min Scan# 225

Delta R.T. 0.01 min

Lab File: VL033695.D

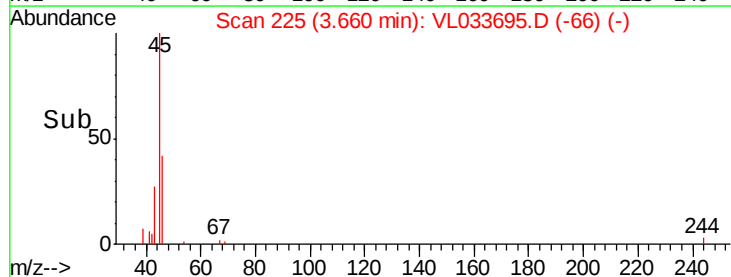
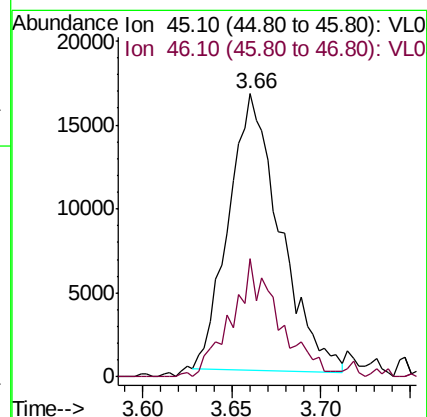
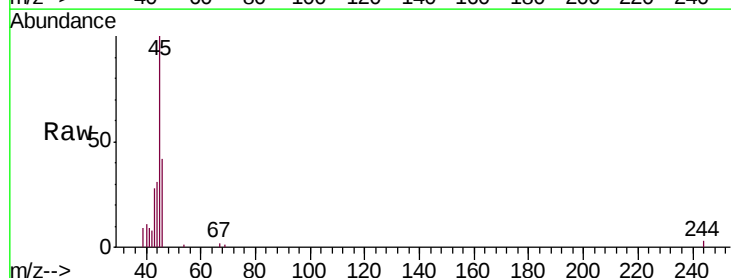
Acq: 14 May 2019 17:37

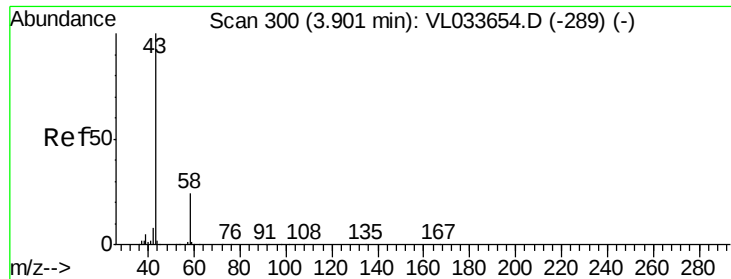
Tgt Ion: 45 Resp: 33371

Ion Ratio Lower Upper

45 100

46 40.8 14.9 59.7





#15

Acetone

Concen: 21.293 ppbv

RT: 3.92 min Scan# 307

Delta R.T. 0.02 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

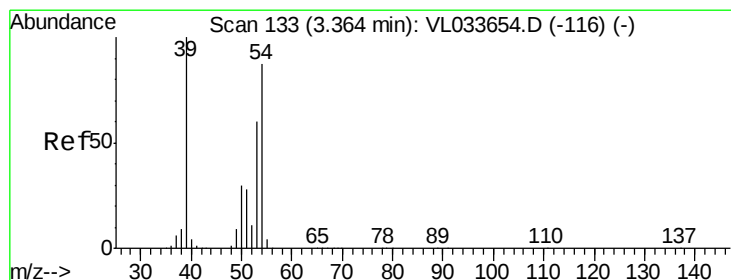
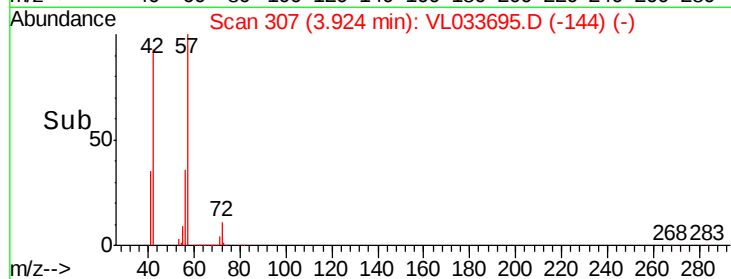
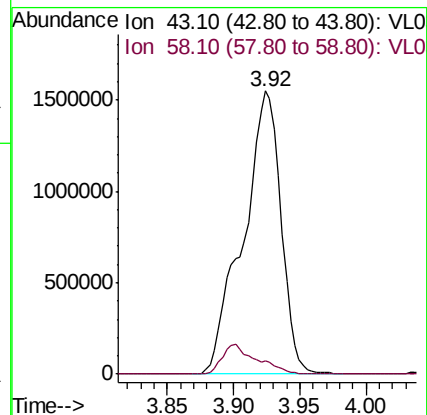
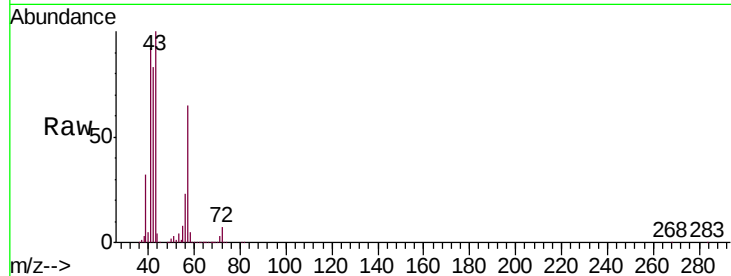
SS02DL

Tgt Ion: 43 Resp: 3079114

Ion Ratio Lower Upper

43 100

58 9.7 20.9 31.3#



#16

1,3-Butadiene

Concen: 0.277 ppbv

RT: 3.34 min Scan# 126

Delta R.T. -0.02 min

Lab File: VL033695.D

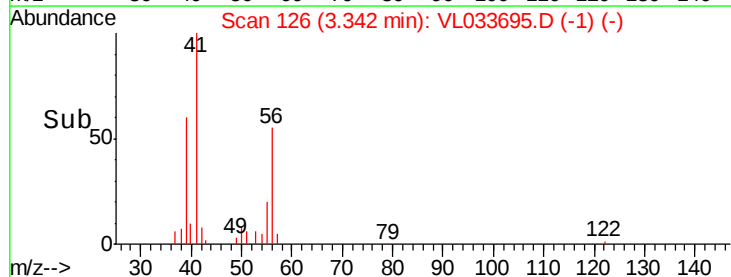
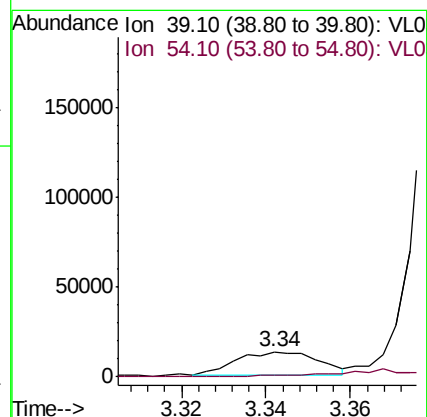
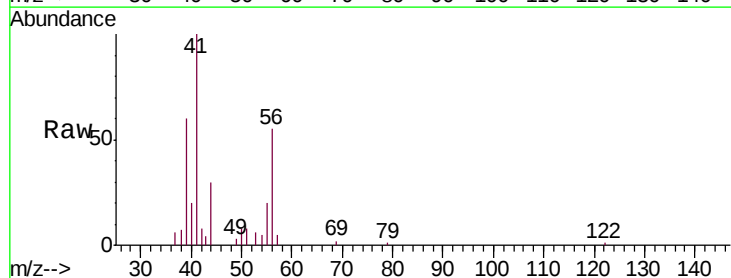
Acq: 14 May 2019 17:37

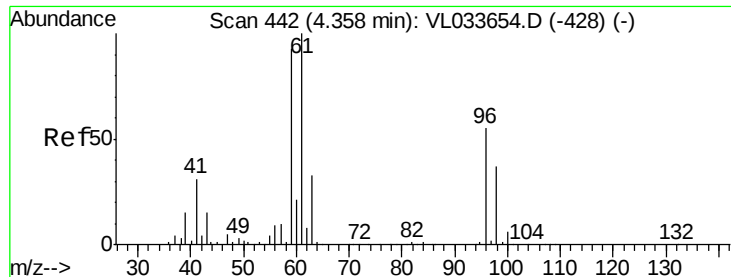
Tgt Ion: 39 Resp: 17162

Ion Ratio Lower Upper

39 100

54 0.0 67.0 100.4#



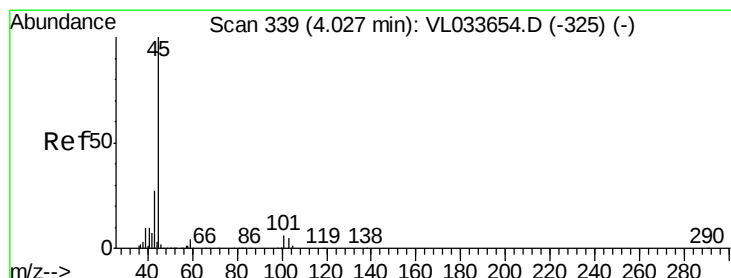
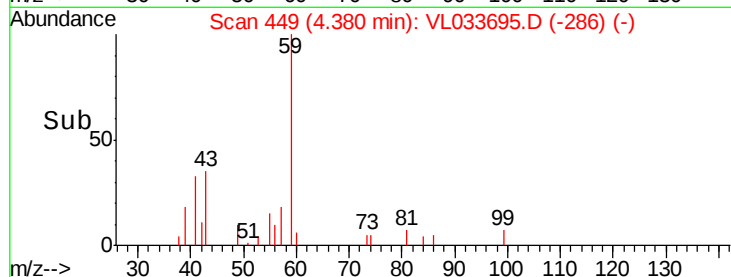
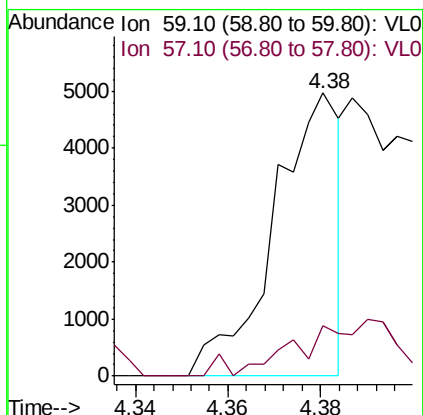
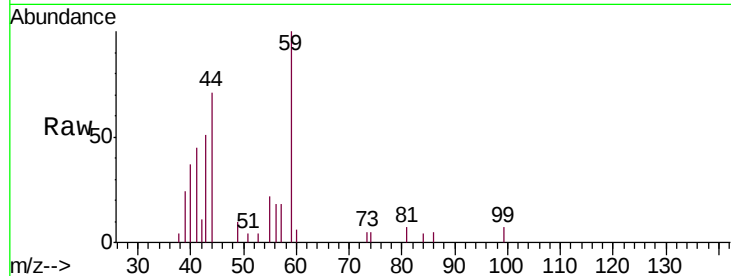


#17

tert-Butyl alcohol
Concen: 0.045 ppbv
RT: 4.38 min Scan# 449
Delta R.T. 0.02 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

Instrument :
MSVOA_L
ClientSampleId :
SS02DL

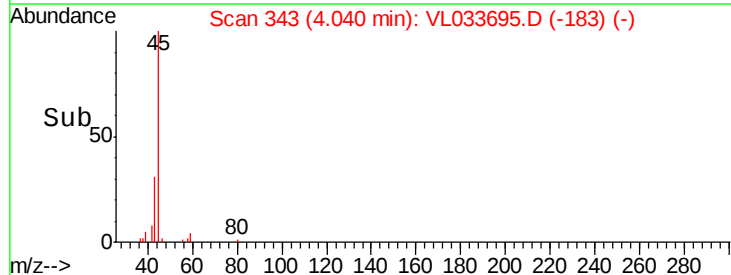
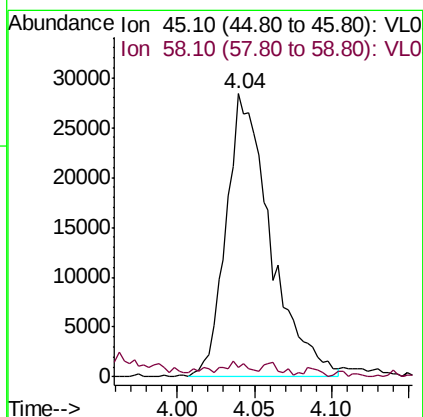
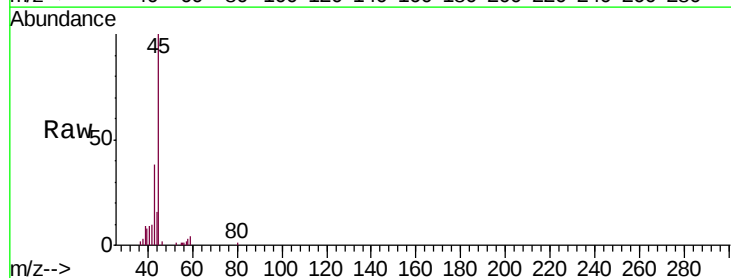
Tgt Ion: 59 Resp: 4954
Ion Ratio Lower Upper
59 100
57 0.0 8.4 12.6#

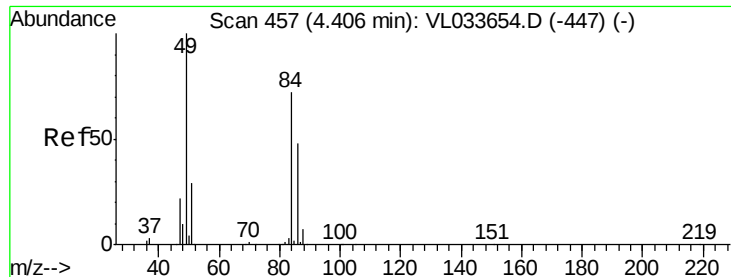


#19

Isopropyl Alcohol
Concen: 0.637 ppbv
RT: 4.04 min Scan# 343
Delta R.T. 0.01 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

Tgt Ion: 45 Resp: 56625
Ion Ratio Lower Upper
45 100
58 0.0 2.0 3.0#

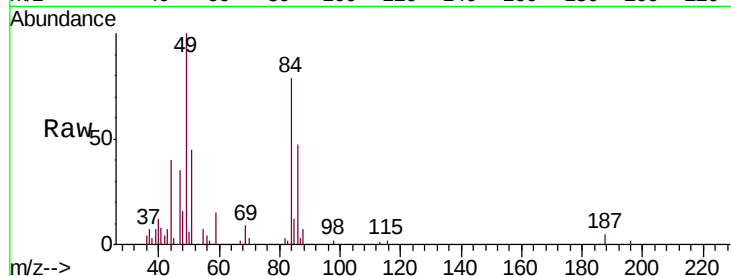




#20
Methylene Chloride
Concen: 0.225 ppbv
RT: 4.41 min Scan# 458
Delta R.T. 0.00 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

Instrument :
MSVOA_L
ClientSampleId :
SS02DL

Tgt Ion	Ratio	Lower	Upper
84	100		
49	126.7	111.8	167.6
51	56.5	32.3	48.5#
86	59.0	53.9	80.9



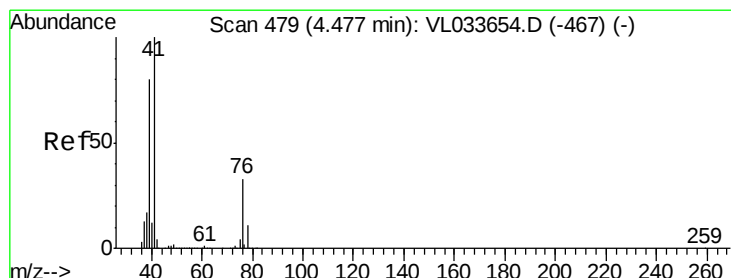
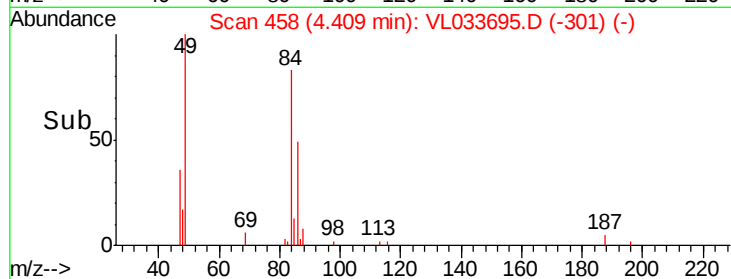
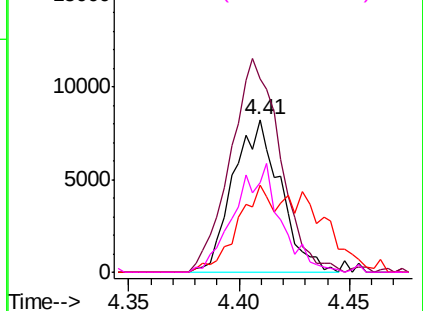
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

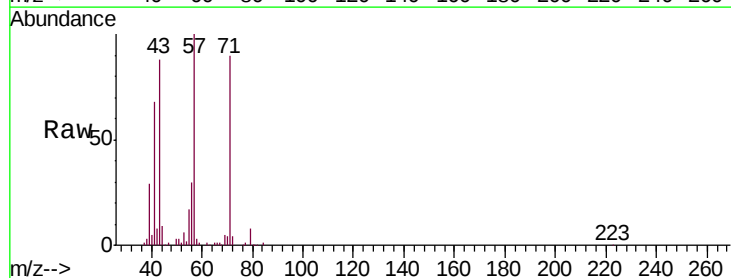
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#21
Allyl Chloride
Concen: 0.771 ppbv
RT: 4.66 min Scan# 536
Delta R.T. 0.18 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

Tgt Ion	Ratio	Lower	Upper
41	100		
76	11.9	26.0	39.0#
39	44.3	64.4	96.6#

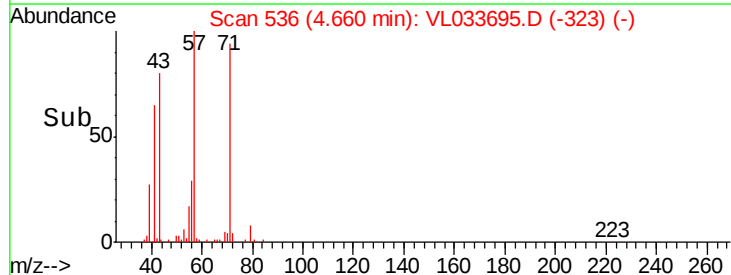
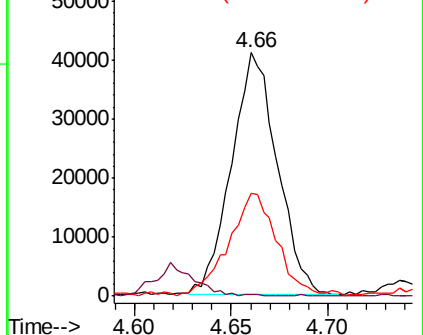


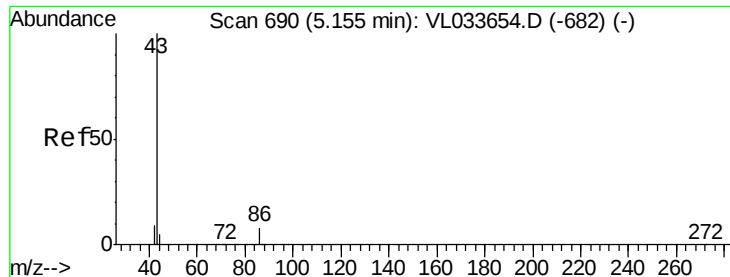
Abundance

Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0





#23

Vinyl Acetate

Concen: 1.286 ppbv

RT: 5.14 min Scan# 684

Delta R.T. -0.02 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

SS02DL

Tgt Ion: 43 Resp: 241604

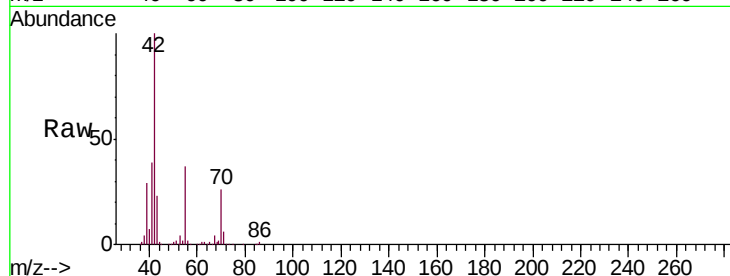
Ion Ratio Lower Upper

43 100

86 3.8 6.0 9.0#

42 434.8 8.0 12.0#

44 4.3 3.9 5.9

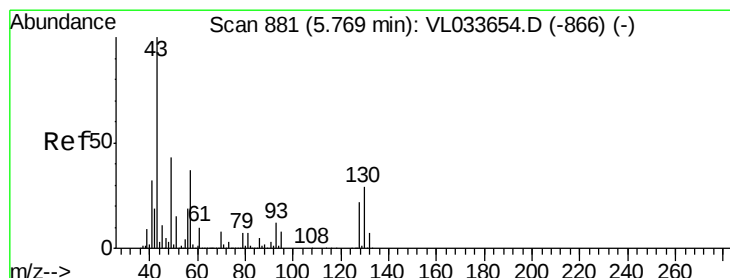
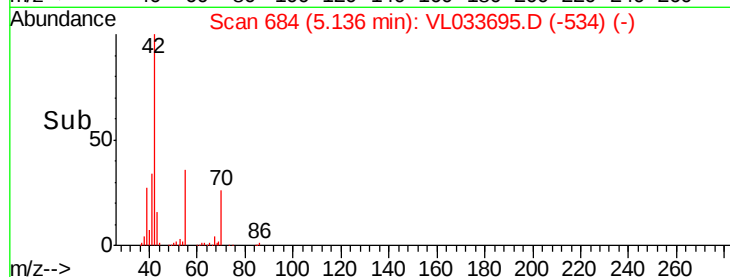
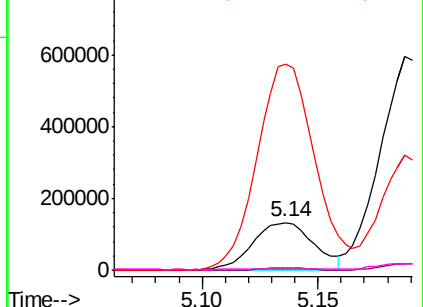


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 0.194 ppbv

RT: 5.78 min Scan# 884

Delta R.T. 0.01 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Tgt Ion: 43 Resp: 45579

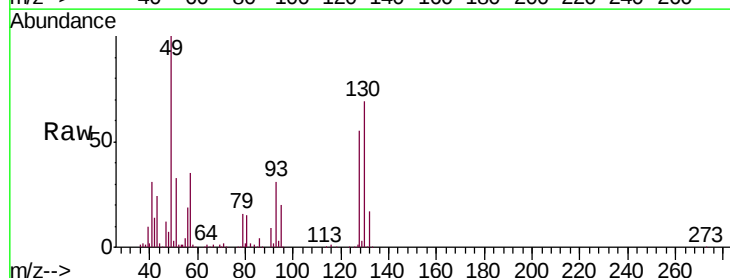
Ion Ratio Lower Upper

43 100

45 1.6 8.0 12.0#

61 0.7 7.5 11.3#

70 2.4 5.8 8.8#

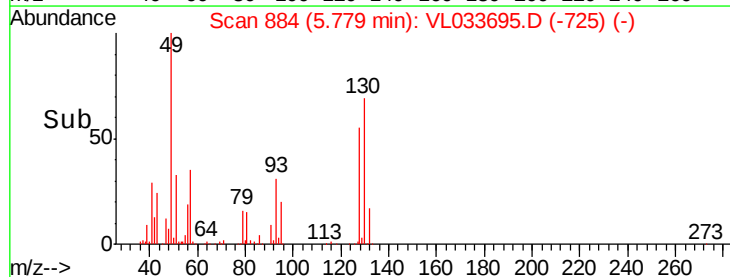
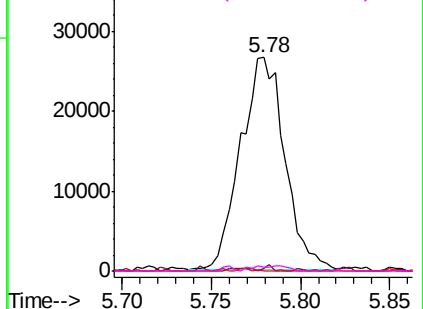


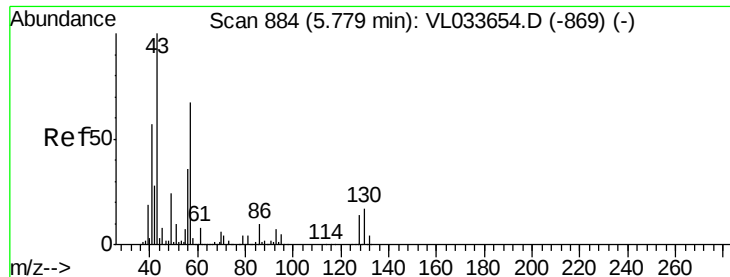
Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.642 ppbv

RT: 5.78 min Scan# 884

Delta R.T. 0.00 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

SS02DL

Tgt Ion: 57 Resp: 64953

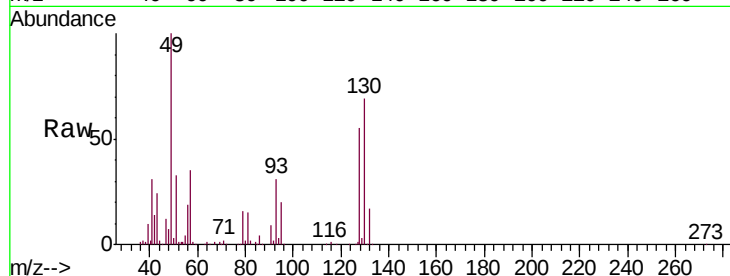
Ion Ratio Lower Upper

57 100

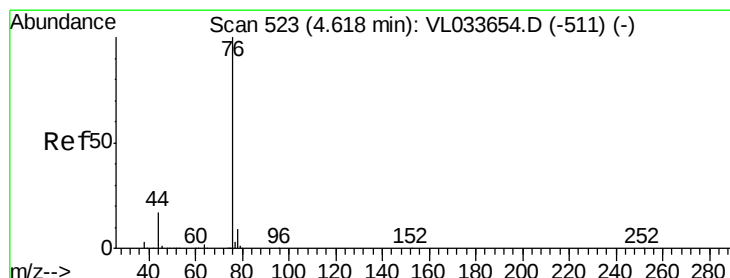
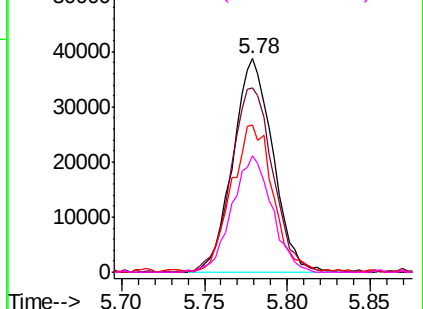
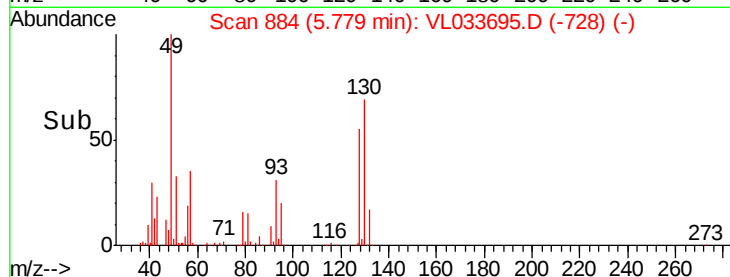
41 89.2 69.7 104.5

43 72.6 181.9 272.9#

56 54.3 42.5 63.7



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



#27

Carbon Disulfide

Concen: 0.047 ppbv

RT: 4.62 min Scan# 523

Delta R.T. 0.00 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

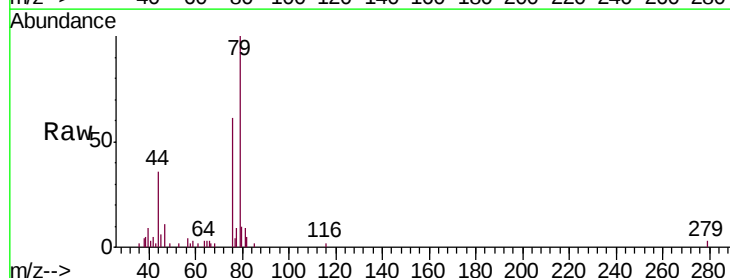
Tgt Ion: 76 Resp: 6434

Ion Ratio Lower Upper

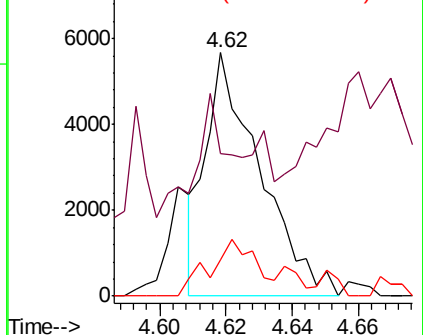
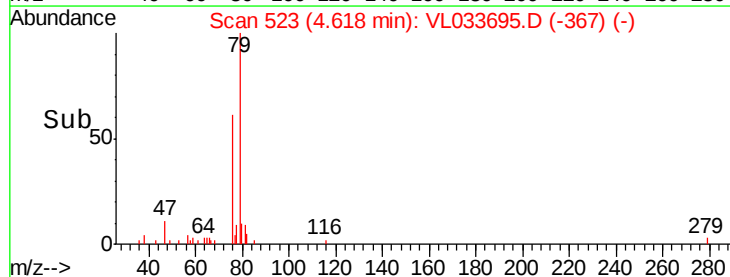
76 100

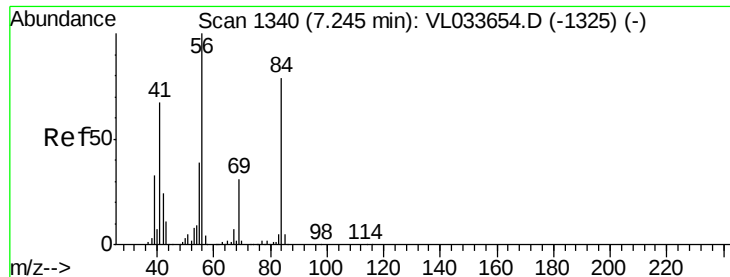
44 83.1 14.4 21.6#

78 33.5 7.4 11.2#



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

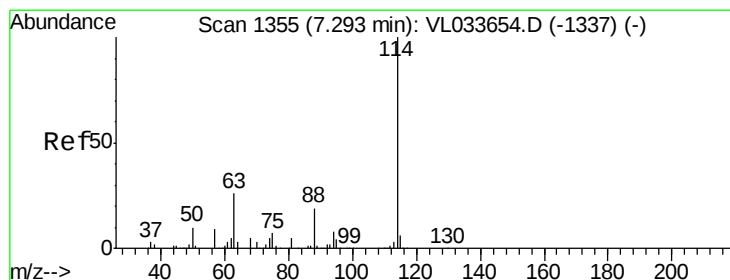
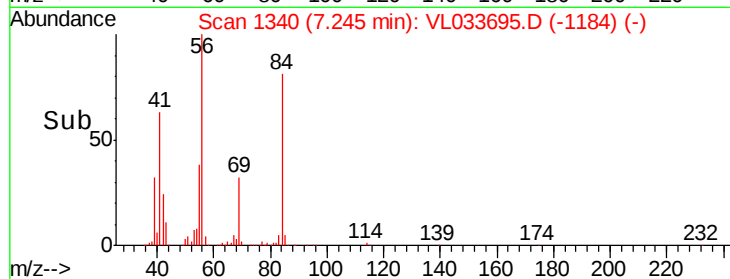
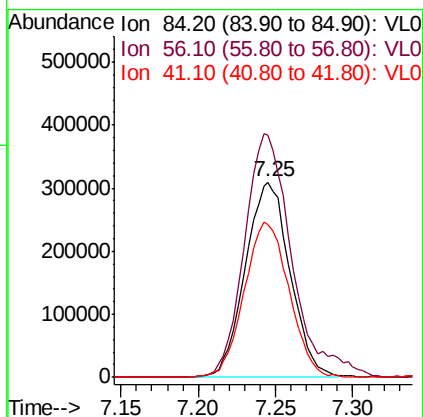
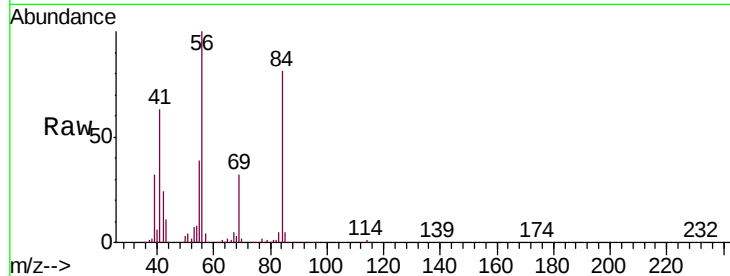




#30
Cyclohexane
Concen: 7.316 ppbv
RT: 7.25 min Scan# 1340
Delta R.T. 0.00 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

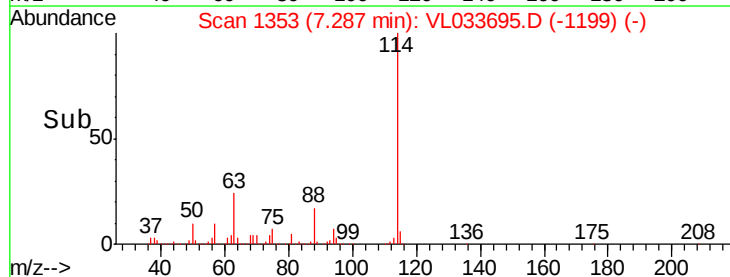
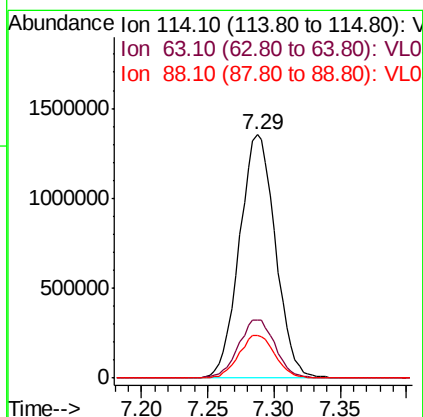
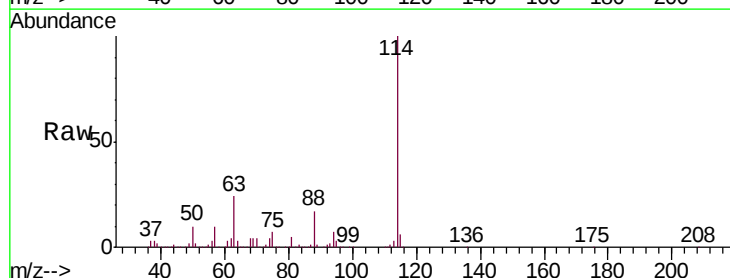
Instrument :
MSVOA_L
ClientSampleId :
SS02DL

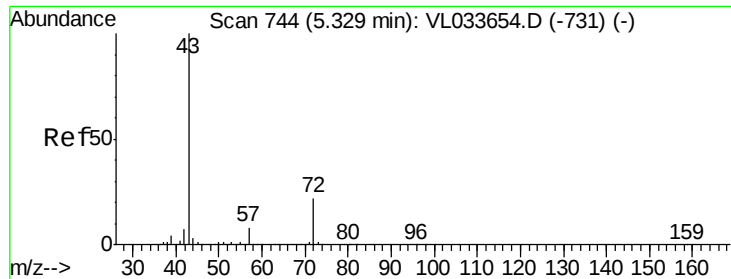
Tgt Ion: 84 Resp: 621305
Ion Ratio Lower Upper
84 100
56 133.0 107.0 160.4
41 80.1 66.6 99.8



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1353
Delta R.T. -0.01 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

Tgt Ion: 114 Resp: 2550163
Ion Ratio Lower Upper
114 100
63 24.5 21.3 31.9
88 17.5 14.4 21.6

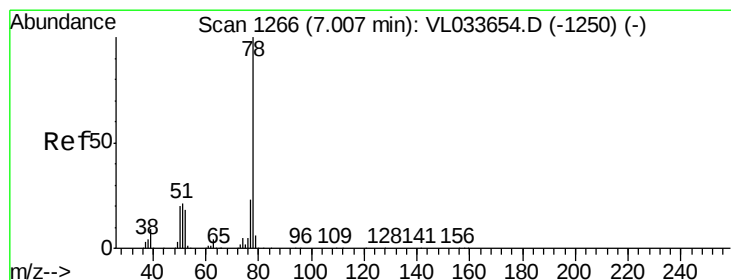
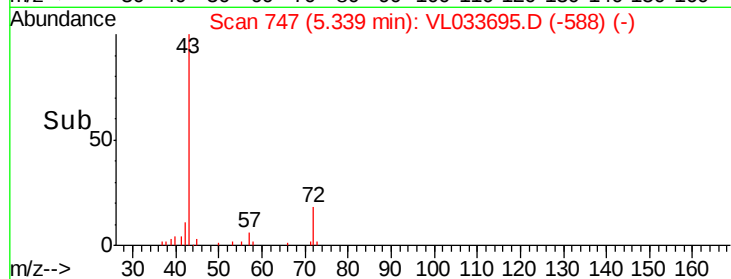
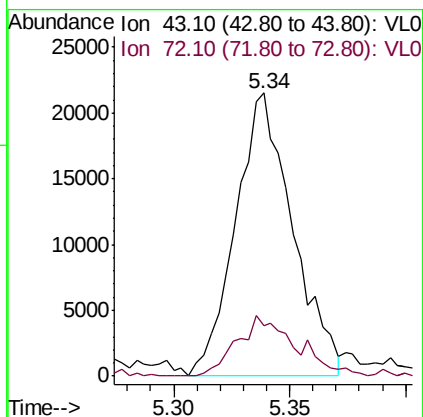
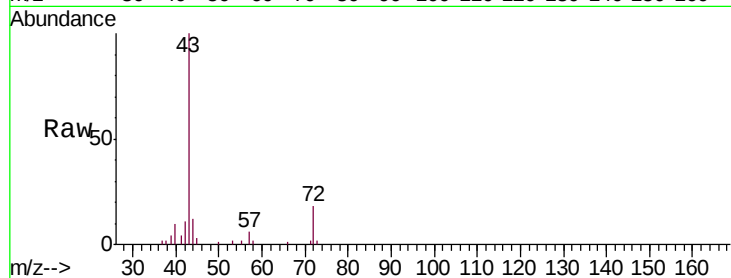




#34
2-Butanone
Concen: 0.226 ppbv
RT: 5.34 min Scan# 747
Delta R.T. 0.01 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

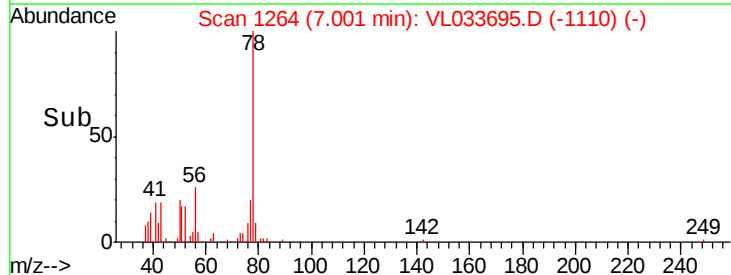
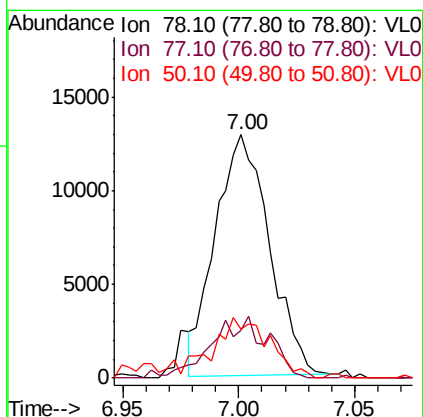
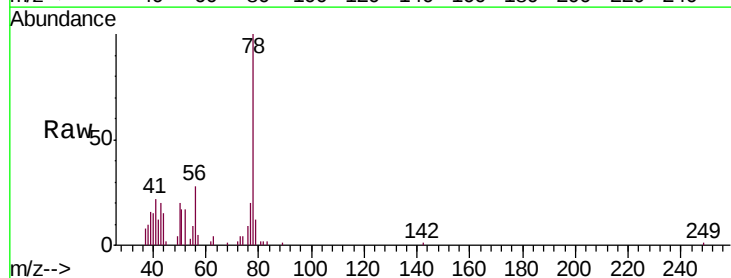
Instrument :
MSVOA_L
ClientSampleId :
SS02DL

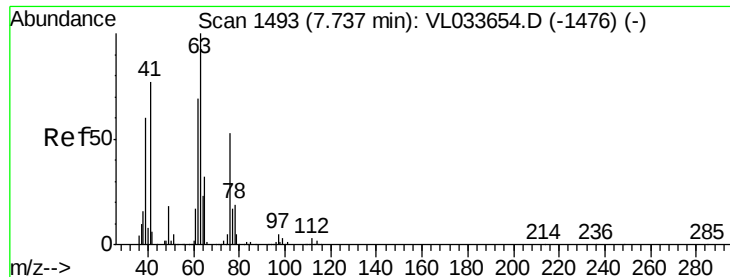
Tgt Ion: 43 Resp: 36829
Ion Ratio Lower Upper
43 100
72 22.7 17.5 26.3



#36
Benzene
Concen: 0.092 ppbv
RT: 7.00 min Scan# 1264
Delta R.T. -0.01 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

Tgt Ion: 78 Resp: 20957
Ion Ratio Lower Upper
78 100
77 20.6 18.2 27.2
50 19.5 15.8 23.6





#39

1,2-Dichloropropane

Concen: 7.182 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.45 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

SS02DL

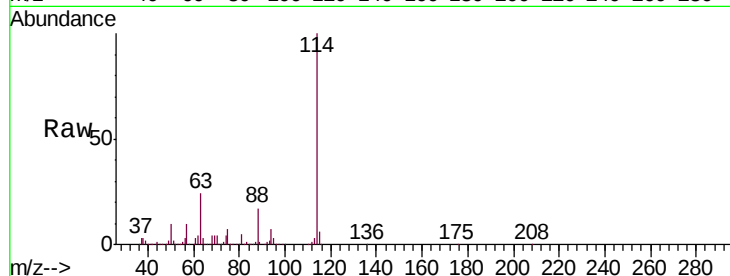
Tgt Ion: 63 Resp: 612082

Ion Ratio Lower Upper

63 100

41 0.2 61.6 92.4#

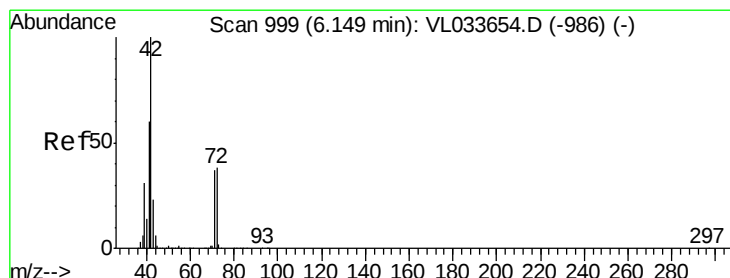
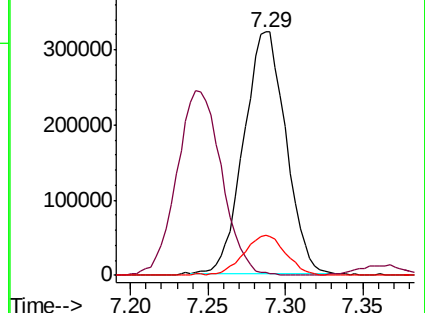
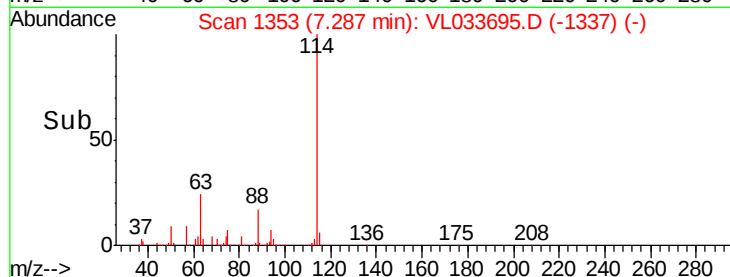
62 16.4 55.0 82.6#



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



#41

Tetrahydrofuran

Concen: 3.465 ppbv

RT: 6.42 min Scan# 1084

Delta R.T. 0.27 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

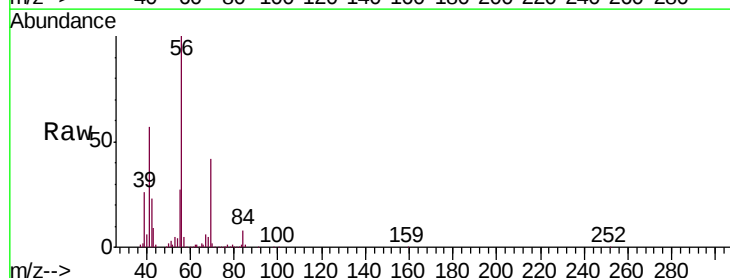
Tgt Ion: 42 Resp: 292370

Ion Ratio Lower Upper

42 100

72 0.0 31.6 47.4#

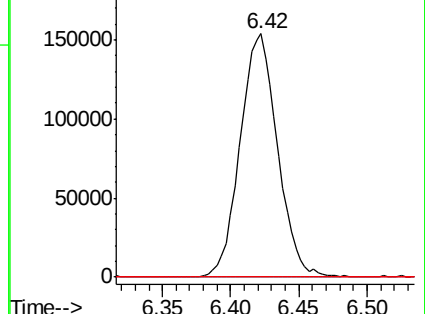
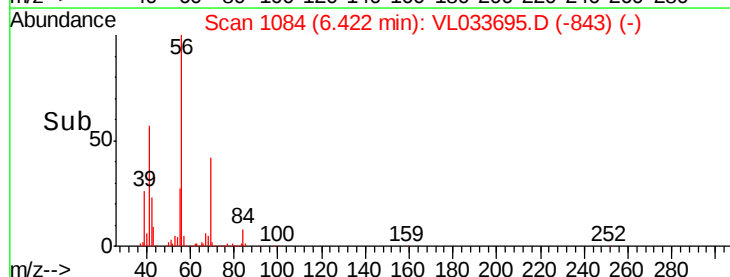
71 0.1 30.6 46.0#

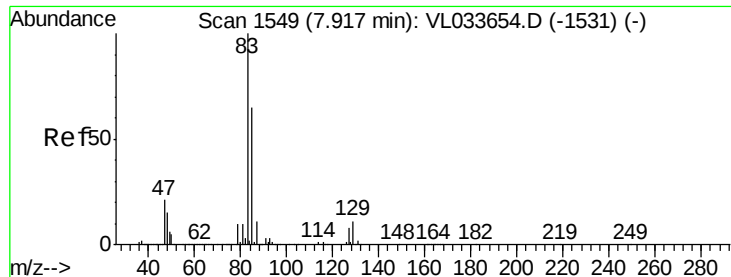


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0





#42

Bromodichloromethane

Concen: 0.085 ppbv

RT: 7.91 min Scan# 1546

Delta R.T. -0.01 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

SS02DL

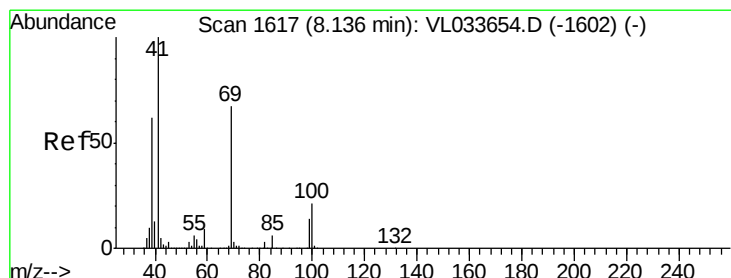
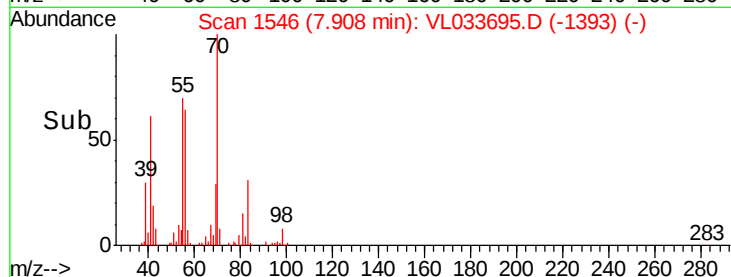
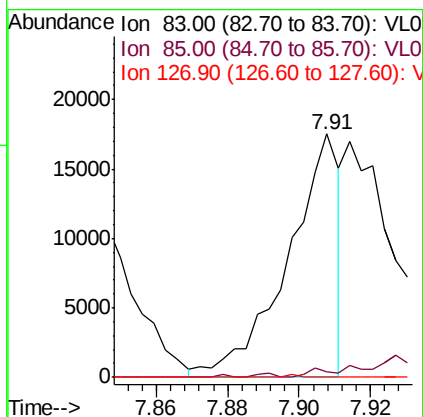
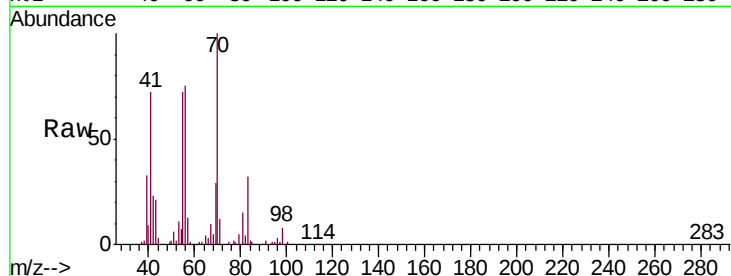
Tgt Ion: 83 Resp: 17607

Ion Ratio Lower Upper

83 100

85 2.4 52.4 78.6#

127 0.0 6.6 9.8#



#43

Methyl Methacrylate

Concen: 0.327 ppbv

RT: 7.99 min Scan# 1572

Delta R.T. -0.14 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

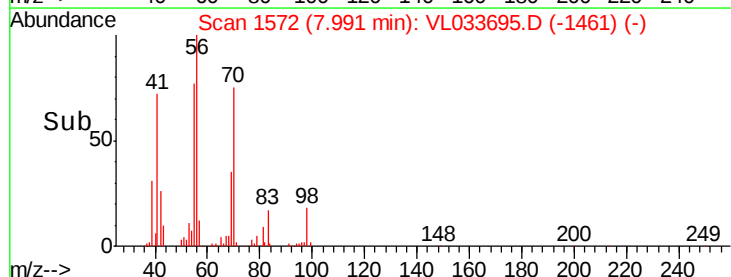
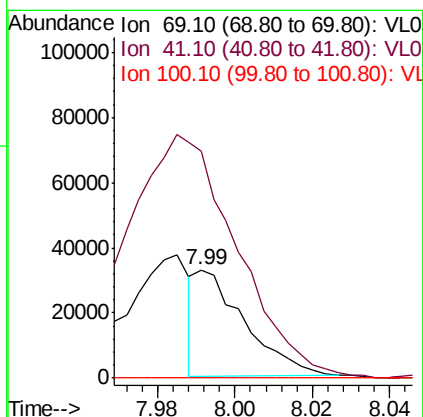
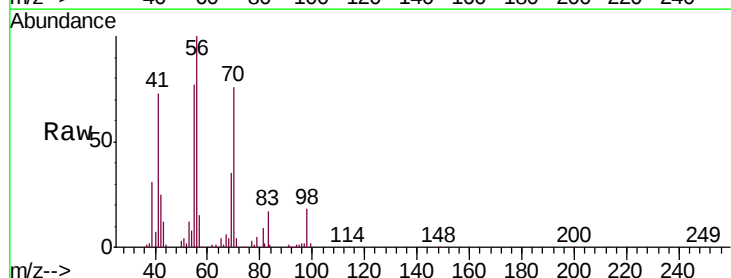
Tgt Ion: 69 Resp: 28164

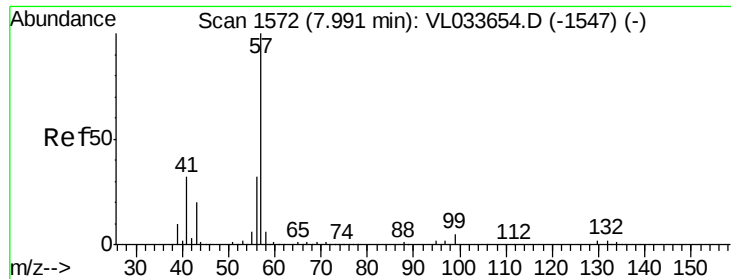
Ion Ratio Lower Upper

69 100

41 0.0 116.6 175.0#

100 0.0 24.6 37.0#





#44

2,2,4-Trimethylpentane

Concen: 0.076 ppbv

RT: 7.98 min Scan# 1570

Delta R.T. -0.01 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

SS02DL

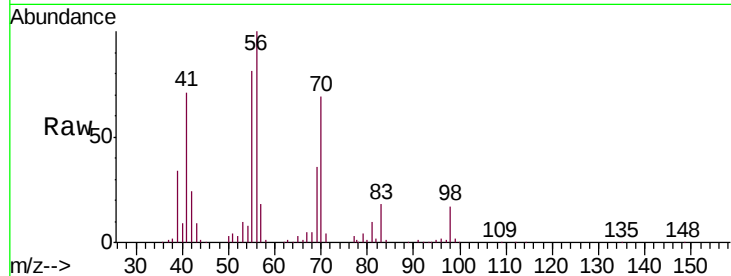
Tgt Ion: 57 Resp: 29735

Ion Ratio Lower Upper

57 100

41 517.2 25.7 38.5#

56 743.4 25.0 37.6#



Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

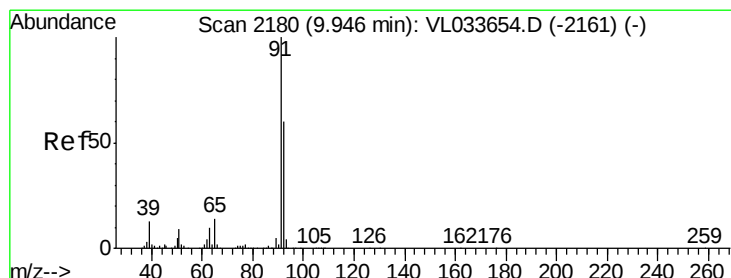
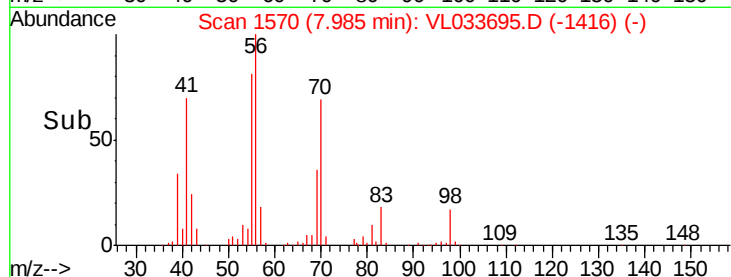
Ion 56.10 (55.80 to 56.80): VL0

100000

50000

7.98

Time--> 7.94 7.96 7.98 8.00 8.02



#53

Toluene

Concen: 0.051 ppbv

RT: 9.94 min Scan# 2178

Delta R.T. -0.01 min

Lab File: VL033695.D

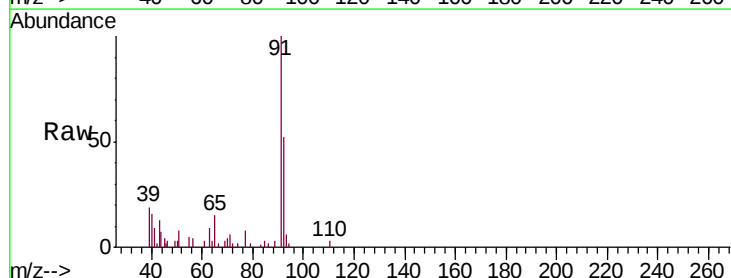
Acq: 14 May 2019 17:37

Tgt Ion: 91 Resp: 12641

Ion Ratio Lower Upper

91 100

92 85.1 47.7 71.5#



Abundance Ion 91.10 (90.80 to 91.80): VL0

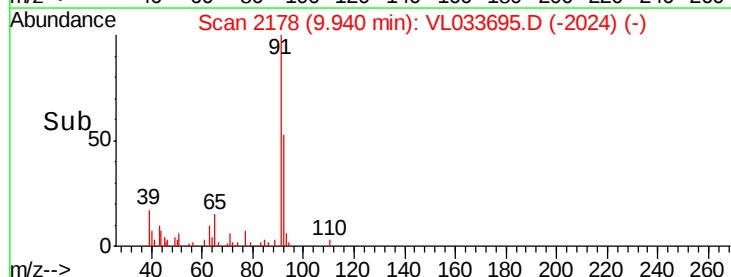
Ion 92.10 (91.80 to 92.80): VL0

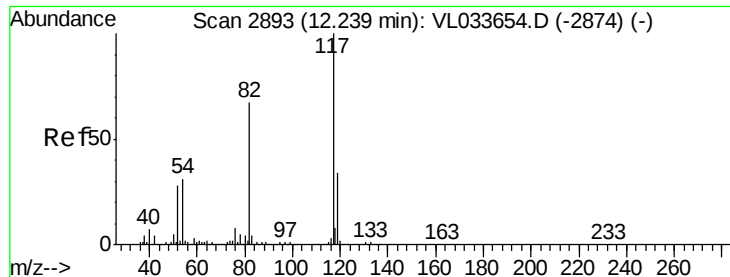
12000

10000

9.94

Time--> 9.90 9.92 9.94

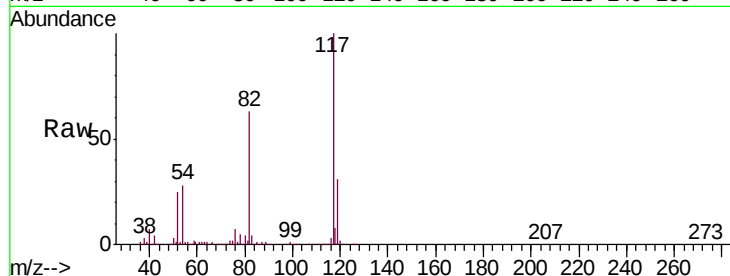




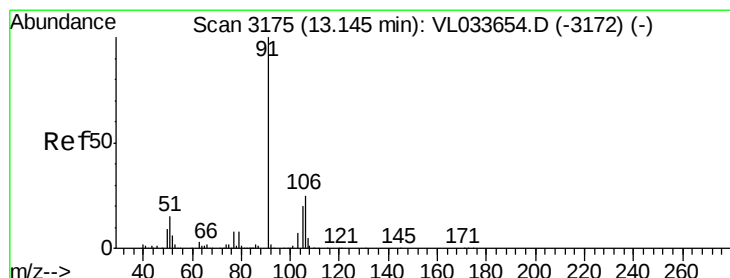
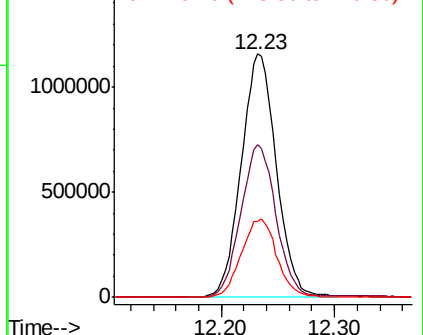
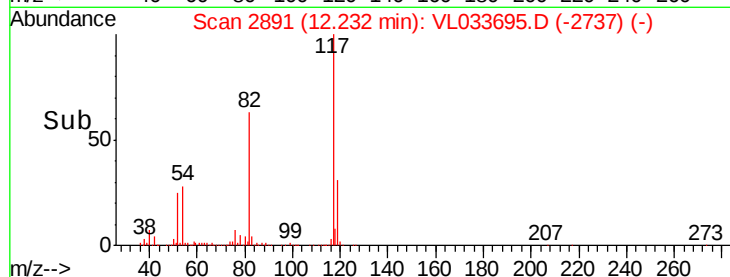
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.23 min Scan# 2891
Delta R.T. -0.01 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

Instrument :
MSVOA_L
ClientSampleId :
SS02DL

Tgt Ion:117 Resp: 2501389
Ion Ratio Lower Upper
117 100
82 63.0 49.7 74.5
119 32.6 24.8 37.2

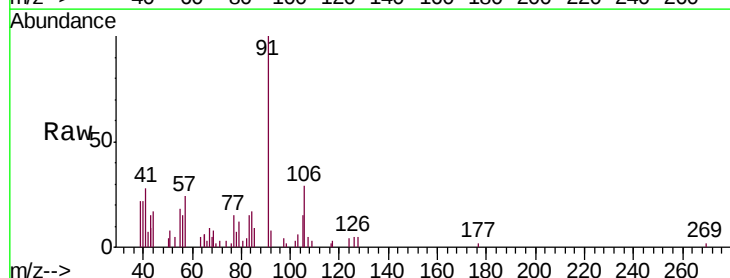


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

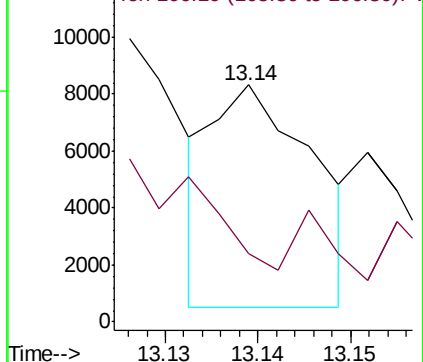
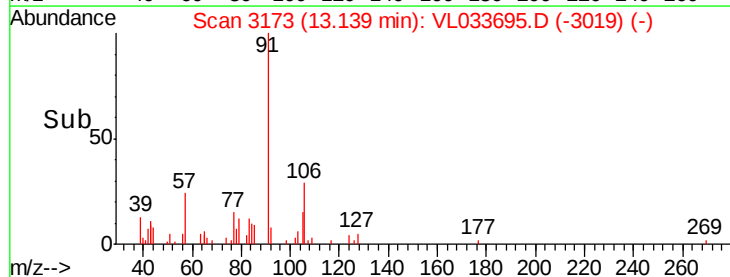


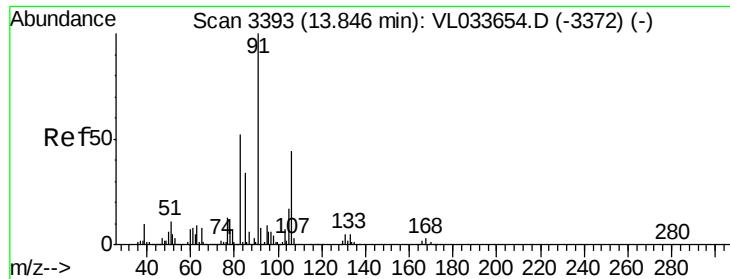
#59
m/p-Xylene
Concen: 0.021 ppbv
RT: 13.14 min Scan# 3173
Delta R.T. -0.01 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

Tgt Ion: 91 Resp: 5901
Ion Ratio Lower Upper
91 100
106 0.0 36.2 54.2#



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V

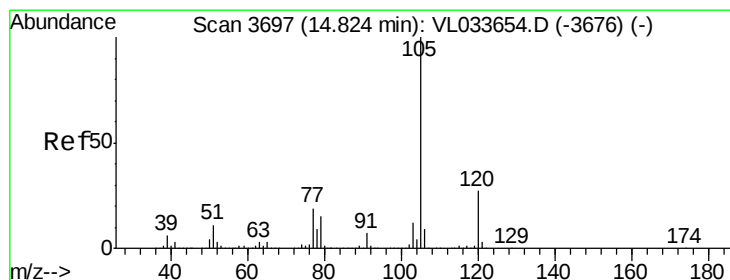
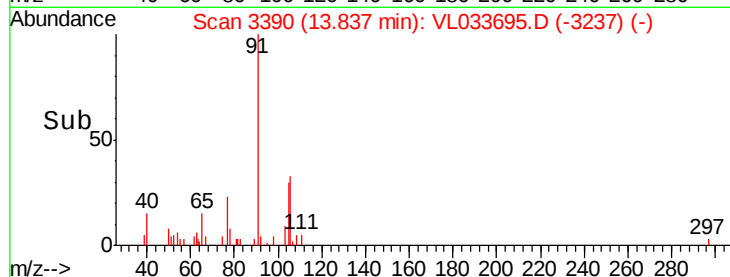
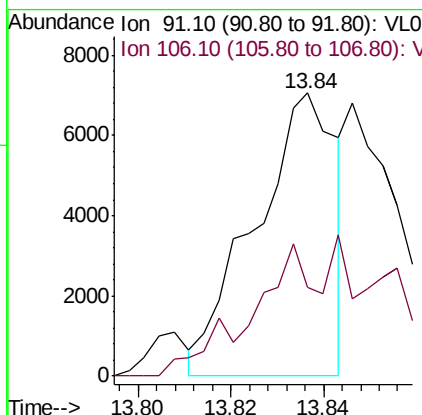
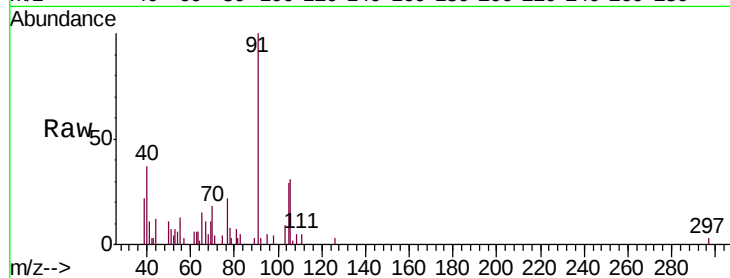




#60
o-Xylene
Concen: 0.029 ppbv
RT: 13.84 min Scan# 3390
Delta R.T. -0.01 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

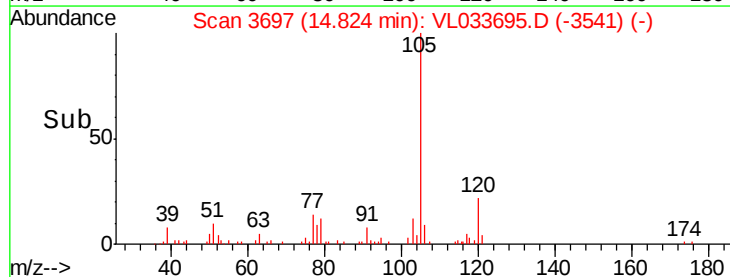
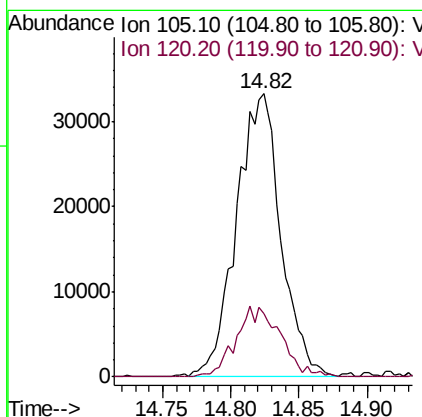
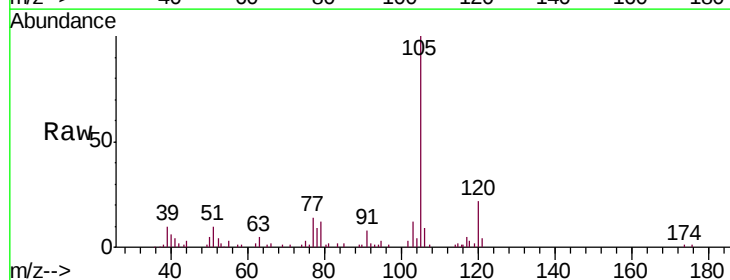
Instrument :
MSVOA_L
ClientSampleId :
SS02DL

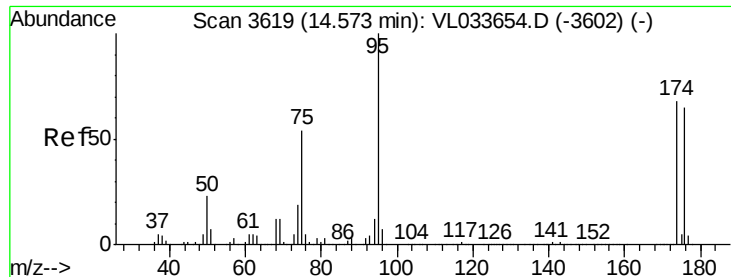
Tgt Ion: 91 Resp: 8558
Ion Ratio Lower Upper
91 100
106 0.0 21.7 65.1#



#62
Isopropylbenzene
Concen: 0.190 ppbv
RT: 14.82 min Scan# 3697
Delta R.T. 0.00 min
Lab File: VL033695.D
Acq: 14 May 2019 17:37

Tgt Ion: 105 Resp: 75370
Ion Ratio Lower Upper
105 100
120 25.0 20.5 30.7





#68

1-Bromo-4-Fluorobenzene

Concen: 9.608 ppbv

RT: 14.57 min Scan# 3618

Delta R.T. -0.00 min

Lab File: VL033695.D

Acq: 14 May 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

SS02DL

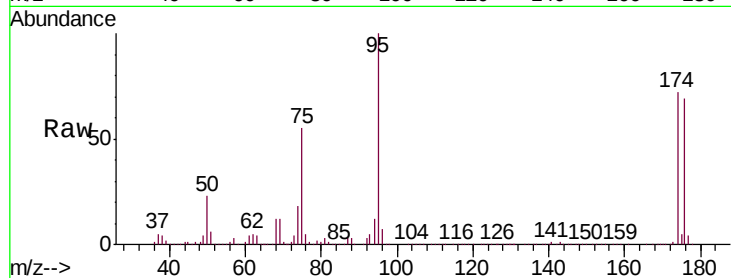
Tgt Ion: 95 Resp: 1969969

Ion Ratio Lower Upper

95 100

174 70.5 54.0 81.0

175 5.0 3.8 5.8



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

