

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL100819\
 Data File : VL034270.D
 Acq On : 9 Oct 2019 5:08
 Operator : SY/AP
 Sample : K5243-01DL 40X
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

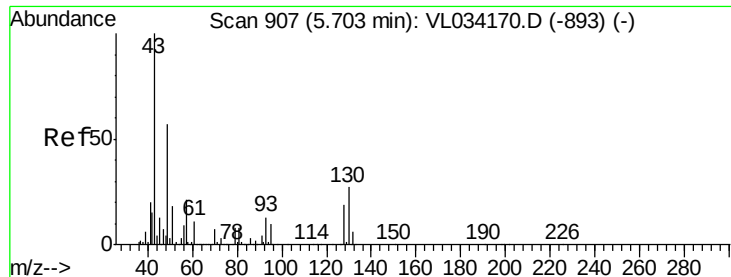
Quant Time: Oct 09 06:52:11 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep 18 12:53:31 2019
 QLast Update : Wed Sep 18 12:53:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	1044823	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.21	114	1997313	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.15	117	2002582	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.49	95	1695709	9.74	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	28830	0.187	ppbv	90
3) Chlorodifluoromethane	2.93	51	4800	0.039	ppbv #	65
8) Dichlorotetrafluoroethane	3.03	85	28830	0.212	ppbv #	22
9) Propene	2.99	41	13573	0.225	ppbv #	70
10) Heptane	8.17	43	53489	0.340	ppbv	99
13) Ethanol	3.96	45	1337725	91.401	ppbv #	40
15) Acetone	3.84	43	1584520	11.315	ppbv	97
17) tert-Butyl alcohol	4.30	59	20196	0.228	ppbv	95
19) Isopropyl Alcohol	3.96	45	1337725	15.535	ppbv	100
20) Methylene Chloride	4.34	84	4170	0.103	ppbv #	60
21) Allyl Chloride	4.30	41	4697	0.059	ppbv #	26
25) Ethyl Acetate	5.71	43	72136	0.272	ppbv #	78
26) Hexane	5.70	57	100168	0.909	ppbv #	40
34) 2-Butanone	5.26	43	122510	0.601	ppbv	95
36) Benzene	6.92	78	8963	0.041	ppbv #	87
38) Trichloroethene	7.88	130	287881	3.652	ppbv	96
39) 1,2-Dichloropropane	7.21	63	601486	6.069	ppbv #	20
52) Tetrachloroethene	11.29	164	2022359	27.749	ppbv	96
53) Toluene	9.86	91	79044	0.328	ppbv	95
59) m/p-Xylene	13.06	91	10248	0.038	ppbv #	32
60) o-Xylene	13.75	91	20445	0.076	ppbv #	33

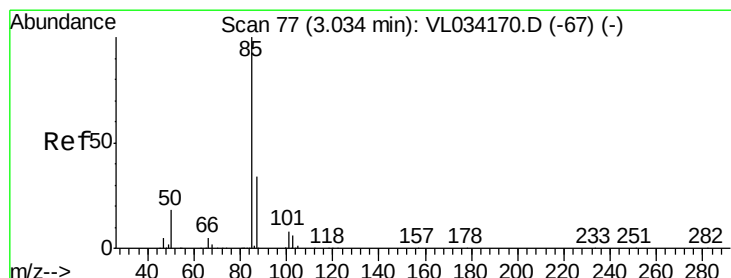
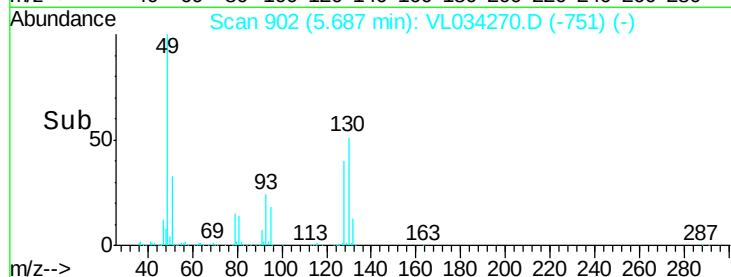
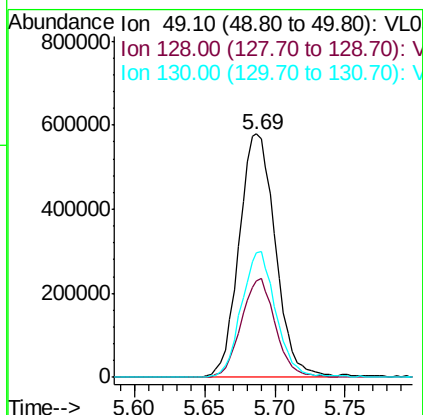
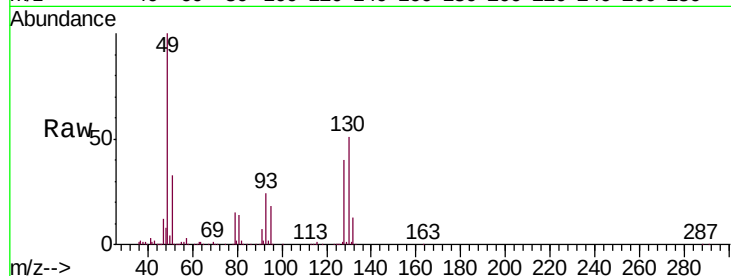
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.69 min Scan# 902
 Delta R.T. -0.02 min
 Lab File: VL034270.D
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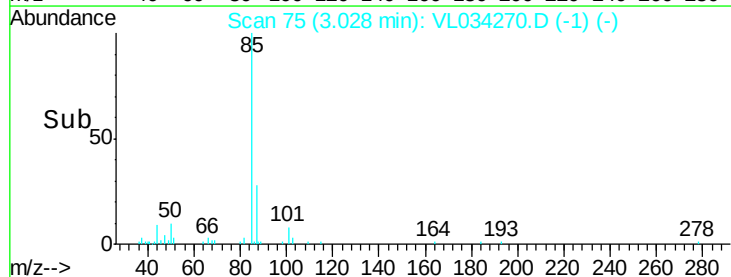
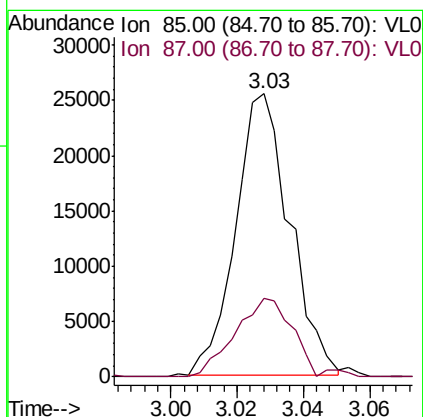
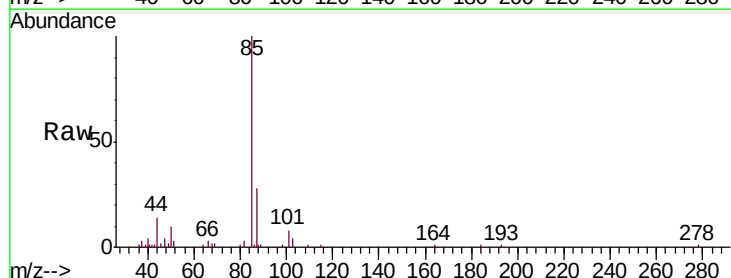
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

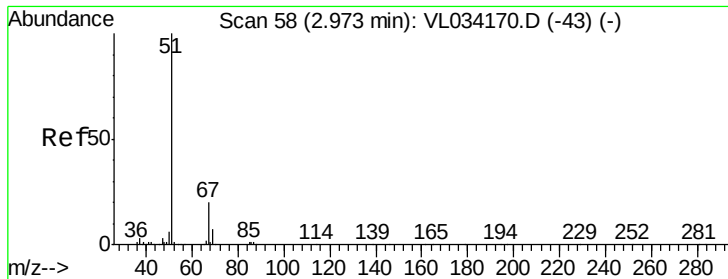
Tgt Ion: 49 Resp: 1044823
 Ion Ratio Lower Upper
 49 100
 128 38.5 17.6 52.9
 130 49.6 22.3 66.9



#2
 Dichlorodifluoromethane
 Concen: 0.187 ppbv
 RT: 3.03 min Scan# 75
 Delta R.T. -0.01 min
 Lab File: VL034270.D
 Acq: 9 Oct 2019 5:08

Tgt Ion: 85 Resp: 28830
 Ion Ratio Lower Upper
 85 100
 87 28.1 27.2 40.8





#3

Chlorodifluoromethane

Concen: 0.039 ppbv

RT: 2.93 min Scan# 46

Delta R.T. -0.04 min

Lab File: VL034270.D

Acq: 9 Oct 2019 5:08

Instrument :

MSVOA_L

ClientSampled :

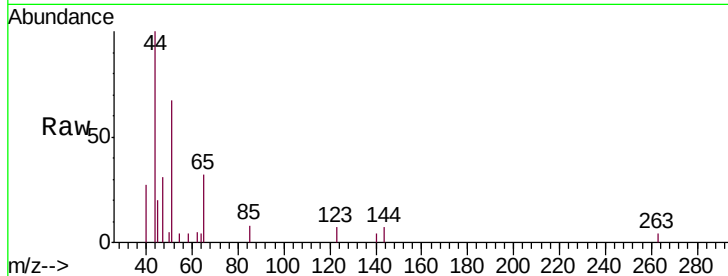
SV1DL

Tgt Ion: 51 Resp: 4800

Ion Ratio Lower Upper

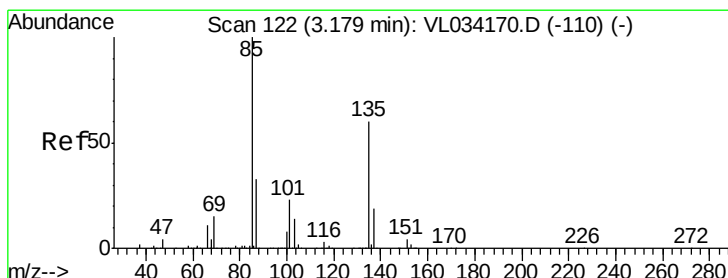
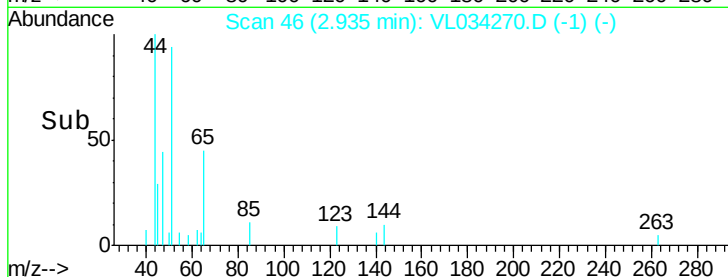
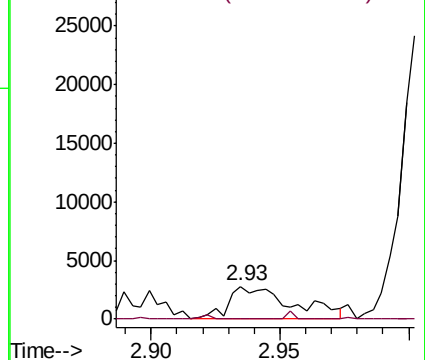
51 100

67 2.8 14.8 22.2#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#8

Dichlorotetrafluoroethane

Concen: 0.212 ppbv

RT: 3.03 min Scan# 75

Delta R.T. -0.15 min

Lab File: VL034270.D

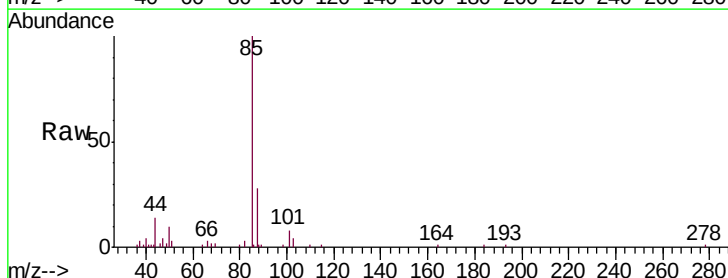
Acq: 9 Oct 2019 5:08

Tgt Ion: 85 Resp: 28830

Ion Ratio Lower Upper

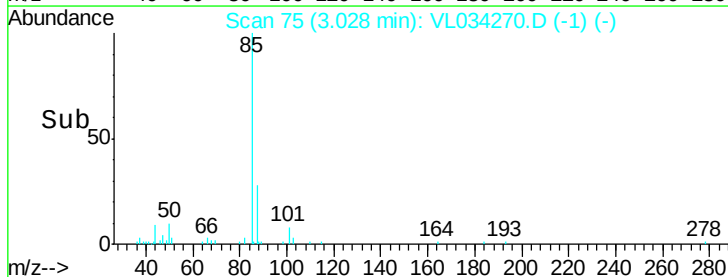
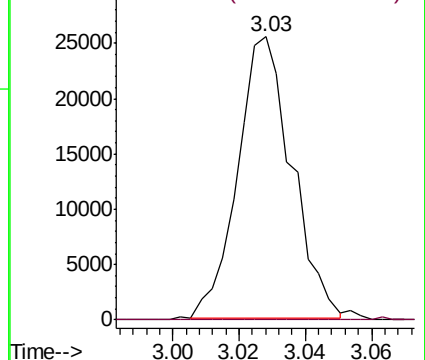
85 100

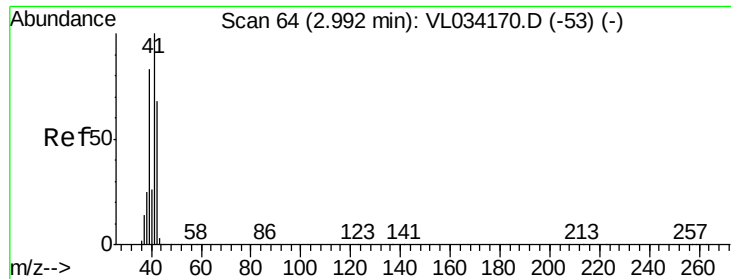
135 0.4 47.3 70.9#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 0.225 ppbv

RT: 2.99 min Scan# 64

Delta R.T. 0.00 min

Lab File: VL034270.D

Acq: 9 Oct 2019 5:08

Instrument :

MSVOA_L

ClientSampleId :

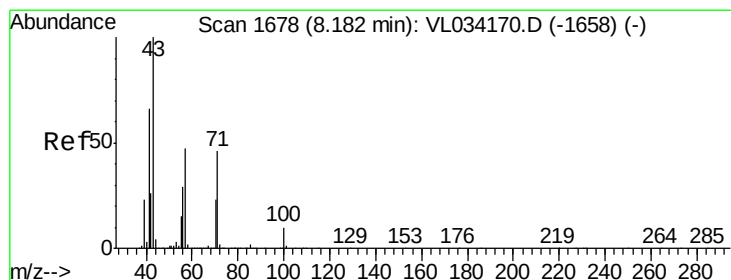
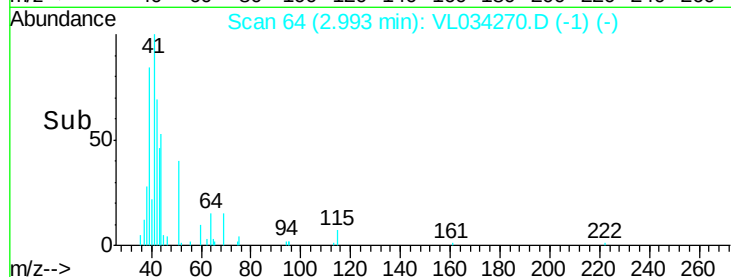
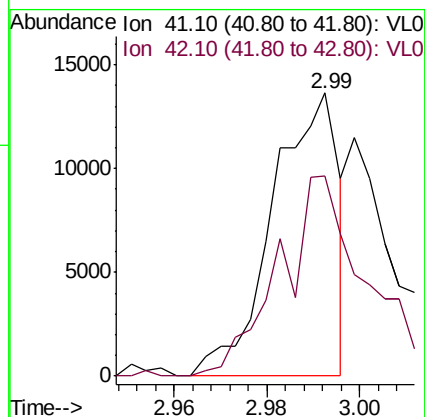
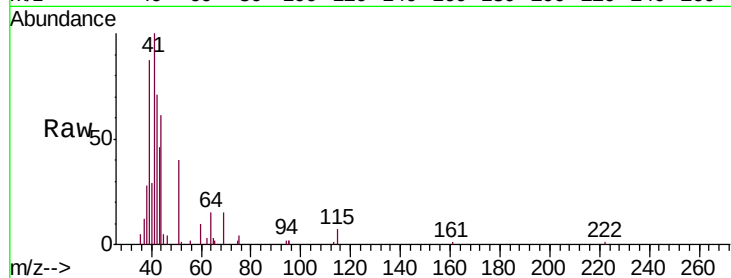
SV1DL

Tgt Ion: 41 Resp: 13573

Ion Ratio Lower Upper

41 100

42 94.3 55.8 83.6#



#10

Heptane

Concen: 0.340 ppbv

RT: 8.17 min Scan# 1674

Delta R.T. -0.01 min

Lab File: VL034270.D

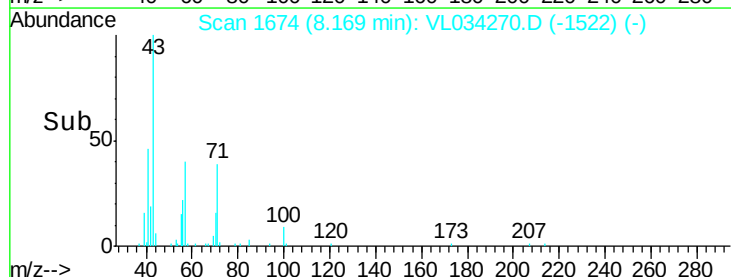
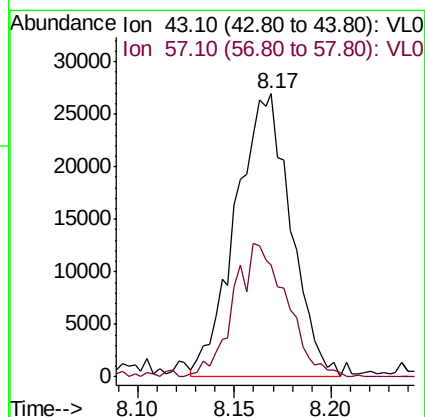
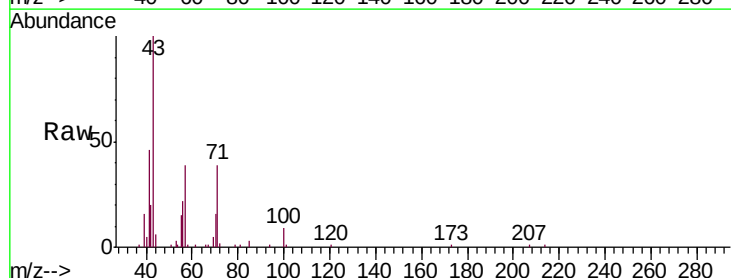
Acq: 9 Oct 2019 5:08

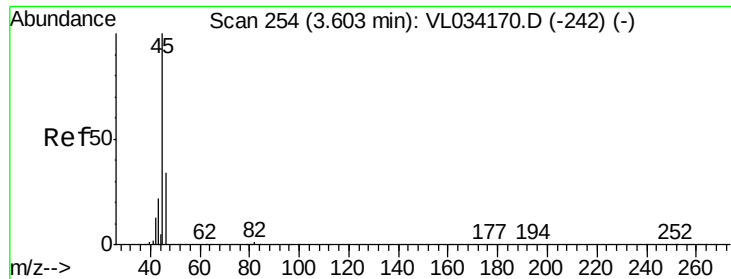
Tgt Ion: 43 Resp: 53489

Ion Ratio Lower Upper

43 100

57 46.0 37.5 56.3





#13

Ethanol

Concen: 91.401 ppbv

RT: 3.96 min Scan# 365

Delta R.T. 0.36 min

Lab File: VL034270.D

Acq: 9 Oct 2019 5:08

Instrument :

MSVOA_L

ClientSampleId :

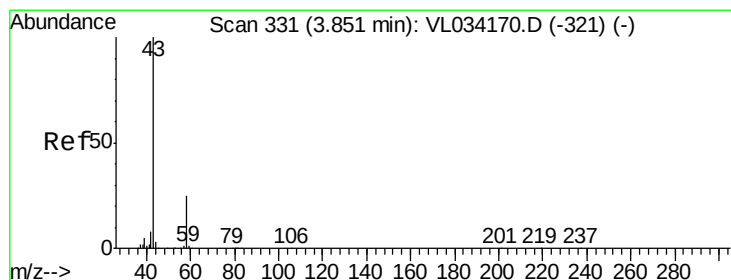
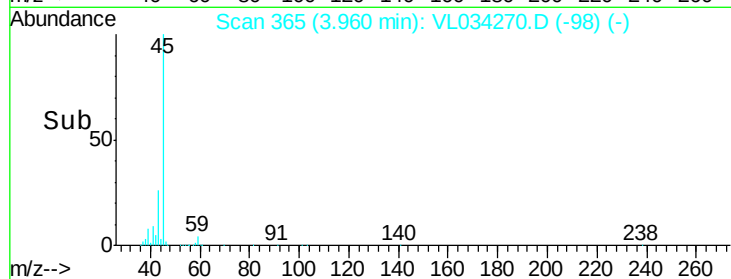
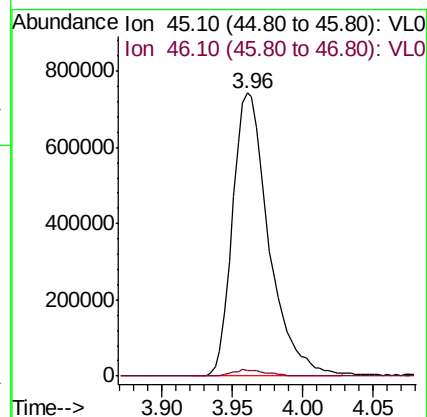
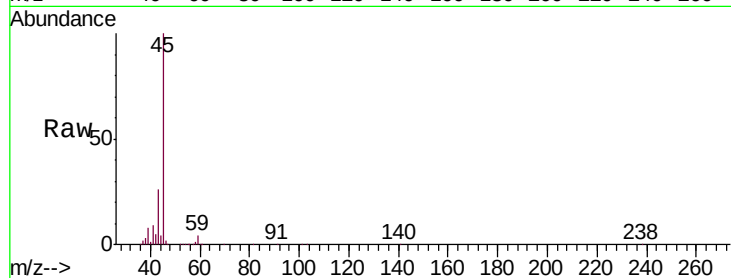
SV1DL

Tgt Ion: 45 Resp: 1337725

Ion Ratio Lower Upper

45 100

46 2.2 15.5 61.9#



#15

Acetone

Concen: 11.315 ppbv

RT: 3.84 min Scan# 328

Delta R.T. -0.01 min

Lab File: VL034270.D

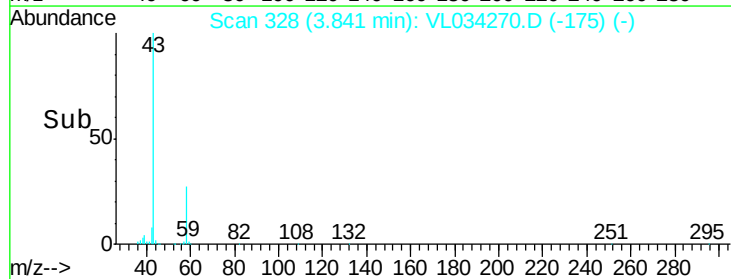
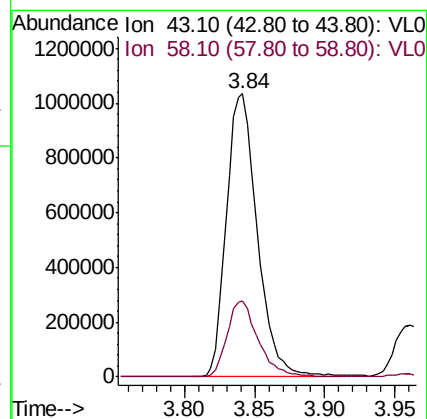
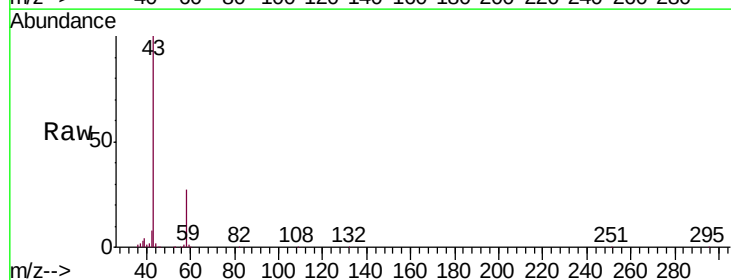
Acq: 9 Oct 2019 5:08

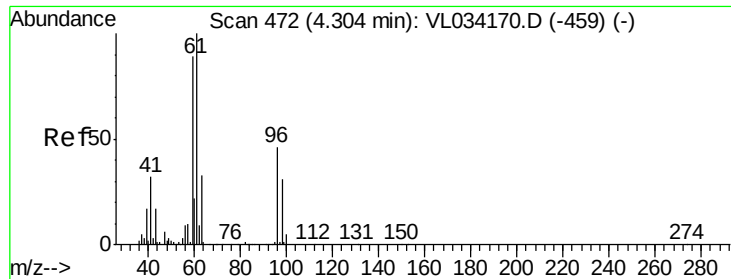
Tgt Ion: 43 Resp: 1584520

Ion Ratio Lower Upper

43 100

58 27.2 20.5 30.7

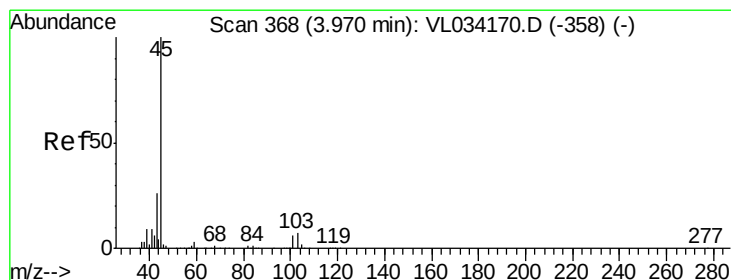
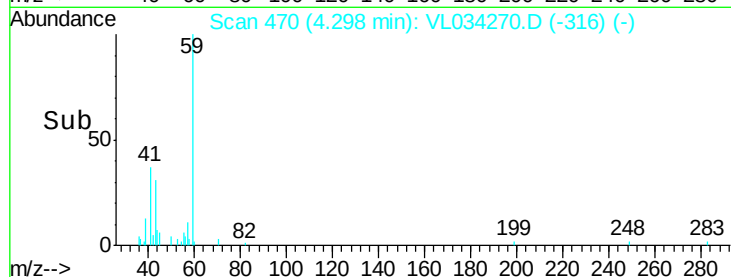
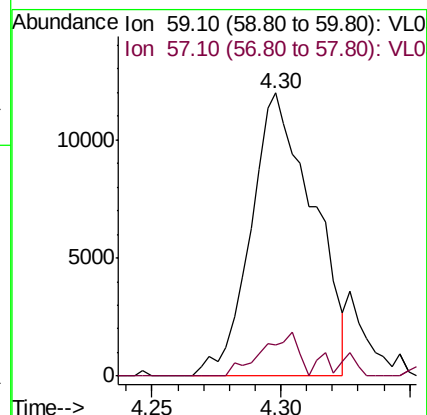
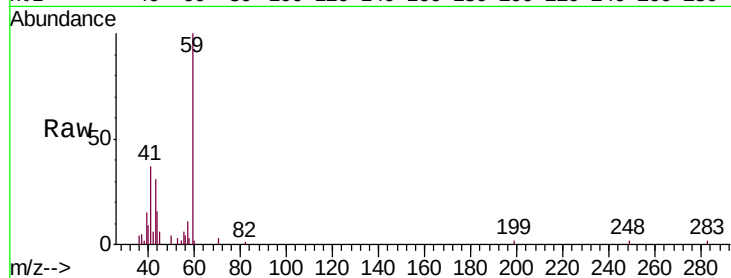




#17
 tert-Butyl alcohol
 Concen: 0.228 ppbv
 RT: 4.30 min Scan# 470
 Delta R.T. -0.01 min
 Lab File: VL034270.D
 Acq: 9 Oct 2019 5:08

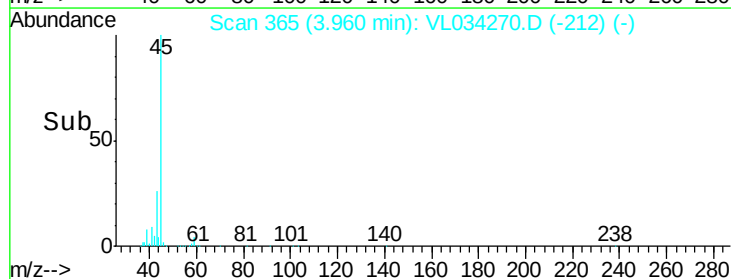
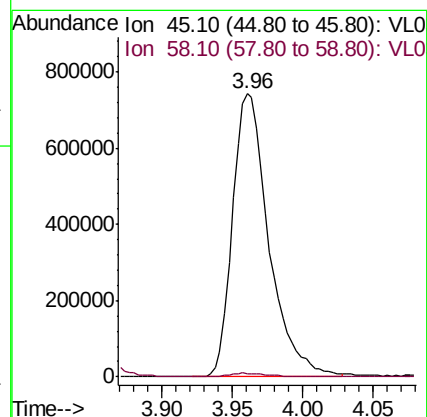
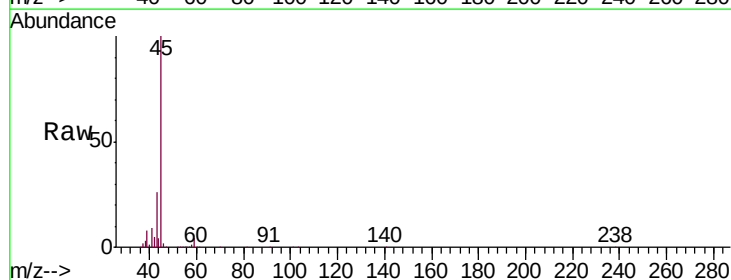
Instrument :
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 ClientSampleId :
 SV1DL

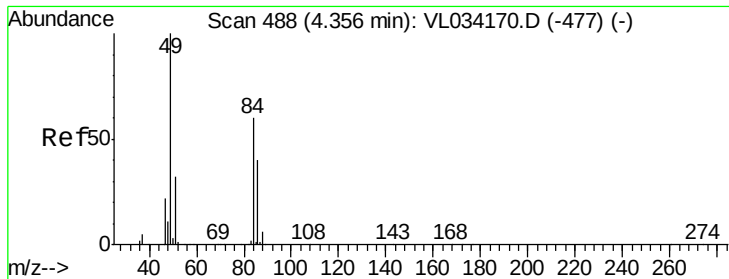
Tgt Ion: 59 Resp: 20196
 Ion Ratio Lower Upper
 59 100
 57 12.7 8.7 13.1



#19
 Isopropyl Alcohol
 Concen: 15.535 ppbv
 RT: 3.96 min Scan# 365
 Delta R.T. -0.01 min
 Lab File: VL034270.D
 Acq: 9 Oct 2019 5:08

Tgt Ion: 45 Resp: 1337725
 Ion Ratio Lower Upper
 45 100
 58 1.7 1.4 2.0

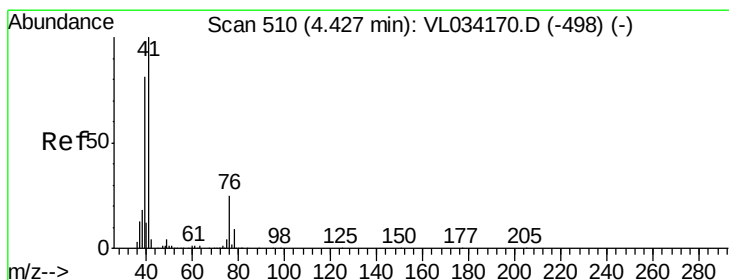
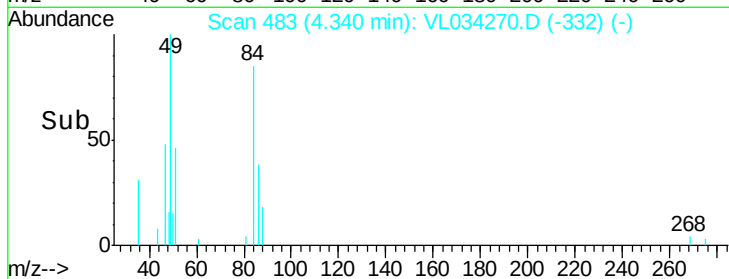
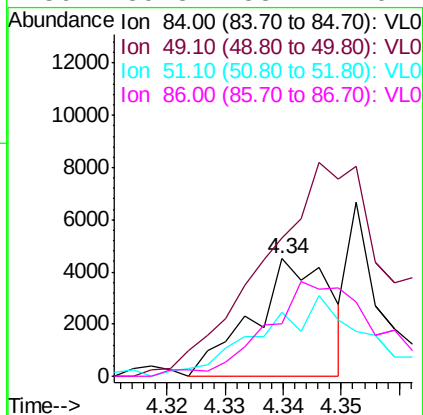
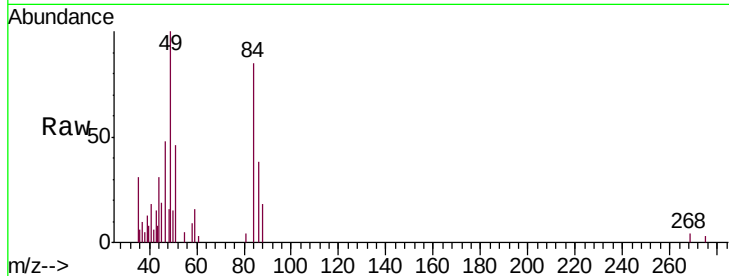




#20
Methylene Chloride
Concen: 0.103 ppbv
RT: 4.34 min Scan# 483
Delta R.T. -0.02 min
Lab File: VL034270.D
Acq: 9 Oct 2019 5:08

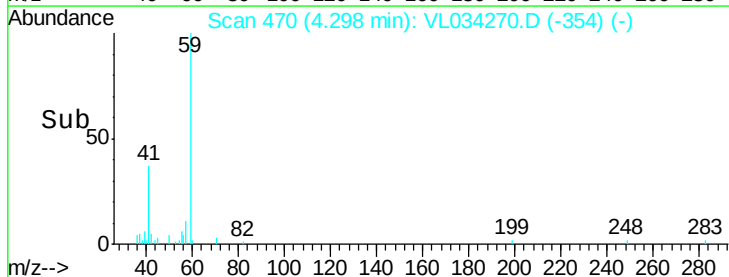
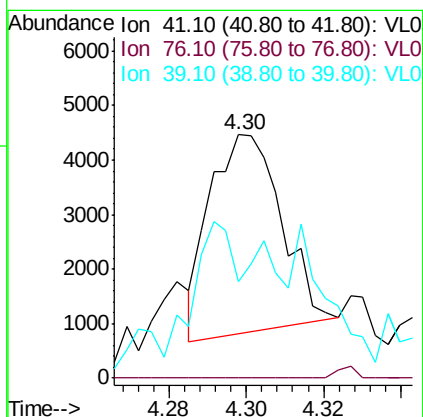
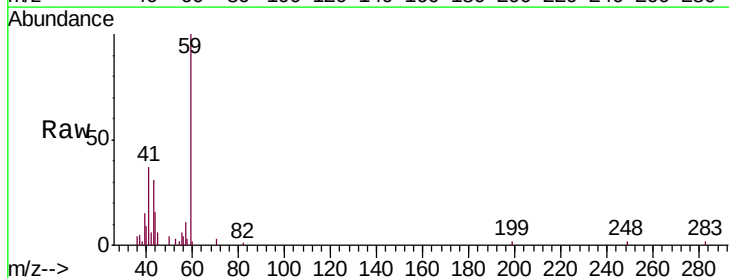
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

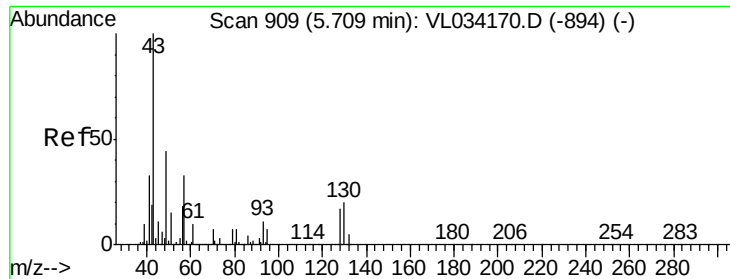
Tgt Ion:	84	Resp:	4170
Ion	Ratio	Lower	Upper
84	100		
49	95.9	133.8	200.8#
51	47.3	43.6	65.4
86	39.3	53.1	79.7#



#21
Allyl Chloride
Concen: 0.059 ppbv
RT: 4.30 min Scan# 470
Delta R.T. -0.13 min
Lab File: VL034270.D
Acq: 9 Oct 2019 5:08

Tgt Ion:	41	Resp:	4697
Ion	Ratio	Lower	Upper
41	100		
76	0.0	21.8	32.6#
39	153.8	64.8	97.2#

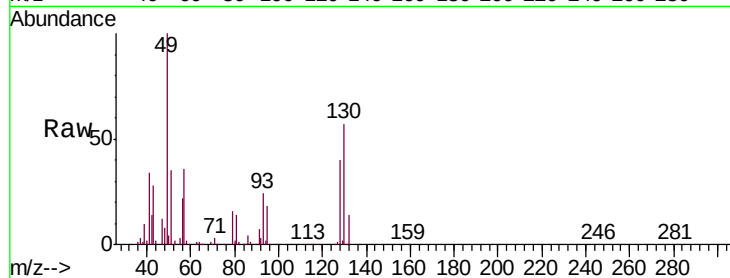




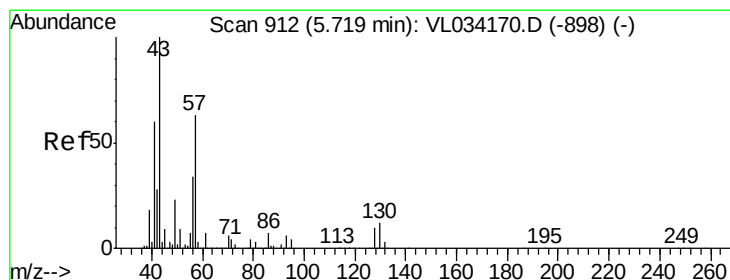
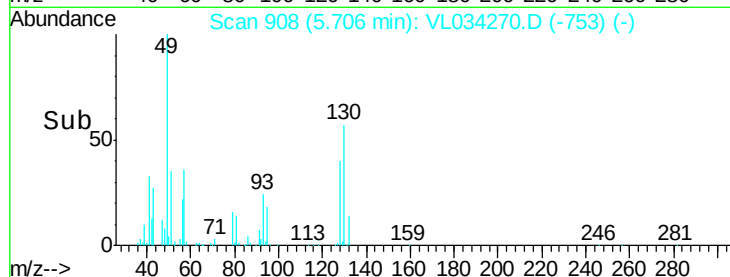
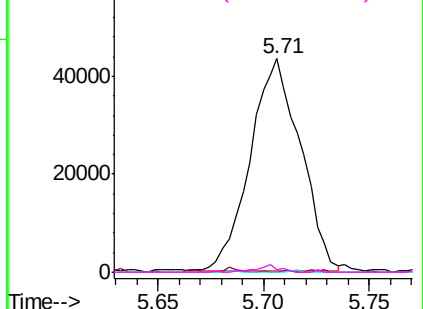
#25
Ethyl Acetate
Concen: 0.272 ppbv
RT: 5.71 min Scan# 908
Delta R.T. -0.00 min
Lab File: VL034270.D
Acq: 9 Oct 2019 5:08

Instrument :
MSVOA_L
ClientSampleId :
SV1DL

Tgt Ion:	43	Resp:	72136
Ion	Ratio	Lower	Upper
43	100		
45	0.9	8.4	12.6#
61	0.1	7.2	10.8#
70	1.7	5.3	7.9#

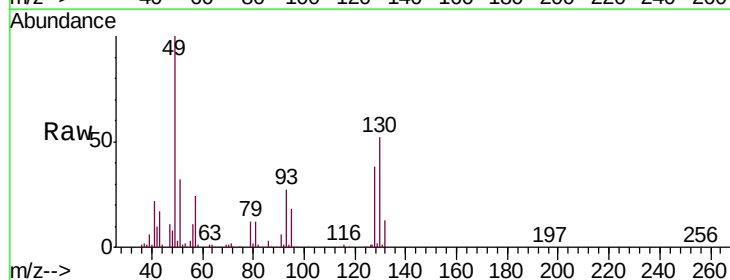


Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 45.10 (44.80 to 45.80): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 70.10 (69.80 to 70.80): VL0

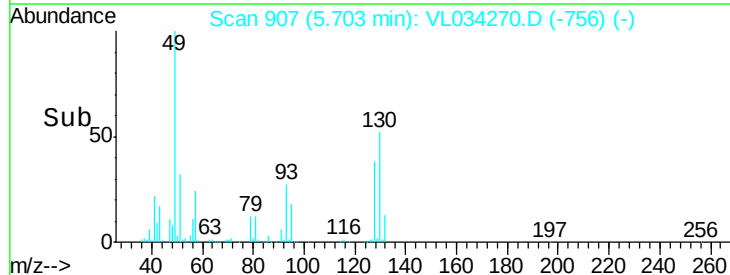
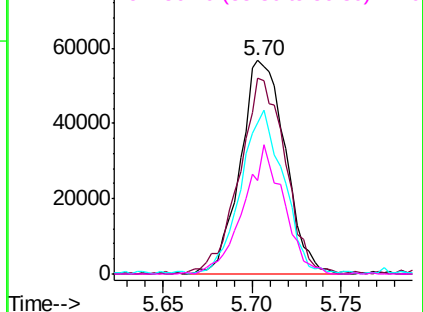


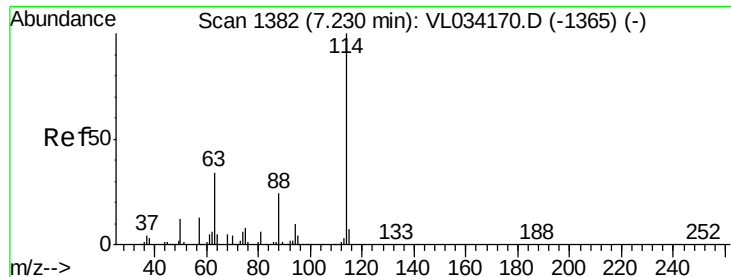
#26
Hexane
Concen: 0.909 ppbv
RT: 5.70 min Scan# 907
Delta R.T. -0.02 min
Lab File: VL034270.D
Acq: 9 Oct 2019 5:08

Tgt Ion:	57	Resp:	100168
Ion	Ratio	Lower	Upper
57	100		
41	94.0	78.5	117.7
43	72.6	189.5	284.3#
56	53.9	43.2	64.8



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

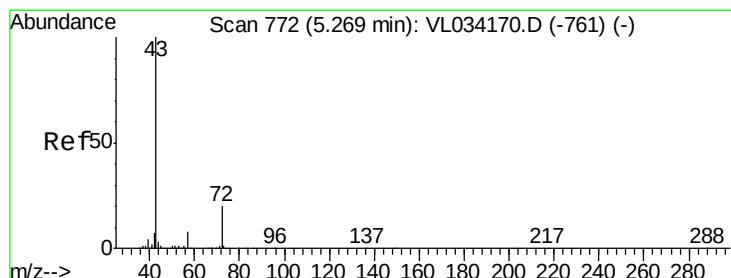
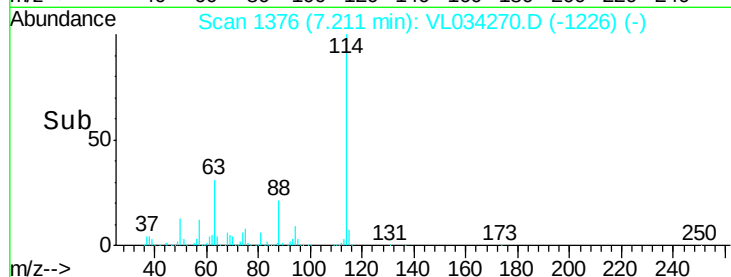
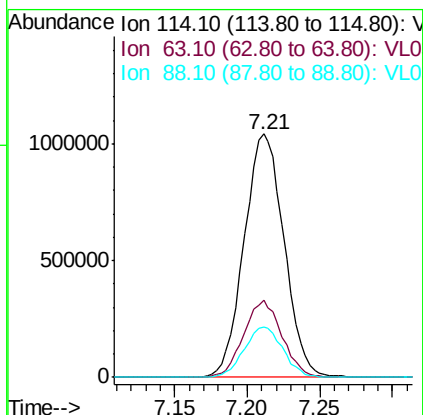
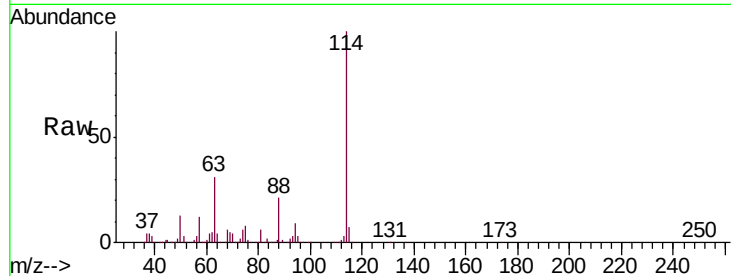




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.21 min Scan# 1376
 Delta R.T. -0.02 min
 Lab File: VL034270.D
 Acq: 9 Oct 2019 5:08

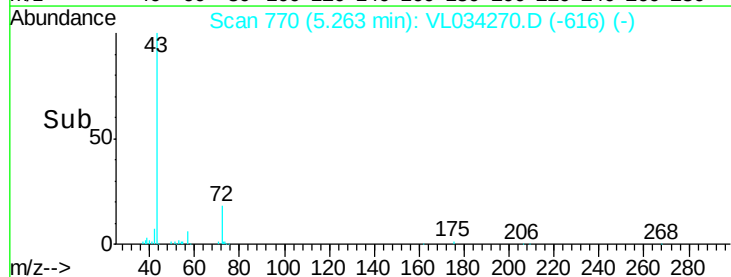
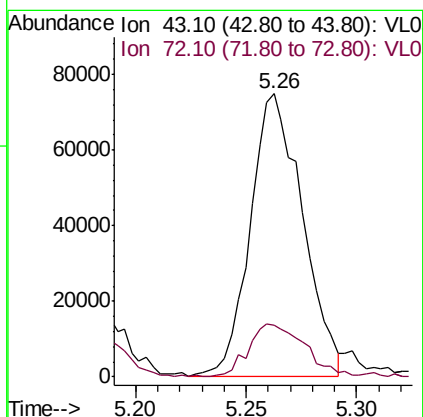
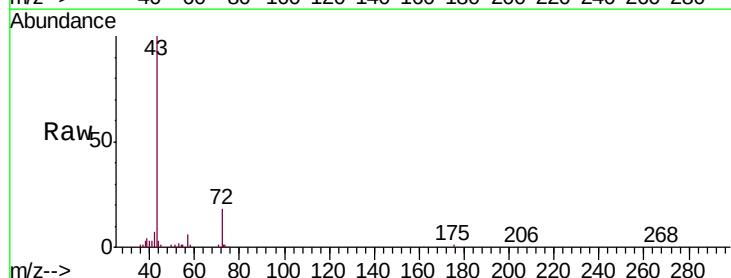
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

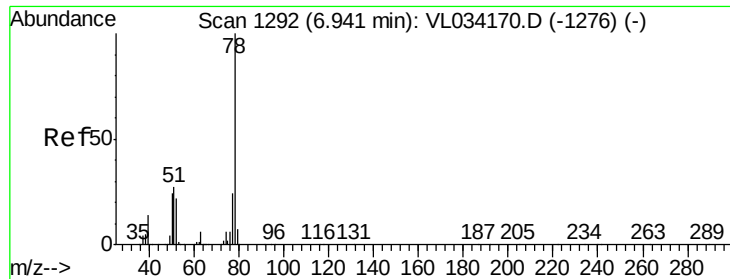
Tgt Ion:114 Resp: 1997313
 Ion Ratio Lower Upper
 114 100
 63 30.4 27.8 41.6
 88 20.3 17.1 25.7



#34
 2-Butanone
 Concen: 0.601 ppbv
 RT: 5.26 min Scan# 770
 Delta R.T. -0.01 min
 Lab File: VL034270.D
 Acq: 9 Oct 2019 5:08

Tgt Ion: 43 Resp: 122510
 Ion Ratio Lower Upper
 43 100
 72 20.9 15.0 22.6





#36

Benzene

Concen: 0.041 ppbv

RT: 6.92 min Scan# 1287

Delta R.T. -0.02 min

Lab File: VL034270.D

Acq: 9 Oct 2019 5:08

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

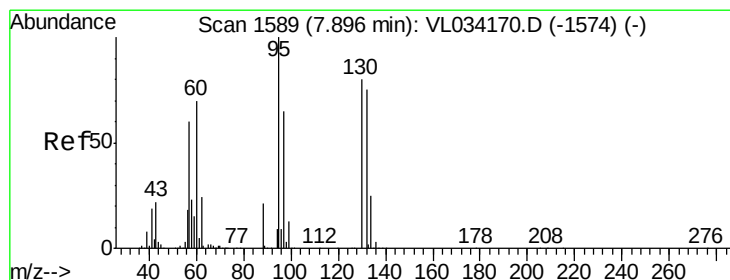
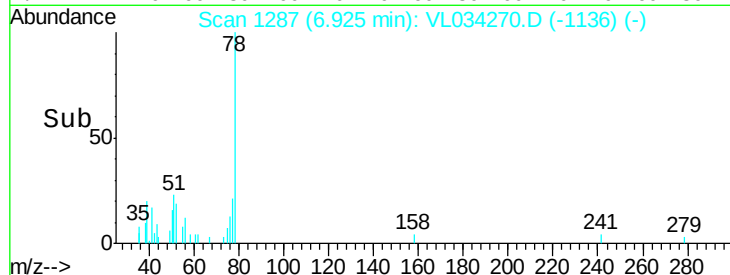
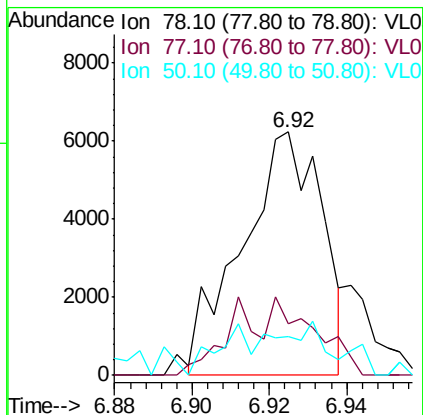
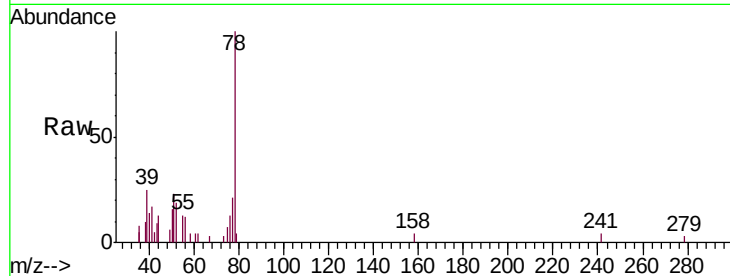
Tgt Ion: 78 Resp: 8963

Ion Ratio Lower Upper

78 100

77 17.7 19.0 28.4#

50 16.7 18.9 28.3#



#38

Trichloroethene

Concen: 3.652 ppbv

RT: 7.88 min Scan# 1583

Delta R.T. -0.02 min

Lab File: VL034270.D

Acq: 9 Oct 2019 5:08

Tgt Ion: 130 Resp: 287881

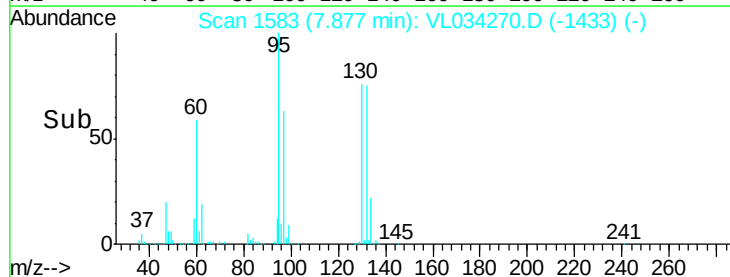
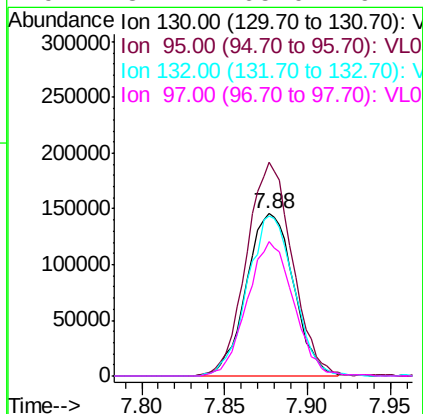
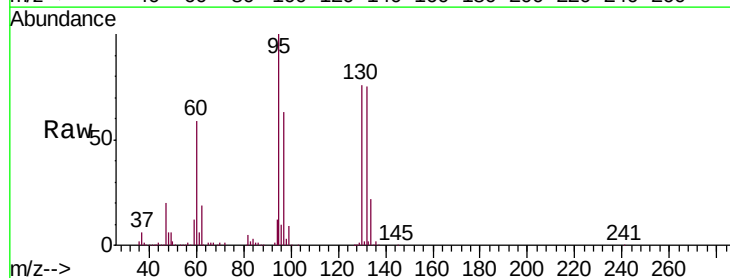
Ion Ratio Lower Upper

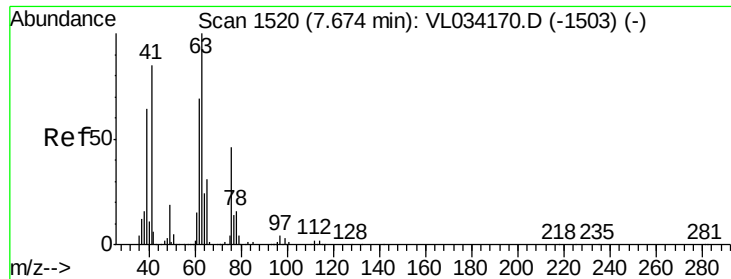
130 100

95 131.5 99.8 149.6

132 98.7 75.2 112.8

97 82.4 65.0 97.4





#39

1,2-Dichloropropane

Concen: 6.069 ppbv

RT: 7.21 min Scan# 1376

Delta R.T. -0.46 min

Lab File: VL034270.D

Acq: 9 Oct 2019 5:08

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

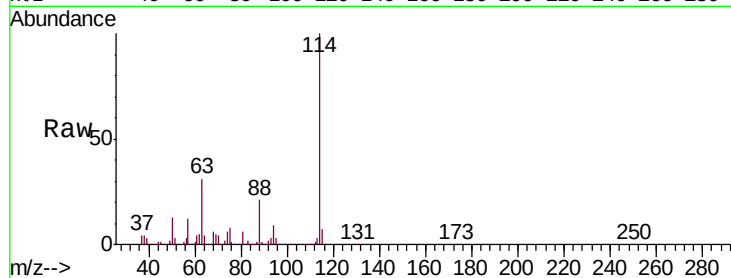
Tgt Ion: 63 Resp: 601486

Ion Ratio Lower Upper

63 100

41 0.0 68.4 102.6#

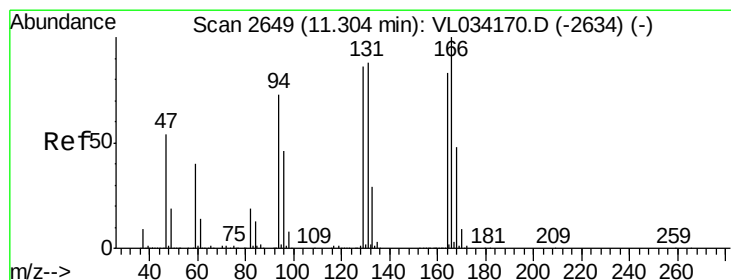
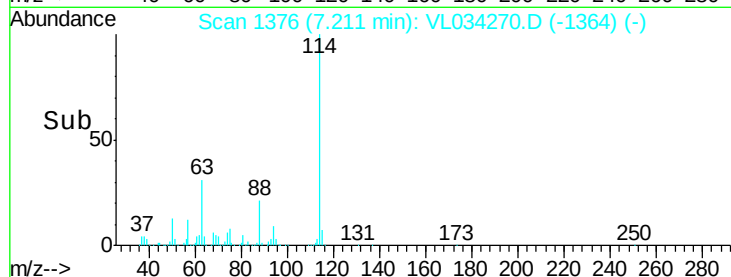
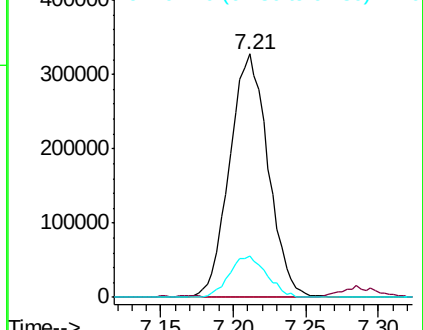
62 17.3 55.4 83.2#



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



#52

Tetrachloroethene

Concen: 27.749 ppbv

RT: 11.29 min Scan# 2644

Delta R.T. -0.02 min

Lab File: VL034270.D

Acq: 9 Oct 2019 5:08

Tgt Ion:164 Resp: 2022359

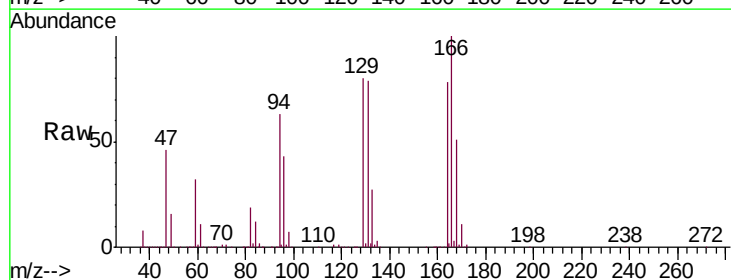
Ion Ratio Lower Upper

164 100

166 127.6 96.7 145.1

129 102.5 82.8 124.2

131 100.2 85.0 127.6

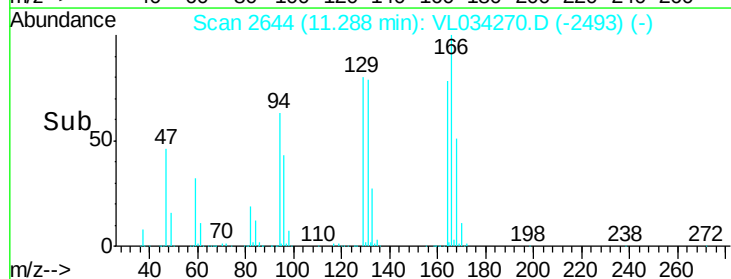
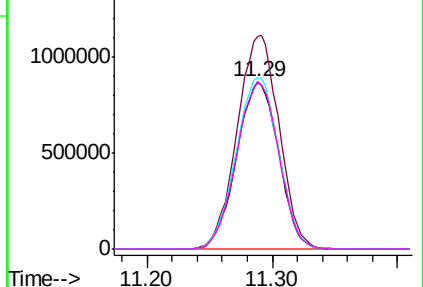


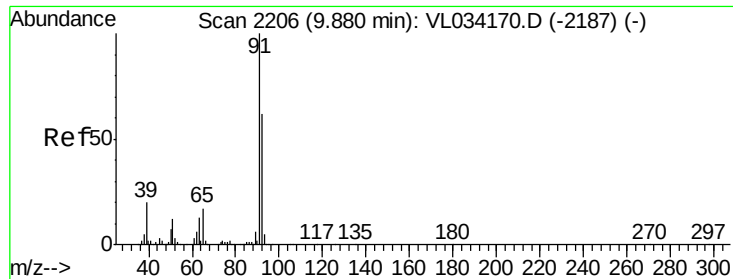
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 0.328 ppbv

RT: 9.86 min Scan# 2200

Delta R.T. -0.02 min

Lab File: VL034270.D

Acq: 9 Oct 2019 5:08

Instrument :

MSVOA_L

ClientSampleId :

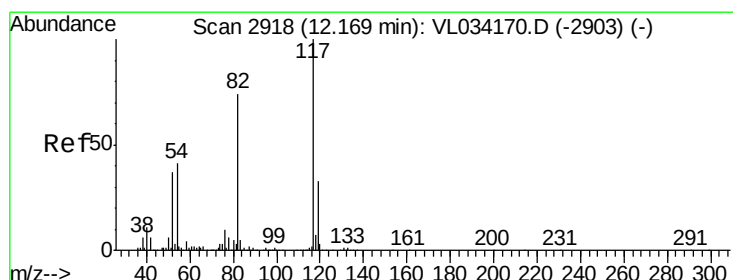
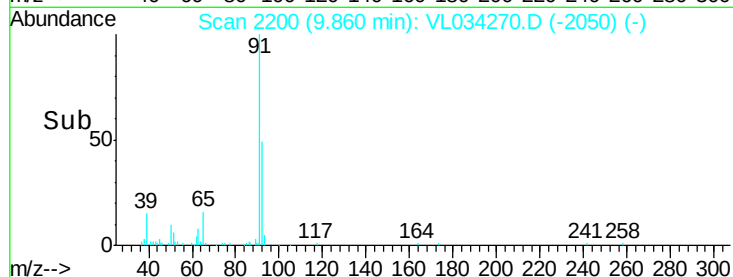
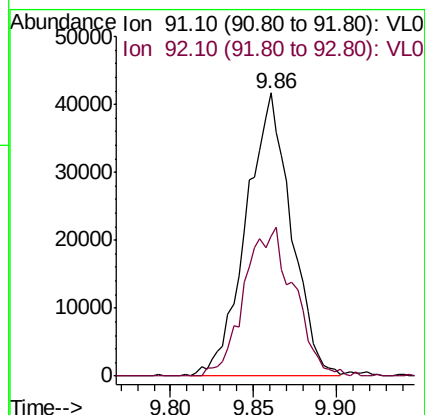
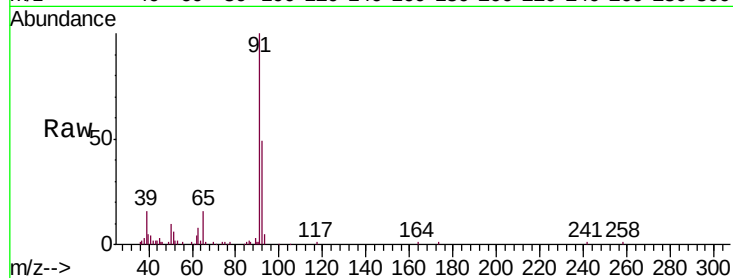
SV1DL

Tgt Ion: 91 Resp: 79044

Ion Ratio Lower Upper

91 100

92 57.8 49.0 73.6



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.15 min Scan# 2912

Delta R.T. -0.02 min

Lab File: VL034270.D

Acq: 9 Oct 2019 5:08

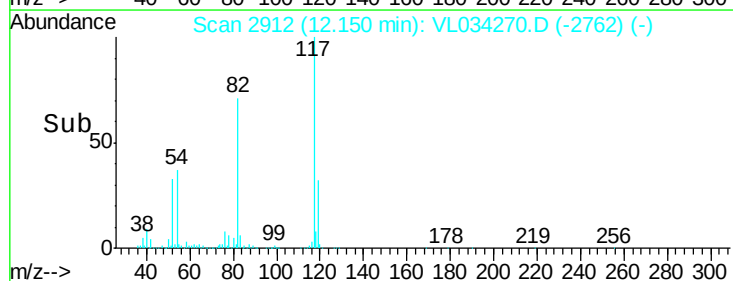
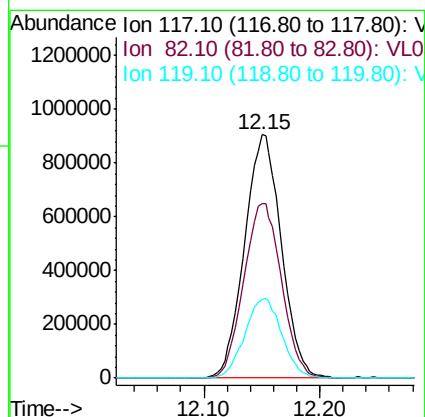
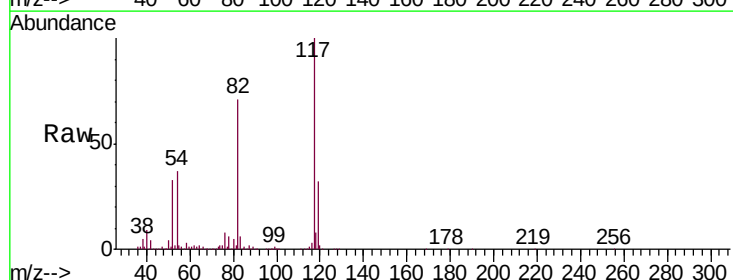
Tgt Ion: 117 Resp: 2002582

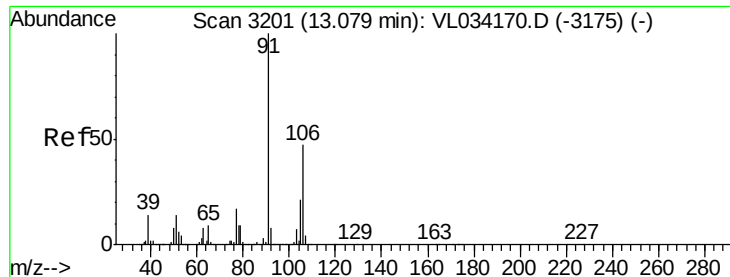
Ion Ratio Lower Upper

117 100

82 73.5 58.2 87.4

119 32.9 23.7 35.5

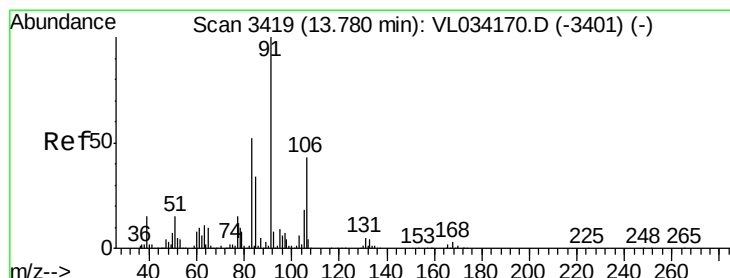
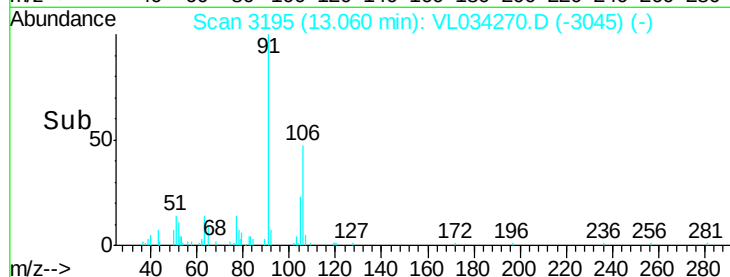
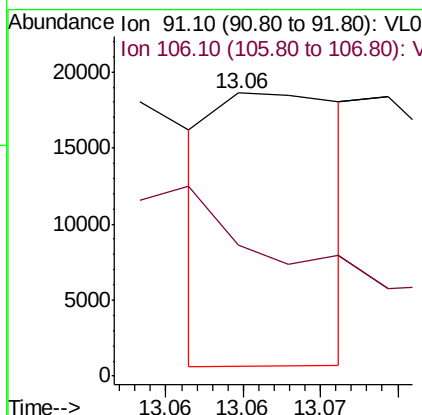
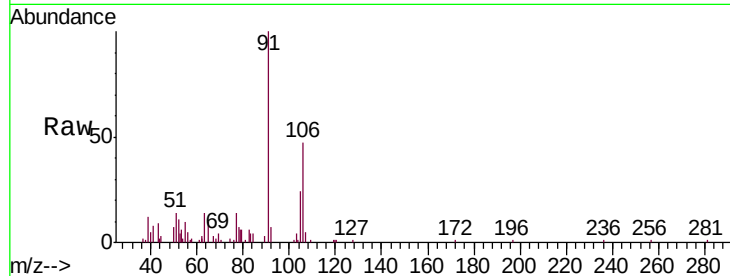




#59
m/p-Xylene
Concen: 0.038 ppbv
RT: 13.06 min Scan# 3195
Delta R.T. -0.02 min
Lab File: VL034270.D
Acq: 9 Oct 2019 5:08

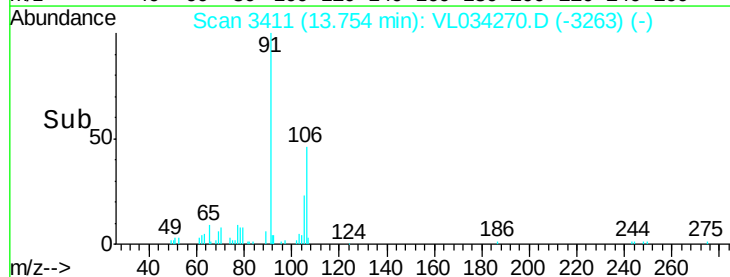
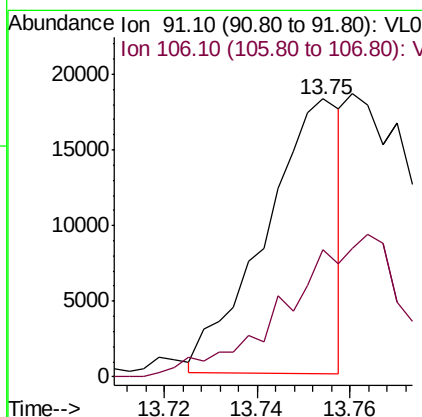
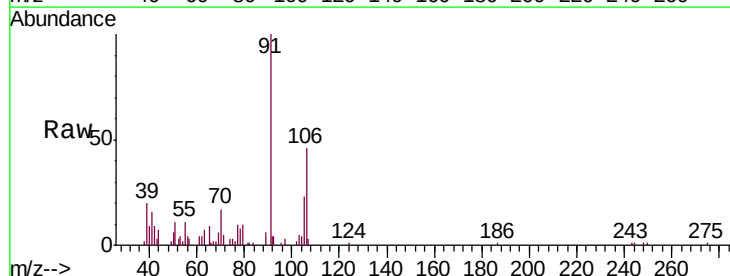
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

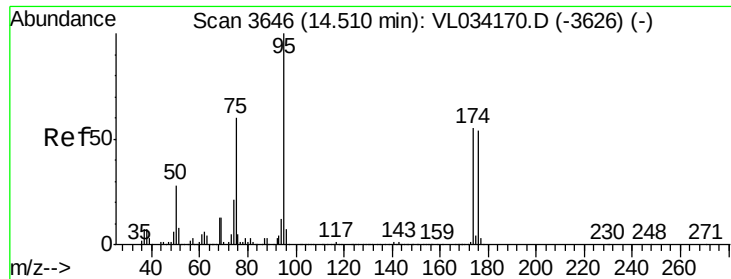
Tgt Ion: 91 Resp: 10248
Ion Ratio Lower Upper
91 100
106 0.0 35.5 53.3#



#60
o-Xylene
Concen: 0.076 ppbv
RT: 13.75 min Scan# 3411
Delta R.T. -0.03 min
Lab File: VL034270.D
Acq: 9 Oct 2019 5:08

Tgt Ion: 91 Resp: 20445
Ion Ratio Lower Upper
91 100
106 0.0 21.2 63.6#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.745 ppbv

RT: 14.49 min Scan# 3640

Delta R.T. -0.02 min

Lab File: VL034270.D

Acq: 9 Oct 2019 5:08

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

Tgt Ion: 95 Resp: 1695709

Ion Ratio Lower Upper

95 100

174 61.0 45.1 67.7

175 4.5 3.3 4.9

