

Data File : VL034697.D
Acq On : 26 Feb 2020 21:13
Operator : SY/AP
Sample : L1663-01DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
EP-104DL

Quant Time: Feb 27 07:30:41 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 26 06:58:15 2020
QLast Update : Wed Feb 26 06:58:15 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1084470	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2260808	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	2229734	10.00	ppbv	0.00

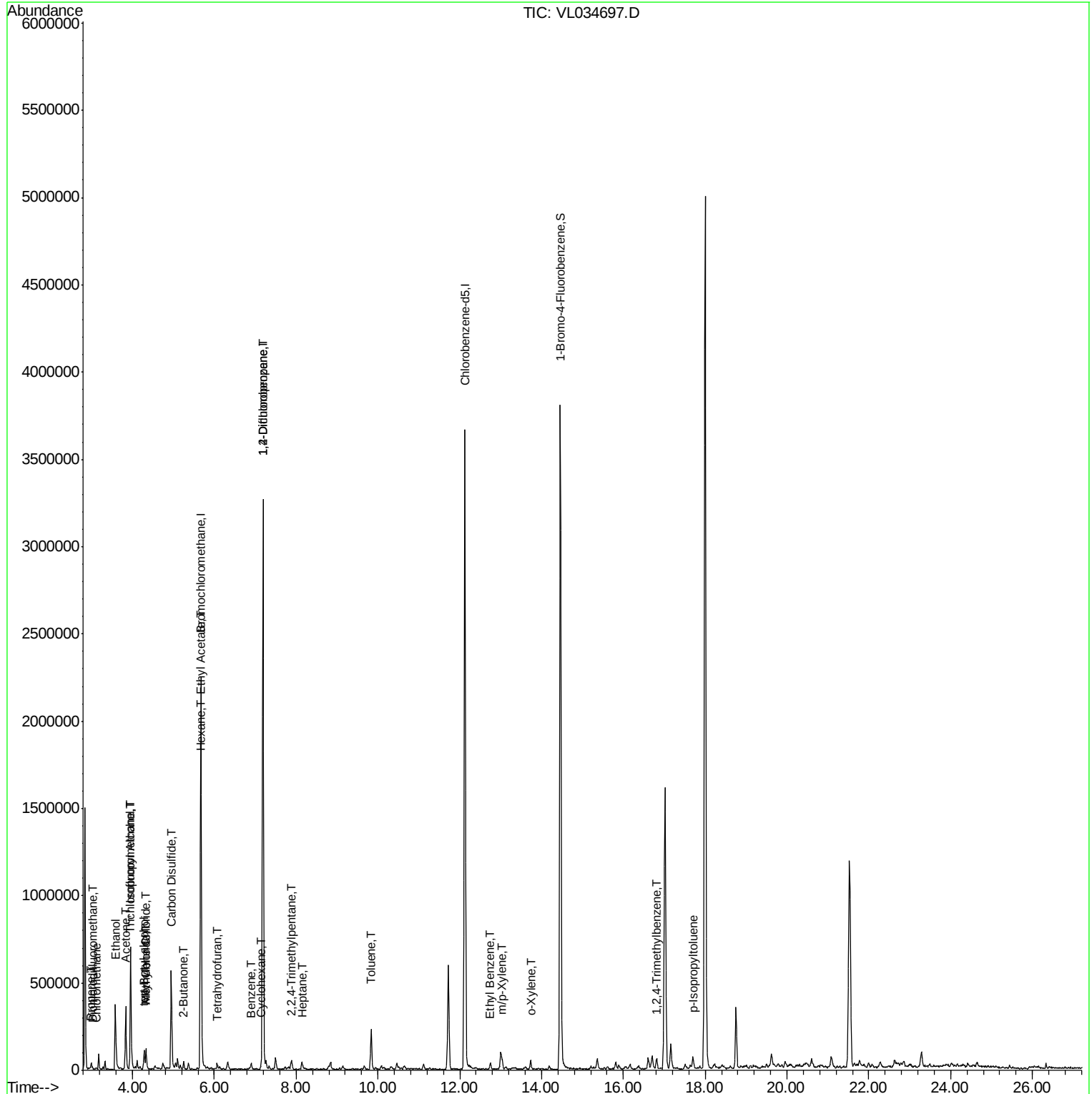
System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.46 95 1858435 10.16 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 101.60%

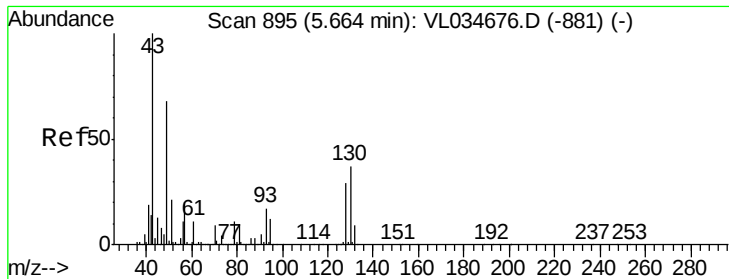
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	3.02	85	3767	0.022	ppbv	95
4) Chloromethane	3.11	50	2595	0.040	ppbv #	63
9) Propene	2.97	41	1184	0.024	ppbv #	15
10) Heptane	8.14	43	10192	0.081	ppbv #	65
11) Trichlorofluoromethane	3.93	101	3096	0.021	ppbv #	54
13) Ethanol	3.58	45	390074	25.240	ppbv	98
15) Acetone	3.83	43	348210	2.818	ppbv	98
17) tert-Butyl alcohol	4.28	59	81585	0.862	ppbv	99
19) Isopropyl Alcohol	3.95	45	731497	9.938	ppbv	99
20) Methylene Chloride	4.33	84	36309	0.790	ppbv #	80
21) Allyl Chloride	4.32	41	1878	0.023	ppbv #	1
25) Ethyl Acetate	5.68	43	39141	0.179	ppbv #	91
26) Hexane	5.69	57	39334	0.390	ppbv #	51
27) Carbon Disulfide	4.95	76	29013	0.253	ppbv #	91
30) Cyclohexane	7.14	84	1827	0.023	ppbv #	1
34) 2-Butanone	5.25	43	38416	0.270	ppbv	93
36) Benzene	6.90	78	11945	0.061	ppbv #	86
39) 1,2-Dichloropropane	7.19	63	628931	8.096	ppbv #	24
41) Tetrahydrofuran	6.05	42	2231	0.030	ppbv #	36
44) 2,2,4-Trimethylpentane	7.89	57	10175	0.030	ppbv #	1
53) Toluene	9.83	91	157815	0.760	ppbv	100
58) Ethyl Benzene	12.75	91	16531	0.061	ppbv #	76
59) m/p-Xylene	13.04	91	15247	0.065	ppbv #	32
60) o-Xylene	13.73	91	24915	0.107	ppbv	82
69) p-Isopropyltoluene	17.70	119	32150	0.092	ppbv #	63
74) 1,2,4-Trimethylbenzene	16.82	105	20081	0.073	ppbv #	71

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. 0.00 min

Lab File: VL034697.D

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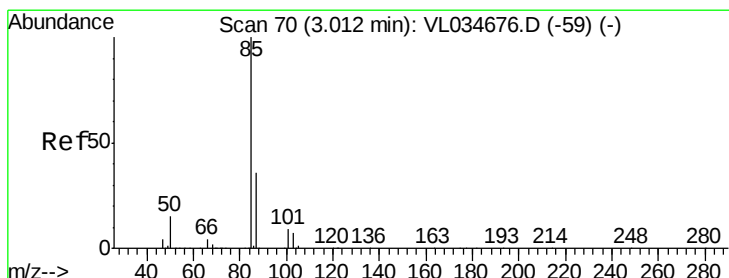
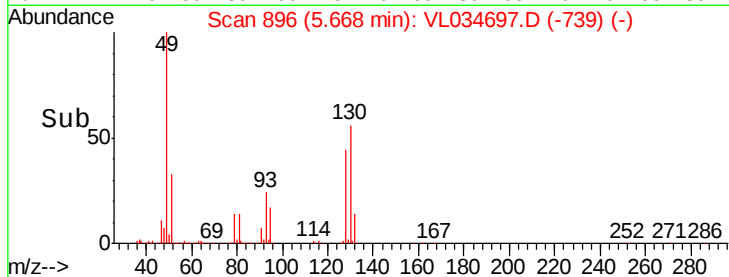
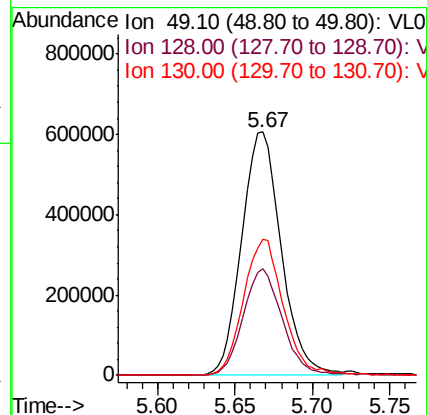
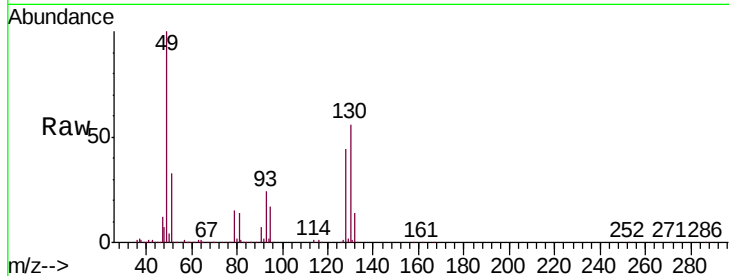
Tgt Ion: 49 Resp: 1084470

Ion Ratio Lower Upper

49 100

128 43.6 21.6 65.0

130 56.5 27.7 83.1



#2

Dichlorodifluoromethane

Concen: 0.022 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.01 min

Lab File: VL034697.D

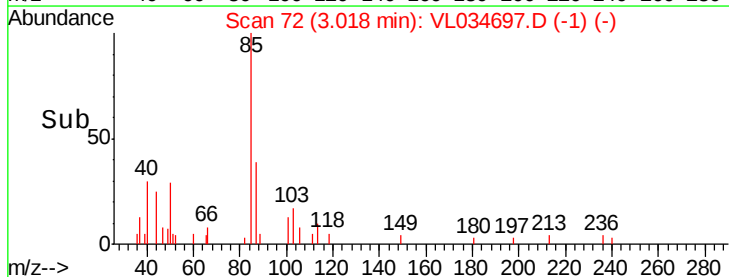
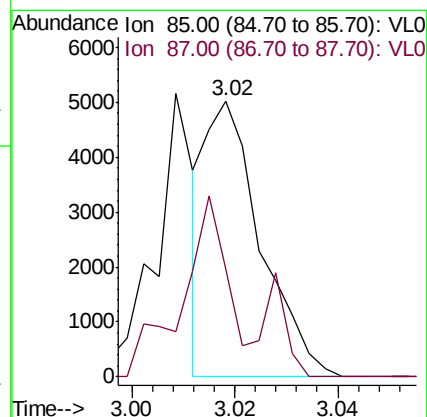
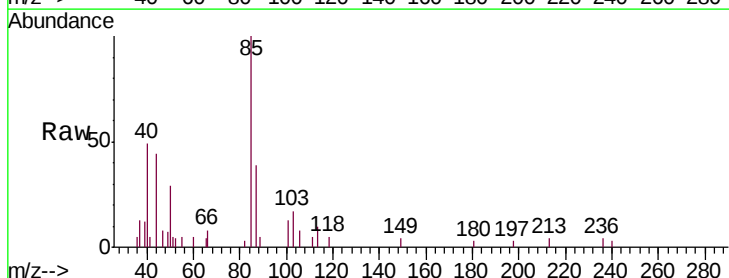
Acq: 26 Feb 2020 21:13

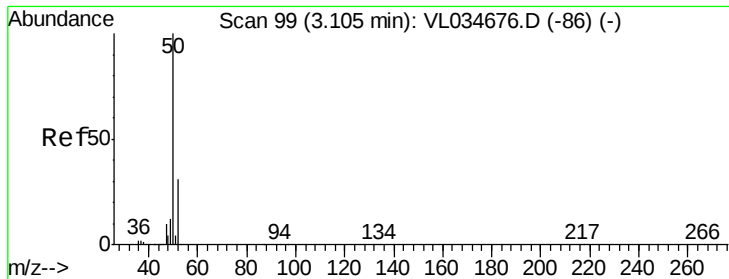
Tgt Ion: 85 Resp: 3767

Ion Ratio Lower Upper

85 100

87 39.2 29.2 43.8





#4

Chloromethane

Concen: 0.040 ppbv

RT: 3.11 min Scan# 100

Delta R.T. 0.00 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

Instrument :

MSVOA_L

ClientSampleId :

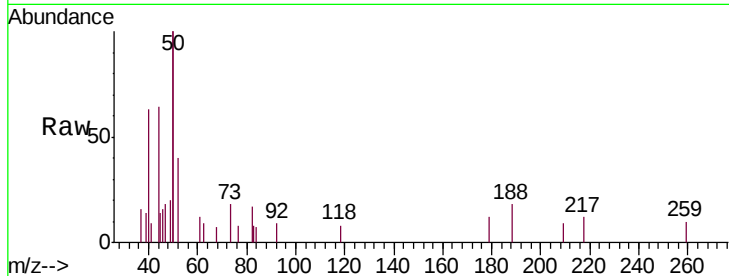
EP-104DL

Tgt Ion: 50 Resp: 2595

Ion Ratio Lower Upper

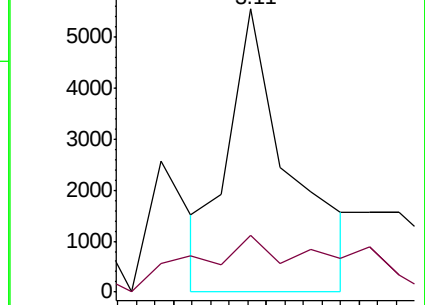
50 100

52 10.7 25.0 37.4#

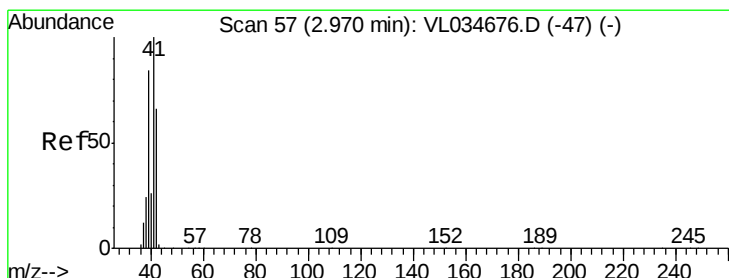
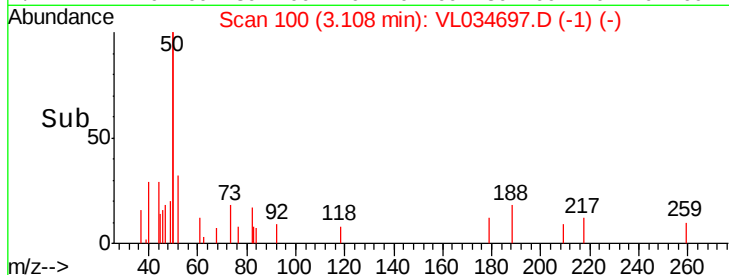


Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



Time-->



#9

Propene

Concen: 0.024 ppbv

RT: 2.97 min Scan# 57

Delta R.T. 0.00 min

Lab File: VL034697.D

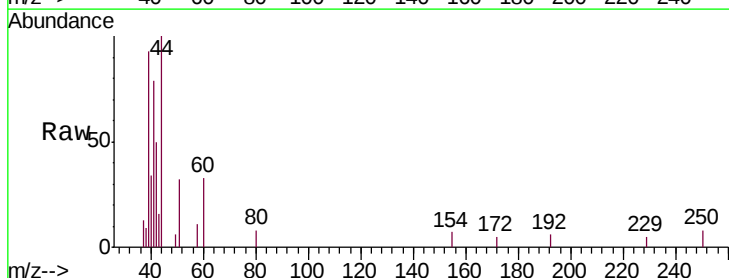
Acq: 26 Feb 2020 21:13

Tgt Ion: 41 Resp: 1184

Ion Ratio Lower Upper

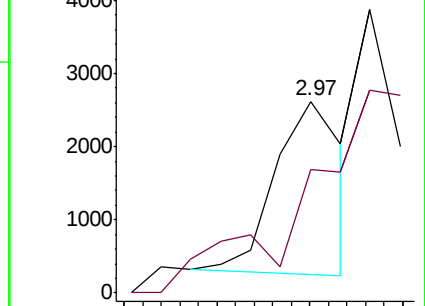
41 100

42 0.0 54.9 82.3#

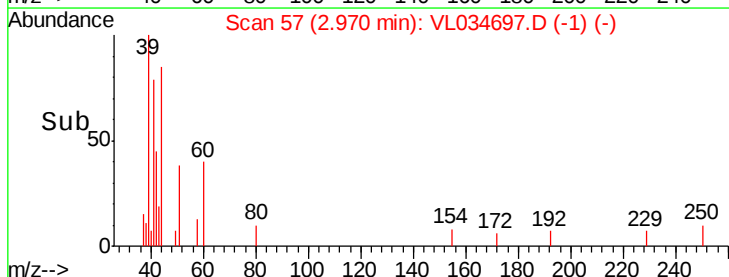


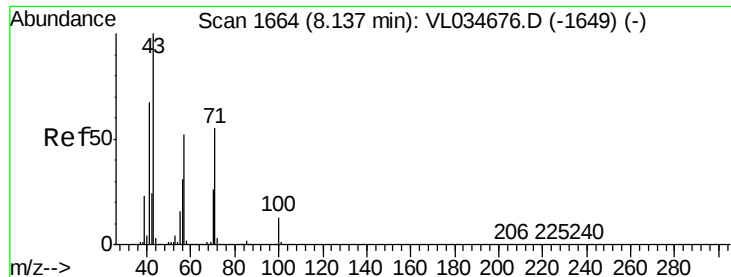
Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



Time-->





#10

Heptane

Concen: 0.081 ppbv

RT: 8.14 min Scan# 1666

Delta R.T. 0.01 min

Lab File: VL034697.D

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Instrument :

MSVOA_L

ClientSampleId :

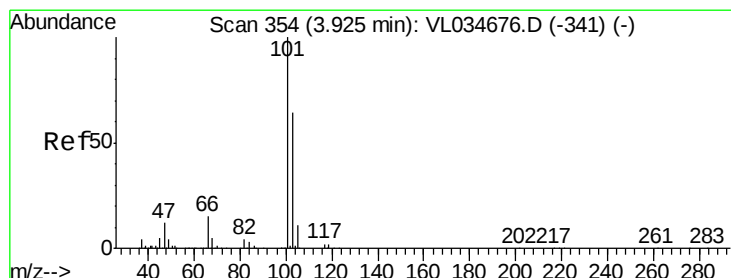
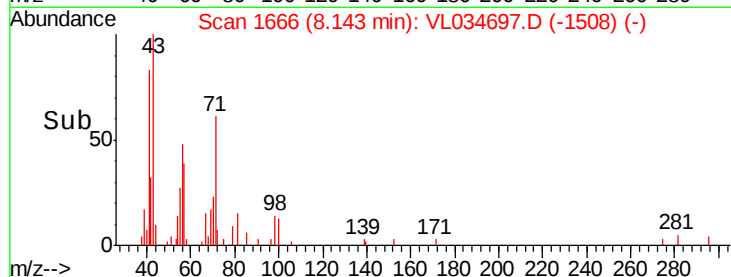
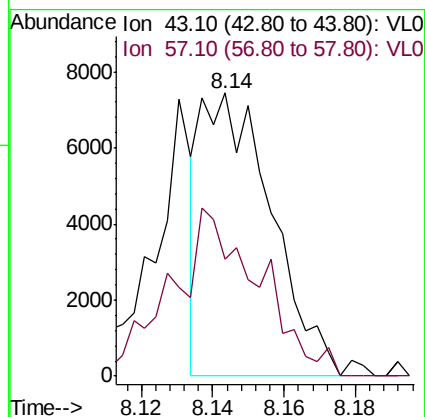
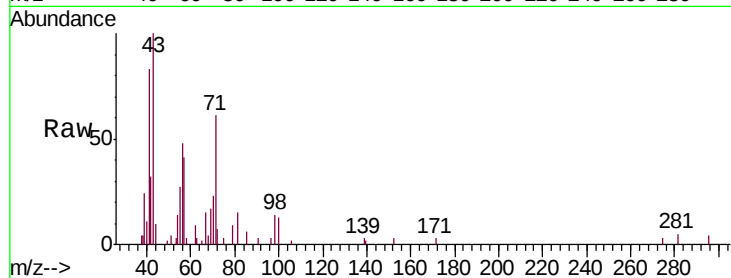
EP-104DL

Tgt Ion: 43 Resp: 10192

Ion Ratio Lower Upper

43 100

57 75.6 41.0 61.6#



#11

Trichlorofluoromethane

Concen: 0.021 ppbv

RT: 3.93 min Scan# 356

Delta R.T. 0.01 min

Lab File: VL034697.D

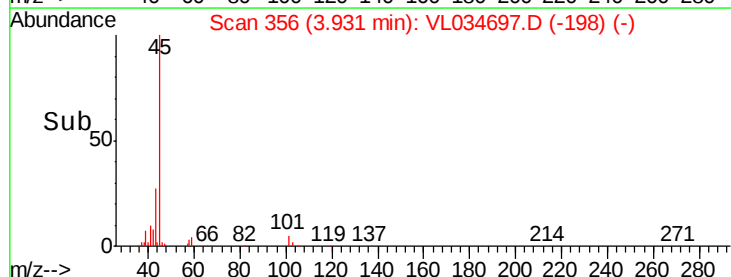
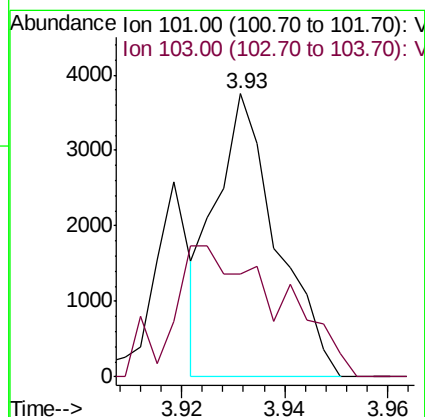
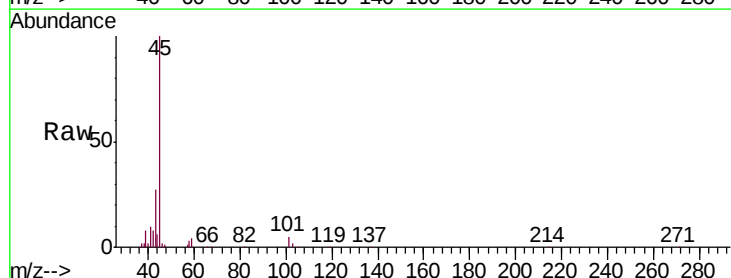
Acq: 26 Feb 2020 21:13

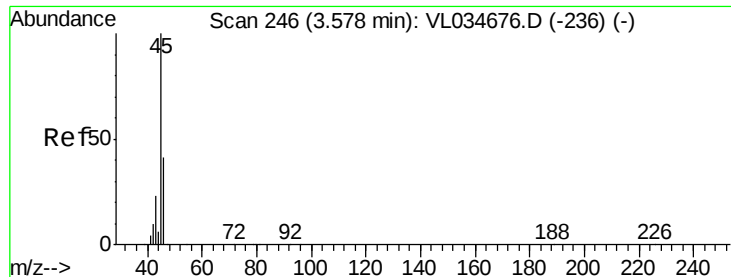
Tgt Ion: 101 Resp: 3096

Ion Ratio Lower Upper

101 100

103 28.1 51.2 76.8#





#13

Ethanol

Concen: 25.240 ppbv

RT: 3.58 min Scan# 246

Delta R.T. 0.00 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

Instrument :

MSVOA_L

ClientSampleId :

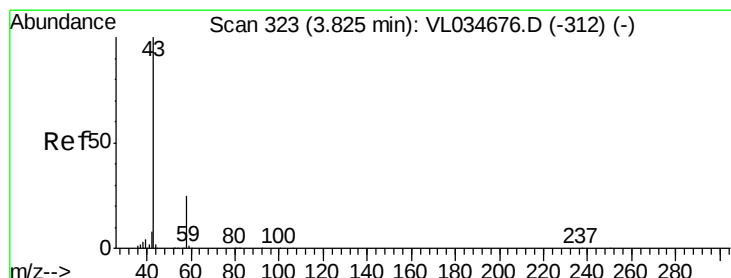
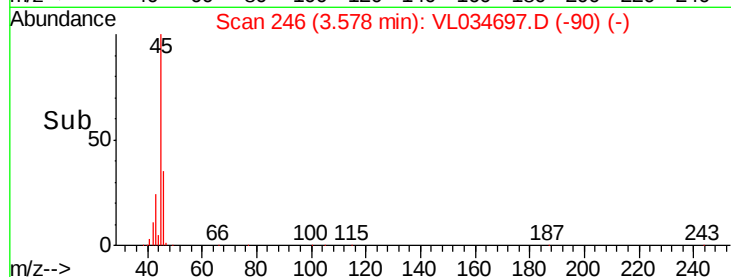
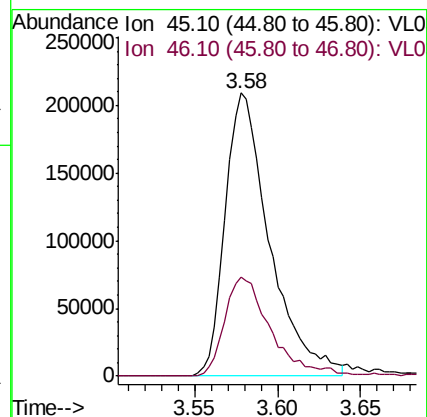
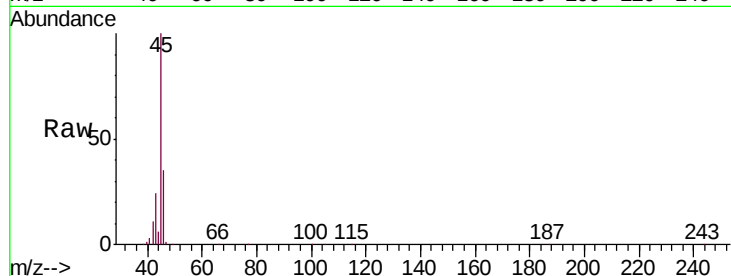
EP-104DL

Tgt Ion: 45 Resp: 390074

Ion Ratio Lower Upper

45 100

46 37.0 15.4 61.4



#15

Acetone

Concen: 2.818 ppbv

RT: 3.83 min Scan# 325

Delta R.T. 0.01 min

Lab File: VL034697.D

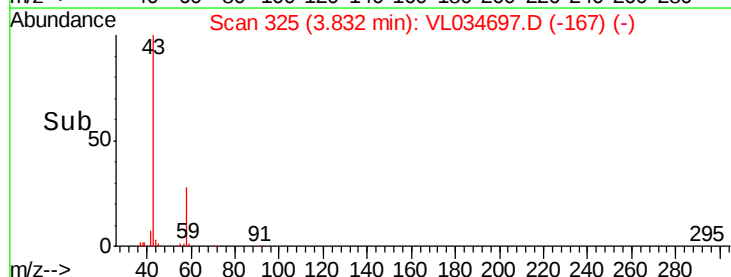
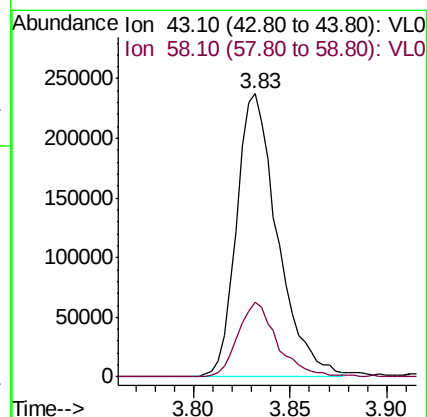
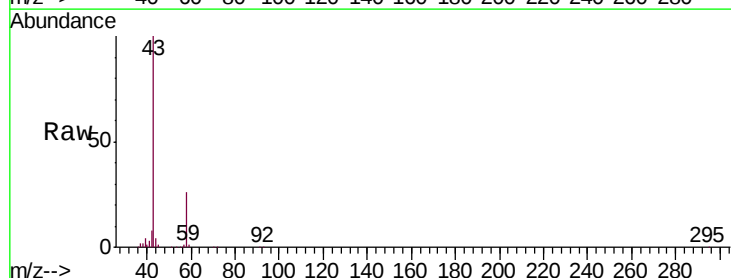
Acq: 26 Feb 2020 21:13

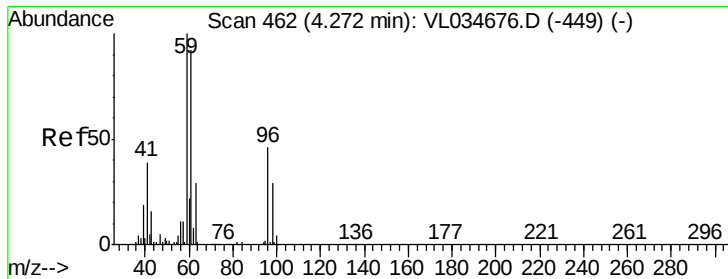
Tgt Ion: 43 Resp: 348210

Ion Ratio Lower Upper

43 100

58 25.6 21.4 32.0





#17

tert-Butyl alcohol

Concen: 0.862 ppbv

RT: 4.28 min Scan# 465

Delta R.T. 0.01 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

Instrument :

MSVOA_L

ClientSampleId :

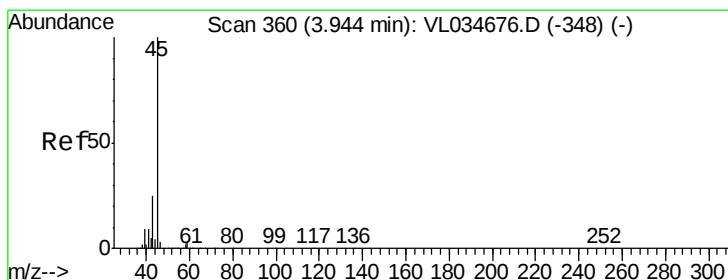
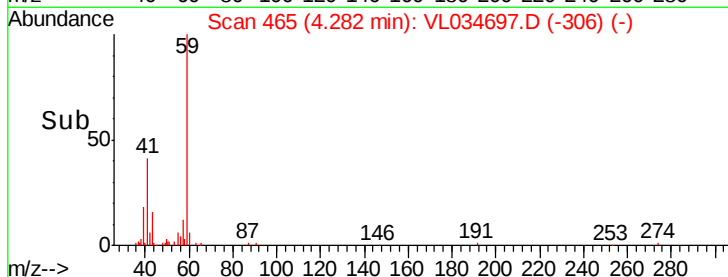
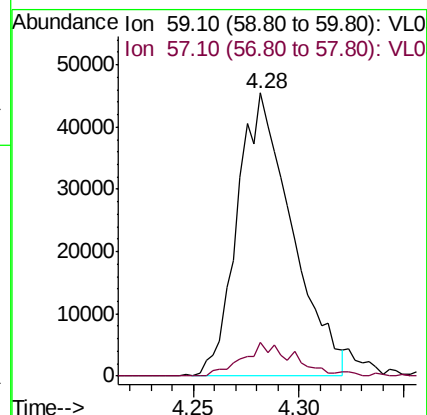
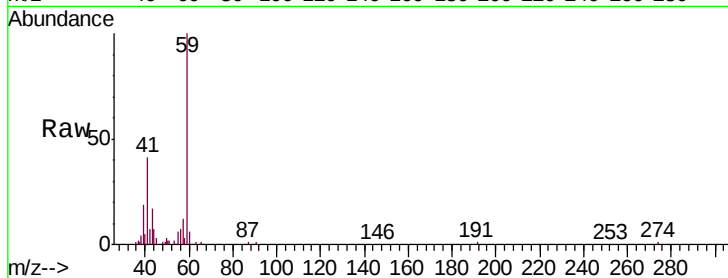
EP-104DL

Tgt Ion: 59 Resp: 81585

Ion Ratio Lower Upper

59 100

57 11.5 8.8 13.2



#19

Isopropyl Alcohol

Concen: 9.938 ppbv

RT: 3.95 min Scan# 361

Delta R.T. 0.00 min

Lab File: VL034697.D

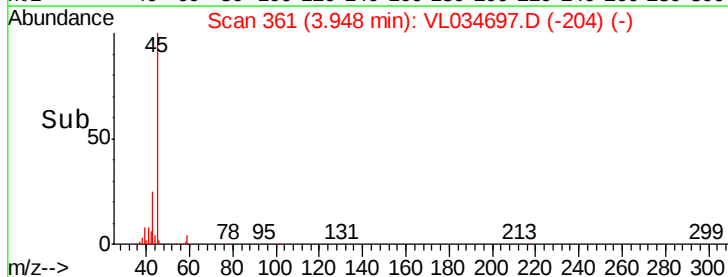
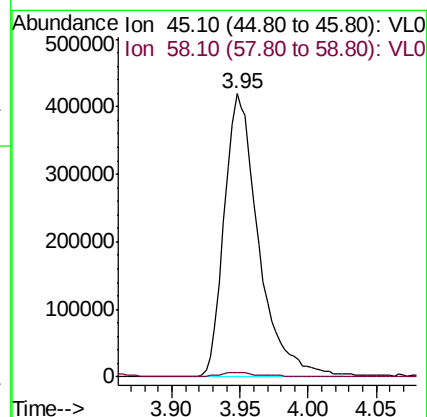
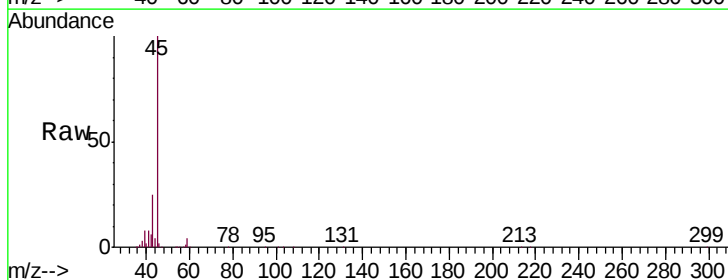
Acq: 26 Feb 2020 21:13

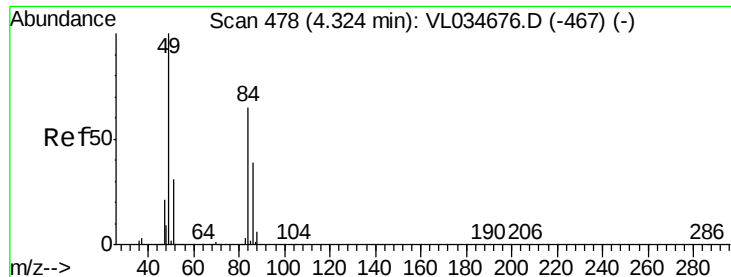
Tgt Ion: 45 Resp: 731497

Ion Ratio Lower Upper

45 100

58 1.9 1.8 2.6





#20

Methylene Chloride

Concen: 0.790 ppbv

RT: 4.33 min Scan# 480

Delta R.T. 0.01 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

Instrument :

MSVOA_L

ClientSampleId :

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Tgt Ion: 84 Resp: 36309

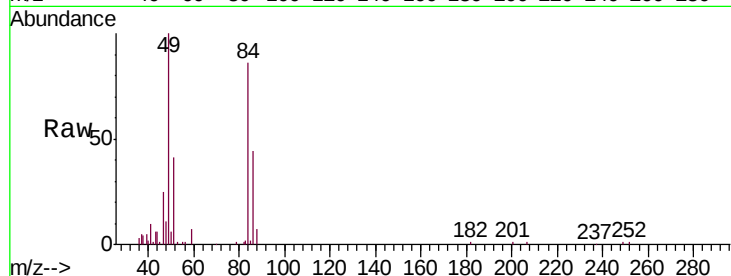
Ion Ratio Lower Upper

84 100

49 115.7 122.8 184.2#

51 46.4 38.6 58.0

86 51.2 47.7 71.5

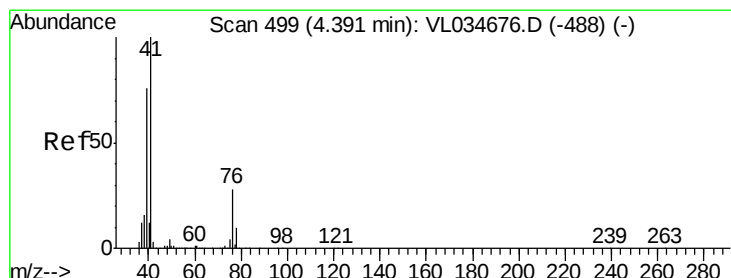
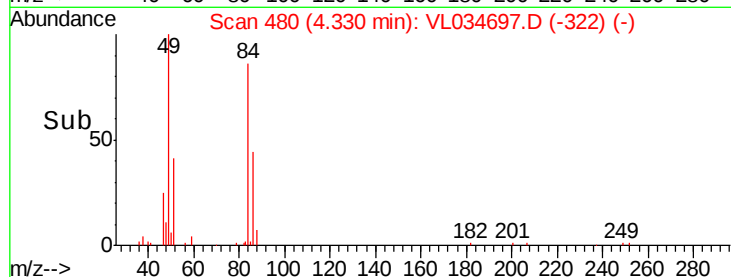
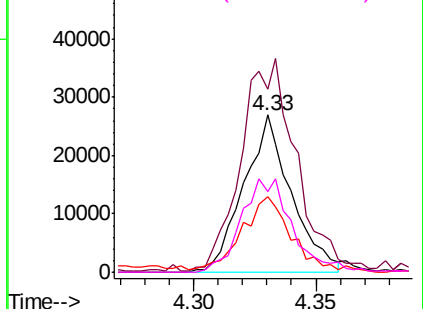


Abundance Ion 84.00 (83.70 to 84.70): VL0

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: 0.023 ppbv

RT: 4.32 min Scan# 476

Delta R.T. -0.07 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

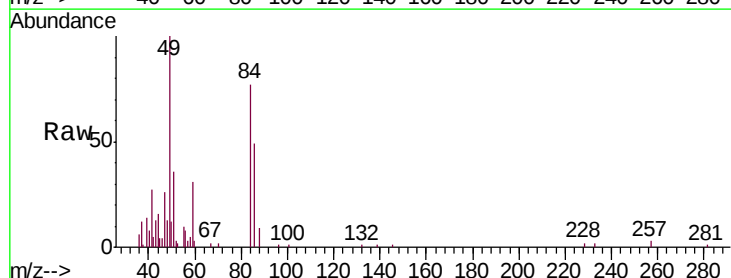
Tgt Ion: 41 Resp: 1878

Ion Ratio Lower Upper

41 100

76 11.9 22.8 34.2#

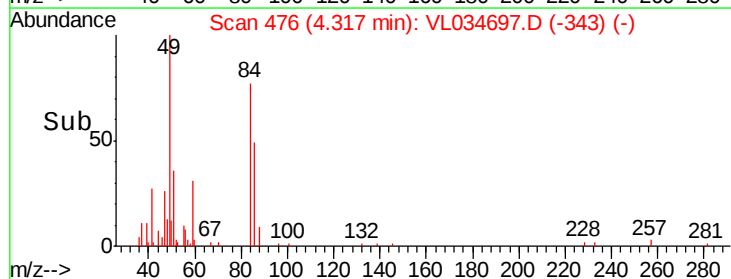
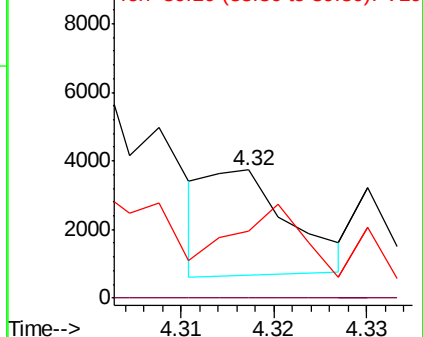
39 242.2 61.7 92.5#

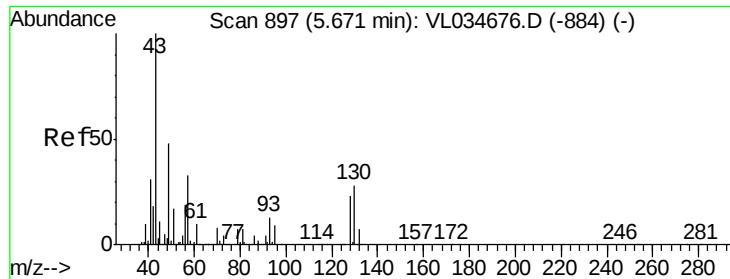


Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0

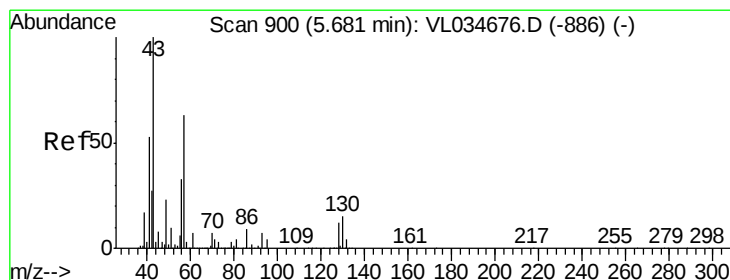
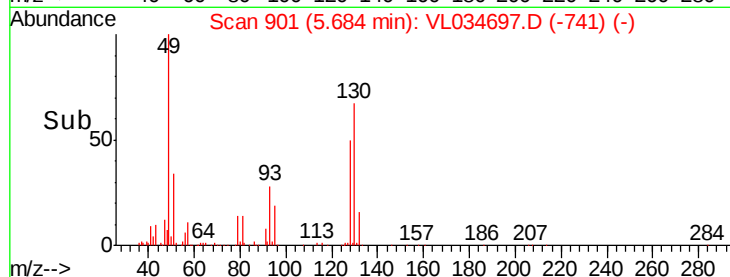
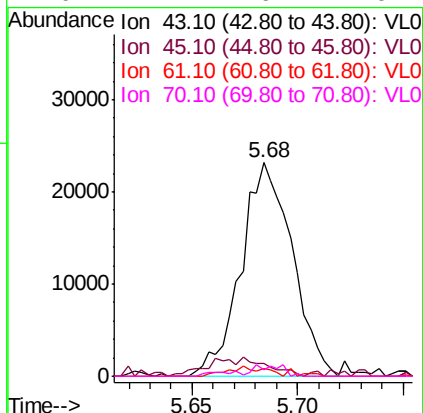
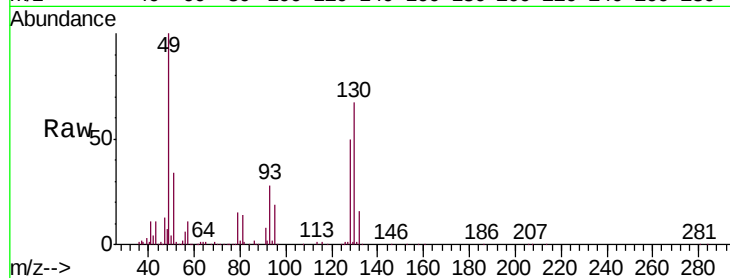




#25
Ethyl Acetate
Concen: 0.179 ppbv
RT: 5.68 min Scan# 901
Delta R.T. 0.01 min
Lab File: VL034697.D
Acq: 26 Feb 2020 21:13

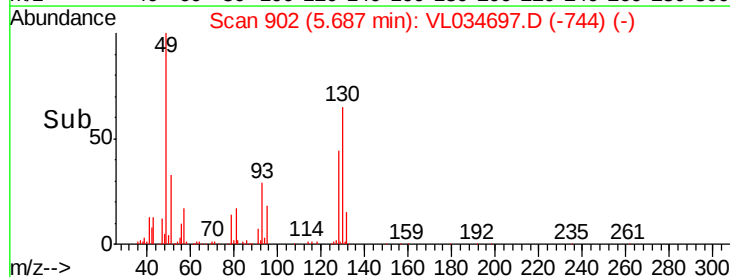
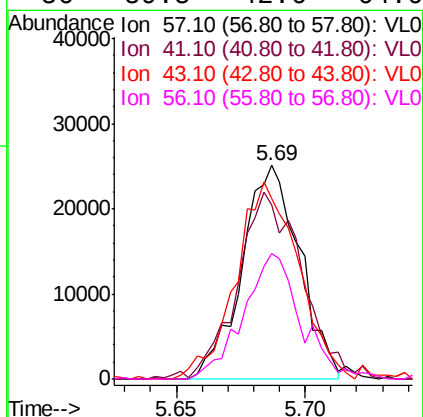
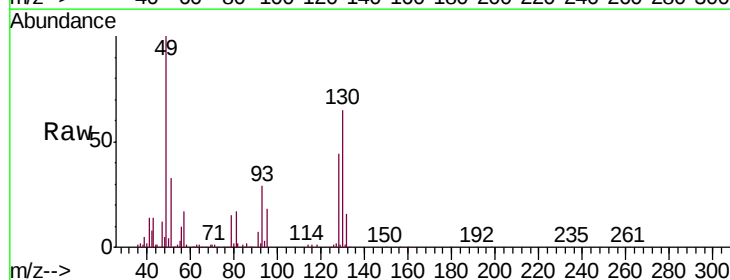
Instrument :
MSVOA_L
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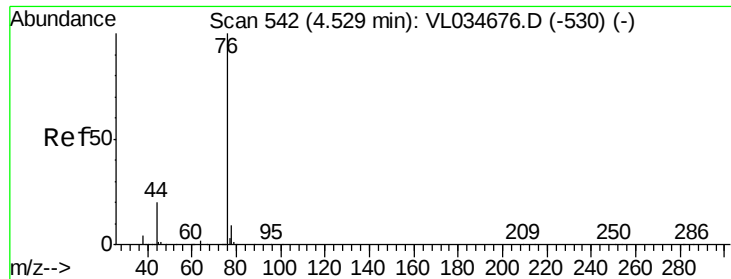
Tgt Ion:	43	Resp:	39141
Ion	Ratio	Lower	Upper
43	100		
45	11.5	8.2	12.4
61	4.1	7.8	11.6#
70	4.1	6.1	9.1#



#26
Hexane
Concen: 0.390 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.01 min
Lab File: VL034697.D
Acq: 26 Feb 2020 21:13

Tgt Ion:	57	Resp:	39334
Ion	Ratio	Lower	Upper
57	100		
41	98.1	70.3	105.5
43	102.3	177.0	265.4#
56	59.5	42.6	64.0





#27

Carbon Disulfide

Concen: 0.253 ppbv

RT: 4.95 min Scan# 672

Delta R.T. 0.42 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

Instrument :

MSVOA_L

ClientSampleId :

EP-104DL

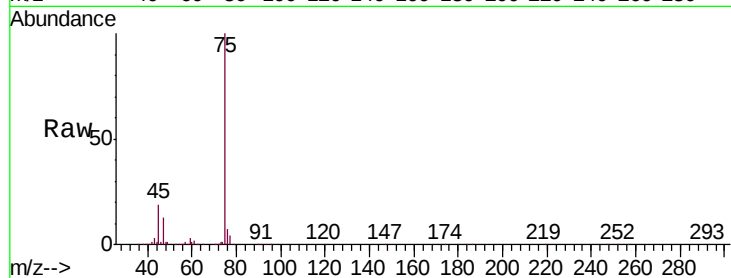
Tgt Ion: 76 Resp: 29013

Ion Ratio Lower Upper

76 100

44 16.4 15.3 22.9

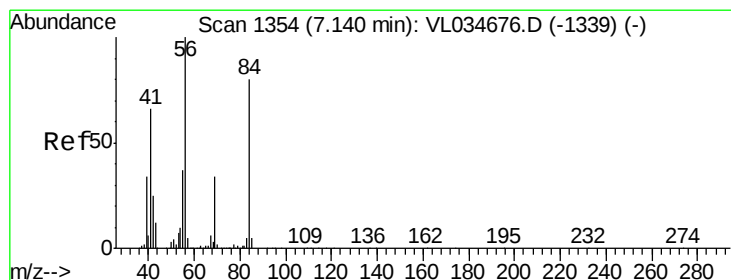
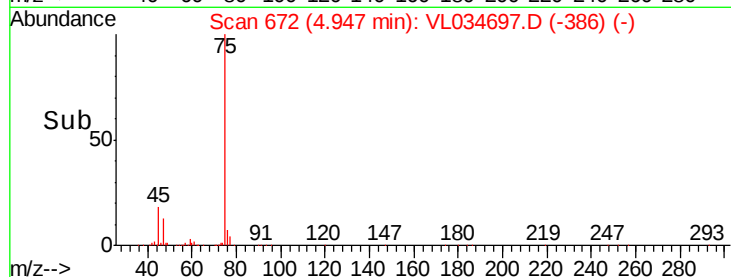
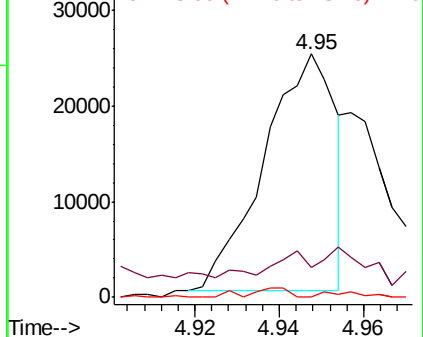
78 3.7 7.6 11.4#



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: 0.023 ppbv

RT: 7.14 min Scan# 1354

Delta R.T. 0.00 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

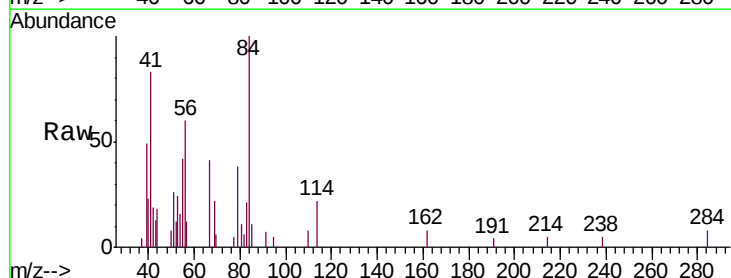
Tgt Ion: 84 Resp: 1827

Ion Ratio Lower Upper

84 100

56 0.0 113.4 170.2#

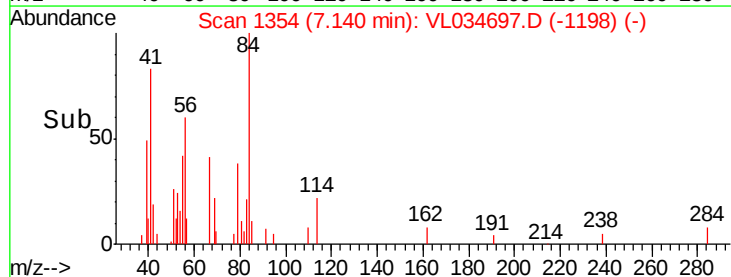
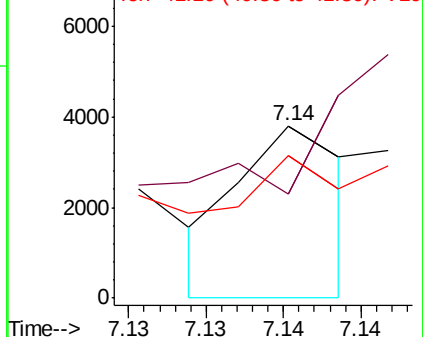
41 419.3 68.2 102.4#

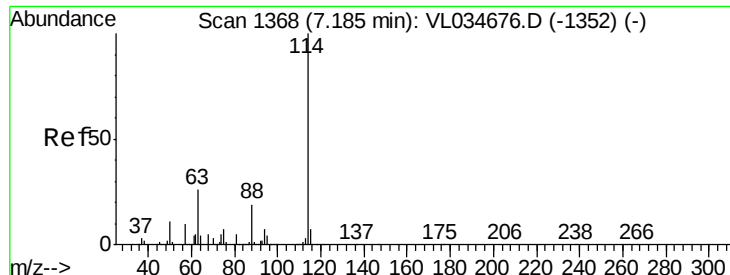


Abundance Ion 84.20 (83.90 to 84.90): VL0

Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

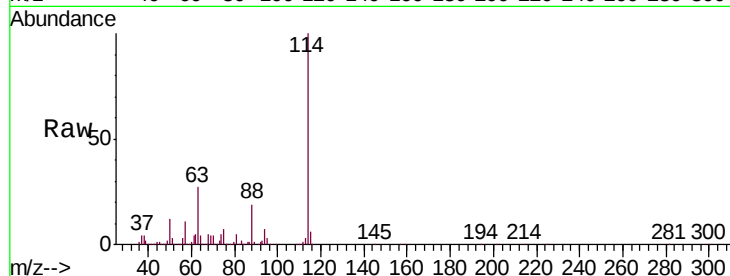




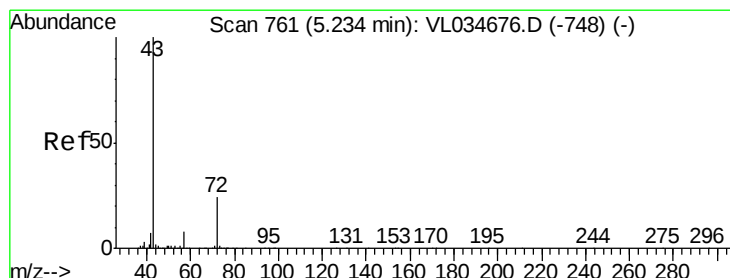
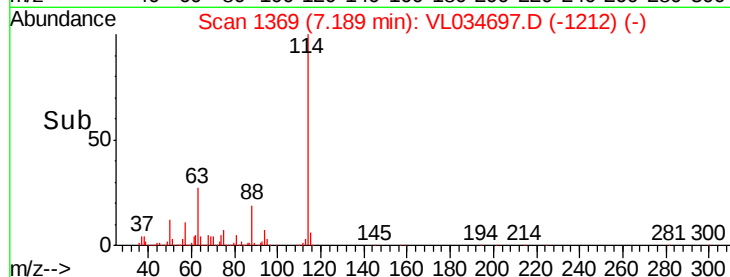
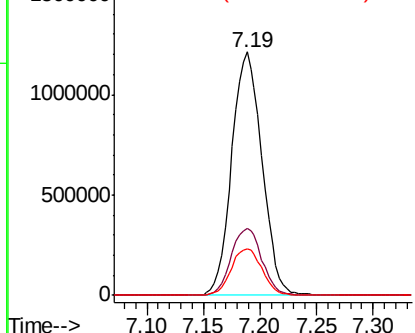
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1369
 Delta R.T. 0.00 min
 Lab File: VL034697.D
 Acq: 26 Feb 2020 21:13

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-104DL

Tgt Ion:114 Resp: 2260808
 Ion Ratio Lower Upper
 114 100
 63 28.0 22.9 34.3
 88 19.6 15.8 23.6

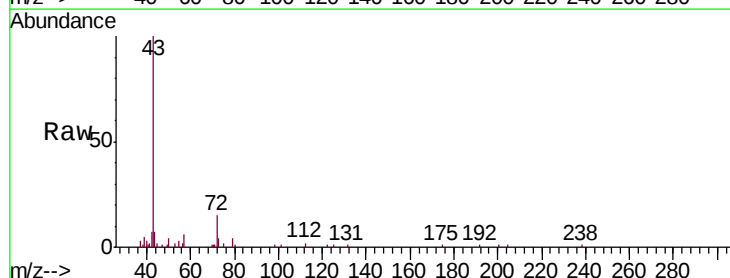


Abundance Ion 114.10 (113.80 to 114.80): V
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

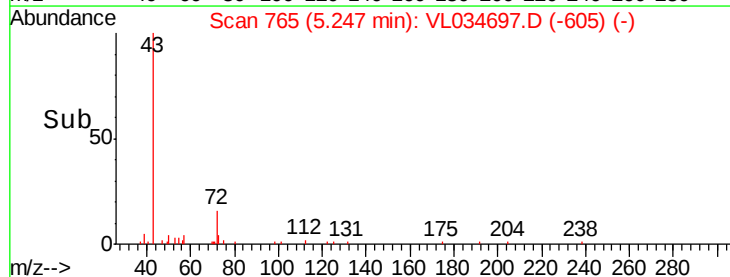
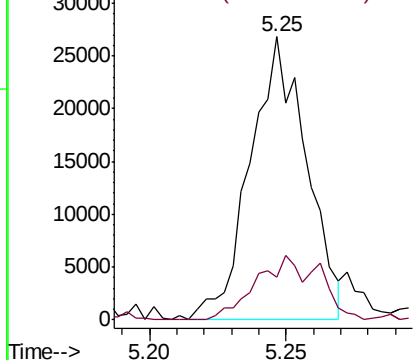


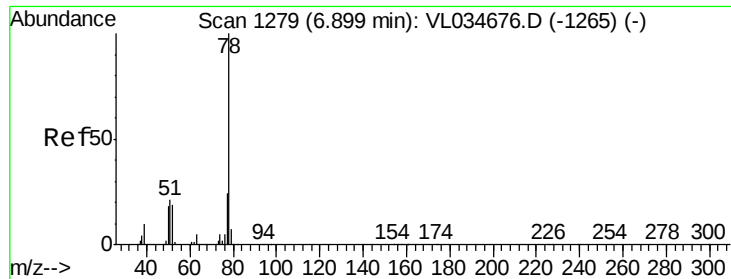
#34
 2-Butanone
 Concen: 0.270 ppbv
 RT: 5.25 min Scan# 765
 Delta R.T. 0.01 min
 Lab File: VL034697.D
 Acq: 26 Feb 2020 21:13

Tgt Ion: 43 Resp: 38416
 Ion Ratio Lower Upper
 43 100
 72 26.3 18.2 27.2



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





#36

Benzene

Concen: 0.061 ppbv

RT: 6.90 min Scan# 1279

Delta R.T. 0.00 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

Instrument :

MSVOA_L

ClientSampleId :

EP-104DL

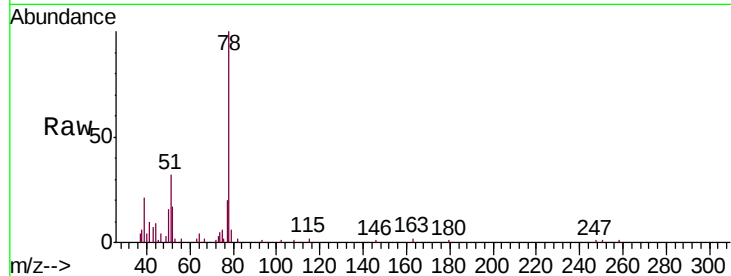
Tgt Ion: 78 Resp: 11945

Ion Ratio Lower Upper

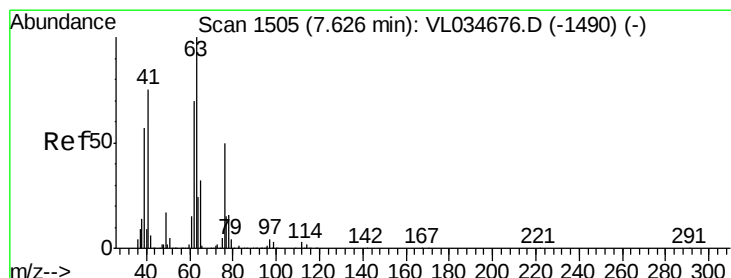
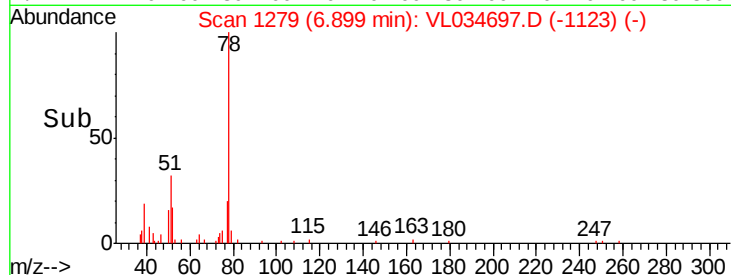
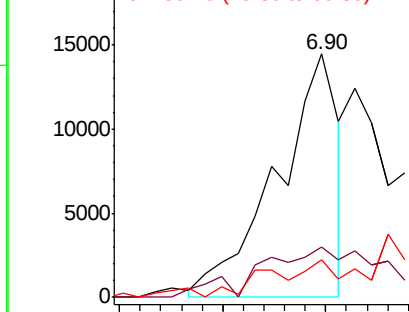
78 100

77 17.5 19.5 29.3#

50 12.0 14.6 21.8#



Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0



#39

1,2-Dichloropropane

Concen: 8.096 ppbv

RT: 7.19 min Scan# 1369

Delta R.T. -0.44 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

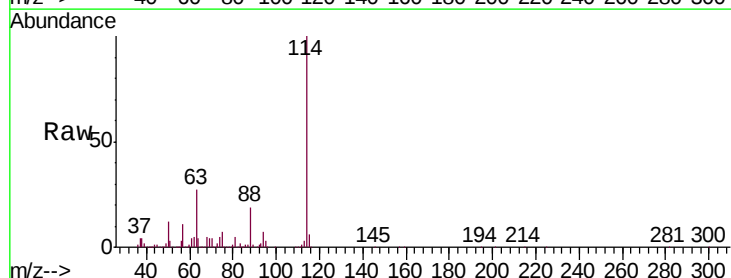
Tgt Ion: 63 Resp: 628931

Ion Ratio Lower Upper

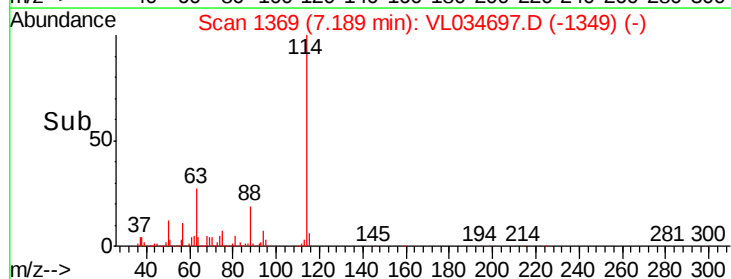
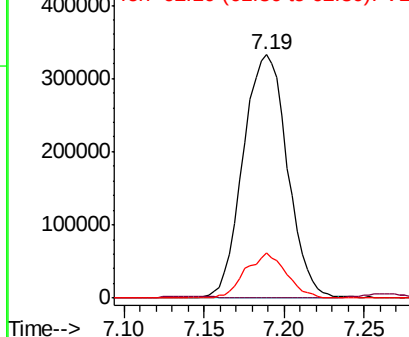
63 100

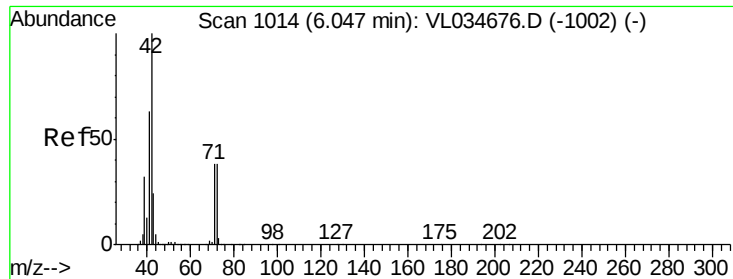
41 0.0 60.2 90.4#

62 18.4 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





#41

Tetrahydrofuran

Concen: 0.030 ppbv

RT: 6.05 min Scan# 1015

Delta R.T. 0.00 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

Instrument :

MSVOA_L

ClientSampled :

EP-104DL

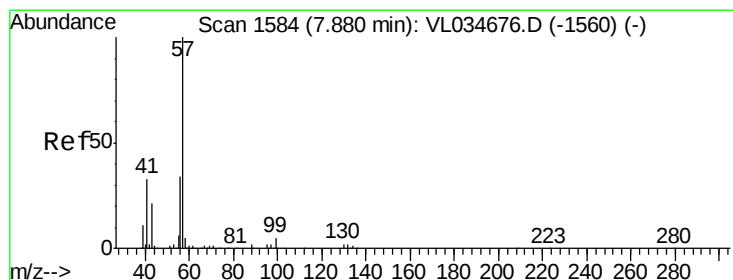
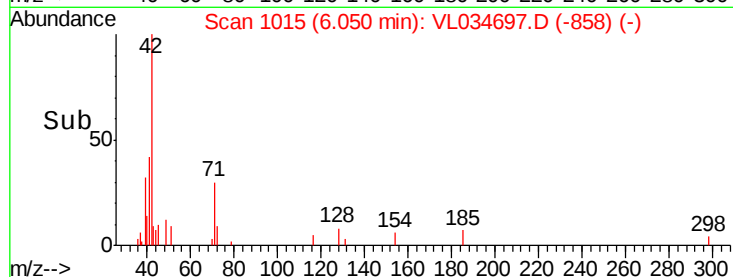
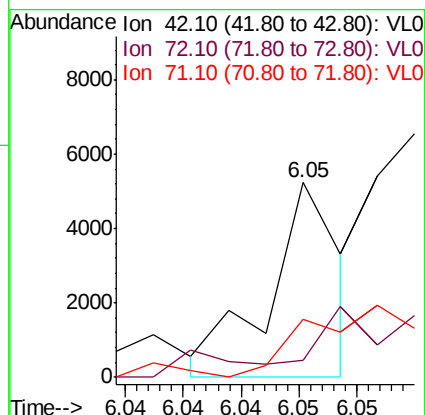
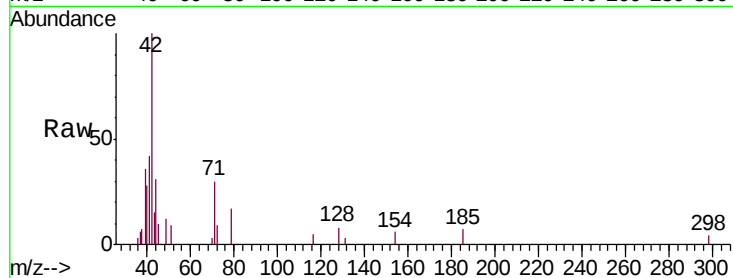
Tgt Ion: 42 Resp: 2231

Ion Ratio Lower Upper

42 100

72 0.0 31.7 47.5#

71 0.0 30.7 46.1#



#44

2,2,4-Trimethylpentane

Concen: 0.030 ppbv

RT: 7.89 min Scan# 1587

Delta R.T. 0.01 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

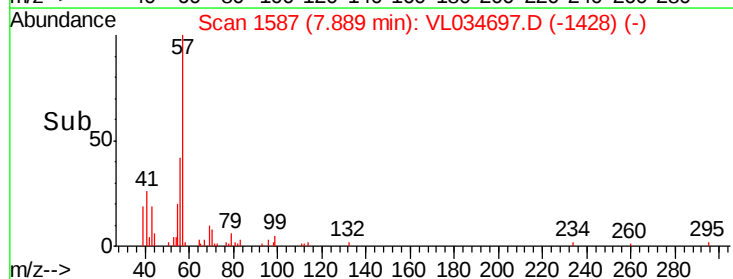
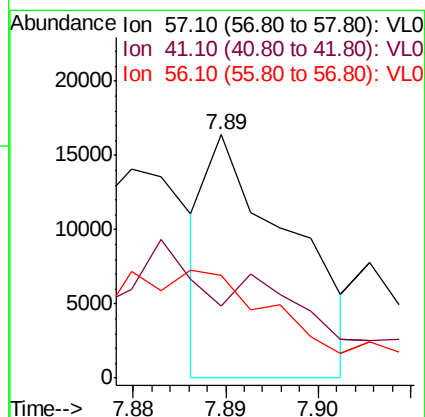
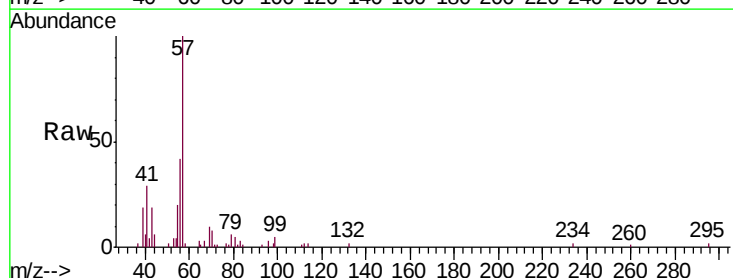
Tgt Ion: 57 Resp: 10175

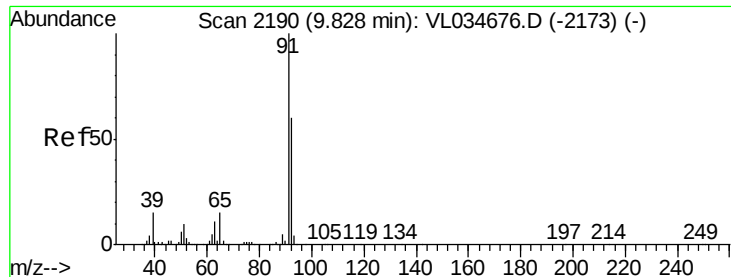
Ion Ratio Lower Upper

57 100

41 162.7 26.0 39.0#

56 142.0 25.6 38.4#





#53

Toluene

Concen: 0.760 ppbv

RT: 9.83 min Scan# 2192

Delta R.T. 0.01 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

Instrument :

MSVOA_L

ClientSampleId :

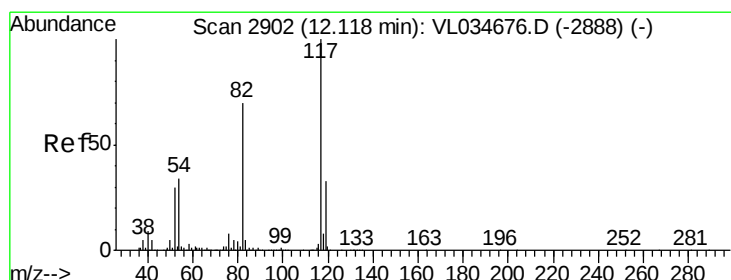
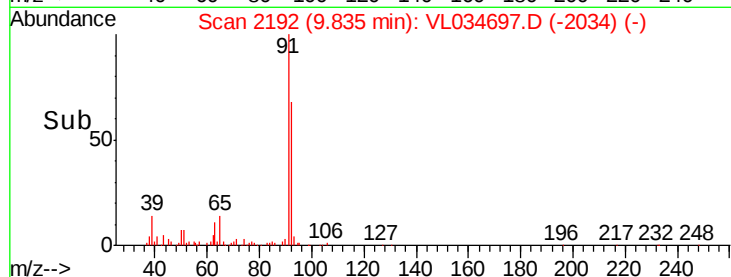
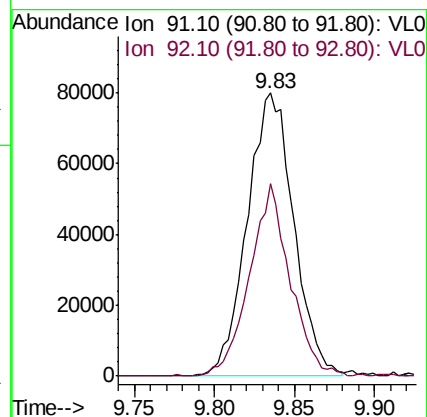
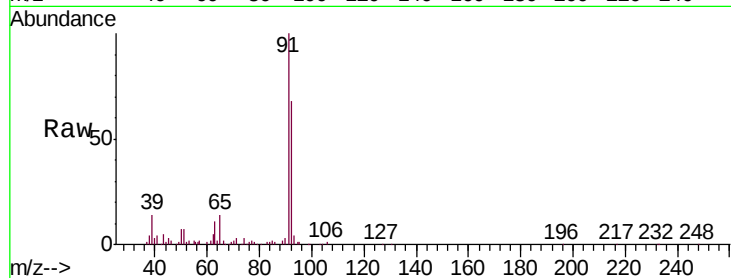
EP-104DL

Tgt Ion: 91 Resp: 157815

Ion Ratio Lower Upper

91 100

92 60.4 48.5 72.7



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2904

Delta R.T. 0.01 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

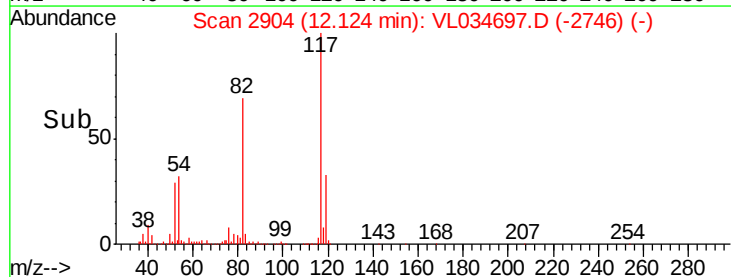
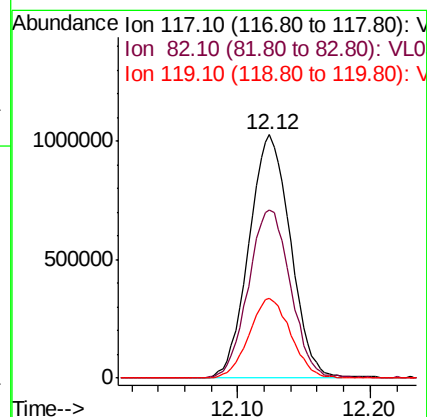
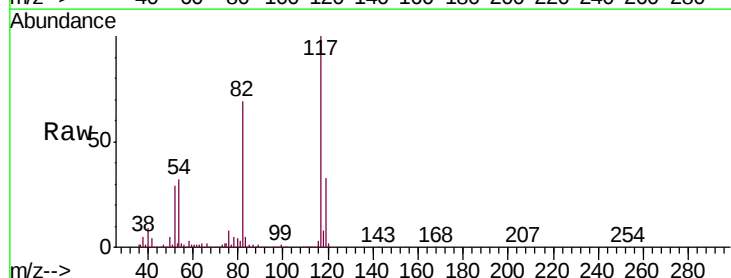
Tgt Ion: 117 Resp: 2229734

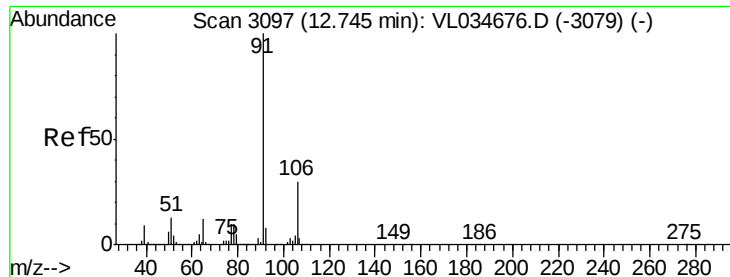
Ion Ratio Lower Upper

117 100

82 70.5 54.1 81.1

119 33.2 27.6 41.4





#58

Ethyl Benzene

Concen: 0.061 ppbv

RT: 12.75 min Scan# 3100

Delta R.T. 0.01 min

Lab File: VL034697.D

Acq: 26 Feb 2020 21:13

Instrument :

MSVOA_L

ClientSampleId :

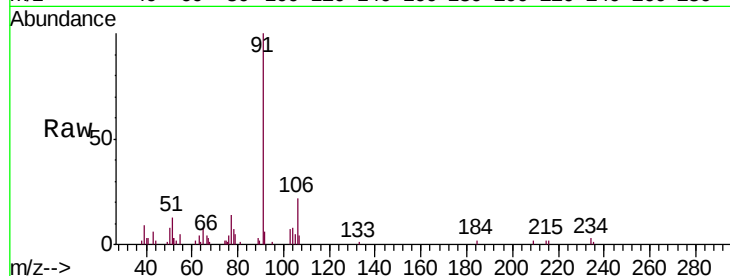
EP-104DL

Tgt Ion: 91 Resp: 16531

Ion Ratio Lower Upper

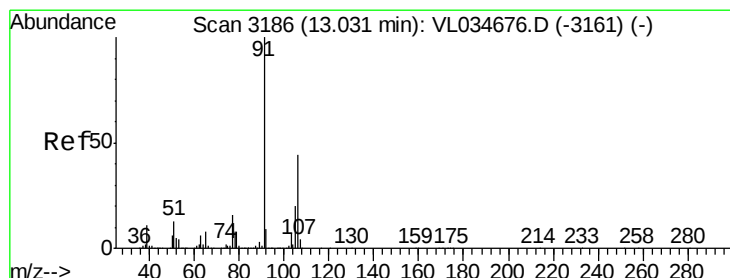
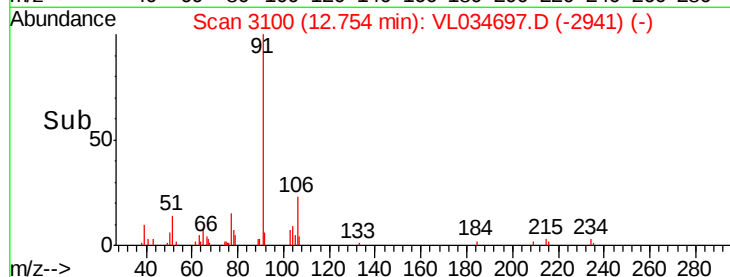
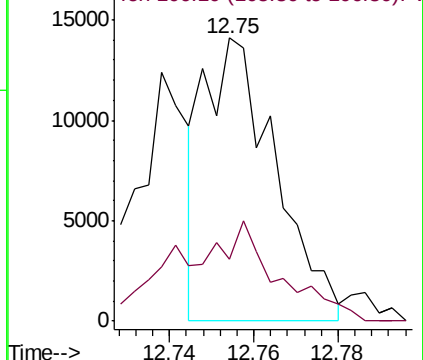
91 100

106 16.8 24.0 36.0#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 0.065 ppbv

RT: 13.04 min Scan# 3189

Delta R.T. 0.01 min

Lab File: VL034697.D

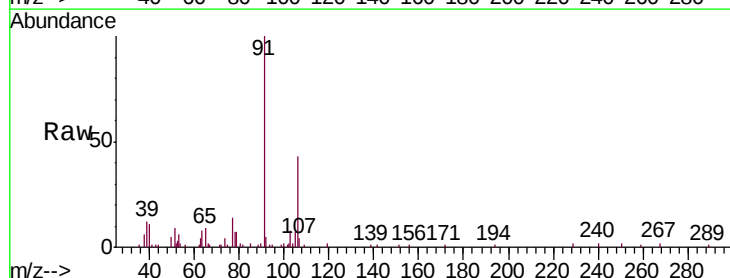
Acq: 26 Feb 2020 21:13

Tgt Ion: 91 Resp: 15247

Ion Ratio Lower Upper

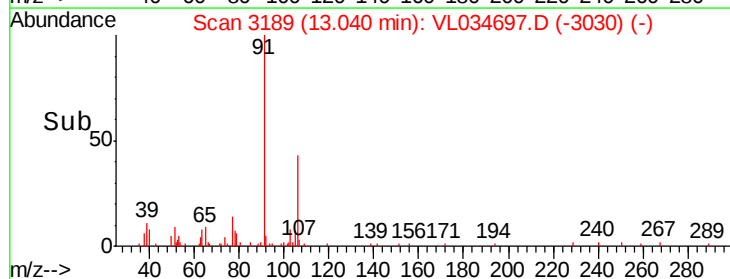
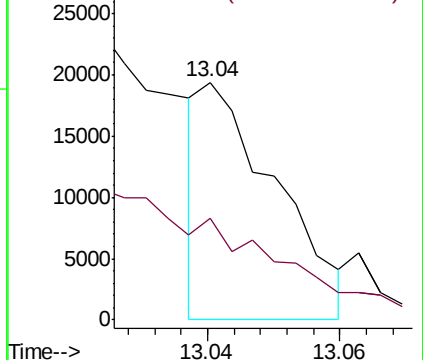
91 100

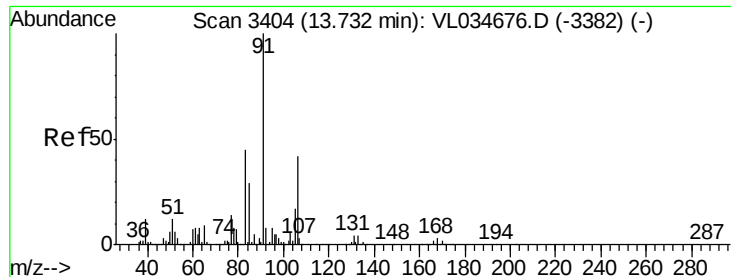
106 0.0 35.6 53.4#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

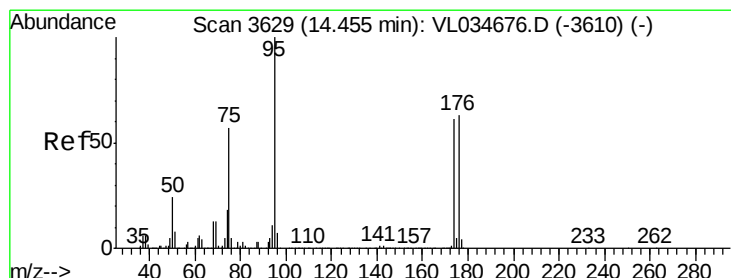
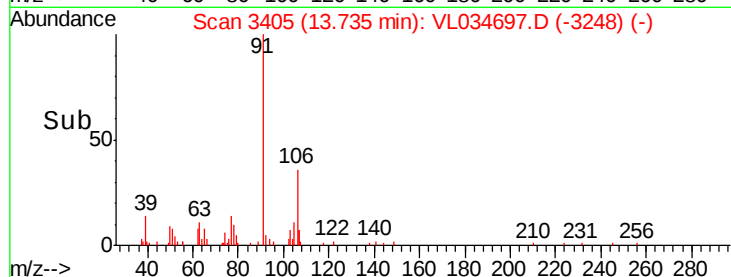
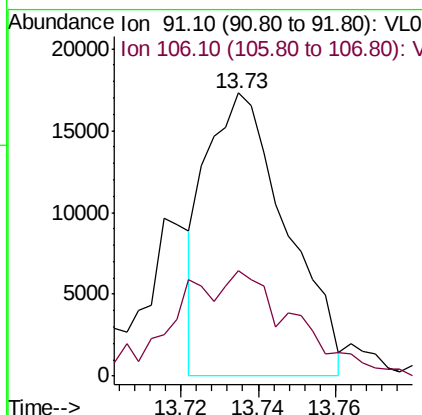
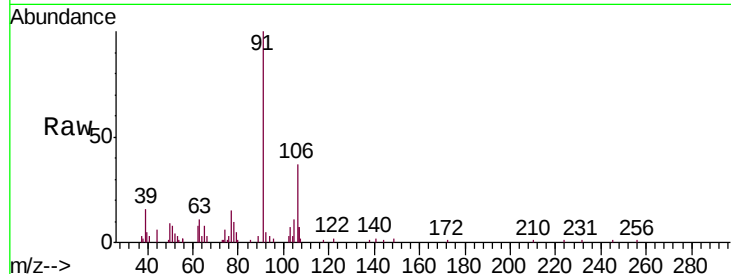




#60
o-Xylene
Concen: 0.107 ppbv
RT: 13.73 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VL034697.D
Acq: 26 Feb 2020 21:13

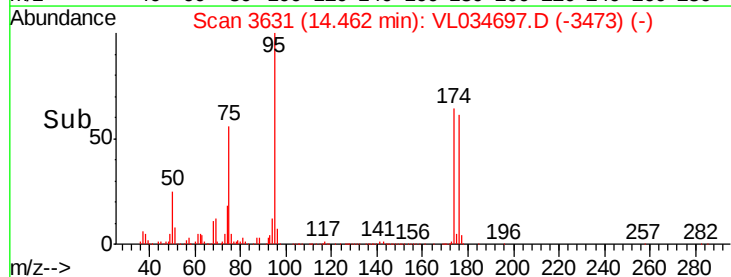
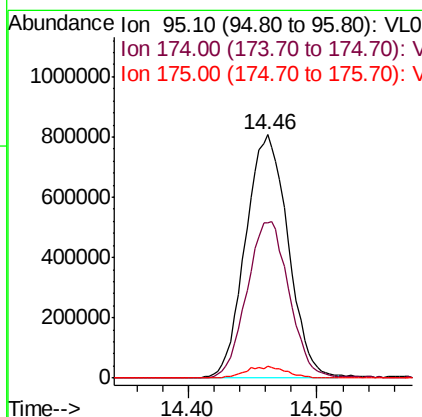
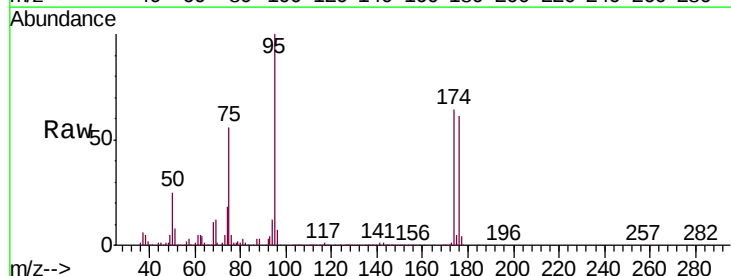
Instrument :
MSVOA_L
ClientSampleId :
EP-104DL

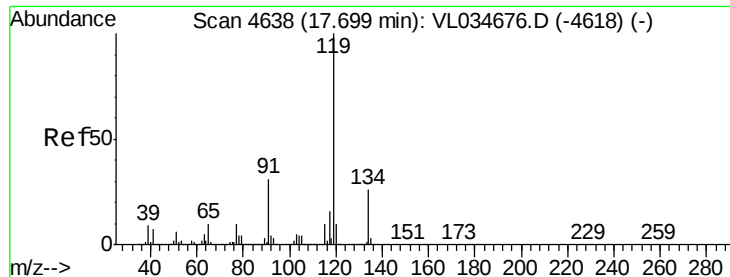
Tgt Ion: 91 Resp: 24915
Ion Ratio Lower Upper
91 100
106 55.6 21.9 65.5



#68
1-Bromo-4-Fluorobenzene
Concen: 10.165 ppbv
RT: 14.46 min Scan# 3631
Delta R.T. 0.01 min
Lab File: VL034697.D
Acq: 26 Feb 2020 21:13

Tgt Ion: 95 Resp: 1858435
Ion Ratio Lower Upper
95 100
174 64.5 50.7 76.1
175 4.7 3.9 5.9

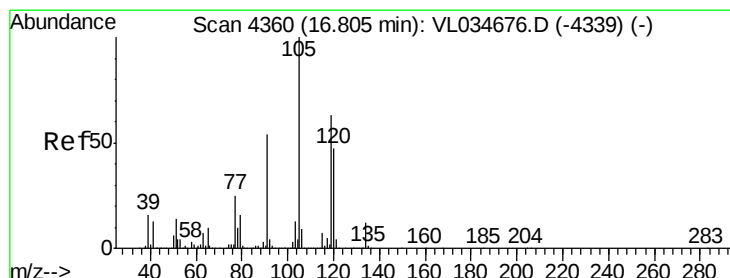
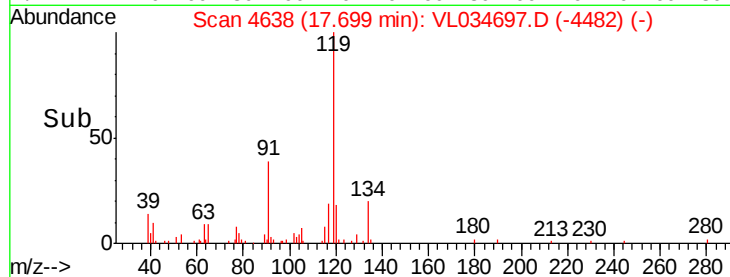
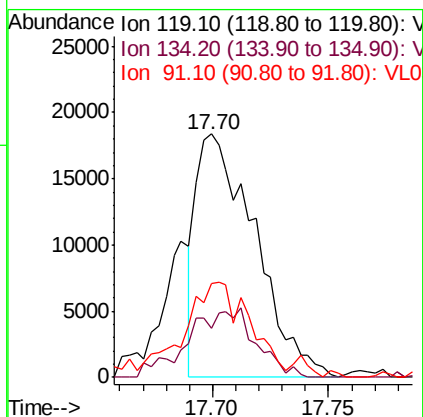
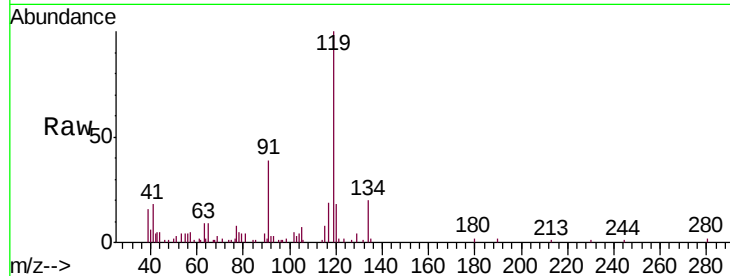




#69
 p-Isopropyltoluene
 Concen: 0.092 ppbv
 RT: 17.70 min Scan# 4638
 Delta R.T. 0.00 min
 Lab File: VL034697.D
 Acq: 26 Feb 2020 21:13

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-104DL

Tgt Ion:119 Resp: 32150
 Ion Ratio Lower Upper
 119 100
 134 32.7 20.6 31.0#
 91 0.0 25.3 37.9#



#74
 1,2,4-Trimethylbenzene
 Concen: 0.073 ppbv
 RT: 16.82 min Scan# 4364
 Delta R.T. 0.01 min
 Lab File: VL034697.D
 Acq: 26 Feb 2020 21:13

Tgt Ion:105 Resp: 20081
 Ion Ratio Lower Upper
 105 100
 120 46.0 37.9 56.9
 91 14.3 43.9 65.9#
 77 15.5 20.3 30.5#

