

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120820\
 Data File : VL036120.D
 Acq On : 9 Dec 2020 7:22
 Operator : SY/AP
 Sample : L4948-14 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-6BDL

Quant Time: Dec 09 08:14:17 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec 07 16:56:49 2020
 QLast Update : Mon Dec 07 16:56:49 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1129527	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.19	114	2285591	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.10	117	2029216	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	1736807	10.78	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	107.80%

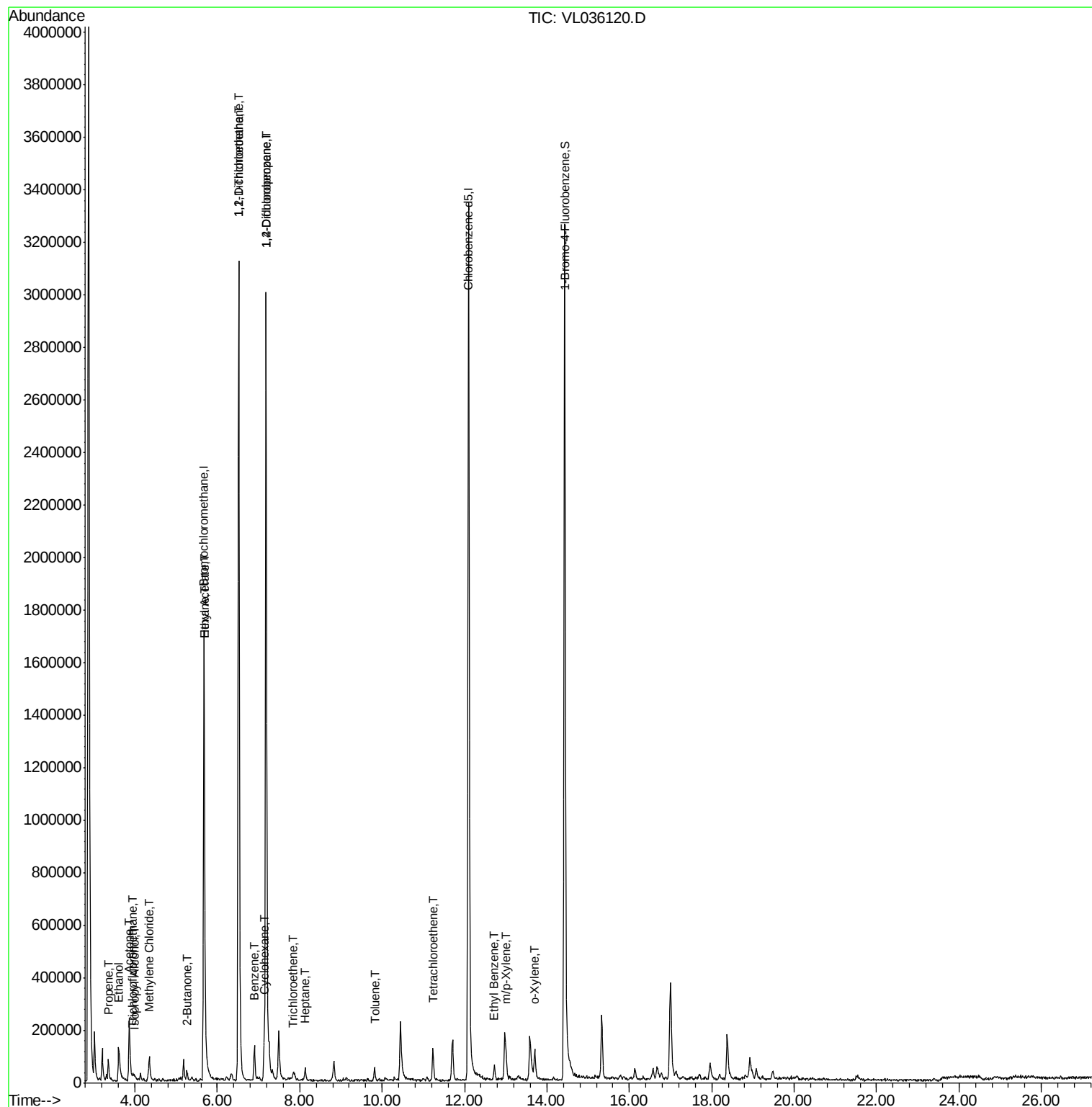
Target Compounds					Ovalue
9) Propene	3.35	41	20903	0.324	ppbv 89
10) Heptane	8.13	43	12307	0.075	ppbv # 33
11) Trichlorofluoromethane	3.95	101	11617	0.075	ppbv # 73
13) Ethanol	3.61	45	170542	19.163	ppbv 96
15) Acetone	3.86	43	287131	2.115	ppbv # 84
19) Isopropyl Alcohol	3.99	45	4111	0.050	ppbv # 100
20) Methylene Chloride	4.34	84	13139	0.236	ppbv 95
25) Ethyl Acetate	5.69	43	17661	0.065	ppbv # 85
26) Hexane	5.69	57	32062	0.263	ppbv # 47
30) Cyclohexane	7.13	84	16837	0.188	ppbv # 1
32) 1,1,1-Trichloroethane	6.52	97	2139437	12.936	ppbv 98
34) 2-Butanone	5.26	43	30646	0.202	ppbv # 53
36) Benzene	6.90	78	51427	0.265	ppbv 94
37) 1,2-Dichloroethane	6.52	62	174289	1.553	ppbv # 1
38) Trichloroethene	7.84	130	2678	0.037	ppbv # 71
39) 1,2-Dichloropropane	7.18	63	712943	9.320	ppbv # 23
52) Tetrachloroethene	11.23	164	10602	0.151	ppbv 90
53) Toluene	9.81	91	8606	0.040	ppbv # 21
58) Ethyl Benzene	12.73	91	16385	0.059	ppbv 98
59) m/p-Xylene	13.01	91	35116	0.150	ppbv # 34
60) o-Xylene	13.71	91	33923	0.154	ppbv # 33

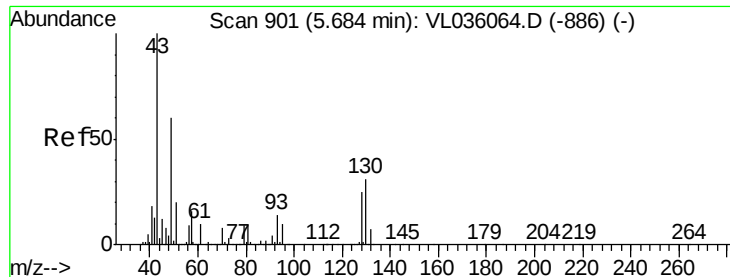
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 897

Delta R.T. -0.01 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Instrument :

MSVOA_L

ClientSampleId :

SS-6BDL

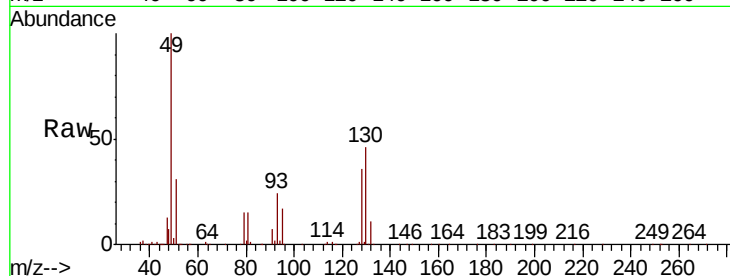
Tot Ion: 49 Resp: 1129527

Ion Ratio Lower Upper

49 100

128 35.9 21.1 63.1

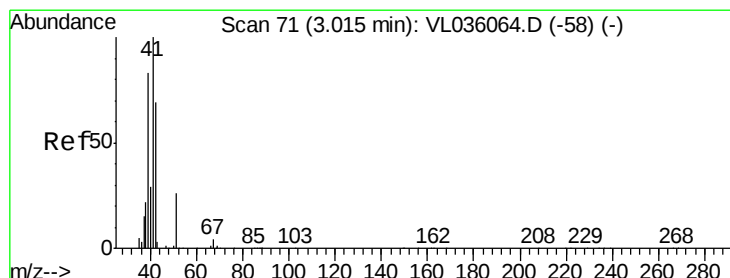
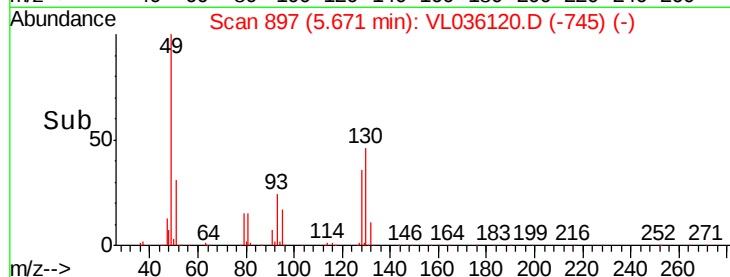
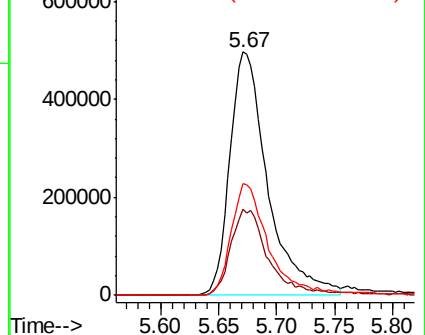
130 46.4 27.1 81.3



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



#9

Propene

Concen: 0.324 ppbv

RT: 3.35 min Scan# 175

Delta R.T. 0.33 min

Lab File: VL036120.D

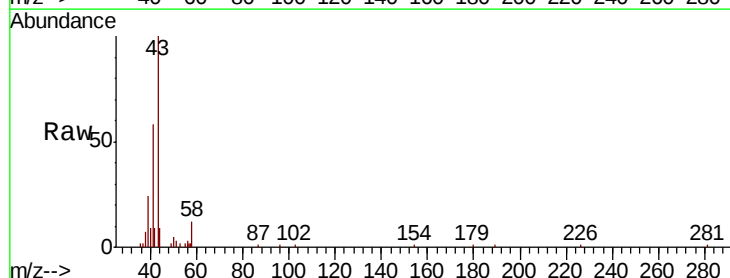
Acq: 9 Dec 2020 7:22

Tgt Ion: 41 Resp: 20903

Ion Ratio Lower Upper

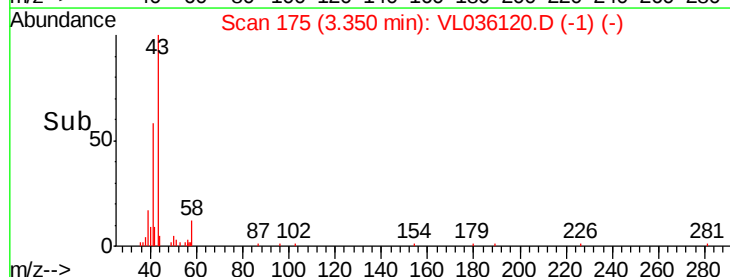
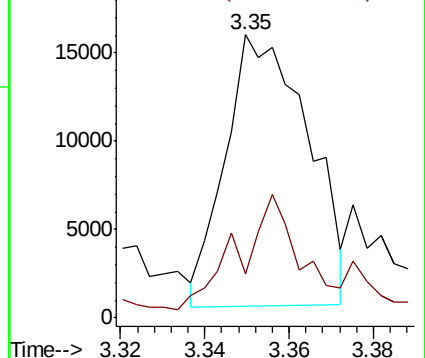
41 100

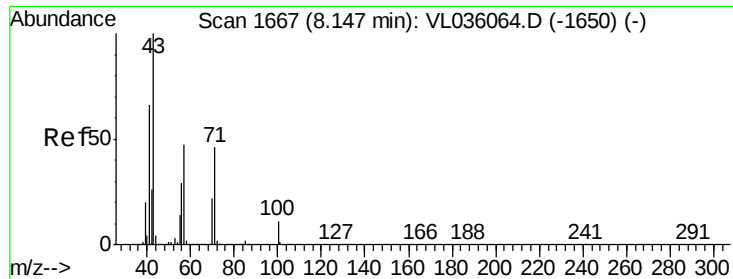
42 61.9 57.0 85.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

Concen: 0.075 ppbv

RT: 8.13 min Scan# 1662

Delta R.T. -0.02 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Instrument :

MSVOA_L

ClientSampleId :

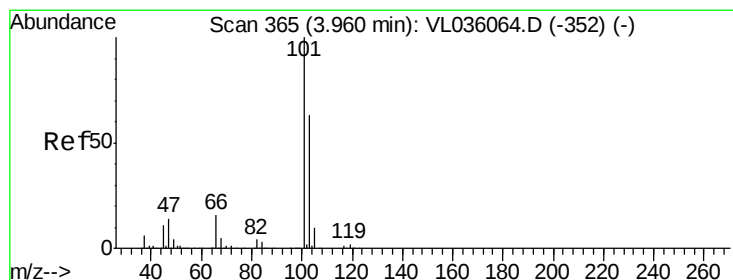
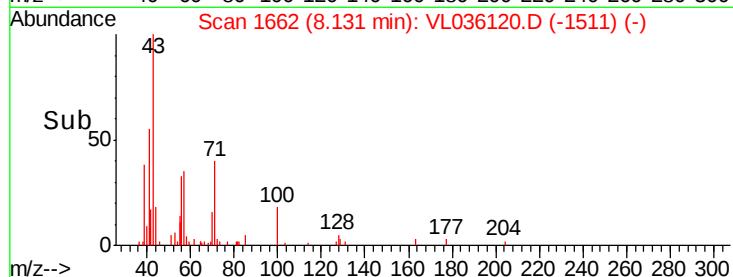
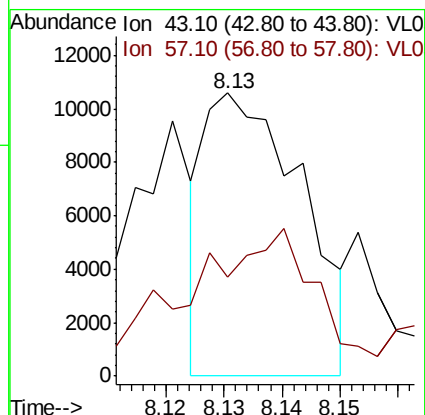
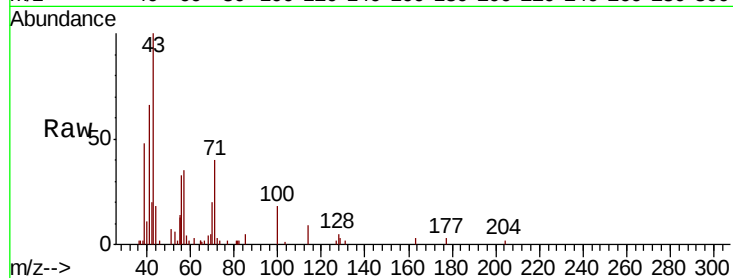
SS-6BDL

Tot Ion: 43 Resp: 12307

Ion Ratio Lower Upper

43 100

57 92.6 37.9 56.9#



#11

Trichlorofluoromethane

Concen: 0.075 ppbv

RT: 3.95 min Scan# 362

Delta R.T. -0.01 min

Lab File: VL036120.D

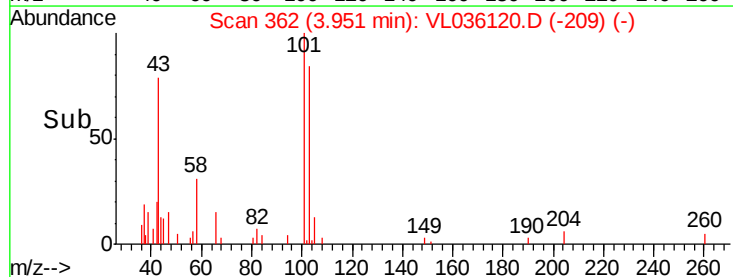
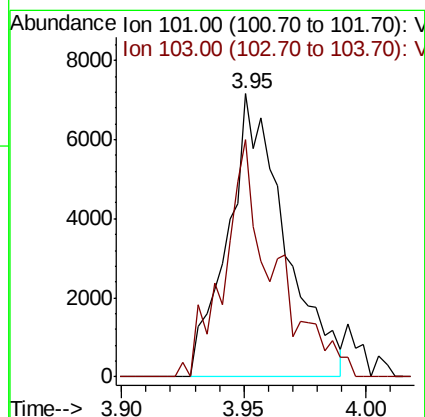
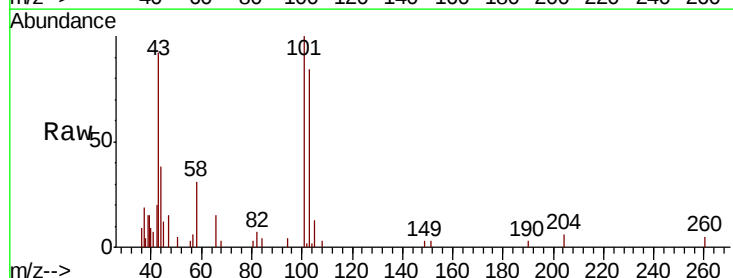
Acq: 9 Dec 2020 7:22

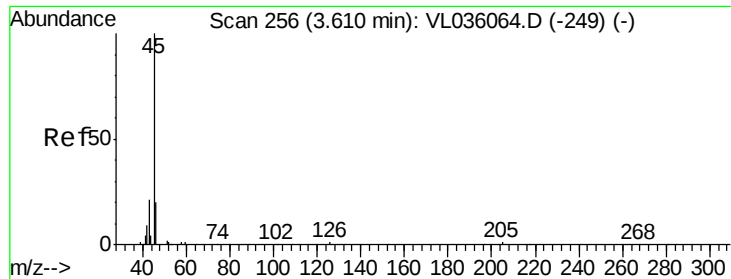
Tgt Ion: 101 Resp: 11617

Ion Ratio Lower Upper

101 100

103 83.9 50.3 75.5#





#13

Ethanol

Concen: 19.163 ppbv

RT: 3.61 min Scan# 256

Delta R.T. 0.00 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Instrument :

MSVOA_L

ClientSampled :

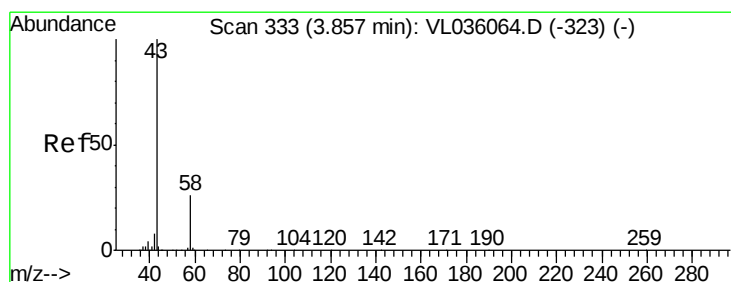
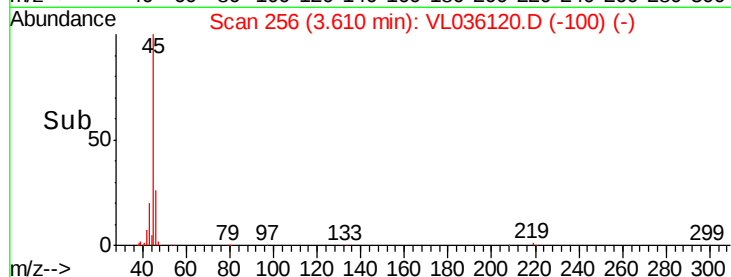
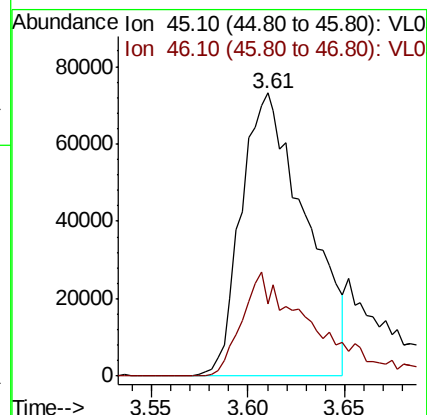
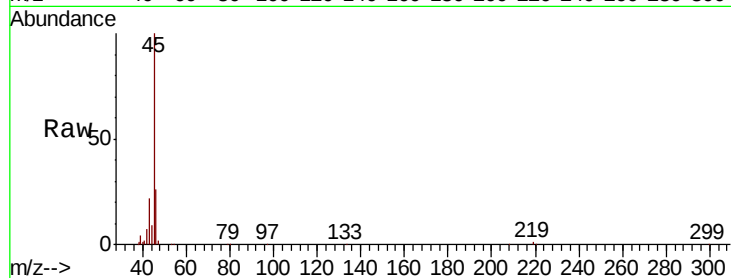
SS-6BDL

Tot Ion: 45 Resp: 170542

Ion Ratio Lower Upper

45 100

46 44.5 19.0 75.8



#15

Acetone

Concen: 2.115 ppbv

RT: 3.86 min Scan# 333

Delta R.T. 0.00 min

Lab File: VL036120.D

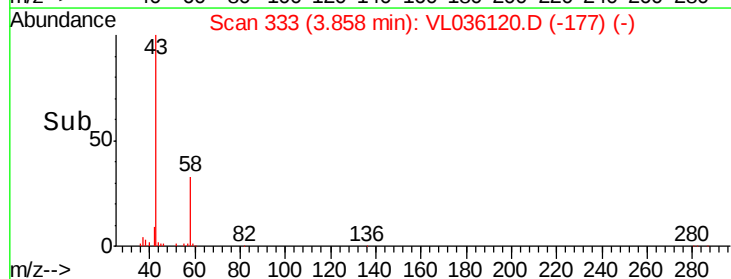
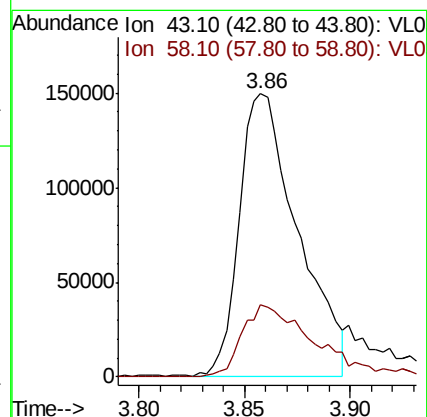
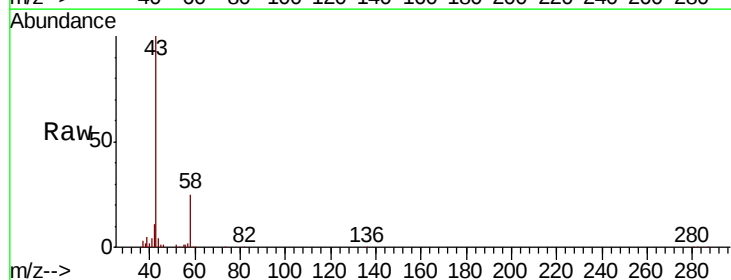
Acq: 9 Dec 2020 7:22

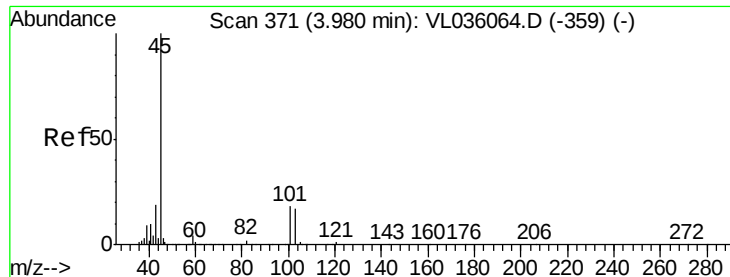
Tgt Ion: 43 Resp: 287131

Ion Ratio Lower Upper

43 100

58 34.3 20.9 31.3#





#19

Isopropyl Alcohol

Concen: 0.050 ppbv

RT: 3.99 min Scan# 373

Delta R.T. 0.01 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Instrument :

MSVOA_L

ClientSampled :

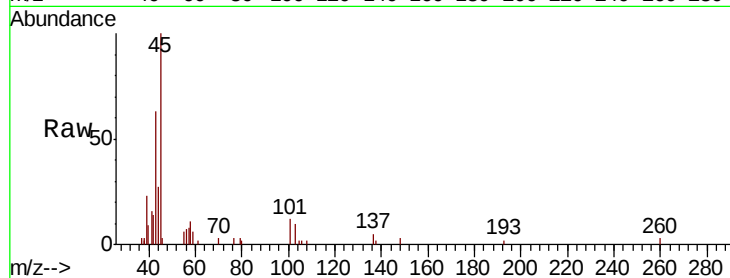
SS-6BDL

Tot Ion: 45 Resp: 4111

Ion Ratio Lower Upper

45 100

58 0.0 0.0 0.0



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.99

10000

8000

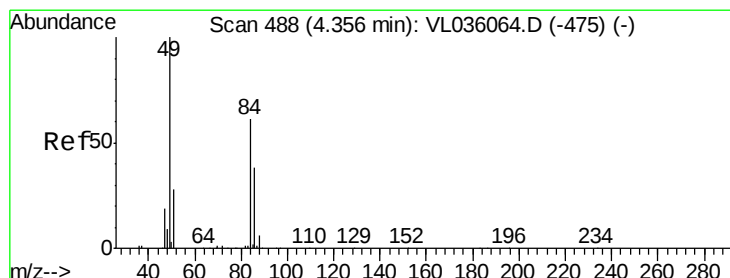
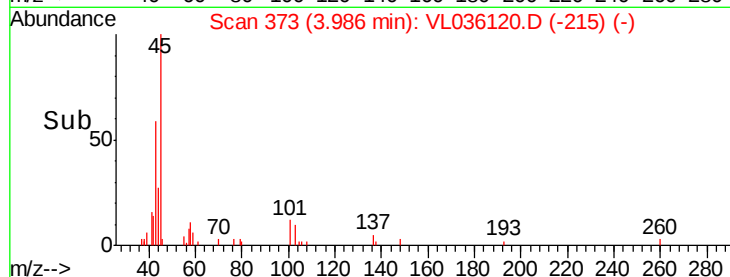
6000

4000

2000

0

Time--> 3.98 3.98 3.98 3.99



#20

Methylene Chloride

Concen: 0.236 ppbv

RT: 4.34 min Scan# 484

Delta R.T. -0.01 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Tgt Ion: 84 Resp: 13139

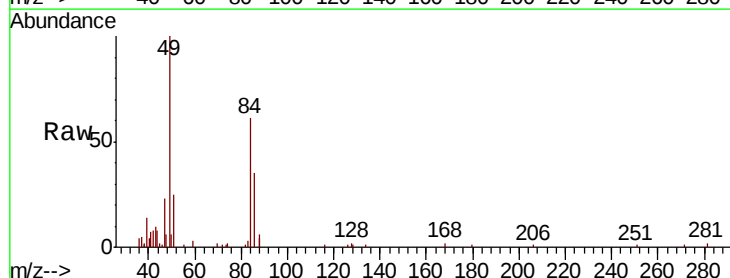
Ion Ratio Lower Upper

84 100

49 163.5 133.0 199.4

51 39.9 38.9 58.3

86 55.8 48.8 73.2



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

40000

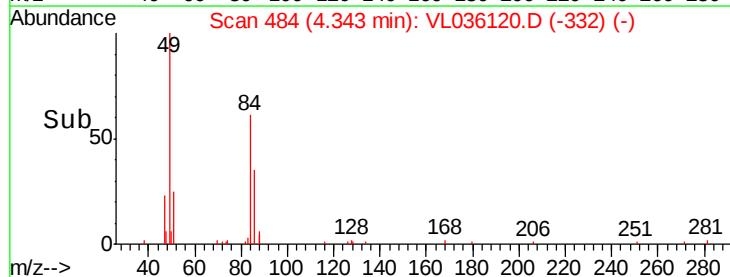
30000

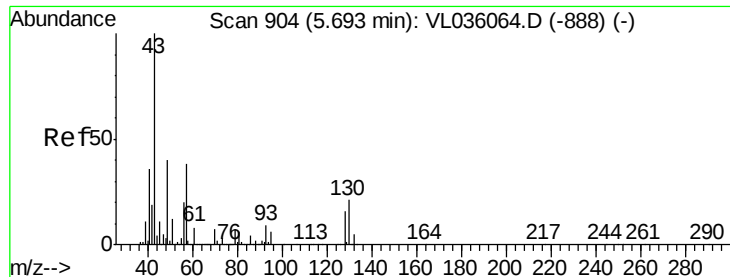
20000

10000

0

Time--> 4.32 4.34





#25

Ethyl Acetate

Concen: 0.065 ppbv

RT: 5.69 min Scan# 903

Delta R.T. -0.00 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Instrument :

MSVOA_L

ClientSampled :

SS-6BDL

Tot Ion: 43 Resp: 17661

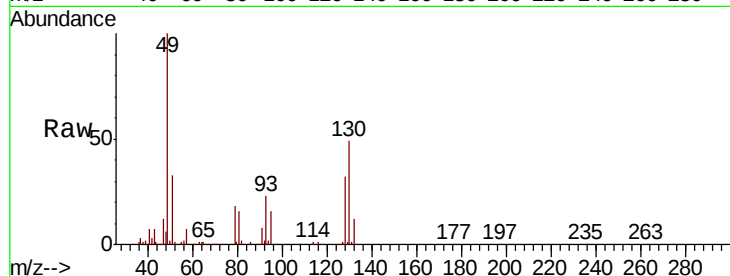
Ion Ratio Lower Upper

43 100

45 9.4 8.2 12.4

61 0.0 7.4 11.2#

70 0.0 5.4 8.0#

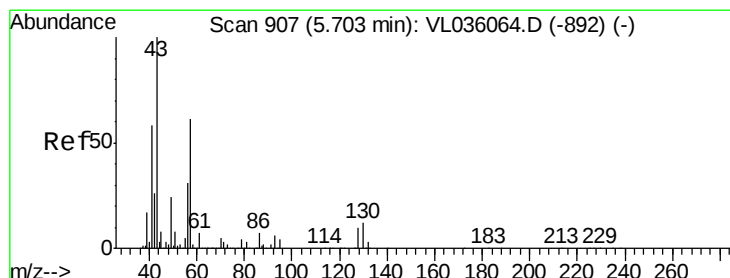
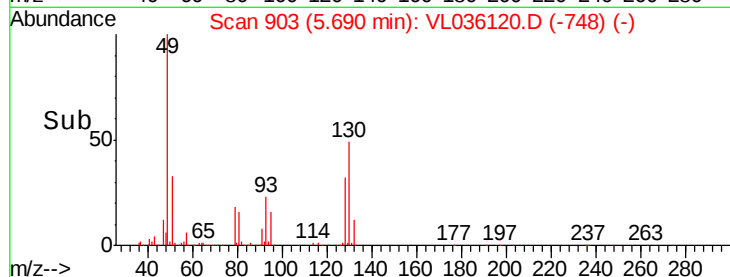
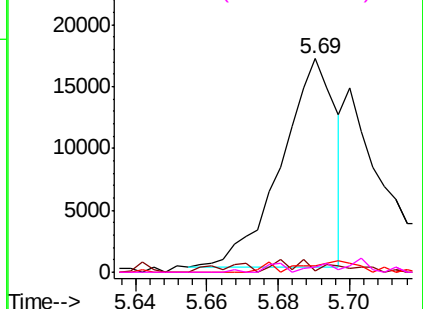


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.263 ppbv

RT: 5.69 min Scan# 903

Delta R.T. -0.01 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Tgt Ion: 57 Resp: 32062

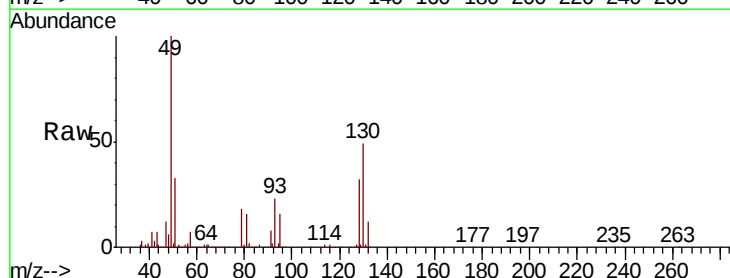
Ion Ratio Lower Upper

57 100

41 107.0 82.9 124.3

43 103.9 199.9 299.9#

56 60.4 43.1 64.7

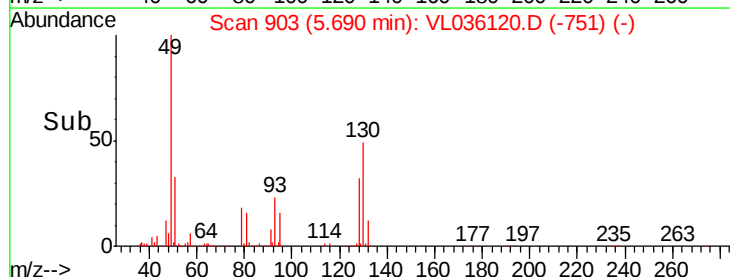
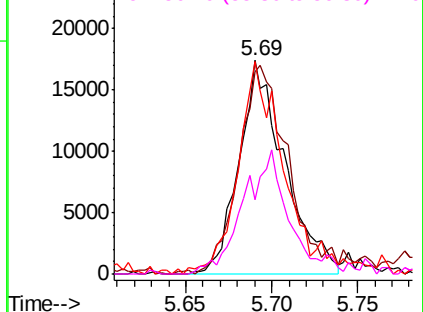


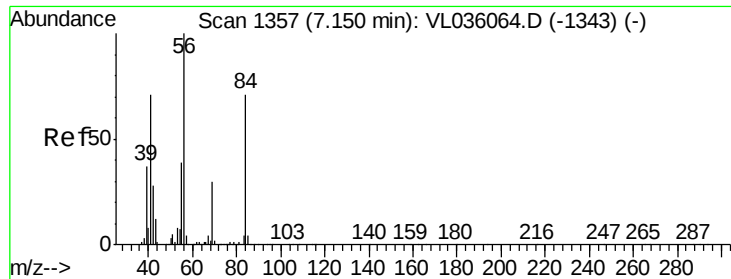
Abundance Ion 57.10 (56.80 to 57.80): VL0

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

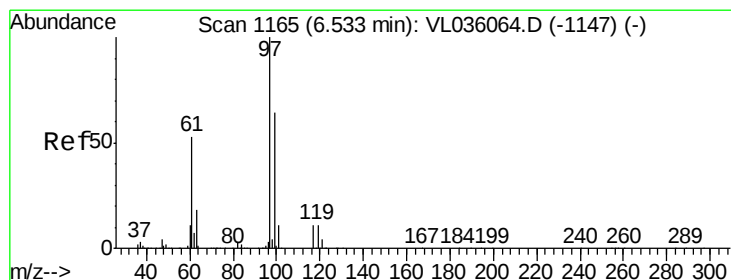
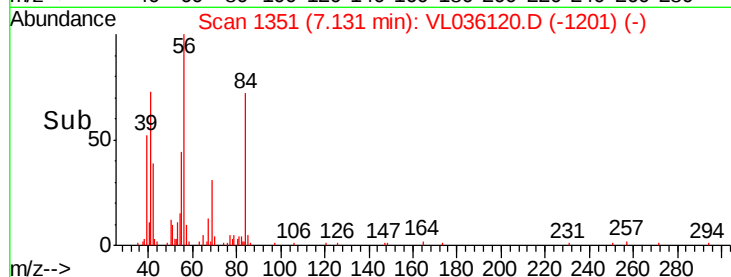
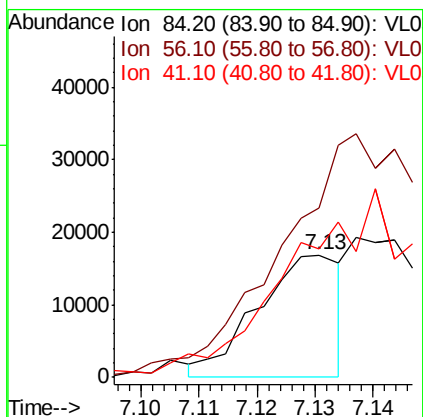
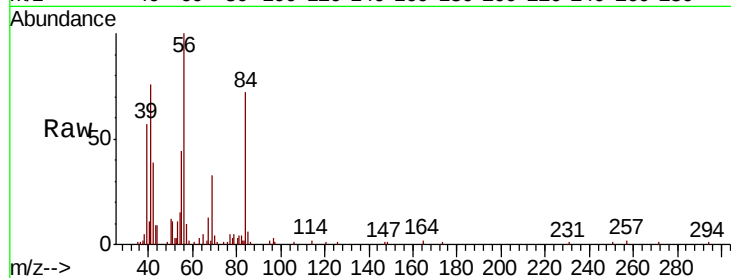




#30
Cyclohexane
Concen: 0.188 ppbv
RT: 7.13 min Scan# 1351
Delta R.T. -0.02 min
Lab File: VL036120.D
Acq: 9 Dec 2020 7:22

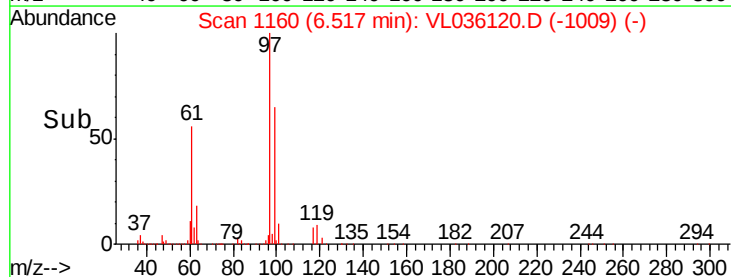
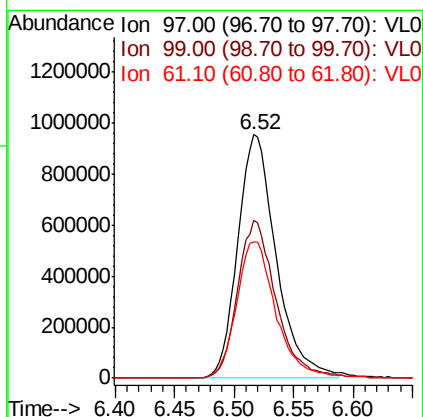
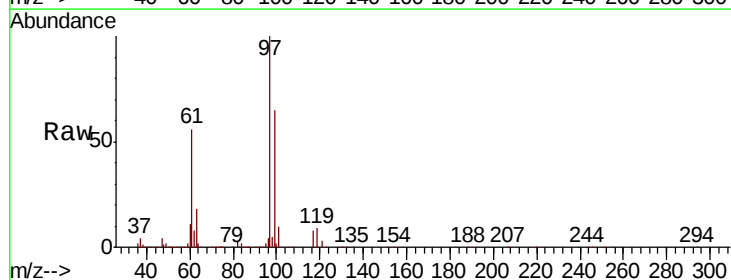
Instrument :
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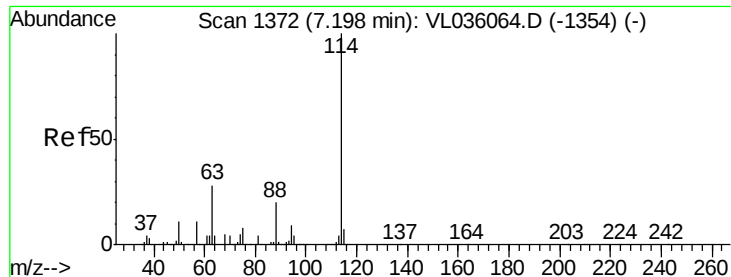
Tot Ion: 84 Resp: 16837
Ion Ratio Lower Upper
84 100
56 0.0 128.0 192.0#
41 0.0 81.3 121.9#



#32
1,1,1-Trichloroethane
Concen: 12.936 ppbv
RT: 6.52 min Scan# 1160
Delta R.T. -0.02 min
Lab File: VL036120.D
Acq: 9 Dec 2020 7:22

Tgt Ion: 97 Resp: 2139437
Ion Ratio Lower Upper
97 100
99 65.2 52.4 78.6
61 57.7 43.4 65.0

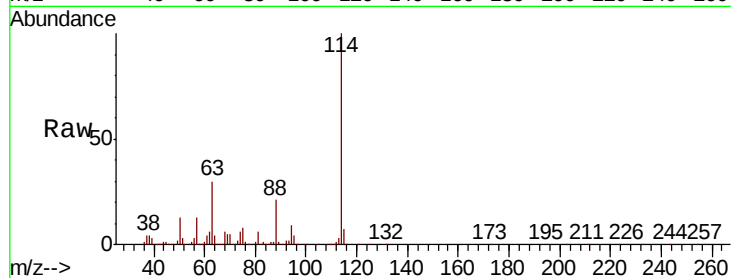




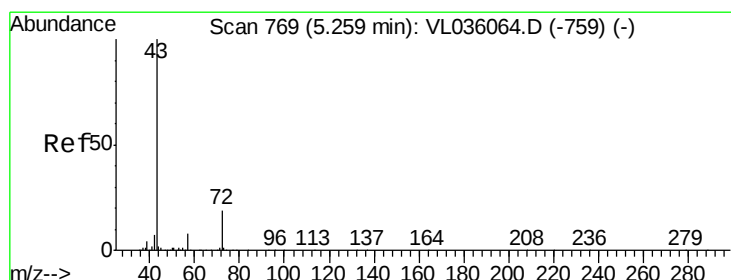
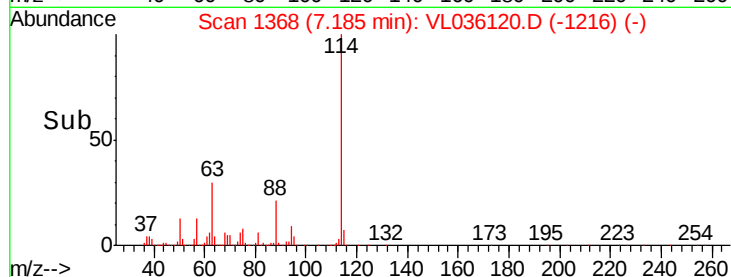
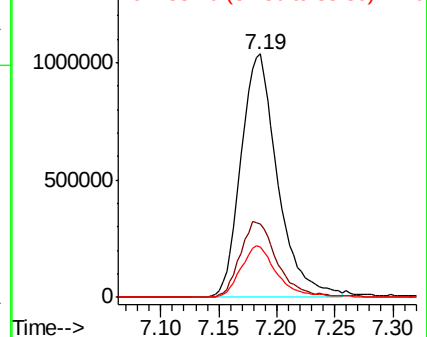
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1368
 Delta R.T. -0.01 min
 Lab File: VL036120.D
 Acq: 9 Dec 2020 7:22

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-6BDL

Tot Ion:114 Resp: 2285591
 Ion Ratio Lower Upper
 114 100
 63 31.9 23.6 35.4
 88 20.9 15.8 23.6

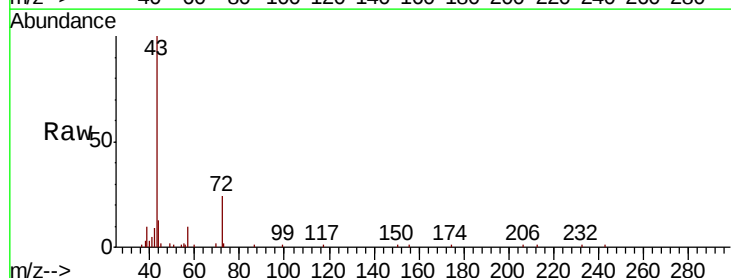


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

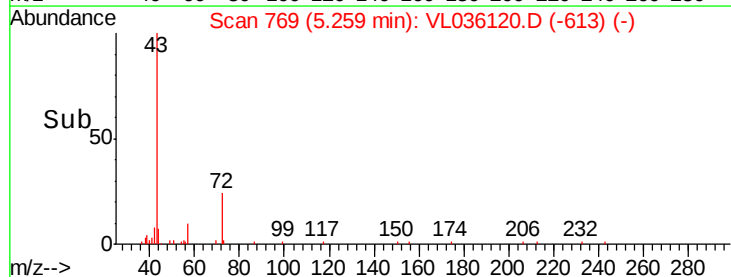
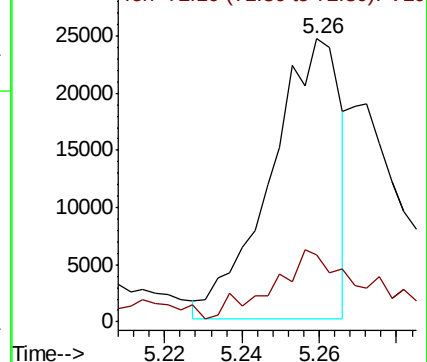


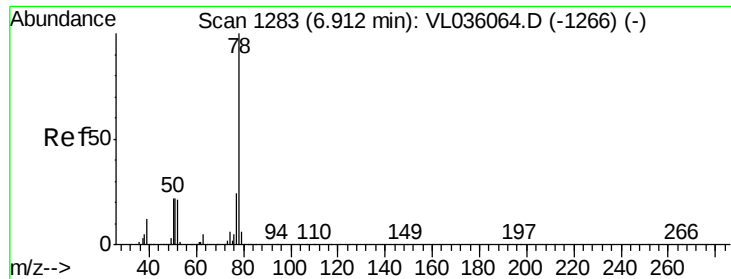
#34
 2-Butanone
 Concen: 0.202 ppbv
 RT: 5.26 min Scan# 769
 Delta R.T. 0.00 min
 Lab File: VL036120.D
 Acq: 9 Dec 2020 7:22

Tgt Ion: 43 Resp: 30646
 Ion Ratio Lower Upper
 43 100
 72 42.6 16.5 24.7#



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





#36

Benzene

Concen: 0.265 ppbv

RT: 6.90 min Scan# 1280

Delta R.T. -0.01 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Instrument :

MSVOA_L

ClientSampleId :

SS-6BDL

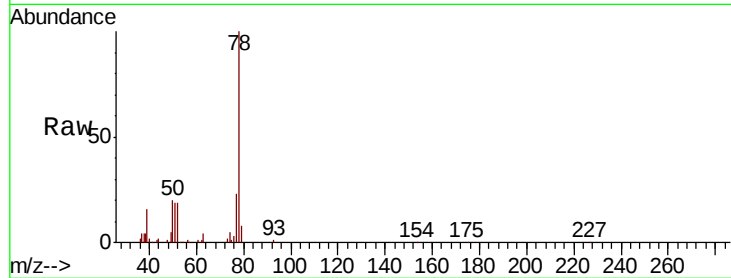
Tot Ion: 78 Resp: 51427

Ion Ratio Lower Upper

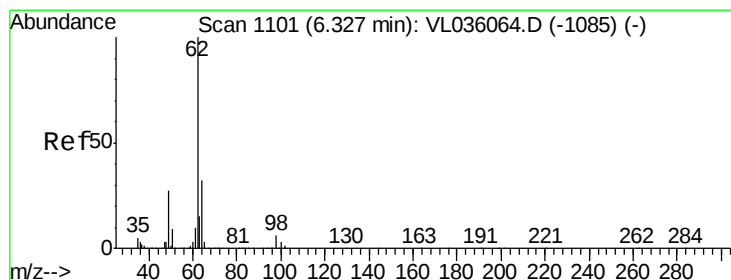
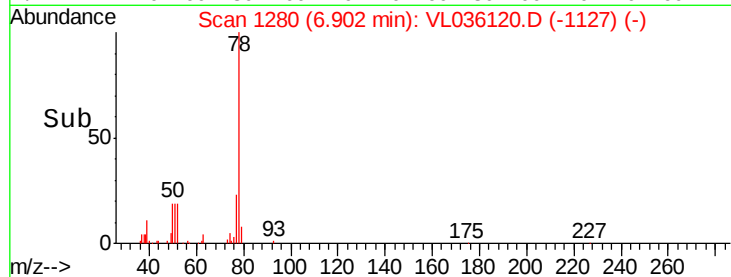
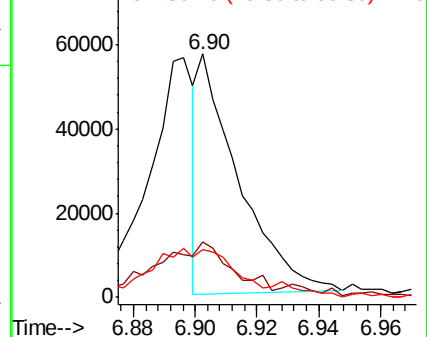
78 100

77 22.2 19.4 29.2

50 18.1 17.8 26.8



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



#37

1,2-Dichloroethane

Concen: 1.553 ppbv

RT: 6.52 min Scan# 1161

Delta R.T. 0.19 min

Lab File: VL036120.D

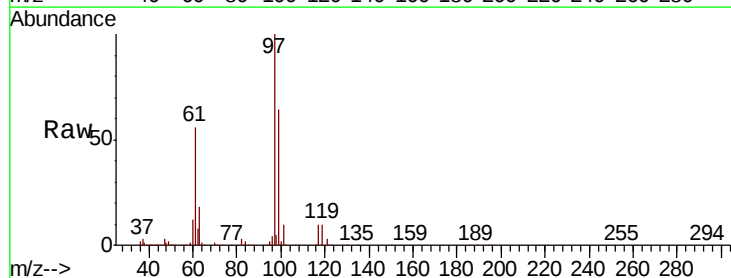
Acq: 9 Dec 2020 7:22

Tgt Ion: 62 Resp: 174289

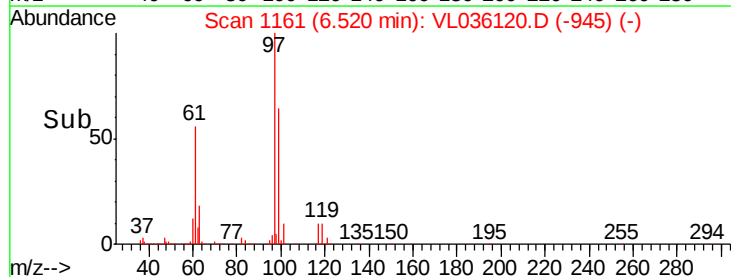
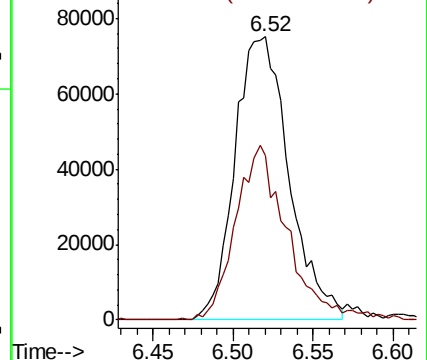
Ion Ratio Lower Upper

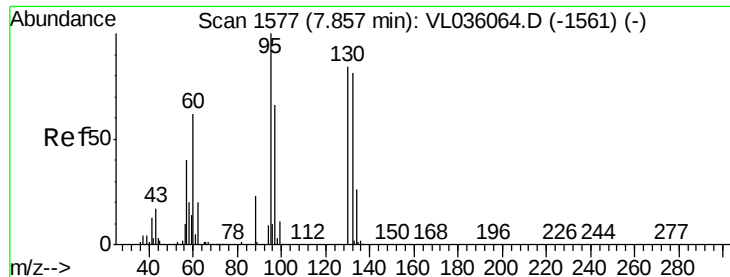
62 100

98 58.9 4.6 7.0#



Abundance Ion 62.10 (61.80 to 62.80): VL0
Ion 98.00 (97.70 to 98.70): VL0





#38

Trichloroethene

Concen: 0.037 ppbv

RT: 7.84 min Scan# 1573

Delta R.T. -0.01 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Instrument :

MSVOA_L

ClientSampleId :

SS-6BDL

Tot Ion:130 Resp: 2678

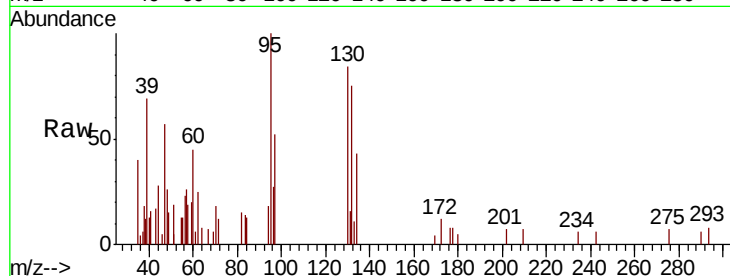
Ion Ratio Lower Upper

130 100

95 107.8 95.2 142.8

132 127.0 76.9 115.3#

97 29.4 62.3 93.5#

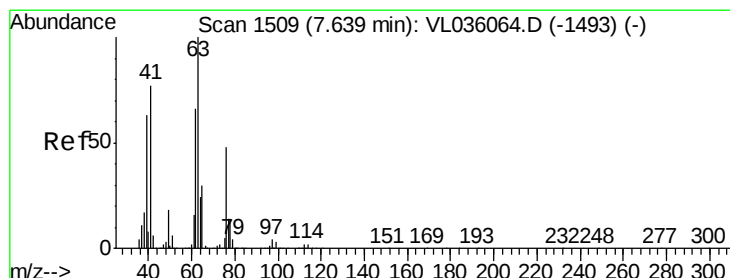
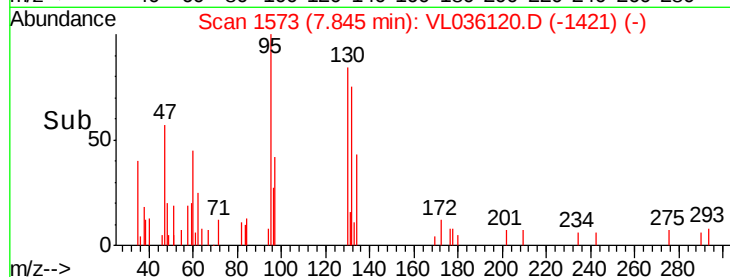
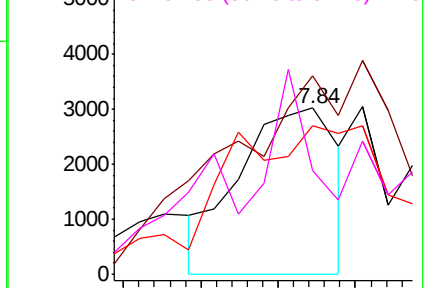


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 9.320 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.46 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

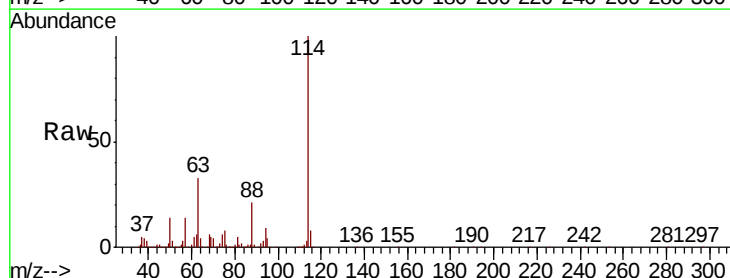
Tgt Ion: 63 Resp: 712943

Ion Ratio Lower Upper

63 100

41 0.0 61.9 92.9#

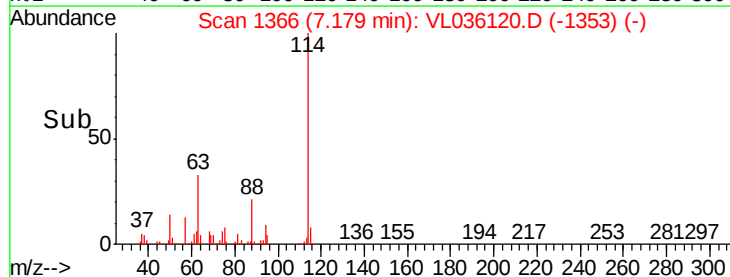
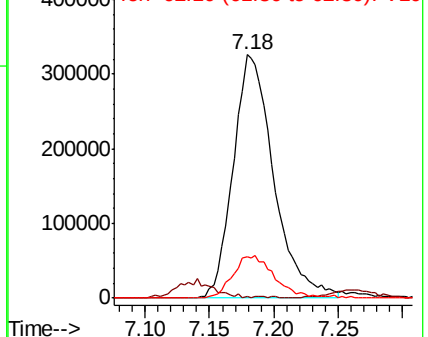
62 16.7 52.5 78.7#

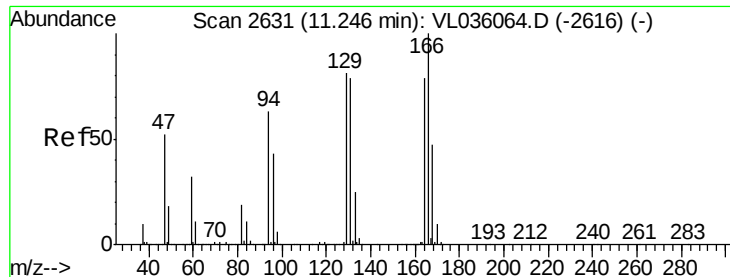


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#52

Tetrachloroethene

Concen: 0.151 ppbv

RT: 11.23 min Scan# 2625

Delta R.T. -0.02 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Instrument :

MSVOA_L

ClientSampleId :

SS-6BDL

Tot Ion:164 Resp: 10602

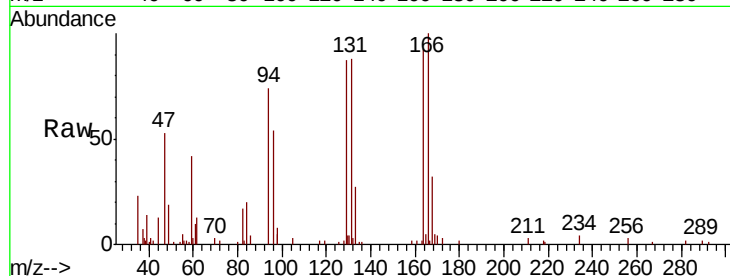
Ion Ratio Lower Upper

164 100

166 109.3 101.9 152.9

129 98.8 82.1 123.1

131 92.1 80.8 121.2

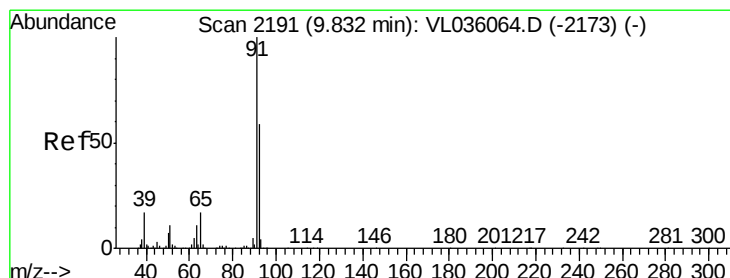
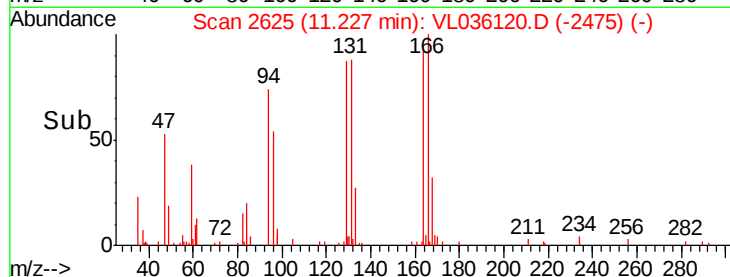
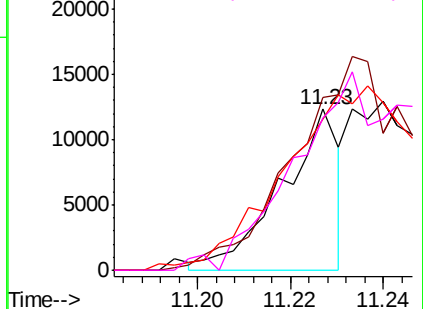


Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.040 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. -0.02 min

Lab File: VL036120.D

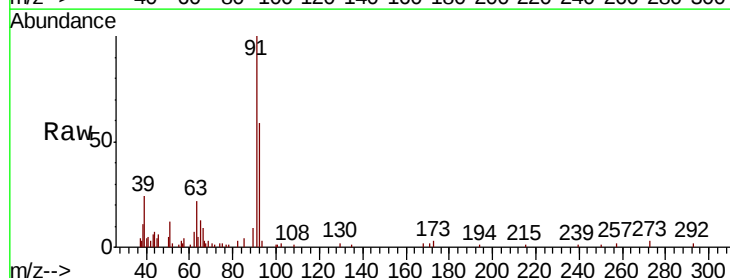
Acq: 9 Dec 2020 7:22

Tgt Ion: 91 Resp: 8606

Ion Ratio Lower Upper

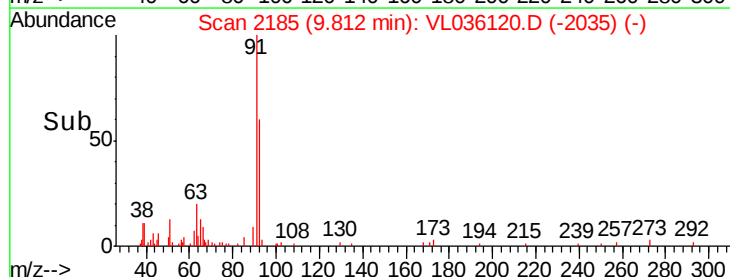
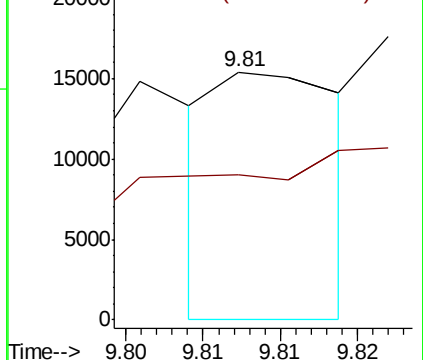
91 100

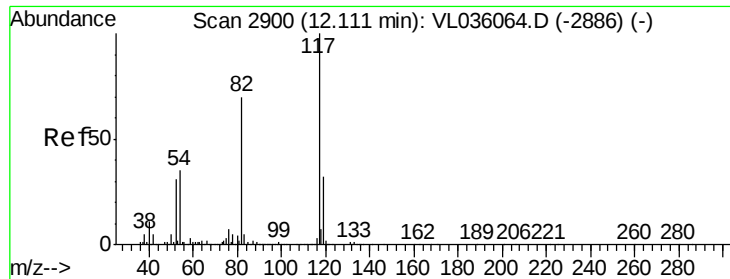
92 0.0 48.2 72.2#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

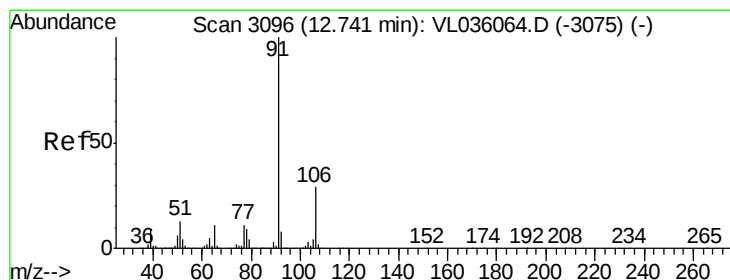
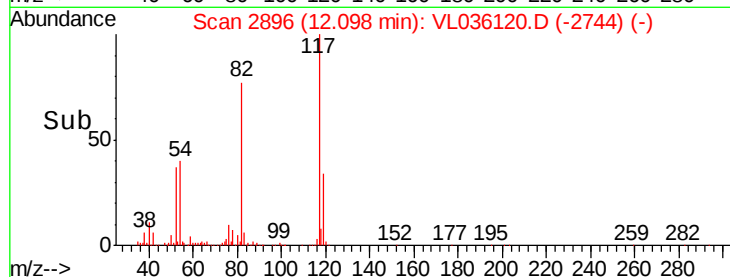
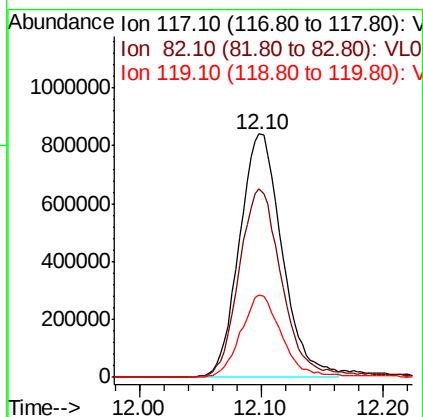
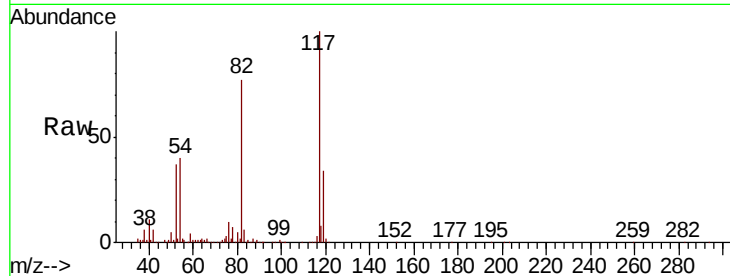




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2896
Delta R.T. -0.01 min
Lab File: VL036120.D
Acq: 9 Dec 2020 7:22

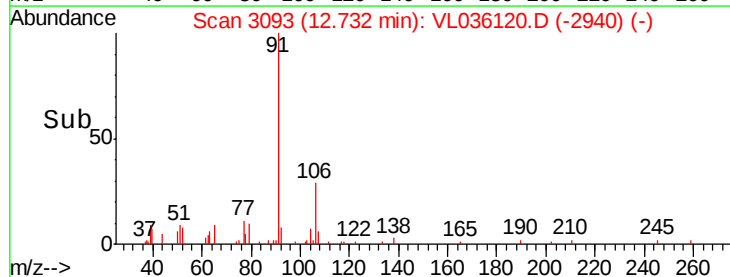
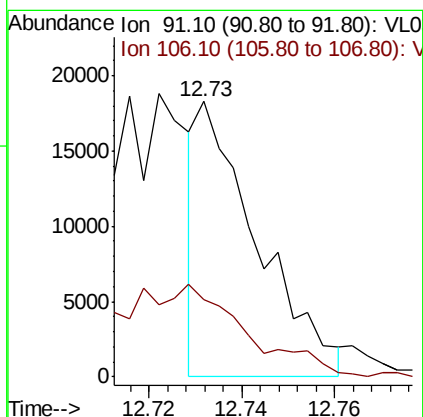
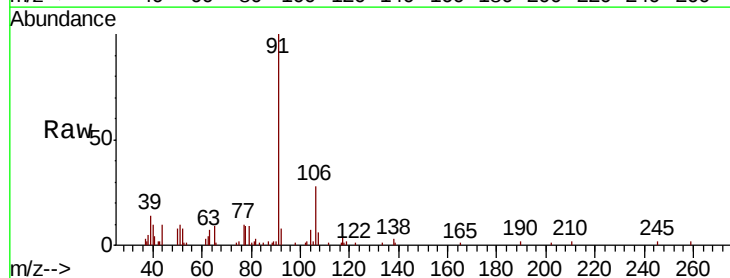
Instrument :
MSVOA_L
ClientSampleId :
SS-6BDL

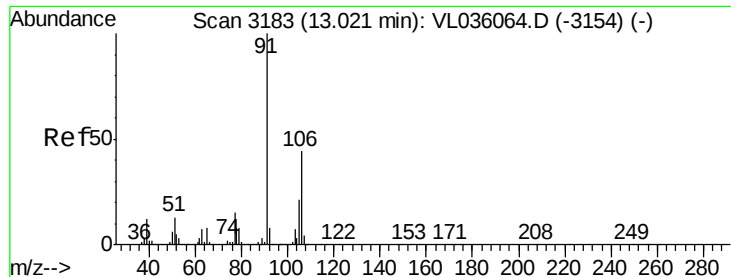
Tot Ion:117 Resp: 2029216
Ion Ratio Lower Upper
117 100
82 79.5 0.0 0.0#
119 33.4 0.0 0.0#



#58
Ethyl Benzene
Concen: 0.059 ppbv
RT: 12.73 min Scan# 3093
Delta R.T. -0.01 min
Lab File: VL036120.D
Acq: 9 Dec 2020 7:22

Tgt Ion: 91 Resp: 16385
Ion Ratio Lower Upper
91 100
106 29.6 23.0 34.4





#59

m/p-Xylene

Concen: 0.150 ppbv

RT: 13.01 min Scan# 3180

Delta R.T. -0.01 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Instrument :

MSVOA_L

ClientSampleId :

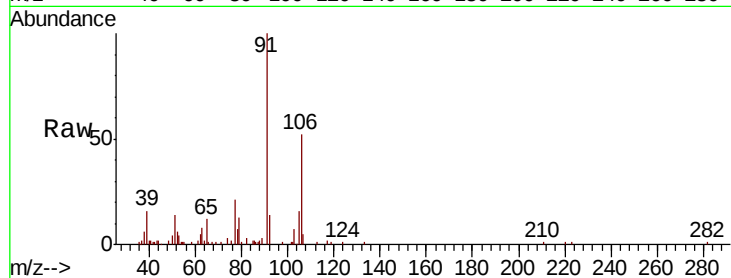
SS-6BDL

Tot Ion: 91 Resp: 35116

Ion Ratio Lower Upper

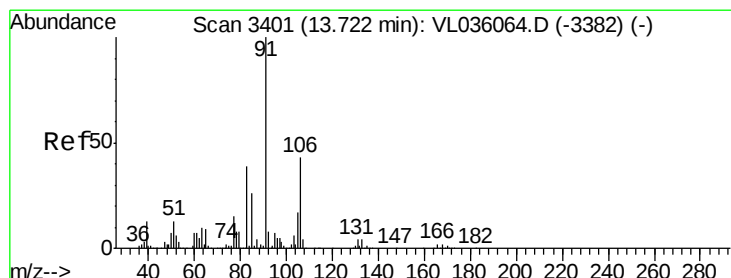
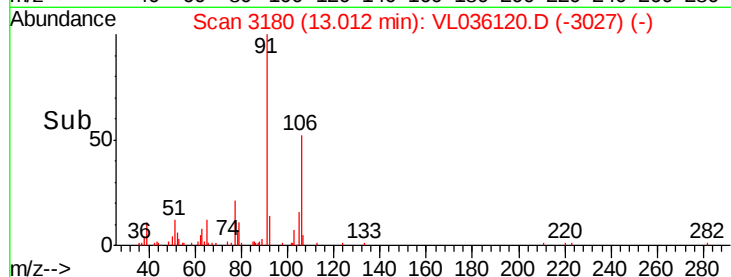
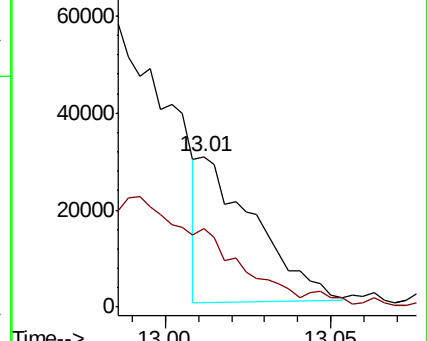
91 100

106 0.0 33.6 50.4#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 0.154 ppbv

RT: 13.71 min Scan# 3397

Delta R.T. -0.01 min

Lab File: VL036120.D

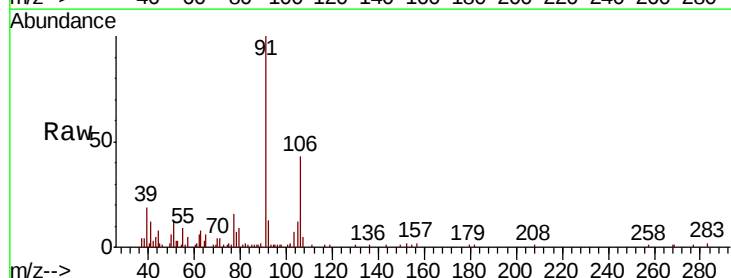
Acq: 9 Dec 2020 7:22

Tgt Ion: 91 Resp: 33923

Ion Ratio Lower Upper

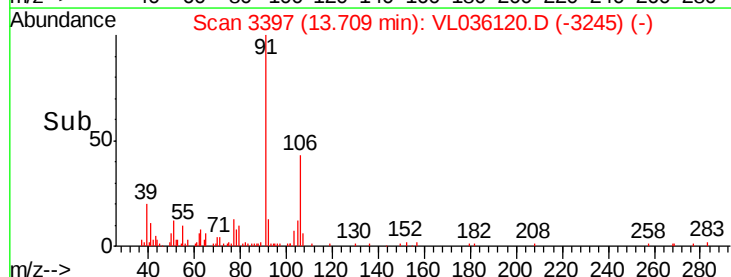
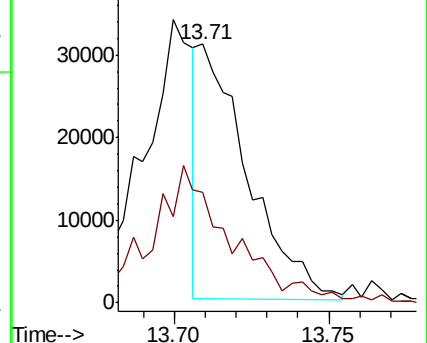
91 100

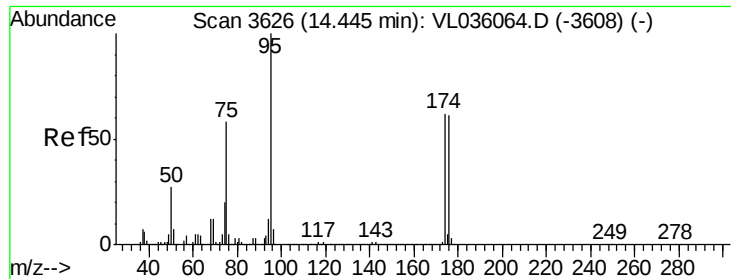
106 0.0 21.6 64.6#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#68

1-Bromo-4-Fluorobenzene

Concen: 10.779 ppbv

RT: 14.43 min Scan# 3621

Delta R.T. -0.02 min

Lab File: VL036120.D

Acq: 9 Dec 2020 7:22

Instrument :

MSVOA_L

ClientSampleId :

SS-6BDL

Tot Ion: 95 Resp: 1736807

Ion Ratio Lower Upper

95 100

174 56.9 50.7 76.1

175 4.2 4.0 6.0

