

Data File : VL036147.D
Acq On : 11 Dec 2020 3:28
Operator : SY/AP
Sample : L4948-13
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS-2B

Quant Time: Dec 11 04:39:04 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	5.65	49	1228139	10.00	ppbv	-0.03
33) 1,4-Difluorobenzene	7.16	114	2518073	10.00	ppbv	-0.04
55) Chlorobenzene-d5	12.07	117	2179682	10.00	ppbv	-0.04

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.40 95 1948029 11.26 ppbv -0.04
Spiked Amount 10.000 Range 65 - 135 Recovery = 112.60%

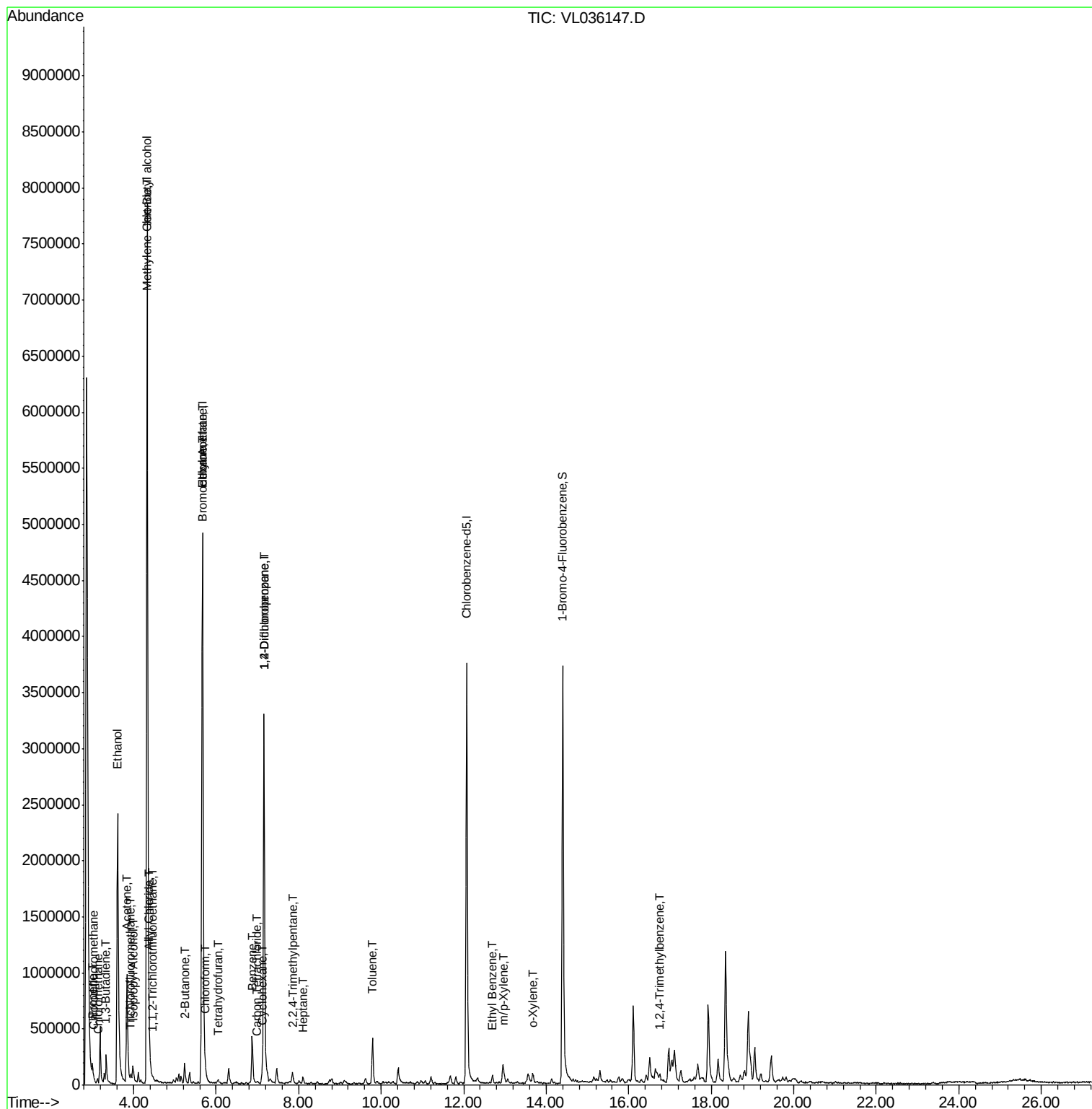
Target Compounds					Qvalue
3) Chlorodifluoromethane	3.03	51	4511	0.032 ppbv	99
4) Chloromethane	3.12	50	36185	0.526 ppbv #	80
9) Propene	2.99	41	54667	0.779 ppbv	96
10) Heptane	8.10	43	19822	0.111 ppbv #	63
11) Trichlorofluoromethane	3.93	101	21742	0.129 ppbv	94
12) 1,1,2-Trichlorotrifluoroet	4.47	101	4299	0.038 ppbv #	51
13) Ethanol	3.61	45	3534691	365.279 ppbv	85
15) Acetone	3.83	43	1302049	8.821 ppbv	100
16) 1,3-Butadiene	3.32	39	3524	0.047 ppbv #	1
17) tert-Butyl alcohol	4.31	59	20773	0.145 ppbv #	91
19) Isopropyl Alcohol	3.98	45	164454	1.823 ppbv #	100
20) Methylene Chloride	4.33	84	3203818	52.968 ppbv	96
21) Allyl Chloride	4.38	41	4054	0.041 ppbv #	18
25) Ethyl Acetate	5.67	43	1449596	4.916 ppbv #	78
26) Hexane	5.67	57	1936882	14.595 ppbv #	37
29) Chloroform	5.74	83	25162	0.144 ppbv #	67
30) Cyclohexane	7.11	84	9069	0.093 ppbv #	1
34) 2-Butanone	5.23	43	220316	1.319 ppbv	94
35) Carbon Tetrachloride	7.00	117	4948	0.034 ppbv #	64
36) Benzene	6.87	78	355042	1.664 ppbv	98
39) 1,2-Dichloropropane	7.16	63	765133	9.079 ppbv #	25
41) Tetrahydrofuran	6.05	42	9151	0.092 ppbv #	9
44) 2,2,4-Trimethylpentane	7.85	57	70594	0.183 ppbv #	71
53) Toluene	9.79	91	302560	1.263 ppbv	99
58) Ethyl Benzene	12.69	91	40296	0.135 ppbv	95
59) m/p-Xylene	12.98	91	41015	0.163 ppbv #	34
60) o-Xylene	13.68	91	14348	0.061 ppbv #	1
74) 1,2,4-Trimethylbenzene	16.74	105	15649	0.064 ppbv #	55

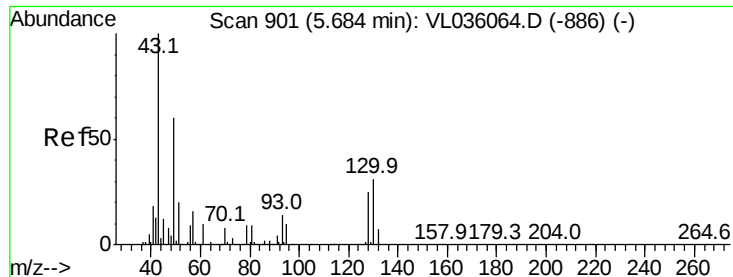
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : VL036147.D
Acq On : 11 Dec 2020 3:28
Operator : SY/AP
Sample : L4948-13
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS-2B

Quant Time: Dec 11 04:39:04 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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.03 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

SS-2B

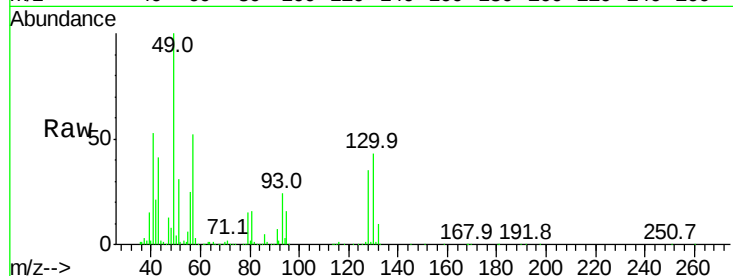
Tgt Ion: 49 Resp: 1228139

Ion Ratio Lower Upper

49 100

128 35.9 21.1 63.1

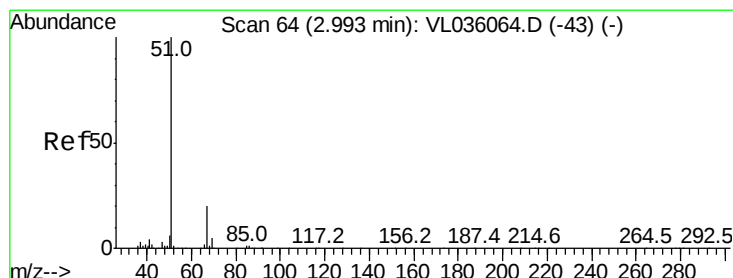
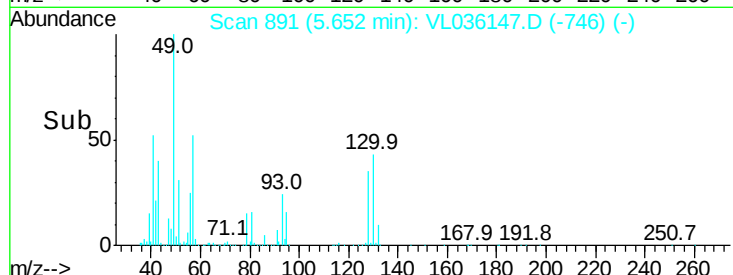
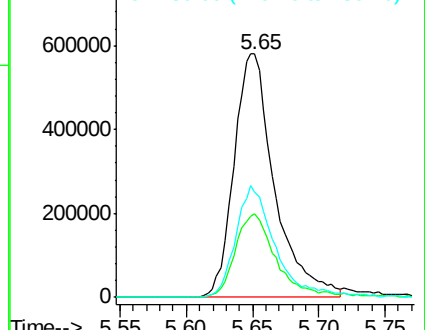
130 45.4 27.1 81.3



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



#3

Chlorodifluoromethane

Concen: 0.032 ppbv

RT: 3.03 min Scan# 76

Delta R.T. 0.04 min

Lab File: VL036147.D

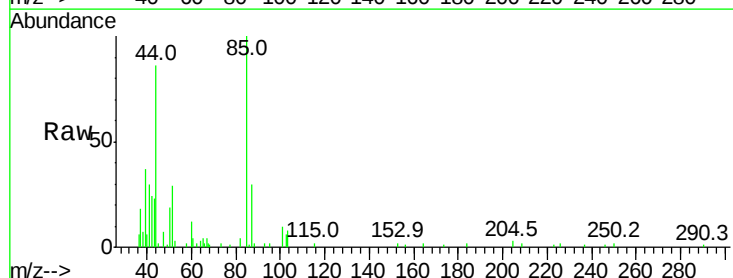
Acq: 11 Dec 2020 3:28

Tgt Ion: 51 Resp: 4511

Ion Ratio Lower Upper

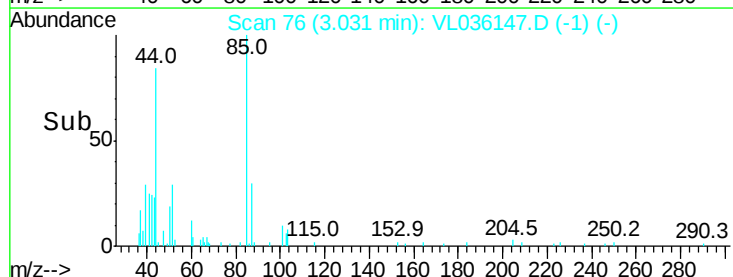
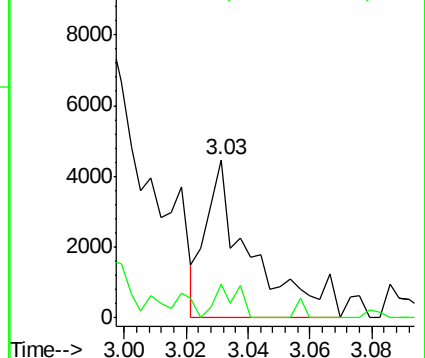
51 100

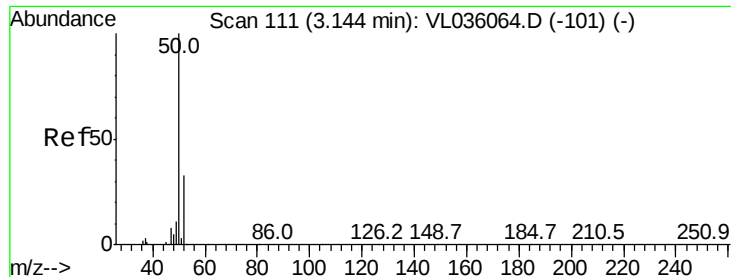
67 17.5 14.3 21.5



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.526 ppbv

RT: 3.12 min Scan# 104

Delta R.T. -0.02 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

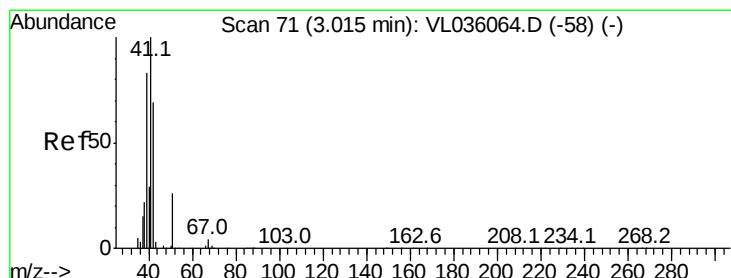
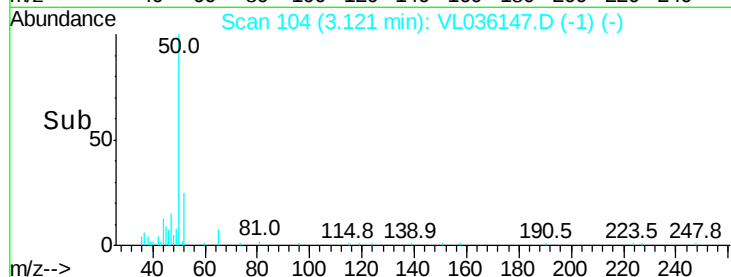
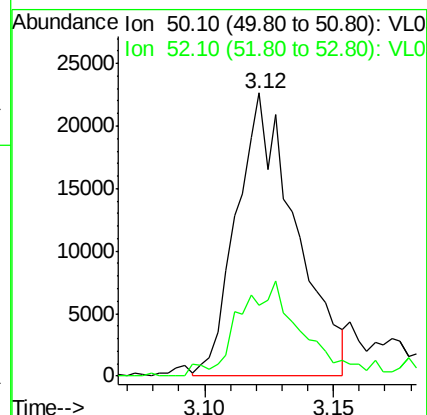
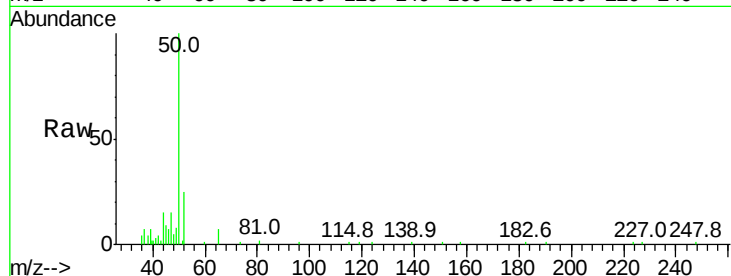
SS-2B

Tgt Ion: 50 Resp: 36185

Ion Ratio Lower Upper

50 100

52 21.4 26.1 39.1#



#9

Propene

Concen: 0.779 ppbv

RT: 2.99 min Scan# 64

Delta R.T. -0.02 min

Lab File: VL036147.D

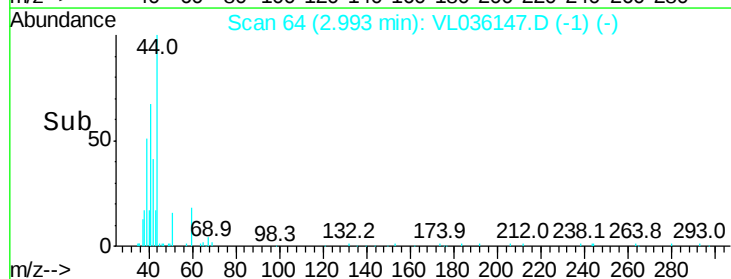
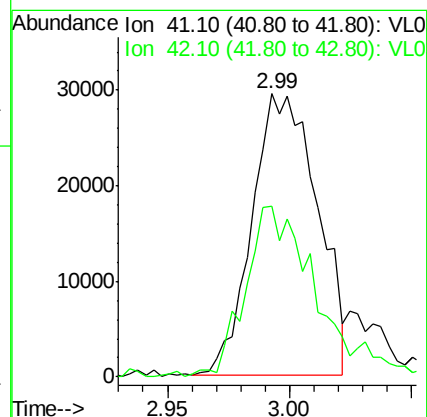
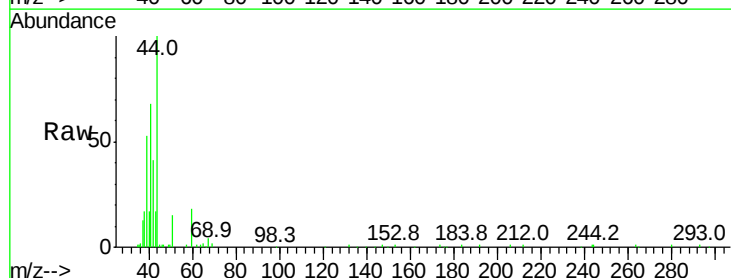
Acq: 11 Dec 2020 3:28

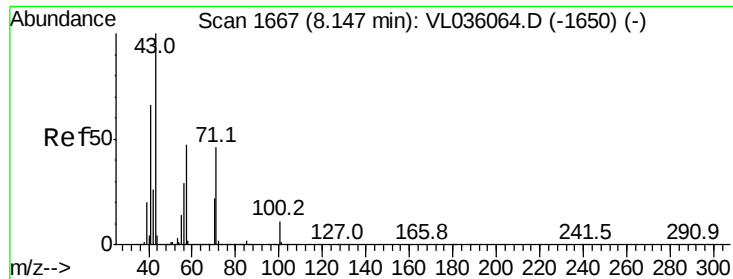
Tgt Ion: 41 Resp: 54667

Ion Ratio Lower Upper

41 100

42 67.7 57.0 85.6





#10

Heptane

Concen: 0.111 ppbv

RT: 8.10 min Scan# 1654

Delta R.T. -0.04 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

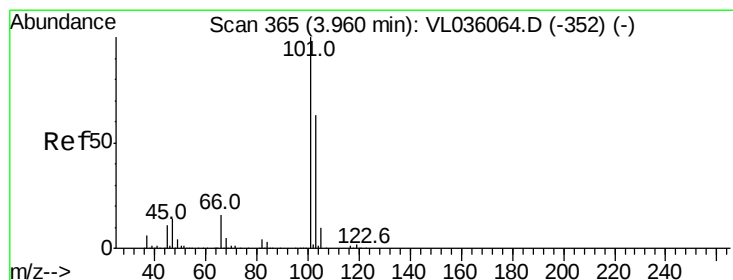
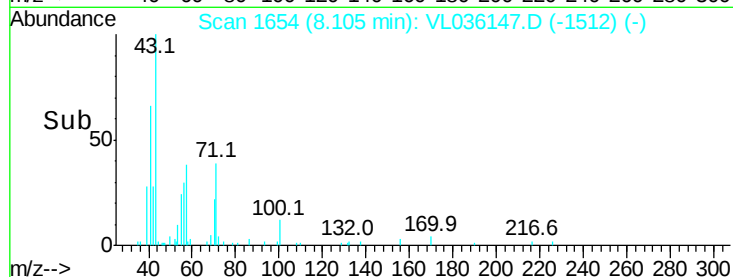
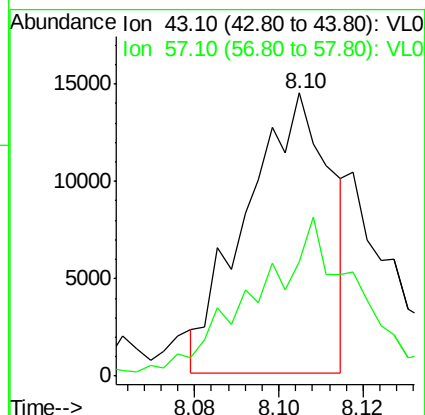
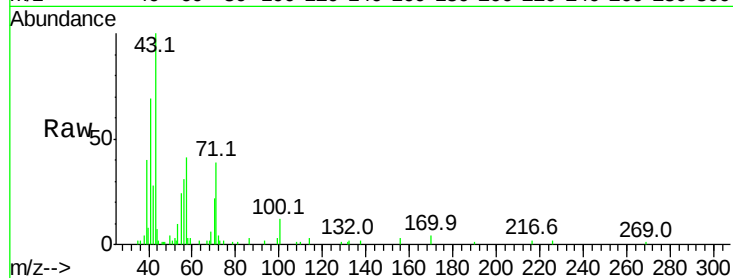
SS-2B

Tgt Ion: 43 Resp: 19822

Ion Ratio Lower Upper

43 100

57 72.3 37.9 56.9#



#11

Trichlorofluoromethane

Concen: 0.129 ppbv

RT: 3.93 min Scan# 357

Delta R.T. -0.03 min

Lab File: VL036147.D

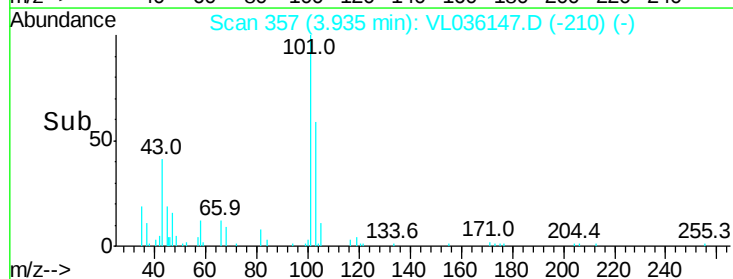
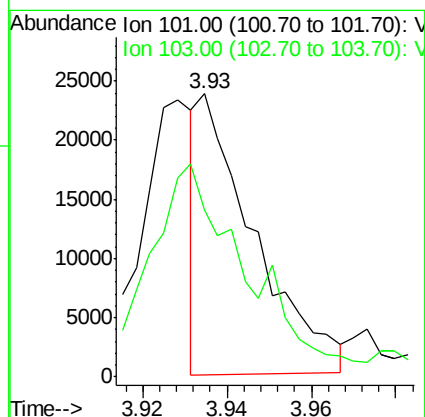
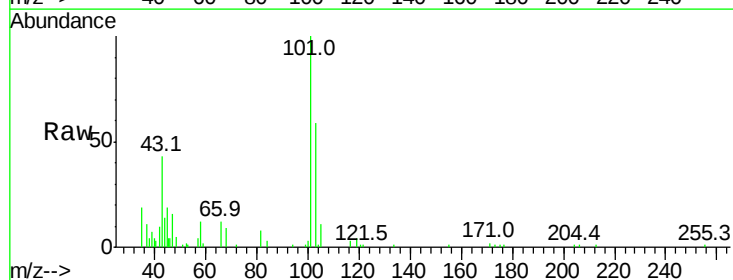
Acq: 11 Dec 2020 3:28

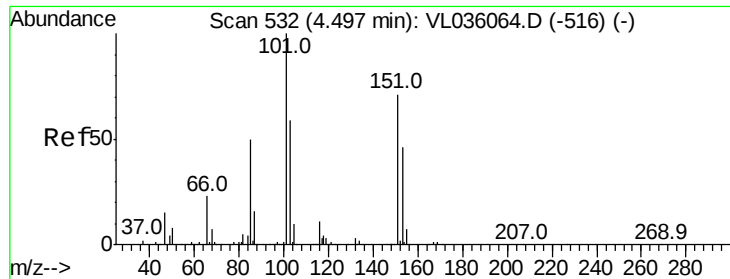
Tgt Ion: 101 Resp: 21742

Ion Ratio Lower Upper

101 100

103 58.4 50.3 75.5





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.038 ppbv

RT: 4.47 min Scan# 524

Delta R.T. -0.03 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

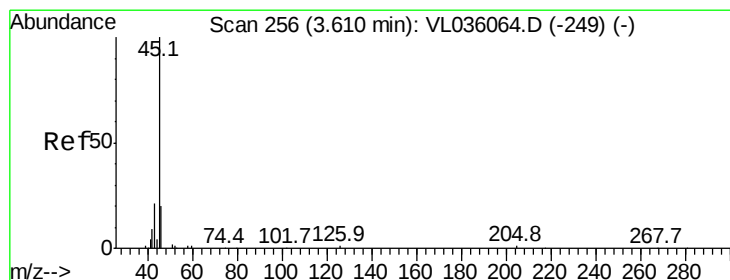
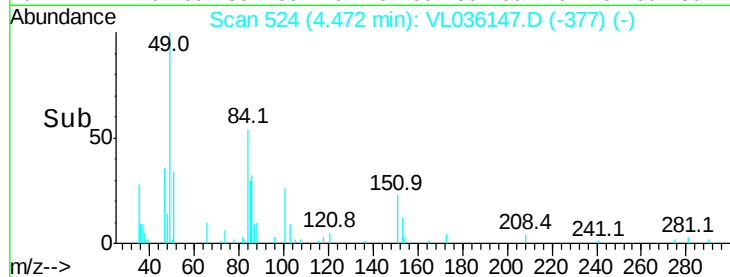
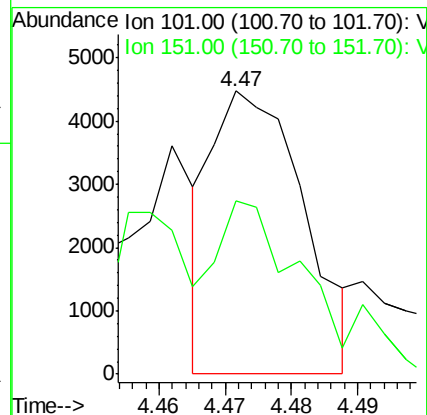
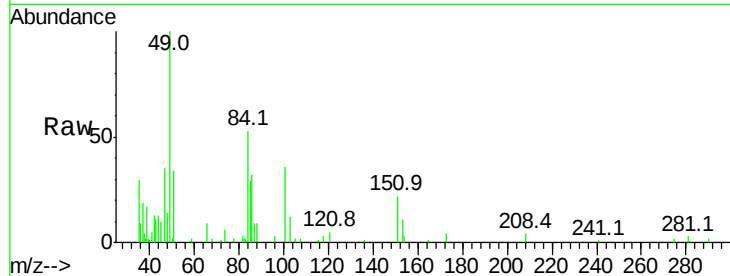
SS-2B

Tgt Ion:101 Resp: 4299

Ion Ratio Lower Upper

101 100

151 115.4 59.3 88.9#



#13

Ethanol

Concen: 365.279 ppbv

RT: 3.61 min Scan# 256

Delta R.T. -0.00 min

Lab File: VL036147.D

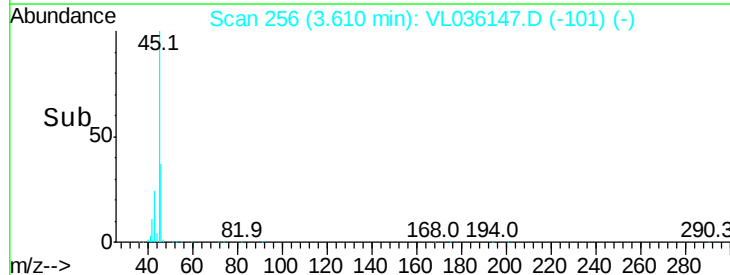
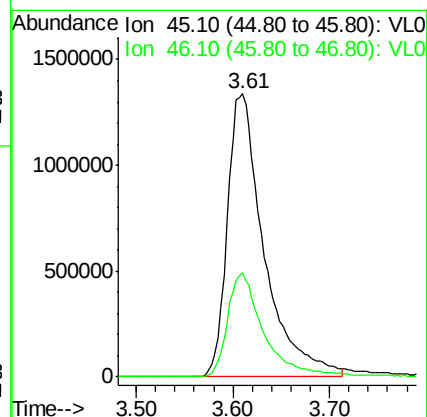
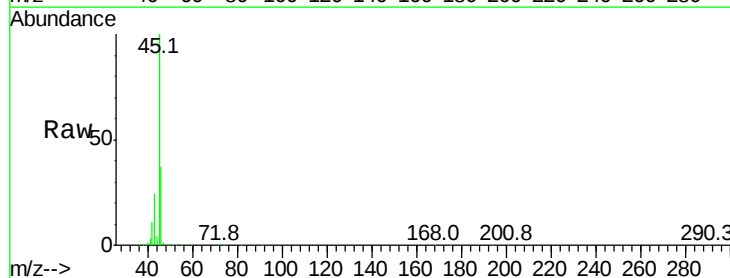
Acq: 11 Dec 2020 3:28

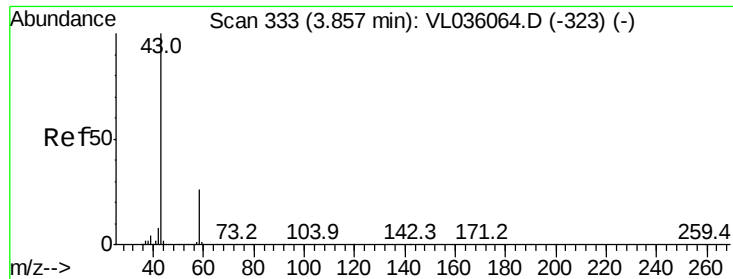
Tgt Ion: 45 Resp: 3534691

Ion Ratio Lower Upper

45 100

46 37.0 19.0 75.8





#15

Acetone

Concen: 8.821 ppbv

RT: 3.83 min Scan# 325

Delta R.T. -0.03 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

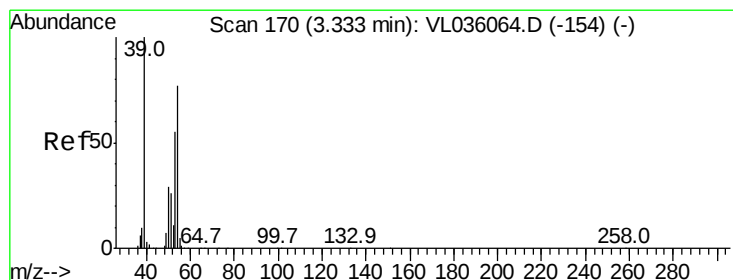
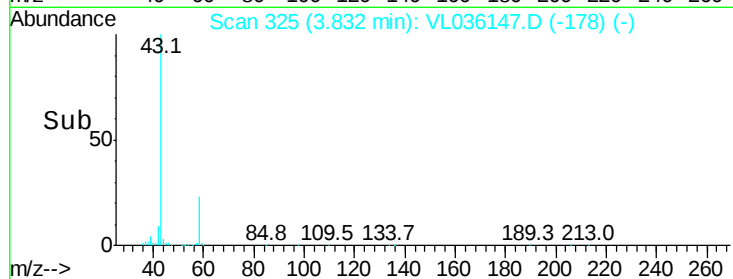
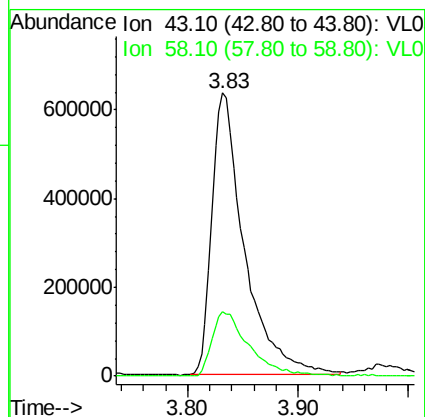
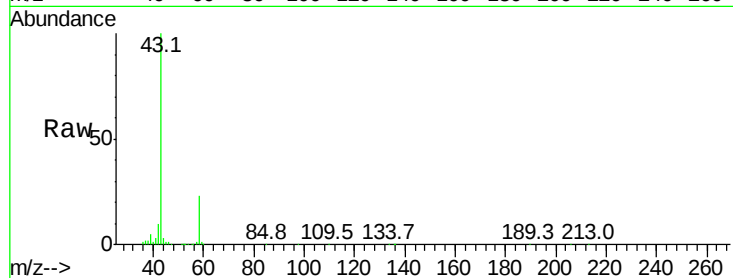
SS-2B

Tgt Ion: 43 Resp: 1302049

Ion Ratio Lower Upper

43 100

58 26.2 20.9 31.3



#16

1,3-Butadiene

Concen: 0.047 ppbv

RT: 3.32 min Scan# 165

Delta R.T. -0.02 min

Lab File: VL036147.D

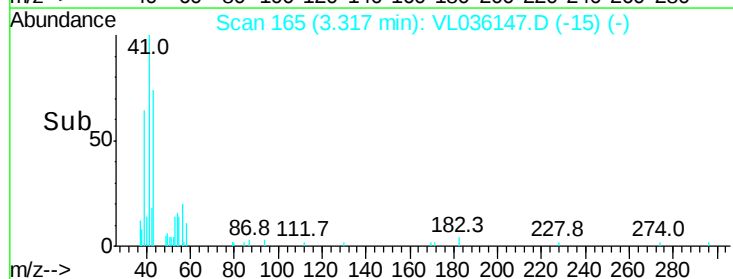
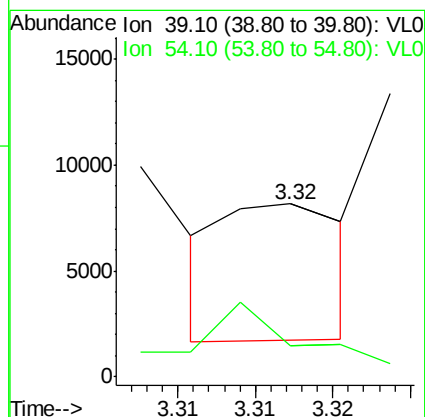
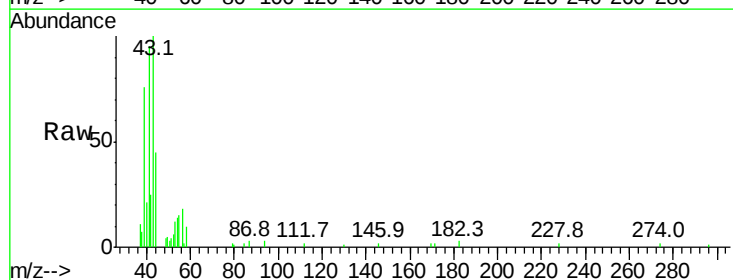
Acq: 11 Dec 2020 3:28

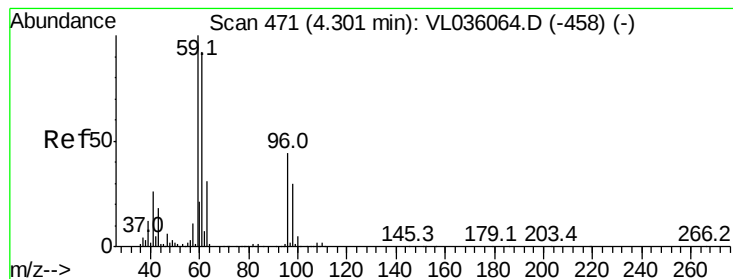
Tgt Ion: 39 Resp: 3524

Ion Ratio Lower Upper

39 100

54 174.1 62.1 93.1#





#17

tert-Butyl alcohol

Concen: 0.145 ppbv

RT: 4.31 min Scan# 474

Delta R.T. 0.01 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

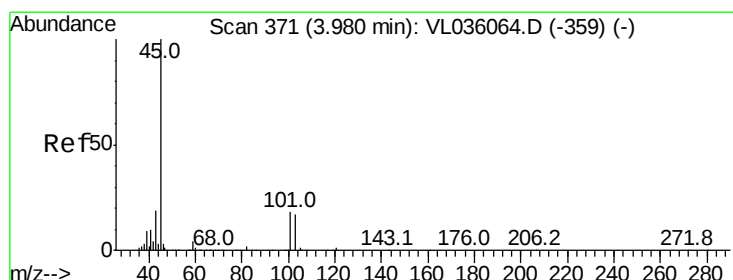
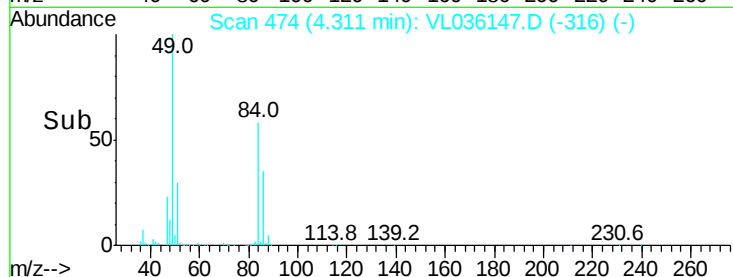
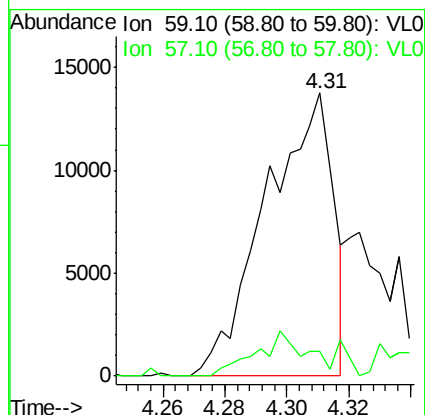
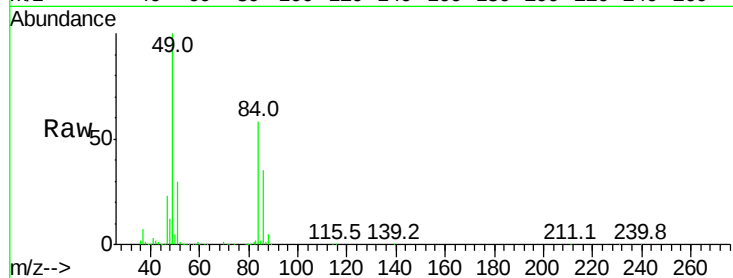
SS-2B

Tgt Ion: 59 Resp: 20773

Ion Ratio Lower Upper

59 100

57 14.2 8.7 13.1#



#19

Isopropyl Alcohol

Concen: 1.823 ppbv

RT: 3.98 min Scan# 370

Delta R.T. -0.00 min

Lab File: VL036147.D

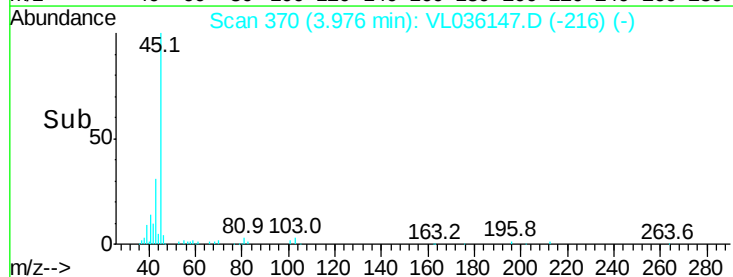
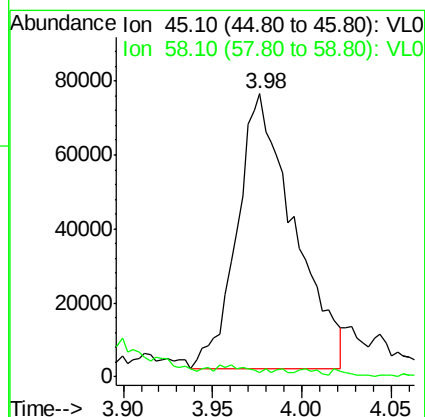
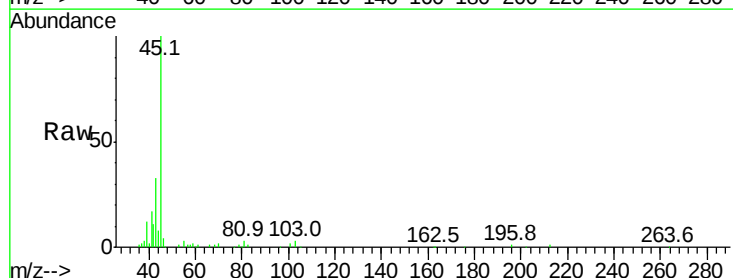
Acq: 11 Dec 2020 3:28

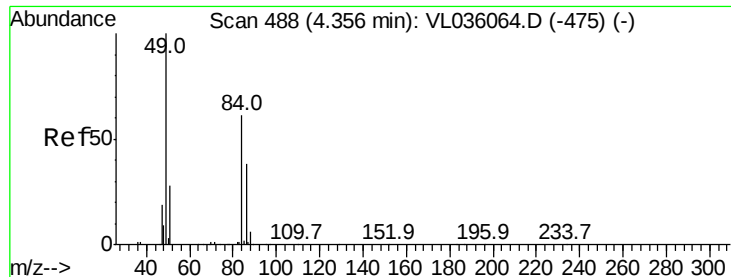
Tgt Ion: 45 Resp: 164454

Ion Ratio Lower Upper

45 100

58 207.6 0.0 0.0#



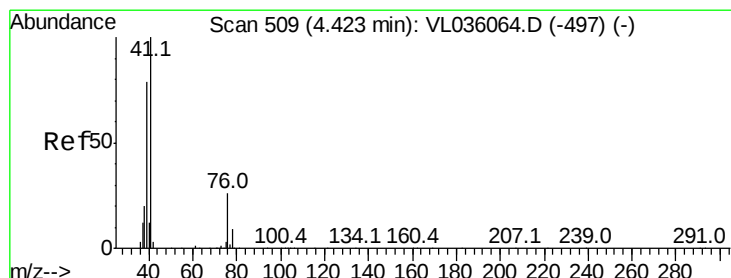
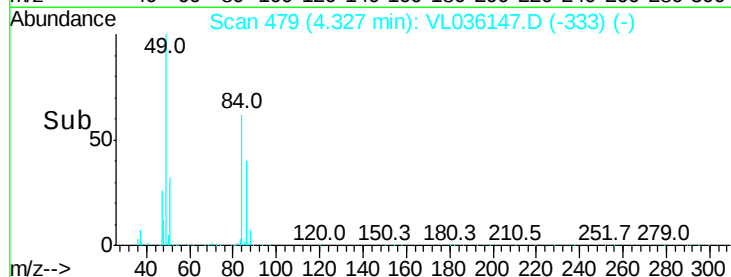
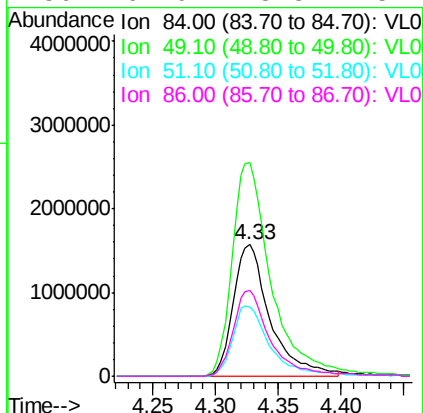
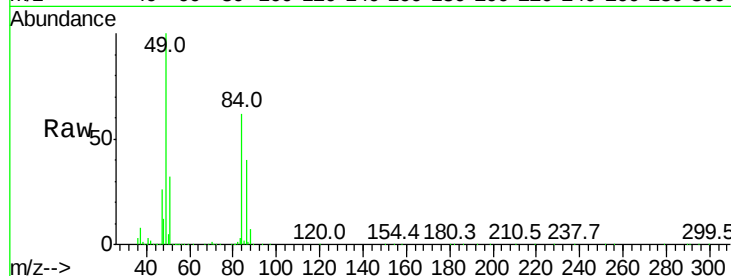


#20
Methylene Chloride
Concen: 52.968 ppbv
RT: 4.33 min Scan# 479
Delta R.T. -0.03 min
Lab File: VL036147.D
Acq: 11 Dec 2020 3:28

Instrument :
MSVOA_L
ClientSampleId :
SS-2B

Tgt Ion: 84 Resp: 3203818

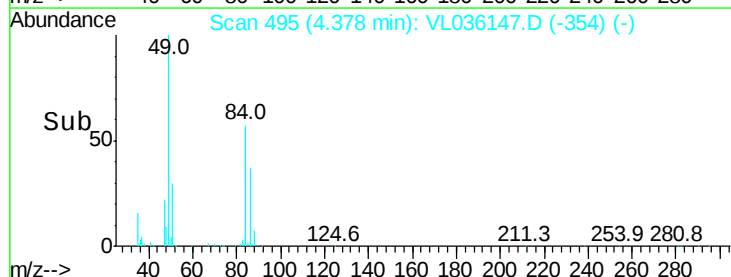
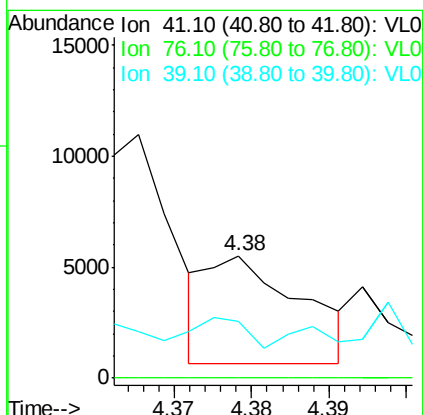
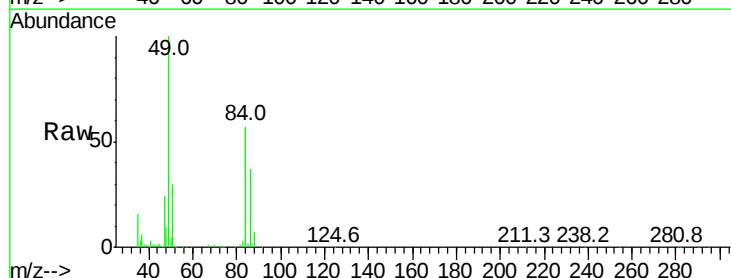
Ion	Ratio	Lower	Upper
84	100		
49	162.2	133.0	199.4
51	52.4	38.9	58.3
86	64.9	48.8	73.2

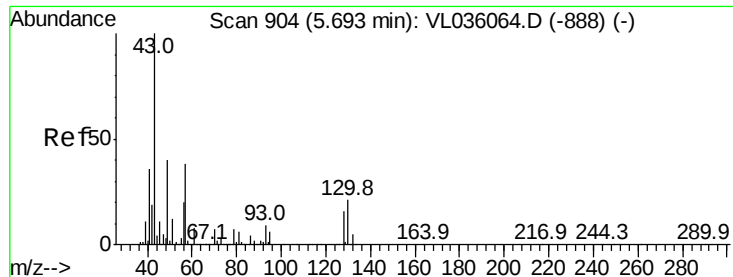


#21
Allyl Chloride
Concen: 0.041 ppbv
RT: 4.38 min Scan# 495
Delta R.T. -0.05 min
Lab File: VL036147.D
Acq: 11 Dec 2020 3:28

Tgt Ion: 41 Resp: 4054

Ion	Ratio	Lower	Upper
41	100		
76	0.0	21.0	31.4#
39	0.0	66.0	99.0#





#25

Ethyl Acetate

Concen: 4.916 ppbv

RT: 5.67 min Scan# 897

Delta R.T. -0.02 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

SS-2B

Tgt Ion: 43 Resp: 1449596

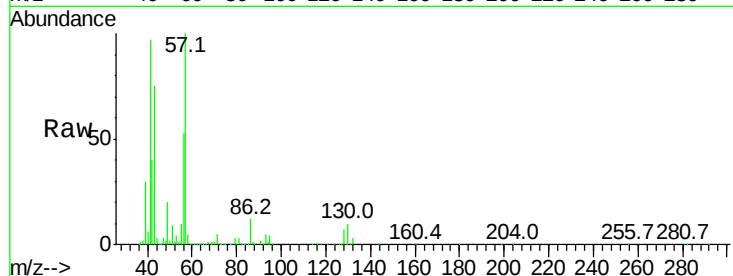
Ion Ratio Lower Upper

43 100

45 0.7 8.2 12.4#

61 0.7 7.4 11.2#

70 1.6 5.4 8.0#

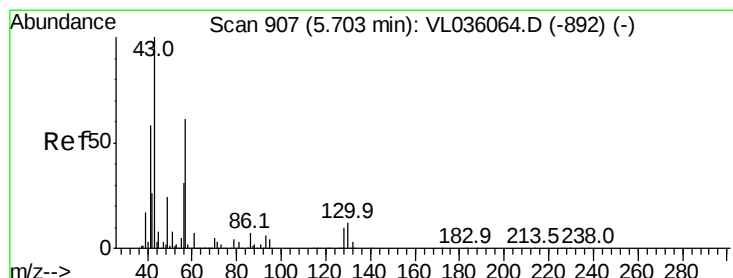
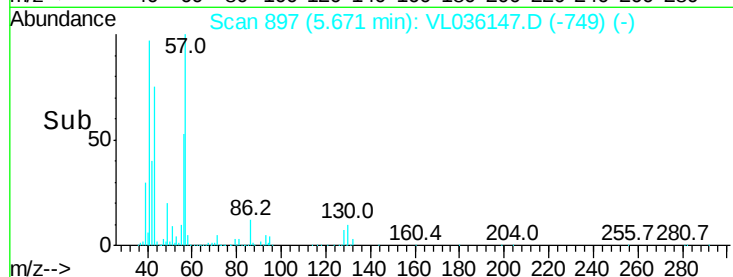
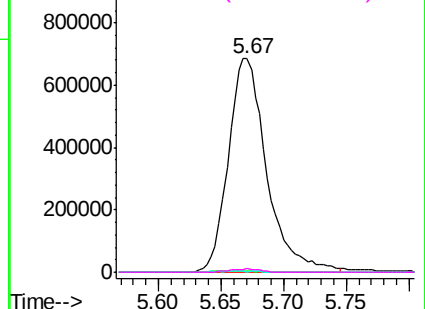


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 14.595 ppbv

RT: 5.67 min Scan# 897

Delta R.T. -0.03 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Tgt Ion: 57 Resp: 1936882

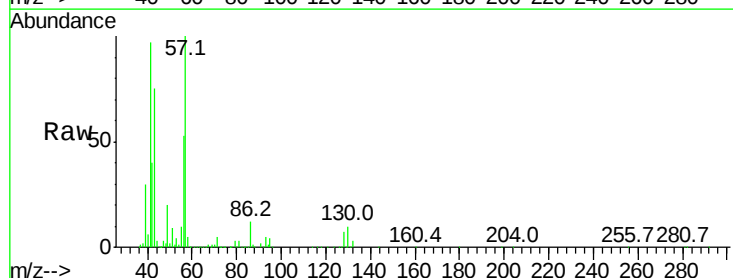
Ion Ratio Lower Upper

57 100

41 97.5 82.9 124.3

43 76.1 199.9 299.9#

56 53.6 43.1 64.7

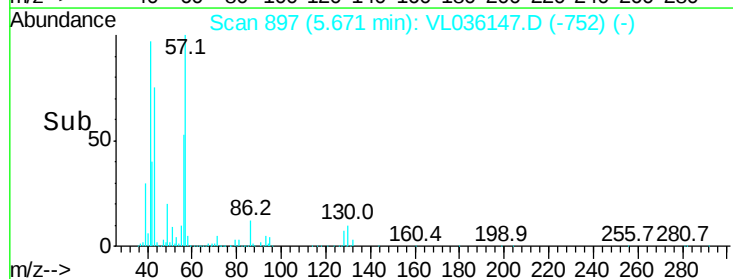
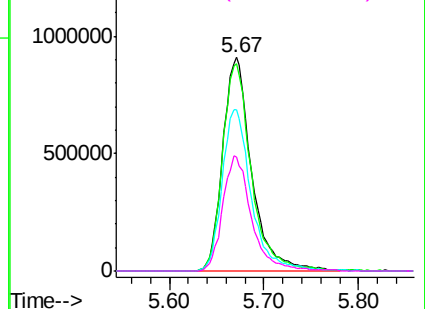


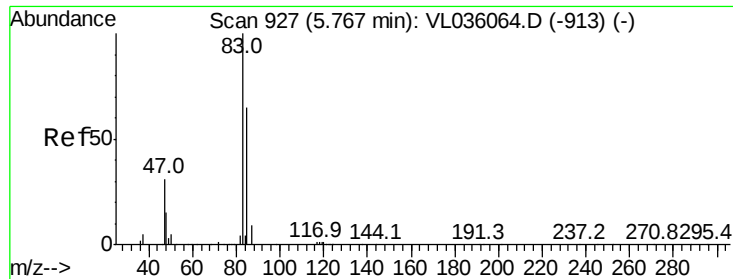
Abundance Ion 57.10 (56.80 to 57.80): VL0

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





#29

Chloroform

Concen: 0.144 ppbv

RT: 5.74 min Scan# 918

Delta R.T. -0.03 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

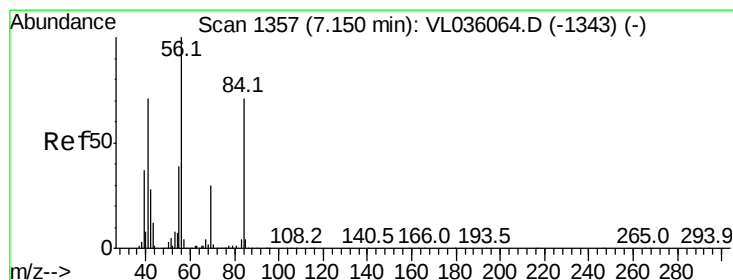
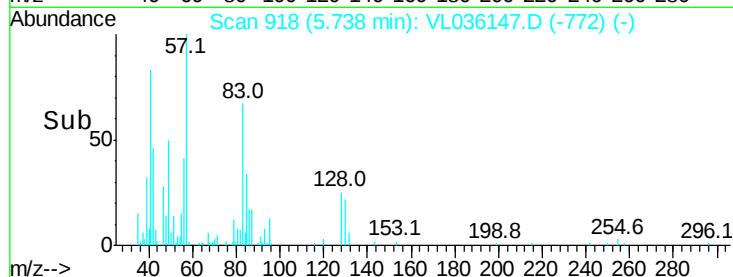
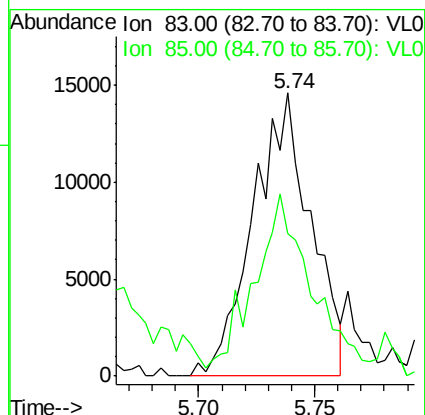
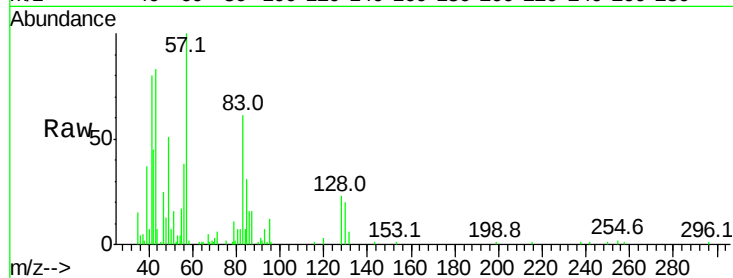
SS-2B

Tgt Ion: 83 Resp: 25162

Ion Ratio Lower Upper

83 100

85 38.7 51.8 77.6#



#30

Cyclohexane

Concen: 0.093 ppbv

RT: 7.11 min Scan# 1345

Delta R.T. -0.04 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

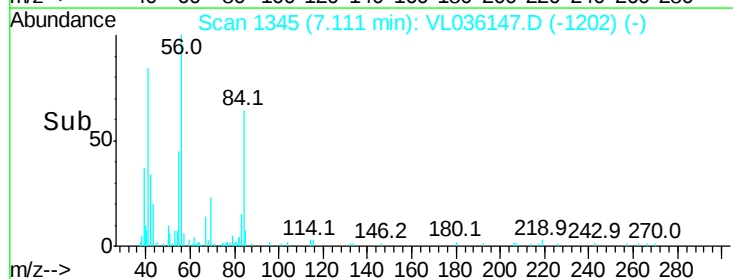
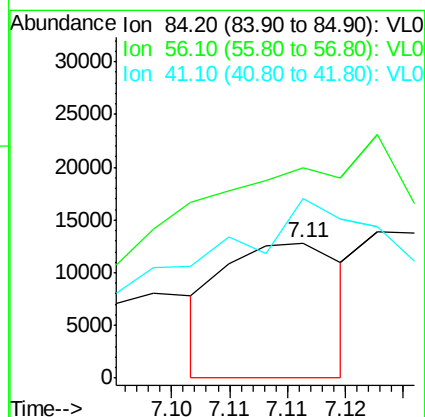
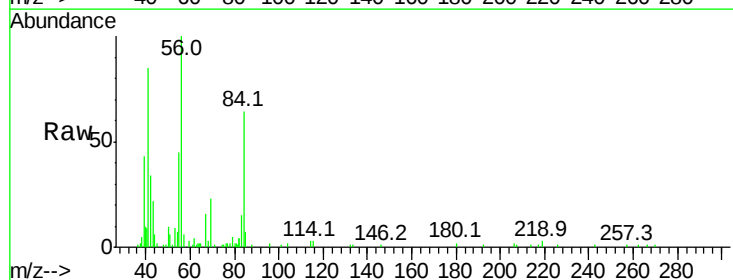
Tgt Ion: 84 Resp: 9069

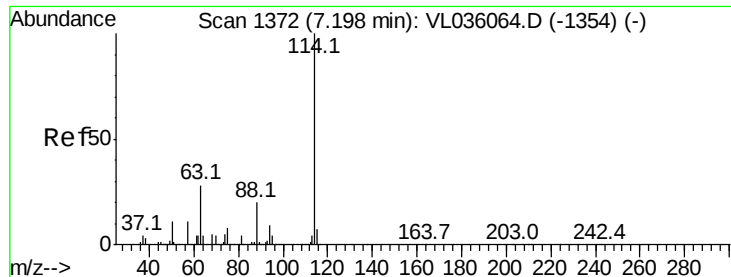
Ion Ratio Lower Upper

84 100

56 0.0 128.0 192.0#

41 442.0 81.3 121.9#

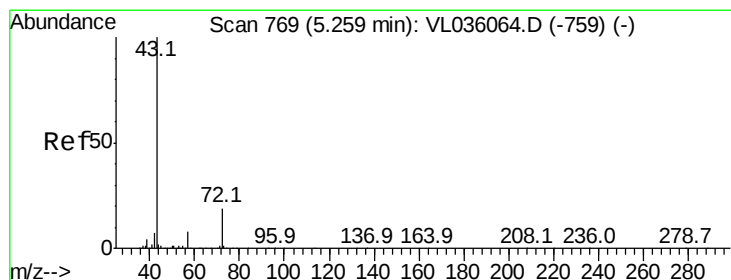
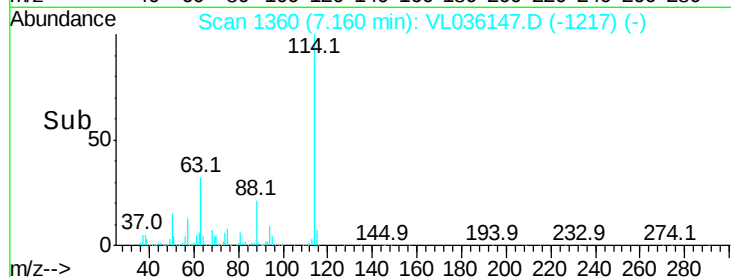
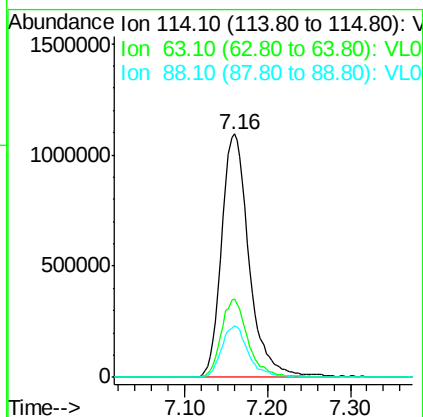
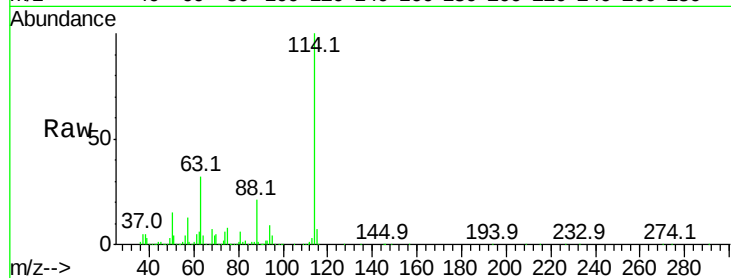




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1360
 Delta R.T. -0.04 min
 Lab File: VL036147.D
 Acq: 11 Dec 2020 3:28

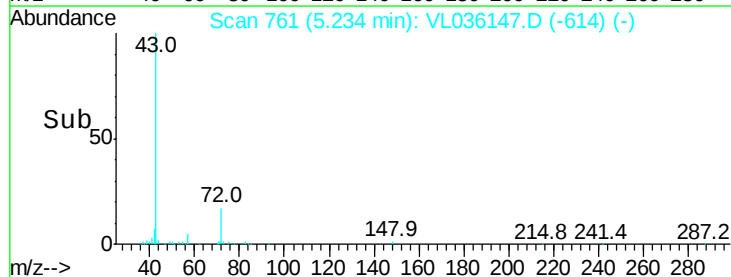
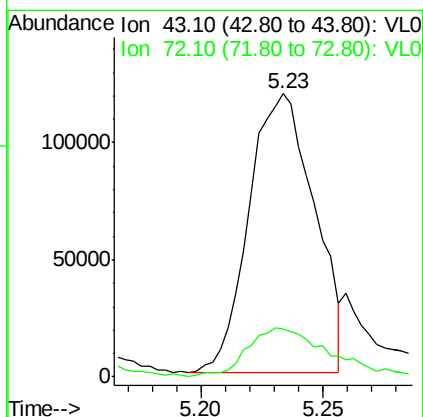
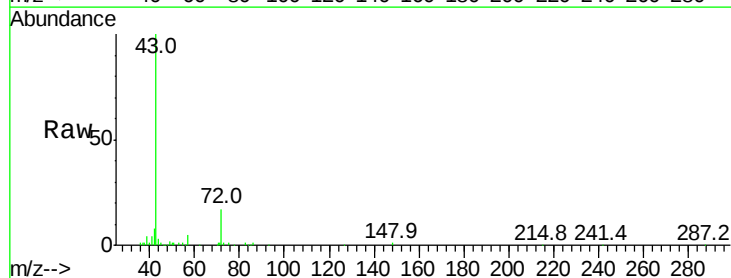
Instrument :
 MSVOA_L
 ClientSampleID :
 SS-2B

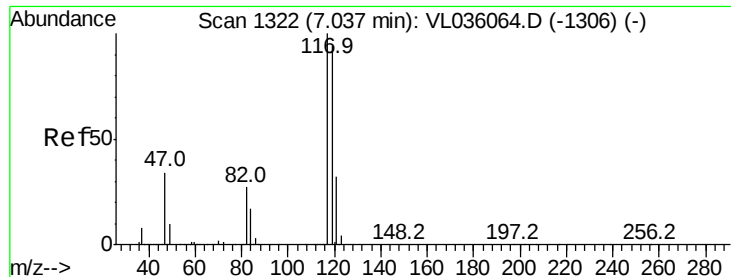
Tgt Ion:114 Resp: 2518073
 Ion Ratio Lower Upper
 114 100
 63 31.6 23.6 35.4
 88 20.9 15.8 23.6



#34
 2-Butanone
 Concen: 1.319 ppbv
 RT: 5.23 min Scan# 761
 Delta R.T. -0.03 min
 Lab File: VL036147.D
 Acq: 11 Dec 2020 3:28

Tgt Ion: 43 Resp: 220316
 Ion Ratio Lower Upper
 43 100
 72 23.3 16.5 24.7





#35

Carbon Tetrachloride

Concen: 0.034 ppbv

RT: 7.00 min Scan# 1310

Delta R.T. -0.04 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

SS-2B

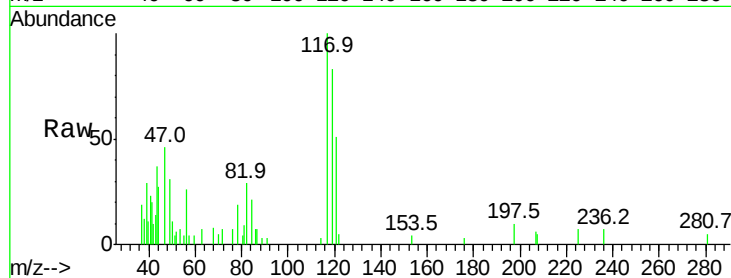
Tgt Ion: 117 Resp: 4948

Ion Ratio Lower Upper

117 100

119 59.1 75.1 112.7#

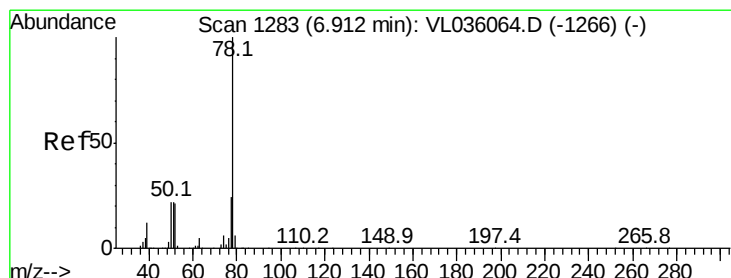
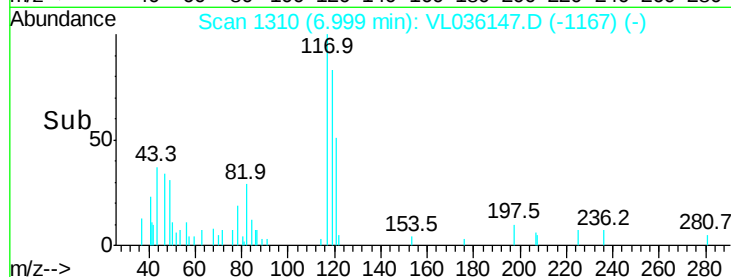
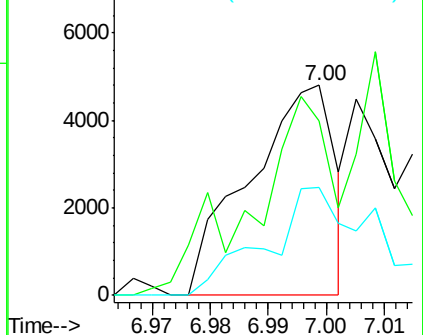
121 51.1 25.6 38.4#



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 1.664 ppbv

RT: 6.87 min Scan# 1270

Delta R.T. -0.04 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

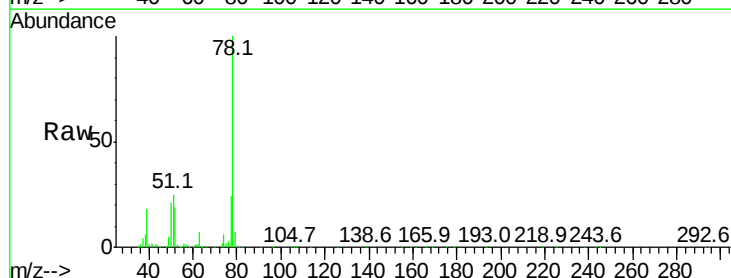
Tgt Ion: 78 Resp: 355042

Ion Ratio Lower Upper

78 100

77 24.0 19.4 29.2

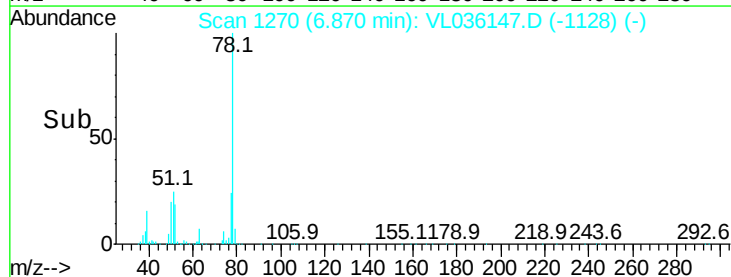
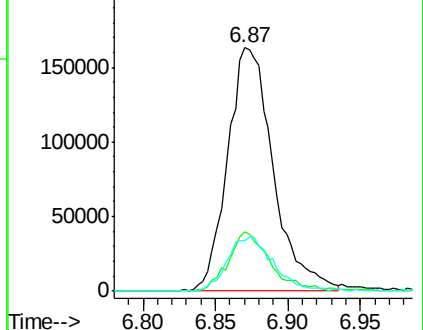
50 20.2 17.8 26.8

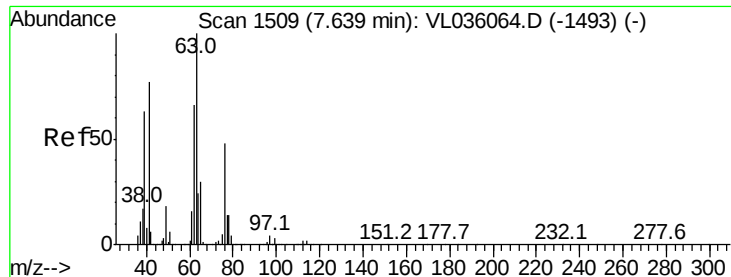


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#39

1,2-Dichloropropane

Concen: 9.079 ppbv

RT: 7.16 min Scan# 1360

Delta R.T. -0.48 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

SS-2B

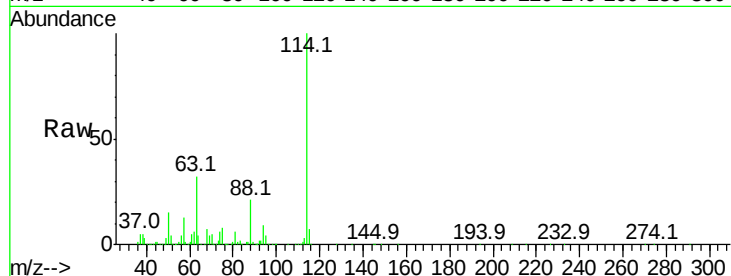
Tgt Ion: 63 Resp: 765133

Ion Ratio Lower Upper

63 100

41 0.0 61.9 92.9#

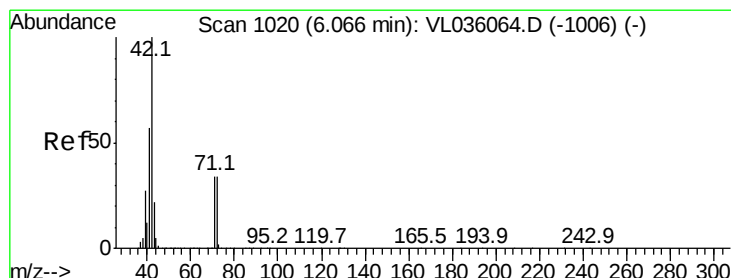
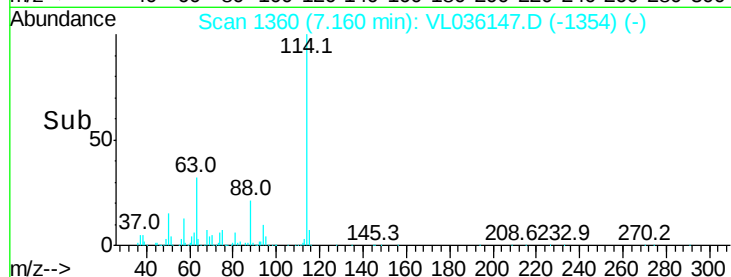
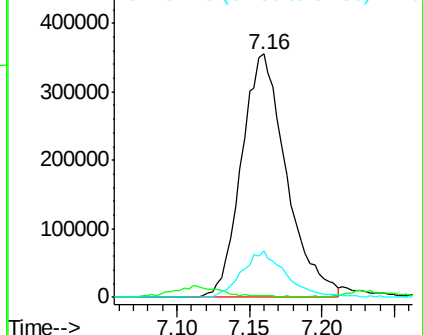
62 19.0 52.5 78.7#



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



#41

Tetrahydrofuran

Concen: 0.092 ppbv

RT: 6.05 min Scan# 1015

Delta R.T. -0.02 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

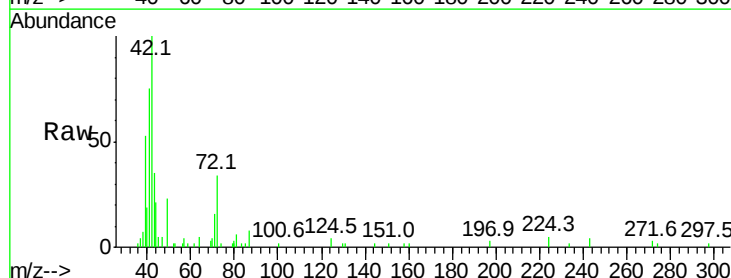
Tgt Ion: 42 Resp: 9151

Ion Ratio Lower Upper

42 100

72 86.9 28.3 42.5#

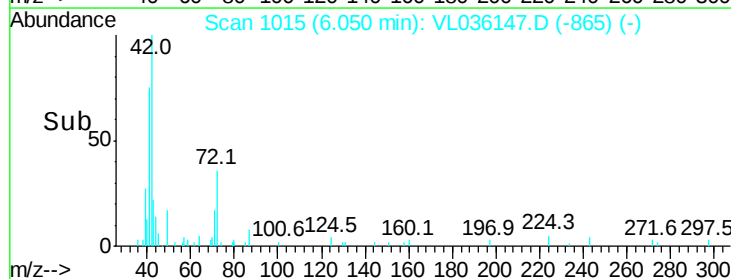
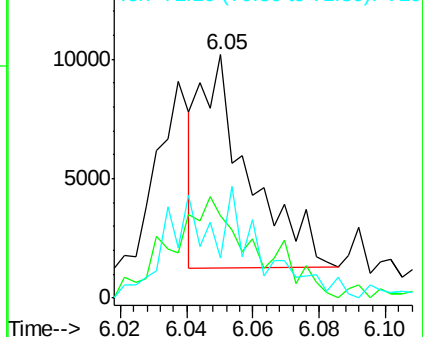
71 88.1 27.3 40.9#

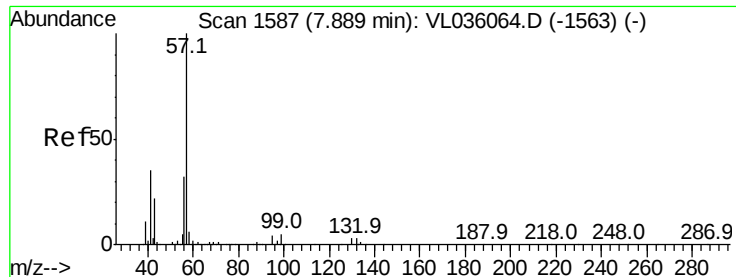


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 0.183 ppbv

RT: 7.85 min Scan# 1576

Delta R.T. -0.04 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

SS-2B

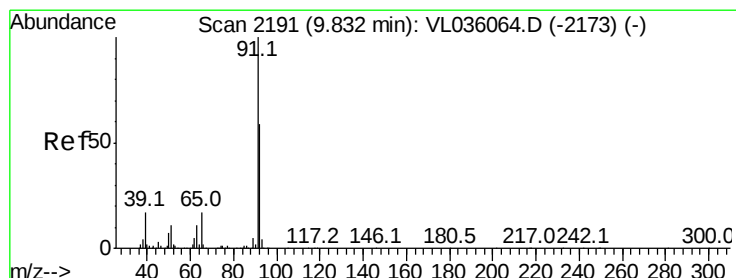
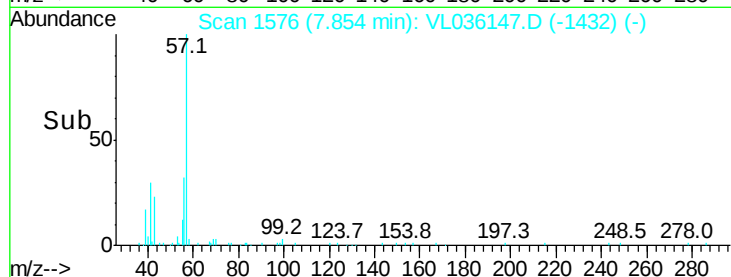
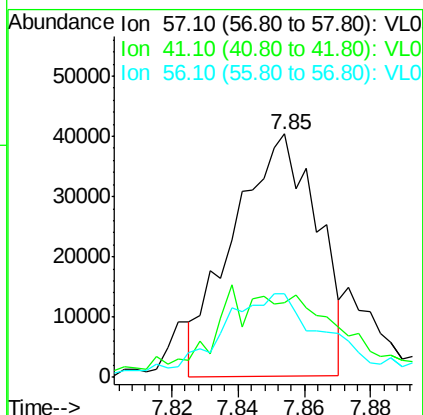
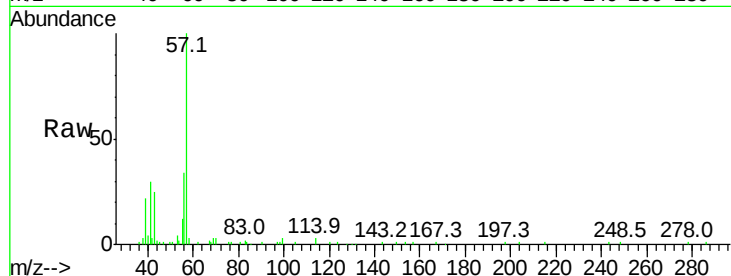
Tgt Ion: 57 Resp: 70594

Ion Ratio Lower Upper

57 100

41 52.5 28.9 43.3#

56 48.0 25.3 37.9#



#53

Toluene

Concen: 1.263 ppbv

RT: 9.79 min Scan# 2178

Delta R.T. -0.04 min

Lab File: VL036147.D

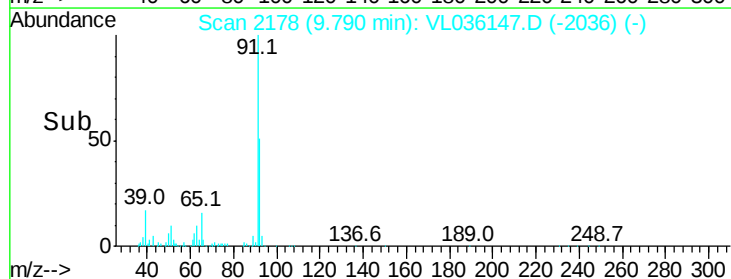
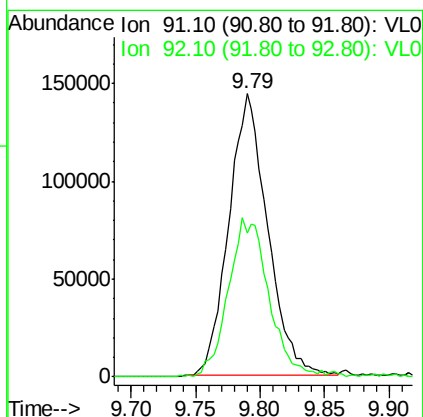
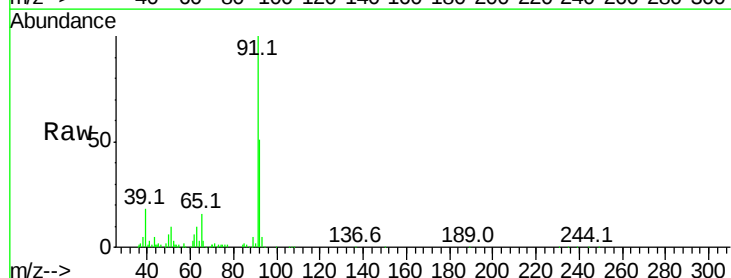
Acq: 11 Dec 2020 3:28

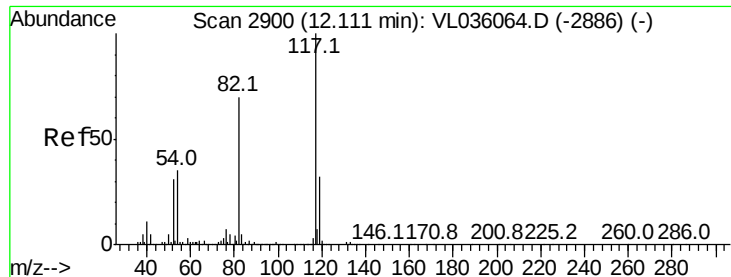
Tgt Ion: 91 Resp: 302560

Ion Ratio Lower Upper

91 100

92 59.1 48.2 72.2

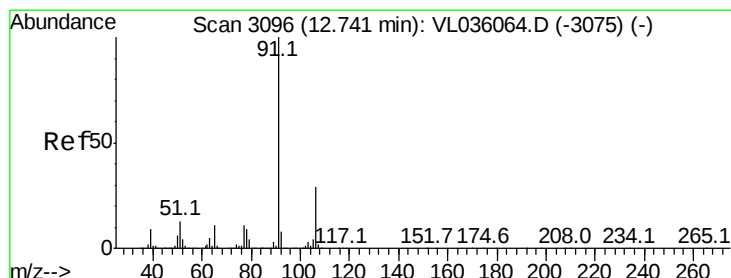
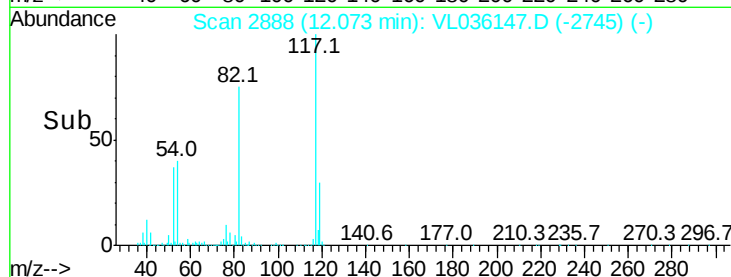
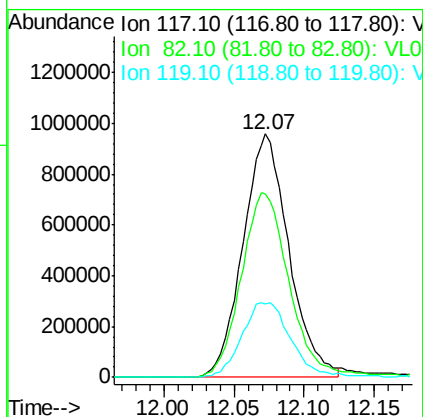
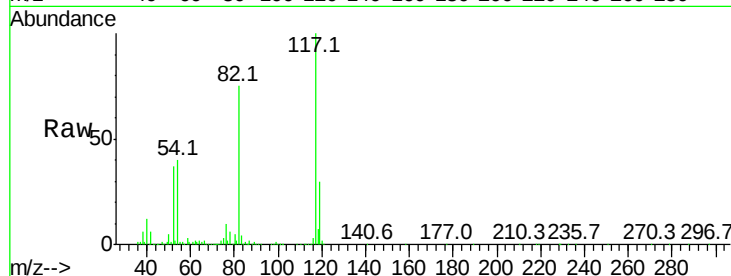




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2888
Delta R.T. -0.04 min
Lab File: VL036147.D
Acq: 11 Dec 2020 3:28

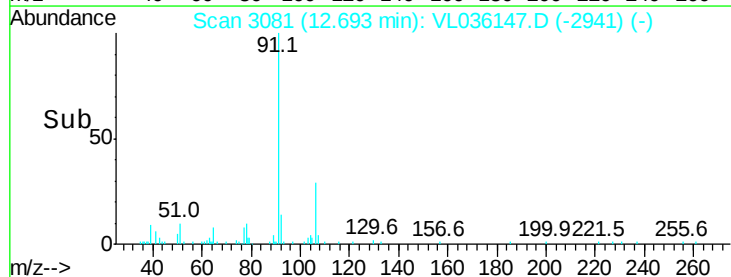
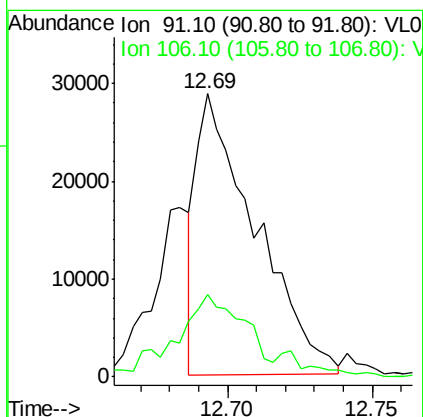
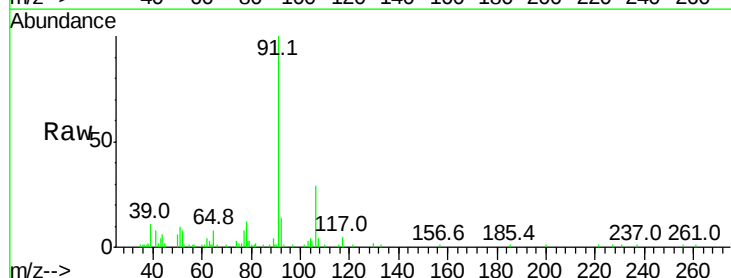
Instrument :
MSVOA_L
ClientSampleId :
SS-2B

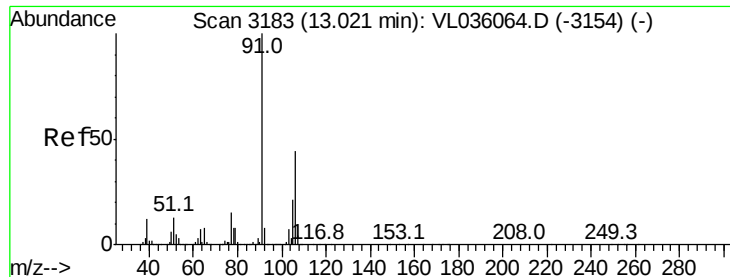
Tgt Ion: 117 Resp: 2179682
Ion Ratio Lower Upper
117 100
82 80.9 0.0 0.0#
119 33.6 0.0 0.0#



#58
Ethyl Benzene
Concen: 0.135 ppbv
RT: 12.69 min Scan# 3081
Delta R.T. -0.05 min
Lab File: VL036147.D
Acq: 11 Dec 2020 3:28

Tgt Ion: 91 Resp: 40296
Ion Ratio Lower Upper
91 100
106 25.9 23.0 34.4





#59

m/p-Xylene

Concen: 0.163 ppbv

RT: 12.98 min Scan# 3170

Delta R.T. -0.04 min

Lab File: VL036147.D

Acq: 11 Dec 2020 3:28

Instrument :

MSVOA_L

ClientSampleId :

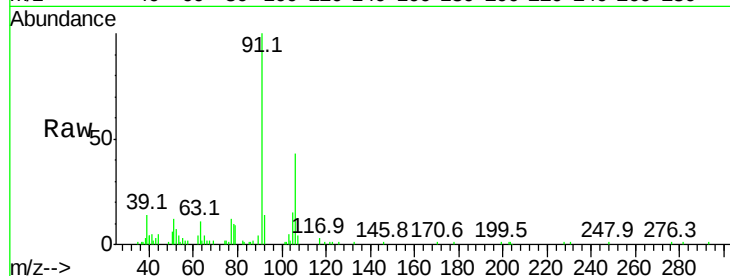
SS-2B

Tgt Ion: 91 Resp: 41015

Ion Ratio Lower Upper

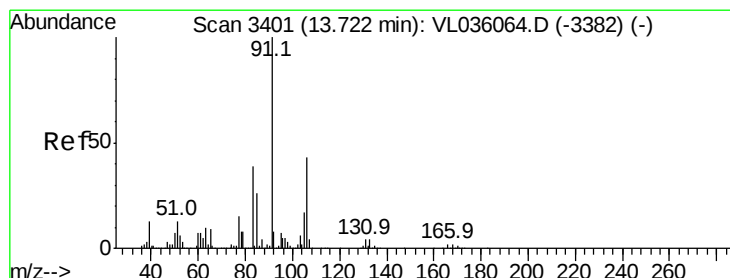
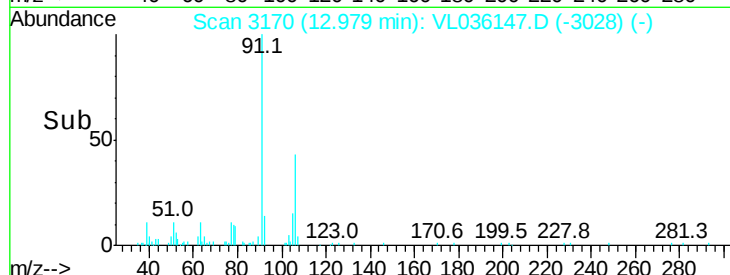
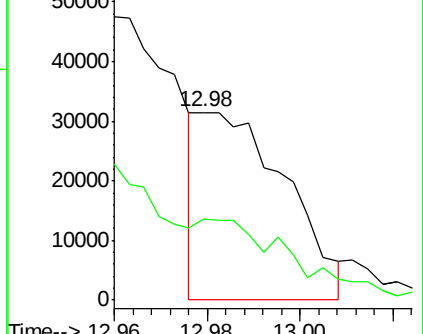
91 100

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: 0.061 ppbv

RT: 13.68 min Scan# 3387

Delta R.T. -0.05 min

Lab File: VL036147.D

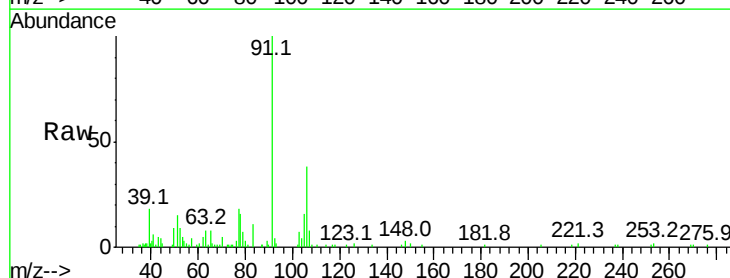
Acq: 11 Dec 2020 3:28

Tgt Ion: 91 Resp: 14348

Ion Ratio Lower Upper

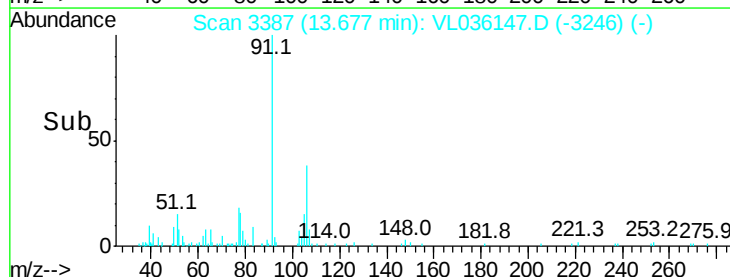
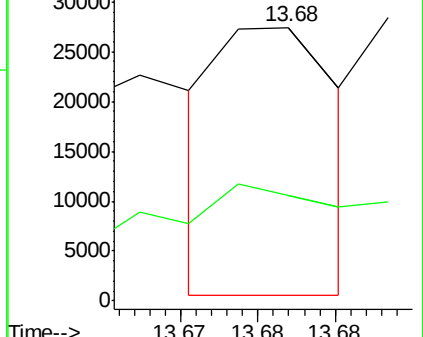
91 100

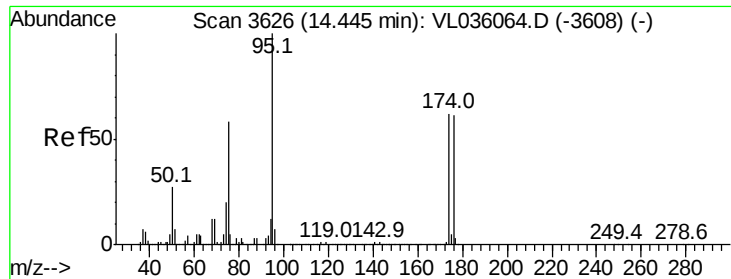
106 174.3 21.6 64.6#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

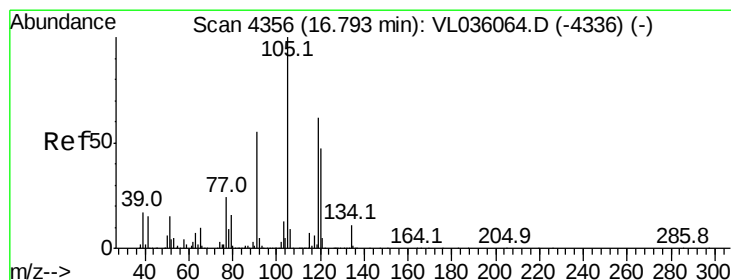
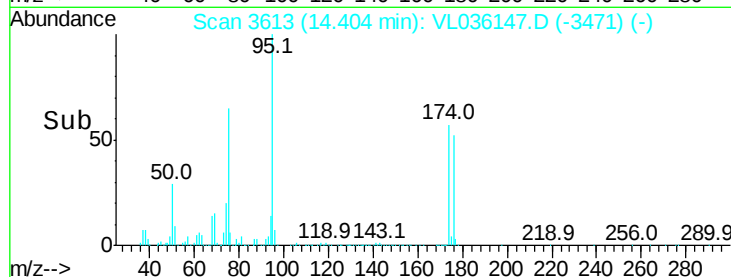
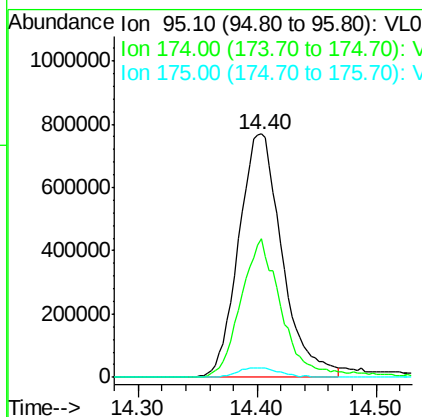
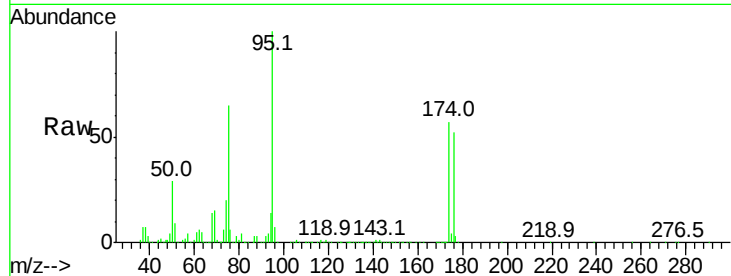




#68
 1-Bromo-4-Fluorobenzene
 Concen: 11.255 ppbv
 RT: 14.40 min Scan# 3613
 Delta R.T. -0.04 min
 Lab File: VL036147.D
 Acq: 11 Dec 2020 3:28

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-2B

Tgt Ion: 95 Resp: 1948029
 Ion Ratio Lower Upper
 95 100
 174 54.9 50.7 76.1
 175 4.0 4.0 6.0#



#74
 1,2,4-Trimethylbenzene
 Concen: 0.064 ppbv
 RT: 16.74 min Scan# 4341
 Delta R.T. -0.05 min
 Lab File: VL036147.D
 Acq: 11 Dec 2020 3:28

Tgt Ion: 105 Resp: 15649
 Ion Ratio Lower Upper
 105 100
 120 35.4 37.4 56.0#
 91 1.6 45.6 68.4#
 77 10.6 19.4 29.2#

