

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120820\
 Data File : VL036115.D
 Acq On : 9 Dec 2020 4:12
 Operator : SY/AP
 Sample : L4948-11DL 40X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-5BDL

Quant Time: Dec 09 07:24:25 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	1146820	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.18	114	2384350	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.10	117	2115809	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	1790961	10.66	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.60%

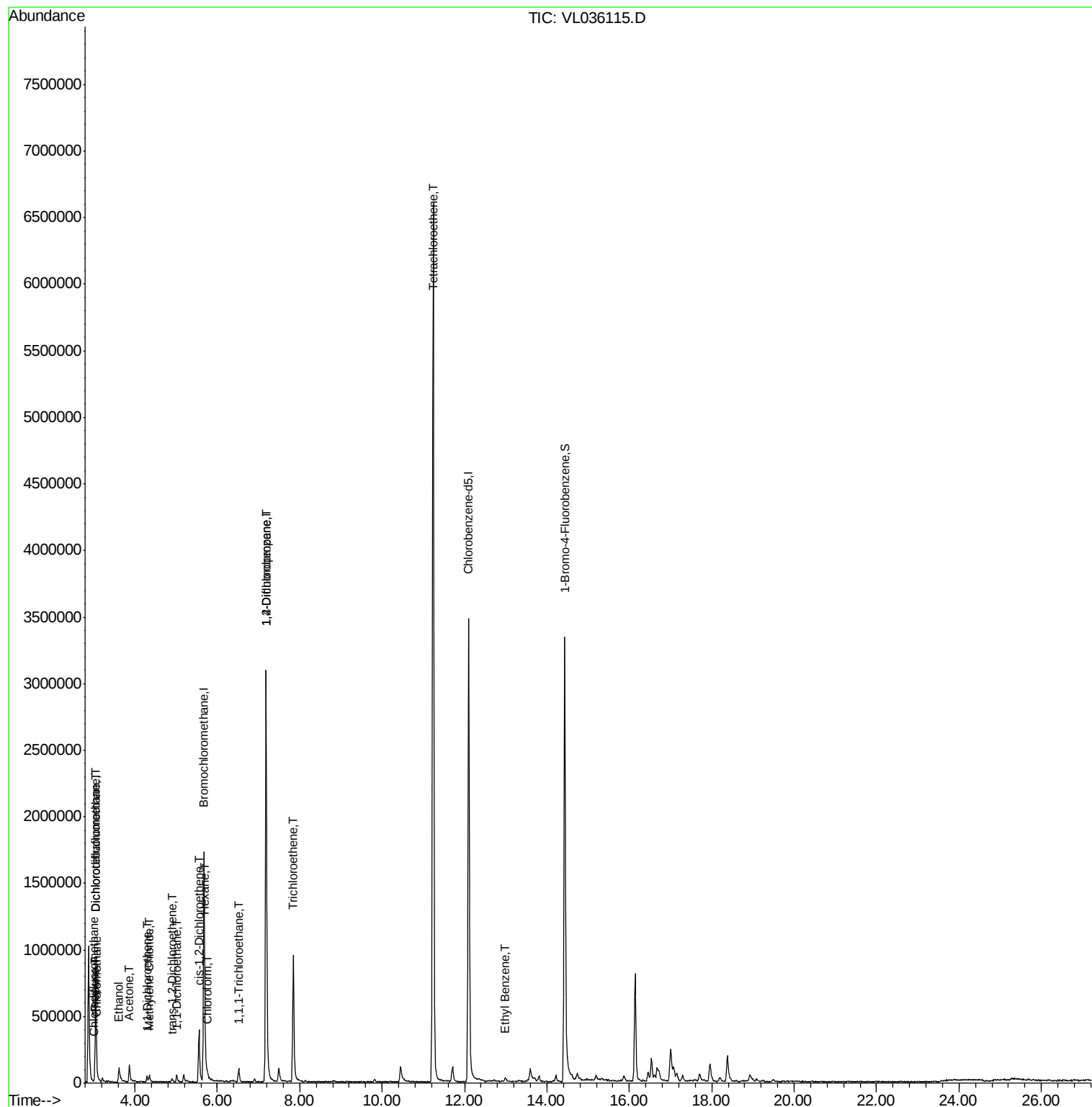
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	854687	6.395	ppbv	100
3) Chlorodifluoromethane	2.99	51	5426	0.041	ppbv	93
4) Chloromethane	3.09	50	2472	0.038	ppbv #	42
8) Dichlorotetrafluoroethane	3.05	85	854687	5.754	ppbv #	16
9) Propene	3.02	41	9164	0.140	ppbv #	58
13) Ethanol	3.61	45	118503	13.115	ppbv	92
15) Acetone	3.86	43	169089	1.227	ppbv #	89
18) 1,1-Dichloroethene	4.29	96	8075	0.170	ppbv #	77
20) Methylene Chloride	4.35	84	13514	0.239	ppbv #	79
22) trans-1,2-Dichloroethene	4.89	96	2447	0.052	ppbv #	39
24) 1,1-Dichloroethane	5.01	63	46426	0.360	ppbv	97
26) Hexane	5.70	57	5228	0.042	ppbv #	43
29) Chloroform	5.75	83	7289	0.045	ppbv #	82
31) cis-1,2-Dichloroethene	5.56	61	272513	2.419	ppbv	92
32) 1,1,1-Trichloroethane	6.52	97	55582	0.331	ppbv #	89
38) Trichloroethene	7.84	130	290693	3.848	ppbv	94
39) 1,2-Dichloropropane	7.18	63	736531	9.230	ppbv #	24
52) Tetrachloroethene	11.24	164	1623123	22.189	ppbv	97
58) Ethyl Benzene	12.98	91	11253	0.039	ppbv	99

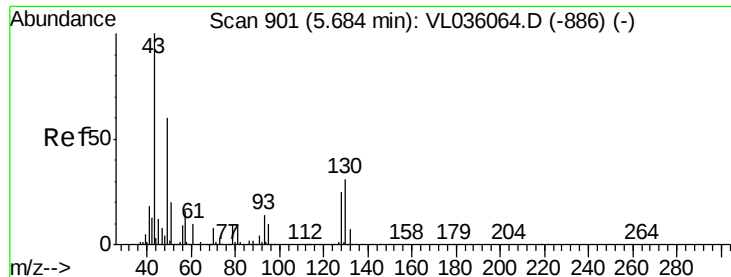
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL120820\
Data File : VL036115.D
Acq On : 9 Dec 2020 4:12
Operator : SY/AP
Sample : L4948-11DL 40X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS-5BDL

Quant Time: Dec 09 07:24:25 2020
Quant Method : Z:\V0ASRV\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: 5.67 min Scan# 897

Delta R.T. -0.01 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Instrument :

MSVOA_L

ClientSampleId :

SS-5BDL

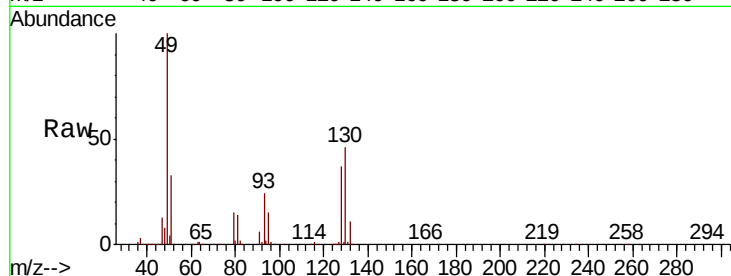
Tot Ion: 49 Resp: 1146820

Ion Ratio Lower Upper

49 100

128 36.5 21.1 63.1

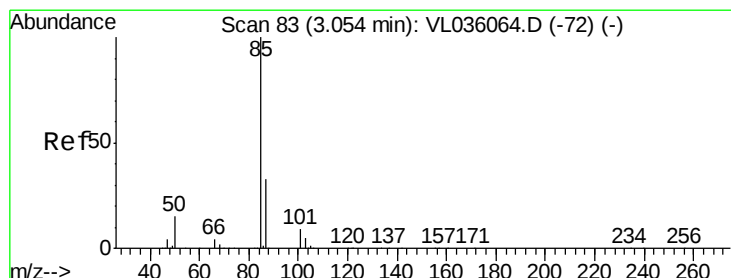
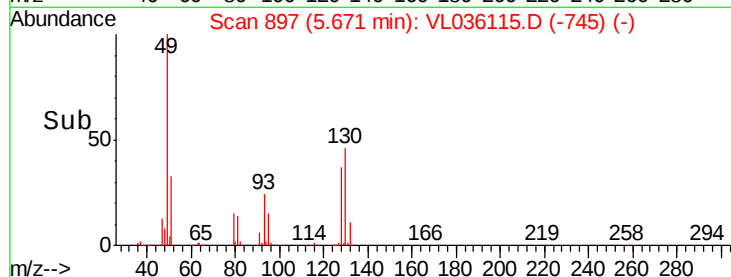
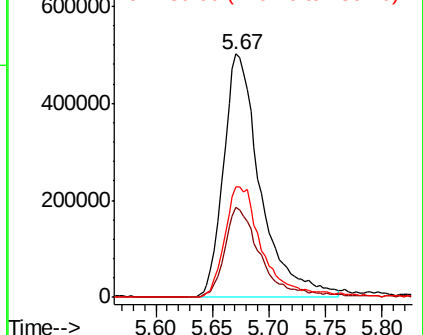
130 47.5 27.1 81.3



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 6.395 ppbv

RT: 3.05 min Scan# 81

Delta R.T. -0.01 min

Lab File: VL036115.D

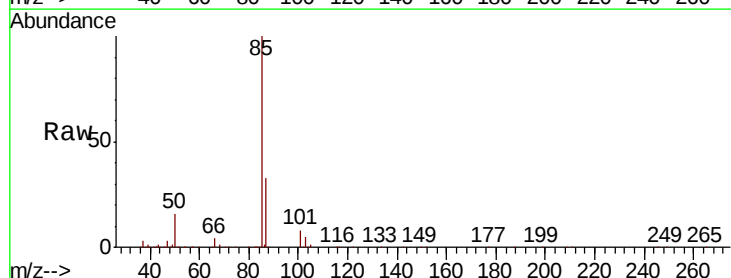
Acq: 9 Dec 2020 4:12

Tgt Ion: 85 Resp: 854687

Ion Ratio Lower Upper

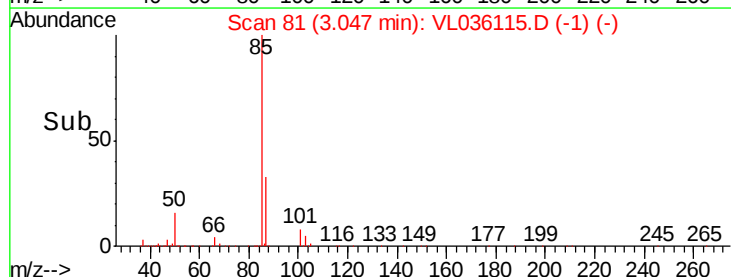
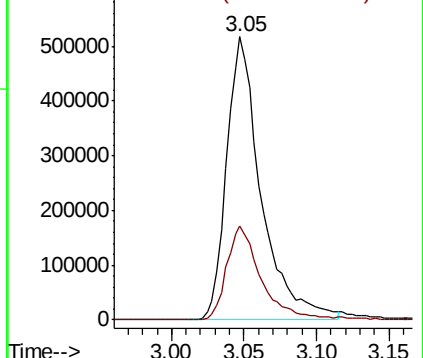
85 100

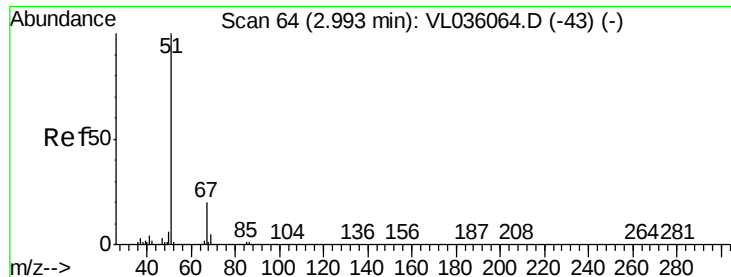
87 33.0 26.5 39.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.041 ppbv

RT: 2.99 min Scan# 62

Delta R.T. -0.01 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Instrument :

MSVOA_L

ClientSampled :

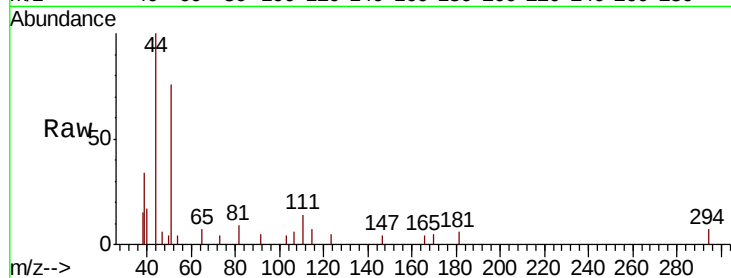
SS-5BDL

Tot Ion: 51 Resp: 5426

Ion Ratio Lower Upper

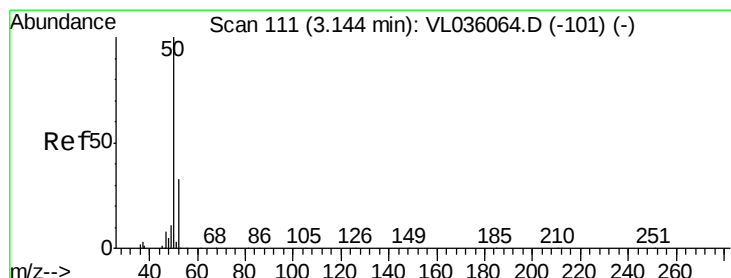
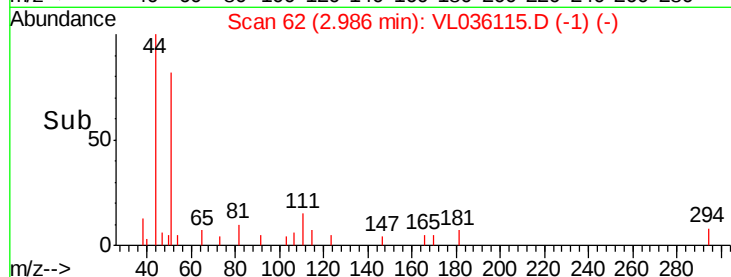
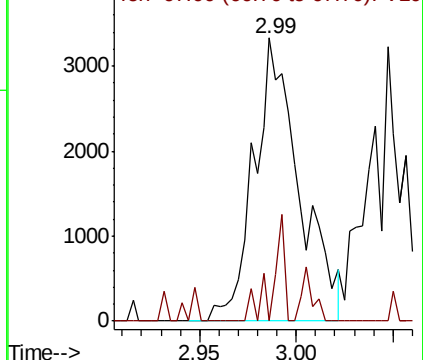
51 100

67 14.6 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: 0.038 ppbv

RT: 3.09 min Scan# 93

Delta R.T. -0.06 min

Lab File: VL036115.D

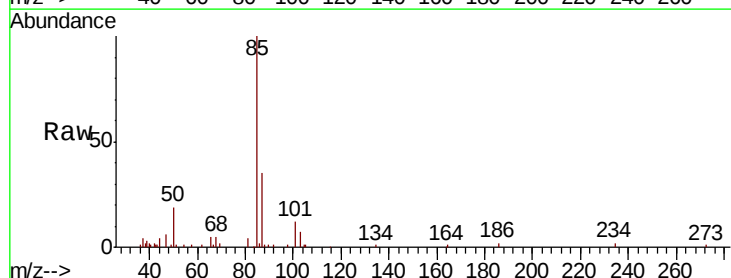
Acq: 9 Dec 2020 4:12

Tgt Ion: 50 Resp: 2472

Ion Ratio Lower Upper

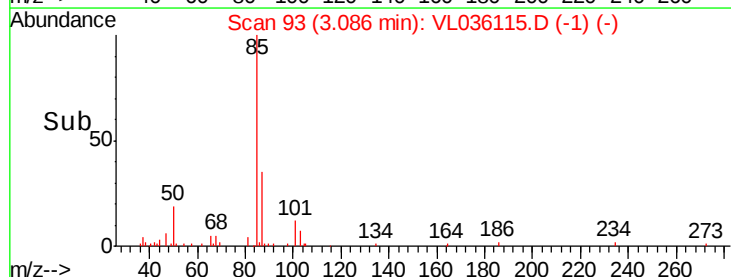
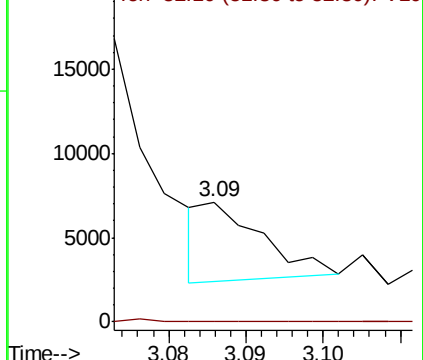
50 100

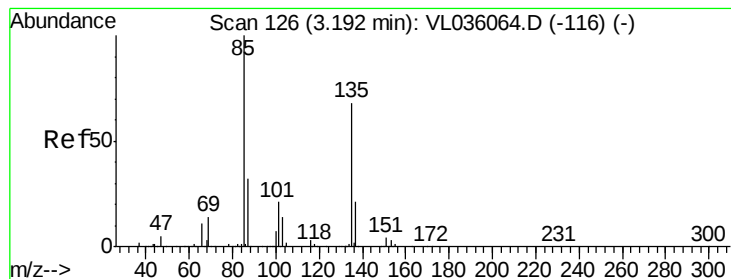
52 0.0 26.1 39.1#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#8

Dichlorotetrafluoroethane

Concen: 5.754 ppbv

RT: 3.05 min Scan# 81

Delta R.T. -0.14 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Instrument :

MSVOA_L

ClientSampleId :

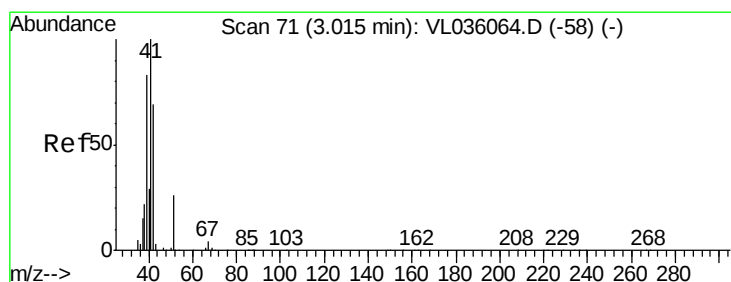
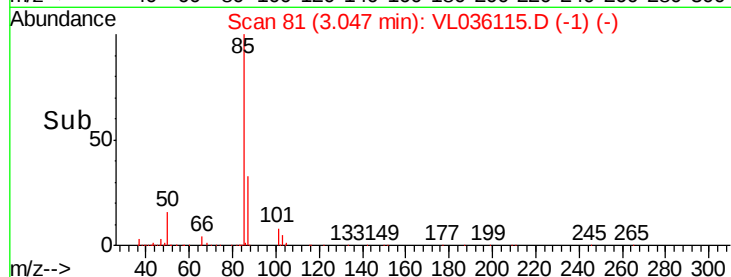
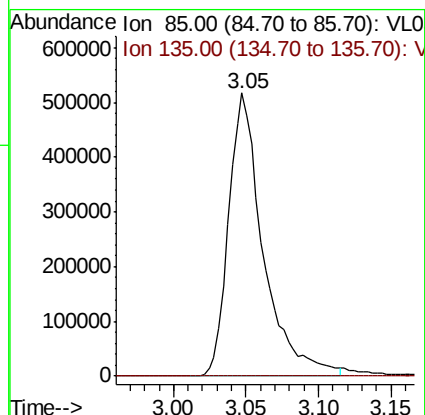
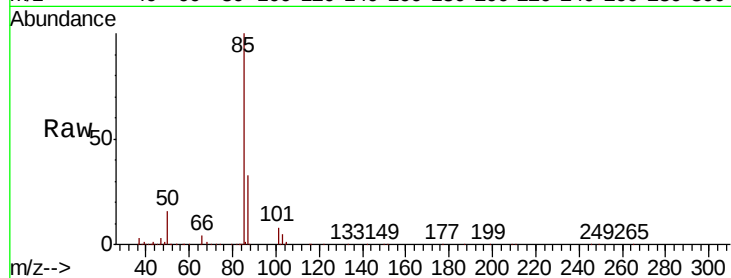
SS-5BDL

Tot Ion: 85 Resp: 854687

Ion Ratio Lower Upper

85 100

135 0.0 53.8 80.8#



#9

Propene

Concen: 0.140 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.01 min

Lab File: VL036115.D

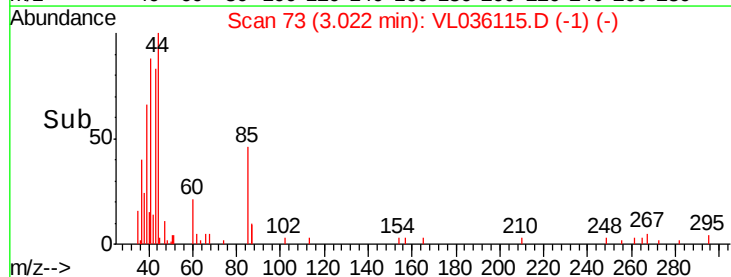
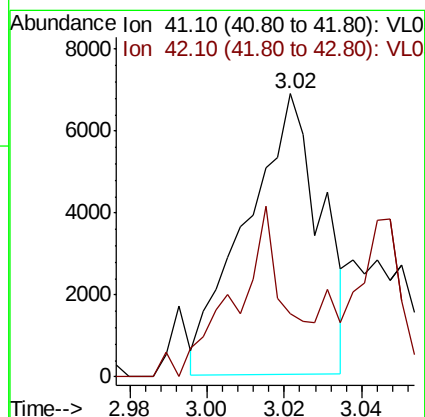
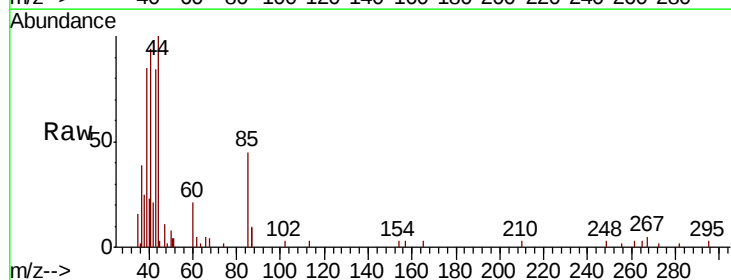
Acq: 9 Dec 2020 4:12

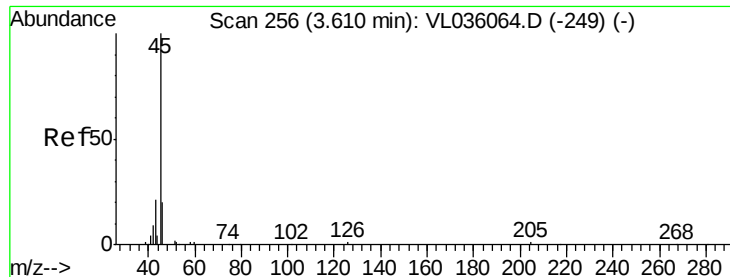
Tgt Ion: 41 Resp: 9164

Ion Ratio Lower Upper

41 100

42 36.9 57.0 85.6#





#13

Ethanol

Concen: 13.115 ppbv

RT: 3.61 min Scan# 256

Delta R.T. 0.00 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Instrument :

MSVOA_L

ClientSampleId :

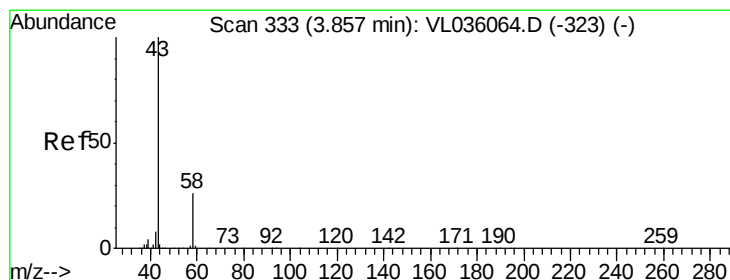
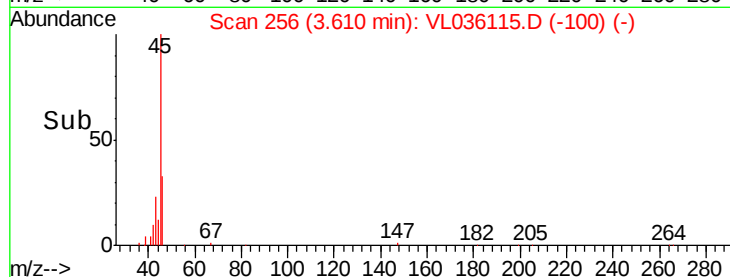
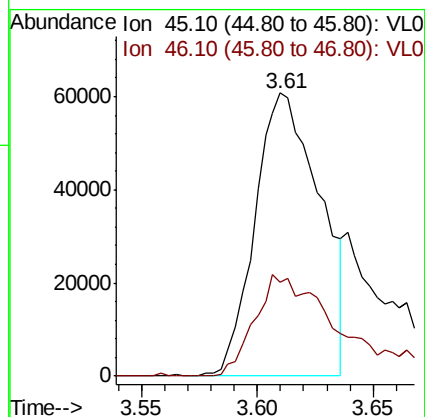
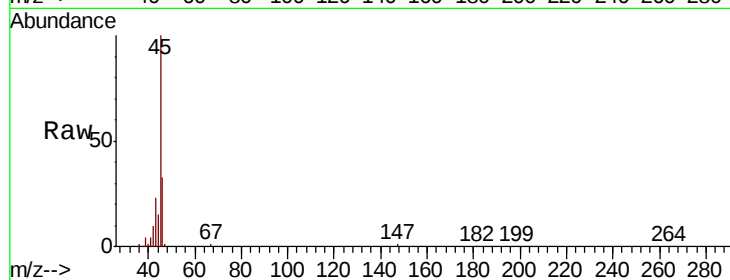
SS-5BDL

Tot Ion: 45 Resp: 118503

Ion Ratio Lower Upper

45 100

46 52.9 19.0 75.8



#15

Acetone

Concen: 1.227 ppbv

RT: 3.86 min Scan# 334

Delta R.T. 0.00 min

Lab File: VL036115.D

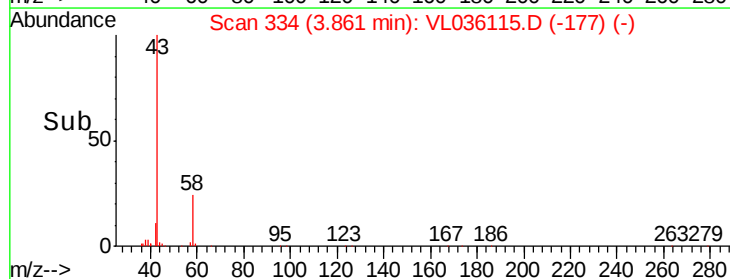
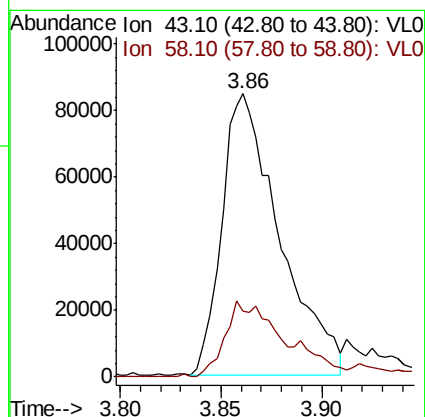
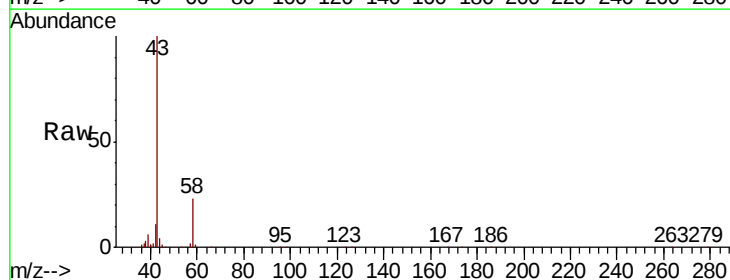
Acq: 9 Dec 2020 4:12

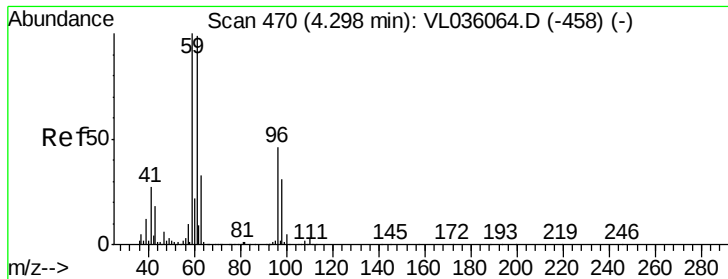
Tgt Ion: 43 Resp: 169089

Ion Ratio Lower Upper

43 100

58 31.6 20.9 31.3#





#18

1,1-Dichloroethene

Concen: 0.170 ppbv

RT: 4.29 min Scan# 469

Delta R.T. -0.00 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Instrument :

MSVOA_L

ClientSampleId :

SS-5BDL

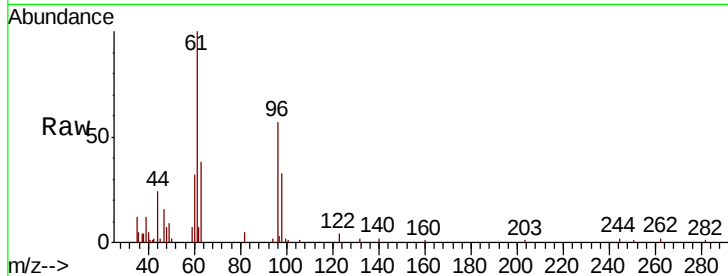
Tot Ion: 96 Resp: 8075

Ion Ratio Lower Upper

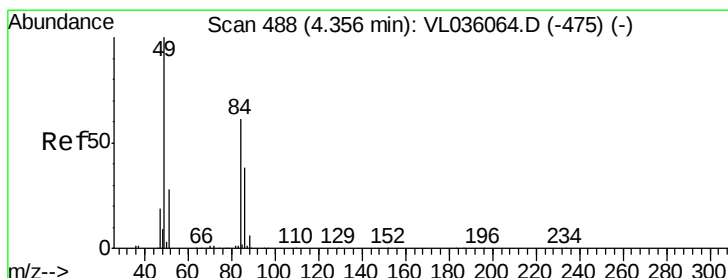
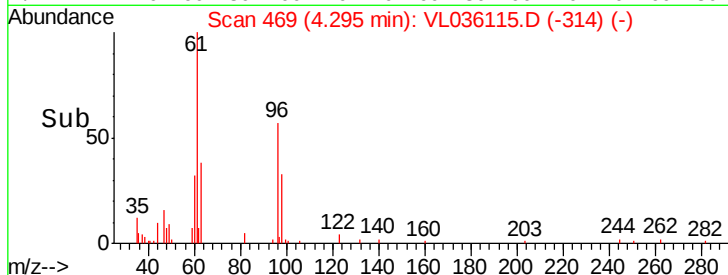
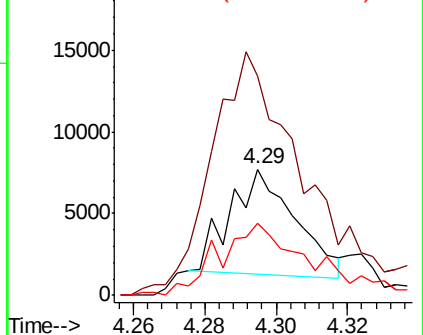
96 100

61 169.9 171.4 257.2#

98 62.3 54.2 81.2



Abundance Ion 96.00 (95.70 to 96.70): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 98.00 (97.70 to 98.70): VL0



#20

Methylene Chloride

Concen: 0.239 ppbv

RT: 4.35 min Scan# 487

Delta R.T. -0.00 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Tgt Ion: 84 Resp: 13514

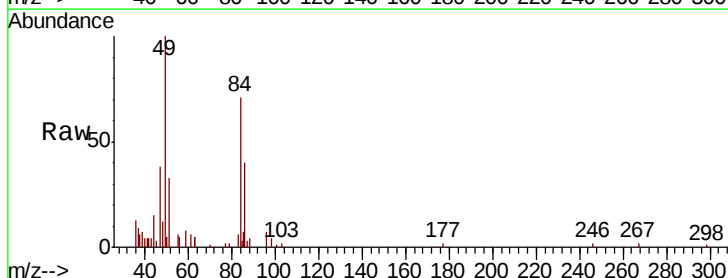
Ion Ratio Lower Upper

84 100

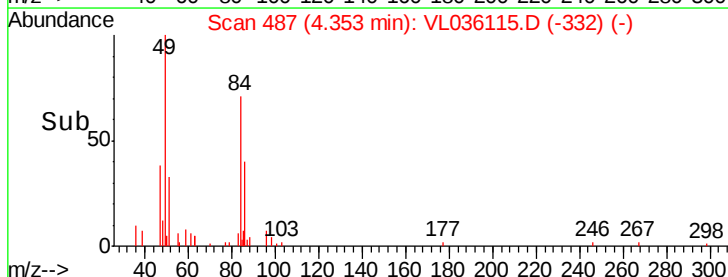
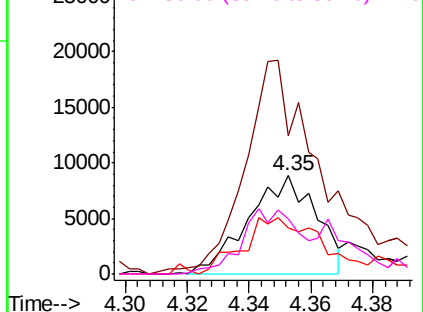
49 128.4 133.0 199.4#

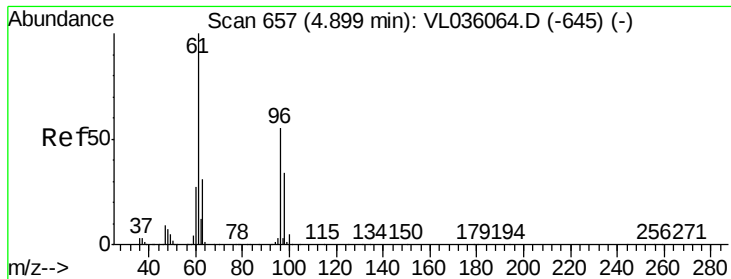
51 41.2 38.9 58.3

86 52.3 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





#22

trans-1,2-Dichloroethene

Concen: 0.052 ppbv

RT: 4.89 min Scan# 654

Delta R.T. -0.01 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Instrument :

MSVOA_L

ClientSampleId :

SS-5BDL

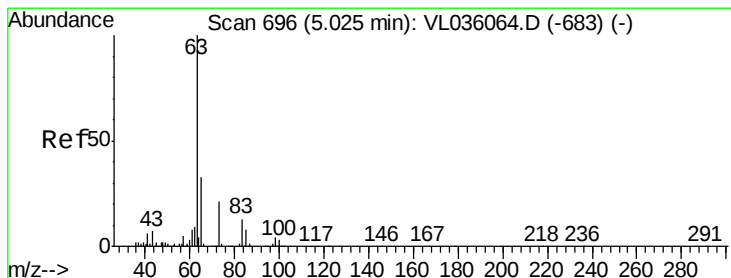
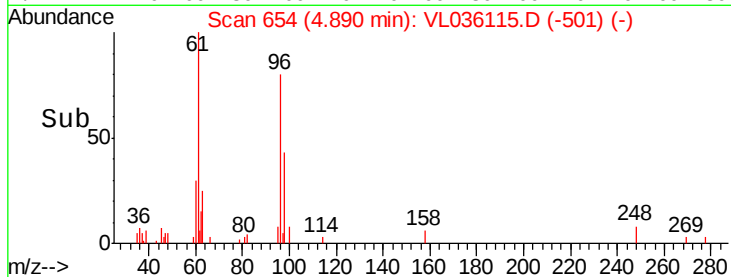
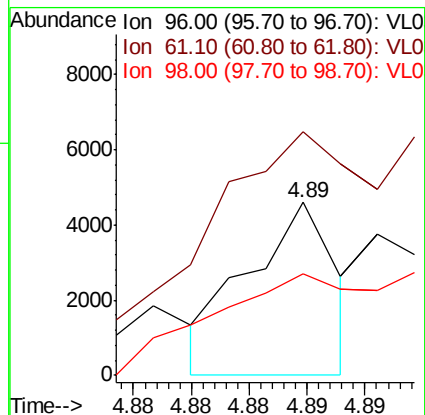
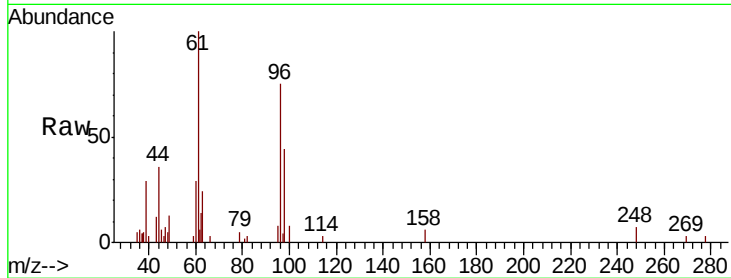
Tot Ion: 96 Resp: 2447

Ion Ratio Lower Upper

96 100

61 77.1 145.7 218.5#

98 42.4 49.2 73.8#



#24

1,1-Dichloroethane

Concen: 0.360 ppbv

RT: 5.01 min Scan# 692

Delta R.T. -0.01 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

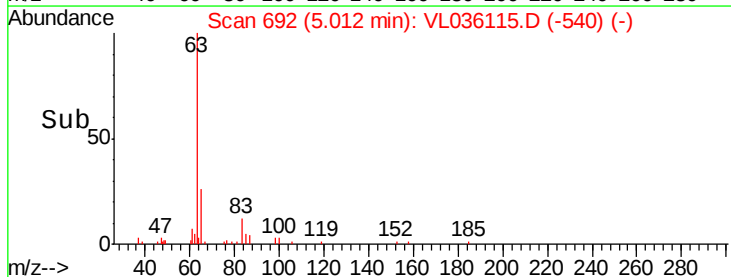
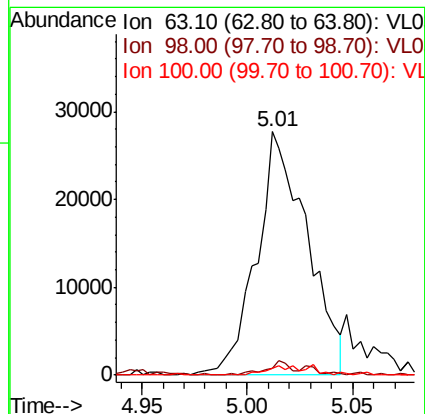
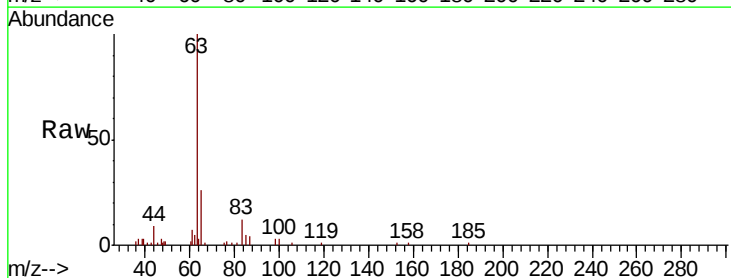
Tgt Ion: 63 Resp: 46426

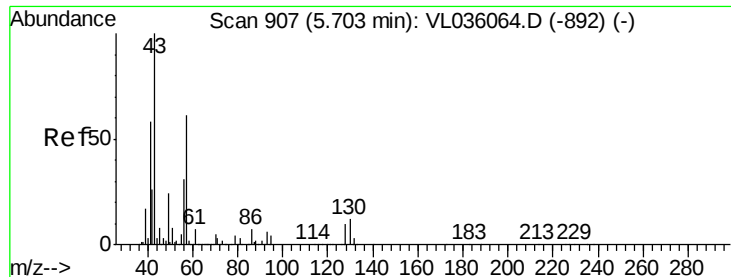
Ion Ratio Lower Upper

63 100

98 2.8 2.2 6.6

100 3.0 1.5 4.4

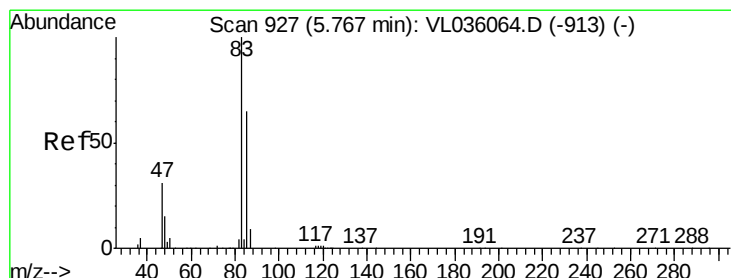
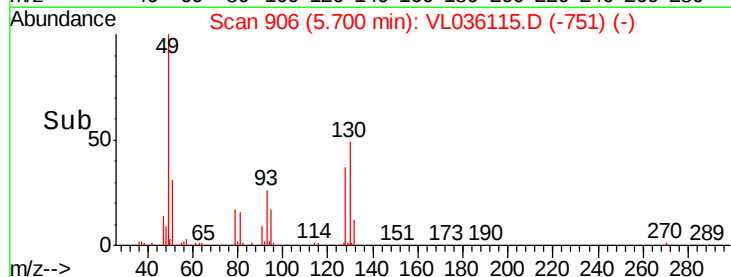
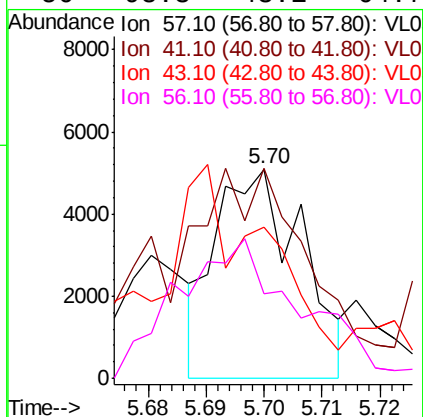
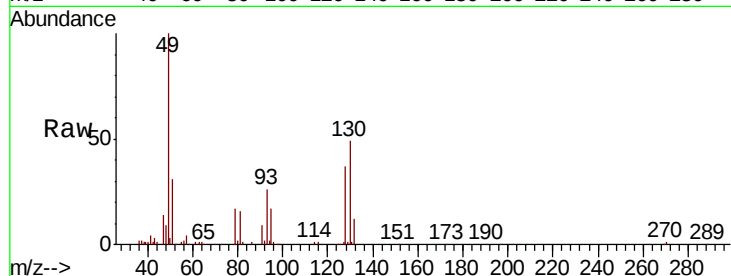




#26
Hexane
Concen: 0.042 ppbv
RT: 5.70 min Scan# 906
Delta R.T. -0.00 min
Lab File: VL036115.D
Acq: 9 Dec 2020 4:12

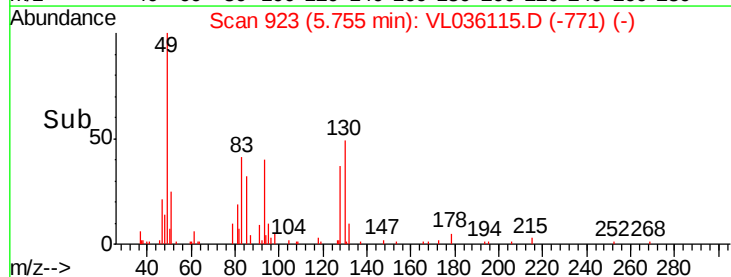
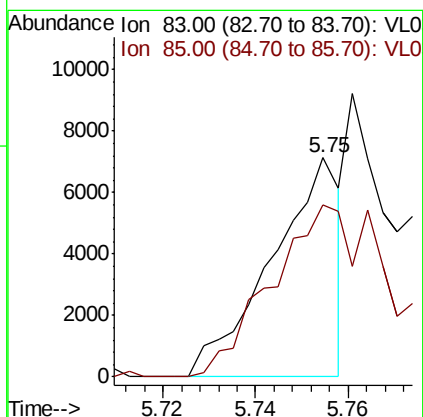
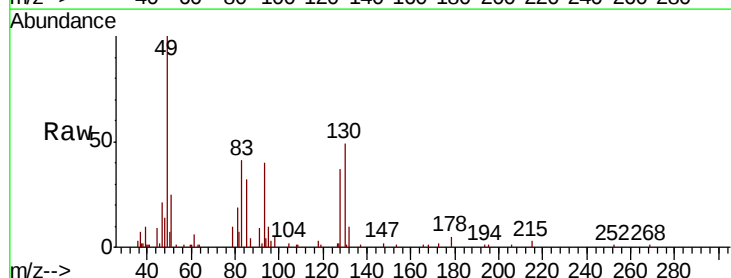
Instrument :
MSVOA_L
ClientSampleId :
SS-5BDL

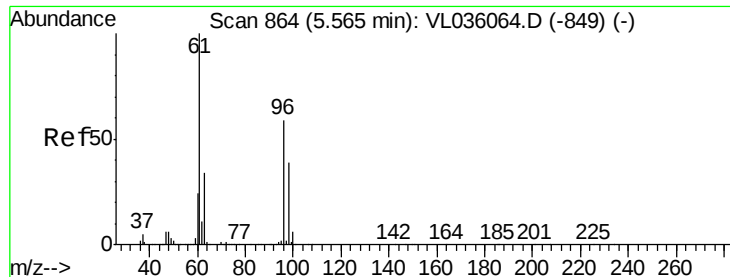
Tot Ion: 57 Resp: 5228
Ion Ratio Lower Upper
57 100
41 199.3 82.9 124.3#
43 180.0 199.9 299.9#
56 98.3 43.1 64.7#



#29
Chloroform
Concen: 0.045 ppbv
RT: 5.75 min Scan# 923
Delta R.T. -0.01 min
Lab File: VL036115.D
Acq: 9 Dec 2020 4:12

Tgt Ion: 83 Resp: 7289
Ion Ratio Lower Upper
83 100
85 78.6 51.8 77.6#



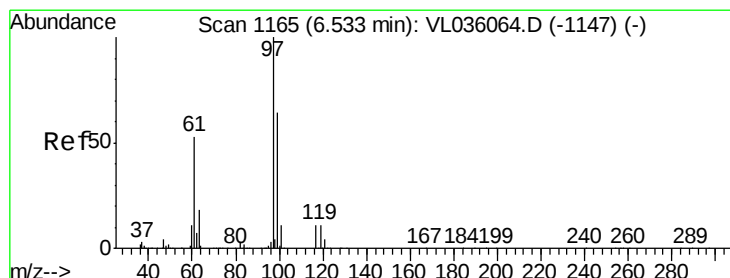
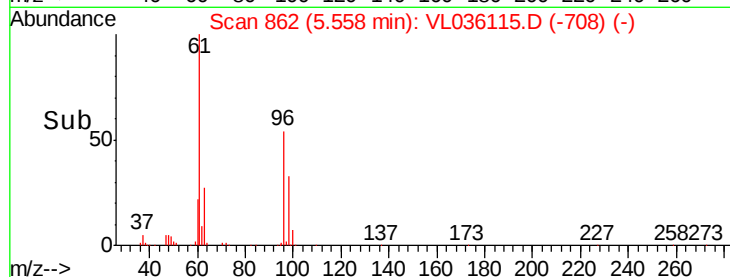
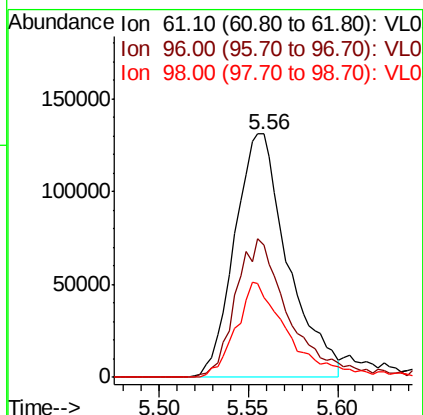
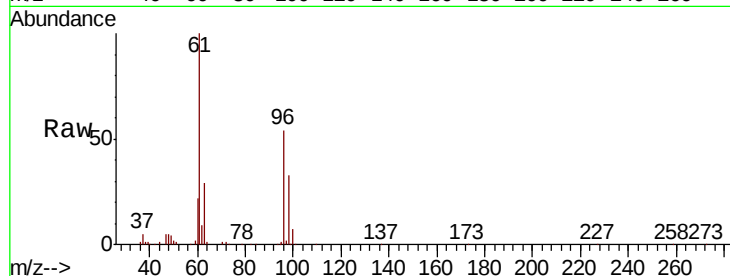


#31

cis-1,2-Dichloroethene
 Concen: 2.419 ppbv
 RT: 5.56 min Scan# 862
 Delta R.T. -0.01 min
 Lab File: VL036115.D
 Acq: 9 Dec 2020 4:12

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-5BDL

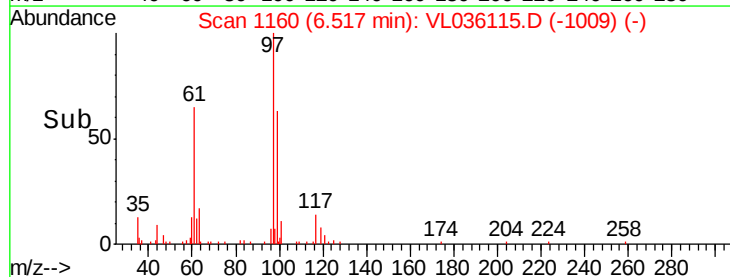
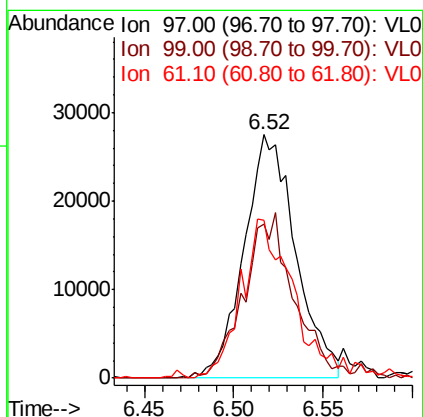
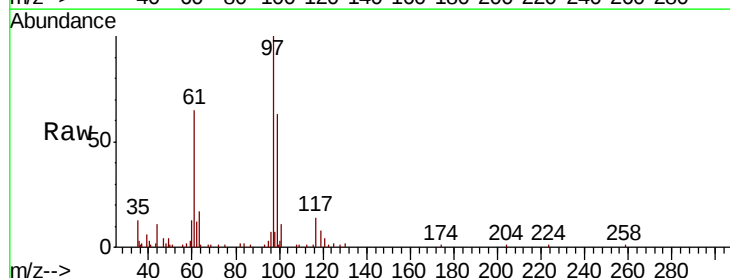
Tot Ion	Ratio	Lower	Upper
61	100		
96	53.9	47.3	70.9
98	32.8	31.4	47.0

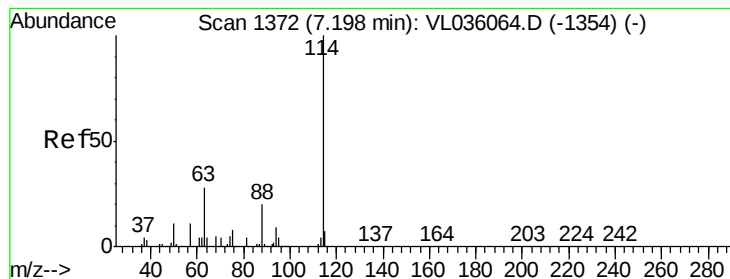


#32

1,1,1-Trichloroethane
 Concen: 0.331 ppbv
 RT: 6.52 min Scan# 1160
 Delta R.T. -0.02 min
 Lab File: VL036115.D
 Acq: 9 Dec 2020 4:12

Tgt Ion	Ratio	Lower	Upper
97	100		
99	67.6	52.4	78.6
61	68.8	43.4	65.0#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1367

Delta R.T. -0.02 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Instrument :

MSVOA_L

ClientSampleId :

SS-5BDL

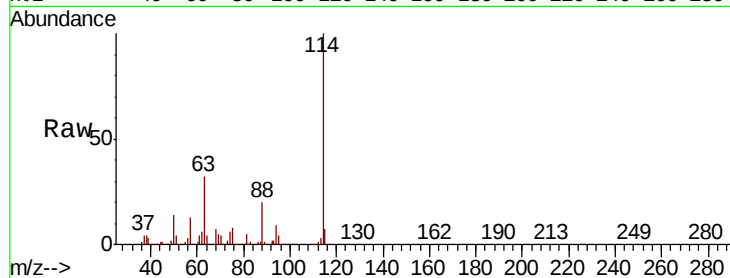
Tot Ion:114 Resp: 2384350

Ion Ratio Lower Upper

114 100

63 31.2 23.6 35.4

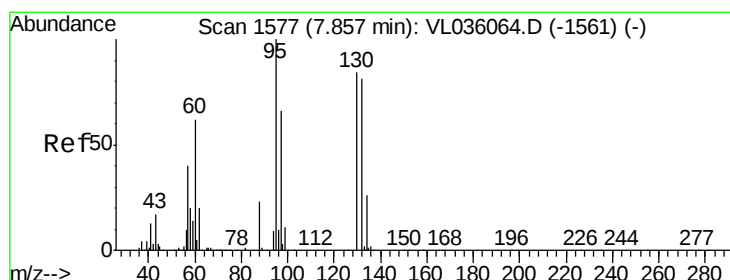
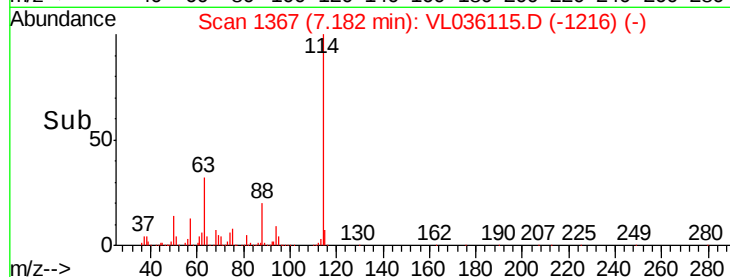
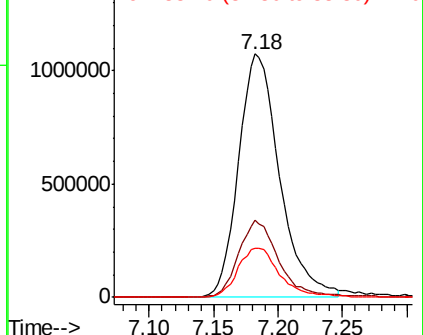
88 21.0 15.8 23.6



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



#38

Trichloroethene

Concen: 3.848 ppbv

RT: 7.84 min Scan# 1573

Delta R.T. -0.01 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Tgt Ion:130 Resp: 290693

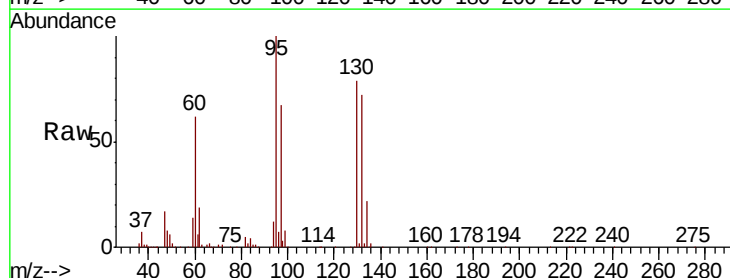
Ion Ratio Lower Upper

130 100

95 125.6 95.2 142.8

132 90.3 76.9 115.3

97 84.0 62.3 93.5

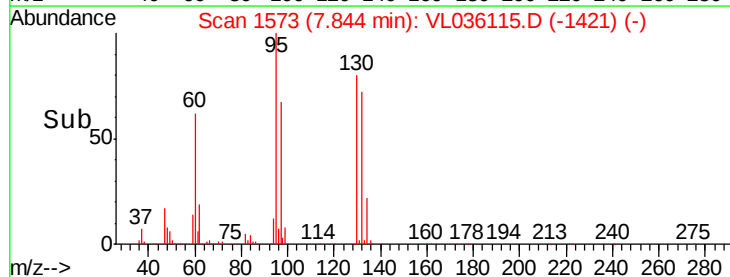
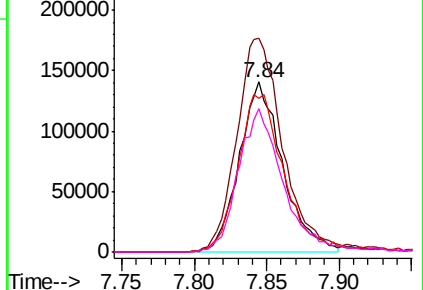


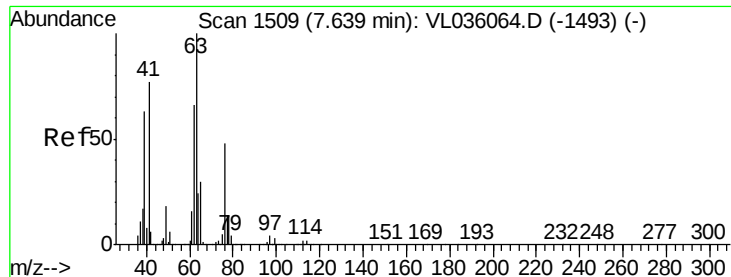
Abundance Ion 130.00 (129.70 to 130.70): V

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: 9.230 ppbv

RT: 7.18 min Scan# 1367

Delta R.T. -0.46 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Instrument :

MSVOA_L

ClientSampleId :

SS-5BDL

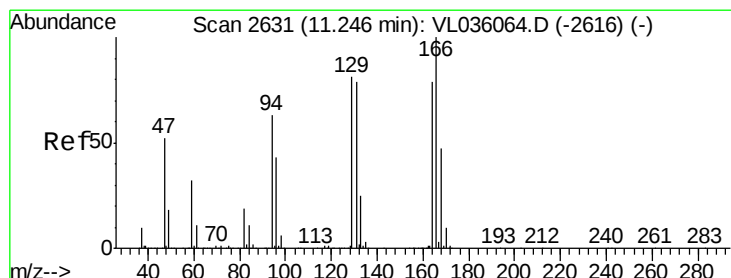
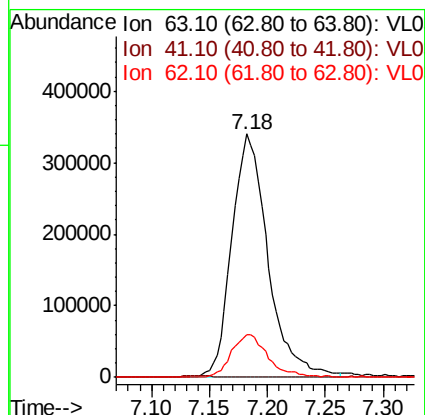
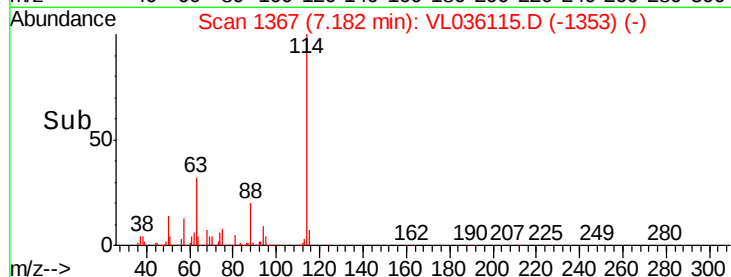
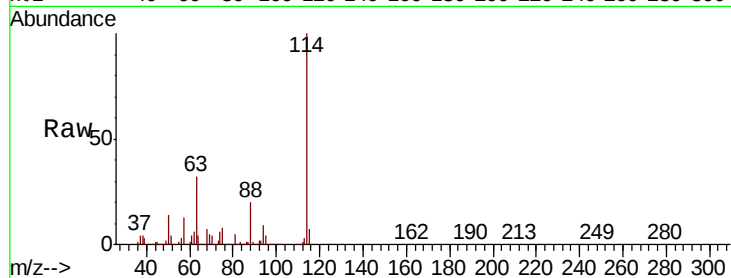
Tot Ion: 63 Resp: 736531

Ion Ratio Lower Upper

63 100

41 0.0 61.9 92.9#

62 17.6 52.5 78.7#



#52

Tetrachloroethene

Concen: 22.189 ppbv

RT: 11.24 min Scan# 2628

Delta R.T. -0.01 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Tgt Ion: 164 Resp: 1623123

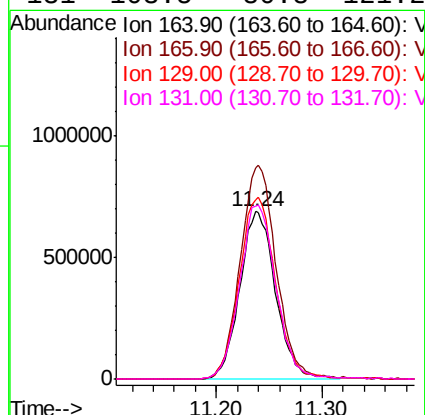
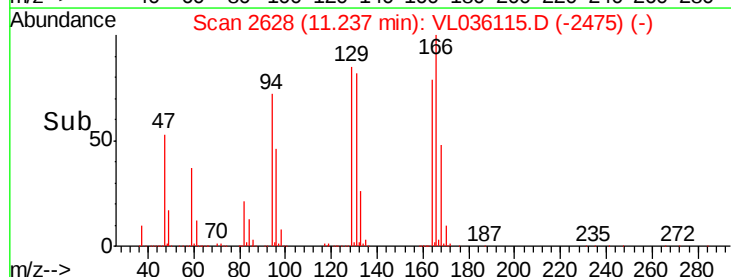
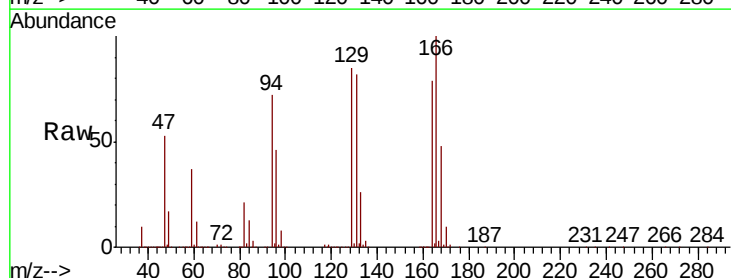
Ion Ratio Lower Upper

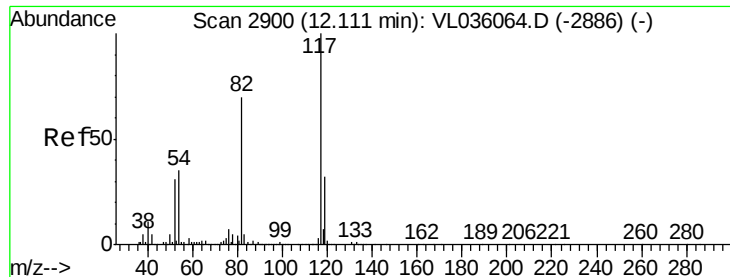
164 100

166 126.0 101.9 152.9

129 107.0 82.1 123.1

131 103.5 80.8 121.2

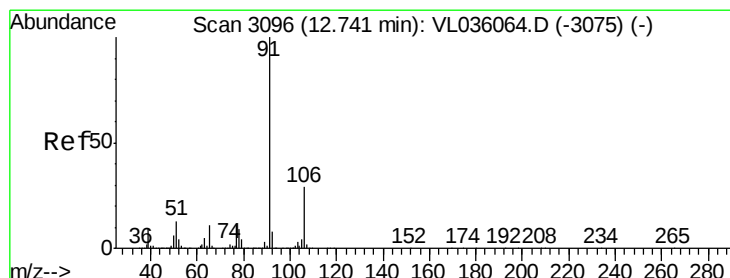
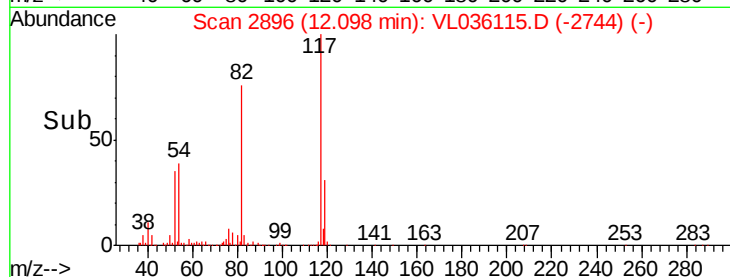
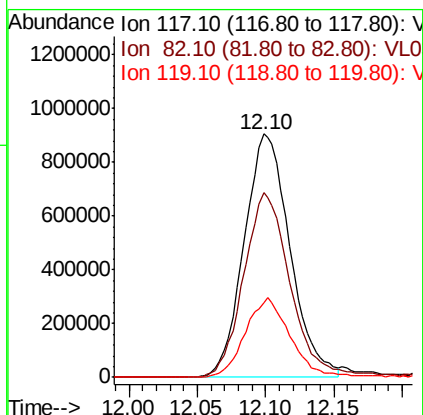
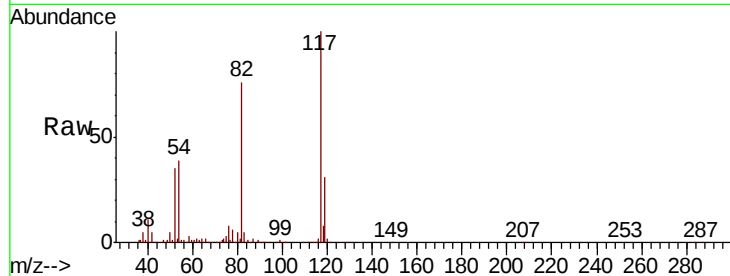




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2896
Delta R.T. -0.01 min
Lab File: VL036115.D
Acq: 9 Dec 2020 4:12

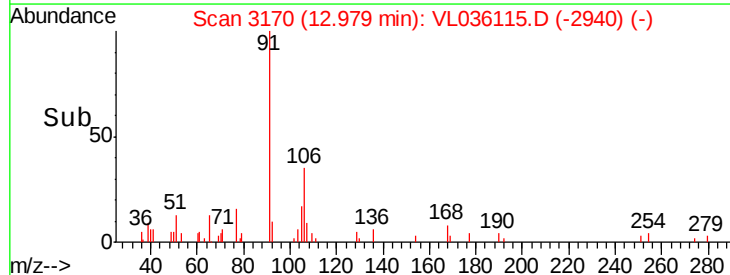
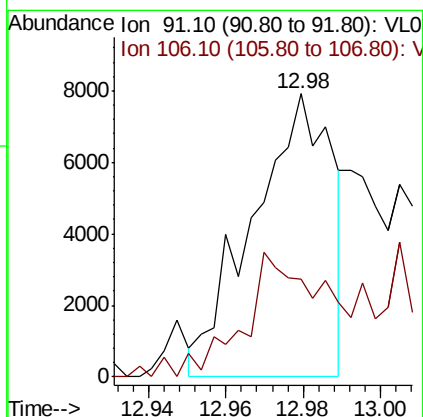
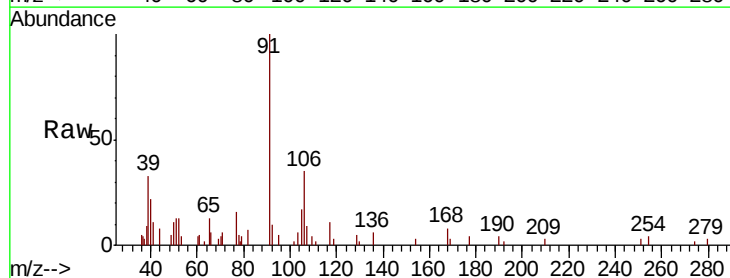
Instrument :
MSVOA_L
ClientSampleId :
SS-5BDL

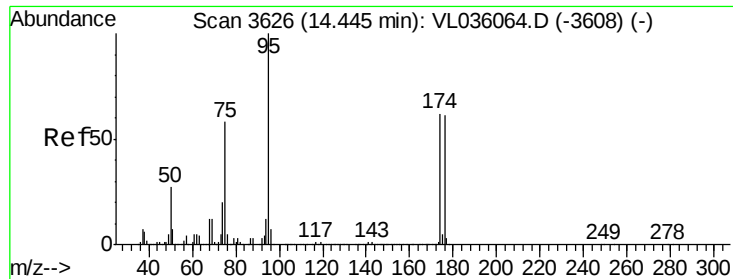
Tot Ion:117 Resp: 2115809
Ion Ratio Lower Upper
117 100
82 78.5 0.0 0.0#
119 32.8 0.0 0.0#



#58
Ethyl Benzene
Concen: 0.039 ppbv
RT: 12.98 min Scan# 3170
Delta R.T. 0.24 min
Lab File: VL036115.D
Acq: 9 Dec 2020 4:12

Tgt Ion: 91 Resp: 11253
Ion Ratio Lower Upper
91 100
106 29.2 23.0 34.4





#68

1-Bromo-4-Fluorobenzene

Concen: 10.660 ppbv

RT: 14.43 min Scan# 3622

Delta R.T. -0.01 min

Lab File: VL036115.D

Acq: 9 Dec 2020 4:12

Instrument :

MSVOA_L

ClientSampleId :

SS-5BDL

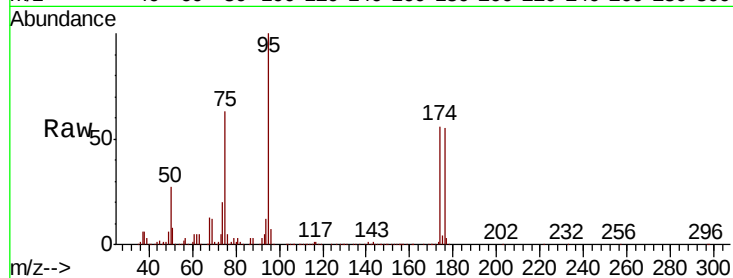
Tot Ion: 95 Resp: 1790961

Ion Ratio Lower Upper

95 100

174 58.7 50.7 76.1

175 4.1 4.0 6.0



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

