

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_X\DATA\VX020320\
 Data File : VX014796.D
 Acq On : 03 Feb 2020 15:34
 Operator : JC/SP
 Sample : L1329-19 4X
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 COMP-5DL

Quant Time: Feb 03 18:17:00 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\624X011520W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Wed Jan 15 12:41:12 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.00	128	412	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.85	114	697741	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.11	117	658028	30.00	ug/l	0.00

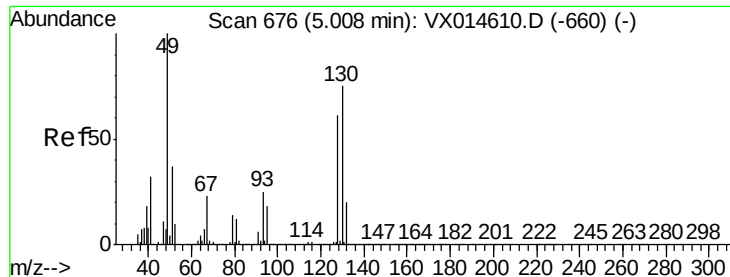
System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.04	65	259554	8962.84	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	29876.13%#
60) 4-Bromofluorobenzene	11.13	95	301525	28.64	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	95.47%
63) Toluene-d8	8.71	98	841594	28.31	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	94.37%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.29	85	54	1.90	ug/l	99
3) Chloromethane	1.32	50	420	13.47	ug/l	91
4) Vinyl Chloride	1.43	62	96	2.74	ug/l	97
5) Bromomethane	1.64	94	1480	67.76	ug/l	83
6) Chloroethane	2.00	64	179	9.07	ug/l	92
7) Trichlorofluoromethane	1.93	101	250	6.45	ug/l #	56
8) Diethyl Ether	2.24	74	238	14.06	ug/l	72
9) 1,1,2-Trichlorotrifluoroet	2.47	101	229	10.10	ug/l	71
10) 1,1-Dichloroethene	2.36	96	188	8.24	ug/l #	1
11) Methyl Iodide	2.77	142	185	6.05	ug/l	88
12) Methyl Acetate	2.91	43	427	10.36	ug/l	91
13) Acrolein	2.29	56	26094	6029.58	ug/l	95
14) Acrylonitrile	3.12	53	213	15.11	ug/l #	6
15) Acetone	2.43	58	221403	46845.43	ug/l	90
16) Carbon Disulfide	2.89	76	179	2.86	ug/l	98
17) Allyl chloride	2.72	41	138	3.27	ug/l	78
18) Methylene Chloride	2.85	84	10400	389.62	ug/l	93
19) trans-1,2-Dichloroethene	3.60	96	128	5.21	ug/l	80
20) Diisopropyl ether	3.86	45	251	3.01	ug/l #	35
21) 1,1-Dichloroethane	3.64	63	201	4.43	ug/l	98
22) cis-1,2-Dichloroethene	4.57	96	116	4.11	ug/l #	1
23) tert-Butyl Alcohol	3.02	59	10242	1756.67	ug/l #	99
24) Methyl tert-Butyl Ether	3.66	73	160	2.11	ug/l	99
25) Chloroform	5.19	83	554	12.61	ug/l #	55
26) Cyclohexane	5.57	56	596	14.24	ug/l #	41
30) 2-Butanone	4.65	43	88757	13.69	ug/l #	97
34) Benzene	6.13	78	18408	0.58	ug/l	97
45) 1,4-Dioxane	7.73	88	1414	7.47	ug/l #	16
62) Toluene	8.78	91	177236	5.08	ug/l	98

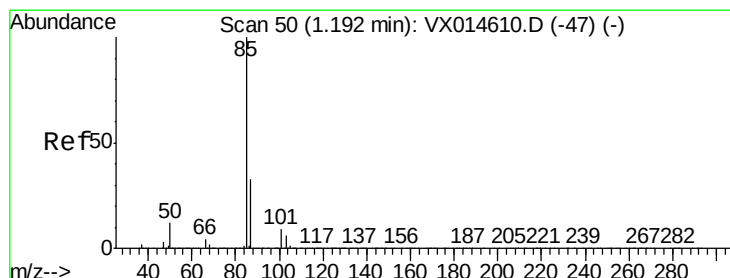
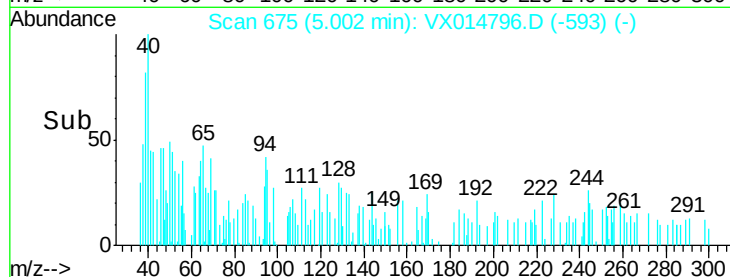
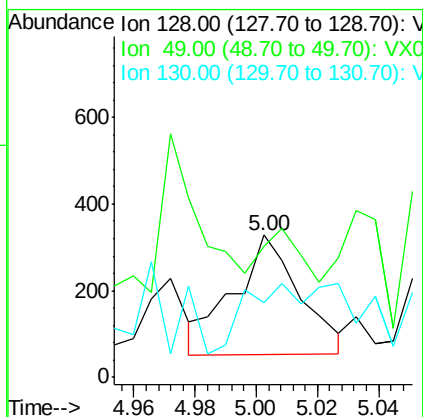
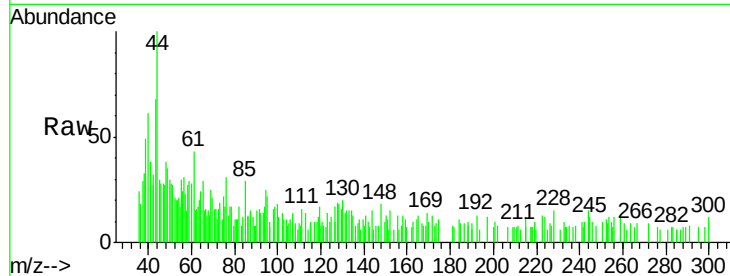
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
 Bromochloromethane
 Concen: 30.00 ug/l
 RT: 5.00 min Scan# 675
 Delta R.T. 0.00 min
 Lab File: VX014796.D
 Acq: 03 Feb 2020 15:34

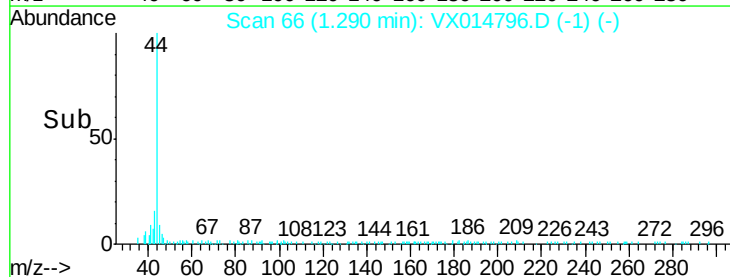
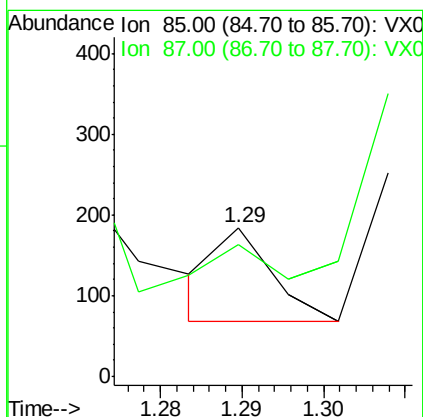
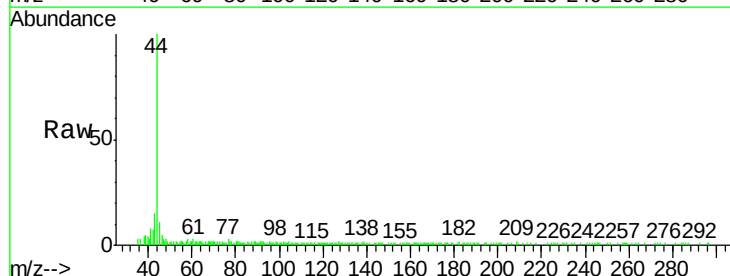
Instrument :
 MSVOA_X
 ClientSampleId :
 COMP-5DL

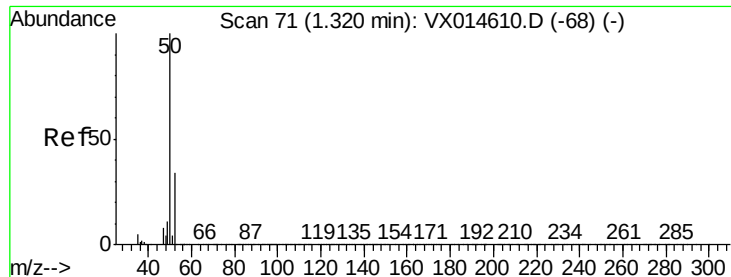
Tgt Ion:128 Resp: 412
 Ion Ratio Lower Upper
 128 100
 49 66.0 0.0 405.0
 130 68.4 0.0 321.5



#2
 Dichlorodifluoromethane
 Concen: 1.90 ug/l
 RT: 1.29 min Scan# 66
 Delta R.T. 0.10 min
 Lab File: VX014796.D
 Acq: 03 Feb 2020 15:34

Tgt Ion: 85 Resp: 54
 Ion Ratio Lower Upper
 85 100
 87 33.0 16.3 48.9

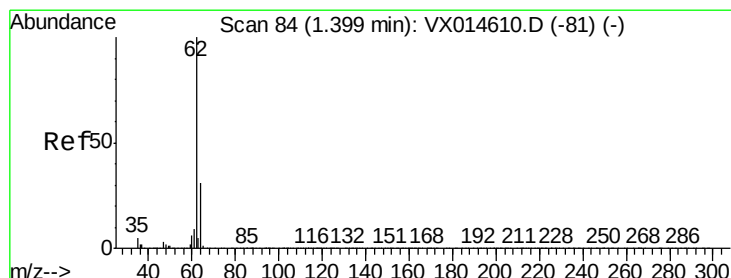
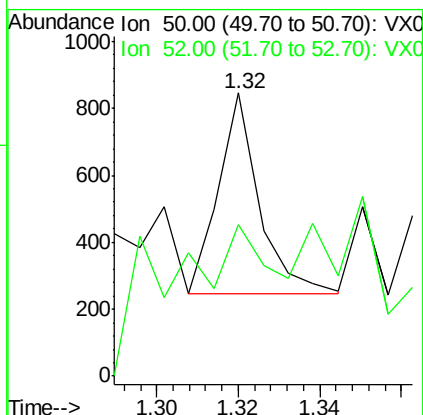
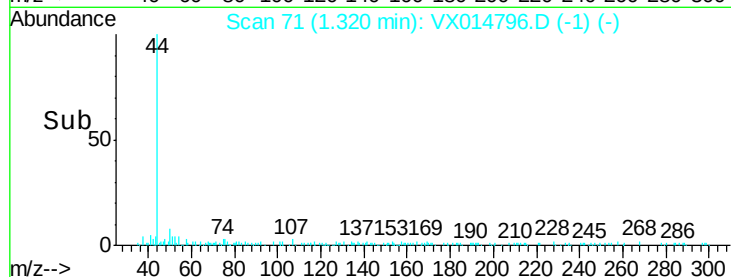
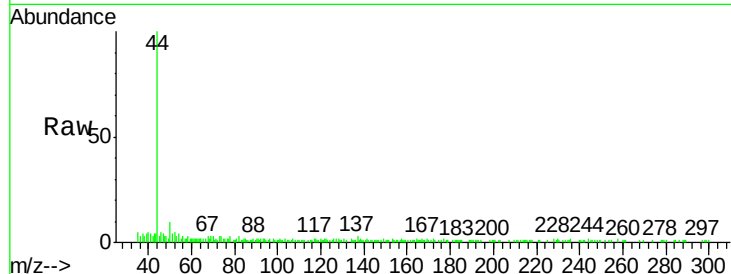




#3
Chloromethane
Concen: 13.47 ug/l
RT: 1.32 min Scan# 71
Delta R.T. 0.00 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

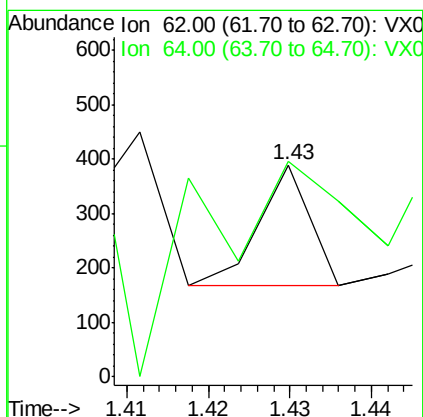
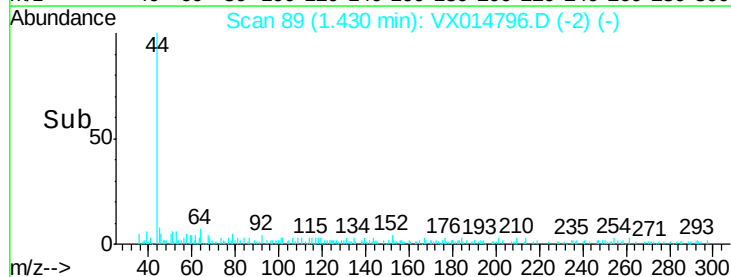
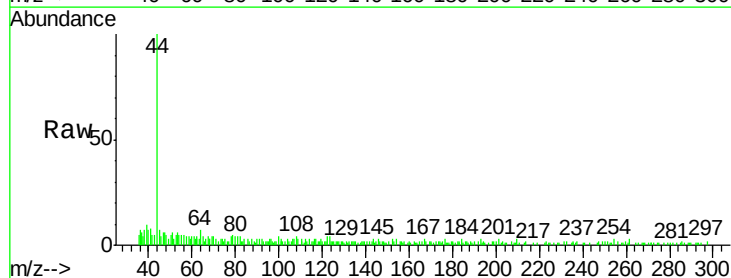
Instrument :
MSVOA_X
ClientSampleId :
COMP-5DL

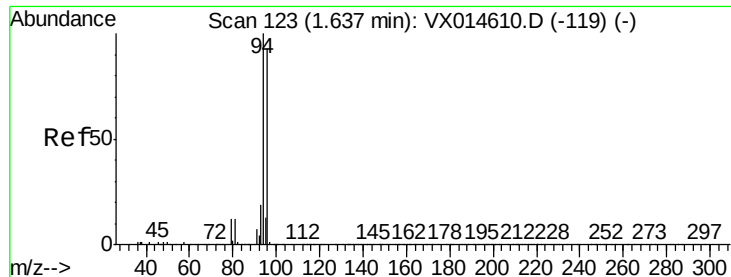
Tgt Ion: 50 Resp: 420
Ion Ratio Lower Upper
50 100
52 25.3 24.3 36.5



#4
Vinyl Chloride
Concen: 2.74 ug/l
RT: 1.43 min Scan# 89
Delta R.T. 0.03 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

Tgt Ion: 62 Resp: 96
Ion Ratio Lower Upper
62 100
64 33.3 25.2 37.8





#5

Bromomethane

Concen: 67.76 ug/l

RT: 1.64 min Scan# 124

Delta R.T. 0.01 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

Instrument :

MSVOA_X

ClientSampled :

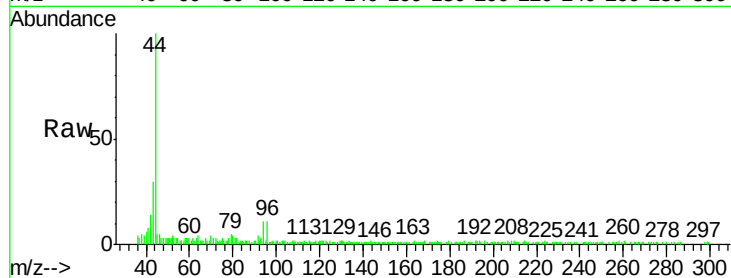
COMP-5DL

Tgt Ion: 94 Resp: 1480

Ion Ratio Lower Upper

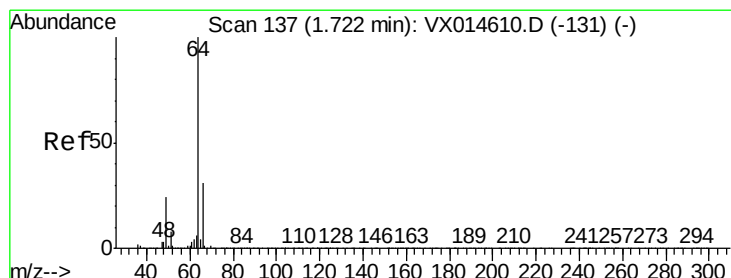
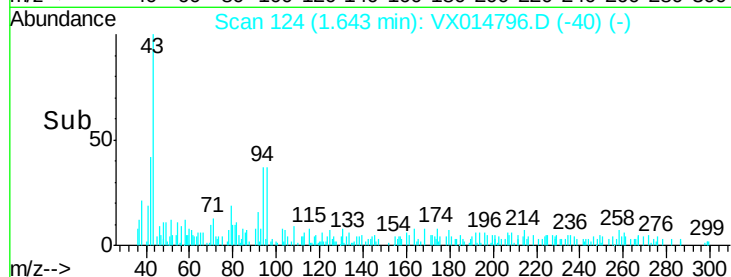
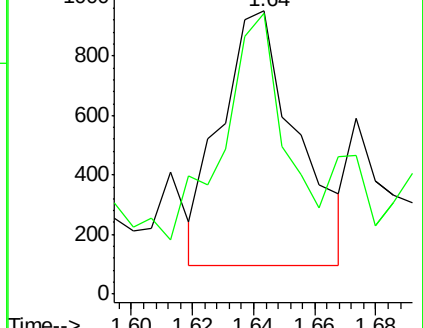
94 100

96 77.2 74.4 111.6



Abundance Ion 94.00 (93.70 to 94.70): VX0

Ion 96.00 (95.70 to 96.70): VX0



#6

Chloroethane

Concen: 9.07 ug/l

RT: 2.00 min Scan# 183

Delta R.T. 0.30 min

Lab File: VX014796.D

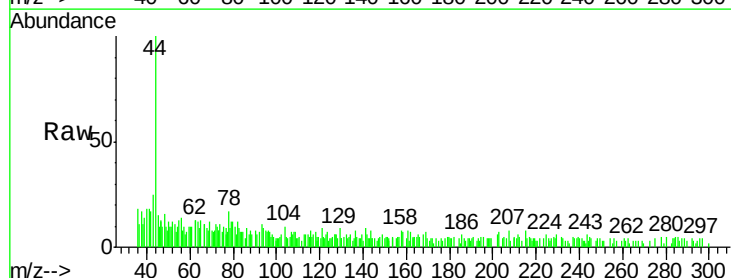
Acq: 03 Feb 2020 15:34

Tgt Ion: 64 Resp: 179

Ion Ratio Lower Upper

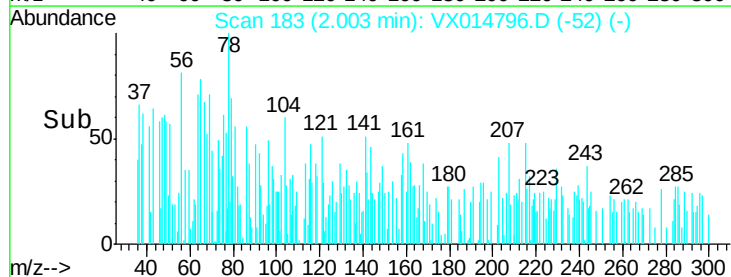
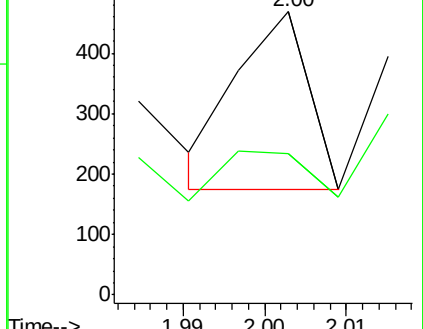
64 100

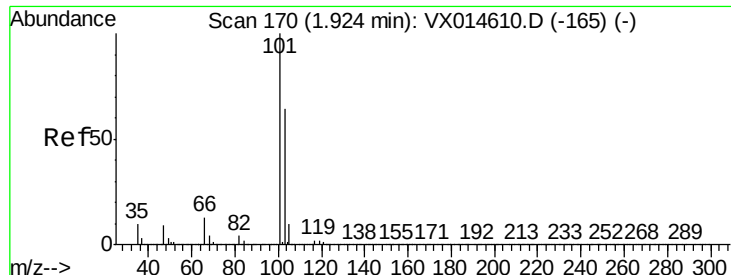
66 27.0 25.2 37.8



Abundance Ion 64.00 (63.70 to 64.70): VX0

Ion 66.00 (65.70 to 66.70): VX0



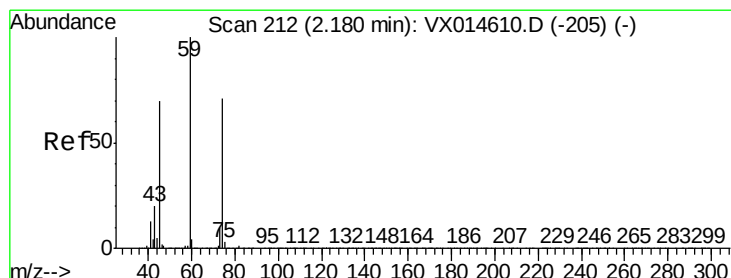
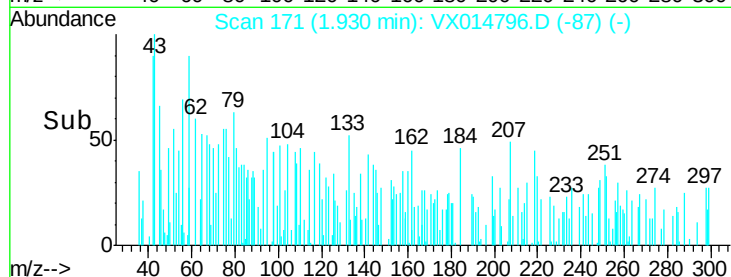
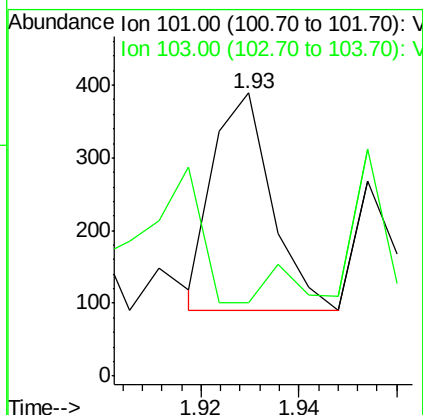
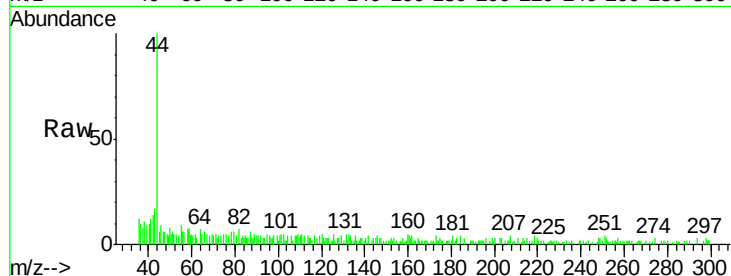


#7

Trichlorofluoromethane
 Concen: 6.45 ug/l
 RT: 1.93 min Scan# 171
 Delta R.T. 0.01 min
 Lab File: VX014796.D
 Acq: 03 Feb 2020 15:34

Instrument :
 MSVOA_X
 ClientSampleId :
 COMP-5DL

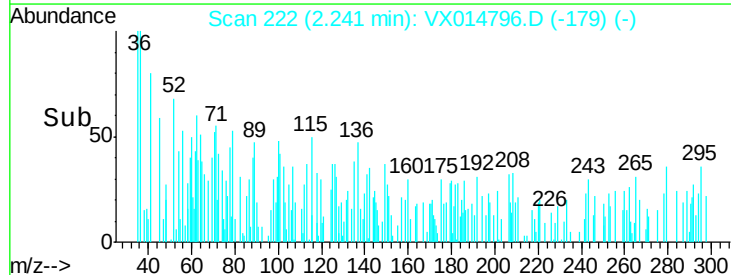
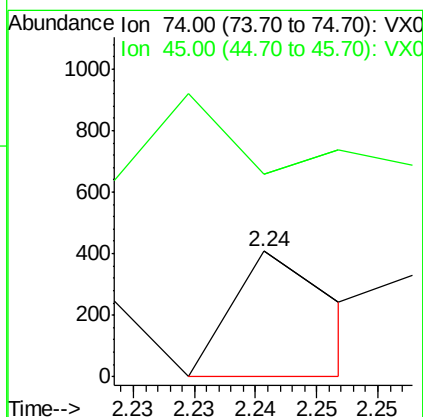
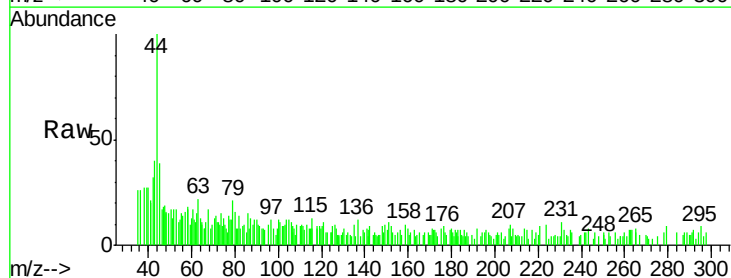
Tgt Ion: 101 Resp: 250
 Ion Ratio Lower Upper
 101 100
 103 29.8 51.6 77.4#

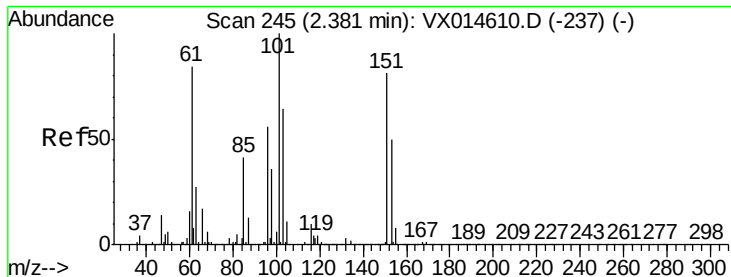


#8

Diethyl Ether
 Concen: 14.06 ug/l
 RT: 2.24 min Scan# 222
 Delta R.T. 0.06 min
 Lab File: VX014796.D
 Acq: 03 Feb 2020 15:34

Tgt Ion: 74 Resp: 238
 Ion Ratio Lower Upper
 74 100
 45 74.8 20.6 185.0





#9

1,1,2-Trichlorotrifluoroethane

Concen: 10.10 ug/l

RT: 2.47 min Scan# 260

Delta R.T. 0.10 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

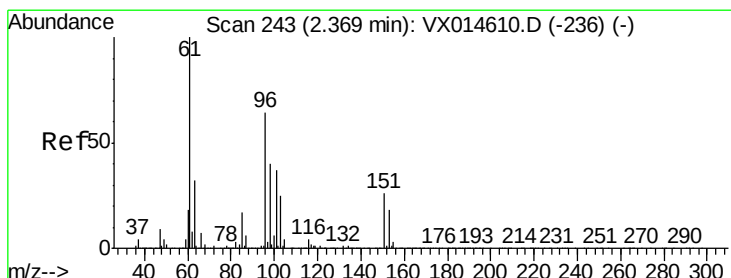
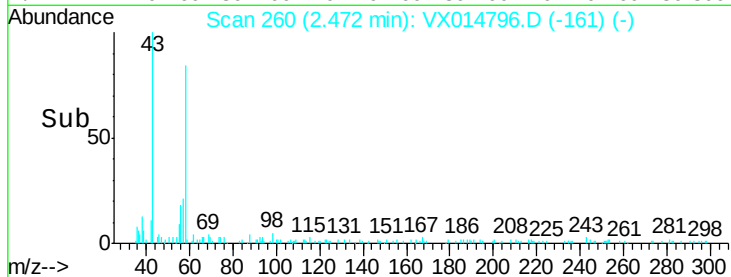
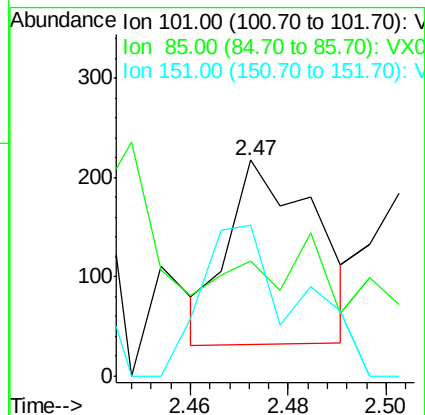
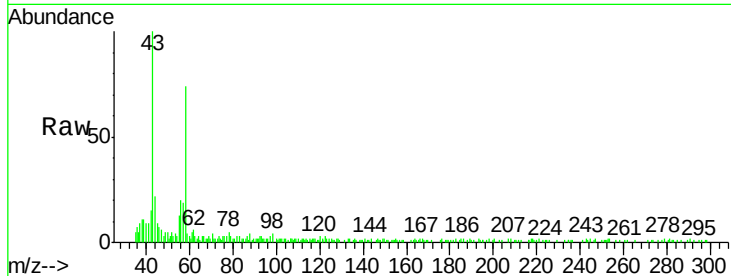
Instrument :

MSVOA_X

ClientSampleId :

COMP-5DL

Tgt Ion:	101	Resp:	229
Ion	Ratio	Lower	Upper
101	100		
85	9.6	0.0	85.6
151	65.1	0.0	159.4



#10

1,1-Dichloroethene

Concen: 8.24 ug/l

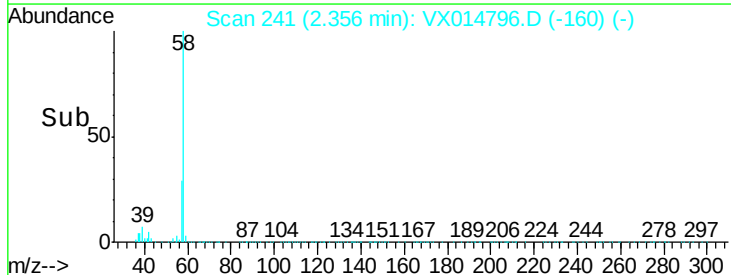
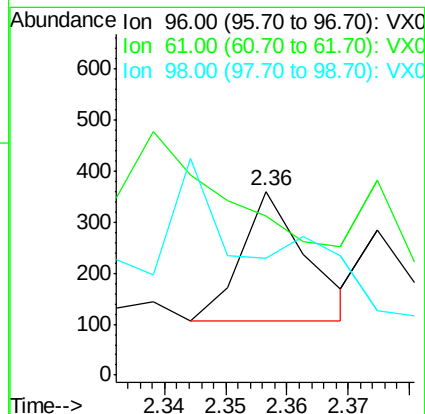
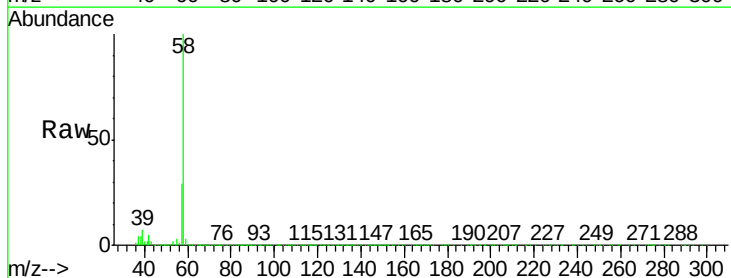
RT: 2.36 min Scan# 241

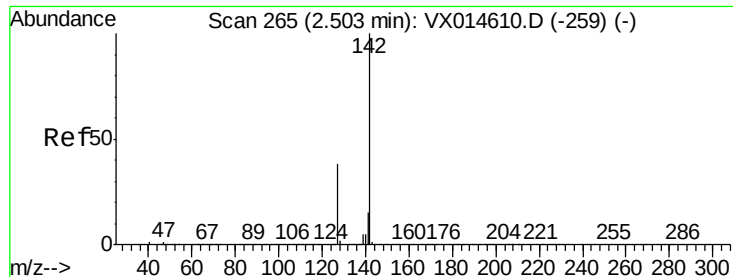
Delta R.T. -0.01 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

Tgt Ion:	96	Resp:	188
Ion	Ratio	Lower	Upper
96	100		
61	0.0	123.0	184.6#
98	0.0	51.4	77.0#

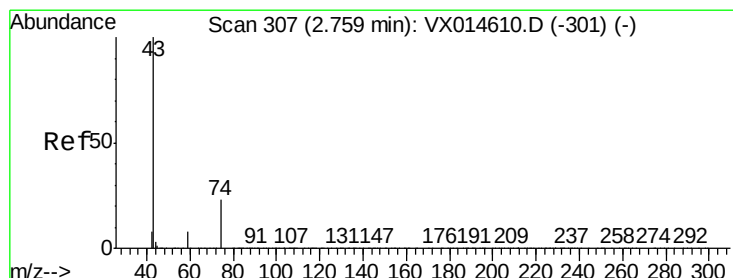
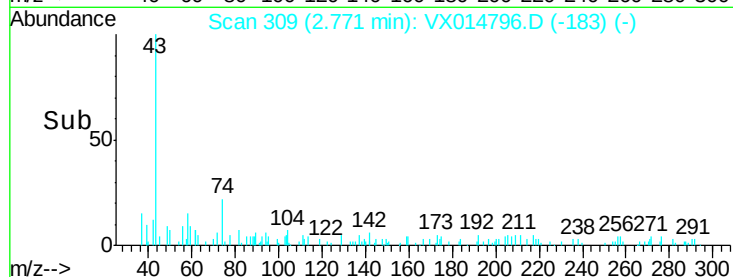
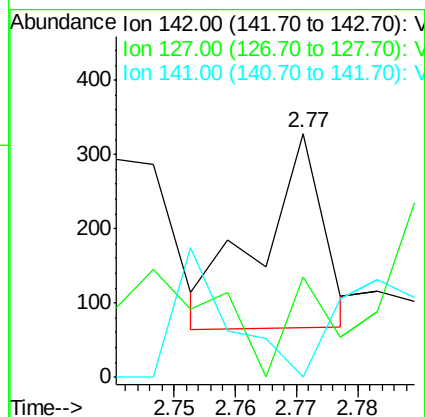
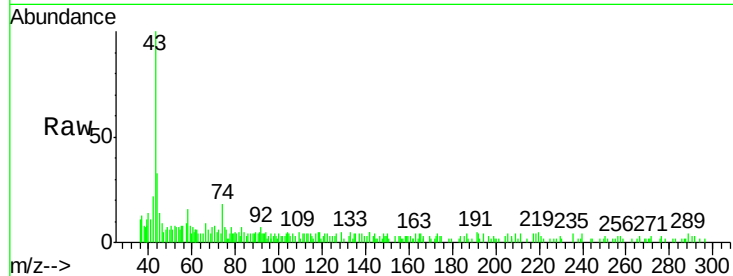




#11
Methyl Iodide
Concen: 6.05 ug/l
RT: 2.77 min Scan# 309
Delta R.T. 0.27 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

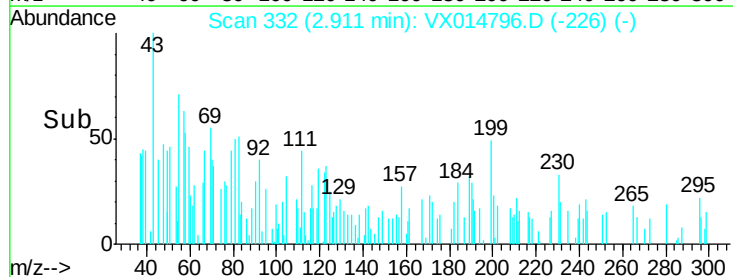
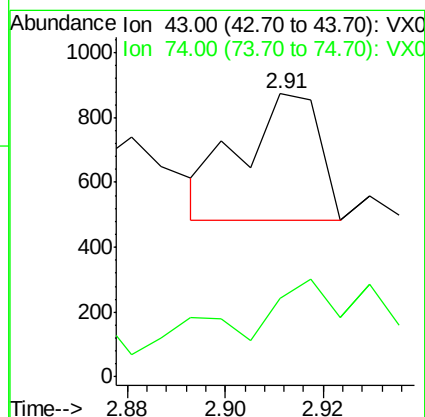
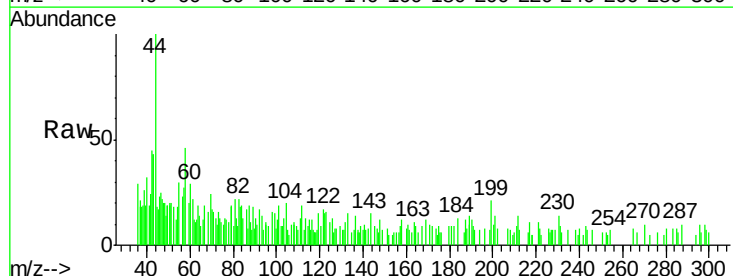
Instrument :
MSVOA_X
ClientSampleId :
COMP-5DL

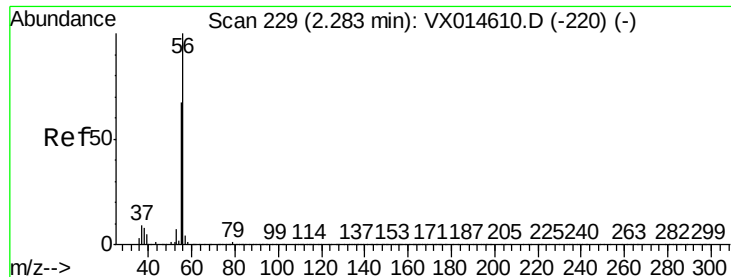
Tgt Ion: 142 Resp: 185
Ion Ratio Lower Upper
142 100
127 29.1 19.5 58.5
141 14.1 7.0 20.9



#12
Methyl Acetate
Concen: 10.36 ug/l
RT: 2.91 min Scan# 332
Delta R.T. 0.15 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

Tgt Ion: 43 Resp: 427
Ion Ratio Lower Upper
43 100
74 18.8 18.5 27.7





#13

Acrolein

Concen: 6029.58 ug/l

RT: 2.29 min Scan# 230

Delta R.T. 0.01 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

Instrument :

MSVOA_X

ClientSampleId :

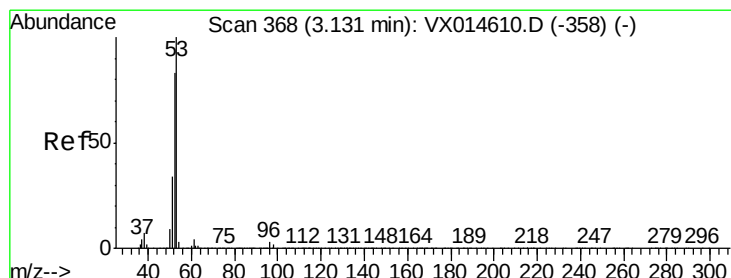
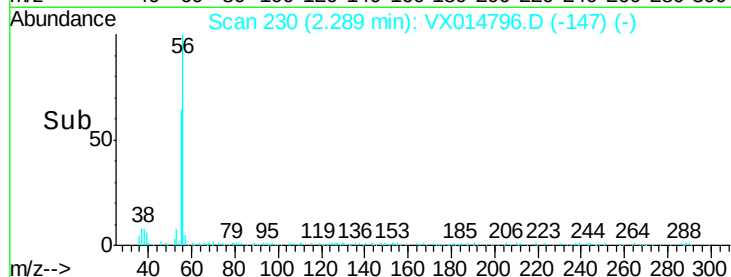
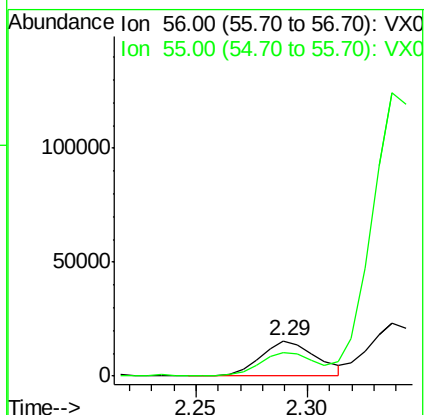
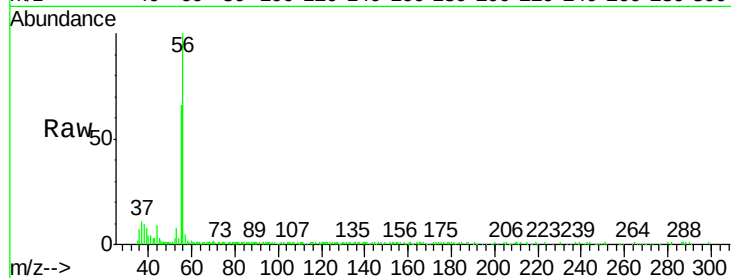
COMP-5DL

Tgt Ion: 56 Resp: 26094

Ion Ratio Lower Upper

56 100

55 64.8 54.9 82.3



#14

Acrylonitrile

Concen: 15.11 ug/l

RT: 3.12 min Scan# 367

Delta R.T. -0.01 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

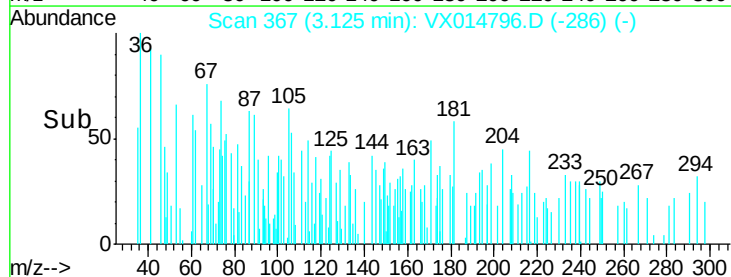
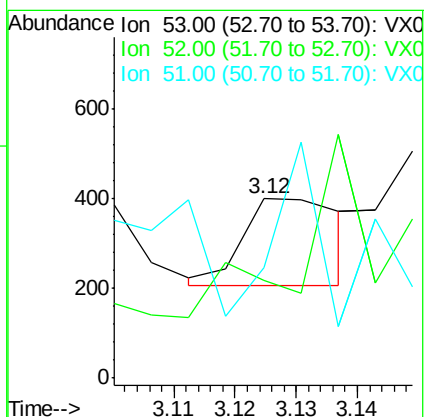
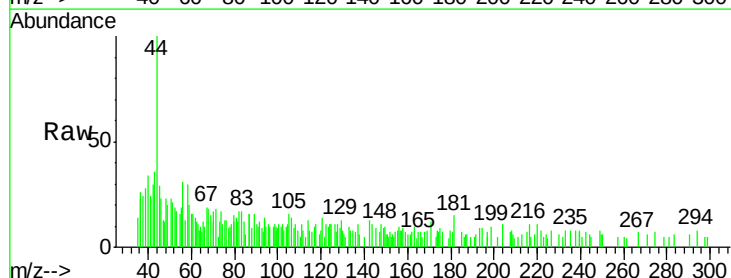
Tgt Ion: 53 Resp: 213

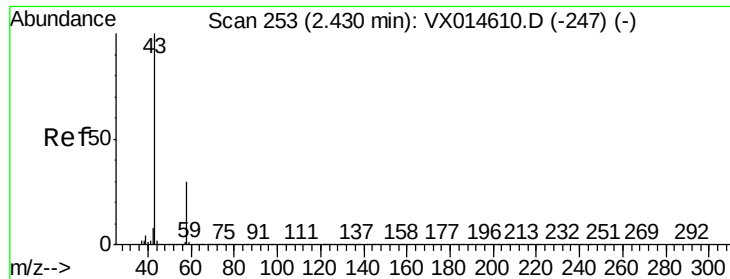
Ion Ratio Lower Upper

53 100

52 0.0 41.5 124.6#

51 93.0 17.8 53.5#

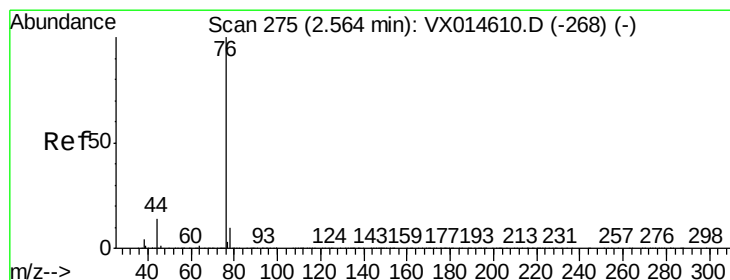
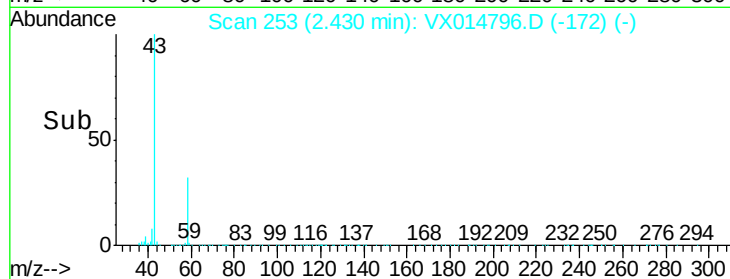
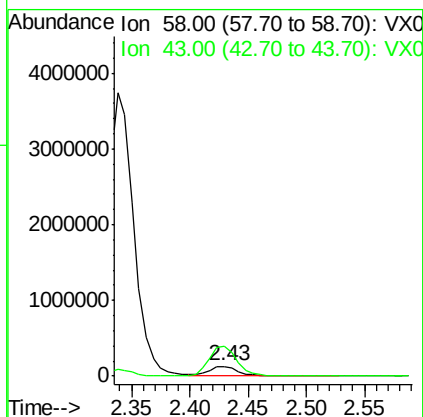
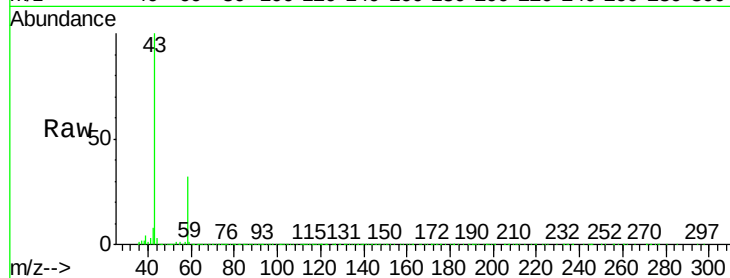




#15
Acetone
Concen: 46845.43 ug/l
RT: 2.43 min Scan# 253
Delta R.T. -0.01 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

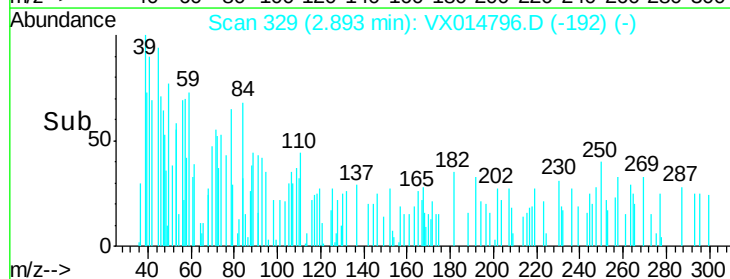
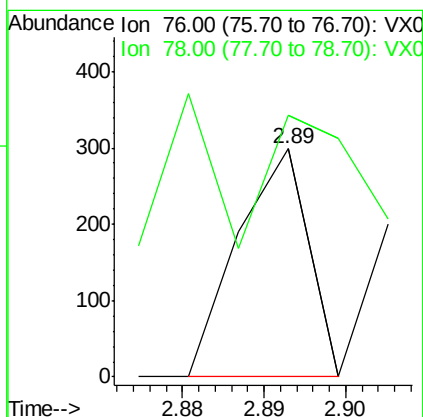
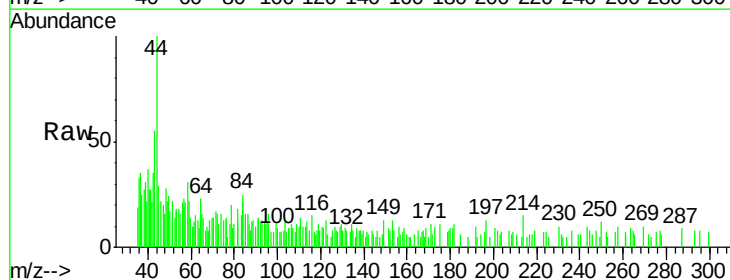
Instrument :
MSVOA_X
ClientSampleId :
COMP-5DL

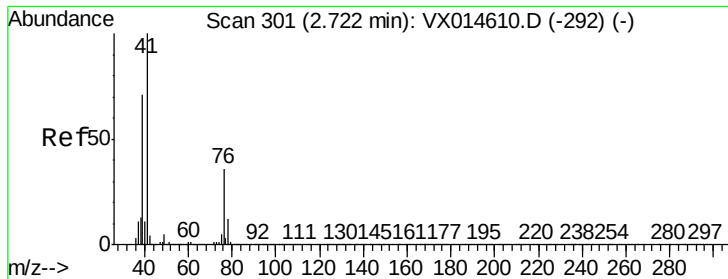
Tgt Ion: 58 Resp: 221403
Ion Ratio Lower Upper
58 100
43 314.0 236.3 354.5



#16
Carbon Disulfide
Concen: 2.86 ug/l
RT: 2.89 min Scan# 329
Delta R.T. 0.34 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

Tgt Ion: 76 Resp: 179
Ion Ratio Lower Upper
76 100
78 10.4 7.8 11.8

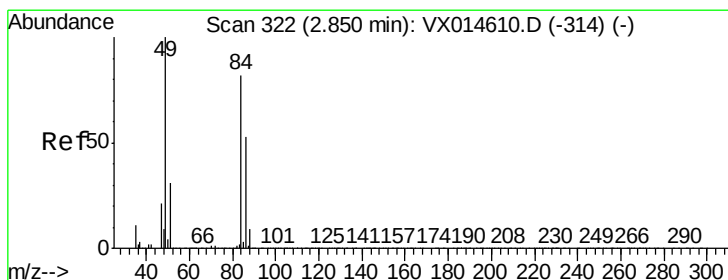
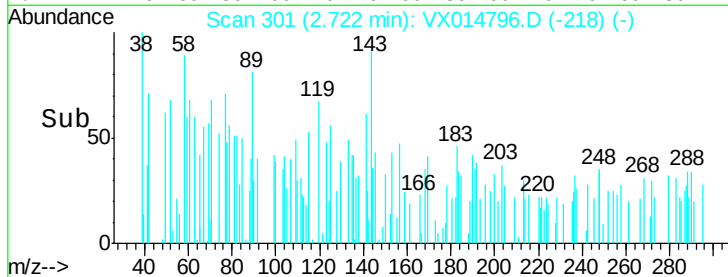
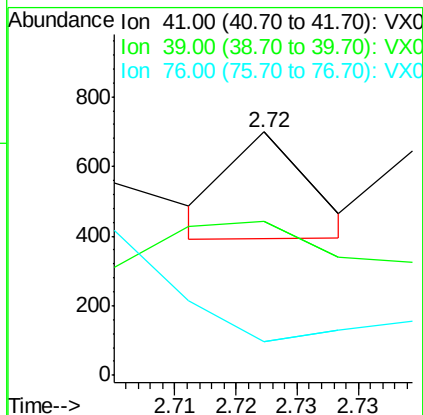
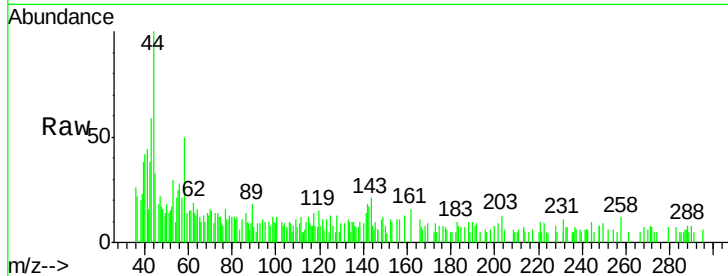




#17
 Allyl chloride
 Concen: 3.27 ug/l
 RT: 2.72 min Scan# 301
 Delta R.T. 0.01 min
 Lab File: VX014796.D
 Acq: 03 Feb 2020 15:34

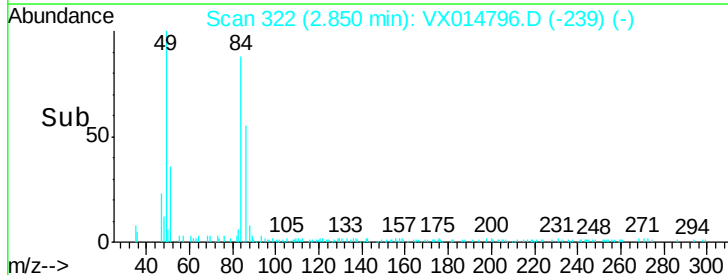
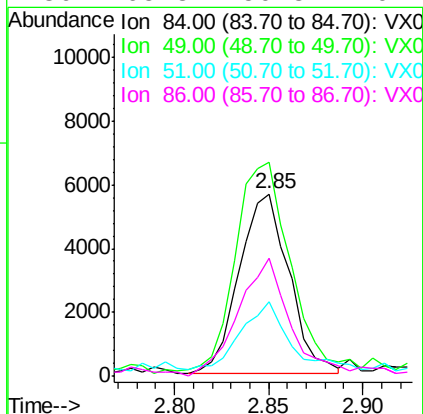
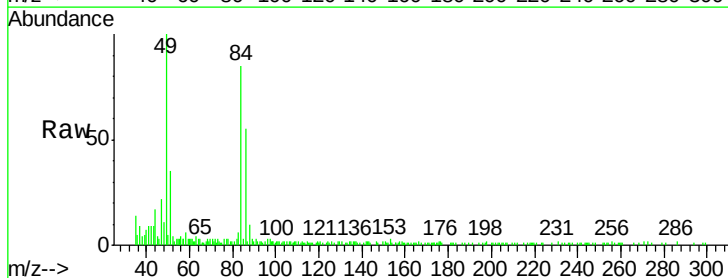
Instrument :
 MSVOA_X
 ClientSampleID :
 COMP-5DL

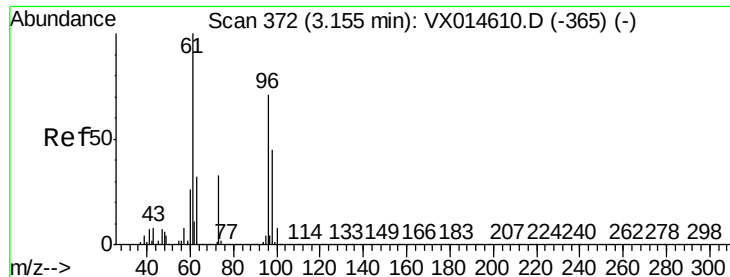
Tgt Ion: 41 Resp: 138
 Ion Ratio Lower Upper
 41 100
 39 44.3 33.4 100.2
 76 28.5 17.0 50.9



#18
 Methylene Chloride
 Concen: 389.62 ug/l
 RT: 2.85 min Scan# 322
 Delta R.T. 0.01 min
 Lab File: VX014796.D
 Acq: 03 Feb 2020 15:34

Tgt Ion: 84 Resp: 10400
 Ion Ratio Lower Upper
 84 100
 49 114.6 102.2 153.2
 51 37.9 31.4 47.0
 86 65.3 50.8 76.2





#19

trans-1,2-Dichloroethene

Concen: 5.21 ug/l

RT: 3.60 min Scan# 445

Delta R.T. 0.45 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

Instrument :

MSVOA_X

ClientSampleId :

COMP-5DL

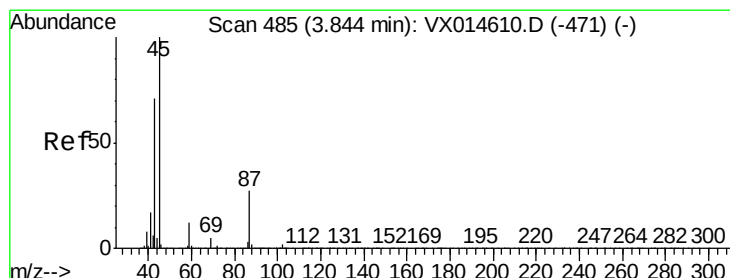
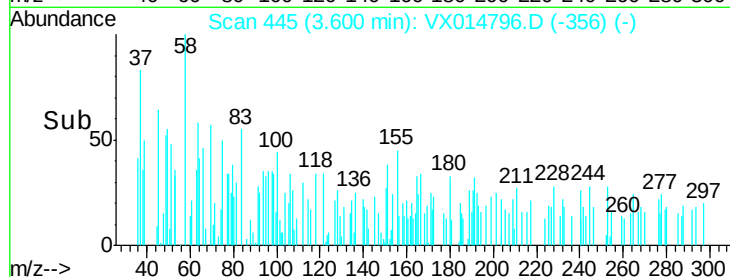
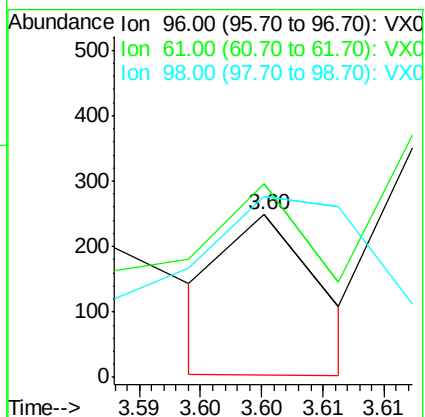
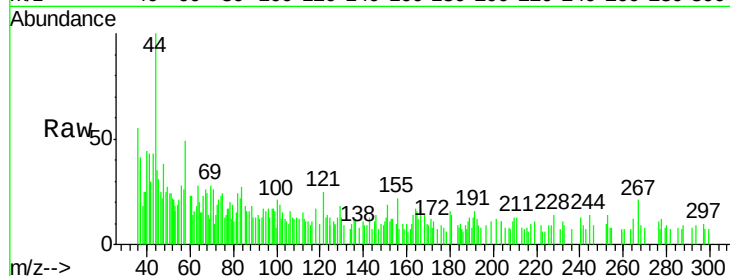
Tgt Ion: 96 Resp: 128

Ion Ratio Lower Upper

96 100

61 107.1 106.6 159.8

98 77.3 51.6 77.4



#20

Diisopropyl ether

Concen: 3.01 ug/l

RT: 3.86 min Scan# 487

Delta R.T. 0.01 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

Tgt Ion: 45 Resp: 251

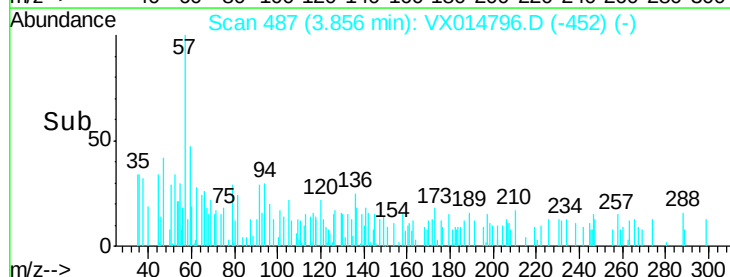
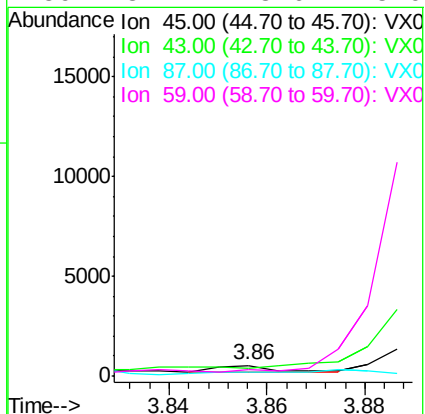
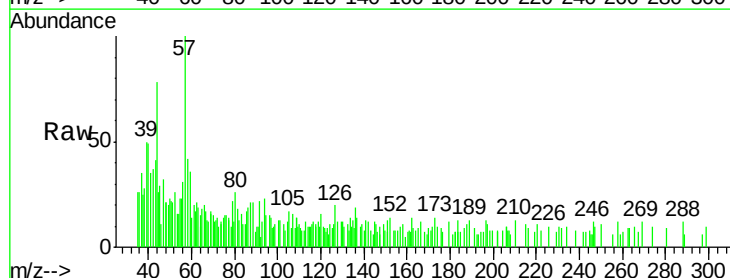
Ion Ratio Lower Upper

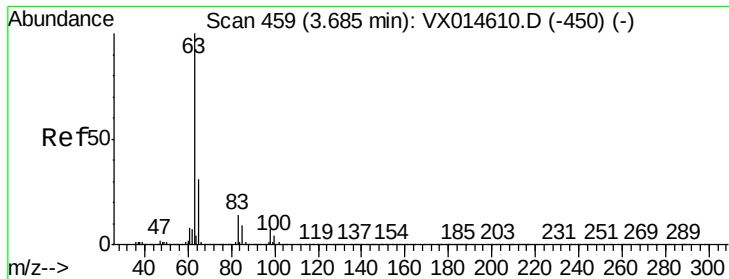
45 100

43 0.0 55.9 83.9#

87 20.8 22.2 33.2#

59 37.4 8.6 13.0#

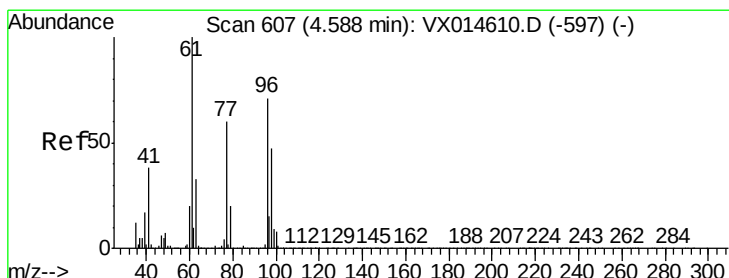
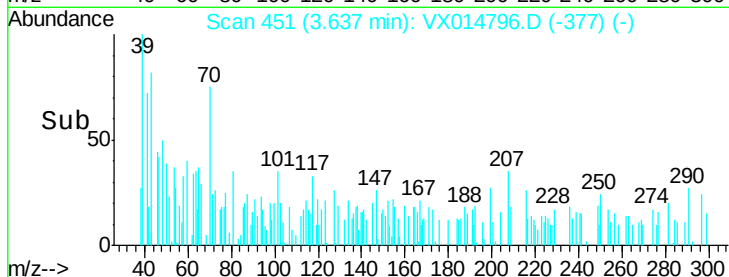
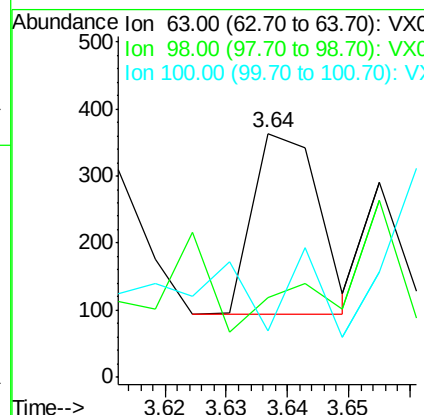
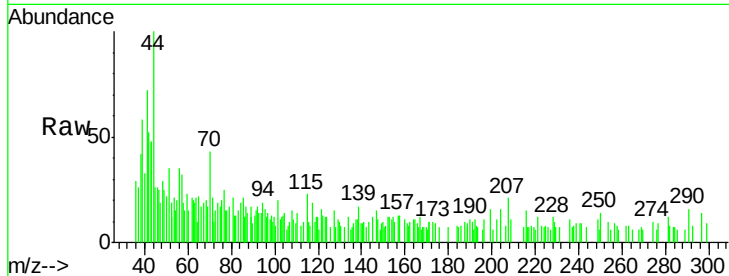




#21
1,1-Dichloroethane
Concen: 4.43 ug/l
RT: 3.64 min Scan# 451
Delta R.T. -0.05 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

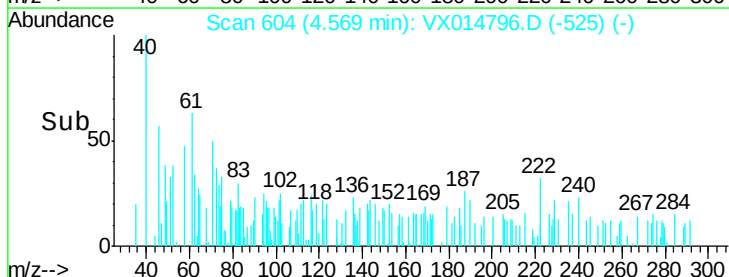
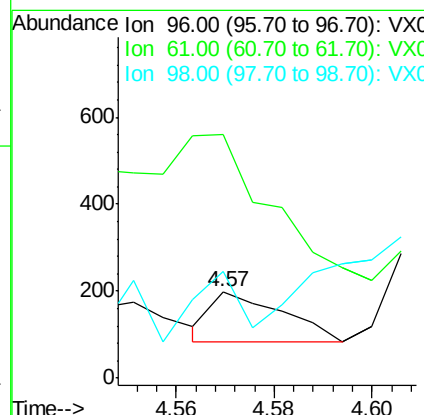
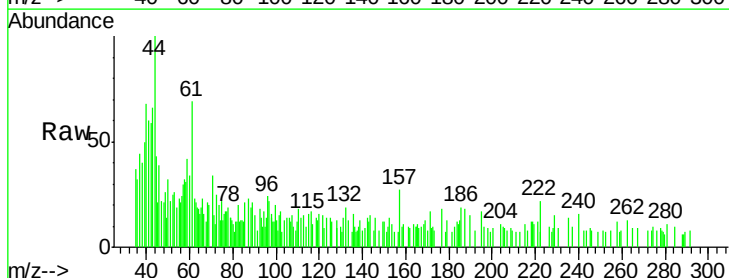
Instrument :
MSVOA_X
ClientSampled :
COMP-5DL

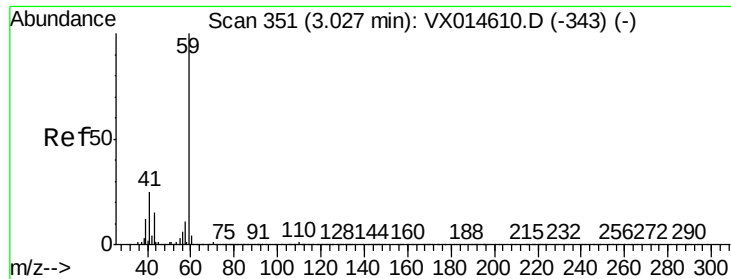
Tgt Ion: 63 Resp: 201
Ion Ratio Lower Upper
63 100
98 6.3 3.4 10.1
100 3.7 2.5 7.4



#22
cis-1,2-Dichloroethene
Concen: 4.11 ug/l
RT: 4.57 min Scan# 604
Delta R.T. -0.02 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

Tgt Ion: 96 Resp: 116
Ion Ratio Lower Upper
96 100
61 422.4 112.4 168.6#
98 92.2 50.3 75.5#



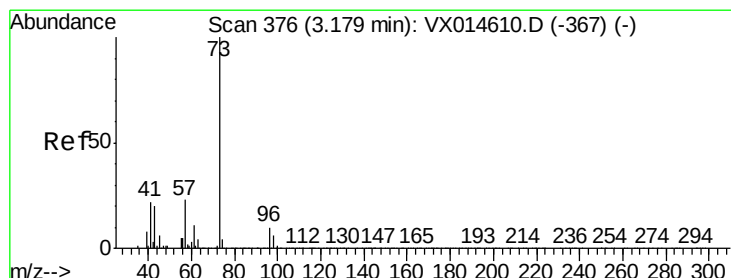
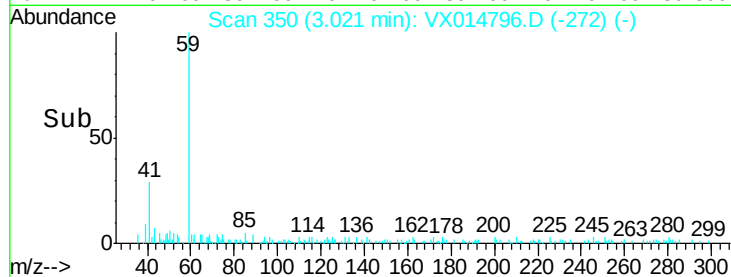
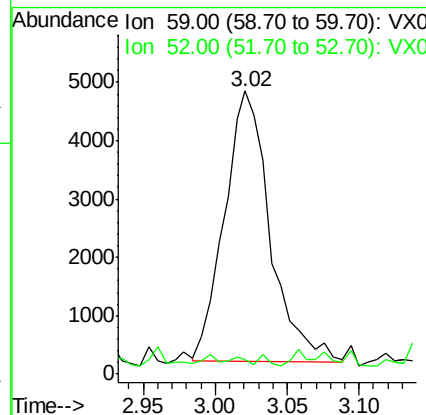
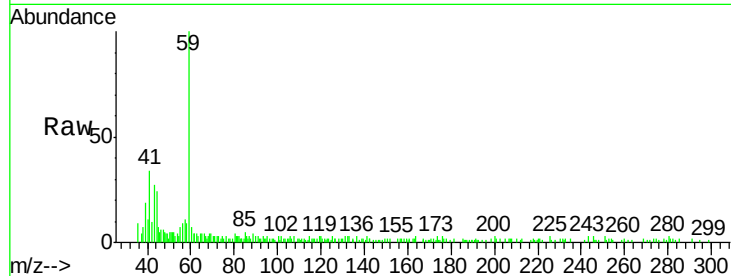


#23

tert-Butyl Alcohol
 Concen: 1756.67 ug/l
 RT: 3.02 min Scan# 350
 Delta R.T. -0.02 min
 Lab File: VX014796.D
 Acq: 03 Feb 2020 15:34

Instrument :
 MSVOA_X
 ClientSampled :
 COMP-5DL

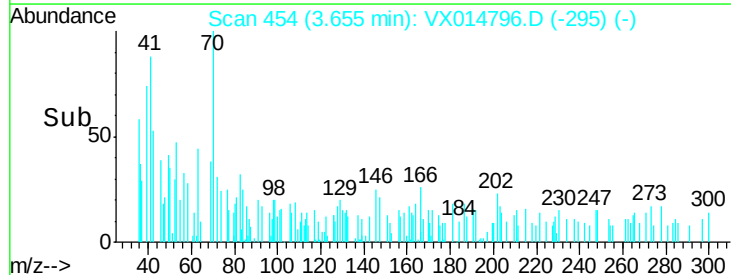
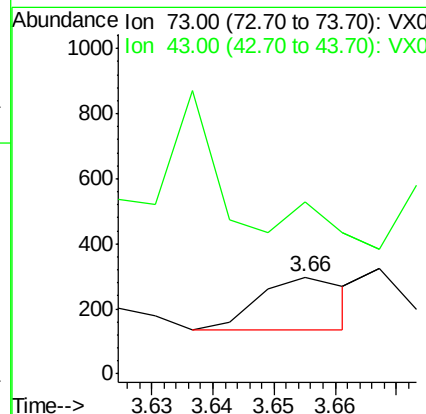
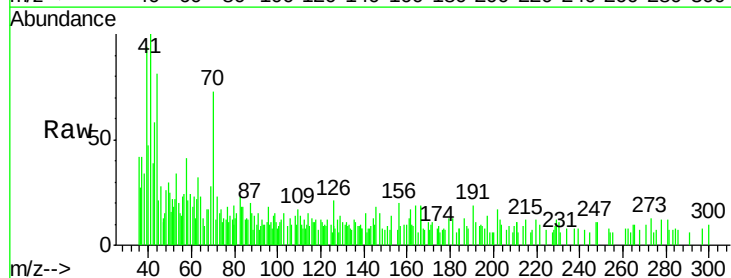
Tgt Ion: 59 Resp: 10242
 Ion Ratio Lower Upper
 59 100
 52 2.0 0.2 0.2#

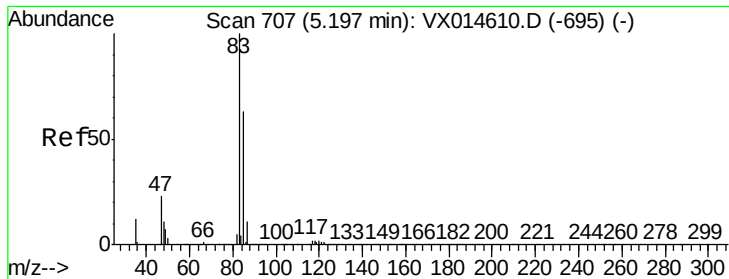


#24

Methyl tert-Butyl Ether
 Concen: 2.11 ug/l
 RT: 3.66 min Scan# 454
 Delta R.T. 0.47 min
 Lab File: VX014796.D
 Acq: 03 Feb 2020 15:34

Tgt Ion: 73 Resp: 160
 Ion Ratio Lower Upper
 73 100
 43 21.3 16.6 25.0





#25

Chloroform

Concen: 12.61 ug/l

RT: 5.19 min Scan# 706

Delta R.T. -0.01 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

Instrument :

MSVOA_X

ClientSampled :

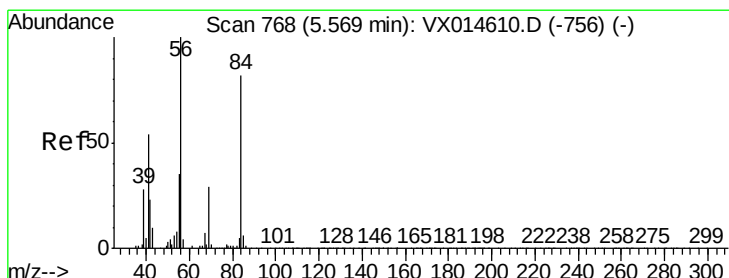
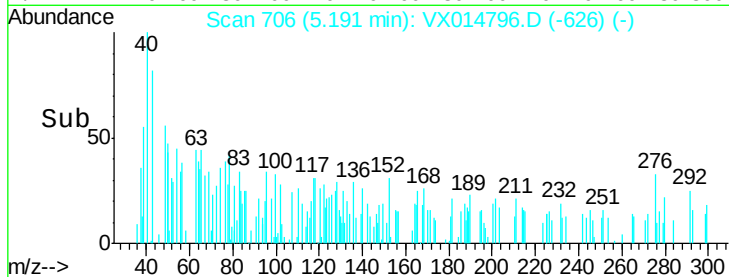
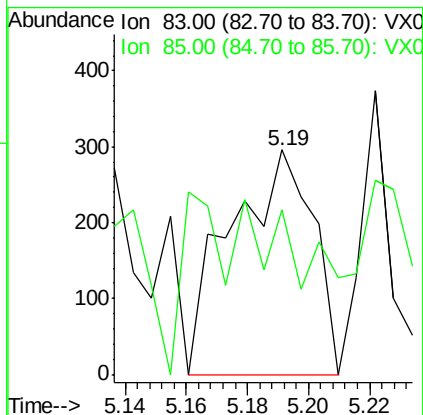
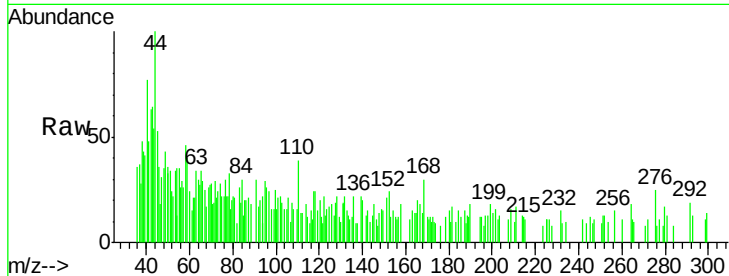
COMP-5DL

Tgt Ion: 83 Resp: 554

Ion Ratio Lower Upper

83 100

85 30.4 52.7 79.1#



#26

Cyclohexane

Concen: 14.24 ug/l

RT: 5.57 min Scan# 768

Delta R.T. 0.00 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

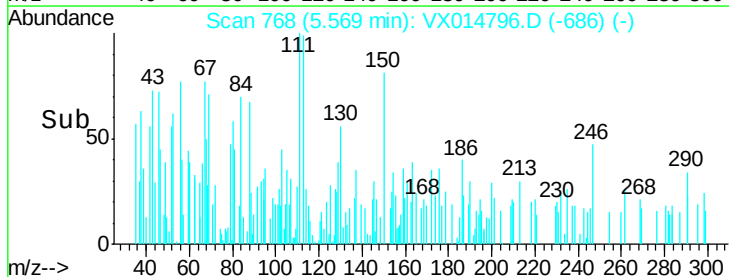
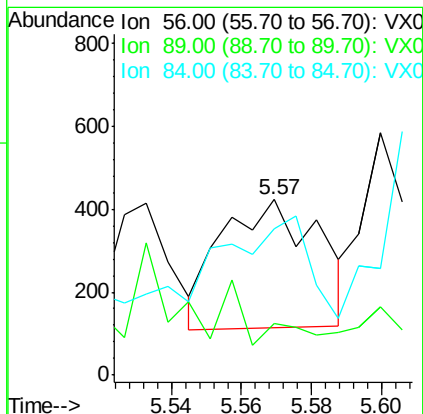
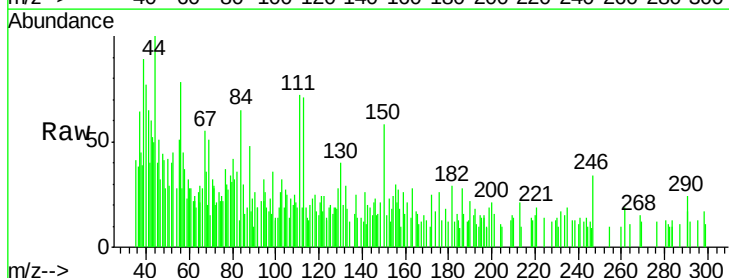
Tgt Ion: 56 Resp: 596

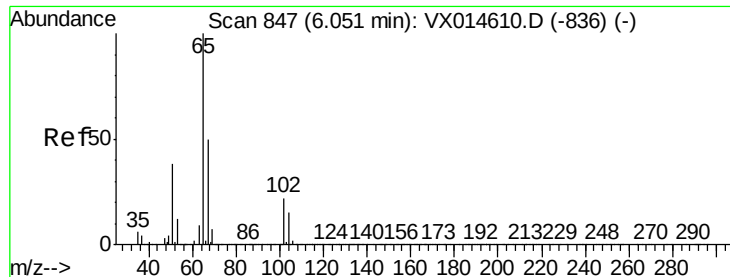
Ion Ratio Lower Upper

56 100

89 20.6 0.1 0.1#

84 33.4 70.8 106.2#





#27

1,2-Dichloroethane-d4

Concen: 8962.84 ug/l

RT: 6.04 min Scan# 846

Delta R.T. -0.01 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

Instrument :

MSVOA_X

ClientSampled :

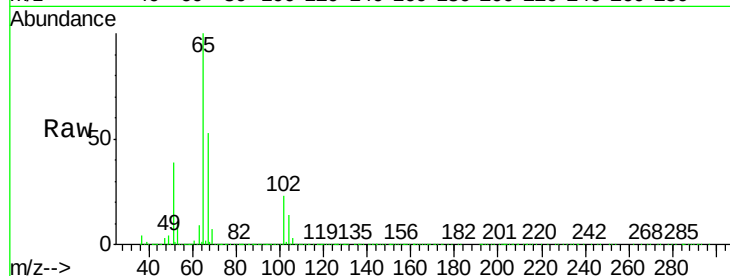
COMP-5DL

Tgt Ion: 65 Resp: 259554

Ion Ratio Lower Upper

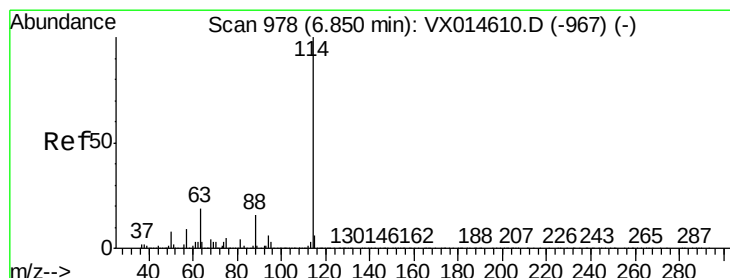
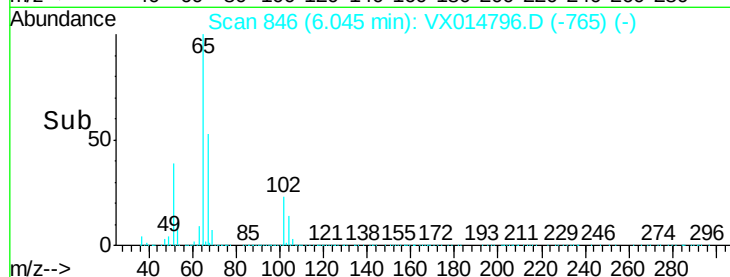
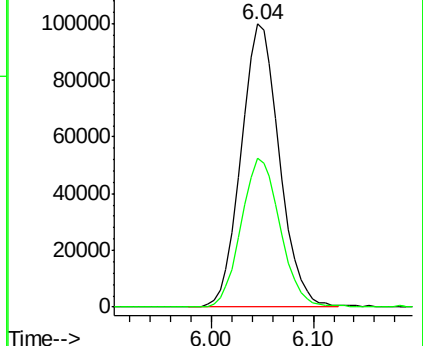
65 100

67 53.4 43.1 64.7



Abundance Ion 65.00 (64.70 to 65.70): VX0

Ion 67.00 (66.70 to 67.70): VX0



#28

1,4-Difluorobenzene

Concen: 30.00 ug/l

RT: 6.85 min Scan# 978

Delta R.T. 0.00 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

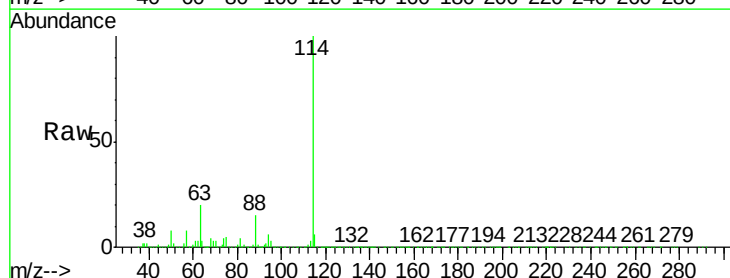
Tgt Ion: 114 Resp: 697741

Ion Ratio Lower Upper

114 100

63 20.6 16.1 24.1

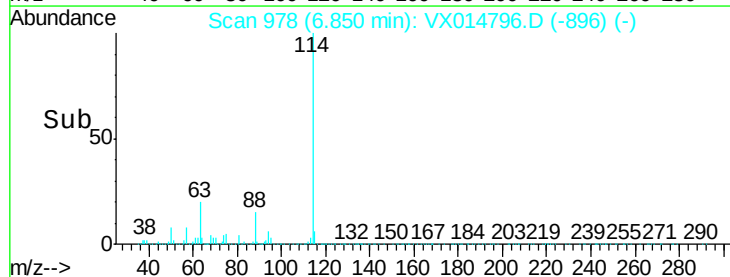
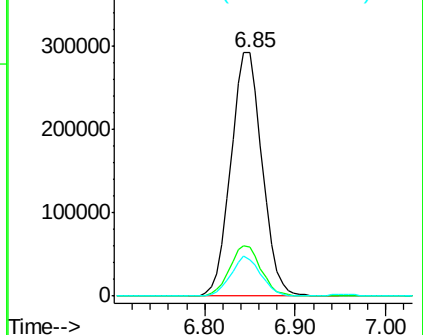
88 15.3 12.5 18.7

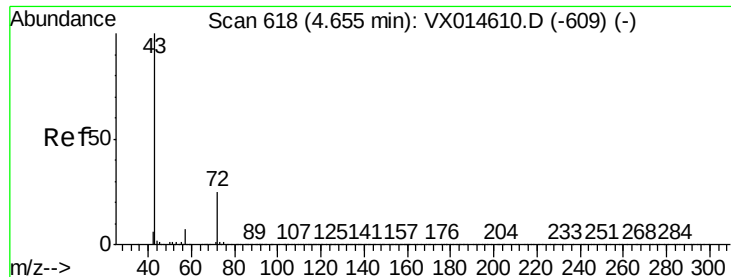


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 88.00 (87.70 to 88.70): VX0

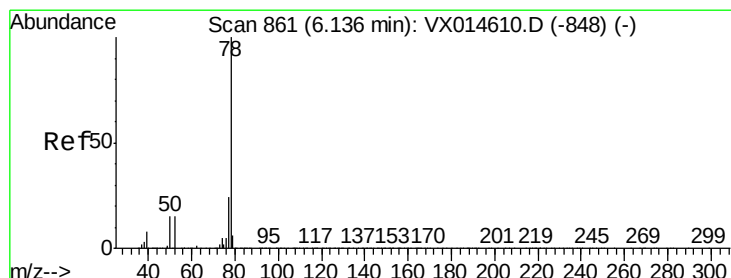
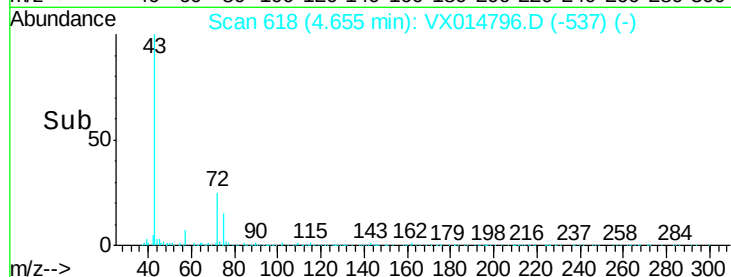
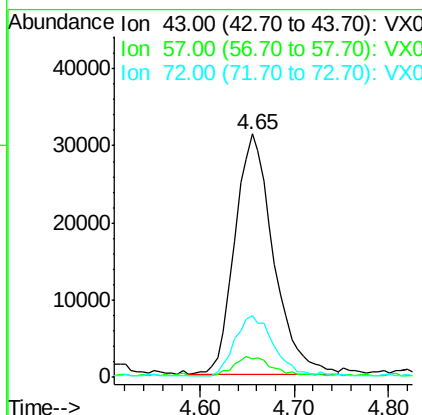
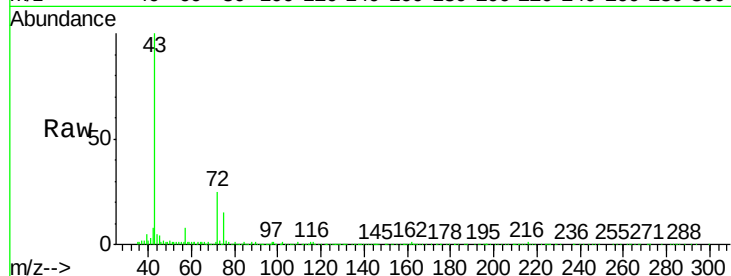




#30
2-Butanone
Concen: 13.69 ug/l
RT: 4.65 min Scan# 618
Delta R.T. -0.01 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

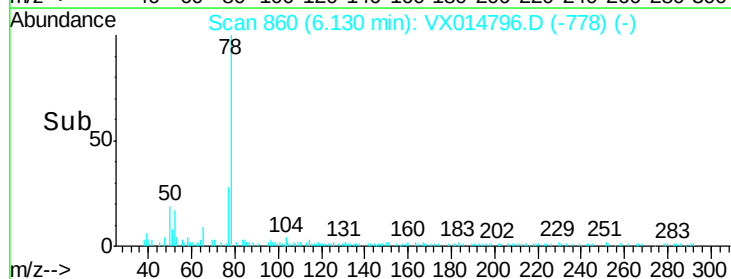
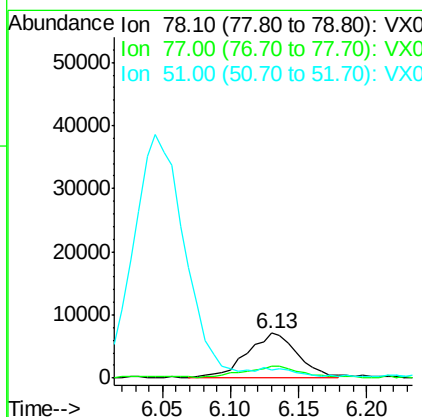
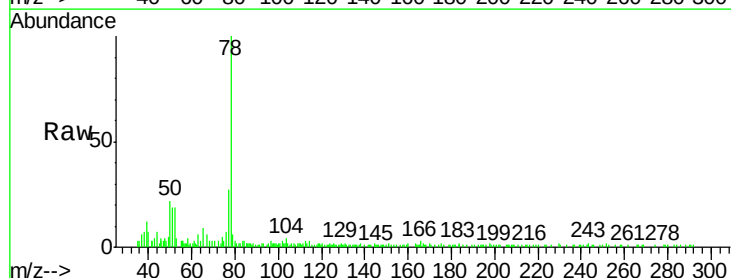
Instrument :
MSVOA_X
ClientSampleId :
COMP-5DL

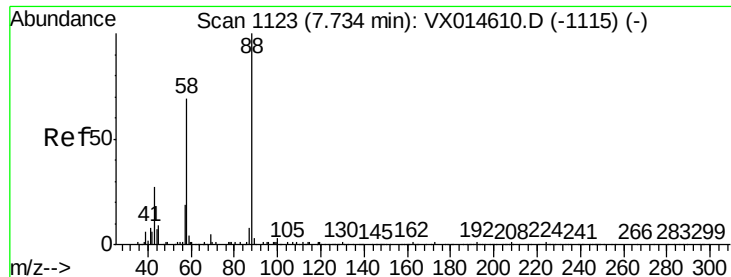
Tgt Ion: 43 Resp: 88757
Ion Ratio Lower Upper
43 100
57 4.2 6.2 9.2#
72 25.0 20.3 30.5



#34
Benzene
Concen: 0.58 ug/l
RT: 6.13 min Scan# 860
Delta R.T. 0.00 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

Tgt Ion: 78 Resp: 18408
Ion Ratio Lower Upper
78 100
77 24.5 18.2 27.2
51 14.4 12.4 18.6

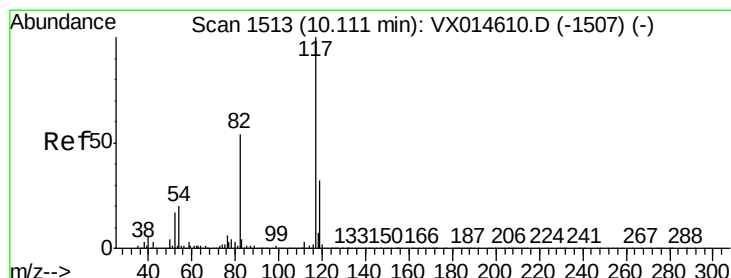
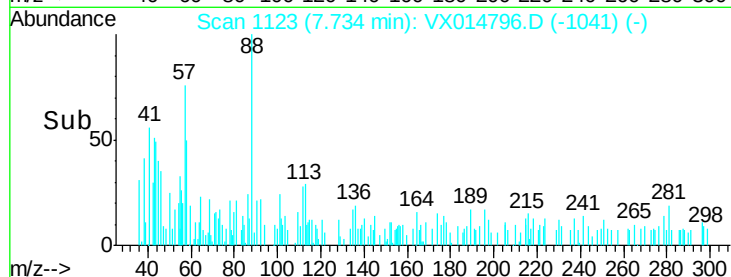
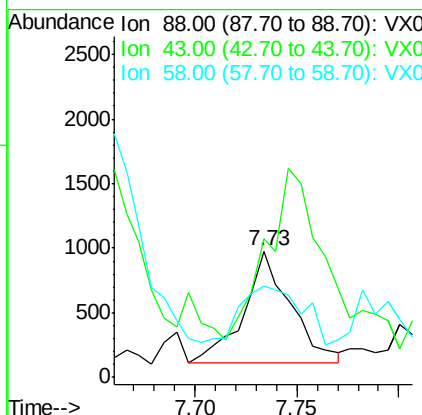
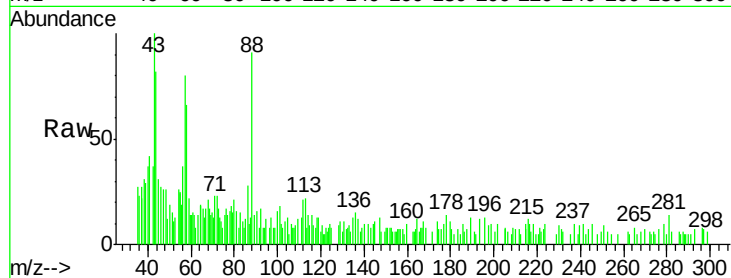




#45
1,4-Dioxane
Concen: 7.47 ug/l
RT: 7.73 min Scan# 1123
Delta R.T. 0.00 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

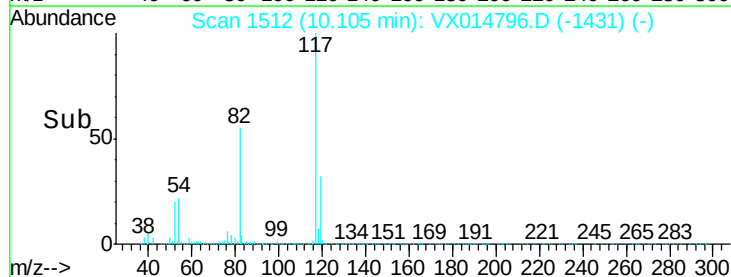
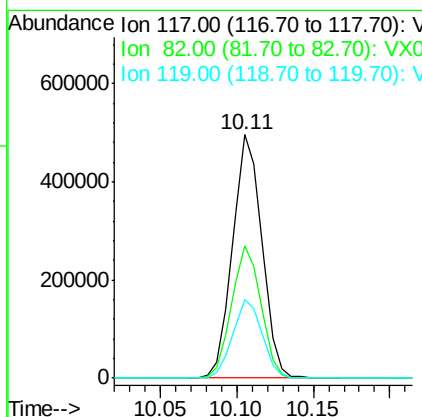
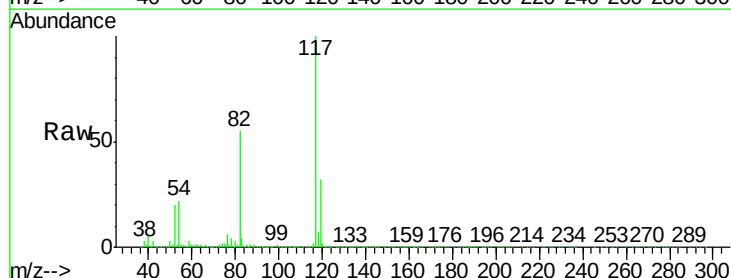
Instrument :
MSVOA_X
ClientSampled :
COMP-5DL

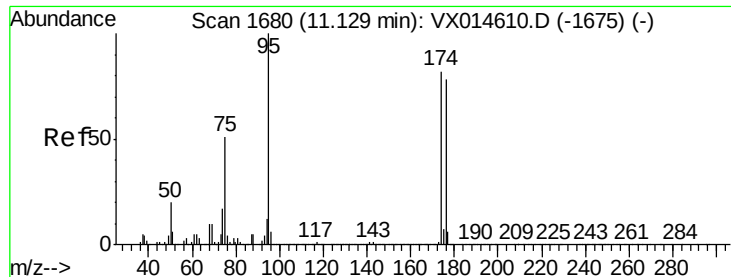
Tgt Ion: 88 Resp: 1414
Ion Ratio Lower Upper
88 100
43 169.2 25.4 38.2#
58 78.7 56.5 84.7



#57
Chlorobenzene-d5
Concen: 30.00 ug/l
RT: 10.11 min Scan# 1512
Delta R.T. -0.01 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

Tgt Ion: 117 Resp: 658028
Ion Ratio Lower Upper
117 100
82 54.1 43.8 65.6
119 32.2 25.8 38.6

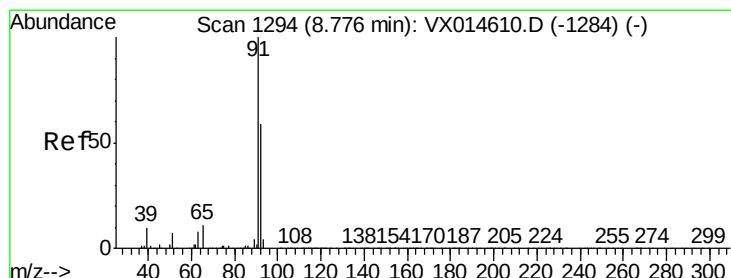
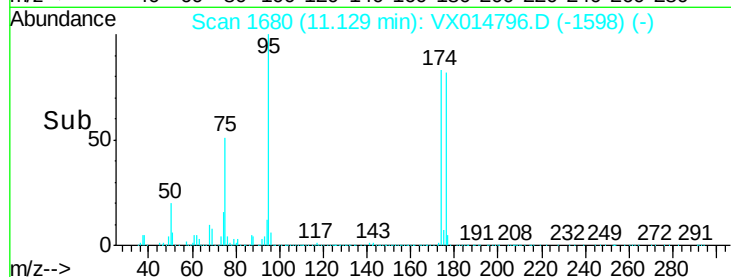
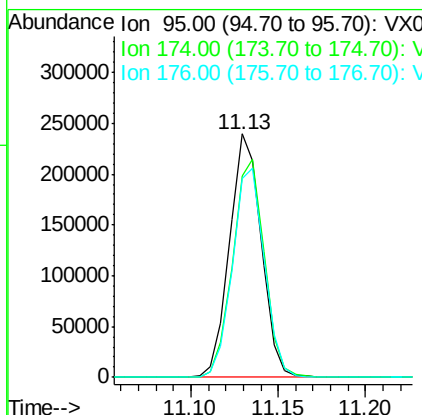
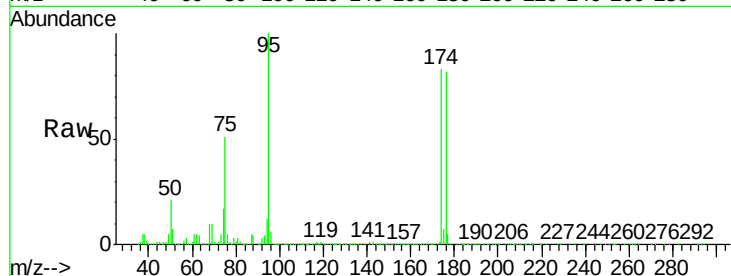




#60
4-Bromofluorobenzene
Concen: 28.64 ug/l
RT: 11.13 min Scan# 1680
Delta R.T. 0.00 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

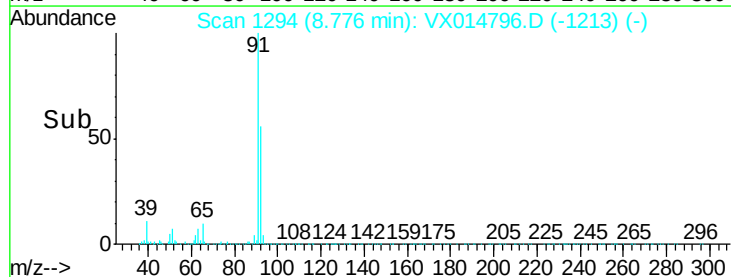
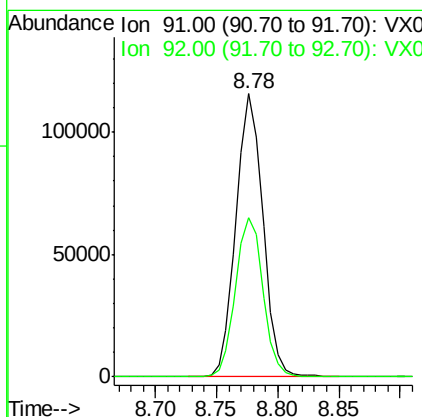
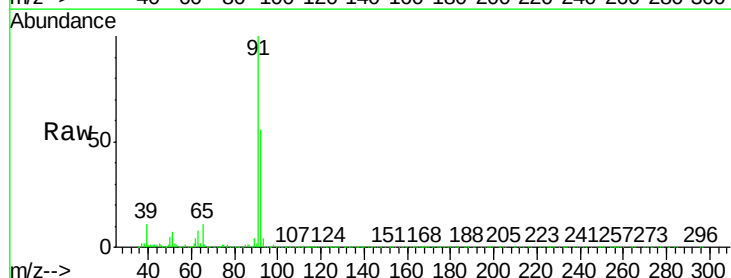
Instrument :
MSVOA_X
ClientSampleId :
COMP-5DL

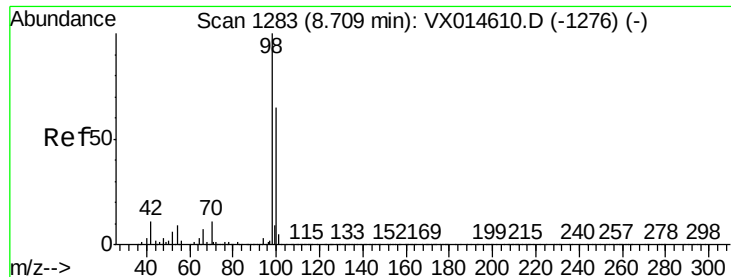
Tgt Ion: 95 Resp: 301525
Ion Ratio Lower Upper
95 100
174 89.7 70.2 105.2
176 86.6 68.3 102.5



#62
Toluene
Concen: 5.08 ug/l
RT: 8.78 min Scan# 1294
Delta R.T. -0.01 min
Lab File: VX014796.D
Acq: 03 Feb 2020 15:34

Tgt Ion: 91 Resp: 177236
Ion Ratio Lower Upper
91 100
92 56.7 46.4 69.6





#63

Toluene-d8

Concen: 28.31 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VX014796.D

Acq: 03 Feb 2020 15:34

Instrument :

MSVOA_X

ClientSampleId :

COMP-5DL

Tgt Ion: 98 Resp: 841594

Ion Ratio Lower Upper

98 100

100 65.5 52.2 78.2

