

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX121919\
 Data File : VX014126.D
 Acq On : 19 Dec 2019 17:24
 Operator : JC/SP
 Sample : K6373-02
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :

Quant Time: Dec 20 00:54:45 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X121219W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 13 01:35:34 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.00	128	238	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.85	114	854885	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.11	117	765178	30.00	ug/l	0.00

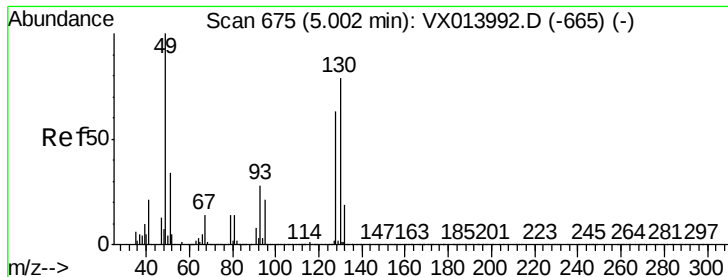
System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.05	65	312036	18306.66	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	61022.20%#
60) 4-Bromofluorobenzene	11.14	95	340019	27.52	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	91.73%
63) Toluene-d8	8.71	98	1011159	29.56	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	98.53%

Target Compounds

					Ovalue	
2) Dichlorodifluoromethane	1.21	85	126	10.480	ug/l	86
3) Chloromethane	1.22	50	259	15.285	ug/l	100
4) Vinyl Chloride	1.66	62	380	21.877	ug/l	98
5) Bromomethane	1.38	94	189	14.884	ug/l	93
6) Chloroethane	1.75	64	279	26.003	ug/l	99
7) Trichlorofluoromethane	1.93	101	300	13.879	ug/l #	30
8) Diethyl Ether	2.17	74	545	54.856	ug/l	32
9) 1,1,2-Trichlorotrifluoroet	2.36	101	299	23.194	ug/l	87
10) 1,1-Dichloroethene	1.97	96	191	14.331	ug/l	90
11) Methyl Iodide	2.50	142	175	10.200	ug/l #	1
12) Methyl Acetate	2.77	43	760	36.836	ug/l #	80
13) Acrolein	2.31	56	516	206.201	ug/l	88
14) Acrylonitrile	3.12	53	213	26.408	ug/l #	1
15) Acetone	2.43	58	21539	9090.470	ug/l	84
16) Carbon Disulfide	2.56	76	1246	34.512	ug/l	99
17) Allyl chloride	2.72	41	225	9.395	ug/l #	45
18) Methylene Chloride	2.64	84	218	13.349	ug/l	92
19) trans-1,2-Dichloroethene	3.15	96	451	30.903	ug/l #	29
20) Diisopropyl ether	3.84	45	525	10.684	ug/l #	37
21) 1,1-Dichloroethane	3.69	63	63	2.362	ug/l #	1
22) cis-1,2-Dichloroethene	4.53	96	200	11.822	ug/l	98
23) tert-Butyl Alcohol	3.05	59	203	64.167	ug/l #	11
24) Methyl tert-Butyl Ether	3.18	73	477	10.595	ug/l #	61
25) Chloroform	5.19	83	188	7.394	ug/l	83
26) Cyclohexane	5.57	56	164	6.896	ug/l #	5
45) 1,4-Dioxane	7.72	88	446	2.036	ug/l #	74

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

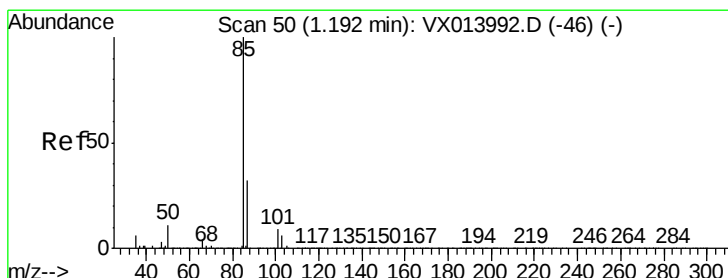
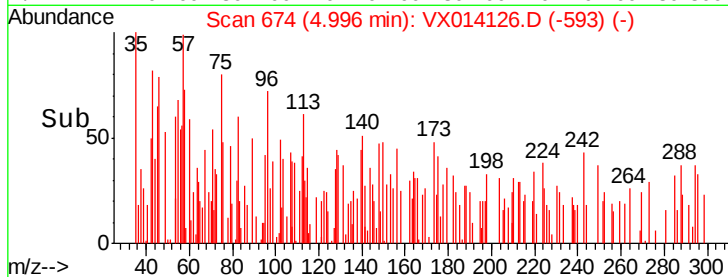
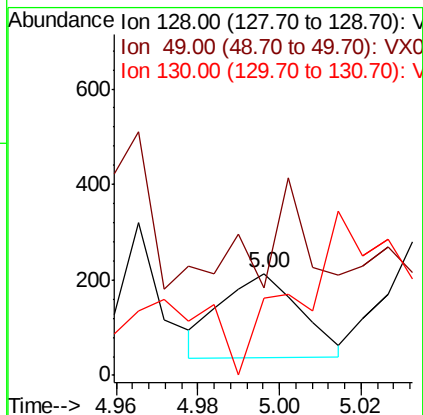
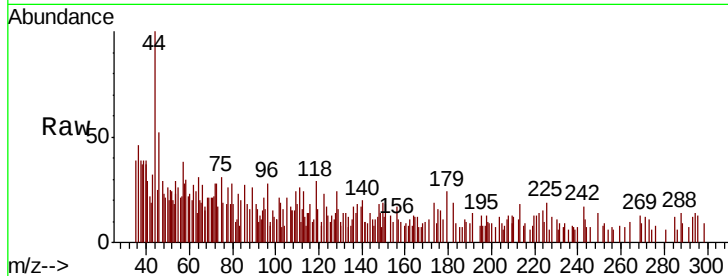


#1

Bromochloromethane
 Concen: 30.000 ug/l
 RT: 5.00 min Scan# 674
 Delta R.T. -0.01 min
 Lab File: VX014126.D
 Acq: 19 Dec 2019 17:24

Instrument :
 MSVOA_X
 ClientSampleId :

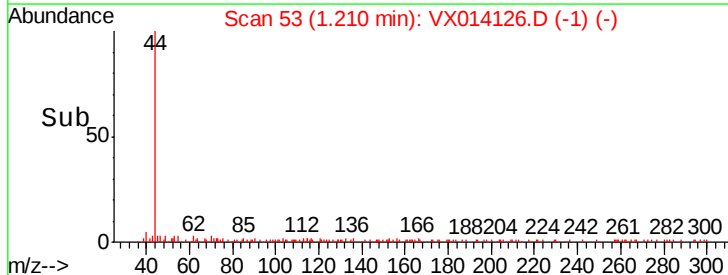
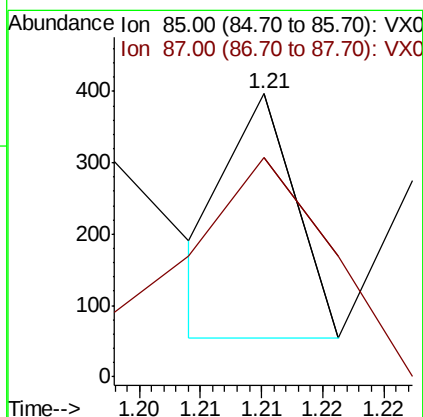
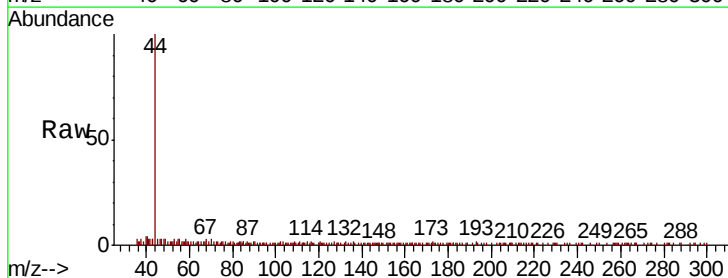
Tot Ion:128 Resp: 238
 Ion Ratio Lower Upper
 128 100
 49 45.8 0.0 405.0
 130 71.8 0.0 321.5

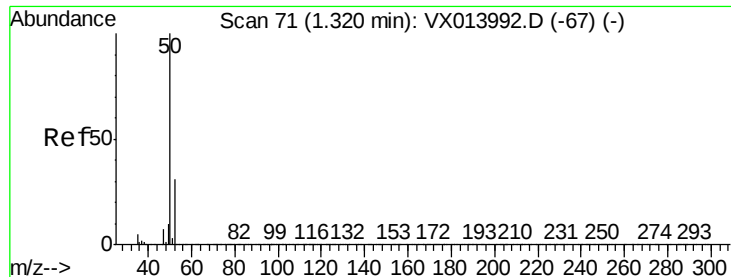


#2

Dichlorodifluoromethane
 Concen: 10.480 ug/l
 RT: 1.21 min Scan# 53
 Delta R.T. 0.02 min
 Lab File: VX014126.D
 Acq: 19 Dec 2019 17:24

Tgt Ion: 85 Resp: 126
 Ion Ratio Lower Upper
 85 100
 87 40.2 16.3 48.9





#3

Chloromethane

Concen: 15.285 ug/l

RT: 1.22 min Scan# 55

Delta R.T. -0.10 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

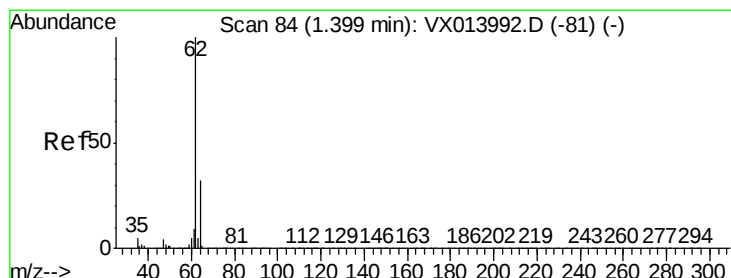
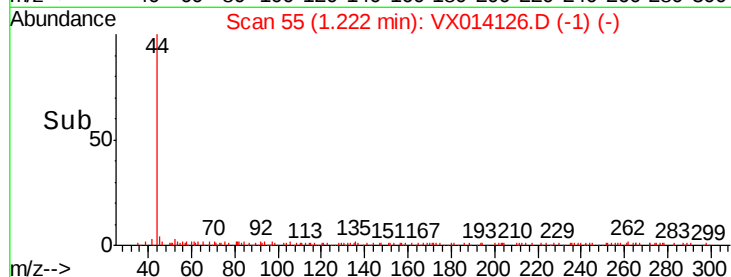
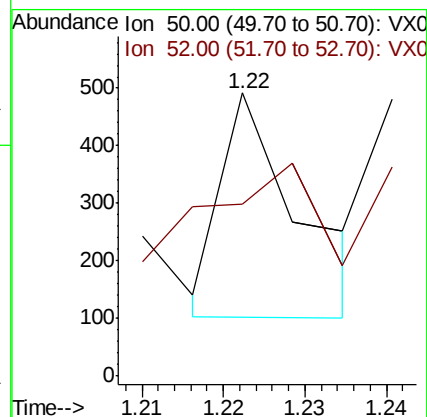
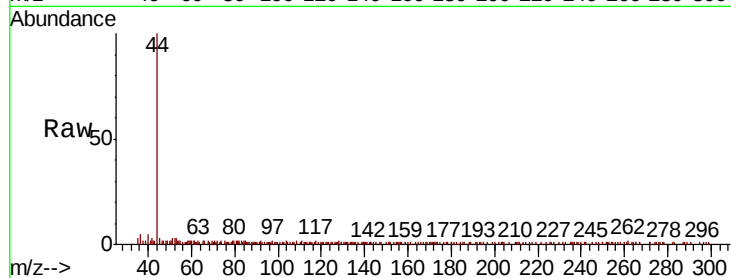
Instrument :
MSVOA_X
ClientSampled :

Tot Ion: 50 Resp: 259

Ion Ratio Lower Upper

50 100

52 30.5 24.3 36.5



#4

Vinyl Chloride

Concen: 21.877 ug/l

RT: 1.66 min Scan# 126

Delta R.T. 0.26 min

Lab File: VX014126.D

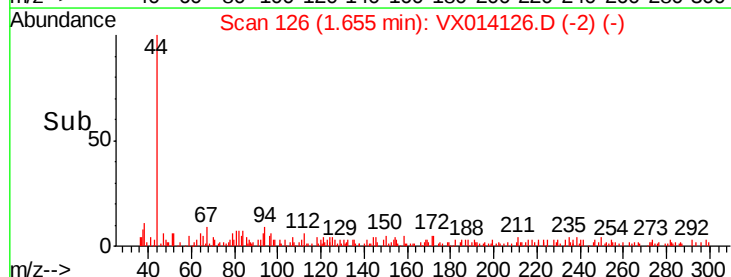
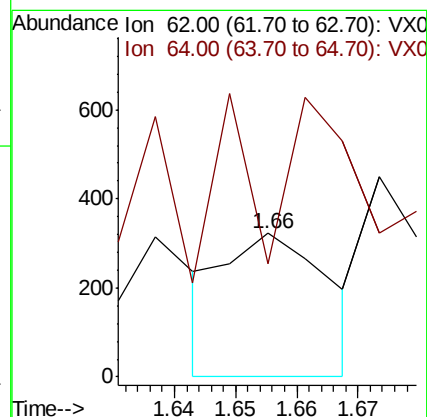
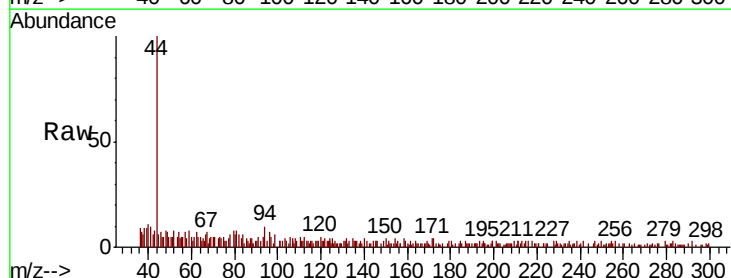
Acq: 19 Dec 2019 17:24

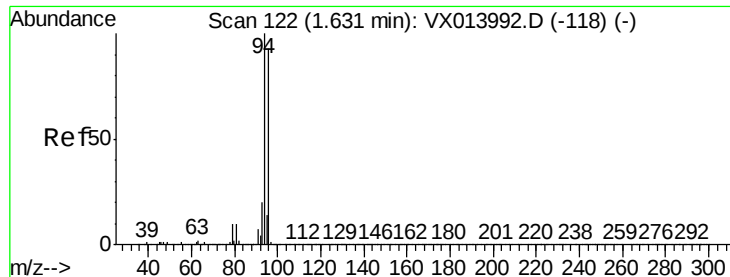
Tgt Ion: 62 Resp: 380

Ion Ratio Lower Upper

62 100

64 32.8 25.2 37.8





#5

Bromomethane

Concen: 14.884 ug/l

RT: 1.38 min Scan# 81

Delta R.T. -0.25 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

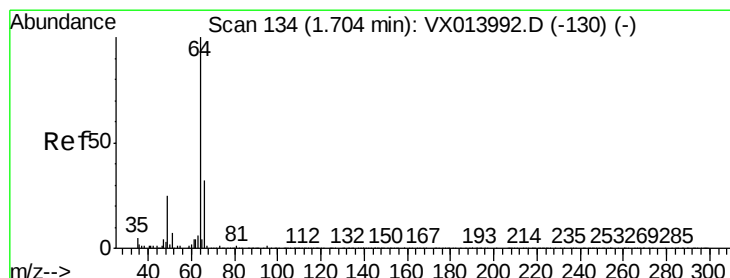
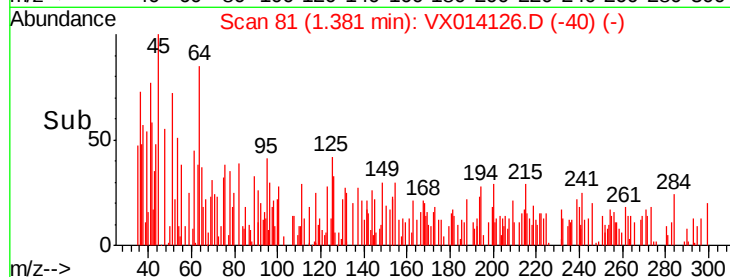
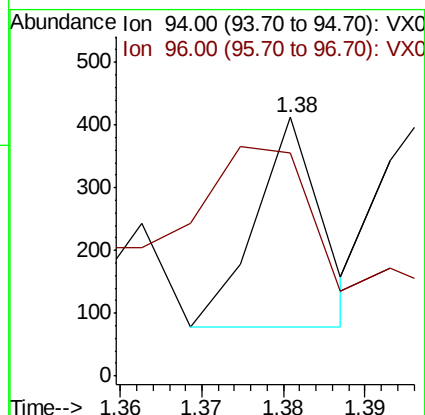
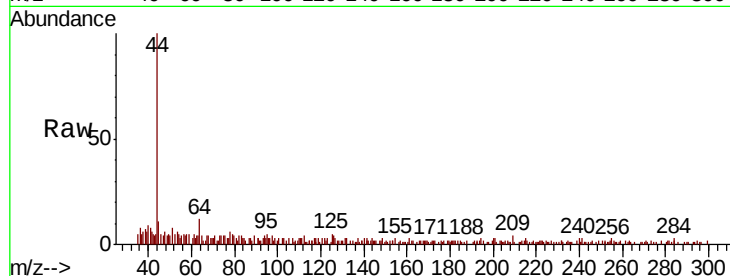
Instrument :
MSVOA_X
ClientSampleId :

Tot Ion: 94 Resp: 189

Ion Ratio Lower Upper

94 100

96 85.9 74.4 111.6



#6

Chloroethane

Concen: 26.003 ug/l

RT: 1.75 min Scan# 141

Delta R.T. 0.04 min

Lab File: VX014126.D

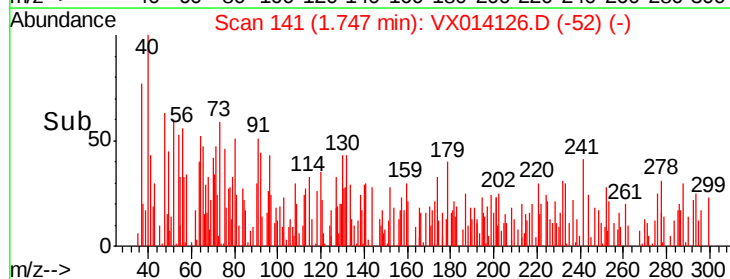
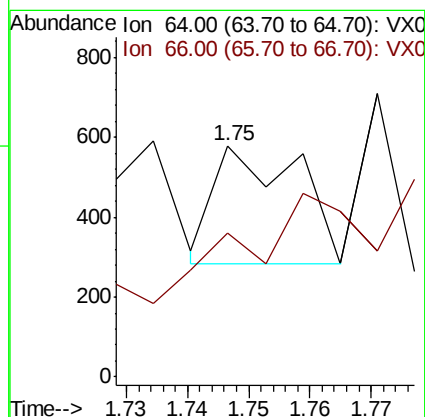
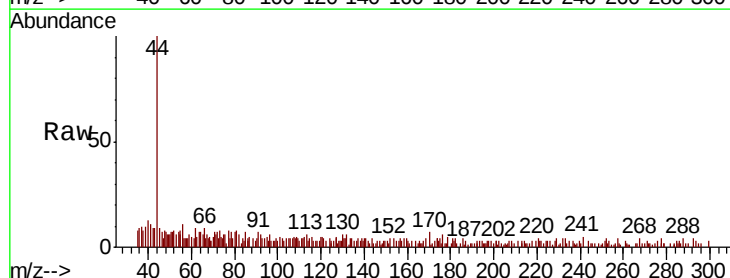
Acq: 19 Dec 2019 17:24

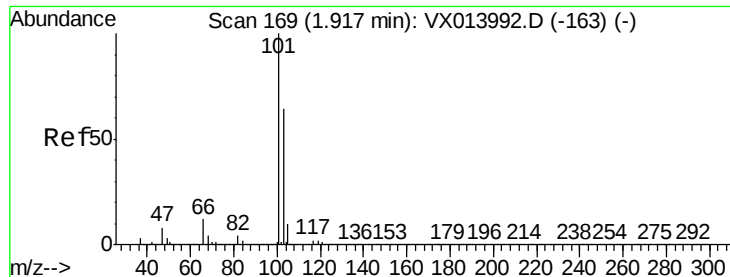
Tgt Ion: 64 Resp: 279

Ion Ratio Lower Upper

64 100

66 32.3 25.2 37.8



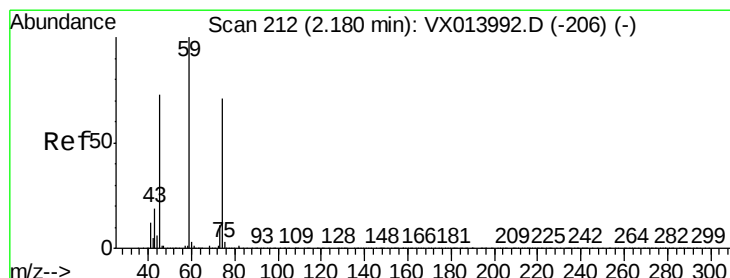
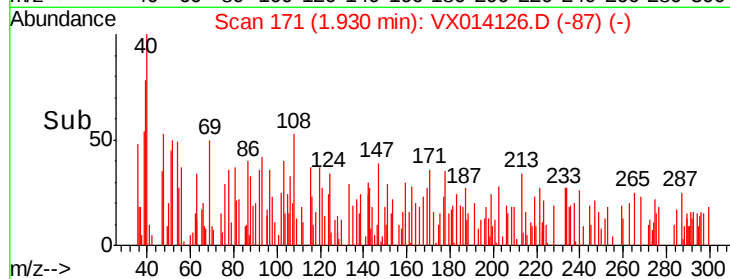
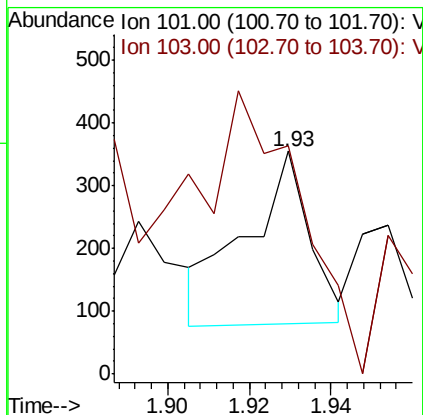
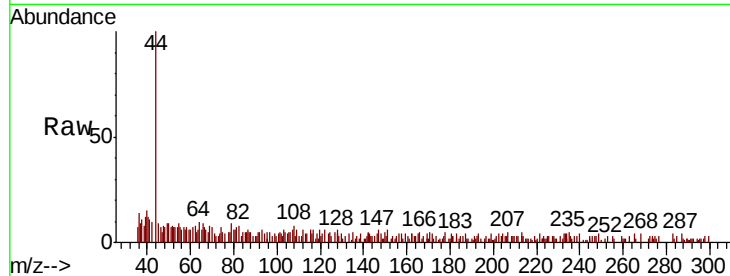


#7

Trichlorofluoromethane
 Concen: 13.879 ug/l
 RT: 1.93 min Scan# 171
 Delta R.T. 0.01 min
 Lab File: VX014126.D
 Acq: 19 Dec 2019 17:24

Instrument :
 MSVOA_X
 ClientSampleId :

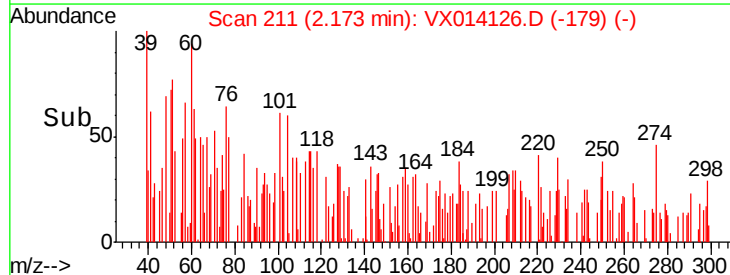
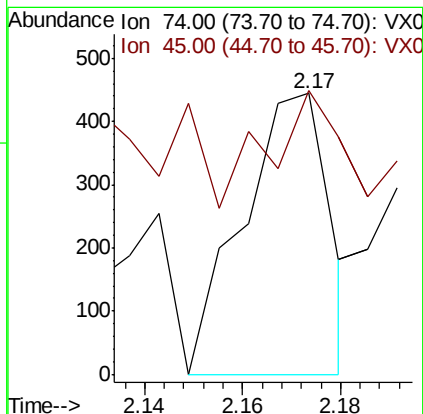
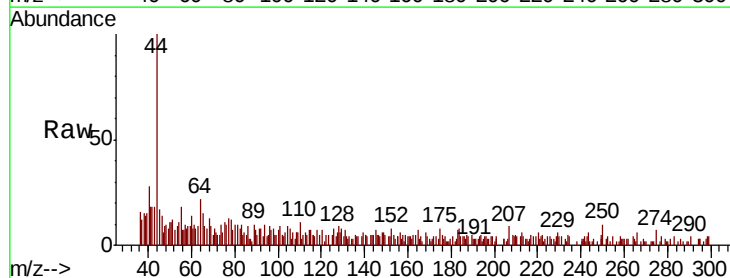
Tot Ion:101 Resp: 300
 Ion Ratio Lower Upper
 101 100
 103 119.4 51.6 77.4#

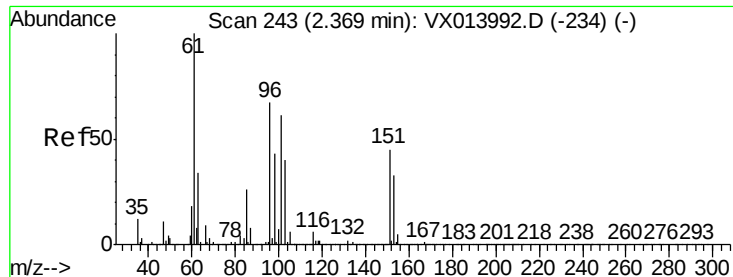


#8

Diethyl Ether
 Concen: 54.856 ug/l
 RT: 2.17 min Scan# 211
 Delta R.T. -0.01 min
 Lab File: VX014126.D
 Acq: 19 Dec 2019 17:24

Tgt Ion: 74 Resp: 545
 Ion Ratio Lower Upper
 74 100
 45 33.8 20.6 185.0





#9

1,1,2-Trichlorotrifluoroethane

Concen: 23.194 ug/l

RT: 2.36 min Scan# 242

Delta R.T. -0.01 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

Instrument :

MSVOA_X

ClientSampleId :

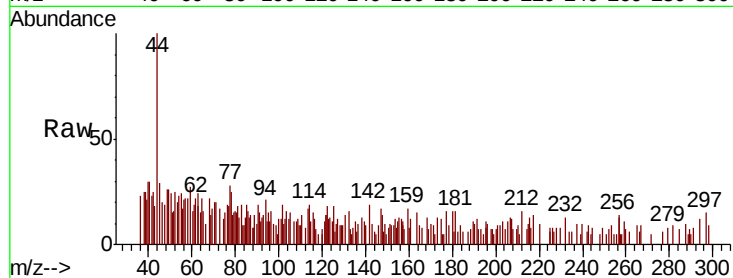
Tot Ion:101 Resp: 299

Ion Ratio Lower Upper

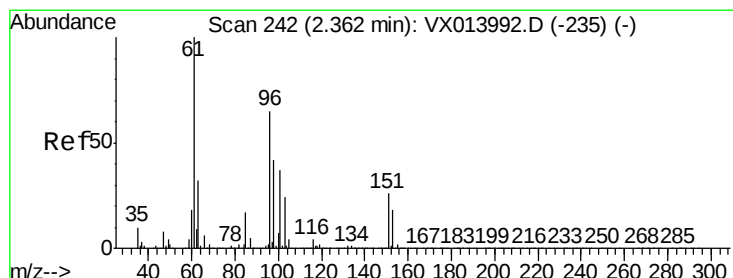
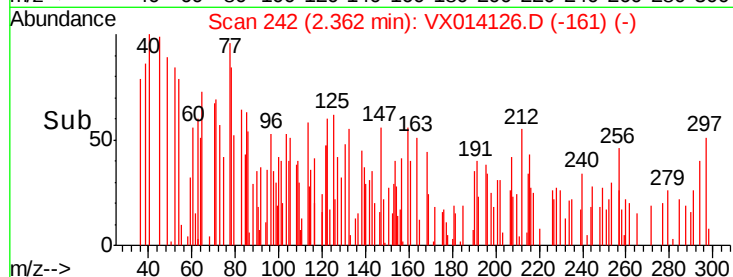
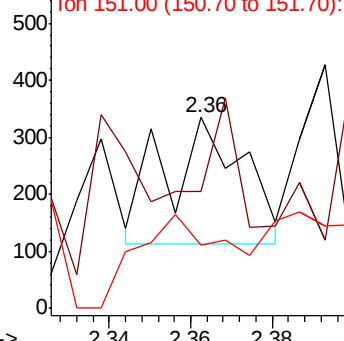
101 100

85 27.8 0.0 85.6

151 86.0 0.0 159.4



Abundance Ion 101.00 (100.70 to 101.70): V
Ion 85.00 (84.70 to 85.70): VX0
Ion 151.00 (150.70 to 151.70): V



#10

1,1-Dichloroethene

Concen: 14.331 ug/l

RT: 1.97 min Scan# 178

Delta R.T. -0.39 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

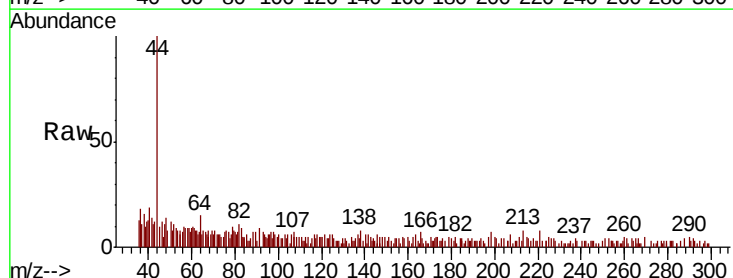
Tgt Ion: 96 Resp: 191

Ion Ratio Lower Upper

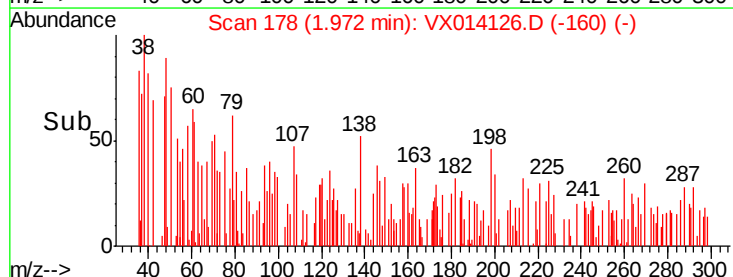
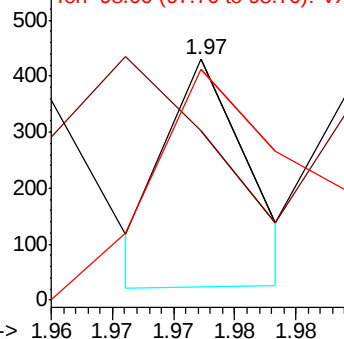
96 100

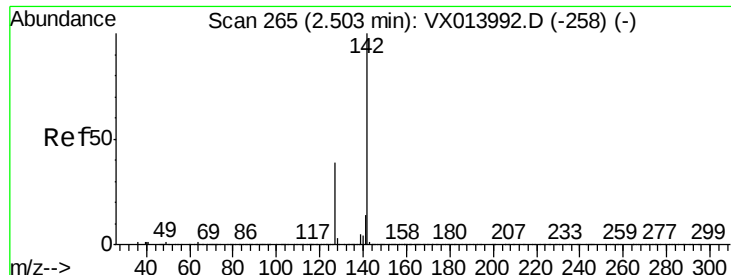
61 139.4 123.0 184.6

98 58.0 51.4 77.0



Abundance Ion 96.00 (95.70 to 96.70): VX0
Ion 61.00 (60.70 to 61.70): VX0
Ion 98.00 (97.70 to 98.70): VX0

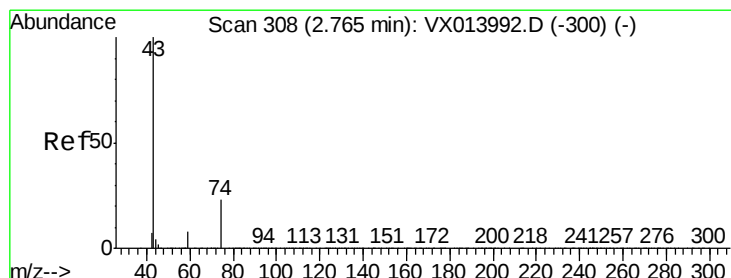
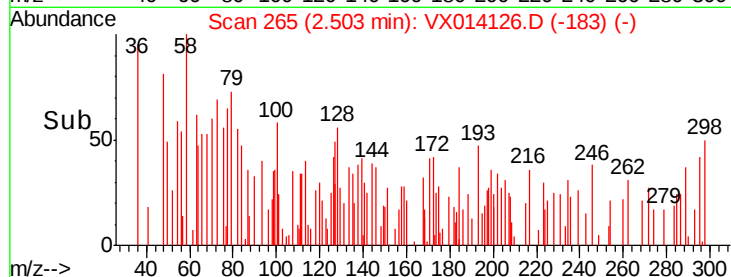
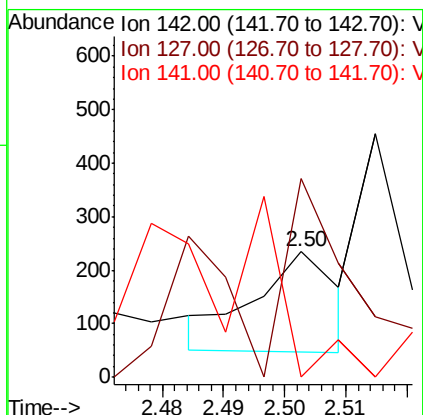
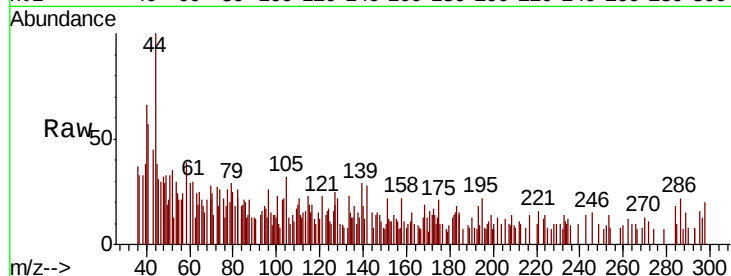




#11
Methyl Iodide
Concen: 10.200 ug/l
RT: 2.50 min Scan# 265
Delta R.T. -0.00 min
Lab File: VX014126.D
Acq: 19 Dec 2019 17:24

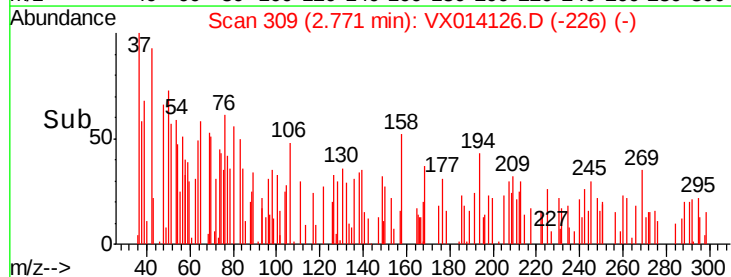
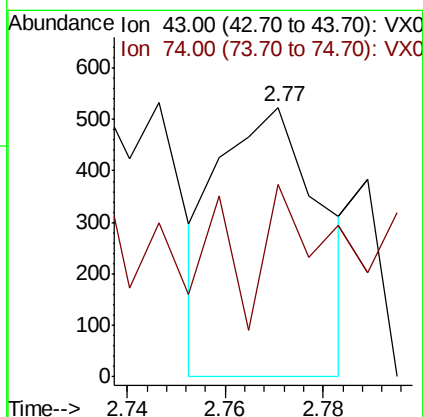
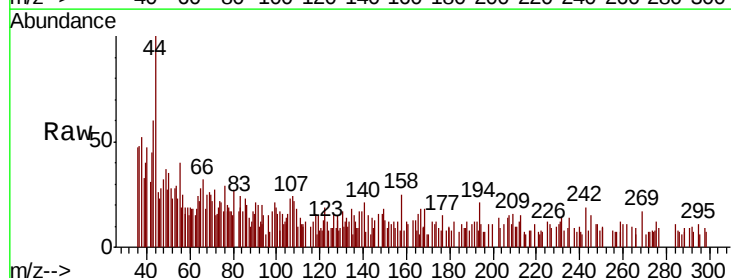
Instrument :
MSVOA_X
ClientSampled :

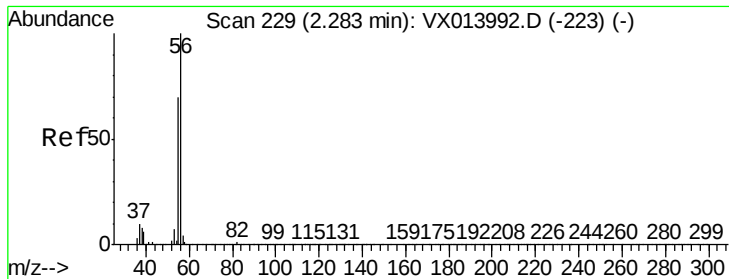
Tot Ion:142 Resp: 175
Ion Ratio Lower Upper
142 100
127 142.7 19.5 58.5#
141 0.0 7.0 20.9#



#12
Methyl Acetate
Concen: 36.836 ug/l
RT: 2.77 min Scan# 309
Delta R.T. 0.01 min
Lab File: VX014126.D
Acq: 19 Dec 2019 17:24

Tgt Ion: 43 Resp: 760
Ion Ratio Lower Upper
43 100
74 32.7 18.5 27.7#

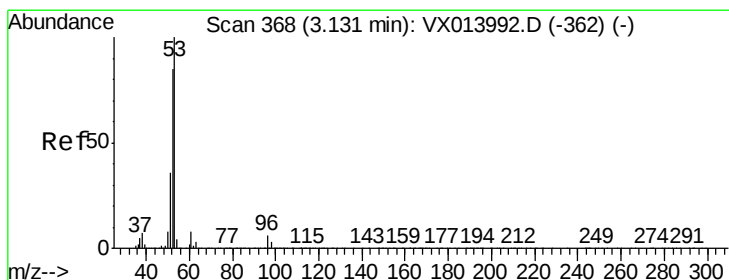
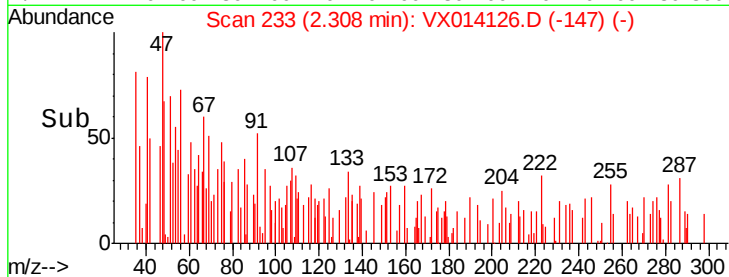
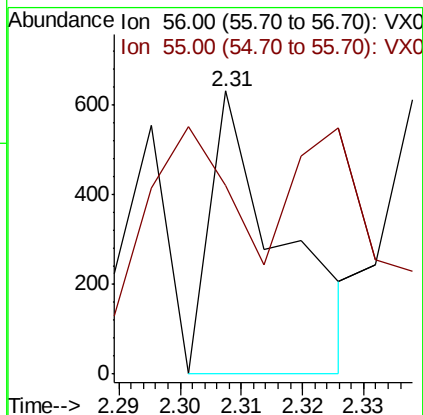
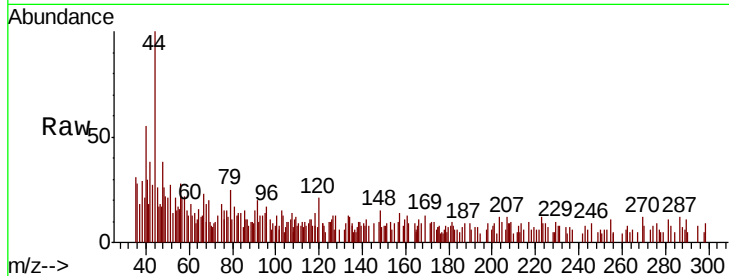




#13
Acrolein
Concen: 206.201 ug/l
RT: 2.31 min Scan# 233
Delta R.T. 0.02 min
Lab File: VX014126.D
Acq: 19 Dec 2019 17:24

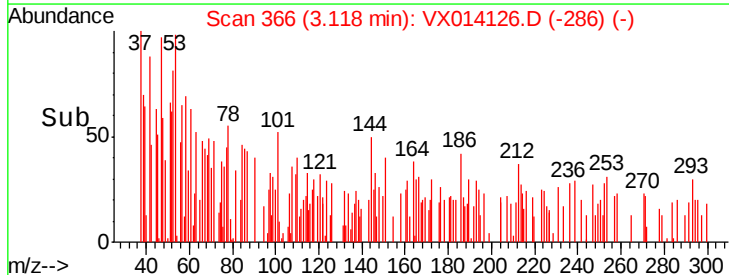
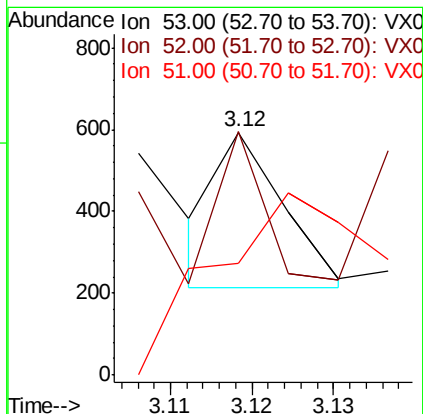
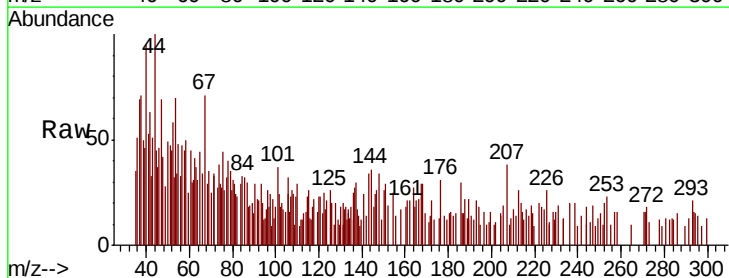
Instrument :
MSVOA_X
ClientSampled :

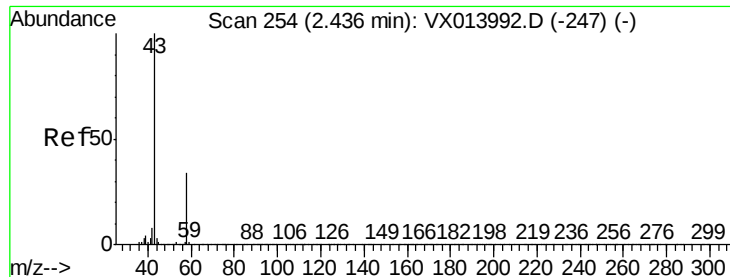
Tot Ion: 56 Resp: 516
Ion Ratio Lower Upper
56 100
55 78.7 54.9 82.3



#14
Acrylonitrile
Concen: 26.408 ug/l
RT: 3.12 min Scan# 366
Delta R.T. -0.01 min
Lab File: VX014126.D
Acq: 19 Dec 2019 17:24

Tgt Ion: 53 Resp: 213
Ion Ratio Lower Upper
53 100
52 99.5 41.5 124.6
51 358.2 17.8 53.5#





#15

Acetone

Concen: 9090.470 ug/l

RT: 2.43 min Scan# 253

Delta R.T. -0.01 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

Instrument :

MSVOA_X

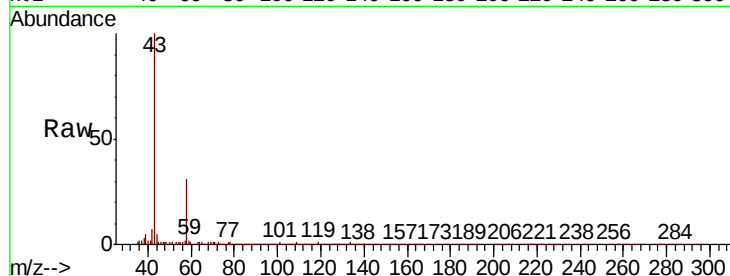
ClientSampleId :

Tot Ion: 58 Resp: 21539

Ion Ratio Lower Upper

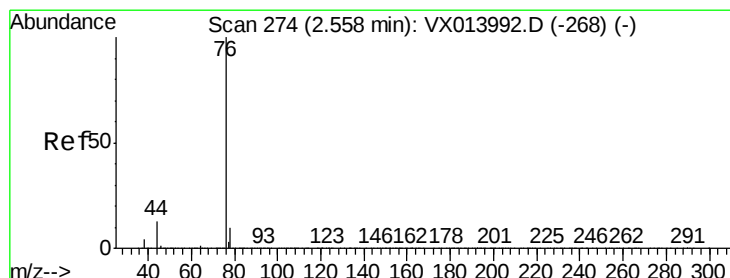
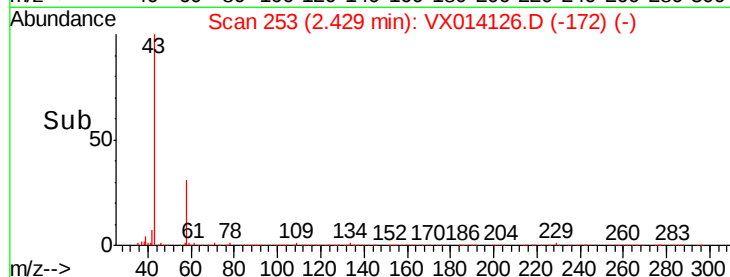
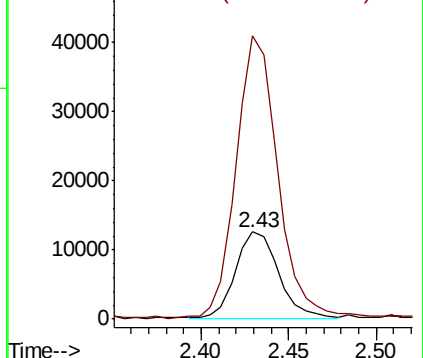
58 100

43 326.7 236.3 354.5



Abundance Ion 58.00 (57.70 to 58.70): VX0

Ion 43.00 (42.70 to 43.70): VX0



#16

Carbon Disulfide

Concen: 34.512 ug/l

RT: 2.56 min Scan# 274

Delta R.T. -0.00 min

Lab File: VX014126.D

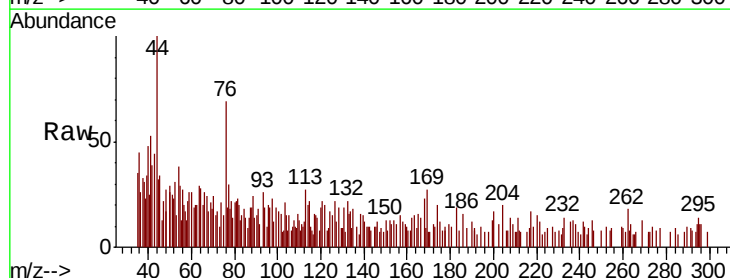
Acq: 19 Dec 2019 17:24

Tgt Ion: 76 Resp: 1246

Ion Ratio Lower Upper

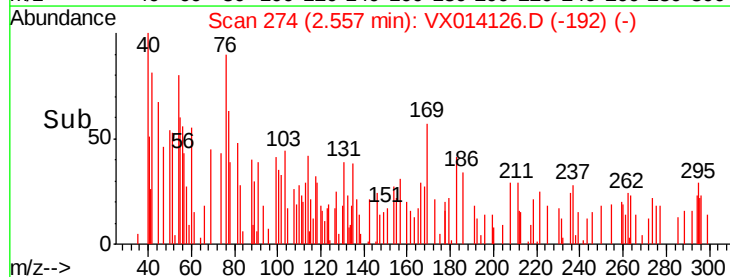
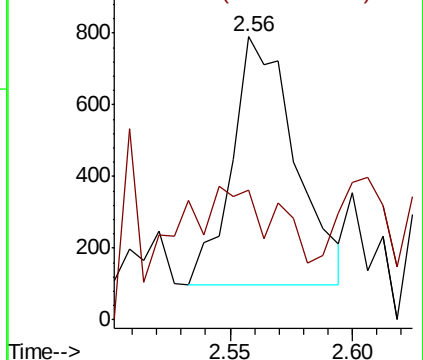
76 100

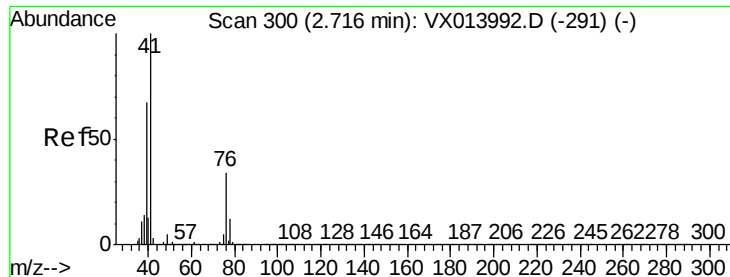
78 9.5 7.8 11.8



Abundance Ion 76.00 (75.70 to 76.70): VX0

Ion 78.00 (77.70 to 78.70): VX0





#17

Allvl chloride

Concen: 9.395 ug/l

RT: 2.72 min Scan# 300

Delta R.T. -0.00 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

Instrument :

MSVOA_X

ClientSampleId :

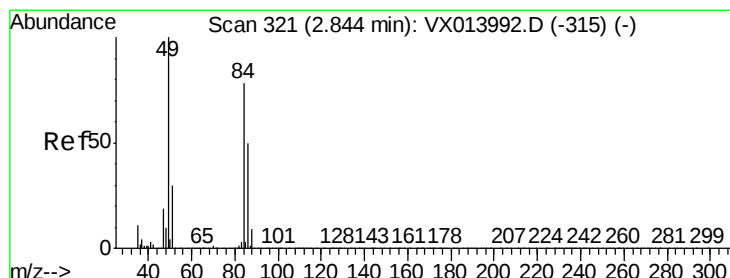
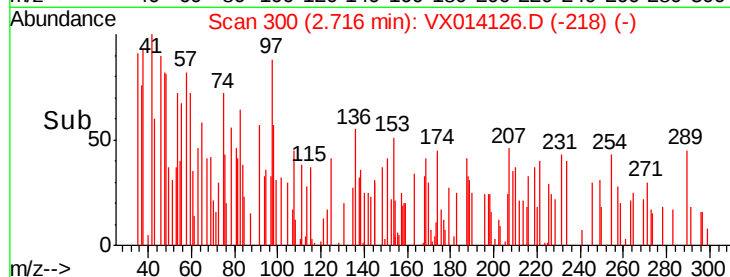
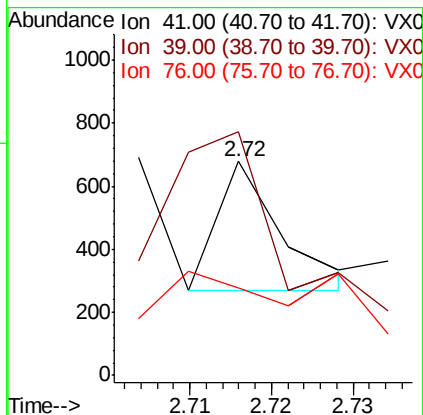
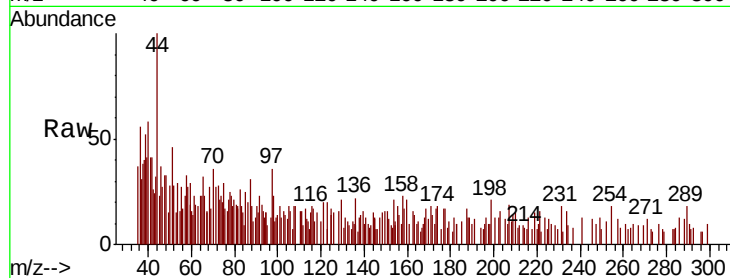
Tot Ion: 41 Resp: 225

Ion Ratio Lower Upper

41 100

39 108.5 33.4 100.2#

76 0.0 17.0 50.9#



#18

Methylene Chloride

Concen: 13.349 ug/l

RT: 2.64 min Scan# 287

Delta R.T. -0.21 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

Tgt Ion: 84 Resp: 218

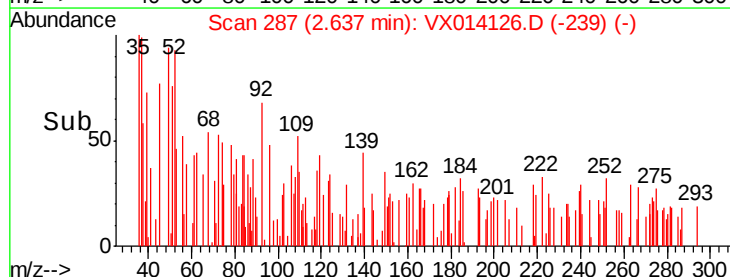
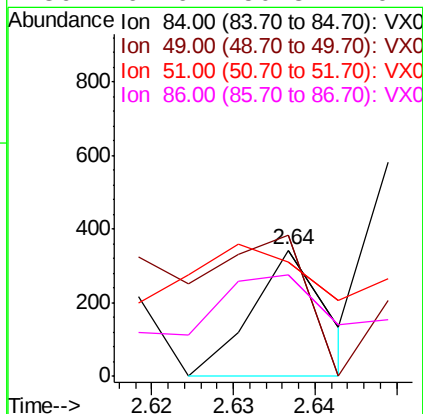
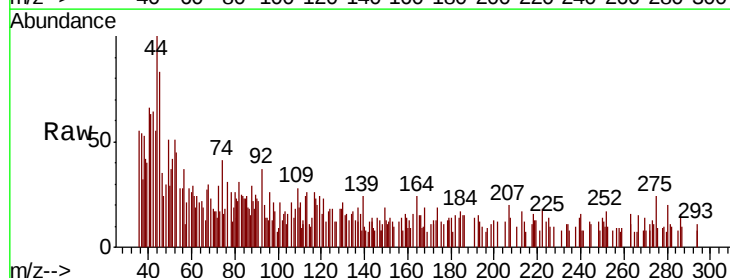
Ion Ratio Lower Upper

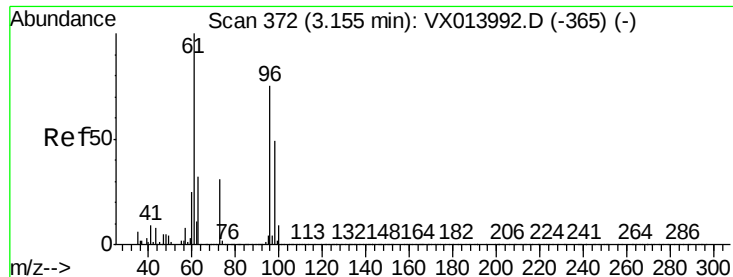
84 100

49 142.5 102.2 153.2

51 39.2 31.4 47.0

86 61.6 50.8 76.2





#19

trans-1,2-Dichloroethene

Concen: 30.903 ug/l

RT: 3.15 min Scan# 372

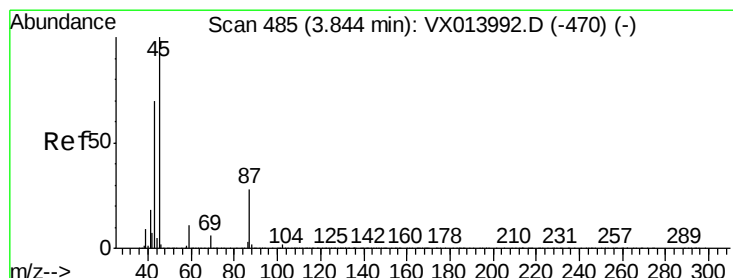
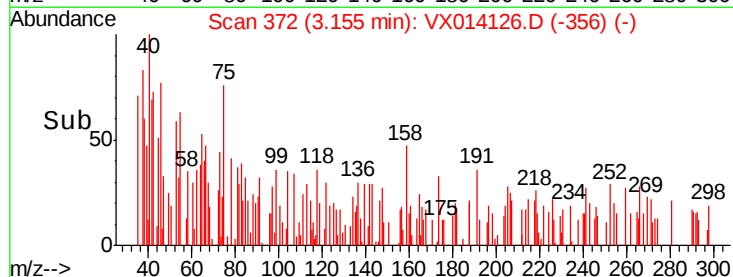
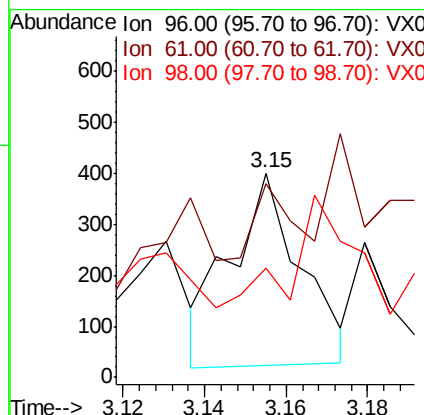
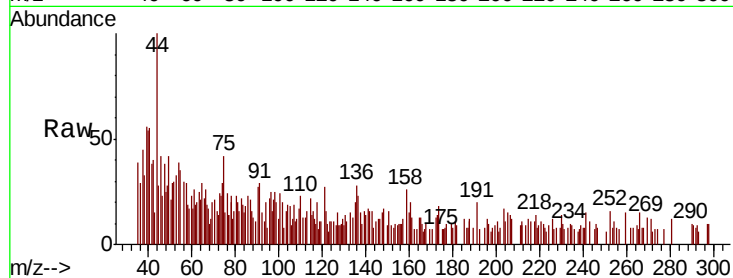
Delta R.T. -0.00 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

Instrument :
MSVOA_X
ClientSampleId :

Tot Ion:	96	Resp:	451
Ion	Ratio	Lower	Upper
96	100		
61	9.2	106.6	159.8#
98	64.1	51.6	77.4



#20

Diisopropyl ether

Concen: 10.684 ug/l

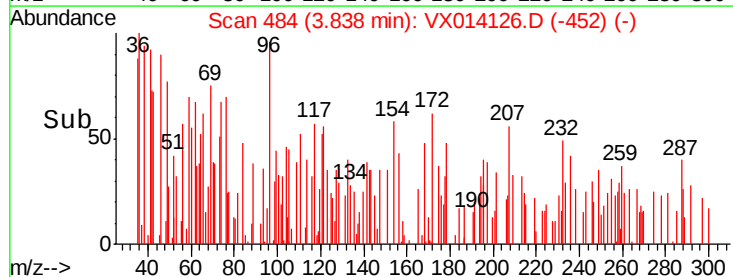
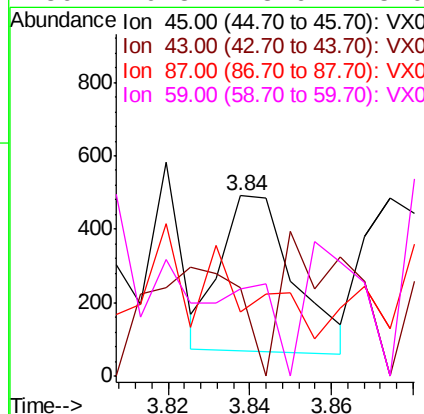
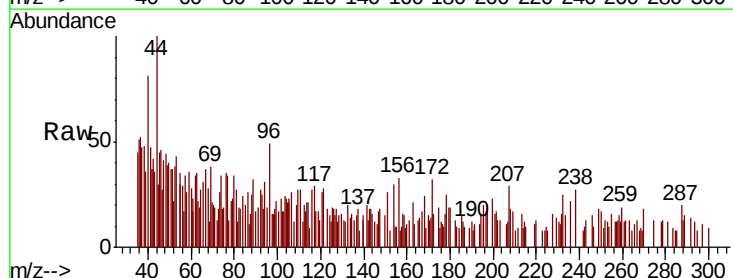
RT: 3.84 min Scan# 484

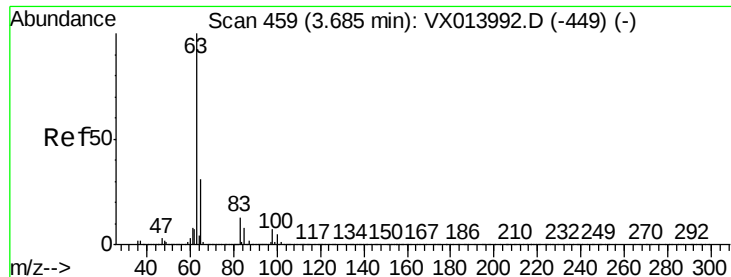
Delta R.T. -0.01 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

Tgt Ion:	45	Resp:	525
Ion	Ratio	Lower	Upper
45	100		
43	0.0	55.9	83.9#
87	11.9	22.2	33.2#
59	10.8	8.6	13.0





#21

1,1-Dichloroethane

Concen: 2.362 ug/l

RT: 3.69 min Scan# 459

Delta R.T. -0.00 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

Instrument :

MSVOA_X

ClientSampleId :

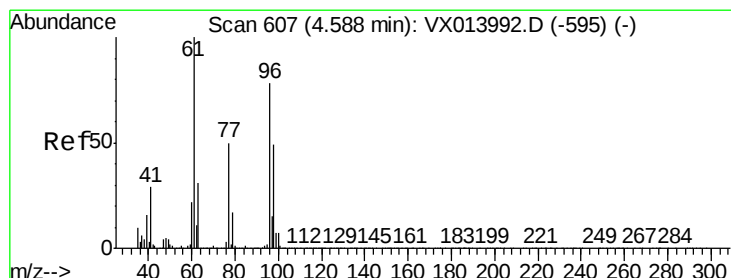
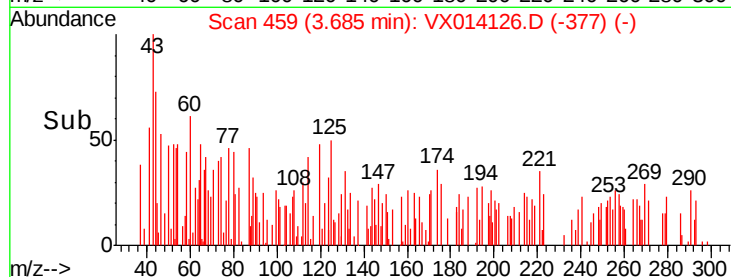
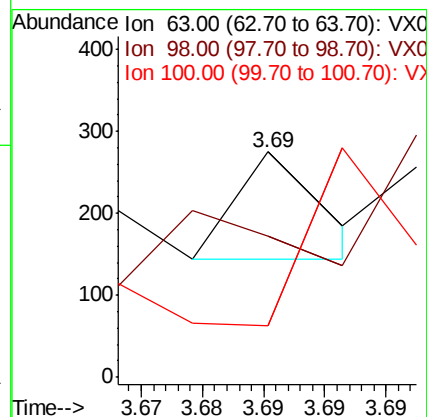
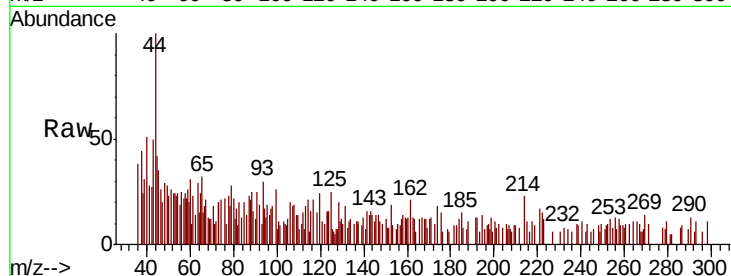
Tot Ion: 63 Resp: 63

Ion Ratio Lower Upper

63 100

98 28.2 3.4 10.1#

100 75.6 2.5 7.4#



#22

cis-1,2-Dichloroethene

Concen: 11.822 ug/l

RT: 4.53 min Scan# 597

Delta R.T. -0.06 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

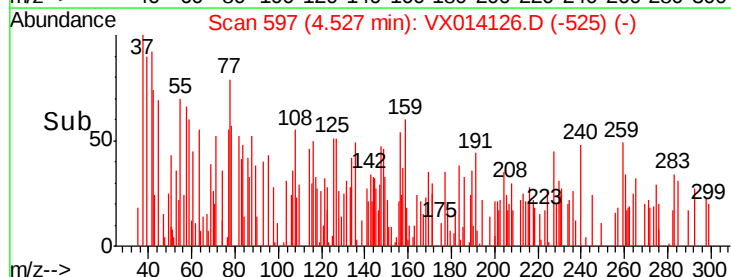
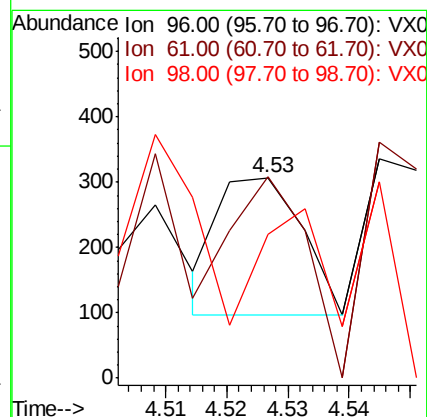
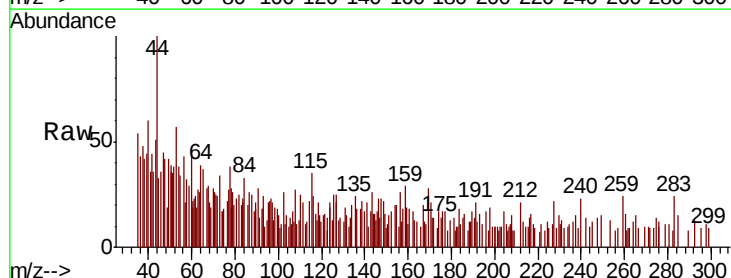
Tgt Ion: 96 Resp: 200

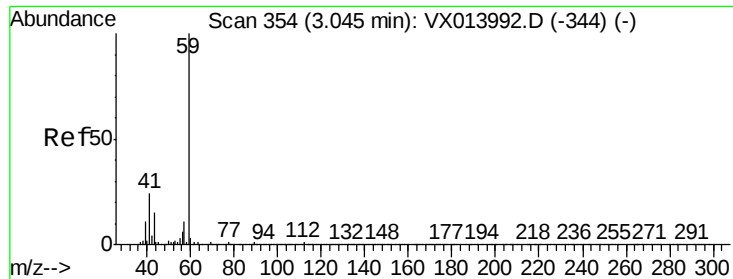
Ion Ratio Lower Upper

96 100

61 139.5 112.4 168.6

98 58.5 50.3 75.5



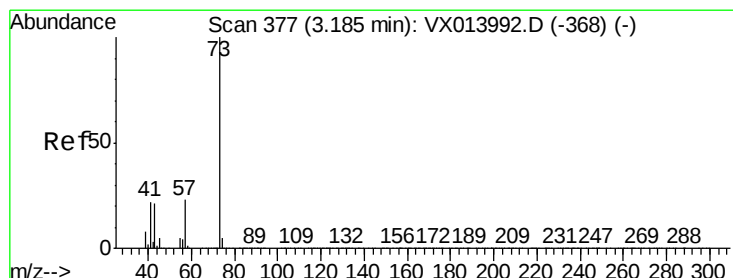
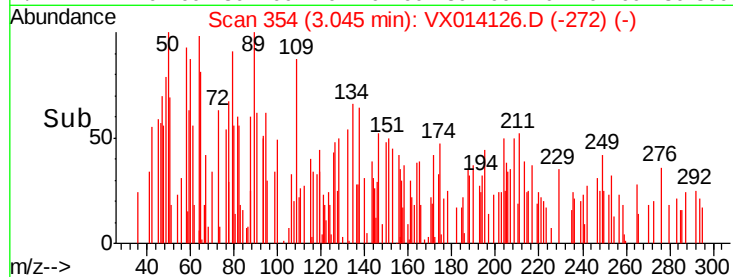
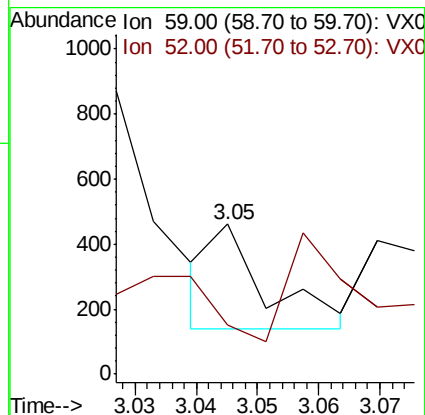
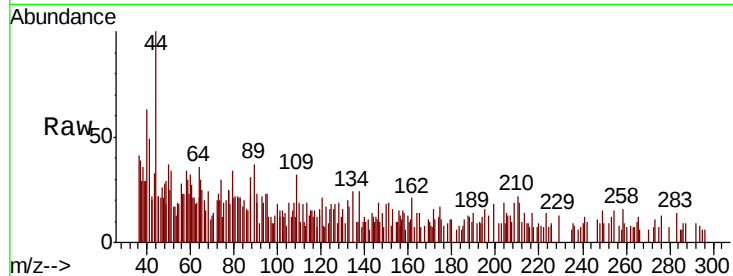


#23

tert-Butyl Alcohol
Concen: 64.167 ug/l
RT: 3.05 min Scan# 354
Delta R.T. -0.00 min
Lab File: VX014126.D
Acq: 19 Dec 2019 17:24

Instrument :
MSVOA_X
ClientSampled :

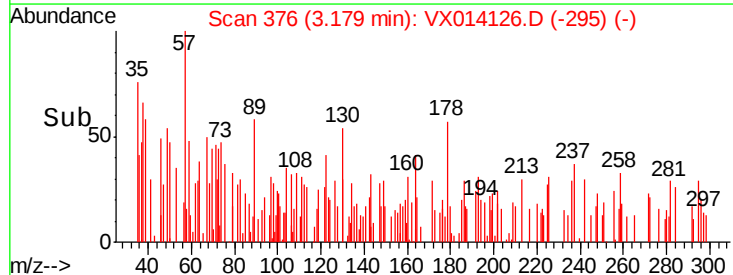
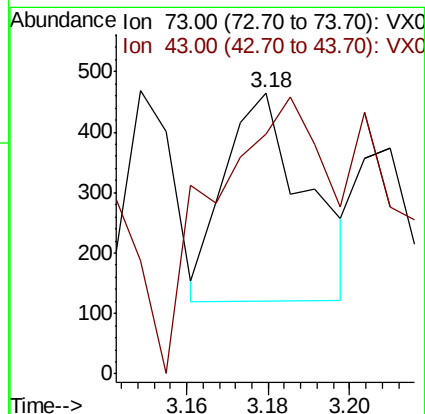
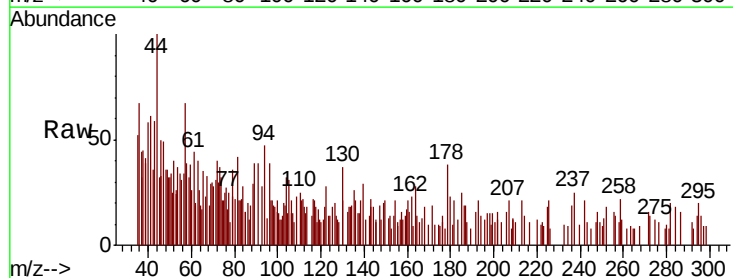
Tot Ion: 59 Resp: 203
Ion Ratio Lower Upper
59 100
52 113.8 0.2 0.2#

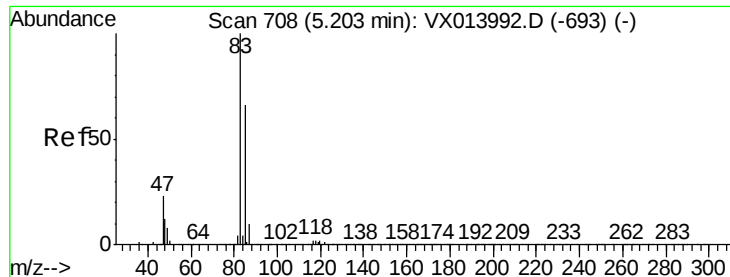


#24

Methyl tert-Butyl Ether
Concen: 10.595 ug/l
RT: 3.18 min Scan# 376
Delta R.T. -0.01 min
Lab File: VX014126.D
Acq: 19 Dec 2019 17:24

Tgt Ion: 73 Resp: 477
Ion Ratio Lower Upper
73 100
43 38.8 16.6 25.0#





#25

Chloroform

Concen: 7.394 ug/l

RT: 5.19 min Scan# 705

Delta R.T. -0.02 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

Instrument :

MSVOA_X

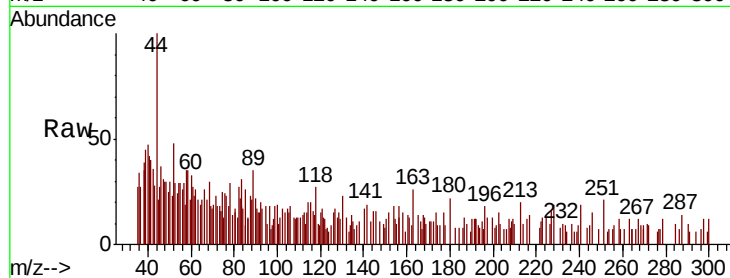
ClientSampleId :

Tot Ion: 83 Resp: 188

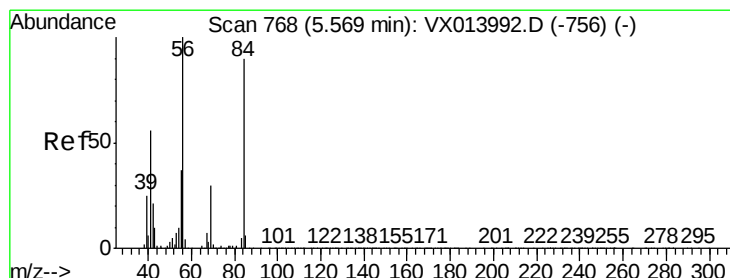
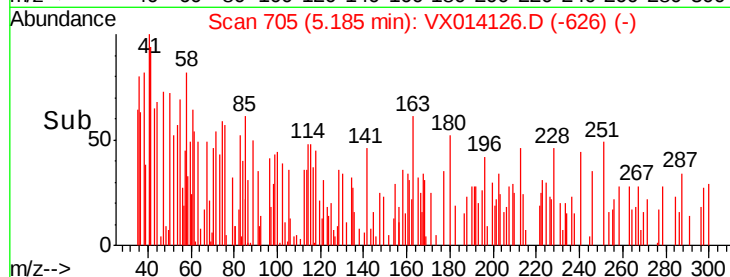
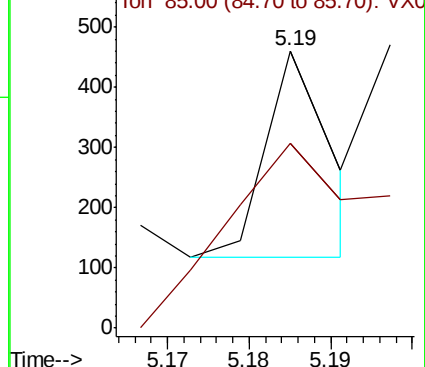
Ion Ratio Lower Upper

83 100

85 52.8 52.7 79.1



Abundance Ion 83.00 (82.70 to 83.70): VX0



#26

Cyclohexane

Concen: 6.896 ug/l

RT: 5.57 min Scan# 768

Delta R.T. -0.00 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

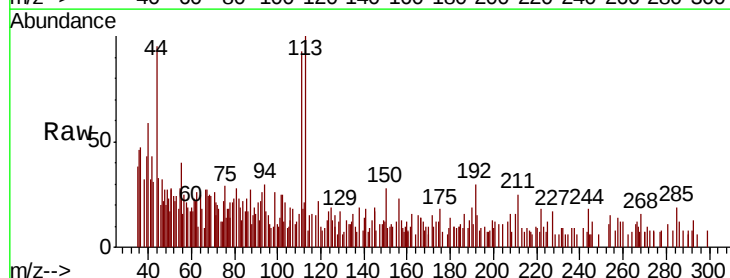
Tgt Ion: 56 Resp: 164

Ion Ratio Lower Upper

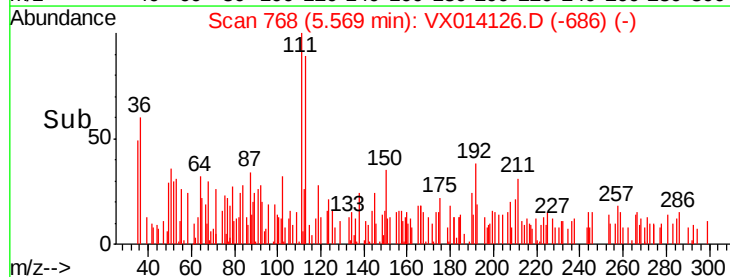
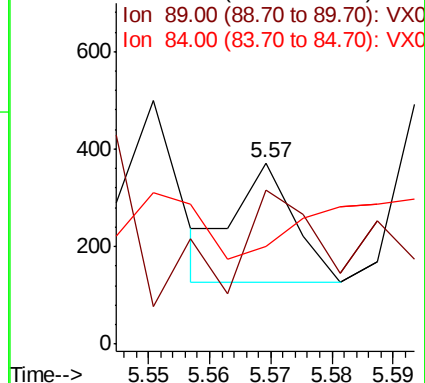
56 100

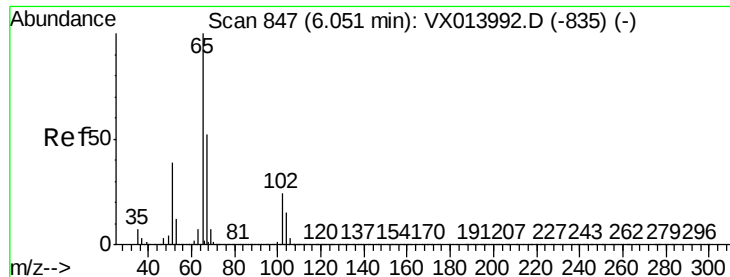
89 148.2 0.1 0.1#

84 0.0 70.8 106.2#



Abundance Ion 56.00 (55.70 to 56.70): VX0



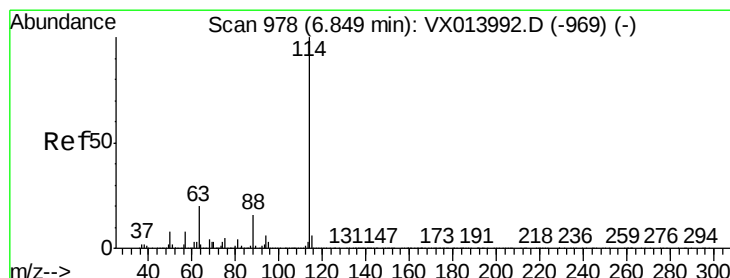
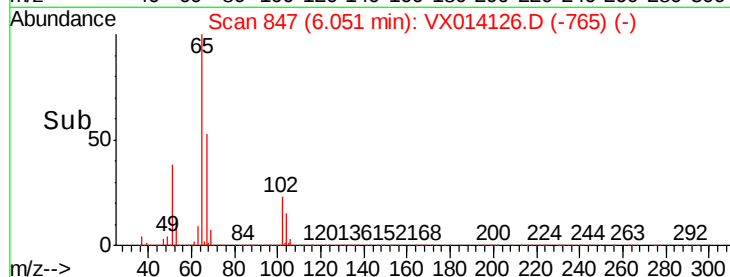
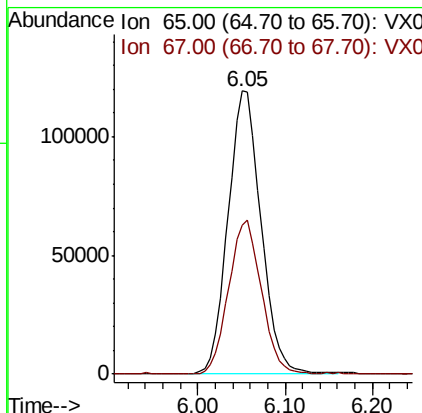
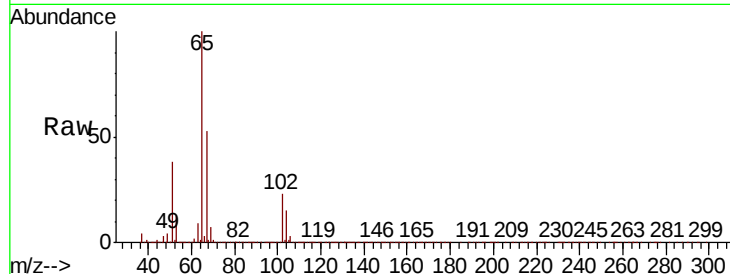


#27

1,2-Dichloroethane-d4
Concen: 18306.664 ug/l
RT: 6.05 min Scan# 847
Delta R.T. -0.00 min
Lab File: VX014126.D
Acq: 19 Dec 2019 17:24

Instrument :
MSVOA_X
ClientSampleId :

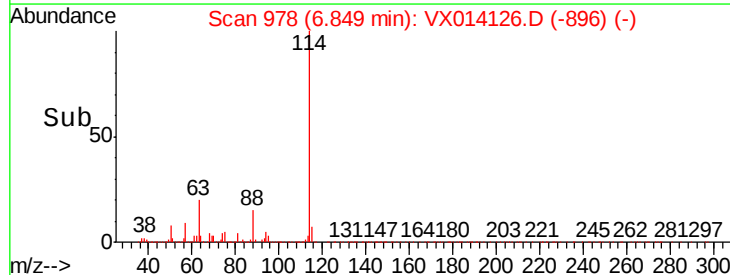
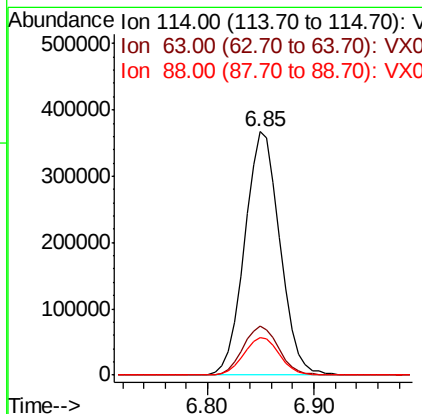
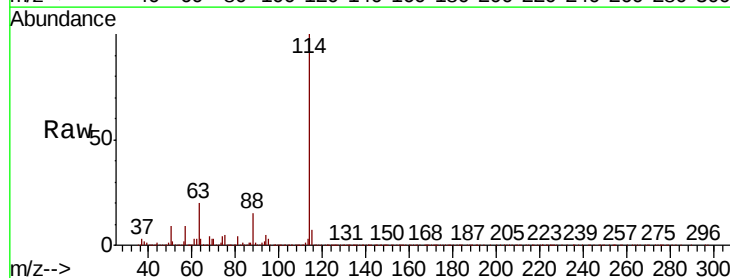
Tot Ion	Ratio	Lower	Upper
65	100		
67	54.2	43.1	64.7

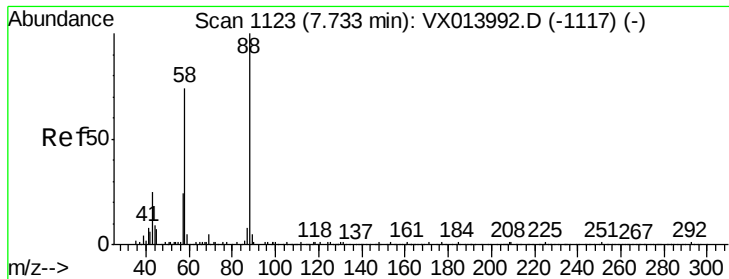


#28

1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 6.85 min Scan# 978
Delta R.T. -0.00 min
Lab File: VX014126.D
Acq: 19 Dec 2019 17:24

Tgt Ion	Ratio	Lower	Upper
114	100		
63	20.2	16.1	24.1
88	15.4	12.5	18.7





#45

1,4-Dioxane

Concen: 2.036 ug/l

RT: 7.72 min Scan# 1121

Delta R.T. -0.01 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

Instrument :

MSVOA_X

ClientSampleId :

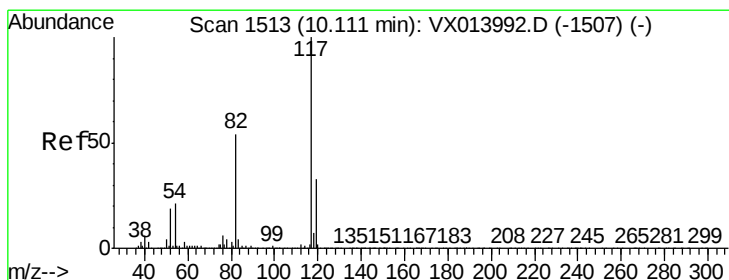
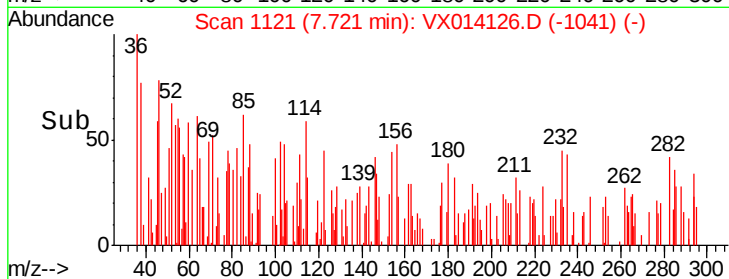
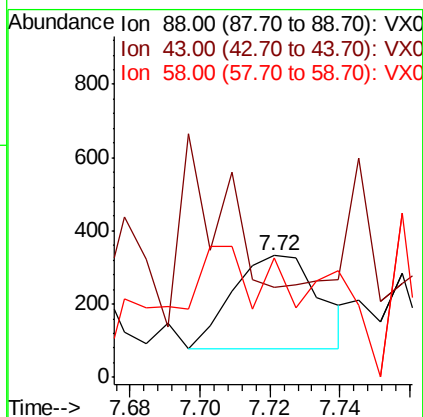
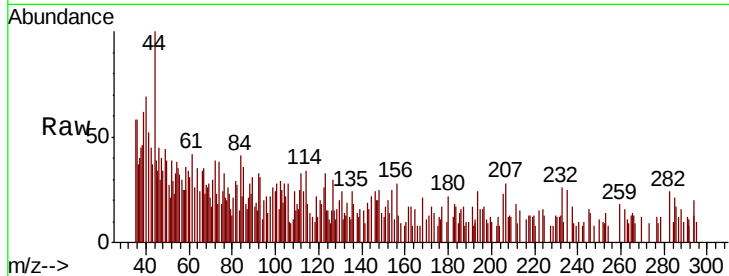
Tot Ion: 88 Resp: 446

Ion Ratio Lower Upper

88 100

43 65.7 25.4 38.2#

58 61.7 56.5 84.7



#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. -0.00 min

Lab File: VX014126.D

Acq: 19 Dec 2019 17:24

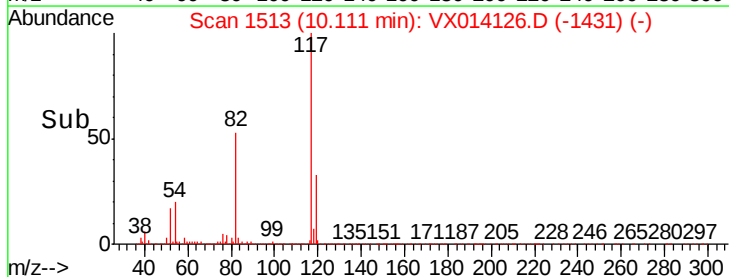
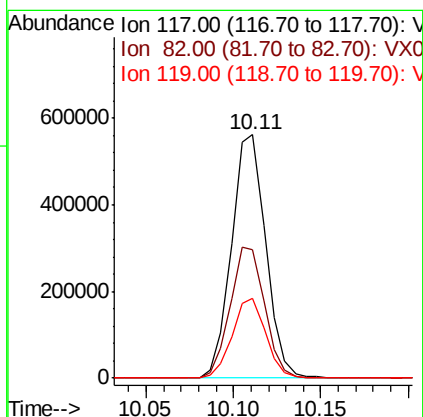
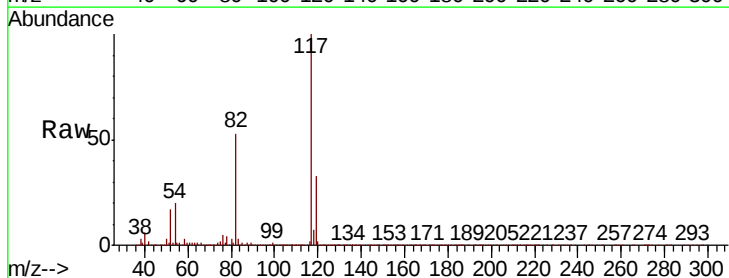
Tgt Ion: 117 Resp: 765178

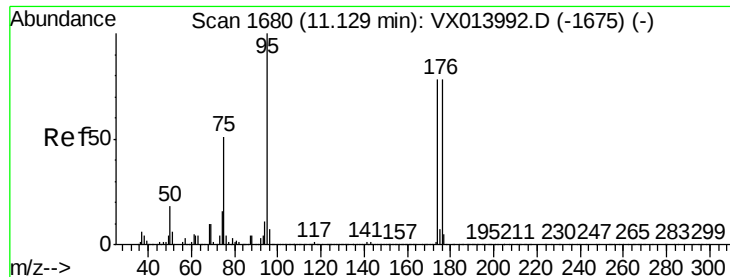
Ion Ratio Lower Upper

117 100

82 54.1 43.8 65.6

119 32.1 25.8 38.6

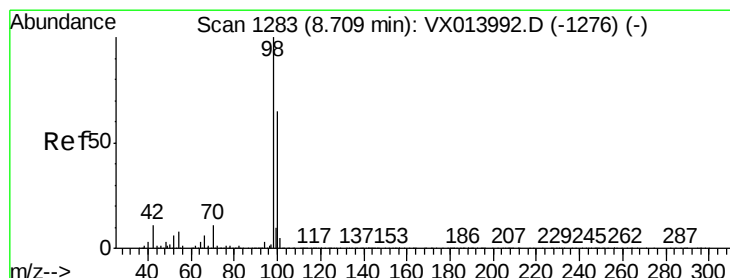
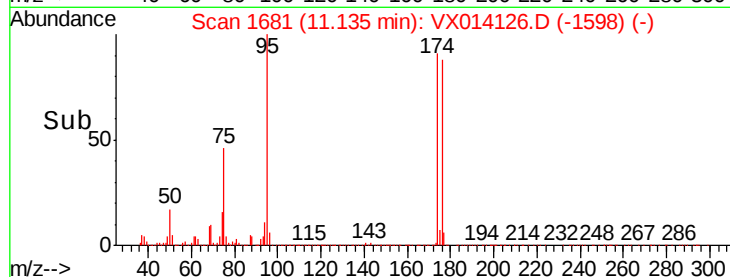
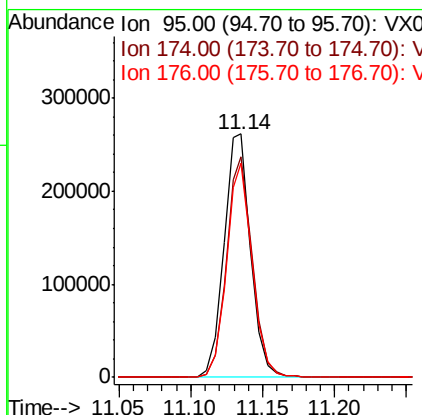
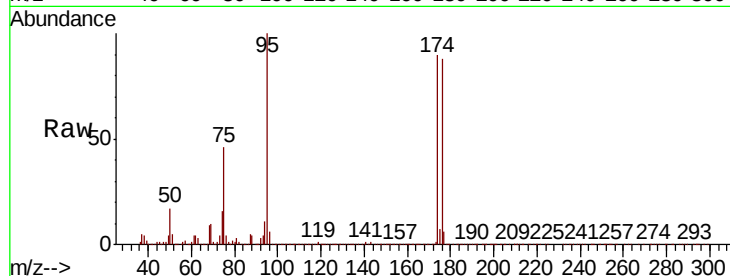




#60
4-Bromofluorobenzene
Concen: 27.519 ug/l
RT: 11.14 min Scan# 1681
Delta R.T. 0.01 min
Lab File: VX014126.D
Acq: 19 Dec 2019 17:24

Instrument :
MSVOA_X
ClientSampleId :

Tot Ion	Ratio	Lower	Upper
95	100		
174	87.8	70.2	105.2
176	84.6	68.3	102.5



#63
Toluene-d8
Concen: 29.564 ug/l
RT: 8.71 min Scan# 1283
Delta R.T. -0.00 min
Lab File: VX014126.D
Acq: 19 Dec 2019 17:24

Tgt Ion	Ratio	Lower	Upper
98	100		
100	65.9	52.2	78.2

