

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_X\DATA\VX081119\
 Data File : VX011443.D
 Acq On : 11 Aug 2019 19:45
 Operator : JC/SP
 Sample : K4292-02
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 RO-COMP-WS

Quant Time: Aug 12 07:52:09 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X080119W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 02 01:55:00 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.65	168	204784	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.85	114	301138	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	278825	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.07	152	122161	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.06	65	109954	53.32	ug/l	0.00
Spiked Amount			Recovery	=	106.64%	
35) Dibromofluoromethane	5.49	113	93242	47.43	ug/l	0.00
Spiked Amount			Recovery	=	94.86%	
50) Toluene-d8	8.71	98	363020	48.92	ug/l	0.00
Spiked Amount			Recovery	=	97.84%	
62) 4-Bromofluorobenzene	11.13	95	118442	44.70	ug/l	0.00
Spiked Amount			Recovery	=	89.40%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
6) Chloroethane	1.70	64	353	Below Cal	#	43
8) Diethyl Ether	2.18	74	452	0.364	ug/l	72
11) Tert butyl alcohol	3.01	59	2832	6.909	ug/l #	79
13) Acrolein	2.29	56	166	0.228	ug/l #	15
16) Acetone	2.43	43	8618	8.779	ug/l	98
18) Methyl Acetate	2.76	43	1594	0.711	ug/l	94
20) Methylene Chloride	2.85	84	66286	30.834	ug/l	96
25) 2-Butanone	4.68	43	381	0.273	ug/l #	46
29) Tetrahydrofuran	5.13	42	213	0.249	ug/l #	67
31) Cyclohexane	5.65	56	4069	1.532	ug/l #	20
36) 1,1-Dichloropropene	5.65	75	14210	5.405	ug/l #	49
38) Carbon Tetrachloride	5.65	117	19165	7.245	ug/l #	13
41) Methacrylonitrile	5.06	41	295	0.205	ug/l #	33
43) Isopropyl Acetate	6.45	43	8219	1.949	ug/l	99
48) Methyl methacrylate	7.67	41	4260	2.147	ug/l #	10
49) 1,4-Dioxane	7.87	88	87	1.512	ug/l #	1
51) 4-Methyl-2-Pentanone	8.61	43	40691	14.954	ug/l #	49
53) t-1,3-Dichloropropene	9.10	75	21	2.845	ug/l #	43
54) cis-1,3-Dichloropropene	8.61	75	20394	6.952	ug/l #	64
57) 1,3-Dichloropropane	9.54	76	4958	1.470	ug/l #	41
59) 2-Hexanone	9.54	43	64979	30.830	ug/l #	50
76) 1,2,3-Trichloropropane	11.13	75	59930	26.938	ug/l #	35
80) 1,3,5-Trimethylbenzene	11.51	105	1796	0.257	ug/l	93
81) trans-1,4-Dichloro-2-buten	11.13	75	59930	69.947	ug/l #	10

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 738

Delta R.T. 0.00 min

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ClientSampleId :

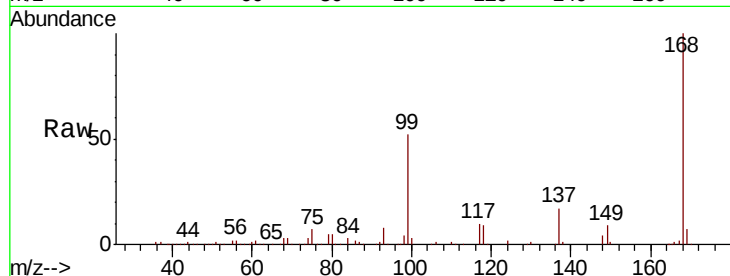
RO-COMP-WS

Tgt Ion:168 Resp: 204784

Ion Ratio Lower Upper

168 100

99 52.2 38.5 57.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

80000

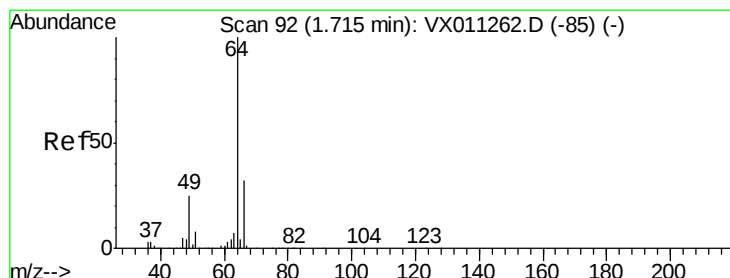
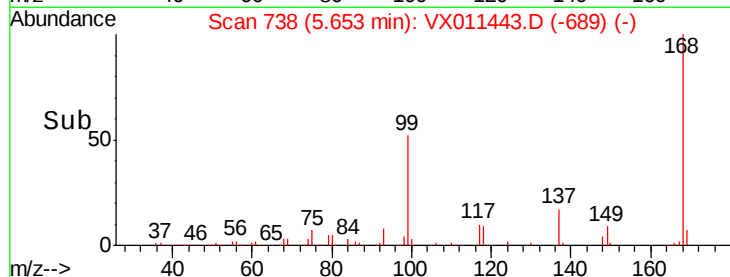
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#6

Chloroethane

Concen: Below Cal

RT: 1.70 min Scan# 89

Delta R.T. -0.02 min

Lab File: VX011443.D

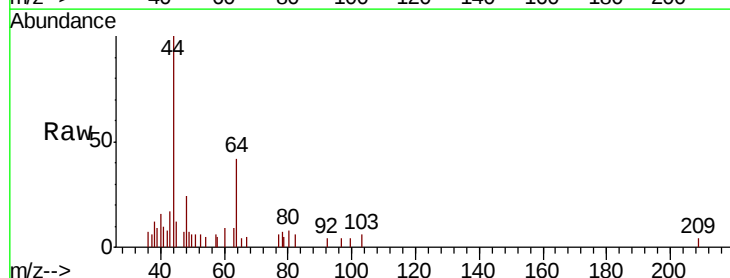
Acq: 11 Aug 2019 19:45

Tgt Ion: 64 Resp: 353

Ion Ratio Lower Upper

64 100

66 0.0 25.1 37.7#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

1.70

600

500

400

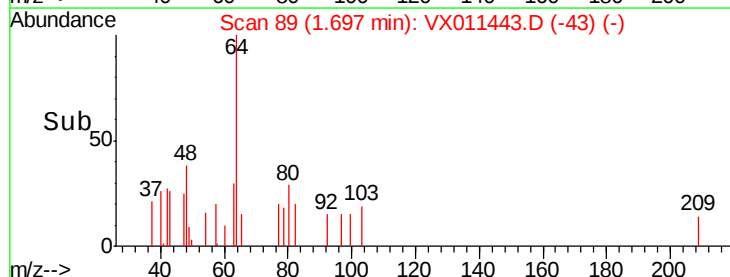
300

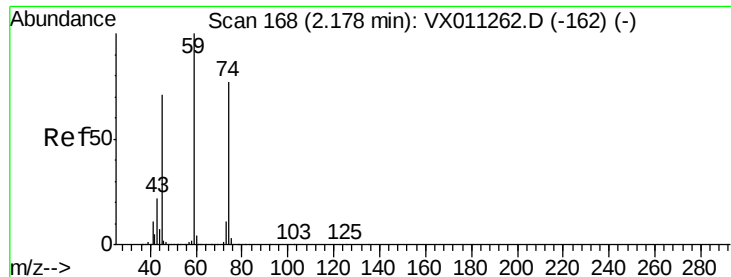
200

100

0

Time--> 1.68 1.70 1.72





#8

Diethyl Ether

Concen: 0.364 ug/l

RT: 2.18 min Scan# 168

Delta R.T. 0.00 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

Instrument :

MSVOA_X

ClientSampled :

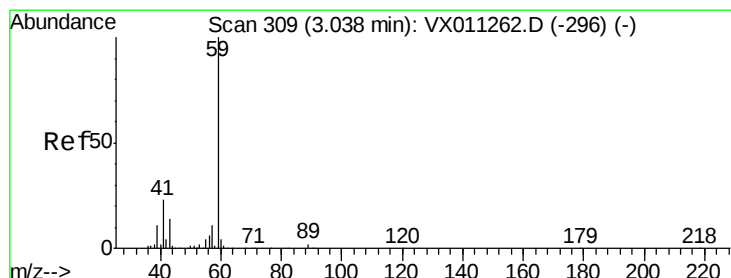
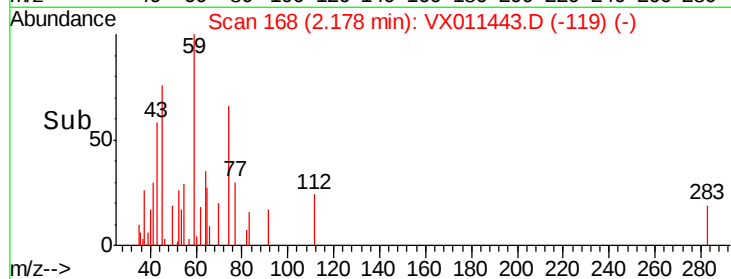
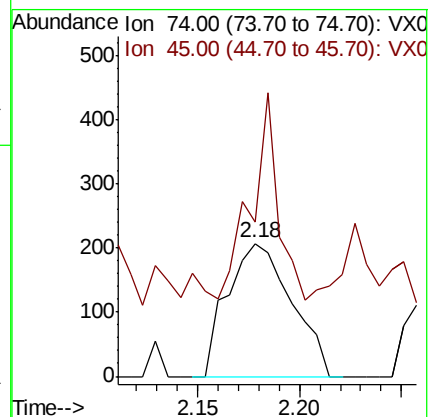
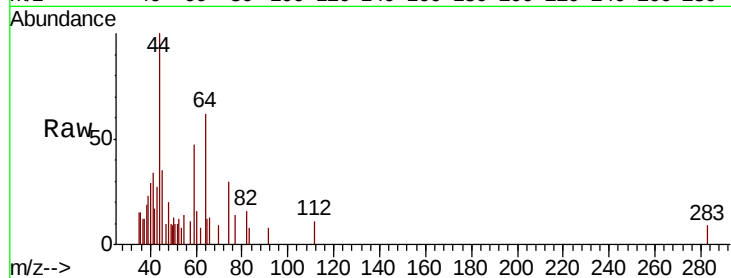
RO-COMP-WS

Tgt Ion: 74 Resp: 452

Ion Ratio Lower Upper

74 100

45 65.5 46.1 138.3



#11

Tert butyl alcohol

Concen: 6.909 ug/l

RT: 3.01 min Scan# 304

Delta R.T. -0.03 min

Lab File: VX011443.D

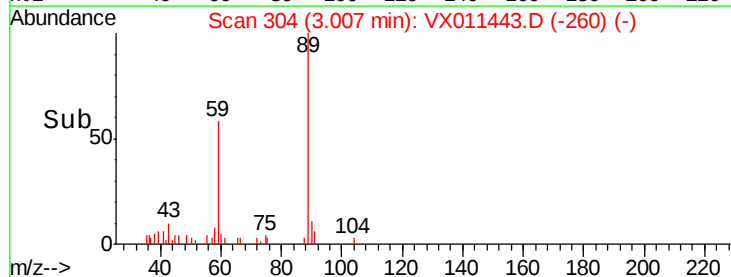
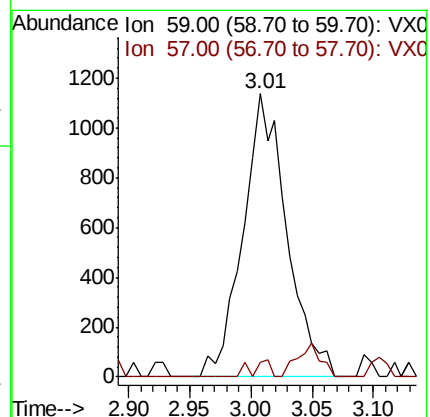
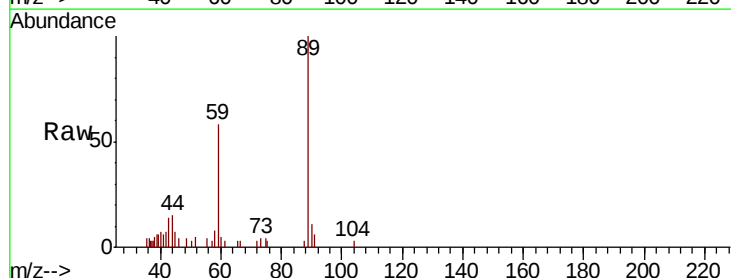
Acq: 11 Aug 2019 19:45

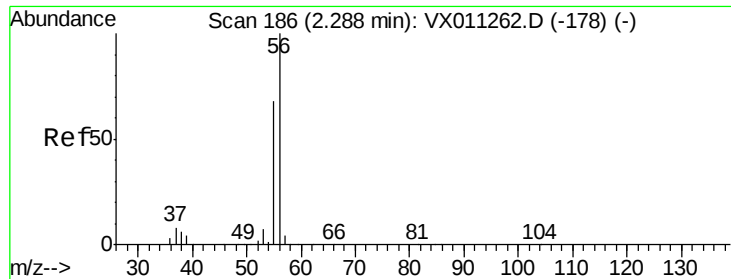
Tgt Ion: 59 Resp: 2832

Ion Ratio Lower Upper

59 100

57 2.4 8.3 12.5#

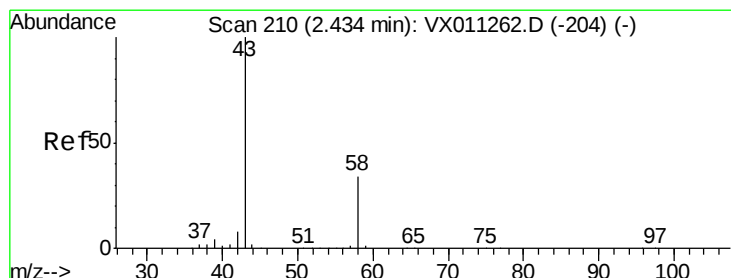
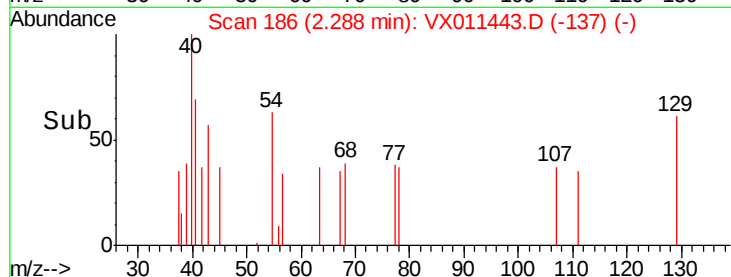
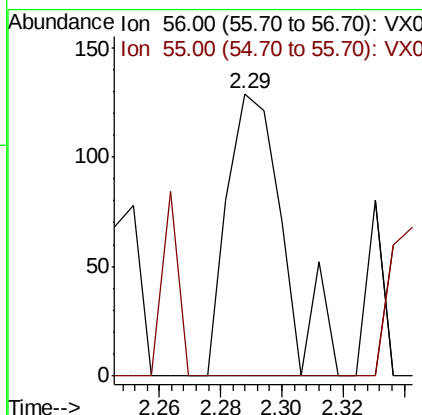
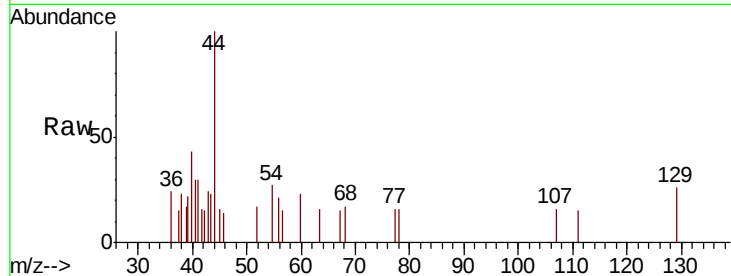




#13
Acrolein
Concen: 0.228 ug/l
RT: 2.29 min Scan# 186
Delta R.T. 0.00 min
Lab File: VX011443.D
Acq: 11 Aug 2019 19:45

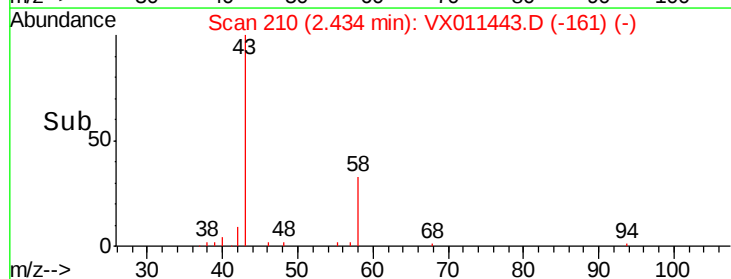
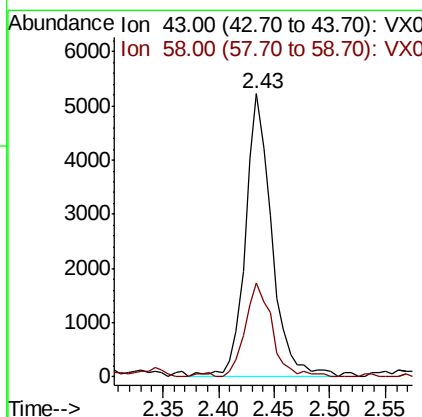
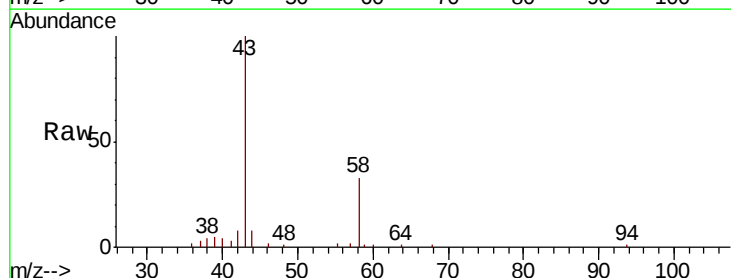
Instrument :
MSVOA_X
ClientSampleId :
RO-COMP-WS

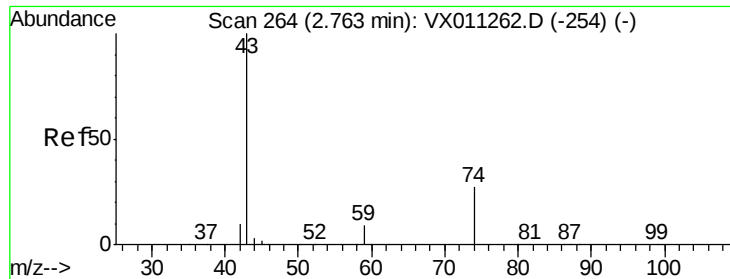
Tgt Ion: 56 Resp: 166
Ion Ratio Lower Upper
56 100
55 0.0 56.0 84.0#



#16
Acetone
Concen: 8.779 ug/l
RT: 2.43 min Scan# 210
Delta R.T. 0.00 min
Lab File: VX011443.D
Acq: 11 Aug 2019 19:45

Tgt Ion: 43 Resp: 8618
Ion Ratio Lower Upper
43 100
58 33.1 27.4 41.0

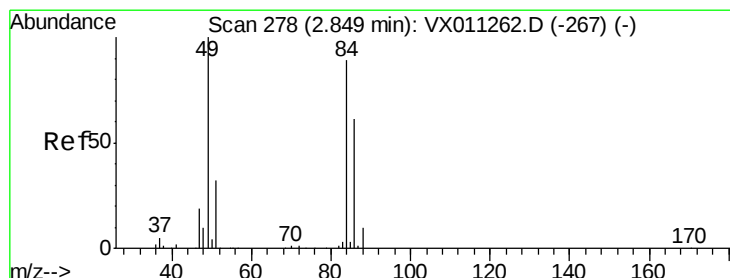
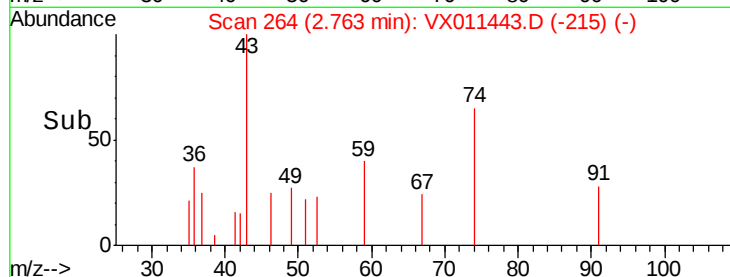
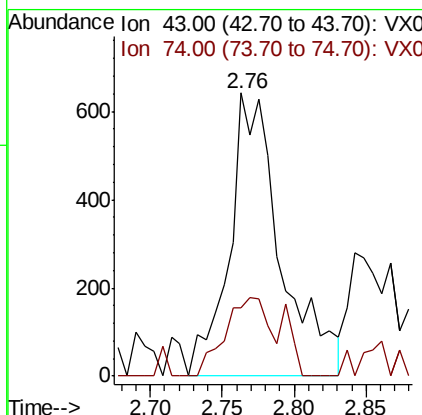
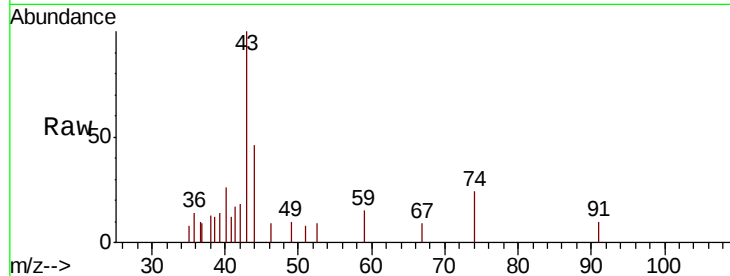




#18
Methyl Acetate
Concen: 0.711 ug/l
RT: 2.76 min Scan# 264
Delta R.T. 0.00 min
Lab File: VX011443.D
Acq: 11 Aug 2019 19:45

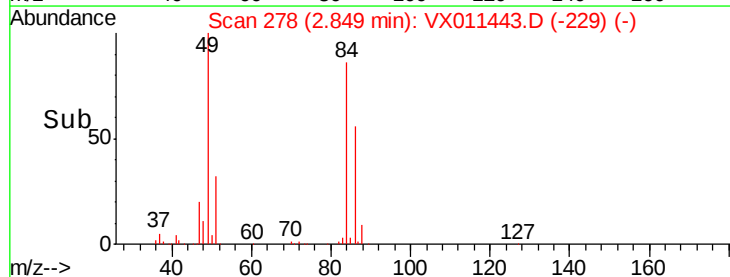
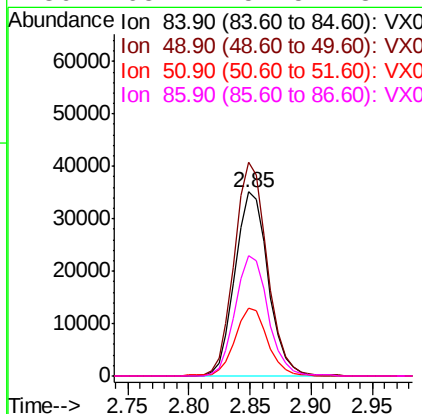
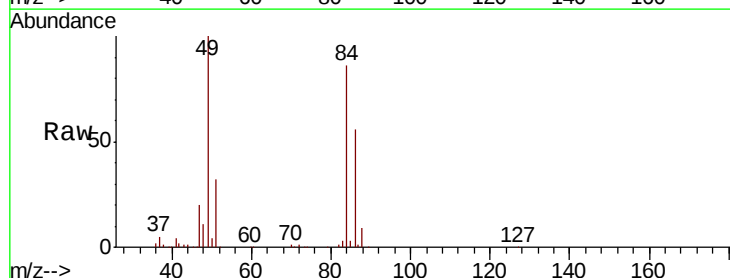
Instrument :
MSVOA_X
ClientSampleId :
RO-COMP-WS

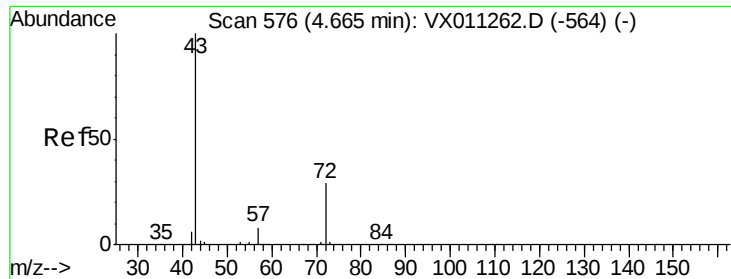
Tgt Ion: 43 Resp: 1594
Ion Ratio Lower Upper
43 100
74 29.5 21.0 31.6



#20
Methylene Chloride
Concen: 30.834 ug/l
RT: 2.85 min Scan# 278
Delta R.T. 0.00 min
Lab File: VX011443.D
Acq: 11 Aug 2019 19:45

Tgt Ion: 84 Resp: 66286
Ion Ratio Lower Upper
84 100
49 115.9 89.3 133.9
51 36.9 28.3 42.5
86 65.4 54.5 81.7





#25

2-Butanone

Concen: 0.273 ug/l

RT: 4.68 min Scan# 578

Delta R.T. 0.01 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

Instrument :

MSVOA_X

ClientSampleId :

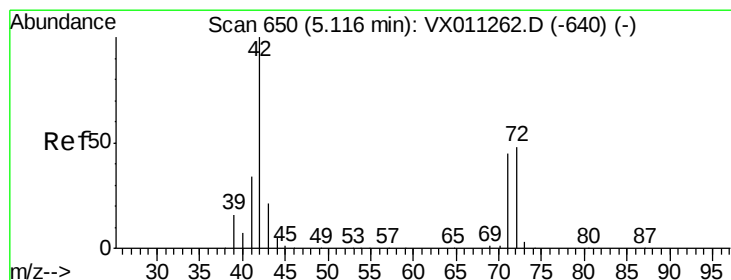
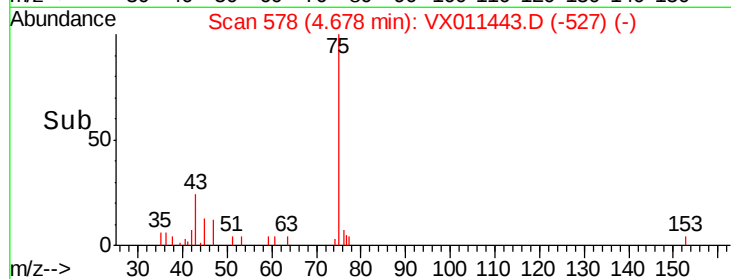
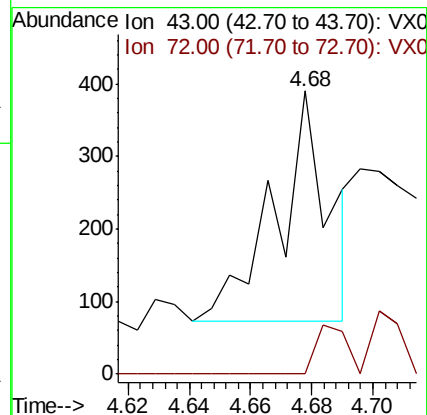
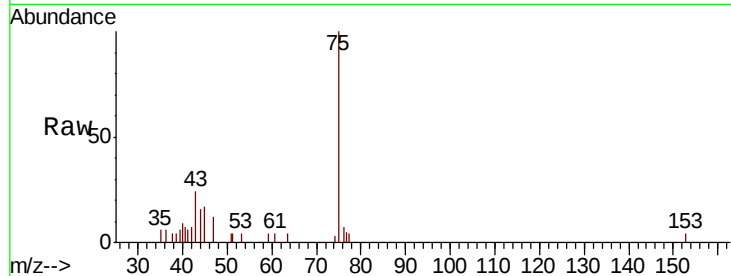
RO-COMP-WS

Tgt Ion: 43 Resp: 381

Ion Ratio Lower Upper

43 100

72 0.0 23.2 34.8#



#29

Tetrahydrofuran

Concen: 0.249 ug/l

RT: 5.13 min Scan# 653

Delta R.T. 0.02 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

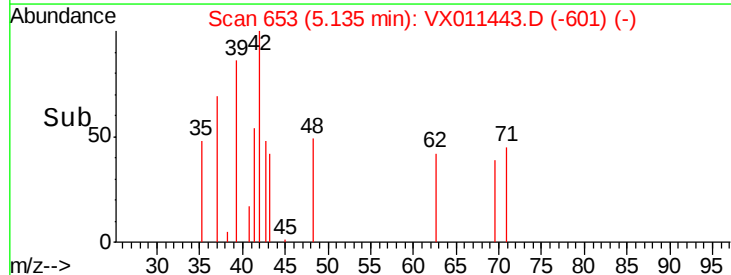
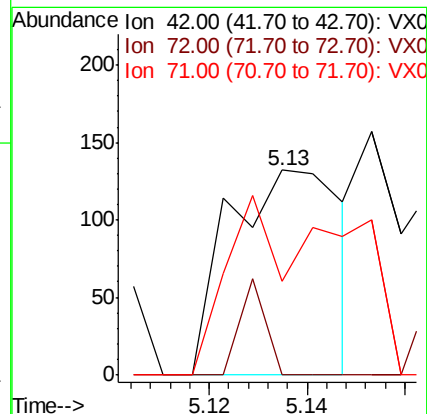
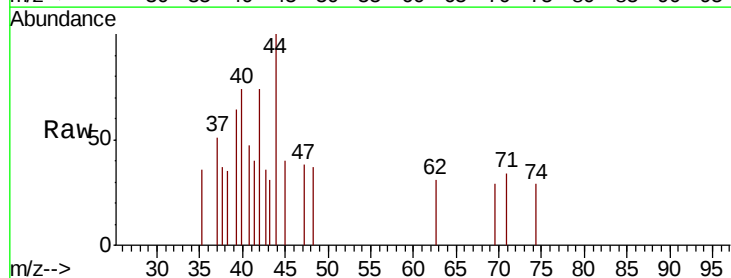
Tgt Ion: 42 Resp: 213

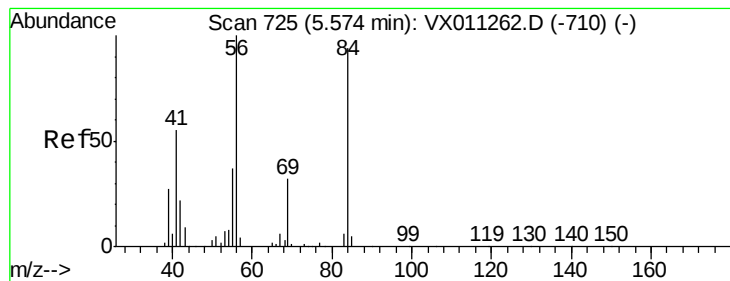
Ion Ratio Lower Upper

42 100

72 10.8 39.9 59.9#

71 41.3 36.9 55.3





#31

Cyclohexane

Concen: 1.532 ug/l

RT: 5.65 min Scan# 738

Delta R.T. 0.08 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

Instrument :

MSVOA_X

ClientSampleId :

RO-COMP-WS

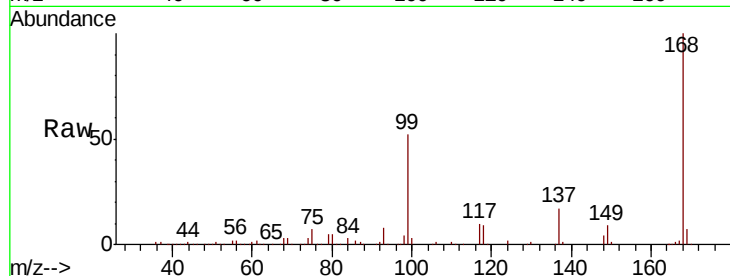
Tgt Ion: 56 Resp: 4069

Ion Ratio Lower Upper

56 100

69 144.5 25.5 38.3#

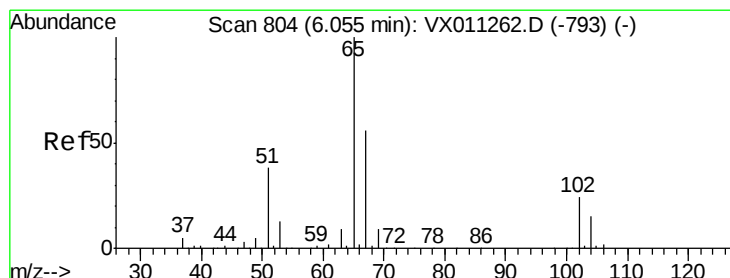
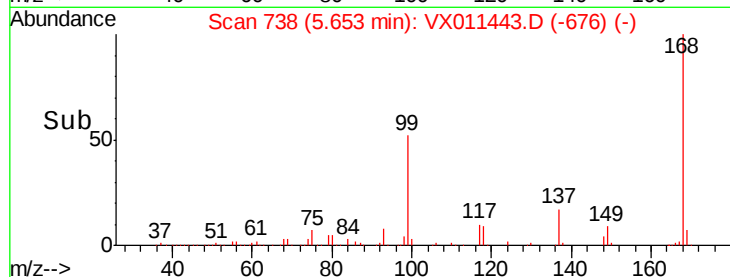
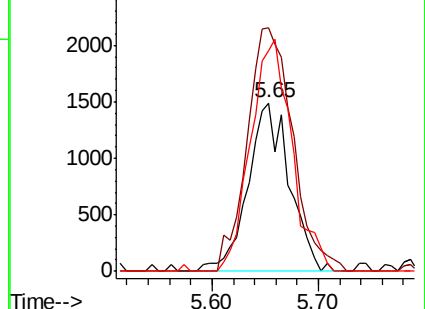
84 130.7 75.0 112.4#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0



#33

1,2-Dichloroethane-d4

Concen: 53.317 ug/l

RT: 6.06 min Scan# 804

Delta R.T. 0.00 min

Lab File: VX011443.D

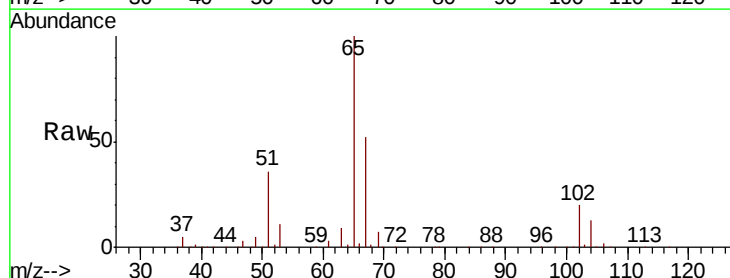
Acq: 11 Aug 2019 19:45

Tgt Ion: 65 Resp: 109954

Ion Ratio Lower Upper

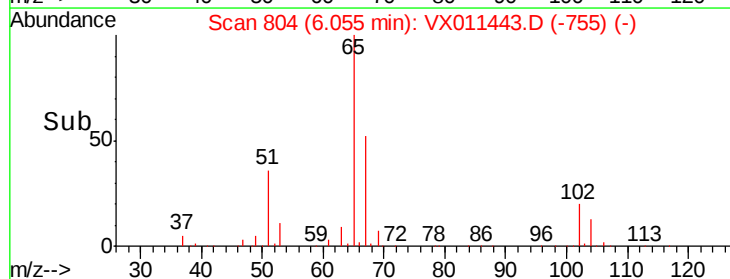
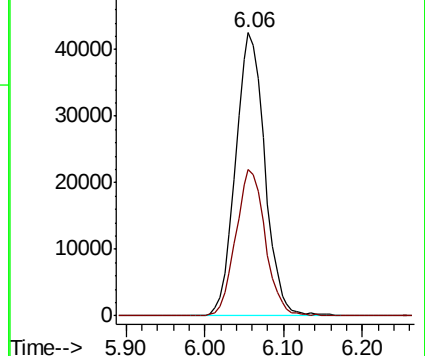
65 100

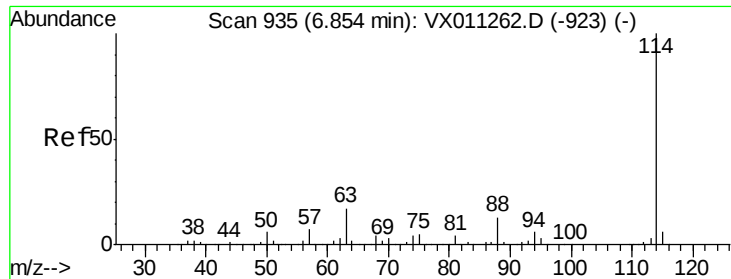
67 52.0 0.0 110.6



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0

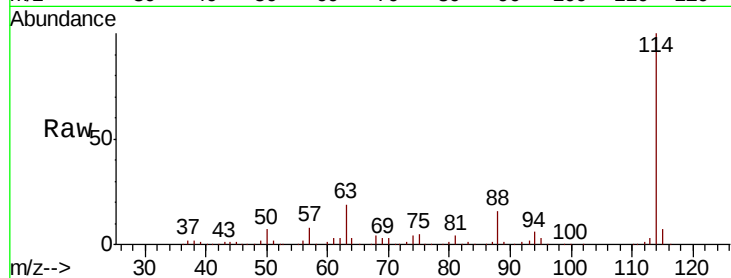




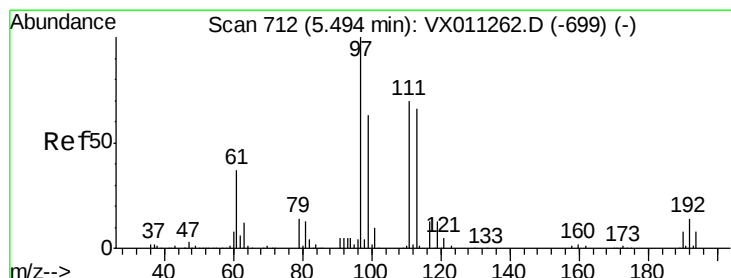
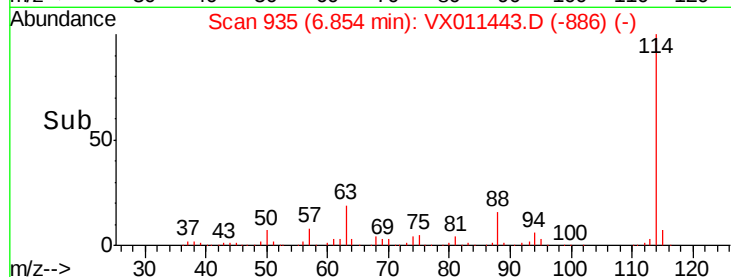
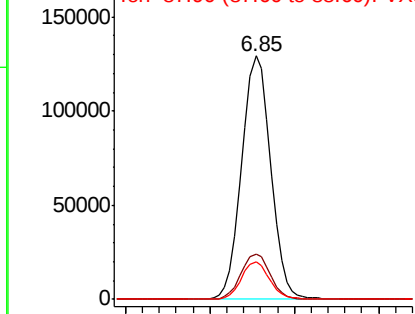
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.85 min Scan# 935
 Delta R.T. 0.00 min
 Lab File: VX011443.D
 Acq: 11 Aug 2019 19:45

Instrument :
 MSVOA_X
 ClientSampleId :
 RO-COMP-WS

Tgt Ion:114 Resp: 301138
 Ion Ratio Lower Upper
 114 100
 63 18.8 0.0 34.0
 88 15.6 0.0 26.4

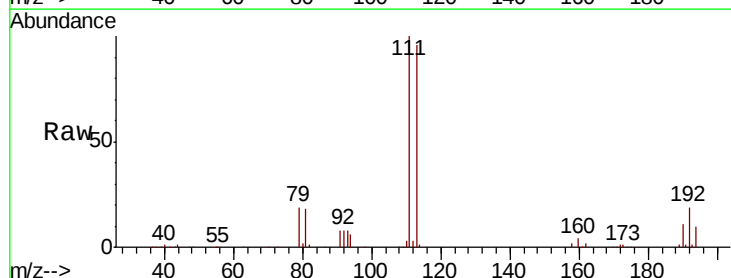


Abundance Ion 113.90 (113.60 to 114.60): V
 Ion 63.00 (62.70 to 63.70): VX0
 Ion 87.90 (87.60 to 88.60): VX0

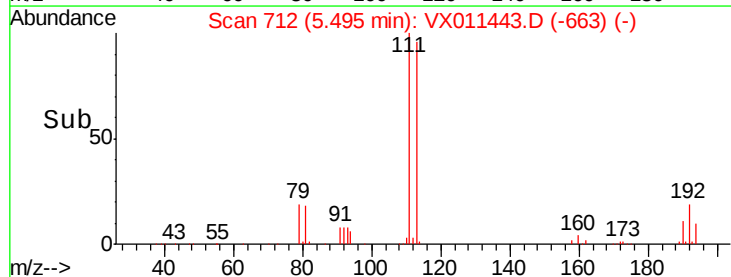
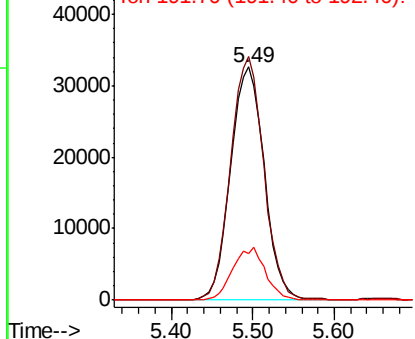


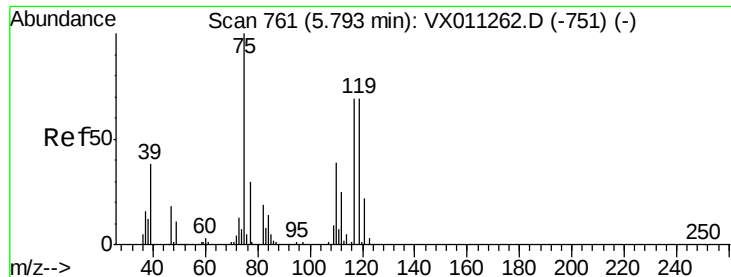
#35
 Dibromofluoromethane
 Concen: 47.426 ug/l
 RT: 5.49 min Scan# 712
 Delta R.T. 0.00 min
 Lab File: VX011443.D
 Acq: 11 Aug 2019 19:45

Tgt Ion:113 Resp: 93242
 Ion Ratio Lower Upper
 113 100
 111 102.4 81.9 122.9
 192 21.8 17.8 26.8



Abundance Ion 112.80 (112.50 to 113.50): V
 Ion 110.80 (110.50 to 111.50): V
 Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 5.405 ug/l

RT: 5.65 min Scan# 738

Delta R.T. -0.14 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

Instrument :

MSVOA_X

ClientSampleId :

RO-COMP-WS

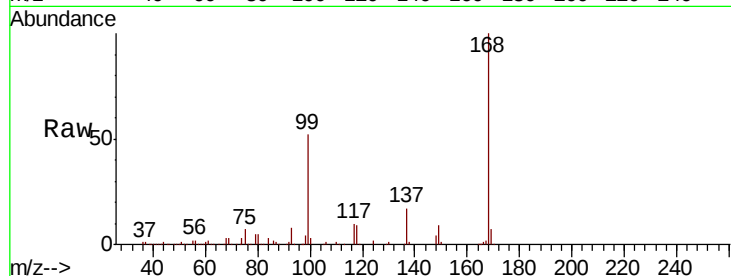
Tgt Ion: 75 Resp: 14210

Ion Ratio Lower Upper

75 100

110 10.4 20.0 59.9#

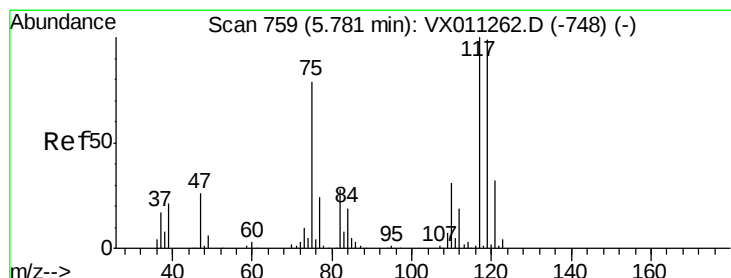
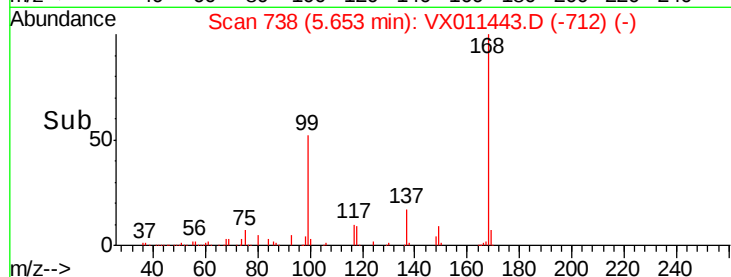
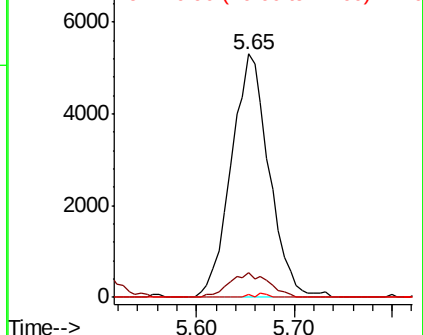
77 0.6 24.8 37.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0



#38

Carbon Tetrachloride

Concen: 7.245 ug/l

RT: 5.65 min Scan# 738

Delta R.T. -0.13 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

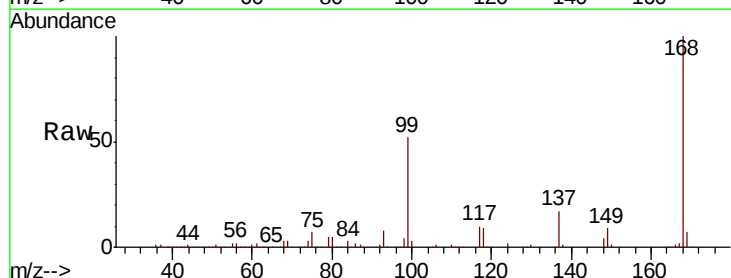
Tgt Ion: 117 Resp: 19165

Ion Ratio Lower Upper

117 100

119 3.5 79.0 118.4#

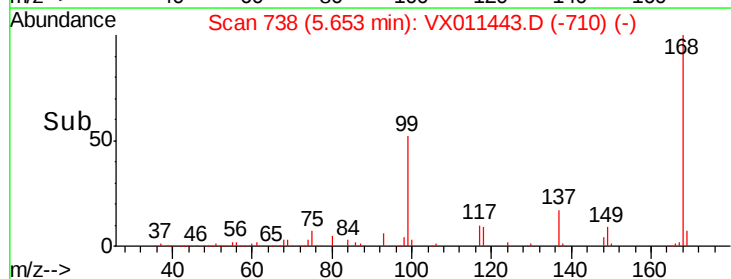
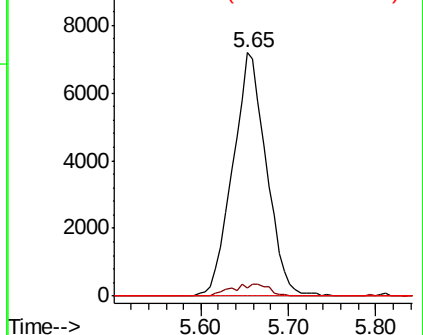
121 0.0 25.9 38.9#

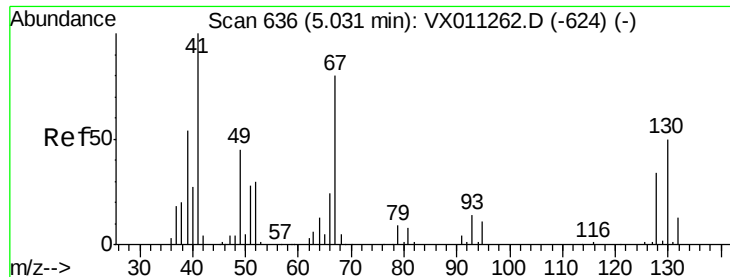


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#41

Methacrylonitrile

Concen: 0.205 ug/l

RT: 5.06 min Scan# 641

Delta R.T. 0.03 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

Instrument :

MSVOA_X

ClientSampled :

RO-COMP-WS

Tgt Ion: 41 Resp: 295

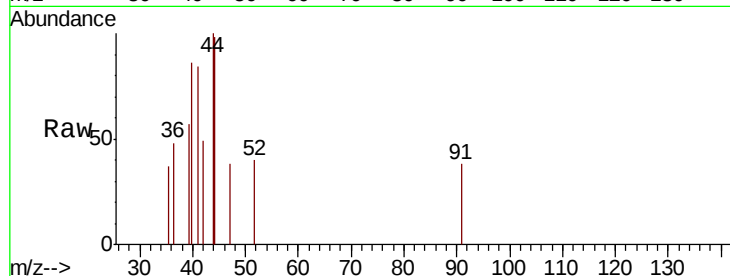
Ion Ratio Lower Upper

41 100

39 101.7 43.0 64.6#

67 0.0 65.1 97.7#

52 29.5 24.8 37.2

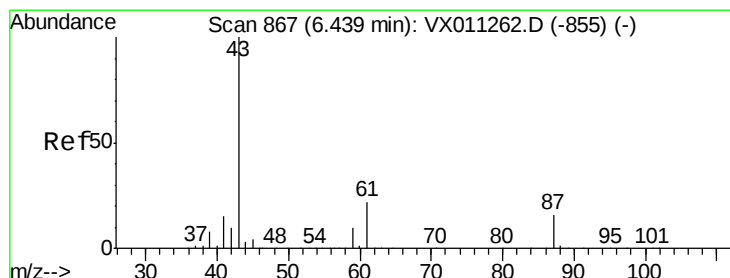
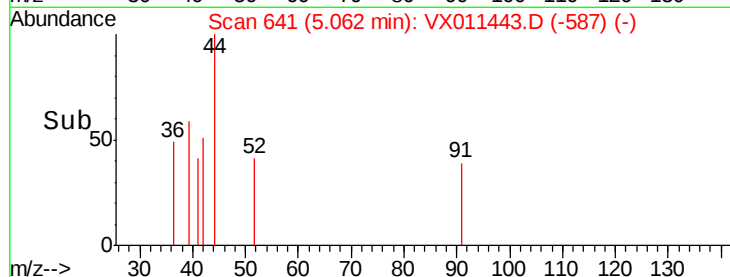
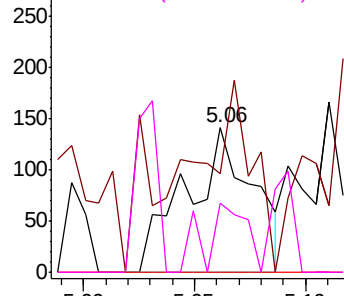


Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 39.00 (38.70 to 39.70): VX0

Ion 67.00 (66.70 to 67.70): VX0

Ion 52.00 (51.70 to 52.70): VX0



#43

Isopropyl Acetate

Concen: 1.949 ug/l

RT: 6.45 min Scan# 868

Delta R.T. 0.01 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

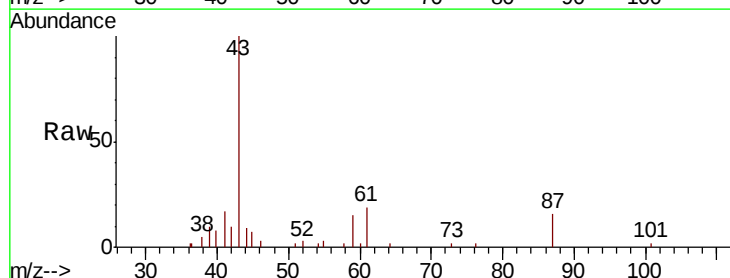
Tgt Ion: 43 Resp: 8219

Ion Ratio Lower Upper

43 100

61 21.4 16.5 24.7

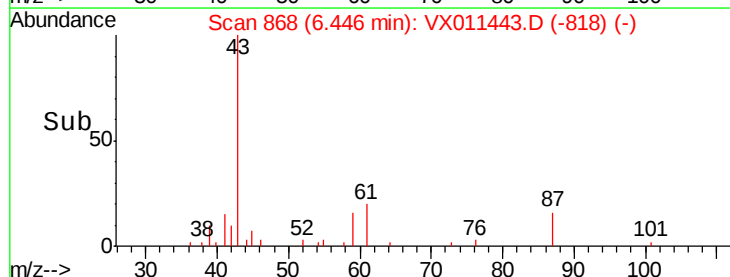
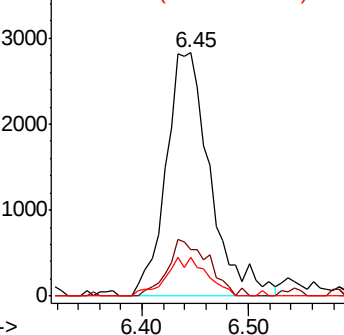
87 14.6 12.1 18.1

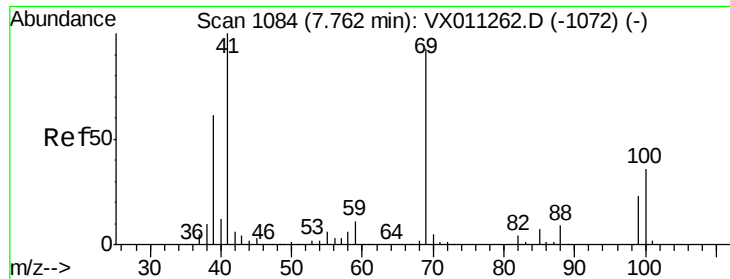


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0

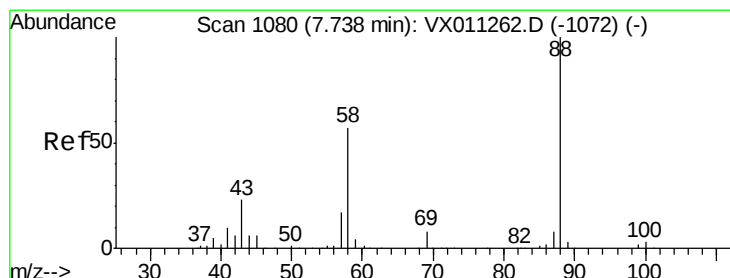
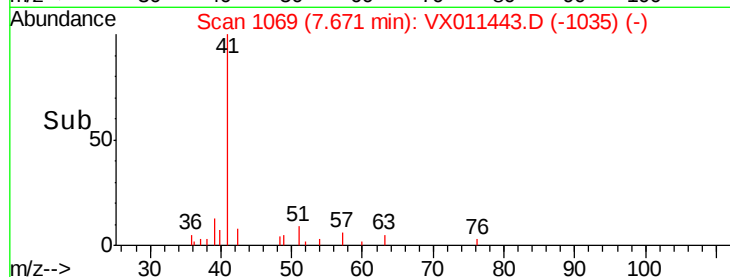
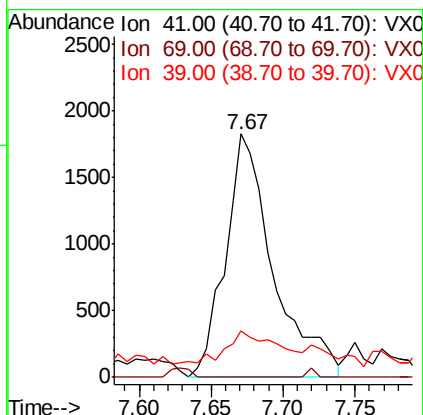
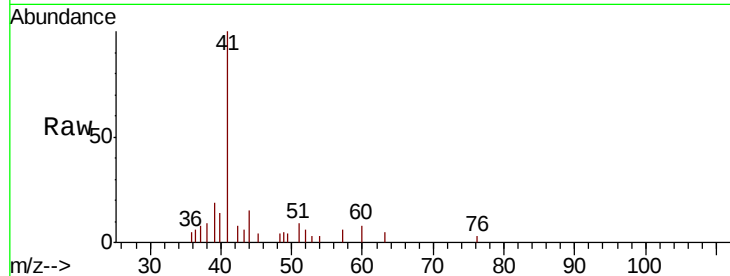




#48
Methyl methacrylate
Concen: 2.147 ug/l
RT: 7.67 min Scan# 1069
Delta R.T. -0.09 min
Lab File: VX011443.D
Acq: 11 Aug 2019 19:45

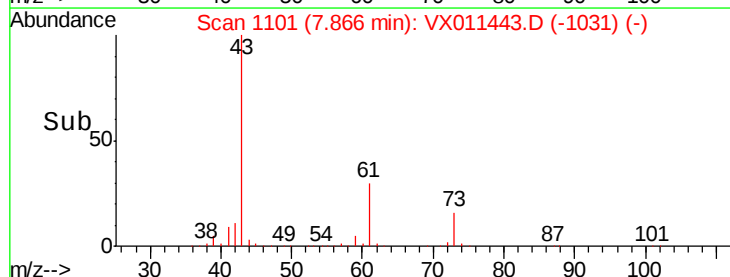
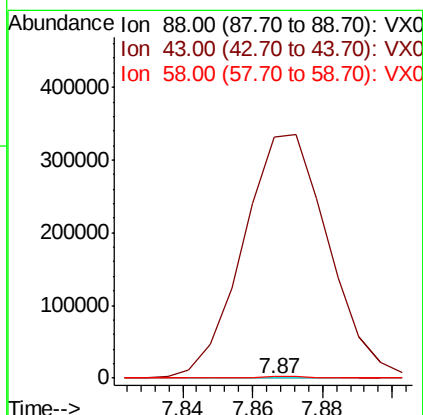
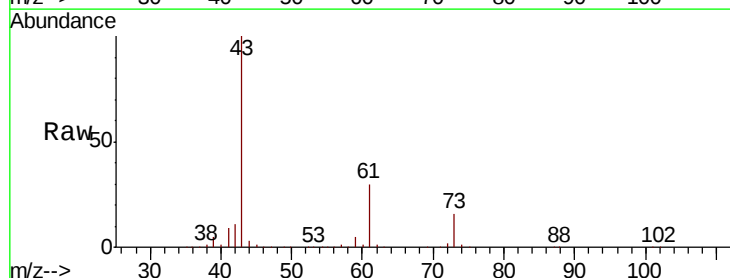
Instrument :
MSVOA_X
ClientSampleId :
RO-COMP-WS

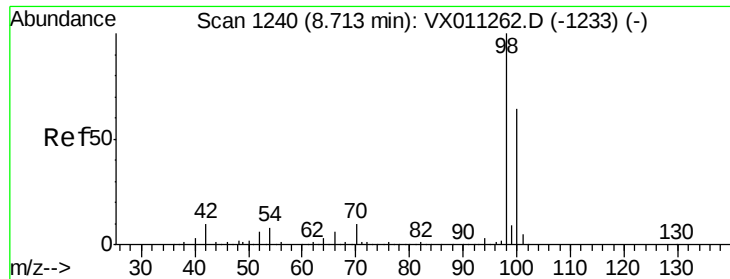
Tgt Ion: 41 Resp: 4260
Ion Ratio Lower Upper
41 100
69 0.0 74.5 111.7#
39 0.0 48.6 72.8#



#49
1,4-Dioxane
Concen: 1.512 ug/l
RT: 7.87 min Scan# 1101
Delta R.T. 0.13 min
Lab File: VX011443.D
Acq: 11 Aug 2019 19:45

Tgt Ion: 88 Resp: 87
Ion Ratio Lower Upper
88 100
43 661467.8 22.2 33.2#
58 3555.2 47.8 71.8#





#50

Toluene-d8

Concen: 48.916 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

Instrument :

MSVOA_X

ClientSampleId :

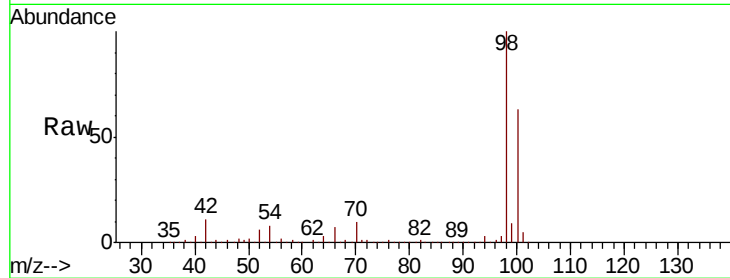
RO-COMP-WS

Tgt Ion: 98 Resp: 363020

Ion Ratio Lower Upper

98 100

100 63.1 51.7 77.5



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX

250000

200000

150000

100000

50000

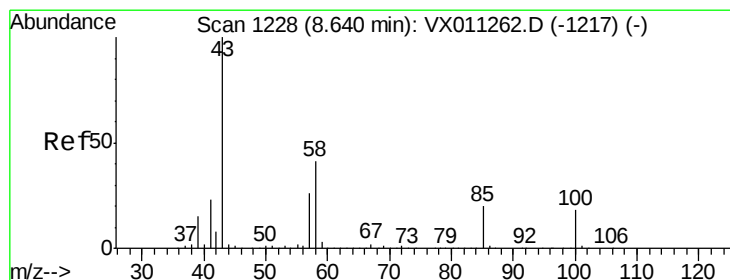
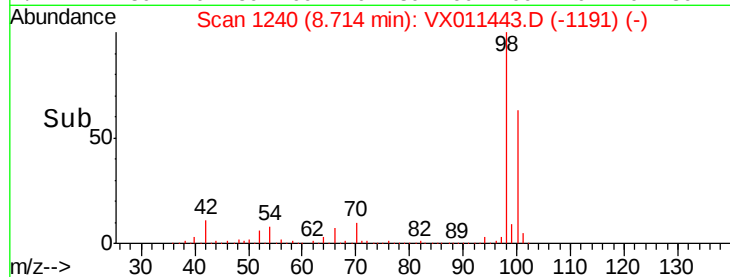
0

8.60

8.70

8.80

Time-->



#51

4-Methyl-2-Pentanone

Concen: 14.954 ug/l

RT: 8.61 min Scan# 1223

Delta R.T. -0.03 min

Lab File: VX011443.D

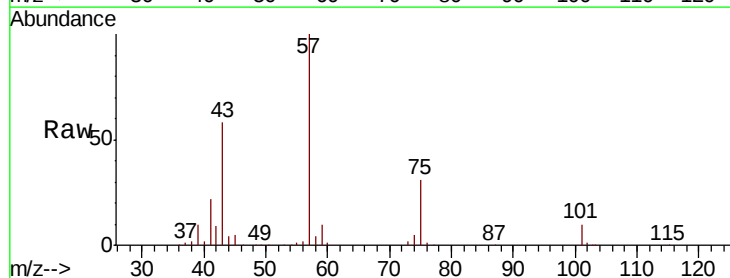
Acq: 11 Aug 2019 19:45

Tgt Ion: 43 Resp: 40691

Ion Ratio Lower Upper

43 100

58 8.5 32.3 48.5#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

30000

25000

20000

15000

10000

5000

0

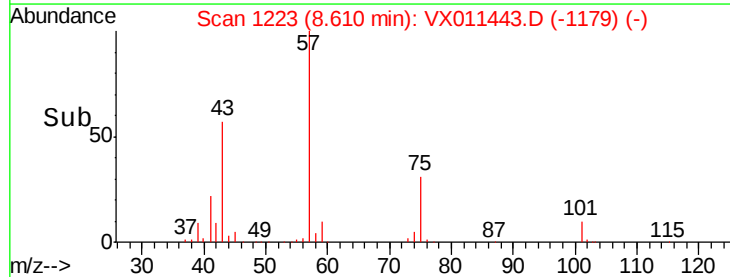
8.55

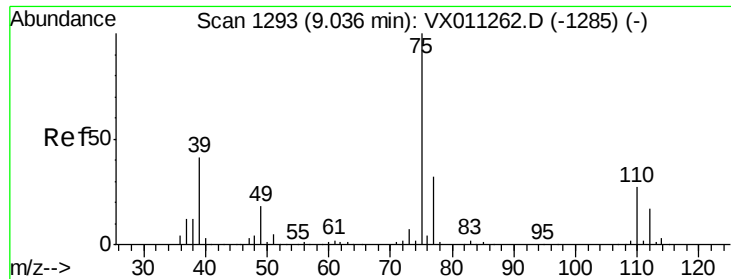
8.60

8.65

8.70

Time-->

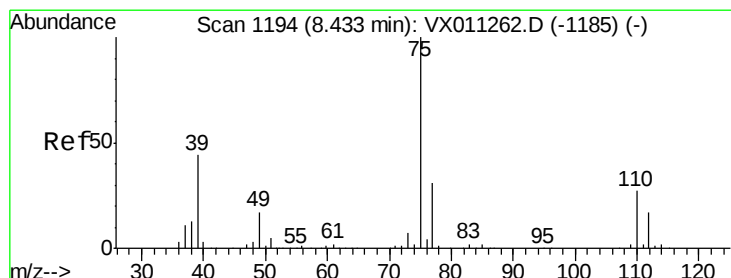
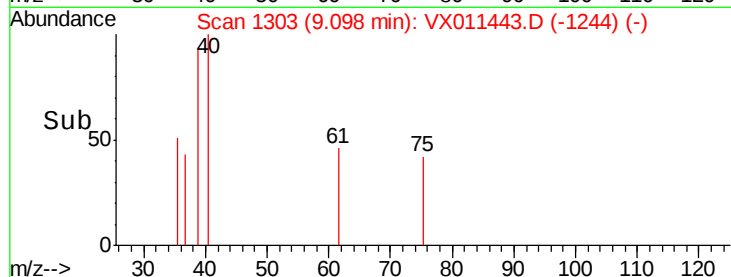
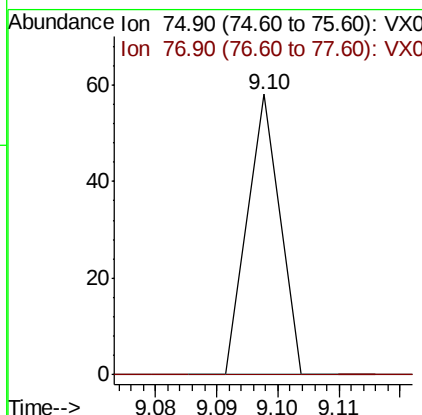
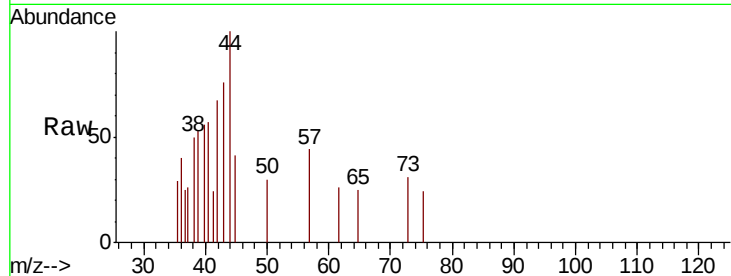




#53
 t-1,3-Dichloropropene
 Concen: 2.845 ug/l
 RT: 9.10 min Scan# 1303
 Delta R.T. 0.06 min
 Lab File: VX011443.D
 Acq: 11 Aug 2019 19:45

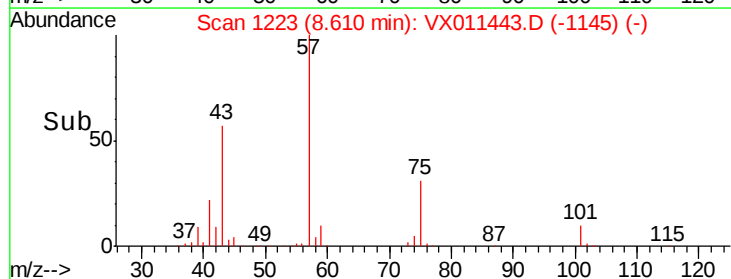
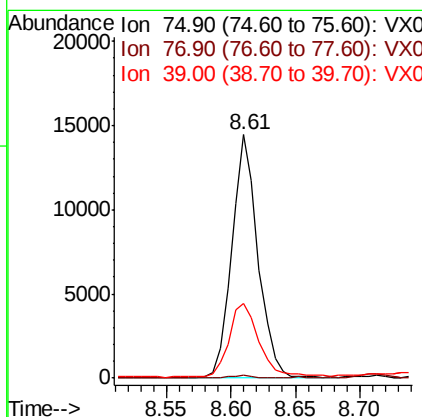
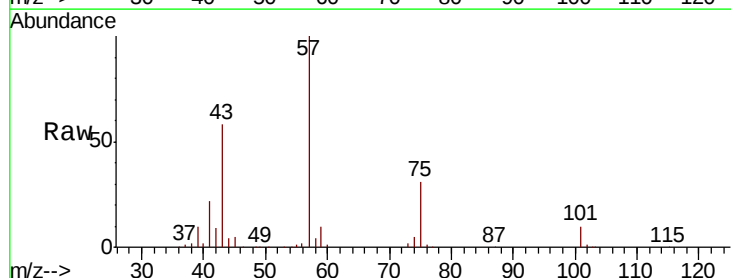
Instrument :
 MSVOA_X
 ClientSampleId :
 RO-COMP-WS

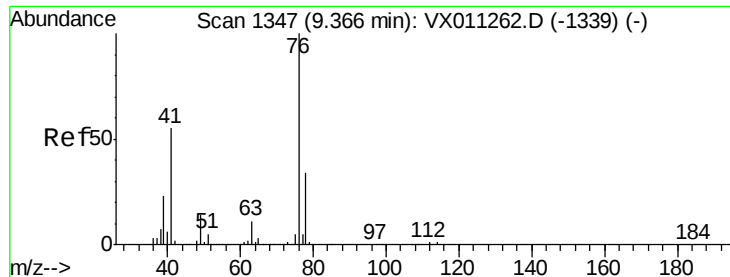
Tgt Ion: 75 Resp: 21
 Ion Ratio Lower Upper
 75 100
 77 0.0 25.4 38.0#



#54
 cis-1,3-Dichloropropene
 Concen: 6.952 ug/l
 RT: 8.61 min Scan# 1223
 Delta R.T. 0.18 min
 Lab File: VX011443.D
 Acq: 11 Aug 2019 19:45

Tgt Ion: 75 Resp: 20394
 Ion Ratio Lower Upper
 75 100
 77 1.0 25.0 37.6#
 39 29.9 35.3 52.9#





#57

1,3-Dichloropropane

Concen: 1.470 ug/l

RT: 9.54 min Scan# 1375

Delta R.T. 0.17 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

Instrument :

MSVOA_X

ClientSampleId :

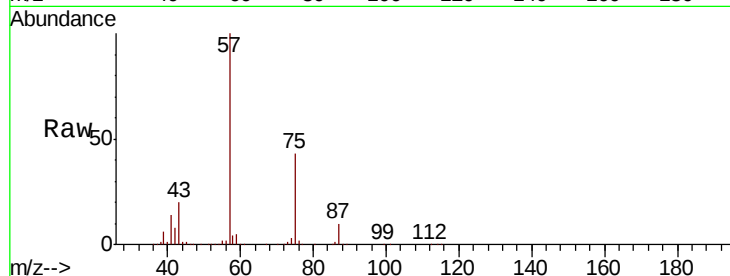
RO-COMP-WS

Tgt Ion: 76 Resp: 4958

Ion Ratio Lower Upper

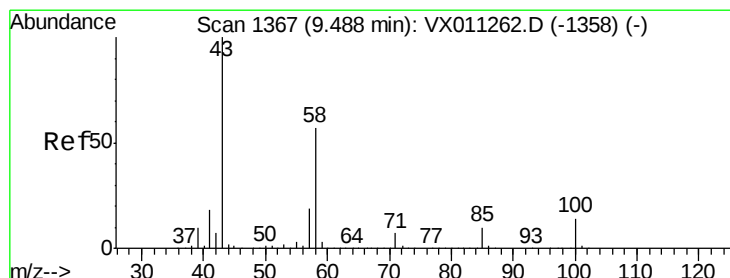
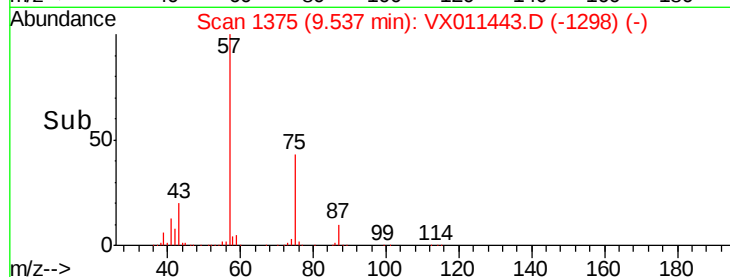
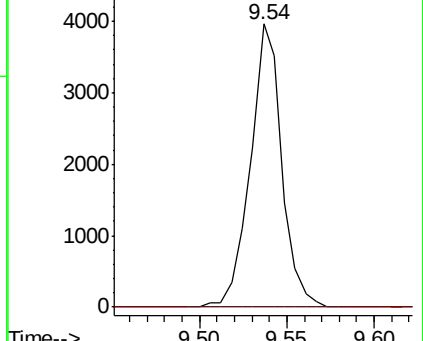
76 100

78 0.0 26.6 40.0#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0



#59

2-Hexanone

Concen: 30.830 ug/l

RT: 9.54 min Scan# 1375

Delta R.T. 0.05 min

Lab File: VX011443.D

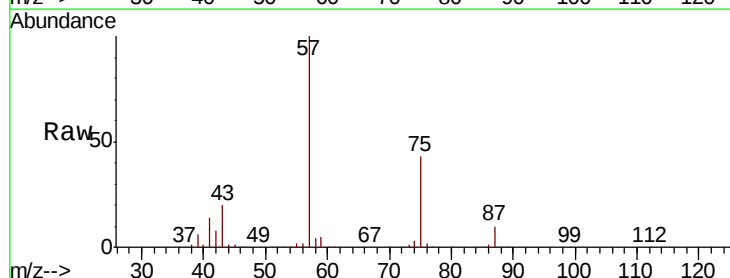
Acq: 11 Aug 2019 19:45

Tgt Ion: 43 Resp: 64979

Ion Ratio Lower Upper

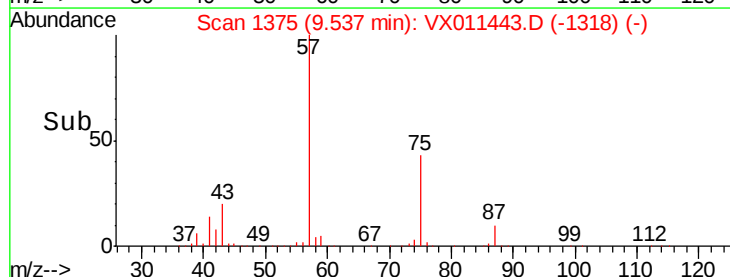
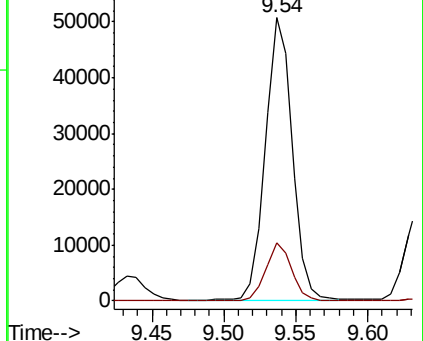
43 100

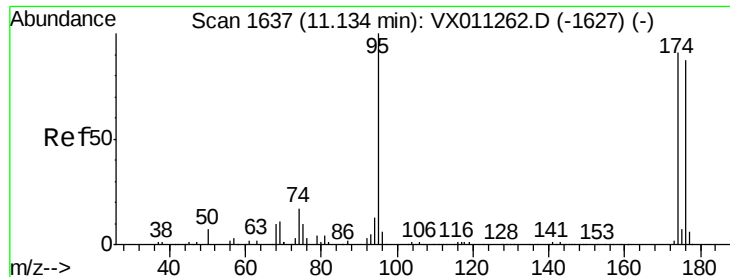
58 19.9 28.2 84.6#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

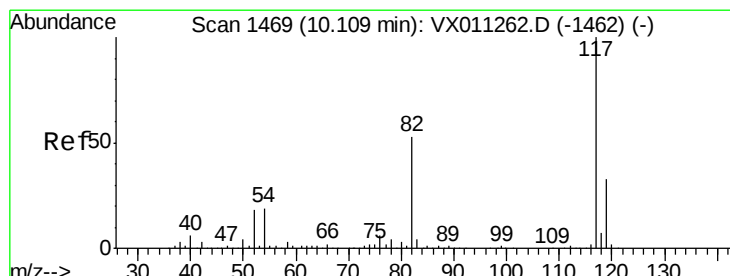
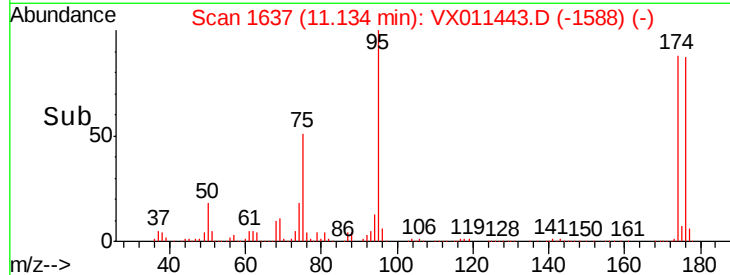
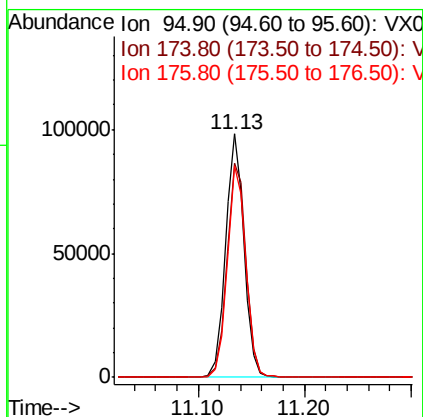
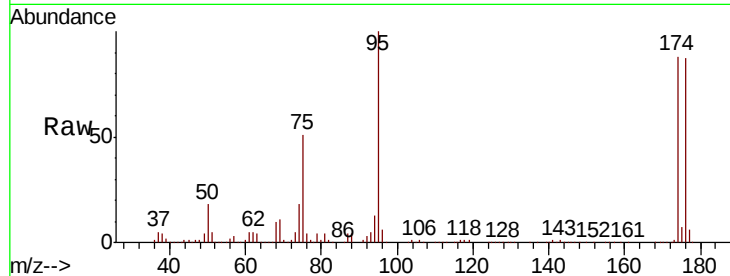




#62
4-Bromofluorobenzene
Concen: 44.702 ug/l
RT: 11.13 min Scan# 1637
Delta R.T. 0.00 min
Lab File: VX011443.D
Acq: 11 Aug 2019 19:45

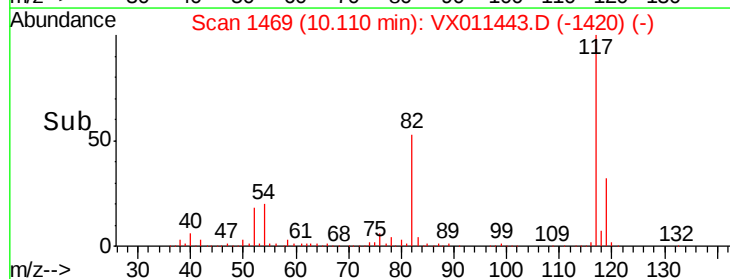
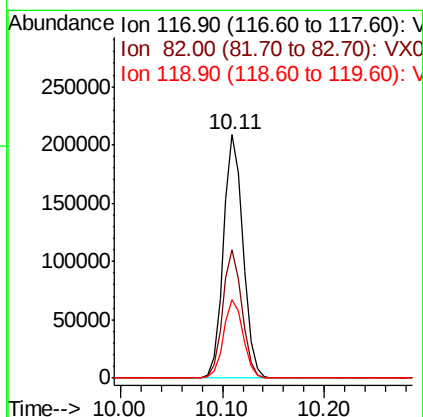
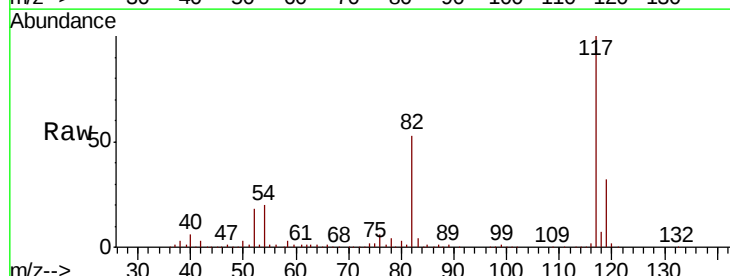
Instrument :
MSVOA_X
ClientSampleId :
RO-COMP-WS

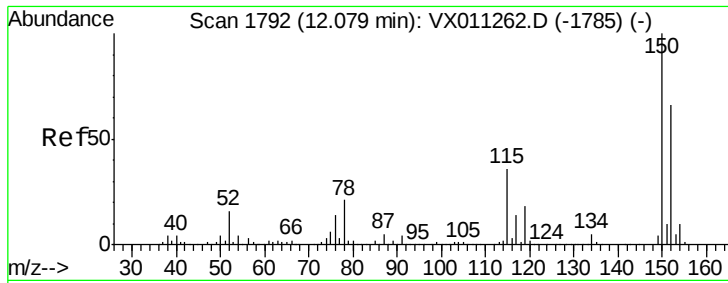
Tgt Ion: 95 Resp: 118442
Ion Ratio Lower Upper
95 100
174 91.9 0.0 191.2
176 87.8 0.0 184.8



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.11 min Scan# 1469
Delta R.T. 0.00 min
Lab File: VX011443.D
Acq: 11 Aug 2019 19:45

Tgt Ion: 117 Resp: 278825
Ion Ratio Lower Upper
117 100
82 52.6 42.2 63.2
119 32.0 26.6 39.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1791

Delta R.T. -0.01 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

Instrument :

MSVOA_X

ClientSampleId :

RO-COMP-WS

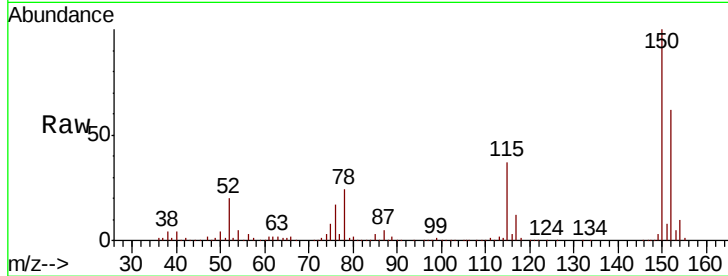
Tgt Ion:152 Resp: 122161

Ion Ratio Lower Upper

152 100

115 57.0 40.0 119.9

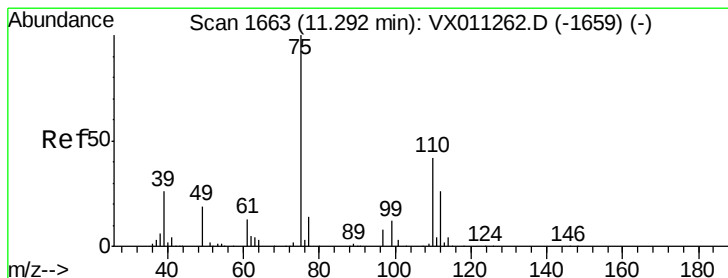
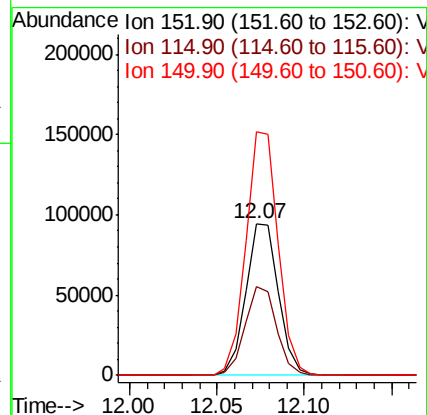
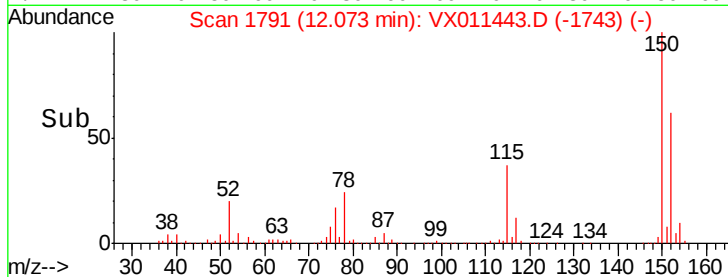
150 159.2 0.0 350.4



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 26.938 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX011443.D

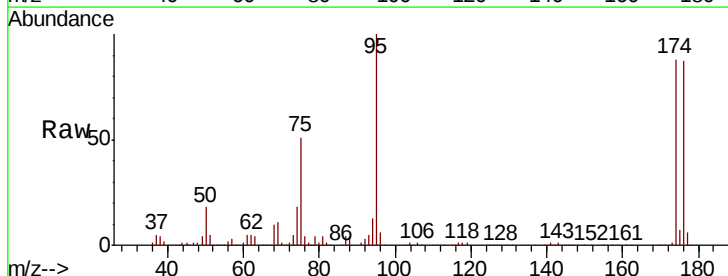
Acq: 11 Aug 2019 19:45

Tgt Ion: 75 Resp: 59930

Ion Ratio Lower Upper

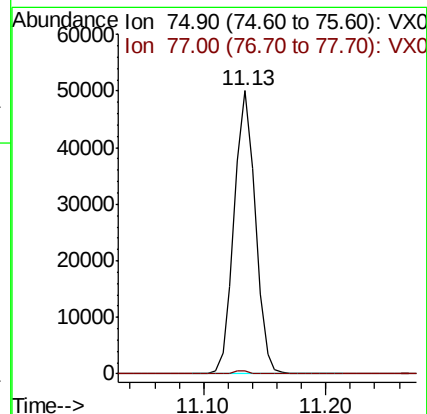
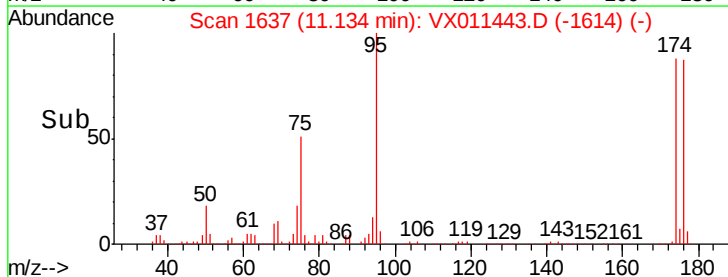
75 100

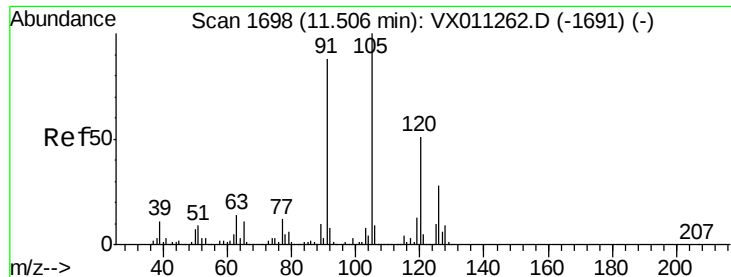
77 1.1 21.1 63.4#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#80

1,3,5-Trimethylbenzene

Concen: 0.257 ug/l

RT: 11.51 min Scan# 1698

Delta R.T. 0.00 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

Instrument :

MSVOA_X

ClientSampleId :

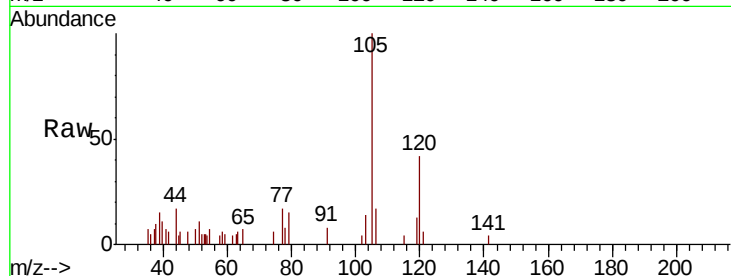
RO-COMP-WS

Tgt Ion:105 Resp: 1796

Ion Ratio Lower Upper

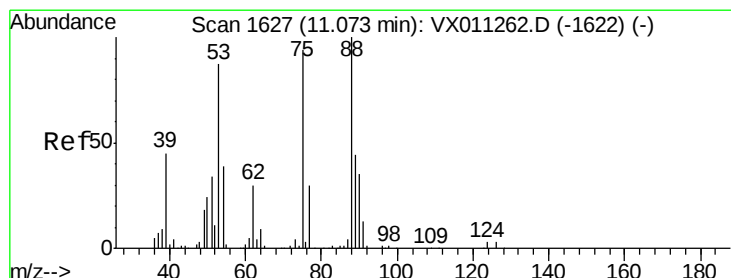
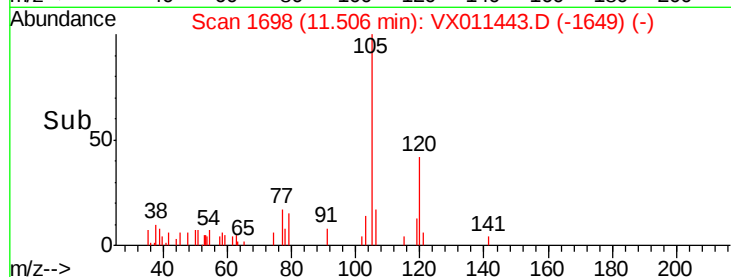
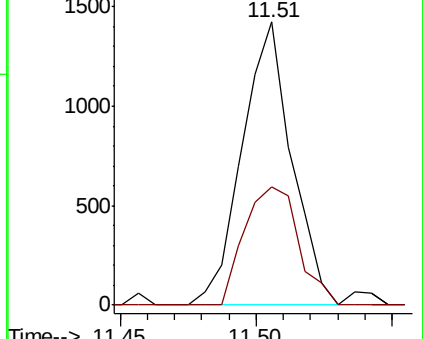
105 100

120 45.6 25.1 75.2



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#81

trans-1,4-Dichloro-2-butene

Concen: 69.947 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX011443.D

Acq: 11 Aug 2019 19:45

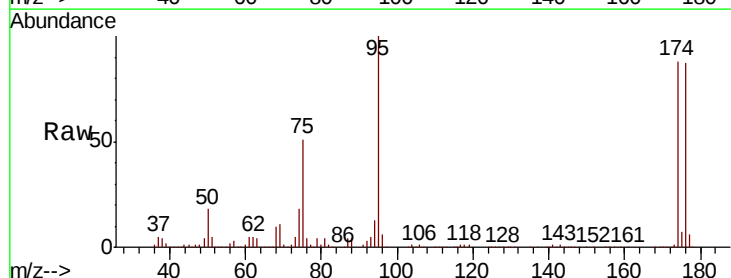
Tgt Ion: 75 Resp: 59930

Ion Ratio Lower Upper

75 100

53 0.4 78.2 117.4#

89 0.0 37.9 56.9#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

