

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_X\DATA\VX081619\
 Data File : VX011610.D
 Acq On : 17 Aug 2019 03:45
 Operator : JC/SP
 Sample : K4265-13
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 44 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 REACTOR-4-A1-(3.4)

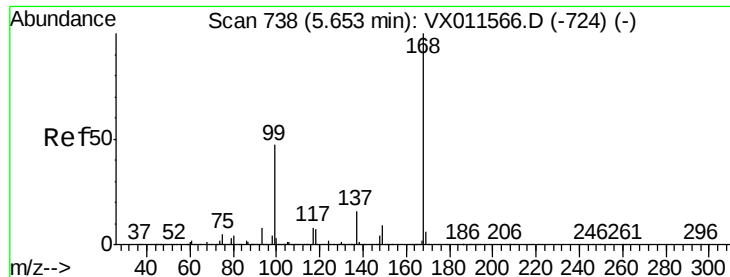
Quant Time: Aug 19 01:18:59 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X081519W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 16 04:15:26 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.65	168	451596	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.85	114	621188	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	557016	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	276201	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	6.06	65	212742	50.80	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.60%	
35) Dibromofluoromethane	5.49	113	186249	45.84	ug/l	0.00
Spiked Amount	50.000		Recovery	=	91.68%	
50) Toluene-d8	8.71	98	710149	56.10	ug/l	0.00
Spiked Amount	50.000		Recovery	=	112.20%	
62) 4-Bromofluorobenzene	11.13	95	249952	46.78	ug/l	0.00
Spiked Amount	50.000		Recovery	=	93.56%	

Target Compounds						Qvalue
5) Bromomethane	1.64	94	798	0.428	ug/l #	3
8) Diethyl Ether	2.18	74	826	0.417	ug/l	91
11) Tert butyl alcohol	3.01	59	8262	8.041	ug/l #	75
13) Acrolein	2.28	56	120	12.545	ug/l #	15
16) Acetone	2.43	43	11538	5.479	ug/l	99
18) Methyl Acetate	2.77	43	5195	0.795	ug/l	96
20) Methylene Chloride	2.85	84	9794	2.215	ug/l #	95
25) 2-Butanone	4.68	43	3178	0.961	ug/l #	87
29) Tetrahydrofuran	5.13	42	965	0.445	ug/l #	53
36) 1,1-Dichloropropene	5.65	75	24225	4.561	ug/l #	51
38) Carbon Tetrachloride	5.65	117	37346	6.382	ug/l #	15
43) Isopropyl Acetate	6.44	43	80581	8.452	ug/l	98
48) Methyl methacrylate	7.68	41	4932	1.045	ug/l #	20
49) 1,4-Dioxane	7.75	88	267	2.126	ug/l #	1
51) 4-Methyl-2-Pentanone	8.61	43	76040	12.186	ug/l #	52
54) cis-1,3-Dichloropropene	8.61	75	37787	6.058	ug/l #	62
59) 2-Hexanone	9.54	43	89640	18.628	ug/l #	50
71) Bromoform	10.69	173	74	3.308	ug/l #	28
74) N-amyl acetate	10.82	43	3801	0.499	ug/l #	53
76) 1,2,3-Trichloropropane	11.13	75	116511	22.246	ug/l #	36
81) trans-1,4-Dichloro-2-buten	11.13	75	116511	59.342	ug/l #	11
92) 1,2-Dibromo-3-Chloropropan	12.97	75	489	0.347	ug/l #	1

(#) = 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

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

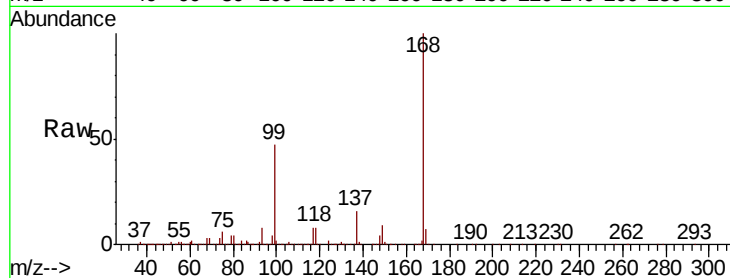
REACTOR-4-A1-(3.4)

Tgt Ion:168 Resp: 451596

Ion Ratio Lower Upper

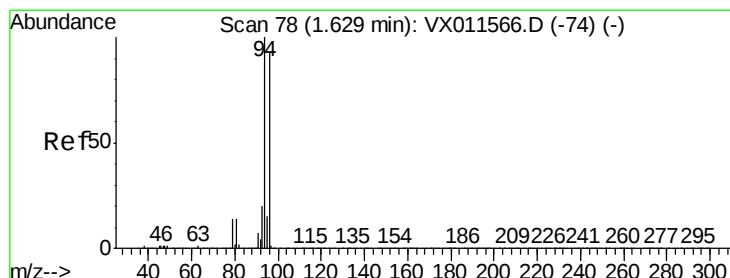
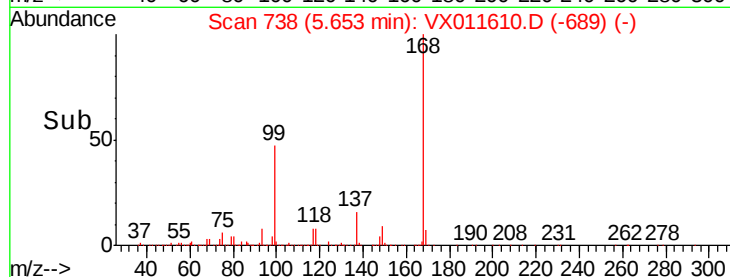
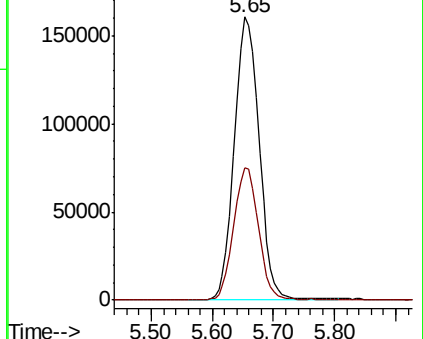
168 100

99 46.5 37.3 55.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#5

Bromomethane

Concen: 0.428 ug/l

RT: 1.64 min Scan# 79

Delta R.T. 0.01 min

Lab File: VX011610.D

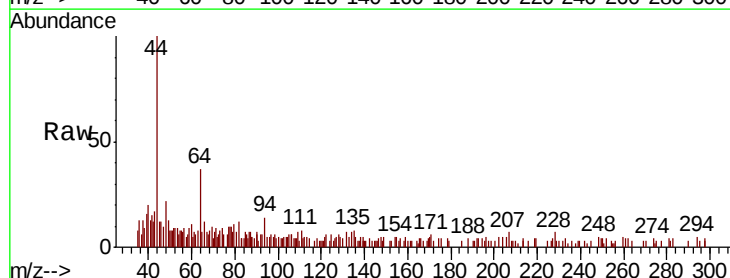
Acq: 17 Aug 2019 03:45

Tgt Ion: 94 Resp: 798

Ion Ratio Lower Upper

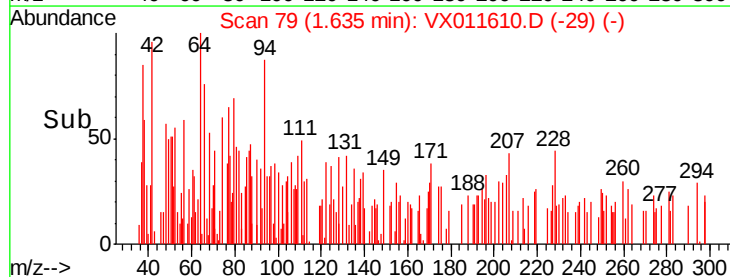
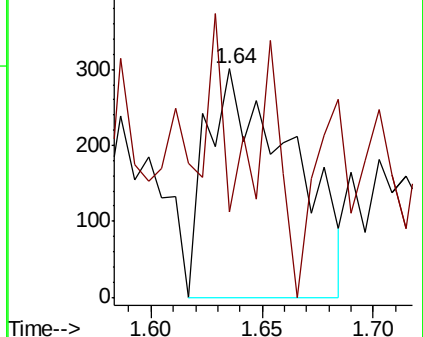
94 100

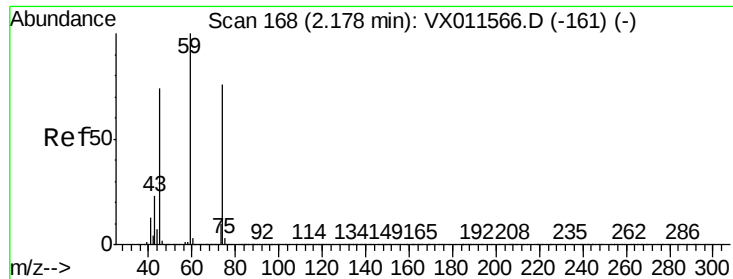
96 0.0 74.8 112.2#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#8

Diethyl Ether

Concen: 0.417 ug/l

RT: 2.18 min Scan# 168

Delta R.T. 0.00 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

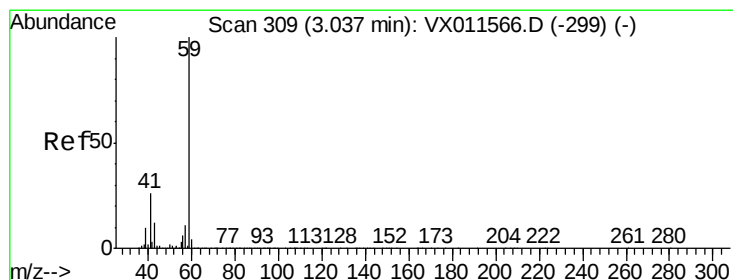
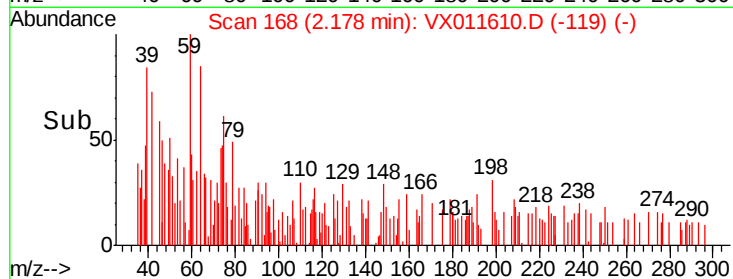
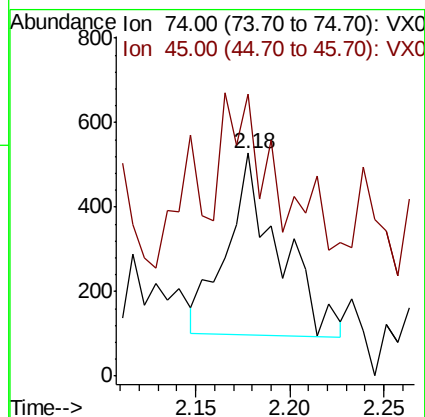
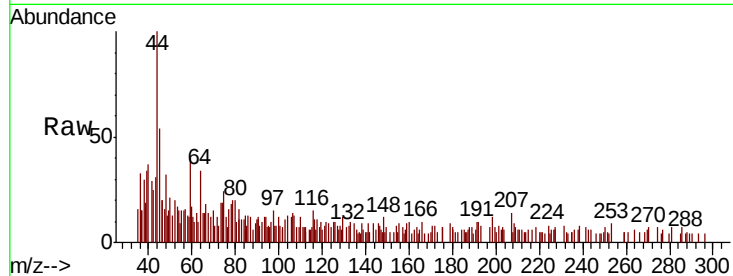
REACTOR-4-A1-(3.4)

Tgt Ion: 74 Resp: 826

Ion Ratio Lower Upper

74 100

45 87.3 48.2 144.6



#11

Tert butyl alcohol

Concen: 8.041 ug/l

RT: 3.01 min Scan# 304

Delta R.T. -0.03 min

Lab File: VX011610.D

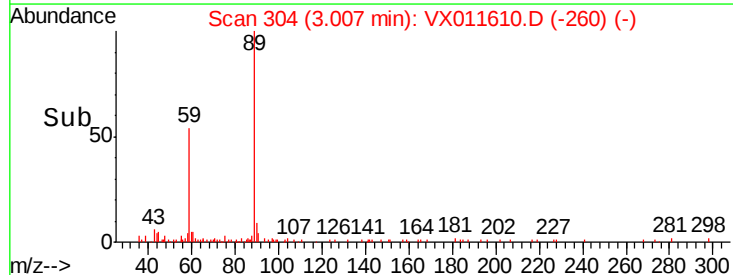
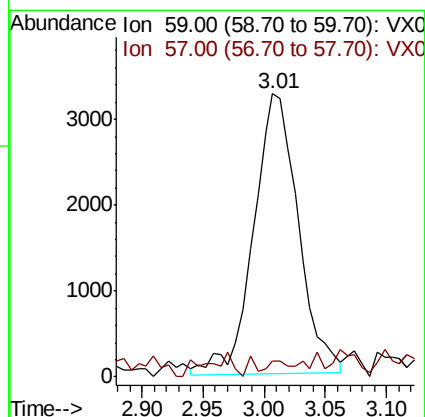
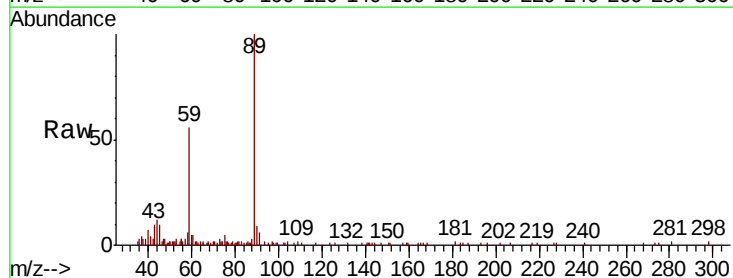
Acq: 17 Aug 2019 03:45

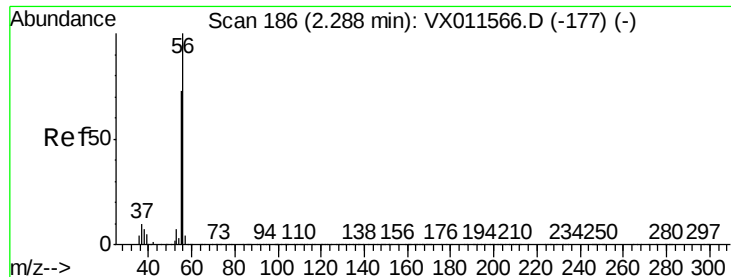
Tgt Ion: 59 Resp: 8262

Ion Ratio Lower Upper

59 100

57 1.6 8.7 13.1#





#13

Acrolein

Concen: 12.545 ug/l

RT: 2.28 min Scan# 184

Delta R.T. -0.01 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

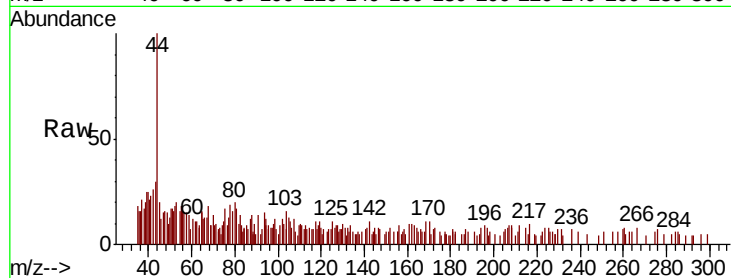
REACTOR-4-A1-(3.4)

Tgt Ion: 56 Resp: 120

Ion Ratio Lower Upper

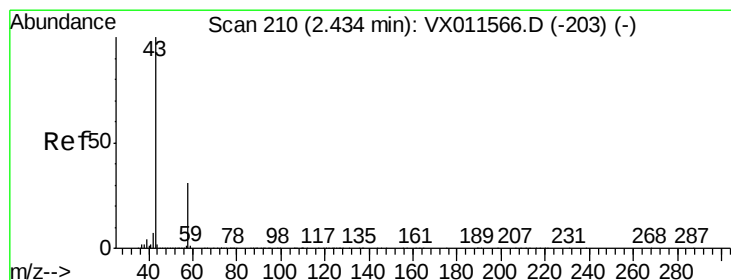
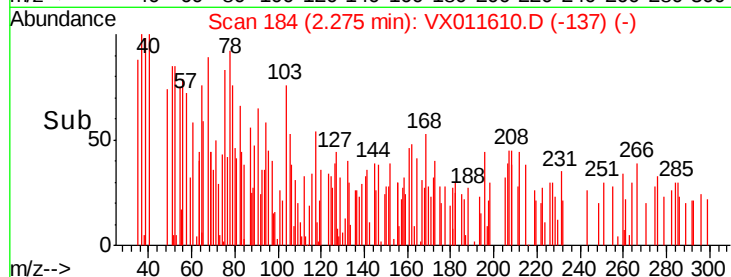
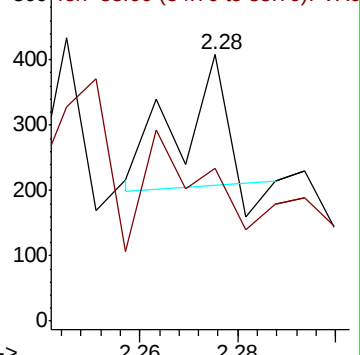
56 100

55 0.0 55.5 83.3#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#16

Acetone

Concen: 5.479 ug/l

RT: 2.43 min Scan# 210

Delta R.T. 0.00 min

Lab File: VX011610.D

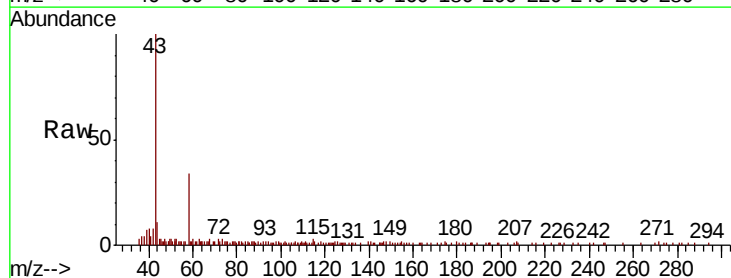
Acq: 17 Aug 2019 03:45

Tgt Ion: 43 Resp: 11538

Ion Ratio Lower Upper

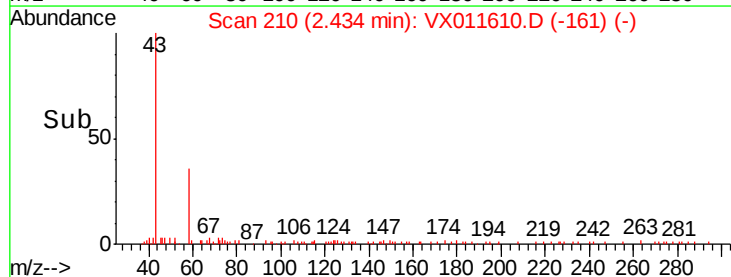
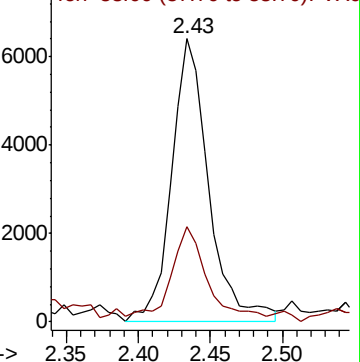
43 100

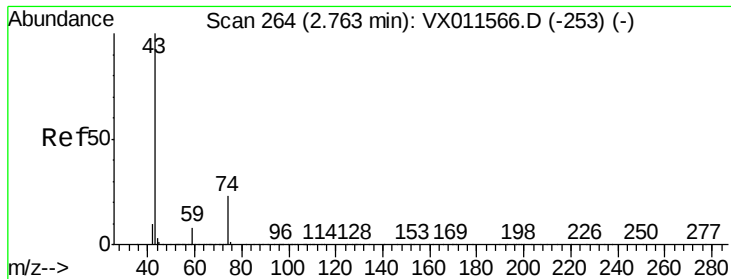
58 31.8 25.2 37.8



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

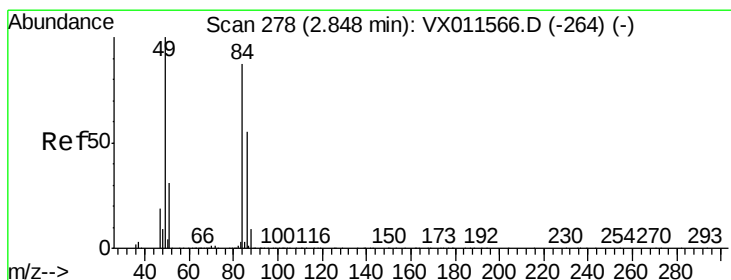
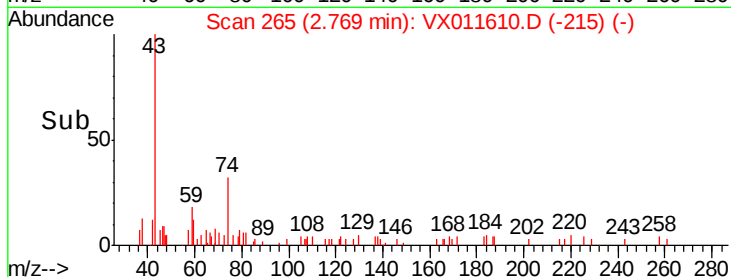
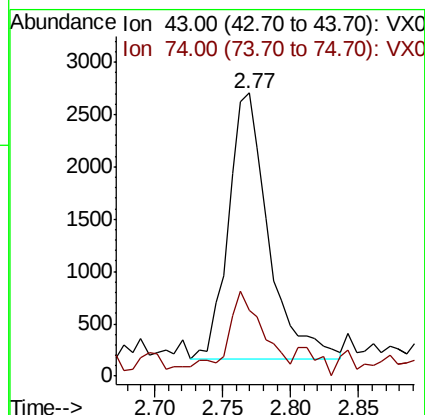
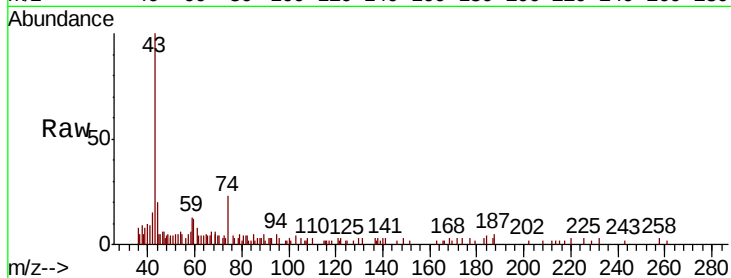




#18
Methyl Acetate
Concen: 0.795 ug/l
RT: 2.77 min Scan# 265
Delta R.T. 0.01 min
Lab File: VX011610.D
Acq: 17 Aug 2019 03:45

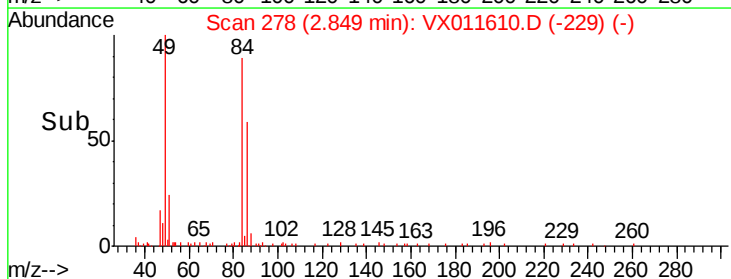
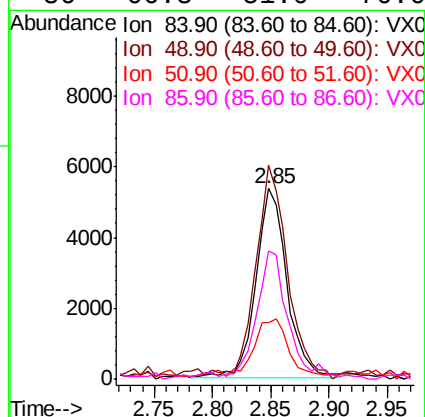
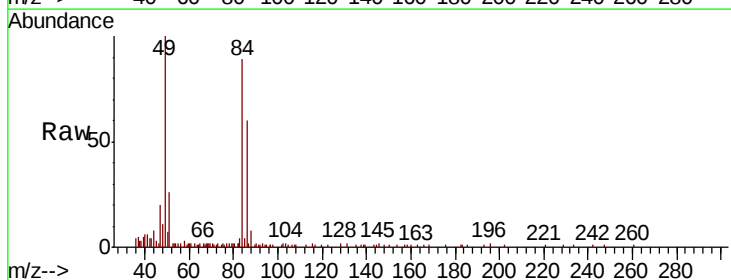
Instrument :
MSVOA_X
ClientSampleId :
REACTOR-4-A1-(3.4)

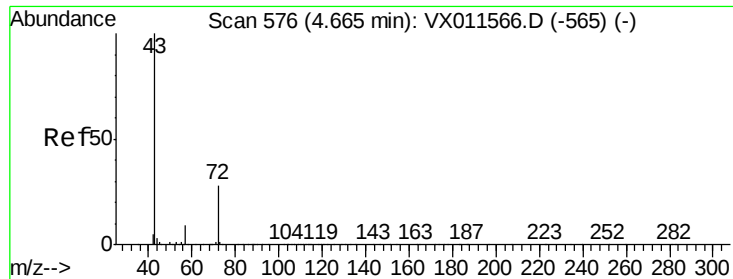
Tgt Ion: 43 Resp: 5195
Ion Ratio Lower Upper
43 100
74 22.5 19.7 29.5



#20
Methylene Chloride
Concen: 2.215 ug/l
RT: 2.85 min Scan# 278
Delta R.T. 0.00 min
Lab File: VX011610.D
Acq: 17 Aug 2019 03:45

Tgt Ion: 84 Resp: 9794
Ion Ratio Lower Upper
84 100
49 110.7 92.4 138.6
51 28.3 28.5 42.7#
86 66.3 51.0 76.6





#25

2-Butanone

Concen: 0.961 ug/l

RT: 4.68 min Scan# 579

Delta R.T. 0.02 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

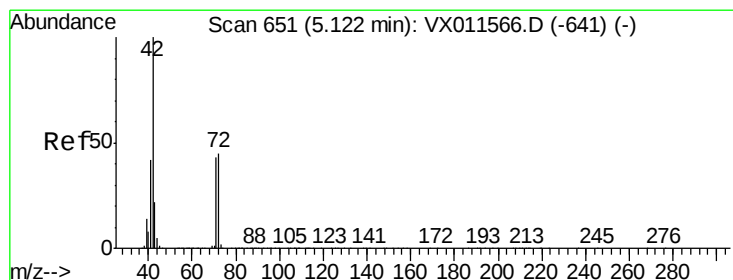
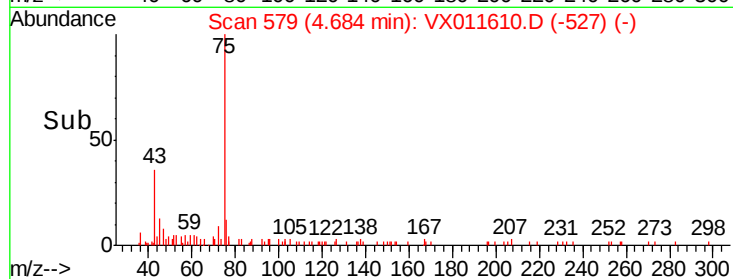
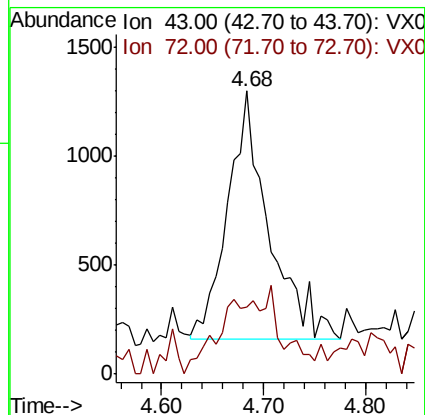
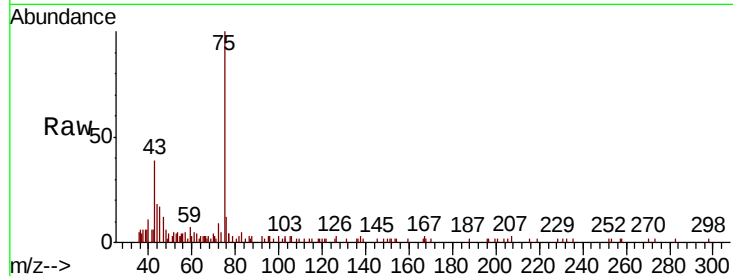
REACTOR-4-A1-(3.4)

Tgt Ion: 43 Resp: 3178

Ion Ratio Lower Upper

43 100

72 21.0 22.2 33.4#



#29

Tetrahydrofuran

Concen: 0.445 ug/l

RT: 5.13 min Scan# 653

Delta R.T. 0.01 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

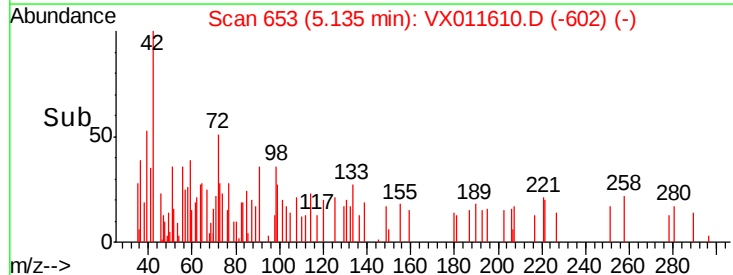
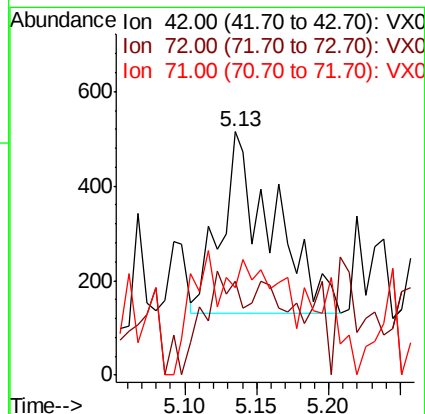
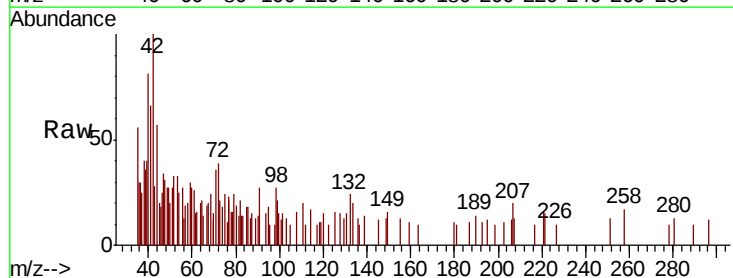
Tgt Ion: 42 Resp: 965

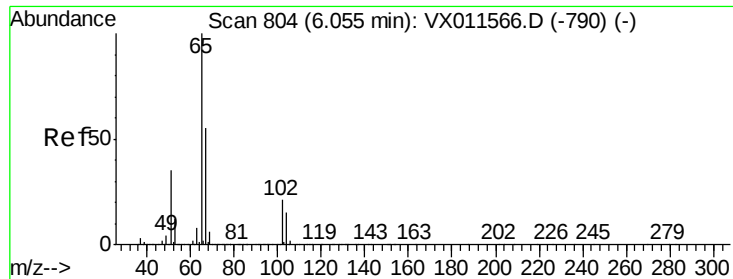
Ion Ratio Lower Upper

42 100

72 0.0 36.1 54.1#

71 27.2 33.8 50.8#





#33

1,2-Dichloroethane-d4

Concen: 50.799 ug/l

RT: 6.06 min Scan# 804

Delta R.T. 0.00 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

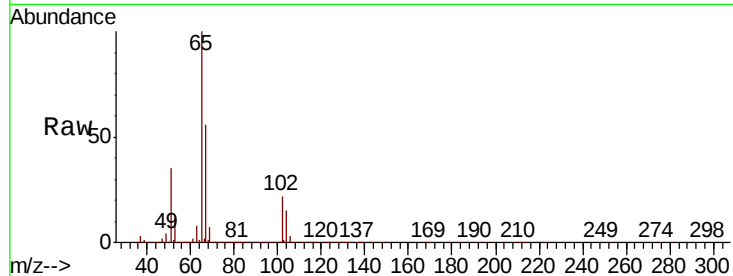
REACTOR-4-A1-(3.4)

Tgt Ion: 65 Resp: 212742

Ion Ratio Lower Upper

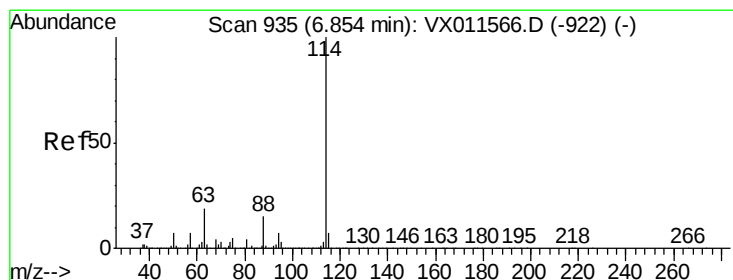
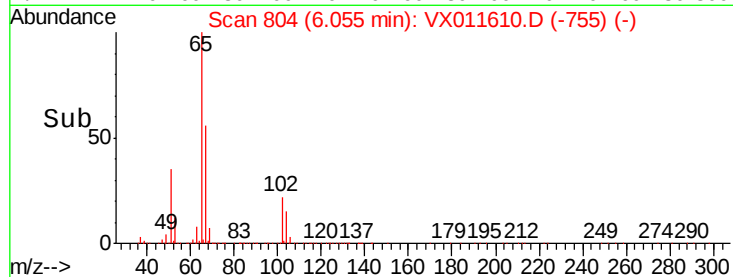
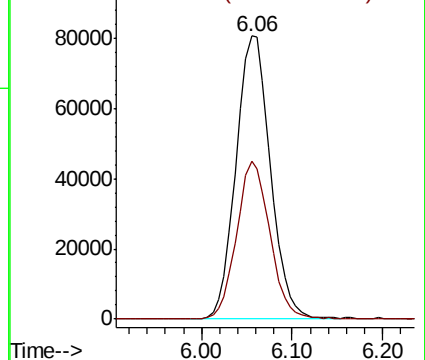
65 100

67 53.9 0.0 107.6



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: VX011610.D

Acq: 17 Aug 2019 03:45

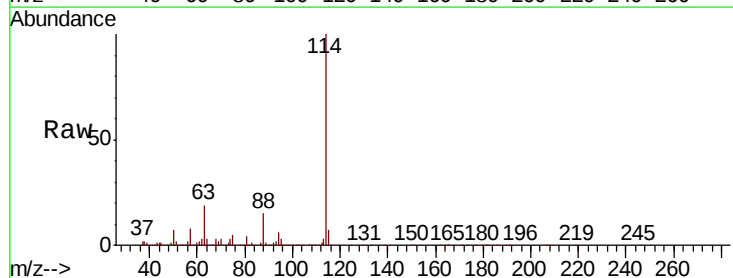
Tgt Ion: 114 Resp: 621188

Ion Ratio Lower Upper

114 100

63 18.6 0.0 37.8

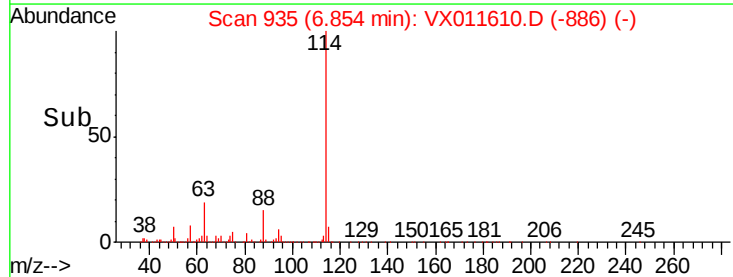
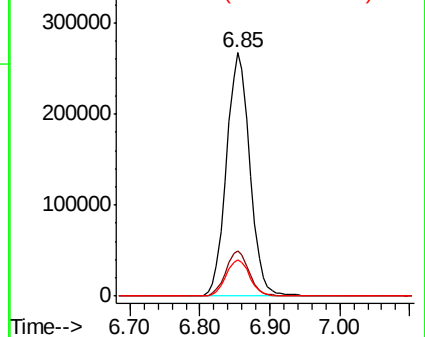
88 15.0 0.0 30.2

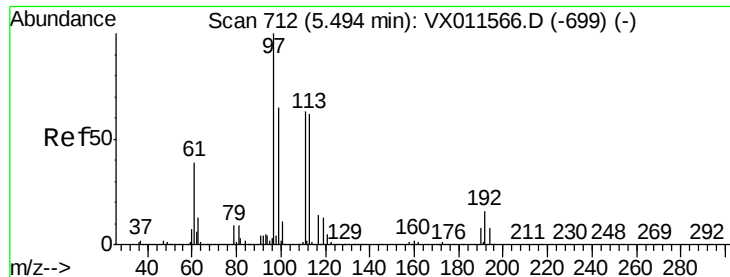


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 45.841 ug/l

RT: 5.49 min Scan# 712

Delta R.T. 0.00 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

REACTOR-4-A1-(3.4)

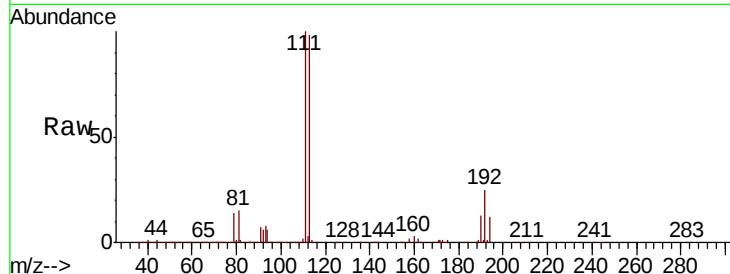
Tgt Ion:113 Resp: 186249

Ion Ratio Lower Upper

113 100

111 100.4 81.1 121.7

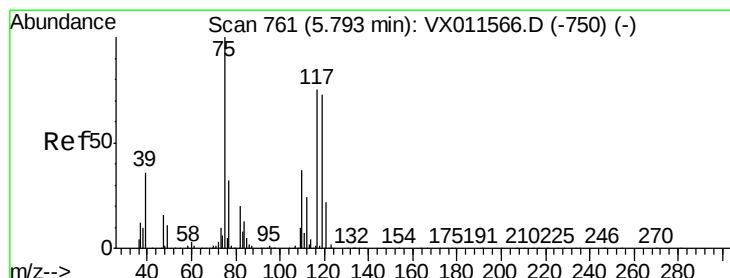
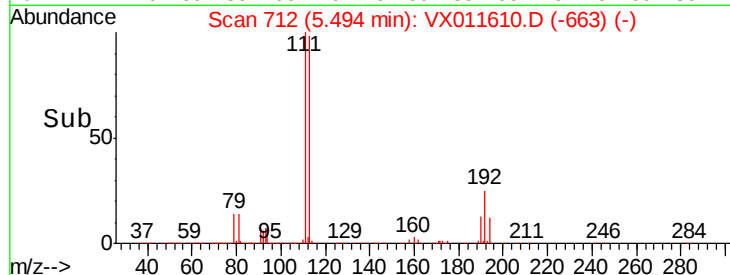
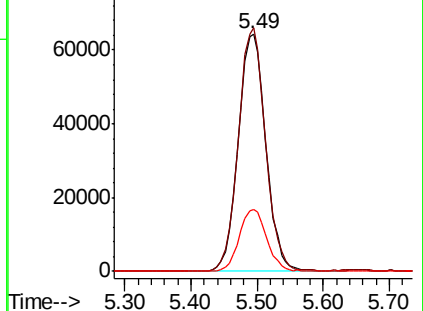
192 26.1 20.8 31.2



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: 4.561 ug/l

RT: 5.65 min Scan# 738

Delta R.T. -0.14 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

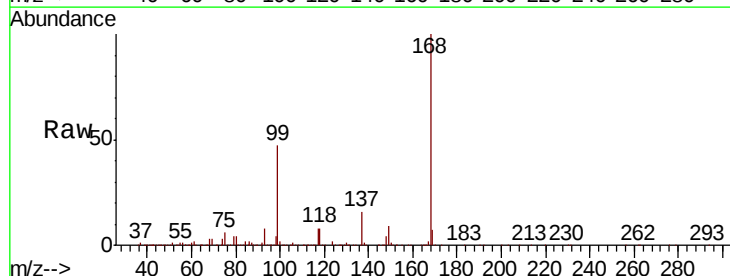
Tgt Ion: 75 Resp: 24225

Ion Ratio Lower Upper

75 100

110 11.9 19.4 58.1#

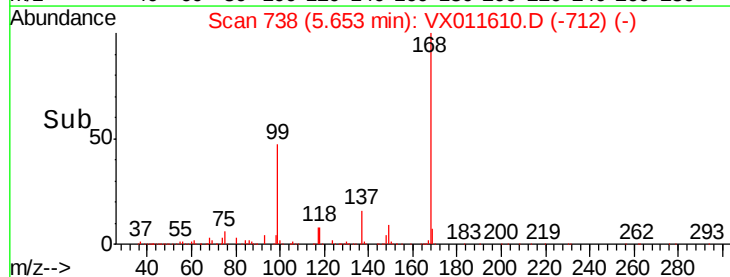
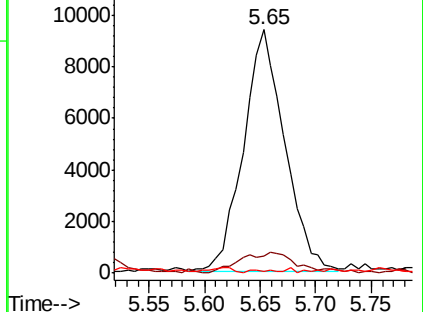
77 0.7 25.1 37.7#

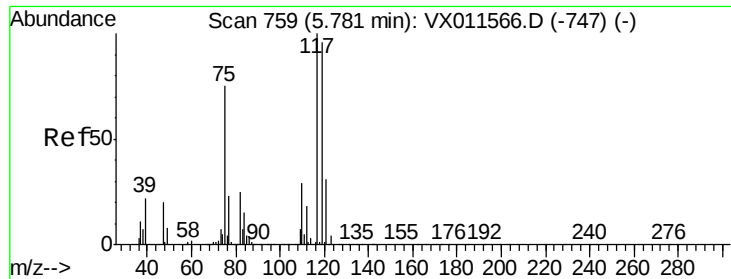


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.382 ug/l

RT: 5.65 min Scan# 738

Delta R.T. -0.13 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

REACTOR-4-A1-(3.4)

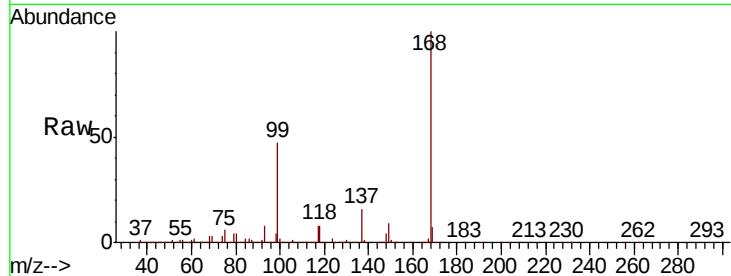
Tgt Ion:117 Resp: 37346

Ion Ratio Lower Upper

117 100

119 4.3 76.9 115.3#

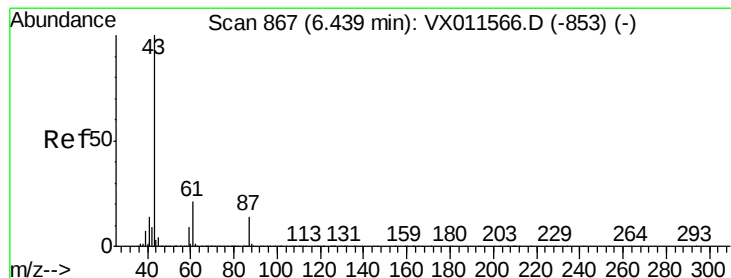
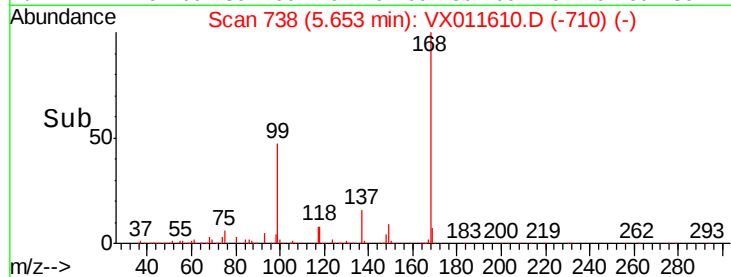
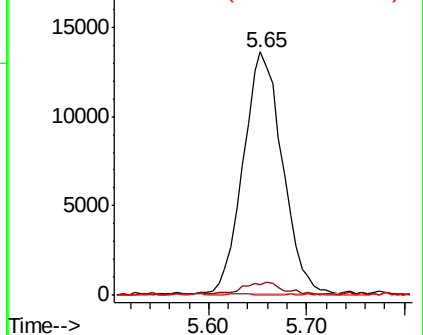
121 0.0 24.8 37.2#



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



#43

Isopropyl Acetate

Concen: 8.452 ug/l

RT: 6.44 min Scan# 867

Delta R.T. 0.00 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

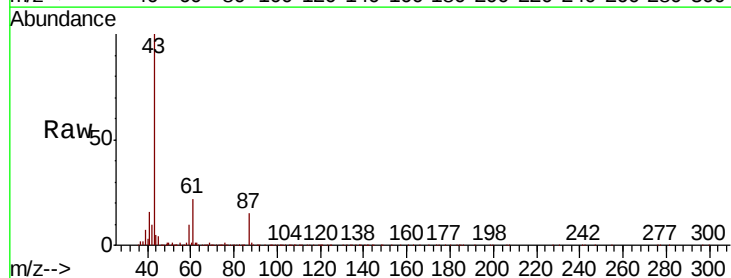
Tgt Ion: 43 Resp: 80581

Ion Ratio Lower Upper

43 100

61 22.0 16.6 24.8

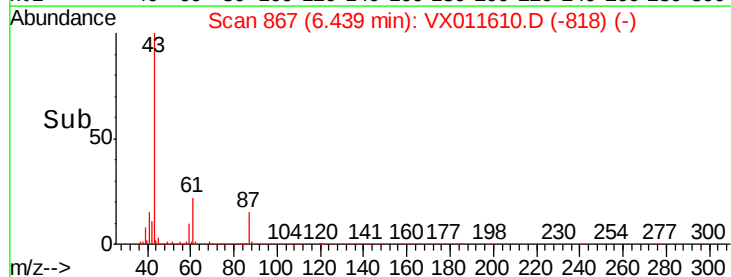
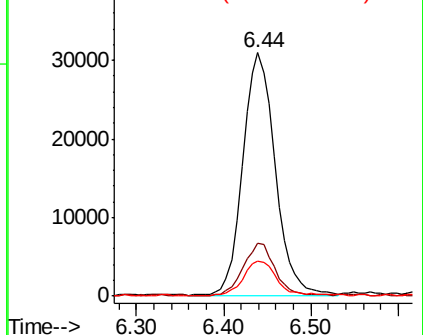
87 14.2 11.4 17.2

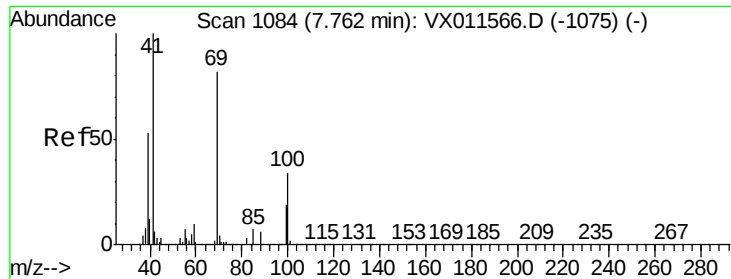


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0

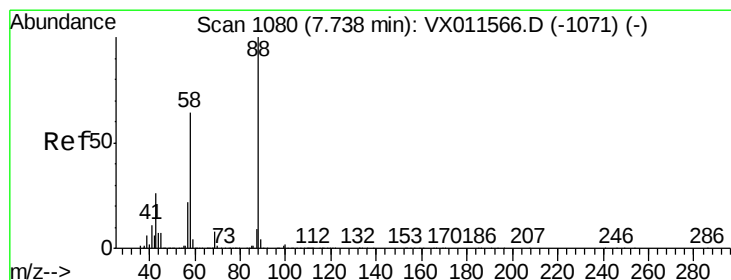
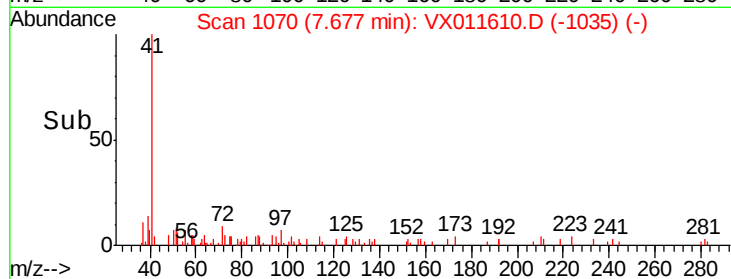
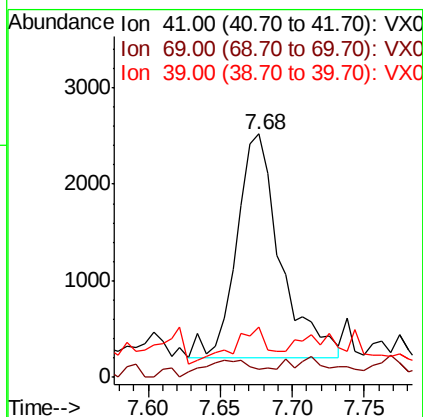
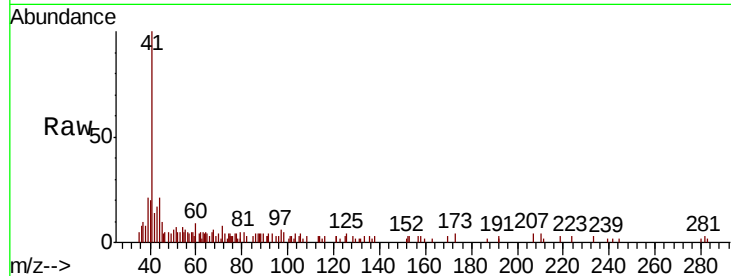




#48
Methyl methacrylate
Concen: 1.045 ug/l
RT: 7.68 min Scan# 1070
Delta R.T. -0.09 min
Lab File: VX011610.D
Acq: 17 Aug 2019 03:45

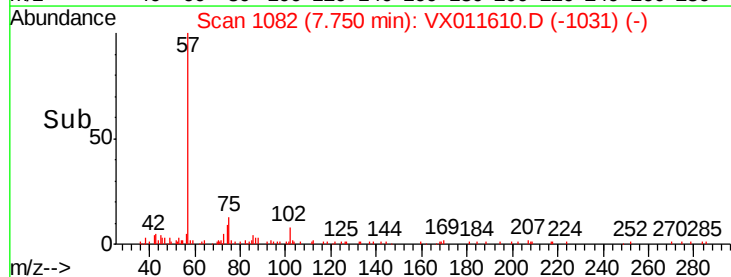
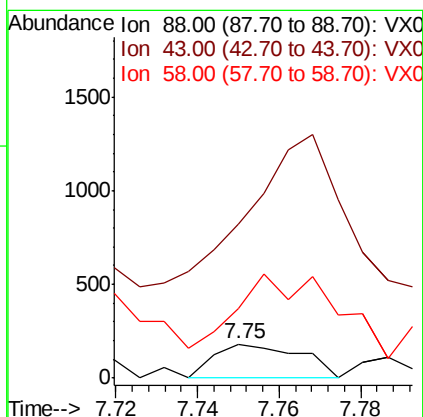
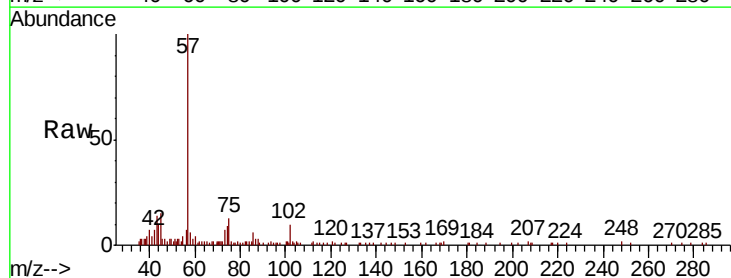
Instrument :
MSVOA_X
ClientSampleId :
REACTOR-4-A1-(3.4)

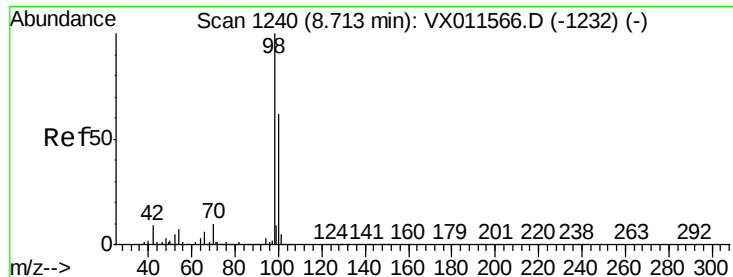
Tgt Ion: 41 Resp: 4932
Ion Ratio Lower Upper
41 100
69 8.5 67.9 101.9#
39 0.0 41.6 62.4#



#49
1,4-Dioxane
Concen: 2.126 ug/l
RT: 7.75 min Scan# 1082
Delta R.T. 0.01 min
Lab File: VX011610.D
Acq: 17 Aug 2019 03:45

Tgt Ion: 88 Resp: 267
Ion Ratio Lower Upper
88 100
43 0.0 23.4 35.0#
58 430.3 54.3 81.5#

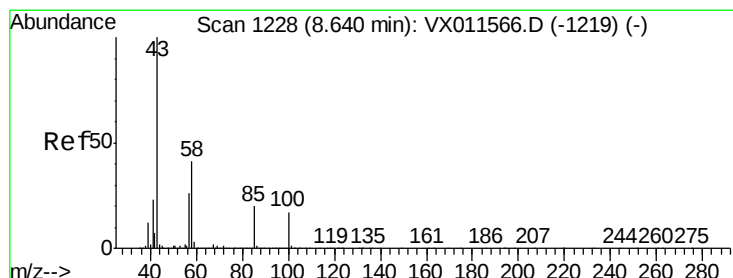
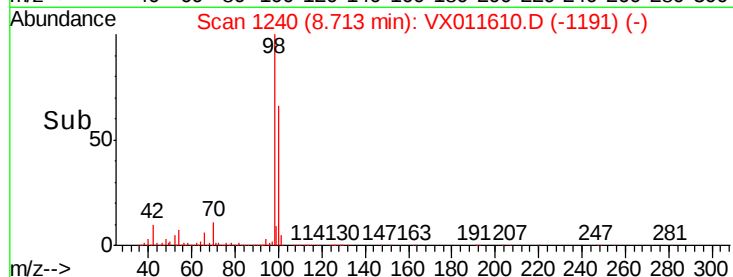
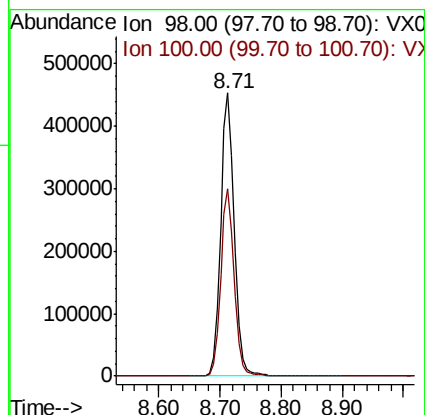
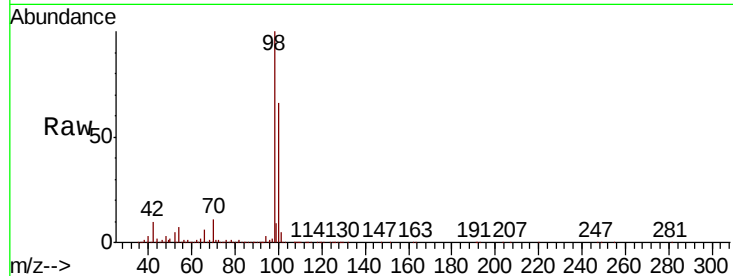




#50
Toluene-d8
Concen: 56.095 ug/l
RT: 8.71 min Scan# 1240
Delta R.T. 0.00 min
Lab File: VX011610.D
Acq: 17 Aug 2019 03:45

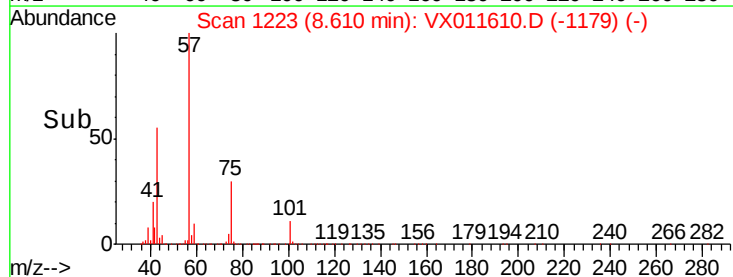
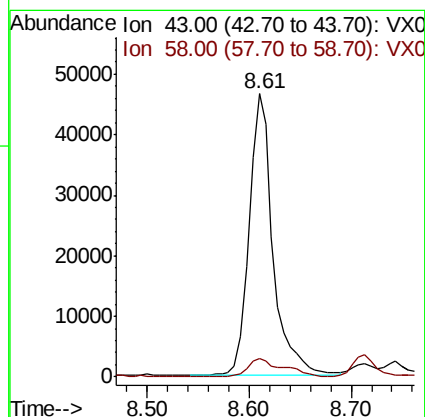
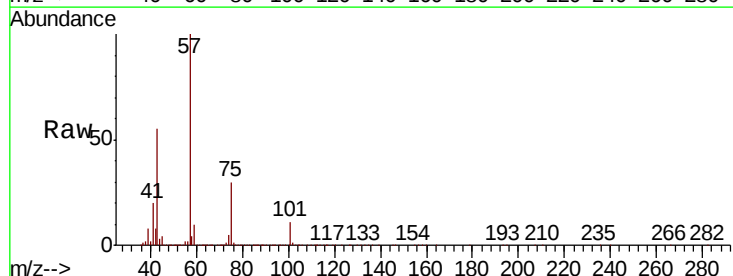
Instrument :
MSVOA_X
ClientSampleId :
REACTOR-4-A1-(3.4)

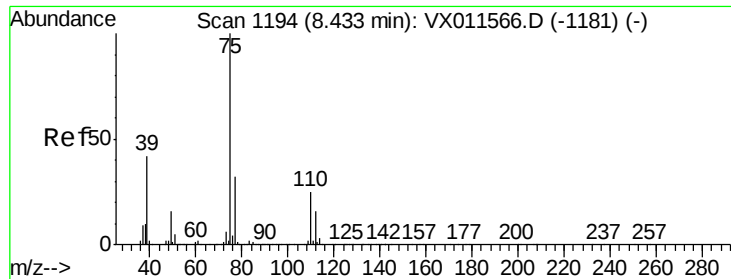
Tgt Ion: 98 Resp: 710149
Ion Ratio Lower Upper
98 100
100 65.2 52.4 78.6



#51
4-Methyl-2-Pentanone
Concen: 12.186 ug/l
RT: 8.61 min Scan# 1223
Delta R.T. -0.03 min
Lab File: VX011610.D
Acq: 17 Aug 2019 03:45

Tgt Ion: 43 Resp: 76040
Ion Ratio Lower Upper
43 100
58 9.9 31.8 47.6#





#54

cis-1,3-Dichloropropene

Concen: 6.058 ug/l

RT: 8.61 min Scan# 1223

Delta R.T. 0.18 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

REACTOR-4-A1-(3.4)

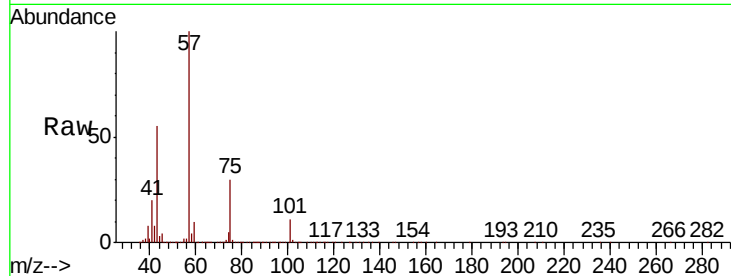
Tgt Ion: 75 Resp: 37787

Ion Ratio Lower Upper

75 100

77 0.4 25.5 38.3#

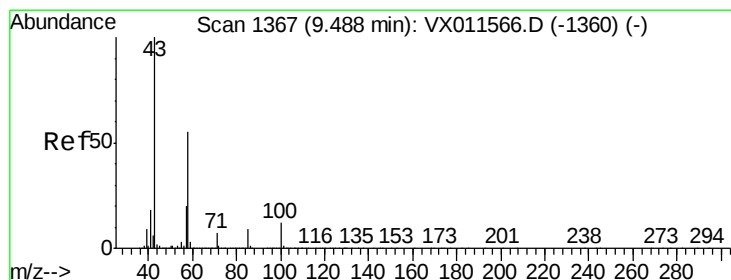
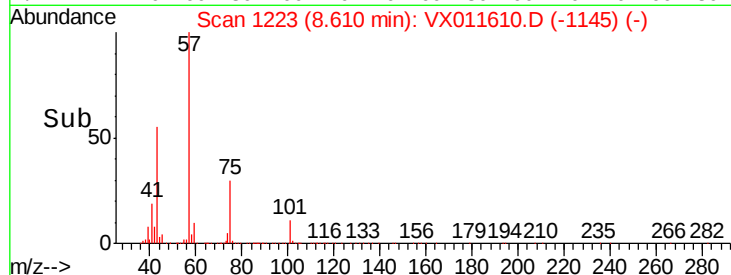
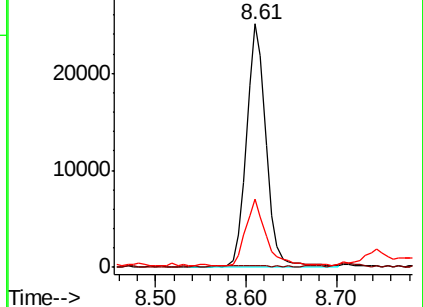
39 27.3 33.6 50.4#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 76.90 (76.60 to 77.60): VX0

Ion 39.00 (38.70 to 39.70): VX0



#59

2-Hexanone

Concen: 18.628 ug/l

RT: 9.54 min Scan# 1375

Delta R.T. 0.05 min

Lab File: VX011610.D

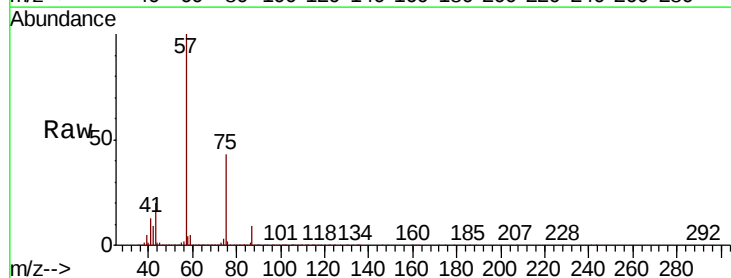
Acq: 17 Aug 2019 03:45

Tgt Ion: 43 Resp: 89640

Ion Ratio Lower Upper

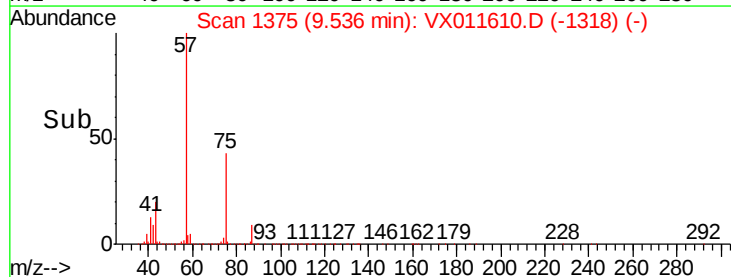
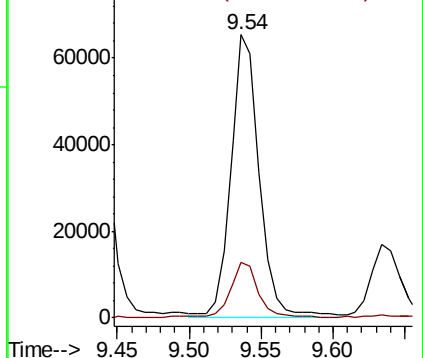
43 100

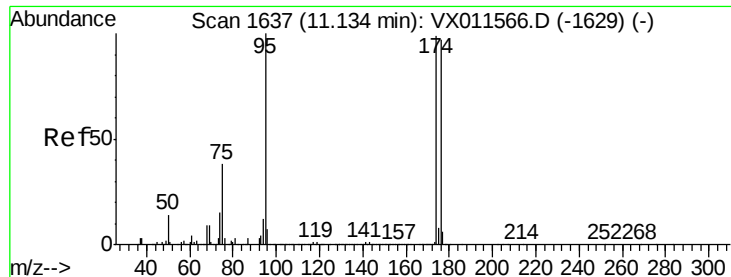
58 18.9 27.5 82.4#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#62

4-Bromofluorobenzene

Concen: 46.777 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

REACTOR-4-A1-(3.4)

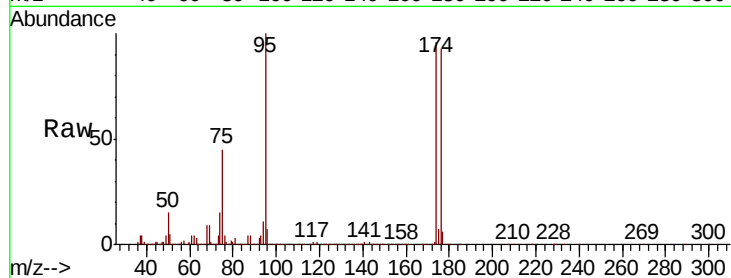
Tgt Ion: 95 Resp: 249952

Ion Ratio Lower Upper

95 100

174 99.8 0.0 200.6

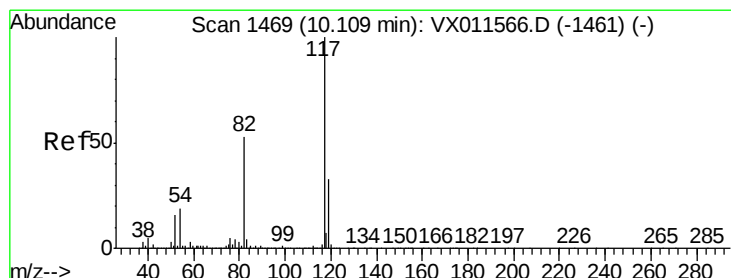
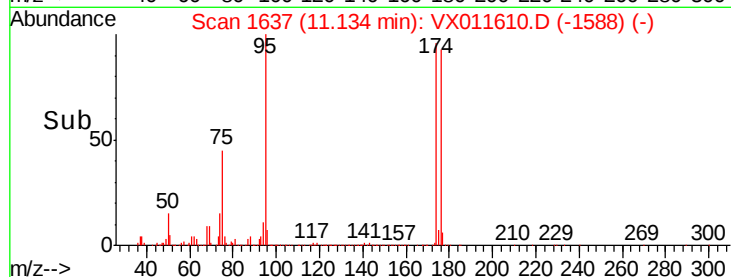
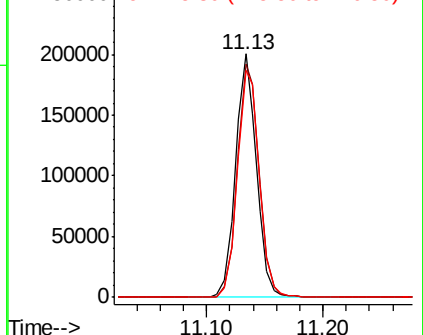
176 97.9 0.0 196.6



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. 0.00 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

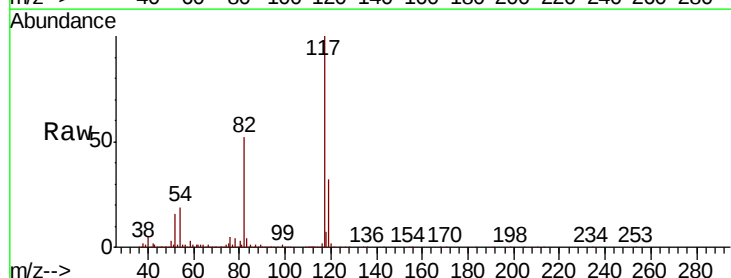
Tgt Ion: 117 Resp: 557016

Ion Ratio Lower Upper

117 100

82 52.3 42.0 63.0

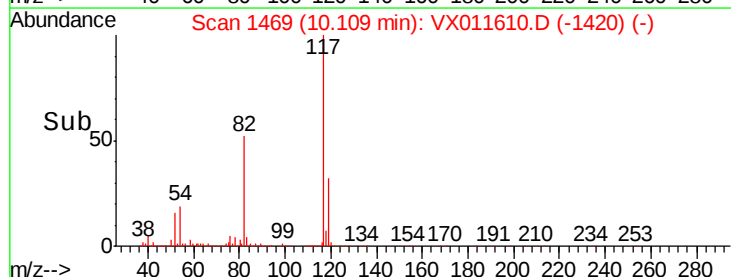
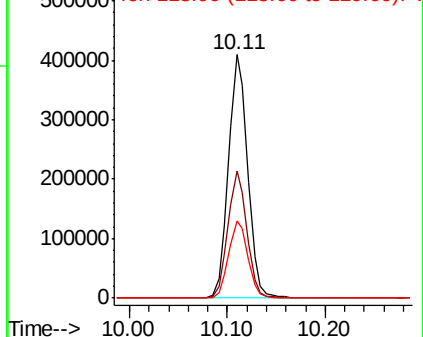
119 31.5 26.5 39.7

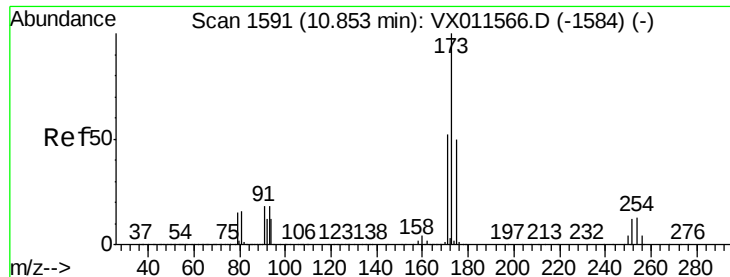


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V





#71

Bromoform

Concen: 3.308 ug/l

RT: 10.69 min Scan# 1565

Delta R.T. -0.16 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

REACTOR-4-A1-(3.4)

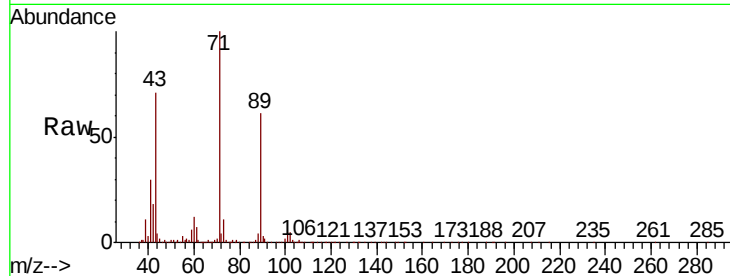
Tgt Ion:173 Resp: 74

Ion Ratio Lower Upper

173 100

175 0.0 24.9 74.7#

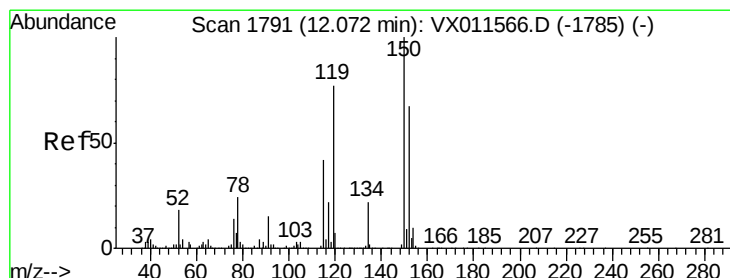
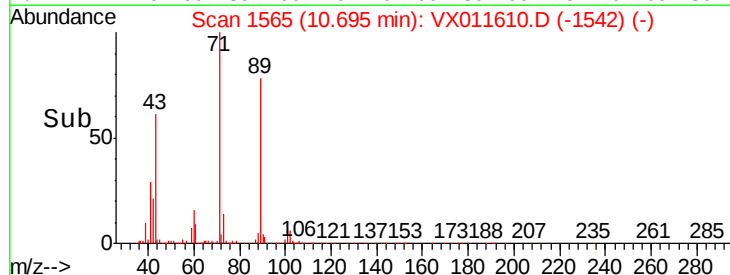
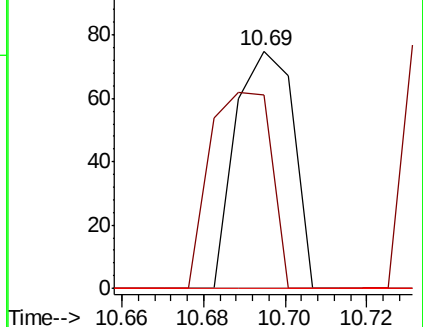
254 0.0 0.1 0.1#



Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.01 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

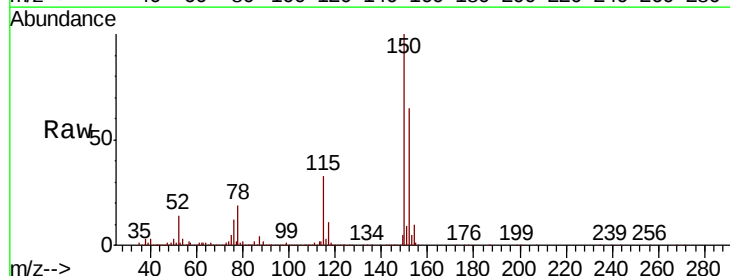
Tgt Ion:152 Resp: 276201

Ion Ratio Lower Upper

152 100

115 53.2 37.3 111.9

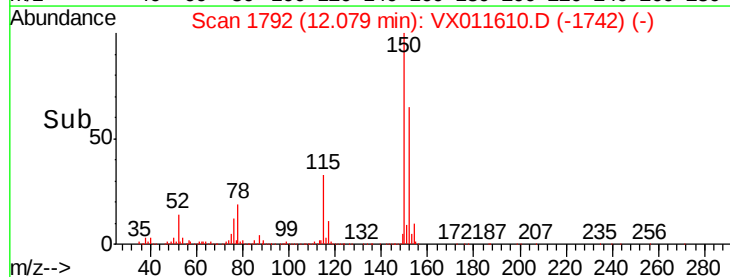
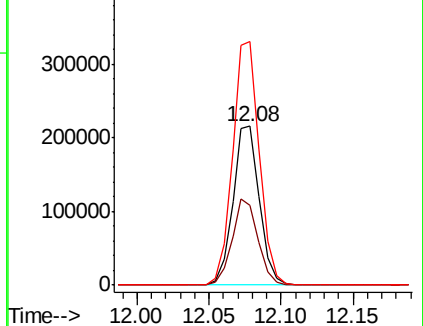
150 155.1 0.0 346.2

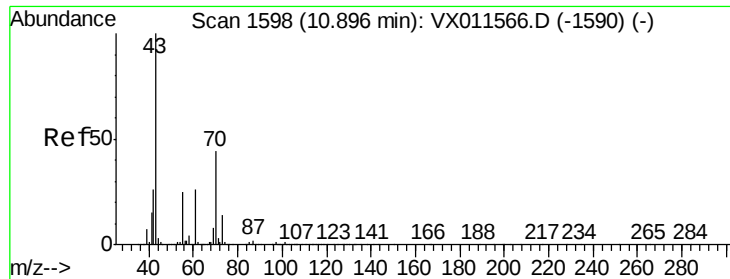


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-ethyl acetate

Concen: 0.499 ug/l

RT: 10.82 min Scan# 1586

Delta R.T. -0.07 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

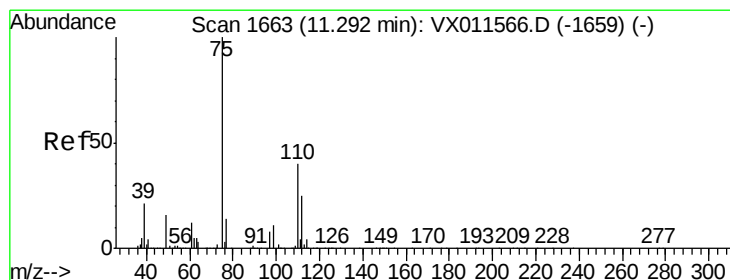
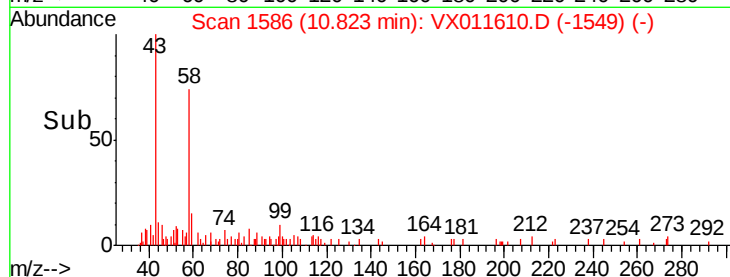
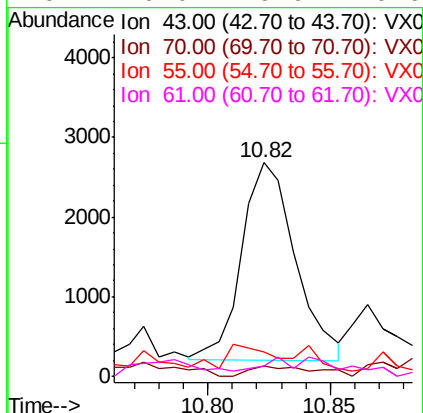
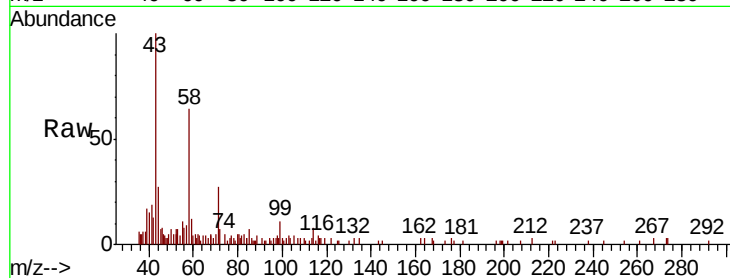
Instrument :

MSVOA_X

ClientSampleId :

REACTOR-4-A1-(3.4)

Tgt Ion:	43	Resp:	3801
Ion	Ratio	Lower	Upper
43	100		
70	6.1	34.7	52.1#
55	11.7	19.6	29.4#
61	0.0	19.9	29.9#



#76

1,2,3-Trichloropropane

Concen: 22.246 ug/l

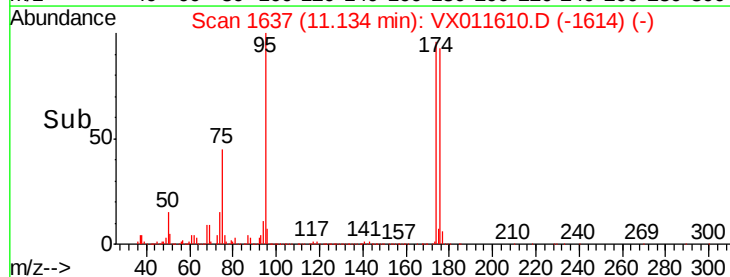
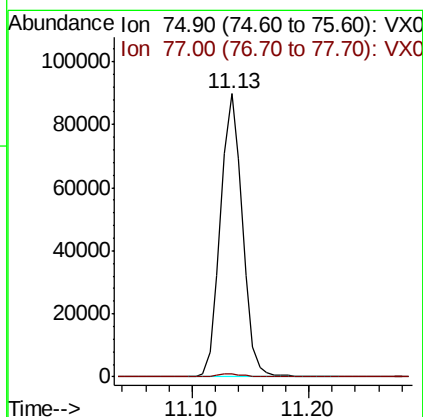
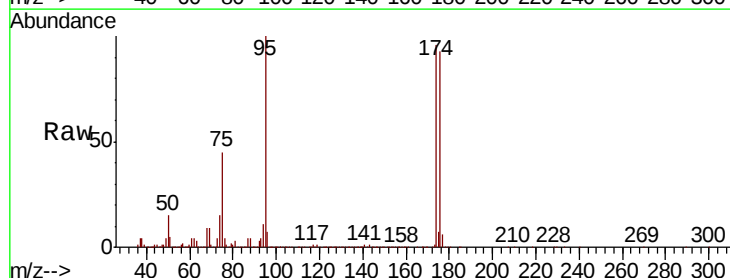
RT: 11.13 min Scan# 1637

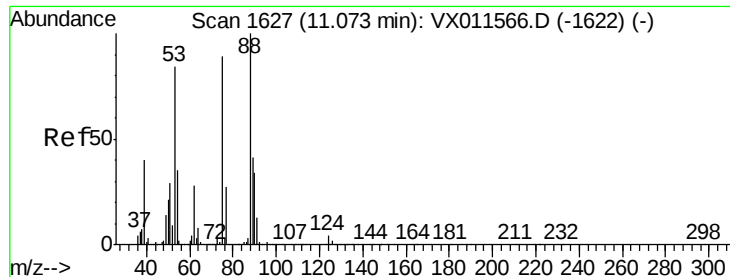
Delta R.T. -0.16 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Tgt Ion:	75	Resp:	116511
Ion	Ratio	Lower	Upper
75	100		
77	1.5	20.9	62.8#





#81

trans-1,4-Dichloro-2-butene

Concen: 59.342 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

Instrument :

MSVOA_X

ClientSampleId :

REACTOR-4-A1-(3.4)

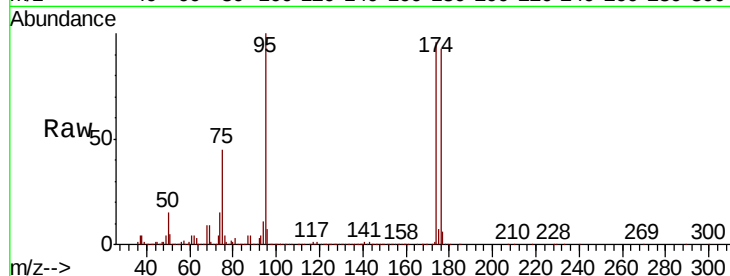
Tgt Ion: 75 Resp: 116511

Ion Ratio Lower Upper

75 100

53 0.1 77.4 116.0#

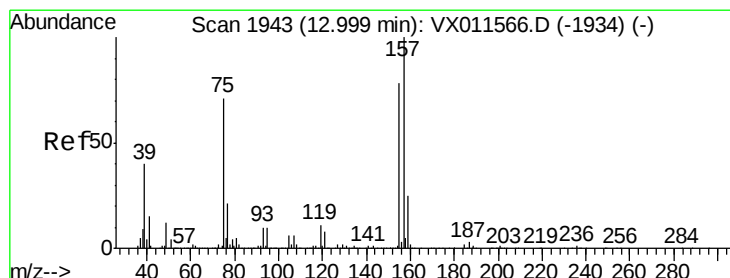
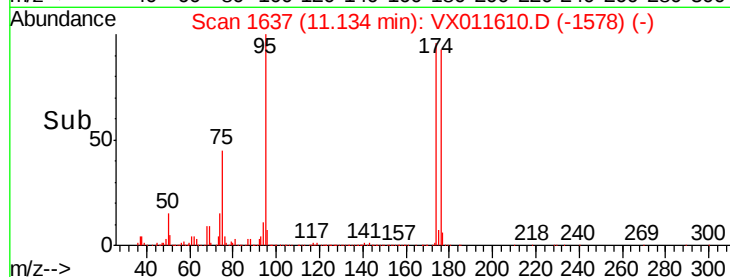
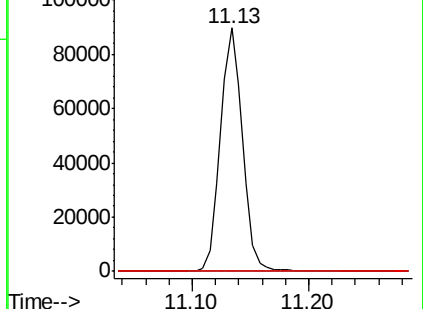
89 0.1 37.3 55.9#



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



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.347 ug/l

RT: 12.97 min Scan# 1939

Delta R.T. -0.02 min

Lab File: VX011610.D

Acq: 17 Aug 2019 03:45

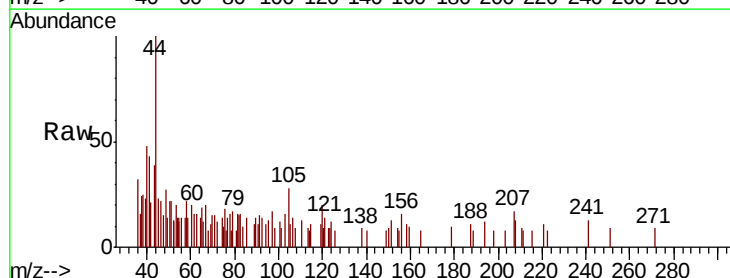
Tgt Ion: 75 Resp: 489

Ion Ratio Lower Upper

75 100

155 8.2 53.0 159.0#

157 3.9 68.3 205.1#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V

