

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX032619\
 Data File : VX008461.D
 Acq On : 26 Mar 2019 17:58
 Operator : JC/SP
 Sample : K2088-05RE
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 TB-2019.03.21RE

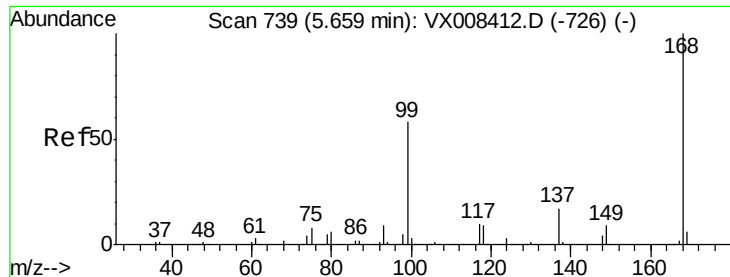
Quant Time: Mar 27 01:53:17 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X032519W.M
 Quant Title : SW846 8260
 QLast Update : Tue Mar 26 07:57:20 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.66	168	240897	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.86	114	406572	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	347666	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	147247	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	170009	46.55	ug/l	0.00
Spiked Amount			Recovery	=	93.10%	
35) Dibromofluoromethane	5.49	113	124021	46.78	ug/l	0.00
Spiked Amount			Recovery	=	93.56%	
50) Toluene-d8	8.71	98	505669	47.70	ug/l	0.00
Spiked Amount			Recovery	=	95.40%	
62) 4-Bromofluorobenzene	11.13	95	172691	43.96	ug/l	0.00
Spiked Amount			Recovery	=	87.92%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.32	50	487	Below Cal	#	87
5) Bromomethane	1.65	94	635	2.102	ug/l #	77
6) Chloroethane	1.62	64	3928	1.672	ug/l #	62
8) Diethyl Ether	2.18	74	1139	0.536	ug/l	98
10) Methyl Iodide	2.51	142	471	4.293	ug/l #	88
11) Tert butyl alcohol	3.04	59	733	0.906	ug/l #	80
13) Acrolein	2.29	56	582	0.990	ug/l #	14
15) Acrylonitrile	3.14	53	711	0.335	ug/l #	89
16) Acetone	2.44	43	8403	4.402	ug/l	92
17) Carbon Disulfide	2.57	76	1548	Below Cal	#	75
20) Methylene Chloride	2.85	84	27884	8.419	ug/l	97
21) trans-1,2-Dichloroethene	3.17	96	163	Below Cal	#	62
25) 2-Butanone	4.69	43	2713	0.887	ug/l	92
29) Tetrahydrofuran	5.15	42	1261	0.625	ug/l #	58
36) 1,1-Dichloropropene	5.67	75	20515	4.732	ug/l #	51
38) Carbon Tetrachloride	5.67	117	23747	6.564	ug/l #	15
40) Benzene	6.13	78	3475	0.268	ug/l	95
49) 1,4-Dioxane	7.75	88	19	0.213	ug/l #	1
51) 4-Methyl-2-Pentanone	8.64	43	1698	0.291	ug/l #	82
52) Toluene	8.79	92	9557	1.232	ug/l	97
68) m/p-Xylenes	10.36	106	2361	0.455	ug/l	99
76) 1,2,3-Trichloropropane	11.13	75	88533	20.224	ug/l #	34
81) trans-1,4-Dichloro-2-buten	11.13	75	88533	64.776	ug/l #	9

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.00 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

Instrument :

MSVOA_X

ClientSampleId :

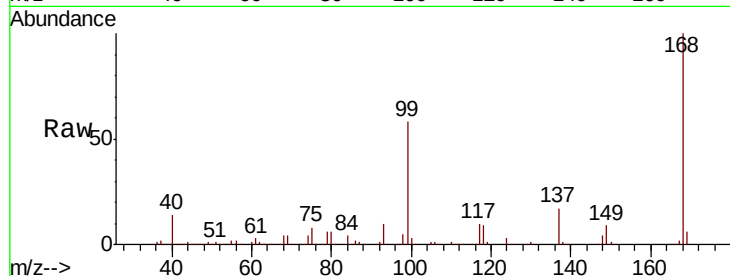
TB-2019.03.21RE

Tot Ion:168 Resp: 240897

Ion Ratio Lower Upper

168 100

99 57.7 46.0 69.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

80000

60000

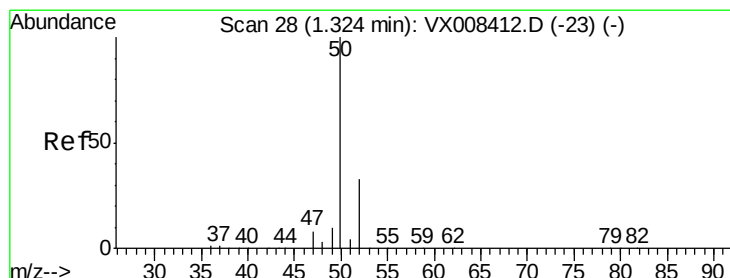
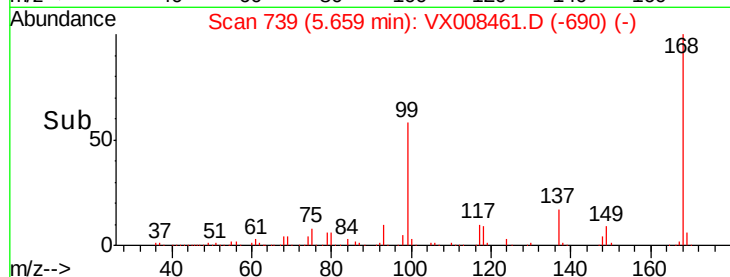
40000

20000

0

Time-->

5.60 5.70 5.80



#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 27

Delta R.T. -0.01 min

Lab File: VX008461.D

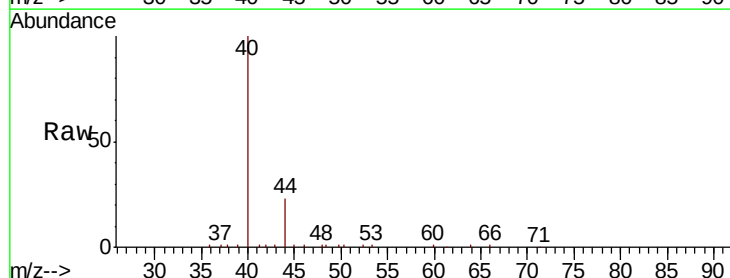
Acq: 26 Mar 2019 17:58

Tgt Ion: 50 Resp: 487

Ion Ratio Lower Upper

50 100

52 25.5 26.2 39.2#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

300

250

200

150

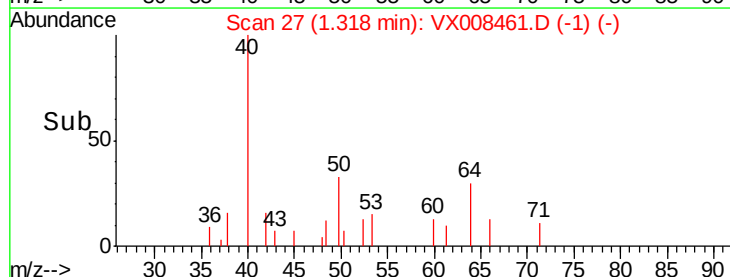
100

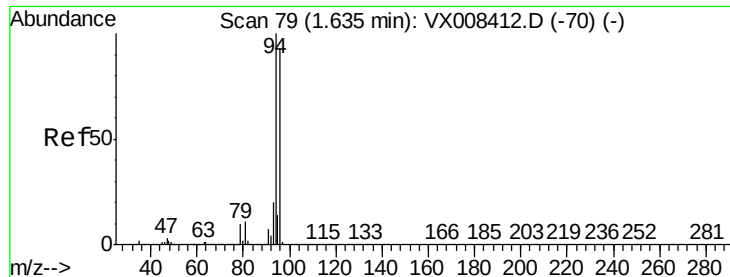
50

0

Time-->

1.30 1.35





#5

Bromomethane

Concen: 2.102 ug/l

RT: 1.65 min Scan# 81

Delta R.T. 0.01 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

Instrument :

MSVOA_X

ClientSampleId :

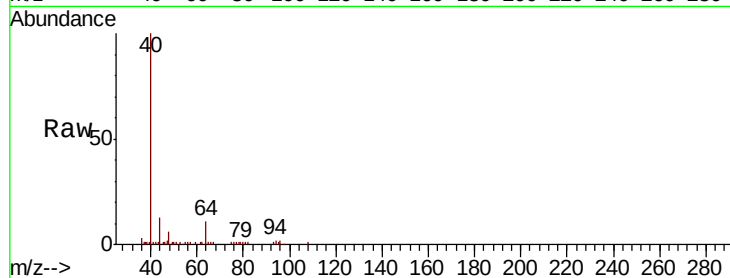
TB-2019.03.21RE

Tot Ion: 94 Resp: 635

Ion Ratio Lower Upper

94 100

96 70.9 74.8 112.2#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.65

250

200

150

100

50

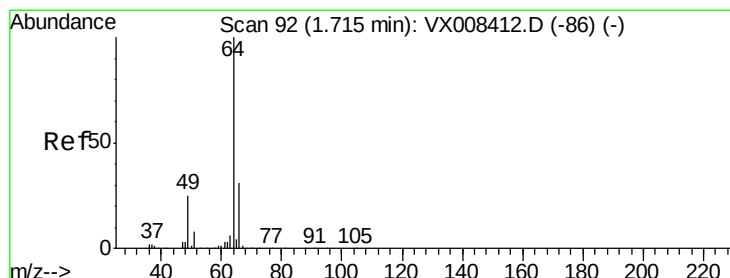
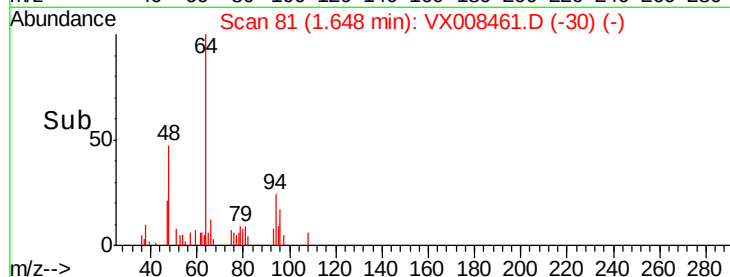
0

1.60

1.65

1.70

Time-->



#6

Chloroethane

Concen: 1.672 ug/l

RT: 1.62 min Scan# 76

Delta R.T. -0.10 min

Lab File: VX008461.D

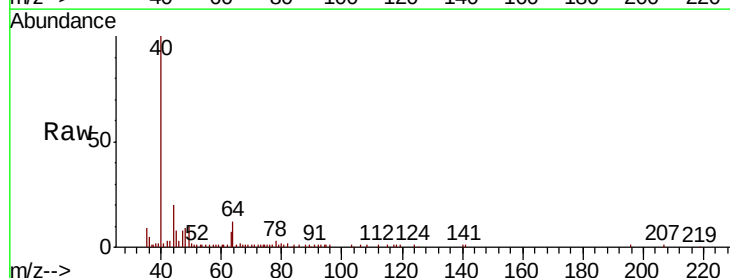
Acq: 26 Mar 2019 17:58

Tgt Ion: 64 Resp: 3928

Ion Ratio Lower Upper

64 100

66 10.2 25.1 37.7#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

1500

1000

500

0

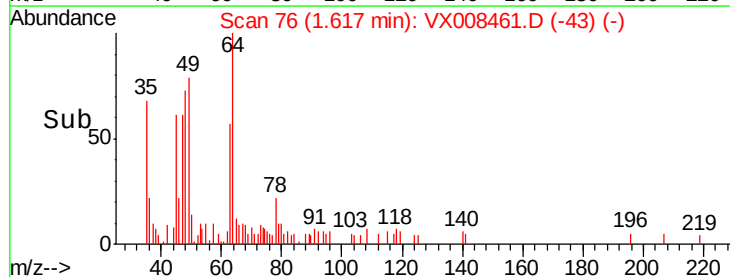
1.50

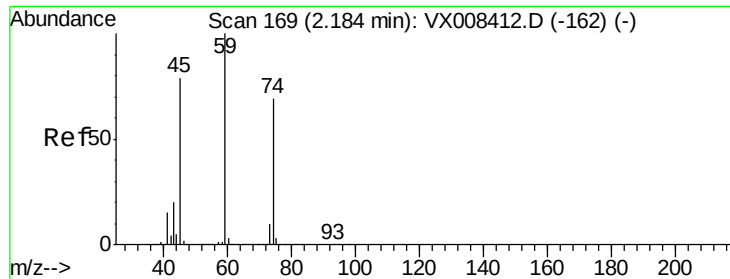
1.55

1.60

1.65

Time-->





#8

Diethyl Ether

Concen: 0.536 ug/l

RT: 2.18 min Scan# 169

Delta R.T. -0.00 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

Instrument :

MSVOA_X

ClientSampled :

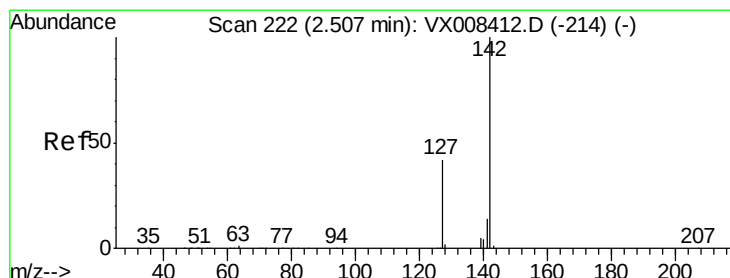
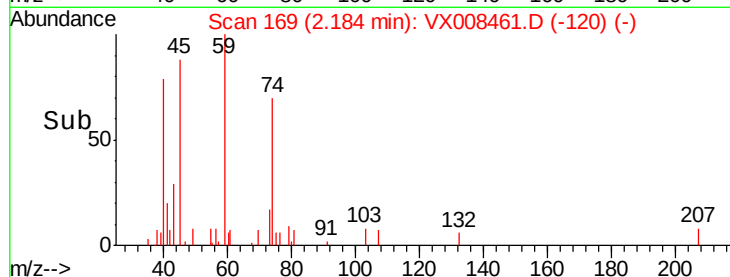
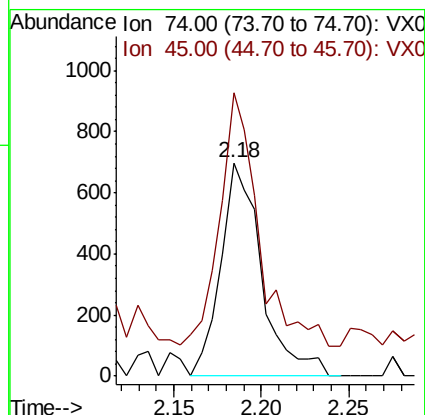
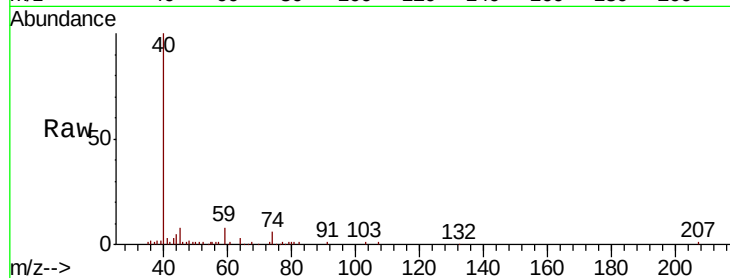
TB-2019.03.21RE

Tot Ion: 74 Resp: 1139

Ion Ratio Lower Upper

74 100

45 114.7 56.4 169.2



#10

Methyl Iodide

Concen: 4.293 ug/l

RT: 2.51 min Scan# 223

Delta R.T. 0.01 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

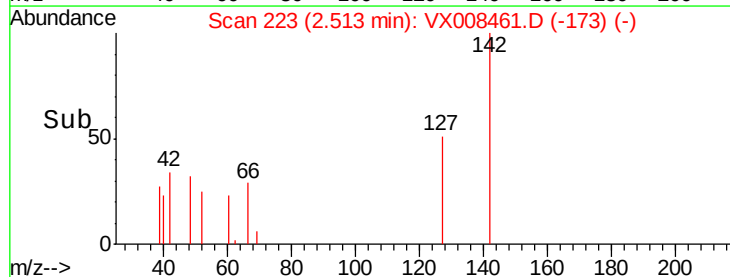
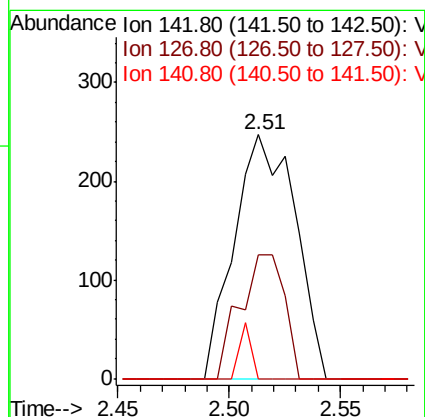
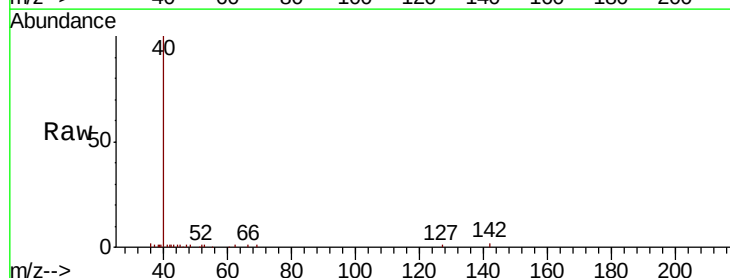
Tgt Ion: 142 Resp: 471

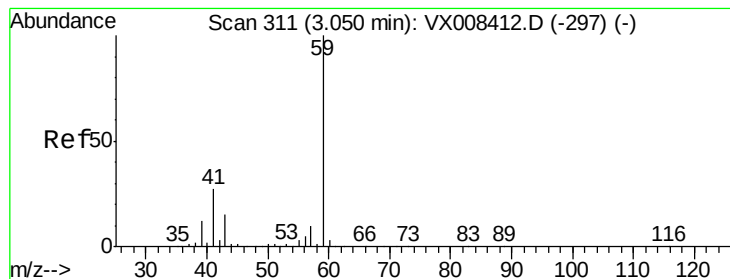
Ion Ratio Lower Upper

142 100

127 37.2 33.6 50.4

141 4.2 11.3 16.9#



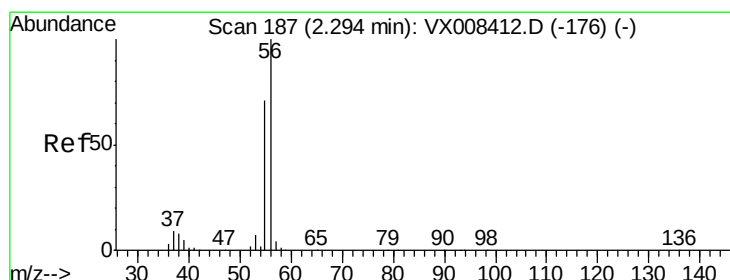
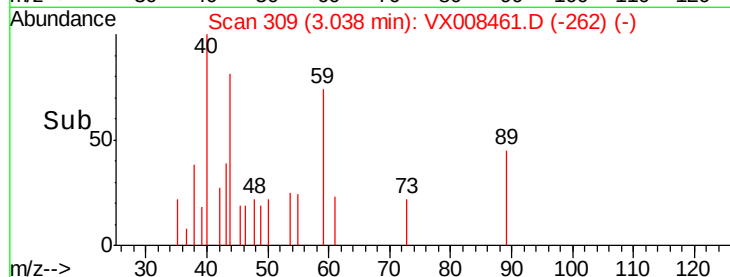
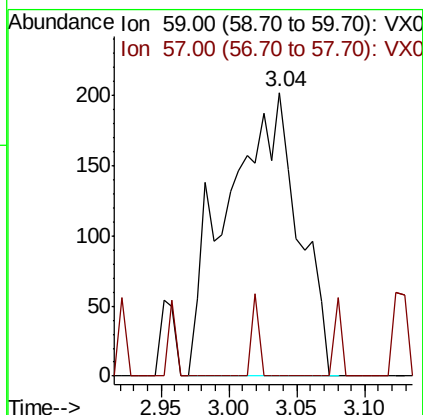
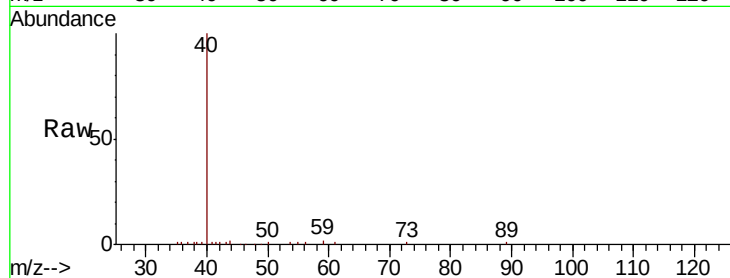


#11

Tert butyl alcohol
Concen: 0.906 ug/l
RT: 3.04 min Scan# 309
Delta R.T. -0.01 min
Lab File: VX008461.D
Acq: 26 Mar 2019 17:58

Instrument :
MSVOA_X
ClientSampled :
TB-2019.03.21RE

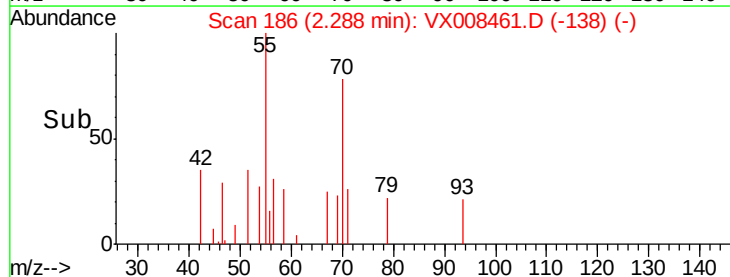
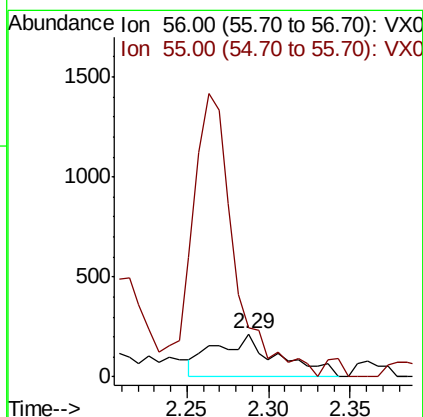
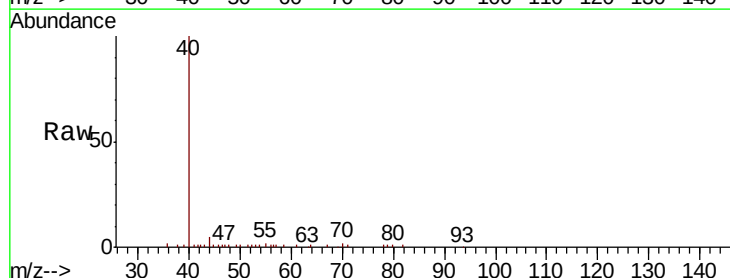
Tot Ion: 59 Resp: 733
Ion Ratio Lower Upper
59 100
57 3.0 8.2 12.4#

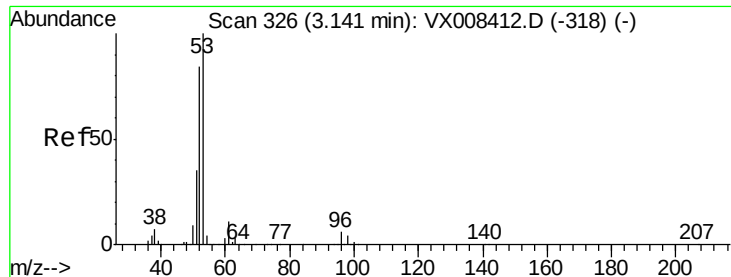


#13

Acrolein
Concen: 0.990 ug/l
RT: 2.29 min Scan# 186
Delta R.T. -0.01 min
Lab File: VX008461.D
Acq: 26 Mar 2019 17:58

Tgt Ion: 56 Resp: 582
Ion Ratio Lower Upper
56 100
55 0.0 56.5 84.7#





#15

Acrylonitrile

Concen: 0.335 ug/l

RT: 3.14 min Scan# 326

Delta R.T. -0.00 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

Instrument :

MSVOA_X

ClientSampleId :

TB-2019.03.21RE

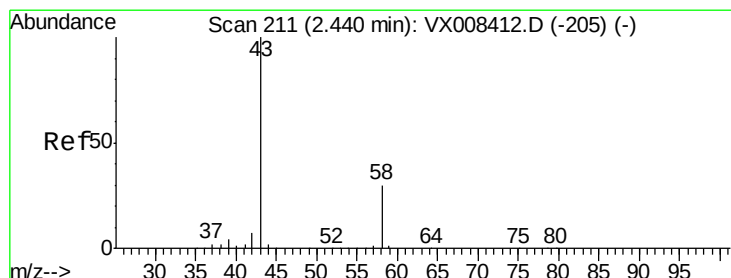
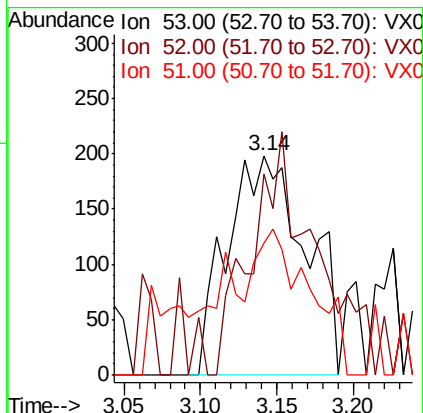
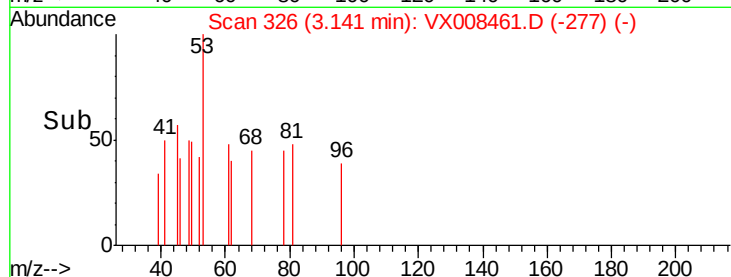
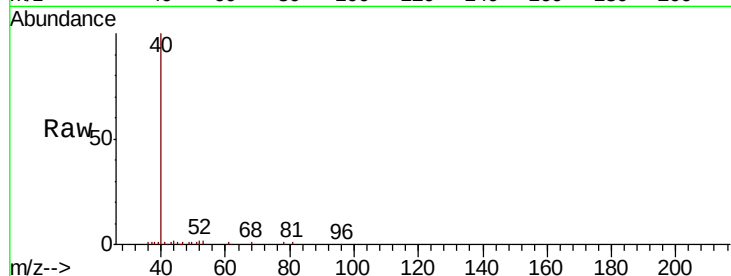
Tot Ion: 53 Resp: 711

Ion Ratio Lower Upper

53 100

52 89.9 66.5 99.7

51 46.7 28.3 42.5#



#16

Acetone

Concen: 4.402 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.00 min

Lab File: VX008461.D

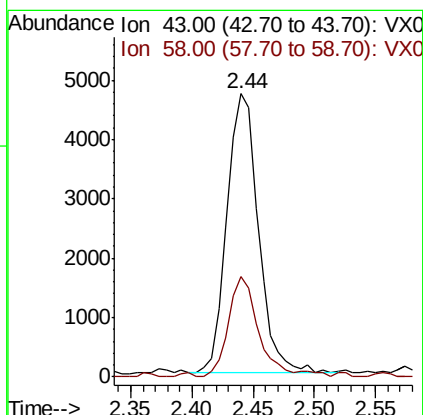
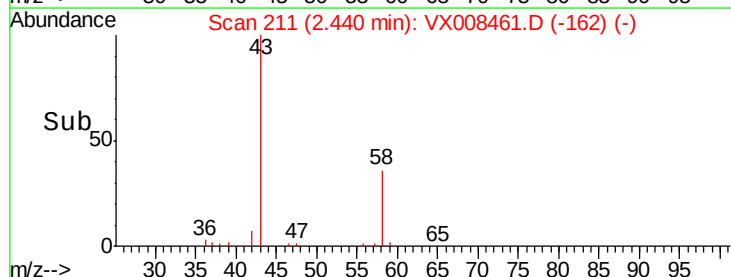
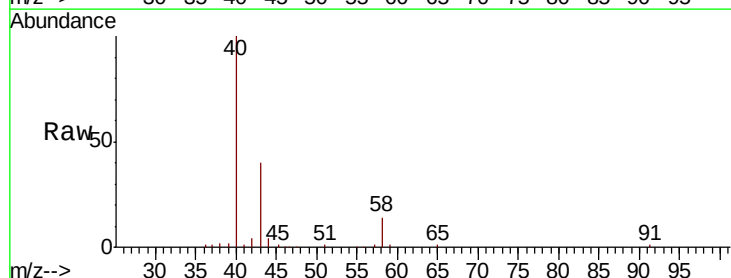
Acq: 26 Mar 2019 17:58

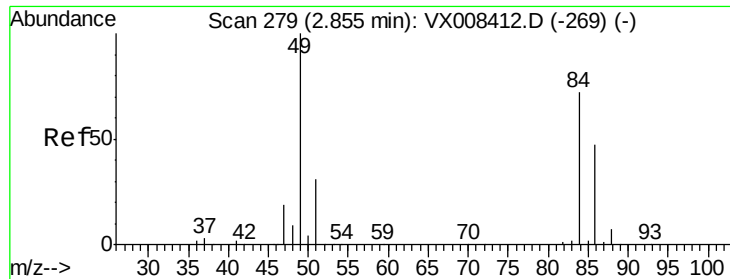
Tgt Ion: 43 Resp: 8403

Ion Ratio Lower Upper

43 100

58 34.7 24.2 36.2

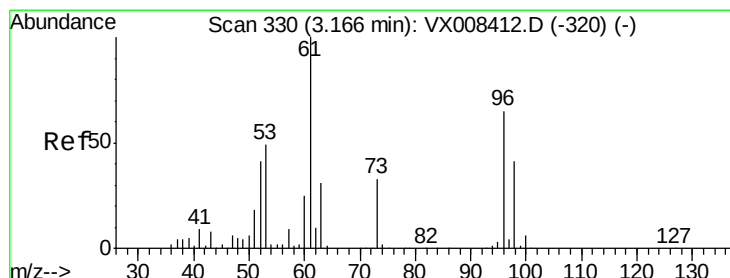
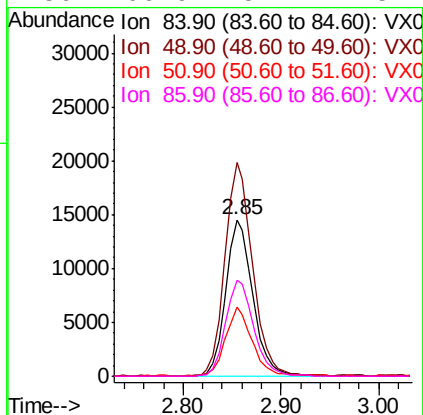
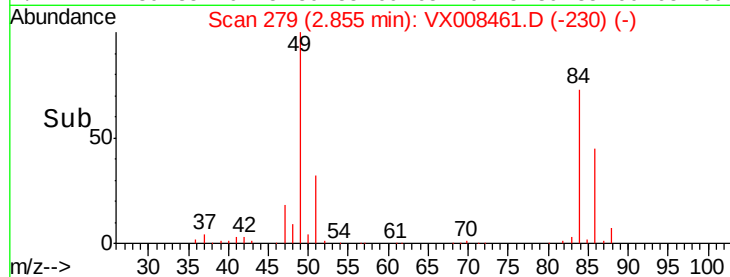
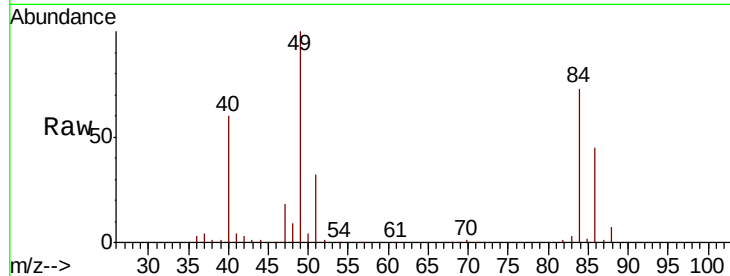




#20
Methylene Chloride
Concen: 8.419 ug/l
RT: 2.85 min Scan# 279
Delta R.T. 0.00 min
Lab File: VX008461.D
Acq: 26 Mar 2019 17:58

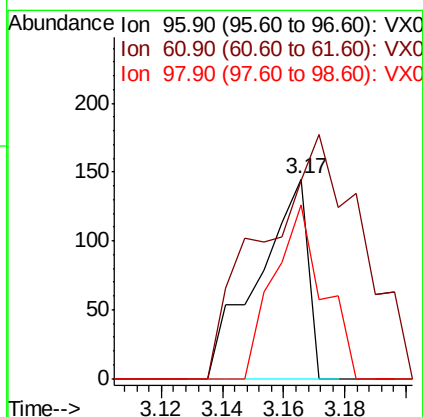
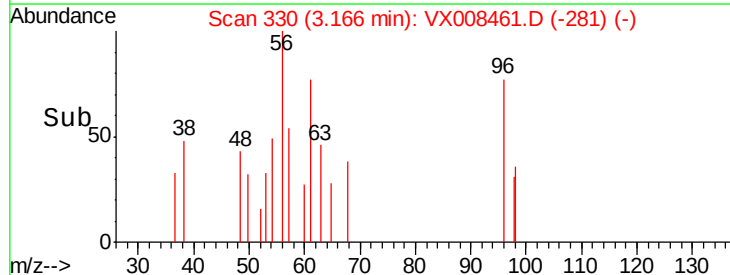
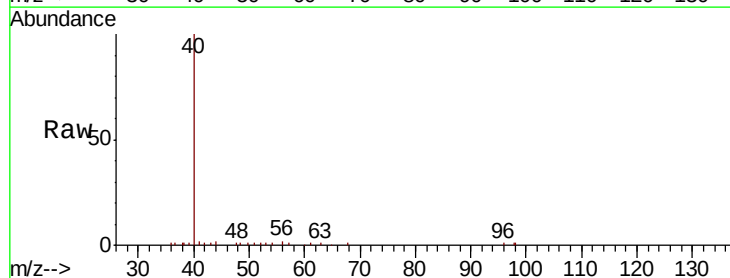
Instrument :
MSVOA_X
ClientSampleId :
TB-2019.03.21RE

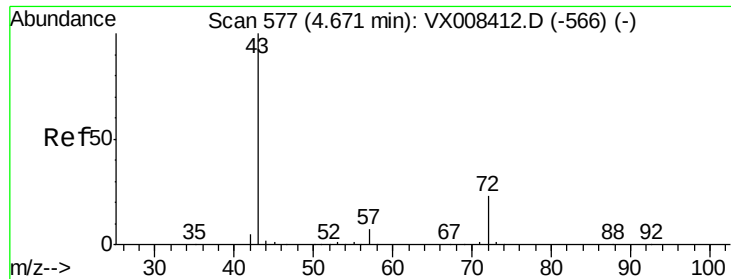
Tot Ion:	84	Resp:	27884
Ion	Ratio	Lower	Upper
84	100		
49	135.9	110.6	165.8
51	43.0	33.9	50.9
86	60.9	52.2	78.2



#21
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 3.17 min Scan# 330
Delta R.T. 0.00 min
Lab File: VX008461.D
Acq: 26 Mar 2019 17:58

Tgt Ion:	96	Resp:	163
Ion	Ratio	Lower	Upper
96	100		
61	99.3	122.6	184.0#
98	86.9	50.9	76.3#





#25

2-Butanone

Concen: 0.887 ug/l

RT: 4.69 min Scan# 580

Delta R.T. 0.02 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

Instrument :

MSVOA_X

ClientSampled :

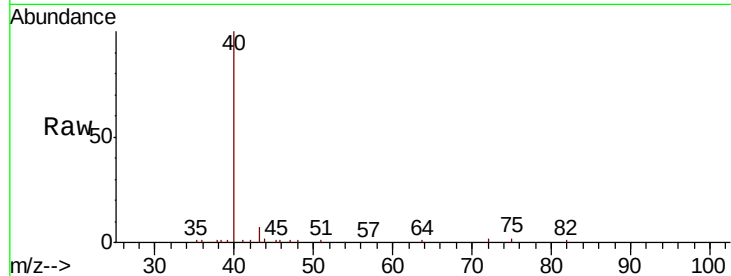
TB-2019.03.21RE

Tot Ion: 43 Resp: 2713

Ion Ratio Lower Upper

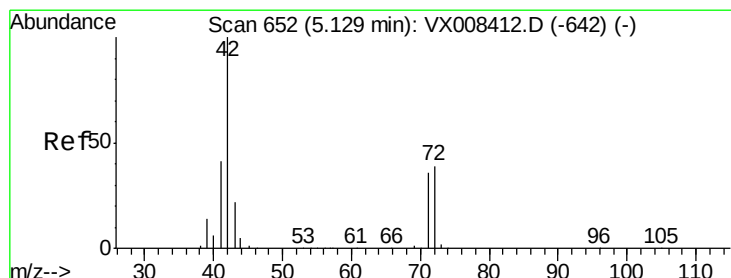
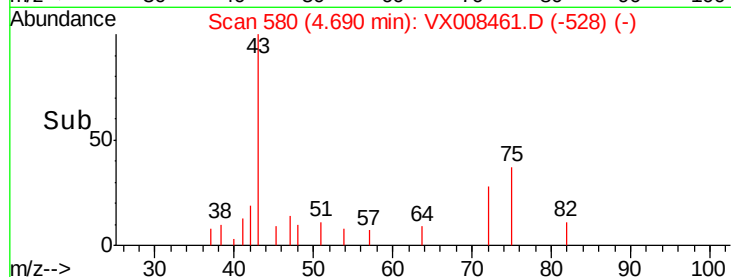
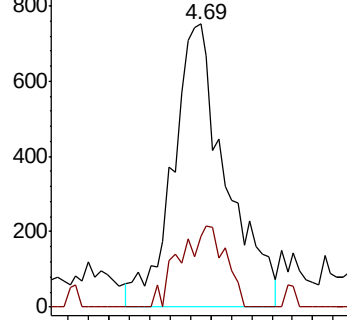
43 100

72 27.2 18.6 28.0



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0



#29

Tetrahydrofuran

Concen: 0.625 ug/l

RT: 5.15 min Scan# 656

Delta R.T. 0.02 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

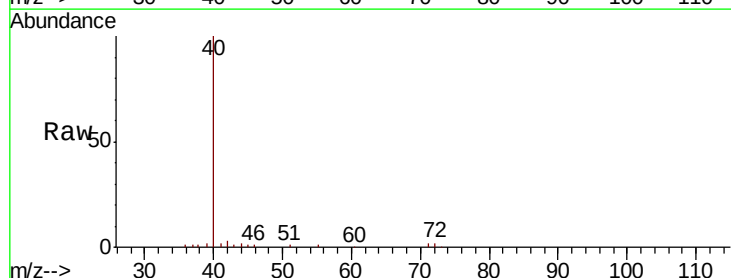
Tgt Ion: 42 Resp: 1261

Ion Ratio Lower Upper

42 100

72 0.0 31.4 47.2#

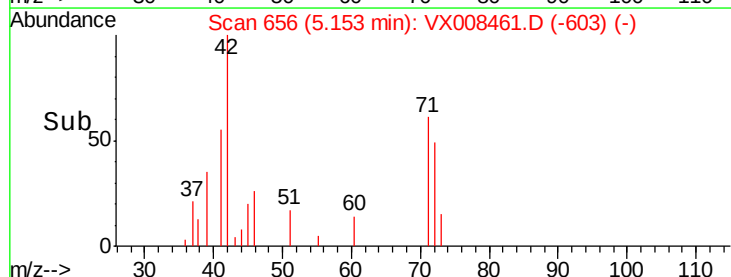
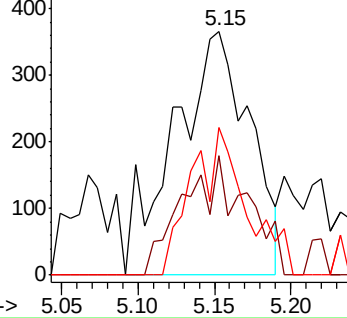
71 25.9 29.4 44.2#

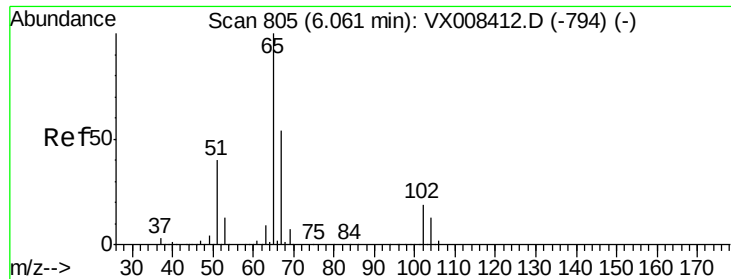


Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0

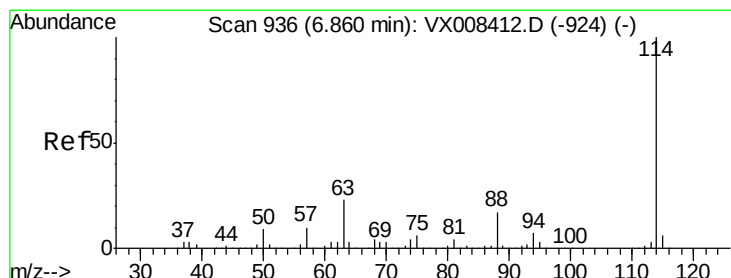
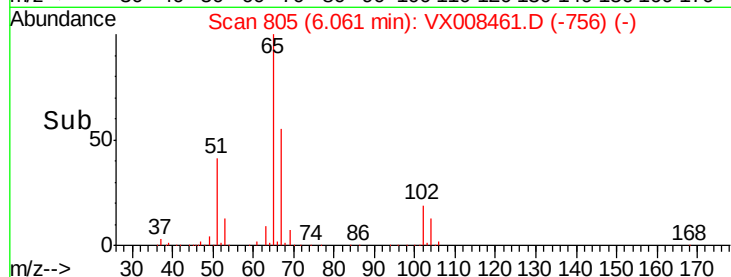
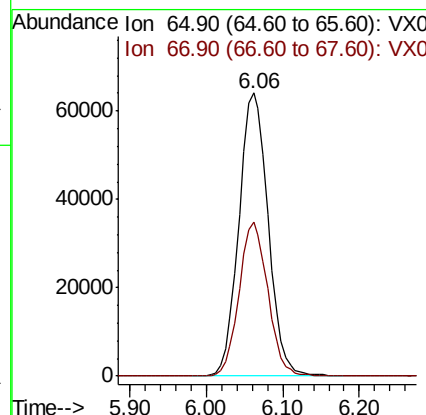
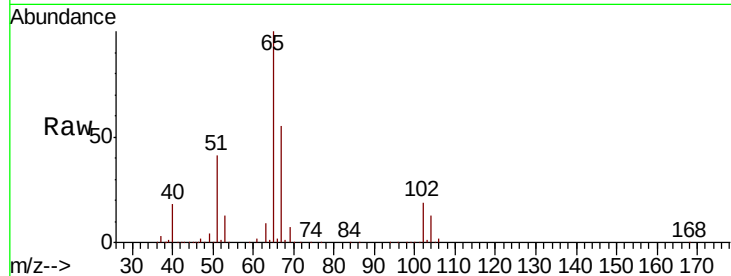




#33
 1,2-Dichloroethane-d4
 Concen: 46.552 ug/l
 RT: 6.06 min Scan# 805
 Delta R.T. -0.00 min
 Lab File: VX008461.D
 Acq: 26 Mar 2019 17:58

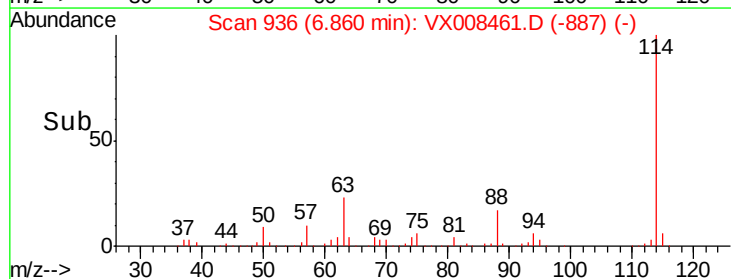
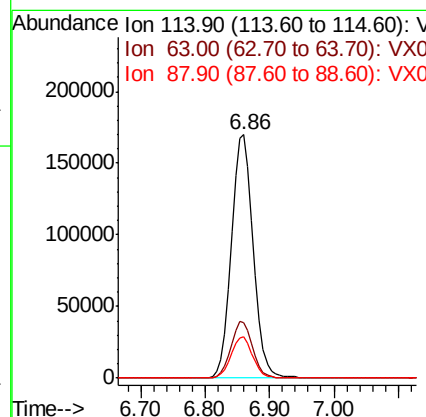
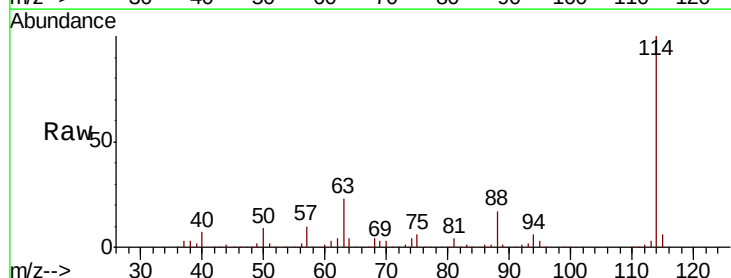
Instrument :
 MSVOA_X
 ClientSampleId :
 TB-2019.03.21RE

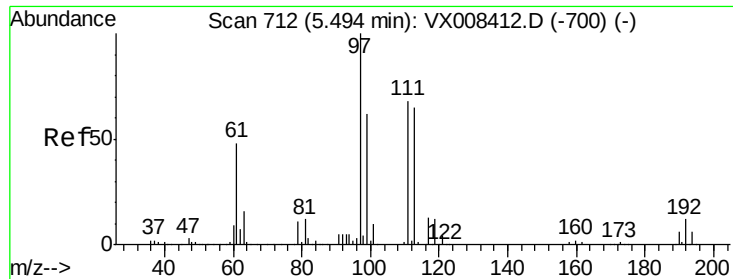
Tot Ion: 65 Resp: 170009
 Ion Ratio Lower Upper
 65 100
 67 53.6 0.0 109.4



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.86 min Scan# 936
 Delta R.T. -0.00 min
 Lab File: VX008461.D
 Acq: 26 Mar 2019 17:58

Tgt Ion: 114 Resp: 406572
 Ion Ratio Lower Upper
 114 100
 63 22.7 0.0 46.4
 88 16.8 0.0 33.2

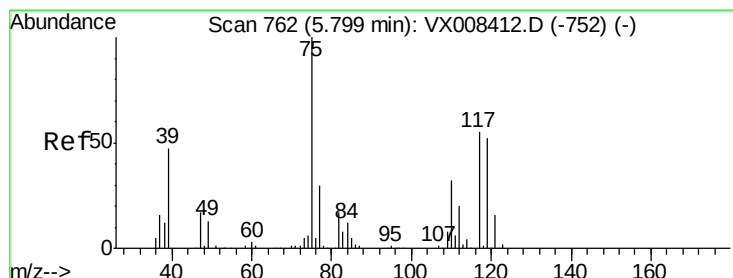
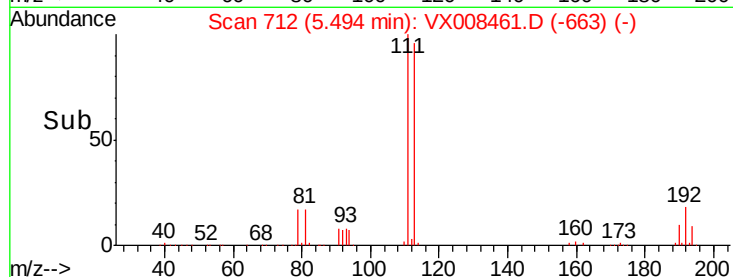
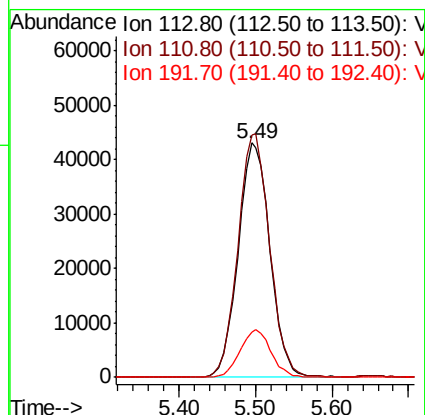
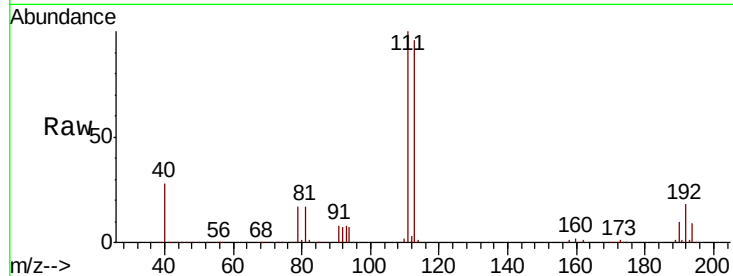




#35
 Dibromofluoromethane
 Concen: 46.782 ug/l
 RT: 5.49 min Scan# 712
 Delta R.T. -0.00 min
 Lab File: VX008461.D
 Acq: 26 Mar 2019 17:58

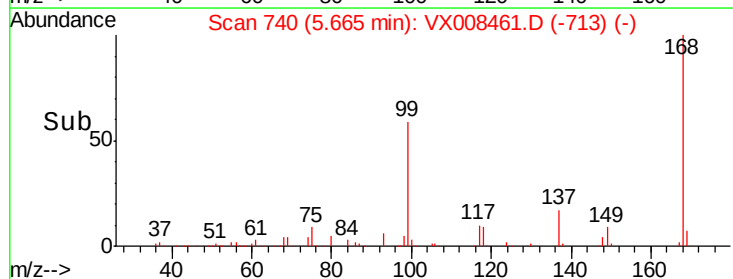
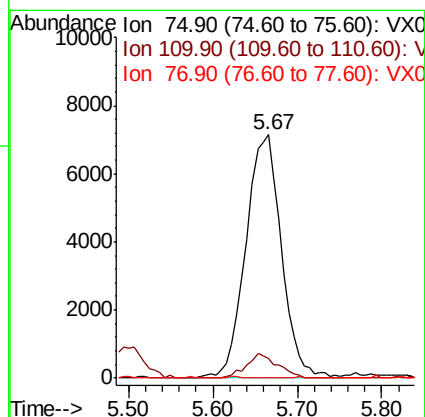
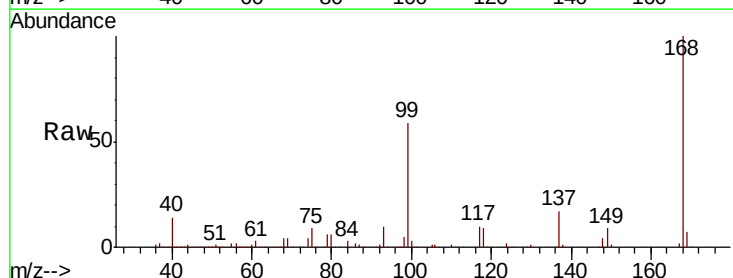
Instrument :
 MSVOA_X
 ClientSampleId :
 TB-2019.03.21RE

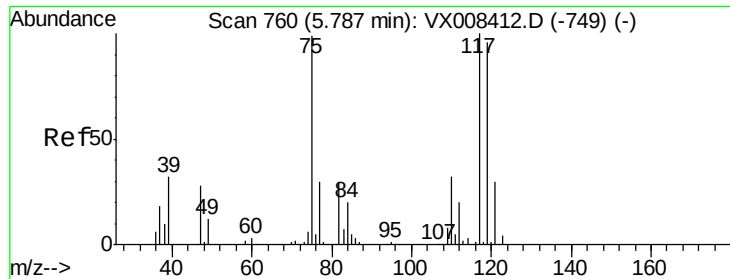
Tot Ion	Ratio	Lower	Upper
113	100		
111	103.4	83.0	124.4
192	19.8	15.6	23.4



#36
 1,1-Dichloropropene
 Concen: 4.732 ug/l
 RT: 5.67 min Scan# 740
 Delta R.T. -0.13 min
 Lab File: VX008461.D
 Acq: 26 Mar 2019 17:58

Tgt Ion	Ratio	Lower	Upper
75	100		
110	8.7	16.6	49.7#
77	0.0	24.2	36.2#





#38

Carbon Tetrachloride

Concen: 6.564 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

Instrument :

MSVOA_X

ClientSampleId :

TB-2019.03.21RE

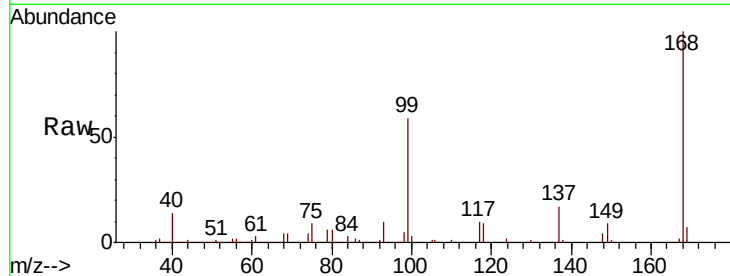
Tot Ion:117 Resp: 23747

Ion Ratio Lower Upper

117 100

119 4.2 76.7 115.1#

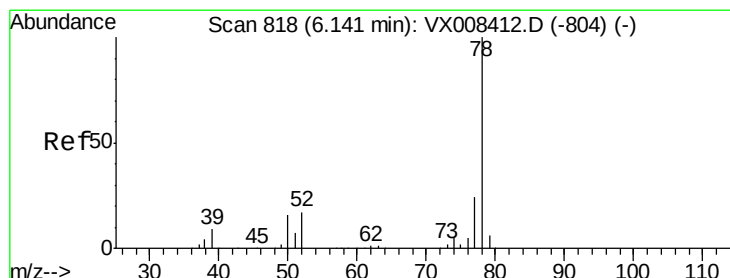
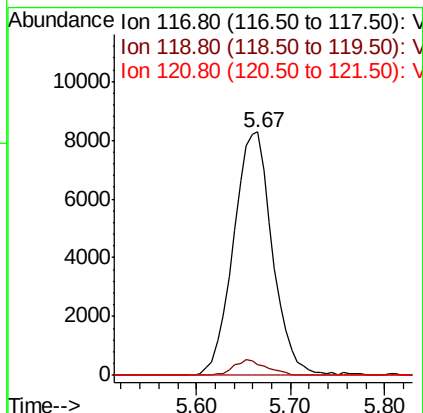
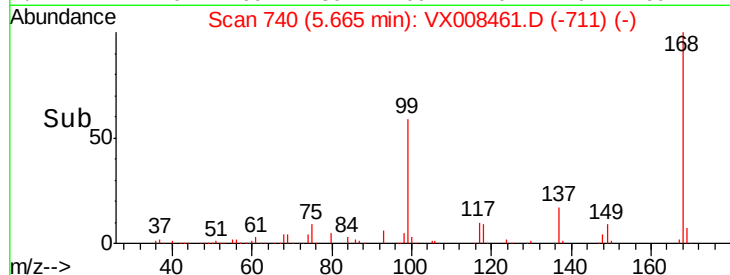
121 0.0 24.3 36.5#



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



#40

Benzene

Concen: 0.268 ug/l

RT: 6.13 min Scan# 817

Delta R.T. -0.01 min

Lab File: VX008461.D

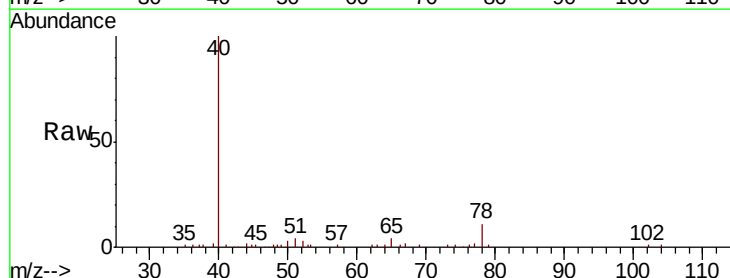
Acq: 26 Mar 2019 17:58

Tgt Ion: 78 Resp: 3475

Ion Ratio Lower Upper

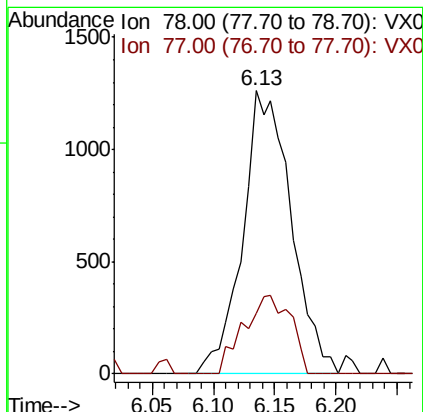
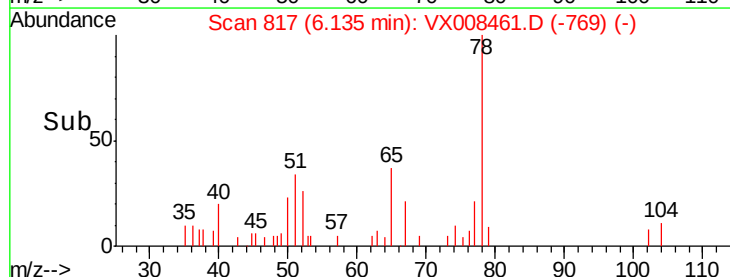
78 100

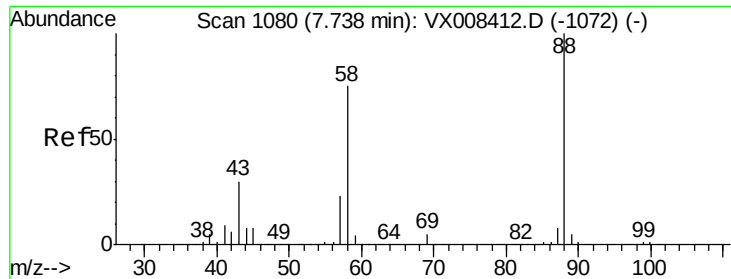
77 21.4 19.3 28.9



Abundance Ion 78.00 (77.70 to 78.70): VX0

Ion 77.00 (76.70 to 77.70): VX0

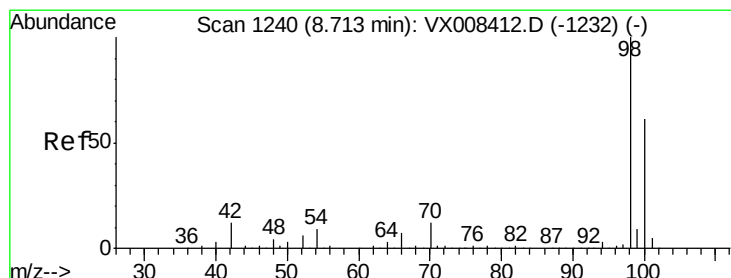
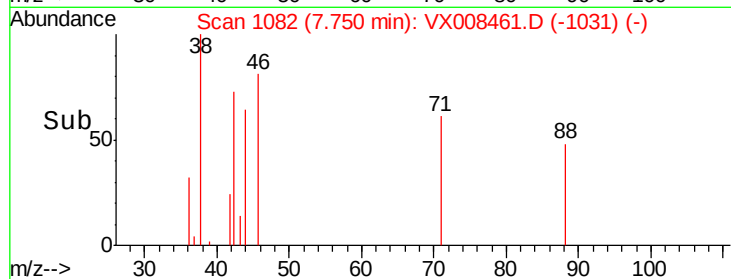
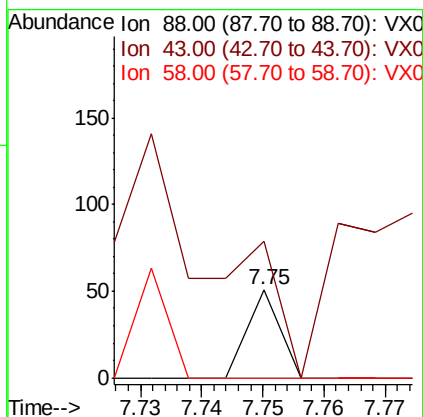
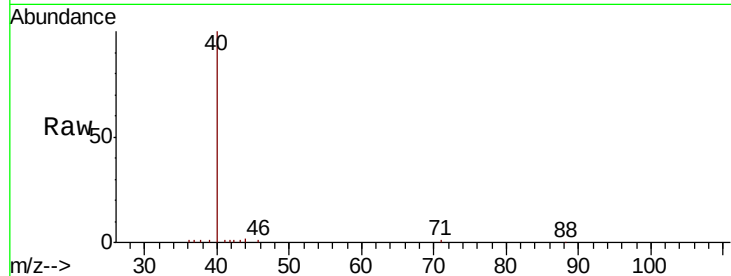




#49
 1,4-Dioxane
 Concen: 0.213 ug/l
 RT: 7.75 min Scan# 1082
 Delta R.T. 0.01 min
 Lab File: VX008461.D
 Acq: 26 Mar 2019 17:58

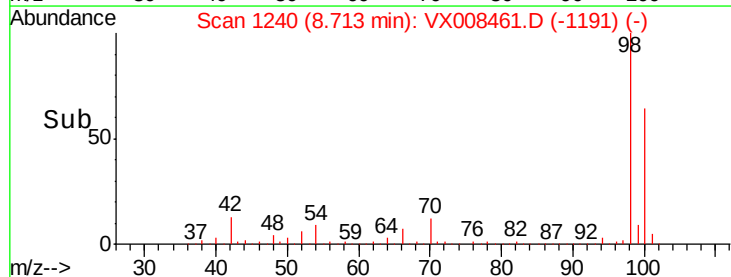
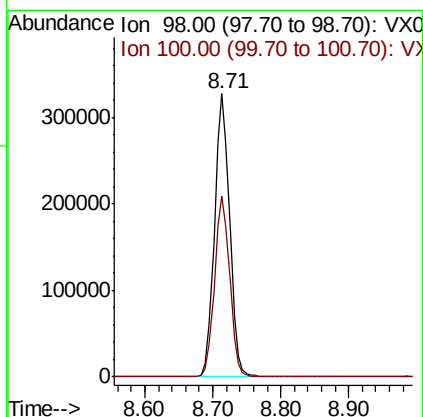
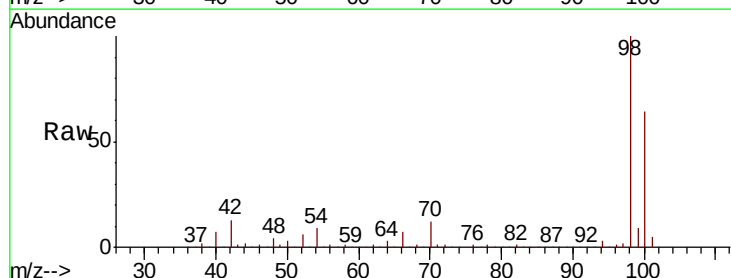
Instrument :
 MSVOA_X
 ClientSampleId :
 TB-2019.03.21RE

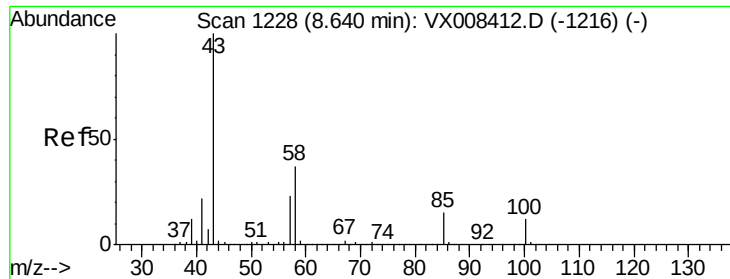
Tot Ion: 88 Resp: 19
 Ion Ratio Lower Upper
 88 100
 43 1126.3 28.6 43.0#
 58 121.1 63.0 94.4#



#50
 Toluene-d8
 Concen: 47.703 ug/l
 RT: 8.71 min Scan# 1240
 Delta R.T. -0.00 min
 Lab File: VX008461.D
 Acq: 26 Mar 2019 17:58

Tgt Ion: 98 Resp: 505669
 Ion Ratio Lower Upper
 98 100
 100 63.9 51.1 76.7





#51

4-Methyl-2-Pentanone

Concen: 0.291 ug/l

RT: 8.64 min Scan# 1228

Delta R.T. -0.00 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

Instrument :

MSVOA_X

ClientSampleId :

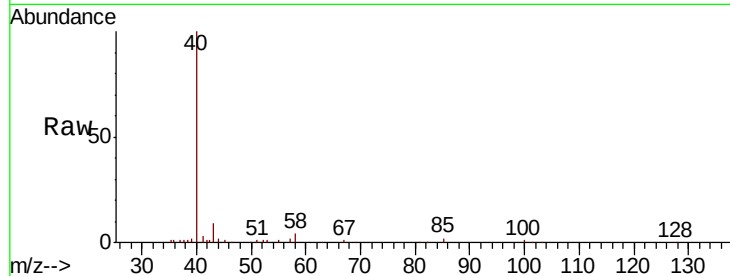
TB-2019.03.21RE

Tot Ion: 43 Resp: 1698

Ion Ratio Lower Upper

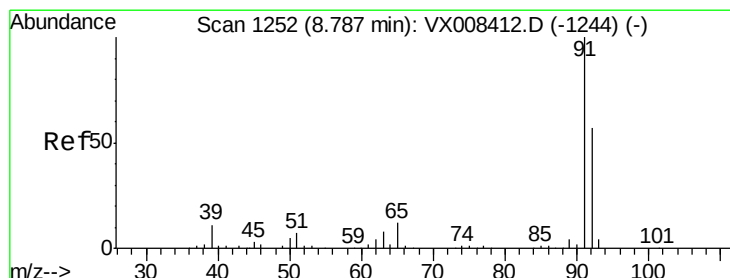
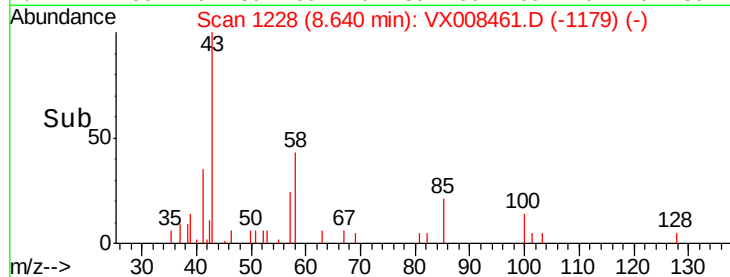
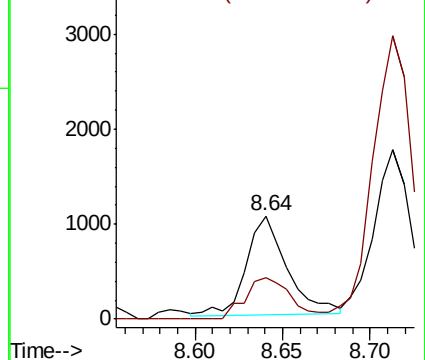
43 100

58 48.2 29.8 44.8#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#52

Toluene

Concen: 1.232 ug/l

RT: 8.79 min Scan# 1252

Delta R.T. -0.00 min

Lab File: VX008461.D

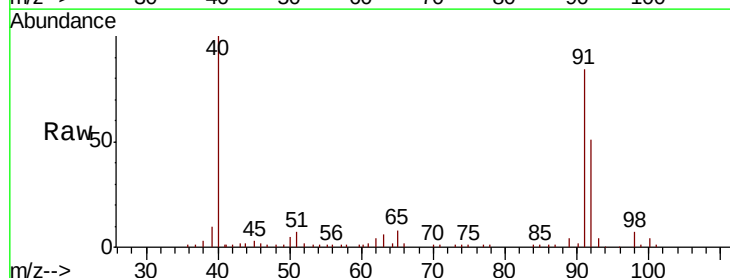
Acq: 26 Mar 2019 17:58

Tgt Ion: 92 Resp: 9557

Ion Ratio Lower Upper

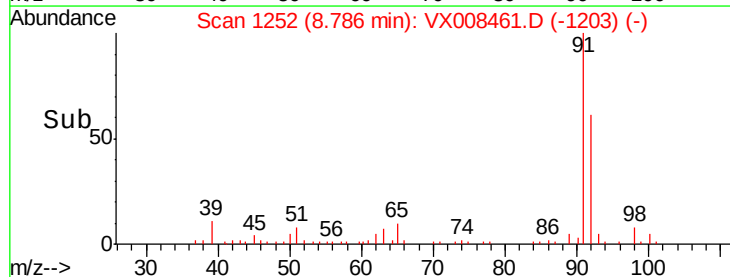
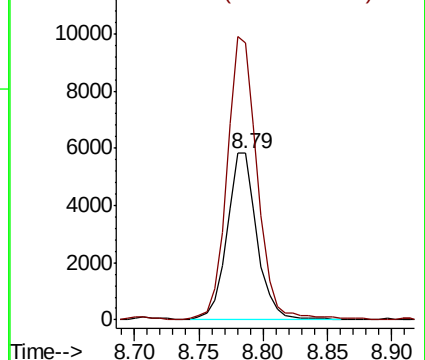
92 100

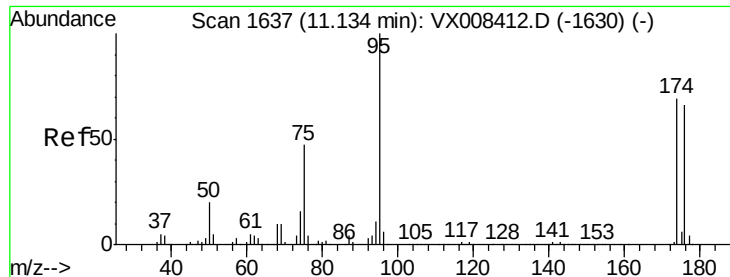
91 170.7 140.2 210.4



Abundance Ion 92.00 (91.70 to 92.70): VX0

Ion 91.00 (90.70 to 91.70): VX0





#62

4-Bromofluorobenzene

Concen: 43.963 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.00 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

Instrument :

MSVOA_X

ClientSampleId :

TB-2019.03.21RE

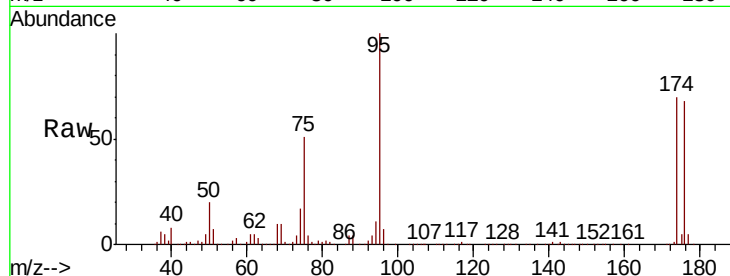
Tot Ion: 95 Resp: 172691

Ion Ratio Lower Upper

95 100

174 74.8 0.0 147.2

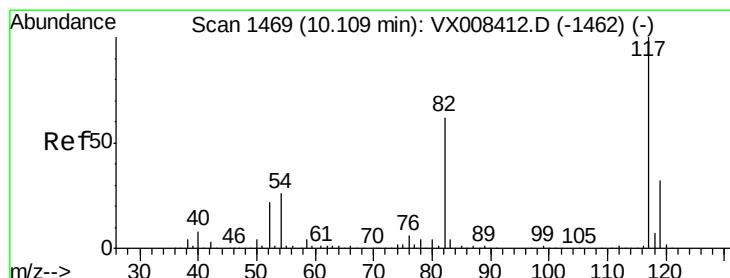
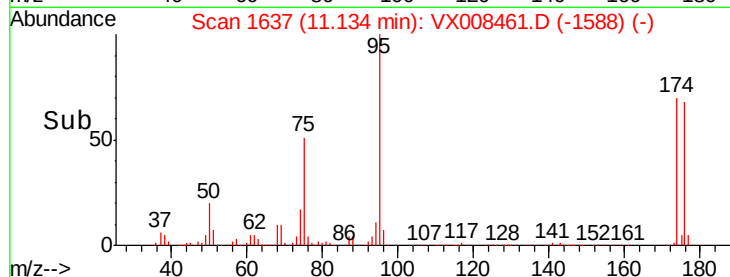
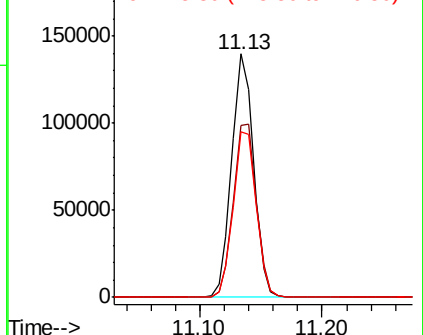
176 71.5 0.0 142.4



Abundance Ion 94.90 (94.60 to 95.60): VX008412.D (-1630) (-)

Ion 173.80 (173.50 to 174.50): VX008412.D (-1630) (-)

Ion 175.80 (175.50 to 176.50): VX008412.D (-1630) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

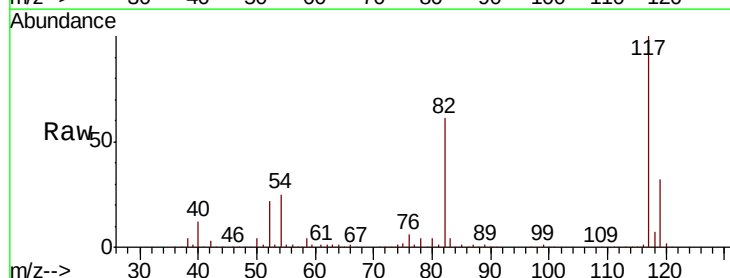
Tgt Ion: 117 Resp: 347666

Ion Ratio Lower Upper

117 100

82 61.4 49.4 74.2

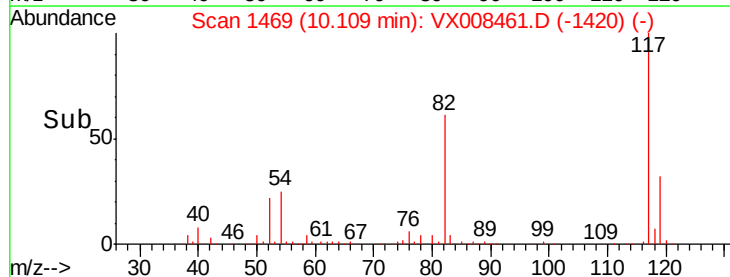
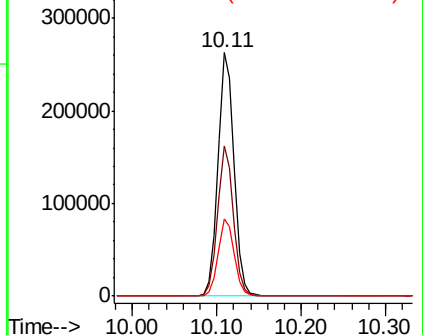
119 31.7 25.4 38.0

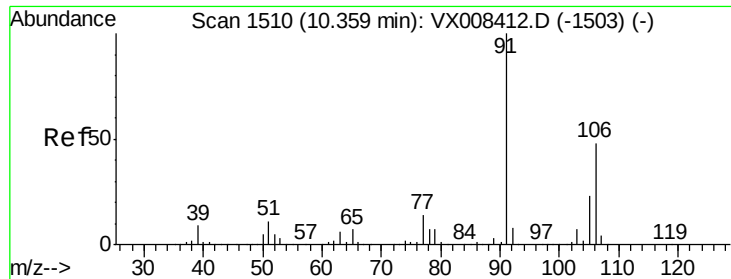


Abundance Ion 116.90 (116.60 to 117.60): VX008412.D (-1462) (-)

Ion 82.00 (81.70 to 82.70): VX008412.D (-1462) (-)

Ion 118.90 (118.60 to 119.60): VX008412.D (-1462) (-)

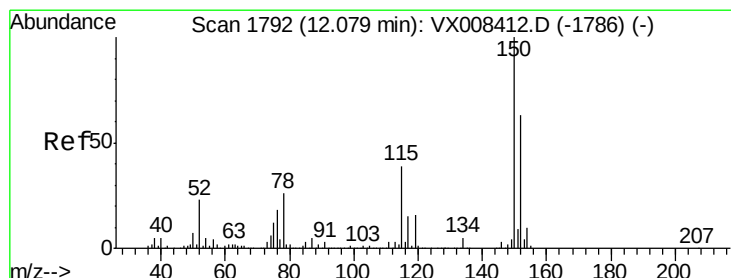
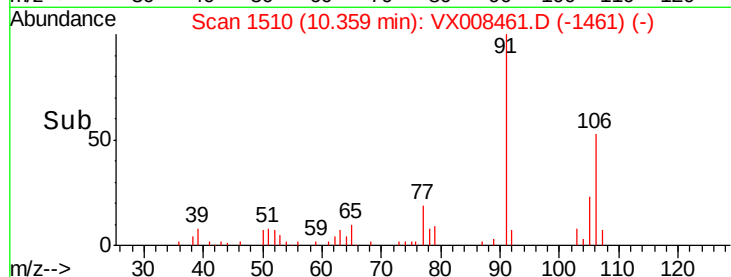
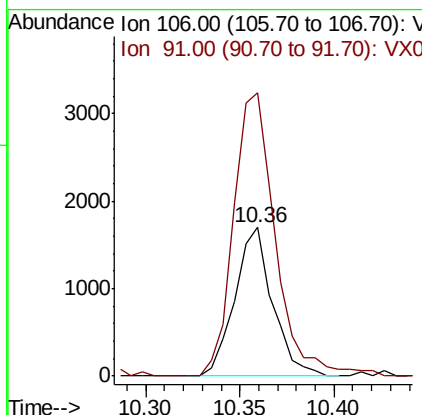
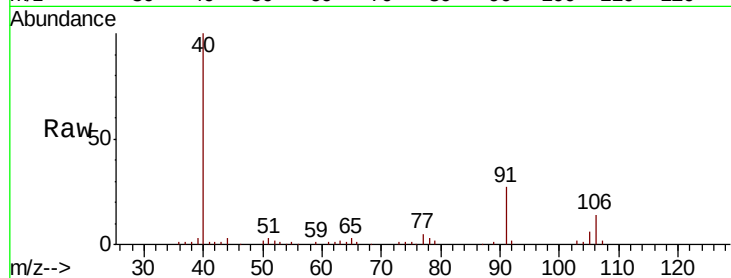




#68
m/p-Xvlenes
Concen: 0.455 ug/l
RT: 10.36 min Scan# 1510
Delta R.T. -0.00 min
Lab File: VX008461.D
Acq: 26 Mar 2019 17:58

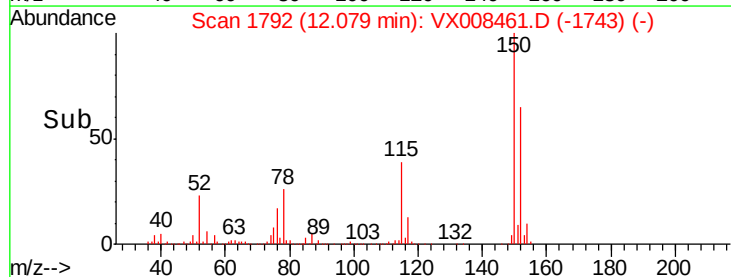
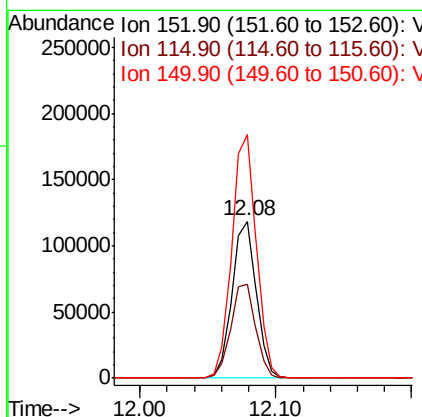
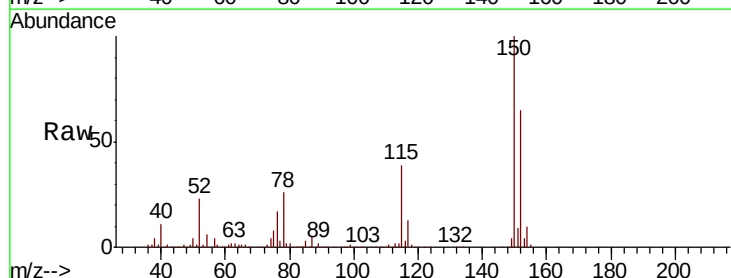
Instrument :
MSVOA_X
ClientSampleId :
TB-2019.03.21RE

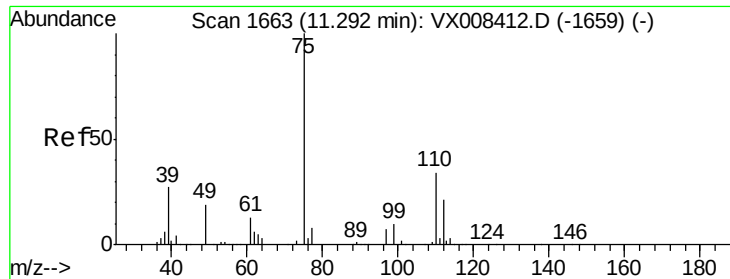
Tot Ion:106 Resp: 2361
Ion Ratio Lower Upper
106 100
91 211.7 168.6 253.0



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.08 min Scan# 1792
Delta R.T. -0.00 min
Lab File: VX008461.D
Acq: 26 Mar 2019 17:58

Tgt Ion:152 Resp: 147247
Ion Ratio Lower Upper
152 100
115 61.4 43.5 130.5
150 156.2 0.0 348.8





#76

1,2,3-Trichloropropane

Concen: 20.224 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

Instrument :

MSVOA_X

ClientSampleId :

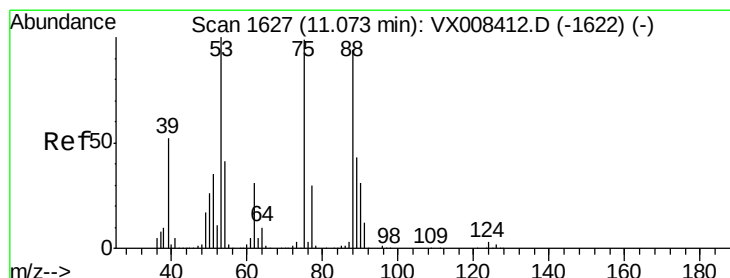
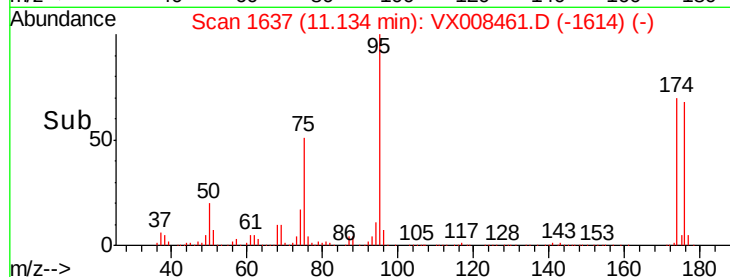
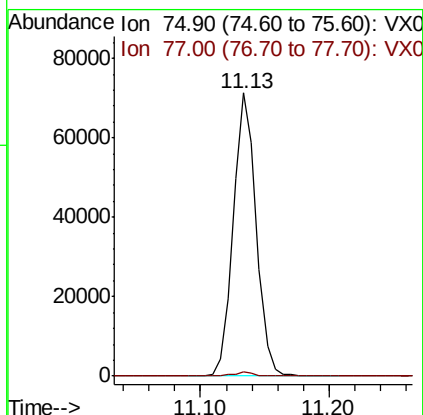
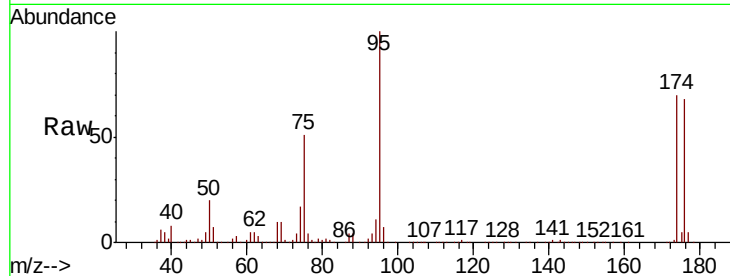
TB-2019.03.21RE

Tot Ion: 75 Resp: 88533

Ion Ratio Lower Upper

75 100

77 1.3 21.9 65.7#



#81

trans-1,4-Dichloro-2-butene

Concen: 64.776 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX008461.D

Acq: 26 Mar 2019 17:58

Tgt Ion: 75 Resp: 88533

Ion Ratio Lower Upper

75 100

53 0.1 82.1 123.1#

89 0.0 34.6 52.0#

