

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX031619\
 Data File : VX008156.D
 Acq On : 16 Mar 2019 22:00
 Operator : JC/SP
 Sample : K1908-04
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 101-102

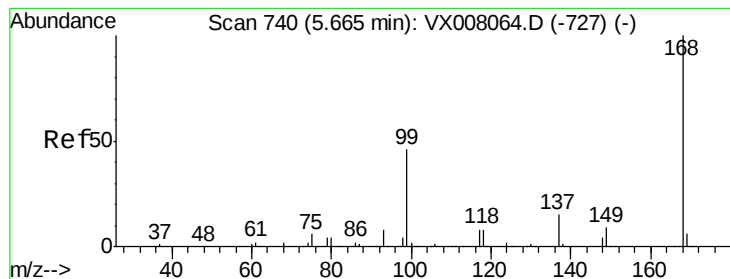
Quant Time: Mar 18 01:19:21 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X031419W.M
 Quant Title : SW846 8260
 QLast Update : Fri Mar 15 03:56:35 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.67	168	318091	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.86	114	429583	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	372788	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	172686	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.07	65	137717	42.92	ug/l	0.00
Spiked Amount			Recovery	=	85.84%	
35) Dibromofluoromethane	5.51	113	128782	47.27	ug/l	0.00
Spiked Amount			Recovery	=	94.54%	
50) Toluene-d8	8.71	98	498177	48.08	ug/l	0.00
Spiked Amount			Recovery	=	96.16%	
62) 4-Bromofluorobenzene	11.13	95	166196	44.78	ug/l	0.00
Spiked Amount			Recovery	=	89.56%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	1.65	94	110	Below Cal	#	65
6) Chloroethane	1.67	64	476	Below Cal	#	83
8) Diethyl Ether	2.20	74	665	0.390	ug/l	98
11) Tert butyl alcohol	3.06	59	374	0.603	ug/l #	73
13) Acrolein	2.30	56	289	0.506	ug/l	86
16) Acetone	2.45	43	8675	5.727	ug/l	96
18) Methyl Acetate	2.78	43	5307	1.621	ug/l #	85
20) Methylene Chloride	2.86	84	5960	2.203	ug/l	94
25) 2-Butanone	4.70	43	2648	1.139	ug/l	95
29) Tetrahydrofuran	5.17	42	744	0.513	ug/l #	89
31) Cyclohexane	5.66	56	4110	0.896	ug/l #	1
36) 1,1-Dichloropropene	5.67	75	18107	5.124	ug/l #	49
38) Carbon Tetrachloride	5.67	117	26079	7.667	ug/l #	16
41) Methacrylonitrile	5.18	41	626	0.283	ug/l #	41
43) Isopropyl Acetate	6.46	43	14457	2.363	ug/l	98
48) Methyl methacrylate	7.68	41	7012	2.195	ug/l #	16
49) 1,4-Dioxane	7.88	88	181	2.627	ug/l #	1
51) 4-Methyl-2-Pentanone	8.62	43	66446	16.482	ug/l #	50
54) cis-1,3-Dichloropropene	8.62	75	36671	8.841	ug/l #	57
57) 1,3-Dichloropropane	9.54	76	8217	1.772	ug/l #	44
59) 2-Hexanone	9.54	43	103255	32.749	ug/l #	52
76) 1,2,3-Trichloropropane	11.13	75	73637	24.553	ug/l #	39
81) trans-1,4-Dichloro-2-buten	11.13	75	73637	69.870	ug/l #	11
95) Naphthalene	13.83	128	13751	1.295	ug/l	99

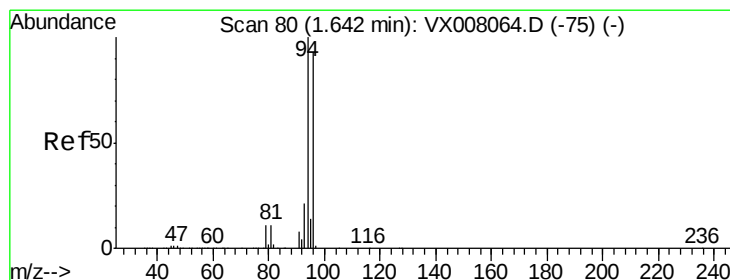
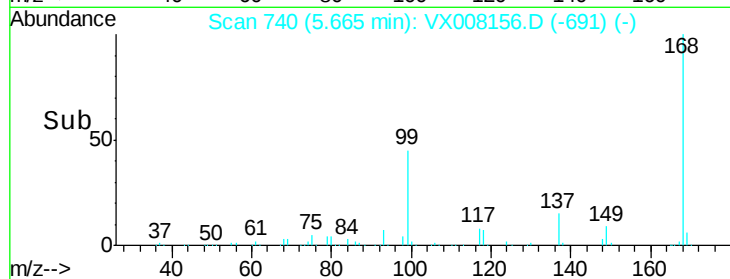
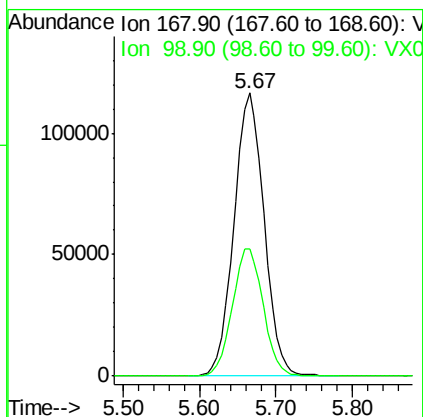
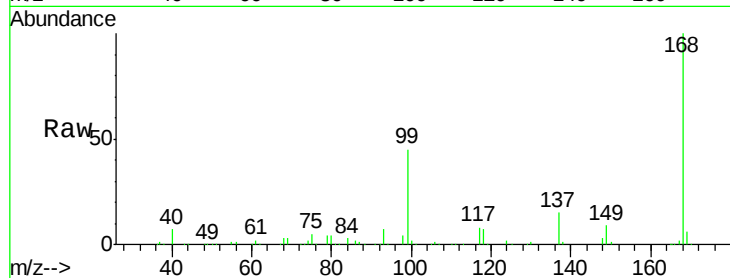
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.67 min Scan# 740
Delta R.T. -0.00 min
Lab File: VX008156.D
Acq: 16 Mar 2019 22:00

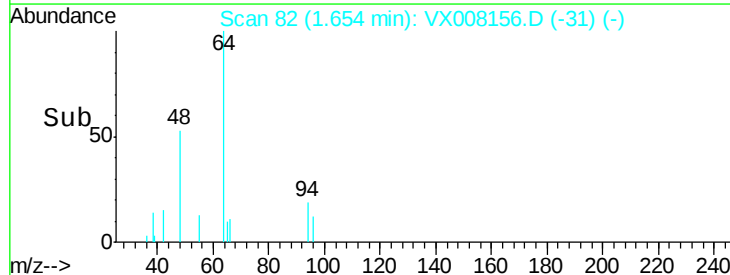
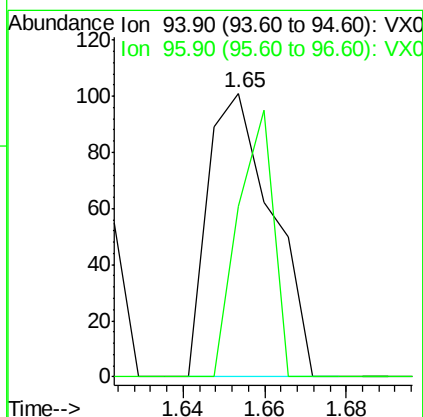
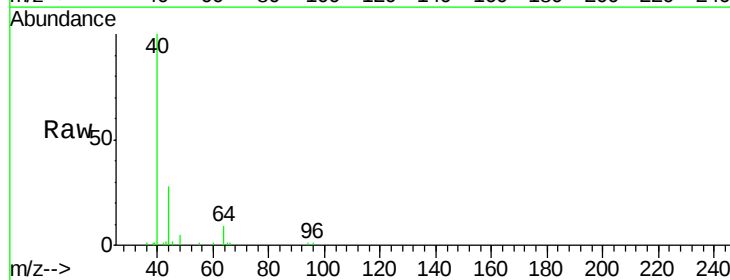
Instrument :
MSVOA_X
ClientSampleId :
101-102

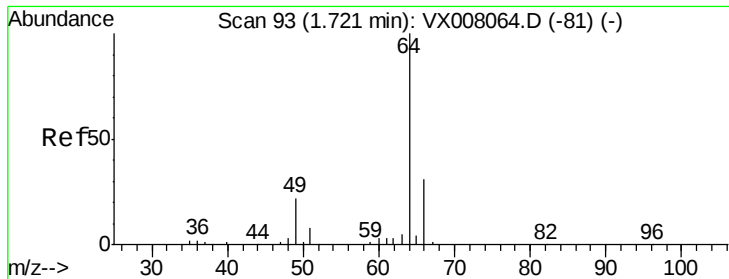
Tot Ion:168 Resp: 318091
Ion Ratio Lower Upper
168 100
99 45.1 37.6 56.4



#5
Bromomethane
Concen: Below Cal
RT: 1.65 min Scan# 82
Delta R.T. 0.01 min
Lab File: VX008156.D
Acq: 16 Mar 2019 22:00

Tgt Ion: 94 Resp: 110
Ion Ratio Lower Upper
94 100
96 60.4 75.5 113.3#





#6

Chloroethane

Concen: Below Cal

RT: 1.67 min Scan# 84

Delta R.T. -0.05 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampled :

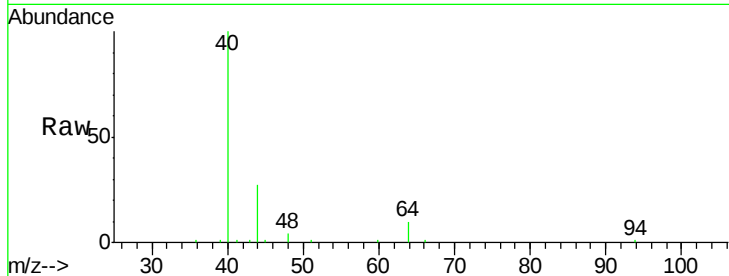
101-102

Tot Ion: 64 Resp: 476

Ion Ratio Lower Upper

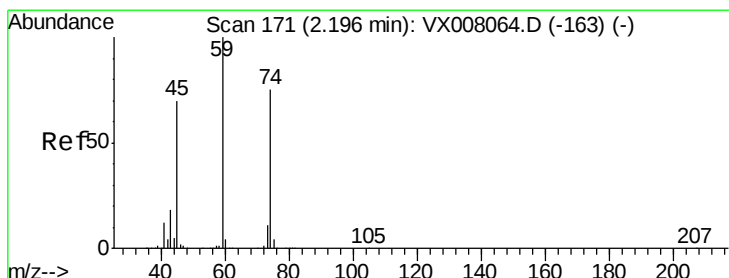
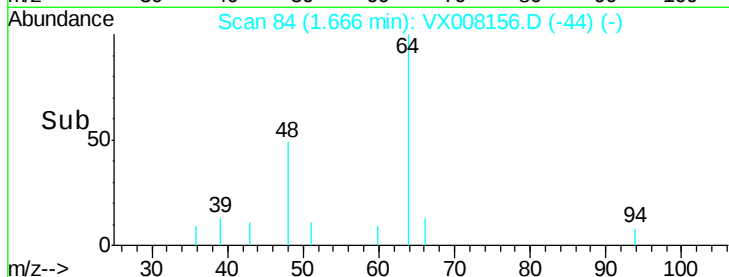
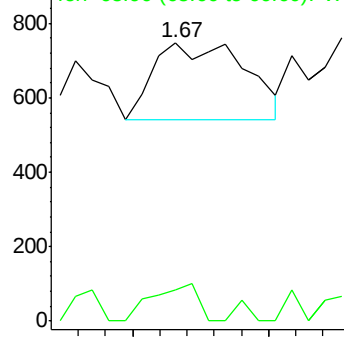
64 100

66 40.8 25.2 37.8#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



#8

Diethyl Ether

Concen: 0.390 ug/l

RT: 2.20 min Scan# 171

Delta R.T. -0.00 min

Lab File: VX008156.D

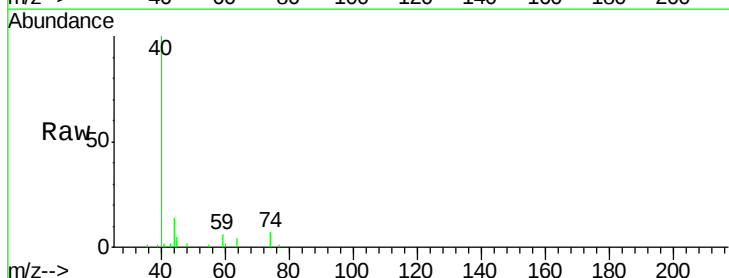
Acq: 16 Mar 2019 22:00

Tgt Ion: 74 Resp: 665

Ion Ratio Lower Upper

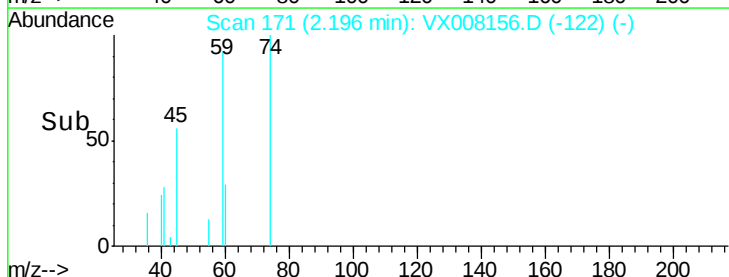
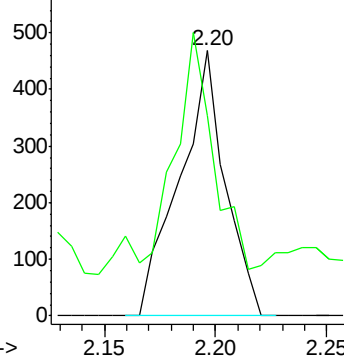
74 100

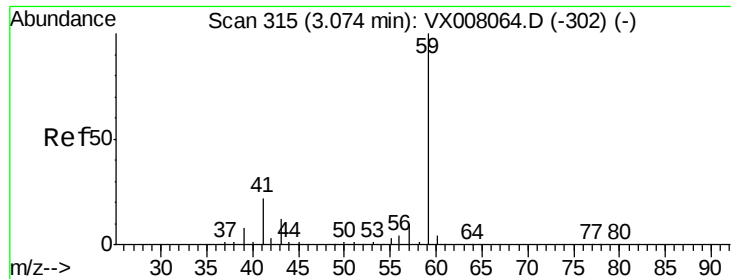
45 106.6 52.1 156.4



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0

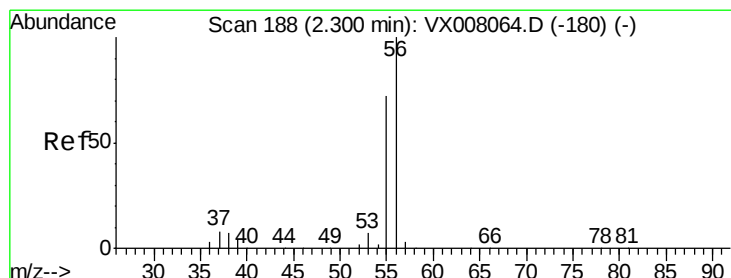
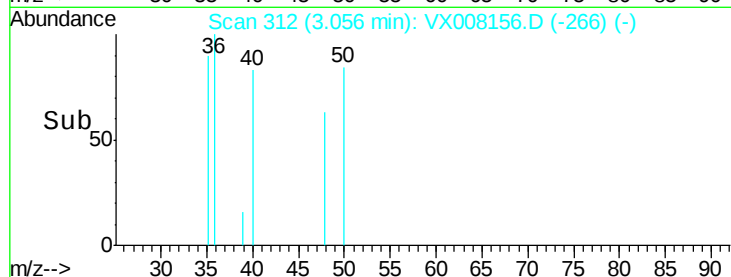
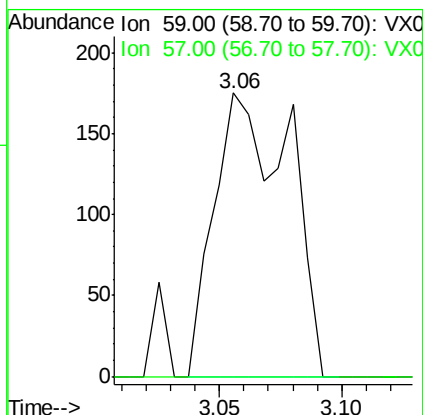
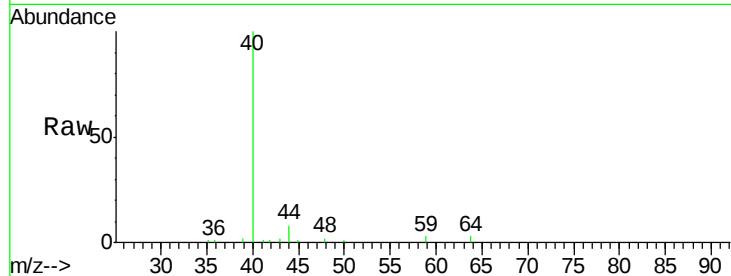




#11
Tert butvl alcohol
Concen: 0.603 ug/l
RT: 3.06 min Scan# 312
Delta R.T. -0.02 min
Lab File: VX008156.D
Acq: 16 Mar 2019 22:00

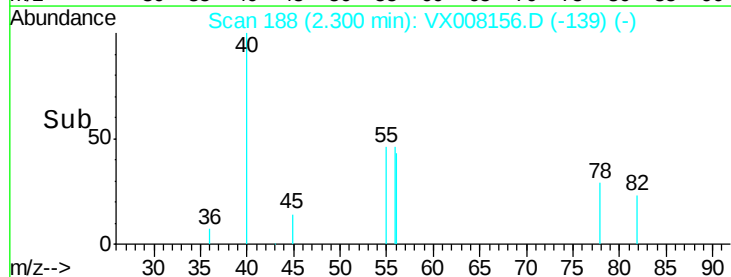
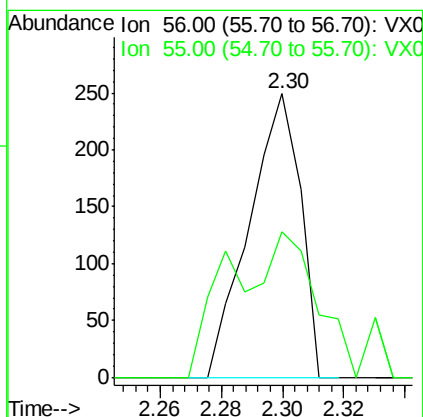
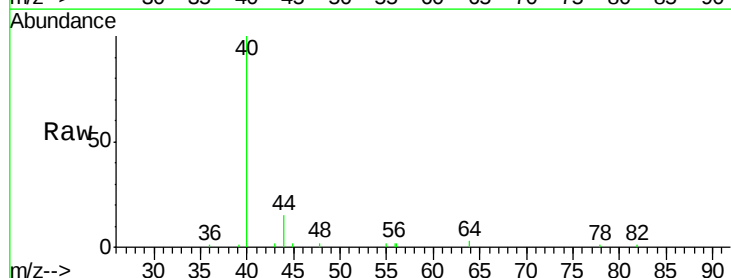
Instrument :
MSVOA_X
ClientSampleId :
101-102

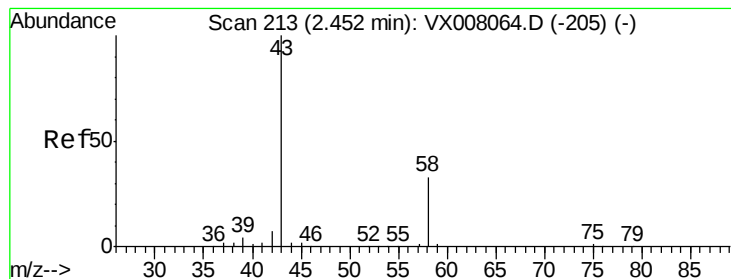
Tot Ion: 59 Resp: 374
Ion Ratio Lower Upper
59 100
57 0.0 8.2 12.2#



#13
Acrolein
Concen: 0.506 ug/l
RT: 2.30 min Scan# 188
Delta R.T. -0.00 min
Lab File: VX008156.D
Acq: 16 Mar 2019 22:00

Tgt Ion: 56 Resp: 289
Ion Ratio Lower Upper
56 100
55 60.9 57.8 86.6





#16

Acetone

Concen: 5.727 ug/l

RT: 2.45 min Scan# 212

Delta R.T. -0.01 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampled :

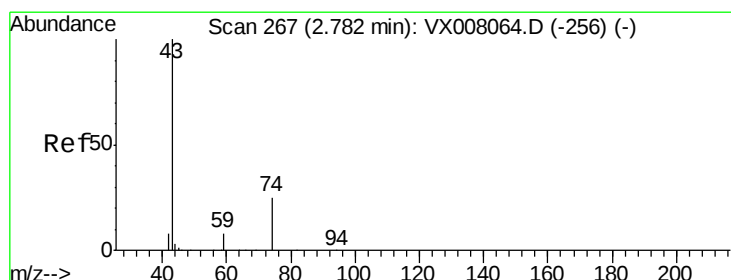
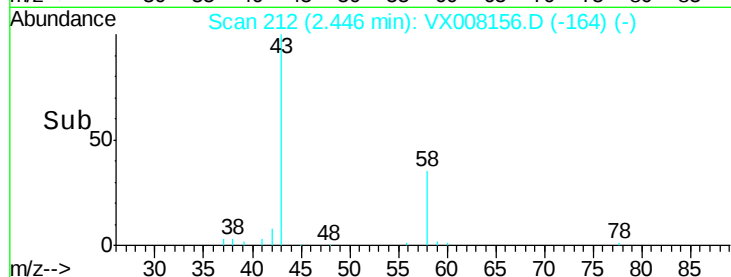
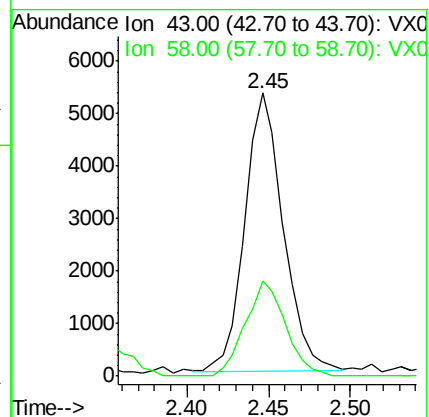
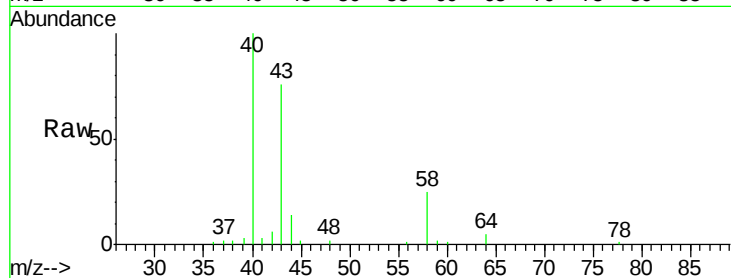
101-102

Tot Ion: 43 Resp: 8675

Ion Ratio Lower Upper

43 100

58 34.3 25.5 38.3



#18

Methyl Acetate

Concen: 1.621 ug/l

RT: 2.78 min Scan# 267

Delta R.T. -0.00 min

Lab File: VX008156.D

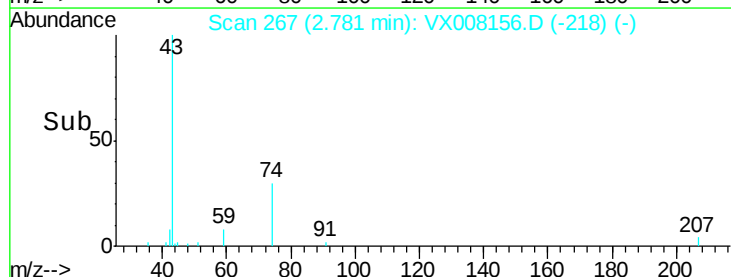
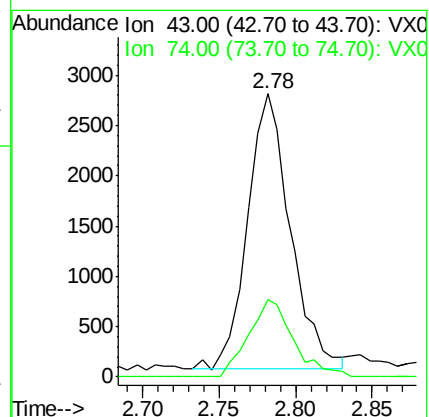
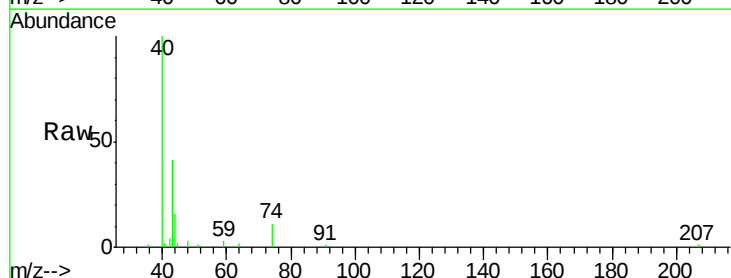
Acq: 16 Mar 2019 22:00

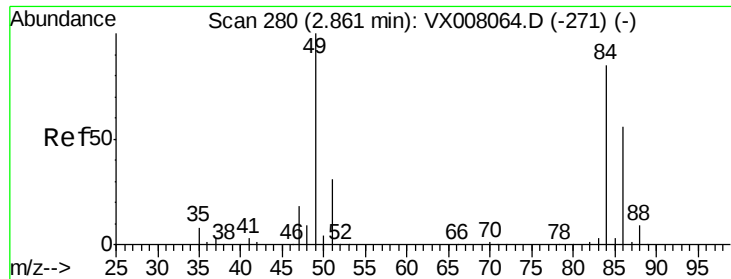
Tgt Ion: 43 Resp: 5307

Ion Ratio Lower Upper

43 100

74 29.3 17.8 26.6#

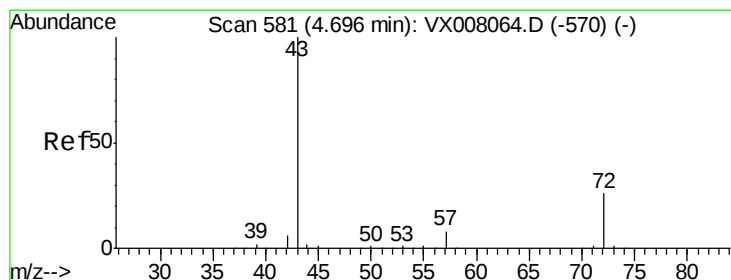
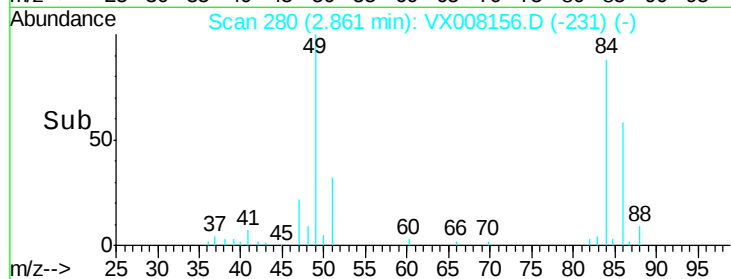
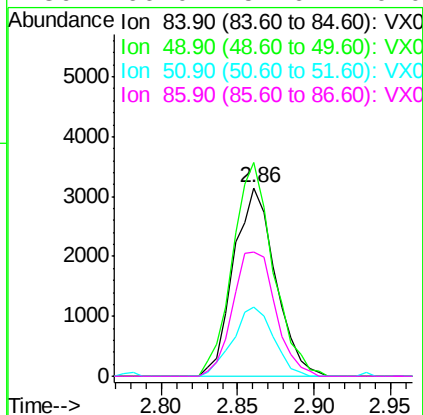
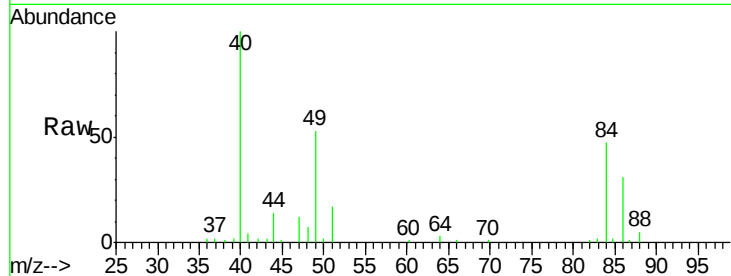




#20
Methvlene Chloride
Concen: 2.203 ug/l
RT: 2.86 min Scan# 280
Delta R.T. -0.00 min
Lab File: VX008156.D
Acq: 16 Mar 2019 22:00

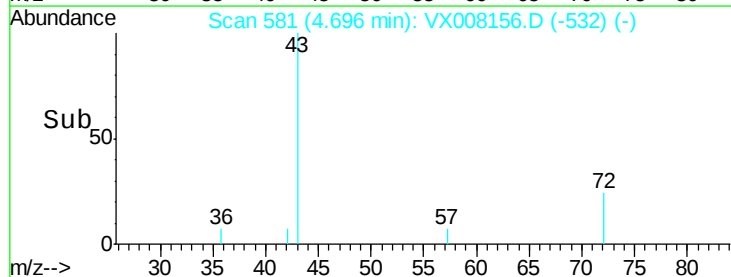
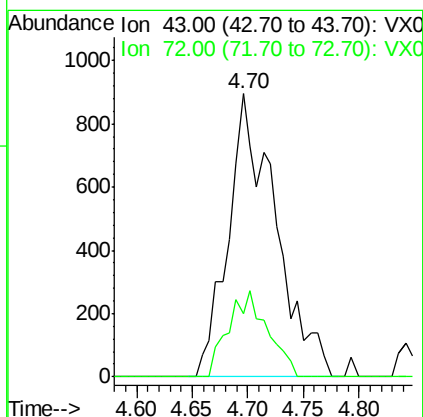
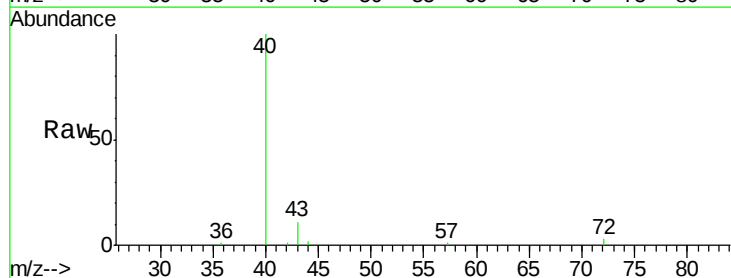
Instrument :
MSVOA_X
ClientSampled :
101-102

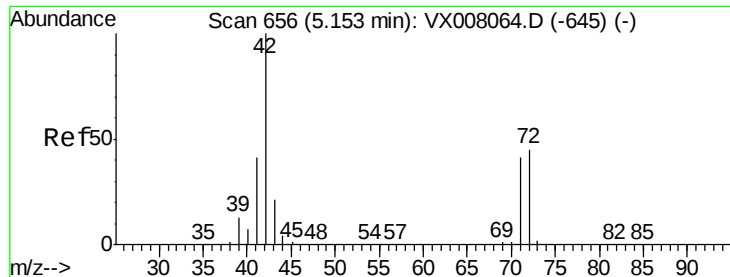
Tot Ion:	84	Resp:	5960
Ion	Ratio	Lower	Upper
84	100		
49	113.4	99.3	148.9
51	36.8	31.3	46.9
86	66.0	52.6	79.0



#25
2-Butanone
Concen: 1.139 ug/l
RT: 4.70 min Scan# 581
Delta R.T. -0.00 min
Lab File: VX008156.D
Acq: 16 Mar 2019 22:00

Tgt Ion:	43	Resp:	2648
Ion	Ratio	Lower	Upper
43	100		
72	22.2	19.9	29.9





#29

Tetrahydrofuran

Concen: 0.513 ug/l

RT: 5.17 min Scan# 658

Delta R.T. 0.01 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampled :

101-102

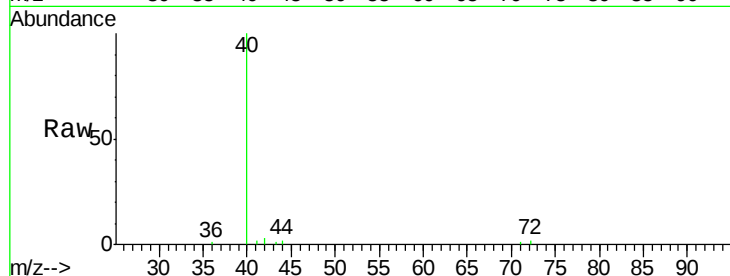
Tot Ion: 42 Resp: 744

Ion Ratio Lower Upper

42 100

72 42.9 33.8 50.6

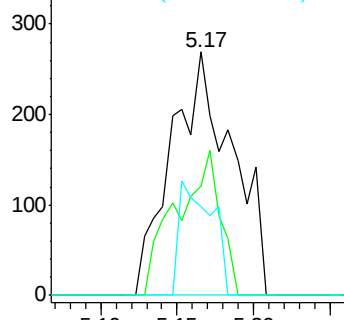
71 25.5 31.5 47.3#



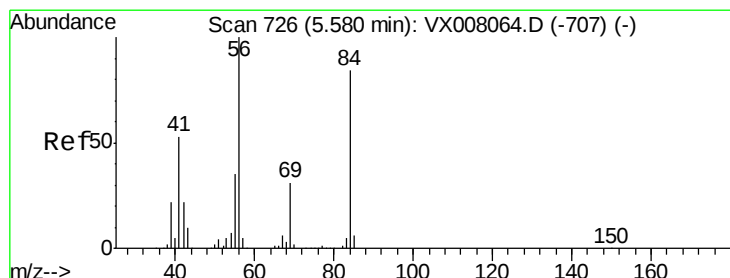
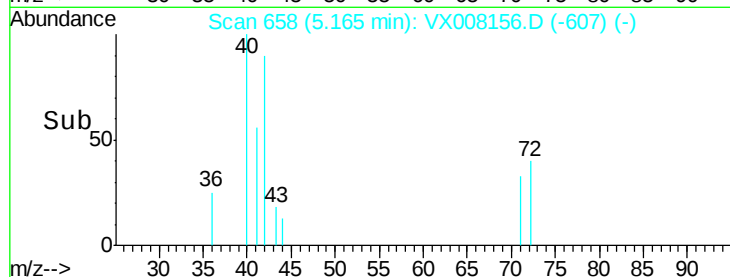
Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0



Time-->



#31

Cyclohexane

Concen: 0.896 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.08 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

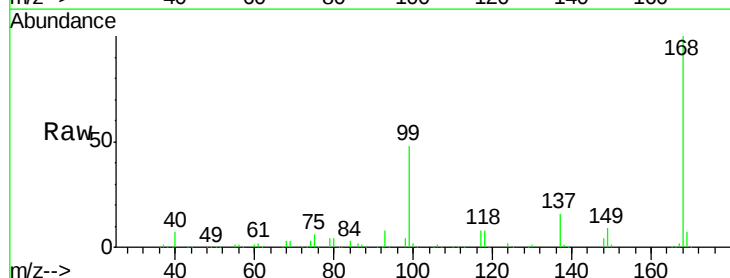
Tgt Ion: 56 Resp: 4110

Ion Ratio Lower Upper

56 100

69 207.1 24.0 36.0#

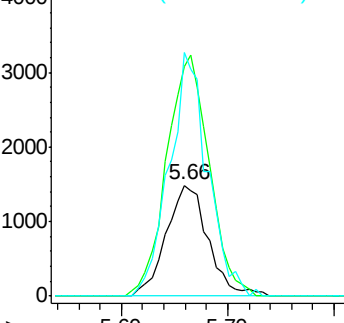
84 220.1 65.3 97.9#



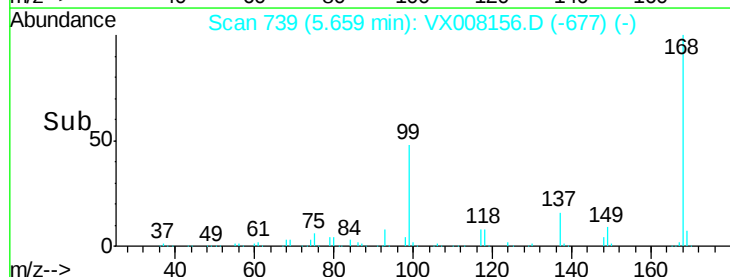
Abundance Ion 56.00 (55.70 to 56.70): VX0

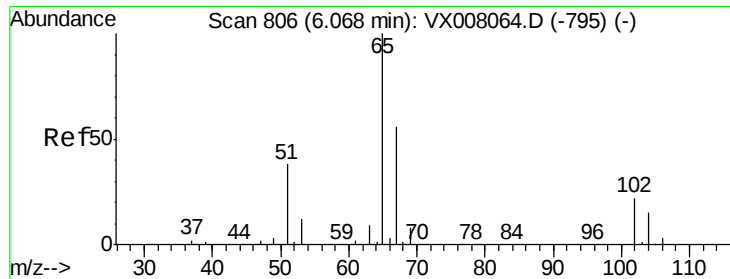
Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0



Time-->

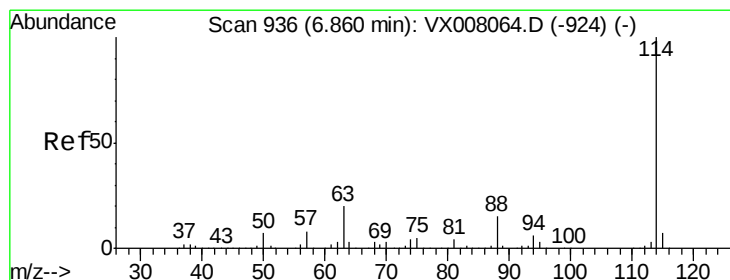
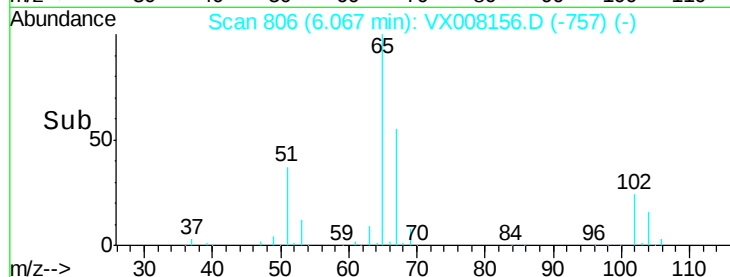
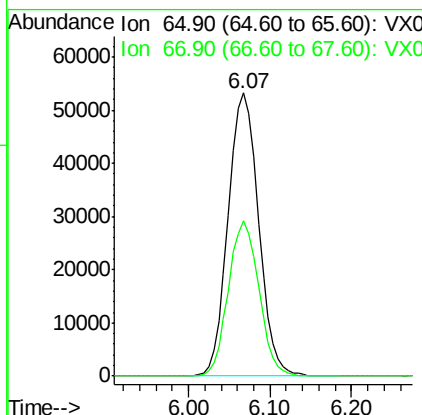
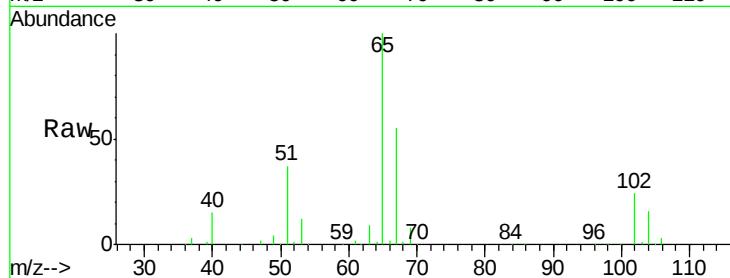




#33
 1,2-Dichloroethane-d4
 Concen: 42.920 ug/l
 RT: 6.07 min Scan# 806
 Delta R.T. -0.00 min
 Lab File: VX008156.D
 Acq: 16 Mar 2019 22:00

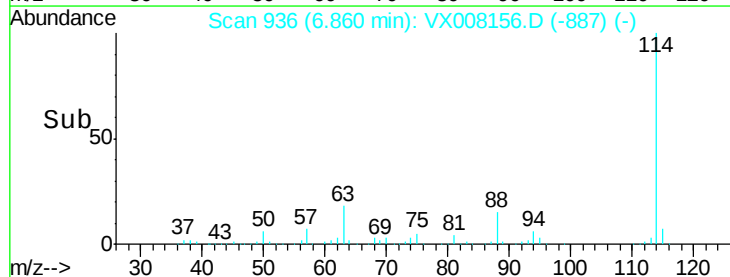
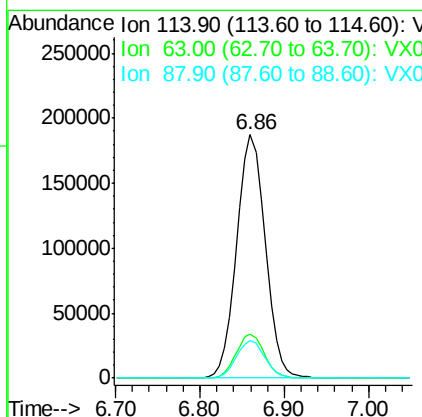
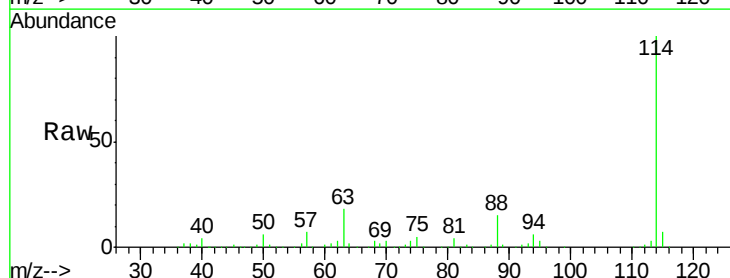
Instrument :
 MSVOA_X
 ClientSampled :
 101-102

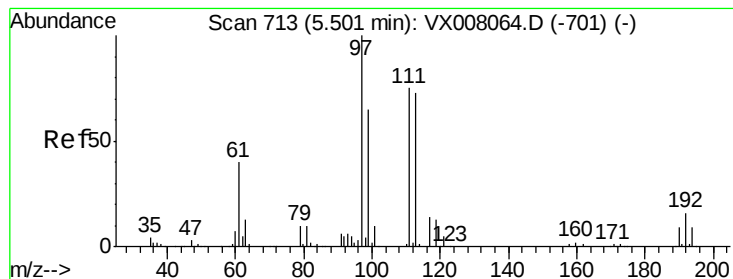
Tot Ion: 65 Resp: 137717
 Ion Ratio Lower Upper
 65 100
 67 54.9 0.0 110.0



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.86 min Scan# 936
 Delta R.T. -0.00 min
 Lab File: VX008156.D
 Acq: 16 Mar 2019 22:00

Tgt Ion: 114 Resp: 429583
 Ion Ratio Lower Upper
 114 100
 63 17.9 0.0 39.8
 88 15.3 0.0 31.4





#35

Dibromofluoromethane

Concen: 47.274 ug/l

RT: 5.51 min Scan# 714

Delta R.T. 0.01 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampled :

101-102

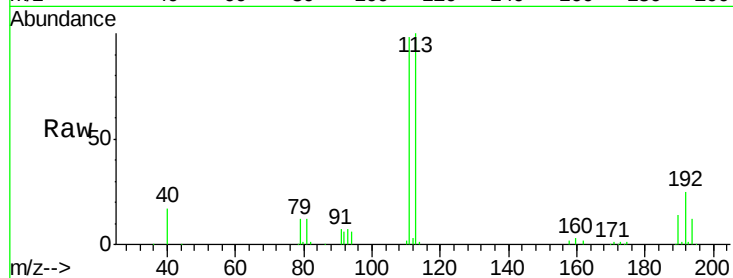
Tot Ion:113 Resp: 128782

Ion Ratio Lower Upper

113 100

111 101.6 81.4 122.0

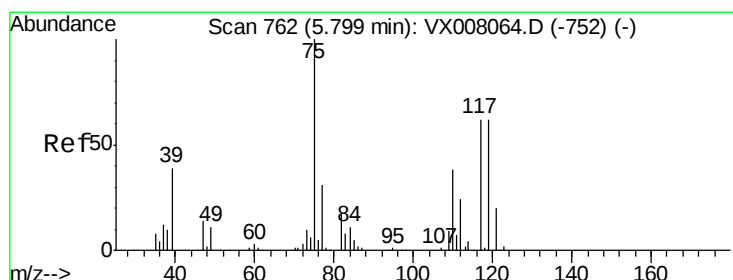
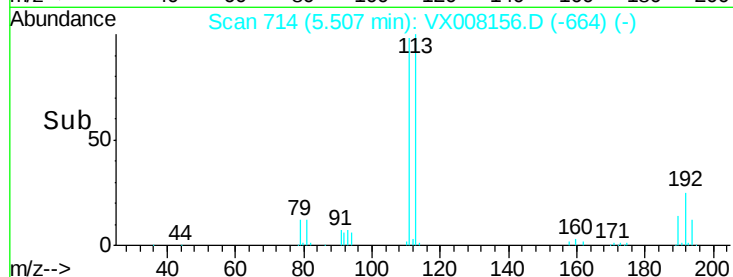
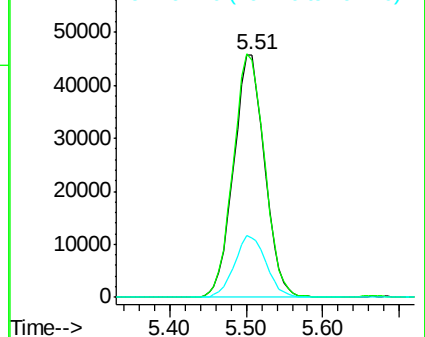
192 25.8 19.4 29.0



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: 5.124 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

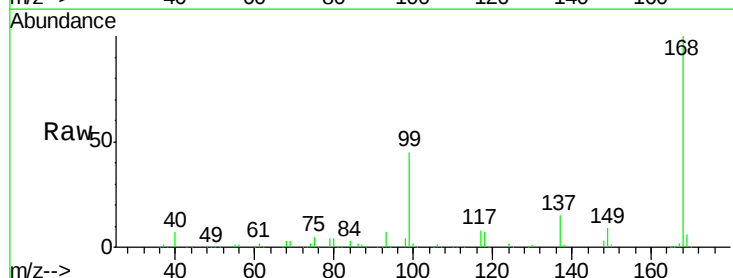
Tgt Ion: 75 Resp: 18107

Ion Ratio Lower Upper

75 100

110 9.1 18.4 55.0#

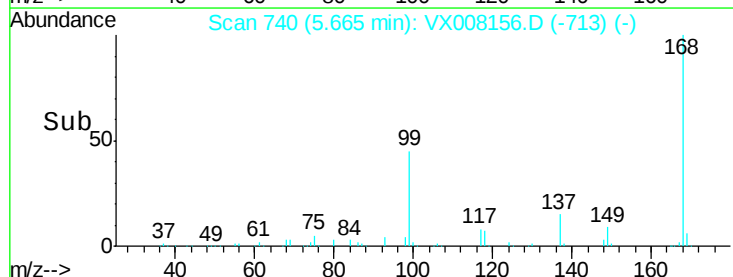
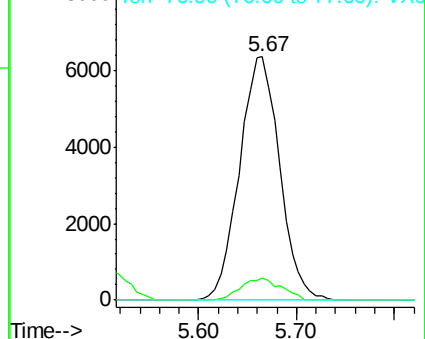
77 0.0 25.0 37.4#

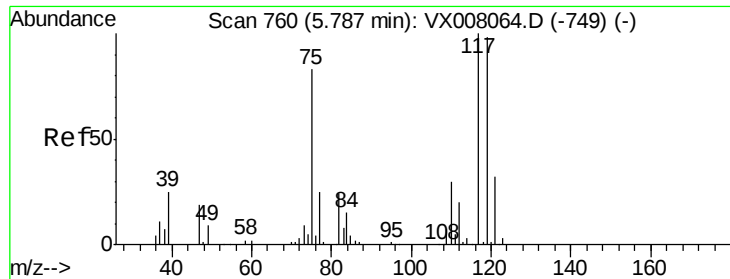


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 7.667 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampleId :

101-102

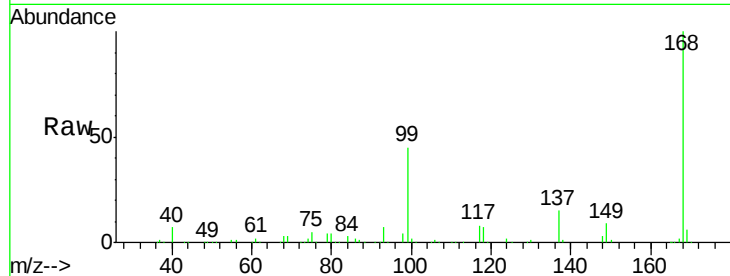
Tot Ion:117 Resp: 26079

Ion Ratio Lower Upper

117 100

119 4.3 76.2 114.2#

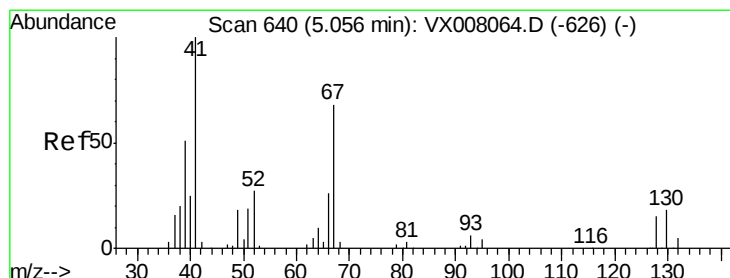
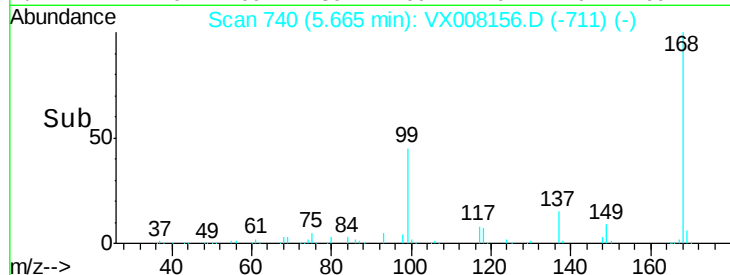
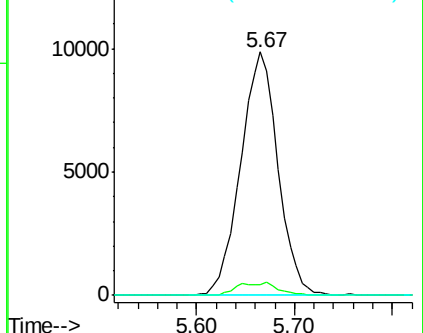
121 0.0 24.6 36.8#



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: 0.283 ug/l

RT: 5.18 min Scan# 660

Delta R.T. 0.12 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Tgt Ion: 41 Resp: 626

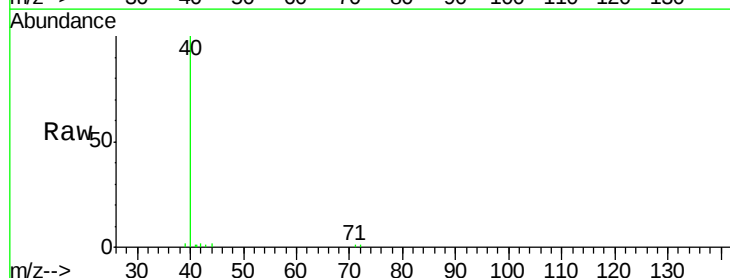
Ion Ratio Lower Upper

41 100

39 32.4 41.6 62.4#

67 0.0 55.8 83.6#

52 0.0 21.7 32.5#

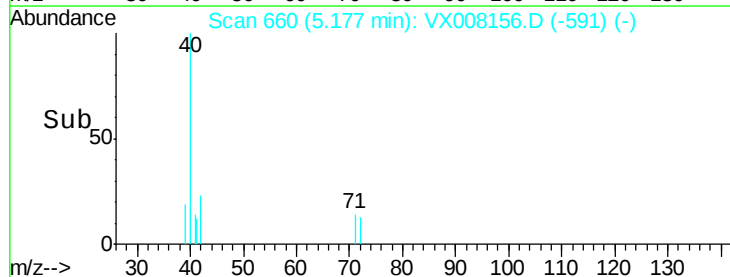
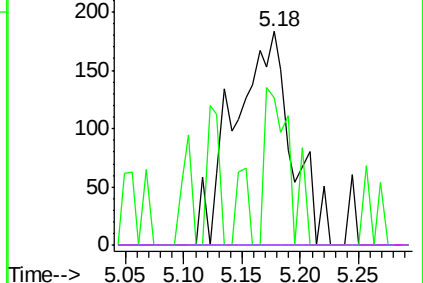


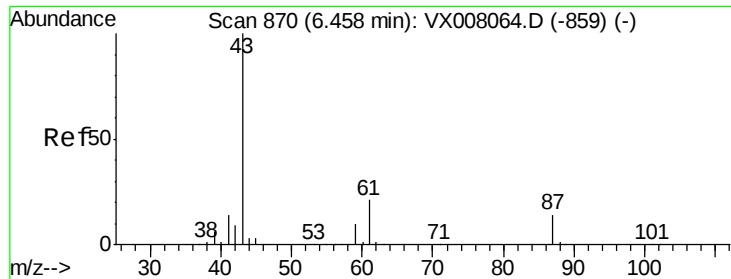
Abundance Ion 41.00 (40.70 to 41.70): VX0

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

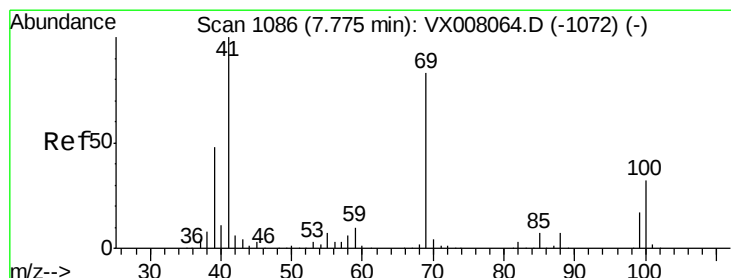
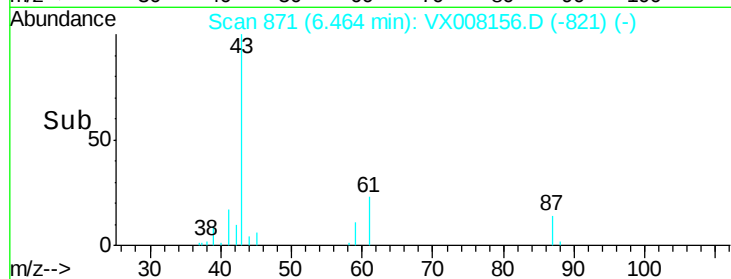
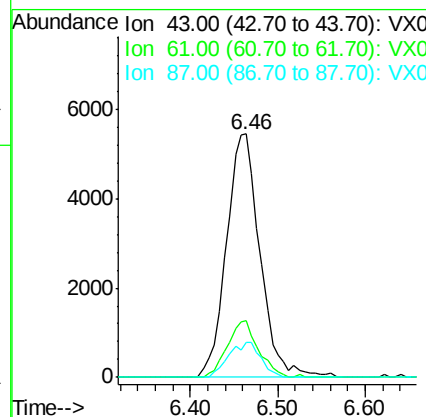
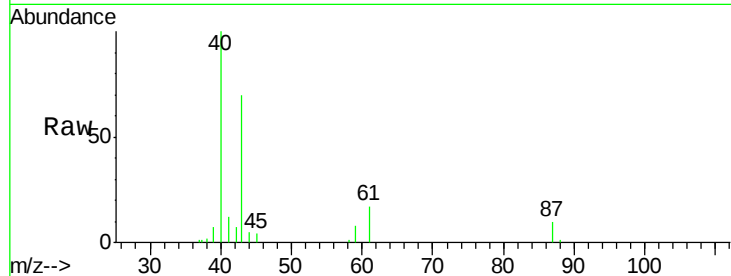




#43
Isopropyl Acetate
Concen: 2.363 ug/l
RT: 6.46 min Scan# 871
Delta R.T. 0.01 min
Lab File: VX008156.D
Acq: 16 Mar 2019 22:00

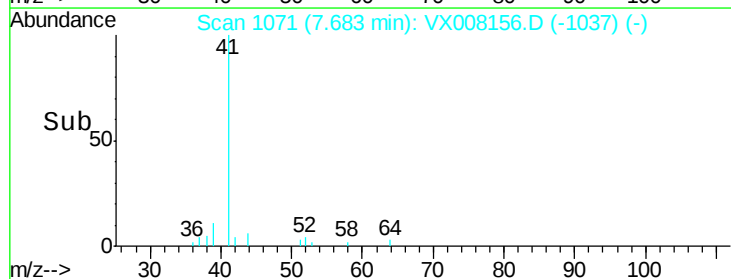
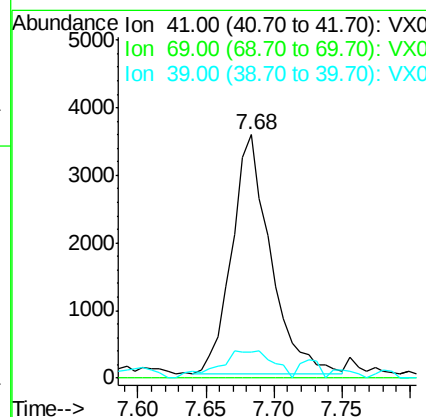
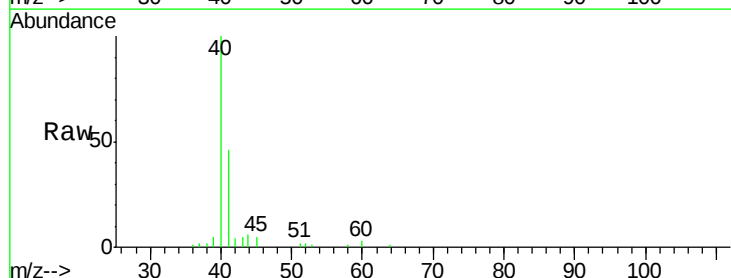
Instrument :
MSVOA_X
ClientSampleId :
101-102

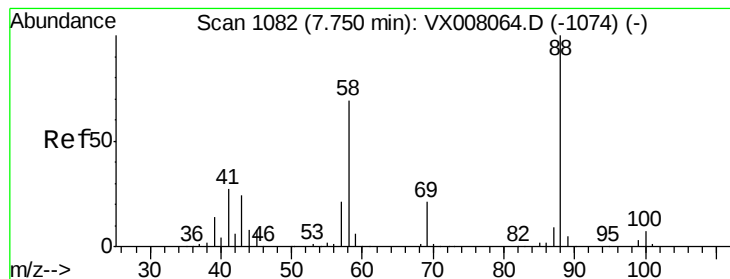
Tot Ion	Ratio	Lower	Upper
43	100		
61	21.5	16.3	24.5
87	13.8	10.5	15.7



#48
Methyl methacrylate
Concen: 2.195 ug/l
RT: 7.68 min Scan# 1071
Delta R.T. -0.09 min
Lab File: VX008156.D
Acq: 16 Mar 2019 22:00

Tgt Ion	Ratio	Lower	Upper
41	100		
69	0.0	65.2	97.8#
39	0.0	39.4	59.2#





#49

1,4-Dioxane

Concen: 2.627 ug/l

RT: 7.88 min Scan# 1103

Delta R.T. 0.13 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampleId :

101-102

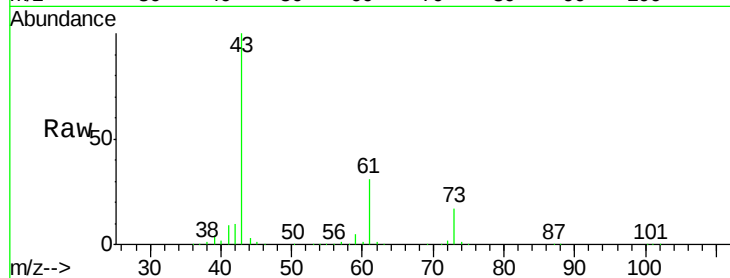
Tot Ion: 88 Resp: 181

Ion Ratio Lower Upper

88 100

43 524987.8 25.1 37.7#

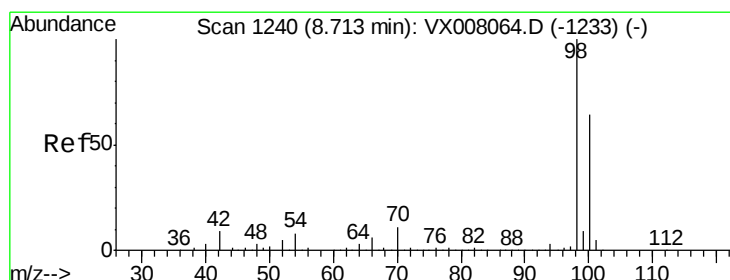
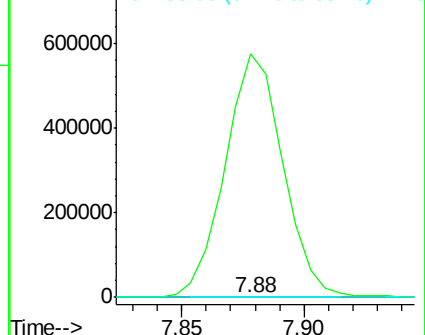
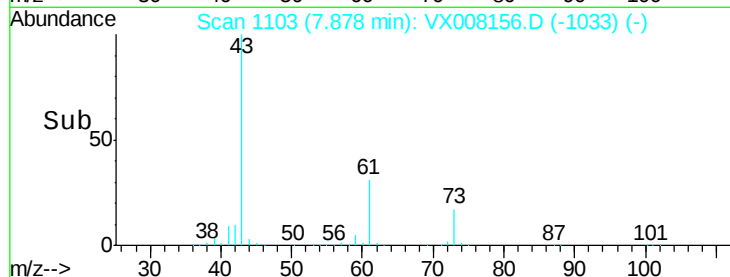
58 2216.6 57.8 86.6#



Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#50

Toluene-d8

Concen: 48.083 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX008156.D

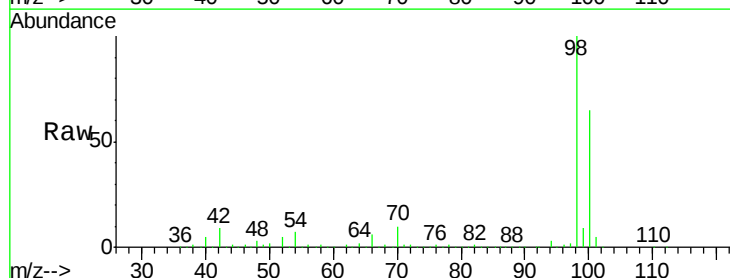
Acq: 16 Mar 2019 22:00

Tgt Ion: 98 Resp: 498177

Ion Ratio Lower Upper

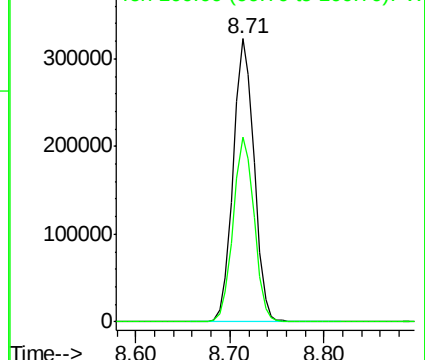
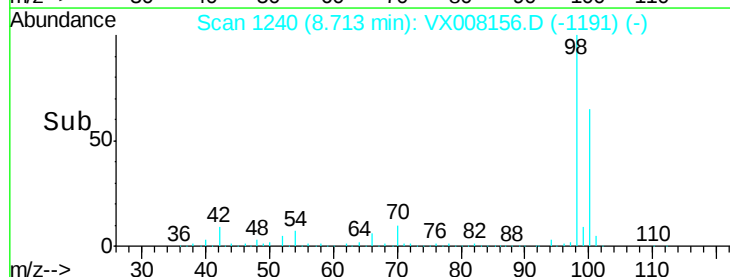
98 100

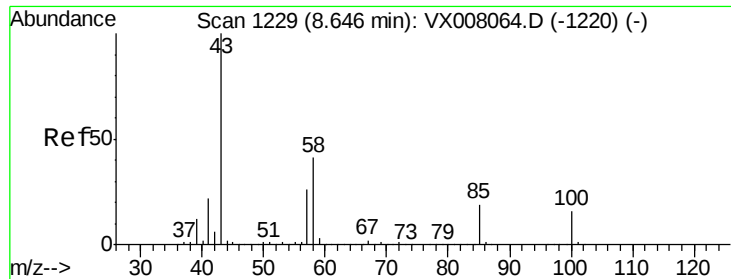
100 65.4 51.7 77.5



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0





#51

4-Methyl-2-Pentanone

Concen: 16.482 ug/l

RT: 8.62 min Scan# 1224

Delta R.T. -0.03 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampleId :

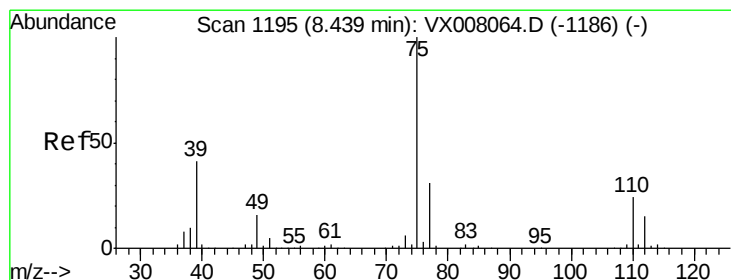
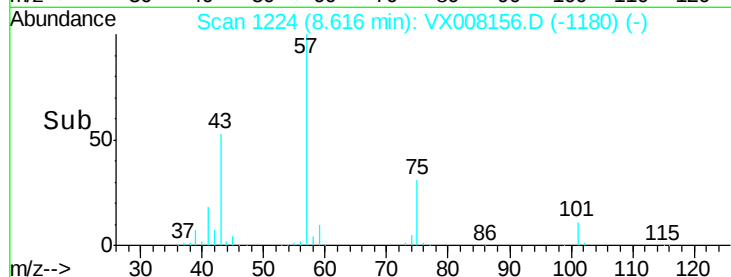
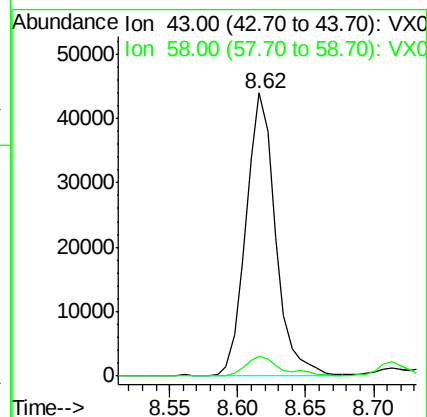
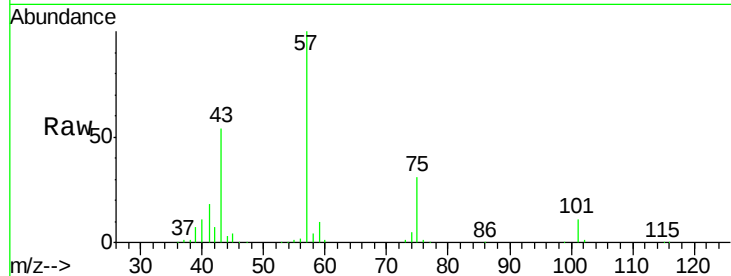
101-102

Tot Ion: 43 Resp: 66446

Ion Ratio Lower Upper

43 100

58 8.6 31.3 46.9#



#54

cis-1,3-Dichloropropene

Concen: 8.841 ug/l

RT: 8.62 min Scan# 1224

Delta R.T. 0.18 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

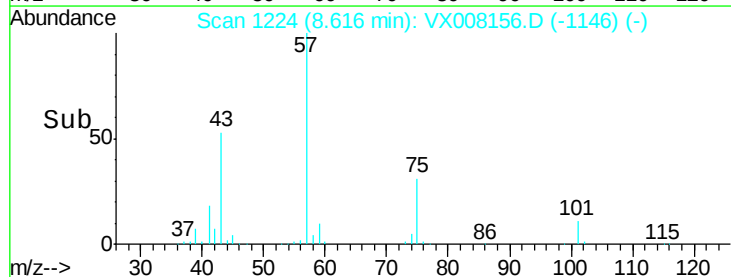
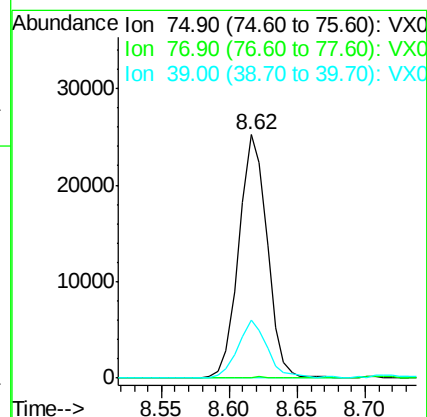
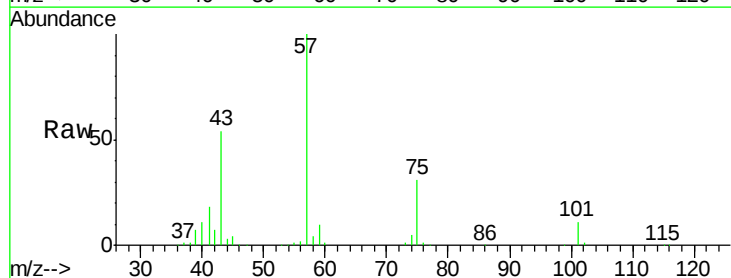
Tgt Ion: 75 Resp: 36671

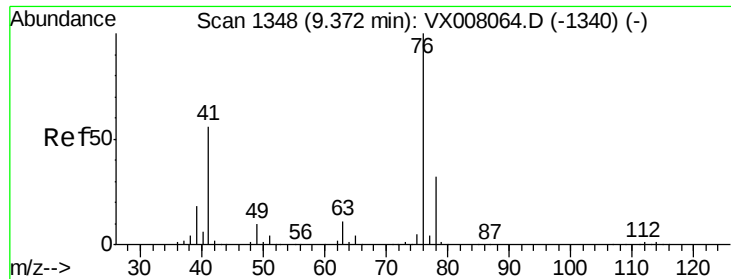
Ion Ratio Lower Upper

75 100

77 0.3 25.0 37.6#

39 23.4 36.6 54.8#





#57

1,3-Dichloropropane

Concen: 1.772 ug/l

RT: 9.54 min Scan# 1376

Delta R.T. 0.17 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampleId :

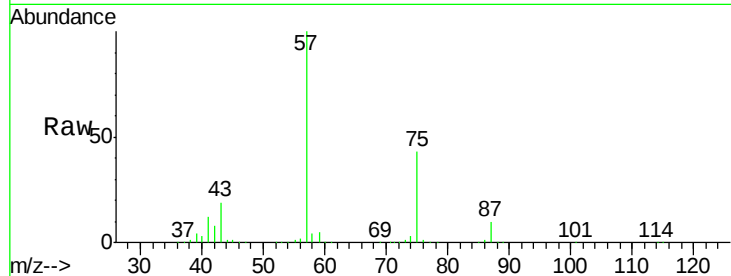
101-102

Tot Ion: 76 Resp: 8217

Ion Ratio Lower Upper

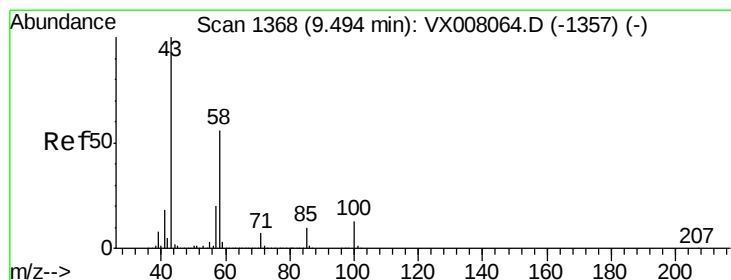
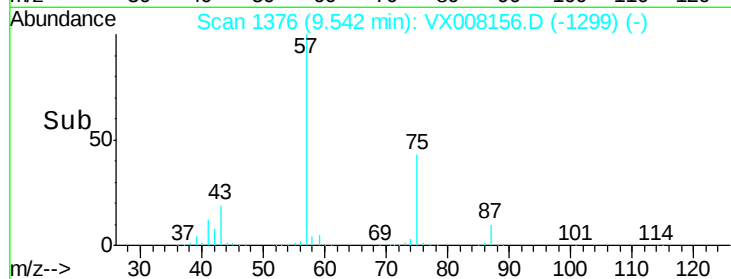
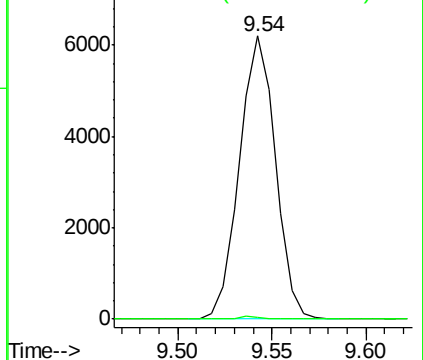
76 100

78 0.5 25.5 38.3#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0



#59

2-Hexanone

Concen: 32.749 ug/l

RT: 9.54 min Scan# 1376

Delta R.T. 0.05 min

Lab File: VX008156.D

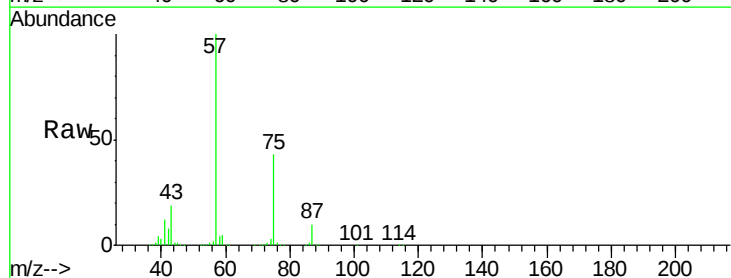
Acq: 16 Mar 2019 22:00

Tgt Ion: 43 Resp: 103255

Ion Ratio Lower Upper

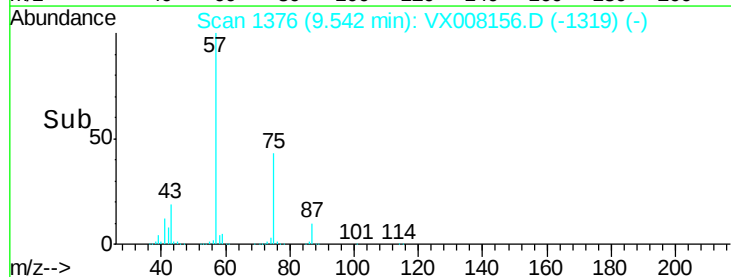
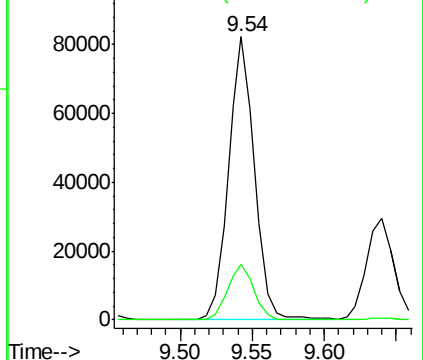
43 100

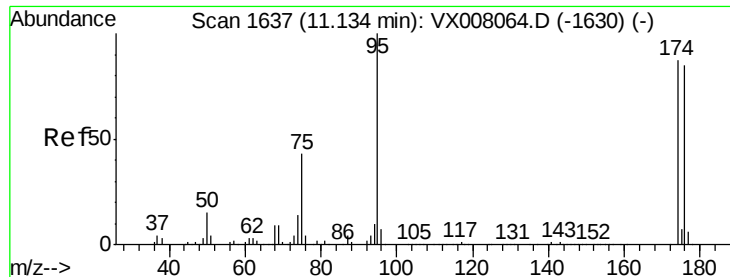
58 20.3 27.6 82.7#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#62

4-Bromofluorobenzene

Concen: 44.777 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.00 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampleId :

101-102

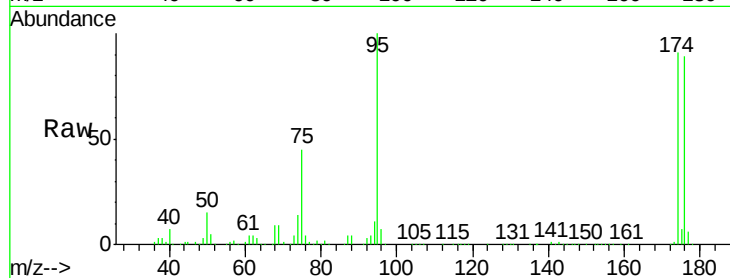
Tot Ion: 95 Resp: 166196

Ion Ratio Lower Upper

95 100

174 97.5 0.0 182.8

176 94.0 0.0 178.0

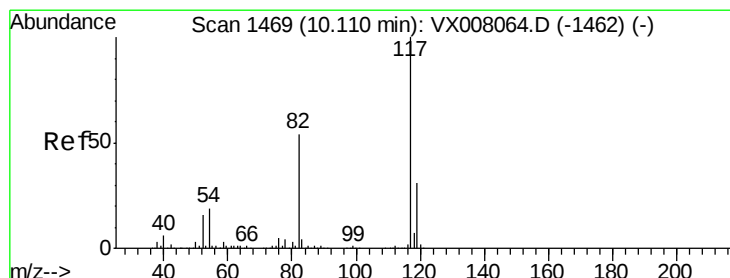
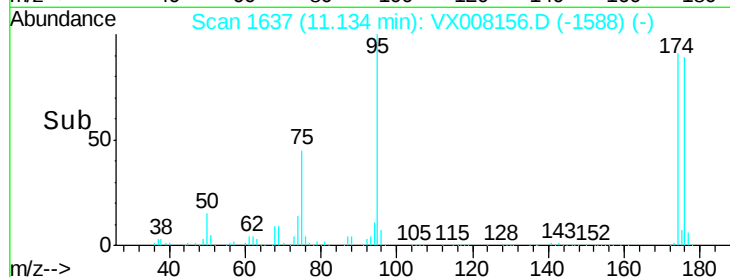


Abundance Ion 94.90 (94.60 to 95.60): VX008064.D (-1630) (-)

Ion 173.80 (173.50 to 174.50): VX008064.D (-1630) (-)

Ion 175.80 (175.50 to 176.50): VX008064.D (-1630) (-)

Time-->



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

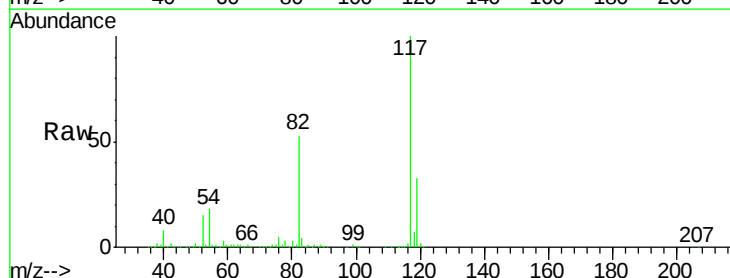
Tgt Ion: 117 Resp: 372788

Ion Ratio Lower Upper

117 100

82 53.1 44.3 66.5

119 33.0 25.3 37.9

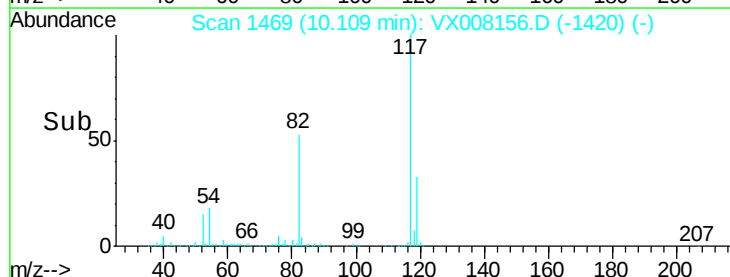


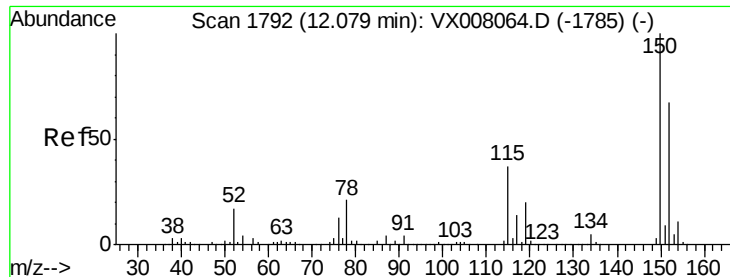
Abundance Ion 116.90 (116.60 to 117.60): VX008064.D (-1462) (-)

Ion 82.00 (81.70 to 82.70): VX008064.D (-1462) (-)

Ion 118.90 (118.60 to 119.60): VX008064.D (-1462) (-)

Time-->





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampled :

101-102

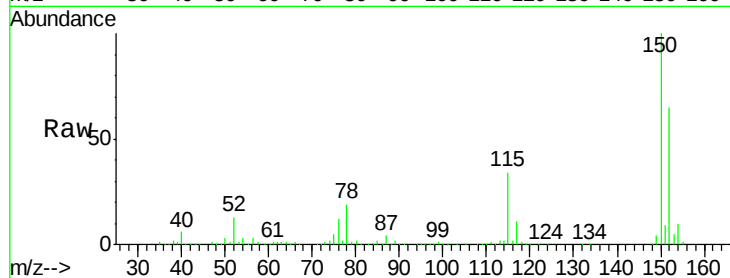
Tot Ion:152 Resp: 172686

Ion Ratio Lower Upper

152 100

115 53.9 38.6 115.7

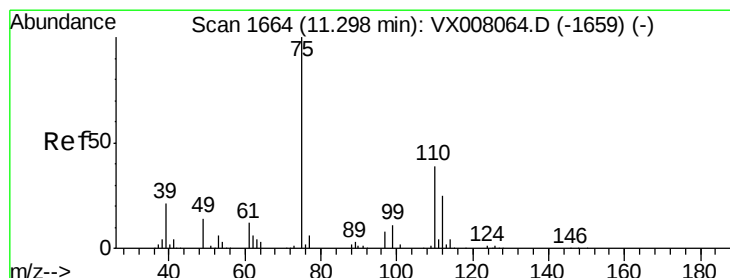
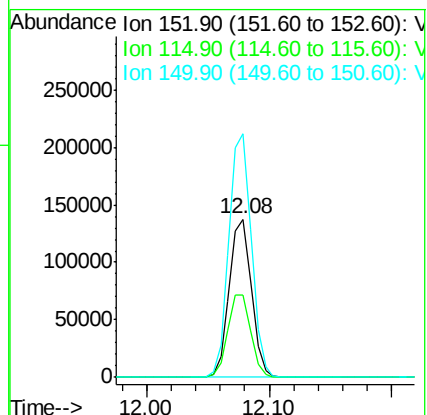
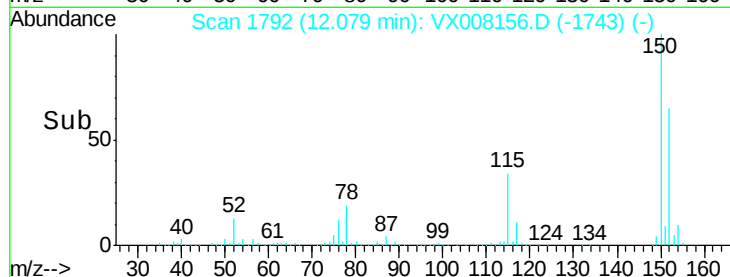
150 155.6 0.0 348.4



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: 24.553 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX008156.D

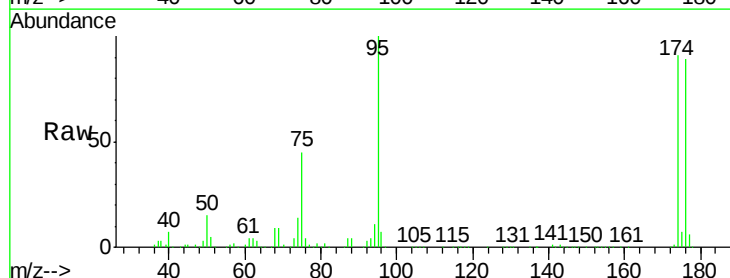
Acq: 16 Mar 2019 22:00

Tgt Ion: 75 Resp: 73637

Ion Ratio Lower Upper

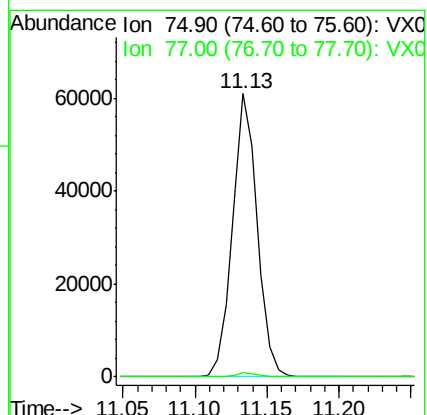
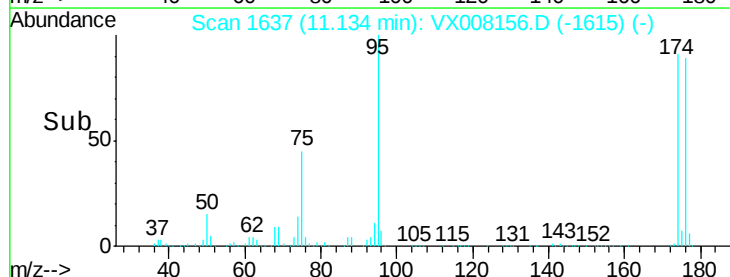
75 100

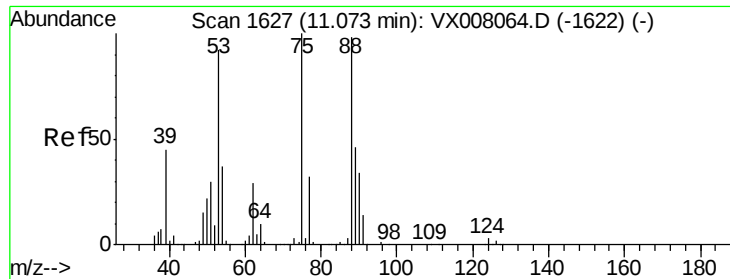
77 1.2 18.9 56.7#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 69.870 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

Instrument :

MSVOA_X

ClientSampleId :
101-102

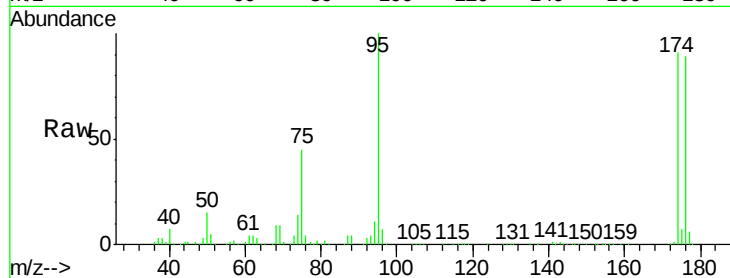
Tot Ion: 75 Resp: 73637

Ion Ratio Lower Upper

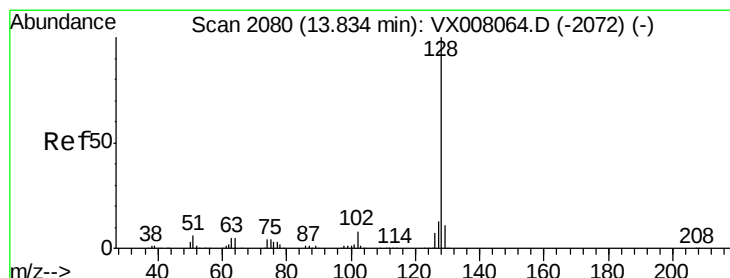
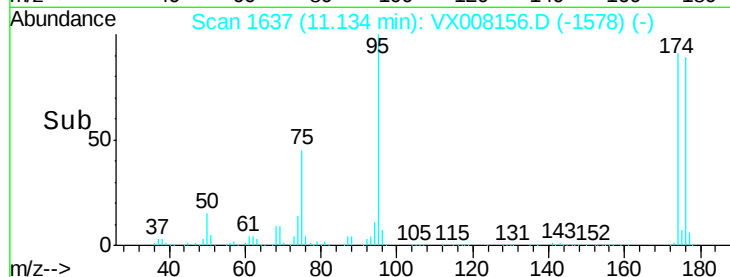
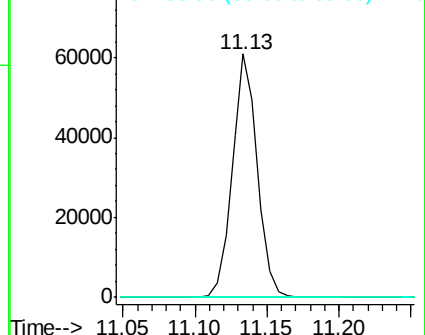
75 100

53 0.0 76.1 114.1#

89 0.0 36.3 54.5#



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



#95

Naphthalene

Concen: 1.295 ug/l

RT: 13.83 min Scan# 2080

Delta R.T. -0.00 min

Lab File: VX008156.D

Acq: 16 Mar 2019 22:00

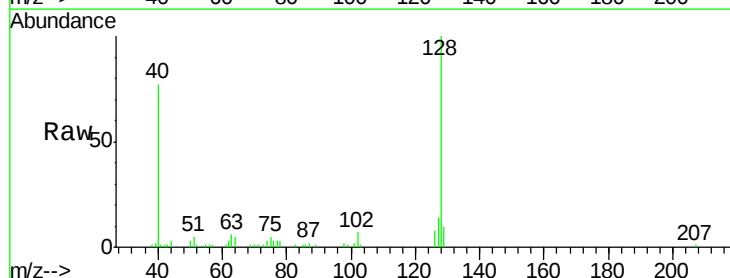
Tgt Ion: 128 Resp: 13751

Ion Ratio Lower Upper

128 100

127 13.4 10.3 15.5

129 10.6 8.7 13.1



Abundance Ion 128.00 (127.70 to 128.70): V
Ion 127.00 (126.70 to 127.70): V
Ion 129.00 (128.70 to 129.70): V

