

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX072619\
 Data File : VX011083.D
 Acq On : 26 Jul 2019 12:18
 Operator : JC/SP
 Sample : K4014-09
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 FB-072519

Quant Time: Jul 27 02:01:02 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X071619W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jul 24 05:39:23 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.66	168	203801	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.86	114	319244	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	297320	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	139556	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	109713	50.60	ug/l	0.00
Spiked Amount			Recovery	=	101.20%	
35) Dibromofluoromethane	5.49	113	101130	49.91	ug/l	0.00
Spiked Amount			Recovery	=	99.82%	
50) Toluene-d8	8.71	98	388486	51.12	ug/l	0.00
Spiked Amount			Recovery	=	102.24%	
62) 4-Bromofluorobenzene	11.13	95	135672	48.57	ug/l	0.00
Spiked Amount			Recovery	=	97.14%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.20	85	157	0.618	ug/l #	43
3) Chloromethane	1.33	50	575	0.307	ug/l #	43
5) Bromomethane	1.67	94	733	0.680	ug/l	95
6) Chloroethane	1.72	64	544	0.448	ug/l #	42
10) Methyl Iodide	2.52	142	907	0.374	ug/l #	82
11) Tert butyl alcohol	3.02	59	3908	7.740	ug/l #	80
13) Acrolein	2.29	56	93	0.319	ug/l #	59
15) Acrylonitrile	3.15	53	281	0.275	ug/l #	58
16) Acetone	2.44	43	5253	5.364	ug/l	98
17) Carbon Disulfide	2.57	76	1090	0.234	ug/l #	75
20) Methylene Chloride	2.86	84	631	0.304	ug/l #	77
25) 2-Butanone	4.67	43	512	0.364	ug/l #	81
29) Tetrahydrofuran	5.15	42	483	0.542	ug/l #	63
31) Cyclohexane	5.67	56	3858	1.311	ug/l #	11
36) 1,1-Dichloropropene	5.66	75	13728	5.235	ug/l #	50
38) Carbon Tetrachloride	5.66	117	18967	6.941	ug/l #	17
51) 4-Methyl-2-Pentanone	8.64	43	581	0.203	ug/l	87
60) Dibromochloromethane	9.34	129	141	2.581	ug/l #	11
76) 1,2,3-Trichloropropane	11.13	75	67448	26.782	ug/l #	35
81) trans-1,4-Dichloro-2-buten	11.13	75	67448	66.434	ug/l #	11
92) 1,2-Dibromo-3-Chloropropan	12.97	75	213	0.330	ug/l #	1

(#) = 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: VX011083.D

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ClientSampleId :

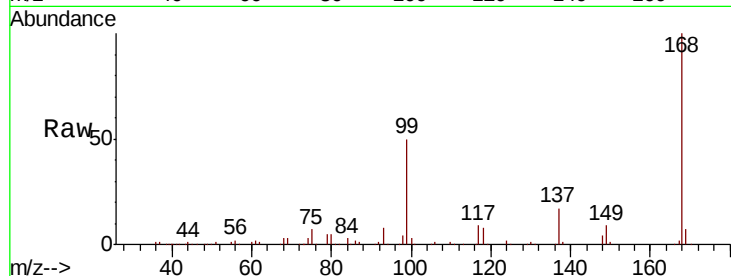
FB-072519

Tot Ion:168 Resp: 203801

Ion Ratio Lower Upper

168 100

99 49.6 37.6 56.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

80000

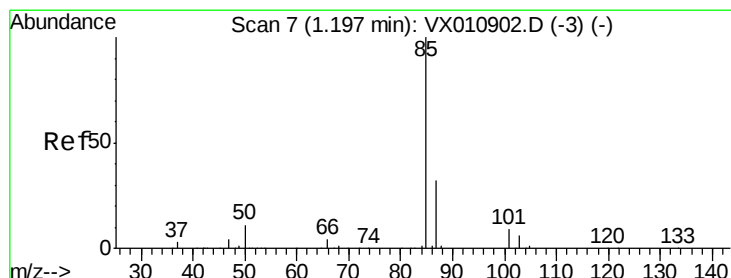
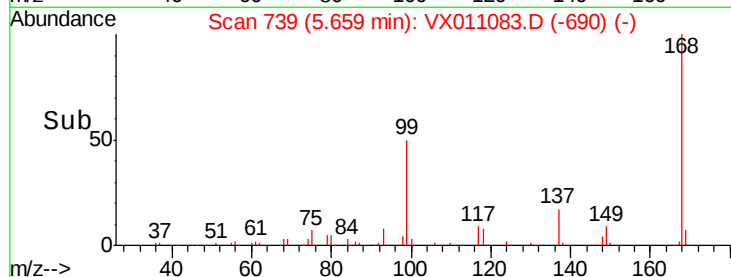
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#2

Dichlorodifluoromethane

Concen: 0.618 ug/l

RT: 1.20 min Scan# 7

Delta R.T. 0.00 min

Lab File: VX011083.D

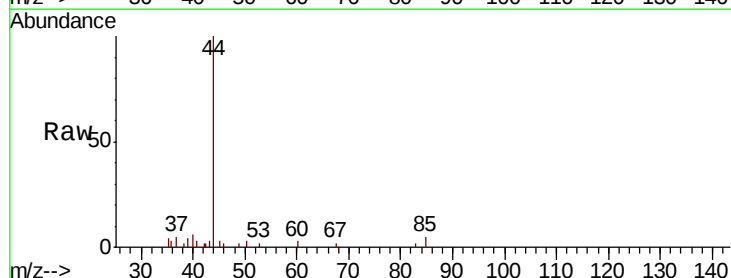
Acq: 26 Jul 2019 12:18

Tgt Ion: 85 Resp: 157

Ion Ratio Lower Upper

85 100

87 0.0 15.9 47.7#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.20

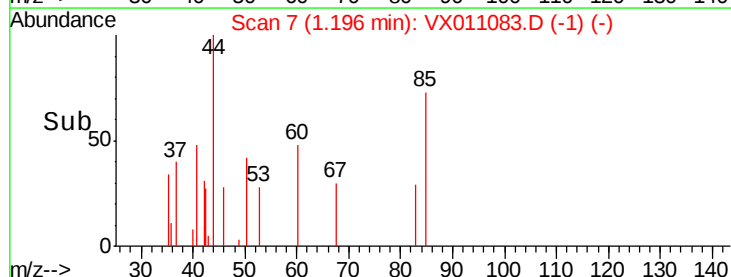
150

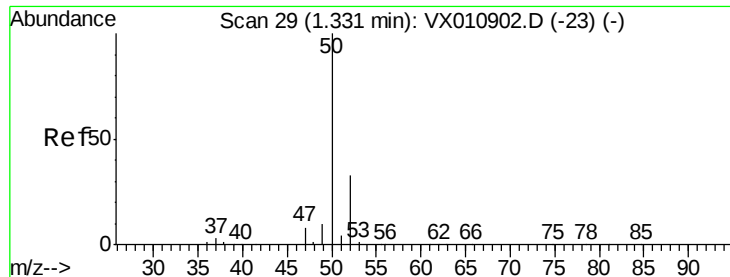
100

50

0

Time--> 1.18 1.20 1.22 1.24





#3

Chloromethane

Concen: 0.307 ug/l

RT: 1.33 min Scan# 29

Delta R.T. -0.00 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

Instrument :

MSVOA_X

ClientSampleId :

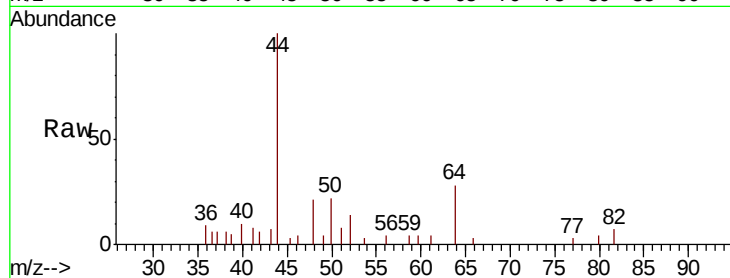
FB-072519

Tot Ion: 50 Resp: 575

Ion Ratio Lower Upper

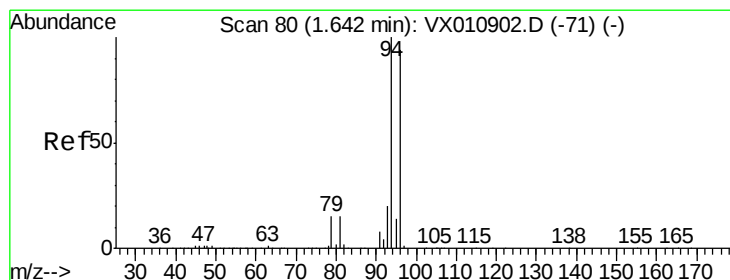
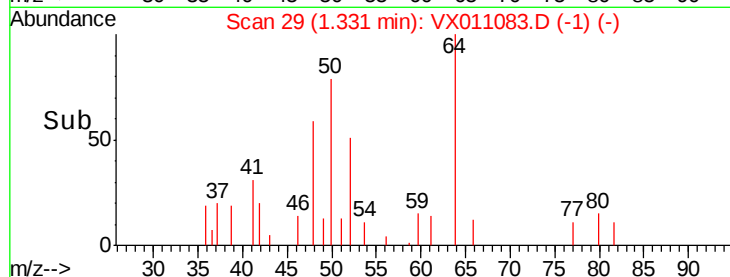
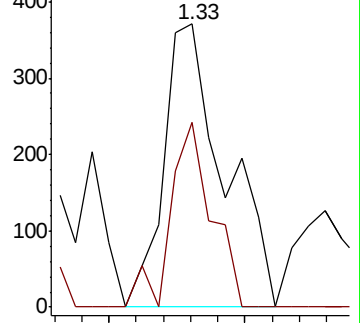
50 100

52 65.2 26.4 39.6#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0



#5

Bromomethane

Concen: 0.680 ug/l

RT: 1.67 min Scan# 84

Delta R.T. 0.02 min

Lab File: VX011083.D

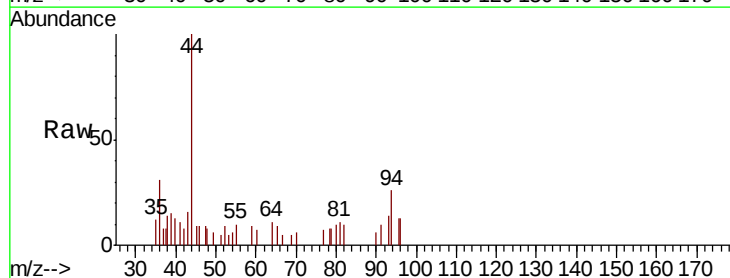
Acq: 26 Jul 2019 12:18

Tgt Ion: 94 Resp: 733

Ion Ratio Lower Upper

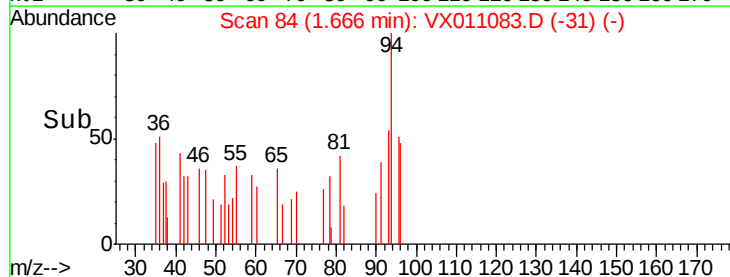
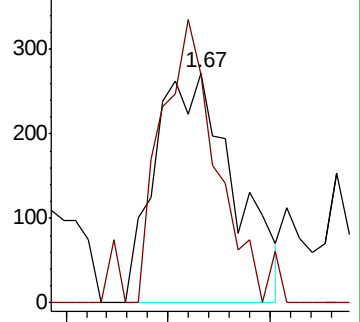
94 100

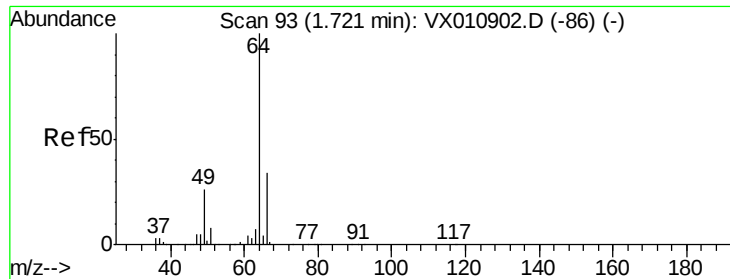
96 99.6 75.6 113.4



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#6

Chloroethane

Concen: 0.448 ug/l

RT: 1.72 min Scan# 93

Delta R.T. -0.00 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

Instrument :

MSVOA_X

ClientSampled :

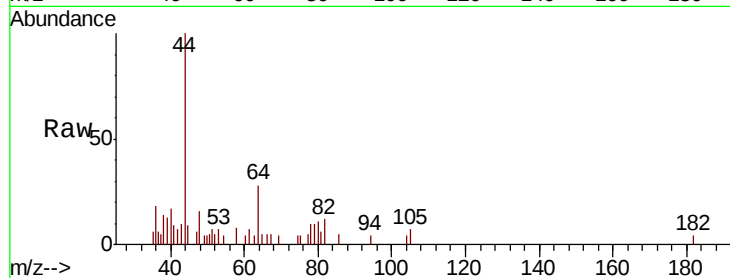
FB-072519

Tot Ion: 64 Resp: 544

Ion Ratio Lower Upper

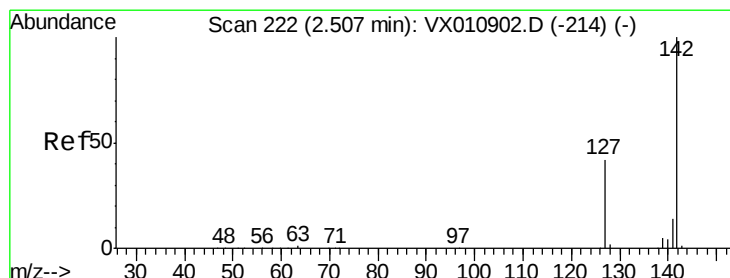
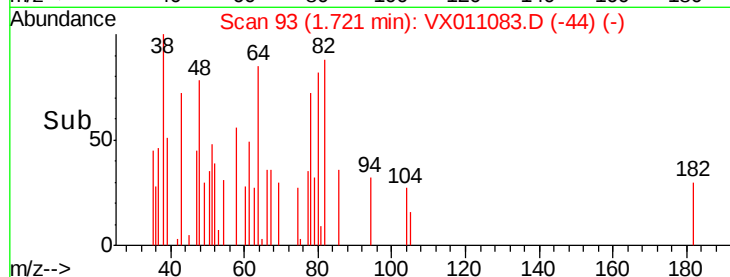
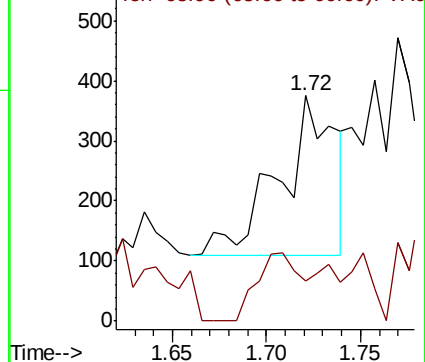
64 100

66 0.8 27.0 40.6#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



#10

Methyl Iodide

Concen: 0.374 ug/l

RT: 2.52 min Scan# 224

Delta R.T. 0.01 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

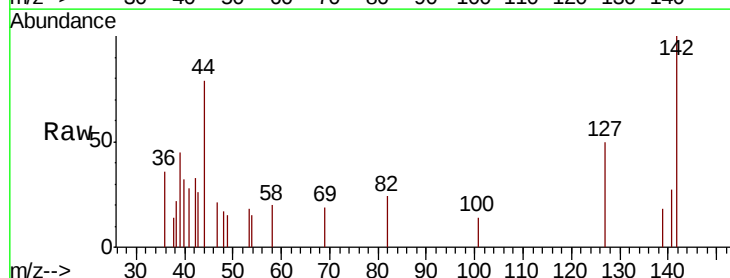
Tgt Ion: 142 Resp: 907

Ion Ratio Lower Upper

142 100

127 52.4 34.2 51.4#

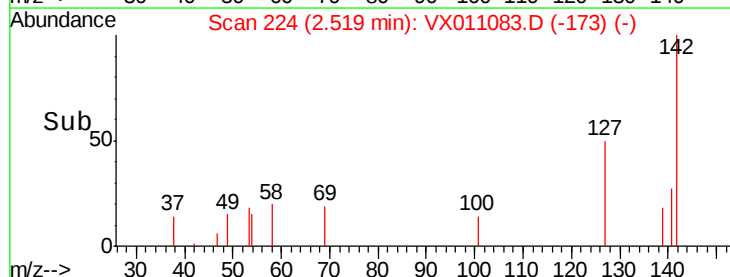
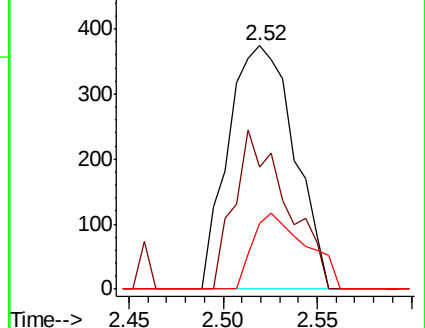
141 25.4 11.7 17.5#



Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

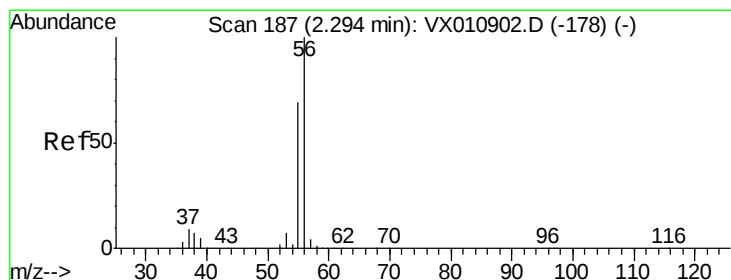
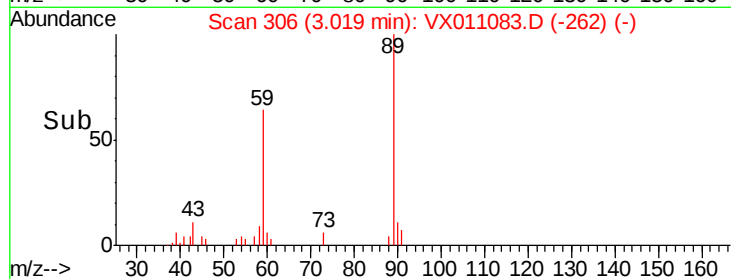
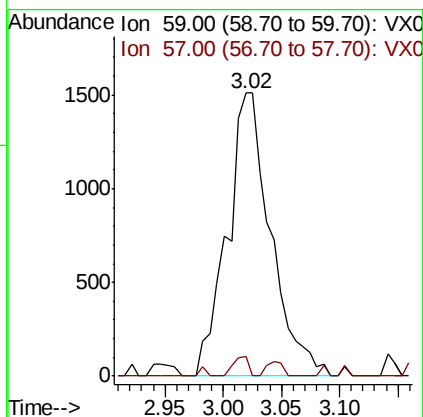
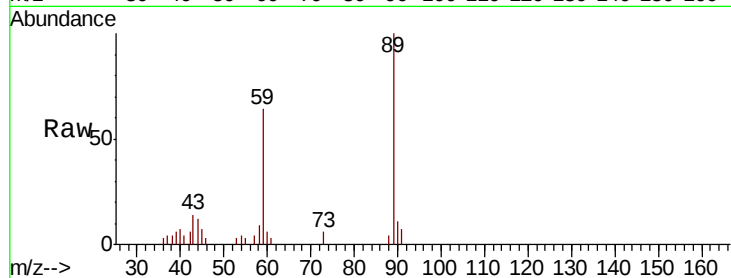




#11
Tert butvl alcohol
Concen: 7.740 ug/l
RT: 3.02 min Scan# 306
Delta R.T. -0.03 min
Lab File: VX011083.D
Acq: 26 Jul 2019 12:18

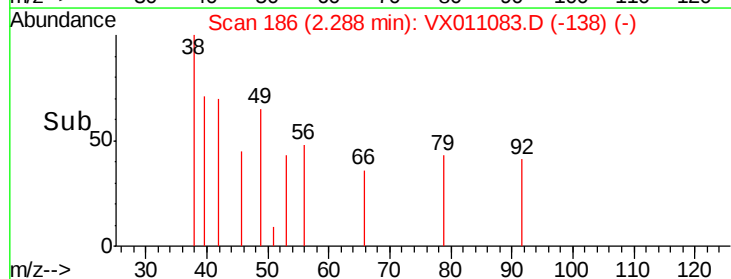
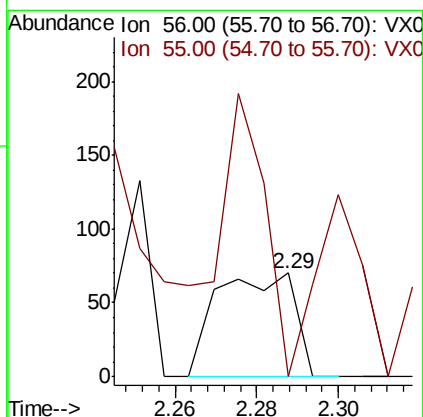
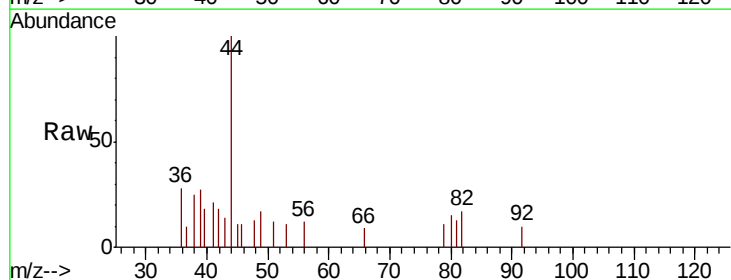
Instrument :
MSVOA_X
ClientSampleId :
FB-072519

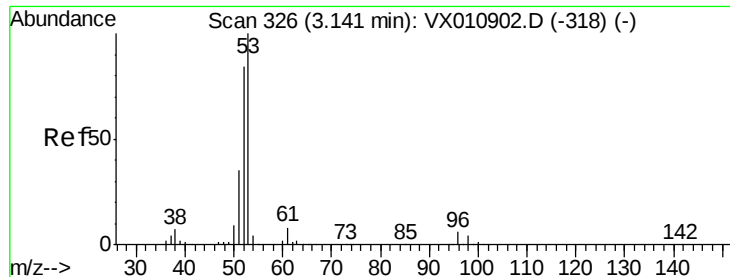
Tot Ion: 59 Resp: 3908
Ion Ratio Lower Upper
59 100
57 2.5 7.9 11.9#



#13
Acrolein
Concen: 0.319 ug/l
RT: 2.29 min Scan# 186
Delta R.T. -0.01 min
Lab File: VX011083.D
Acq: 26 Jul 2019 12:18

Tgt Ion: 56 Resp: 93
Ion Ratio Lower Upper
56 100
55 103.2 55.9 83.9#





#15

Acrylonitrile

Concen: 0.275 ug/l

RT: 3.15 min Scan# 328

Delta R.T. 0.01 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

Instrument :

MSVOA_X

ClientSampled :

FB-072519

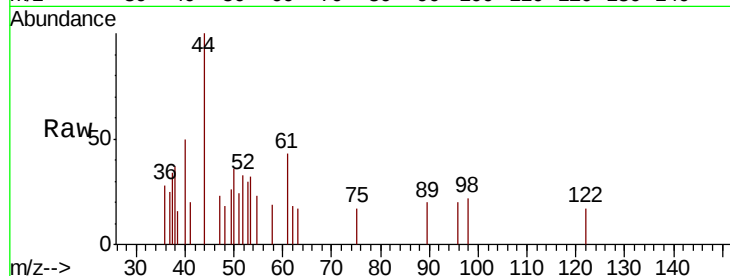
Tot Ion: 53 Resp: 281

Ion Ratio Lower Upper

53 100

52 64.1 66.5 99.7#

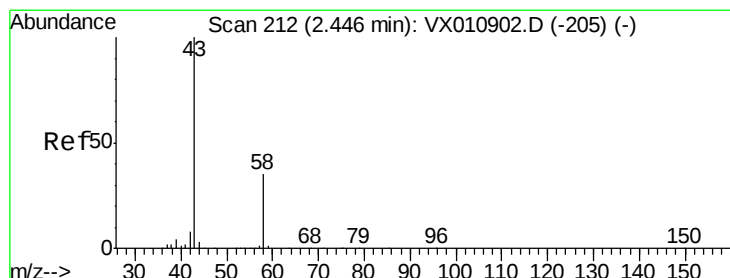
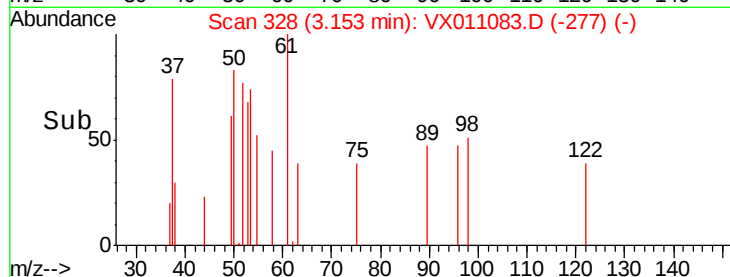
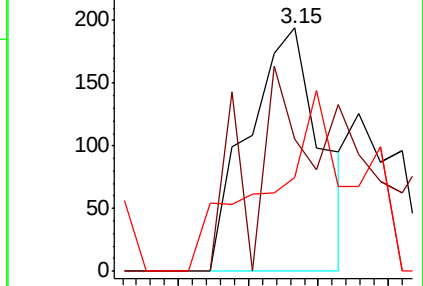
51 89.3 28.2 42.4#



Abundance Ion 53.00 (52.70 to 53.70): VX0

Ion 52.00 (51.70 to 52.70): VX0

Ion 51.00 (50.70 to 51.70): VX0



#16

Acetone

Concen: 5.364 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX011083.D

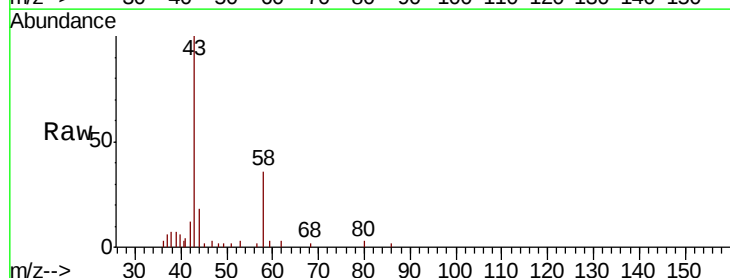
Acq: 26 Jul 2019 12:18

Tgt Ion: 43 Resp: 5253

Ion Ratio Lower Upper

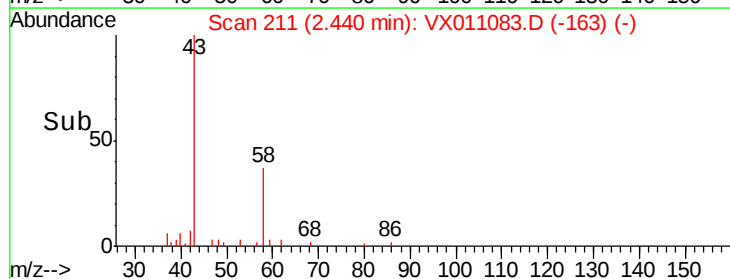
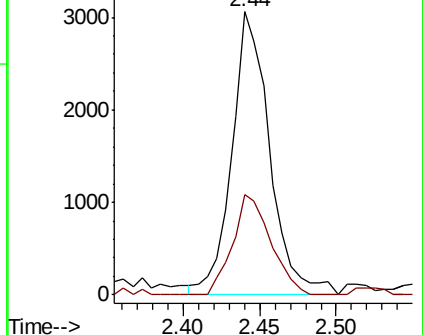
43 100

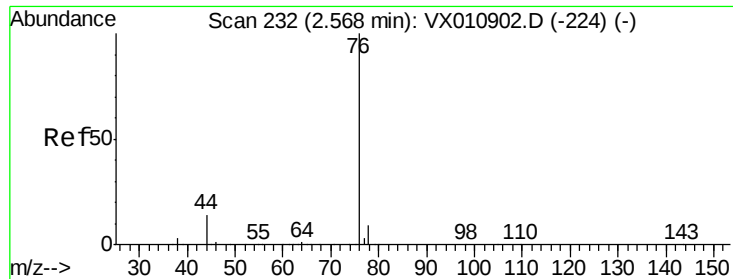
58 35.6 27.7 41.5



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

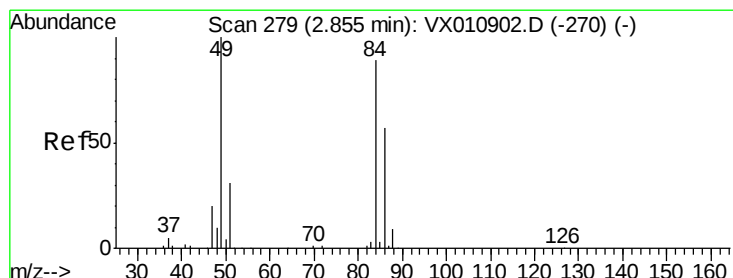
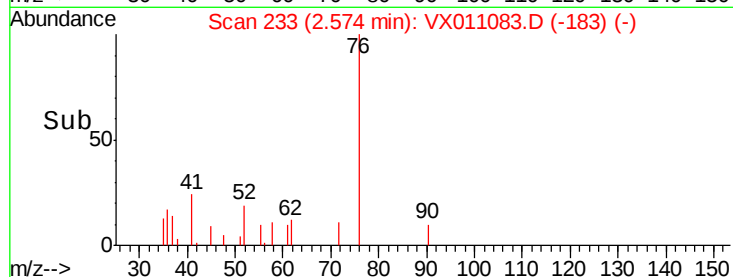
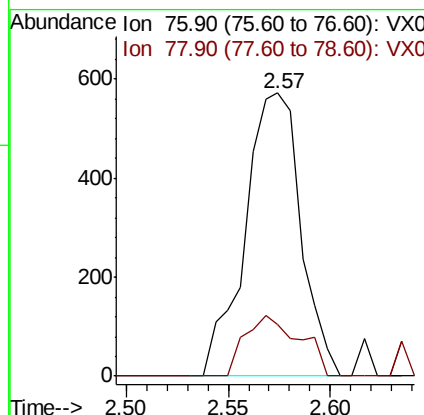
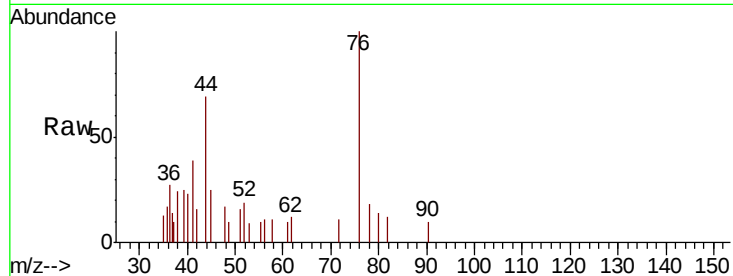




#17
Carbon Disulfide
Concen: 0.234 ug/l
RT: 2.57 min Scan# 233
Delta R.T. 0.01 min
Lab File: VX011083.D
Acq: 26 Jul 2019 12:18

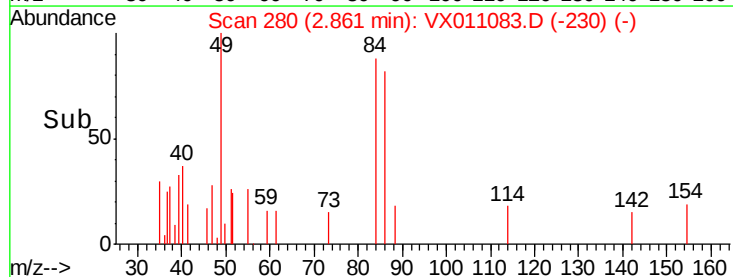
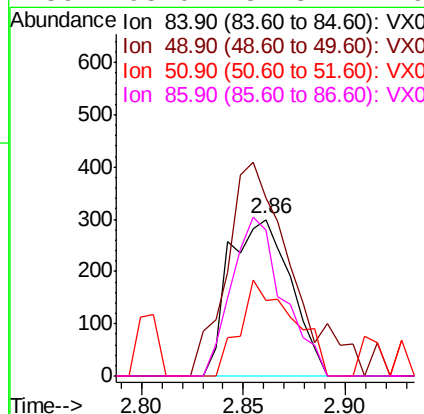
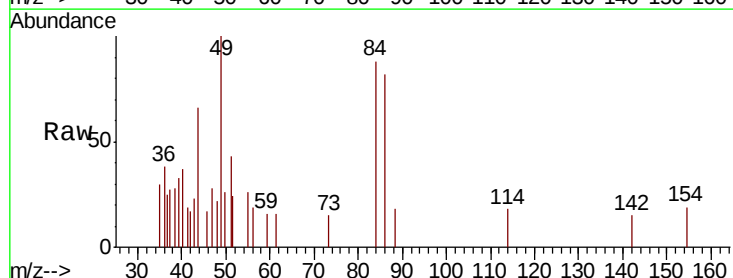
Instrument :
MSVOA_X
ClientSampleId :
FB-072519

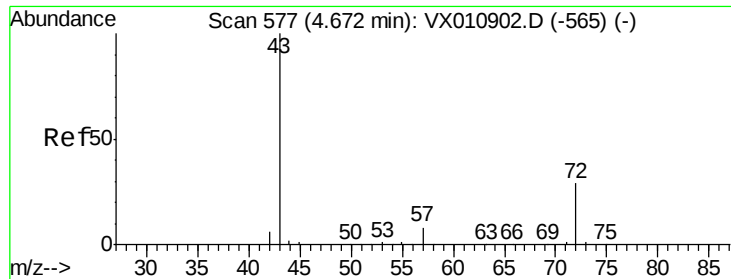
Tot Ion: 76 Resp: 1090
Ion Ratio Lower Upper
76 100
78 18.4 7.4 11.0#



#20
Methylene Chloride
Concen: 0.304 ug/l
RT: 2.86 min Scan# 280
Delta R.T. 0.01 min
Lab File: VX011083.D
Acq: 26 Jul 2019 12:18

Tgt Ion: 84 Resp: 631
Ion Ratio Lower Upper
84 100
49 113.3 89.9 134.9
51 75.3 27.8 41.6#
86 93.0 51.8 77.6#





#25

2-Butanone

Concen: 0.364 ug/l

RT: 4.67 min Scan# 577

Delta R.T. -0.00 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

Instrument :

MSVOA_X

ClientSampleId :

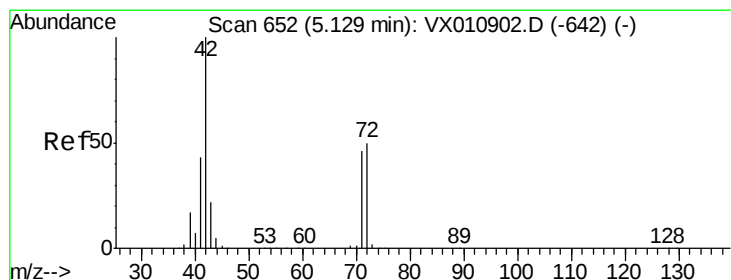
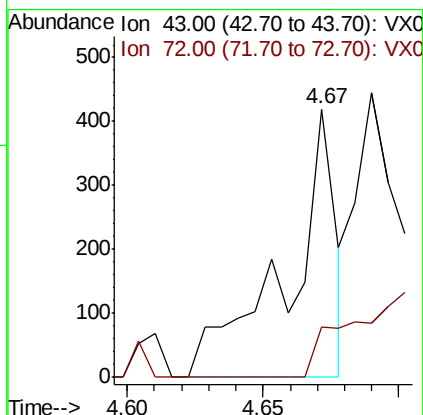
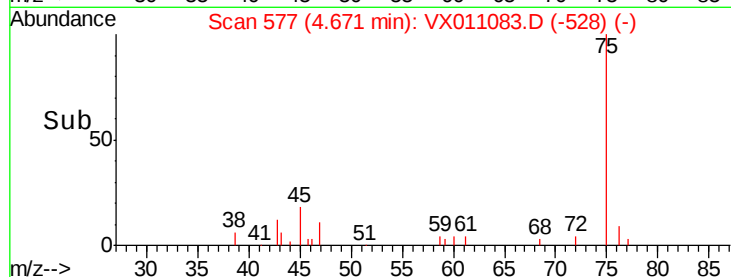
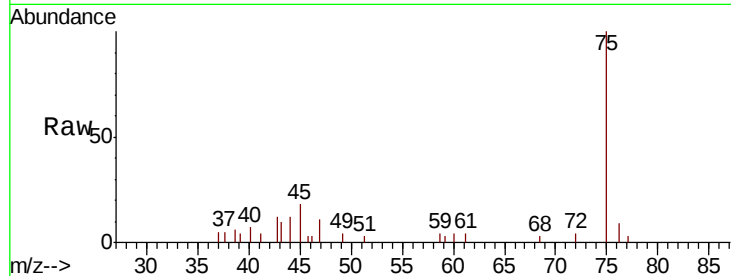
FB-072519

Tot Ion: 43 Resp: 512

Ion Ratio Lower Upper

43 100

72 18.6 23.0 34.6#



#29

Tetrahydrofuran

Concen: 0.542 ug/l

RT: 5.15 min Scan# 656

Delta R.T. 0.02 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

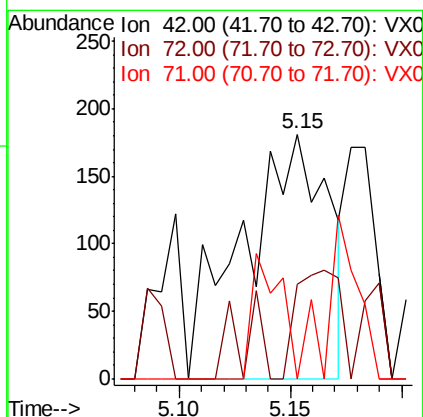
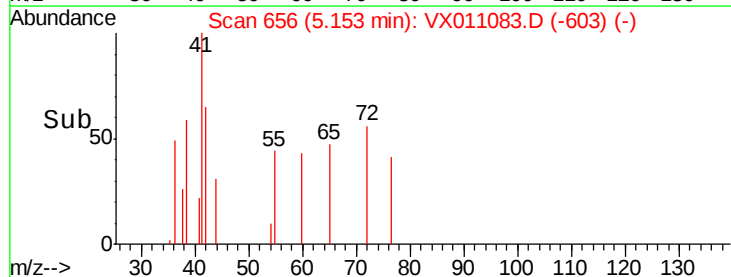
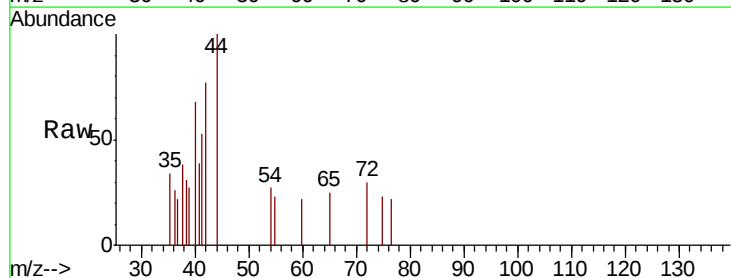
Tgt Ion: 42 Resp: 483

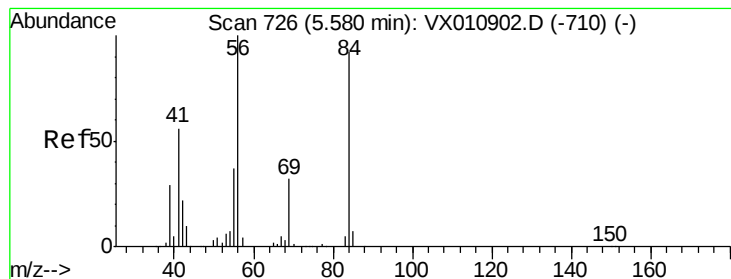
Ion Ratio Lower Upper

42 100

72 22.8 39.8 59.8#

71 23.8 37.0 55.4#





#31

Cyclohexane

Concen: 1.311 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.09 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

Instrument :

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ClientSampleId :

FB-072519

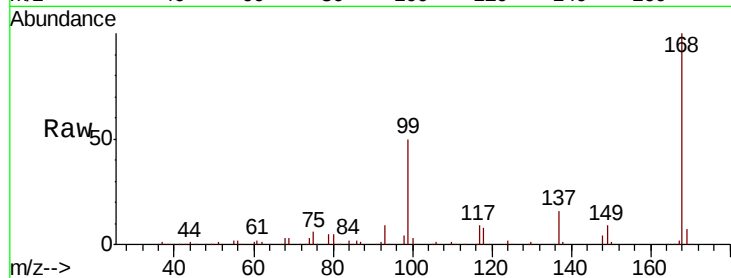
Tot Ion: 56 Resp: 3858

Ion Ratio Lower Upper

56 100

69 169.0 25.8 38.8#

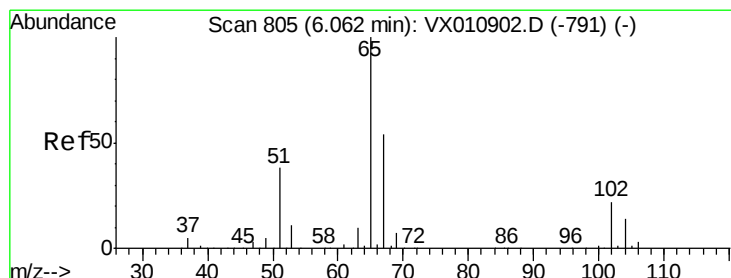
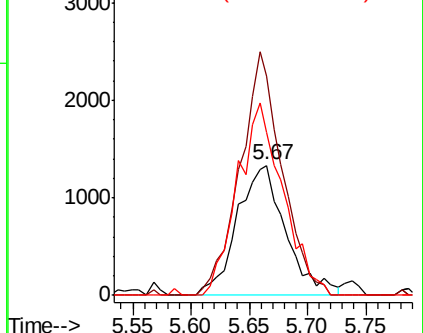
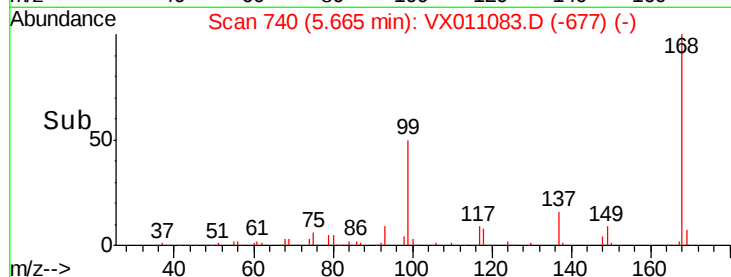
84 125.3 73.8 110.6#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0



#33

1,2-Dichloroethane-d4

Concen: 50.603 ug/l

RT: 6.07 min Scan# 806

Delta R.T. 0.01 min

Lab File: VX011083.D

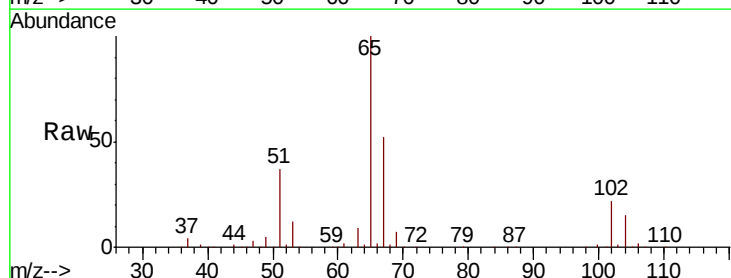
Acq: 26 Jul 2019 12:18

Tgt Ion: 65 Resp: 109713

Ion Ratio Lower Upper

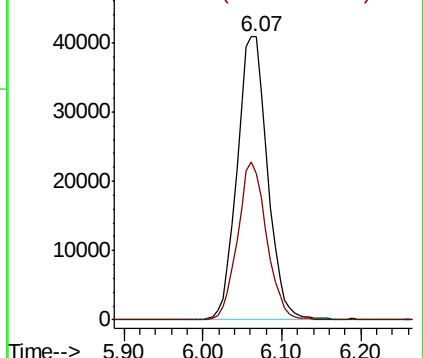
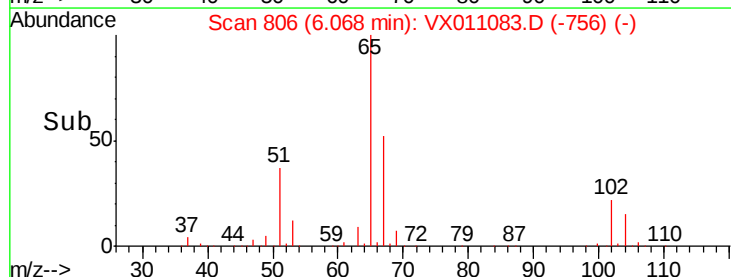
65 100

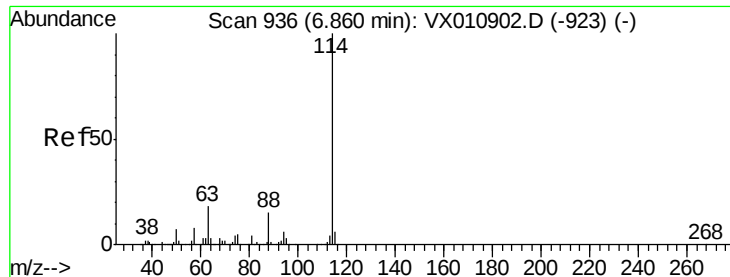
67 53.3 0.0 107.8



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: 6.86 min Scan# 936

Delta R.T. -0.00 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

Instrument :

MSVOA_X

ClientSampleId :

FB-072519

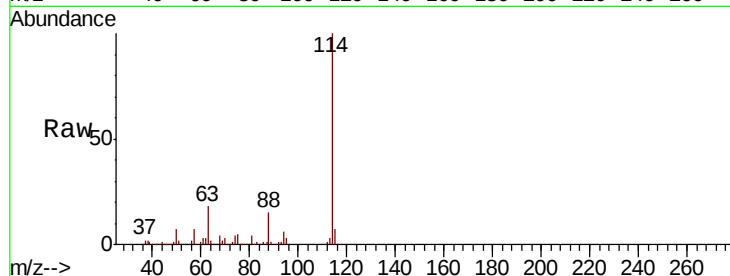
Tot Ion:114 Resp: 319244

Ion Ratio Lower Upper

114 100

63 17.9 0.0 35.6

88 14.6 0.0 29.8



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

150000

100000

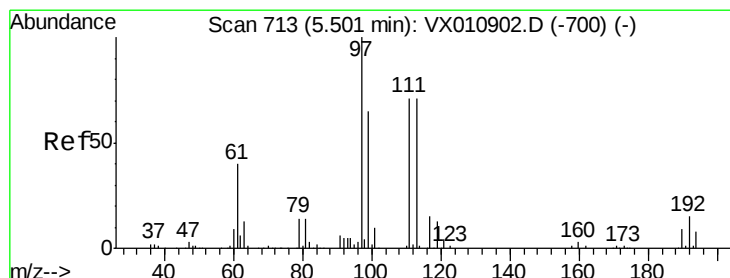
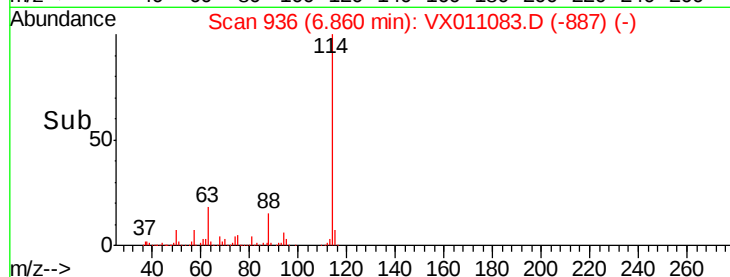
50000

0

6.86

6.80 6.90 7.00

Time-->



#35

Dibromofluoromethane

Concen: 49.908 ug/l

RT: 5.49 min Scan# 712

Delta R.T. -0.01 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

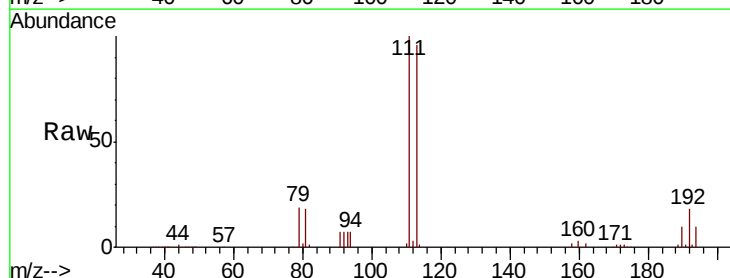
Tgt Ion:113 Resp: 101130

Ion Ratio Lower Upper

113 100

111 103.0 82.3 123.5

192 22.1 17.4 26.2



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

50000

40000

30000

20000

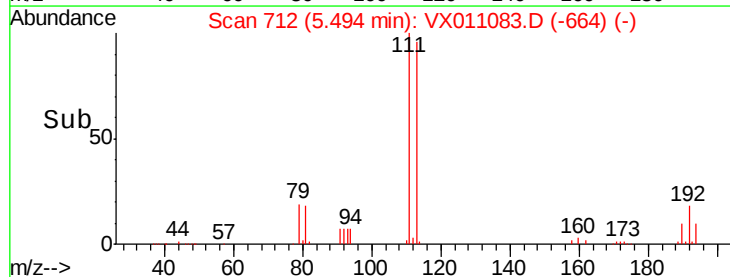
10000

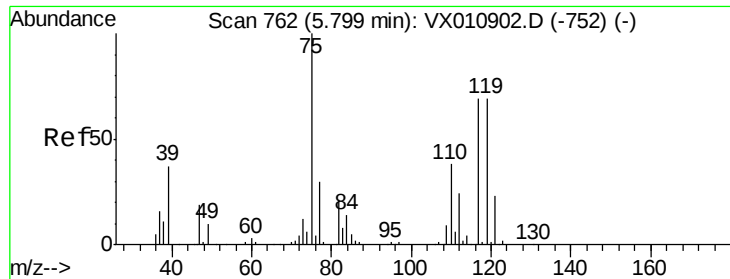
0

5.49

5.40 5.50 5.60

Time-->

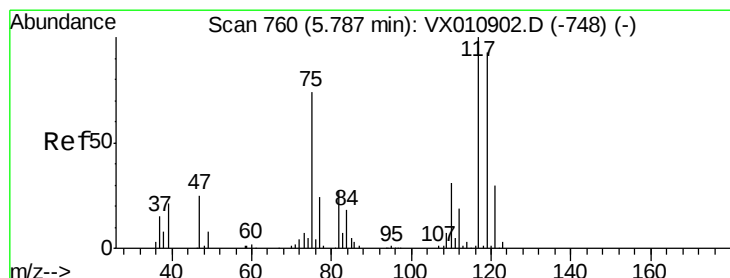
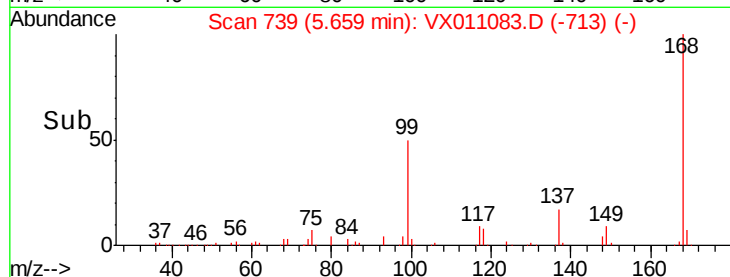
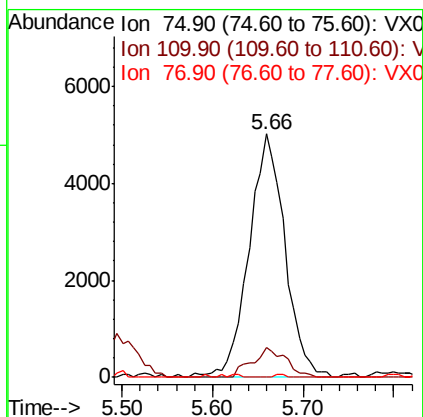
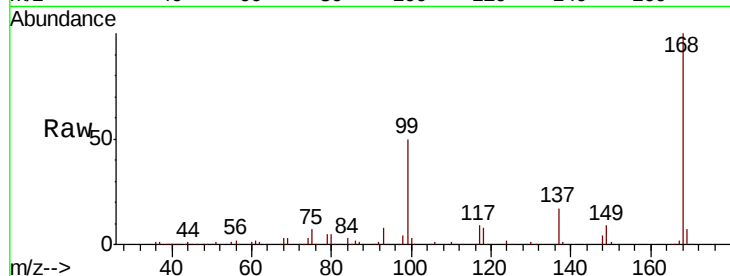




#36
 1,1-Dichloropropene
 Concen: 5.235 ug/l
 RT: 5.66 min Scan# 739
 Delta R.T. -0.14 min
 Lab File: VX011083.D
 Acq: 26 Jul 2019 12:18

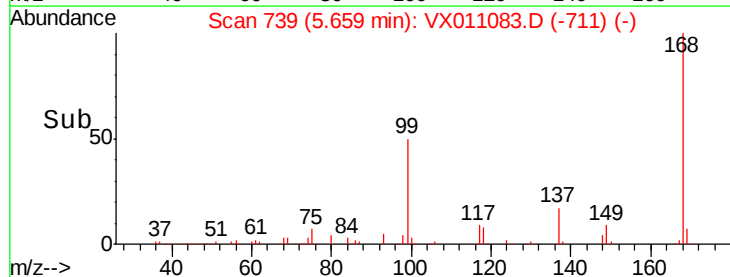
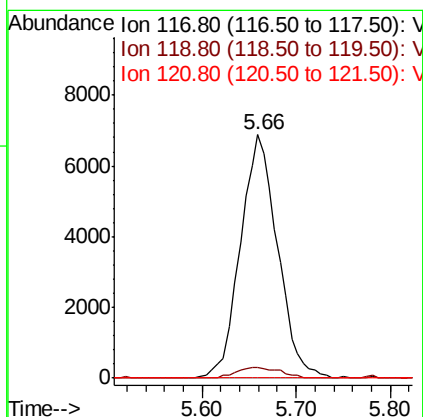
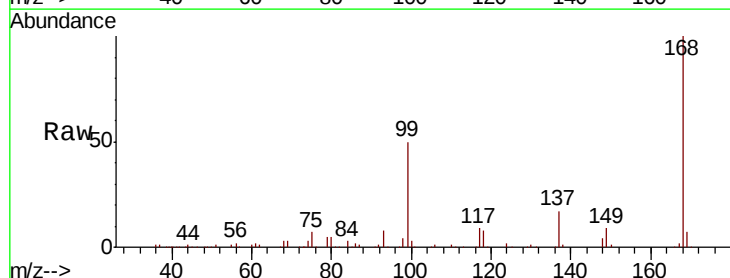
Instrument :
 MSVOA_X
 ClientSampleId :
 FB-072519

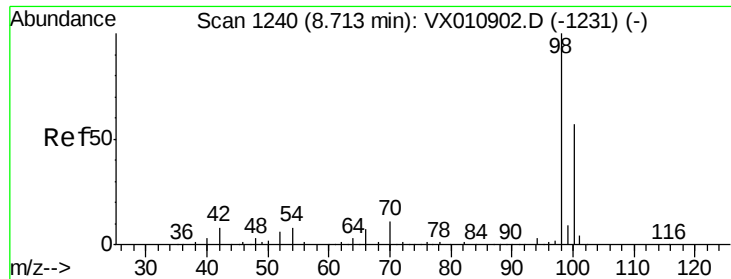
Tot Ion: 75 Resp: 13728
 Ion Ratio Lower Upper
 75 100
 110 11.5 19.9 59.7#
 77 0.3 25.0 37.4#



#38
 Carbon Tetrachloride
 Concen: 6.941 ug/l
 RT: 5.66 min Scan# 739
 Delta R.T. -0.13 min
 Lab File: VX011083.D
 Acq: 26 Jul 2019 12:18

Tgt Ion: 117 Resp: 18967
 Ion Ratio Lower Upper
 117 100
 119 4.3 74.2 111.2#
 121 0.0 24.2 36.2#





#50

Toluene-d8

Concen: 51.117 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

Instrument :

MSVOA_X

ClientSampleId :

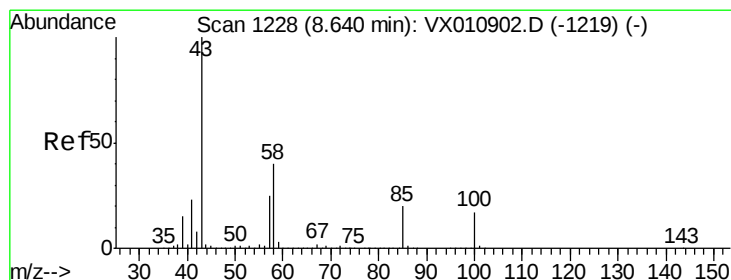
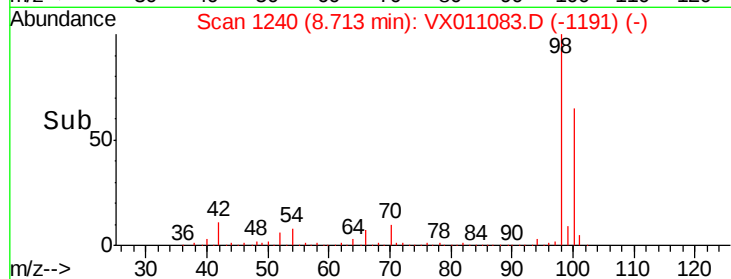
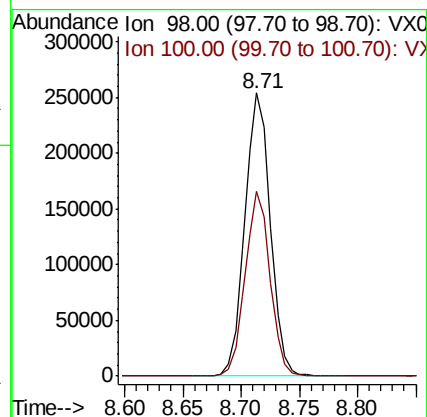
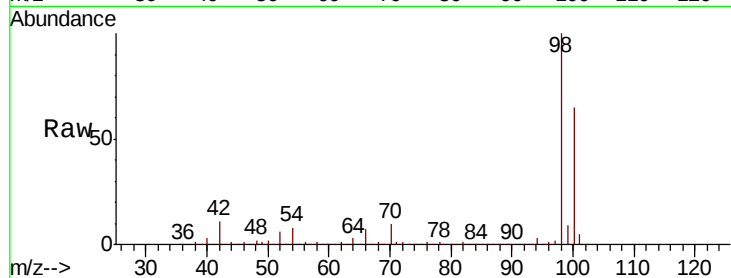
FB-072519

Tot Ion: 98 Resp: 388486

Ion Ratio Lower Upper

98 100

100 63.7 50.6 75.8



#51

4-Methyl-2-Pentanone

Concen: 0.203 ug/l

RT: 8.64 min Scan# 1228

Delta R.T. -0.00 min

Lab File: VX011083.D

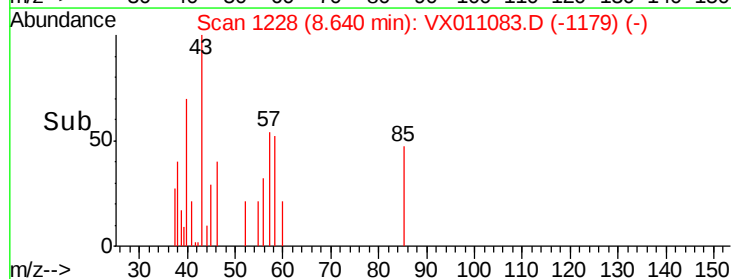
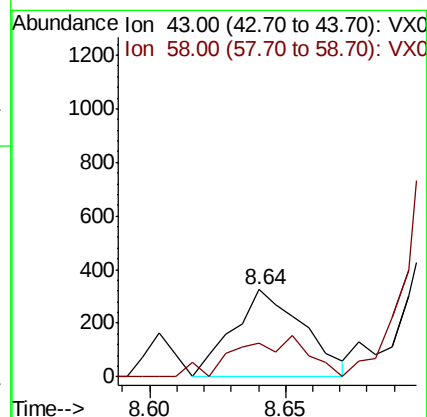
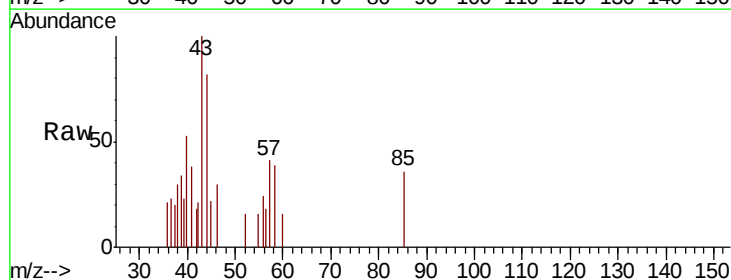
Acq: 26 Jul 2019 12:18

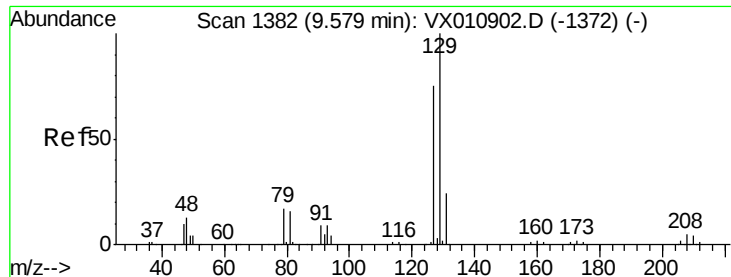
Tgt Ion: 43 Resp: 581

Ion Ratio Lower Upper

43 100

58 48.2 32.2 48.4





#60

Dibromochloromethane

Concen: 2.581 ug/l

RT: 9.34 min Scan# 1343

Delta R.T. -0.24 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

Instrument :

MSVOA_X

ClientSampleId :

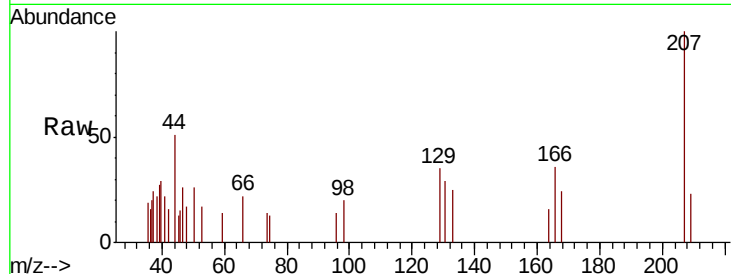
FB-072519

Tot Ion:129 Resp: 141

Ion Ratio Lower Upper

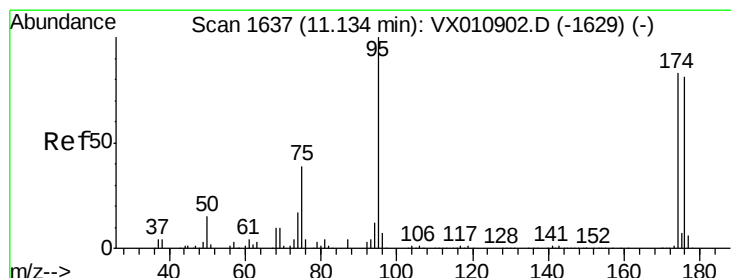
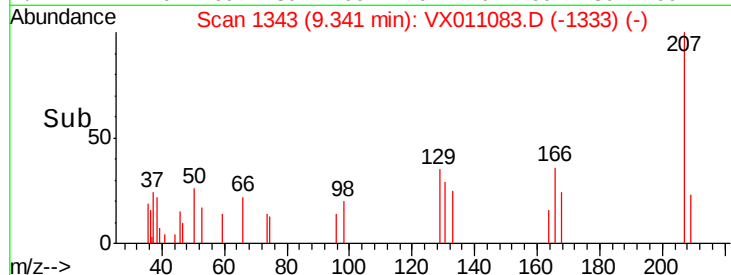
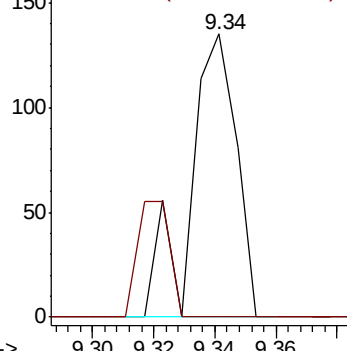
129 100

127 0.0 38.6 115.8#



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V



#62

4-Bromofluorobenzene

Concen: 48.567 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.00 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

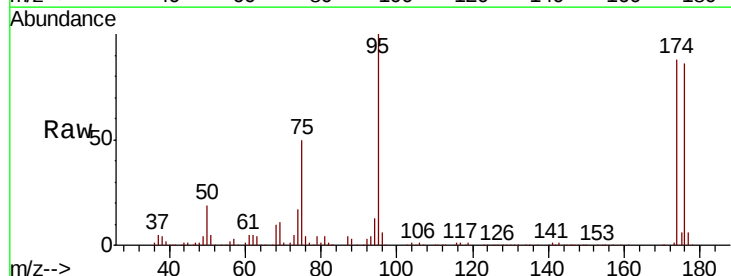
Tgt Ion: 95 Resp: 135672

Ion Ratio Lower Upper

95 100

174 90.3 0.0 180.6

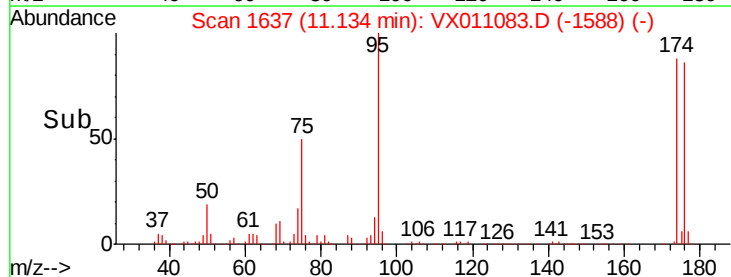
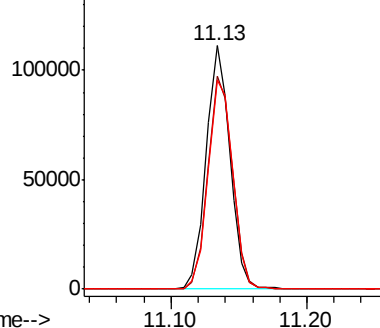
176 89.4 0.0 173.8

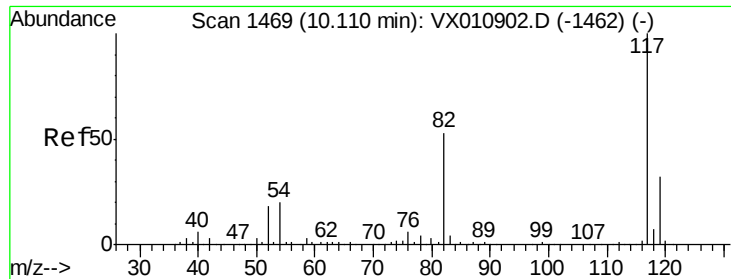


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

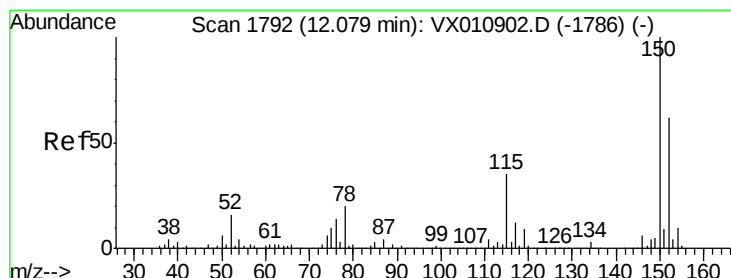
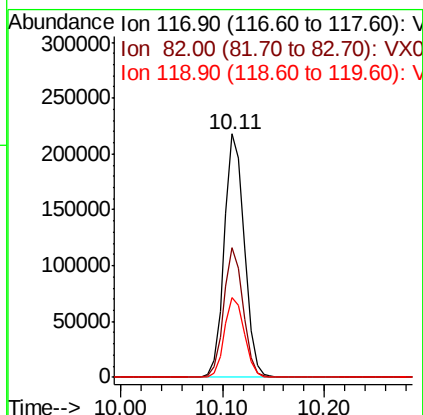
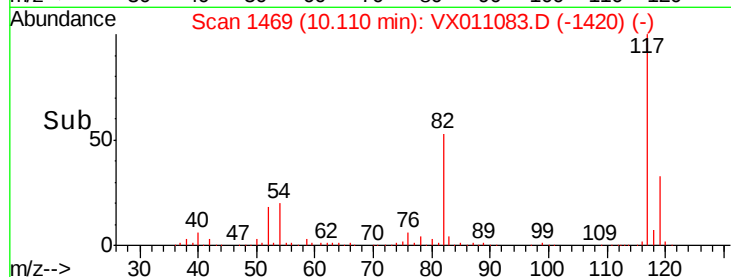
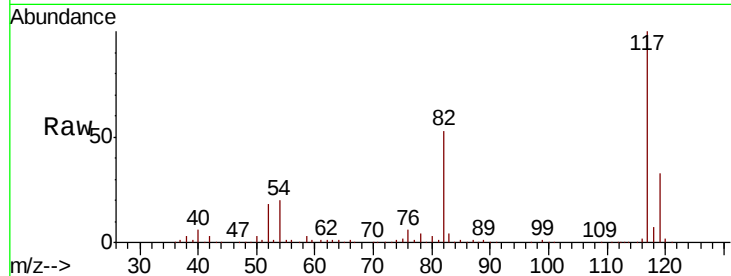




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.11 min Scan# 1469
Delta R.T. -0.00 min
Lab File: VX011083.D
Acq: 26 Jul 2019 12:18

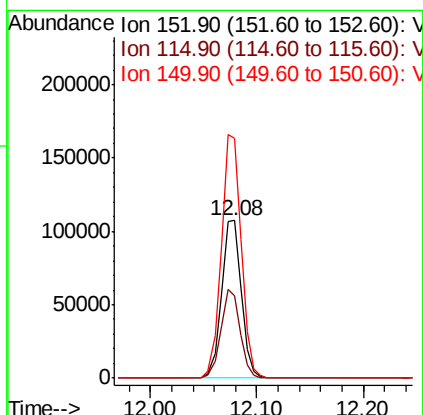
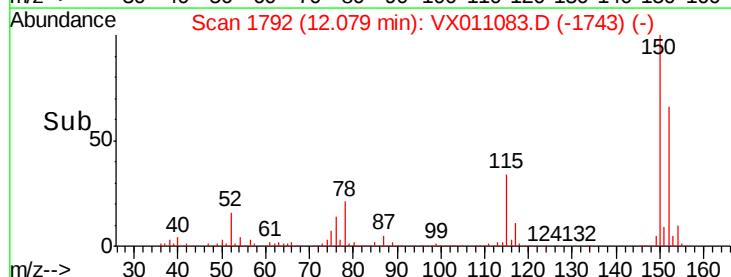
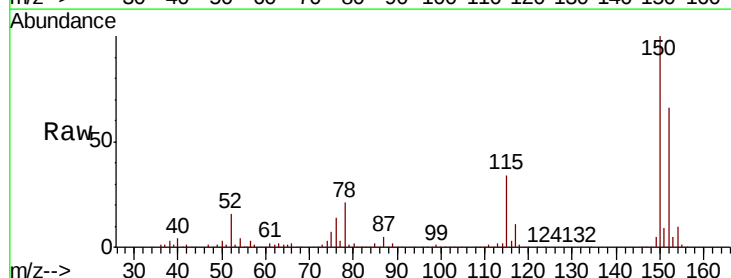
Instrument :
MSVOA_X
ClientSampled :
FB-072519

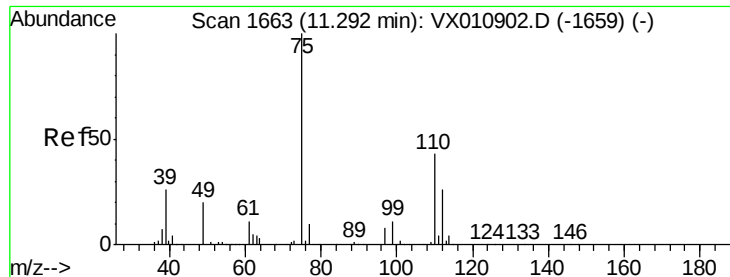
Tot Ion:117 Resp: 297320
Ion Ratio Lower Upper
117 100
82 53.1 42.6 63.8
119 32.8 25.9 38.9



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.08 min Scan# 1792
Delta R.T. -0.00 min
Lab File: VX011083.D
Acq: 26 Jul 2019 12:18

Tgt Ion:152 Resp: 139556
Ion Ratio Lower Upper
152 100
115 54.6 39.7 119.1
150 155.0 0.0 345.6





#76

1,2,3-Trichloropropane

Concen: 26.782 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

Instrument :

MSVOA_X

ClientSampleId :

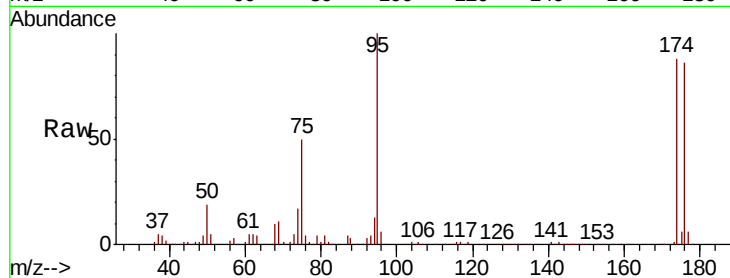
FB-072519

Tot Ion: 75 Resp: 67448

Ion Ratio Lower Upper

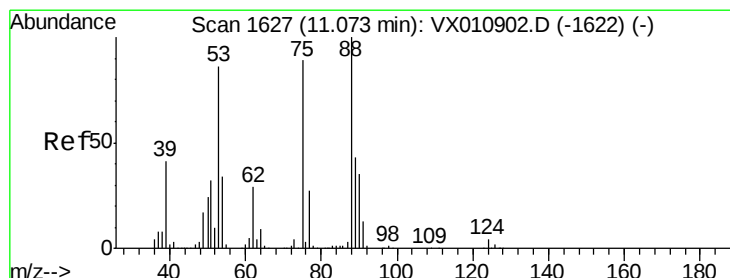
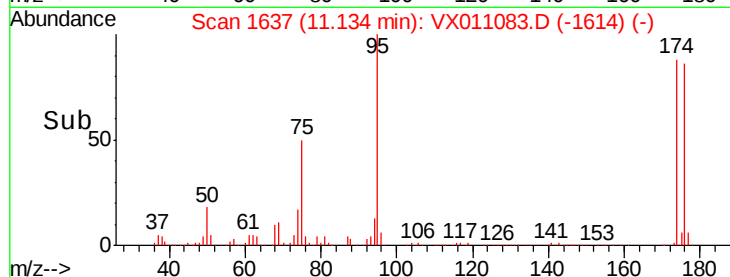
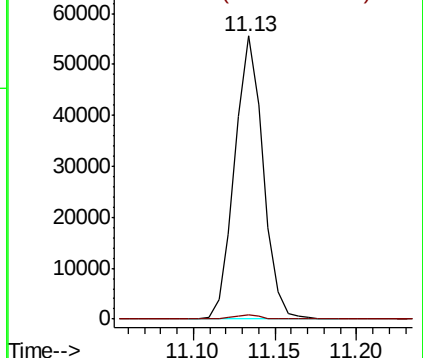
75 100

77 1.4 21.3 64.0#



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: 66.434 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

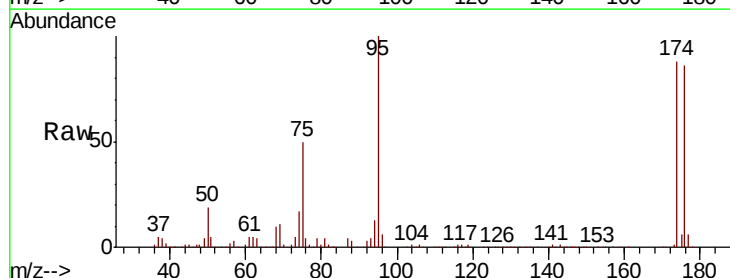
Tgt Ion: 75 Resp: 67448

Ion Ratio Lower Upper

75 100

53 0.0 76.7 115.1#

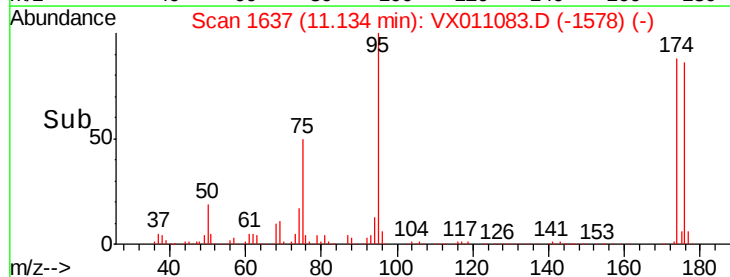
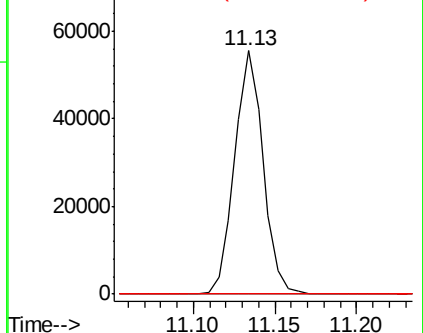
89 0.1 38.5 57.7#

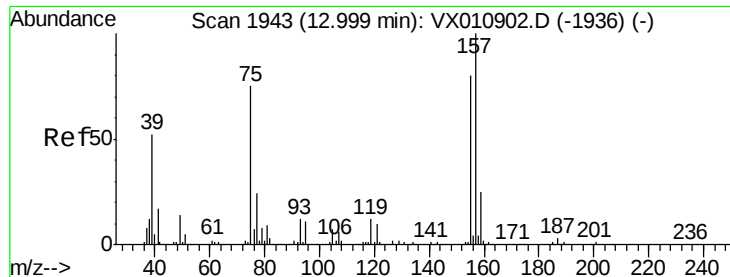


Abundance Ion 74.90 (74.60 to 75.60): VX0

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: 0.330 ug/l

RT: 12.97 min Scan# 1939

Delta R.T. -0.02 min

Lab File: VX011083.D

Acq: 26 Jul 2019 12:18

Instrument :

MSVOA_X

ClientSampleId :

FB-072519

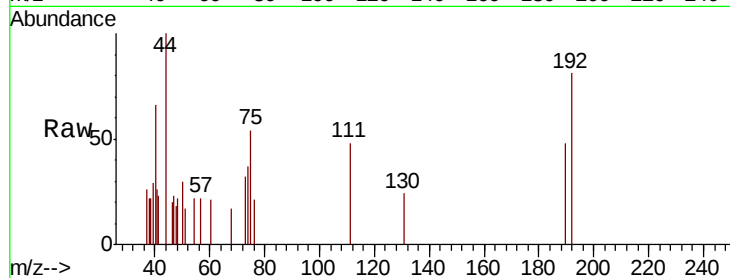
Tot Ion: 75 Resp: 213

Ion Ratio Lower Upper

75 100

155 0.0 48.7 146.1#

157 0.0 62.5 187.6#



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

