

Data Path : Z:\HPCHEM1\BNA F\DATA\BF101715\
 Data File : BF082339.D
 Acq On : 16 Oct 2015 21:39
 Operator : UM/IZ
 Sample : G4046-04 10X
 Misc :
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 MANAHAWKEN112

Manual Integrations
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 10/19/2015 5:32:30 PM

Quant Time: Oct 19 02:55:18 2015
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF101015.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Sat Oct 17 01:08:23 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	51432m	20.00	ng	0.09
21) Naphthalene-d8	8.21	136	234368m	20.00	ng	0.08
38) Acenaphthene-d10	9.95	164	129589m	20.00	ng	0.07
63) Phenanthrene-d10	11.45	188	198676m	20.00	ng	0.08
75) Chrysene-d12	14.15	240	187743m	20.00	ng	0.08
86) Perylene-d12	15.69	264	200069m	20.00	ng	0.10

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	5.53	112	18788	7.37	ng	0.10
7) Phenol-d6	6.56	99	28281	8.53	ng	0.08
23) Nitrobenzene-d5	7.49	82	14617m	4.19	ng	0.07
41) 2,4,6-Tribromophenol	10.75	330	9341m	7.69	ng	0.07
44) 2-Fluorobiphenyl	9.27	172	46355m	5.93	ng	0.06
78) Terphenyl-d14	13.04	244	55112m	7.78	ng	0.08

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
31) Naphthalene	8.23	128	159647m	15.71	ng	
37) 2-Methylnaphthalene	8.91	142	187813m	26.67	ng	
45) 1,1'-Biphenyl	9.37	154	111118m	11.24	ng	
48) Acenaphthylene	9.82	152	132326m	10.92	ng	
51) Acenaphthene	10.00	154	936425m	128.72	ng	
54) Dibenzofuran	10.17	168	1536360m	153.82	ng	
57) Fluorene	10.51	166	1469872m	179.18	ng	
70) Phenanthrene	11.52	178	9484043m	973.88	ng	
71) Anthracene	11.55	178	1414965m	141.00	ng	
72) Carbazole	11.69	167	1648779m	180.11	ng	
74) Fluoranthene	12.71	202	7362201m	703.89	ng	
77) Pyrene	12.94	202	5114144m	459.01	ng	
80) Benzo(a)anthracene	14.14	228	1517297m	155.33	ng	
82) Chrysene	14.18	228	1596645m	155.12	ng	
85) Indeno(1,2,3-cd)pyrene	17.17	276	134276m	16.41	ng	
87) Benzo(b)fluoranthene	15.26	252	843423m	69.29	ng	
88) Benzo(k)fluoranthene	15.27	252	400215m	39.12	ng	
89) Benzo(a)pyrene	15.62	252	331717m	31.71	ng	
90) Dibenzo(a,h)anthracene	17.18	278	35362m	4.13	ng	
91) Benzo(a,h,i)perylene	17.61	276	94126m	11.30	ng	

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

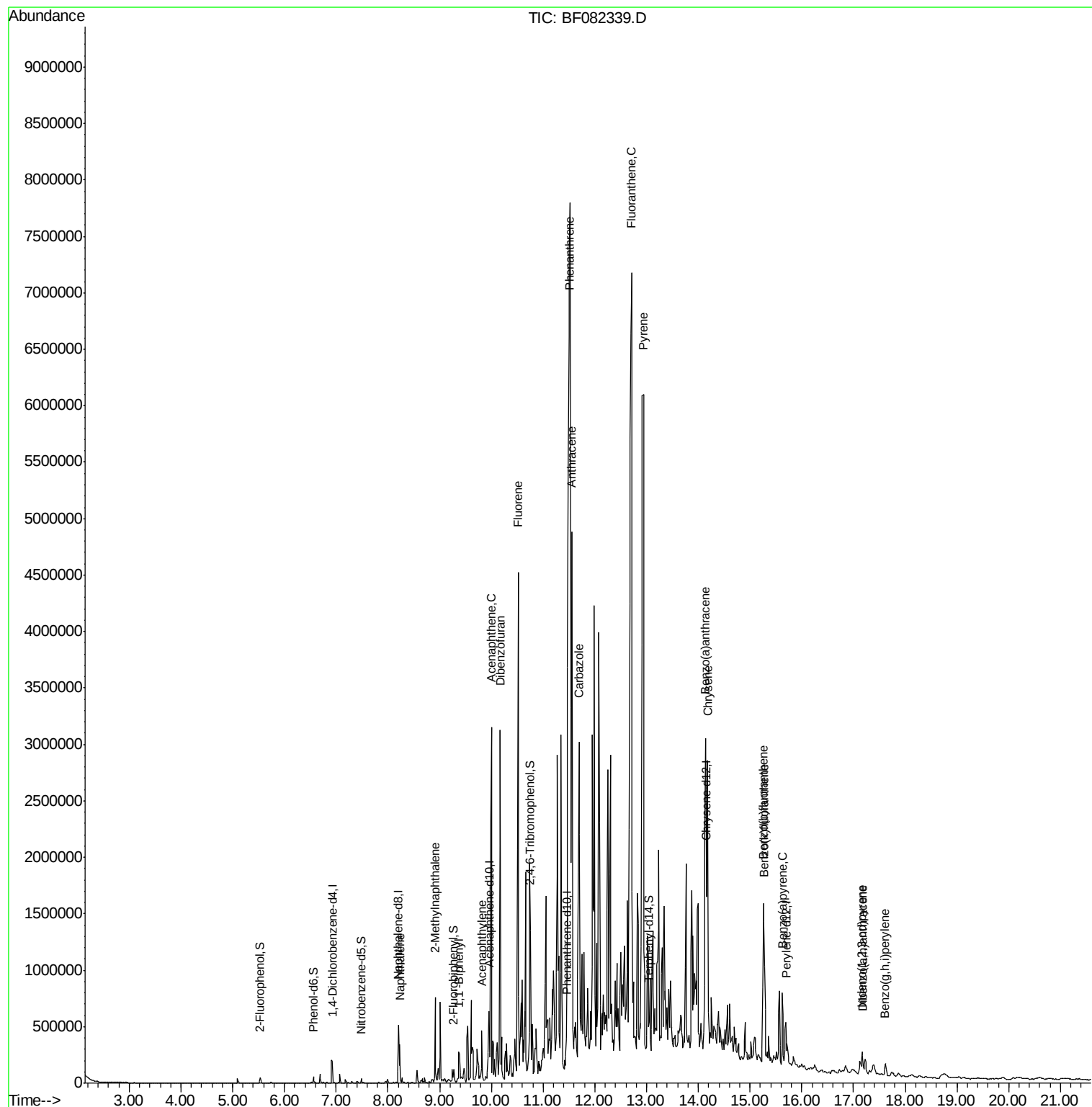
Data Path : Z:\HPCHEM1\BNA F\DATA\BF101715\
Data File : BF082339.D
Acq On : 16 Oct 2015 21:39
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ALS Vial : 21 Sample Multiplier: 1

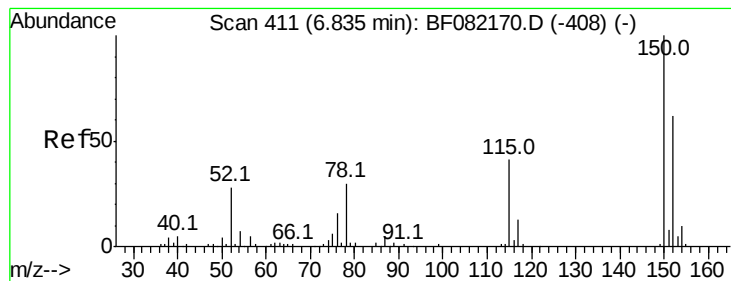
Instrument :
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Quant Time: Oct 19 02:55:18 2015
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QLast Update : Sat Oct 17 01:08:23 2015
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng/mL

RT: 6.93 min Scan# 419

Delta R.T. 0.09 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Instrument :

BNA_F

ClientSampleId :

MANAHAWKEN112

Tot Ion:152 Resp: 51432

Ion Ratio Lower Upper

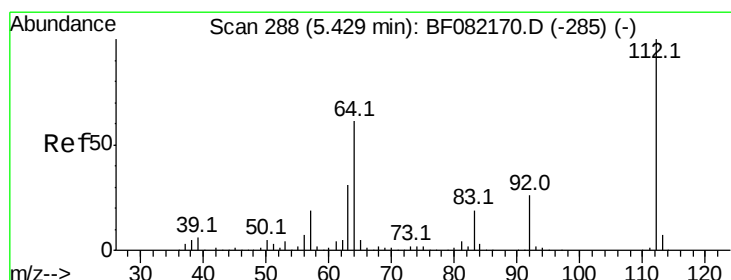
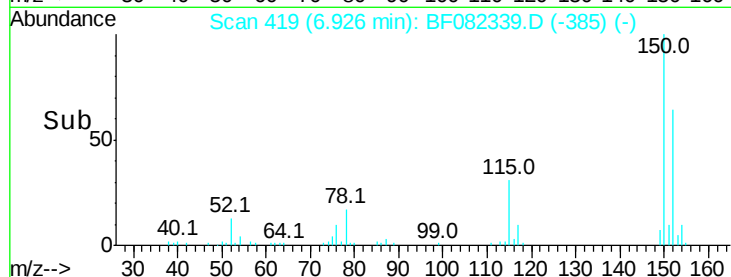
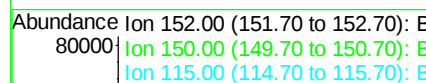
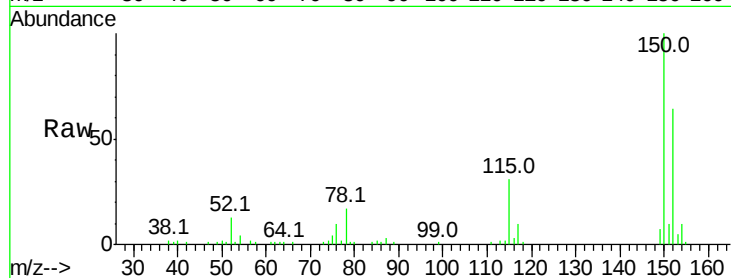
152 100

150 156.9 129.0 193.4

115 49.1 52.1 78.1#

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#5

2-Fluorophenol

Concen: 7.37 ng

RT: 5.53 min Scan# 297

Delta R.T. 0.10 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

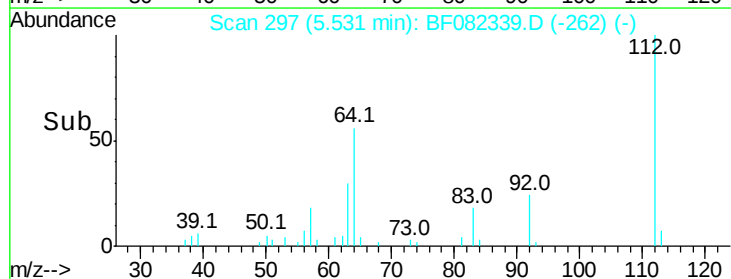
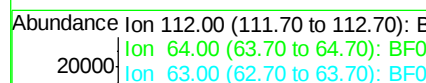
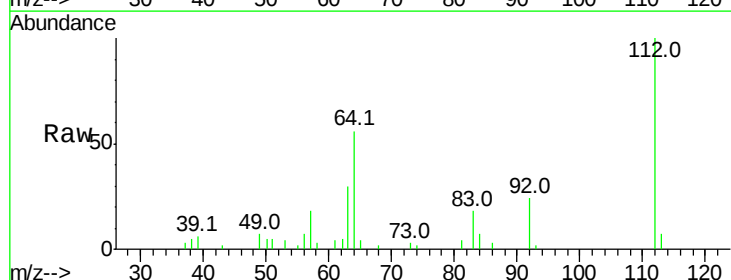
Tgt Ion:112 Resp: 18788

Ion Ratio Lower Upper

112 100

64 56.1 48.6 73.0

63 30.3 25.1 37.7





#7

Phenol-d6

Concen: 8.53 ng

RT: 6.56 min Scan# 387

Delta R.T. 0.08 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Instrument :

BNA_F

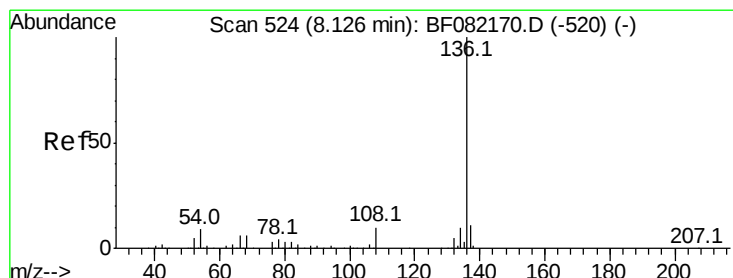
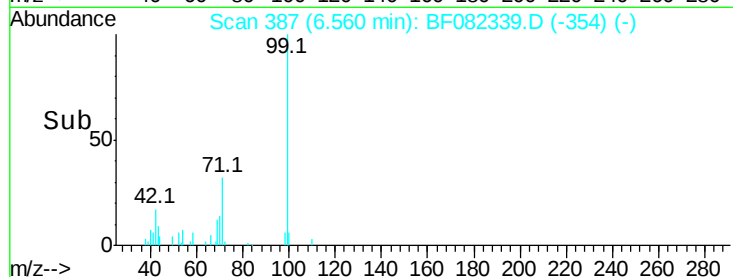
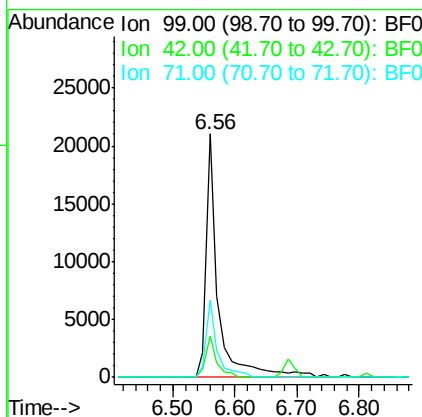
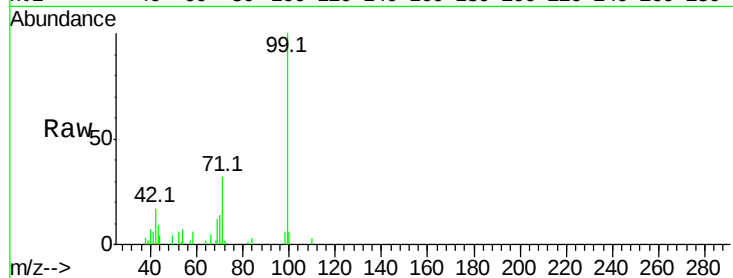
ClientSampleId :

MANAHAWKEN112

Tot Ion:	99	Resp:	28281
Ion Ratio	Lower	Upper	
99	100		
42	17.0	13.2	19.8
71	31.7	25.6	38.4

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#21

Naphthalene-d8

Concen: 20.00 ng m

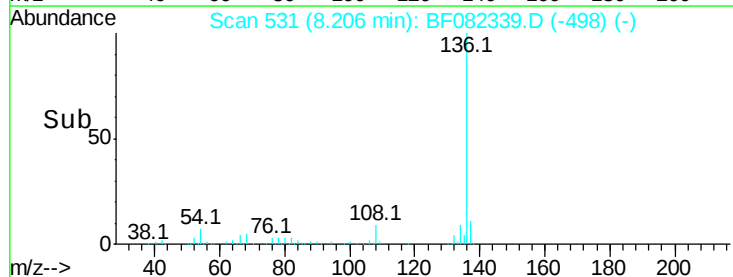
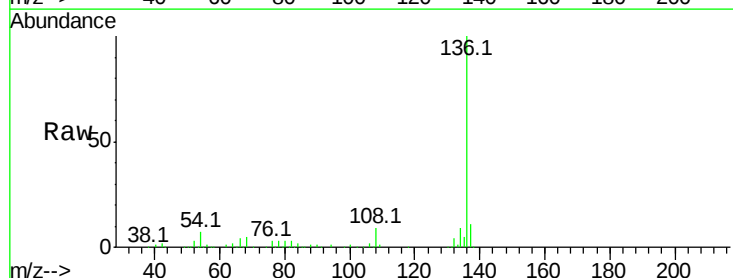
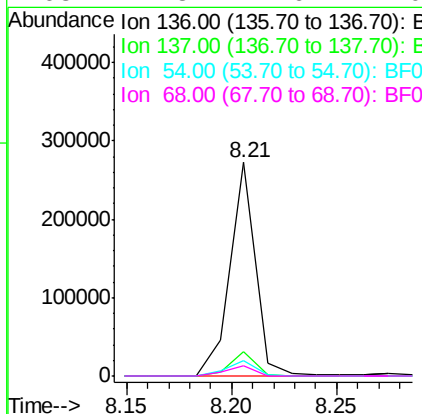
RT: 8.21 min Scan# 531

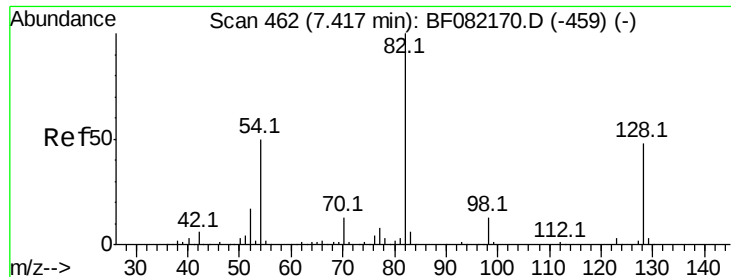
Delta R.T. 0.08 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Tgt Ion:	136	Resp:	234368
Ion Ratio	Lower	Upper	
136	100		
137	11.1	9.0	13.6
54	6.9	7.5	11.3#
68	4.8	4.6	7.0





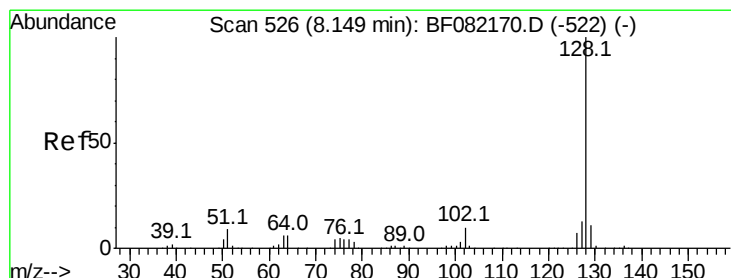
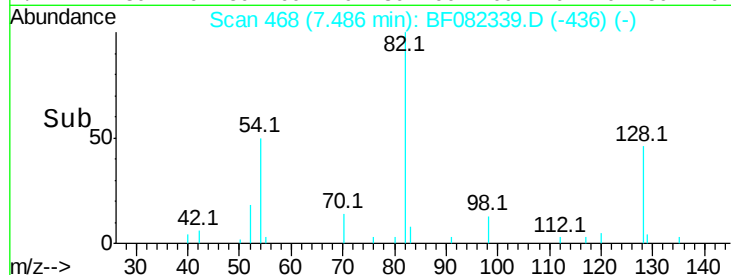
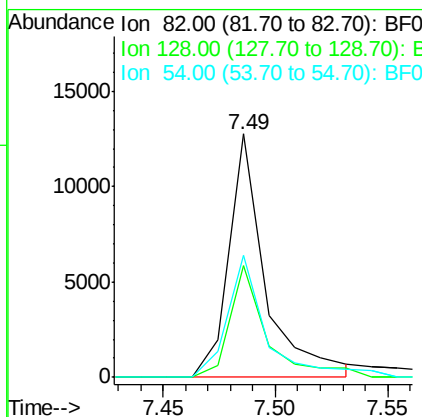
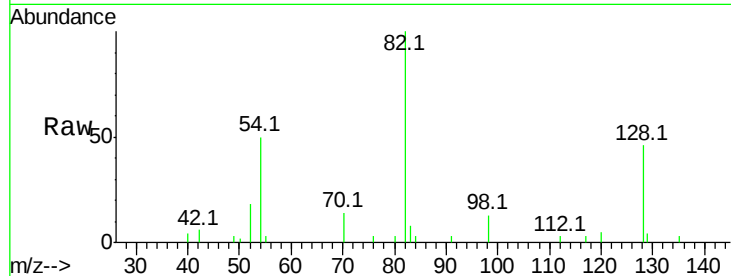
#23
Nitrobenzene-d5
Concen: 4.19 ng m
RT: 7.49 min Scan# 468
Delta R.T. 0.07 min
Lab File: BF082339.D
Acq: 16 Oct 2015 21:39

Instrument :
BNA_F
ClientSampleId :
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Tot Ion	Ratio	Lower	Upper
82	100		
128	46.0	38.7	58.1
54	49.9	40.1	60.1

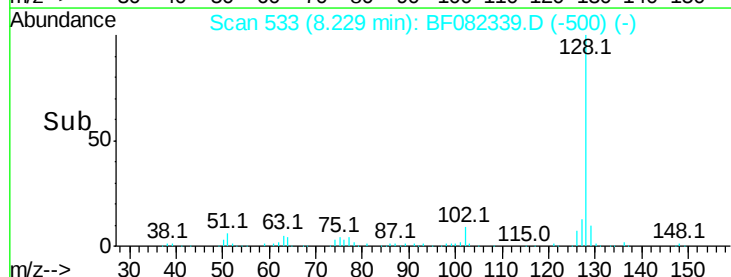
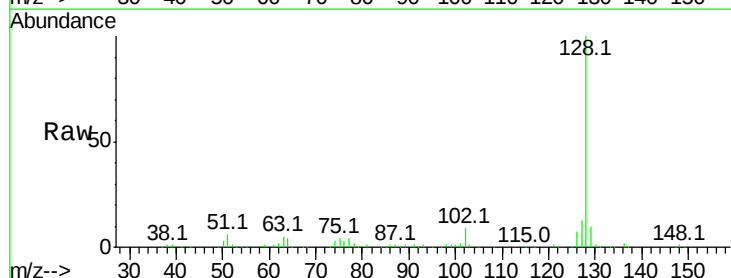
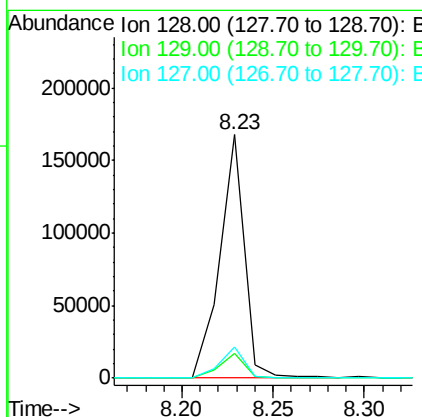
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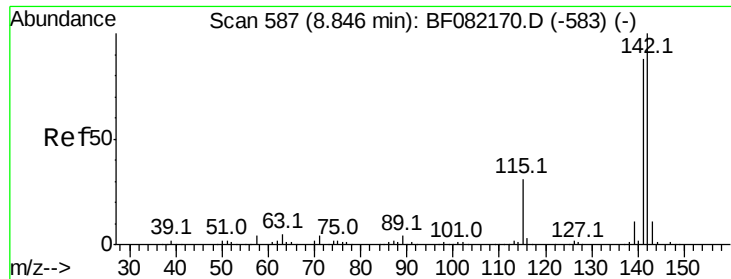
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#31
Naphthalene
Concen: 15.71 ng m
RT: 8.23 min Scan# 533
Delta R.T. 0.08 min
Lab File: BF082339.D
Acq: 16 Oct 2015 21:39

Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.4	9.1	13.7
127	12.6	10.7	16.1





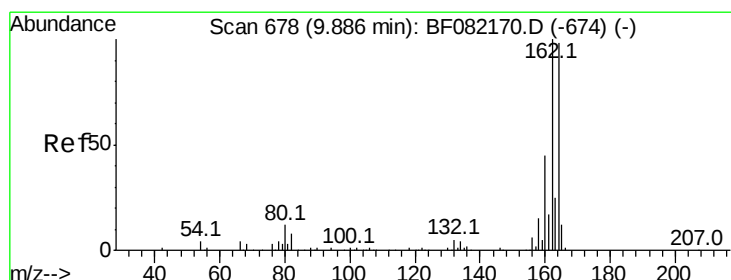
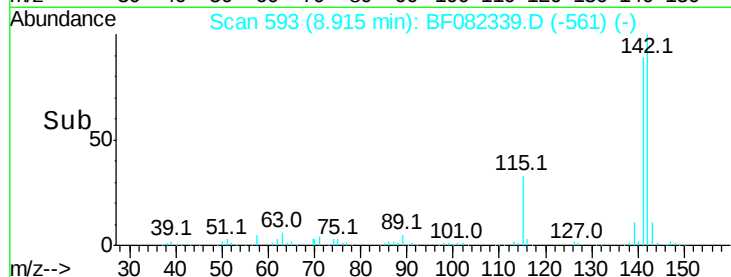
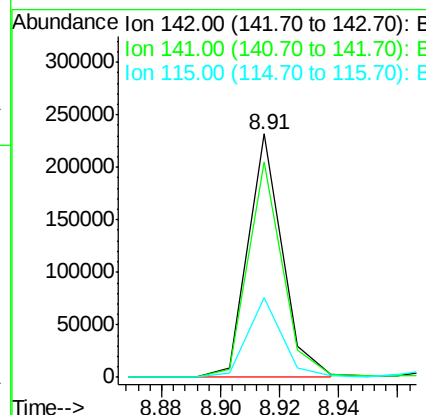
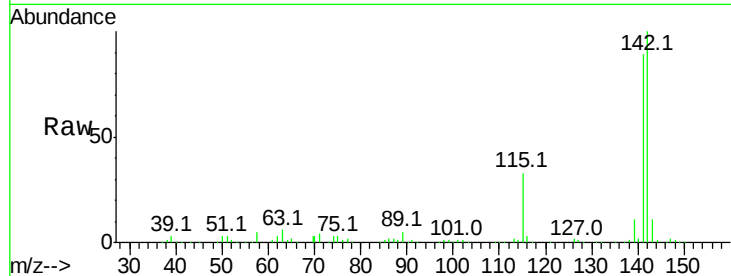
#37
2-Methylnaphthalene
Concen: 26.67 ng m
RT: 8.91 min Scan# 593
Delta R.T. 0.07 min
Lab File: BF082339.D
Acq: 16 Oct 2015 21:39

Instrument :
BNA_F
ClientSampleId :
MANAHAWKEN112

Tot Ion	Ratio	Lower	Upper
142	100		
141	88.7	70.4	105.6
115	33.0	24.6	37.0

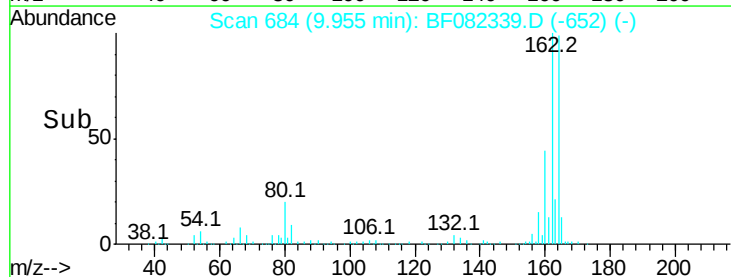
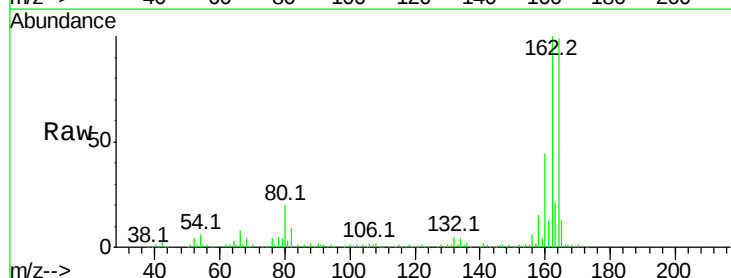
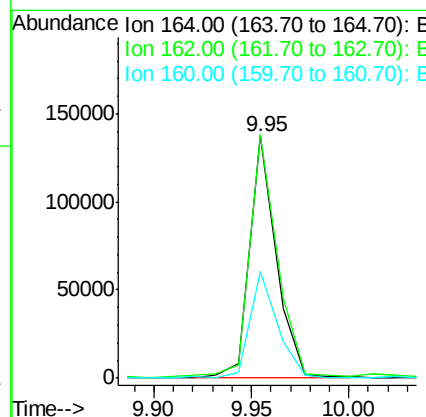
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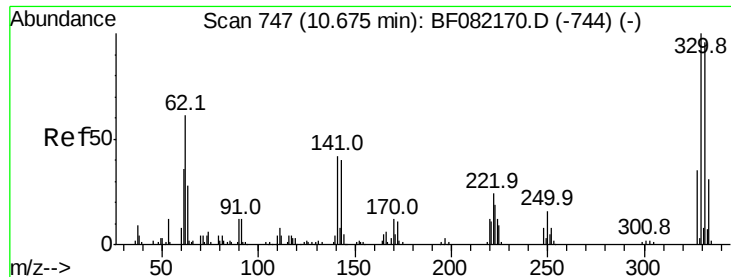
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#38
Acenaphthene-d10
Concen: 20.00 ng m
RT: 9.95 min Scan# 684
Delta R.T. 0.07 min
Lab File: BF082339.D
Acq: 16 Oct 2015 21:39

Tgt Ion	Ratio	Lower	Upper
164	100		
162	100.7	81.6	122.4
160	44.3	36.4	54.6





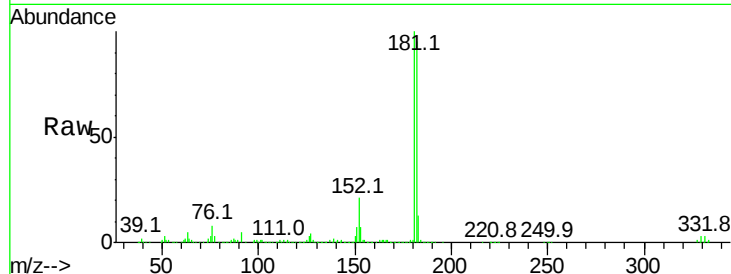
#41
 2,4,6-Tribromophenol
 Concen: 7.69 ng m
 RT: 10.75 min Scan# 754
 Delta R.T. 0.07 min
 Lab File: BF082339.D
 Acq: 16 Oct 2015 21:39

Instrument :
 BNA_F
 ClientSampleId :
 MANAHAWKEN112

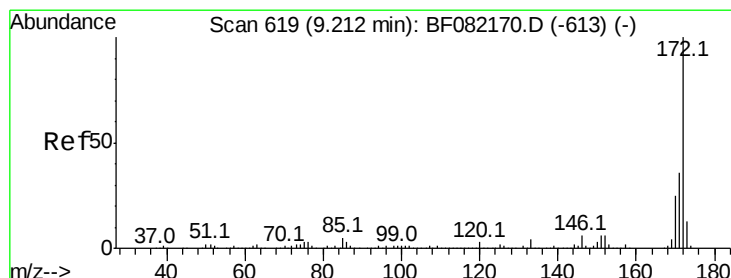
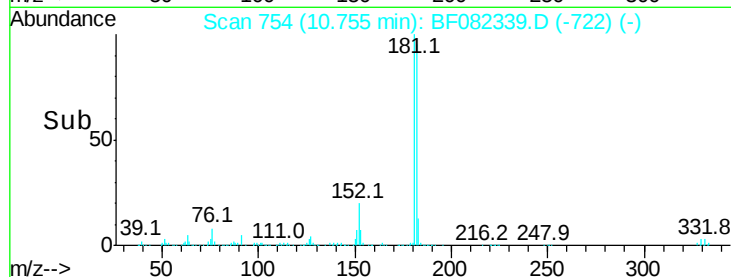
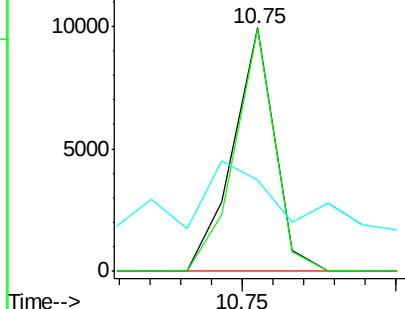
Tot Ion	Ratio	Lower	Upper
330	100		
332	0.0	77.1	115.7#
141	0.0	29.8	44.8#

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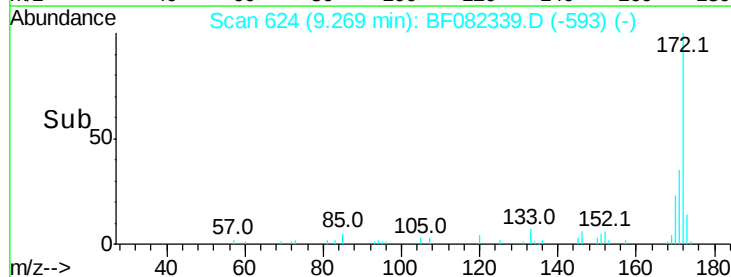
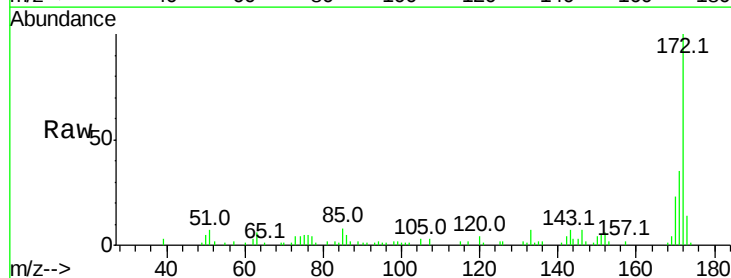
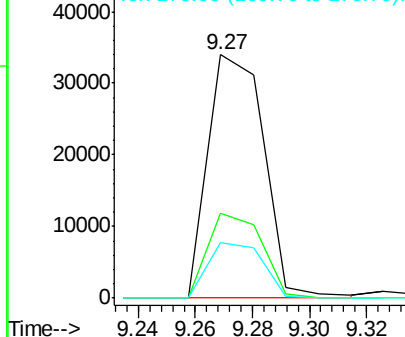
Abundance Ion 329.80 (329.50 to 330.50): E
 Ion 331.80 (331.50 to 332.50): E
 Ion 141.00 (140.70 to 141.70): E

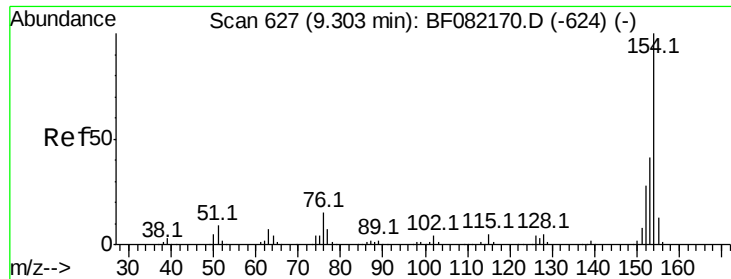


#44
 2-Fluorobiphenyl
 Concen: 5.93 ng m
 RT: 9.27 min Scan# 624
 Delta R.T. 0.06 min
 Lab File: BF082339.D
 Acq: 16 Oct 2015 21:39

Tgt Ion	Ratio	Lower	Upper
172	100		
171	34.7	28.6	42.8
170	23.0	19.7	29.5

Abundance Ion 172.00 (171.70 to 172.70): E
 Ion 171.00 (170.70 to 171.70): E
 Ion 170.00 (169.70 to 170.70): E





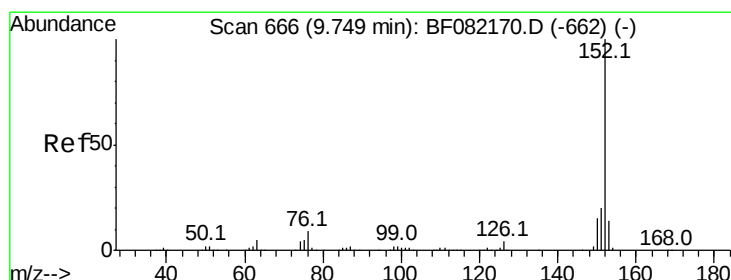
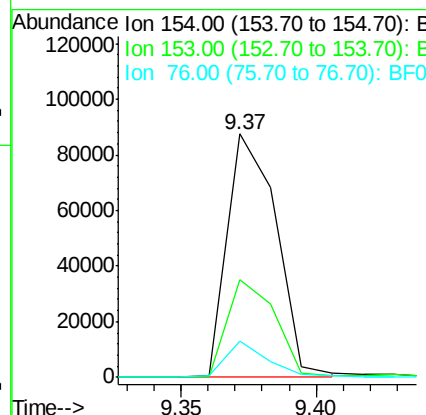
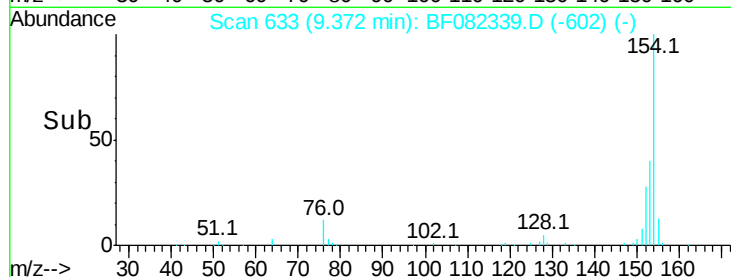
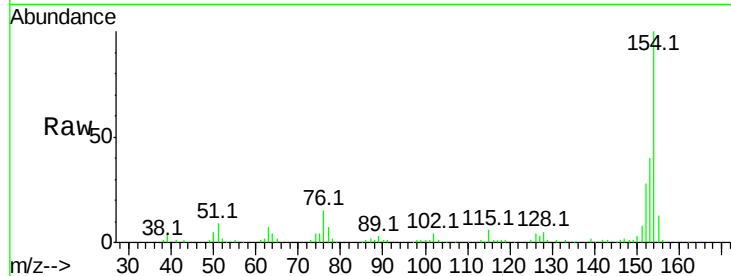
#45
 1,1'-Biphenyl
 Concen: 11.24 ng m
 RT: 9.37 min Scan# 633
 Delta R.T. 0.06 min
 Lab File: BF082339.D
 Acq: 16 Oct 2015 21:39

Instrument :
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 ClientSampleId :
 MANAHAWKEN112

Tot Ion	Ratio	Resp	Lower	Upper
154	100	111118		
153	39.9	20.6	60.6	
76	15.1	0.0	35.2	

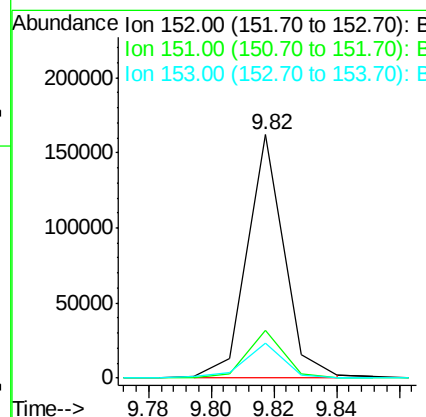
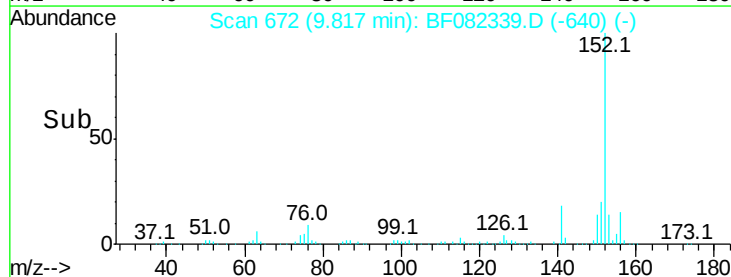
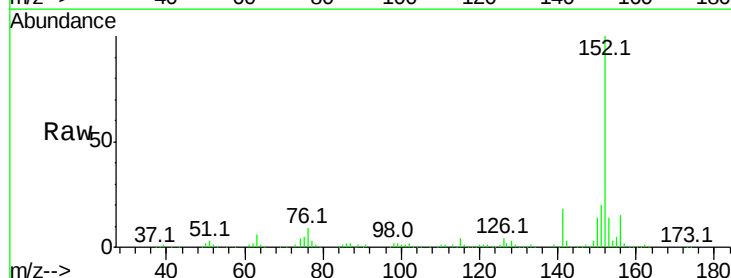
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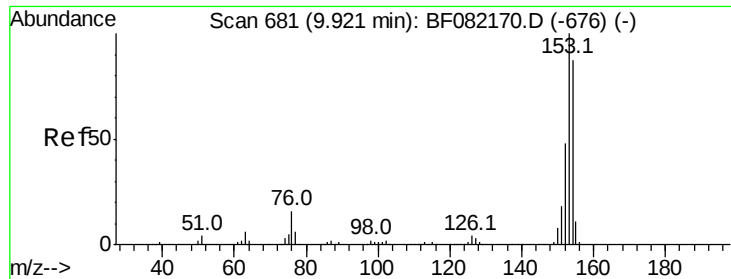
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#48
 Acenaphthylene
 Concen: 10.92 ng m
 RT: 9.82 min Scan# 672
 Delta R.T. 0.07 min
 Lab File: BF082339.D
 Acq: 16 Oct 2015 21:39

Tgt Ion	Ratio	Resp	Lower	Upper
152	100	132326		
151	19.8	16.4	24.6	
153	14.4	10.8	16.2	





#51

Acenaphthene

Concen: 128.72 ng m

RT: 10.00 min Scan# 688

Delta R.T. 0.08 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Instrument :

BNA_F

ClientSampleId :

MANAHAWKEN112

Tot Ion:154 Resp: 936425

Ion Ratio Lower Upper

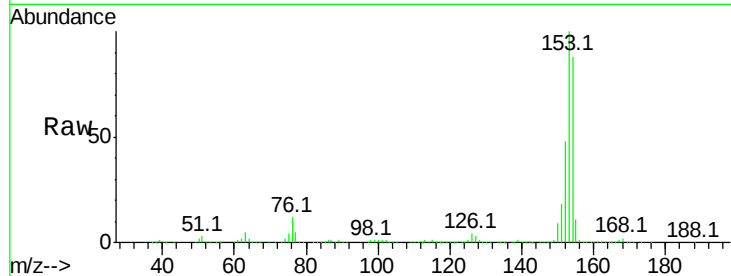
154 100

153 113.8 91.4 137.2

152 54.7 44.3 66.5

Manual Integrations
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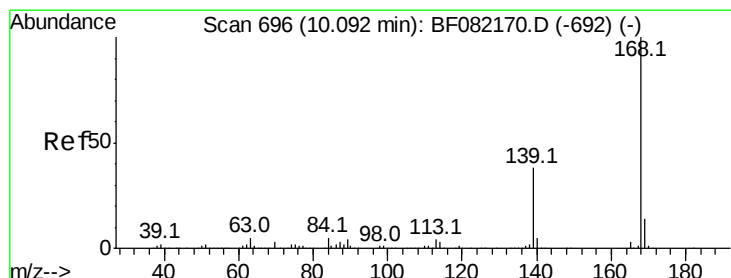
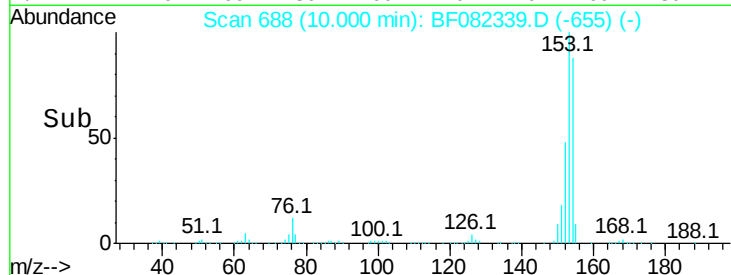
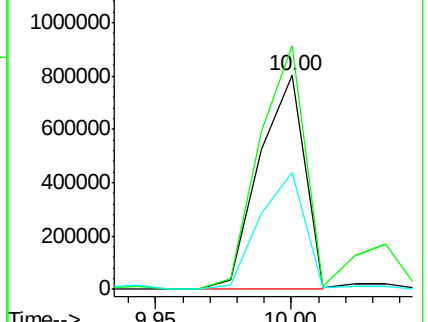
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Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E



#54

Dibenzofuran

Concen: 153.82 ng m

RT: 10.17 min Scan# 703

Delta R.T. 0.08 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

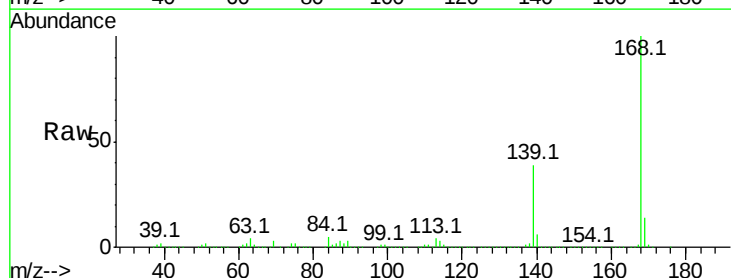
Tgt Ion:168 Resp: 1536360

Ion Ratio Lower Upper

168 100

139 39.3 31.0 46.6

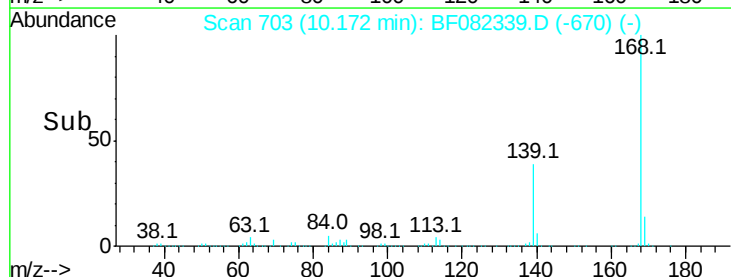
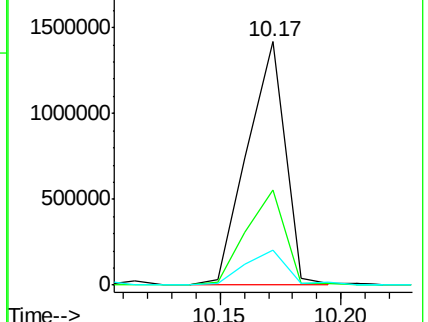
169 14.2 10.9 16.3

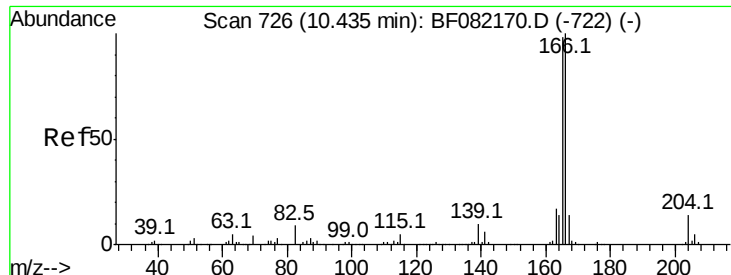


Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 169.00 (168.70 to 169.70): E





#57

Fluorene

Concen: 179.18 ng/mL

RT: 10.51 min Scan# 733

Delta R.T. 0.08 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Instrument :

BNA_F

ClientSampleId :

MANAHAWKEN112

Tot Ion:166 Resp: 1469872

Ion Ratio Lower Upper

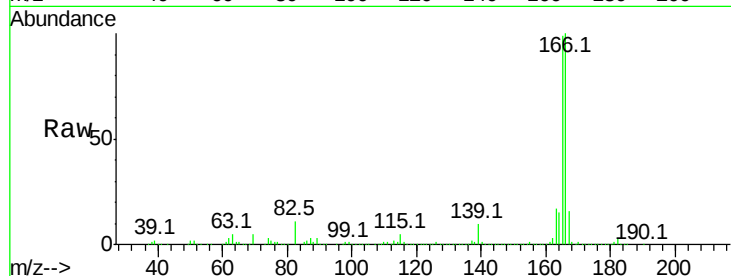
166 100

165 99.5 78.3 117.5

167 16.3 10.8 16.2#

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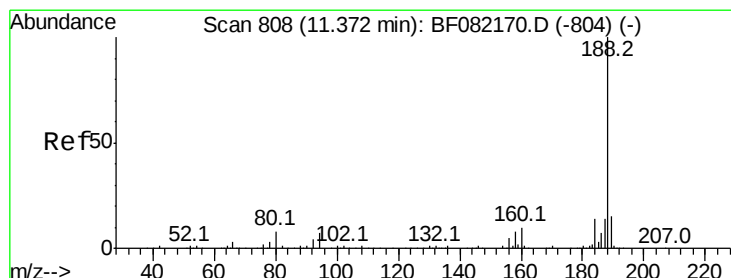
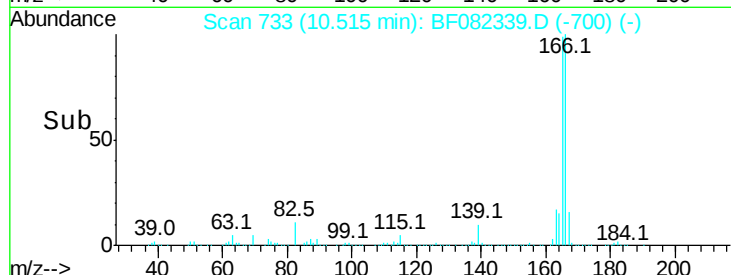
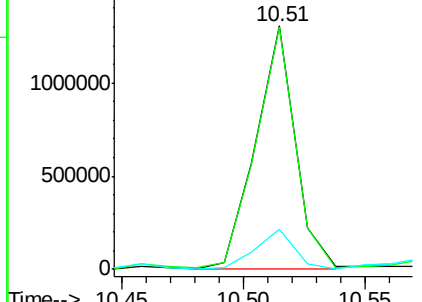
MMdadoda
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Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E



#63

Phenanthrene-d10

Concen: 20.00 ng/mL

RT: 11.45 min Scan# 815

Delta R.T. 0.08 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

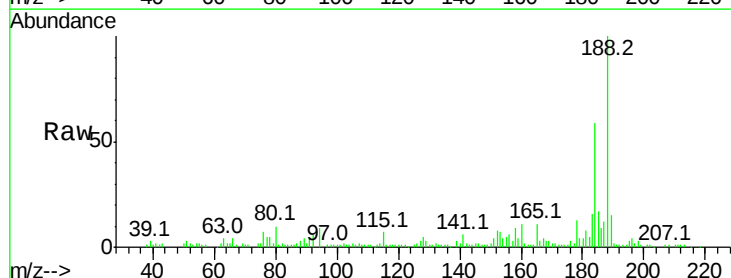
Tgt Ion:188 Resp: 198676

Ion Ratio Lower Upper

188 100

94 8.6 5.8 8.6

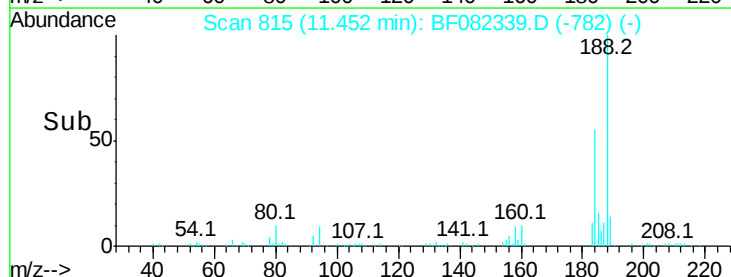
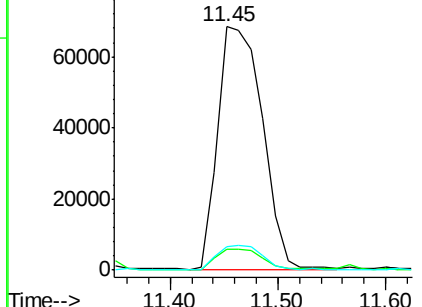
80 9.8 6.4 9.6#

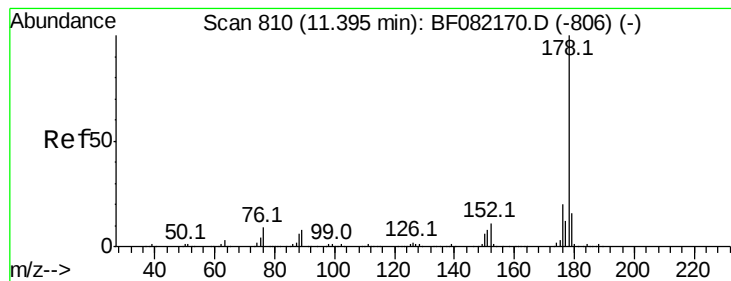


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0





#70

Phenanthrene

Concen: 973.88 ng m

RT: 11.52 min Scan# 821

Delta R.T. 0.13 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Instrument :

BNA_F

ClientSampleId :

MANAHAWKEN112

Tot Ion:178 Resp: 9484043

Ion Ratio Lower Upper

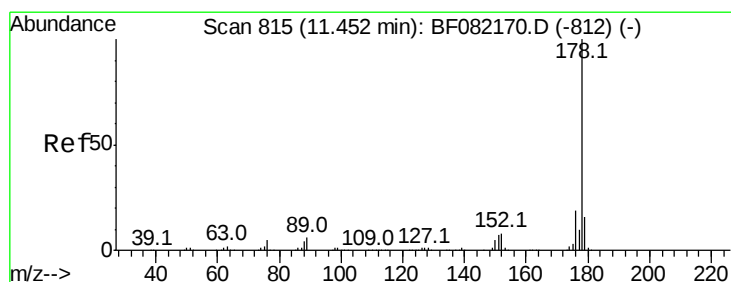
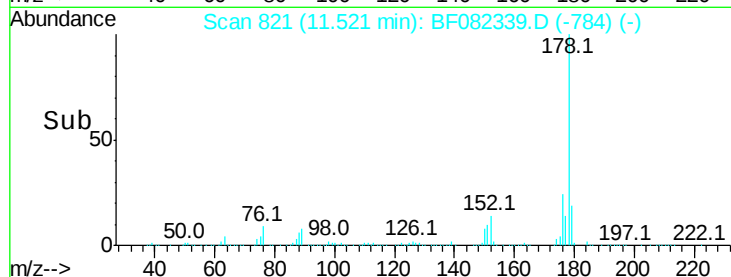
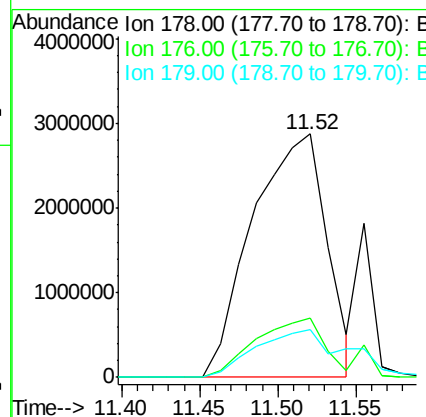
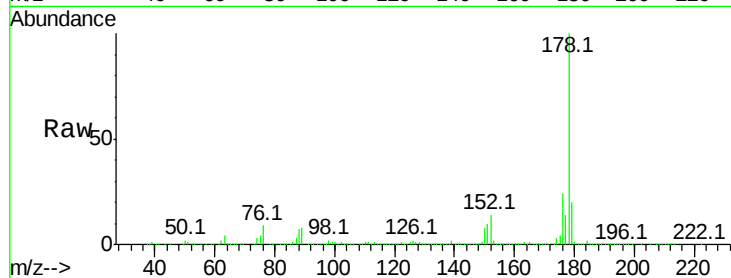
178 100

176 24.4 16.0 24.0#

179 19.6 12.6 19.0#

Manual Integrations
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#71

Anthracene

Concen: 141.00 ng m

RT: 11.55 min Scan# 824

Delta R.T. 0.10 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

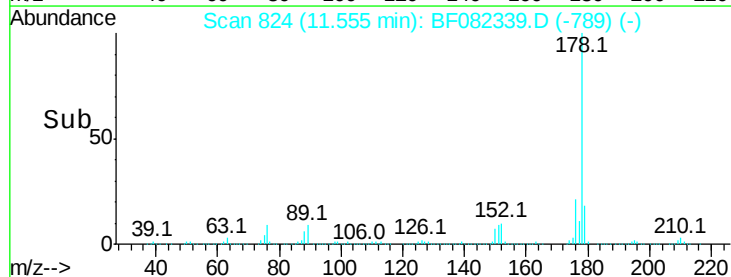
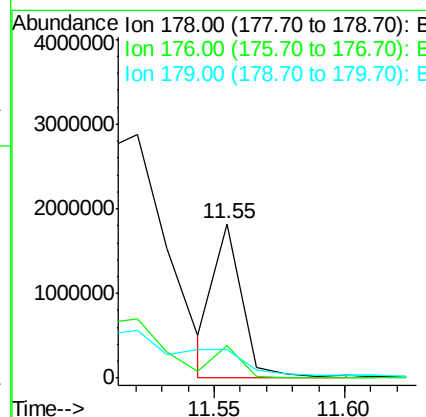
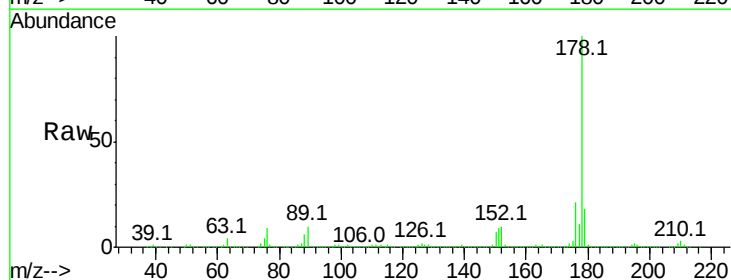
Tgt Ion:178 Resp: 1414965

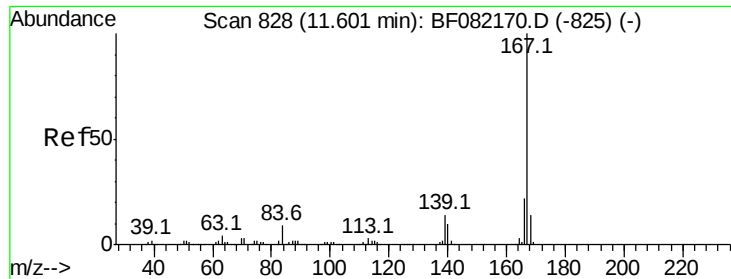
Ion Ratio Lower Upper

178 100

176 21.4 15.4 23.0

179 18.4 12.5 18.7





#72

Carbazole

Concen: 180.11 ng m

RT: 11.69 min Scan# 836

Delta R.T. 0.08 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Instrument :

BNA_F

ClientSampleId :

MANAHAWKEN112

Tot Ion:167 Resp: 1648779

Ion Ratio Lower Upper

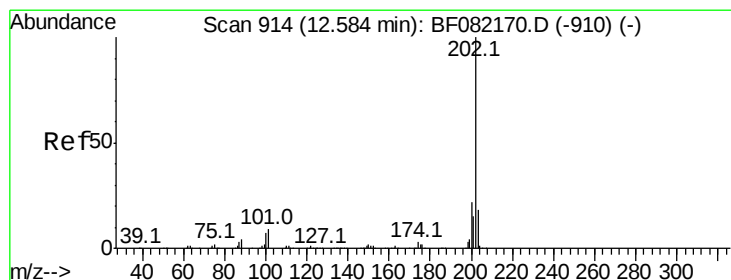
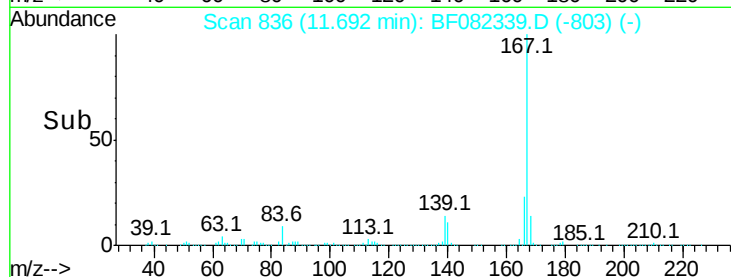
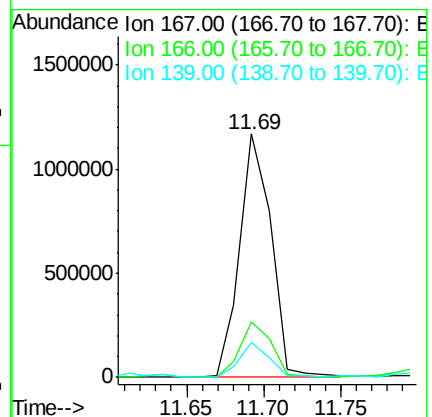
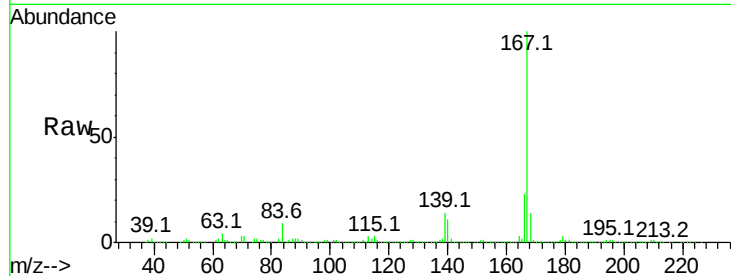
167 100

166 23.0 17.3 25.9

139 14.4 11.2 16.8

Manual Integrations
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#74

Fluoranthene

Concen: 703.89 ng m

RT: 12.71 min Scan# 925

Delta R.T. 0.11 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

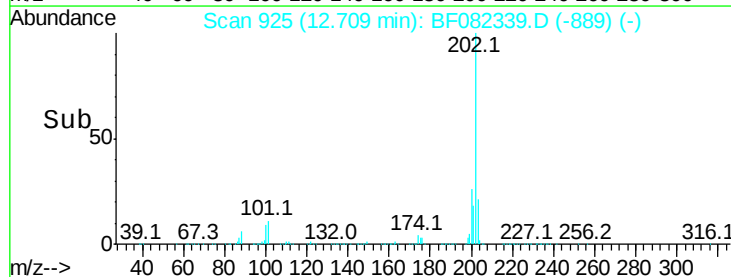
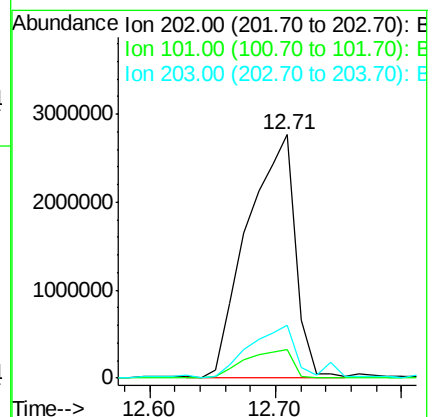
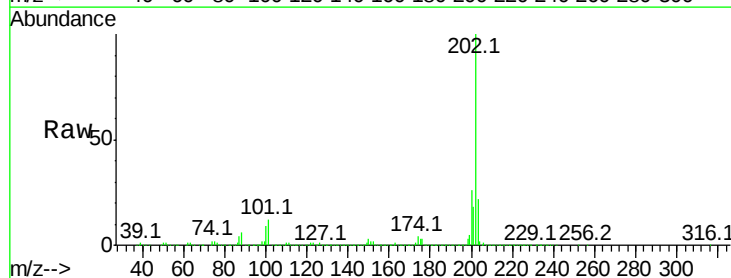
Tgt Ion:202 Resp: 7362201

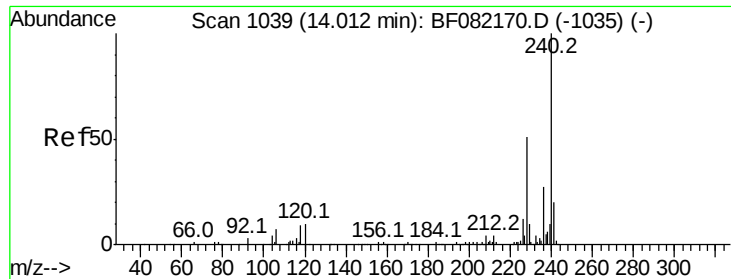
Ion Ratio Lower Upper

202 100

101 11.5 0.0 29.3

203 21.7 0.0 37.8





#75

Chrysene-d12

Concen: 20.00 ng m

RT: 14.15 min Scan# 1051

Delta R.T. 0.08 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Instrument :

BNA_F

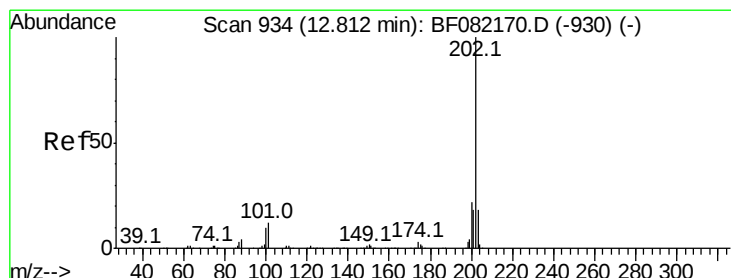
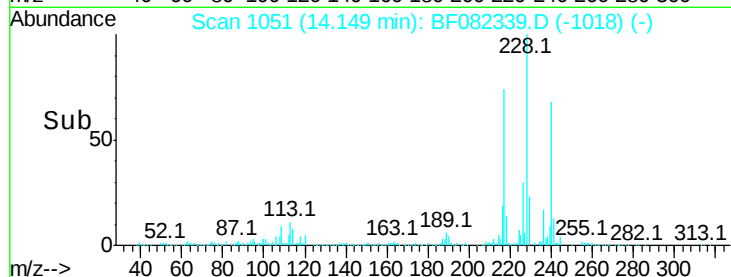
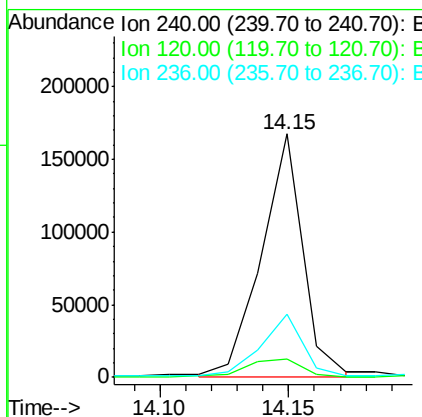
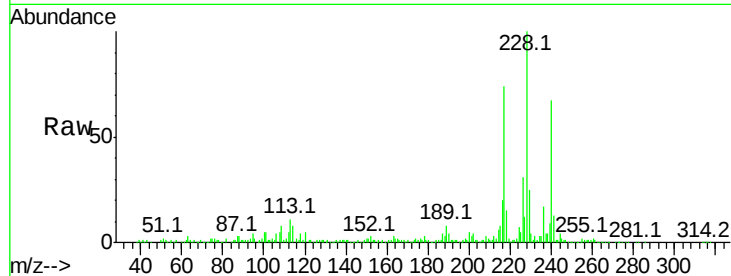
ClientSampleId :

MANAHAWKEN112

Tot Ion:	240	Resp:	187743
Ion Ratio	Lower	Upper	
240	100		
120	7.4	8.1	12.1#
236	26.1	21.3	31.9

Manual Integrations
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#77

Pyrene

Concen: 459.01 ng m

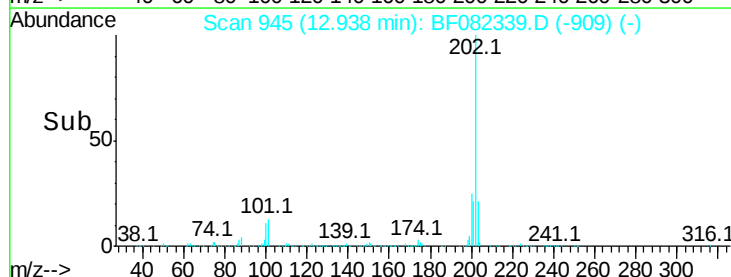
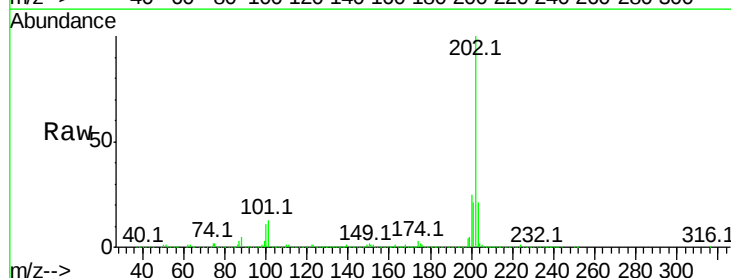
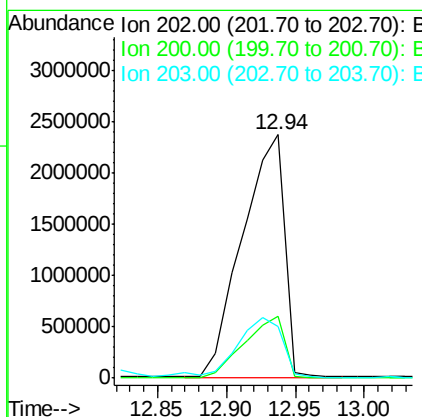
RT: 12.94 min Scan# 945

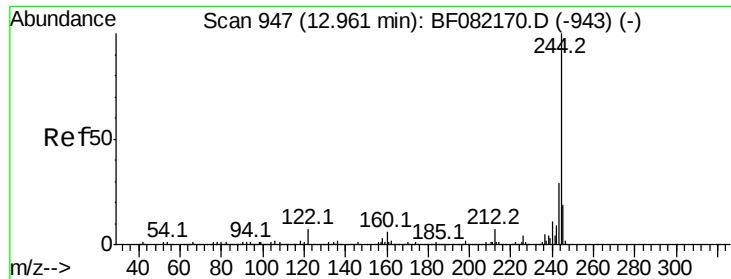
Delta R.T. 0.11 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Tgt Ion:	202	Resp:	5114144
Ion Ratio	Lower	Upper	
202	100		
200	25.5	17.9	26.9
203	21.0	14.5	21.7





#78

Terphenyl-d14

Concen: 7.78 ng/mL

RT: 13.04 min Scan# 954

Delta R.T. 0.08 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Instrument :

BNA_F

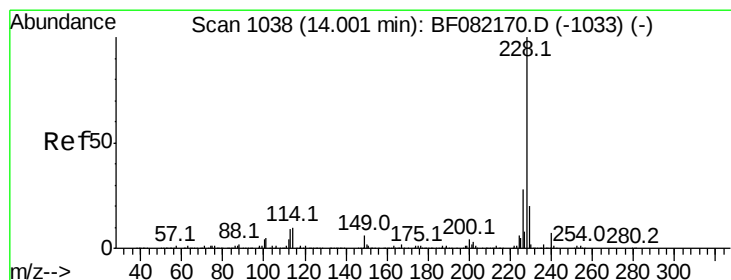
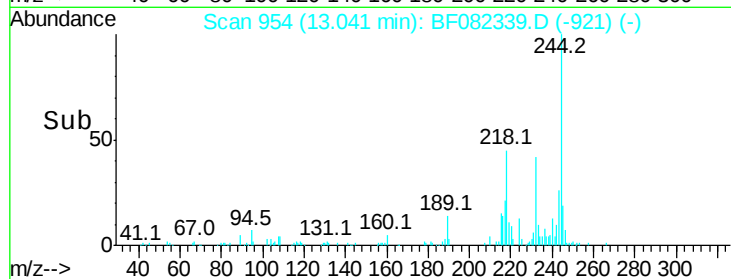
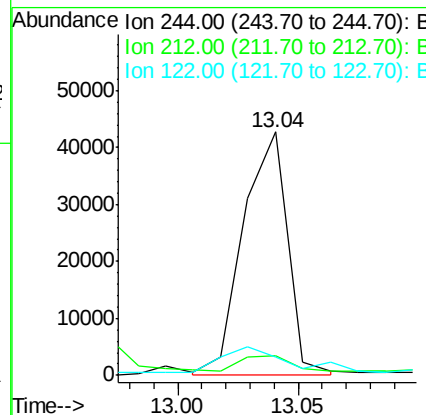
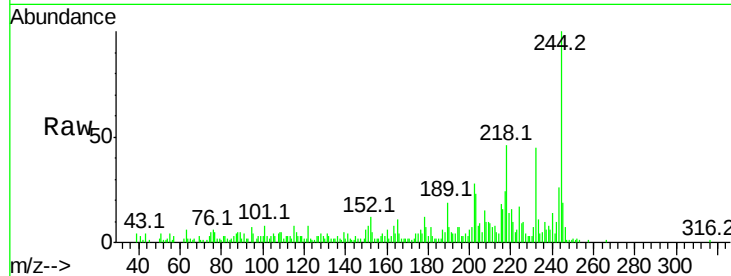
ClientSampleId :

MANAHAWKEN112

Tot Ion:	244	Resp:	55112
Ion Ratio	Lower	Upper	
244	100		
212	7.8	5.8	8.6
122	7.7	5.9	8.9

Manual Integrations
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#80

Benzo(a)anthracene

Concen: 155.33 ng/mL

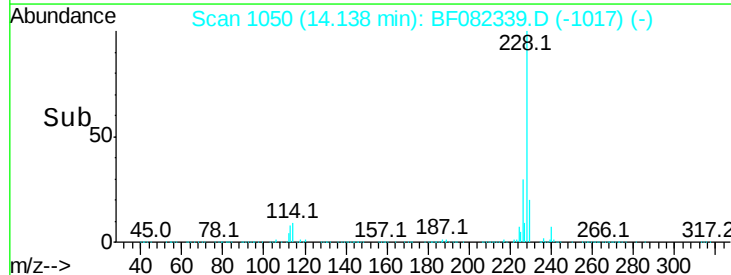
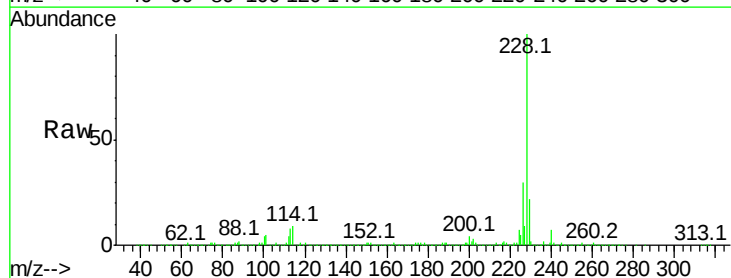
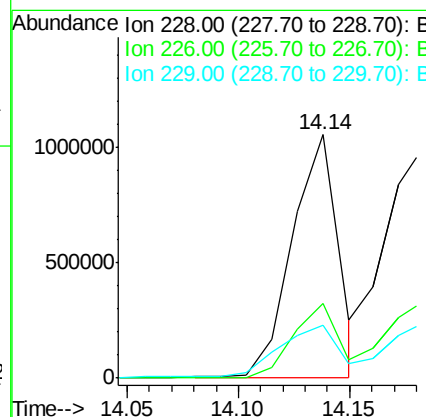
RT: 14.14 min Scan# 1050

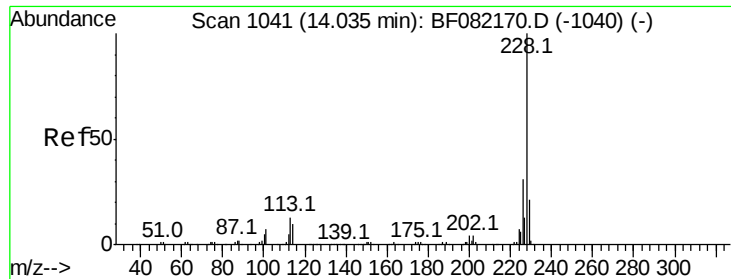
Delta R.T. 0.08 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Tgt Ion:	228	Resp:	1517297
Ion Ratio	Lower	Upper	
228	100		
226	30.4	22.3	33.5
229	21.8	16.2	24.2





#82

Chrysene

Concen: 155.12 ng m

RT: 14.18 min Scan# 1054

Delta R.T. 0.09 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Instrument :

BNA_F

ClientSampleId :

MANAHAWKEN112

Tot Ion:228 Resp: 1596645

Ion Ratio Lower Upper

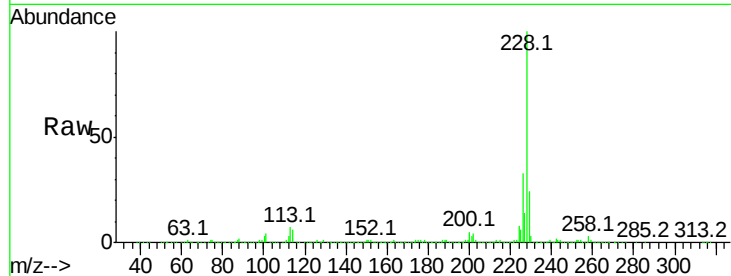
228 100

226 33.0 24.4 36.6

229 24.1 16.3 24.5

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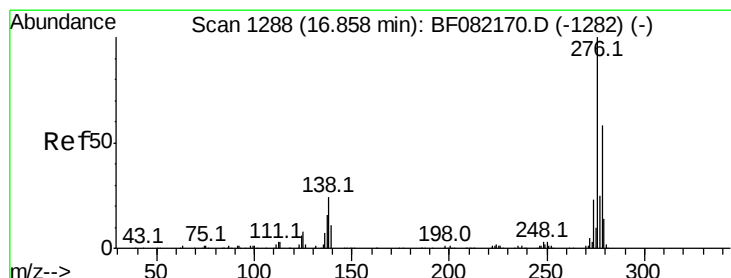
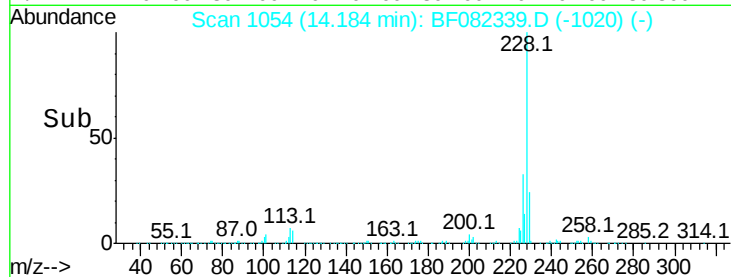
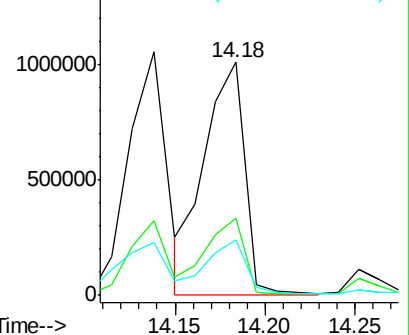
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Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#85

Indeno(1,2,3-cd)pyrene

Concen: 16.41 ng m

RT: 17.17 min Scan# 1315

Delta R.T. 0.14 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

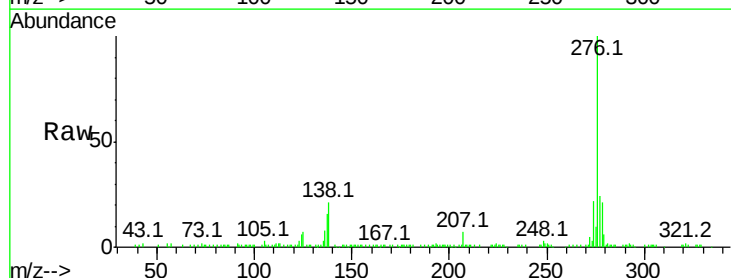
Tgt Ion:276 Resp: 134276

Ion Ratio Lower Upper

276 100

138 0.0 19.7 29.5#

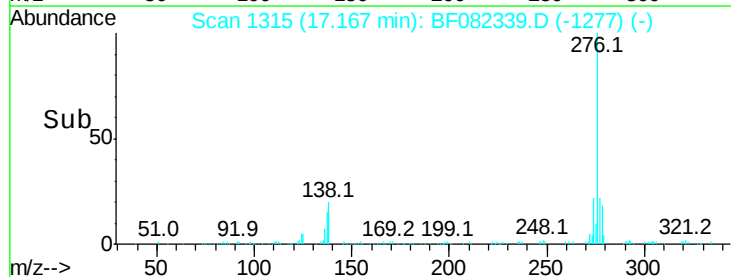
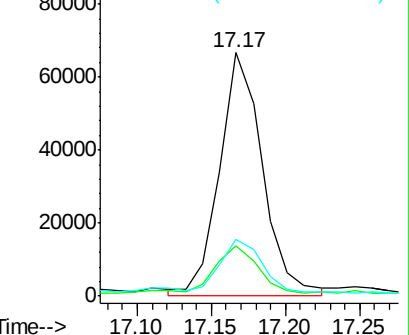
277 0.0 20.1 30.1#

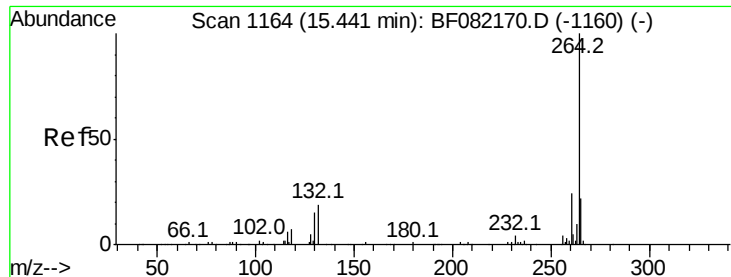


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E





#86

Pervlene-d12

Concen: 20.00 ng m

RT: 15.69 min Scan# 1186

Delta R.T. 0.10 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Instrument :

BNA_F

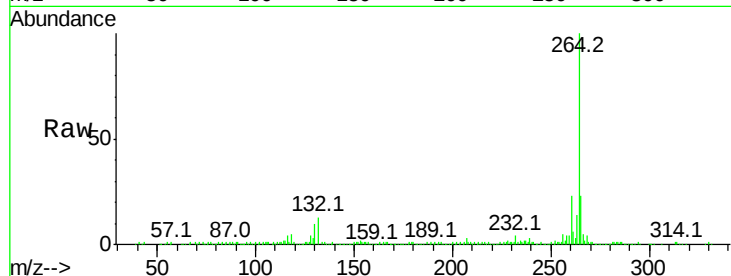
ClientSampleId :

MANAHAWKEN112

Tot Ion	Ratio	Lower	Upper
264	100		
260	23.3	19.0	28.6
265	23.2	17.3	25.9

Manual Integrations
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Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

15.69

150000

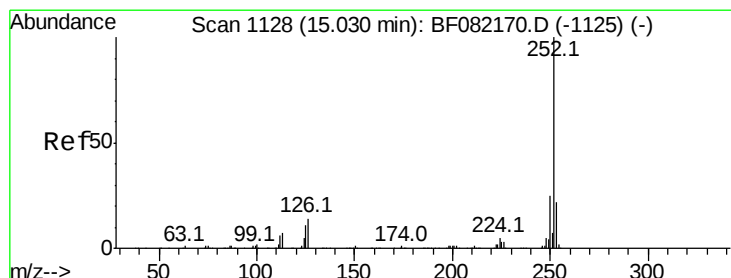
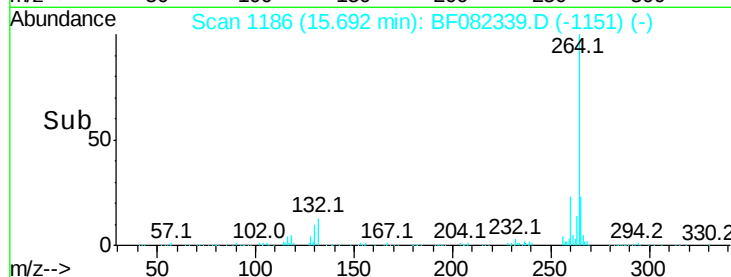
100000

50000

0

15.65 15.70 15.75

Time-->



#87

Benzo(b)fluoranthene

Concen: 69.29 ng m

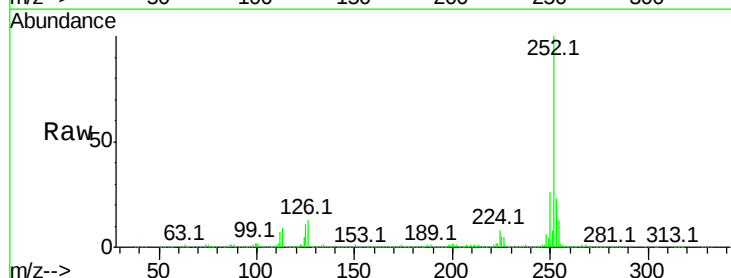
RT: 15.26 min Scan# 1148

Delta R.T. 0.09 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.0	18.0	27.0
125	10.8	8.6	12.8



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

15.26

600000

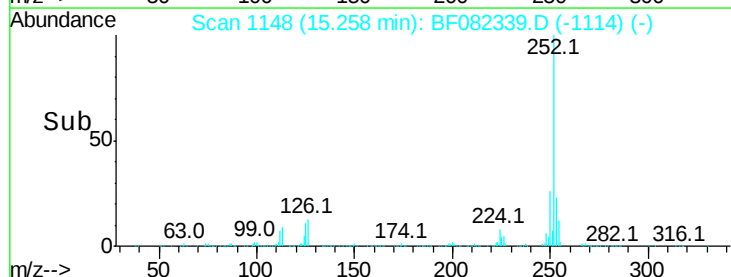
400000

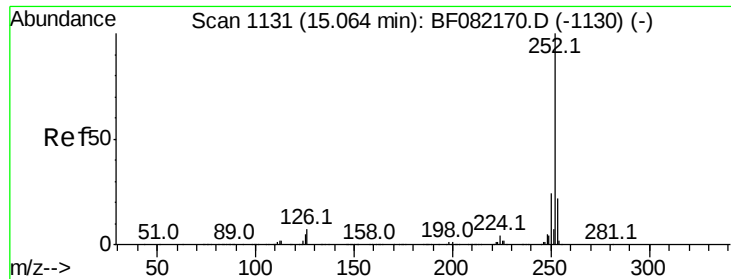
200000

0

15.25

Time-->





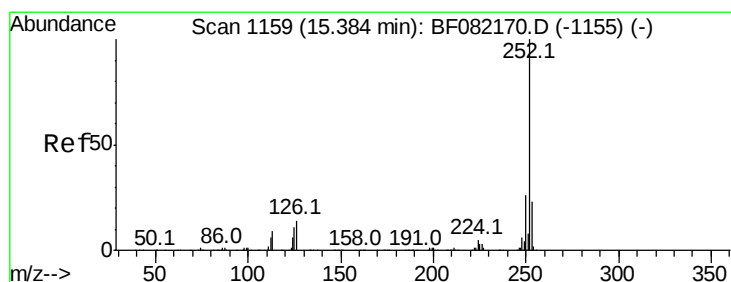
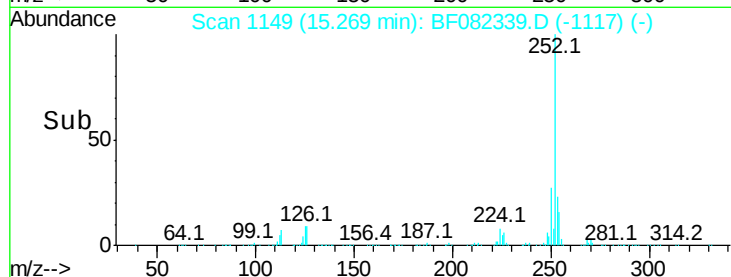
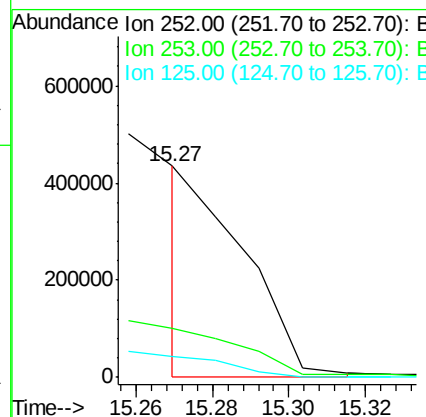
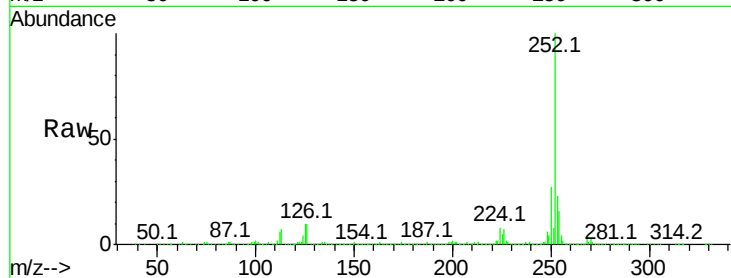
#88
Benzo(k)fluoranthene
Concen: 39.12 ng m
RT: 15.27 min Scan# 1149
Delta R.T. 0.07 min
Lab File: BF082339.D
Acq: 16 Oct 2015 21:39

Instrument :
BNA_F
ClientSampleId :
MANAHAWKEN112

Tot Ion	Ratio	Resp	Lower	Upper
252	100	400215		
253	23.2		17.8	26.6
125	9.8		6.7	10.1

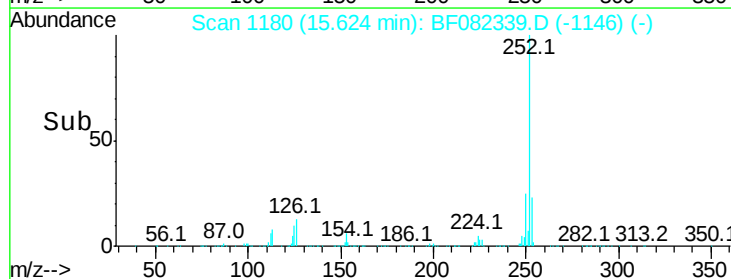
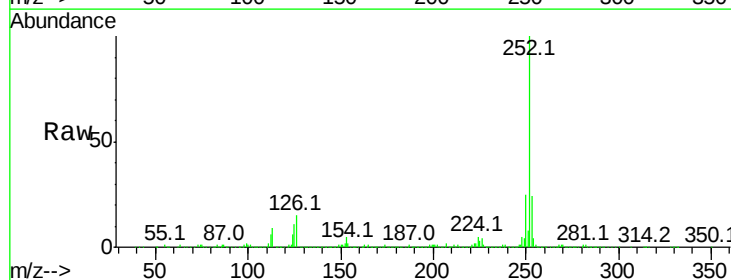
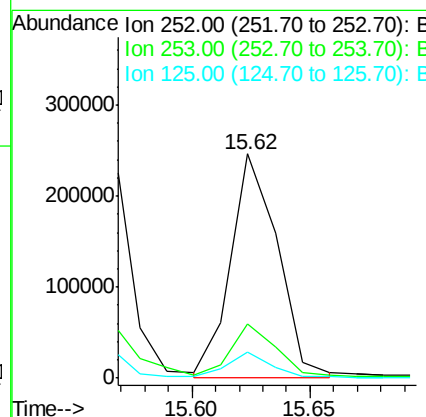
Manual Integrations
APPROVED

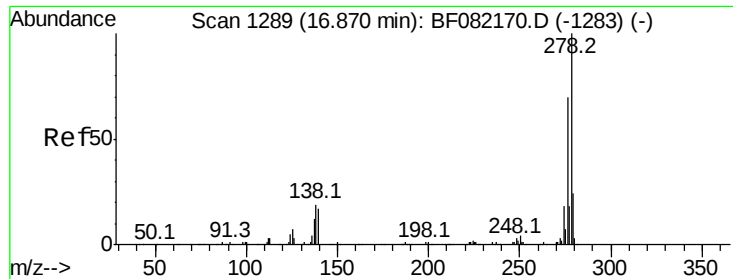
MMdadoda
10/19/2015 5:32:30 PM



#89
Benzo(a)pyrene
Concen: 31.71 ng m
RT: 15.62 min Scan# 1180
Delta R.T. 0.09 min
Lab File: BF082339.D
Acq: 16 Oct 2015 21:39

Tgt Ion	Ratio	Resp	Lower	Upper
252	100	331717		
253	23.9		18.2	27.2
125	11.4		8.9	13.3





#90

Dibenzo(a,h)anthracene

Concen: 4.13 ng m

RT: 17.18 min Scan# 1316

Delta R.T. 0.13 min

Lab File: BF082339.D

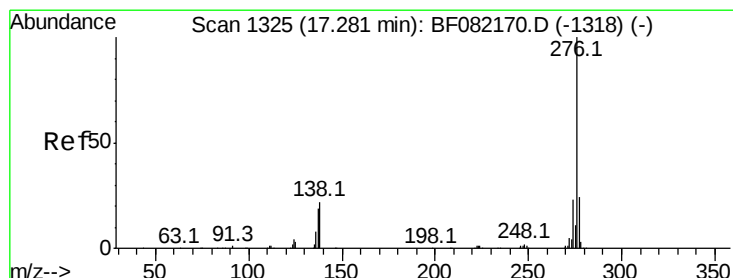
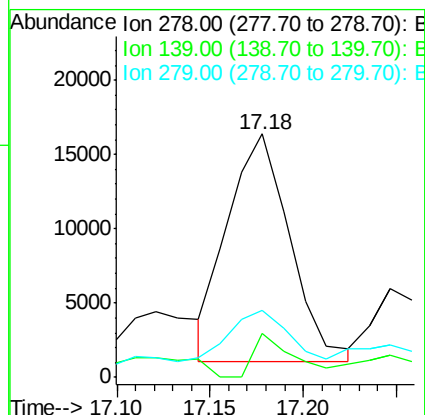
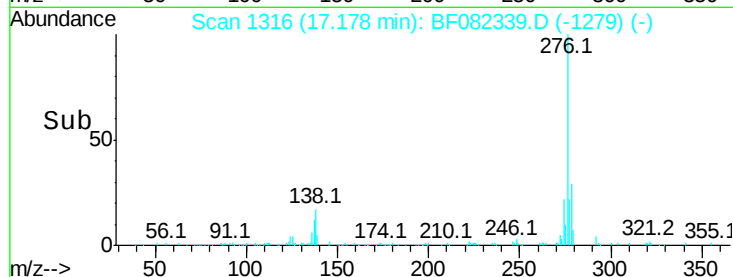
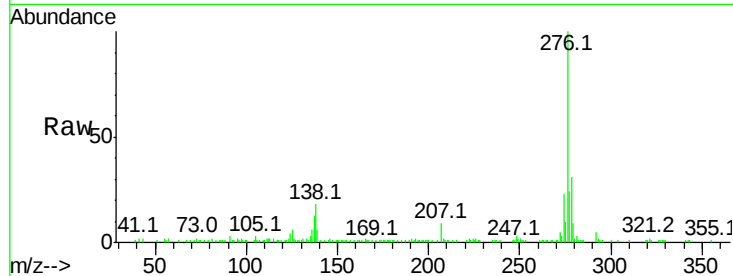
Acq: 16 Oct 2015 21:39

Instrument :
BNA_F
ClientSampleId :
MANAHAWKEN112

Tot Ion	Ratio	Lower	Upper
278	100		
139	17.9	13.3	19.9
279	27.5	18.9	28.3

Manual Integrations
APPROVED

MMdadoda
10/19/2015 5:32:30 PM



#91

Benzo(g,h,i)perylene

Concen: 11.30 ng m

RT: 17.61 min Scan# 1354

Delta R.T. 0.15 min

Lab File: BF082339.D

Acq: 16 Oct 2015 21:39

Tgt Ion	Ratio	Lower	Upper
276	100		
277	25.1	18.8	28.2
138	24.5	17.4	26.2

