

Data Path : Z:\HPCHEM1\BNA F\DATA\BF040816\
 Data File : BF086193.D
 Acq On : 9 Apr 2016 2:58
 Operator : UM/SJ
 Sample : H2099-05
 Misc :
 ALS Vial : 32 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 PE-A-1

Manual Integrations
 APPROVED

Sohil
 4/11/2016 5:45:27 PM

Quant Time: Apr 11 16:30:49 2016
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF040216.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Apr 01 23:17:06 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.74	152	94772	20.00	ng	-0.03
21) Naphthalene-d8	8.04	136	126274	20.00	ng	-0.02
38) Acenaphthene-d10	9.81	164	102931	20.00	ng	0.00
63) Phenanthrene-d10	11.30	188	152666	20.00	ng	0.00
75) Chrysene-d12	13.92	240	200307	20.00	ng	-0.01
86) Perylene-d12	15.30	264	215854	20.00	ng	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	5.32	112	642056	115.80	ng	-0.05
7) Phenol-d6	6.38	99	695792	98.80	ng	-0.03
23) Nitrobenzene-d5	7.31	82	405264	189.27	ng	-0.03
41) 2,4,6-Tribromophenol	10.60	330	109853	113.71	ng	0.00
44) 2-Fluorobiphenyl	9.13	172	445000	71.88	ng	-0.01
78) Terphenyl-d14	12.85	244	498731	58.53	ng	-0.02
Target Compounds						Qvalue
31) Naphthalene	8.08	128	787509m	123.98	ng	
37) 2-Methylnaphthalene	8.78	142	1269756	306.02	ng	96
45) 1,1'-Biphenyl	9.23	154	205753	23.18	ng	94
51) Acenaphthene	9.85	154	332598	54.26	ng	# 88
57) Fluorene	10.36	166	595597	86.13	ng	# 86
70) Phenanthrene	11.33	178	3574693	429.21	ng	98
71) Anthracene	11.38	178	1009133m	115.67	ng	
72) Carbazole	11.52	167	560670	74.76	ng	# 90
74) Fluoranthene	12.51	202	3506289	404.76	ng	91
77) Pyrene	12.74	202	2936958	208.07	ng	97
80) Benzo(a)anthracene	13.91	228	2455305	207.95	ng	97
82) Chrysene	13.95	228	2299663m	202.19	ng	
85) Indeno(1,2,3-cd)pyrene	16.66	276	937308	101.57	ng	94
87) Benzo(b)fluoranthene	14.92	252	3084555m	227.16	ng	
88) Benzo(k)fluoranthene	14.95	252	128276m	10.67	ng	
89) Benzo(a)pyrene	15.20	252	1143884	95.08	ng	97
90) Dibenzo(a,h)anthracene	16.65	278	266410m	27.52	ng	
91) Benzo(g,h,i)perylene	17.06	276	808185	86.28	ng	96

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

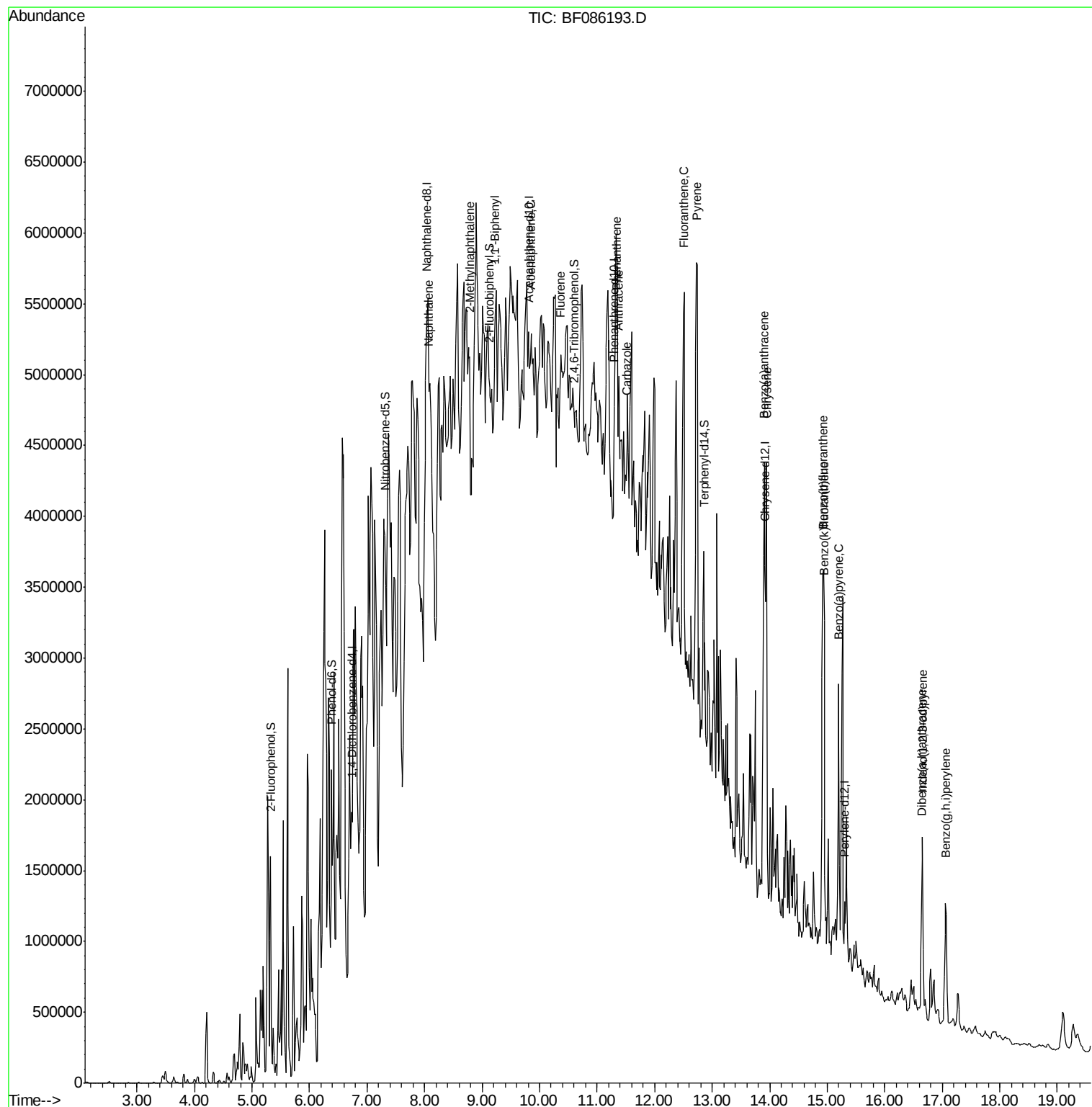
Data Path : Z:\HPCHEM1\BNA F\DATA\BF040816\
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#1

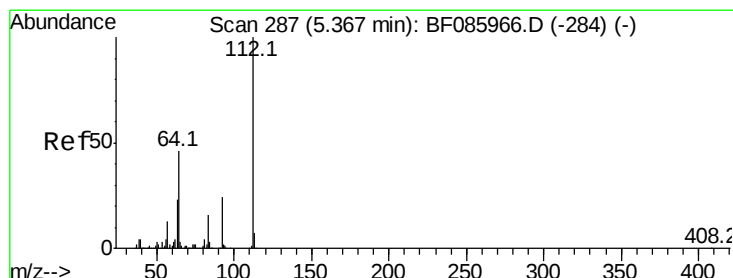
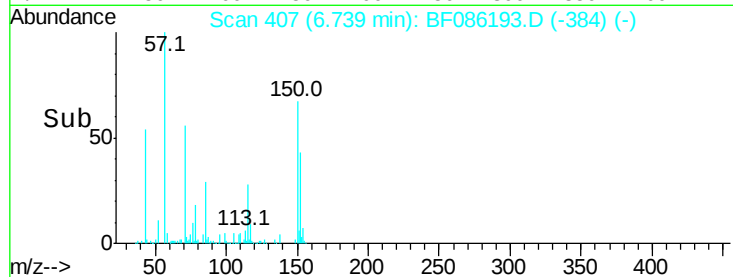
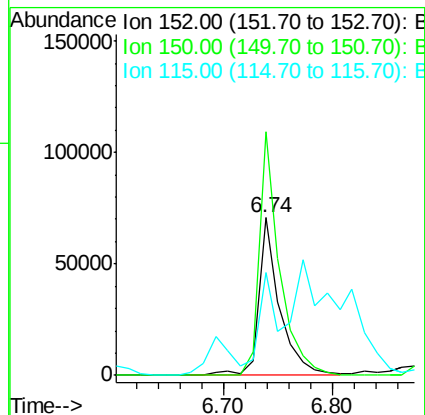
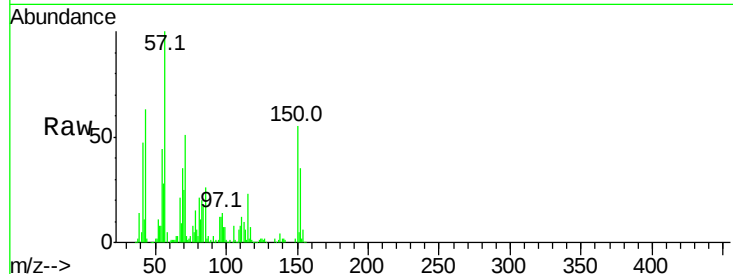
1,4-Dichlorobenzene-d4
Concen: 20.00 ng
RT: 6.74 min Scan# 407
Delta R.T. -0.03 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Instrument :
BNA_F
ClientSampleId :
PE-A-1

Tot Ion	Ratio	Lower	Upper
152	100		
150	154.8	124.2	186.2
115	65.2	47.0	70.6

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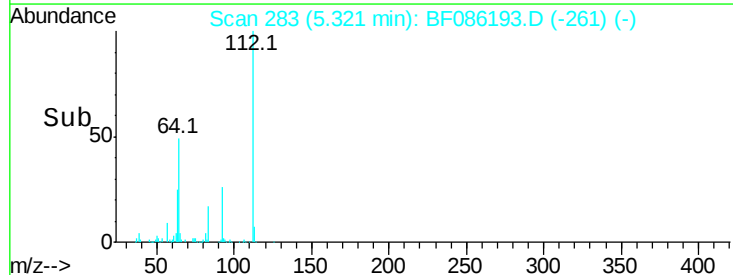
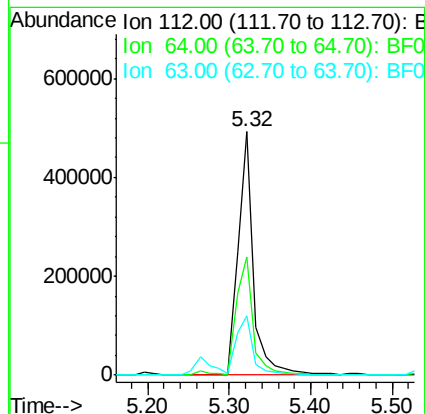
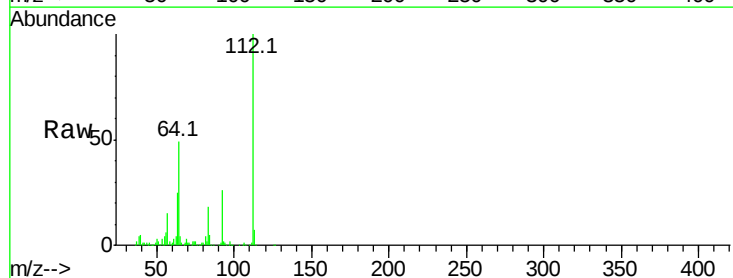
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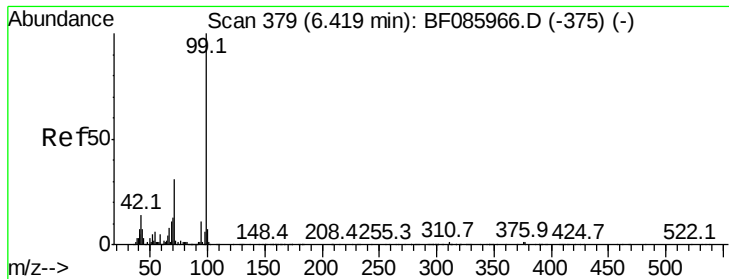


#5

2-Fluorophenol
Concen: 115.80 ng
RT: 5.32 min Scan# 283
Delta R.T. -0.05 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Tgt Ion	Ratio	Lower	Upper
112	100		
64	48.8	39.9	59.9
63	24.5	20.2	30.2





#7

Phenol-d6

Concen: 98.80 ng

RT: 6.38 min Scan# 376

Delta R.T. -0.03 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Instrument :

BNA_F

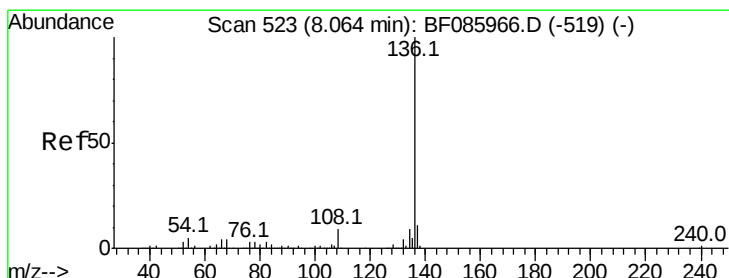
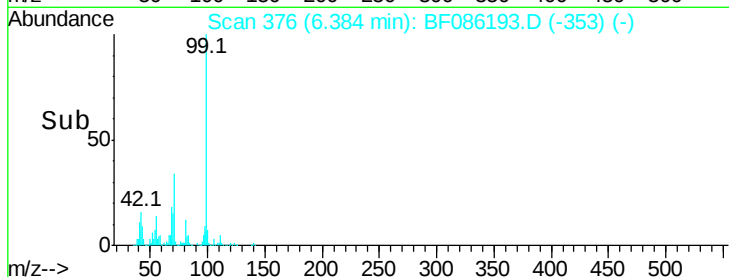
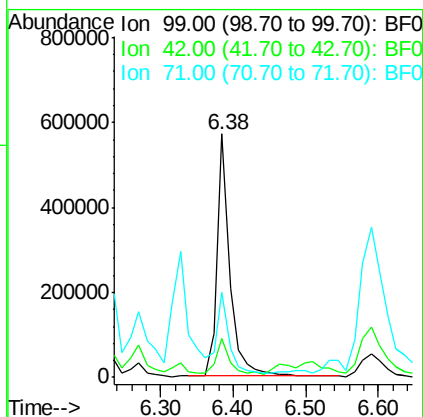
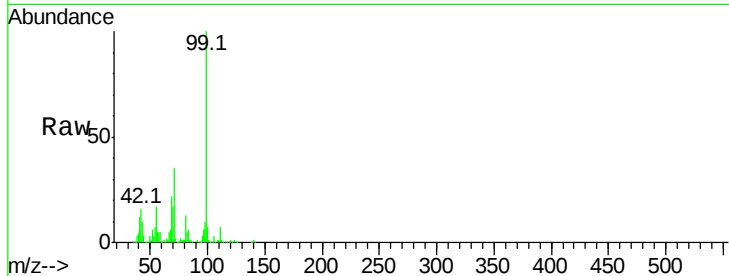
ClientSampleId :

PE-A-1

Tot Ion	Ion	Ratio	Resp	Lower	Upper
99	100		695792		
42	16.0	11.1	16.7		
71	34.7	24.9	37.3		

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#21

Naphthalene-d8

Concen: 20.00 ng

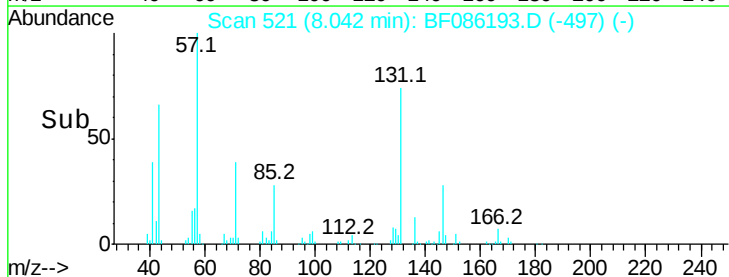
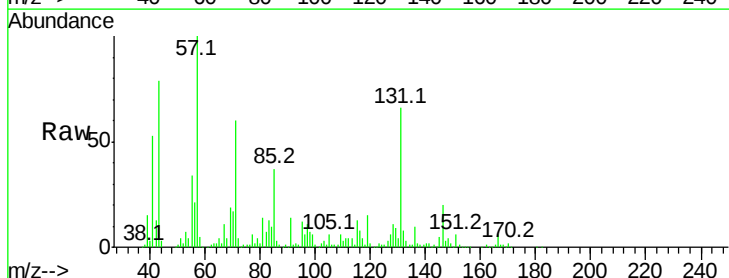
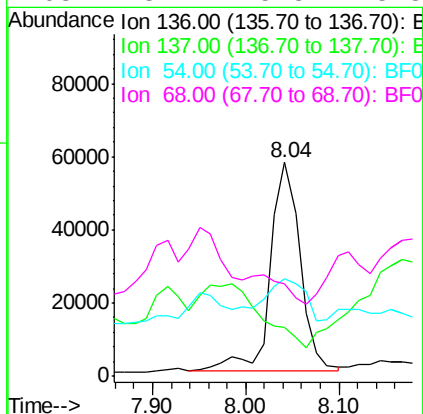
RT: 8.04 min Scan# 521

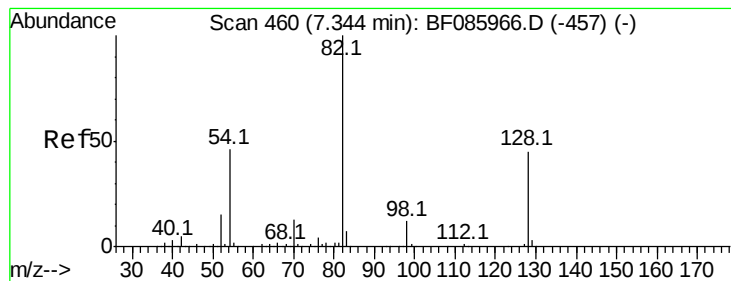
Delta R.T. -0.02 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
136	100		126274		
137	22.6	9.1	13.7#		
54	45.4	7.4	11.0#		
68	43.2	5.8	8.8#		





#23

Nitrobenzene-d5

Concen: 189.27 ng

RT: 7.31 min Scan# 457

Delta R.T. -0.03 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Instrument :

BNA_F

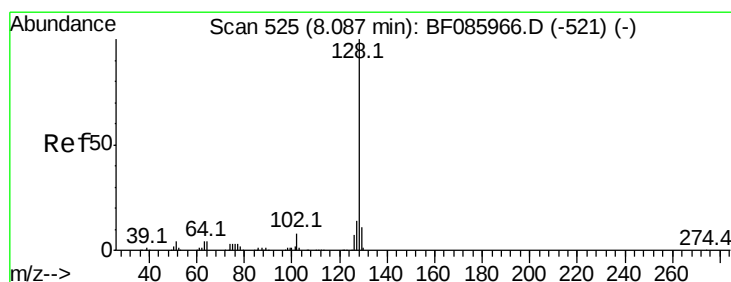
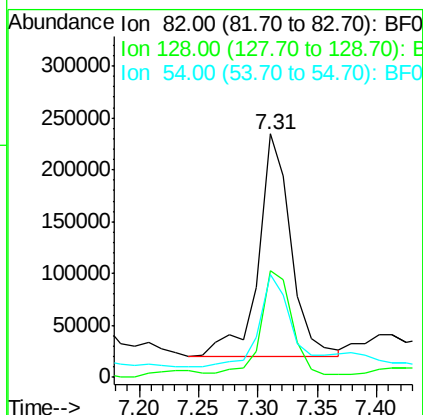
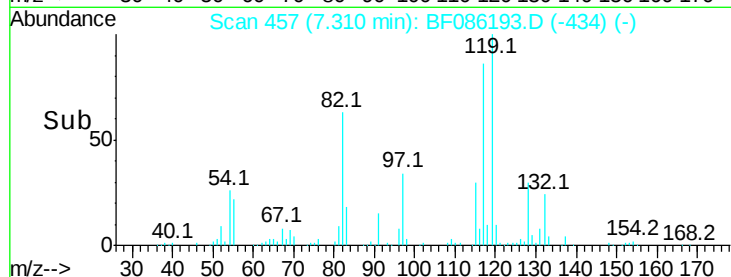
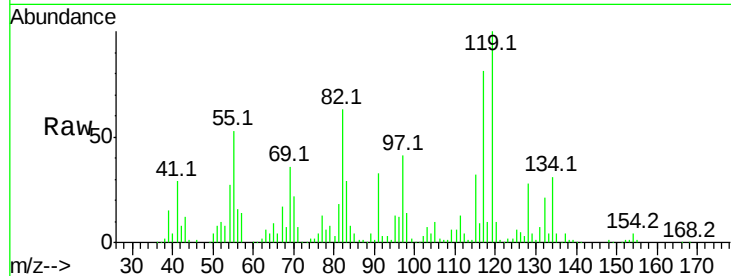
ClientSampleId :

PE-A-1

Tot Ion	82	Resp	405264
Ion Ratio	Lower	Upper	
82	100		
128	44.1	41.8	62.8
54	42.1	33.4	50.0

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#31

Naphthalene

Concen: 123.98 ng m

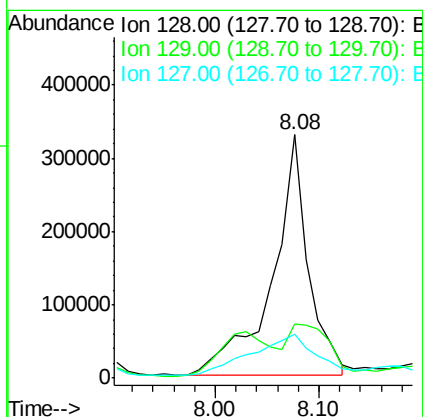
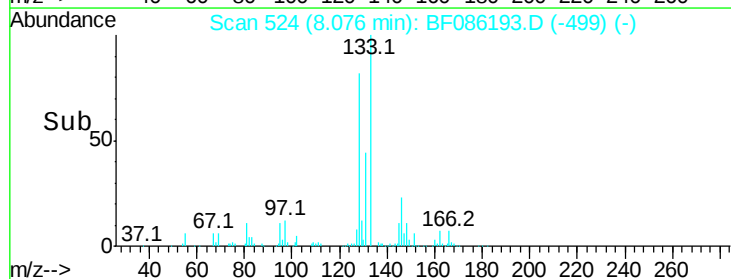
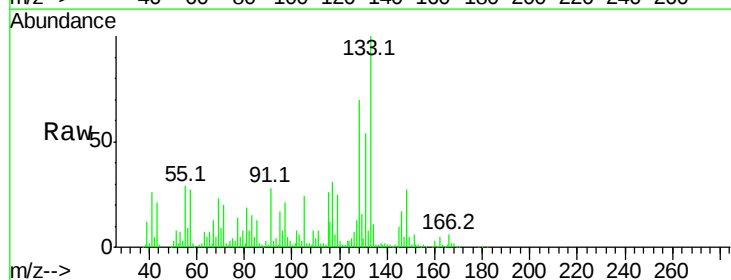
RT: 8.08 min Scan# 524

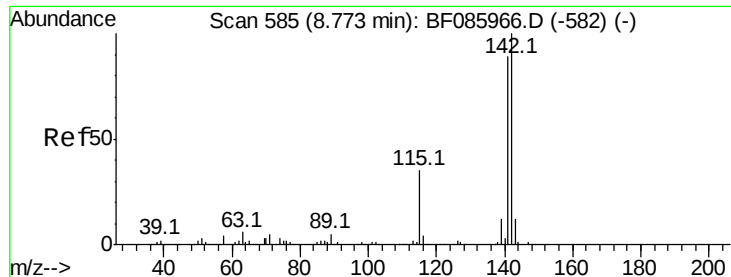
Delta R.T. -0.01 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Tgt Ion	128	Resp	787509
Ion Ratio	Lower	Upper	
128	100		
129	22.4	9.4	14.0#
127	18.0	11.0	16.6#





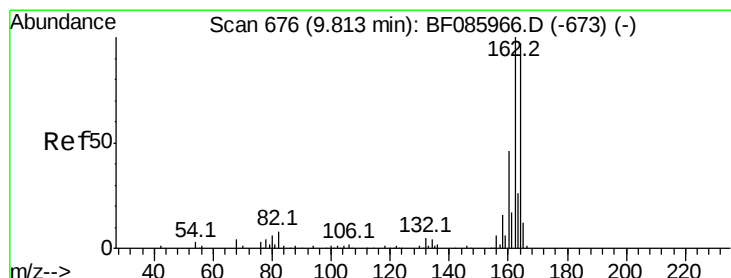
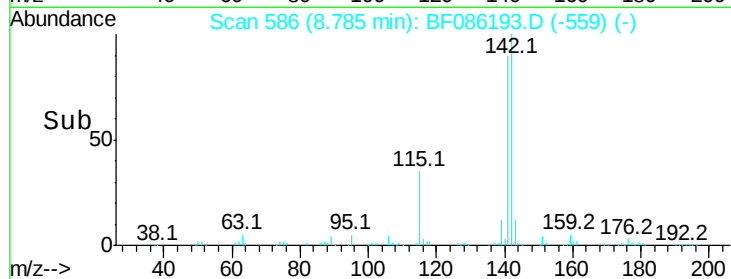
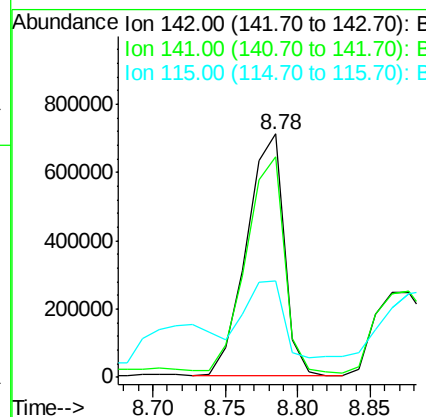
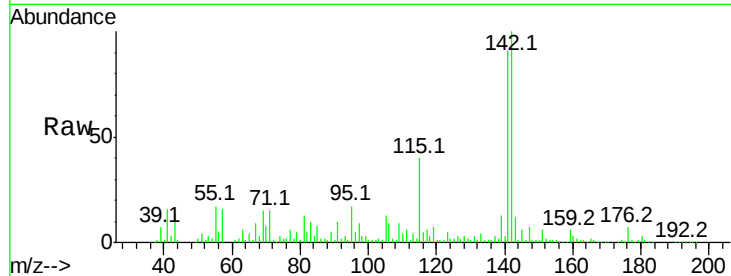
#37
2-Methylnaphthalene
Concen: 306.02 ng
RT: 8.78 min Scan# 586
Delta R.T. 0.01 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Instrument :
BNA_F
ClientSampled :
PE-A-1

Tot Ion	Ratio	Lower	Upper
142	100		
141	90.8	71.6	107.4
115	39.5	26.8	40.2

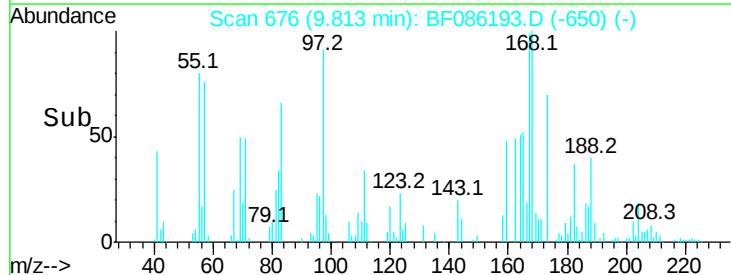
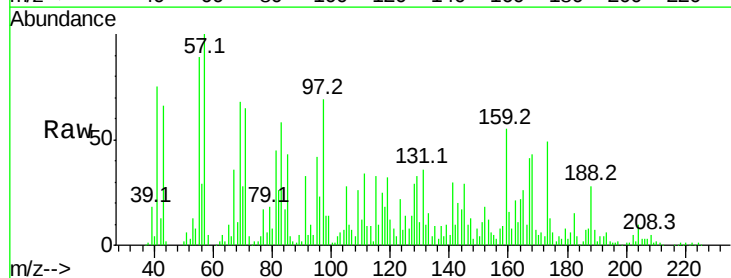
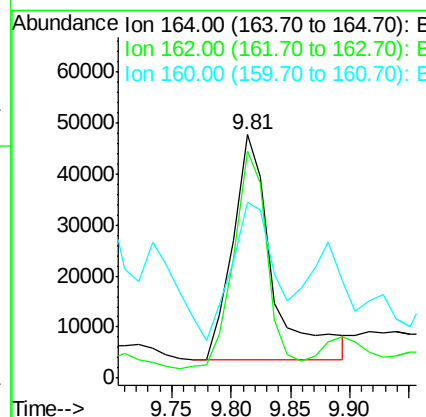
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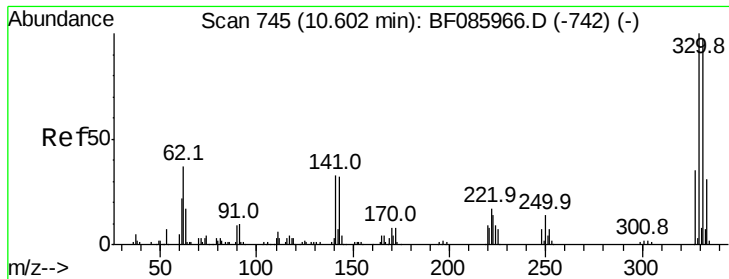
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#38
Acenaphthene-d10
Concen: 20.00 ng
RT: 9.81 min Scan# 676
Delta R.T. 0.00 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Tgt Ion	Ratio	Lower	Upper
164	100		
162	93.3	82.1	123.1
160	72.0	37.4	56.2#





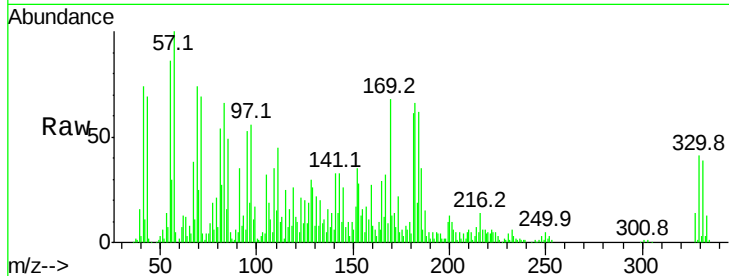
#41
 2,4,6-Tribromophenol
 Concen: 113.71 ng
 RT: 10.60 min Scan# 745
 Delta R.T. 0.00 min
 Lab File: BF086193.D
 Acq: 9 Apr 2016 2:58

Instrument :
 BNA_F
 ClientSampleId :
 PE-A-1

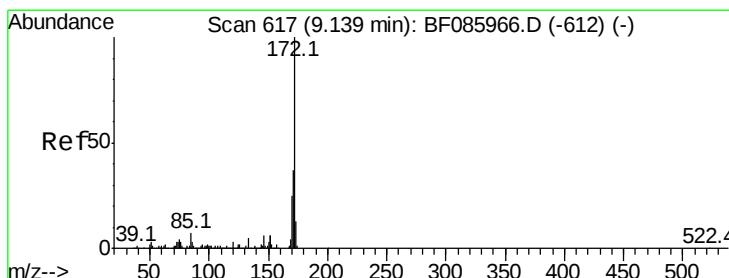
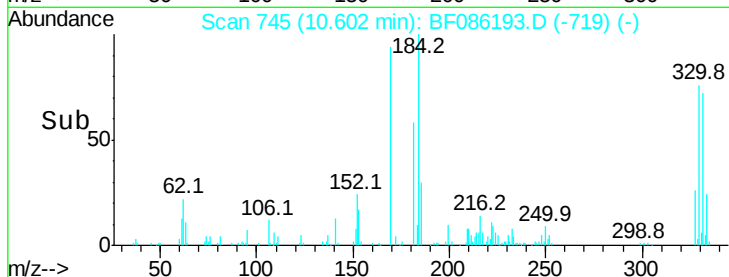
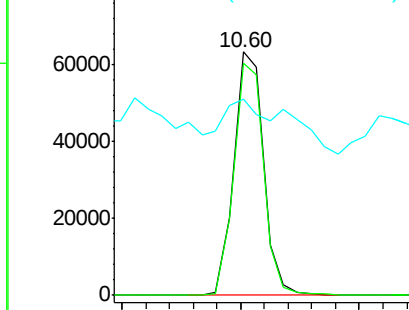
Tot Ion	Ratio	Resp	Lower	Upper
330	100			
332	96.7	78.2	117.2	
141	17.4	31.5	47.3	

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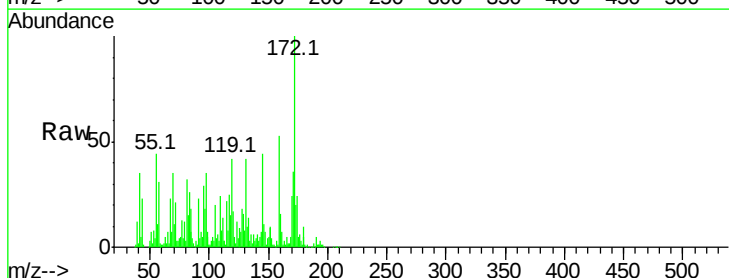


Abundance Ion 329.80 (329.50 to 330.50): E
 Ion 331.80 (331.50 to 332.50): E
 Ion 141.00 (140.70 to 141.70): E

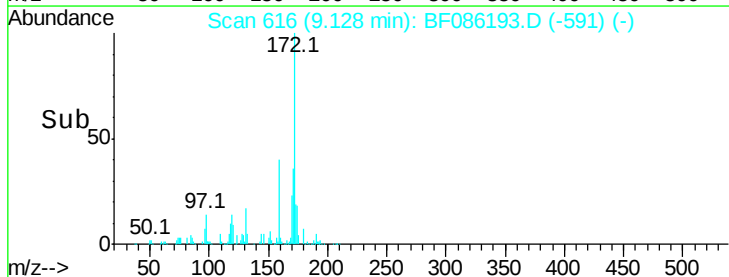
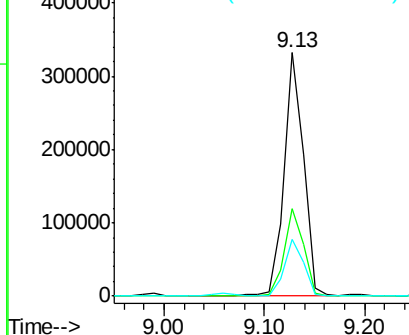


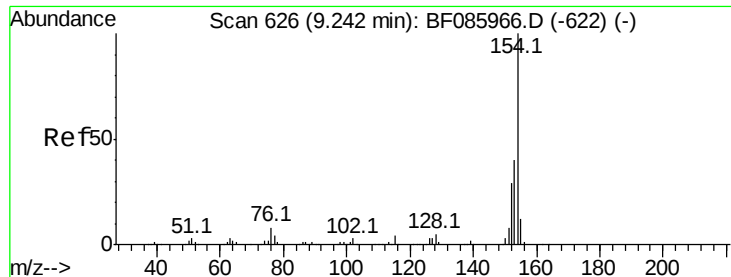
#44
 2-Fluorobiphenyl
 Concen: 71.88 ng
 RT: 9.13 min Scan# 616
 Delta R.T. -0.01 min
 Lab File: BF086193.D
 Acq: 9 Apr 2016 2:58

Tgt Ion	Ratio	Resp	Lower	Upper
172	100			
171	35.8	29.4	44.2	
170	23.5	19.8	29.6	



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: 23.18 ng

RT: 9.23 min Scan# 625

Delta R.T. -0.01 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Instrument :

BNA_F

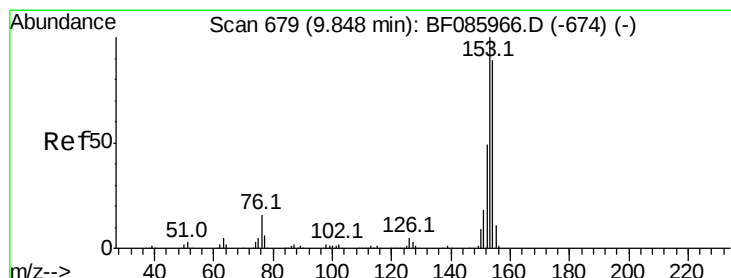
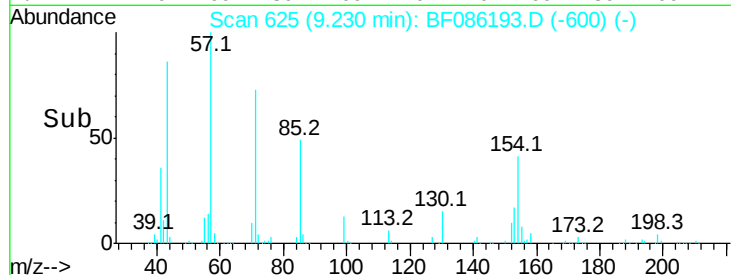
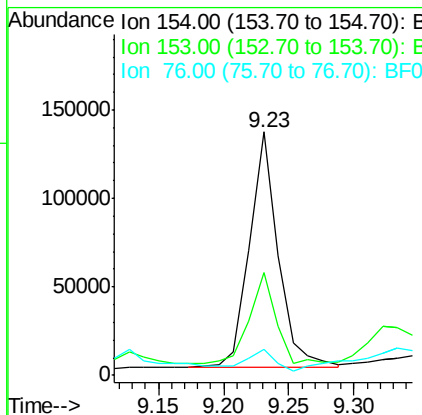
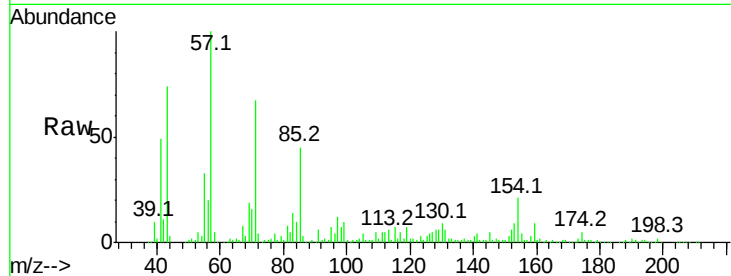
ClientSampled :

PE-A-1

Tot Ion:	154	Resp:	205753
Ion Ratio	Lower	Upper	
154	100		
153	42.2	20.8	60.8
76	10.5	0.0	36.7

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#51

Acenaphthene

Concen: 54.26 ng

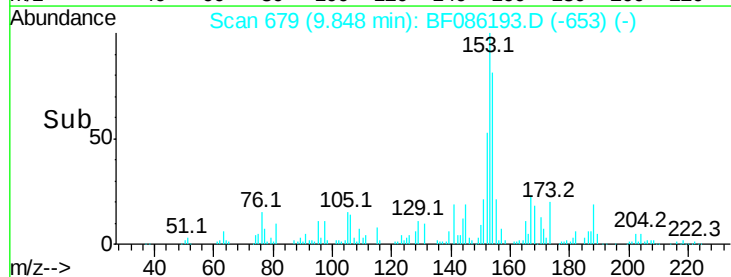
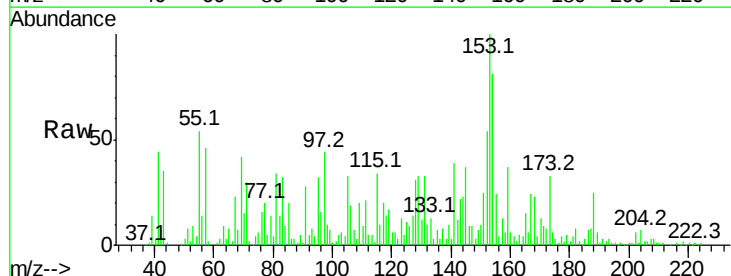
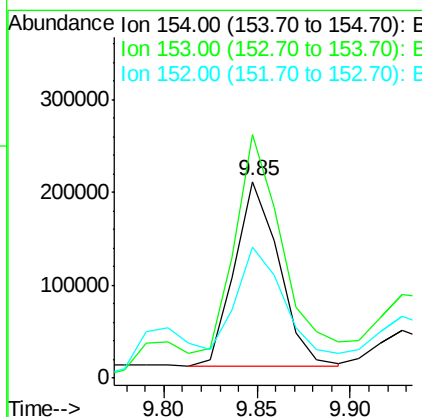
RT: 9.85 min Scan# 679

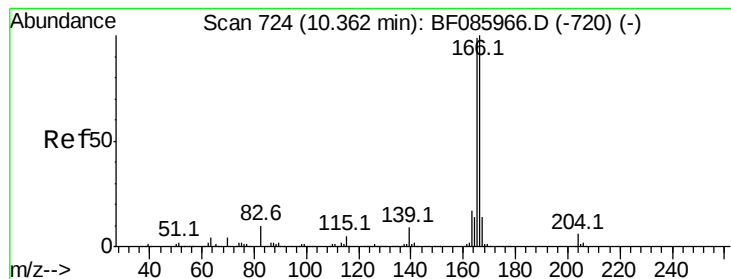
Delta R.T. 0.00 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Tgt Ion:	154	Resp:	332598
Ion Ratio	Lower	Upper	
154	100		
153	123.8	90.1	135.1
152	66.9	44.2	66.2#





#57

Fluorene

Concen: 86.13 ng

RT: 10.36 min Scan# 724

Delta R.T. 0.00 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Instrument :

BNA_F

ClientSampleId :

PE-A-1

Tot Ion:166 Resp: 595597

Ion Ratio Lower Upper

166 100

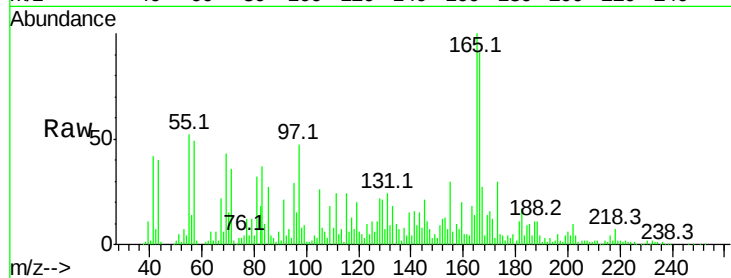
165 109.8 79.4 119.0

167 30.1 11.0 16.4#

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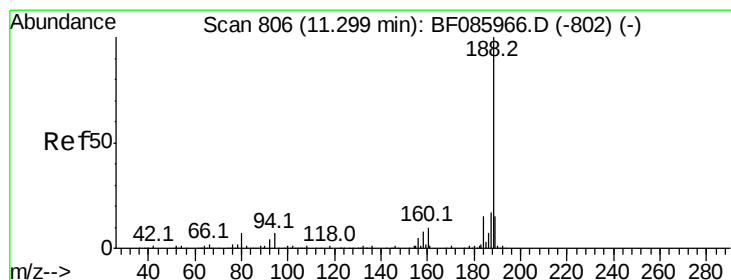
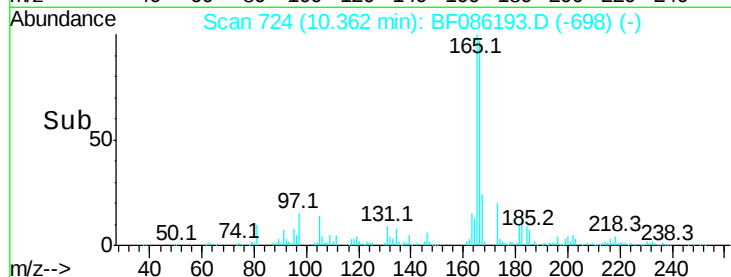
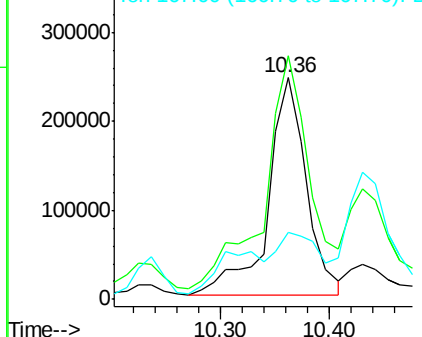
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Abundance Ion 166.00 (165.70 to 166.70): E

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

RT: 11.30 min Scan# 806

Delta R.T. 0.00 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

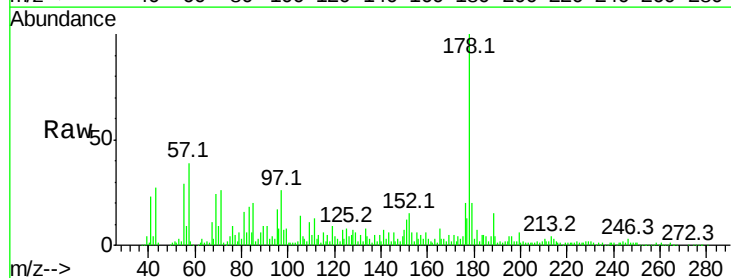
Tgt Ion:188 Resp: 152666

Ion Ratio Lower Upper

188 100

94 19.6 5.4 8.0#

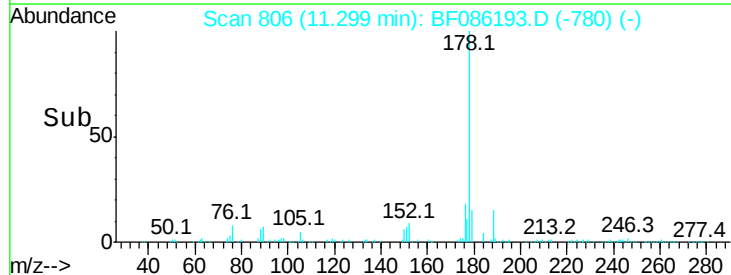
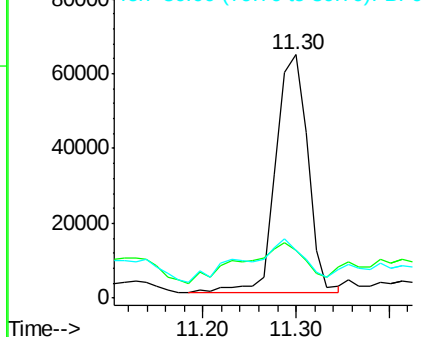
80 19.6 5.5 8.3#

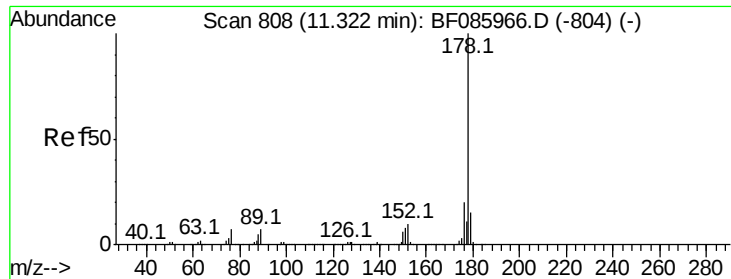


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0





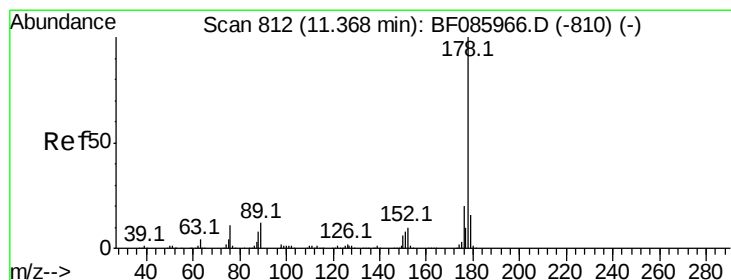
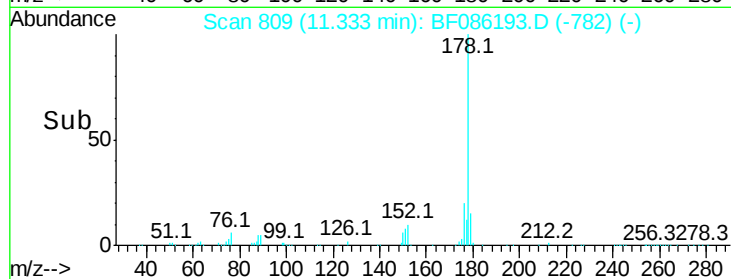
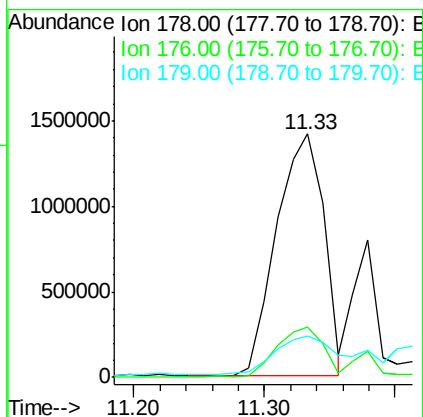
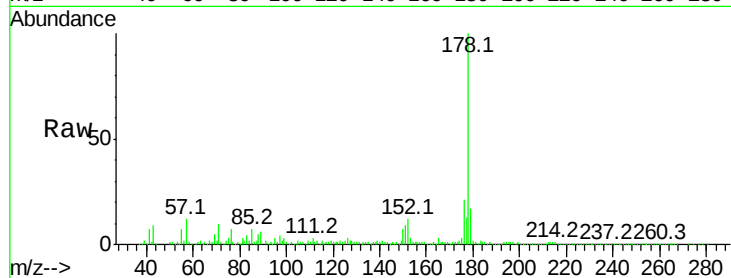
#70
Phenanthrene
Concen: 429.21 ng
RT: 11.33 min Scan# 809
Delta R.T. 0.01 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Instrument :
BNA_F
ClientSampleId :
PE-A-1

Tot Ion:178 Resp: 3574693
Ion Ratio Lower Upper
178 100
176 20.7 16.3 24.5
179 17.1 12.6 18.8

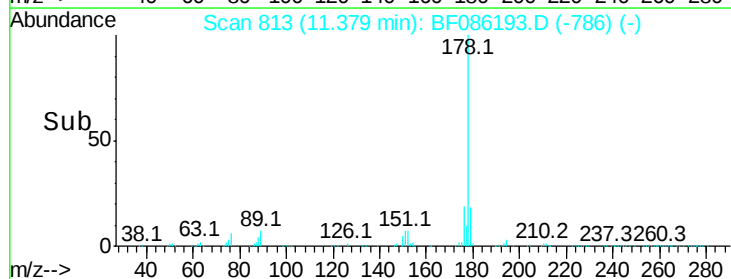
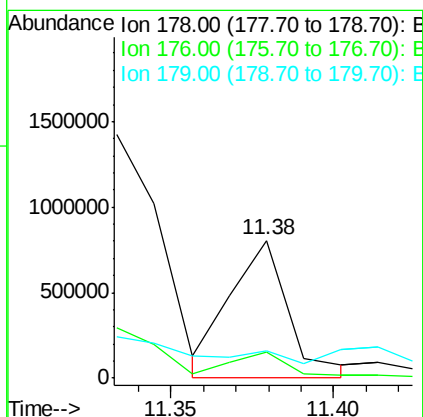
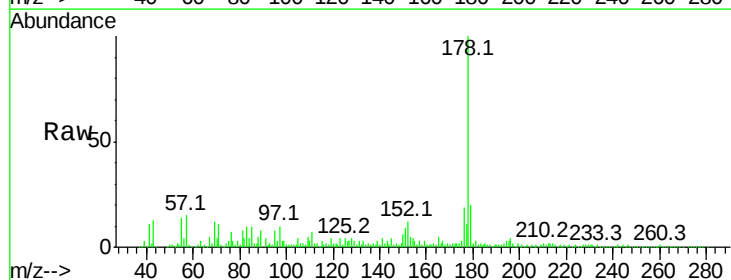
Manual Integrations
APPROVED

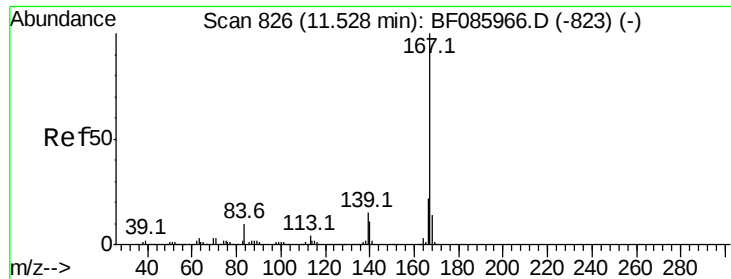
Sohil
4/11/2016 5:45:27 PM



#71
Anthracene
Concen: 115.67 ng m
RT: 11.38 min Scan# 813
Delta R.T. 0.01 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Tgt Ion:178 Resp: 1009133
Ion Ratio Lower Upper
178 100
176 19.2 15.9 23.9
179 20.0 13.0 19.4#





#72

Carbazole

Concen: 74.76 ng

RT: 11.52 min Scan# 825

Delta R.T. -0.01 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Instrument :

BNA_F

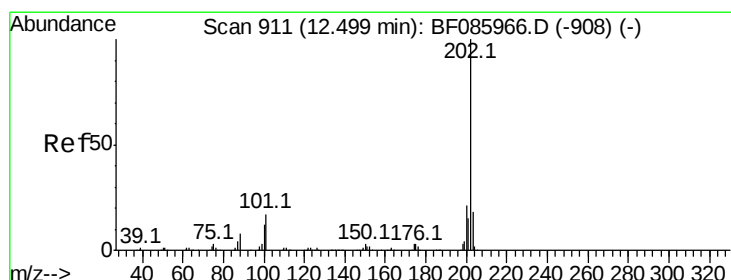
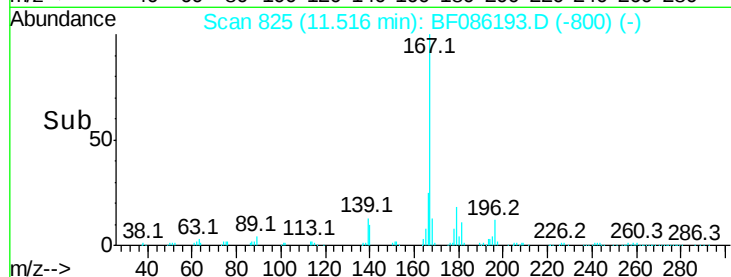
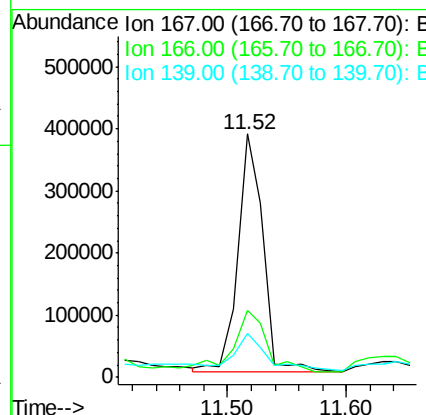
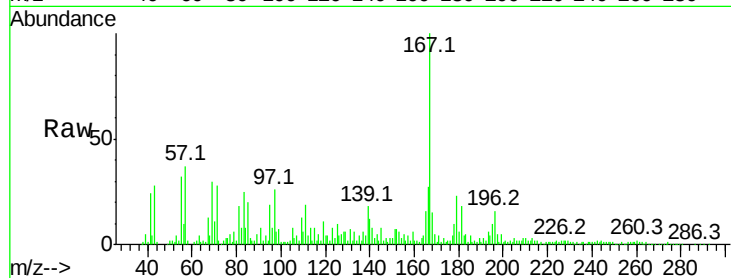
ClientSampled :

PE-A-1

Tot Ion:	167	Resp:	560670
Ion Ratio	Lower	Upper	
167	100		
166	27.5	17.8	26.8#
139	18.0	11.6	17.4#

Manual Integrations
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4/11/2016 5:45:27 PM



#74

Fluoranthene

Concen: 404.76 ng

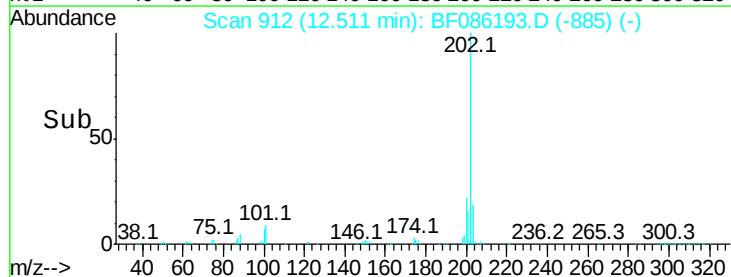
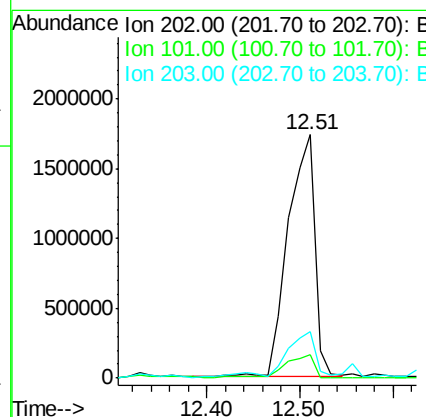
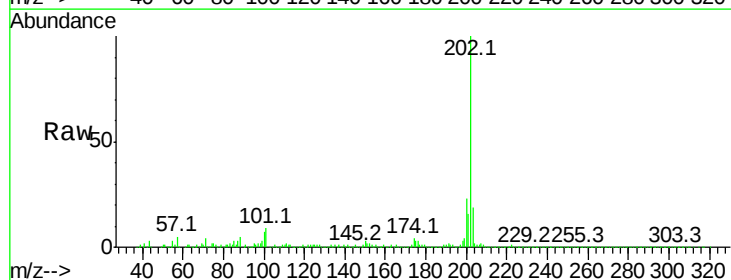
RT: 12.51 min Scan# 912

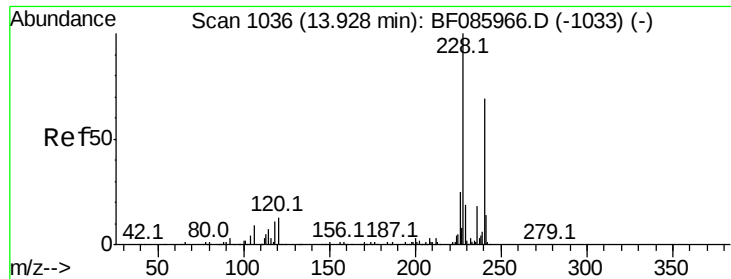
Delta R.T. 0.01 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Tgt Ion:	202	Resp:	3506289
Ion Ratio	Lower	Upper	
202	100		
101	9.4	0.0	36.6
203	18.9	0.0	38.1





#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.92 min Scan# 1035

Delta R.T. -0.01 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Instrument :

BNA_F

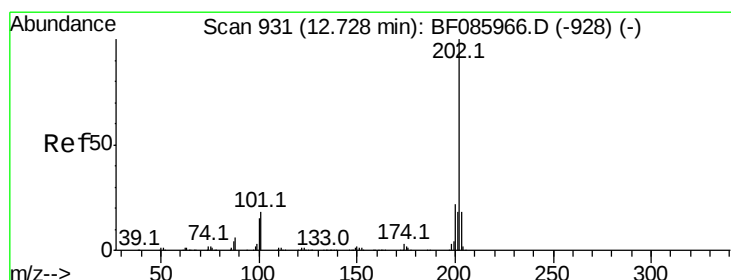
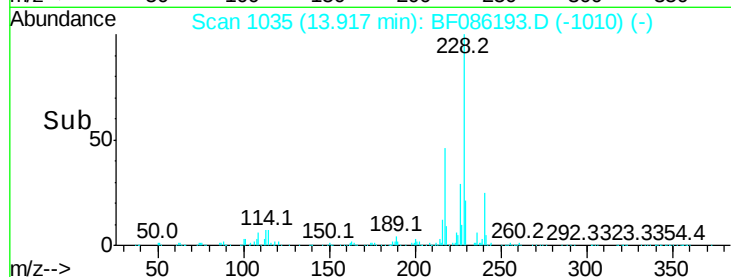
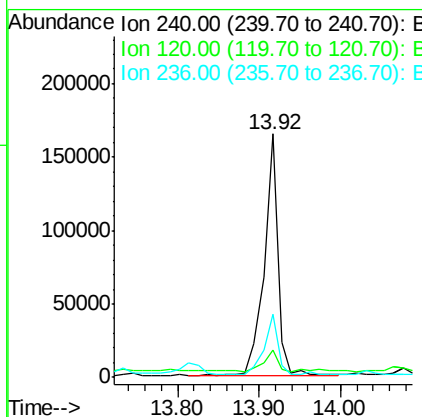
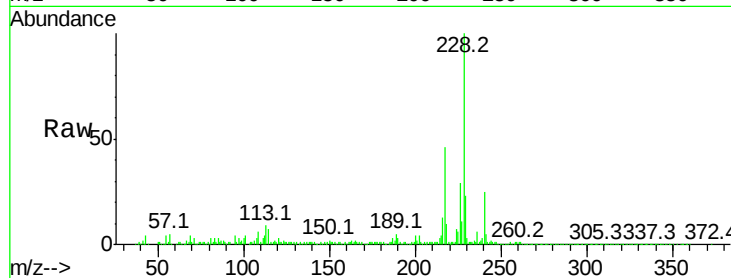
ClientSampleId :

PE-A-1

Tot Ion	Ratio	Lower	Upper
240	100		
120	11.0	13.8	20.8#
236	26.1	20.6	30.8

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4/11/2016 5:45:27 PM



#77

Pyrene

Concen: 208.07 ng

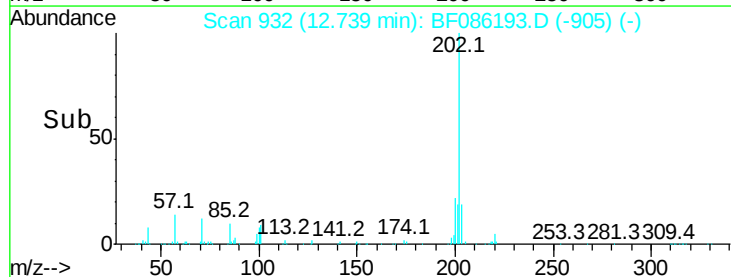
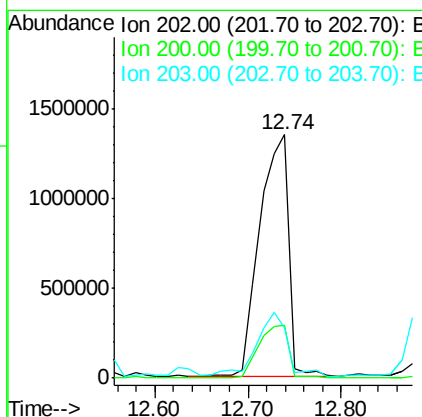
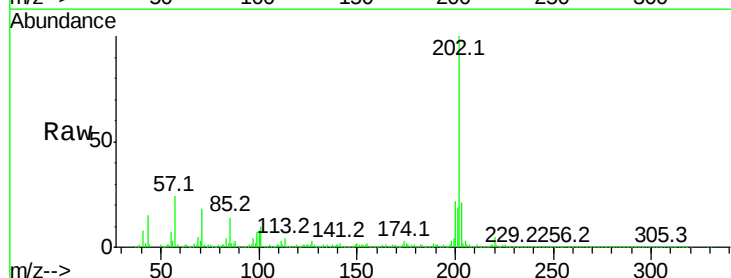
RT: 12.74 min Scan# 932

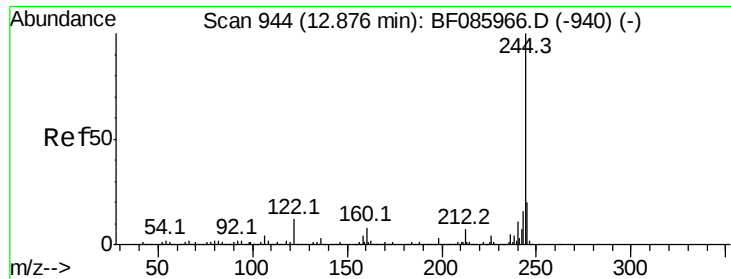
Delta R.T. 0.01 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Tgt Ion	Ratio	Lower	Upper
202	100		
200	22.0	17.6	26.4
203	20.6	14.0	21.0





#78

Terphenyl-d14

Concen: 58.53 ng

RT: 12.85 min Scan# 942

Delta R.T. -0.02 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Instrument :

BNA_F

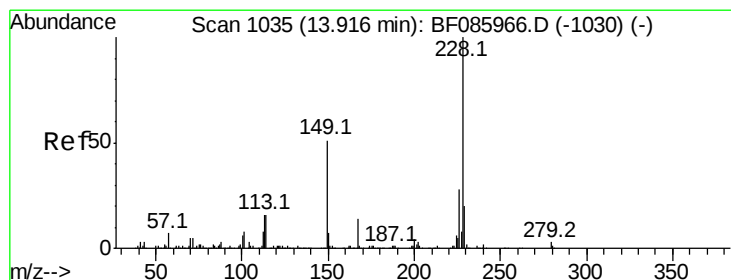
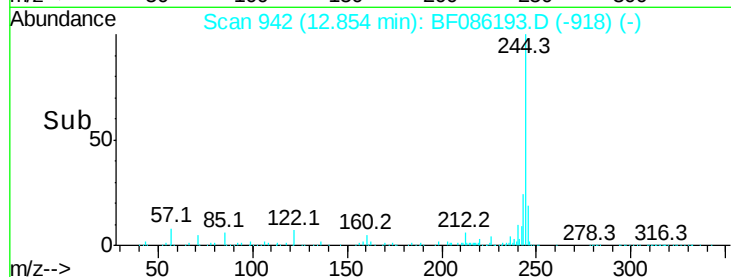
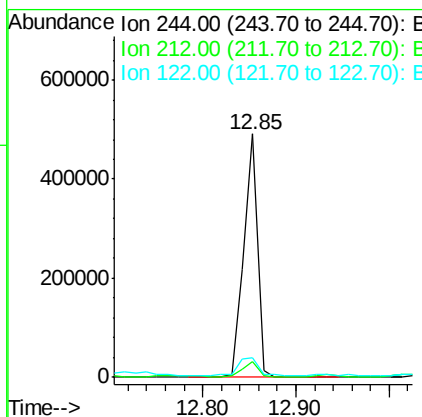
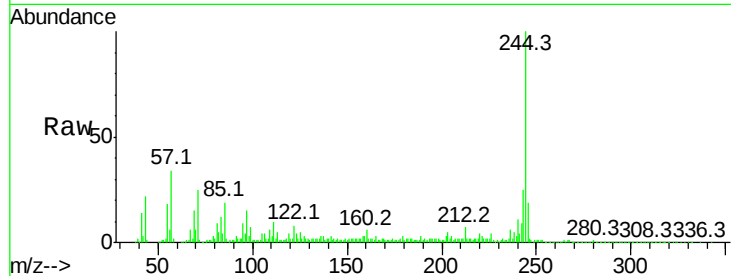
ClientSampleId :

PE-A-1

Tot Ion:	244	Resp:	498731
Ion Ratio	Lower	Upper	
244	100		
212	6.5	6.1	9.1
122	8.0	10.2	15.4#

Manual Integrations
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#80

Benzo(a)anthracene

Concen: 207.95 ng

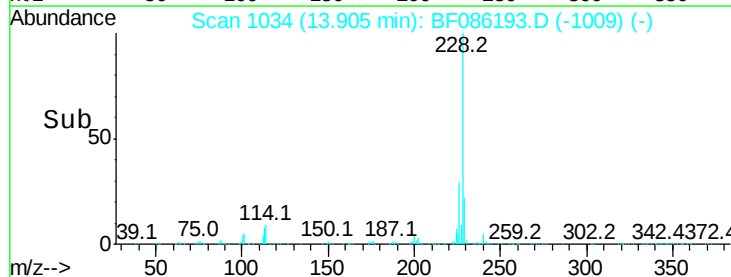
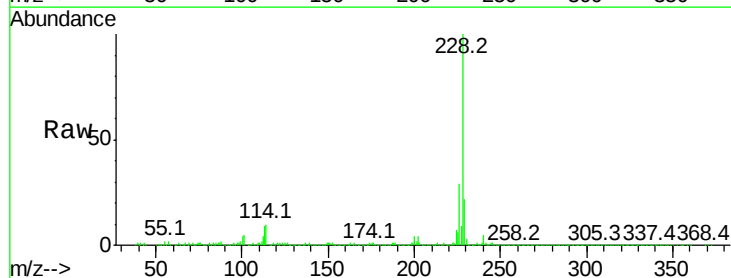
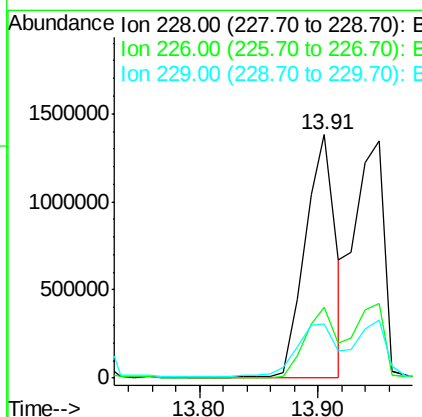
RT: 13.91 min Scan# 1034

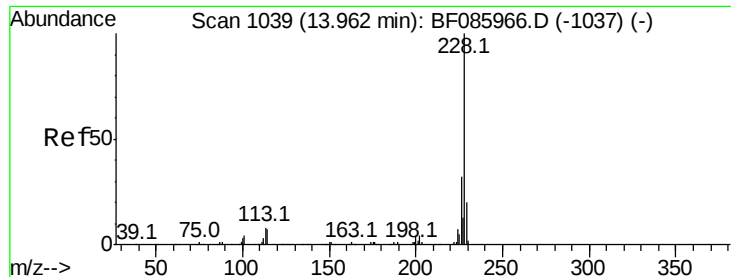
Delta R.T. -0.01 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Tgt Ion:	228	Resp:	2455305
Ion Ratio	Lower	Upper	
228	100		
226	29.0	22.1	33.1
229	22.1	16.2	24.4





#82

Chrysene

Concen: 202.19 ng/mL

RT: 13.95 min Scan# 1038

Delta R.T. -0.01 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

Instrument :

BNA_F

ClientSampled :

PE-A-1

Tot Ion:228 Resp: 2299663

Ion Ratio Lower Upper

228 100

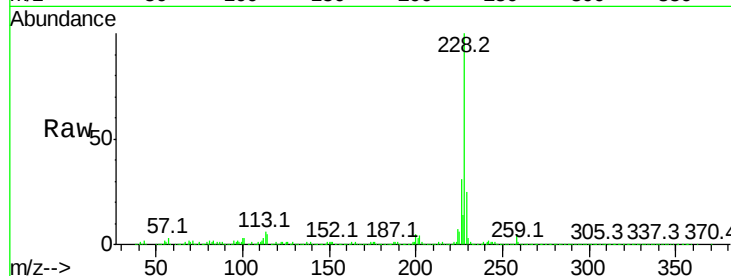
226 31.3 25.0 37.6

229 24.6 15.7 23.5#

Manual Integrations
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Sohil

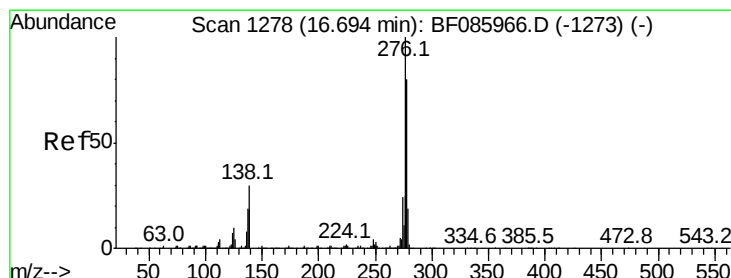
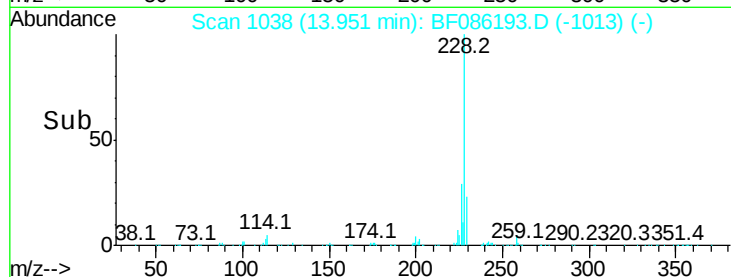
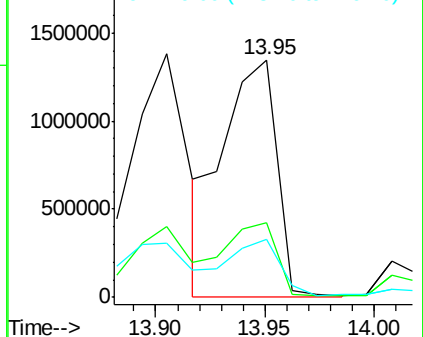
4/11/2016 5:45:27 PM



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: 101.57 ng/mL

RT: 16.66 min Scan# 1275

Delta R.T. -0.03 min

Lab File: BF086193.D

Acq: 9 Apr 2016 2:58

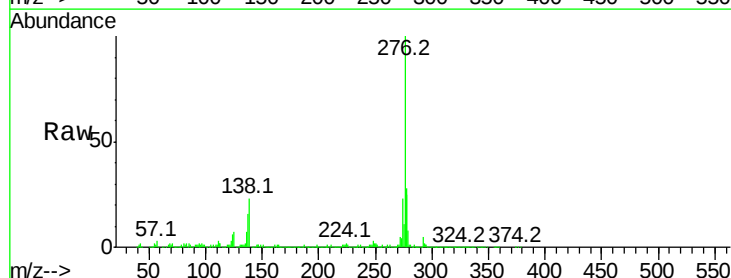
Tgt Ion:276 Resp: 937308

Ion Ratio Lower Upper

276 100

138 26.2 24.2 36.4

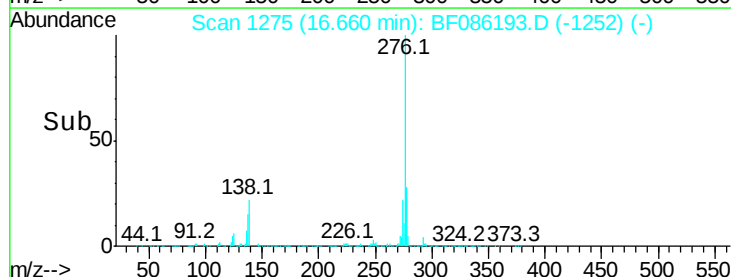
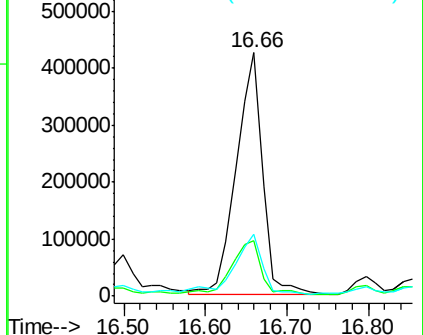
277 27.0 20.0 30.0

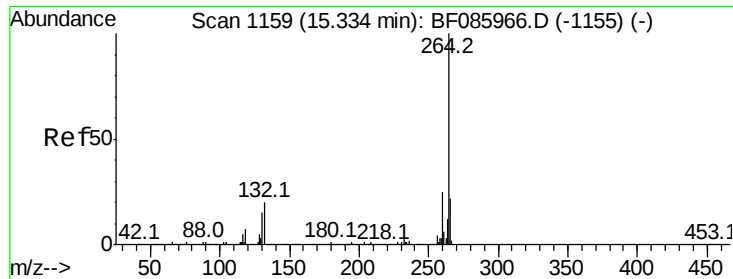


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E





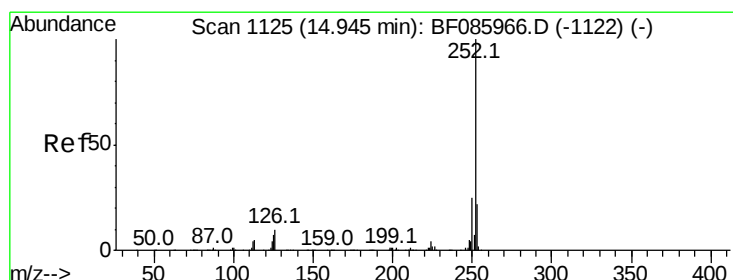
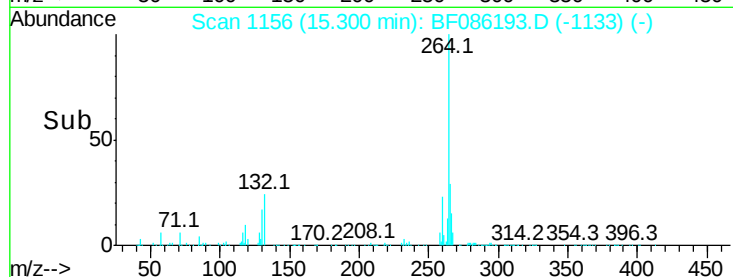
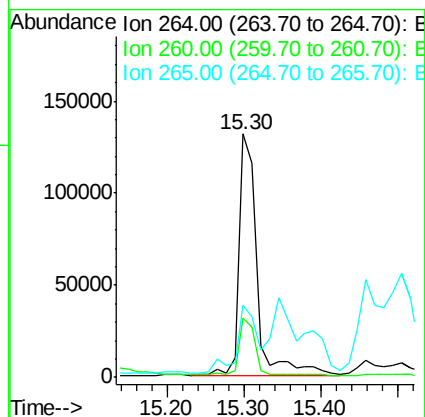
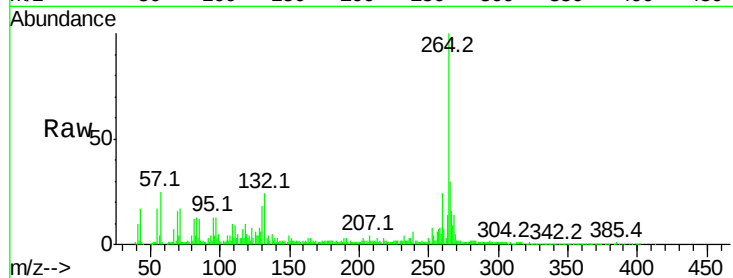
#86
Pervlene-d12
Concen: 20.00 ng
RT: 15.30 min Scan# 1156
Delta R.T. -0.03 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Instrument :
BNA_F
ClientSampled :
PE-A-1

Tot Ion	Ratio	Resp Lower	Upper
264	100		
260	24.4	19.4	29.2
265	29.8	17.2	25.8

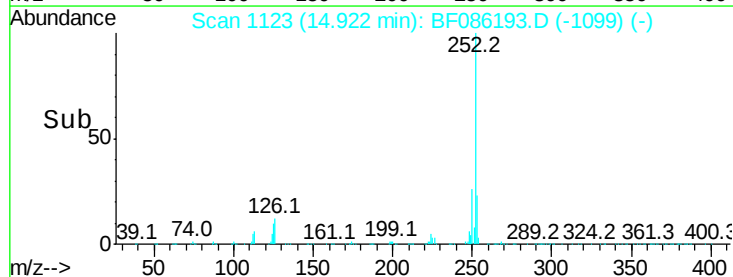
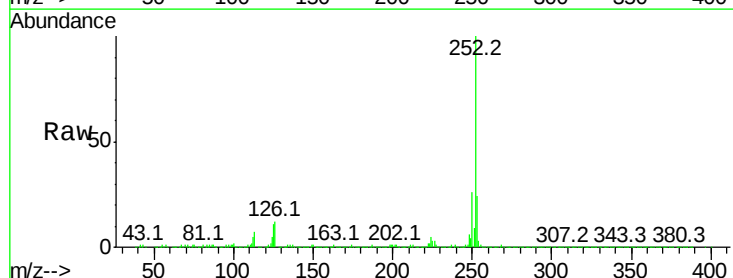
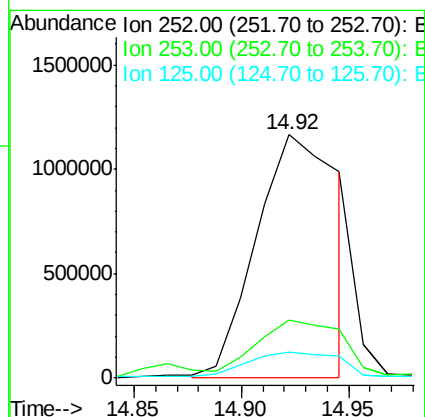
Manual Integrations
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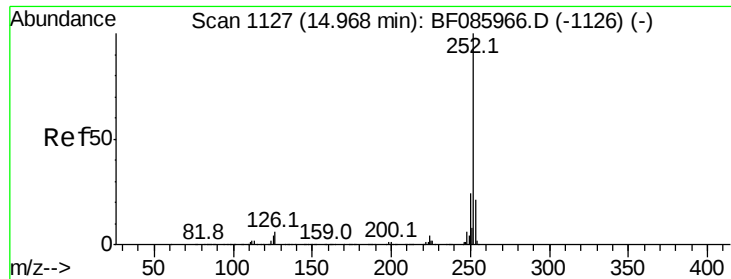
Sohil
4/11/2016 5:45:27 PM



#87
Benzo(b)fluoranthene
Concen: 227.16 ng m
RT: 14.92 min Scan# 1123
Delta R.T. -0.02 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Tgt Ion	Ratio	Resp Lower	Upper
252	100		
253	23.7	17.6	26.4
125	10.9	10.3	15.5





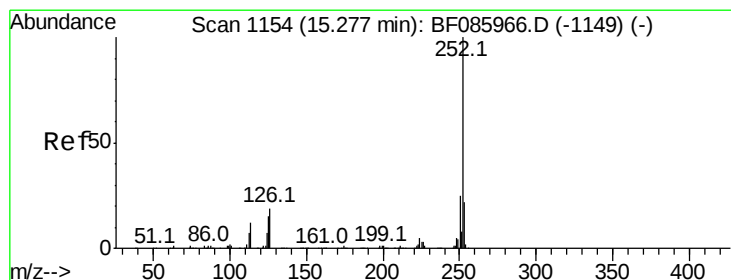
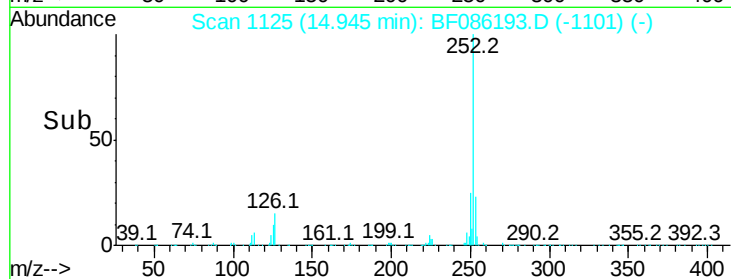
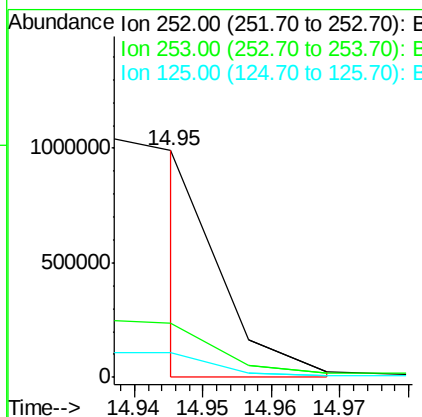
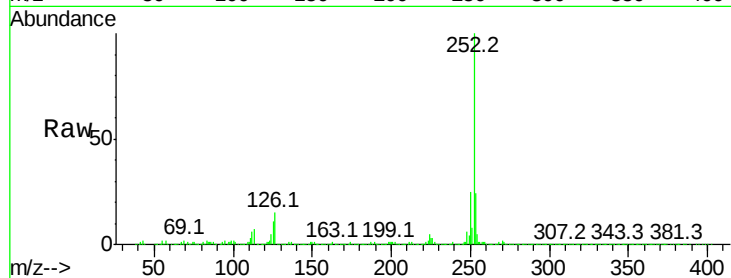
#88
Benzo(k)fluoranthene
Concen: 10.67 ng m
RT: 14.95 min Scan# 1125
Delta R.T. -0.02 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Instrument :
BNA_F
ClientSampleId :
PE-A-1

Tot Ion	Ratio	Lower	Upper
252	100		
253	23.7	17.8	26.6
125	10.7	7.7	11.5

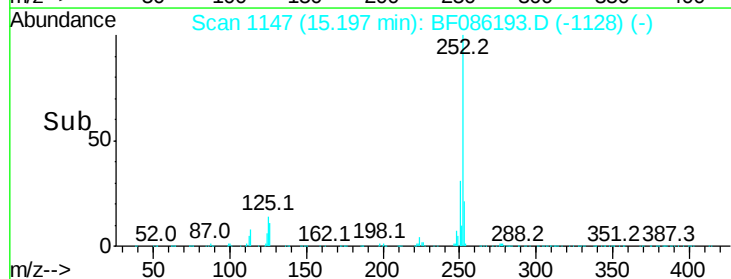
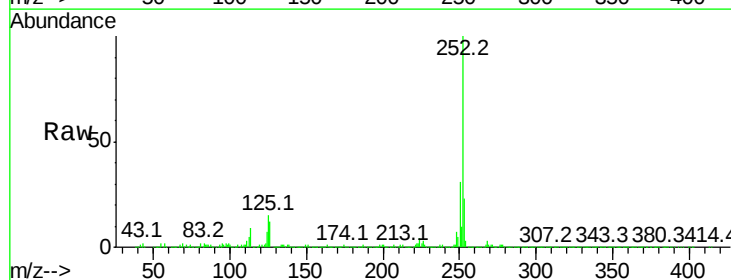
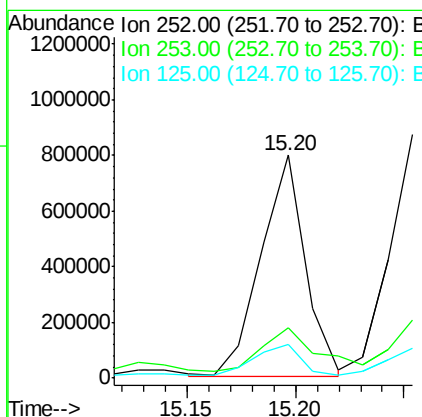
Manual Integrations
APPROVED

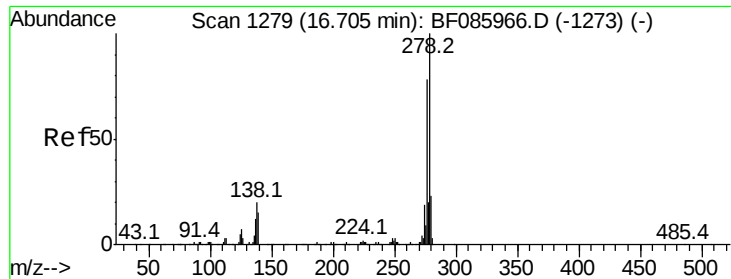
Sohil
4/11/2016 5:45:27 PM



#89
Benzo(a)pyrene
Concen: 95.08 ng
RT: 15.20 min Scan# 1147
Delta R.T. -0.08 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.7	17.4	26.0
125	15.0	10.3	15.5





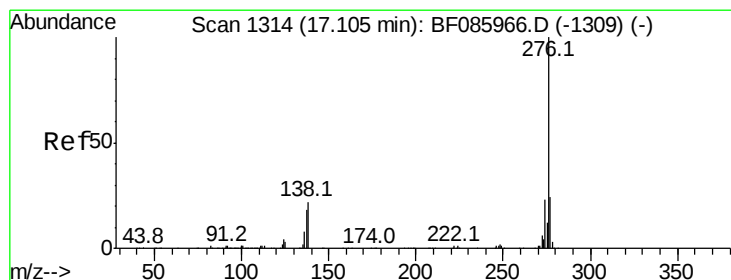
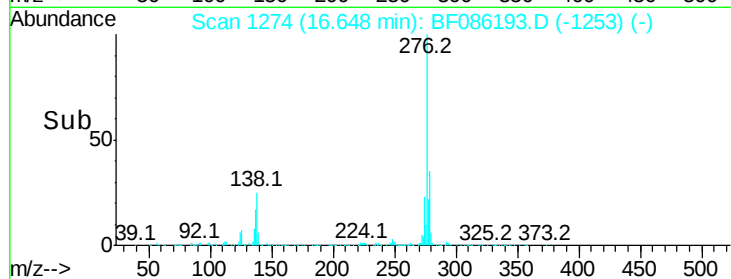
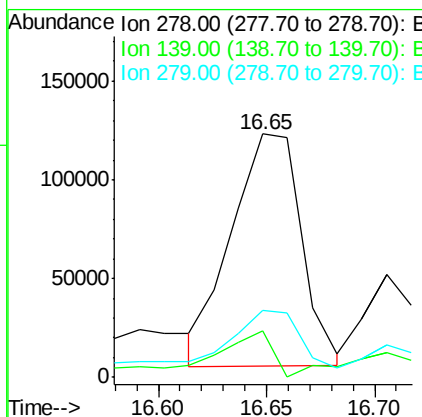
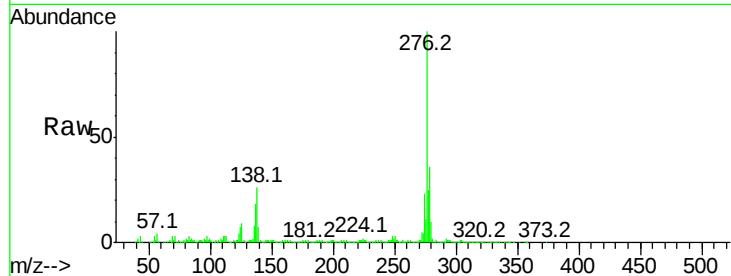
#90
Dibenzo(a,h)anthracene
Concen: 27.52 ng/ml
RT: 16.65 min Scan# 1274
Delta R.T. -0.06 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Instrument :
BNA_F
ClientSampleId :
PE-A-1

Tot Ion:	278	Resp:	266410
Ion Ratio	Lower	Upper	
278	100		
139	19.0	14.4	21.6
279	27.7	19.1	28.7

Manual Integrations
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Sohil
4/11/2016 5:45:27 PM



#91
Benzo(g,h,i)perylene
Concen: 86.28 ng/ml
RT: 17.06 min Scan# 1310
Delta R.T. -0.05 min
Lab File: BF086193.D
Acq: 9 Apr 2016 2:58

Tgt Ion:	276	Resp:	808185
Ion Ratio	Lower	Upper	
276	100		
277	24.5	18.8	28.2
138	25.4	22.6	34.0

