

Data Path : Z:\HPCHEM1\BNA F\DATA\BF073116\
 Data File : BF089501.D
 Acq On : 1 Aug 2016 8:43
 Operator : UM/SJ
 Sample : H4215-02DL 10X
 Misc :
 ALS Vial : 36 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SB-15-COMPDL

Manual Integrations
 APPROVED

sohil
 8/1/2016 7:16:39 PM

Quant Time: Aug 01 14:12:10 2016
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072716.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jul 28 16:02:32 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.49	152	33850	20.00	ng	-0.06
21) Naphthalene-d8	7.78	136	131482	20.00	ng	-0.05
38) Acenaphthene-d10	9.52	164	47640	20.00	ng	-0.06
63) Phenanthrene-d10	10.99	188	94127	20.00	ng	-0.06
75) Chrysene-d12	13.62	240	86819	20.00	ng	-0.05
86) Perylene-d12	14.95	264	66474	20.00	ng	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	5.06	112	22884	10.79	ng	-0.05
7) Phenol-d6	6.16	99	32556	11.62	ng	-0.05
23) Nitrobenzene-d5	7.07	82	17020	7.64	ng	-0.05
41) 2,4,6-Tribromophenol	10.31	330	4038	10.23	ng	-0.06
44) 2-Fluorobiphenyl	8.86	172	29561	9.11	ng	-0.06
78) Terphenyl-d14	12.58	244	24277	6.54	ng	-0.05
Target Compounds						Qvalue
31) Naphthalene	7.80	128	32949	5.06	ng	99
37) 2-Methylnaphthalene	8.49	142	12789	3.26	ng	94
48) Acenaphthylene	9.38	152	15094	3.15	ng	# 97
49) Dimethylphthalate	9.27	163	8281	2.28	ng	# 96
51) Acenaphthene	9.55	154	22416	8.00	ng	98
54) Dibenzofuran	9.74	168	21162	5.54	ng	# 94
57) Fluorene	10.07	166	32013	9.60	ng	98
70) Phenanthrene	11.02	178	114074	23.50	ng	99
71) Anthracene	11.07	178	45747	8.48	ng	99
74) Fluoranthene	12.20	202	178649	34.98	ng	98
77) Pyrene	12.42	202	161671	24.57	ng	98
80) Benzo(a)anthracene	13.61	228	82460m	16.83	ng	
82) Chrysene	13.65	228	82547m	15.83	ng	
85) Indeno(1,2,3-cd)pyrene	16.13	276	30070	8.11	ng	# 90
87) Benzo(b)fluoranthene	14.61	252	75032m	18.18	ng	
88) Benzo(k)fluoranthene	14.62	252	36736m	9.68	ng	
89) Benzo(a)pyrene	14.90	252	53985	14.58	ng	96
90) Dibenz(a,h)anthracene	16.14	278	11424	3.92	ng	# 87
91) Benzo(a,h,i)perylene	16.48	276	25610	8.93	ng	97

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

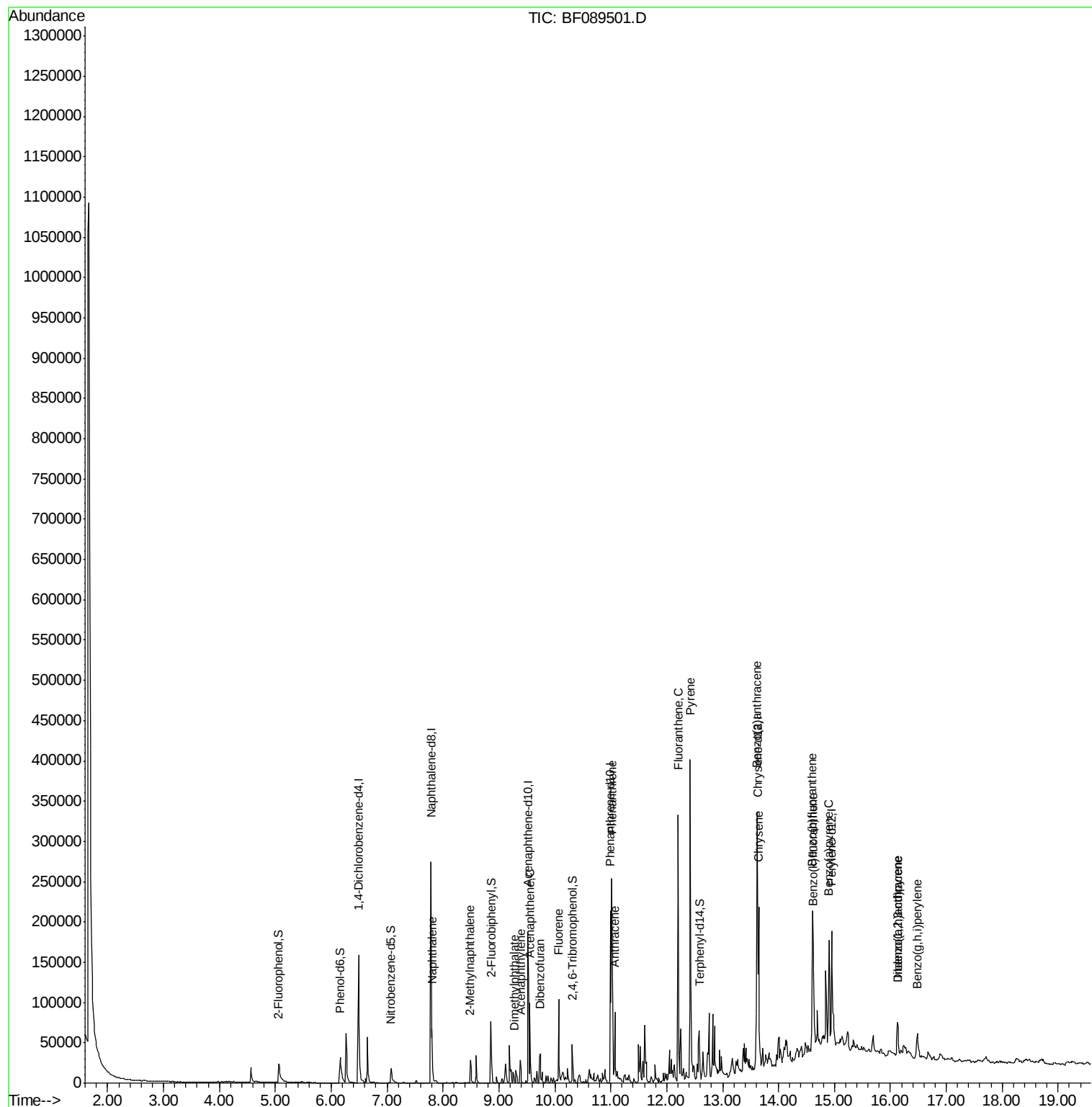
Data Path : Z:\HPCHEM1\BNA F\DATA\BF073116\
Data File : BF089501.D
Acq On : 1 Aug 2016 8:43
Operator : UM/SJ
Sample : H4215-02DL 10X
Misc :
ALS Vial : 36 Sample Multiplier: 1

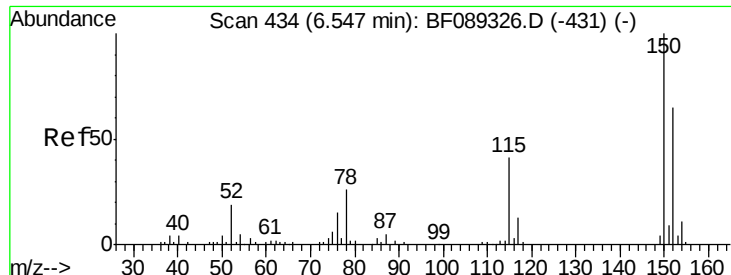
Instrument :
BNA_F
ClientSampleID :
SB-15-COMPDL

Manual Integrations
APPROVED

sohil
8/1/2016 7:16:39 PM

Quant Time: Aug 01 14:12:10 2016
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jul 28 16:02:32 2016
Response via : Initial Calibration





#1

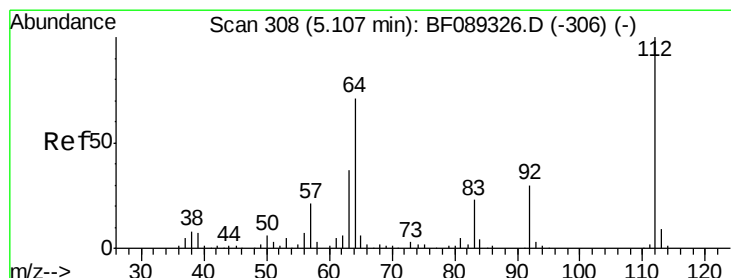
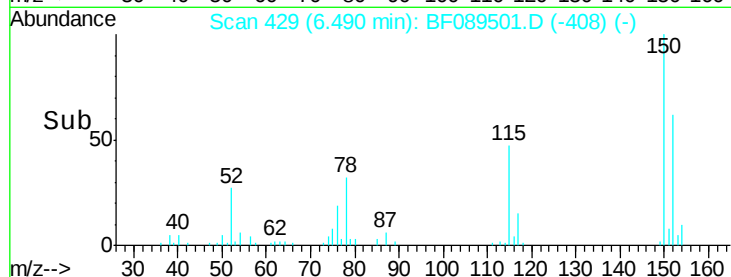
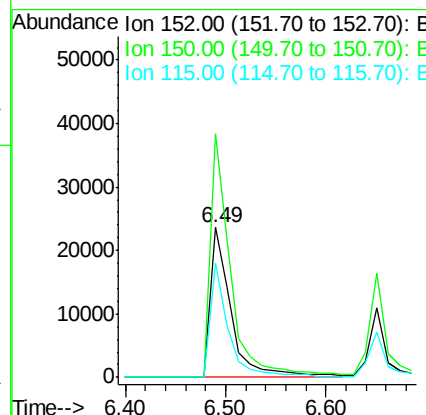
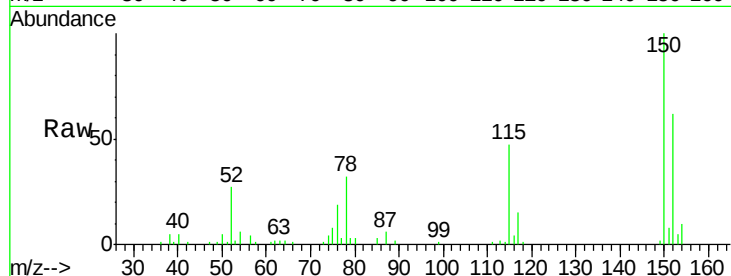
1,4-Dichlorobenzene-d4
Concen: 20.00 ng
RT: 6.49 min Scan# 429
Delta R.T. -0.06 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Instrument :
BNA_F
ClientSampleId :
SB-15-COMPDL

Tot Ion	Ratio	Lower	Upper
152	100		
150	162.2	129.5	194.3
115	75.8	51.4	77.2

Manual Integrations
APPROVED

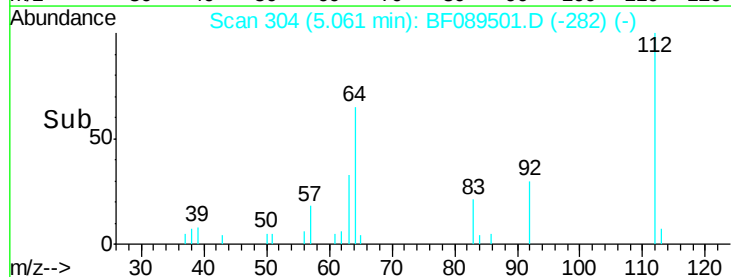
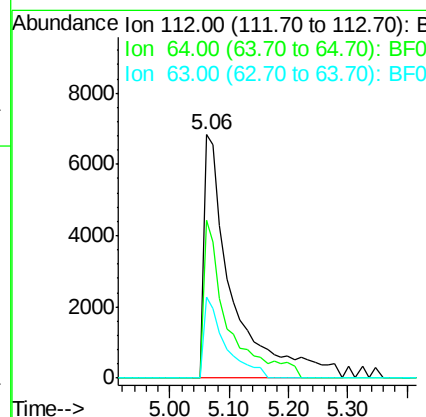
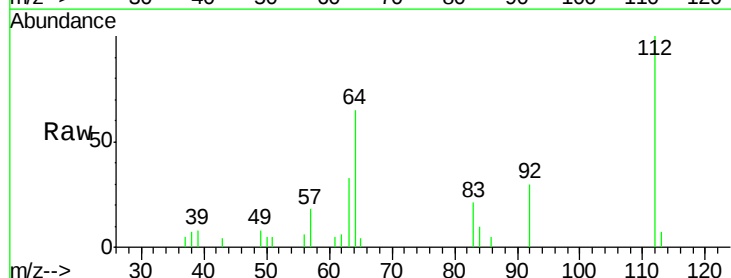
sohil
8/1/2016 7:16:39 PM



#5

2-Fluorophenol
Concen: 10.79 ng
RT: 5.06 min Scan# 304
Delta R.T. -0.05 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Tgt Ion	Ratio	Lower	Upper
112	100		
64	65.0	55.0	82.6
63	33.3	29.4	44.2





#7

Phenol-d6

Concen: 11.62 ng

RT: 6.16 min Scan# 400

Delta R.T. -0.05 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Instrument :

BNA_F

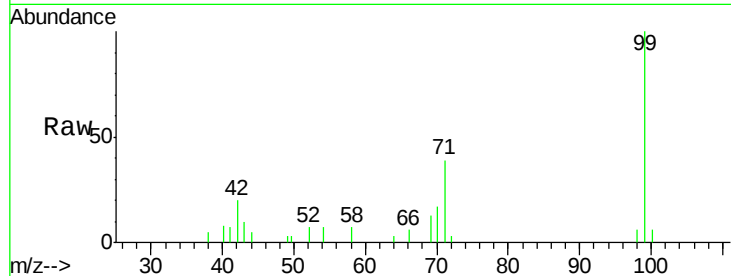
ClientSampleId :

SB-15-COMPDL

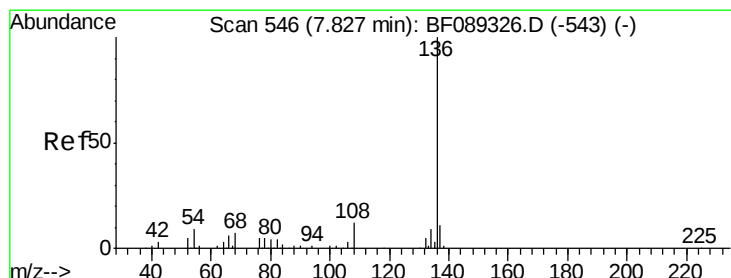
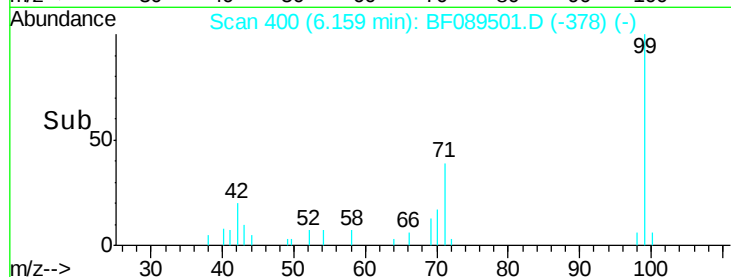
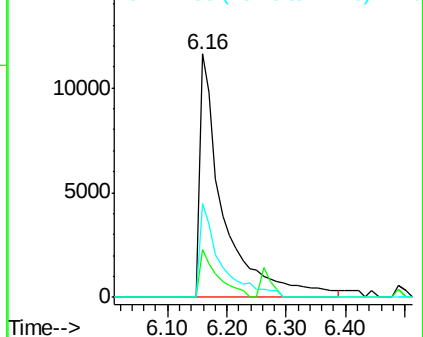
Tot Ion:	99	Resp:	32556
Ion Ratio	Lower	Upper	
99	100		
42	19.6	13.6	20.4
71	38.7	29.4	44.2

Manual Integrations
APPROVED

sohil
8/1/2016 7:16:39 PM



Abundance Ion 99.00 (98.70 to 99.70): BF0
Ion 42.00 (41.70 to 42.70): BF0
Ion 71.00 (70.70 to 71.70): BF0



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.78 min Scan# 542

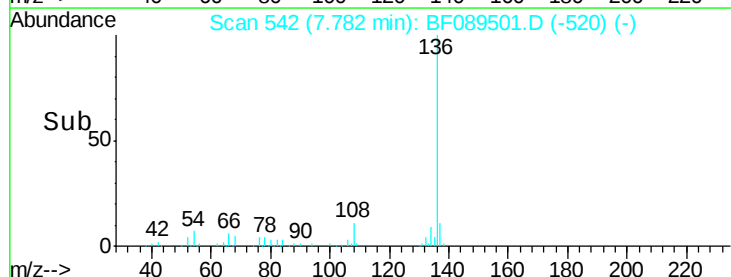
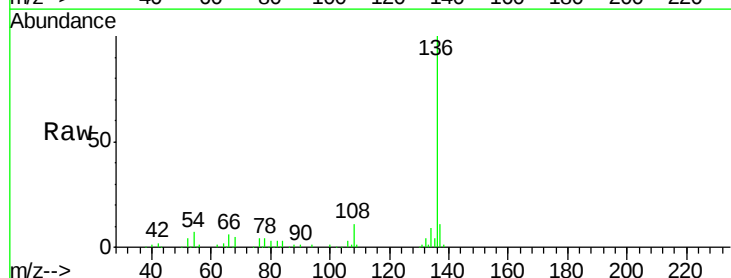
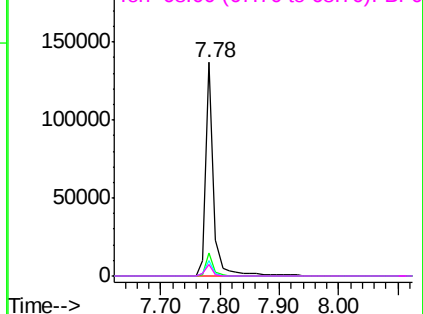
Delta R.T. -0.05 min

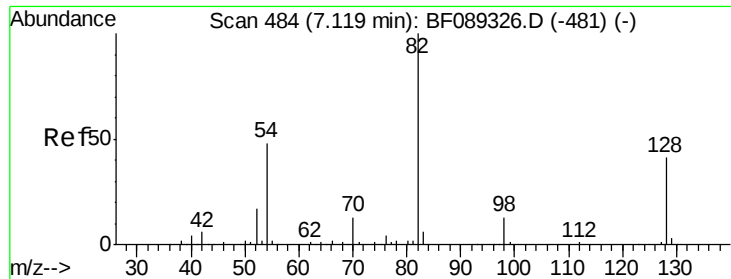
Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Tgt Ion:	136	Resp:	131482
Ion Ratio	Lower	Upper	
136	100		
137	10.6	8.6	13.0
54	7.3	7.0	10.4
68	5.4	4.9	7.3

Abundance Ion 136.00 (135.70 to 136.70): E
Ion 137.00 (136.70 to 137.70): E
Ion 54.00 (53.70 to 54.70): BF0
Ion 68.00 (67.70 to 68.70): BF0





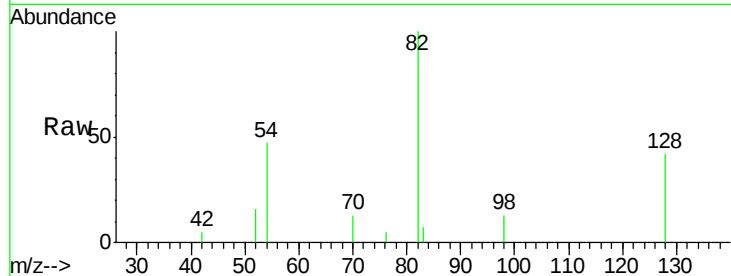
#23
Nitrobenzene-d5
Concen: 7.64 ng
RT: 7.07 min Scan# 480
Delta R.T. -0.05 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Instrument :
BNA_F
ClientSampleId :
SB-15-COMPDL

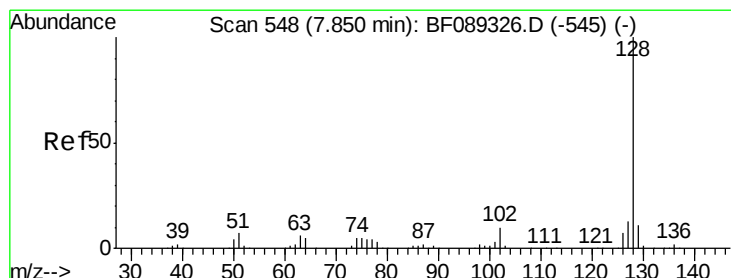
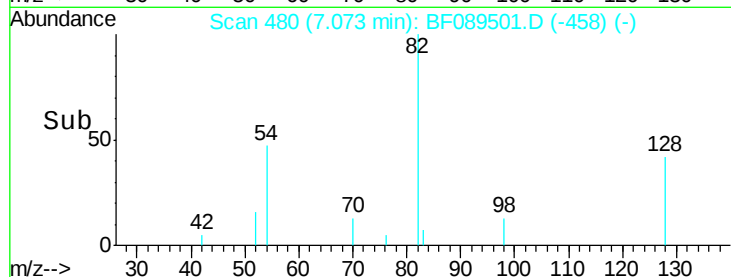
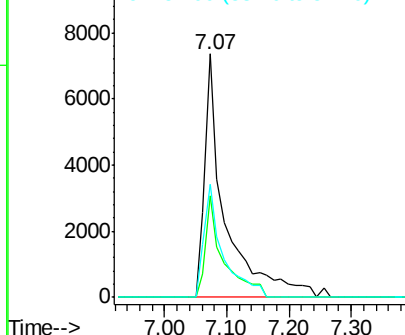
Tot Ion	Ratio	Lower	Upper
82	100		
128	41.7	32.5	48.7
54	46.7	38.8	58.2

Manual Integrations
APPROVED

sohil
8/1/2016 7:16:39 PM

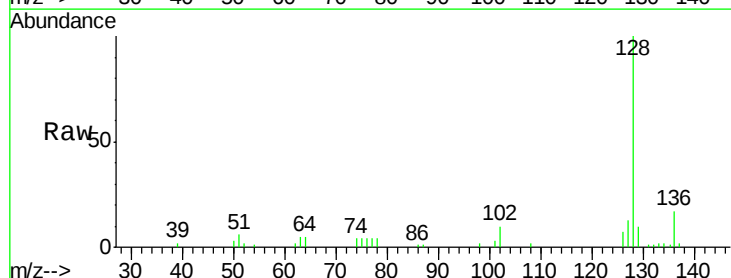


Abundance Ion 82.00 (81.70 to 82.70): BF0
Ion 128.00 (127.70 to 128.70): E
Ion 54.00 (53.70 to 54.70): BF0

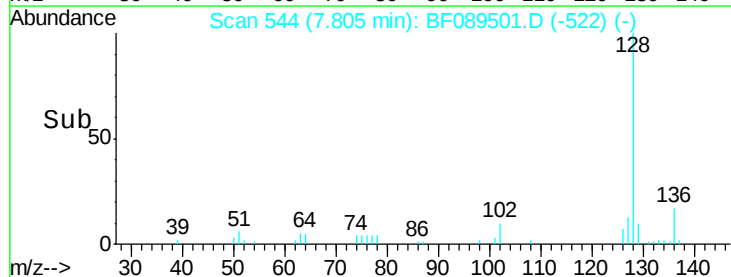
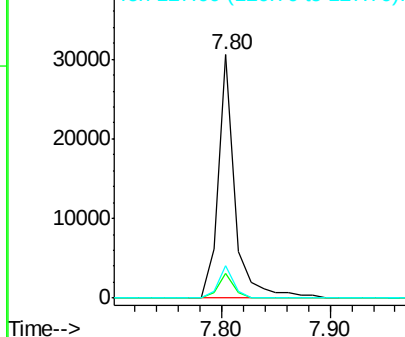


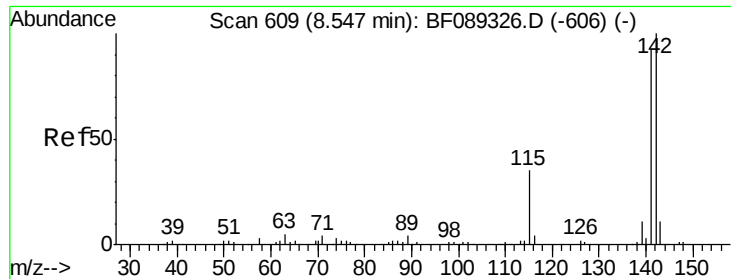
#31
Naphthalene
Concen: 5.06 ng
RT: 7.80 min Scan# 544
Delta R.T. -0.05 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.3	8.8	13.2
127	13.2	10.8	16.2



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





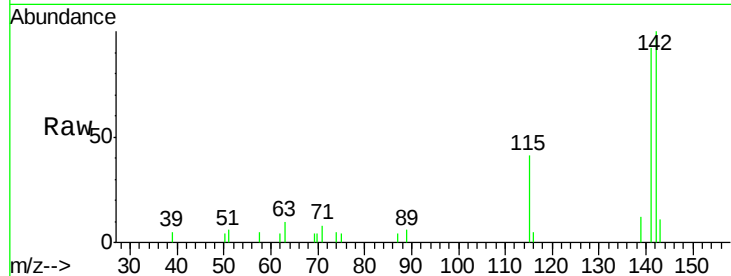
#37
2-Methylnaphthalene
Concen: 3.26 ng
RT: 8.49 min Scan# 604
Delta R.T. -0.06 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Instrument :
BNA_F
ClientSampleId :
SB-15-COMPDL

Tot Ion	Ratio	Lower	Upper
142	100		
141	91.8	70.9	106.3
115	41.2	27.6	41.4

Manual Integrations
APPROVED

sohil
8/1/2016 7:16:39 PM

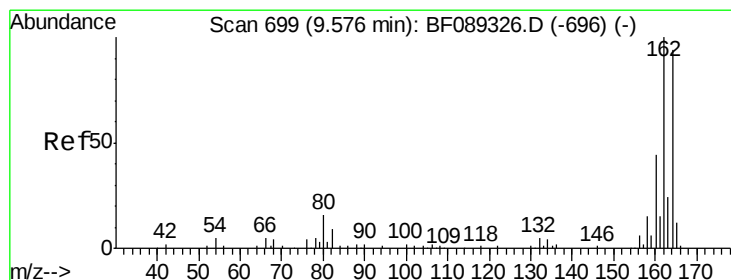
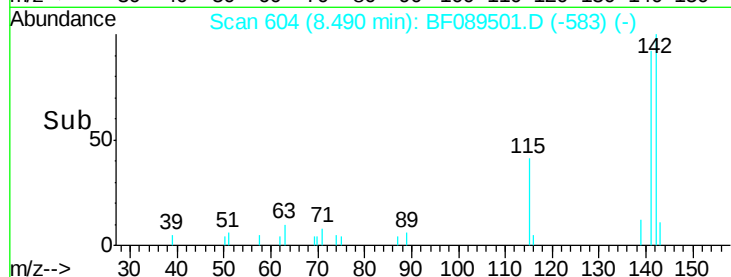
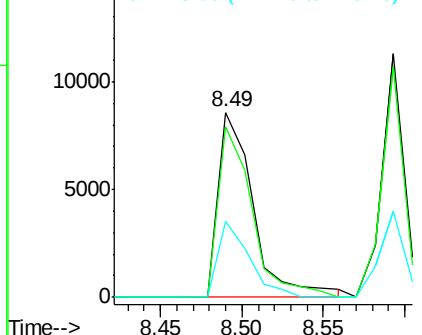


Abundance

Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E



#38
Acenaphthene-d10
Concen: 20.00 ng
RT: 9.52 min Scan# 694
Delta R.T. -0.06 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

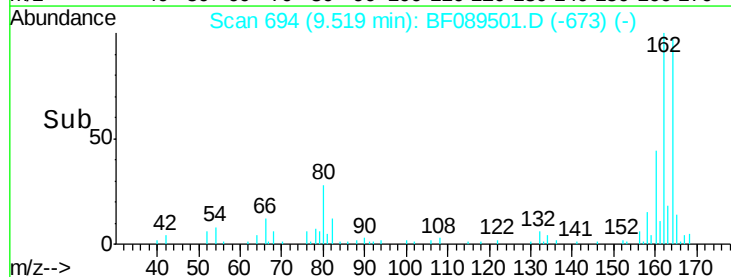
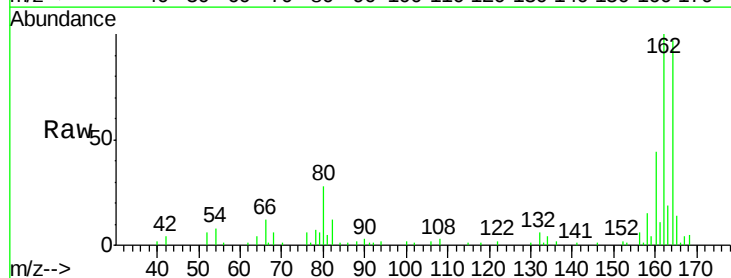
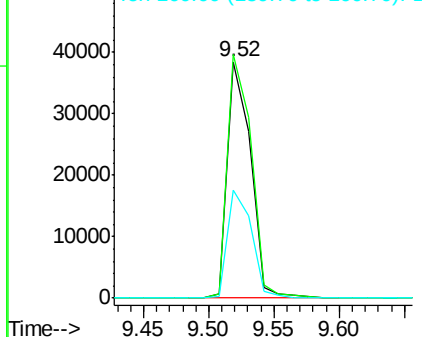
Tgt Ion	Ratio	Lower	Upper
164	100		
162	103.1	83.7	125.5
160	45.5	37.8	56.6

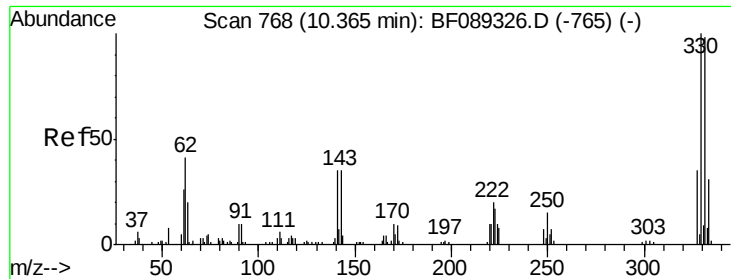
Abundance

Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





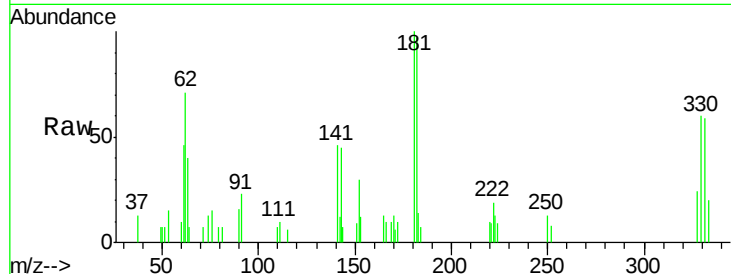
#41
 2,4,6-Tribromophenol
 Concen: 10.23 ng
 RT: 10.31 min Scan# 763
 Delta R.T. -0.06 min
 Lab File: BF089501.D
 Acq: 1 Aug 2016 8:43

Instrument :
 BNA_F
 ClientSampleId :
 SB-15-COMPDL

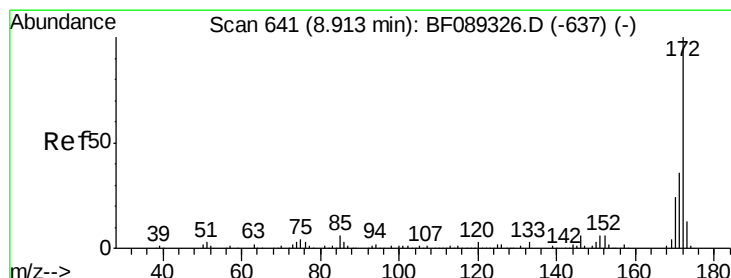
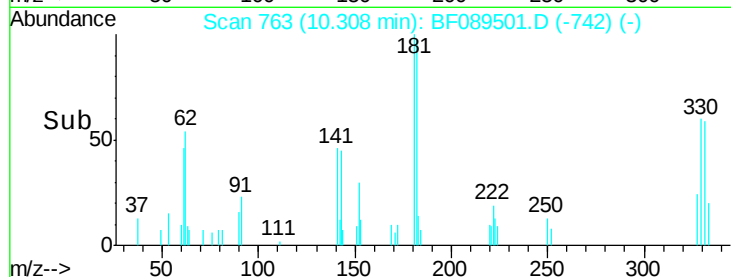
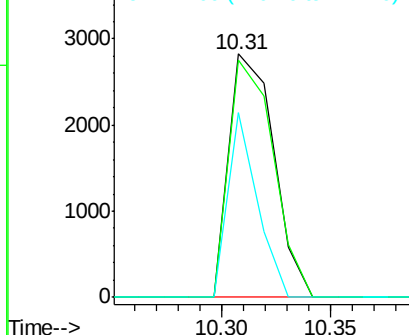
Tot Ion	Ratio	Lower	Upper
330	100		
332	97.0	76.8	115.2
141	49.4	37.3	55.9

Manual Integrations
 APPROVED

sohil
 8/1/2016 7:16:39 PM



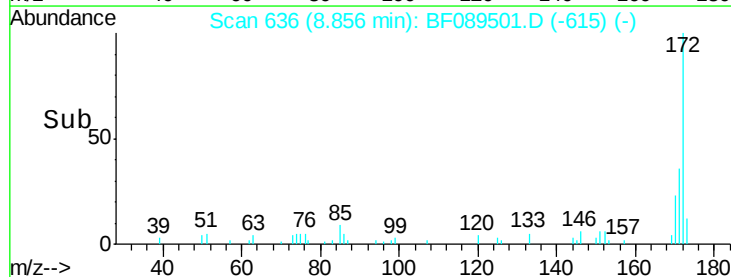
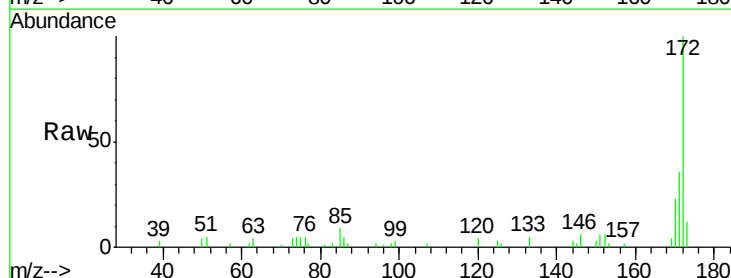
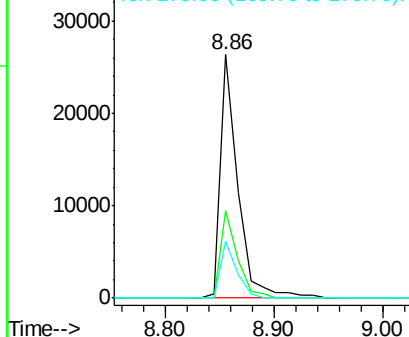
Abundance Ion 329.80 (329.50 to 330.50): E
 Ion 331.80 (331.50 to 332.50): E
 Ion 141.00 (140.70 to 141.70): E

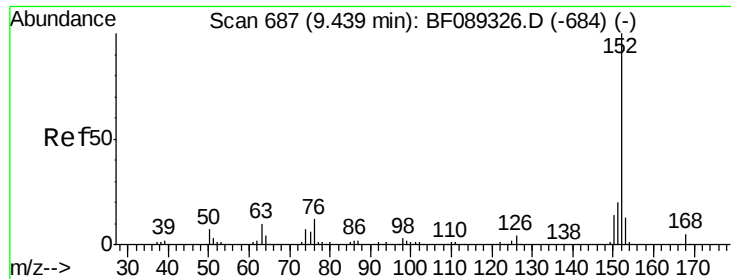


#44
 2-Fluorobiphenyl
 Concen: 9.11 ng
 RT: 8.86 min Scan# 636
 Delta R.T. -0.06 min
 Lab File: BF089501.D
 Acq: 1 Aug 2016 8:43

Tgt Ion	Ratio	Lower	Upper
172	100		
171	35.8	29.2	43.8
170	23.2	19.2	28.8

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





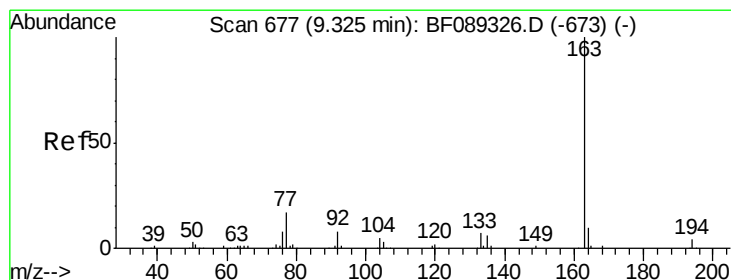
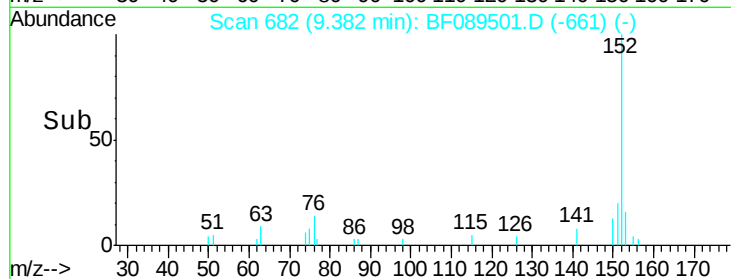
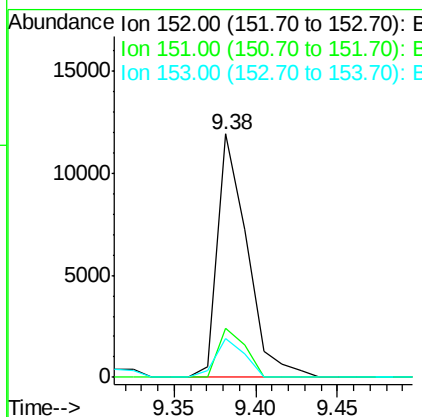
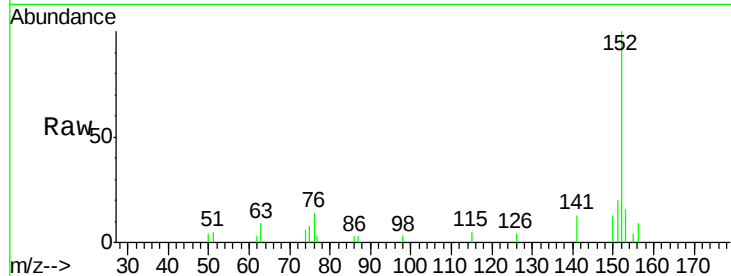
#48
Acenaphthylene
Concen: 3.15 ng
RT: 9.38 min Scan# 682
Delta R.T. -0.06 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Instrument :
BNA_F
ClientSampleId :
SB-15-COMPDL

Tot Ion	Ratio	Lower	Upper
152	100		
151	20.3	16.2	24.2
153	15.9	10.2	15.4

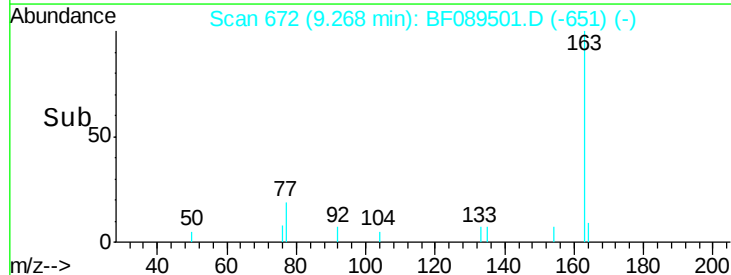
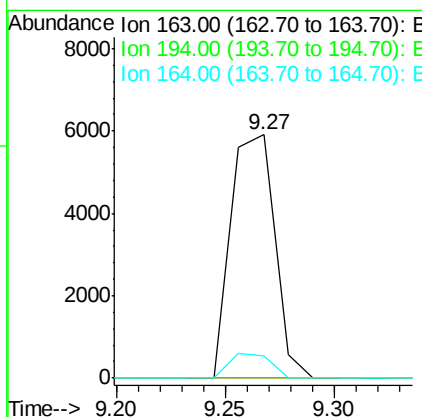
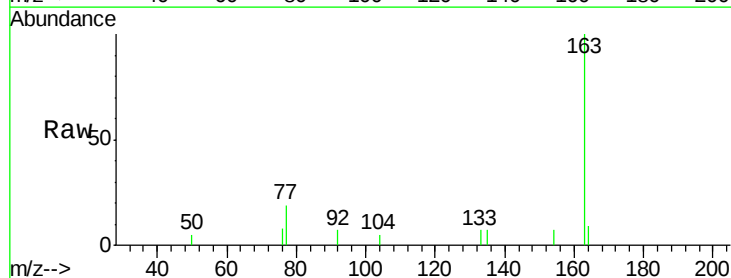
Manual Integrations
APPROVED

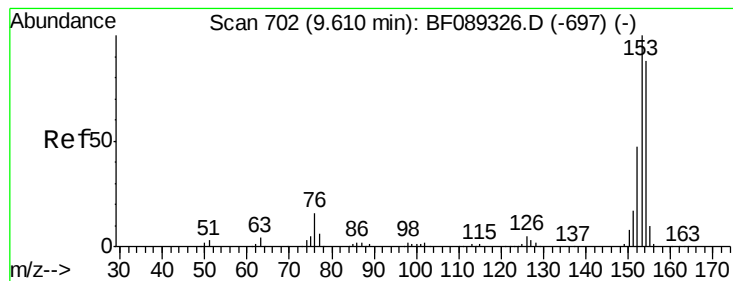
sohil
8/1/2016 7:16:39 PM



#49
Dimethylphthalate
Concen: 2.28 ng
RT: 9.27 min Scan# 672
Delta R.T. -0.06 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Tgt Ion	Ratio	Lower	Upper
163	100		
194	0.0	2.8	4.2
164	9.1	7.8	11.8





#51

Acenaphthene

Concen: 8.00 ng

RT: 9.55 min Scan# 697

Delta R.T. -0.06 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Instrument :

BNA_F

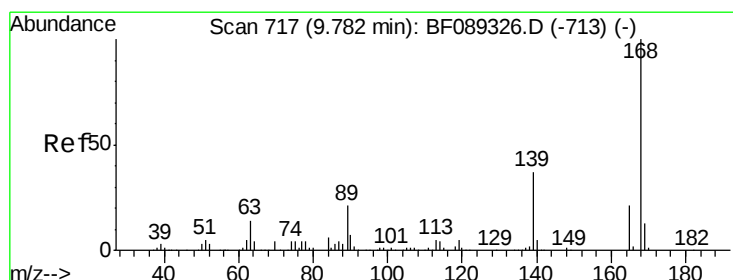
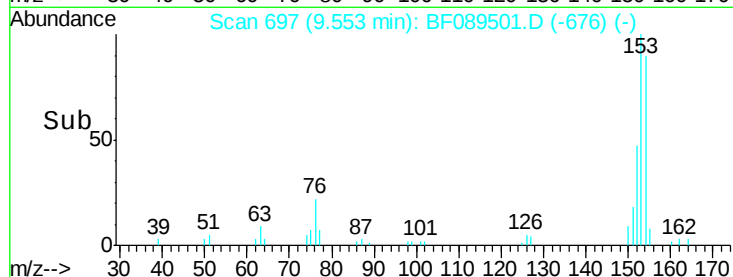
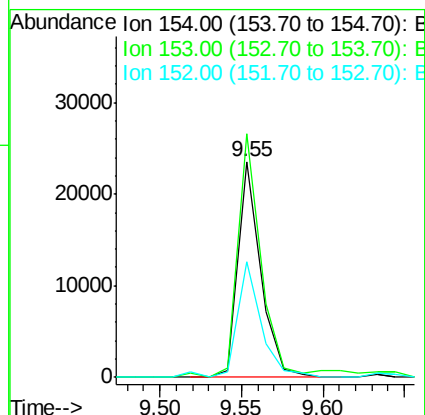
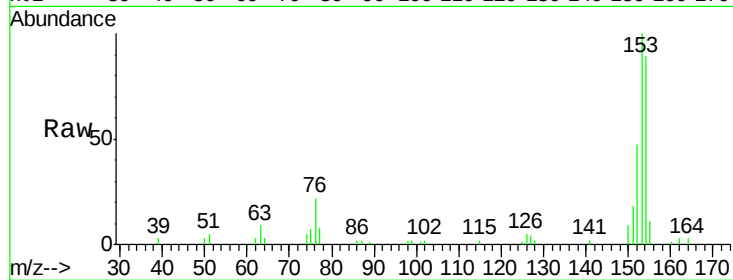
ClientSampleId :

SB-15-COMPDL

Tot Ion:	154	Resp:	22416
Ion Ratio	Lower	Upper	
154	100		
153	112.7	91.4	137.2
152	53.2	43.8	65.6

Manual Integrations
APPROVED

sohil
8/1/2016 7:16:39 PM



#54

Dibenzofuran

Concen: 5.54 ng

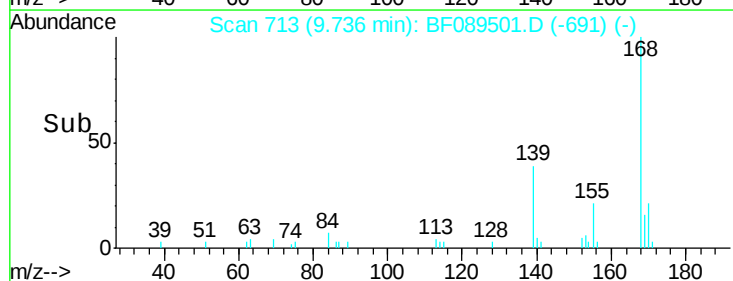
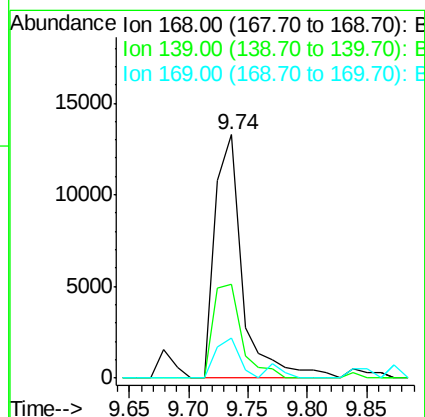
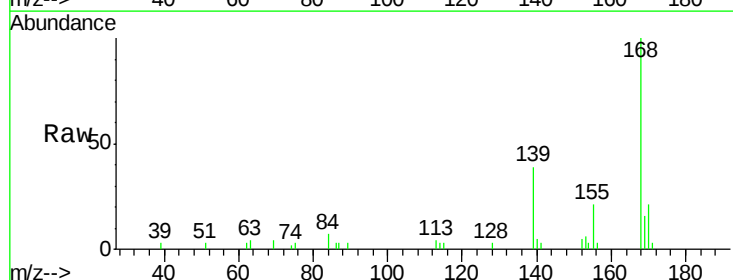
RT: 9.74 min Scan# 713

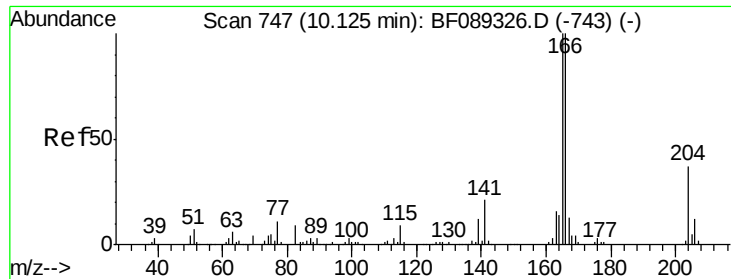
Delta R.T. -0.05 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Tgt Ion:	168	Resp:	21162
Ion Ratio	Lower	Upper	
168	100		
139	38.6	33.7	50.5
169	16.4	10.7	16.1#





#57

Fluorene

Concen: 9.60 ng

RT: 10.07 min Scan# 742

Delta R.T. -0.06 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Instrument :

BNA_F

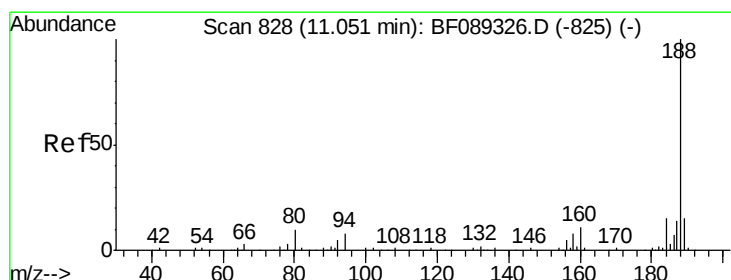
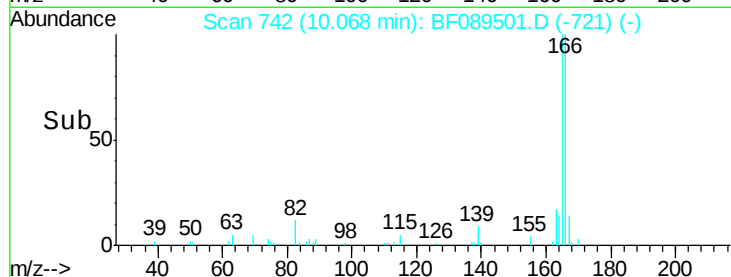
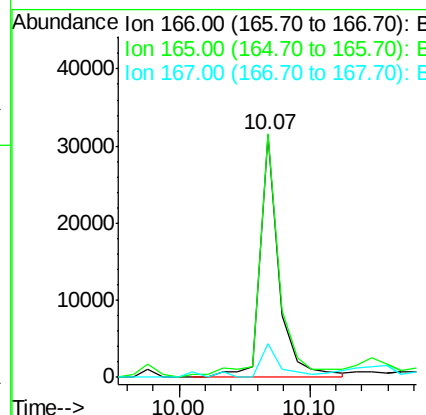
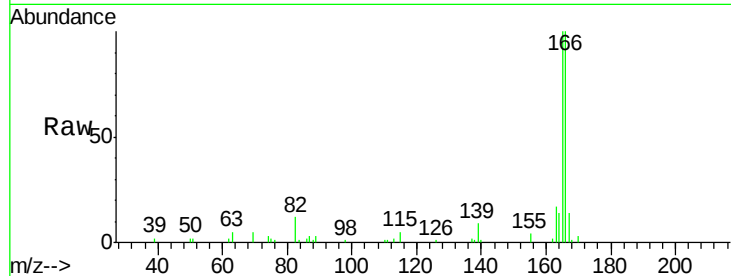
ClientSampleId :

SB-15-COMPDL

Tot Ion	Ion	Ratio	Resp	Lower	Upper
166	100		32013		
165	100.3	79.0		118.4	
167	14.0	10.2		15.2	

Manual Integrations
APPROVED

sohil
8/1/2016 7:16:39 PM



#63

Phenanthrene-d10

Concen: 20.00 ng

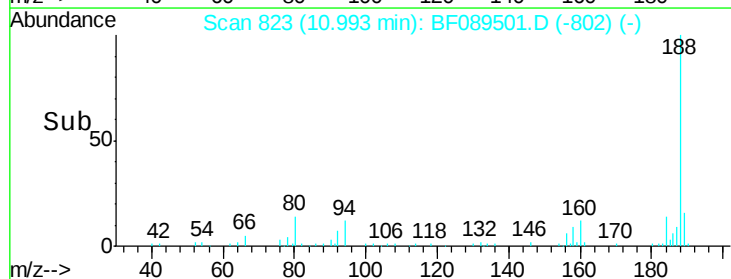
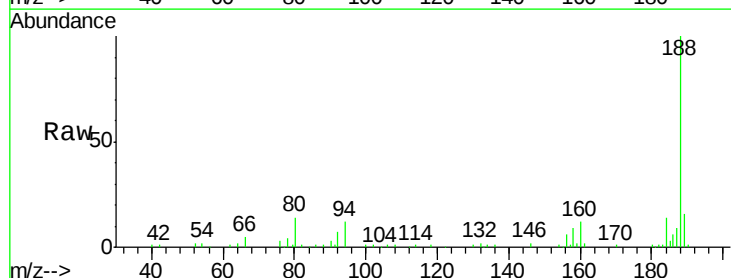
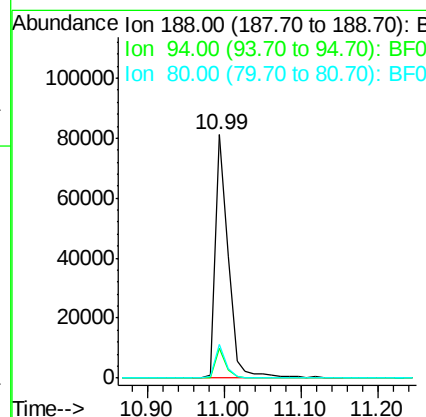
RT: 10.99 min Scan# 823

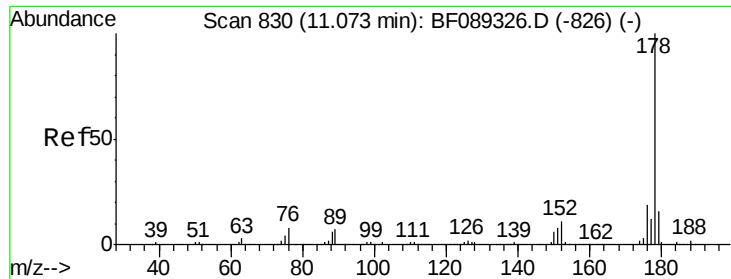
Delta R.T. -0.06 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
188	100		94127		
94	12.4	6.5		9.7#	
80	13.7	7.2		10.8#	





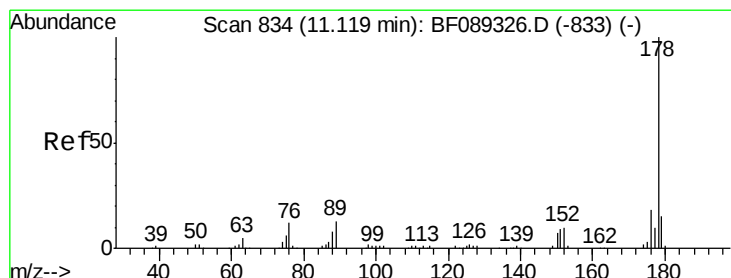
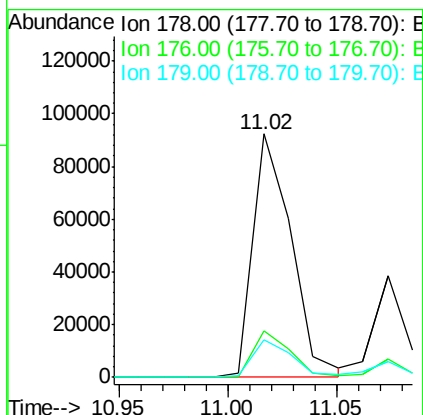
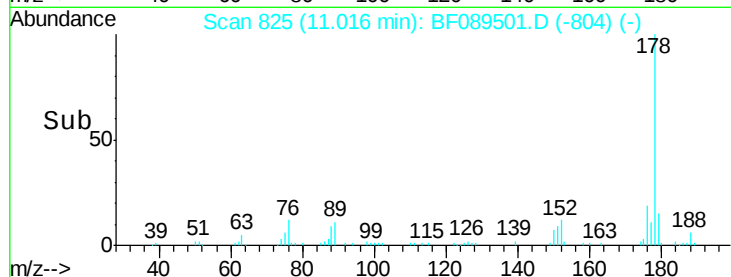
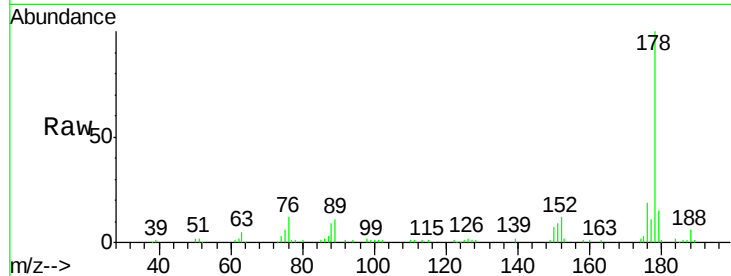
#70
Phenanthrene
Concen: 23.50 ng
RT: 11.02 min Scan# 825
Delta R.T. -0.06 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Instrument :
BNA_F
ClientSampleId :
SB-15-COMPDL

Tot Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.5	23.3
179	15.2	12.3	18.5

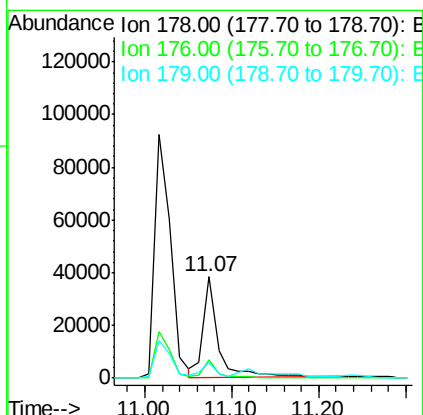
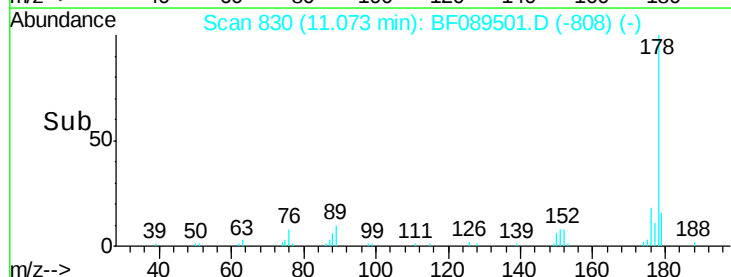
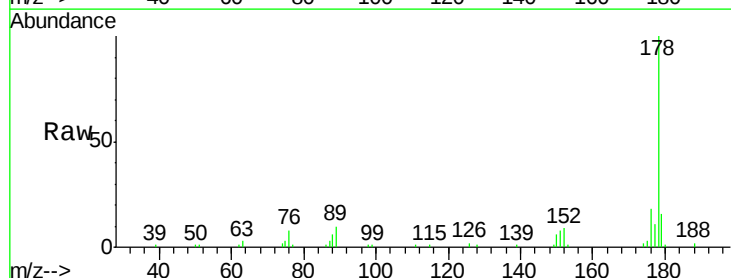
Manual Integrations
APPROVED

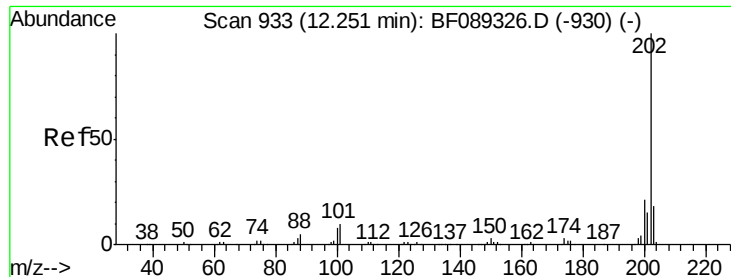
sohil
8/1/2016 7:16:39 PM



#71
Anthracene
Concen: 8.48 ng
RT: 11.07 min Scan# 830
Delta R.T. -0.05 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.2	14.8	22.2
179	16.2	12.6	18.8





#74

Fluoranthene

Concen: 34.98 ng

RT: 12.20 min Scan# 929

Delta R.T. -0.05 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Instrument :

BNA_F

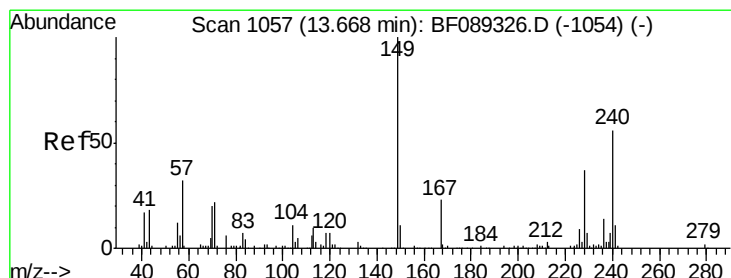
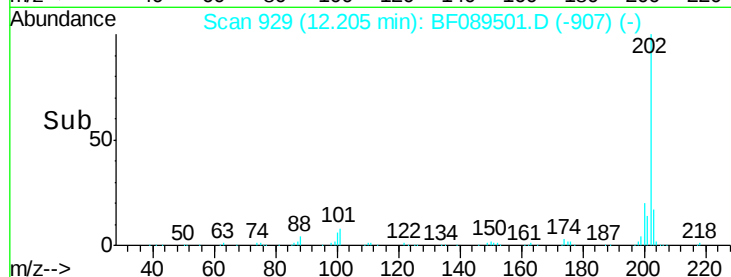
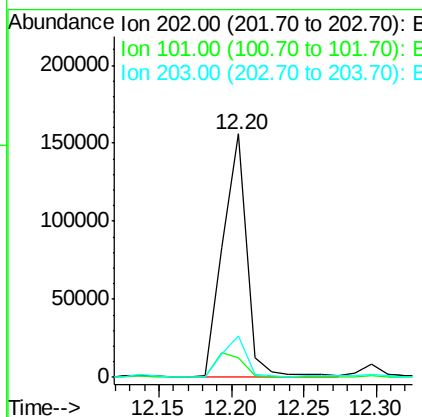
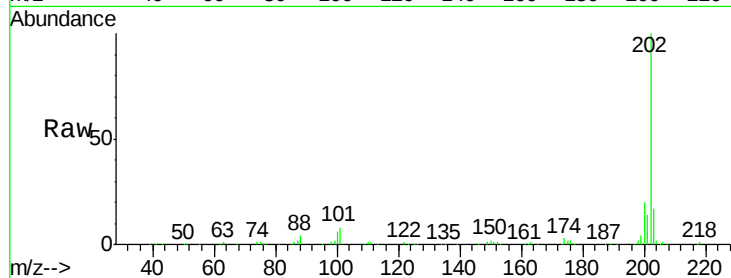
ClientSampleId :

SB-15-COMPDL

Tot Ion:	202	Resp:	178649
Ion Ratio	Lower	Upper	
202	100		
101	8.2	0.0	29.9
203	16.7	0.0	37.3

Manual Integrations
APPROVED

sohil
8/1/2016 7:16:39 PM



#75

Chrysene-d12

Concen: 20.00 ng

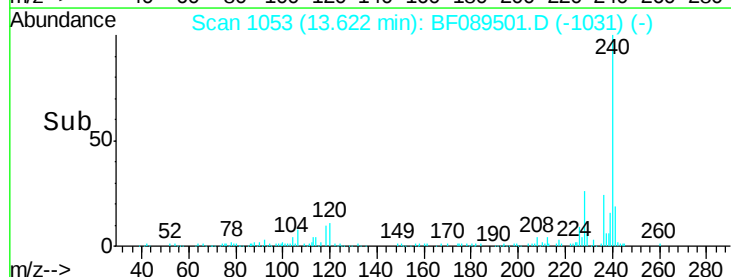
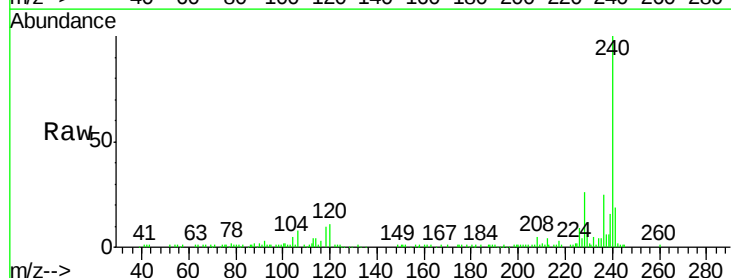
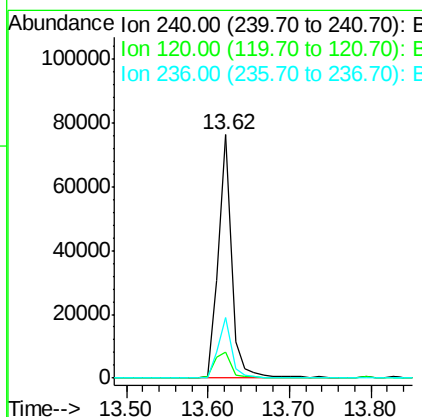
RT: 13.62 min Scan# 1053

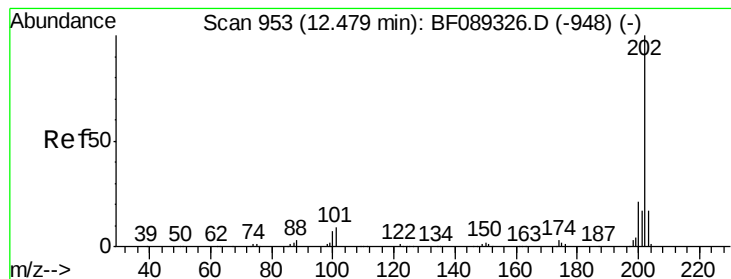
Delta R.T. -0.05 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Tgt Ion:	240	Resp:	86819
Ion Ratio	Lower	Upper	
240	100		
120	10.7	9.1	13.7
236	25.1	20.6	30.8





#77

Pvrene

Concen: 24.57 ng

RT: 12.42 min Scan# 948

Delta R.T. -0.05 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Instrument :

BNA_F

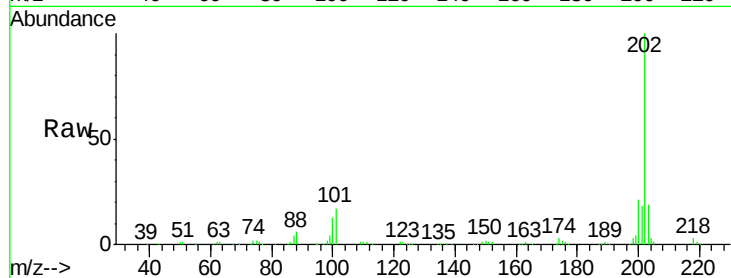
ClientSampleId :

SB-15-COMPDL

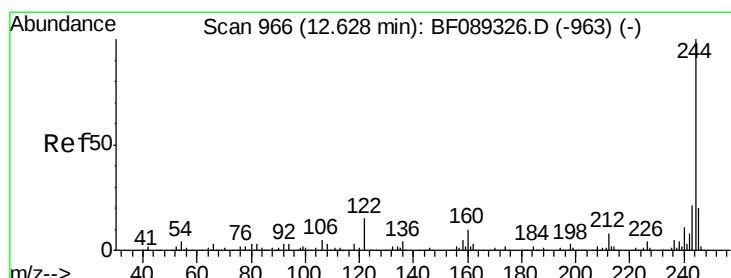
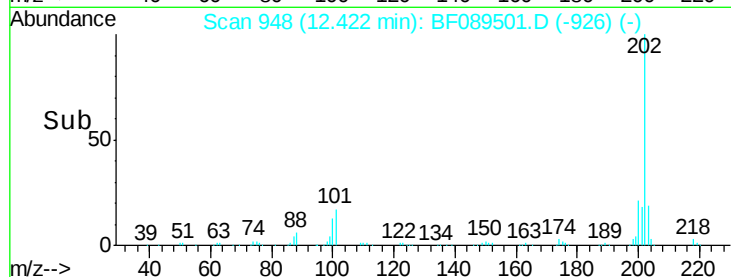
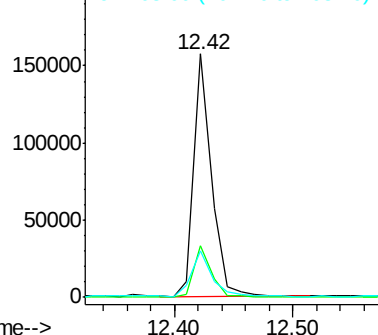
Tot Ion:	202	Resp:	161671
Ion Ratio	Lower	Upper	
202	100		
200	21.1	16.9	25.3
203	19.3	14.0	21.0

Manual Integrations
APPROVED

sohil
8/1/2016 7:16:39 PM



Abundance Ion 202.00 (201.70 to 202.70): E
Ion 200.00 (199.70 to 200.70): E
Ion 203.00 (202.70 to 203.70): E



#78

Terphenyl-d14

Concen: 6.54 ng

RT: 12.58 min Scan# 962

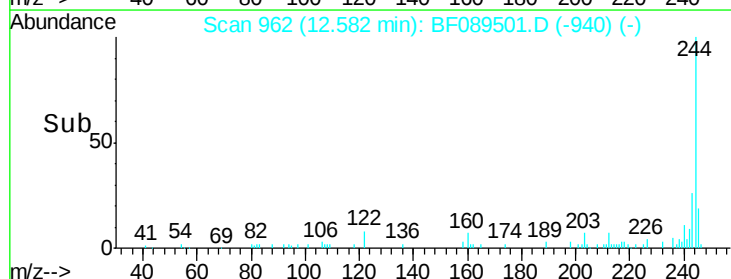
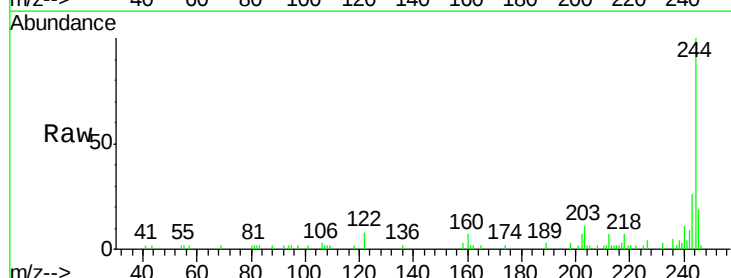
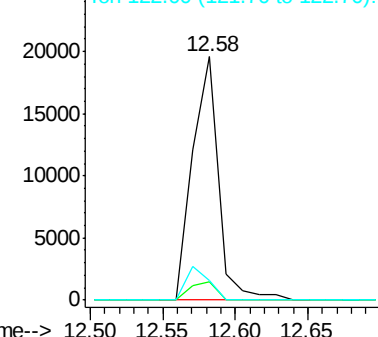
Delta R.T. -0.05 min

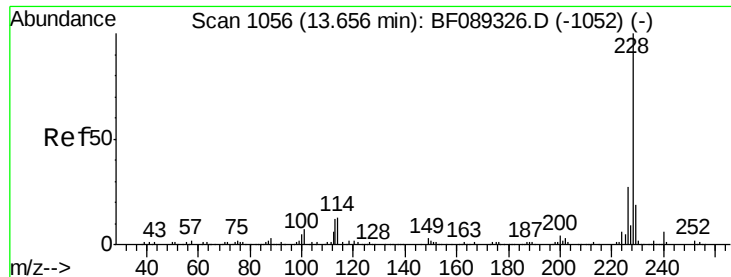
Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Tgt Ion:	244	Resp:	24277
Ion Ratio	Lower	Upper	
244	100		
212	7.3	6.5	9.7
122	8.3	11.4	17.0

Abundance Ion 244.00 (243.70 to 244.70): E
Ion 212.00 (211.70 to 212.70): E
Ion 122.00 (121.70 to 122.70): E





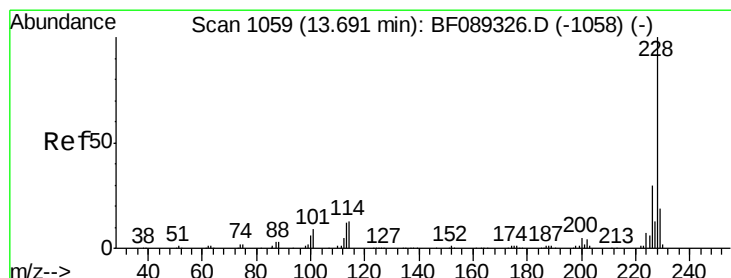
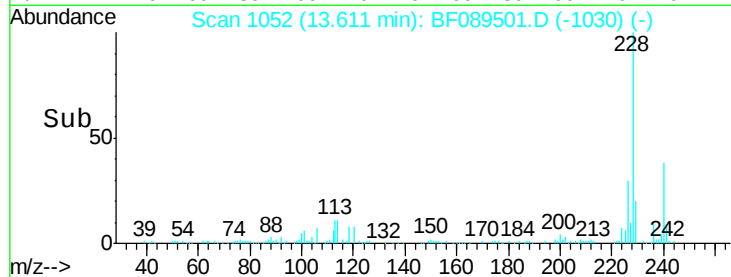
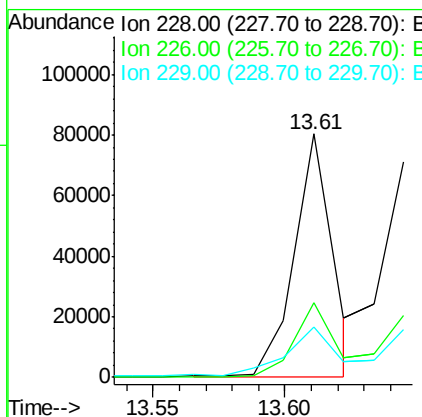
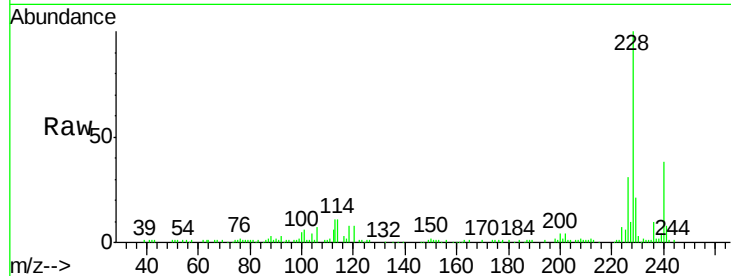
#80
Benzo(a)anthracene
Concen: 16.83 ng m
RT: 13.61 min Scan# 1052
Delta R.T. -0.05 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Instrument :
BNA_F
ClientSampled :
SB-15-COMPDL

Tot Ion	Ratio	Lower	Upper
228	100		
226	30.6	21.4	32.2
229	20.8	15.9	23.9

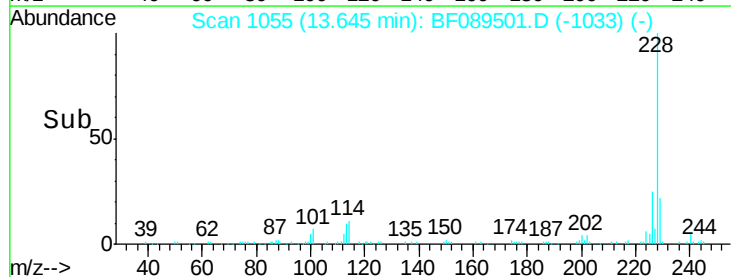
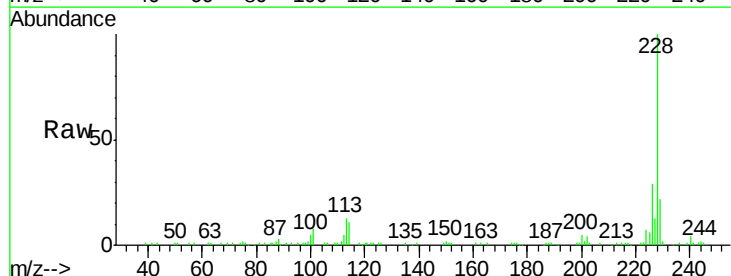
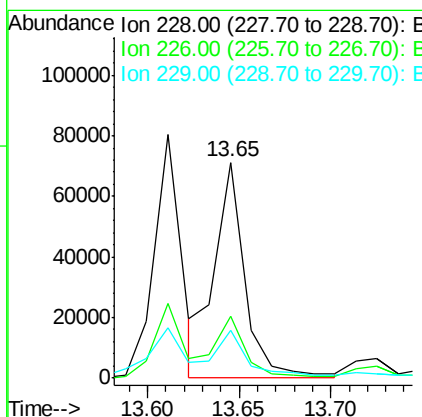
Manual Integrations
APPROVED

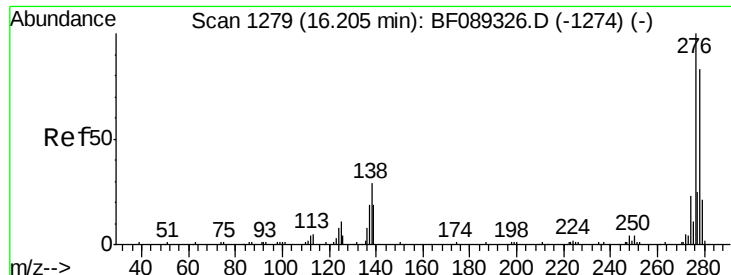
sohil
8/1/2016 7:16:39 PM



#82
Chrysene
Concen: 15.83 ng m
RT: 13.65 min Scan# 1055
Delta R.T. -0.05 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.0	24.2	36.2
229	21.9	15.9	23.9





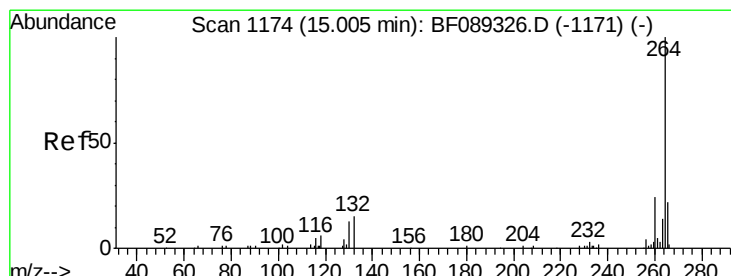
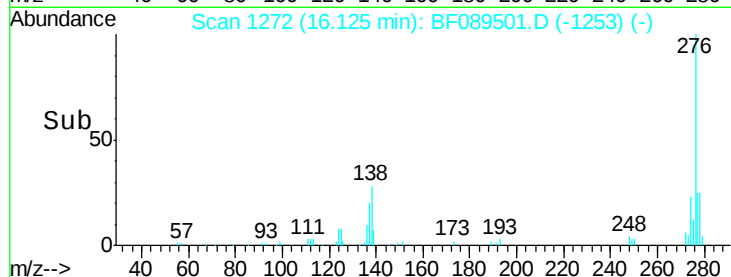
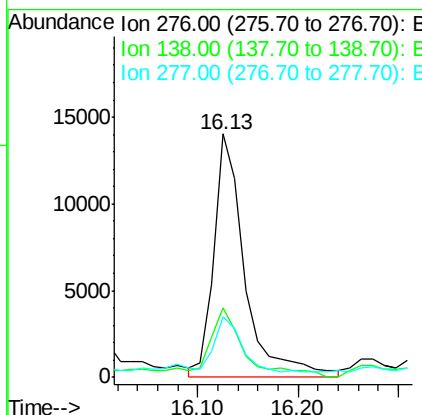
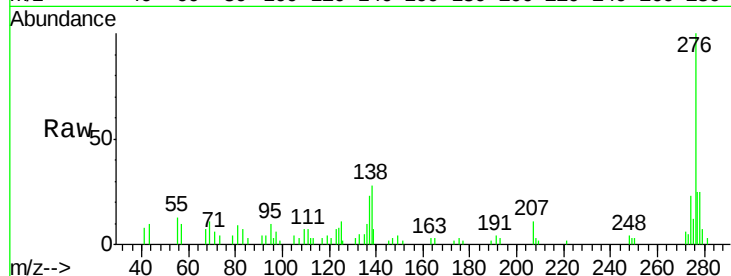
#85
Indeno(1,2,3-cd)pyrene
Concen: 8.11 ng
RT: 16.13 min Scan# 1272
Delta R.T. -0.08 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Instrument :
BNA_F
ClientSampleId :
SB-15-COMPDL

Tot Ion	Ratio	Lower	Upper
276	100		
138	30.9	23.0	34.4
277	34.1	20.2	30.4

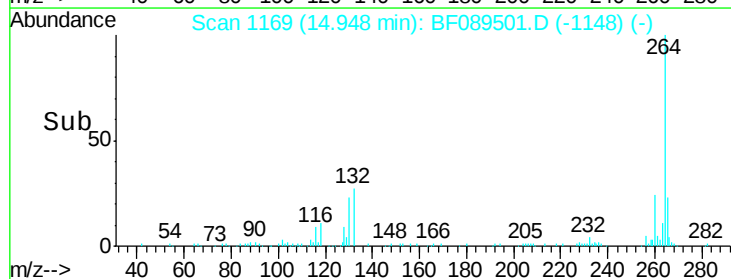
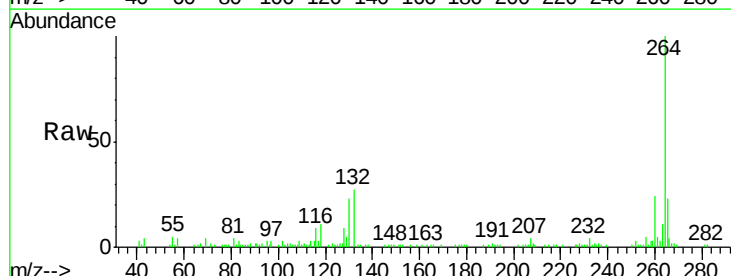
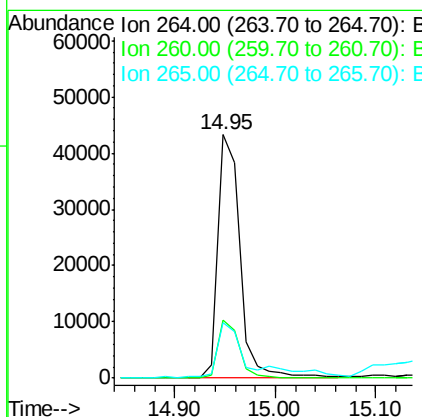
Manual Integrations
APPROVED

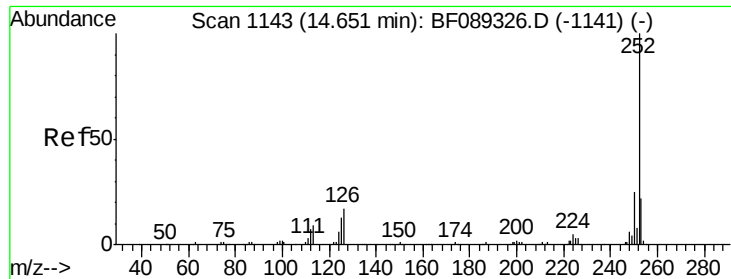
sohil
8/1/2016 7:16:39 PM



#86
Perylene-d12
Concen: 20.00 ng
RT: 14.95 min Scan# 1169
Delta R.T. -0.06 min
Lab File: BF089501.D
Acq: 1 Aug 2016 8:43

Tgt Ion	Ratio	Lower	Upper
264	100		
260	23.6	19.0	28.4
265	22.8	17.5	26.3





#87

Benzo(b)fluoranthene

Concen: 18.18 ng m

RT: 14.61 min Scan# 1139

Delta R.T. -0.05 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Instrument :

BNA_F

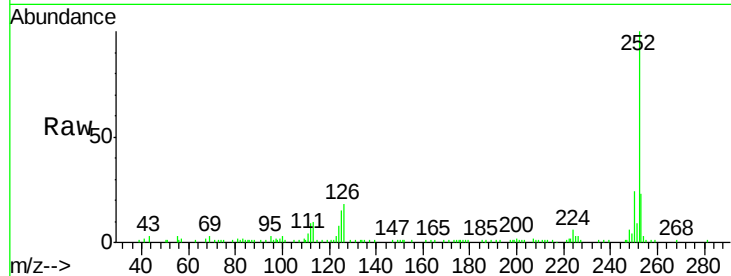
ClientSampleId :

SB-15-COMPDL

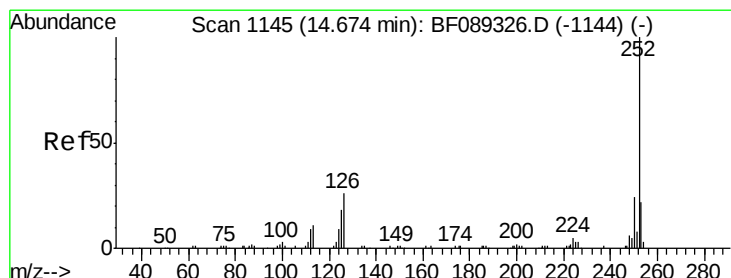
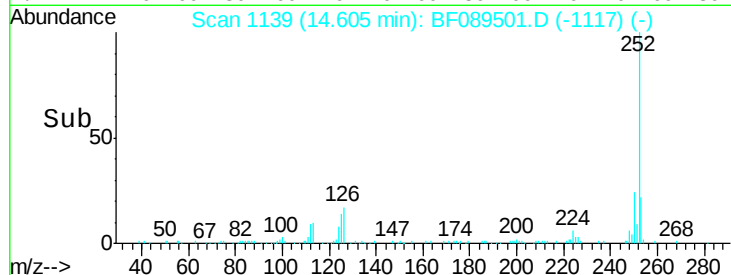
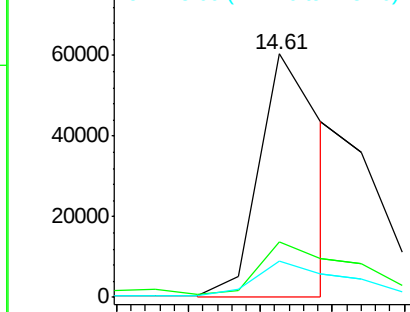
Tot Ion	Ratio	Lower	Upper
252	100		
253	22.7	17.2	25.8
125	15.1	9.7	14.5

Manual Integrations
APPROVED

sohil
8/1/2016 7:16:39 PM



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



#88

Benzo(k)fluoranthene

Concen: 9.68 ng m

RT: 14.62 min Scan# 1140

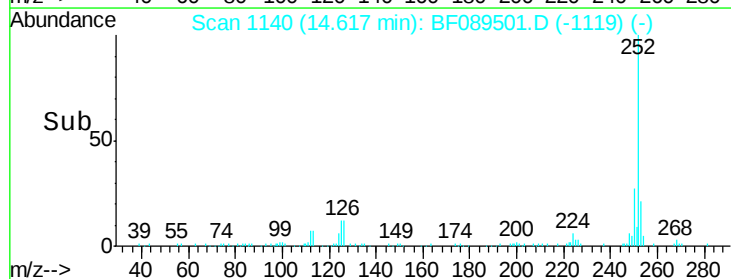
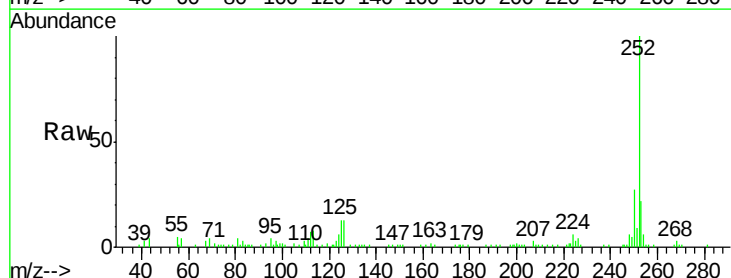
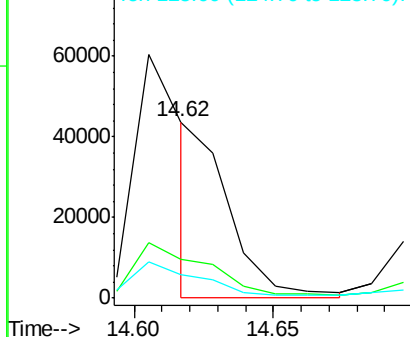
Delta R.T. -0.06 min

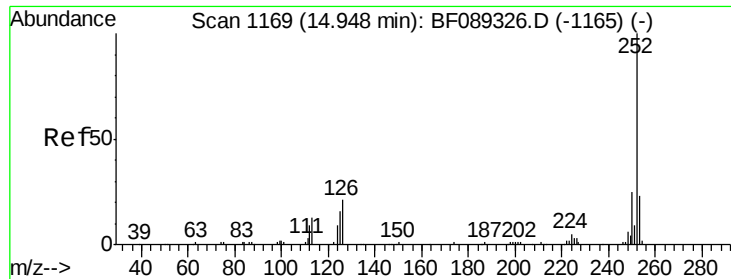
Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.2	17.8	26.8
125	13.2	10.7	16.1

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





#89

Benzo(a)pyrene

Concen: 14.58 ng

RT: 14.90 min Scan# 1165

Delta R.T. -0.05 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Instrument :

BNA_F

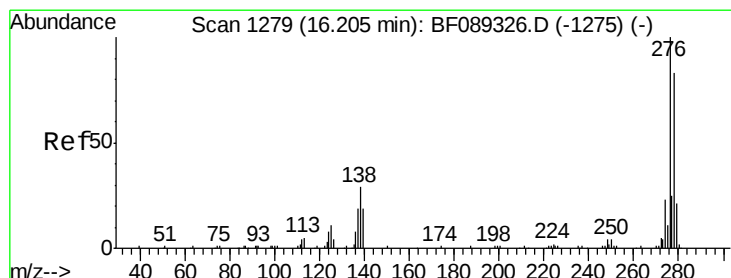
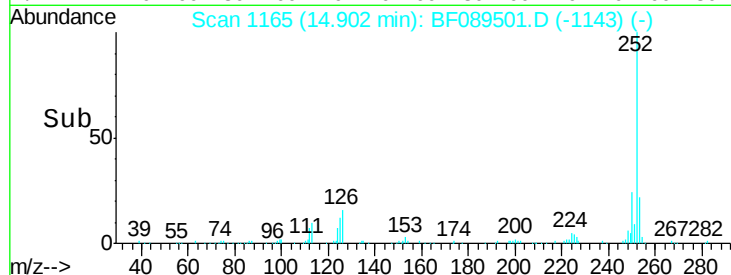
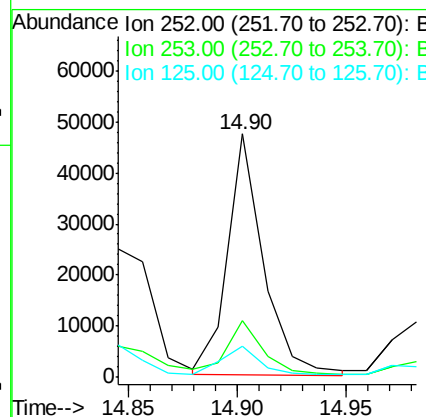
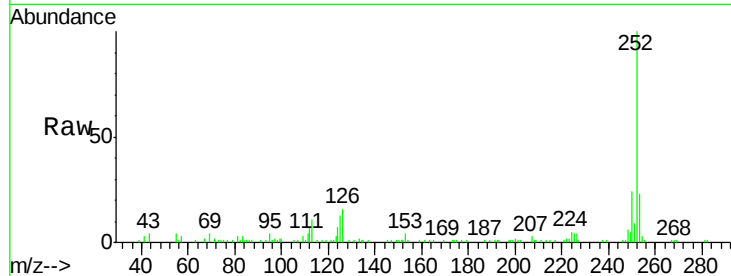
ClientSampleId :

SB-15-COMPDL

Tot Ion:	252	Resp:	53985
Ion Ratio	Lower	Upper	
252	100		
253	23.4	17.4	26.2
125	13.0	12.4	18.6

Manual Integrations
APPROVED

sohil
8/1/2016 7:16:39 PM



#90

Dibenzo(a,h)anthracene

Concen: 3.92 ng

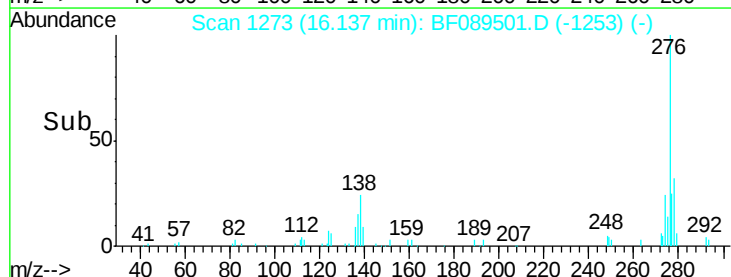
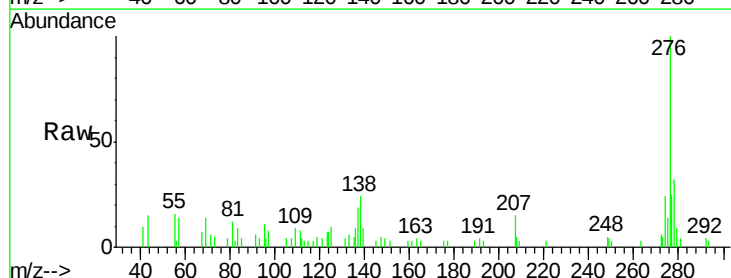
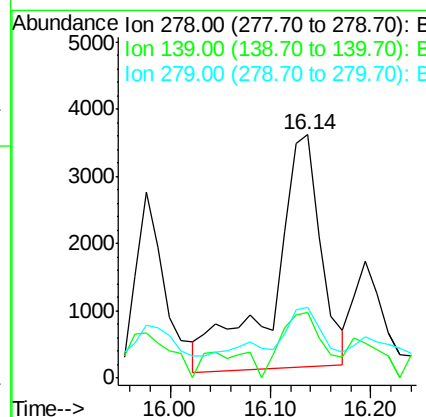
RT: 16.14 min Scan# 1273

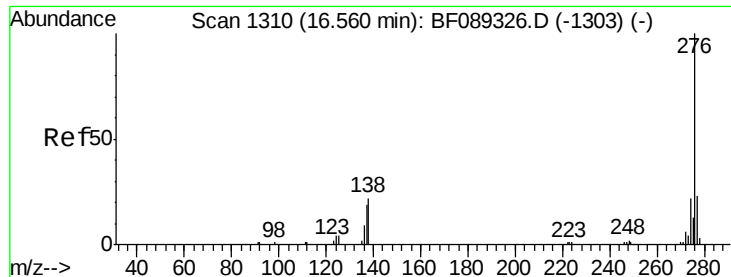
Delta R.T. -0.07 min

Lab File: BF089501.D

Acq: 1 Aug 2016 8:43

Tgt Ion:	278	Resp:	11424
Ion Ratio	Lower	Upper	
278	100		
139	27.1	16.3	24.5#
279	29.3	19.1	28.7#





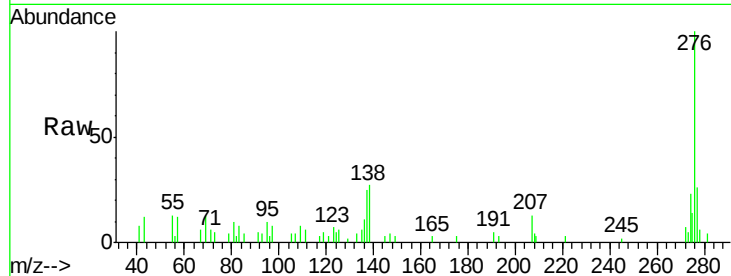
#91
 Benzo(a,h,i)perylene
 Concen: 8.93 ng
 RT: 16.48 min Scan# 1303
 Delta R.T. -0.07 min
 Lab File: BF089501.D
 Acq: 1 Aug 2016 8:43

Instrument :
 BNA_F
 ClientSampleId :
 SB-15-COMPDL

Tot Ion	Ratio	Lower	Upper
276	100		
277	26.0	18.6	28.0
138	26.9	21.4	32.0

Manual Integrations
 APPROVED

sohil
 8/1/2016 7:16:39 PM



Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

