

Data Path : Z:\HPCHEM1\BNA E\DATA\BE080216\
 Data File : BE092140.D
 Acq On : 3 Aug 2016 9:23
 Operator : UM/SJ
 Sample : PB92567BS
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 PB92567BS

Manual Integrations
 APPROVED

umangi
 8/3/2016 5:55:50 PM

Quant Time: Aug 03 12:44:53 2016
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-PAH-BE080216.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Aug 02 16:59:37 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.17	152	17070	5.00	ng	0.00
6) Naphthalene-d8	10.98	136	73432	5.00	ng	-0.01
10) Acenaphthene-d10	14.83	164	36121	5.00	ng	-0.02
16) Phenanthrene-d10	17.56	188	74462	5.00	ng	-0.02
22) Chrysene-d12	21.73	240	76746	5.00	ng	-0.02
28) Perylene-d12	24.14	264	72622	5.00	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.69	112	23692	5.40	ng	0.00
5) Phenol-d6	7.34	99	30514	5.22	ng	-0.01
7) Nitrobenzene-d5	9.34	82	14024	2.42	ng	-0.01
11) 2,4,6-Tribromophenol	16.32	330	6582	5.61	ng	-0.01
12) 2-Fluorobiphenyl	13.46	172	29498	2.58	ng	0.00
24) Terphenyl-d14	20.19	244	32594	2.96	ng	-0.02
Target Compounds						Qvalue
2) 1,4-Dioxane	3.44	88	4731	2.04	ng	# 79
3) n-Nitrosodimethylamine	3.79	42	7801	2.46	ng	98
8) Naphthalene	11.03	128	38423	2.43	ng	95
9) 2-Methylnaphthalene	12.65	142	25873	2.49	ng	97
13) Acenaphthylene	14.54	152	153860	2.41	ng	98
14) Acenaphthene	14.90	154	24395	2.40	ng	# 98
15) Fluorene	15.88	166	29711	2.31	ng	100
17) Hexachlorobenzene	16.89	284	8073	2.22	ng	# 38
18) Pentachlorophenol	17.24	266	6089	4.53	ng	# 83
19) Phenanthrene	17.61	178	52150	2.56	ng	100
20) Anthracene	17.70	178	48171	2.43	ng	99
21) Fluoranthene	19.63	202	203872	2.24	ng	97
23) Pyrene	19.99	202	220753	2.75	ng	97
25) Benzo(a)anthracene	21.72	228	213753	2.53	ng	98
26) Chrysene	21.77	228	196476m	2.33	ng	
27) Indeno(1,2,3-cd)pyrene	26.63	276	225232	2.45	ng	100
29) Benzo(b)fluoranthene	23.40	252	50478m	2.54	ng	
30) Benzo(k)fluoranthene	23.45	252	48224	2.53	ng	96
31) Benzo(a)pyrene	24.02	252	45739	2.50	ng	95
32) Dibenzo(a,h)anthracene	26.65	278	45983	2.64	ng	96
33) Benzo(g,h,i)perylene	27.40	276	199180	2.68	ng	96

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

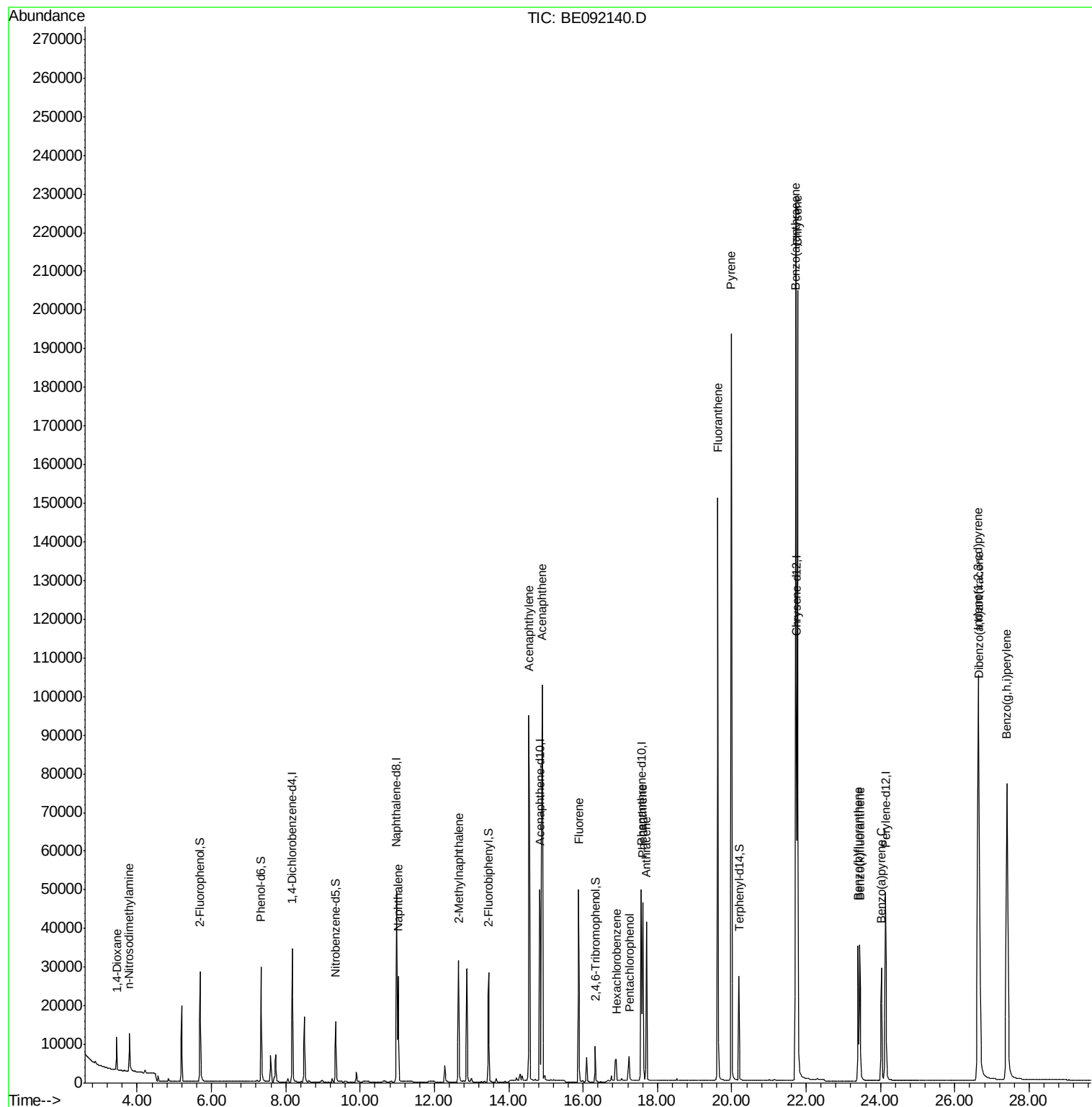
Data Path : Z:\HPCHEM1\BNA E\DATA\BE080216\
Data File : BE092140.D
Acq On : 3 Aug 2016 9:23
Operator : UM/SJ
Sample : PB92567BS
Misc :
ALS Vial : 24 Sample Multiplier: 1

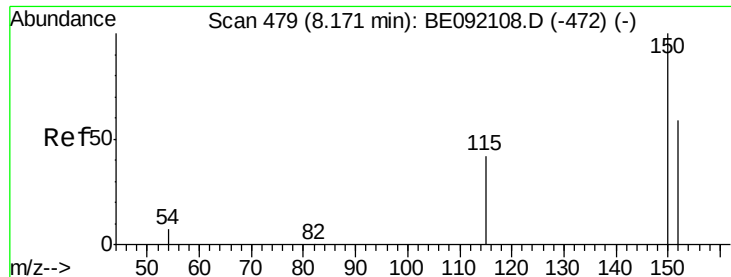
Instrument :
BNA_E
ClientSampleId :
PB92567BS

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM

Quant Time: Aug 03 12:44:53 2016
Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-PAH-BE080216.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Aug 02 16:59:37 2016
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 8.17 min Scan# 479

Delta R.T. 0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Instrument :

BNA_E

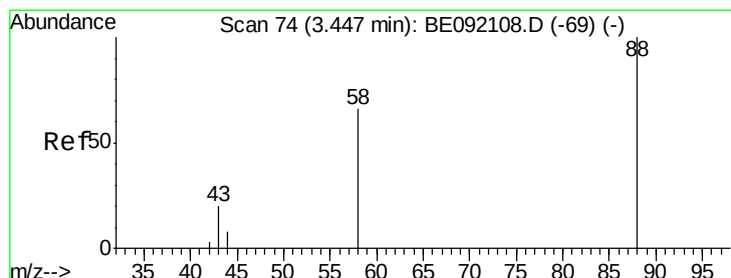
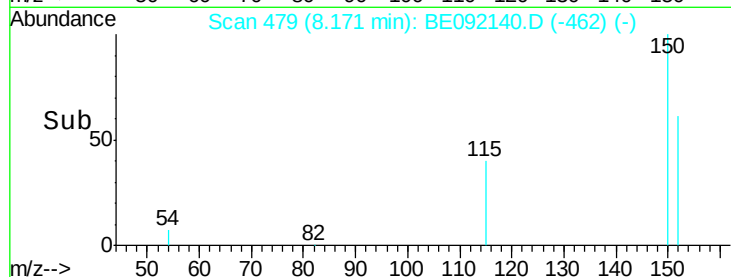
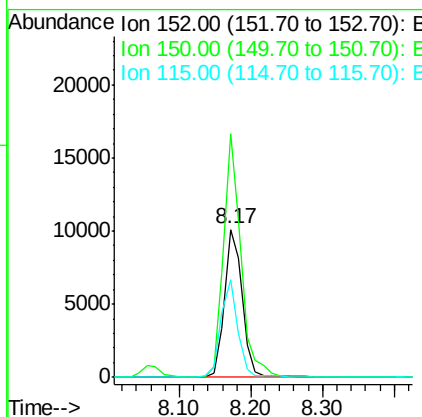
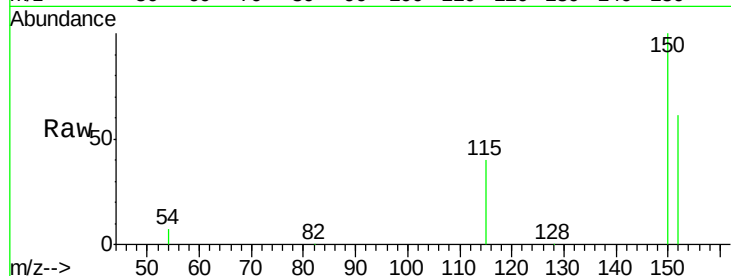
ClientSampleId :

PB92567BS

Tot Ion	Ratio	Lower	Upper
152	100		
150	164.2	106.0	159.0#
115	66.0	36.9	55.3#

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM



#2

1,4-Dioxane

Concen: 2.04 ng

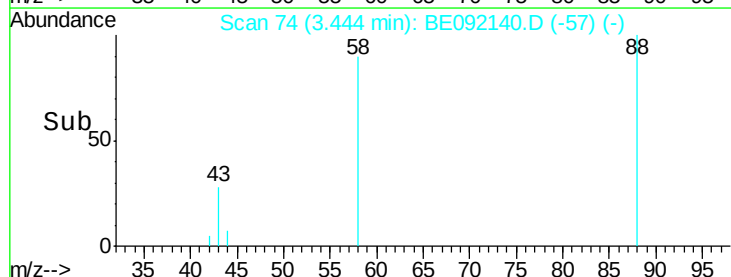
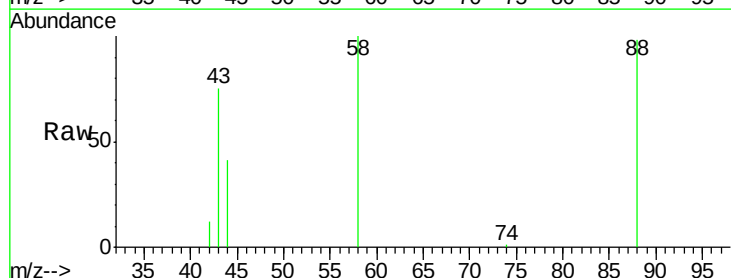
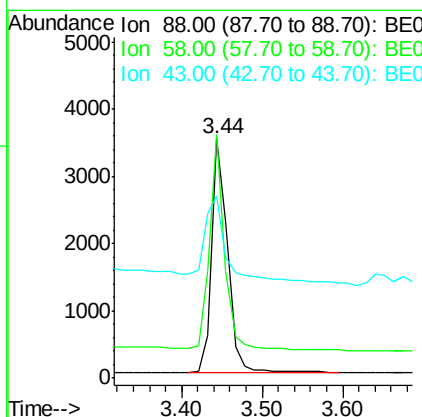
RT: 3.44 min Scan# 74

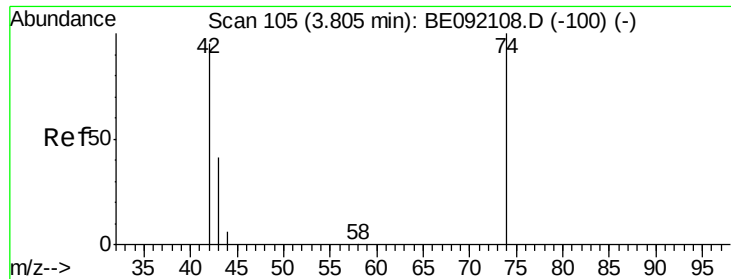
Delta R.T. -0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tgt Ion	Ratio	Lower	Upper
88	100		
58	90.4	62.1	93.1
43	54.7	27.2	40.8#





#3

n-Nitrosodimethylamine

Concen: 2.46 ng

RT: 3.79 min Scan# 104

Delta R.T. -0.01 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Instrument :

BNA_E

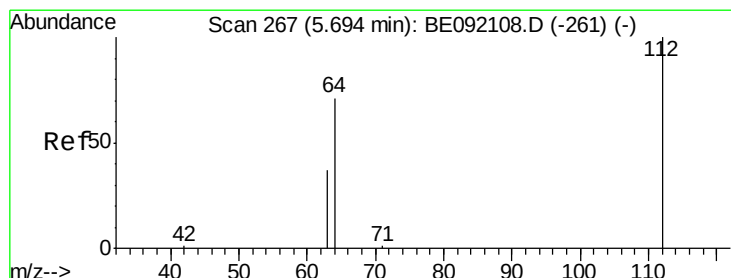
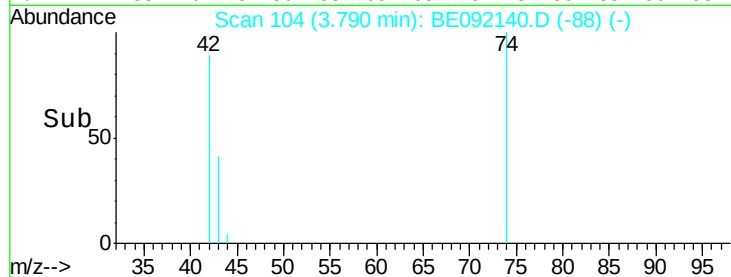
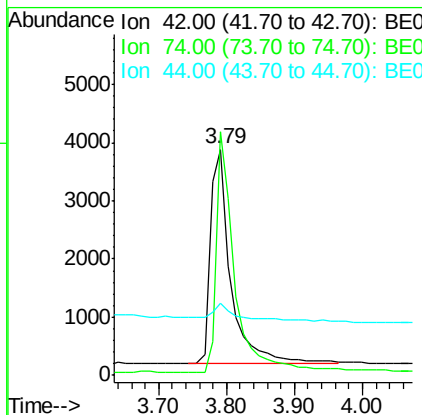
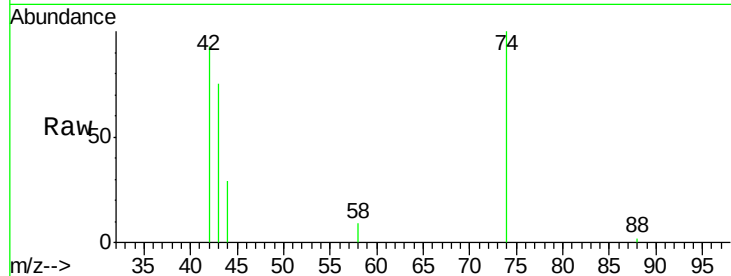
ClientSampleId :

PB92567BS

Tot Ion:	42	Resp:	7801
Ion	Ratio	Lower	Upper
42	100		
74	101.5	82.8	124.2
44	10.3	9.0	13.4

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM



#4

2-Fluorophenol

Concen: 5.40 ng

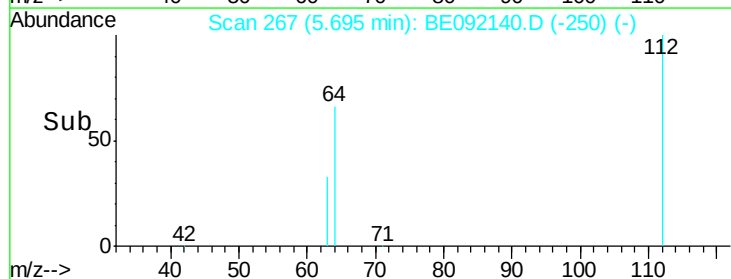
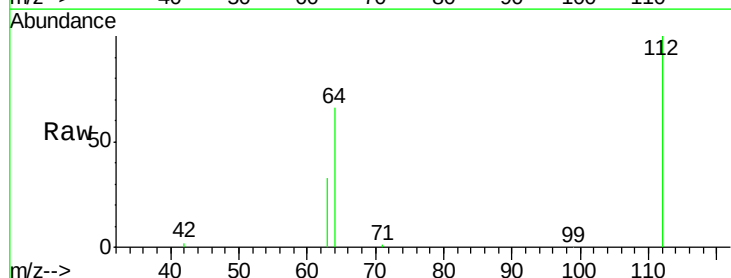
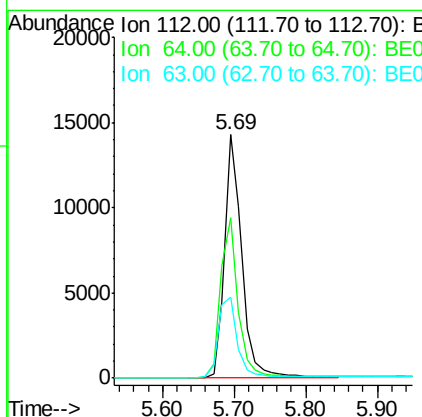
RT: 5.69 min Scan# 267

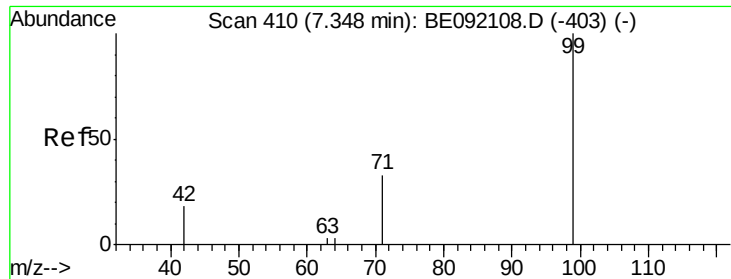
Delta R.T. 0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tgt Ion:	112	Resp:	23692
Ion	Ratio	Lower	Upper
112	100		
64	66.7	55.9	83.9
63	36.3	31.1	46.7





#5

Phenol-d6

Concen: 5.22 ng

RT: 7.34 min Scan# 409

Delta R.T. -0.01 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Instrument :

BNA_E

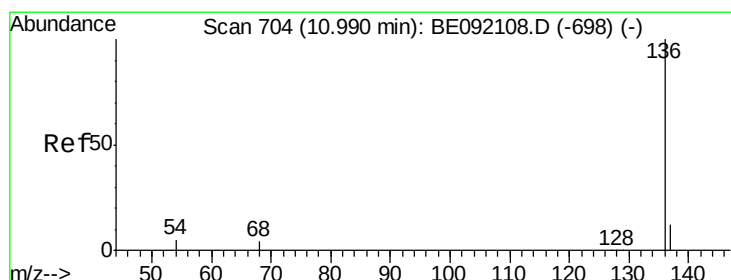
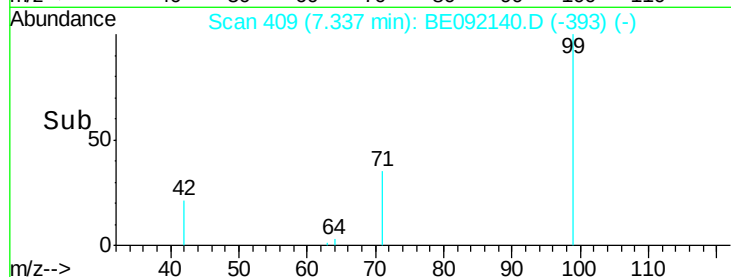
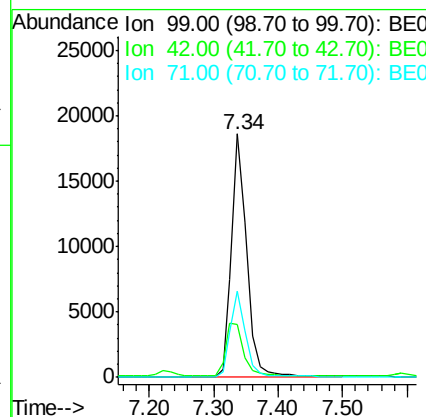
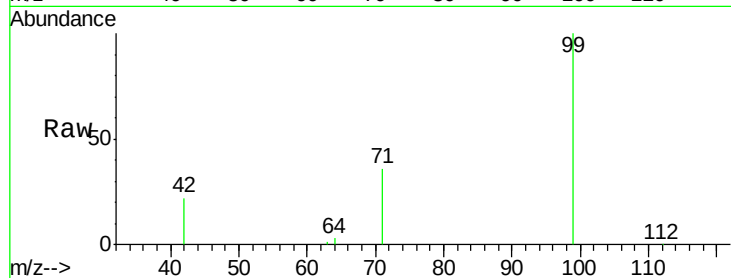
ClientSampleId :

PB92567BS

Tot Ion:	99	Resp:	30514
Ion Ratio	Lower	Upper	
99	100		
42	25.5	22.4	33.6
71	35.2	28.9	43.3

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM



#6

Naphthalene-d8

Concen: 5.00 ng

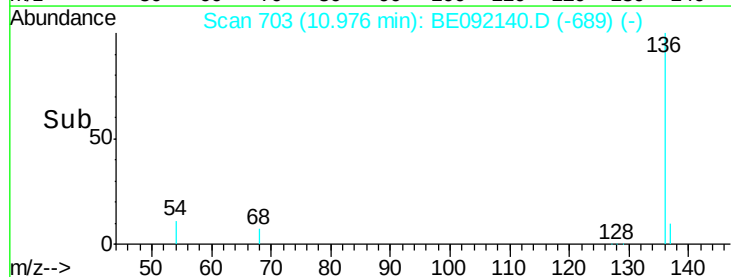
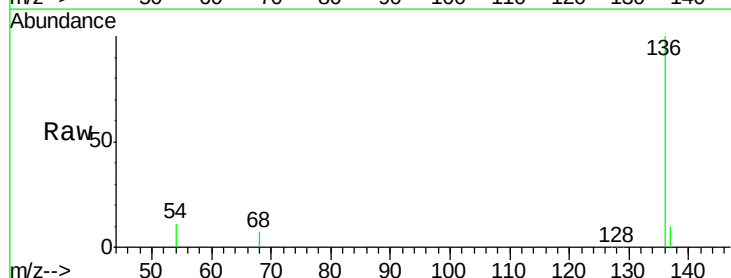
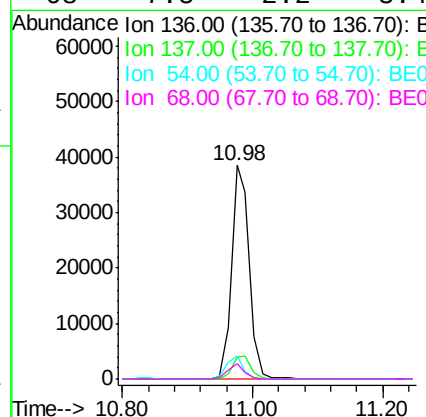
RT: 10.98 min Scan# 703

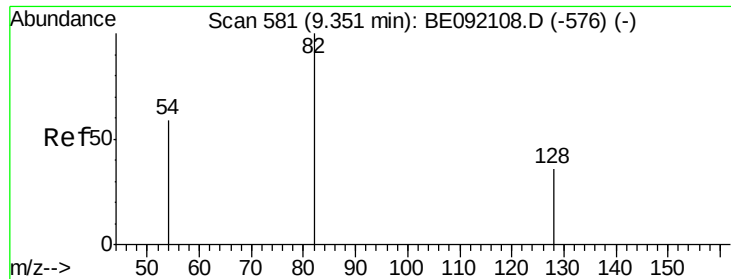
Delta R.T. -0.01 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tgt Ion:	136	Resp:	73432
Ion Ratio	Lower	Upper	
136	100		
137	10.2	9.1	13.7
54	10.7	2.7	4.1#
68	7.5	2.2	3.4#





#7

Nitrobenzene-d5

Concen: 2.42 ng

RT: 9.34 min Scan# 580

Delta R.T. -0.01 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Instrument :

BNA_E

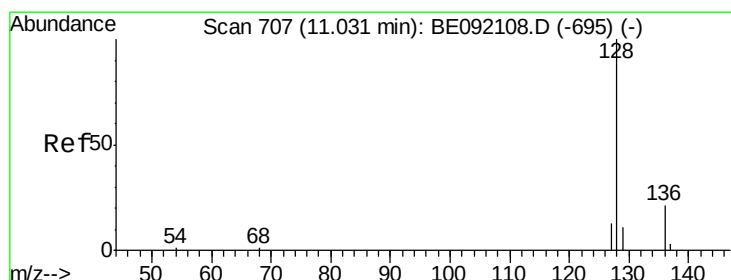
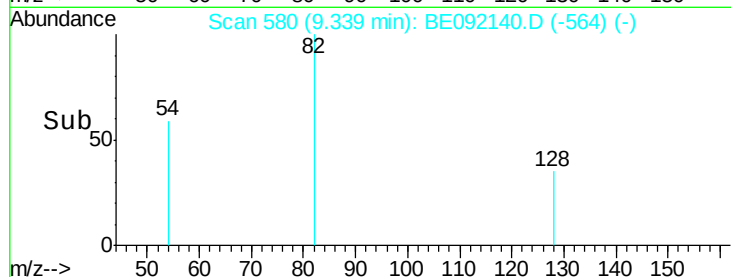
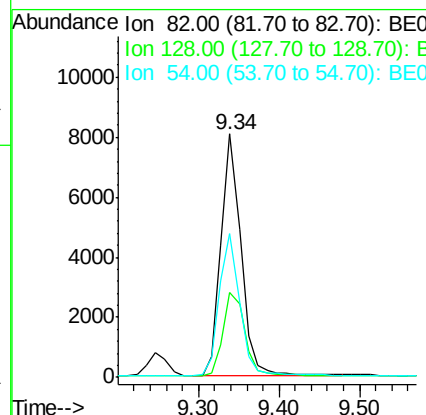
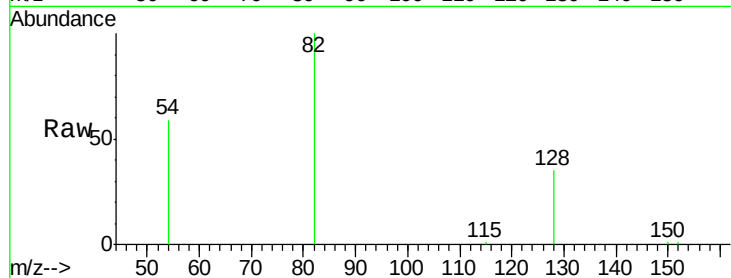
ClientSampleId :

PB92567BS

Tot Ion:	82	Resp:	14024
Ion Ratio	Lower	Upper	
82	100		
128	35.1	33.0	49.4
54	59.0	42.6	63.8

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM



#8

Naphthalene

Concen: 2.43 ng

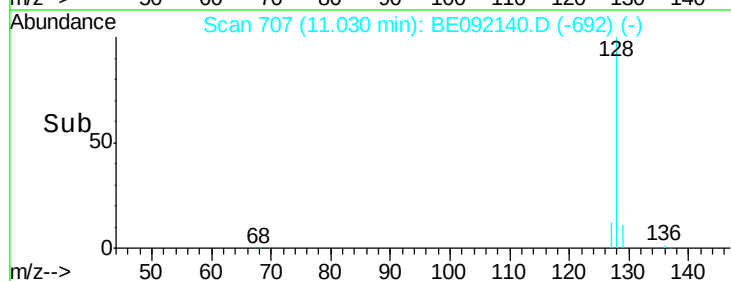
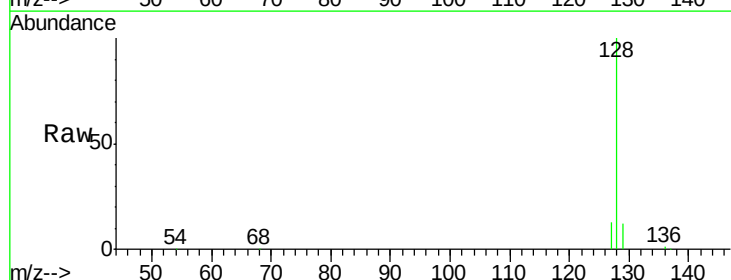
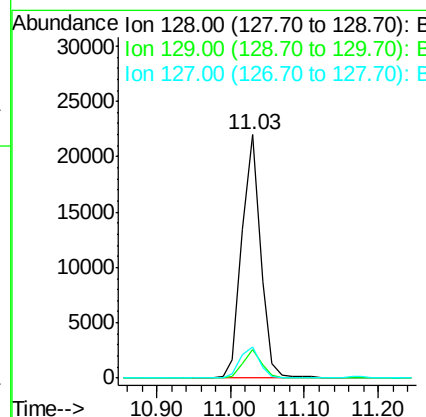
RT: 11.03 min Scan# 707

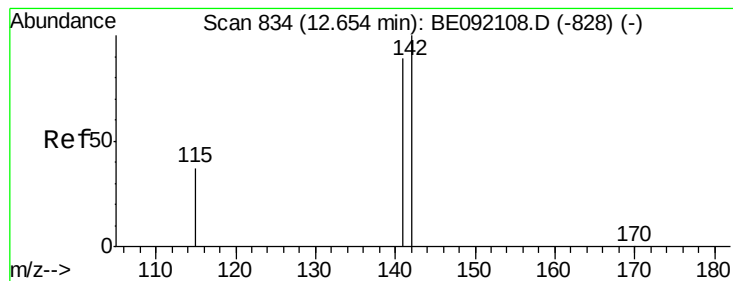
Delta R.T. -0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tgt Ion:	128	Resp:	38423
Ion Ratio	Lower	Upper	
128	100		
129	11.5	11.1	16.7
127	12.5	11.3	16.9





#9

2-Methylnaphthalene

Concen: 2.49 ng

RT: 12.65 min Scan# 834

Delta R.T. -0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Instrument :

BNA_E

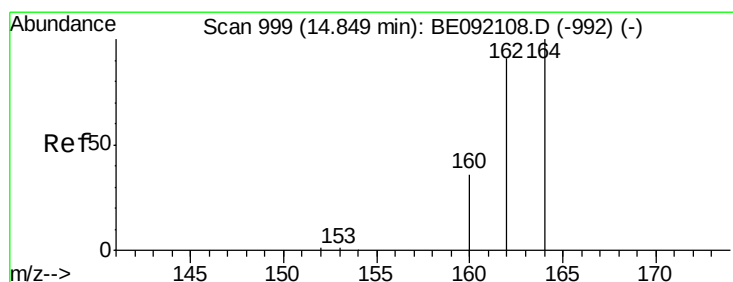
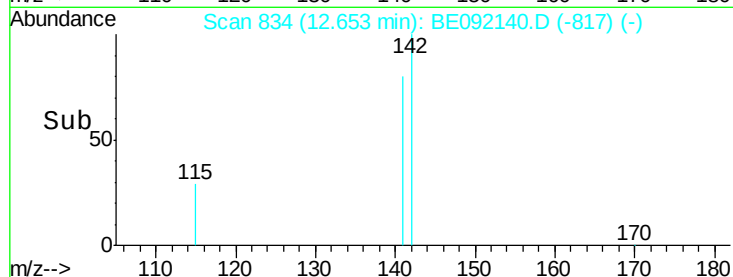
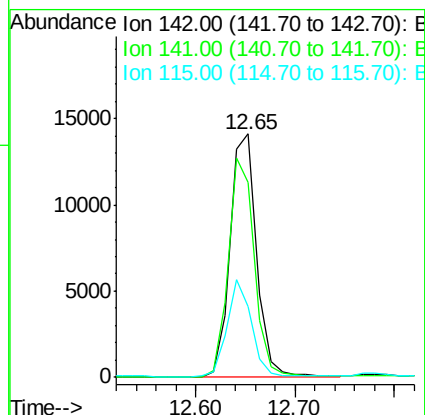
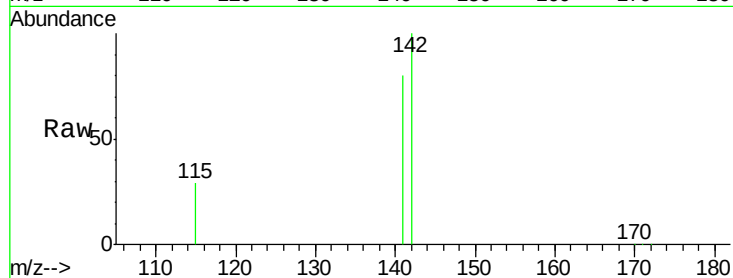
ClientSampleId :

PB92567BS

Tot Ion:	142	Resp:	25873
Ion Ratio	Lower	Upper	
142	100		
141	80.0	65.1	97.7
115	29.1	27.0	40.4

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM



#10

Acenaphthene-d10

Concen: 5.00 ng

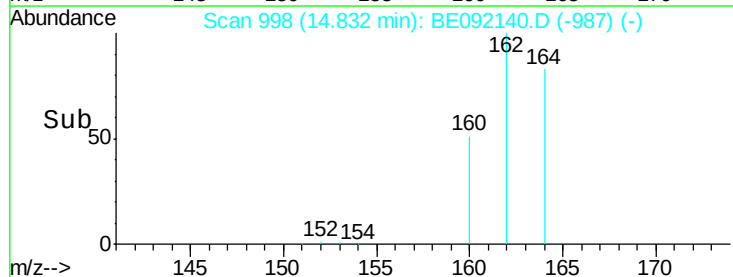
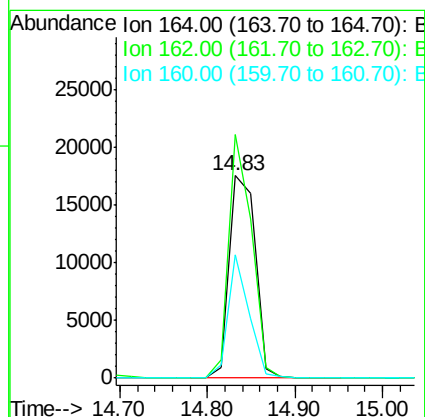
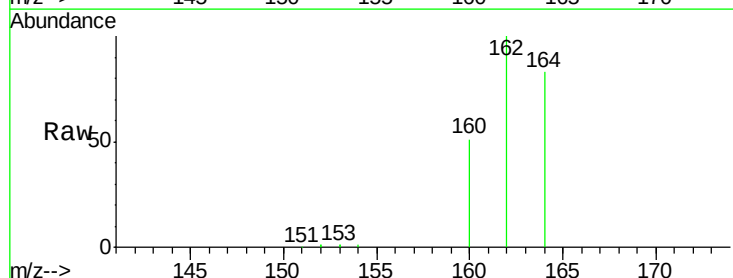
RT: 14.83 min Scan# 998

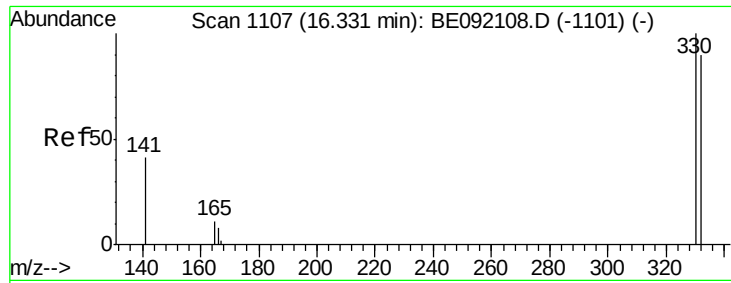
Delta R.T. -0.02 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tgt Ion:	164	Resp:	36121
Ion Ratio	Lower	Upper	
164	100		
162	120.3	69.5	104.3#
160	61.0	27.6	41.4#





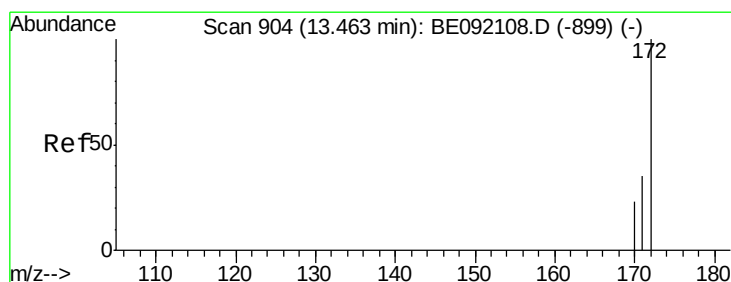
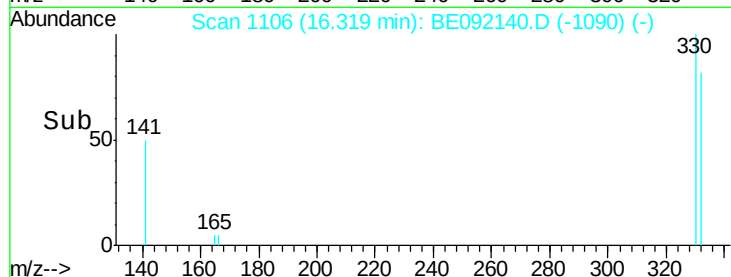
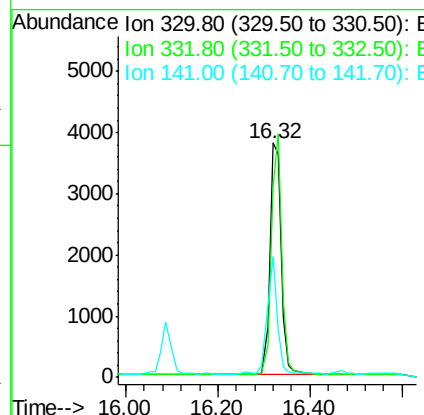
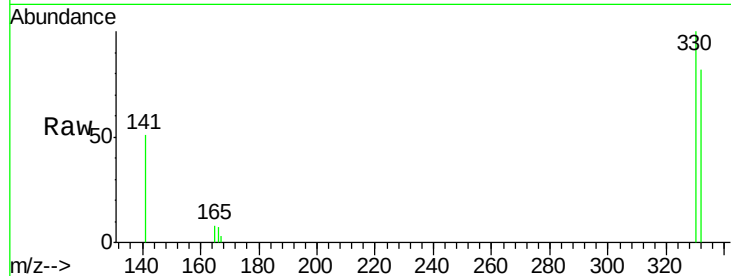
#11
 2,4,6-Tribromophenol
 Concen: 5.61 ng
 RT: 16.32 min Scan# 1106
 Delta R.T. -0.01 min
 Lab File: BE092140.D
 Acq: 3 Aug 2016 9:23

Instrument :
 BNA_E
 ClientSampleID :
 PB92567BS

Tot Ion	Ratio	Resp	Lower	Upper
330	100	6582		
332	96.7	74.2	111.4	
141	44.1	139.8	209.8#	

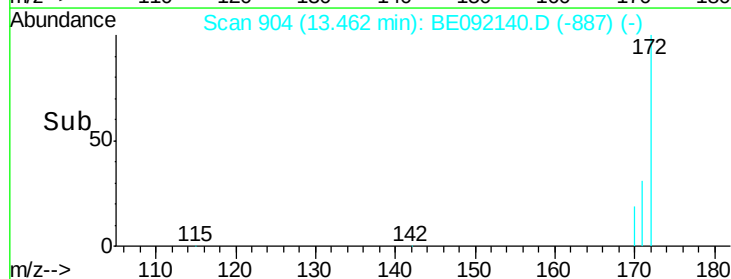
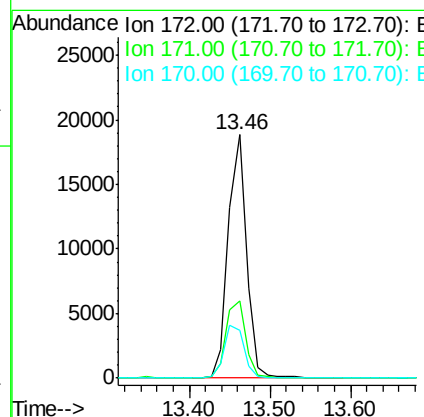
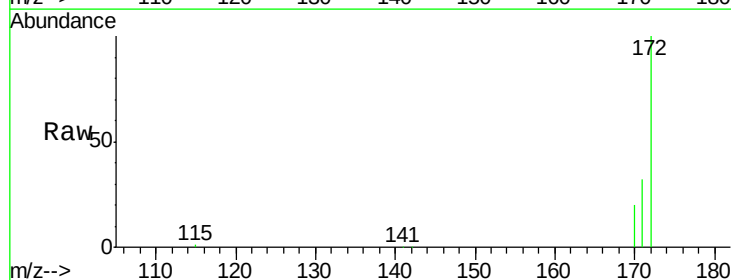
Manual Integrations
 APPROVED

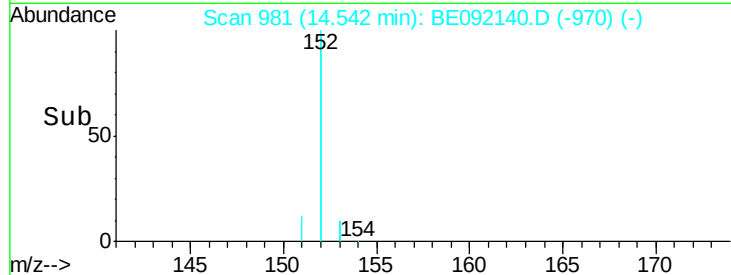
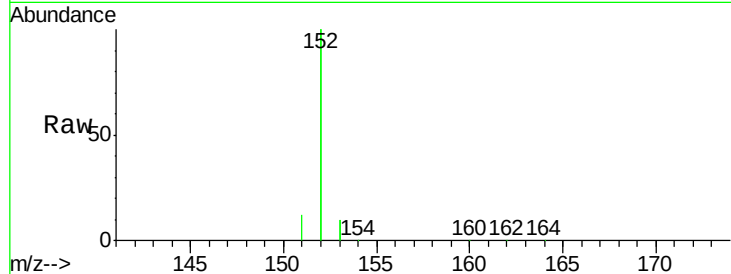
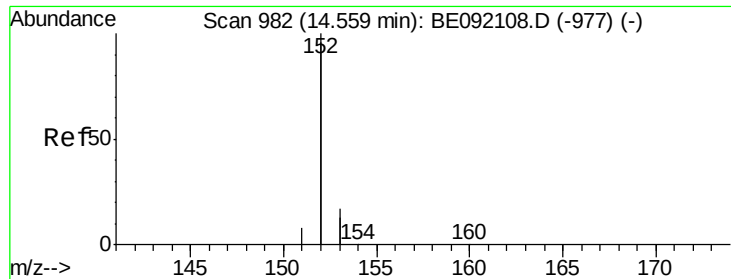
umangi
 8/3/2016 5:55:50 PM



#12
 2-Fluorobiphenyl
 Concen: 2.58 ng
 RT: 13.46 min Scan# 904
 Delta R.T. -0.00 min
 Lab File: BE092140.D
 Acq: 3 Aug 2016 9:23

Tgt Ion	Ratio	Resp	Lower	Upper
172	100	29498		
171	31.6	30.3	45.5	
170	19.5	21.6	32.4#	





#13

Acenaphthylene

Concen: 2.41 ng

RT: 14.54 min Scan# 981

Delta R.T. -0.02 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tot Ion:	152	Resp:	153860
Ion Ratio	Lower	Upper	
152	100		
151	5.0	4.0	6.0
153	13.2	9.6	14.4

Instrument :

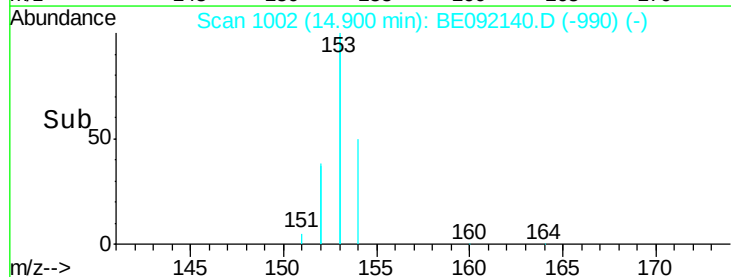
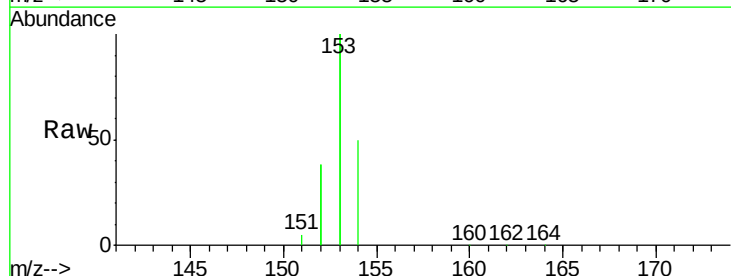
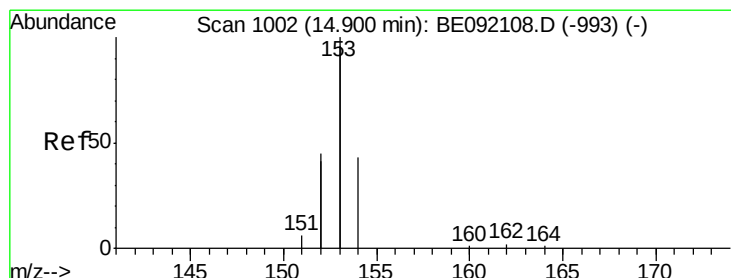
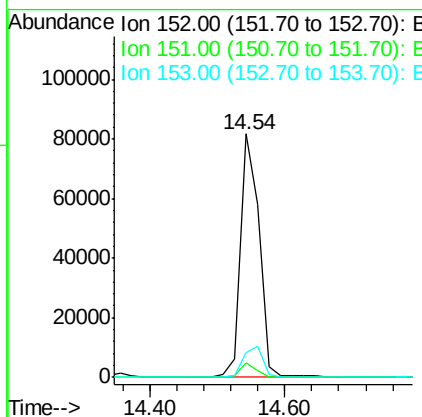
BNA_E

ClientSampled :

PB92567BS

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM



#14

Acenaphthene

Concen: 2.40 ng

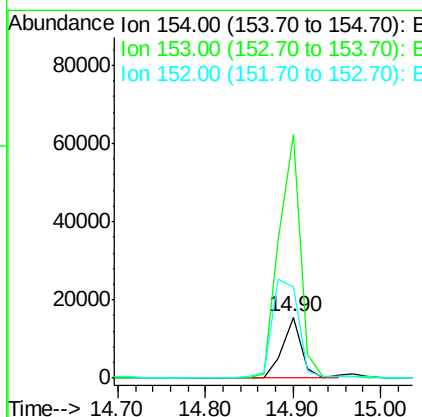
RT: 14.90 min Scan# 1002

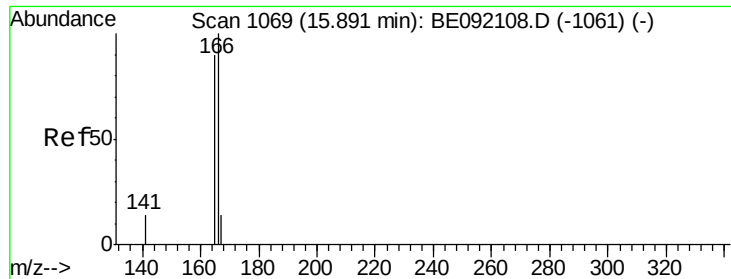
Delta R.T. 0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tgt Ion:	154	Resp:	24395
Ion Ratio	Lower	Upper	
154	100		
153	437.0	345.1	517.7
152	214.5	0.0	0.0#





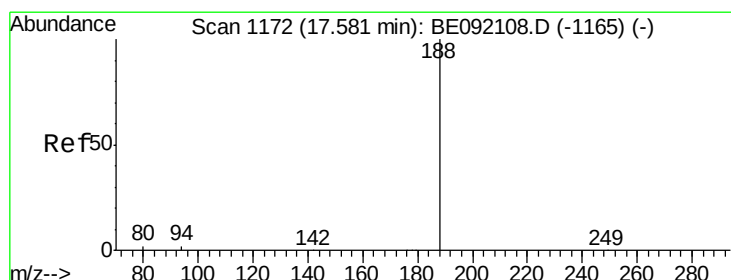
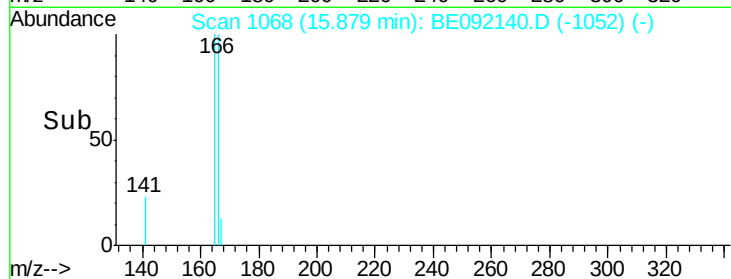
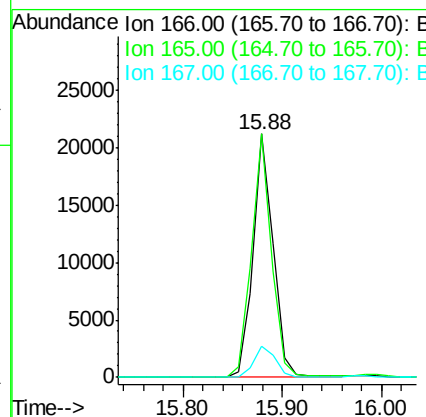
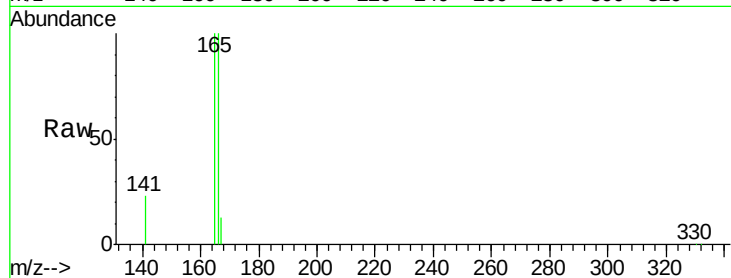
#15
 Fluorene
 Concen: 2.31 ng
 RT: 15.88 min Scan# 1068
 Delta R.T. -0.01 min
 Lab File: BE092140.D
 Acq: 3 Aug 2016 9:23

Instrument :
 BNA_E
 ClientSampled :
 PB92567BS

Tot Ion	Ratio	Lower	Upper
166	100		
165	98.7	78.6	118.0
167	13.4	11.1	16.7

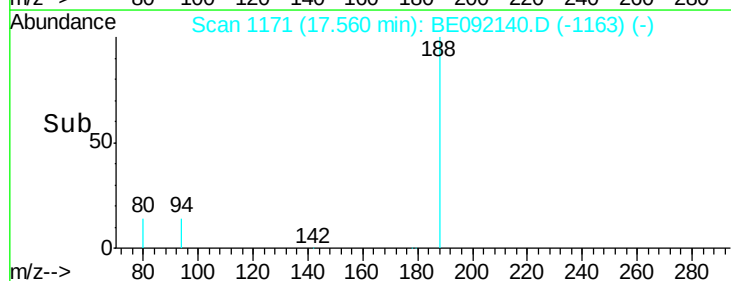
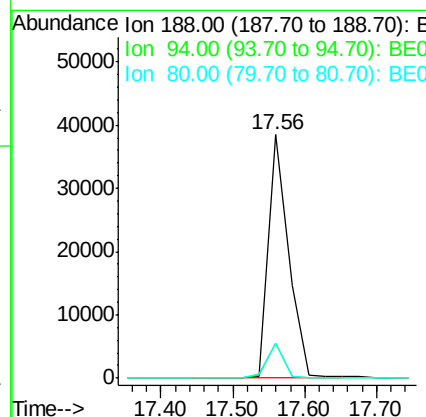
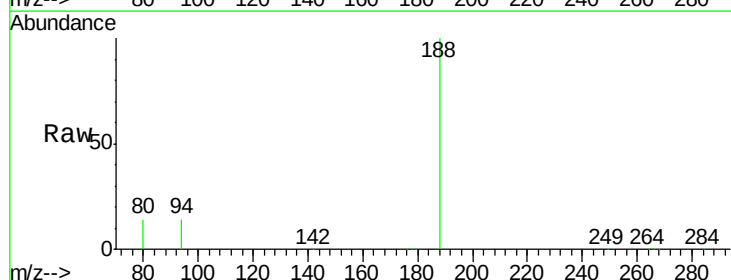
Manual Integrations
 APPROVED

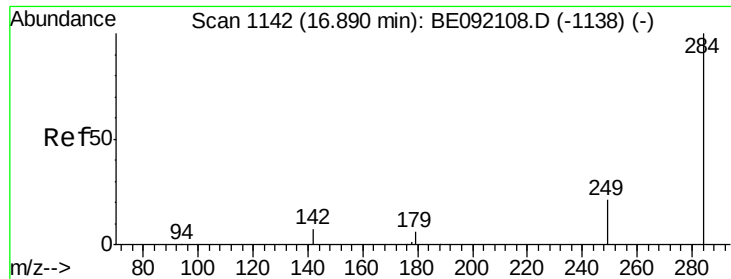
umangi
 8/3/2016 5:55:50 PM



#16
 Phenanthrene-d10
 Concen: 5.00 ng
 RT: 17.56 min Scan# 1171
 Delta R.T. -0.02 min
 Lab File: BE092140.D
 Acq: 3 Aug 2016 9:23

Tgt Ion	Ratio	Lower	Upper
188	100		
94	14.2	3.9	5.9#
80	14.4	3.4	5.0#





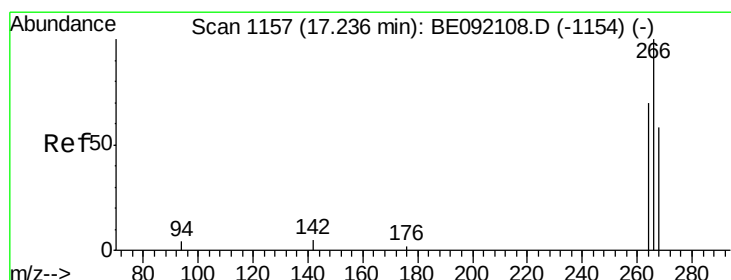
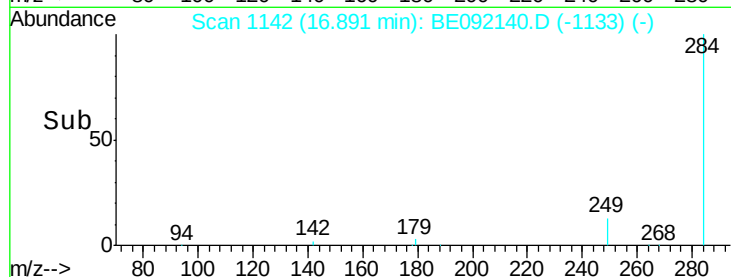
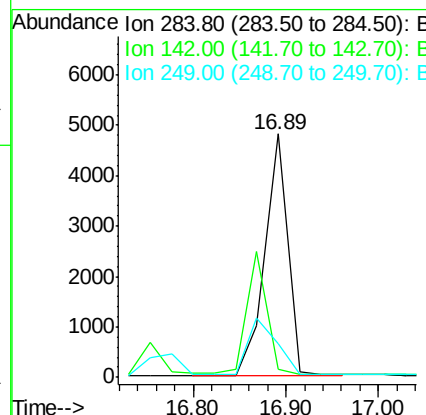
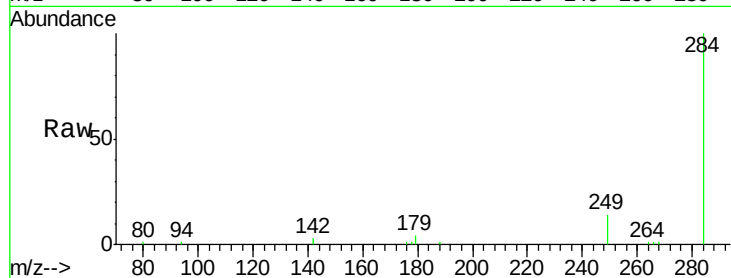
#17
Hexachlorobenzene
Concen: 2.22 ng
RT: 16.89 min Scan# 1142
Delta R.T. 0.00 min
Lab File: BE092140.D
Acq: 3 Aug 2016 9:23

Instrument :
BNA_E
ClientSampleId :
PB92567BS

Tot Ion	Ratio	Lower	Upper
284	100		
142	0.0	33.3	49.9#
249	0.0	25.4	38.0#

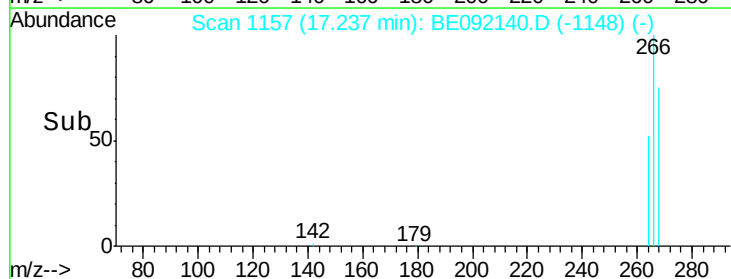
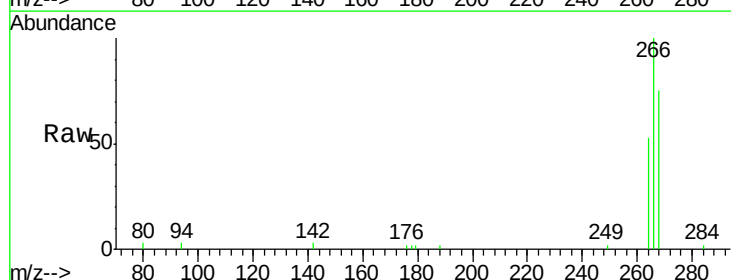
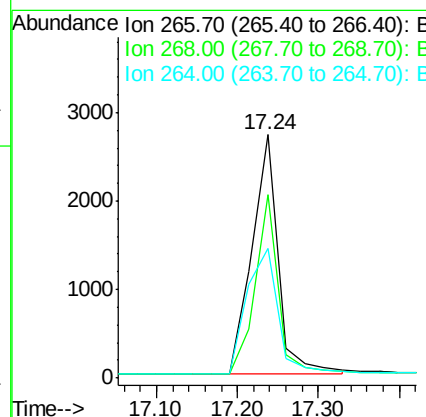
Manual Integrations
APPROVED

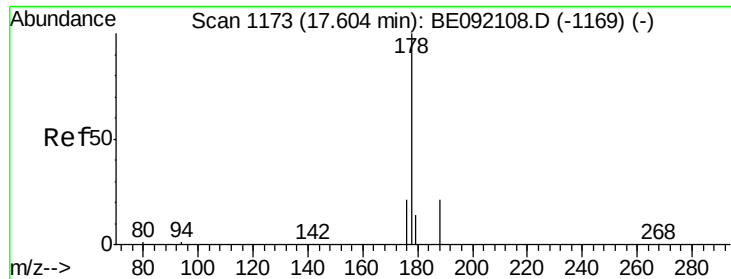
umangi
8/3/2016 5:55:50 PM



#18
Pentachlorophenol
Concen: 4.53 ng
RT: 17.24 min Scan# 1157
Delta R.T. 0.00 min
Lab File: BE092140.D
Acq: 3 Aug 2016 9:23

Tgt Ion	Ratio	Lower	Upper
266	100		
268	75.4	62.7	94.1
264	53.2	63.5	95.3#





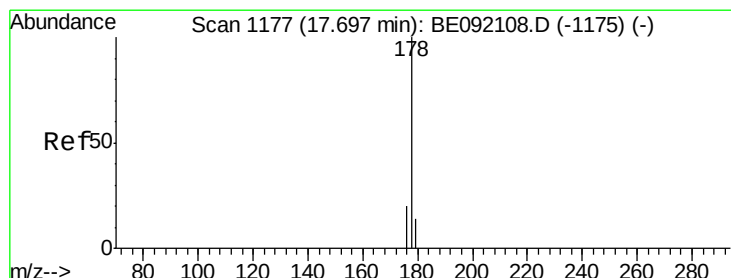
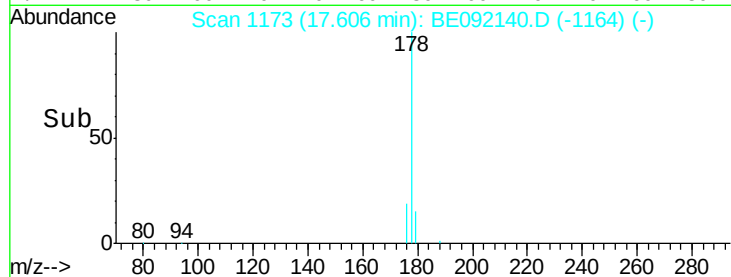
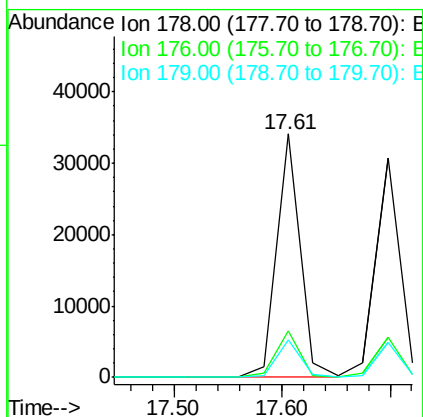
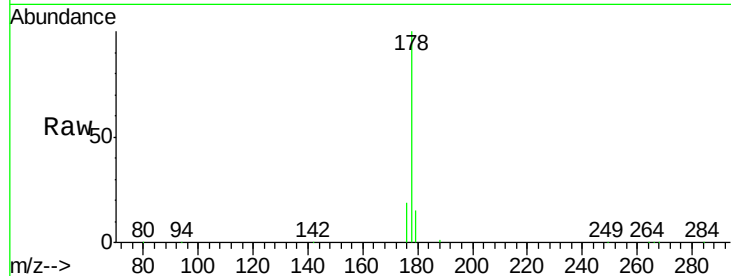
#19
Phenanthrene
Concen: 2.56 ng
RT: 17.61 min Scan# 1173
Delta R.T. 0.00 min
Lab File: BE092140.D
Acq: 3 Aug 2016 9:23

Instrument :
BNA_E
ClientSampleId :
PB92567BS

Tot Ion	Ratio	Lower	Upper
178	100		
176	19.2	15.4	23.0
179	15.5	12.7	19.1

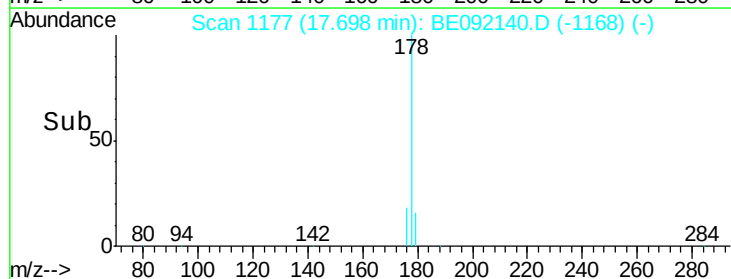
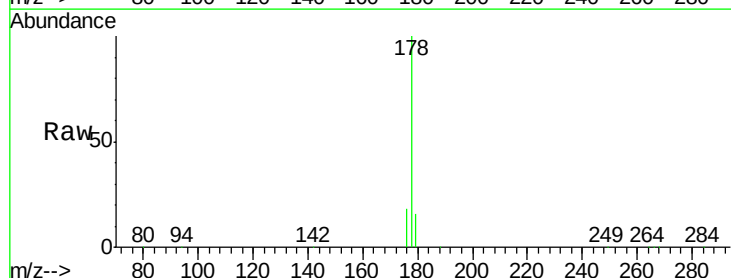
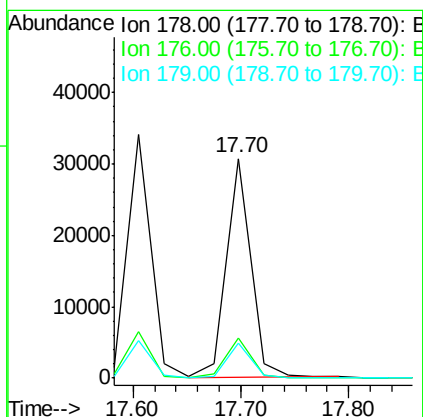
Manual Integrations
APPROVED

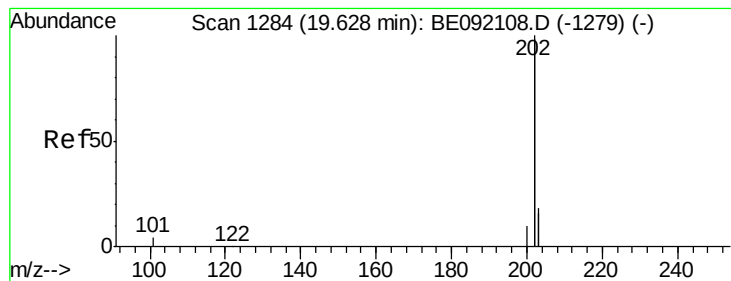
umangi
8/3/2016 5:55:50 PM



#20
Anthracene
Concen: 2.43 ng
RT: 17.70 min Scan# 1177
Delta R.T. 0.00 min
Lab File: BE092140.D
Acq: 3 Aug 2016 9:23

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.3	15.2	22.8
179	15.5	12.2	18.4





#21

Fluoranthene

Concen: 2.24 ng

RT: 19.63 min Scan# 1284

Delta R.T. 0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Instrument :

BNA_E

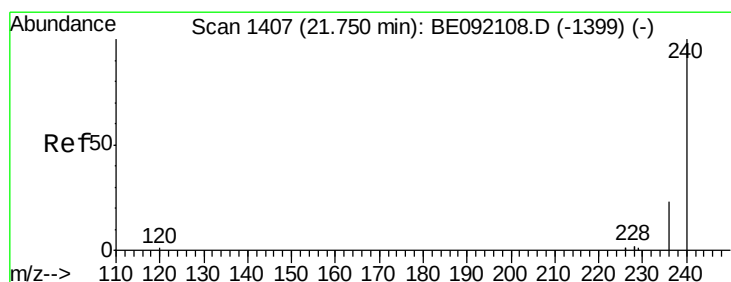
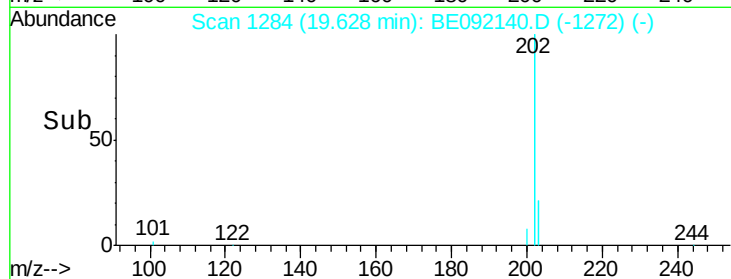
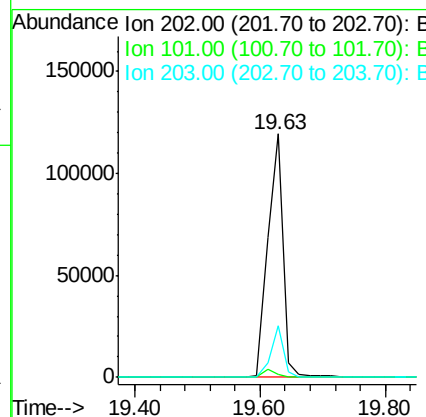
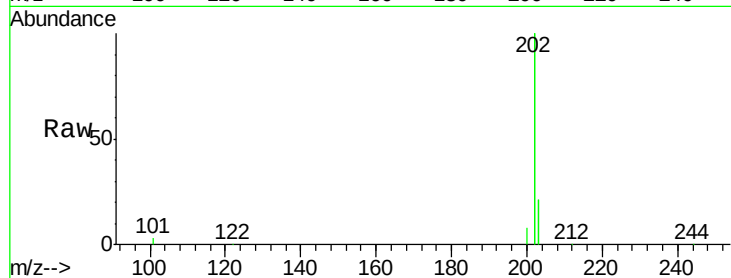
ClientSampleId :

PB92567BS

Tot Ion:	202	Resp:	203872
Ion Ratio	Lower	Upper	
202	100		
101	2.9	2.2	3.2
203	17.9	13.0	19.4

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM



#22

Chrysene-d12

Concen: 5.00 ng

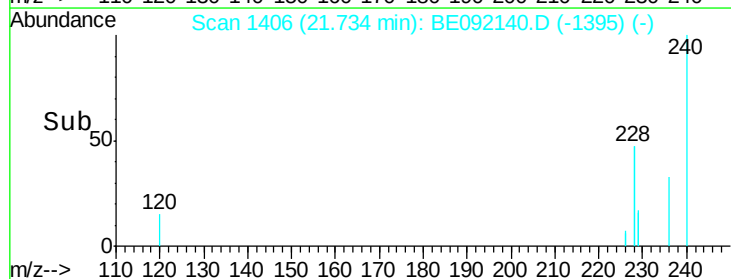
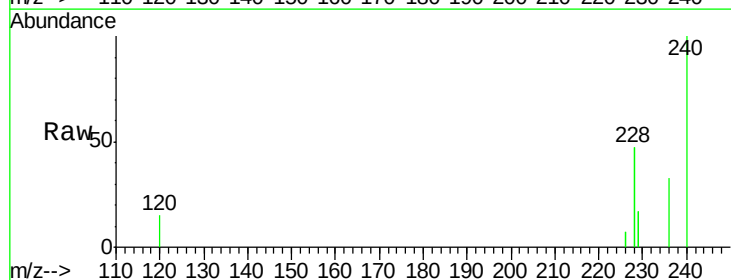
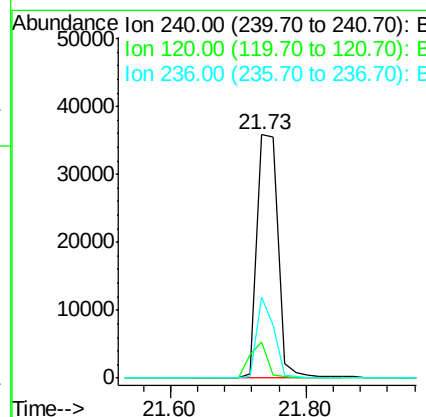
RT: 21.73 min Scan# 1406

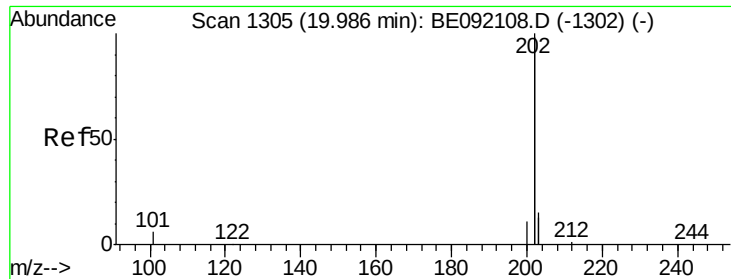
Delta R.T. -0.02 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tgt Ion:	240	Resp:	76746
Ion Ratio	Lower	Upper	
240	100		
120	15.1	0.6	1.0#
236	33.2	18.2	27.4#





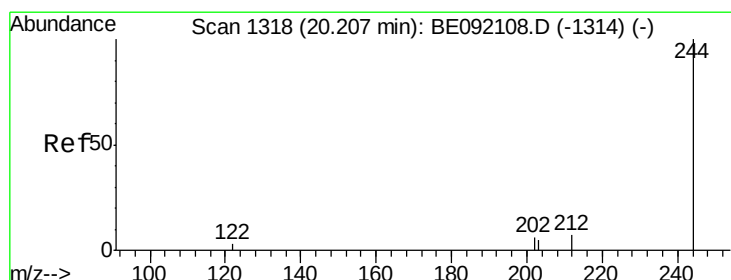
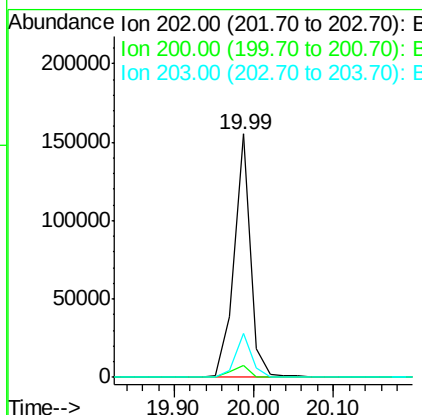
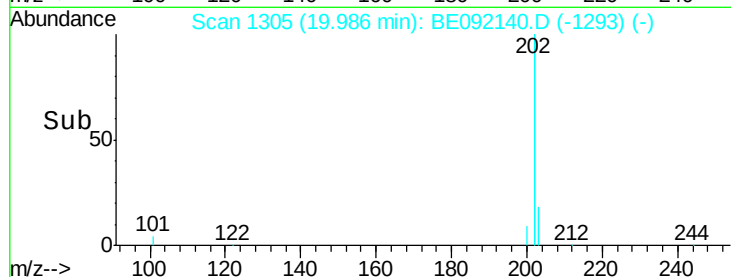
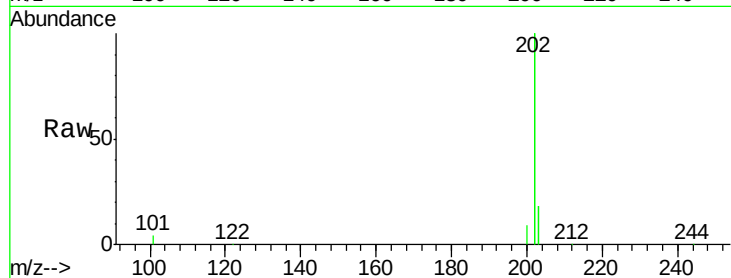
#23
Pvrene
Concen: 2.75 ng
RT: 19.99 min Scan# 1305
Delta R.T. 0.00 min
Lab File: BE092140.D
Acq: 3 Aug 2016 9:23

Instrument :
BNA_E
ClientSampleId :
PB92567BS

Tot Ion	Ratio	Resp Lower	Upper
202	100		
200	5.2	4.4	6.6
203	18.1	13.4	20.0

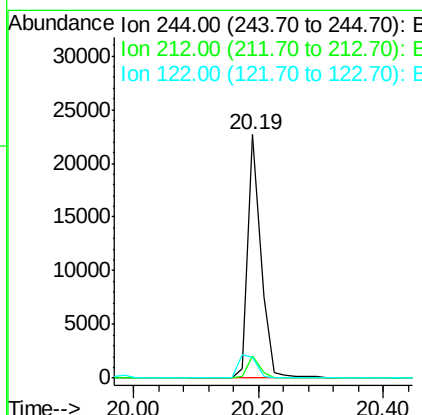
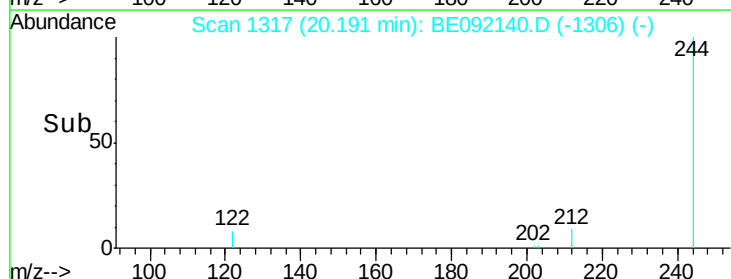
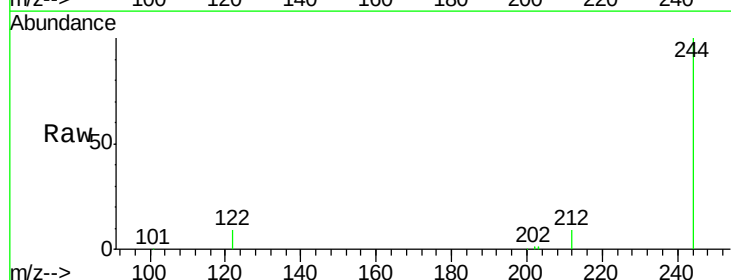
Manual Integrations
APPROVED

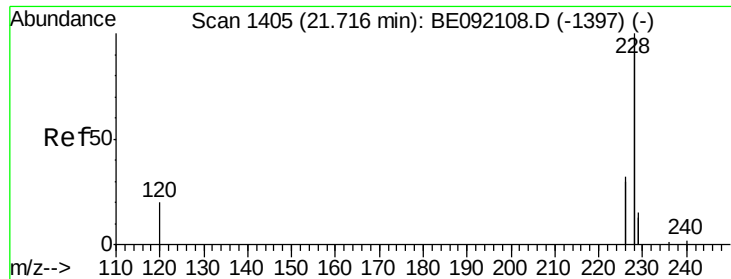
umangi
8/3/2016 5:55:50 PM



#24
Terphenyl-d14
Concen: 2.96 ng
RT: 20.19 min Scan# 1317
Delta R.T. -0.02 min
Lab File: BE092140.D
Acq: 3 Aug 2016 9:23

Tgt Ion	Ratio	Resp Lower	Upper
244	100		
212	9.2	9.1	13.7
122	8.6	11.0	16.4





#25

Benzo(a)anthracene

Concen: 2.53 ng

RT: 21.72 min Scan# 1405

Delta R.T. 0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Instrument :

BNA_E

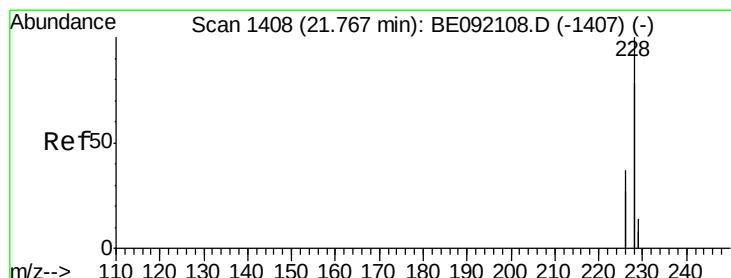
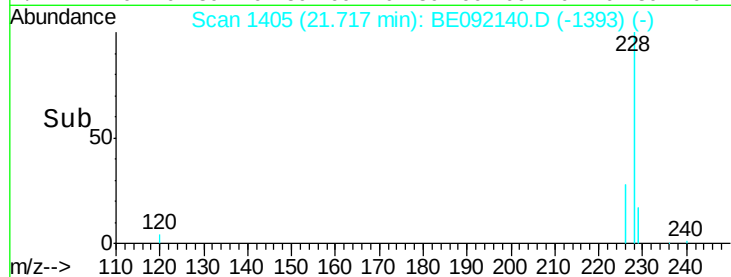
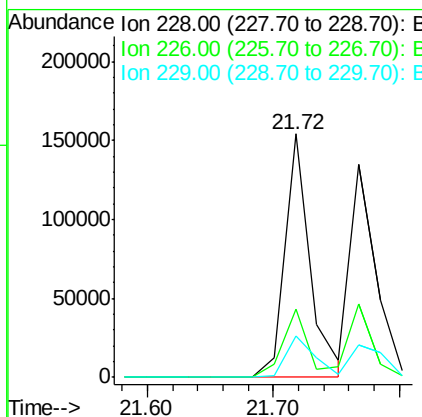
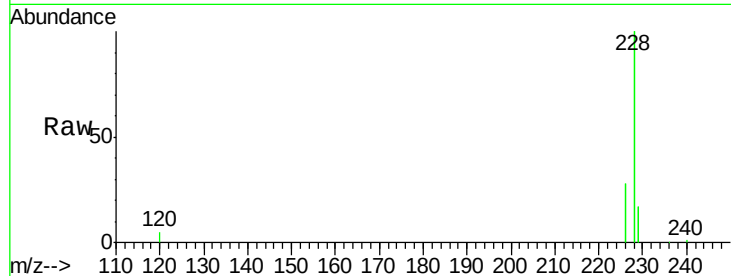
ClientSampleId :

PB92567BS

Tot Ion:	228	Resp:	213753
Ion Ratio	Lower	Upper	
228	100		
226	27.9	22.1	33.1
229	16.9	15.1	22.7

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM



#26

Chrysene

Concen: 2.33 ng m

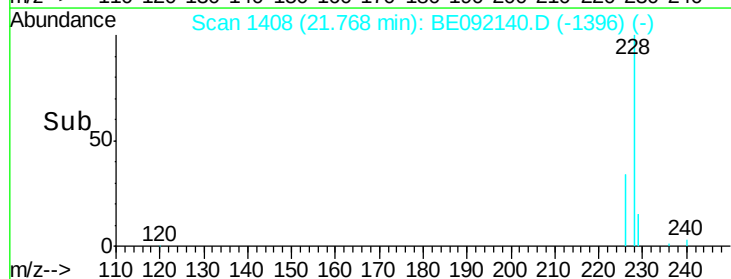
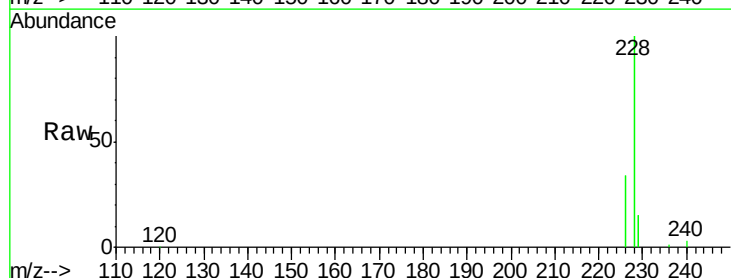
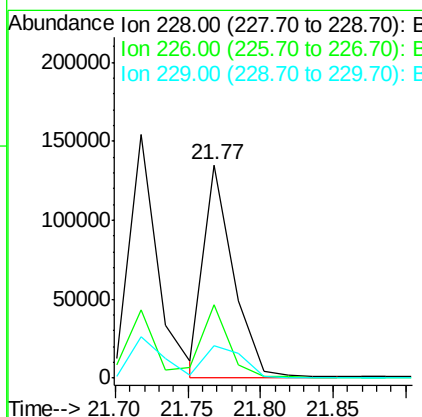
RT: 21.77 min Scan# 1408

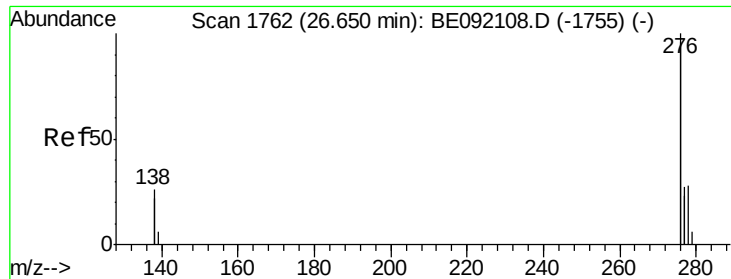
Delta R.T. 0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tgt Ion:	228	Resp:	196476
Ion Ratio	Lower	Upper	
228	100		
226	34.4	22.3	33.5#
229	15.0	16.9	25.3#





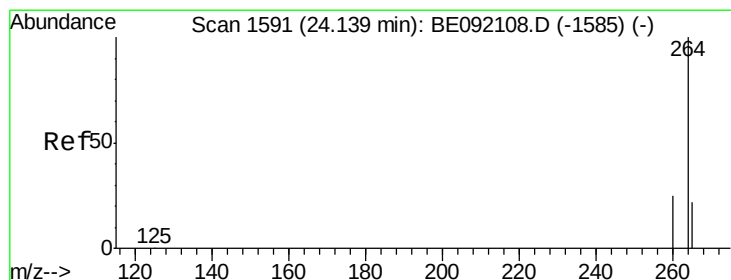
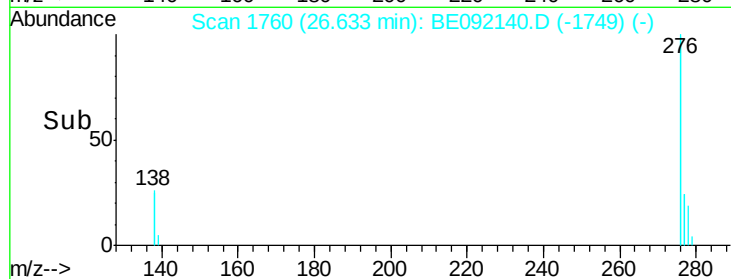
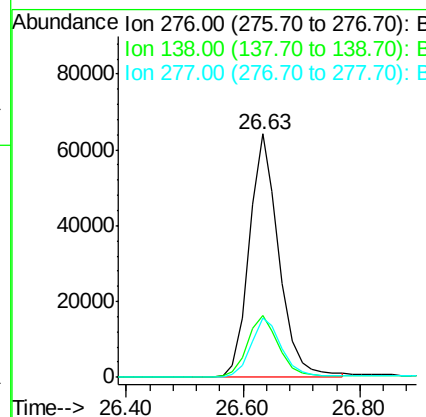
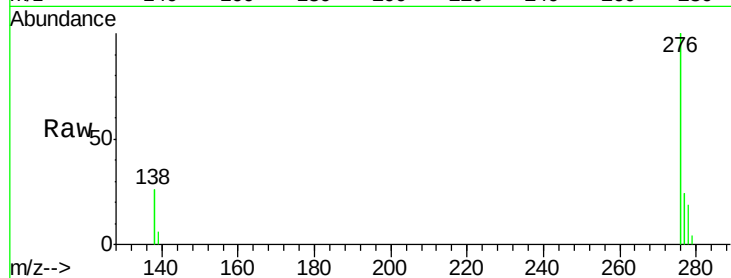
#27
Indeno(1,2,3-cd)pyrene
Concen: 2.45 ng
RT: 26.63 min Scan# 1760
Delta R.T. -0.02 min
Lab File: BE092140.D
Acq: 3 Aug 2016 9:23

Instrument :
BNA_E
ClientSampleId :
PB92567BS

Tot Ion	Ratio	Resp Lower	Resp Upper
276	100		
138	26.5	21.2	31.8
277	24.7	19.8	29.8

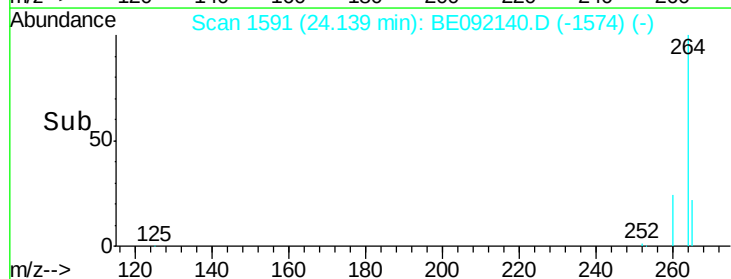
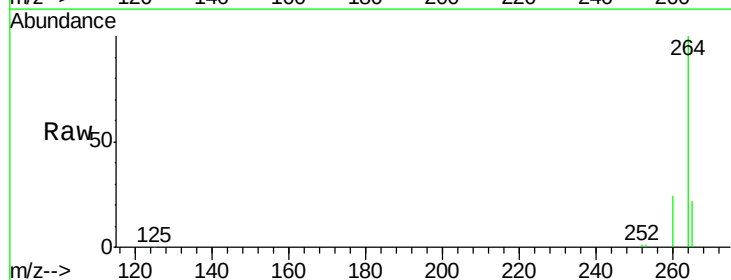
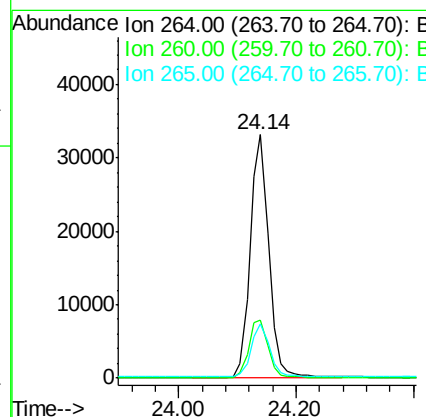
Manual Integrations
APPROVED

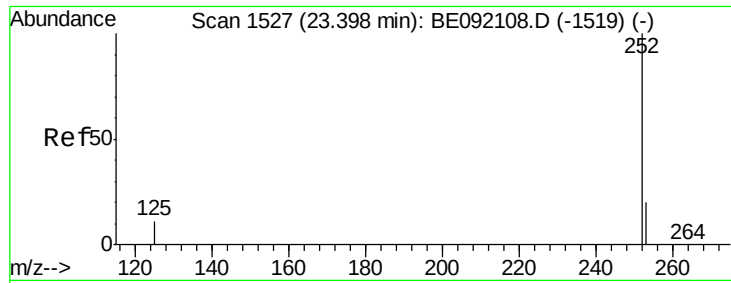
umangi
8/3/2016 5:55:50 PM



#28
Perylene-d12
Concen: 5.00 ng
RT: 24.14 min Scan# 1591
Delta R.T. 0.00 min
Lab File: BE092140.D
Acq: 3 Aug 2016 9:23

Tgt Ion	Ratio	Resp Lower	Resp Upper
264	100		
260	24.0	20.8	31.2
265	22.5	16.6	25.0





#29

Benzo(b)fluoranthene

Concen: 2.54 ng m

RT: 23.40 min Scan# 1527

Delta R.T. 0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Instrument :

BNA_E

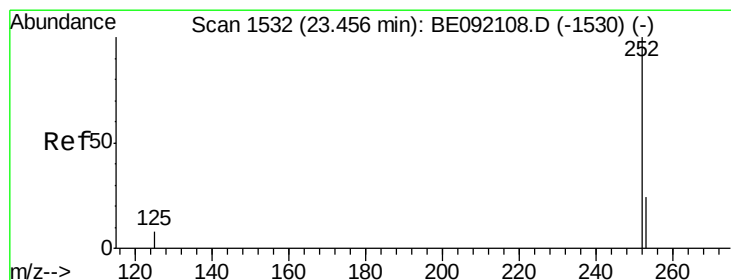
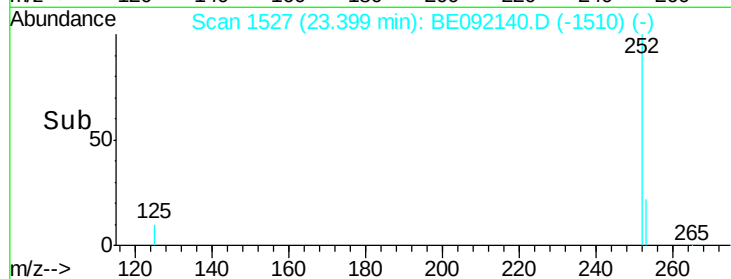
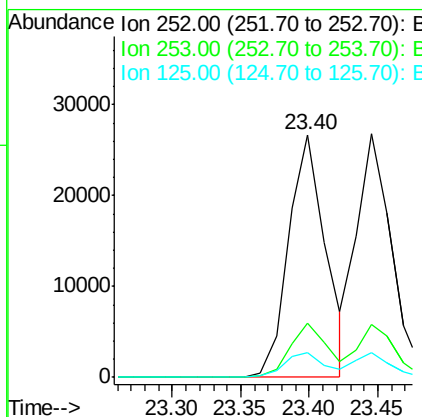
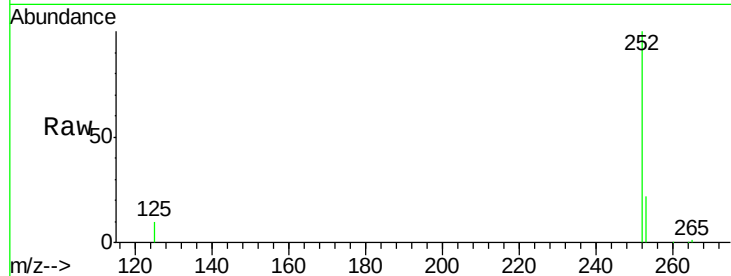
ClientSampleId :

PB92567BS

Tot Ion	Ratio	Lower	Upper
252	100		
253	22.1	17.4	26.0
125	10.1	10.2	15.2

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM



#30

Benzo(k)fluoranthene

Concen: 2.53 ng

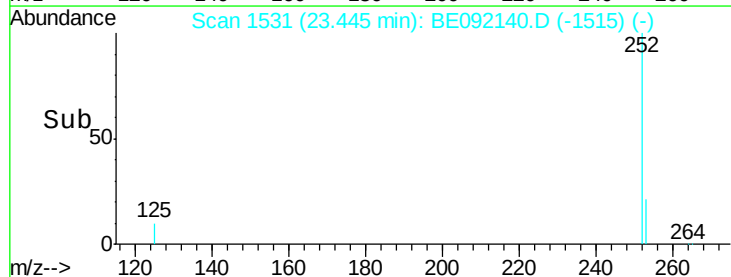
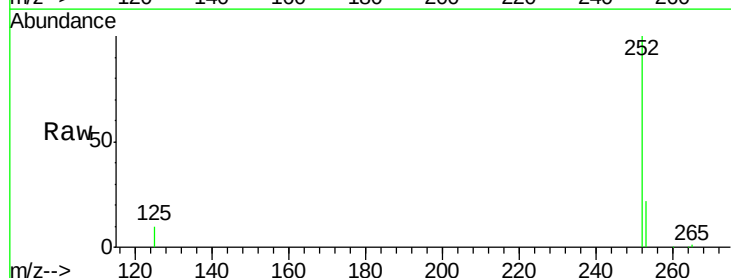
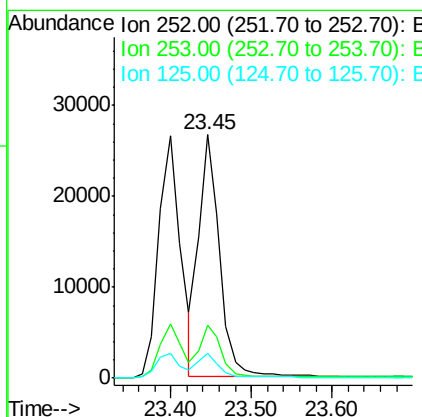
RT: 23.45 min Scan# 1531

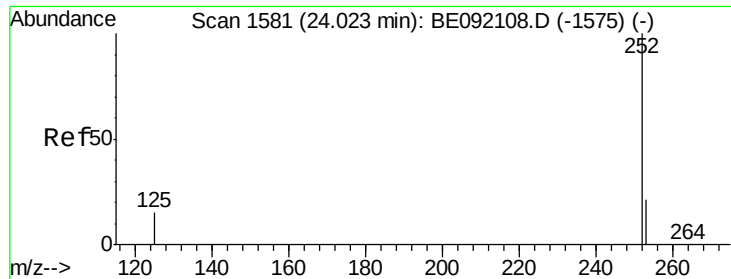
Delta R.T. -0.01 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.7	19.4	29.0
125	10.3	8.9	13.3





#31

Benzo(a)pyrene

Concen: 2.50 ng

RT: 24.02 min Scan# 1581

Delta R.T. 0.00 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Instrument :

BNA_E

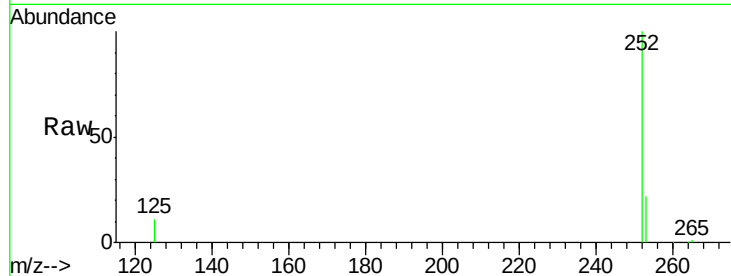
ClientSampleId :

PB92567BS

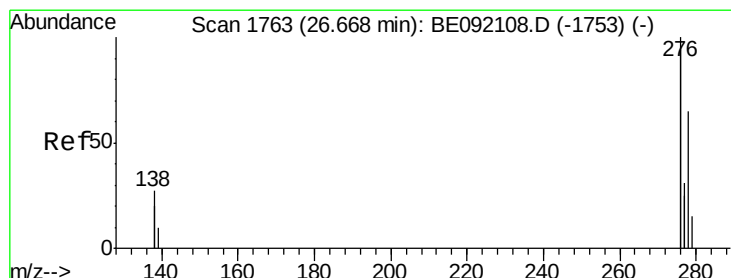
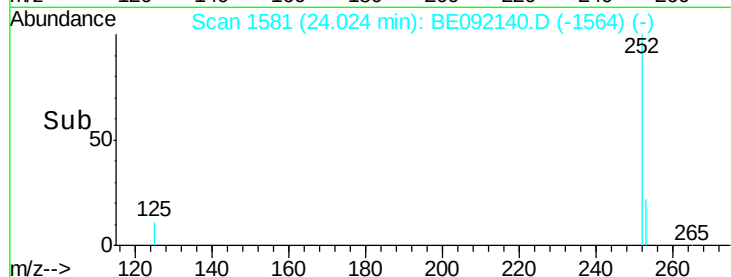
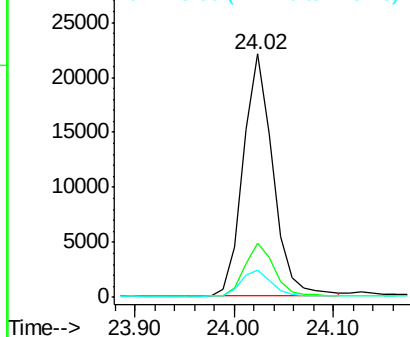
Tot Ion:	252	Resp:	45739
Ion Ratio	Lower	Upper	
252	100		
253	22.1	19.8	29.8
125	11.4	10.4	15.6

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 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



#32

Dibenzo(a,h)anthracene

Concen: 2.64 ng

RT: 26.65 min Scan# 1761

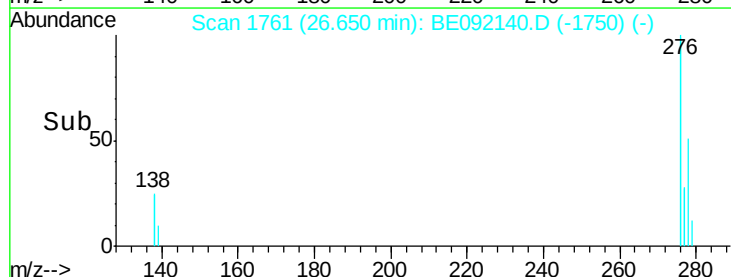
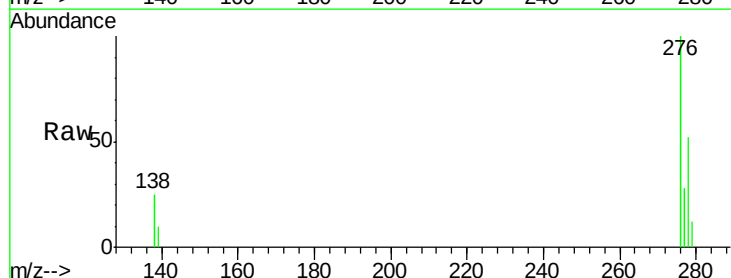
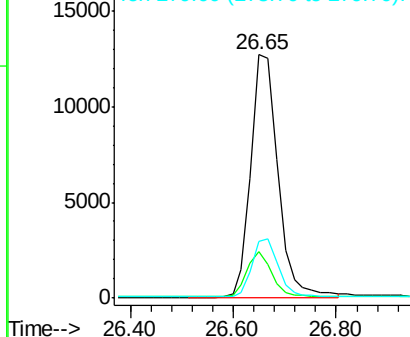
Delta R.T. -0.02 min

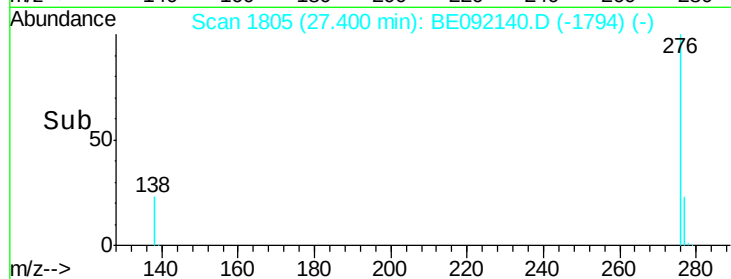
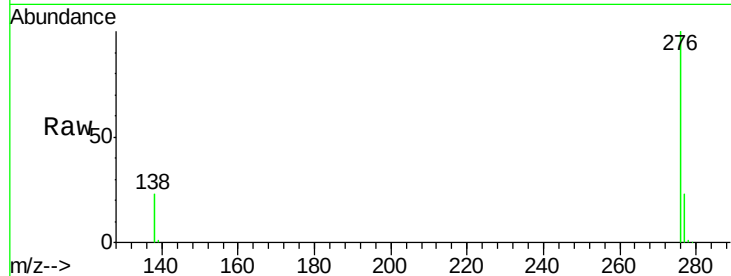
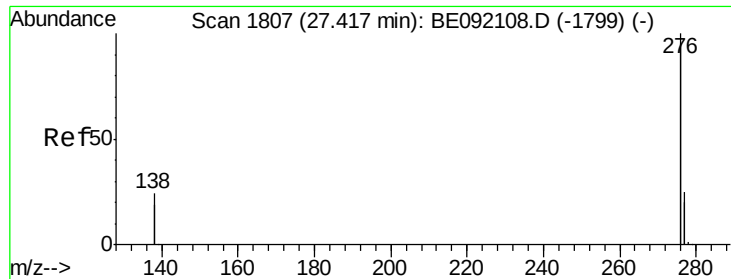
Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Tgt Ion:	278	Resp:	45983
Ion Ratio	Lower	Upper	
278	100		
139	19.1	16.7	25.1
279	23.3	20.3	30.5

Abundance Ion 278.00 (277.70 to 278.70): E
Ion 139.00 (138.70 to 139.70): E
Ion 279.00 (278.70 to 279.70): E





#33

Benzo(a,h,i)perylene

Concen: 2.68 ng

RT: 27.40 min Scan# 1805

Delta R.T. -0.02 min

Lab File: BE092140.D

Acq: 3 Aug 2016 9:23

Instrument :

BNA_E

ClientSampleId :

PB92567BS

Tot Ion:	276	Resp:	199180
Ion Ratio	Lower	Upper	
276	100		
277	23.0	19.5	29.3
138	23.5	20.8	31.2

Manual Integrations
APPROVED

umangi
8/3/2016 5:55:50 PM

