

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE103114\
 Data File : BE088463.D
 Acq On : 1 Nov 2014 22:03
 Operator : TP/JJ
 Sample : F4312-12RE
 Misc :
 ALS Vial : 38 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 YS19-SS28-1014RE

Manual Integrations
 APPROVED

mohammad
 11/4/2014 9:07:48 AM

Quant Time: Nov 02 05:06:52 2014
 Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SIM-PAH-BE103114.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Sat Nov 01 00:42:07 2014
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.09	152	46341	5.00	ng	0.00
3) Naphthalene-d8	8.65	136	173165	5.00	ng	0.00
7) Acenaphthene-d10	10.79	164	80837	5.00	ng	0.00
12) Phenanthrene-d10	12.91	188	172804	5.00	ng	0.00
16) Chrysene-d12	18.33	240	106681	5.00	ng	0.02
22) Perylene-d12	21.40	264	104911	5.00	ng	0.03
System Monitoring Compounds						
4) Nitrobenzene-d5	7.79	82	588975	46.38	ng	0.02
8) 2-Fluorobiphenyl	10.00	172	660999	29.01	ng	0.01
18) Terphenyl-d14	16.11	244	550373	28.08	ng	0.04
Target Compounds						Qvalue
5) Naphthalene	8.68	128	1251	0.03	ng	# 88
10) Acenaphthene	10.84	154	1868	0.10	ng	74
11) Fluorene	11.50	166	1570	0.08	ng	# 96
13) Phenanthrene	12.95	178	177053	1.13	ng	99
14) Anthracene	13.03	178	30859m	0.24	ng	
15) Fluoranthene	15.19	202	71209	2.79	ng	99
17) Pyrene	15.65	202	61982	1.78	ng	96
19) Benzo(a)anthracene	18.31	228	138396	1.38	ng	98
20) Chrysene	18.38	228	141031	1.43	ng	96
21) Indeno(1,2,3-cd)pyrene	23.58	276	92696m	1.01	ng	
23) Benzo(b)fluoranthene	20.64	252	49329	2.14	ng	97
24) Benzo(k)fluoranthene	20.69	252	18649m	0.74	ng	
25) Benzo(a)pyrene	21.28	252	31690	1.43	ng	98
26) Dibenzo(a,h)anthracene	23.66	278	5155	0.25	ng	# 78
27) Benzo(g,h,i)perylene	24.21	276	86324	0.92	ng	99

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

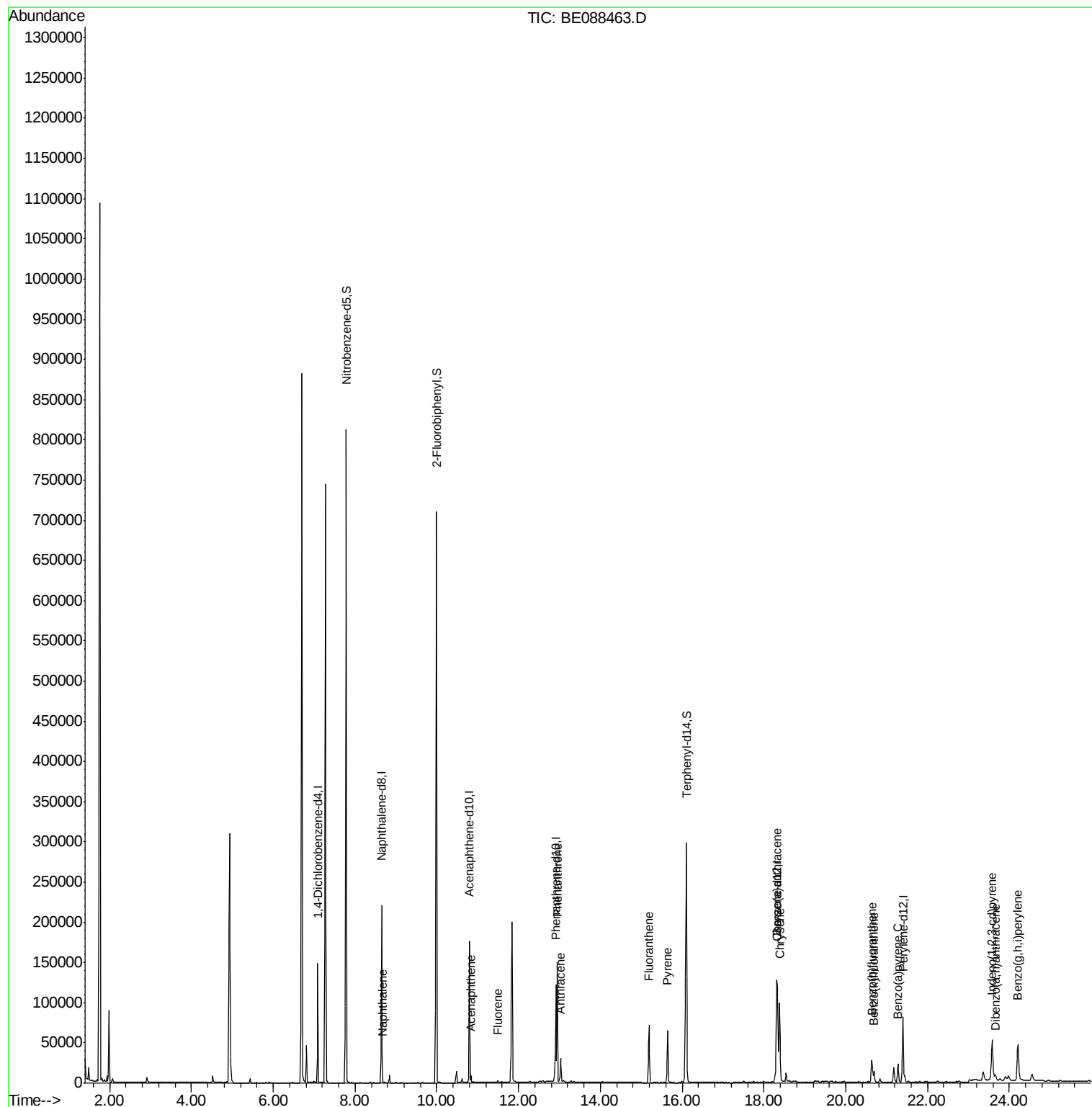
Data Path : Z:\HPCHEM1\BNA_E\DATA\BE103114\
Data File : BE088463.D
Acq On : 1 Nov 2014 22:03
Operator : TP/JJ
Sample : F4312-12RE
Misc :
ALS Vial : 38 Sample Multiplier: 1

Instrument :
BNA_E
ClientSampleId :
YS19-SS28-1014RE

Manual Integrations
APPROVED

mohammad
11/4/2014 9:07:48 AM

Quant Time: Nov 02 05:06:52 2014
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SIM-PAH-BE103114.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Nov 01 00:42:07 2014
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 7.09 min Scan# 1247

Delta R.T. 0.00 min

Lab File: BE088463.D

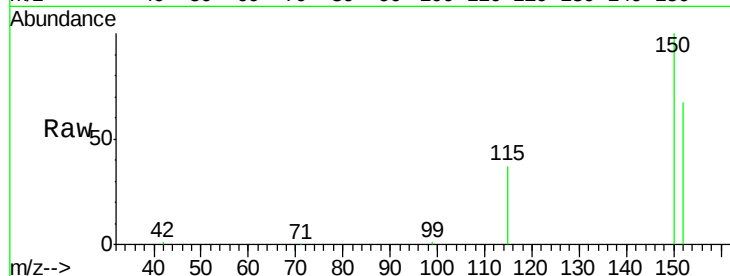
Acq: 1 Nov 2014 22:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS28-1014RE



Tgt Ion:152 Resp: 46341

Ion Ratio Lower Upper

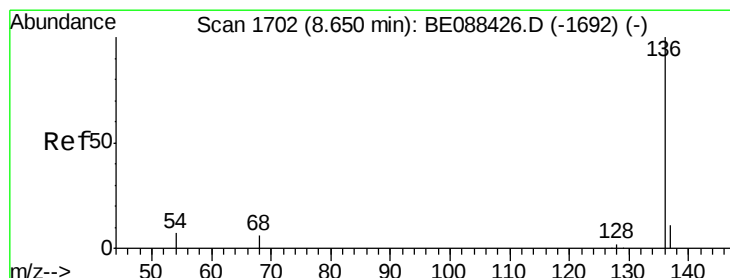
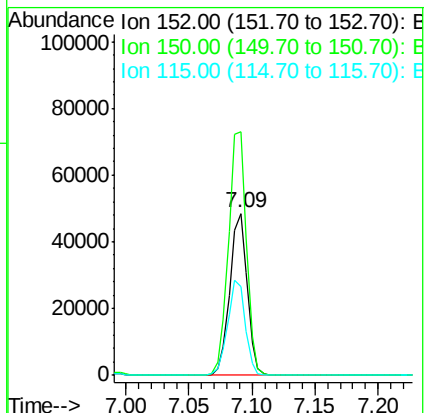
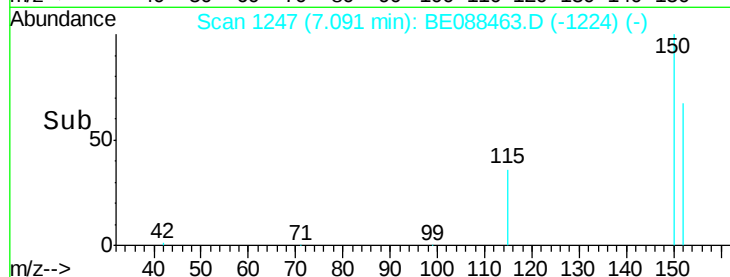
152 100

150 150.0 121.8 182.8

115 54.8 43.9 65.9

Manual Integrations
APPROVED

mohammad
11/4/2014 9:07:48 AM



#3

Naphthalene-d8

Concen: 5.00 ng

RT: 8.65 min Scan# 1702

Delta R.T. -0.00 min

Lab File: BE088463.D

Acq: 1 Nov 2014 22:03

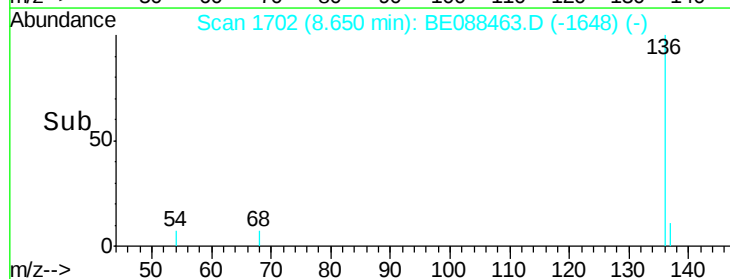
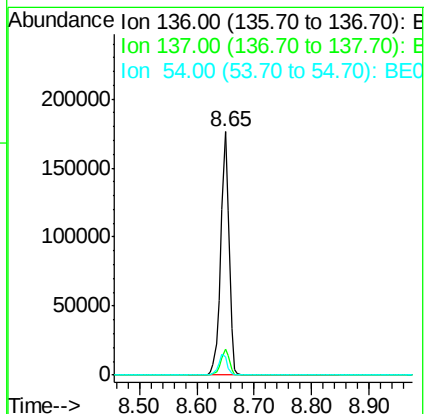
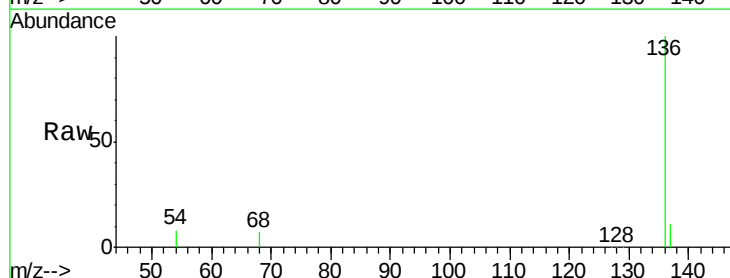
Tgt Ion:136 Resp: 173165

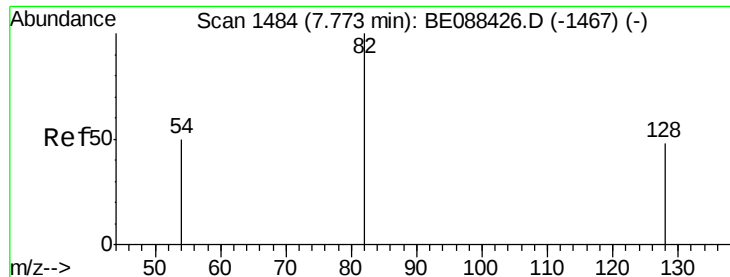
Ion Ratio Lower Upper

136 100

137 10.7 8.8 13.2

54 7.5 5.3 7.9





#4

Nitrobenzene-d5

Concen: 46.38 ng

RT: 7.79 min Scan# 1492

Delta R.T. 0.02 min

Lab File: BE088463.D

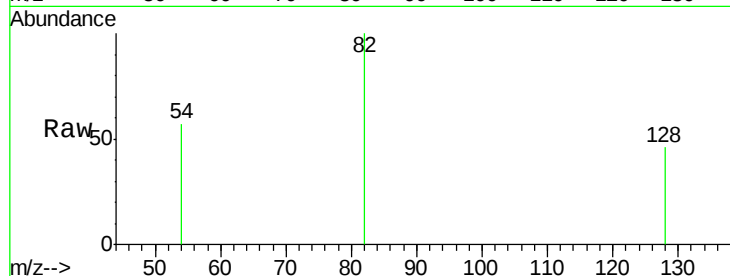
Acq: 1 Nov 2014 22:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS28-1014RE



Tgt Ion: 82 Resp: 588975

Ion Ratio Lower Upper

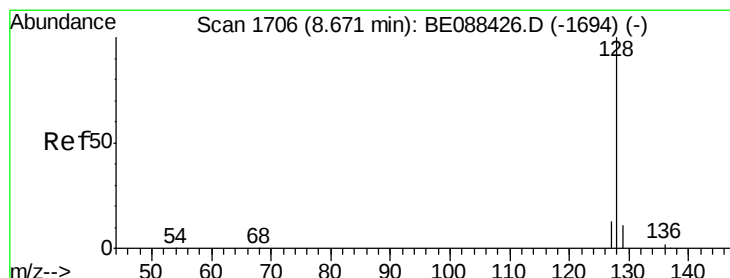
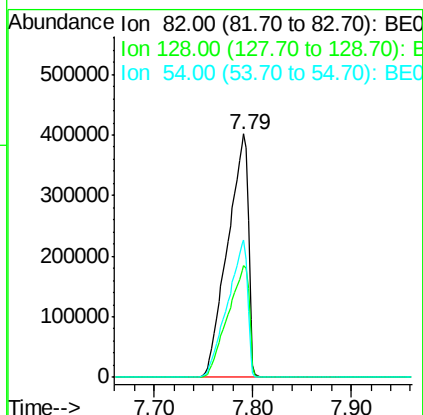
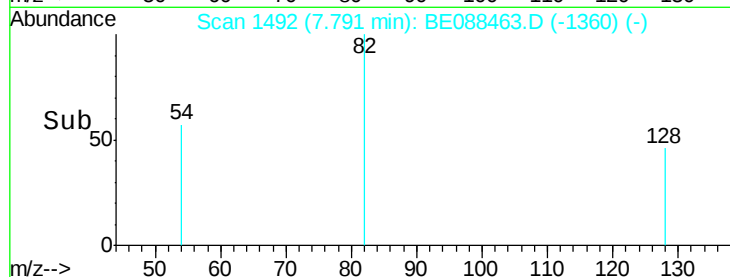
82 100

128 45.9 38.4 57.6

54 56.5 40.2 60.2

Manual Integrations
APPROVED

mohammad
11/4/2014 9:07:48 AM



#5

Naphthalene

Concen: 0.03 ng

RT: 8.68 min Scan# 1707

Delta R.T. 0.01 min

Lab File: BE088463.D

Acq: 1 Nov 2014 22:03

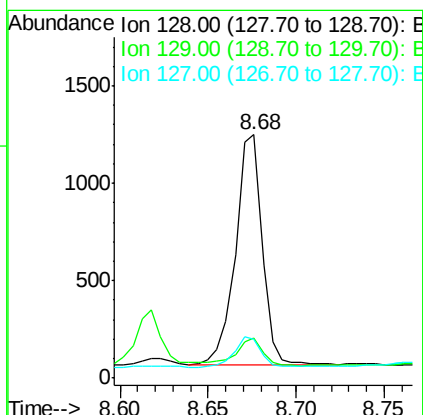
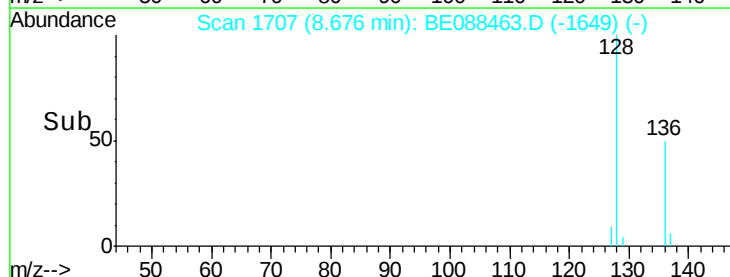
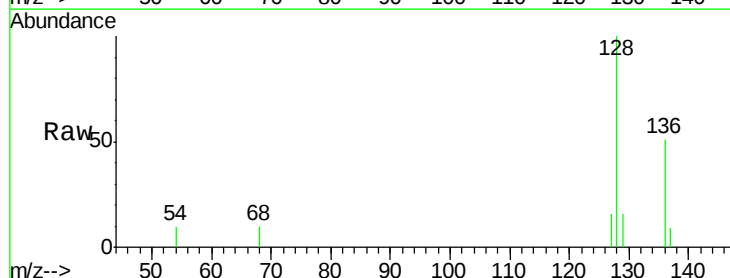
Tgt Ion: 128 Resp: 1251

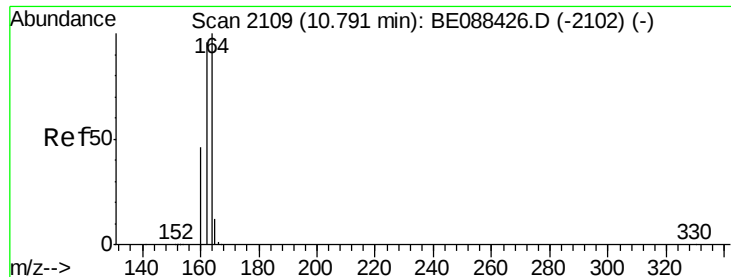
Ion Ratio Lower Upper

128 100

129 16.5 8.6 12.8#

127 16.2 10.1 15.1#





#7

Acenaphthene-d10

Concen: 5.00 ng

RT: 10.79 min Scan# 2109

Delta R.T. 0.00 min

Lab File: BE088463.D

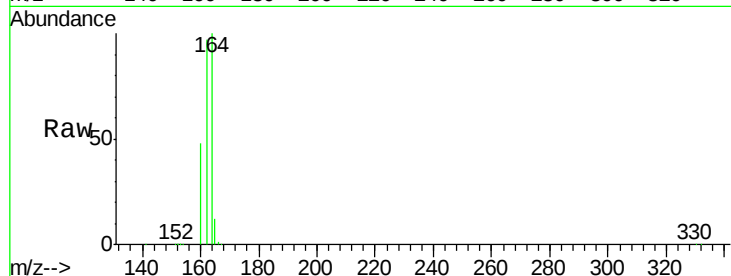
Acq: 1 Nov 2014 22:03

Instrument :

BNA_E

ClientSampleId :

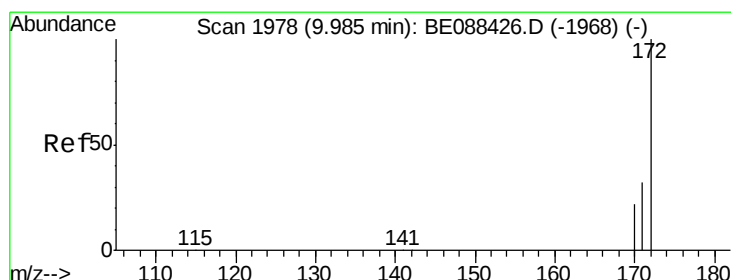
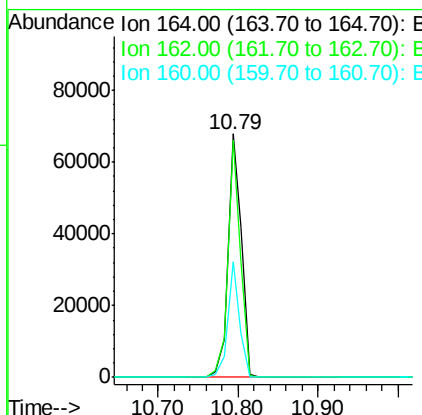
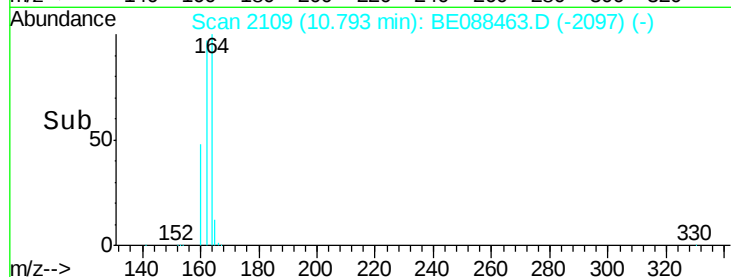
YS19-SS28-1014RE



Tgt Ion:	164	Resp:	80837
Ion Ratio	Lower	Upper	
164	100		
162	97.4	77.0	115.4
160	47.6	36.8	55.2

Manual Integrations
APPROVED

mohammad
11/4/2014 9:07:48 AM



#8

2-Fluorobiphenyl

Concen: 29.01 ng

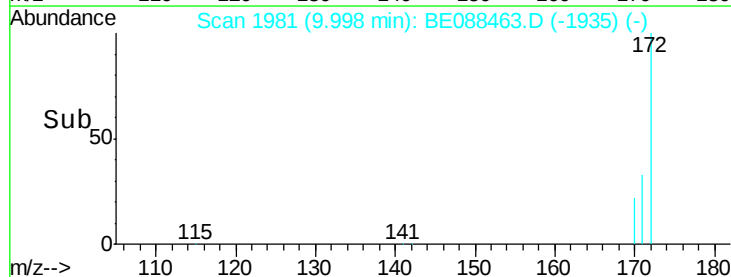
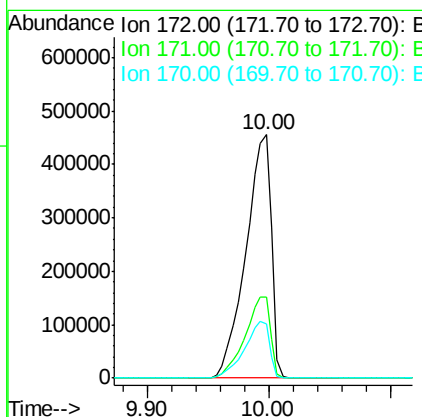
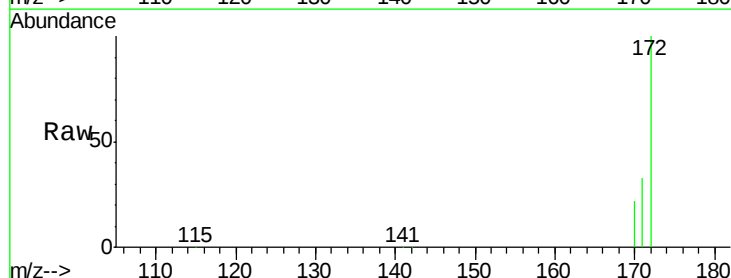
RT: 10.00 min Scan# 1981

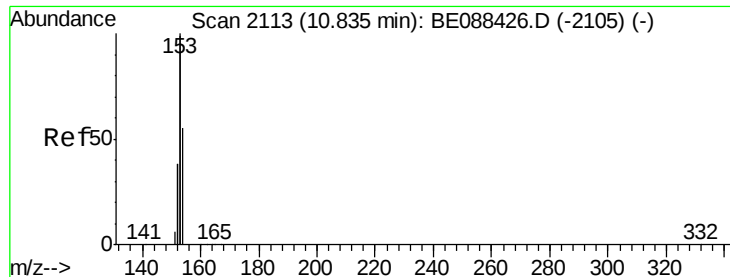
Delta R.T. 0.01 min

Lab File: BE088463.D

Acq: 1 Nov 2014 22:03

Tgt Ion:	172	Resp:	660999
Ion Ratio	Lower	Upper	
172	100		
171	33.1	26.0	39.0
170	22.3	17.6	26.4





#10

Acenaphthene

Concen: 0.10 ng

RT: 10.84 min Scan# 2113

Delta R.T. 0.00 min

Lab File: BE088463.D

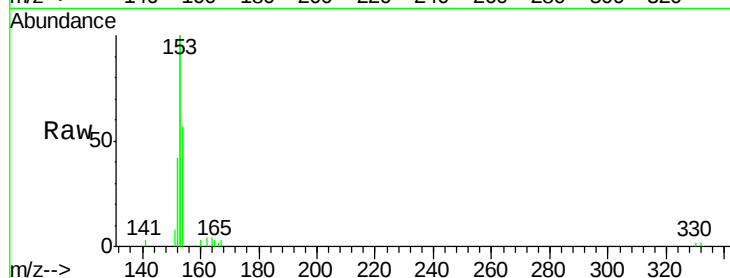
Acq: 1 Nov 2014 22:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS28-1014RE



Tgt Ion:154 Resp: 1868

Ion Ratio Lower Upper

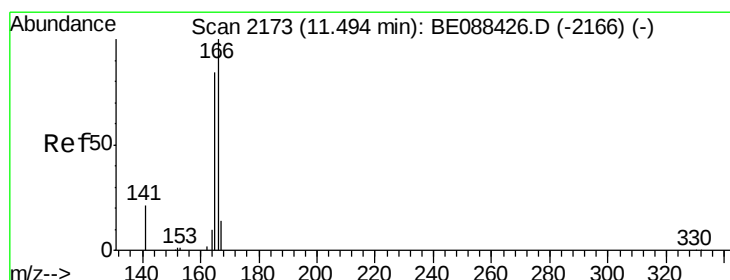
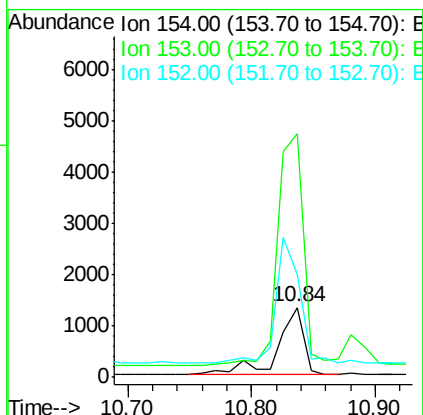
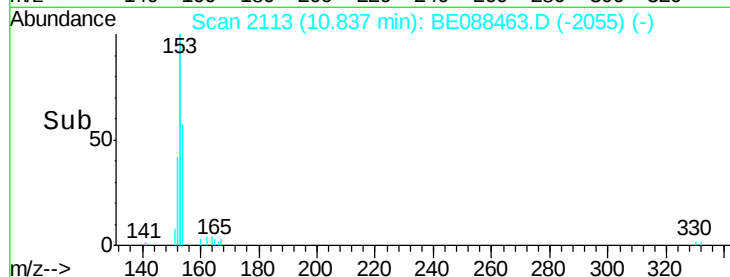
154 100

153 337.8 324.3 486.5

152 224.6 154.9 232.3

Manual Integrations
APPROVED

mohammad
11/4/2014 9:07:48 AM



#11

Fluorene

Concen: 0.08 ng

RT: 11.50 min Scan# 2173

Delta R.T. 0.00 min

Lab File: BE088463.D

Acq: 1 Nov 2014 22:03

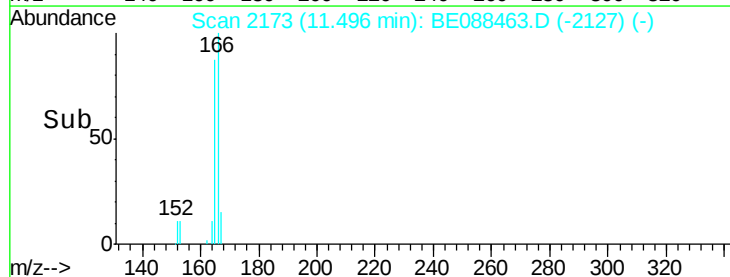
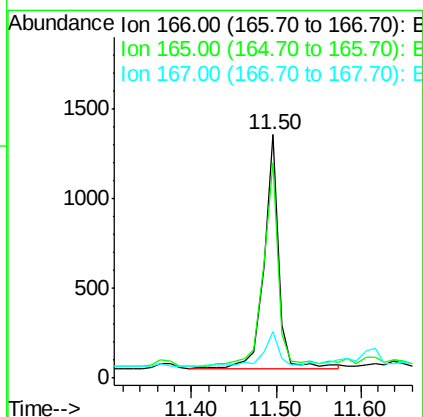
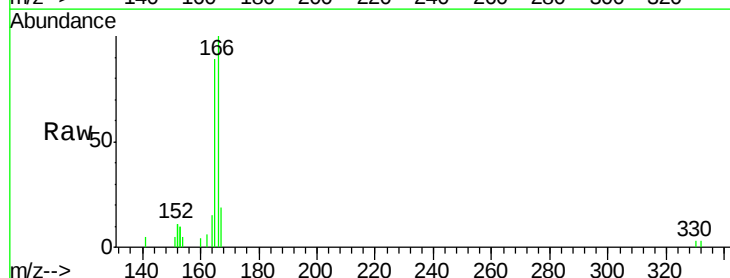
Tgt Ion:166 Resp: 1570

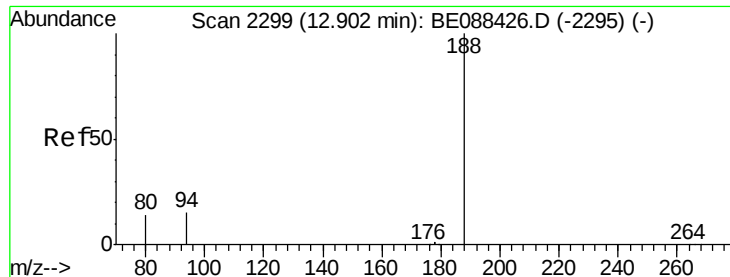
Ion Ratio Lower Upper

166 100

165 91.5 71.3 106.9

167 18.3 10.7 16.1#





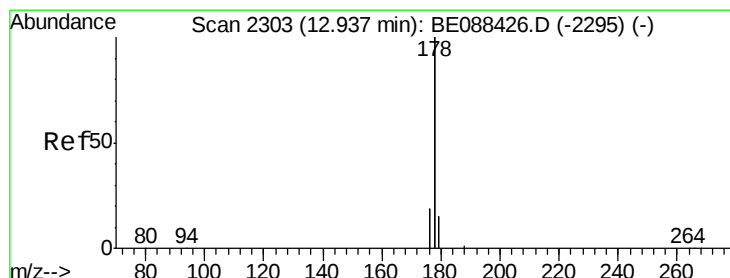
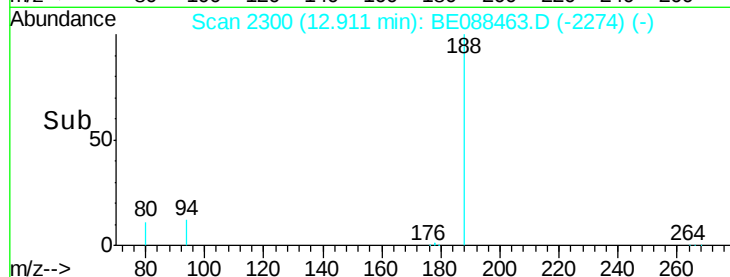
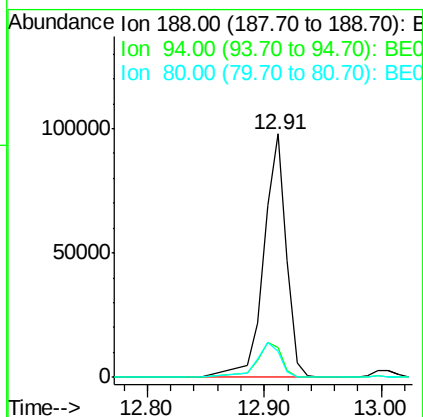
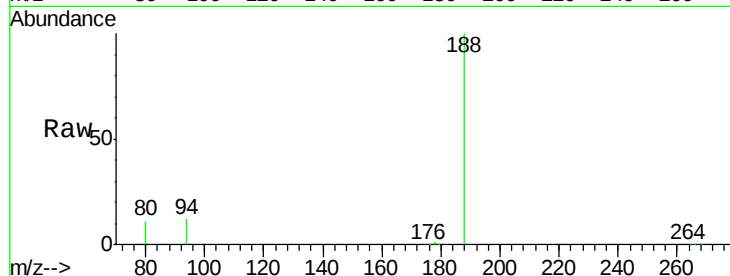
#12
Phenanthrene-d10
Concen: 5.00 ng
RT: 12.91 min Scan# 2300
Delta R.T. 0.01 min
Lab File: BE088463.D
Acq: 1 Nov 2014 22:03

Instrument :
BNA_E
ClientSampleId :
YS19-SS28-1014RE

Tgt Ion	Ratio	Resp Lower	Resp Upper
188	100		
94	12.1	11.8	17.8
80	10.8	10.9	16.3

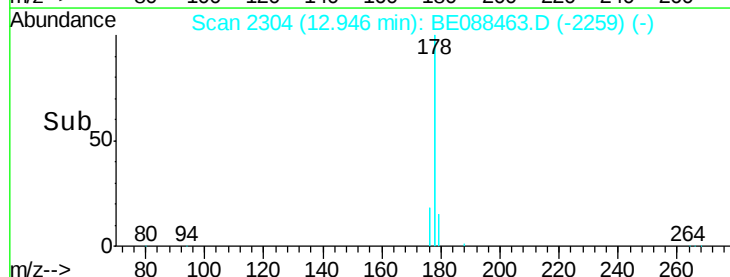
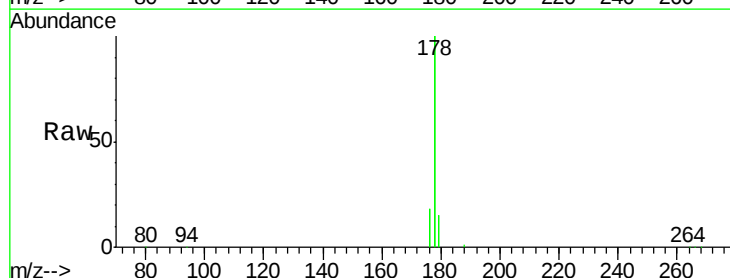
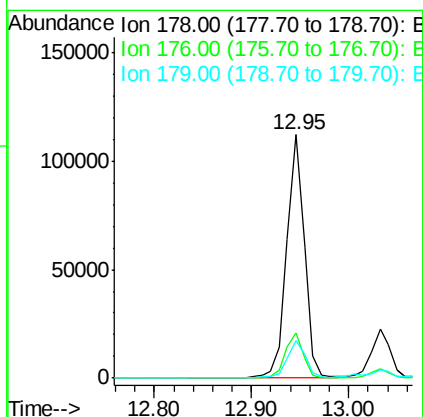
Manual Integrations
APPROVED

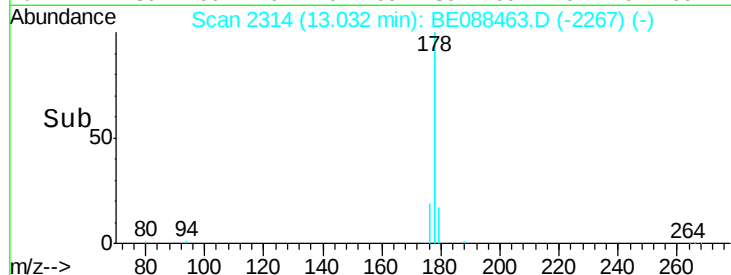
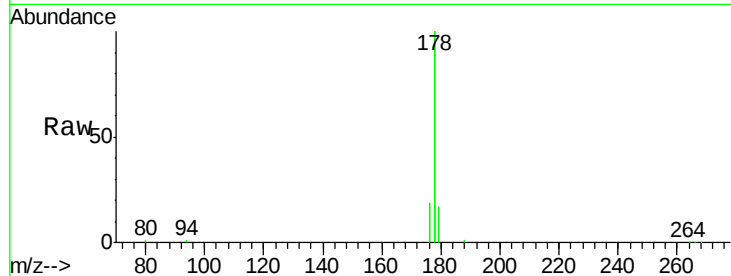
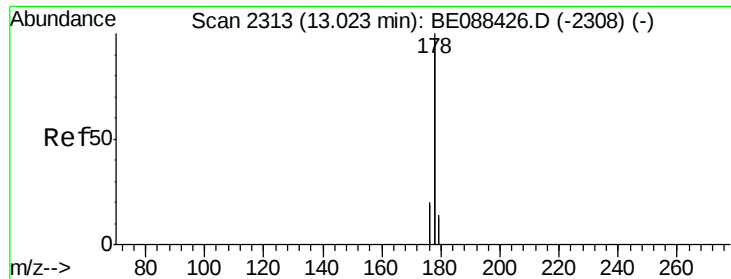
mohammad
11/4/2014 9:07:48 AM



#13
Phenanthrene
Concen: 1.13 ng
RT: 12.95 min Scan# 2304
Delta R.T. 0.01 min
Lab File: BE088463.D
Acq: 1 Nov 2014 22:03

Tgt Ion	Ratio	Resp Lower	Resp Upper
178	100		
176	19.3	15.4	23.2
179	17.1	12.8	19.2





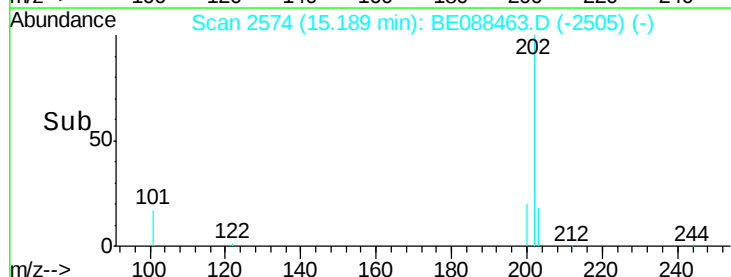
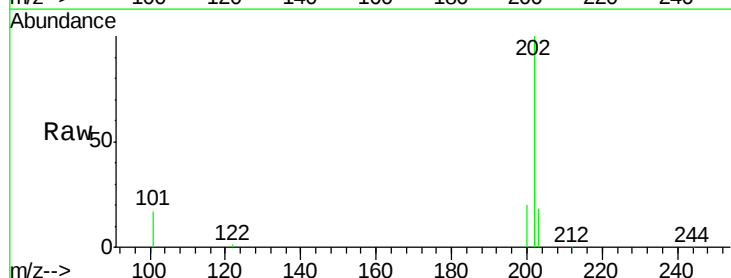
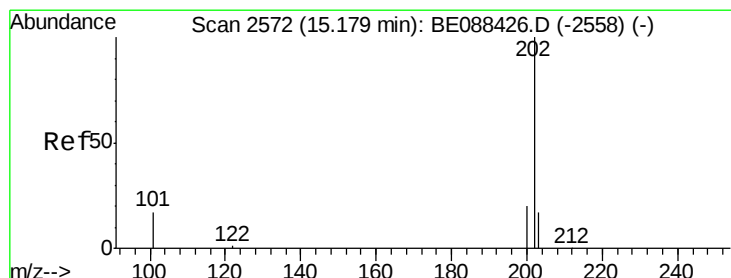
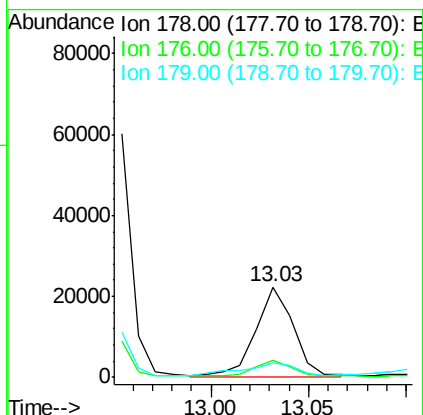
#14
 Anthracene
 Concen: 0.24 ng m
 RT: 13.03 min Scan# 2314
 Delta R.T. 0.01 min
 Lab File: BE088463.D
 Acq: 1 Nov 2014 22:03

Instrument :
 BNA_E
 ClientSampleId :
 YS19-SS28-1014RE

Tgt Ion	Ratio	Lower	Upper
178	100		
176	110.6	15.0	22.4#
179	97.9	12.5	18.7#

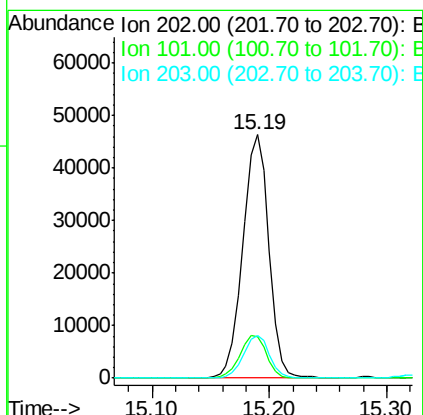
Manual Integrations
 APPROVED

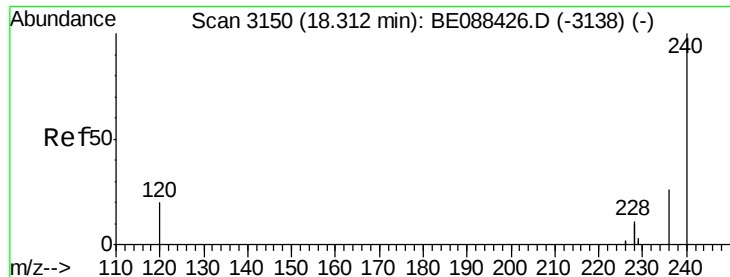
mohammad
 11/4/2014 9:07:48 AM



#15
 Fluoranthene
 Concen: 2.79 ng
 RT: 15.19 min Scan# 2574
 Delta R.T. 0.01 min
 Lab File: BE088463.D
 Acq: 1 Nov 2014 22:03

Tgt Ion	Ratio	Lower	Upper
202	100		
101	17.6	14.3	21.5
203	17.2	13.6	20.4





#16

Chrysene-d12

Concen: 5.00 ng

RT: 18.33 min Scan# 3153

Delta R.T. 0.02 min

Lab File: BE088463.D

Acq: 1 Nov 2014 22:03

Instrument :

BNA_E

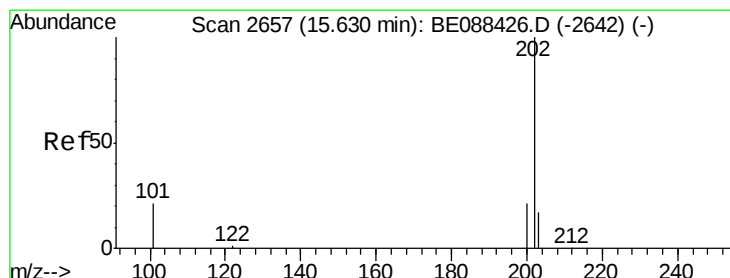
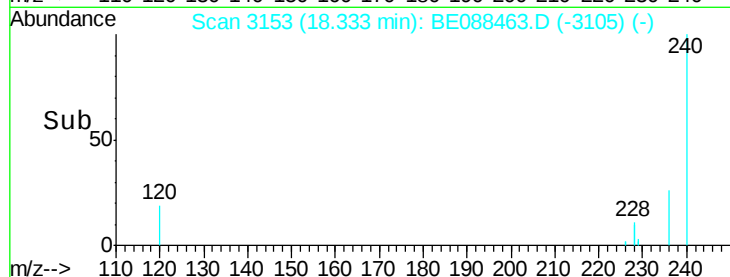
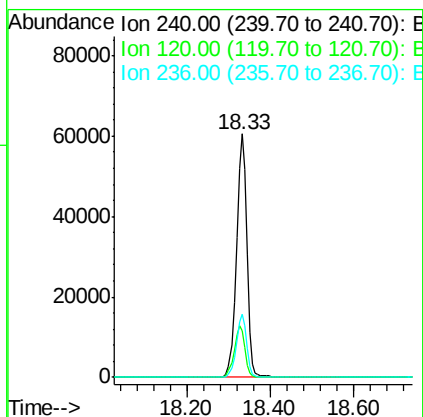
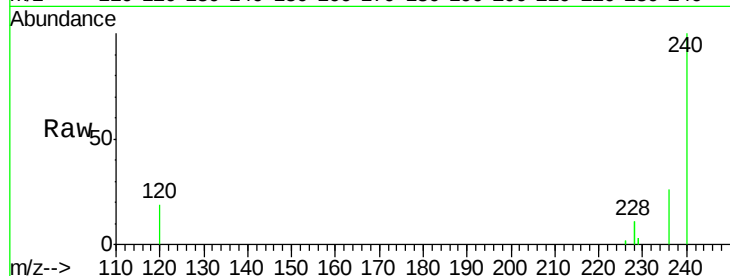
ClientSampleId :

YS19-SS28-1014RE

Tgt Ion:	240	Resp:	106681
Ion Ratio	Lower	Upper	
240	100		
120	18.9	16.4	24.6
236	25.8	20.5	30.7

Manual Integrations
APPROVED

mohammad
11/4/2014 9:07:48 AM



#17

Pyrene

Concen: 1.78 ng

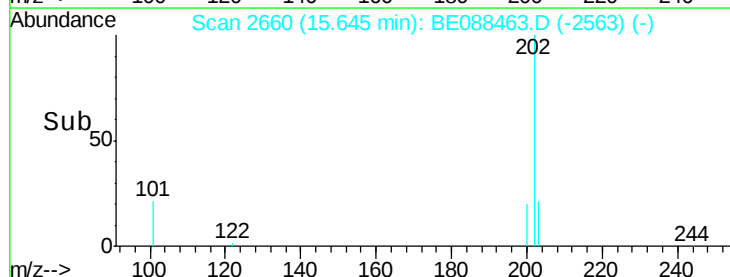
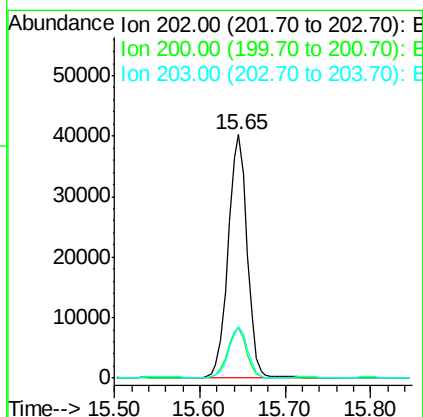
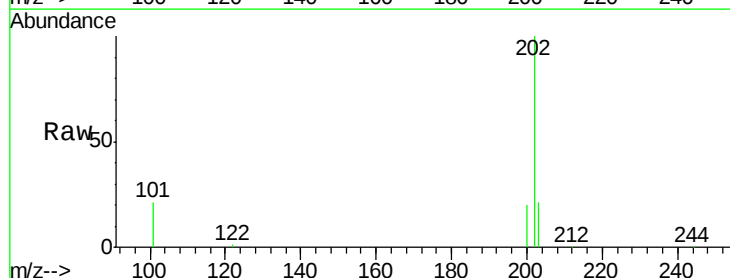
RT: 15.65 min Scan# 2660

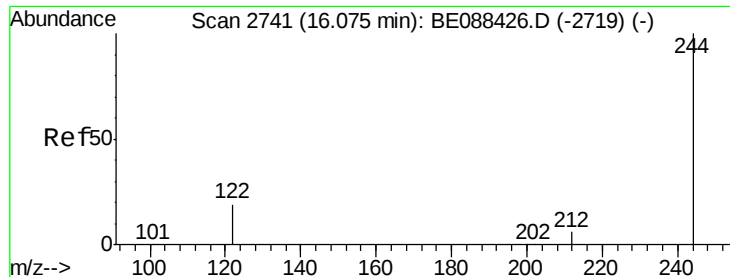
Delta R.T. 0.02 min

Lab File: BE088463.D

Acq: 1 Nov 2014 22:03

Tgt Ion:	202	Resp:	61982
Ion Ratio	Lower	Upper	
202	100		
200	20.3	16.1	24.1
203	20.6	13.8	20.8





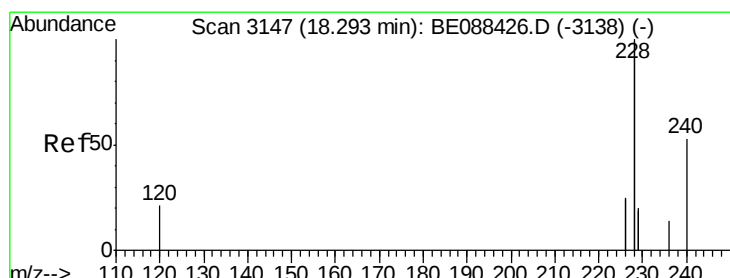
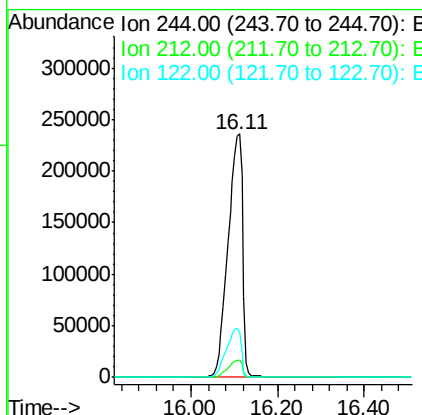
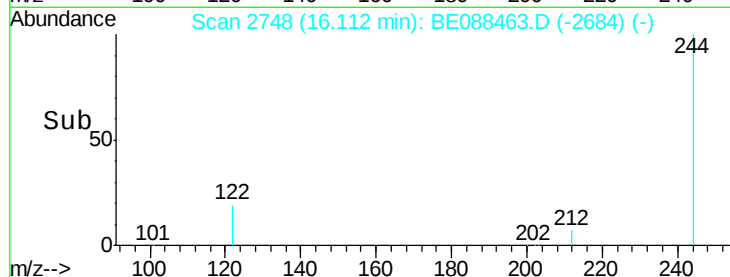
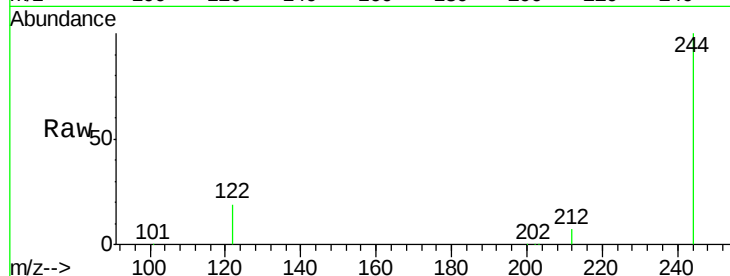
#18
 Terphenyl-d14
 Concen: 28.08 ng
 RT: 16.11 min Scan# 2748
 Delta R.T. 0.04 min
 Lab File: BE088463.D
 Acq: 1 Nov 2014 22:03

Instrument :
 BNA_E
 ClientSampleId :
 YS19-SS28-1014RE

Tgt Ion	Ratio	Lower	Upper
244	100		
212	7.1	5.5	8.3
122	18.6	15.6	23.4

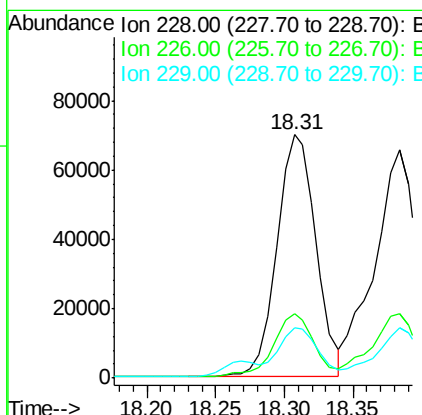
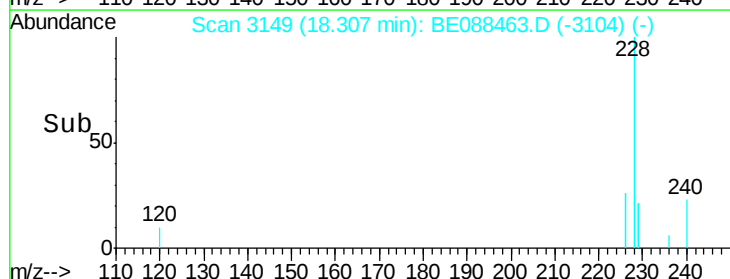
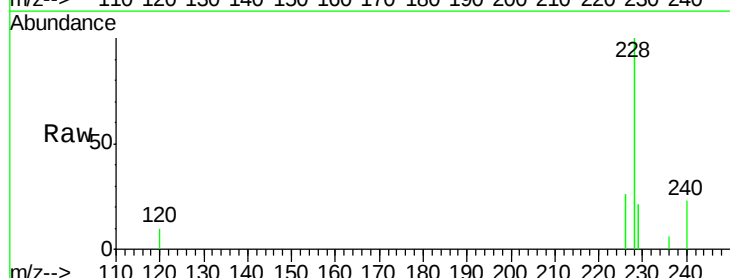
Manual Integrations
 APPROVED

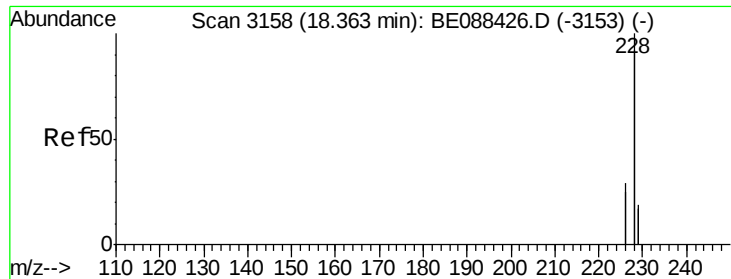
mohammad
 11/4/2014 9:07:48 AM



#19
 Benzo(a)anthracene
 Concen: 1.38 ng
 RT: 18.31 min Scan# 3149
 Delta R.T. 0.01 min
 Lab File: BE088463.D
 Acq: 1 Nov 2014 22:03

Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.2	19.8	29.6
229	20.7	16.0	24.0





#20

Chrysene

Concen: 1.43 ng

RT: 18.38 min Scan# 3161

Delta R.T. 0.02 min

Lab File: BE088463.D

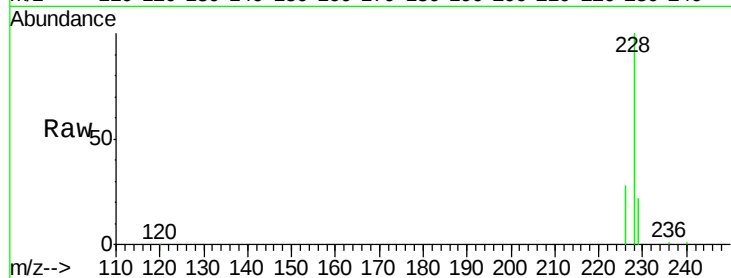
Acq: 1 Nov 2014 22:03

Instrument :

BNA_E

ClientSampleId :

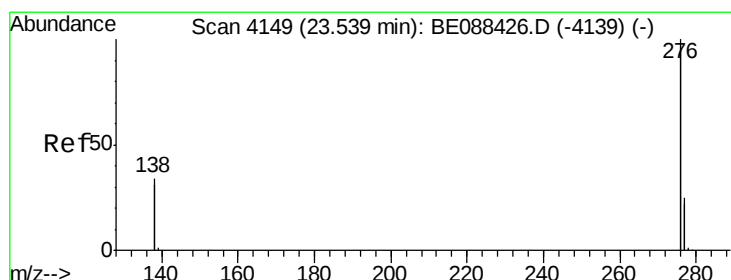
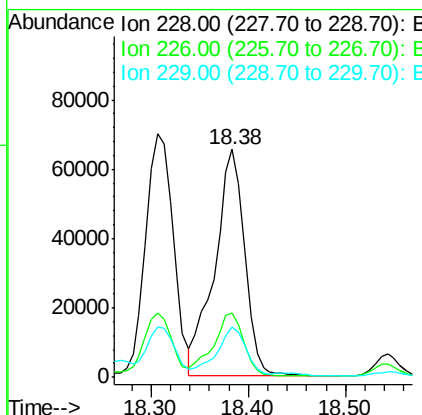
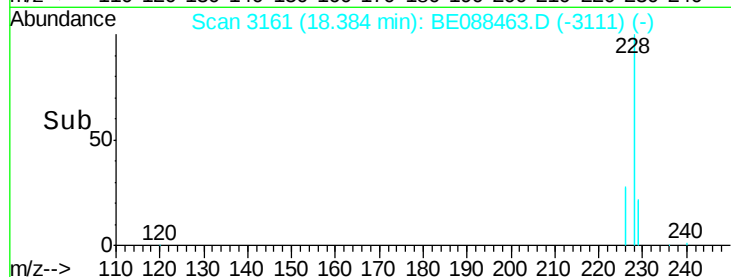
YS19-SS28-1014RE



Tgt Ion:	228	Resp:	141031
Ion Ratio	Lower	Upper	
228	100		
226	28.5	23.6	35.4
229	22.1	15.4	23.2

Manual Integrations
APPROVED

mohammad
11/4/2014 9:07:48 AM



#21

Indeno(1,2,3-cd)pyrene

Concen: 1.01 ng m

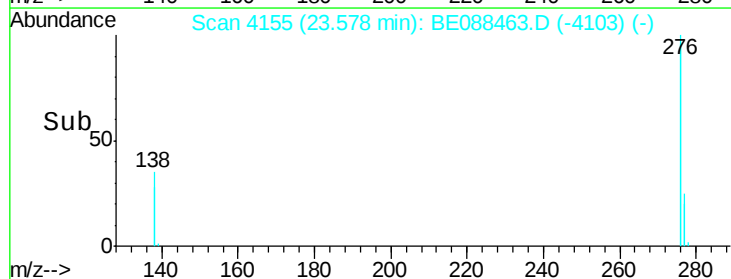
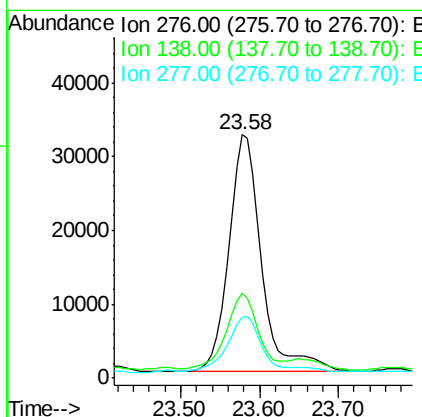
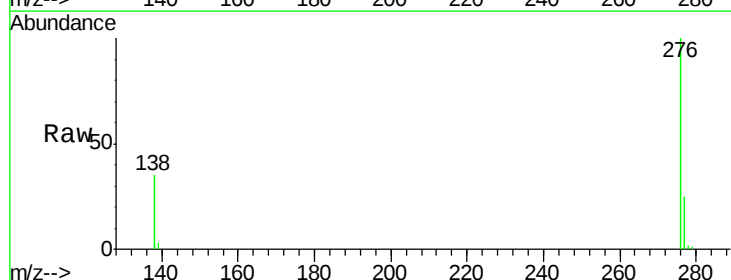
RT: 23.58 min Scan# 4155

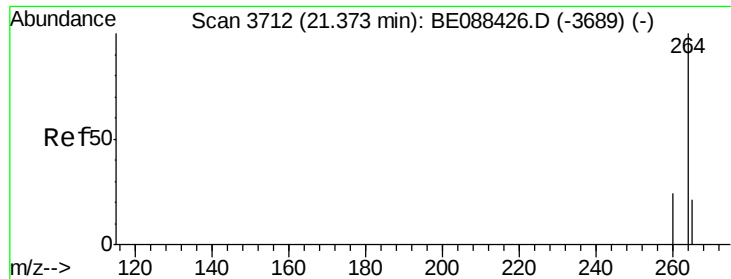
Delta R.T. 0.04 min

Lab File: BE088463.D

Acq: 1 Nov 2014 22:03

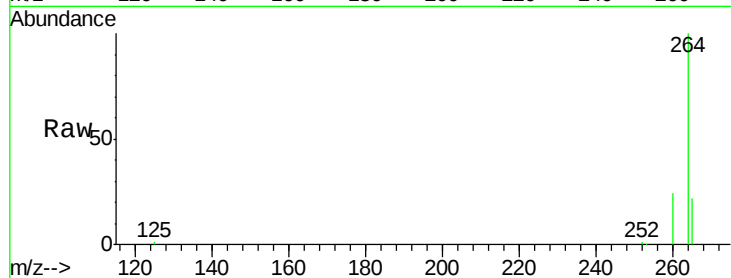
Tgt Ion:	276	Resp:	92696
Ion Ratio	Lower	Upper	
276	100		
138	30.2	20.2	30.2
277	23.1	14.8	22.2#





#22
Perylene-d12
Concen: 5.00 ng
RT: 21.40 min Scan# 3718
Delta R.T. 0.03 min
Lab File: BE088463.D
Acq: 1 Nov 2014 22:03

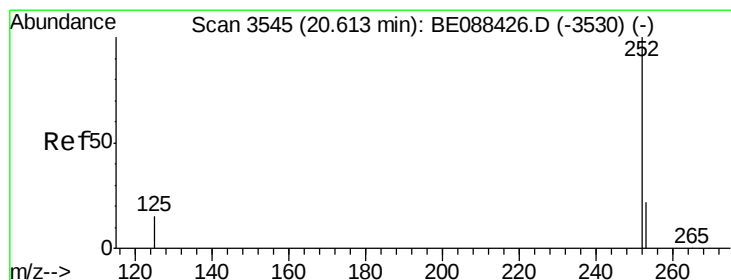
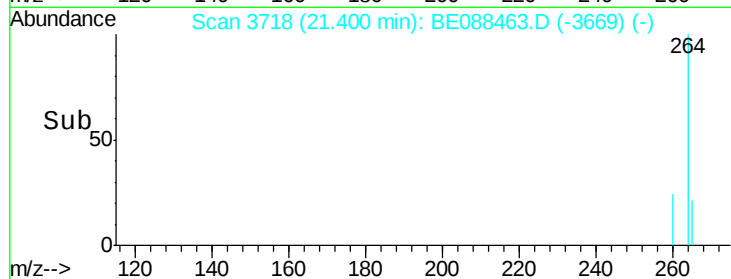
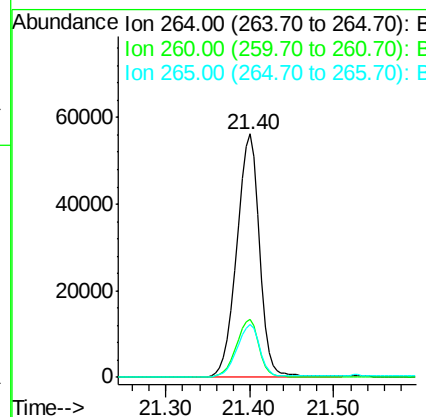
Instrument :
BNA_E
ClientSampleId :
YS19-SS28-1014RE



Tgt Ion	Ratio	Resp	Lower	Upper
264	100	104911		
260	24.0	18.9	28.3	
265	21.7	17.2	25.8	

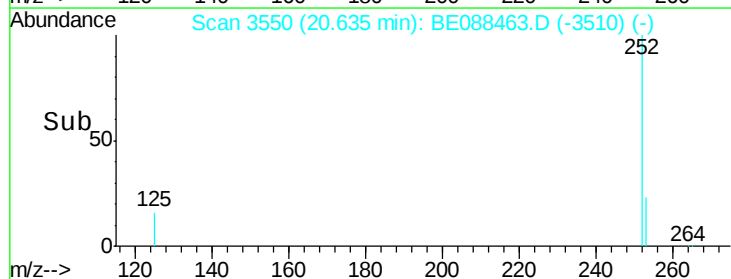
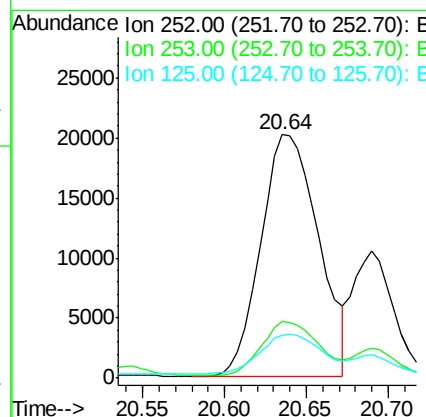
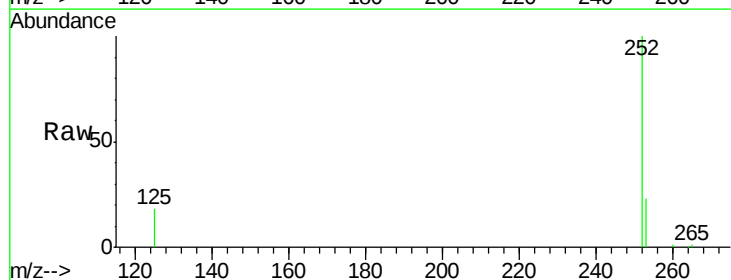
Manual Integrations
APPROVED

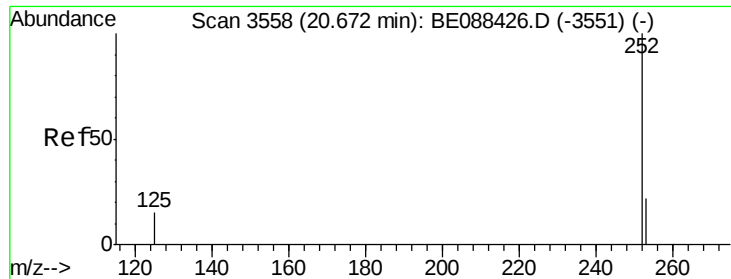
mohammad
11/4/2014 9:07:48 AM



#23
Benzo(b)fluoranthene
Concen: 2.14 ng
RT: 20.64 min Scan# 3550
Delta R.T. 0.02 min
Lab File: BE088463.D
Acq: 1 Nov 2014 22:03

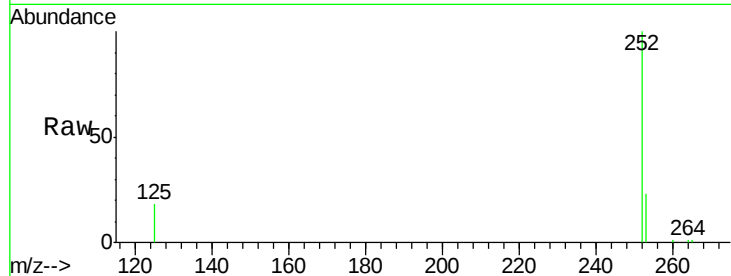
Tgt Ion	Ratio	Resp	Lower	Upper
252	100	49329		
253	23.1	17.8	26.8	
125	17.5	12.3	18.5	





#24
Benzo(k)fluoranthene
Concen: 0.74 ng m
RT: 20.69 min Scan# 3562
Delta R.T. 0.02 min
Lab File: BE088463.D
Acq: 1 Nov 2014 22:03

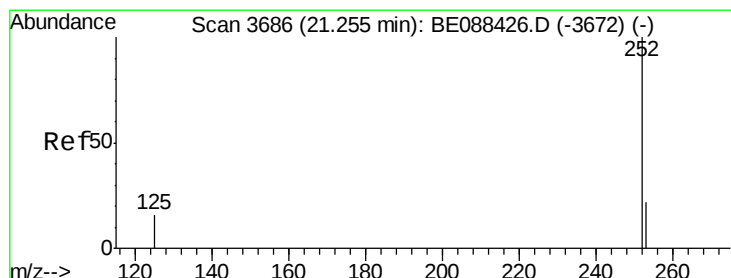
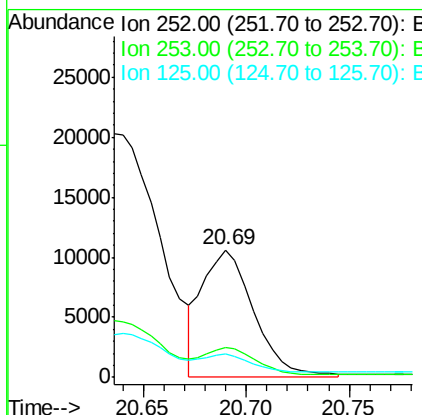
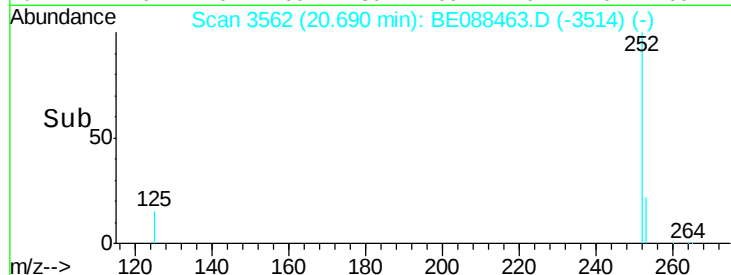
Instrument :
BNA_E
ClientSampleId :
YS19-SS28-1014RE



Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.5	17.8	26.8
125	18.4	12.2	18.4#

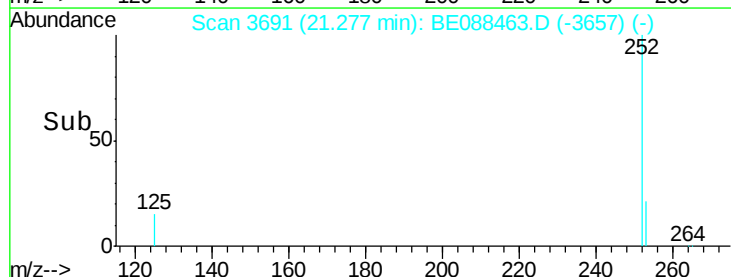
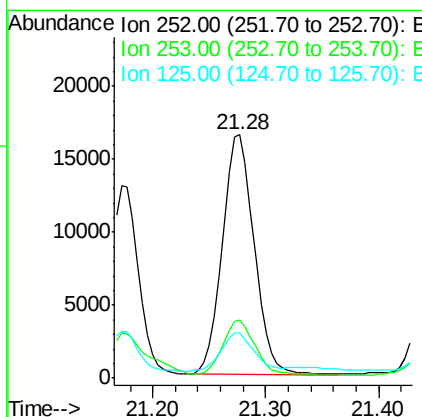
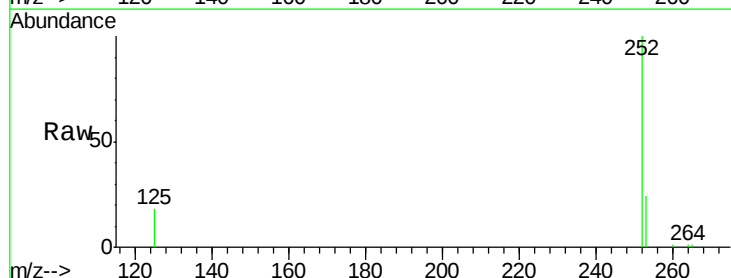
Manual Integrations
APPROVED

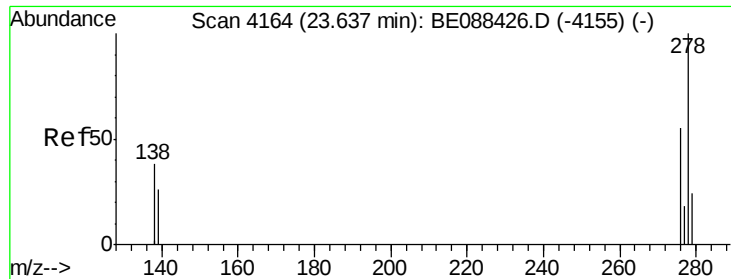
mohammad
11/4/2014 9:07:48 AM



#25
Benzo(a)pyrene
Concen: 1.43 ng
RT: 21.28 min Scan# 3691
Delta R.T. 0.02 min
Lab File: BE088463.D
Acq: 1 Nov 2014 22:03

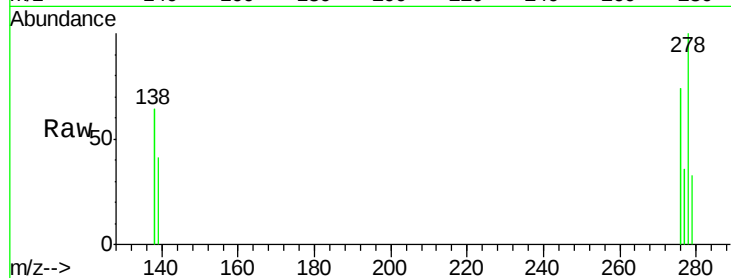
Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.8	18.2	27.4
125	18.4	13.7	20.5





#26
Dibenzo(a,h)anthracene
Concen: 0.25 ng
RT: 23.66 min Scan# 4168
Delta R.T. 0.03 min
Lab File: BE088463.D
Acq: 1 Nov 2014 22:03

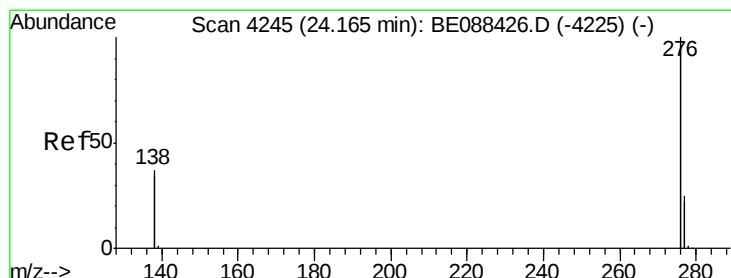
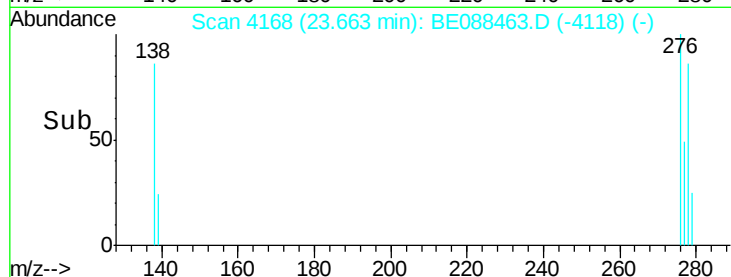
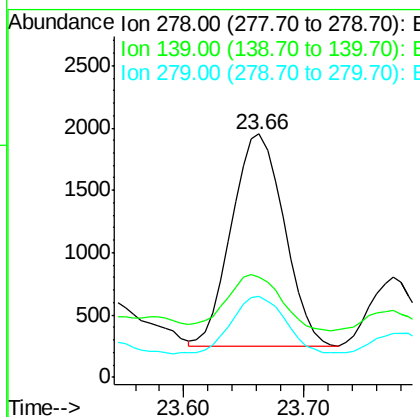
Instrument :
BNA_E
ClientSampleId :
YS19-SS28-1014RE



Tgt Ion	Ratio	Lower	Upper
278	100		
139	41.2	22.1	33.1#
279	33.5	19.7	29.5#

Manual Integrations
APPROVED

mohammad
11/4/2014 9:07:48 AM



#27
Benzo(g,h,i)perylene
Concen: 0.92 ng
RT: 24.21 min Scan# 4252
Delta R.T. 0.05 min
Lab File: BE088463.D
Acq: 1 Nov 2014 22:03

Tgt Ion	Ratio	Lower	Upper
276	100		
277	25.6	19.8	29.6
138	36.8	29.3	43.9

