

Data Path : Z:\HPCHEM1\BNA E\DATA\BE021716\
 Data File : BE091407.D
 Acq On : 17 Feb 2016 16:54
 Operator : UM/IZ
 Sample : H1445-01
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 LIBERTY-SF-005

Manual Integrations
 APPROVED

UMANGI
 2/18/2016 9:52:59 AM

Quant Time: Feb 18 00:14:44 2016
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-SIM-BE020216.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Wed Feb 03 00:27:53 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.87	152	45537	5.00	ng	0.00
4) Naphthalene-d8	9.55	136	227548	5.00	ng	0.00
8) Acenaphthene-d10	13.35	164	146988	5.00	ng	0.00
14) Phenanthrene-d10	16.08	188	323915	5.00	ng	-0.01
18) Chrysene-d12	20.21	240	349294	5.00	ng	0.00
24) Perylene-d12	22.09	264	339359	5.00	ng	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.90	112	65732	6.13	ng	-0.04
3) Phenol-d6	6.53	99	109302	7.16	ng	-0.04
5) Nitrobenzene-d5	8.16	82	57856	3.90	ng	0.00
9) 2,4,6-Tribromophenol	14.89	330	25973	3.80	ng	-0.01
10) 2-Fluorobiphenyl	11.99	172	168178	4.40	ng	-0.02
20) Terphenyl-d14	18.60	244	239134	4.63	ng	-0.02
Target Compounds						Qvalue
6) Naphthalene	9.59	128	43490	0.85	ng	99
7) 2-Methylnaphthalene	11.10	142	91690	2.92	ng	100
11) Acenaphthylene	13.09	152	684773	2.75	ng	100
12) Acenaphthene	13.41	154	148747	3.69	ng	97
13) Fluorene	14.39	166	497204	9.54	ng	99
15) Phenanthrene	16.12	178	2951313	34.70	ng	97
16) Anthracene	16.20	178	849153m	11.91	ng	
17) Fluoranthene	18.07	202	2481474	27.27	ng	98
19) Pyrene	18.46	202	2229859	29.46	ng	97
21) Benzo(a)anthracene	20.18	228	894215	11.26	ng	95
22) Chrysene	20.24	228	903470	10.52	ng	96
23) Indeno(1,2,3-cd)pyrene	23.68	276	344687	4.36	ng	99
25) Benzo(b)fluoranthene	21.54	252	461769	5.45	ng	# 96
26) Benzo(k)fluoranthene	21.56	252	607238	7.16	ng	# 95
27) Benzo(a)pyrene	21.99	252	636713	8.04	ng	# 96
28) Dibenzo(a,h)anthracene	23.63	278	136278	1.92	ng	# 91
29) Benzo(g,h,i)perylene	24.23	276	337551	4.03	ng	98

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

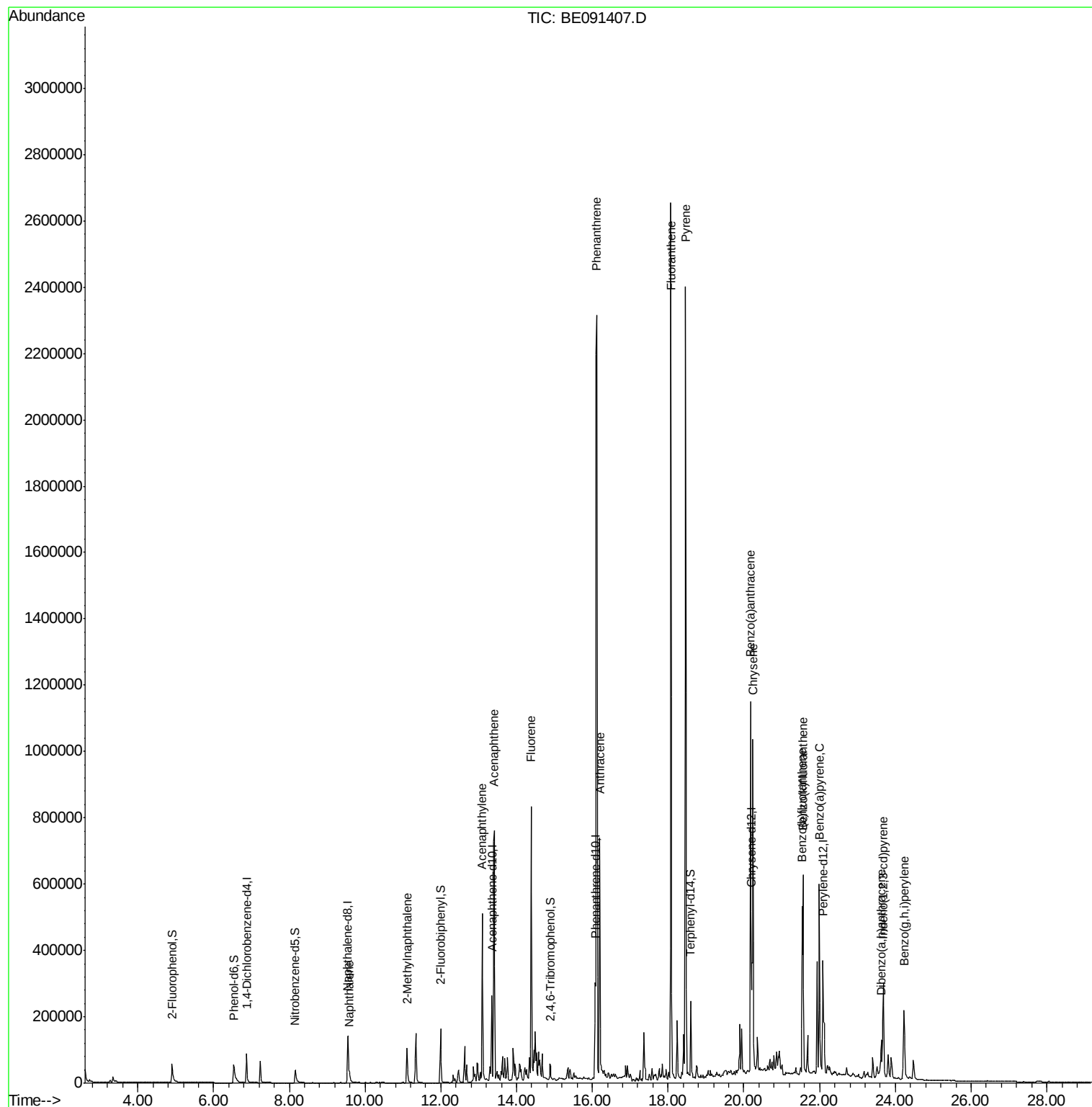
Data Path : Z:\HPCHEM1\BNA E\DATA\BE021716\
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ALS Vial : 5 Sample Multiplier: 1

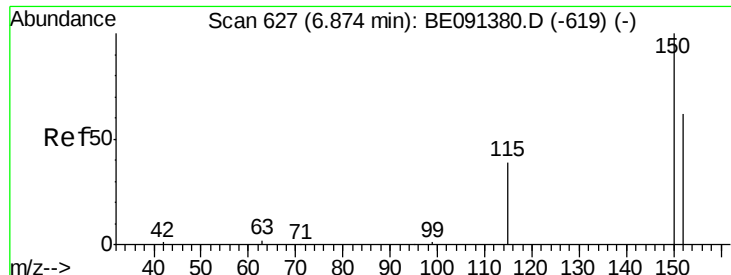
Instrument :
BNA_E
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LIBERTY-SF-005

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#1

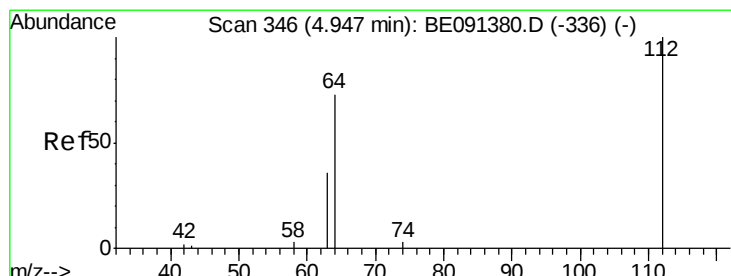
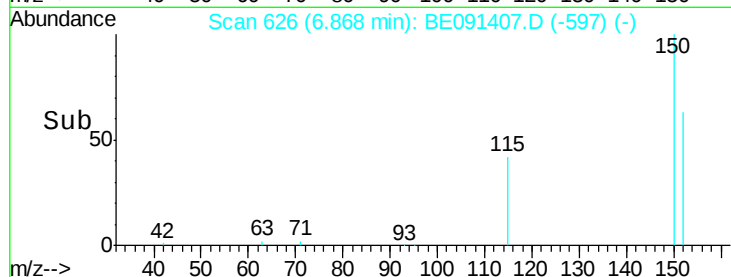
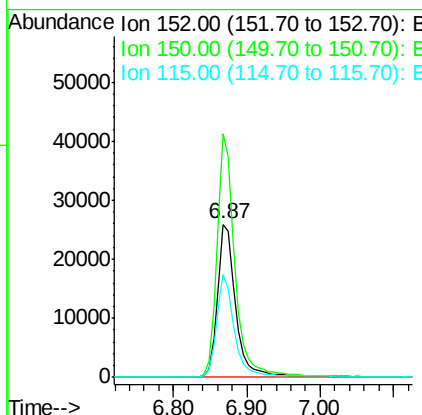
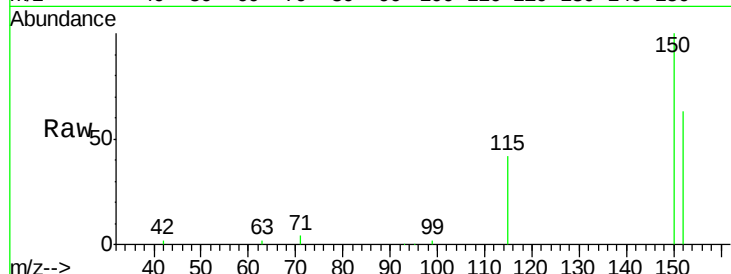
1,4-Dichlorobenzene-d4
Concen: 5.00 ng
RT: 6.87 min Scan# 626
Delta R.T. -0.01 min
Lab File: BE091407.D
Acq: 17 Feb 2016 16:54

Instrument :
BNA_E
ClientSampleId :
LIBERTY-SF-005

Tot Ion	Ratio	Lower	Upper
152	100		
150	159.0	128.9	193.3
115	67.2	50.9	76.3

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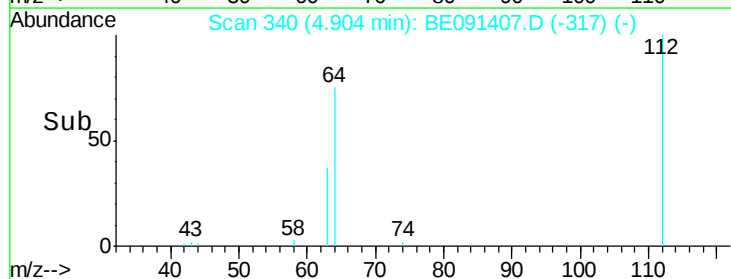
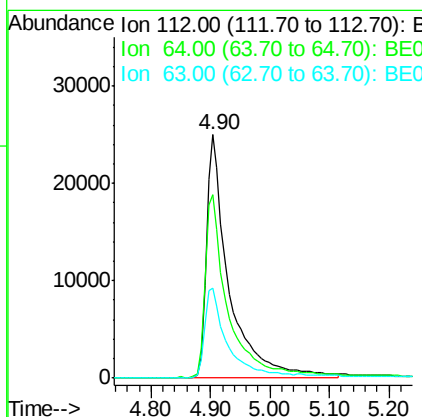
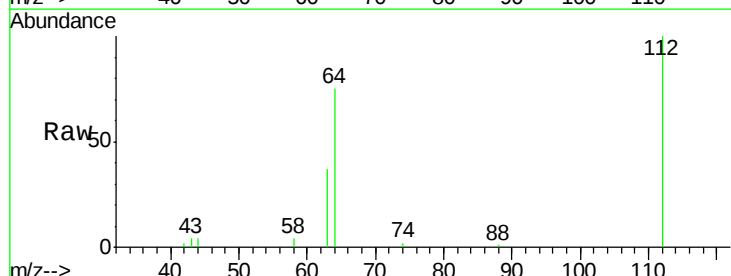
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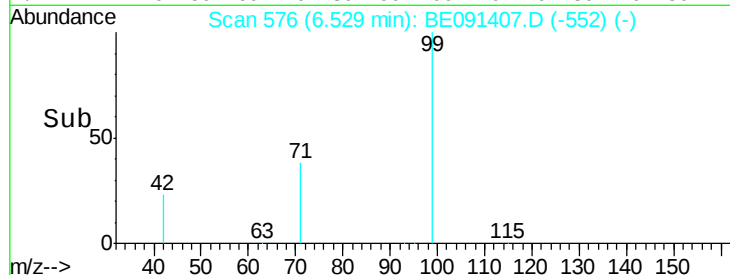
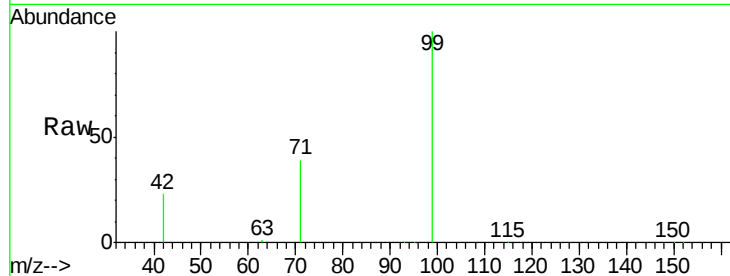
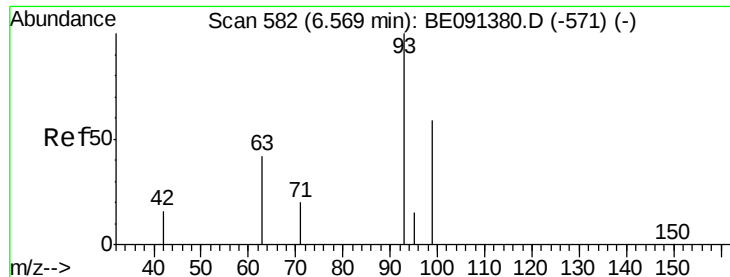


#2

2-Fluorophenol
Concen: 6.13 ng
RT: 4.90 min Scan# 340
Delta R.T. -0.04 min
Lab File: BE091407.D
Acq: 17 Feb 2016 16:54

Tgt Ion	Ratio	Lower	Upper
112	100		
64	76.2	60.5	90.7
63	38.4	29.8	44.8





#3

Phenol-d6

Concen: 7.16 ng

RT: 6.53 min Scan# 576

Delta R.T. -0.04 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tot Ion:	99	Resp:	109302
Ion Ratio	Lower	Upper	
99	100		
42	18.2	13.3	19.9
71	37.8	25.6	38.4

Instrument :

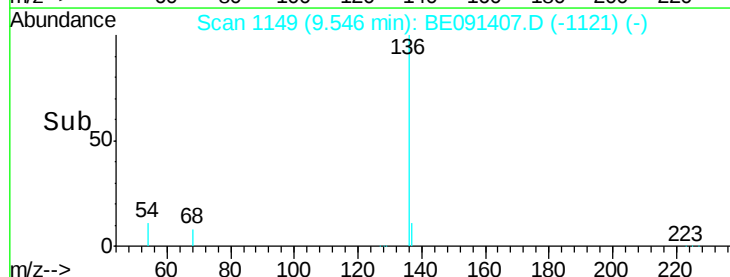
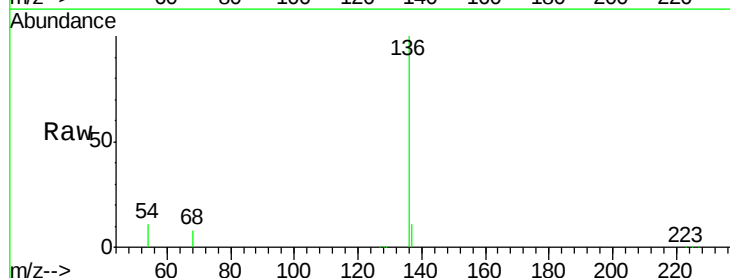
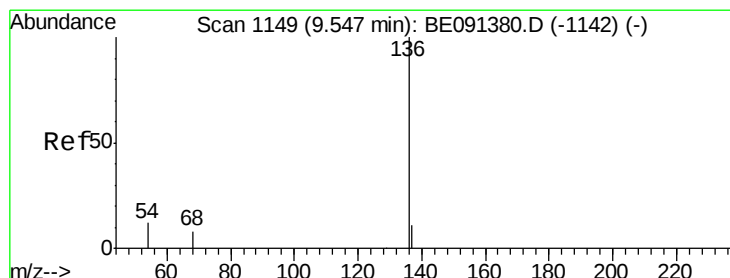
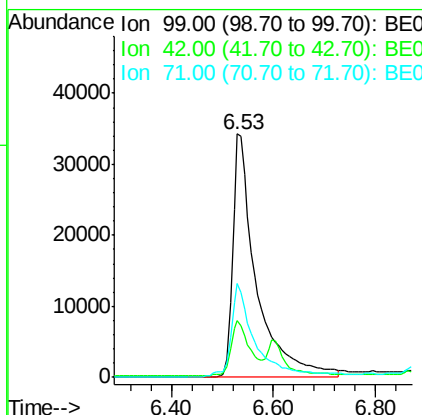
BNA_E

ClientSampleId :

LIBERTY-SF-005

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#4

Naphthalene-d8

Concen: 5.00 ng

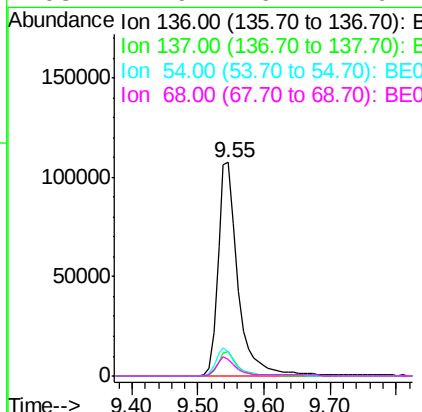
RT: 9.55 min Scan# 1149

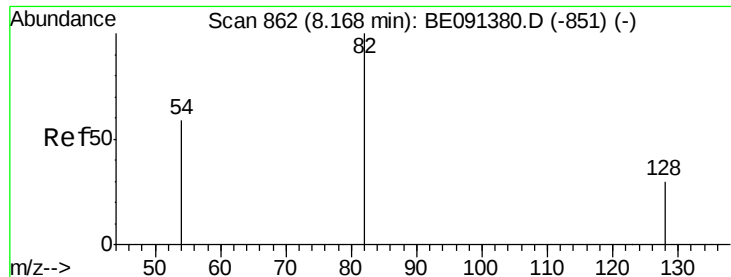
Delta R.T. -0.00 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tgt Ion:	136	Resp:	227548
Ion Ratio	Lower	Upper	
136	100		
137	11.2	8.7	13.1
54	11.1	9.3	13.9
68	7.9	6.7	10.1





#5

Nitrobenzene-d5

Concen: 3.90 ng

RT: 8.16 min Scan# 860

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

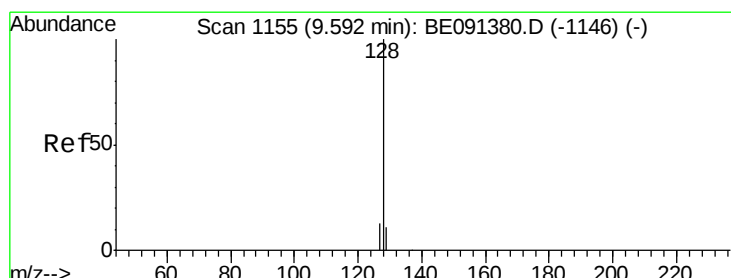
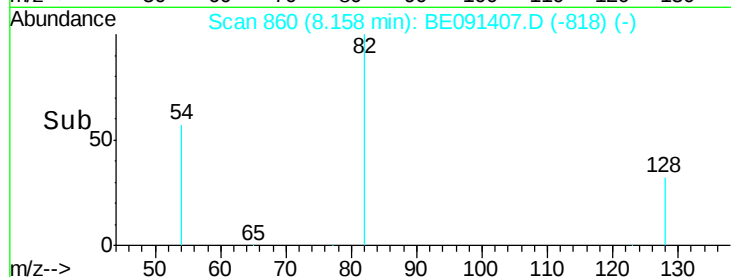
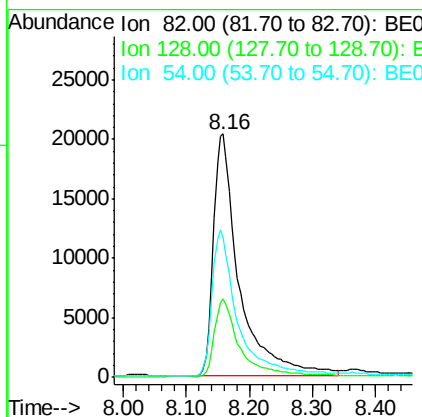
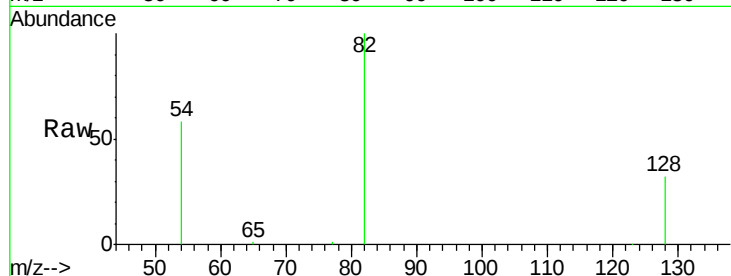
ClientSampleId :

LIBERTY-SF-005

Tot Ion:	82	Resp:	57856
Ion Ratio	Lower	Upper	
82	100		
128	32.4	25.0	37.4
54	57.5	48.1	72.1

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#6

Naphthalene

Concen: 0.85 ng

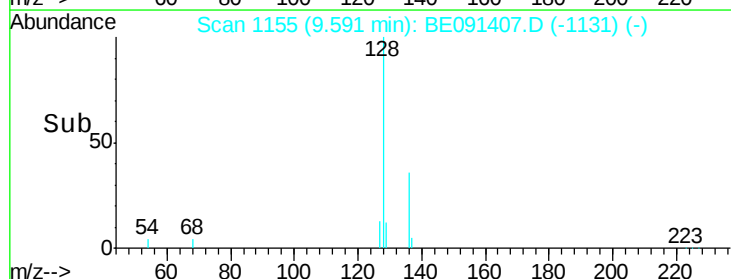
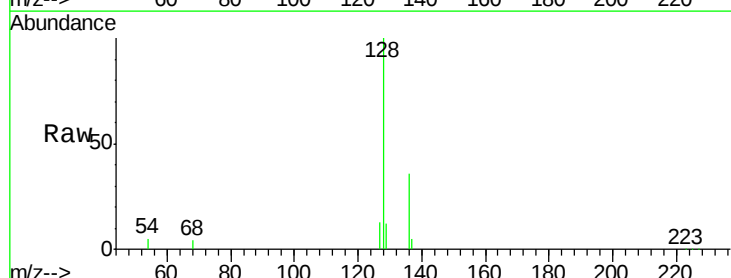
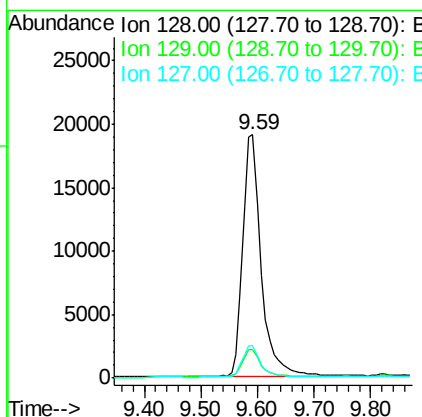
RT: 9.59 min Scan# 1155

Delta R.T. -0.00 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tgt Ion:	128	Resp:	43490
Ion Ratio	Lower	Upper	
128	100		
129	11.9	9.1	13.7
127	13.2	10.5	15.7





#7

2-Methylnaphthalene

Concen: 2.92 ng

RT: 11.10 min Scan# 1404

Delta R.T. -0.02 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

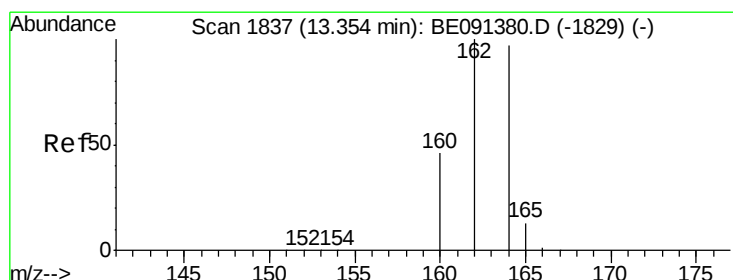
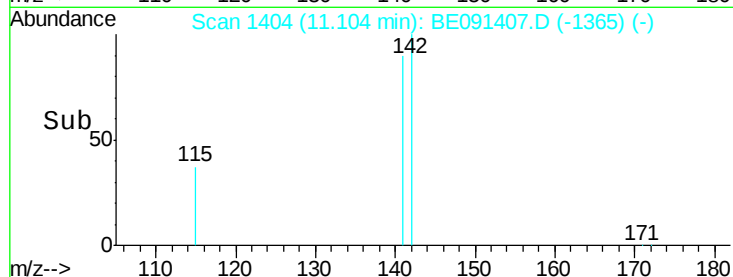
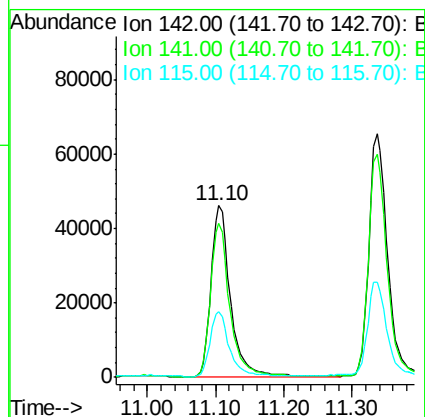
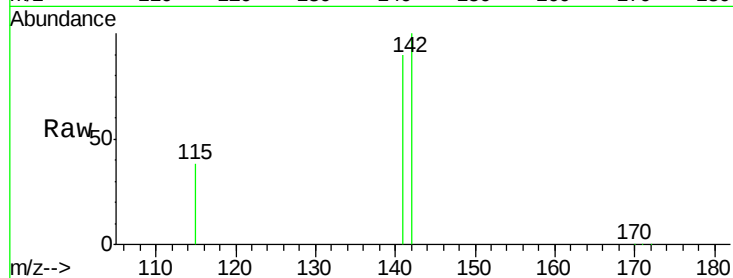
ClientSampleId :

LIBERTY-SF-005

Tot Ion:	142	Resp:	91690
Ion Ratio	Lower	Upper	
142	100		
141	89.8	72.3	108.5
115	38.1	30.5	45.7

Manual Integrations
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#8

Acenaphthene-d10

Concen: 5.00 ng

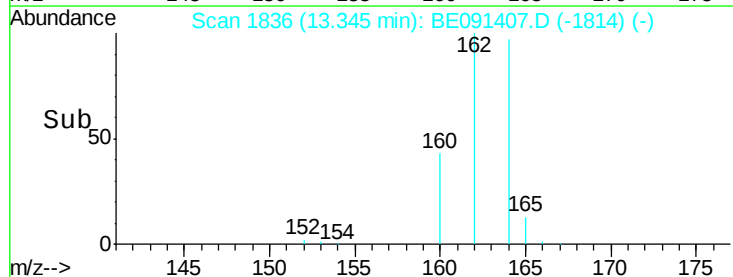
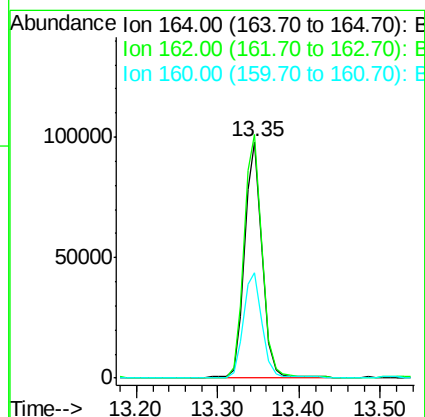
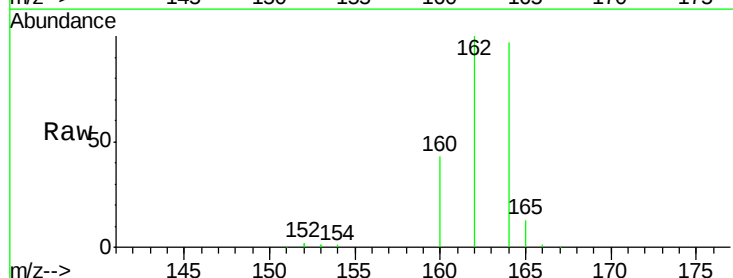
RT: 13.35 min Scan# 1836

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tgt Ion:	164	Resp:	146988
Ion Ratio	Lower	Upper	
164	100		
162	102.9	82.2	123.2
160	44.6	37.8	56.8





#9

2,4,6-Tribromophenol

Concen: 3.80 ng

RT: 14.89 min Scan# 2002

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

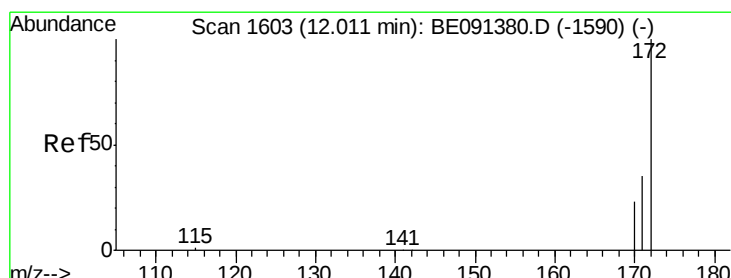
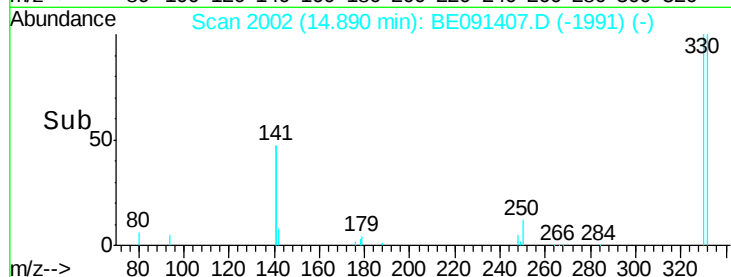
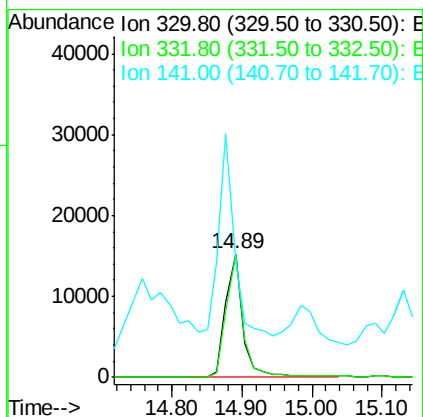
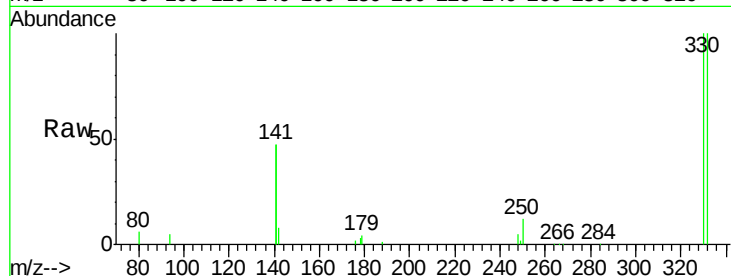
ClientSampleId :

LIBERTY-SF-005

Tot Ion	Ratio	Lower	Upper
330	100		
332	98.1	78.8	118.2
141	150.0	105.1	157.7

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#10

2-Fluorobiphenyl

Concen: 4.40 ng

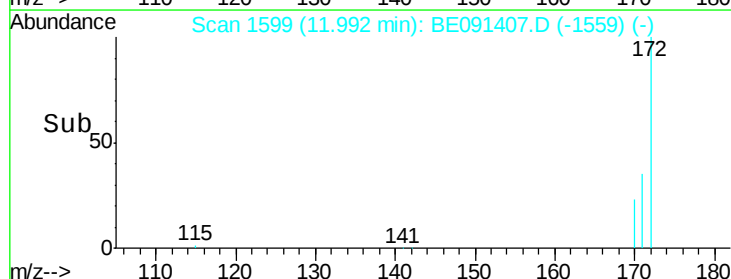
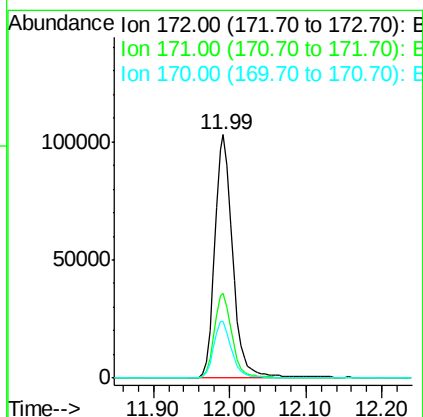
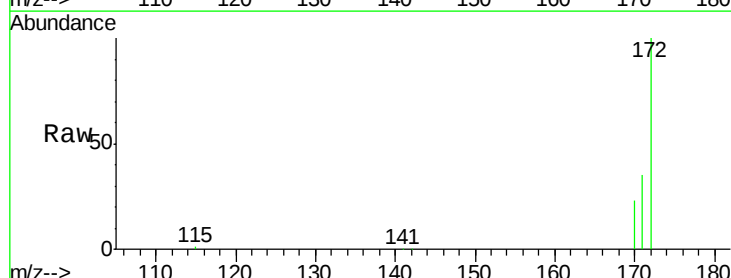
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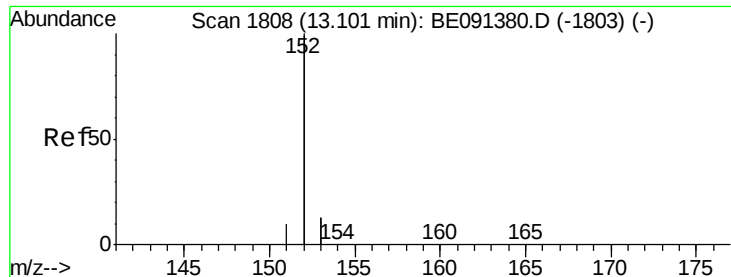
Delta R.T. -0.02 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tgt Ion	Ratio	Lower	Upper
172	100		
171	34.9	27.8	41.8
170	23.2	18.6	28.0





#11

Acenaphthylene

Concen: 2.75 ng

RT: 13.09 min Scan# 1807

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

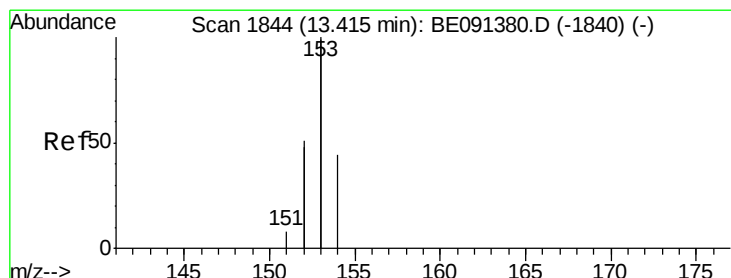
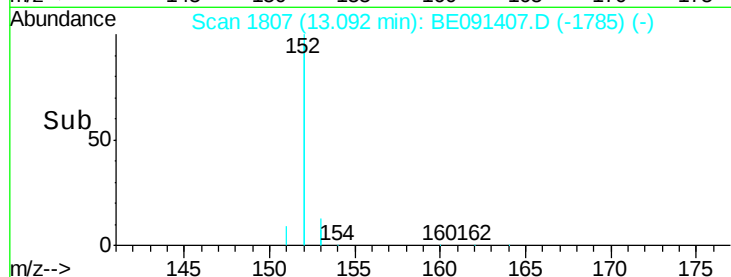
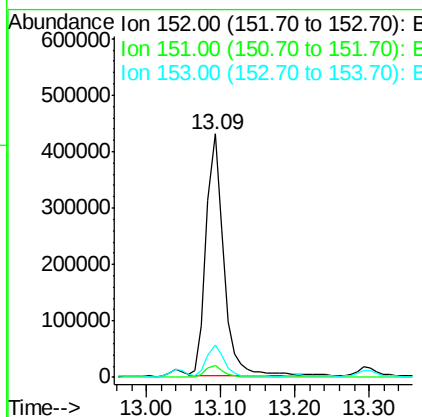
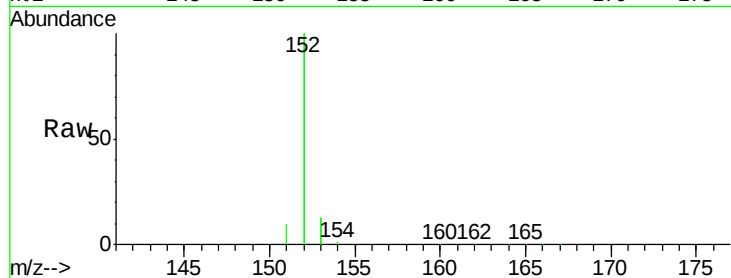
ClientSampleId :

LIBERTY-SF-005

Tot Ion:	152	Resp:	684773
Ion Ratio	Lower	Upper	
152	100		
151	4.8	3.8	5.8
153	12.5	10.2	15.4

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#12

Acenaphthene

Concen: 3.69 ng

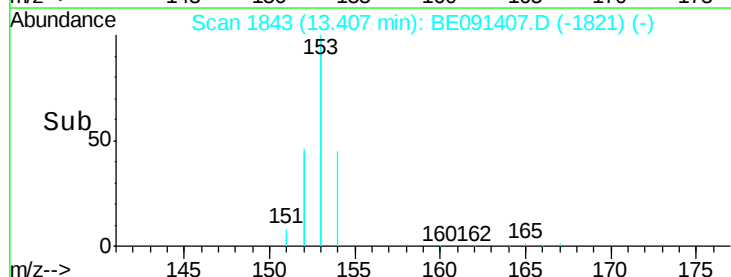
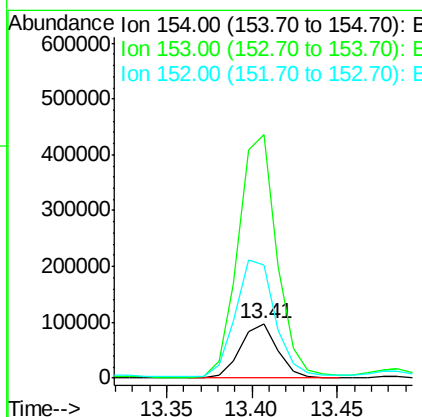
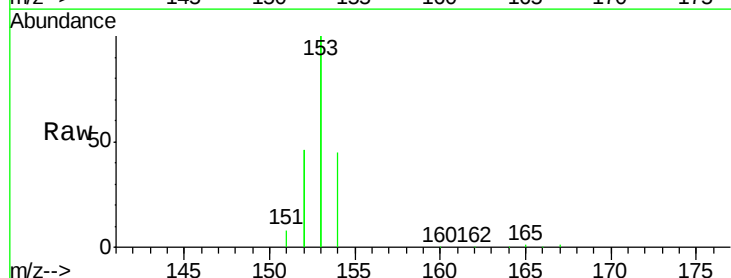
RT: 13.41 min Scan# 1843

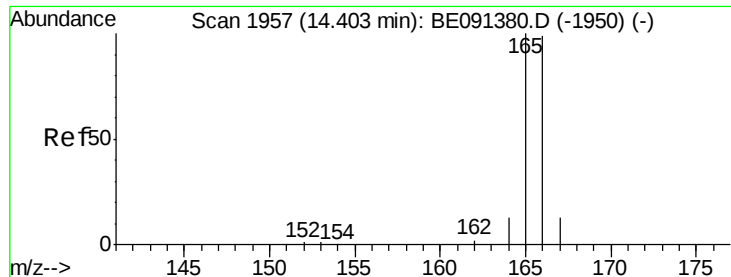
Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tgt Ion:	154	Resp:	148747
Ion Ratio	Lower	Upper	
154	100		
153	463.9	369.8	554.8
152	228.8	194.4	291.6





#13

Fluorene

Concen: 9.54 ng

RT: 14.39 min Scan# 1955

Delta R.T. -0.02 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

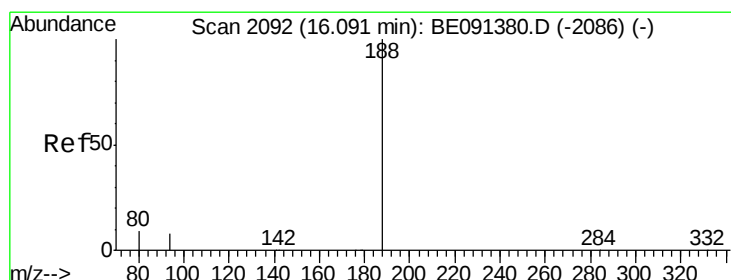
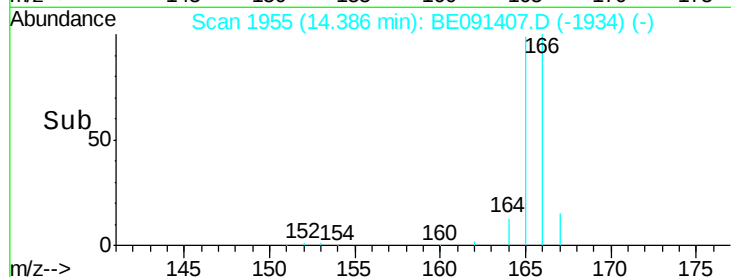
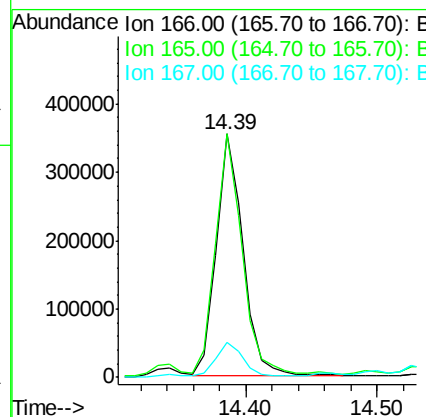
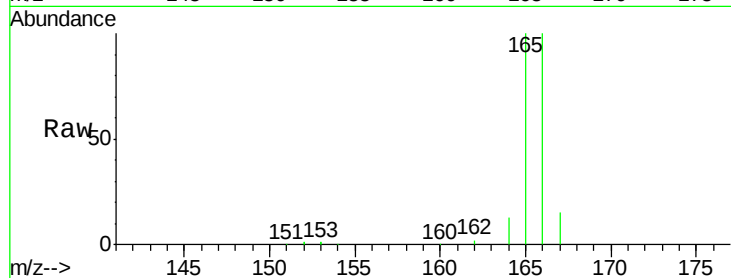
ClientSampleId :

LIBERTY-SF-005

Tot Ion:	166	Resp:	497204
Ion Ratio	Lower	Upper	
166	100		
165	98.5	79.3	118.9
167	14.2	10.6	16.0

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#14

Phenanthrene-d10

Concen: 5.00 ng

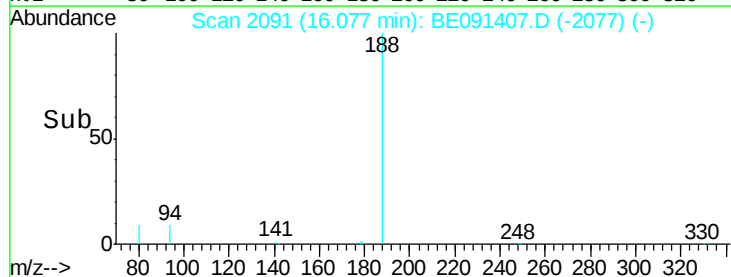
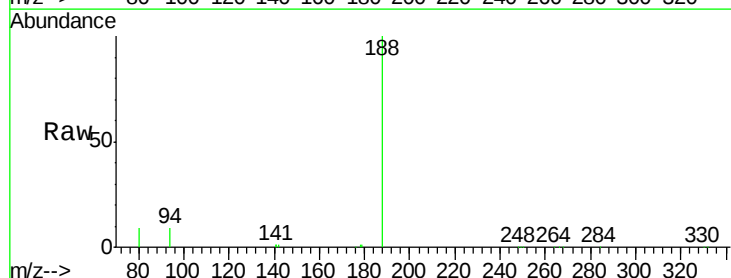
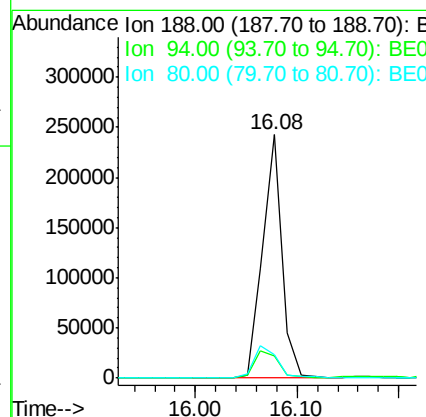
RT: 16.08 min Scan# 2091

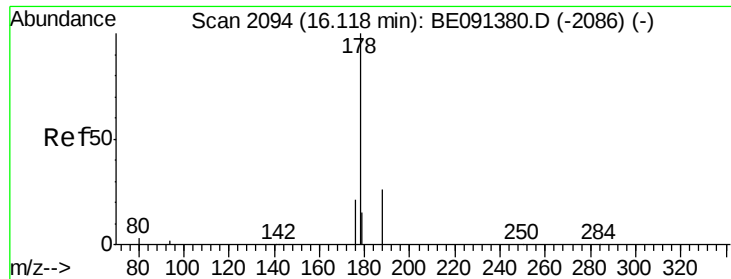
Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tgt Ion:	188	Resp:	323915
Ion Ratio	Lower	Upper	
188	100		
94	9.2	6.6	10.0
80	9.5	7.0	10.6





#15

Phenanthrene

Concen: 34.70 ng

RT: 16.12 min Scan# 2094

Delta R.T. -0.00 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

ClientSampleId :

LIBERTY-SF-005

Tot Ion:178 Resp: 2951313

Ion	Ratio	Lower	Upper
178	100		
176	21.0	15.4	23.2
179	16.8	12.7	19.1

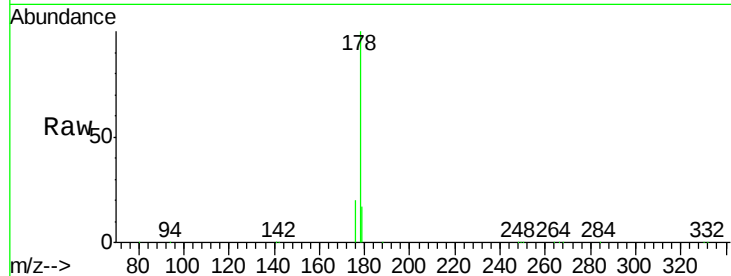
178 100

176 21.0 15.4 23.2

179 16.8 12.7 19.1

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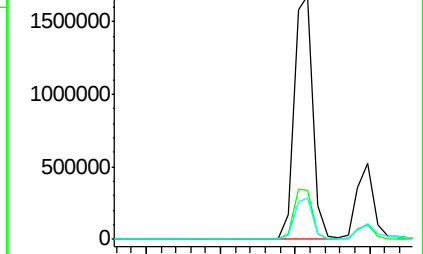
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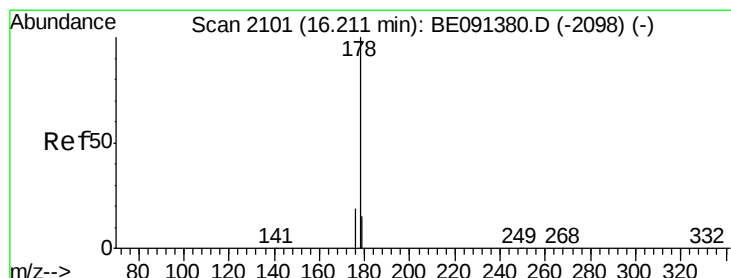
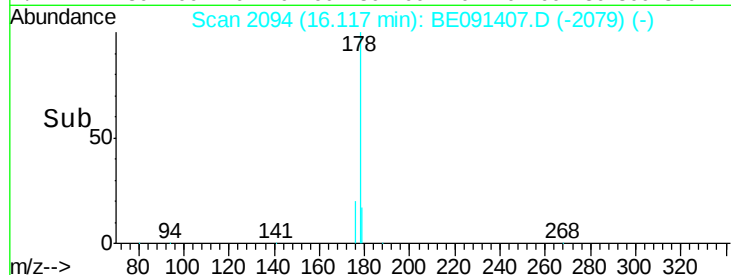
Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



Time-->



#16

Anthracene

Concen: 11.91 ng m

RT: 16.20 min Scan# 2100

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

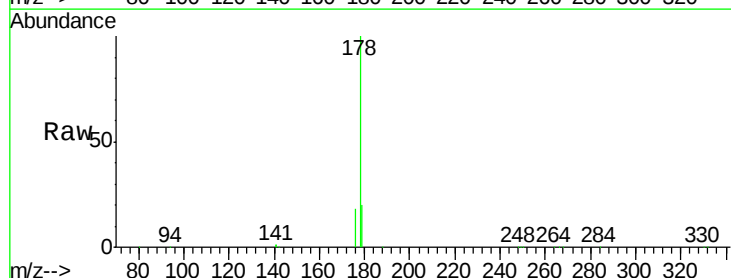
Tgt Ion:178 Resp: 849153

Ion	Ratio	Lower	Upper
178	100		
176	72.8	14.8	22.2#
179	57.4	12.1	18.1#

178 100

176 72.8 14.8 22.2#

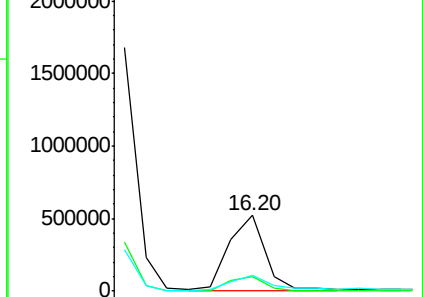
179 57.4 12.1 18.1#



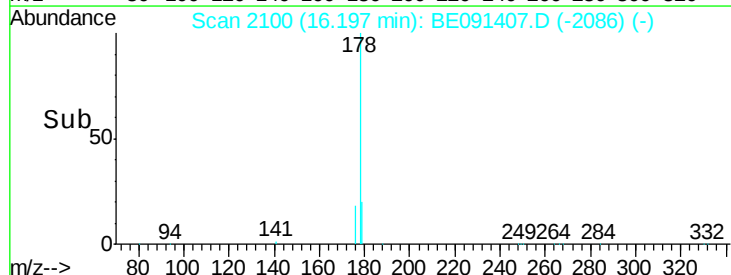
Abundance Ion 178.00 (177.70 to 178.70): E

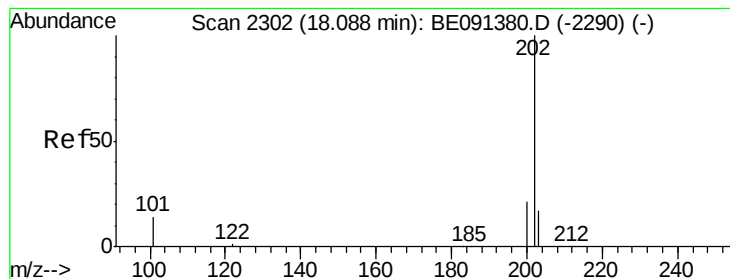
Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



Time-->





#17

Fluoranthene

Concen: 27.27 ng

RT: 18.07 min Scan# 2300

Delta R.T. -0.02 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

ClientSampleId :

LIBERTY-SF-005

Tot Ion:202 Resp: 2481474

Ion Ratio Lower Upper

202 100

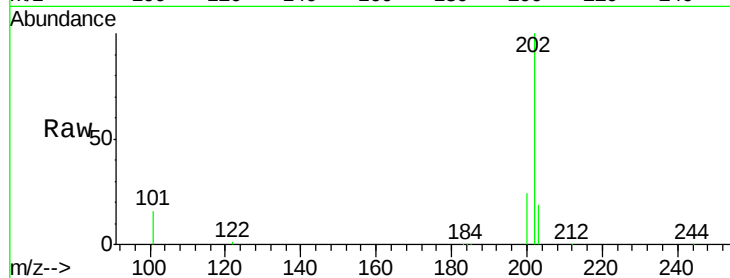
101 14.0 10.5 15.7

203 18.5 13.9 20.9

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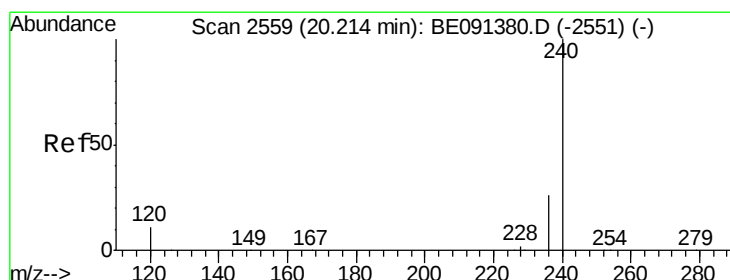
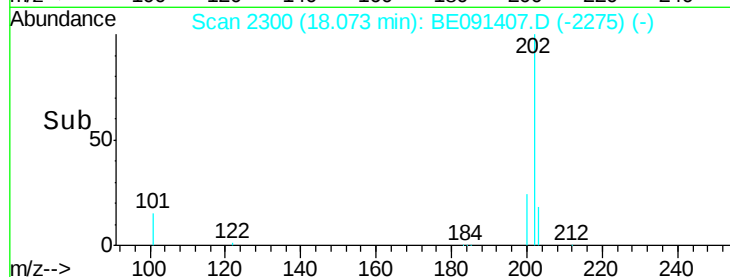
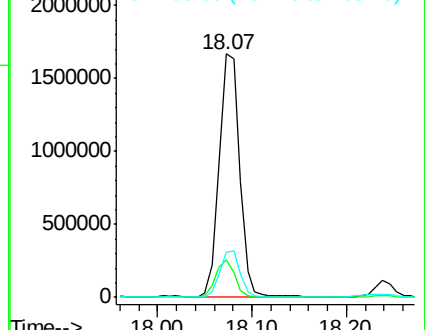
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Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#18

Chrysene-d12

Concen: 5.00 ng

RT: 20.21 min Scan# 2559

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

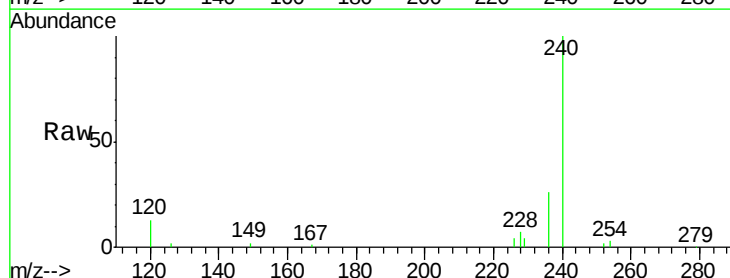
Tgt Ion:240 Resp: 349294

Ion Ratio Lower Upper

240 100

120 13.4 8.9 13.3#

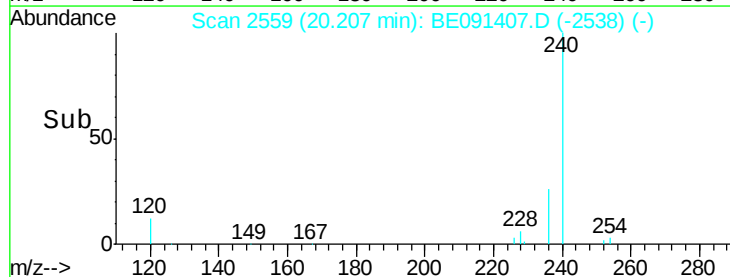
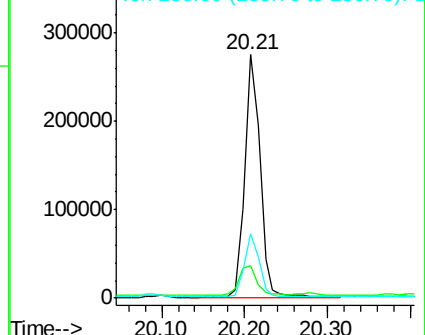
236 26.2 21.0 31.4



Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#19

Pvrene

Concen: 29.46 ng

RT: 18.46 min Scan# 2352

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

ClientSampleId :

LIBERTY-SF-005

Tot Ion:202 Resp: 2229859

Ion Ratio Lower Upper

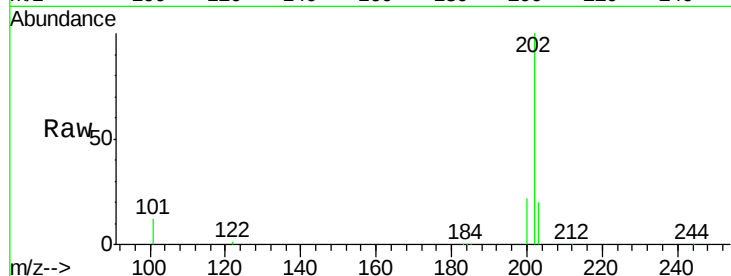
202 100

200 22.5 16.8 25.2

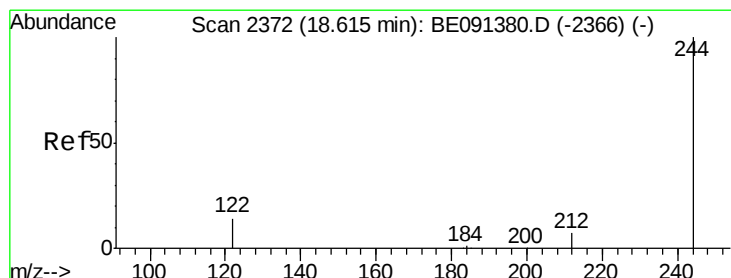
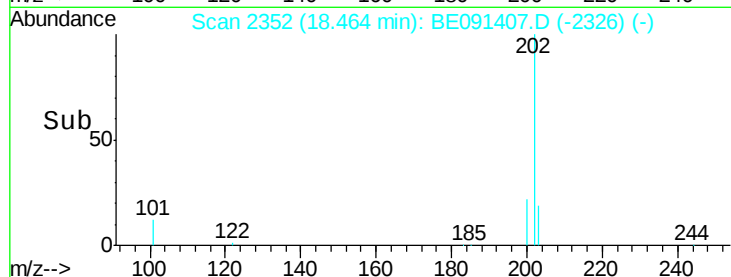
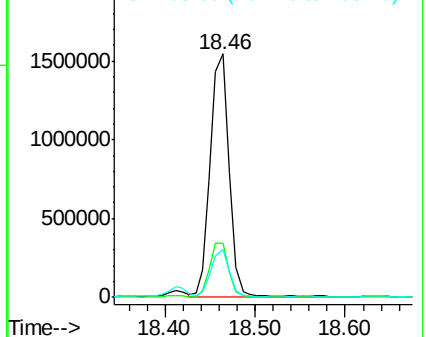
203 18.7 14.0 21.0

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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



#20

Terphenyl-d14

Concen: 4.63 ng

RT: 18.60 min Scan# 2370

Delta R.T. -0.02 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tgt Ion:244 Resp: 239134

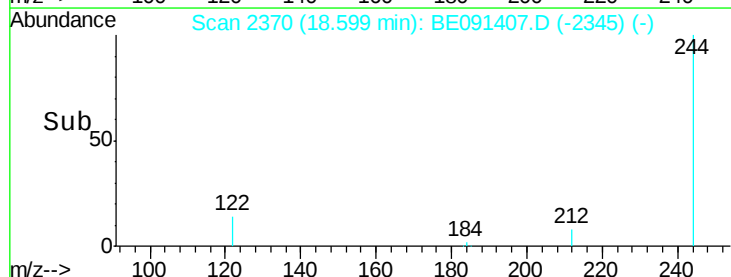
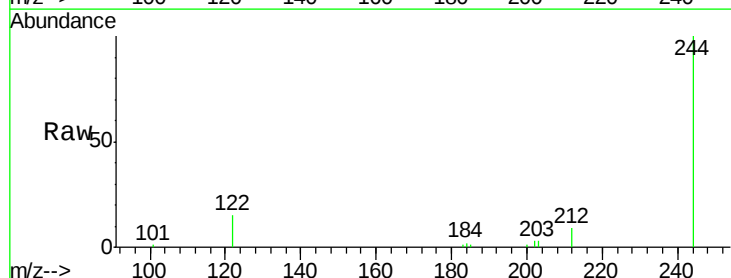
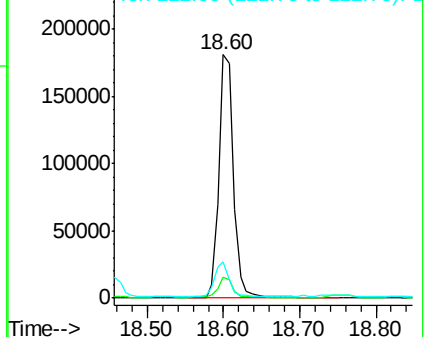
Ion Ratio Lower Upper

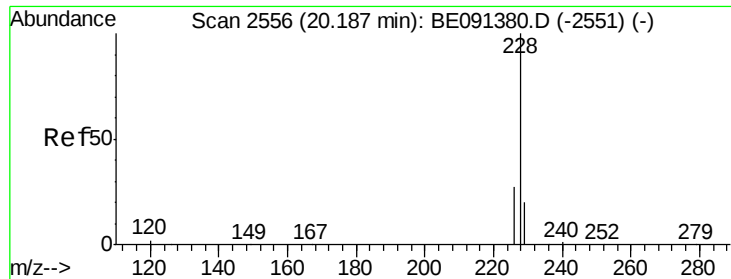
244 100

212 8.6 6.1 9.1

122 14.9 11.0 16.6

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





#21

Benzo(a)anthracene

Concen: 11.26 ng

RT: 20.18 min Scan# 2556

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

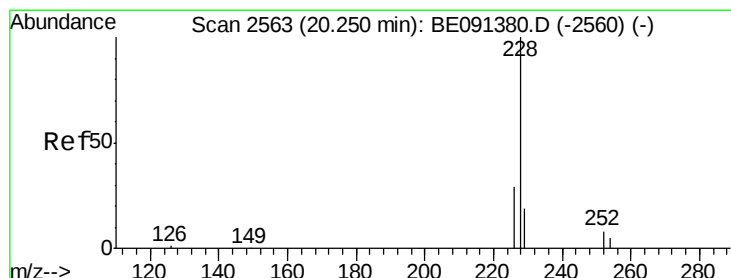
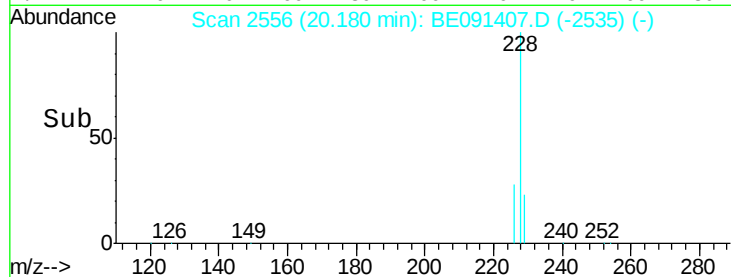
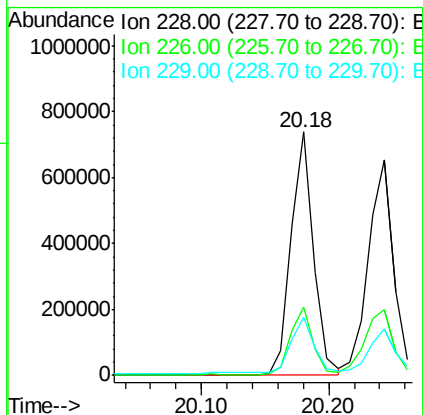
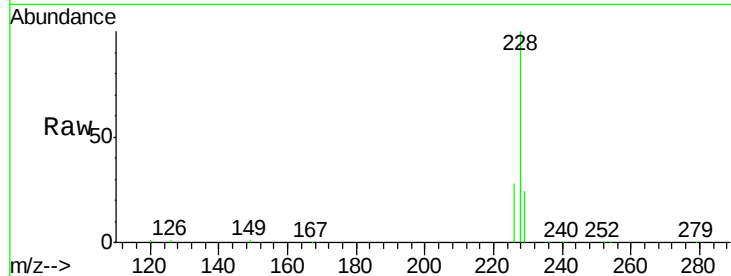
ClientSampleId :

LIBERTY-SF-005

Tot Ion:	228	Resp:	894215
Ion Ratio	Lower	Upper	
228	100		
226	28.1	21.7	32.5
229	24.0	16.1	24.1

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#22

Chrysene

Concen: 10.52 ng

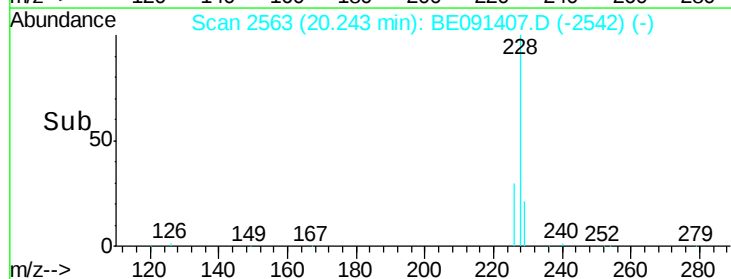
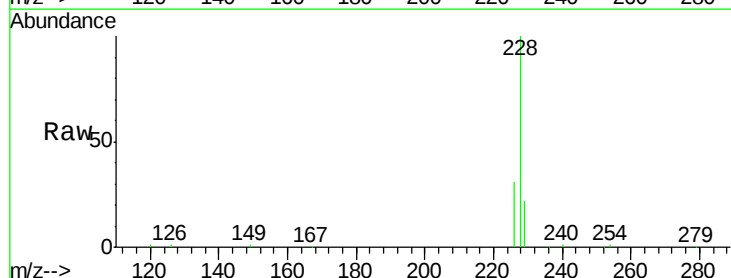
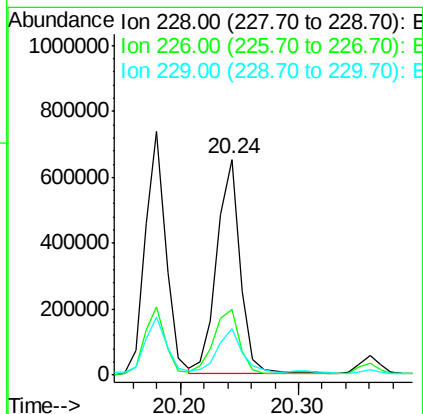
RT: 20.24 min Scan# 2563

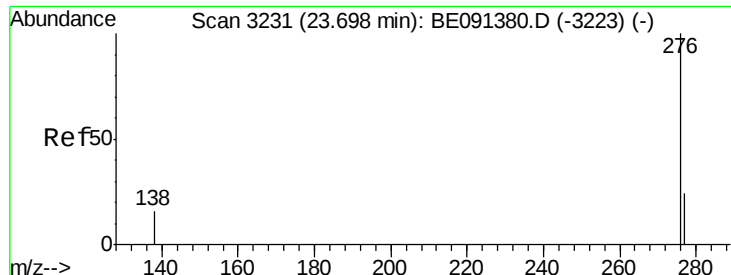
Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tgt Ion:	228	Resp:	903470
Ion Ratio	Lower	Upper	
228	100		
226	30.7	23.4	35.0
229	21.8	15.7	23.5





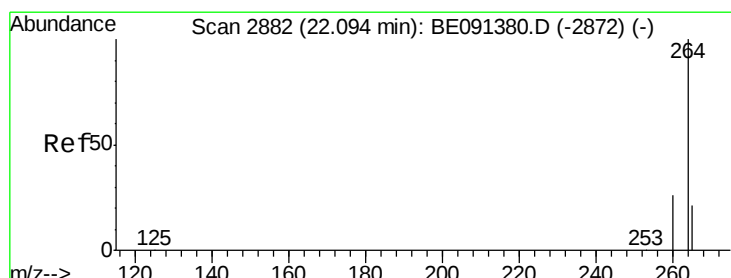
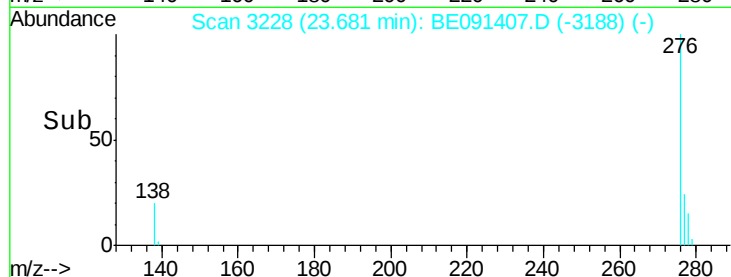
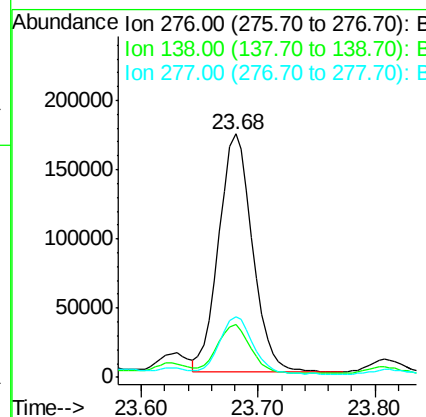
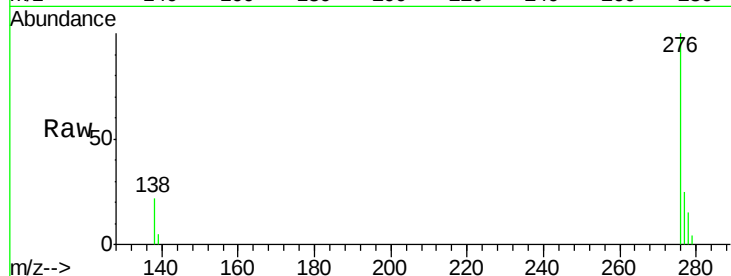
#23
Indeno(1,2,3-cd)pyrene
Concen: 4.36 ng
RT: 23.68 min Scan# 3228
Delta R.T. -0.02 min
Lab File: BE091407.D
Acq: 17 Feb 2016 16:54

Instrument :
BNA_E
ClientSampleId :
LIBERTY-SF-005

Tot Ion	Ratio	Resp	Lower	Upper
276	100	344687		
138	20.1	16.6	25.0	
277	24.2	19.0	28.6	

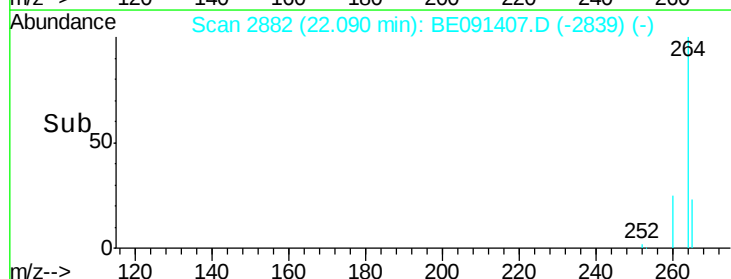
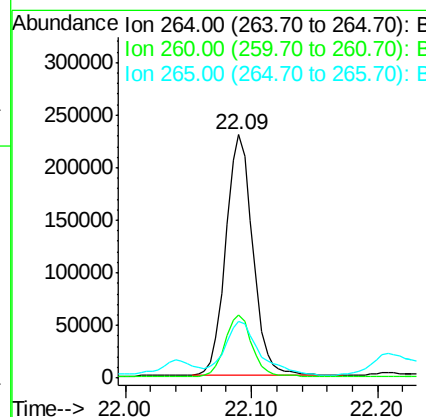
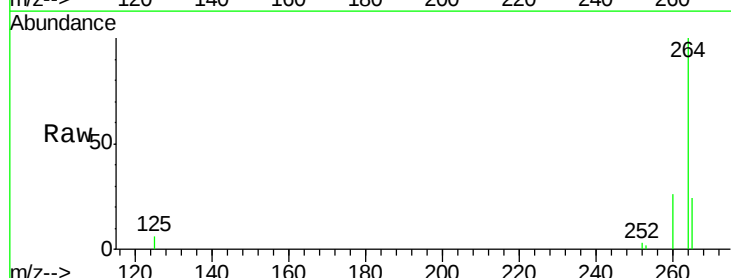
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#24
Perylene-d12
Concen: 5.00 ng
RT: 22.09 min Scan# 2882
Delta R.T. -0.00 min
Lab File: BE091407.D
Acq: 17 Feb 2016 16:54

Tgt Ion	Ratio	Resp	Lower	Upper
264	100	339359		
260	25.7	20.7	31.1	
265	23.5	17.2	25.8	





#25

Benzo(b)fluoranthene

Concen: 5.45 ng

RT: 21.54 min Scan# 2761

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

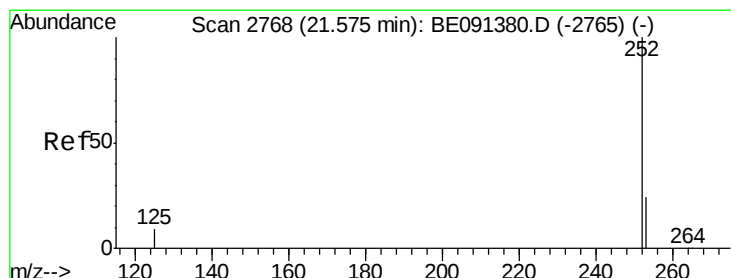
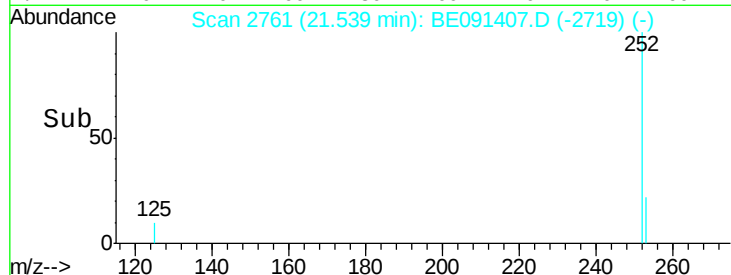
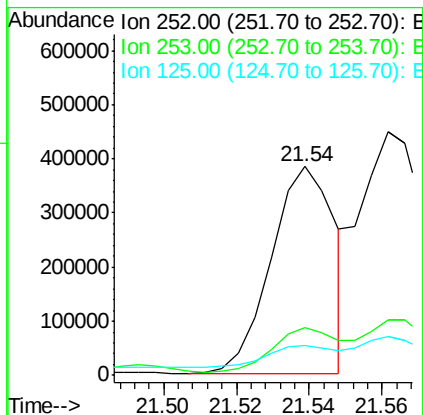
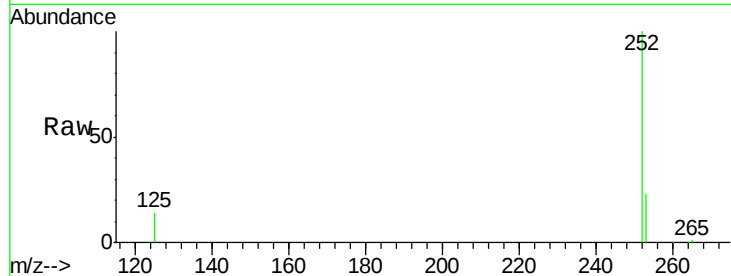
ClientSampleId :

LIBERTY-SF-005

Tot Ion	Ratio	Lower	Upper
252	100		
253	22.9	18.2	27.2
125	14.3	8.3	12.5

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#26

Benzo(k)fluoranthene

Concen: 7.16 ng

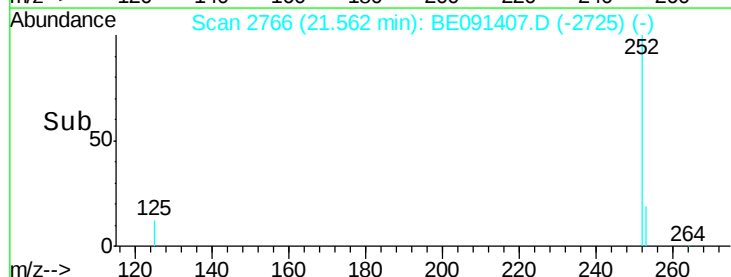
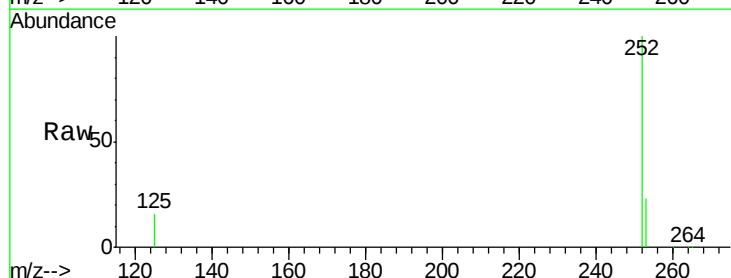
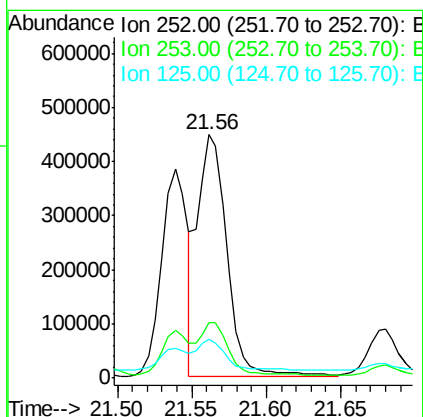
RT: 21.56 min Scan# 2766

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.8	18.1	27.1
125	15.7	8.2	12.4





#27

Benzo(a)pyrene

Concen: 8.04 ng

RT: 21.99 min Scan# 2861

Delta R.T. -0.01 min

Lab File: BE091407.D

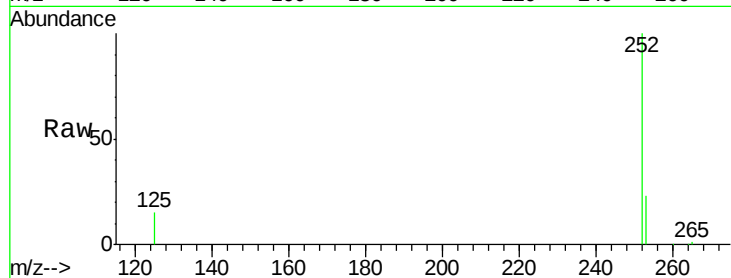
Acq: 17 Feb 2016 16:54

Instrument :

BNA_E

ClientSampleId :

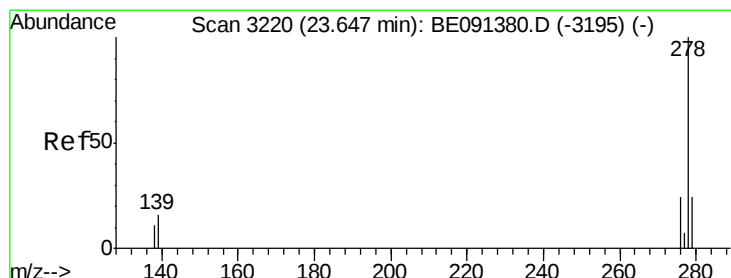
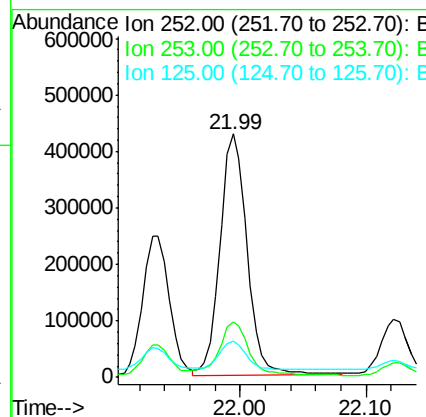
LIBERTY-SF-005



Tot Ion	Ratio	Lower	Upper
252	100		
253	23.0	17.5	26.3
125	14.7	9.4	14.0

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#28

Dibenzo(a,h)anthracene

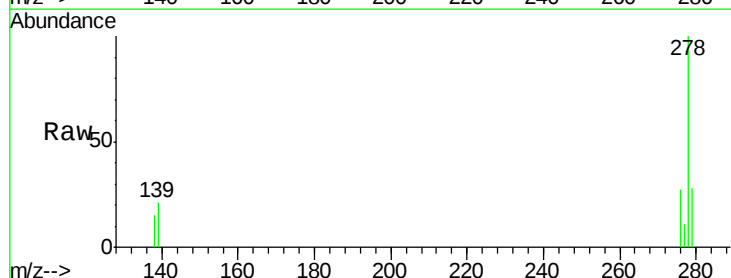
Concen: 1.92 ng

RT: 23.63 min Scan# 3217

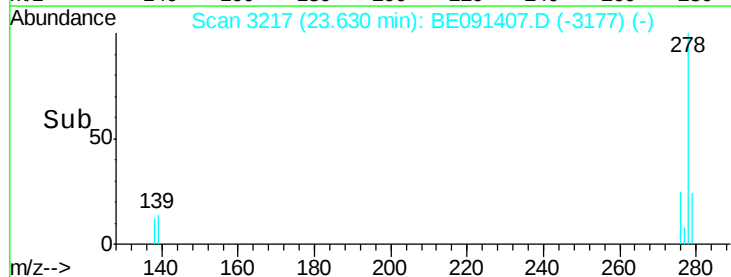
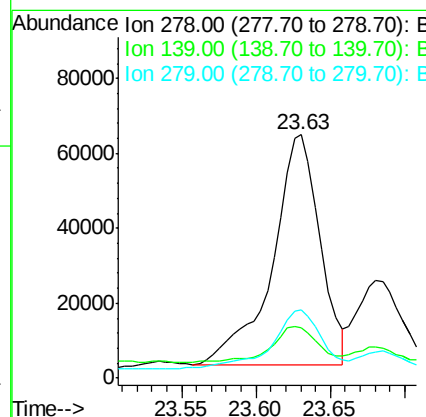
Delta R.T. -0.02 min

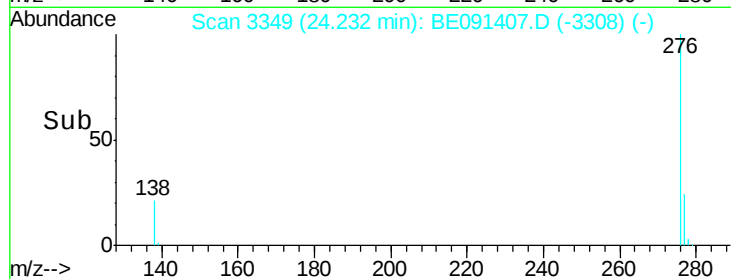
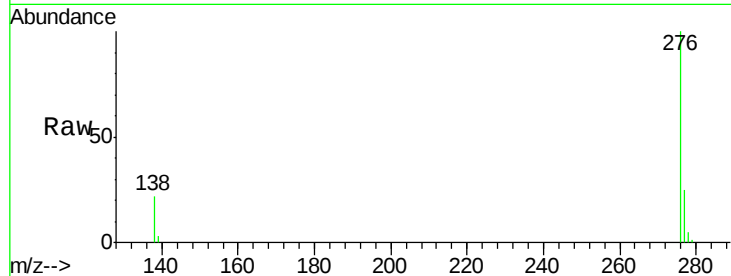
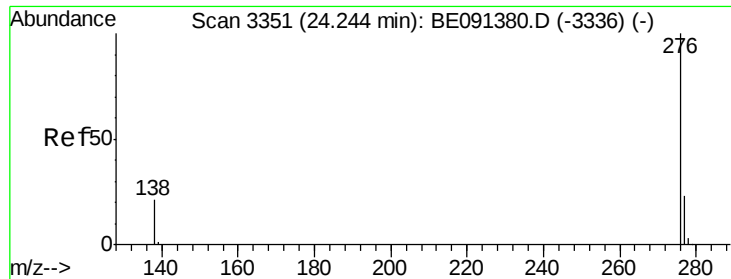
Lab File: BE091407.D

Acq: 17 Feb 2016 16:54



Tgt Ion	Ratio	Lower	Upper
278	100		
139	20.6	13.0	19.4
279	28.3	19.2	28.8





#29

Benzo(a,h,i)perylene

Concen: 4.03 ng

RT: 24.23 min Scan# 3349

Delta R.T. -0.01 min

Lab File: BE091407.D

Acq: 17 Feb 2016 16:54

Tot Ion	Ratio	Lower	Upper
276	100		
277	25.3	18.9	28.3
138	21.9	17.0	25.6

Instrument :

BNA_E

ClientSampleId :

LIBERTY-SF-005

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