

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE022415\
 Data File : BE089680.D
 Acq On : 24 Feb 2015 20:52
 Operator : TP/JJ
 Sample : MDL-06-S
 Misc : MDL-SOIL-0.2/0.4
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 MDL-06-S

Quant Time: Feb 25 04:20:17 2015
 Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SIMPAH-BE022415.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Wed Feb 25 04:05:13 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.34	152	52899	5.00	ng	0.00
4) Naphthalene-d8	12.24	136	226402	5.00	ng	0.00
8) Acenaphthene-d10	16.41	164	102692	5.00	ng	0.00
13) Phenanthrene-d10	19.77	188	185693	5.00	ng	0.00
19) Chrysene-d12	23.66	240	139127	5.00	ng	0.00
25) Perylene-d12	25.34	264	104675	5.00	ng	0.00

System Monitoring Compounds						
5) Nitrobenzene-d5	10.60	82	118998	8.85	ng	0.00
9) 2-Fluorobiphenyl	14.88	172	218266	9.56	ng	0.00
21) Terphenyl-d14	22.30	244	198098	12.14	ng	0.00

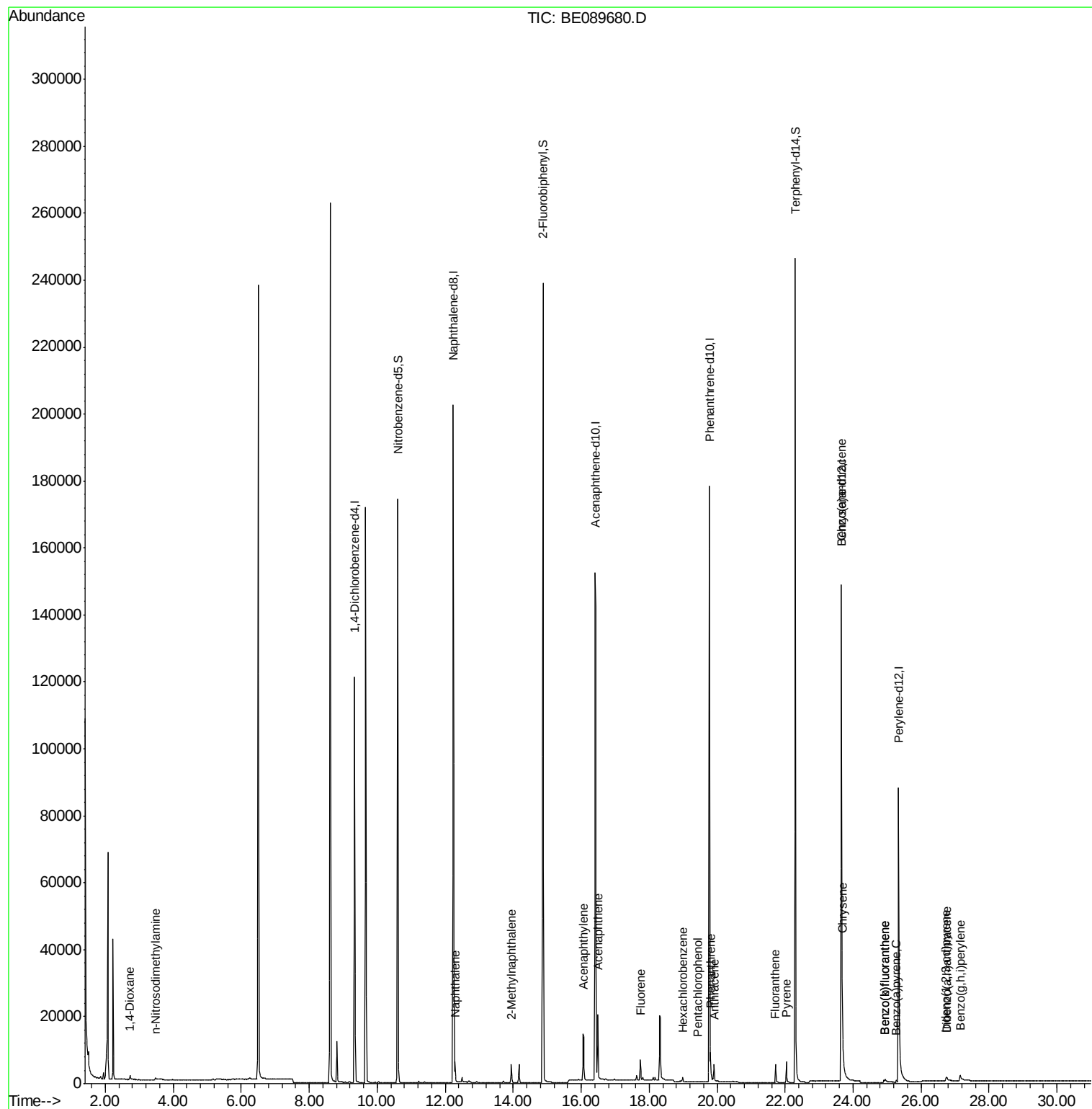
Target Compounds						Qvalue
2) 1,4-Dioxane	2.72	88	1002	0.15	ng	# 81
3) n-Nitrosodimethylamine	3.47	42	957	0.18	ng	# 76
6) Naphthalene	12.29	128	7478	0.17	ng	97
7) 2-Methylnaphthalene	13.95	142	3907	0.16	ng	96
10) Acenaphthylene	16.06	152	20748	0.14	ng	100
11) Acenaphthene	16.49	154	3825	0.16	ng	97
12) Fluorene	17.74	166	4391	0.17	ng	98
14) Hexachlorobenzene	18.99	284	842	0.18	ng	98
15) Pentachlorophenol	19.44	266	49	0.32	ng	# 73
16) Phenanthrene	19.81	178	6753	0.17	ng	98
17) Anthracene	19.91	178	5262	0.16	ng	99
18) Fluoranthene	21.72	202	4877	0.15	ng	98
20) Pyrene	22.04	202	5200	0.15	ng	99
22) Benzo(a)anthracene	23.65	228	15129	0.17	ng	98
23) Chrysene	23.68	228	24048	0.19	ng	98
24) Indeno(1,2,3-cd)pyrene	26.74	276	2692	0.29	ng	# 46
26) Benzo(b)fluoranthene	24.94	252	1844	0.46	ng	93
27) Benzo(k)fluoranthene	24.94	252	1844	0.21	ng	# 91
28) Benzo(a)pyrene	25.27	252	988	0.16	ng	# 88
29) Dibenzo(a,h)anthracene	26.77	278	524	0.35	ng	# 87
30) Benzo(g,h,i)perylene	27.15	276	5410	0.40	ng	# 85

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

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE022415\
Data File : BE089680.D
Acq On : 24 Feb 2015 20:52
Operator : TP/JJ
Sample : MDL-06-S
Misc : MDL-SOIL-0.2/0.4
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_E
ClientSampleID :
MDL-06-S

Quant Time: Feb 25 04:20:17 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SIMPAH-BE022415.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Feb 25 04:05:13 2015
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 9.34 min Scan# 1299

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

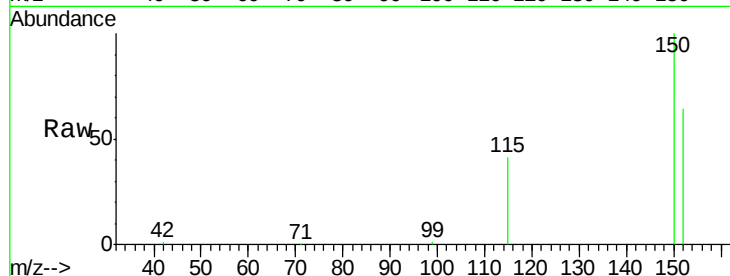
Tgt Ion:152 Resp: 52899

Ion Ratio Lower Upper

152 100

150 156.0 123.4 185.0

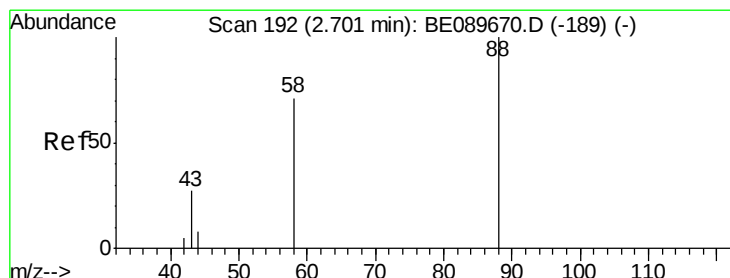
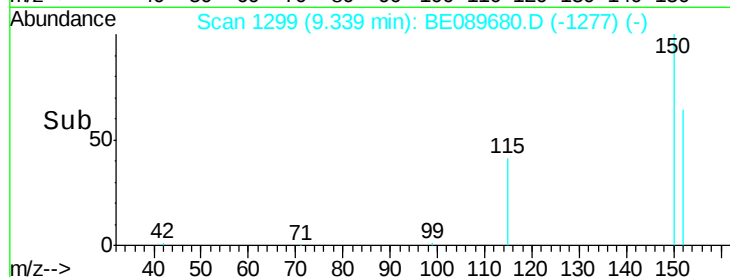
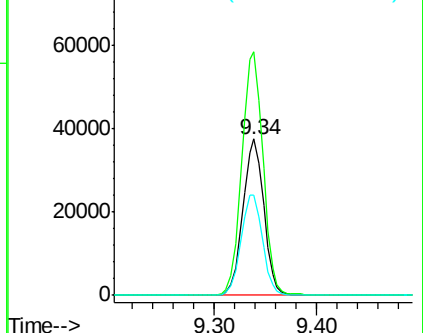
115 64.2 50.8 76.2



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

Ion 115.00 (114.70 to 115.70): E



#2

1,4-Dioxane

Concen: 0.15 ng

RT: 2.72 min Scan# 195

Delta R.T. 0.02 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

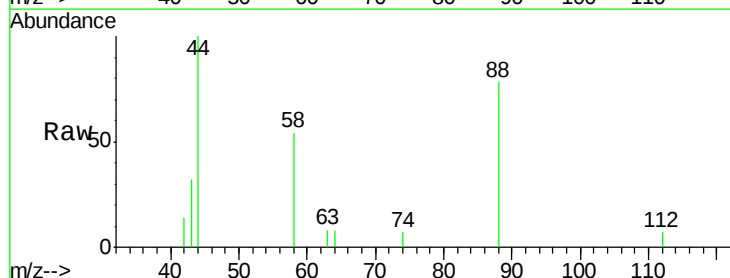
Tgt Ion: 88 Resp: 1002

Ion Ratio Lower Upper

88 100

58 79.4 62.4 93.6

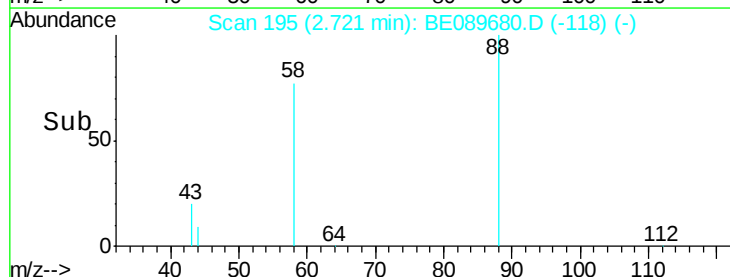
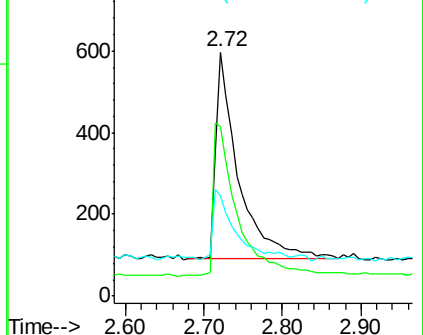
43 0.0 26.6 40.0#

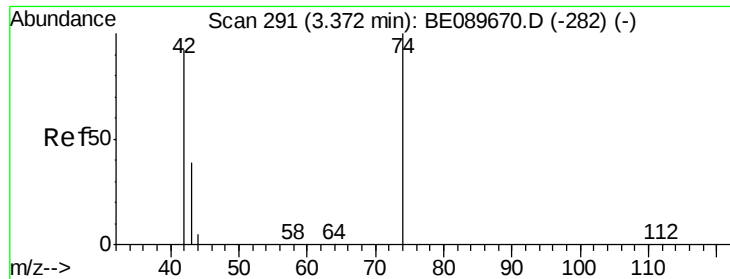


Abundance Ion 88.00 (87.70 to 88.70): BE0

Ion 58.00 (57.70 to 58.70): BE0

Ion 43.00 (42.70 to 43.70): BE0





#3

n-Nitrosodimethylamine

Concen: 0.18 ng

RT: 3.47 min Scan# 306

Delta R.T. 0.10 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

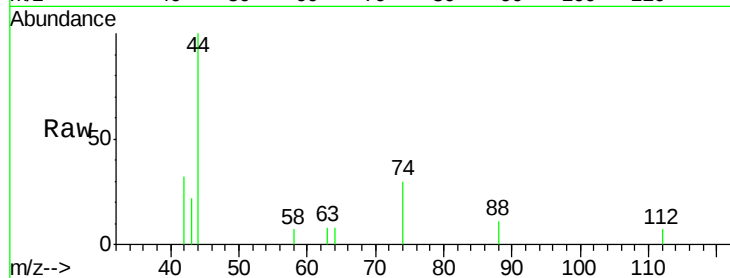
Tgt Ion: 42 Resp: 957

Ion Ratio Lower Upper

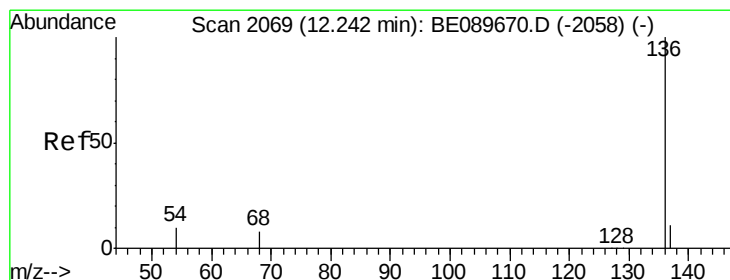
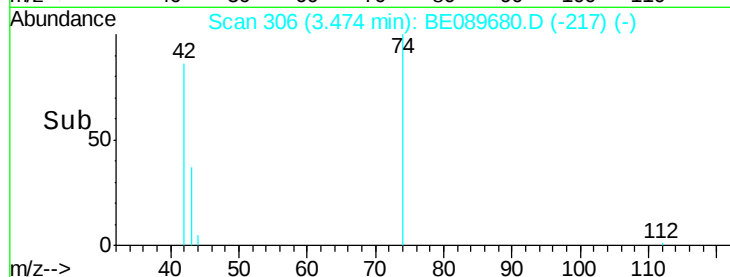
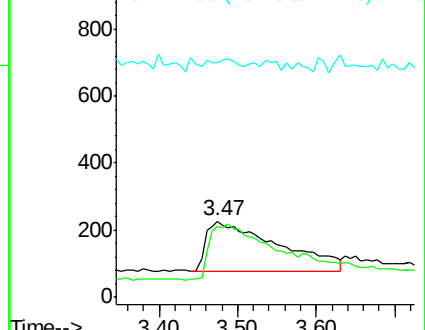
42 100

74 140.8 91.1 136.7#

44 8.8 4.7 7.1#



Abundance Ion 42.00 (41.70 to 42.70): BE0
Ion 74.00 (73.70 to 74.70): BE0
Ion 44.00 (43.70 to 44.70): BE0



#4

Naphthalene-d8

Concen: 5.00 ng

RT: 12.24 min Scan# 2069

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

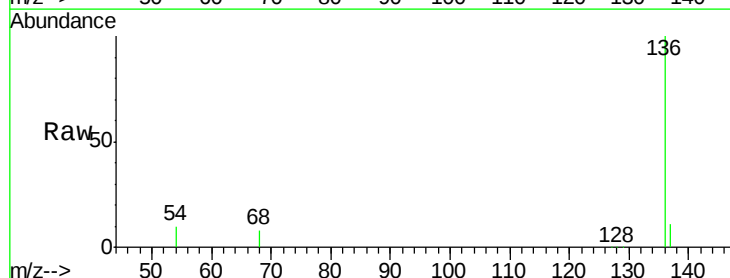
Tgt Ion: 136 Resp: 226402

Ion Ratio Lower Upper

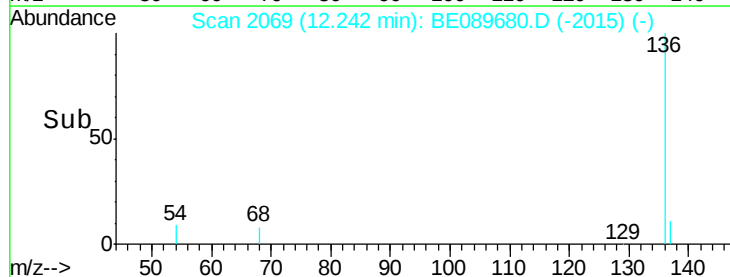
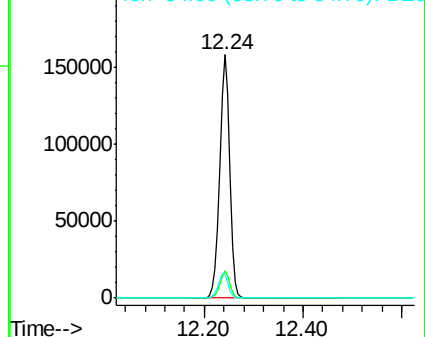
136 100

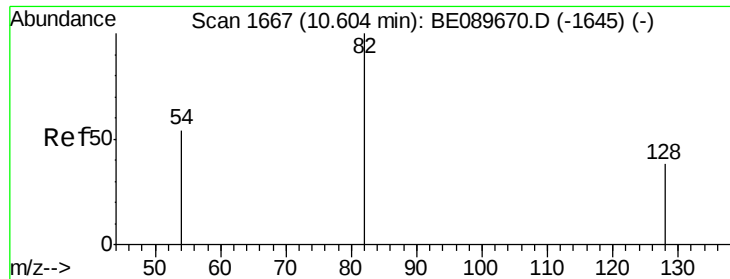
137 11.0 8.7 13.1

54 9.5 7.8 11.8



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): BE0





#5

Nitrobenzene-d5

Concen: 8.85 ng

RT: 10.60 min Scan# 1667

Delta R.T. 0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

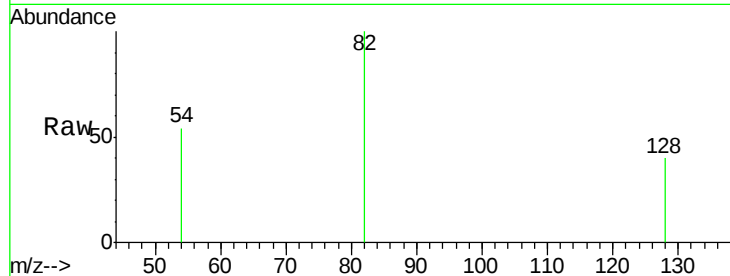
Tgt Ion: 82 Resp: 118998

Ion Ratio Lower Upper

82 100

128 40.0 30.6 46.0

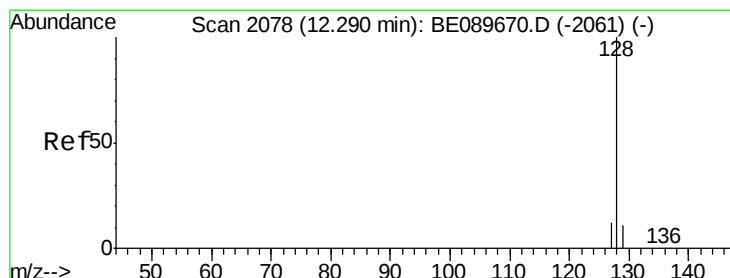
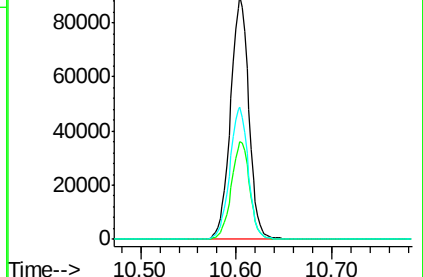
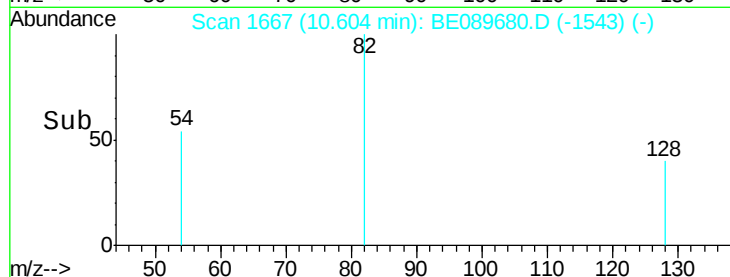
54 54.4 43.6 65.4



Abundance Ion 82.00 (81.70 to 82.70): BE089670.D (-1645) (-)

Ion 128.00 (127.70 to 128.70): BE089670.D (-1645) (-)

Ion 54.00 (53.70 to 54.70): BE089670.D (-1645) (-)



#6

Naphthalene

Concen: 0.17 ng

RT: 12.29 min Scan# 2078

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

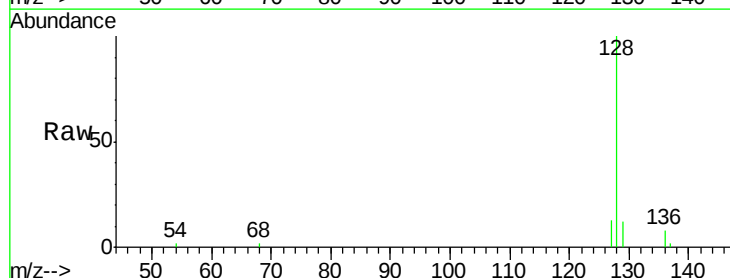
Tgt Ion: 128 Resp: 7478

Ion Ratio Lower Upper

128 100

129 12.1 8.9 13.3

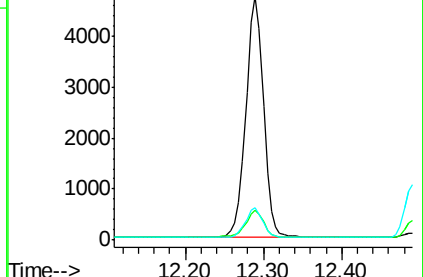
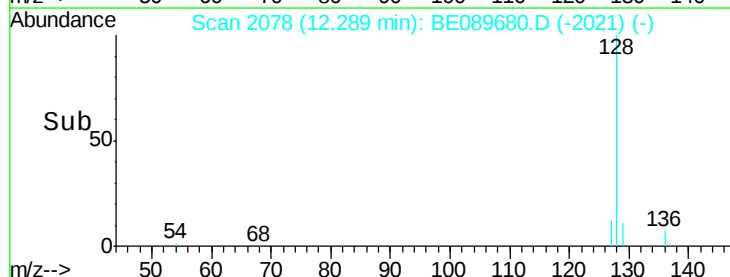
127 13.3 9.7 14.5



Abundance Ion 128.00 (127.70 to 128.70): BE089670.D (-2061) (-)

Ion 129.00 (128.70 to 129.70): BE089670.D (-2061) (-)

Ion 127.00 (126.70 to 127.70): BE089670.D (-2061) (-)





#7

2-Methylnaphthalene

Concen: 0.16 ng

RT: 13.95 min Scan# 2417

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

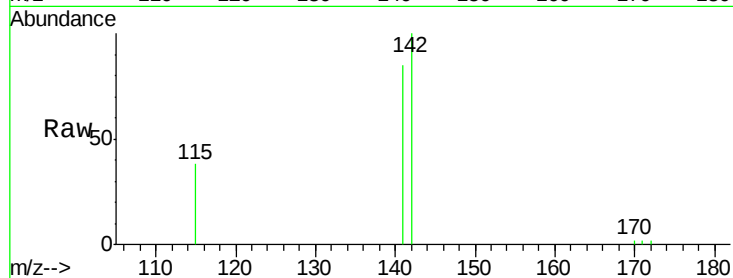
Tgt Ion:142 Resp: 3907

Ion Ratio Lower Upper

142 100

141 85.0 66.0 99.0

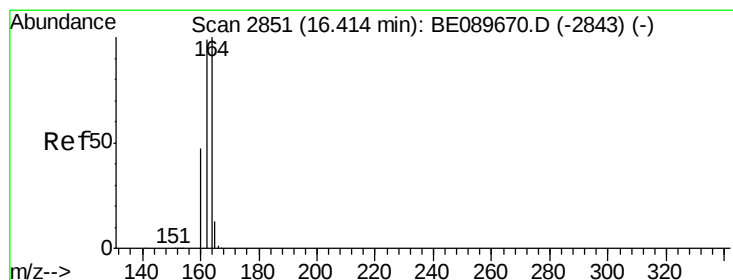
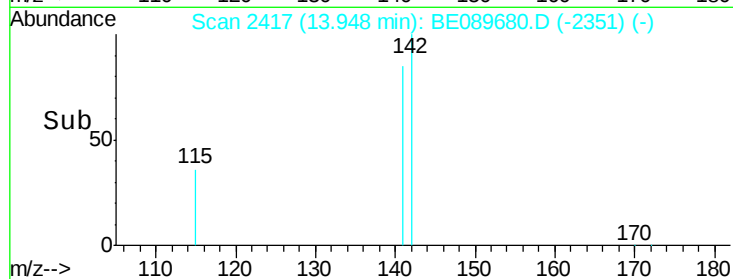
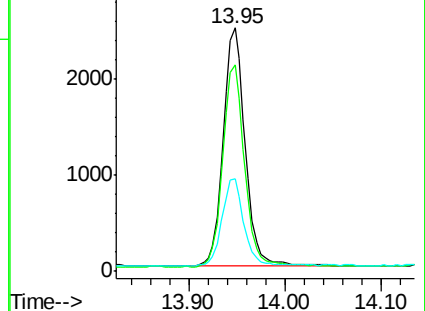
115 38.0 27.4 41.0



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



#8

Acenaphthene-d10

Concen: 5.00 ng

RT: 16.41 min Scan# 2851

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

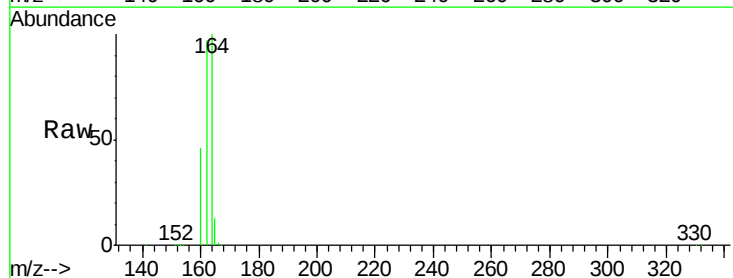
Tgt Ion:164 Resp: 102692

Ion Ratio Lower Upper

164 100

162 97.4 79.4 119.2

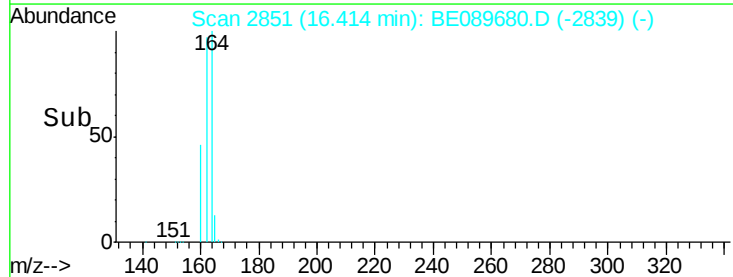
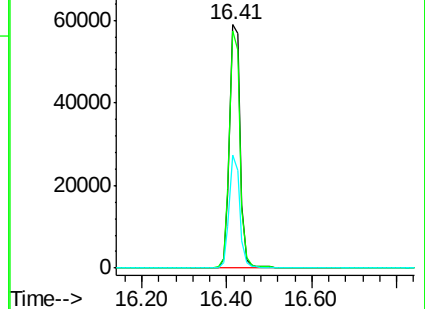
160 46.3 37.6 56.4



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





#9

2-Fluorobiphenyl

Concen: 9.56 ng

RT: 14.88 min Scan# 2621

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

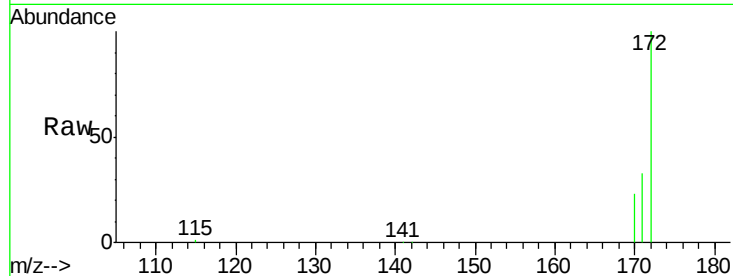
Tgt Ion:172 Resp: 218266

Ion Ratio Lower Upper

172 100

171 33.5 27.3 40.9

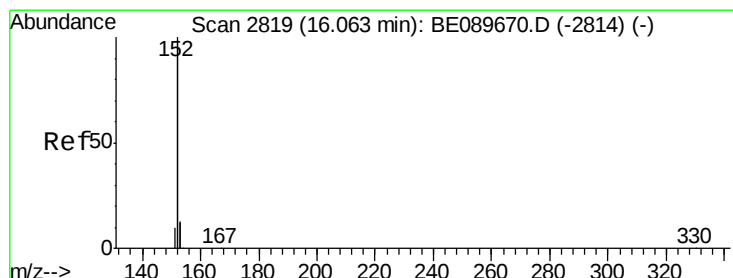
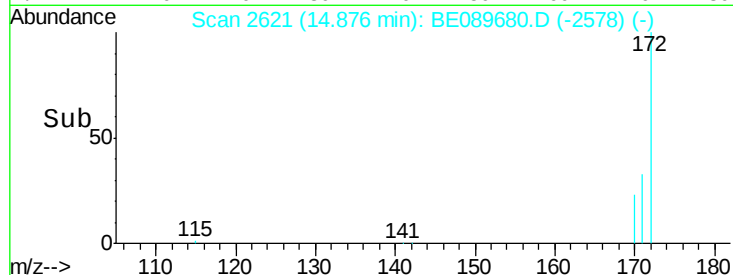
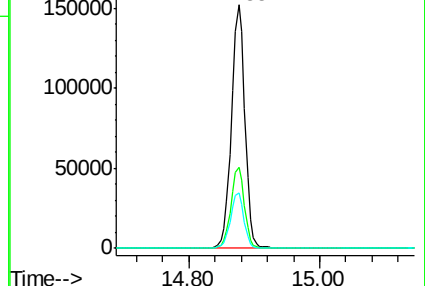
170 22.8 18.5 27.7



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



#10

Acenaphthylene

Concen: 0.14 ng

RT: 16.06 min Scan# 2819

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

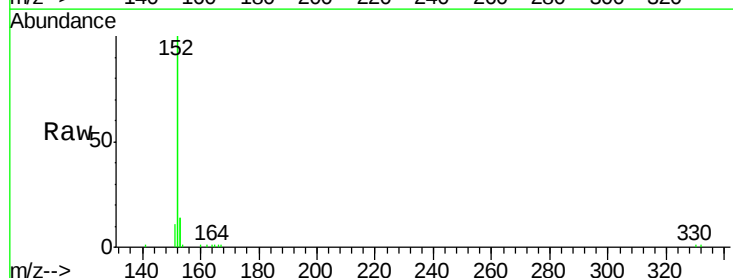
Tgt Ion:152 Resp: 20748

Ion Ratio Lower Upper

152 100

151 4.9 3.8 5.6

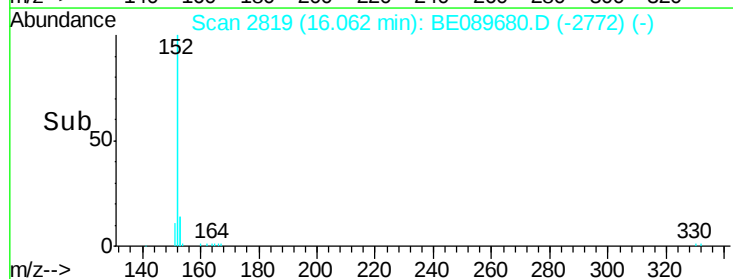
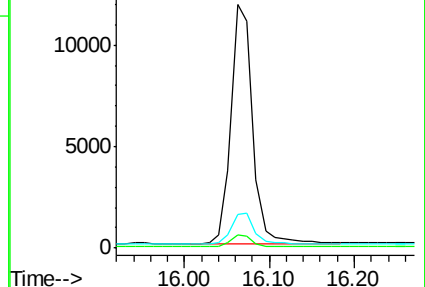
153 13.2 10.4 15.6

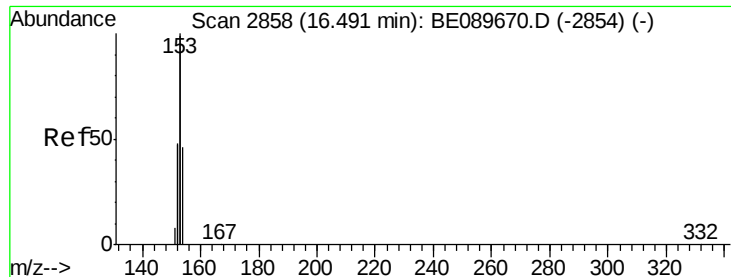


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#11

Acenaphthene

Concen: 0.16 ng

RT: 16.49 min Scan# 2858

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

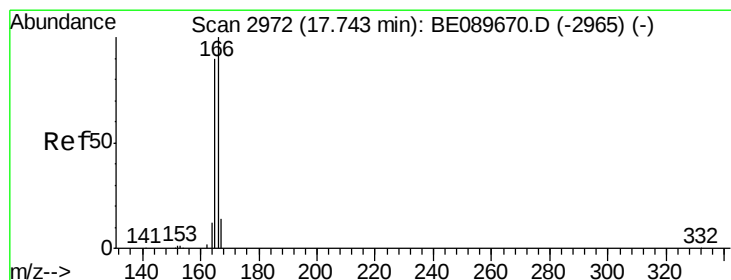
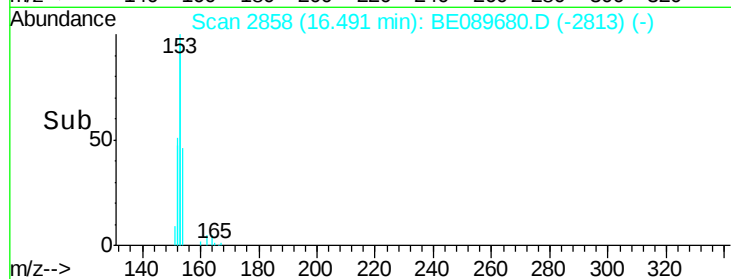
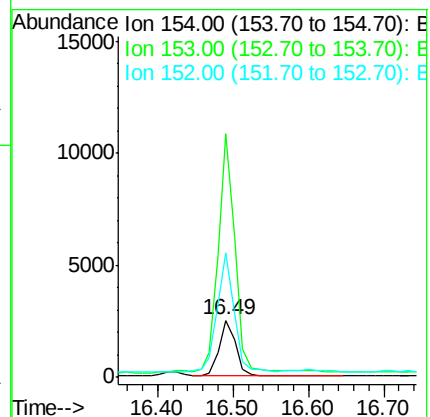
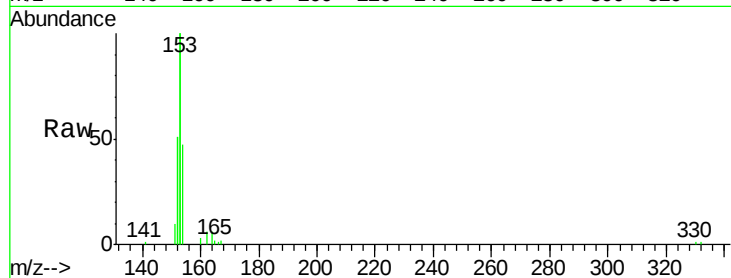
Tgt Ion:154 Resp: 3825

Ion Ratio Lower Upper

154 100

153 429.0 345.8 518.8

152 218.6 168.6 252.8



#12

Fluorene

Concen: 0.17 ng

RT: 17.74 min Scan# 2972

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

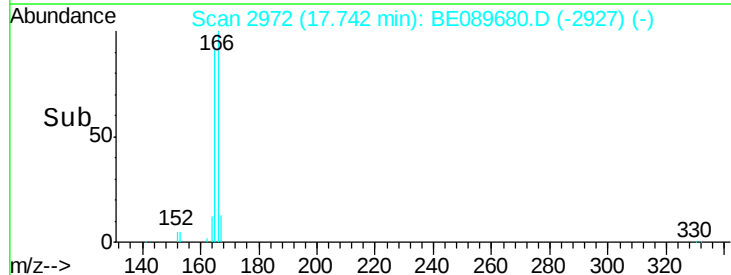
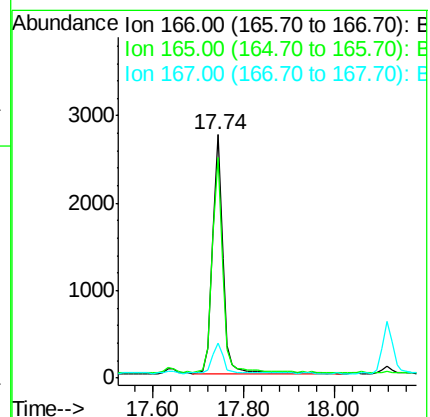
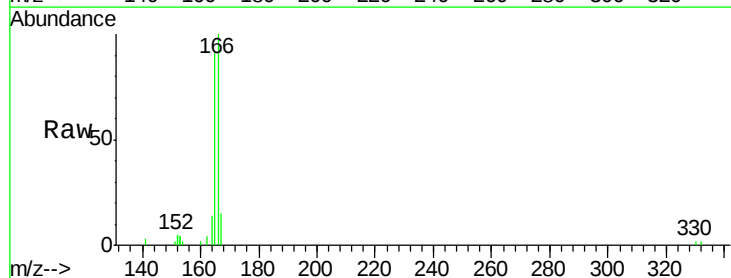
Tgt Ion:166 Resp: 4391

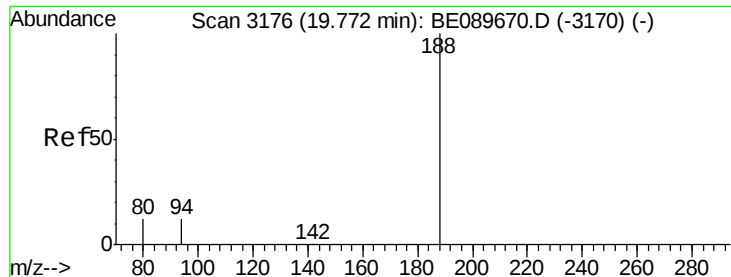
Ion Ratio Lower Upper

166 100

165 89.8 73.6 110.4

167 13.2 10.6 16.0

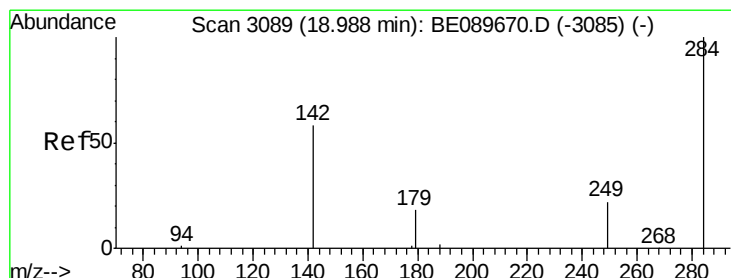
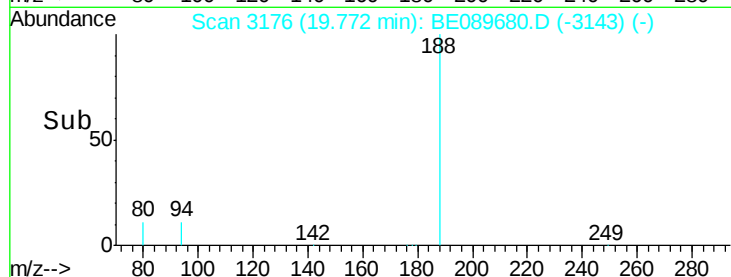
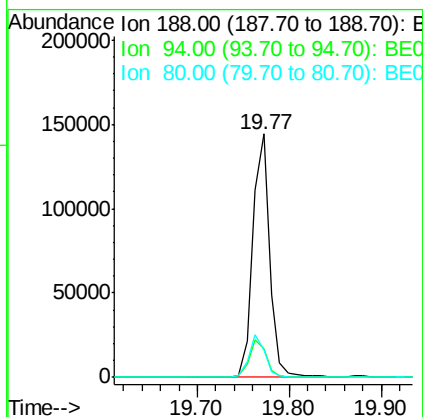
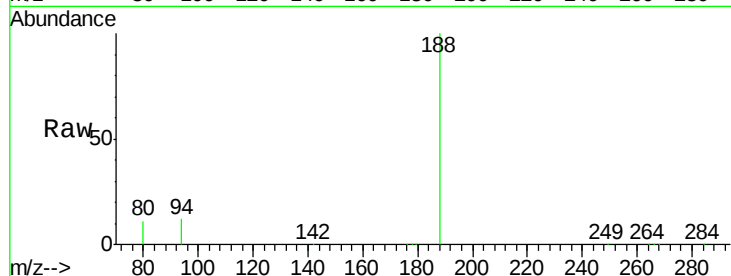




#13
Phenanthrene-d10
Concen: 5.00 ng
RT: 19.77 min Scan# 3176
Delta R.T. -0.00 min
Lab File: BE089680.D
Acq: 24 Feb 2015 20:52

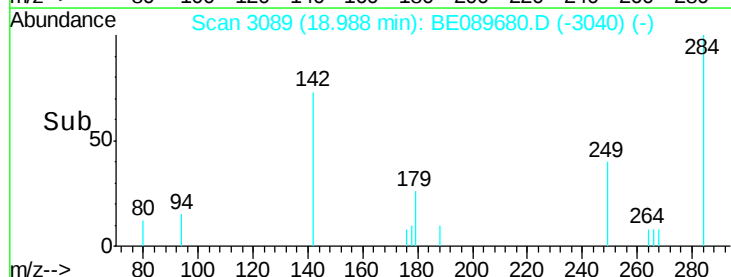
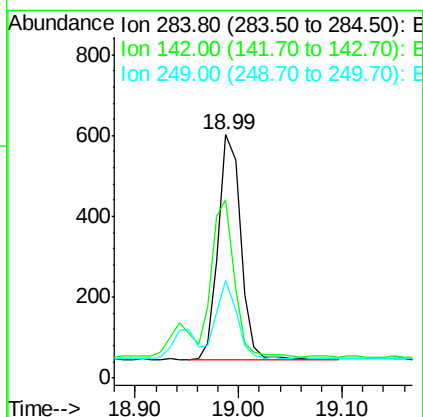
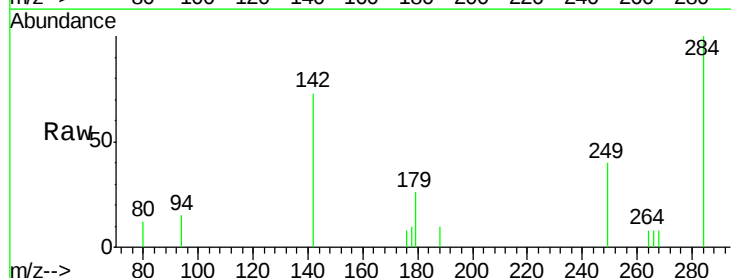
Instrument :
BNA_E
ClientSampleId :
MDL-06-S

Tgt Ion:188 Resp: 185693
Ion Ratio Lower Upper
188 100
94 11.5 9.4 14.2
80 11.4 9.5 14.3



#14
Hexachlorobenzene
Concen: 0.18 ng
RT: 18.99 min Scan# 3089
Delta R.T. -0.00 min
Lab File: BE089680.D
Acq: 24 Feb 2015 20:52

Tgt Ion:284 Resp: 842
Ion Ratio Lower Upper
284 100
142 70.0 55.4 83.2
249 32.1 27.2 40.8





#15

Pentachlorophenol

Concen: 0.32 ng

RT: 19.44 min Scan# 3139

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

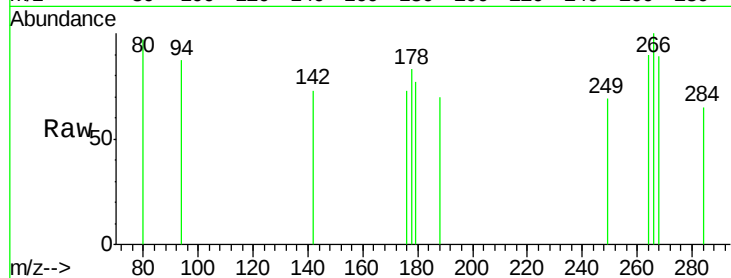
Tgt Ion: 266 Resp: 49

Ion Ratio Lower Upper

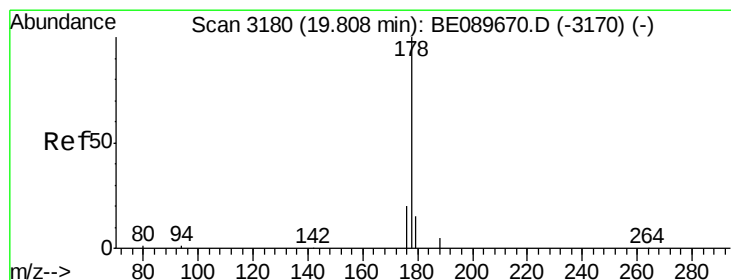
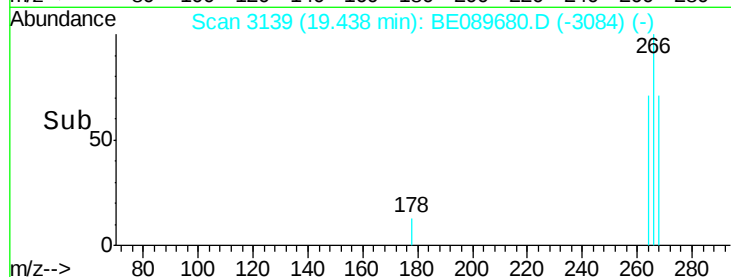
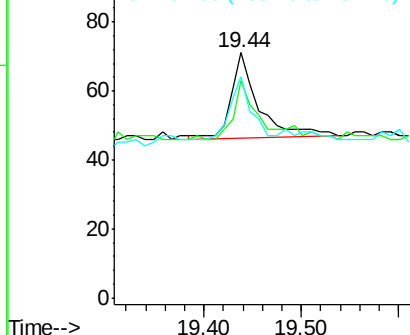
266 100

268 88.7 56.3 84.5#

264 90.1 51.8 77.8#



Abundance Ion 265.70 (265.40 to 266.40): E
Ion 268.00 (267.70 to 268.70): E
Ion 264.00 (263.70 to 264.70): E



#16

Phenanthrene

Concen: 0.17 ng

RT: 19.81 min Scan# 3180

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

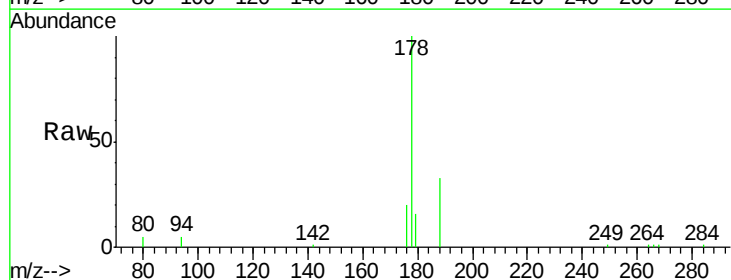
Tgt Ion: 178 Resp: 6753

Ion Ratio Lower Upper

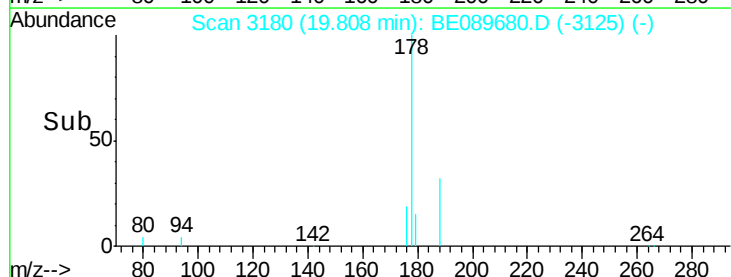
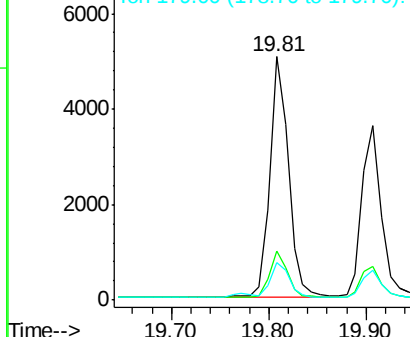
178 100

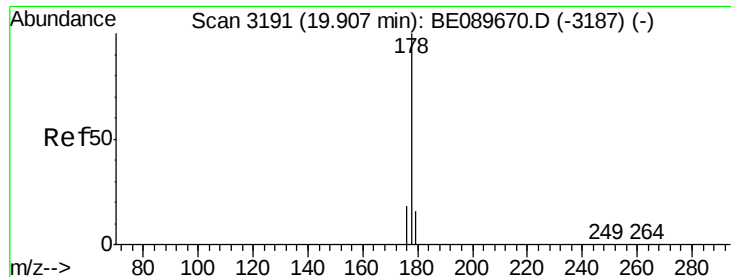
176 19.0 15.3 22.9

179 17.0 12.5 18.7



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





#17

Anthracene

Concen: 0.16 ng

RT: 19.91 min Scan# 3191

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

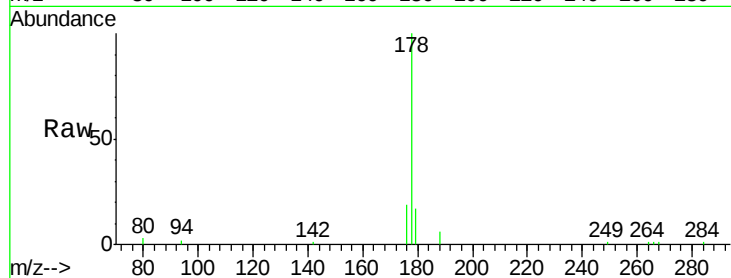
Tgt Ion:178 Resp: 5262

Ion Ratio Lower Upper

178 100

176 18.5 14.8 22.2

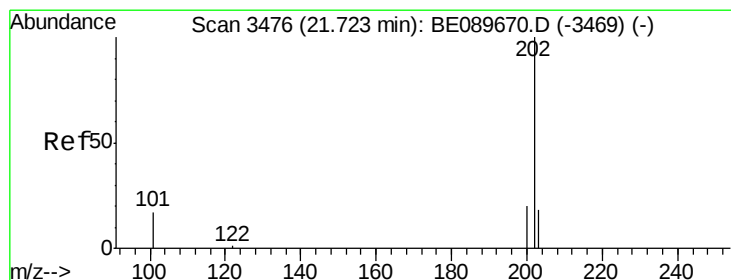
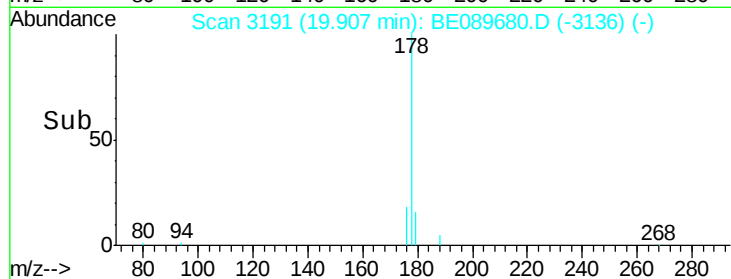
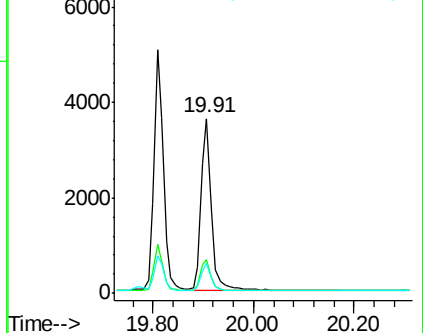
179 14.6 12.2 18.2



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



#18

Fluoranthene

Concen: 0.15 ng

RT: 21.72 min Scan# 3476

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

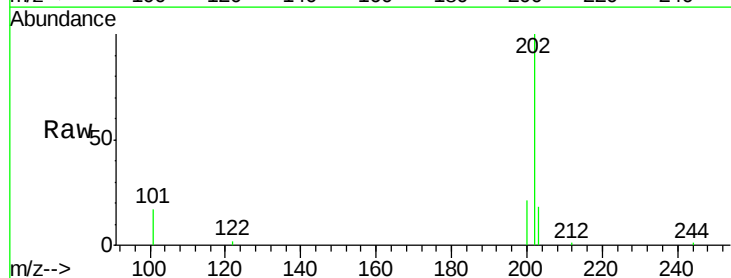
Tgt Ion:202 Resp: 4877

Ion Ratio Lower Upper

202 100

101 17.4 14.9 22.3

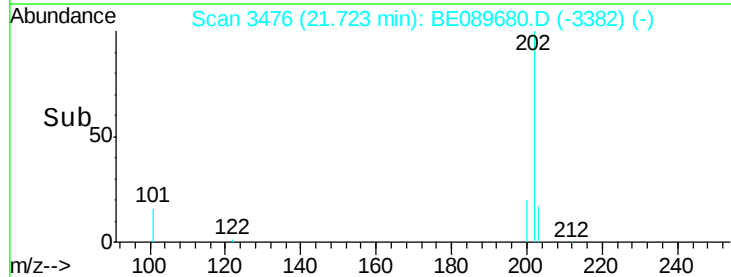
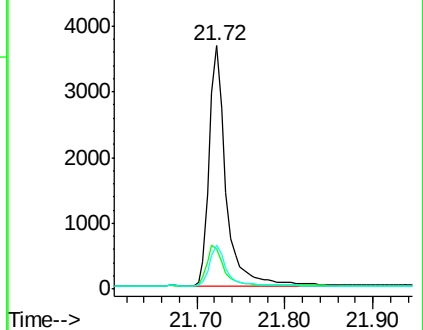
203 16.8 13.8 20.6

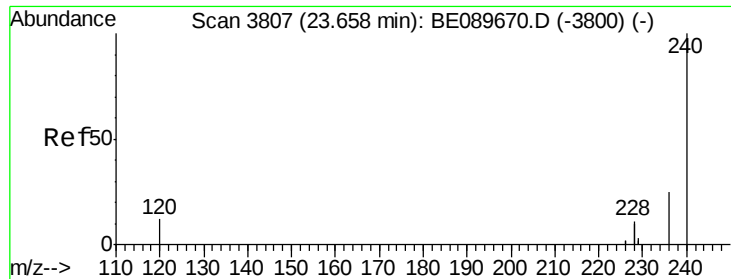


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E





#19

Chrysene-d12

Concen: 5.00 ng

RT: 23.66 min Scan# 3807

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

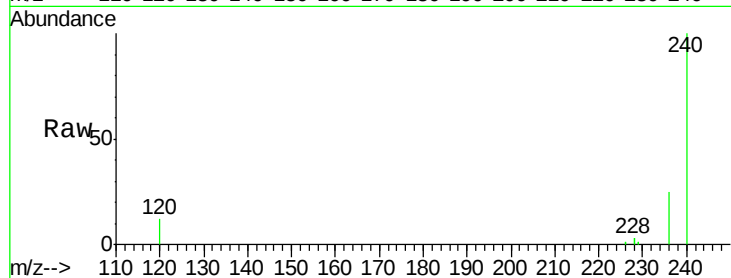
Tgt Ion:240 Resp: 139127

Ion Ratio Lower Upper

240 100

120 12.0 9.4 14.0

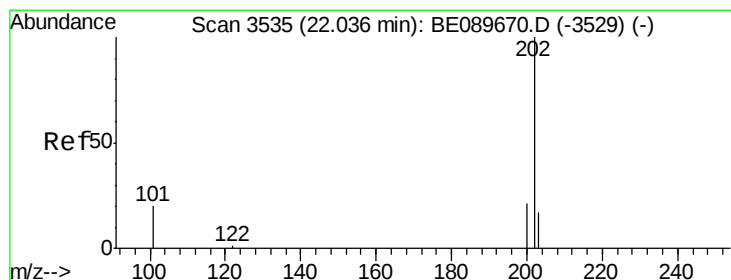
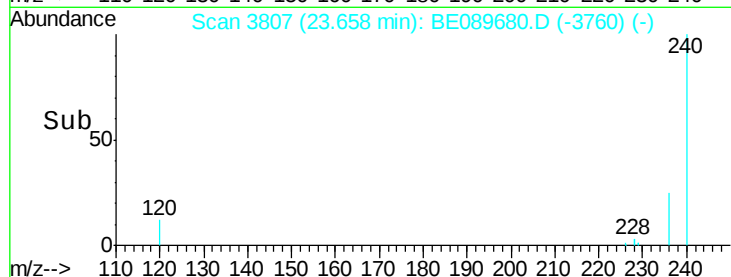
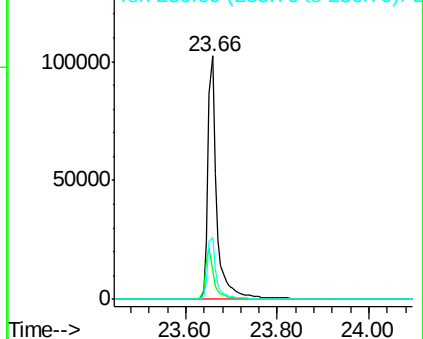
236 25.3 19.9 29.9



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



#20

Pyrene

Concen: 0.15 ng

RT: 22.04 min Scan# 3535

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

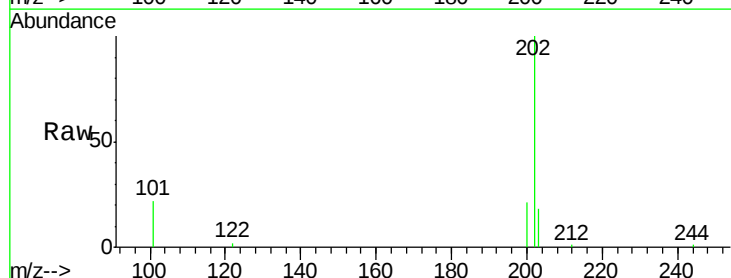
Tgt Ion:202 Resp: 5200

Ion Ratio Lower Upper

202 100

200 20.3 16.4 24.6

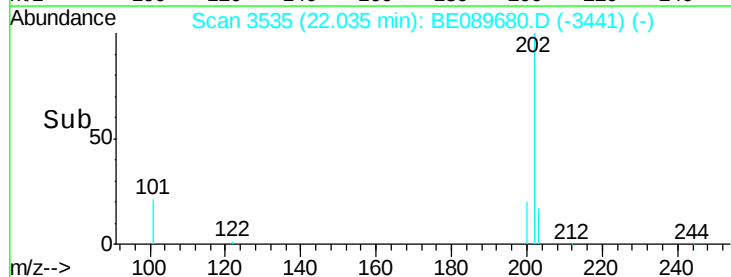
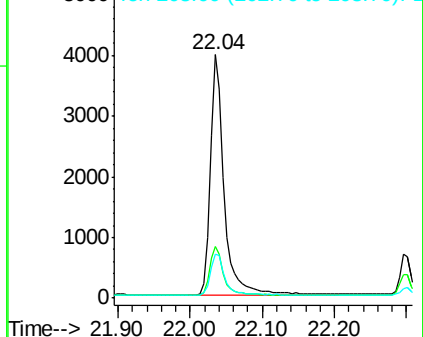
203 18.2 13.9 20.9



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





#21

Terphenyl-d14

Concen: 12.14 ng

RT: 22.30 min Scan# 3585

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

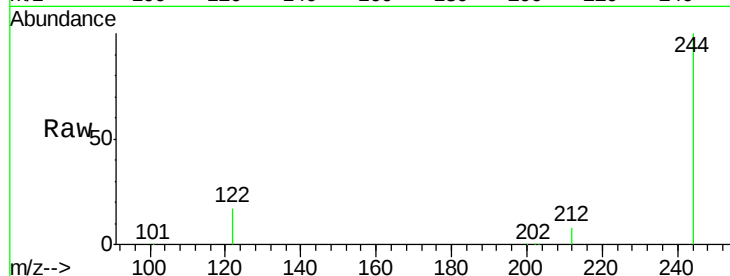
Tgt Ion:244 Resp: 198098

Ion Ratio Lower Upper

244 100

212 8.2 7.0 10.6

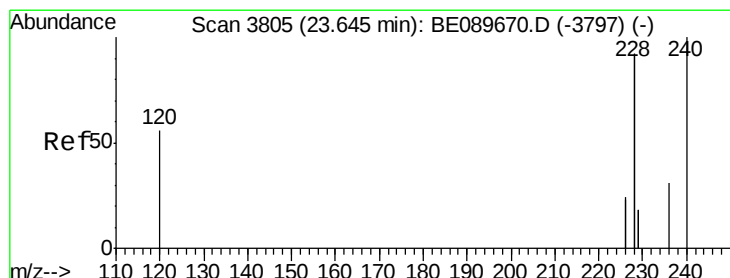
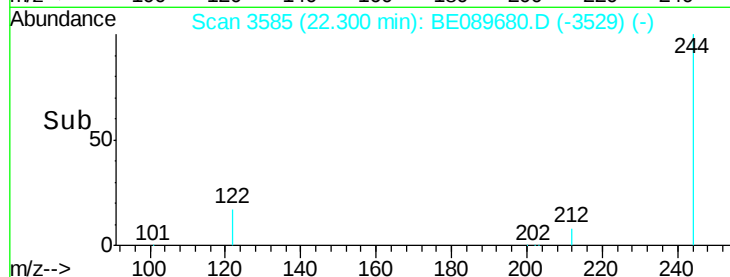
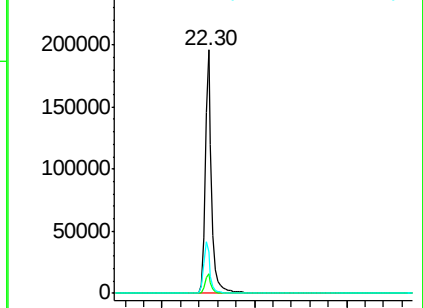
122 16.9 15.4 23.0



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



#22

Benzo(a)anthracene

Concen: 0.17 ng

RT: 23.65 min Scan# 3805

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

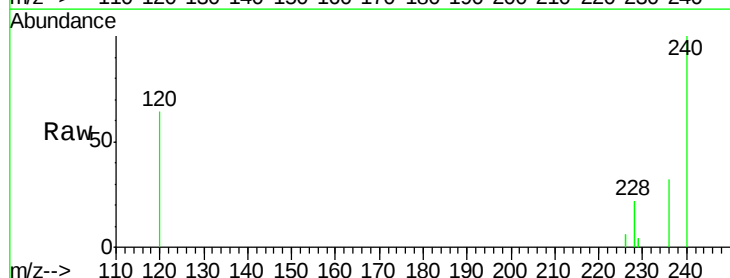
Tgt Ion:228 Resp: 15129

Ion Ratio Lower Upper

228 100

226 27.6 20.6 31.0

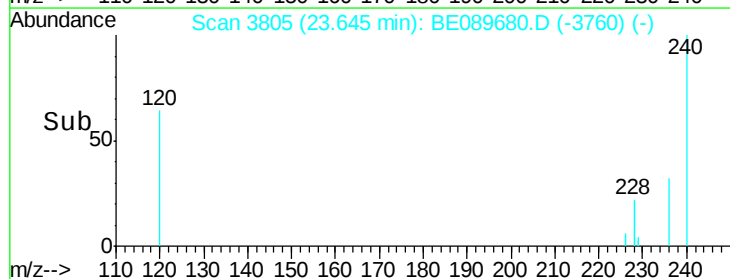
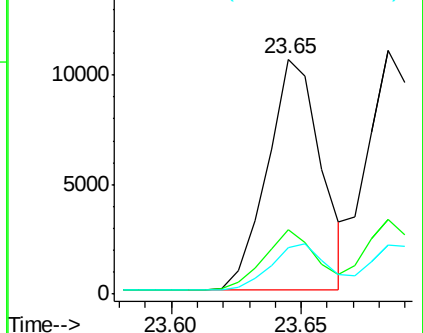
229 19.6 15.8 23.6



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#23

Chrysene

Concen: 0.19 ng

RT: 23.68 min Scan# 3811

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

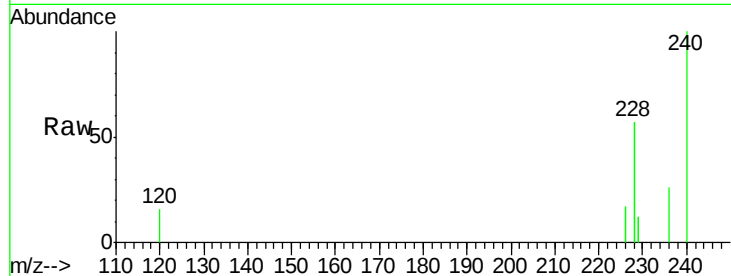
Tgt Ion:228 Resp: 24048

Ion Ratio Lower Upper

228 100

226 30.6 23.6 35.4

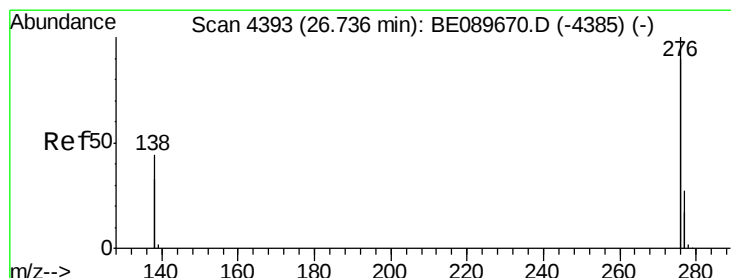
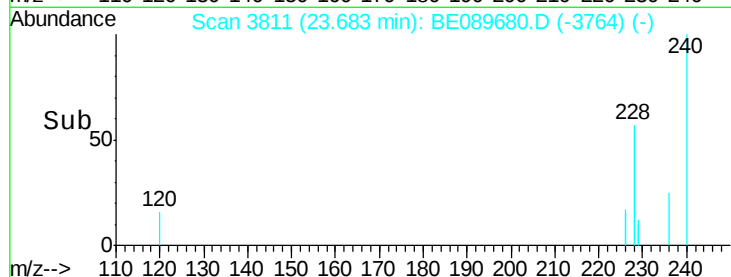
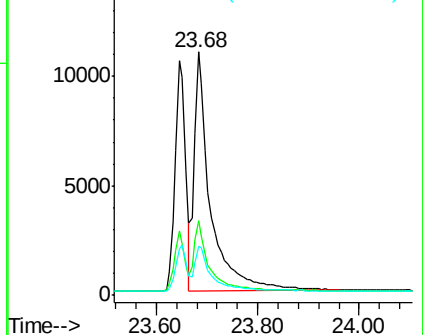
229 20.4 15.3 22.9



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#24

Indeno(1,2,3-cd)pyrene

Concen: 0.29 ng

RT: 26.74 min Scan# 4393

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

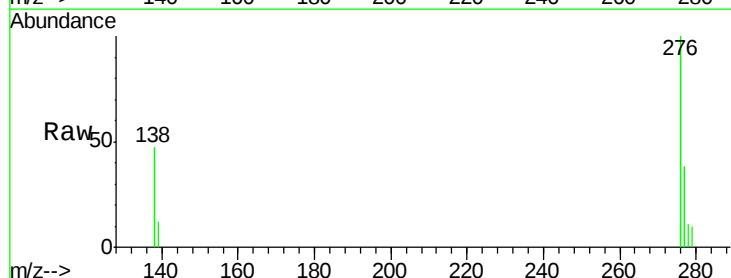
Tgt Ion:276 Resp: 2692

Ion Ratio Lower Upper

276 100

138 47.7 0.0 0.0#

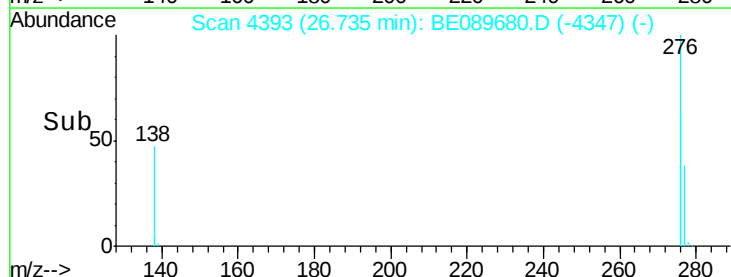
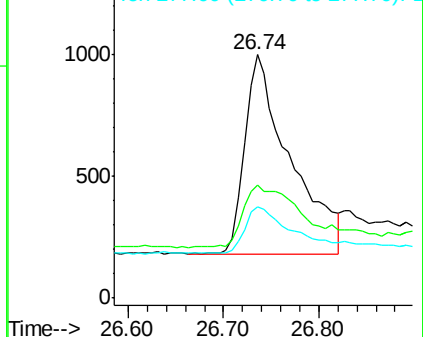
277 24.9 5.2 7.8#

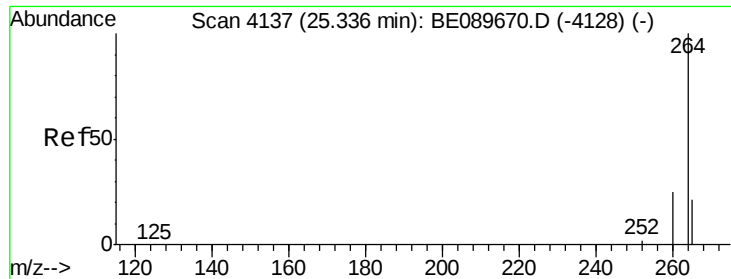


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

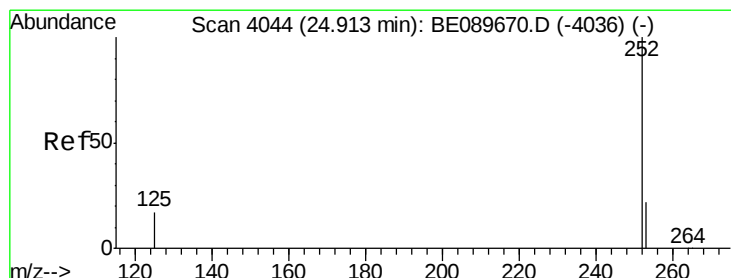
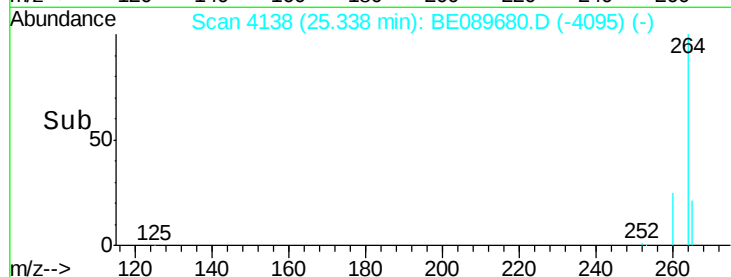
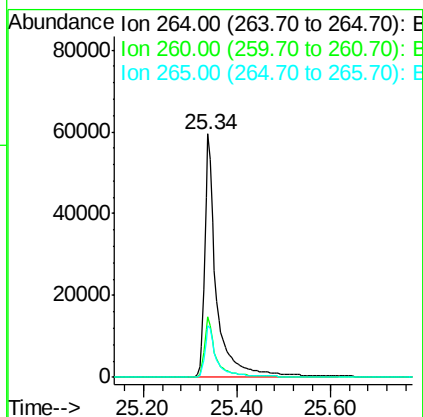
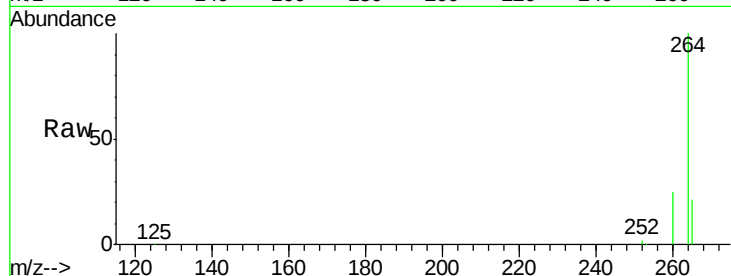




#25
 Perylene-d12
 Concen: 5.00 ng
 RT: 25.34 min Scan# 4138
 Delta R.T. 0.00 min
 Lab File: BE089680.D
 Acq: 24 Feb 2015 20:52

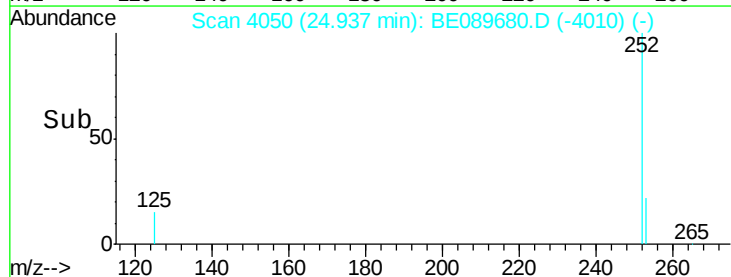
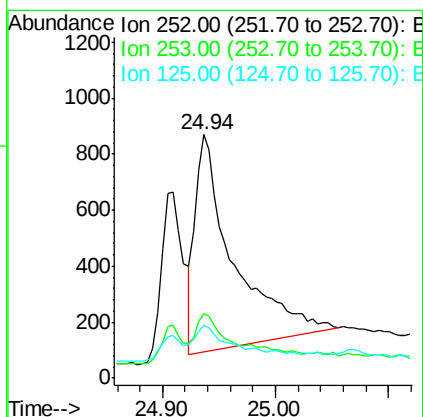
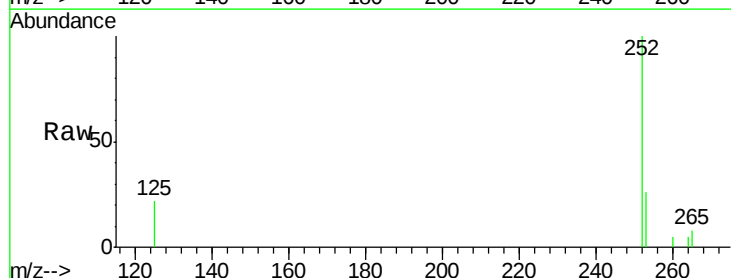
Instrument :
 BNA_E
 ClientSampleId :
 MDL-06-S

Tgt Ion: 264 Resp: 104675
 Ion Ratio Lower Upper
 264 100
 260 25.1 20.2 30.4
 265 21.2 17.0 25.4



#26
 Benzo(b)fluoranthene
 Concen: 0.46 ng
 RT: 24.94 min Scan# 4050
 Delta R.T. 0.02 min
 Lab File: BE089680.D
 Acq: 24 Feb 2015 20:52

Tgt Ion: 252 Resp: 1844
 Ion Ratio Lower Upper
 252 100
 253 26.5 18.6 27.8
 125 21.9 15.0 22.6





#27

Benzo(k)fluoranthene

Concen: 0.21 ng

RT: 24.94 min Scan# 4050

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

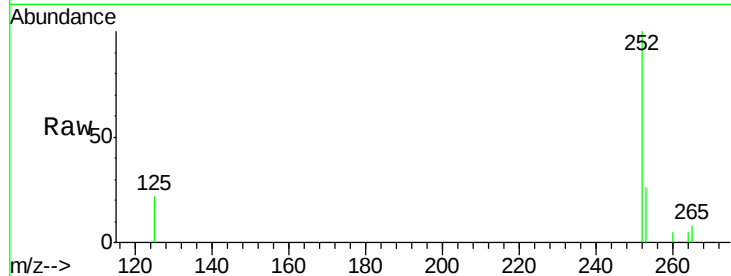
Tgt Ion:252 Resp: 1844

Ion Ratio Lower Upper

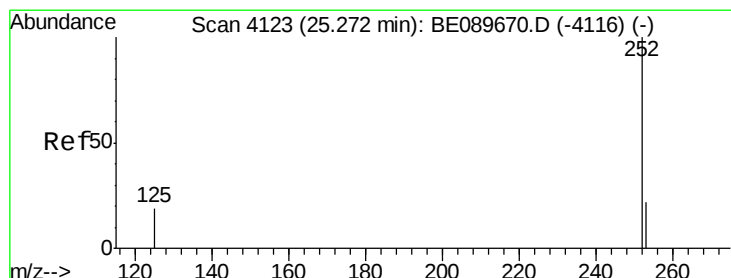
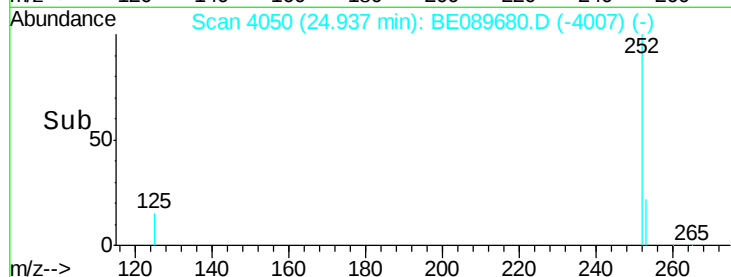
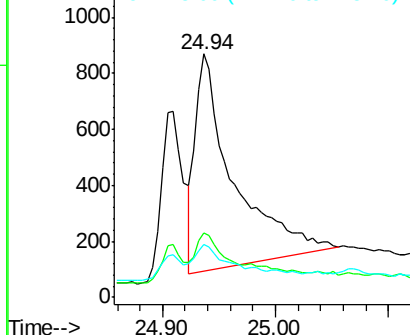
252 100

253 26.5 18.0 27.0

125 21.9 14.3 21.5#



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



#28

Benzo(a)pyrene

Concen: 0.16 ng

RT: 25.27 min Scan# 4123

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

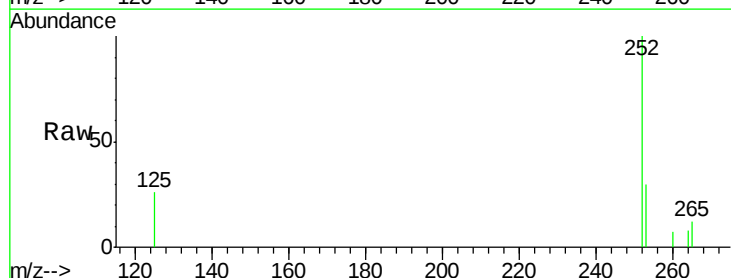
Tgt Ion:252 Resp: 988

Ion Ratio Lower Upper

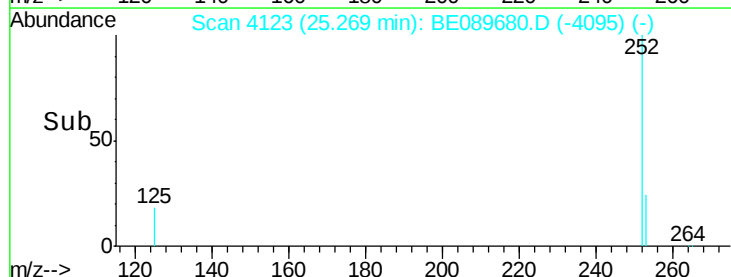
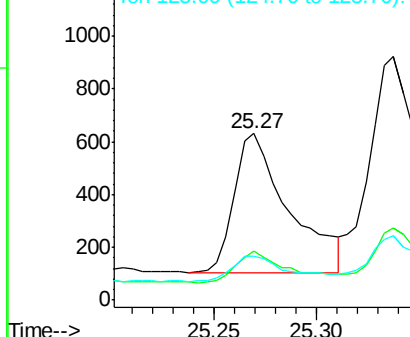
252 100

253 29.7 18.8 28.2#

125 26.2 16.6 24.8#



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





#29

Dibenzo(a,h)anthracene

Concen: 0.35 ng

RT: 26.77 min Scan# 4398

Delta R.T. -0.00 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Instrument :

BNA_E

ClientSampleId :

MDL-06-S

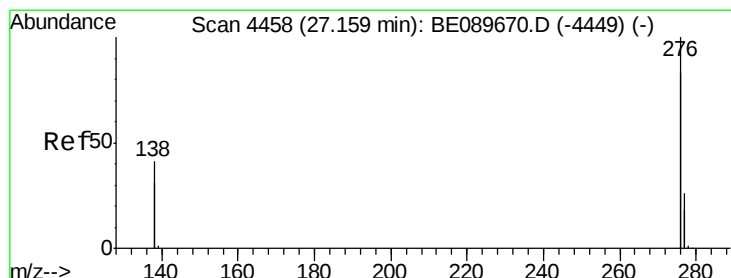
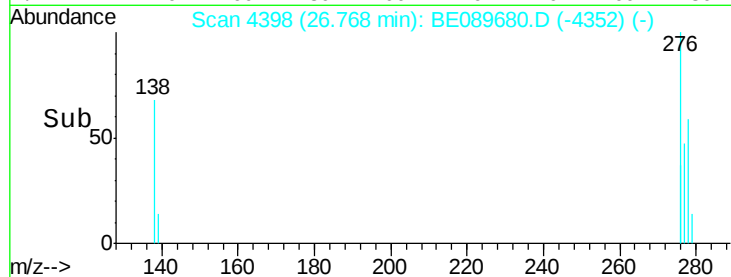
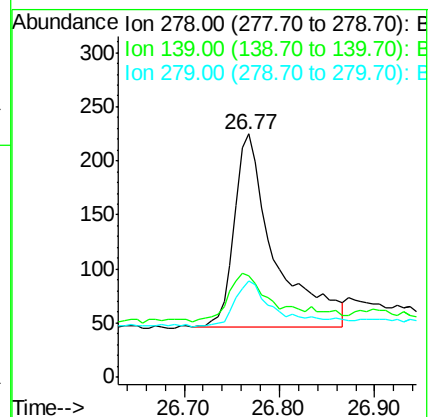
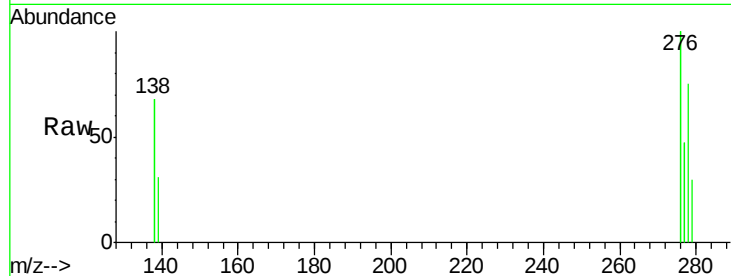
Tgt Ion: 278 Resp: 524

Ion Ratio Lower Upper

278 100

139 41.8 30.4 45.6

279 39.6 22.0 33.0#



#30

Benzo(g,h,i)perylene

Concen: 0.40 ng

RT: 27.15 min Scan# 4457

Delta R.T. -0.01 min

Lab File: BE089680.D

Acq: 24 Feb 2015 20:52

Tgt Ion: 276 Resp: 5410

Ion Ratio Lower Upper

276 100

277 36.3 21.0 31.6#

138 48.6 33.0 49.4

