

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE011615\
 Data File : BE089413.D
 Acq On : 17 Jan 2015 4:54
 Operator : TP/IZ
 Sample : MDL-02-S
 Misc : MDL-SOIL-0.1/0.2
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 ClientSampleId :

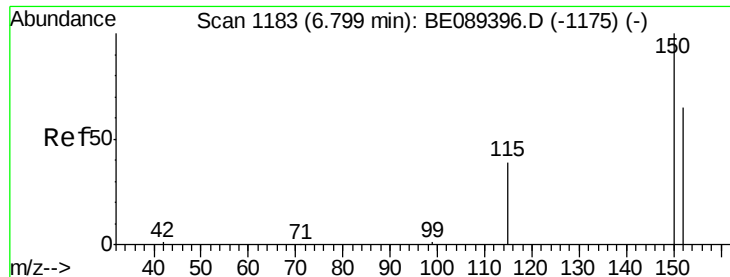
Quant Time: Jan 17 06:08:14 2015
 Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SIM-PAH-BE011615.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jan 16 22:56:59 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.80	152	16922	5.00	ng	0.00
3) Naphthalene-d8	8.36	136	62631	5.00	ng	0.00
7) Acenaphthene-d10	10.49	164	28166	5.00	ng	0.00
12) Phenanthrene-d10	12.50	188	43083	5.00	ng	0.00
16) Chrysene-d12	17.78	240	31541	5.00	ng	0.00
22) Perylene-d12	20.81	264	25756	5.00	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) Nitrobenzene-d5	7.50	82	36072	10.51	ng	0.00
8) 2-Fluorobiphenyl	9.70	172	65689	9.36	ng	0.00
18) Terphenyl-d14	15.58	244	37492	8.22	ng	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	2.04	88	156	0.06	ng	# 82
5) Naphthalene	8.39	128	1010	0.07	ng	# 85
6) 2-Methylnaphthalene	9.25	142	505	0.06	ng	# 94
9) Acenaphthylene	10.33	152	3164	0.06	ng	# 99
10) Acenaphthene	10.54	154	621	0.08	ng	# 82
11) Fluorene	11.19	166	483	0.06	ng	# 98
13) Phenanthrene	12.65	178	2527	0.06	ng	# 98
14) Anthracene	12.65	178	2527	0.06	ng	# 100
15) Fluoranthene	14.72	202	489	0.06	ng	# 98
17) Pyrene	15.16	202	477	0.05	ng	# 99
19) Benzo(a)anthracene	17.77	228	1637	0.07	ng	# 71
20) Chrysene	17.84	228	2036	0.06	ng	# 65
21) Indeno(1,2,3-cd)pyrene	22.88	276	153	0.41	ng	# 65
23) Benzo(b)fluoranthene	20.03	252	5	0.34	ng	# 1
24) Benzo(k)fluoranthene	20.14	252	91	0.10	ng	# 6
25) Benzo(a)pyrene	20.71	252	83	0.33	ng	# 7
26) Dibenzo(a,h)anthracene	22.94	278	35	0.39	ng	# 10
27) Benzo(g,h,i)perylene	23.43	276	264	0.27	ng	# 15

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



#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 6.80 min Scan# 1183

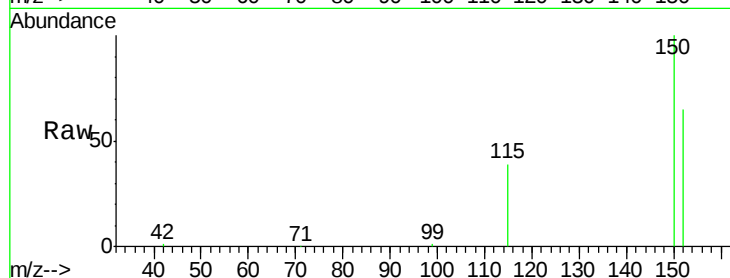
Delta R.T. -0.00 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampled :



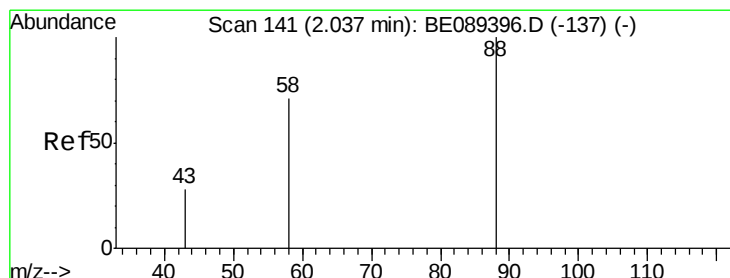
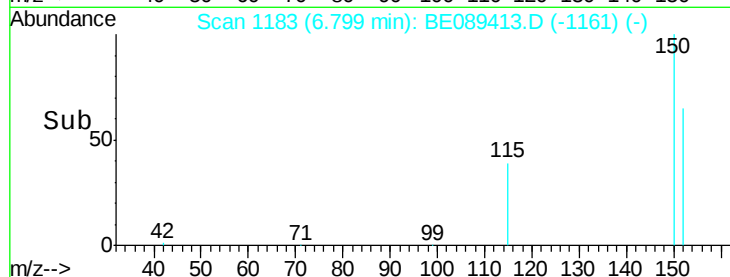
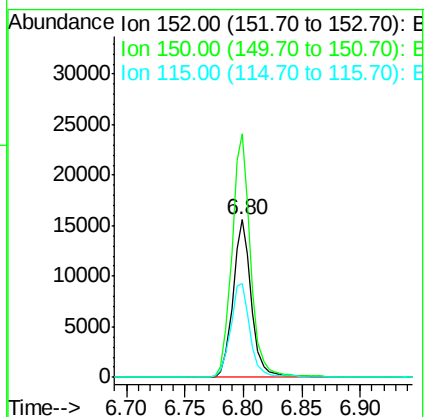
Tgt Ion: 152 Resp: 16922

Ion Ratio Lower Upper

152 100

150 154.4 123.6 185.4

115 59.9 48.1 72.1



#2

1,4-Dioxane

Concen: 0.06 ng

RT: 2.04 min Scan# 142

Delta R.T. 0.01 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

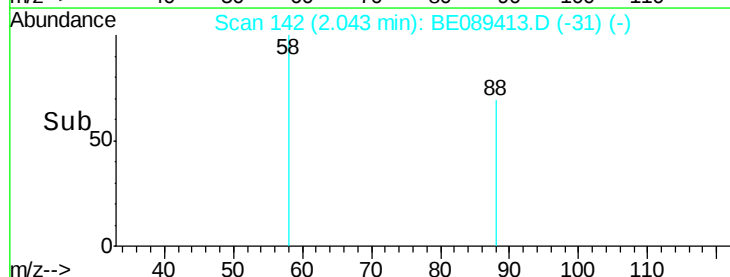
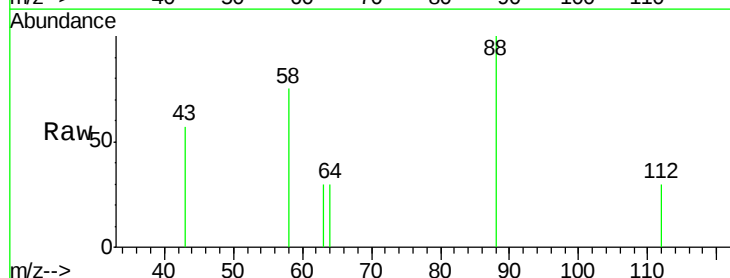
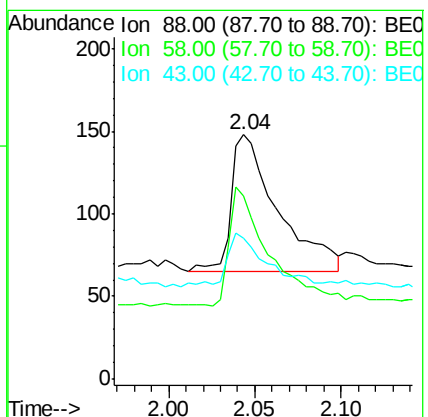
Tgt Ion: 88 Resp: 156

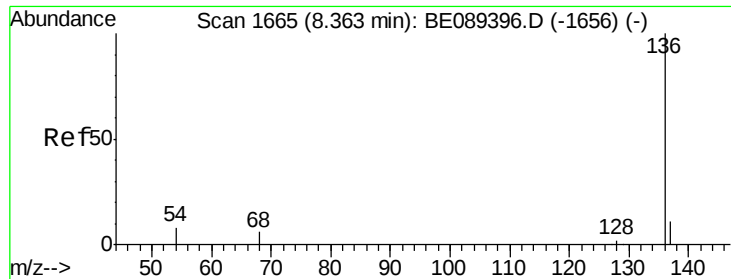
Ion Ratio Lower Upper

88 100

58 78.2 63.8 95.8

43 0.0 25.8 38.8#





#3

Naphthalene-d8

Concen: 5.00 ng

RT: 8.36 min Scan# 1666

Delta R.T. 0.00 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampled :

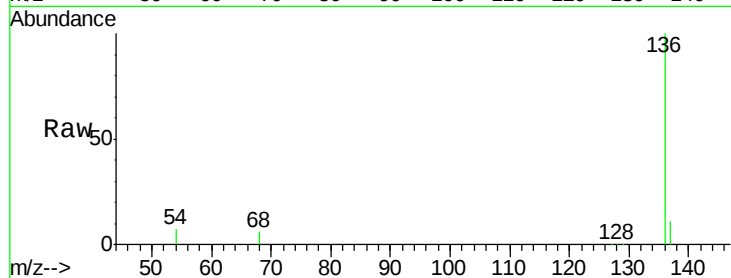
Tgt Ion: 136 Resp: 62631

Ion Ratio Lower Upper

136 100

137 11.0 8.8 13.2

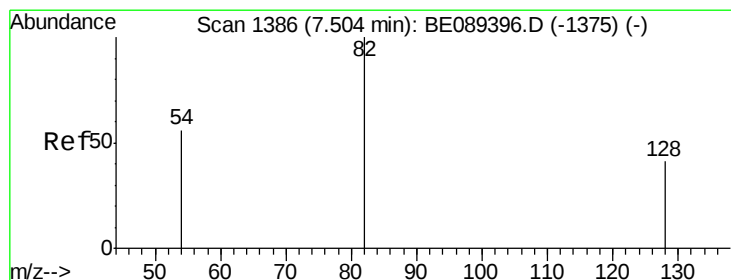
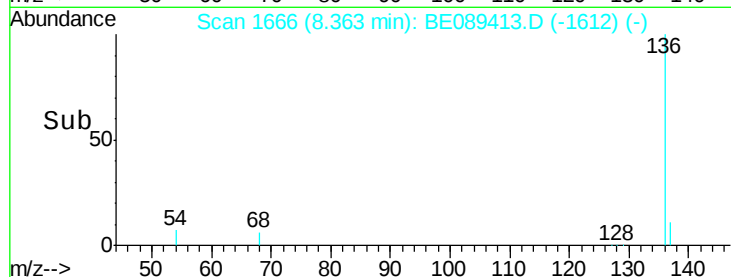
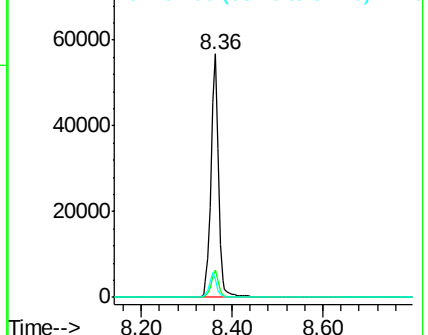
54 7.5 6.2 9.2



Abundance Ion 136.00 (135.70 to 136.70): BE089413.D (-1612) (-)

Ion 137.00 (136.70 to 137.70): BE089413.D (-1612) (-)

Ion 54.00 (53.70 to 54.70): BE089413.D (-1612) (-)



#4

Nitrobenzene-d5

Concen: 10.51 ng

RT: 7.50 min Scan# 1384

Delta R.T. -0.01 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

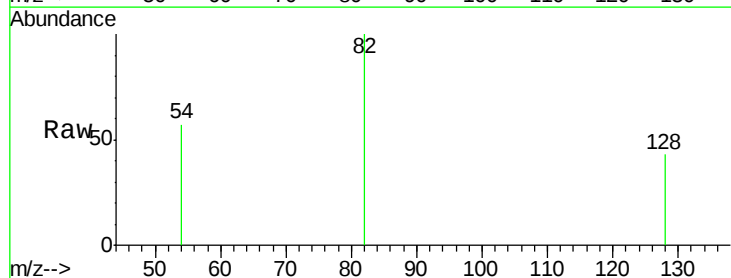
Tgt Ion: 82 Resp: 36072

Ion Ratio Lower Upper

82 100

128 42.8 33.4 50.2

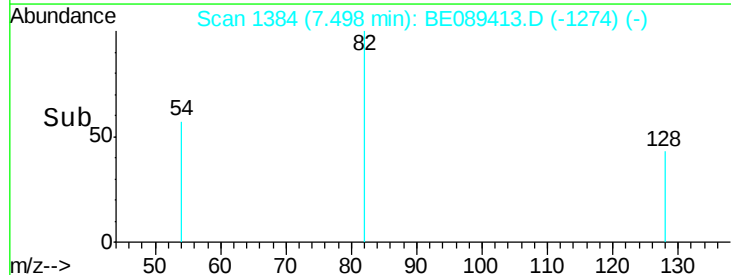
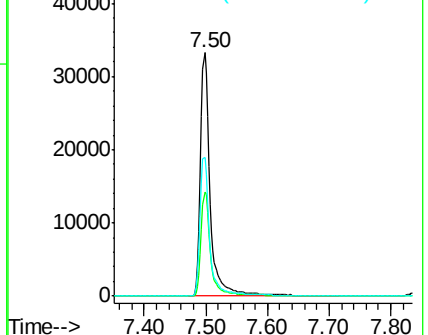
54 56.8 45.2 67.8

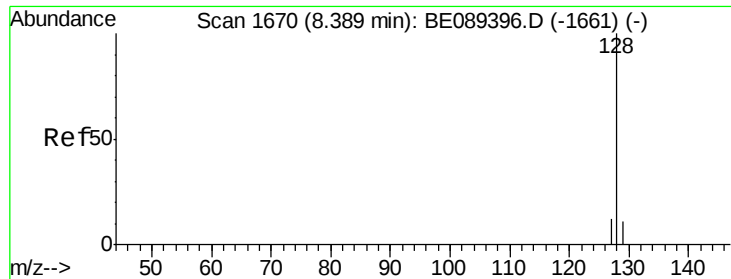


Abundance Ion 82.00 (81.70 to 82.70): BE089413.D (-1274) (-)

Ion 128.00 (127.70 to 128.70): BE089413.D (-1274) (-)

Ion 54.00 (53.70 to 54.70): BE089413.D (-1274) (-)





#5

Naphthalene

Concen: 0.07 ng

RT: 8.39 min Scan# 1671

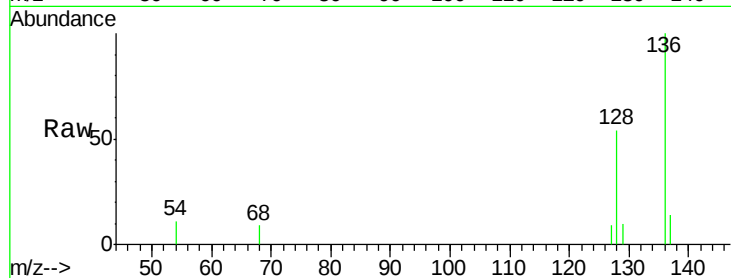
Delta R.T. 0.00 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampled :



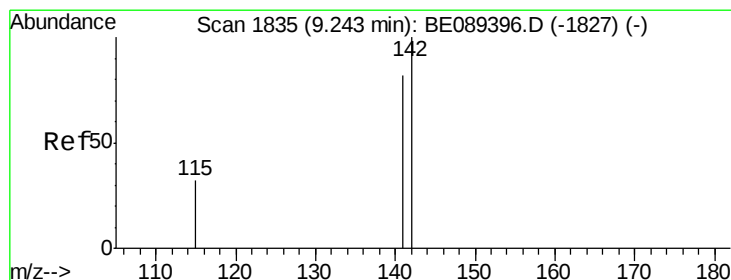
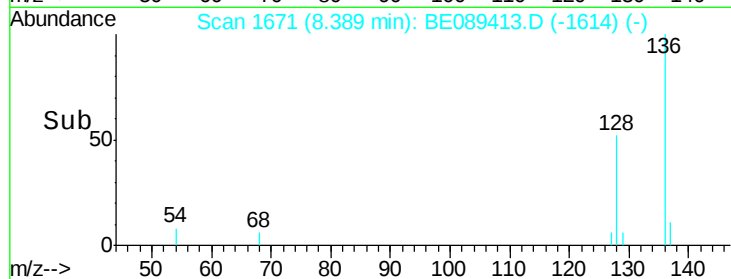
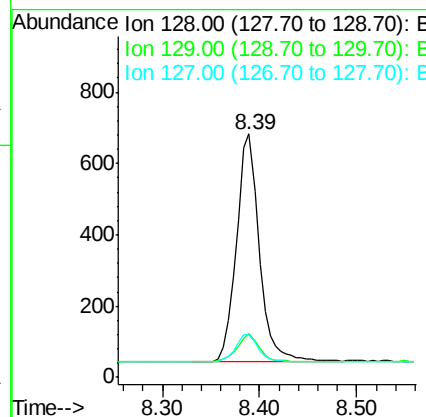
Tgt Ion:128 Resp: 1010

Ion Ratio Lower Upper

128 100

129 17.9 9.2 13.8#

127 17.6 9.7 14.5#



#6

2-Methylnaphthalene

Concen: 0.06 ng

RT: 9.25 min Scan# 1838

Delta R.T. 0.01 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

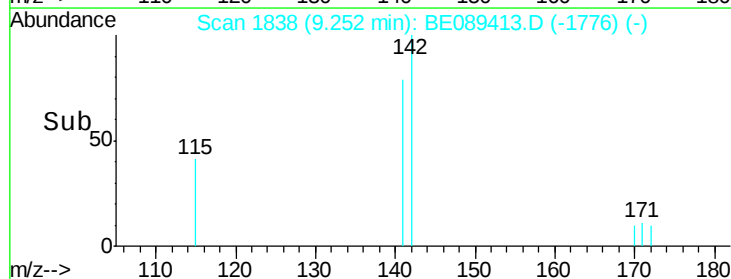
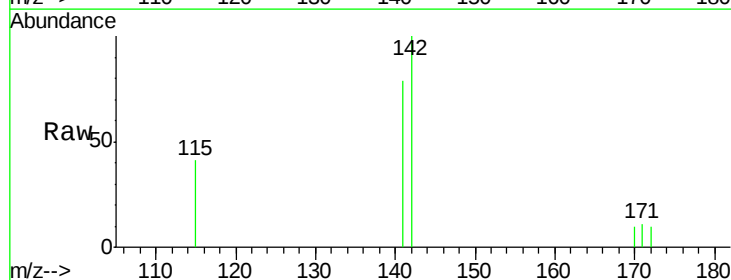
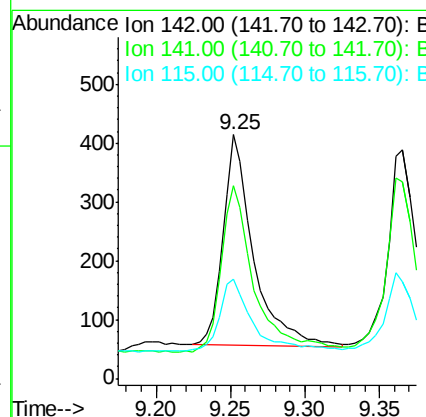
Tgt Ion:142 Resp: 505

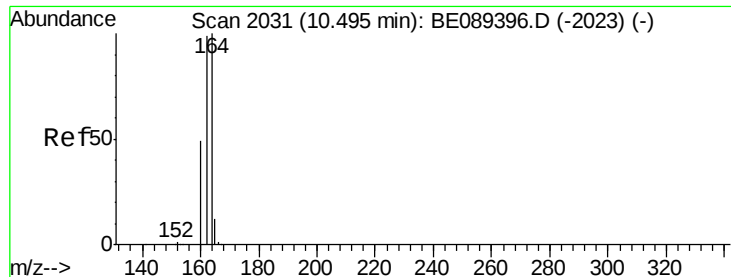
Ion Ratio Lower Upper

142 100

141 79.0 65.3 97.9

115 40.8 26.1 39.1#





#7

Acenaphthene-d10

Concen: 5.00 ng

RT: 10.49 min Scan# 2032

Delta R.T. 0.00 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampled :

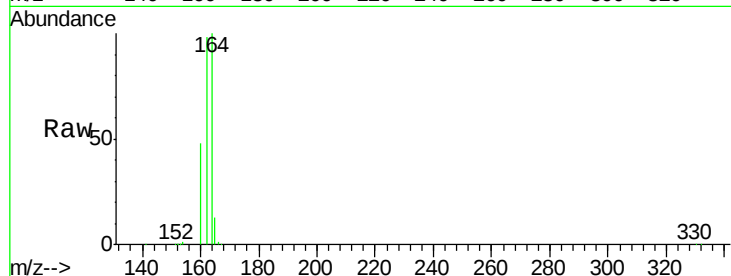
Tgt Ion:164 Resp: 28166

Ion Ratio Lower Upper

164 100

162 98.2 79.2 118.8

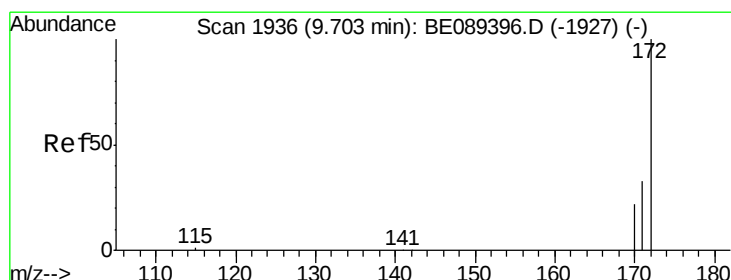
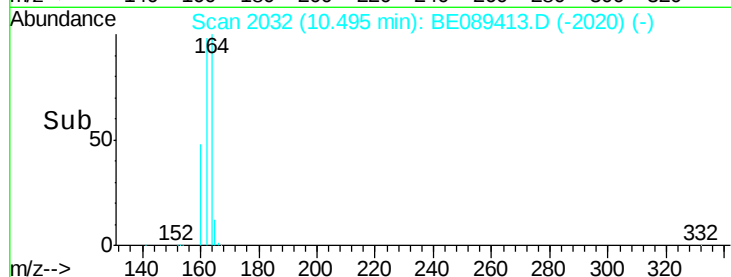
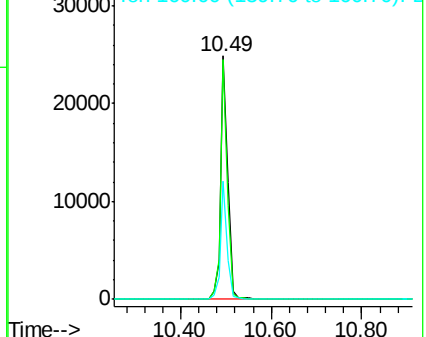
160 48.5 39.3 58.9



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



#8

2-Fluorobiphenyl

Concen: 9.36 ng

RT: 9.70 min Scan# 1937

Delta R.T. -0.00 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

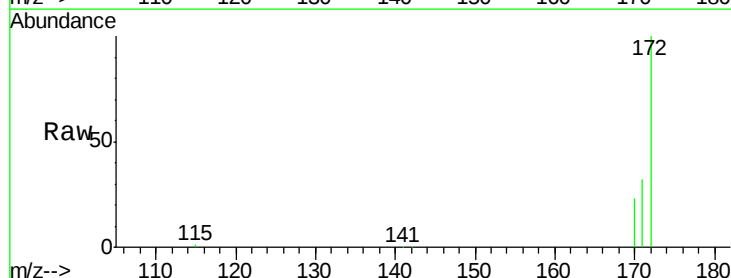
Tgt Ion:172 Resp: 65689

Ion Ratio Lower Upper

172 100

171 32.4 26.3 39.5

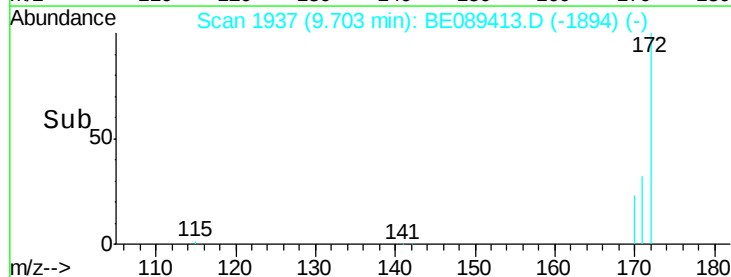
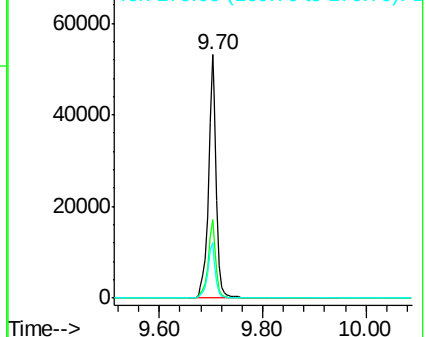
170 22.6 18.2 27.4

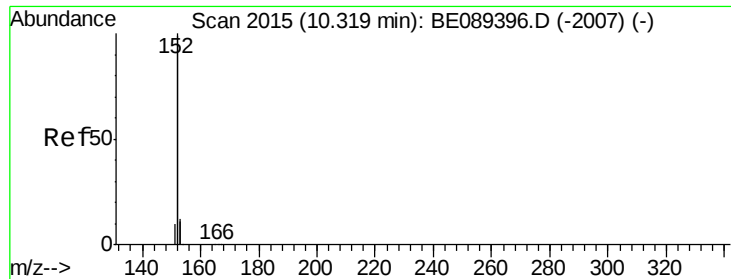


Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





#9

Acenaphthylene

Concen: 0.06 ng

RT: 10.33 min Scan# 2017

Delta R.T. 0.01 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampled :

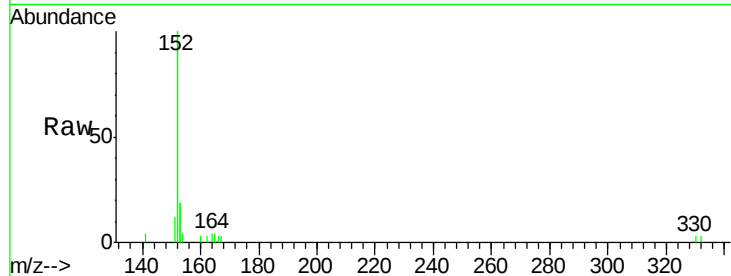
Tgt Ion:152 Resp: 3164

Ion Ratio Lower Upper

152 100

151 4.9 3.7 5.5

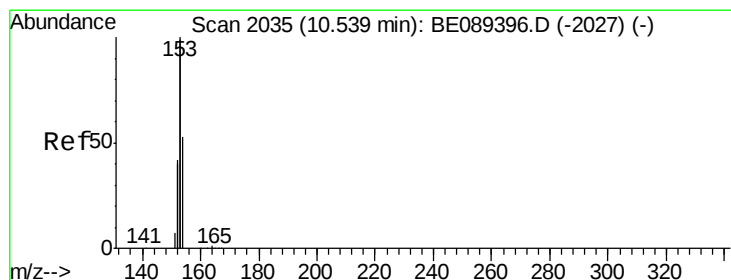
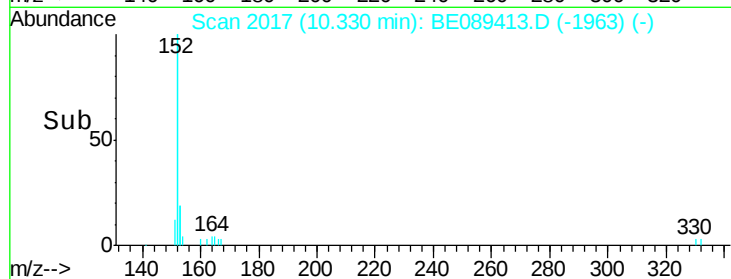
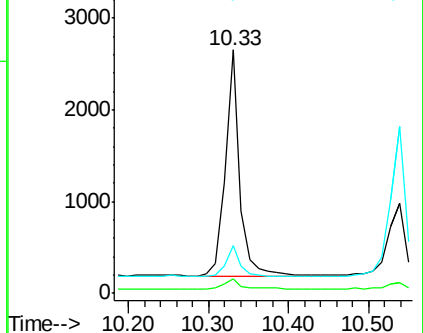
153 12.6 10.2 15.4



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



#10

Acenaphthene

Concen: 0.08 ng

RT: 10.54 min Scan# 2036

Delta R.T. 0.00 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

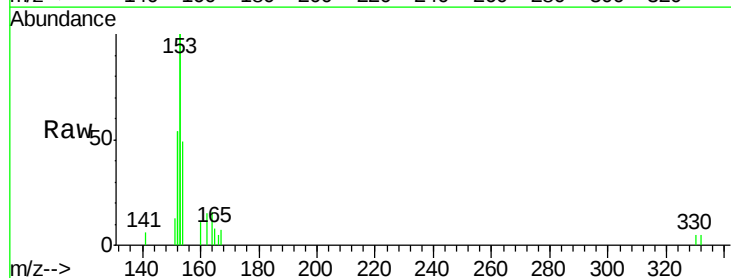
Tgt Ion:154 Resp: 621

Ion Ratio Lower Upper

154 100

153 349.4 328.2 492.4

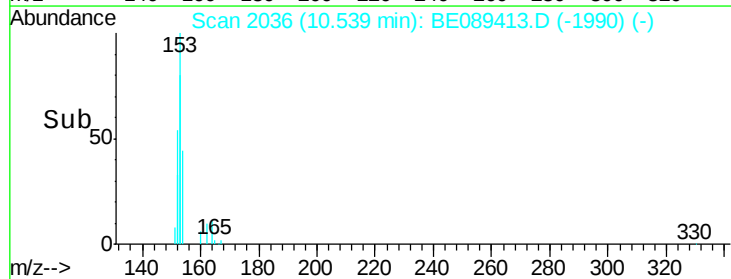
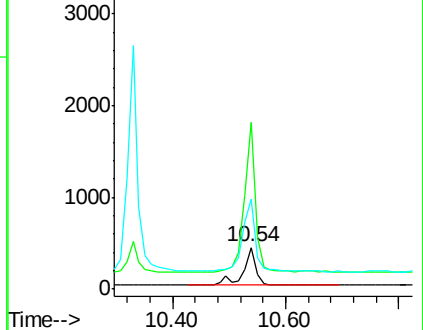
152 198.7 162.8 244.2

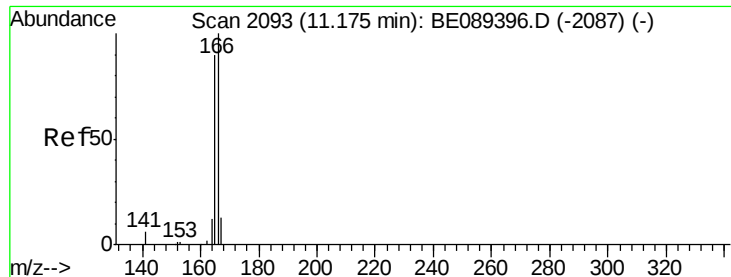


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E





#11

Fluorene

Concen: 0.06 ng

RT: 11.19 min Scan# 2095

Delta R.T. 0.01 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampled :

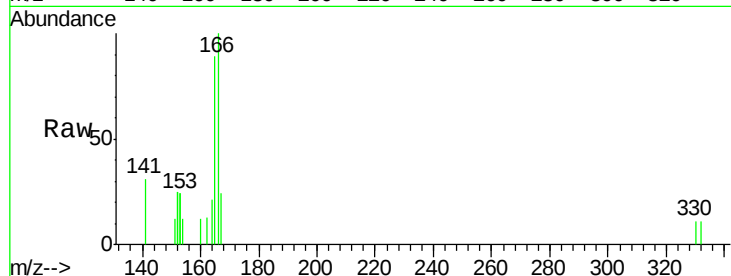
Tgt Ion:166 Resp: 483

Ion Ratio Lower Upper

166 100

165 92.8 73.0 109.6

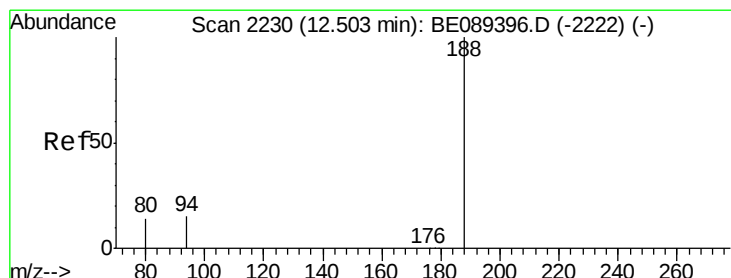
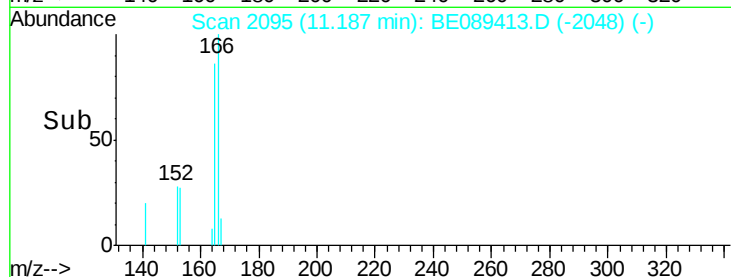
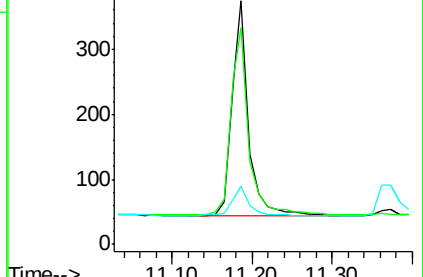
167 15.1 11.0 16.4



Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E



#12

Phenanthrene-d10

Concen: 5.00 ng

RT: 12.50 min Scan# 2231

Delta R.T. -0.00 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

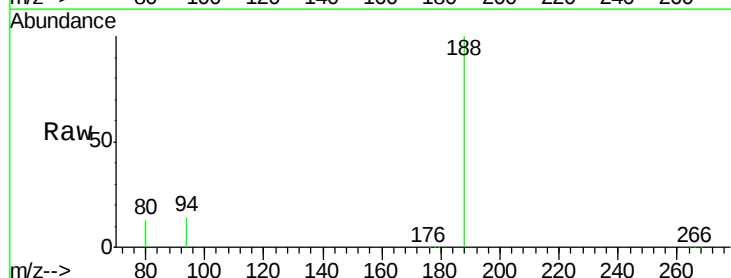
Tgt Ion:188 Resp: 43083

Ion Ratio Lower Upper

188 100

94 14.0 11.9 17.9

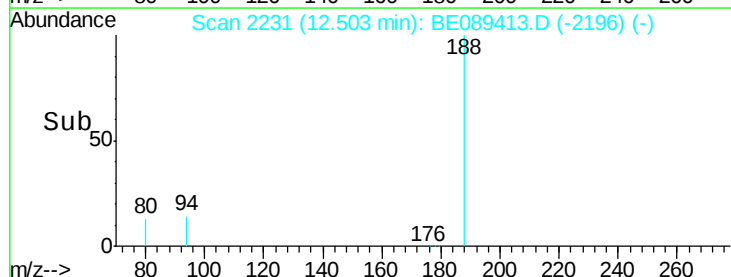
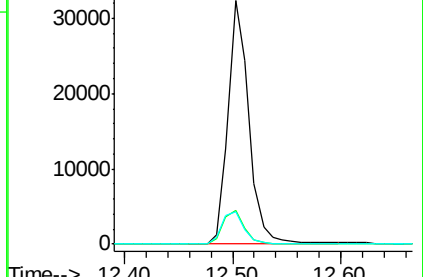
80 13.3 10.9 16.3

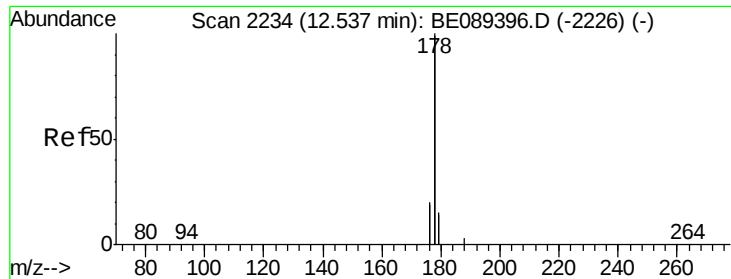


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BE0

Ion 80.00 (79.70 to 80.70): BE0

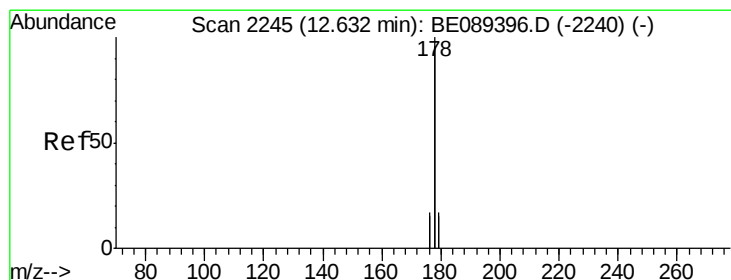
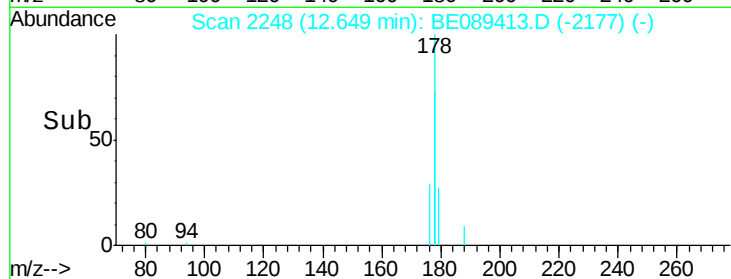
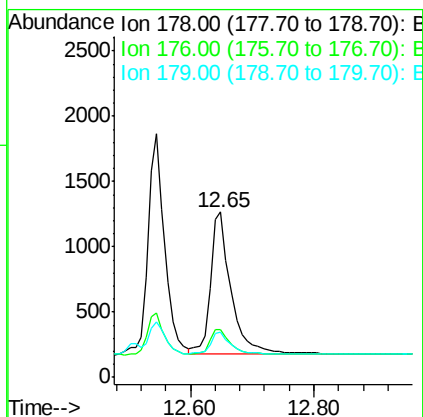
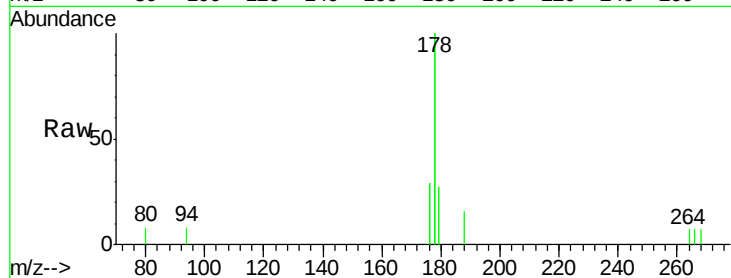




#13
 Phenanthrene
 Concen: 0.06 ng
 RT: 12.65 min Scan# 2248
 Delta R.T. 0.11 min
 Lab File: BE089413.D
 Acq: 17 Jan 2015 4:54

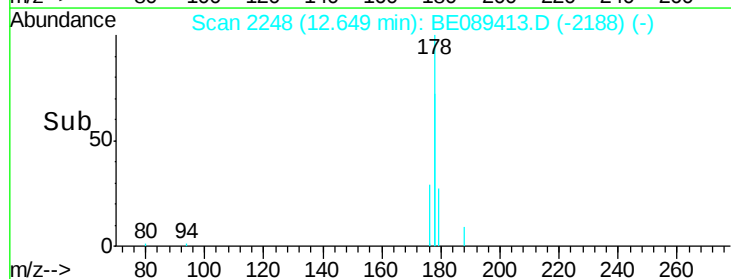
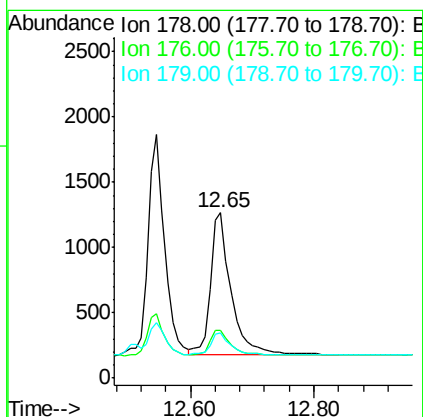
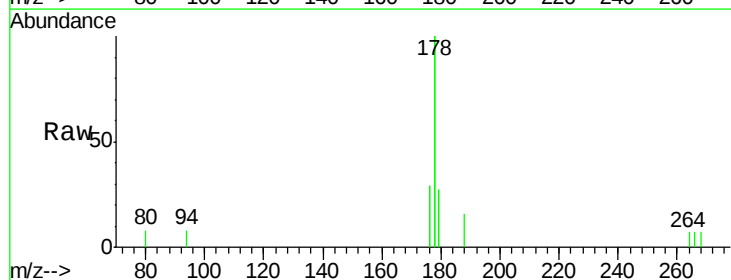
Instrument :
 ClientSampled :

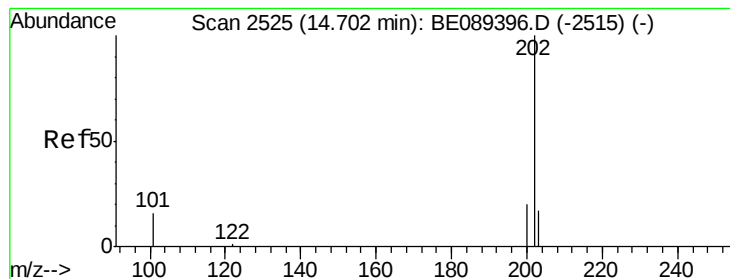
Tgt Ion:178 Resp: 2527
 Ion Ratio Lower Upper
 178 100
 176 17.5 15.0 22.4
 179 15.1 12.4 18.6



#14
 Anthracene
 Concen: 0.06 ng
 RT: 12.65 min Scan# 2248
 Delta R.T. 0.02 min
 Lab File: BE089413.D
 Acq: 17 Jan 2015 4:54

Tgt Ion:178 Resp: 2527
 Ion Ratio Lower Upper
 178 100
 176 17.5 14.2 21.4
 179 15.1 12.1 18.1





#15

Fluoranthene

Concen: 0.06 ng

RT: 14.72 min Scan# 2529

Delta R.T. 0.02 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampleId :

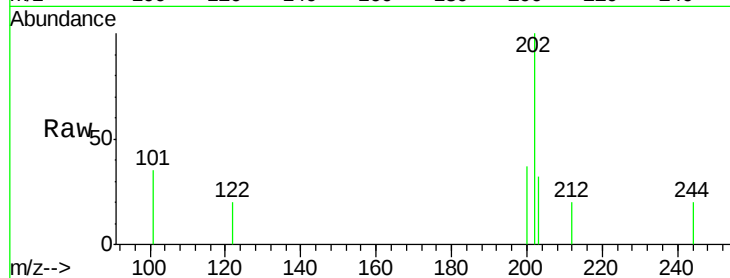
Tgt Ion:202 Resp: 489

Ion Ratio Lower Upper

202 100

101 17.4 13.4 20.2

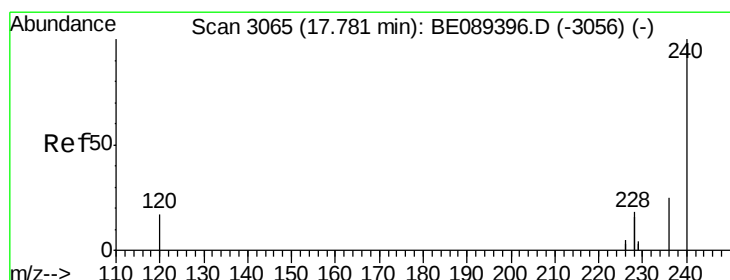
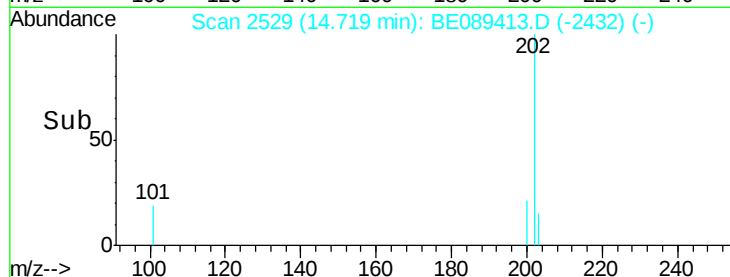
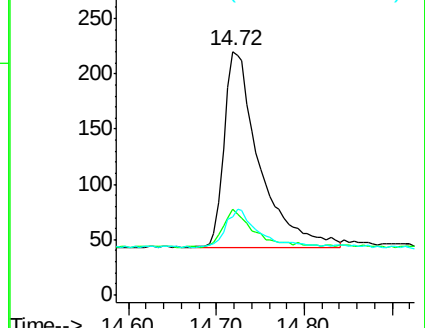
203 18.0 13.7 20.5



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



#16

Chrysene-d12

Concen: 5.00 ng

RT: 17.78 min Scan# 3066

Delta R.T. -0.00 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

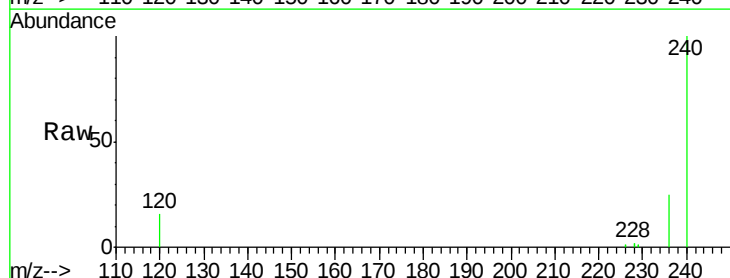
Tgt Ion:240 Resp: 31541

Ion Ratio Lower Upper

240 100

120 16.1 13.4 20.2

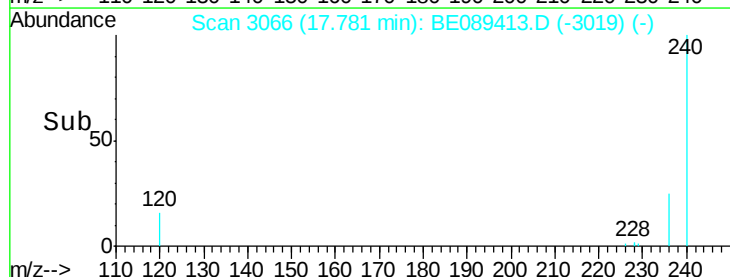
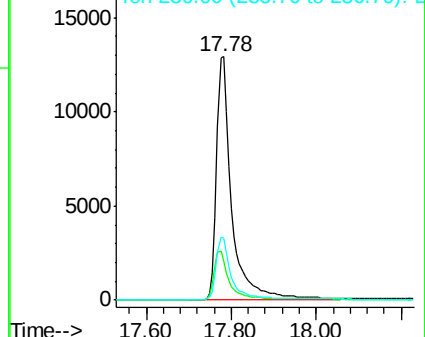
236 25.3 20.2 30.4

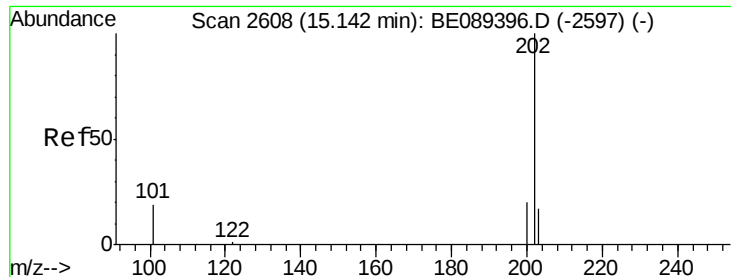


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

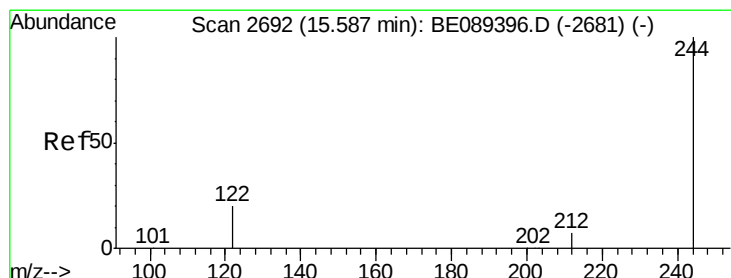
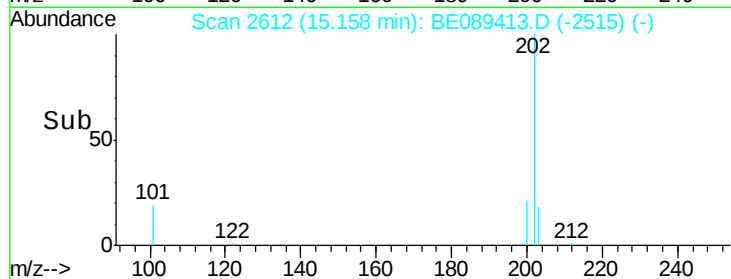
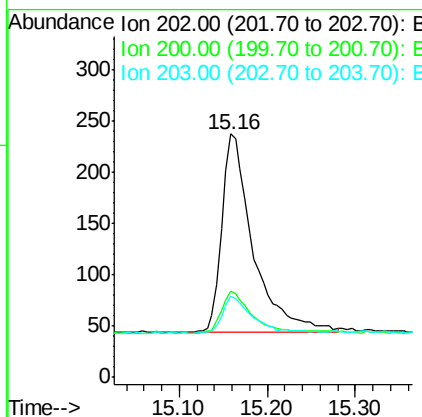
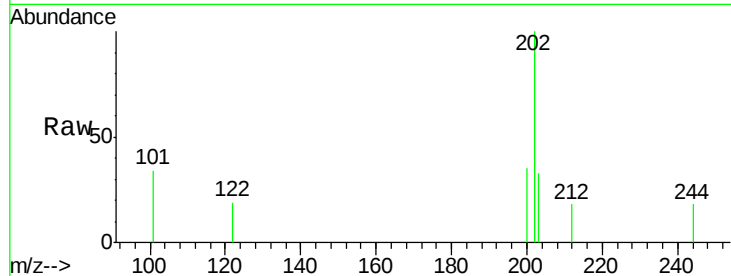




#17
 Pyrene
 Concen: 0.05 ng
 RT: 15.16 min Scan# 2612
 Delta R.T. 0.02 min
 Lab File: BE089413.D
 Acq: 17 Jan 2015 4:54

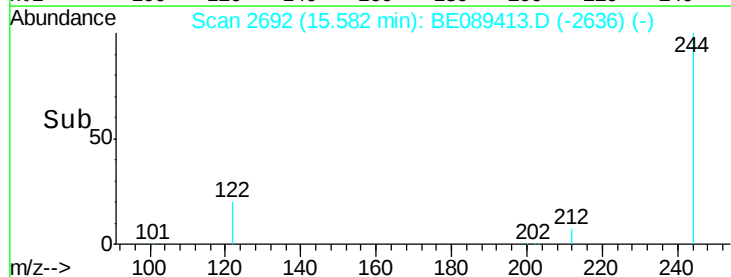
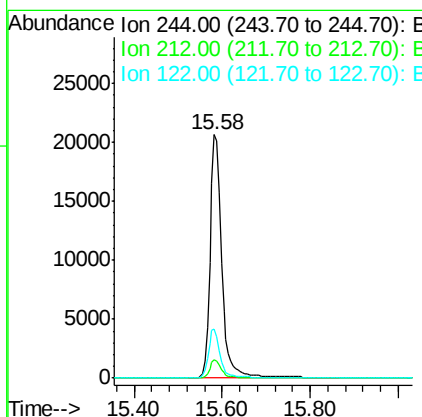
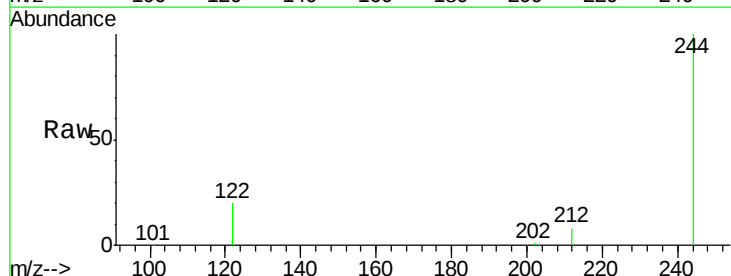
Instrument :
 ClientSampled :

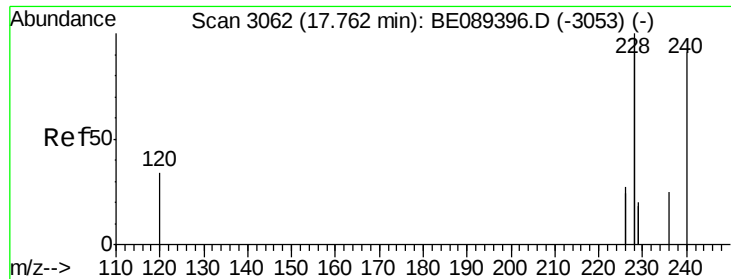
Tgt Ion:202 Resp: 477
 Ion Ratio Lower Upper
 202 100
 200 20.5 16.1 24.1
 203 17.6 13.7 20.5



#18
 Terphenyl-d14
 Concen: 8.22 ng
 RT: 15.58 min Scan# 2692
 Delta R.T. -0.00 min
 Lab File: BE089413.D
 Acq: 17 Jan 2015 4:54

Tgt Ion:244 Resp: 37492
 Ion Ratio Lower Upper
 244 100
 212 7.5 7.0 10.4
 122 20.4 17.4 26.2





#19

Benzo(a)anthracene

Concen: 0.07 ng

RT: 17.77 min Scan# 3064

Delta R.T. 0.01 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampleId :

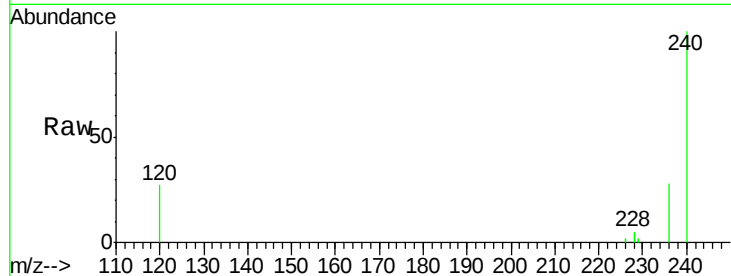
Tgt Ion:228 Resp: 1637

Ion Ratio Lower Upper

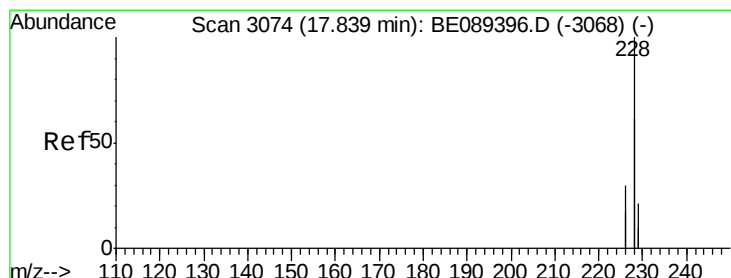
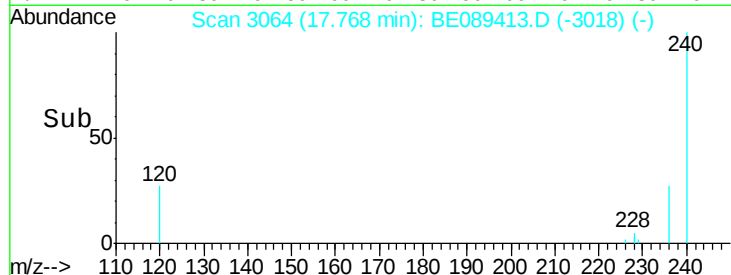
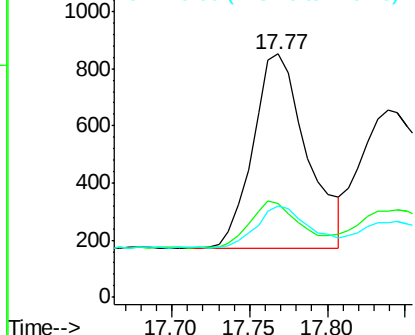
228 100

226 38.7 21.5 32.3#

229 37.6 16.3 24.5#



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



#20

Chrysene

Concen: 0.06 ng

RT: 17.84 min Scan# 3075

Delta R.T. -0.00 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

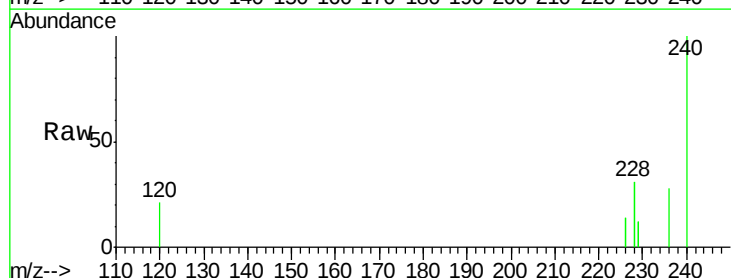
Tgt Ion:228 Resp: 2036

Ion Ratio Lower Upper

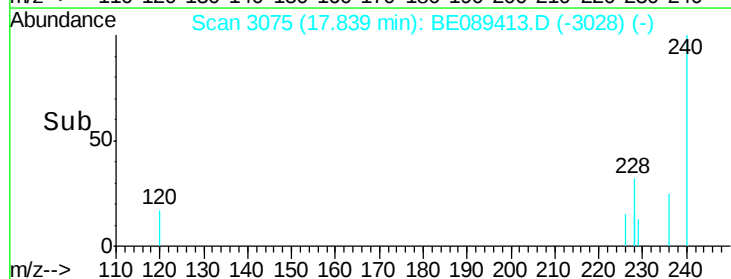
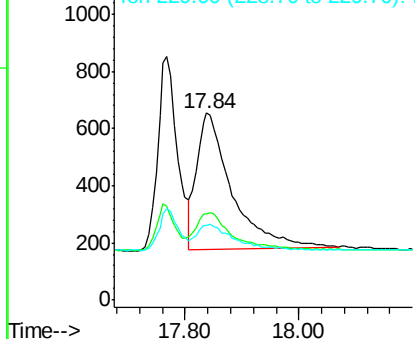
228 100

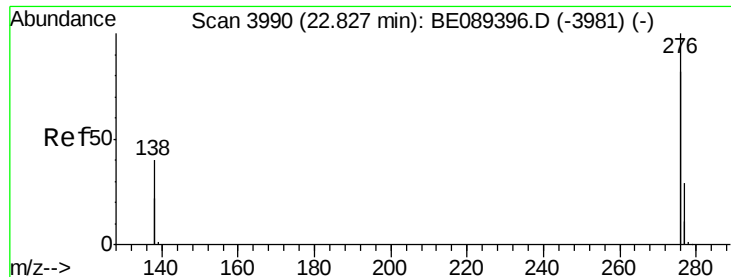
226 45.9 23.8 35.6#

229 40.1 16.5 24.7#



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





#21

Indeno(1,2,3-cd)pyrene

Concen: 0.41 ng

RT: 22.88 min Scan# 3999

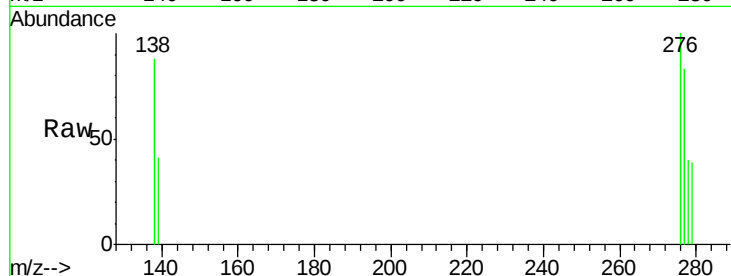
Delta R.T. 0.05 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampled :



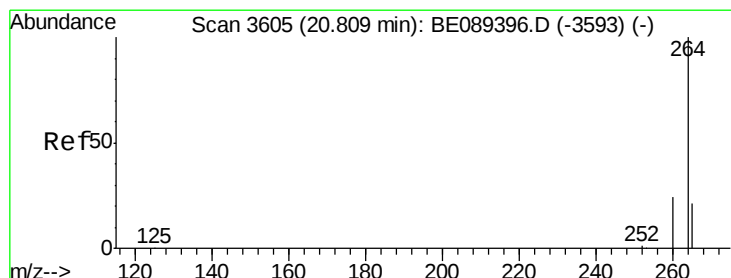
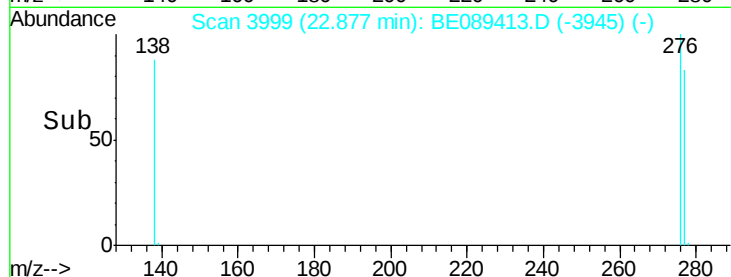
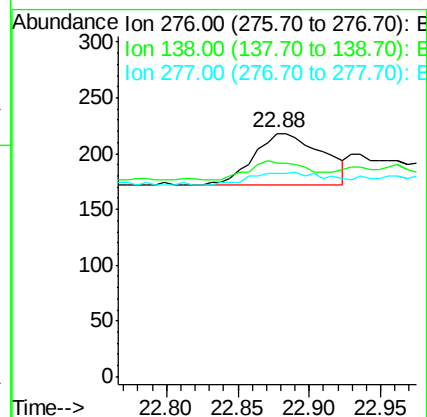
Tgt Ion: 276 Resp: 153

Ion Ratio Lower Upper

276 100

138 32.0 13.8 20.8#

277 26.8 9.8 14.6#



#22

Perylene-d12

Concen: 5.00 ng

RT: 20.81 min Scan# 3606

Delta R.T. -0.00 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

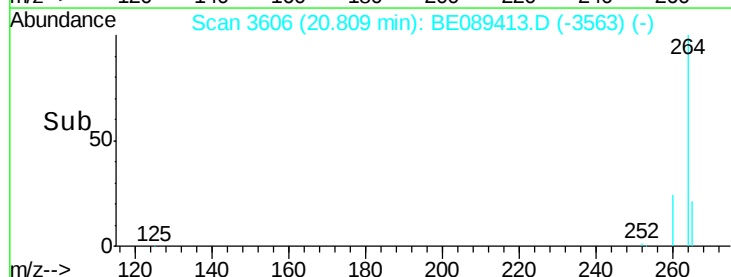
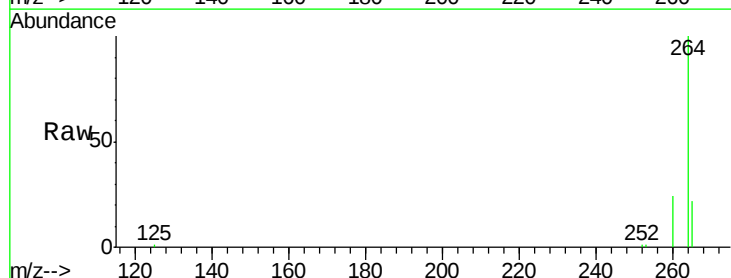
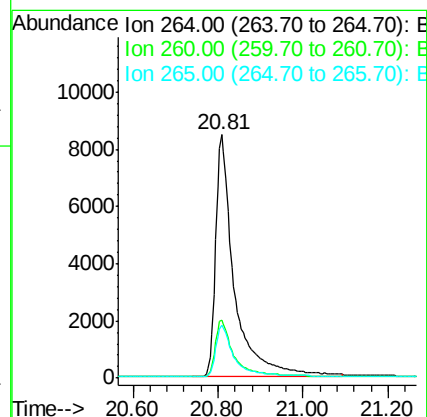
Tgt Ion: 264 Resp: 25756

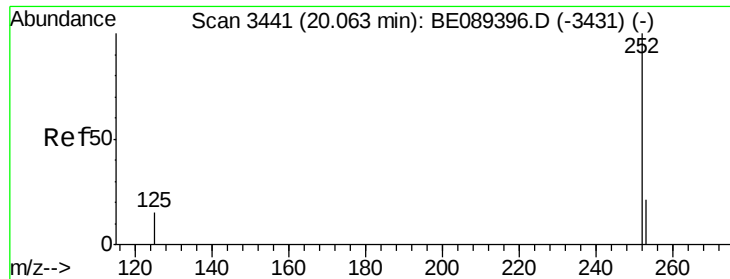
Ion Ratio Lower Upper

264 100

260 23.9 19.1 28.7

265 21.7 17.5 26.3





#23

Benzo(b)fluoranthene

Concen: 0.34 ng

RT: 20.03 min Scan# 3436

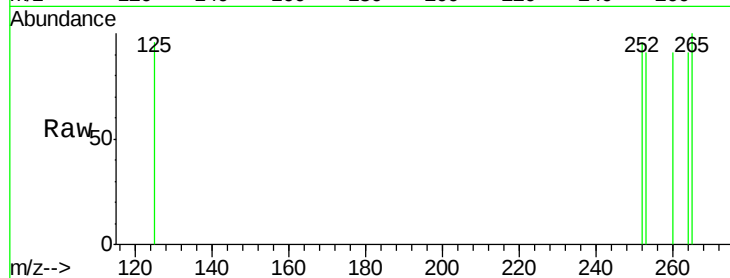
Delta R.T. -0.03 min

Lab File: BE089413.D

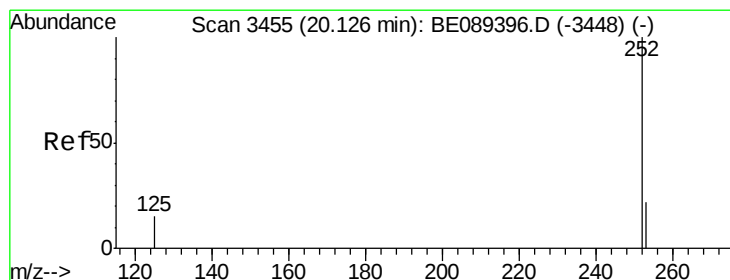
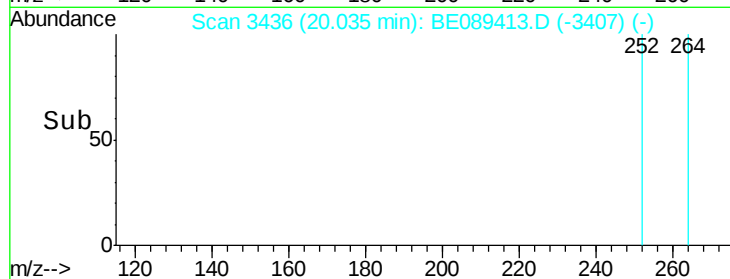
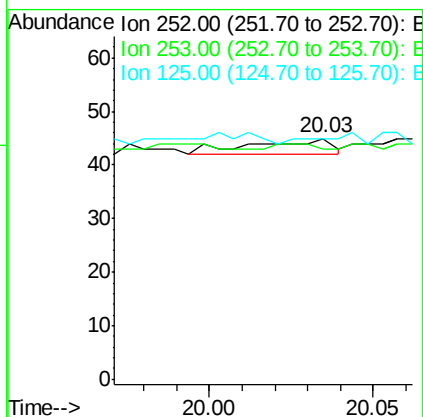
Acq: 17 Jan 2015 4:54

Instrument :

ClientSampled :



Tgt Ion:	252	Resp:	5
Ion	Ratio	Lower	Upper
252	100		
253	95.6	19.1	28.7#
125	100.0	14.3	21.5#



#24

Benzo(k)fluoranthene

Concen: 0.10 ng

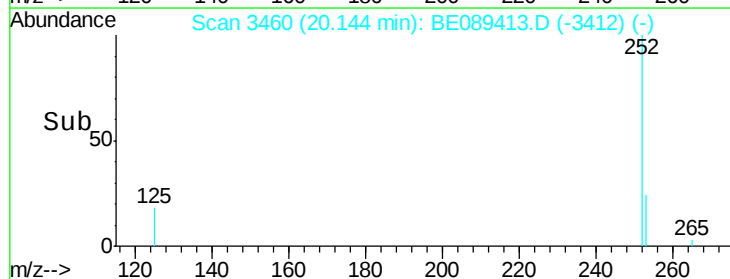
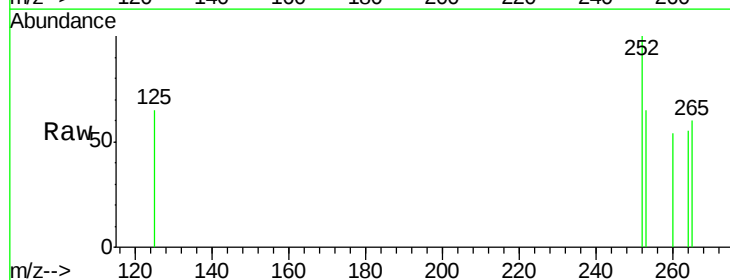
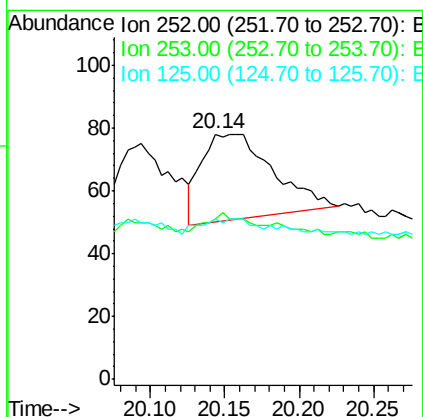
RT: 20.14 min Scan# 3460

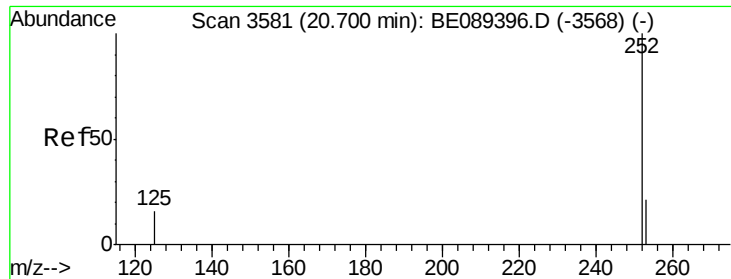
Delta R.T. 0.02 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Tgt Ion:	252	Resp:	91
Ion	Ratio	Lower	Upper
252	100		
253	65.4	19.4	29.0#
125	65.4	14.0	21.0#





#25

Benzo(a)pyrene

Concen: 0.33 ng

RT: 20.71 min Scan# 3584

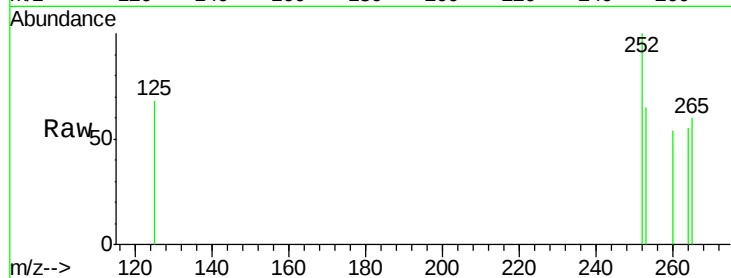
Delta R.T. 0.01 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampled :



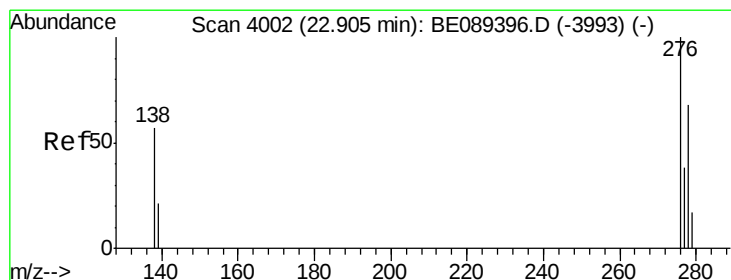
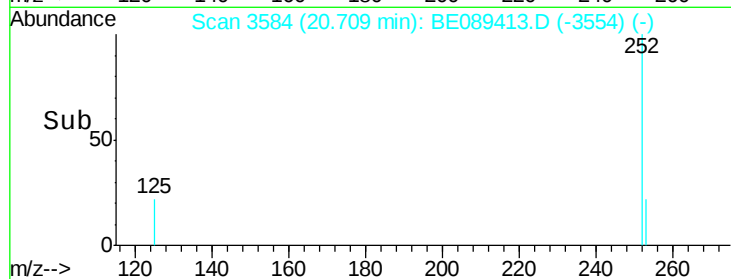
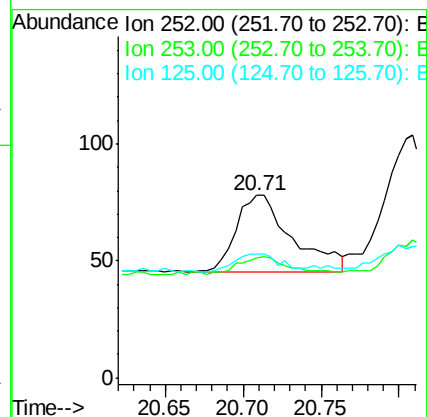
Tgt Ion: 252 Resp: 83

Ion Ratio Lower Upper

252 100

253 65.4 19.5 29.3#

125 67.9 15.4 23.2#



#26

Dibenzo(a,h)anthracene

Concen: 0.39 ng

RT: 22.94 min Scan# 4009

Delta R.T. 0.04 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

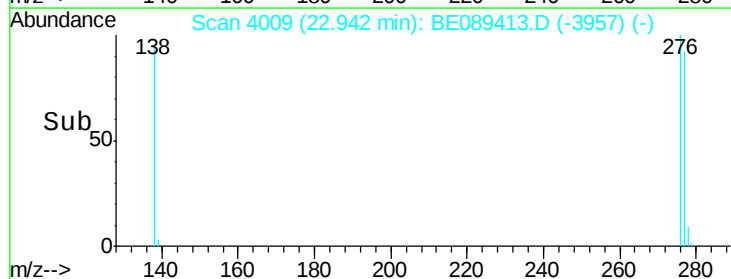
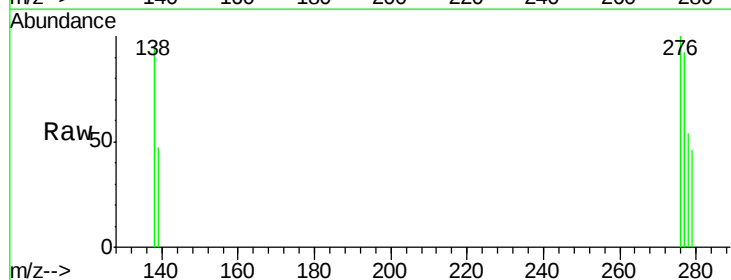
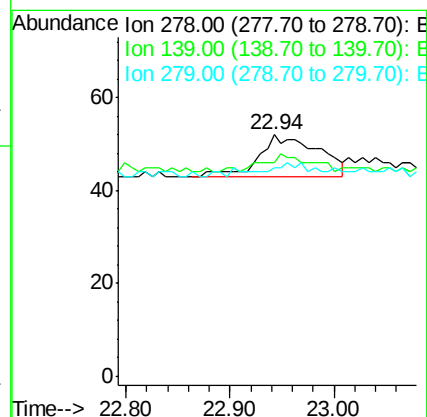
Tgt Ion: 278 Resp: 35

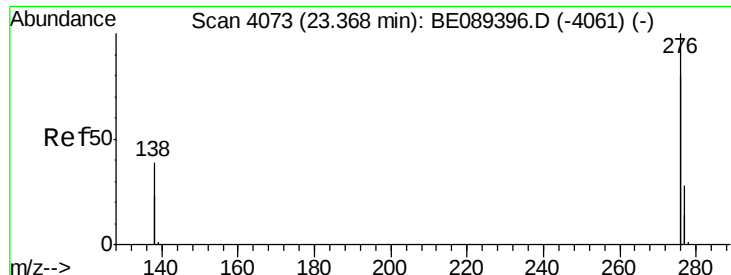
Ion Ratio Lower Upper

278 100

139 88.5 30.5 45.7#

279 86.5 25.8 38.8#





#27

Benzo(g,h,i)perylene

Concen: 0.27 ng

RT: 23.43 min Scan# 4084

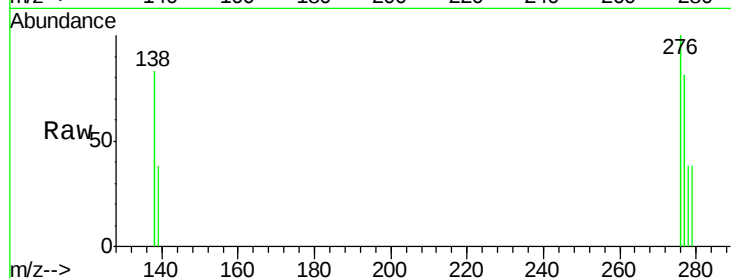
Delta R.T. 0.06 min

Lab File: BE089413.D

Acq: 17 Jan 2015 4:54

Instrument :

ClientSampleId :



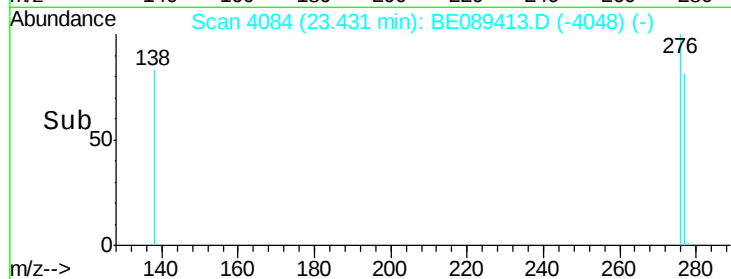
Tgt Ion: 276 Resp: 264

Ion Ratio Lower Upper

276 100

277 80.9 22.8 34.2#

138 83.5 30.8 46.2#



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

