

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA E\DATA\BE120117\
 Data File : BE094897.D
 Acq On : 1 Dec 2017 9:25
 Operator : SJ/JU
 Sample : I6298-16
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 PT-PAH-SOIL

Quant Time: Dec 01 14:17:28 2017
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-SIM-BE113017.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 01 13:33:28 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.48	152	7866	0.40	ng	0.00
7) Naphthalene-d8	11.33	136	18434	0.40	ng	0.00
13) Acenaphthene-d10	15.06	164	10412	0.40	ng	-0.01
19) Phenanthrene-d10	17.77	188	24952	0.40	ng	0.00
27) Chrysene-d12	21.89	240	27138	0.40	ng	0.00
34) Perylene-d12	24.56	264	22762	0.40	ng	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	5.95	112	3829	0.31	ng	0.00
5) Phenol-d6	7.59	99	6565	0.36	ng	0.00
8) Nitrobenzene-d5	9.66	82	3353	0.31	ng	0.00
11) 2-Methylnaphthalene-d10	12.86	152	10452	0.36	ng	0.00
14) 2,4,6-Tribromophenol	16.53	330	558	0.31	ng	0.00
15) 2-Fluorobiphenyl	13.71	172	15072	0.34	ng	0.00
25) Fluoranthene-d10	19.76	212	134226	0.39	ng	0.00
29) Terphenyl-d14	20.33	244	21802	0.43	ng	0.00

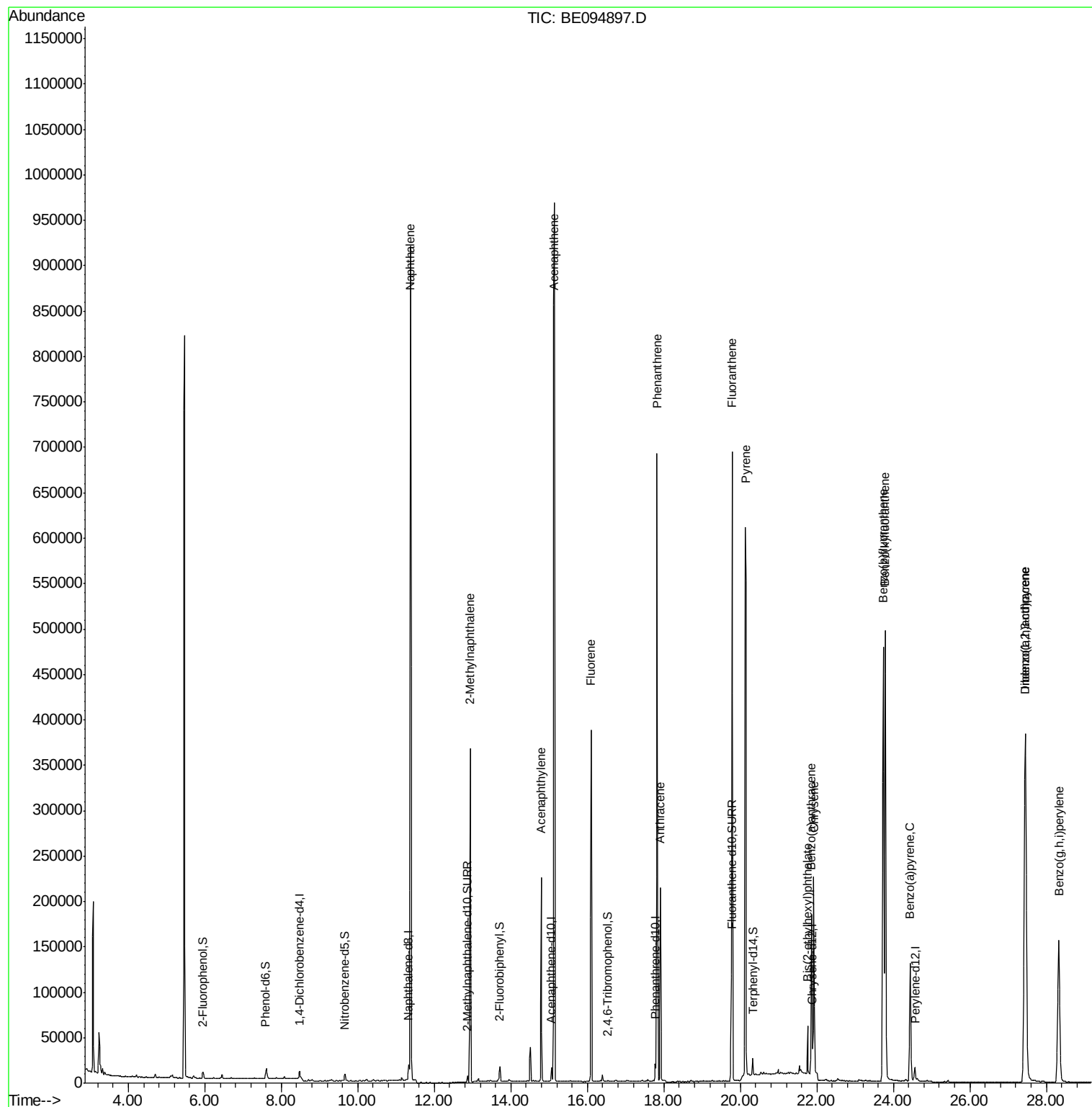
Target Compounds						Qvalue
9) Naphthalene	11.38	128	1478075	6.839	ng	99
12) 2-Methylnaphthalene	12.94	142	342702	6.382	ng	96
16) Acenaphthylene	14.79	152	232750	3.956	ng	100
17) Acenaphthene	15.14	154	576210	15.153	ng	95
18) Fluorene	16.10	166	266793	5.514	ng	# 78
23) Phenanthrene	17.82	178	691948	8.703	ng	98
24) Anthracene	17.91	178	235164	2.789	ng	# 95
26) Fluoranthene	19.79	202	642459	6.286	ng	99
28) Pyrene	20.13	202	907532	9.685	ng	98
30) Benzo(a)anthracene	21.85	228	187282	2.251	ng	# 62
31) Chrysene	21.92	228	212687	2.313	ng	# 64
32) Bis(2-ethylhexyl)phthalate	21.76	149	62646	0.454	ng	99
33) Indeno(1,2,3-cd)pyrene	27.44	276	686230	9.120	ng	98
35) Benzo(b)fluoranthene	23.73	252	710290	8.547	ng	# 39
36) Benzo(k)fluoranthene	23.79	252	763617	9.015	ng	# 39
37) Benzo(a)pyrene	24.44	252	215230	2.954	ng	# 32
38) Dibenzo(a,h)anthracene	27.46	278	397422	5.905	ng	# 42
39) Benzo(a,h,i)perylene	28.32	276	396834	5.904	ng	# 52

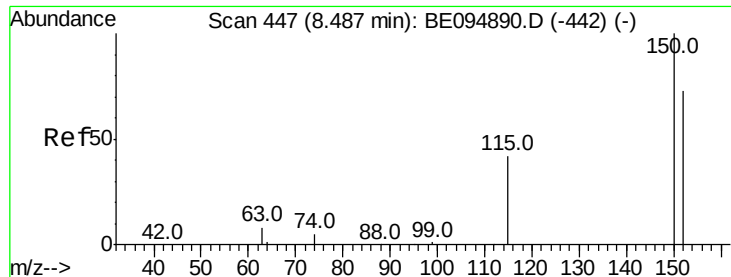
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA E\DATA\BE120117\
Data File : BE094897.D
Acq On : 1 Dec 2017 9:25
Operator : SJ/JU
Sample : I6298-16
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_E
ClientSampleId :
PT-PAH-SOIL

Quant Time: Dec 01 14:17:28 2017
Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-SIM-BE113017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 01 13:33:28 2017
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 0.400 ng

RT: 8.48 min Scan# 447

Delta R.T. -0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

PT-PAH-SOIL

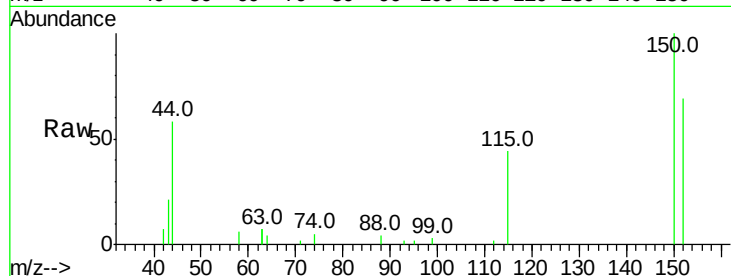
Tot Ion:152 Resp: 7866

Ion Ratio Lower Upper

152 100

150 145.1 117.2 175.8

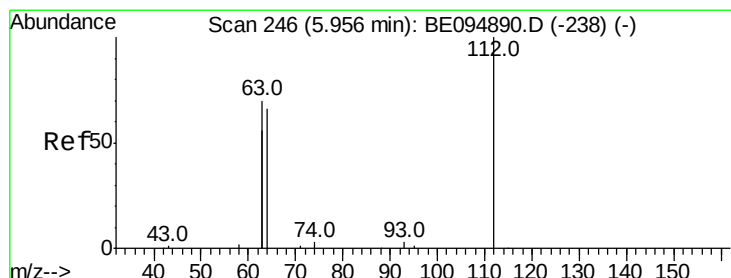
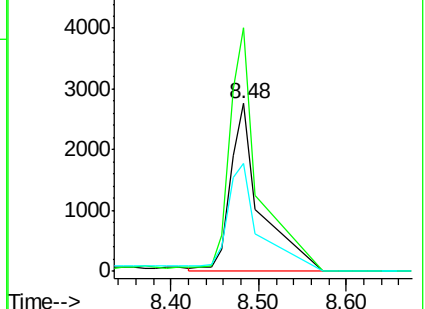
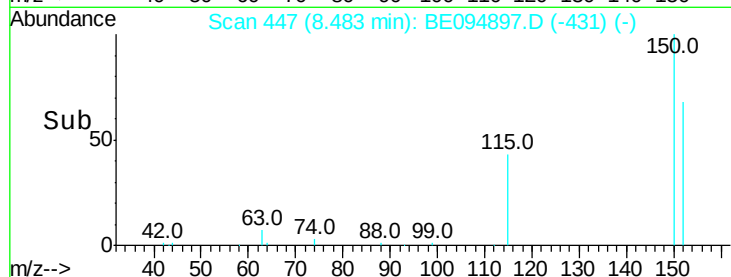
115 64.5 57.0 85.6



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



#4

2-Fluorophenol

Concen: 0.308 ng

RT: 5.95 min Scan# 246

Delta R.T. -0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

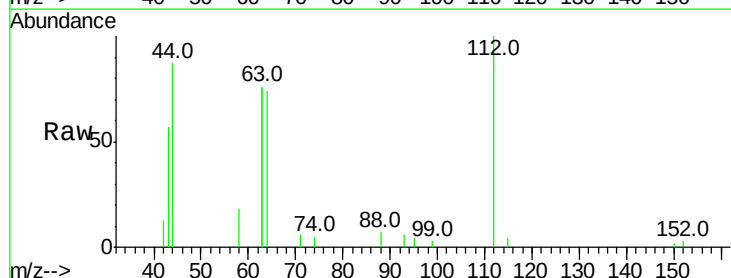
Tgt Ion:112 Resp: 3829

Ion Ratio Lower Upper

112 100

64 77.5 60.1 90.1

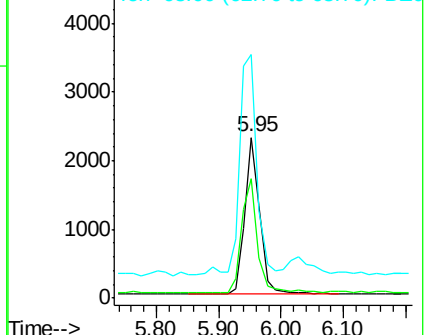
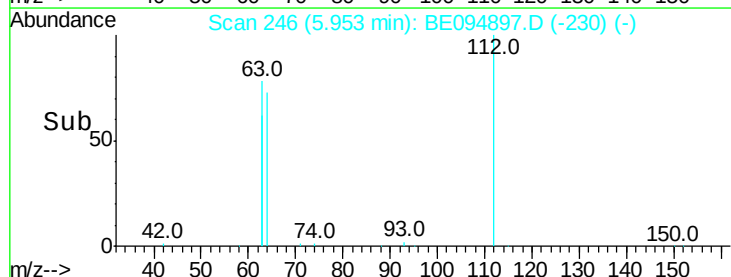
63 160.7 116.8 175.2

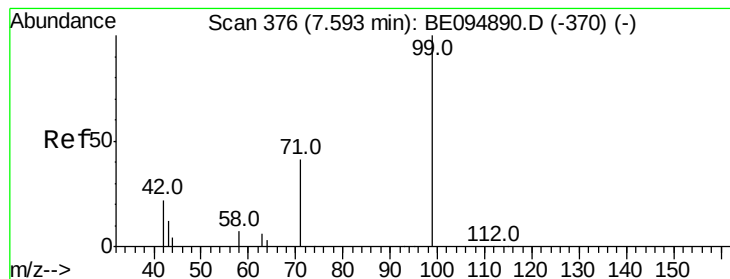


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BE0

Ion 63.00 (62.70 to 63.70): BE0





#5

Phenol-d6

Concen: 0.356 ng

RT: 7.59 min Scan# 376

Delta R.T. -0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

PT-PAH-SOIL

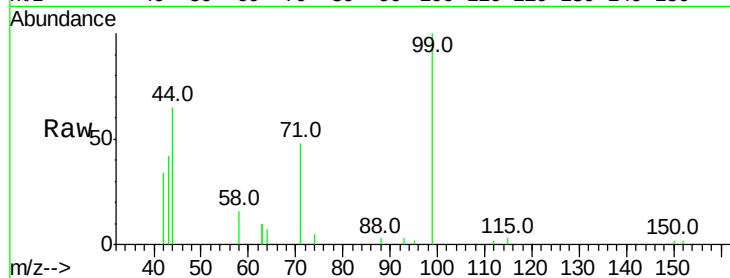
Tot Ion: 99 Resp: 6565

Ion Ratio Lower Upper

99 100

42 34.3 20.2 30.2#

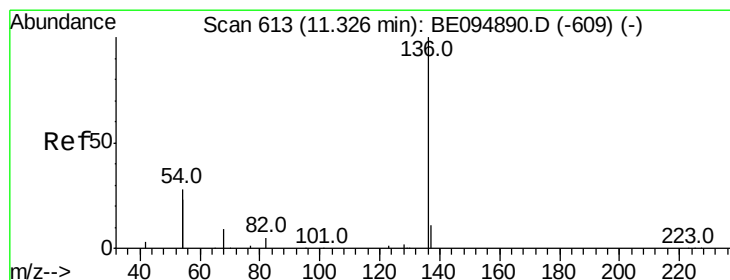
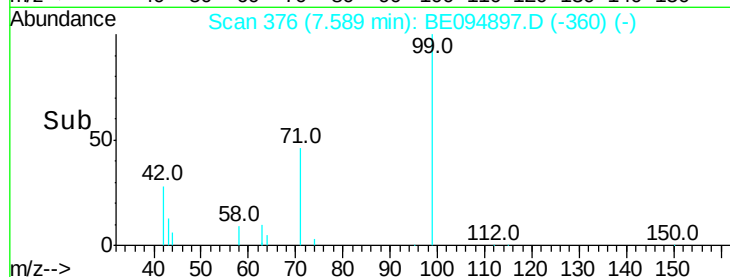
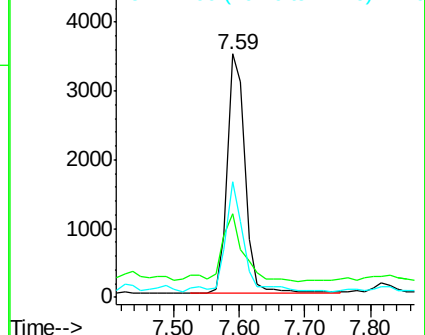
71 46.1 28.4 42.6#



Abundance Ion 99.00 (98.70 to 99.70): BE0

Ion 42.00 (41.70 to 42.70): BE0

Ion 71.00 (70.70 to 71.70): BE0



#7

Naphthalene-d8

Concen: 0.400 ng

RT: 11.33 min Scan# 613

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Tgt Ion: 136 Resp: 18434

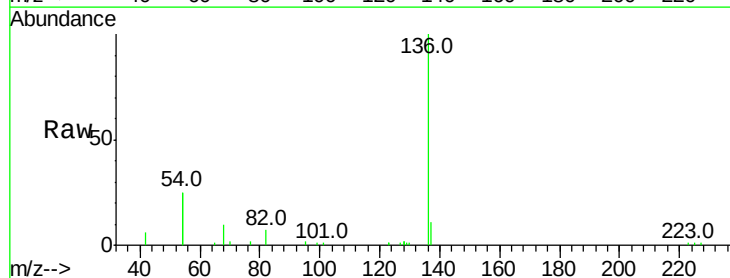
Ion Ratio Lower Upper

136 100

137 11.3 9.5 14.3

54 50.8 29.1 43.7#

68 9.6 6.2 9.2#

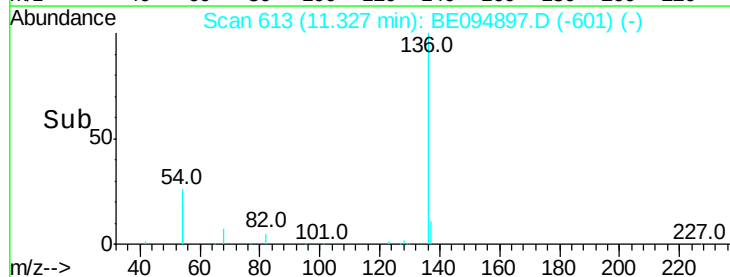
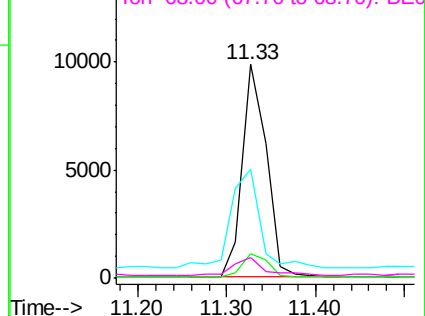


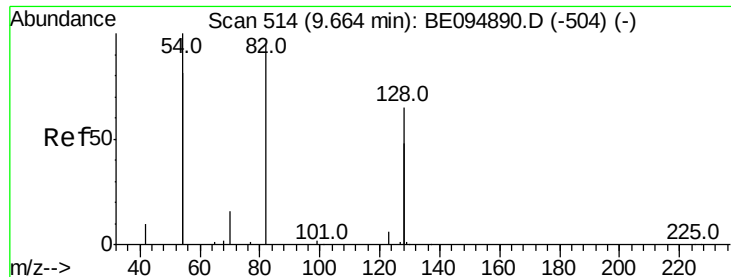
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0

Ion 68.00 (67.70 to 68.70): BE0





#8

Nitrobenzene-d5

Concen: 0.307 ng

RT: 9.66 min Scan# 514

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

PT-PAH-SOIL

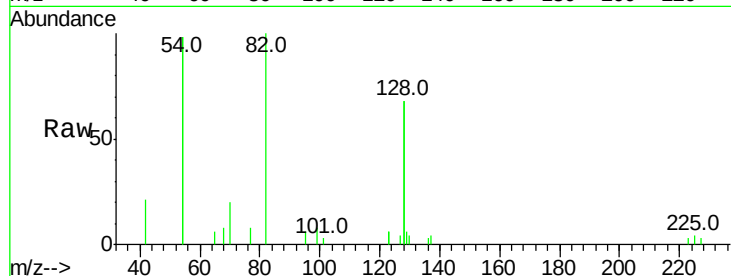
Tot Ion: 82 Resp: 3353

Ion Ratio Lower Upper

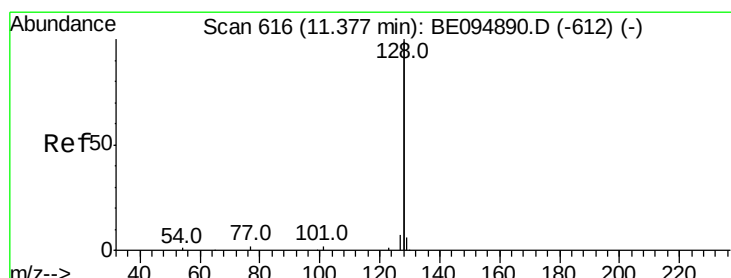
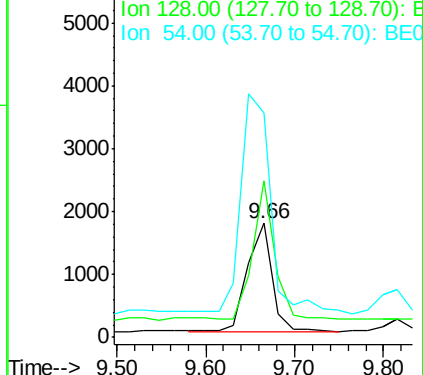
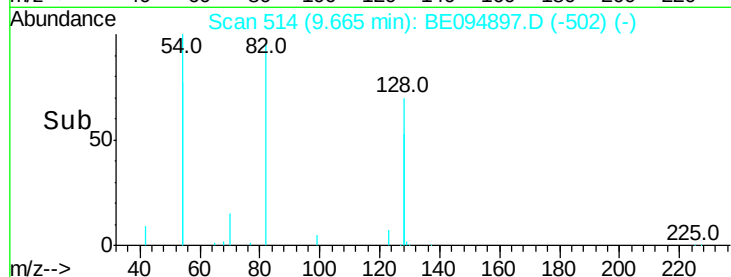
82 100

128 136.8 150.0 225.0#

54 196.7 154.2 231.4



Abundance Ion 82.00 (81.70 to 82.70): BE094897.D (-502) (-)



#9

Naphthalene

Concen: 6.839 ng

RT: 11.38 min Scan# 616

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

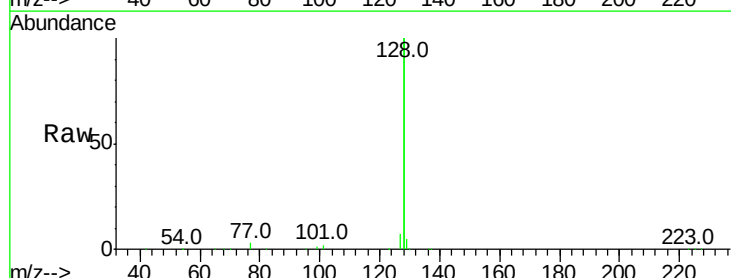
Tgt Ion: 128 Resp: 1478075

Ion Ratio Lower Upper

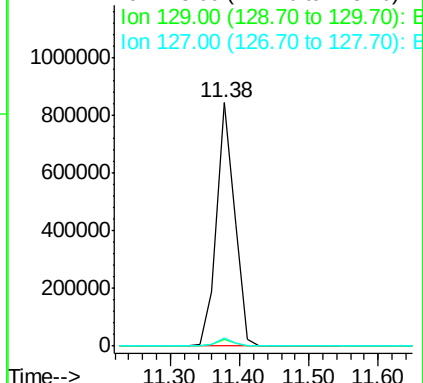
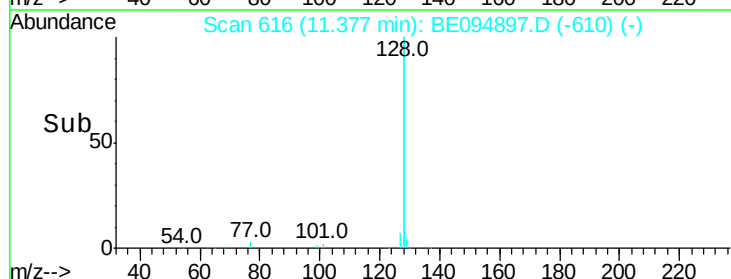
128 100

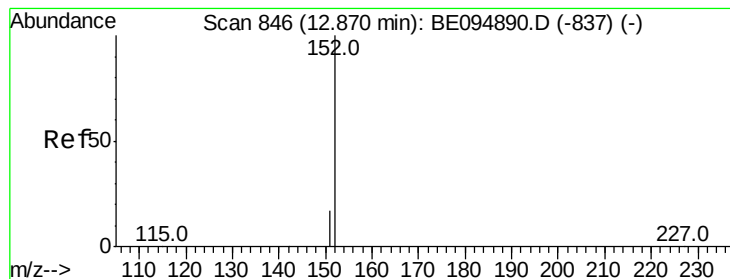
129 2.7 2.6 3.8

127 3.4 2.8 4.2



Abundance Ion 128.00 (127.70 to 128.70): BE094897.D (-610) (-)





#11

2-Methylnaphthalene-d10

Concen: 0.355 ng

RT: 12.86 min Scan# 845

Delta R.T. -0.01 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

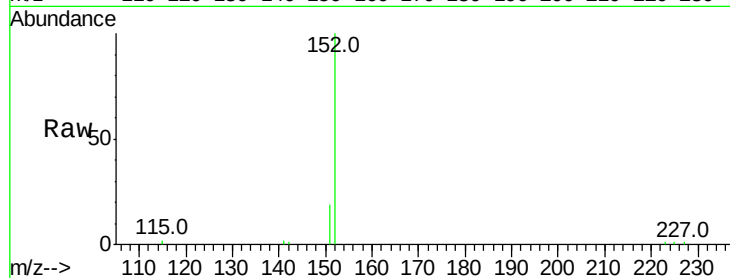
PT-PAH-SOIL

Tot Ion:152 Resp: 10452

Ion Ratio Lower Upper

152 100

151 20.9 15.4 23.0



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

12.86

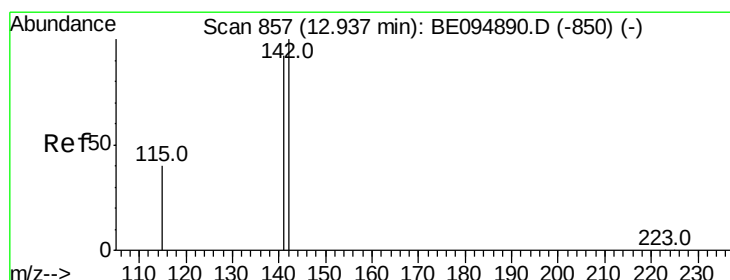
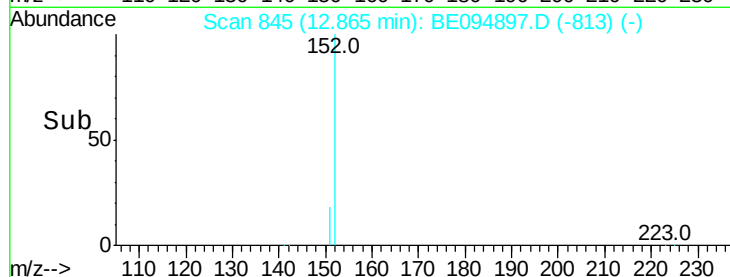
6000

4000

2000

0

Time--> 12.80 12.85 12.90 12.95



#12

2-Methylnaphthalene

Concen: 6.382 ng

RT: 12.94 min Scan# 857

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

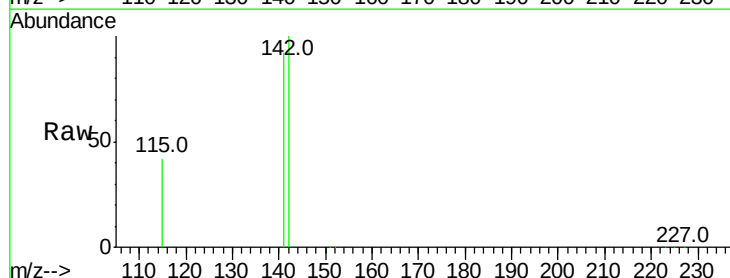
Tgt Ion:142 Resp: 342702

Ion Ratio Lower Upper

142 100

141 91.6 70.4 105.6

115 41.9 31.7 47.5



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

200000

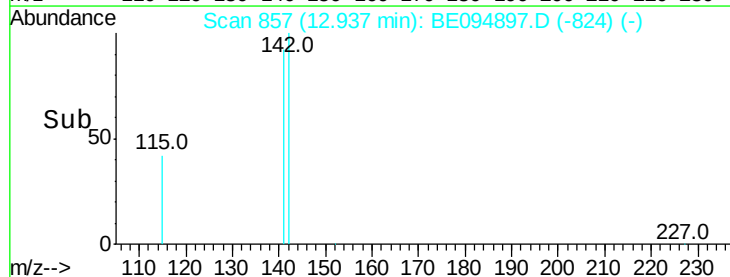
150000

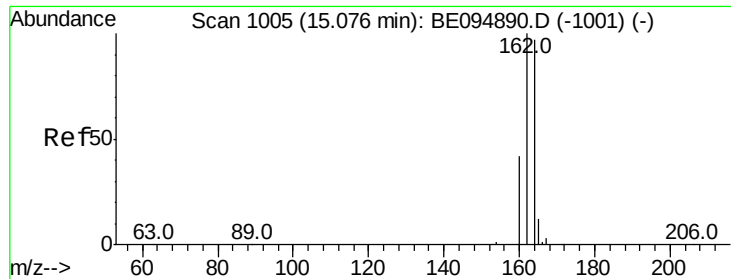
100000

50000

0

Time--> 12.80 12.90 13.00 13.10

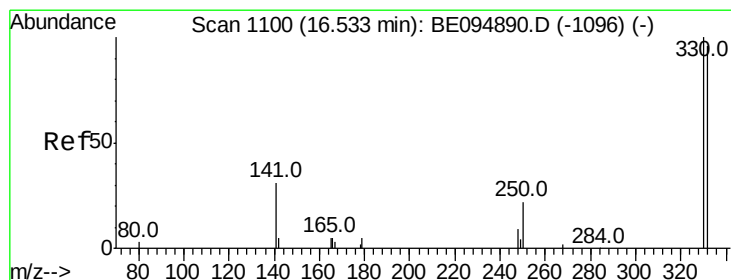
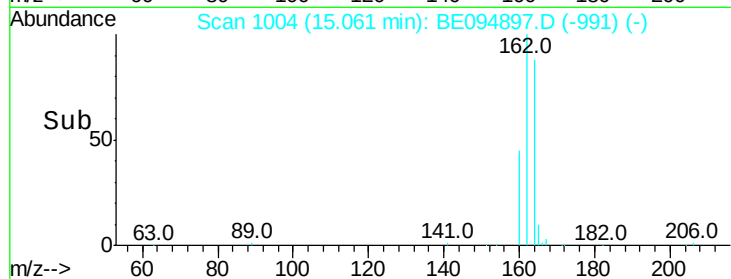
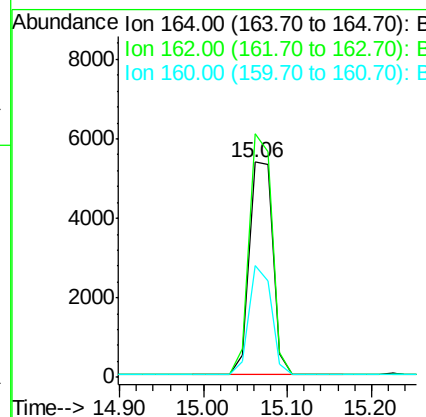
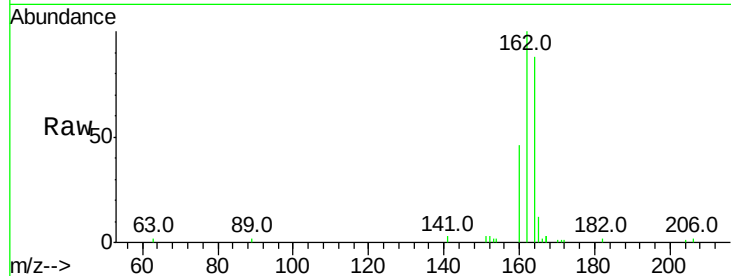




#13
 Acenaphthene-d10
 Concen: 0.400 ng
 RT: 15.06 min Scan# 1004
 Delta R.T. -0.01 min
 Lab File: BE094897.D
 Acq: 1 Dec 2017 9:25

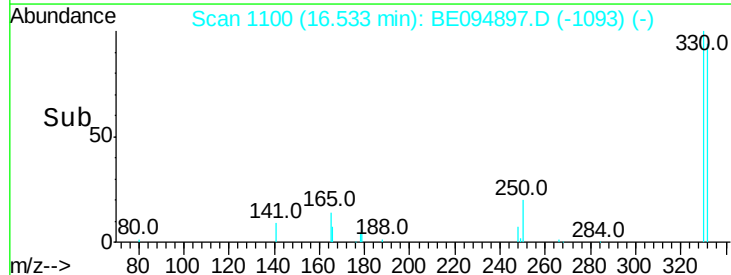
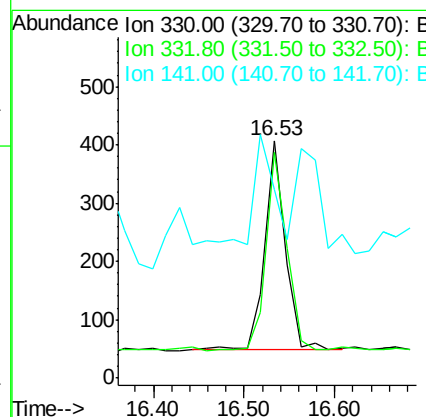
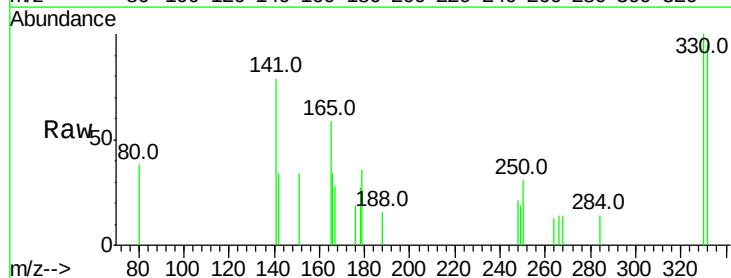
Instrument :
 BNA_E
 ClientSampleId :
 PT-PAH-SOIL

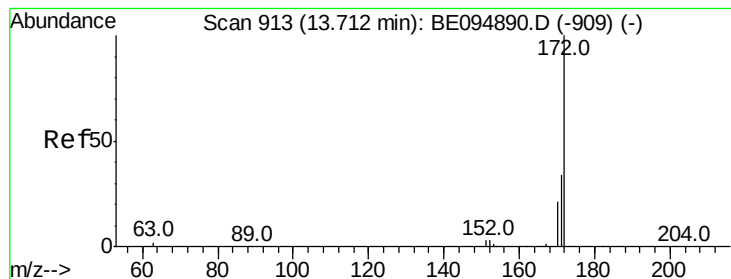
Tot Ion:164 Resp: 10412
 Ion Ratio Lower Upper
 164 100
 162 113.0 83.1 124.7
 160 51.9 37.1 55.7



#14
 2,4,6-Tribromophenol
 Concen: 0.306 ng
 RT: 16.53 min Scan# 1100
 Delta R.T. 0.00 min
 Lab File: BE094897.D
 Acq: 1 Dec 2017 9:25

Tgt Ion:330 Resp: 558
 Ion Ratio Lower Upper
 330 100
 332 96.4 152.7 229.1#
 141 48.2 33.7 50.5





#15

2-Fluorobiphenyl

Concen: 0.338 ng

RT: 13.71 min Scan# 913

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

PT-PAH-SOIL

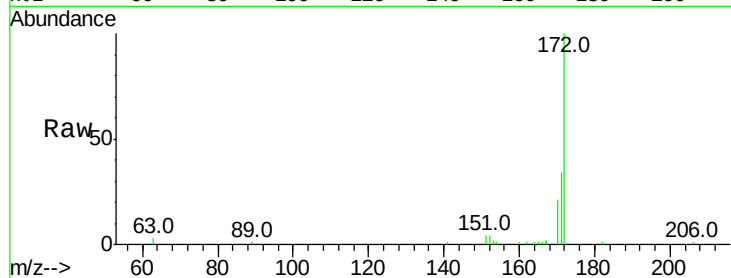
Tot Ion:172 Resp: 15072

Ion Ratio Lower Upper

172 100

171 34.4 29.9 44.9

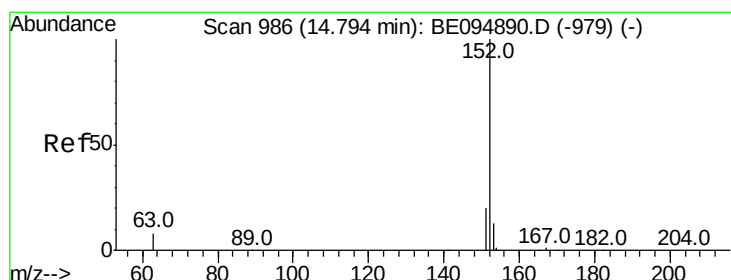
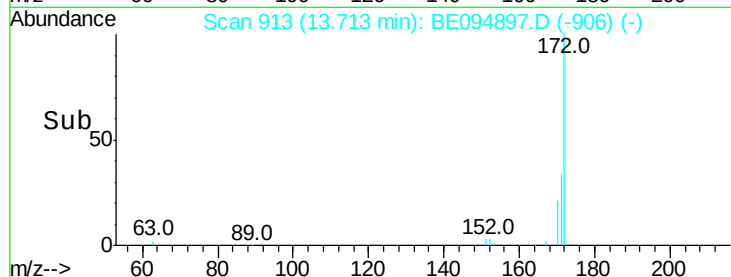
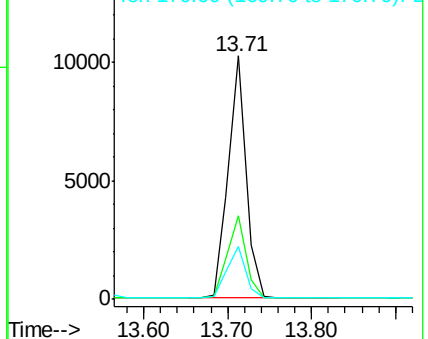
170 21.5 21.8 32.8#



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



#16

Acenaphthylene

Concen: 3.956 ng

RT: 14.79 min Scan# 986

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

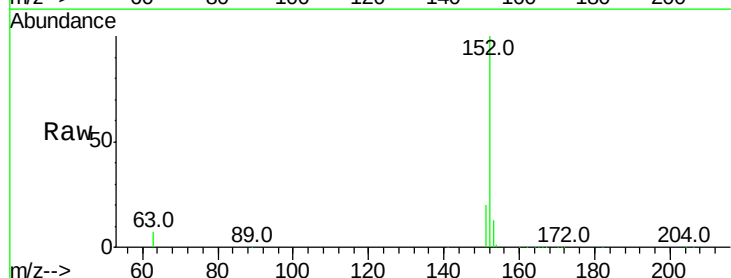
Tgt Ion:152 Resp: 232750

Ion Ratio Lower Upper

152 100

151 19.9 15.7 23.5

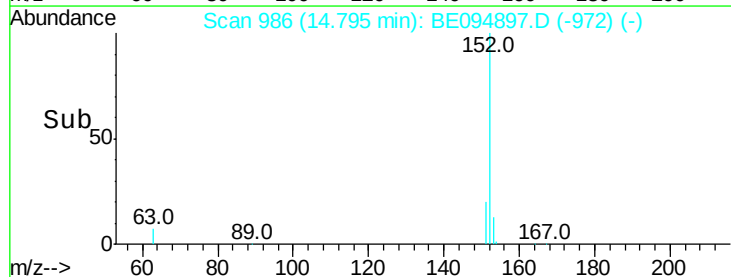
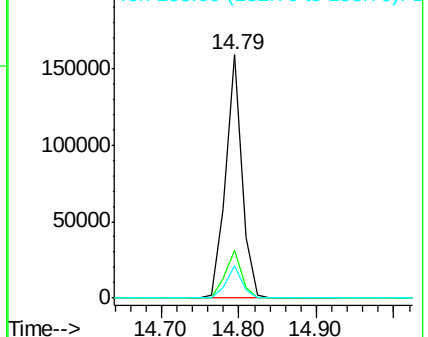
153 13.0 10.5 15.7

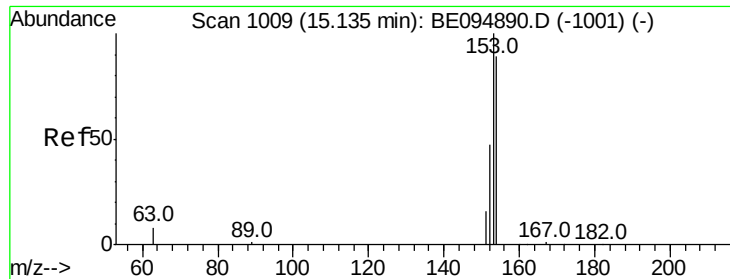


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#17

Acenaphthene

Concen: 15.153 ng

RT: 15.14 min Scan# 1009

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

PT-PAH-SOIL

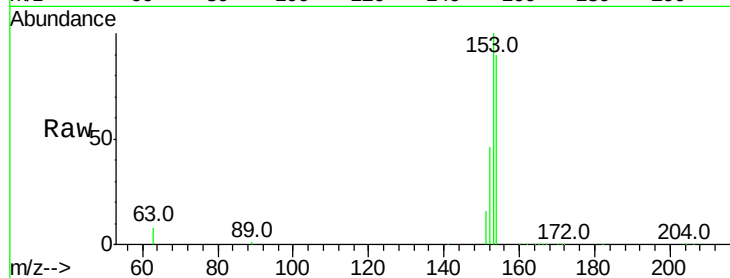
Tot Ion:154 Resp: 576210

Ion Ratio Lower Upper

154 100

153 116.7 89.2 133.8

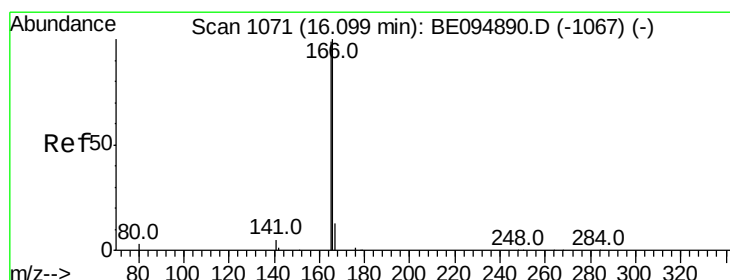
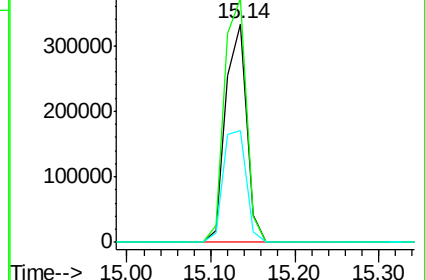
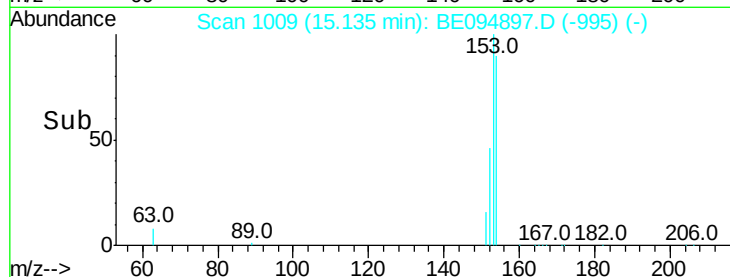
152 57.0 42.0 63.0



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



#18

Fluorene

Concen: 5.514 ng

RT: 16.10 min Scan# 1071

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

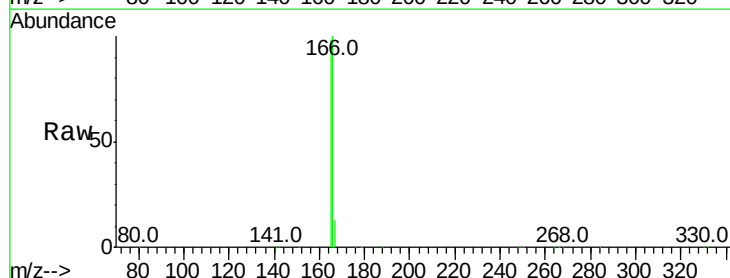
Tgt Ion:166 Resp: 266793

Ion Ratio Lower Upper

166 100

165 100.8 77.8 116.6

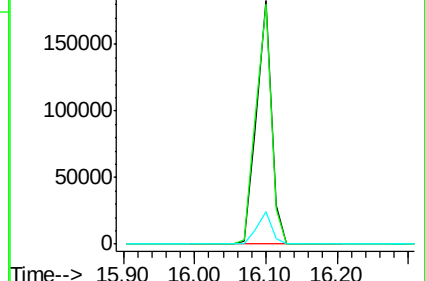
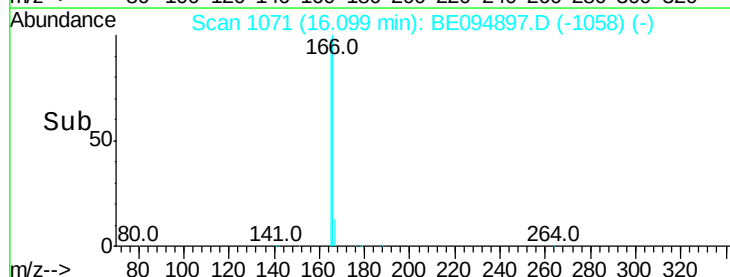
167 13.1 42.4 63.6#

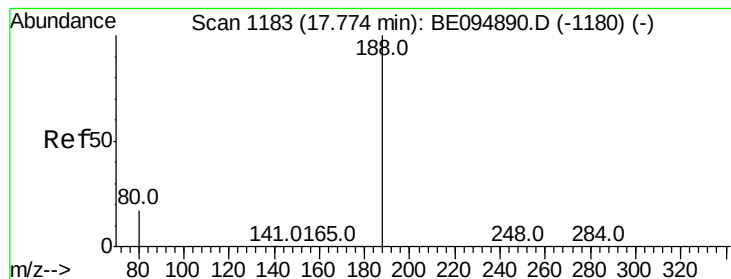


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.77 min Scan# 1183

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

PT-PAH-SOIL

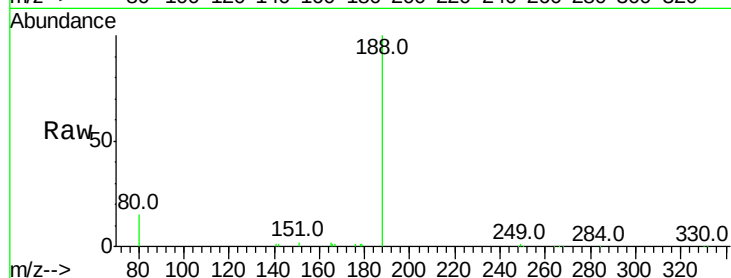
Tot Ion:188 Resp: 24952

Ion Ratio Lower Upper

188 100

94 0.0 3.9 5.9#

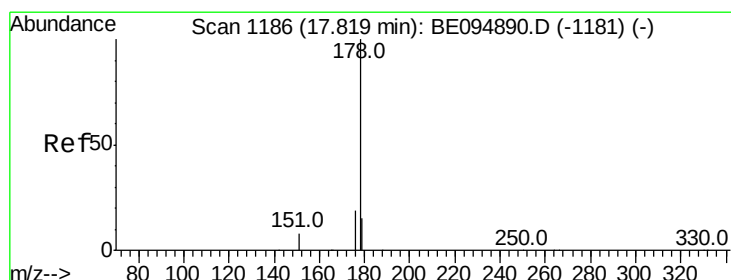
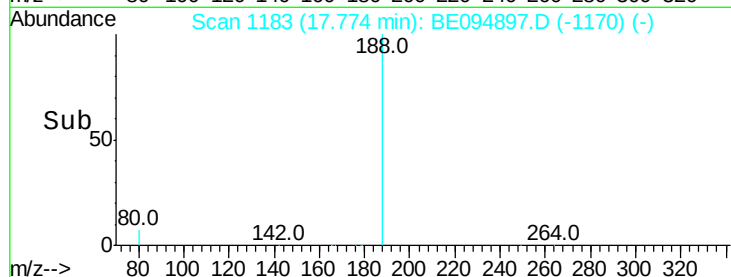
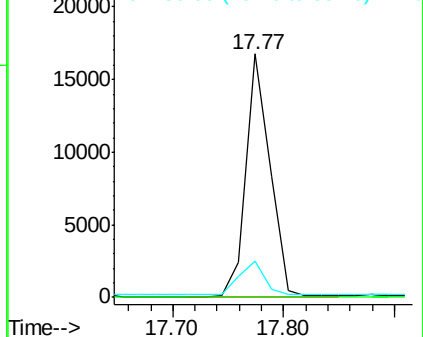
80 14.9 3.6 5.4#



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



#23

Phenanthrene

Concen: 8.703 ng

RT: 17.82 min Scan# 1186

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

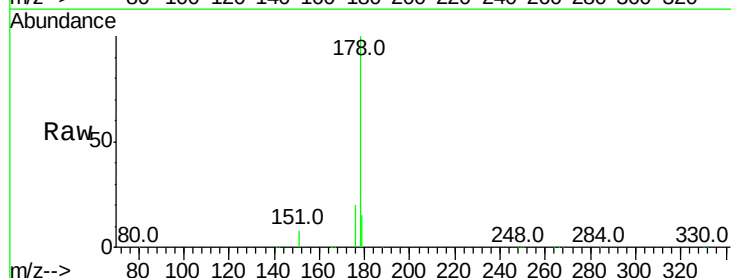
Tgt Ion:178 Resp: 691948

Ion Ratio Lower Upper

178 100

176 19.8 15.1 22.7

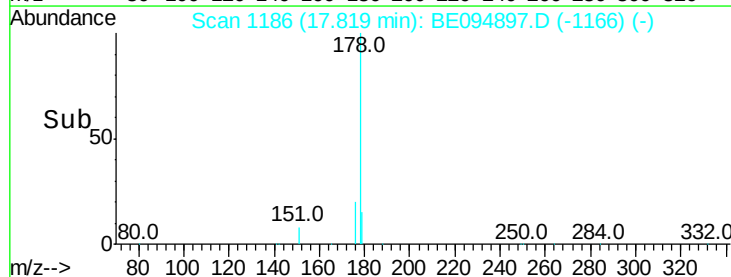
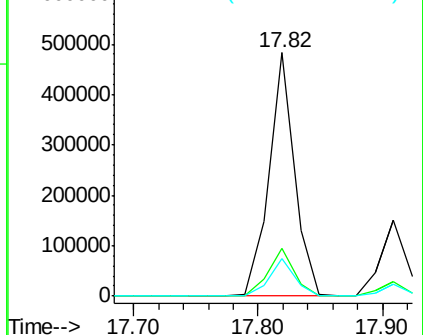
179 15.2 11.8 17.6

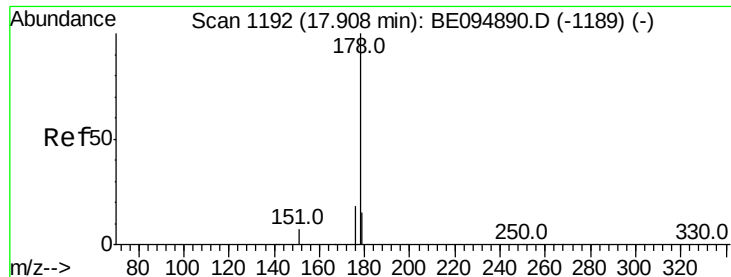


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#24

Anthracene

Concen: 2.789 ng

RT: 17.91 min Scan# 1192

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

PT-PAH-SOIL

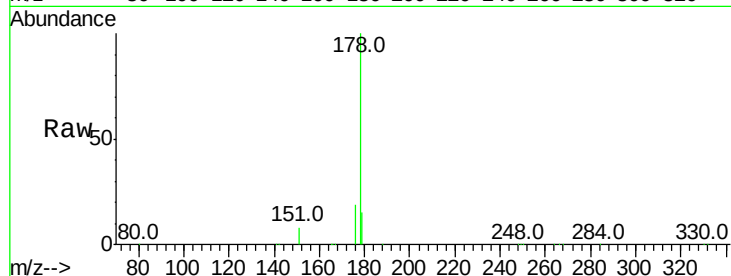
Tot Ion:178 Resp: 235164

Ion Ratio Lower Upper

178 100

176 19.6 12.8 19.2#

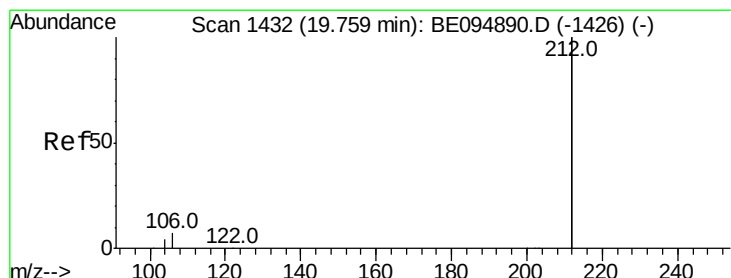
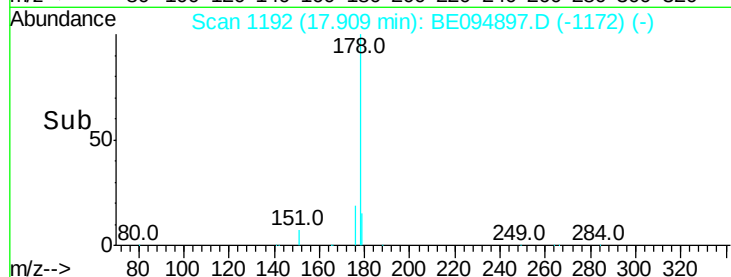
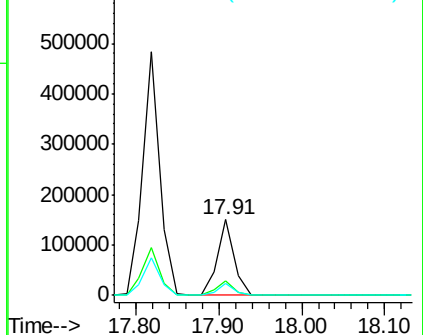
179 15.9 13.0 19.6



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



#25

Fluoranthene-d10

Concen: 0.394 ng

RT: 19.76 min Scan# 1432

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

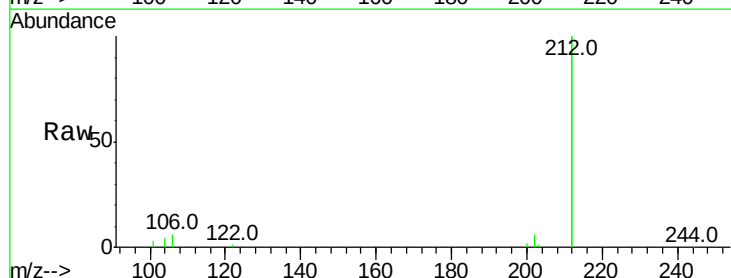
Tgt Ion:212 Resp: 134226

Ion Ratio Lower Upper

212 100

106 3.6 2.8 4.2

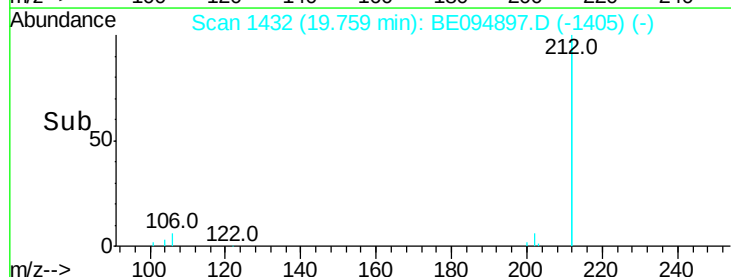
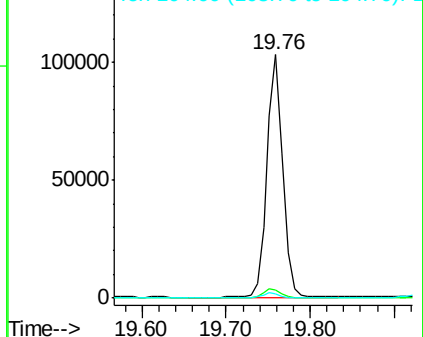
104 2.2 1.6 2.4

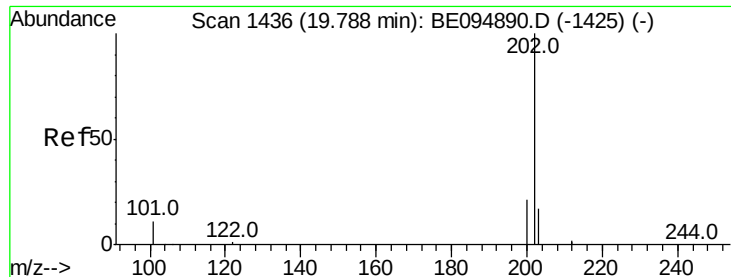


Abundance Ion 212.00 (211.70 to 212.70): E

Ion 106.00 (105.70 to 106.70): E

Ion 104.00 (103.70 to 104.70): E

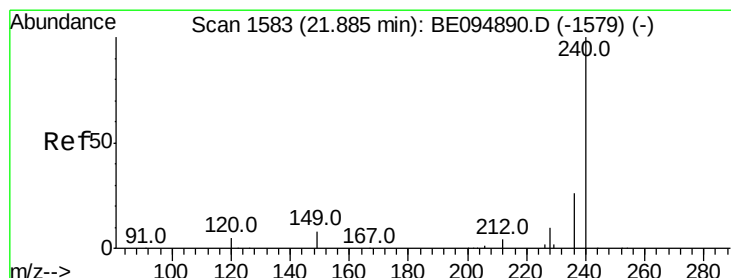
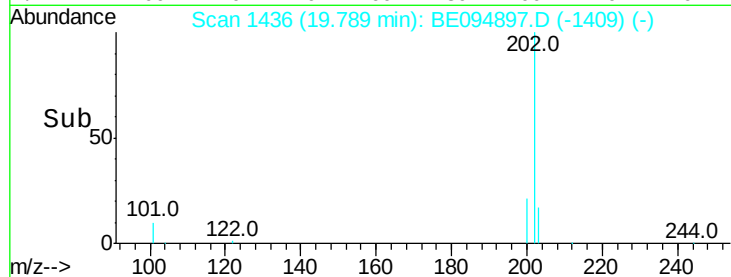
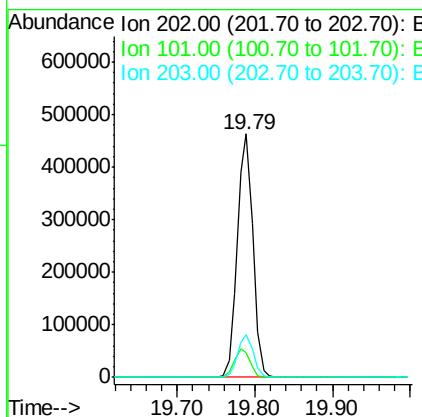
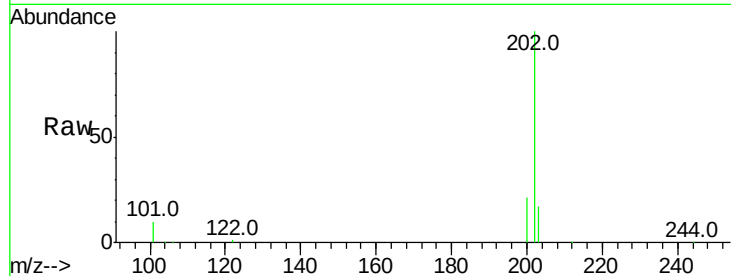




#26
 Fluoranthene
 Concen: 6.286 ng
 RT: 19.79 min Scan# 1436
 Delta R.T. 0.00 min
 Lab File: BE094897.D
 Acq: 1 Dec 2017 9:25

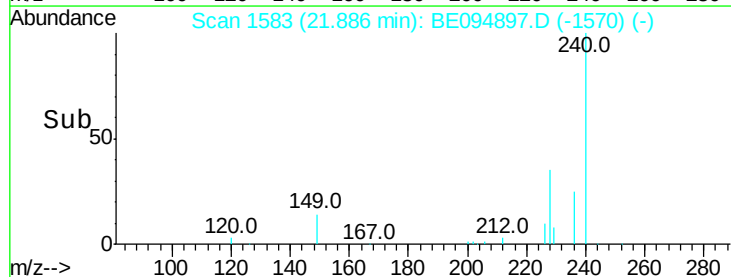
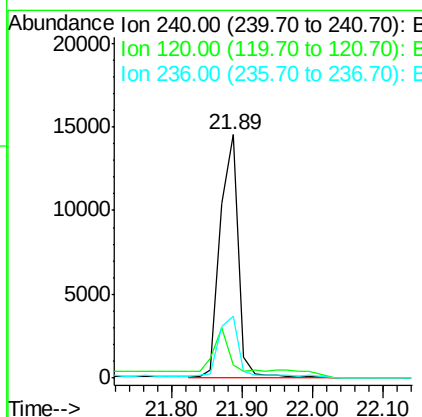
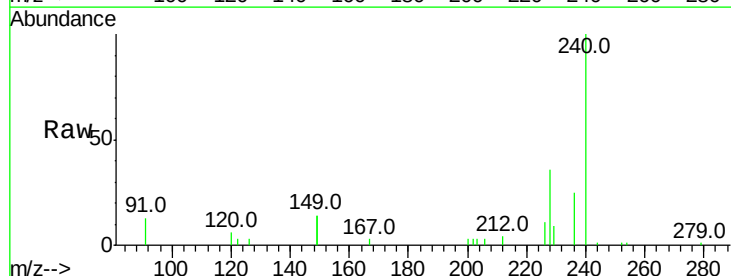
Instrument :
 BNA_E
 ClientSampleId :
 PT-PAH-SOIL

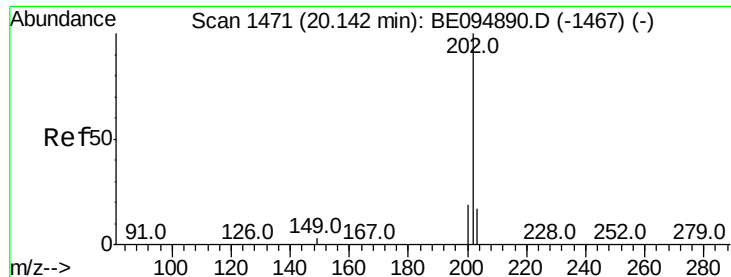
Tot Ion:202 Resp: 642459
 Ion Ratio Lower Upper
 202 100
 101 11.9 9.8 14.8
 203 17.4 13.7 20.5



#27
 Chrysene-d12
 Concen: 0.400 ng
 RT: 21.89 min Scan# 1583
 Delta R.T. 0.00 min
 Lab File: BE094897.D
 Acq: 1 Dec 2017 9:25

Tgt Ion:240 Resp: 27138
 Ion Ratio Lower Upper
 240 100
 120 5.6 5.5 8.3
 236 25.4 20.7 31.1

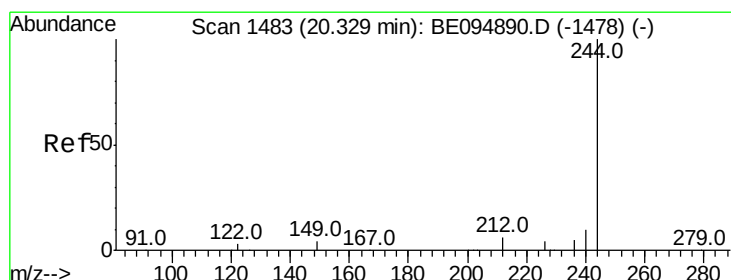
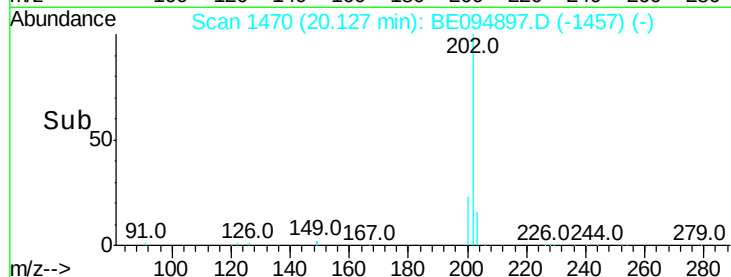
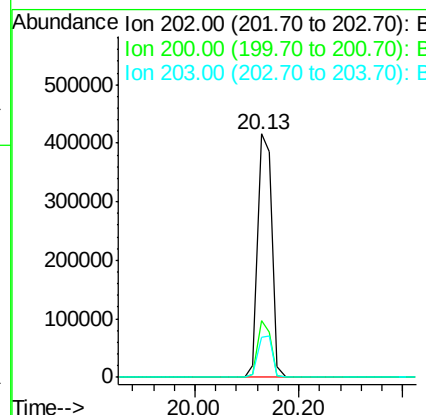
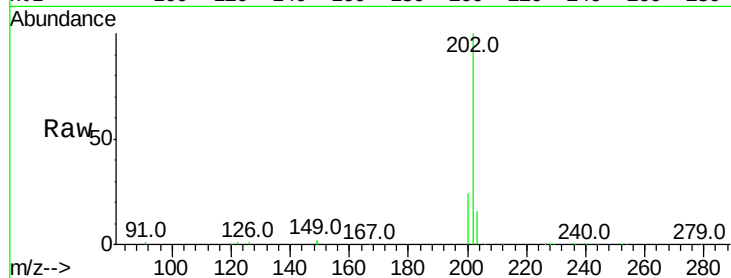




#28
 Pvrene
 Concen: 9.685 ng
 RT: 20.13 min Scan# 1470
 Delta R.T. -0.01 min
 Lab File: BE094897.D
 Acq: 1 Dec 2017 9:25

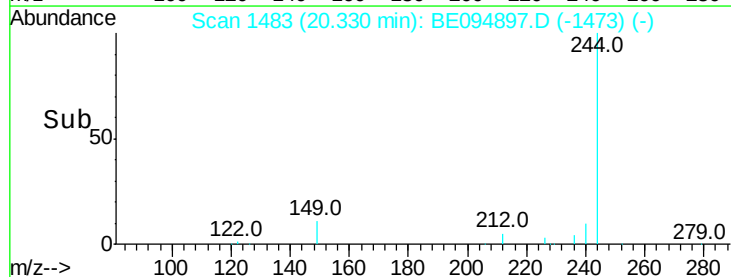
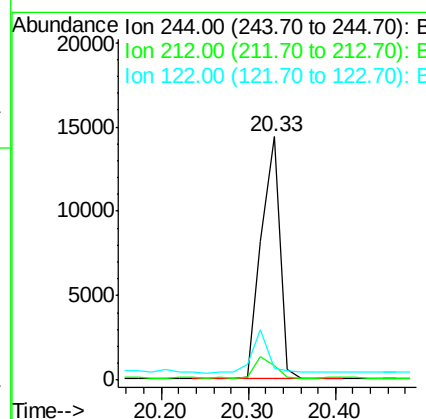
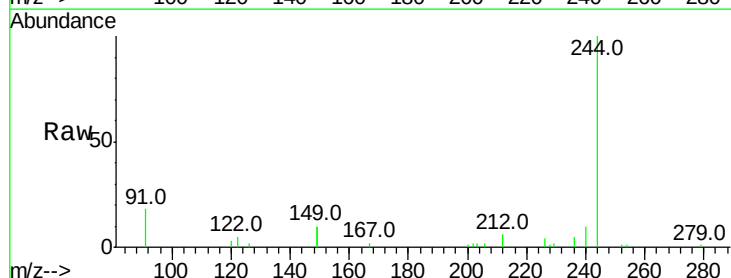
Instrument :
 BNA_E
 ClientSampleId :
 PT-PAH-SOIL

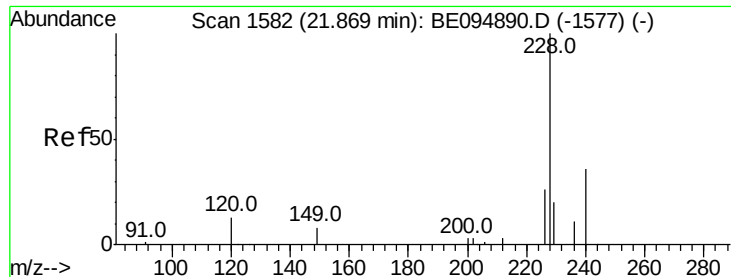
Tot Ion	Ratio	Lower	Upper
202	100		
200	19.0	16.6	25.0
203	17.4	13.8	20.8



#29
 Terphenyl-d14
 Concen: 0.435 ng
 RT: 20.33 min Scan# 1483
 Delta R.T. 0.00 min
 Lab File: BE094897.D
 Acq: 1 Dec 2017 9:25

Tgt Ion	Ratio	Lower	Upper
244	100		
212	6.1	25.4	38.0#
122	5.0	8.1	12.1#





#30

Benzo(a)anthracene

Concen: 2.251 ng

RT: 21.85 min Scan# 1581

Delta R.T. -0.01 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

PT-PAH-SOIL

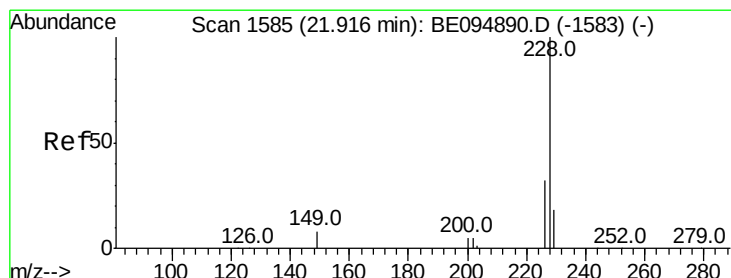
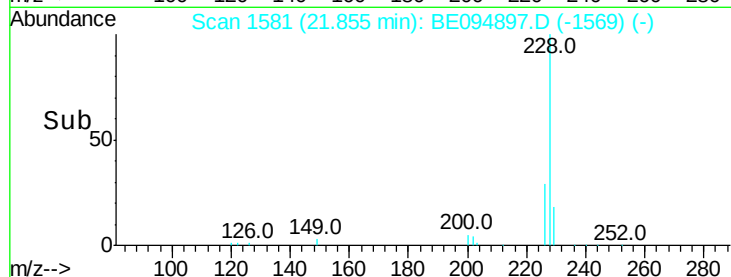
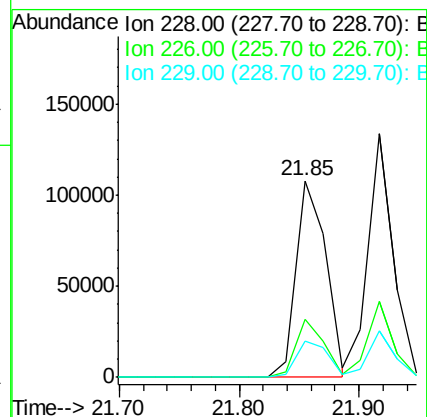
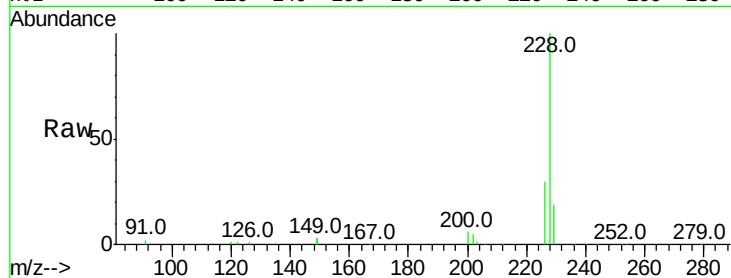
Tot Ion:228 Resp: 187282

Ion Ratio Lower Upper

228 100

226 29.5 40.0 60.0#

229 18.6 40.0 60.0#



#31

Chrysene

Concen: 2.313 ng

RT: 21.92 min Scan# 1585

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

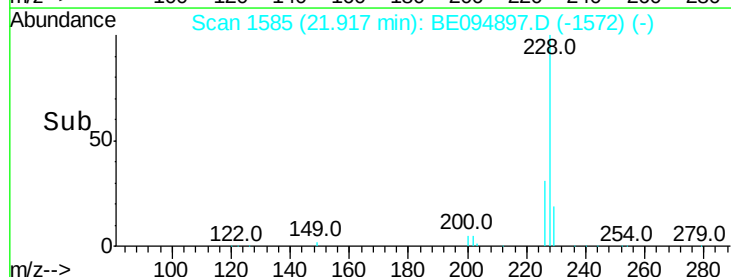
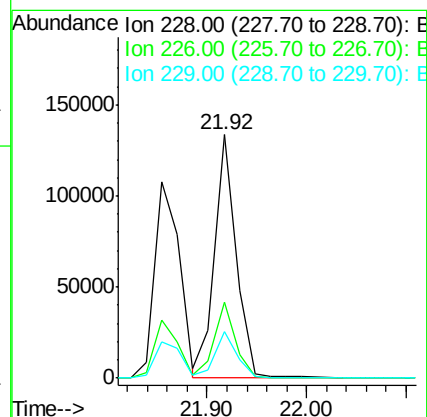
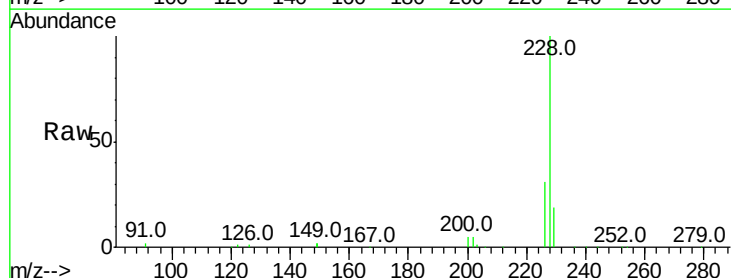
Tgt Ion:228 Resp: 212687

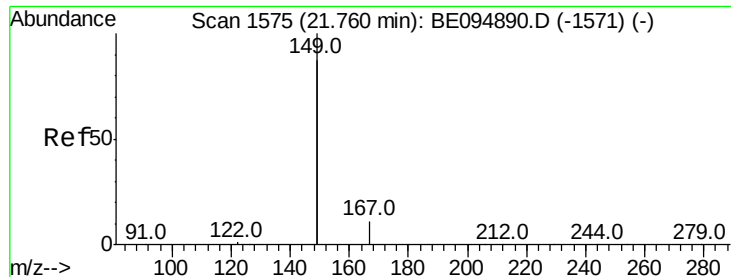
Ion Ratio Lower Upper

228 100

226 31.1 40.0 60.0#

229 19.2 40.0 60.0#





#32

Bis(2-ethylhexyl)phthalate

Concen: 0.454 ng

RT: 21.76 min Scan# 1575

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

PT-PAH-SOIL

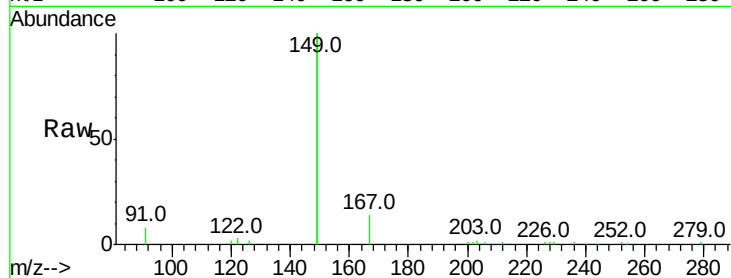
Tot Ion:149 Resp: 62646

Ion Ratio Lower Upper

149 100

167 7.1 5.4 8.0

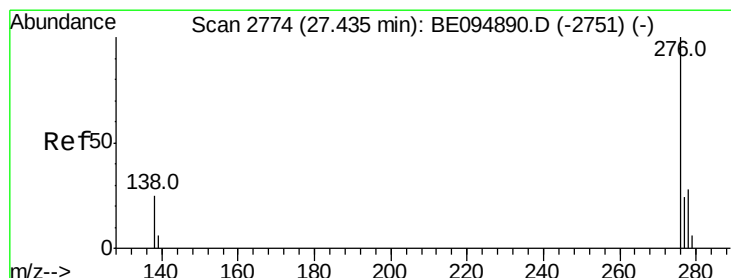
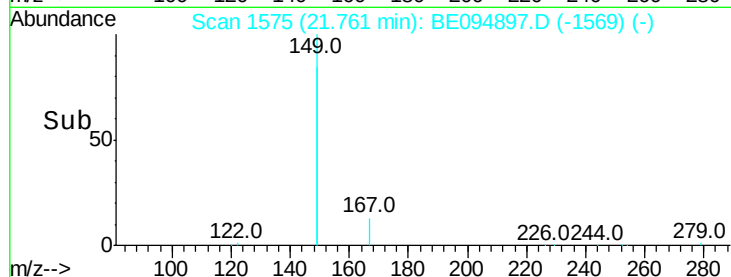
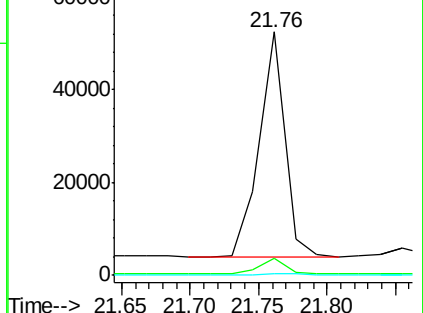
279 0.8 0.7 1.1



Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E



#33

Indeno(1,2,3-cd)pyrene

Concen: 9.120 ng

RT: 27.44 min Scan# 2775

Delta R.T. 0.00 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

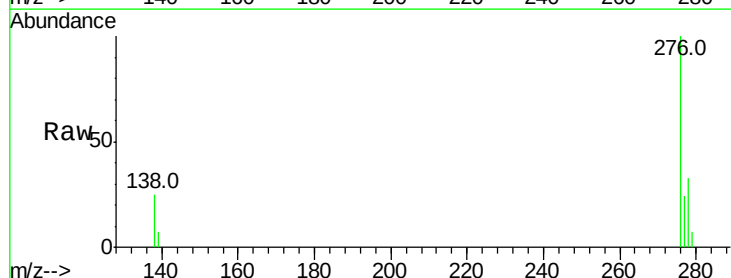
Tgt Ion:276 Resp: 686230

Ion Ratio Lower Upper

276 100

138 26.4 22.5 33.7

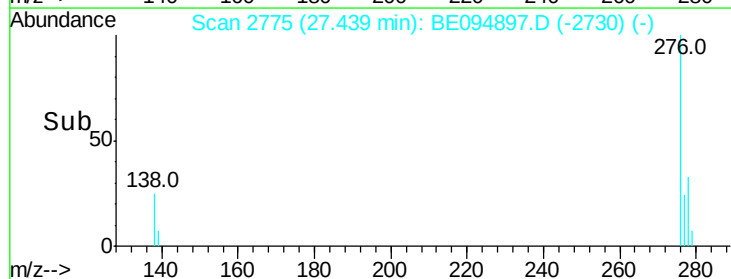
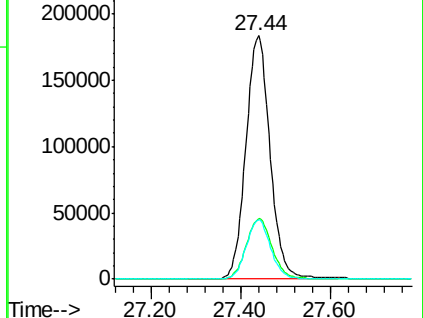
277 24.6 19.9 29.9

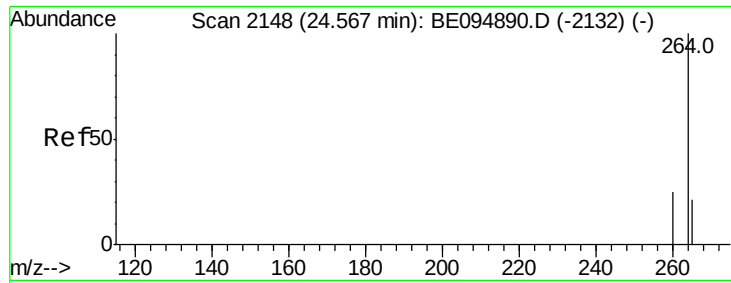


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

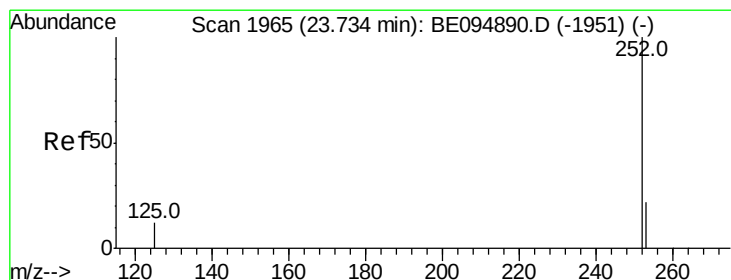
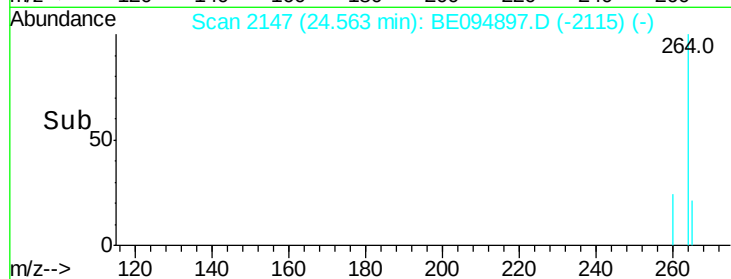
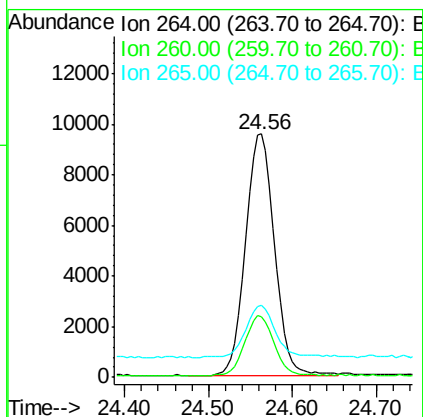
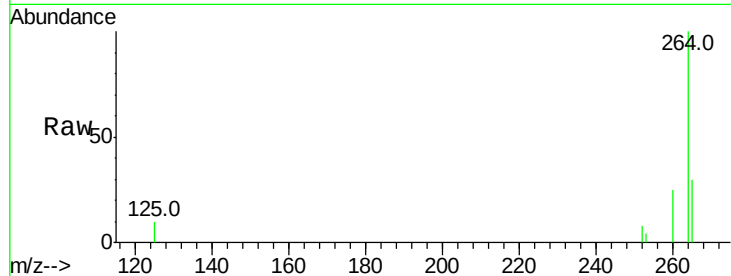




#34
Pervlene-d12
Concen: 0.400 ng
RT: 24.56 min Scan# 2147
Delta R.T. -0.00 min
Lab File: BE094897.D
Acq: 1 Dec 2017 9:25

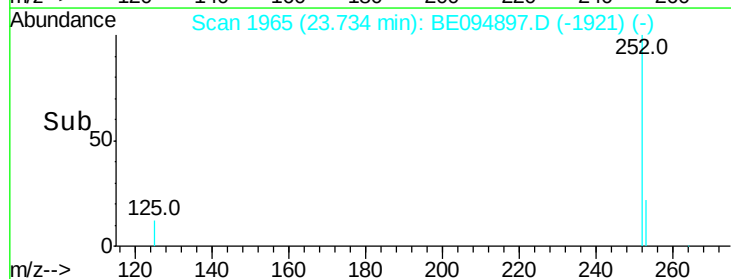
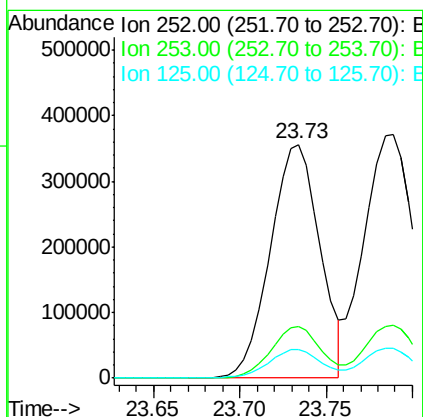
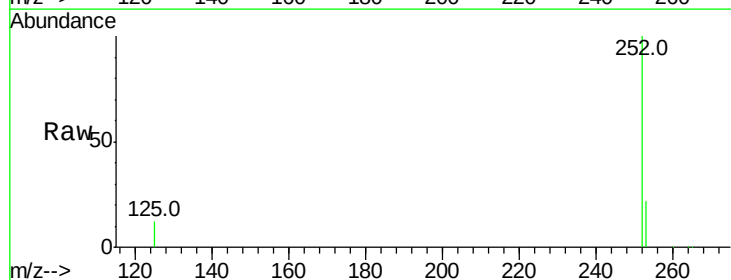
Instrument :
BNA_E
ClientSampleId :
PT-PAH-SOIL

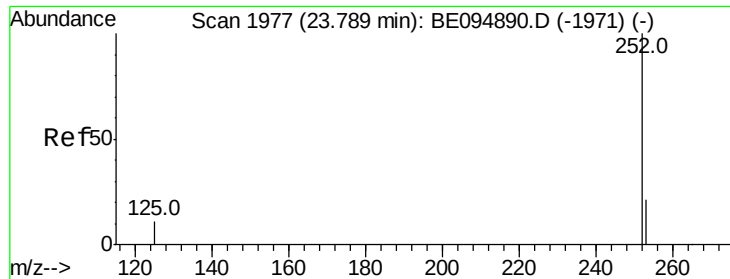
Tot Ion:264 Resp: 22762
Ion Ratio Lower Upper
264 100
260 24.8 20.5 30.7
265 29.6 22.8 34.2



#35
Benzo(b)fluoranthene
Concen: 8.547 ng
RT: 23.73 min Scan# 1965
Delta R.T. 0.00 min
Lab File: BE094897.D
Acq: 1 Dec 2017 9:25

Tgt Ion:252 Resp: 710290
Ion Ratio Lower Upper
252 100
253 22.1 48.0 72.0#
125 12.3 56.0 84.0#

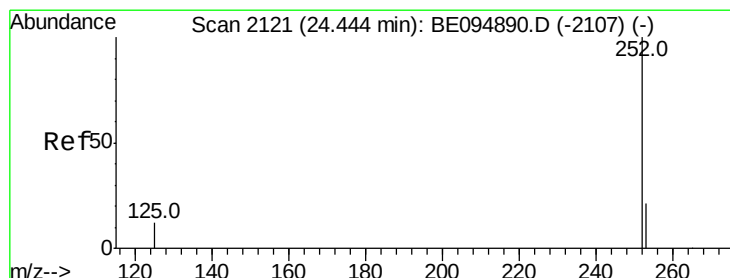
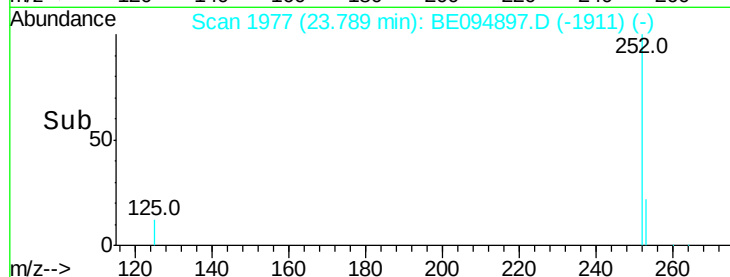
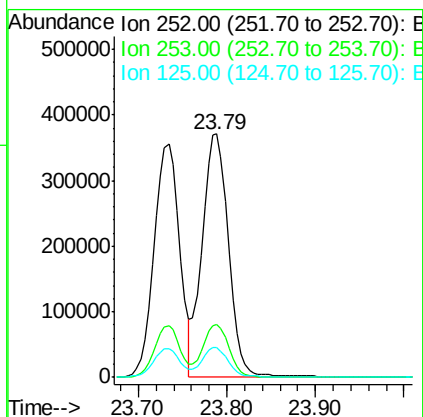
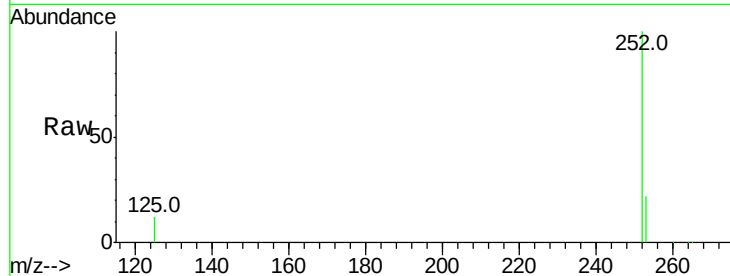




#36
Benzo(k)fluoranthene
Concen: 9.015 ng
RT: 23.79 min Scan# 1977
Delta R.T. 0.00 min
Lab File: BE094897.D
Acq: 1 Dec 2017 9:25

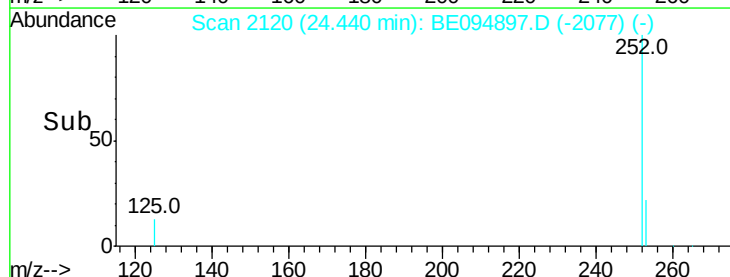
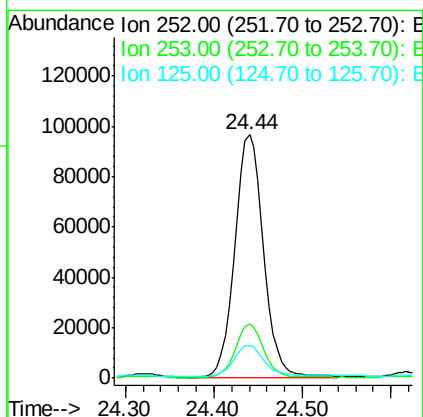
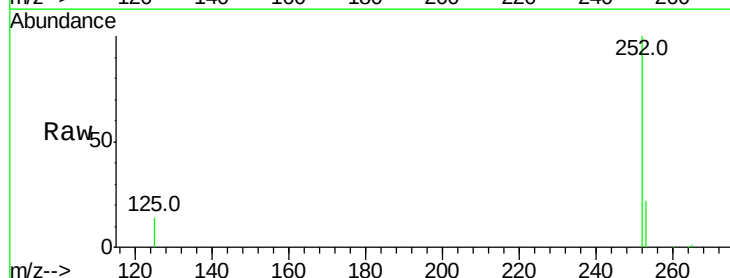
Instrument :
BNA_E
ClientSampleId :
PT-PAH-SOIL

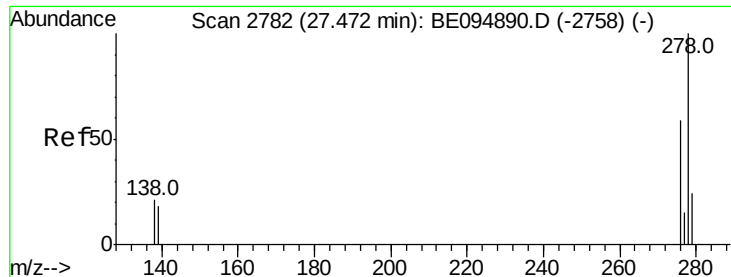
Tot Ion:252 Resp: 763617
Ion Ratio Lower Upper
252 100
253 21.9 48.0 72.0#
125 12.1 56.0 84.0#



#37
Benzo(a)pyrene
Concen: 2.954 ng
RT: 24.44 min Scan# 2120
Delta R.T. -0.00 min
Lab File: BE094897.D
Acq: 1 Dec 2017 9:25

Tgt Ion:252 Resp: 215230
Ion Ratio Lower Upper
252 100
253 22.1 52.0 78.0#
125 13.5 68.0 102.0#





#38

Dibenzo(a,h)anthracene

Concen: 5.905 ng

RT: 27.46 min Scan# 2780

Delta R.T. -0.01 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Instrument :

BNA_E

ClientSampleId :

PT-PAH-SOIL

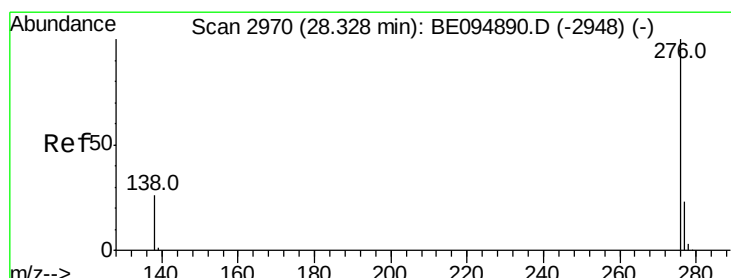
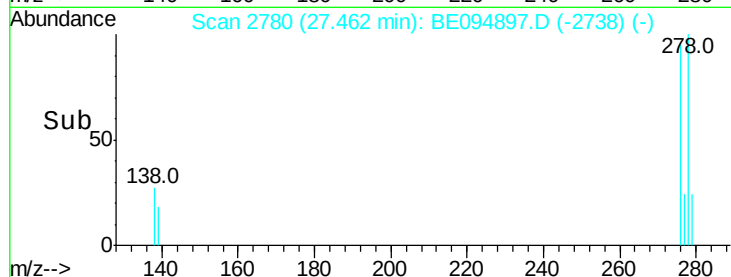
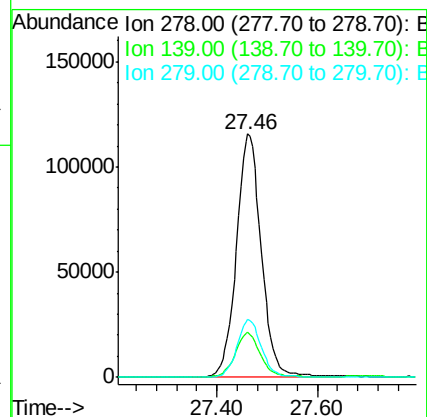
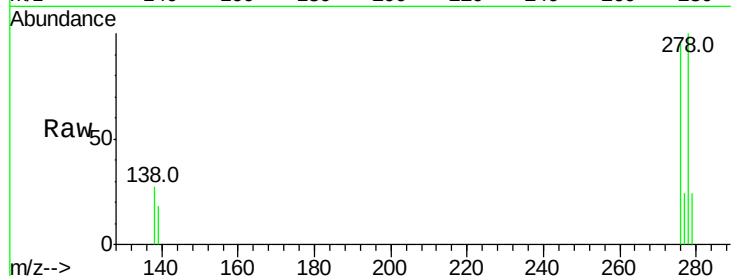
Tot Ion:278 Resp: 397422

Ion Ratio Lower Upper

278 100

139 18.3 56.0 84.0#

279 23.7 52.0 78.0#



#39

Benzo(g,h,i)perylene

Concen: 5.904 ng

RT: 28.32 min Scan# 2969

Delta R.T. -0.01 min

Lab File: BE094897.D

Acq: 1 Dec 2017 9:25

Tgt Ion:276 Resp: 396834

Ion Ratio Lower Upper

276 100

277 23.5 52.0 78.0#

138 24.4 44.0 66.0#

