

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE020416\
 Data File : BE091390.D
 Acq On : 4 Feb 2016 11:38
 Operator : UM/IZ
 Sample : G4825-04
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 LOQ-SOIL2016-02

Quant Time: Feb 05 06:32:57 2016
 Quant Method : Z:\HPCHEM1\BNA_E\METHODS\8270-SIM-BE020216.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Wed Feb 03 00:27:53 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.87	152	50579	5.00	ng	0.00
4) Naphthalene-d8	9.55	136	232531	5.00	ng	0.00
8) Acenaphthene-d10	13.36	164	149369	5.00	ng	0.00
14) Phenanthrene-d10	16.09	188	388593	5.00	ng	0.00
18) Chrysene-d12	20.21	240	412824	5.00	ng	0.00
24) Perylene-d12	22.10	264	370303	5.00	ng	0.00

System Monitoring Compounds						
2) 2-Fluorophenol	4.91	112	78883	6.61	ng	-0.04
3) Phenol-d6	6.54	99	107144	6.34	ng	-0.03
5) Nitrobenzene-d5	8.17	82	43354	2.94	ng	0.00
9) 2,4,6-Tribromophenol	14.90	330	26460	3.80	ng	0.00
10) 2-Fluorobiphenyl	12.02	172	151952	3.91	ng	0.00
20) Terphenyl-d14	18.61	244	252738	4.14	ng	0.00

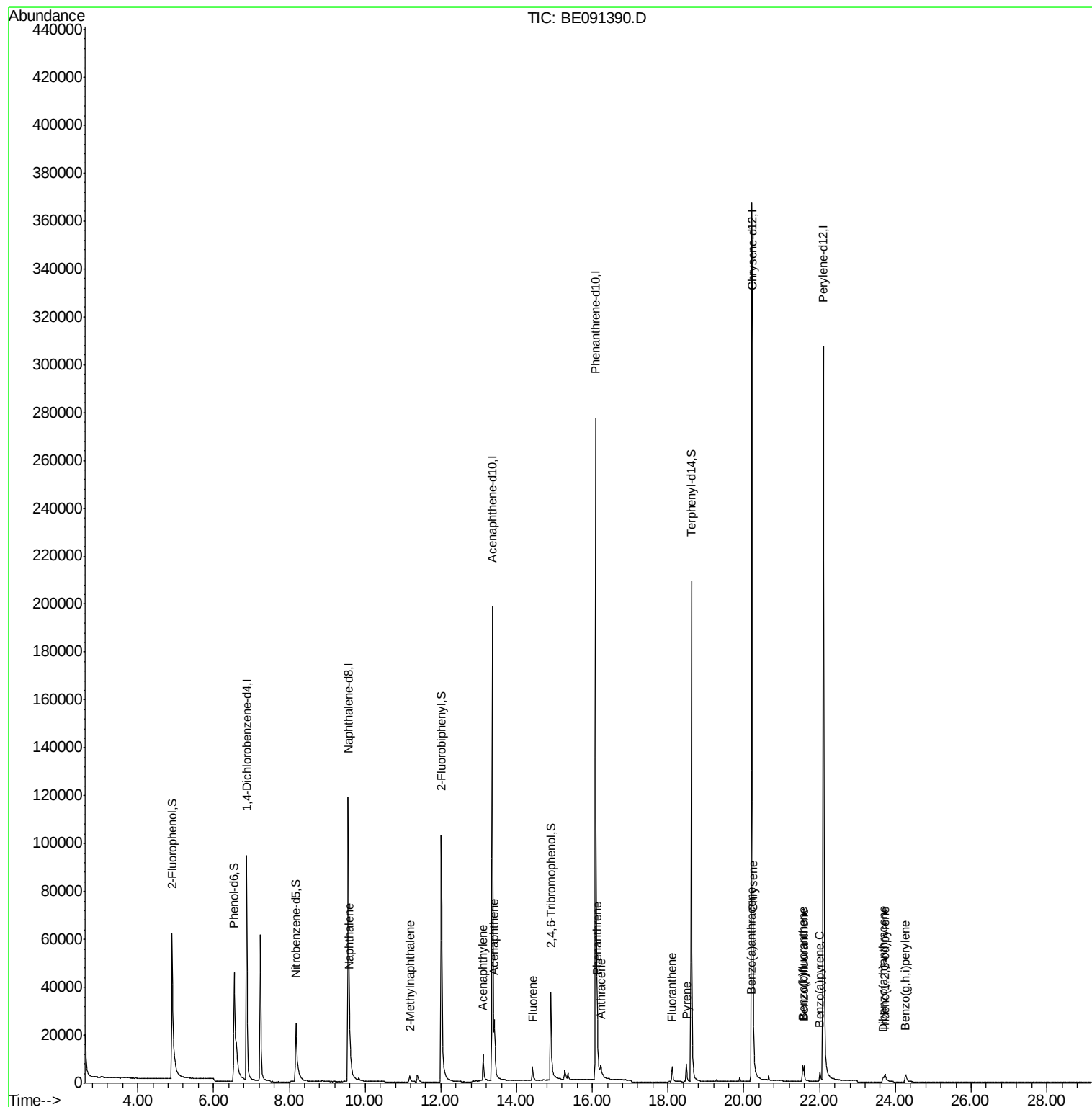
Target Compounds						Qvalue
6) Naphthalene	9.60	128	6067	0.12	ng	# 94
7) 2-Methylnaphthalene	11.17	142	3420	0.23	ng	98
11) Acenaphthylene	13.12	152	20081	0.25	ng	100
12) Acenaphthene	13.42	154	4543	0.11	ng	98
13) Fluorene	14.42	166	5455	0.10	ng	100
15) Phenanthrene	16.13	178	11760	0.12	ng	97
16) Anthracene	16.22	178	8315	0.10	ng	99
17) Fluoranthene	18.10	202	9445	0.20	ng	99
19) Pyrene	18.49	202	9510	0.11	ng	99
21) Benzo(a)anthracene	20.19	228	7823	0.25	ng	98
22) Chrysene	20.25	228	13478	0.06	ng	98
23) Indeno(1,2,3-cd)pyrene	23.73	276	7565	0.24	ng	# 94
25) Benzo(b)fluoranthene	21.55	252	7174	0.22	ng	# 95
26) Benzo(k)fluoranthene	21.58	252	8852	0.11	ng	# 96
27) Benzo(a)pyrene	22.01	252	6005	0.24	ng	# 90
28) Dibenzo(a,h)anthracene	23.68	278	5381	0.31	ng	# 91
29) Benzo(g,h,i)perylene	24.27	276	7985	0.23	ng	# 94

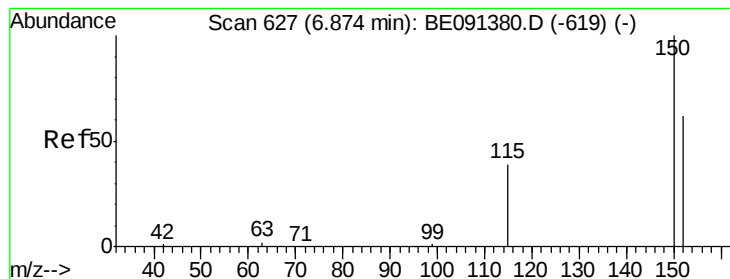
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE020416\
Data File : BE091390.D
Acq On : 4 Feb 2016 11:38
Operator : UM/IZ
Sample : G4825-04
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_E
ClientSampleId :
LOQ-SOIL2016-02

Quant Time: Feb 05 06:32:57 2016
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\8270-SIM-BE020216.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Feb 03 00:27:53 2016
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 6.87 min Scan# 627

Delta R.T. 0.00 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

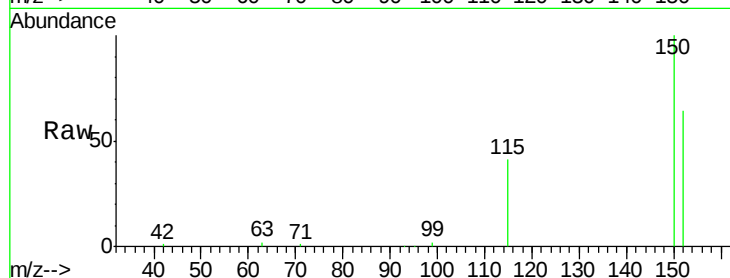
Tgt Ion:152 Resp: 50579

Ion Ratio Lower Upper

152 100

150 157.3 128.9 193.3

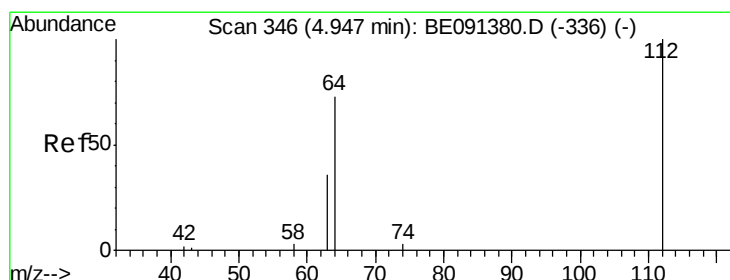
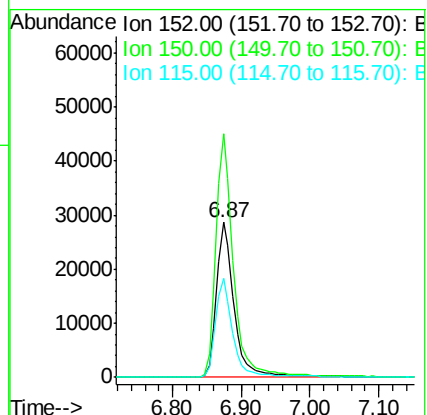
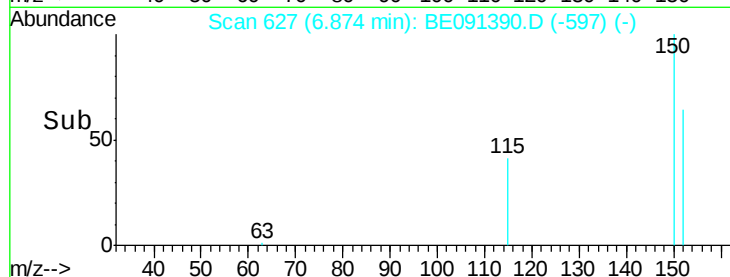
115 64.0 50.9 76.3



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

2-Fluorophenol

Concen: 6.61 ng

RT: 4.91 min Scan# 340

Delta R.T. -0.04 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

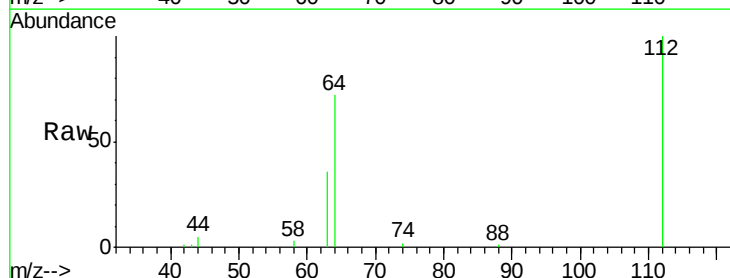
Tgt Ion:112 Resp: 78883

Ion Ratio Lower Upper

112 100

64 72.5 60.5 90.7

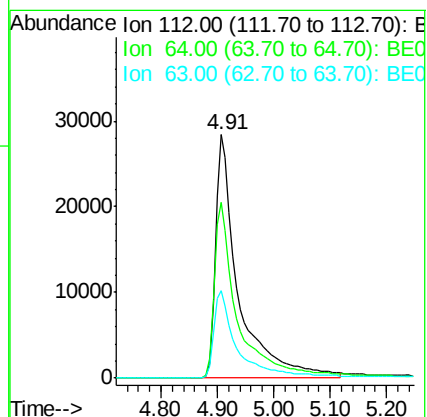
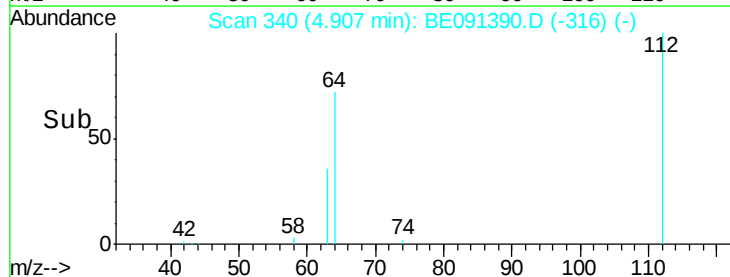
63 36.5 29.8 44.8

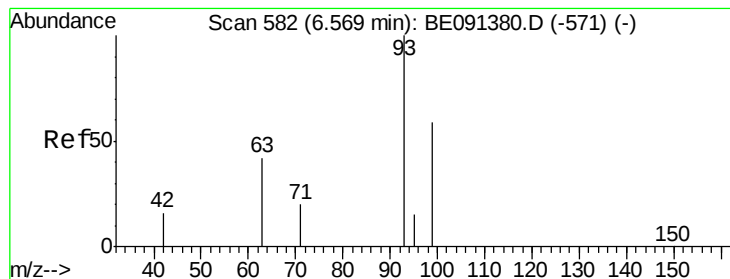


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BE0

Ion 63.00 (62.70 to 63.70): BE0





#3

Phenol-d6

Concen: 6.34 ng

RT: 6.54 min Scan# 578

Delta R.T. -0.03 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

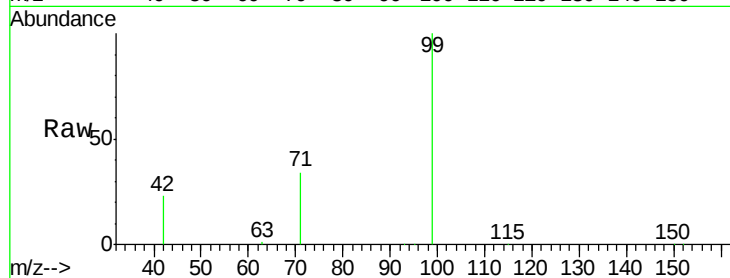
Tgt Ion: 99 Resp: 107144

Ion Ratio Lower Upper

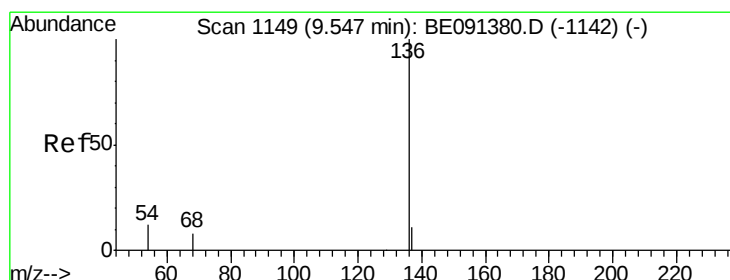
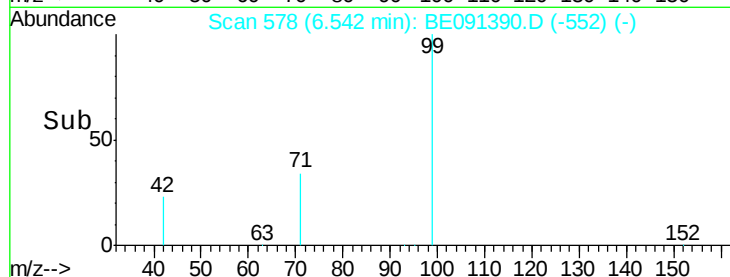
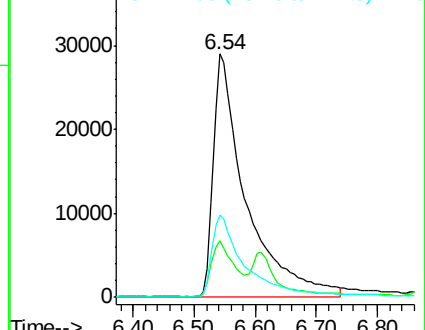
99 100

42 15.8 13.3 19.9

71 33.8 25.6 38.4



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



#4

Naphthalene-d8

Concen: 5.00 ng

RT: 9.55 min Scan# 1150

Delta R.T. 0.01 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Tgt Ion: 136 Resp: 232531

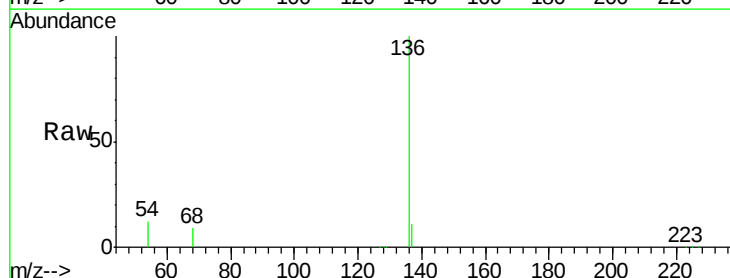
Ion Ratio Lower Upper

136 100

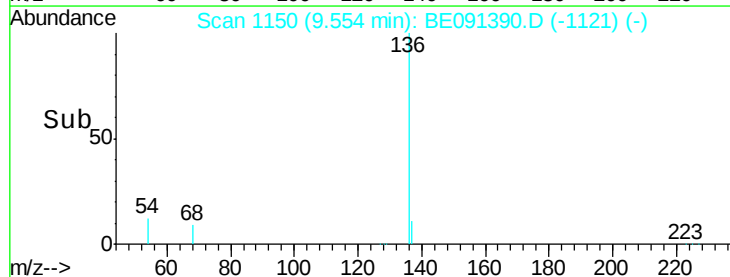
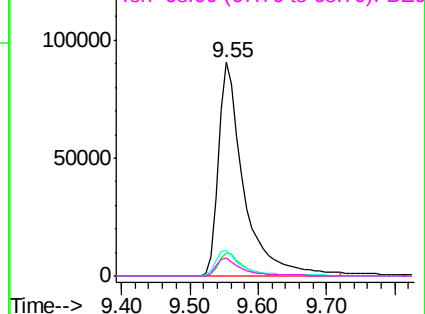
137 11.0 8.7 13.1

54 11.8 9.3 13.9

68 8.6 6.7 10.1



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





#5

Nitrobenzene-d5

Concen: 2.94 ng

RT: 8.17 min Scan# 863

Delta R.T. 0.00 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

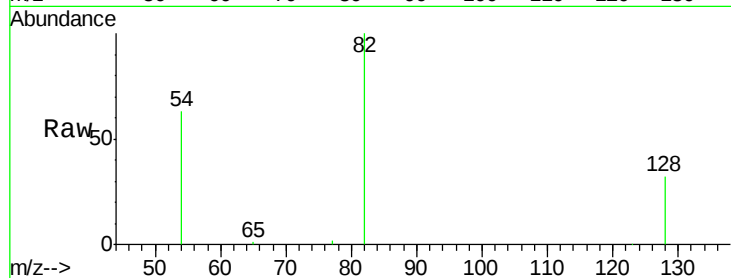
Tgt Ion: 82 Resp: 43354

Ion Ratio Lower Upper

82 100

128 32.3 25.0 37.4

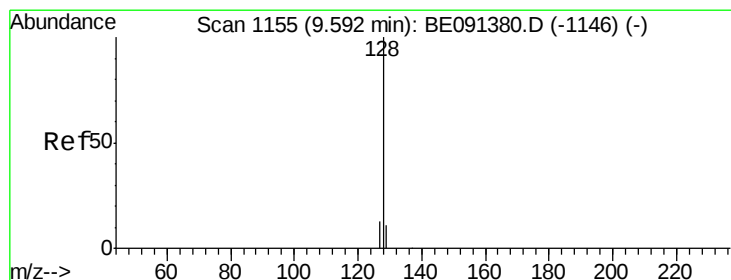
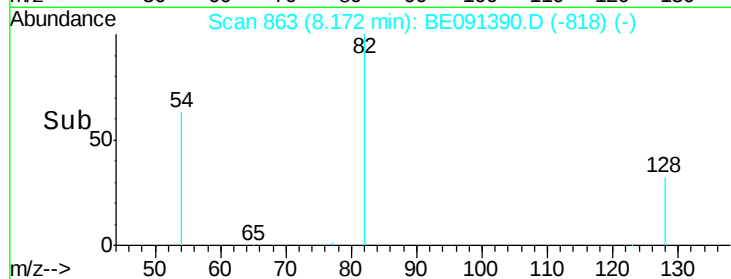
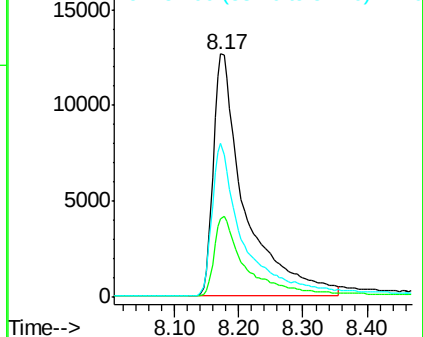
54 63.0 48.1 72.1



Abundance Ion 82.00 (81.70 to 82.70): BE0

Ion 128.00 (127.70 to 128.70): BE0

Ion 54.00 (53.70 to 54.70): BE0



#6

Naphthalene

Concen: 0.12 ng

RT: 9.60 min Scan# 1156

Delta R.T. 0.01 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

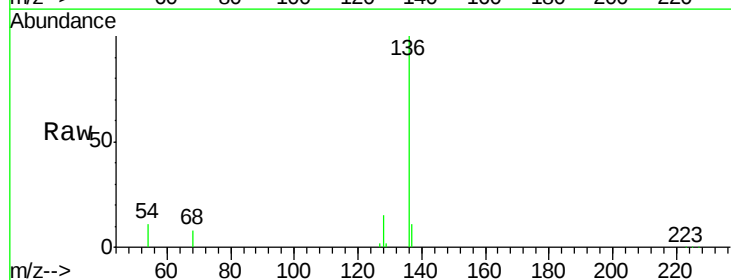
Tgt Ion: 128 Resp: 6067

Ion Ratio Lower Upper

128 100

129 13.9 9.1 13.7#

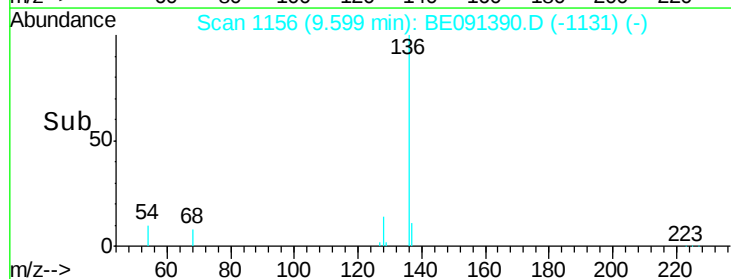
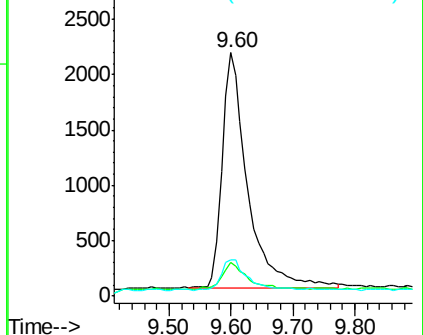
127 15.1 10.5 15.7



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E





#7

2-Methylnaphthalene

Concen: 0.23 ng

RT: 11.17 min Scan# 1419

Delta R.T. 0.05 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

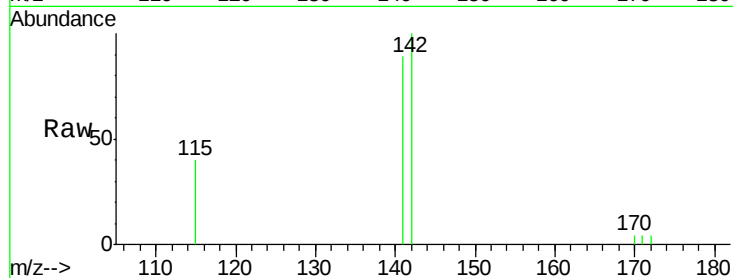
Tgt Ion:142 Resp: 3420

Ion Ratio Lower Upper

142 100

141 89.3 72.3 108.5

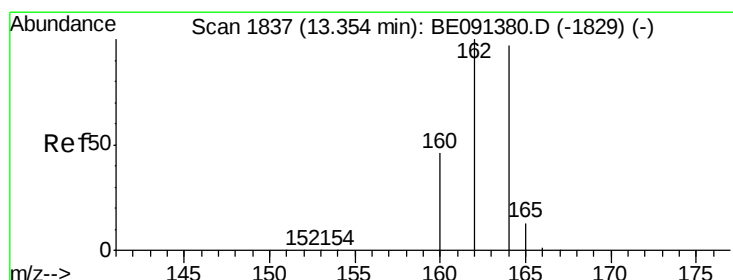
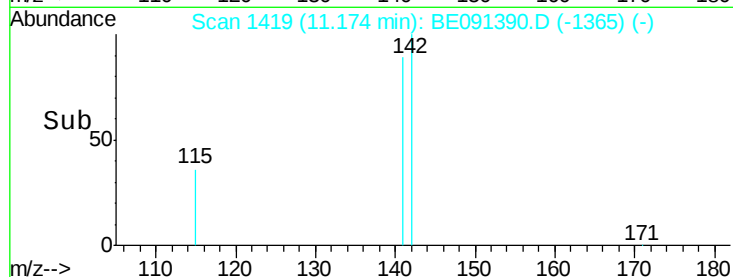
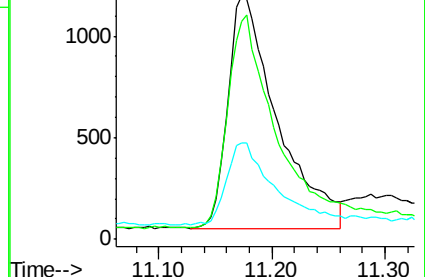
115 39.7 30.5 45.7



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: 13.36 min Scan# 1838

Delta R.T. 0.01 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

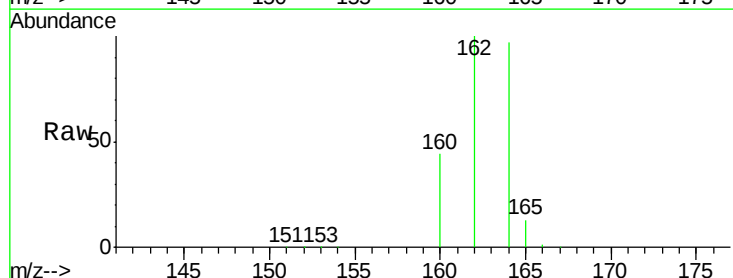
Tgt Ion:164 Resp: 149369

Ion Ratio Lower Upper

164 100

162 102.6 82.2 123.2

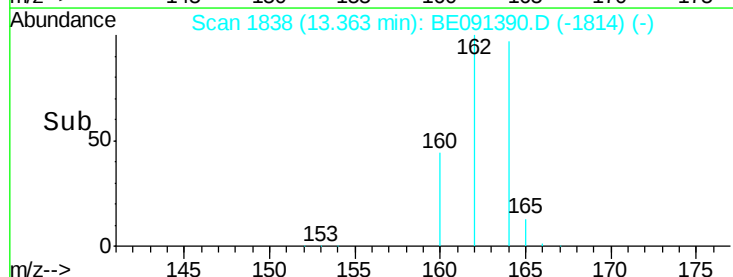
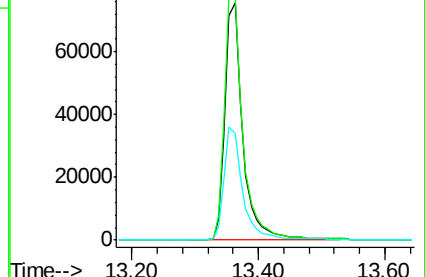
160 45.1 37.8 56.8



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

2,4,6-Tribromophenol

Concen: 3.80 ng

RT: 14.90 min Scan# 2003

Delta R.T. 0.00 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

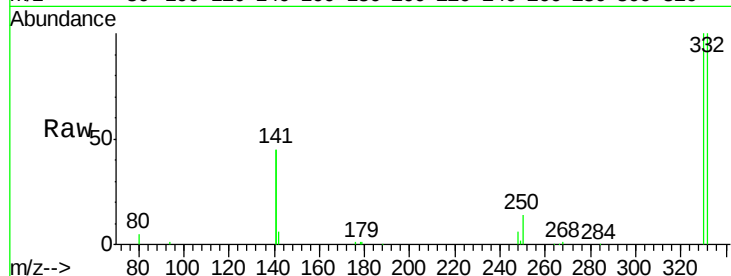
Tgt Ion:330 Resp: 26460

Ion Ratio Lower Upper

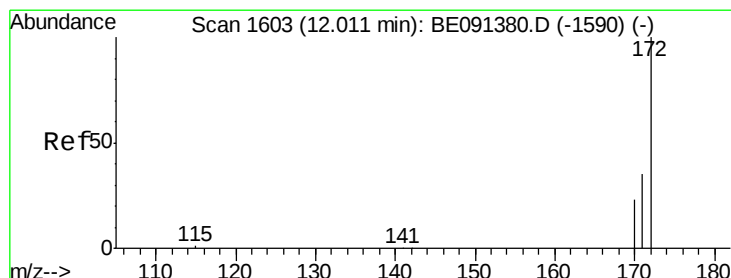
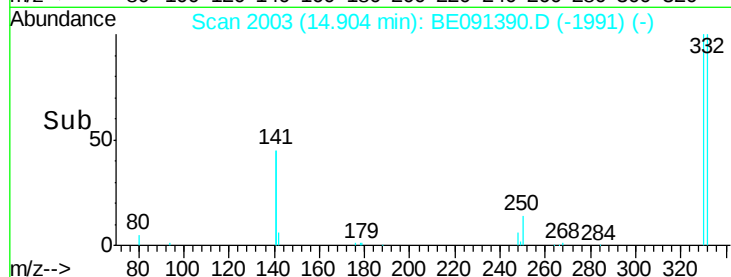
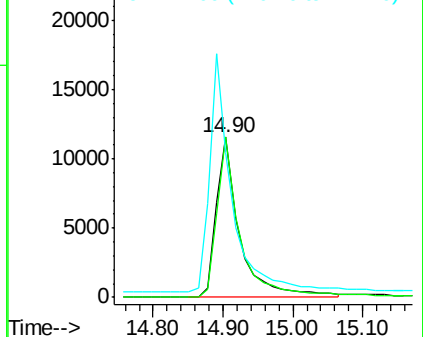
330 100

332 97.5 78.8 118.2

141 144.6 105.1 157.7



Abundance Ion 329.80 (329.50 to 330.50): E
Ion 331.80 (331.50 to 332.50): E
Ion 141.00 (140.70 to 141.70): E



#10

2-Fluorobiphenyl

Concen: 3.91 ng

RT: 12.02 min Scan# 1604

Delta R.T. 0.00 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

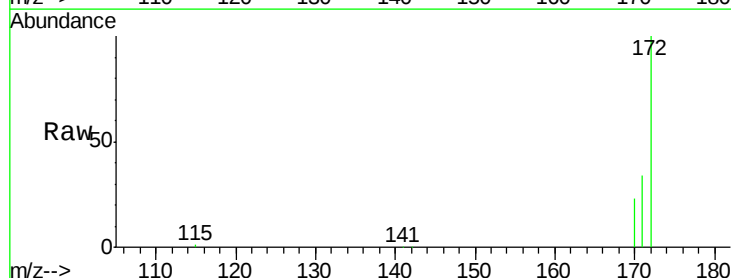
Tgt Ion:172 Resp: 151952

Ion Ratio Lower Upper

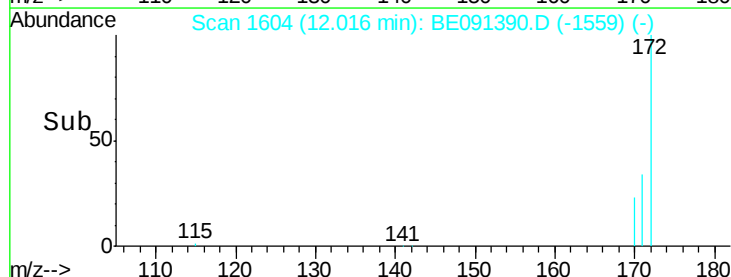
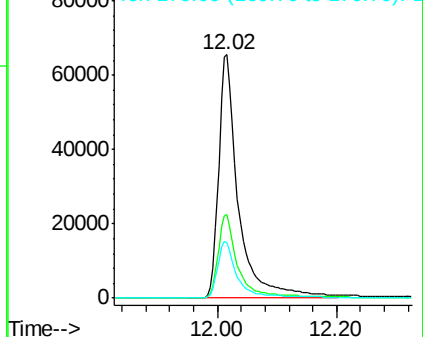
172 100

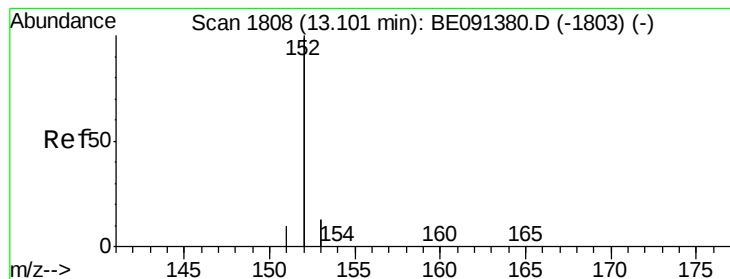
171 34.4 27.8 41.8

170 22.7 18.6 28.0



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





#11

Acenaphthylene

Concen: 0.25 ng

RT: 13.12 min Scan# 1810

Delta R.T. 0.02 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

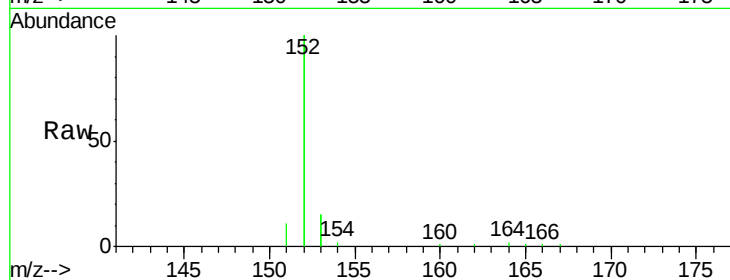
Tgt Ion:152 Resp: 20081

Ion Ratio Lower Upper

152 100

151 4.7 3.8 5.8

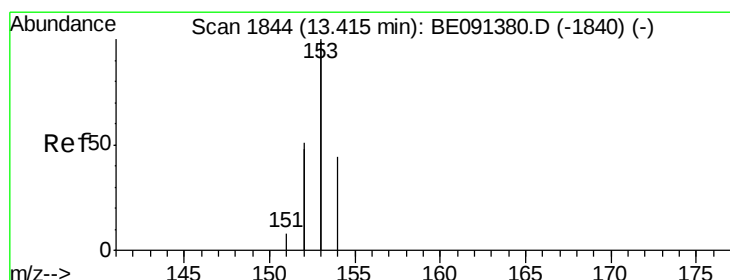
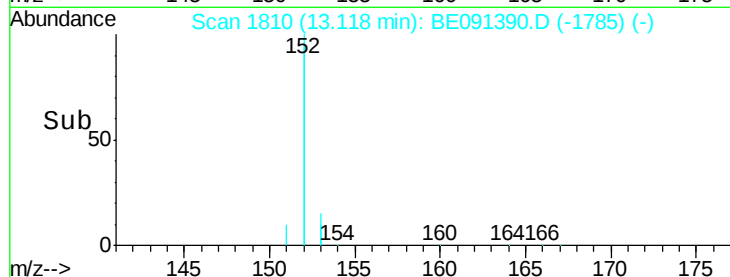
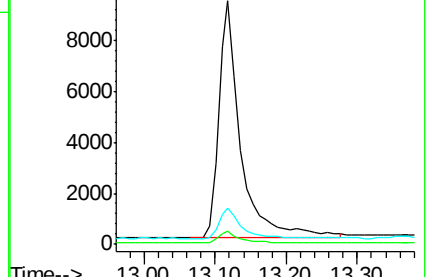
153 12.6 10.2 15.4



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



#12

Acenaphthene

Concen: 0.11 ng

RT: 13.42 min Scan# 1844

Delta R.T. -0.00 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

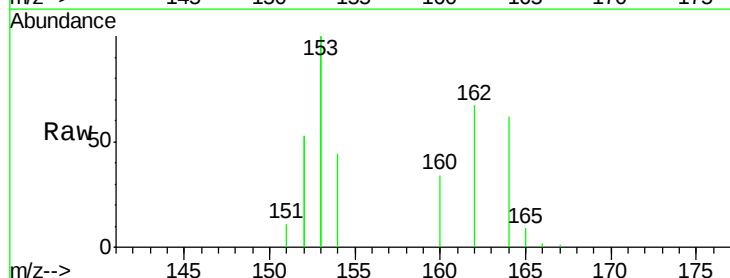
Tgt Ion:154 Resp: 4543

Ion Ratio Lower Upper

154 100

153 464.1 369.8 554.8

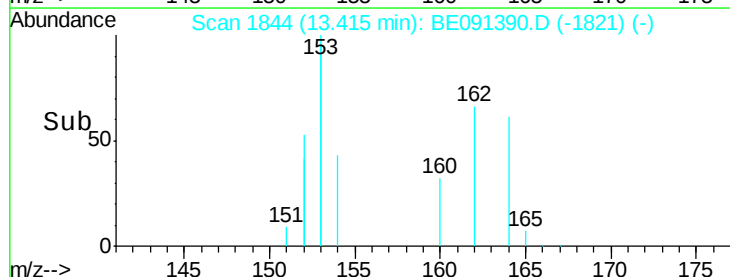
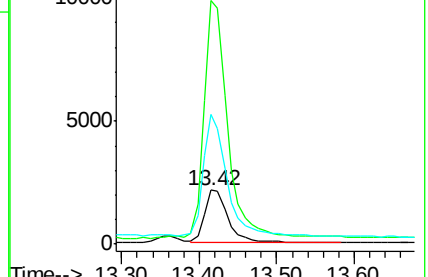
152 233.5 194.4 291.6

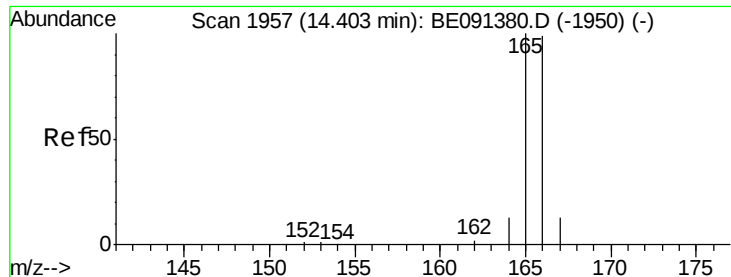


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E





#13

Fluorene

Concen: 0.10 ng

RT: 14.42 min Scan# 1959

Delta R.T. 0.02 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

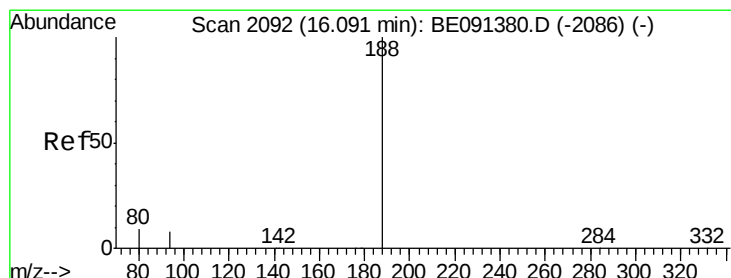
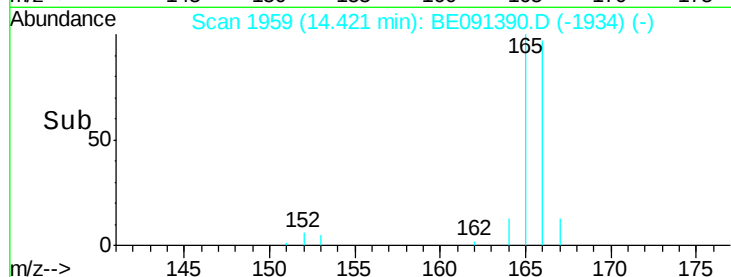
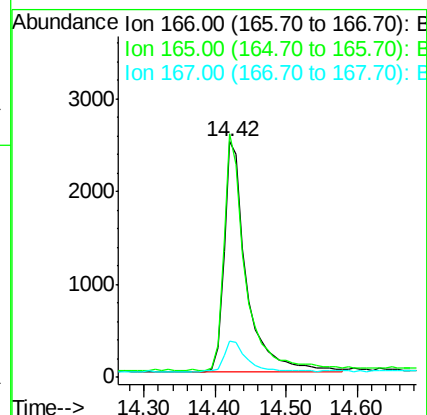
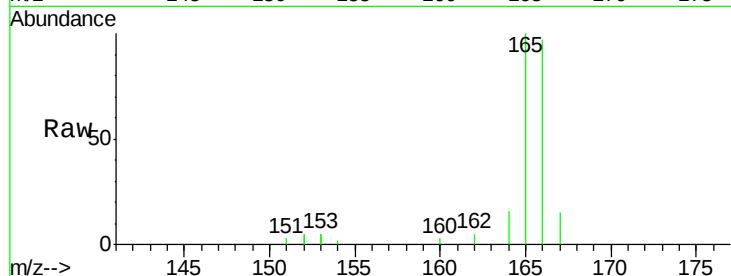
Tgt Ion:166 Resp: 5455

Ion Ratio Lower Upper

166 100

165 99.0 79.3 118.9

167 13.9 10.6 16.0



#14

Phenanthrene-d10

Concen: 5.00 ng

RT: 16.09 min Scan# 2092

Delta R.T. -0.00 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

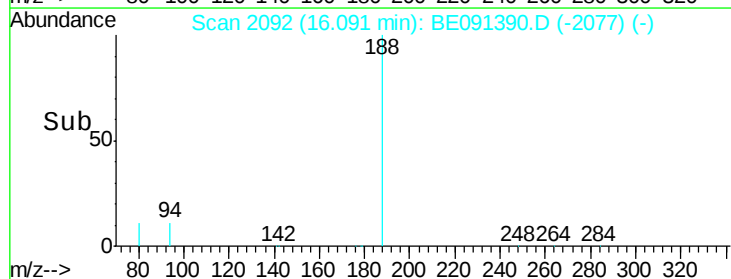
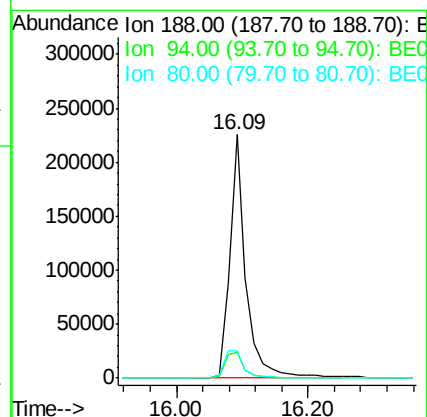
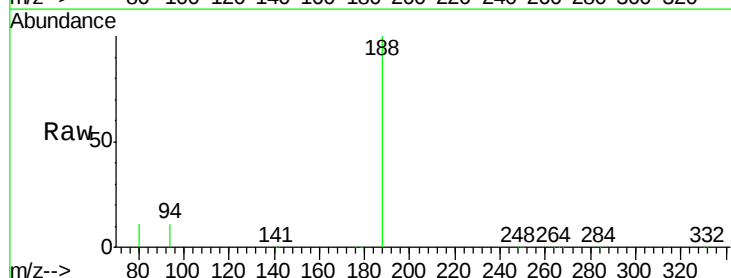
Tgt Ion:188 Resp: 388593

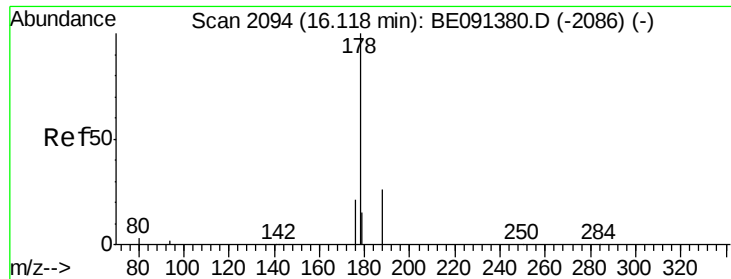
Ion Ratio Lower Upper

188 100

94 10.8 6.6 10.0#

80 11.4 7.0 10.6#





#15

Phenanthrene

Concen: 0.12 ng

RT: 16.13 min Scan# 2095

Delta R.T. 0.01 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

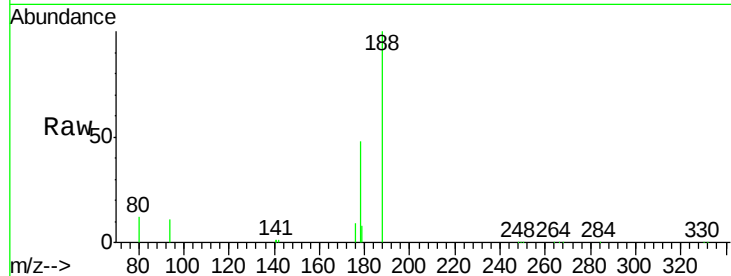
Tgt Ion:178 Resp: 11760

Ion Ratio Lower Upper

178 100

176 18.8 15.4 23.2

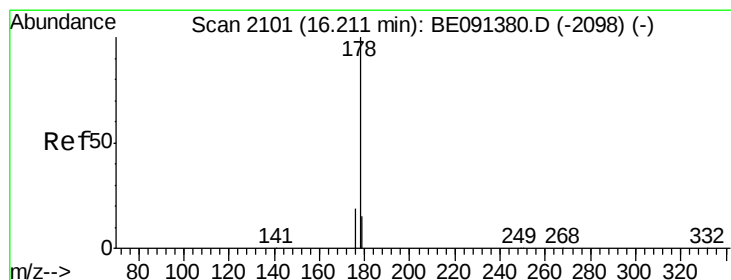
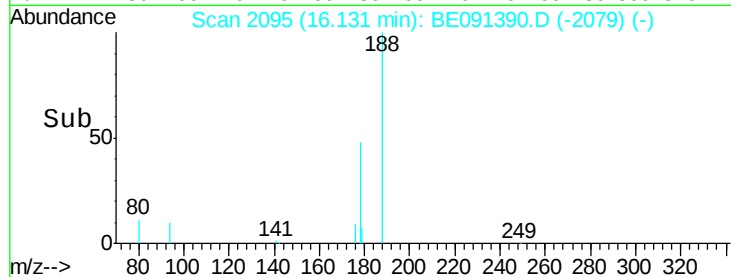
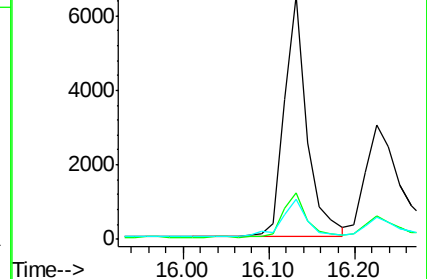
179 18.2 12.7 19.1



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#16

Anthracene

Concen: 0.10 ng

RT: 16.22 min Scan# 2102

Delta R.T. 0.01 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

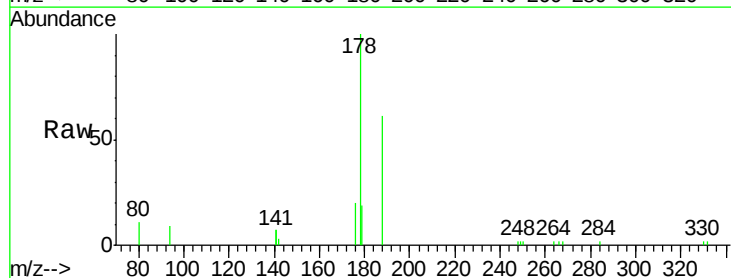
Tgt Ion:178 Resp: 8315

Ion Ratio Lower Upper

178 100

176 18.2 14.8 22.2

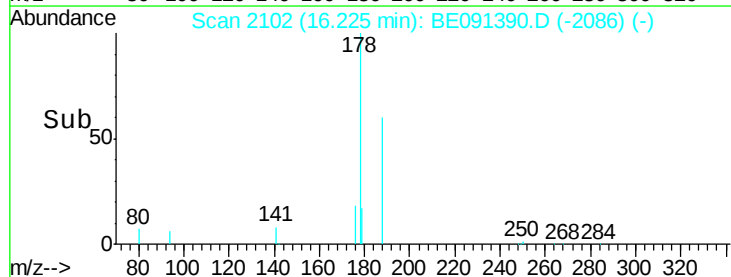
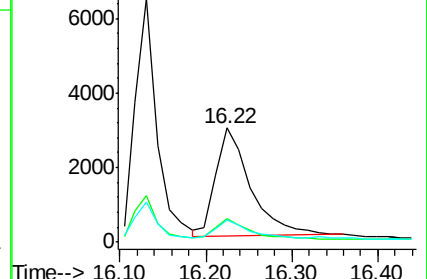
179 15.7 12.1 18.1

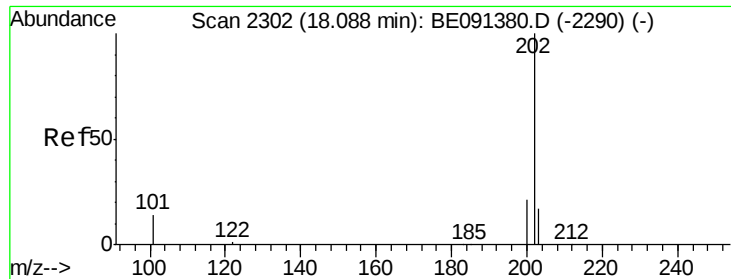


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E

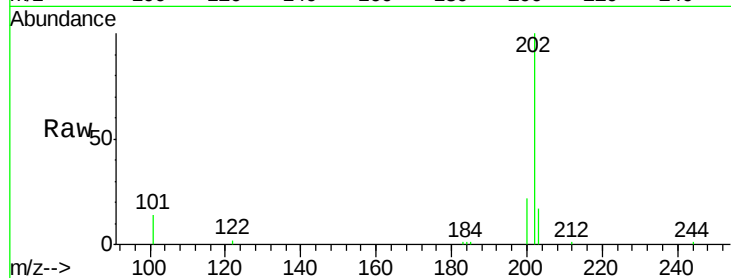




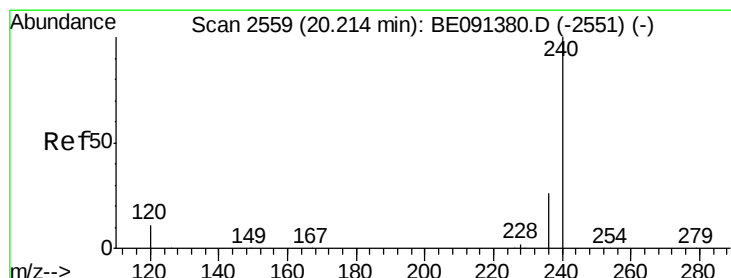
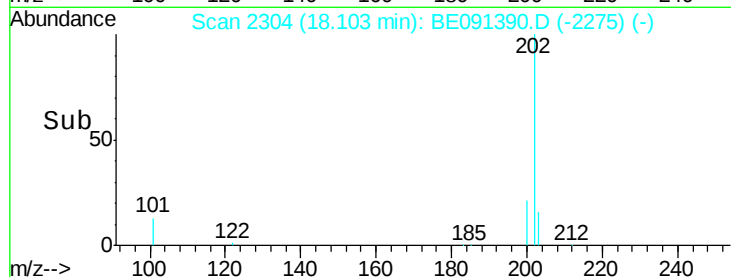
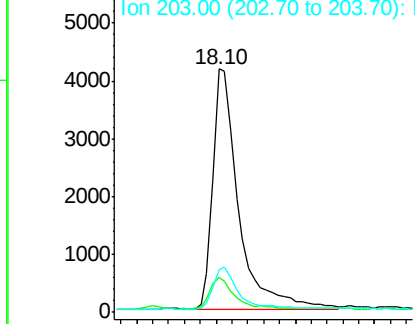
#17
 Fluoranthene
 Concen: 0.20 ng
 RT: 18.10 min Scan# 2304
 Delta R.T. 0.02 min
 Lab File: BE091390.D
 Acq: 4 Feb 2016 11:38

Instrument :
 BNA_E
 ClientSampleId :
 LOQ-SOIL2016-02

Tgt Ion:202 Resp: 9445
 Ion Ratio Lower Upper
 202 100
 101 12.3 10.5 15.7
 203 17.4 13.9 20.9

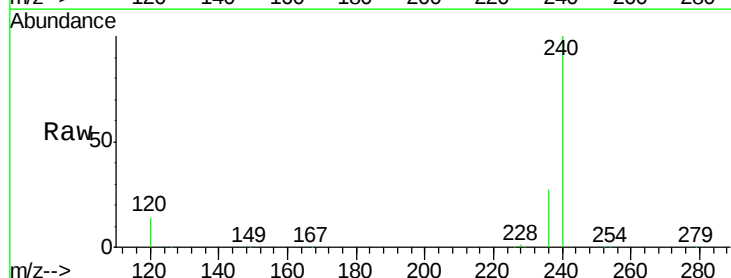


Abundance Ion 202.00 (201.70 to 202.70): E
 Ion 101.00 (100.70 to 101.70): E
 Ion 203.00 (202.70 to 203.70): E

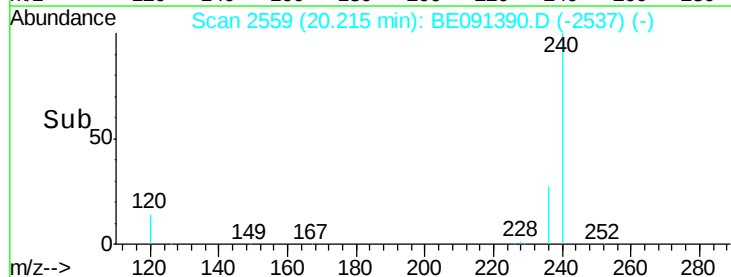
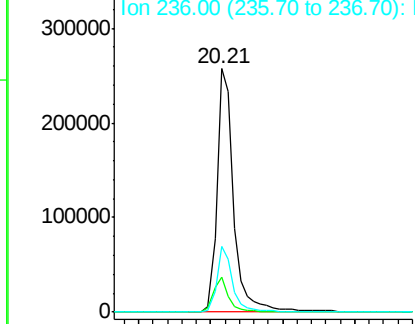


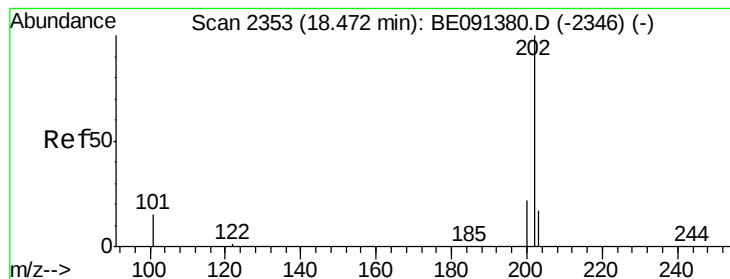
#18
 Chrysene-d12
 Concen: 5.00 ng
 RT: 20.21 min Scan# 2559
 Delta R.T. 0.00 min
 Lab File: BE091390.D
 Acq: 4 Feb 2016 11:38

Tgt Ion:240 Resp: 412824
 Ion Ratio Lower Upper
 240 100
 120 14.4 8.9 13.3#
 236 26.8 21.0 31.4



Abundance Ion 240.00 (239.70 to 240.70): E
 Ion 120.00 (119.70 to 120.70): E
 Ion 236.00 (235.70 to 236.70): E





#19

Pyrene

Concen: 0.11 ng

RT: 18.49 min Scan# 2355

Delta R.T. 0.02 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

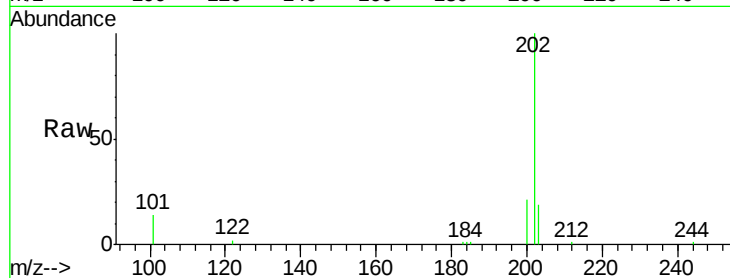
Tgt Ion:202 Resp: 9510

Ion Ratio Lower Upper

202 100

200 20.9 16.8 25.2

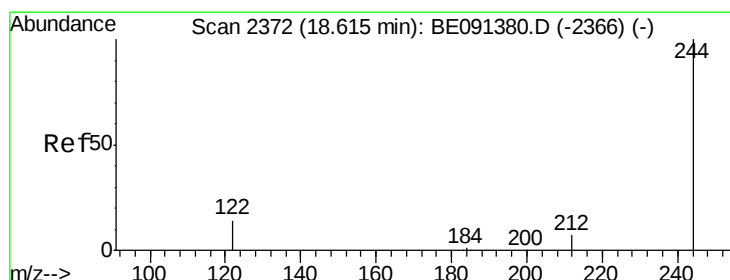
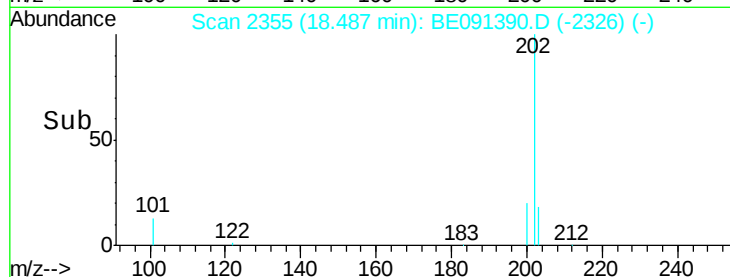
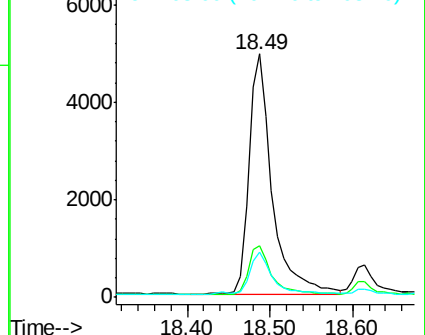
203 16.5 14.0 21.0



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



#20

Terphenyl-d14

Concen: 4.14 ng

RT: 18.61 min Scan# 2372

Delta R.T. -0.00 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

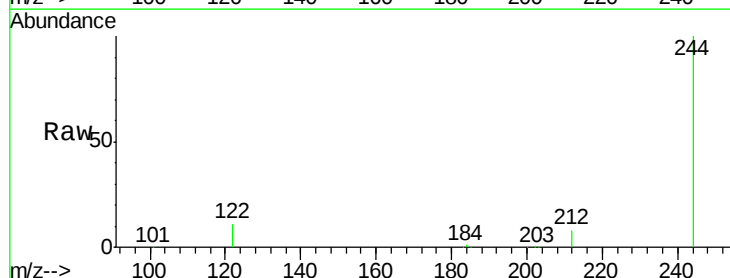
Tgt Ion:244 Resp: 252738

Ion Ratio Lower Upper

244 100

212 7.6 6.1 9.1

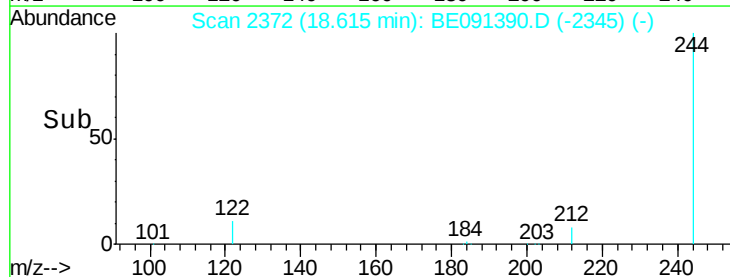
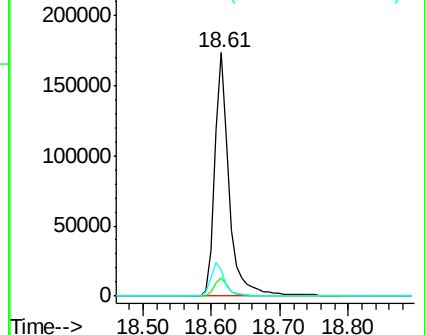
122 10.6 11.0 16.6#

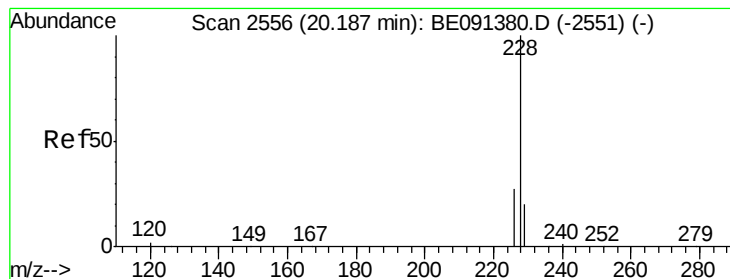


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#21

Benzo(a)anthracene

Concen: 0.25 ng

RT: 20.19 min Scan# 2556

Delta R.T. 0.00 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

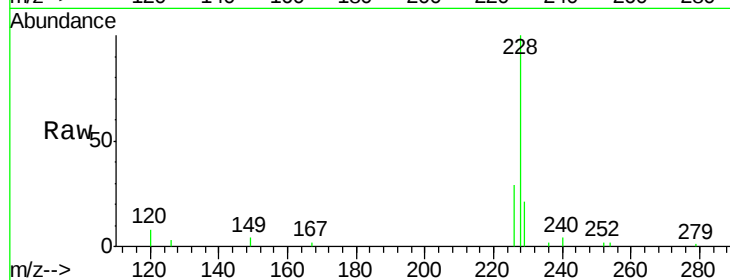
Tgt Ion:228 Resp: 7823

Ion Ratio Lower Upper

228 100

226 28.6 21.7 32.5

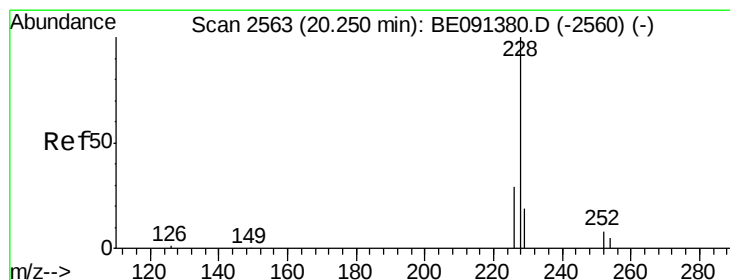
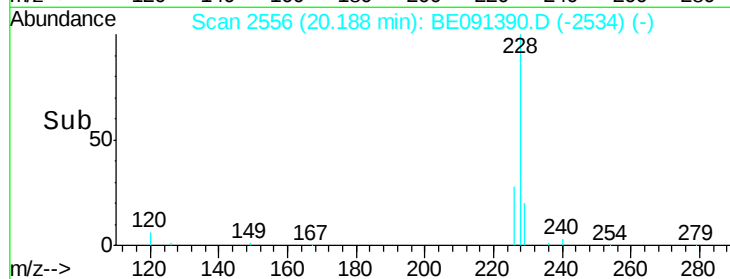
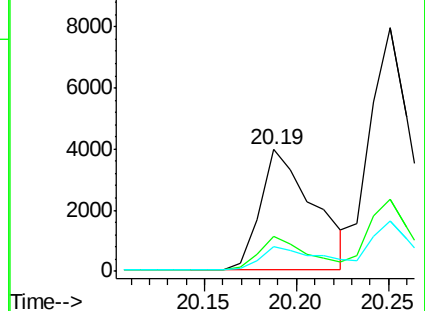
229 20.6 16.1 24.1



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



#22

Chrysene

Concen: 0.06 ng

RT: 20.25 min Scan# 2563

Delta R.T. 0.00 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

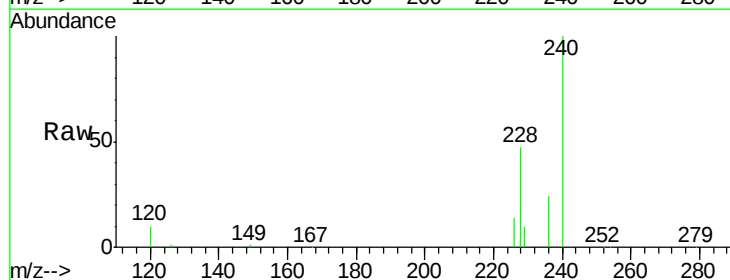
Tgt Ion:228 Resp: 13478

Ion Ratio Lower Upper

228 100

226 29.9 23.4 35.0

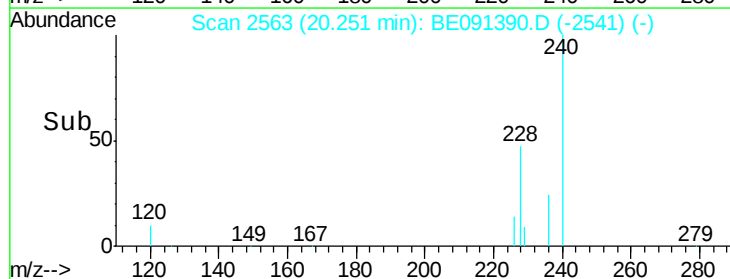
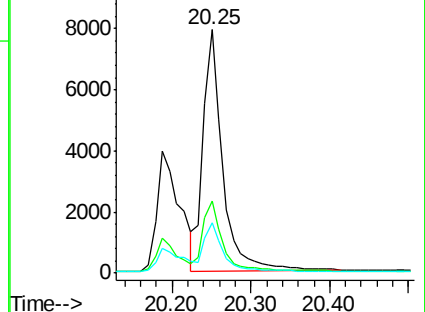
229 20.7 15.7 23.5

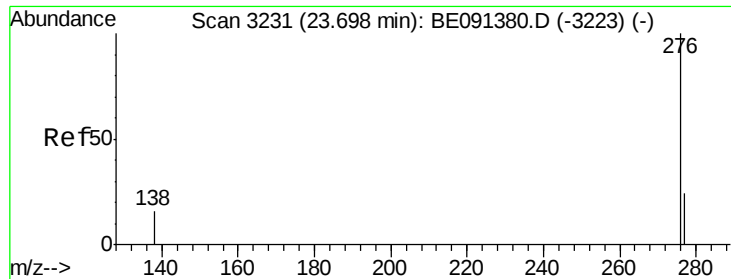


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#23

Indeno(1,2,3-cd)pyrene

Concen: 0.24 ng

RT: 23.73 min Scan# 3236

Delta R.T. 0.03 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

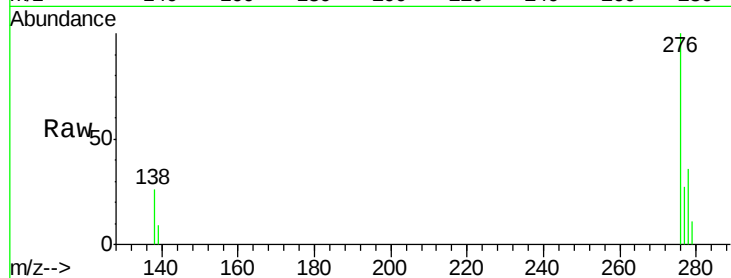
Tgt Ion:276 Resp: 7565

Ion Ratio Lower Upper

276 100

138 15.6 16.6 25.0#

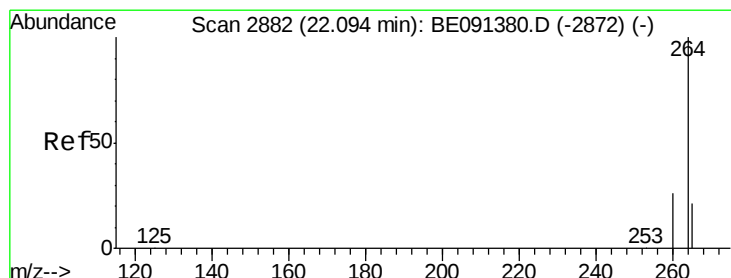
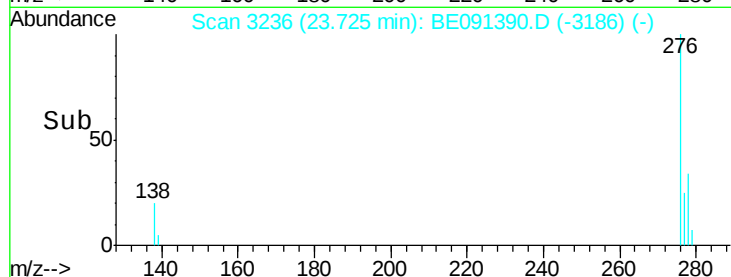
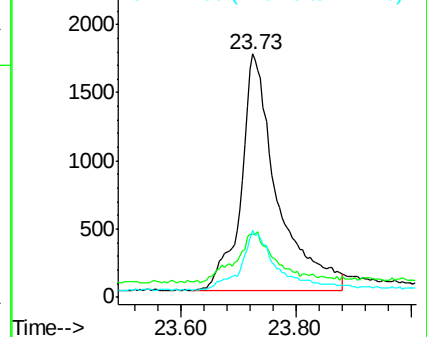
277 24.7 19.0 28.6



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



#24

Perylene-d12

Concen: 5.00 ng

RT: 22.10 min Scan# 2883

Delta R.T. 0.00 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

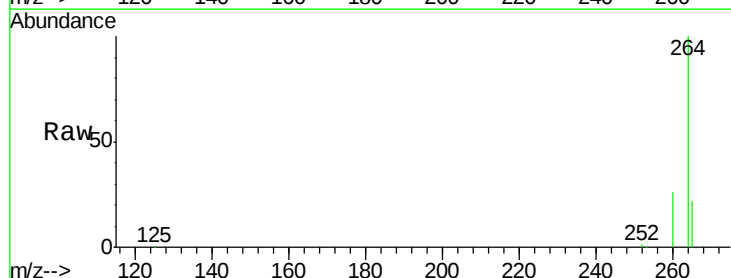
Tgt Ion:264 Resp: 370303

Ion Ratio Lower Upper

264 100

260 25.7 20.7 31.1

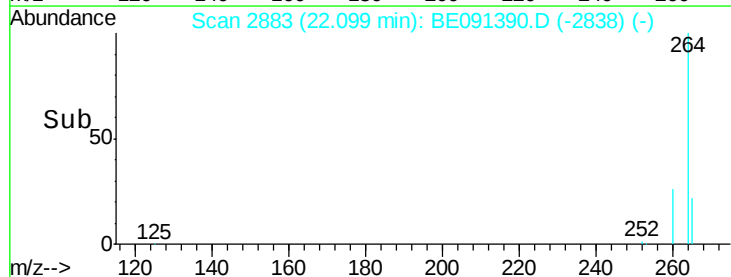
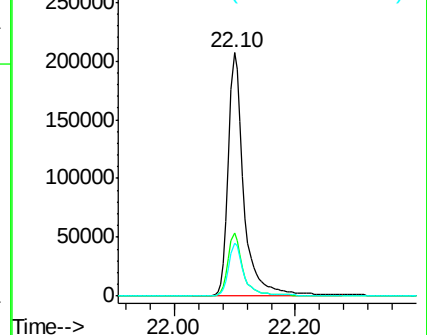
265 21.8 17.2 25.8

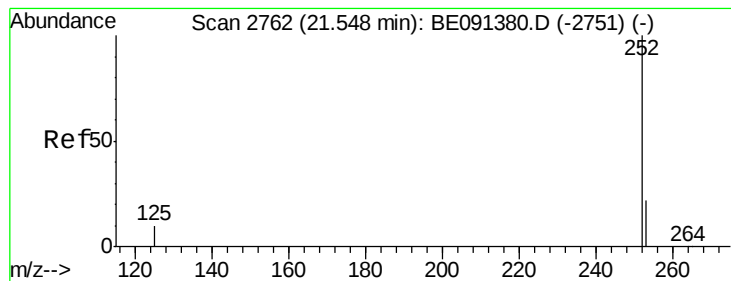


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





#25

Benzo(b)fluoranthene

Concen: 0.22 ng

RT: 21.55 min Scan# 2763

Delta R.T. 0.01 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02

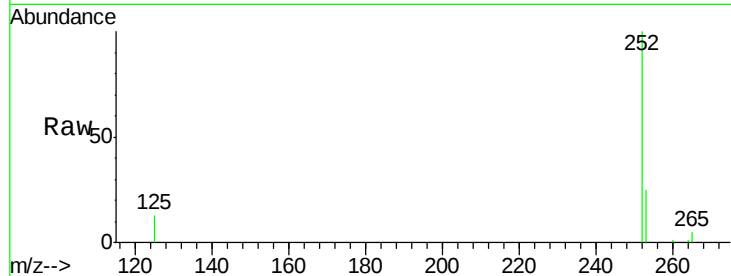
Tgt Ion:252 Resp: 7174

Ion Ratio Lower Upper

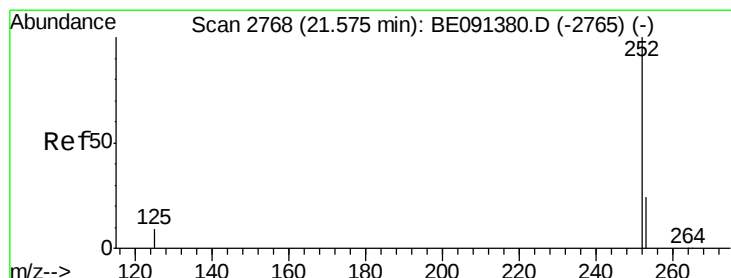
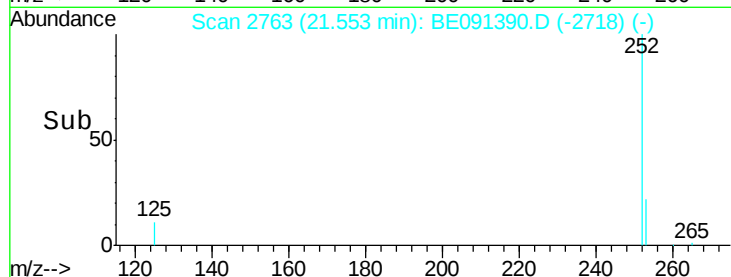
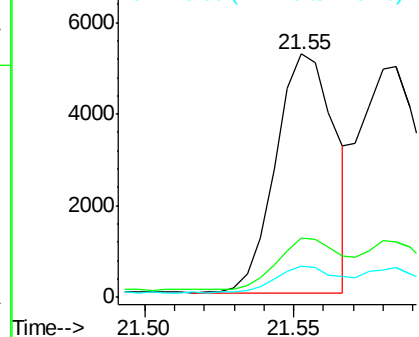
252 100

253 24.6 18.2 27.2

125 13.0 8.3 12.5#



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



#26

Benzo(k)fluoranthene

Concen: 0.11 ng

RT: 21.58 min Scan# 2770

Delta R.T. 0.01 min

Lab File: BE091390.D

Acq: 4 Feb 2016 11:38

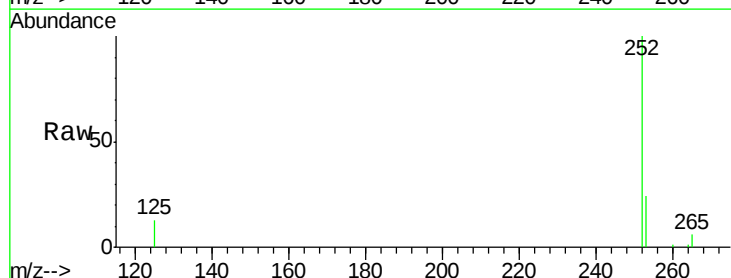
Tgt Ion:252 Resp: 8852

Ion Ratio Lower Upper

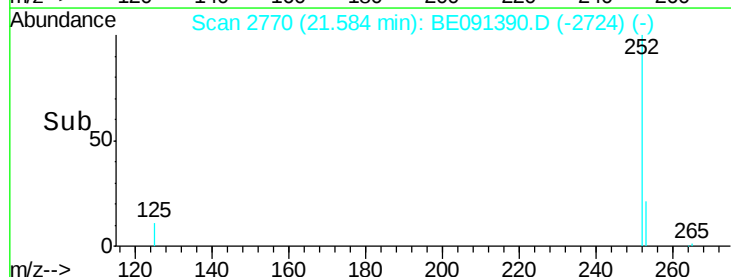
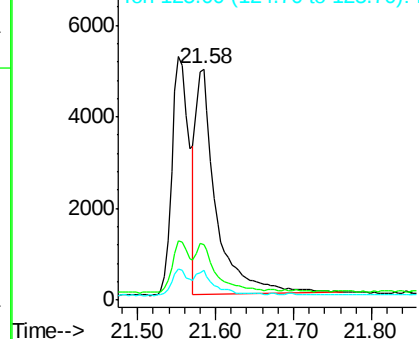
252 100

253 24.0 18.1 27.1

125 12.9 8.2 12.4#



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

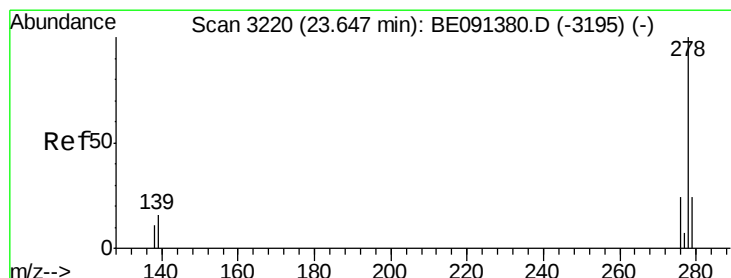
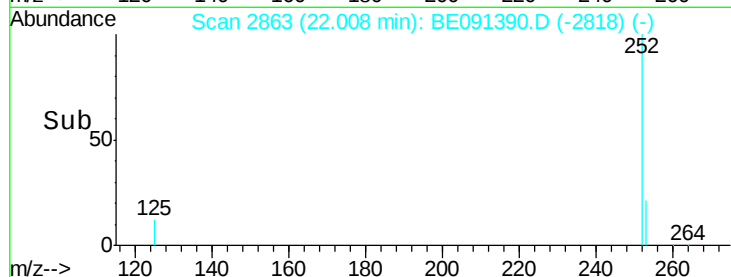
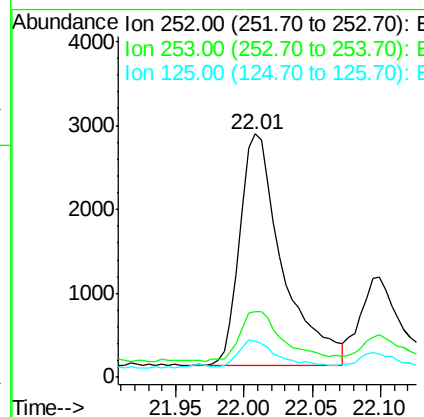
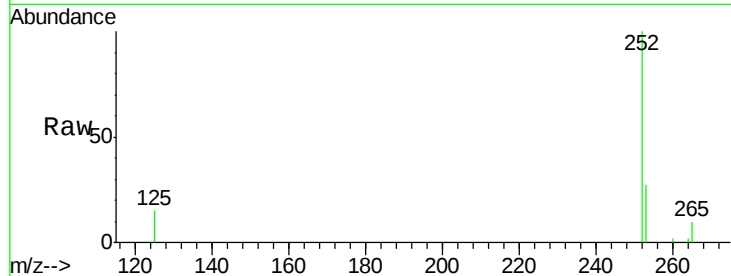




#27
Benzo(a)pyrene
Concen: 0.24 ng
RT: 22.01 min Scan# 2863
Delta R.T. 0.00 min
Lab File: BE091390.D
Acq: 4 Feb 2016 11:38

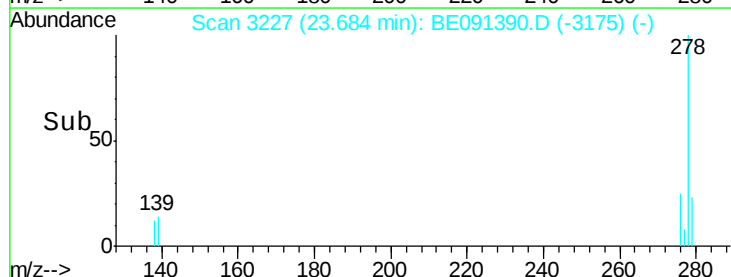
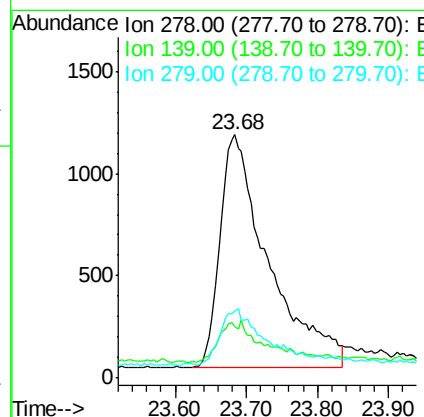
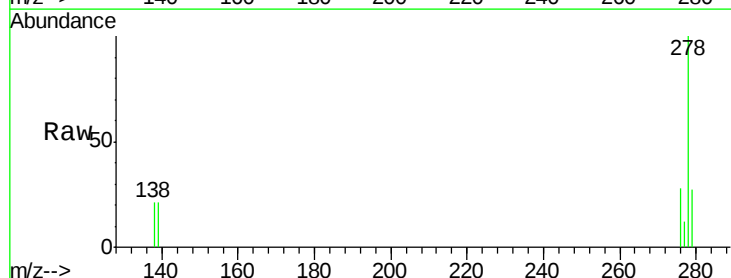
Instrument :
BNA_E
ClientSampleId :
LOQ-SOIL2016-02

Tgt Ion:252 Resp: 6005
Ion Ratio Lower Upper
252 100
253 27.2 17.5 26.3#
125 15.0 9.4 14.0#



#28
Dibenzo(a,h)anthracene
Concen: 0.31 ng
RT: 23.68 min Scan# 3227
Delta R.T. 0.04 min
Lab File: BE091390.D
Acq: 4 Feb 2016 11:38

Tgt Ion:278 Resp: 5381
Ion Ratio Lower Upper
278 100
139 21.1 13.0 19.4#
279 27.4 19.2 28.8





#29

Benzo(g,h,i)perylene

Concen: 0.23 ng

RT: 24.27 min Scan# 3356

Delta R.T. 0.03 min

Lab File: BE091390.D

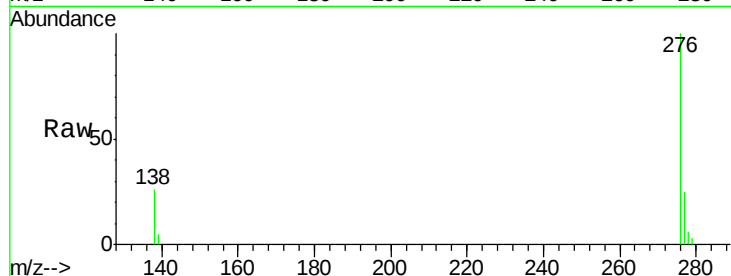
Acq: 4 Feb 2016 11:38

Instrument :

BNA_E

ClientSampleId :

LOQ-SOIL2016-02



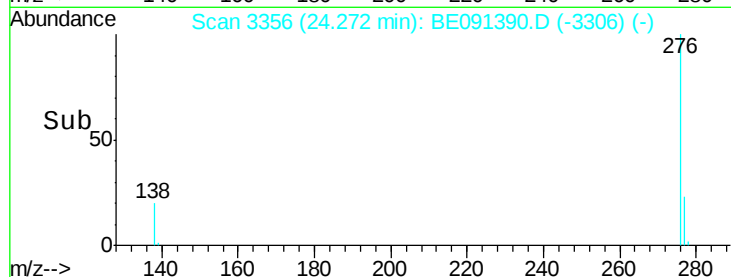
Tgt Ion: 276 Resp: 7985

Ion Ratio Lower Upper

276 100

277 25.1 18.9 28.3

138 25.6 17.0 25.6#



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

