

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF052219\
 Data File : BF114509.D
 Acq On : 23 May 2019 2:59
 Operator : JU/SJ
 Sample : K2978-01 2X
 Misc :
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 RO-SOIL

Manual Integrations
 APPROVED

mohammad
 5/24/2019 8:49:39 AM

Quant Time: May 23 04:51:52 2019
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon May 20 04:47:40 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.83	152	194364	20.00	ng	-0.01
21) Naphthalene-d8	8.11	136	779185	20.00	ng	-0.01
39) Acenaphthene-d10	9.87	164	359453	20.00	ng	0.00
64) Phenanthrene-d10	11.35	188	629390	20.00	ng	0.00
76) Chrysene-d12	14.01	240	423600	20.00	ng	0.00
87) Perylene-d12	15.48	264	444878	20.00	ng	0.02

System Monitoring Compounds						
5) 2-Fluorophenol	5.46	112	297953	24.67	ng	-0.01
7) Phenol-d6	6.47	99	395812	27.71	ng	-0.01
23) Nitrobenzene-d5	7.39	82	221517	15.95	ng	-0.01
42) 2,4,6-Tribromophenol	10.66	330	81795	22.01	ng	0.00
45) 2-Fluorobiphenyl	9.19	172	429096	18.06	ng	0.00
79) Terphenyl-d14	12.93	244	360961	17.57	ng	0.00

Target Compounds				Qvalue		
31) Naphthalene	8.13	128	152474	4.189	ng	99
49) Acenaphthylene	9.73	152	506651	14.254	ng	98
50) Dimethylphthalate	9.58	163	52999	2.009	ng	99
71) Phenanthrene	11.38	178	716069	23.385	ng	97
72) Anthracene	11.43	178	419700	13.646	ng	99
75) Fluoranthene	12.58	202	2666213	80.857	ng	99
78) Pyrene	12.81	202	3085051	90.533	ng	98
81) Benzo(a)anthracene	14.00	228	2003971m	73.142	ng	
83) Chrysene	14.03	228	1653366	61.560	ng	99
84) Bis(2-ethylhexyl)phthalate	13.96	149	47232	2.518	ng	98
86) Indeno(1,2,3-cd)pyrene	16.97	276	1035484	43.624	ng	95
88) Benzo(b)fluoranthene	15.06	252	2549024m	89.435	ng	
89) Benzo(k)fluoranthene	15.08	252	681914m	26.046	ng	
90) Benzo(a)pyrene	15.43	252	1755008	69.966	ng	98
91) Dibenzo(a,h)anthracene	16.96	278	253786m	12.176	ng	
92) Benzo(g,h,i)perylene	17.42	276	1130902	54.141	ng	98

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

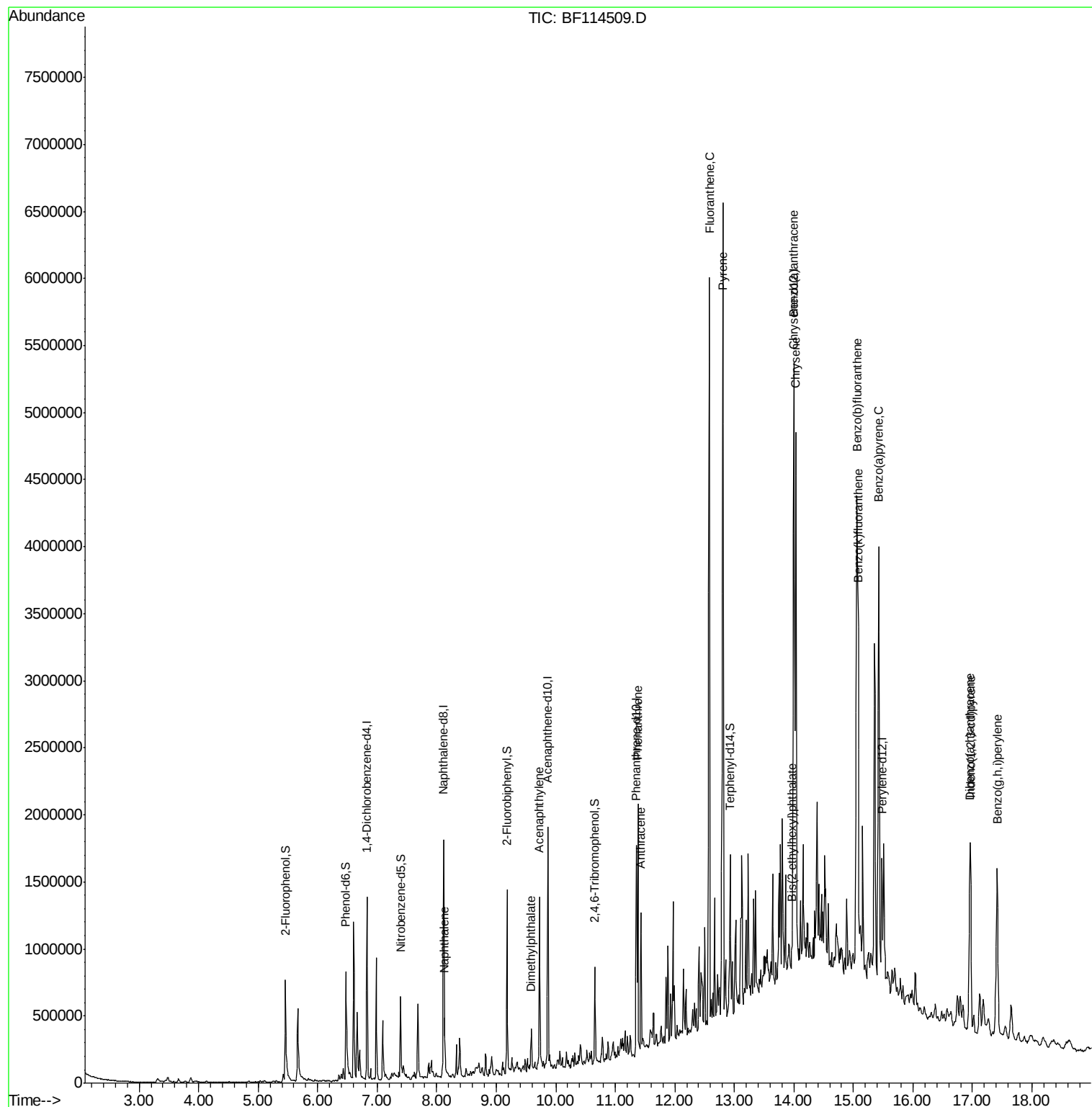
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF052219\
Data File : BF114509.D
Acq On : 23 May 2019 2:59
Operator : JU/SJ
Sample : K2978-01 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

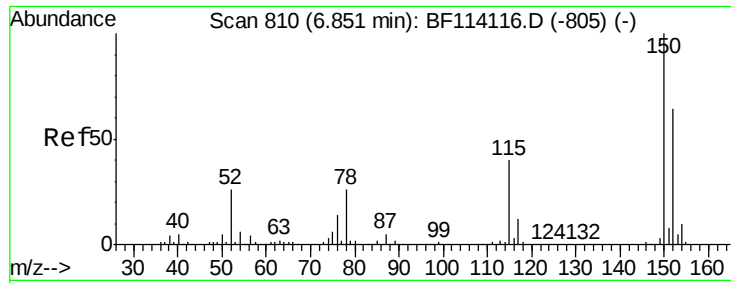
Instrument :
BNA_F
ClientSampleId :
RO-SOIL

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM

Quant Time: May 23 04:51:52 2019
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 20 04:47:40 2019
Response via : Initial Calibration





#1

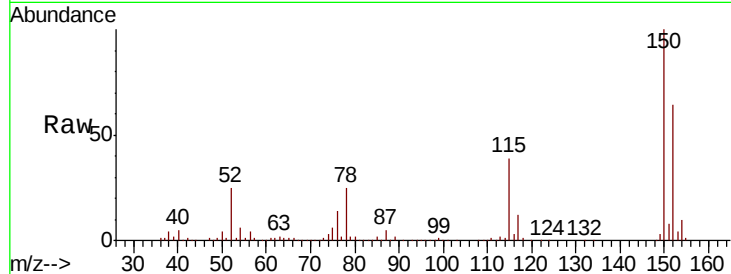
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.83 min Scan# 806
Delta R.T. -0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Instrument :
BNA_F
ClientSampleId :
RO-SOIL

Tot Ion	Ratio	Lower	Upper
152	100		
150	155.0	124.3	186.5
115	60.1	49.1	73.7

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM

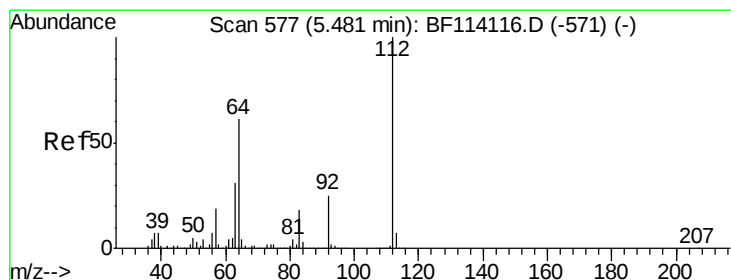
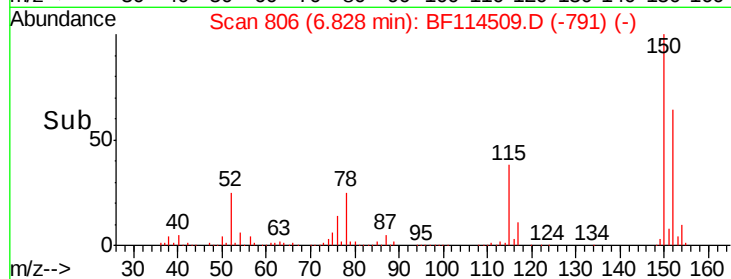
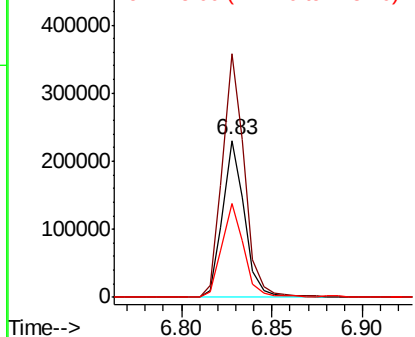


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

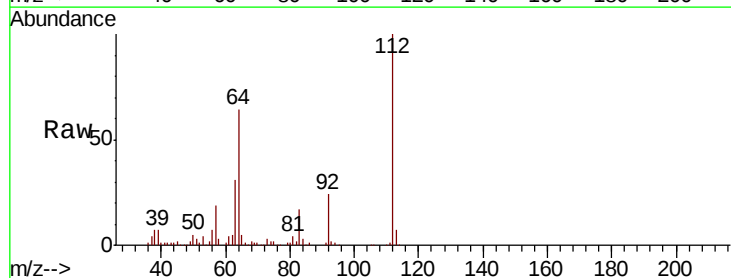
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol
Concen: 24.669 ng
RT: 5.46 min Scan# 573
Delta R.T. -0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Tgt Ion	Ratio	Lower	Upper
112	100		
64	64.4	49.0	73.6
63	31.2	24.6	37.0

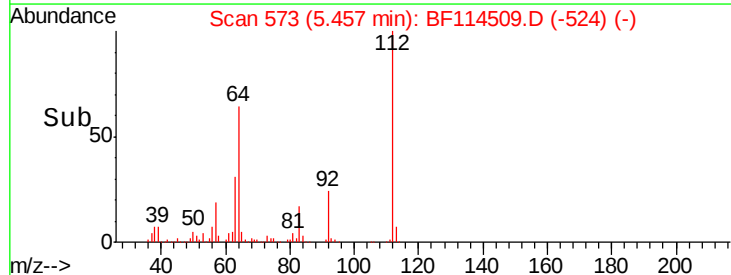
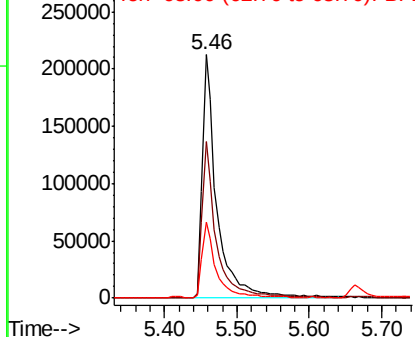


Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 27.709 ng

RT: 6.47 min Scan# 746

Delta R.T. -0.01 min

Lab File: BF114509.D

Acq: 23 May 2019 2:59

Instrument :

BNA_F

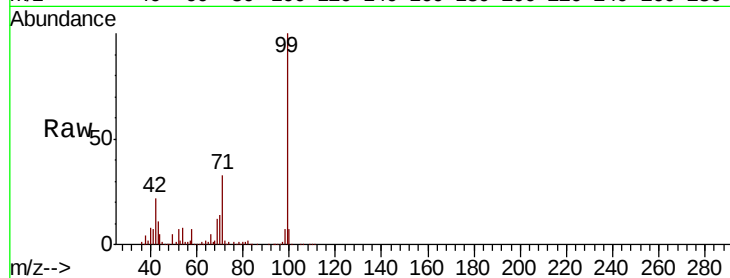
ClientSampleId :

RO-SOIL

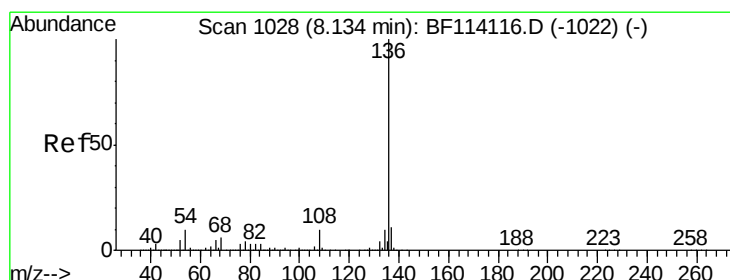
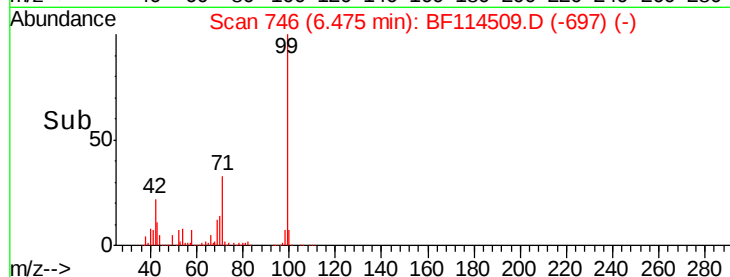
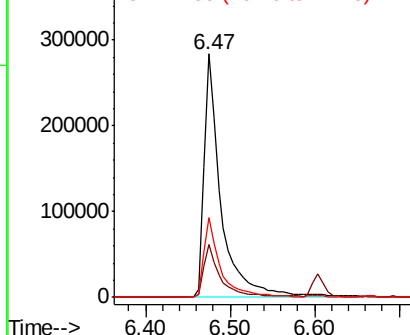
Tot Ion:	99	Resp:	395812
Ion Ratio	Lower	Upper	
99	100		
42	21.6	17.9	26.9
71	32.5	26.2	39.2

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM



Abundance Ion 99.00 (98.70 to 99.70): BF1
Ion 42.00 (41.70 to 42.70): BF1
Ion 71.00 (70.70 to 71.70): BF1



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.11 min Scan# 1024

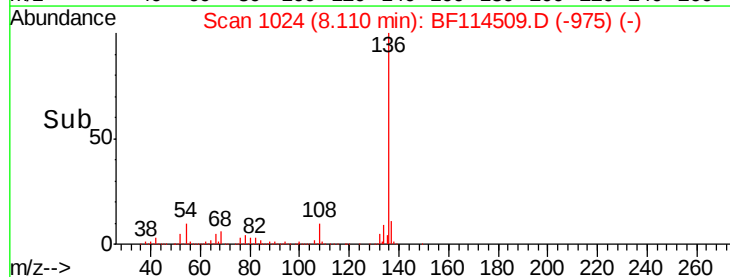
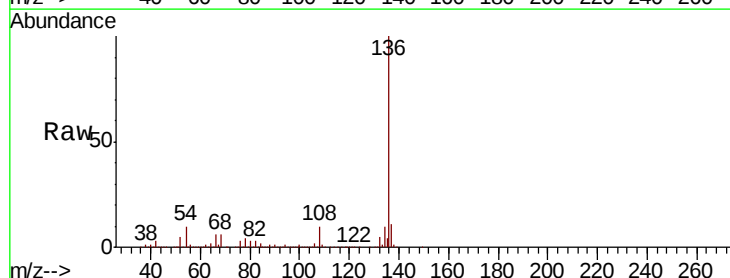
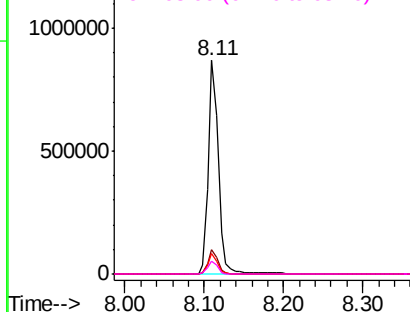
Delta R.T. -0.01 min

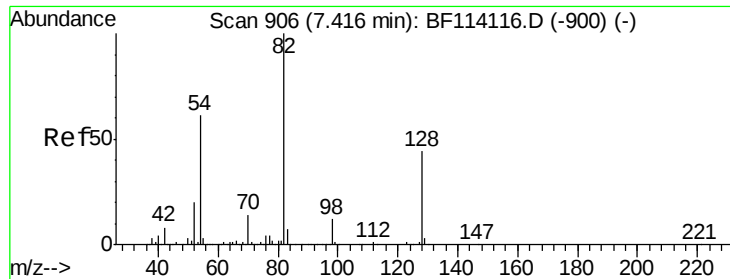
Lab File: BF114509.D

Acq: 23 May 2019 2:59

Tgt Ion:	136	Resp:	779185
Ion Ratio	Lower	Upper	
136	100		
137	11.2	8.8	13.2
54	9.8	7.8	11.8
68	6.2	5.1	7.7

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): BF1
Ion 68.00 (67.70 to 68.70): BF1





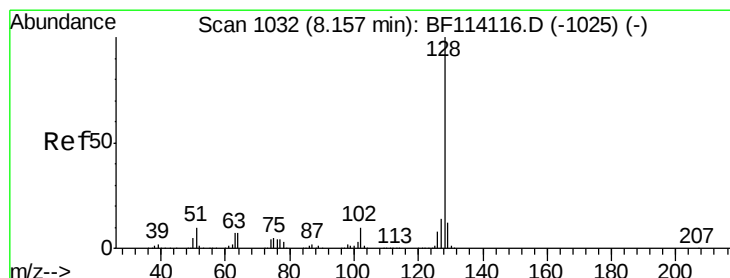
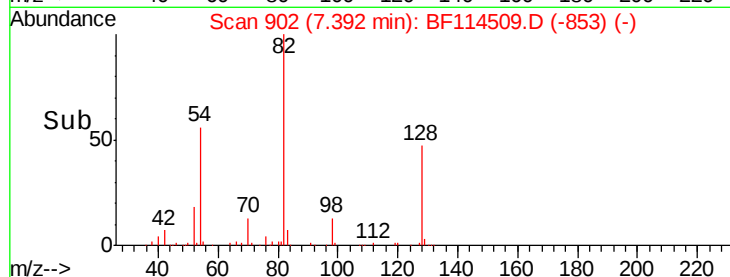
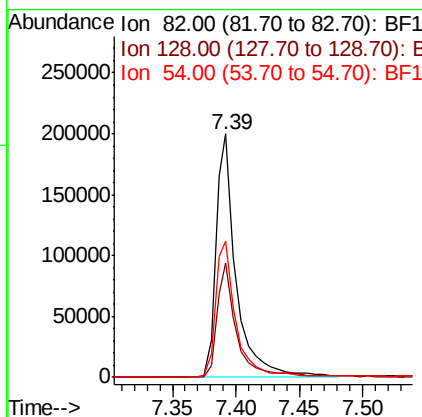
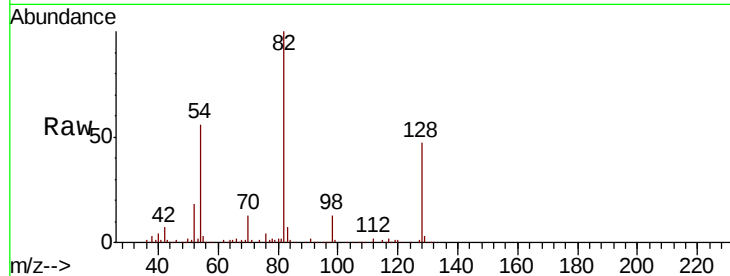
#23
Nitrobenzene-d5
Concen: 15.955 ng
RT: 7.39 min Scan# 902
Delta R.T. -0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Instrument :
BNA_F
ClientSampled :
RO-SOIL

Tot Ion:	82	Resp:	221517
Ion Ratio	Lower	Upper	
82	100		
128	46.9	35.5	53.3
54	56.0	48.5	72.7

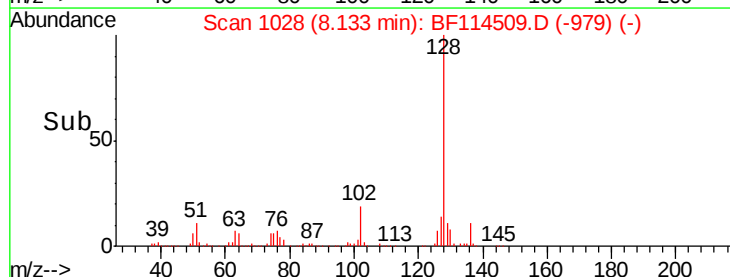
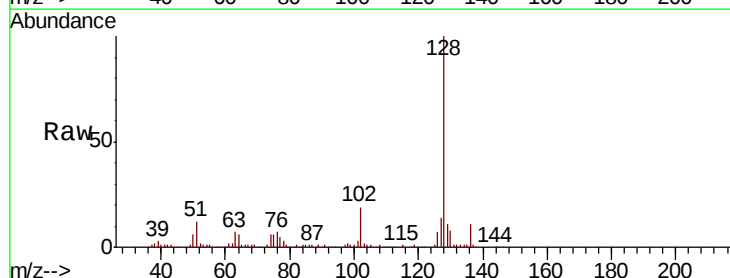
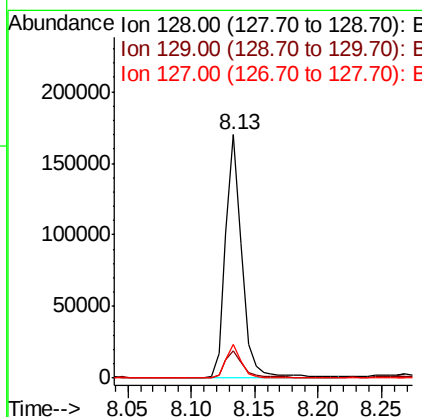
Manual Integrations
APPROVED

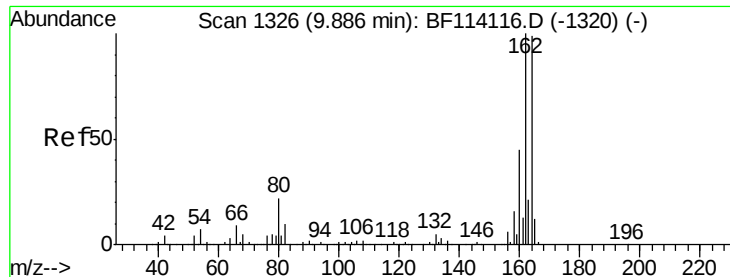
mohammad
5/24/2019 8:49:39 AM



#31
Naphthalene
Concen: 4.189 ng
RT: 8.13 min Scan# 1028
Delta R.T. -0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Tgt Ion:	128	Resp:	152474
Ion Ratio	Lower	Upper	
128	100		
129	11.4	9.6	14.4
127	13.8	11.3	16.9





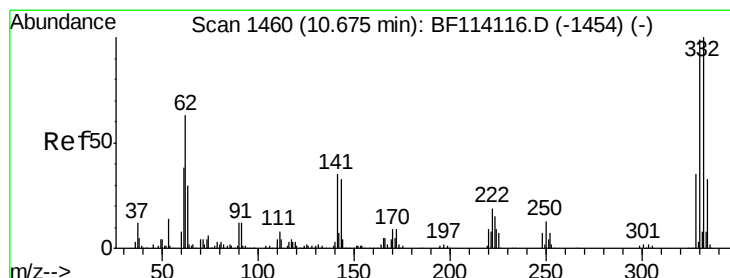
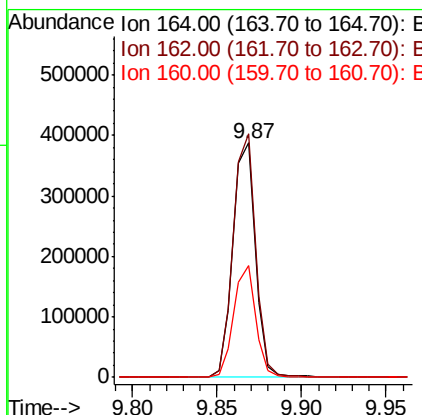
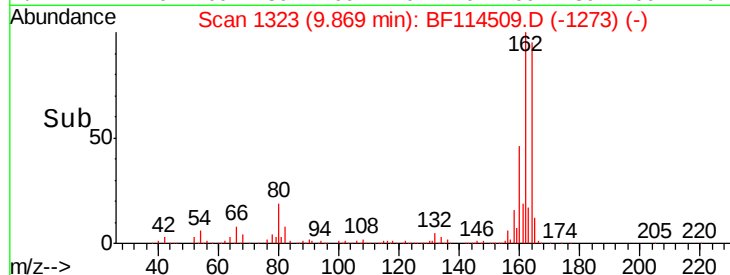
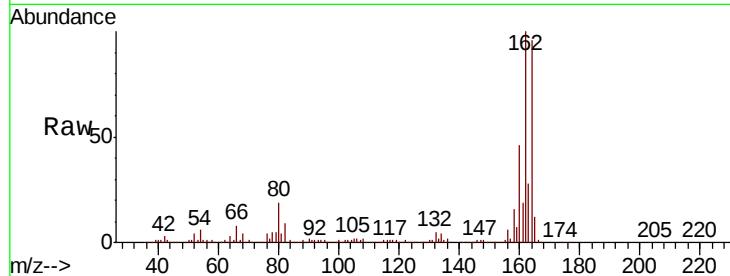
#39
 Acenaphthene-d10
 Concen: 20.000 ng
 RT: 9.87 min Scan# 1323
 Delta R.T. -0.01 min
 Lab File: BF114509.D
 Acq: 23 May 2019 2:59

Instrument :
 BNA_F
 ClientSampleId :
 RO-SOIL

Tot Ion:	164	Resp:	359453
Ion Ratio	Lower	Upper	
164	100		
162	104.0	80.6	120.8
160	47.6	36.5	54.7

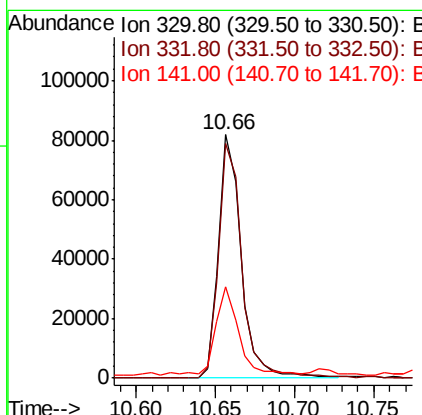
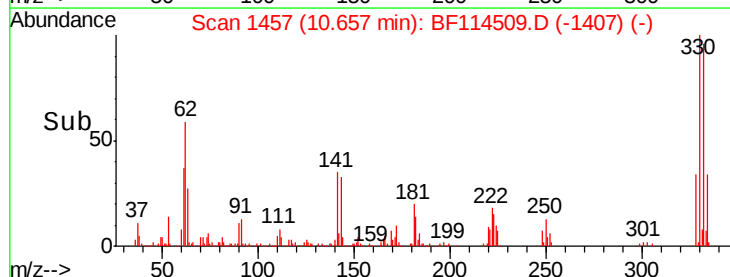
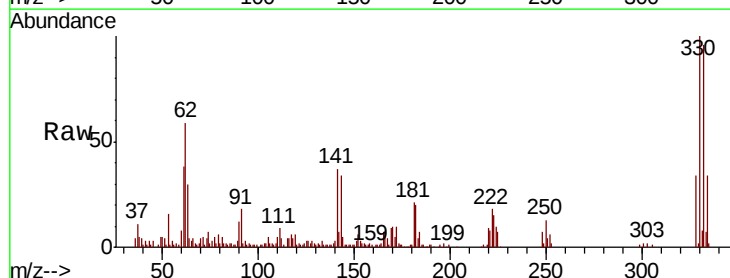
Manual Integrations
 APPROVED

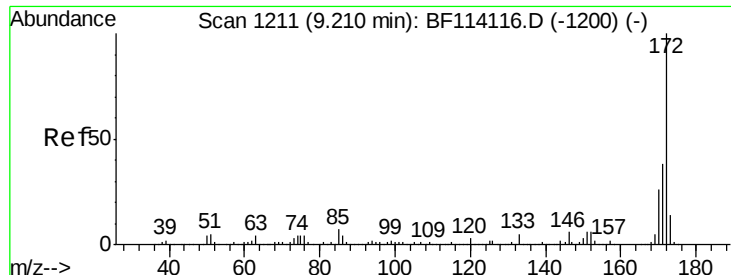
mohammad
 5/24/2019 8:49:39 AM



#42
 2,4,6-Tribromophenol
 Concen: 22.011 ng
 RT: 10.66 min Scan# 1457
 Delta R.T. -0.01 min
 Lab File: BF114509.D
 Acq: 23 May 2019 2:59

Tgt Ion:	330	Resp:	81795
Ion Ratio	Lower	Upper	
330	100		
332	100.2	81.4	122.2
141	34.5	26.6	40.0





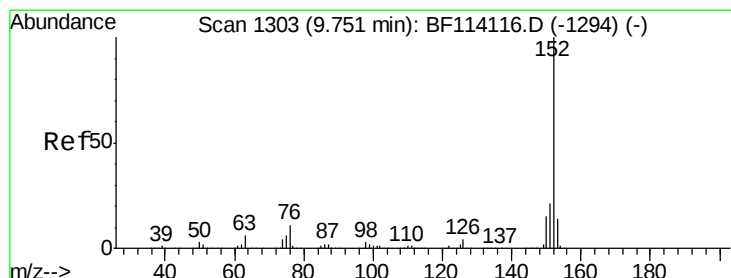
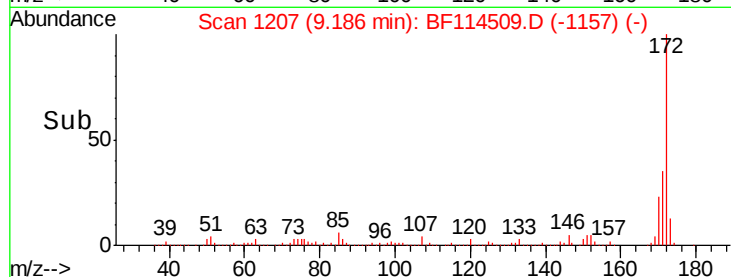
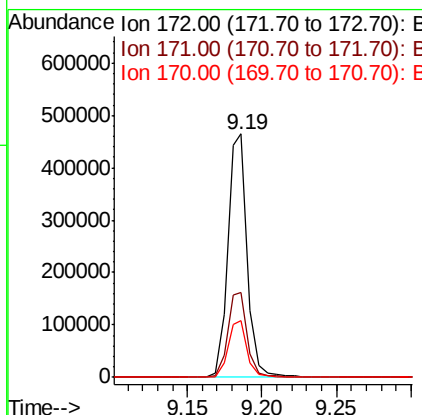
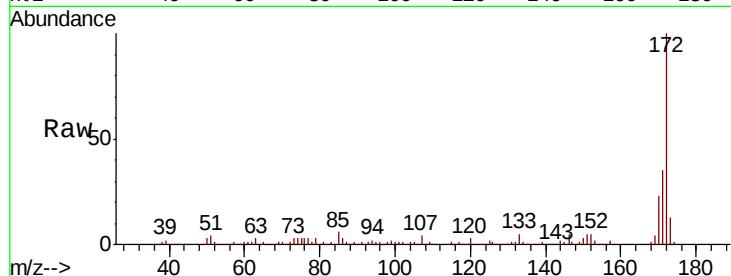
#45
2-Fluorobiphenyl
Concen: 18.057 ng
RT: 9.19 min Scan# 1207
Delta R.T. -0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Instrument :
BNA_F
ClientSampleId :
RO-SOIL

Tot Ion	Ratio	Lower	Upper
172	100		
171	34.9	30.7	46.1
170	23.1	20.5	30.7

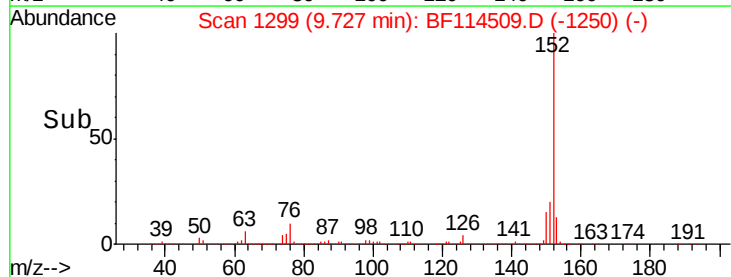
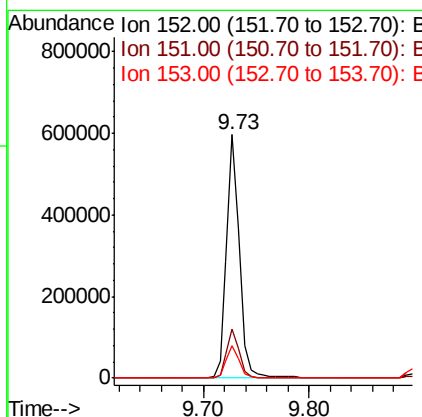
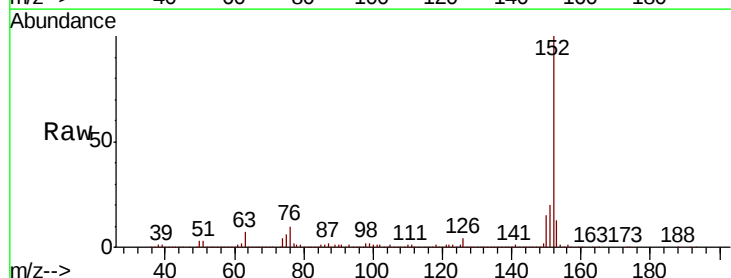
Manual Integrations
APPROVED

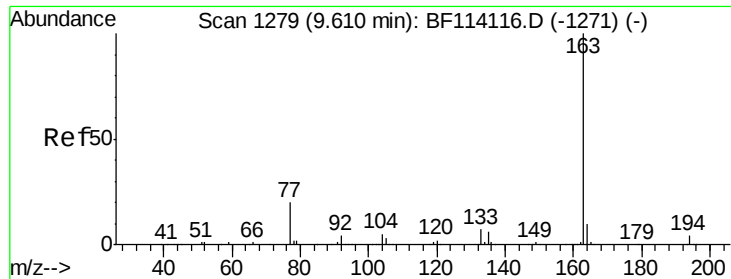
mohammad
5/24/2019 8:49:39 AM



#49
Acenaphthylene
Concen: 14.254 ng
RT: 9.73 min Scan# 1299
Delta R.T. -0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Tgt Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.8	25.2
153	13.3	11.4	17.2





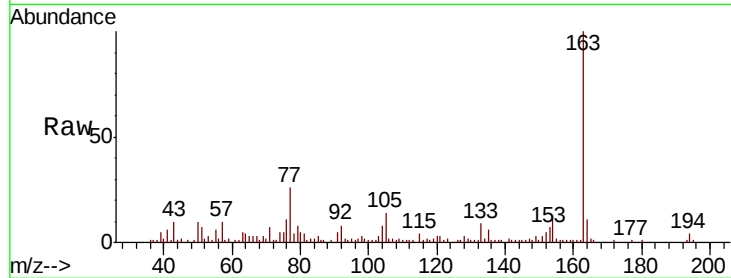
#50
Dimethylphthalate
Concen: 2.009 ng
RT: 9.58 min Scan# 1274
Delta R.T. -0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Instrument :
BNA_F
ClientSampleId :
RO-SOIL

Tot Ion	Ratio	Resp	Lower	Upper
163	100	52999		
194	3.7		3.4	5.0
164	10.5		8.2	12.2

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM

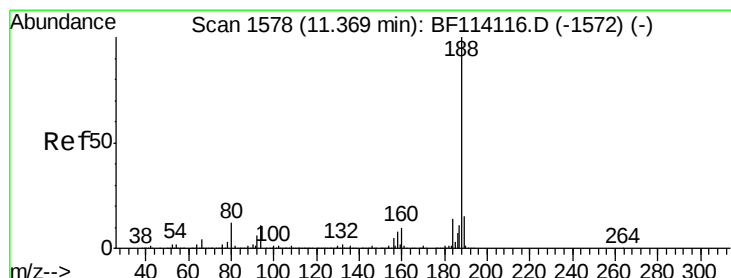
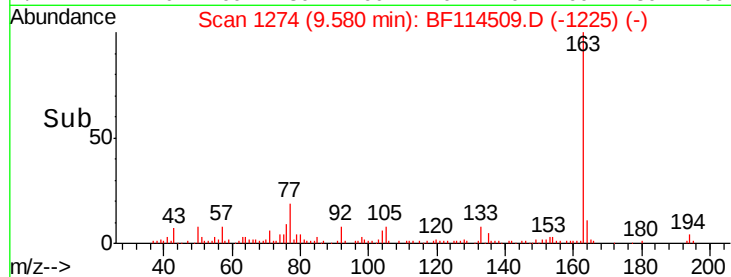
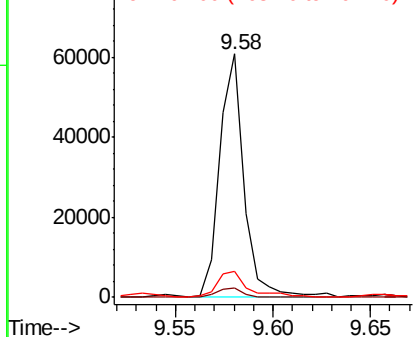


Abundance

Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.35 min Scan# 1575
Delta R.T. -0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

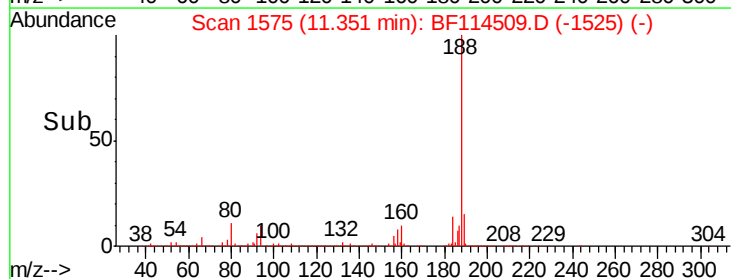
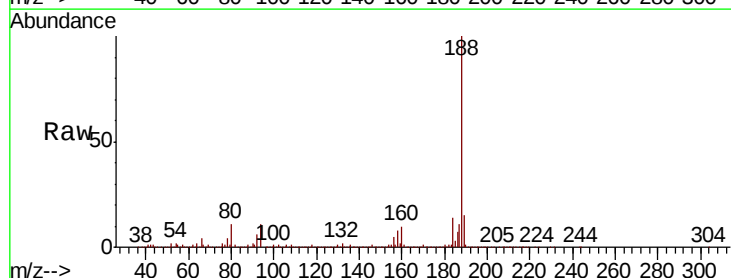
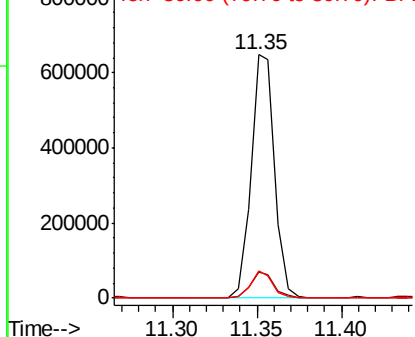
Tgt Ion	Ratio	Resp	Lower	Upper
188	100	629390		
94	10.8		8.4	12.6
80	11.2		9.2	13.8

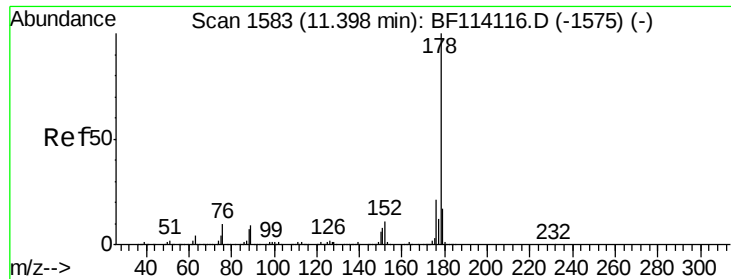
Abundance

Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF1

Ion 80.00 (79.70 to 80.70): BF1





#71

Phenanthrene

Concen: 23.385 ng

RT: 11.38 min Scan# 1580

Delta R.T. -0.01 min

Lab File: BF114509.D

Acq: 23 May 2019 2:59

Instrument :

BNA_F

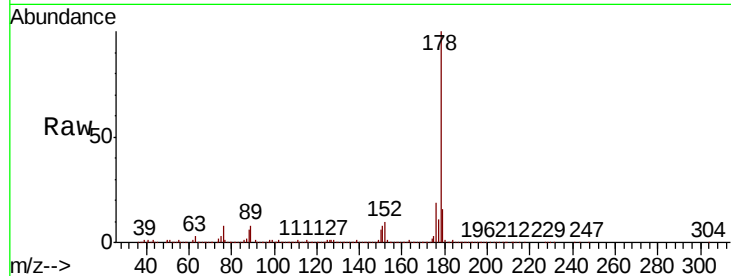
ClientSampled :

RO-SOIL

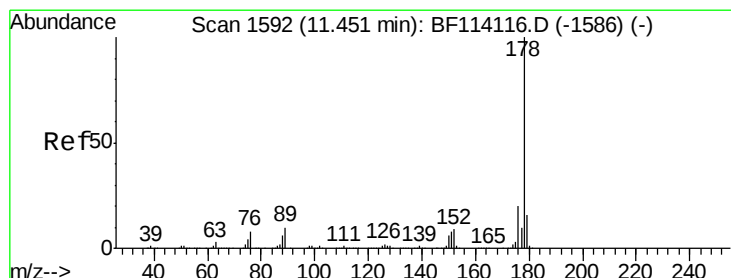
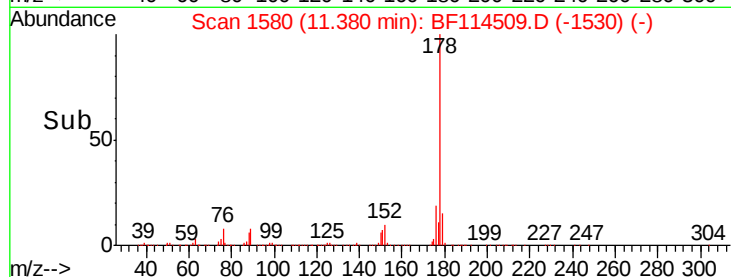
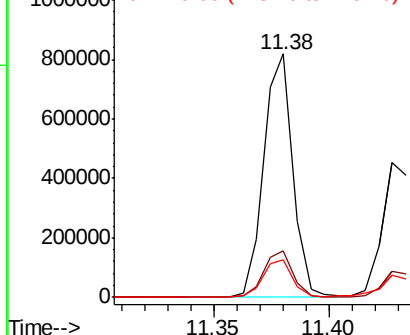
Tot Ion:178	Resp:	716069
Ion Ratio	Lower	Upper
178 100		
176 18.9	16.4	24.6
179 15.5	13.2	19.8

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM



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



#72

Anthracene

Concen: 13.646 ng

RT: 11.43 min Scan# 1588

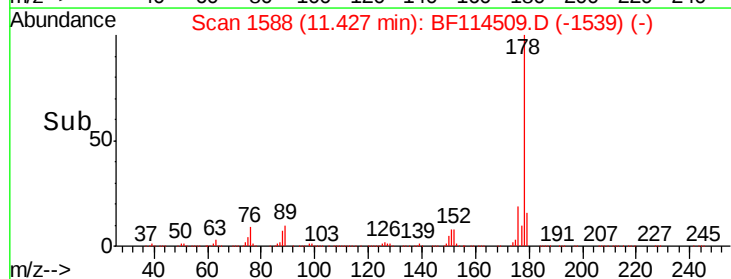
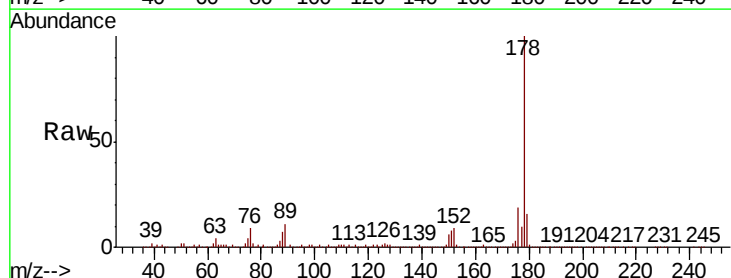
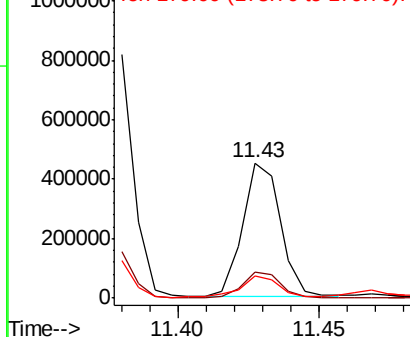
Delta R.T. -0.01 min

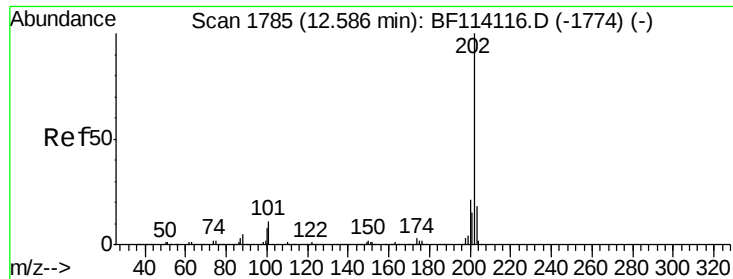
Lab File: BF114509.D

Acq: 23 May 2019 2:59

Tgt Ion:178	Resp:	419700
Ion Ratio	Lower	Upper
178 100		
176 19.3	15.8	23.8
179 16.4	13.0	19.4

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





#75

Fluoranthene

Concen: 80.857 ng

RT: 12.58 min Scan# 1784

Delta R.T. 0.01 min

Lab File: BF114509.D

Acq: 23 May 2019 2:59

Instrument :

BNA_F

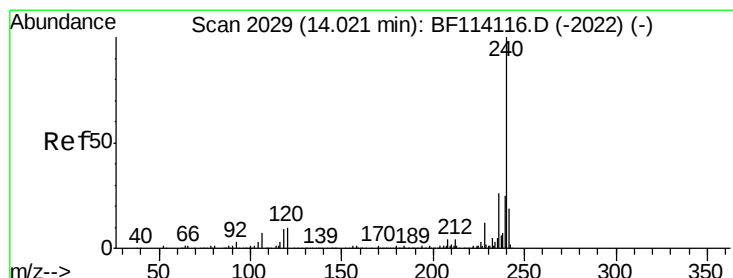
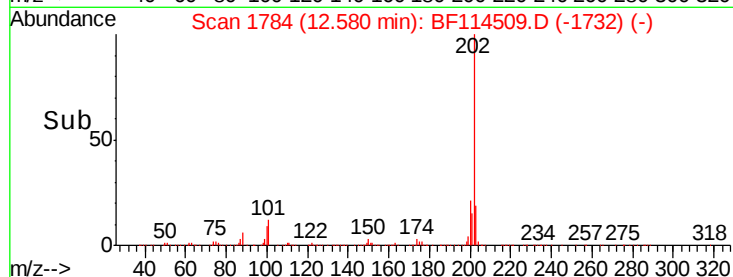
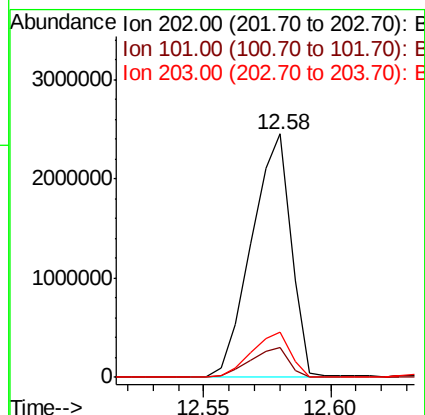
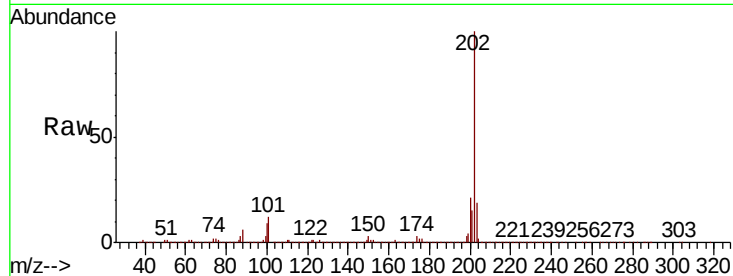
ClientSampled :

RO-SOIL

Tot Ion:	202	Resp:	2666213
Ion	Ratio	Lower	Upper
202	100		
101	12.0	0.0	31.0
203	18.7	0.0	38.4

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM



#76

Chrysene-d12

Concen: 20.000 ng

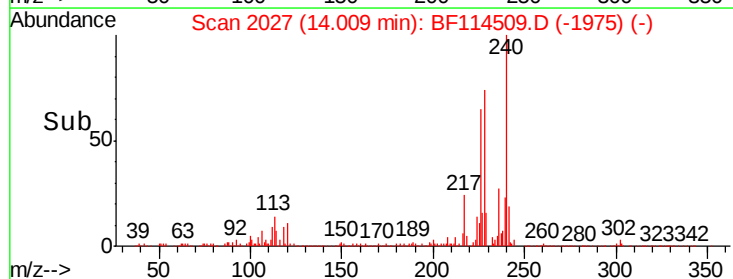
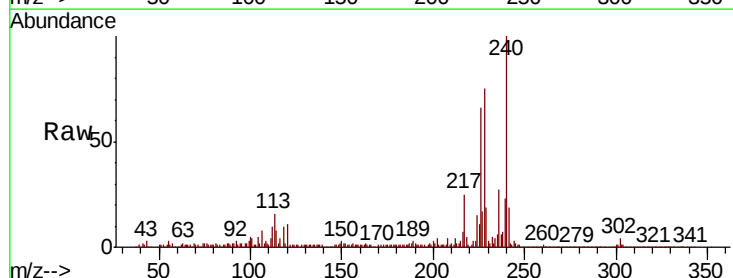
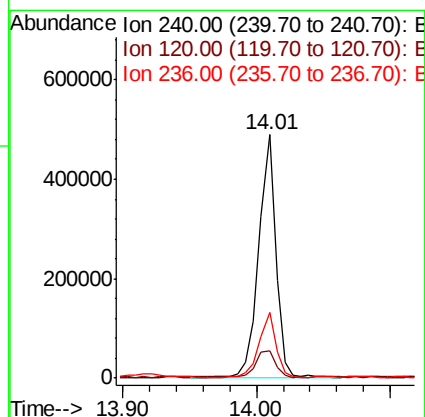
RT: 14.01 min Scan# 2027

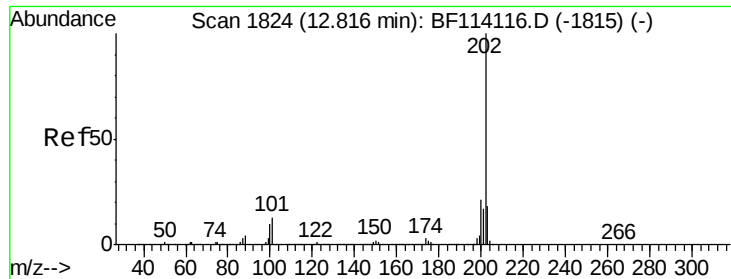
Delta R.T. 0.01 min

Lab File: BF114509.D

Acq: 23 May 2019 2:59

Tgt Ion:	240	Resp:	423600
Ion	Ratio	Lower	Upper
240	100		
120	11.3	8.3	12.5
236	27.2	20.8	31.2





#78

Pvrene

Concen: 90.533 ng

RT: 12.81 min Scan# 1823

Delta R.T. 0.01 min

Lab File: BF114509.D

Acq: 23 May 2019 2:59

Instrument :

BNA_F

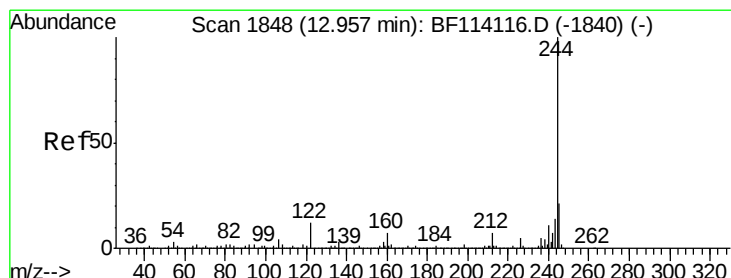
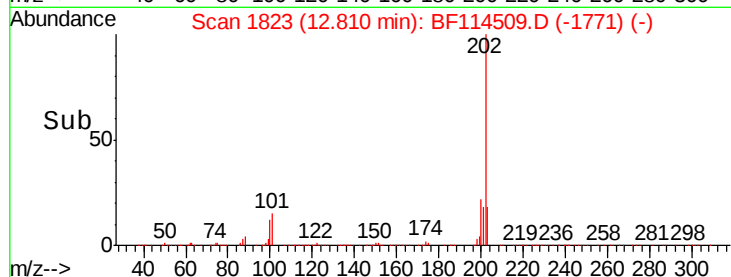
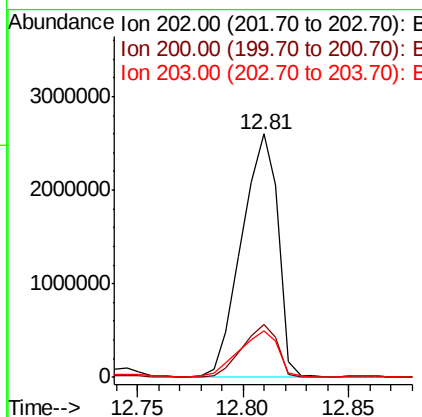
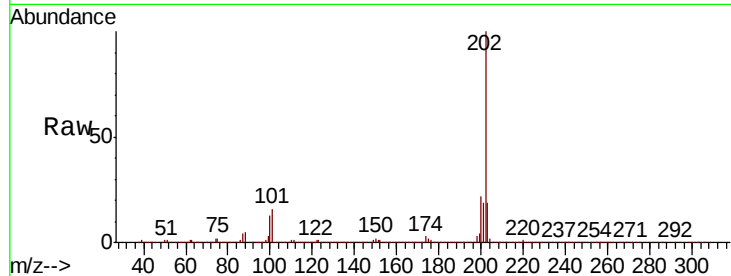
ClientSampleId :

RO-SOIL

Tot Ion:	202	Resp:	3085051
Ion Ratio	Lower	Upper	
202	100		
200	21.9	16.9	25.3
203	19.1	14.5	21.7

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM



#79

Terphenyl-d14

Concen: 17.566 ng

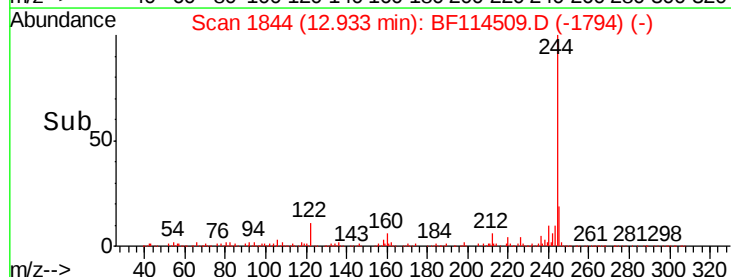
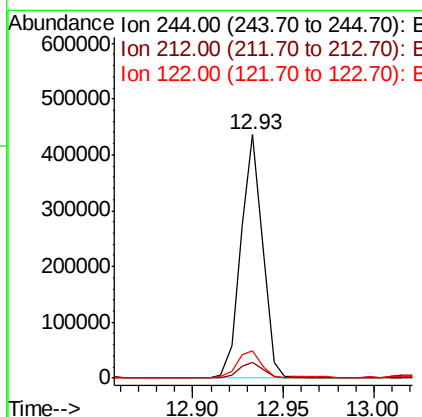
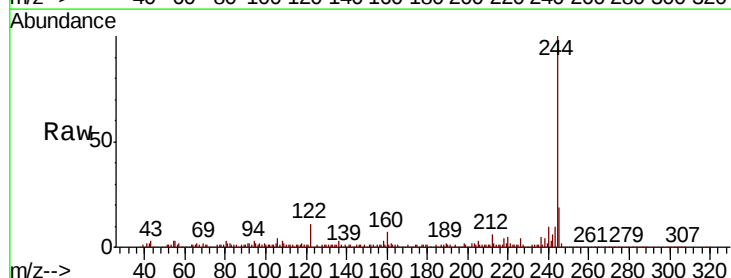
RT: 12.93 min Scan# 1844

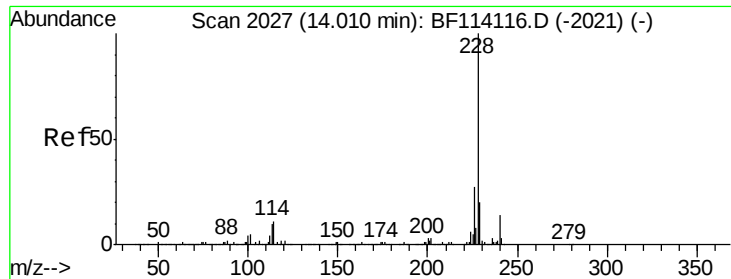
Delta R.T. -0.01 min

Lab File: BF114509.D

Acq: 23 May 2019 2:59

Tgt Ion:	244	Resp:	360961
Ion Ratio	Lower	Upper	
244	100		
212	6.5	5.8	8.6
122	11.3	9.4	14.2





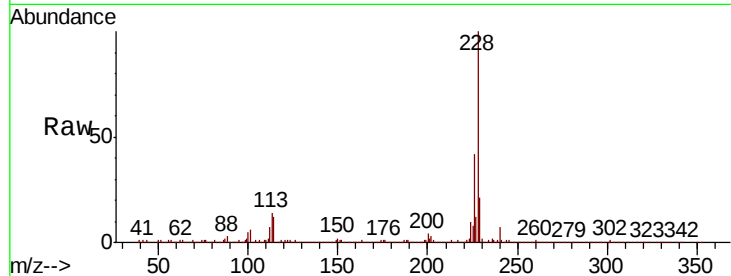
#81
Benzo(a)anthracene
Concen: 73.142 ng m
RT: 14.00 min Scan# 2025
Delta R.T. 0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Instrument :
BNA_F
ClientSampleId :
RO-SOIL

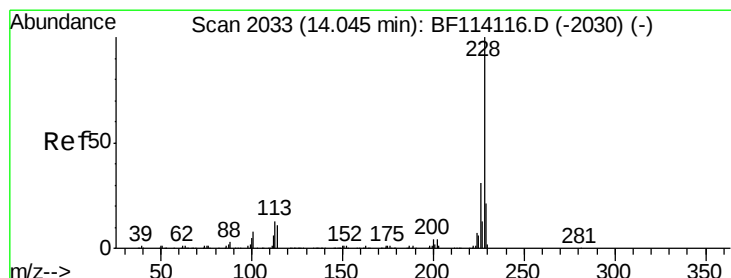
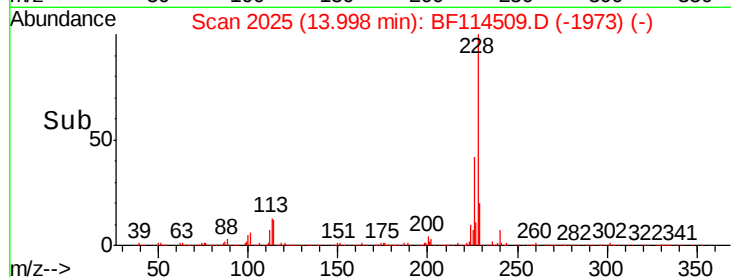
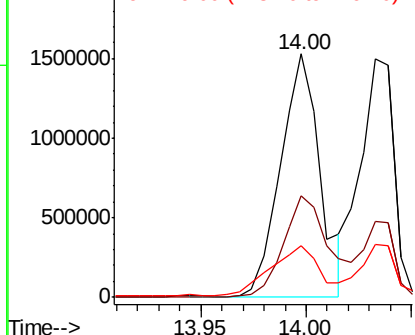
Tot Ion:228 Resp: 2003971
Ion Ratio Lower Upper
228 100
226 41.8 22.2 33.2#
229 21.0 16.4 24.6

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM

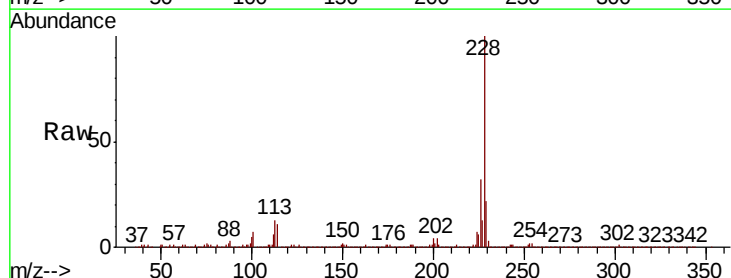


Abundance Ion 228.00 (227.70 to 228.70): E
Ion 226.00 (225.70 to 226.70): E
Ion 229.00 (228.70 to 229.70): E

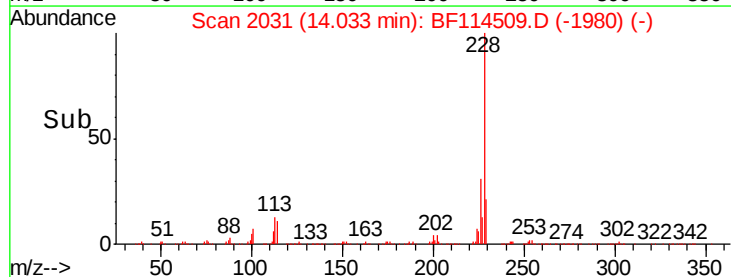
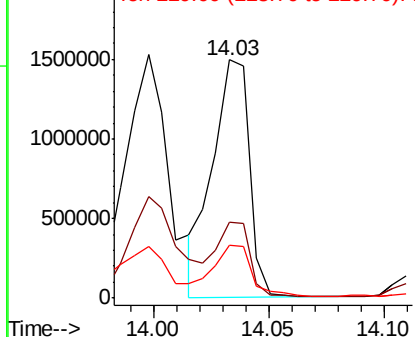


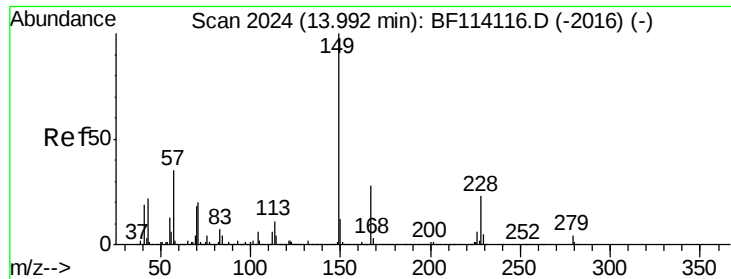
#83
Chrysene
Concen: 61.560 ng
RT: 14.03 min Scan# 2031
Delta R.T. 0.00 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Tgt Ion:228 Resp: 1653366
Ion Ratio Lower Upper
228 100
226 31.8 25.0 37.6
229 22.1 17.0 25.6



Abundance Ion 228.00 (227.70 to 228.70): E
Ion 226.00 (225.70 to 226.70): E
Ion 229.00 (228.70 to 229.70): E





#84

Bis(2-ethylhexyl)phthalate

Concen: 2.518 ng

RT: 13.96 min Scan# 2019

Delta R.T. 0.00 min

Lab File: BF114509.D

Acq: 23 May 2019 2:59

Instrument :

BNA_F

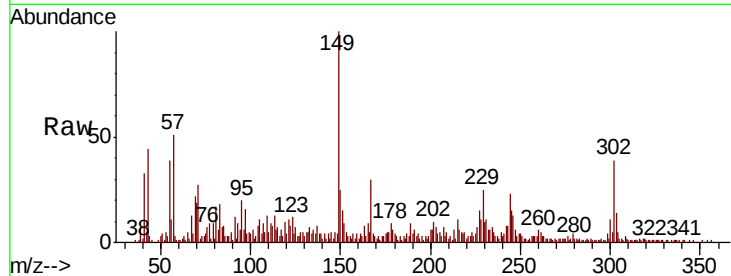
ClientSampled :

RO-SOIL

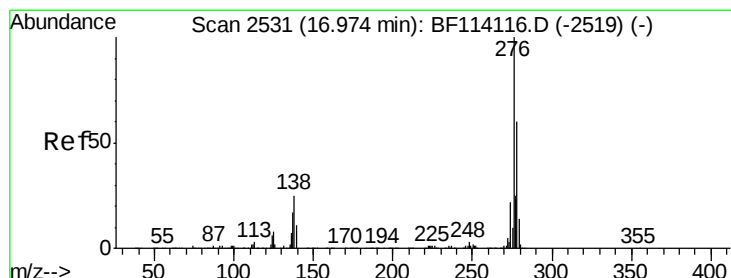
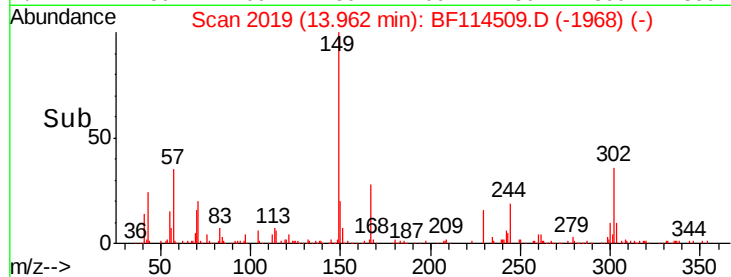
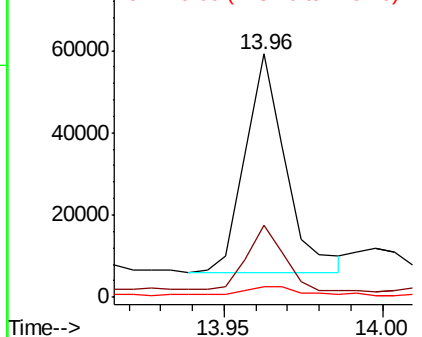
Tot Ion:	149	Resp:	47232
Ion Ratio	Lower	Upper	
149	100		
167	29.5	22.6	33.8
279	4.2	3.0	4.6

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM



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



#86

Indeno(1,2,3-cd)pyrene

Concen: 43.624 ng

RT: 16.97 min Scan# 2530

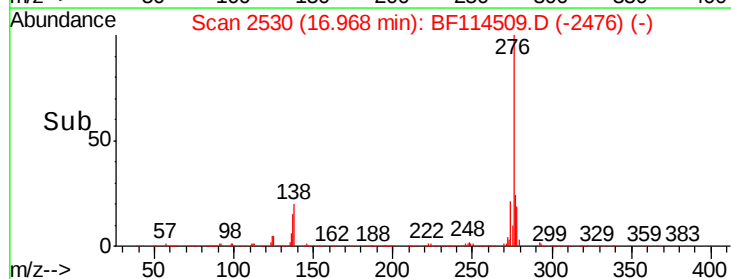
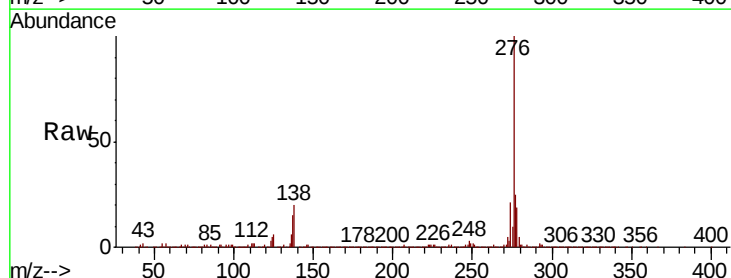
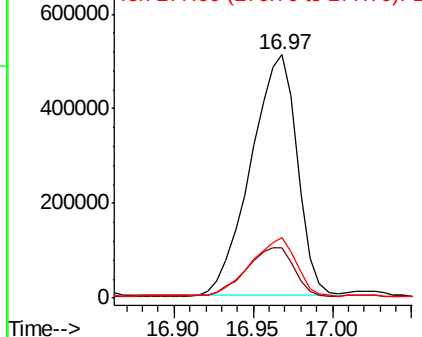
Delta R.T. 0.02 min

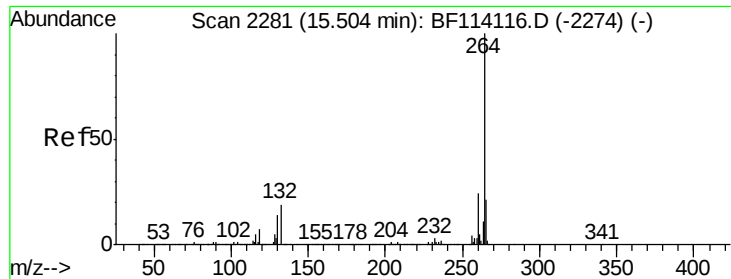
Lab File: BF114509.D

Acq: 23 May 2019 2:59

Tgt Ion:	276	Resp:	1035484
Ion Ratio	Lower	Upper	
276	100		
138	20.8	20.2	30.2
277	24.2	20.0	30.0

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





#87

Pervlene-d12

Concen: 20.000 ng

RT: 15.48 min Scan# 2277

Delta R.T. 0.02 min

Lab File: BF114509.D

Acq: 23 May 2019 2:59

Instrument :

BNA_F

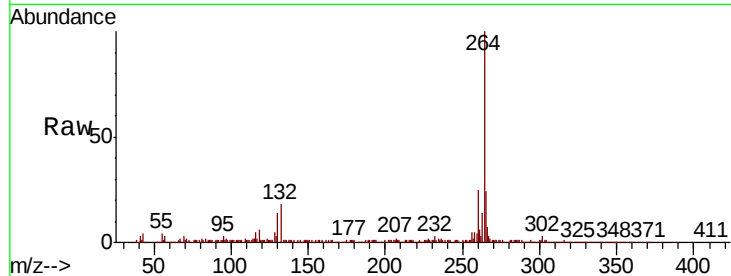
ClientSampled :

RO-SOIL

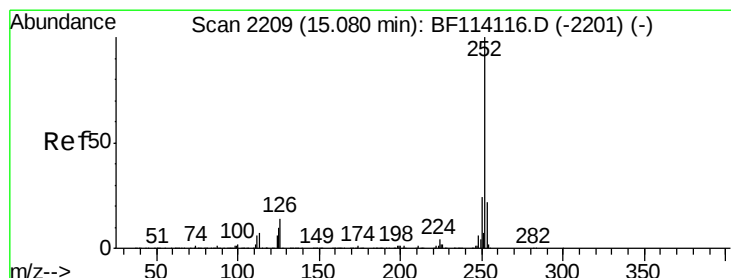
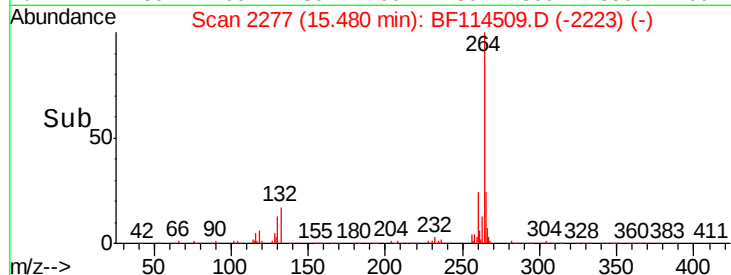
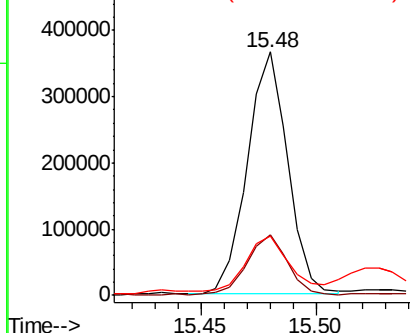
Tot Ion:	264	Resp:	444878
Ion Ratio	Lower	Upper	
264	100		
260	24.8	19.4	29.0
265	24.4	16.9	25.3

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM



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



#88

Benzo(b)fluoranthene

Concen: 89.435 ng m

RT: 15.06 min Scan# 2205

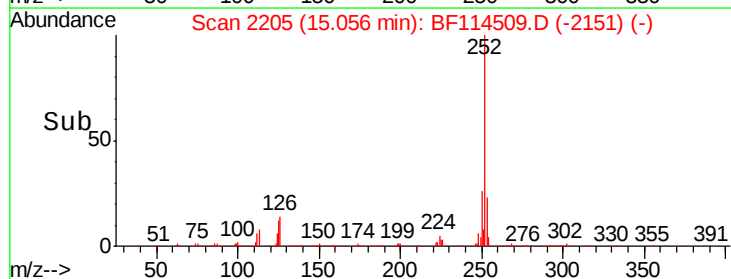
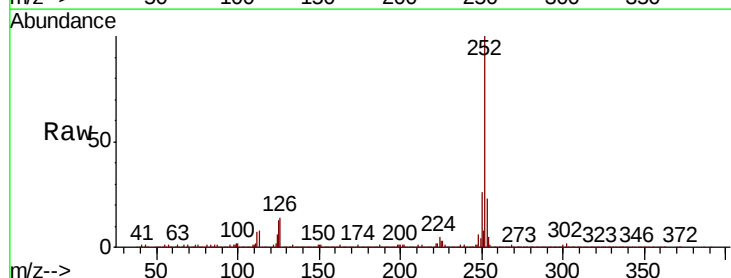
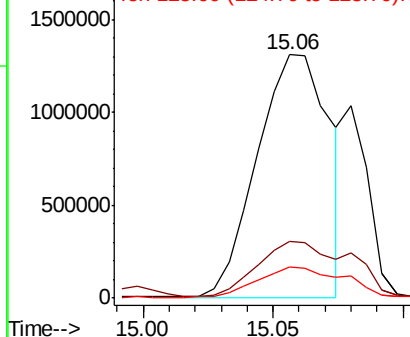
Delta R.T. 0.02 min

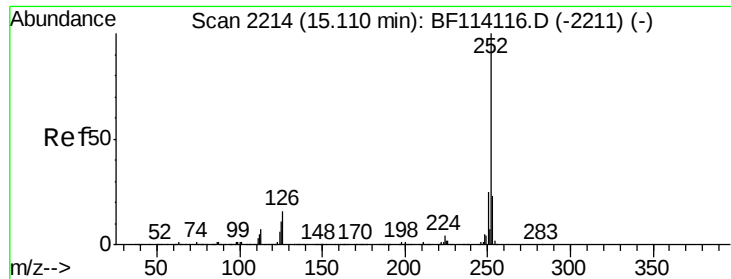
Lab File: BF114509.D

Acq: 23 May 2019 2:59

Tgt Ion:	252	Resp:	2549024
Ion Ratio	Lower	Upper	
252	100		
253	23.1	17.8	26.8
125	12.6	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





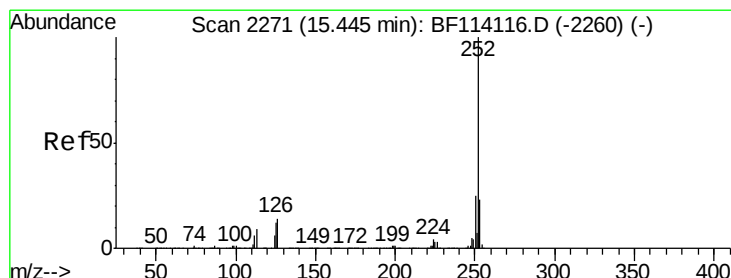
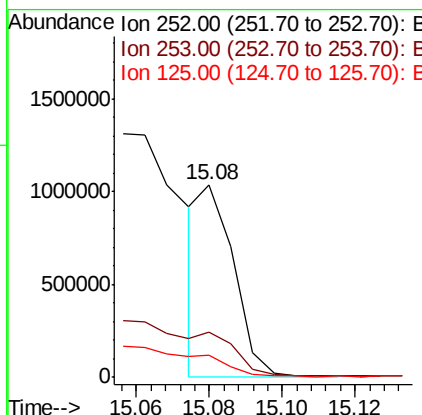
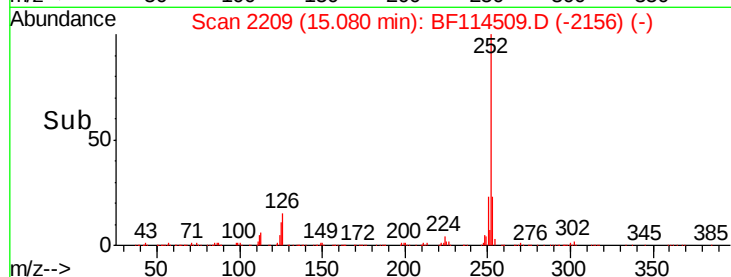
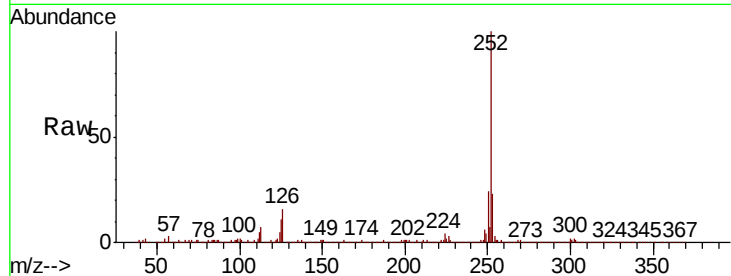
#89
Benzo(k)fluoranthene
Concen: 26.046 ng m
RT: 15.08 min Scan# 2209
Delta R.T. 0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Instrument :
BNA_F
ClientSampleId :
RO-SOIL

Tot Ion	Ratio	Lower	Upper
252	100		
253	23.2	18.2	27.2
125	11.3	8.6	13.0

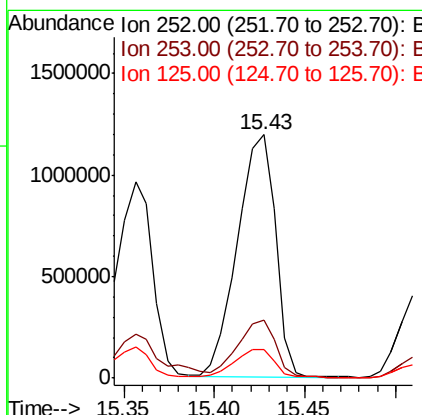
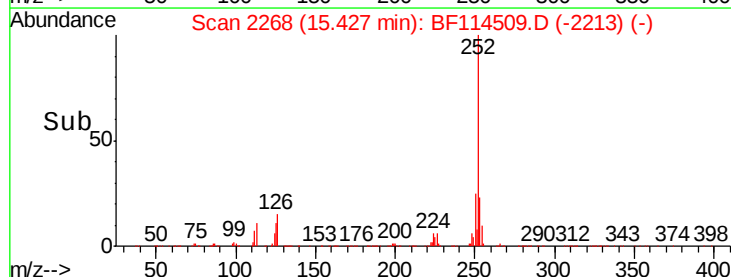
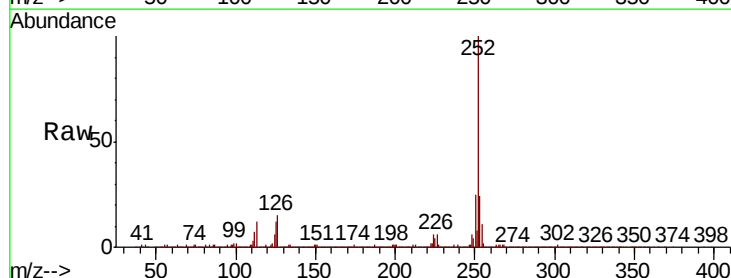
Manual Integrations
APPROVED

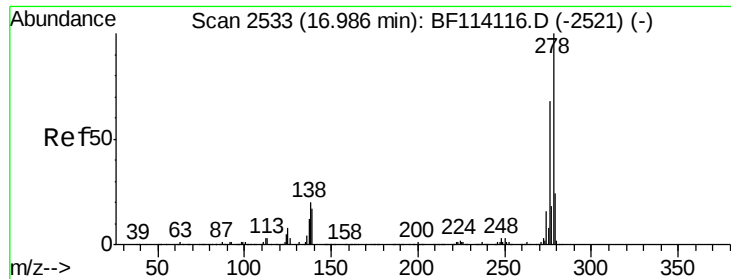
mohammad
5/24/2019 8:49:39 AM



#90
Benzo(a)pyrene
Concen: 69.966 ng
RT: 15.43 min Scan# 2268
Delta R.T. 0.02 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.9	18.1	27.1
125	11.7	9.5	14.3





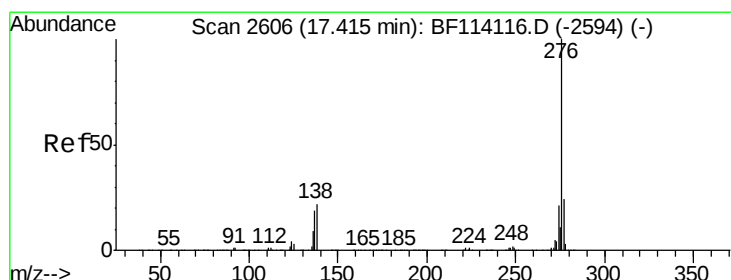
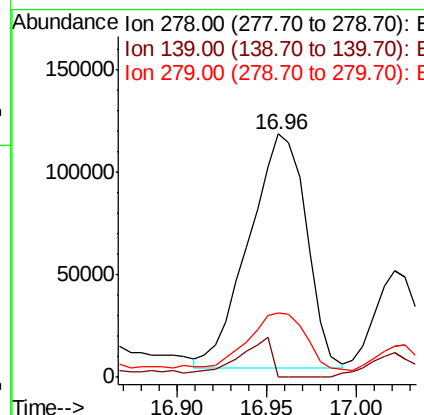
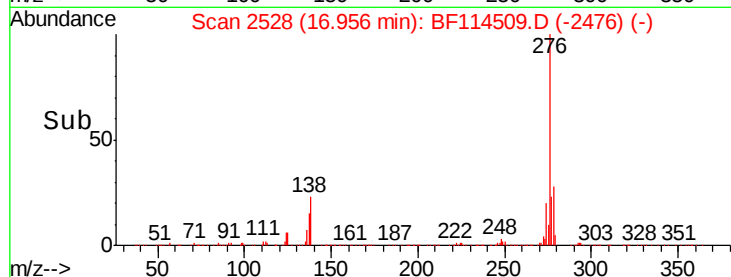
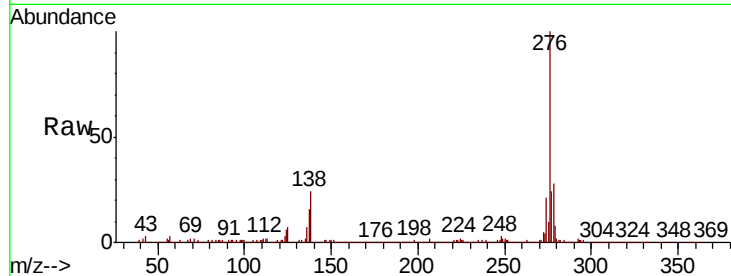
#91
Dibenzo(a,h)anthracene
Concen: 12.176 ng m
RT: 16.96 min Scan# 2528
Delta R.T. 0.01 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Instrument :
BNA_F
ClientSampleId :
RO-SOIL

Tot Ion	Ratio	Lower	Upper
278	100		
139	0.0	13.5	20.3#
279	26.6	19.0	28.6

Manual Integrations
APPROVED

mohammad
5/24/2019 8:49:39 AM



#92
Benzo(g,h,i)perylene
Concen: 54.141 ng
RT: 17.42 min Scan# 2606
Delta R.T. 0.03 min
Lab File: BF114509.D
Acq: 23 May 2019 2:59

Tgt Ion	Ratio	Lower	Upper
276	100		
277	25.0	19.0	28.4
138	21.9	17.8	26.6

