

Data Path : Z:\HPCHEM1\BNA F\DATA\BF071216\
 Data File : BF088948.D
 Acq On : 13 Jul 2016 6:49
 Operator : UM/SJ
 Sample : H3889-09DL 400X
 Misc :
 ALS Vial : 29 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SS-9DL

Manual Integrations

APPROVED
 SOHIL
 7/13/2016 9:25:45 AM

Quant Time: Jul 13 12:10:26 2016
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF063016.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Jul 11 18:13:32 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.70	152	61630	20.00	ng	-0.01
21) Naphthalene-d8	7.99	136	248397	20.00	ng	-0.01
38) Acenaphthene-d10	9.74	164	101619	20.00	ng	-0.01
63) Phenanthrene-d10	11.21	188	146840	20.00	ng	-0.01
75) Chrysene-d12	13.84	240	137887	20.00	ng	-0.01
86) Perylene-d12	15.21	264	117887	20.00	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.29	112	630	0.15	ng	0.00
7) Phenol-d6	6.34	99	1239	0.23	ng	-0.01
23) Nitrobenzene-d5	7.26	82	859	0.18	ng	-0.02
41) 2,4,6-Tribromophenol	0.00	330	0	0.00	ng	
44) 2-Fluorobiphenyl	9.06	172	1752	0.27	ng	-0.01
78) Terphenyl-d14	12.79	244	1159	0.19	ng	-0.01
Target Compounds						
51) Acenaphthene	9.77	154	33604	5.22	ng	Qvalue 100
54) Dibenzofuran	9.94	168	20846	2.47	ng	93
57) Fluorene	10.28	166	21909	3.37	ng	98
70) Phenanthrene	11.23	178	252092	31.41	ng	99
71) Anthracene	11.29	178	58400	7.32	ng	96
72) Carbazole	11.44	167	40051	5.33	ng	99
74) Fluoranthene	12.42	202	394560	48.49	ng	97
77) Pyrene	12.65	202	307931	26.34	ng	98
80) Benzo(a)anthracene	13.83	228	172388m	19.42	ng	
82) Chrysene	13.86	228	167095m	19.02	ng	
85) Indeno(1,2,3-cd)pyrene	16.49	276	57692	8.54	ng	# 100
87) Benzo(b)fluoranthene	14.83	252	189061m	25.57	ng	
88) Benzo(k)fluoranthene	14.86	252	64491m	10.02	ng	
89) Benzo(a)pyrene	15.15	252	112275m	17.93	ng	
90) Dibenzo(a,h)anthracene	16.50	278	14825m	2.84	ng	
91) Benzo(g,h,i)perylene	16.88	276	50872	9.40	ng	# 92

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

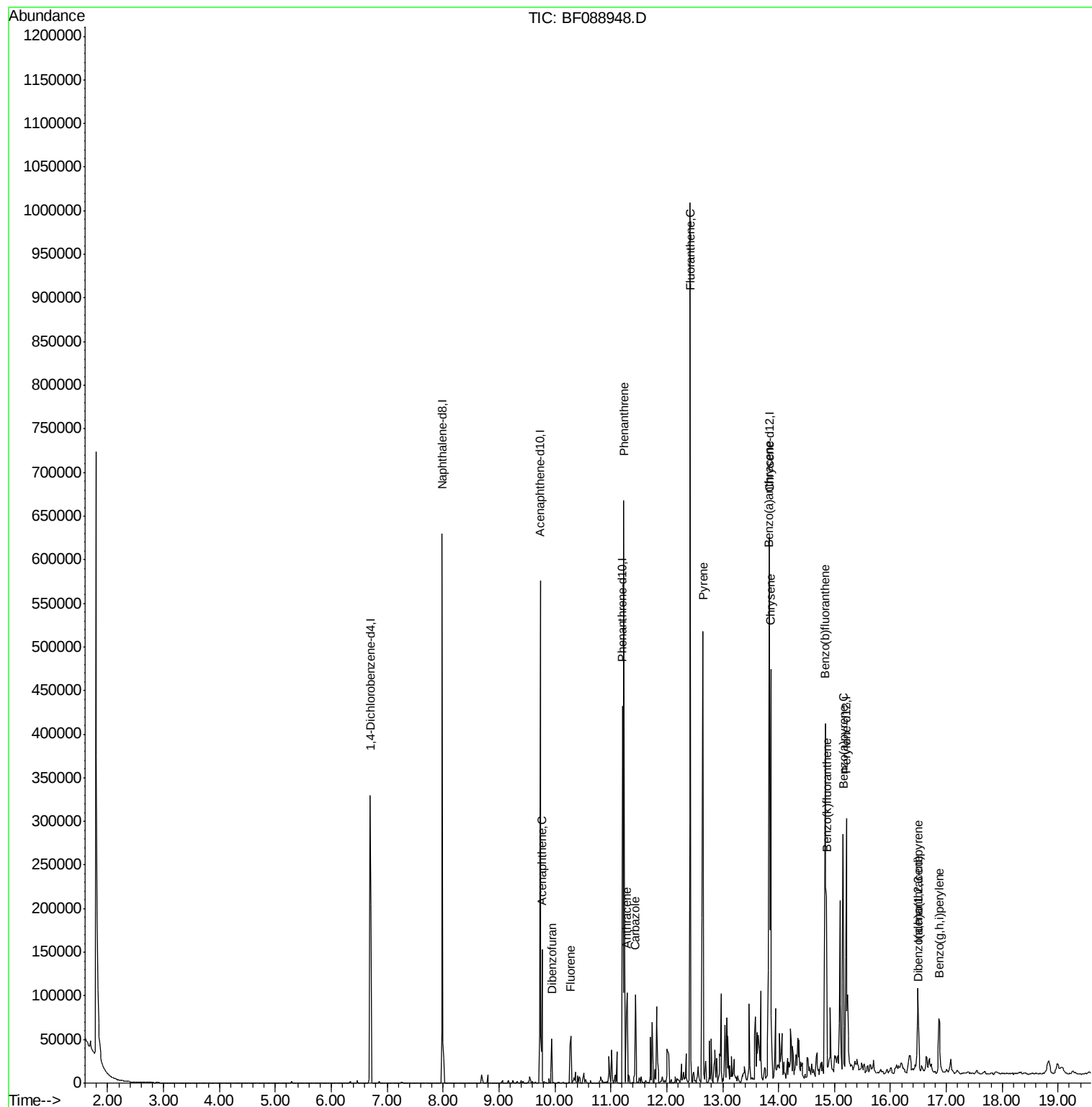
Data Path : Z:\HPCHEM1\BNA F\DATA\BF071216\
Data File : BF088948.D
Acq On : 13 Jul 2016 6:49
Operator : UM/SJ
Sample : H3889-09DL 400X
Misc :
ALS Vial : 29 Sample Multiplier: 1

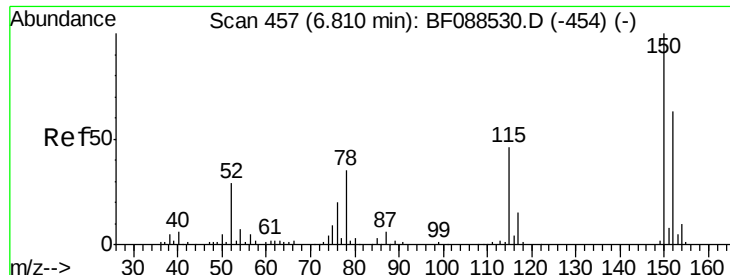
Instrument :
BNA_F
ClientSampleId :
SS-9DL

Manual Integrations

Quant Time: Jul 13 12:10:26 2016
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF063016.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Jul 11 18:13:32 2016
Response via : Initial Calibration

APPROVED
SOHIL
7/13/2016 9:25:45 AM





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.70 min Scan# 447

Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

Instrument :

BNA_F

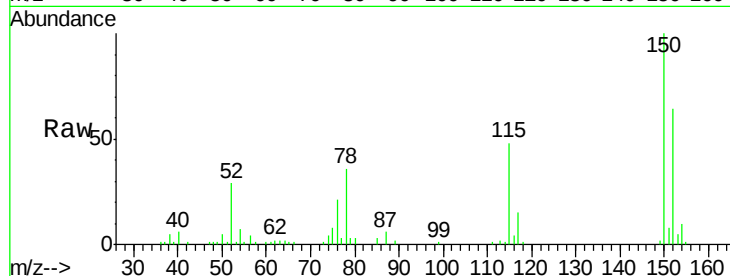
ClientSampled :

SS-9DL

Manual Integrations

SOHIL

7/13/2016 9:25:45 AM



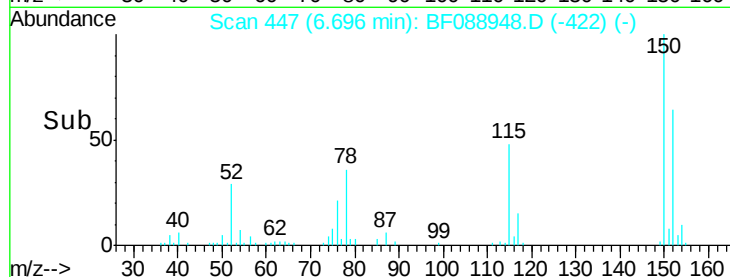
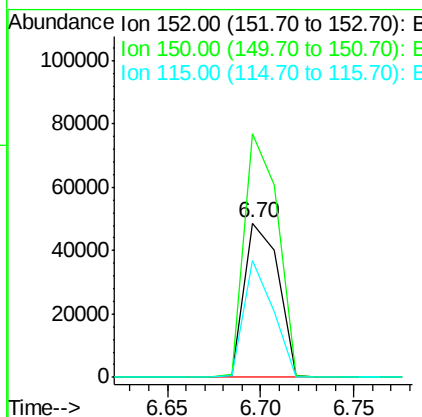
Tot Ion:152 Resp: 61630

Ion Ratio Lower Upper

152 100

150 157.4 123.8 185.6

115 75.5 39.6 59.4#



#5

2-Fluorophenol

Concen: 0.15 ng

RT: 5.29 min Scan# 324

Delta R.T. -0.00 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

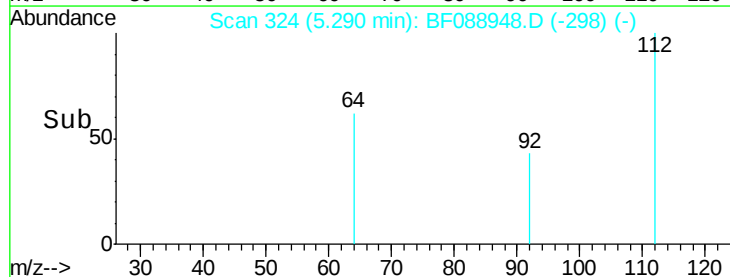
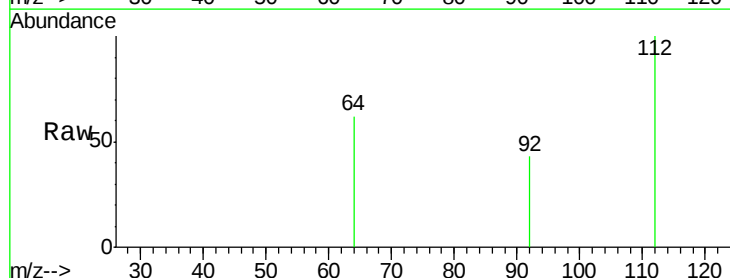
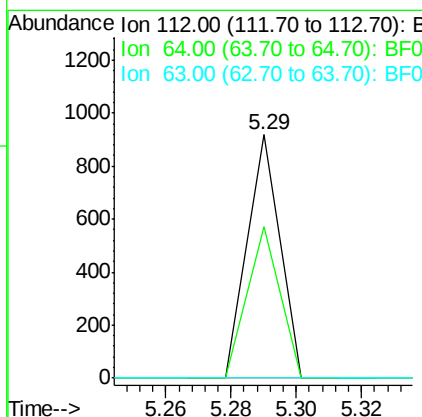
Tgt Ion:112 Resp: 630

Ion Ratio Lower Upper

112 100

64 62.0 42.2 63.2

63 0.0 21.8 32.8#





#7

Phenol-d6

Concen: 0.23 ng

RT: 6.34 min Scan# 416

Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

Instrument :

BNA_F

ClientSampleId :

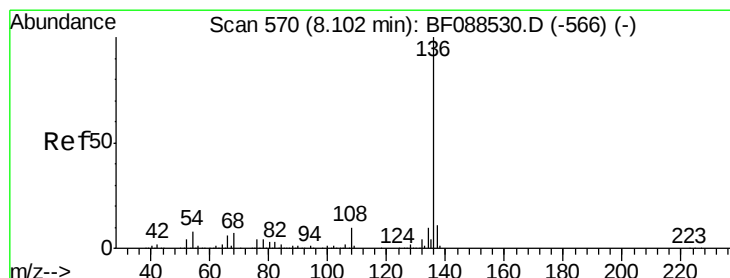
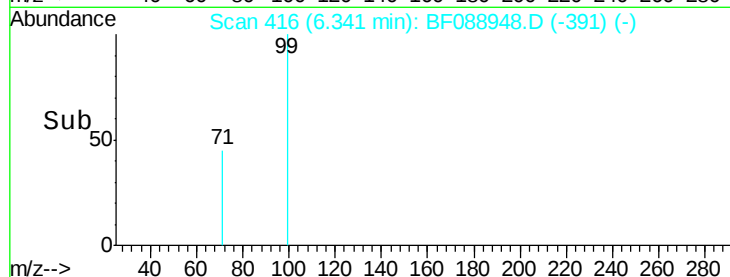
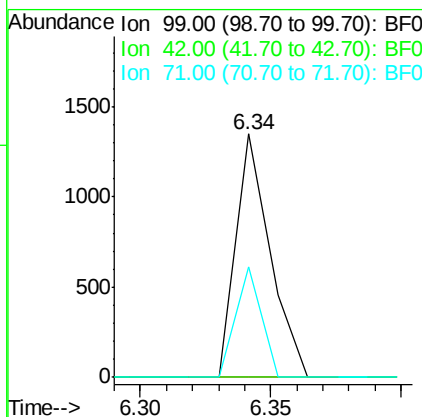
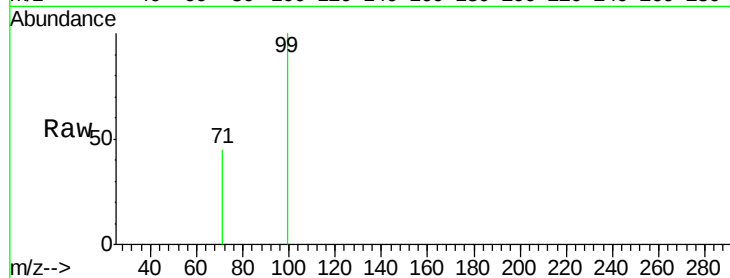
SS-9DL

Tot Ion:	99	Resp:	1239
Ion Ratio	Lower	Upper	
99	100		
42	0.0	12.2	18.2#
71	45.2	23.4	35.0#

Manual Integrations

SOHIL

7/13/2016 9:25:45 AM



#21

Naphthalene-d8

Concen: 20.00 ng

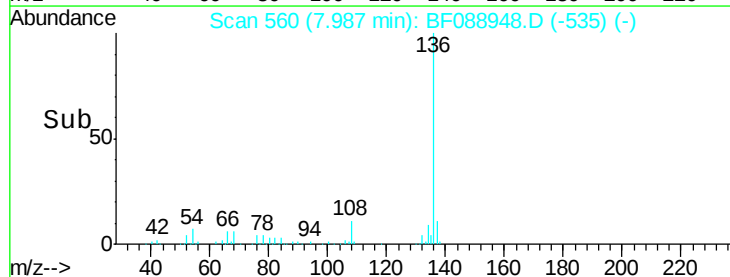
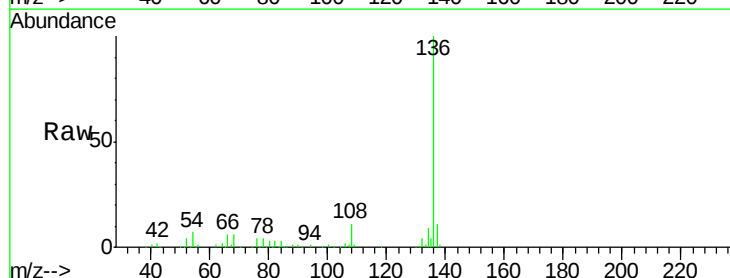
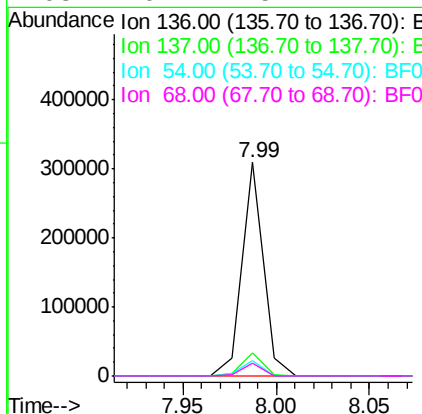
RT: 7.99 min Scan# 560

Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

Tgt Ion:	136	Resp:	248397
Ion Ratio	Lower	Upper	
136	100		
137	11.1	9.1	13.7
54	7.2	6.6	10.0
68	6.1	5.1	7.7





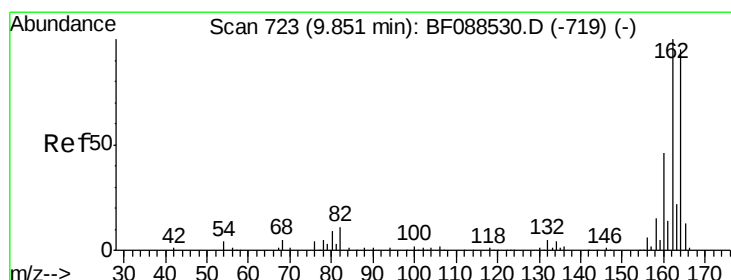
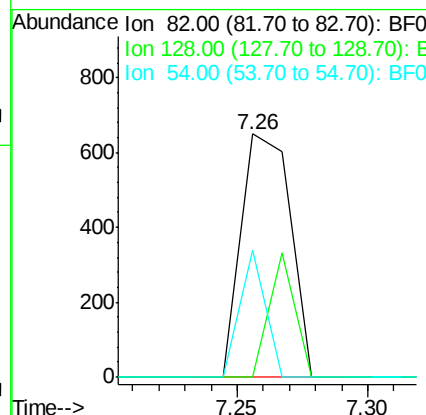
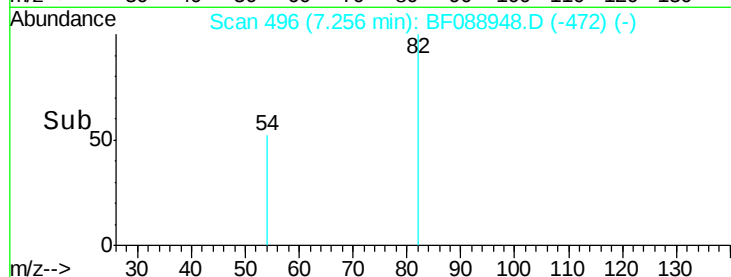
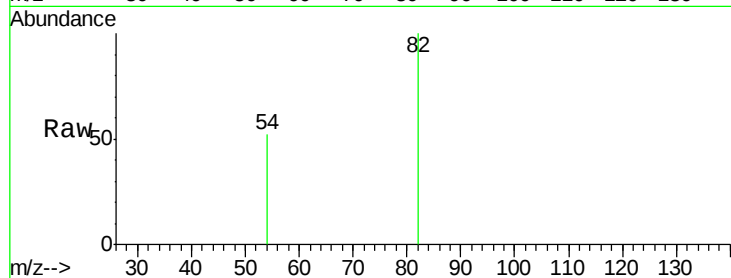
#23
 Nitrobenzene-d5
 Concen: 0.18 ng
 RT: 7.26 min Scan# 496
 Delta R.T. -0.02 min
 Lab File: BF088948.D
 Acq: 13 Jul 2016 6:49

Instrument :
 BNA_F
 ClientSampleID :
 SS-9DL

Tot Ion	Ratio	Lower	Upper
82	100		
128	0.0	35.9	53.9#
54	52.2	40.9	61.3

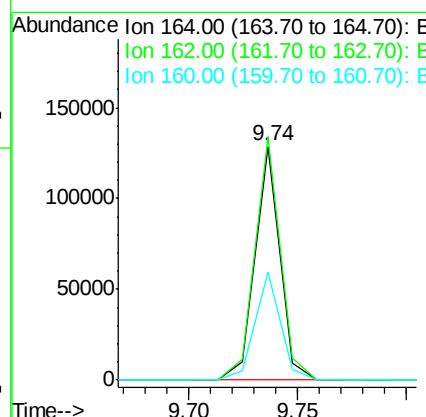
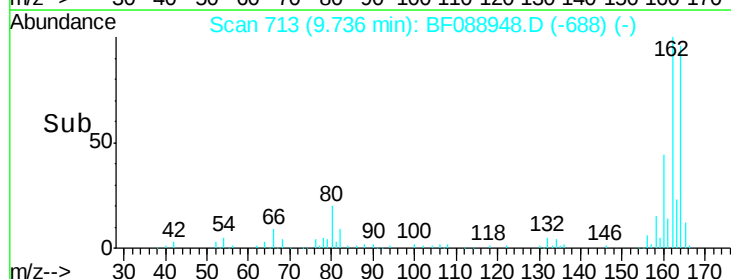
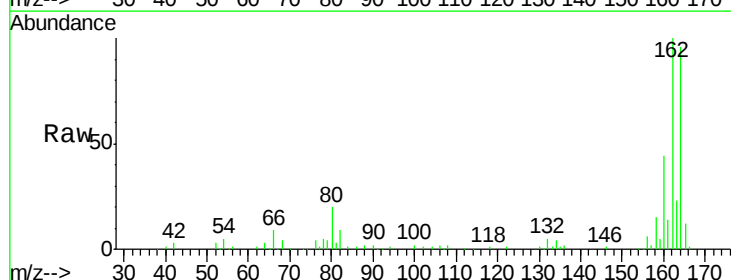
Manual Integrations

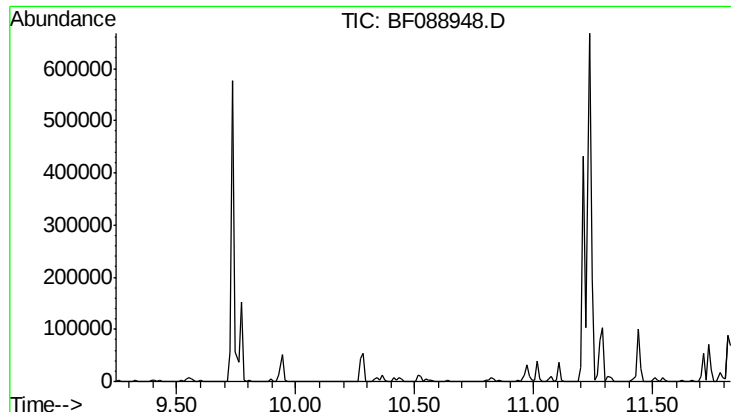
SOHIL
 7/13/2016 9:25:45 AM



#38
 Acenaphthene-d10
 Concen: 20.00 ng
 RT: 9.74 min Scan# 713
 Delta R.T. -0.01 min
 Lab File: BF088948.D
 Acq: 13 Jul 2016 6:49

Tgt Ion	Ratio	Lower	Upper
164	100		
162	104.2	85.4	128.2
160	46.4	39.5	59.3





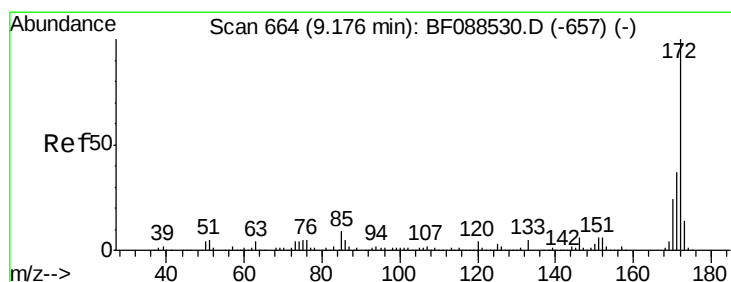
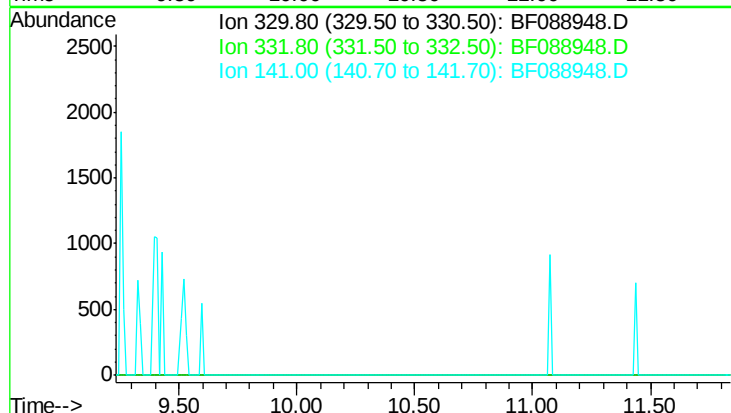
#41
2,4,6-Tribromophenol
Concen: 0.00 ng
Expected RT: 10.54 min
Lab File: BF088948.D
Acq: 13 Jul 2016 6:49

Instrument :
BNA_F
ClientSampleId :
SS-9DL

Tot Ion: 330
Sig Exp Ratio
330 100
332 0.0
141 0.0

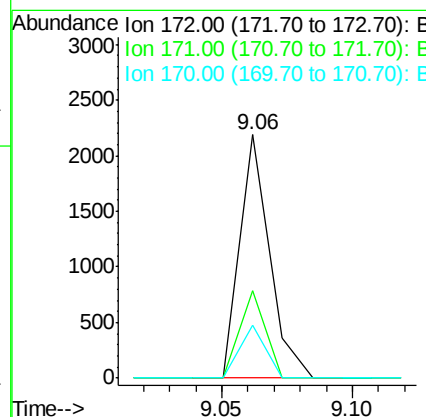
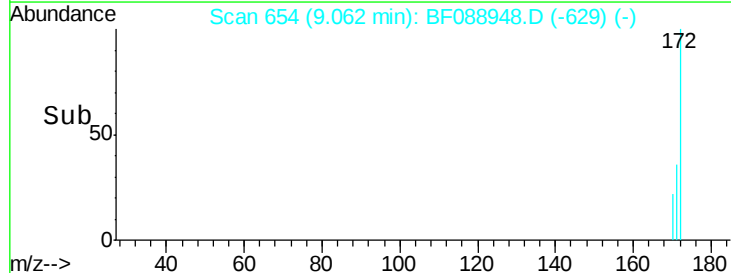
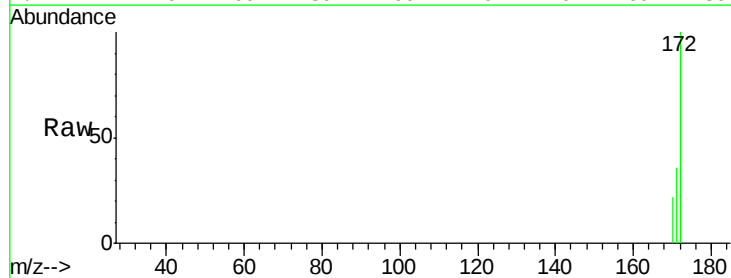
Manual Integrations

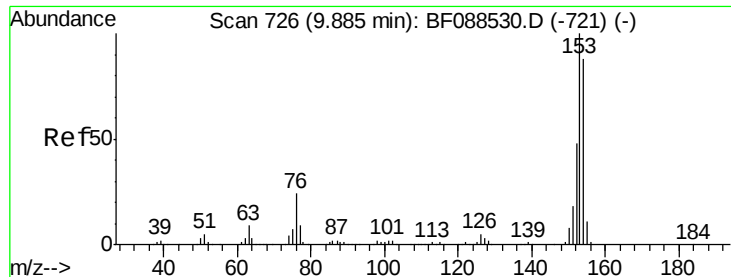
APPROVED
SOHIL
7/13/2016 9:25:45 AM



#44
2-Fluorobiphenyl
Concen: 0.27 ng
RT: 9.06 min Scan# 654
Delta R.T. -0.01 min
Lab File: BF088948.D
Acq: 13 Jul 2016 6:49

Tgt Ion:172 Resp: 1752
Ion Ratio Lower Upper
172 100
171 36.2 28.6 43.0
170 21.7 19.2 28.8





#51

Acenaphthene

Concen: 5.22 ng

RT: 9.77 min Scan# 716

Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

Instrument :

BNA_F

ClientSampleId :

SS-9DL

Tot Ion:154 Resp: 33604

Ion Ratio Lower Upper

154 100

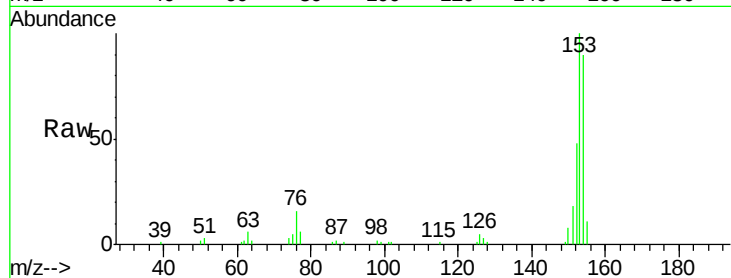
153 111.5 89.5 134.3

152 53.5 42.7 64.1

Manual Integrations

SOHIL

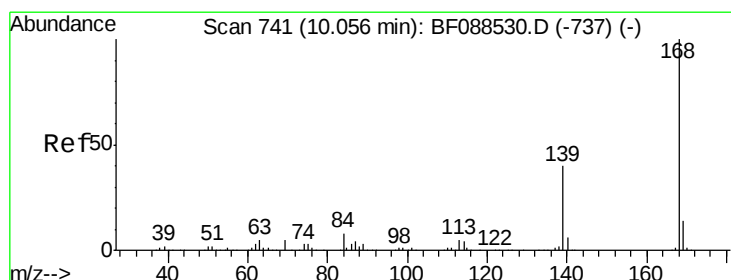
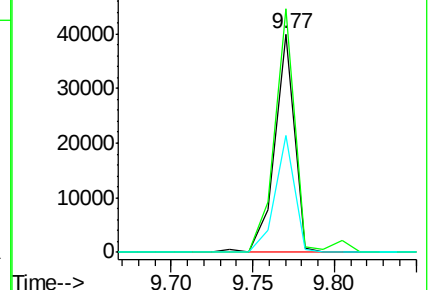
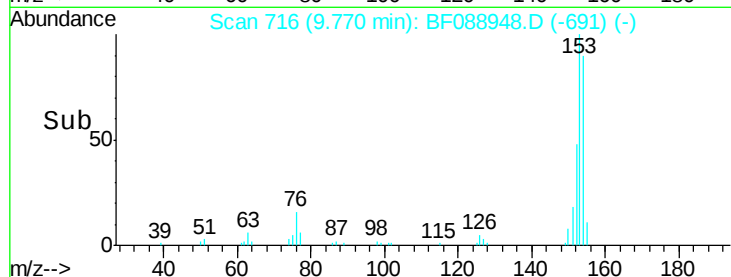
7/13/2016 9:25:45 AM



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



#54

Dibenzofuran

Concen: 2.47 ng

RT: 9.94 min Scan# 731

Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

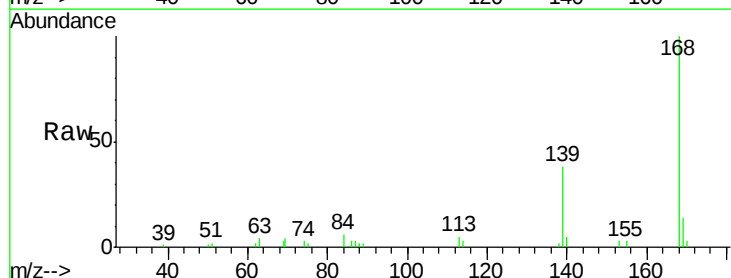
Tgt Ion:168 Resp: 20846

Ion Ratio Lower Upper

168 100

139 37.9 26.4 39.6

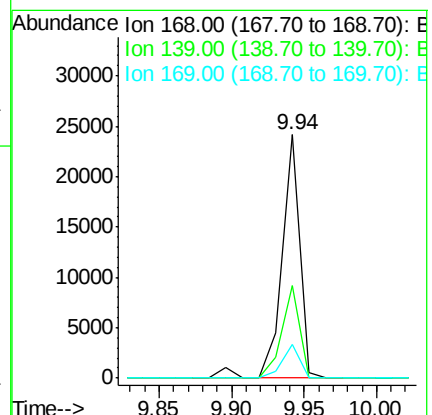
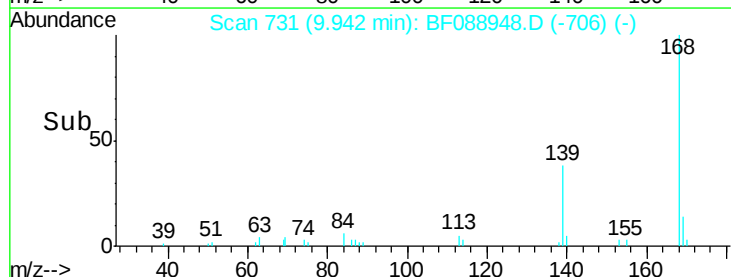
169 13.8 10.4 15.6

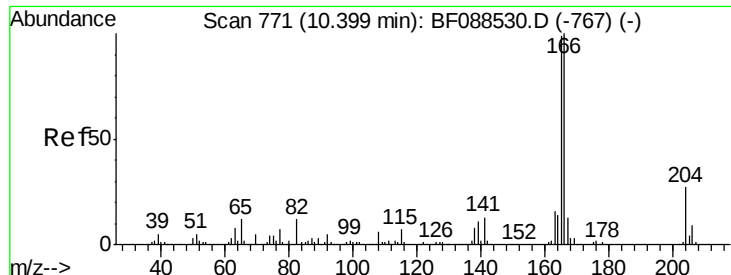


Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 169.00 (168.70 to 169.70): E





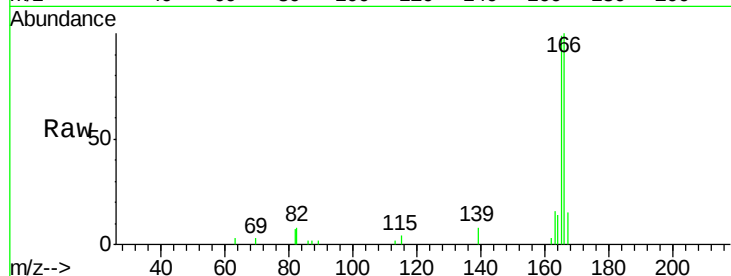
#57
Fluorene
 Concen: 3.37 ng
 RT: 10.28 min Scan# 761
 Delta R.T. -0.01 min
 Lab File: BF088948.D
 Acq: 13 Jul 2016 6:49

Instrument :
 BNA_F
 ClientSampleID :
 SS-9DL

Tot Ion	Ion	Ratio	Lower	Upper
21909	166	100		
	165	99.0	77.8	116.8
	167	14.7	11.2	16.8

Manual Integrations

APPROVED
 SOHIL
 7/13/2016 9:25:45 AM



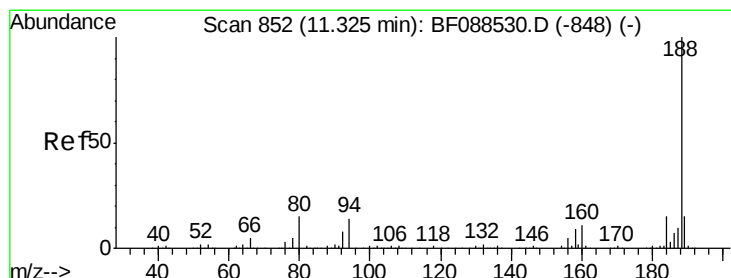
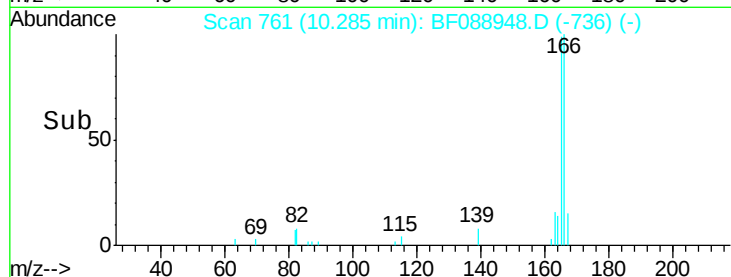
Abundance

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

Time-->



#63
Phenanthrene-d10
 Concen: 20.00 ng
 RT: 11.21 min Scan# 842
 Delta R.T. -0.01 min
 Lab File: BF088948.D
 Acq: 13 Jul 2016 6:49

Tgt Ion	Ion	Ratio	Lower	Upper
146840	188	100		
	94	10.4	9.0	13.6
	80	12.1	10.0	15.0

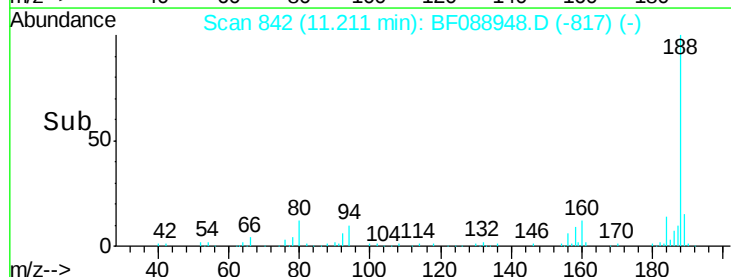
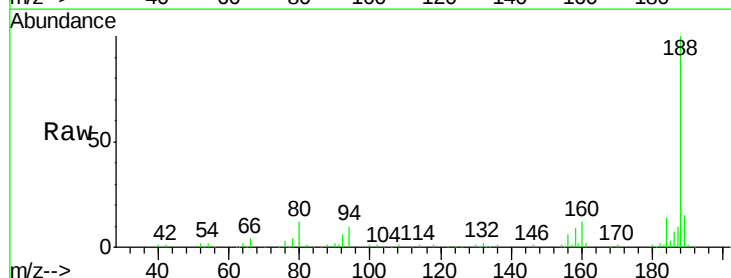
Abundance

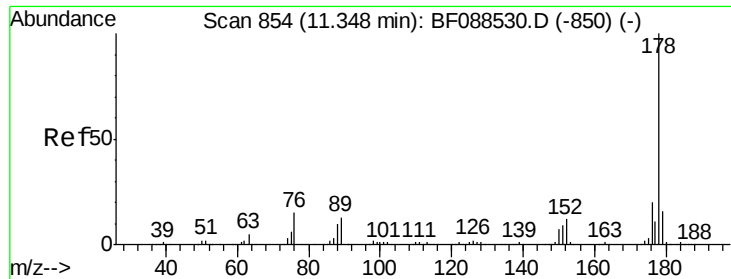
Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0

Time-->





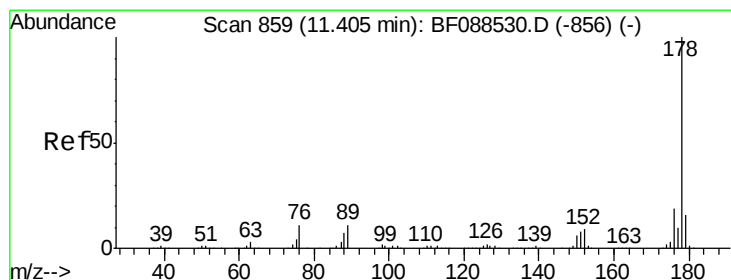
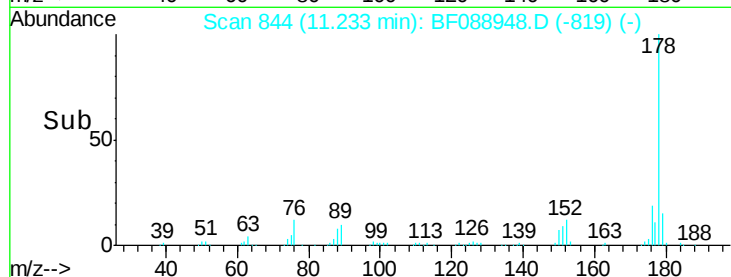
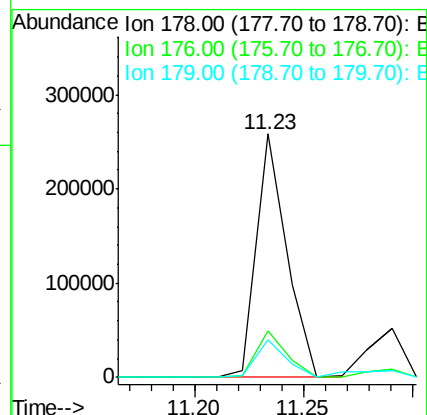
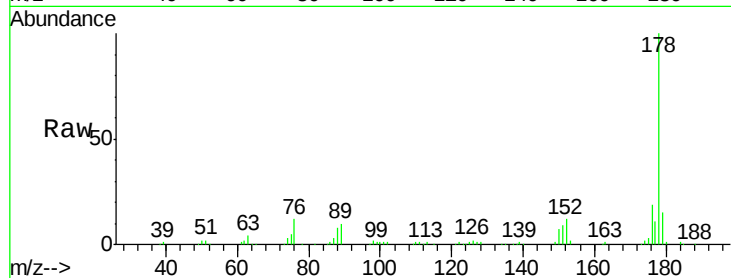
#70
Phenanthrene
Concen: 31.41 ng
RT: 11.23 min Scan# 844
Delta R.T. -0.01 min
Lab File: BF088948.D
Acq: 13 Jul 2016 6:49

Instrument :
BNA_F
ClientSampleId :
SS-9DL

Tot Ion	Ratio	Lower	Upper
178	100		
176	19.2	15.8	23.6
179	15.4	13.0	19.4

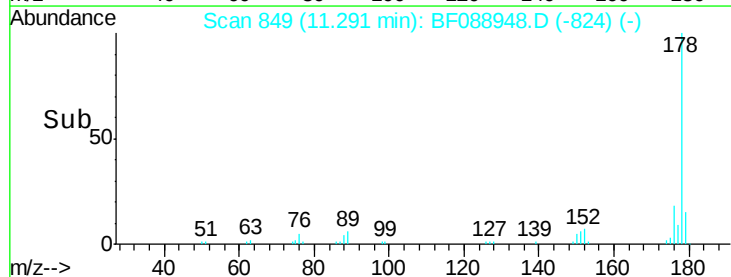
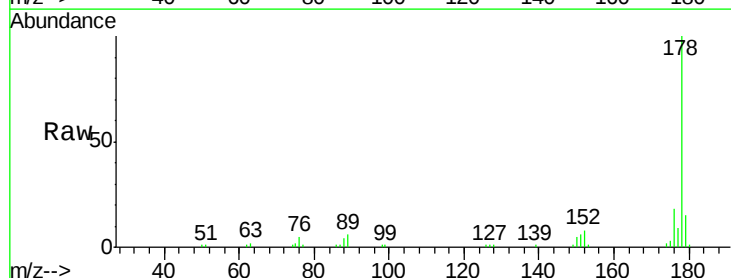
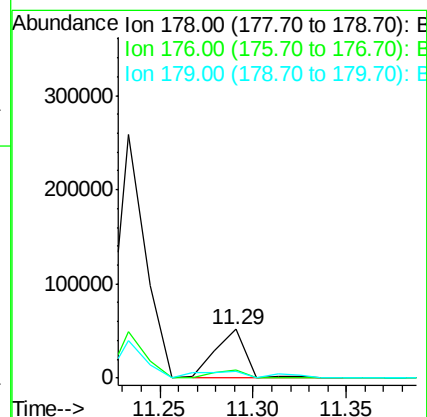
Manual Integrations

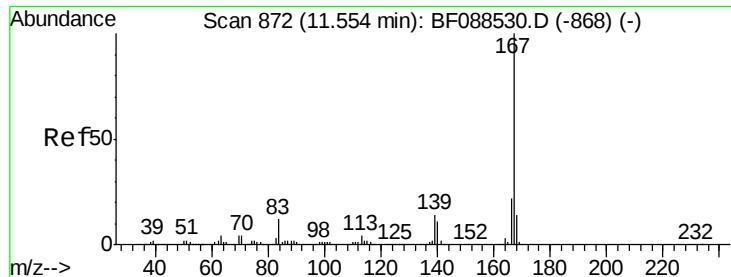
SOHIL
7/13/2016 9:25:45 AM



#71
Anthracene
Concen: 7.32 ng
RT: 11.29 min Scan# 849
Delta R.T. -0.01 min
Lab File: BF088948.D
Acq: 13 Jul 2016 6:49

Tgt Ion	Ratio	Lower	Upper
178	100		
176	17.7	15.6	23.4
179	14.7	12.8	19.2





#72

Carbazole

Concen: 5.33 ng

RT: 11.44 min Scan# 862

Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

Instrument :

BNA_F

ClientSampleId :

SS-9DL

Tot Ion:167 Resp: 40051

Ion Ratio Lower Upper

167 100

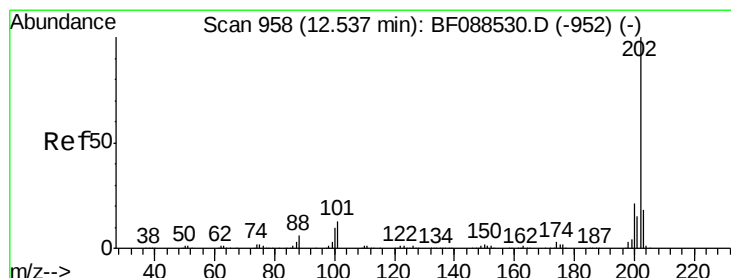
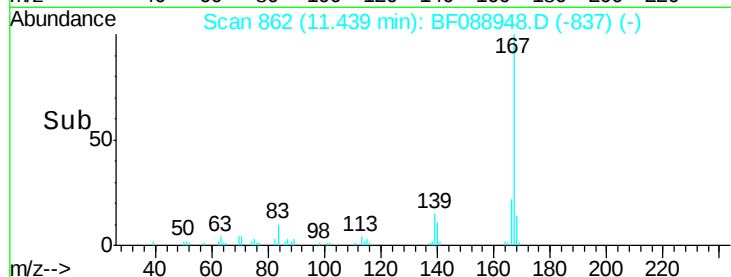
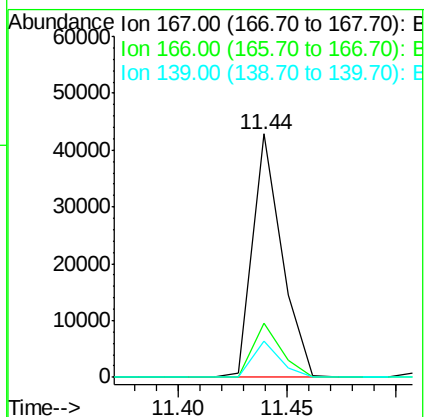
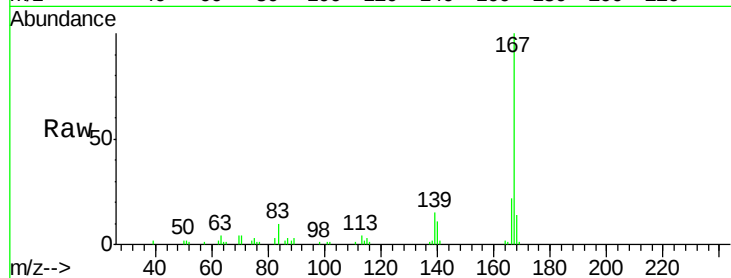
166 22.4 17.8 26.6

139 14.7 11.2 16.8

Manual Integrations

SOHIL

7/13/2016 9:25:45 AM



#74

Fluoranthene

Concen: 48.49 ng

RT: 12.42 min Scan# 948

Delta R.T. -0.00 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

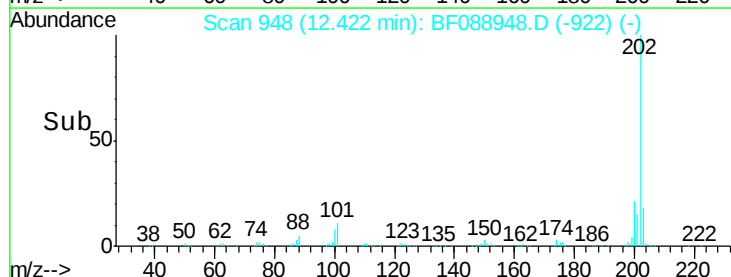
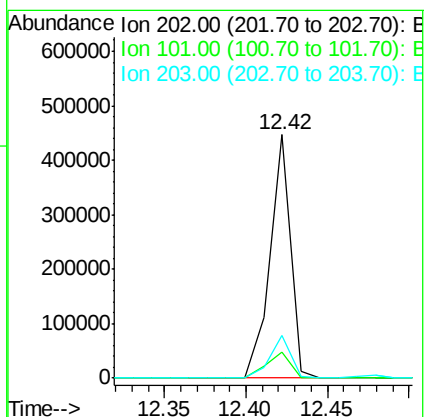
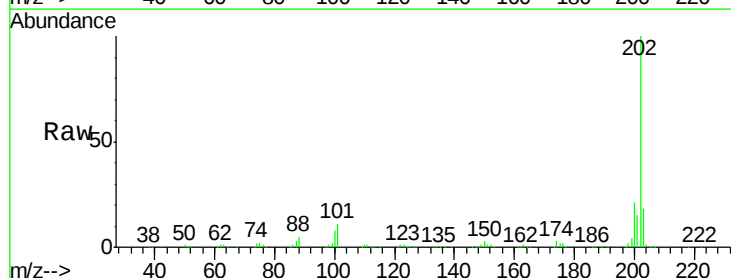
Tgt Ion:202 Resp: 394560

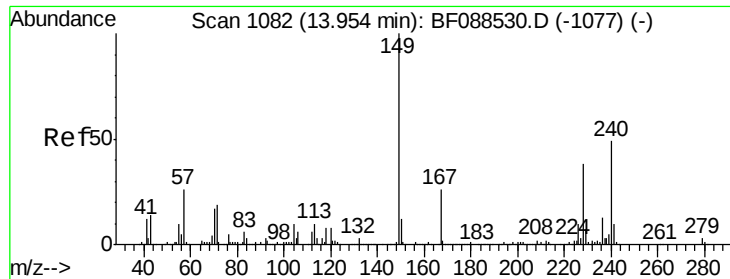
Ion Ratio Lower Upper

202 100

101 10.9 0.0 33.1

203 17.7 0.0 38.1





#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.84 min Scan# 1072

Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

Instrument :

BNA_F

ClientSampleId :

SS-9DL

Tot Ion:240 Resp: 137887

Ion Ratio Lower Upper

240 100

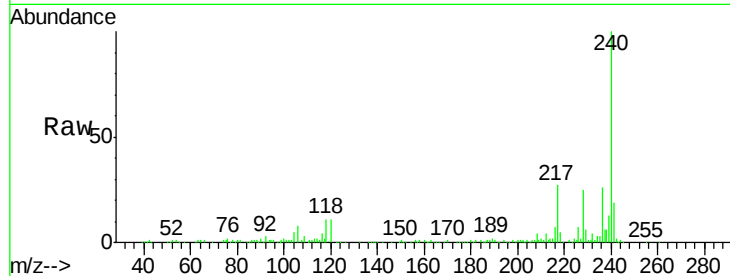
120 11.4 6.8 10.2#

236 26.0 20.2 30.2

Manual Integrations

SOHIL

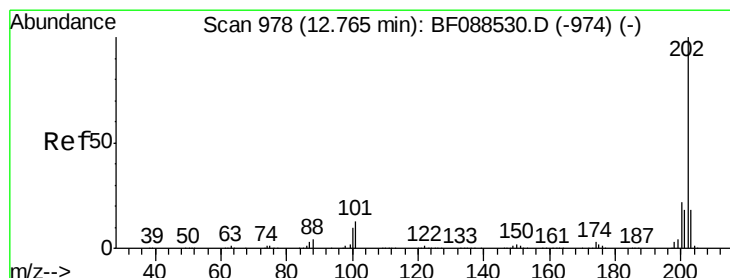
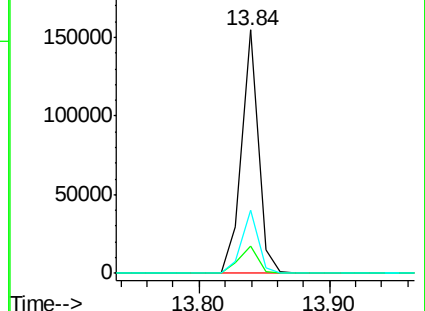
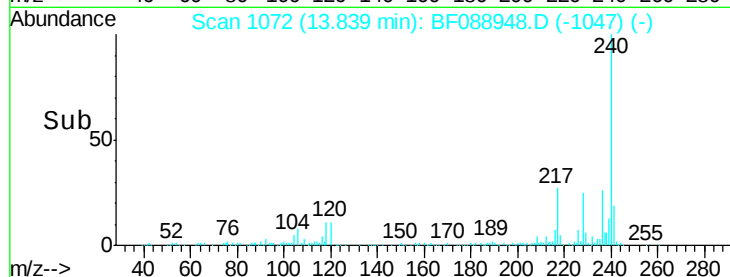
7/13/2016 9:25:45 AM



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



#77

Pyrene

Concen: 26.34 ng

RT: 12.65 min Scan# 968

Delta R.T. -0.00 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

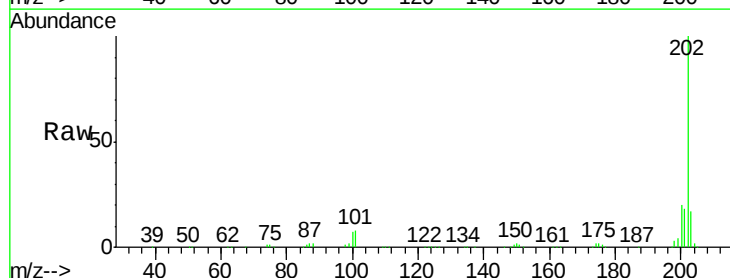
Tgt Ion:202 Resp: 307931

Ion Ratio Lower Upper

202 100

200 20.4 17.4 26.2

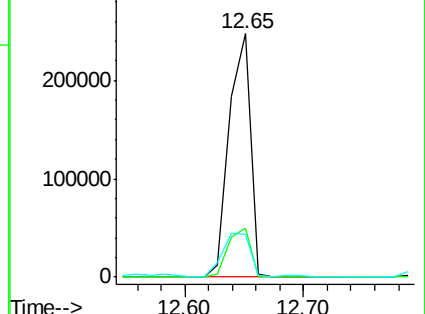
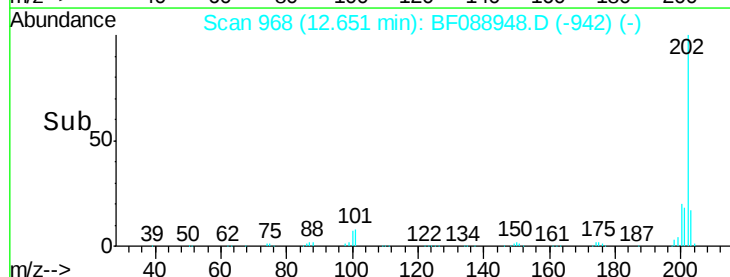
203 17.4 14.5 21.7

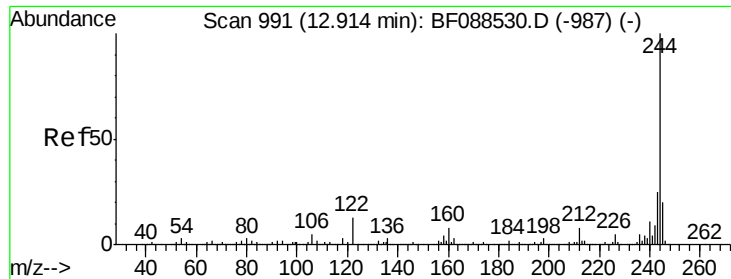


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





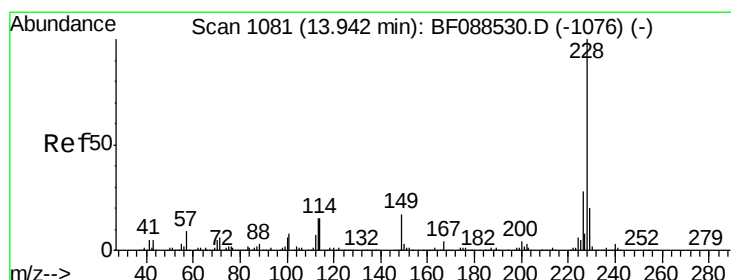
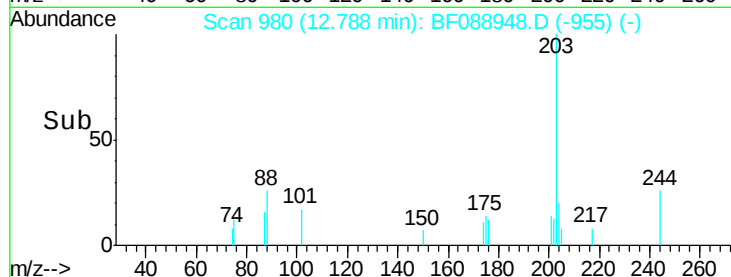
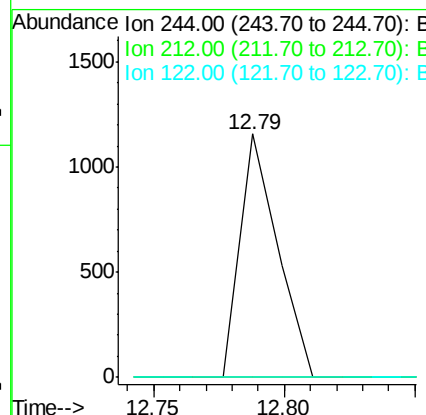
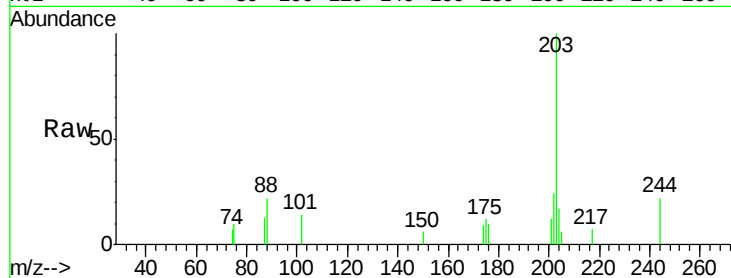
#78
 Terphenyl-d14
 Concen: 0.19 ng
 RT: 12.79 min Scan# 980
 Delta R.T. -0.01 min
 Lab File: BF088948.D
 Acq: 13 Jul 2016 6:49

Instrument :
 BNA_F
 ClientSampleId :
 SS-9DL

Tot Ion	Ratio	Lower	Upper
244	100		
212	0.0	6.0	9.0#
122	0.0	11.2	16.8#

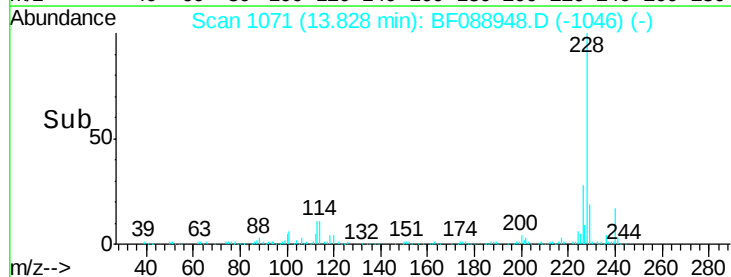
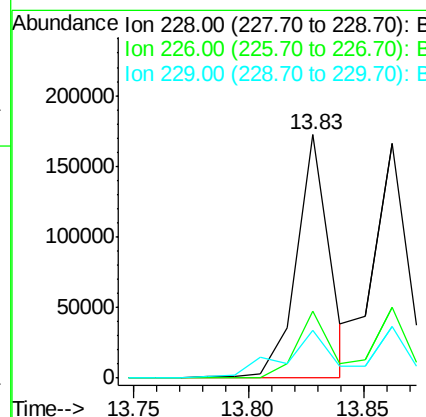
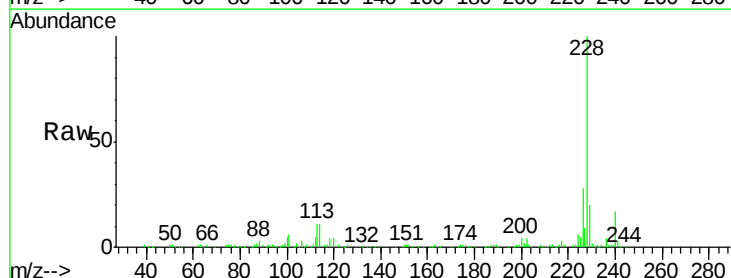
Manual Integrations

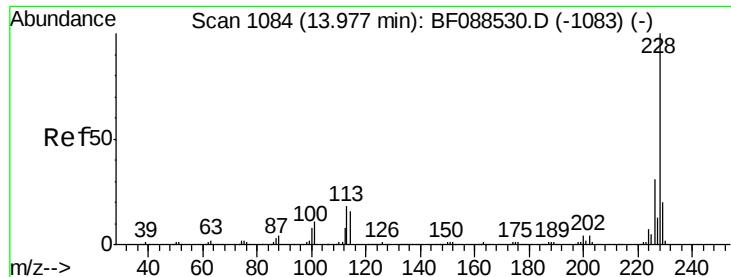
SOHIL
 7/13/2016 9:25:45 AM



#80
 Benzo(a)anthracene
 Concen: 19.42 ng m
 RT: 13.83 min Scan# 1071
 Delta R.T. -0.01 min
 Lab File: BF088948.D
 Acq: 13 Jul 2016 6:49

Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.5	22.3	33.5
229	19.7	16.0	24.0





#82

Chrysene

Concen: 19.02 ng/mL

RT: 13.86 min Scan# 1074

Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

Instrument :

BNA_F

ClientSampleID :

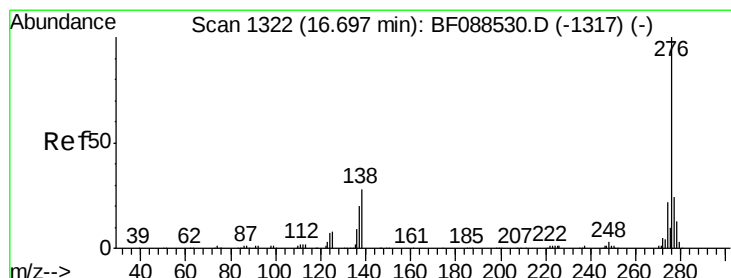
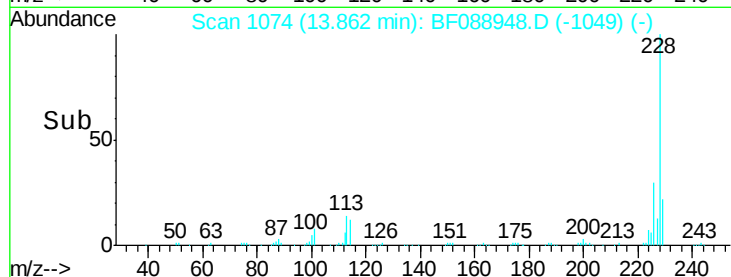
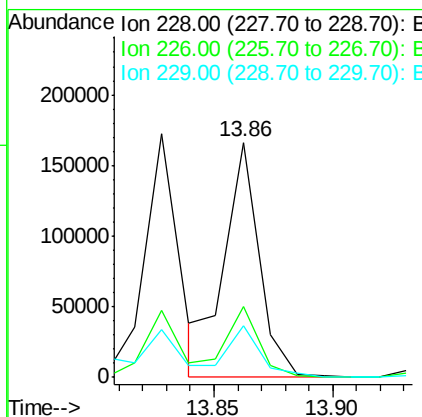
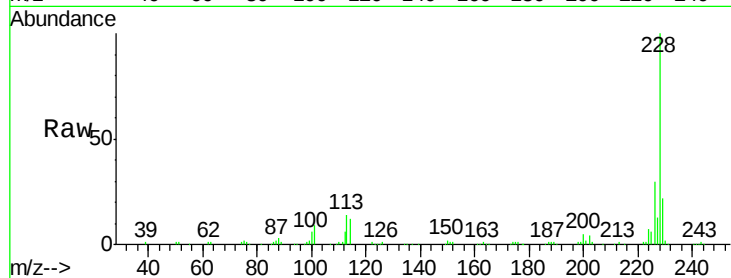
SS-9DL

Tot Ion:	228	Resp:	167095
Ion Ratio	Lower	Upper	
228	100		
226	30.2	25.4	38.2
229	22.3	16.3	24.5

Manual Integrations

SOHIL

7/13/2016 9:25:45 AM



#85

Indeno(1,2,3-cd)pyrene

Concen: 8.54 ng/mL

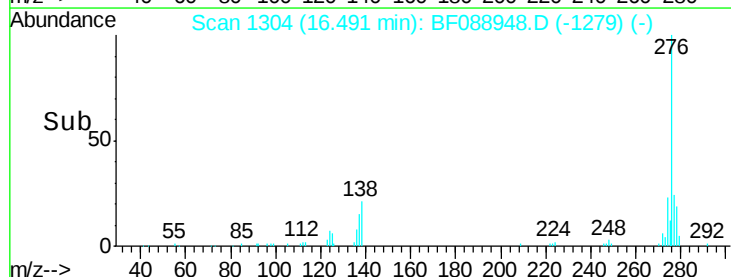
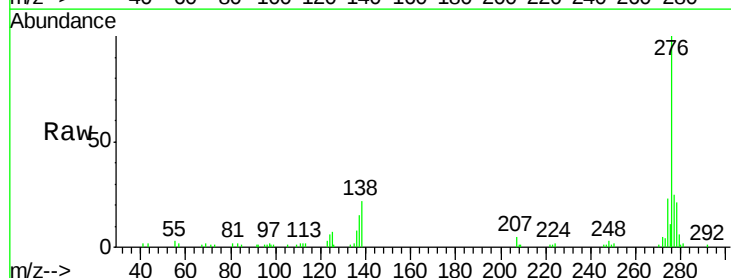
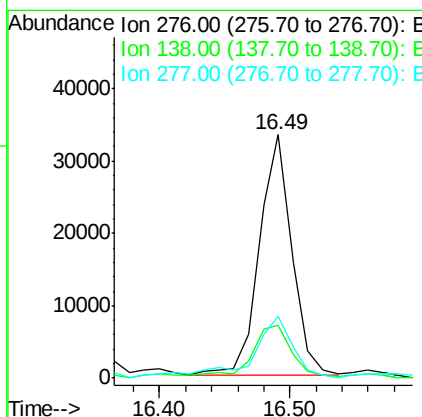
RT: 16.49 min Scan# 1304

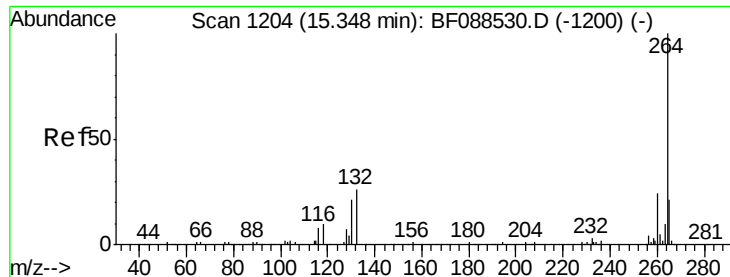
Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

Tgt Ion:	276	Resp:	57692
Ion Ratio	Lower	Upper	
276	100		
138	27.7	0.0	0.0#
277	33.7	0.0	0.0#





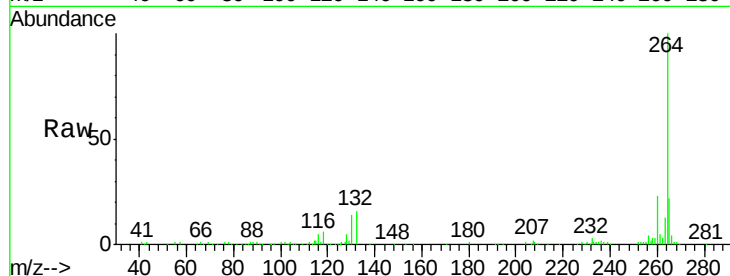
#86
Pervlene-d12
Concen: 20.00 ng
RT: 15.21 min Scan# 1192
Delta R.T. -0.00 min
Lab File: BF088948.D
Acq: 13 Jul 2016 6:49

Instrument :
BNA_F
ClientSampleId :
SS-9DL

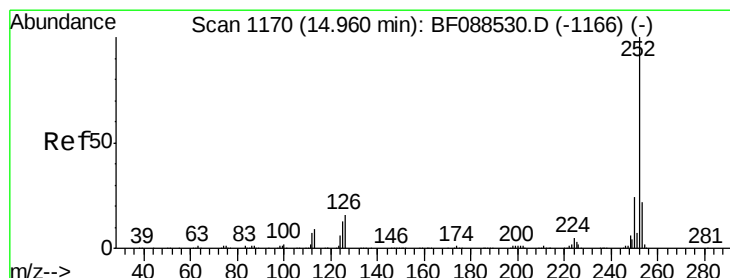
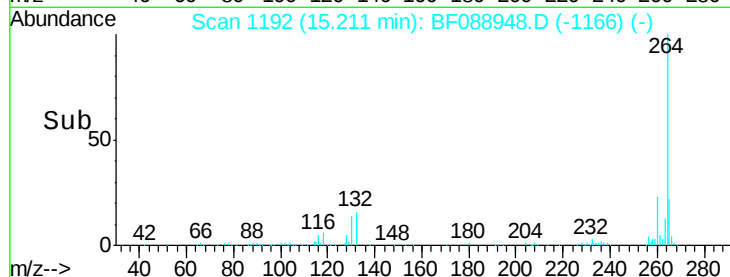
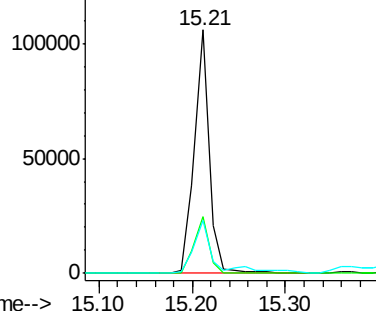
Tot Ion	Ratio	Lower	Upper
264	100		
260	23.3	19.2	28.8
265	21.8	16.9	25.3

Manual Integrations

SOHIL
7/13/2016 9:25:45 AM



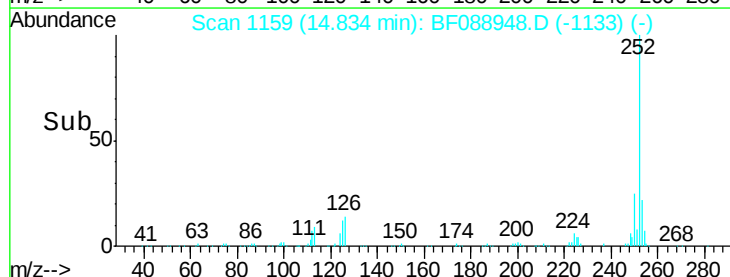
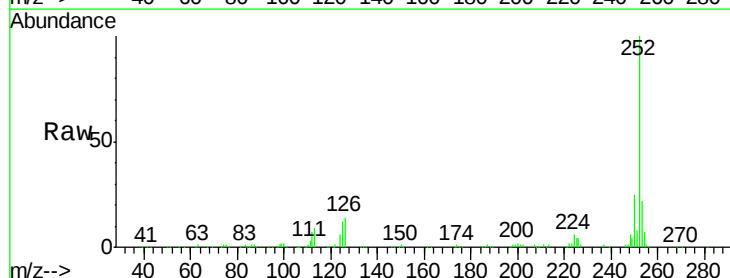
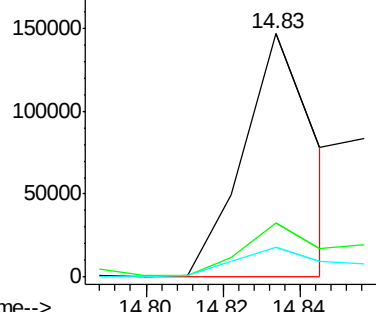
Abundance Ion 264.00 (263.70 to 264.70): E
Ion 260.00 (259.70 to 260.70): E
Ion 265.00 (264.70 to 265.70): E

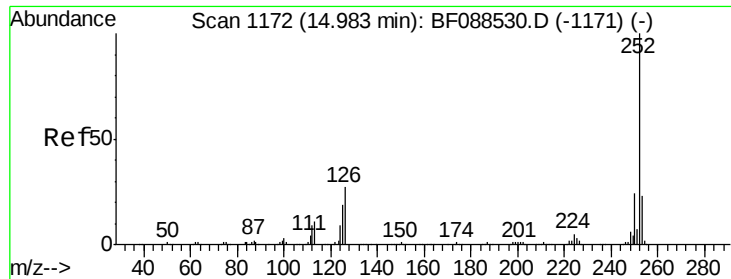


#87
Benzo(b)fluoranthene
Concen: 25.57 ng m
RT: 14.83 min Scan# 1159
Delta R.T. -0.00 min
Lab File: BF088948.D
Acq: 13 Jul 2016 6:49

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.3	17.4	26.2
125	12.3	7.1	10.7#

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





#88

Benzo(k)fluoranthene

Concen: 10.02 ng m

RT: 14.86 min Scan# 1161

Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

Instrument :

BNA_F

ClientSampleId :

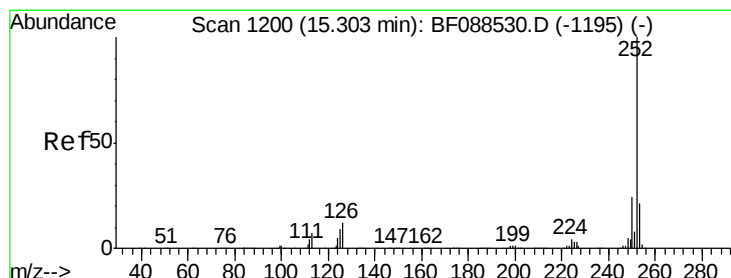
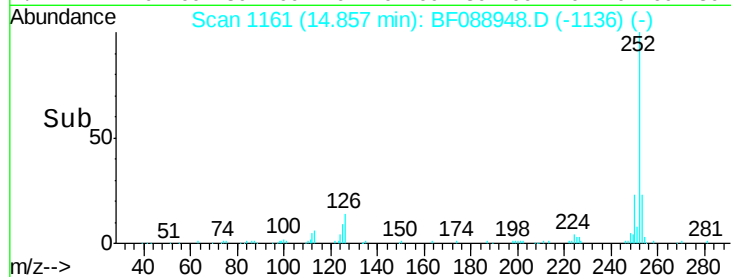
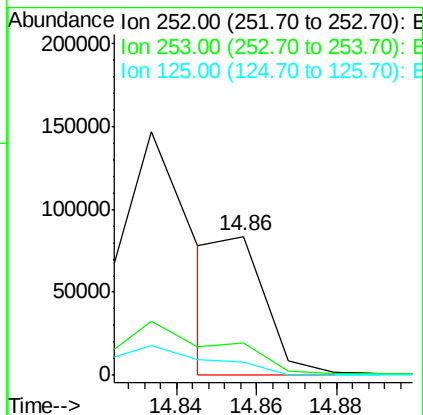
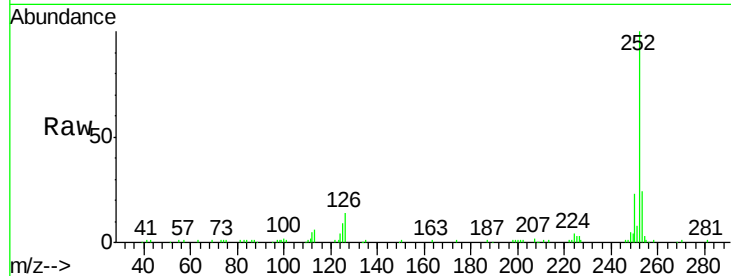
SS-9DL

Tot Ion:	252	Resp:	64491
Ion Ratio	Lower	Upper	
252	100		
253	23.6	18.0	27.0
125	9.3	11.2	16.8#

Manual Integrations

SOHIL

7/13/2016 9:25:45 AM



#89

Benzo(a)pyrene

Concen: 17.93 ng m

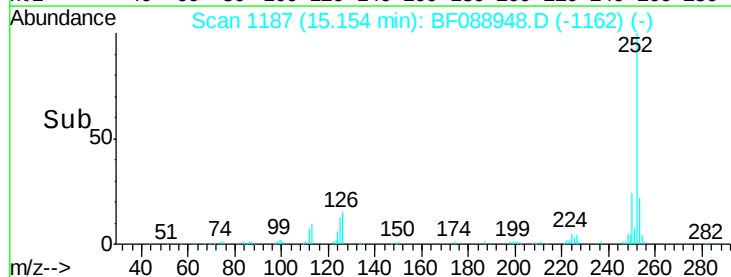
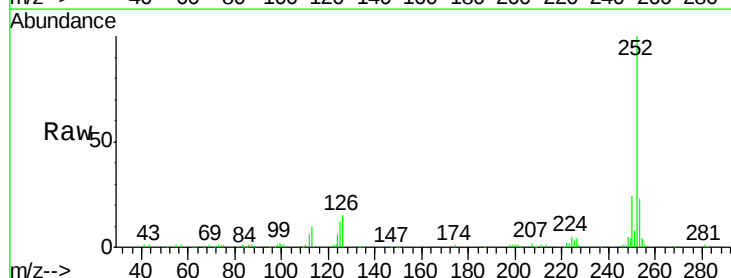
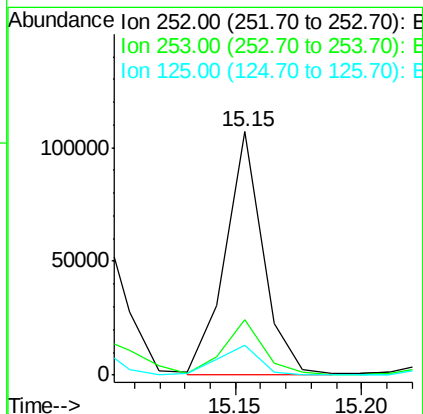
RT: 15.15 min Scan# 1187

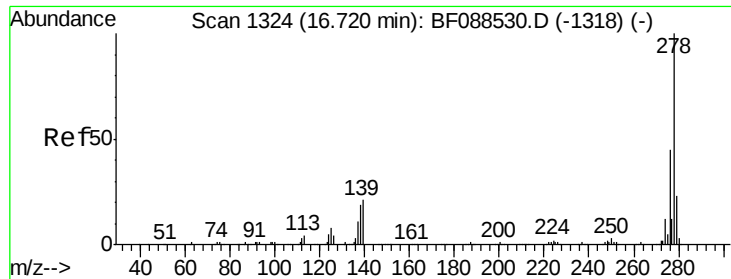
Delta R.T. -0.01 min

Lab File: BF088948.D

Acq: 13 Jul 2016 6:49

Tgt Ion:	252	Resp:	112275
Ion Ratio	Lower	Upper	
252	100		
253	22.7	17.9	26.9
125	12.1	12.5	18.7#





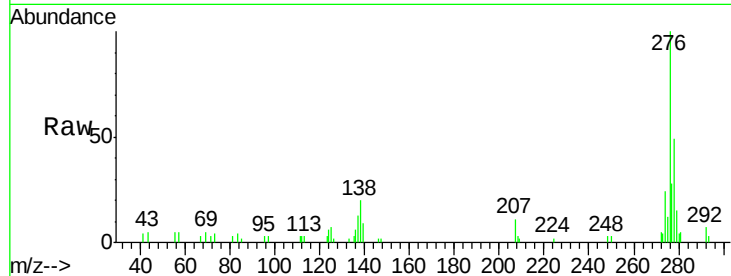
#90
Dibenzo(a,h)anthracene
Concen: 2.84 ng/ml
RT: 16.50 min Scan# 1305
Delta R.T. -0.01 min
Lab File: BF088948.D
Acq: 13 Jul 2016 6:49

Instrument :
BNA_F
ClientSampled :
SS-9DL

Tot Ion	Ratio	Lower	Upper
278	100		
139	18.5	15.7	23.5
279	29.7	19.4	29.2#

Manual Integrations

APPROVED
SOHIL
7/13/2016 9:25:45 AM

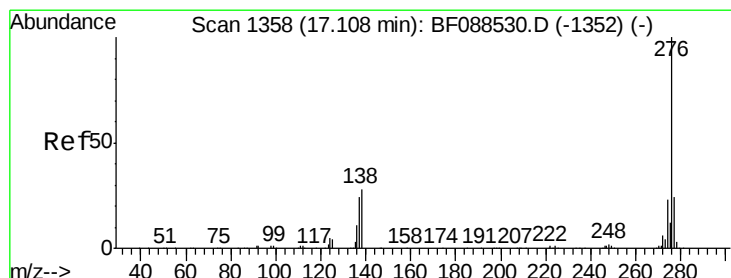
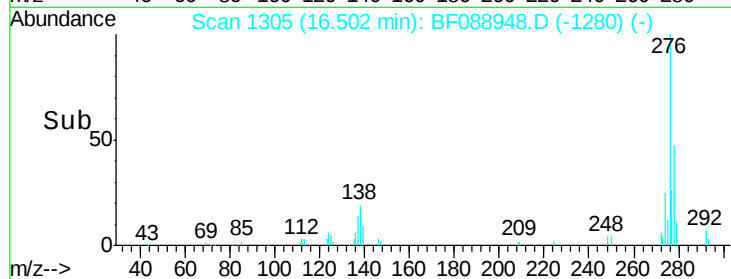
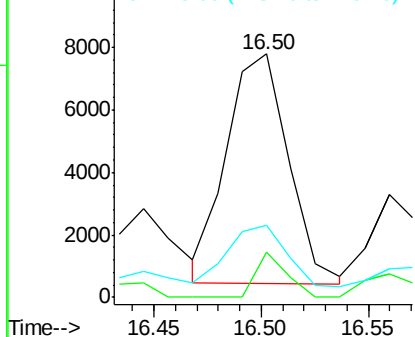


Abundance

Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E



#91
Benzo(g,h,i)perylene
Concen: 9.40 ng/ml
RT: 16.88 min Scan# 1338
Delta R.T. -0.01 min
Lab File: BF088948.D
Acq: 13 Jul 2016 6:49

Tgt Ion	Ratio	Lower	Upper
276	100		
277	23.9	18.9	28.3
138	18.9	21.4	32.2#

Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

