

Data Path : Z:\HPCHEM1\BNA F\DATA\BF031616\
 Data File : BF085491.D
 Acq On : 17 Mar 2016 5:16
 Operator : UM/SJ
 Sample : H1796-09 50X
 Misc :
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 AOU2-SB09(6-8)

Manual Integrations
 APPROVED

Sohil
 3/17/2016 5:20:44 PM

Quant Time: Mar 17 05:30:23 2016
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF031516.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Mar 15 18:57:05 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.90	152	121055	20.00	ng	-0.01
21) Naphthalene-d8	8.18	136	490027	20.00	ng	-0.02
38) Acenaphthene-d10	9.94	164	204851	20.00	ng	-0.01
63) Phenanthrene-d10	11.43	188	310330	20.00	ng	-0.01
75) Chrysene-d12	14.06	240	215908	20.00	ng	-0.02
86) Perylene-d12	15.51	264	273659	20.00	ng	-0.02

System Monitoring Compounds						
5) 2-Fluorophenol	5.50	112	8356	1.19	ng	-0.01
7) Phenol-d6	6.52	99	15183	1.66	ng	-0.03
23) Nitrobenzene-d5	7.46	82	10770	1.30	ng	-0.02
41) 2,4,6-Tribromophenol	10.73	330	2826	1.50	ng	-0.02
44) 2-Fluorobiphenyl	9.26	172	29024	2.46	ng	-0.02
78) Terphenyl-d14	13.01	244	17559	1.84	ng	-0.02

Target Compounds				Qvalue		
31) Naphthalene	8.21	128	1564238	65.33	ng	100
37) 2-Methylnaphthalene	8.90	142	465334	30.69	ng	100
45) 1,1'-Biphenyl	9.36	154	149948	8.97	ng	94
48) Acenaphthylene	9.81	152	487139	24.03	ng	97
51) Acenaphthene	9.97	154	51769	4.06	ng	98
54) Dibenzofuran	10.15	168	98659	6.30	ng	# 92
57) Fluorene	10.49	166	410017	32.85	ng	99
70) Phenanthrene	11.45	178	1398906	86.55	ng	100
71) Anthracene	11.50	178	479283	29.11	ng	98
72) Carbazole	11.66	167	40887	2.94	ng	93
74) Fluoranthene	12.64	202	596006	39.23	ng	97
77) Pyrene	12.87	202	918970	56.75	ng	99
80) Benzo(a)anthracene	14.05	228	340317	27.49	ng	# 85
82) Chrysene	14.09	228	257807m	23.15	ng	
85) Indeno(1,2,3-cd)pyrene	16.94	276	115312	10.92	ng	94
87) Benzo(b)fluoranthene	15.09	252	273302m	15.29	ng	
88) Benzo(k)fluoranthene	15.11	252	54164m	3.87	ng	
89) Benzo(a)pyrene	15.45	252	301553	19.53	ng	97
90) Dibenzo(a,h)anthracene	16.95	278	35354	2.34	ng	# 88
91) Benzo(a,h,i)perylene	17.37	276	150364	9.76	ng	96

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

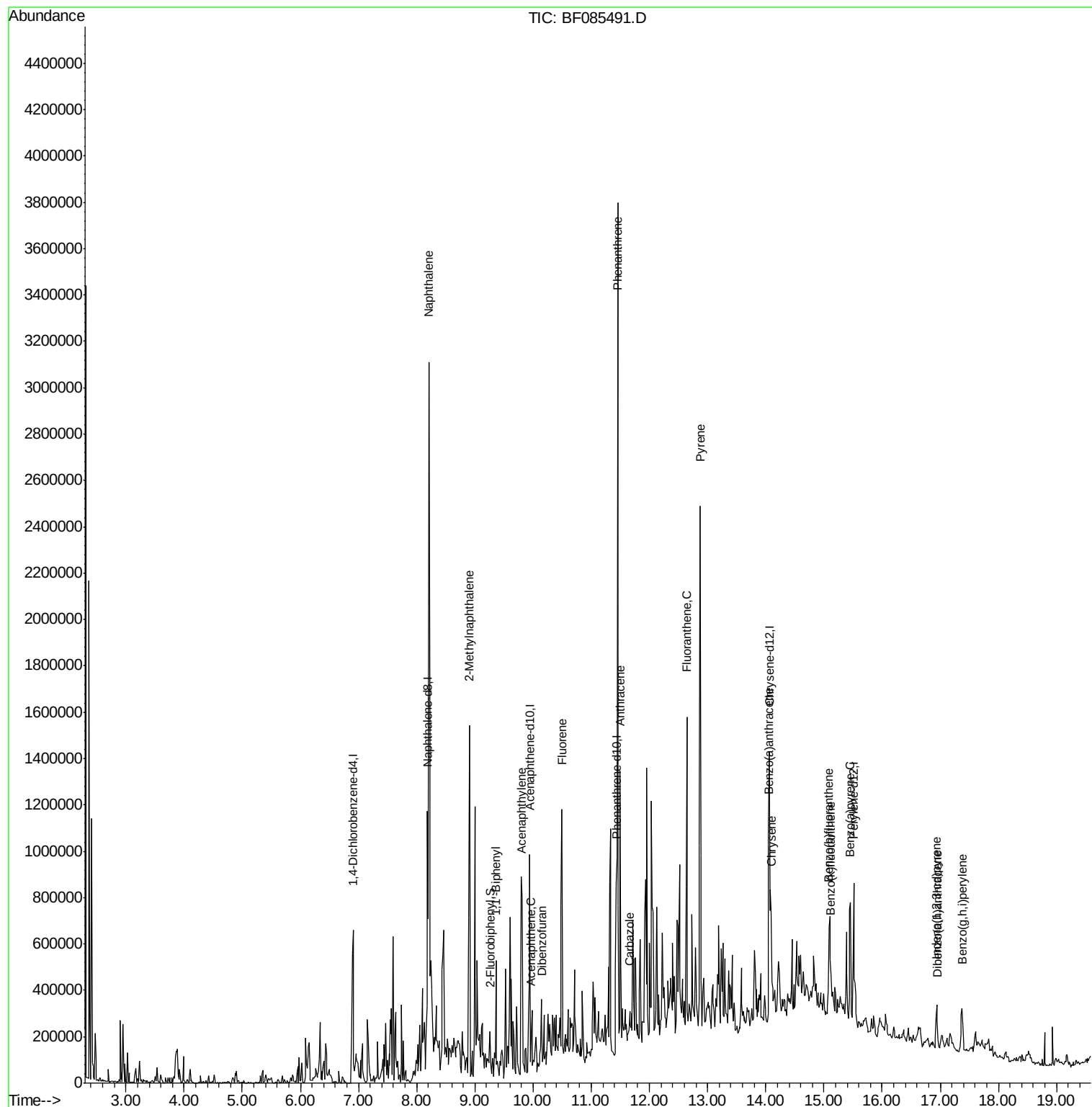
Data Path : Z:\HPCHEM1\BNA F\DATA\BF031616\
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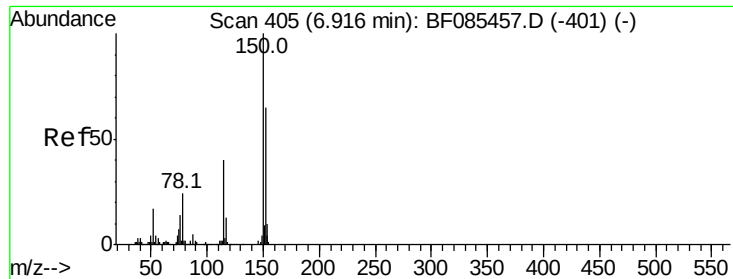
Instrument :
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AOU2-SB09(6-8)

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#1

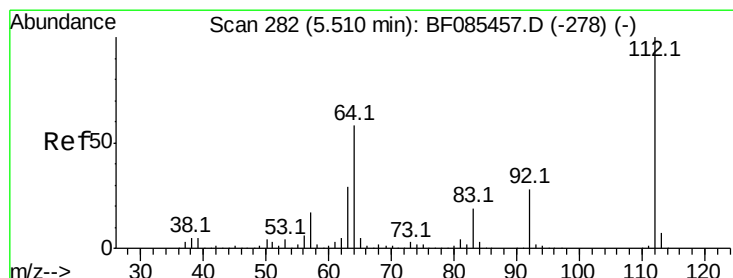
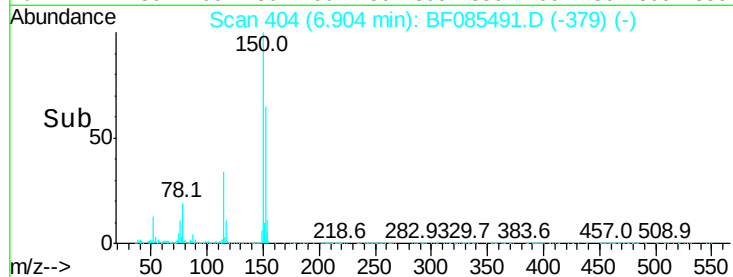
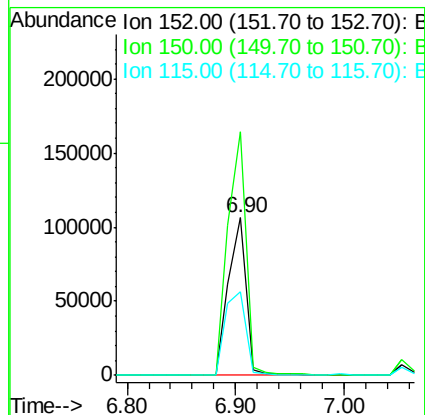
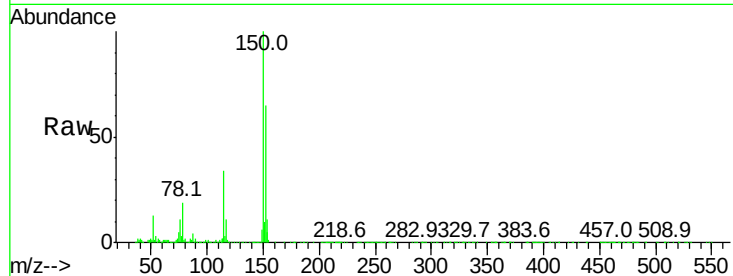
1,4-Dichlorobenzene-d4
Concen: 20.00 ng
RT: 6.90 min Scan# 404
Delta R.T. -0.01 min
Lab File: BF085491.D
Acq: 17 Mar 2016 5:16

Instrument :
BNA_F
ClientSampleId :
AOU2-SB09(6-8)

Tot Ion	Ratio	Lower	Upper
152	100		
150	154.7	124.6	186.8
115	52.9	46.6	70.0

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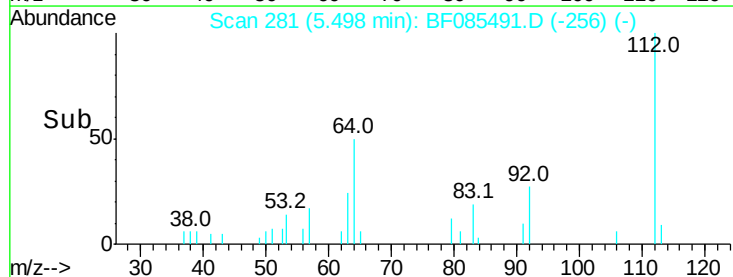
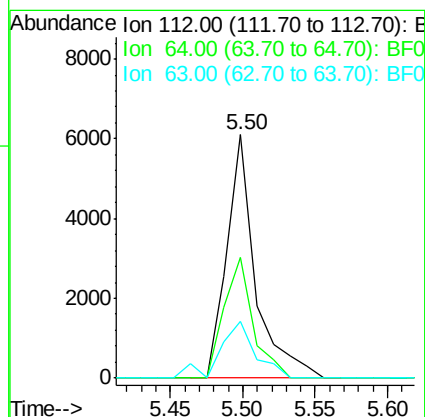
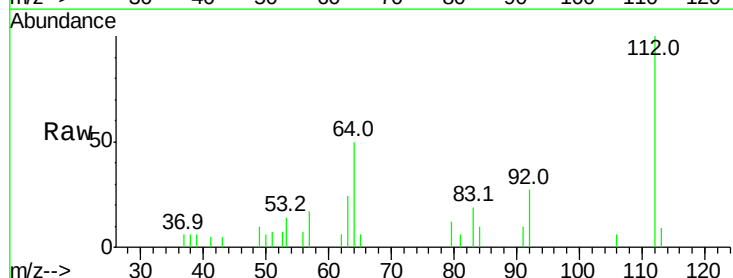
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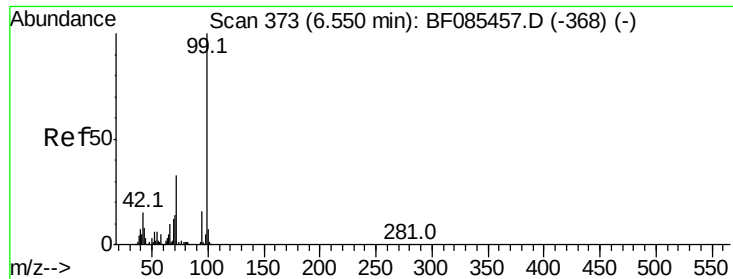


#5

2-Fluorophenol
Concen: 1.19 ng
RT: 5.50 min Scan# 281
Delta R.T. -0.01 min
Lab File: BF085491.D
Acq: 17 Mar 2016 5:16

Tgt Ion	Ratio	Lower	Upper
112	100		
64	49.8	49.0	73.4
63	23.6	24.8	37.2





#7

Phenol-d6

Concen: 1.66 ng

RT: 6.52 min Scan# 370

Delta R.T. -0.03 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Instrument :

BNA_F

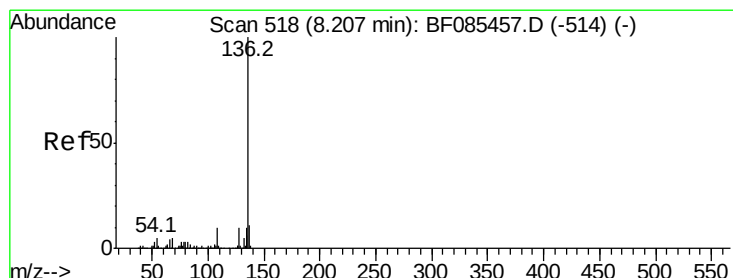
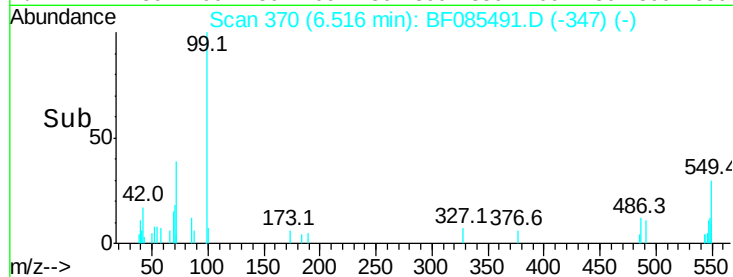
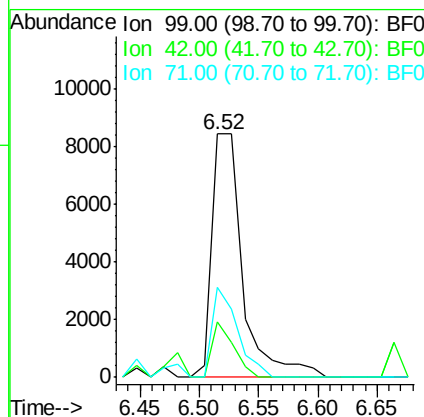
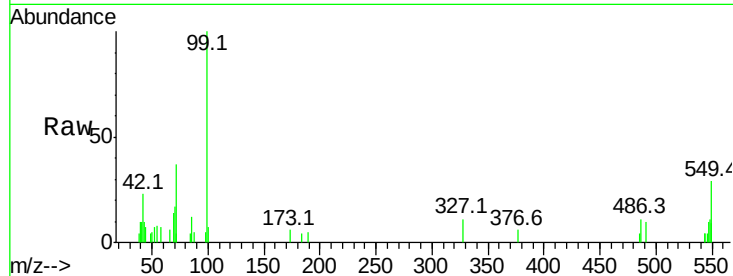
ClientSampleId :

AOU2-SB09(6-8)

Tot Ion:	99	Resp:	15183
Ion Ratio	Lower	Upper	
99	100		
42	22.8	13.6	20.4#
71	36.9	26.7	40.1

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#21

Naphthalene-d8

Concen: 20.00 ng

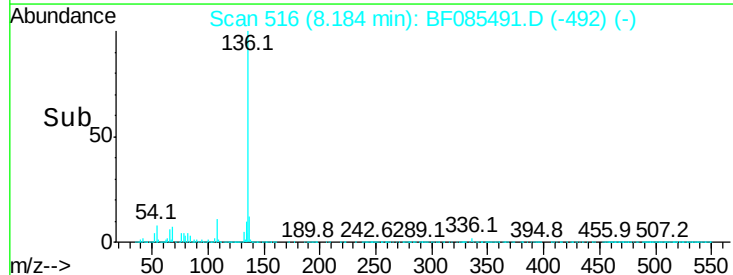
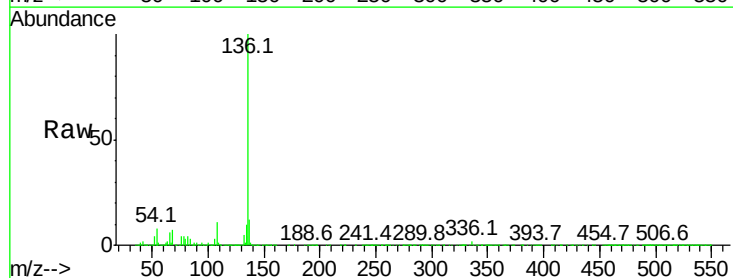
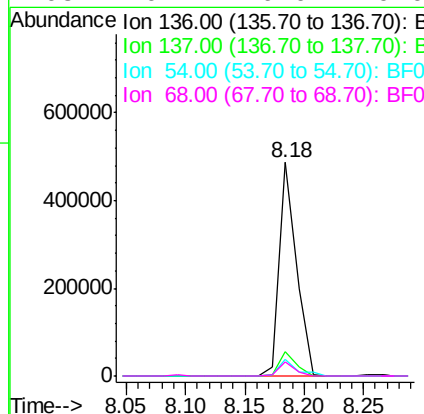
RT: 8.18 min Scan# 516

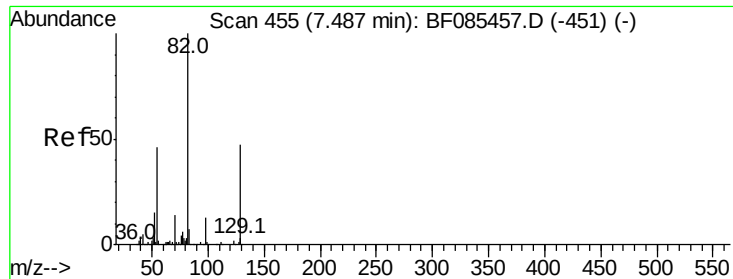
Delta R.T. -0.02 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Tgt Ion:	136	Resp:	490027
Ion Ratio	Lower	Upper	
136	100		
137	11.6	9.3	13.9
54	8.1	7.4	11.2
68	6.7	6.0	9.0





#23

Nitrobenzene-d5

Concen: 1.30 ng

RT: 7.46 min Scan# 453

Delta R.T. -0.02 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Instrument :

BNA_F

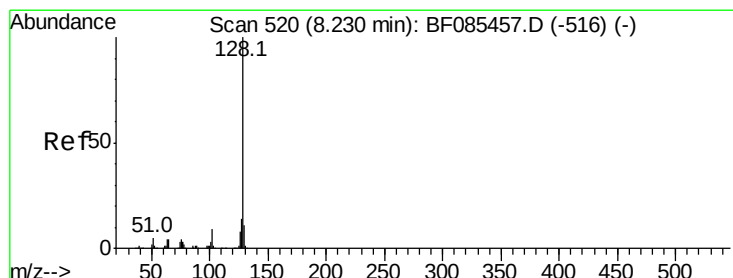
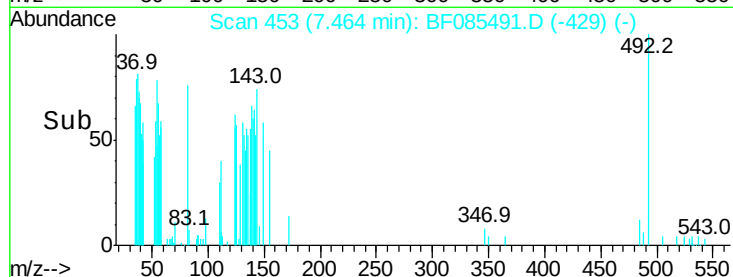
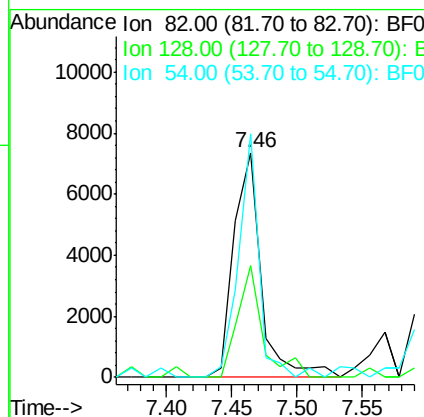
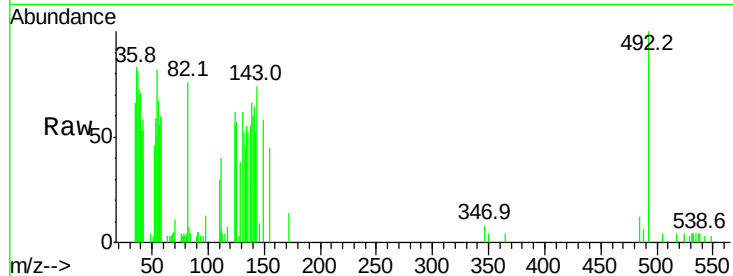
ClientSampled :

AOU2-SB09(6-8)

Tot Ion:	82	Resp:	10770
Ion Ratio	Lower	Upper	
82	100		
128	49.8	34.5	51.7
54	108.4	39.3	58.9#

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#31

Naphthalene

Concen: 65.33 ng

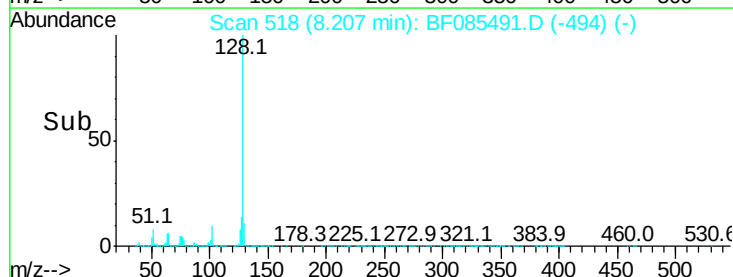
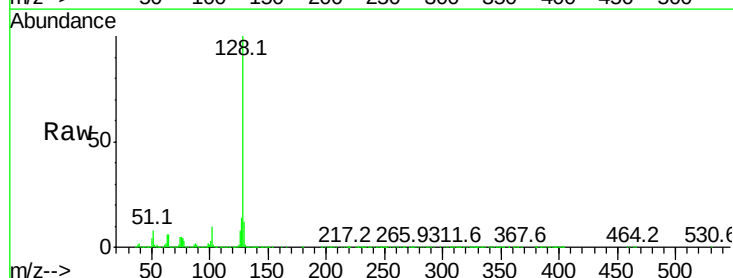
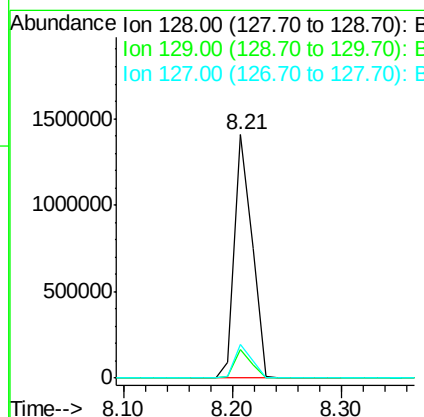
RT: 8.21 min Scan# 518

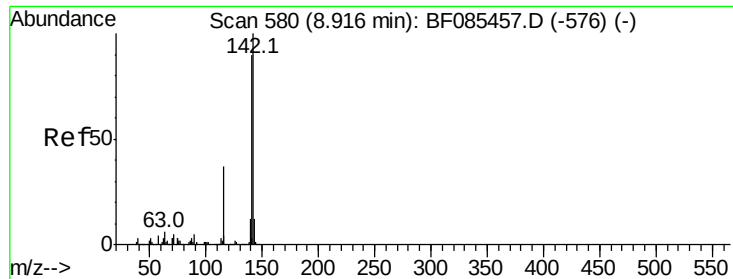
Delta R.T. -0.02 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Tgt Ion:	128	Resp:	1564238
Ion Ratio	Lower	Upper	
128	100		
129	11.9	9.7	14.5
127	14.0	11.2	16.8





#37

2-Methylnaphthalene

Concen: 30.69 ng

RT: 8.90 min Scan# 579

Delta R.T. -0.01 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Instrument :

BNA_F

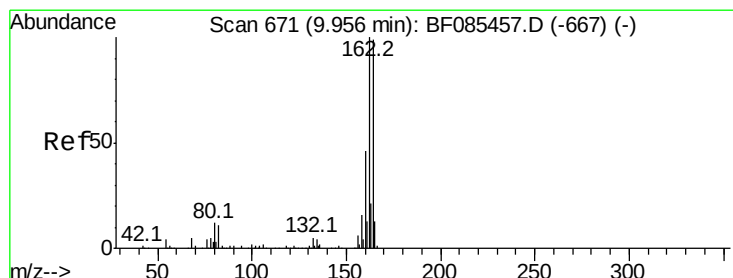
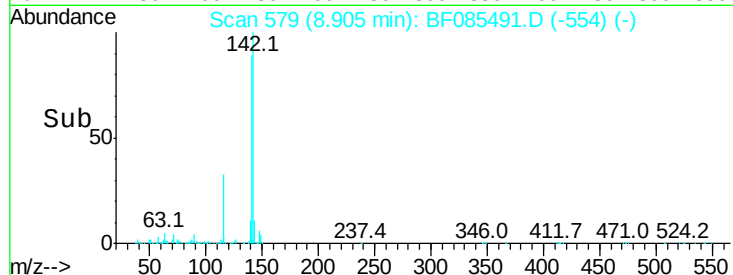
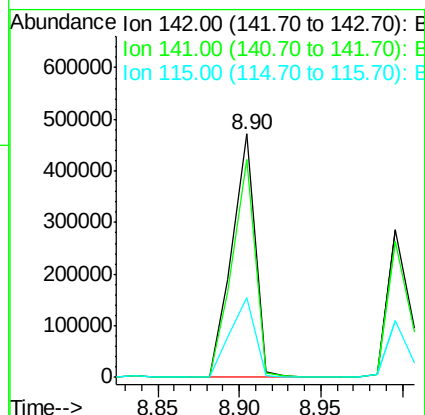
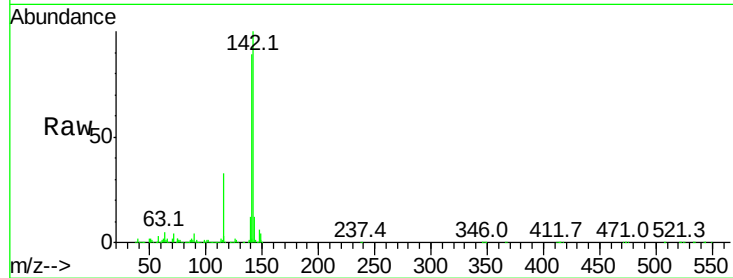
ClientSampleId :

AOU2-SB09(6-8)

Tot Ion:	142	Resp:	465334
Ion Ratio	Lower	Upper	
142	100		
141	89.5	71.7	107.5
115	32.7	26.2	39.4

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#38

Acenaphthene-d10

Concen: 20.00 ng

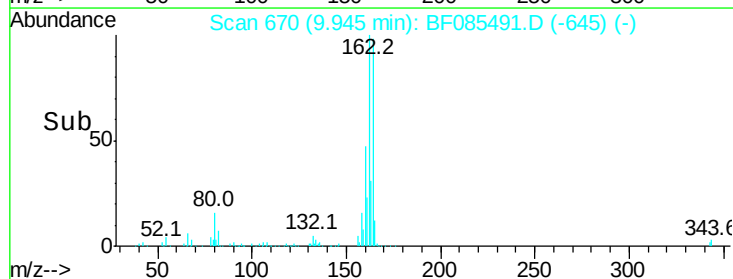
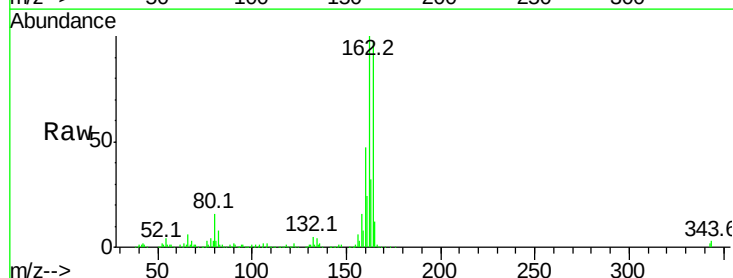
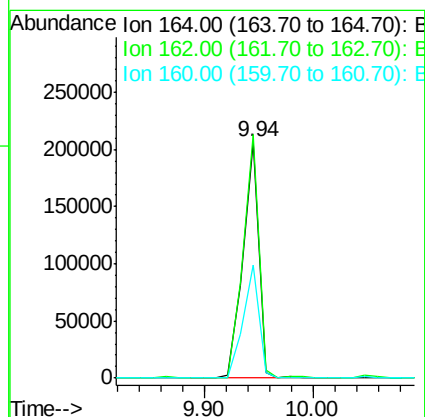
RT: 9.94 min Scan# 670

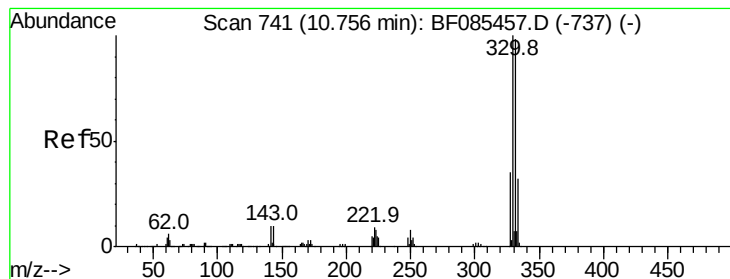
Delta R.T. -0.01 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Tgt Ion:	164	Resp:	204851
Ion Ratio	Lower	Upper	
164	100		
162	103.1	83.3	124.9
160	48.1	37.9	56.9





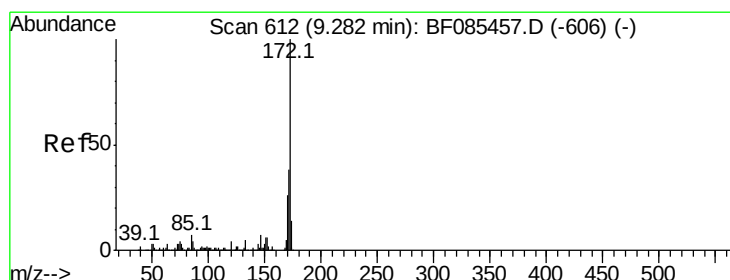
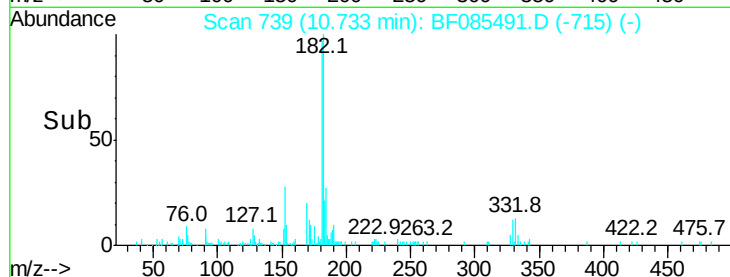
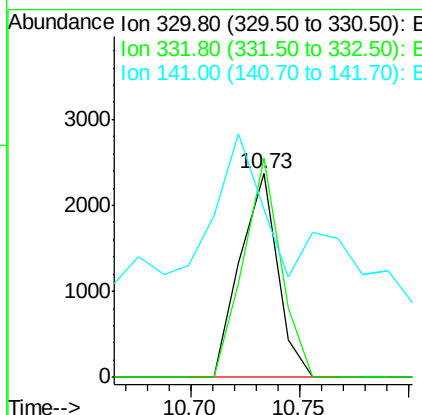
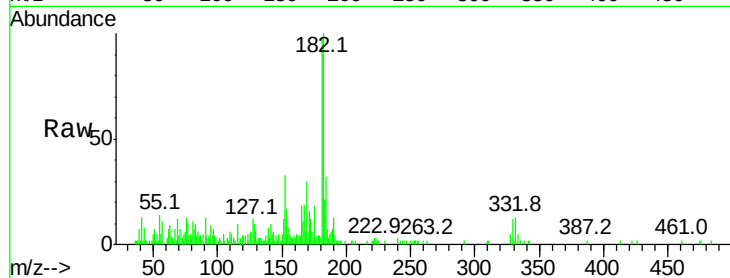
#41
 2,4,6-Tribromophenol
 Concen: 1.50 ng
 RT: 10.73 min Scan# 739
 Delta R.T. -0.02 min
 Lab File: BF085491.D
 Acq: 17 Mar 2016 5:16

Instrument :
 BNA_F
 ClientSampleId :
 AOU2-SB09(6-8)

Tot Ion	Ratio	Lower	Upper
330	100		
332	108.0	77.1	115.7
141	80.3	35.0	52.6

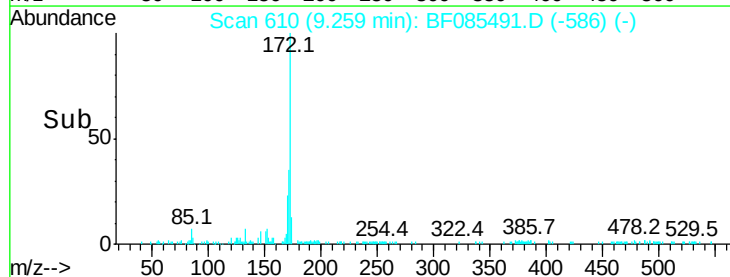
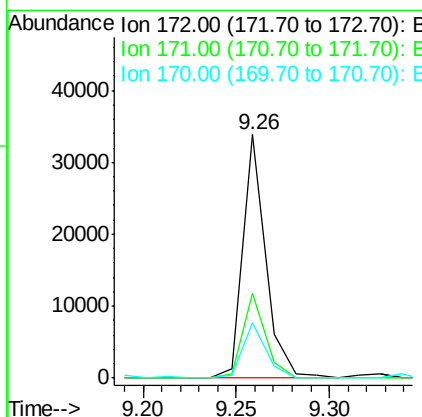
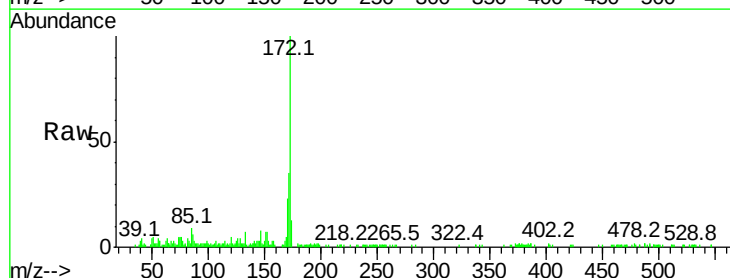
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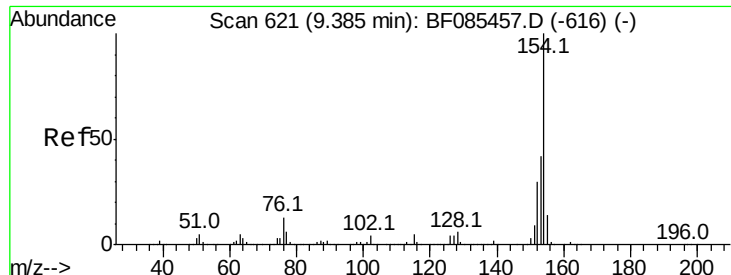
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#44
 2-Fluorobiphenyl
 Concen: 2.46 ng
 RT: 9.26 min Scan# 610
 Delta R.T. -0.02 min
 Lab File: BF085491.D
 Acq: 17 Mar 2016 5:16

Tgt Ion	Ratio	Lower	Upper
172	100		
171	34.7	29.3	43.9
170	23.0	20.0	30.0





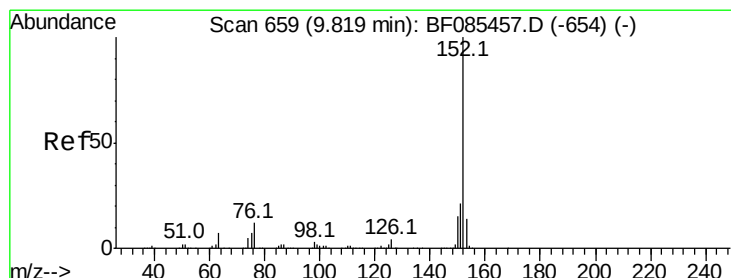
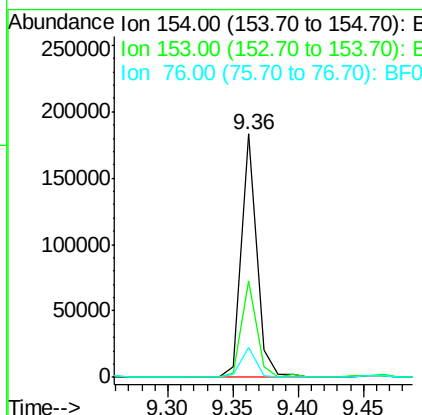
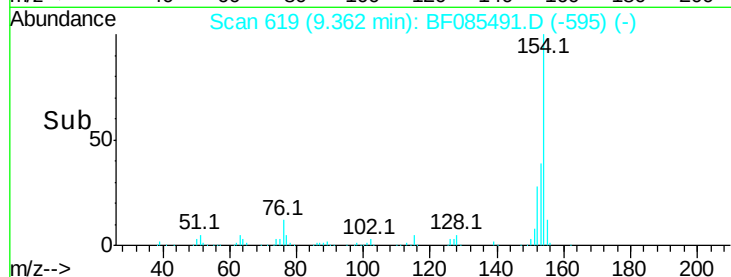
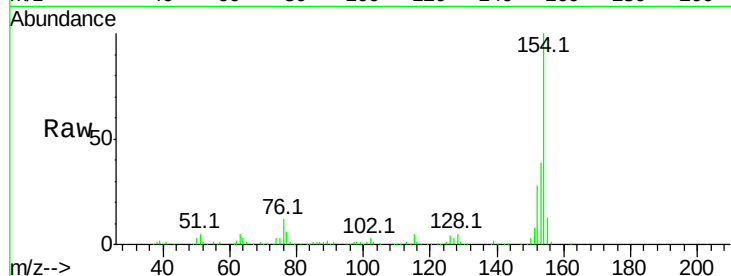
#45
1,1'-Biphenyl
Concen: 8.97 ng
RT: 9.36 min Scan# 619
Delta R.T. -0.02 min
Lab File: BF085491.D
Acq: 17 Mar 2016 5:16

Instrument :
BNA_F
ClientSampleId :
AOU2-SB09(6-8)

Tot Ion:	154	Resp:	149948
Ion Ratio	Lower	Upper	
154	100		
153	39.4	21.4	61.4
76	12.1	0.0	37.5

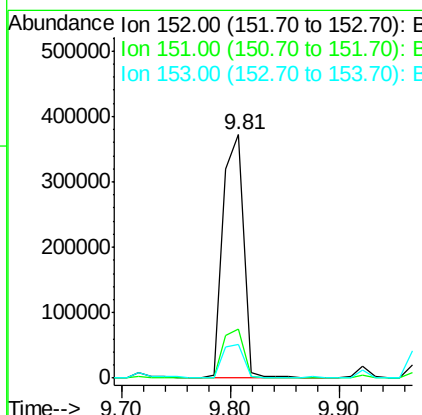
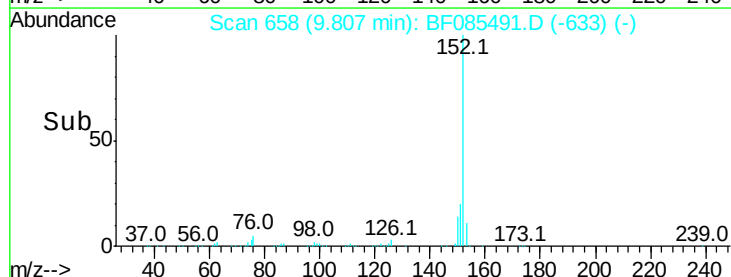
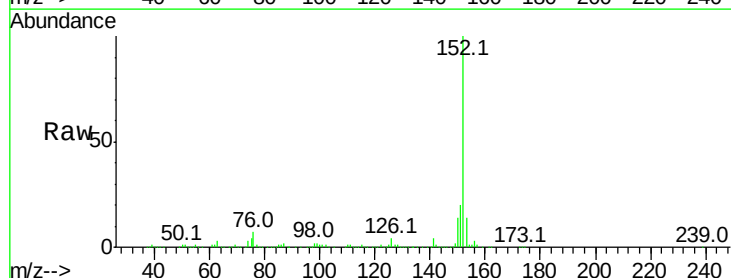
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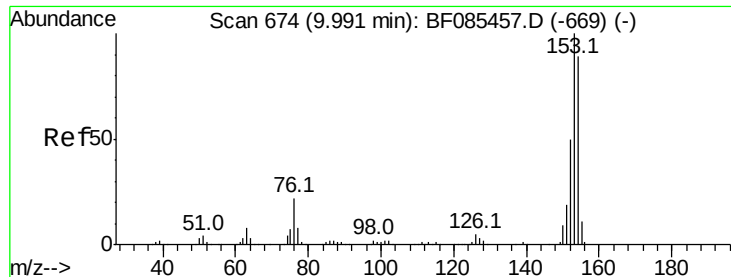
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#48
Acenaphthylene
Concen: 24.03 ng
RT: 9.81 min Scan# 658
Delta R.T. -0.01 min
Lab File: BF085491.D
Acq: 17 Mar 2016 5:16

Tgt Ion:	152	Resp:	487139
Ion Ratio	Lower	Upper	
152	100		
151	20.0	17.5	26.3
153	13.7	11.3	16.9





#51

Acenaphthene

Concen: 4.06 ng

RT: 9.97 min Scan# 672

Delta R.T. -0.02 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Instrument :

BNA_F

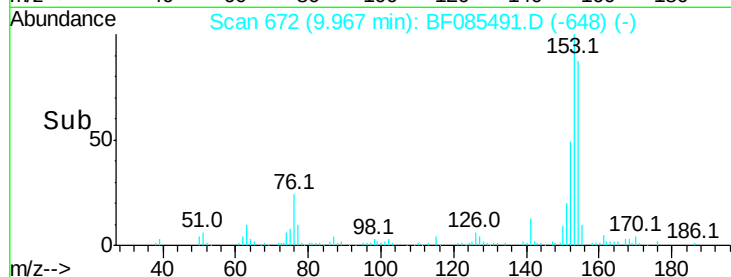
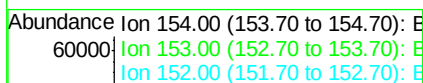
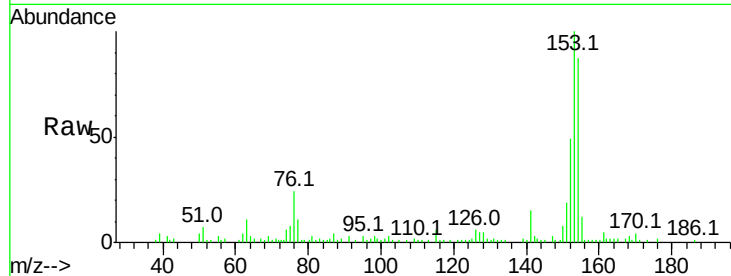
ClientSampleId :

AOU2-SB09(6-8)

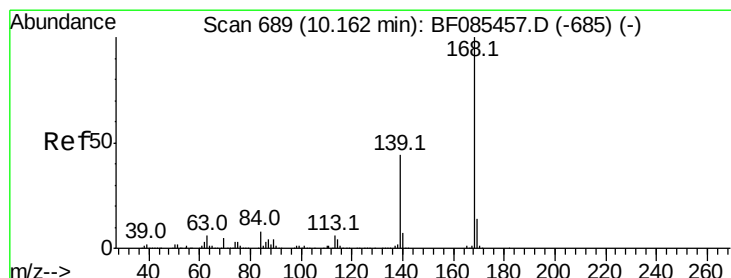
Tot Ion:	154	Resp:	51769
Ion Ratio	Lower	Upper	
154	100		
153	114.8	89.8	134.8
152	56.8	44.6	66.8

Manual Integrations
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Time-->



#54

Dibenzofuran

Concen: 6.30 ng

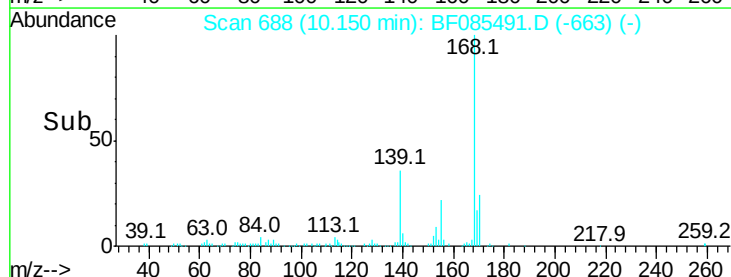
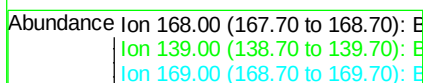
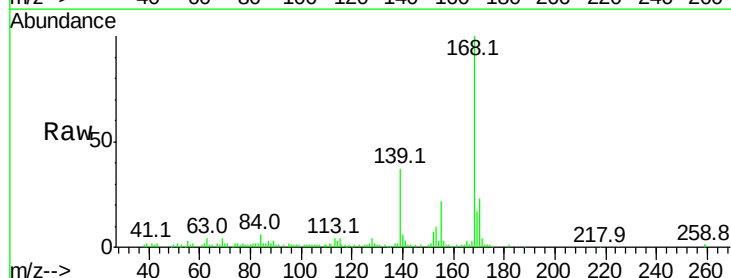
RT: 10.15 min Scan# 688

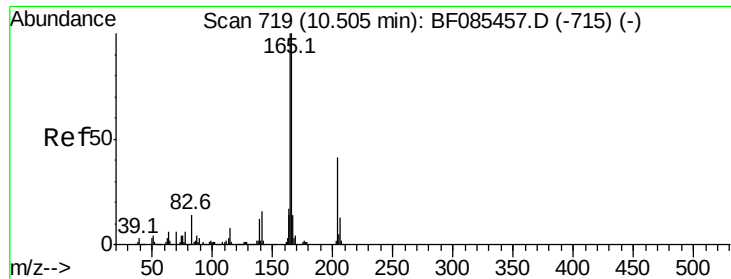
Delta R.T. -0.01 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Tgt Ion:	168	Resp:	98659
Ion Ratio	Lower	Upper	
168	100		
139	36.7	33.6	50.4
169	17.4	11.2	16.8#





#57

Fluorene

Concen: 32.85 ng

RT: 10.49 min Scan# 718

Delta R.T. -0.01 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Instrument :

BNA_F

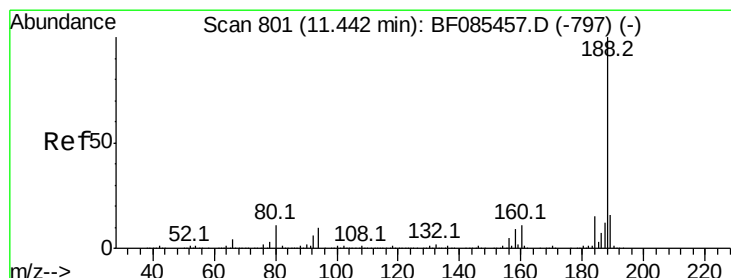
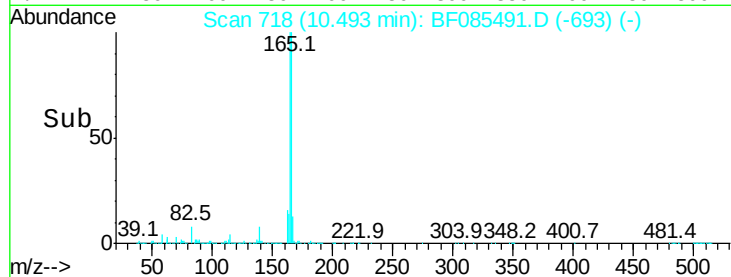
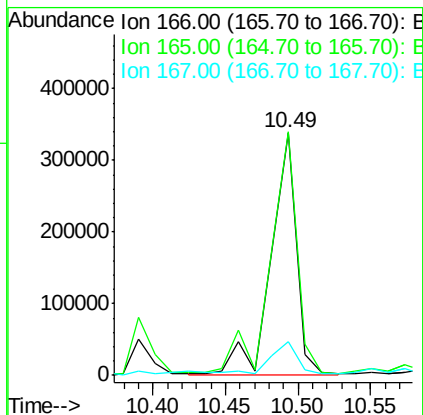
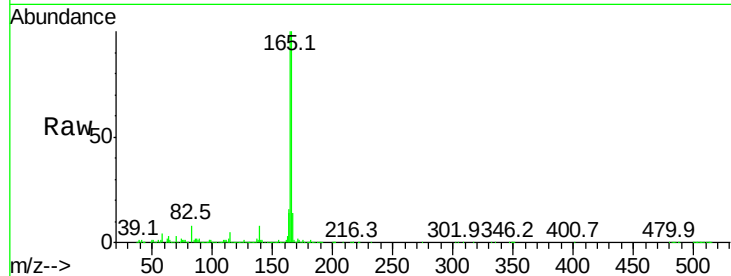
ClientSampleId :

AOU2-SB09(6-8)

Tot Ion:	166	Resp:	410017
Ion Ratio	Lower	Upper	
166	100		
165	100.5	79.4	119.0
167	13.8	11.0	16.6

Manual Integrations
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#63

Phenanthrene-d10

Concen: 20.00 ng

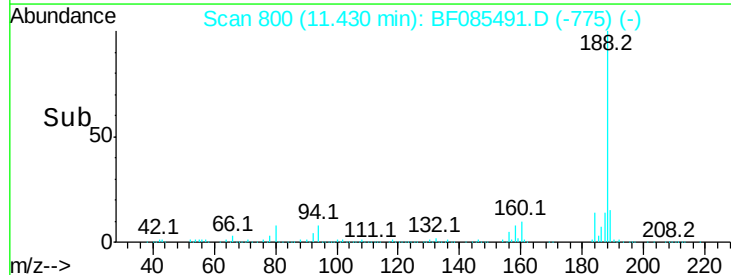
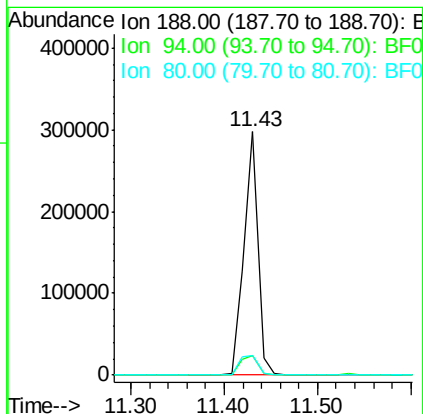
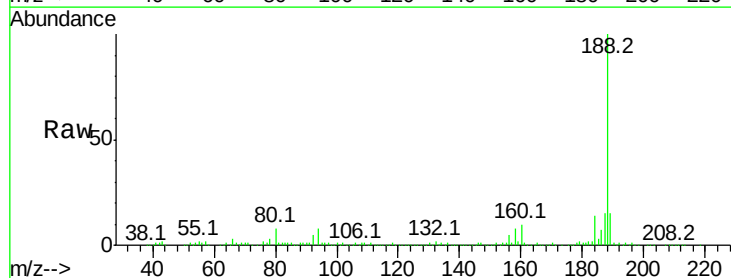
RT: 11.43 min Scan# 800

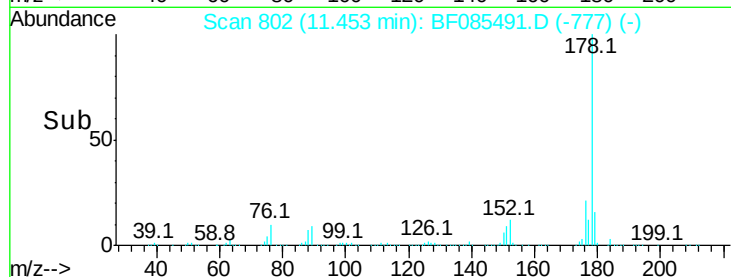
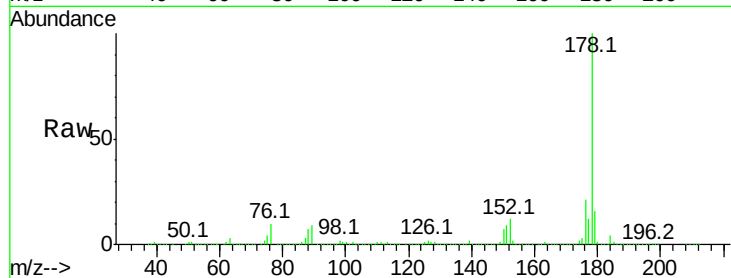
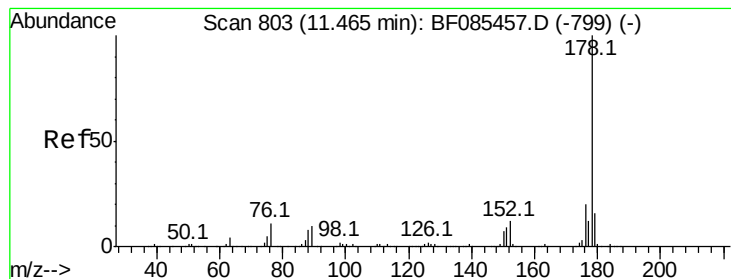
Delta R.T. -0.01 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Tgt Ion:	188	Resp:	310330
Ion Ratio	Lower	Upper	
188	100		
94	8.0	7.0	10.6
80	8.0	7.4	11.0





#70

Phenanthrene

Concen: 86.55 ng

RT: 11.45 min Scan# 802

Delta R.T. -0.01 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Tot Ion:178 Resp: 1398906

Ion Ratio Lower Upper

178 100

176 20.9 16.8 25.2

179 16.4 13.1 19.7

Instrument :

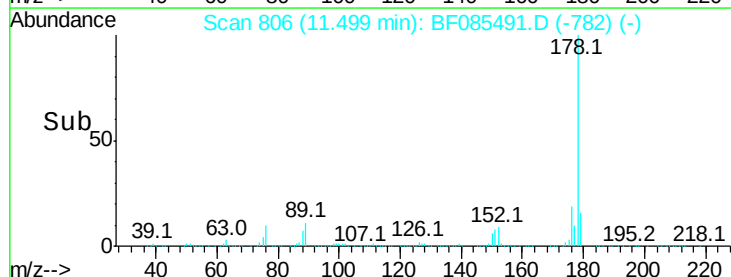
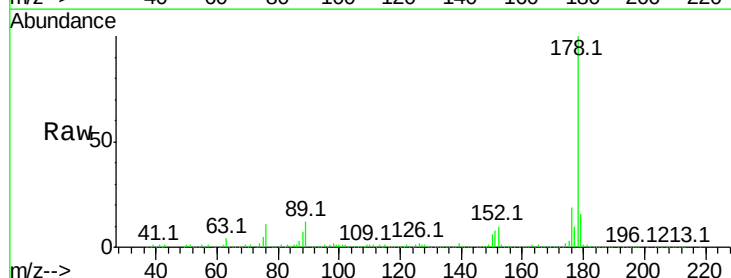
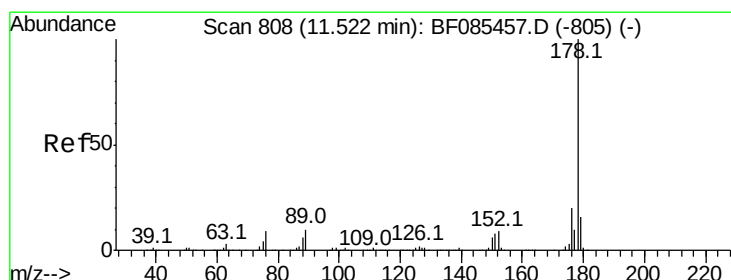
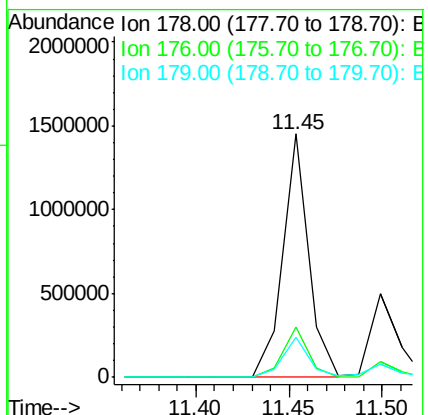
BNA_F

ClientSampleId :

AOU2-SB09(6-8)

Manual Integrations
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#71

Anthracene

Concen: 29.11 ng

RT: 11.50 min Scan# 806

Delta R.T. -0.02 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

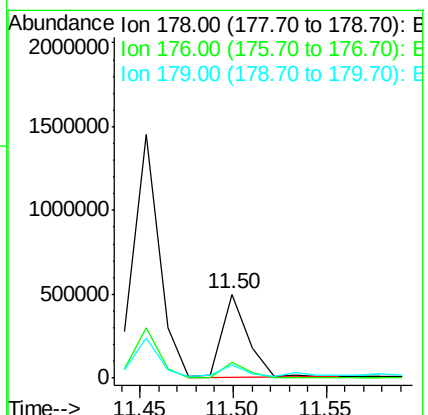
Tgt Ion:178 Resp: 479283

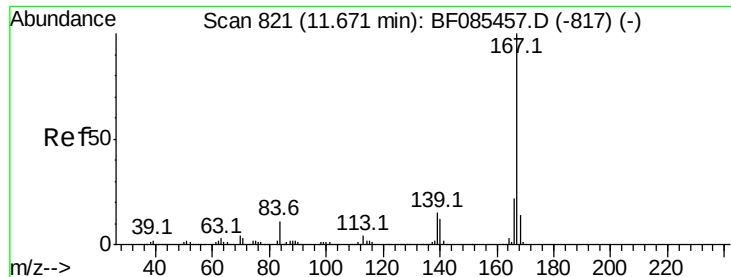
Ion Ratio Lower Upper

178 100

176 19.2 15.9 23.9

179 16.5 12.5 18.7





#72

Carbazole

Concen: 2.94 ng

RT: 11.66 min Scan# 820

Delta R.T. -0.01 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Instrument :

BNA_F

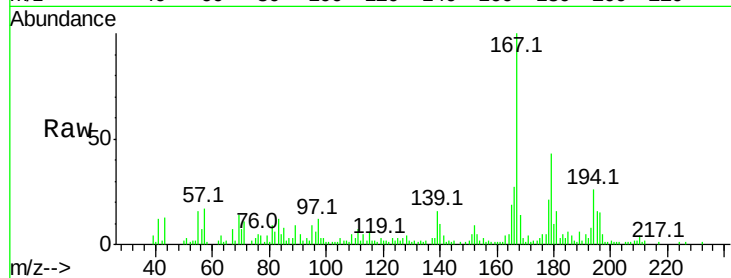
ClientSampleId :

AOU2-SB09(6-8)

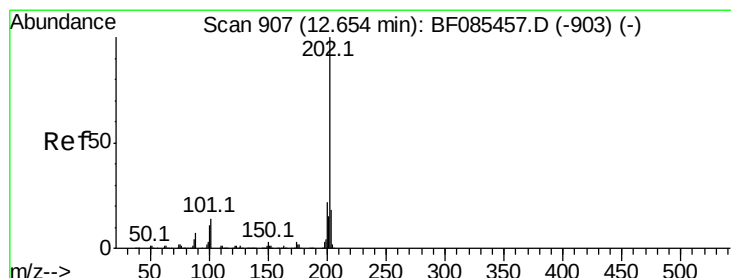
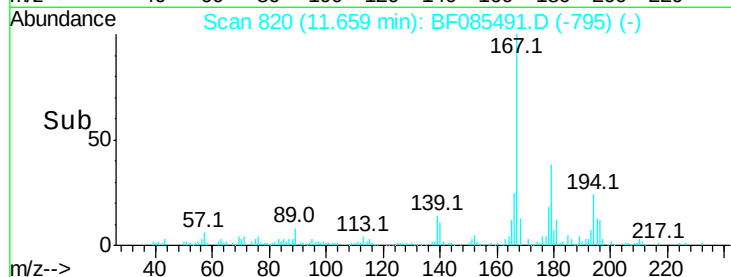
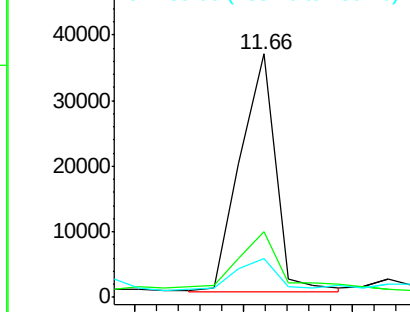
Tot Ion:	167	Resp:	40887
Ion Ratio	Lower	Upper	
167	100		
166	27.0	18.2	27.2
139	15.9	11.4	17.0

Manual Integrations
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Abundance Ion 167.00 (166.70 to 167.70): E
Ion 166.00 (165.70 to 166.70): E
Ion 139.00 (138.70 to 139.70): E



#74

Fluoranthene

Concen: 39.23 ng

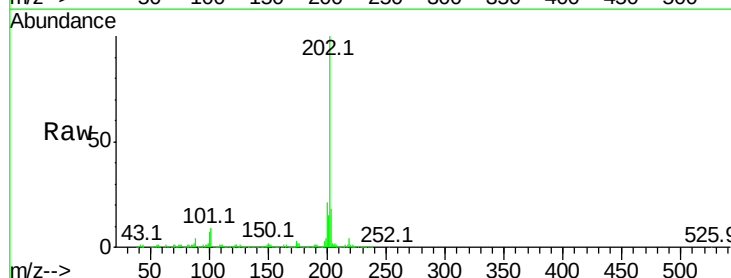
RT: 12.64 min Scan# 906

Delta R.T. -0.01 min

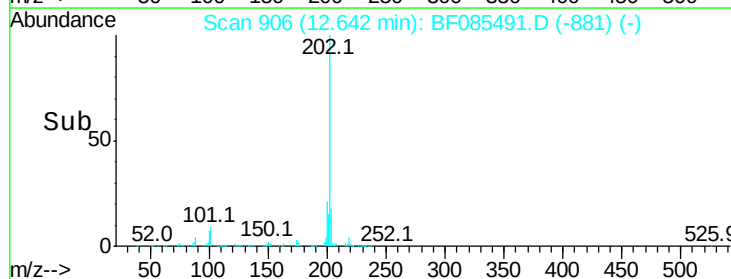
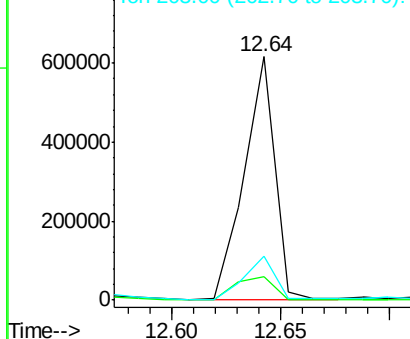
Lab File: BF085491.D

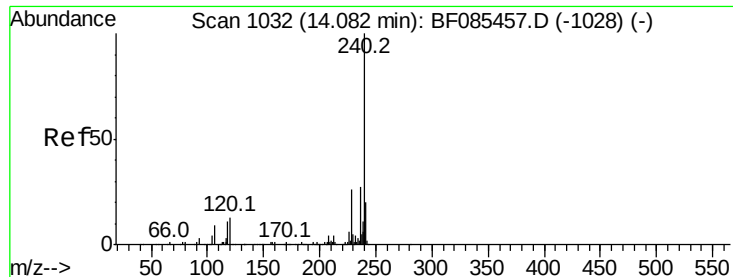
Acq: 17 Mar 2016 5:16

Tgt Ion:	202	Resp:	596006
Ion Ratio	Lower	Upper	
202	100		
101	9.4	0.0	31.8
203	18.0	0.0	38.4



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





#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.06 min Scan# 1030

Delta R.T. -0.02 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Instrument :

BNA_F

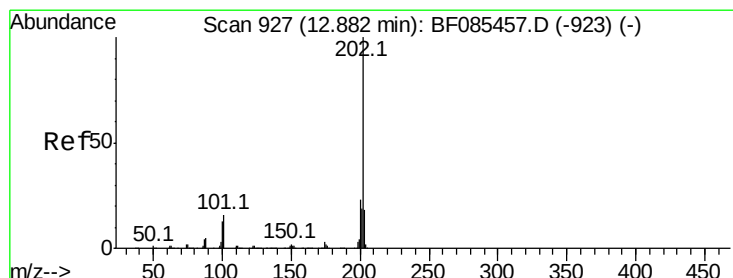
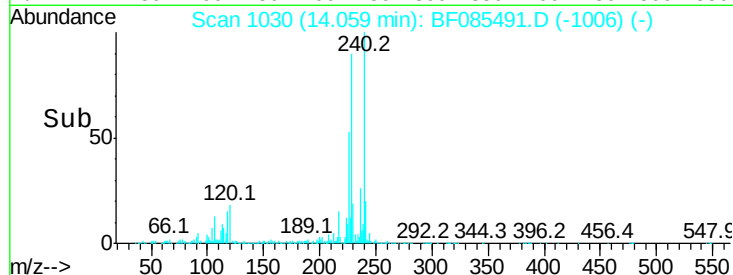
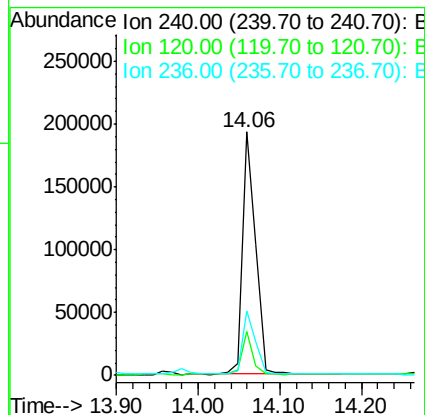
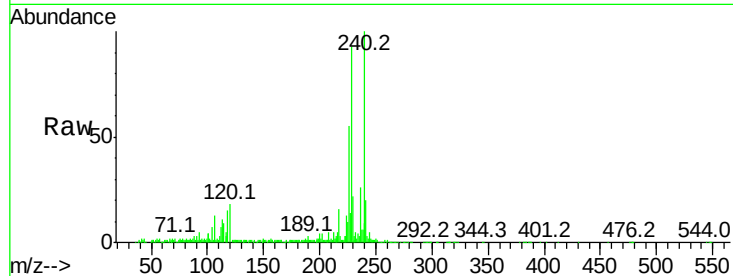
ClientSampled :

AOU2-SB09(6-8)

Tot Ion	Ratio	Lower	Upper
240	100		
120	18.2	5.3	7.9#
236	26.3	20.7	31.1

Manual Integrations
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#77

Pyrene

Concen: 56.75 ng

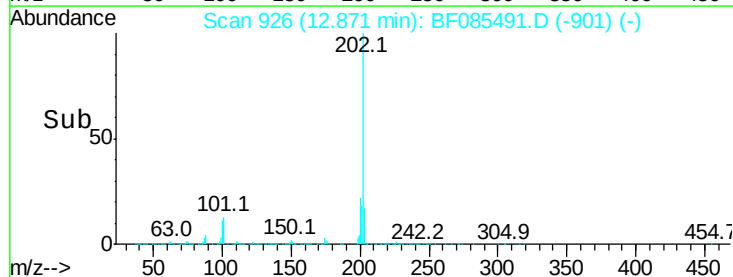
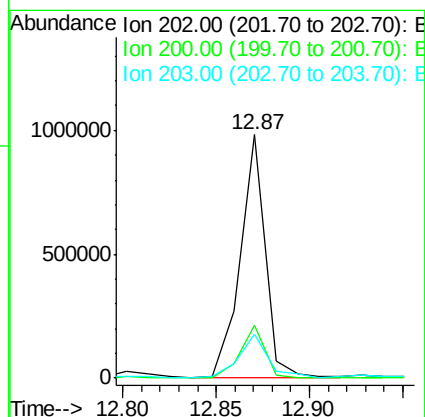
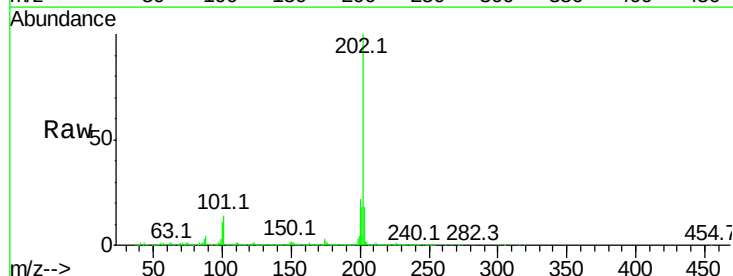
RT: 12.87 min Scan# 926

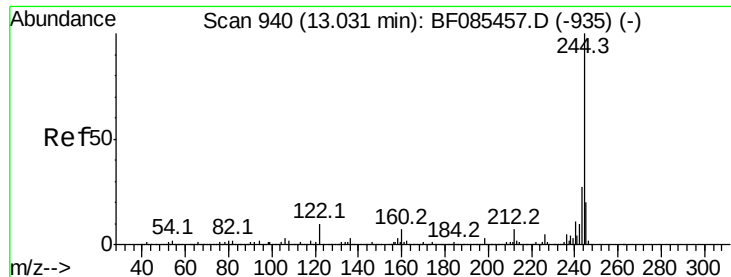
Delta R.T. -0.01 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Tgt Ion	Ratio	Lower	Upper
202	100		
200	22.0	18.2	27.4
203	17.9	14.7	22.1





#78

Terphenyl-d14

Concen: 1.84 ng

RT: 13.01 min Scan# 938

Delta R.T. -0.02 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Instrument :

BNA_F

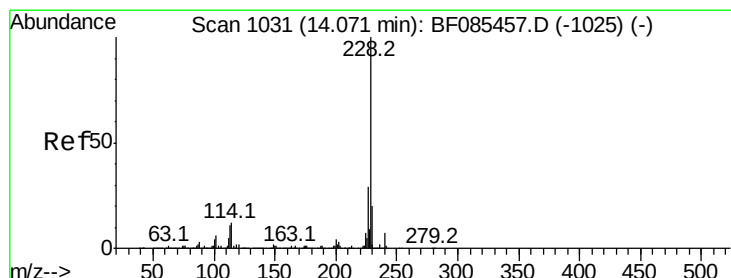
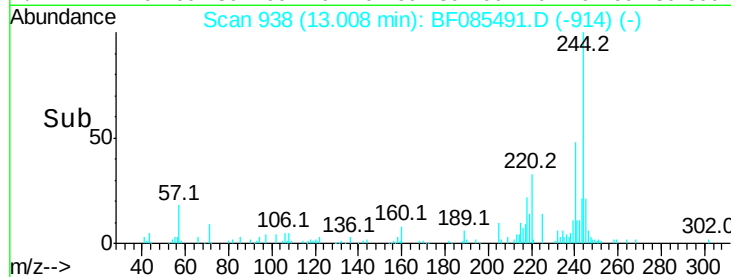
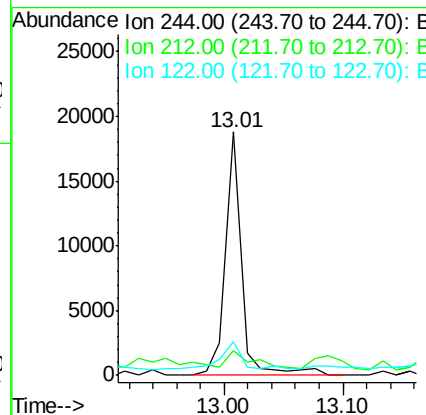
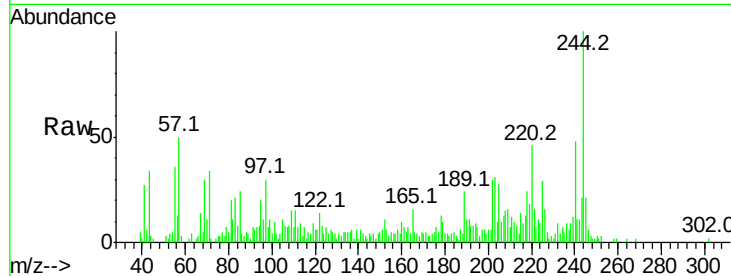
ClientSampleId :

AOU2-SB09(6-8)

Tot Ion:	244	Resp:	17559
Ion Ratio	Lower	Upper	
244	100		
212	10.2	6.4	9.6#
122	13.7	11.4	17.2

Manual Integrations
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#80

Benzo(a)anthracene

Concen: 27.49 ng

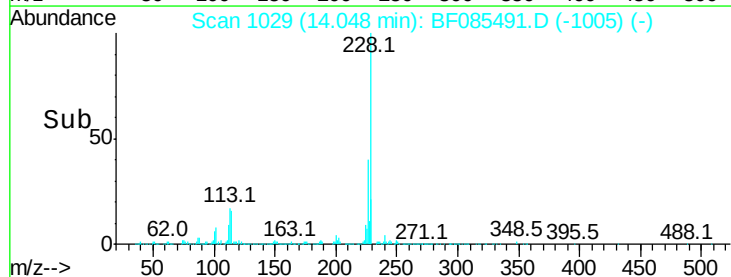
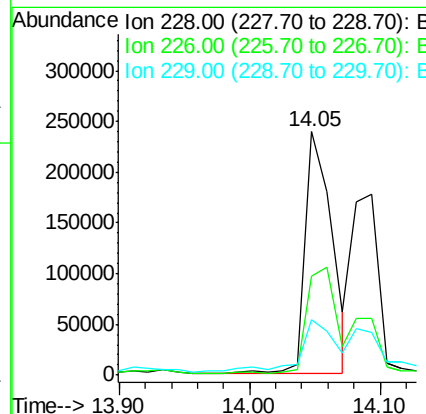
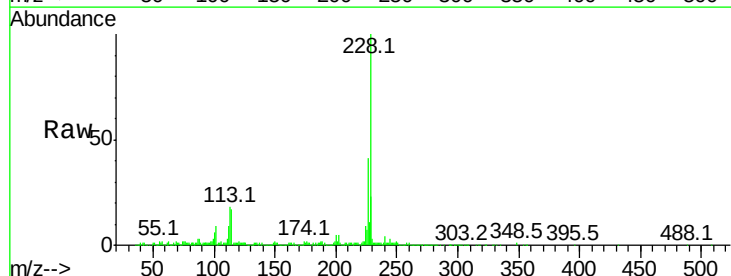
RT: 14.05 min Scan# 1029

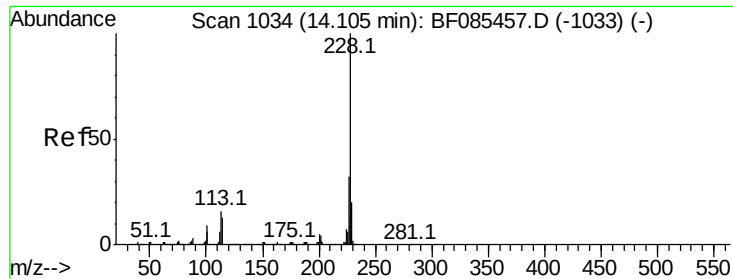
Delta R.T. -0.02 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Tgt Ion:	228	Resp:	340317
Ion Ratio	Lower	Upper	
228	100		
226	40.5	22.8	34.2#
229	23.0	16.6	24.8





#82

Chrysene

Concen: 23.15 ng/mL

RT: 14.09 min Scan# 1033

Delta R.T. -0.01 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Instrument :

BNA_F

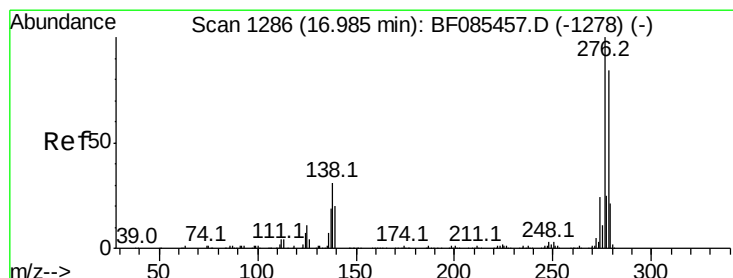
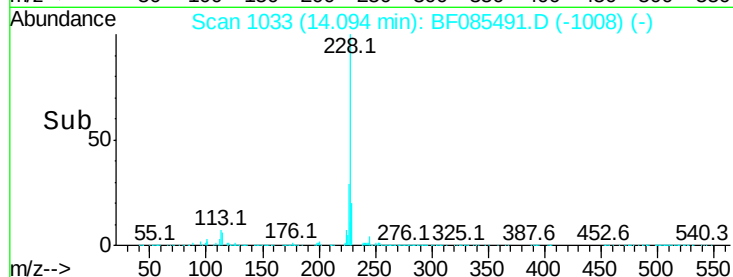
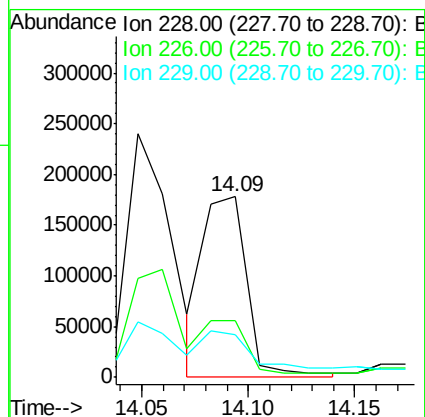
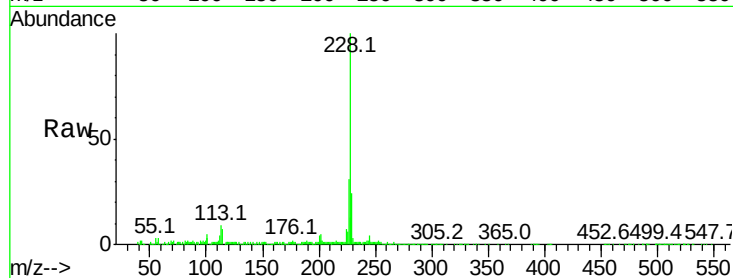
ClientSampleId :

AOU2-SB09(6-8)

Tot Ion:	228	Resp:	257807
Ion Ratio	Lower	Upper	
228	100		
226	31.3	25.2	37.8
229	23.5	16.0	24.0

Manual Integrations
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#85

Indeno(1,2,3-cd)pyrene

Concen: 10.92 ng/mL

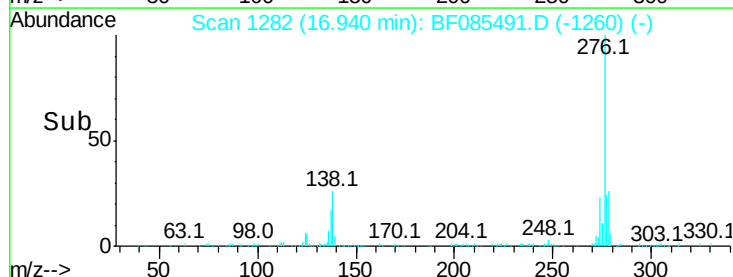
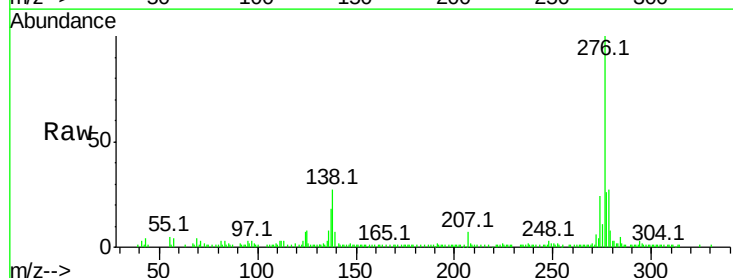
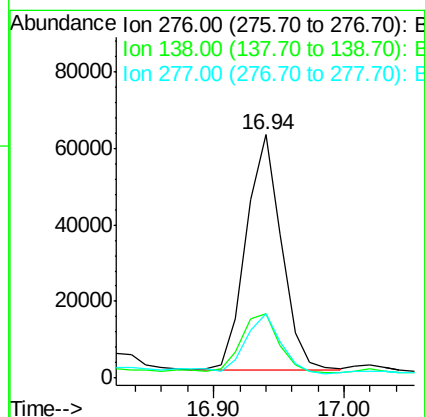
RT: 16.94 min Scan# 1282

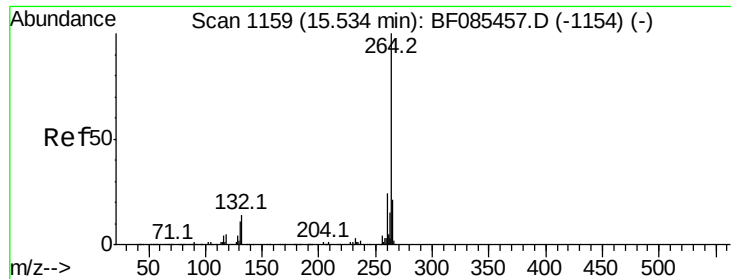
Delta R.T. -0.05 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Tgt Ion:	276	Resp:	115312
Ion Ratio	Lower	Upper	
276	100		
138	27.1	26.4	39.6
277	25.2	20.2	30.2





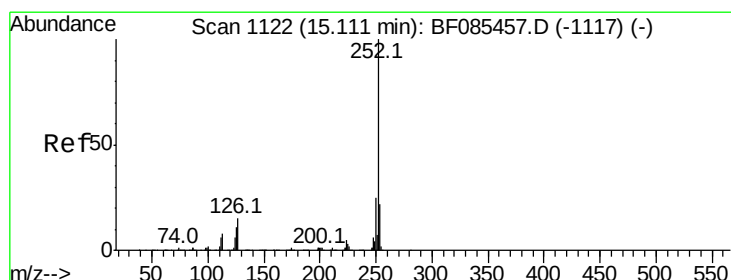
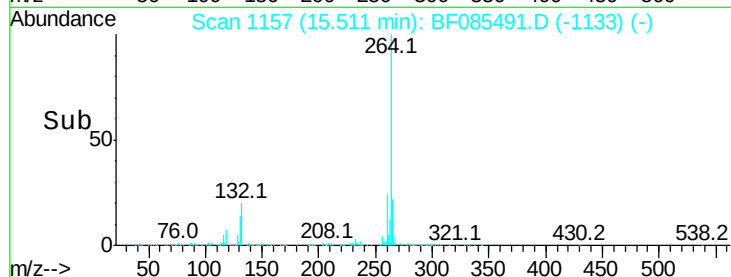
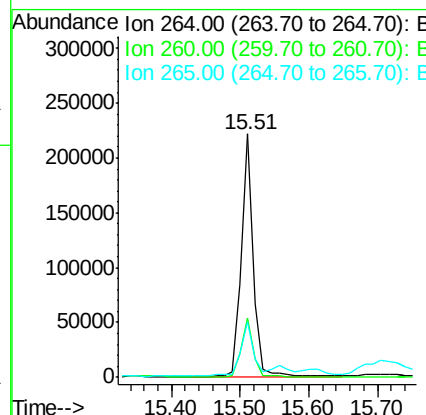
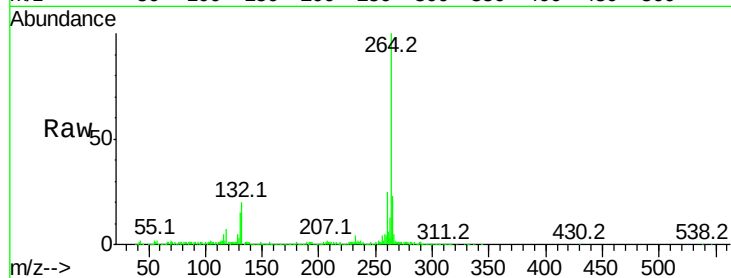
#86
Pervlene-d12
Concen: 20.00 ng
RT: 15.51 min Scan# 1157
Delta R.T. -0.02 min
Lab File: BF085491.D
Acq: 17 Mar 2016 5:16

Instrument :
BNA_F
ClientSampleId :
AOU2-SB09(6-8)

Tot Ion	Ratio	Resp	Lower	Upper
264	100			
260	24.5	19.2	28.8	
265	22.7	17.3	25.9	

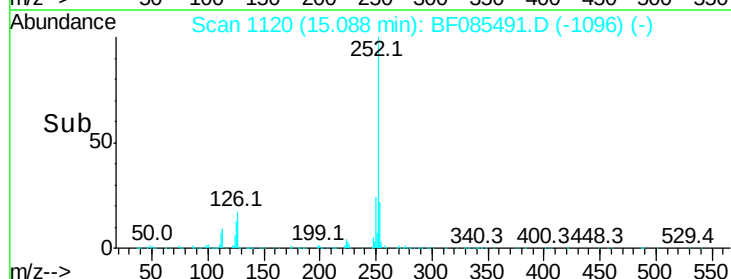
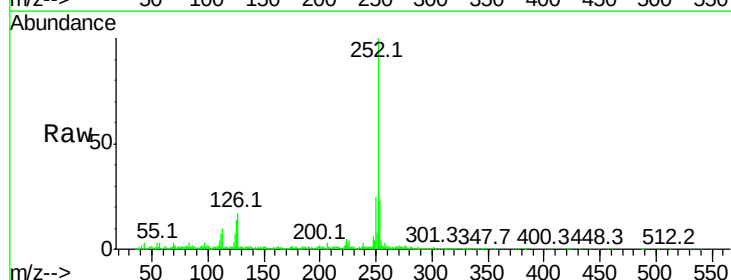
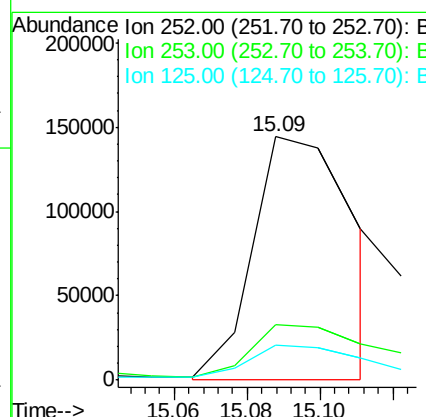
Manual Integrations
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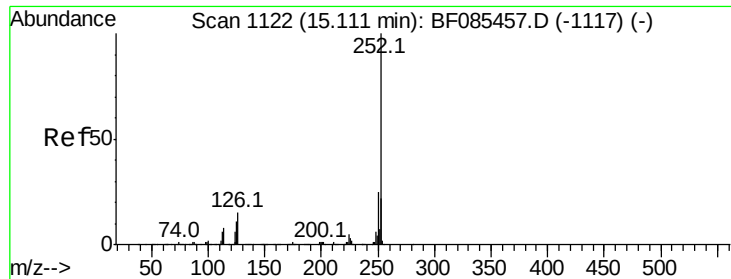
Sohil
3/17/2016 5:20:44 PM



#87
Benzo(b)fluoranthene
Concen: 15.29 ng m
RT: 15.09 min Scan# 1120
Delta R.T. -0.02 min
Lab File: BF085491.D
Acq: 17 Mar 2016 5:16

Tgt Ion	Ratio	Resp	Lower	Upper
252	100			
253	23.0	17.8	26.6	
125	14.4	11.3	16.9	





#88

Benzo(k)fluoranthene

Concen: 3.87 ng

RT: 15.11 min Scan# 1122

Delta R.T. -0.03 min

Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Instrument :

BNA_F

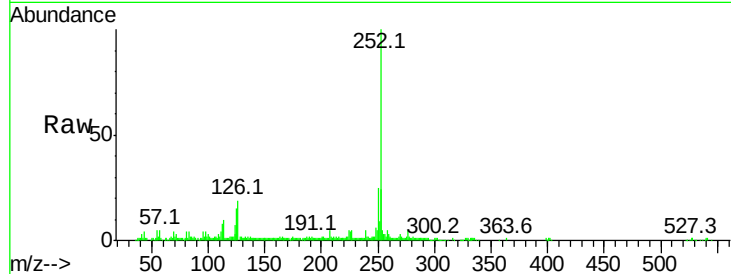
ClientSampleId :

AOU2-SB09(6-8)

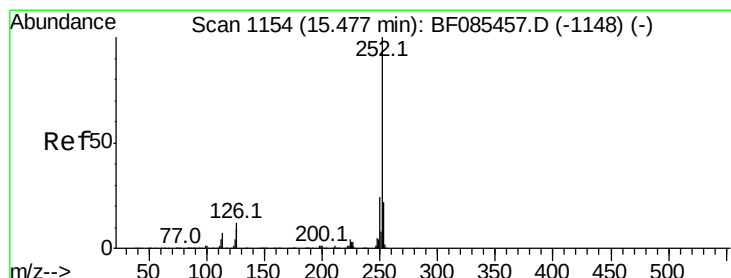
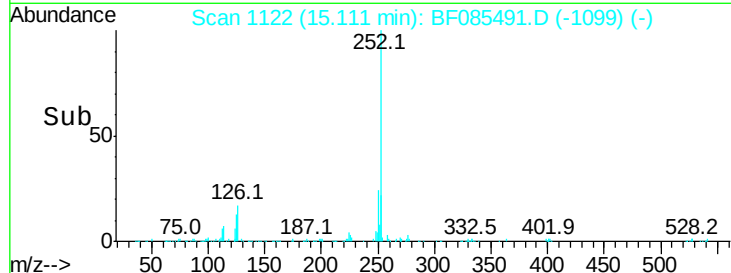
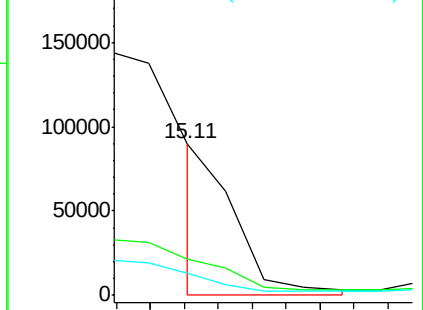
Tot Ion:	252	Resp:	54164
Ion Ratio	Lower	Upper	
252	100		
253	24.2	17.8	26.6
125	14.7	10.4	15.6

Manual Integrations
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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(a)pyrene

Concen: 19.53 ng

RT: 15.45 min Scan# 1152

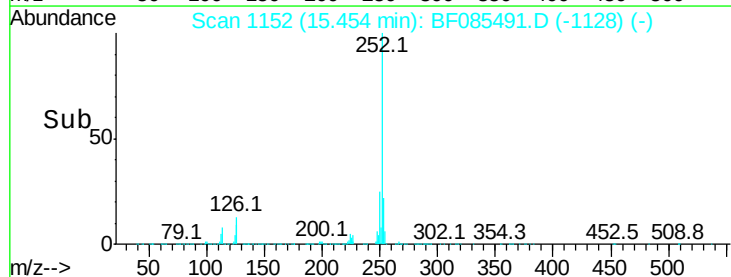
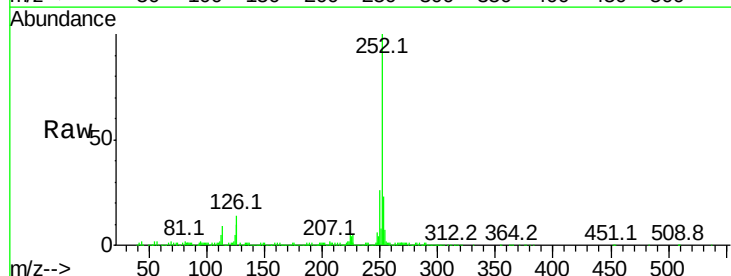
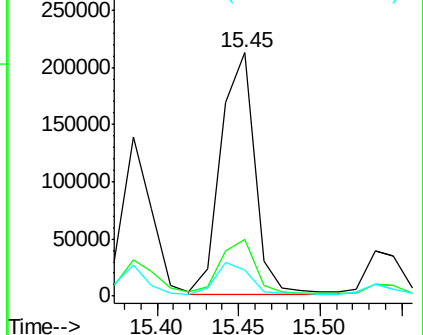
Delta R.T. -0.02 min

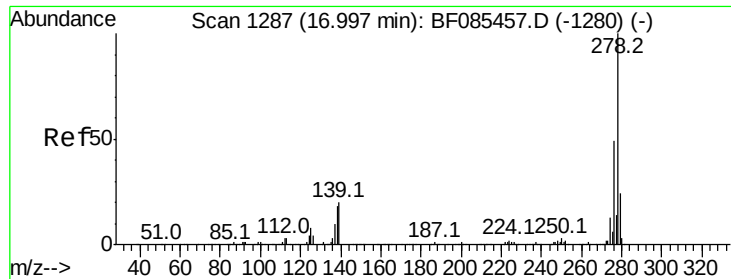
Lab File: BF085491.D

Acq: 17 Mar 2016 5:16

Tgt Ion:	252	Resp:	301553
Ion Ratio	Lower	Upper	
252	100		
253	23.4	17.4	26.0
125	10.5	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





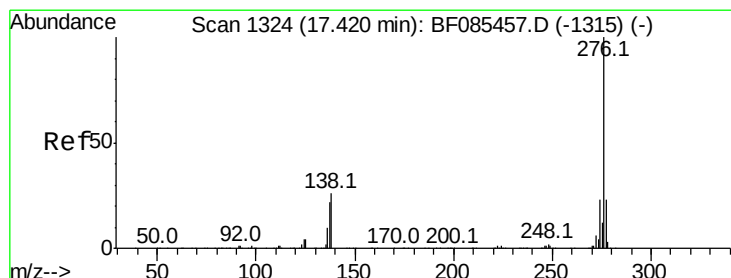
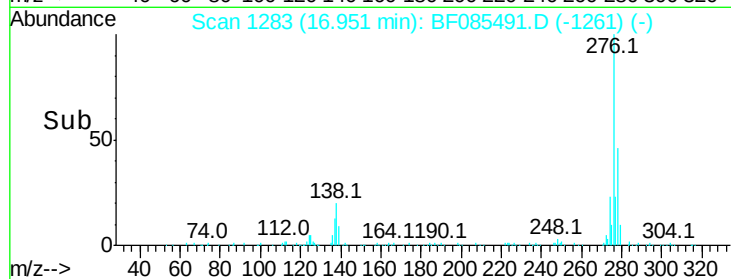
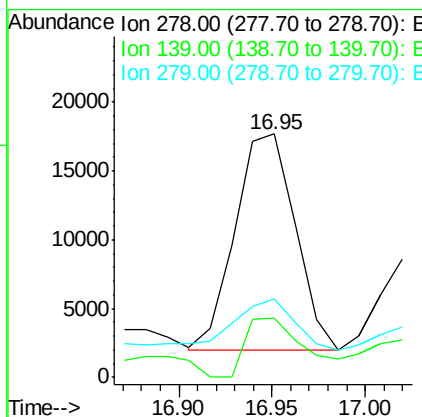
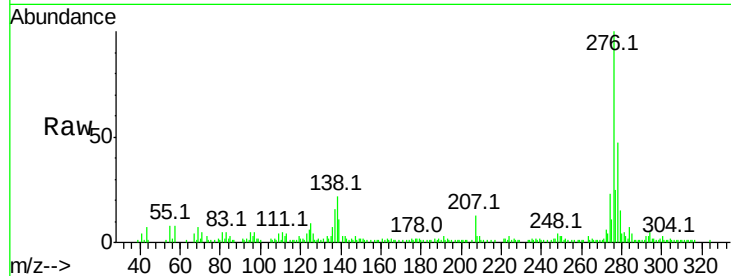
#90
Dibenzo(a,h)anthracene
Concen: 2.34 ng
RT: 16.95 min Scan# 1283
Delta R.T. -0.05 min
Lab File: BF085491.D
Acq: 17 Mar 2016 5:16

Instrument :
BNA_F
ClientSampleId :
AOU2-SB09(6-8)

Tot Ion	Ratio	Lower	Upper
278	100		
139	24.4	17.3	25.9
279	32.3	19.2	28.8

Manual Integrations
APPROVED

Sohil
3/17/2016 5:20:44 PM



#91
Benzo(g,h,i)perylene
Concen: 9.76 ng
RT: 17.37 min Scan# 1320
Delta R.T. -0.05 min
Lab File: BF085491.D
Acq: 17 Mar 2016 5:16

Tgt Ion	Ratio	Lower	Upper
276	100		
277	25.0	19.0	28.4
138	25.4	22.5	33.7

