

Data Path : Z:\HPCHEM1\BNA F\DATA\BF052716\
 Data File : BF087465.D
 Acq On : 28 May 2016 3:46
 Operator : UM/SJ
 Sample : H3290-01
 Misc :
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 GM-SP-(0-4)

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Quant Time: May 28 05:28:04 2016
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF052316.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Wed May 25 16:26:52 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.48	152	114699	20.00	ng	-0.03
21) Naphthalene-d8	9.52	136	451341	20.00	ng	-0.03
38) Acenaphthene-d10	12.34	164	199432	20.00	ng	-0.05
63) Phenanthrene-d10	14.74	188	329381	20.00	ng	-0.03
75) Chrysene-d12	18.45	240	230703	20.00	ng	-0.03
86) Perylene-d12	20.13	264	214528	20.00	ng	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	5.38	112	715474	109.61	ng	-0.03
7) Phenol-d6	7.04	99	984693	111.64	ng	-0.03
23) Nitrobenzene-d5	8.40	82	644366	71.95	ng	-0.05
41) 2,4,6-Tribromophenol	13.63	330	176321	92.00	ng	-0.05
44) 2-Fluorobiphenyl	11.29	172	983293	69.51	ng	-0.05
78) Terphenyl-d14	17.10	244	635009	58.52	ng	-0.03
Target Compounds						Qvalue
31) Naphthalene	9.55	128	90805	4.02	ng	99
37) 2-Methylnaphthalene	10.68	142	66969	4.74	ng	# 96
48) Acenaphthylene	12.12	152	170453	8.38	ng	99
49) Dimethylphthalate	11.99	163	140134	8.77	ng	99
54) Dibenzofuran	12.70	168	42494	2.51	ng	95
70) Phenanthrene	14.79	178	331671	18.18	ng	99
71) Anthracene	14.88	178	168182	9.12	ng	98
72) Carbazole	15.18	167	51583	3.28	ng	# 97
74) Fluoranthene	16.55	202	861158	47.07	ng	95
77) Pyrene	16.86	202	778458	46.88	ng	99
79) Butylbenzylphthalate	17.76	149	36595	4.97	ng	# 65
80) Benzo(a)anthracene	18.43	228	424044	32.31	ng	95
82) Chrysene	18.48	228	400192	30.73	ng	97
85) Indeno(1,2,3-cd)pyrene	21.36	276	211450	20.25	ng	# 89
87) Benzo(b)fluoranthene	19.73	252	564858m	41.34	ng	
88) Benzo(k)fluoranthene	19.75	252	214906m	18.27	ng	
89) Benzo(a)pyrene	20.08	252	316439	26.77	ng	96
90) Dibenzo(a,h)anthracene	21.37	278	47056	4.67	ng	# 92
91) Benzo(a,h,i)perylene	21.71	276	183803	18.48	ng	# 92

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

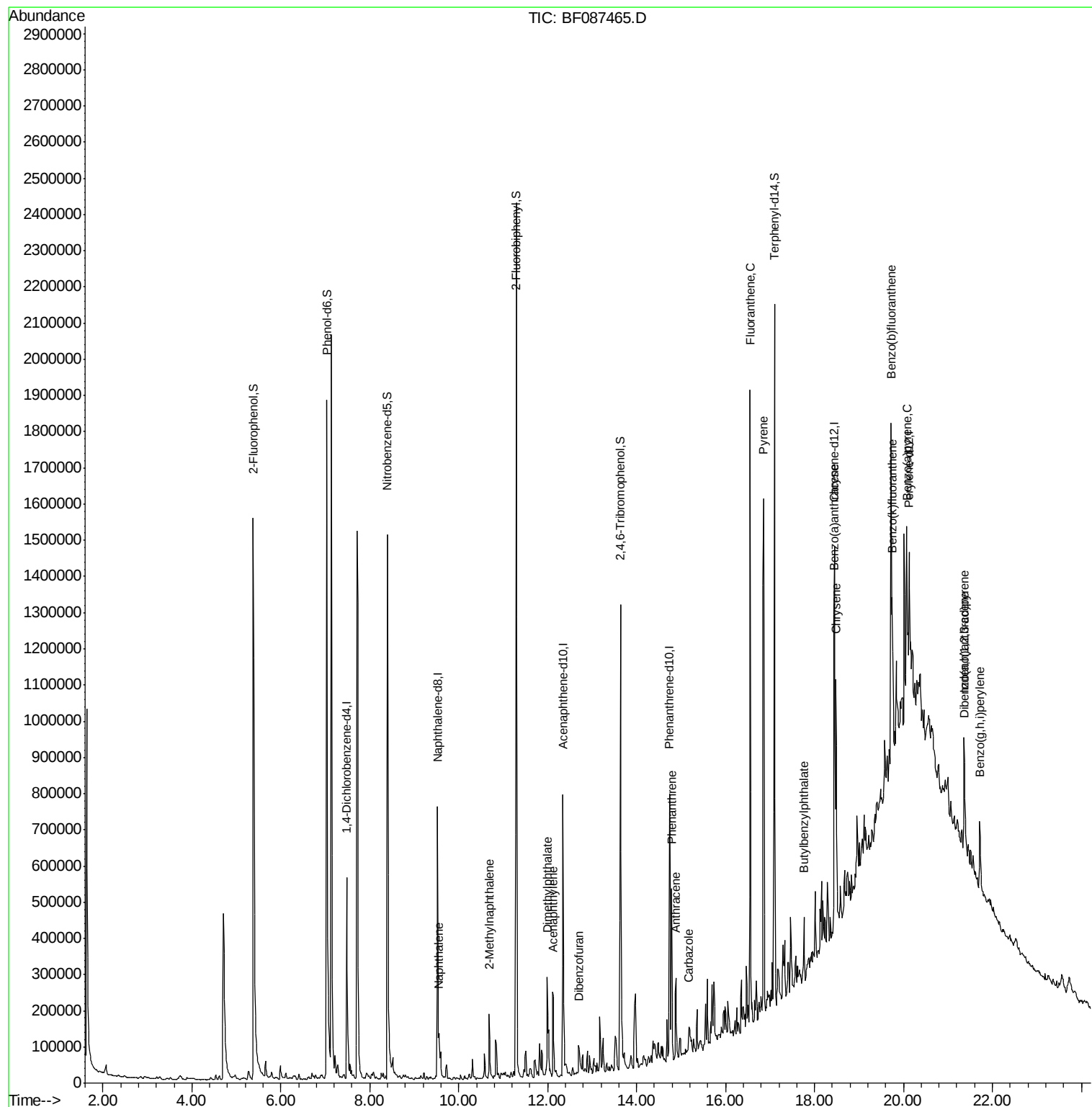
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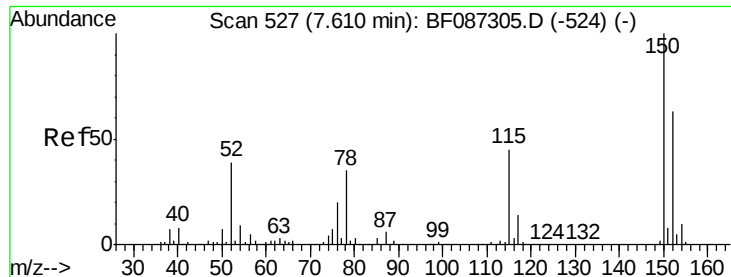
Instrument :
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QLast Update : Wed May 25 16:26:52 2016
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 7.48 min Scan# 516

Delta R.T. -0.03 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Instrument :

BNA_F

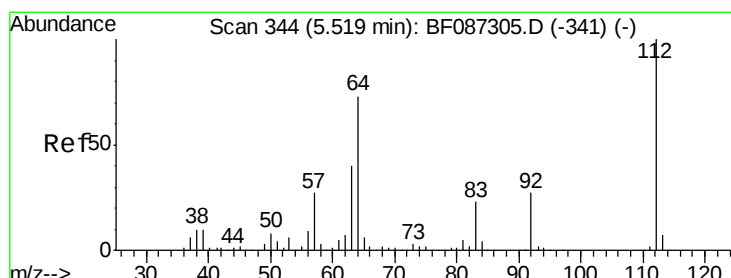
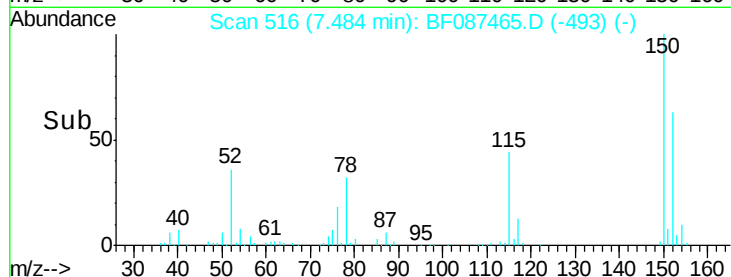
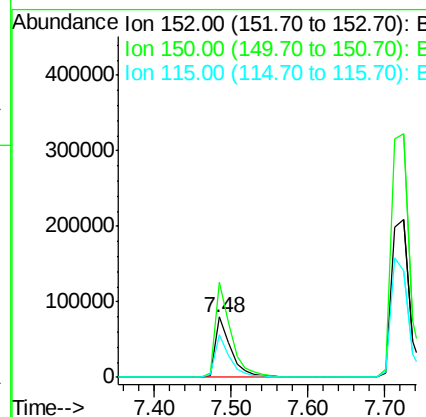
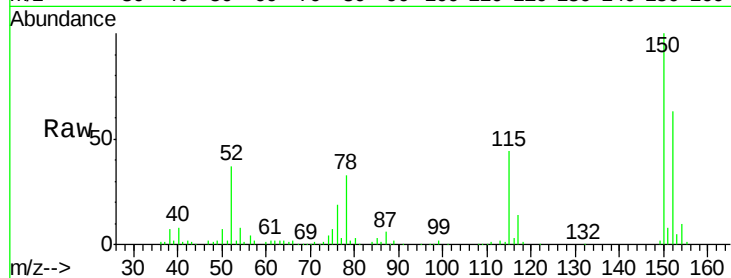
ClientSampleId :

GM-SP-(0-4)

Tot Ion:	152	Resp:	114699
Ion Ratio	Lower	Upper	
152	100		
150	158.4	125.8	188.6
115	70.2	51.5	77.3

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#5

2-Fluorophenol

Concen: 109.61 ng

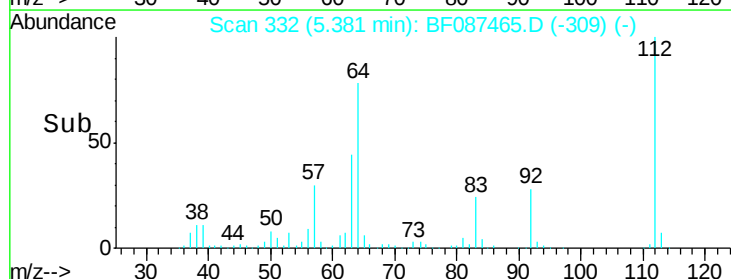
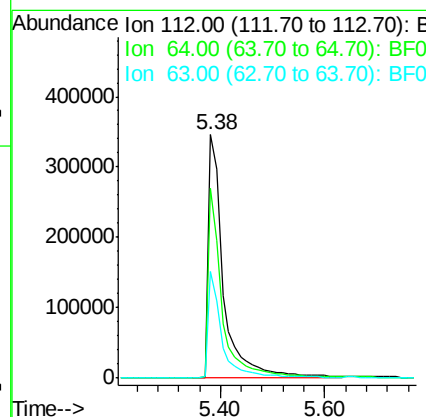
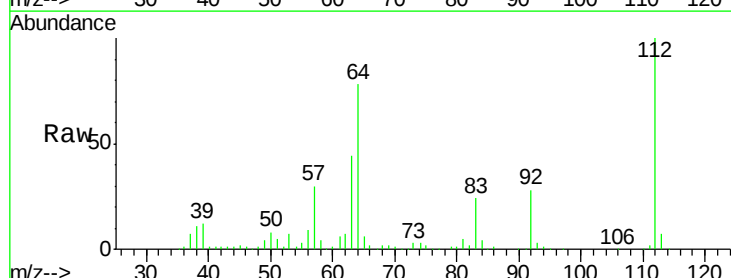
RT: 5.38 min Scan# 332

Delta R.T. -0.03 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Tgt Ion:	112	Resp:	715474
Ion Ratio	Lower	Upper	
112	100		
64	78.0	52.1	78.1
63	44.0	25.7	38.5#





#7

Phenol-d6

Concen: 111.64 ng

RT: 7.04 min Scan# 477

Delta R.T. -0.03 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Instrument :

BNA_F

ClientSampleId :

GM-SP-(0-4)

Tot Ion: 99 Resp: 984693

Ion Ratio Lower Upper

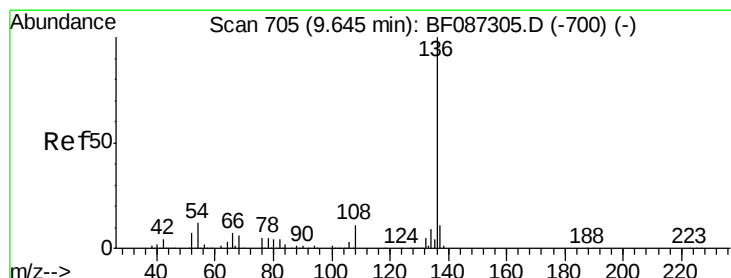
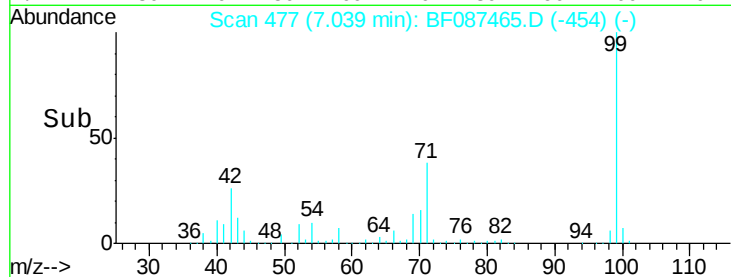
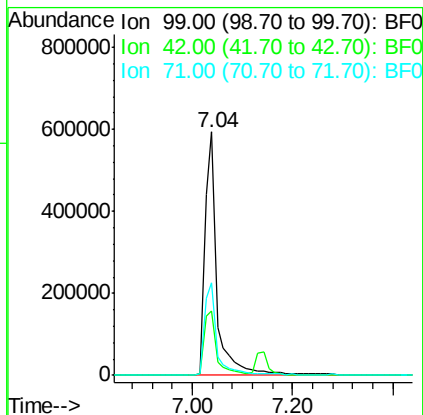
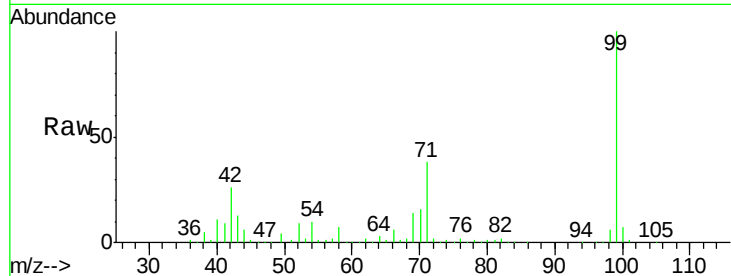
99 100

42 26.2 13.6 20.4#

71 38.2 24.6 36.8#

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#21

Naphthalene-d8

Concen: 20.00 ng

RT: 9.52 min Scan# 694

Delta R.T. -0.03 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Tgt Ion: 136 Resp: 451341

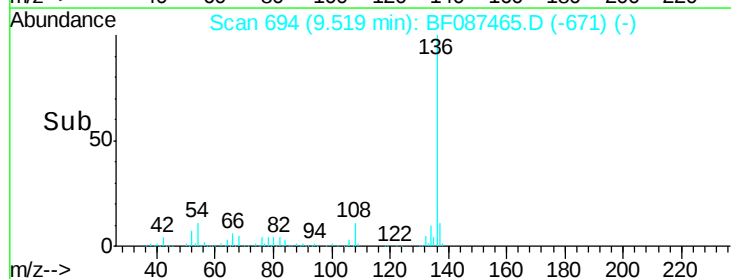
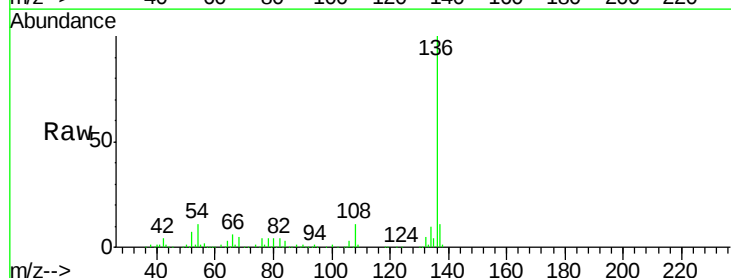
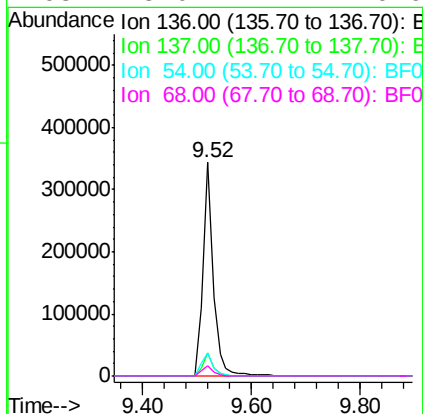
Ion Ratio Lower Upper

136 100

137 10.8 8.8 13.2

54 10.9 5.0 7.4#

68 5.0 4.4 6.6





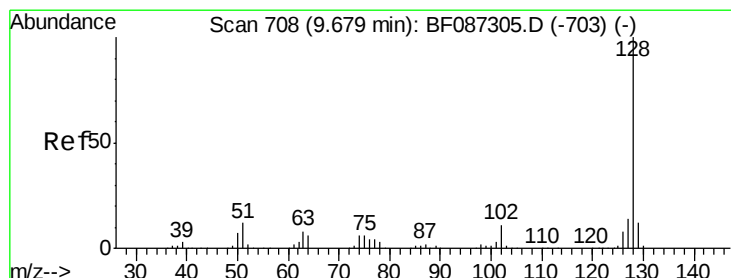
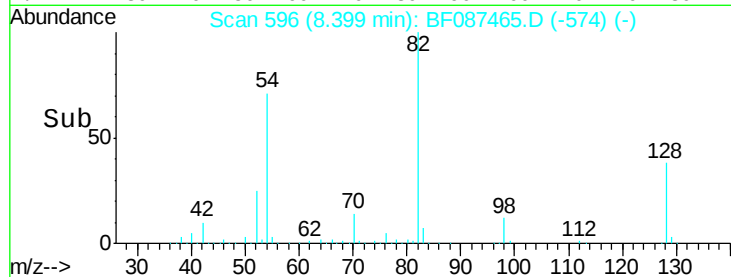
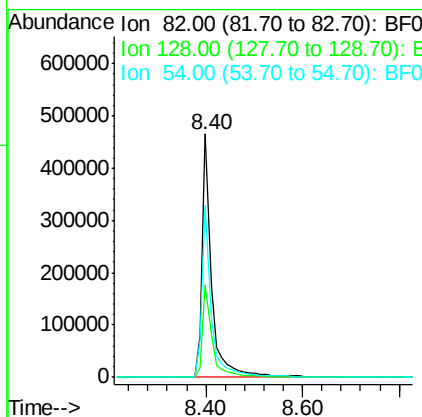
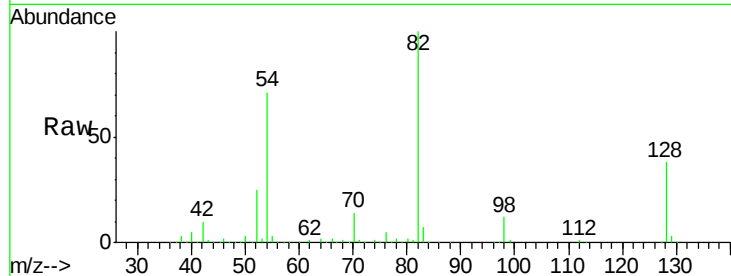
#23
 Nitrobenzene-d5
 Concen: 71.95 ng
 RT: 8.40 min Scan# 596
 Delta R.T. -0.05 min
 Lab File: BF087465.D
 Acq: 28 May 2016 3:46

Instrument :
 BNA_F
 ClientSampleId :
 GM-SP-(0-4)

Tot Ion	Ratio	Lower	Upper
82	100		
128	37.8	40.6	61.0#
54	70.6	38.1	57.1#

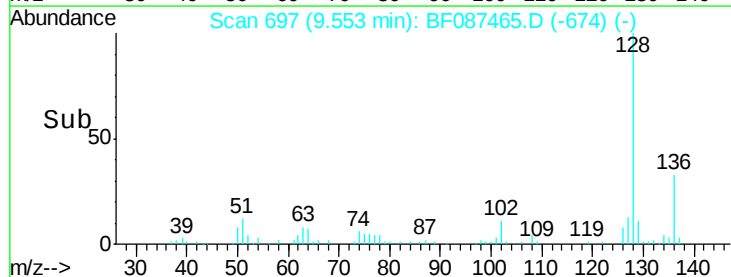
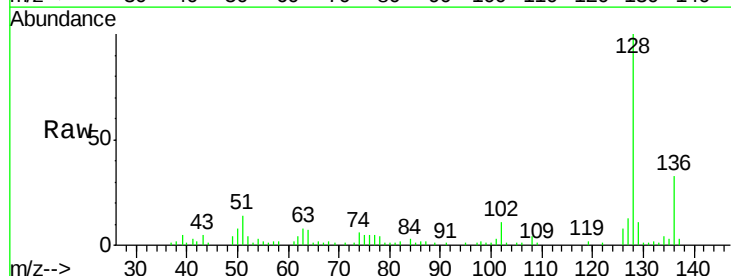
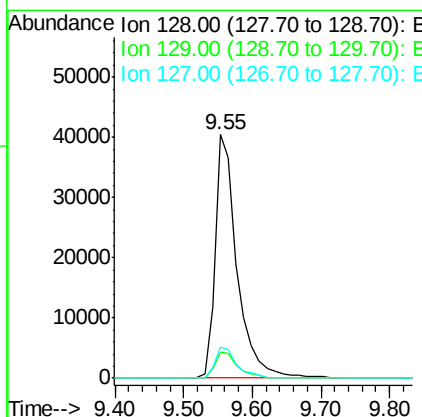
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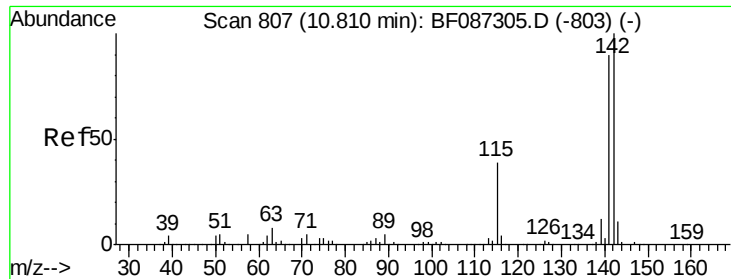
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#31
 Naphthalene
 Concen: 4.02 ng
 RT: 9.55 min Scan# 697
 Delta R.T. -0.03 min
 Lab File: BF087465.D
 Acq: 28 May 2016 3:46

Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.7	8.6	13.0
127	12.5	10.8	16.2





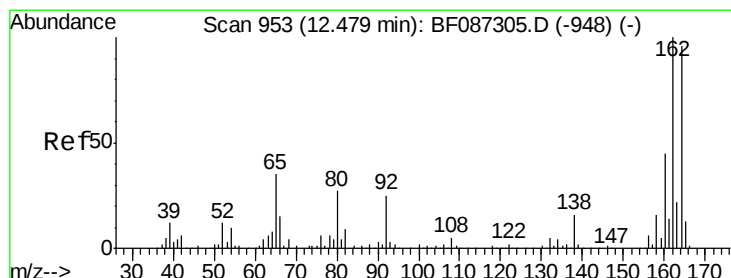
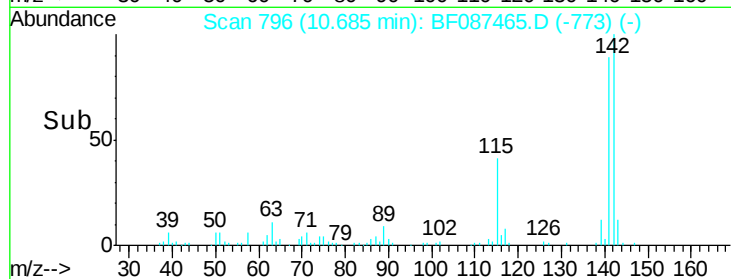
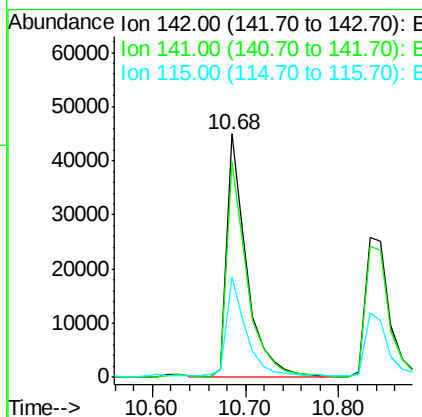
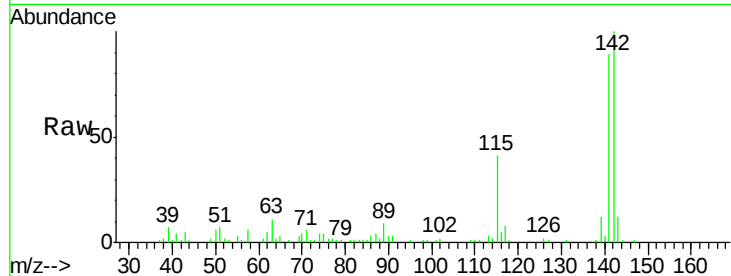
#37
2-Methylnaphthalene
Concen: 4.74 ng
RT: 10.68 min Scan# 796
Delta R.T. -0.03 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Instrument :
BNA_F
ClientSampleId :
GM-SP-(0-4)

Tot Ion	Ratio	Lower	Upper
142	100		
141	88.7	71.0	106.6
115	41.1	26.6	39.8

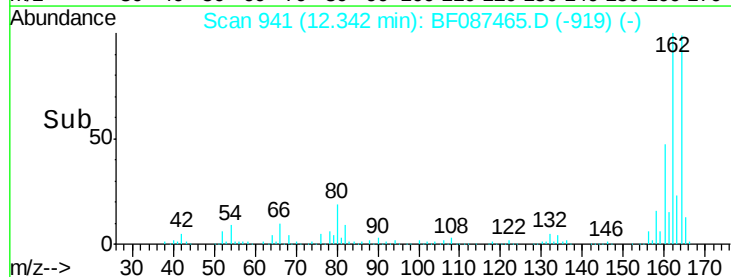
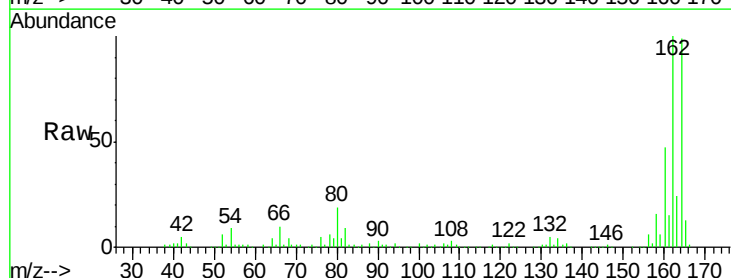
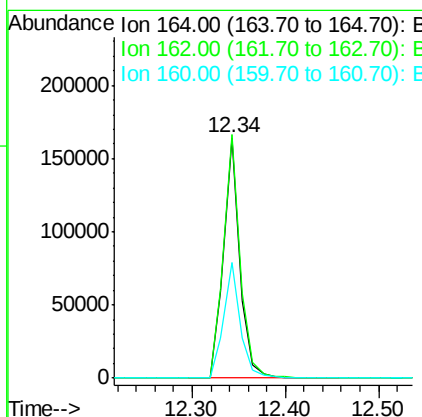
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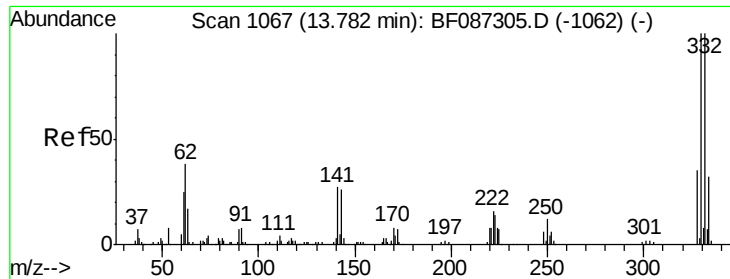
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#38
Acenaphthene-d10
Concen: 20.00 ng
RT: 12.34 min Scan# 941
Delta R.T. -0.05 min
Lab File: BF087465.D
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Tgt Ion	Ratio	Lower	Upper
164	100		
162	101.3	82.8	124.2
160	47.8	36.9	55.3





#41

2,4,6-Tribromophenol

Concen: 92.00 ng

RT: 13.63 min Scan# 1054

Delta R.T. -0.05 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Instrument :

BNA_F

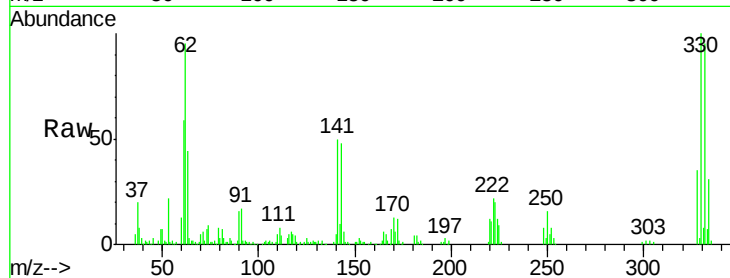
ClientSampleId :

GM-SP-(0-4)

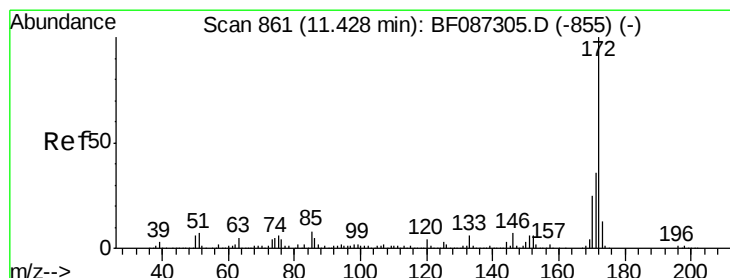
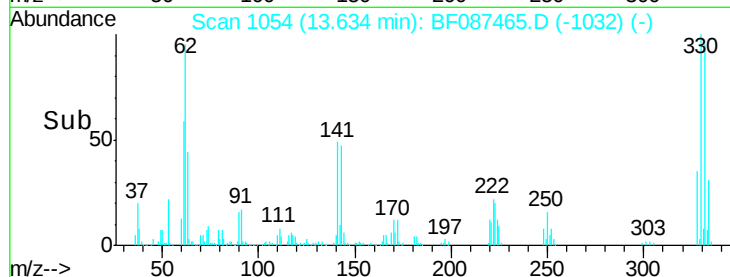
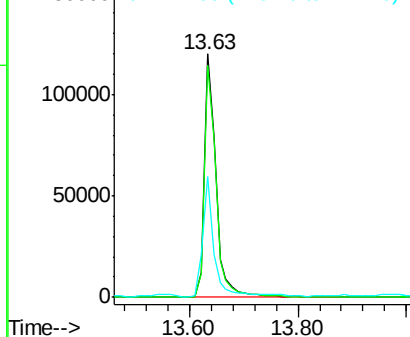
Tot Ion:	330	Resp:	176321
Ion Ratio	Lower	Upper	
330	100		
332	96.4	79.0	118.4
141	48.5	31.2	46.8#

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



#44

2-Fluorobiphenyl

Concen: 69.51 ng

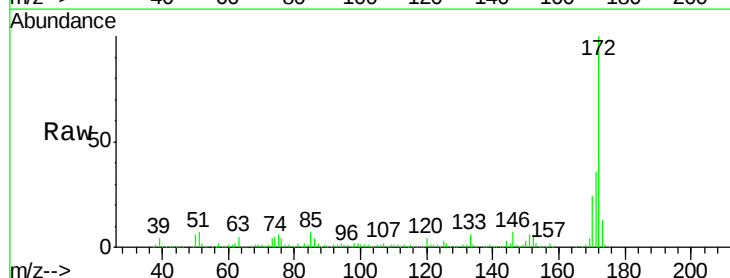
RT: 11.29 min Scan# 849

Delta R.T. -0.05 min

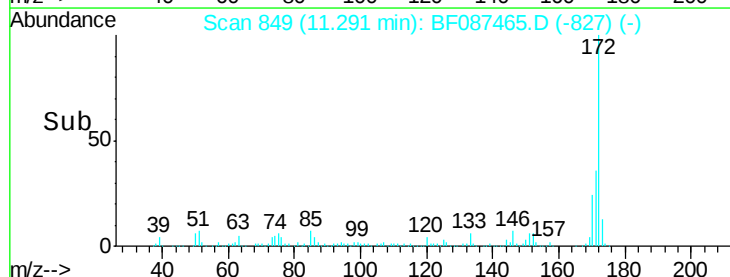
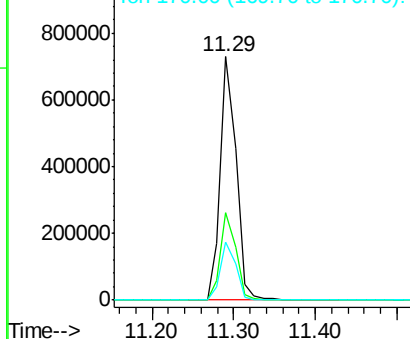
Lab File: BF087465.D

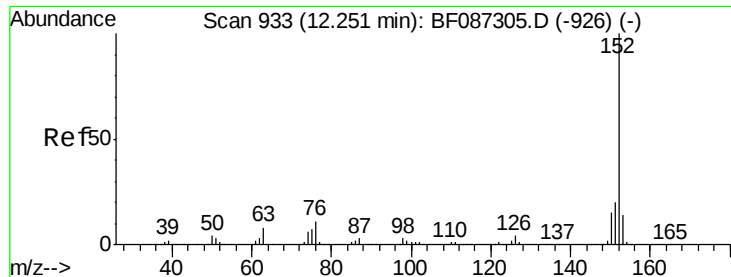
Acq: 28 May 2016 3:46

Tgt Ion:	172	Resp:	983293
Ion Ratio	Lower	Upper	
172	100		
171	35.8	29.0	43.6
170	23.9	19.8	29.8



Abundance Ion 172.00 (171.70 to 172.70): E
Ion 171.00 (170.70 to 171.70): E
Ion 170.00 (169.70 to 170.70): E





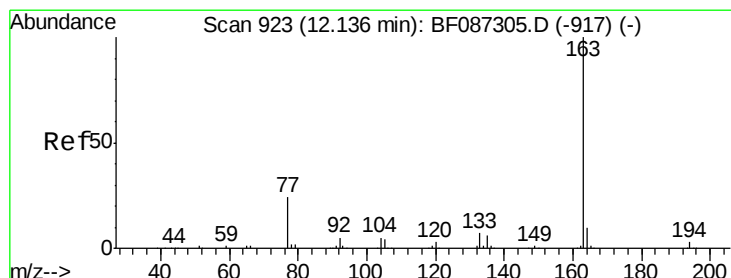
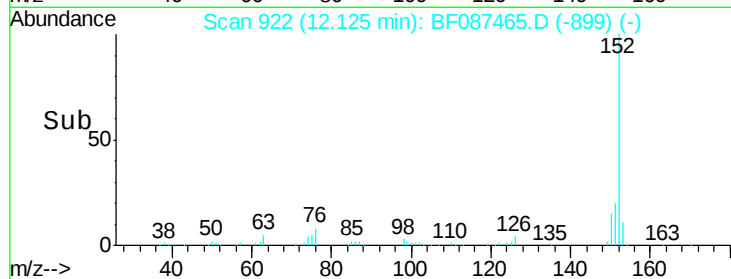
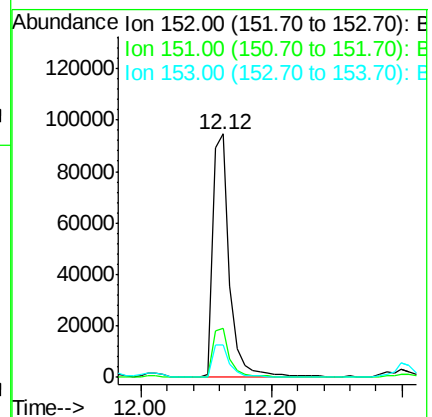
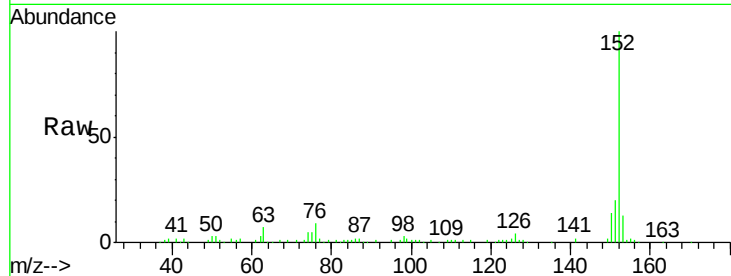
#48
Acenaphthylene
Concen: 8.38 ng
RT: 12.12 min Scan# 922
Delta R.T. -0.03 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Instrument :
BNA_F
ClientSampleId :
GM-SP-(0-4)

Tot Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.8	25.2
153	13.4	10.9	16.3

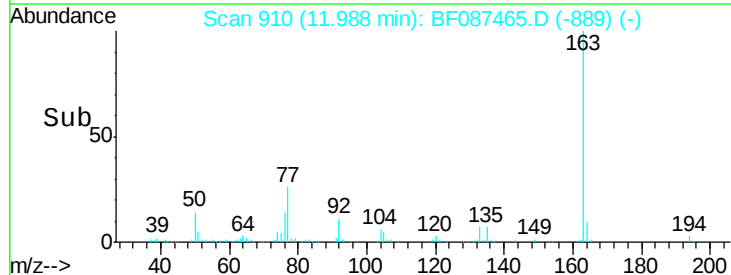
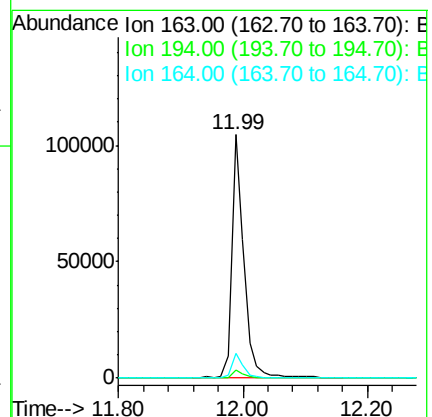
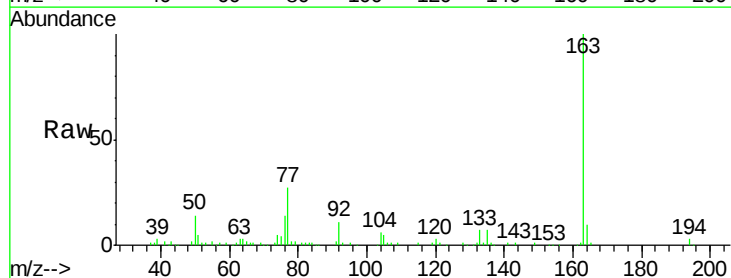
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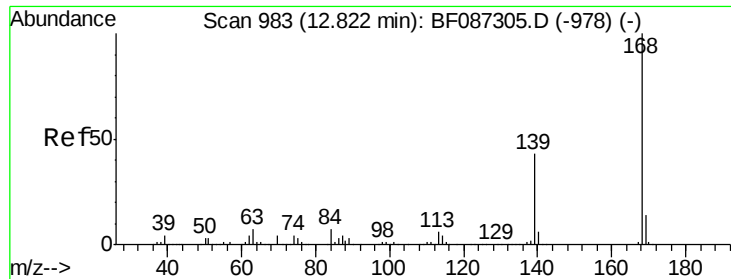
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#49
Dimethylphthalate
Concen: 8.77 ng
RT: 11.99 min Scan# 910
Delta R.T. -0.06 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Tgt Ion	Ratio	Lower	Upper
163	100		
194	3.3	2.6	4.0
164	10.0	8.2	12.4





#54

Dibenzenofuran

Concen: 2.51 ng

RT: 12.70 min Scan# 972

Delta R.T. -0.02 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Instrument :

BNA_F

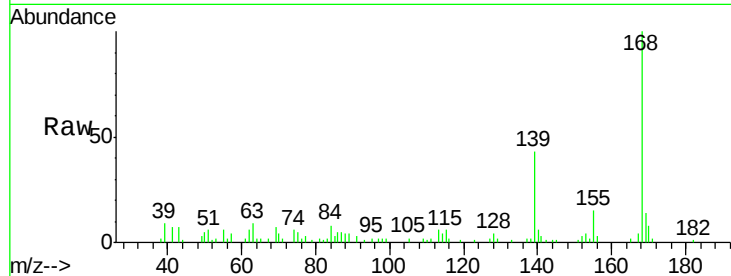
ClientSampleId :

GM-SP-(0-4)

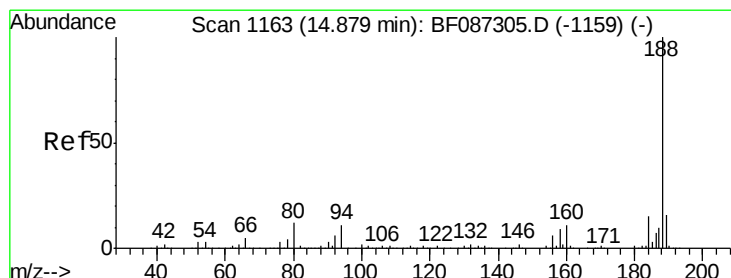
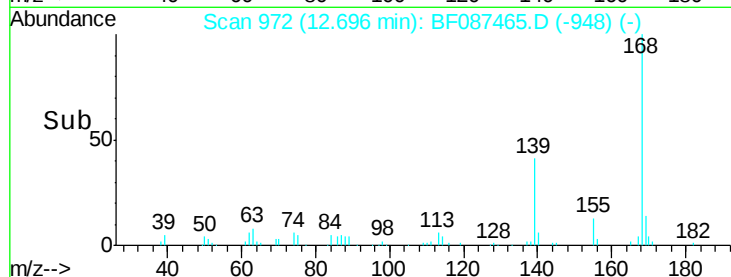
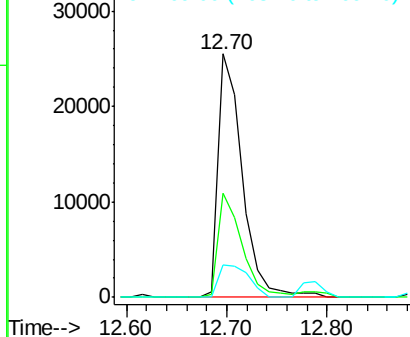
Tot Ion:	168	Resp:	42494
Ion	Ratio	Lower	Upper
168	100		
139	42.9	31.4	47.0
169	13.5	10.7	16.1

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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



#63

Phenanthrene-d10

Concen: 20.00 ng

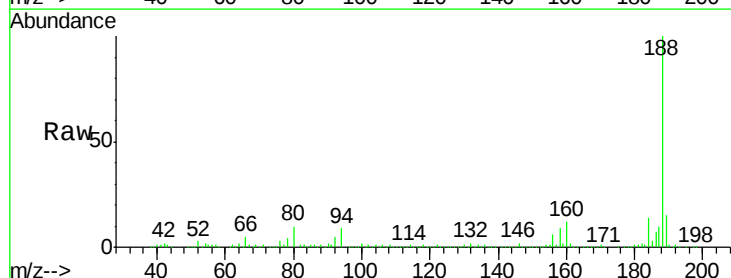
RT: 14.74 min Scan# 1151

Delta R.T. -0.03 min

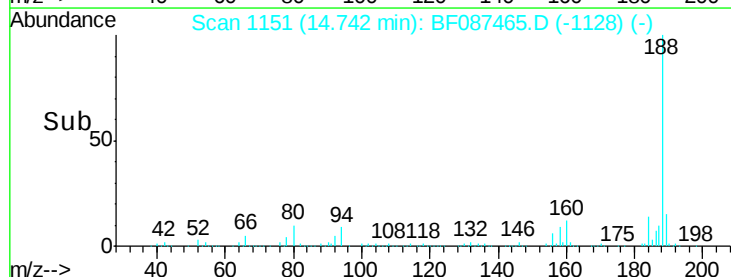
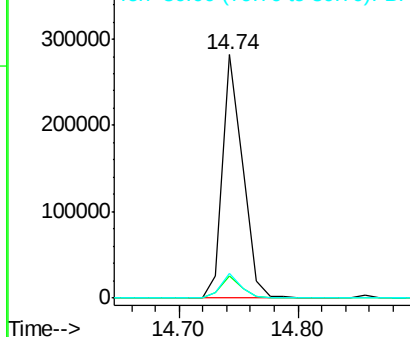
Lab File: BF087465.D

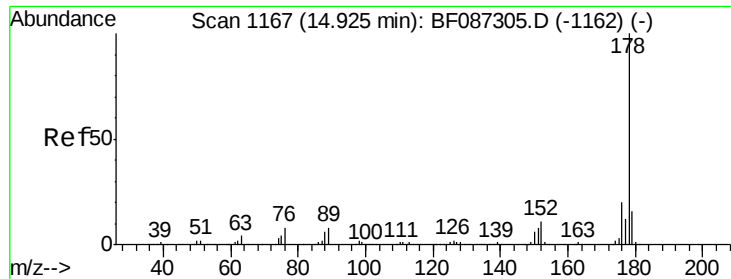
Acq: 28 May 2016 3:46

Tgt Ion:	188	Resp:	329381
Ion	Ratio	Lower	Upper
188	100		
94	9.3	6.8	10.2
80	10.3	7.1	10.7



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





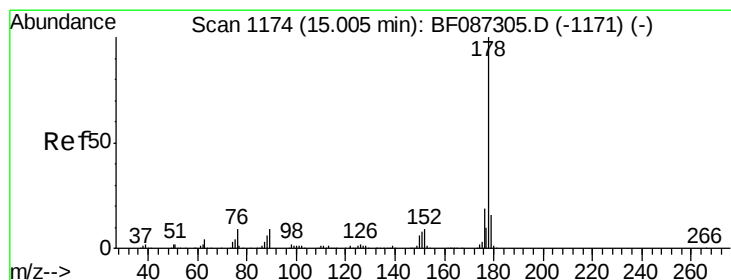
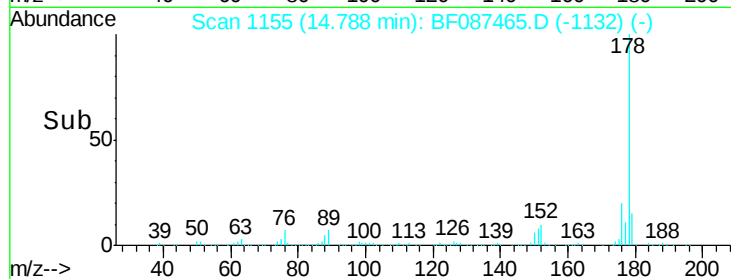
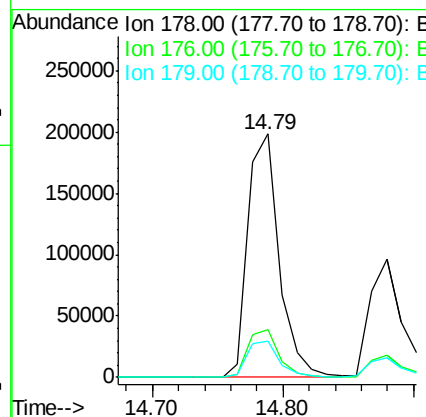
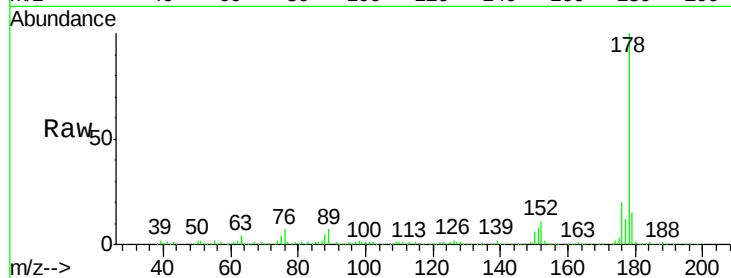
#70
Phenanthrene
Concen: 18.18 ng
RT: 14.79 min Scan# 1155
Delta R.T. -0.03 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Instrument :
BNA_F
ClientSampled :
GM-SP-(0-4)

Tot Ion	Ratio	Lower	Upper
178	100		
176	19.7	16.0	24.0
179	15.1	12.6	18.8

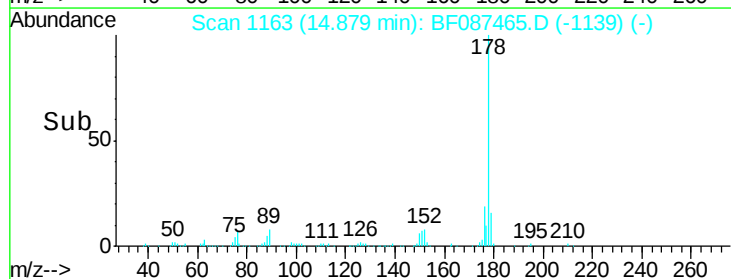
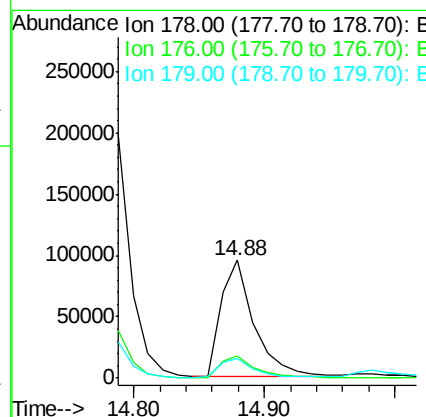
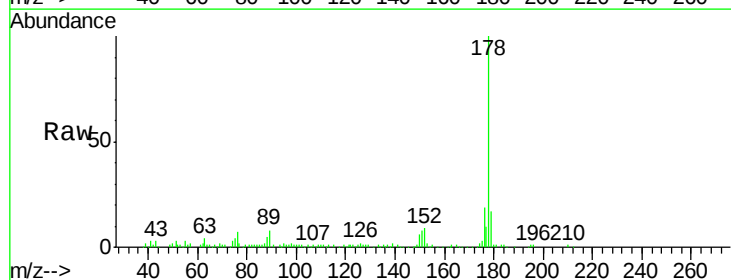
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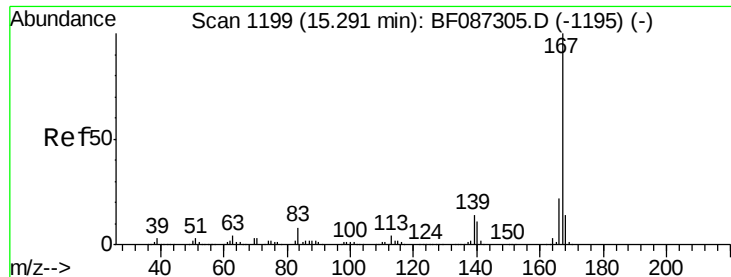
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#71
Anthracene
Concen: 9.12 ng
RT: 14.88 min Scan# 1163
Delta R.T. -0.02 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.6	15.6	23.4
179	16.8	12.7	19.1





#72

Carbazole

Concen: 3.28 ng

RT: 15.18 min Scan# 1189

Delta R.T. -0.01 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Instrument :

BNA_F

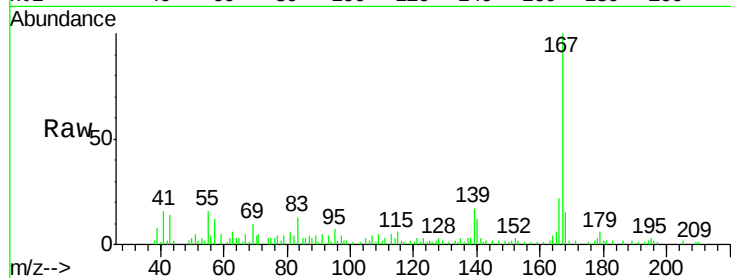
ClientSampleId :

GM-SP-(0-4)

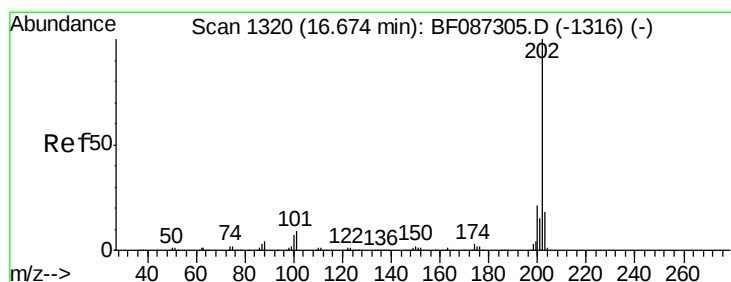
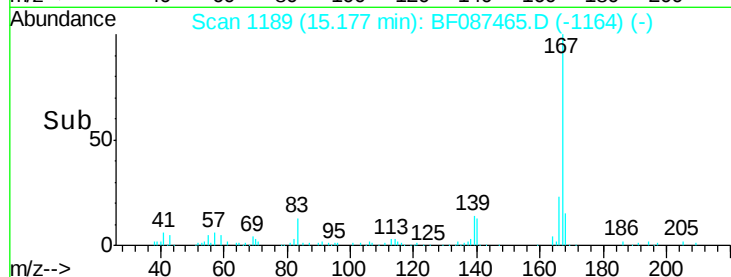
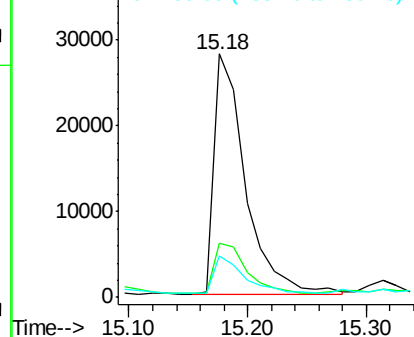
Tot Ion:	167	Resp:	51583
Ion Ratio	Lower	Upper	
167	100		
166	22.3	17.7	26.5
139	16.8	10.8	16.2

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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: 47.07 ng

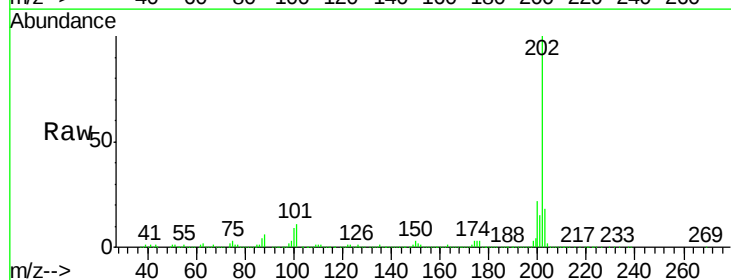
RT: 16.55 min Scan# 1309

Delta R.T. -0.03 min

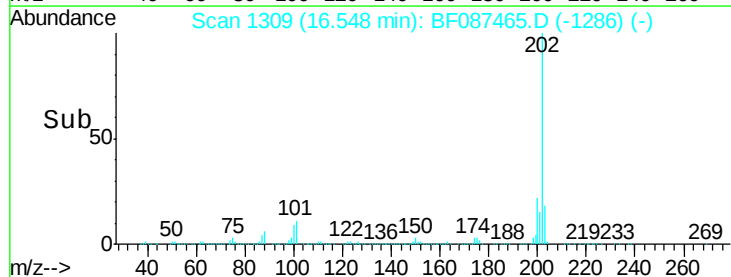
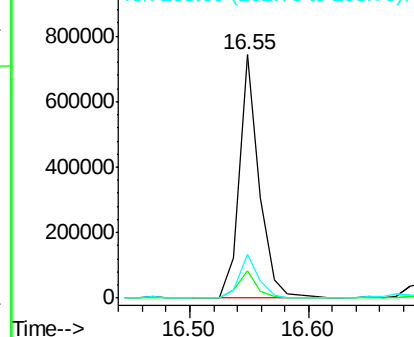
Lab File: BF087465.D

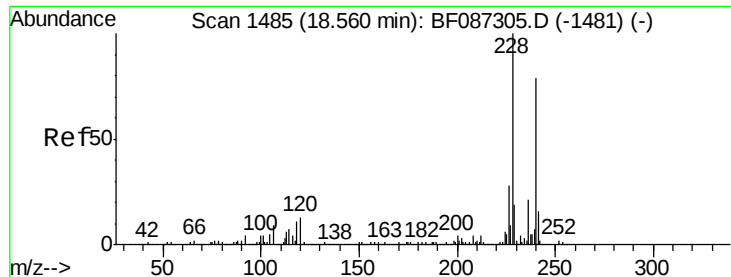
Acq: 28 May 2016 3:46

Tgt Ion:	202	Resp:	861158
Ion Ratio	Lower	Upper	
202	100		
101	11.2	0.0	35.4
203	18.3	0.0	38.1



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: 18.45 min Scan# 1475

Delta R.T. -0.03 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Instrument :

BNA_F

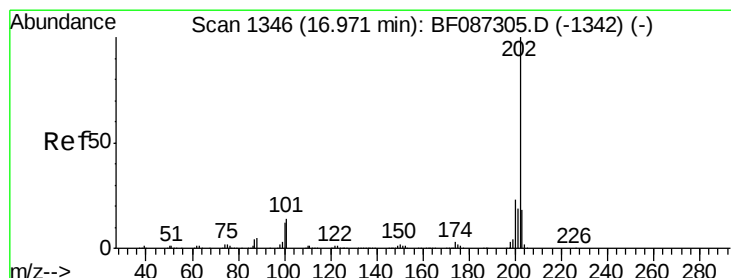
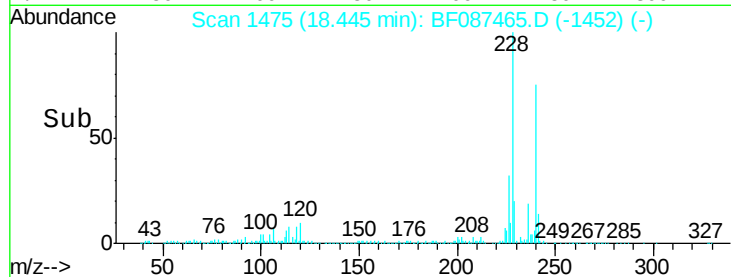
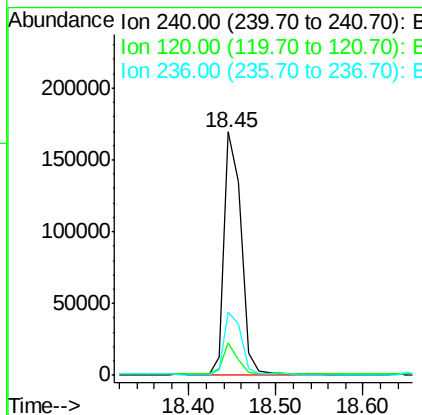
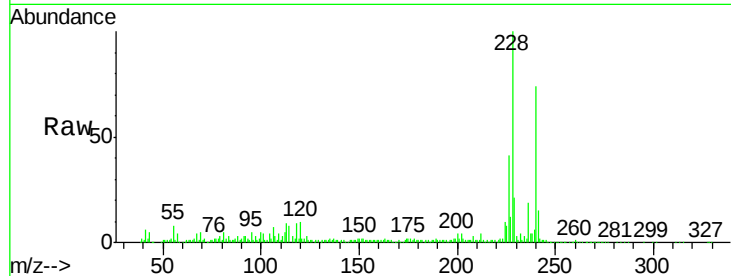
ClientSampleId :

GM-SP-(0-4)

Tot Ion:	240	Resp:	230703
Ion Ratio	Lower	Upper	
240	100		
120	13.5	11.2	16.8
236	26.2	21.2	31.8

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#77

Pyrene

Concen: 46.88 ng

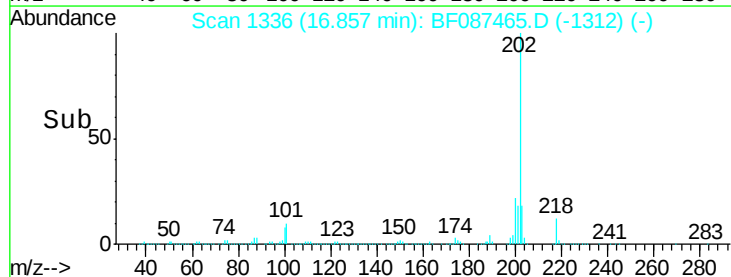
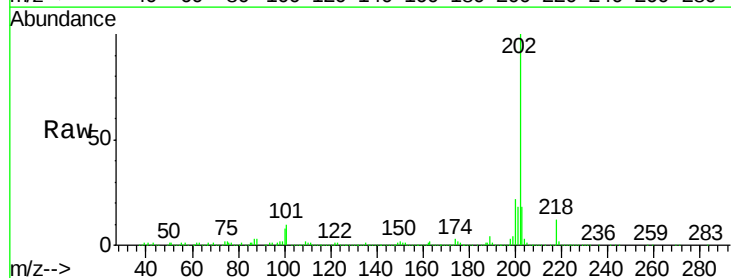
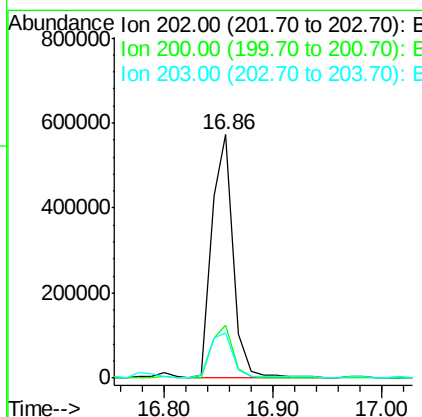
RT: 16.86 min Scan# 1336

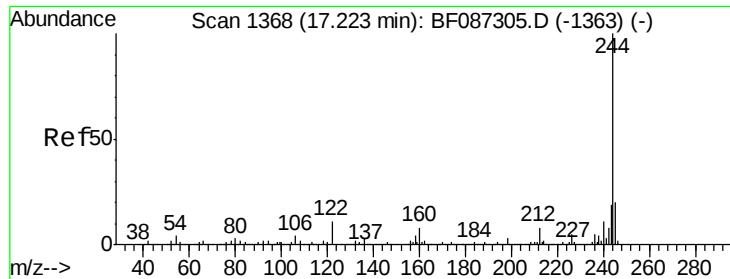
Delta R.T. -0.02 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Tgt Ion:	202	Resp:	778458
Ion Ratio	Lower	Upper	
202	100		
200	21.7	17.7	26.5
203	18.5	14.2	21.4





#78

Terphenyl-d14

Concen: 58.52 ng

RT: 17.10 min Scan# 1357

Delta R.T. -0.03 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Instrument :

BNA_F

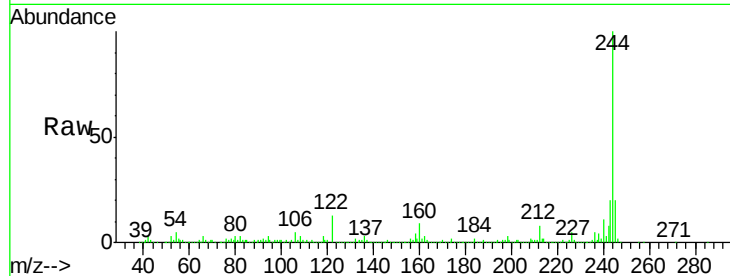
ClientSampleId :

GM-SP-(0-4)

Tot Ion:	244	Resp:	635009
Ion Ratio	Lower	Upper	
244	100		
212	8.1	6.2	9.2
122	12.8	12.0	18.0

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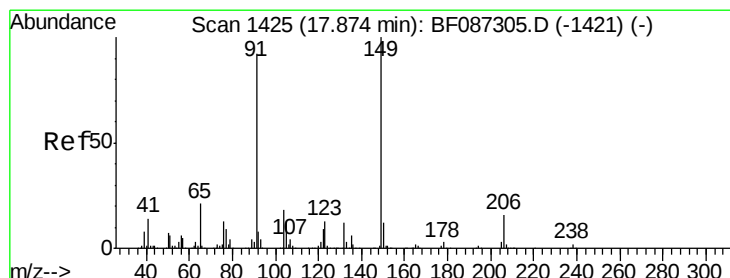
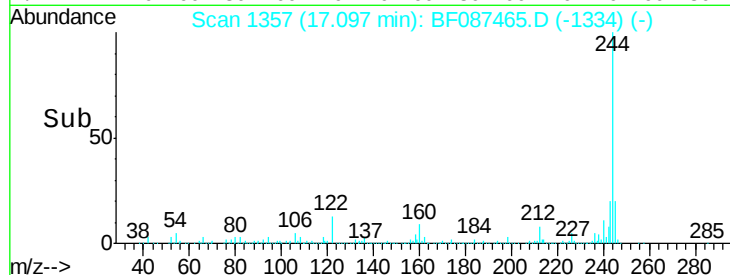
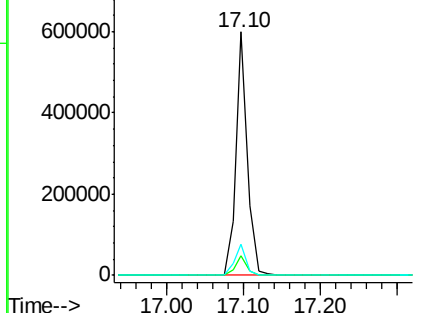
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Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



#79

Butylbenzylphthalate

Concen: 4.97 ng

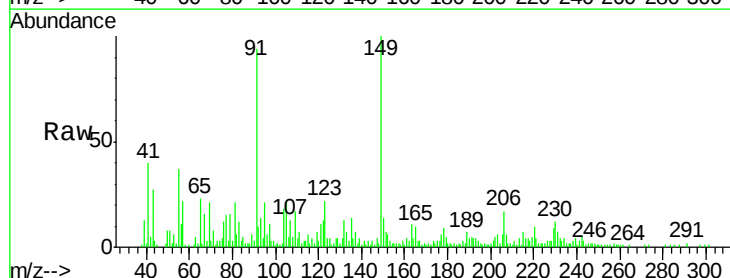
RT: 17.76 min Scan# 1415

Delta R.T. -0.03 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

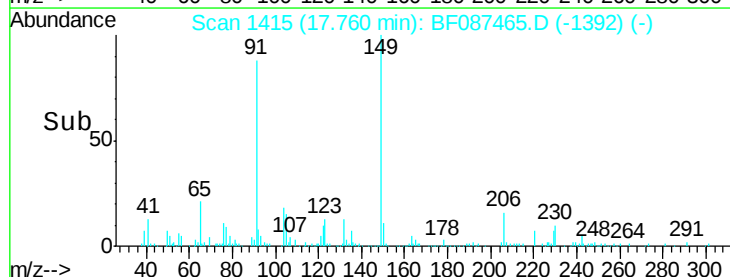
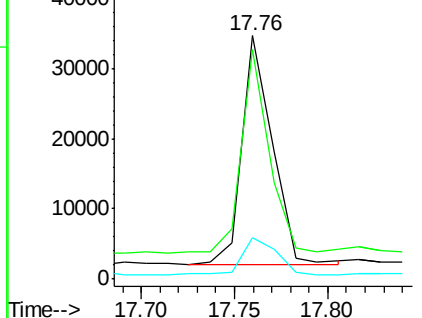
Tgt Ion:	149	Resp:	36595
Ion Ratio	Lower	Upper	
149	100		
91	94.2	48.0	72.0#
206	17.2	15.8	23.6

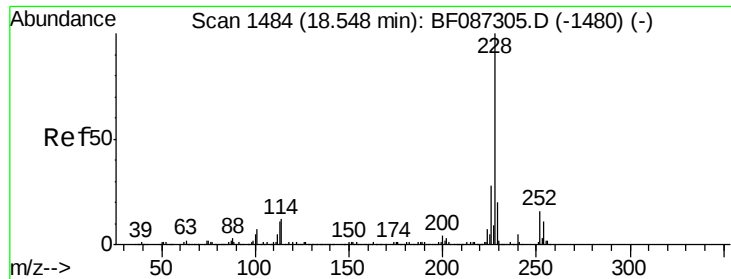


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 91.00 (90.70 to 91.70): BF0

Ion 206.00 (205.70 to 206.70): E





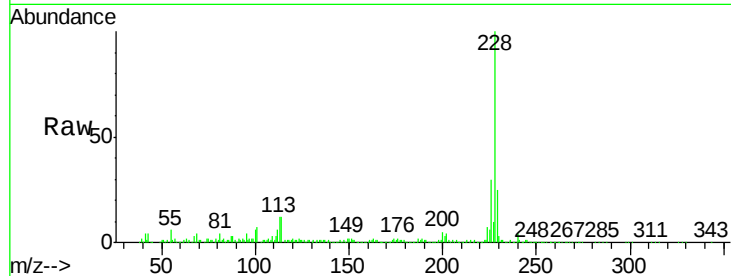
#80
Benzo(a)anthracene
Concen: 32.31 ng
RT: 18.43 min Scan# 1474
Delta R.T. -0.02 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Instrument :
BNA_F
ClientSampled :
GM-SP-(0-4)

Tot Ion	Ratio	Lower	Upper
228	100		
226	29.6	22.5	33.7
229	24.9	16.6	25.0

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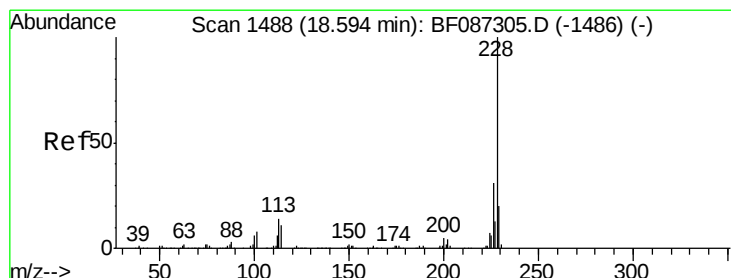
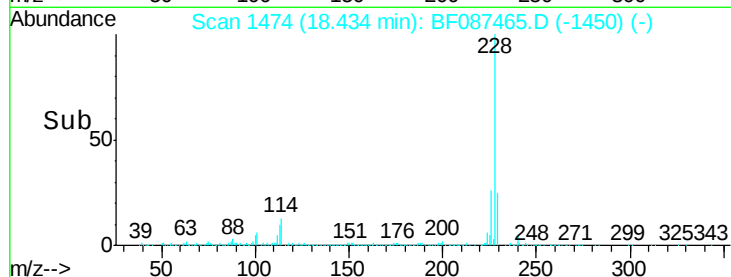
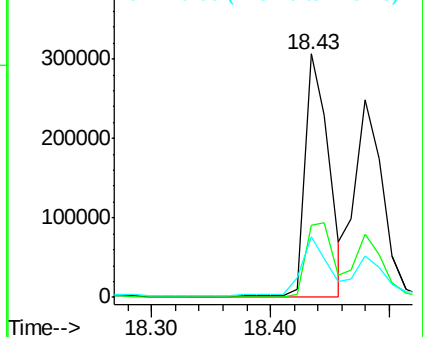


Abundance

Ion 228.00 (227.70 to 228.70): E

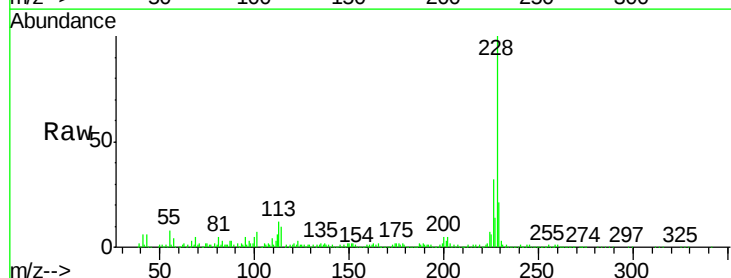
Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#82
Chrysene
Concen: 30.73 ng
RT: 18.48 min Scan# 1478
Delta R.T. -0.03 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Tgt Ion	Ratio	Lower	Upper
228	100		
226	31.9	24.4	36.6
229	21.0	15.8	23.8

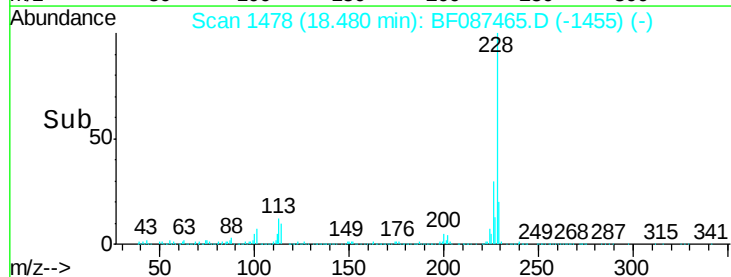
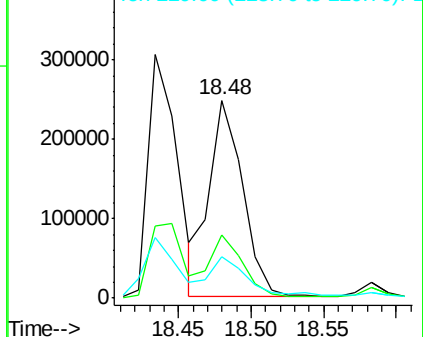


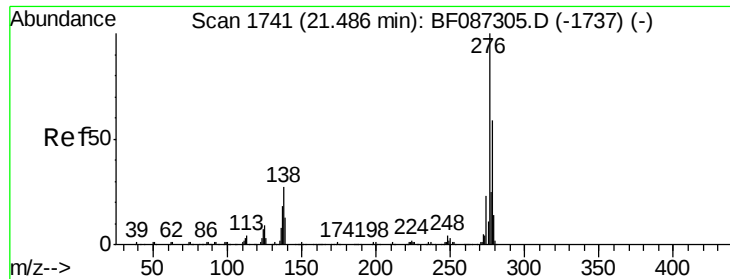
Abundance

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





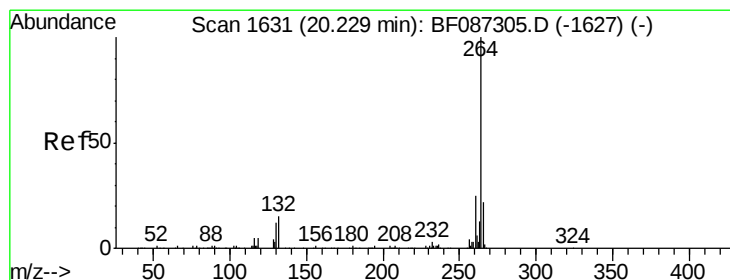
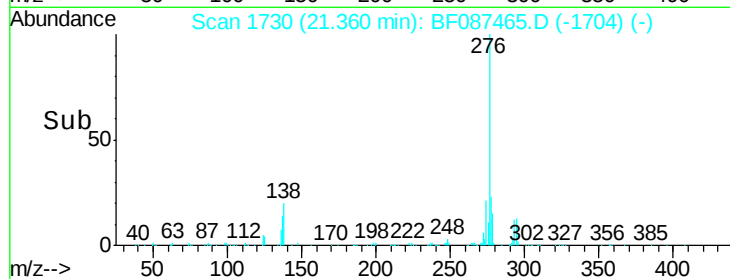
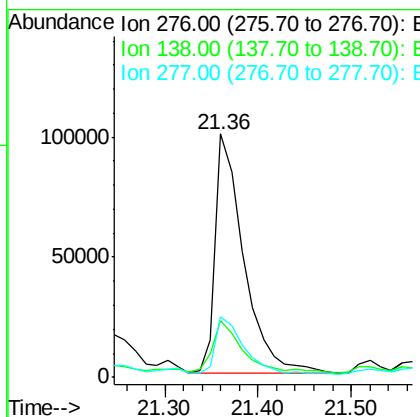
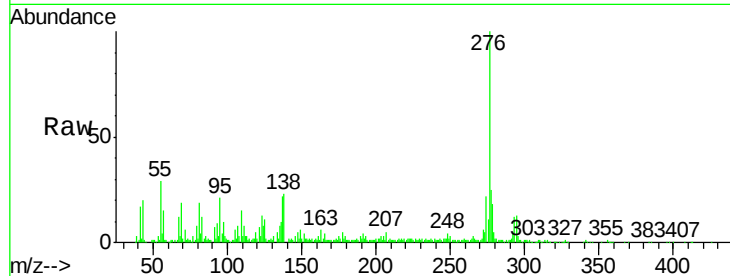
#85
Indeno(1,2,3-cd)pyrene
Concen: 20.25 ng
RT: 21.36 min Scan# 1730
Delta R.T. -0.00 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Instrument :
BNA_F
ClientSampled :
GM-SP-(0-4)

Tot Ion	Ratio	Resp Lower	Upper
276	100		
138	22.9	25.6	38.4#
277	23.5	20.5	30.7

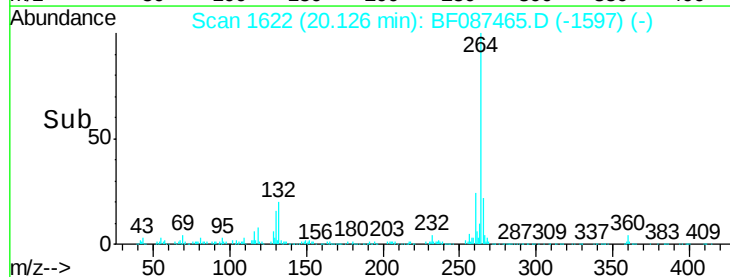
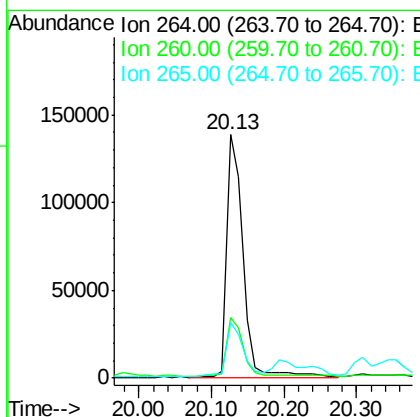
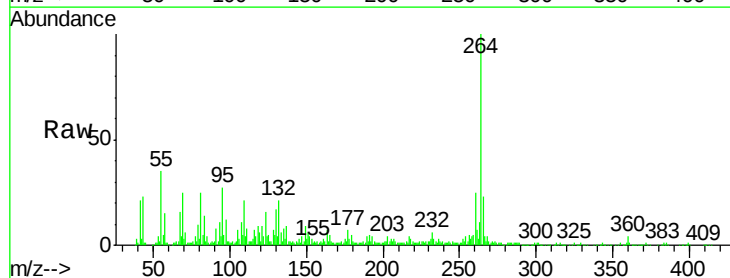
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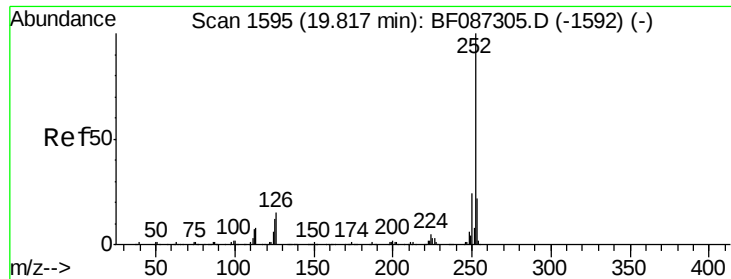
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#86
Perylene-d12
Concen: 20.00 ng
RT: 20.13 min Scan# 1622
Delta R.T. -0.01 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Tgt Ion	Ratio	Resp Lower	Upper
264	100		
260	24.8	19.5	29.3
265	22.6	17.3	25.9





#87

Benzo(b)fluoranthene

Concen: 41.34 ng m

RT: 19.73 min Scan# 1587

Delta R.T. -0.00 min

Lab File: BF087465.D

Acq: 28 May 2016 3:46

Instrument :

BNA_F

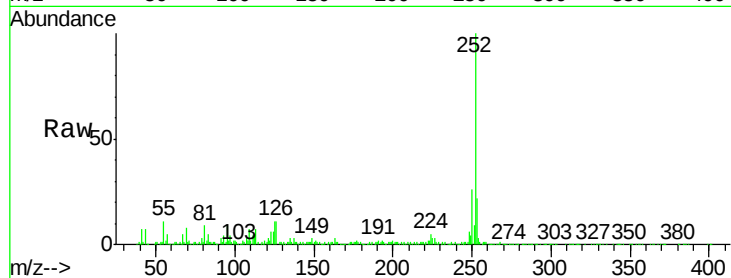
ClientSampleId :

GM-SP-(0-4)

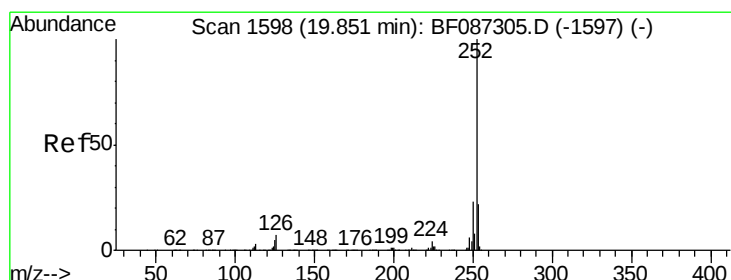
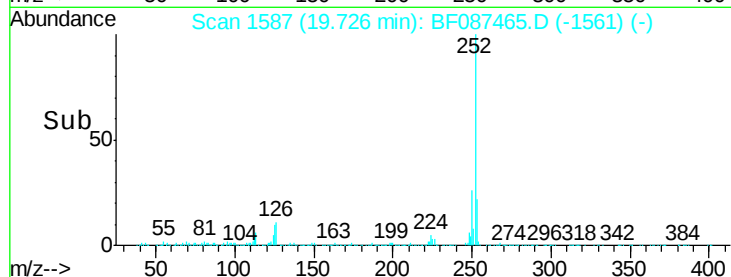
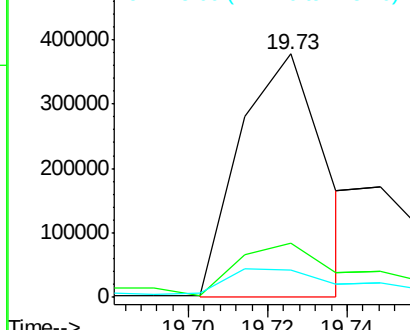
Tot Ion:	252	Resp:	564858
Ion Ratio	Lower	Upper	
252	100		
253	22.4	17.8	26.6
125	11.3	11.4	17.0

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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



#88

Benzo(k)fluoranthene

Concen: 18.27 ng m

RT: 19.75 min Scan# 1589

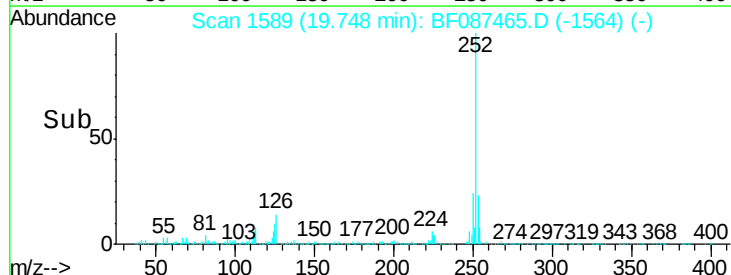
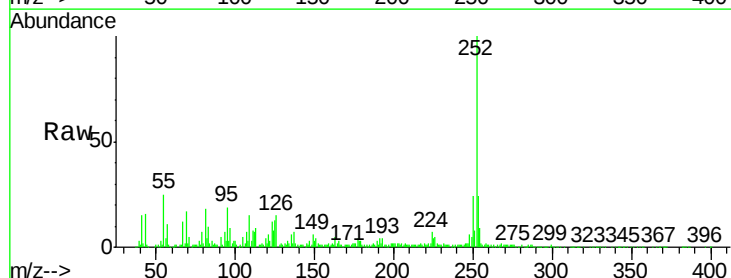
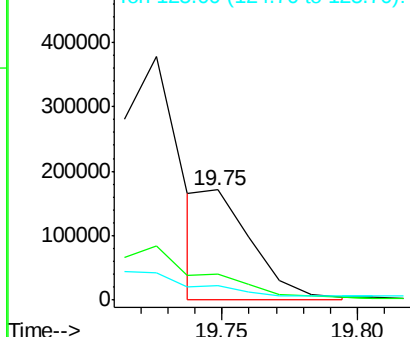
Delta R.T. -0.01 min

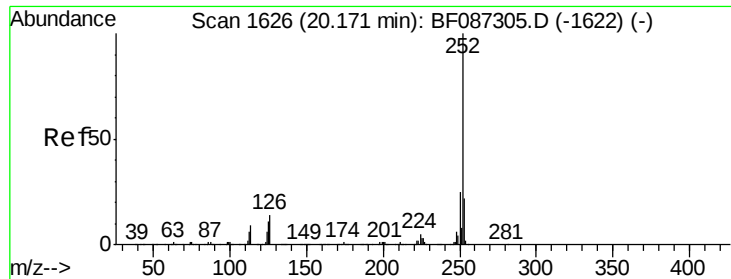
Lab File: BF087465.D

Acq: 28 May 2016 3:46

Tgt Ion:	252	Resp:	214906
Ion Ratio	Lower	Upper	
252	100		
253	23.8	17.8	26.6
125	13.0	9.1	13.7

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





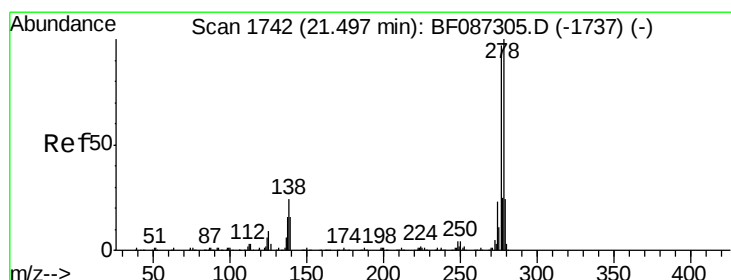
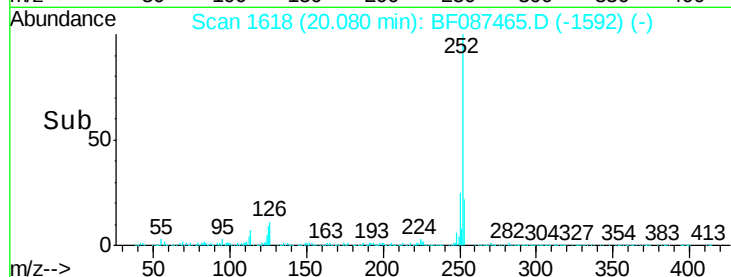
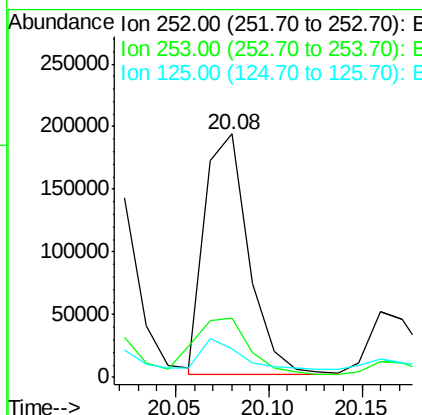
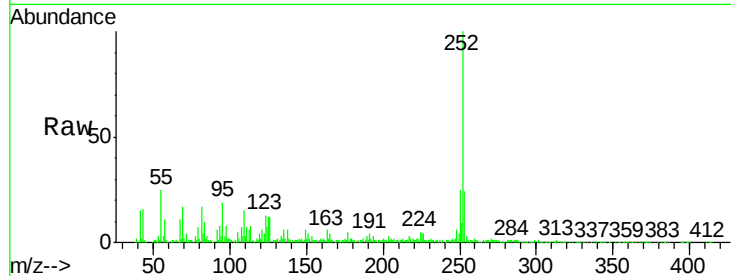
#89
Benzo(a)pyrene
Concen: 26.77 ng
RT: 20.08 min Scan# 1618
Delta R.T. -0.00 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Instrument :
BNA_F
ClientSampleId :
GM-SP-(0-4)

Tot Ion	Ratio	Resp	Lower	Upper
252	100			
253	24.3	17.2	25.8	
125	11.6	9.0	13.6	

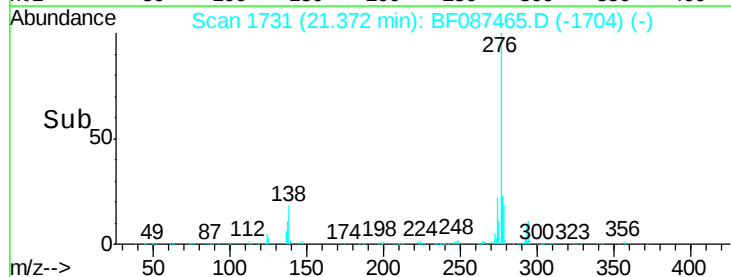
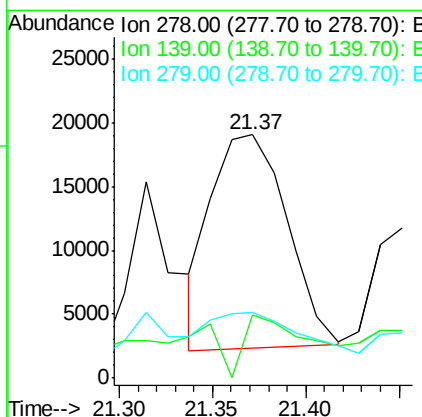
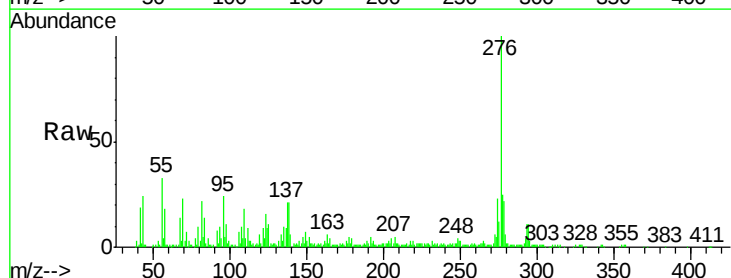
Manual Integrations
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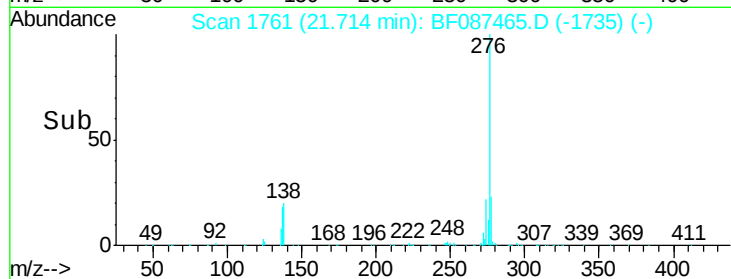
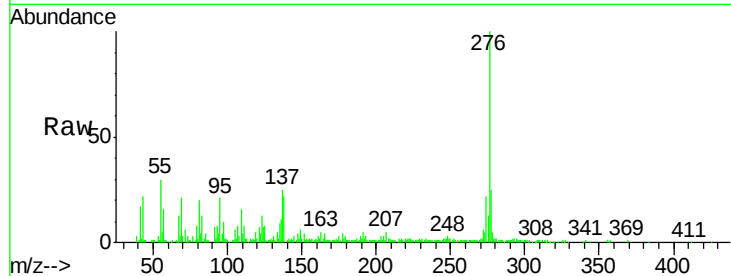
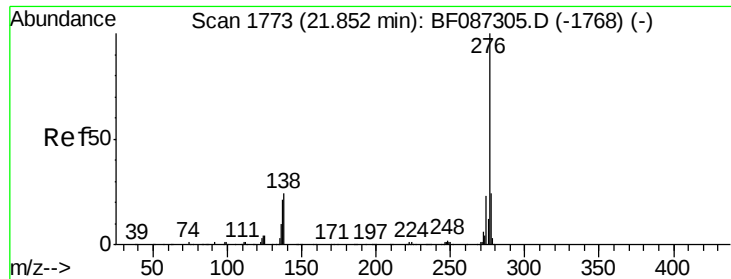
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#90
Dibenzo(a,h)anthracene
Concen: 4.67 ng
RT: 21.37 min Scan# 1731
Delta R.T. 0.01 min
Lab File: BF087465.D
Acq: 28 May 2016 3:46

Tgt Ion	Ratio	Resp	Lower	Upper
278	100			
139	25.7	16.6	24.8#	
279	26.9	19.6	29.4	





#91
 Benzo(a,h,i)perylene
 Concen: 18.48 ng
 RT: 21.71 min Scan# 1761
 Delta R.T. -0.00 min
 Lab File: BF087465.D
 Acq: 28 May 2016 3:46

Instrument :
 BNA_F
 ClientSampleId :
 GM-SP-(0-4)

Tot Ion	Ratio	Lower	Upper
276	100		
277	24.8	19.6	29.4
138	22.1	23.6	35.4

Manual Integrations
 APPROVED

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