

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102918\
 Data File : BF110288.D
 Acq On : 30 Oct 2018 3:09
 Operator : JU/SJ
 Sample : J5685-03
 Misc :
 ALS Vial : 38 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 DOCUMENTATION-27

Manual Integrations
 APPROVED

Sohil
 10/30/2018 3:04:36 PM

Quant Time: Oct 30 09:18:08 2018
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF102318.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Oct 29 17:29:00 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.97	152	105516	20.00	ng	0.00
21) Naphthalene-d8	8.25	136	384984	20.00	ng	0.00
39) Acenaphthene-d10	10.02	164	148421	20.00	ng	0.00
64) Phenanthrene-d10	11.51	188	240975	20.00	ng	0.00
76) Chrysene-d12	14.16	240	142279	20.00	ng	0.00
87) Perylene-d12	15.70	264	111947	20.00	ng	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	5.59	112	591404	91.27	ng	0.00
7) Phenol-d6	6.60	99	727561	87.79	ng	0.00
23) Nitrobenzene-d5	7.53	82	434329	66.92	ng	0.00
42) 2,4,6-Tribromophenol	10.81	330	110351	75.06	ng	0.00
45) 2-Fluorobiphenyl	9.33	172	786978	83.26	ng	0.00
79) Terphenyl-d14	13.09	244	557260	81.46	ng	0.00
Target Compounds						
10) Phenol	6.60	94	51443	5.807	ng	Qvalue # 76
31) Naphthalene	8.27	128	37734	2.127	ng	99
49) Acenaphthylene	9.87	152	50390	3.544	ng	98
50) Dimethylphthalate	9.72	163	131515	12.004	ng	99
52) Acenaphthene	10.05	154	30539	3.246	ng	98
58) Fluorene	10.56	166	35063	3.577	ng	99
71) Phenanthrene	11.53	178	477349	37.858	ng	100
72) Anthracene	11.59	178	175864	13.915	ng	99
73) Carbazole	11.74	167	46303	3.752	ng	98
75) Fluoranthene	12.73	202	1056403	82.553	ng	99
78) Pyrene	12.97	202	1006634	98.688	ng	99
81) Benzo(a)anthracene	14.15	228	491250	58.223	ng	97
83) Chrysene	14.19	228	426994	53.282	ng	96
84) Bis(2-ethylhexyl)phthalate	14.12	149	29296	4.895	ng	# 95
86) Indeno(1,2,3-cd)pyrene	17.29	276	212618	31.981	ng	97
88) Benzo(b)fluoranthene	15.24	252	520372m	80.496	ng	
89) Benzo(k)fluoranthene	15.27	252	182191m	28.668	ng	
90) Benzo(a)pyrene	15.64	252	373954	62.866	ng	99
91) Dibenzo(a,h)anthracene	17.29	278	54498	10.618	ng	# 94
92) Benzo(a,h,i)perylene	17.77	276	205861	40.702	ng	95

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

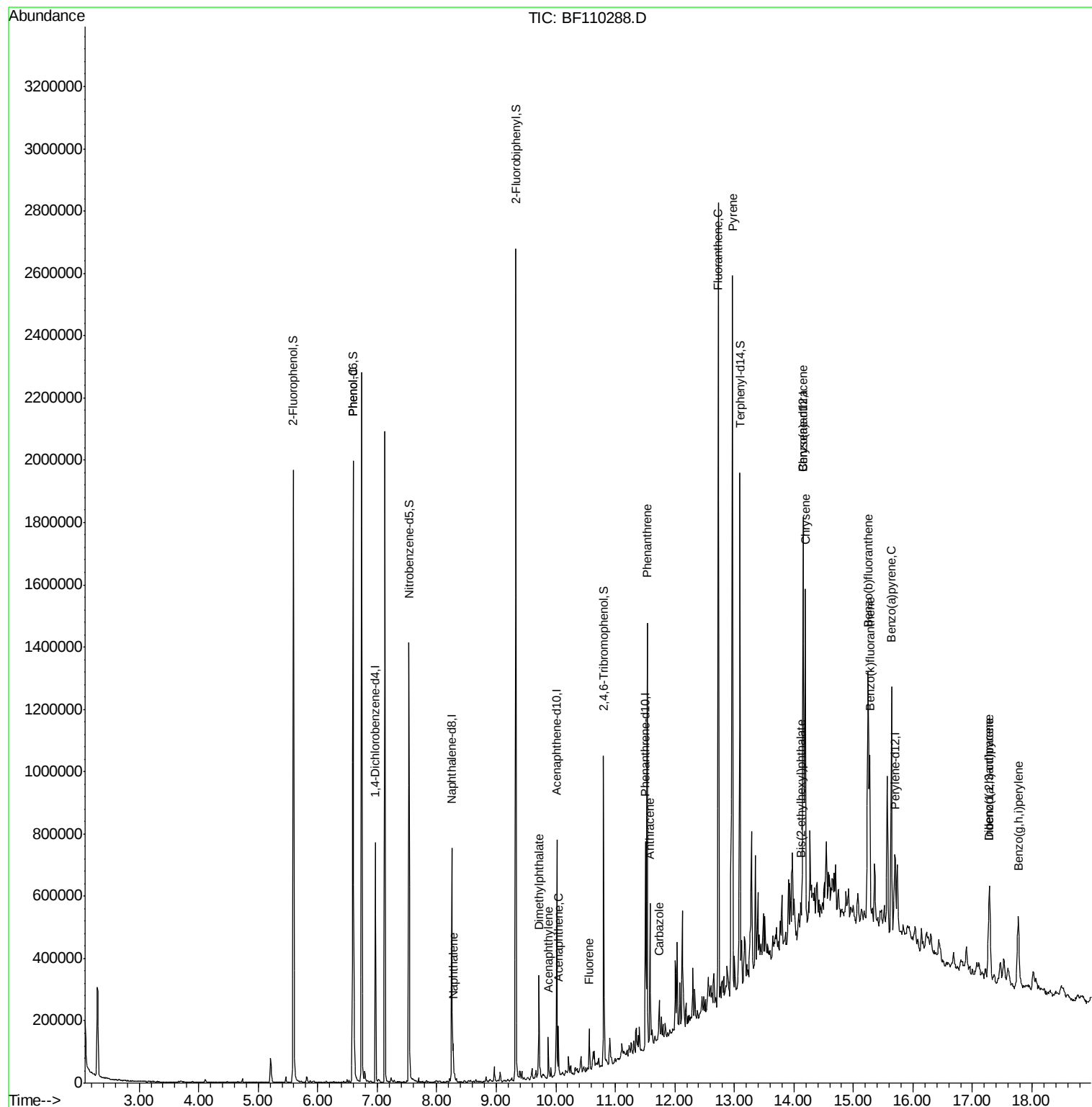
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102918\
Data File : BF110288.D
Acq On : 30 Oct 2018 3:09
Operator : JU/SJ
Sample : J5685-03
Misc :
ALS Vial : 38 Sample Multiplier: 1

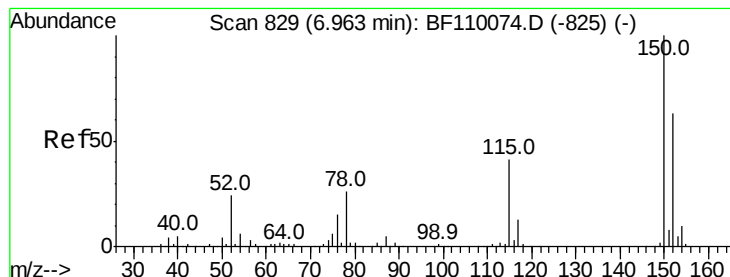
Instrument :
BNA_F
ClientSampleId :
DOCUMENTATION-27

Manual Integrations
APPROVED

Sohil
10/30/2018 3:04:36 PM

Quant Time: Oct 30 09:18:08 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF102318.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Oct 29 17:29:00 2018
Response via : Initial Calibration





#1

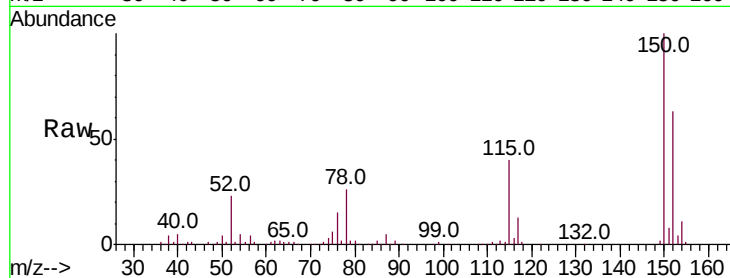
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.97 min Scan# 830
Delta R.T. -0.00 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Instrument :
BNA_F
ClientSampleId :
DOCUMENTATION-27

Tot Ion	Ratio	Lower	Upper
152	100		
150	159.7	122.7	184.1
115	64.1	49.1	73.7

Manual Integrations
APPROVED

Sohil
10/30/2018 3:04:36 PM

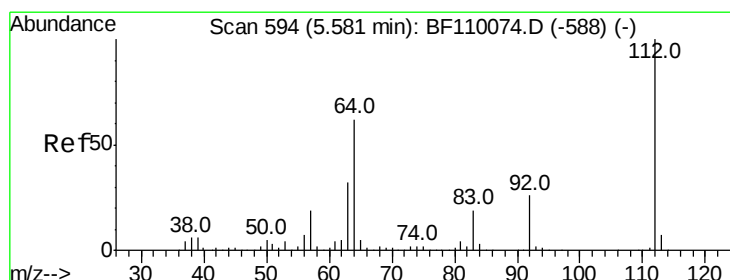
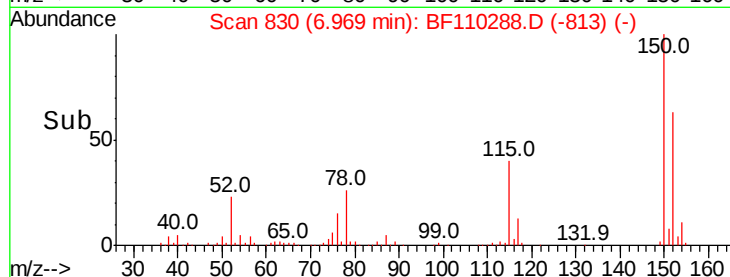
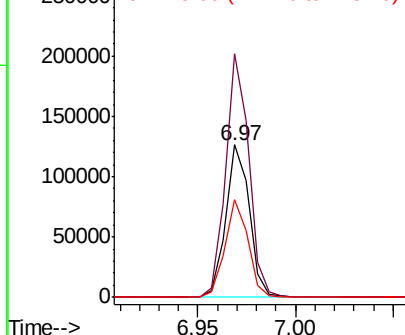


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

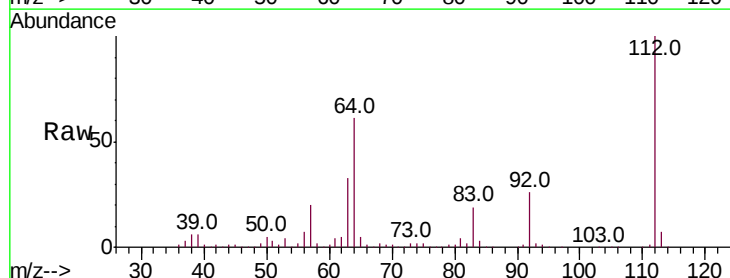
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol
Concen: 91.273 ng
RT: 5.59 min Scan# 596
Delta R.T. 0.01 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Lower	Upper
112	100		
64	61.5	44.1	66.1
63	33.0	23.7	35.5

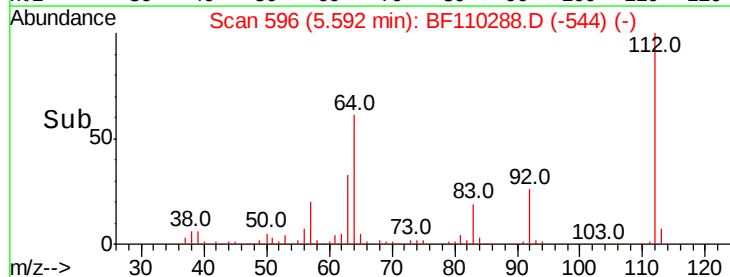
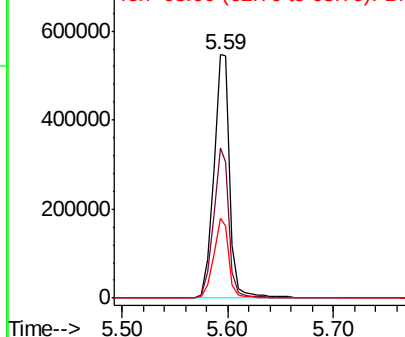


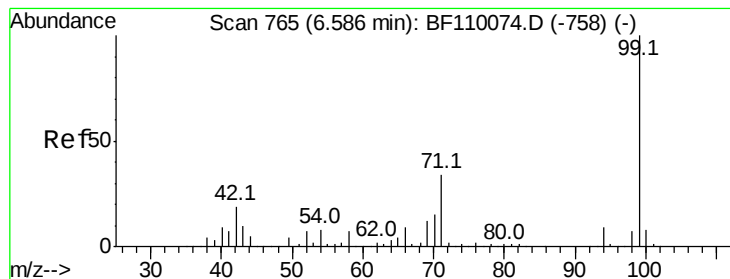
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 87.787 ng

RT: 6.60 min Scan# 767

Delta R.T. 0.01 min

Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Instrument :

BNA_F

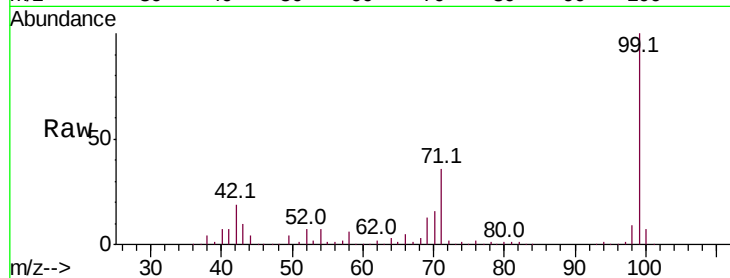
ClientSampleId :

DOCUMENTATION-27

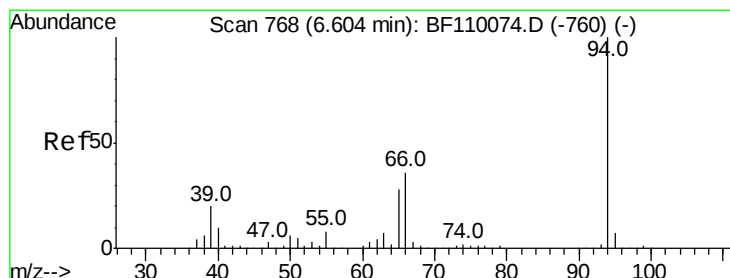
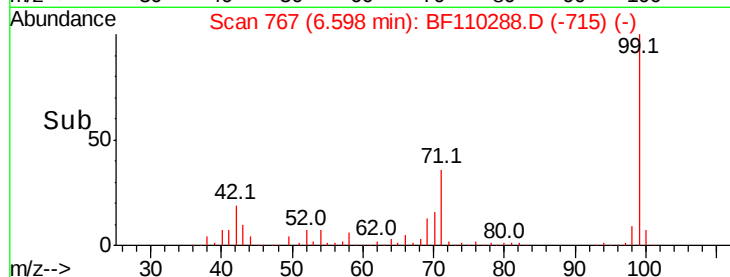
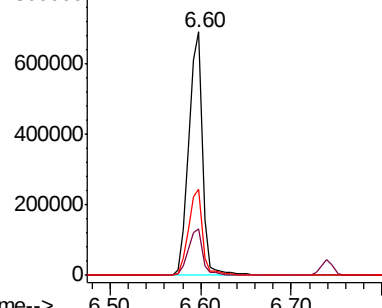
Tot Ion	Ion	Ratio	Resp	Lower	Upper
99	100		727561		
42	18.9	15.8	23.6		
71	35.7	28.0	42.0		

Manual Integrations
APPROVED

Sohil
10/30/2018 3:04:36 PM



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



#10

Phenol

Concen: 5.807 ng

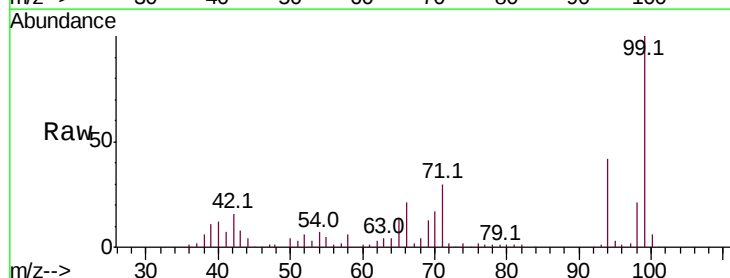
RT: 6.60 min Scan# 768

Delta R.T. -0.00 min

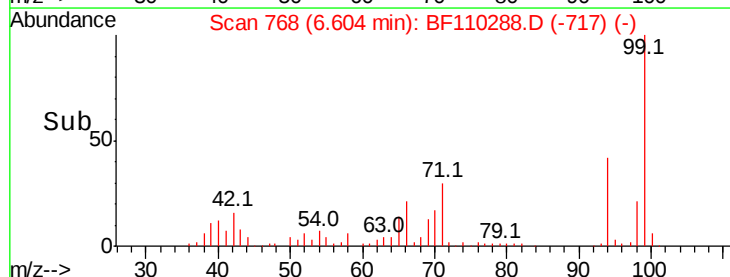
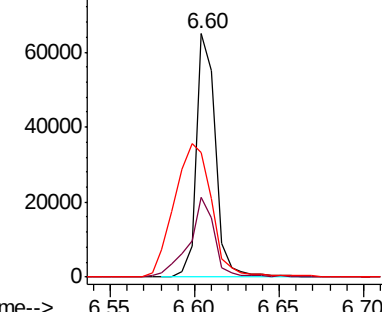
Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
94	100		51443		
65	32.8	25.3	65.3		
66	51.0	54.5	94.5#		



Abundance Ion 94.00 (93.70 to 94.70): BF1
Ion 65.00 (64.70 to 65.70): BF1
Ion 66.00 (65.70 to 66.70): BF1





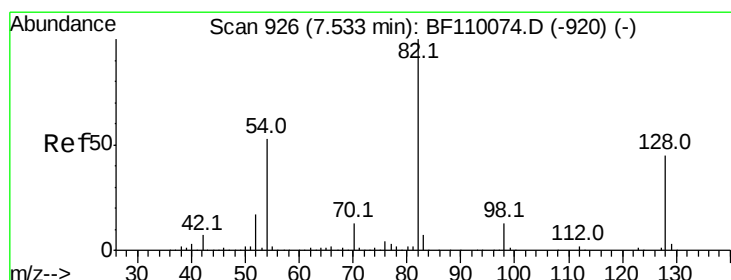
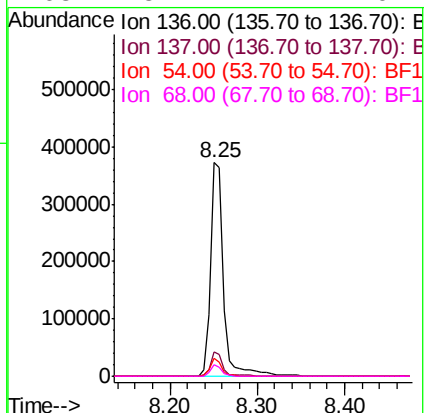
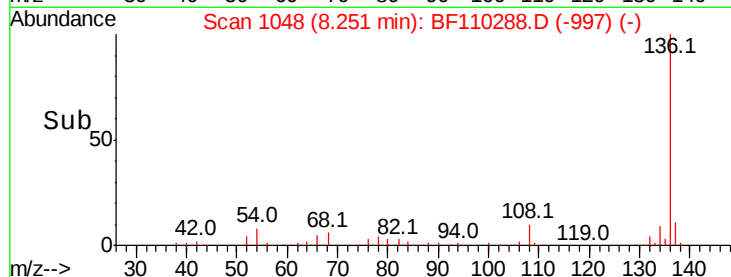
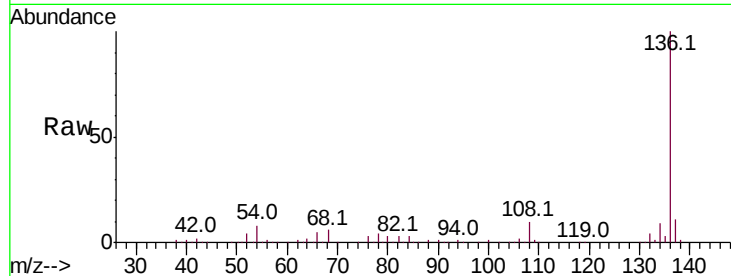
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.25 min Scan# 1048
Delta R.T. -0.00 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Instrument :
BNA_F
ClientSampleId :
DOCUMENTATION-27

Tot Ion	Ratio	Resp	Lower	Upper
136	100			
137	11.2	8.8	13.2	
54	8.2	5.4	8.2	
68	5.7	4.2	6.2	

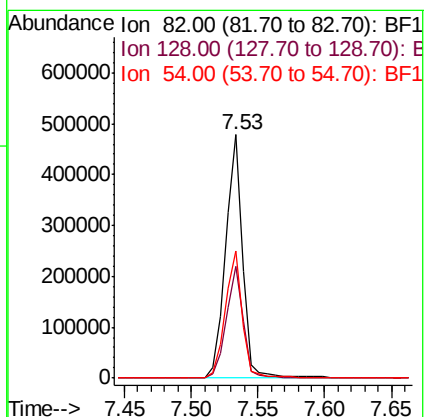
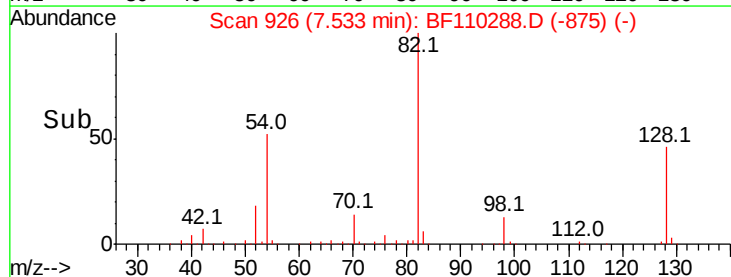
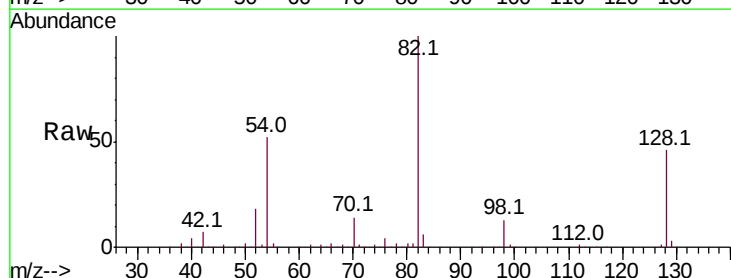
Manual Integrations
APPROVED

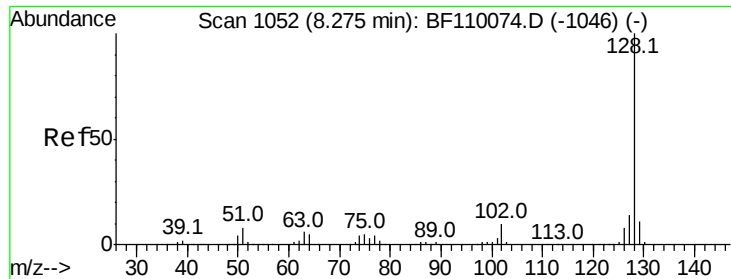
Sohil
10/30/2018 3:04:36 PM



#23
Nitrobenzene-d5
Concen: 66.916 ng
RT: 7.53 min Scan# 926
Delta R.T. -0.00 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Resp	Lower	Upper
82	100			
128	45.9	34.2	51.2	
54	52.2	38.6	58.0	





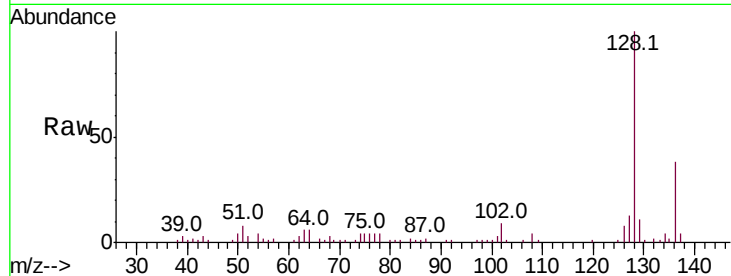
#31
Naphthalene
Concen: 2.127 ng
RT: 8.27 min Scan# 1052
Delta R.T. -0.00 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Instrument :
BNA_F
ClientSampleId :
DOCUMENTATION-27

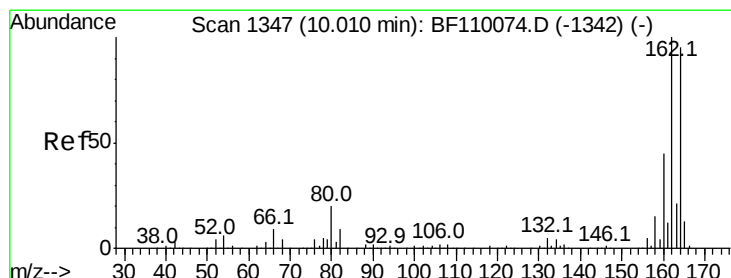
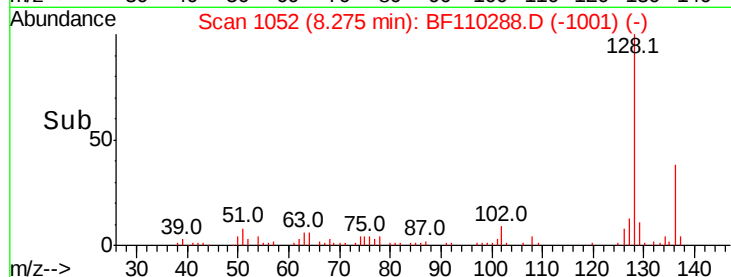
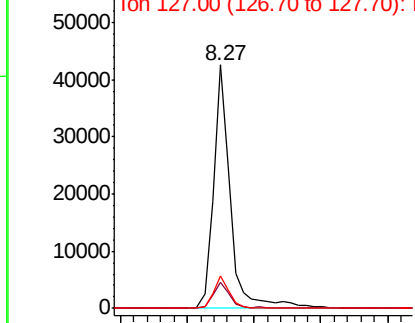
Tot Ion	Ratio	Lower	Upper
128	100		
129	10.6	8.8	13.2
127	13.5	10.8	16.2

Manual Integrations
APPROVED

Sohil
10/30/2018 3:04:36 PM



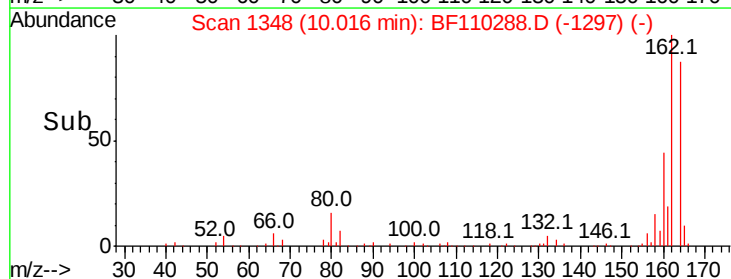
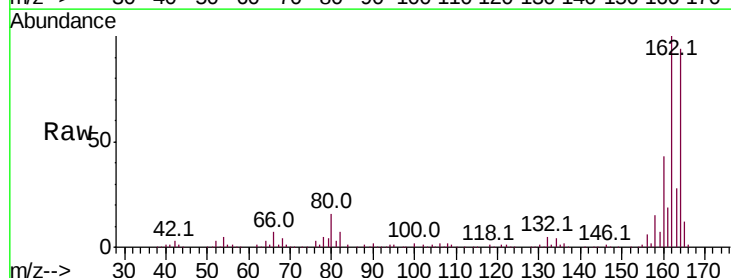
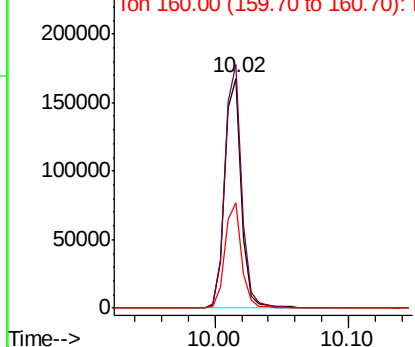
Abundance Ion 128.00 (127.70 to 128.70): E
Ion 129.00 (128.70 to 129.70): E
Ion 127.00 (126.70 to 127.70): E

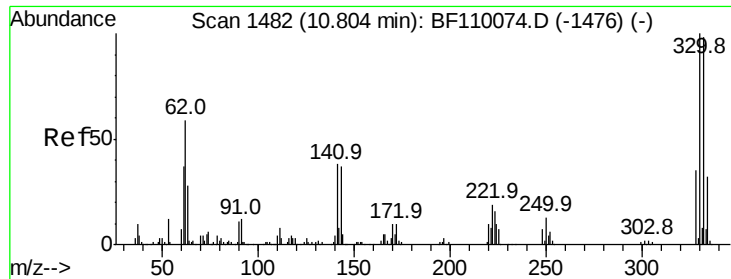


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 10.02 min Scan# 1348
Delta R.T. 0.00 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Lower	Upper
164	100		
162	106.1	83.0	124.6
160	45.9	37.0	55.6

Abundance Ion 164.00 (163.70 to 164.70): E
Ion 162.00 (161.70 to 162.70): E
Ion 160.00 (159.70 to 160.70): E





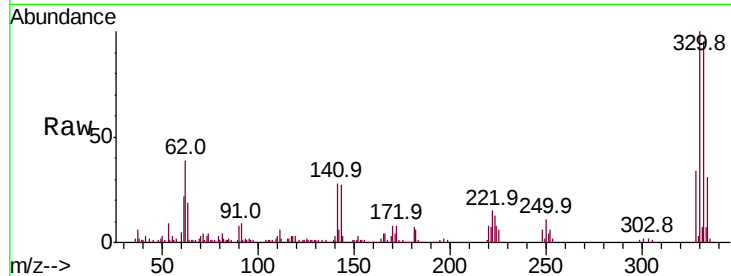
#42
 2,4,6-Tribromophenol
 Concen: 75.058 ng
 RT: 10.81 min Scan# 1483
 Delta R.T. -0.00 min
 Lab File: BF110288.D
 Acq: 30 Oct 2018 3:09

Instrument :
 BNA_F
 ClientSampleId :
 DOCUMENTATION-27

Tot Ion	Ratio	Resp	Lower	Upper
330	100	110351		
332	95.4	77.1	115.7	
141	36.8	27.0	40.4	

Manual Integrations
 APPROVED

Sohil
 10/30/2018 3:04:36 PM

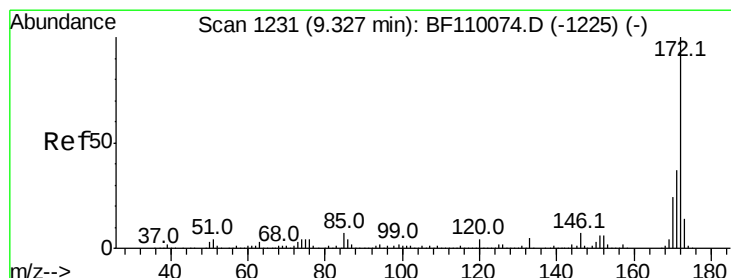
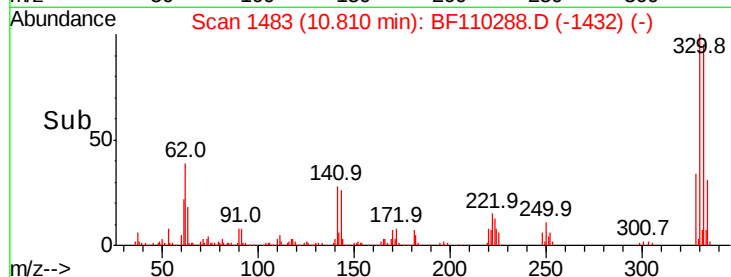
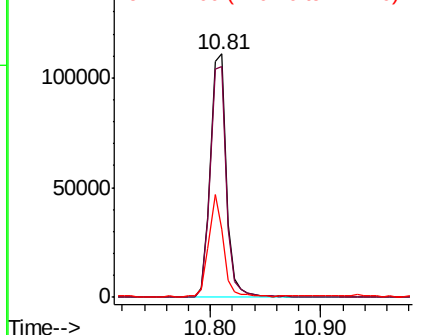


Abundance

Ion 329.80 (329.50 to 330.50): E

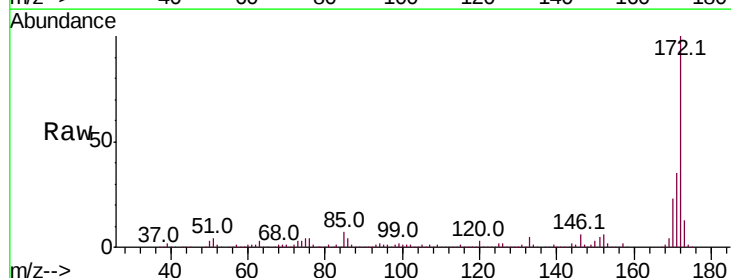
Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#45
 2-Fluorobiphenyl
 Concen: 83.260 ng
 RT: 9.33 min Scan# 1231
 Delta R.T. -0.00 min
 Lab File: BF110288.D
 Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Resp	Lower	Upper
172	100	786978		
171	34.8	28.6	43.0	
170	23.2	19.7	29.5	

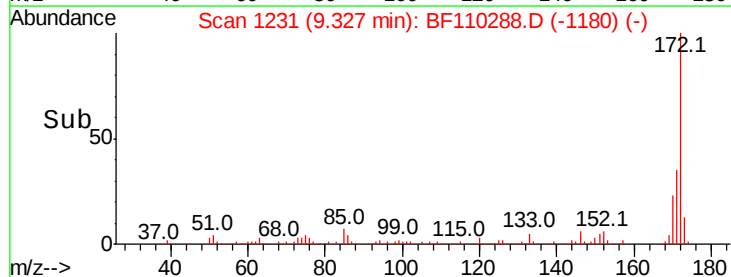
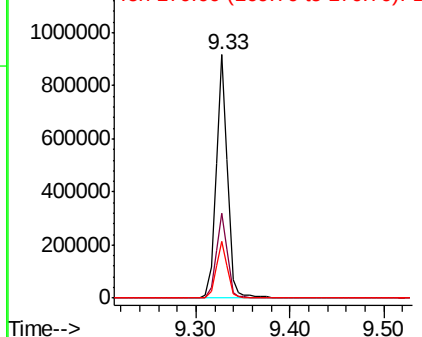


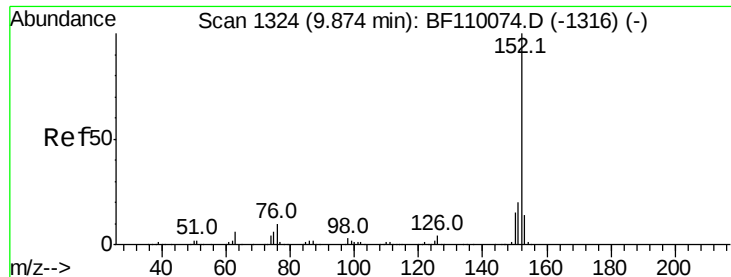
Abundance

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





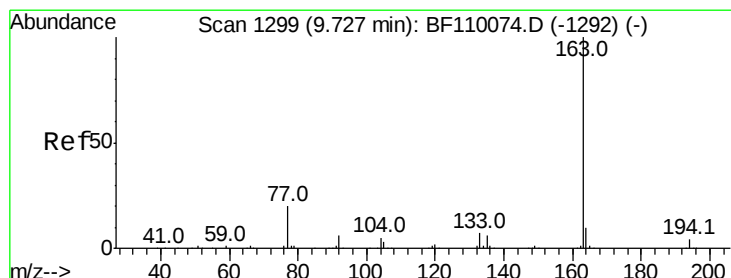
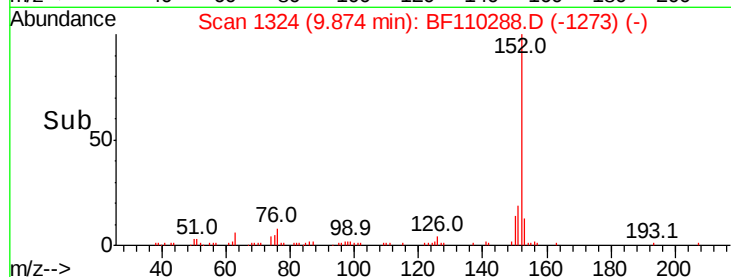
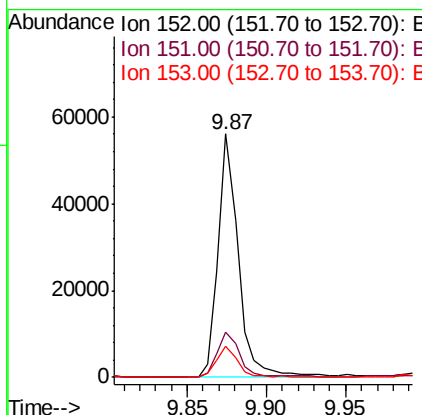
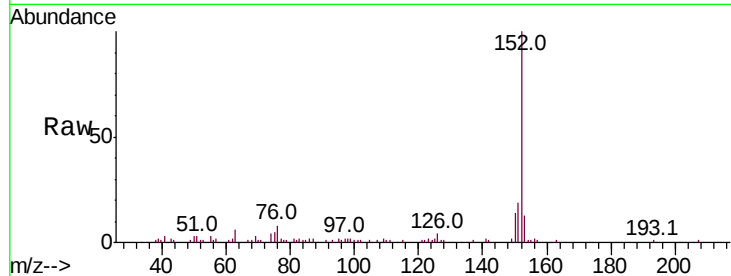
#49
Acenaphthylene
Concen: 3.544 ng
RT: 9.87 min Scan# 1324
Delta R.T. -0.00 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Instrument :
BNA_F
ClientSampleId :
DOCUMENTATION-27

Tot Ion	Ratio	Resp	Lower	Upper
152	100	50390		
151	18.7		15.8	23.8
153	13.1		10.4	15.6

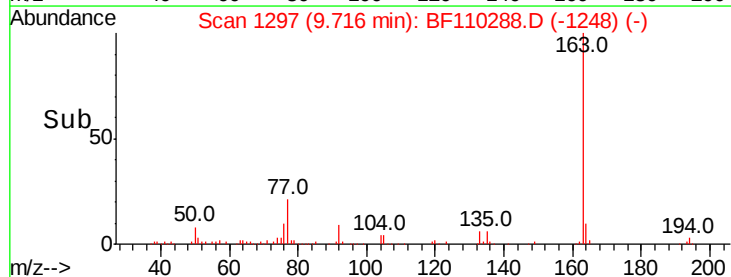
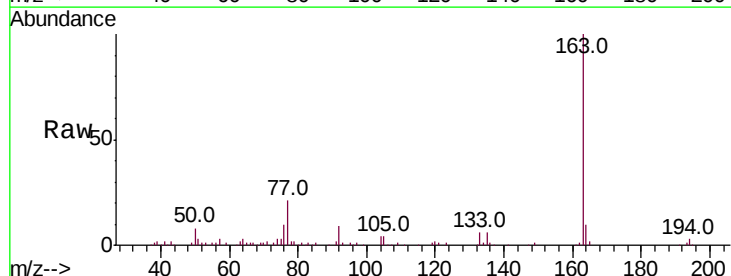
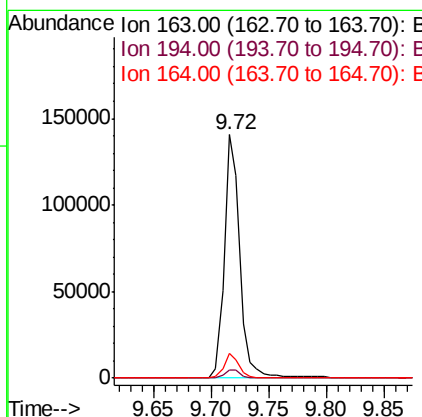
Manual Integrations
APPROVED

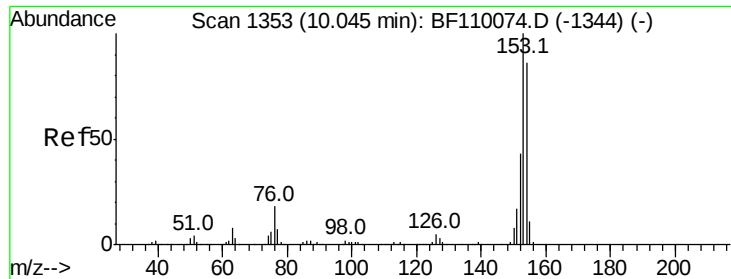
Sohil
10/30/2018 3:04:36 PM



#50
Dimethylphthalate
Concen: 12.004 ng
RT: 9.72 min Scan# 1297
Delta R.T. -0.01 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Resp	Lower	Upper
163	100	131515		
194	3.5		3.2	4.8
164	10.1		8.1	12.1





#52

Acenaphthene

Concen: 3.246 ng

RT: 10.05 min Scan# 1353

Delta R.T. -0.01 min

Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Instrument :

BNA_F

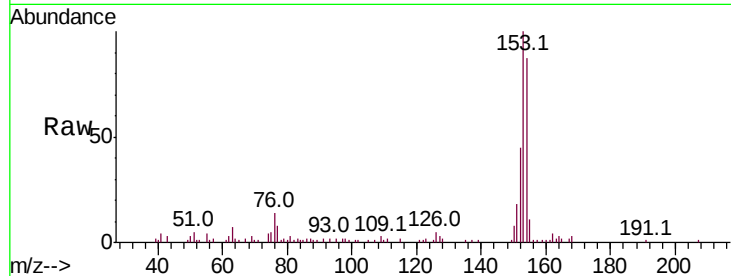
ClientSampleId :

DOCUMENTATION-27

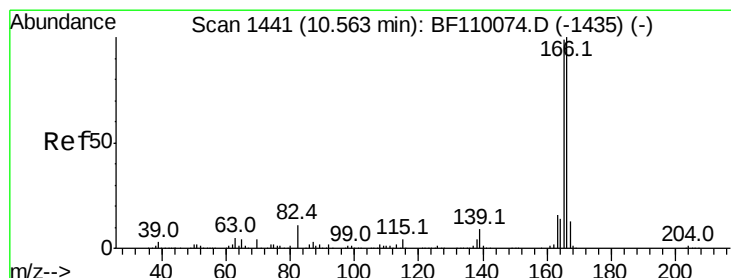
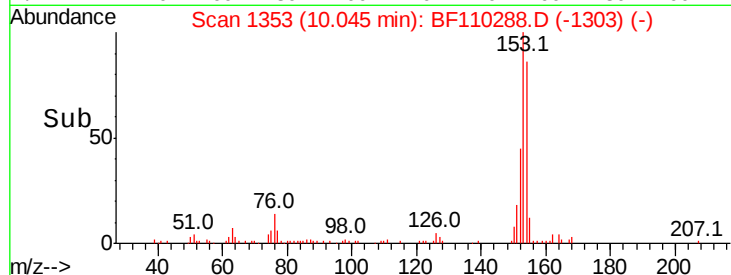
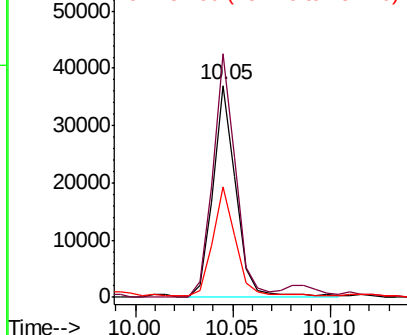
Tot Ion:	154	Resp:	30539
Ion	Ratio	Lower	Upper
154	100		
153	114.8	90.1	135.1
152	52.2	43.4	65.2

Manual Integrations
APPROVED

Sohil
10/30/2018 3:04:36 PM



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



#58

Fluorene

Concen: 3.577 ng

RT: 10.56 min Scan# 1441

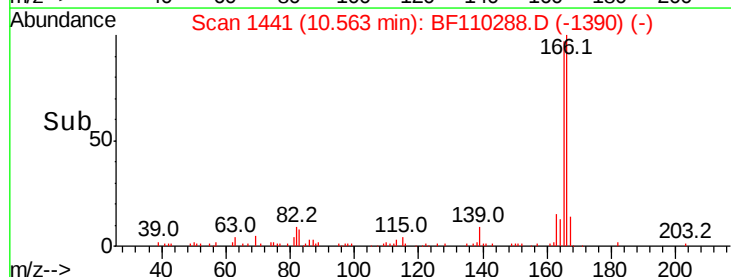
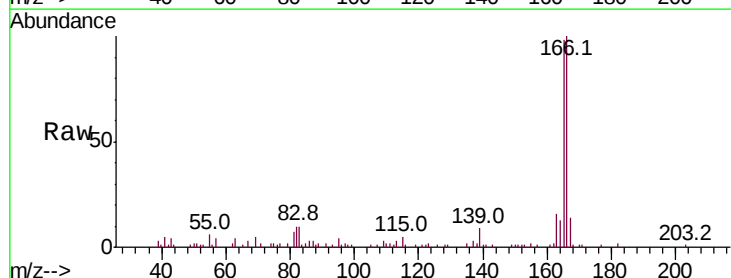
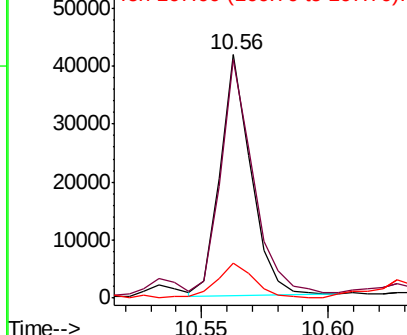
Delta R.T. -0.00 min

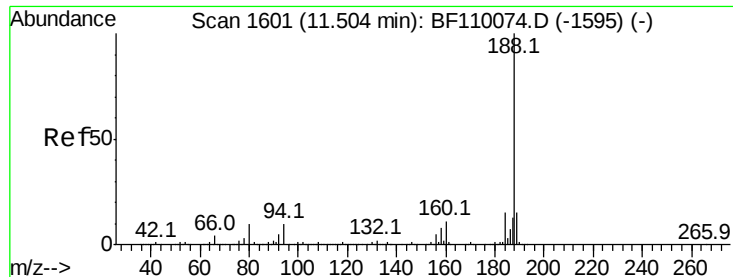
Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Tgt Ion:	166	Resp:	35063
Ion	Ratio	Lower	Upper
166	100		
165	97.8	78.6	117.8
167	14.4	10.8	16.2

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





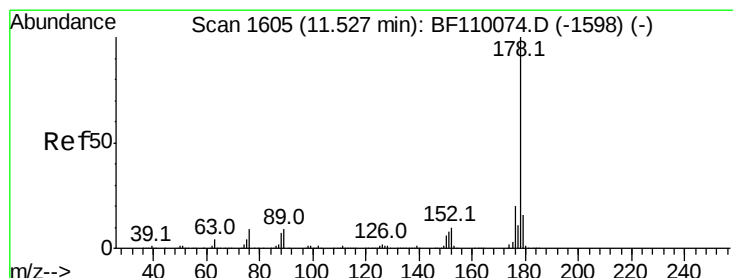
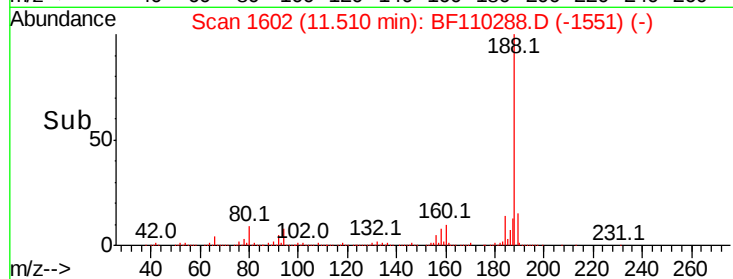
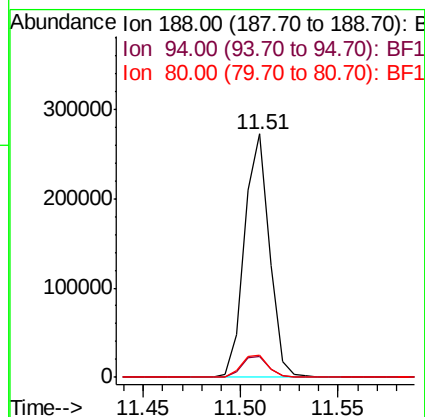
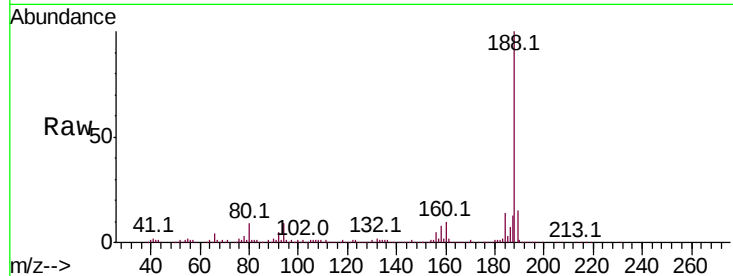
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.51 min Scan# 1602
Delta R.T. -0.00 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Instrument :
BNA_F
ClientSampleId :
DOCUMENTATION-27

Tot Ion	Ratio	Resp Lower	Upper
188	100		
94	8.6	7.2	10.8
80	8.9	7.9	11.9

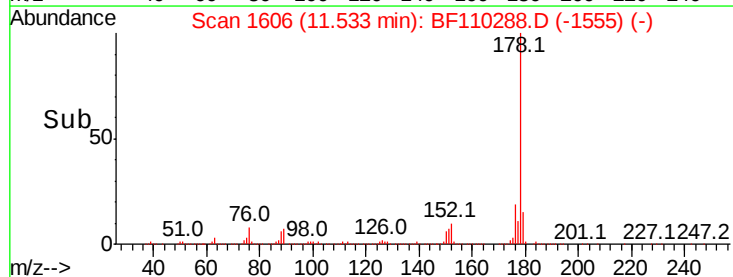
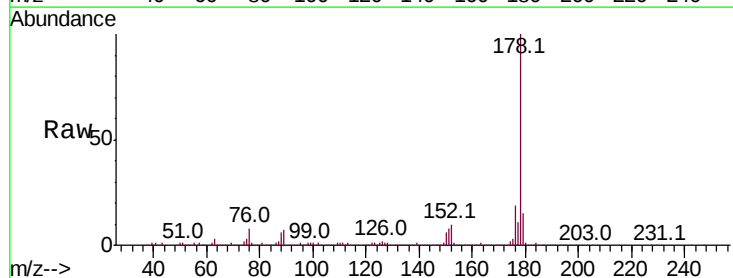
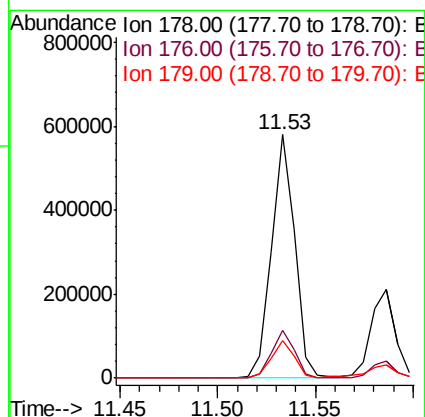
Manual Integrations
APPROVED

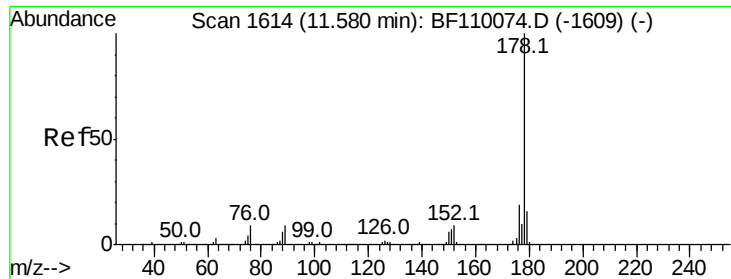
Sohil
10/30/2018 3:04:36 PM



#71
Phenanthrene
Concen: 37.858 ng
RT: 11.53 min Scan# 1606
Delta R.T. -0.00 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Resp Lower	Upper
178	100		
176	19.4	15.5	23.3
179	15.5	12.5	18.7





#72

Anthracene

Concen: 13.915 ng

RT: 11.59 min Scan# 1615

Delta R.T. 0.00 min

Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Instrument :

BNA_F

ClientSampleId :

DOCUMENTATION-27

Tot Ion:178 Resp: 175864

Ion Ratio Lower Upper

178 100

176 18.7 15.4 23.2

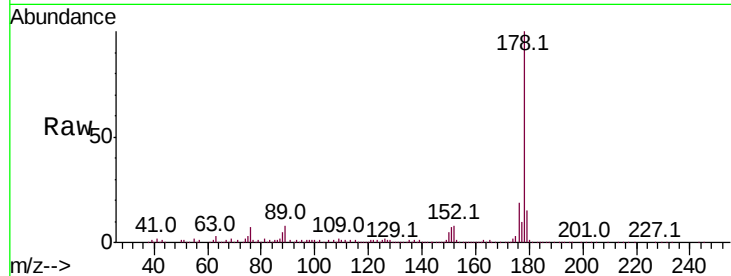
179 15.3 12.6 18.8

Manual Integrations

APPROVED

Sohil

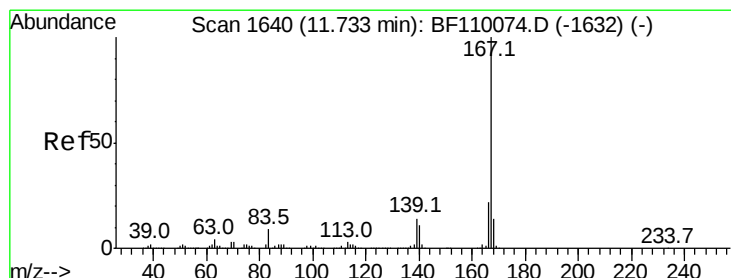
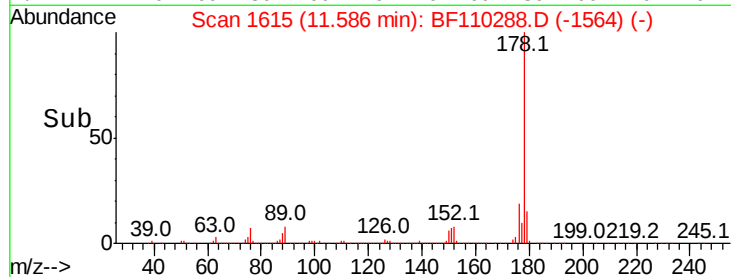
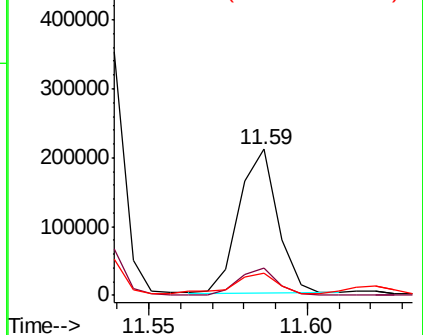
10/30/2018 3:04:36 PM



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#73

Carbazole

Concen: 3.752 ng

RT: 11.74 min Scan# 1641

Delta R.T. 0.00 min

Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

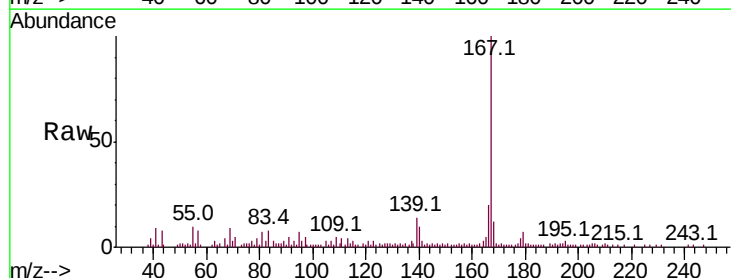
Tgt Ion:167 Resp: 46303

Ion Ratio Lower Upper

167 100

166 20.4 17.4 26.0

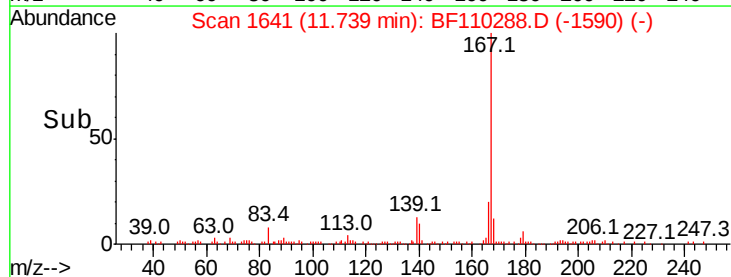
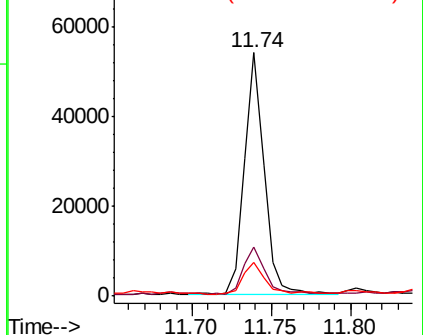
139 13.9 10.9 16.3

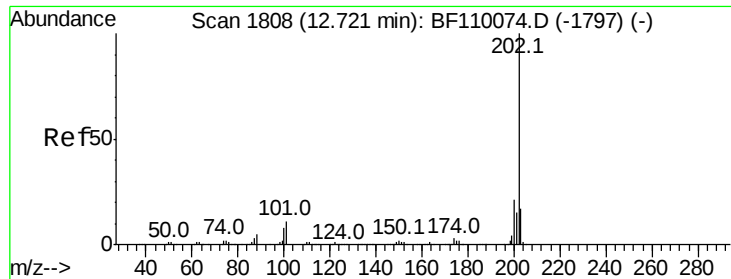


Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E





#75

Fluoranthene

Concen: 82.553 ng

RT: 12.73 min Scan# 1810

Delta R.T. 0.01 min

Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Instrument :

BNA_F

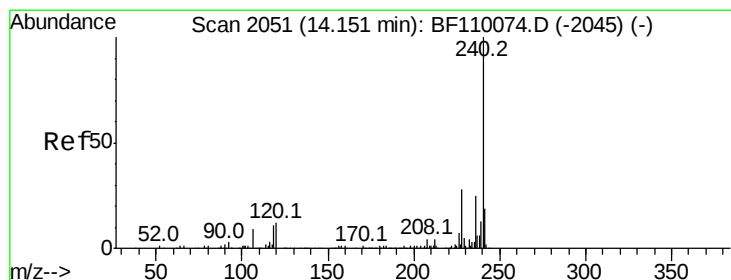
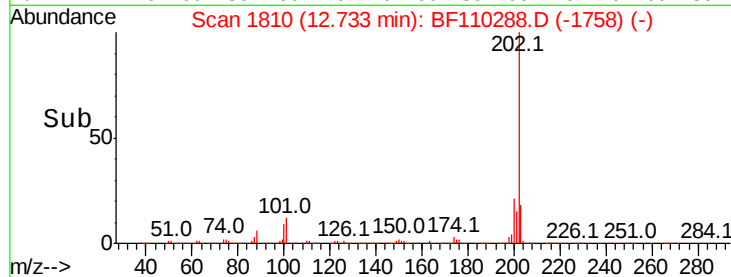
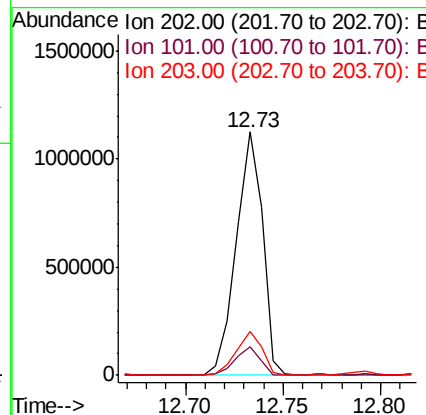
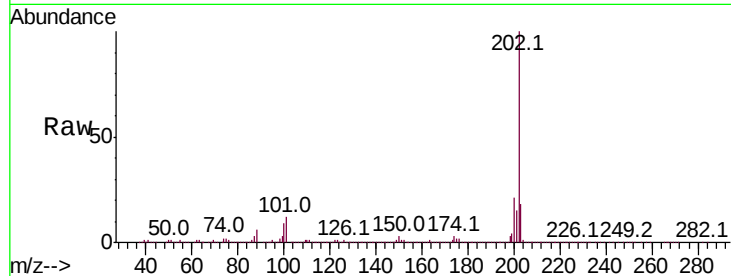
ClientSampleId :

DOCUMENTATION-27

Tot Ion:	202	Resp:	1056403
Ion Ratio	Lower	Upper	
202	100		
101	11.9	0.0	31.4
203	18.0	0.0	37.7

Manual Integrations
APPROVED

Sohil
10/30/2018 3:04:36 PM



#76

Chrysene-d12

Concen: 20.000 ng

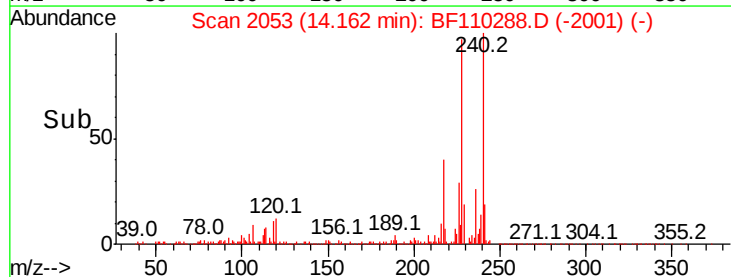
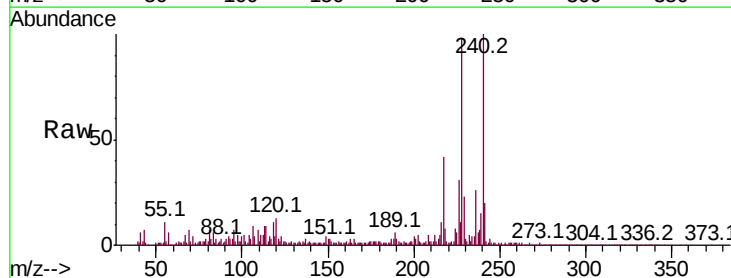
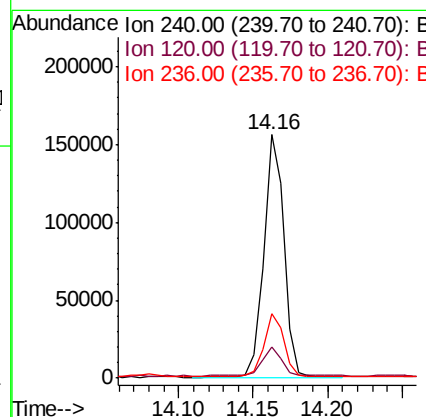
RT: 14.16 min Scan# 2053

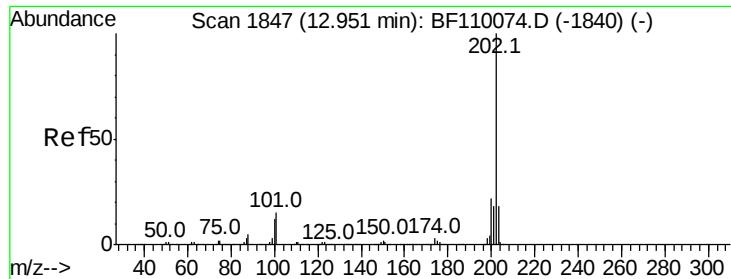
Delta R.T. 0.01 min

Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Tgt Ion:	240	Resp:	142279
Ion Ratio	Lower	Upper	
240	100		
120	12.9	8.3	12.5#
236	26.4	21.2	31.8





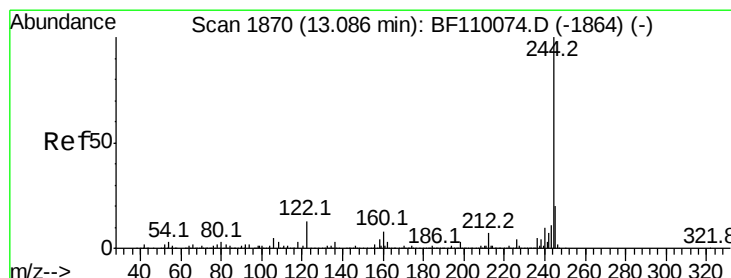
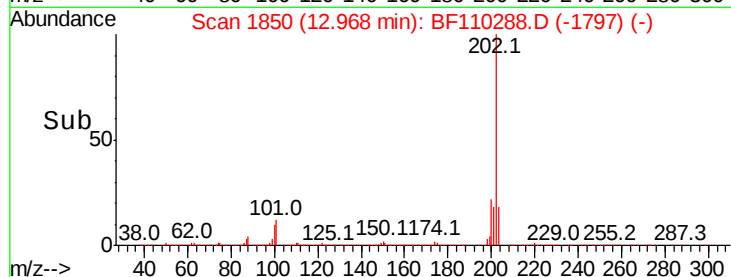
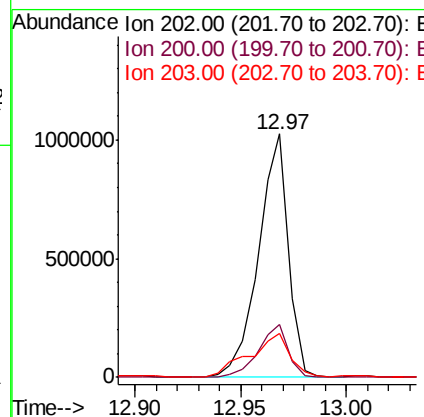
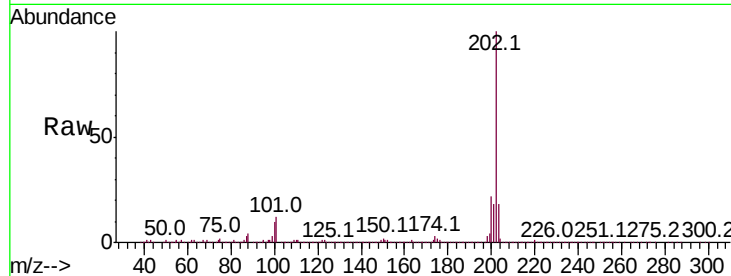
#78
Pvrene
Concen: 98.688 ng
RT: 12.97 min Scan# 1850
Delta R.T. 0.01 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Instrument :
BNA_F
ClientSampleId :
DOCUMENTATION-27

Tot Ion	Ratio	Lower	Upper
202	100		
200	21.8	17.8	26.6
203	18.1	14.2	21.4

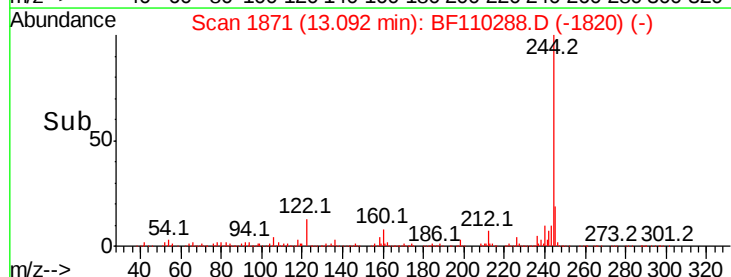
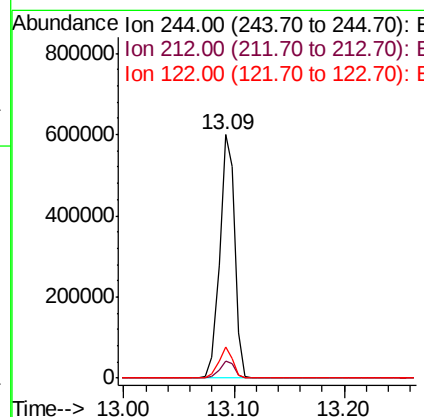
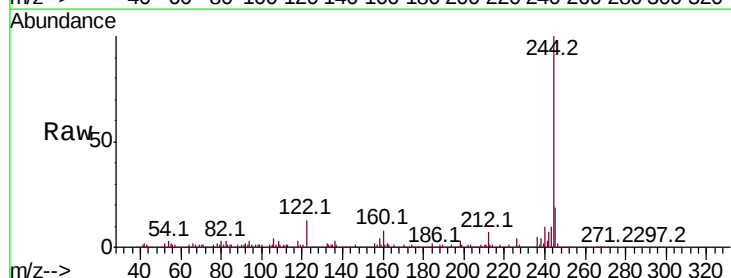
Manual Integrations
APPROVED

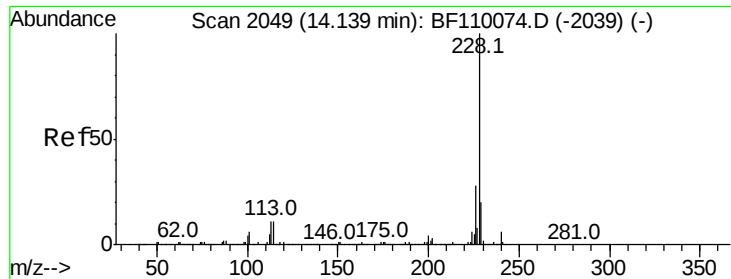
Sohil
10/30/2018 3:04:36 PM



#79
Terphenyl-d14
Concen: 81.455 ng
RT: 13.09 min Scan# 1871
Delta R.T. -0.00 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Lower	Upper
244	100		
212	7.1	5.8	8.8
122	12.7	8.7	13.1





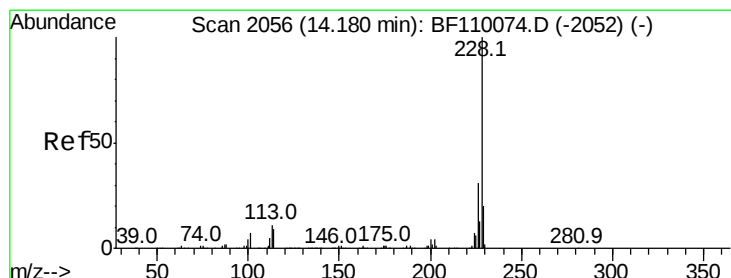
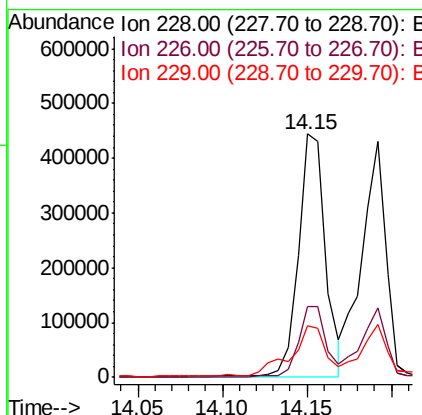
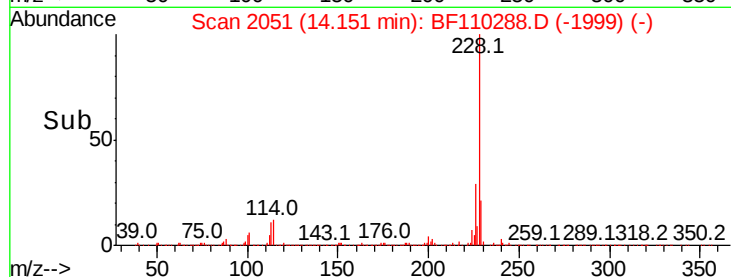
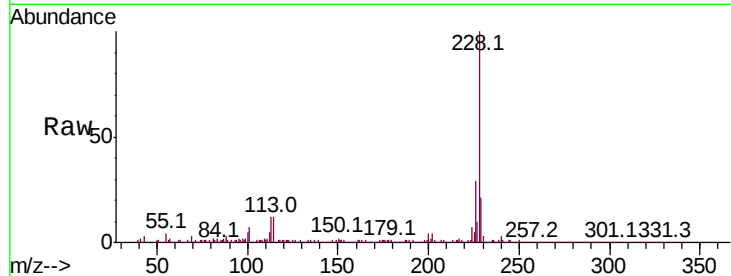
#81
Benzo(a)anthracene
Concen: 58.223 ng
RT: 14.15 min Scan# 2051
Delta R.T. 0.01 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Instrument :
BNA_F
ClientSampleId :
DOCUMENTATION-27

Tot Ion	Ratio	Lower	Upper
228	100		
226	29.0	22.1	33.1
229	21.4	15.6	23.4

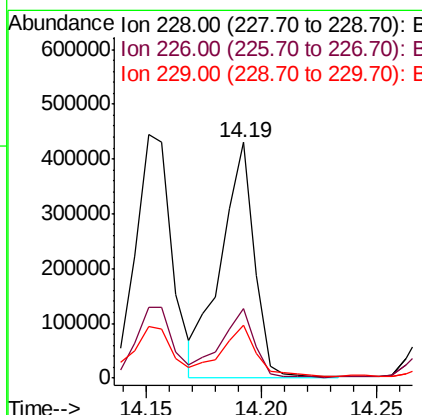
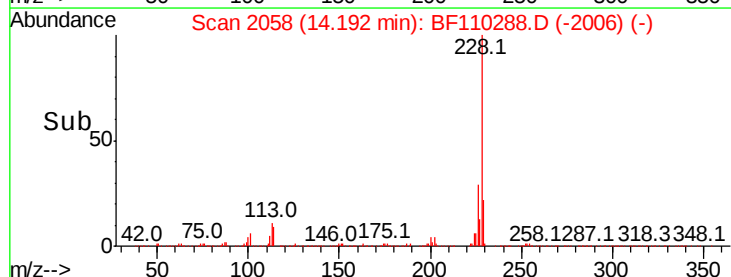
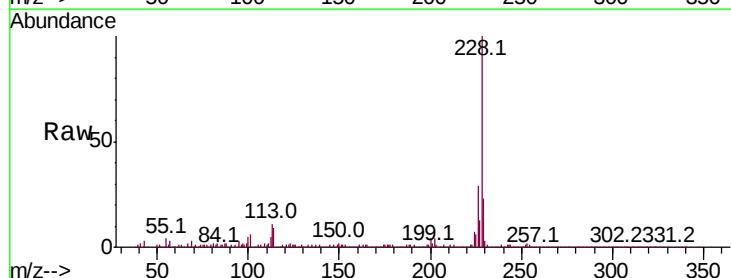
Manual Integrations
APPROVED

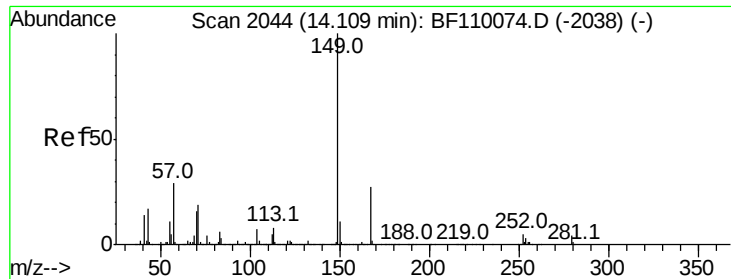
Sohil
10/30/2018 3:04:36 PM



#83
Chrysene
Concen: 53.282 ng
RT: 14.19 min Scan# 2058
Delta R.T. 0.01 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.4	24.7	37.1
229	22.6	15.9	23.9





#84

Bis(2-ethylhexyl)phthalate

Concen: 4.895 ng

RT: 14.12 min Scan# 2045

Delta R.T. 0.01 min

Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Instrument :

BNA_F

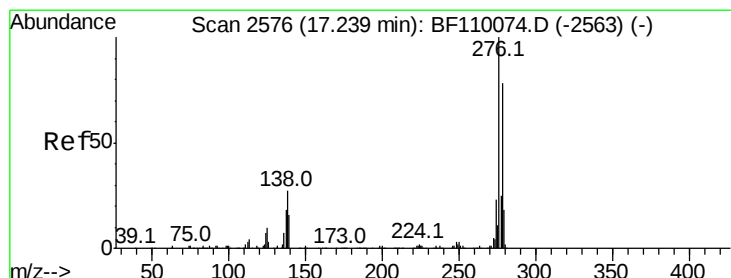
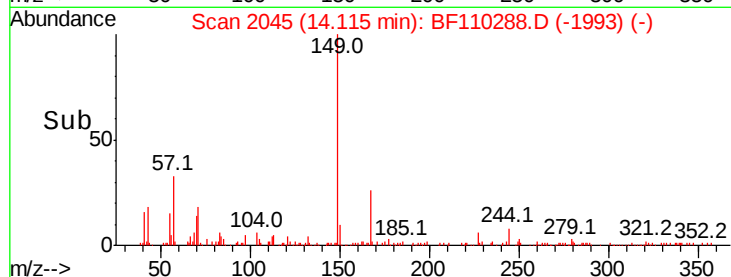
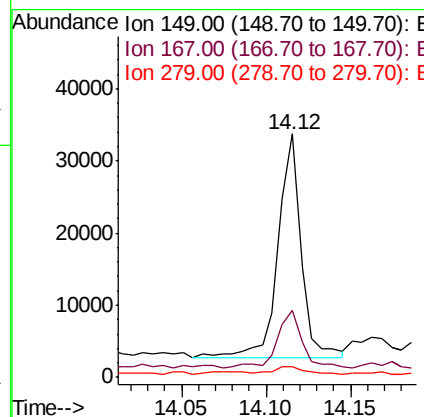
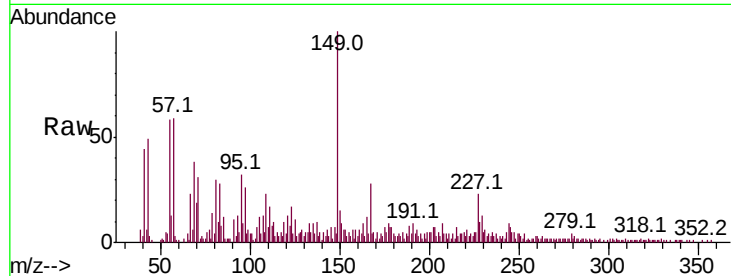
ClientSampleId :

DOCUMENTATION-27

Tot Ion	Ratio	Resp Lower	Upper
149	100		
167	27.7	19.8	29.8
279	4.4	2.7	4.1

Manual Integrations
APPROVED

Sohil
10/30/2018 3:04:36 PM



#86

Indeno(1,2,3-cd)pyrene

Concen: 31.981 ng

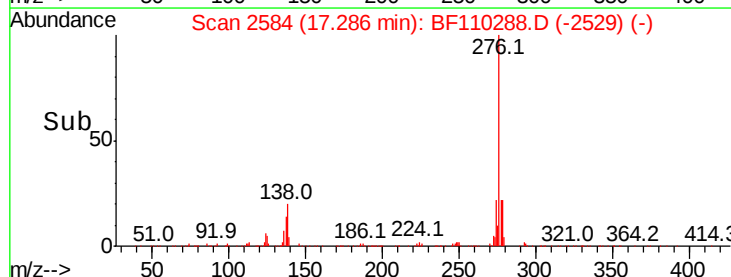
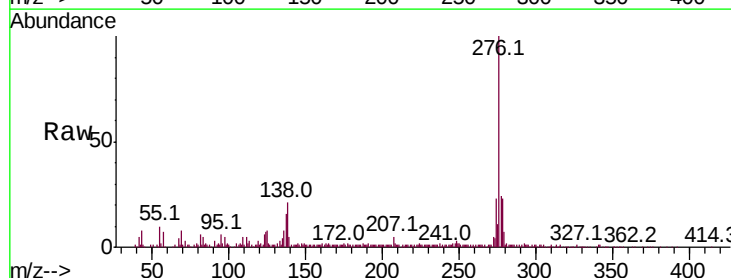
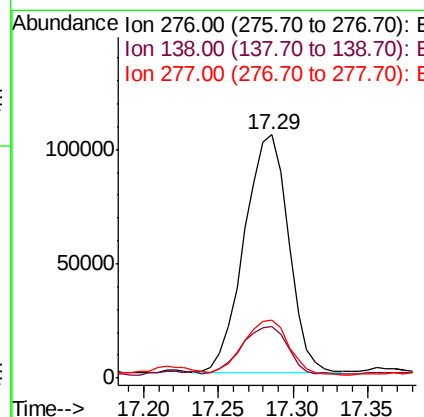
RT: 17.29 min Scan# 2584

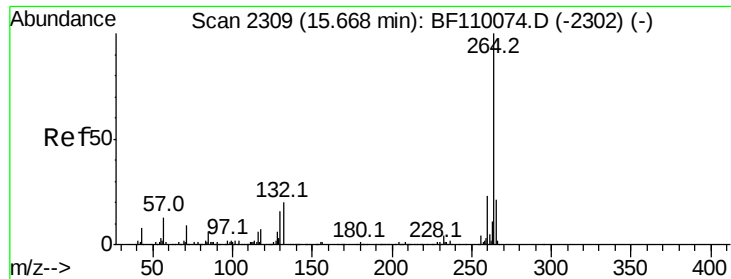
Delta R.T. 0.02 min

Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Resp Lower	Upper
276	100		
138	20.5	18.5	27.7
277	24.1	20.0	30.0





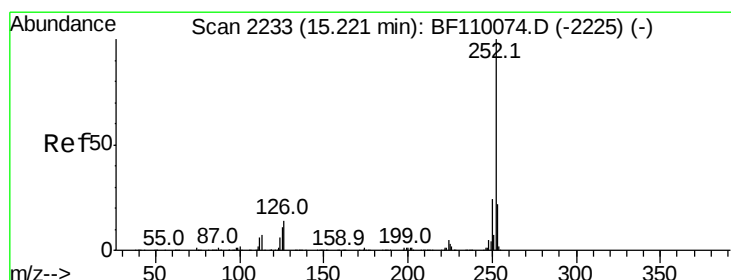
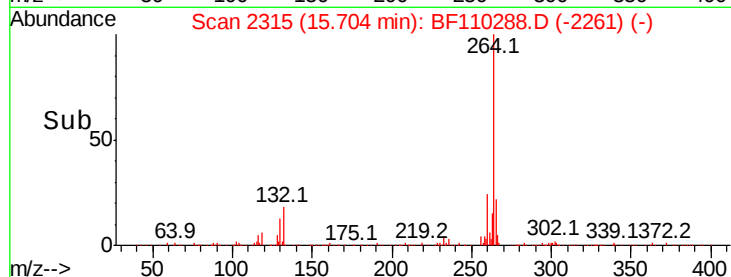
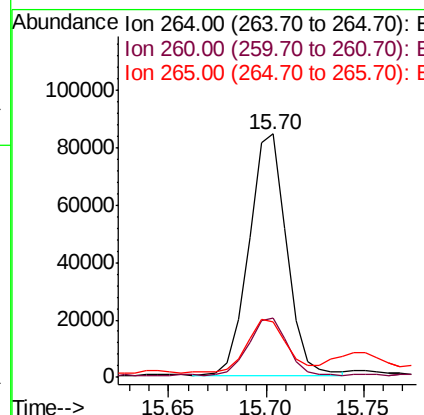
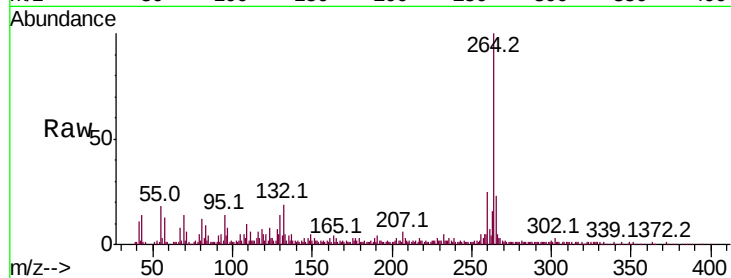
#87
Pervlene-d12
Concen: 20.000 ng
RT: 15.70 min Scan# 2315
Delta R.T. 0.02 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Instrument :
BNA_F
ClientSampleId :
DOCUMENTATION-27

Tot Ion	Ratio	Lower	Upper
264	100		
260	24.6	18.7	28.1
265	22.8	16.7	25.1

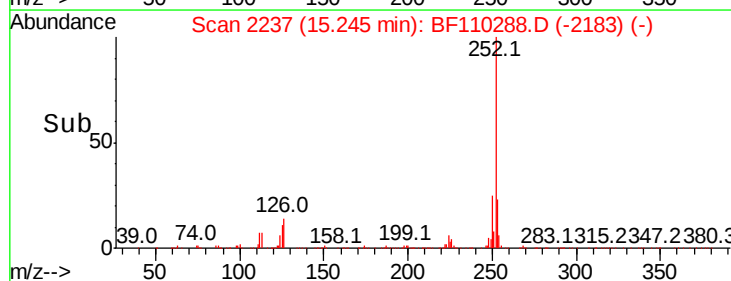
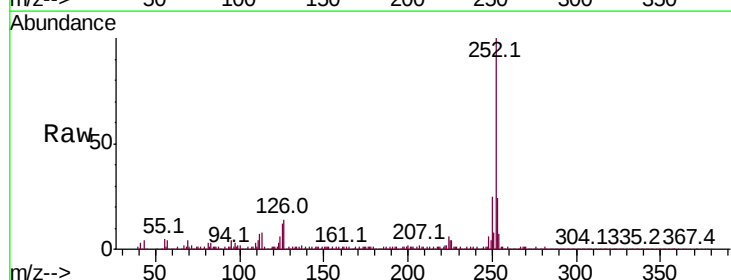
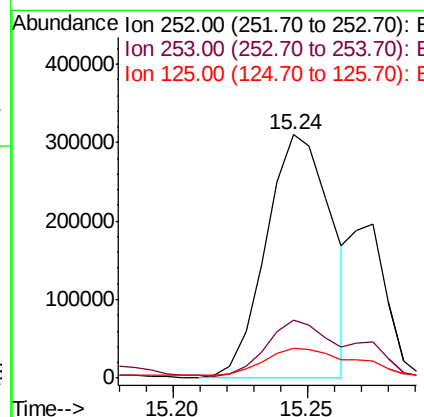
Manual Integrations
APPROVED

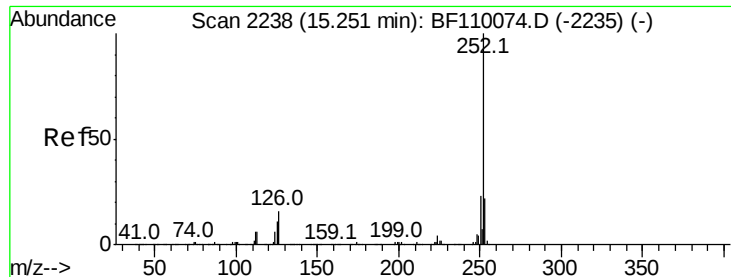
Sohil
10/30/2018 3:04:36 PM



#88
Benzo(b)fluoranthene
Concen: 80.496 ng m
RT: 15.24 min Scan# 2237
Delta R.T. 0.02 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.0	17.2	25.8
125	12.2	8.2	12.4





#89

Benzo(k)fluoranthene

Concen: 28.668 ng/mL

RT: 15.27 min Scan# 2242

Delta R.T. 0.01 min

Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Instrument :

BNA_F

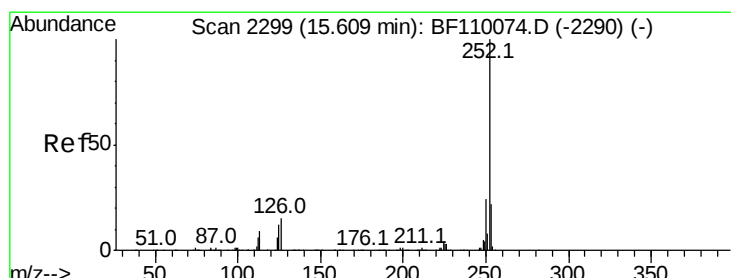
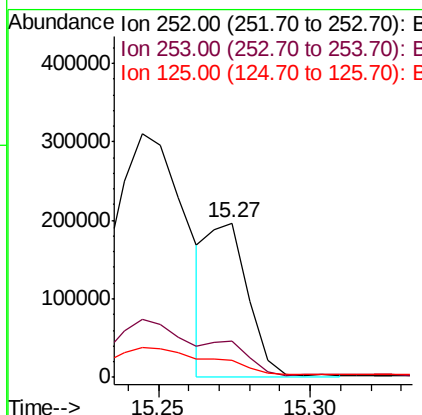
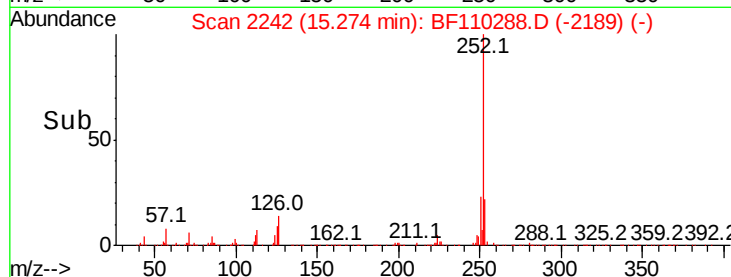
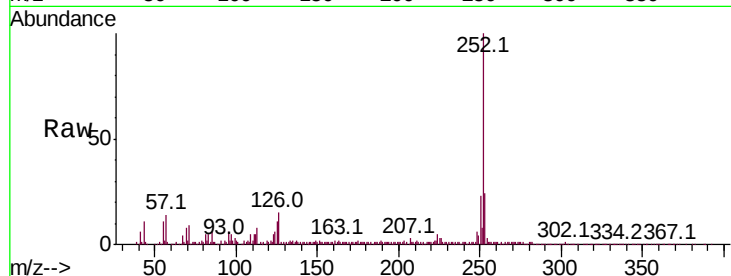
ClientSampleId :

DOCUMENTATION-27

Tot Ion:	252	Resp:	182191
Ion Ratio	Lower	Upper	
252	100		
253	23.8	17.2	25.8
125	10.9	7.4	11.0

Manual Integrations
APPROVED

Sohil
10/30/2018 3:04:36 PM



#90

Benzo(a)pyrene

Concen: 62.866 ng/mL

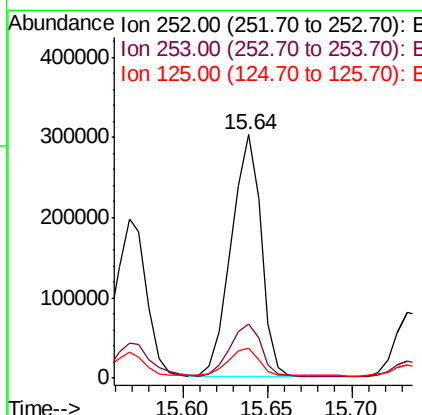
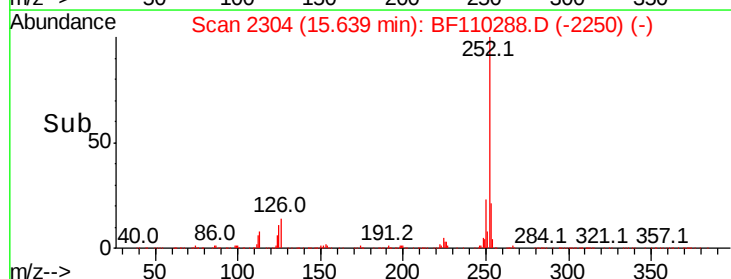
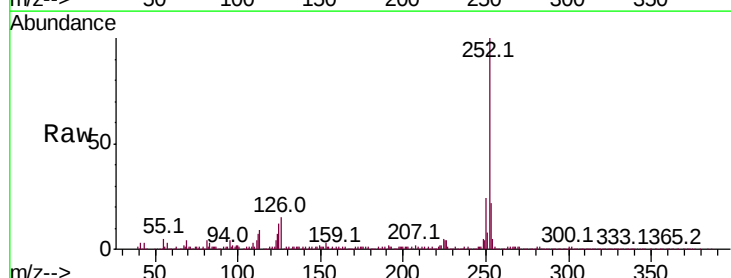
RT: 15.64 min Scan# 2304

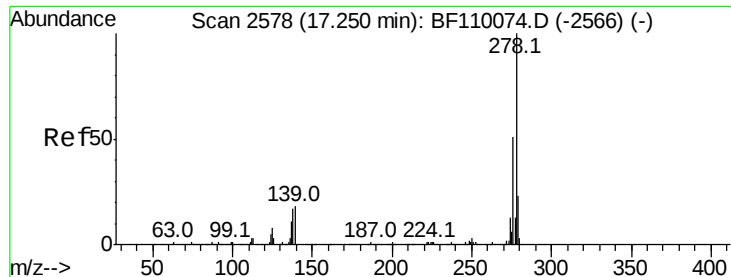
Delta R.T. 0.02 min

Lab File: BF110288.D

Acq: 30 Oct 2018 3:09

Tgt Ion:	252	Resp:	373954
Ion Ratio	Lower	Upper	
252	100		
253	22.3	18.2	27.4
125	12.0	9.0	13.6





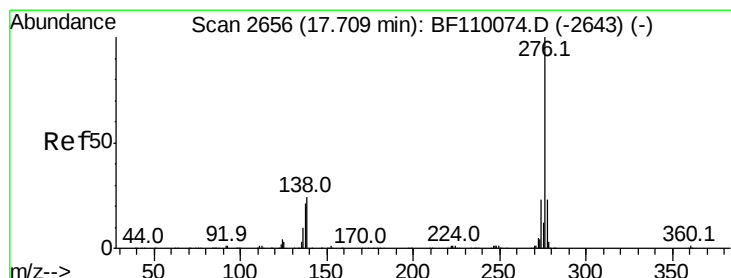
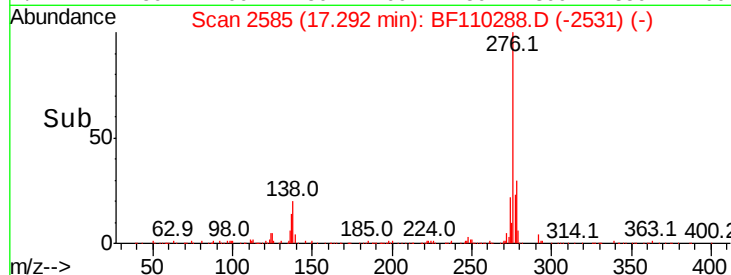
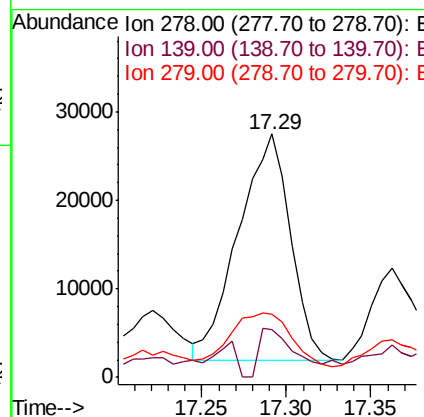
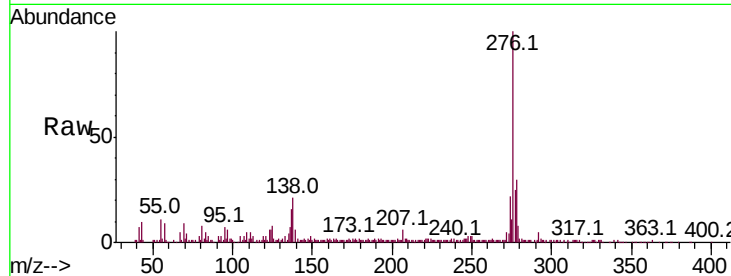
#91
Dibenzo(a,h)anthracene
Concen: 10.618 ng
RT: 17.29 min Scan# 2585
Delta R.T. 0.02 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Instrument :
BNA_F
ClientSampleId :
DOCUMENTATION-27

Tot Ion	Ratio	Lower	Upper
278	100		
139	19.4	12.7	19.1#
279	25.8	19.0	28.4

Manual Integrations
APPROVED

Sohil
10/30/2018 3:04:36 PM



#92
Benzo(g,h,i)perylene
Concen: 40.702 ng
RT: 17.77 min Scan# 2666
Delta R.T. 0.03 min
Lab File: BF110288.D
Acq: 30 Oct 2018 3:09

Tgt Ion	Ratio	Lower	Upper
276	100		
277	25.1	18.8	28.2
138	22.8	16.0	24.0

