

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
 Data File : BF107683.D
 Acq On : 26 Jul 2018 4:08
 Operator : JU/SJ
 Sample : J4144-01DL 100X
 Misc :
 ALS Vial : 34 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 MCMaster-SEDIMENT-7-23-18DL

Manual Integrations
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Sohil
 7/26/2018 2:02:33 PM

Quant Time: Jul 26 08:25:22 2018
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF072018.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 20 16:29:27 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.97	152	167899	20.00	ng	-0.01
21) Naphthalene-d8	8.25	136	710011	20.00	ng	-0.01
38) Acenaphthene-d10	10.01	164	274065	20.00	ng	-0.01
63) Phenanthrene-d10	11.51	188	474887	20.00	ng	0.00
75) Chrysene-d12	14.15	240	393125	20.00	ng	-0.01
86) Perylene-d12	15.69	264	330138	20.00	ng	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	5.64	112	136	0.01	ng	0.03
7) Phenol-d6	6.67	99	2964	0.24	ng	0.05
23) Nitrobenzene-d5	7.55	82	1415	0.13	ng	0.00
41) 2,4,6-Tribromophenol	10.81	330	1562	0.50	ng	-0.01
44) 2-Fluorobiphenyl	0.00	172	0d	0.00	ng	
78) Terphenyl-d14	13.08	244	12480	0.81	ng	-0.02
Target Compounds						
31) Naphthalene	8.27	128	1400474	44.855	ng	99
37) 2-Methylnaphthalene	8.97	142	337780	15.612	ng	100
45) 1,1'-Biphenyl	9.42	154	72072	3.019	ng	99
48) Acenaphthylene	9.87	152	110340	4.025	ng	98
51) Acenaphthene	10.04	154	201914	11.756	ng	99
54) Dibenzofuran	10.22	168	229048	9.058	ng	98
57) Fluorene	10.56	166	219613	12.174	ng	94
70) Phenanthrene	11.53	178	736014	31.805	ng	100
71) Anthracene	11.58	178	227738	9.774	ng	98
74) Fluoranthene	12.72	202	501374	20.190	ng	95
77) Pyrene	12.95	202	401637	14.936	ng	97
80) Benzo(a)anthracene	14.14	228	174591	7.578	ng	94
82) Chrysene	14.18	228	135082	6.104	ng	96
85) Indeno(1,2,3-cd)pyrene	17.27	276	39796	2.122	ng	95
87) Benzo(b)fluoranthene	15.23	252	111534m	6.173	ng	
88) Benzo(k)fluoranthene	15.25	252	56032m	3.165	ng	
89) Benzo(a)pyrene	15.62	252	93227	5.641	ng	99
91) Benzo(g,h,i)perylene	17.74	276	33420	2.372	ng	# 90

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

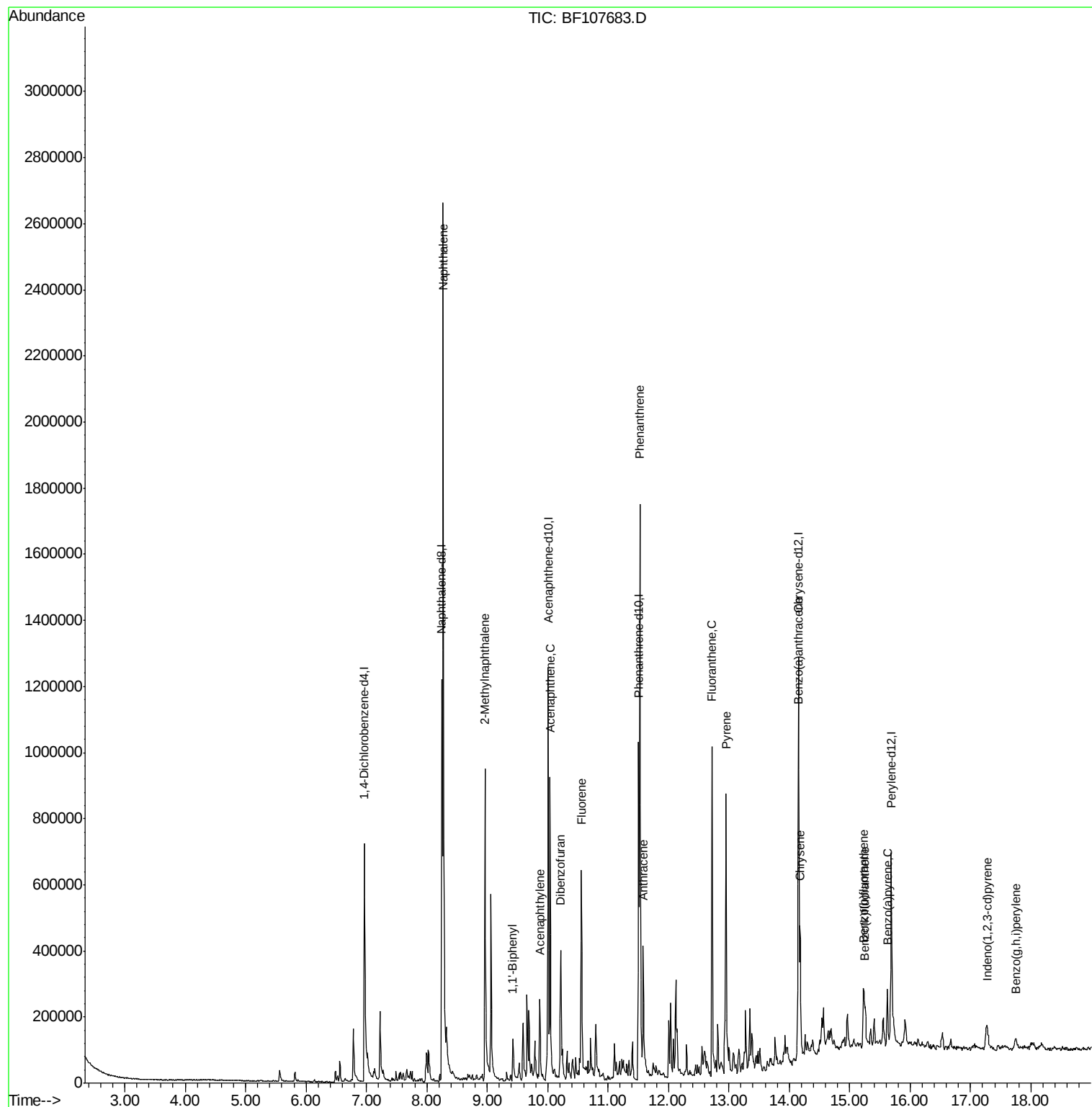
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107683.D
Acq On : 26 Jul 2018 4:08
Operator : JU/SJ
Sample : J4144-01DL 100X
Misc :
ALS Vial : 34 Sample Multiplier: 1

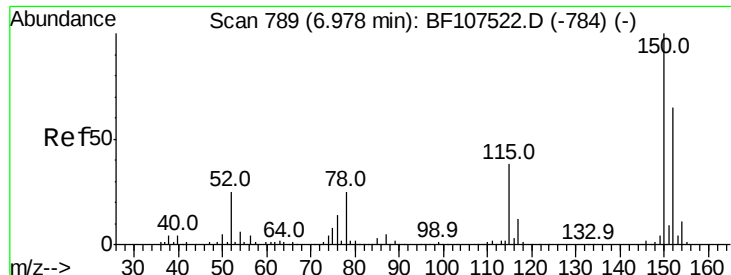
Instrument :
BNA_F
ClientSampleId :
MCMaster-SEDIMENT-7-23-18DL

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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
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#1

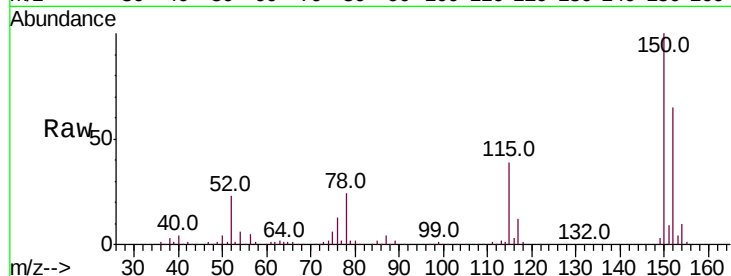
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.97 min Scan# 787
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Instrument :
BNA_F
ClientSampleId :
MCMaster-SEDIMENT-7-23-18DL

Tot Ion	Ratio	Lower	Upper
152	100		
150	154.7	124.6	186.8
115	60.3	50.1	75.1

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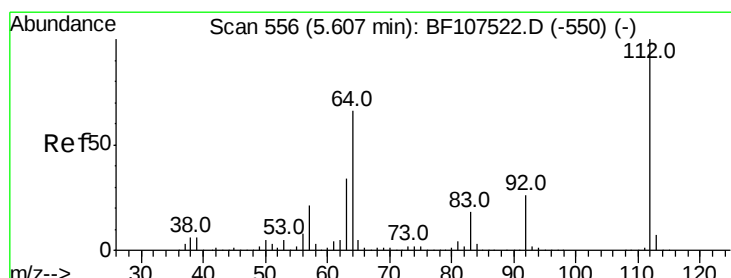
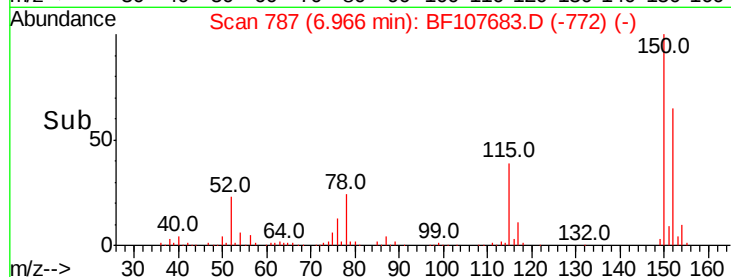
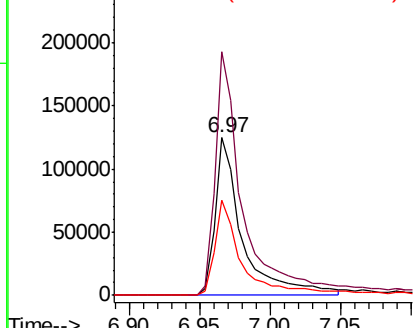


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

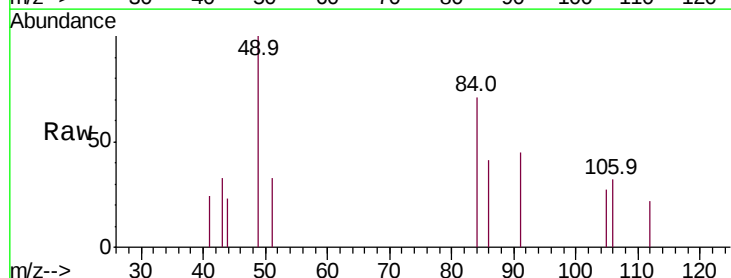
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol
Concen: 0.013 ng
RT: 5.64 min Scan# 561
Delta R.T. 0.03 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Tgt Ion	Ratio	Lower	Upper
112	100		
64	0.0	47.9	71.9#
63	0.0	23.7	35.5#

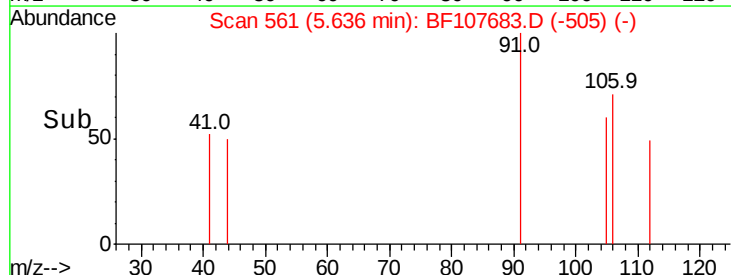
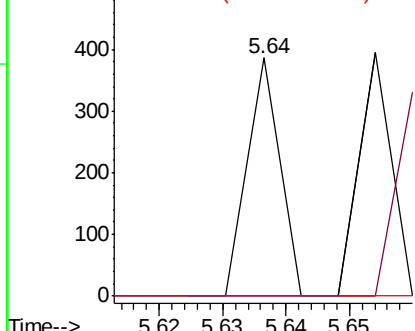


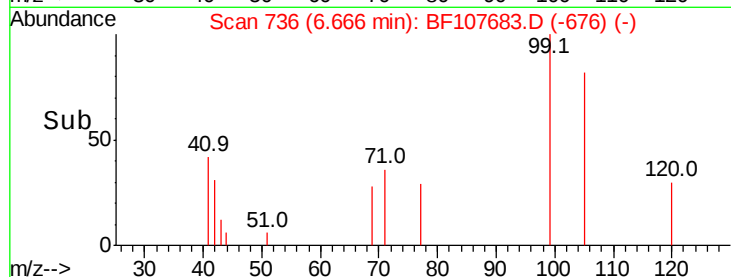
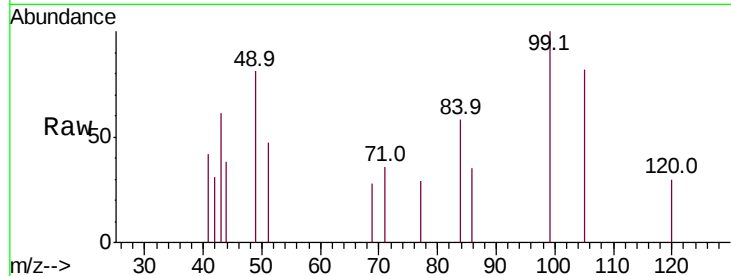
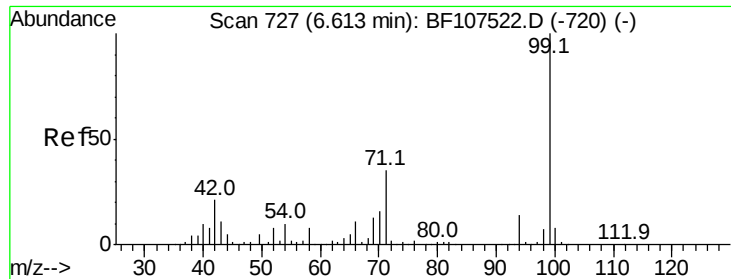
Abundance

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





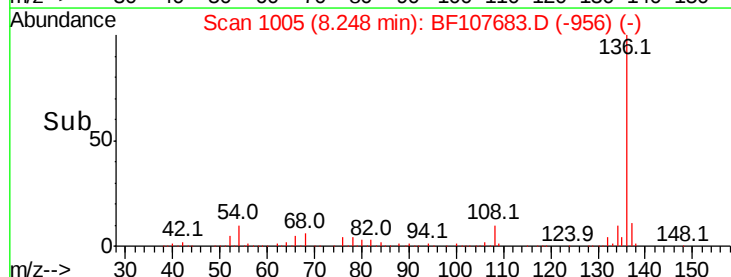
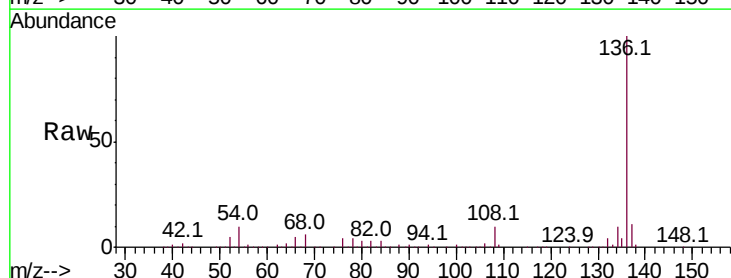
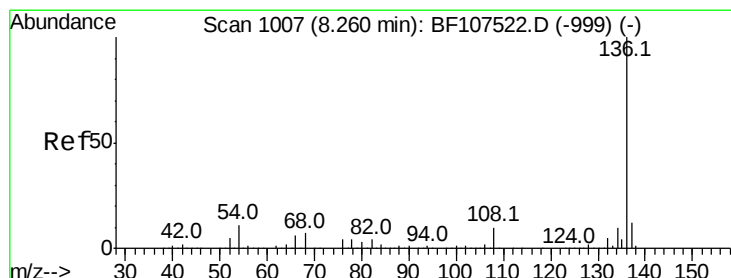
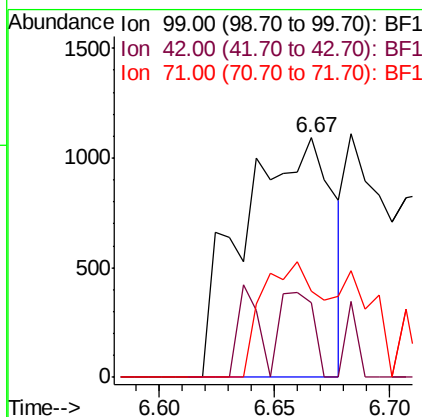
#7
Phenol-d6
Concen: 0.236 ng
RT: 6.67 min Scan# 736
Delta R.T. 0.05 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Tot Ion: 99 Resp: 2964
Ion Ratio Lower Upper
99 100
42 31.1 14.5 21.7#
71 36.3 25.4 38.0

Instrument :
BNA_F
ClientSampleId :
MCMaster-SEDIMENT-7-23-18DL

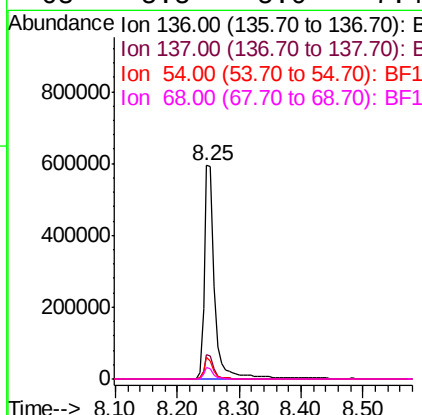
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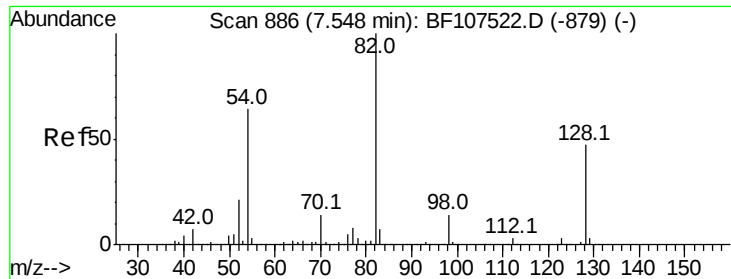
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#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.25 min Scan# 1005
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Tgt Ion: 136 Resp: 710011
Ion Ratio Lower Upper
136 100
137 11.2 8.9 13.3
54 10.1 6.6 9.8#
68 5.5 5.0 7.4





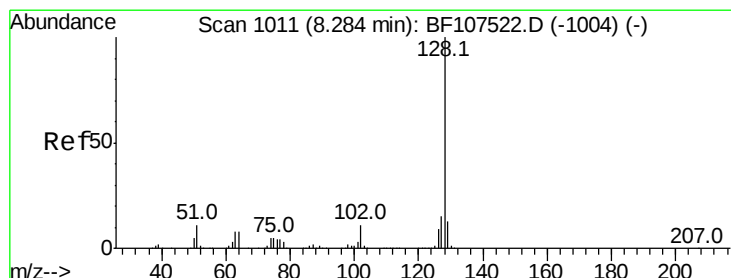
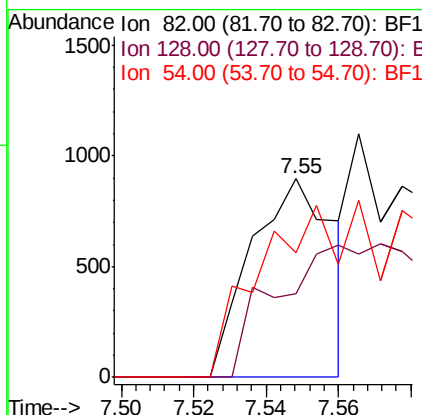
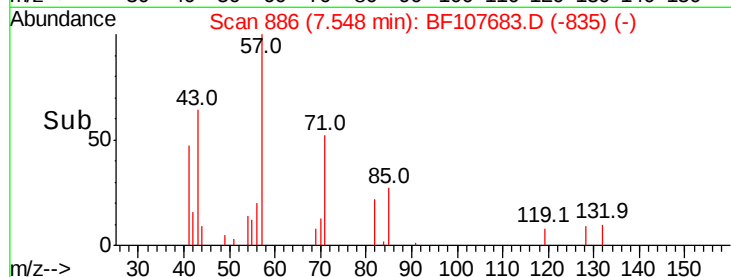
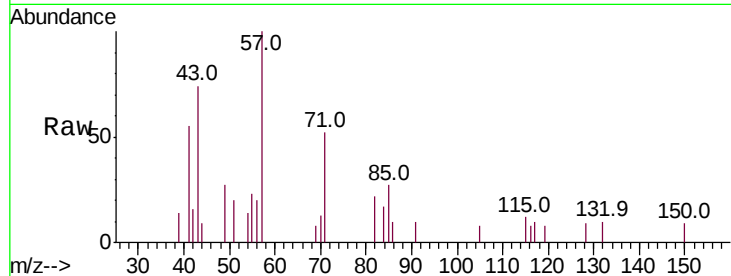
#23
 Nitrobenzene-d5
 Concen: 0.134 ng
 RT: 7.55 min Scan# 886
 Delta R.T. 0.00 min
 Lab File: BF107683.D
 Acq: 26 Jul 2018 4:08

Instrument :
 BNA_F
 ClientSampleId :
 MCMaster-SEDIMENT-7-23-18DL

Tot Ion:	82	Resp:	1415
Ion Ratio	Lower	Upper	
82	100		
128	42.3	36.1	54.1
54	62.6	41.4	62.2#

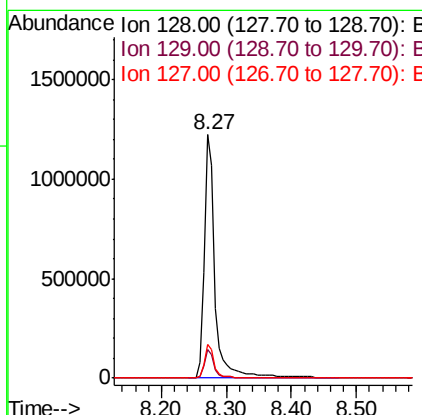
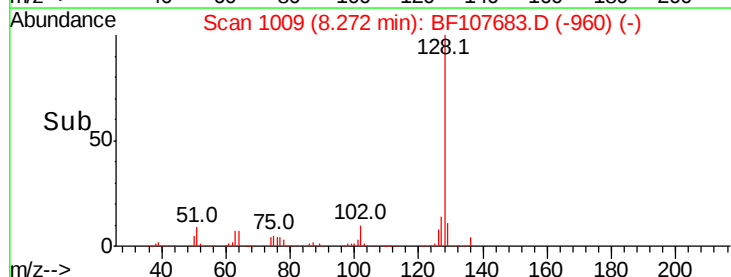
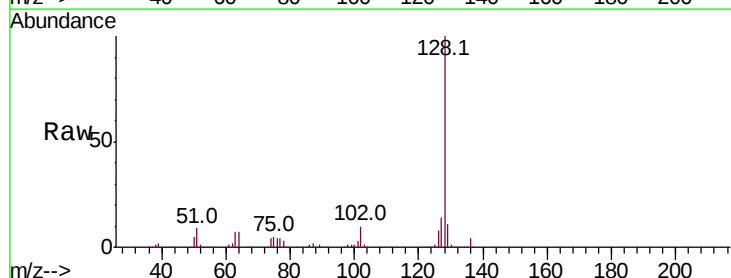
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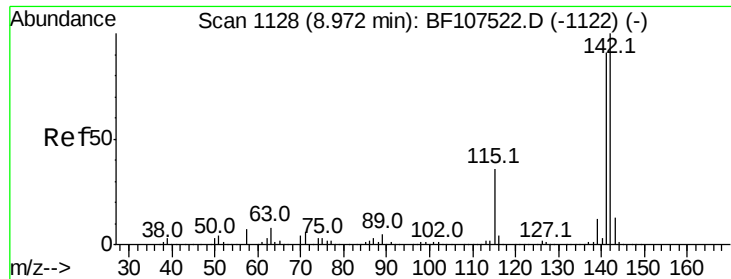
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#31
 Naphthalene
 Concen: 44.855 ng
 RT: 8.27 min Scan# 1009
 Delta R.T. -0.01 min
 Lab File: BF107683.D
 Acq: 26 Jul 2018 4:08

Tgt Ion:	128	Resp:	1400474
Ion Ratio	Lower	Upper	
128	100		
129	11.5	8.8	13.2
127	13.9	10.9	16.3





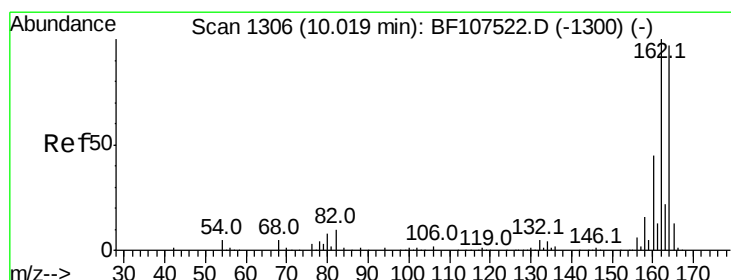
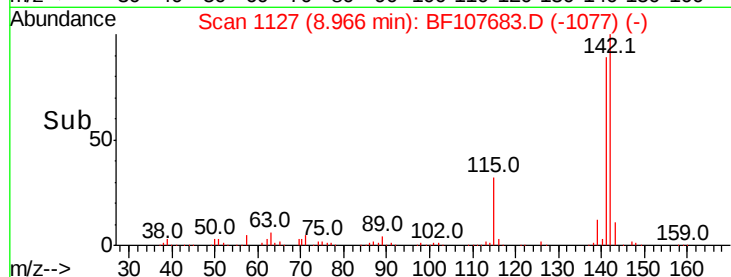
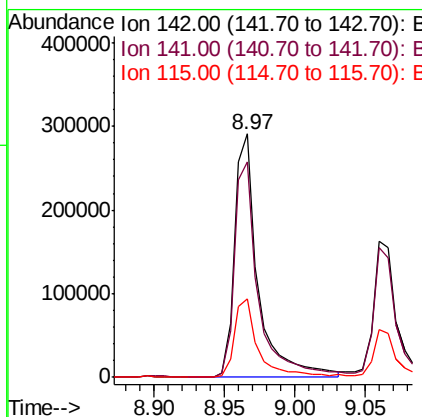
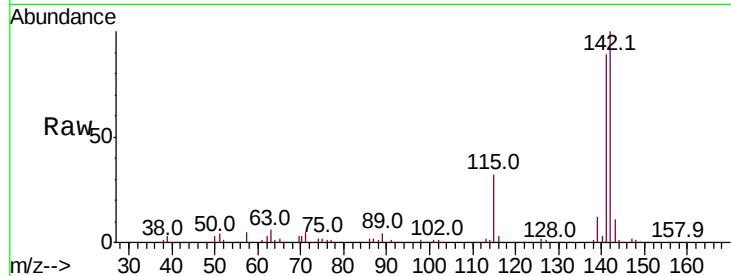
#37
2-Methylnaphthalene
Concen: 15.612 ng
RT: 8.97 min Scan# 1127
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Instrument :
BNA_F
ClientSampleId :
MCMASTER-SEDIMENT-7-23-18DL

Tot Ion	Ratio	Lower	Upper
142	100		
141	88.7	70.8	106.2
115	32.2	26.1	39.1

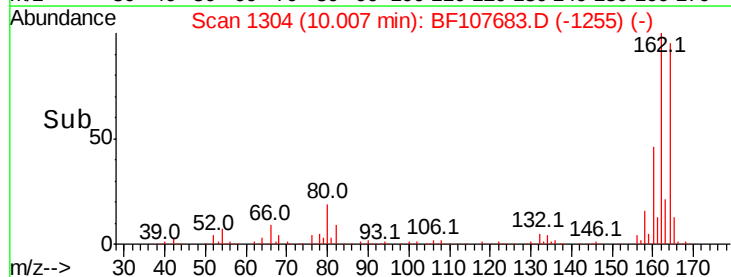
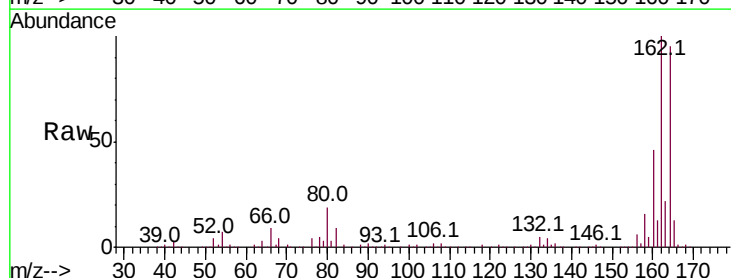
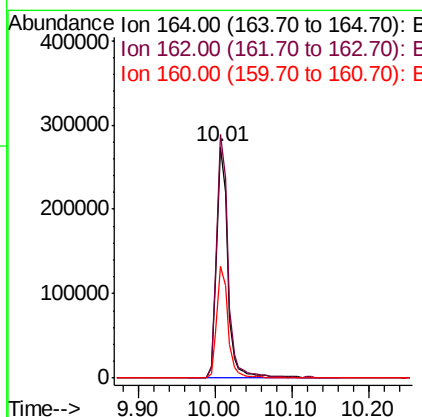
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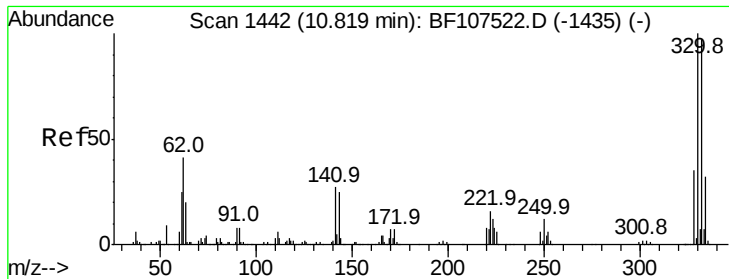
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#38
Acenaphthene-d10
Concen: 20.000 ng
RT: 10.01 min Scan# 1304
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Tgt Ion	Ratio	Lower	Upper
164	100		
162	105.2	86.1	129.1
160	48.4	38.3	57.5





#41

2,4,6-Tribromophenol

Concen: 0.501 ng

RT: 10.81 min Scan# 1440

Delta R.T. -0.01 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Instrument :

BNA_F

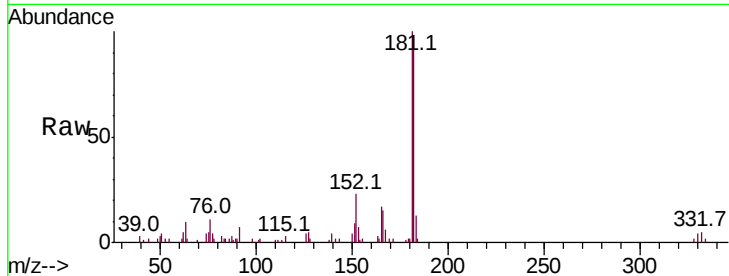
ClientSampleId :

MCMaster-SEDIMENT-7-23-18DL

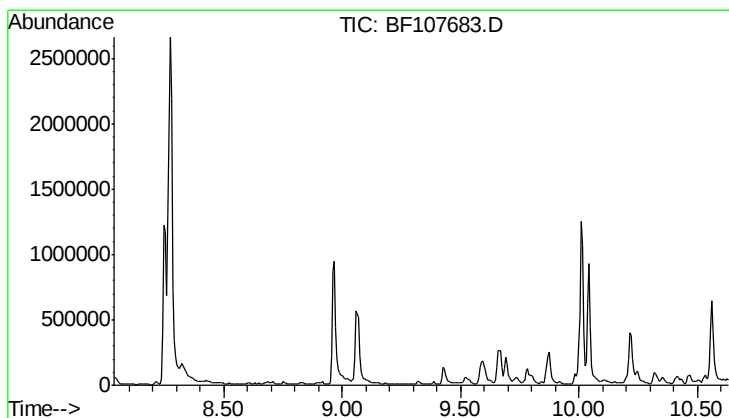
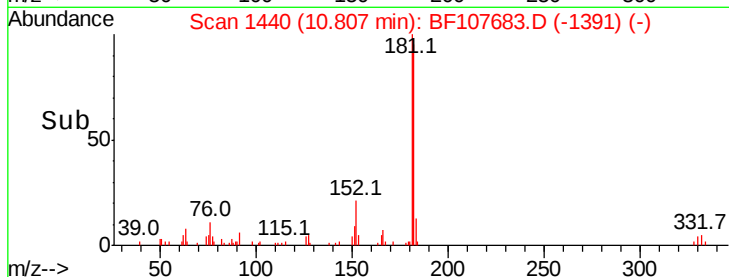
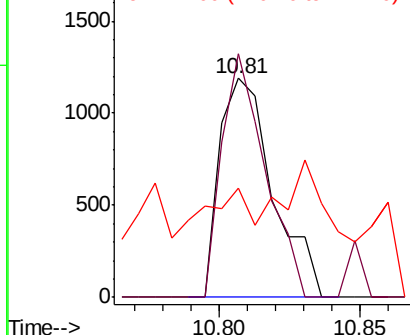
Tot Ion:	330	Resp:	1562
Ion Ratio	Lower	Upper	
330	100		
332	90.2	77.0	115.6
141	44.2	29.9	44.9

Manual Integrations
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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

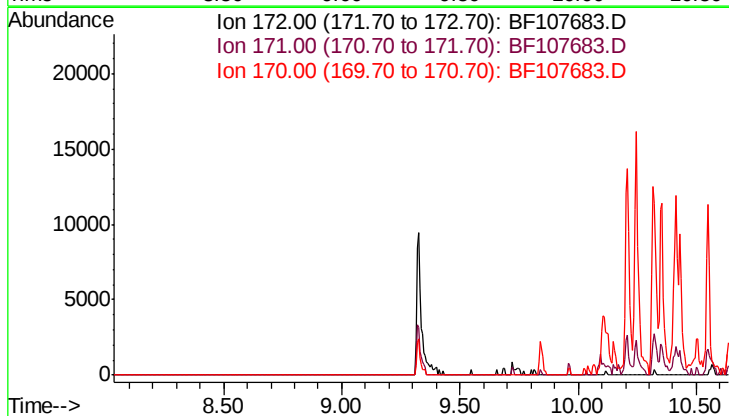
Concen: 0.000 ng

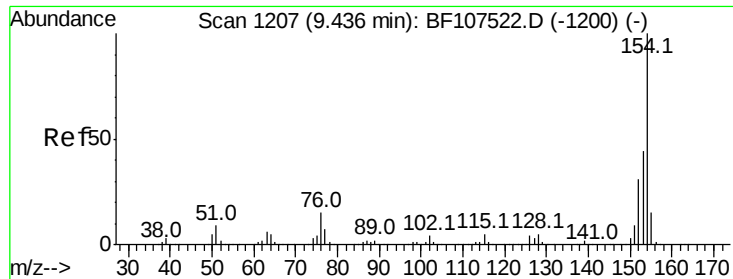
Expected RT: 9.34 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Tgt Ion:	172
Sig	Exp Ratio
172	100
171	37.1
170	24.5





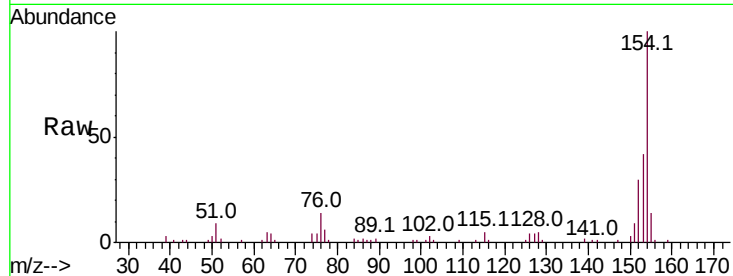
#45
1,1'-Biphenyl
Concen: 3.019 ng
RT: 9.42 min Scan# 1205
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Instrument :
BNA_F
ClientSampleId :
MCMaster-SEDIMENT-7-23-18DL

Tot Ion	Ratio	Lower	Upper
154	100		
153	42.3	21.3	61.3
76	13.6	0.0	34.0

Manual Integrations
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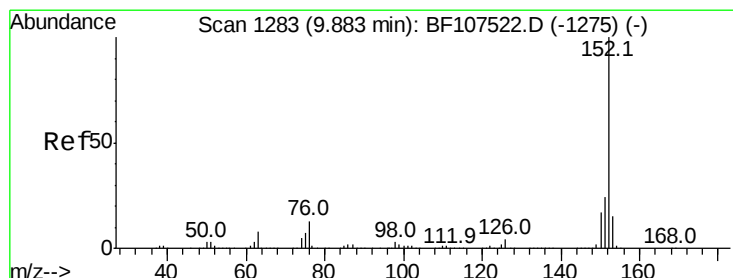
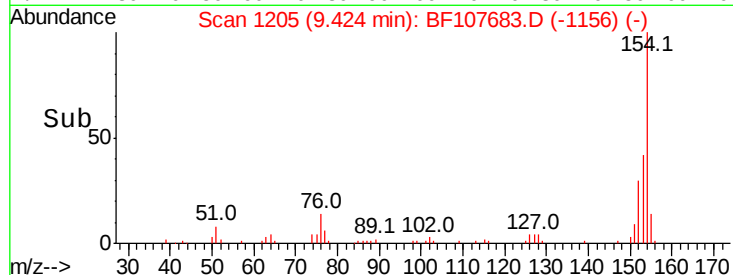
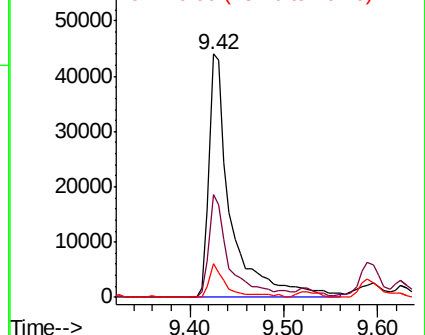


Abundance

Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 76.00 (75.70 to 76.70): BF1



#48
Acenaphthylene
Concen: 4.025 ng
RT: 9.87 min Scan# 1281
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

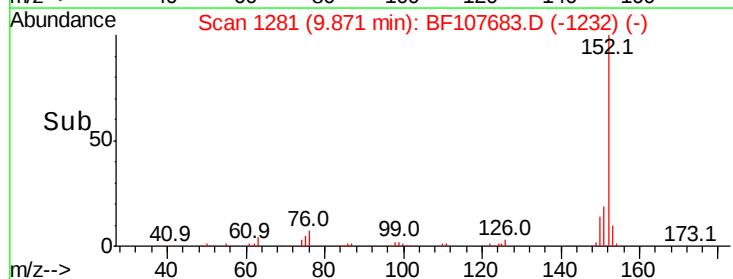
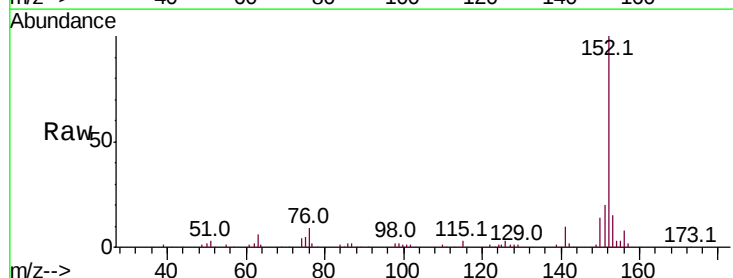
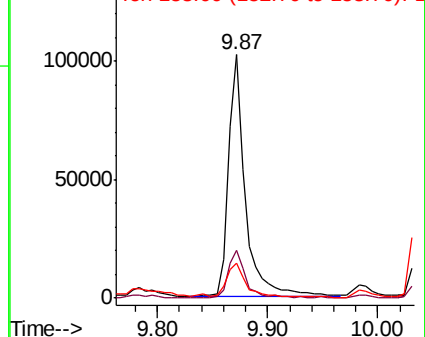
Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.7	16.3	24.5
153	14.6	10.7	16.1

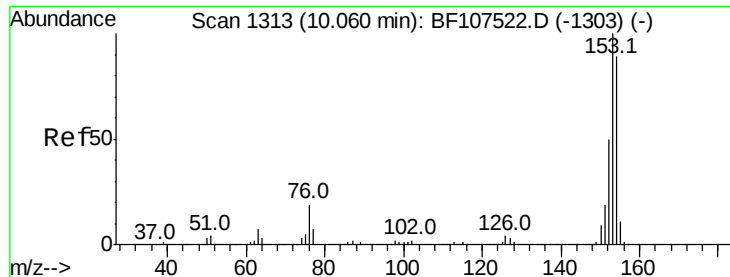
Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#51

Acenaphthene

Concen: 11.756 ng

RT: 10.04 min Scan# 1310

Delta R.T. -0.02 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Instrument :

BNA_F

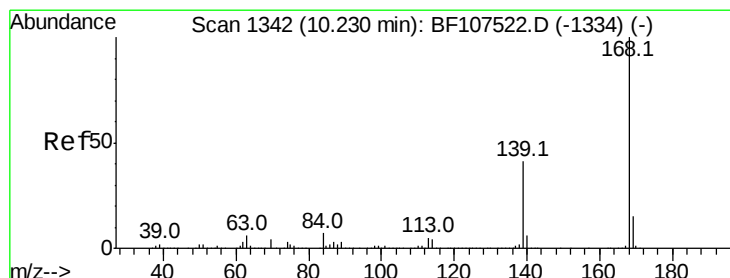
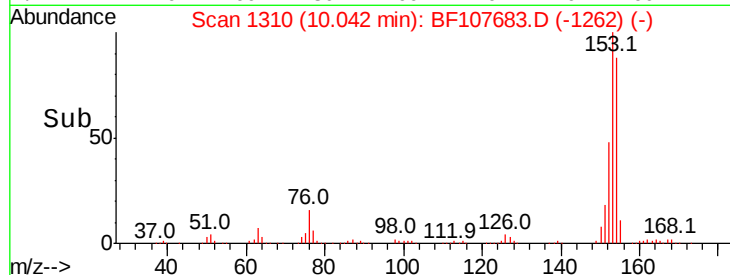
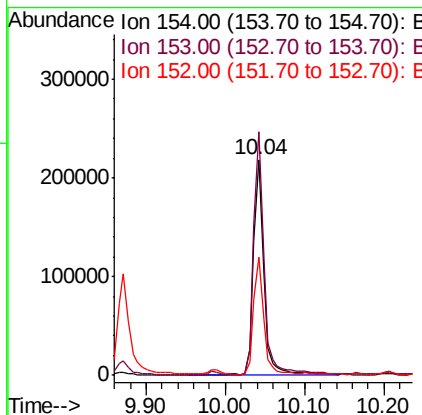
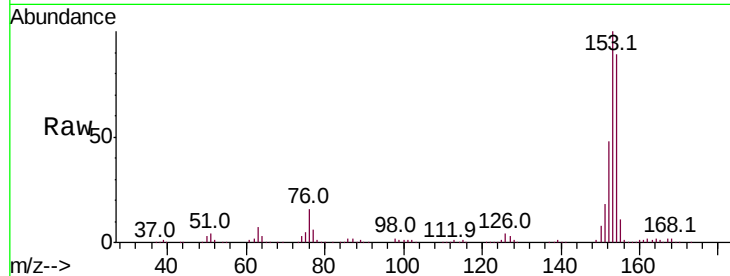
ClientSampleId :

MCMaster-SEDIMENT-7-23-18DL

Tot Ion:	154	Resp:	201914
Ion Ratio	Lower	Upper	
154	100		
153	112.7	91.2	136.8
152	54.6	43.8	65.8

Manual Integrations
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7/26/2018 2:02:33 PM



#54

Dibenzofuran

Concen: 9.058 ng

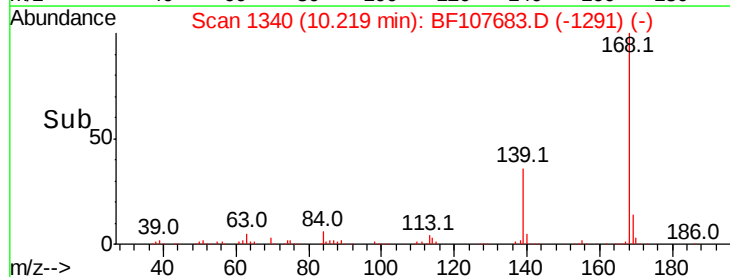
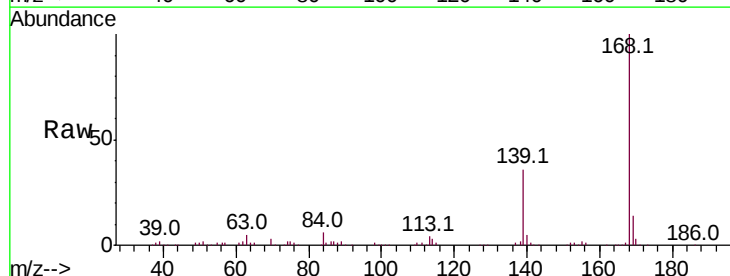
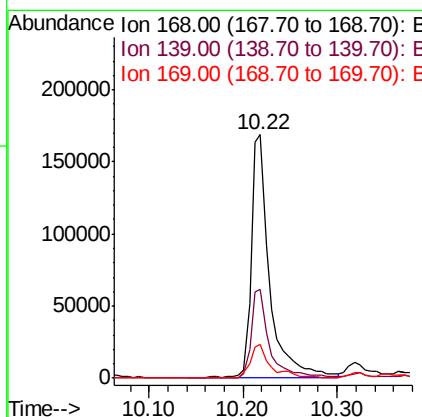
RT: 10.22 min Scan# 1340

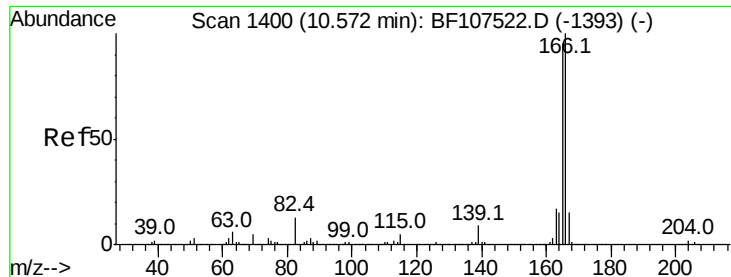
Delta R.T. -0.01 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Tgt Ion:	168	Resp:	229048
Ion Ratio	Lower	Upper	
168	100		
139	36.3	30.1	45.1
169	13.7	10.9	16.3





#57

Fluorene

Concen: 12.174 ng

RT: 10.56 min Scan# 1398

Delta R.T. -0.01 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Instrument :

BNA_F

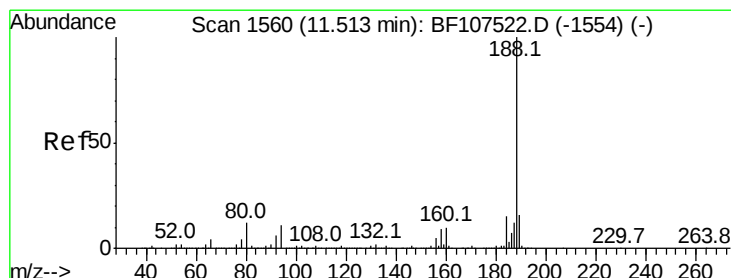
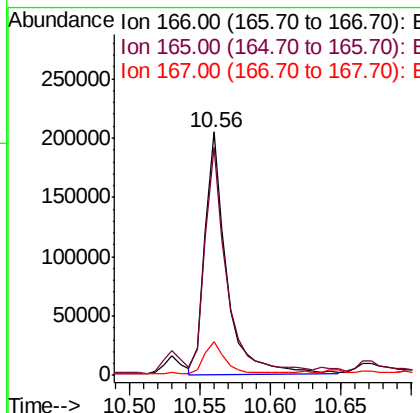
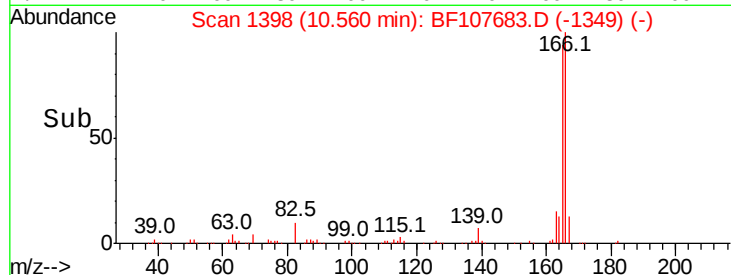
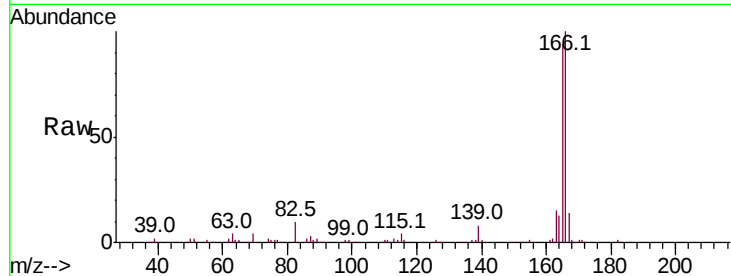
ClientSampleId :

MCMaster-SEDIMENT-7-23-18DL

Tot Ion:	166	Resp:	219613
Ion Ratio	Lower	Upper	
166	100		
165	93.7	79.8	119.8
167	13.6	10.6	16.0

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7/26/2018 2:02:33 PM



#63

Phenanthrene-d10

Concen: 20.000 ng

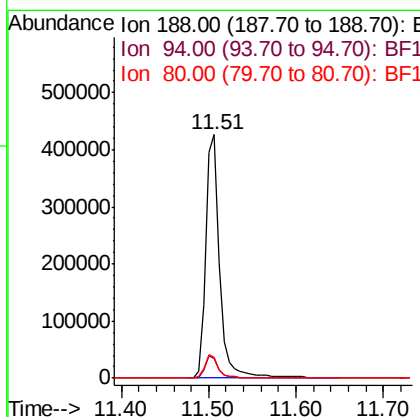
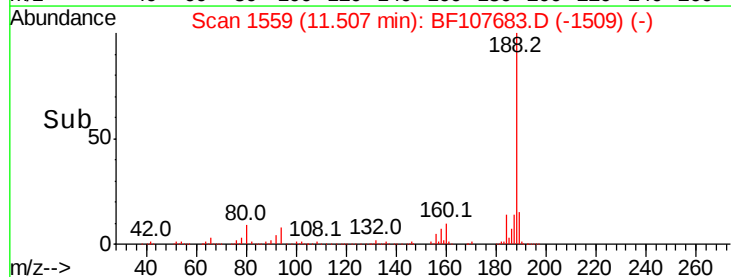
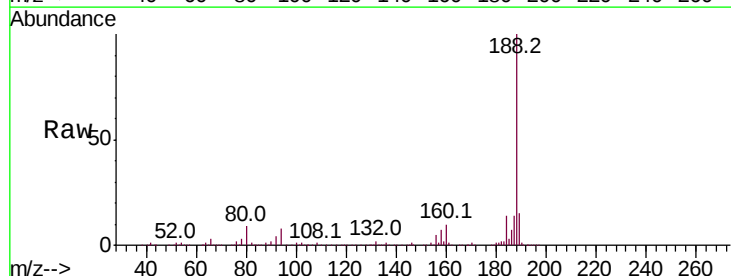
RT: 11.51 min Scan# 1559

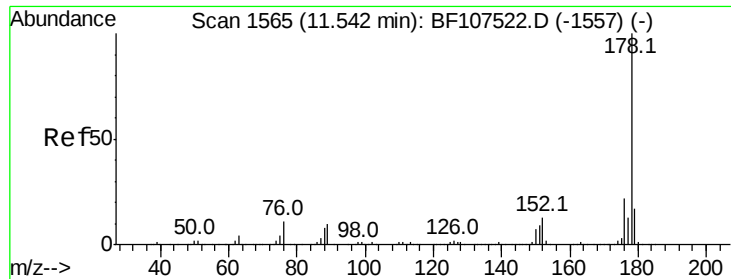
Delta R.T. -0.01 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Tgt Ion:	188	Resp:	474887
Ion Ratio	Lower	Upper	
188	100		
94	7.9	8.5	12.7#
80	8.7	9.2	13.8#





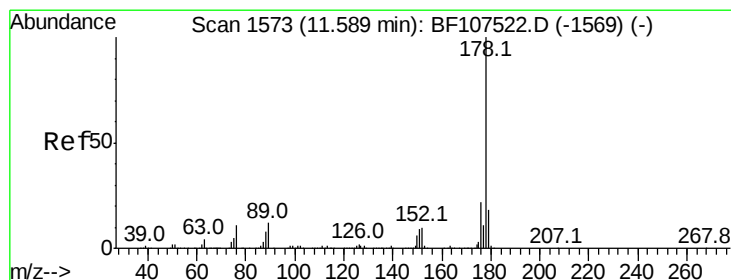
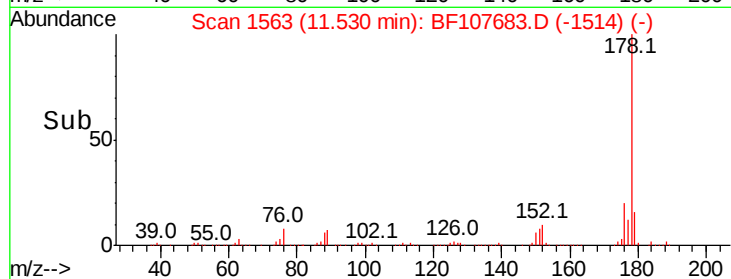
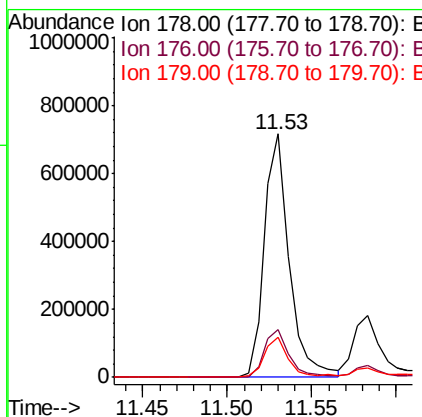
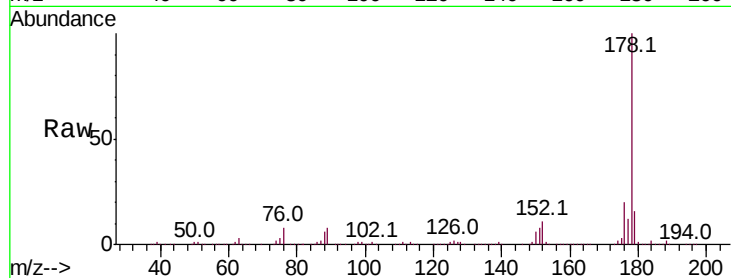
#70
Phenanthrene
Concen: 31.805 ng
RT: 11.53 min Scan# 1563
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Instrument :
BNA_F
ClientSampleId :
MCMaster-Sediment-7-23-18DL

Tot Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.8	23.8
179	16.4	13.0	19.6

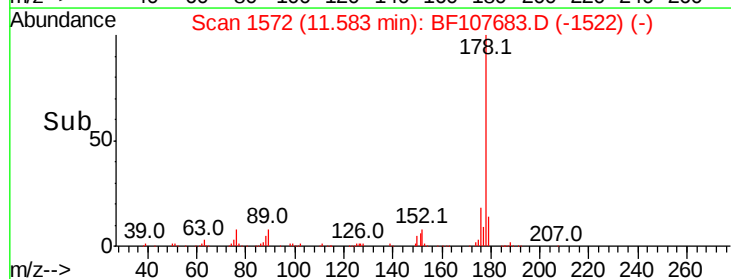
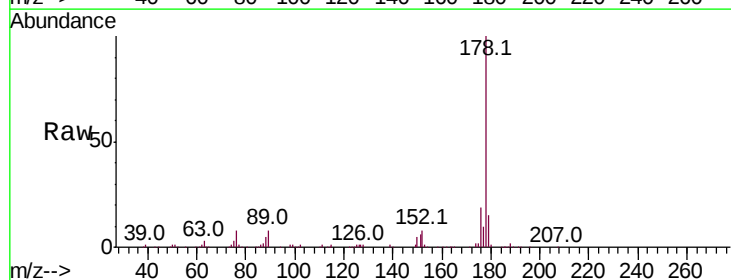
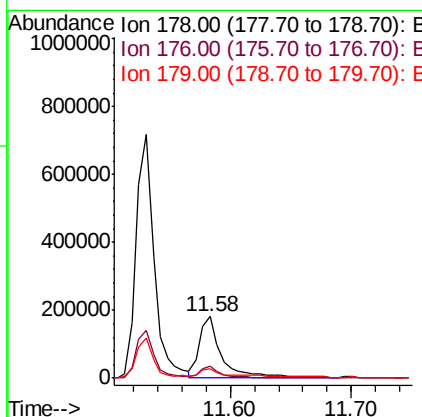
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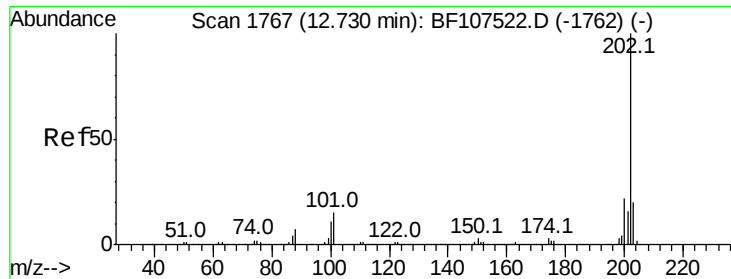
Sohil
7/26/2018 2:02:33 PM



#71
Anthracene
Concen: 9.774 ng
RT: 11.58 min Scan# 1572
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.6	15.4	23.2
179	15.1	12.6	19.0





#74

Fluoranthene

Concen: 20.190 ng

RT: 12.72 min Scan# 1766

Delta R.T. -0.01 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Instrument :

BNA_F

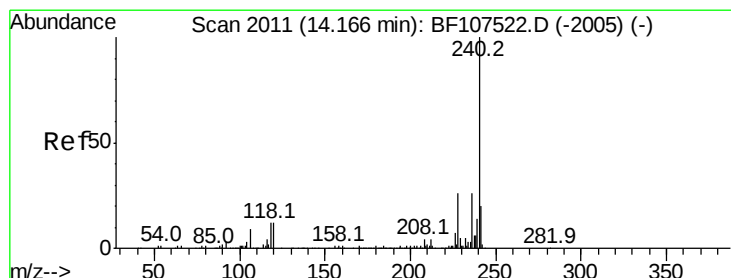
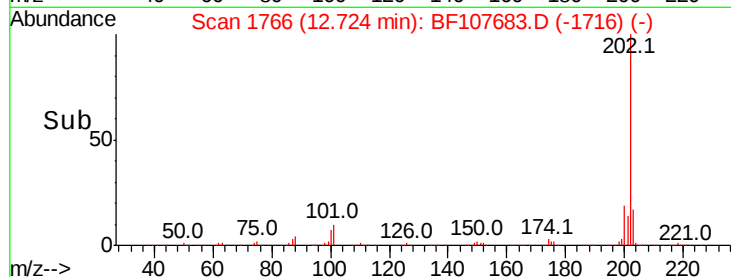
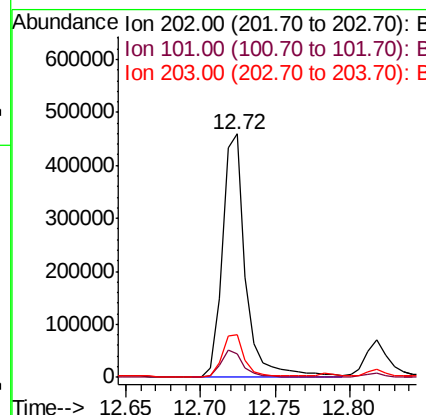
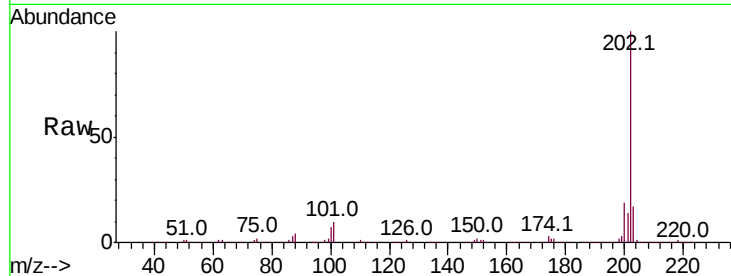
ClientSampleId :

MCMaster-SEDIMENT-7-23-18DL

Tot Ion:	202	Resp:	501374
Ion Ratio	Lower	Upper	
202	100		
101	9.9	0.0	34.1
203	17.4	0.0	38.1

Manual Integrations
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#75

Chrysene-d12

Concen: 20.000 ng

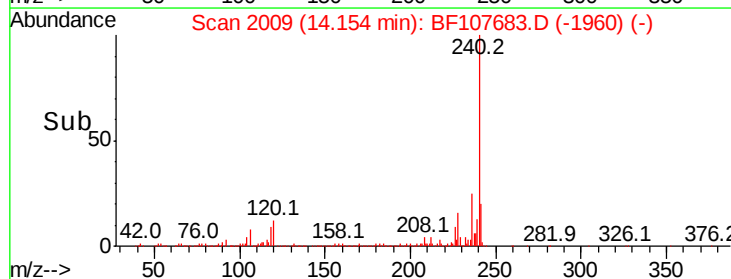
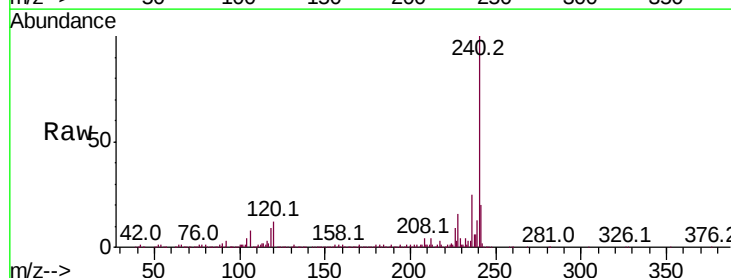
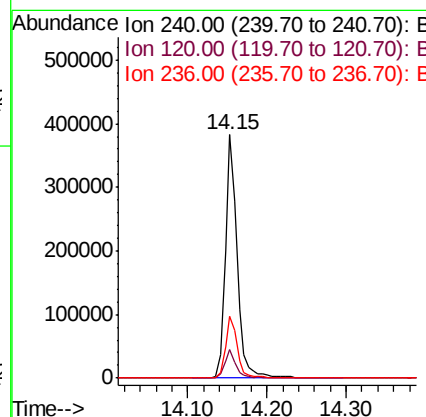
RT: 14.15 min Scan# 2009

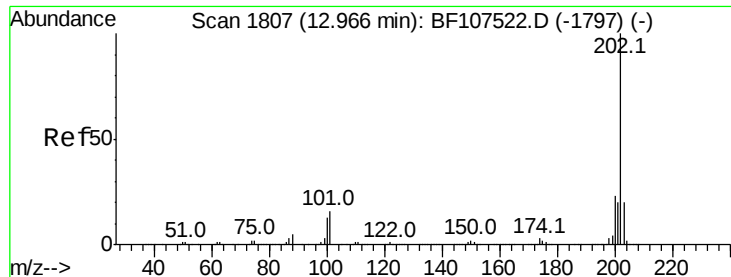
Delta R.T. -0.01 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Tgt Ion:	240	Resp:	393125
Ion Ratio	Lower	Upper	
240	100		
120	11.6	9.5	14.3
236	25.5	20.7	31.1





#77

Pvrene

Concen: 14.936 ng

RT: 12.95 min Scan# 1805

Delta R.T. -0.01 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Instrument :

BNA_F

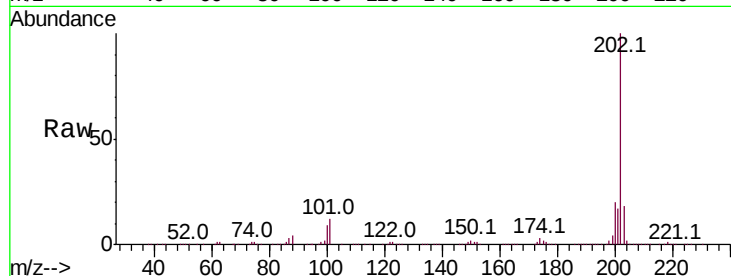
ClientSampleId :

MCMaster-SEDIMENT-7-23-18DL

Tot Ion:202	Resp:	401637
Ion Ratio	Lower	Upper
202 100		
200 19.8	17.4	26.2
203 17.5	14.3	21.5

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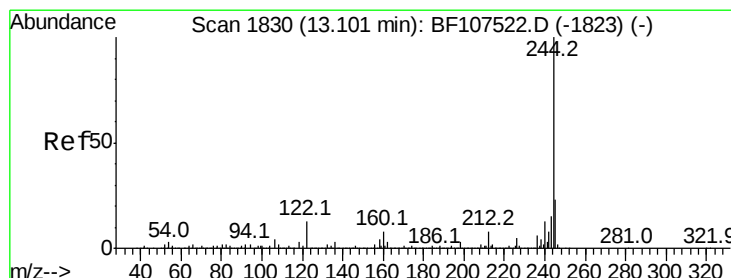
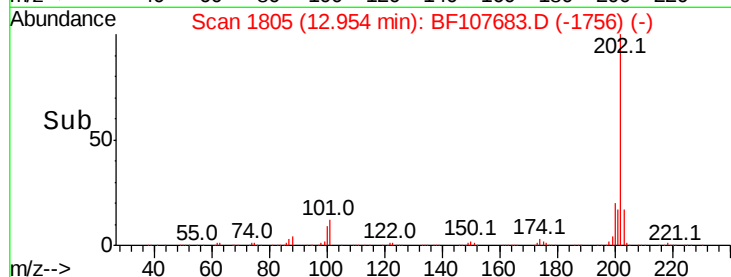
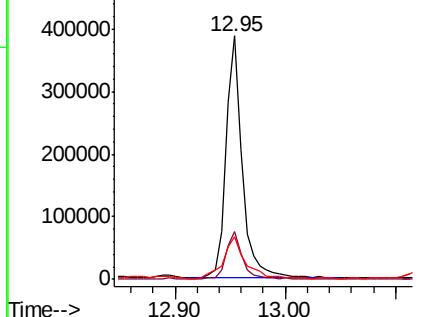
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Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



#78

Terphenyl-d14

Concen: 0.813 ng

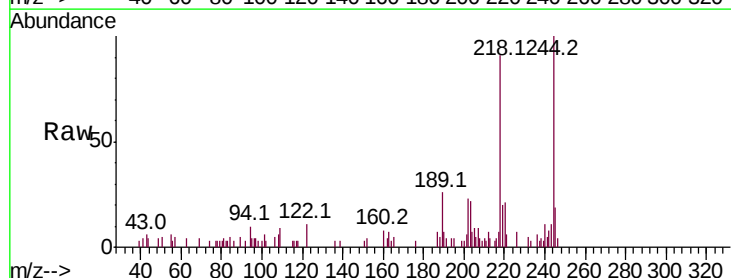
RT: 13.08 min Scan# 1827

Delta R.T. -0.02 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

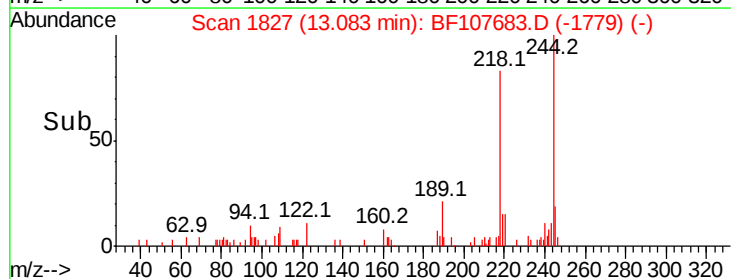
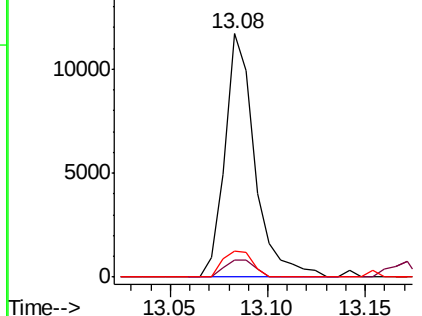
Tgt Ion:244	Resp:	12480
Ion Ratio	Lower	Upper
244 100		
212 7.1	5.4	8.0
122 10.6	11.0	16.4#

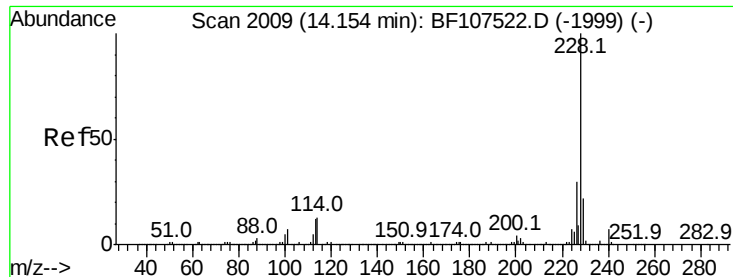


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





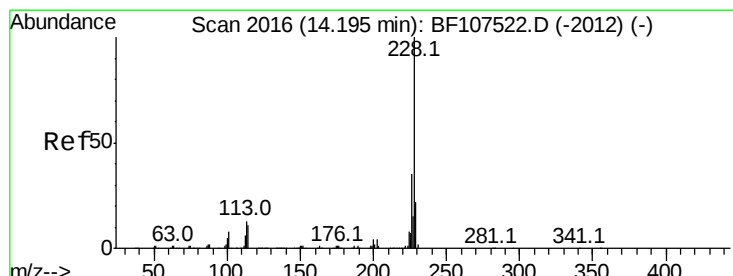
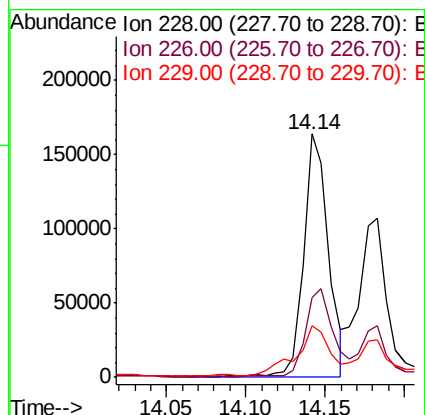
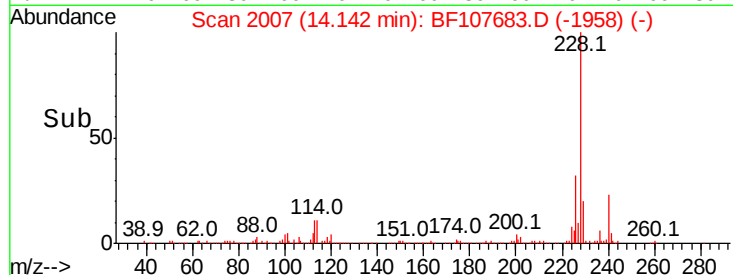
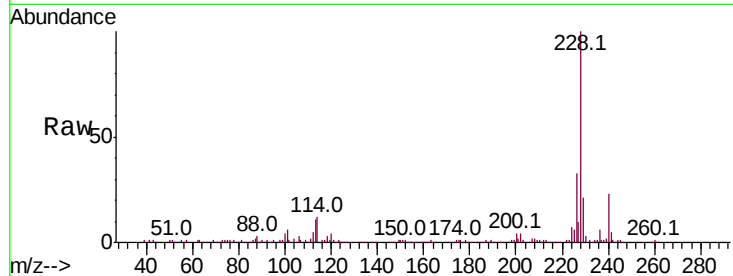
#80
Benzo(a)anthracene
Concen: 7.578 ng
RT: 14.14 min Scan# 2007
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Instrument :
BNA_F
ClientSampleId :
MCMaster-SEDIMENT-7-23-18DL

Tot Ion:	228	Resp:	174591
Ion Ratio	Lower	Upper	
228	100		
226	32.5	22.6	33.8
229	21.1	15.8	23.6

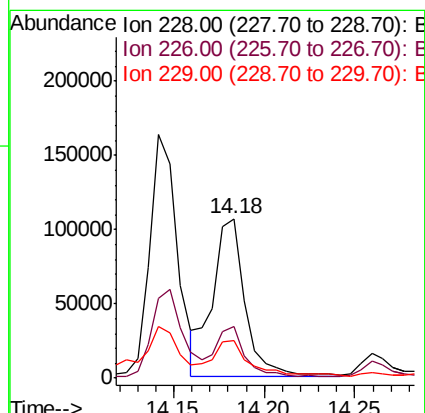
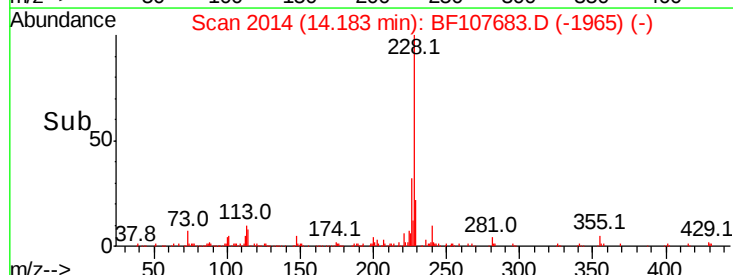
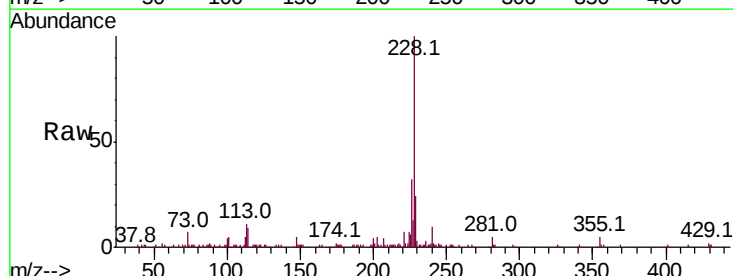
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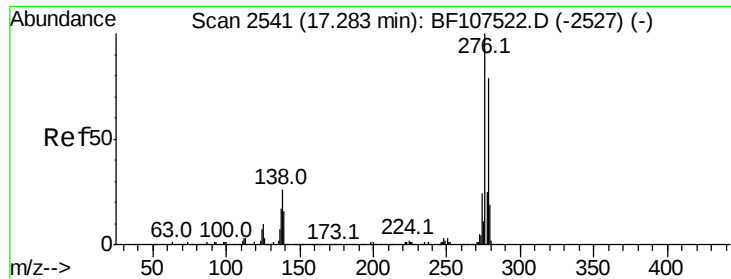
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#82
Chrysene
Concen: 6.104 ng
RT: 14.18 min Scan# 2014
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Tgt Ion:	228	Resp:	135082
Ion Ratio	Lower	Upper	
228	100		
226	32.3	25.0	37.6
229	23.7	16.2	24.4





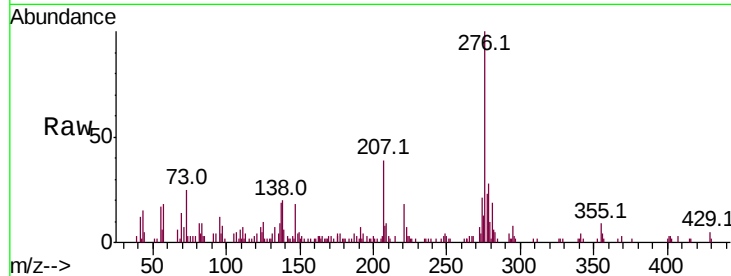
#85
Indeno(1,2,3-cd)pyrene
Concen: 2.122 ng
RT: 17.27 min Scan# 2538
Delta R.T. -0.02 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Instrument :
BNA_F
ClientSampleId :
MCMaster-SEDIMENT-7-23-18DL

Tot Ion	Ratio	Lower	Upper
276	100		
138	27.8	25.0	37.6
277	23.6	20.1	30.1

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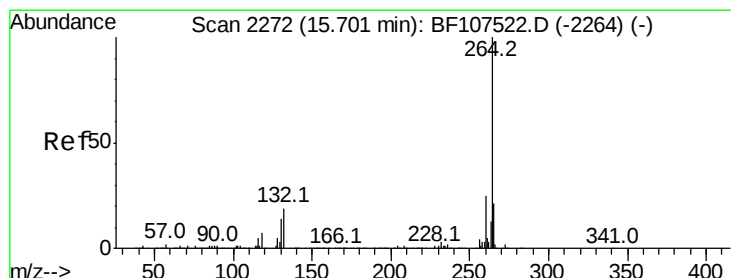
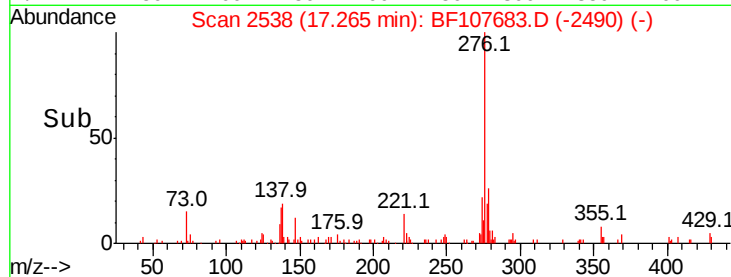
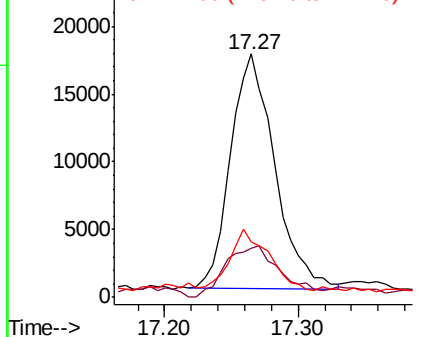


Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#86
Perylene-d12
Concen: 20.000 ng
RT: 15.69 min Scan# 2270
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

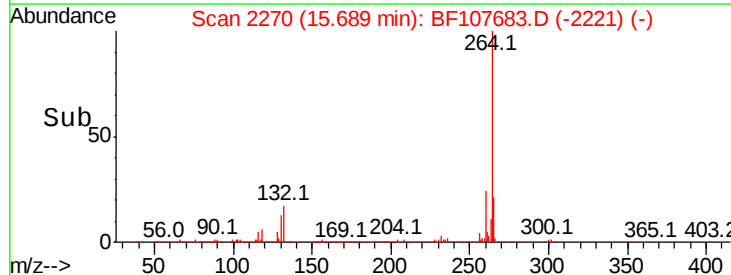
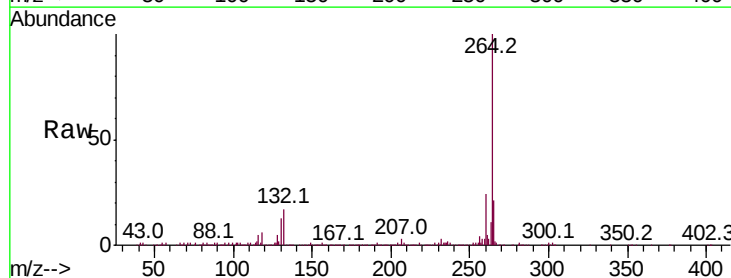
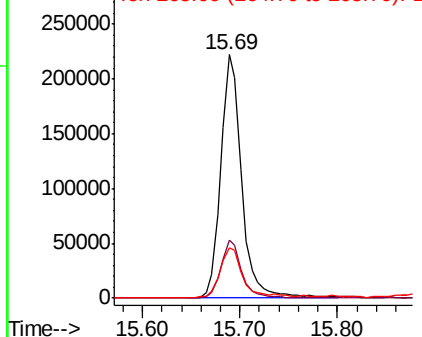
Tgt Ion	Ratio	Lower	Upper
264	100		
260	23.9	19.2	28.8
265	20.9	17.5	26.3

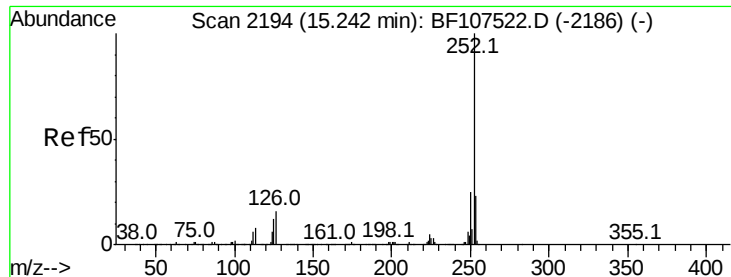
Abundance

Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





#87

Benzo(b)fluoranthene

Concen: 6.173 ng m

RT: 15.23 min Scan# 2192

Delta R.T. -0.01 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Instrument :

BNA_F

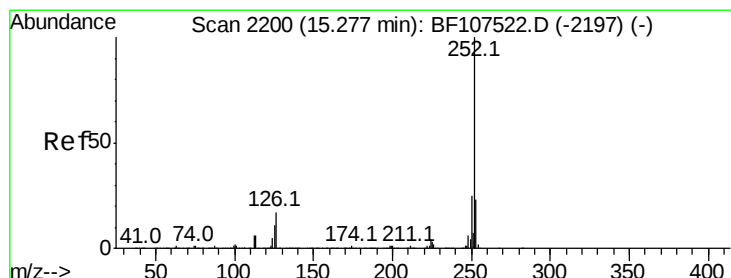
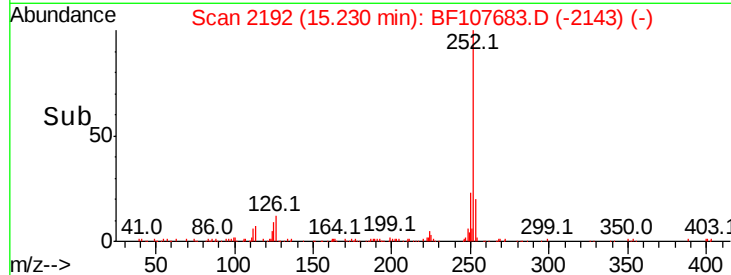
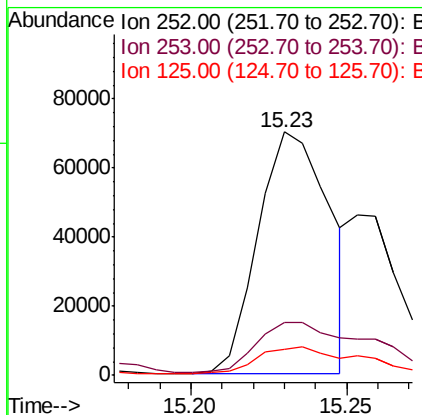
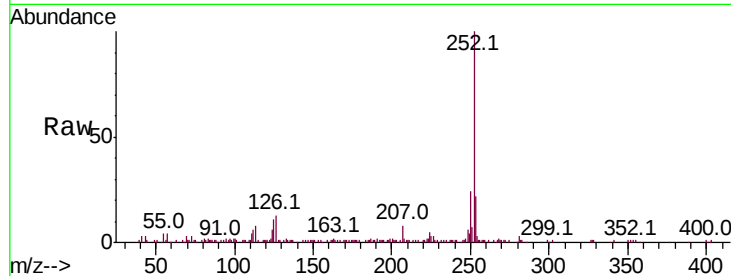
ClientSampleId :

MCMaster-SEDIMENT-7-23-18DL

Tot Ion:	252	Resp:	111534
Ion Ratio	Lower	Upper	
252	100		
253	21.6	17.0	25.6
125	10.5	9.0	13.6

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#88

Benzo(k)fluoranthene

Concen: 3.165 ng m

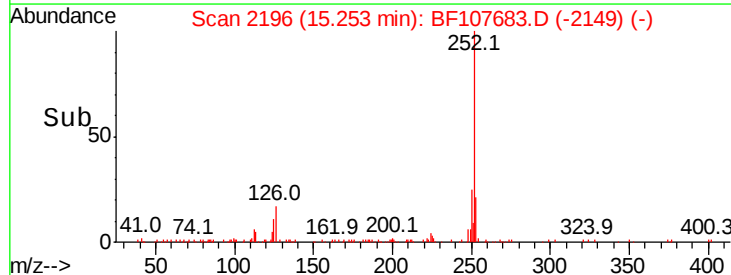
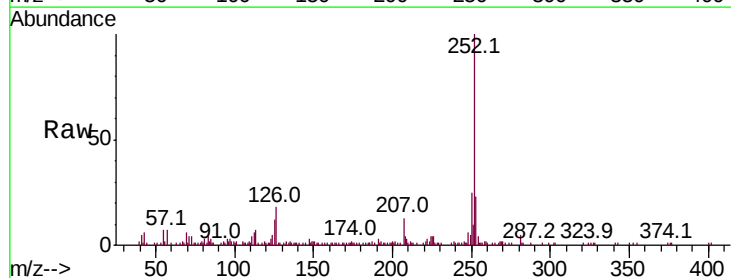
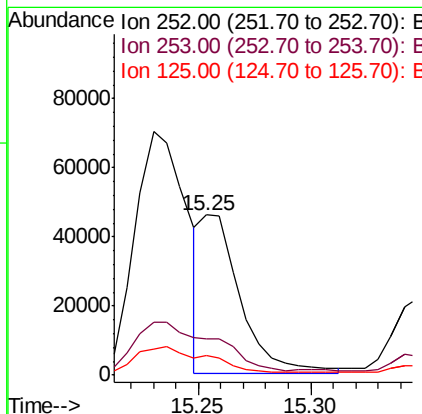
RT: 15.25 min Scan# 2196

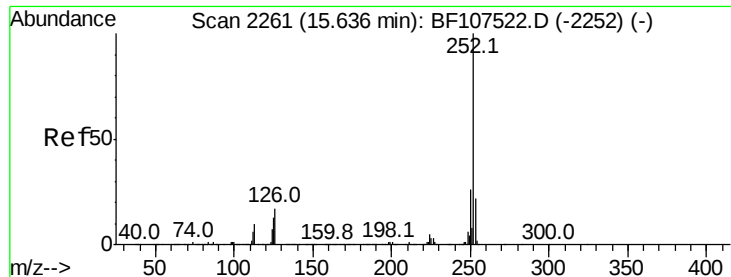
Delta R.T. -0.02 min

Lab File: BF107683.D

Acq: 26 Jul 2018 4:08

Tgt Ion:	252	Resp:	56032
Ion Ratio	Lower	Upper	
252	100		
253	22.6	17.9	26.9
125	12.3	10.2	15.2





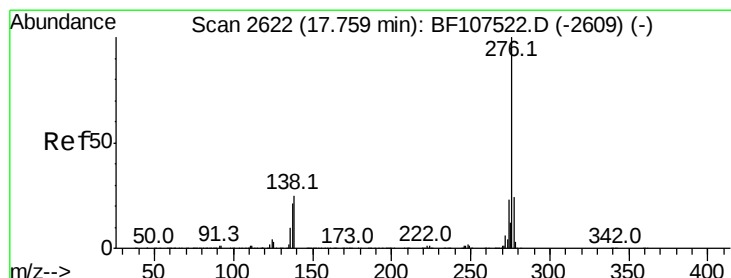
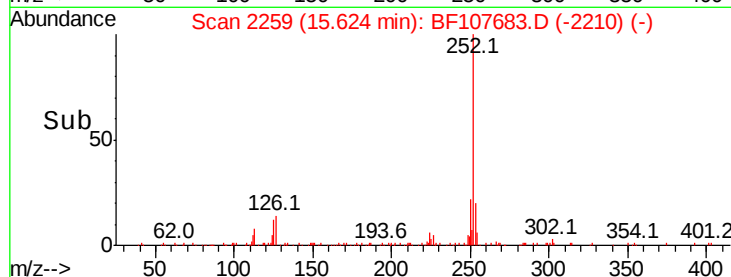
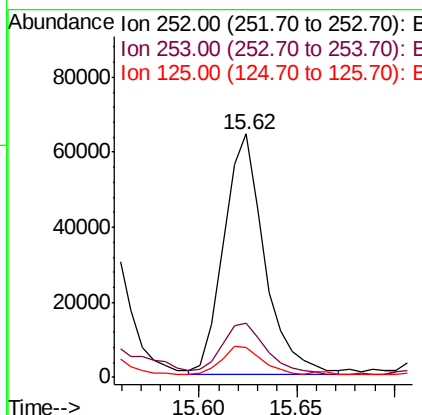
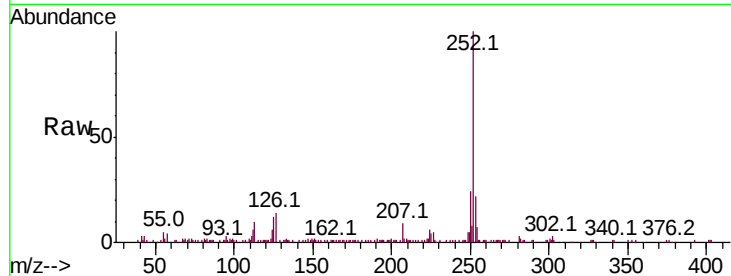
#89
Benzo(a)pyrene
Concen: 5.641 ng
RT: 15.62 min Scan# 2259
Delta R.T. -0.01 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Instrument :
BNA_F
ClientSampleId :
MCMaster-SEDIMENT-7-23-18DL

Tot Ion	Ratio	Lower	Upper
252	100		
253	22.0	17.1	25.7
125	12.4	9.8	14.6

Manual Integrations
APPROVED

Sohil
7/26/2018 2:02:33 PM



#91
Benzo(g,h,i)perylene
Concen: 2.372 ng
RT: 17.74 min Scan# 2619
Delta R.T. -0.02 min
Lab File: BF107683.D
Acq: 26 Jul 2018 4:08

Tgt Ion	Ratio	Lower	Upper
276	100		
277	24.0	17.9	26.9
138	19.0	21.8	32.8#

