

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF081619\
 Data File : BF116334.D
 Acq On : 16 Aug 2019 22:50
 Operator : HP/JU
 Sample : K4265-20
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 REACTOR-4-A1-A4-(0-1)

Manual Integrations
 APPROVED

mohammad
 8/20/2019 8:37:00 AM

Quant Time: Aug 19 07:50:24 2019
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF073019.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Wed Aug 07 11:13:18 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.82	152	151622	20.00	ng	-0.03
21) Naphthalene-d8	8.10	136	571570	20.00	ng	-0.03
39) Acenaphthene-d10	9.85	164	288819	20.00	ng	-0.04
64) Phenanthrene-d10	11.34	188	470815	20.00	ng	-0.03
76) Chrysene-d12	13.98	240	262912	20.00	ng	-0.03
87) Perylene-d12	15.44	264	292048	20.00	ng	-0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	5.45	112	1192409	131.65	ng	-0.02
7) Phenol-d6	6.46	99	1570292	137.42	ng	-0.02
23) Nitrobenzene-d5	7.39	82	994680	100.45	ng	-0.03
42) 2,4,6-Tribromophenol	10.64	330	369254	131.87	ng	-0.03
45) 2-Fluorobiphenyl	9.17	172	1448184	93.92	ng	-0.04
79) Terphenyl-d14	12.92	244	1307861	104.82	ng	-0.04

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
31) Naphthalene	8.12	128	92836	3.452	ng	97
50) Dimethylphthalate	9.57	163	172005	8.747	ng	98
52) Acenaphthene	9.88	154	190435	12.537	ng	99
55) Dibenzofuran	10.06	168	150510	6.814	ng	98
58) Fluorene	10.40	166	187700	11.045	ng	99
71) Phenanthrene	11.36	178	1664711	69.164	ng	99
72) Anthracene	11.42	178	602779	24.746	ng	99
73) Carbazole	11.57	167	203854	9.224	ng	99
75) Fluoranthene	12.56	202	1901200	75.451	ng	97
78) Pyrene	12.79	202	1621636	81.824	ng	98
81) Benzo(a)anthracene	13.97	228	839032	49.929	ng	99
83) Chrysene	14.00	228	664009	40.701	ng	98
86) Indeno(1,2,3-cd)pyrene	16.90	276	371815	27.135	ng	96
88) Benzo(b)fluoranthene	15.02	252	779654m	46.170	ng	
89) Benzo(k)fluoranthene	15.04	252	297094m	18.063	ng	
90) Benzo(a)pyrene	15.38	252	584027	38.689	ng	99
91) Dibenzo(a,h)anthracene	16.90	278	96005m	7.347	ng	
92) Benzo(g,h,i)perylene	17.34	276	335629	26.154	ng	96

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

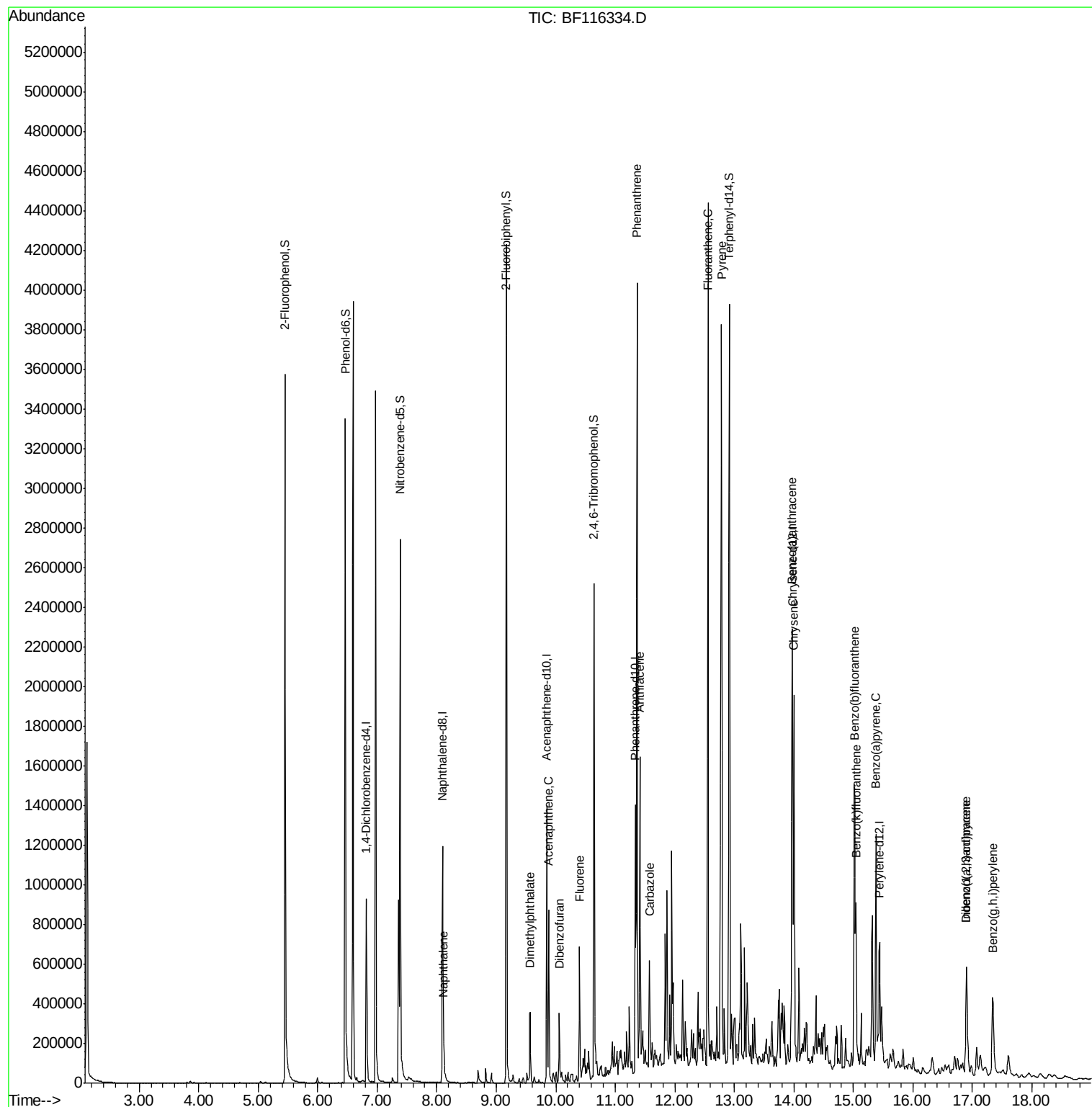
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF081619\
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Misc :
ALS Vial : 11 Sample Multiplier: 1

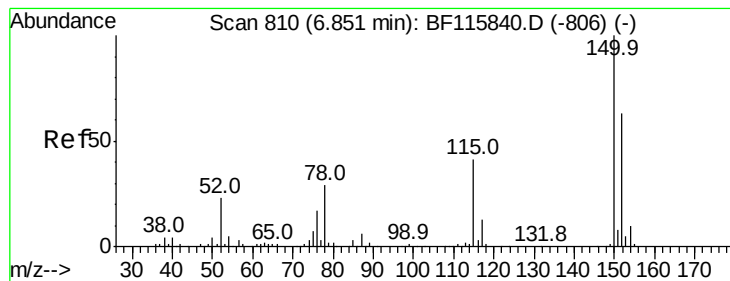
Instrument :
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REACTOR-4-A1-A4-(0-1)

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#1

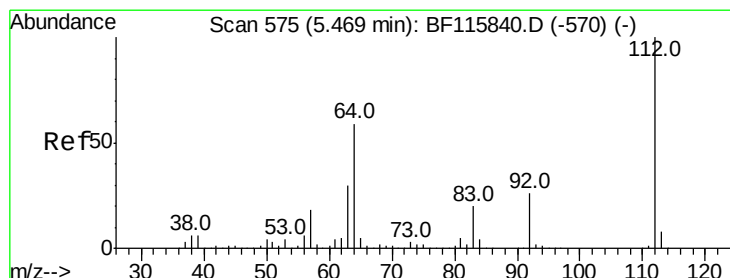
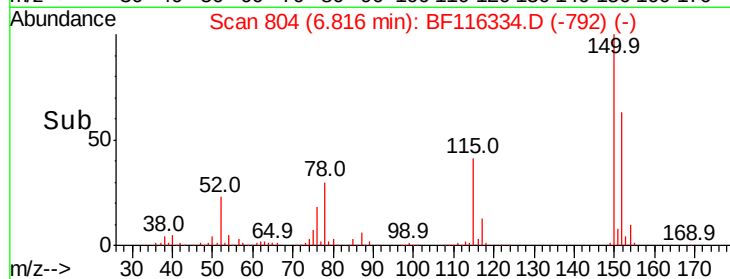
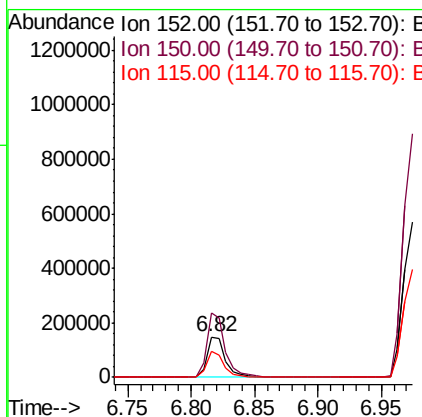
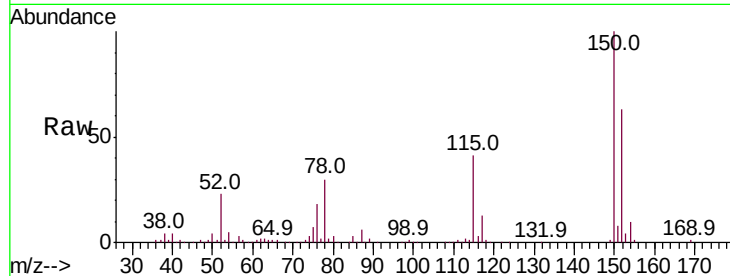
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.82 min Scan# 804
Delta R.T. -0.03 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Instrument :
BNA_F
ClientSampleId :
REACTOR-4-A1-A4-(0-1)

Tot Ion	Ratio	Lower	Upper
152	100		
150	159.9	126.2	189.2
115	64.9	49.9	74.9

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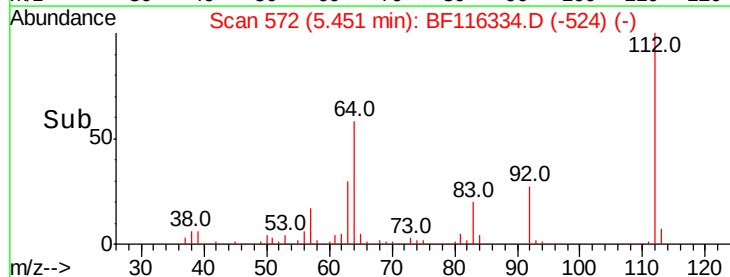
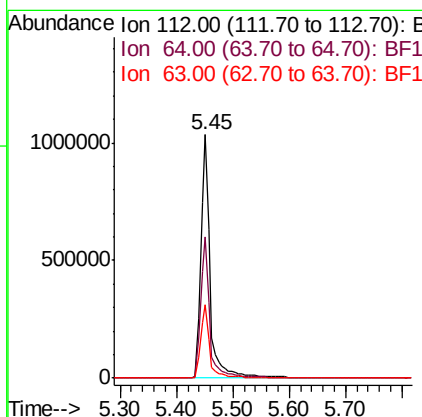
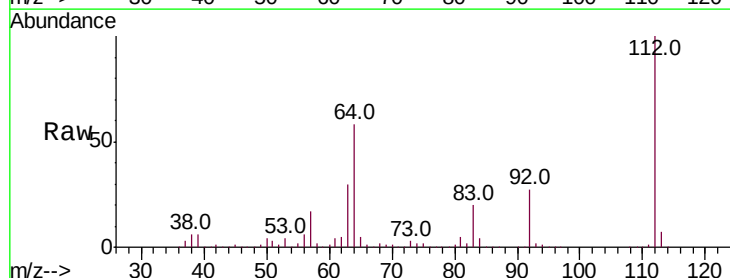
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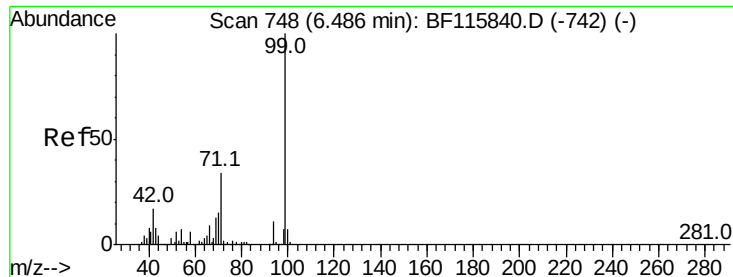


#5

2-Fluorophenol
Concen: 131.654 ng
RT: 5.45 min Scan# 572
Delta R.T. -0.02 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Lower	Upper
112	100		
64	58.0	45.4	68.2
63	30.0	23.7	35.5





#7

Phenol-d6

Concen: 137.417 ng

RT: 6.46 min Scan# 744

Delta R.T. -0.02 min

Lab File: BF116334.D

Acq: 16 Aug 2019 22:50

Instrument :

BNA_F

ClientSampleId :

REACTOR-4-A1-A4-(0-1)

Tot Ion: 99 Resp: 1570292

Ion Ratio Lower Upper

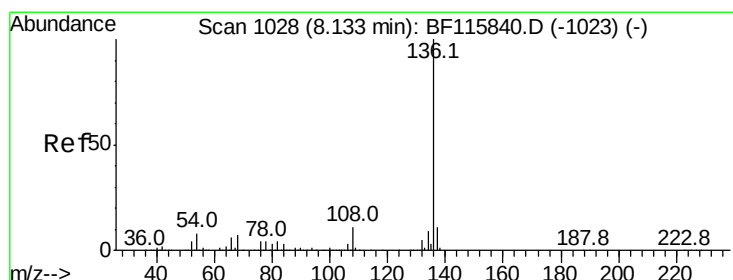
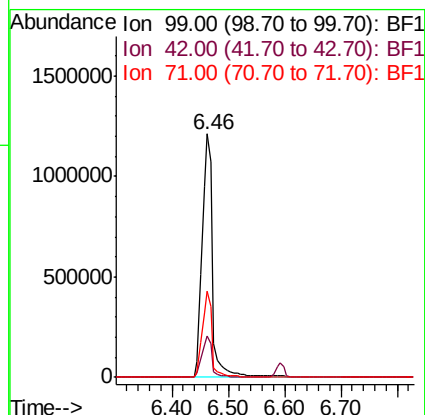
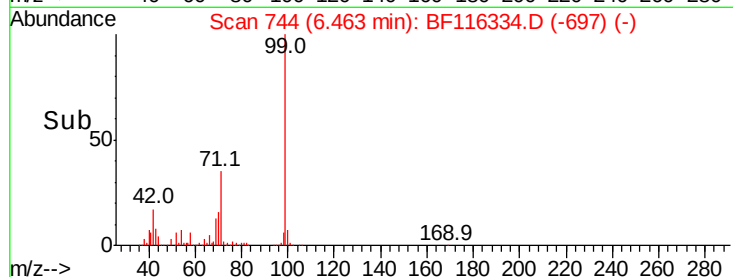
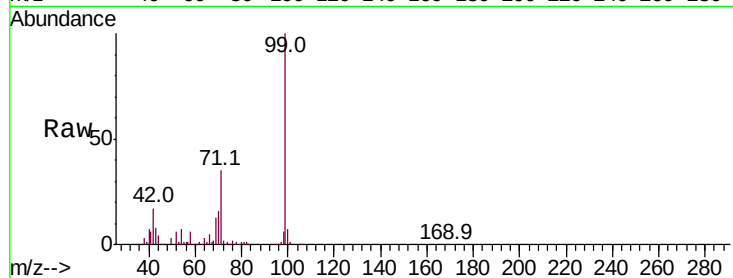
99 100

42 17.2 13.8 20.8

71 35.2 27.3 40.9

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#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.10 min Scan# 1022

Delta R.T. -0.03 min

Lab File: BF116334.D

Acq: 16 Aug 2019 22:50

Tgt Ion: 136 Resp: 571570

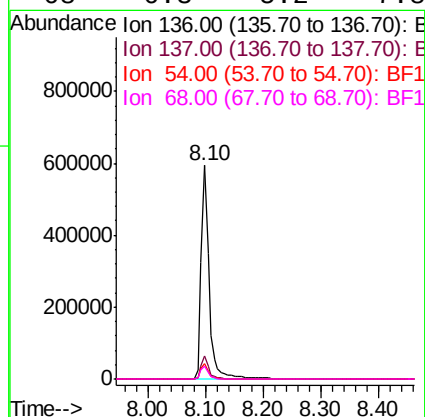
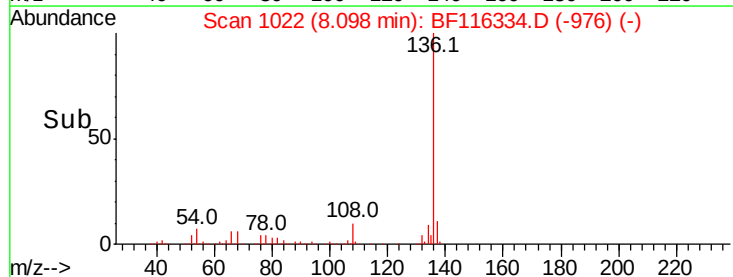
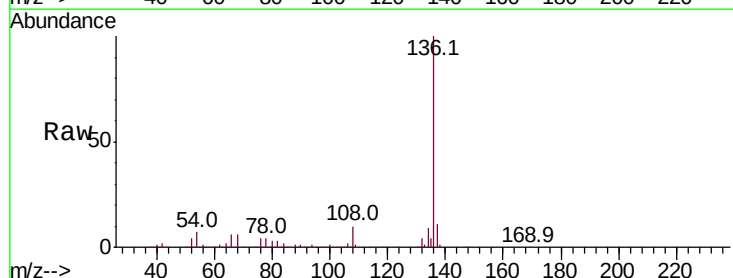
Ion Ratio Lower Upper

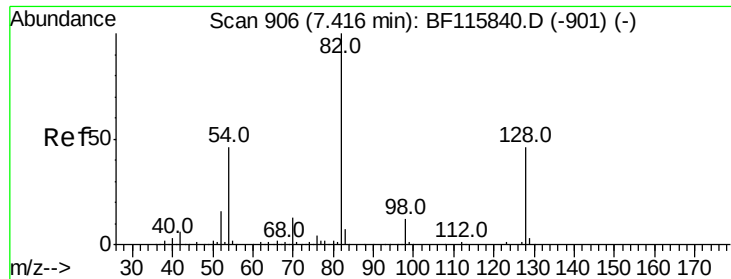
136 100

137 11.0 9.0 13.4

54 7.1 5.8 8.6

68 6.3 5.2 7.8





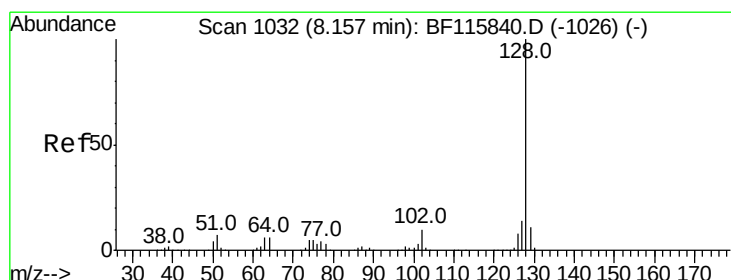
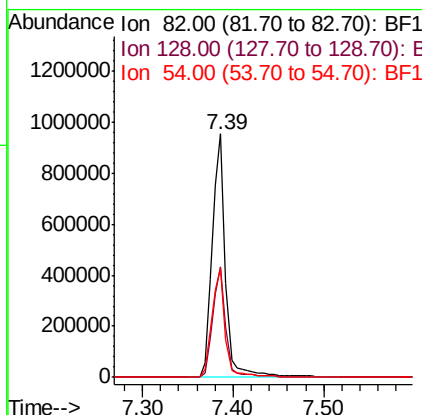
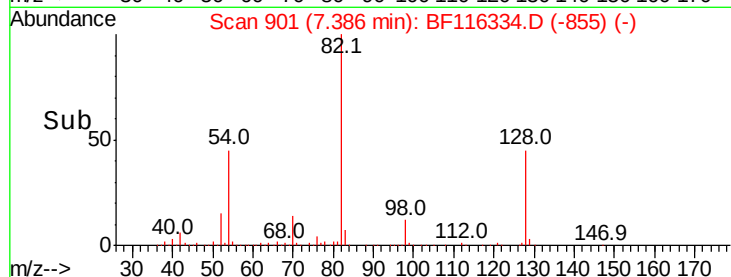
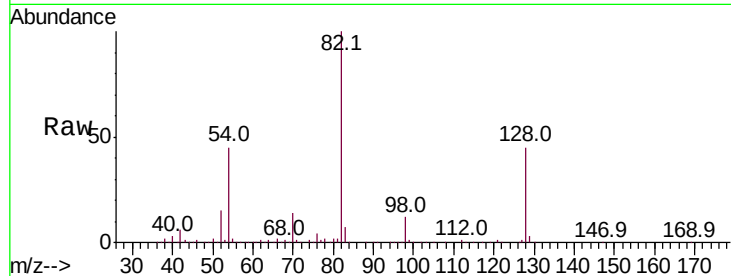
#23
Nitrobenzene-d5
Concen: 100.453 ng
RT: 7.39 min Scan# 901
Delta R.T. -0.03 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Instrument :
BNA_F
ClientSampleId :
REACTOR-4-A1-A4-(0-1)

Tot Ion	Ratio	Lower	Upper
82	100		
128	45.2	36.5	54.7
54	44.8	36.0	54.0

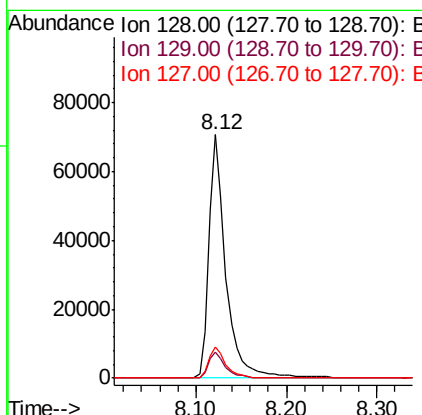
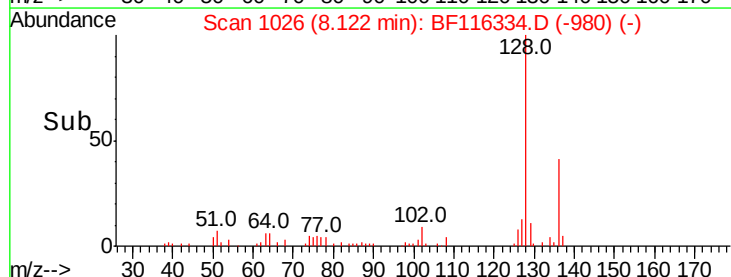
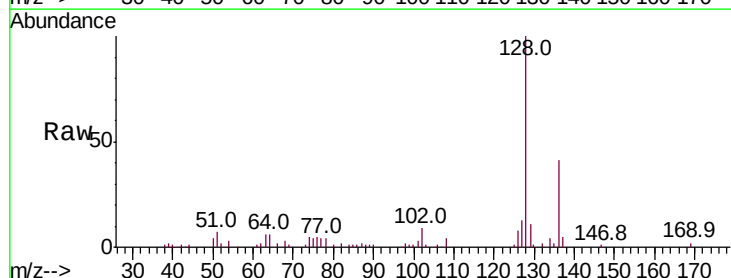
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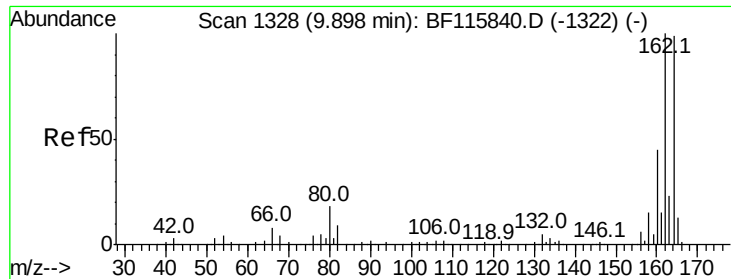
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#31
Naphthalene
Concen: 3.452 ng
RT: 8.12 min Scan# 1026
Delta R.T. -0.03 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.9	9.3	13.9
127	12.8	11.4	17.0





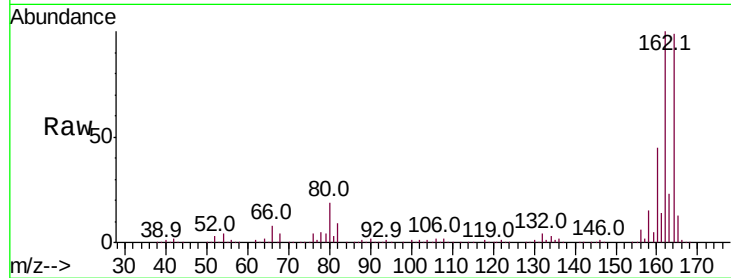
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.85 min Scan# 1320
Delta R.T. -0.04 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Instrument :
BNA_F
ClientSampleId :
REACTOR-4-A1-A4-(0-1)

Tot Ion	Ratio	Resp	Lower	Upper
164	100	288819		
162	100.7	82.6	124.0	
160	45.0	37.6	56.4	

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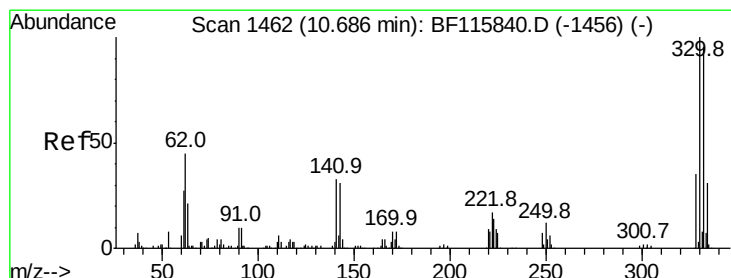
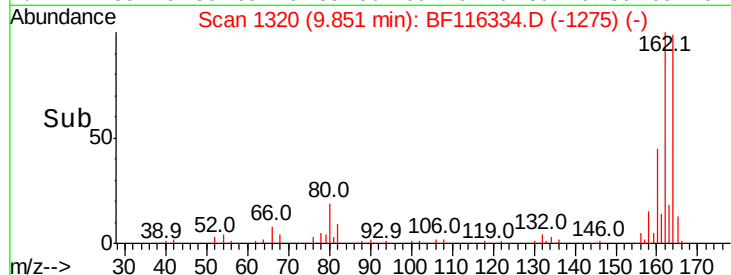
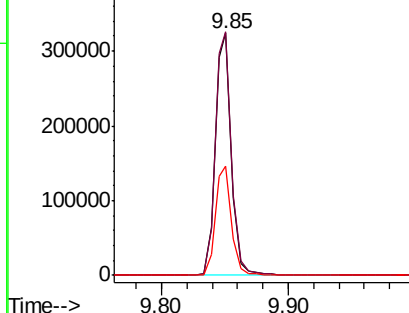


Abundance

Ion 164.00 (163.70 to 164.70): E

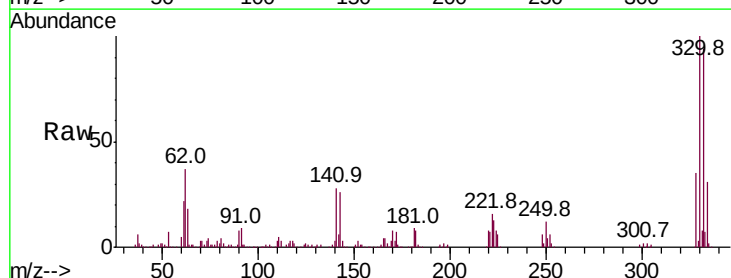
Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E



#42
2,4,6-Tribromophenol
Concen: 131.868 ng
RT: 10.64 min Scan# 1455
Delta R.T. -0.03 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Resp	Lower	Upper
330	100	369254		
332	95.0	76.8	115.2	
141	33.0	26.3	39.5	

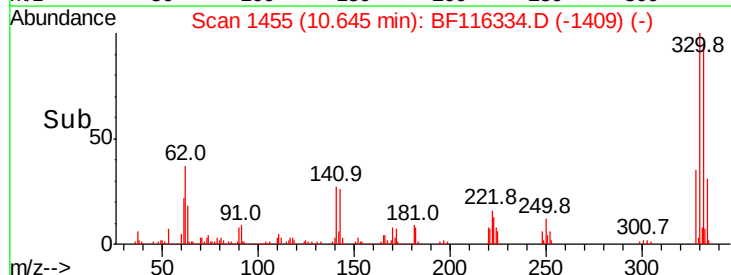
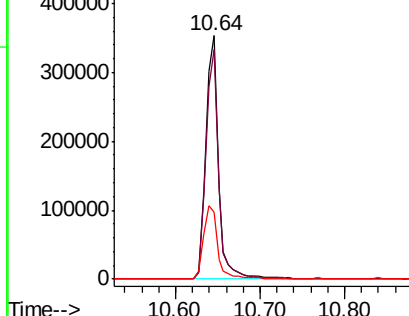


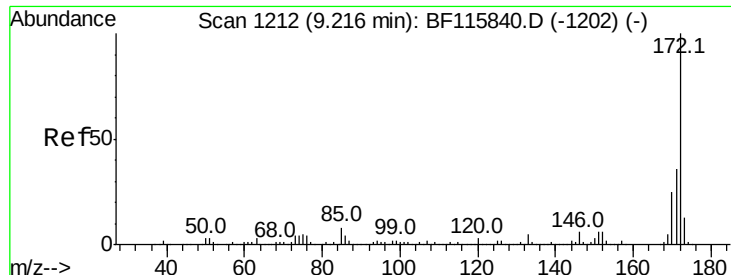
Abundance

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





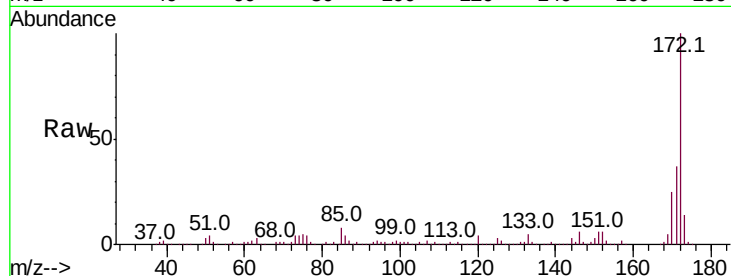
#45
2-Fluorobiphenyl
Concen: 93.919 ng
RT: 9.17 min Scan# 1204
Delta R.T. -0.04 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Instrument :
BNA_F
ClientSampleId :
REACTOR-4-A1-A4-(0-1)

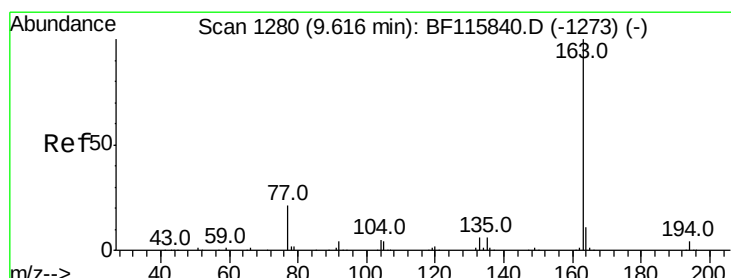
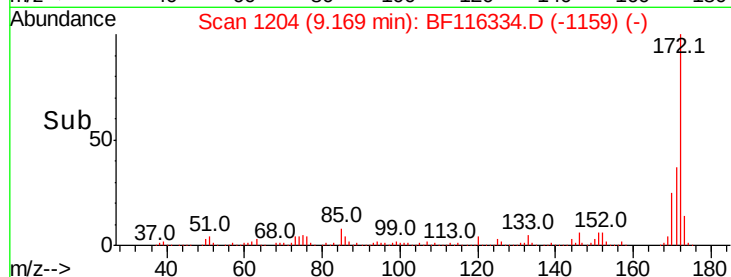
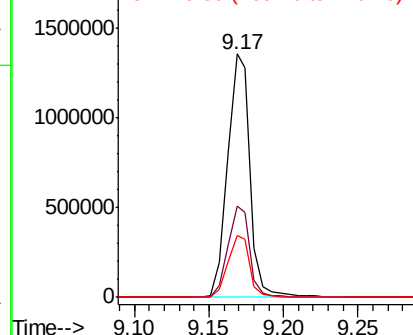
Tot Ion	Ratio	Lower	Upper
172	100		
171	37.3	29.6	44.4
170	25.5	20.1	30.1

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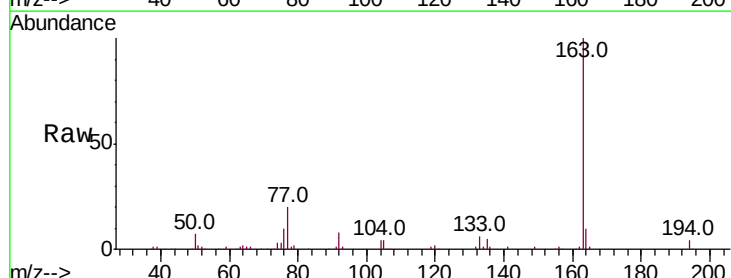


Abundance Ion 172.00 (171.70 to 172.70): E
Ion 171.00 (170.70 to 171.70): E
Ion 170.00 (169.70 to 170.70): E

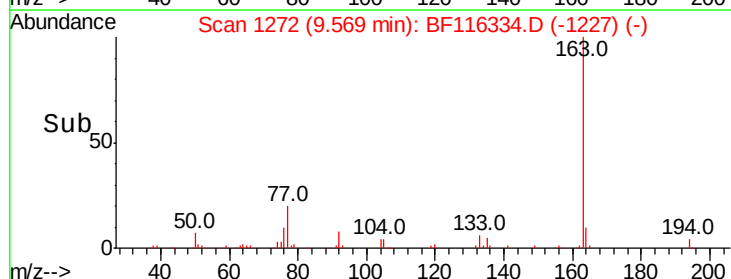
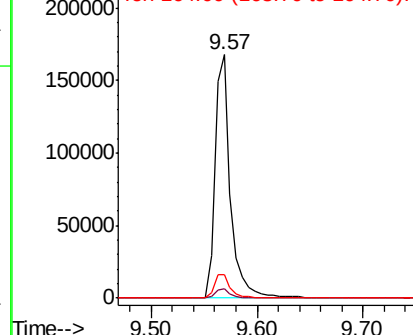


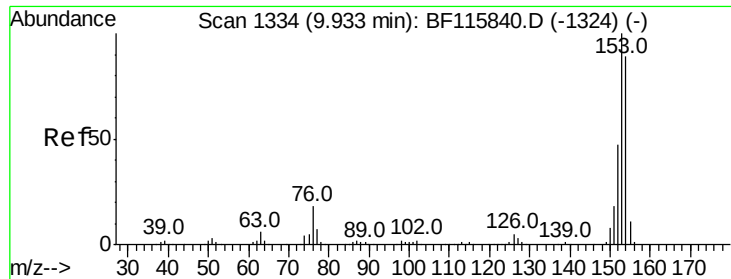
#50
Dimethylphthalate
Concen: 8.747 ng
RT: 9.57 min Scan# 1272
Delta R.T. -0.04 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Lower	Upper
163	100		
194	3.7	3.0	4.6
164	9.7	8.4	12.6



Abundance Ion 163.00 (162.70 to 163.70): E
Ion 194.00 (193.70 to 194.70): E
Ion 164.00 (163.70 to 164.70): E





#52

Acenaphthene

Concen: 12.537 ng

RT: 9.88 min Scan# 1325

Delta R.T. -0.04 min

Lab File: BF116334.D

Acq: 16 Aug 2019 22:50

Instrument :

BNA_F

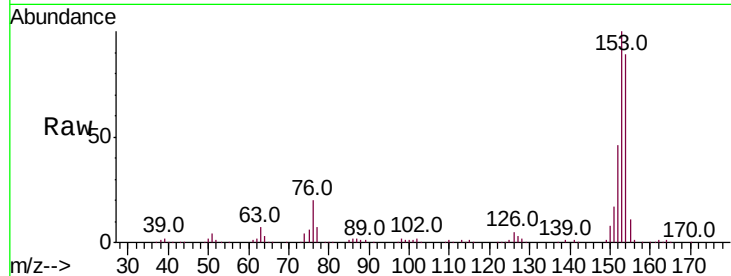
ClientSampleId :

REACTOR-4-A1-A4-(0-1)

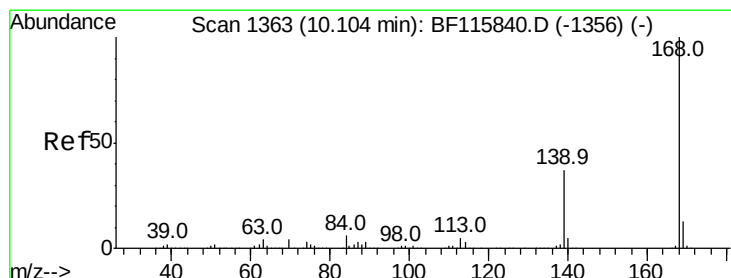
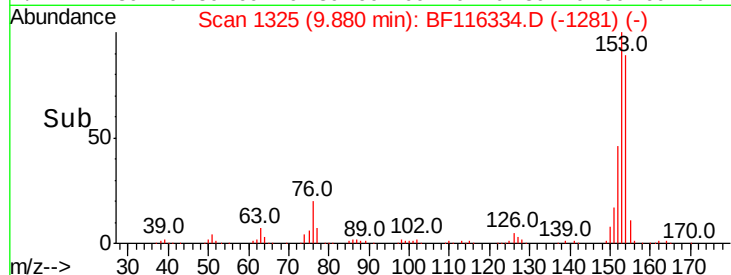
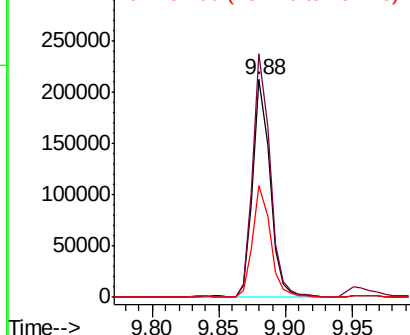
Tot Ion:	154	Resp:	190435
Ion Ratio	Lower	Upper	
154	100		
153	111.9	89.4	134.0
152	51.6	42.3	63.5

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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



#55

Dibenzofuran

Concen: 6.814 ng

RT: 10.06 min Scan# 1355

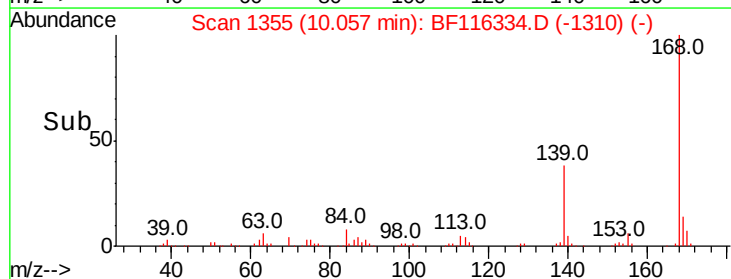
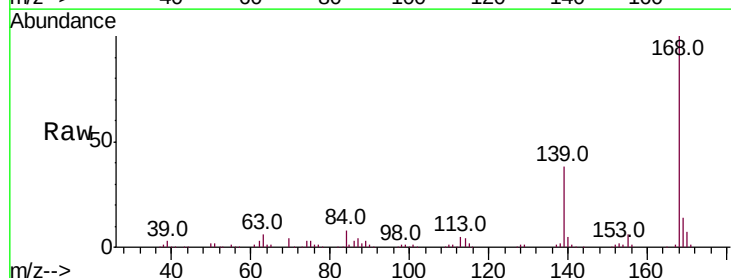
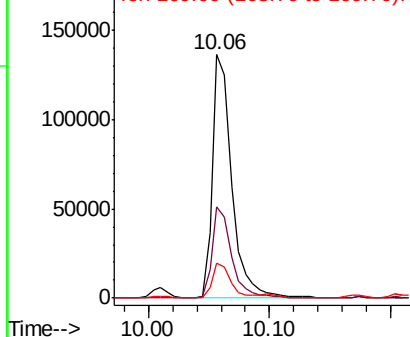
Delta R.T. -0.04 min

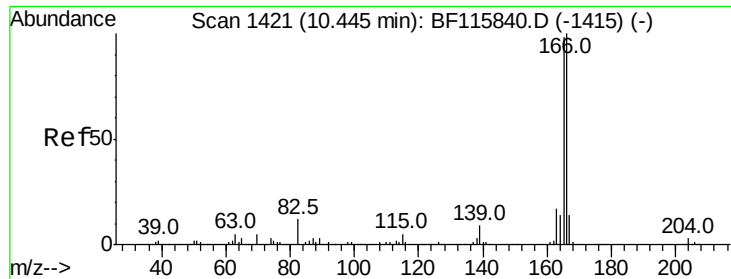
Lab File: BF116334.D

Acq: 16 Aug 2019 22:50

Tgt Ion:	168	Resp:	150510
Ion Ratio	Lower	Upper	
168	100		
139	37.6	31.4	47.2
169	14.2	10.9	16.3

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





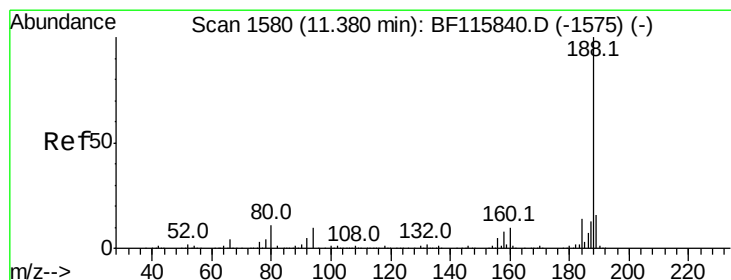
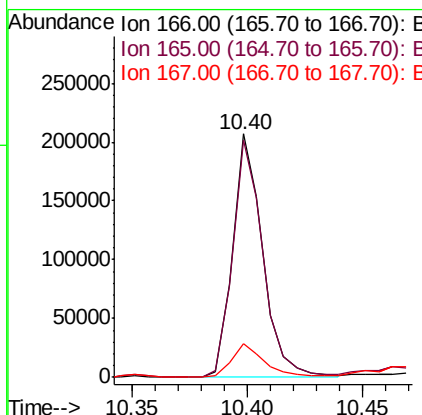
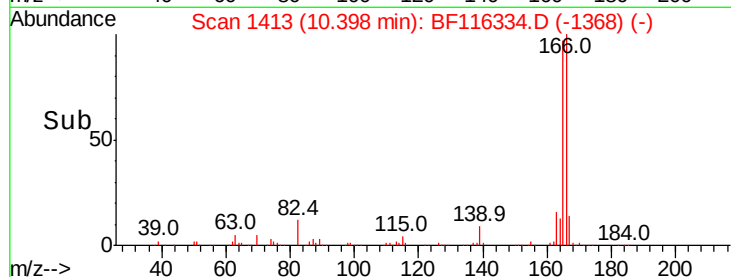
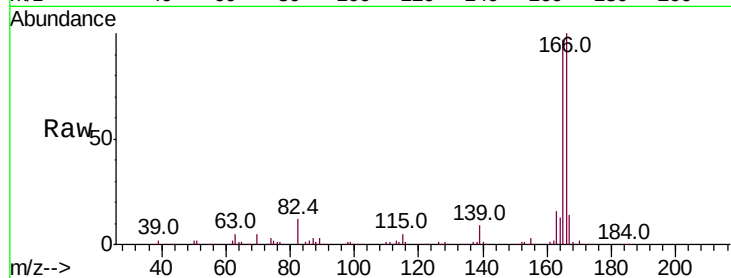
#58
 Fluorene
 Concen: 11.045 ng
 RT: 10.40 min Scan# 1413
 Delta R.T. -0.04 min
 Lab File: BF116334.D
 Acq: 16 Aug 2019 22:50

Instrument :
 BNA_F
 ClientSampleId :
 REACTOR-4-A1-A4-(0-1)

Tot Ion	Ratio	Lower	Upper
166	100		
165	97.4	78.4	117.6
167	13.8	11.0	16.4

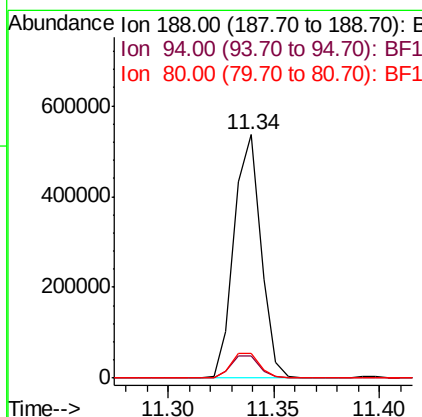
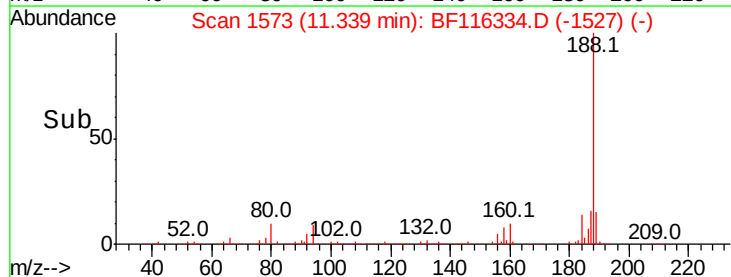
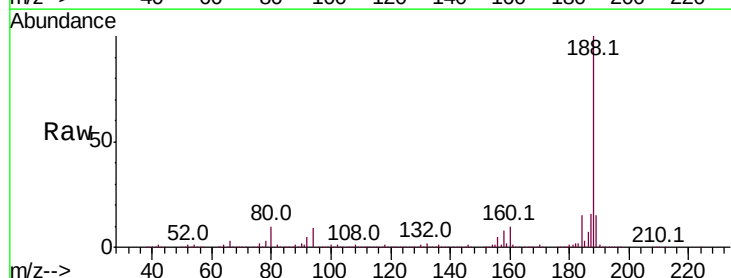
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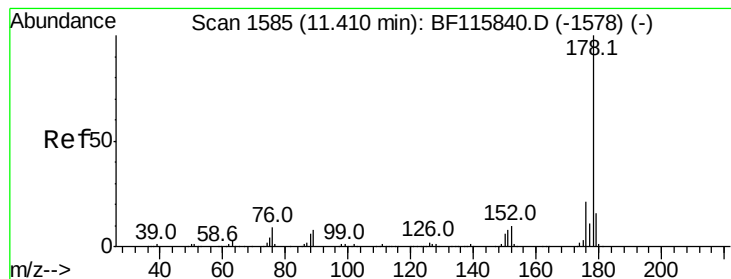
mohammad
 8/20/2019 8:37:00 AM



#64
 Phenanthrene-d10
 Concen: 20.000 ng
 RT: 11.34 min Scan# 1573
 Delta R.T. -0.03 min
 Lab File: BF116334.D
 Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Lower	Upper
188	100		
94	9.1	8.1	12.1
80	10.0	8.7	13.1





#71

Phenanthrene

Concen: 69.164 ng

RT: 11.36 min Scan# 1577

Delta R.T. -0.04 min

Lab File: BF116334.D

Acq: 16 Aug 2019 22:50

Instrument :

BNA_F

ClientSampleId :

REACTOR-4-A1-A4-(0-1)

Tot Ion:178 Resp: 1664711

Ion Ratio Lower Upper

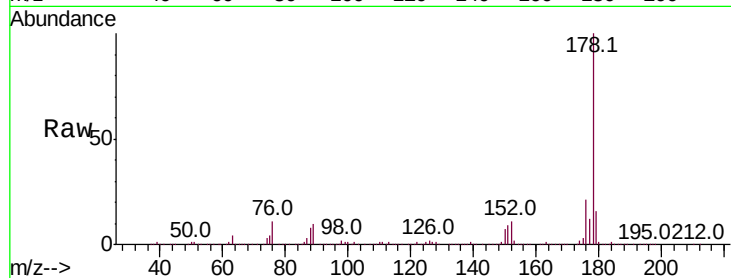
178 100

176 20.8 16.6 24.8

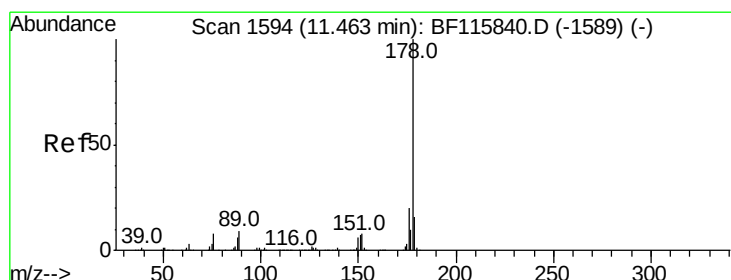
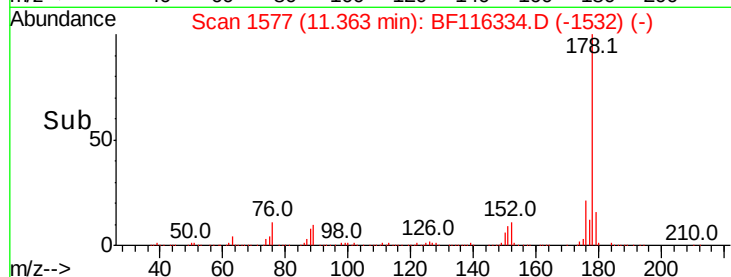
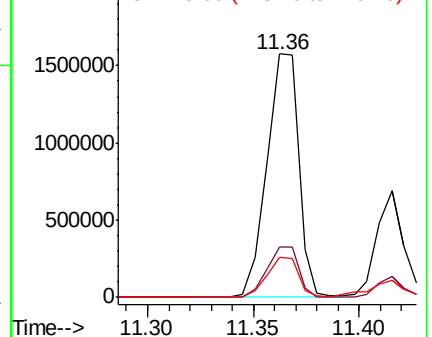
179 16.5 12.5 18.7

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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



#72

Anthracene

Concen: 24.746 ng

RT: 11.42 min Scan# 1586

Delta R.T. -0.03 min

Lab File: BF116334.D

Acq: 16 Aug 2019 22:50

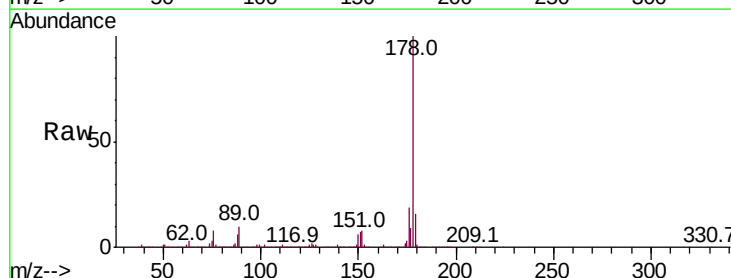
Tgt Ion:178 Resp: 602779

Ion Ratio Lower Upper

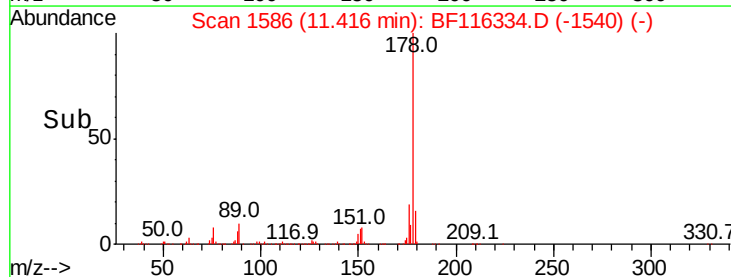
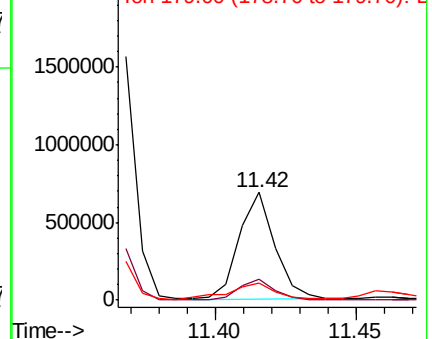
178 100

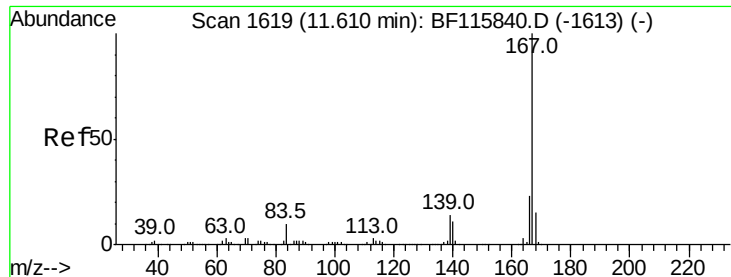
176 19.3 15.7 23.5

179 15.9 13.0 19.6



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





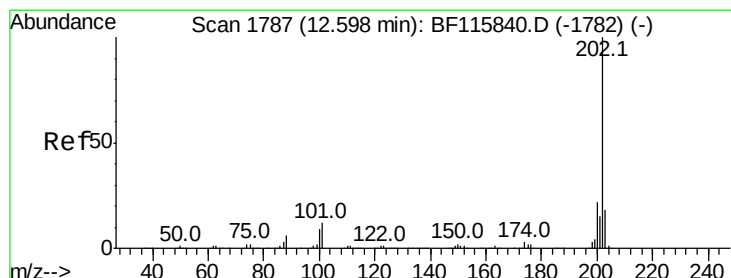
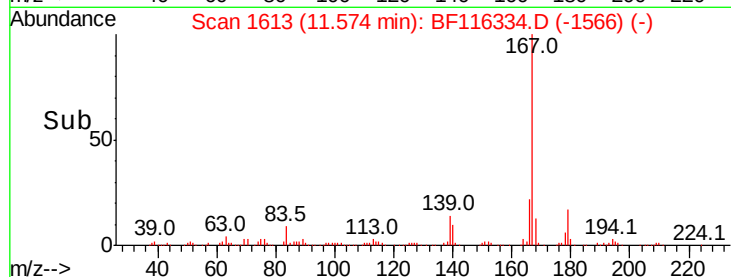
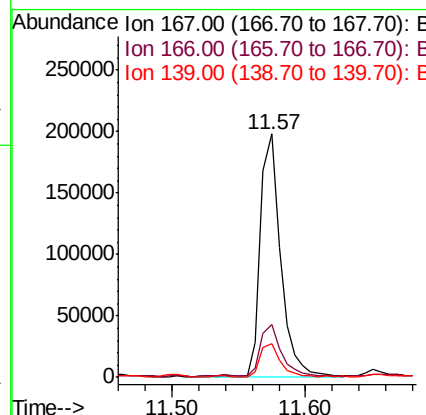
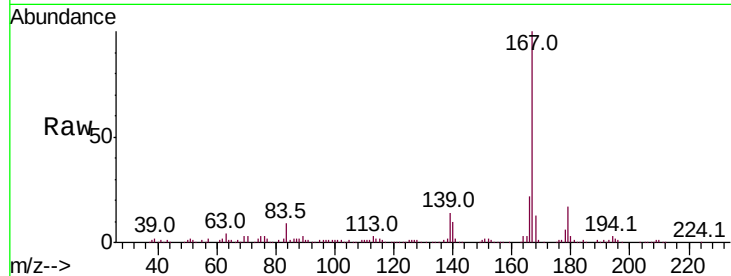
#73
 Carbazole
 Concen: 9.224 ng
 RT: 11.57 min Scan# 1613
 Delta R.T. -0.02 min
 Lab File: BF116334.D
 Acq: 16 Aug 2019 22:50

Instrument :
 BNA_F
 ClientSampleId :
 REACTOR-4-A1-A4-(0-1)

Tot Ion	Ratio	Lower	Upper
167	100		
166	22.0	17.8	26.6
139	13.7	11.4	17.0

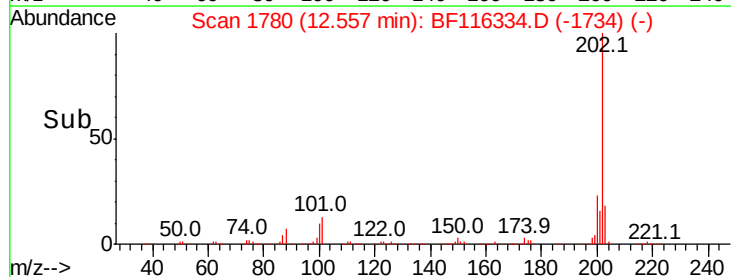
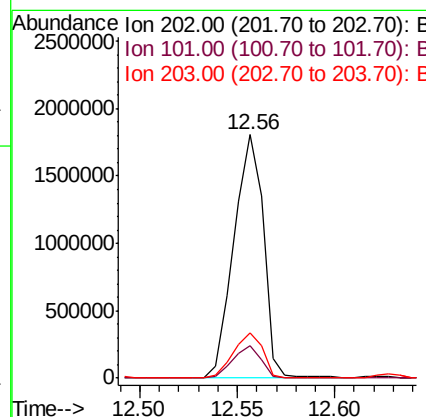
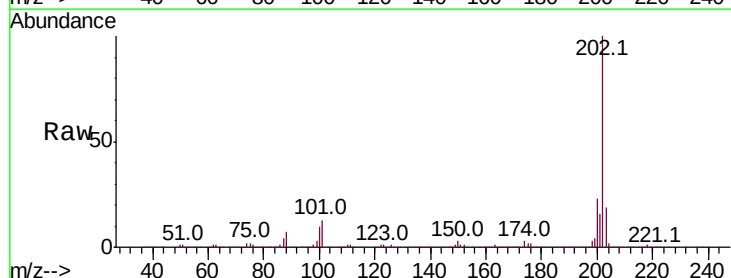
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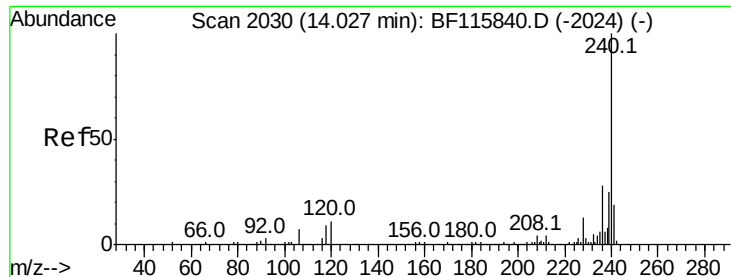
mohammad
 8/20/2019 8:37:00 AM



#75
 Fluoranthene
 Concen: 75.451 ng
 RT: 12.56 min Scan# 1780
 Delta R.T. -0.03 min
 Lab File: BF116334.D
 Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Lower	Upper
202	100		
101	13.3	0.0	31.2
203	18.5	0.0	37.8





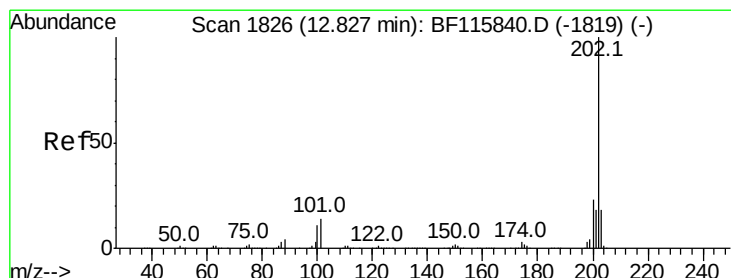
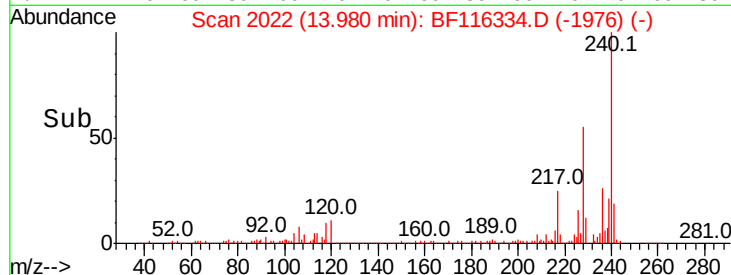
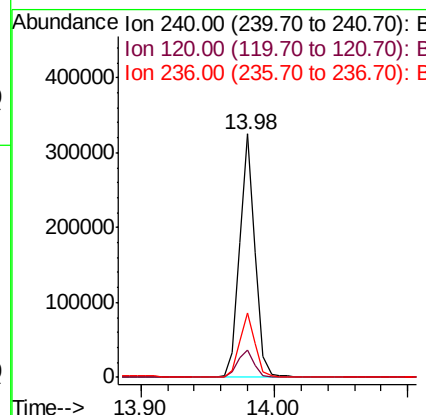
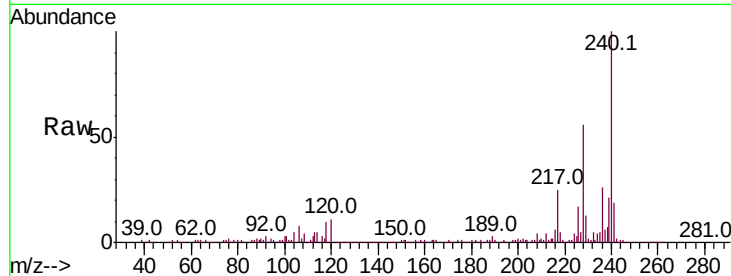
#76
 Chrysene-d12
 Concen: 20.000 ng
 RT: 13.98 min Scan# 2022
 Delta R.T. -0.03 min
 Lab File: BF116334.D
 Acq: 16 Aug 2019 22:50

Instrument :
 BNA_F
 ClientSampleId :
 REACTOR-4-A1-A4-(0-1)

Tot Ion	Ratio	Lower	Upper
240	100		
120	11.5	10.7	16.1
236	26.3	22.2	33.2

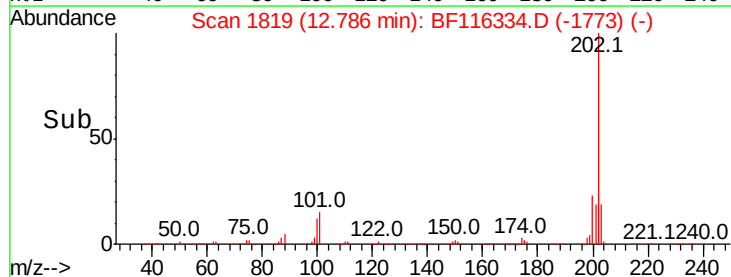
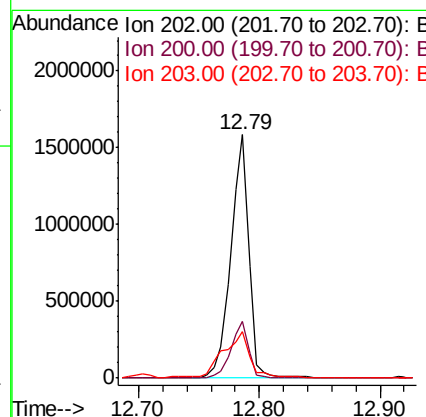
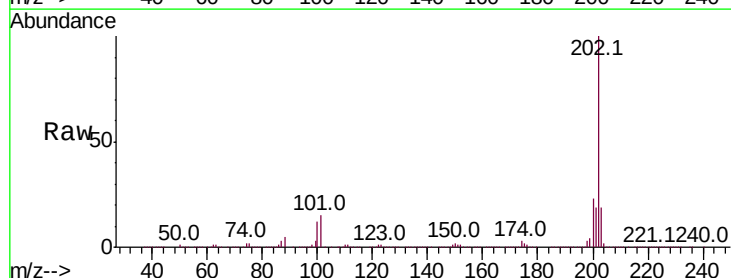
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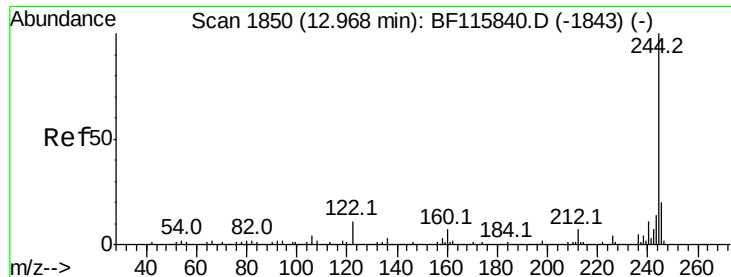
mohammad
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#78
 Pyrene
 Concen: 81.824 ng
 RT: 12.79 min Scan# 1819
 Delta R.T. -0.03 min
 Lab File: BF116334.D
 Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Lower	Upper
202	100		
200	23.1	18.0	27.0
203	18.8	14.1	21.1





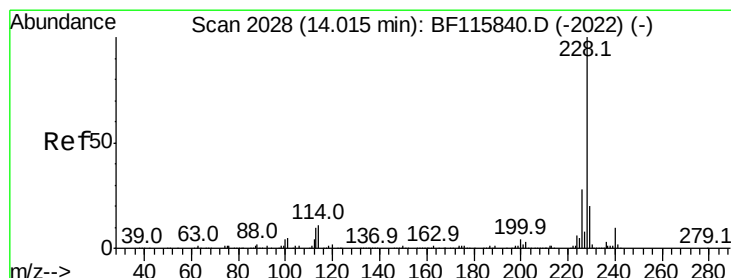
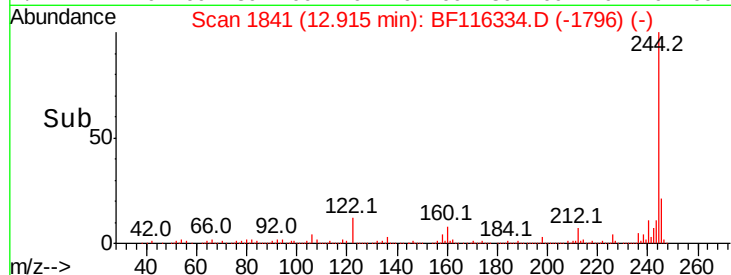
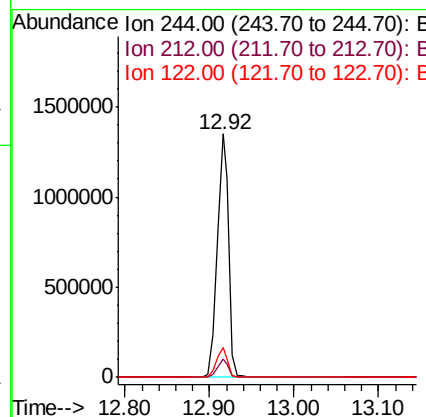
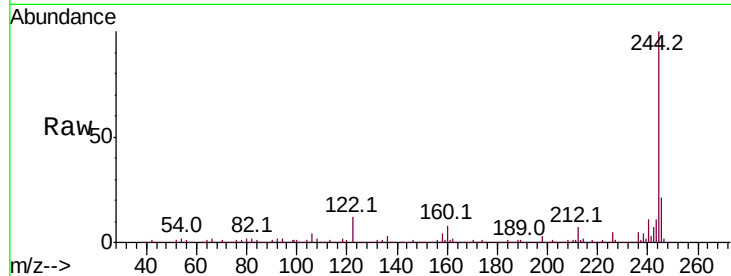
#79
 Terphenyl-d14
 Concen: 104.821 ng
 RT: 12.92 min Scan# 1841
 Delta R.T. -0.04 min
 Lab File: BF116334.D
 Acq: 16 Aug 2019 22:50

Instrument :
 BNA_F
 ClientSampleId :
 REACTOR-4-A1-A4-(0-1)

Tot Ion	Ratio	Lower	Upper
244	100		
212	7.4	5.8	8.8
122	12.3	9.0	13.4

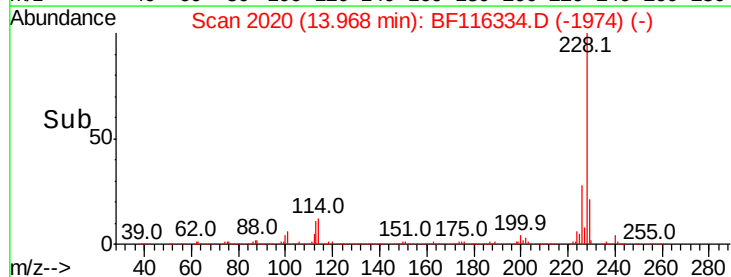
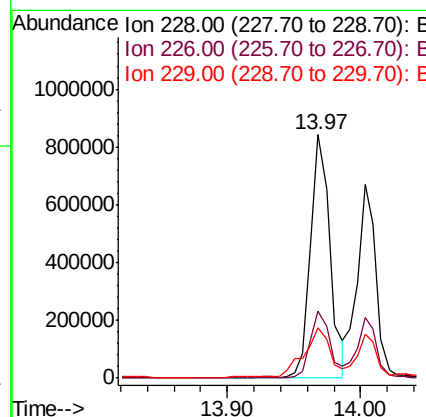
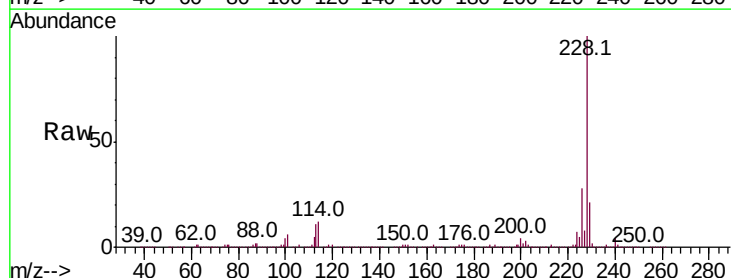
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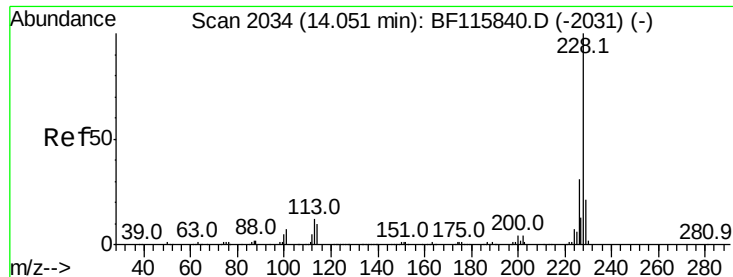
mohammad
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#81
 Benzo(a)anthracene
 Concen: 49.929 ng
 RT: 13.97 min Scan# 2020
 Delta R.T. -0.03 min
 Lab File: BF116334.D
 Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.7	22.7	34.1
229	20.8	16.2	24.4





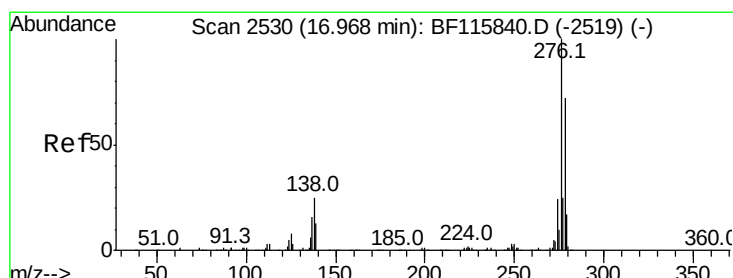
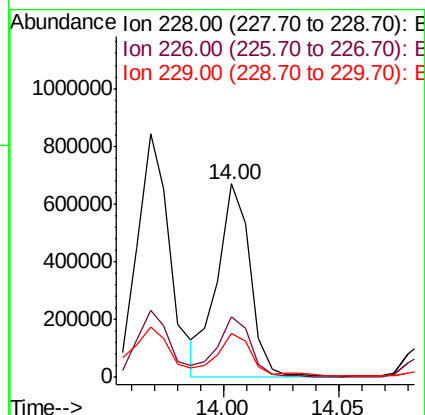
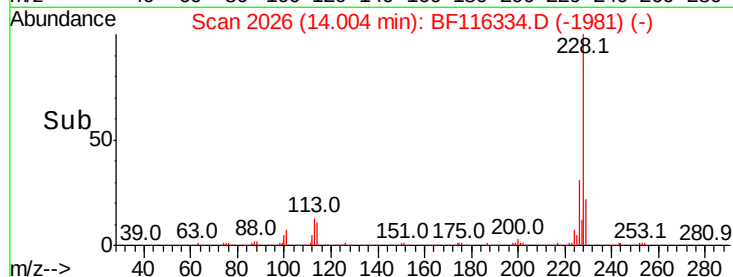
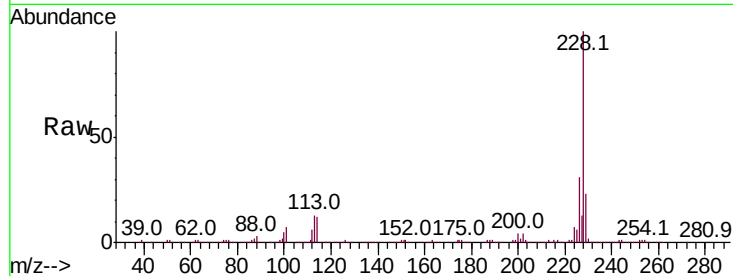
#83
Chrysene
Concen: 40.701 ng
RT: 14.00 min Scan# 2026
Delta R.T. -0.04 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Instrument :
BNA_F
ClientSampleId :
REACTOR-4-A1-A4-(0-1)

Tot Ion:	228	Resp:	664009
Ion	Ratio	Lower	Upper
228	100		
226	31.4	25.5	38.3
229	23.0	16.6	24.8

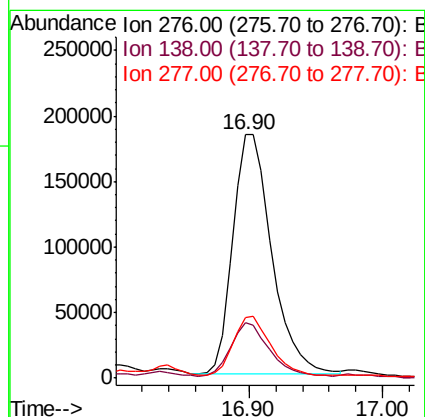
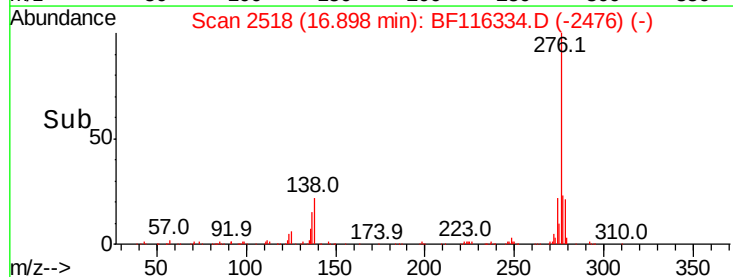
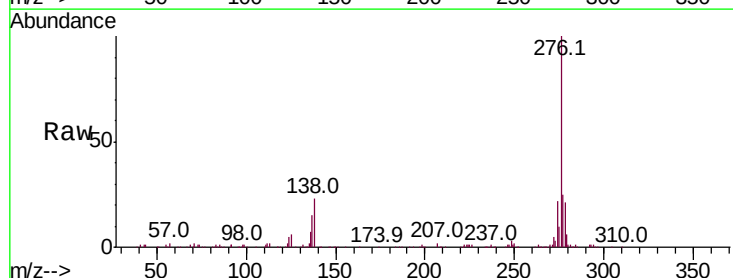
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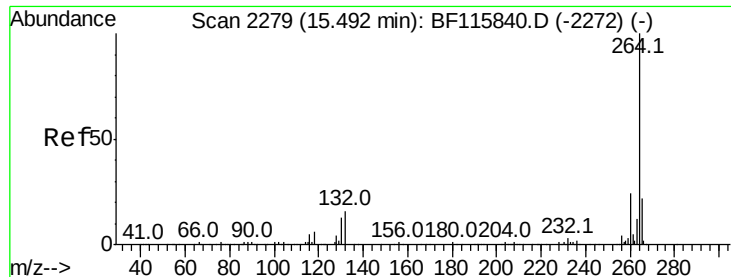
mohammad
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#86
Indeno(1,2,3-cd)pyrene
Concen: 27.135 ng
RT: 16.90 min Scan# 2518
Delta R.T. -0.05 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Tgt Ion:	276	Resp:	371815
Ion	Ratio	Lower	Upper
276	100		
138	22.7	20.4	30.6
277	23.5	20.0	30.0





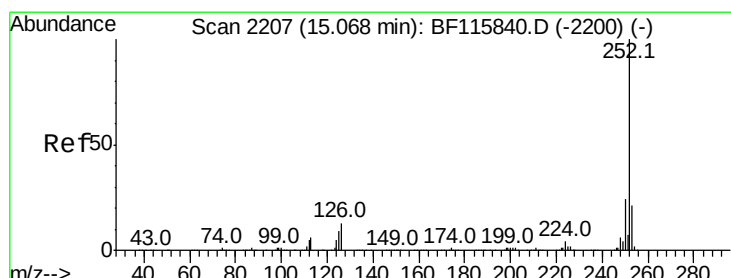
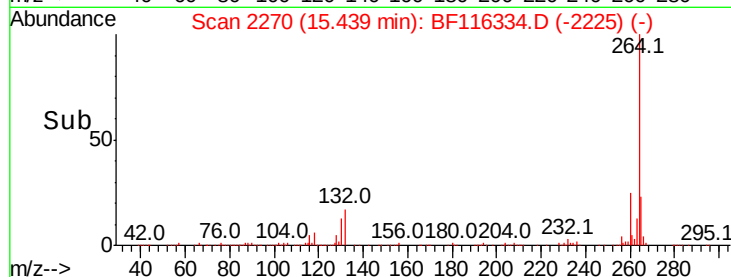
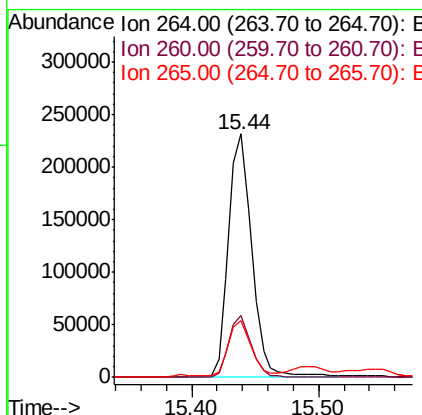
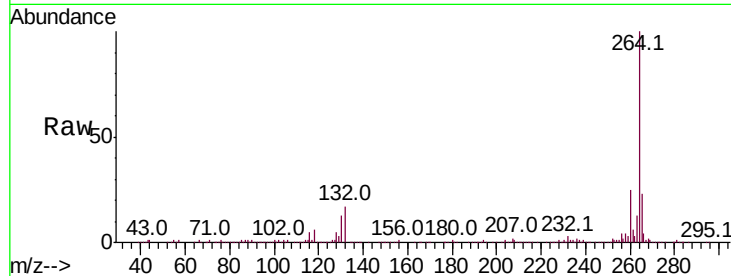
#87
Pervlene-d12
Concen: 20.000 ng
RT: 15.44 min Scan# 2270
Delta R.T. -0.04 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Instrument :
BNA_F
ClientSampleId :
REACTOR-4-A1-A4-(0-1)

Tot Ion	Ratio	Lower	Upper
264	100		
260	25.2	19.7	29.5
265	23.3	17.4	26.0

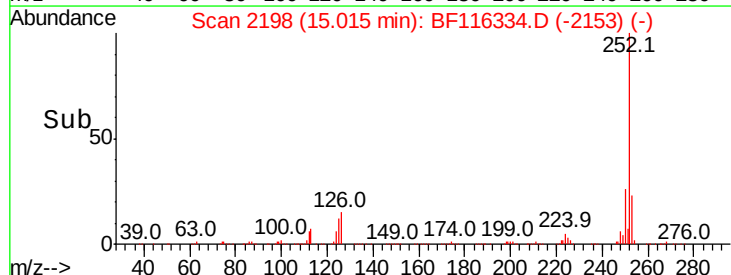
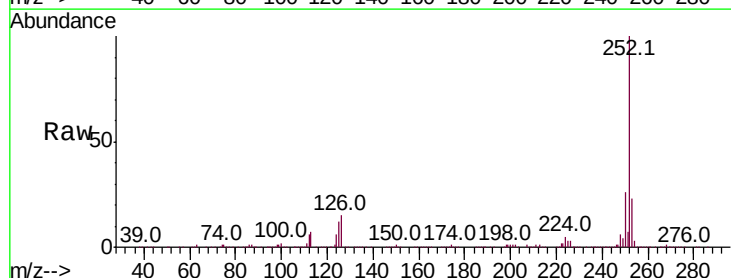
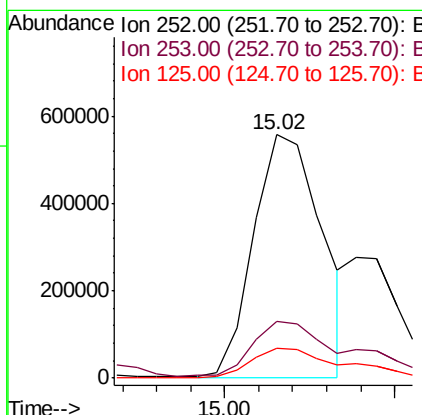
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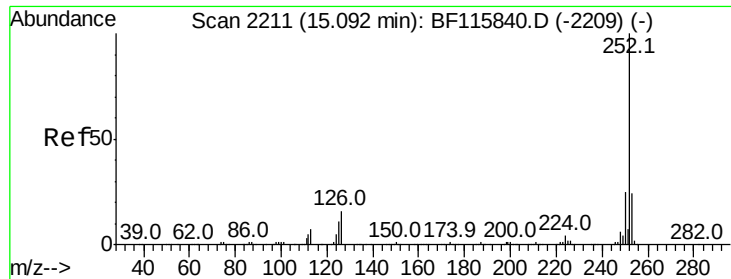
mohammad
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#88
Benzo(b)fluoranthene
Concen: 46.170 ng m
RT: 15.02 min Scan# 2198
Delta R.T. -0.04 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.2	17.8	26.8
125	12.1	8.4	12.6





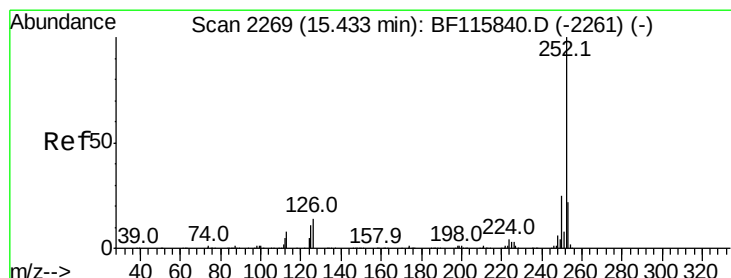
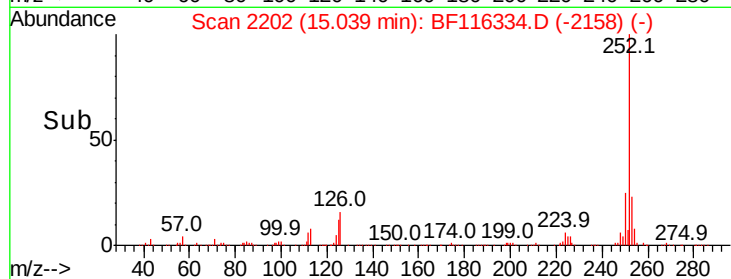
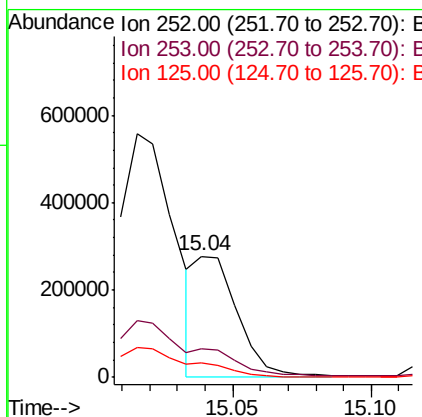
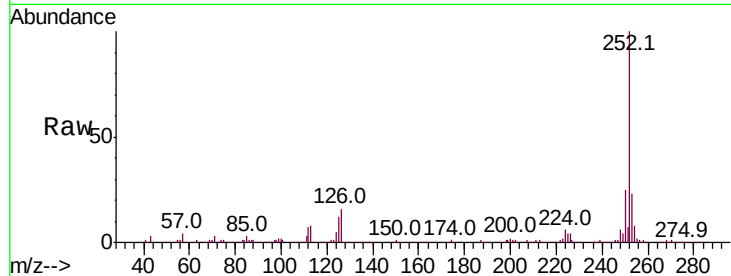
#89
Benzo(k)fluoranthene
Concen: 18.063 ng m
RT: 15.04 min Scan# 2202
Delta R.T. -0.04 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Instrument :
BNA_F
ClientSampleId :
REACTOR-4-A1-A4-(0-1)

Tot Ion	Ratio	Lower	Upper
252	100		
253	23.2	17.8	26.8
125	11.7	7.7	11.5

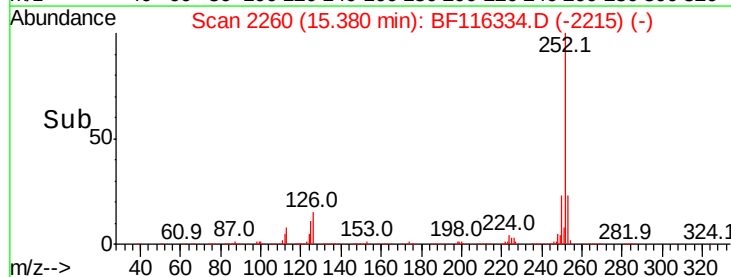
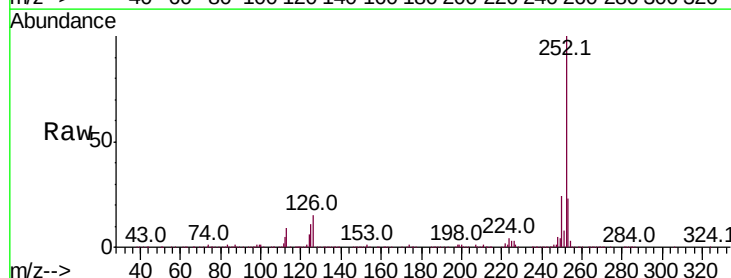
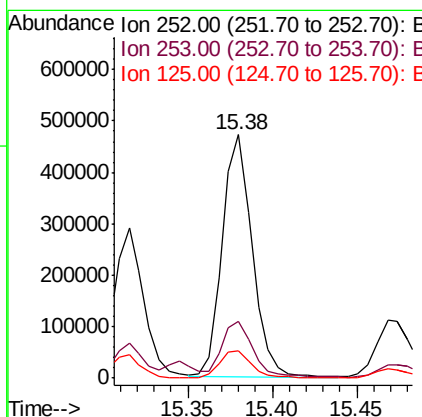
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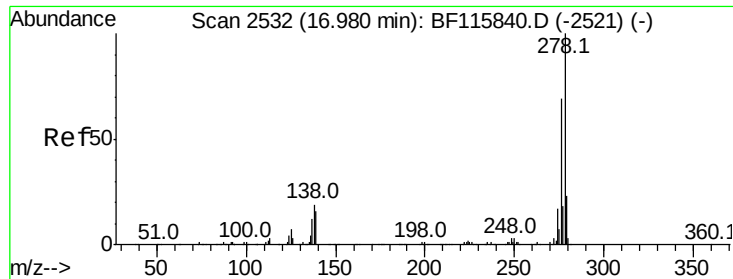
mohammad
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#90
Benzo(a)pyrene
Concen: 38.689 ng
RT: 15.38 min Scan# 2260
Delta R.T. -0.04 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.1	18.0	27.0
125	11.3	8.9	13.3





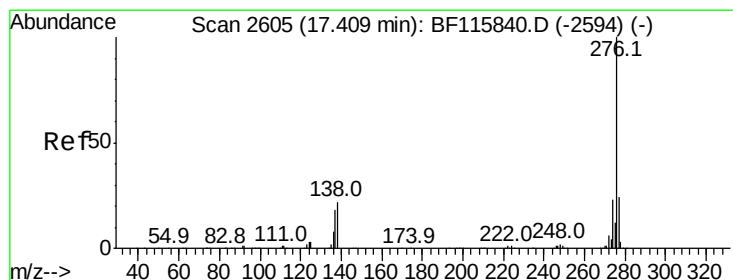
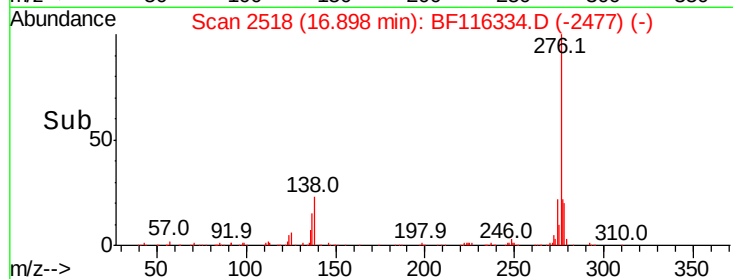
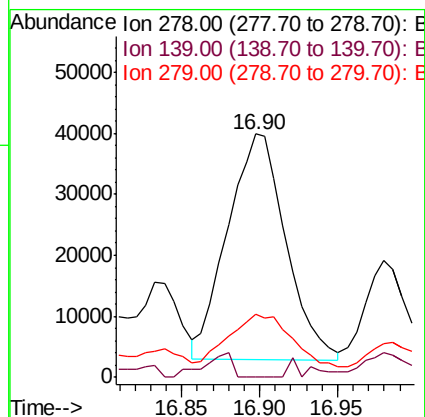
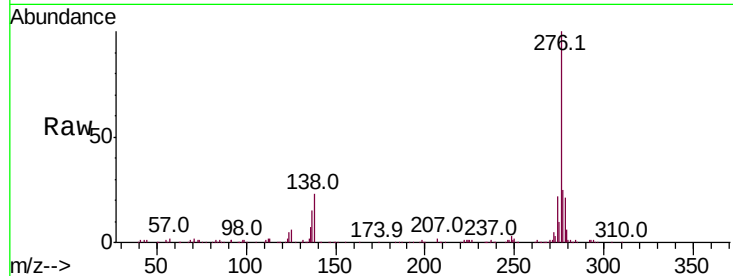
#91
Dibenzo(a,h)anthracene
Concen: 7.347 ng m
RT: 16.90 min Scan# 2518
Delta R.T. -0.06 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Instrument :
BNA_F
ClientSampleId :
REACTOR-4-A1-A4-(0-1)

Tot Ion	Ratio	Lower	Upper
278	100		
139	0.0	12.8	19.2#
279	25.8	18.8	28.2

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#92
Benzo(g,h,i)perylene
Concen: 26.154 ng
RT: 17.34 min Scan# 2593
Delta R.T. -0.05 min
Lab File: BF116334.D
Acq: 16 Aug 2019 22:50

Tgt Ion	Ratio	Lower	Upper
276	100		
277	25.1	18.4	27.6
138	23.0	17.0	25.6

