

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF042219\  
 Data File : BF113900.D  
 Acq On : 23 Apr 2019 1:21  
 Operator : JU/SJ  
 Sample : K2193-09RE 5X  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 HR-05-041719-B

Quant Time: Apr 23 06:40:02 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF042219.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Apr 23 03:32:35 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.90  | 152  | 162131   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.18  | 136  | 556128   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.93  | 164  | 287878   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.42 | 188  | 613896   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.06 | 240  | 565741   | 20.00 | ng    | -0.01    |
| 87) Perylene-d12          | 15.54 | 264  | 452885   | 20.00 | ng    | -0.03    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.51  | 112  | 200886   | 21.19 | ng    | 0.00     |
| 7) Phenol-d6                | 6.52  | 99   | 250794   | 21.09 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.45  | 82   | 143258   | 15.91 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.72 | 330  | 74496    | 21.24 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.25  | 172  | 260484   | 14.15 | ng    | 0.00     |
| 79) Terphenyl-d14           | 13.00 | 244  | 391733   | 14.20 | ng    | 0.00     |

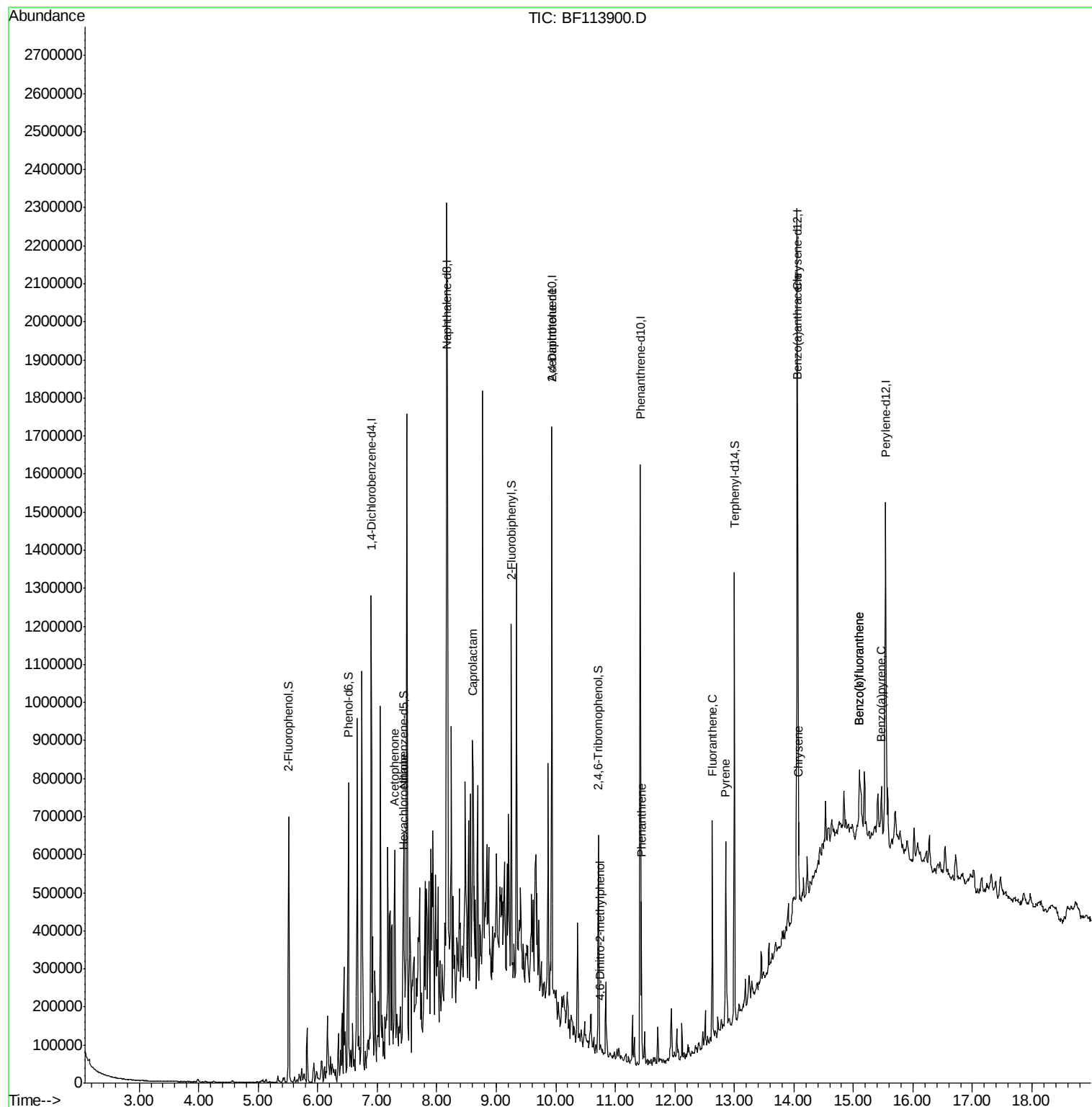
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 9) Benzaldehyde                | 6.43  | 77   | 2401     | Below Cal |       | # 1    |
| 18) Hexachloroethane           | 7.43  | 117  | 14702    | 3.402     | ng    | # 1    |
| 22) Acetophenone               | 7.29  | 105  | 40912    | 3.306     | ng    | # 16   |
| 35) Caprolactam                | 8.61  | 113  | 13886    | 5.160     | ng    | # 34   |
| 57) 2,4-Dinitrotoluene         | 9.93  | 165  | 40438    | 7.173     | ng    | # 30   |
| 65) 4,6-Dinitro-2-methylphenol | 10.75 | 198  | 112      | 7.342     | ng    | # 1    |
| 71) Phenanthrene               | 11.44 | 178  | 142980   | 4.634     | ng    | 98     |
| 75) Fluoranthene               | 12.63 | 202  | 228487   | 6.788     | ng    | 98     |
| 78) Pyrene                     | 12.86 | 202  | 199262   | 5.037     | ng    | 97     |
| 81) Benzo(a)anthracene         | 14.04 | 228  | 98521    | 2.956     | ng    | 97     |
| 83) Chrysene                   | 14.08 | 228  | 77826    | 2.397     | ng    | 96     |
| 88) Benzo(b)fluoranthene       | 15.10 | 252  | 111751   | 3.900     | ng    | # 89   |
| 89) Benzo(k)fluoranthene       | 15.10 | 252  | 111751   | 4.534     | ng    | # 90   |
| 90) Benzo(a)pyrene             | 15.47 | 252  | 57975    | 2.339     | ng    | # 87   |

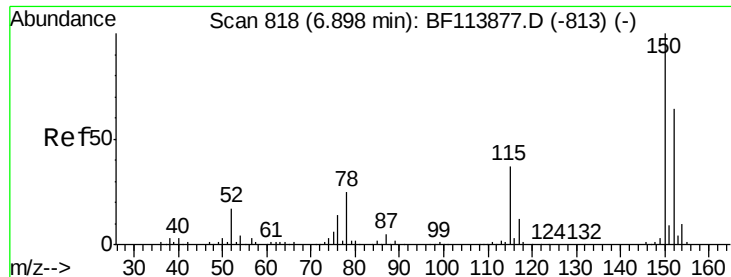
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF042219\  
Data File : BF113900.D  
Acq On : 23 Apr 2019 1:21  
Operator : JU/SJ  
Sample : K2193-09RE 5X  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HR-05-041719-B

Quant Time: Apr 23 06:40:02 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF042219.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Apr 23 03:32:35 2019  
Response via : Initial Calibration



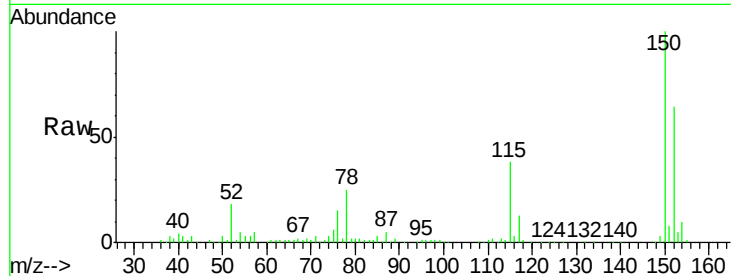


#1

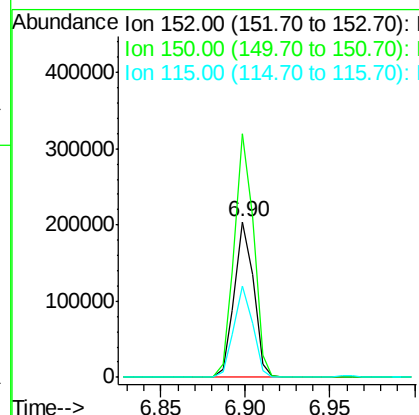
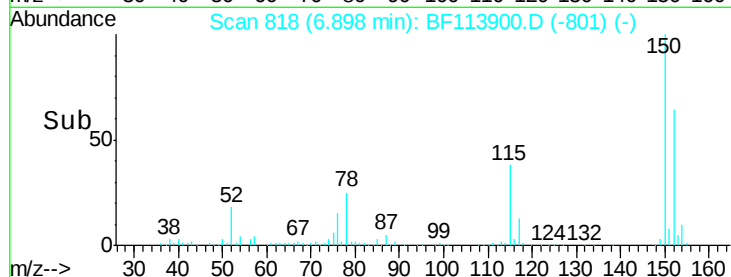
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.90 min Scan# 818  
Delta R.T. 0.00 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

Instrument :  
BNA\_F  
ClientSampleId :  
HR-05-041719-B

Tot Ion:152 Resp: 162131  
Ion Ratio Lower Upper  
152 100  
150 156.6 125.9 188.9  
115 59.1 45.9 68.9



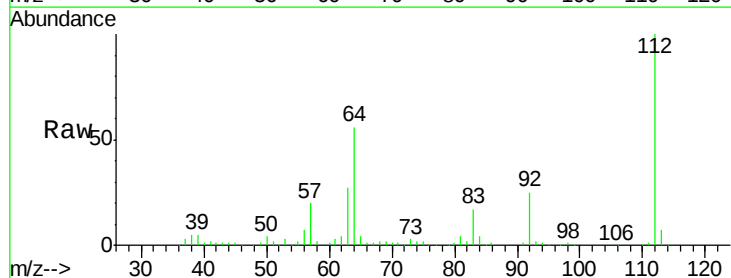
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



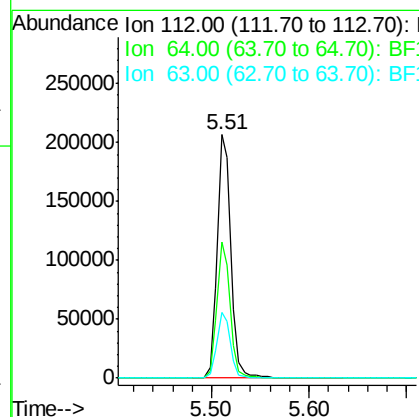
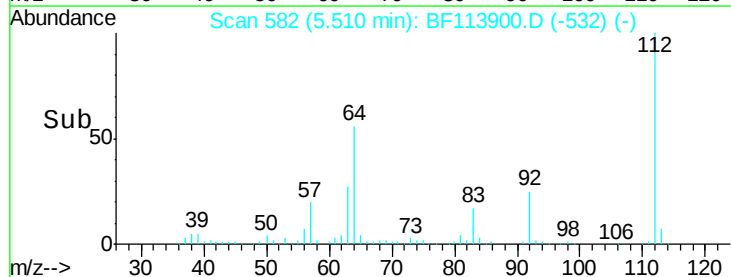
#5

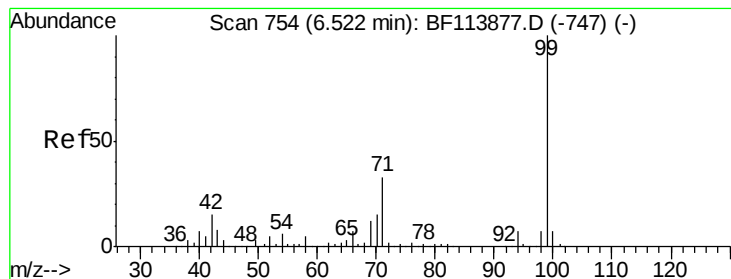
2-Fluorophenol  
Concen: 21.192 ng  
RT: 5.51 min Scan# 582  
Delta R.T. -0.01 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

Tgt Ion:112 Resp: 200886  
Ion Ratio Lower Upper  
112 100  
64 56.2 46.6 69.8  
63 27.1 23.1 34.7



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: 21.088 ng

RT: 6.52 min Scan# 753

Delta R.T. -0.01 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

Instrument :

BNA\_F

ClientSampleId :

HR-05-041719-B

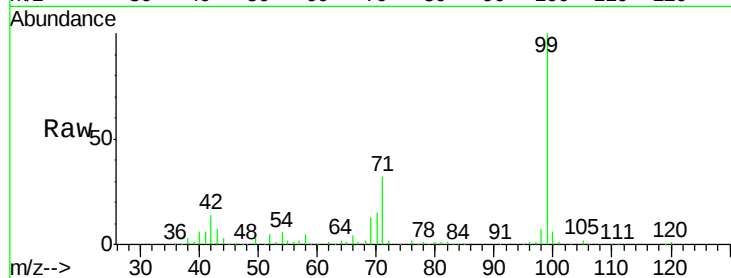
Tot Ion: 99 Resp: 250794

Ion Ratio Lower Upper

99 100

42 14.0 12.5 18.7

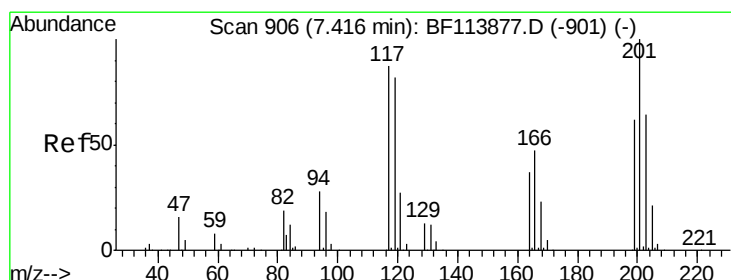
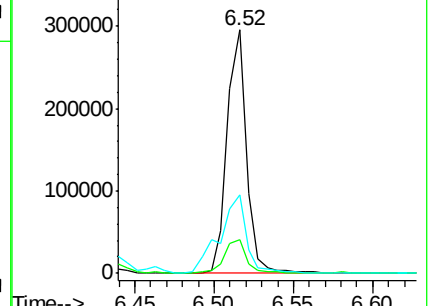
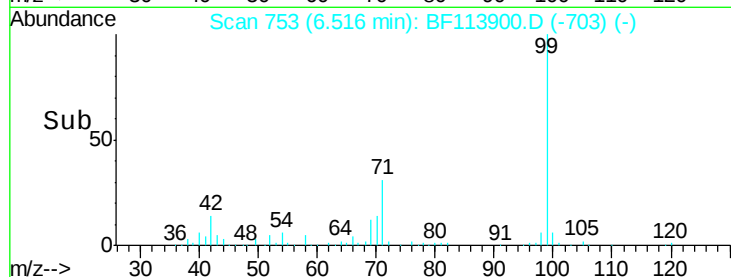
71 32.1 26.9 40.3



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



#18

Hexachloroethane

Concen: 3.402 ng

RT: 7.43 min Scan# 909

Delta R.T. 0.02 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

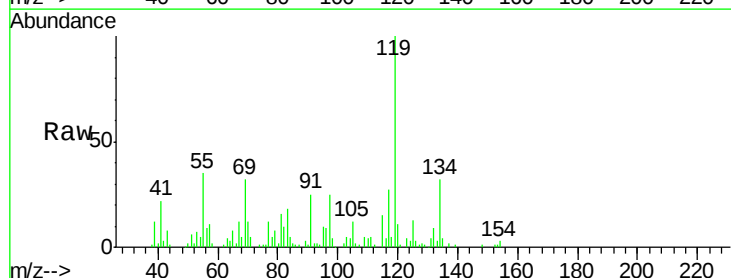
Tgt Ion: 117 Resp: 14702

Ion Ratio Lower Upper

117 100

119 368.7 74.4 111.6#

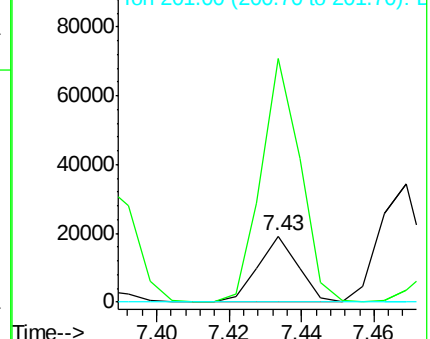
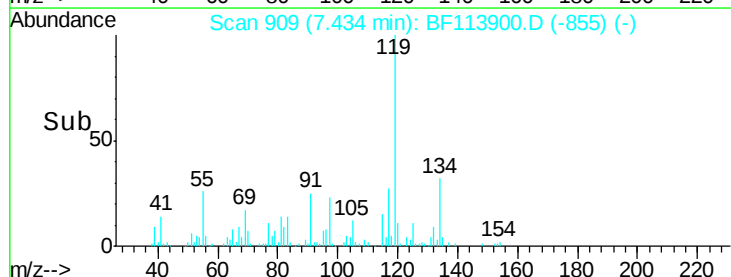
201 0.0 90.2 135.2#

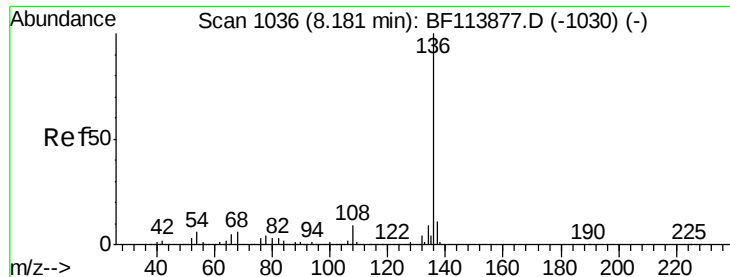


Abundance Ion 117.00 (116.70 to 117.70): E

Ion 119.00 (118.70 to 119.70): E

Ion 201.00 (200.70 to 201.70): E





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.18 min Scan# 1036

Delta R.T. 0.00 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

Instrument :

BNA\_F

ClientSampleId :

HR-05-041719-B

Tot Ion:136 Resp: 556128

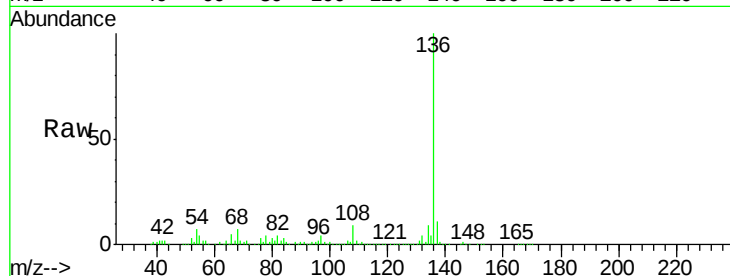
Ion Ratio Lower Upper

136 100

137 11.3 8.6 12.8

54 6.6 5.0 7.6

68 6.7 4.9 7.3

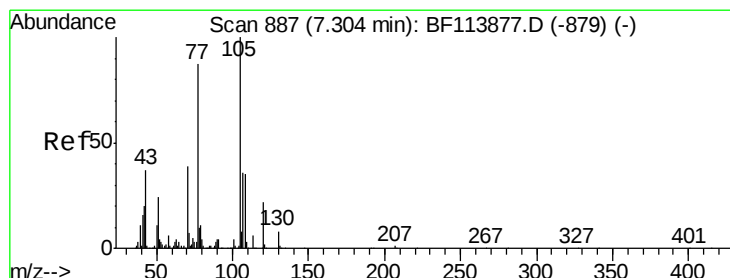
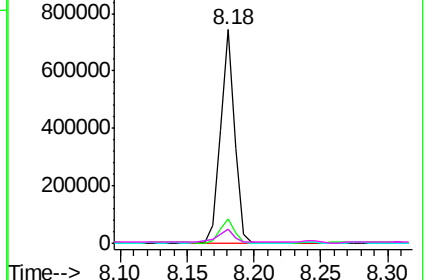
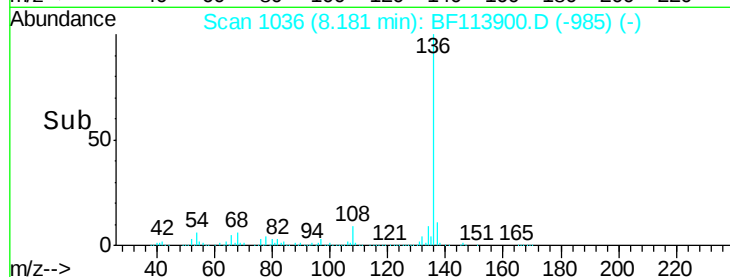


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1



#22

Acetophenone

Concen: 3.306 ng

RT: 7.29 min Scan# 885

Delta R.T. -0.01 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

Tgt Ion:105 Resp: 40912

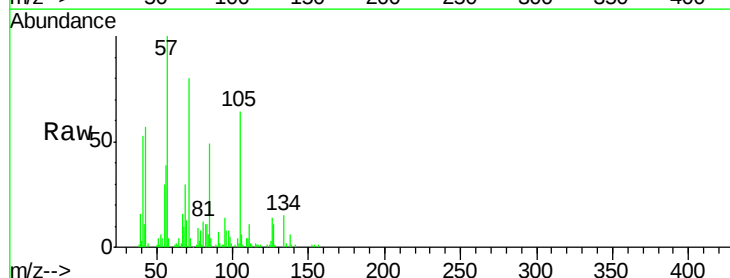
Ion Ratio Lower Upper

105 100

71 124.5 6.1 9.1#

51 5.9 16.8 25.2#

120 0.0 17.6 26.4#

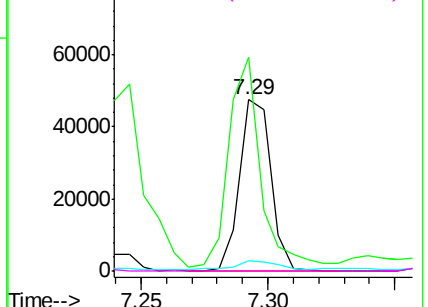
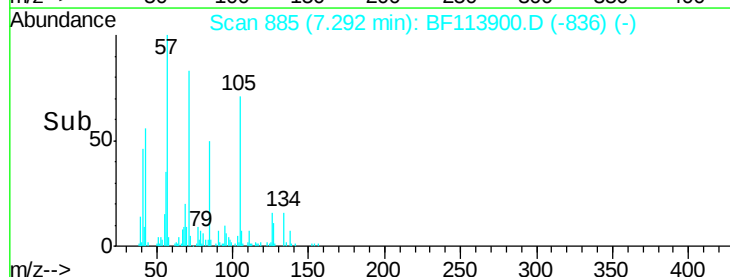


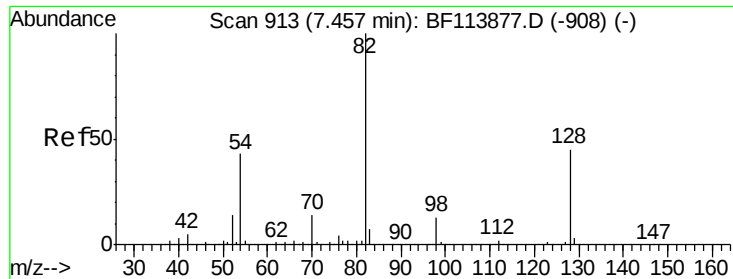
Abundance Ion 105.00 (104.70 to 105.70): E

Ion 71.00 (70.70 to 71.70): BF1

Ion 51.00 (50.70 to 51.70): BF1

Ion 120.00 (119.70 to 120.70): E

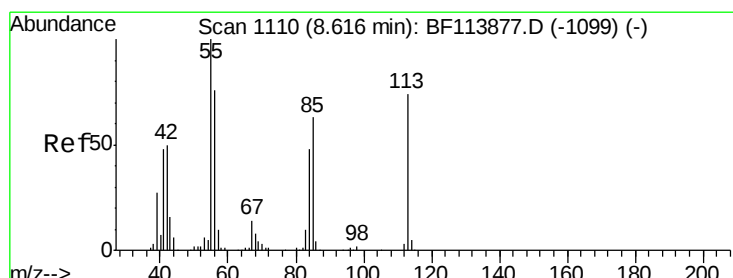
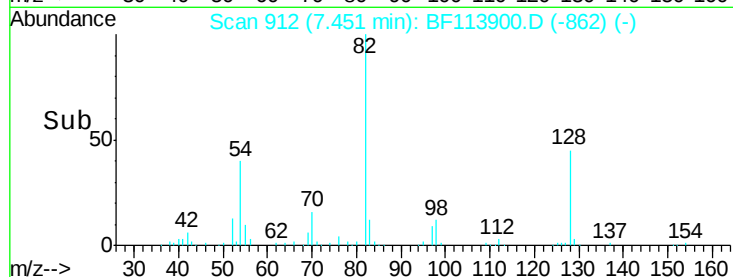
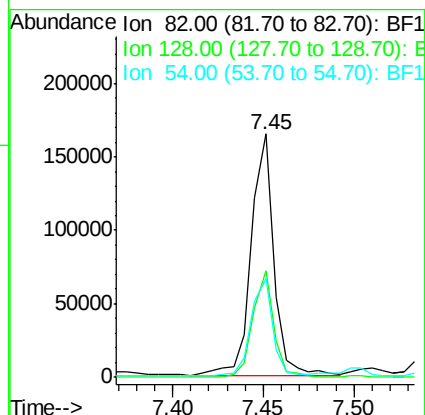
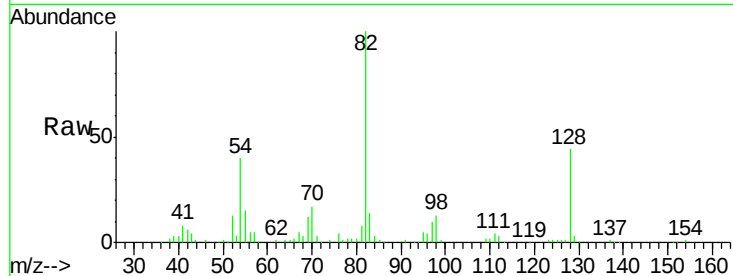




#23  
Nitrobenzene-d5  
Concen: 15.905 ng  
RT: 7.45 min Scan# 912  
Delta R.T. -0.01 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

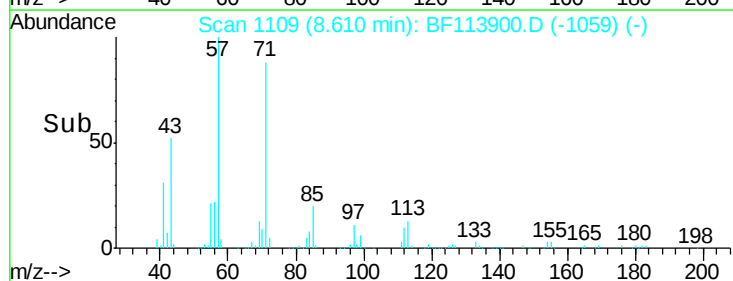
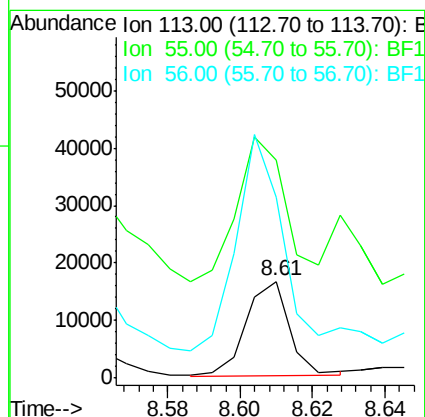
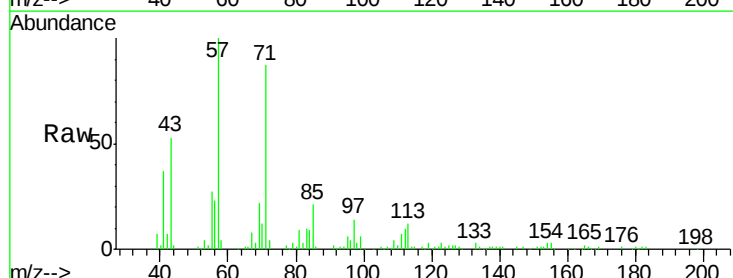
Instrument :  
BNA\_F  
ClientSampleId :  
HR-05-041719-B

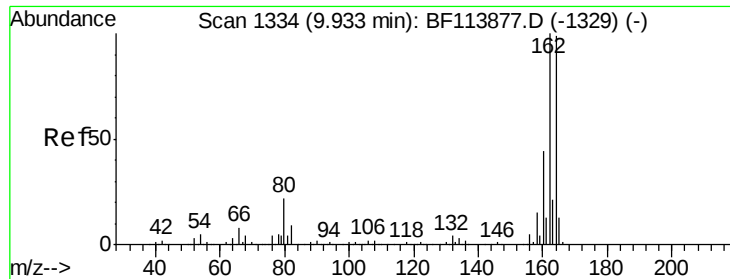
Tot Ion: 82 Resp: 143258  
Ion Ratio Lower Upper  
82 100  
128 43.9 36.8 55.2  
54 40.4 33.8 50.6



#35  
Caprolactam  
Concen: 5.160 ng  
RT: 8.61 min Scan# 1109  
Delta R.T. -0.01 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

Tgt Ion: 113 Resp: 13886  
Ion Ratio Lower Upper  
113 100  
55 226.3 128.6 168.6#  
56 188.2 91.9 131.9#

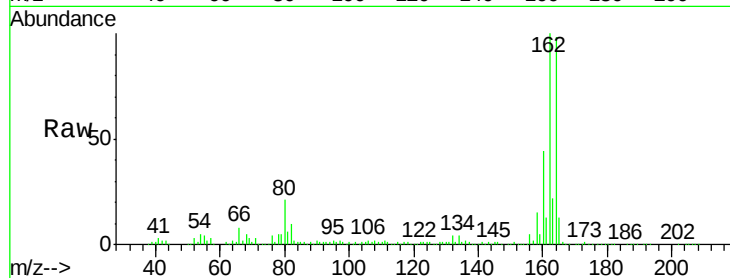




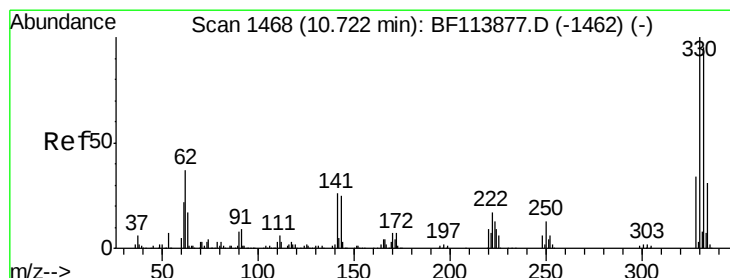
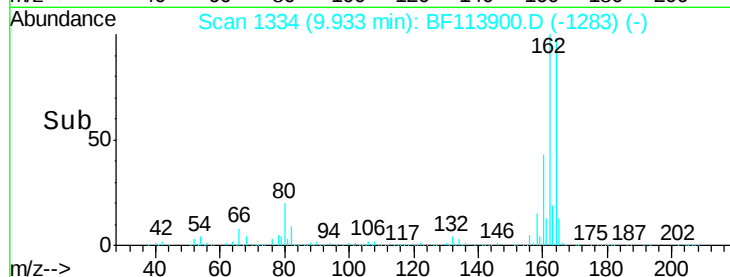
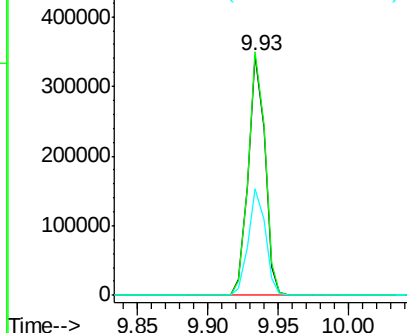
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.93 min Scan# 1334  
Delta R.T. 0.00 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

Instrument :  
BNA\_F  
ClientSampleId :  
HR-05-041719-B

Tot Ion:164 Resp: 287878  
Ion Ratio Lower Upper  
164 100  
162 101.7 81.1 121.7  
160 44.3 35.8 53.6

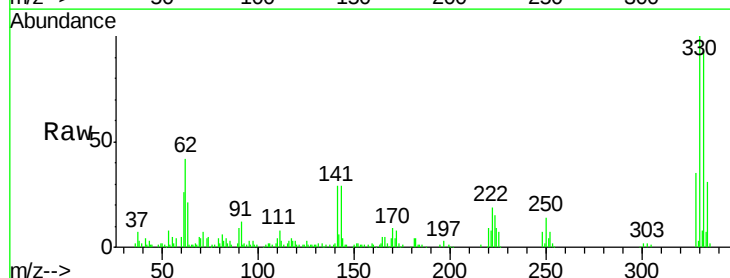


Abundance Ion 164.00 (163.70 to 164.70): E  
Ion 162.00 (161.70 to 162.70): E  
Ion 160.00 (159.70 to 160.70): E

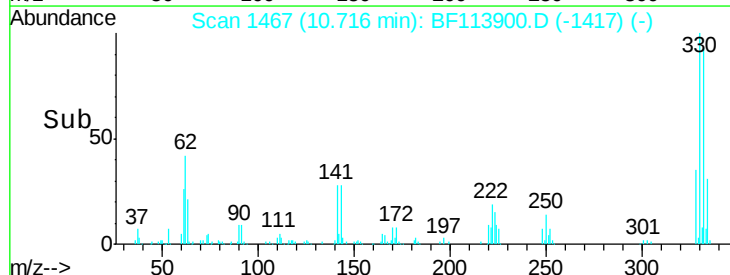
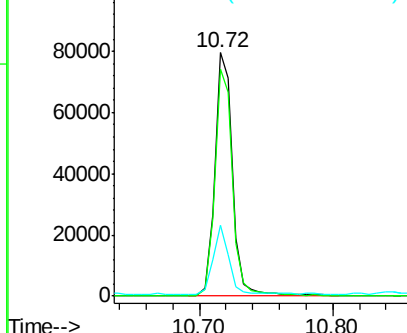


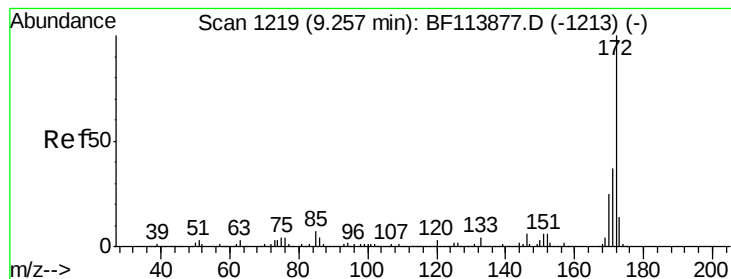
#42  
2,4,6-Tribromophenol  
Concen: 21.242 ng  
RT: 10.72 min Scan# 1467  
Delta R.T. -0.01 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

Tgt Ion:330 Resp: 74496  
Ion Ratio Lower Upper  
330 100  
332 93.3 77.5 116.3  
141 24.7 22.2 33.2



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: 14.152 ng

RT: 9.25 min Scan# 1218

Delta R.T. -0.00 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

Instrument :

BNA\_F

ClientSampleId :

HR-05-041719-B

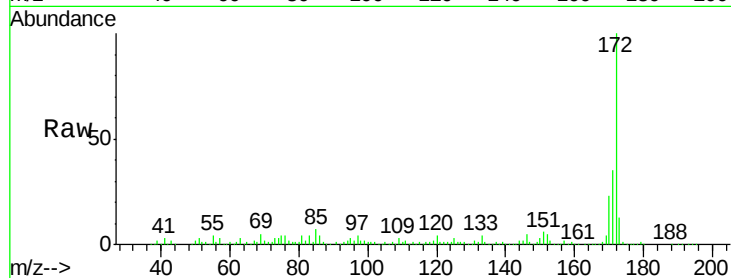
Tot Ion:172 Resp: 260484

Ion Ratio Lower Upper

172 100

171 35.2 29.4 44.0

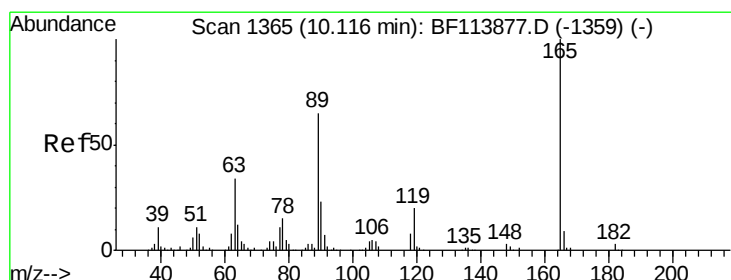
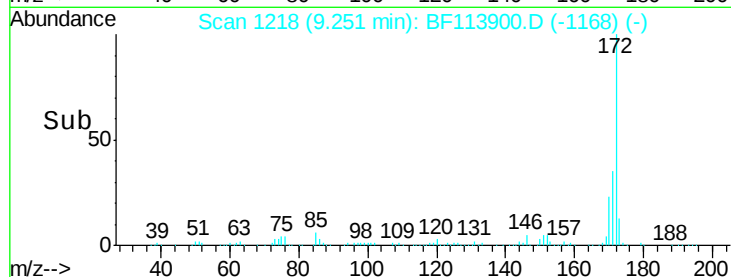
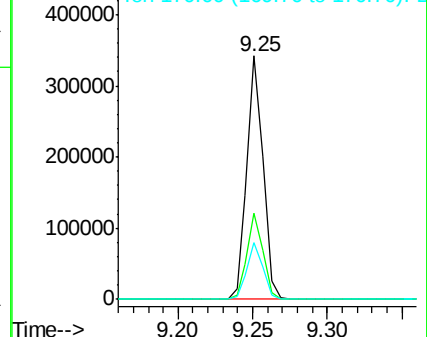
170 23.3 19.9 29.9



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



#57

2,4-Dinitrotoluene

Concen: 7.173 ng

RT: 9.93 min Scan# 1334

Delta R.T. -0.18 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

Tgt Ion:165 Resp: 40438

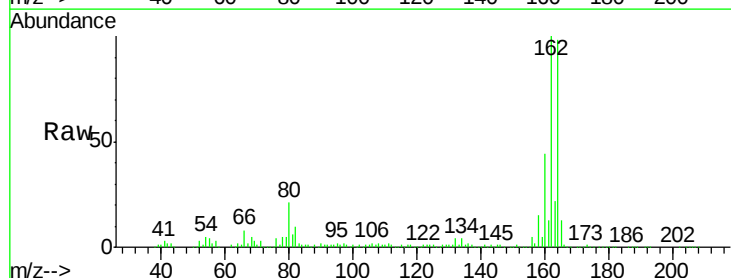
Ion Ratio Lower Upper

165 100

63 1.7 27.4 41.0#

89 1.7 51.8 77.6#

182 1.6 2.2 3.2#

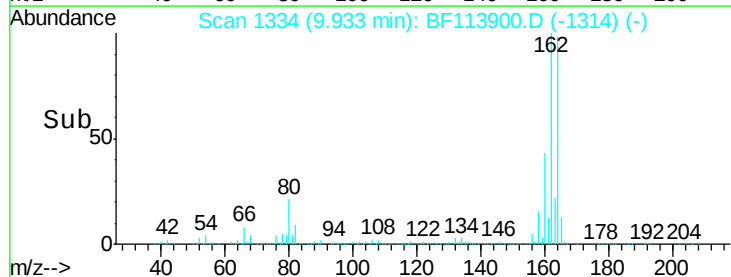
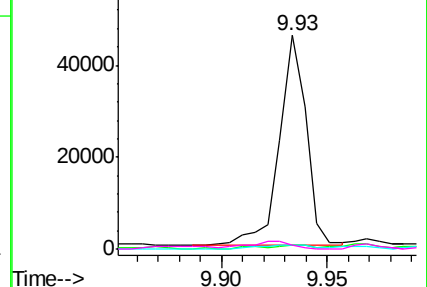


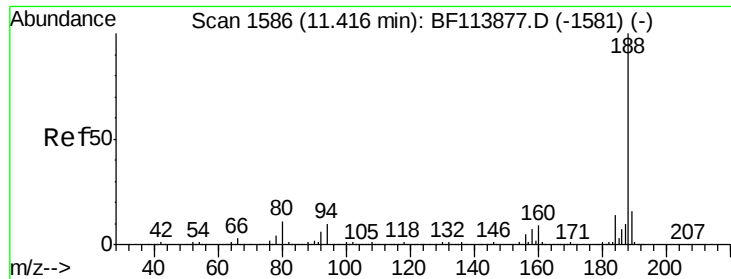
Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF1

Ion 89.00 (88.70 to 89.70): BF1

Ion 182.00 (181.70 to 182.70): E





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.42 min Scan# 1587

Delta R.T. 0.01 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

Instrument :

BNA\_F

ClientSampleId :

HR-05-041719-B

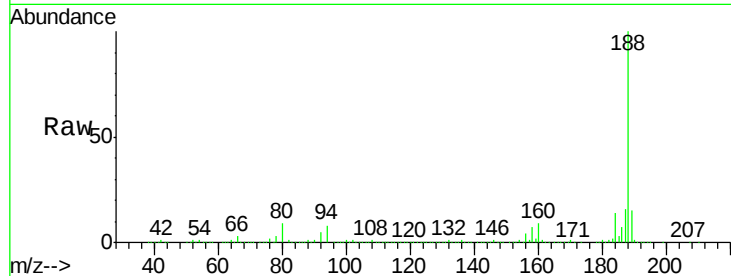
Tot Ion:188 Resp: 613896

Ion Ratio Lower Upper

188 100

94 8.1 8.2 12.4#

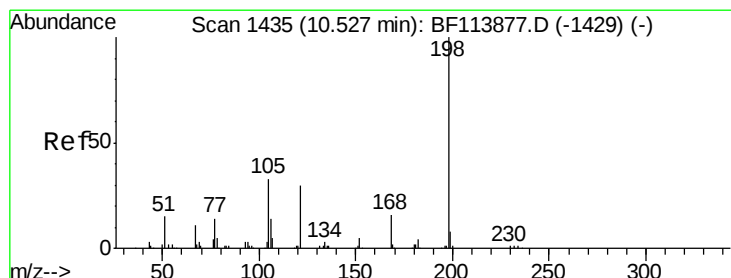
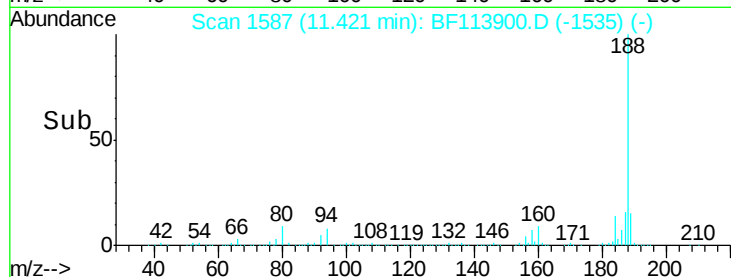
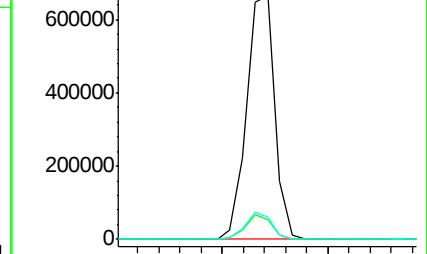
80 8.9 9.0 13.6#



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF1

Ion 80.00 (79.70 to 80.70): BF1



#65

4,6-Dinitro-2-methylphenol

Concen: 7.342 ng

RT: 10.75 min Scan# 1473

Delta R.T. 0.22 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

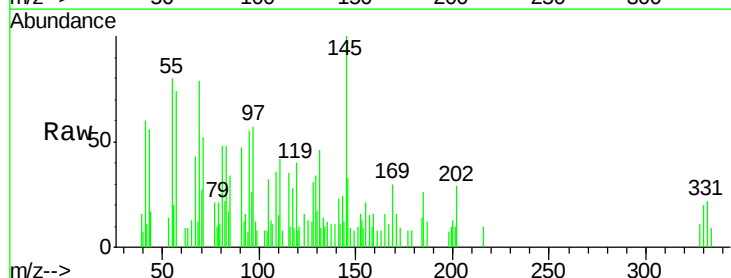
Tgt Ion:198 Resp: 112

Ion Ratio Lower Upper

198 100

51 0.0 11.1 51.1#

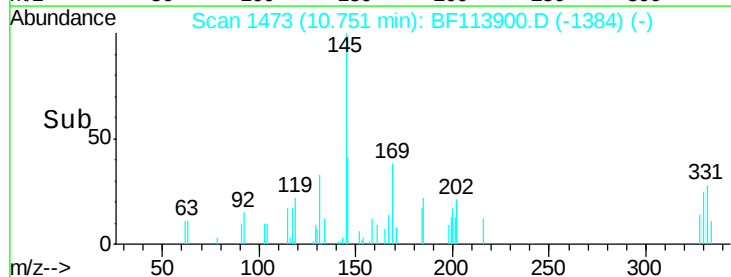
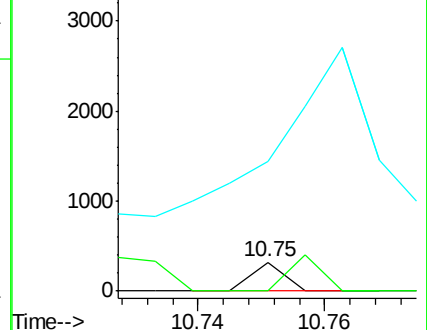
105 455.3 20.7 60.7#

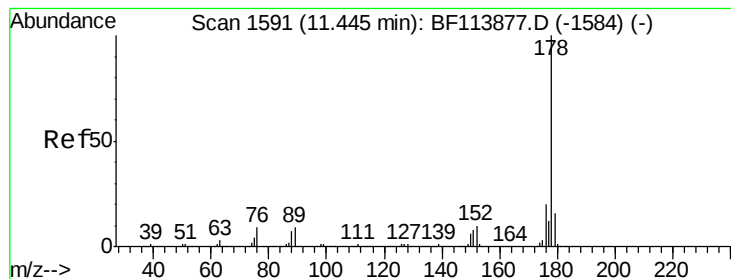


Abundance Ion 198.00 (197.70 to 198.70): E

Ion 51.00 (50.70 to 51.70): BF1

Ion 105.00 (104.70 to 105.70): E





#71

Phenanthrene

Concen: 4.634 ng

RT: 11.44 min Scan# 1590

Delta R.T. -0.01 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

Instrument :

BNA\_F

ClientSampleId :

HR-05-041719-B

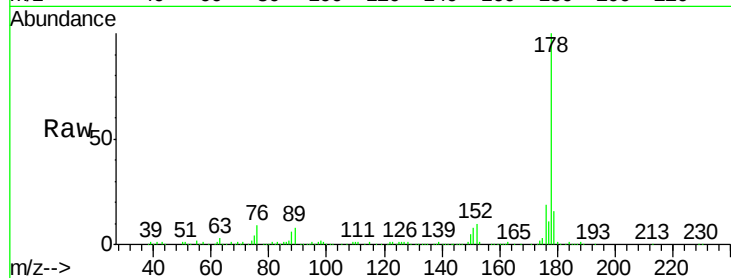
Tot Ion:178 Resp: 142980

Ion Ratio Lower Upper

178 100

176 18.7 16.1 24.1

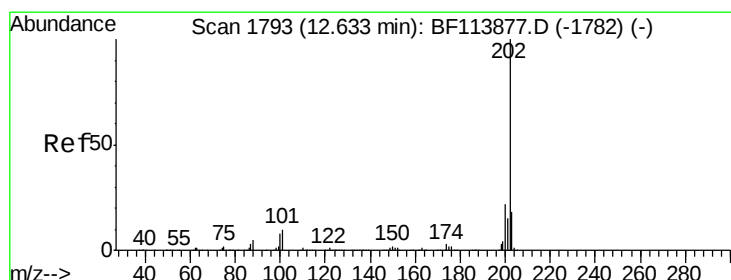
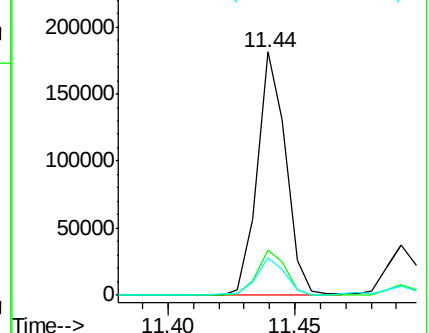
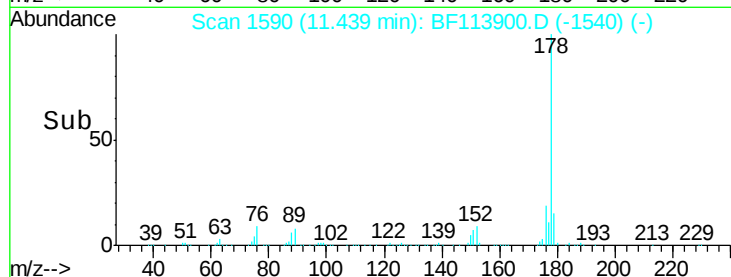
179 15.7 12.8 19.2



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



#75

Fluoranthene

Concen: 6.788 ng

RT: 12.63 min Scan# 1792

Delta R.T. -0.01 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

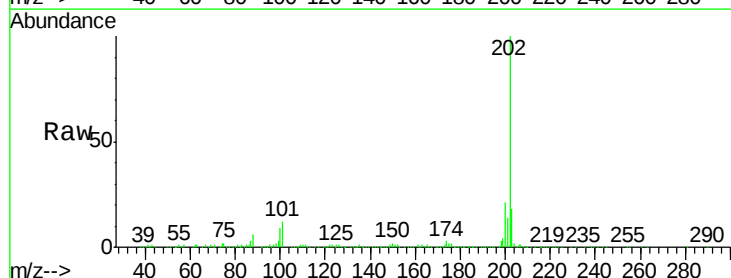
Tgt Ion:202 Resp: 228487

Ion Ratio Lower Upper

202 100

101 11.7 0.0 32.9

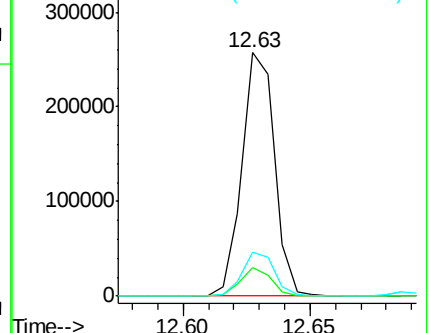
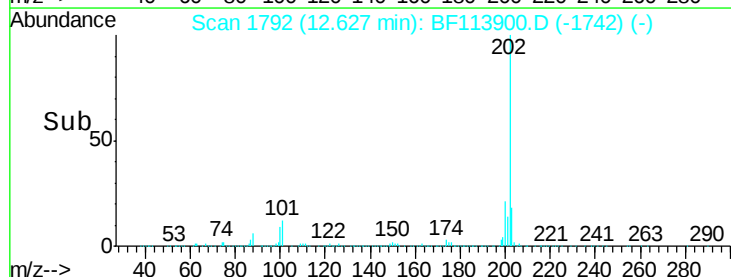
203 17.8 0.0 38.2

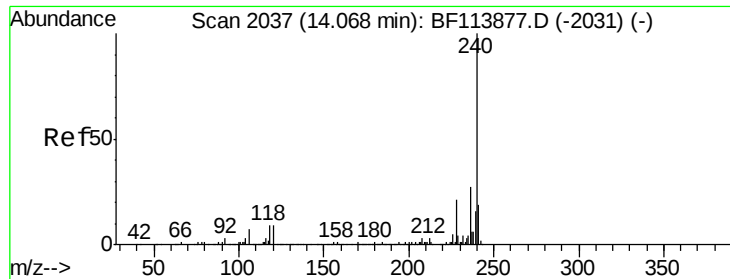


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E

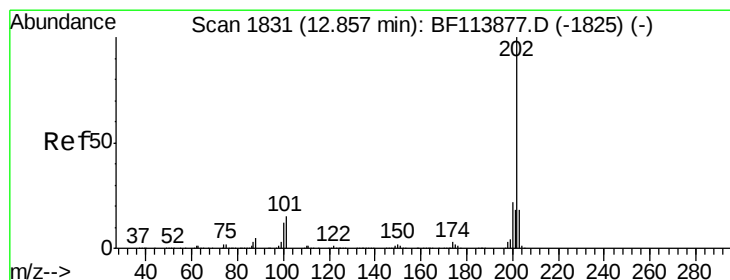
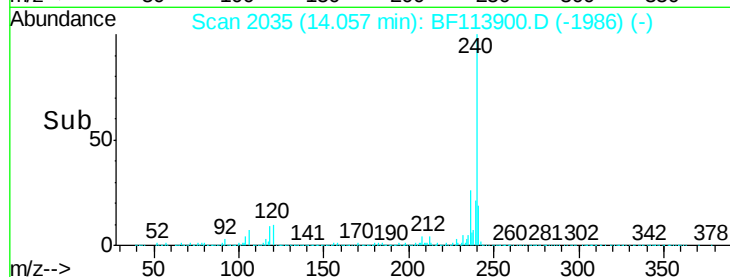
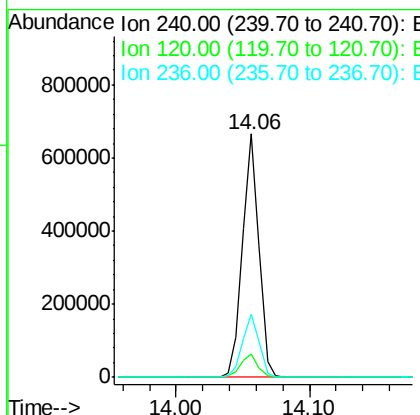
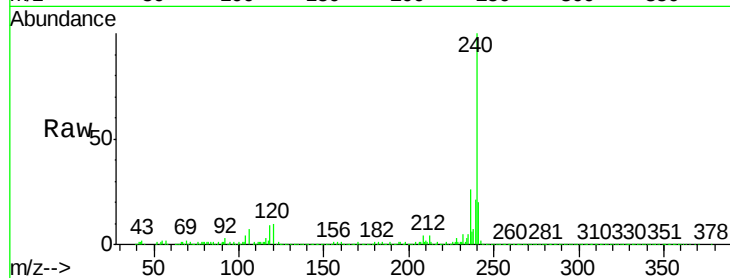




#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.06 min Scan# 2035  
Delta R.T. -0.01 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

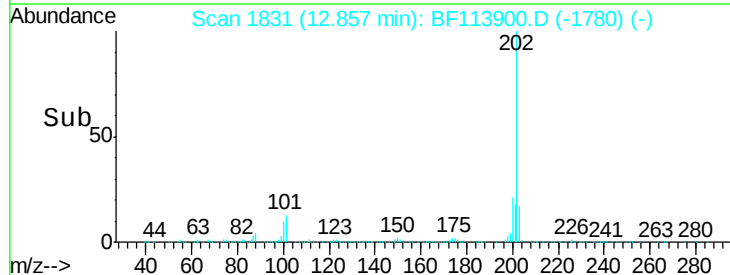
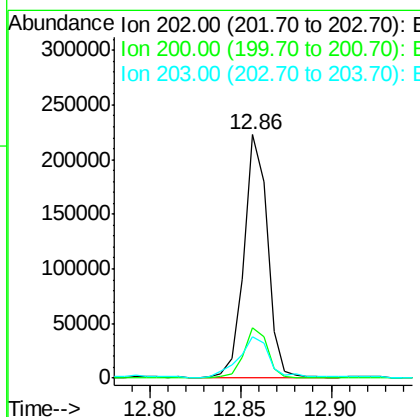
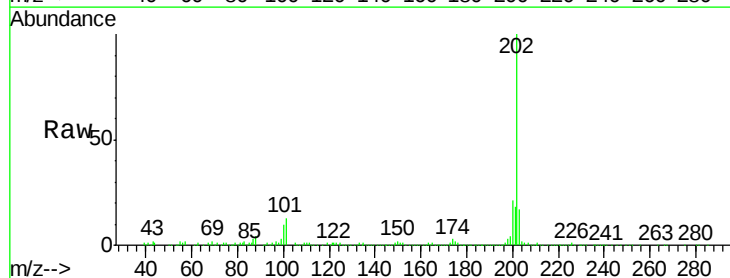
Instrument :  
BNA\_F  
ClientSampleId :  
HR-05-041719-B

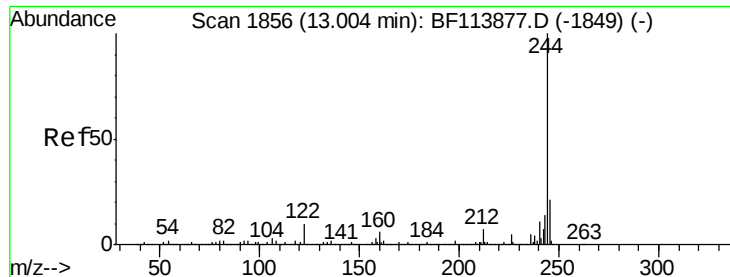
Tot Ion:240 Resp: 565741  
Ion Ratio Lower Upper  
240 100  
120 9.9 9.3 13.9  
236 26.2 21.2 31.8



#78  
Pyrene  
Concen: 5.037 ng  
RT: 12.86 min Scan# 1831  
Delta R.T. 0.00 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

Tgt Ion:202 Resp: 199262  
Ion Ratio Lower Upper  
202 100  
200 20.7 17.7 26.5  
203 17.2 15.0 22.6





#79

Terphenyl-d14

Concen: 14.196 ng

RT: 13.00 min Scan# 1855

Delta R.T. -0.01 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

Instrument :

BNA\_F

ClientSampleId :

HR-05-041719-B

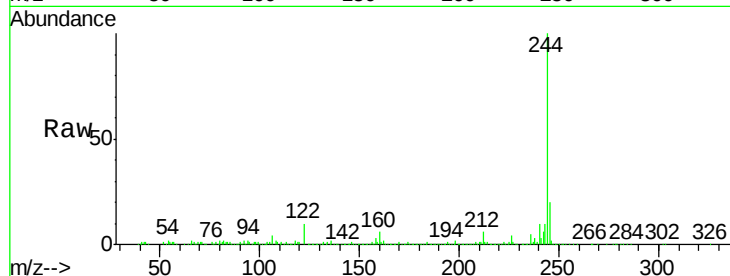
Tot Ion:244 Resp: 391733

Ion Ratio Lower Upper

244 100

212 6.1 5.4 8.2

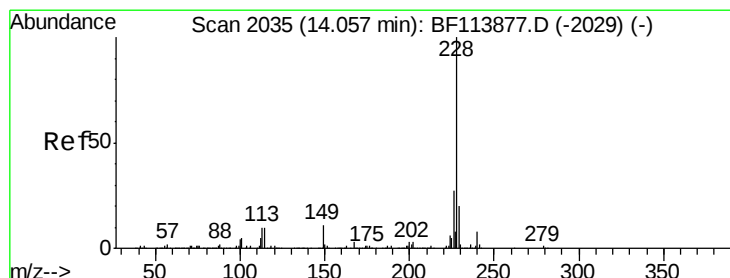
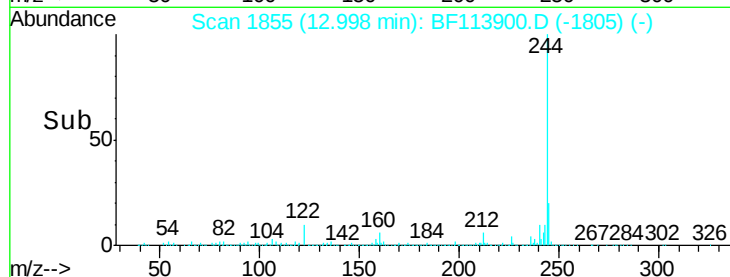
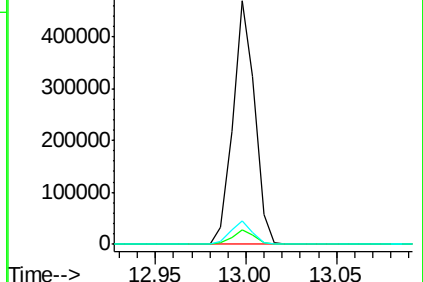
122 9.9 7.6 11.4



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



#81

Benzo(a)anthracene

Concen: 2.956 ng

RT: 14.04 min Scan# 2033

Delta R.T. -0.01 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

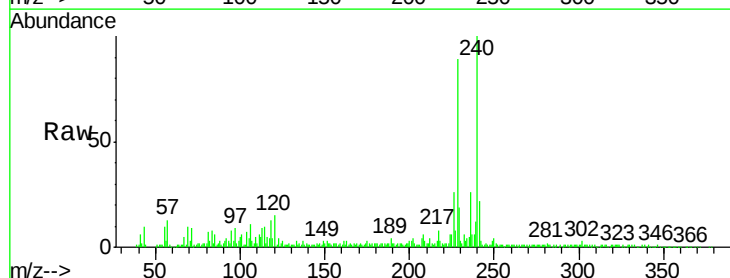
Tgt Ion:228 Resp: 98521

Ion Ratio Lower Upper

228 100

226 28.6 22.2 33.2

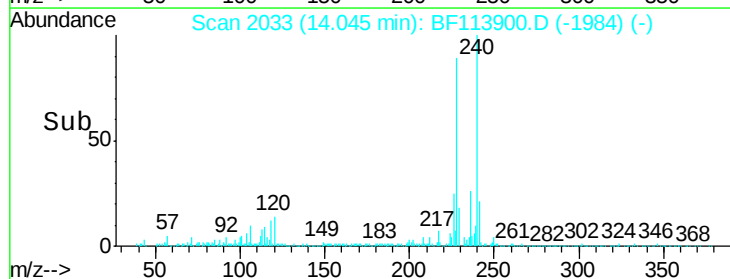
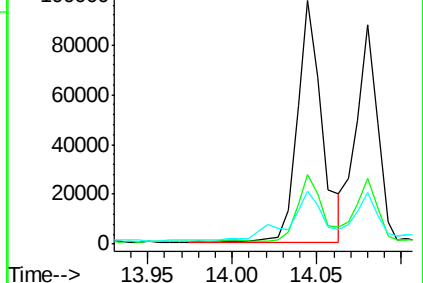
229 21.7 16.0 24.0

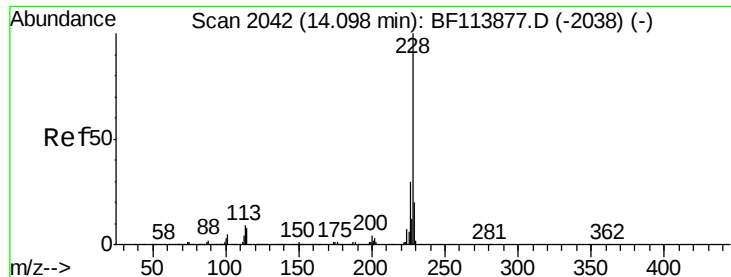


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

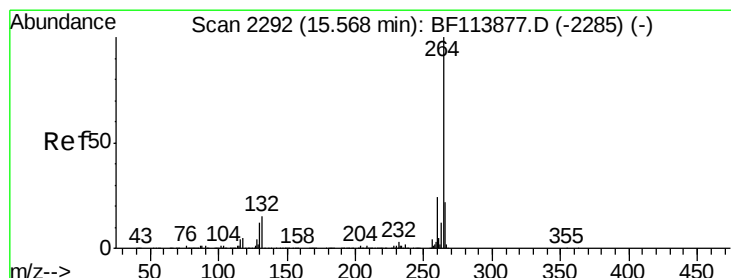
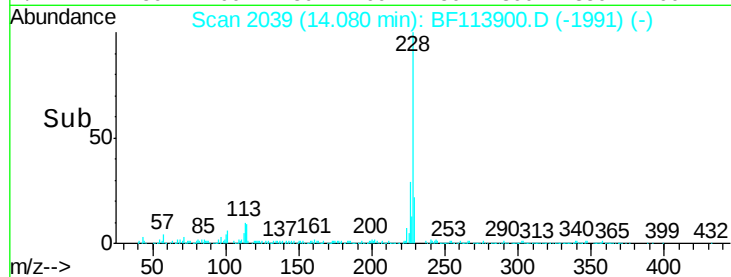
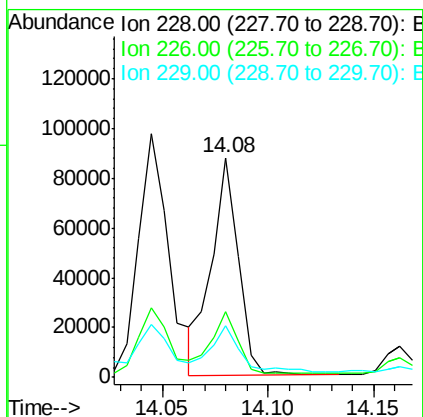
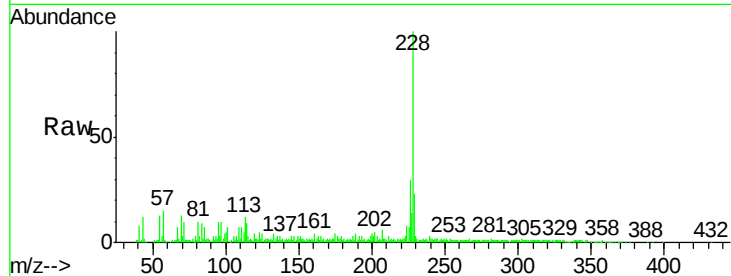




#83  
Chrysene  
Concen: 2.397 ng  
RT: 14.08 min Scan# 2039  
Delta R.T. -0.02 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

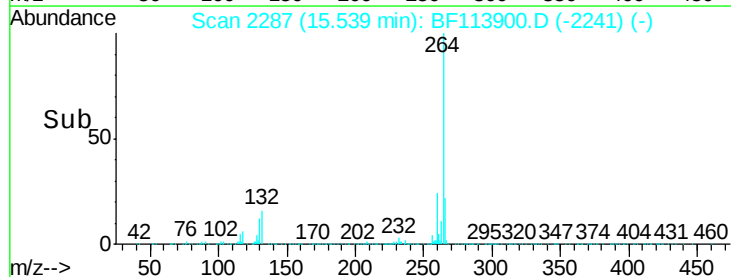
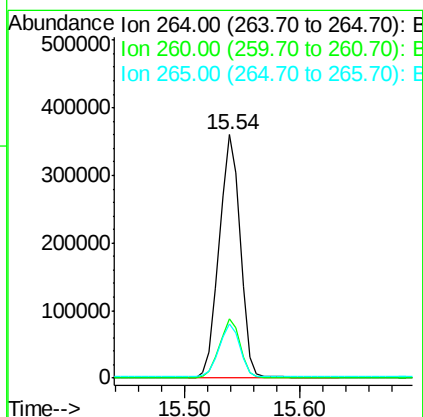
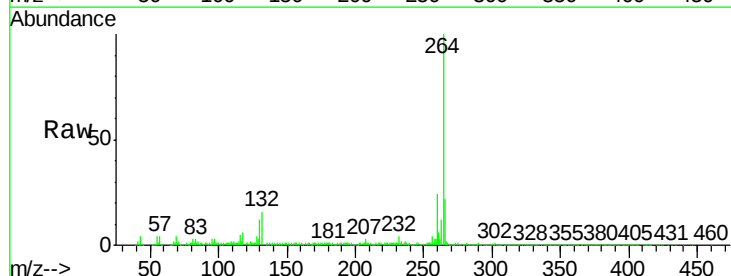
Instrument :  
BNA\_F  
ClientSampleId :  
HR-05-041719-B

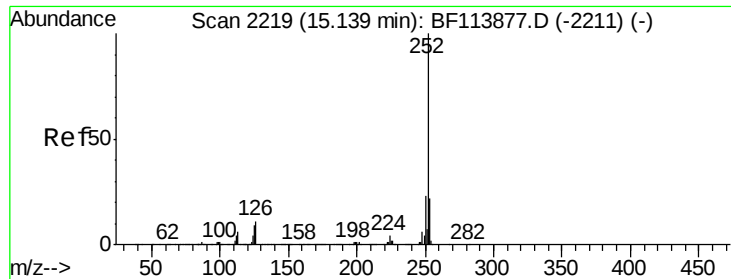
Tot Ion:228 Resp: 77826  
Ion Ratio Lower Upper  
228 100  
226 30.0 25.2 37.8  
229 23.5 16.7 25.1



#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.54 min Scan# 2287  
Delta R.T. -0.03 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

Tgt Ion:264 Resp: 452885  
Ion Ratio Lower Upper  
264 100  
260 24.1 18.9 28.3  
265 22.4 17.3 25.9

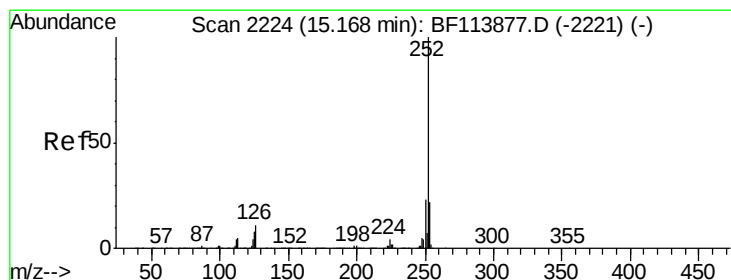
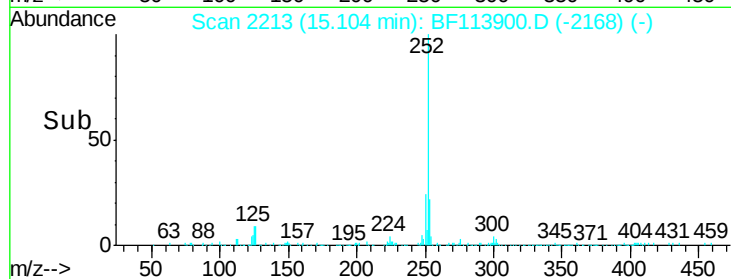
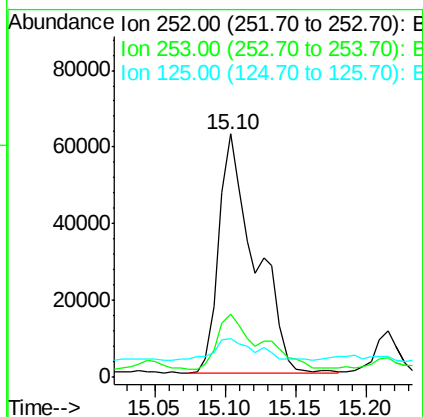
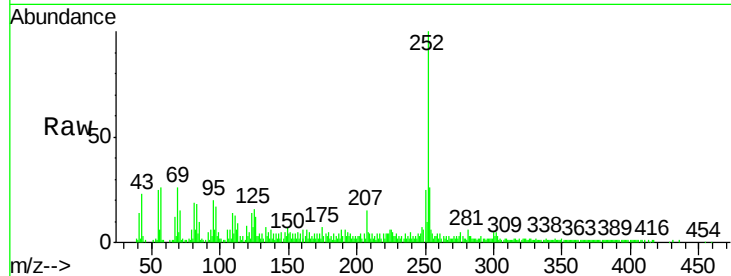




#88  
Benzo(b)fluoranthene  
Concen: 3.900 ng  
RT: 15.10 min Scan# 2213  
Delta R.T. -0.04 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

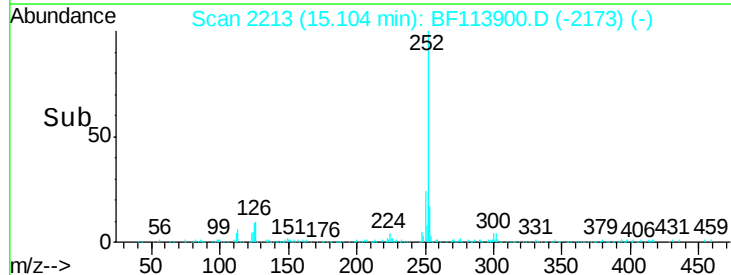
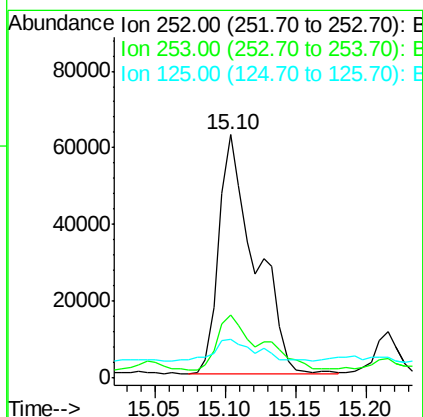
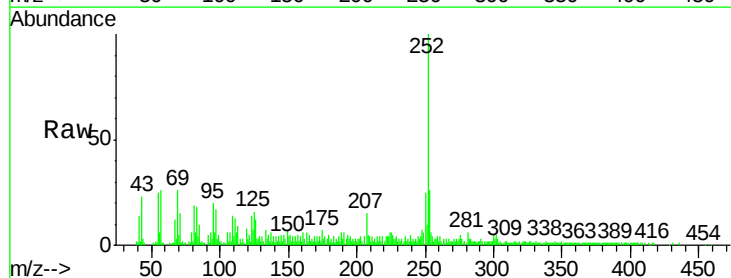
Instrument :  
BNA\_F  
ClientSampleId :  
HR-05-041719-B

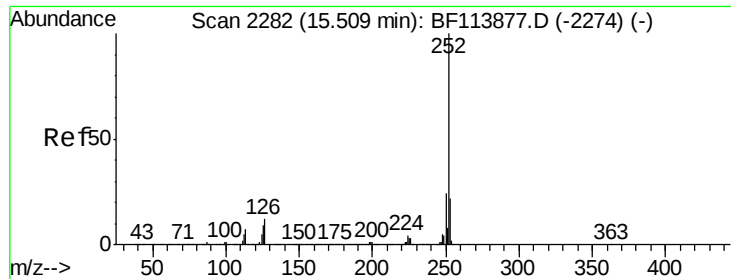
Tot Ion:252 Resp: 111751  
Ion Ratio Lower Upper  
252 100  
253 26.1 17.8 26.6  
125 16.0 7.0 10.6#



#89  
Benzo(k)fluoranthene  
Concen: 4.534 ng  
RT: 15.10 min Scan# 2213  
Delta R.T. -0.06 min  
Lab File: BF113900.D  
Acq: 23 Apr 2019 1:21

Tgt Ion:252 Resp: 111751  
Ion Ratio Lower Upper  
252 100  
253 26.1 18.2 27.2  
125 16.0 7.4 11.2#





#90

Benzo(a)pyrene

Concen: 2.339 ng

RT: 15.47 min Scan# 2276

Delta R.T. -0.04 min

Lab File: BF113900.D

Acq: 23 Apr 2019 1:21

Instrument :

BNA\_F

ClientSampleId :

HR-05-041719-B

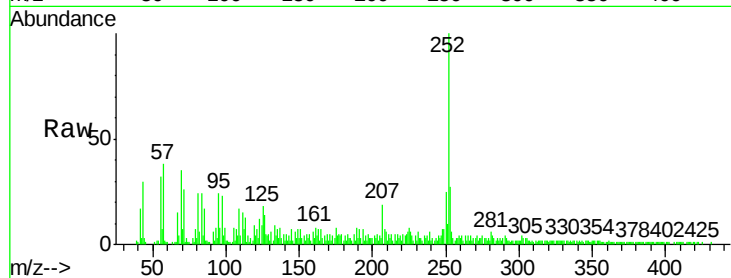
Tot Ion:252 Resp: 57975

Ion Ratio Lower Upper

252 100

253 26.8 17.5 26.3#

125 18.0 8.5 12.7#



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

