

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF091216\  
 Data File : BF090068.D  
 Acq On : 12 Sep 2016 17:28  
 Operator : UM/SJ  
 Sample : H4744-04  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

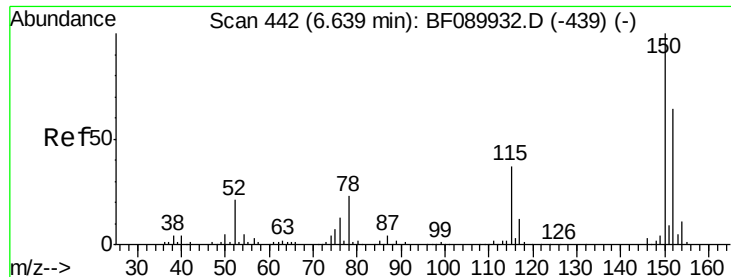
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-1B

Quant Time: Sep 13 02:42:03 2016  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF083116.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Sep 08 16:07:52 2016  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 6.73  | 152  | 508022   | 20.00 | ng    | 0.13     |
| 21) Naphthalene-d8             | 7.86  | 136  | 737755   | 20.00 | ng    | -0.03    |
| 38) Acenaphthene-d10           | 9.61  | 164  | 325576   | 20.00 | ng    | -0.02    |
| 63) Phenanthrene-d10           | 11.07 | 188  | 564577   | 20.00 | ng    | -0.03    |
| 75) Chrysene-d12               | 13.69 | 240  | 492103   | 20.00 | ng    | -0.03    |
| 86) Perylene-d12               | 15.03 | 264  | 353582   | 20.00 | ng    | -0.03    |
| System Monitoring Compounds    |       |      |          |       |       |          |
| 5) 2-Fluorophenol              | 5.15  | 112  | 1219344  | 38.42 | ng    | -0.01    |
| 7) Phenol-d6                   | 6.23  | 99   | 1378863  | 35.75 | ng    | -0.02    |
| 23) Nitrobenzene-d5            | 7.14  | 82   | 780446   | 61.35 | ng    | -0.03    |
| 41) 2,4,6-Tribromophenol       | 10.39 | 330  | 289228   | 90.04 | ng    | -0.03    |
| 44) 2-Fluorobiphenyl           | 8.95  | 172  | 1525351  | 76.91 | ng    | -0.02    |
| 78) Terphenyl-d14              | 12.66 | 244  | 1220640  | 61.27 | ng    | -0.02    |
| Target Compounds               |       |      |          |       |       |          |
| 19) n-Nitroso-di-n-propylamine | 7.14  | 70   | 100341   | 3.99  | ng    | # 83     |
| 25) Isophorone                 | 7.14  | 82   | 671773   | 25.97 | ng    | # 65     |
| 49) Dimethylphthalate          | 9.34  | 163  | 508024   | 21.59 | ng    | 99       |
| 56) 2,4-Dinitrotoluene         | 9.61  | 165  | 40105    | 6.04  | ng    | # 29     |
| 66) 4-Bromophenyl-phenylether  | 10.39 | 248  | 18073    | 3.18  | ng    | # 1      |
| 70) Phenanthrene               | 11.10 | 178  | 104701   | 3.72  | ng    | 96       |
| 74) Fluoranthene               | 12.27 | 202  | 187123   | 6.35  | ng    | 96       |
| 77) Pyrene                     | 12.50 | 202  | 170593   | 4.92  | ng    | 99       |
| 80) Benzo(a)anthracene         | 13.68 | 228  | 94902    | 3.15  | ng    | 97       |
| 82) Chrysene                   | 13.68 | 228  | 94902    | 3.37  | ng    | 98       |
| 87) Benzo(b)fluoranthene       | 14.67 | 252  | 99412    | 4.49  | ng    | # 94     |
| 88) Benzo(k)fluoranthene       | 14.67 | 252  | 99412    | 5.29  | ng    | # 95     |
| 89) Benzo(a)pyrene             | 14.97 | 252  | 53792    | 2.83  | ng    | # 93     |

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

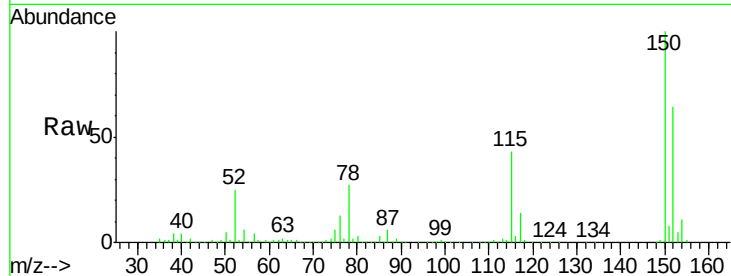
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Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091216\  
Data File : BF090068.D  
Acq On    : 12 Sep 2016  17:28  
Operator  : UM/SJ  
Sample    : H4744-04  
Misc      :  
ALS Vial  : 14      Sample Multiplier: 1
```



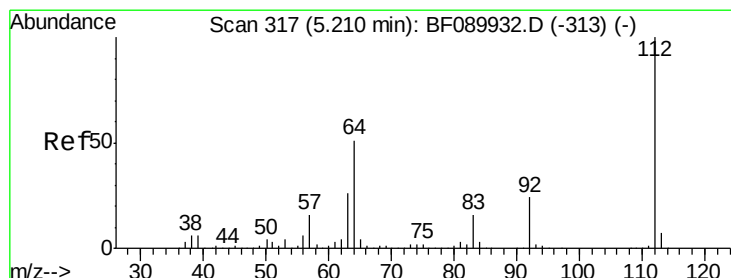
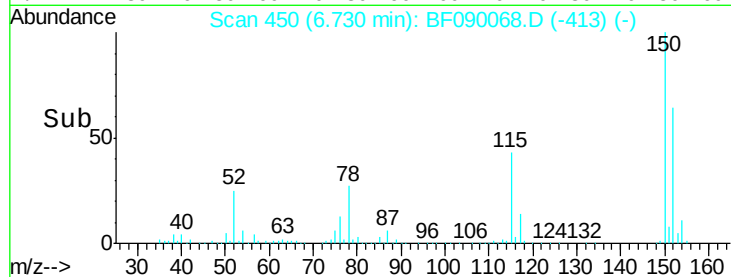
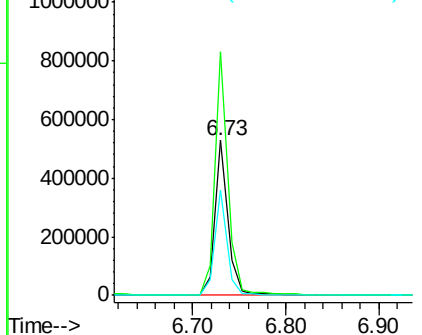
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 6.73 min Scan# 450  
 Delta R.T. 0.13 min  
 Lab File: BF090068.D  
 Acq: 12 Sep 2016 17:28

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-1B

Tgt Ion:152 Resp: 508022  
 Ion Ratio Lower Upper  
 152 100  
 150 156.9 127.4 191.2  
 115 68.1 46.3 69.5

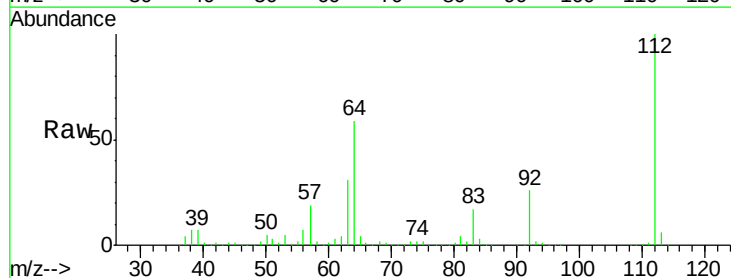


Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E

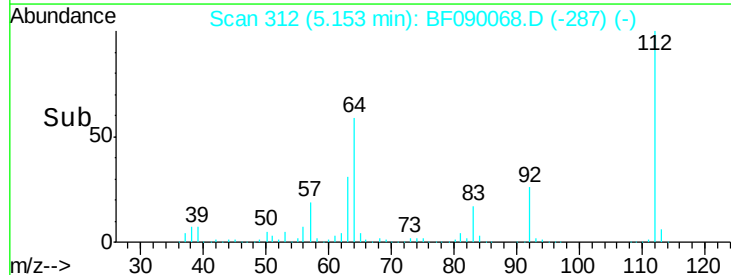
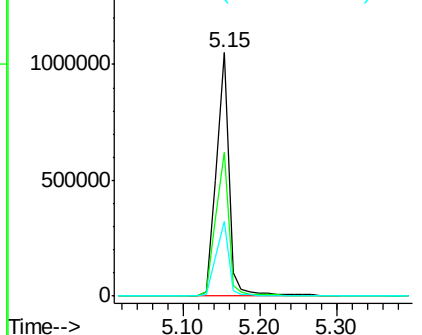


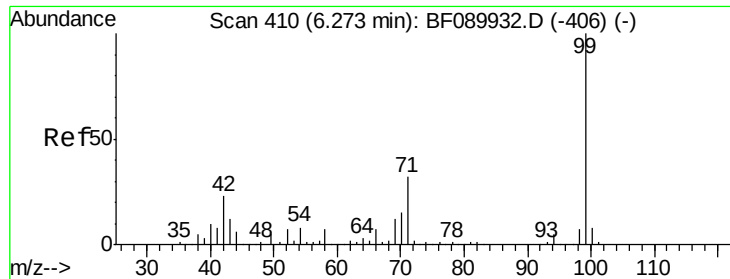
#5  
 2-Fluorophenol  
 Concen: 38.42 ng  
 RT: 5.15 min Scan# 312  
 Delta R.T. -0.01 min  
 Lab File: BF090068.D  
 Acq: 12 Sep 2016 17:28

Tgt Ion:112 Resp: 1219344  
 Ion Ratio Lower Upper  
 112 100  
 64 59.2 41.1 61.7  
 63 30.6 21.2 31.8



Abundance Ion 112.00 (111.70 to 112.70): E  
 Ion 64.00 (63.70 to 64.70): BF0  
 Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 35.75 ng

RT: 6.23 min Scan# 406

Delta R.T. -0.02 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SP-1B

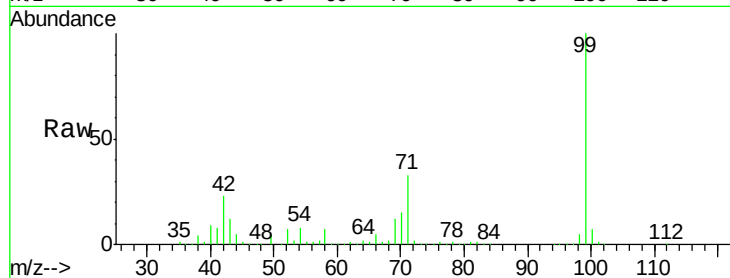
Tgt Ion: 99 Resp: 1378863

Ion Ratio Lower Upper

99 100

42 23.2 18.6 27.8

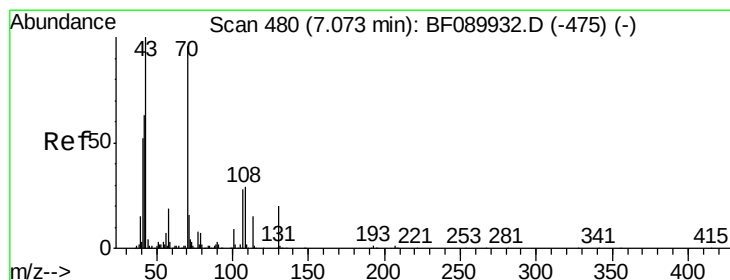
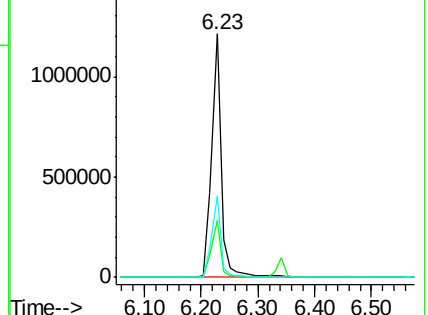
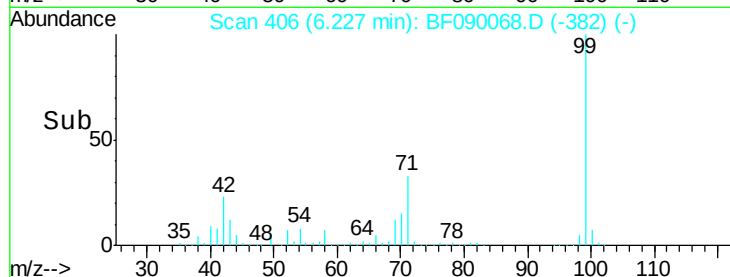
71 33.4 25.8 38.6



Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0



#19

n-Nitroso-di-n-propylamine

Concen: 3.99 ng

RT: 7.14 min Scan# 486

Delta R.T. 0.10 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

Tgt Ion: 70 Resp: 100341

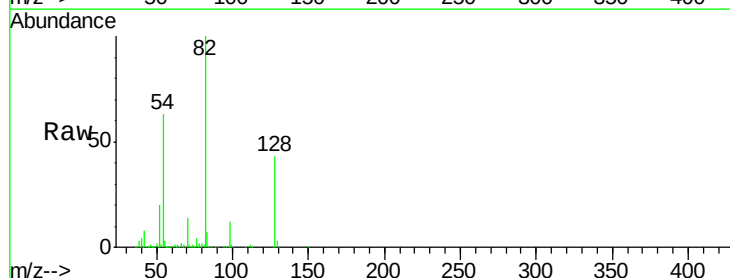
Ion Ratio Lower Upper

70 100

42 59.0 52.1 78.1

101 0.0 7.4 11.2#

130 2.4 17.0 25.4#

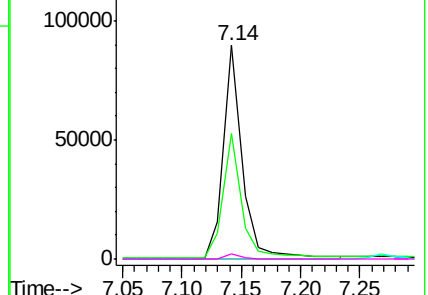
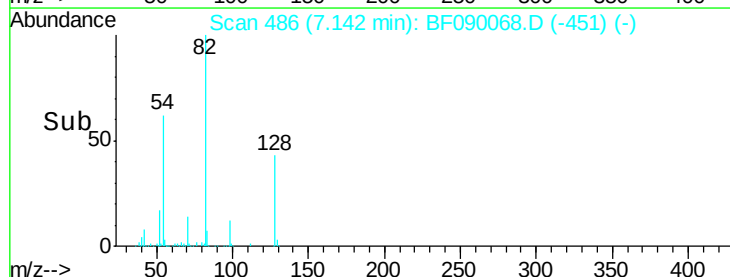


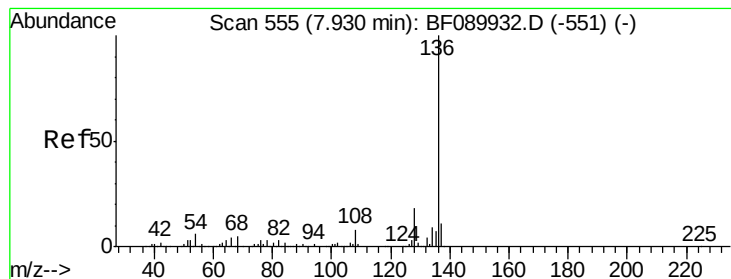
Abundance Ion 70.00 (69.70 to 70.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 101.00 (100.70 to 101.70): BF0

Ion 130.00 (129.70 to 130.70): BF0





#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.86 min Scan# 549

Delta R.T. -0.03 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SP-1B

Tgt Ion:136 Resp: 737755

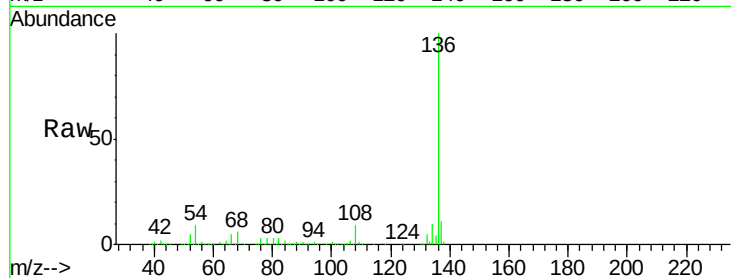
Ion Ratio Lower Upper

136 100

137 11.0 8.3 12.5

54 8.7 4.8 7.2#

68 5.9 3.7 5.5#

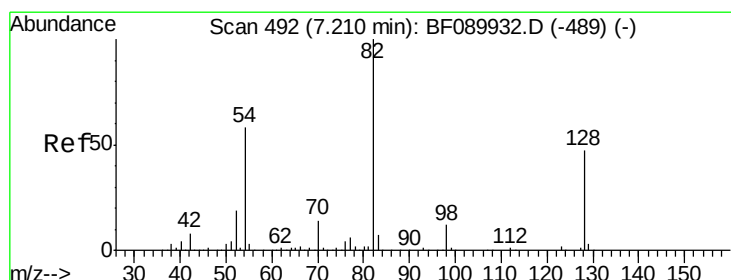
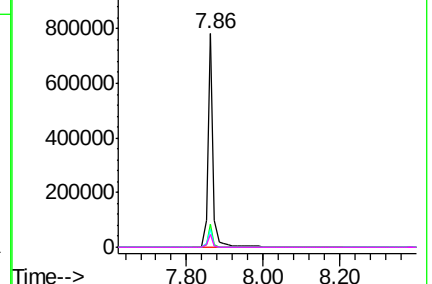
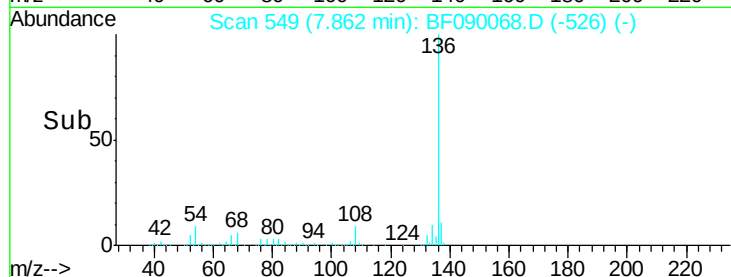


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF0

Ion 68.00 (67.70 to 68.70): BF0



#23

Nitrobenzene-d5

Concen: 61.35 ng

RT: 7.14 min Scan# 486

Delta R.T. -0.03 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

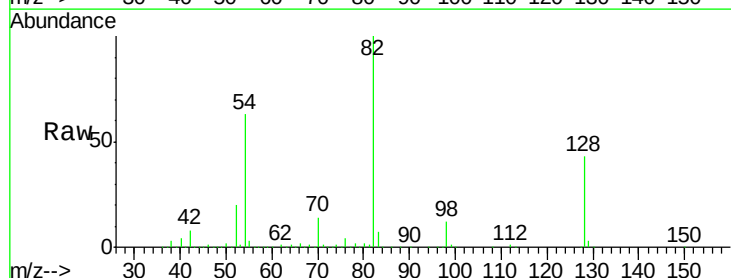
Tgt Ion: 82 Resp: 780446

Ion Ratio Lower Upper

82 100

128 43.3 37.8 56.8

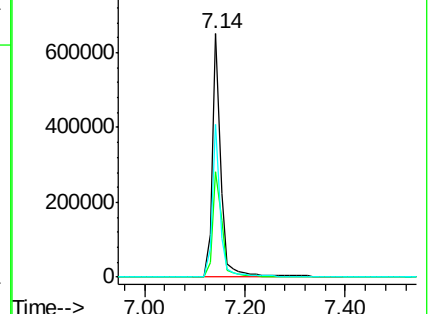
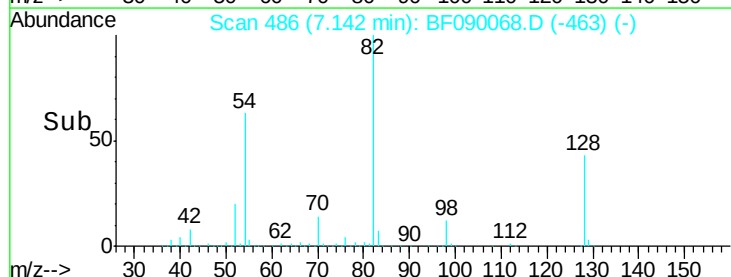
54 62.9 46.9 70.3

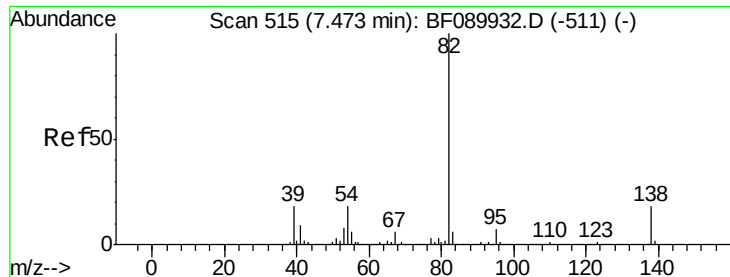


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0

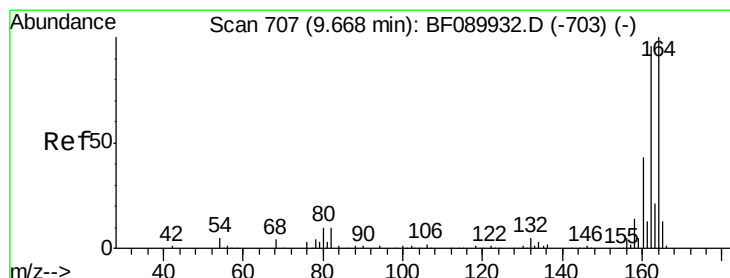
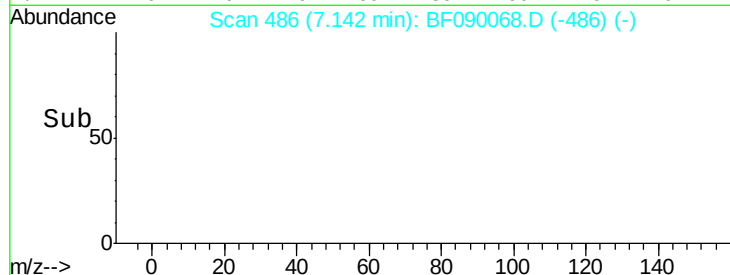
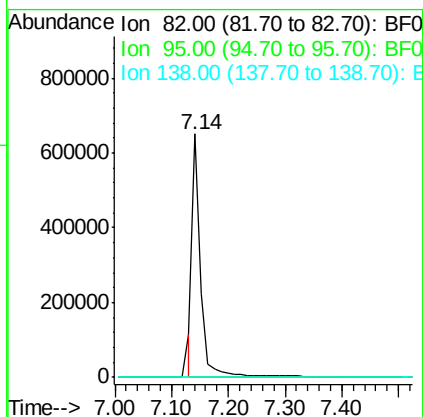
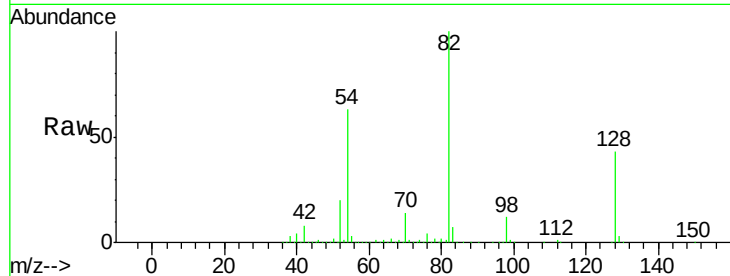




#25  
Isophorone  
Concen: 25.97 ng  
RT: 7.14 min Scan# 486  
Delta R.T. -0.30 min  
Lab File: BF090068.D  
Acq: 12 Sep 2016 17:28

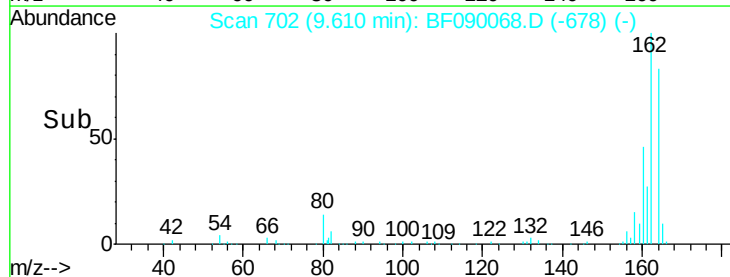
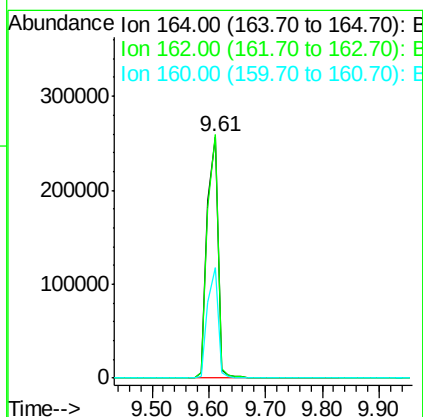
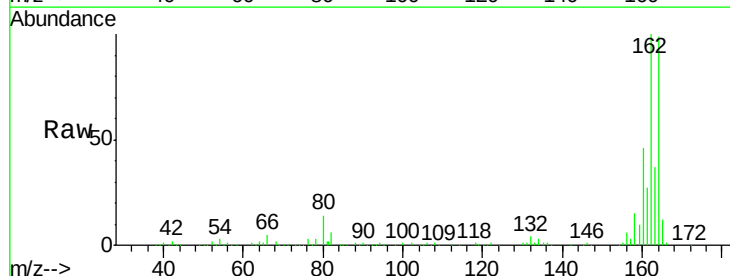
Instrument :  
BNA\_F  
ClientSampleId :  
SP-1B

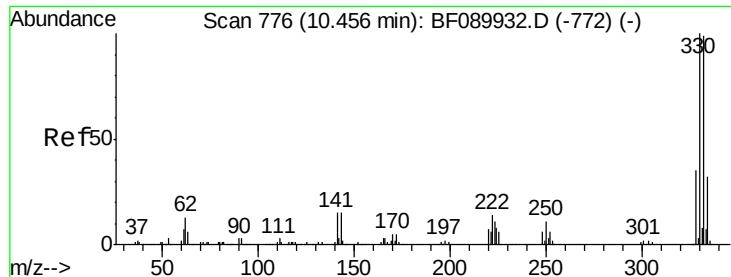
Tgt Ion: 82 Resp: 671773  
Ion Ratio Lower Upper  
82 100  
95 0.0 5.5 8.3#  
138 0.0 14.4 21.6#



#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 9.61 min Scan# 702  
Delta R.T. -0.02 min  
Lab File: BF090068.D  
Acq: 12 Sep 2016 17:28

Tgt Ion: 164 Resp: 325576  
Ion Ratio Lower Upper  
164 100  
162 100.9 77.1 115.7  
160 45.9 35.3 52.9

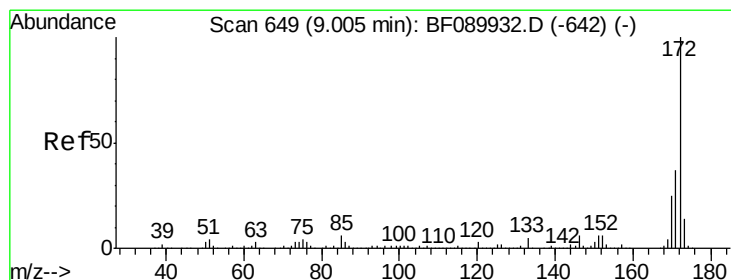
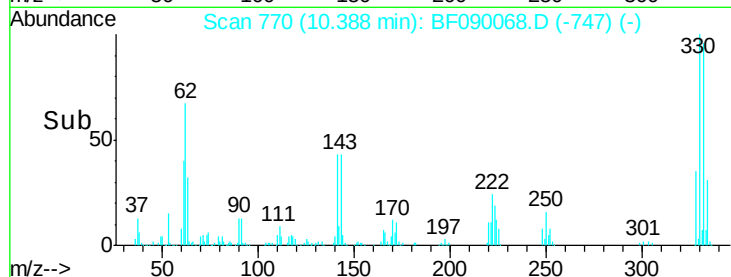
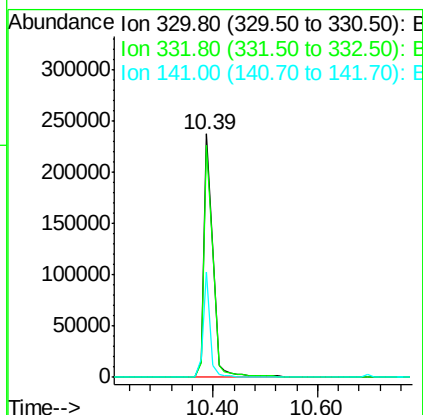
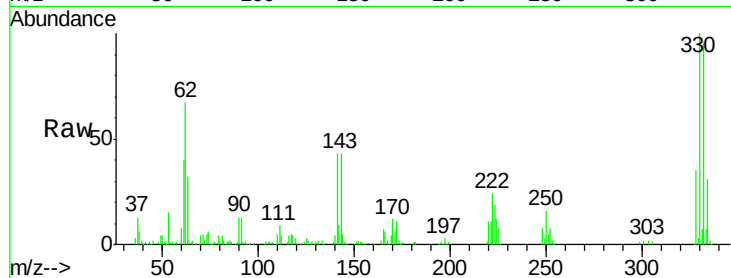




#41  
 2,4,6-Tribromophenol  
 Concen: 90.04 ng  
 RT: 10.39 min Scan# 770  
 Delta R.T. -0.03 min  
 Lab File: BF090068.D  
 Acq: 12 Sep 2016 17:28

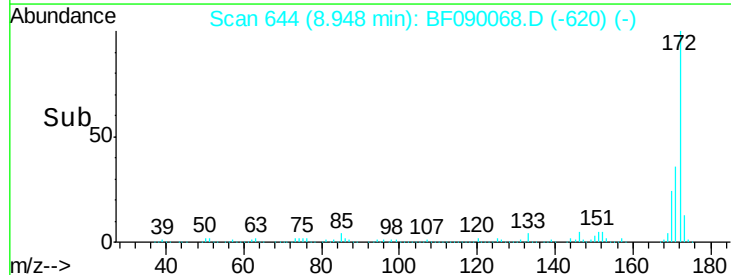
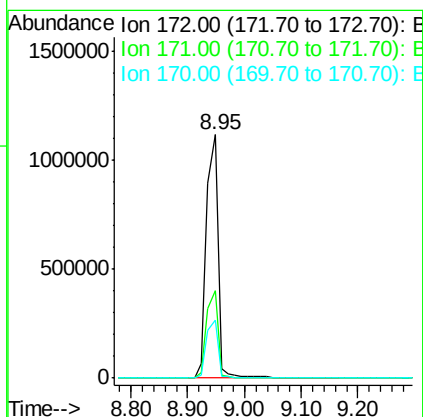
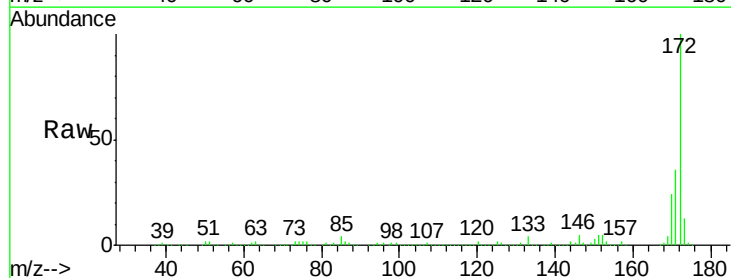
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-1B

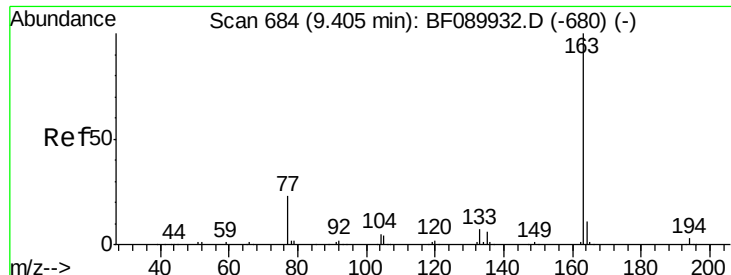
Tgt Ion:330 Resp: 289228  
 Ion Ratio Lower Upper  
 330 100  
 332 94.9 78.6 117.8  
 141 33.7 23.3 34.9



#44  
 2-Fluorobiphenyl  
 Concen: 76.91 ng  
 RT: 8.95 min Scan# 644  
 Delta R.T. -0.02 min  
 Lab File: BF090068.D  
 Acq: 12 Sep 2016 17:28

Tgt Ion:172 Resp: 1525351  
 Ion Ratio Lower Upper  
 172 100  
 171 35.7 29.4 44.2  
 170 24.1 20.1 30.1





#49

Dimethylphthalate

Concen: 21.59 ng

RT: 9.34 min Scan# 678

Delta R.T. -0.05 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SP-1B

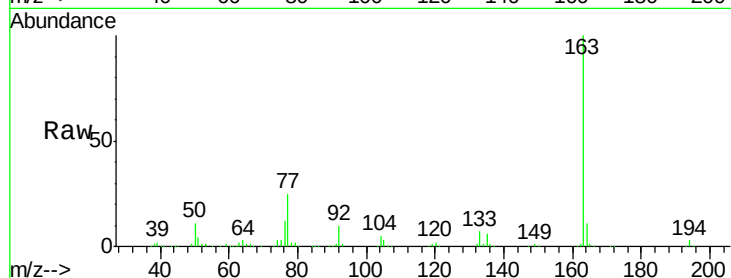
Tgt Ion:163 Resp: 508024

Ion Ratio Lower Upper

163 100

194 3.2 2.7 4.1

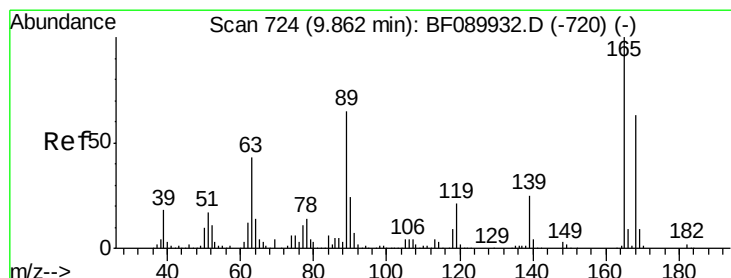
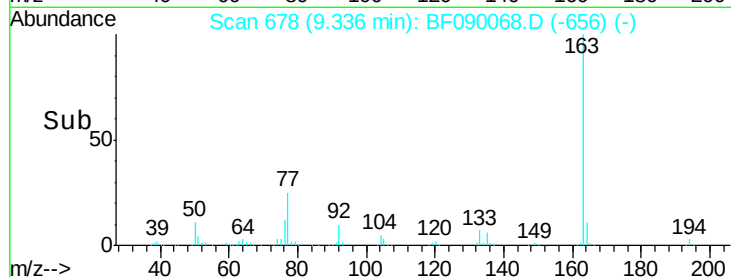
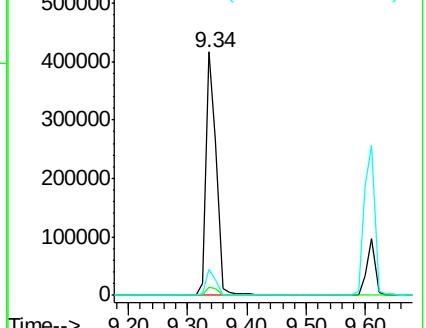
164 10.9 9.0 13.4



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



#56

2,4-Dinitrotoluene

Concen: 6.04 ng

RT: 9.61 min Scan# 702

Delta R.T. -0.22 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

Tgt Ion:165 Resp: 40105

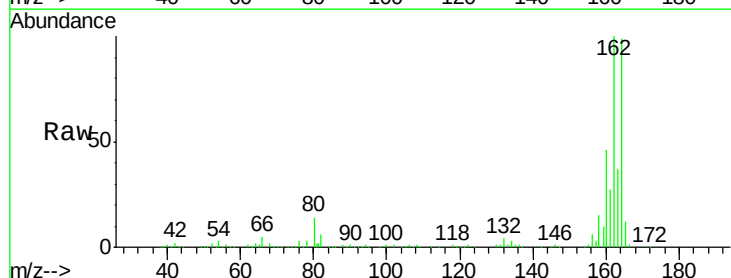
Ion Ratio Lower Upper

165 100

63 1.4 32.5 48.7#

89 1.4 48.3 72.5#

182 0.0 1.7 2.5#

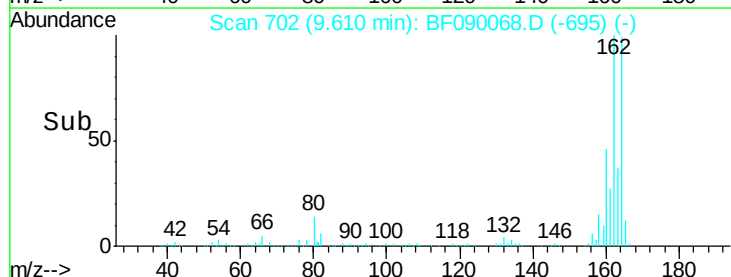
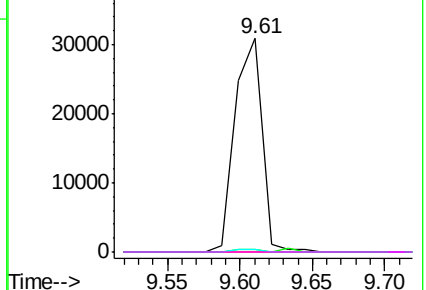


Abundance Ion 165.00 (164.70 to 165.70): E

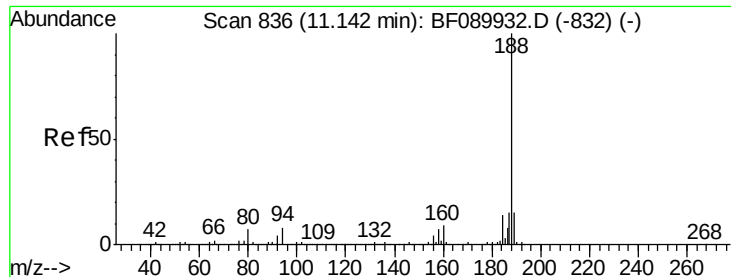
Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0

Ion 182.00 (181.70 to 182.70): E



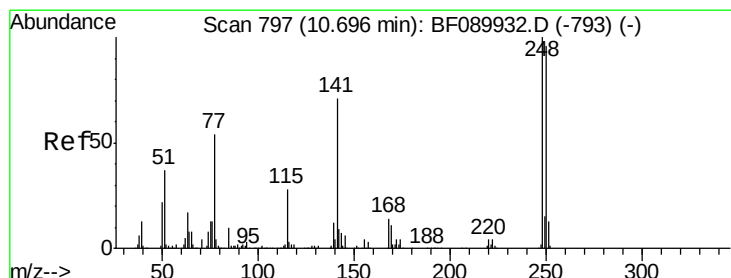
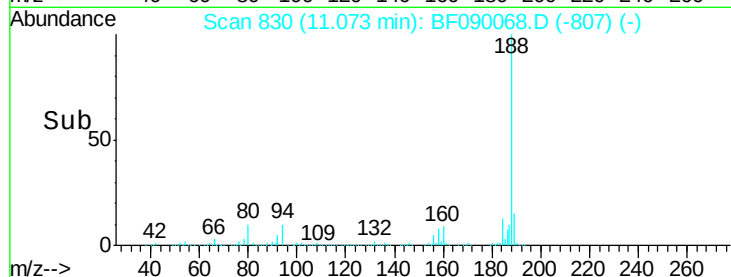
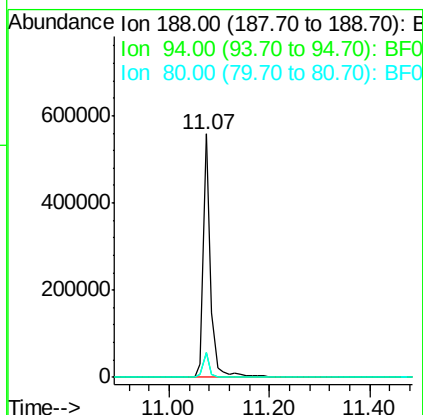
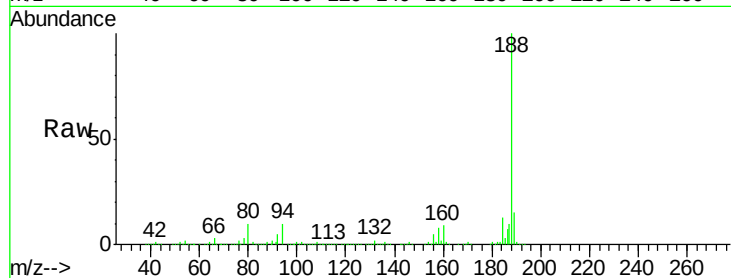




#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.07 min Scan# 830  
Delta R.T. -0.03 min  
Lab File: BF090068.D  
Acq: 12 Sep 2016 17:28

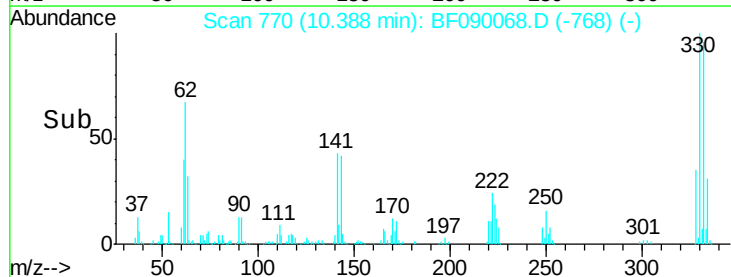
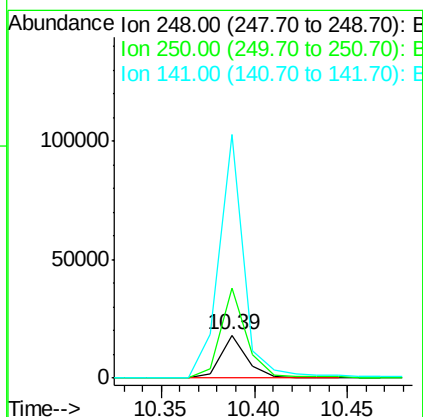
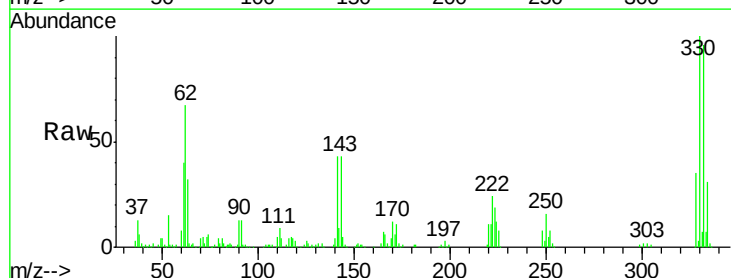
Instrument :  
BNA\_F  
ClientSampleId :  
SP-1B

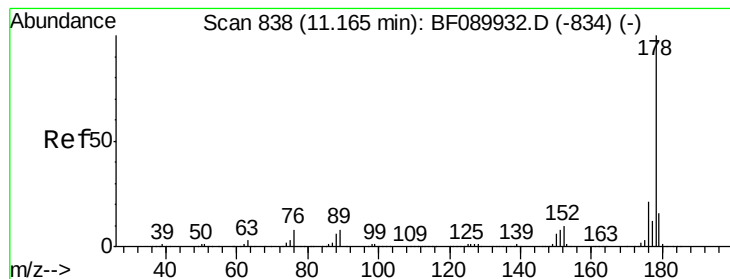
Tgt Ion:188 Resp: 564577  
Ion Ratio Lower Upper  
188 100  
94 10.1 5.9 8.9#  
80 10.0 5.8 8.8#



#66  
4-Bromophenyl-phenylether  
Concen: 3.18 ng  
RT: 10.39 min Scan# 770  
Delta R.T. -0.27 min  
Lab File: BF090068.D  
Acq: 12 Sep 2016 17:28

Tgt Ion:248 Resp: 18073  
Ion Ratio Lower Upper  
248 100  
250 206.8 77.3 115.9#  
141 563.0 55.8 83.8#





#70

Phenanthrene

Concen: 3.72 ng

RT: 11.10 min Scan# 832

Delta R.T. -0.03 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SP-1B

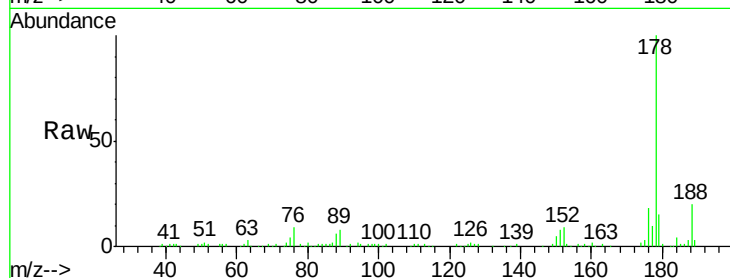
Tgt Ion:178 Resp: 104701

Ion Ratio Lower Upper

178 100

176 18.2 16.5 24.7

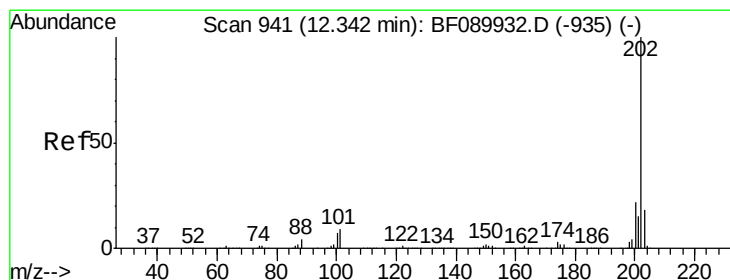
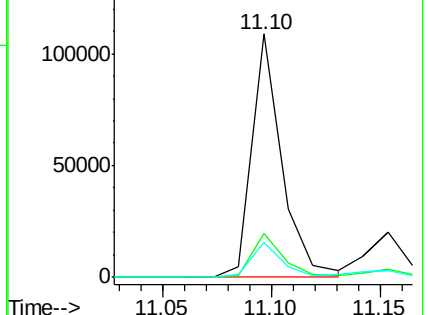
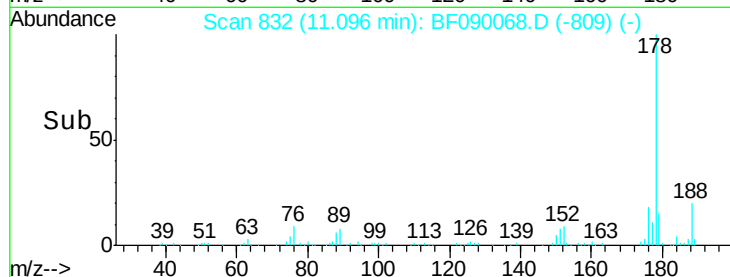
179 14.6 12.8 19.2



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



#74

Fluoranthene

Concen: 6.35 ng

RT: 12.27 min Scan# 935

Delta R.T. -0.03 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

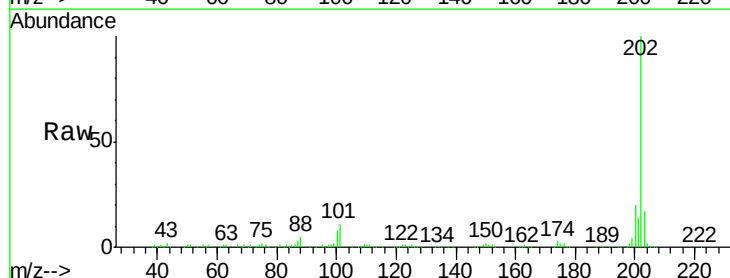
Tgt Ion:202 Resp: 187123

Ion Ratio Lower Upper

202 100

101 10.9 0.0 28.5

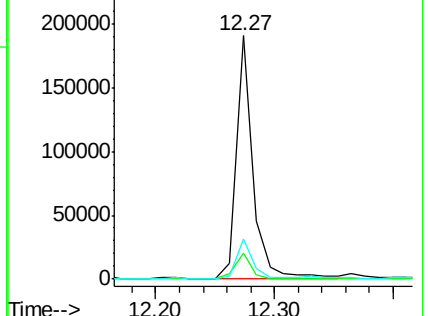
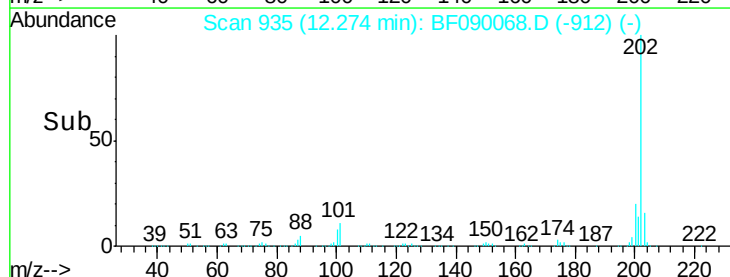
203 16.6 0.0 38.0

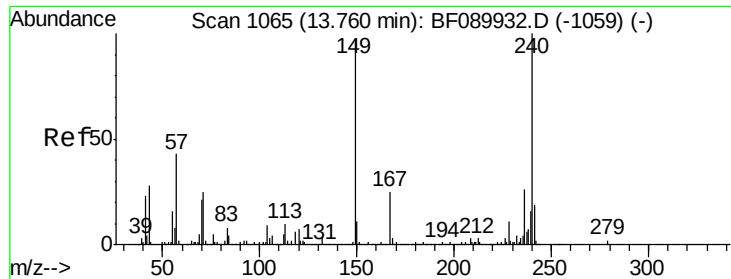


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E





#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.69 min Scan# 1059

Delta R.T. -0.03 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SP-1B

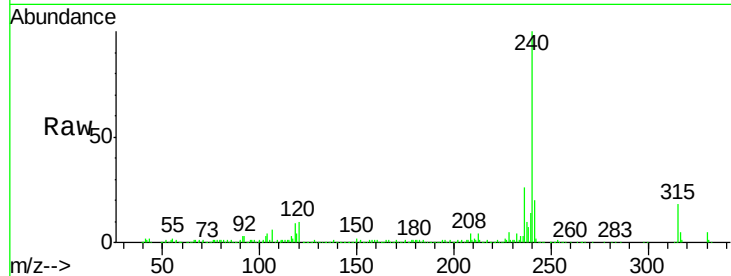
Tgt Ion:240 Resp: 492103

Ion Ratio Lower Upper

240 100

120 10.2 5.7 8.5#

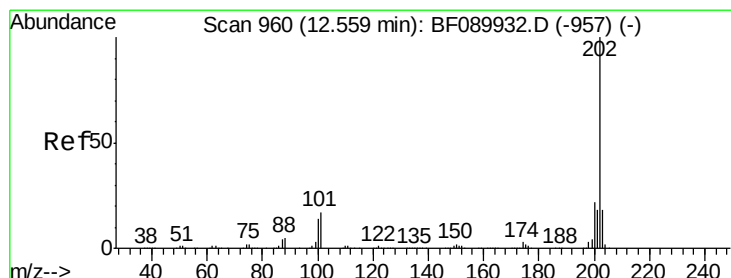
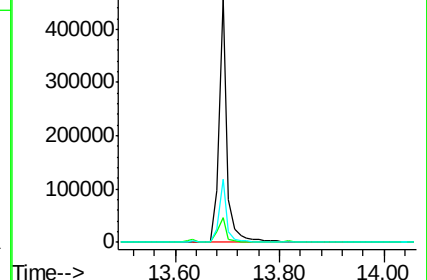
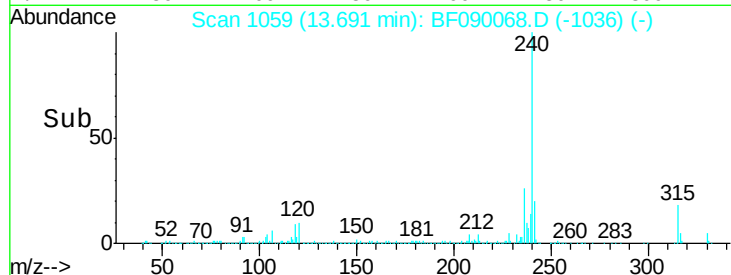
236 25.9 21.3 31.9



Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#77

Pyrene

Concen: 4.92 ng

RT: 12.50 min Scan# 955

Delta R.T. -0.03 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

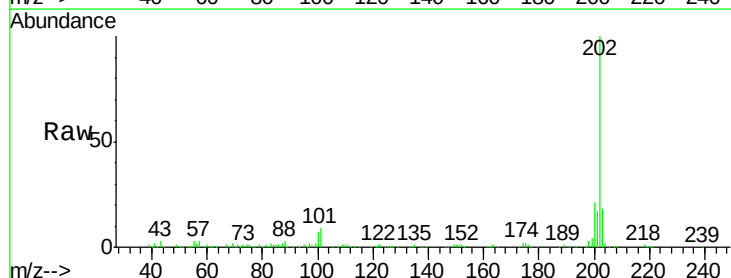
Tgt Ion:202 Resp: 170593

Ion Ratio Lower Upper

202 100

200 21.0 17.6 26.4

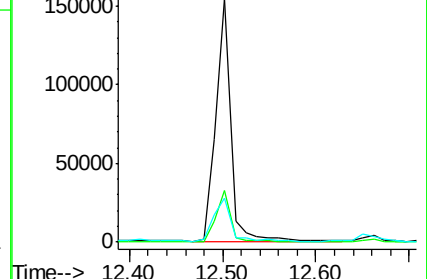
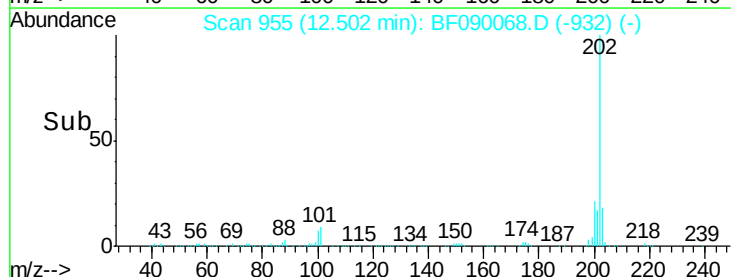
203 18.0 14.6 21.8

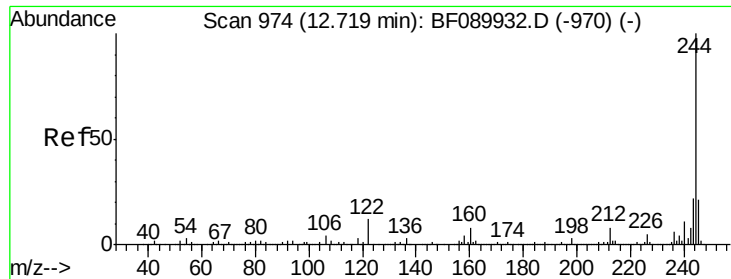


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

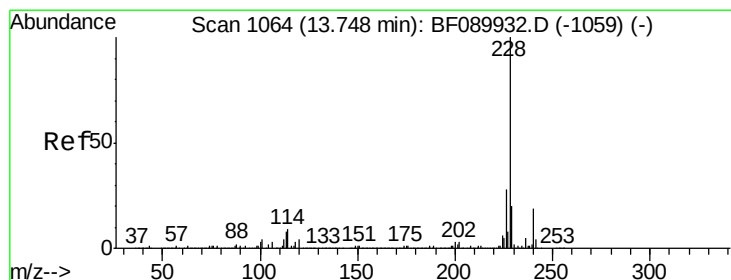
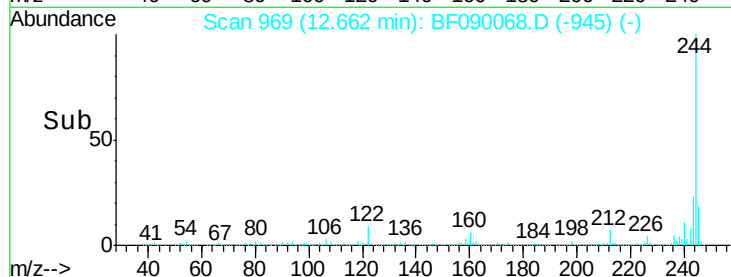
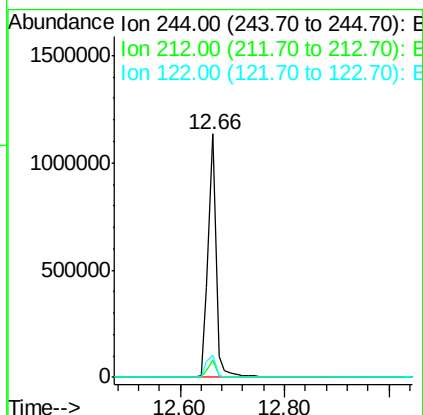
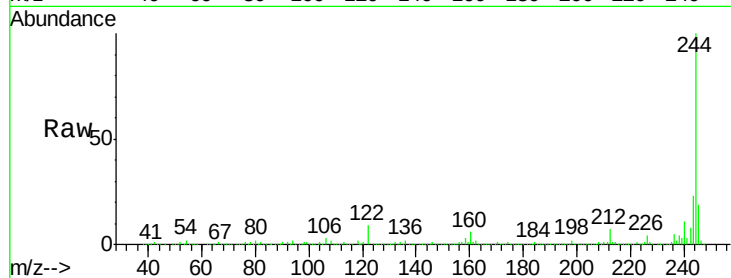




#78  
 Terphenyl-d14  
 Concen: 61.27 ng  
 RT: 12.66 min Scan# 969  
 Delta R.T. -0.02 min  
 Lab File: BF090068.D  
 Acq: 12 Sep 2016 17:28

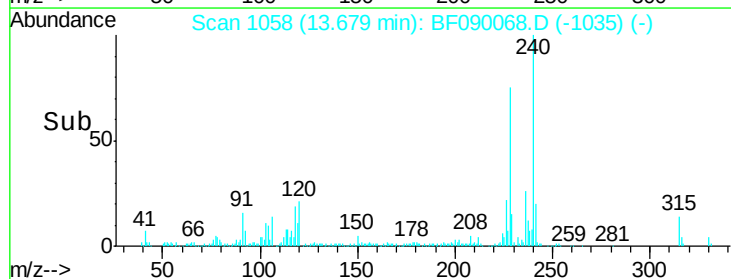
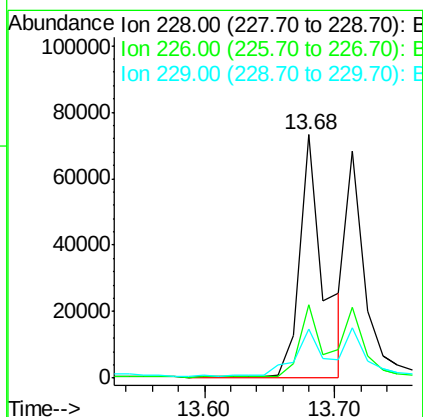
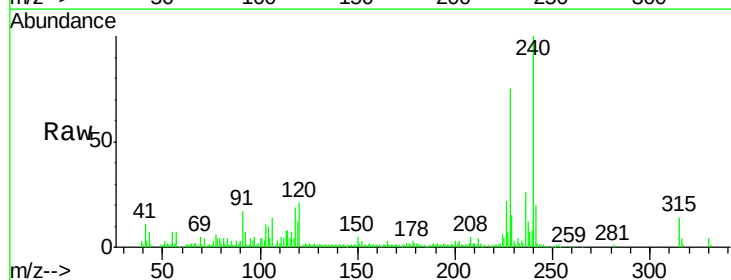
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-1B

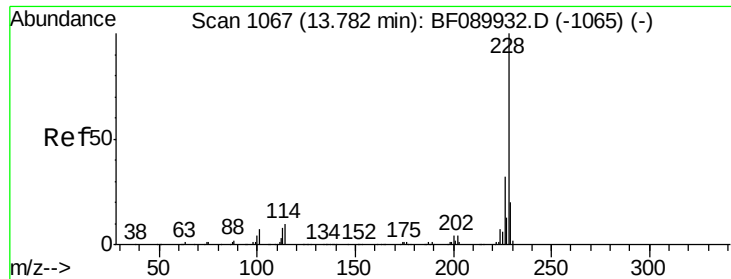
Tgt Ion:244 Resp: 1220640  
 Ion Ratio Lower Upper  
 244 100  
 212 7.0 6.1 9.1  
 122 9.4 9.6 14.4#



#80  
 Benzo(a)anthracene  
 Concen: 3.15 ng  
 RT: 13.68 min Scan# 1058  
 Delta R.T. -0.03 min  
 Lab File: BF090068.D  
 Acq: 12 Sep 2016 17:28

Tgt Ion:228 Resp: 94902  
 Ion Ratio Lower Upper  
 228 100  
 226 30.1 22.2 33.2  
 229 20.3 15.8 23.6





#82

Chrysene

Concen: 3.37 ng

RT: 13.68 min Scan# 1058

Delta R.T. -0.07 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SP-1B

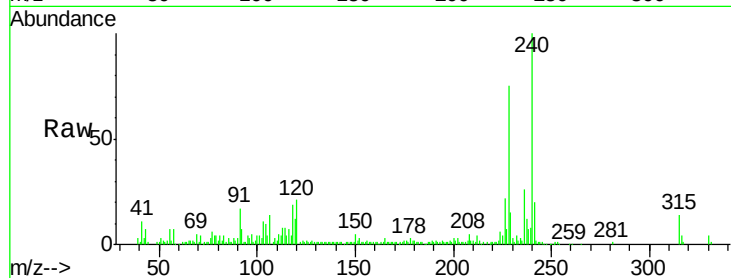
Tgt Ion:228 Resp: 94902

Ion Ratio Lower Upper

228 100

226 30.1 25.2 37.8

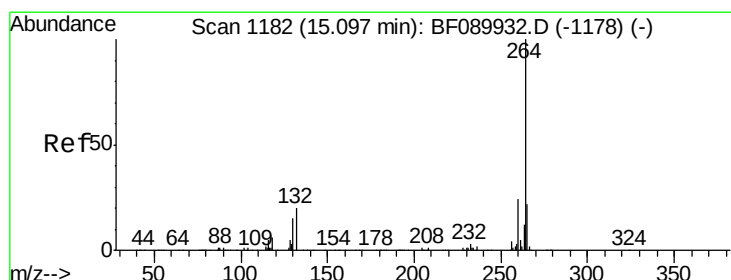
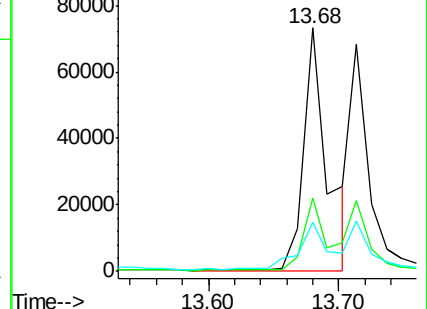
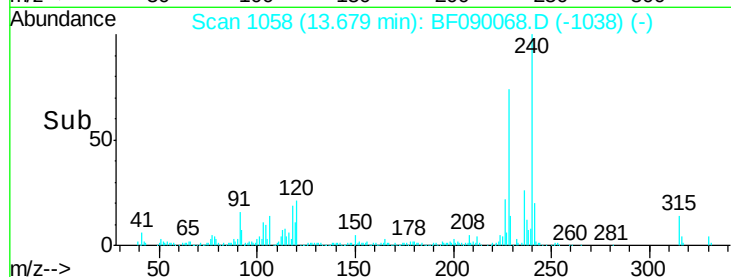
229 20.3 16.2 24.2



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



#86

Perylene-d12

Concen: 20.00 ng

RT: 15.03 min Scan# 1176

Delta R.T. -0.03 min

Lab File: BF090068.D

Acq: 12 Sep 2016 17:28

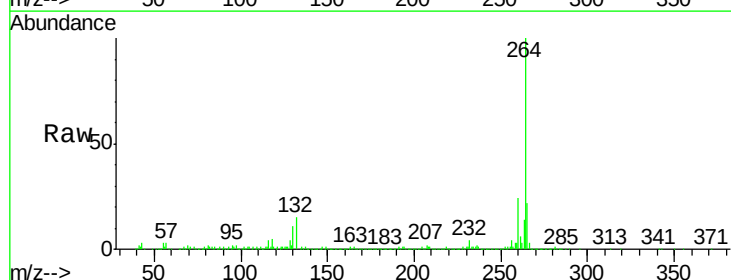
Tgt Ion:264 Resp: 353582

Ion Ratio Lower Upper

264 100

260 24.2 19.4 29.0

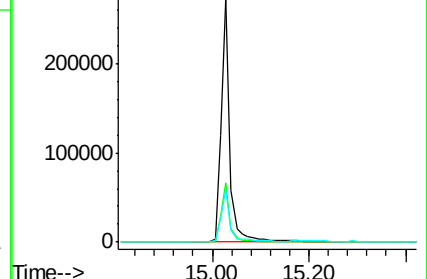
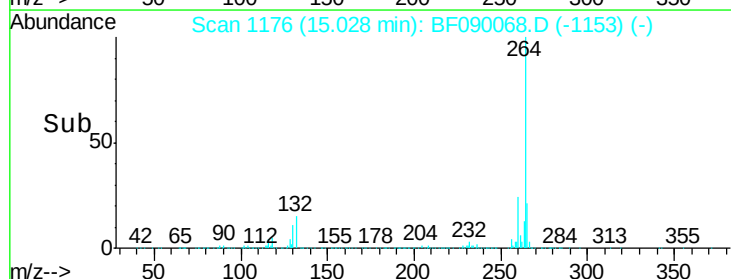
265 21.7 17.4 26.2

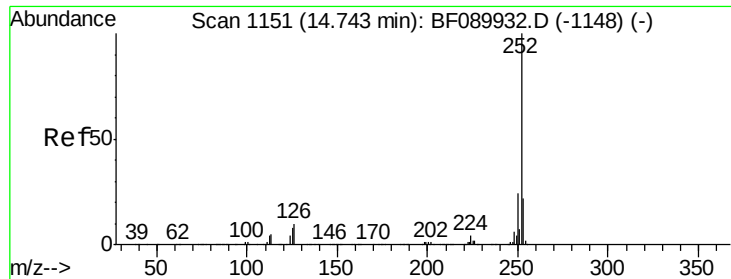


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

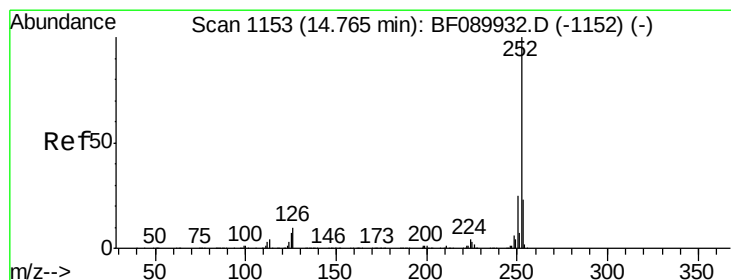
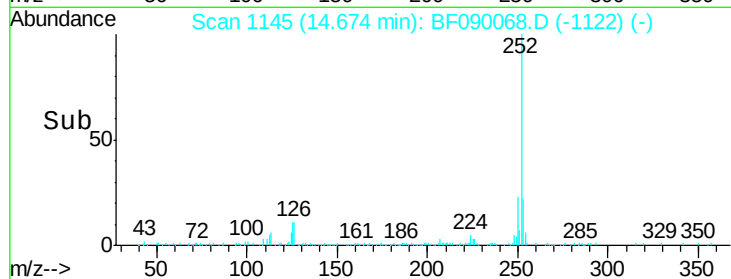
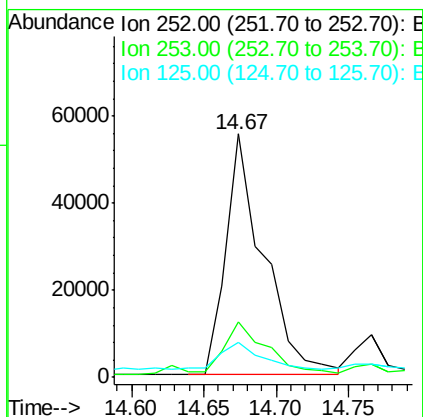
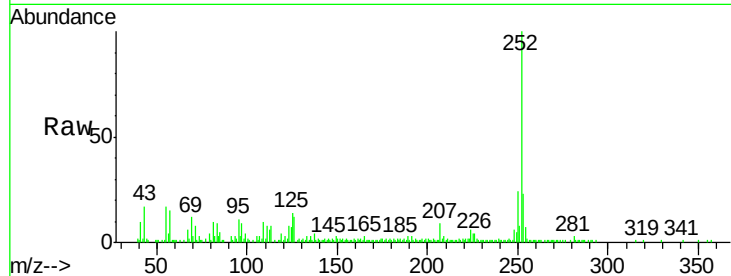




#87  
Benzo(b)fluoranthene  
Concen: 4.49 ng  
RT: 14.67 min Scan# 1145  
Delta R.T. -0.03 min  
Lab File: BF090068.D  
Acq: 12 Sep 2016 17:28

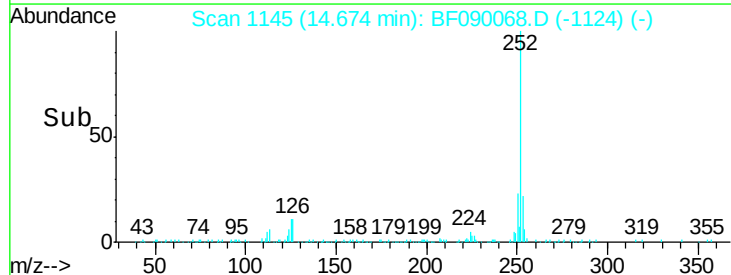
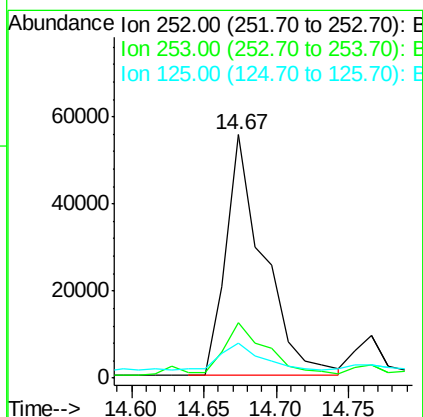
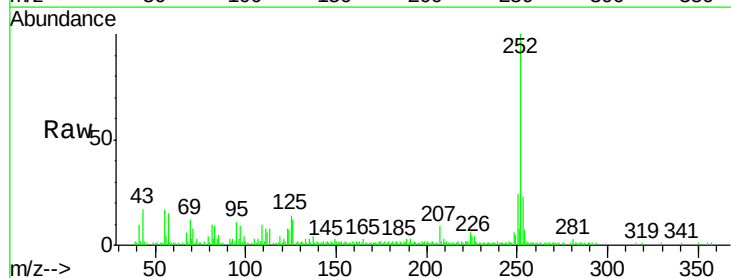
Instrument :  
BNA\_F  
ClientSampleId :  
SP-1B

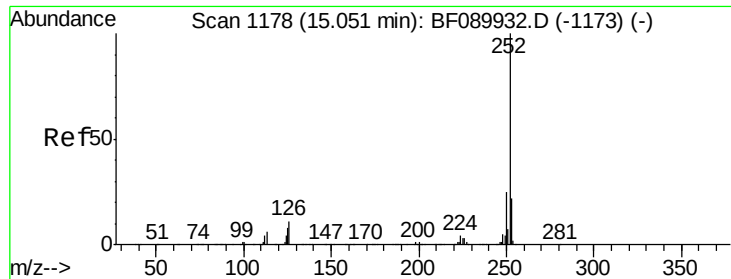
Tgt Ion:252 Resp: 99412  
Ion Ratio Lower Upper  
252 100  
253 22.9 18.0 27.0  
125 14.2 5.7 8.5#



#88  
Benzo(k)fluoranthene  
Concen: 5.29 ng  
RT: 14.67 min Scan# 1145  
Delta R.T. -0.06 min  
Lab File: BF090068.D  
Acq: 12 Sep 2016 17:28

Tgt Ion:252 Resp: 99412  
Ion Ratio Lower Upper  
252 100  
253 22.9 17.8 26.8  
125 14.2 7.3 10.9#





#89

Benzo(a)pyrene

Concen: 2.83 ng

RT: 14.97 min Scan# 1171

Delta R.T. -0.03 min

Lab File: BF090068.D

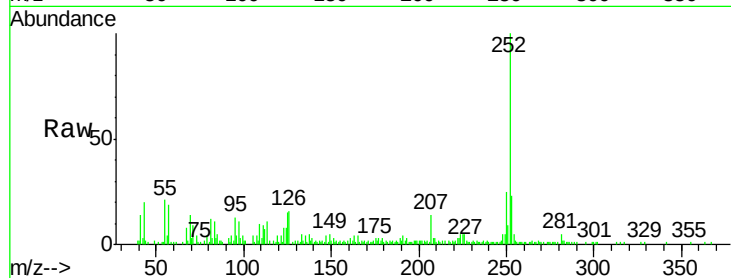
Acq: 12 Sep 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SP-1B



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 252   | Resp: | 53792 |
| Ion      | Ratio | Lower | Upper |
| 252      | 100   |       |       |
| 253      | 22.7  | 17.5  | 26.3  |
| 125      | 14.9  | 6.3   | 9.5#  |

