

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF100215\  
 Data File : BF082040.D  
 Acq On : 4 Oct 2015 00:24  
 Operator : UM/IZ  
 Sample : G3891-09  
 Misc :  
 ALS Vial : 60 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SS-9(0-2)

Quant Time: Oct 05 01:47:14 2015  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092815.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Sep 28 18:10:42 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.89  | 152  | 76740    | 20.00 | ng    | -0.05    |
| 21) Naphthalene-d8        | 8.17  | 136  | 317234   | 20.00 | ng    | -0.05    |
| 38) Acenaphthene-d10      | 9.93  | 164  | 155896   | 20.00 | ng    | -0.05    |
| 63) Phenanthrene-d10      | 11.43 | 188  | 290477   | 20.00 | ng    | -0.03    |
| 75) Chrysene-d12          | 14.07 | 240  | 238645   | 20.00 | ng    | -0.05    |
| 86) Perylene-d12          | 15.53 | 264  | 221835   | 20.00 | ng    | -0.05    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.49  | 112  | 480363   | 113.63 | ng    | -0.03    |
| 7) Phenol-d6                | 6.51  | 99   | 641194   | 120.54 | ng    | -0.05    |
| 23) Nitrobenzene-d5         | 7.45  | 82   | 377245   | 79.27  | ng    | -0.05    |
| 41) 2,4,6-Tribromophenol    | 10.73 | 330  | 163027   | 103.26 | ng    | -0.03    |
| 44) 2-Fluorobiphenyl        | 9.26  | 172  | 783855   | 83.93  | ng    | -0.05    |
| 78) Terphenyl-d14           | 13.02 | 244  | 687850   | 96.75  | ng    | -0.03    |

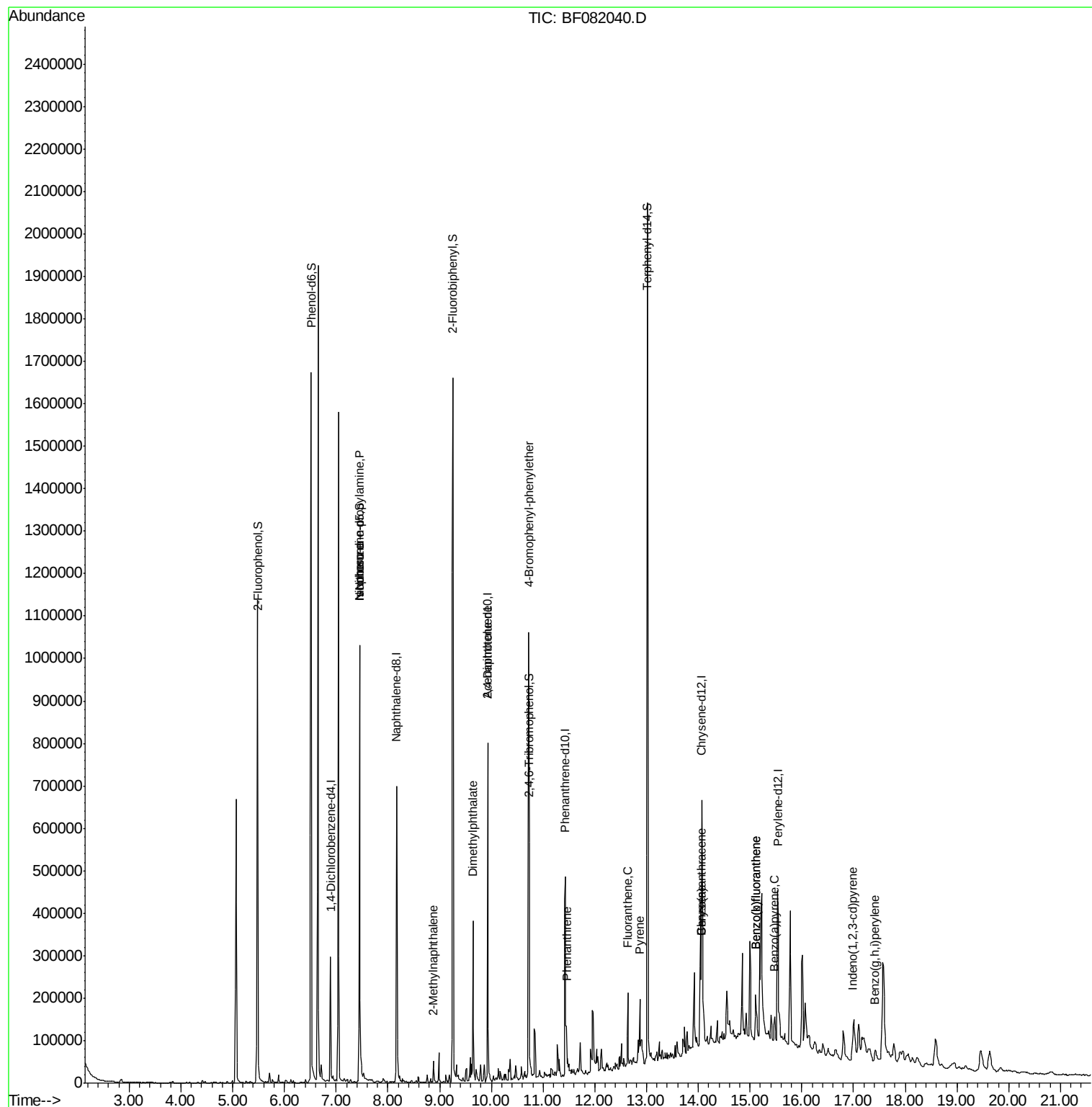
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 19) n-Nitroso-di-n-propylamine | 7.45  | 70   | 47751    | 14.77     | ng    | # 58   |
| 25) Isophorone                 | 7.45  | 82   | 334241   | 35.44     | ng    | # 58   |
| 37) 2-Methylnaphthalene        | 8.88  | 142  | 21607    | 2.25      | ng    | # 88   |
| 49) Dimethylphthalate          | 9.65  | 163  | 165088   | 15.34     | ng    | # 97   |
| 56) 2,4-Dinitrotoluene         | 9.93  | 165  | 21046    | 7.07      | ng    | # 32   |
| 57) Fluorene                   | 10.48 | 166  | 2737     | Below Cal |       | # 75   |
| 66) 4-Bromophenyl-phenylether  | 10.72 | 248  | 10069    | 3.44      | ng    | # 1    |
| 70) Phenanthrene               | 11.45 | 178  | 53999    | 2.28      | ng    | # 97   |
| 73) Di-n-butylphthalate        | 11.99 | 149  | 6170     | Below Cal |       | # 91   |
| 74) Fluoranthene               | 12.64 | 202  | 82129    | 5.28      | ng    | # 88   |
| 77) Pyrene                     | 12.87 | 202  | 73272    | 5.14      | ng    | # 97   |
| 80) Benzo(a)anthracene         | 14.06 | 228  | 44049    | 3.43      | ng    | # 86   |
| 82) Chrysene                   | 14.06 | 228  | 44049    | 3.49      | ng    | # 88   |
| 85) Indeno(1,2,3-cd)pyrene     | 16.98 | 276  | 26468    | 2.63      | ng    | # 88   |
| 87) Benzo(b)fluoranthene       | 15.11 | 252  | 89260    | 7.05      | ng    | # 88   |
| 88) Benzo(k)fluoranthene       | 15.11 | 252  | 89260    | 7.69      | ng    | # 88   |
| 89) Benzo(a)pyrene             | 15.48 | 252  | 39632    | 3.61      | ng    | # 87   |
| 91) Benzo(g,h,i)perylene       | 17.42 | 276  | 27061    | 2.86      | ng    | # 80   |

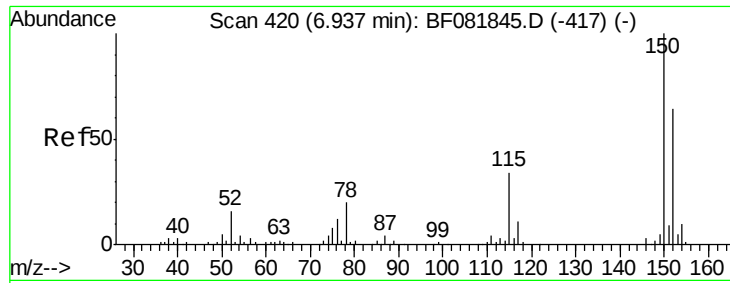
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF100215\  
Data File : BF082040.D  
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Misc :  
ALS Vial : 60 Sample Multiplier: 1

Instrument :  
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SS-9(0-2)

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Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092815.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Sep 28 18:10:42 2015  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.89 min Scan# 416

Delta R.T. -0.05 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Instrument :

BNA\_F

ClientSampleId :

SS-9(0-2)

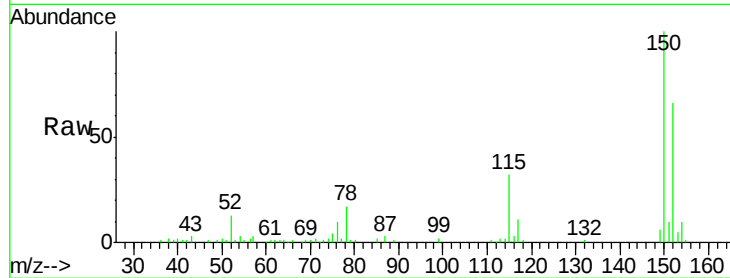
Tgt Ion:152 Resp: 76740

Ion Ratio Lower Upper

152 100

150 151.6 124.7 187.1

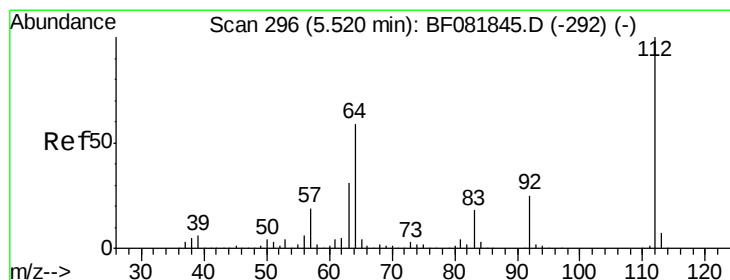
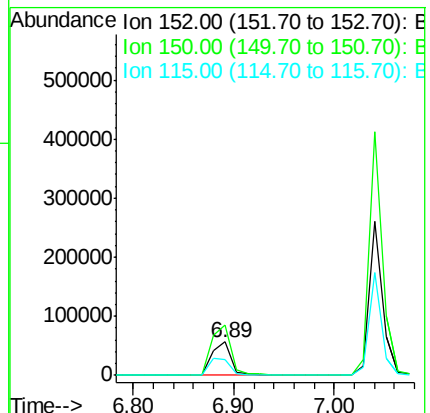
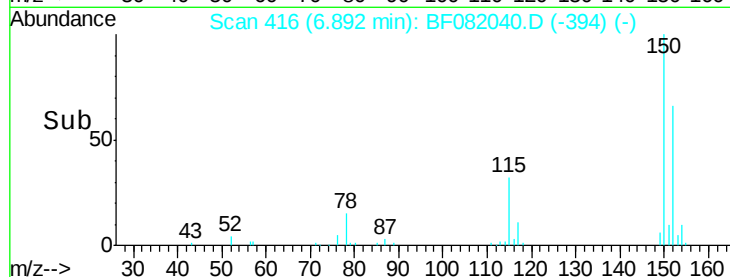
115 48.3 39.0 58.4



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: 113.63 ng

RT: 5.49 min Scan# 293

Delta R.T. -0.03 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

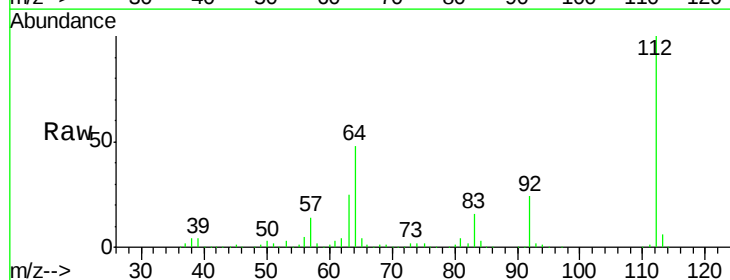
Tgt Ion:112 Resp: 480363

Ion Ratio Lower Upper

112 100

64 47.9 39.7 59.5

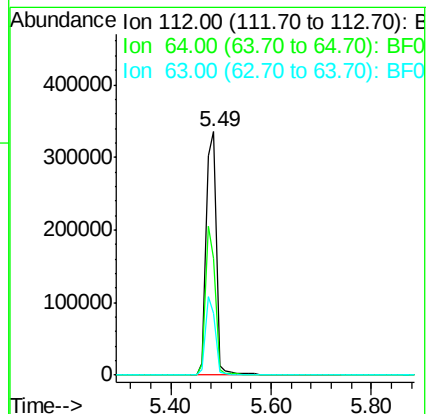
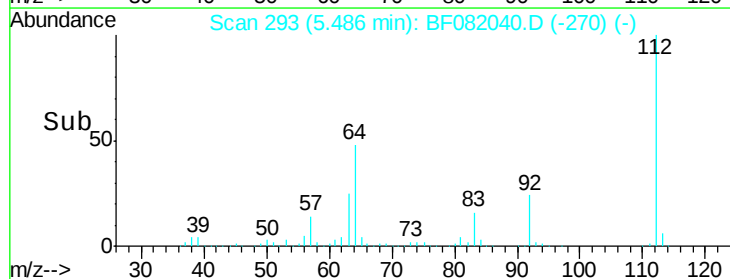
63 25.2 17.4 26.0

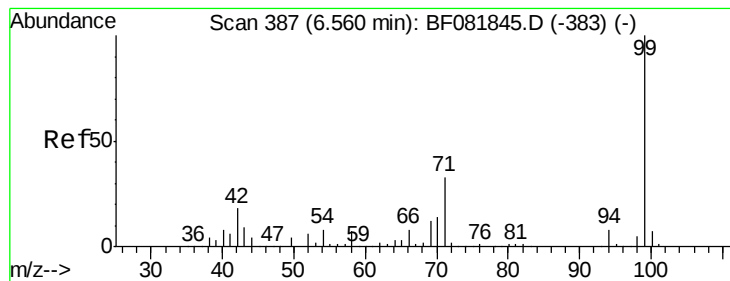


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 120.54 ng

RT: 6.51 min Scan# 383

Delta R.T. -0.05 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Instrument :

BNA\_F

ClientSampleId :

SS-9(0-2)

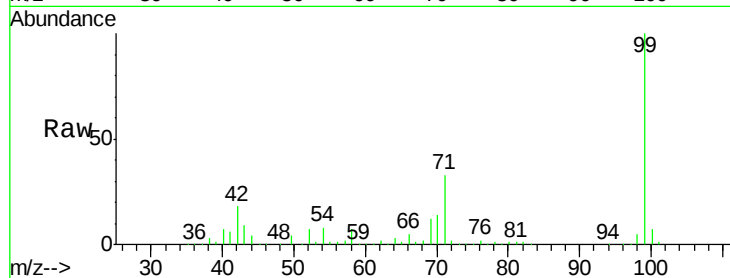
Tgt Ion: 99 Resp: 641194

Ion Ratio Lower Upper

99 100

42 17.8 13.7 20.5

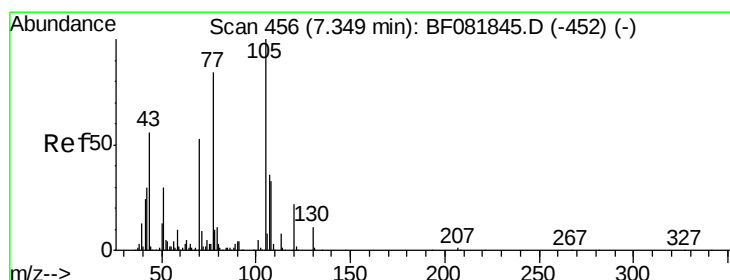
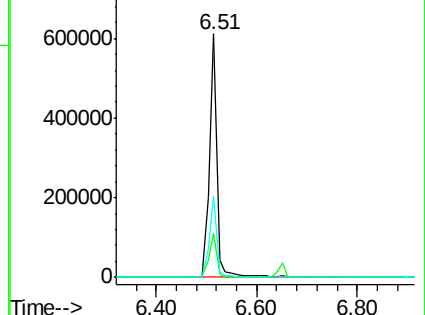
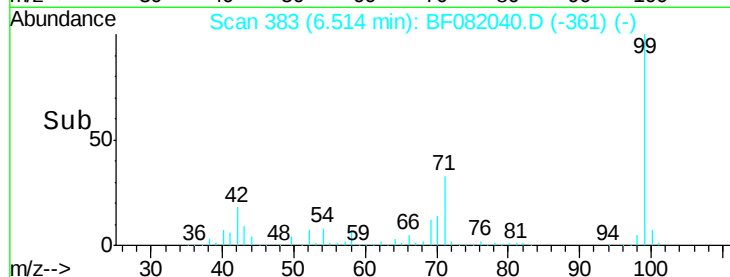
71 33.3 14.2 21.2#



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: 14.77 ng

RT: 7.45 min Scan# 465

Delta R.T. 0.10 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Tgt Ion: 70 Resp: 47751

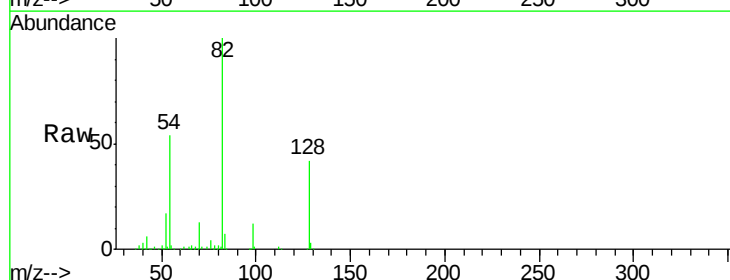
Ion Ratio Lower Upper

70 100

42 46.5 63.8 95.6#

101 0.0 9.2 13.8#

130 2.2 27.3 40.9#

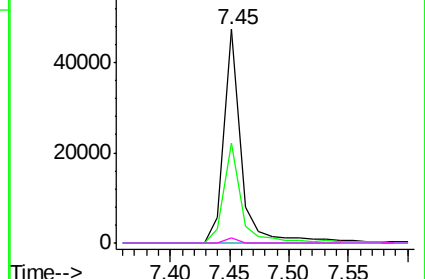
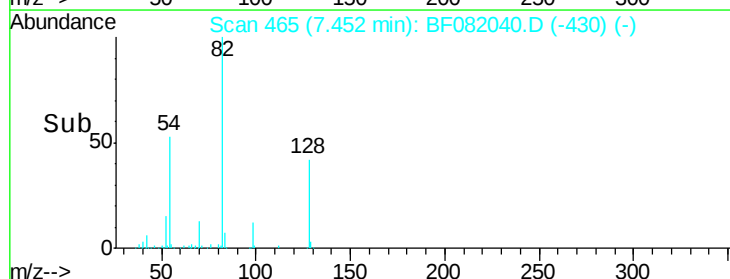


Abundance Ion 70.00 (69.70 to 70.70): BF0

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

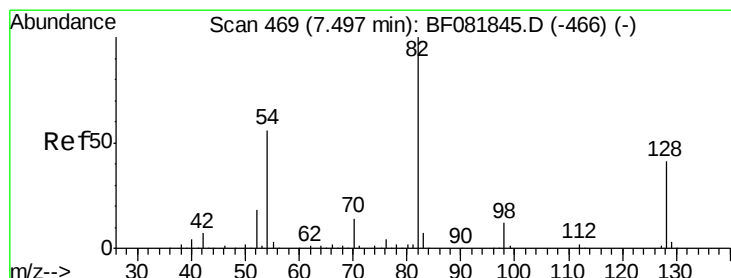
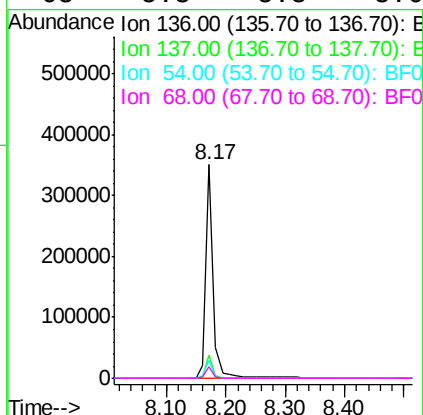
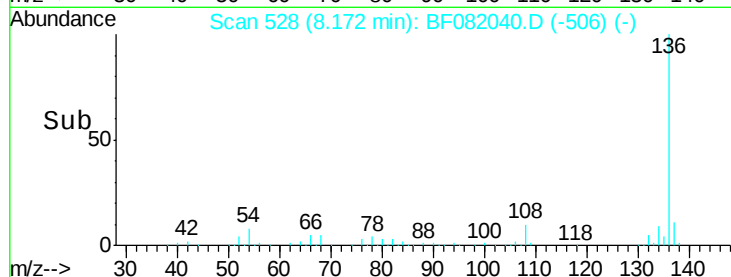
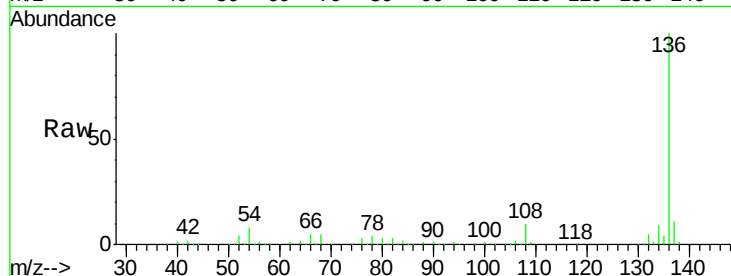




#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 8.17 min Scan# 528  
Delta R.T. -0.05 min  
Lab File: BF082040.D  
Acq: 4 Oct 2015 00:24

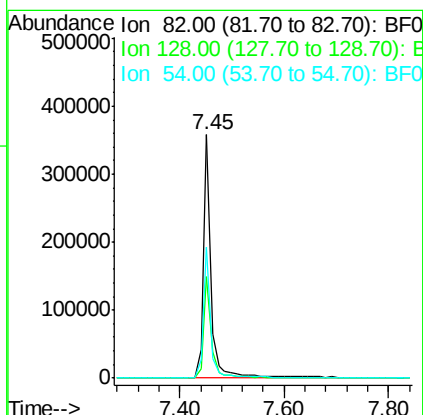
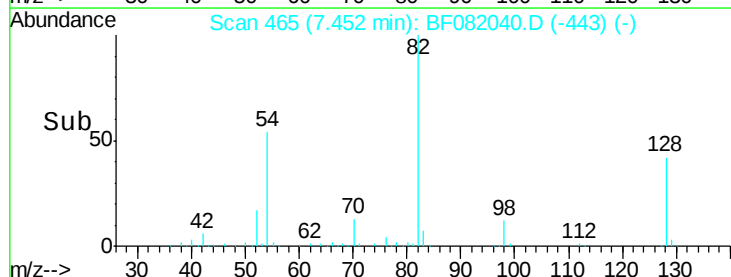
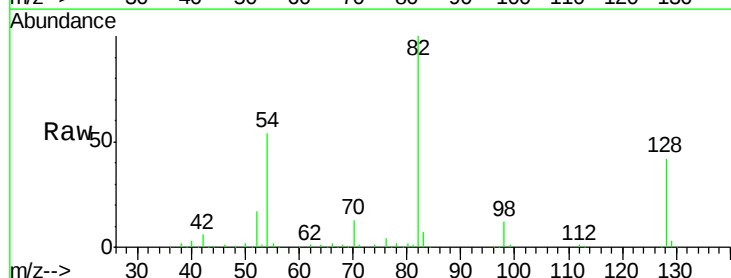
Instrument :  
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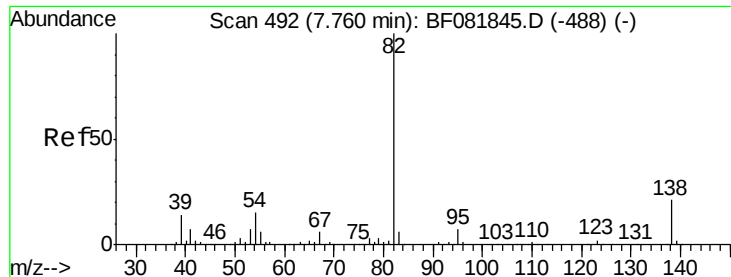
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 317234 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 11.1  | 9.0   | 13.6   |
| 54       | 8.3   | 8.2   | 12.2   |
| 68       | 5.3   | 5.8   | 8.6#   |



#23  
Nitrobenzene-d5  
Concen: 79.27 ng  
RT: 7.45 min Scan# 465  
Delta R.T. -0.05 min  
Lab File: BF082040.D  
Acq: 4 Oct 2015 00:24

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 82    | Resp: | 377245 |
| Ion      | Ratio | Lower | Upper  |
| 82       | 100   |       |        |
| 128      | 42.0  | 51.0  | 76.6#  |
| 54       | 53.7  | 47.5  | 71.3   |





#25

Isophorone

Concen: 35.44 ng

RT: 7.45 min Scan# 465

Delta R.T. -0.31 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Instrument :

BNA\_F

ClientSampleId :

SS-9(0-2)

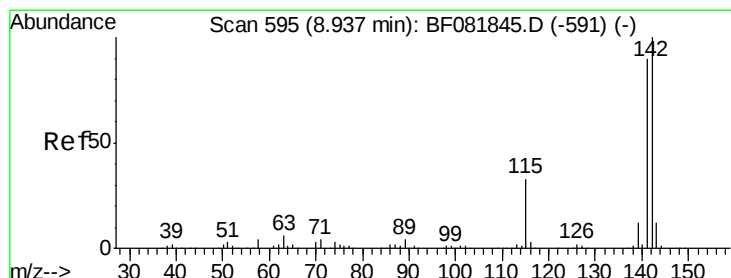
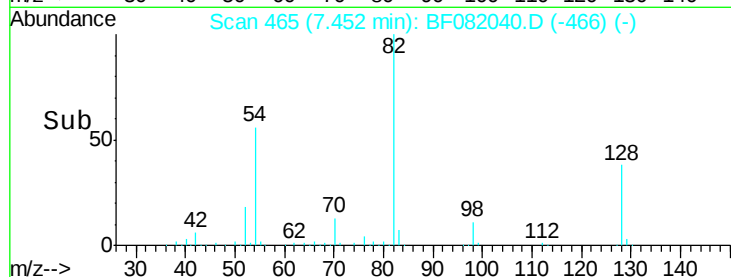
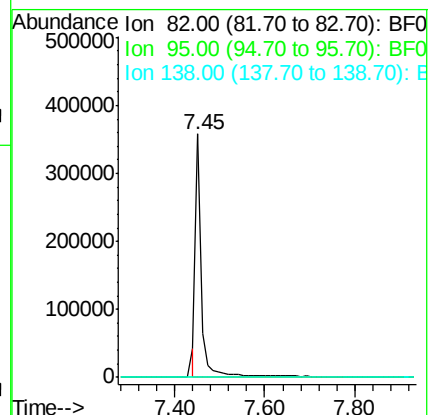
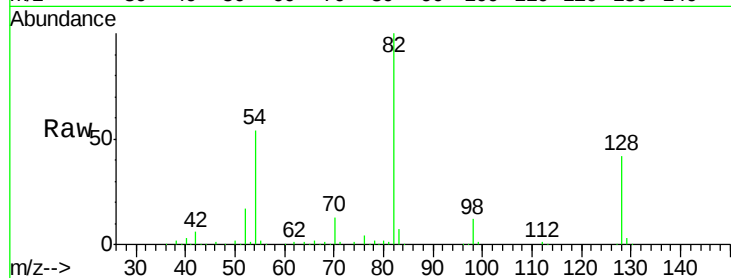
Tgt Ion: 82 Resp: 334241

Ion Ratio Lower Upper

82 100

95 0.0 4.0 6.0#

138 0.0 18.3 27.5#



#37

2-Methylnaphthalene

Concen: 2.25 ng

RT: 8.88 min Scan# 590

Delta R.T. -0.06 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

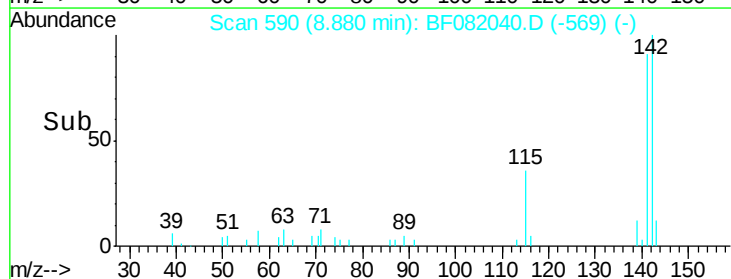
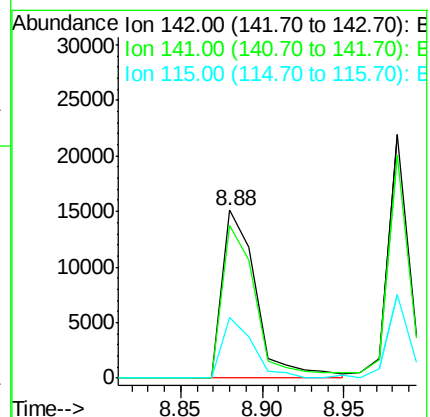
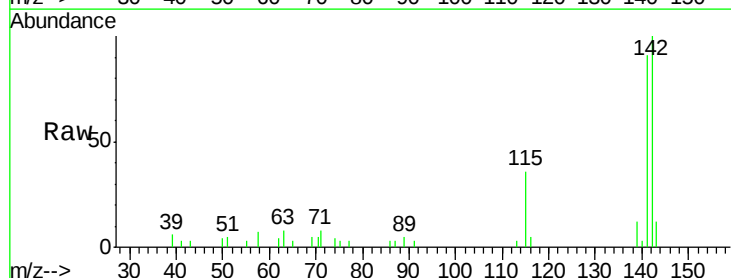
Tgt Ion: 142 Resp: 21607

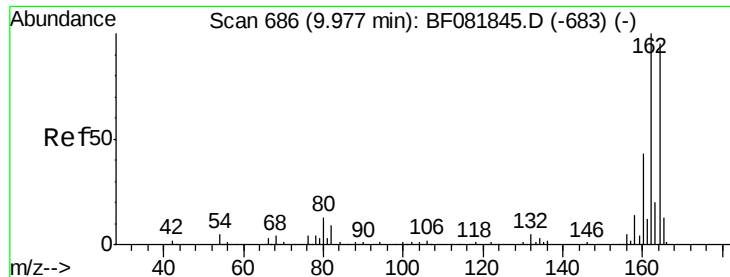
Ion Ratio Lower Upper

142 100

141 91.2 67.5 101.3

115 36.3 18.2 27.2#





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.93 min Scan# 682

Delta R.T. -0.05 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Instrument :

BNA\_F

ClientSampleId :

SS-9(0-2)

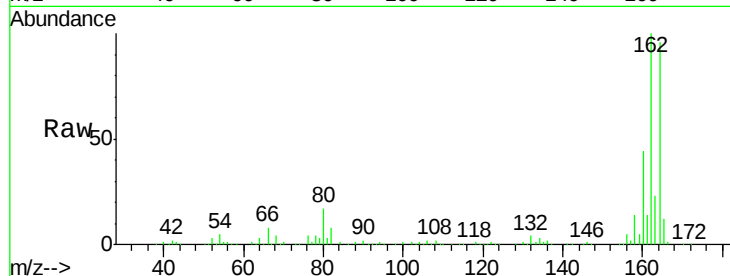
Tgt Ion:164 Resp: 155896

Ion Ratio Lower Upper

164 100

162 103.9 75.2 112.8

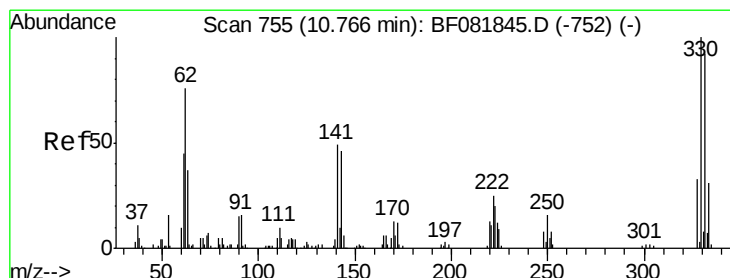
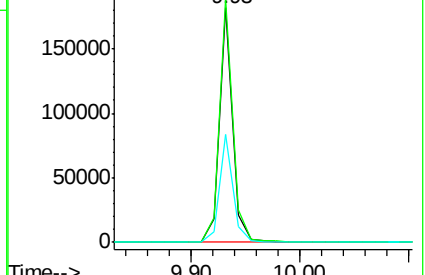
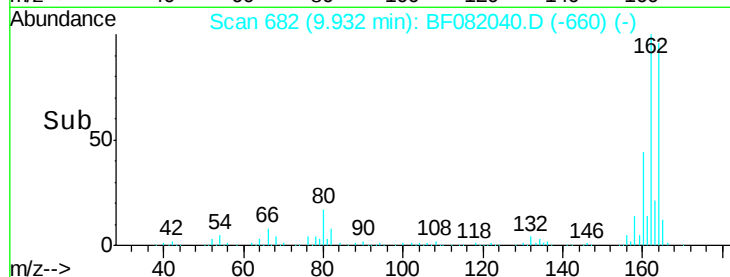
160 46.1 31.5 47.3



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



#41

2,4,6-Tribromophenol

Concen: 103.26 ng

RT: 10.73 min Scan# 752

Delta R.T. -0.03 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

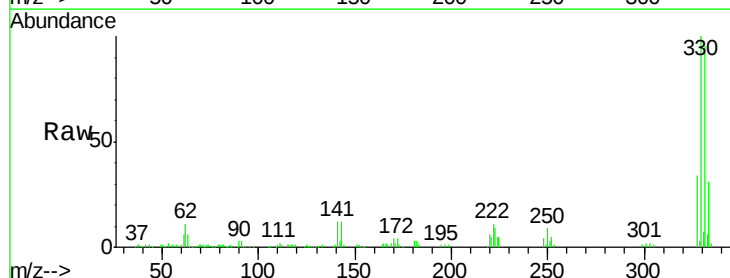
Tgt Ion:330 Resp: 163027

Ion Ratio Lower Upper

330 100

332 96.1 76.6 114.8

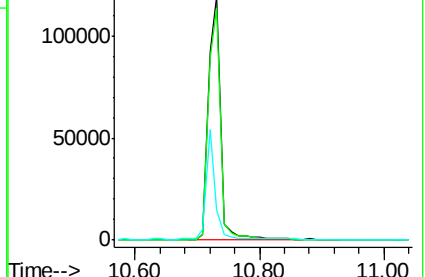
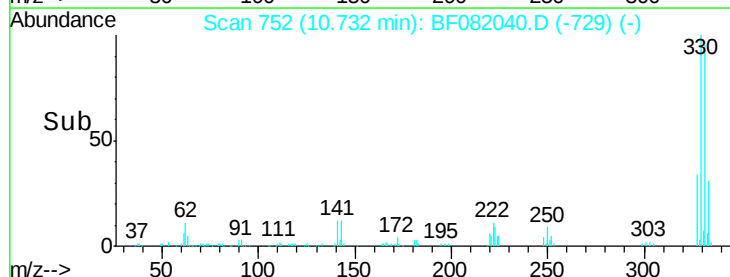
141 32.7 29.7 44.5

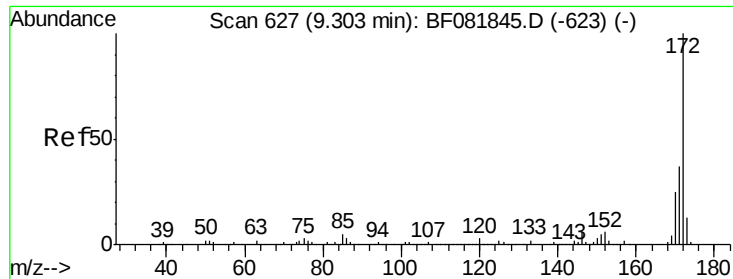


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

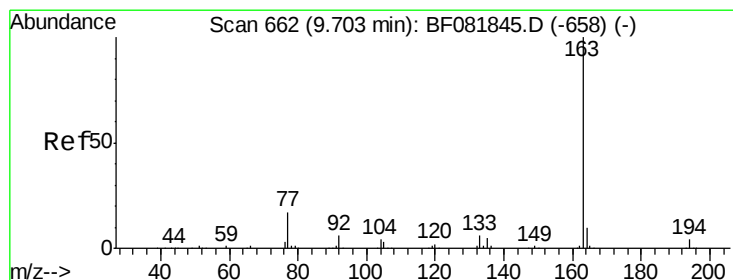
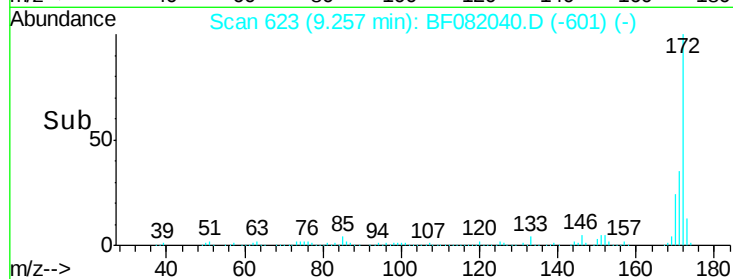
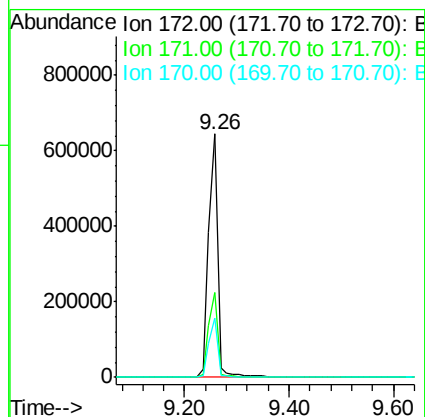
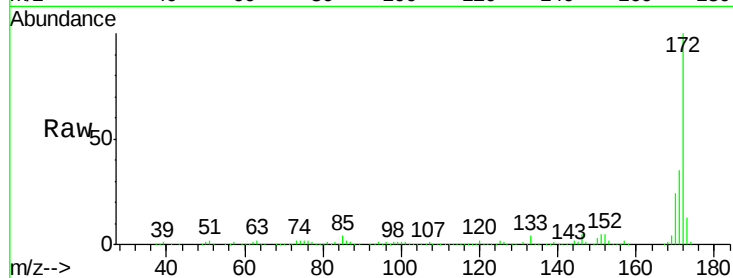




#44  
 2-Fluorobiphenyl  
 Concen: 83.93 ng  
 RT: 9.26 min Scan# 623  
 Delta R.T. -0.05 min  
 Lab File: BF082040.D  
 Acq: 4 Oct 2015 00:24

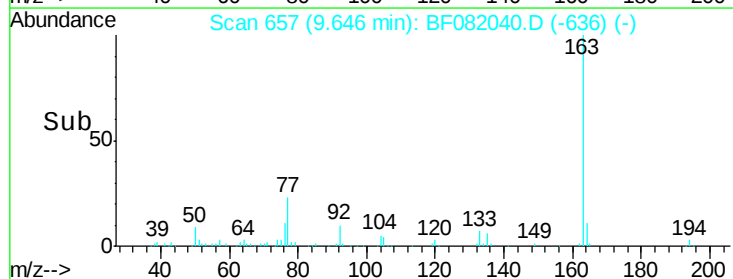
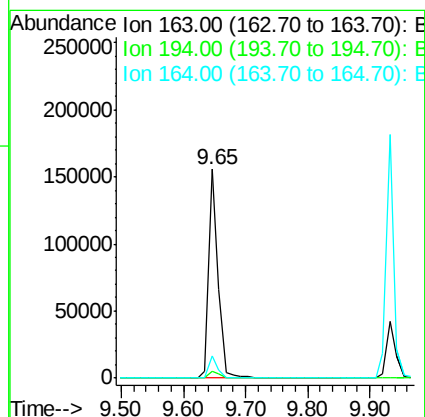
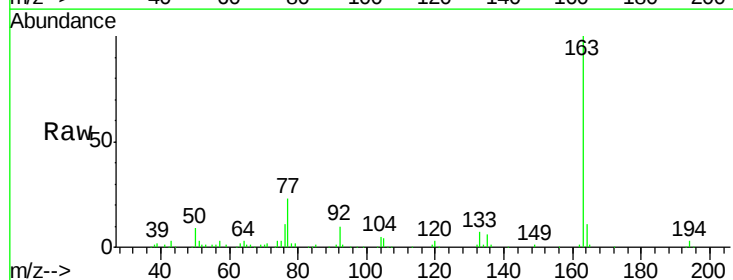
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SS-9(0-2)

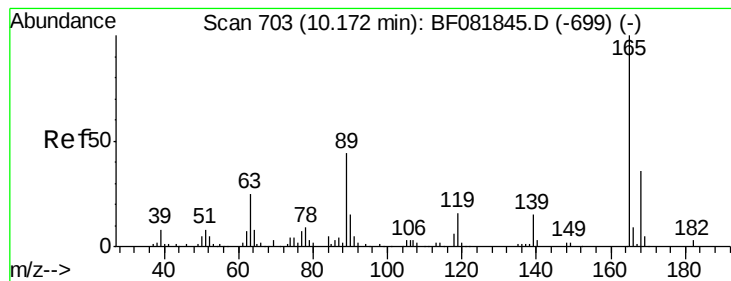
Tgt Ion:172 Resp: 783855  
 Ion Ratio Lower Upper  
 172 100  
 171 35.1 26.1 39.1  
 170 24.1 17.4 26.2



#49  
 Dimethylphthalate  
 Concen: 15.34 ng  
 RT: 9.65 min Scan# 657  
 Delta R.T. -0.06 min  
 Lab File: BF082040.D  
 Acq: 4 Oct 2015 00:24

Tgt Ion:163 Resp: 165088  
 Ion Ratio Lower Upper  
 163 100  
 194 3.1 4.4 6.6#  
 164 10.6 8.3 12.5

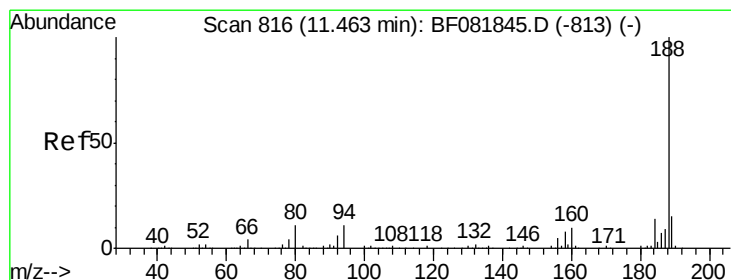
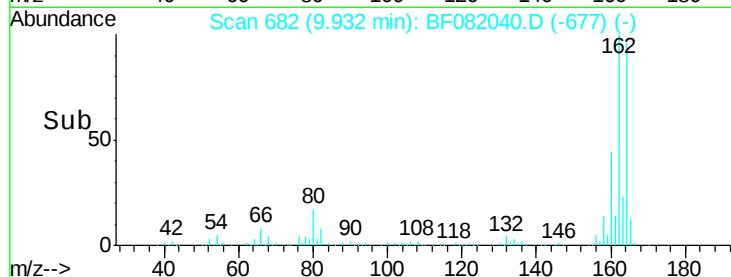
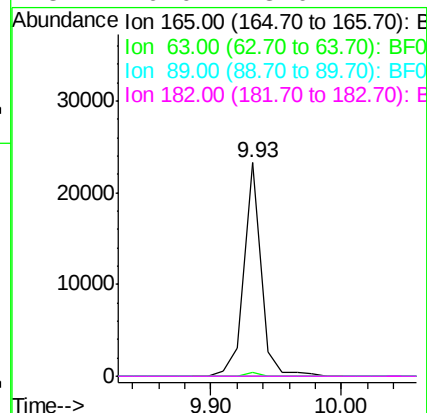
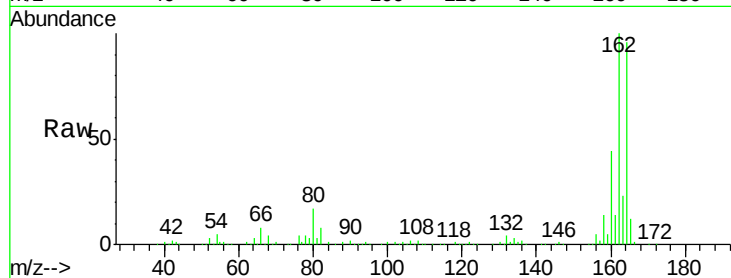




#56  
 2,4-Dinitrotoluene  
 Concen: 7.07 ng  
 RT: 9.93 min Scan# 682  
 Delta R.T. -0.24 min  
 Lab File: BF082040.D  
 Acq: 4 Oct 2015 00:24

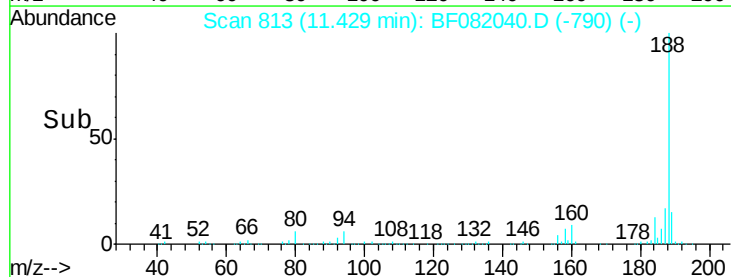
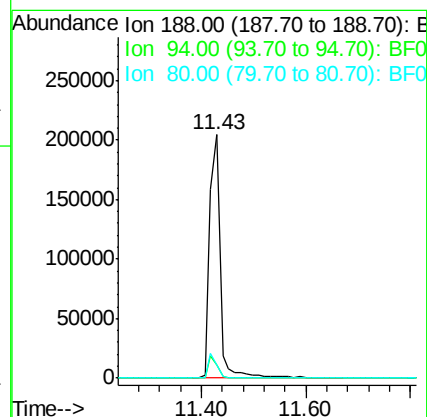
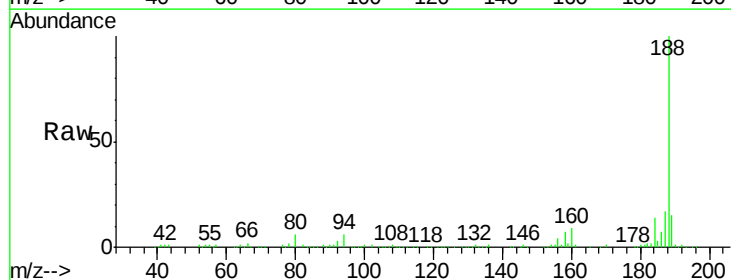
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SS-9(0-2)

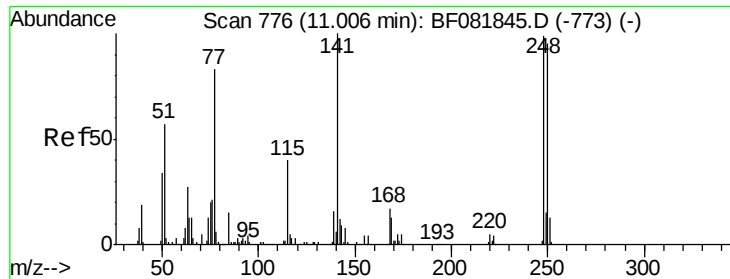
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.6   | 29.8  | 44.6# |
| 89      | 0.0   | 44.5  | 66.7# |
| 182     | 0.0   | 3.0   | 4.4#  |



#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 11.43 min Scan# 813  
 Delta R.T. -0.03 min  
 Lab File: BF082040.D  
 Acq: 4 Oct 2015 00:24

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 5.7   | 11.1  | 16.7# |
| 80      | 5.7   | 11.0  | 16.4# |





#66

4-Bromophenyl-phenylether

Concen: 3.44 ng

RT: 10.72 min Scan# 751

Delta R.T. -0.29 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Instrument :

BNA\_F

ClientSampleId :

SS-9(0-2)

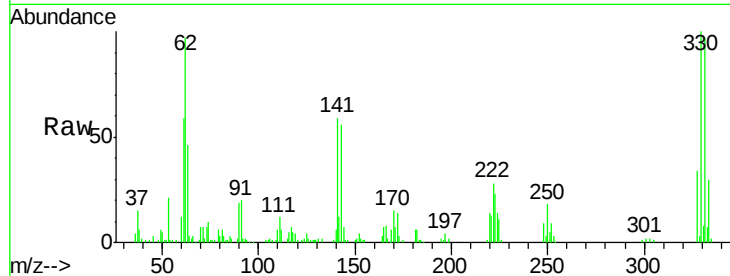
Tgt Ion:248 Resp: 10069

Ion Ratio Lower Upper

248 100

250 196.7 78.5 117.7#

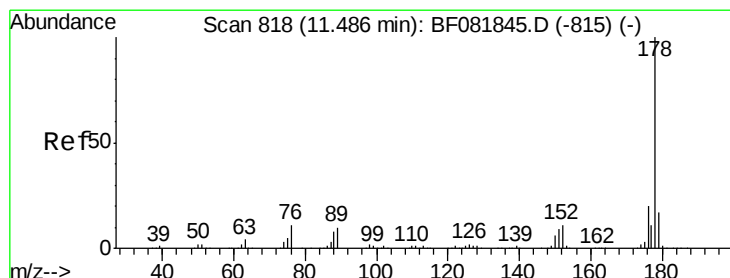
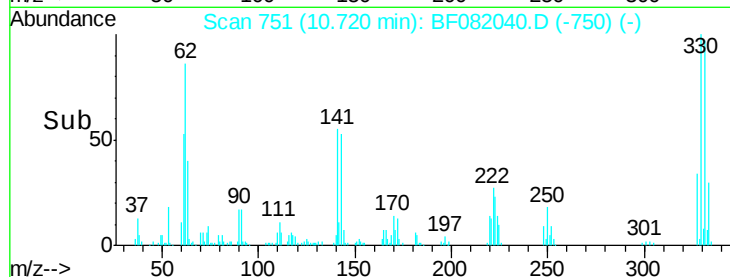
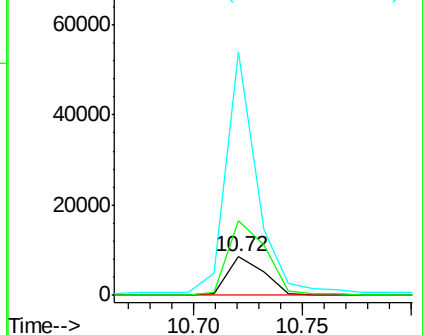
141 636.8 59.0 88.6#



Abundance Ion 248.00 (247.70 to 248.70): E

Ion 250.00 (249.70 to 250.70): E

Ion 141.00 (140.70 to 141.70): E



#70

Phenanthrene

Concen: 2.28 ng

RT: 11.45 min Scan# 815

Delta R.T. -0.03 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

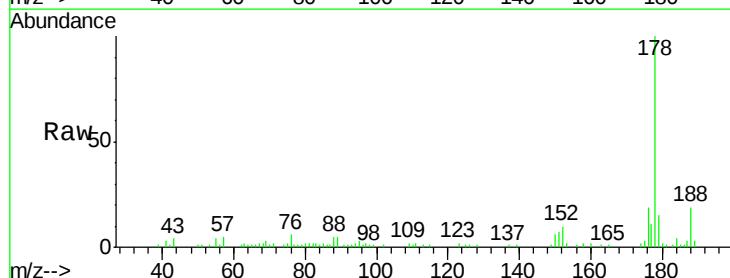
Tgt Ion:178 Resp: 53999

Ion Ratio Lower Upper

178 100

176 19.2 13.8 20.8

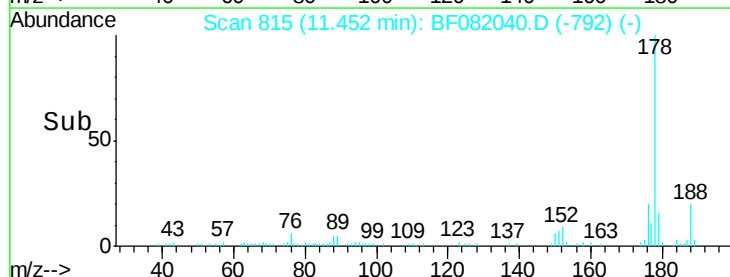
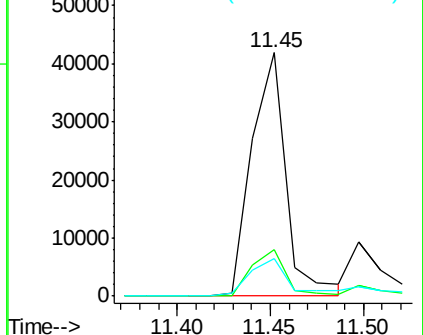
179 15.5 12.2 18.2

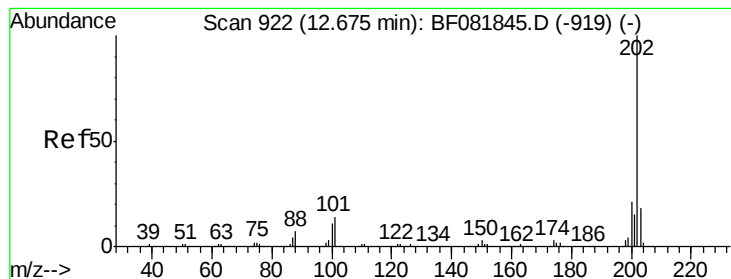


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#74

Fluoranthene

Concen: 5.28 ng

RT: 12.64 min Scan# 919

Delta R.T. -0.03 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Instrument :

BNA\_F

ClientSampleId :

SS-9(0-2)

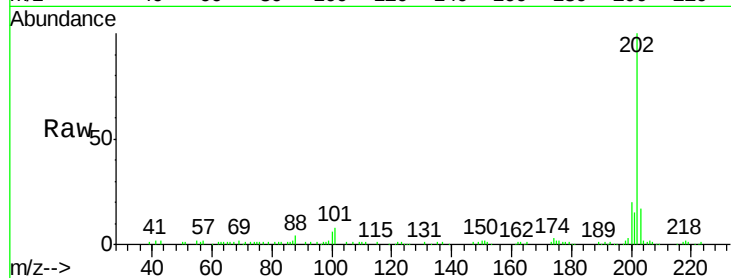
Tgt Ion:202 Resp: 82129

Ion Ratio Lower Upper

202 100

101 8.3 0.0 38.3

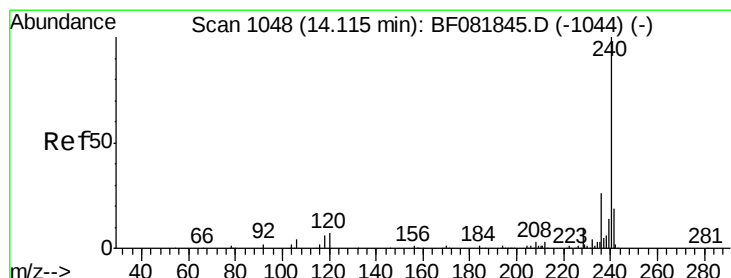
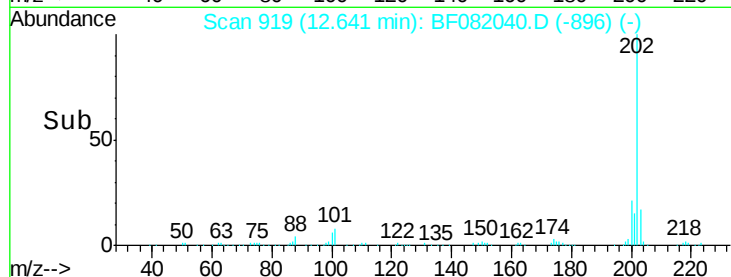
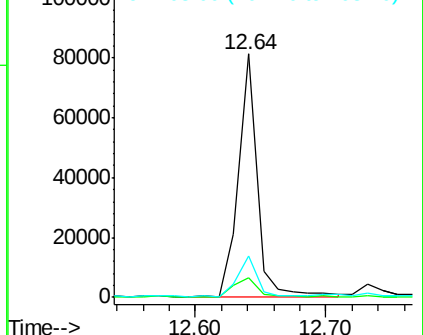
203 17.2 0.0 37.3



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: 14.07 min Scan# 1044

Delta R.T. -0.05 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

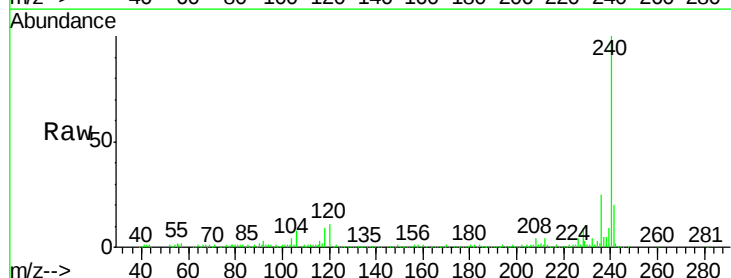
Tgt Ion:240 Resp: 238645

Ion Ratio Lower Upper

240 100

120 11.0 16.2 24.2#

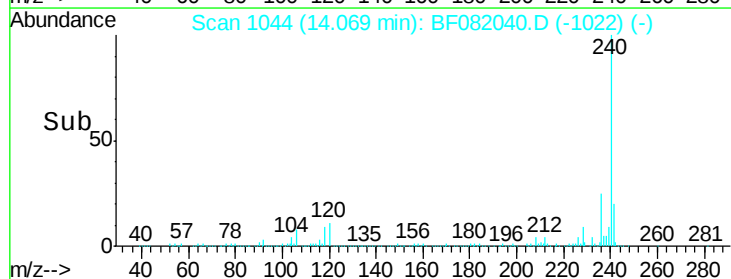
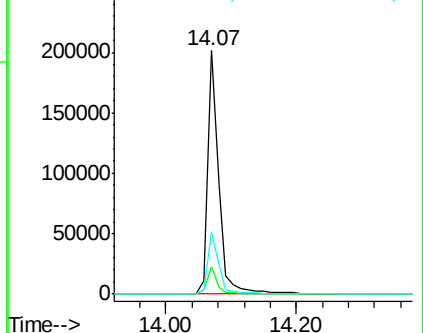
236 25.3 18.4 27.6

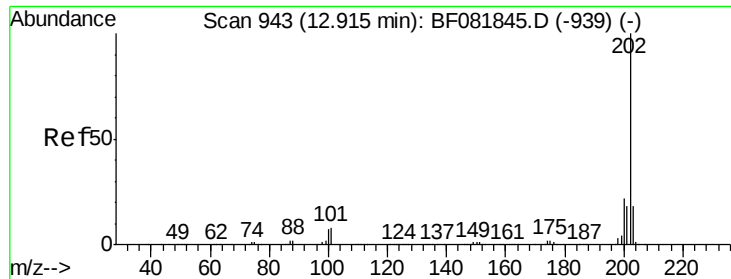


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

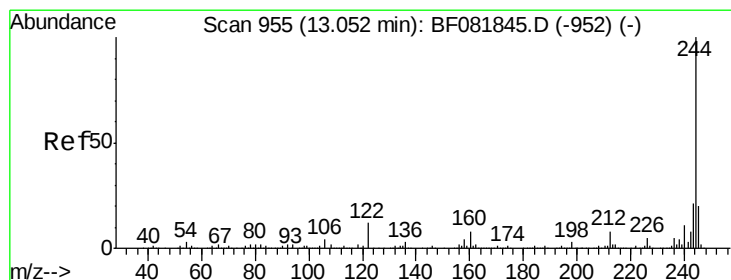
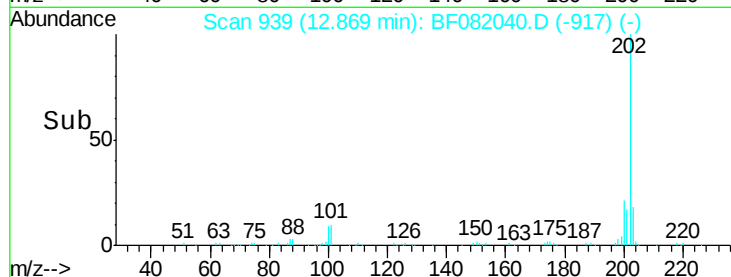
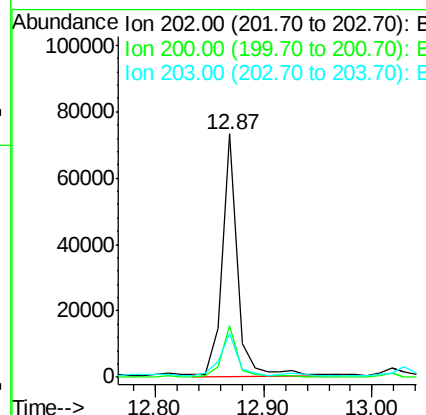
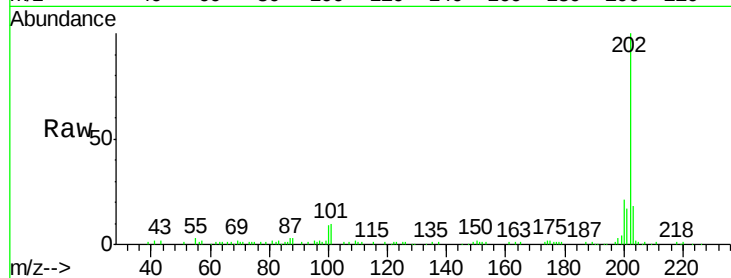




#77  
 Pyrene  
 Concen: 5.14 ng  
 RT: 12.87 min Scan# 939  
 Delta R.T. -0.05 min  
 Lab File: BF082040.D  
 Acq: 4 Oct 2015 00:24

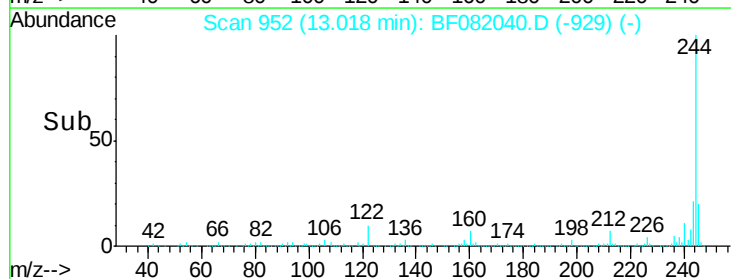
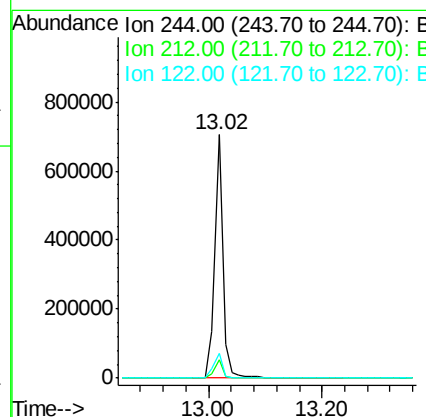
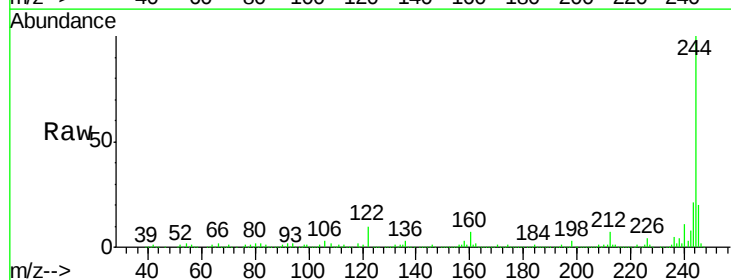
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SS-9(0-2)

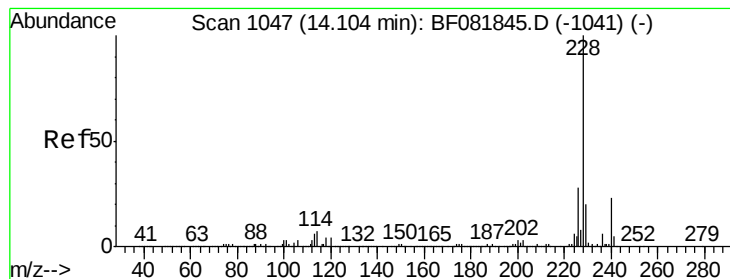
Tgt Ion: 202 Resp: 73272  
 Ion Ratio Lower Upper  
 202 100  
 200 21.0 15.0 22.4  
 203 17.9 14.1 21.1



#78  
 Terphenyl-d14  
 Concen: 96.75 ng  
 RT: 13.02 min Scan# 952  
 Delta R.T. -0.03 min  
 Lab File: BF082040.D  
 Acq: 4 Oct 2015 00:24

Tgt Ion: 244 Resp: 687850  
 Ion Ratio Lower Upper  
 244 100  
 212 7.5 4.3 6.5#  
 122 9.9 17.4 26.2#





#80

Benzo(a)anthracene

Concen: 3.43 ng

RT: 14.06 min Scan# 1043

Delta R.T. -0.05 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Instrument :

BNA\_F

ClientSampleId :

SS-9(0-2)

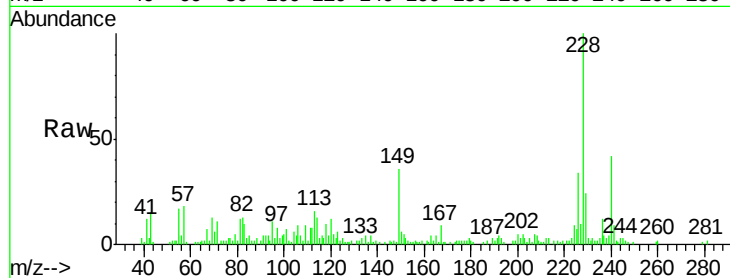
Tgt Ion:228 Resp: 44049

Ion Ratio Lower Upper

228 100

226 33.7 20.0 30.0#

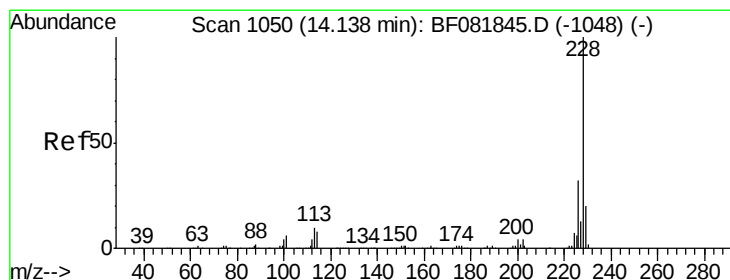
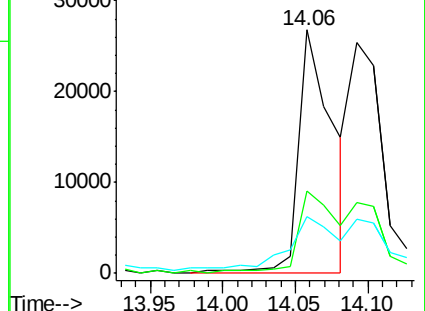
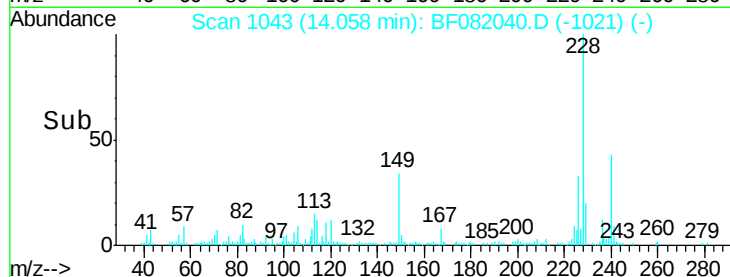
229 23.5 15.4 23.2#



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



#82

Chrysene

Concen: 3.49 ng

RT: 14.06 min Scan# 1043

Delta R.T. -0.08 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

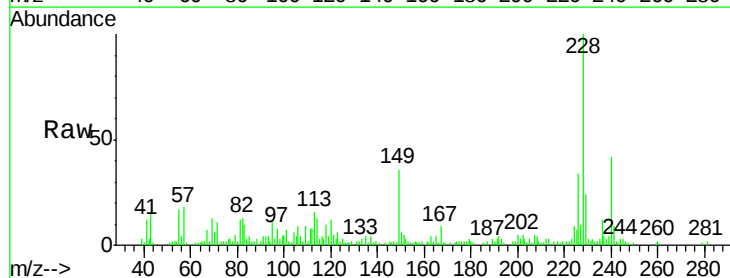
Tgt Ion:228 Resp: 44049

Ion Ratio Lower Upper

228 100

226 33.7 21.0 31.4#

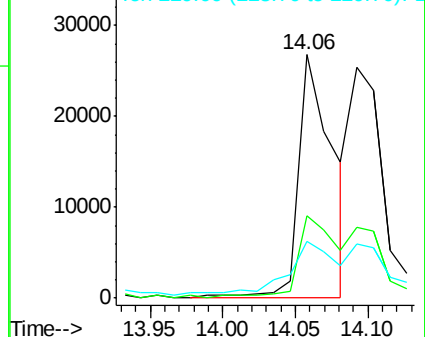
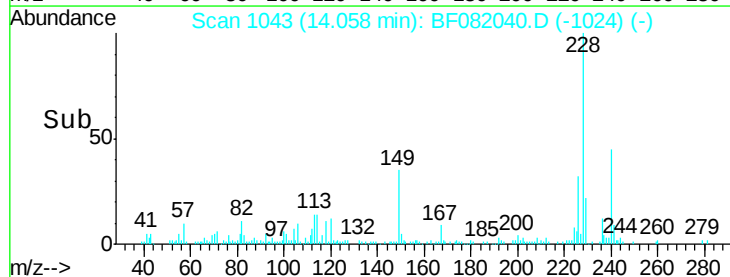
229 23.5 15.6 23.4#

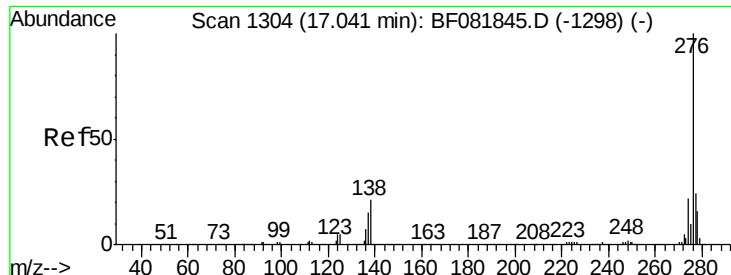


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#85

Indeno(1,2,3-cd)pyrene

Concen: 2.63 ng

RT: 16.98 min Scan# 1299

Delta R.T. -0.06 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Instrument :

BNA\_F

ClientSampleId :

SS-9(0-2)

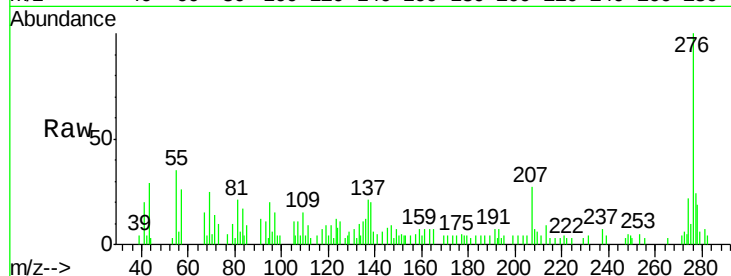
Tgt Ion: 276 Resp: 26468

Ion Ratio Lower Upper

276 100

138 36.5 25.7 38.5

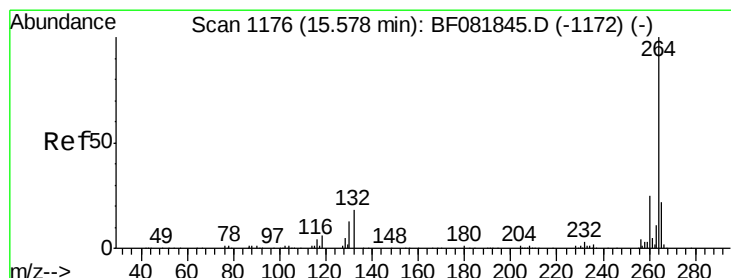
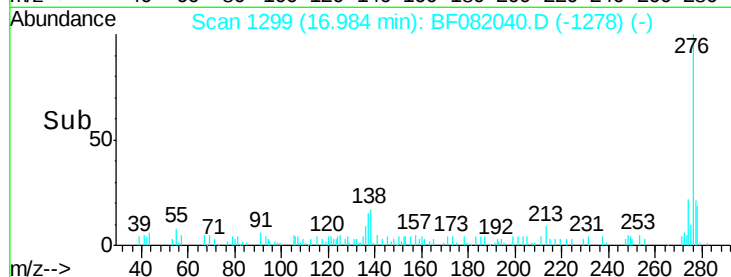
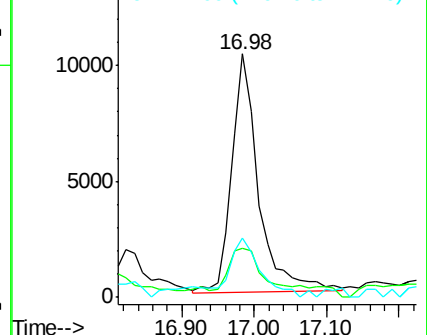
277 27.7 15.6 23.4#



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: 20.00 ng

RT: 15.53 min Scan# 1172

Delta R.T. -0.05 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

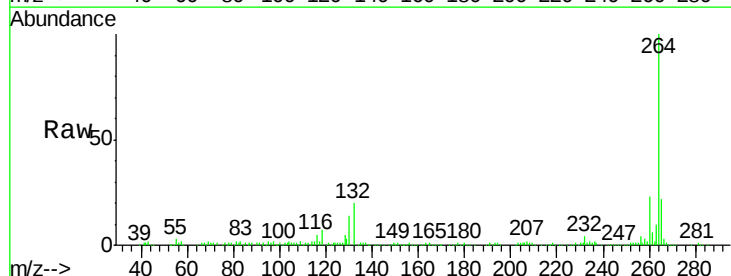
Tgt Ion: 264 Resp: 221835

Ion Ratio Lower Upper

264 100

260 23.5 16.7 25.1

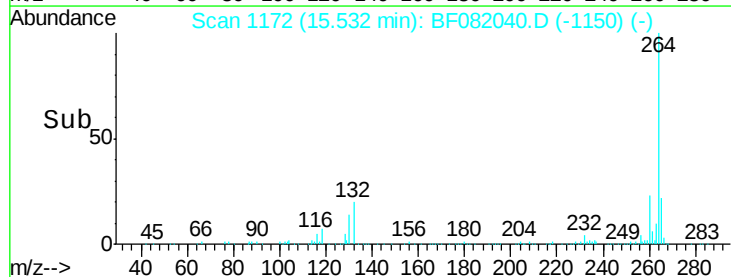
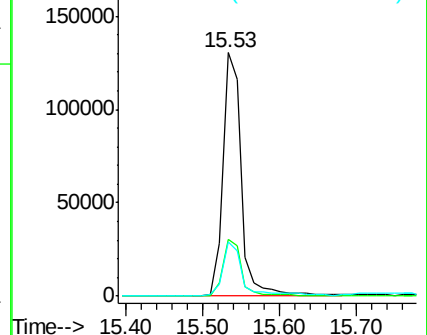
265 22.4 17.2 25.8

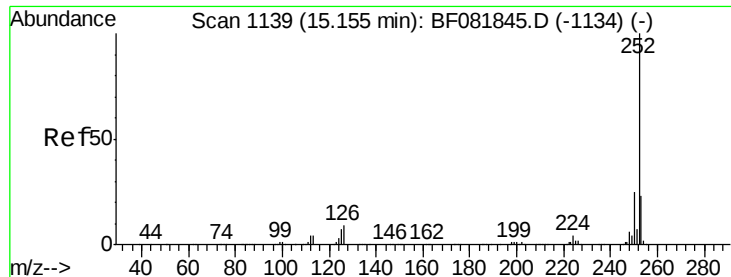


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





#87

Benzo(b)fluoranthene

Concen: 7.05 ng

RT: 15.11 min Scan# 1135

Delta R.T. -0.05 min

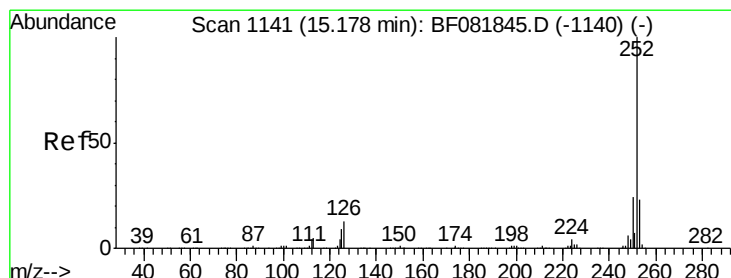
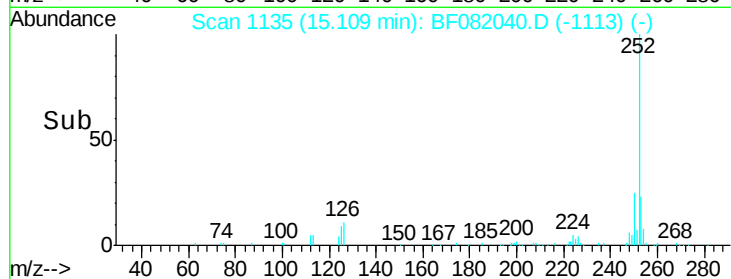
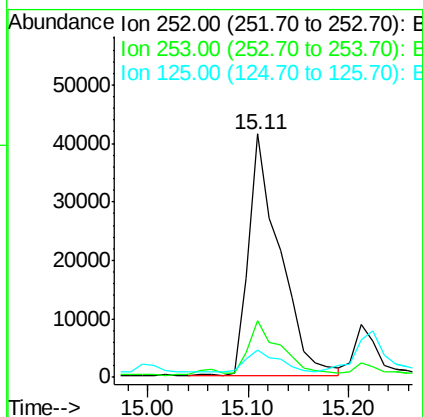
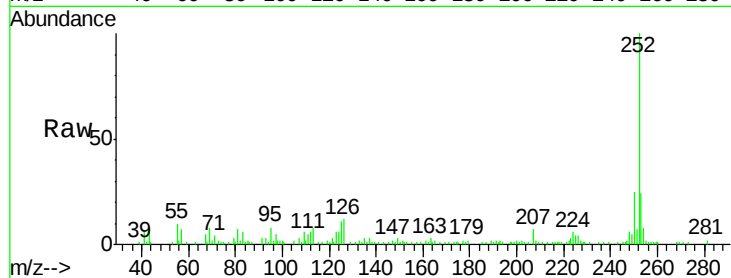
Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Instrument :  
BNA\_F  
ClientSampleId :  
SS-9(0-2)

Tgt Ion:252 Resp: 89260

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 23.5  | 17.5  | 26.3  |
| 125 | 11.4  | 17.1  | 25.7# |



#88

Benzo(k)fluoranthene

Concen: 7.69 ng

RT: 15.11 min Scan# 1135

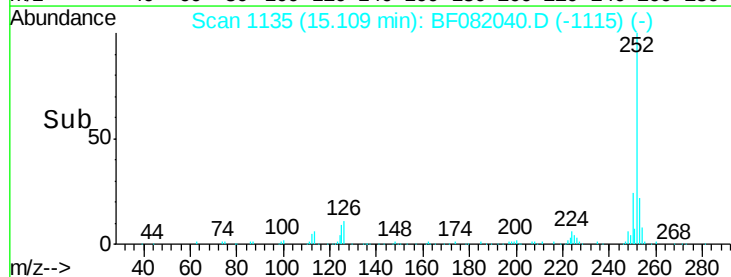
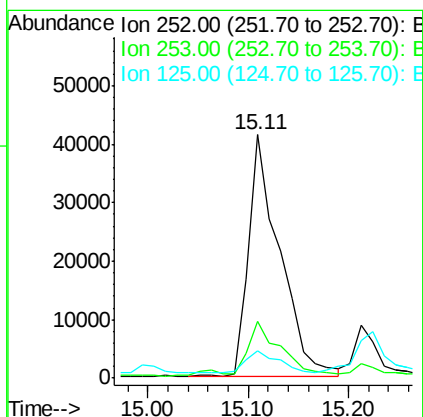
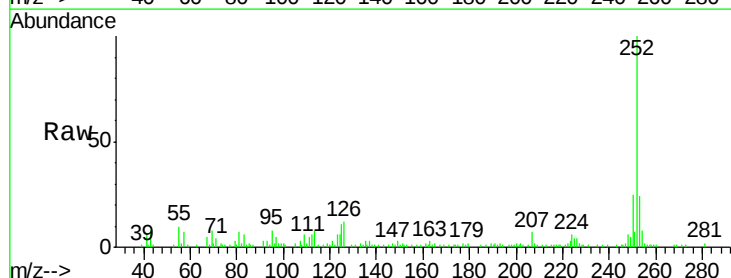
Delta R.T. -0.07 min

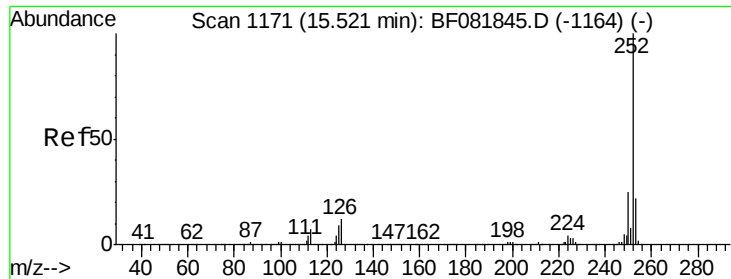
Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Tgt Ion:252 Resp: 89260

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 23.5  | 17.0  | 25.4  |
| 125 | 11.4  | 16.0  | 24.0# |





#89

Benzo(a)pyrene

Concen: 3.61 ng

RT: 15.48 min Scan# 1167

Delta R.T. -0.05 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

Instrument :

BNA\_F

ClientSampleId :

SS-9(0-2)

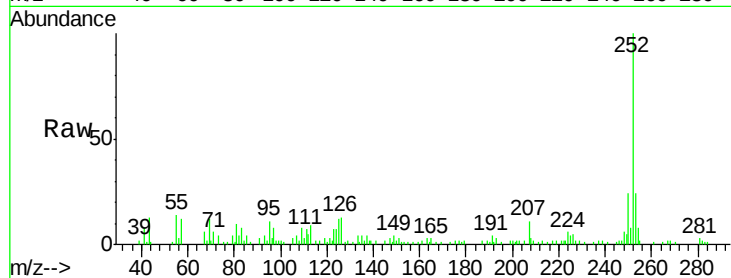
Tgt Ion:252 Resp: 39632

Ion Ratio Lower Upper

252 100

253 23.8 17.2 25.8

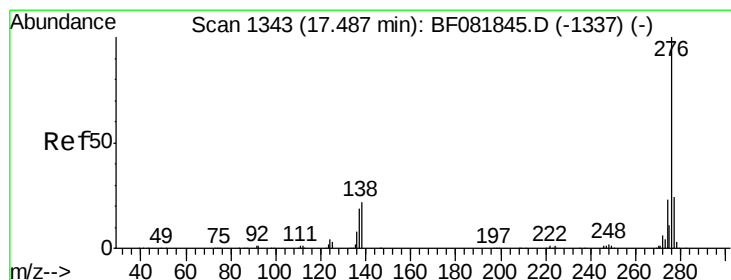
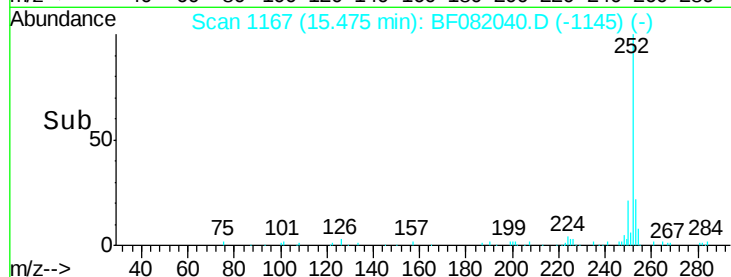
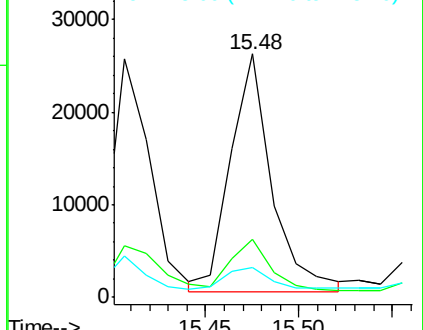
125 12.3 18.0 27.0#



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



#91

Benzo(g,h,i)perylene

Concen: 2.86 ng

RT: 17.42 min Scan# 1337

Delta R.T. -0.07 min

Lab File: BF082040.D

Acq: 4 Oct 2015 00:24

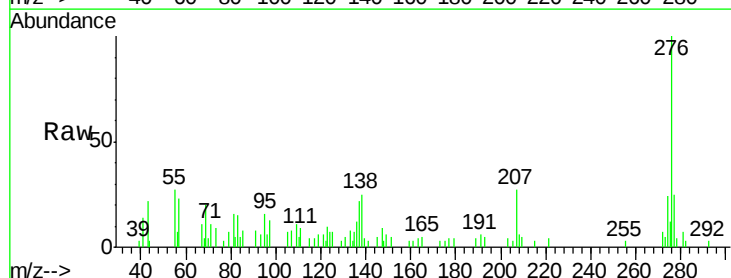
Tgt Ion:276 Resp: 27061

Ion Ratio Lower Upper

276 100

277 24.9 17.8 26.6

138 25.2 34.6 51.8#



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

