

Data Path : Z:\HPCHEM1\BNA F\Data\BF092816\  
 Data File : BF090277.D  
 Acq On : 28 Sep 2016 13:44  
 Operator : UM/SJ  
 Sample : H4949-12DL 10X  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Sep 28 17:07:00 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092016.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Sep 26 15:58:38 2016  
 Response via : Initial Calibration

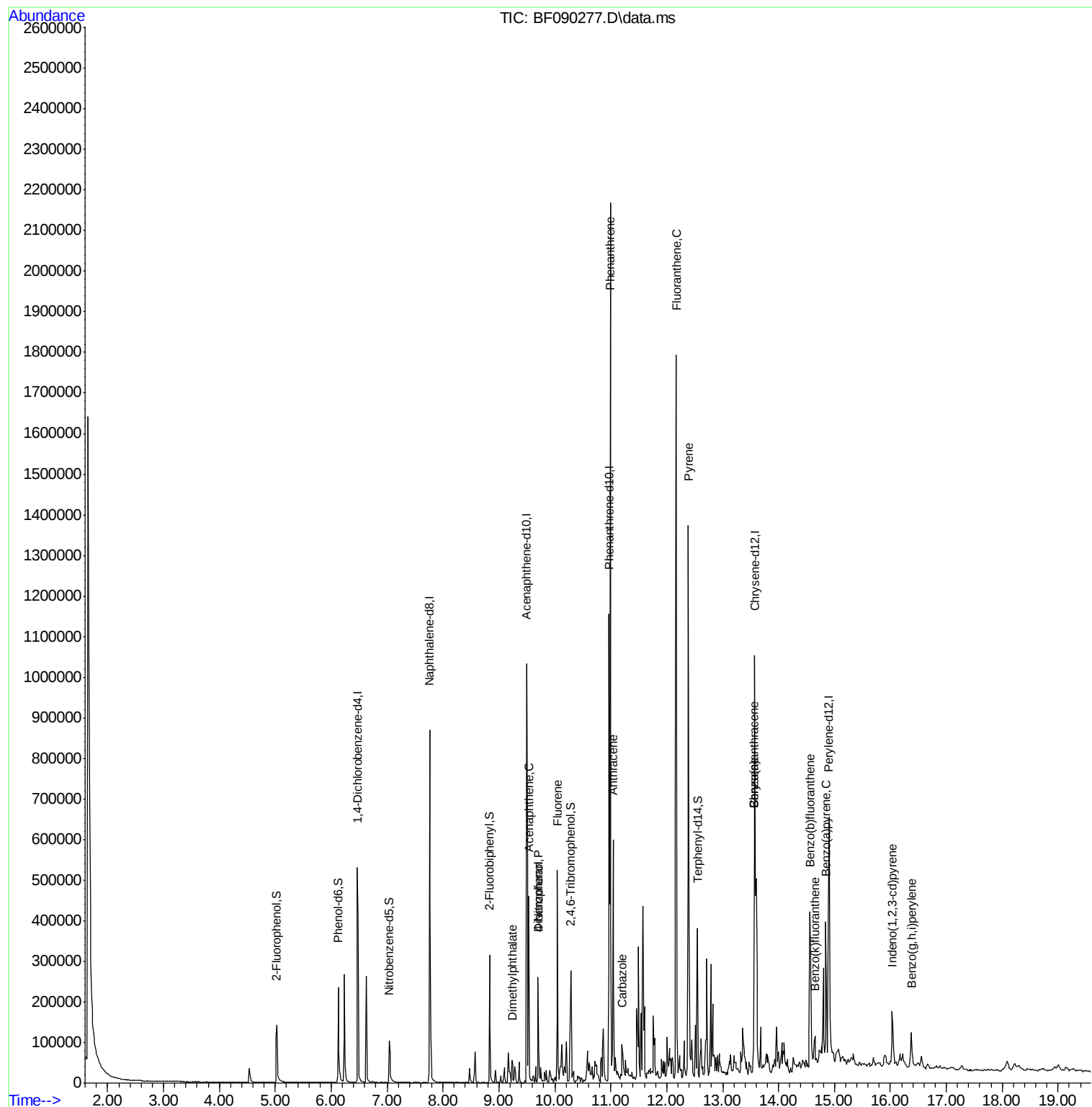
| Internal Standards          | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|--------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.467  | 152  | 126818   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8          | 7.759  | 136  | 499336   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10        | 9.496  | 164  | 274568   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10        | 10.971 | 188  | 434741   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12            | 13.576 | 240  | 268801   | 20.00 | ng    | -0.02    |
| 86) Perylene-d12            | 14.902 | 264  | 266631   | 20.00 | ng    | -0.01    |
| System Monitoring Compounds |        |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.027  | 112  | 82212    | 10.57 | ng    | 0.00     |
| 7) Phenol-d6                | 6.124  | 99   | 123408   | 12.84 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.039  | 82   | 65133    | 7.56  | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol    | 10.285 | 330  | 26593    | 11.29 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 8.833  | 172  | 127071   | 9.09  | ng    | -0.02    |
| 78) Terphenyl-d14           | 12.548 | 244  | 100458   | 9.49  | ng    | -0.01    |
| Target Compounds            |        |      |          |       |       | Qvalue   |
| 49) Dimethylphthalate       | 9.245  | 163  | 37369    | 2.14  | ng    | 99       |
| 51) Acenaphthene            | 9.530  | 154  | 95190    | 6.81  | ng    | 99       |
| 54) Dibenzofuran            | 9.702  | 168  | 110139   | 5.99  | ng    | 98       |
| 55) 4-Nitrophenol           | 9.702  | 139  | 40383    | 12.90 | ng    | # 18     |
| 57) Fluorene                | 10.045 | 166  | 158589   | 11.45 | ng    | 99       |
| 70) Phenanthrene            | 10.993 | 178  | 781574   | 38.44 | ng    | 99       |
| 71) Anthracene              | 11.039 | 178  | 289155   | 13.56 | ng    | 99       |
| 72) Carbazole               | 11.211 | 167  | 57971    | 2.57  | ng    | 98       |
| 74) Fluoranthene            | 12.171 | 202  | 767114   | 35.15 | ng    | 95       |
| 77) Pyrene                  | 12.388 | 202  | 557028   | 30.28 | ng    | 96       |
| 80) Benzo(a)anthracene      | 13.565 | 228  | 245110   | 16.95 | ng    | 98       |
| 82) Chrysene                | 13.565 | 228  | 245110   | 17.40 | ng    | 95       |
| 85) Indeno(1,2,3-cd)pyrene  | 16.034 | 276  | 81634    | 7.17  | ng    | 90       |
| 87) Benzo(b)fluoranthene    | 14.559 | 252  | 271862   | 18.41 | ng    | 98       |
| 88) Benzo(k)fluoranthene    | 14.651 | 252  | 35604    | 2.57  | ng    | 94       |
| 89) Benzo(a)pyrene          | 14.845 | 252  | 165339   | 11.90 | ng    | # 93     |
| 91) Benzo(a,h,i)perylene    | 16.377 | 276  | 66920    | 6.31  | ng    | 93       |

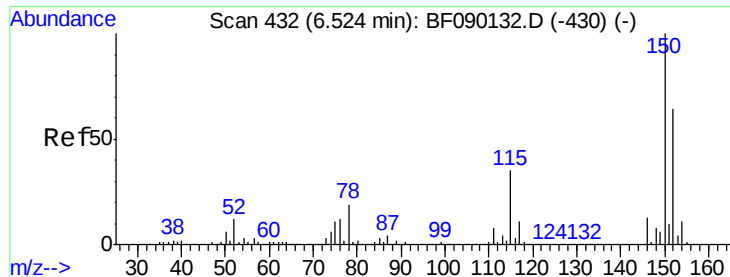
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA F\Data\BF092816\  
Data File : BF090277.D  
Acq On : 28 Sep 2016 13:44  
Operator : UM/SJ  
Sample : H4949-12DL 10X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

Quant Time: Sep 28 17:07:00 2016  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Sep 26 15:58:38 2016  
Response via : Initial Calibration

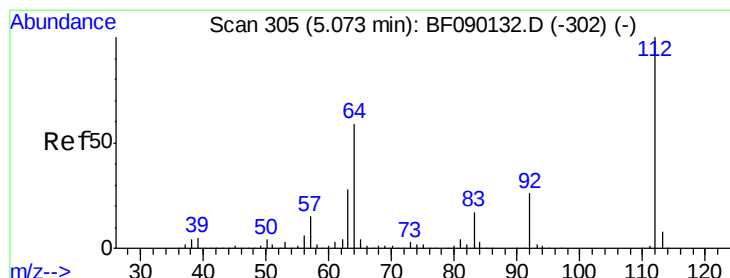
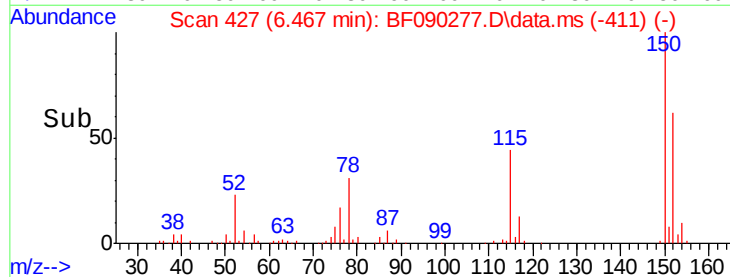
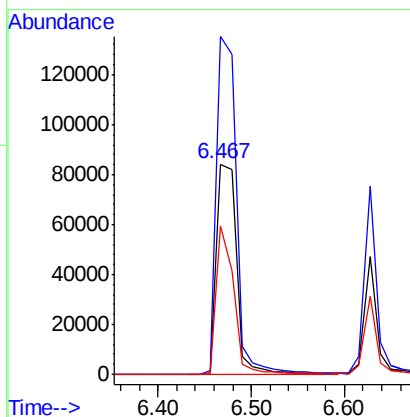
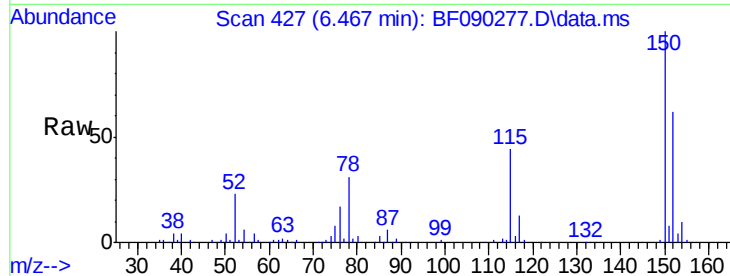




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 6.467 min Scan# 42  
 Delta R.T. -0.012 min  
 Lab File: BF090277.D  
 Acq: 28 Sep 2016 13:44

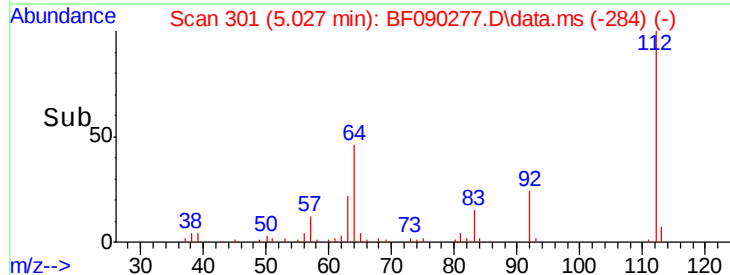
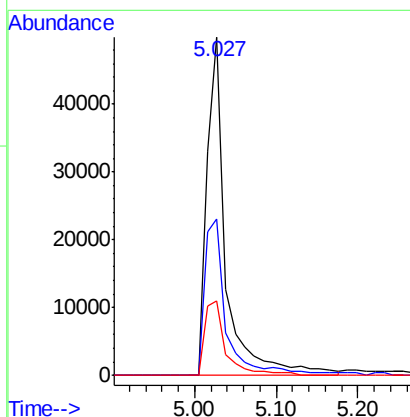
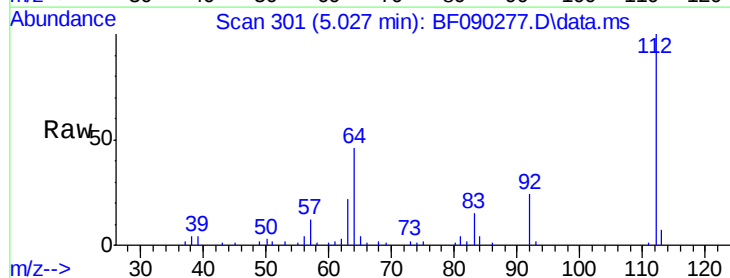
Instrument :  
 BNA\_F  
 ClientSampled :

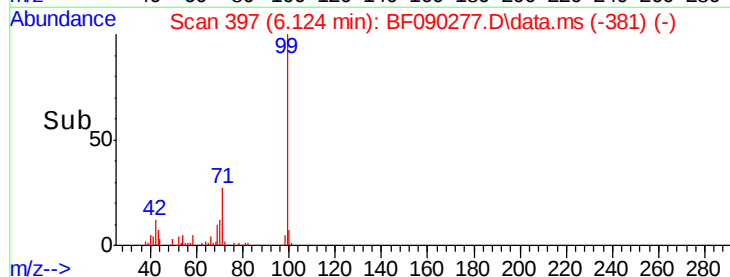
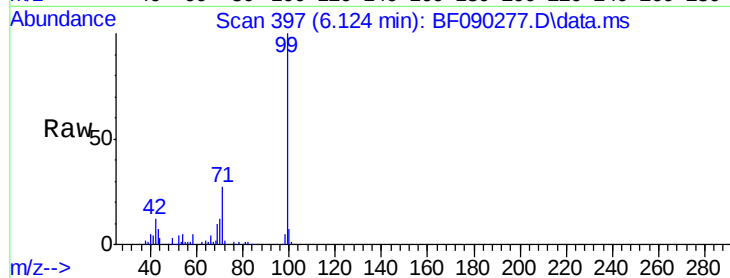
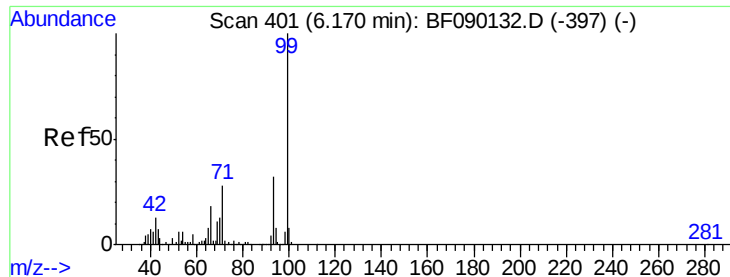
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 160.7 | 128.9 | 193.3 |
| 115     | 70.8  | 55.5  | 83.3  |



#5  
 2-Fluorophenol  
 Concen: 10.57 ng  
 RT: 5.027 min Scan# 301  
 Delta R.T. -0.000 min  
 Lab File: BF090277.D  
 Acq: 28 Sep 2016 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 46.2  | 39.8  | 59.6  |
| 63      | 22.1  | 18.9  | 28.3  |





#7

Phenol-d6

Concen: 12.84 ng

RT: 6.124 min Scan# 39

Delta R.T. -0.012 min

Lab File: BF090277.D

Acq: 28 Sep 2016 13:44

Instrument :

BNA\_F

ClientSampleId :

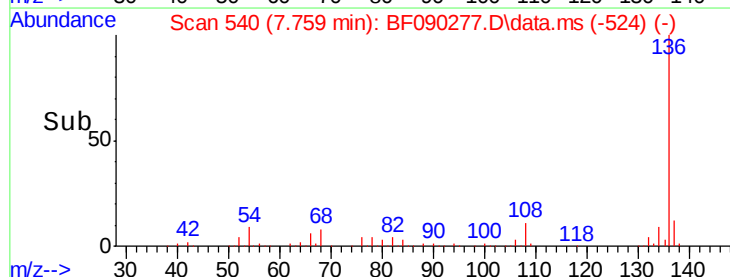
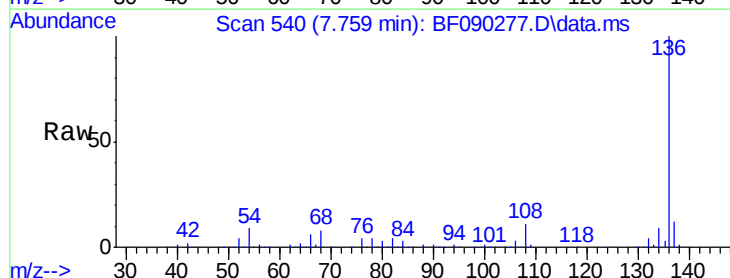
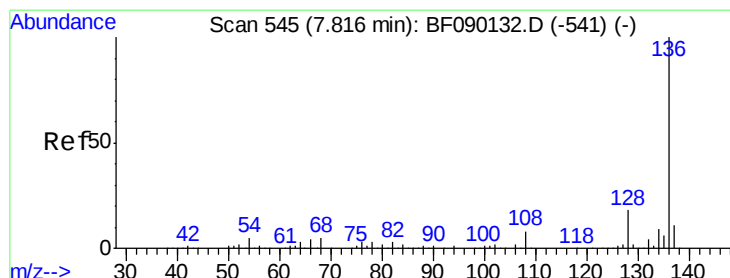
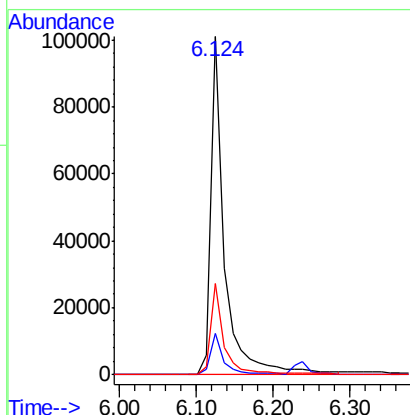
Tot Ion: 99 Resp: 123408

Ion Ratio Lower Upper

99 100

42 12.0 10.6 15.8

71 26.8 23.0 34.6



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.759 min Scan# 540

Delta R.T. -0.012 min

Lab File: BF090277.D

Acq: 28 Sep 2016 13:44

Tgt Ion: 136 Resp: 499336

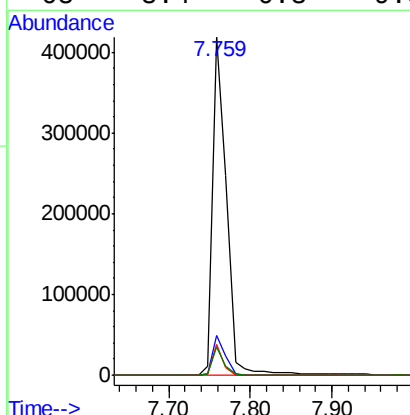
Ion Ratio Lower Upper

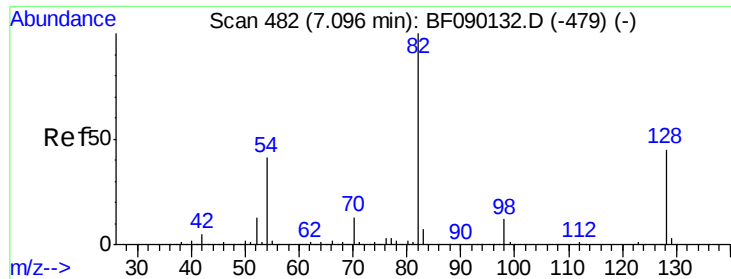
136 100

137 11.8 9.0 13.4

54 9.0 6.4 9.6

68 8.4 6.3 9.5

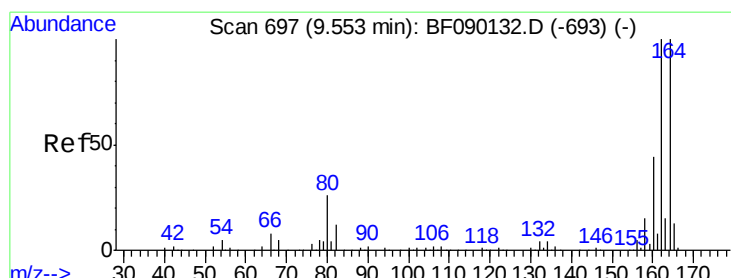
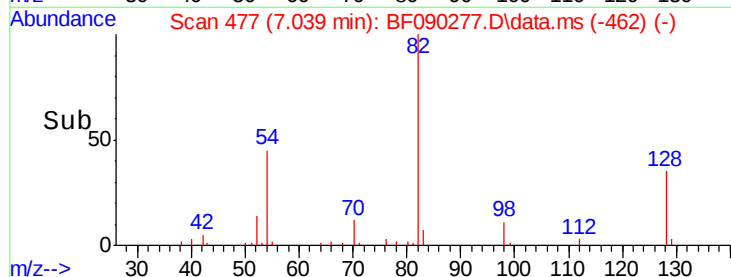
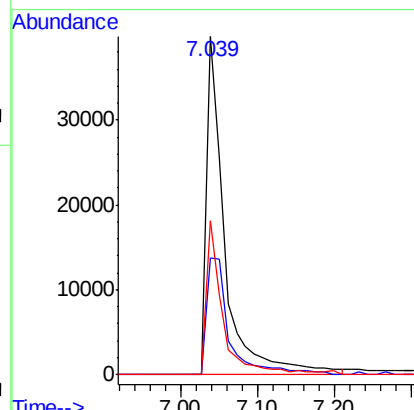
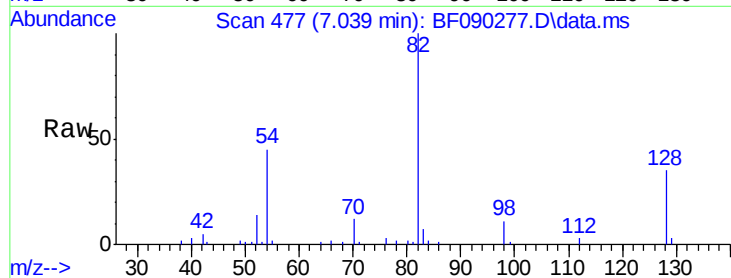




#23  
 Nitrobenzene-d5  
 Concen: 7.56 ng  
 RT: 7.039 min Scan# 47  
 Delta R.T. -0.023 min  
 Lab File: BF090277.D  
 Acq: 28 Sep 2016 13:44

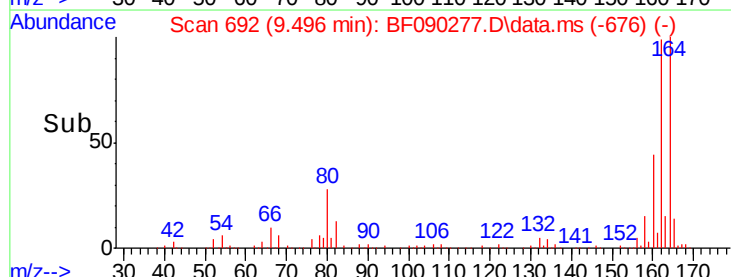
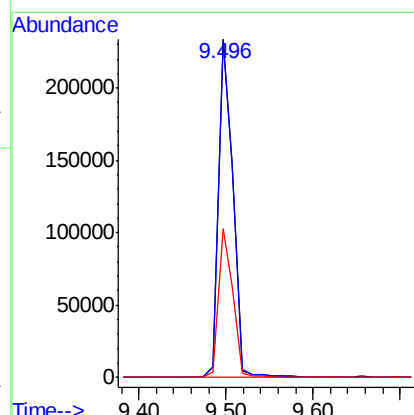
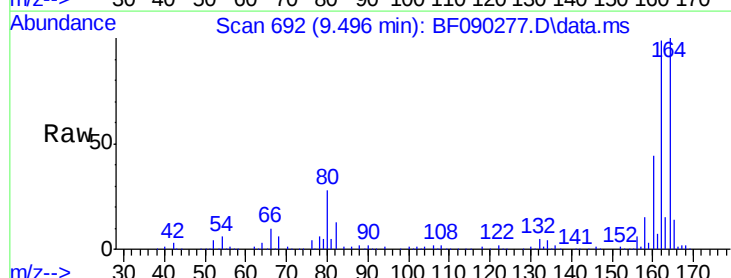
Instrument :  
 BNA\_F  
 ClientSampleId :

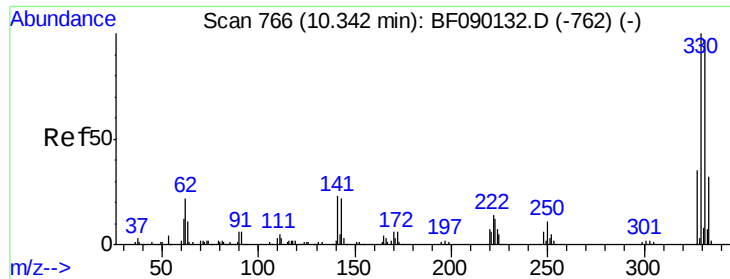
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 34.5  | 37.5  | 56.3# |
| 54      | 45.5  | 31.9  | 47.9  |



#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.496 min Scan# 692  
 Delta R.T. -0.012 min  
 Lab File: BF090277.D  
 Acq: 28 Sep 2016 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 99.3  | 81.4  | 122.2 |
| 160     | 44.0  | 36.6  | 54.8  |

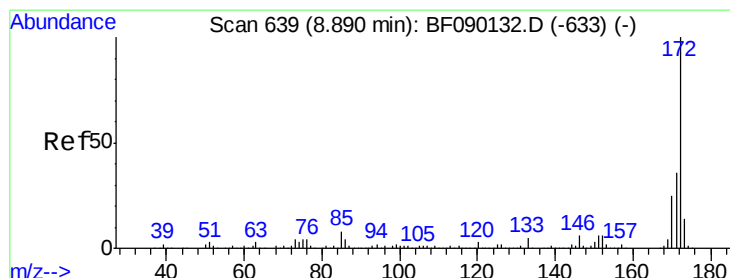
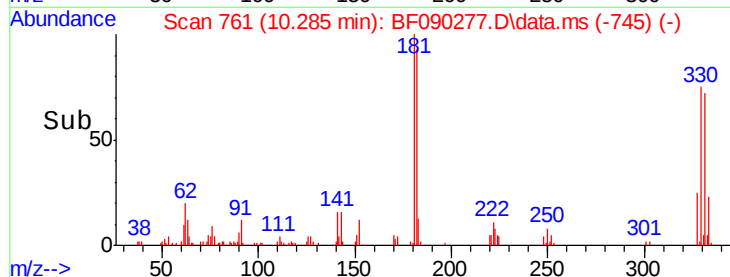
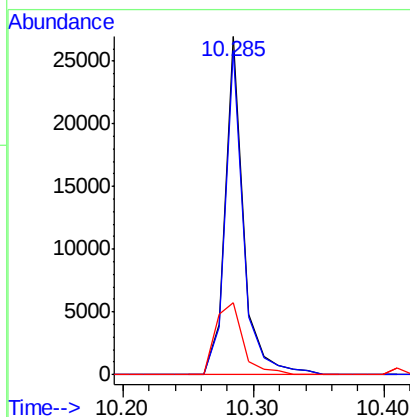
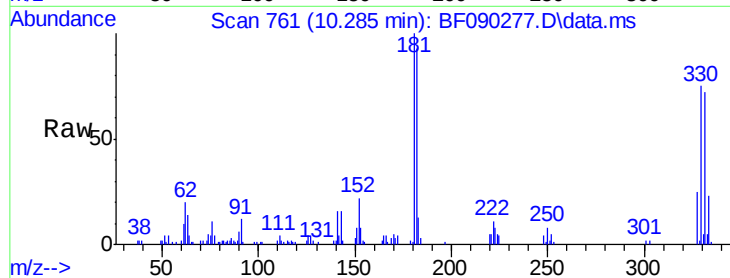




#41  
 2,4,6-Tribromophenol  
 Concen: 11.29 ng  
 RT: 10.285 min Scan# 761  
 Delta R.T. -0.012 min  
 Lab File: BF090277.D  
 Acq: 28 Sep 2016 13:44

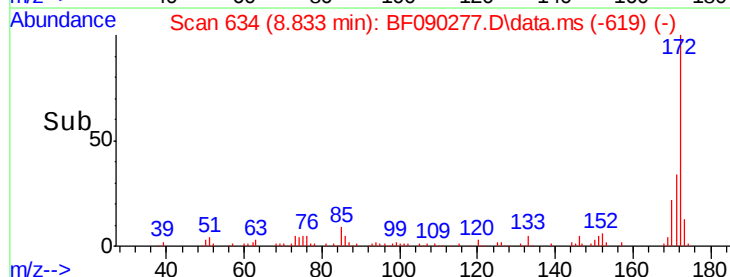
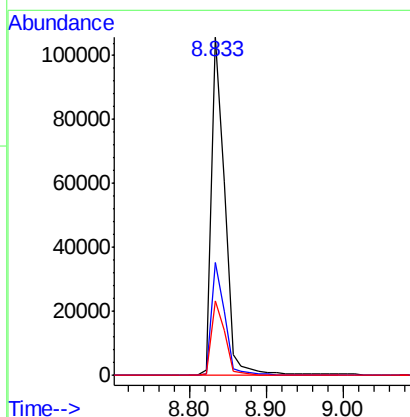
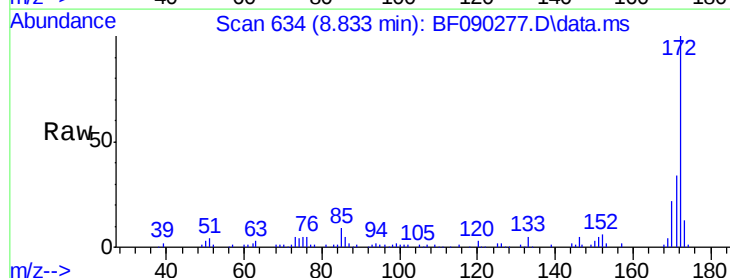
Instrument :  
 BNA\_F  
 ClientSampled :

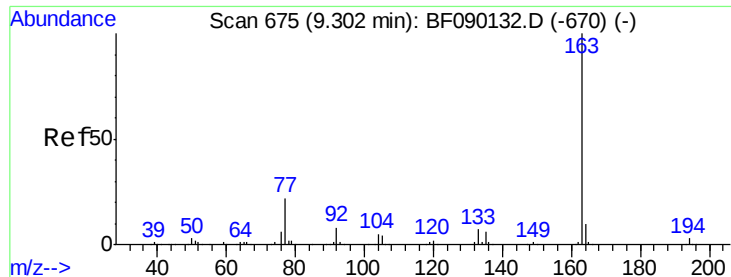
| Tot Ion   | 330   | 332   | 141  |
|-----------|-------|-------|------|
| Resp:     | 26593 |       |      |
| Ion Ratio | 100   | 95.4  | 31.7 |
| Lower     |       | 78.1  | 23.9 |
| Upper     |       | 117.1 | 35.9 |



#44  
 2-Fluorobiphenyl  
 Concen: 9.09 ng  
 RT: 8.833 min Scan# 634  
 Delta R.T. -0.023 min  
 Lab File: BF090277.D  
 Acq: 28 Sep 2016 13:44

| Tgt Ion   | 172    | 171  | 170  |
|-----------|--------|------|------|
| Resp:     | 127071 |      |      |
| Ion Ratio | 100    | 33.5 | 22.1 |
| Lower     |        | 29.2 | 19.8 |
| Upper     |        | 43.8 | 29.8 |

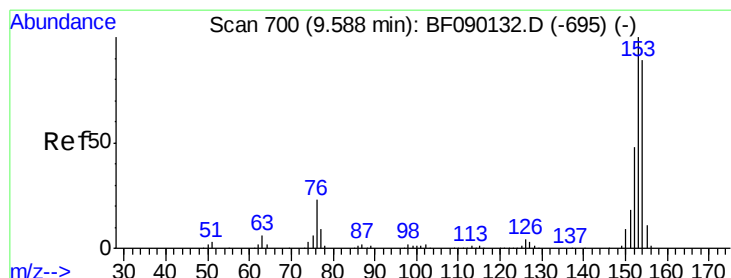
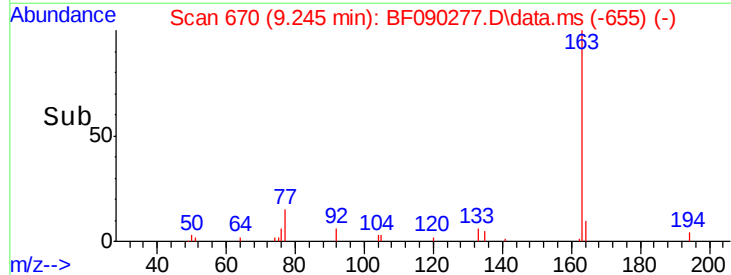
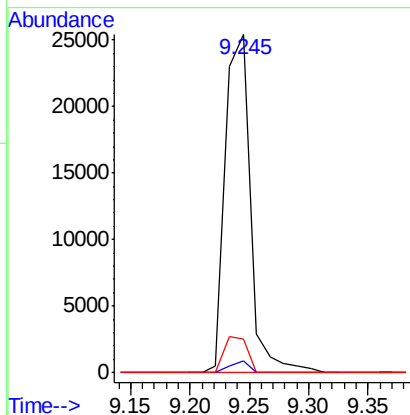
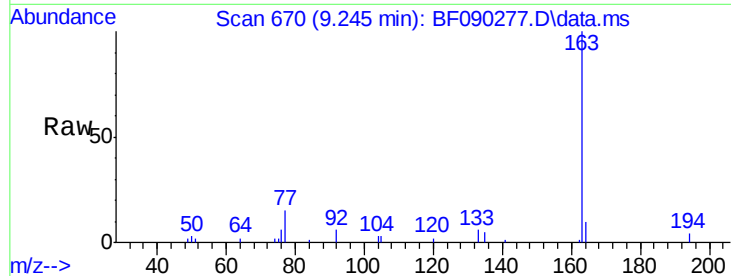




#49  
Dimethylphthalate  
Concen: 2.14 ng  
RT: 9.245 min Scan# 67  
Delta R.T. -0.023 min  
Lab File: BF090277.D  
Acq: 28 Sep 2016 13:44

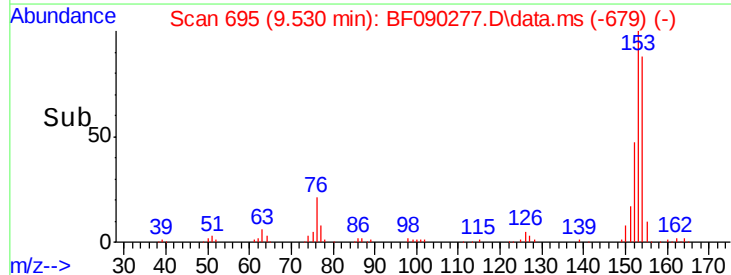
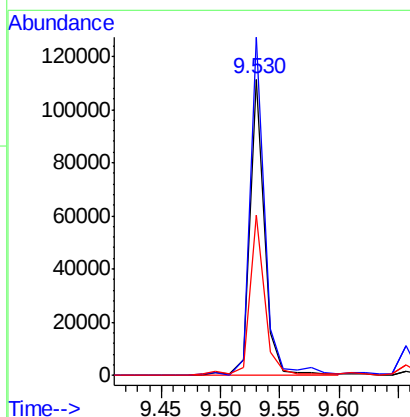
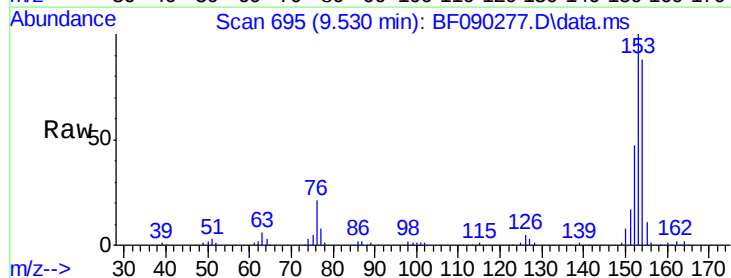
Instrument :  
BNA\_F  
ClientSampleId :

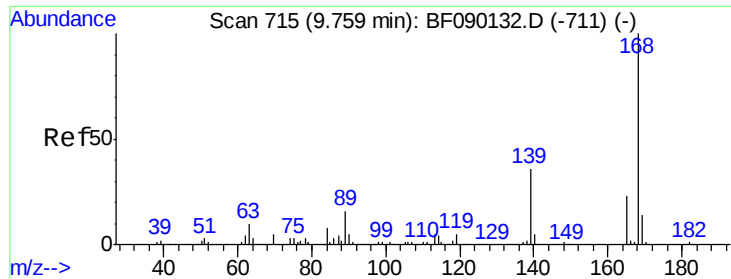
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 3.6   | 2.8   | 4.2   |
| 164     | 9.8   | 8.1   | 12.1  |



#51  
Acenaphthene  
Concen: 6.81 ng  
RT: 9.530 min Scan# 695  
Delta R.T. -0.012 min  
Lab File: BF090277.D  
Acq: 28 Sep 2016 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 114.2 | 90.8  | 136.2 |
| 152     | 54.1  | 44.2  | 66.4  |

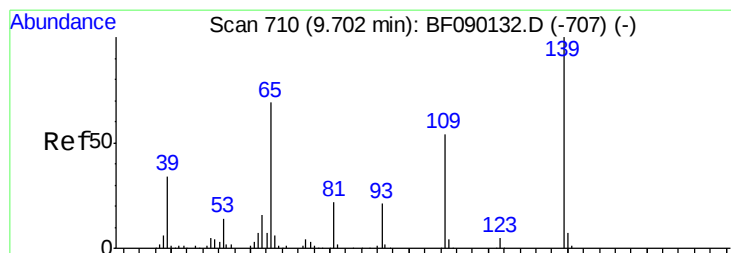
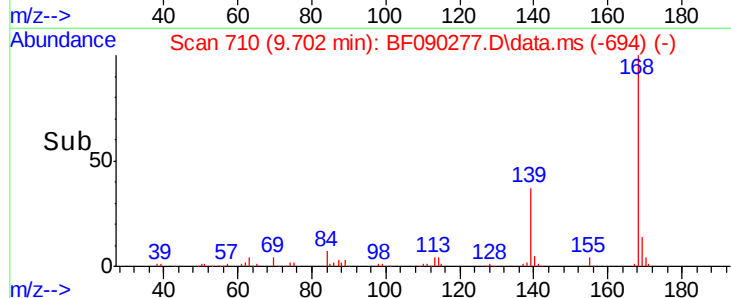
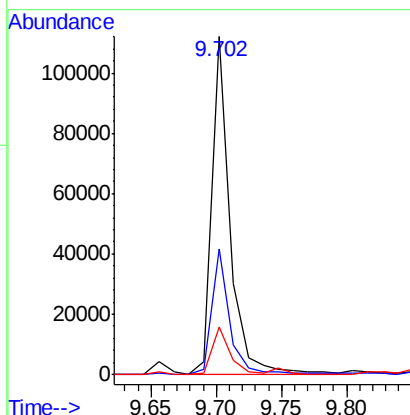
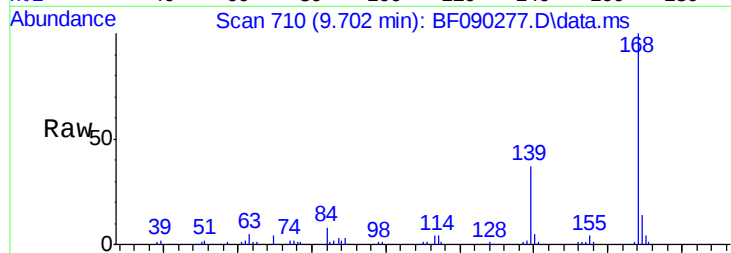




#54  
Dibenzenofuran  
Concen: 5.99 ng  
RT: 9.702 min Scan# 71  
Delta R.T. -0.012 min  
Lab File: BF090277.D  
Acq: 28 Sep 2016 13:44

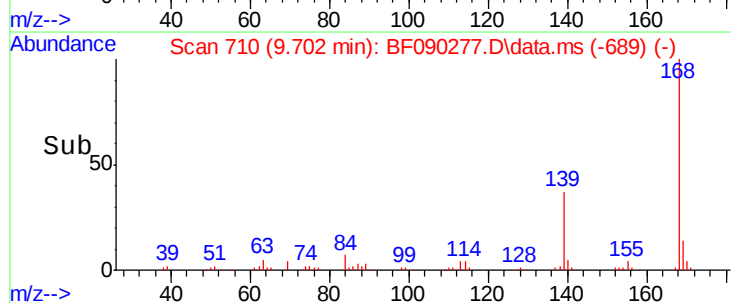
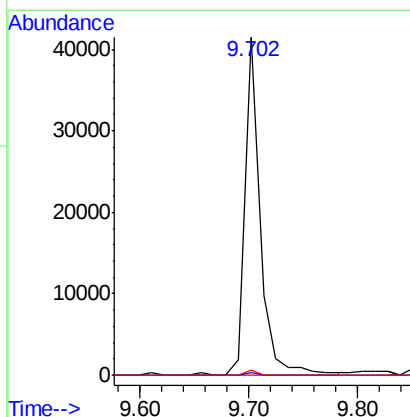
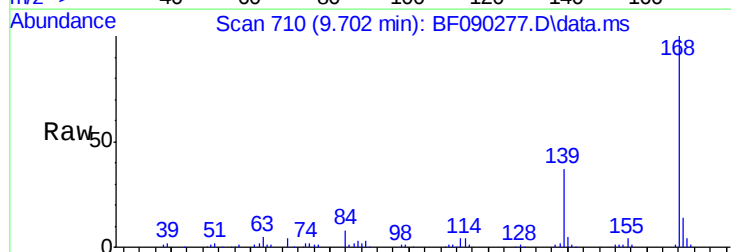
Instrument :  
BNA\_F  
ClientSampleId :

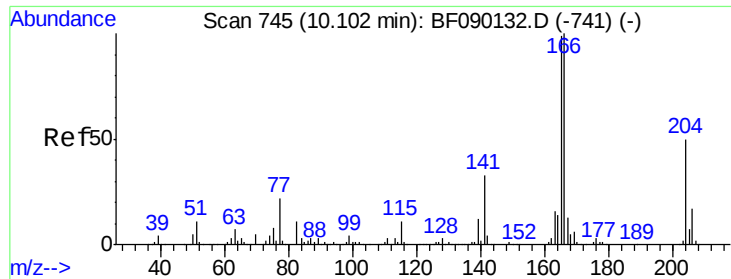
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 168     | 100   |       |       |
| 139     | 37.0  | 28.8  | 43.2  |
| 169     | 13.9  | 10.7  | 16.1  |



#55  
4-Nitrophenol  
Concen: 12.90 ng  
RT: 9.702 min Scan# 710  
Delta R.T. 0.046 min  
Lab File: BF090277.D  
Acq: 28 Sep 2016 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 139     | 100   |       |       |
| 109     | 0.8   | 35.6  | 75.6# |
| 65      | 1.7   | 55.5  | 95.5# |

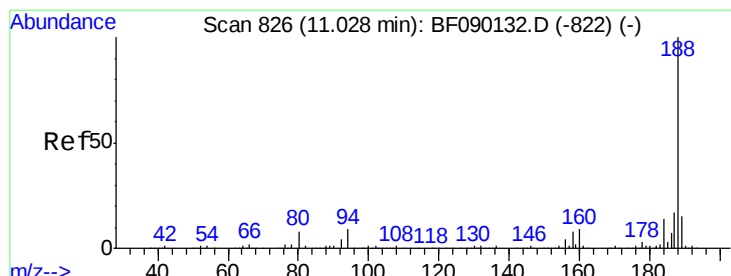
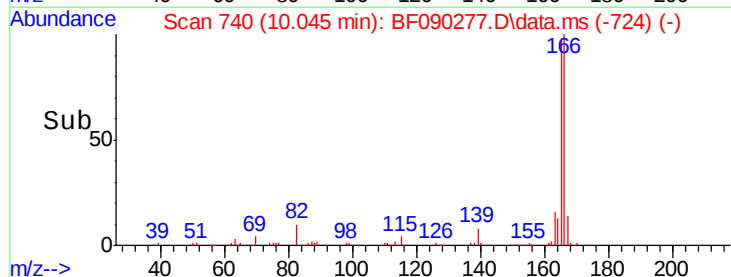
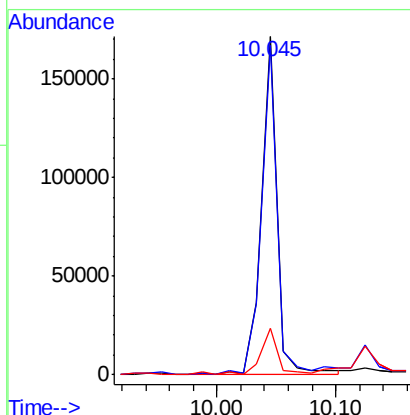
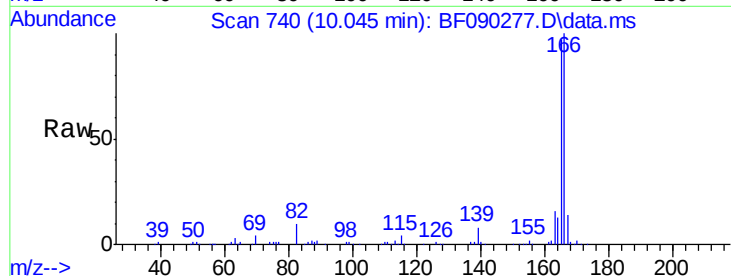




#57  
 Fluorene  
 Concen: 11.45 ng  
 RT: 10.045 min Scan# 74  
 Delta R.T. -0.012 min  
 Lab File: BF090277.D  
 Acq: 28 Sep 2016 13:44

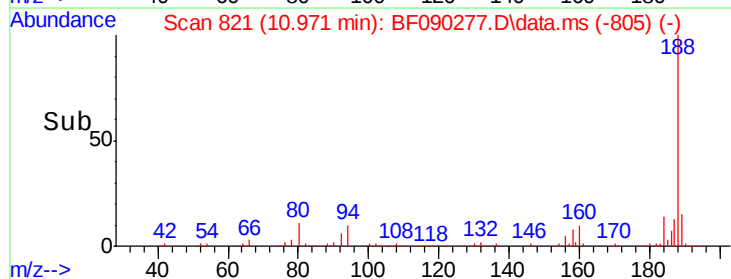
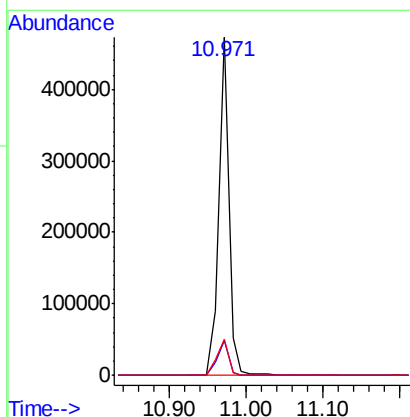
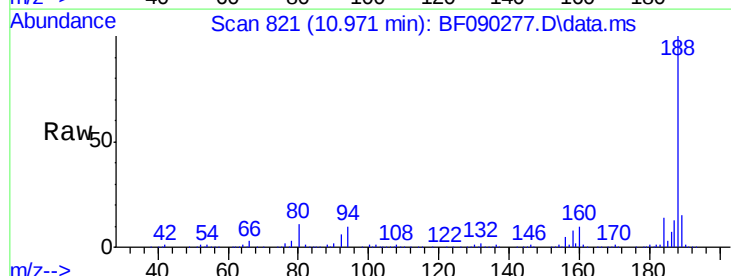
Instrument :  
 BNA\_F  
 ClientSampleId :

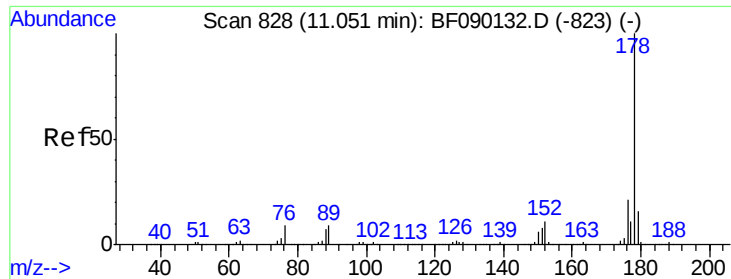
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 97.4  | 78.5  | 117.7 |
| 167     | 13.6  | 11.2  | 16.8  |



#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 10.971 min Scan# 821  
 Delta R.T. -0.012 min  
 Lab File: BF090277.D  
 Acq: 28 Sep 2016 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 10.2  | 10.5  | 15.7# |
| 80      | 10.8  | 11.2  | 16.8# |





#70

Phenanthrene

Concen: 38.44 ng

RT: 10.993 min Scan# 82

Delta R.T. -0.012 min

Lab File: BF090277.D

Acq: 28 Sep 2016 13:44

Instrument :

BNA\_F

ClientSampleId :

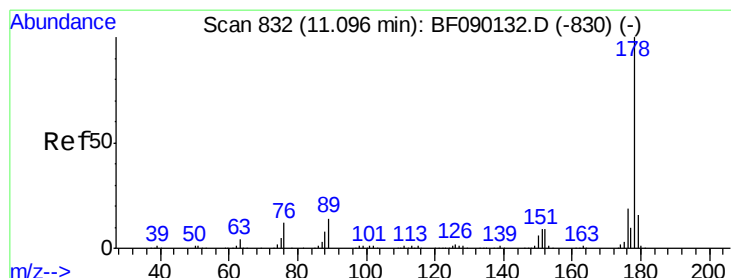
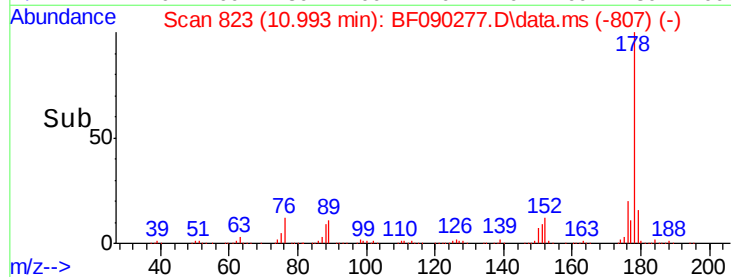
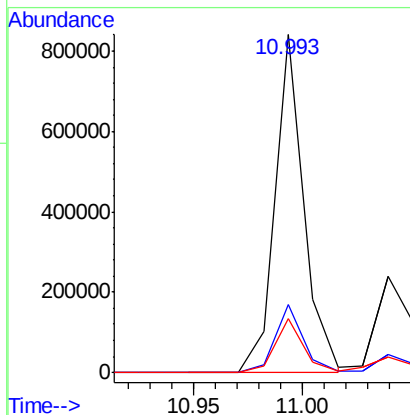
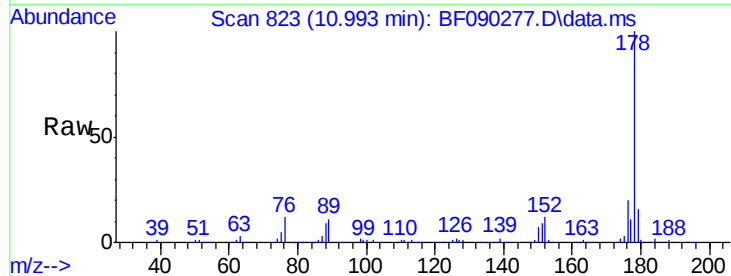
Tot Ion:178 Resp: 781574

Ion Ratio Lower Upper

178 100

176 20.1 15.9 23.9

179 15.8 12.9 19.3



#71

Anthracene

Concen: 13.56 ng

RT: 11.039 min Scan# 827

Delta R.T. -0.023 min

Lab File: BF090277.D

Acq: 28 Sep 2016 13:44

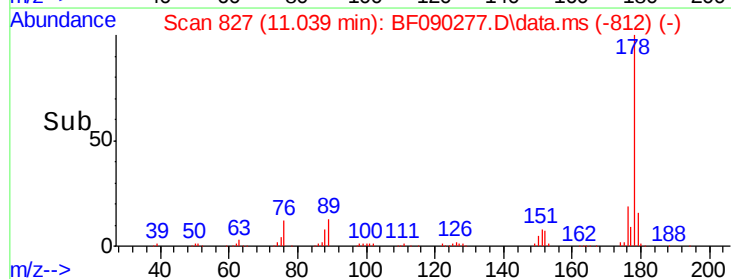
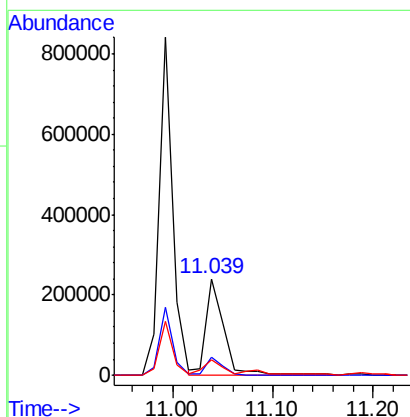
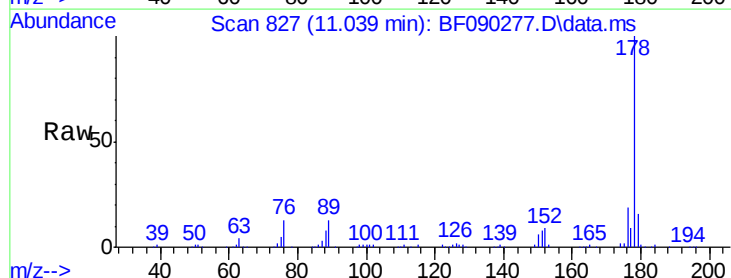
Tgt Ion:178 Resp: 289155

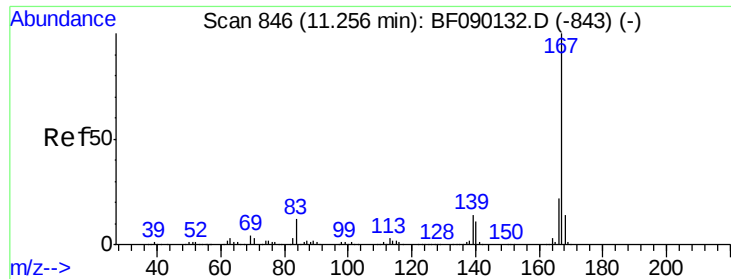
Ion Ratio Lower Upper

178 100

176 18.8 15.8 23.6

179 16.0 12.6 19.0

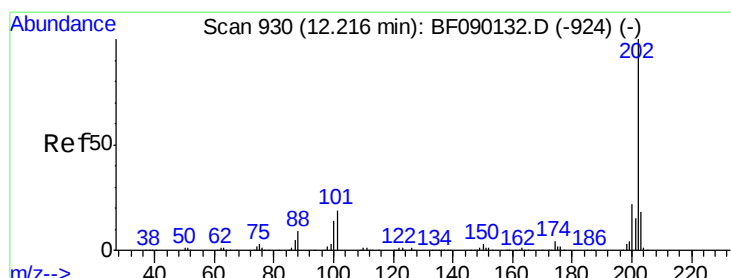
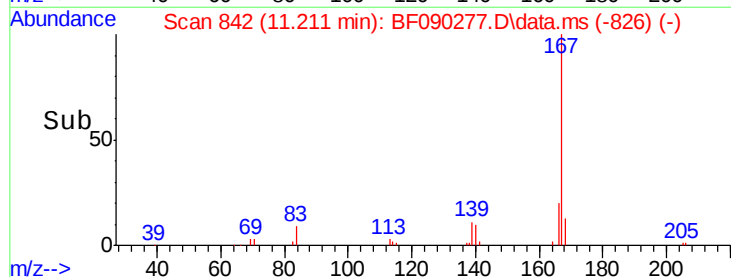
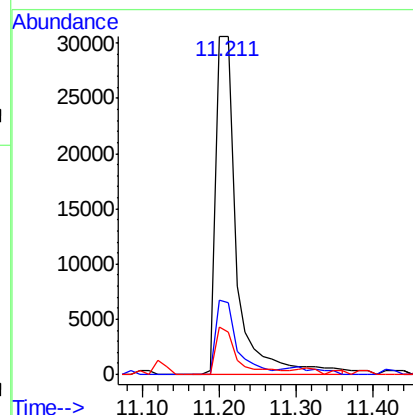
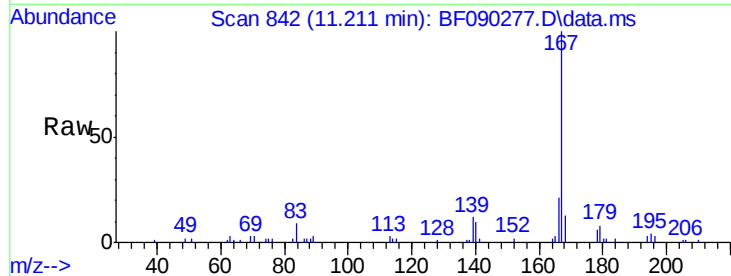




#72  
 Carbazole  
 Concen: 2.57 ng  
 RT: 11.211 min Scan# 84  
 Delta R.T. -0.012 min  
 Lab File: BF090277.D  
 Acq: 28 Sep 2016 13:44

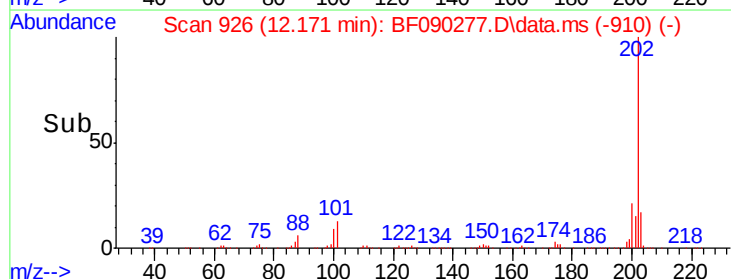
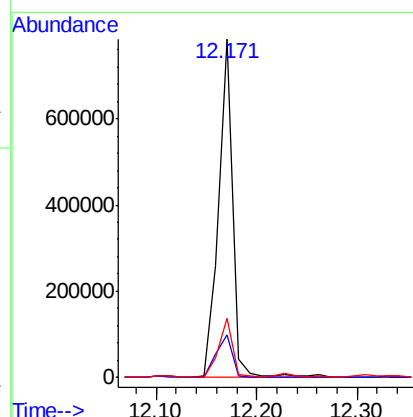
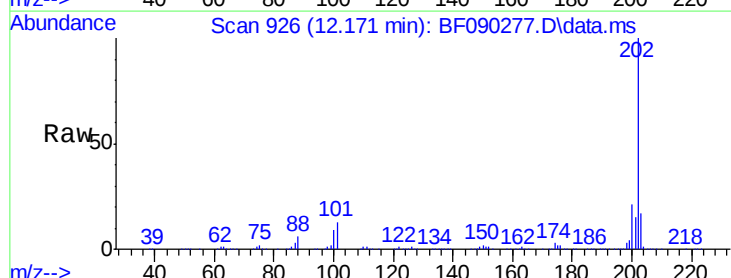
Instrument :  
 BNA\_F  
 ClientSampleId :

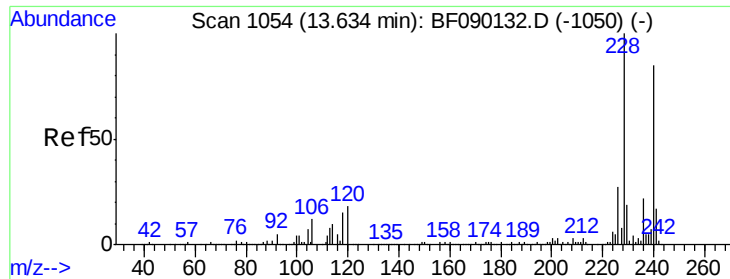
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 21.4  | 18.0  | 27.0  |
| 139     | 12.4  | 10.4  | 15.6  |



#74  
 Fluoranthene  
 Concen: 35.15 ng  
 RT: 12.171 min Scan# 926  
 Delta R.T. -0.012 min  
 Lab File: BF090277.D  
 Acq: 28 Sep 2016 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 12.7  | 0.0   | 36.1  |
| 203     | 17.4  | 0.0   | 38.2  |

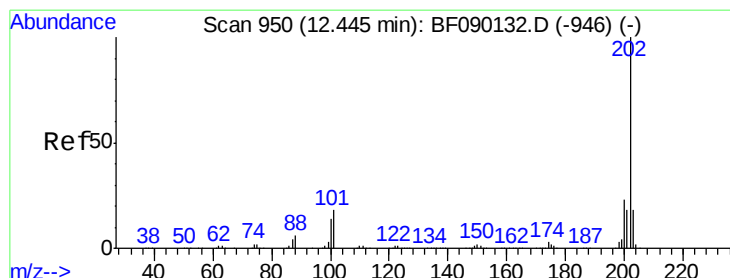
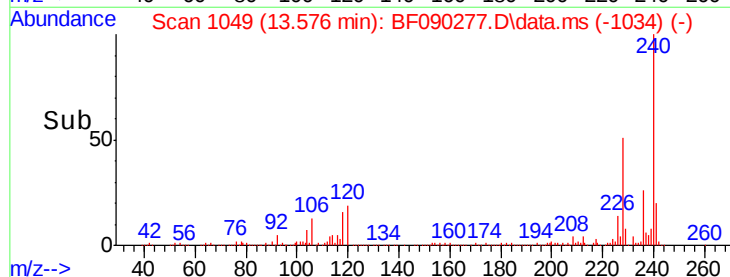
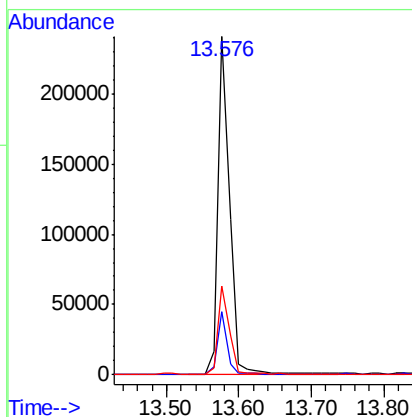
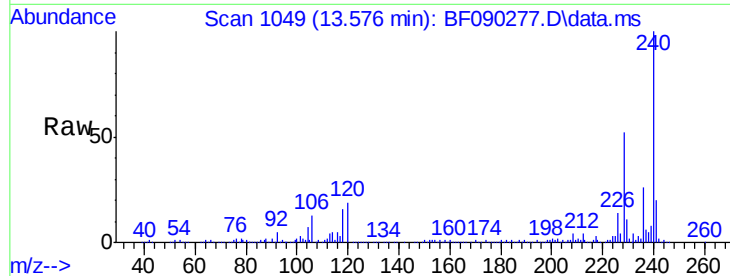




#75  
Chrysene-d12  
Concen: 20.00 ng  
RT: 13.576 min Scan# 10  
Delta R.T. -0.023 min  
Lab File: BF090277.D  
Acq: 28 Sep 2016 13:44

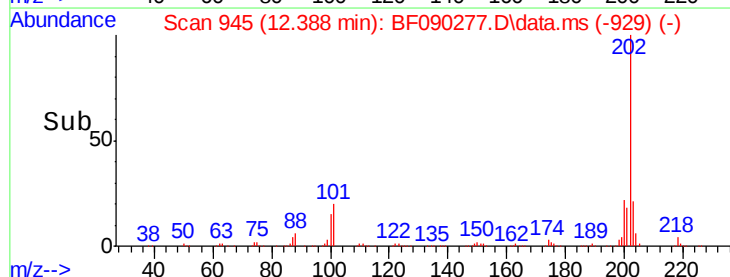
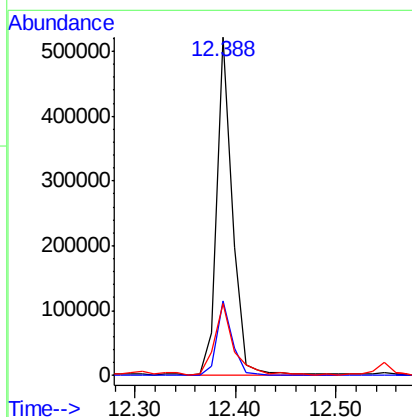
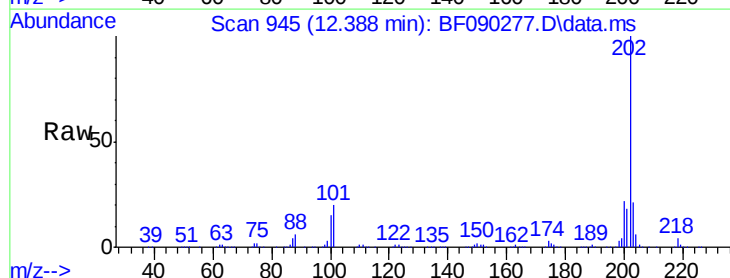
Instrument :  
BNA\_F  
ClientSampled :

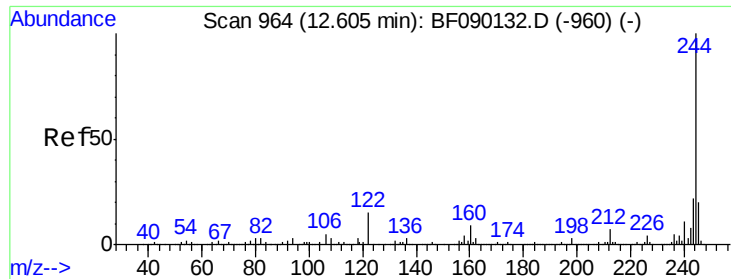
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 18.5  | 10.6  | 16.0  |
| 236     | 26.3  | 21.6  | 32.4  |



#77  
Pyrene  
Concen: 30.28 ng  
RT: 12.388 min Scan# 945  
Delta R.T. -0.012 min  
Lab File: BF090277.D  
Acq: 28 Sep 2016 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.9  | 17.9  | 26.9  |
| 203     | 21.3  | 14.2  | 21.4  |





#78

Terphenyl-d14

Concen: 9.49 ng

RT: 12.548 min Scan# 95

Delta R.T. -0.012 min

Lab File: BF090277.D

Acq: 28 Sep 2016 13:44

Instrument :

BNA\_F

ClientSampleId :

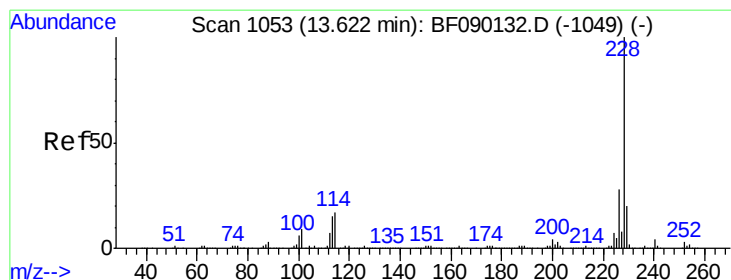
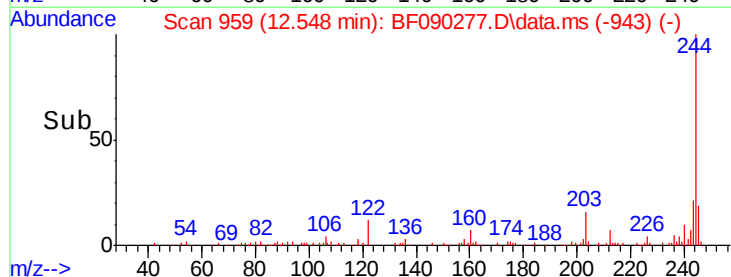
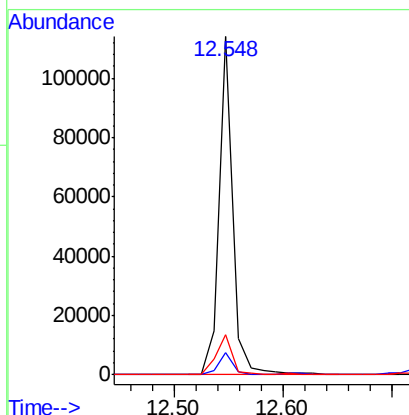
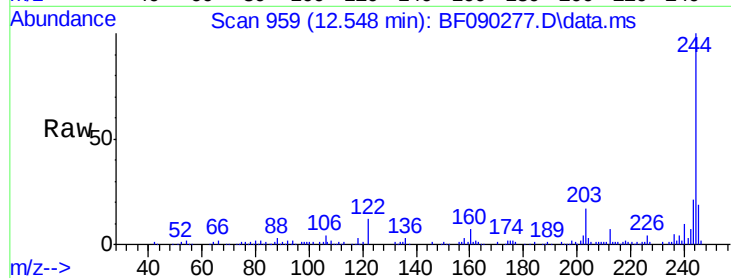
Tot Ion:244 Resp: 100458

Ion Ratio Lower Upper

244 100

212 6.5 5.8 8.8

122 11.9 9.4 14.0



#80

Benzo(a)anthracene

Concen: 16.95 ng

RT: 13.565 min Scan# 1048

Delta R.T. -0.023 min

Lab File: BF090277.D

Acq: 28 Sep 2016 13:44

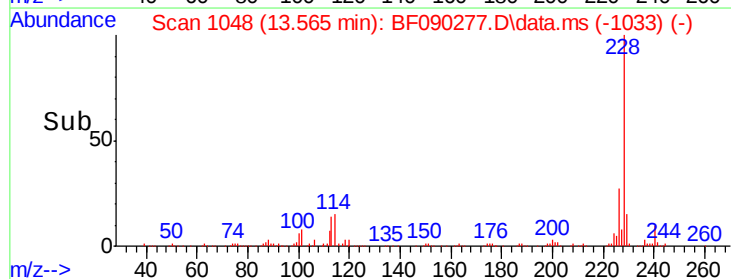
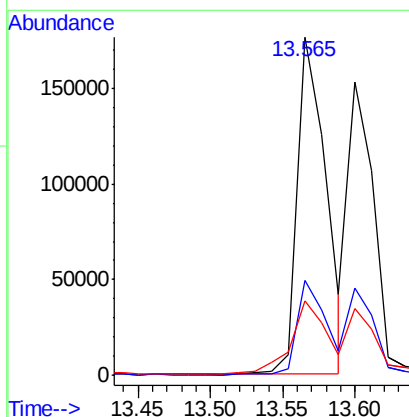
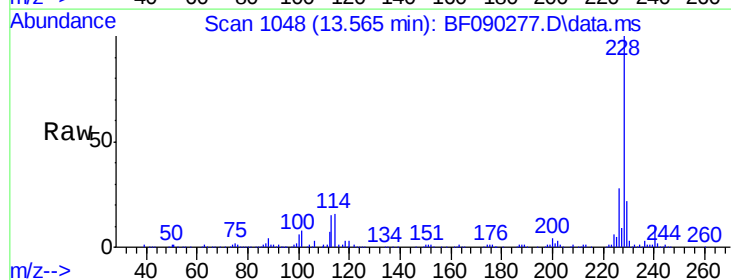
Tgt Ion:228 Resp: 245110

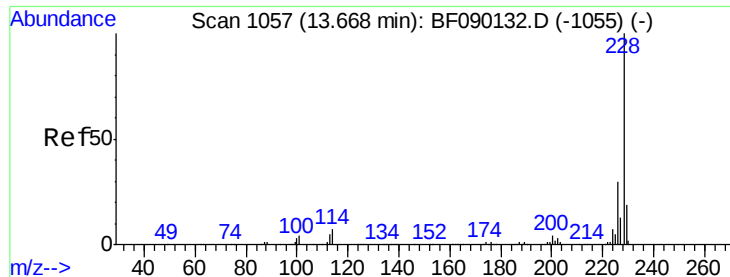
Ion Ratio Lower Upper

228 100

226 27.9 22.0 33.0

229 22.0 16.2 24.2





#82

Chrysene

Concen: 17.40 ng

RT: 13.565 min Scan# 1057

Delta R.T. -0.057 min

Lab File: BF090277.D

Acq: 28 Sep 2016 13:44

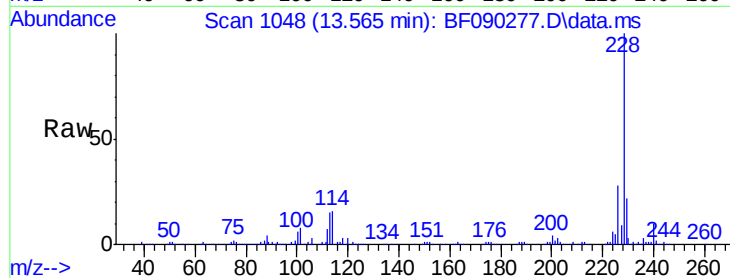
Instrument :

BNA\_F

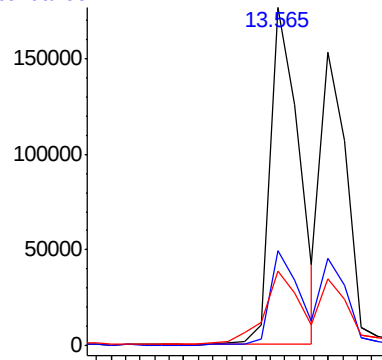
ClientSampleId :

Tot Ion:228 Resp: 245110

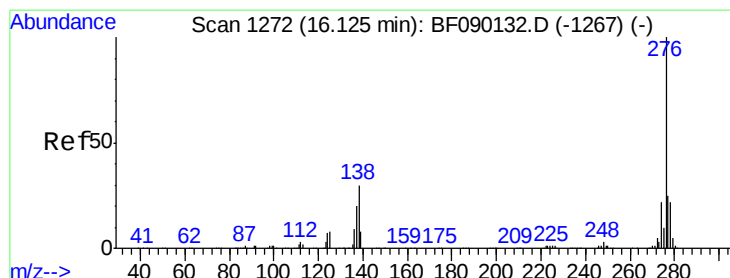
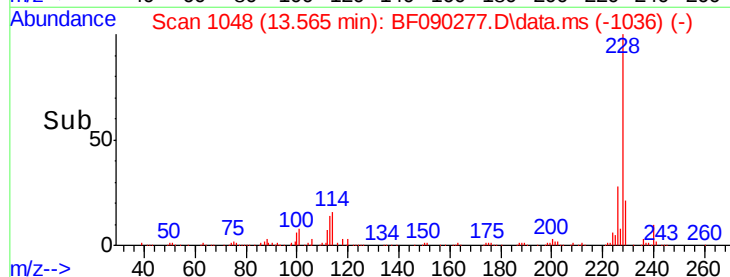
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 27.9  | 24.6  | 37.0  |
| 229 | 22.0  | 16.2  | 24.4  |



Abundance



Time-->



#85

Indeno(1,2,3-cd)pyrene

Concen: 7.17 ng

RT: 16.034 min Scan# 1264

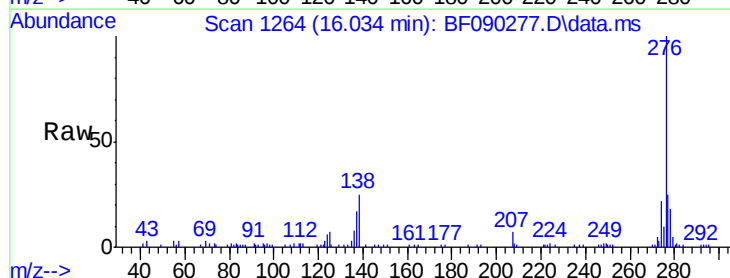
Delta R.T. -0.023 min

Lab File: BF090277.D

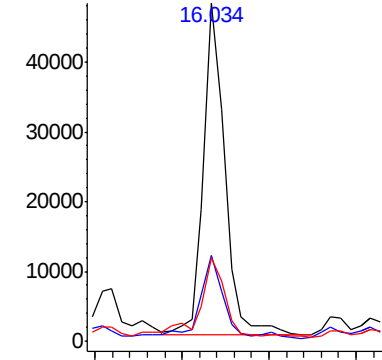
Acq: 28 Sep 2016 13:44

Tgt Ion:276 Resp: 81634

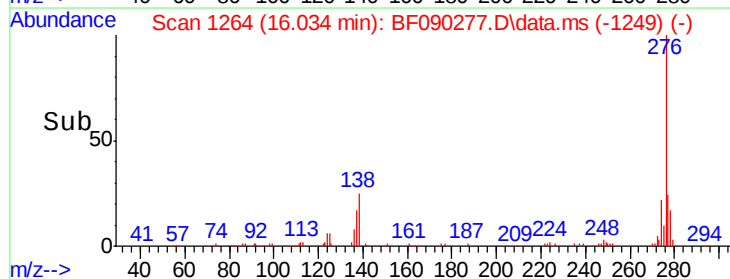
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 276 | 100   |       |       |
| 138 | 26.4  | 25.9  | 38.9  |
| 277 | 29.4  | 19.9  | 29.9  |

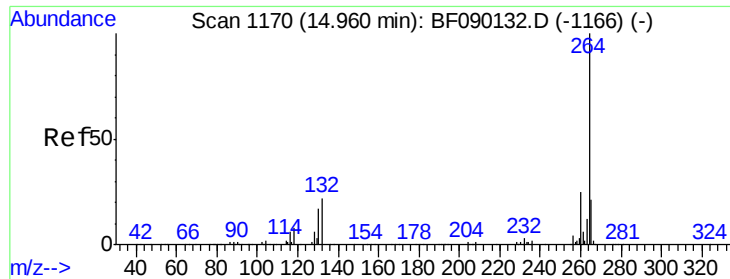


Abundance



Time-->

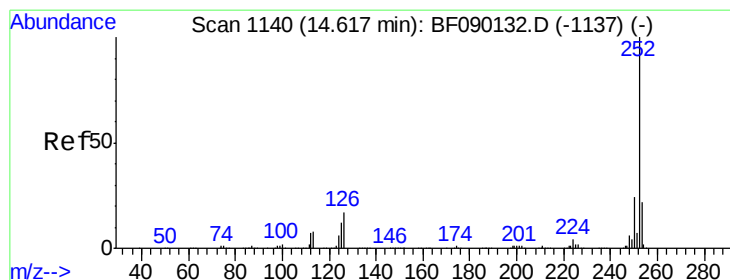
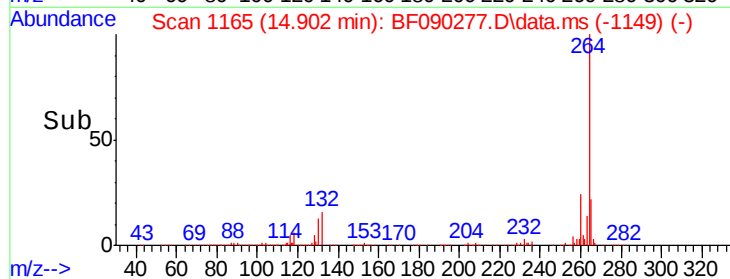
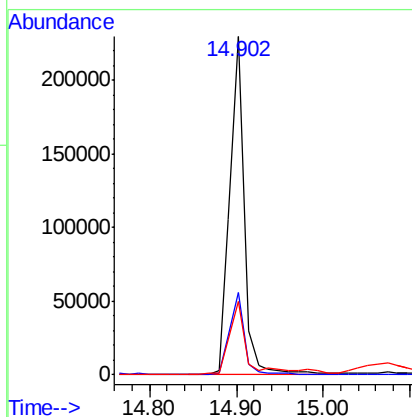
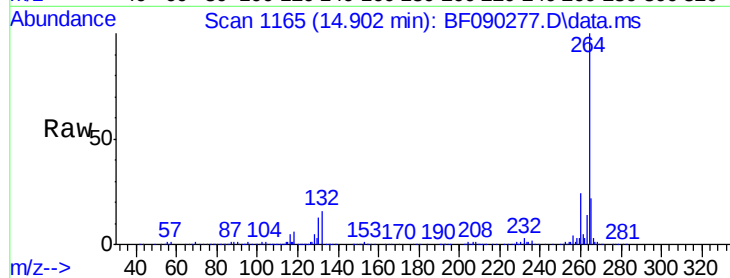




#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 14.902 min Scan# 1170  
Delta R.T. -0.012 min  
Lab File: BF090277.D  
Acq: 28 Sep 2016 13:44

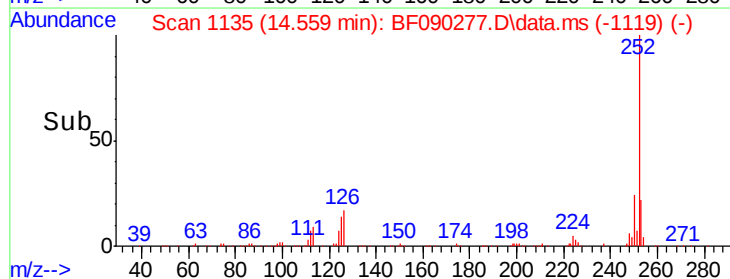
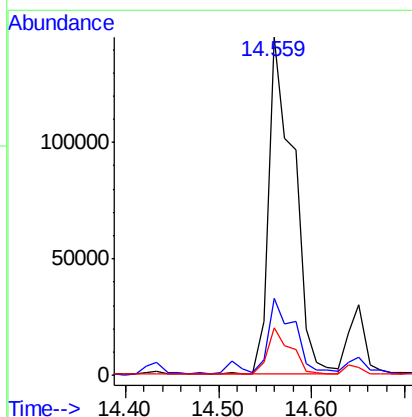
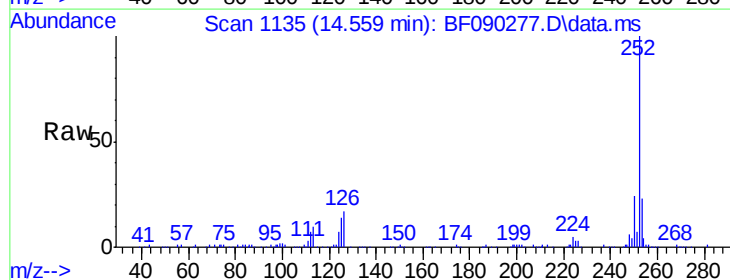
Instrument :  
BNA\_F  
ClientSampleId :

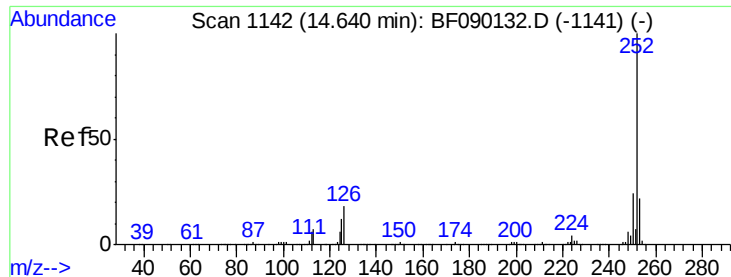
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.4  | 19.5  | 29.3  |
| 265     | 21.7  | 17.0  | 25.4  |



#87  
Benzo(b)fluoranthene  
Concen: 18.41 ng  
RT: 14.559 min Scan# 1135  
Delta R.T. -0.012 min  
Lab File: BF090277.D  
Acq: 28 Sep 2016 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 17.9  | 26.9  |
| 125     | 14.2  | 12.7  | 19.1  |





#88

Benzo(k)fluoranthene

Concen: 2.57 ng

RT: 14.651 min Scan# 1142

Delta R.T. 0.057 min

Lab File: BF090277.D

Acq: 28 Sep 2016 13:44

Instrument :

BNA\_F

ClientSampleId :

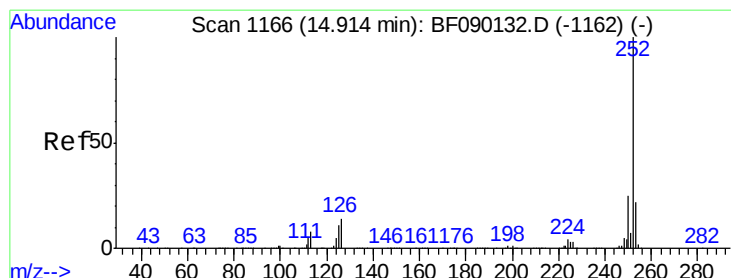
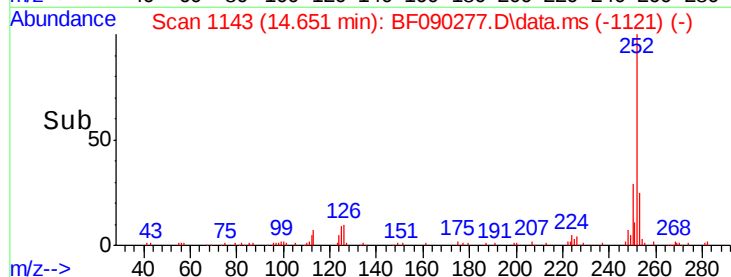
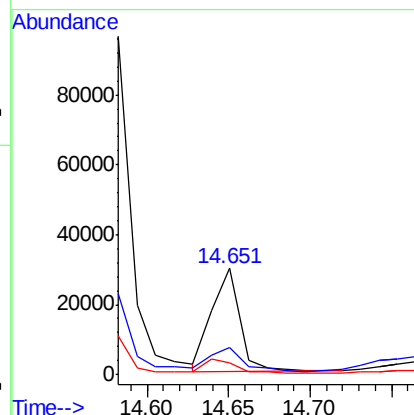
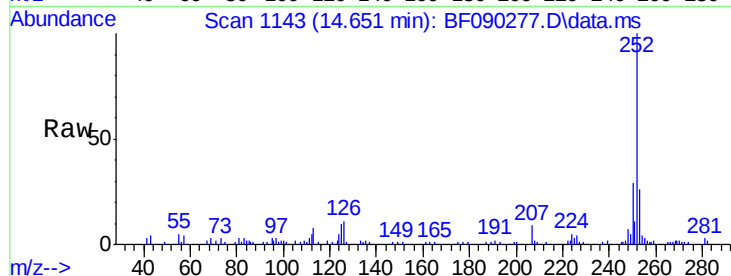
Tot Ion:252 Resp: 35604

Ion Ratio Lower Upper

252 100

253 25.8 17.8 26.8

125 10.4 7.8 11.6



#89

Benzo(a)pyrene

Concen: 11.90 ng

RT: 14.845 min Scan# 1160

Delta R.T. -0.023 min

Lab File: BF090277.D

Acq: 28 Sep 2016 13:44

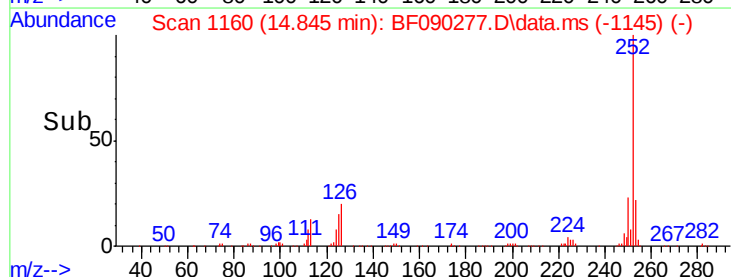
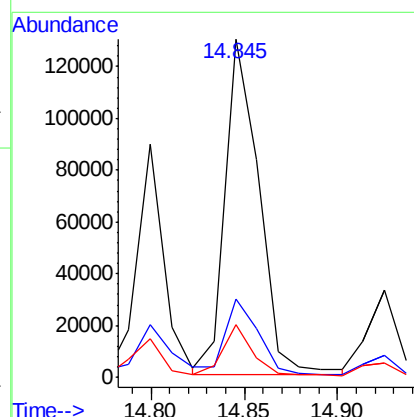
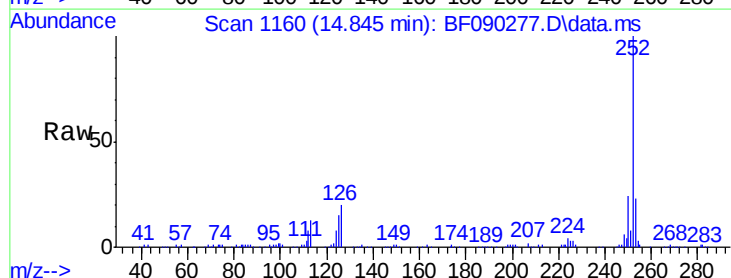
Tgt Ion:252 Resp: 165339

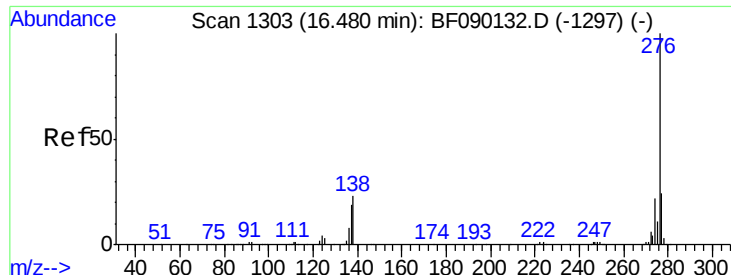
Ion Ratio Lower Upper

252 100

253 23.0 17.4 26.0

125 15.5 7.7 11.5#





#91

Benzo(a,h,i)perylene

Concen: 6.31 ng

RT: 16.377 min Scan# 12

Delta R.T. -0.023 min

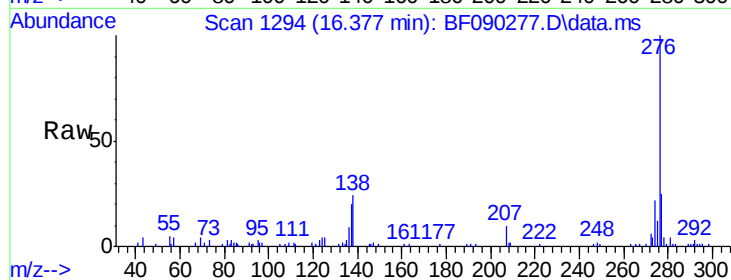
Lab File: BF090277.D

Acq: 28 Sep 2016 13:44

Instrument :

BNA\_F

ClientSampleId :



Tot Ion: 276 Resp: 66920

Ion Ratio Lower Upper

276 100

277 24.7 18.9 28.3

138 23.5 23.3 34.9

