

Data Path : Z:\HPCHEM1\BNA F\DATA\BF042517\  
 Data File : BF094624.D  
 Acq On : 26 Apr 2017 1:06  
 Operator : SJ/MA  
 Sample : I2821-01  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Apr 26 05:35:30 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF041717.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Apr 17 14:59:23 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 5.75  | 152  | 113090   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 7.25  | 136  | 419454   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10      | 9.39  | 164  | 163561   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.21 | 188  | 245145   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12          | 14.46 | 240  | 233092   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 16.09 | 264  | 162196   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 4.30  | 112  | 463685   | 68.02  | ng    | 0.00     |
| 7) Phenol-d6                | 5.39  | 99   | 174842   | 21.76  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 6.41  | 82   | 595056   | 87.60  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.37 | 330  | 179110   | 140.00 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 8.58  | 172  | 1132324  | 101.86 | ng    | 0.00     |
| 78) Terphenyl-d14           | 13.19 | 244  | 736501   | 84.46  | ng    | 0.00     |

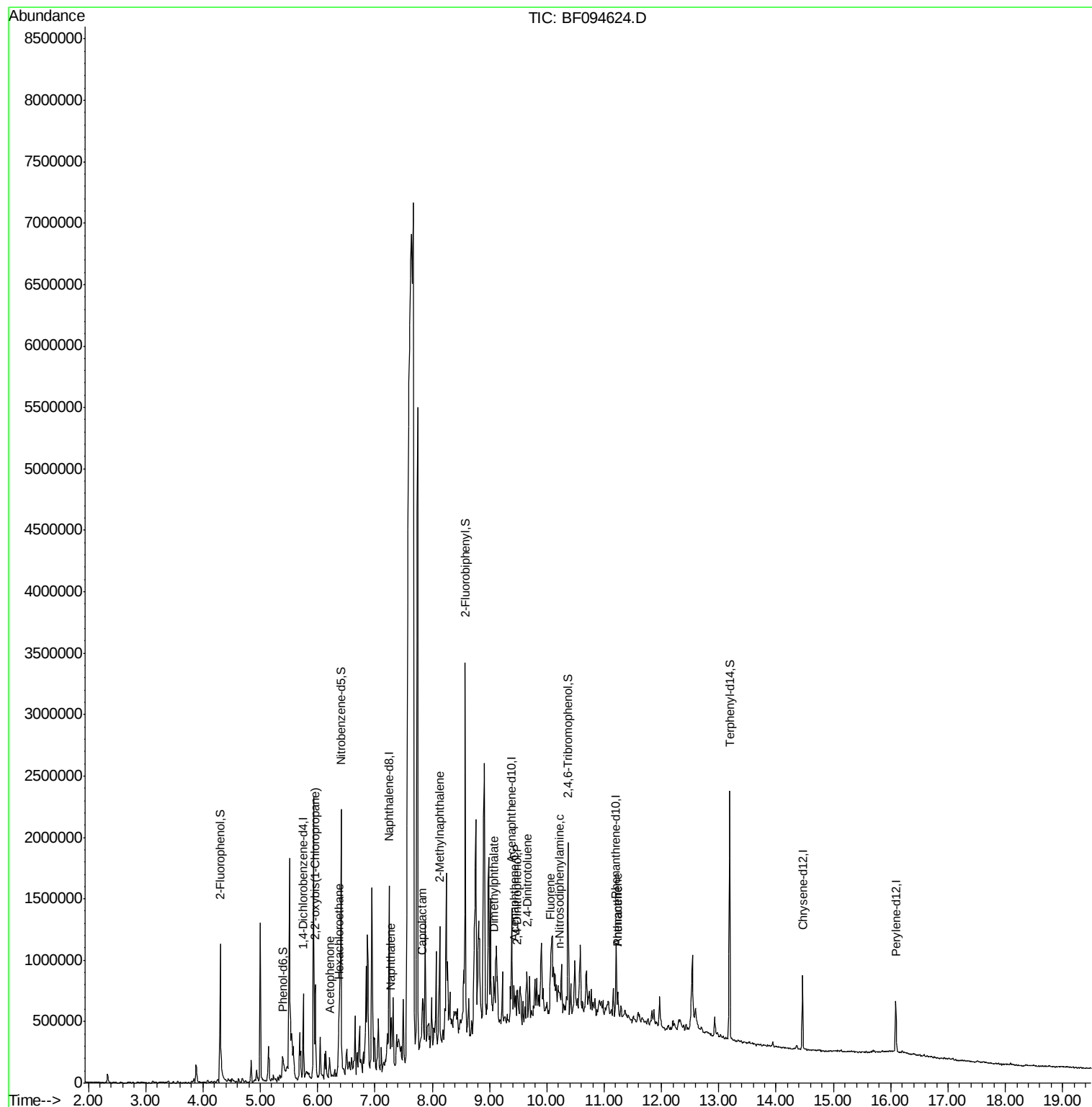
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|--------------------------------|-------|------|----------|-------|-------|--------|
| 16) 2,2'-oxybis(1-Chloropropan | 5.96  | 45   | 24223    | 2.56  | ng    | 74     |
| 18) Hexachloroethane           | 6.37  | 117  | 91200    | 30.77 | ng    | # 4    |
| 22) Acetophenone               | 6.21  | 105  | 54516    | 5.35  | ng    | # 50   |
| 31) Naphthalene                | 7.27  | 128  | 101025   | 5.01  | ng    | 97     |
| 35) Caprolactam                | 7.82  | 113  | 8267     | 4.53  | ng    | # 30   |
| 37) 2-Methylnaphthalene        | 8.13  | 142  | 298878   | 21.66 | ng    | 98     |
| 49) Dimethylphthalate          | 9.08  | 163  | 112536   | 9.23  | ng    | # 90   |
| 51) Acenaphthene               | 9.42  | 154  | 37529    | 3.78  | ng    | 97     |
| 53) 2,4-Dinitrophenol          | 9.48  | 184  | 154      | 5.85  | ng    | # 1    |
| 56) 2,4-Dinitrotoluene         | 9.65  | 165  | 8262     | 2.46  | ng    | # 48   |
| 57) Fluorene                   | 10.06 | 166  | 48128    | 4.29  | ng    | # 93   |
| 65) n-Nitrosodiphenylamine     | 10.22 | 169  | 23752    | 2.79  | ng    | # 79   |
| 70) Phenanthrene               | 11.24 | 178  | 81680    | 5.92  | ng    | 98     |
| 71) Anthracene                 | 11.24 | 178  | 81680    | 5.72  | ng    | 97     |

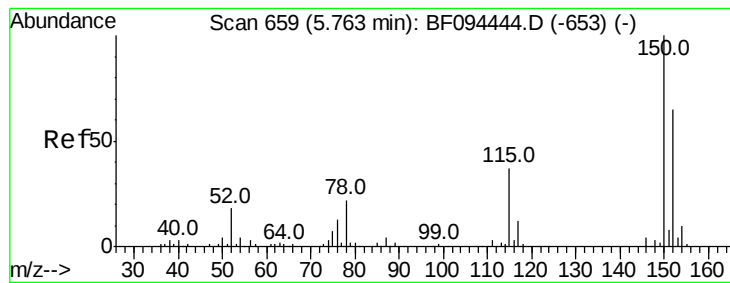
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Mon Apr 17 14:59:23 2017  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 5.75 min Scan# 649

Delta R.T. -0.01 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

Instrument :  
BNA\_F  
ClientSampled :

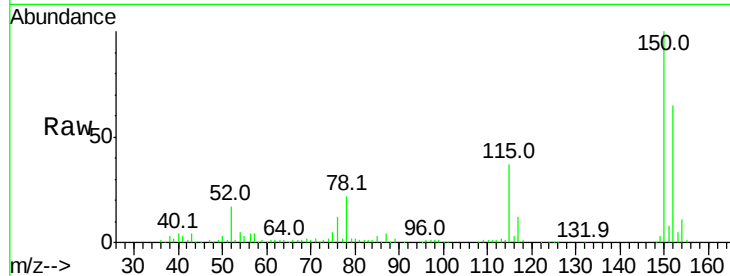
Tot Ion:152 Resp: 113090

Ion Ratio Lower Upper

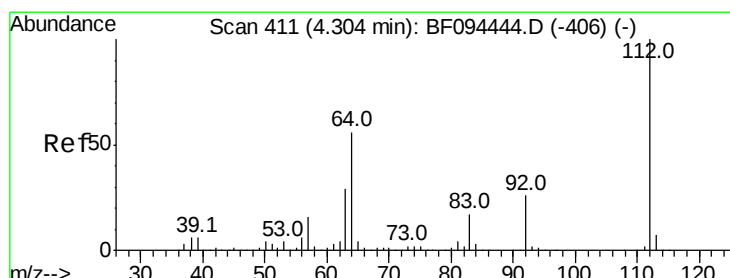
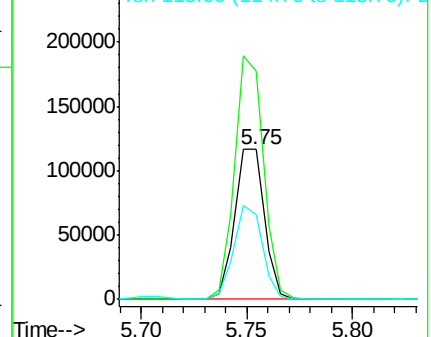
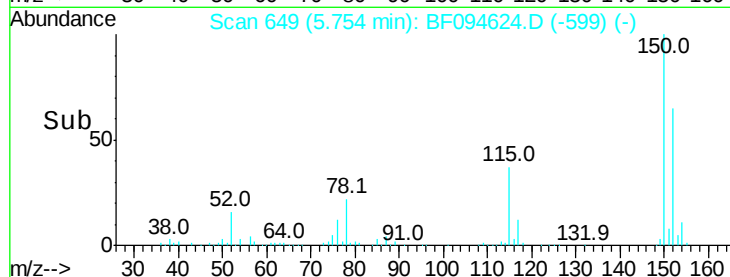
152 100

150 152.9 126.2 189.2

115 56.9 52.2 78.2



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: 68.02 ng

RT: 4.30 min Scan# 402

Delta R.T. -0.00 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

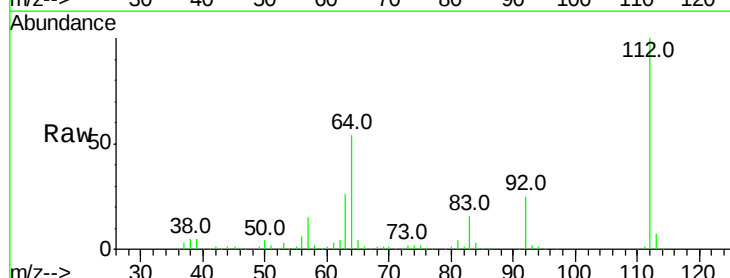
Tgt Ion:112 Resp: 463685

Ion Ratio Lower Upper

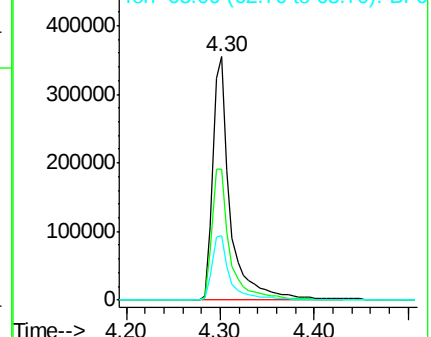
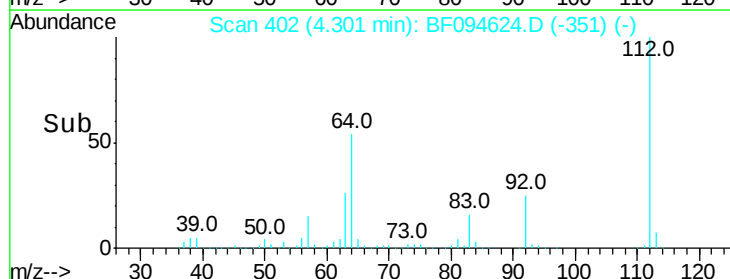
112 100

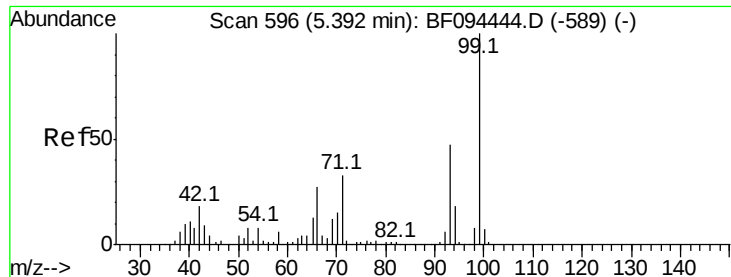
64 53.9 46.0 69.0

63 26.4 23.4 35.0



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: 21.76 ng

RT: 5.39 min Scan# 587

Delta R.T. -0.00 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

Instrument :

BNA\_F

ClientSampleId :

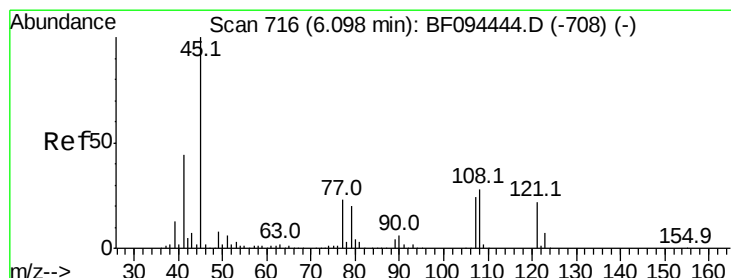
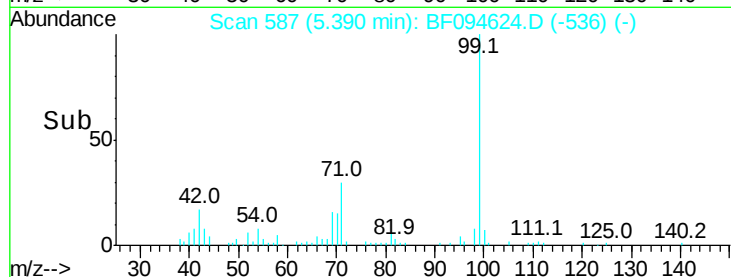
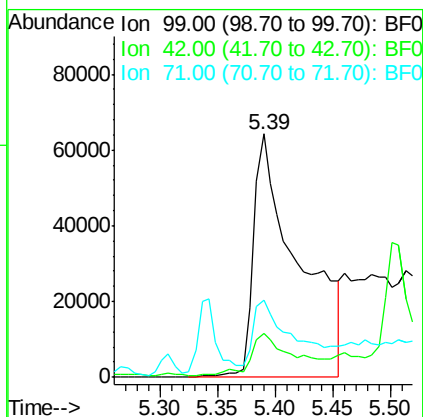
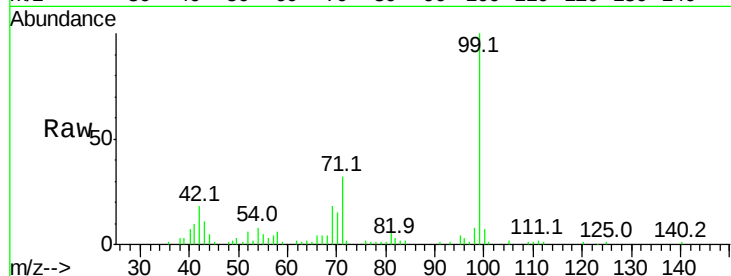
Tot Ion: 99 Resp: 174842

Ion Ratio Lower Upper

99 100

42 18.0 13.5 20.3

71 31.5 24.5 36.7



#16

2,2'-oxybis(1-Chloropropane)

Concen: 2.56 ng

RT: 5.96 min Scan# 684

Delta R.T. -0.14 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

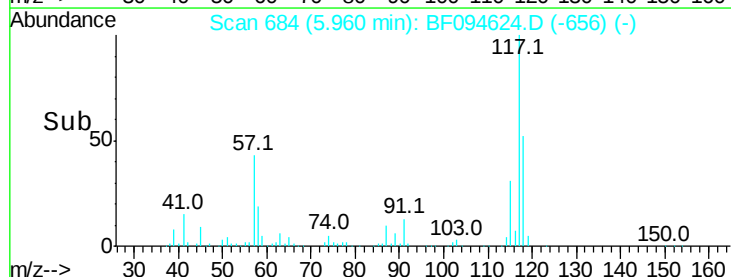
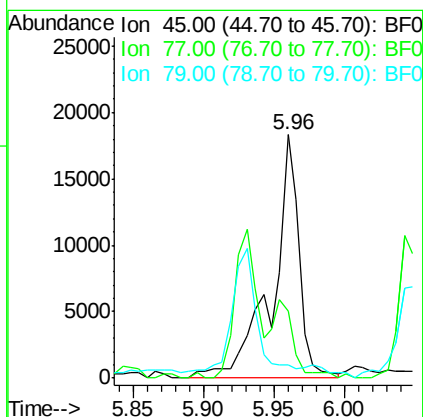
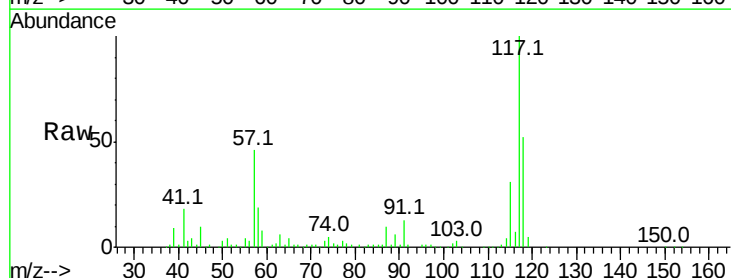
Tgt Ion: 45 Resp: 24223

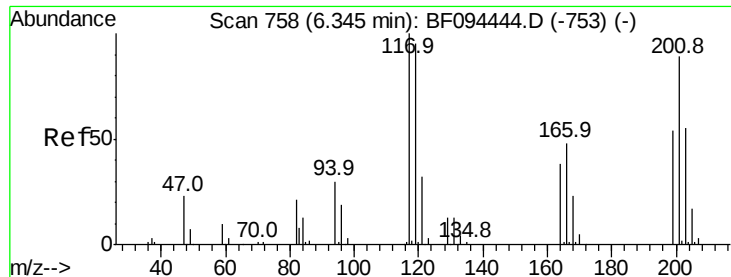
Ion Ratio Lower Upper

45 100

77 27.3 0.0 33.2

79 5.2 0.0 30.0

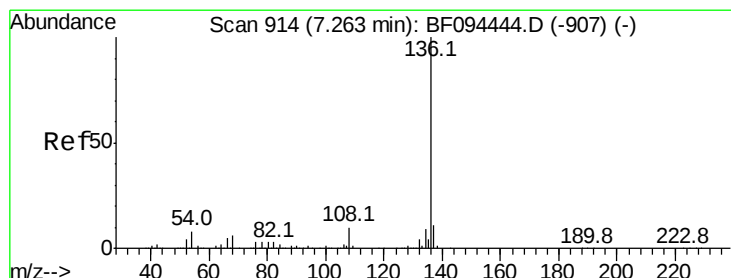
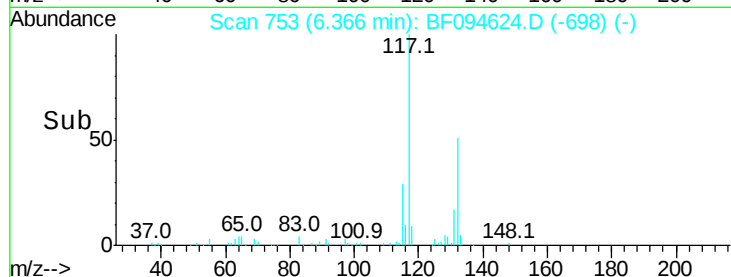
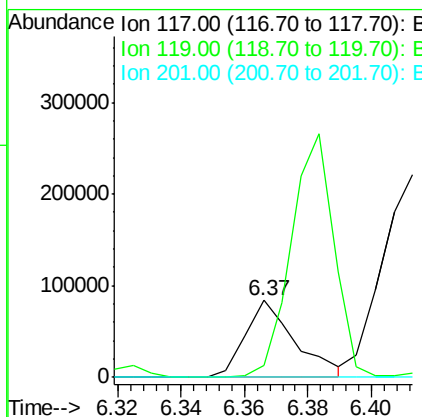
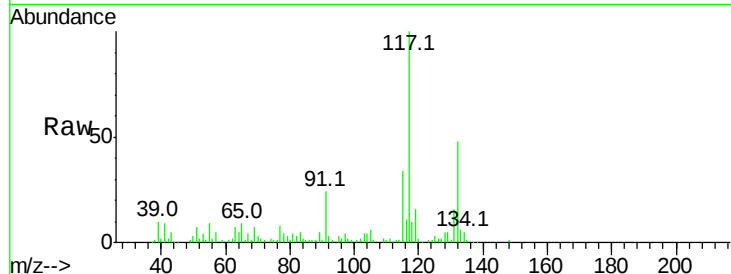




#18  
Hexachloroethane  
Concen: 30.77 ng  
RT: 6.37 min Scan# 753  
Delta R.T. 0.02 min  
Lab File: BF094624.D  
Acq: 26 Apr 2017 1:06

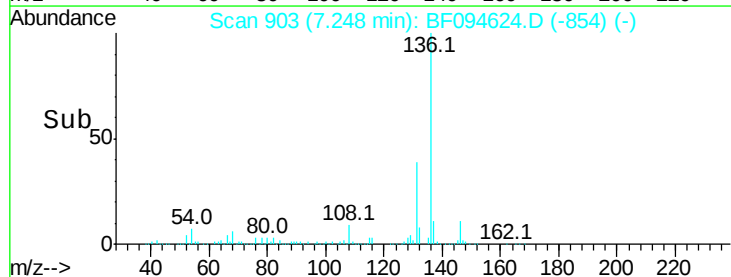
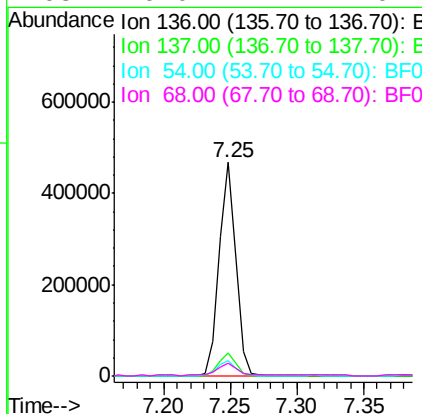
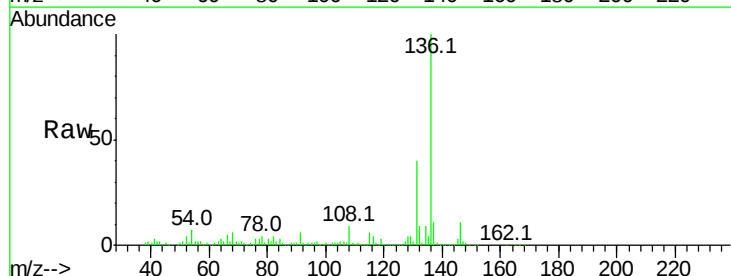
Instrument :  
BNA\_F  
ClientSampleId :

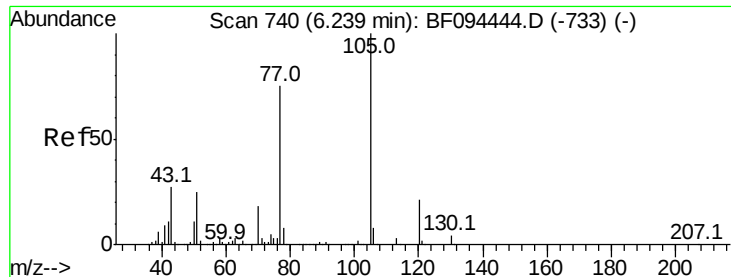
Tot Ion:117 Resp: 91200  
Ion Ratio Lower Upper  
117 100  
119 15.8 77.4 116.0#  
201 0.0 94.6 141.8#



#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 7.25 min Scan# 903  
Delta R.T. -0.01 min  
Lab File: BF094624.D  
Acq: 26 Apr 2017 1:06

Tgt Ion:136 Resp: 419454  
Ion Ratio Lower Upper  
136 100  
137 10.8 8.5 12.7  
54 7.4 4.9 7.3#  
68 6.0 4.1 6.1

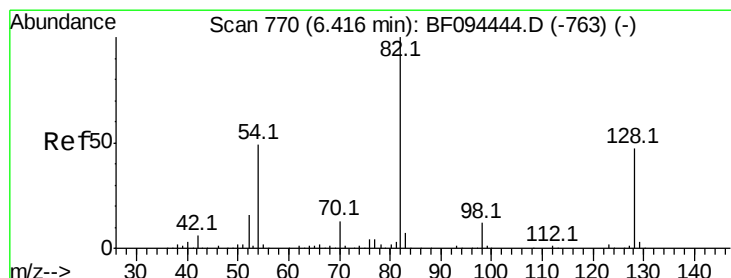
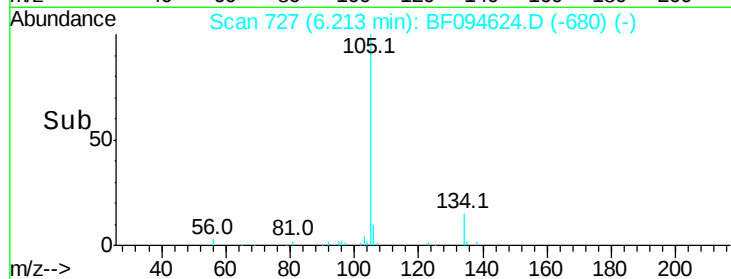
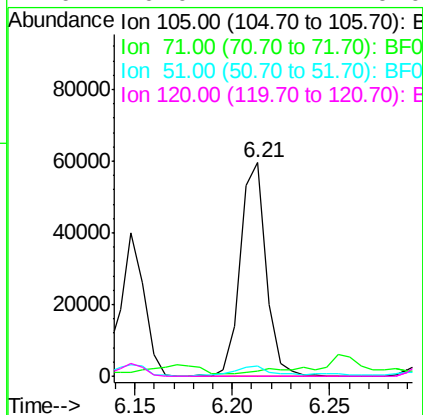
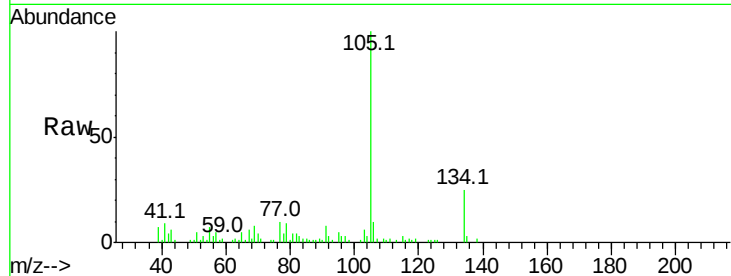




#22  
Acetophenone  
Concen: 5.35 ng  
RT: 6.21 min Scan# 727  
Delta R.T. -0.03 min  
Lab File: BF094624.D  
Acq: 26 Apr 2017 1:06

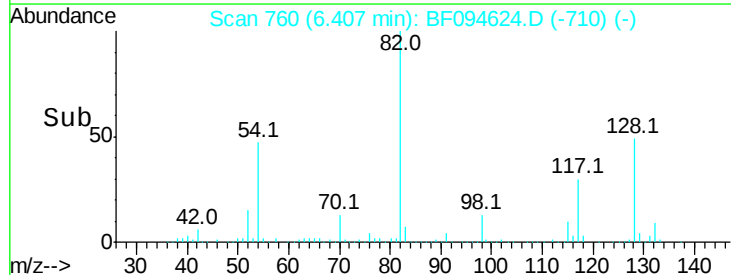
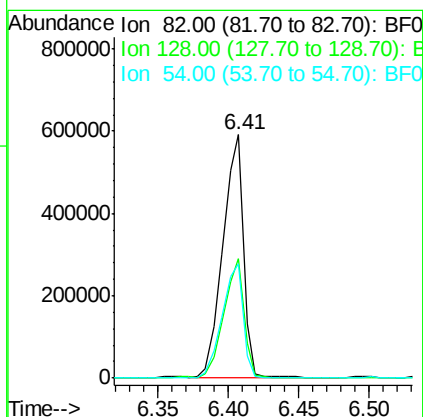
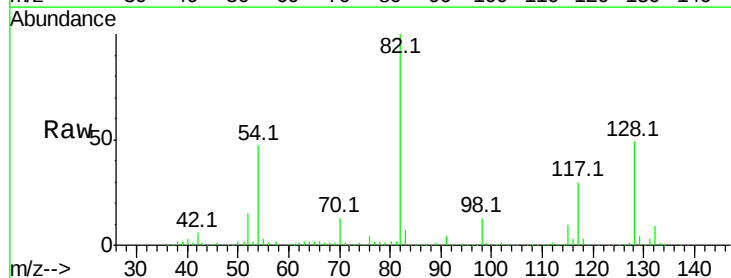
Instrument :  
BNA\_F  
ClientSampleId :

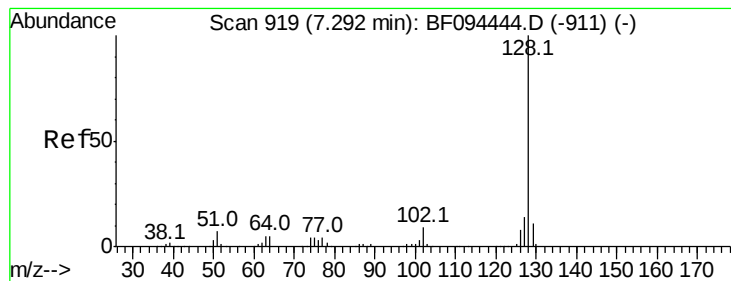
Tot Ion:105 Resp: 54516  
Ion Ratio Lower Upper  
105 100  
71 2.3 2.8 4.2#  
51 4.6 30.7 46.1#  
120 0.0 17.4 26.0#



#23  
Nitrobenzene-d5  
Concen: 87.60 ng  
RT: 6.41 min Scan# 760  
Delta R.T. -0.01 min  
Lab File: BF094624.D  
Acq: 26 Apr 2017 1:06

Tgt Ion: 82 Resp: 595056  
Ion Ratio Lower Upper  
82 100  
128 49.2 34.0 51.0  
54 47.0 42.2 63.2





#31

Naphthalene

Concen: 5.01 ng

RT: 7.27 min Scan# 907

Delta R.T. -0.02 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

Instrument :

BNA\_F

ClientSampleId :

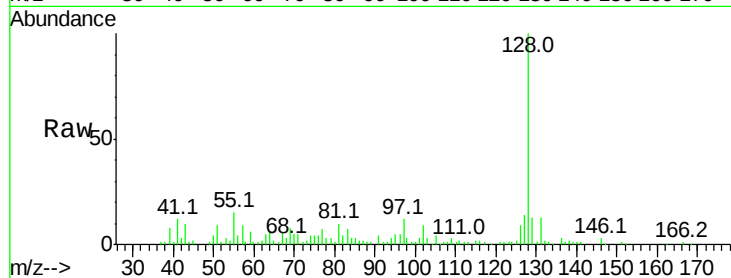
Tot Ion:128 Resp: 101025

Ion Ratio Lower Upper

128 100

129 12.7 9.0 13.6

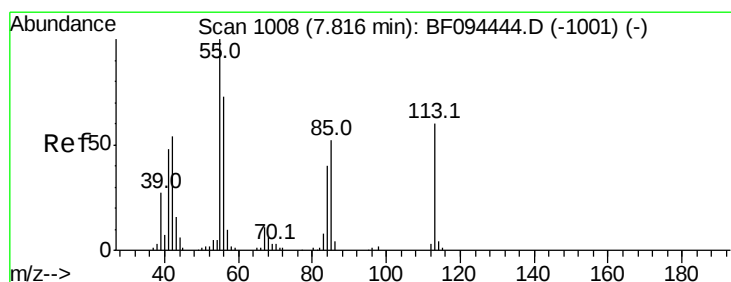
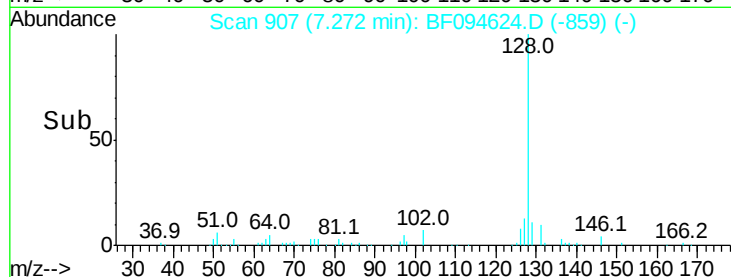
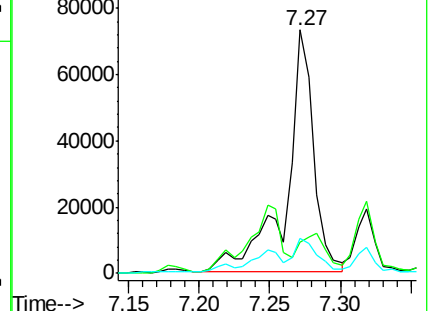
127 14.1 10.8 16.2



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#35

Caprolactam

Concen: 4.53 ng

RT: 7.82 min Scan# 1001

Delta R.T. 0.01 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

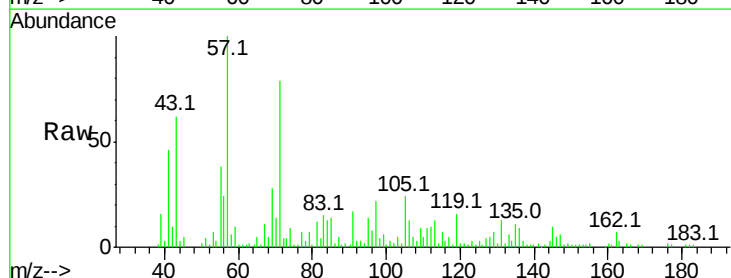
Tgt Ion:113 Resp: 8267

Ion Ratio Lower Upper

113 100

55 290.3 150.2 190.2#

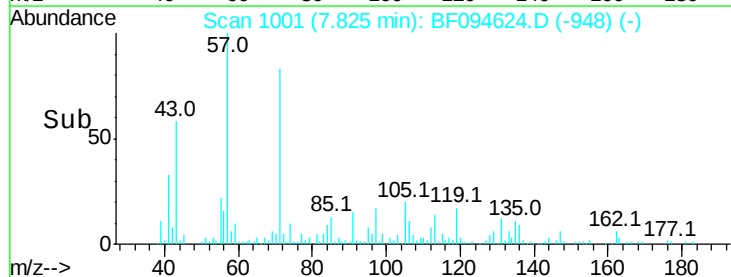
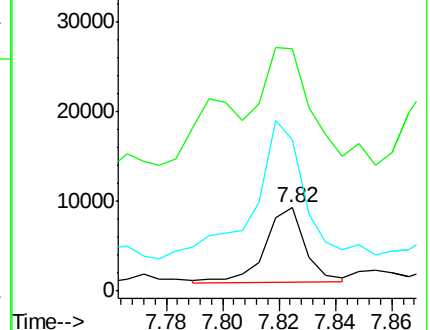
56 182.0 107.8 147.8#

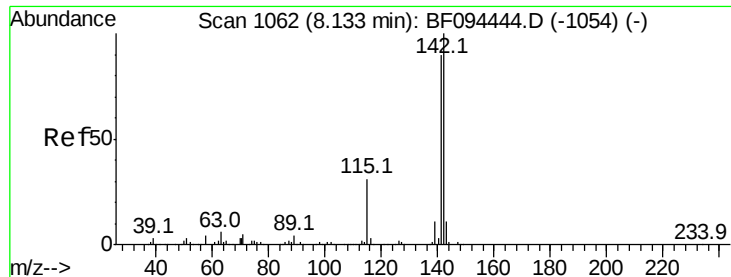


Abundance Ion 113.00 (112.70 to 113.70): E

Ion 55.00 (54.70 to 55.70): BF0

Ion 56.00 (55.70 to 56.70): BF0





#37

2-Methylnaphthalene

Concen: 21.66 ng

RT: 8.13 min Scan# 1053

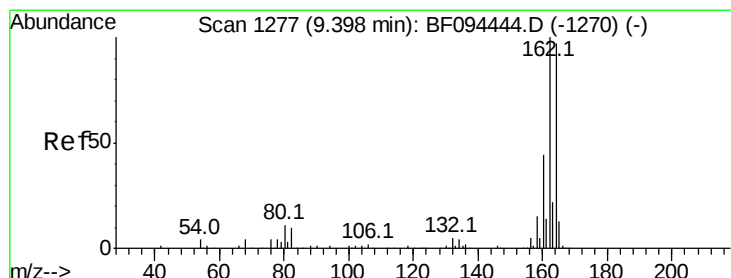
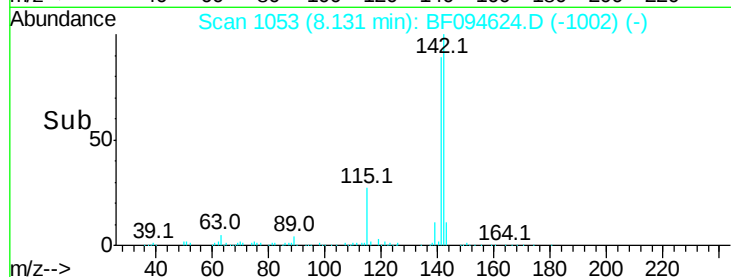
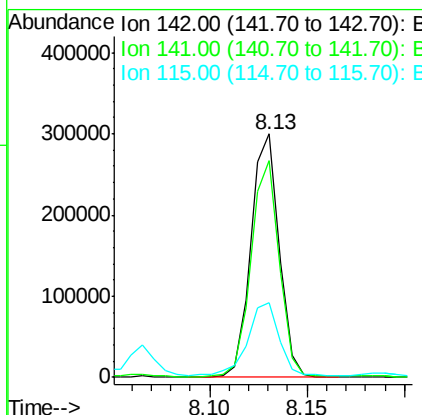
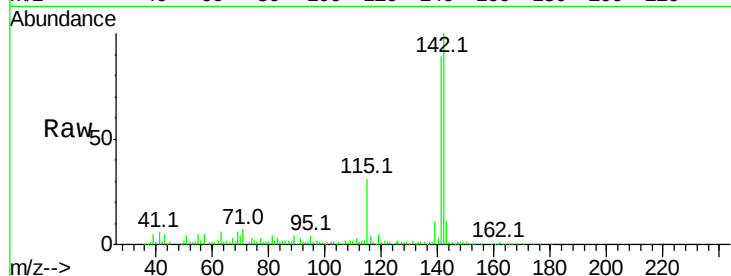
Delta R.T. -0.00 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

Instrument :  
BNA\_F  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 89.1  | 71.3  | 106.9 |
| 115     | 30.8  | 27.1  | 40.7  |



#38

Acenaphthene-d10

Concen: 20.00 ng

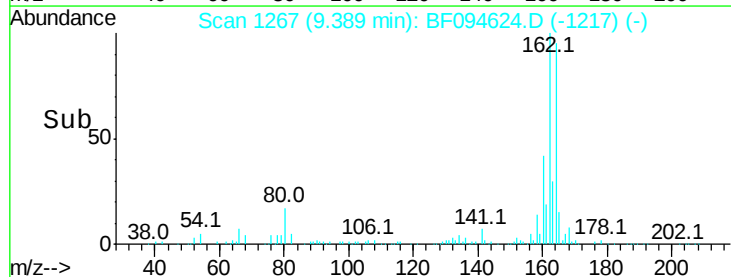
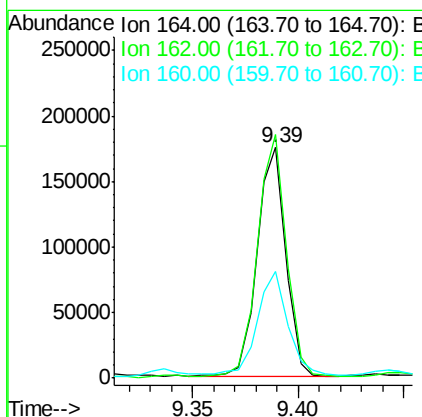
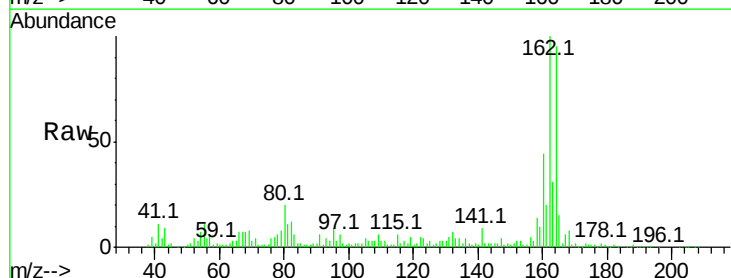
RT: 9.39 min Scan# 1267

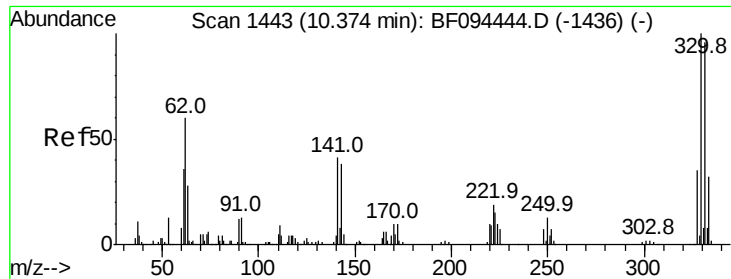
Delta R.T. -0.01 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 105.7 | 82.6  | 123.8 |
| 160     | 46.5  | 36.2  | 54.2  |

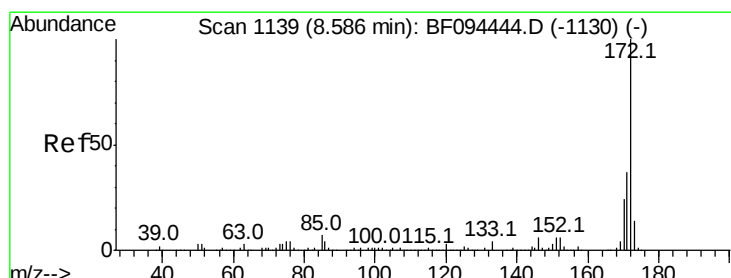
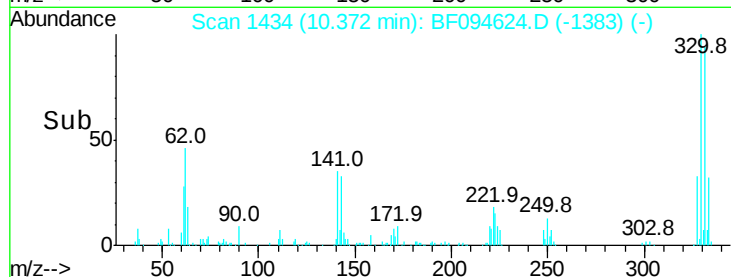
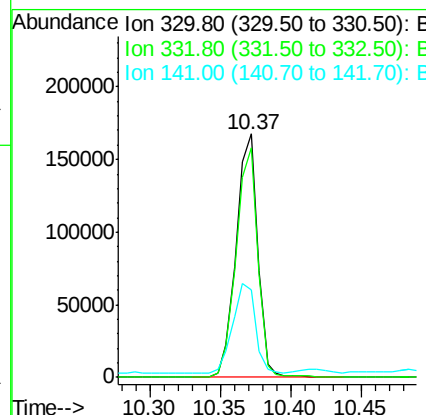
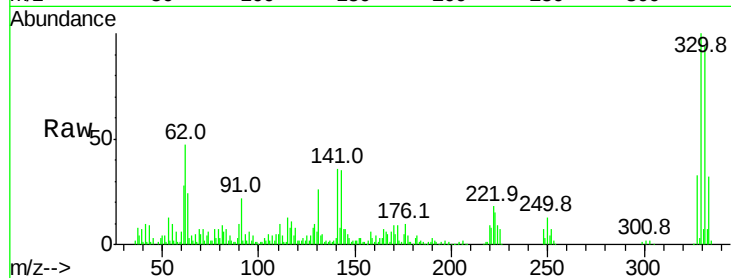




#41  
 2,4,6-Tribromophenol  
 Concen: 140.00 ng  
 RT: 10.37 min Scan# 1434  
 Delta R.T. -0.00 min  
 Lab File: BF094624.D  
 Acq: 26 Apr 2017 1:06

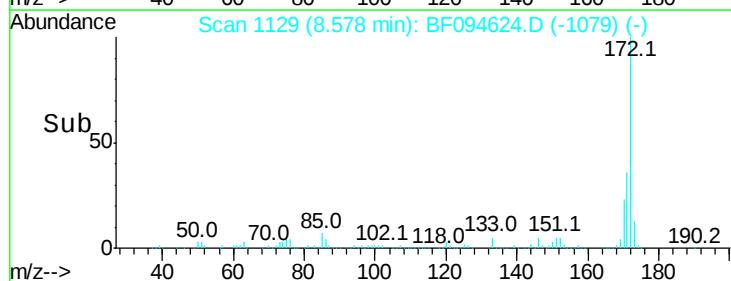
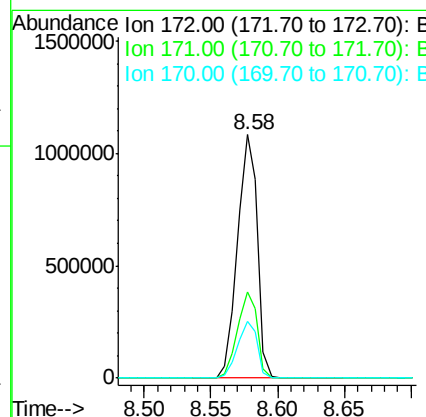
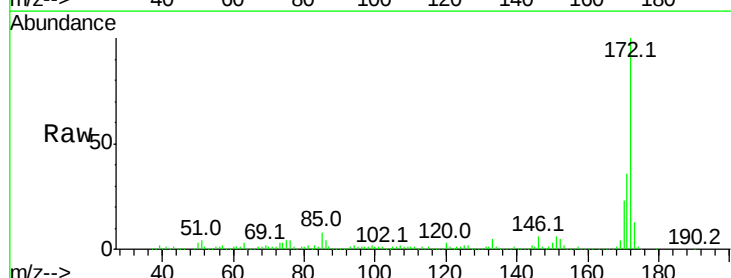
Instrument :  
 BNA\_F  
 ClientSampled :

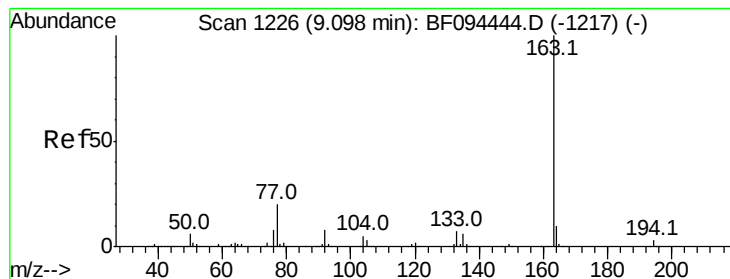
Tot Ion:330 Resp: 179110  
 Ion Ratio Lower Upper  
 330 100  
 332 94.6 76.6 115.0  
 141 38.1 31.4 47.2



#44  
 2-Fluorobiphenyl  
 Concen: 101.86 ng  
 RT: 8.58 min Scan# 1129  
 Delta R.T. -0.01 min  
 Lab File: BF094624.D  
 Acq: 26 Apr 2017 1:06

Tgt Ion:172 Resp: 1132324  
 Ion Ratio Lower Upper  
 172 100  
 171 35.5 29.6 44.4  
 170 23.3 19.8 29.8





#49

Dimethylphthalate

Concen: 9.23 ng

RT: 9.08 min Scan# 1214

Delta R.T. -0.02 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

Instrument :

BNA\_F

ClientSampleId :

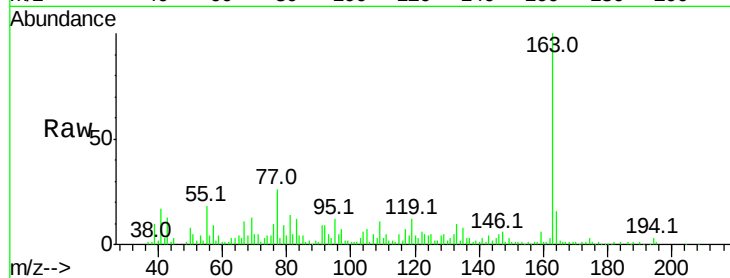
Tot Ion:163 Resp: 112536

Ion Ratio Lower Upper

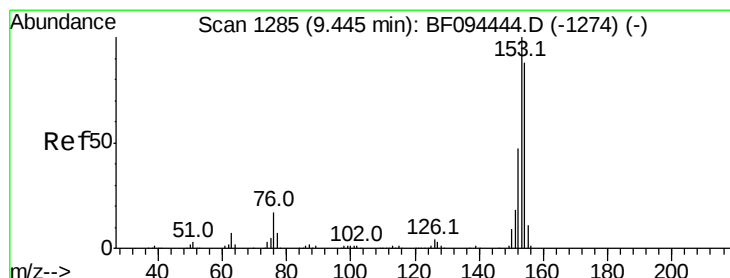
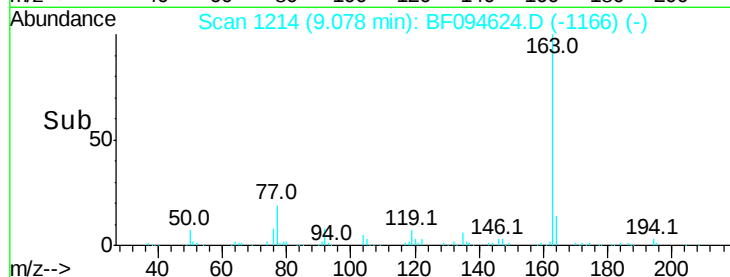
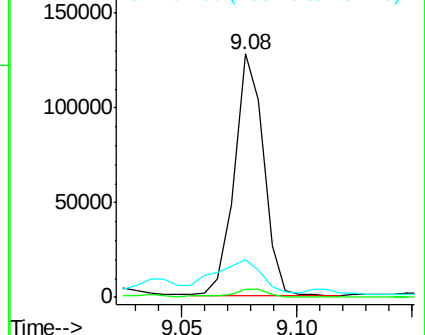
163 100

194 3.3 2.6 4.0

164 15.6 8.4 12.6#



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



#51

Acenaphthene

Concen: 3.78 ng

RT: 9.42 min Scan# 1273

Delta R.T. -0.02 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

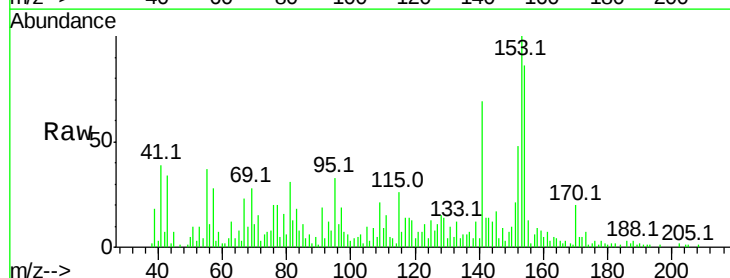
Tgt Ion:154 Resp: 37529

Ion Ratio Lower Upper

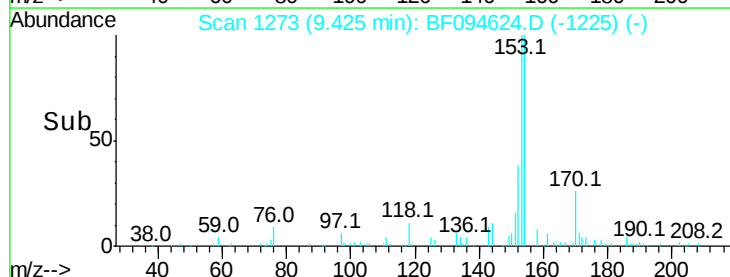
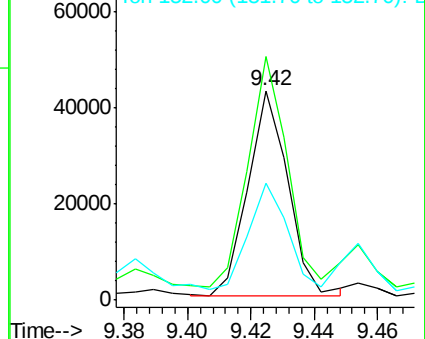
154 100

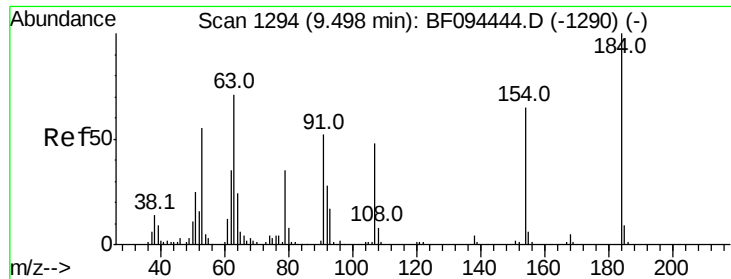
153 116.5 90.5 135.7

152 55.7 43.6 65.4



Abundance Ion 154.00 (153.70 to 154.70): E  
Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E

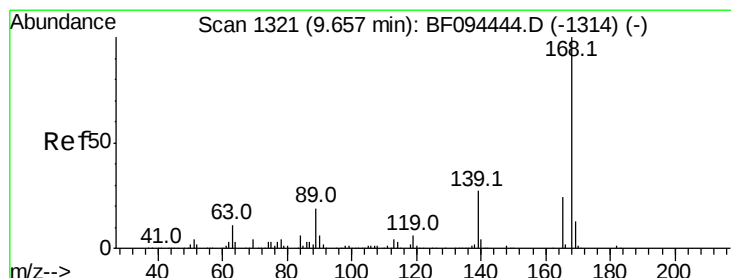
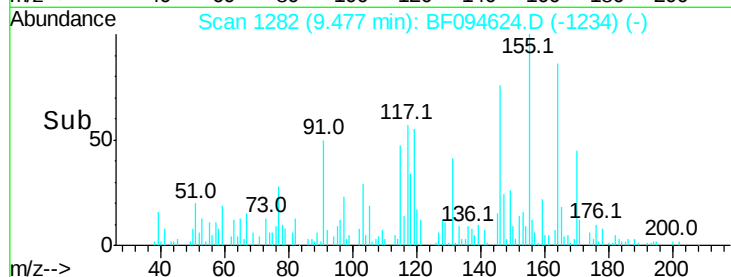
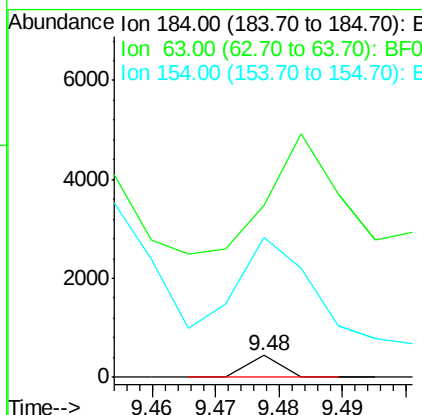
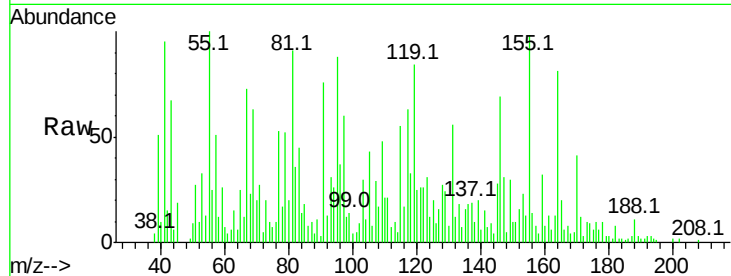




#53  
 2,4-Dinitrophenol  
 Concen: 5.85 ng  
 RT: 9.48 min Scan# 1282  
 Delta R.T. -0.02 min  
 Lab File: BF094624.D  
 Acq: 26 Apr 2017 1:06

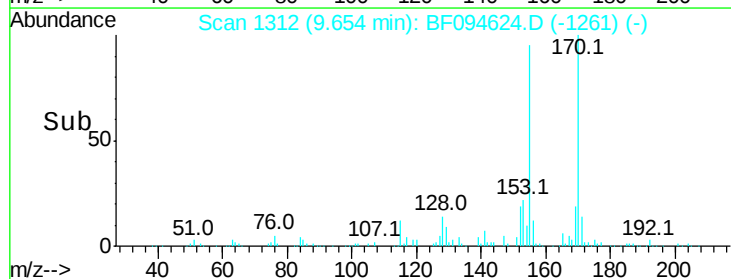
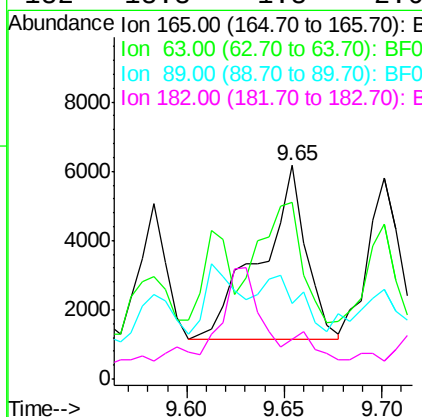
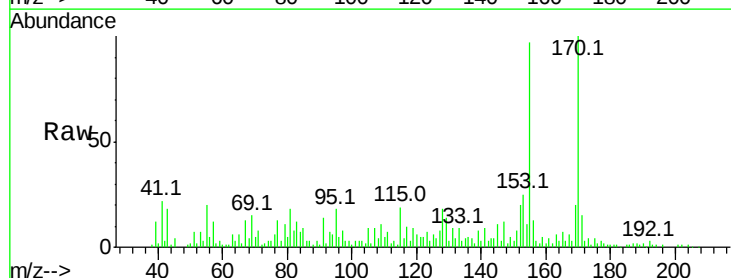
Instrument :  
 BNA\_F  
 ClientSampleId :

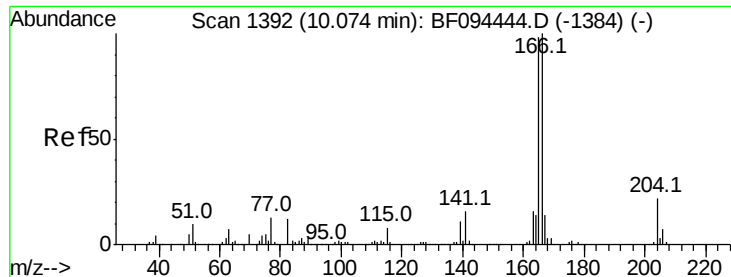
Tot Ion:184 Resp: 154  
 Ion Ratio Lower Upper  
 184 100  
 63 798.2 62.7 94.1#  
 154 647.7 81.1 121.7#



#56  
 2,4-Dinitrotoluene  
 Concen: 2.46 ng  
 RT: 9.65 min Scan# 1312  
 Delta R.T. -0.00 min  
 Lab File: BF094624.D  
 Acq: 26 Apr 2017 1:06

Tgt Ion:165 Resp: 8262  
 Ion Ratio Lower Upper  
 165 100  
 63 82.8 25.4 38.0#  
 89 35.7 46.4 69.6#  
 182 18.3 1.8 2.6#

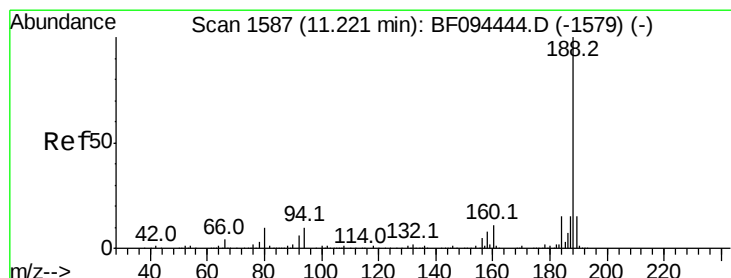
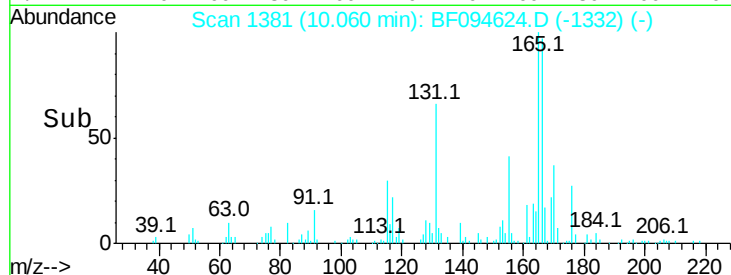
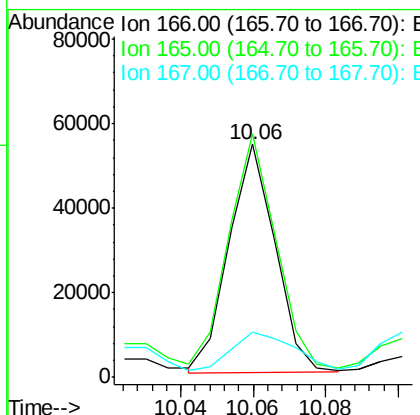
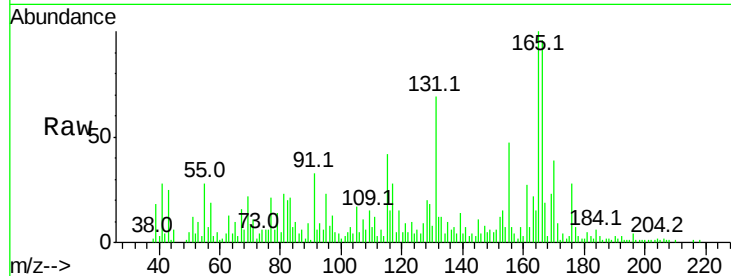




#57  
**Fluorene**  
 Concen: 4.29 ng  
 RT: 10.06 min Scan# 1381  
 Delta R.T. -0.01 min  
 Lab File: BF094624.D  
 Acq: 26 Apr 2017 1:06

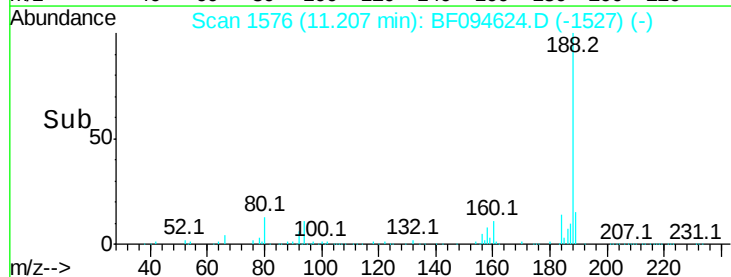
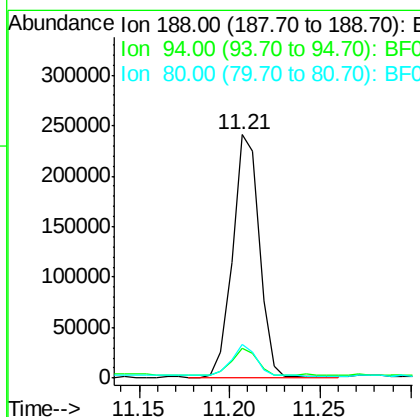
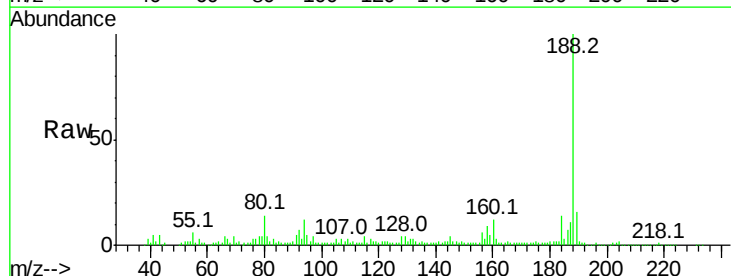
Instrument :  
 BNA\_F  
 ClientSampleId :

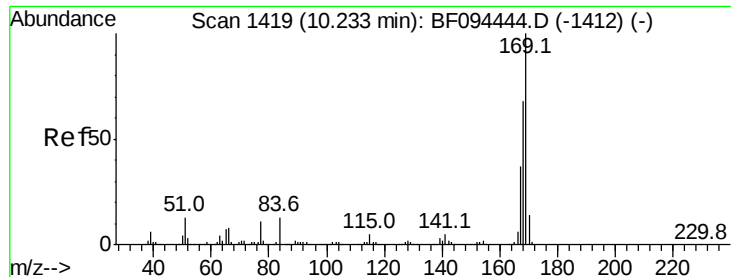
Tot Ion:166 Resp: 48128  
 Ion Ratio Lower Upper  
 166 100  
 165 104.5 78.8 118.2  
 167 19.5 10.6 16.0#



#63  
**Phenanthrene-d10**  
 Concen: 20.00 ng  
 RT: 11.21 min Scan# 1576  
 Delta R.T. -0.01 min  
 Lab File: BF094624.D  
 Acq: 26 Apr 2017 1:06

Tgt Ion:188 Resp: 245145  
 Ion Ratio Lower Upper  
 188 100  
 94 12.2 9.4 14.2  
 80 14.0 10.2 15.2

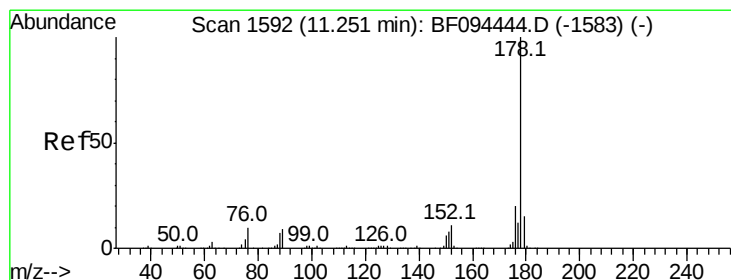
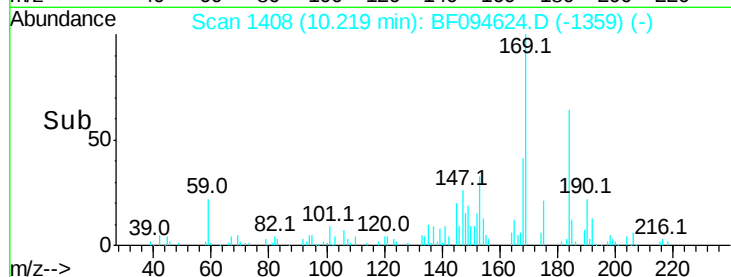
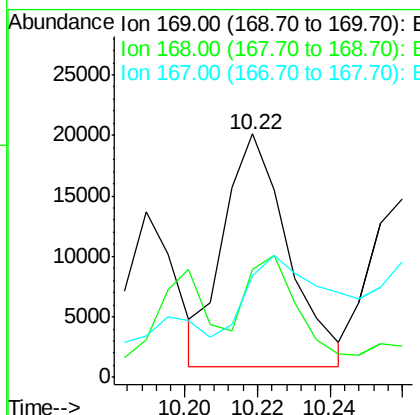
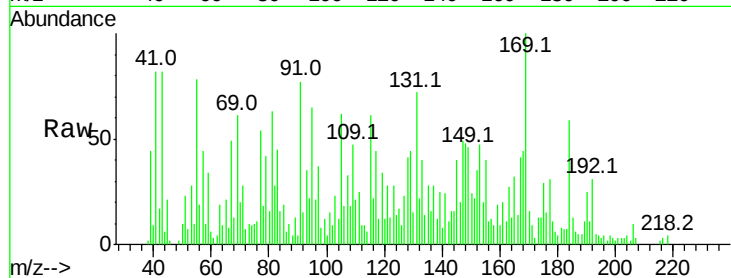




#65  
 n-Nitrosodiphenylamine  
 Concen: 2.79 ng  
 RT: 10.22 min Scan# 1408  
 Delta R.T. -0.01 min  
 Lab File: BF094624.D  
 Acq: 26 Apr 2017 1:06

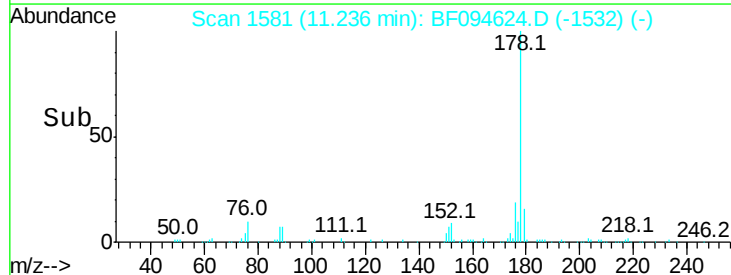
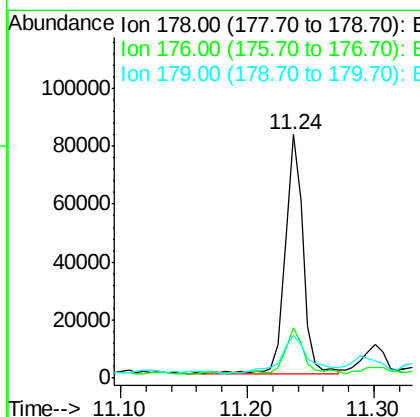
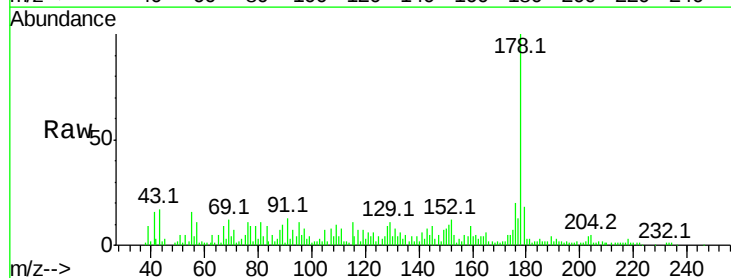
Instrument :  
 BNA\_F  
 ClientSampleId :

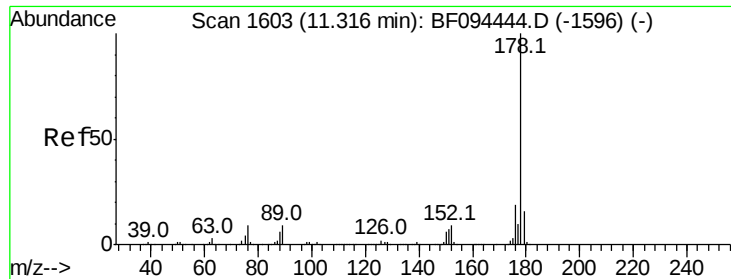
Tot Ion:169 Resp: 23752  
 Ion Ratio Lower Upper  
 169 100  
 168 44.2 53.2 79.8#  
 167 41.5 29.5 44.3



#70  
 Phenanthrene  
 Concen: 5.92 ng  
 RT: 11.24 min Scan# 1581  
 Delta R.T. -0.01 min  
 Lab File: BF094624.D  
 Acq: 26 Apr 2017 1:06

Tgt Ion:178 Resp: 81680  
 Ion Ratio Lower Upper  
 178 100  
 176 20.4 16.2 24.4  
 179 17.6 12.6 19.0

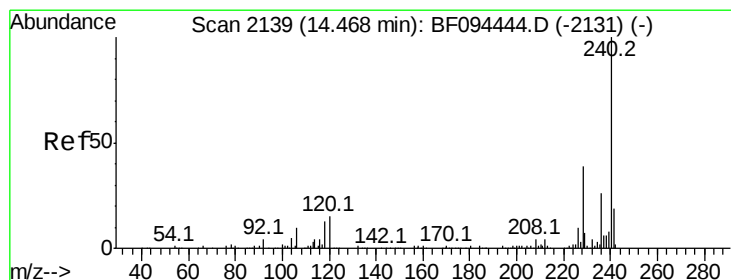
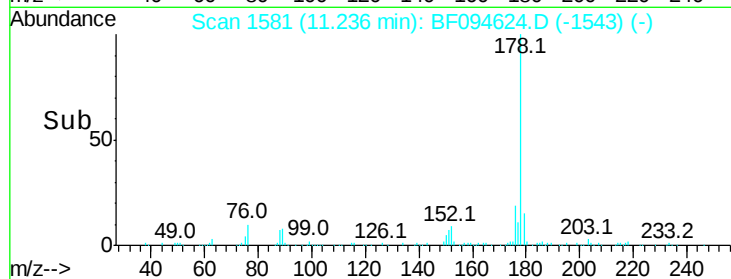
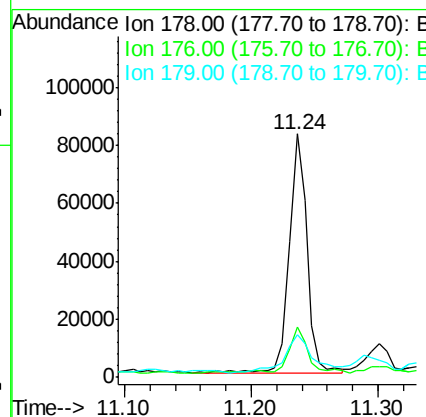
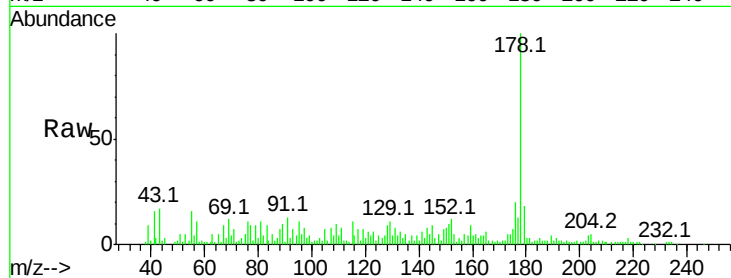




#71  
 Anthracene  
 Concen: 5.72 ng  
 RT: 11.24 min Scan# 1581  
 Delta R.T. -0.08 min  
 Lab File: BF094624.D  
 Acq: 26 Apr 2017 1:06

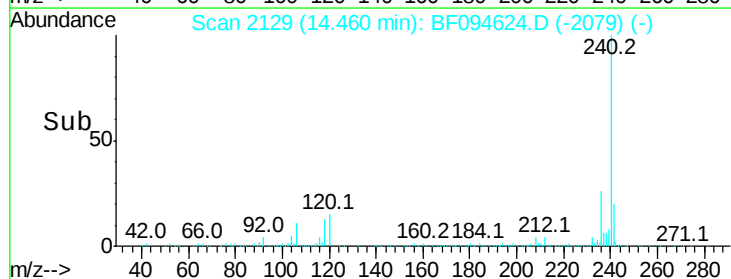
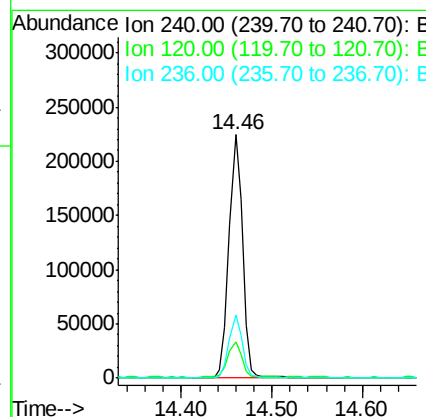
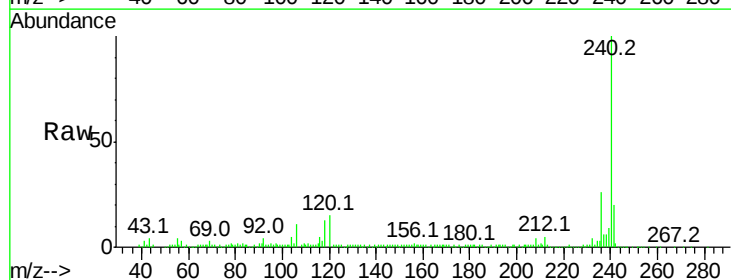
Instrument :  
 BNA\_F  
 ClientSampled :

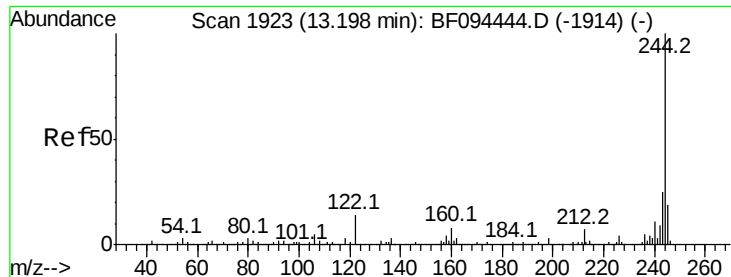
Tot Ion:178 Resp: 81680  
 Ion Ratio Lower Upper  
 178 100  
 176 20.4 15.8 23.8  
 179 17.6 12.7 19.1



#75  
 Chrysene-d12  
 Concen: 20.00 ng  
 RT: 14.46 min Scan# 2129  
 Delta R.T. -0.01 min  
 Lab File: BF094624.D  
 Acq: 26 Apr 2017 1:06

Tgt Ion:240 Resp: 233092  
 Ion Ratio Lower Upper  
 240 100  
 120 15.1 5.8 8.8#  
 236 26.2 20.5 30.7





#78

Terphenyl-d14

Concen: 84.46 ng

RT: 13.19 min Scan# 1913

Delta R.T. -0.01 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

Instrument :

BNA\_F

ClientSampleId :

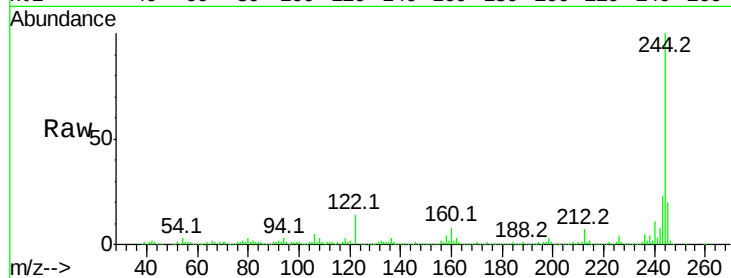
Tot Ion:244 Resp: 736501

Ion Ratio Lower Upper

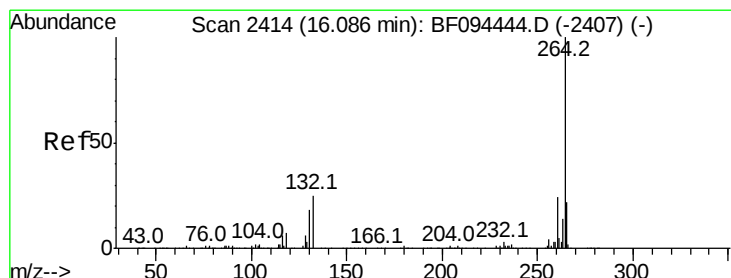
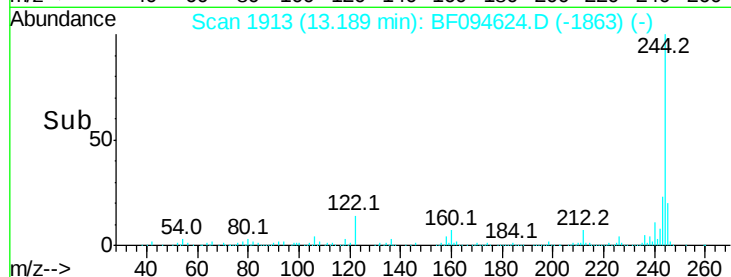
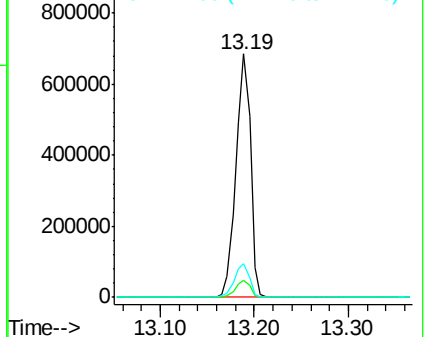
244 100

212 7.1 6.0 9.0

122 14.0 10.3 15.5



Abundance Ion 244.00 (243.70 to 244.70): E  
Ion 212.00 (211.70 to 212.70): E  
Ion 122.00 (121.70 to 122.70): E



#86

Perylene-d12

Concen: 20.00 ng

RT: 16.09 min Scan# 2406

Delta R.T. 0.00 min

Lab File: BF094624.D

Acq: 26 Apr 2017 1:06

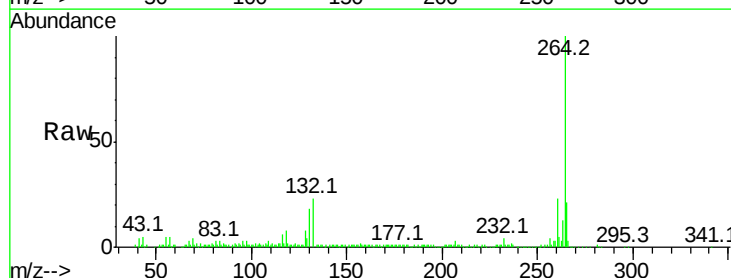
Tgt Ion:264 Resp: 162196

Ion Ratio Lower Upper

264 100

260 23.3 19.5 29.3

265 20.8 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

