Quantitation Report (LSC Reviewed)

Data Path : Z:\HPCHEM1\BNA F\DATA\BF051915\
Data File : BF079364.D
Acq On : 20 May 2015 4:00
Operator : TP/IZ
Sample : G2281-03
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-02

Quant Time: May 20 06:35:52 2015
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF043015.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed May 20 05:08:22 2015
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 7.13 | 152 | 45809 | 20.00 | ng | | 0.00 |
| 21) Naphthalene-d8 | 8.71 | 136 | 188026 | 20.00 | ng | | 0.00 |
| 38) Acenaphthene-d10 | 10.88 | 164 | 91056 | 20.00 | ng | | 0.00 |
| 63) Phenanthrene-d10 | 12.72 | 188 | 178323 | 20.00 | ng | | 0.00 |
| 75) Chrysene-d12 | 16.00 | 240 | 192101 | 20.00 | ng | | -0.02 |
| 86) Perylene-d12 | 17.68 | 264 | 211093 | 20.00 | ng | | -0.14 |
| **System Monitoring Compounds** | | | | | | | |
| 5) 2-Fluorophenol | 5.42 | 112 | 264095m | 99.24 | ng | | 0.00 |
| 7) Phenol-d6 | 6.71 | 99 | 350265 | 99.57 | ng | | 0.00 |
| 23) Nitrobenzene-d5 | 7.82 | 82 | 196351 | 60.02 | ng | | -0.01 |
| 41) 2,4,6-Tribromophenol | 11.86 | 330 | 99125 | 100.63 | ng | | 0.00 |
| 44) 2-Fluorobiphenyl | 10.06 | 172 | 419758 | 64.23 | ng | | 0.00 |
| 78) Terphenyl-d14 | 14.71 | 244 | 468109 | 58.34 | ng | | -0.01 |
| **Target Compounds** | | | | | | | Qvalue |
| 31) Naphthalene | 8.73 | 128 | 139740 | 15.60 | ng | | 99 |
| 37) 2-Methylnaphthalene | 9.59 | 142 | 46555 | 7.50 | ng | | 98 |
| 48) Acenaphthylene | 10.70 | 152 | 49075 | 5.29 | ng | | 97 |
| 49) Dimethylphthalate | 10.56 | 163 | 26880 | 4.02 | ng | | 99 |
| 51) Acenaphthene | 10.91 | 154 | 71779 | 12.98 | ng | | 100 |
| 54) Dibenzofuran | 11.13 | 168 | 73526 | 9.21 | ng | | 96 |
| 57) Fluorene | 11.55 | 166 | 104270 | 15.91 | ng | | 100 |
| 70) Phenanthrene | 12.75 | 178 | 955805 | 95.81 | ng | | 100 |
| 71) Anthracene | 12.81 | 178 | 269077 | 27.49 | ng | | 99 |
| 72) Carbazole | 13.02 | 167 | 81544 | 8.74 | ng | | 99 |
| 74) Fluoranthene | 14.23 | 202 | 856519 | 82.40 | ng | | 93 |
| 77) Pyrene | 14.50 | 202 | 812459 | 73.39 | ng | | 99 |
| 80) Benzo(a)anthracene | 15.99 | 228 | 463143 | 44.03 | ng | | 95 |
| 82) Chrysene | 16.03 | 228 | 350212 | 34.61 | ng | | 98 |
| 85) Indeno(1,2,3-cd)pyrene | 19.04 | 276 | 221197 | 17.16 | ng | | 96 |
| 87) Benzo(b)fluoranthene | 17.26 | 252 | 462580m | 40.04 | ng | | |
| 88) Benzo(k)fluoranthene | 17.28 | 252 | 153076m | 13.69 | ng | | |
| 89) Benzo(a)pyrene | 17.61 | 252 | 358554 | 33.70 | ng | # | 96 |
| 90) Dibenzo(a,h)anthracene | 19.05 | 278 | 56458m | 4.99 | ng | | |
| 91) Benzo(g,h,i)perylene | 19.45 | 276 | 216146 | 19.07 | ng | | 98 |

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

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Acq On : 20 May 2015 4:00
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Sample : G2281-03
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed May 20 05:08:22 2015
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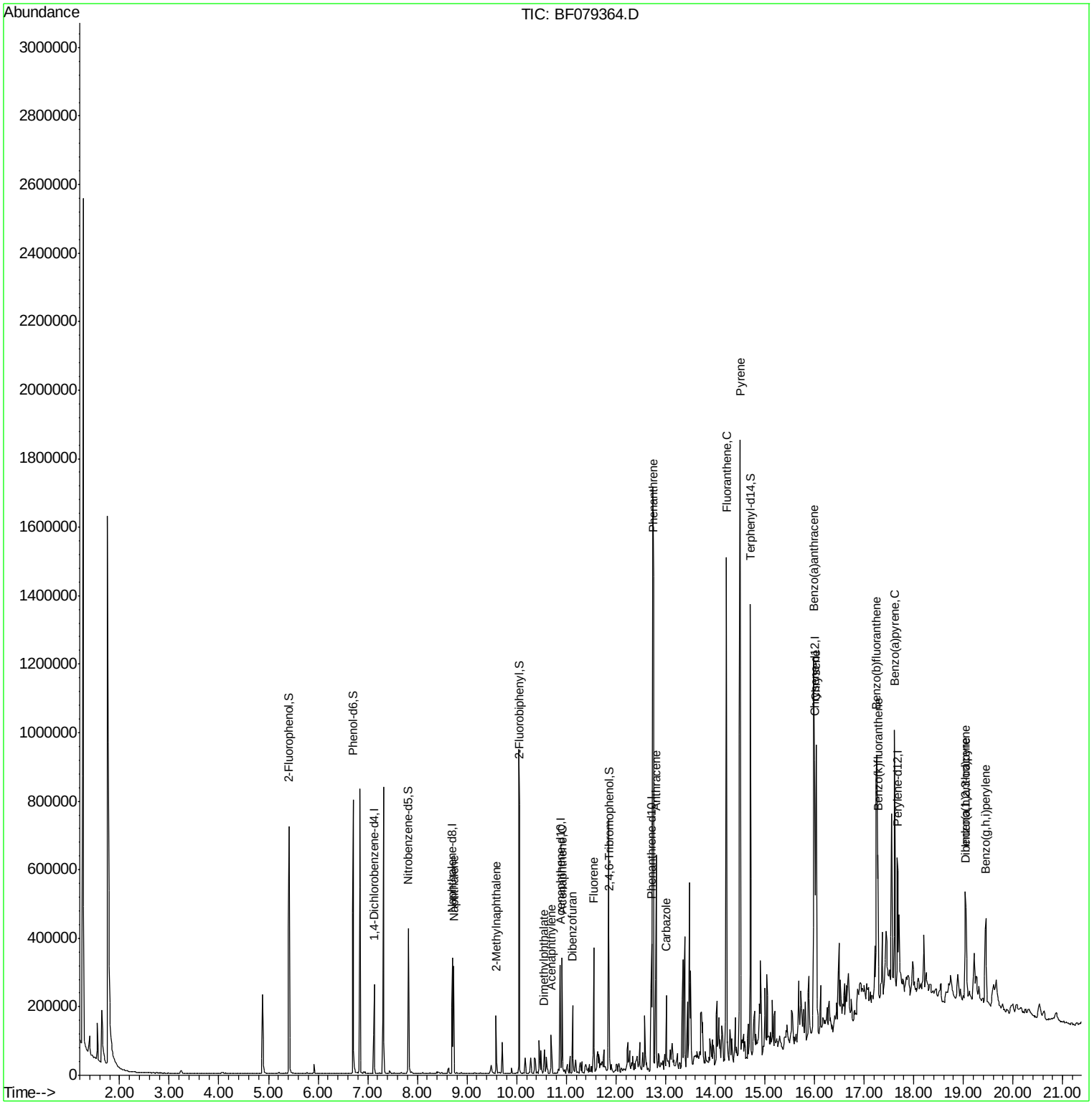
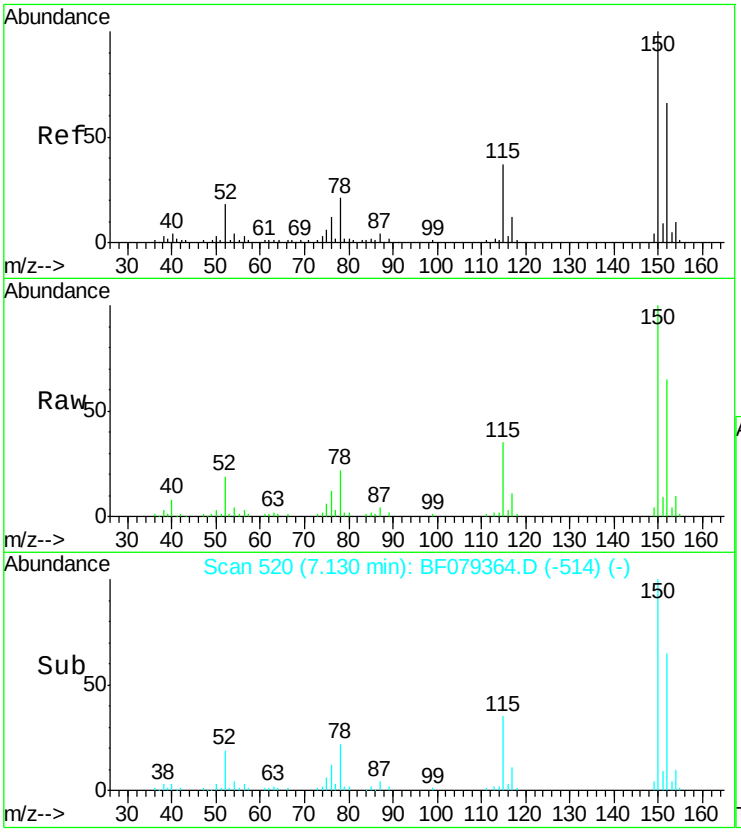


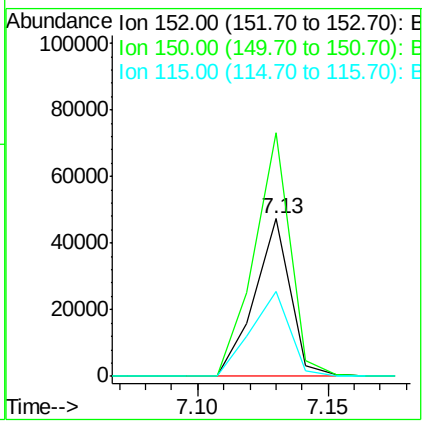


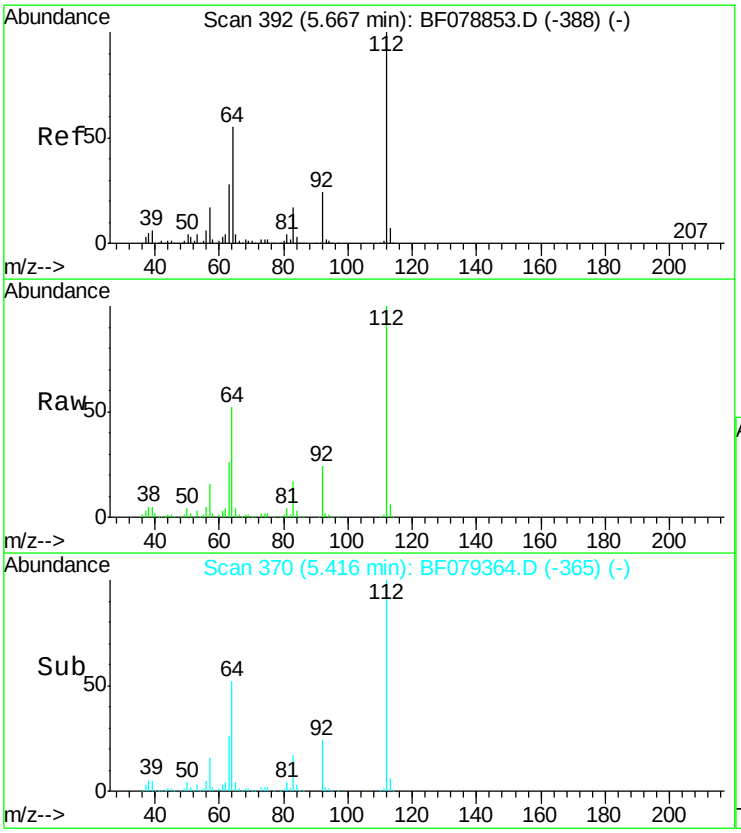

#1
1,4-Dichlorobenzene-d4
Concen: 20.00 ng
RT: 7.13 min Scan# 520
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:152 Resp: 45809

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 154.4 | 123.8 | 185.8 |
| 115 | 53.6 | 49.4 | 74.0 |

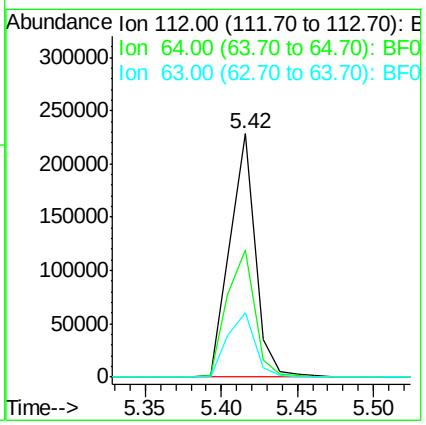


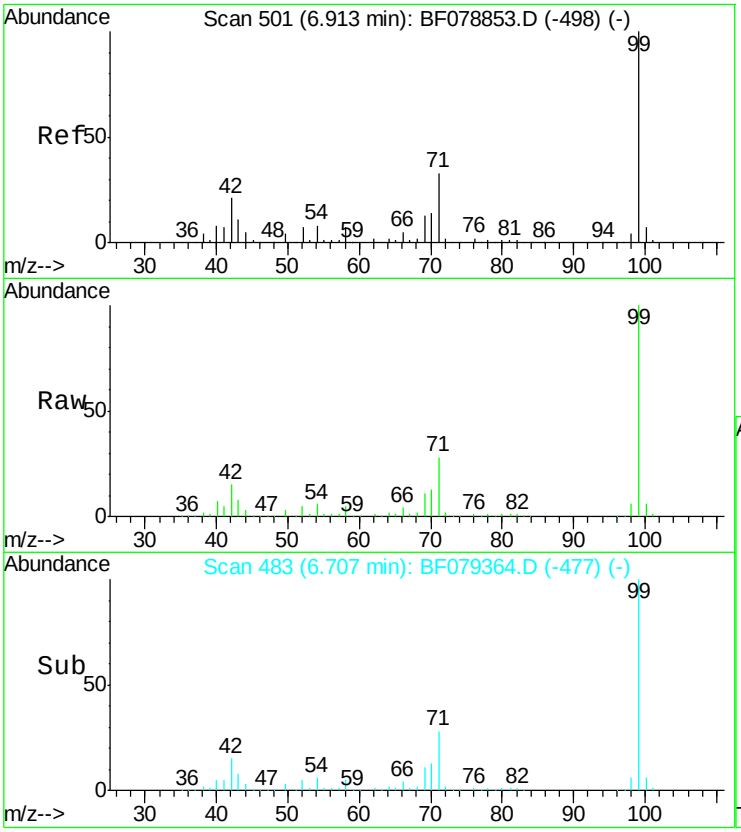




#5
2-Fluorophenol
Concen: 99.24 ng m
RT: 5.42 min Scan# 370
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:112 Resp: 264095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 52.2 | 44.2 | 66.2 |
| 63 | 26.4 | 22.7 | 34.1 |



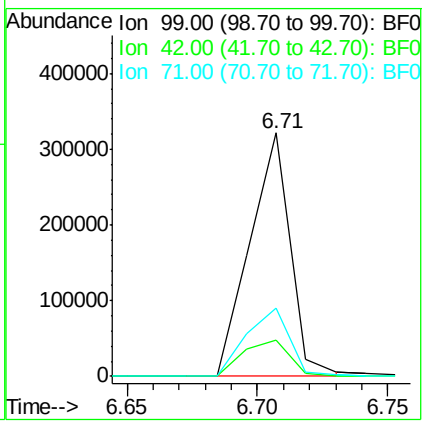


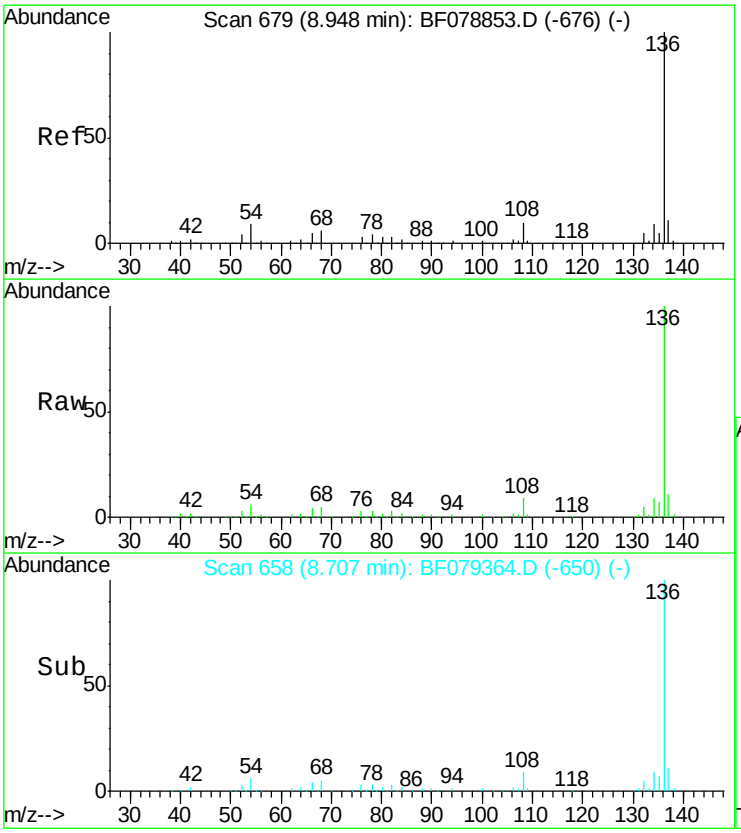

#7
Phenol-d6
Concen: 99.57 ng
RT: 6.71 min Scan# 483
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion: 99 Resp: 350265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 14.7 | 17.1 | 25.7# |
| 71 | 28.1 | 26.3 | 39.5 |

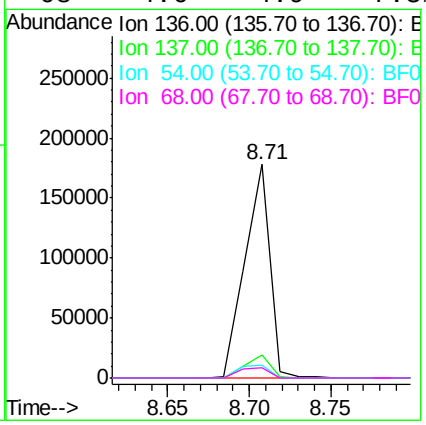


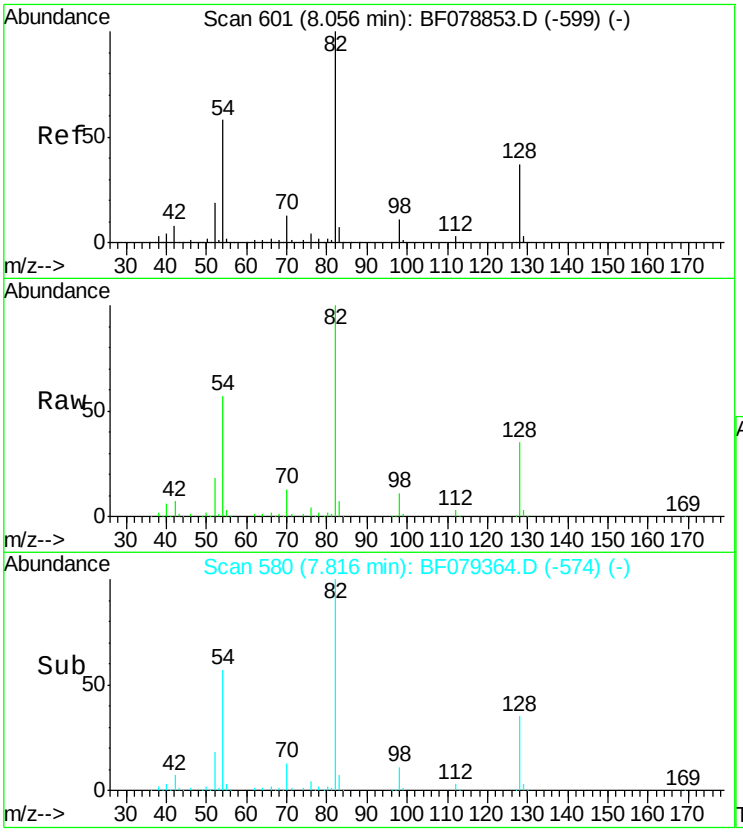




#21
Naphthalene-d8
Concen: 20.00 ng
RT: 8.71 min Scan# 658
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:136 Resp: 188026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 10.6 | 8.8 | 13.2 |
| 54 | 5.7 | 6.9 | 10.3# |
| 68 | 4.6 | 4.9 | 7.3# |



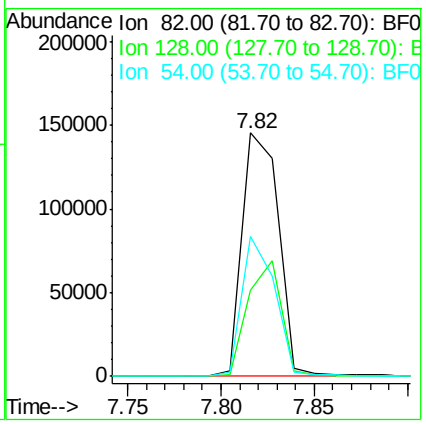


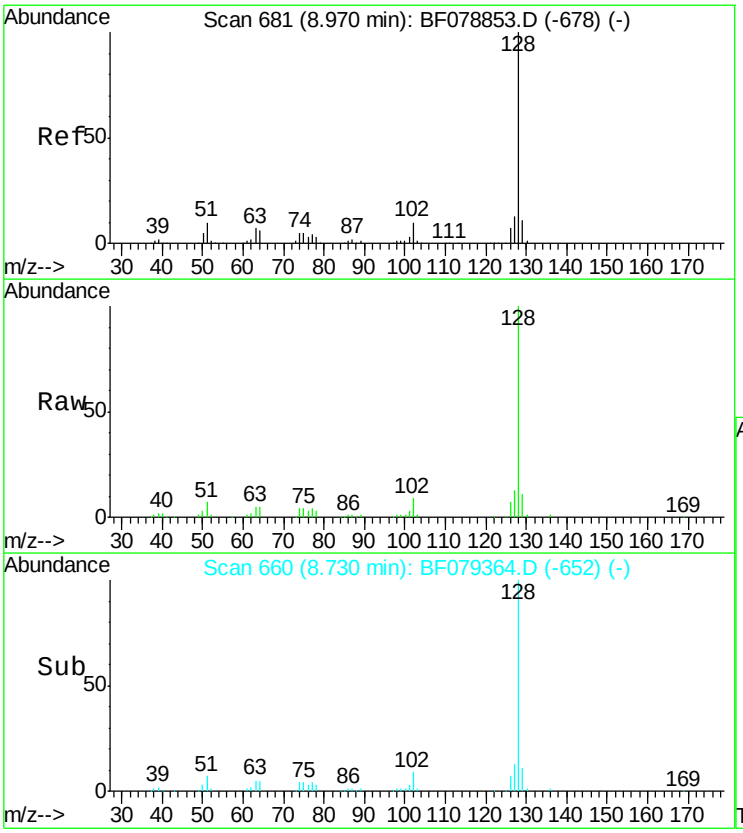

#23
Nitrobenzene-d5
Concen: 60.02 ng
RT: 7.82 min Scan# 580
Delta R.T. -0.01 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion: 82 Resp: 196351

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 35.3 | 29.7 | 44.5 |
| 54 | 57.3 | 46.2 | 69.4 |

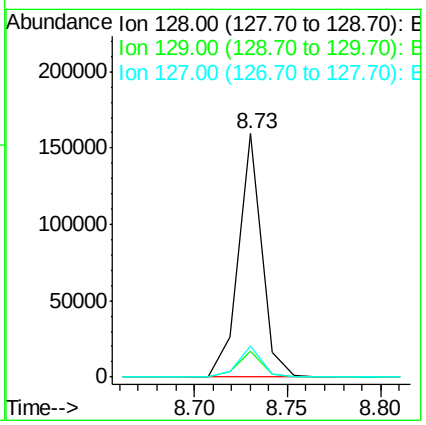


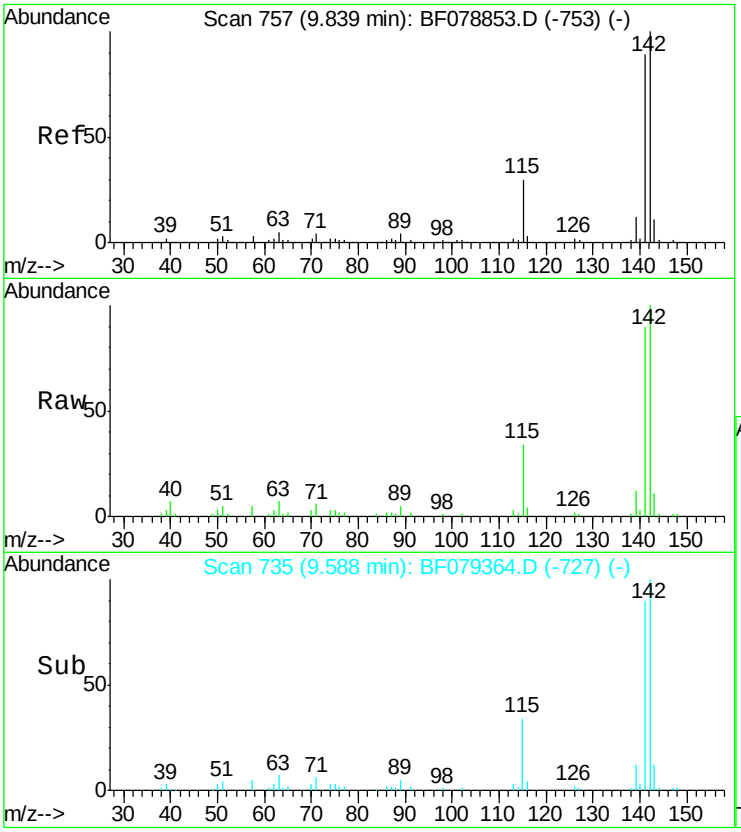




#31
Naphthalene
Concen: 15.60 ng
RT: 8.73 min Scan# 660
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:128 Resp: 139740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 10.8 | 9.2 | 13.8 |
| 127 | 12.6 | 10.3 | 15.5 |



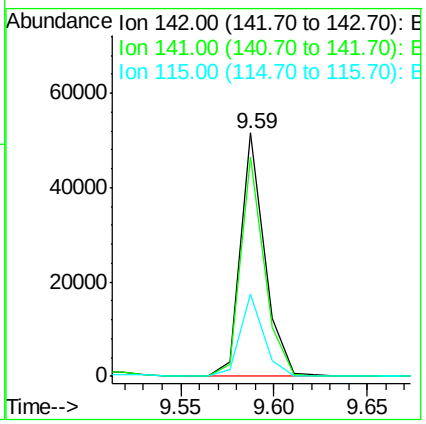


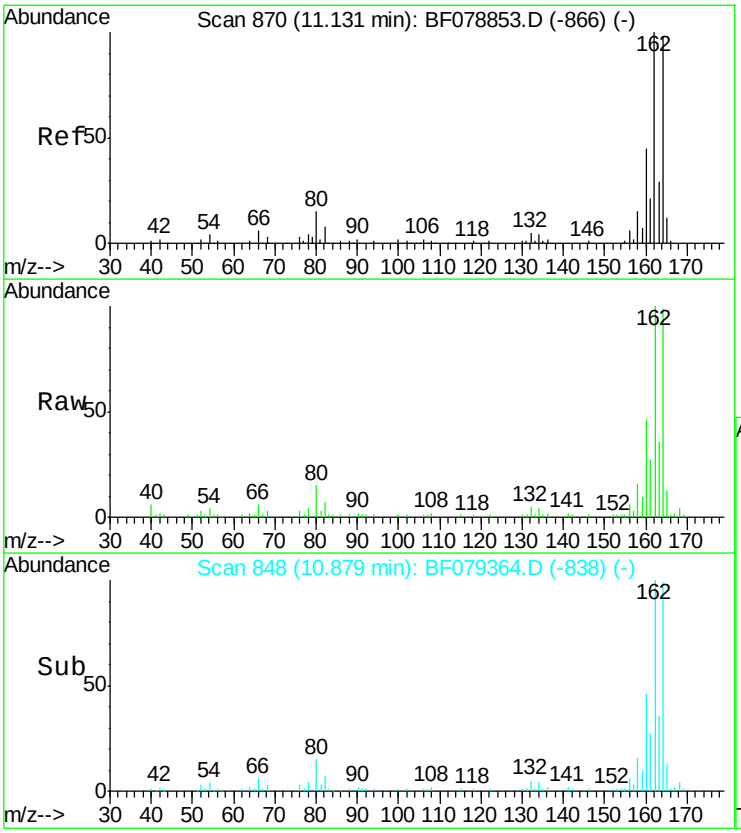

#37
2-Methylnaphthalene
Concen: 7.50 ng
RT: 9.59 min Scan# 735
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:142 Resp: 46555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 89.8 | 71.6 | 107.4 |
| 115 | 33.9 | 24.2 | 36.4 |

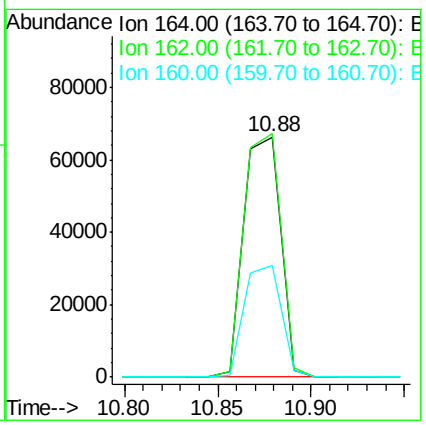


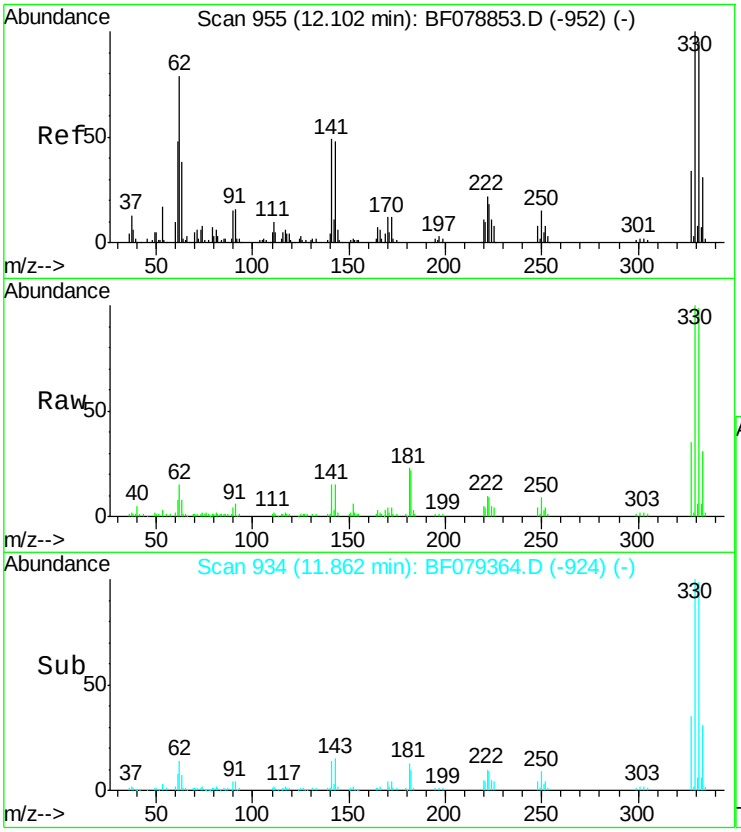




#38
Acenaphthene-d10
Concen: 20.00 ng
RT: 10.88 min Scan# 848
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:164 Resp: 91056

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 101.4 | 81.4 | 122.0 |
| 160 | 46.4 | 36.6 | 54.8 |



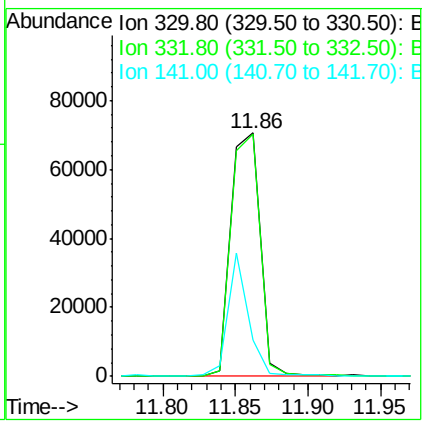


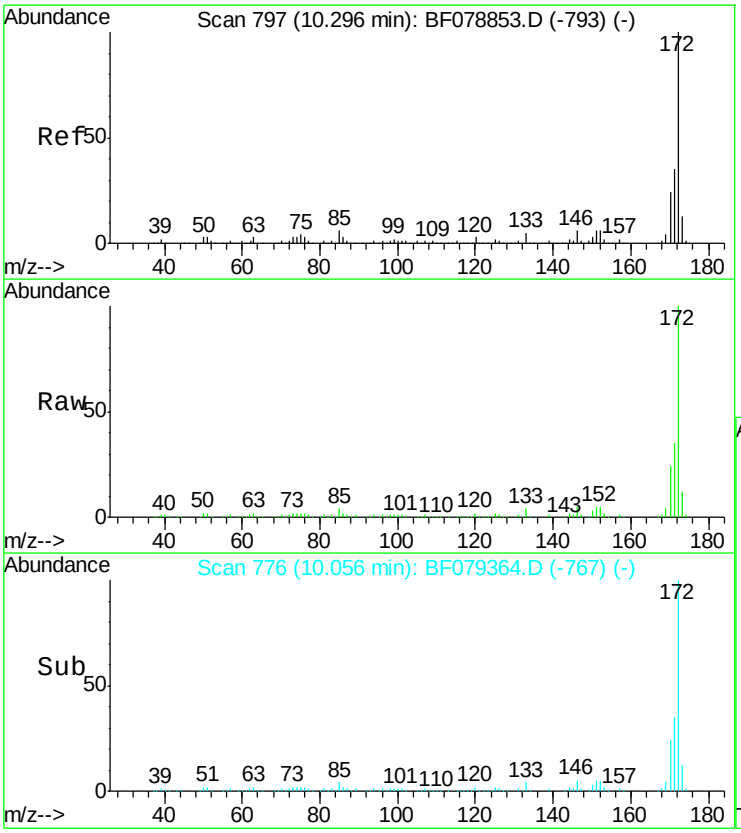

#41
2,4,6-Tribromophenol
Concen: 100.63 ng
RT: 11.86 min Scan# 934
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:330 Resp: 99125

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 99.0 | 76.9 | 115.3 |
| 141 | 36.2 | 27.8 | 41.8 |

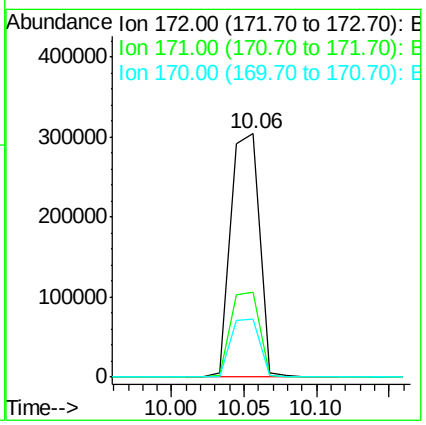


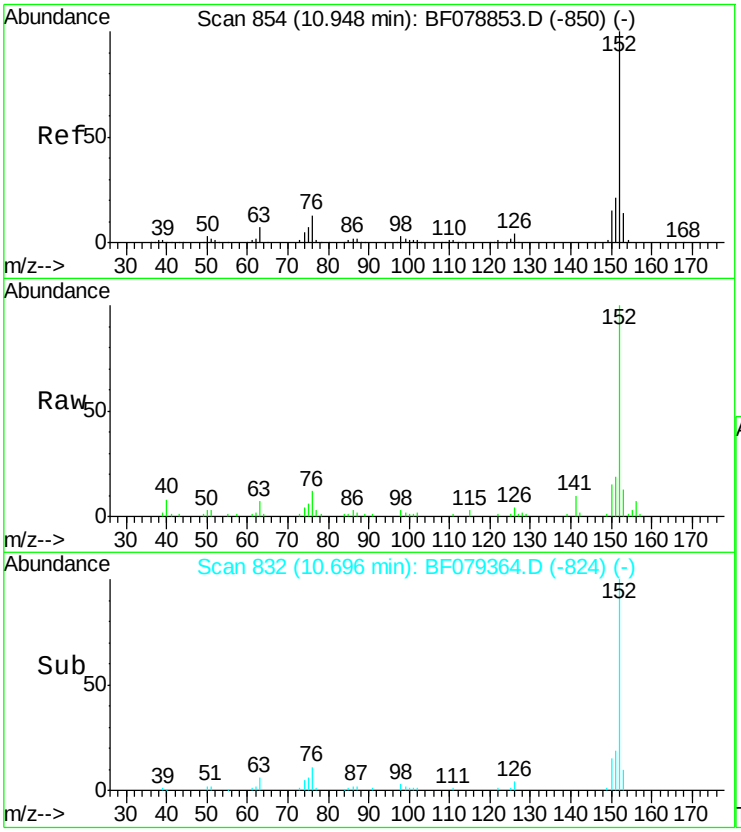




#44
2-Fluorobiphenyl
Concen: 64.23 ng
RT: 10.06 min Scan# 776
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:172 Resp: 419758

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 34.7 | 28.3 | 42.5 |
| 170 | 23.8 | 19.4 | 29.2 |



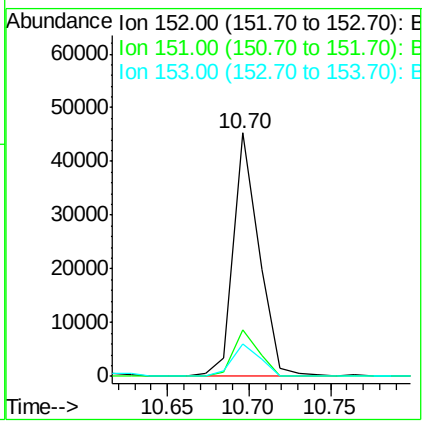


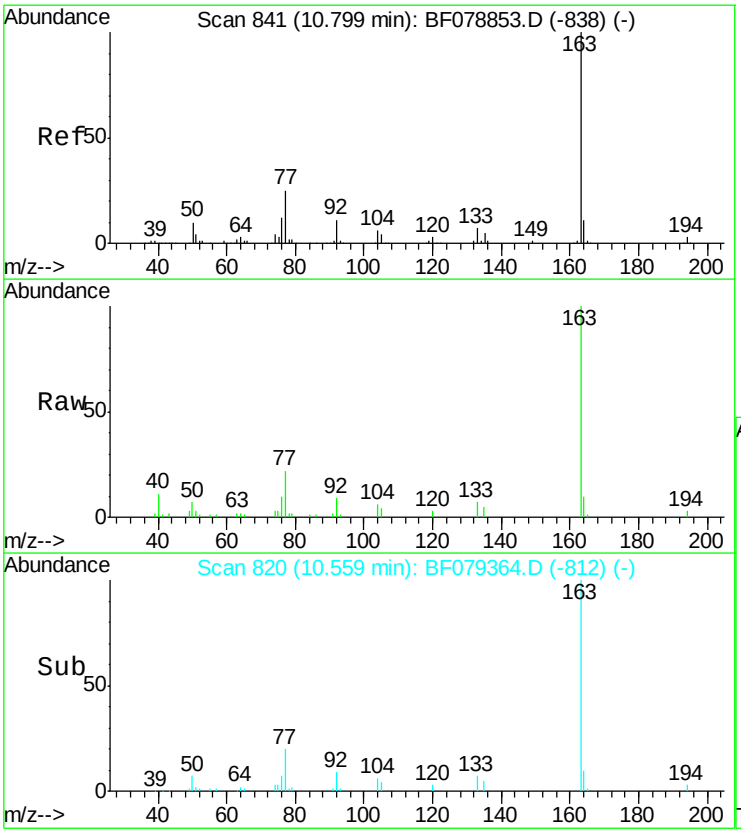

#48
Acenaphthylene
Concen: 5.29 ng
RT: 10.70 min Scan# 832
Delta R.T. -0.01 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:152 Resp: 49075

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.0 | 16.6 | 24.8 |
| 153 | 13.3 | 11.0 | 16.6 |

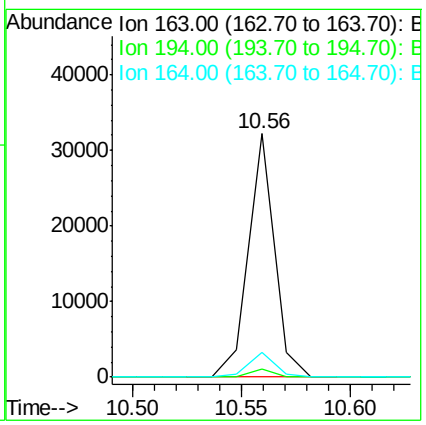


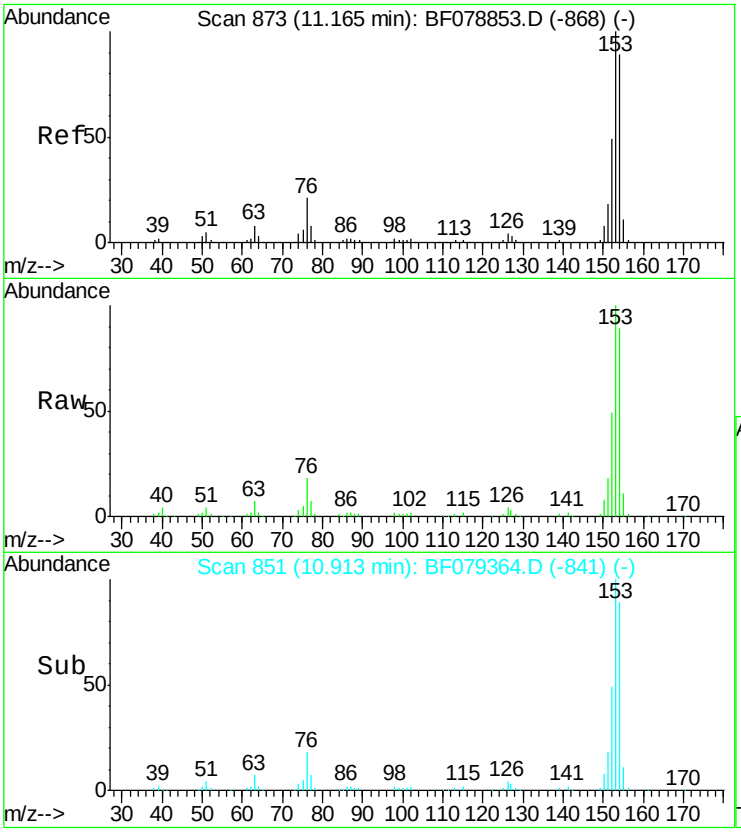




#49
Dimethylphthalate
Concen: 4.02 ng
RT: 10.56 min Scan# 820
Delta R.T. -0.01 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:163 Resp: 26880

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 163 | 100 | | |
| 194 | 3.2 | 2.4 | 3.6 |
| 164 | 10.1 | 8.6 | 12.8 |



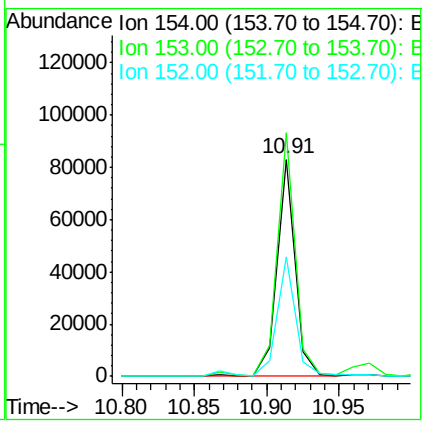


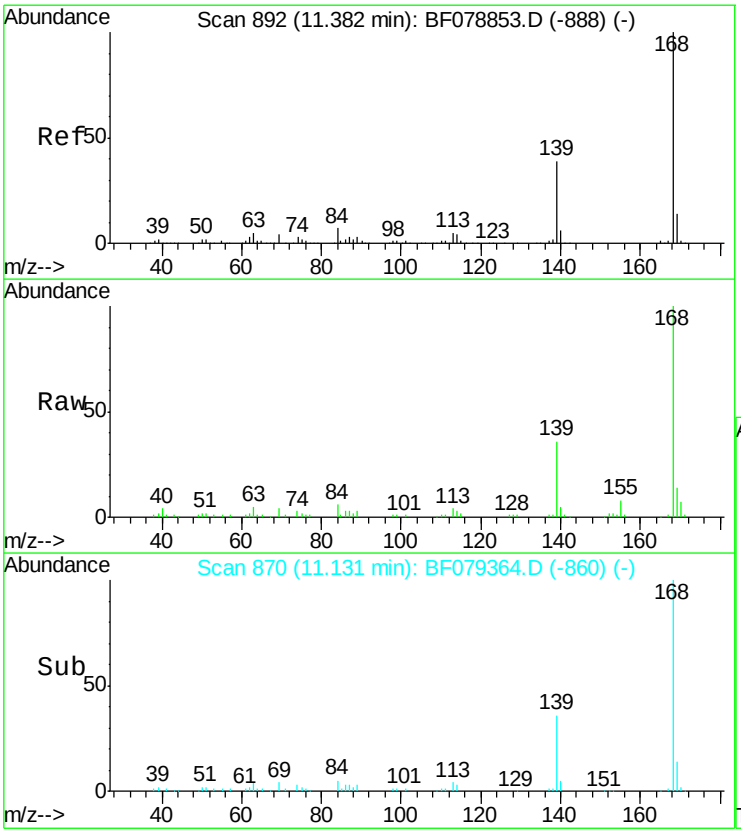

#51
Acenaphthene
Concen: 12.98 ng
RT: 10.91 min Scan# 851
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:154 Resp: 71779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 112.2 | 90.2 | 135.2 |
| 152 | 55.1 | 43.8 | 65.8 |

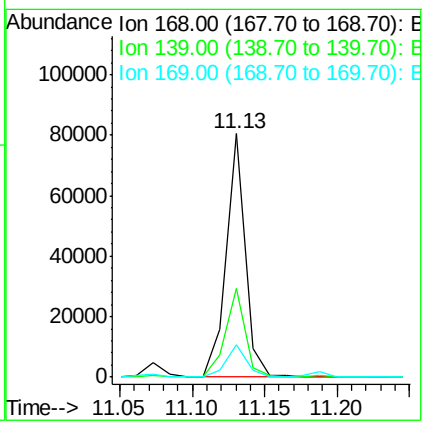


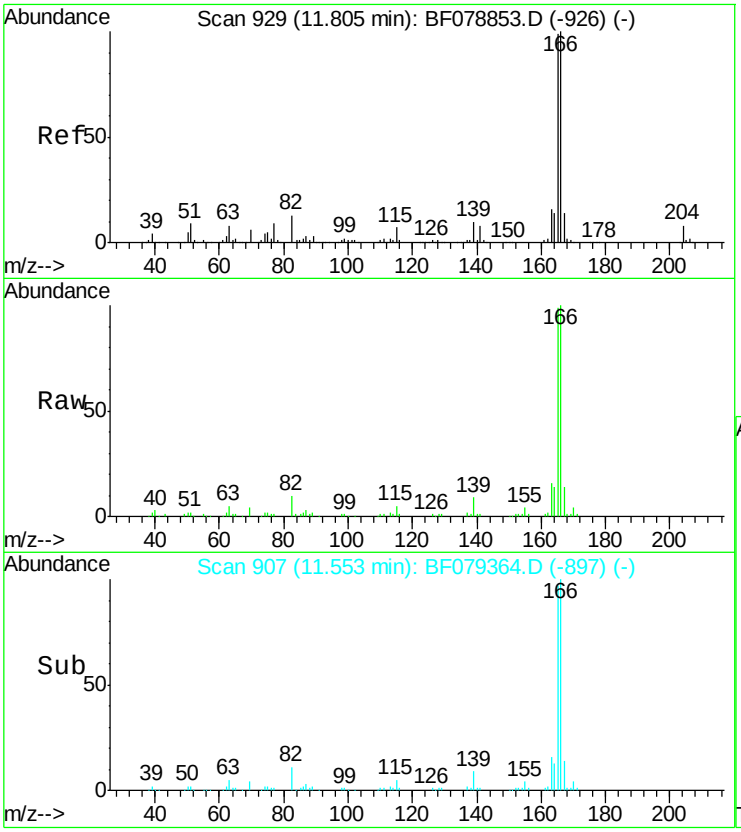




#54
Dibenzofuran
Concen: 9.21 ng
RT: 11.13 min Scan# 870
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:168 Resp: 73526

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 139 | 36.5 | 31.5 | 47.3 |
| 169 | 13.6 | 11.0 | 16.4 |



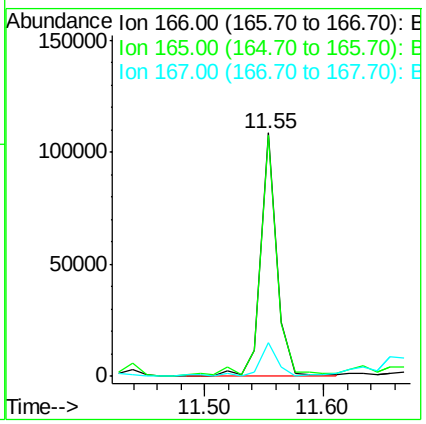


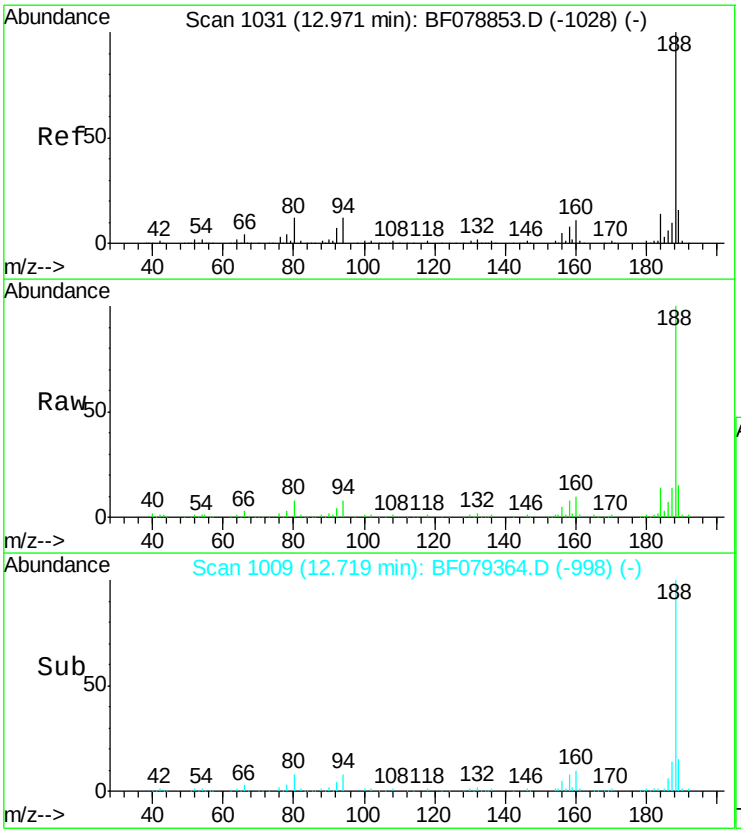

#57
Fluorene
Concen: 15.91 ng
RT: 11.55 min Scan# 907
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:166 Resp: 104270

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 98.9 | 79.5 | 119.3 |
| 167 | 13.9 | 11.0 | 16.6 |

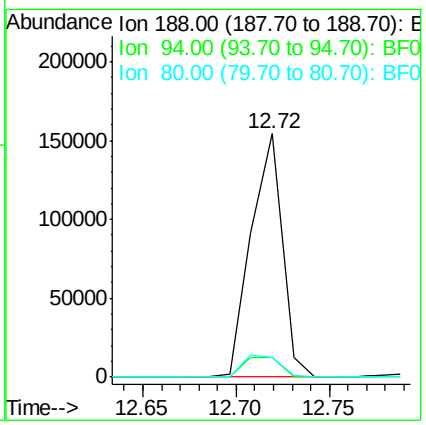


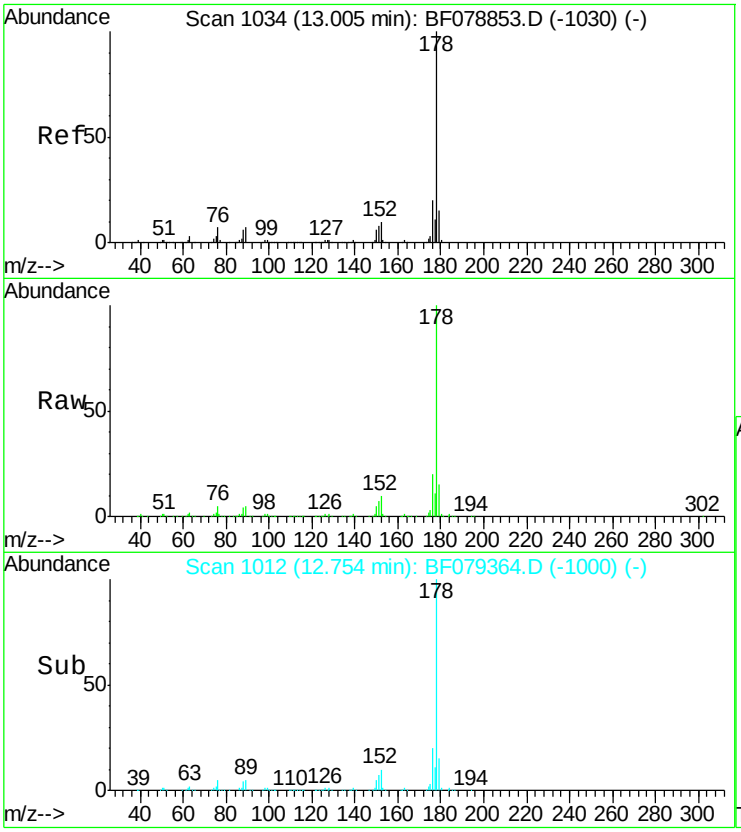




#63
Phenanthrene-d10
Concen: 20.00 ng
RT: 12.72 min Scan# 1009
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:188 Resp: 178323

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 8.1 | 9.4 | 14.0# |
| 80 | 8.1 | 9.8 | 14.6# |



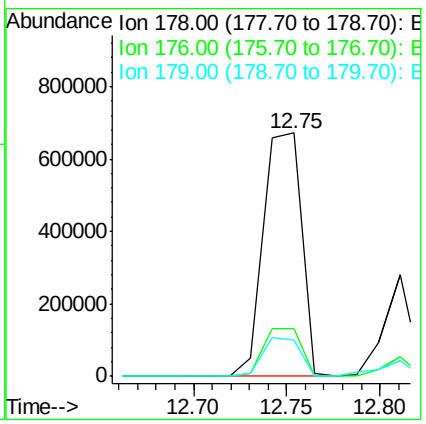


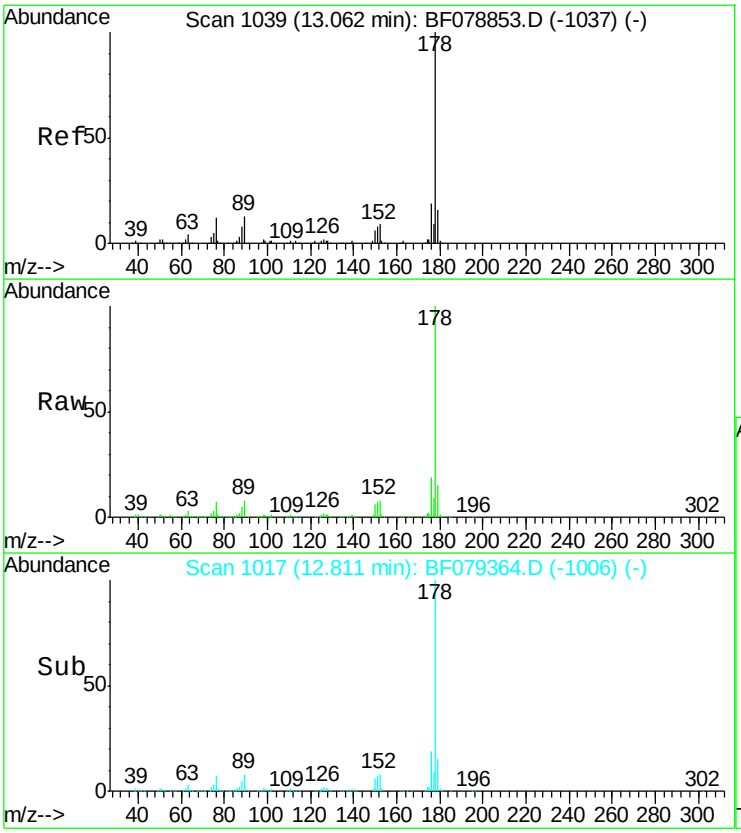

#70
Phenanthrene
Concen: 95.81 ng
RT: 12.75 min Scan# 1012
Delta R.T. 0.01 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:178 Resp: 955805

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.9 | 15.9 | 23.9 |
| 179 | 15.1 | 12.2 | 18.4 |

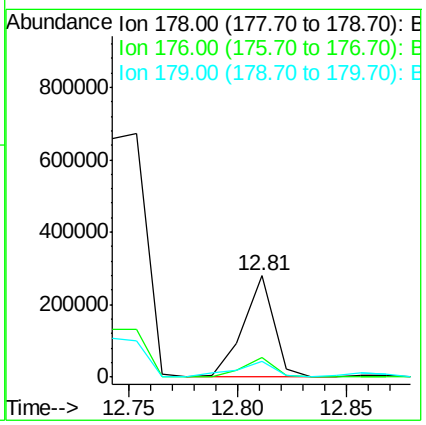


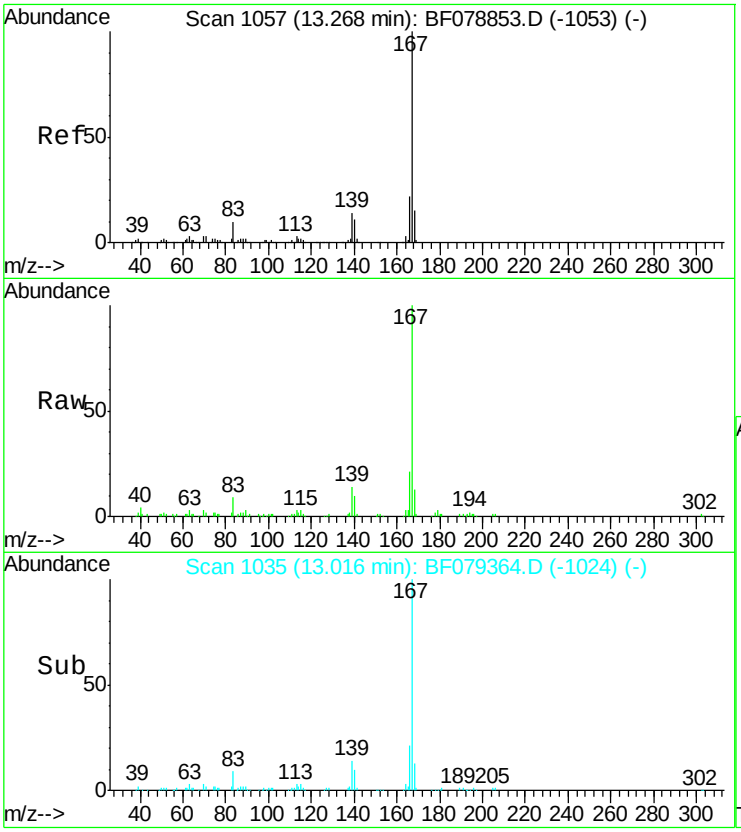




#71
Anthracene
Concen: 27.49 ng
RT: 12.81 min Scan# 1017
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:178 Resp: 269077

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.9 | 15.3 | 22.9 |
| 179 | 15.1 | 12.6 | 19.0 |



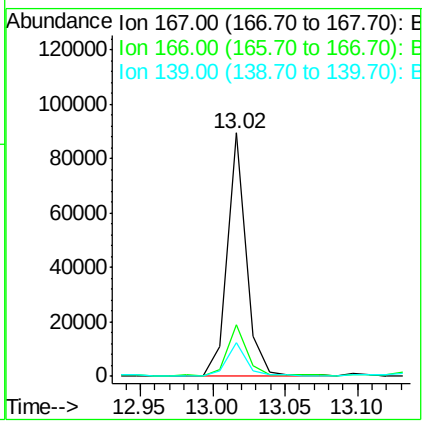


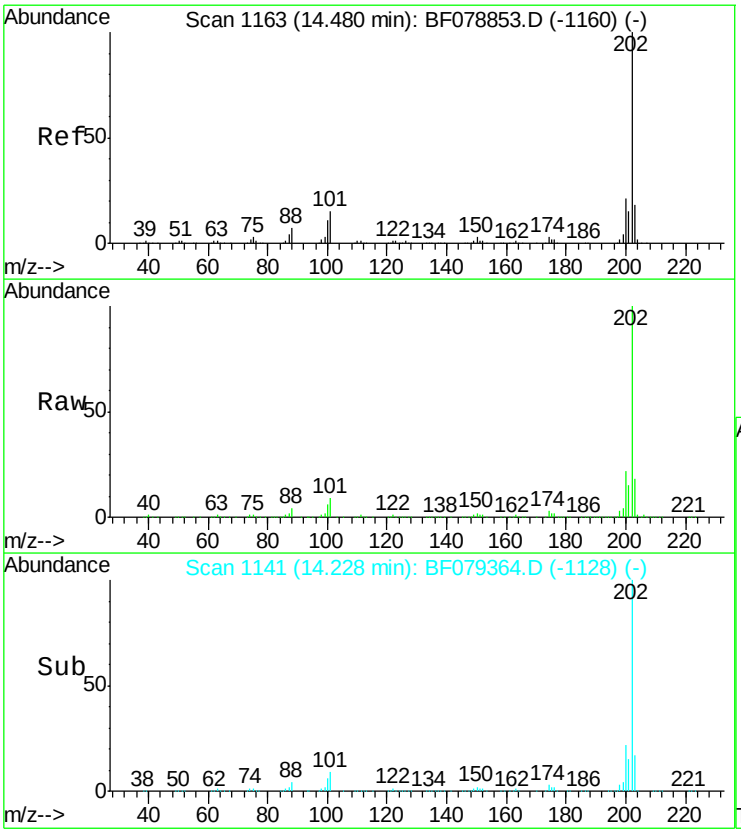

#72
Carbazole
Concen: 8.74 ng
RT: 13.02 min Scan# 1035
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:167 Resp: 81544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 167 | 100 | | |
| 166 | 21.0 | 17.5 | 26.3 |
| 139 | 13.6 | 11.0 | 16.4 |

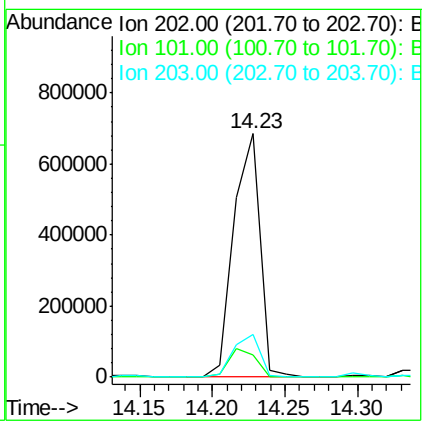


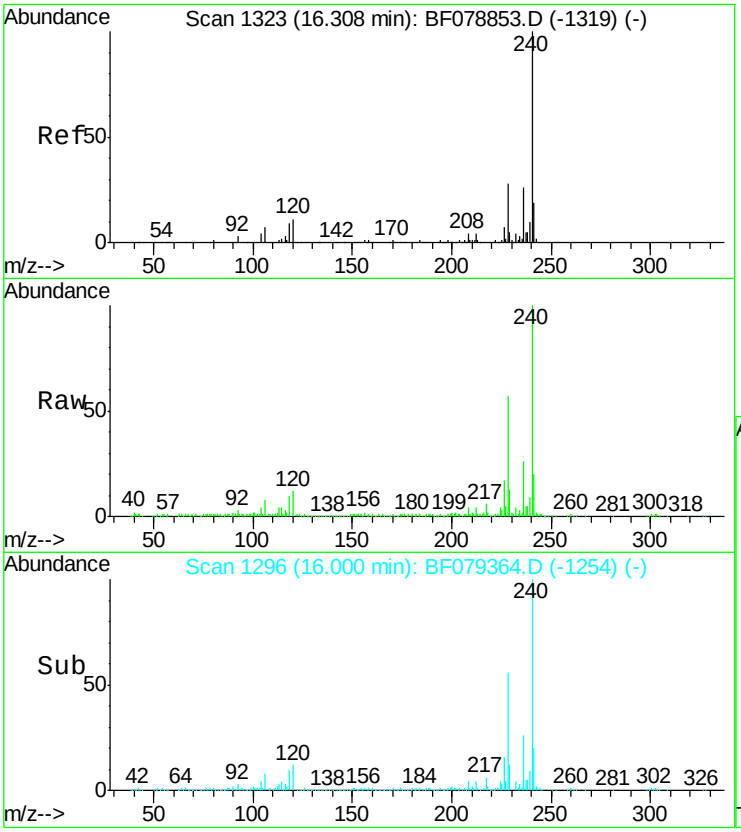




#74
Fluoranthene
Concen: 82.40 ng
RT: 14.23 min Scan# 1141
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:202 Resp: 856519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 9.0 | 0.0 | 34.7 |
| 203 | 17.6 | 0.0 | 37.9 |



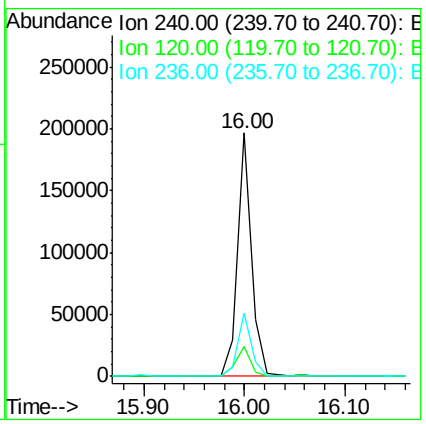


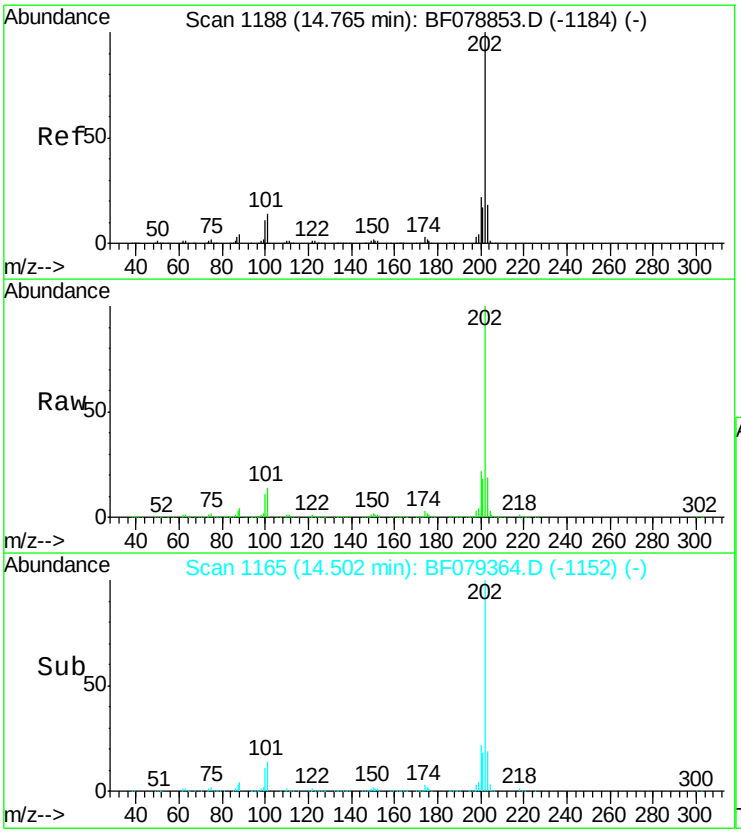

#75
Chrysene-d12
Concen: 20.00 ng
RT: 16.00 min Scan# 1296
Delta R.T. -0.02 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:240 Resp: 192101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 12.4 | 8.6 | 12.8 |
| 236 | 25.7 | 21.0 | 31.6 |

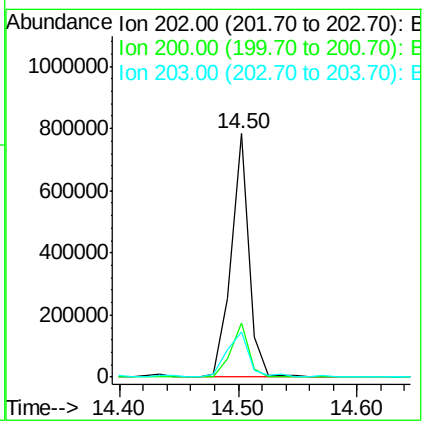


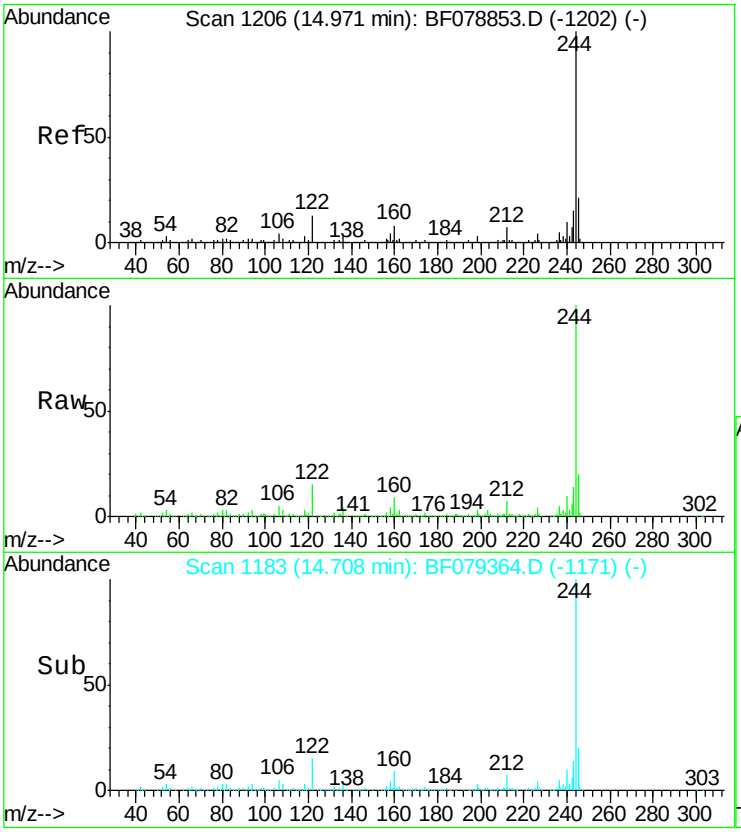




#77
Pyrene
Concen: 73.39 ng
RT: 14.50 min Scan# 1165
Delta R.T. -0.00 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:202 Resp: 812459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 22.0 | 17.5 | 26.3 |
| 203 | 18.8 | 14.7 | 22.1 |



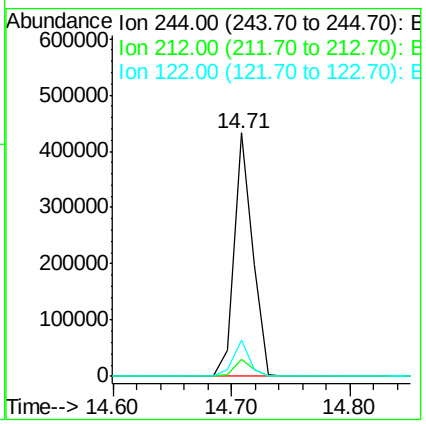


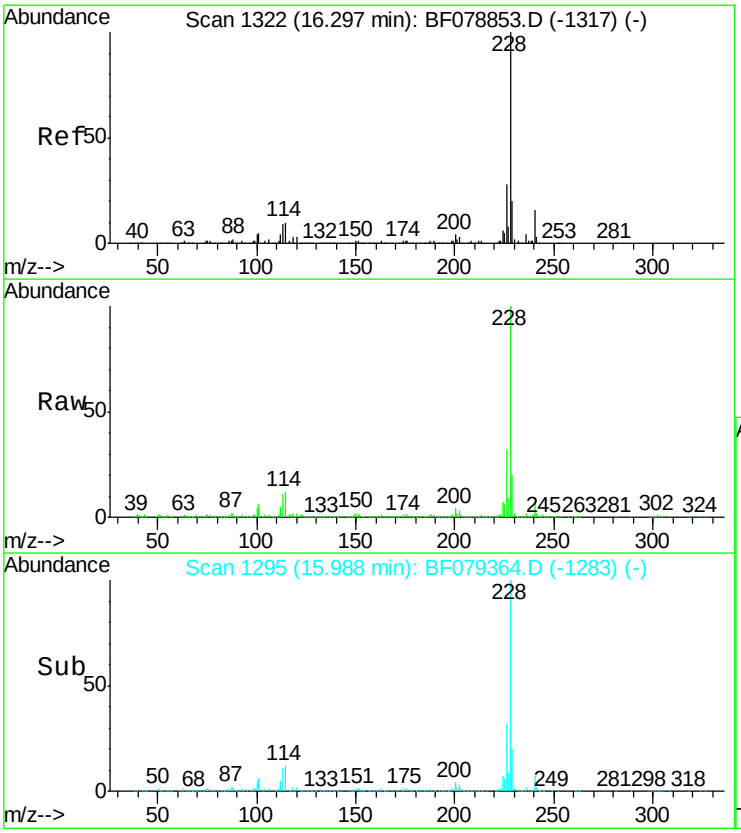

#78
Terphenyl-d14
Concen: 58.34 ng
RT: 14.71 min Scan# 1183
Delta R.T. -0.01 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:244 Resp: 468109

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 7.2 | 5.6 | 8.4 |
| 122 | 14.8 | 10.5 | 15.7 |

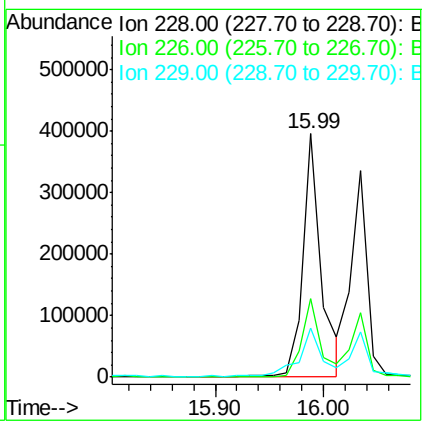


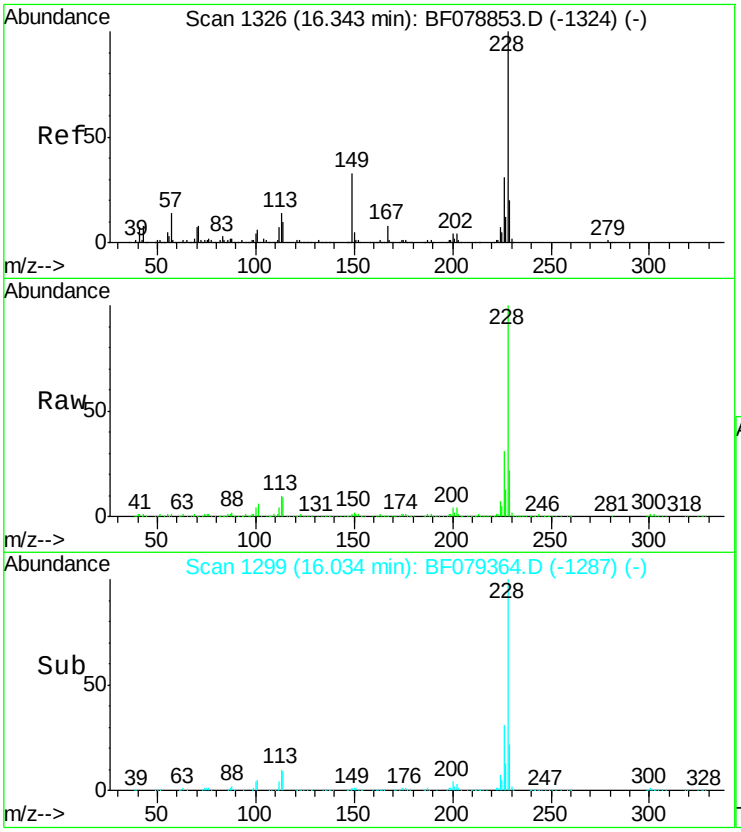




#80
Benzo(a)anthracene
Concen: 44.03 ng
RT: 15.99 min Scan# 1295
Delta R.T. -0.02 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:228 Resp: 463143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 32.2 | 22.3 | 33.5 |
| 229 | 20.4 | 16.1 | 24.1 |



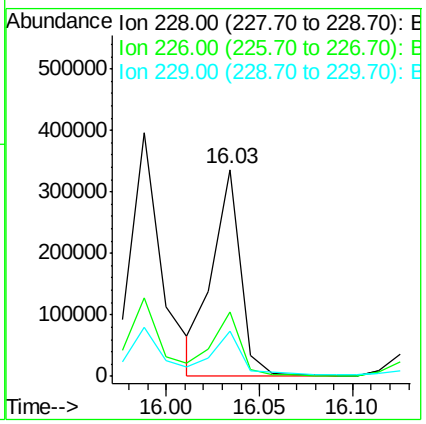


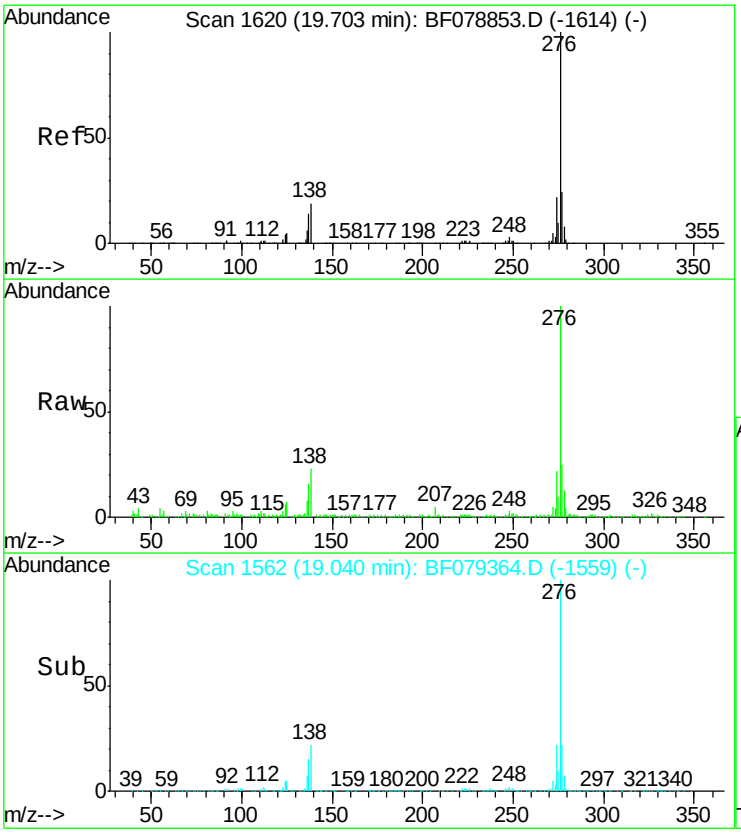

#82
Chrysene
Concen: 34.61 ng
RT: 16.03 min Scan# 1299
Delta R.T. -0.02 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:228 Resp: 350212

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.9 | 24.8 | 37.2 |
| 229 | 22.1 | 16.1 | 24.1 |

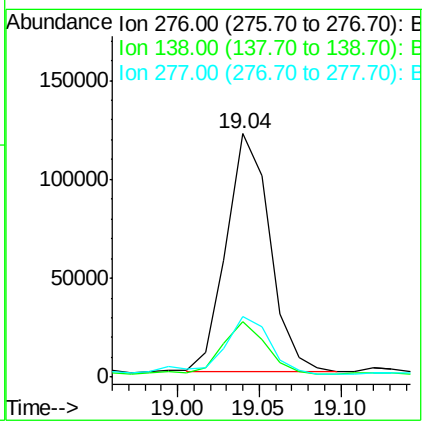


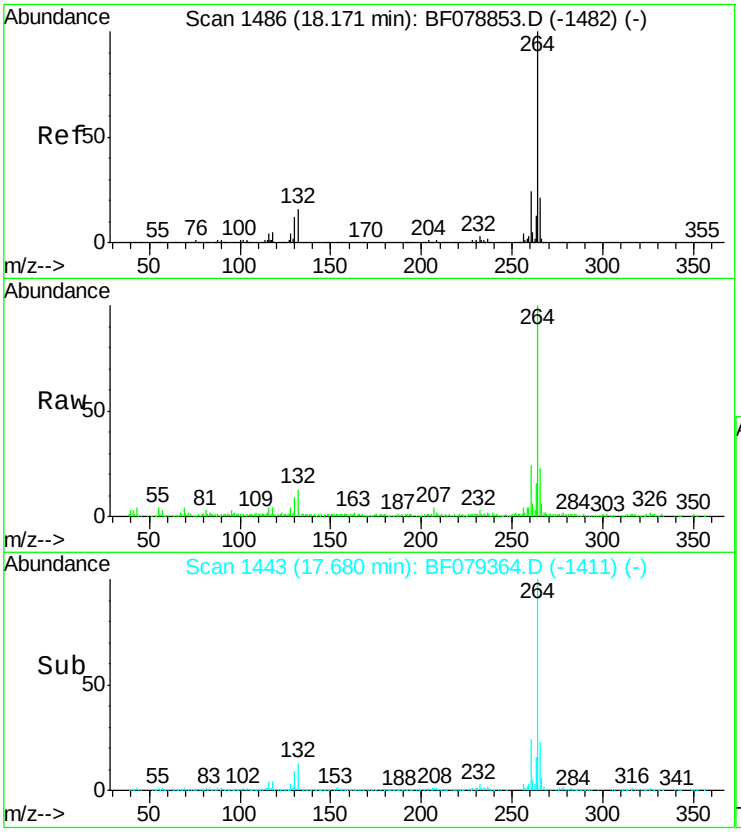




#85
Indeno(1,2,3-cd)pyrene
Concen: 17.16 ng
RT: 19.04 min Scan# 1562
Delta R.T. -0.17 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:276 Resp: 221197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 22.3 | 21.1 | 31.7 |
| 277 | 24.9 | 19.9 | 29.9 |



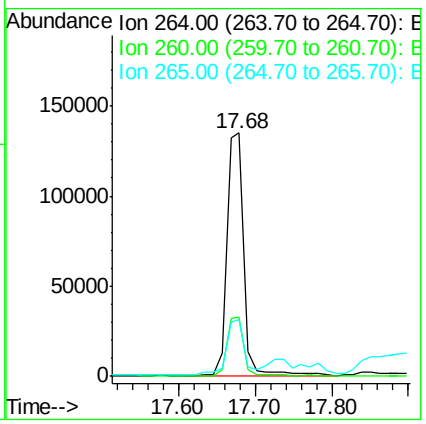


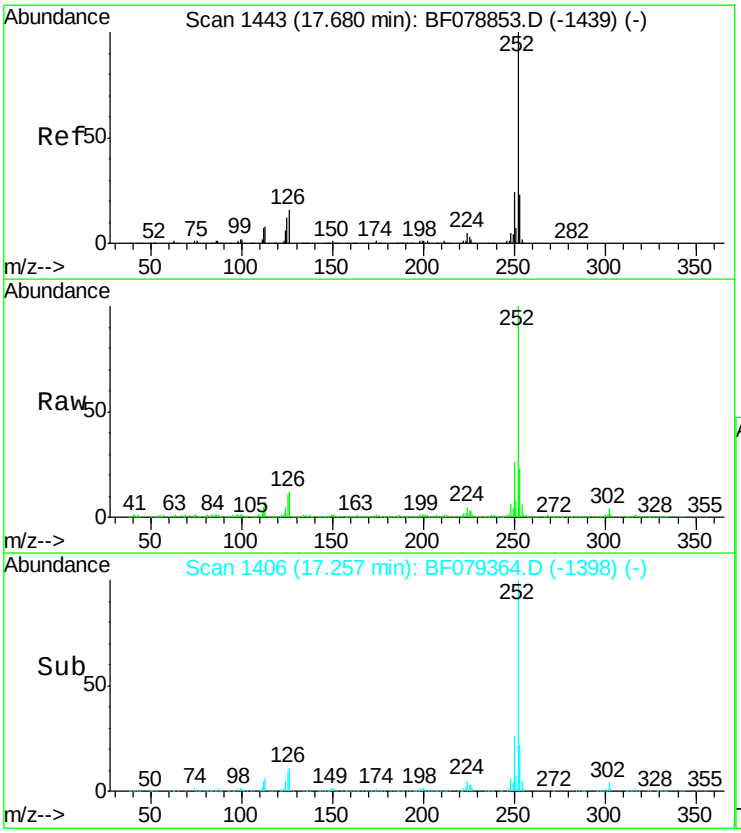

#86
Perylene-d12
Concen: 20.00 ng
RT: 17.68 min Scan# 1443
Delta R.T. -0.14 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:264 Resp: 211093

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 24.2 | 19.2 | 28.8 |
| 265 | 23.3 | 17.2 | 25.8 |

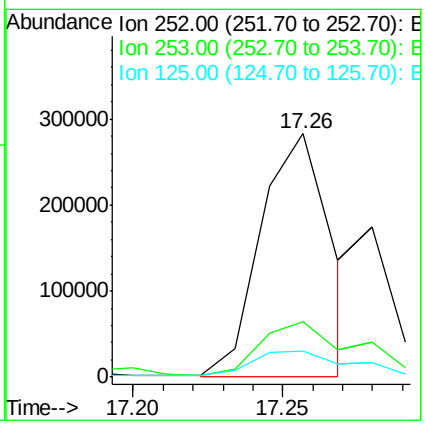


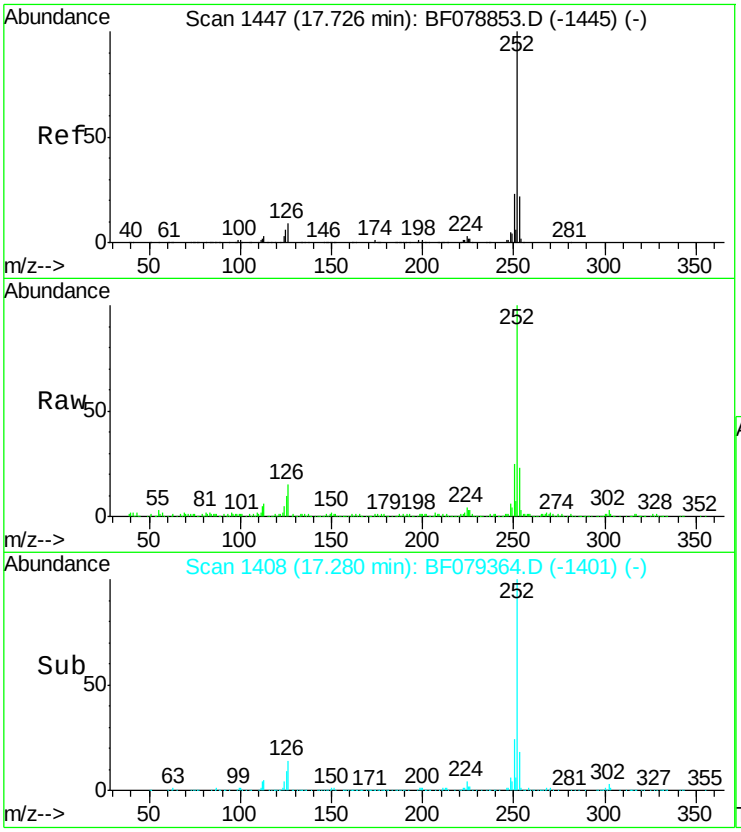




#87
Benzo(b)fluoranthene
Concen: 40.04 ng m
RT: 17.26 min Scan# 1406
Delta R.T. -0.09 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:252 Resp: 462580

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.8 | 18.1 | 27.1 |
| 125 | 10.8 | 9.4 | 14.2 |



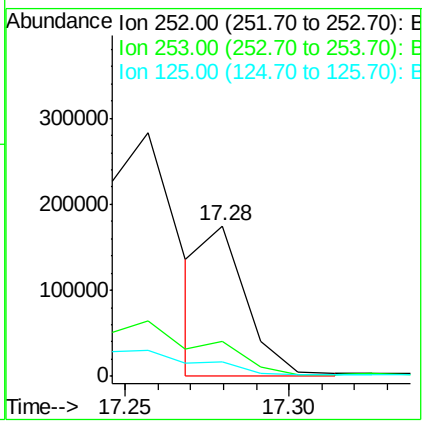


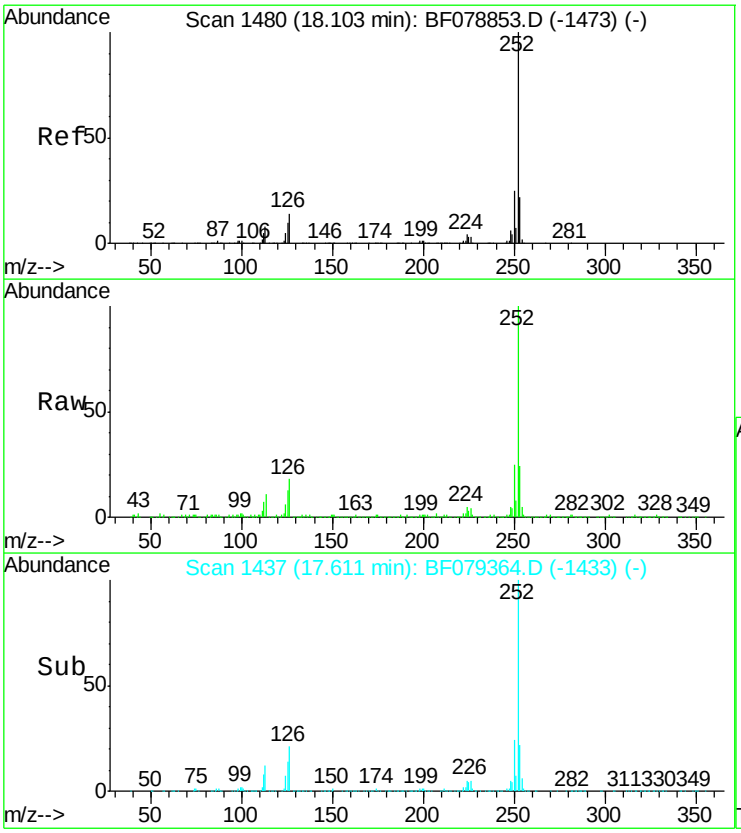

#88
Benzo(k)fluoranthene
Concen: 13.69 ng m
RT: 17.28 min Scan# 1408
Delta R.T. -0.10 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:252 Resp: 153076

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.4 | 17.4 | 26.0 |
| 125 | 9.9 | 6.1 | 9.1# |

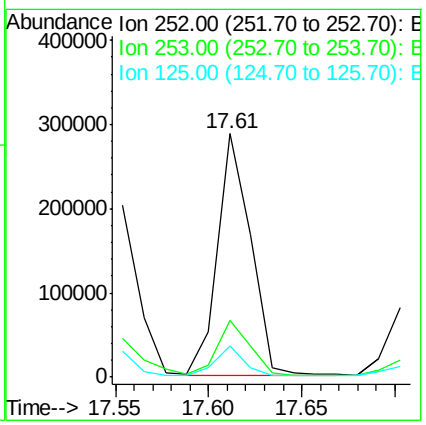


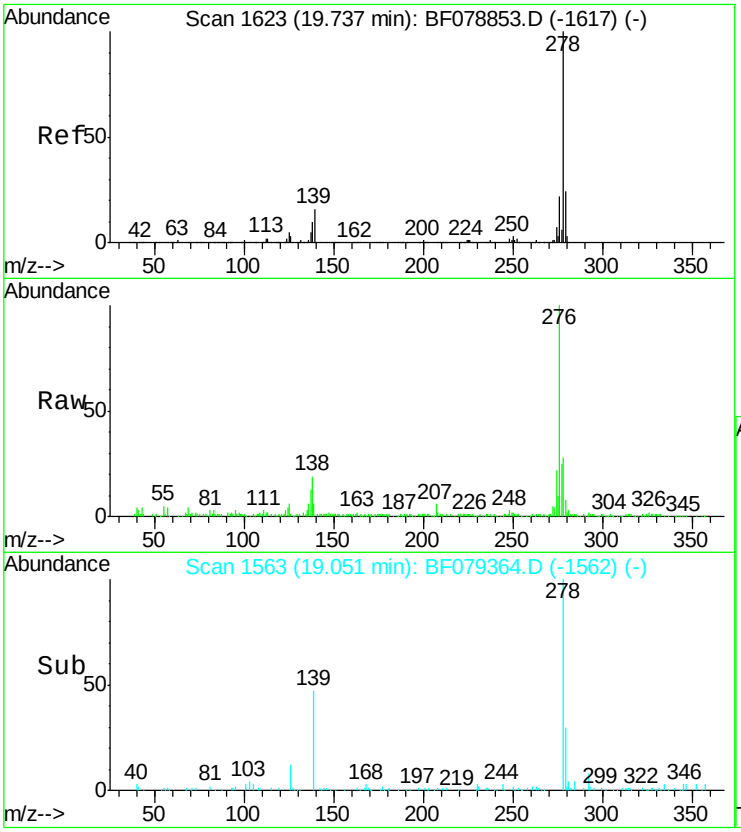




#89
Benzo(a)pyrene
Concen: 33.70 ng
RT: 17.61 min Scan# 1437
Delta R.T. -0.14 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:252 Resp: 358554

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.5 | 18.0 | 27.0 |
| 125 | 13.0 | 8.2 | 12.2# |



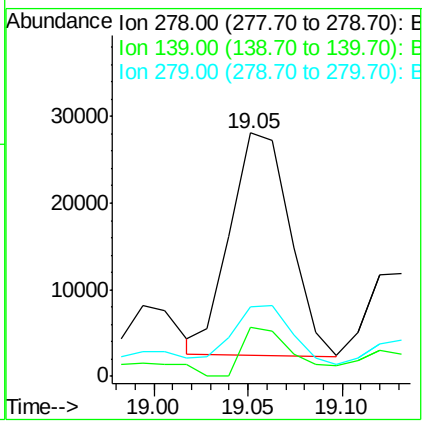


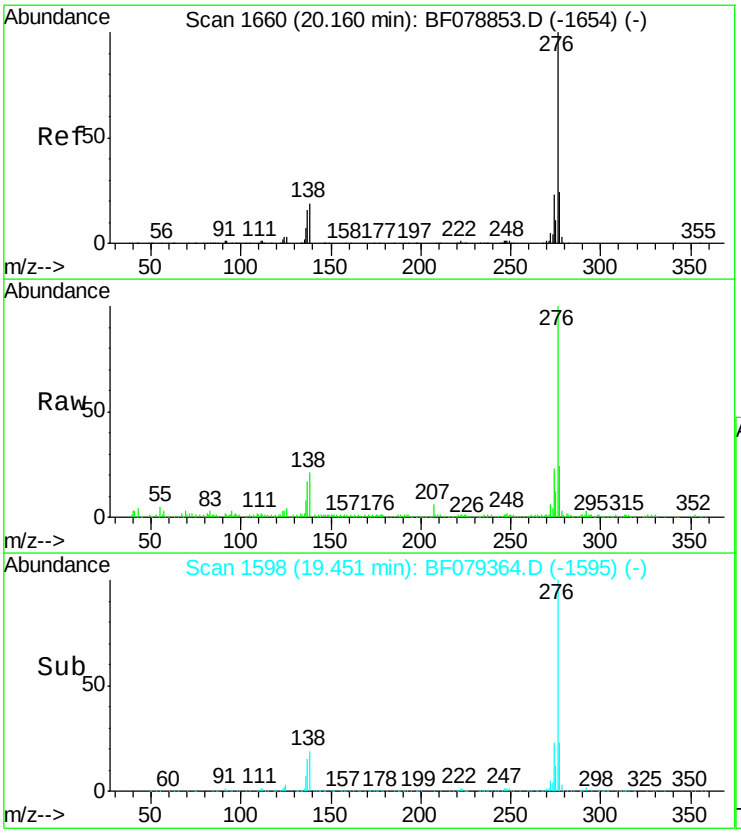

#90
Dibenzo(a,h)anthracene
Concen: 4.99 ng m
RT: 19.05 min Scan# 1563
Delta R.T. -0.19 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

**Instrument :**
BNA_F
**ClientSampleId :**
SB-02

Tgt Ion:278 Resp: 56458

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 20.0 | 13.1 | 19.7# |
| 279 | 28.5 | 19.1 | 28.7 |




#91
Benzo(g,h,i)perylene
Concen: 19.07 ng
RT: 19.45 min Scan# 1598
Delta R.T. -0.17 min
Lab File: BF079364.D
Acq: 20 May 2015 4:00

Tgt Ion:276 Resp: 216146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 23.8 | 18.8 | 28.2 |
| 138 | 20.8 | 15.2 | 22.8 |