Quantitation Report (LSC Reviewed)

Data Path : Z:\HPCHEM1\BNA F\DATA\BF020316\
Data File : BF084810.D
Acq On : 4 Feb 2016 3:12
Operator : SJ/IZ
Sample : H1312-04
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SUP-B036(25-27)

**Manual Integrations APPROVED**
mohammad
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Quant Time: Feb 04 05:18:00 2016
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF020116.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Feb 03 14:16:01 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 6.68 | 152 | 181225 | 20.00 | ng | | 0.00 |
| 21) Naphthalene-d8 | 7.97 | 136 | 771696 | 20.00 | ng | | 0.00 |
| 38) Acenaphthene-d10 | 9.72 | 164 | 355426 | 20.00 | ng | | -0.01 |
| 63) Phenanthrene-d10 | 11.21 | 188 | 627720 | 20.00 | ng | | 0.00 |
| 75) Chrysene-d12 | 13.84 | 240 | 462174 | 20.00 | ng | | 0.00 |
| 86) Perylene-d12 | 15.21 | 264 | 359644 | 20.00 | ng | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 5) 2-Fluorophenol | 5.28 | 112 | 1011071 | 86.90 | ng | | 0.00 |
| 7) Phenol-d6 | 6.34 | 99 | 1529857 | 106.06 | ng | | 0.00 |
| 23) Nitrobenzene-d5 | 7.25 | 82 | 839488 | 61.28 | ng | | -0.01 |
| 41) 2,4,6-Tribromophenol | 10.51 | 330 | 287470 | 77.54 | ng | | -0.01 |
| 44) 2-Fluorobiphenyl | 9.06 | 172 | 1503006 | 66.18 | ng | | 0.00 |
| 78) Terphenyl-d14 | 12.80 | 244 | 1282378 | 62.88 | ng | | 0.00 |
| **Target Compounds** | | | | | | | Qvalue |
| 31) Naphthalene | 8.00 | 128 | 505495 | 13.06 | ng | | 99 |
| 37) 2-Methylnaphthalene | 8.68 | 142 | 86615 | 3.58 | ng | | 96 |
| 49) Dimethylphthalate | 9.45 | 163 | 318060 | 11.75 | ng | # | 90 |
| 51) Acenaphthene | 9.76 | 154 | 96518 | 4.18 | ng | | 98 |
| 54) Dibenzofuran | 9.93 | 168 | 115018 | 4.08 | ng | | 98 |
| 57) Fluorene | 10.27 | 166 | 130185 | 5.53 | ng | | 97 |
| 70) Phenanthrene | 11.23 | 178 | 1139722 | 32.74 | ng | | 98 |
| 71) Anthracene | 11.28 | 178 | 308000 | 8.78 | ng | | 99 |
| 72) Carbazole | 11.44 | 167 | 103873 | 3.40 | ng | | 99 |
| 74) Fluoranthene | 12.41 | 202 | 764286 | 21.69 | ng | | 99 |
| 77) Pyrene | 12.64 | 202 | 805390 | 22.76 | ng | | 99 |
| 80) Benzo(a)anthracene | 13.83 | 228 | 308271m | 10.75 | ng | | |
| 82) Chrysene | 13.86 | 228 | 287855m | 10.35 | ng | | |
| 85) Indeno(1,2,3-cd)pyrene | 16.49 | 276 | 78915 | 3.60 | ng | | 96 |
| 87) Benzo(b)fluoranthene | 14.83 | 252 | 207387m | 8.58 | ng | | |
| 88) Benzo(k)fluoranthene | 14.85 | 252 | 77242m | 3.87 | ng | | |
| 89) Benzo(a)pyrene | 15.15 | 252 | 164310 | 7.98 | ng | # | 97 |
| 91) Benzo(g,h,i)perylene | 16.88 | 276 | 82233 | 4.71 | ng | | 98 |

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

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**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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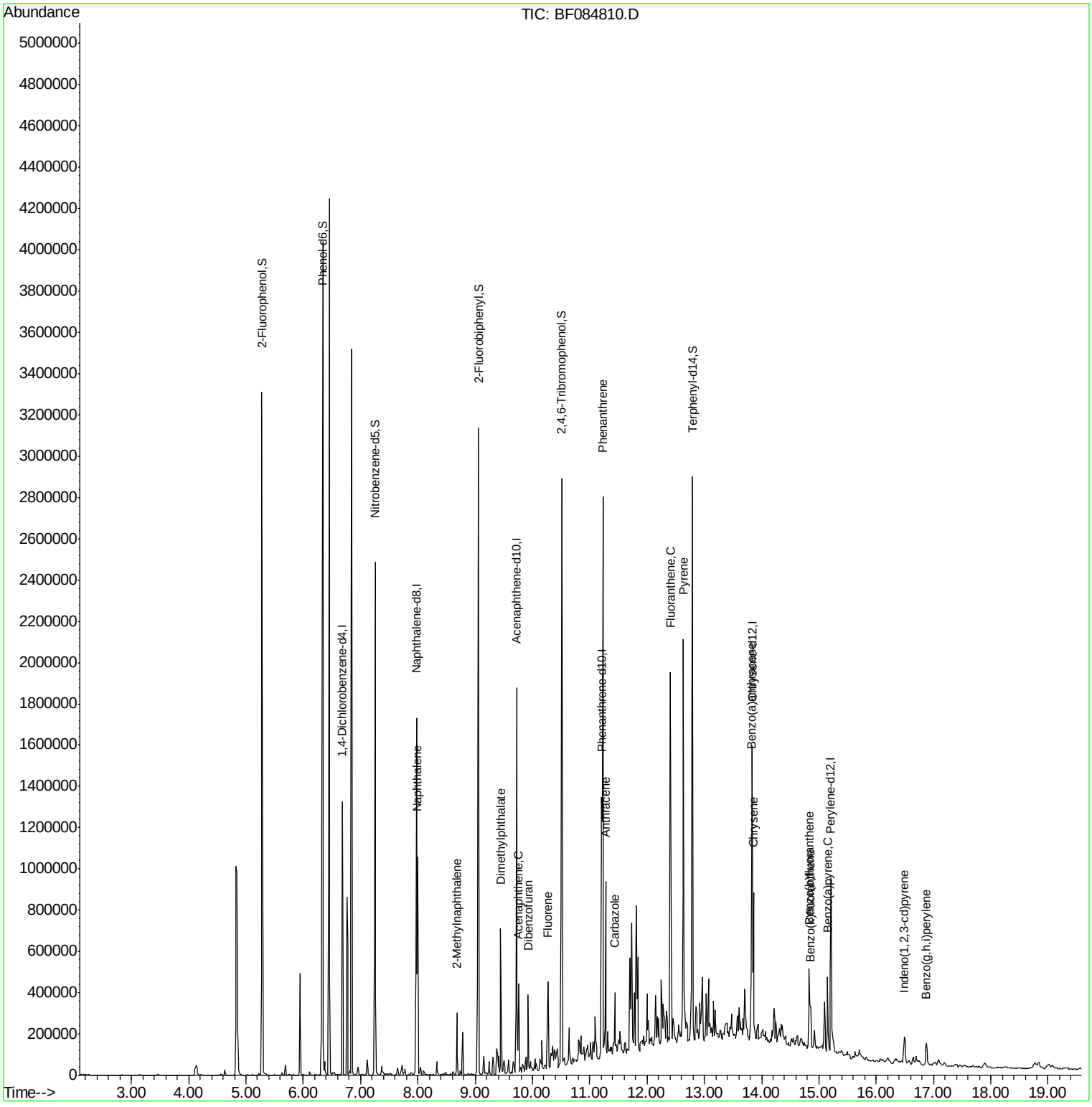
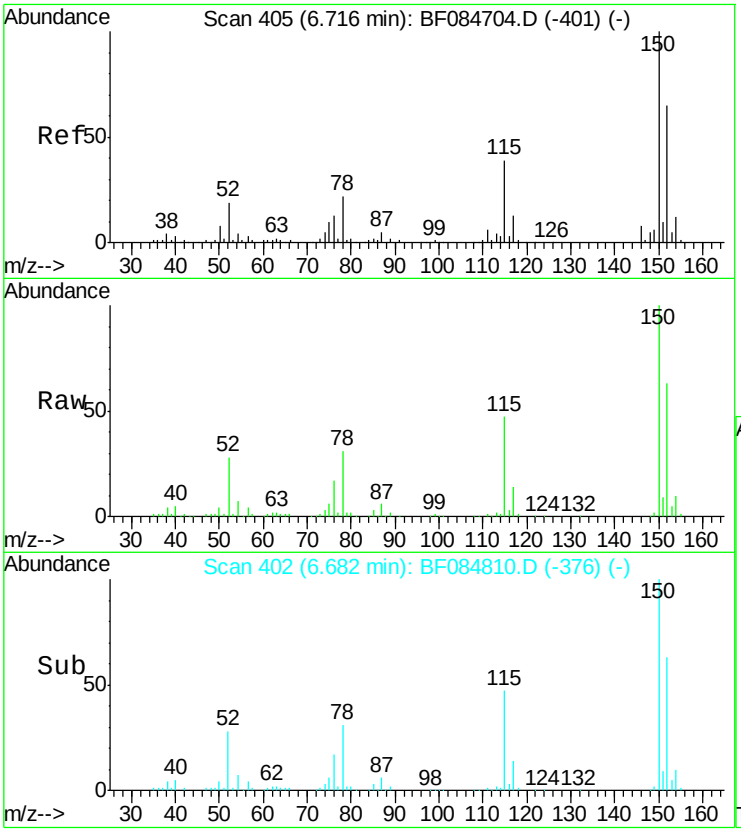
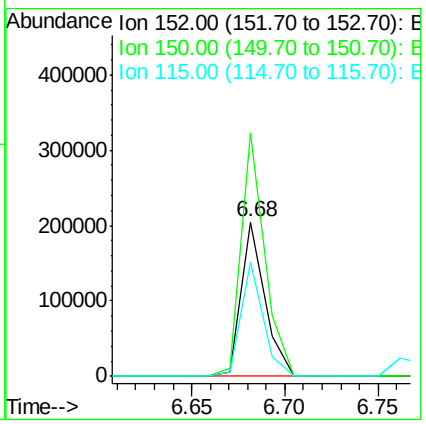





#1
1,4-Dichlorobenzene-d4
Concen: 20.00 ng
RT: 6.68 min Scan# 402
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:152 Resp: 181225

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 157.6 | 123.0 | 184.4 |
| 115 | 73.9 | 51.4 | 77.2 |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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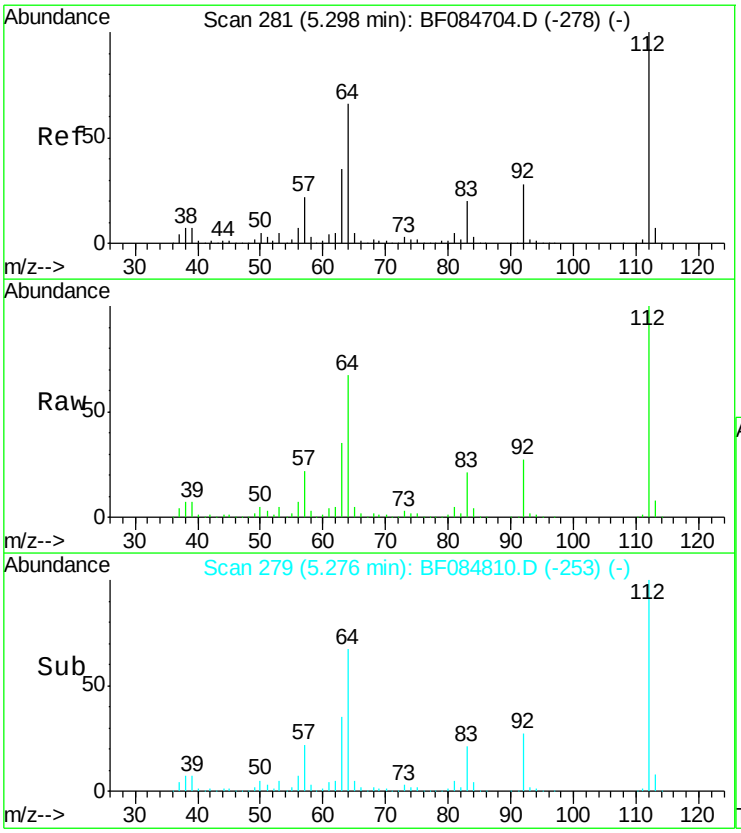
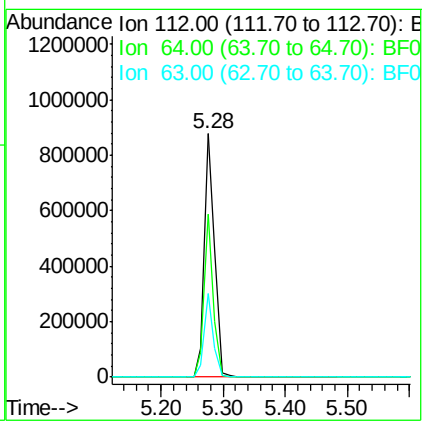
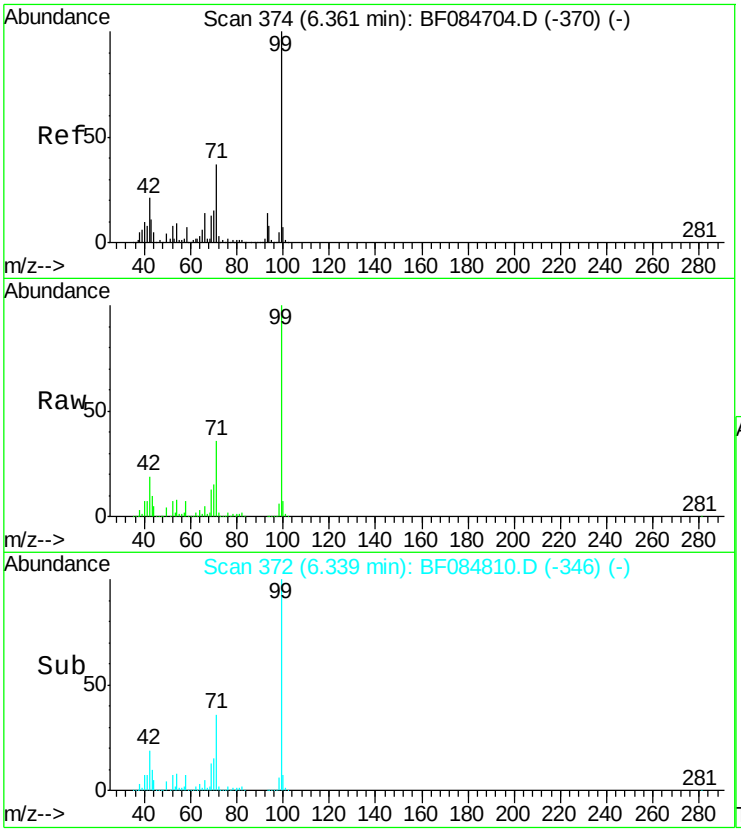



#5
2-Fluorophenol
Concen: 86.90 ng
RT: 5.28 min Scan# 279
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:112 Resp: 1011071

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 67.0 | 36.6 | 55.0# |
| 63 | 34.5 | 19.4 | 29.0# |

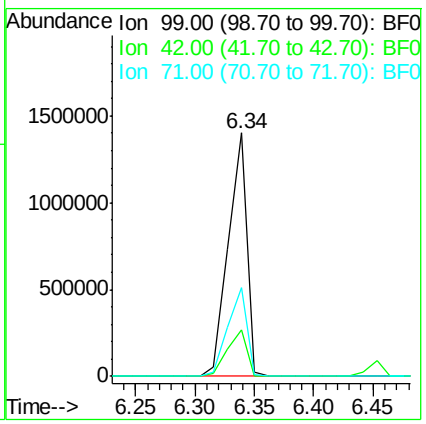





#7
Phenol-d6
Concen: 106.06 ng
RT: 6.34 min Scan# 372
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion: 99 Resp: 1529857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 19.2 | 12.8 | 19.2 |
| 71 | 36.4 | 30.9 | 46.3 |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

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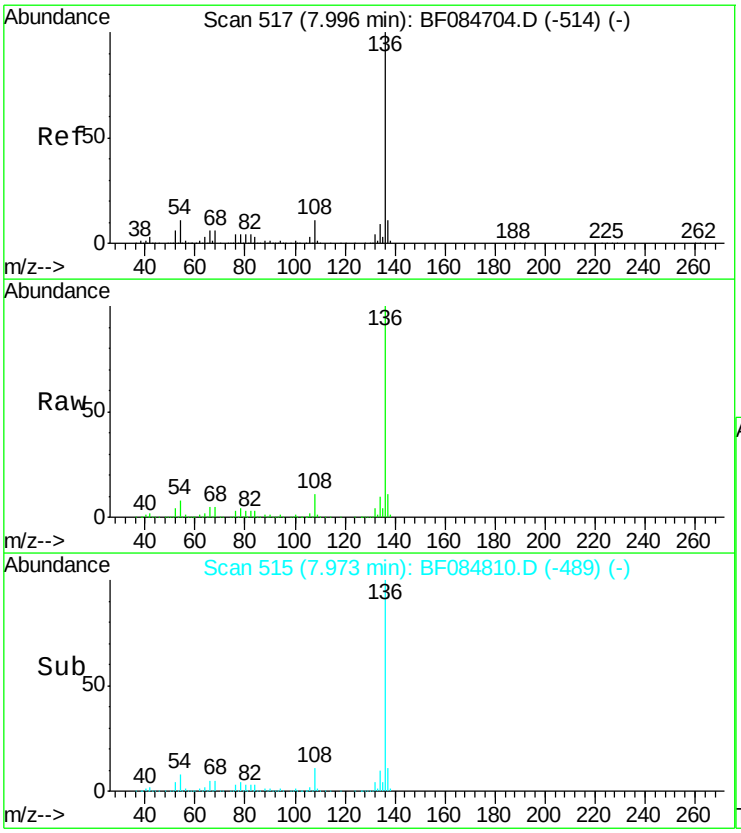
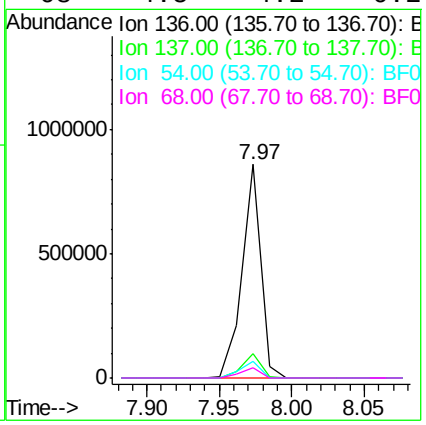
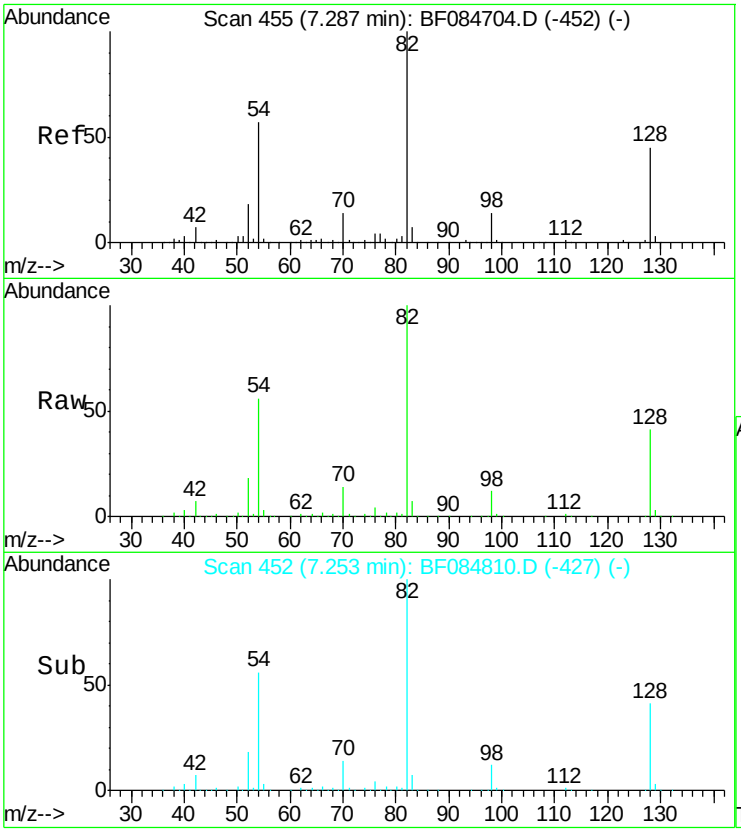



#21
Naphthalene-d8
Concen: 20.00 ng
RT: 7.97 min Scan# 515
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:136 Resp: 771696

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 11.3 | 8.7 | 13.1 |
| 54 | 7.7 | 5.8 | 8.8 |
| 68 | 4.5 | 4.2 | 6.2 |

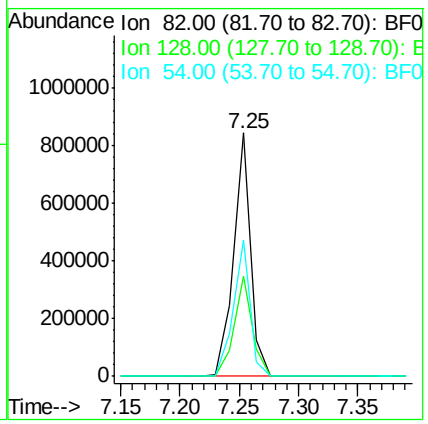





#23
Nitrobenzene-d5
Concen: 61.28 ng
RT: 7.25 min Scan# 452
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion: 82 Resp: 839488

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 41.1 | 34.6 | 51.8 |
| 54 | 56.1 | 38.4 | 57.6 |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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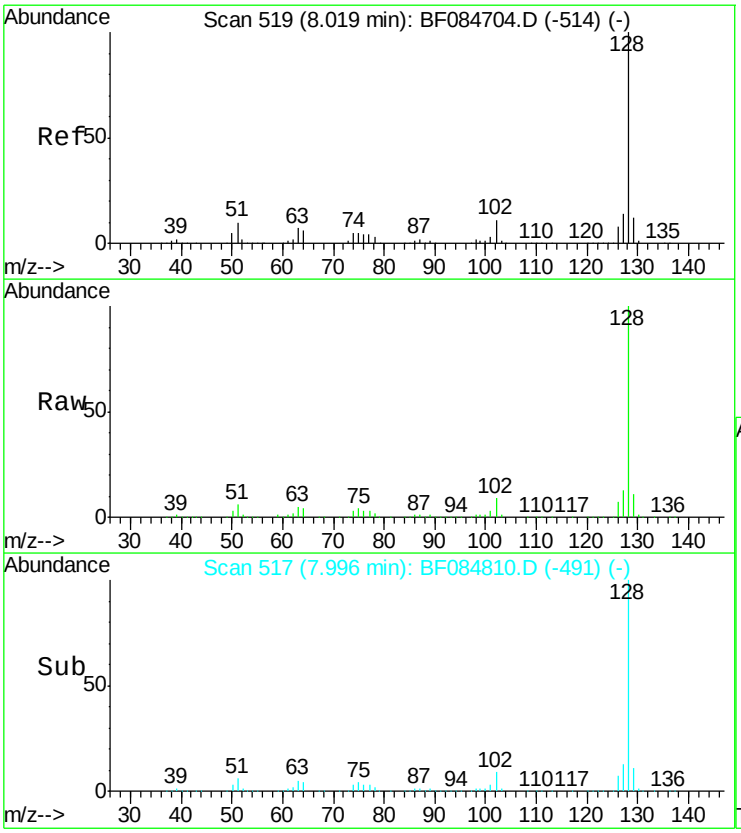
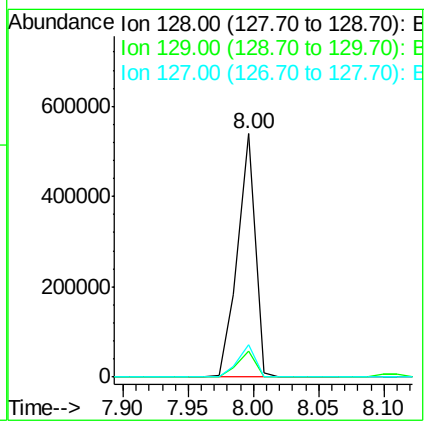
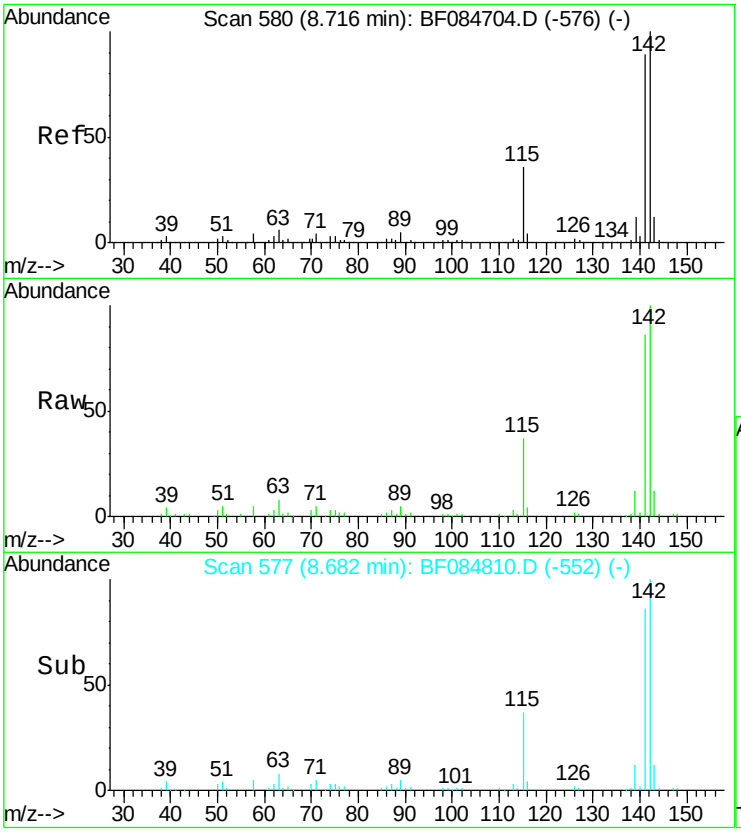



#31
Naphthalene
Concen: 13.06 ng
RT: 8.00 min Scan# 517
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:128 Resp: 505495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 10.8 | 9.1 | 13.7 |
| 127 | 13.3 | 11.1 | 16.7 |

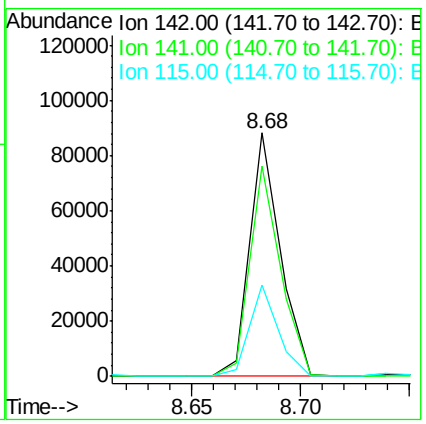





#37
2-Methylnaphthalene
Concen: 3.58 ng
RT: 8.68 min Scan# 577
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:142 Resp: 86615

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 86.4 | 72.4 | 108.6 |
| 115 | 37.4 | 27.9 | 41.9 |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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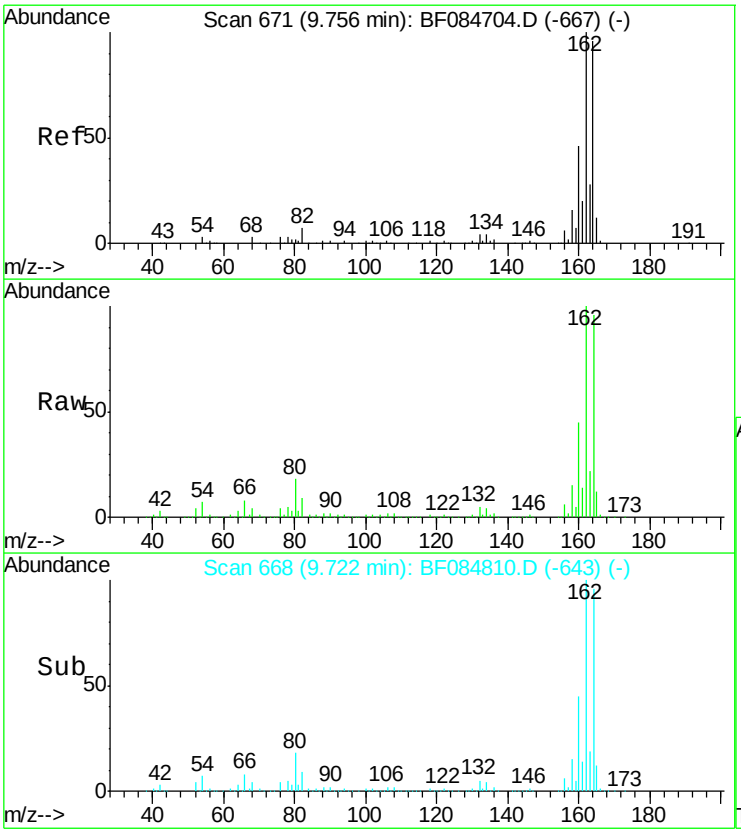
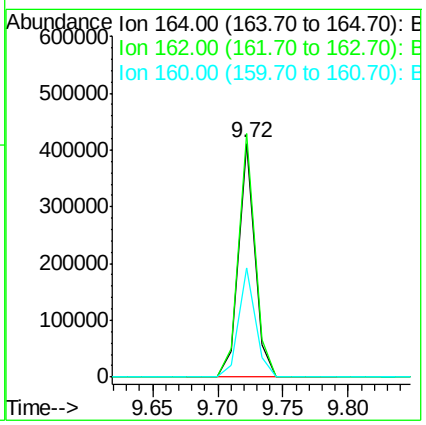
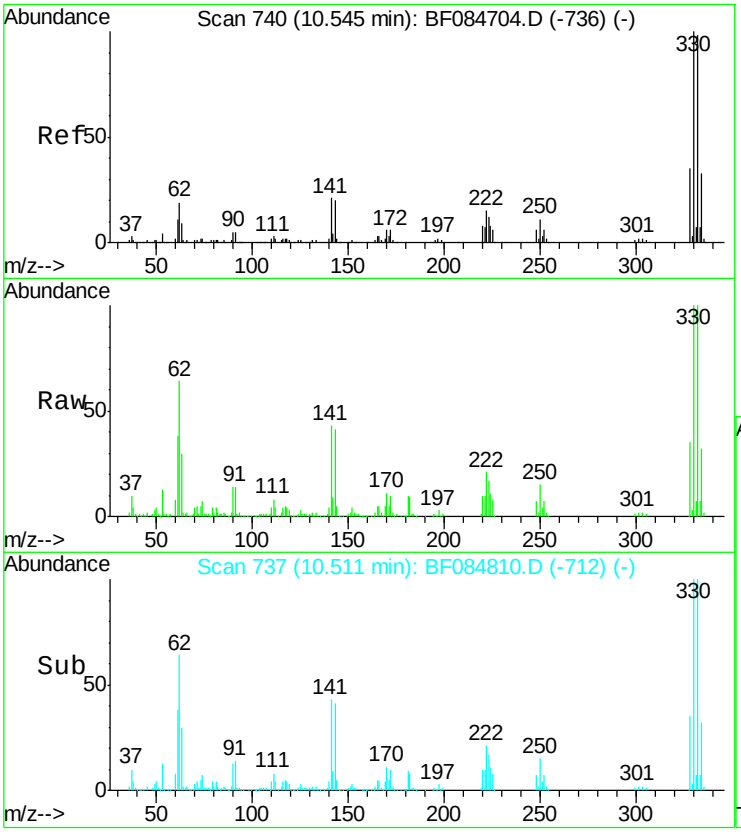



#38
Acenaphthene-d10
Concen: 20.00 ng
RT: 9.72 min Scan# 668
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:164 Resp: 355426

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 104.2 | 85.1 | 127.7 |
| 160 | 47.0 | 37.5 | 56.3 |

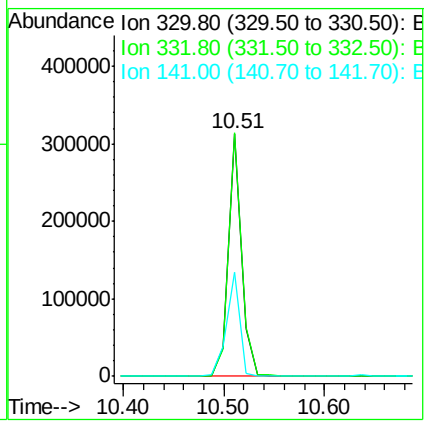





#41
2,4,6-Tribromophenol
Concen: 77.54 ng
RT: 10.51 min Scan# 737
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:330 Resp: 287470

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 100.3 | 76.6 | 114.8 |
| 141 | 44.5 | 27.8 | 41.6# |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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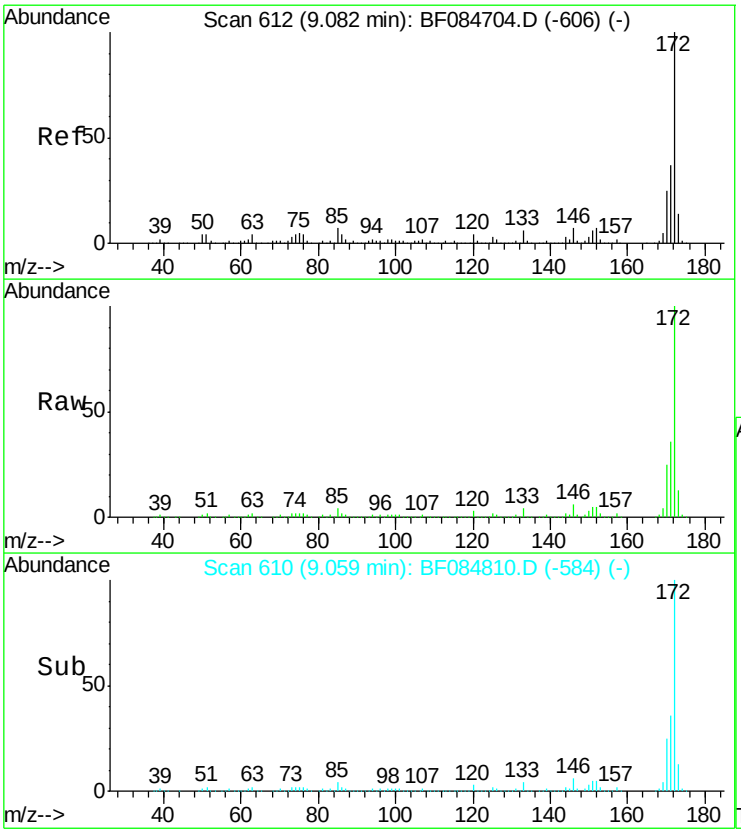
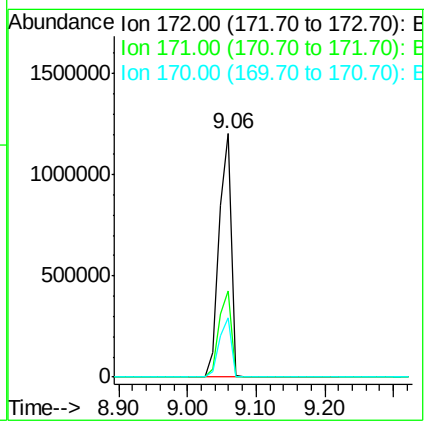
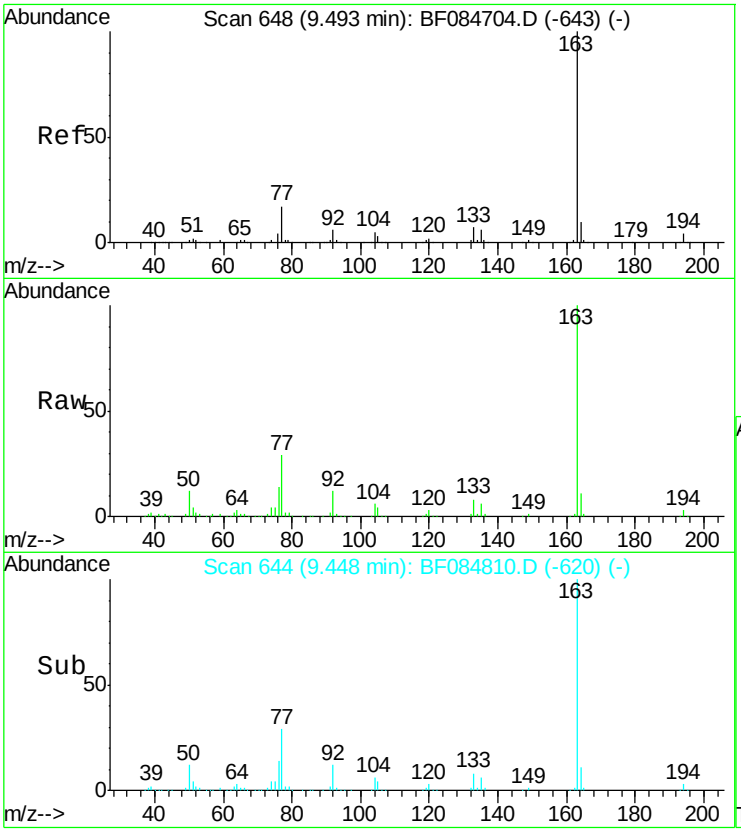



#44
2-Fluorobiphenyl
Concen: 66.18 ng
RT: 9.06 min Scan# 610
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:172 Resp: 1503006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 35.6 | 28.9 | 43.3 |
| 170 | 24.6 | 18.6 | 27.8 |

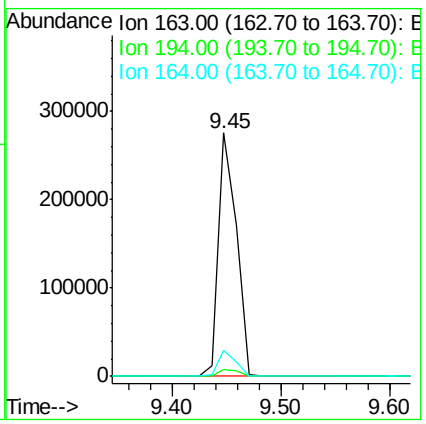





#49
Dimethylphthalate
Concen: 11.75 ng
RT: 9.45 min Scan# 644
Delta R.T. -0.02 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:163 Resp: 318060

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 163 | 100 | | |
| 194 | 3.0 | 8.0 | 12.0# |
| 164 | 10.6 | 8.0 | 12.0 |




**Instrument :**
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**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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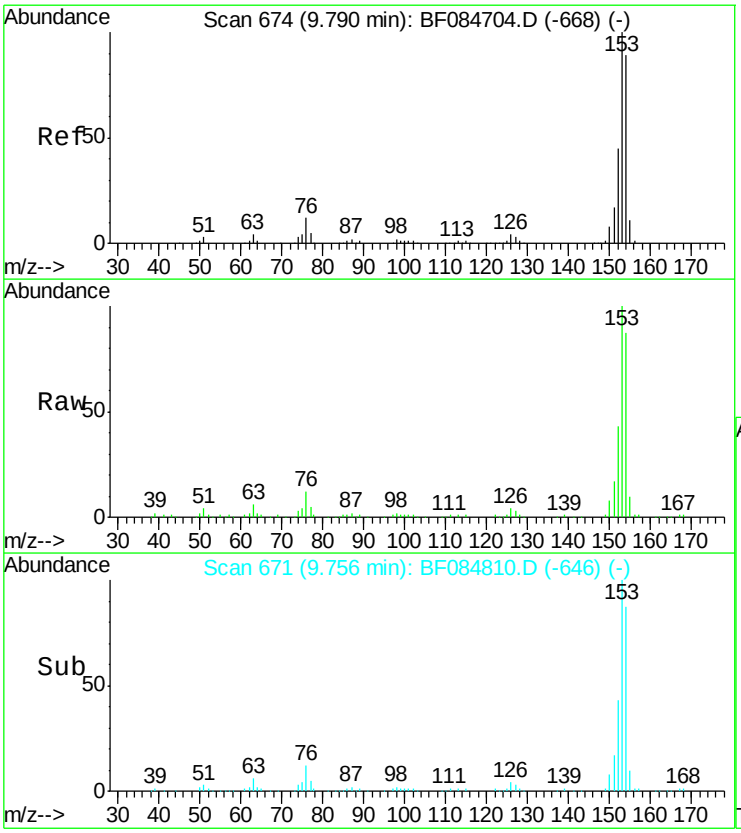
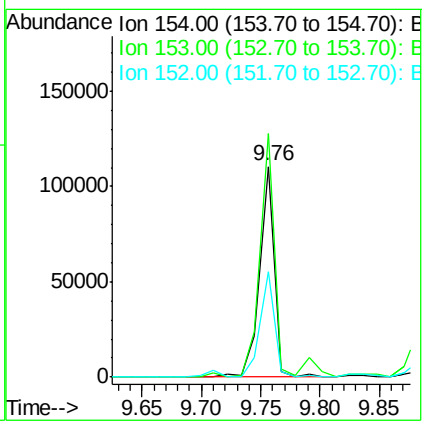
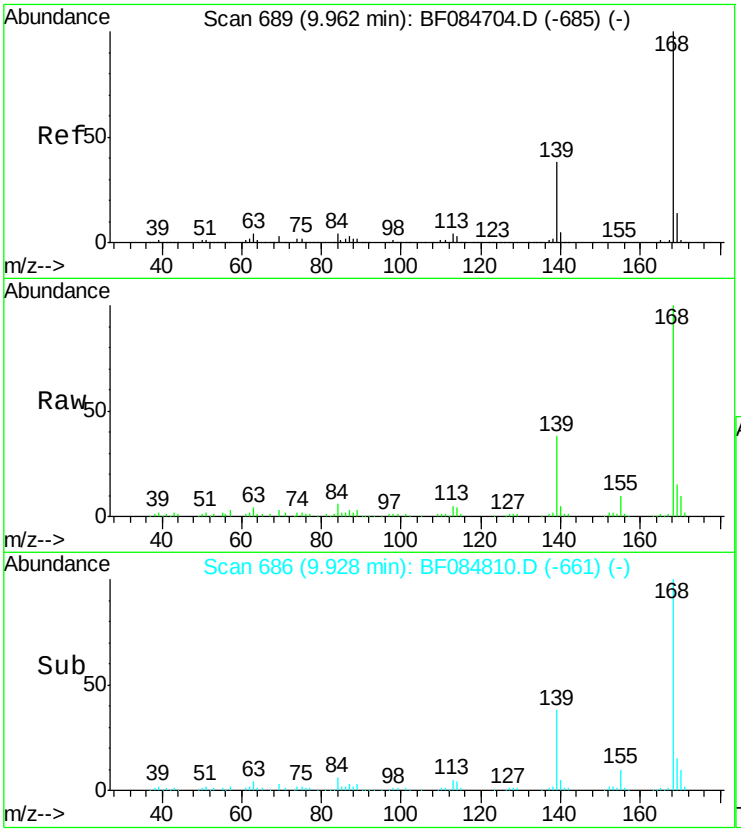



#51
Acenaphthene
Concen: 4.18 ng
RT: 9.76 min Scan# 671
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:154 Resp: 96518

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 115.5 | 91.5 | 137.3 |
| 152 | 49.7 | 43.0 | 64.6 |

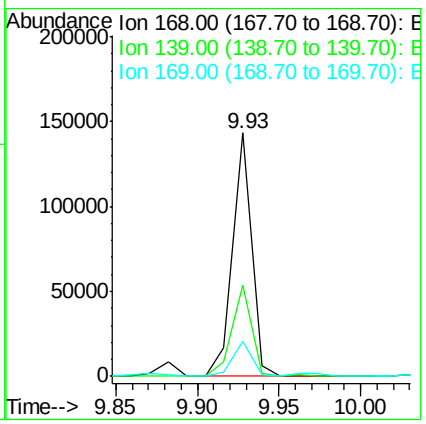





#54
Dibenzofuran
Concen: 4.08 ng
RT: 9.93 min Scan# 686
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:168 Resp: 115018

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 139 | 37.5 | 30.5 | 45.7 |
| 169 | 14.6 | 10.4 | 15.6 |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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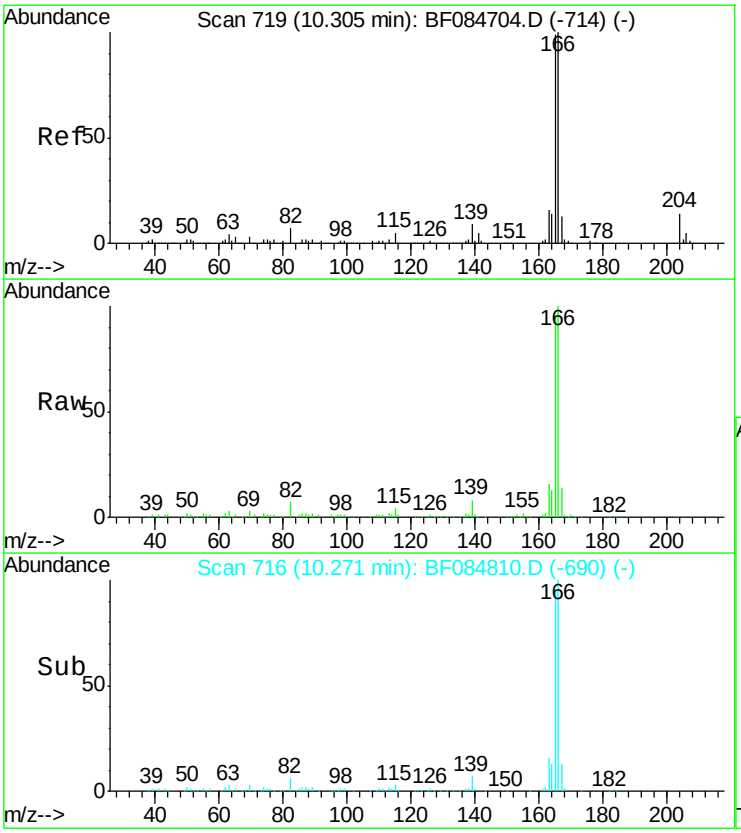
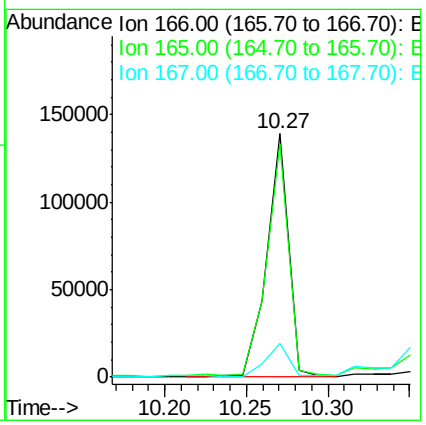
2/4/2016 2:05:10 PM

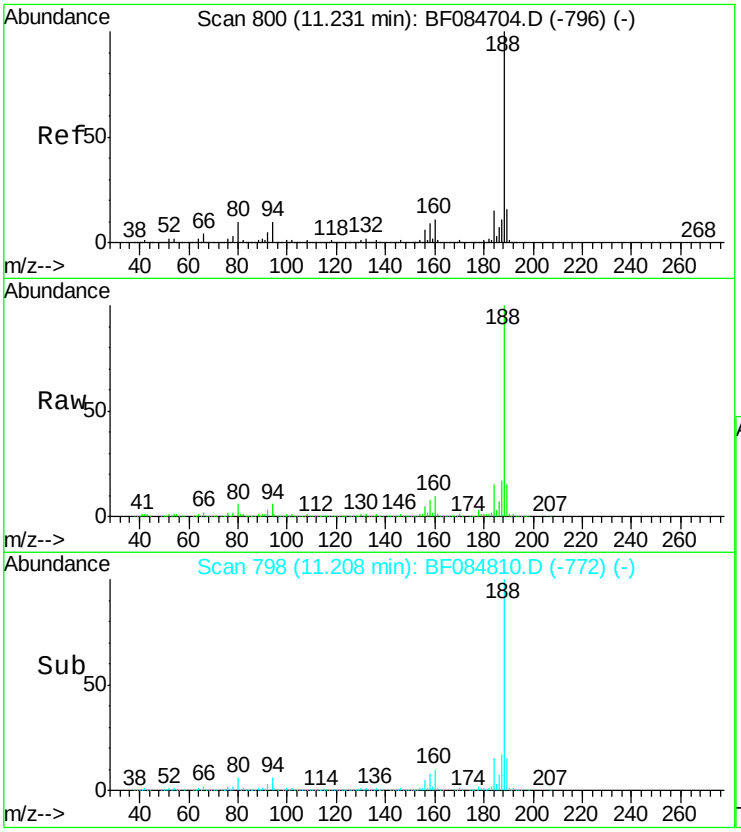



#57
Fluorene
Concen: 5.53 ng
RT: 10.27 min Scan# 716
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:166 Resp: 130185

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 95.9 | 79.1 | 118.7 |
| 167 | 13.6 | 10.4 | 15.6 |

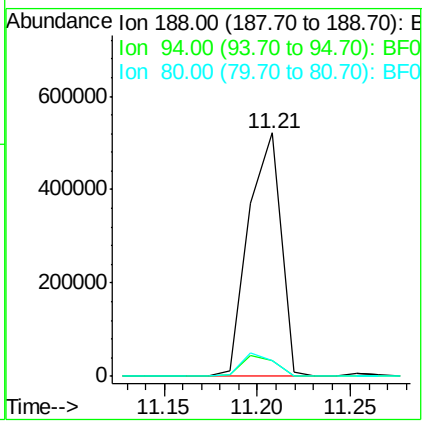





#63
Phenanthrene-d10
Concen: 20.00 ng
RT: 11.21 min Scan# 798
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:188 Resp: 627720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 6.3 | 9.0 | 13.4# |
| 80 | 6.4 | 9.6 | 14.4# |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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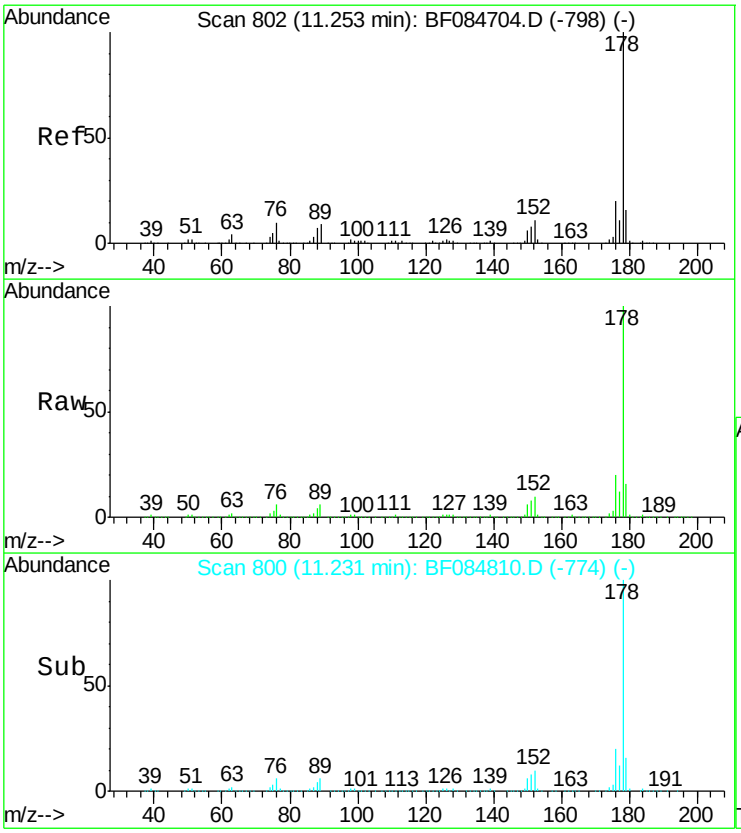
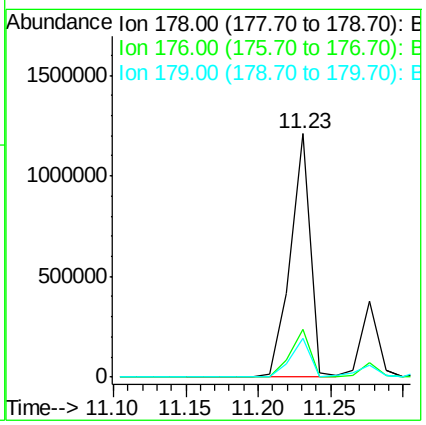
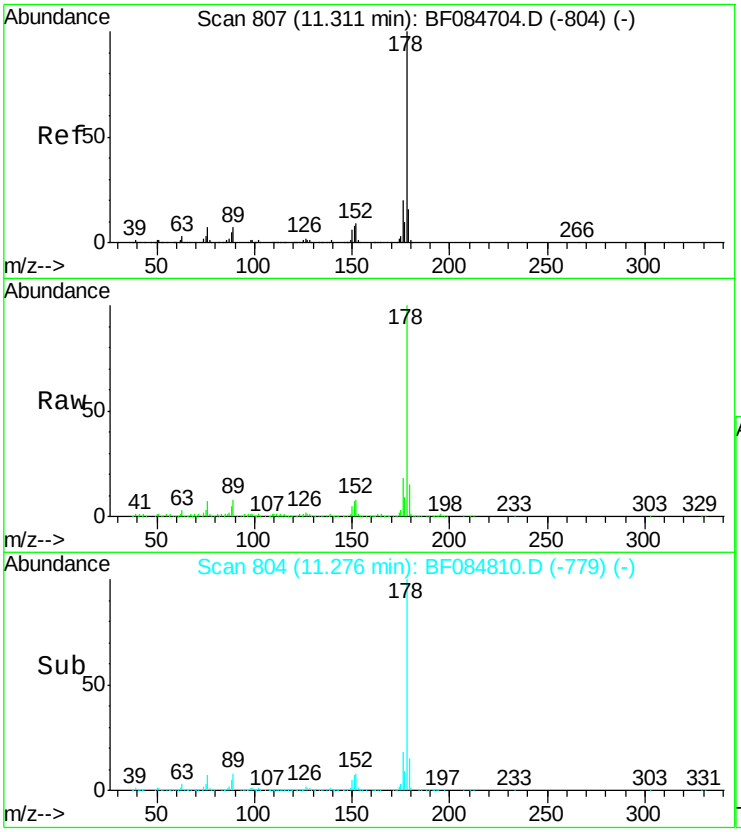



#70
Phenanthrene
Concen: 32.74 ng
RT: 11.23 min Scan# 800
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:178 Resp: 1139722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.8 | 15.3 | 22.9 |
| 179 | 16.1 | 12.0 | 18.0 |

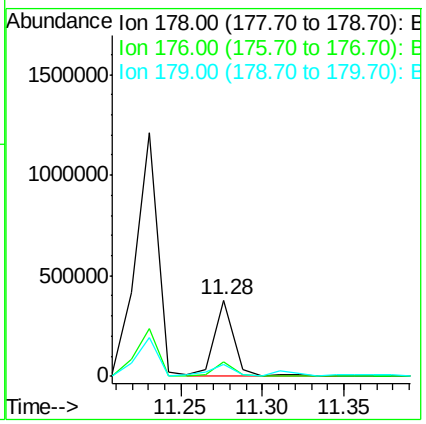





#71
Anthracene
Concen: 8.78 ng
RT: 11.28 min Scan# 804
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:178 Resp: 308000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.3 | 15.4 | 23.0 |
| 179 | 15.4 | 12.5 | 18.7 |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

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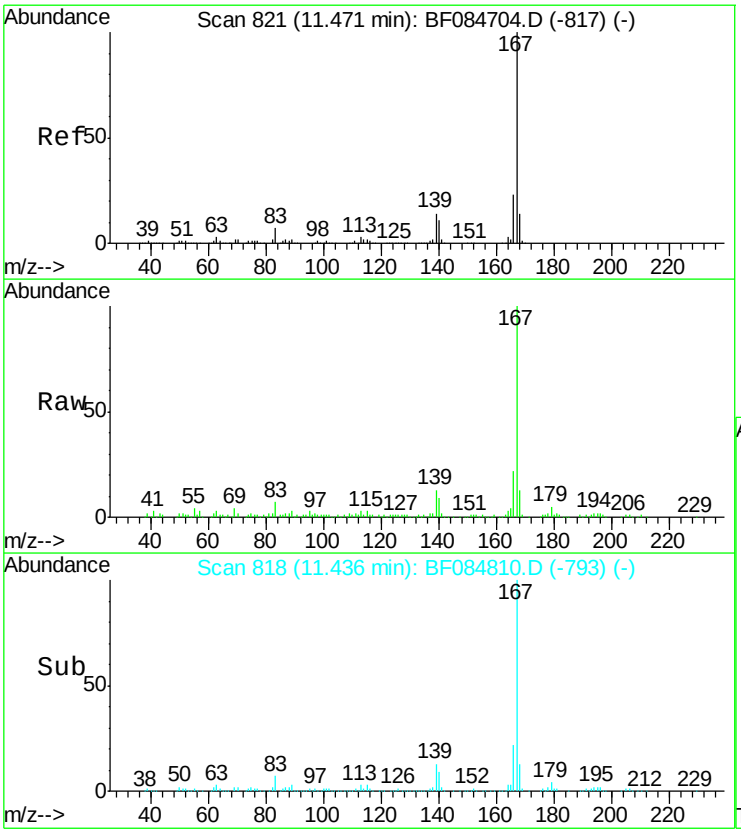
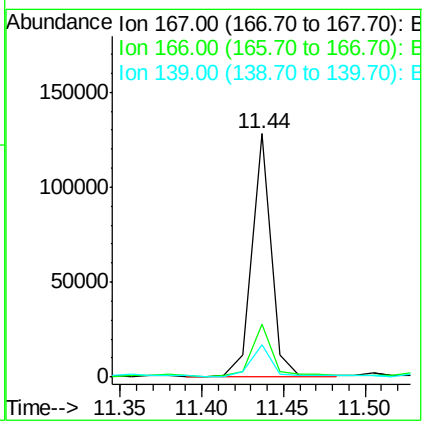
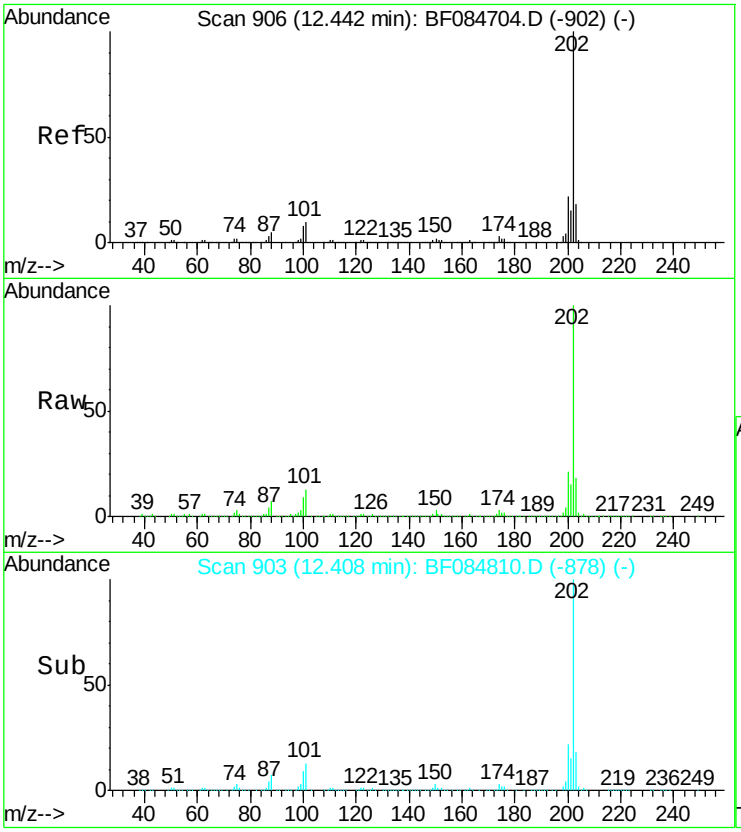



#72
Carbazole
Concen: 3.40 ng
RT: 11.44 min Scan# 818
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:167 Resp: 103873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 167 | 100 | | |
| 166 | 21.9 | 17.6 | 26.4 |
| 139 | 13.5 | 11.8 | 17.8 |

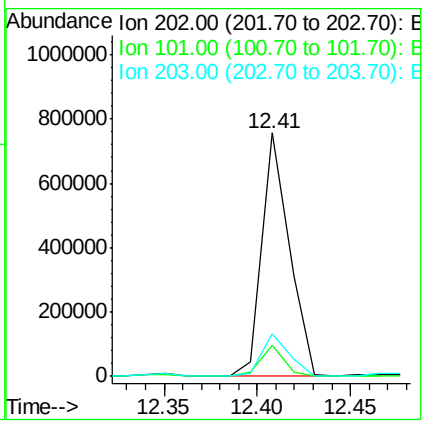





#74
Fluoranthene
Concen: 21.69 ng
RT: 12.41 min Scan# 903
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:202 Resp: 764286

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 12.6 | 0.0 | 32.8 |
| 203 | 17.6 | 0.0 | 37.9 |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

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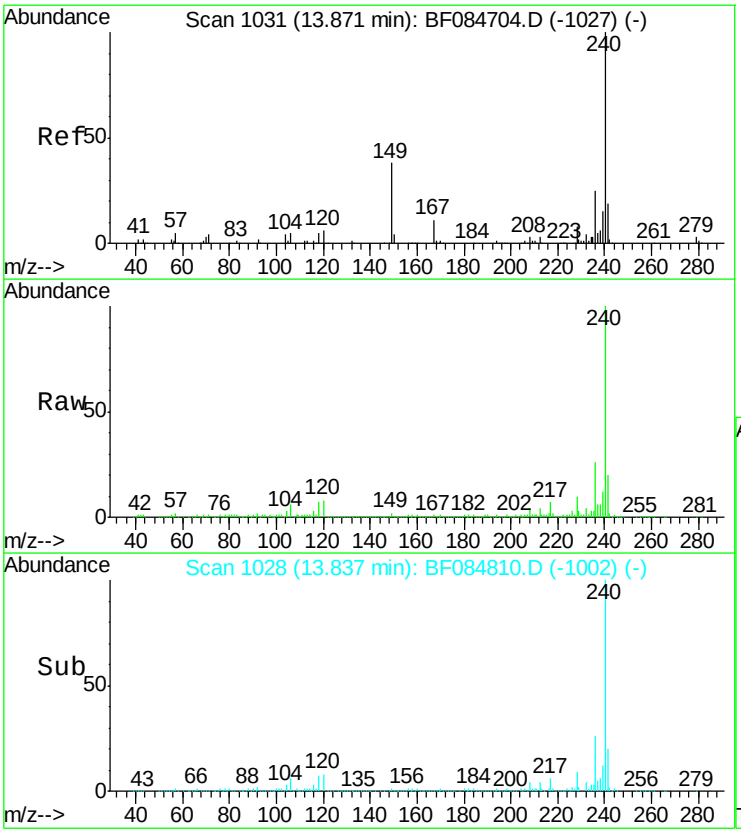
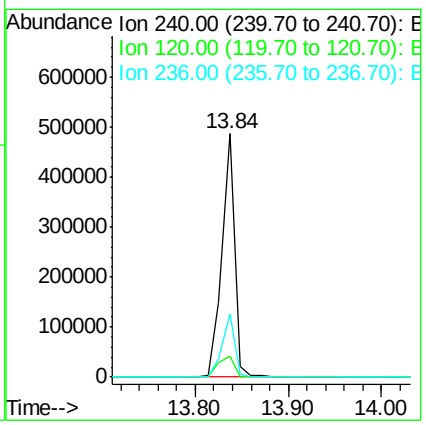
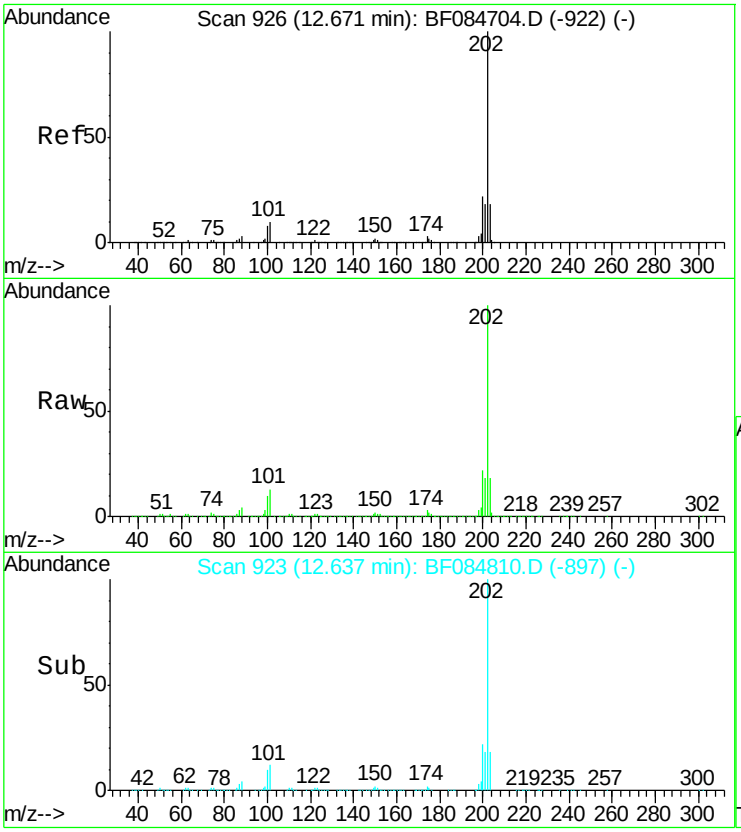



#75
Chrysene-d12
Concen: 20.00 ng
RT: 13.84 min Scan# 1028
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:240 Resp: 462174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 8.4 | 9.5 | 14.3# |
| 236 | 25.8 | 20.6 | 31.0 |

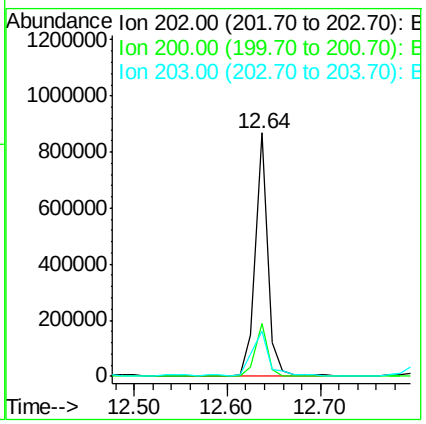





#77
Pyrene
Concen: 22.76 ng
RT: 12.64 min Scan# 923
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:202 Resp: 805390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.6 | 17.2 | 25.8 |
| 203 | 18.3 | 14.3 | 21.5 |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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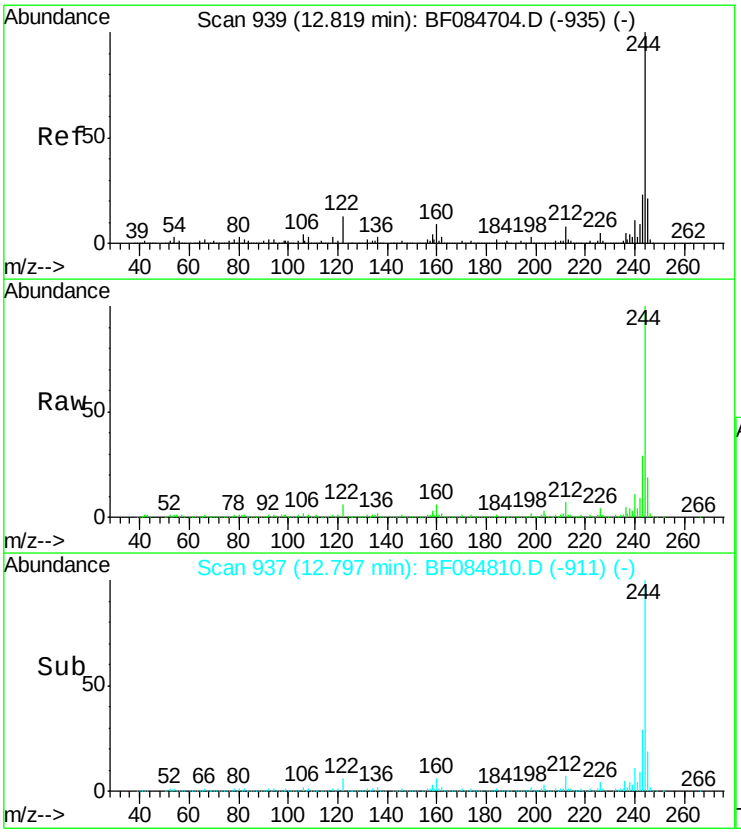
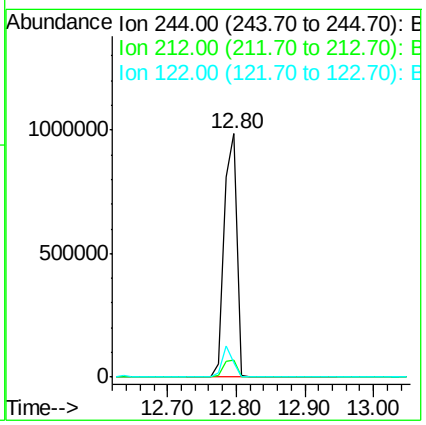
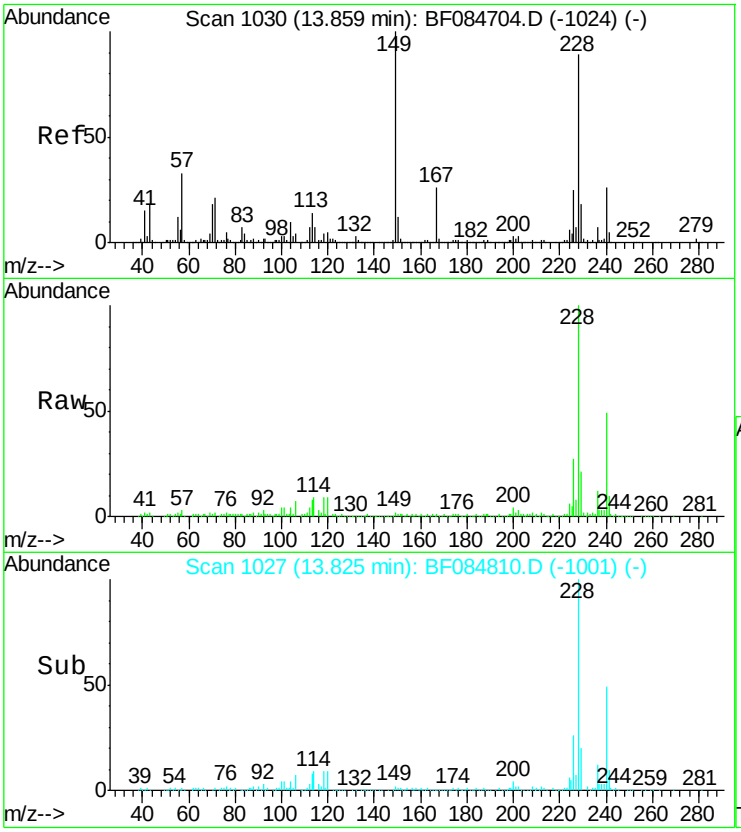



#78
Terphenyl-d14
Concen: 62.88 ng
RT: 12.80 min Scan# 937
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:244 Resp: 1282378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 6.9 | 5.7 | 8.5 |
| 122 | 6.2 | 7.4 | 11.0# |

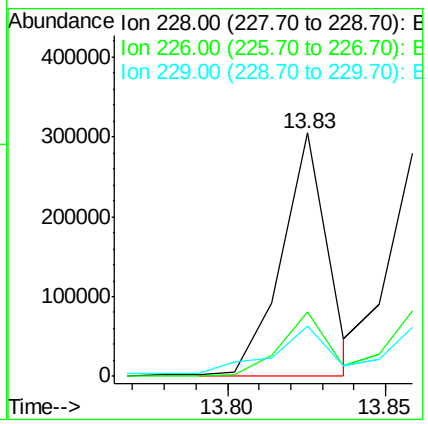





#80
Benzo(a)anthracene
Concen: 10.75 ng m
RT: 13.83 min Scan# 1027
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:228 Resp: 308271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 26.7 | 21.8 | 32.6 |
| 229 | 20.9 | 15.8 | 23.8 |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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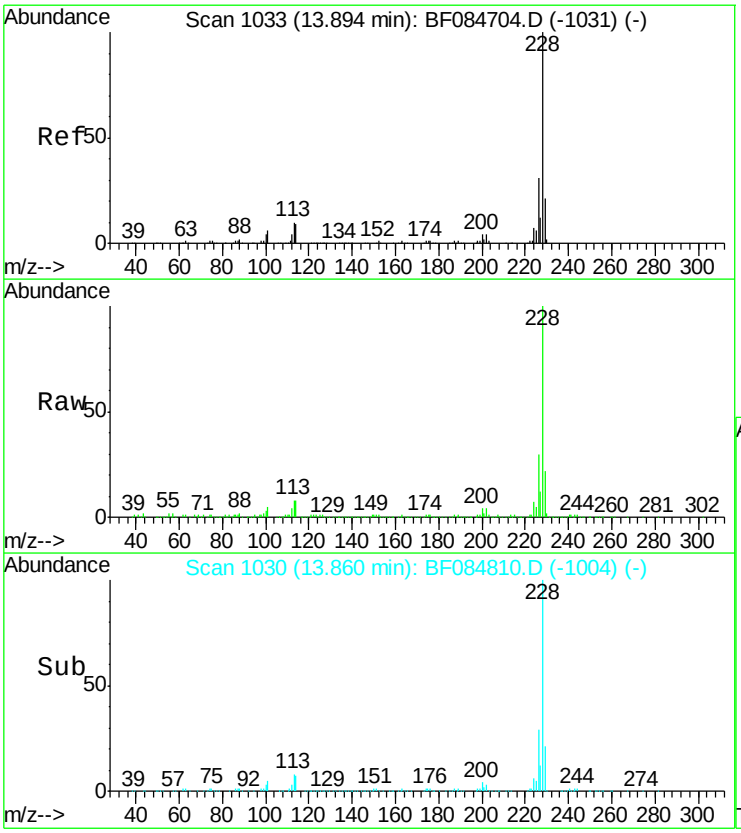
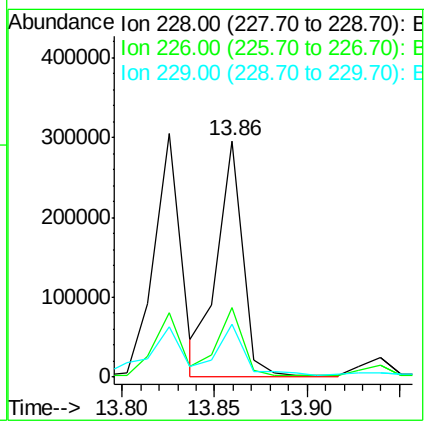
2/4/2016 2:05:10 PM

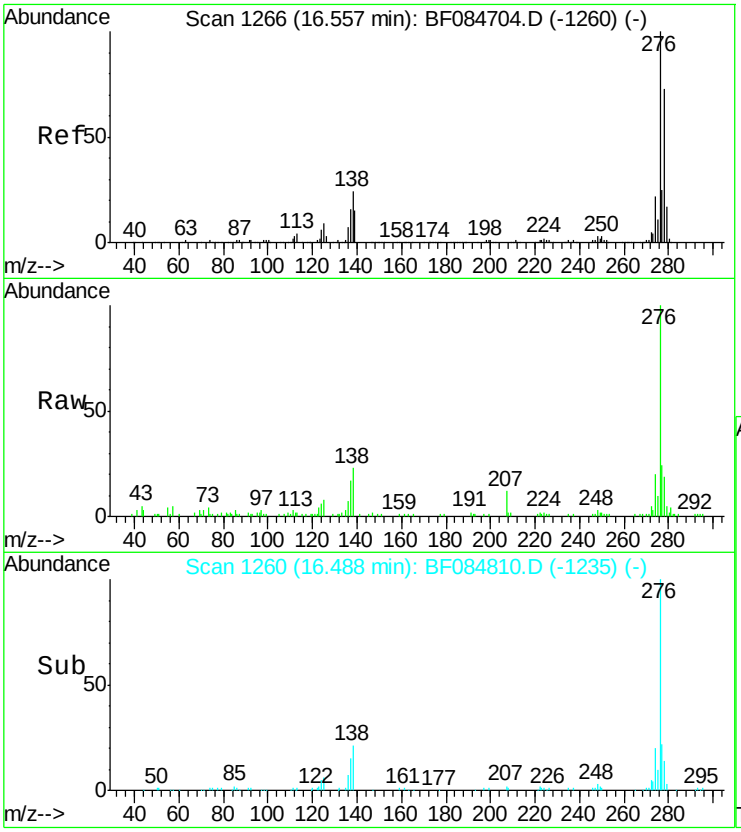



#82
Chrysene
Concen: 10.35 ng m
RT: 13.86 min Scan# 1030
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:228 Resp: 287855

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.7 | 24.3 | 36.5 |
| 229 | 22.2 | 16.1 | 24.1 |






#85
Indeno(1,2,3-cd)pyrene
Concen: 3.60 ng
RT: 16.49 min Scan# 1260
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:276 Resp: 78915

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 22.9 | 20.6 | 30.8 |
| 277 | 25.9 | 20.1 | 30.1 |

**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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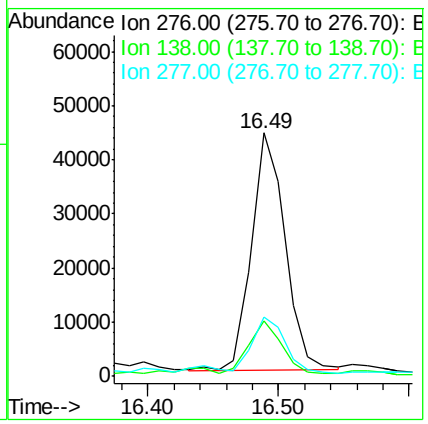
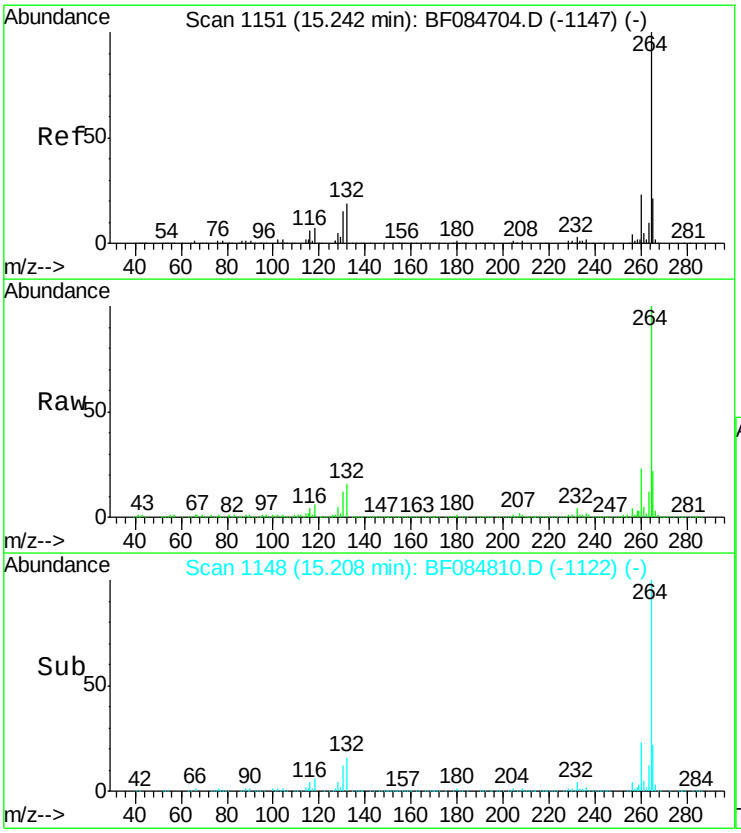
2/4/2016 2:05:10 PM

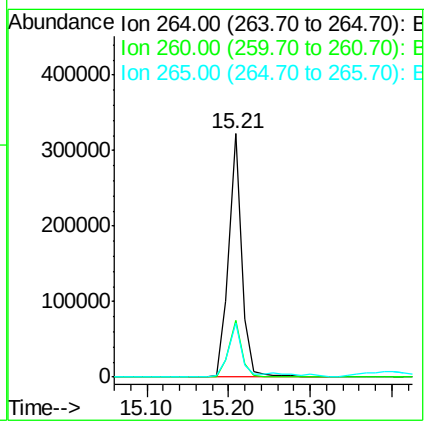


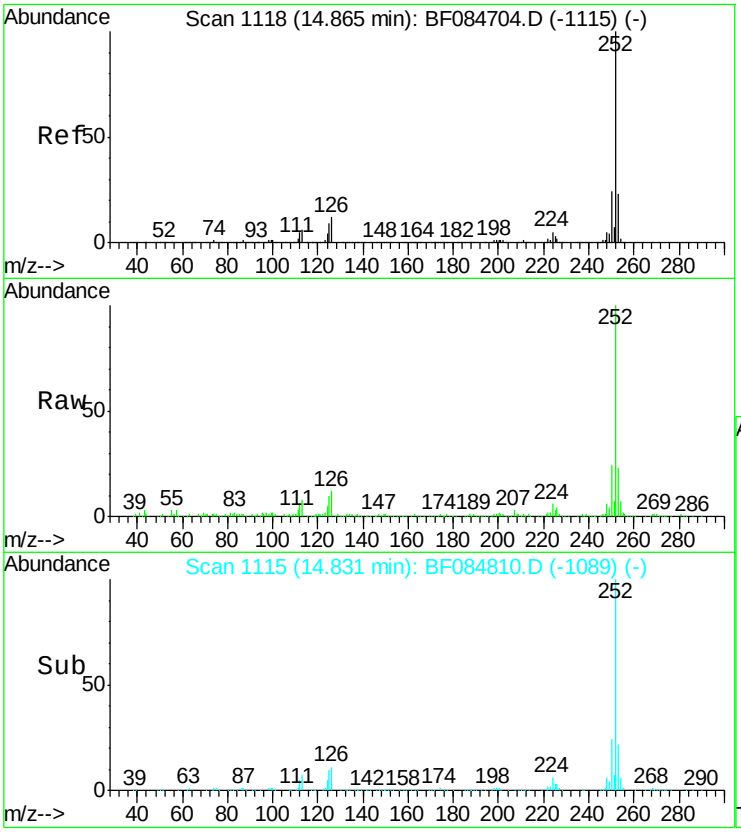




#86
Perylene-d12
Concen: 20.00 ng
RT: 15.21 min Scan# 1148
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:264 Resp: 359644

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 23.2 | 19.4 | 29.2 |
| 265 | 22.0 | 17.8 | 26.6 |

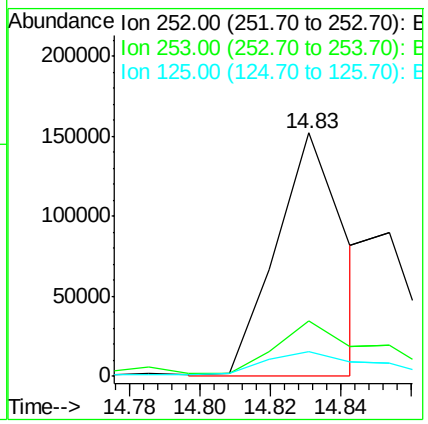





#87
Benzo(b)fluoranthene
Concen: 8.58 ng m
RT: 14.83 min Scan# 1115
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:252 Resp: 207387

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.7 | 17.3 | 25.9 |
| 125 | 10.3 | 6.5 | 9.7# |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

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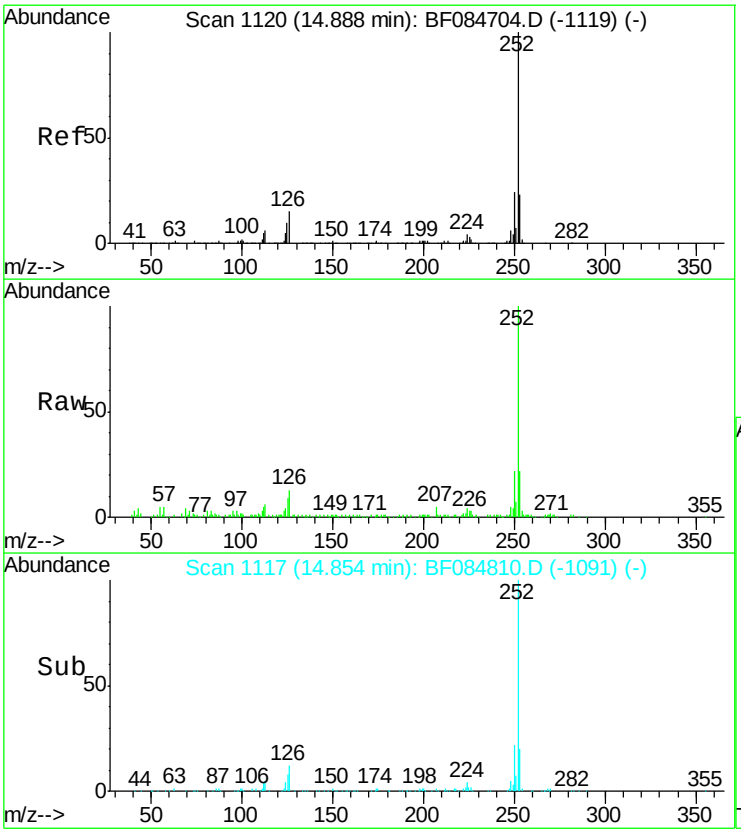
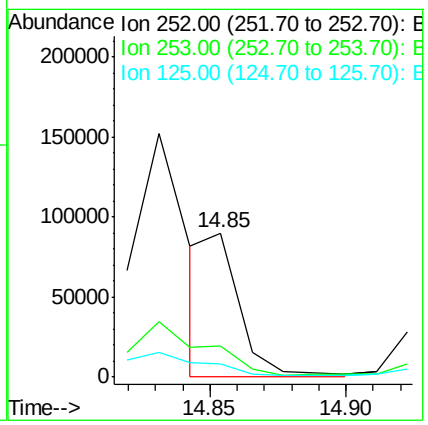
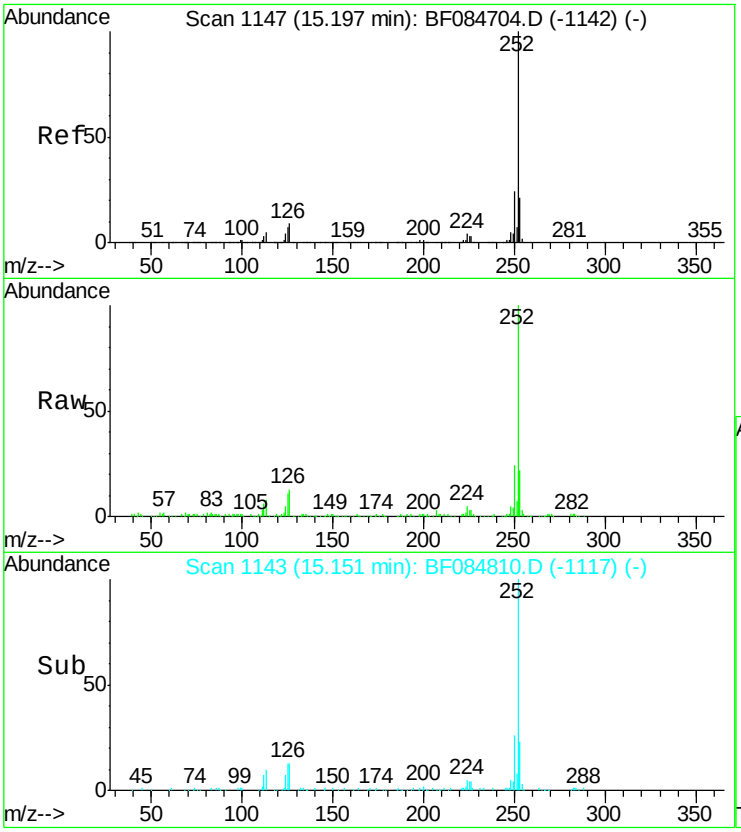



#88
Benzo(k)fluoranthene
Concen: 3.87 ng m
RT: 14.85 min Scan# 1117
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:252 Resp: 77242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.6 | 18.1 | 27.1 |
| 125 | 9.0 | 9.0 | 13.6# |

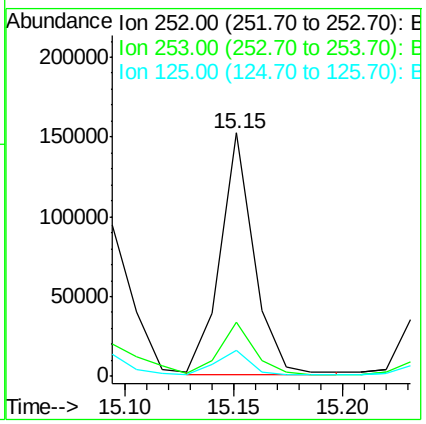





#89
Benzo(a)pyrene
Concen: 7.98 ng
RT: 15.15 min Scan# 1143
Delta R.T. 0.00 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:252 Resp: 164310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.3 | 17.3 | 25.9 |
| 125 | 10.6 | 7.0 | 10.4# |




**Instrument :**
BNA_F
**ClientSampleId :**
SUP-B036(25-27)

**Manual Integrations APPROVED**
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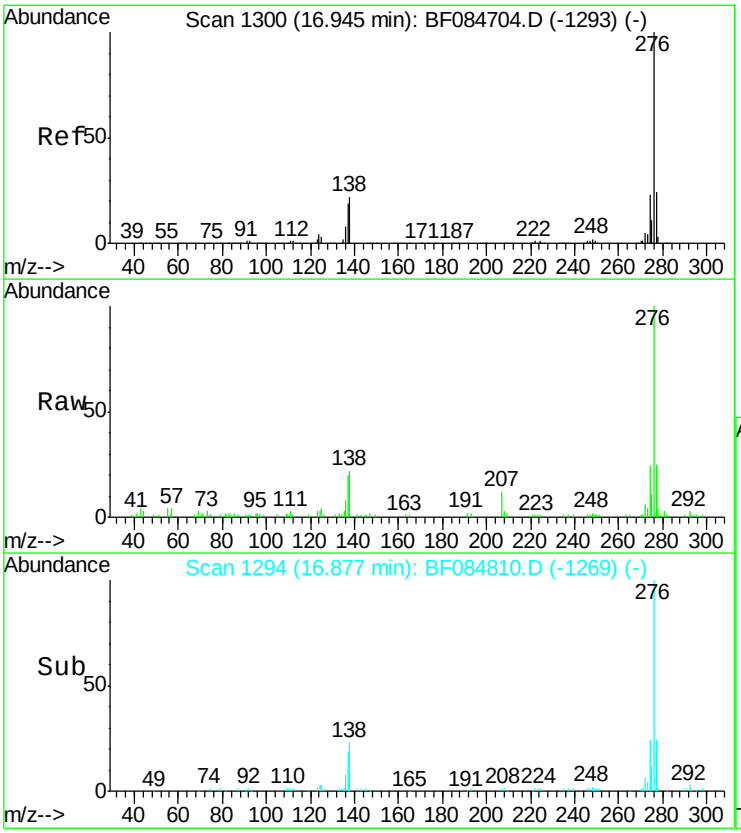


#91
Benzo(g,h,i)perylene
Concen: 4.71 ng
RT: 16.88 min Scan# 1294
Delta R.T. -0.01 min
Lab File: BF084810.D
Acq: 4 Feb 2016 3:12

Tgt Ion:276 Resp: 82233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 25.4 | 18.8 | 28.2 |
| 138 | 22.2 | 17.8 | 26.6 |