Quantitation Report (QT Reviewed)

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF121817\
Data File : BF101515.D
Acq On : 19 Dec 2017 9:43
Operator : SJ/JU
Sample : I6877-04DL2 10X
Misc :
ALS Vial : 42 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7(13-15)DL2

**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

Quant Time: Dec 19 10:35:35 2017
Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121417.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 18 15:38:59 2017
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 6.81 | 152 | 136727 | 20.00 | ng | | 0.00 |
| 21) Naphthalene-d8 | 8.09 | 136 | 506120 | 20.00 | ng | | 0.00 |
| 38) Acenaphthene-d10 | 9.85 | 164 | 188122 | 20.00 | ng | | 0.00 |
| 63) Phenanthrene-d10 | 11.34 | 188 | 284761 | 20.00 | ng | | 0.00 |
| 75) Chrysene-d12 | 13.99 | 240 | 286418 | 20.00 | ng | | 0.00 |
| 86) Perylene-d12 | 15.46 | 264 | 276445 | 20.00 | ng | | 0.01 |
| **System Monitoring Compounds** | | | | | | | |
| 5) 2-Fluorophenol | 5.44 | 112 | 104879 | 11.43 | ng | | 0.02 |
| 7) Phenol-d6 | 6.46 | 99 | 131139 | 11.48 | ng | | 0.00 |
| 23) Nitrobenzene-d5 | 7.38 | 82 | 70387 | 7.74 | ng | | 0.00 |
| 41) 2,4,6-Tribromophenol | 10.65 | 330 | 16229 | 8.95 | ng | | 0.00 |
| 44) 2-Fluorobiphenyl | 9.16 | 172 | 117883 | 9.72 | ng | | 0.00 |
| 78) Terphenyl-d14 | 12.92 | 244 | 75006 | 6.31 | ng | | 0.00 |
| **Target Compounds** | | | | | | | Qvalue |
| 51) Acenaphthene | 9.88 | 154 | 25213 | 2.081 | ng | | 97 |
| 70) Phenanthrene | 11.36 | 178 | 264962 | 16.732 | ng | | 99 |
| 71) Anthracene | 11.42 | 178 | 85046 | 5.258 | ng | | 98 |
| 72) Carbazole | 11.58 | 167 | 44628 | 2.947 | ng | | 99 |
| 74) Fluoranthene | 12.56 | 202 | 412962 | 24.844 | ng | | 97 |
| 77) Pyrene | 12.79 | 202 | 413080 | 19.217 | ng | | 99 |
| 80) Benzo(a)anthracene | 13.98 | 228 | 341380 | 18.050 | ng | | 100 |
| 82) Chrysene | 14.02 | 228 | 271958 | 15.230 | ng | | 97 |
| 85) Indeno(1,2,3-cd)pyrene | 16.94 | 276 | 244812 | 15.395 | ng | # | 90 |
| 87) Benzo(b)fluoranthene | 15.03 | 252 | 454241m | 26.958 | ng | | |
| 88) Benzo(k)fluoranthene | 15.06 | 252 | 159176m | 9.716 | ng | | |
| 89) Benzo(a)pyrene | 15.40 | 252 | 411570 | 26.496 | ng | | 97 |
| 90) Dibenzo(a,h)anthracene | 16.94 | 278 | 61680m | 4.625 | ng | | |
| 91) Benzo(g,h,i)perylene | 17.39 | 276 | 221541 | 16.776 | ng | | 93 |

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

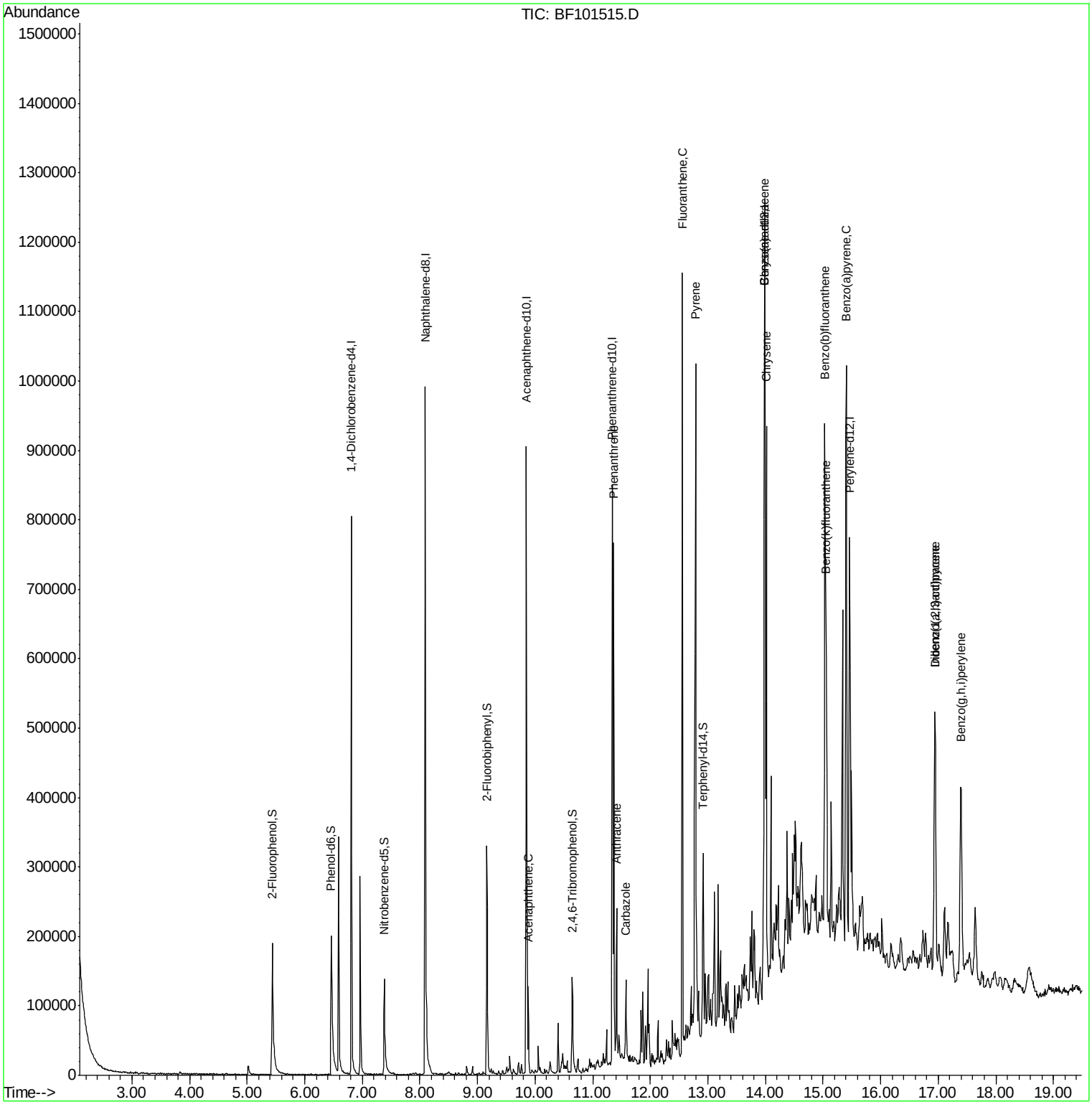
Quantitation Report (QT Reviewed)

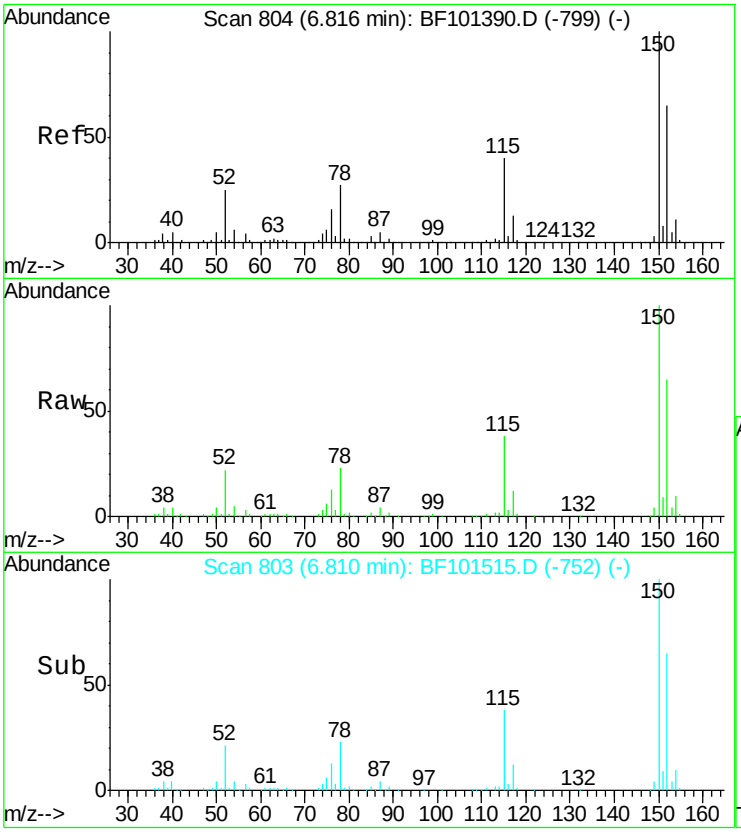
Data Path : Z:\HPCHEM1\BNA_F\DATA\BF121817\
Data File : BF101515.D
Acq On : 19 Dec 2017 9:43
Operator : SJ/JU
Sample : I6877-04DL2 10X
Misc :
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Dec 19 10:35:35 2017
Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121417.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 18 15:38:59 2017
Response via : Initial Calibration

**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

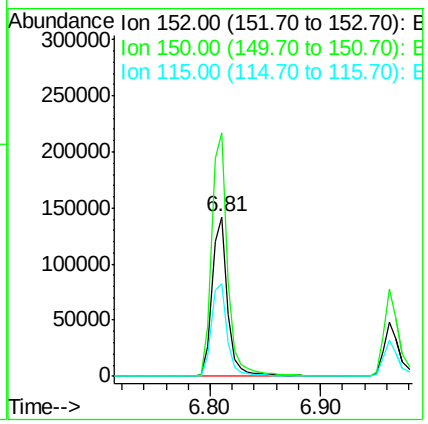





#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.81 min Scan# 803
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

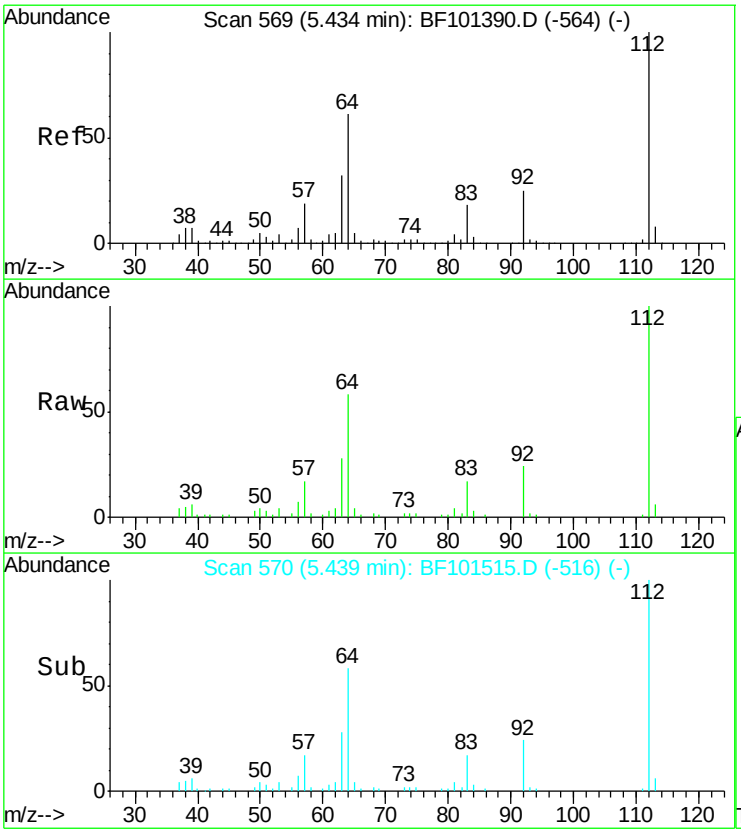
Tgt Ion:152 Resp: 136727

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 152.8 | 124.6 | 186.8 |
| 115 | 58.1 | 50.1 | 75.1 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

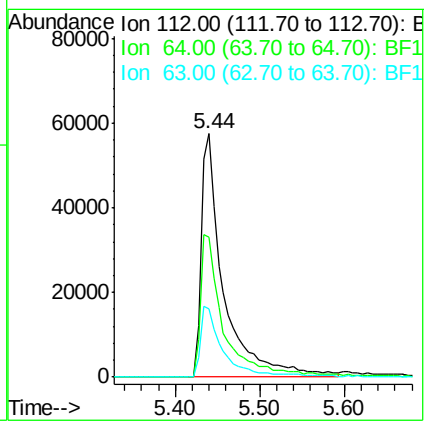
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

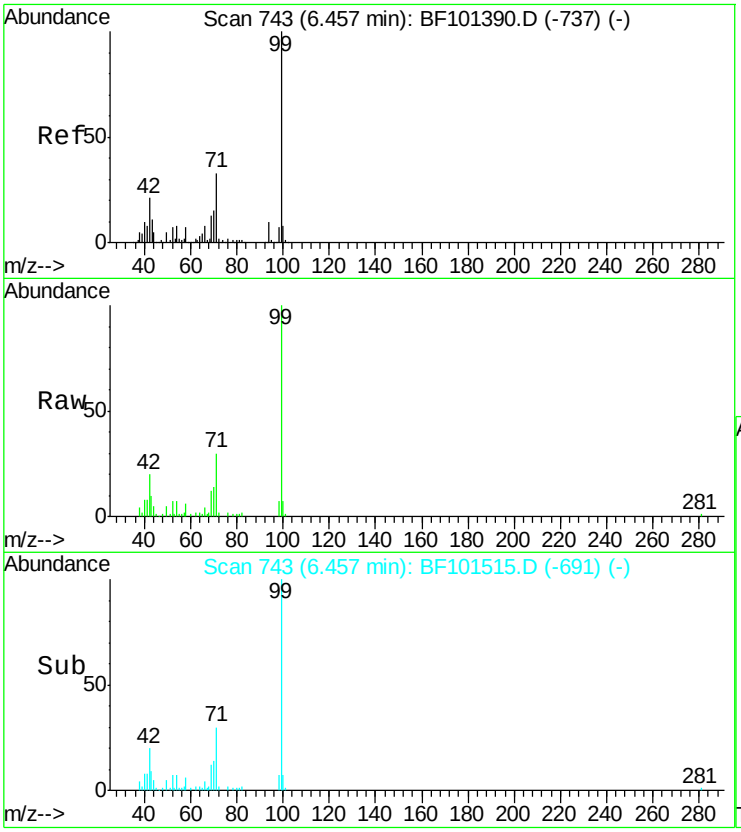



#5
2-Fluorophenol
Concen: 11.426 ng
RT: 5.44 min Scan# 570
Delta R.T. 0.02 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:112 Resp: 104879

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 64 | 57.7 | 47.9 | 71.9 |
| 63 | 28.1 | 23.7 | 35.5 |

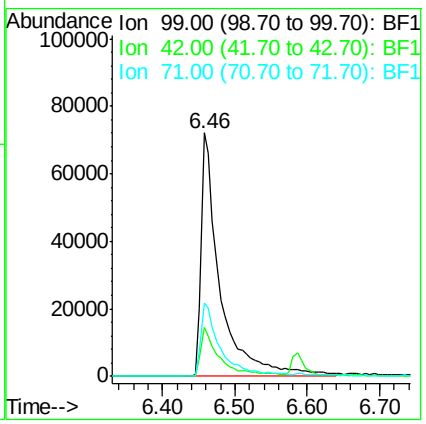





#7
Phenol-d6
Concen: 11.480 ng
RT: 6.46 min Scan# 743
Delta R.T. 0.01 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

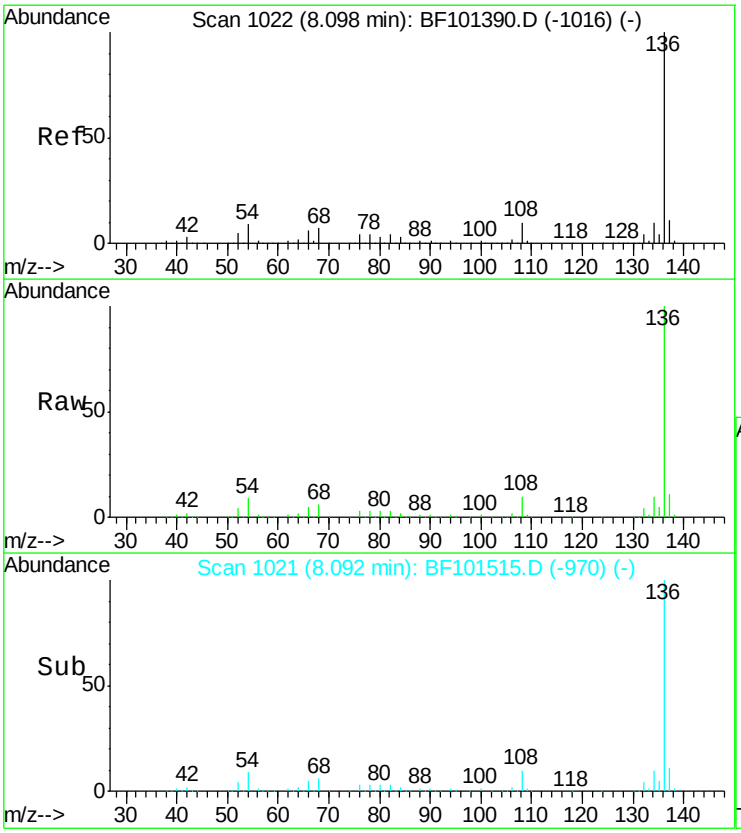
Tgt Ion: 99 Resp: 131139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 99 | 100 | | |
| 42 | 20.2 | 14.5 | 21.7 |
| 71 | 30.0 | 25.4 | 38.0 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

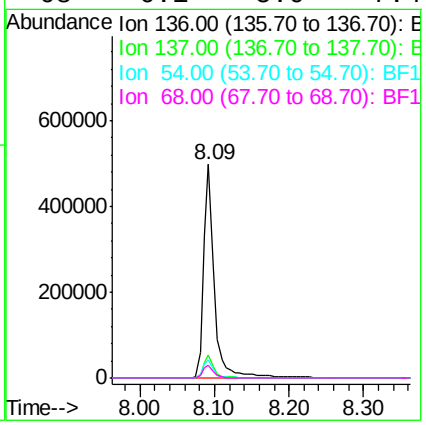
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

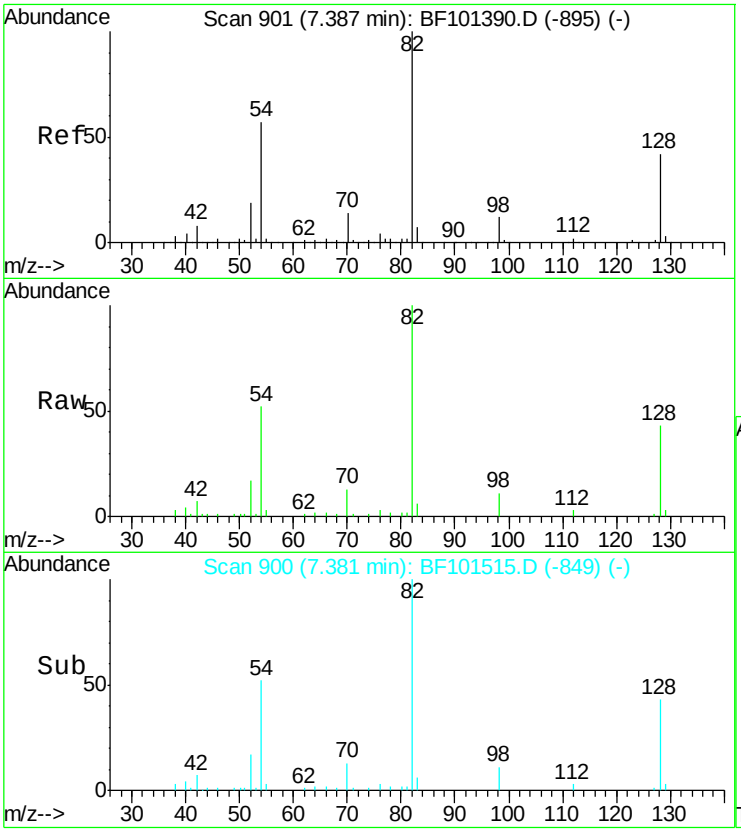



#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.09 min Scan# 1021
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:136 Resp: 506120

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 11.0 | 8.9 | 13.3 |
| 54 | 8.7 | 6.6 | 9.8 |
| 68 | 6.1 | 5.0 | 7.4 |

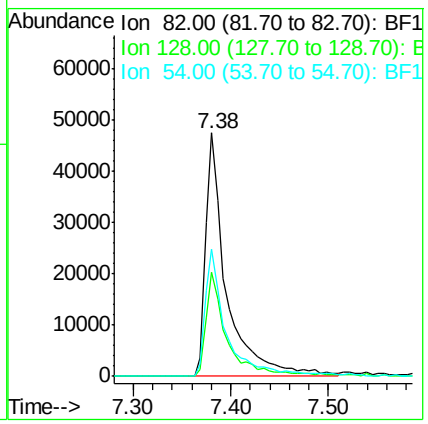





#23
Nitrobenzene-d5
Concen: 7.742 ng
RT: 7.38 min Scan# 900
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

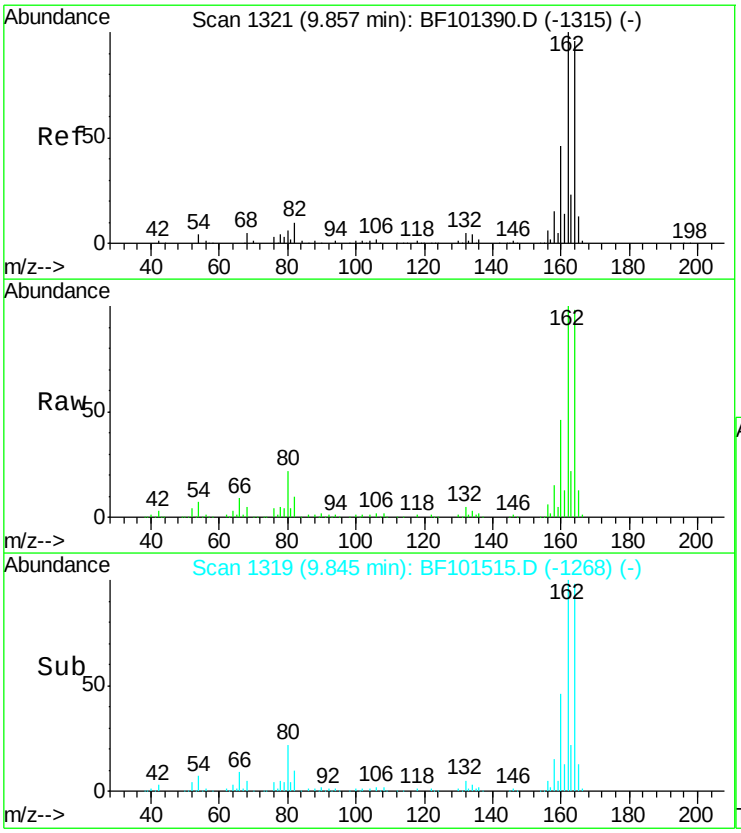
Tgt Ion: 82 Resp: 70387

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 42.6 | 36.1 | 54.1 |
| 54 | 52.0 | 41.4 | 62.2 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

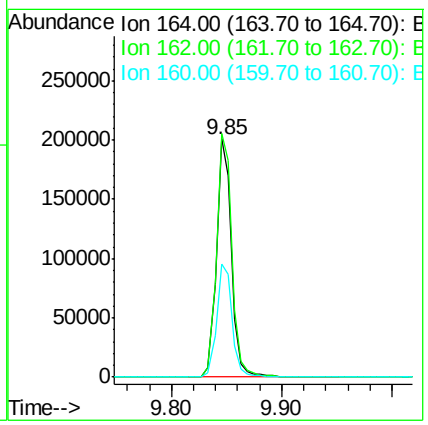
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

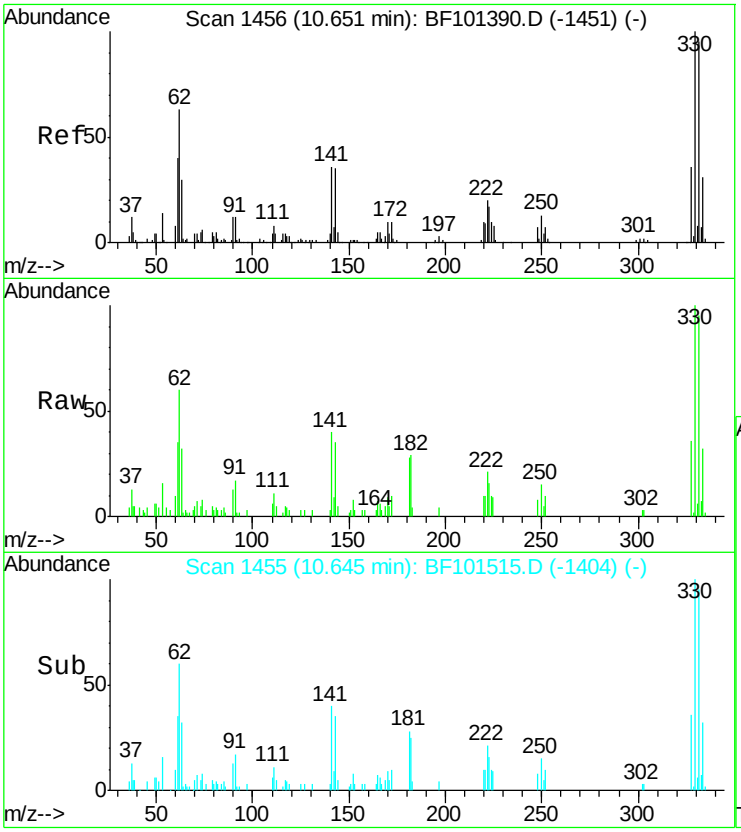



#38
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.85 min Scan# 1319
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:164 Resp: 188122

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 102.3 | 86.1 | 129.1 |
| 160 | 47.4 | 38.3 | 57.5 |

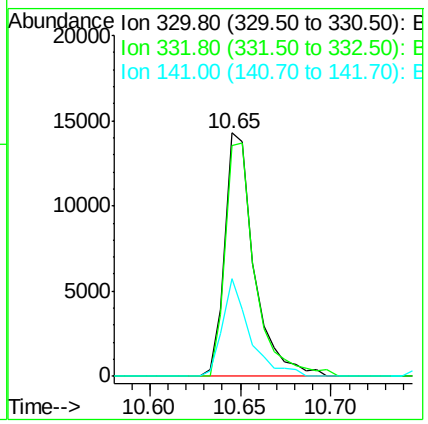





#41
2,4,6-Tribromophenol
Concen: 8.953 ng
RT: 10.65 min Scan# 1455
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

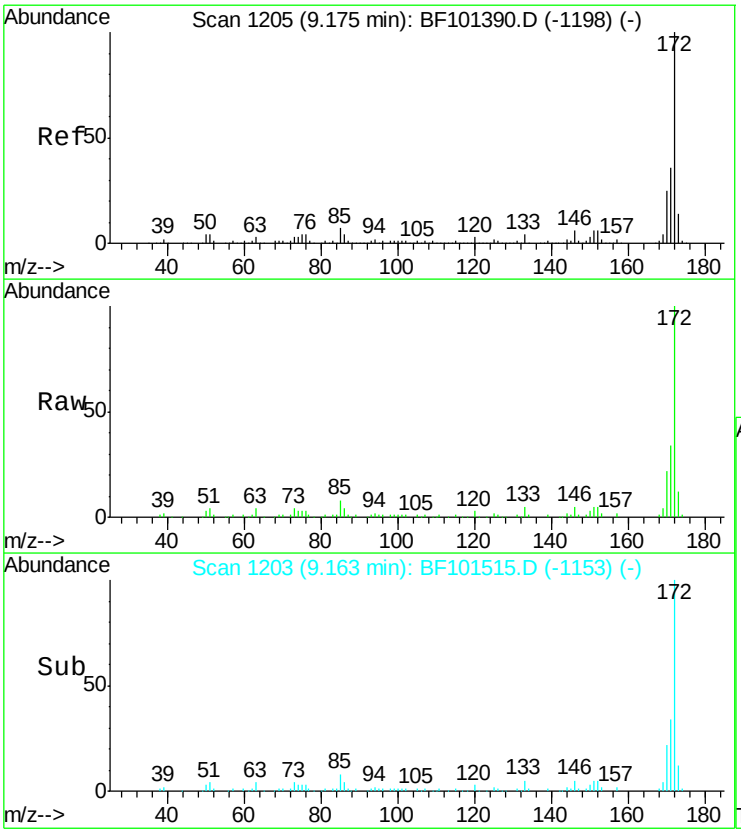
Tgt Ion:330 Resp: 16229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 330 | 100 | | |
| 332 | 96.8 | 77.0 | 115.6 |
| 141 | 36.7 | 29.9 | 44.9 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

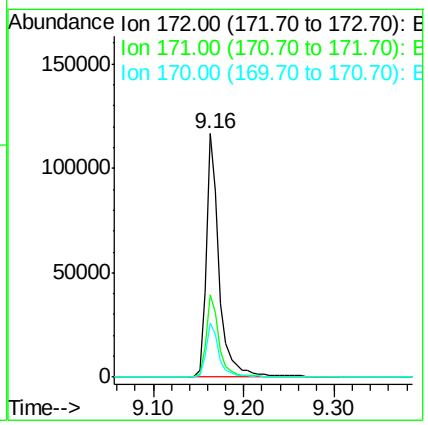
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

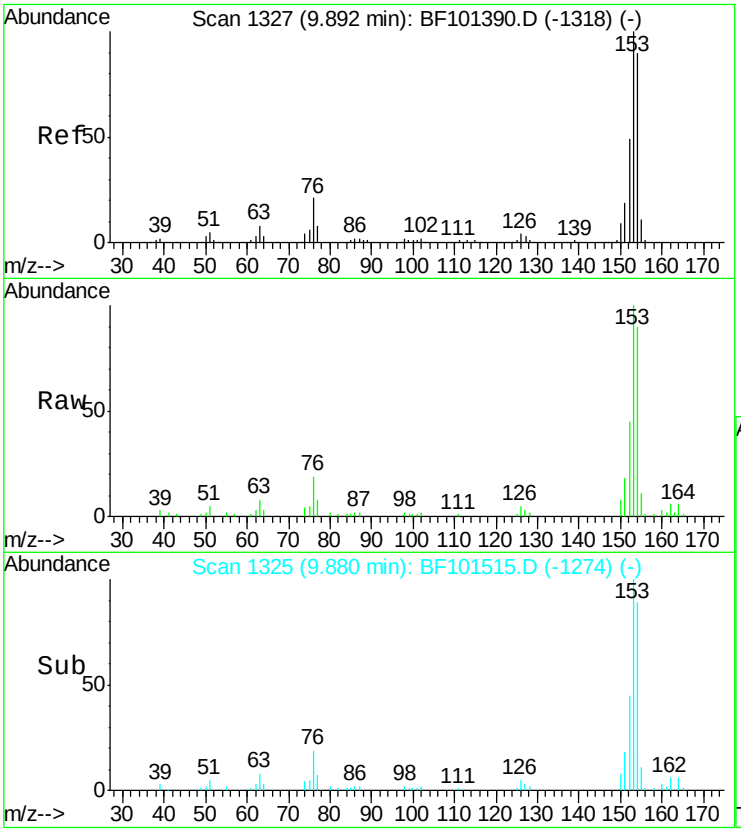



#44
2-Fluorobiphenyl
Concen: 9.721 ng
RT: 9.16 min Scan# 1203
Delta R.T. -0.01 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:172 Resp: 117883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 33.7 | 29.7 | 44.5 |
| 170 | 22.3 | 19.6 | 29.4 |

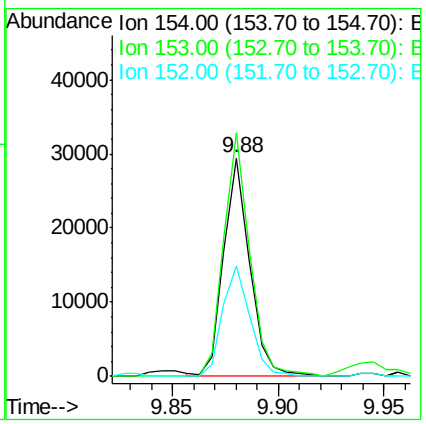





#51
Acenaphthene
Concen: 2.081 ng
RT: 9.88 min Scan# 1325
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

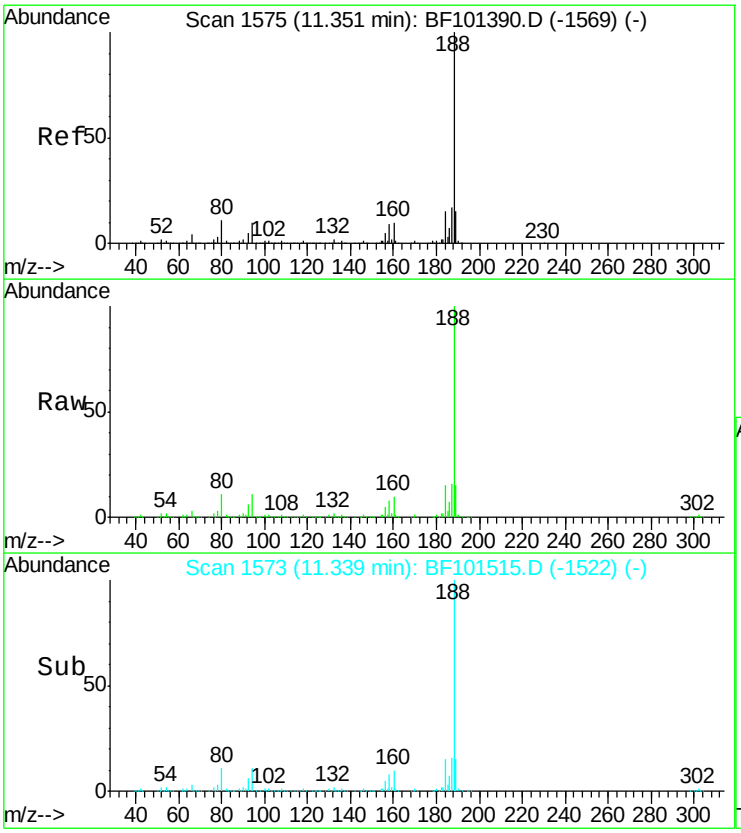
Tgt Ion:154 Resp: 25213

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 111.6 | 91.2 | 136.8 |
| 152 | 50.6 | 43.8 | 65.8 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

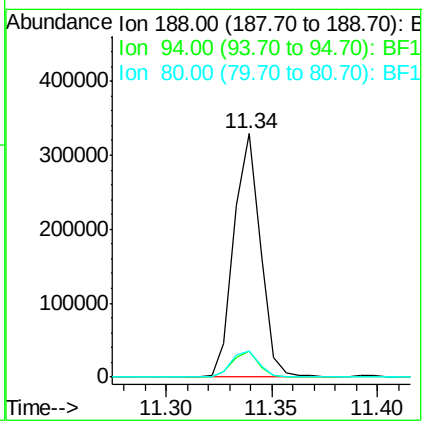
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

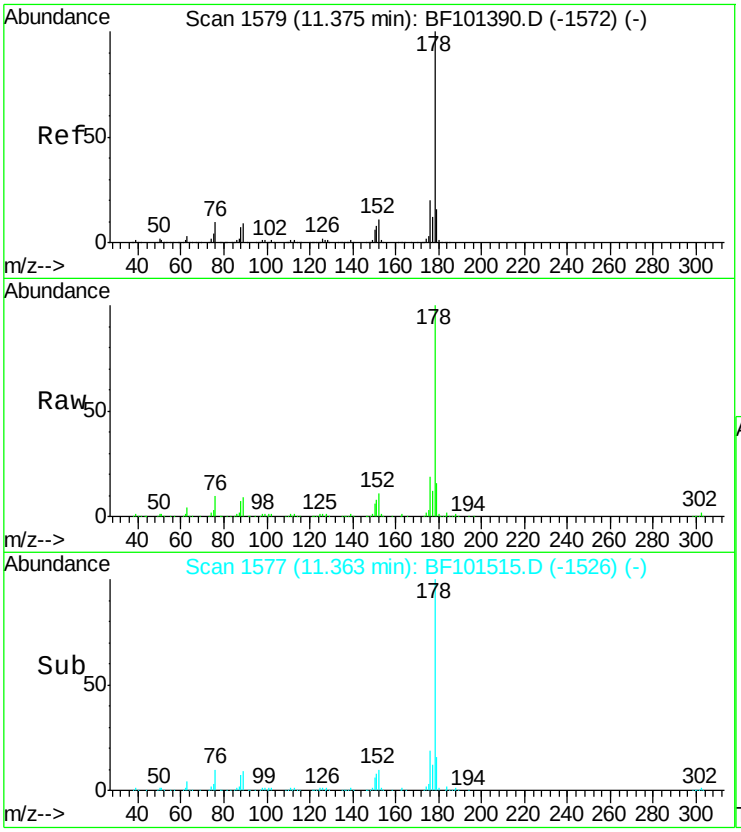



#63
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.34 min Scan# 1573
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:188 Resp: 284761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 10.5 | 8.5 | 12.7 |
| 80 | 10.7 | 9.2 | 13.8 |

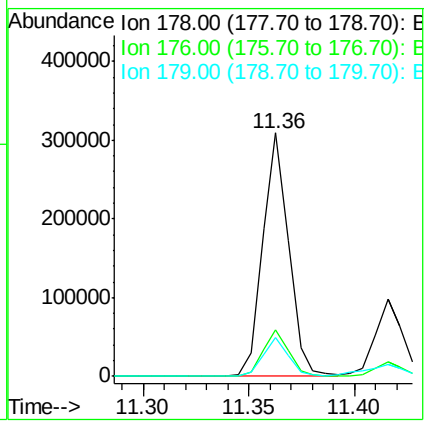





#70
Phenanthrene
Concen: 16.732 ng
RT: 11.36 min Scan# 1577
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

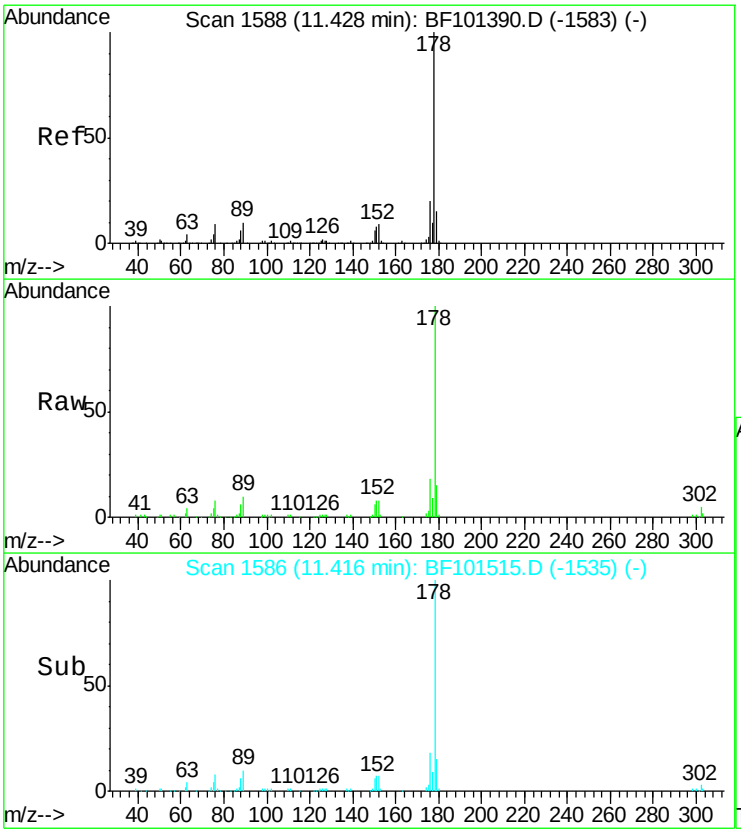
Tgt Ion:178 Resp: 264962

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 19.3 | 15.8 | 23.8 |
| 179 | 15.7 | 13.0 | 19.6 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

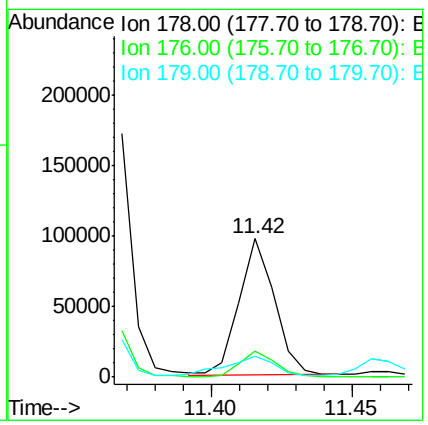
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

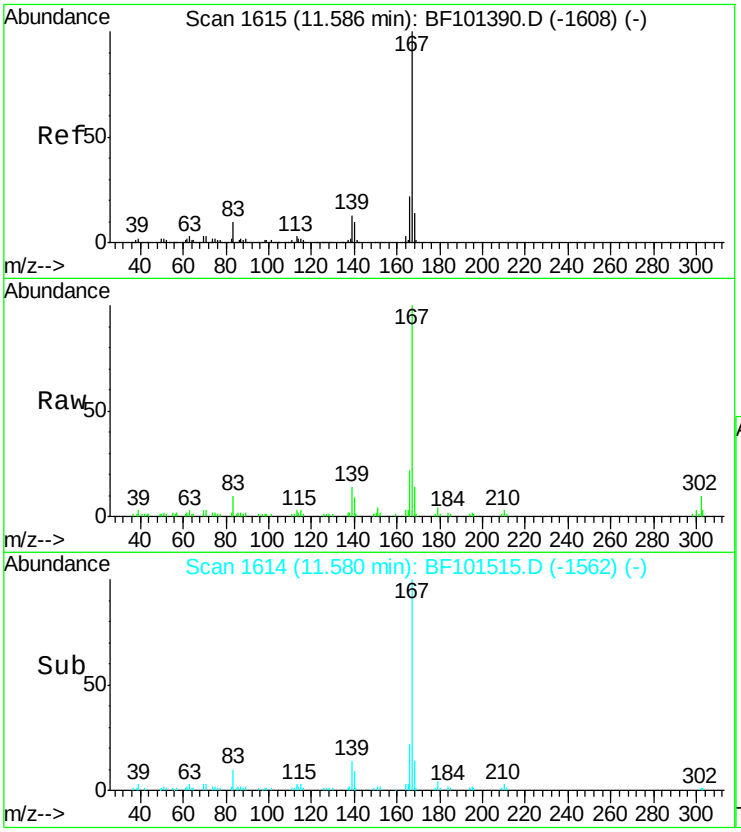



#71
Anthracene
Concen: 5.258 ng
RT: 11.42 min Scan# 1586
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:178 Resp: 85046

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.4 | 15.4 | 23.2 |
| 179 | 15.0 | 12.6 | 19.0 |

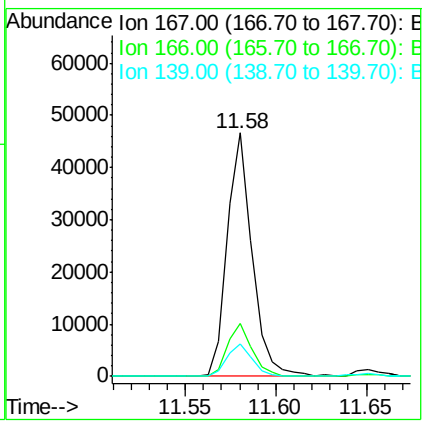





#72
Carbazole
Concen: 2.947 ng
RT: 11.58 min Scan# 1614
Delta R.T. 0.01 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

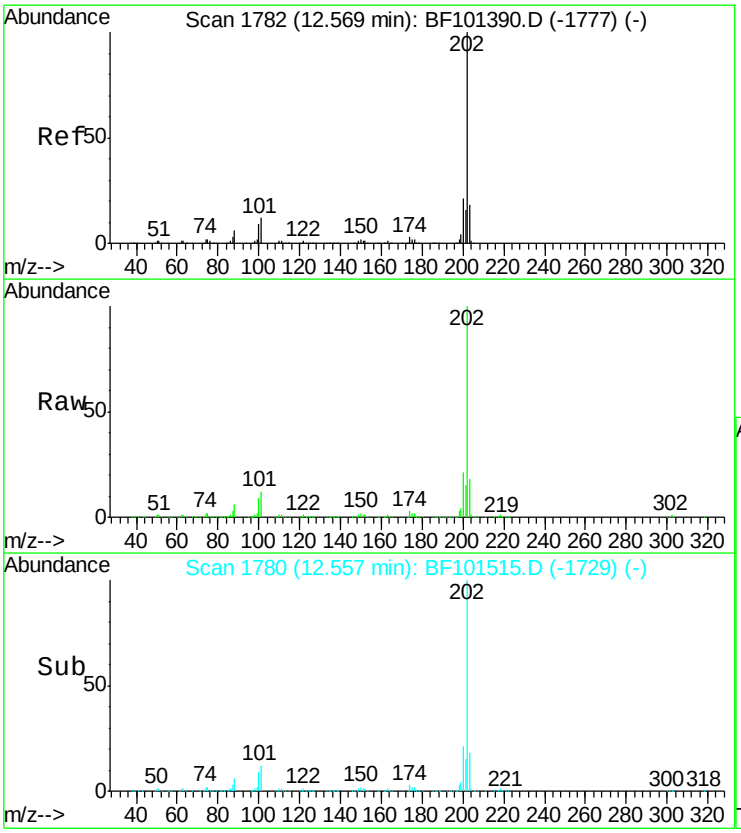
Tgt Ion:167 Resp: 44628

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 167 | 100 | | |
| 166 | 21.6 | 17.6 | 26.4 |
| 139 | 13.5 | 10.9 | 16.3 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

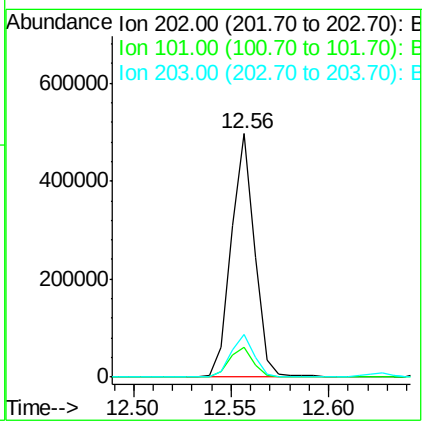
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

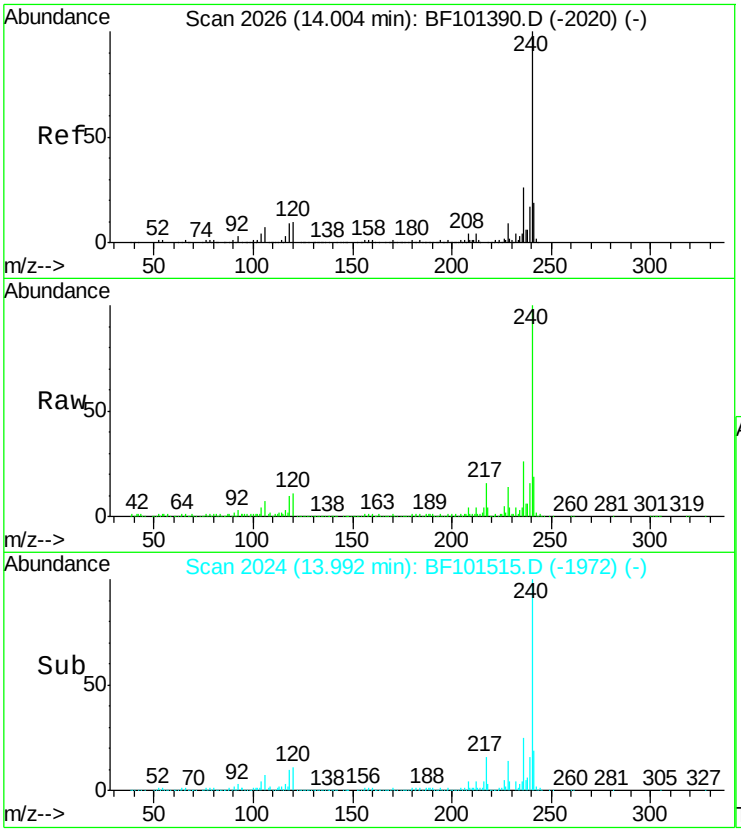



#74
Fluoranthene
Concen: 24.844 ng
RT: 12.56 min Scan# 1780
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:202 Resp: 412962

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 12.4 | 0.0 | 34.1 |
| 203 | 17.6 | 0.0 | 38.1 |

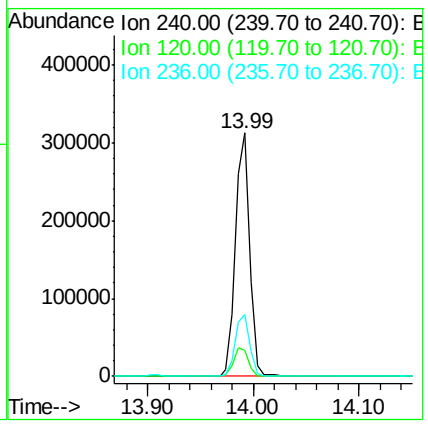





#75
Chrysene-d12
Concen: 20.000 ng
RT: 13.99 min Scan# 2024
Delta R.T. 0.01 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

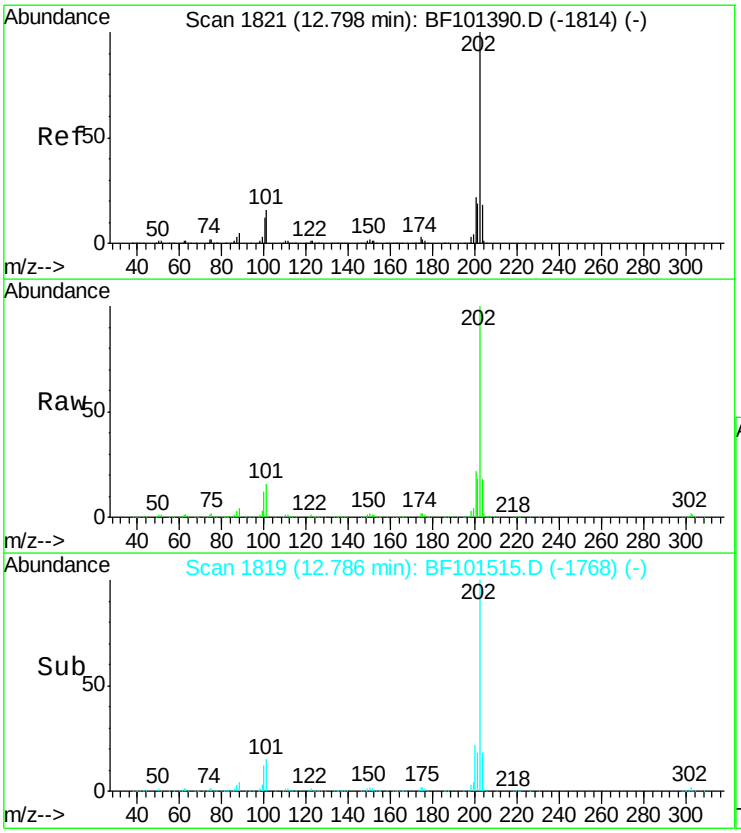
Tgt Ion:240 Resp: 286418

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 10.9 | 9.5 | 14.3 |
| 236 | 25.5 | 20.7 | 31.1 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

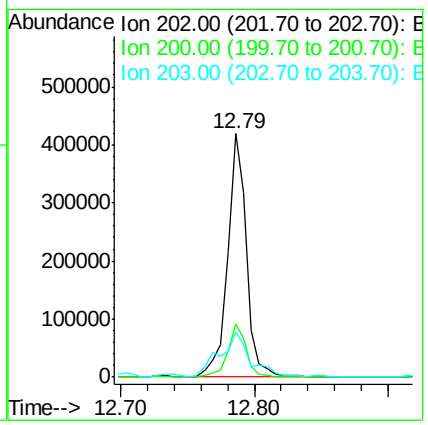
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

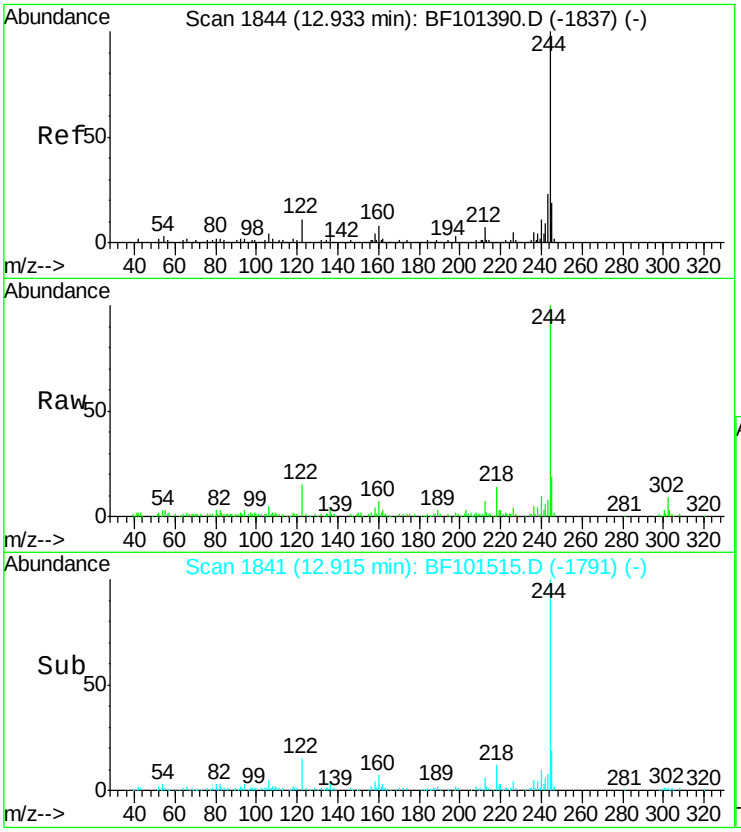



#77
Pyrene
Concen: 19.217 ng
RT: 12.79 min Scan# 1819
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:202 Resp: 413080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.6 | 17.4 | 26.2 |
| 203 | 18.4 | 14.3 | 21.5 |

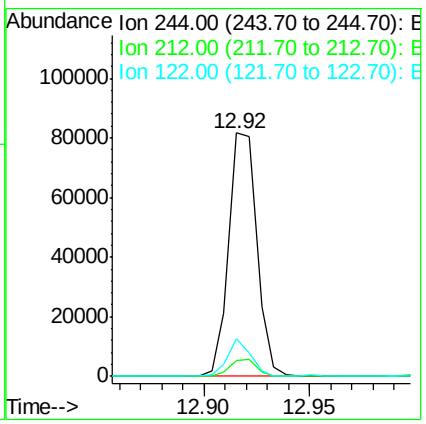





#78
Terphenyl-d14
Concen: 6.313 ng
RT: 12.92 min Scan# 1841
Delta R.T. -0.01 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

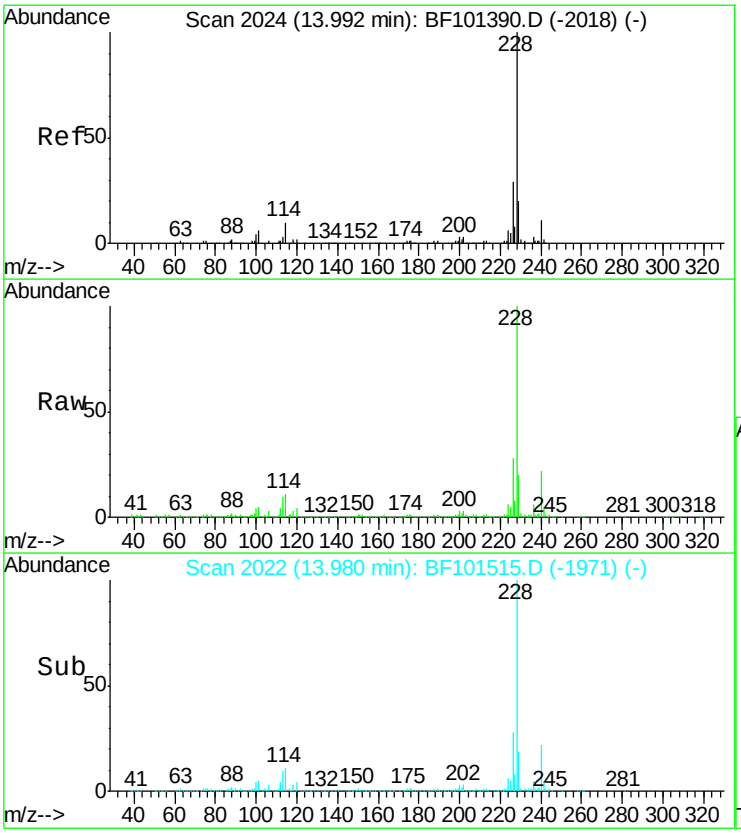
Tgt Ion:244 Resp: 75006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 6.7 | 5.4 | 8.0 |
| 122 | 15.3 | 11.0 | 16.4 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

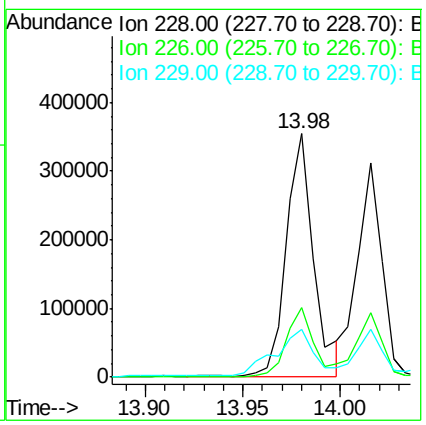
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

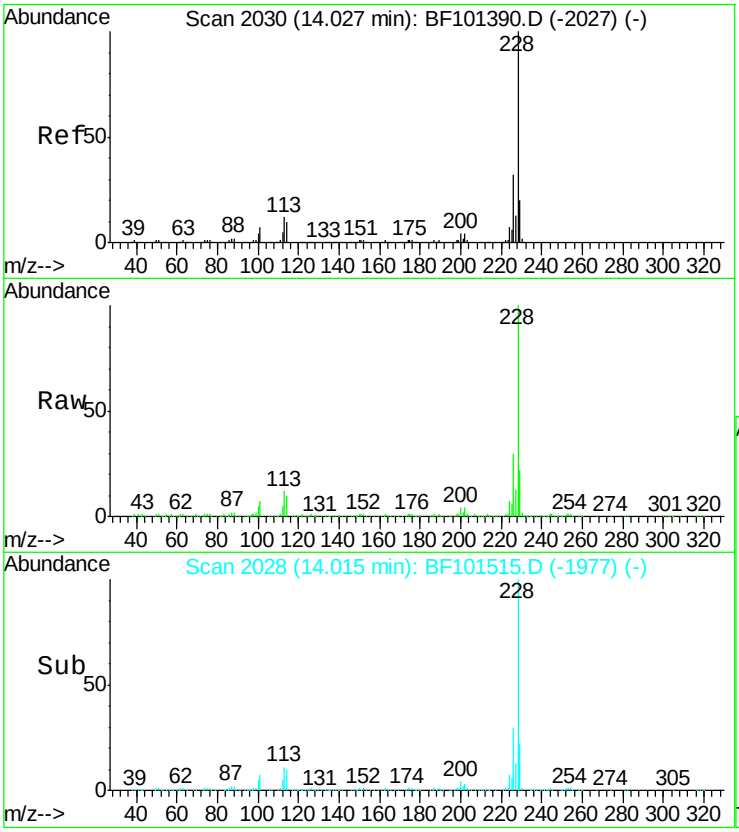



#80
Benzo(a)anthracene
Concen: 18.050 ng
RT: 13.98 min Scan# 2022
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:228 Resp: 341380

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.4 | 22.6 | 33.8 |
| 229 | 19.7 | 15.8 | 23.6 |

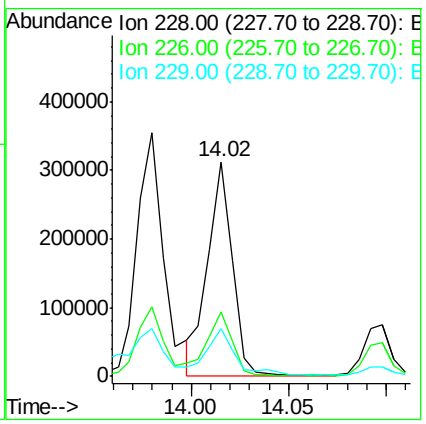





#82
Chrysene
Concen: 15.230 ng
RT: 14.02 min Scan# 2028
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

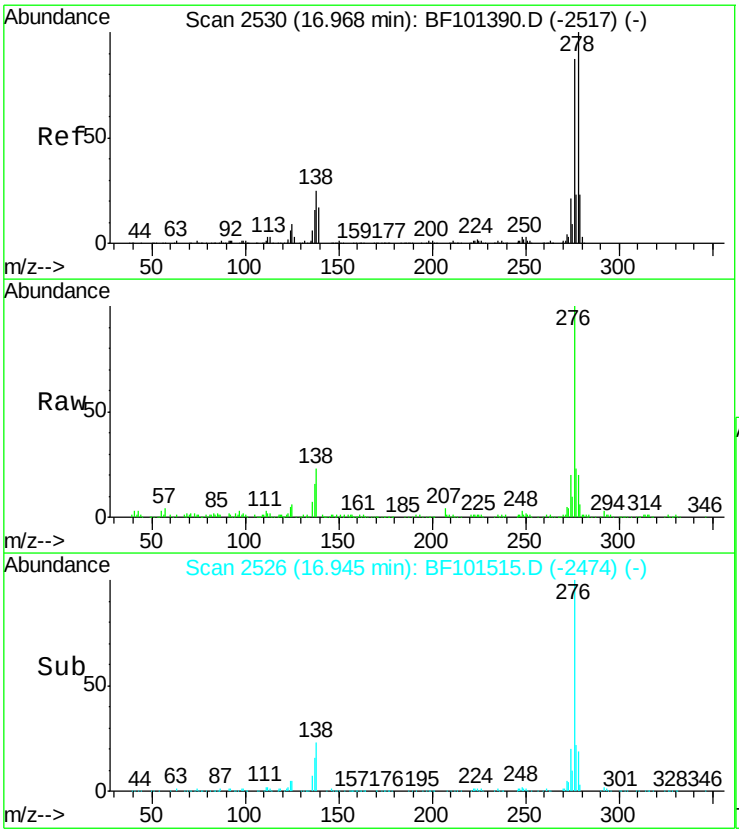
Tgt Ion:228 Resp: 271958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.1 | 25.0 | 37.6 |
| 229 | 22.4 | 16.2 | 24.4 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

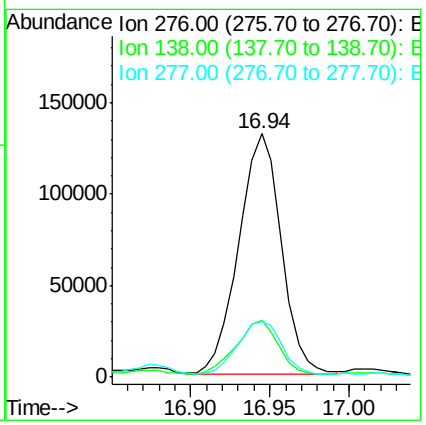
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

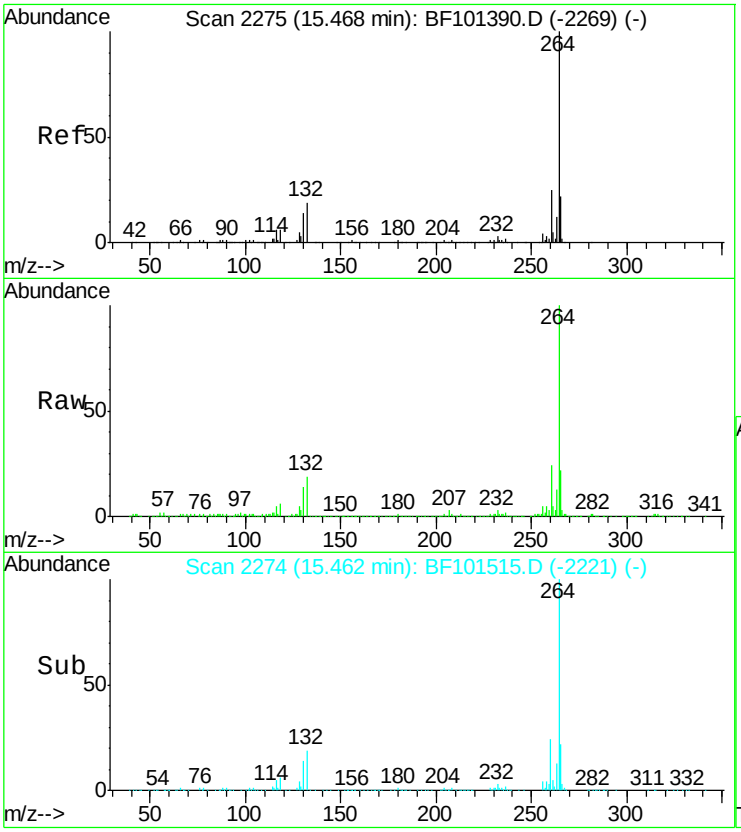



#85
Indeno(1,2,3-cd)pyrene
Concen: 15.395 ng
RT: 16.94 min Scan# 2526
Delta R.T. 0.01 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:276 Resp: 244812

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 23.4 | 25.0 | 37.6# |
| 277 | 23.1 | 20.1 | 30.1 |

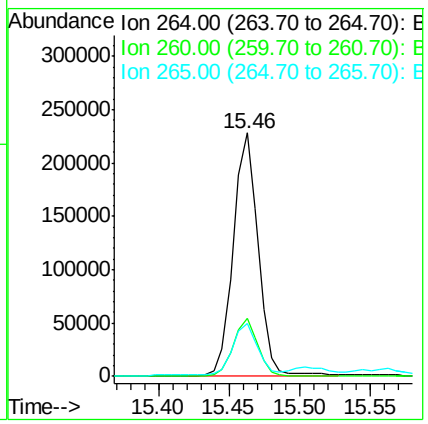





#86
Perylene-d12
Concen: 20.000 ng
RT: 15.46 min Scan# 2274
Delta R.T. 0.01 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

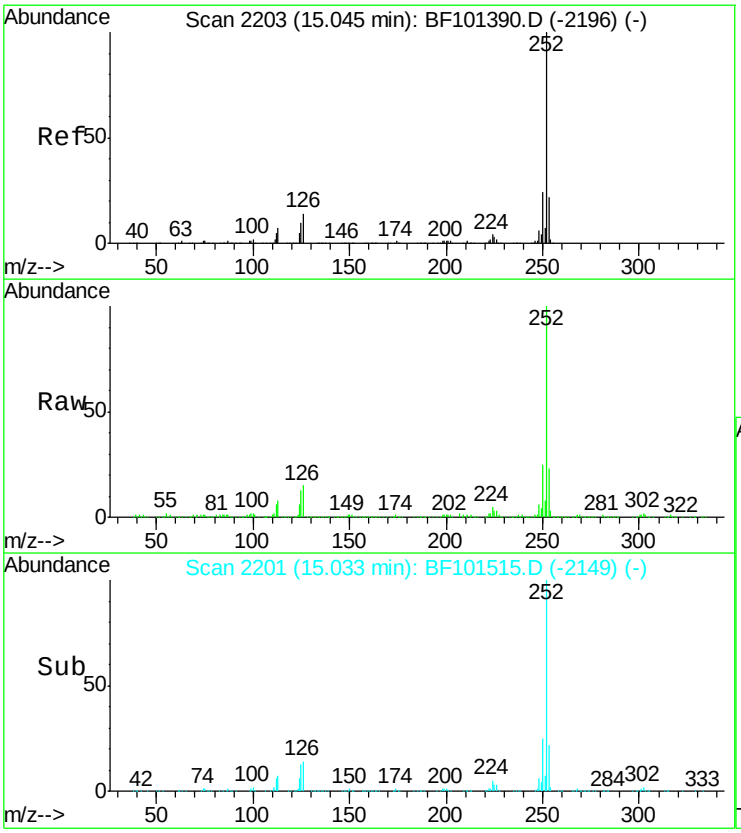
Tgt Ion:264 Resp: 276445

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 24.1 | 19.2 | 28.8 |
| 265 | 22.0 | 17.5 | 26.3 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

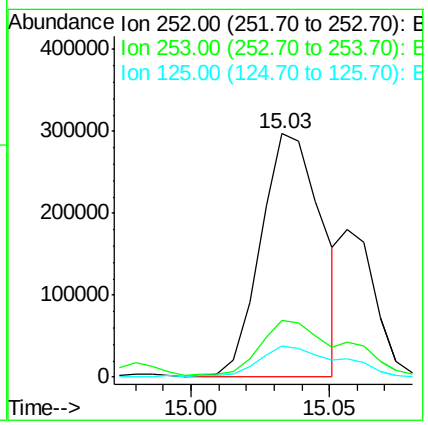
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

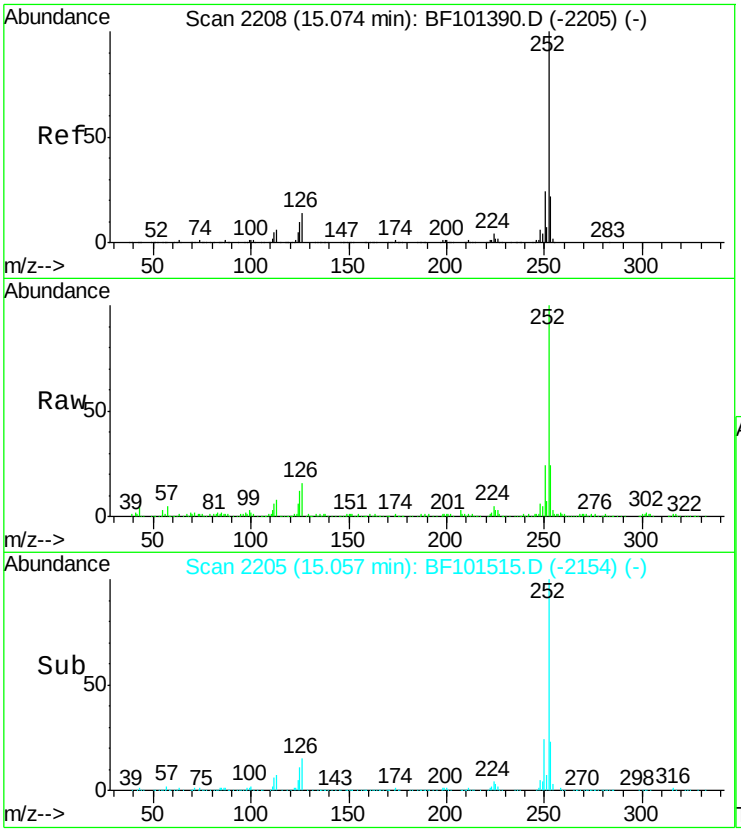



#87
Benzo(b)fluoranthene
Concen: 26.958 ng m
RT: 15.03 min Scan# 2201
Delta R.T. 0.01 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:252 Resp: 454241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.1 | 17.0 | 25.6 |
| 125 | 12.9 | 9.0 | 13.6 |

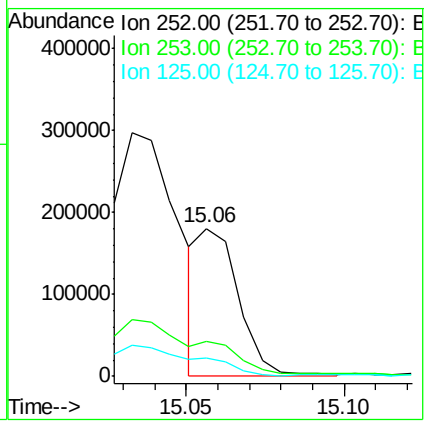





#88
Benzo(k)fluoranthene
Concen: 9.716 ng m
RT: 15.06 min Scan# 2205
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

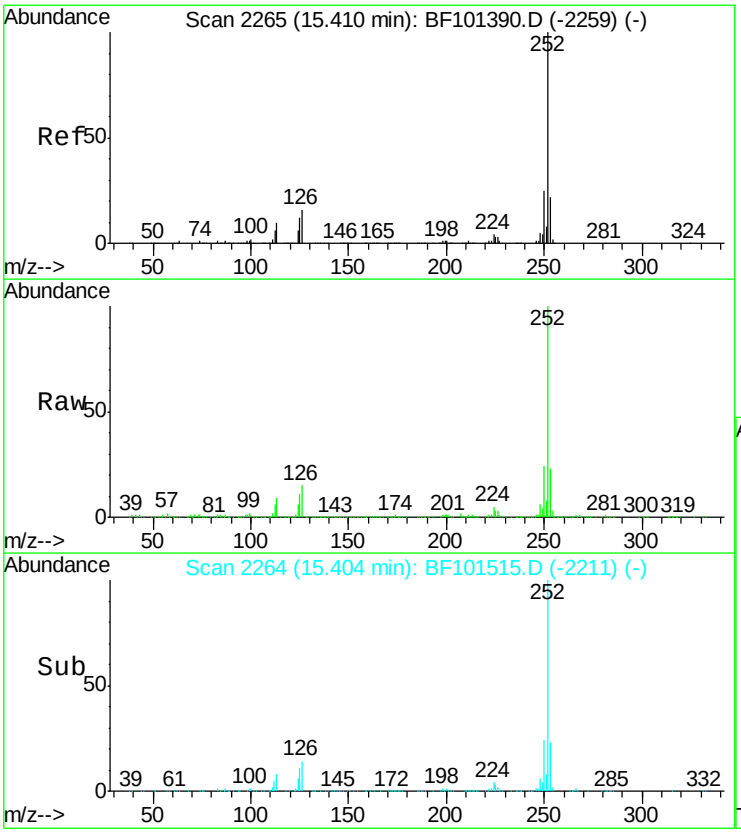
Tgt Ion:252 Resp: 159176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.7 | 17.9 | 26.9 |
| 125 | 12.0 | 10.2 | 15.2 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

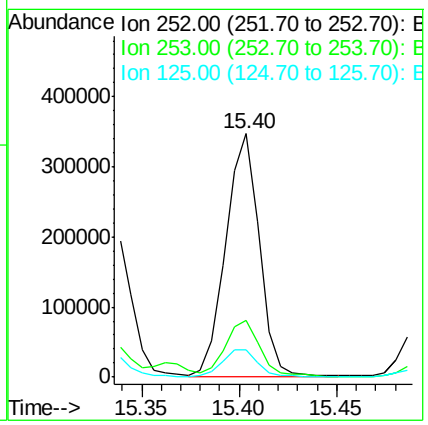
**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM

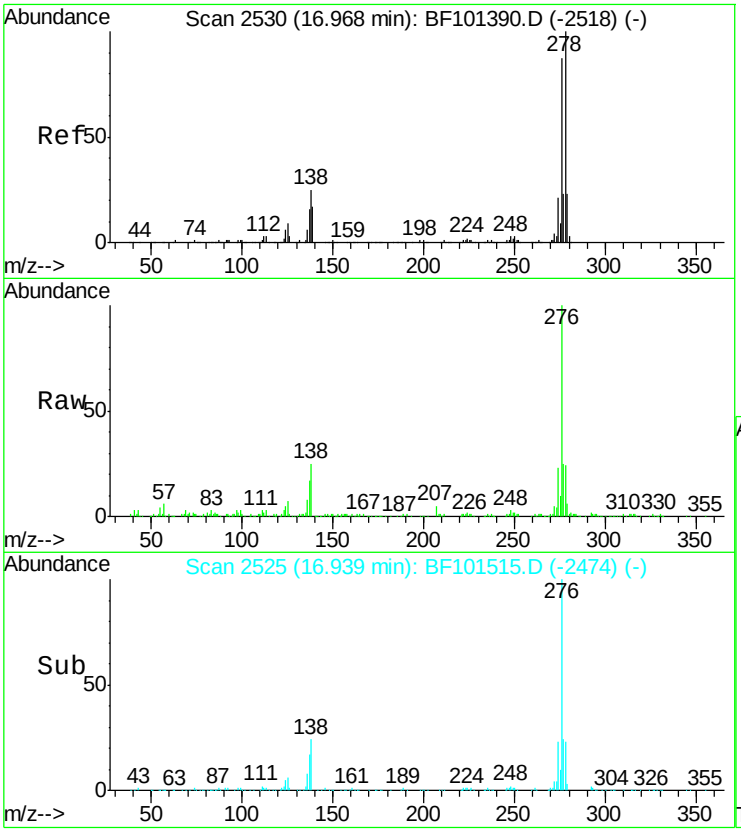



#89
Benzo(a)pyrene
Concen: 26.496 ng
RT: 15.40 min Scan# 2264
Delta R.T. 0.01 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:252 Resp: 411570

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.4 | 17.1 | 25.7 |
| 125 | 11.5 | 9.8 | 14.6 |

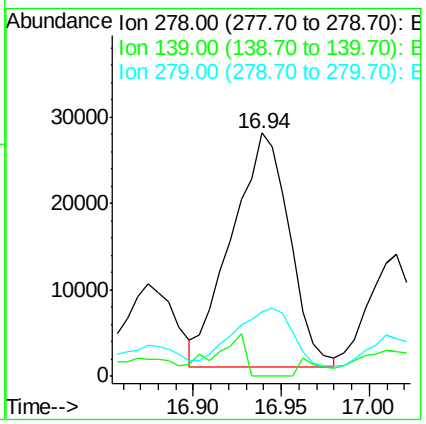





#90
Dibenzo(a,h)anthracene
Concen: 4.625 ng m
RT: 16.94 min Scan# 2525
Delta R.T. -0.00 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

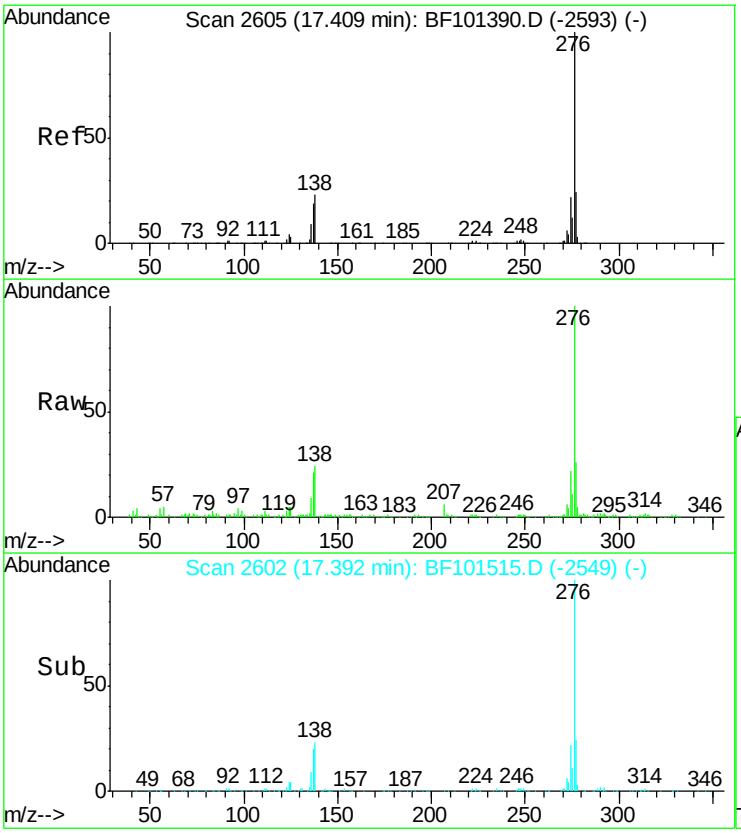
Tgt Ion:278 Resp: 61680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 0.0 | 15.9 | 23.9# |
| 279 | 26.2 | 19.0 | 28.4 |




**Instrument :**
BNA_F
**ClientSampleId :**
SB-7(13-15)DL2

**Manual Integrations APPROVED**
Sohil
12/19/2017 4:50:18 PM




#91
Benzo(g,h,i)perylene
Concen: 16.776 ng
RT: 17.39 min Scan# 2602
Delta R.T. 0.01 min
Lab File: BF101515.D
Acq: 19 Dec 2017 9:43

Tgt Ion:276 Resp: 221541

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 25.7 | 17.9 | 26.9 |
| 138 | 23.8 | 21.8 | 32.8 |