Quantitation Report (QT Reviewed)

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE102214\
Data File : BE088196.D
Acq On : 22 Oct 2014 23:19
Operator : TP/JJ
Sample : F4325-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_E
**ClientSampleId :** YS19-SS12-1014

**Manual Integrations APPROVED**
mohammad
10/28/2014 12:07:29 PM

Quant Time: Oct 27 04:52:59 2014
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SIM-PAH-BE102014.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Oct 21 02:11:14 2014
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 7.14 | 152 | 26256 | 5.00 | ng | | 0.00 |
| 3) Naphthalene-d8 | 8.70 | 136 | 99506 | 5.00 | ng | | 0.00 |
| 7) Acenaphthene-d10 | 10.85 | 164 | 53133 | 5.00 | ng | | 0.00 |
| 12) Phenanthrene-d10 | 12.97 | 188 | 77472 | 5.00 | ng | | 0.00 |
| 16) Chrysene-d12 | 18.39 | 240 | 48494 | 5.00 | ng | | 0.00 |
| 22) Perylene-d12 | 21.44 | 264 | 48417 | 5.00 | ng | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 4) Nitrobenzene-d5 | 7.84 | 82 | 424180 | 59.13 | ng | | 0.01 |
| 8) 2-Fluorobiphenyl | 10.04 | 172 | 519310 | 35.38 | ng | | 0.00 |
| 18) Terphenyl-d14 | 16.16 | 244 | 391485 | 50.17 | ng | | 0.02 |
| **Target Compounds** | | | | | | | Qvalue |
| 5) Naphthalene | 8.72 | 128 | 904 | 0.04 | ng | # | 89 |
| 6) 2-Methylnaphthalene | 9.57 | 142 | 1018 | 0.08 | ng | # | 93 |
| 9) Acenaphthylene | 10.67 | 152 | 9670 | 0.12 | ng | | 99 |
| 10) Acenaphthene | 10.88 | 154 | 2753 | 0.22 | ng | | 90 |
| 11) Fluorene | 11.55 | 166 | 2675 | 0.20 | ng | | 99 |
| 13) Phenanthrene | 13.01 | 178 | 121659 | 1.99 | ng | # | 95 |
| 14) Anthracene | 13.09 | 178 | 33897m | 0.56 | ng | | |
| 15) Fluoranthene | 15.25 | 202 | 48253 | 3.27 | ng | | 99 |
| 17) Pyrene | 15.70 | 202 | 37900m | 2.87 | ng | | |
| 19) Benzo(a)anthracene | 18.36 | 228 | 70733 | 1.64 | ng | | 99 |
| 20) Chrysene | 18.44 | 228 | 74755 | 1.77 | ng | | 97 |
| 21) Indeno(1,2,3-cd)pyrene | 23.64 | 276 | 45013 | 0.96 | ng | # | 93 |
| 23) Benzo(b)fluoranthene | 20.69 | 252 | 20799 | 1.80 | ng | | 97 |
| 24) Benzo(k)fluoranthene | 20.74 | 252 | 9506 | 0.77 | ng | | 96 |
| 25) Benzo(a)pyrene | 21.33 | 252 | 14336 | 1.35 | ng | | 98 |
| 26) Dibenzo(a,h)anthracene | 23.73 | 278 | 3078 | 0.30 | ng | | 91 |
| 27) Benzo(g,h,i)perylene | 24.27 | 276 | 42304 | 0.92 | ng | | 98 |

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

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Data Path : Z:\HPCHEM1\BNA_E\DATA\BE102214\
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**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

**Manual Integrations APPROVED**
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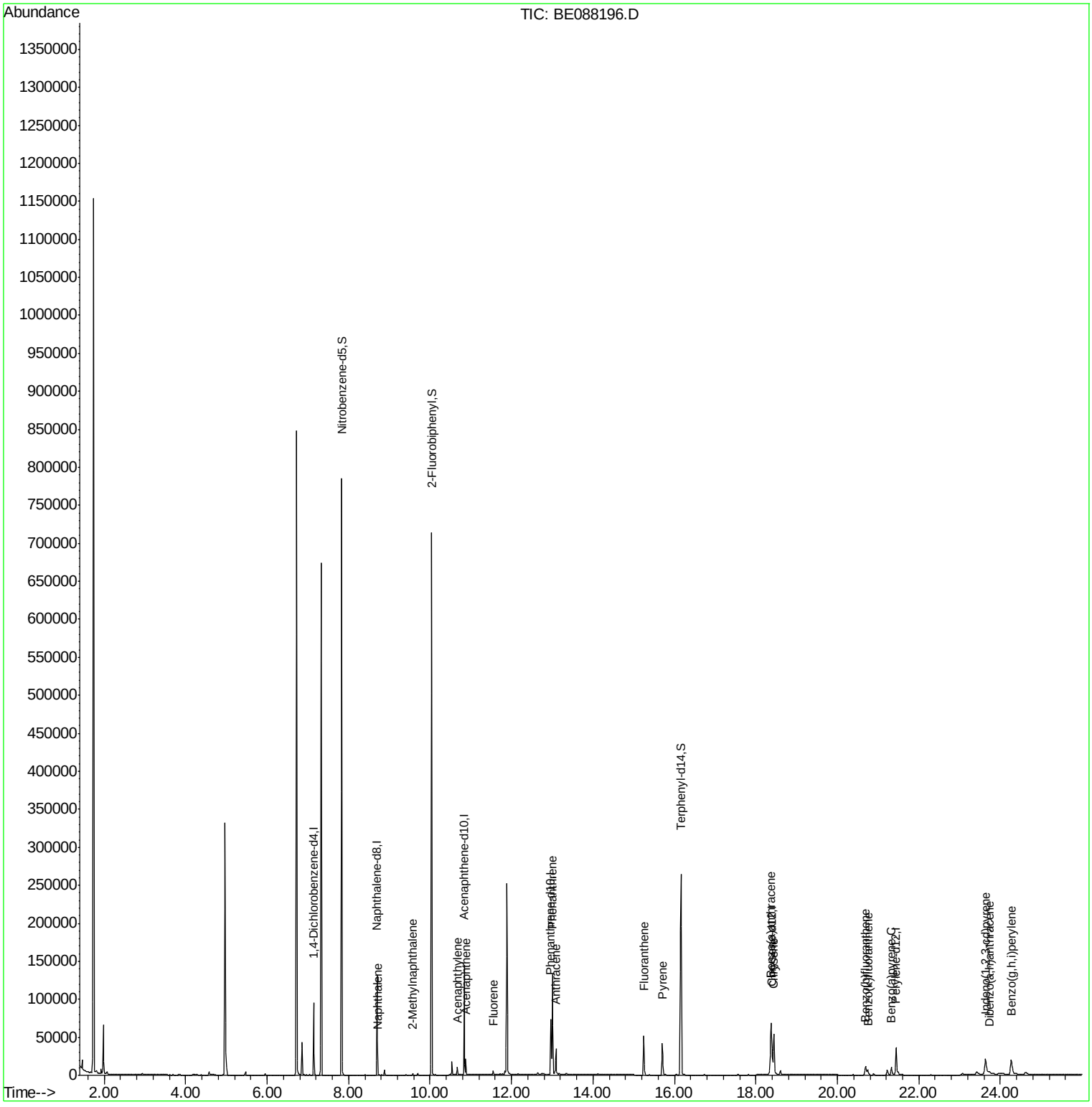
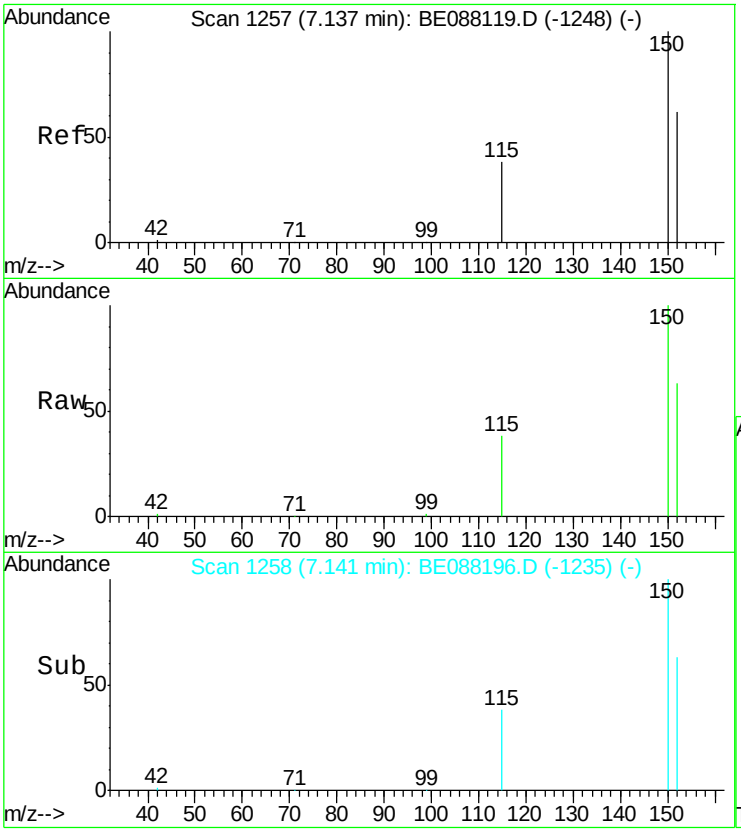
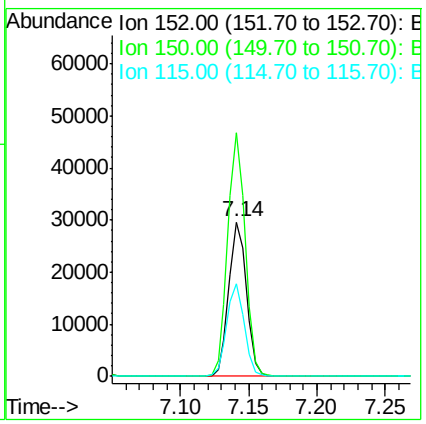





#1
1,4-Dichlorobenzene-d4
Concen: 5.00 ng
RT: 7.14 min Scan# 1258
Delta R.T. 0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:152 Resp: 26256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 157.7 | 129.2 | 193.8 |
| 115 | 60.1 | 49.3 | 73.9 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

**Manual Integrations APPROVED**
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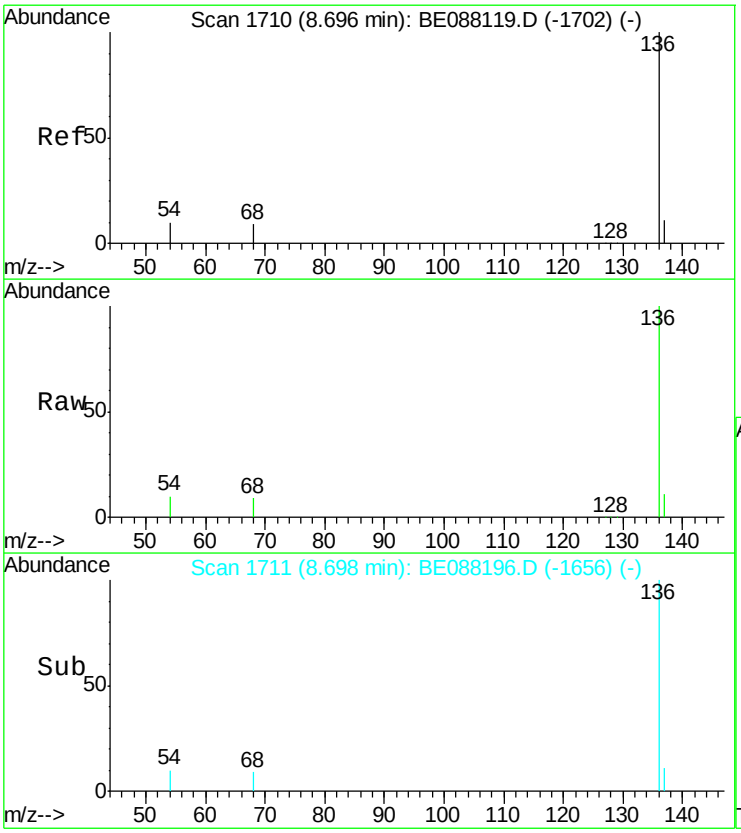
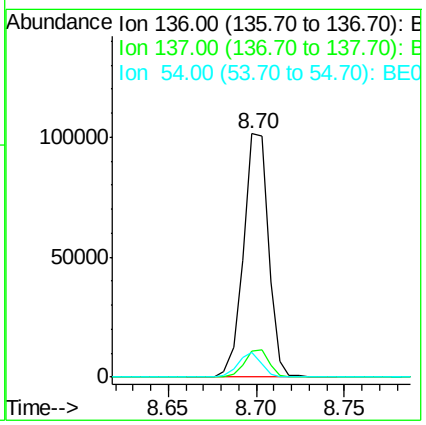
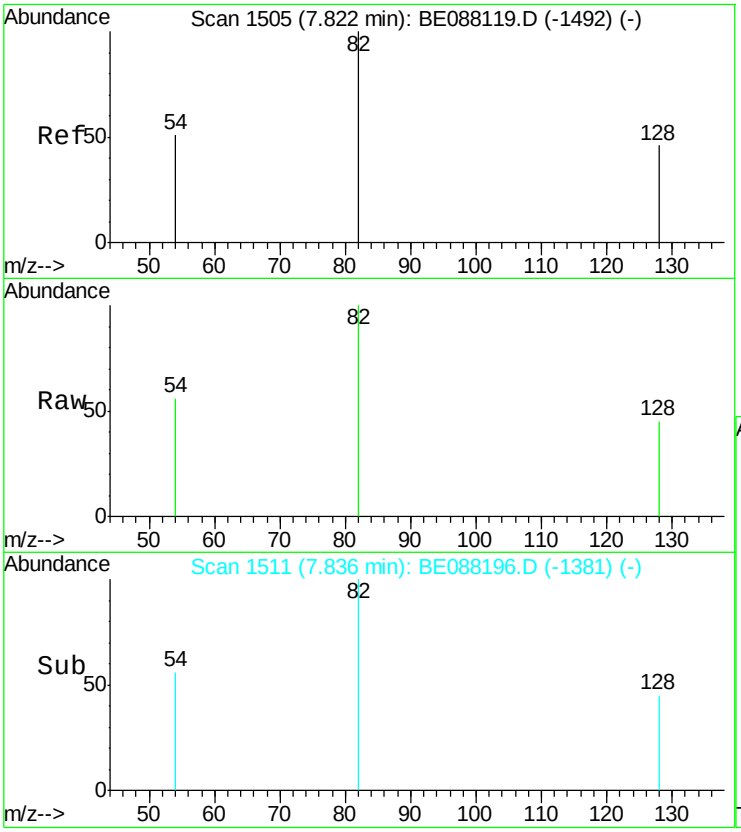



#3
Naphthalene-d8
Concen: 5.00 ng
RT: 8.70 min Scan# 1711
Delta R.T. 0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:136 Resp: 99506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 10.6 | 8.6 | 12.8 |
| 54 | 10.3 | 7.7 | 11.5 |

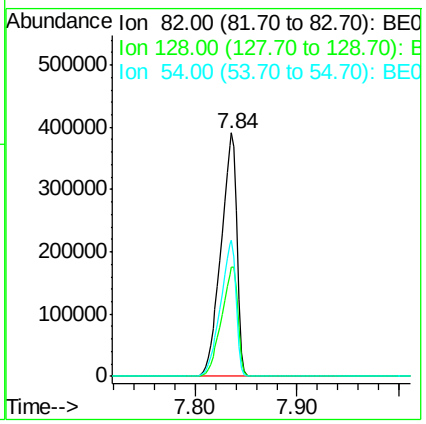





#4
Nitrobenzene-d5
Concen: 59.13 ng
RT: 7.84 min Scan# 1511
Delta R.T. 0.01 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion: 82 Resp: 424180

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 45.1 | 37.1 | 55.7 |
| 54 | 55.8 | 41.1 | 61.7 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

**Manual Integrations APPROVED**
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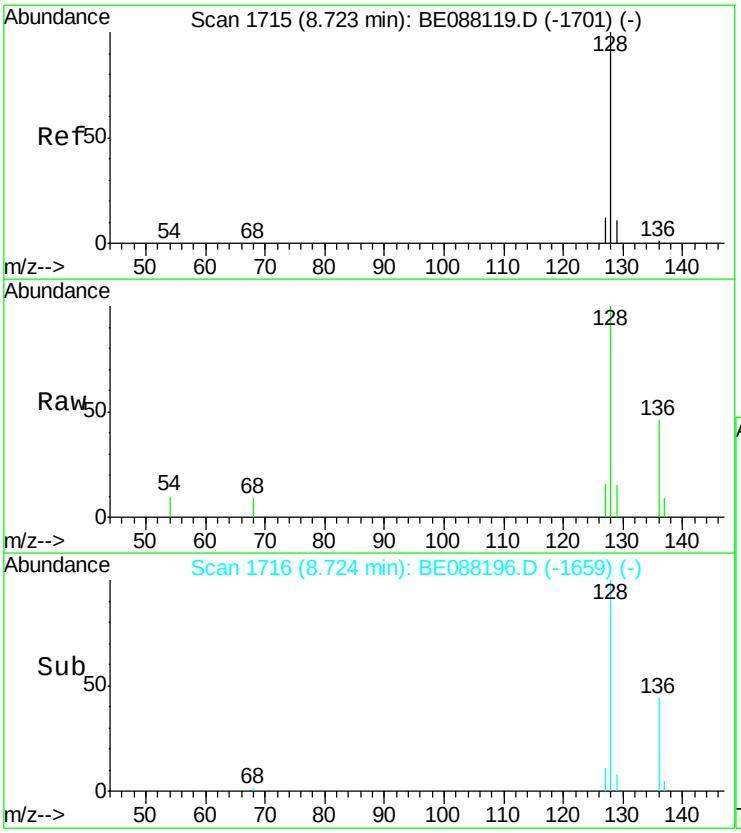
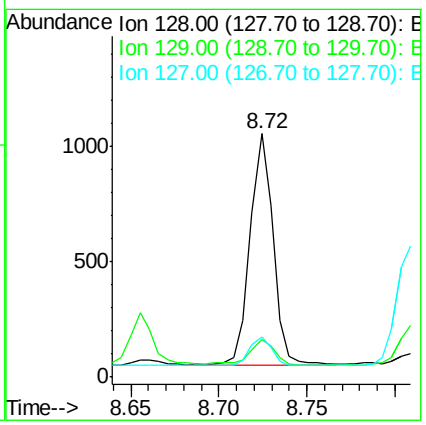
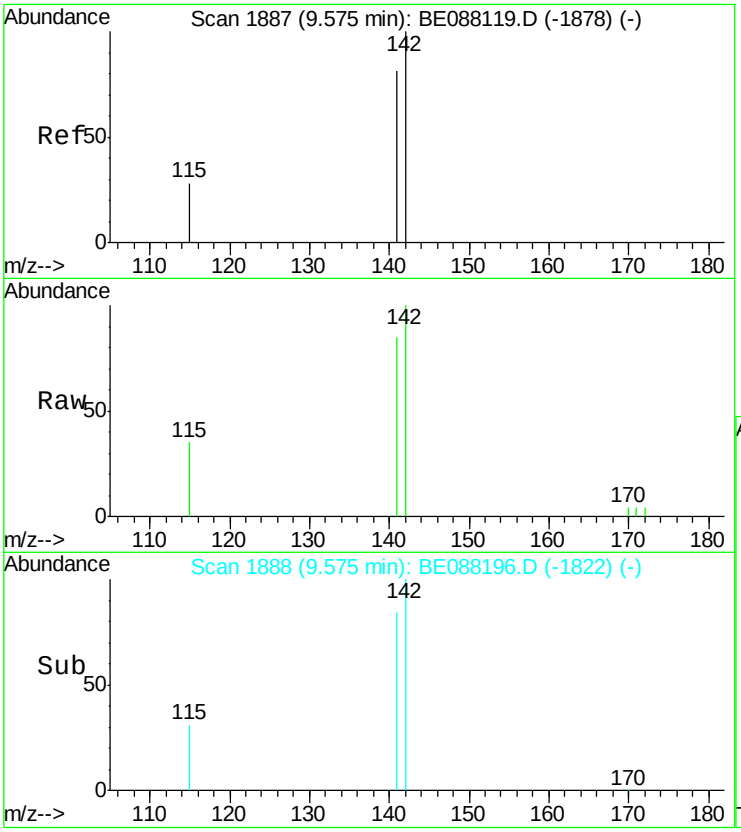



#5
Naphthalene
Concen: 0.04 ng
RT: 8.72 min Scan# 1716
Delta R.T. 0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:128 Resp: 904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 15.2 | 8.9 | 13.3# |
| 127 | 16.4 | 9.7 | 14.5# |

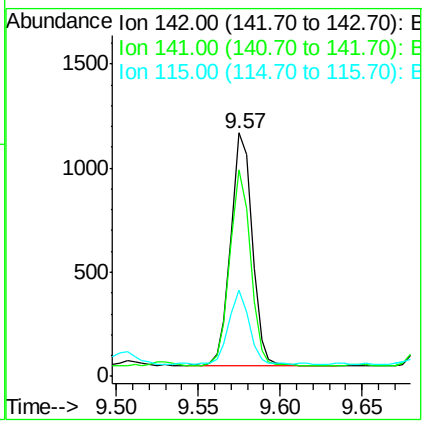





#6
2-Methylnaphthalene
Concen: 0.08 ng
RT: 9.57 min Scan# 1888
Delta R.T. -0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:142 Resp: 1018

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 84.7 | 64.6 | 97.0 |
| 115 | 35.2 | 22.6 | 34.0# |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

**Manual Integrations APPROVED**
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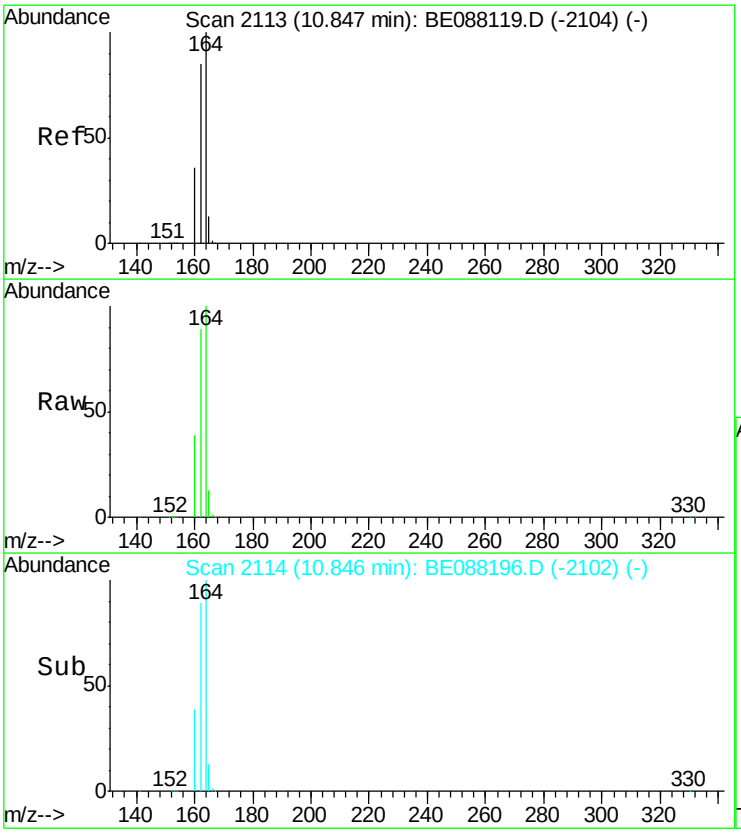
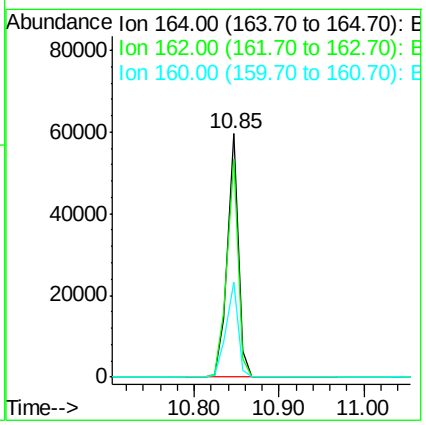
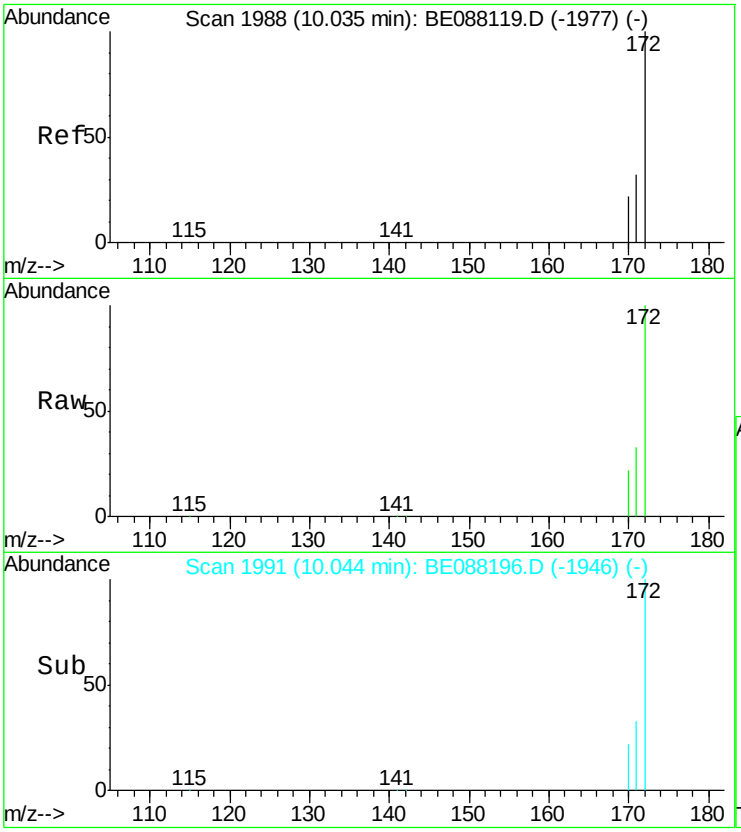



#7
Acenaphthene-d10
Concen: 5.00 ng
RT: 10.85 min Scan# 2114
Delta R.T. -0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:164 Resp: 53133

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 89.3 | 68.3 | 102.5 |
| 160 | 39.0 | 28.7 | 43.1 |

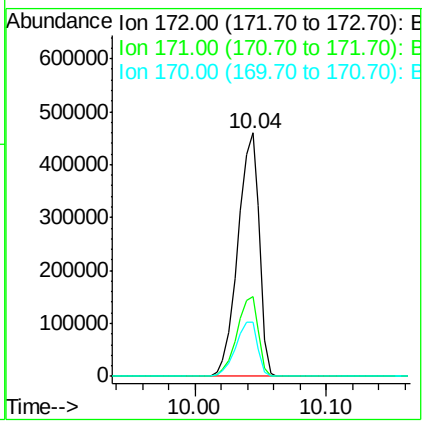





#8
2-Fluorobiphenyl
Concen: 35.38 ng
RT: 10.04 min Scan# 1991
Delta R.T. 0.01 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:172 Resp: 519310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 32.7 | 25.4 | 38.2 |
| 170 | 22.1 | 17.4 | 26.2 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

**Manual Integrations APPROVED**
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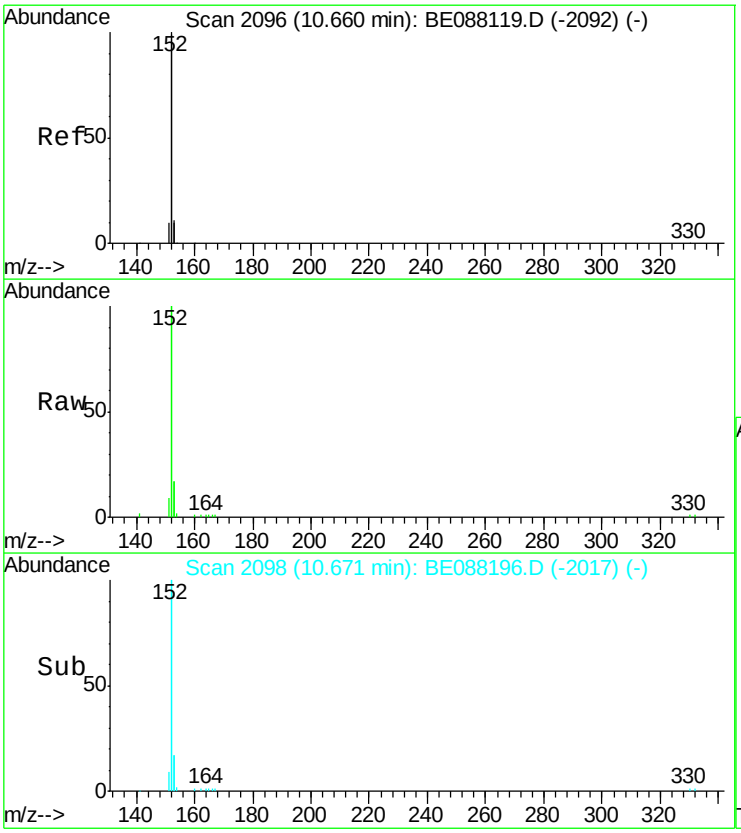
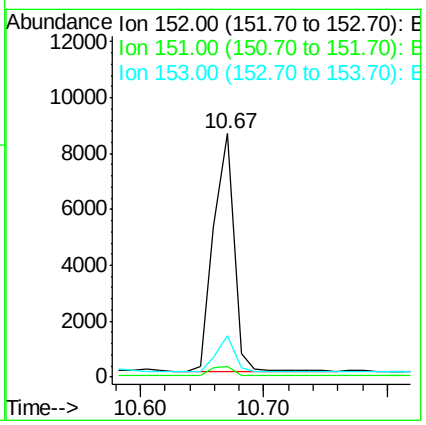
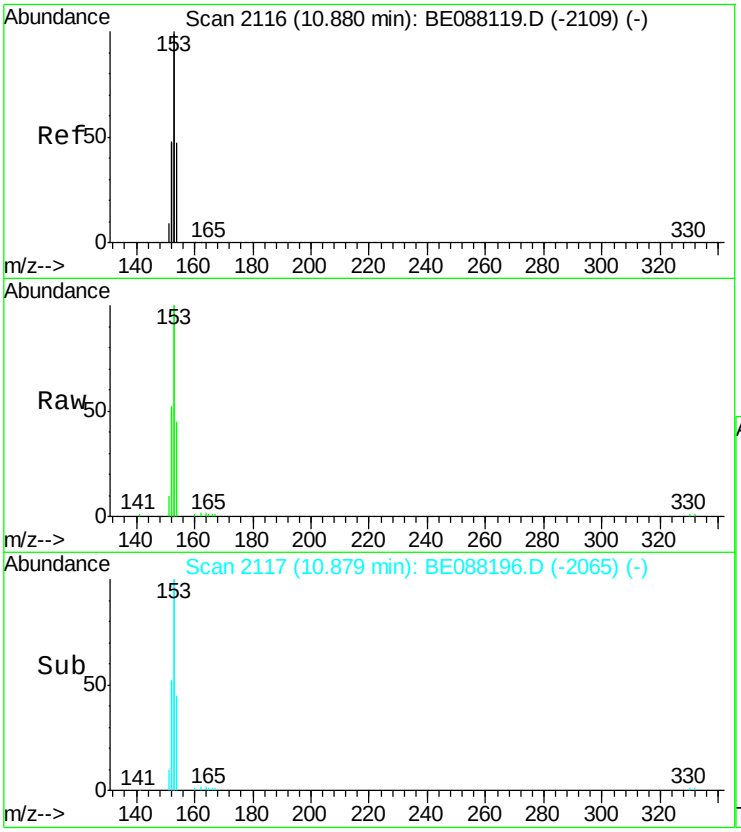



#9
Acenaphthylene
Concen: 0.12 ng
RT: 10.67 min Scan# 2098
Delta R.T. 0.01 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:152 Resp: 9670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 4.7 | 3.7 | 5.5 |
| 153 | 13.4 | 10.4 | 15.6 |

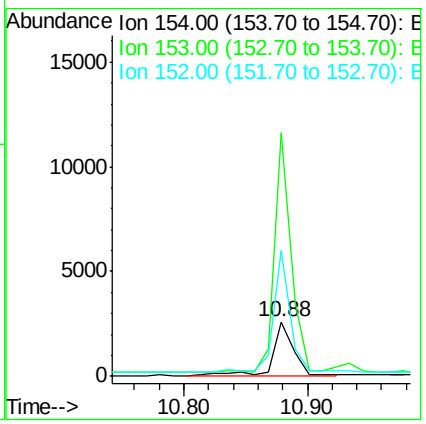





#10
Acenaphthene
Concen: 0.22 ng
RT: 10.88 min Scan# 2117
Delta R.T. -0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:154 Resp: 2753

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 377.6 | 327.8 | 491.6 |
| 152 | 192.8 | 157.6 | 236.4 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

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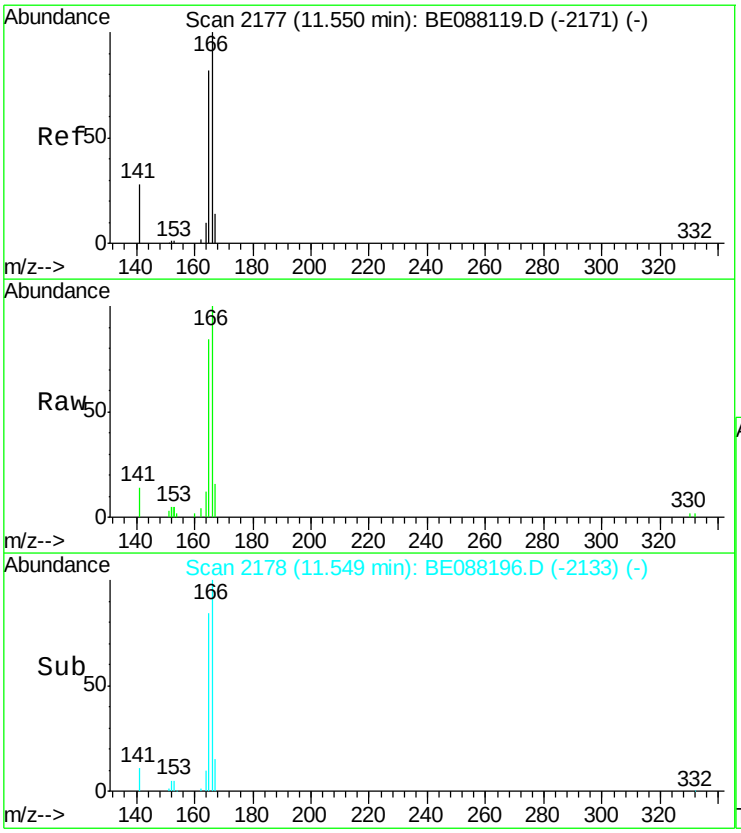
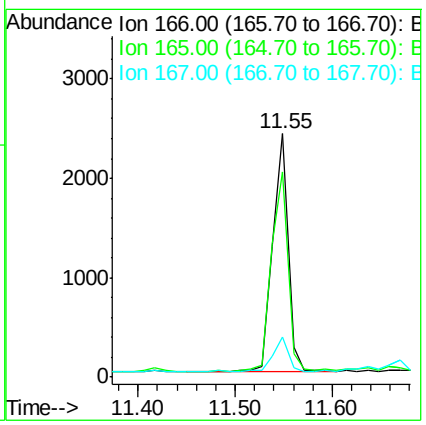
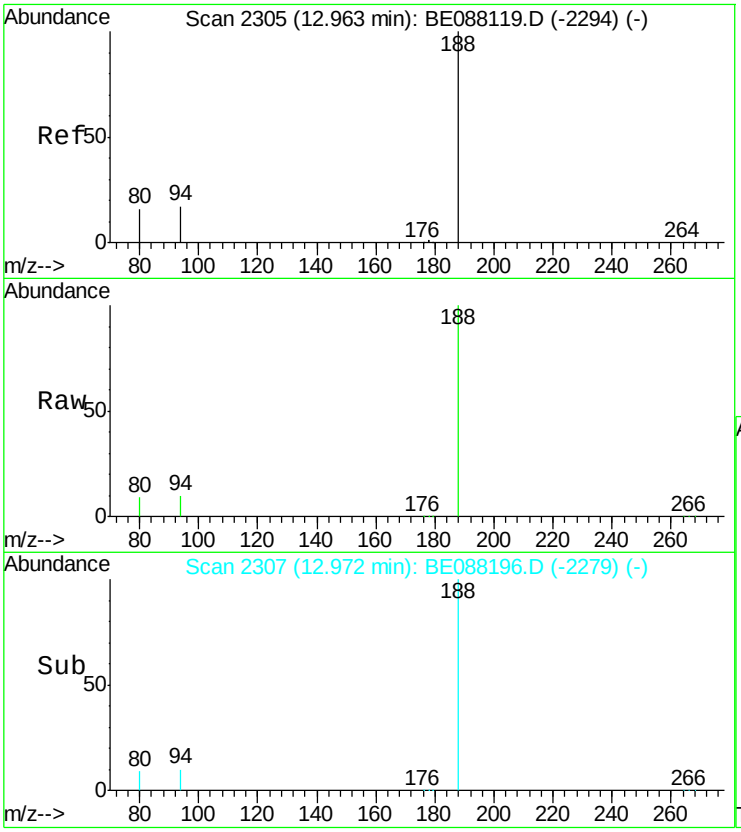



#11
Fluorene
Concen: 0.20 ng
RT: 11.55 min Scan# 2178
Delta R.T. -0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:166 Resp: 2675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 89.6 | 71.4 | 107.2 |
| 167 | 14.5 | 10.6 | 16.0 |






#12
Phenanthrene-d10
Concen: 5.00 ng
RT: 12.97 min Scan# 2307
Delta R.T. 0.01 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:188 Resp: 77472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 10.3 | 13.9 | 20.9# |
| 80 | 9.1 | 12.9 | 19.3# |

**Instrument :**
BNA_E
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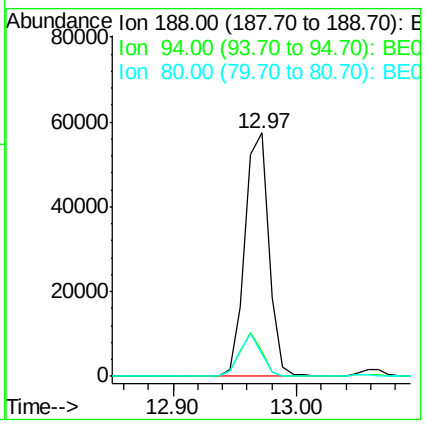
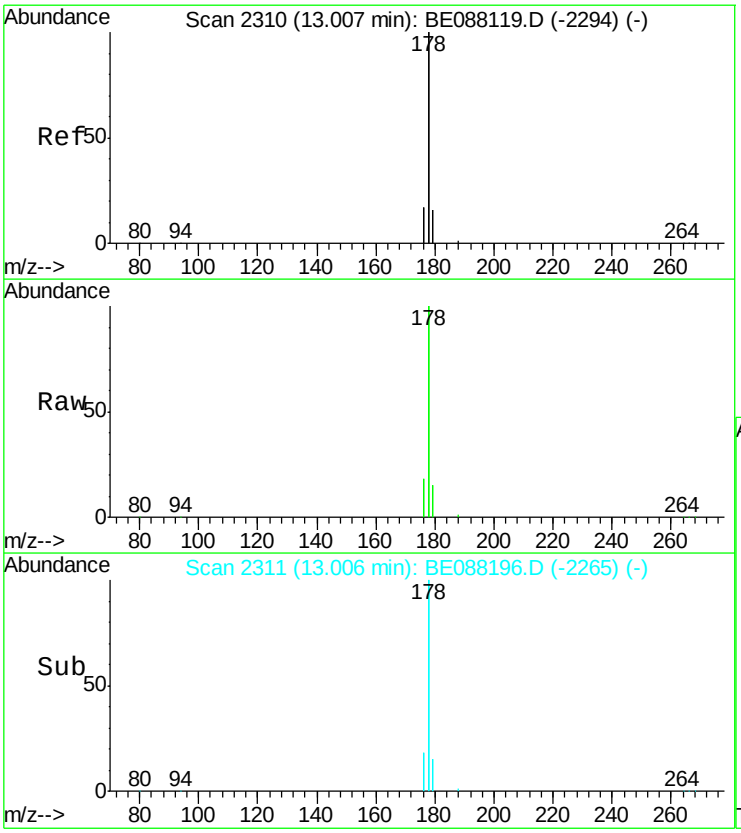
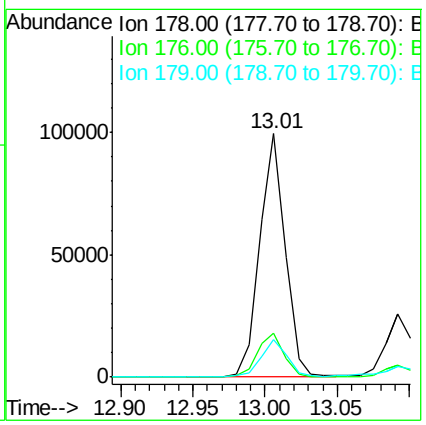


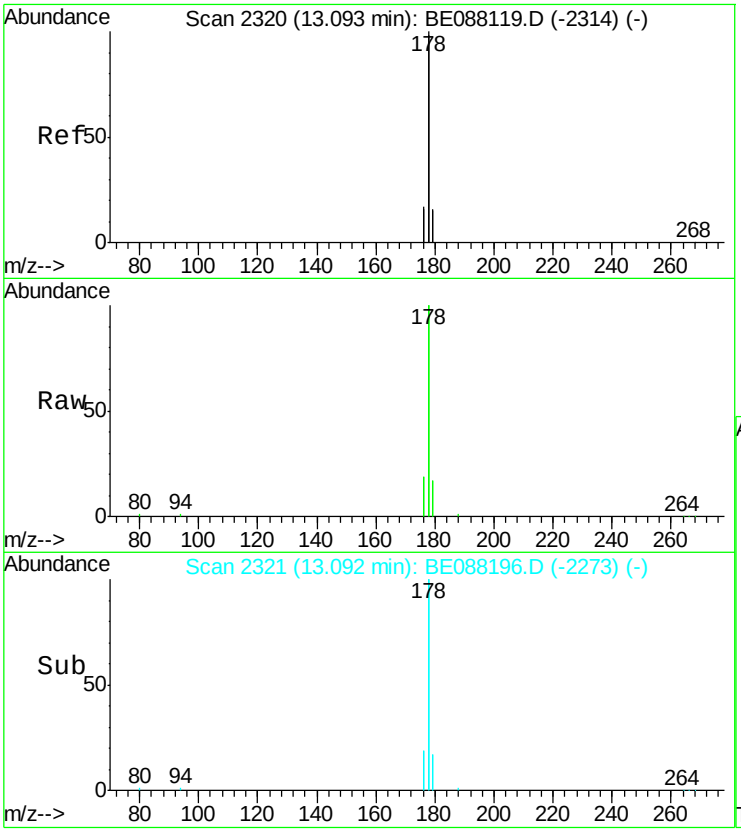




#13
Phenanthrene
Concen: 1.99 ng
RT: 13.01 min Scan# 2311
Delta R.T. 0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:178 Resp: 121659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.8 | 12.5 | 18.7# |
| 179 | 16.1 | 13.5 | 20.3 |






#14
Anthracene
Concen: 0.56 ng m
RT: 13.09 min Scan# 2321
Delta R.T. -0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:178 Resp: 33897

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 67.6 | 14.6 | 21.8# |
| 179 | 57.8 | 12.5 | 18.7# |

**Instrument :**
BNA_E
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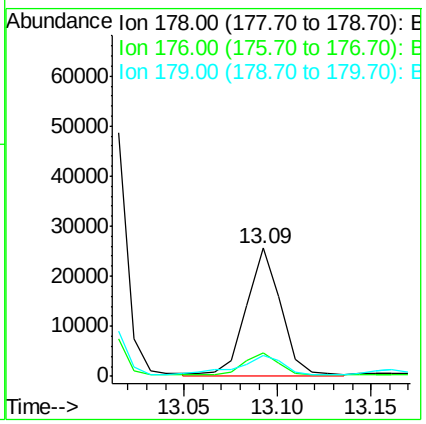
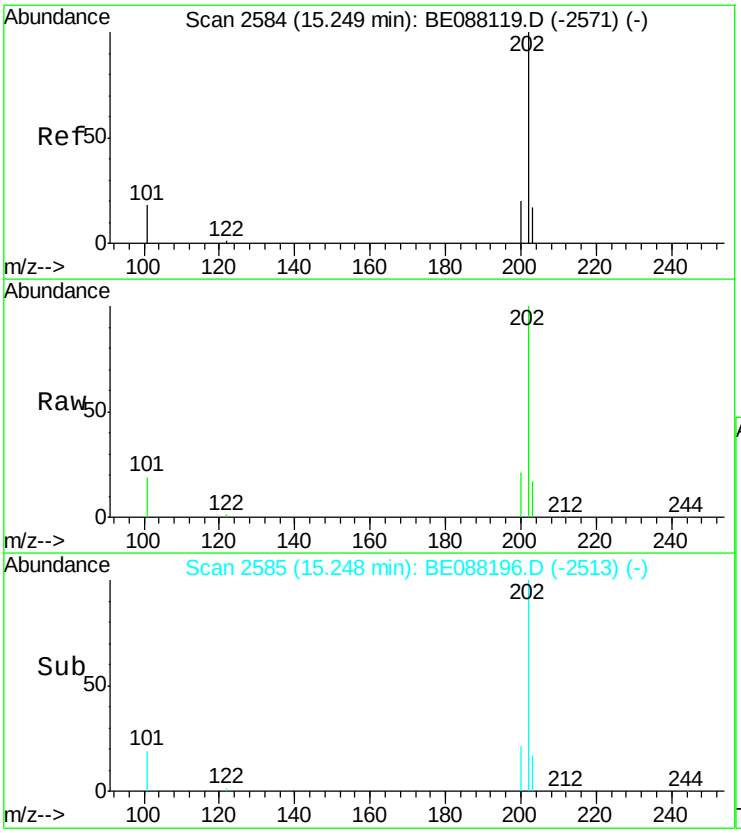
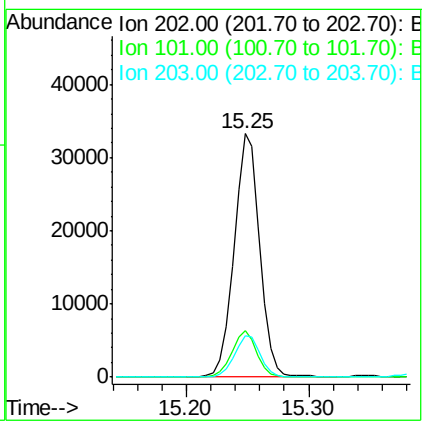


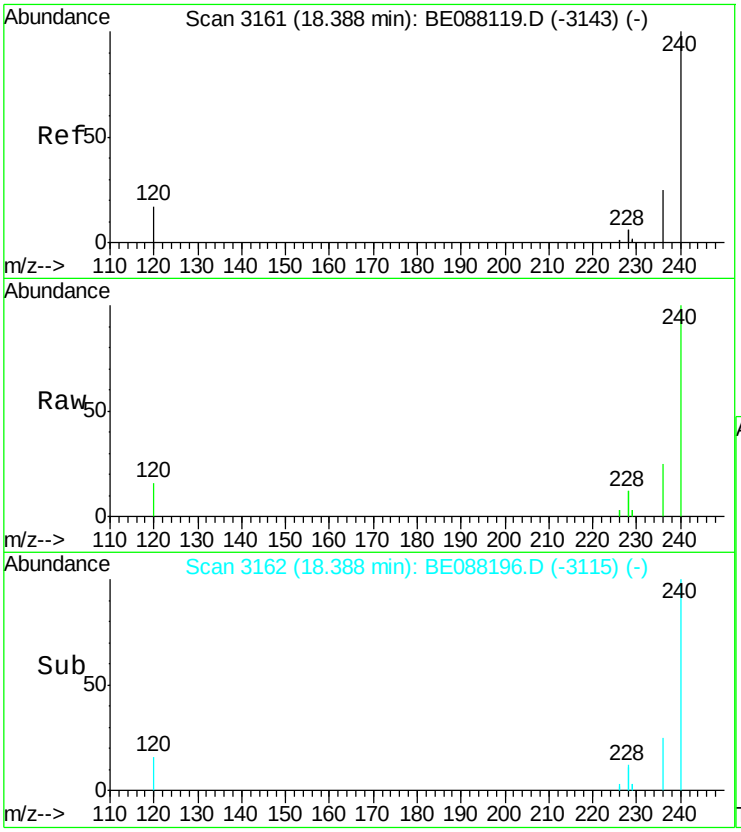




#15
Fluoranthene
Concen: 3.27 ng
RT: 15.25 min Scan# 2585
Delta R.T. -0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:202 Resp: 48253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 18.4 | 14.8 | 22.2 |
| 203 | 17.2 | 13.5 | 20.3 |






#16
Chrysene-d12
Concen: 5.00 ng
RT: 18.39 min Scan# 3162
Delta R.T. 0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:240 Resp: 48494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 16.4 | 13.9 | 20.9 |
| 236 | 25.2 | 19.9 | 29.9 |

**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

**Manual Integrations APPROVED**
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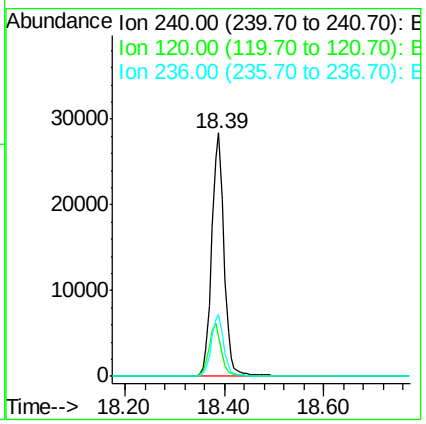
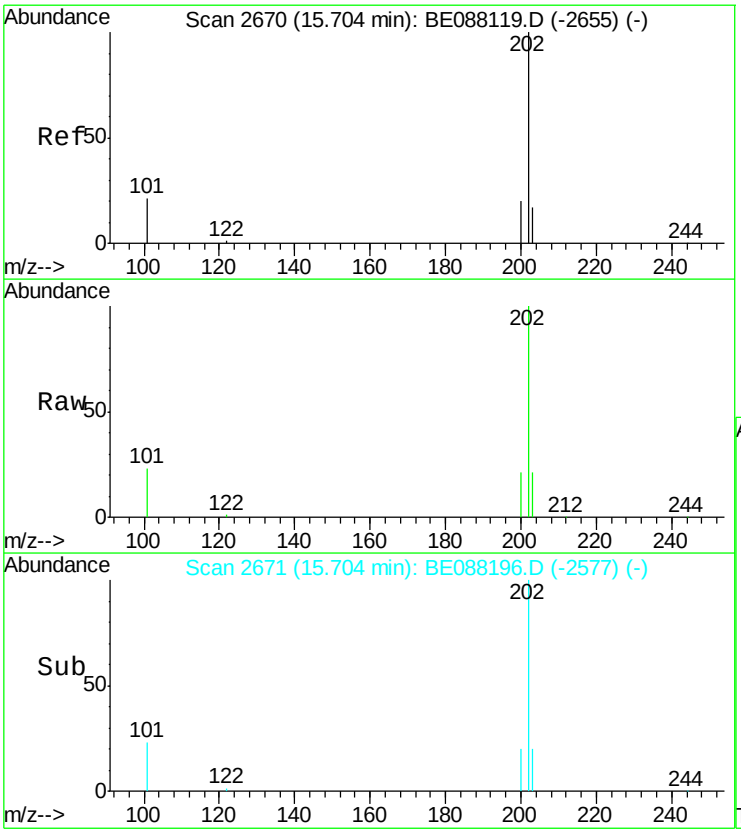
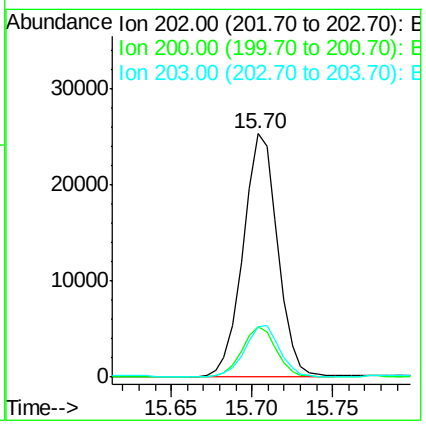


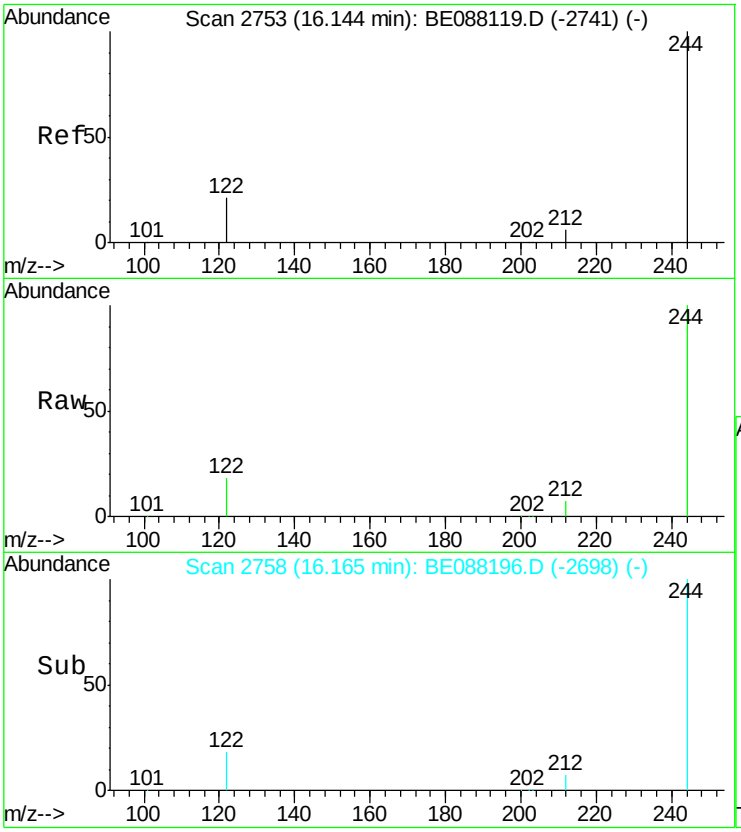




#17
Pyrene
Concen: 2.87 ng m
RT: 15.70 min Scan# 2671
Delta R.T. -0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:202 Resp: 37900

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 25.3 | 16.1 | 24.1# |
| 203 | 21.8 | 13.9 | 20.9# |

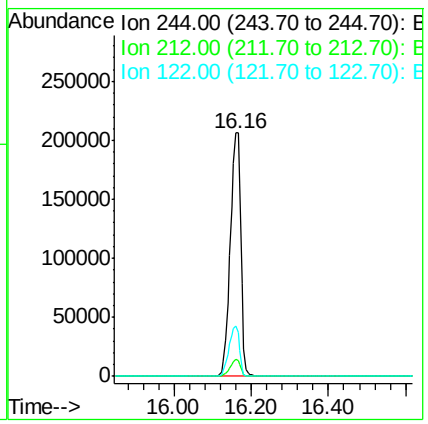





#18
Terphenyl-d14
Concen: 50.17 ng
RT: 16.16 min Scan# 2758
Delta R.T. 0.02 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:244 Resp: 391485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 6.6 | 5.4 | 8.0 |
| 122 | 18.1 | 17.5 | 26.3 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

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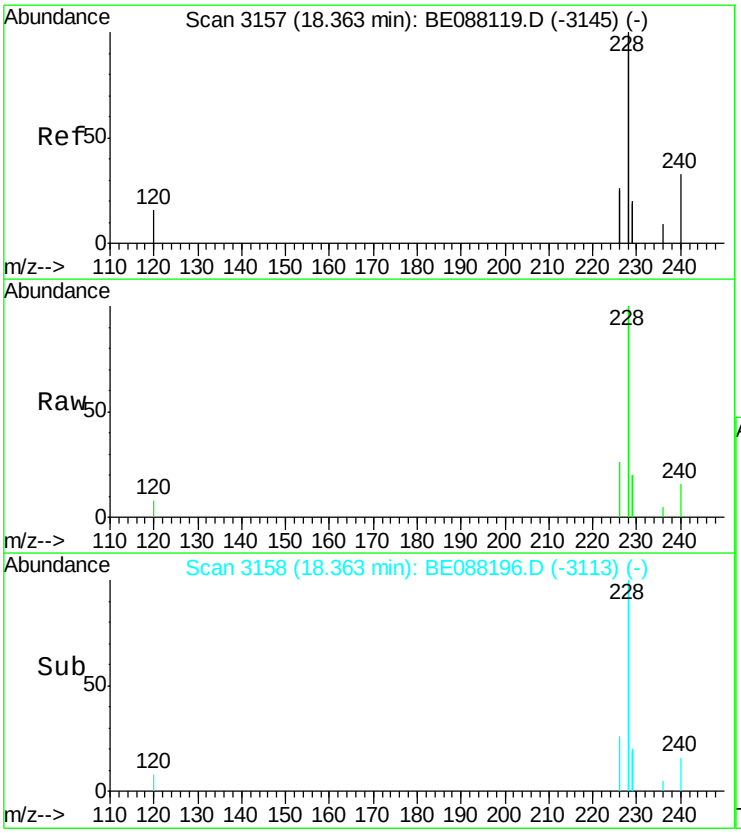
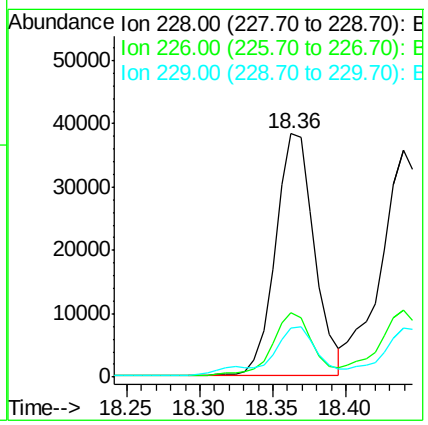
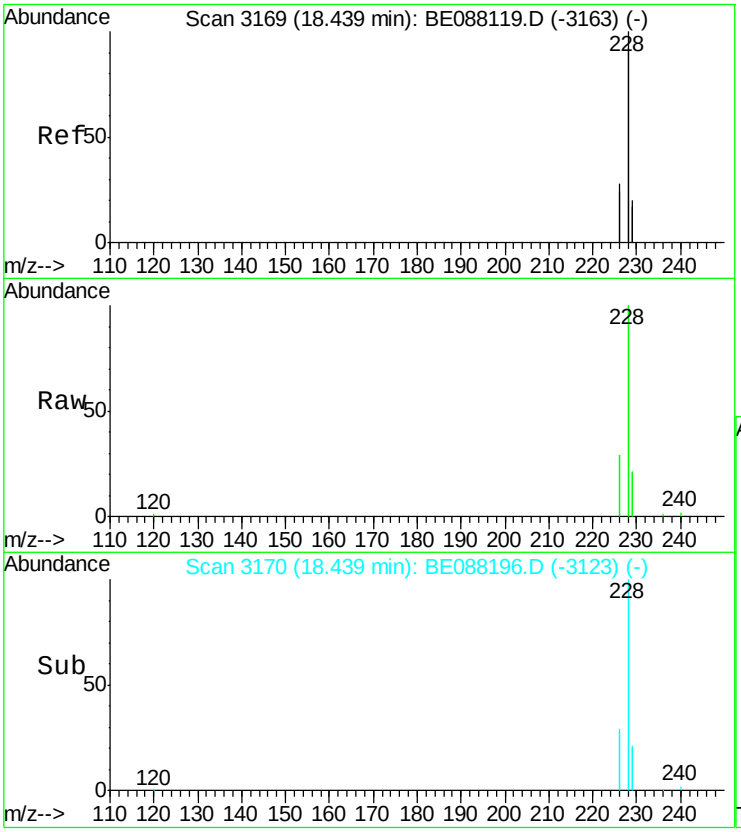



#19
Benzo(a)anthracene
Concen: 1.64 ng
RT: 18.36 min Scan# 3158
Delta R.T. 0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:228 Resp: 70733

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 26.4 | 20.8 | 31.2 |
| 229 | 20.1 | 15.6 | 23.4 |

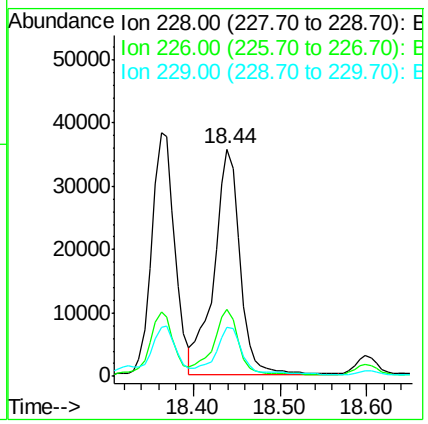





#20
Chrysene
Concen: 1.77 ng
RT: 18.44 min Scan# 3170
Delta R.T. 0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:228 Resp: 74755

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.4 | 22.7 | 34.1 |
| 229 | 21.3 | 15.8 | 23.6 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

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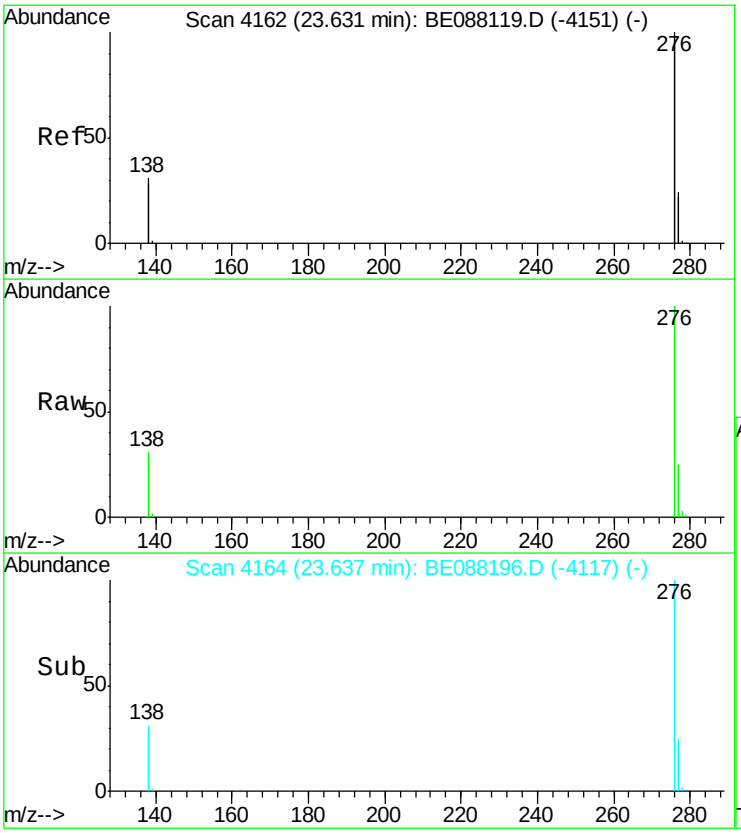
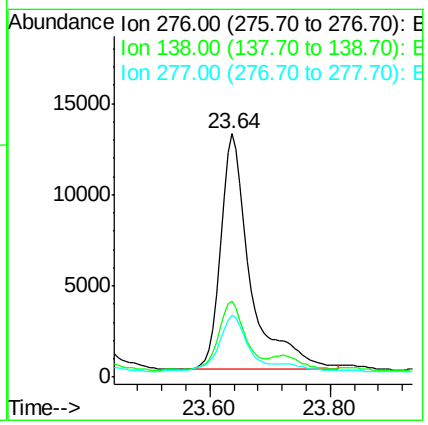
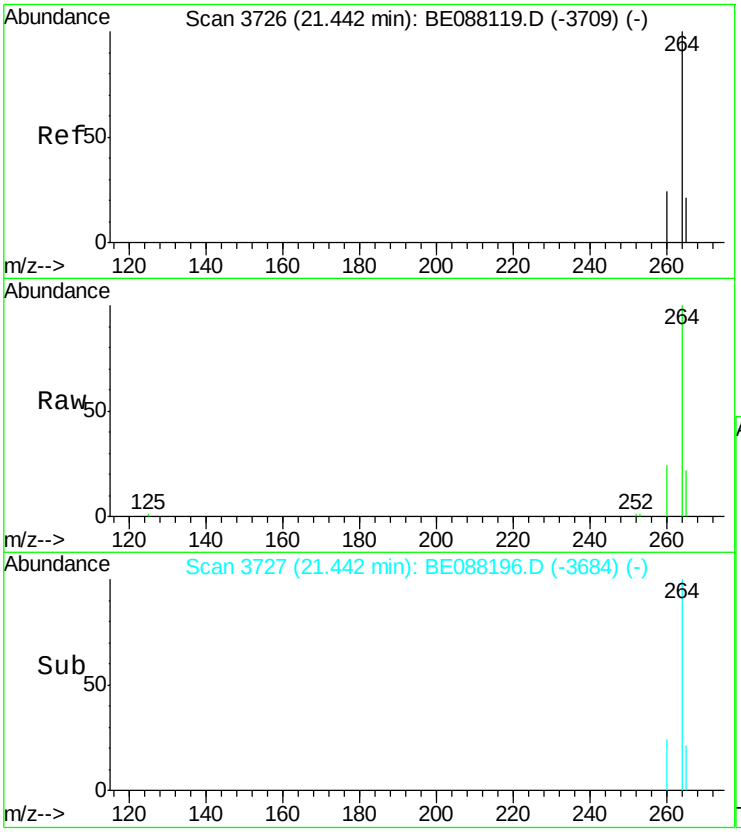



#21
Indeno(1,2,3-cd)pyrene
Concen: 0.96 ng
RT: 23.64 min Scan# 4164
Delta R.T. 0.01 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:276 Resp: 45013

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 25.6 | 18.5 | 27.7 |
| 277 | 21.9 | 14.6 | 21.8# |

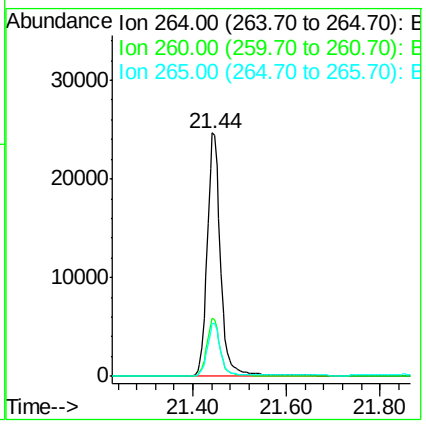





#22
Perylene-d12
Concen: 5.00 ng
RT: 21.44 min Scan# 3727
Delta R.T. -0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:264 Resp: 48417

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 23.9 | 19.0 | 28.4 |
| 265 | 21.5 | 17.2 | 25.8 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

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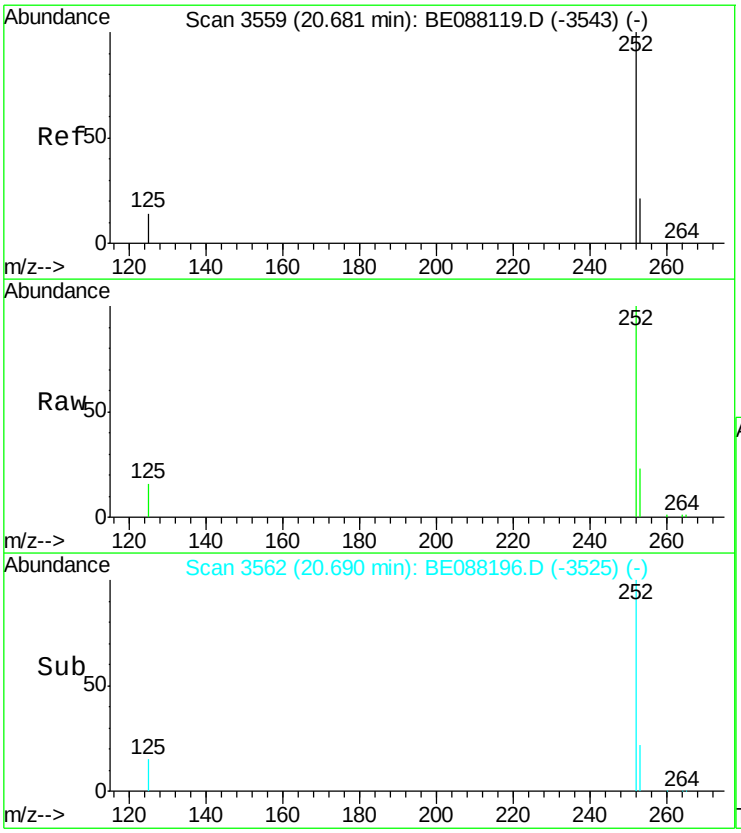
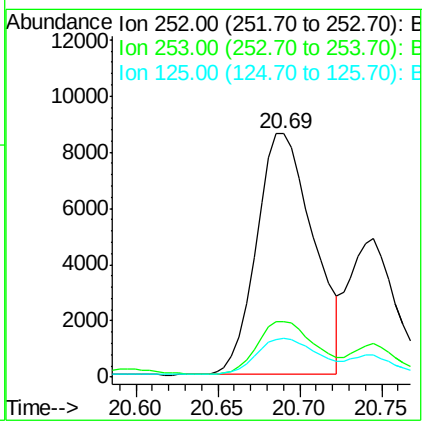
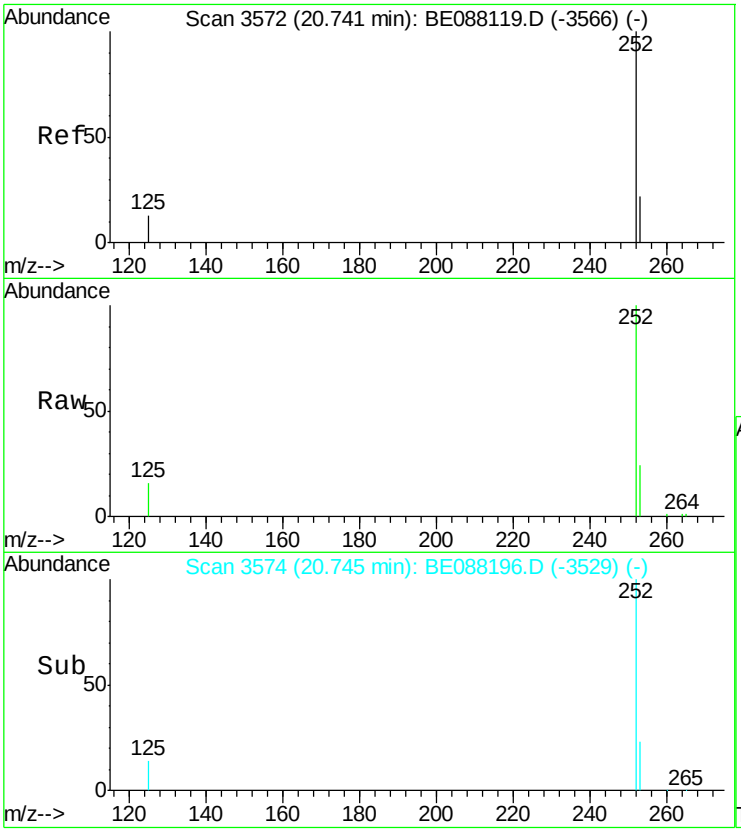



#23
Benzo(b)fluoranthene
Concen: 1.80 ng
RT: 20.69 min Scan# 3562
Delta R.T. 0.01 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:252 Resp: 20799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.9 | 17.4 | 26.0 |
| 125 | 16.2 | 11.8 | 17.8 |

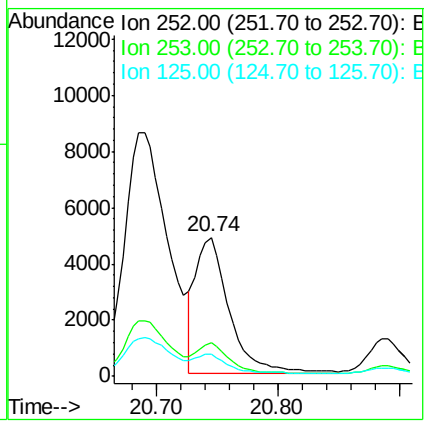





#24
Benzo(k)fluoranthene
Concen: 0.77 ng
RT: 20.74 min Scan# 3574
Delta R.T. 0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:252 Resp: 9506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.9 | 17.6 | 26.4 |
| 125 | 15.6 | 11.5 | 17.3 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

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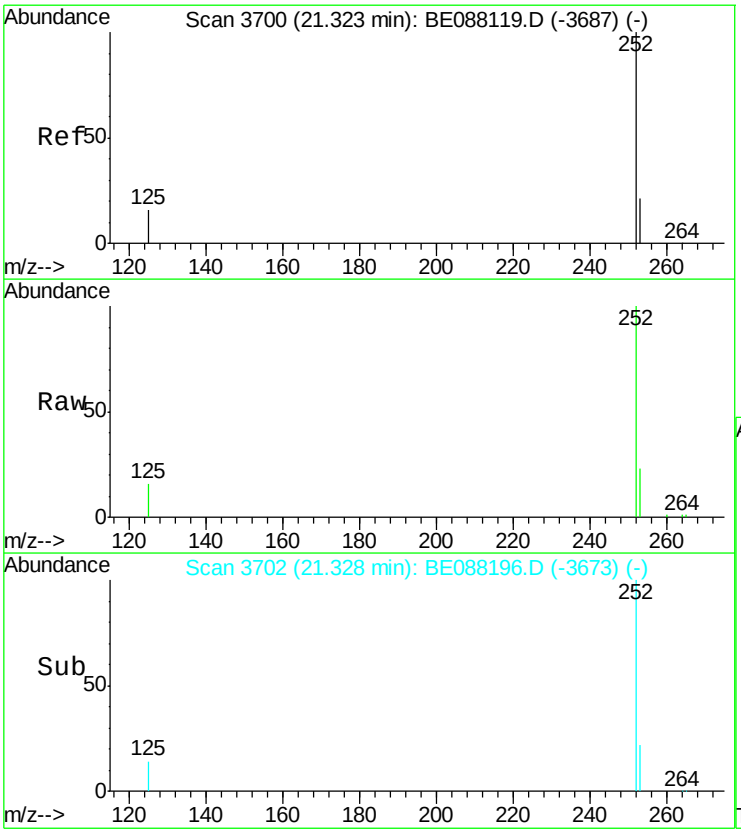
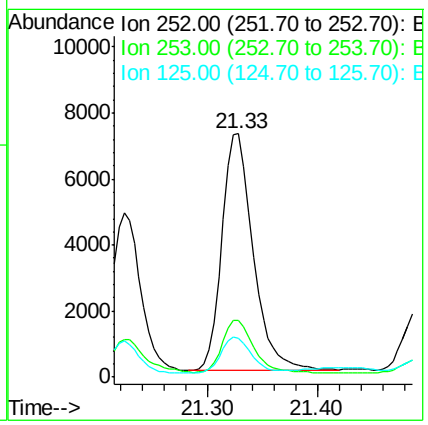
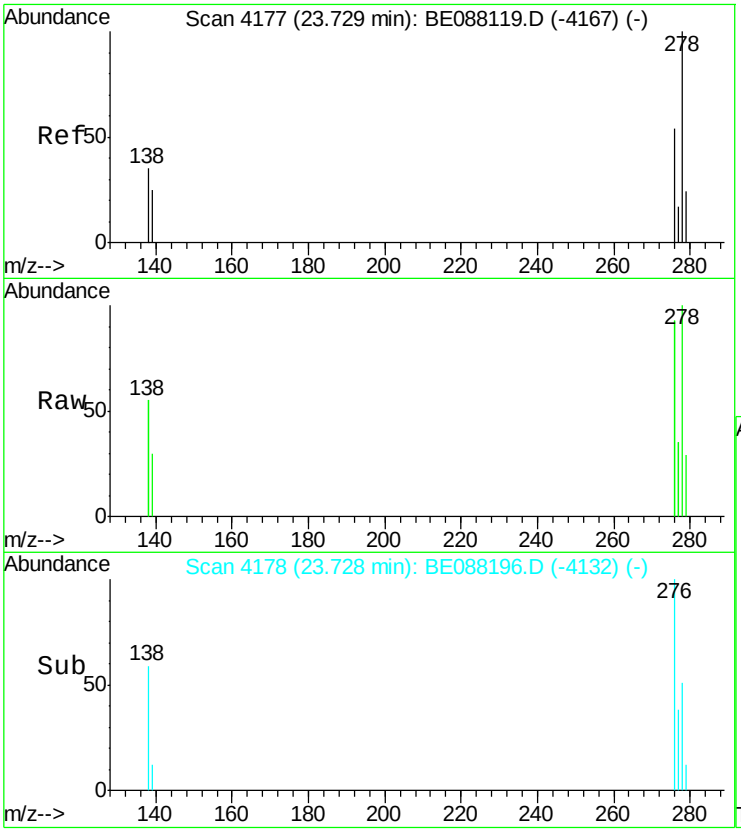



#25
Benzo(a)pyrene
Concen: 1.35 ng
RT: 21.33 min Scan# 3702
Delta R.T. 0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:252 Resp: 14336

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.4 | 17.5 | 26.3 |
| 125 | 15.9 | 13.0 | 19.6 |

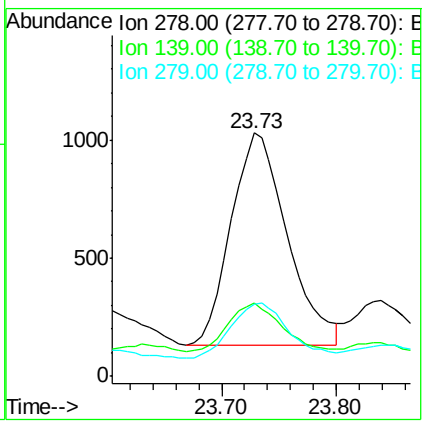





#26
Dibenzo(a,h)anthracene
Concen: 0.30 ng
RT: 23.73 min Scan# 4178
Delta R.T. -0.00 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:278 Resp: 3078

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 30.1 | 20.9 | 31.3 |
| 279 | 29.5 | 19.8 | 29.8 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS12-1014

**Manual Integrations APPROVED**
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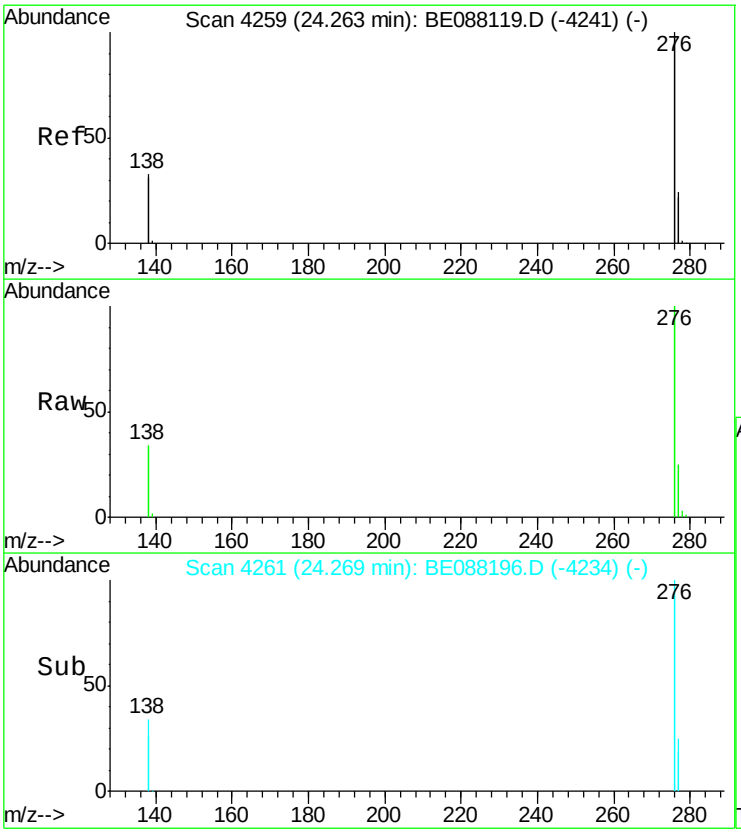


#27
Benzo(g,h,i)perylene
Concen: 0.92 ng
RT: 24.27 min Scan# 4261
Delta R.T. 0.01 min
Lab File: BE088196.D
Acq: 22 Oct 2014 23:19

Tgt Ion:276 Resp: 42304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 25.4 | 19.2 | 28.8 |
| 138 | 33.7 | 26.6 | 40.0 |