Quantitation Report (QT Reviewed)

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE102114\
Data File : BE088168.D
Acq On : 22 Oct 2014 6:55
Operator : TP/JJ
Sample : F4312-15 5X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_E
**ClientSampleId :** YS19-SS02-1014

**Manual Integrations APPROVED**
mohammad
10/22/2014 1:55:58 PM

Quant Time: Oct 22 07:30:23 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 | 19973 | 5.00 | ng | | 0.00 |
| 3) Naphthalene-d8 | 8.70 | 136 | 76238 | 5.00 | ng | | 0.00 |
| 7) Acenaphthene-d10 | 10.85 | 164 | 40220 | 5.00 | ng | | 0.00 |
| 12) Phenanthrene-d10 | 12.96 | 188 | 64963 | 5.00 | ng | | 0.00 |
| 16) Chrysene-d12 | 18.38 | 240 | 50582 | 5.00 | ng | | 0.00 |
| 22) Perylene-d12 | 21.44 | 264 | 43679 | 5.00 | ng | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 4) Nitrobenzene-d5 | 7.83 | 82 | 87671 | 15.95 | ng | | 0.00 |
| 8) 2-Fluorobiphenyl | 10.04 | 172 | 130730 | 11.77 | ng | | 0.00 |
| 18) Terphenyl-d14 | 16.15 | 244 | 103239 | 12.68 | ng | | 0.00 |
| **Target Compounds** | | | | | | | Qvalue |
| 5) Naphthalene | 8.72 | 128 | 973 | 0.06 | ng | # | 90 |
| 6) 2-Methylnaphthalene | 9.58 | 142 | 399 | 0.04 | ng | # | 95 |
| 9) Acenaphthylene | 10.67 | 152 | 2994 | 0.05 | ng | | 98 |
| 10) Acenaphthene | 10.88 | 154 | 2173 | 0.23 | ng | | 93 |
| 11) Fluorene | 11.55 | 166 | 2016 | 0.20 | ng | | 98 |
| 13) Phenanthrene | 13.01 | 178 | 155108 | 3.16 | ng | # | 95 |
| 14) Anthracene | 13.09 | 178 | 32752m | 0.65 | ng | | |
| 15) Fluoranthene | 15.25 | 202 | 64855 | 5.25 | ng | | 99 |
| 17) Pyrene | 15.70 | 202 | 55781m | 4.06 | ng | | |
| 19) Benzo(a)anthracene | 18.36 | 228 | 99785 | 2.22 | ng | | 99 |
| 20) Chrysene | 18.44 | 228 | 106849 | 2.42 | ng | | 97 |
| 21) Indeno(1,2,3-cd)pyrene | 23.64 | 276 | 56628 | 1.16 | ng | # | 87 |
| 23) Benzo(b)fluoranthene | 20.69 | 252 | 29757 | 2.86 | ng | | 98 |
| 24) Benzo(k)fluoranthene | 20.74 | 252 | 13410 | 1.20 | ng | | 98 |
| 25) Benzo(a)pyrene | 21.32 | 252 | 19873 | 2.08 | ng | | 98 |
| 26) Dibenzo(a,h)anthracene | 23.72 | 278 | 2581 | 0.27 | ng | # | 88 |
| 27) Benzo(g,h,i)perylene | 24.26 | 276 | 57699 | 1.39 | ng | | 99 |

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

Quantitation Report (QT Reviewed)

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE102114\
Data File : BE088168.D
Acq On : 22 Oct 2014 6:55
Operator : TP/JJ
Sample : F4312-15 5X
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 22 07:30:23 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

**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

**Manual Integrations APPROVED**
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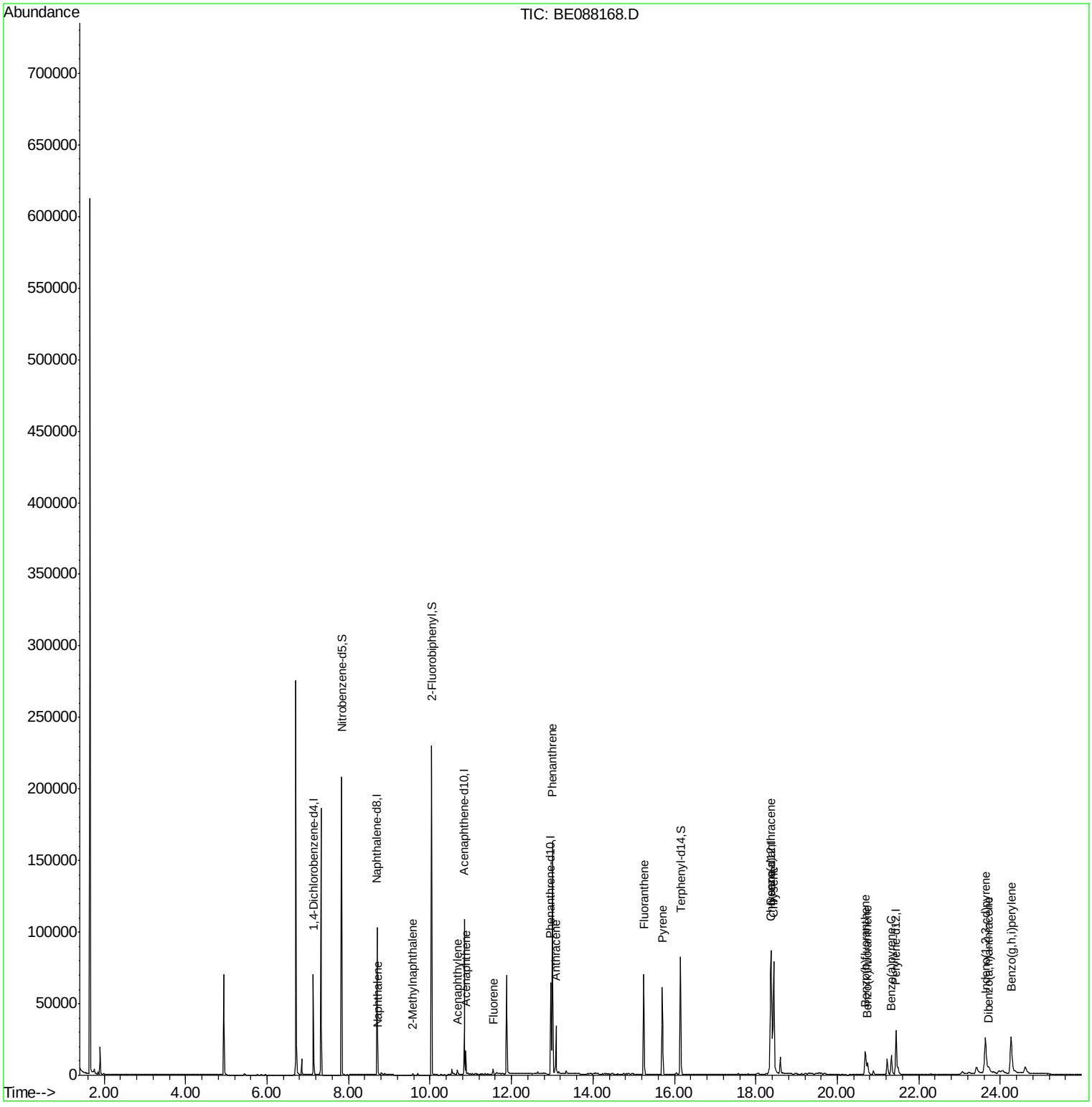
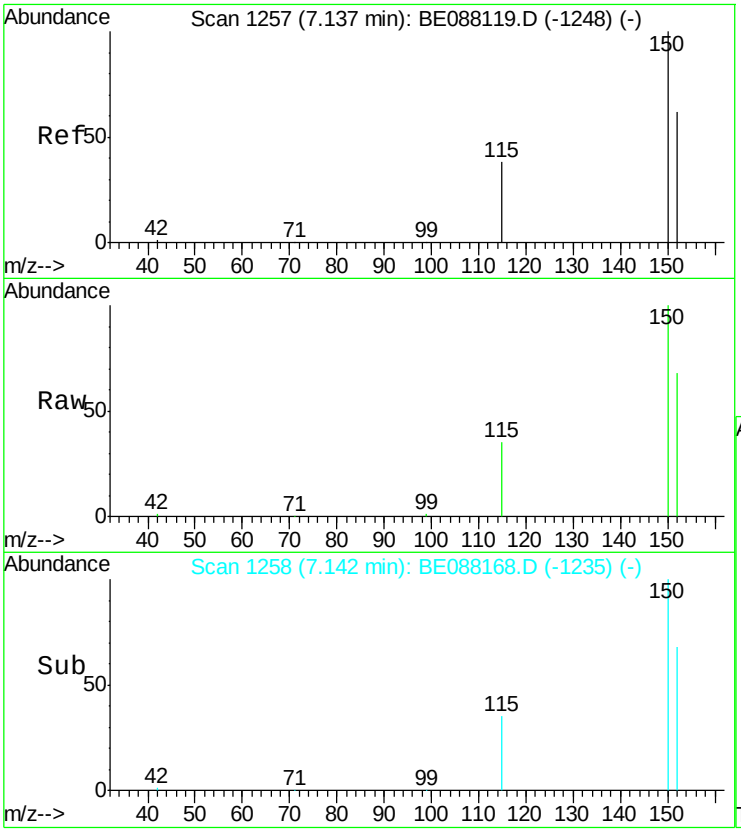
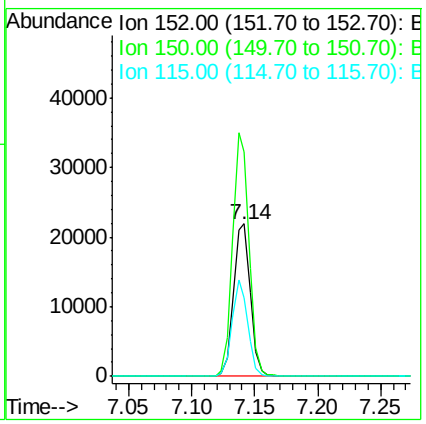





#1
1,4-Dichlorobenzene-d4
Concen: 5.00 ng
RT: 7.14 min Scan# 1258
Delta R.T. 0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:152 Resp: 19973

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 150 | 147.3 | 129.2 | 193.8 |
| 115 | 51.7 | 49.3 | 73.9 |




**Instrument :**
BNA_E
**ClientSampleId :**
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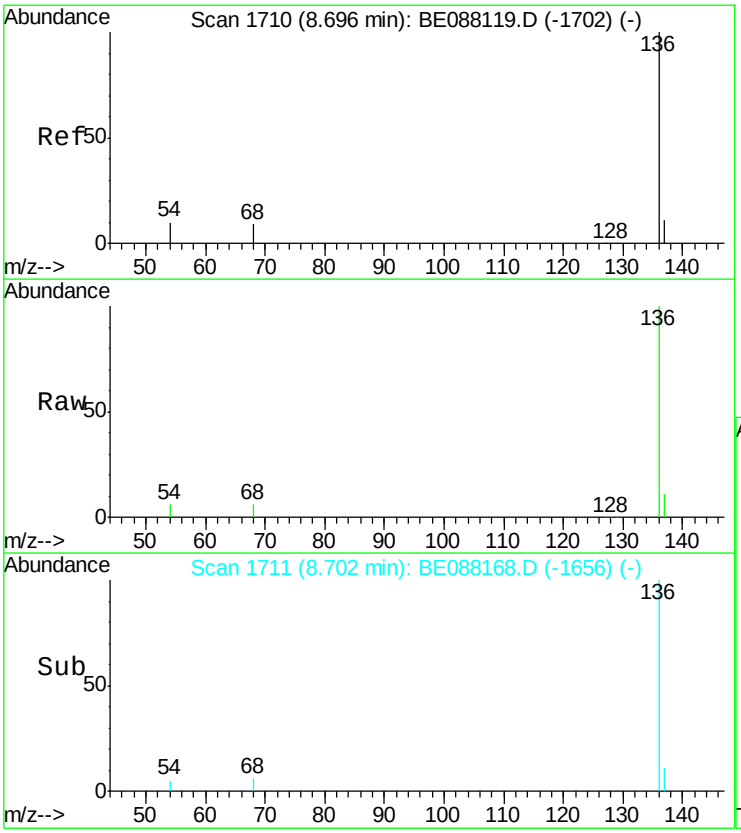
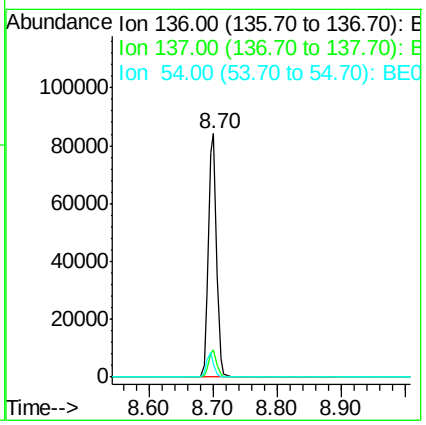
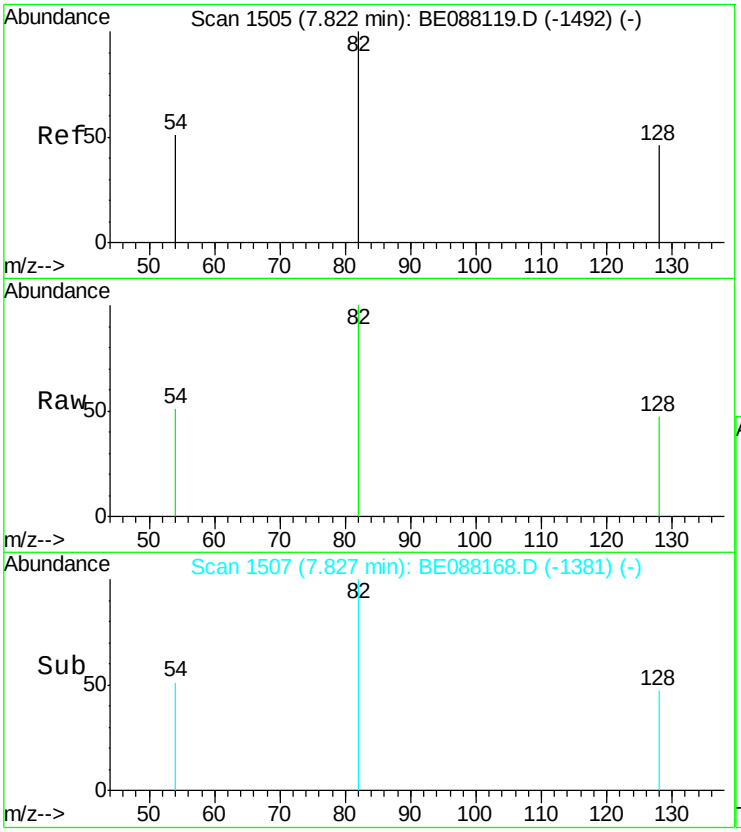



#3
Naphthalene-d8
Concen: 5.00 ng
RT: 8.70 min Scan# 1711
Delta R.T. 0.01 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:136 Resp: 76238

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 136 | 100 | | |
| 137 | 11.3 | 8.6 | 12.8 |
| 54 | 5.5 | 7.7 | 11.5# |

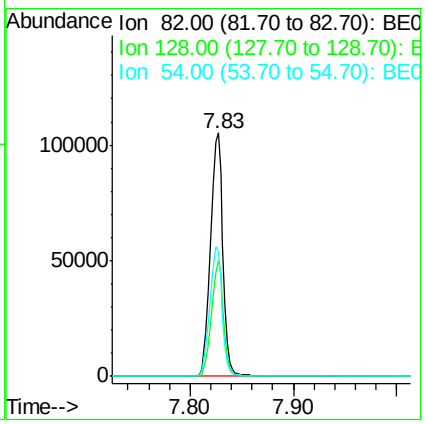





#4
Nitrobenzene-d5
Concen: 15.95 ng
RT: 7.83 min Scan# 1507
Delta R.T. 0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion: 82 Resp: 87671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 128 | 47.3 | 37.1 | 55.7 |
| 54 | 51.0 | 41.1 | 61.7 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

**Manual Integrations APPROVED**
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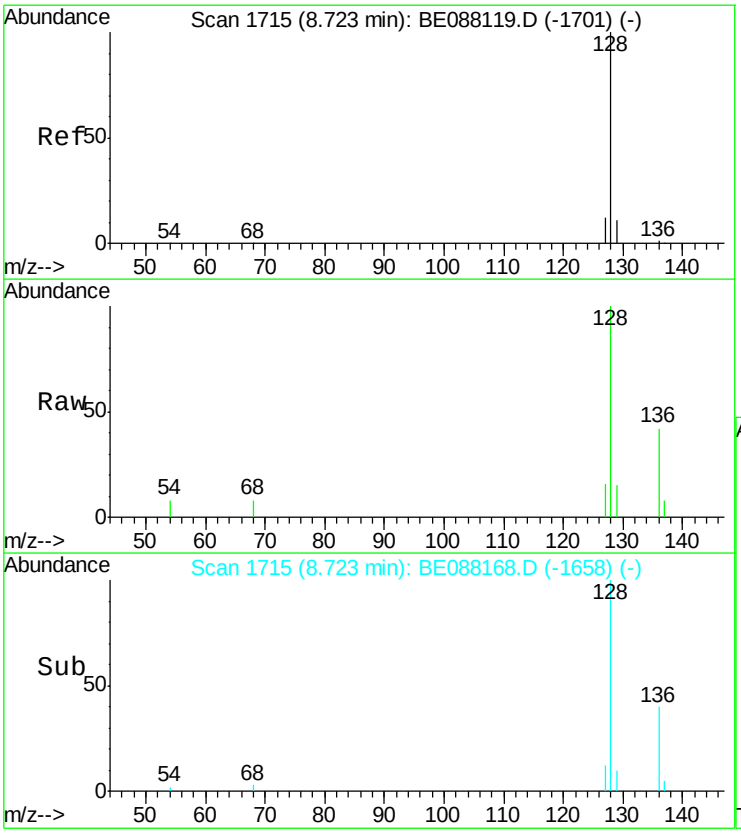
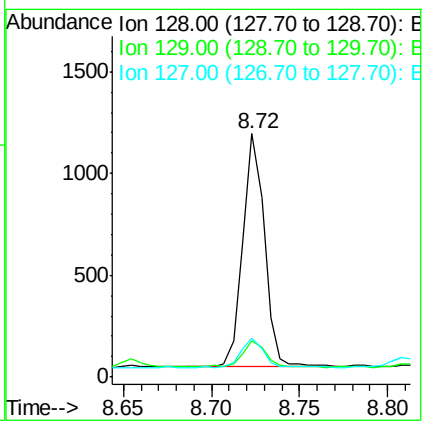
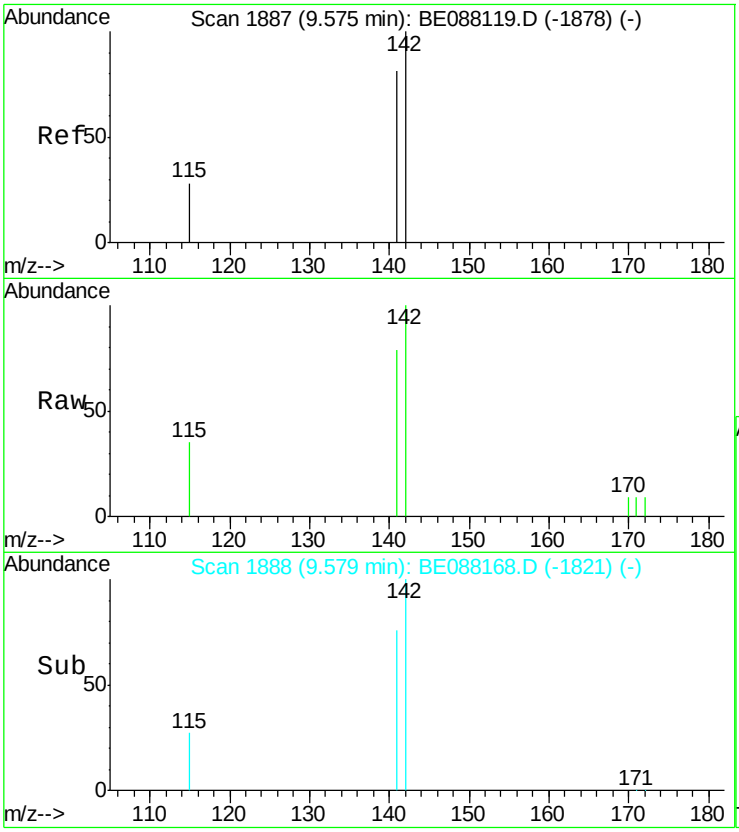



#5
Naphthalene
Concen: 0.06 ng
RT: 8.72 min Scan# 1715
Delta R.T. 0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:128 Resp: 973

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 14.7 | 8.9 | 13.3# |
| 127 | 16.1 | 9.7 | 14.5# |

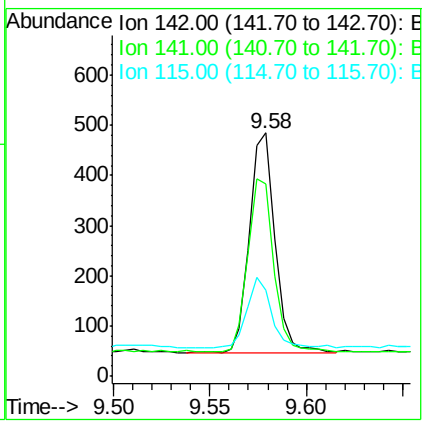





#6
2-Methylnaphthalene
Concen: 0.04 ng
RT: 9.58 min Scan# 1888
Delta R.T. 0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:142 Resp: 399

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 78.8 | 64.6 | 97.0 |
| 115 | 35.5 | 22.6 | 34.0# |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

**Manual Integrations APPROVED**
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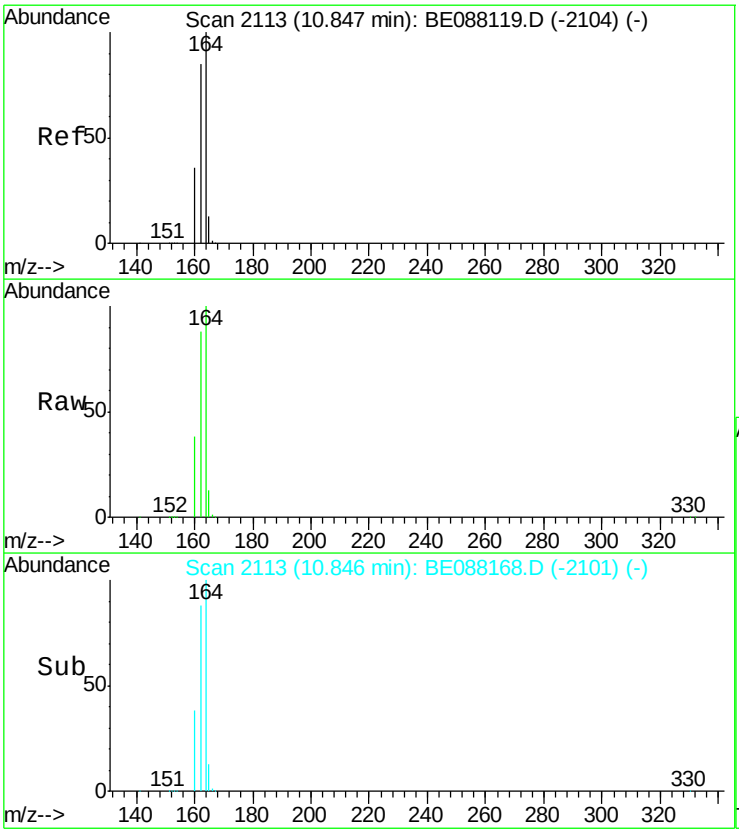
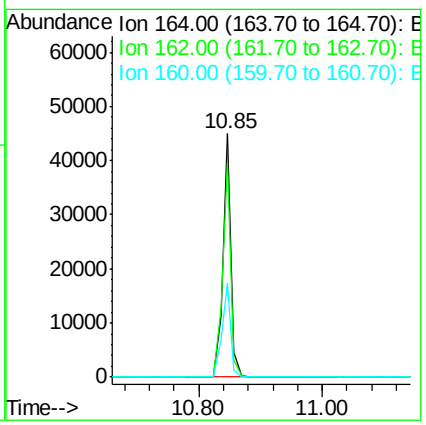
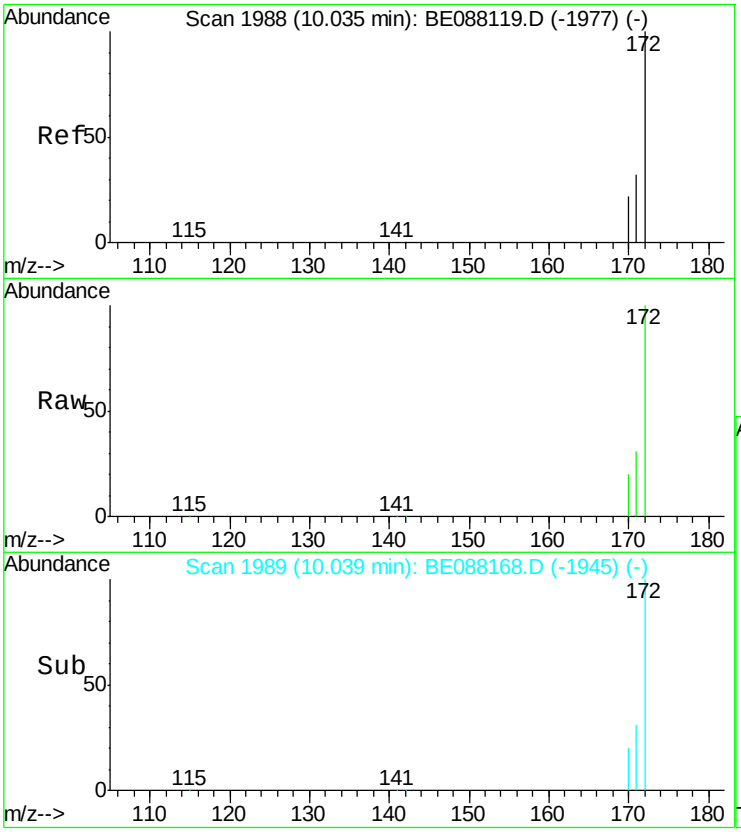



#7
Acenaphthene-d10
Concen: 5.00 ng
RT: 10.85 min Scan# 2113
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:164 Resp: 40220

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 162 | 88.2 | 68.3 | 102.5 |
| 160 | 38.4 | 28.7 | 43.1 |






#8
2-Fluorobiphenyl
Concen: 11.77 ng
RT: 10.04 min Scan# 1989
Delta R.T. 0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:172 Resp: 130730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 172 | 100 | | |
| 171 | 30.9 | 25.4 | 38.2 |
| 170 | 20.4 | 17.4 | 26.2 |

**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

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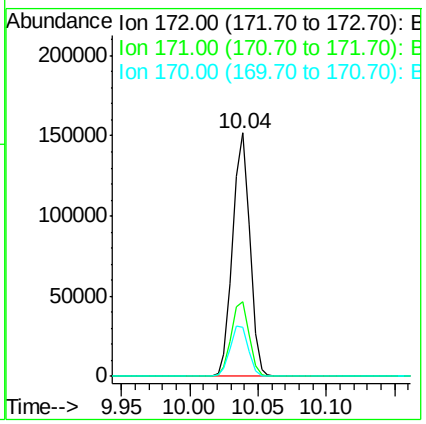
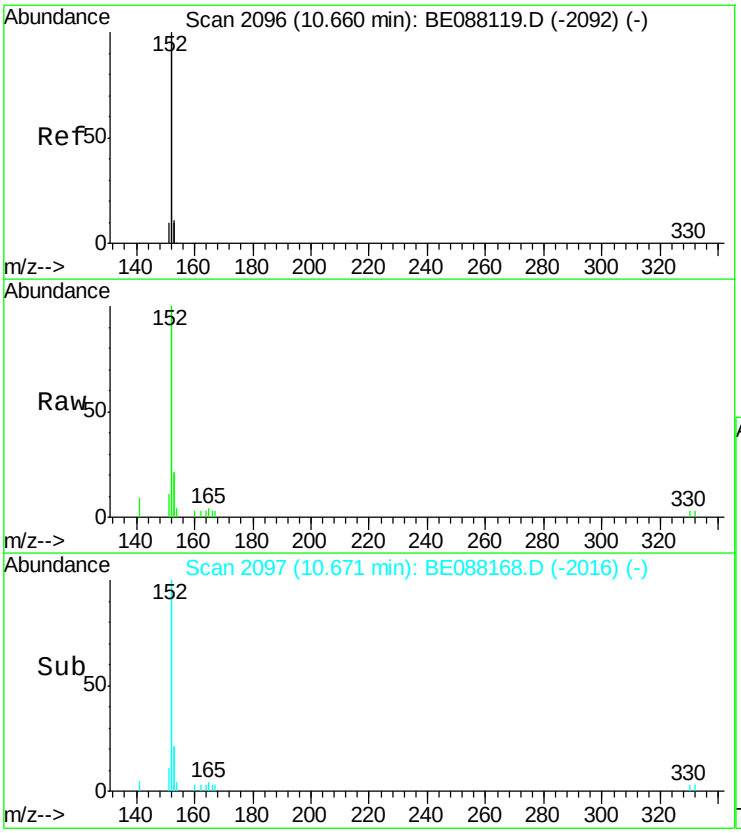
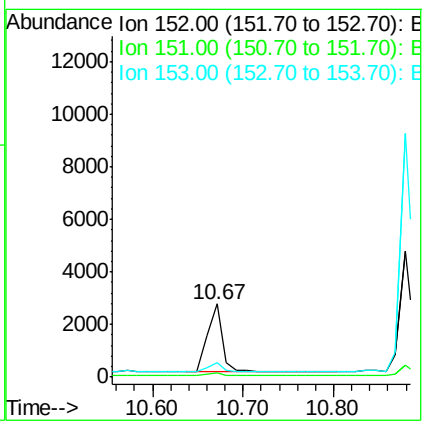


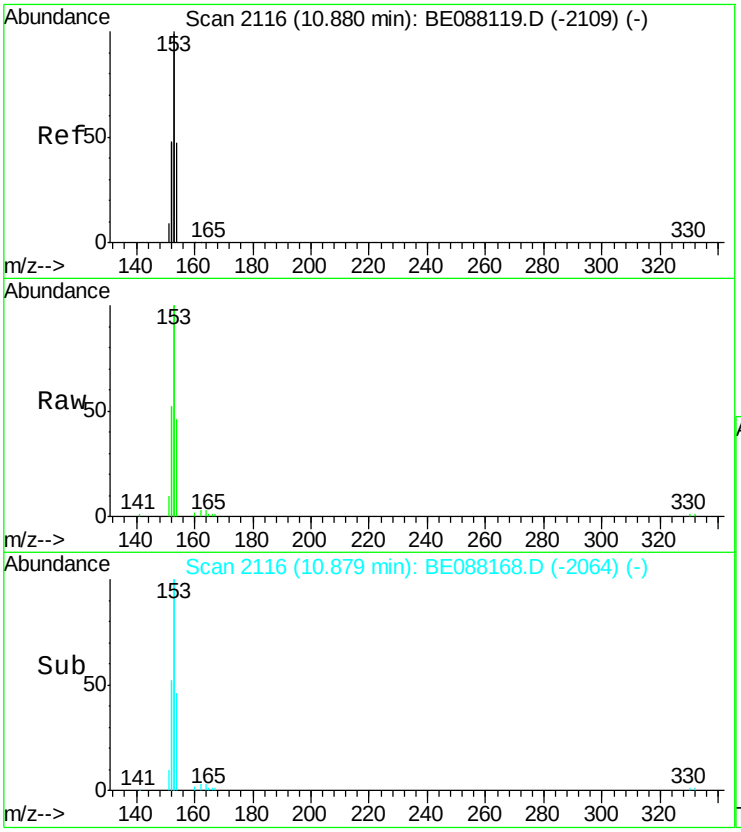




#9
Acenaphthylene
Concen: 0.05 ng
RT: 10.67 min Scan# 2097
Delta R.T. 0.01 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:152 Resp: 2994

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 4.6 | 3.7 | 5.5 |
| 153 | 14.1 | 10.4 | 15.6 |

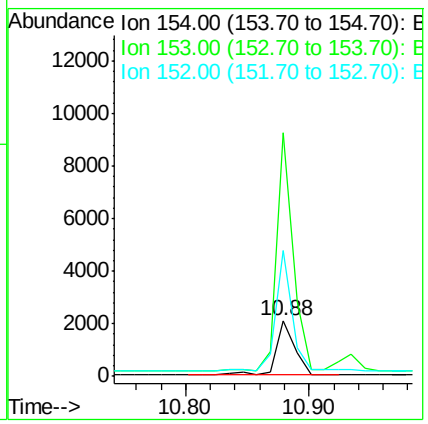





#10
Acenaphthene
Concen: 0.23 ng
RT: 10.88 min Scan# 2116
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:154 Resp: 2173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 386.3 | 327.8 | 491.6 |
| 152 | 196.4 | 157.6 | 236.4 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

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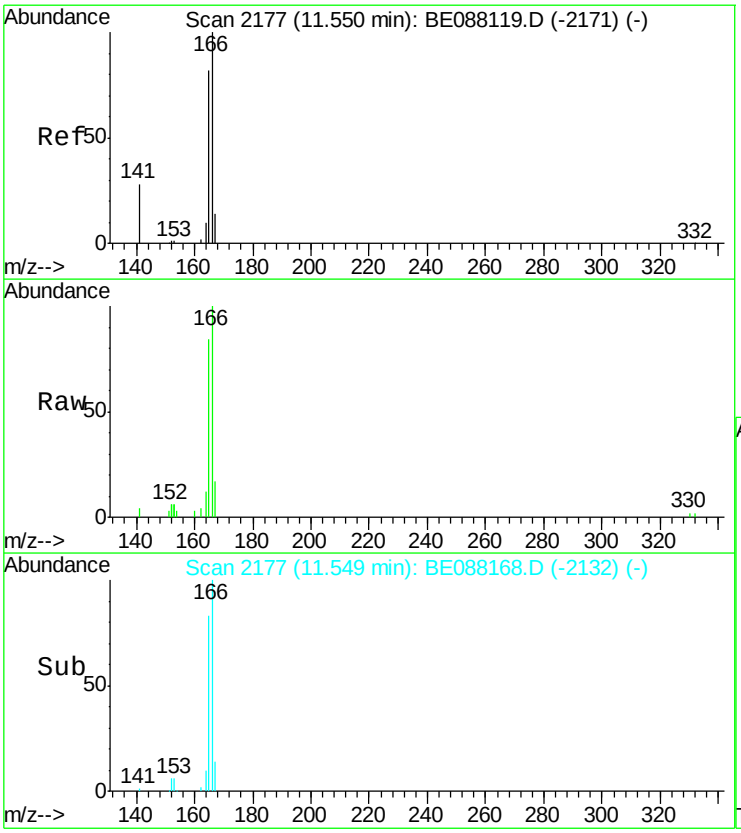
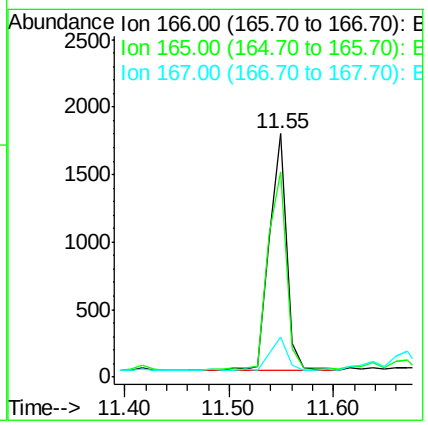
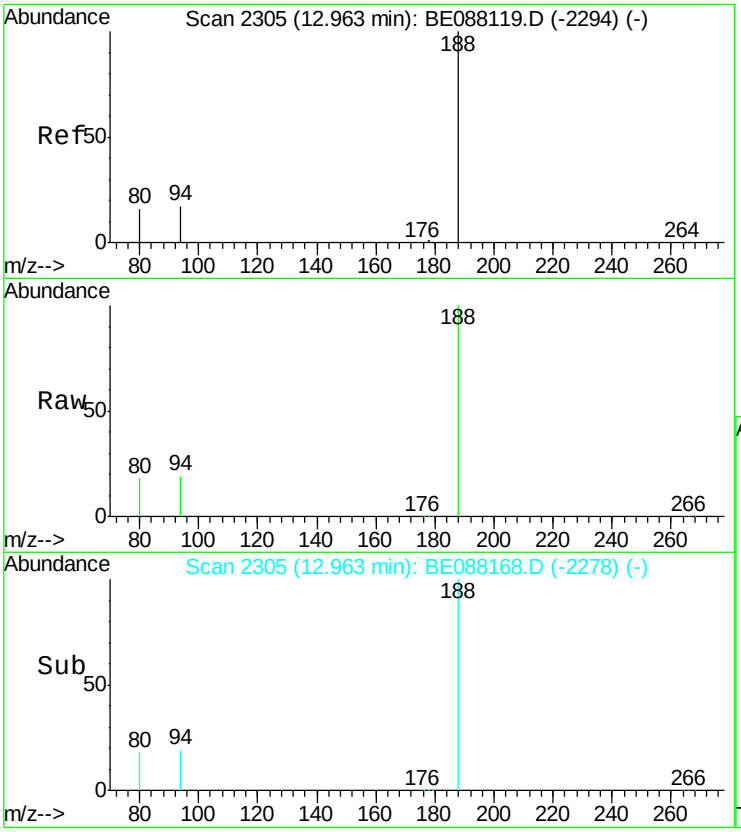



#11
Fluorene
Concen: 0.20 ng
RT: 11.55 min Scan# 2177
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:166 Resp: 2016

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 90.9 | 71.4 | 107.2 |
| 167 | 14.0 | 10.6 | 16.0 |

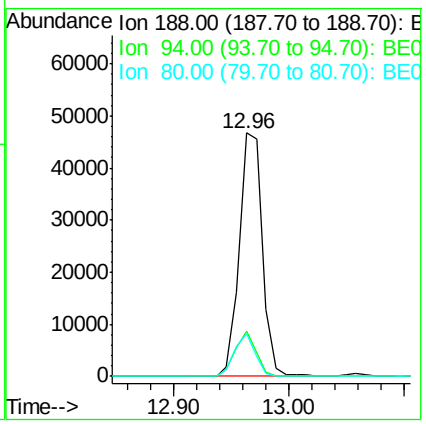





#12
Phenanthrene-d10
Concen: 5.00 ng
RT: 12.96 min Scan# 2305
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:188 Resp: 64963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 188 | 100 | | |
| 94 | 18.6 | 13.9 | 20.9 |
| 80 | 17.6 | 12.9 | 19.3 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

**Manual Integrations APPROVED**
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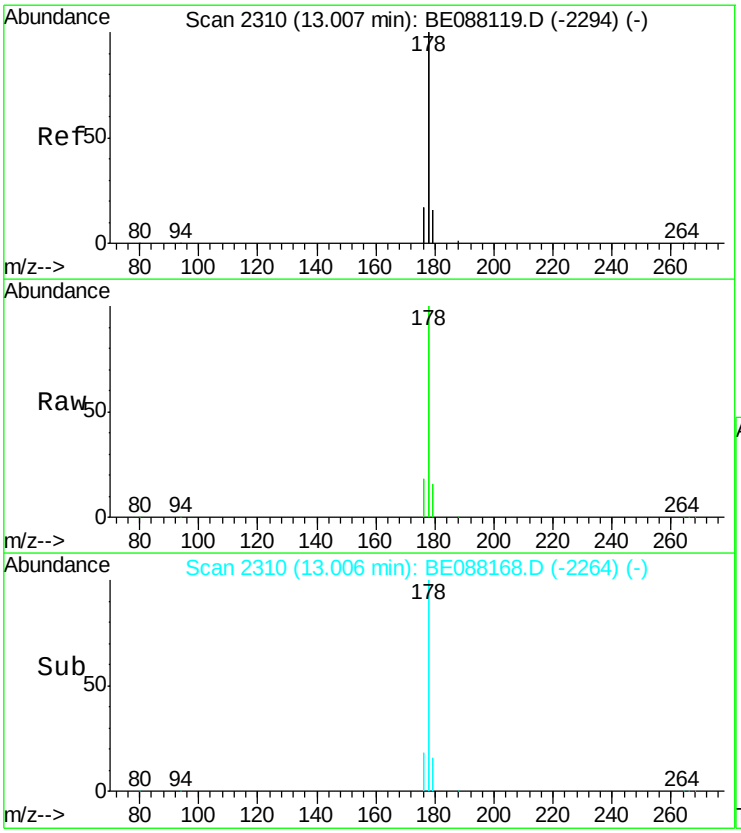
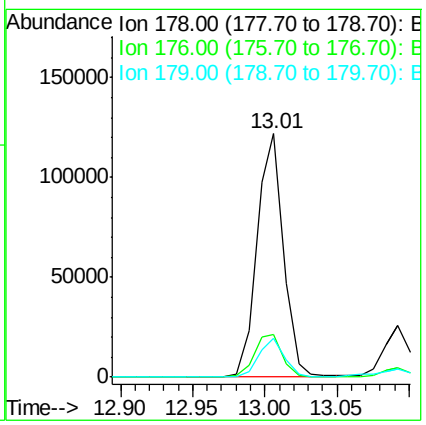
10/22/2014 1:55:58 PM

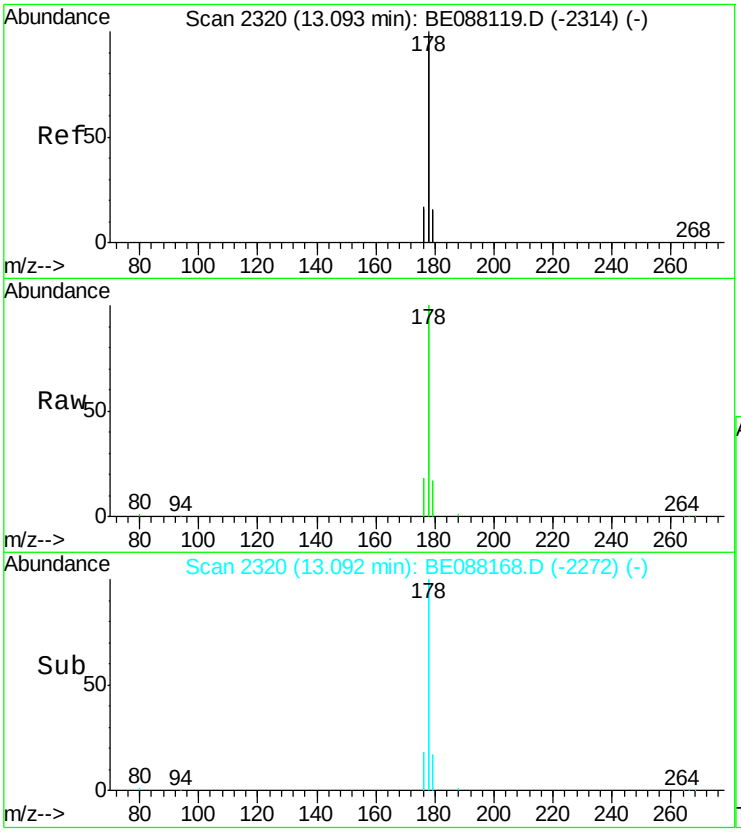



#13
Phenanthrene
Concen: 3.16 ng
RT: 13.01 min Scan# 2310
Delta R.T. 0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:178 Resp: 155108

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 18.8 | 12.5 | 18.7# |
| 179 | 15.7 | 13.5 | 20.3 |






#14
Anthracene
Concen: 0.65 ng m
RT: 13.09 min Scan# 2320
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:178 Resp: 32752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 176 | 89.1 | 14.6 | 21.8# |
| 179 | 74.1 | 12.5 | 18.7# |

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**Manual Integrations APPROVED**
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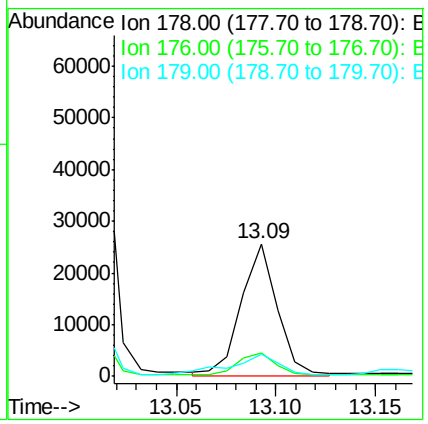
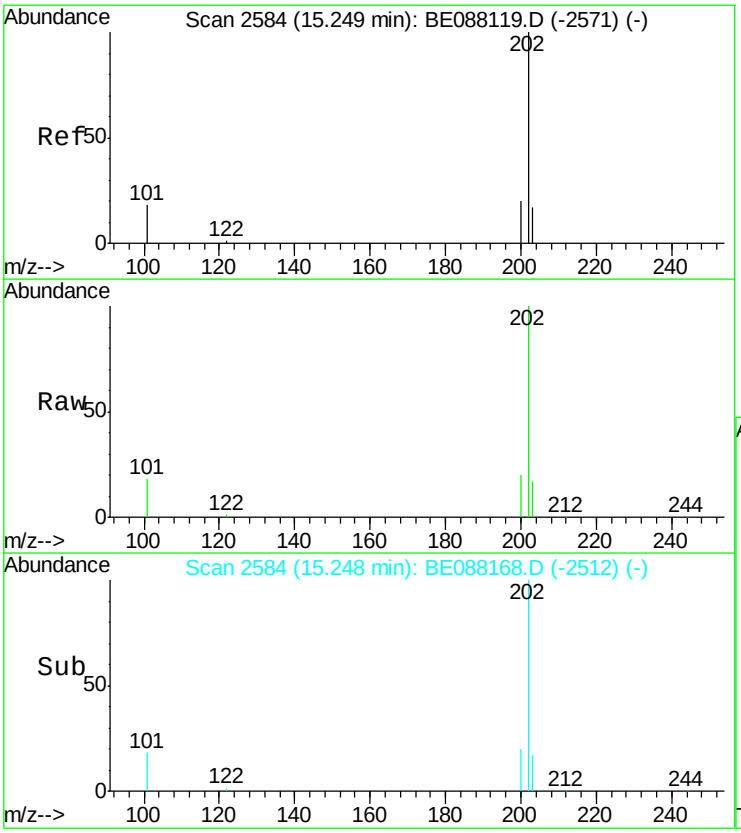
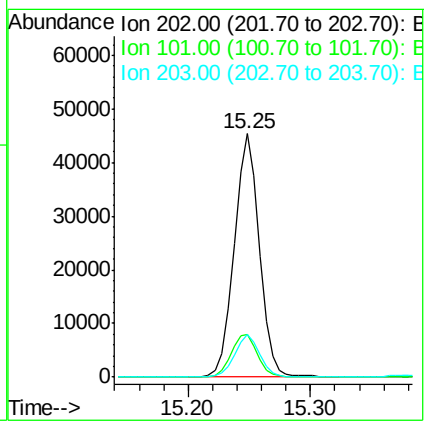


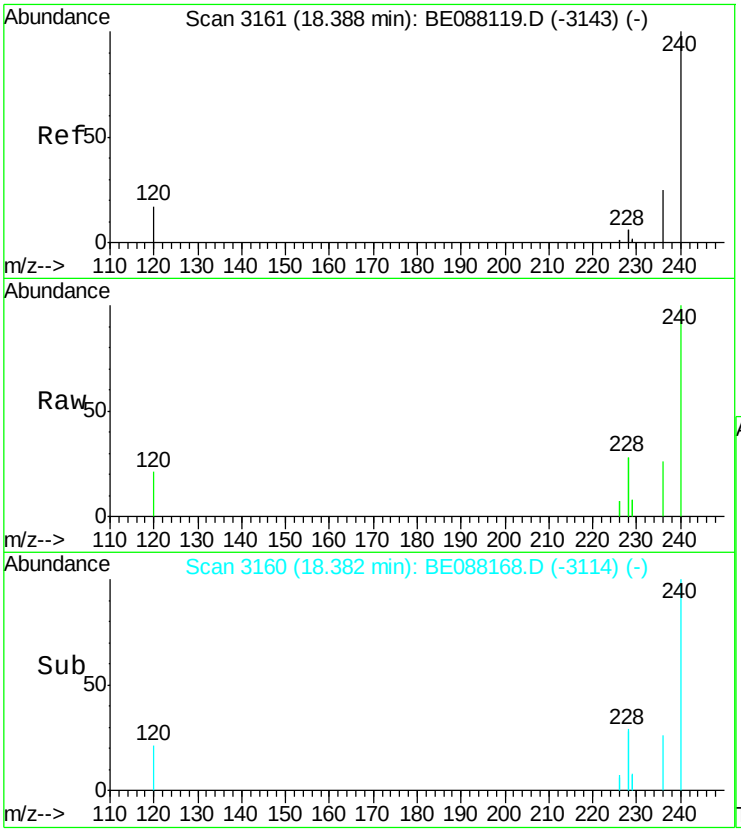




#15
Fluoranthene
Concen: 5.25 ng
RT: 15.25 min Scan# 2584
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:202 Resp: 64855

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 18.2 | 14.8 | 22.2 |
| 203 | 17.2 | 13.5 | 20.3 |






#16
Chrysene-d12
Concen: 5.00 ng
RT: 18.38 min Scan# 3160
Delta R.T. -0.01 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:240 Resp: 50582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 240 | 100 | | |
| 120 | 21.3 | 13.9 | 20.9# |
| 236 | 25.9 | 19.9 | 29.9 |

**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

**Manual Integrations APPROVED**
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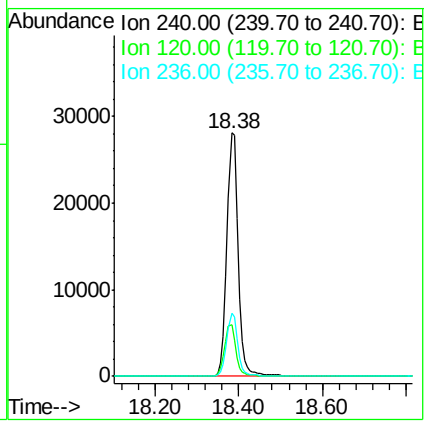
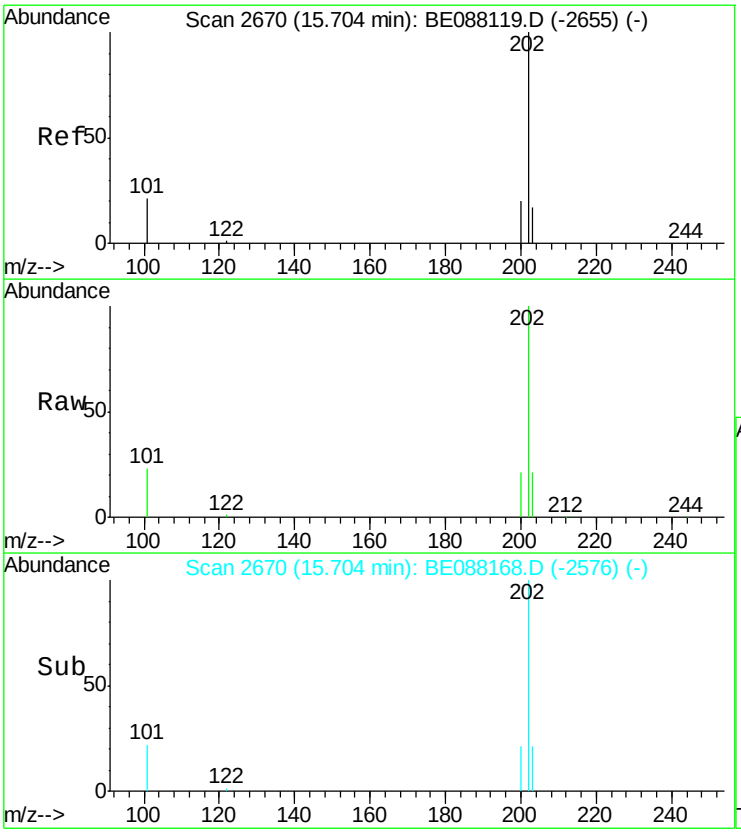
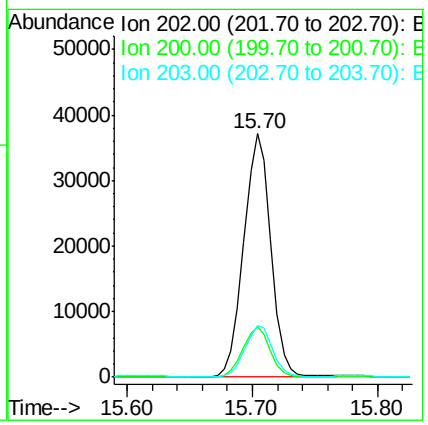


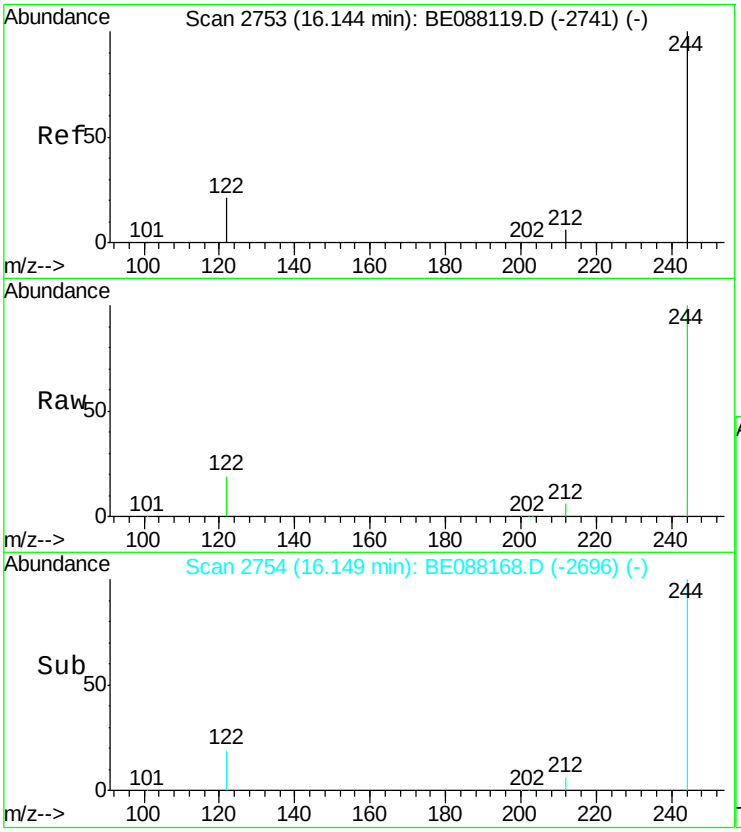




#17
Pyrene
Concen: 4.06 ng m
RT: 15.70 min Scan# 2670
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:202 Resp: 55781

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 23.1 | 16.1 | 24.1 |
| 203 | 20.0 | 13.9 | 20.9 |






#18
Terphenyl-d14
Concen: 12.68 ng
RT: 16.15 min Scan# 2754
Delta R.T. 0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:244 Resp: 103239

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 244 | 100 | | |
| 212 | 6.4 | 5.4 | 8.0 |
| 122 | 19.2 | 17.5 | 26.3 |

**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

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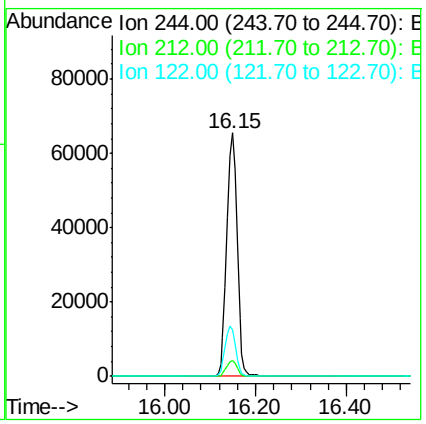
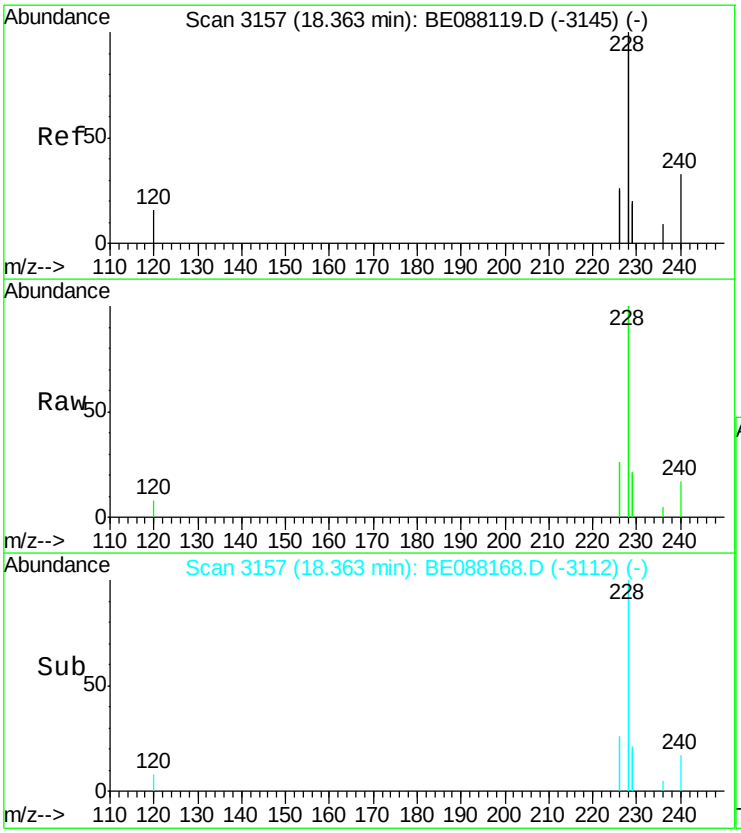
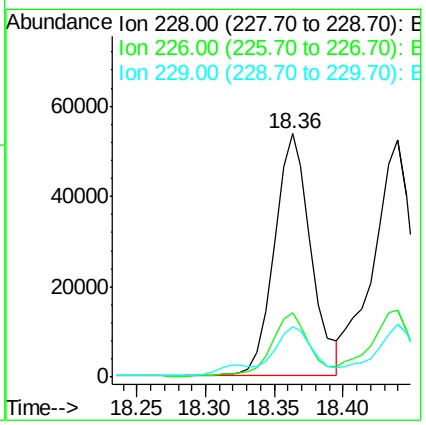


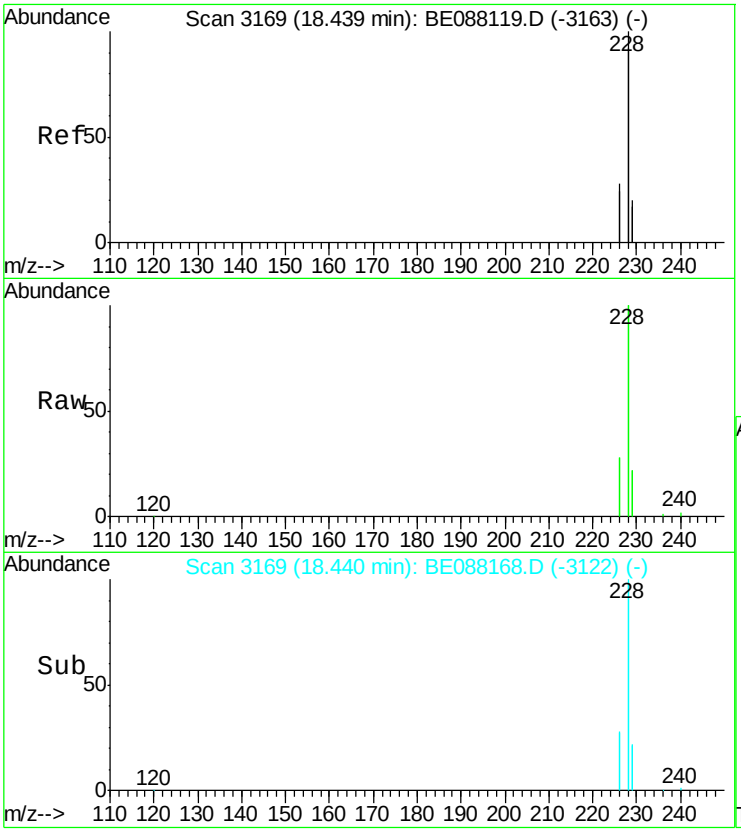




#19
Benzo(a)anthracene
Concen: 2.22 ng
RT: 18.36 min Scan# 3157
Delta R.T. 0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:228 Resp: 99785

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 26.2 | 20.8 | 31.2 |
| 229 | 20.7 | 15.6 | 23.4 |






#20
Chrysene
Concen: 2.42 ng
RT: 18.44 min Scan# 3169
Delta R.T. 0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:228 Resp: 106849

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 28.1 | 22.7 | 34.1 |
| 229 | 22.1 | 15.8 | 23.6 |

**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

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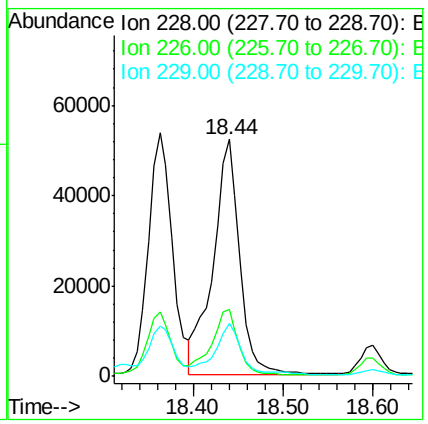
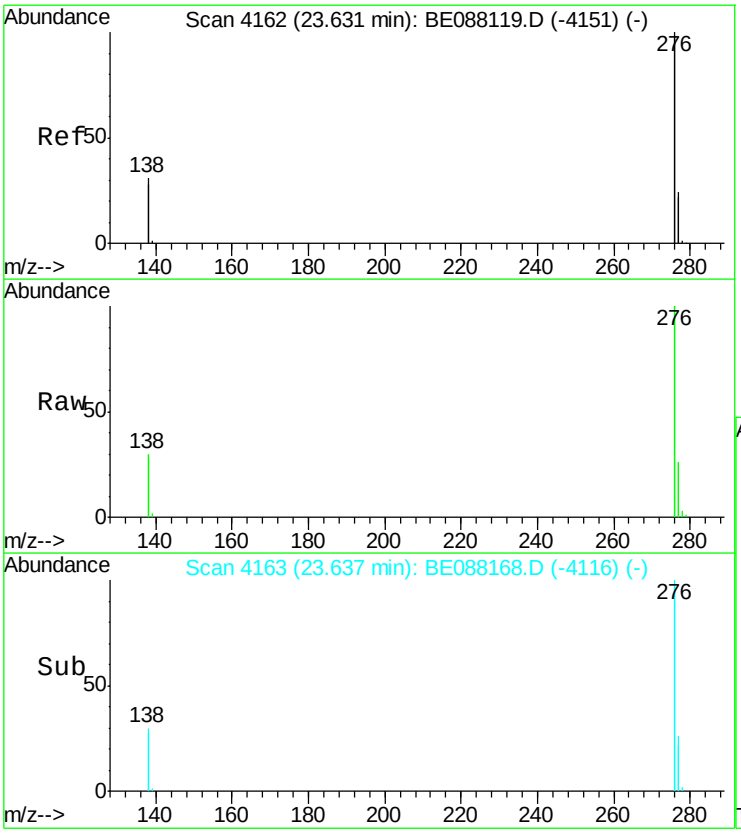
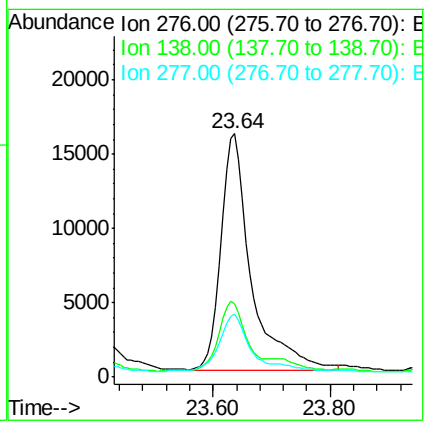


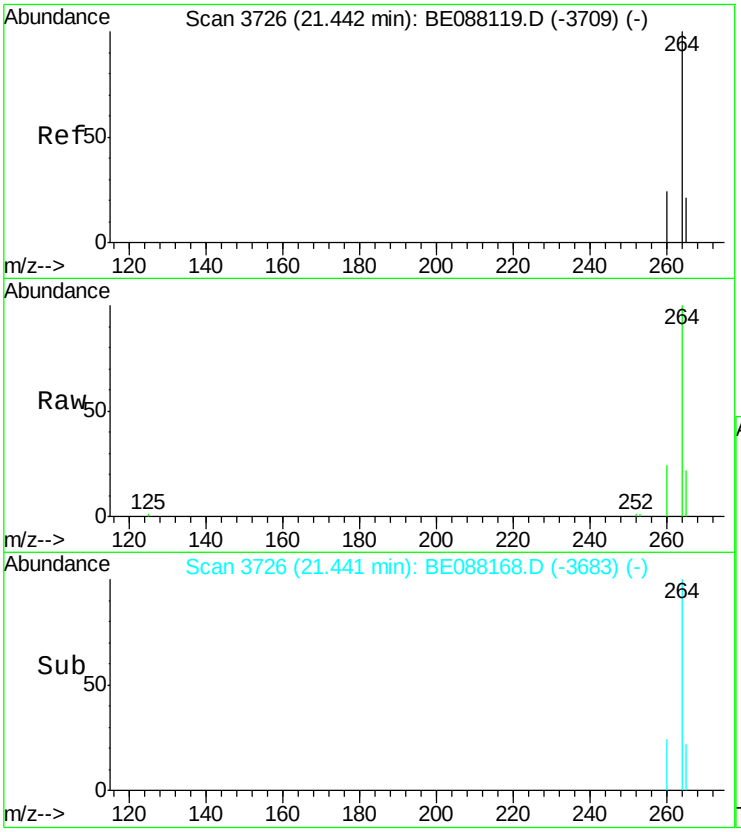




#21
Indeno(1,2,3-cd)pyrene
Concen: 1.16 ng
RT: 23.64 min Scan# 4163
Delta R.T. 0.01 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:276 Resp: 56628

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 26.8 | 18.5 | 27.7 |
| 277 | 27.3 | 14.6 | 21.8# |

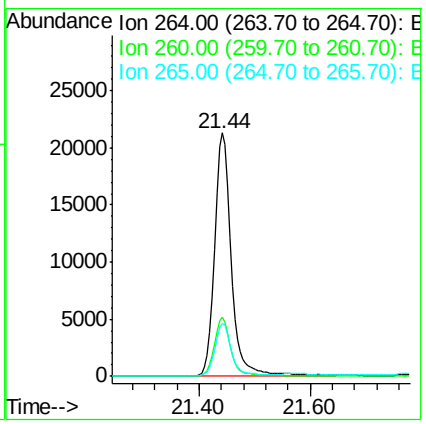





#22
Perylene-d12
Concen: 5.00 ng
RT: 21.44 min Scan# 3726
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:264 Resp: 43679

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 264 | 100 | | |
| 260 | 24.2 | 19.0 | 28.4 |
| 265 | 21.8 | 17.2 | 25.8 |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

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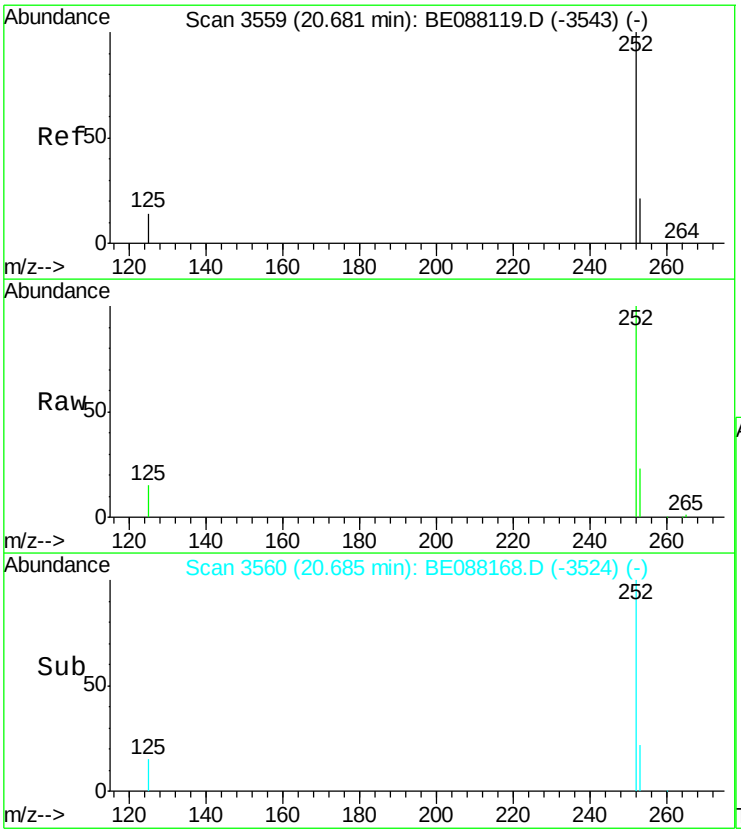
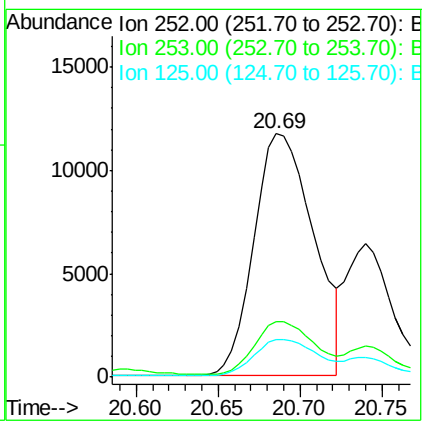
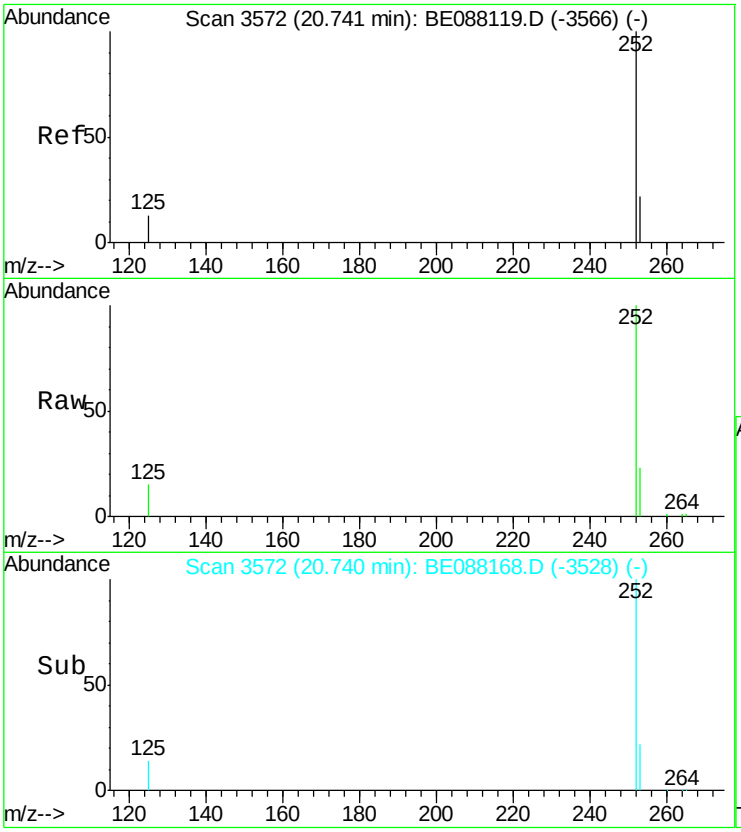



#23
Benzo(b)fluoranthene
Concen: 2.86 ng
RT: 20.69 min Scan# 3560
Delta R.T. 0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:252 Resp: 29757

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.8 | 17.4 | 26.0 |
| 125 | 15.3 | 11.8 | 17.8 |






#24
Benzo(k)fluoranthene
Concen: 1.20 ng
RT: 20.74 min Scan# 3572
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:252 Resp: 13410

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.9 | 17.6 | 26.4 |
| 125 | 15.0 | 11.5 | 17.3 |

**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

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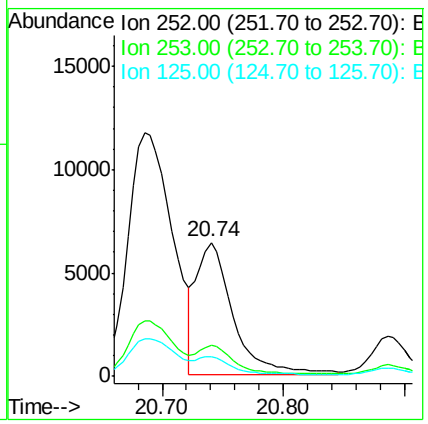
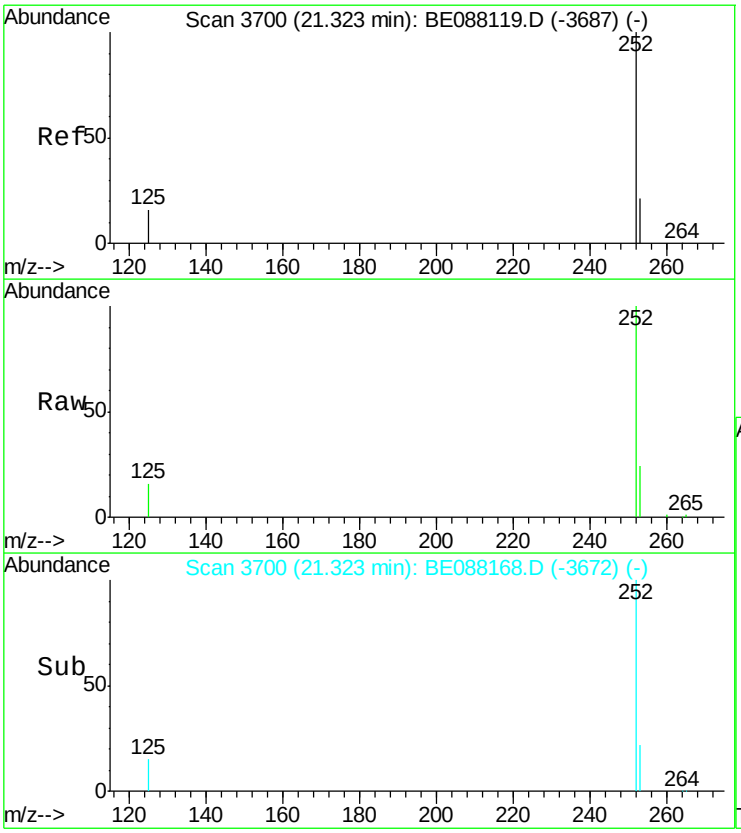
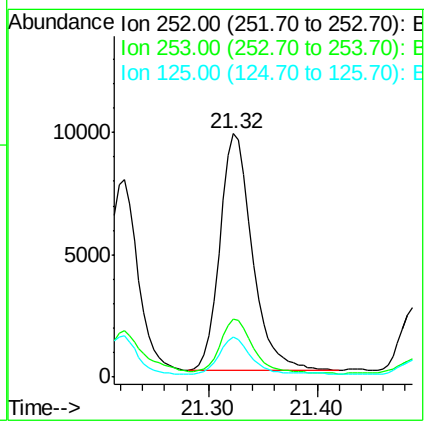


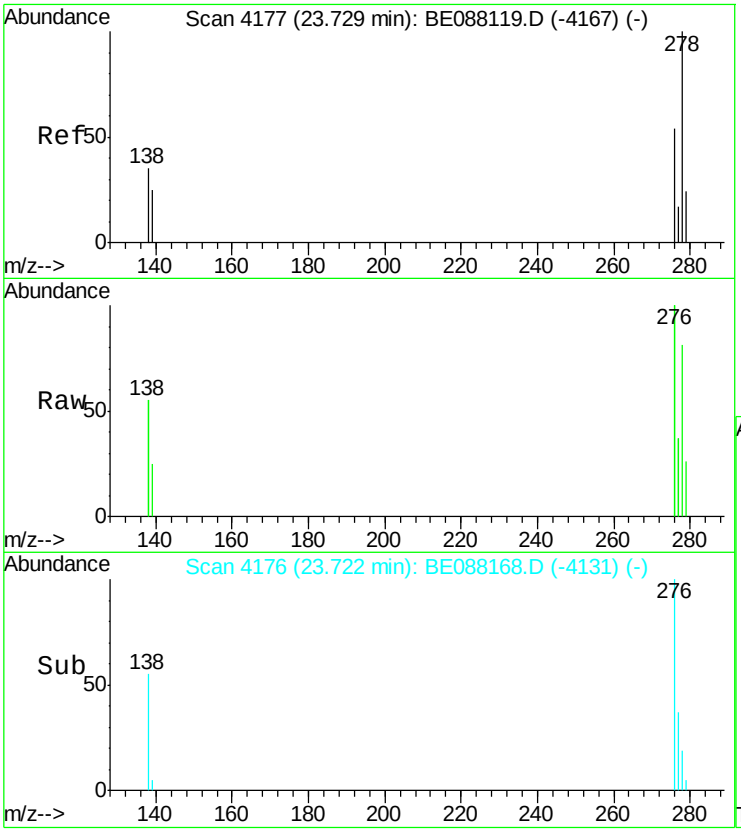




#25
Benzo(a)pyrene
Concen: 2.08 ng
RT: 21.32 min Scan# 3700
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:252 Resp: 19873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.6 | 17.5 | 26.3 |
| 125 | 16.3 | 13.0 | 19.6 |

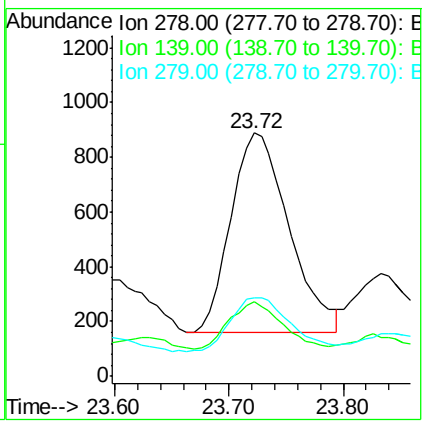





#26
Dibenzo(a,h)anthracene
Concen: 0.27 ng
RT: 23.72 min Scan# 4176
Delta R.T. -0.01 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:278 Resp: 2581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 30.8 | 20.9 | 31.3 |
| 279 | 32.2 | 19.8 | 29.8# |




**Instrument :**
BNA_E
**ClientSampleId :**
YS19-SS02-1014

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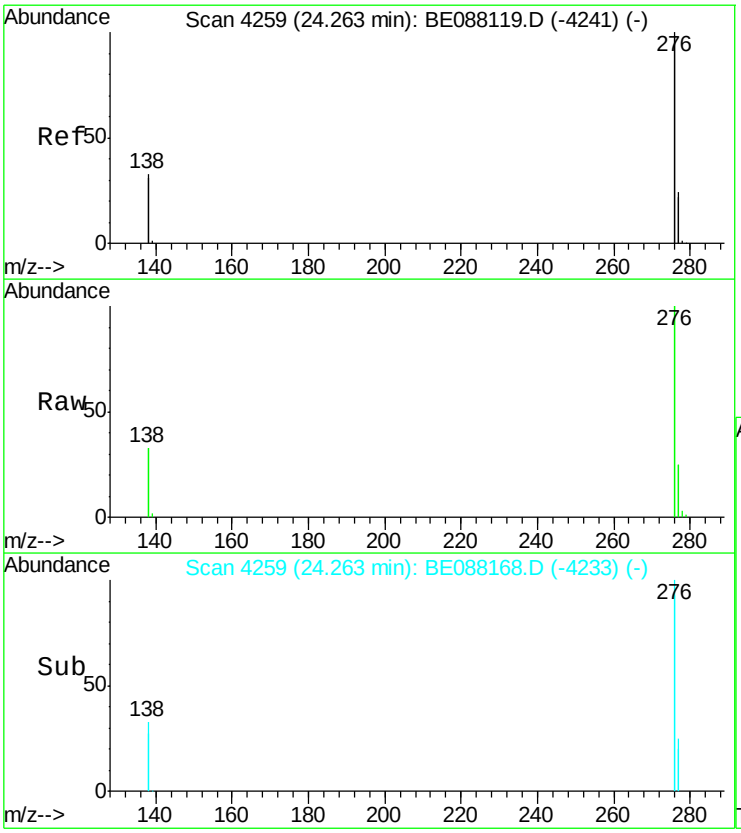


#27
Benzo(g,h,i)perylene
Concen: 1.39 ng
RT: 24.26 min Scan# 4259
Delta R.T. -0.00 min
Lab File: BE088168.D
Acq: 22 Oct 2014 6:55

Tgt Ion:276 Resp: 57699

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 277 | 25.0 | 19.2 | 28.8 |
| 138 | 33.5 | 26.6 | 40.0 |