

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE010715\  
 Data File : BE089351.D  
 Acq On : 8 Jan 2015 6:56  
 Operator : TP/IZ  
 Sample : PB81203BL  
 Misc : LOQ-/LOD-SOIL-SIM  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PB81203BL

Manual Integrations  
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TEJASKUMAR  
 1/9/2015 5:21:44 PM

Quant Time: Jan 08 15:44:27 2015  
 Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIM-PAH-BASE-BE010715.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 08 15:21:44 2015  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.95  | 152  | 12193    | 5.00 | ng    | 0.00     |
| 2) Naphthalene-d8           | 8.51  | 136  | 50055    | 5.00 | ng    | 0.00     |
| 6) Acenaphthene-d10         | 10.65 | 164  | 26074    | 5.00 | ng    | 0.00     |
| 11) Phenanthrene-d10        | 12.72 | 188  | 39758    | 5.00 | ng    | 0.00     |
| 15) Chrysene-d12            | 18.06 | 240  | 22145    | 5.00 | ng    | 0.00     |
| 21) Perylene-d12            | 21.12 | 264  | 22868    | 5.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |      |       |          |
| 3) Nitrobenzene-d5          | 7.65  | 82   | 23189    | 6.66 | ng    | 0.00     |
| 7) 2-Fluorobiphenyl         | 9.85  | 172  | 41597    | 5.85 | ng    | 0.00     |
| 17) Terphenyl-d14           | 15.84 | 244  | 27198    | 6.94 | ng    | 0.00     |
| Target Compounds            |       |      |          |      |       | Qvalue   |
| 4) Naphthalene              | 8.54  | 128  | 428      | 0.04 | ng    | # 79     |
| 5) 2-Methylnaphthalene      | 9.39  | 142  | 690      | 0.10 | ng    | # 96     |
| 8) Acenaphthylene           | 10.48 | 152  | 5065     | 0.11 | ng    | # 88     |
| 9) Acenaphthene             | 10.69 | 154  | 880      | 0.13 | ng    | # 90     |
| 10) Fluorene                | 11.34 | 166  | 916      | 0.12 | ng    | # 100    |
| 12) Phenanthrene            | 12.75 | 178  | 5216     | 0.13 | ng    | # 92     |
| 13) Anthracene              | 12.84 | 178  | 4696     | 0.12 | ng    | # 89     |
| 14) Fluoranthene            | 14.96 | 202  | 996      | 0.11 | ng    | # 88     |
| 16) Pyrene                  | 15.41 | 202  | 1000     | 0.14 | ng    | # 87     |
| 18) Benzo(a)anthracene      | 18.05 | 228  | 2866     | 0.13 | ng    | # 84     |
| 19) Chrysene                | 18.12 | 228  | 2784     | 0.12 | ng    | # 82     |
| 20) Indeno(1,2,3-cd)pyrene  | 23.23 | 276  | 2337m    | 0.11 | ng    | # 67     |
| 22) Benzo(b)fluoranthene    | 20.37 | 252  | 498      | 0.10 | ng    | # 72     |
| 23) Benzo(k)fluoranthene    | 20.43 | 252  | 687      | 0.11 | ng    | # 69     |
| 24) Benzo(a)pyrene          | 21.01 | 252  | 530      | 0.11 | ng    | # 45     |
| 25) Dibenzo(a,h)anthracene  | 23.31 | 278  | 441      | 0.10 | ng    | # 64     |
| 26) Benzo(g,h,i)perylene    | 23.82 | 276  | 2618     | 0.12 | ng    | #        |

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

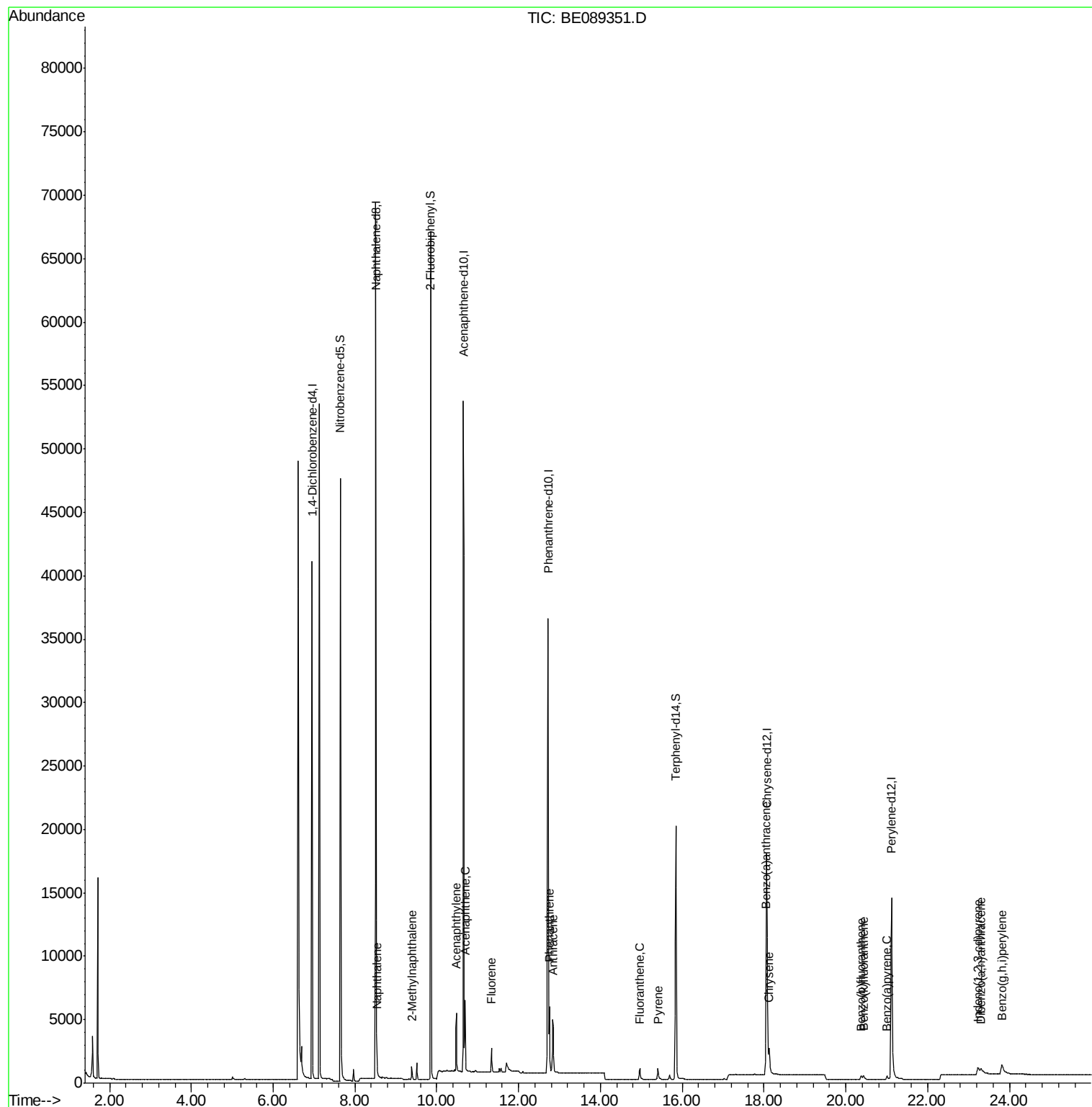
Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE010715\  
Data File : BE089351.D  
Acq On : 8 Jan 2015 6:56  
Operator : TP/IZ  
Sample : PB81203BL  
Misc : LOQ-/LOD-SOIL-SIM  
ALS Vial : 24 Sample Multiplier: 1

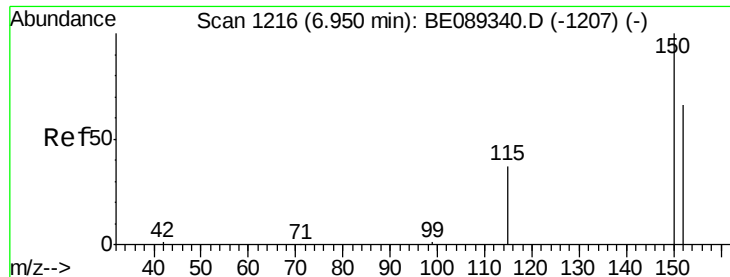
Instrument :  
BNA\_E  
ClientSampled :  
PB81203BL

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1/9/2015 5:21:44 PM

Quant Time: Jan 08 15:44:27 2015  
Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIM-PAH-BASE-BE010715.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jan 08 15:21:44 2015  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 6.95 min Scan# 1216

Delta R.T. -0.00 min

Lab File: BE089351.D

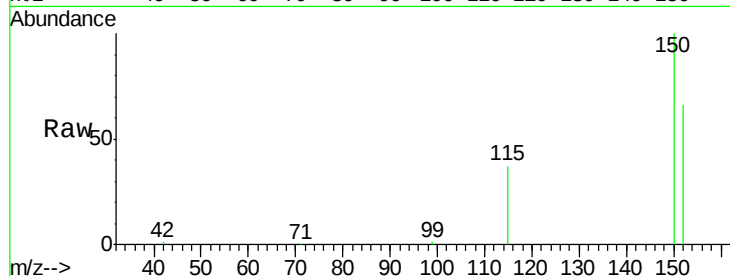
Acq: 8 Jan 2015 6:56

Instrument :

BNA\_E

ClientSampleId :

PB81203BL



Tgt Ion:152 Resp: 12193

Ion Ratio Lower Upper

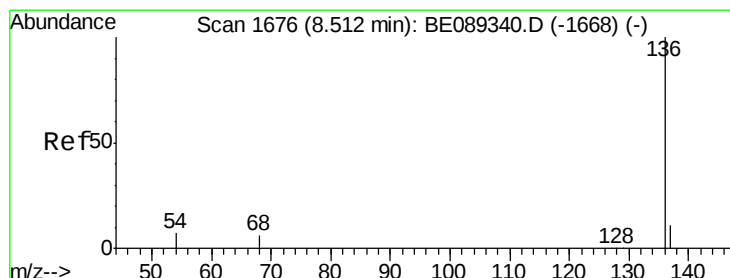
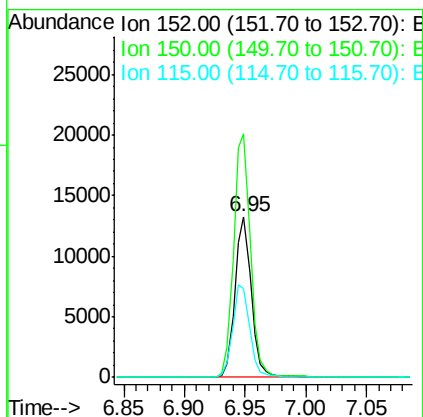
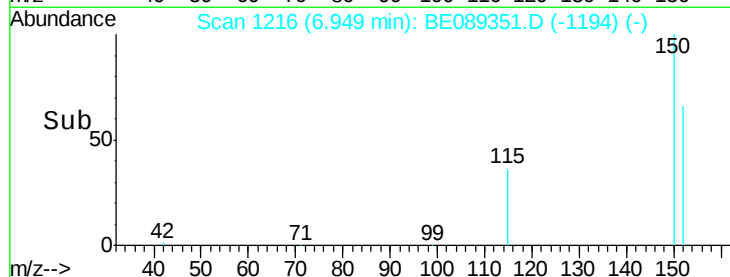
152 100

150 151.5 121.5 182.3

115 55.5 45.2 67.8

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#2

Naphthalene-d8

Concen: 5.00 ng

RT: 8.51 min Scan# 1676

Delta R.T. -0.00 min

Lab File: BE089351.D

Acq: 8 Jan 2015 6:56

Tgt Ion:136 Resp: 50055

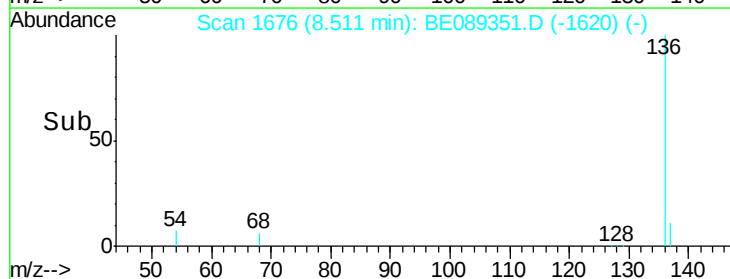
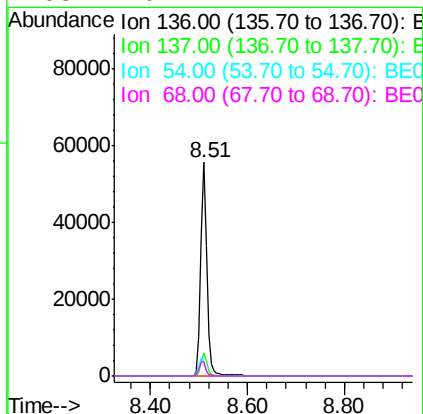
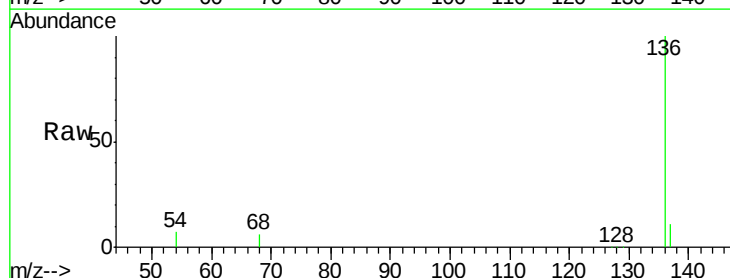
Ion Ratio Lower Upper

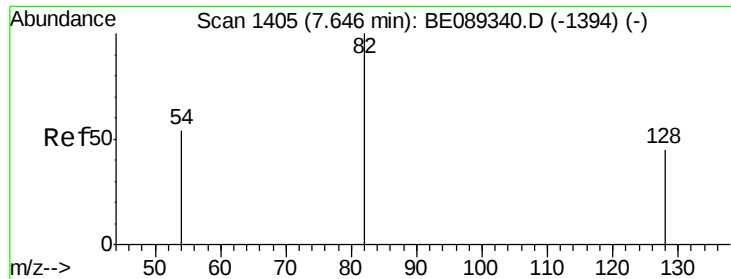
136 100

137 10.8 9.0 13.4

54 7.2 5.4 8.0

68 6.4 4.7 7.1





#3

Nitrobenzene-d5

Concen: 6.66 ng

RT: 7.65 min Scan# 1405

Delta R.T. -0.00 min

Lab File: BE089351.D

Acq: 8 Jan 2015 6:56

Instrument :

BNA\_E

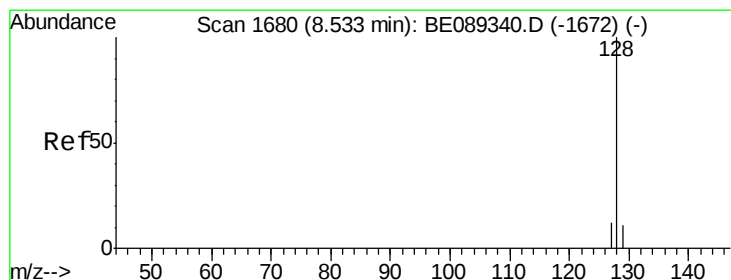
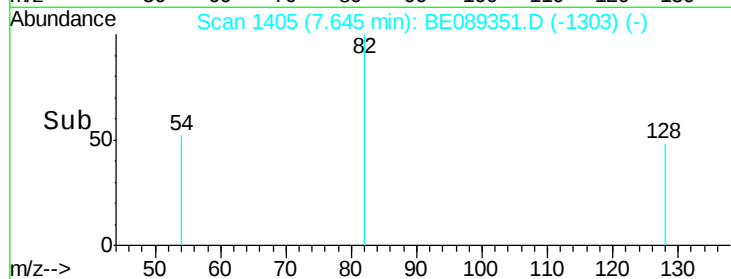
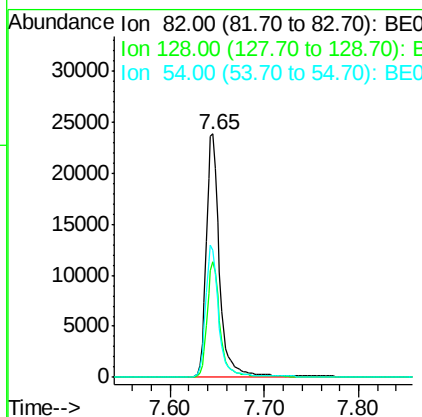
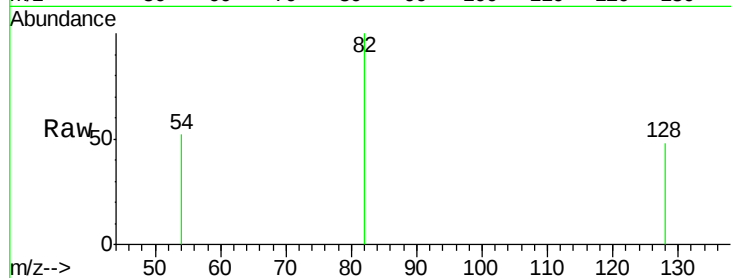
ClientSampleId :

PB81203BL

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| Tgt Ion | 82    | Resp  | 23189 |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 82      | 100   |       |       |
| 128     | 47.5  | 36.5  | 54.7  |
| 54      | 52.3  | 43.5  | 65.3  |



#4

Naphthalene

Concen: 0.04 ng

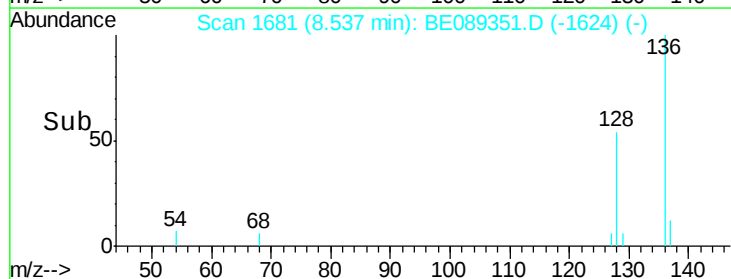
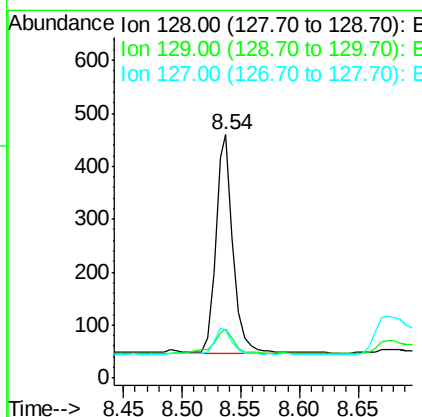
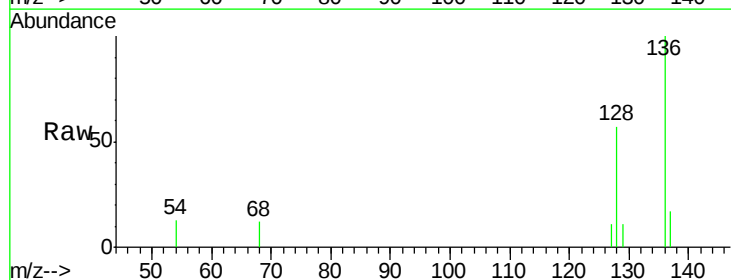
RT: 8.54 min Scan# 1681

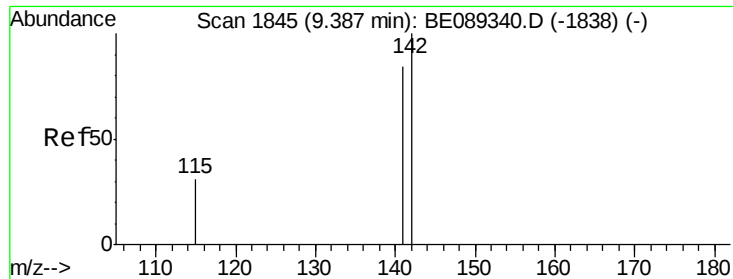
Delta R.T. 0.00 min

Lab File: BE089351.D

Acq: 8 Jan 2015 6:56

| Tgt Ion | 128   | Resp  | 428   |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 128     | 100   |       |       |
| 129     | 20.0  | 8.8   | 13.2# |
| 127     | 19.8  | 10.0  | 15.0# |





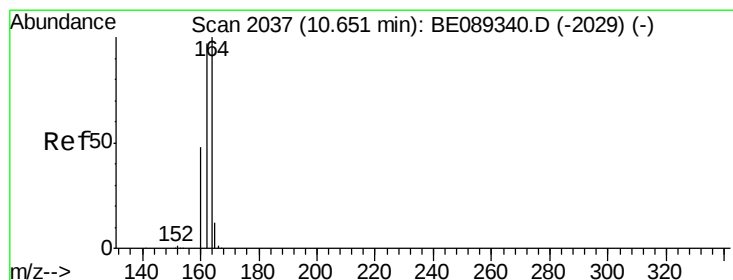
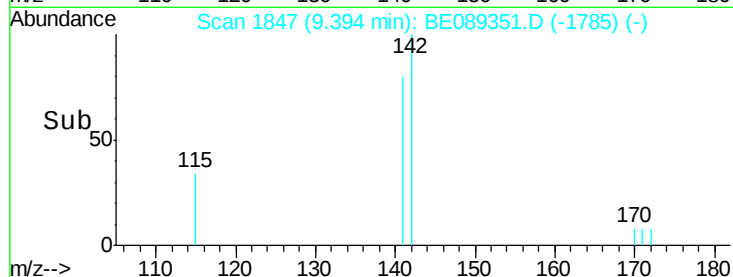
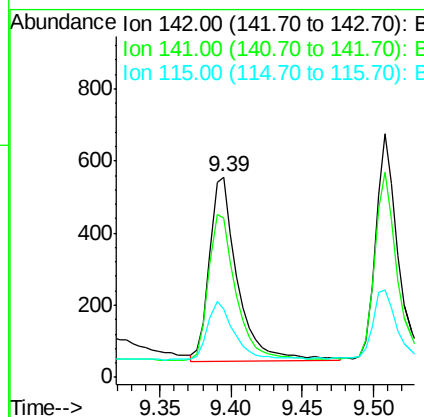
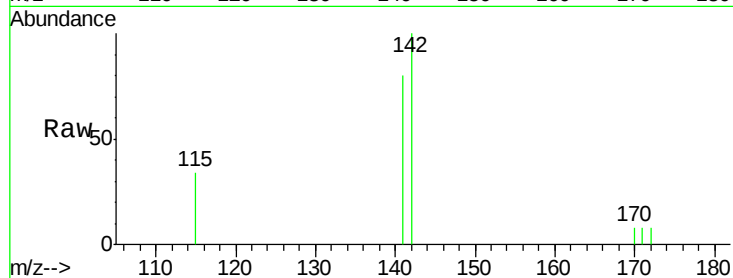
#5  
2-Methylnaphthalene  
Concen: 0.10 ng  
RT: 9.39 min Scan# 1847  
Delta R.T. 0.01 min  
Lab File: BE089351.D  
Acq: 8 Jan 2015 6:56

Instrument :  
BNA\_E  
ClientSampleId :  
PB81203BL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 79.6  | 66.3  | 99.5  |
| 115     | 34.2  | 25.2  | 37.8  |

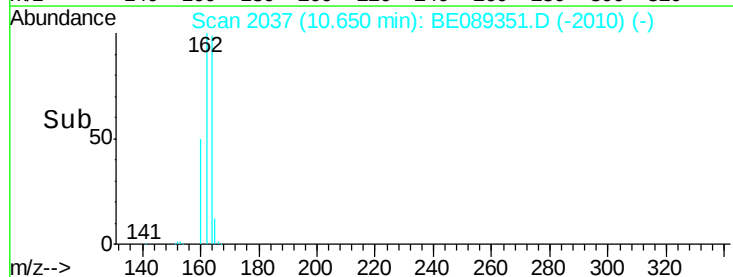
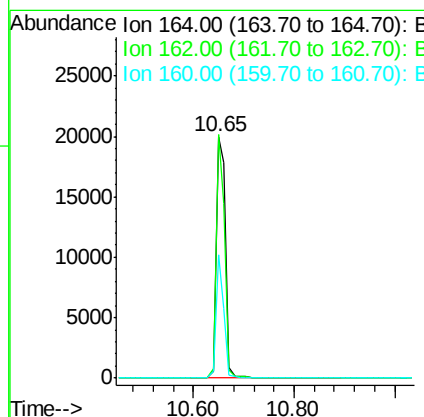
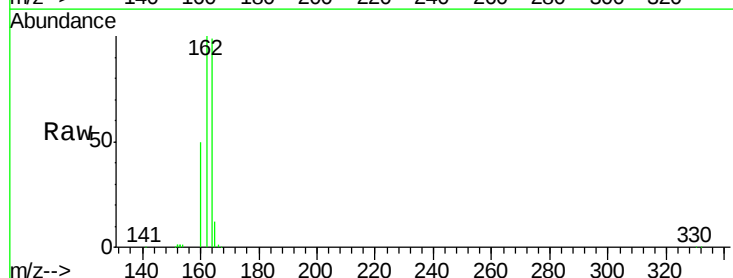
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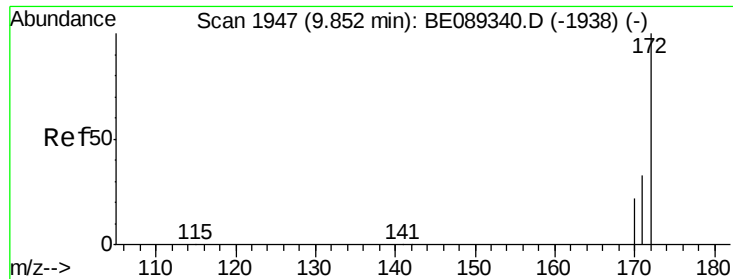
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#6  
Acenaphthene-d10  
Concen: 5.00 ng  
RT: 10.65 min Scan# 2037  
Delta R.T. -0.00 min  
Lab File: BE089351.D  
Acq: 8 Jan 2015 6:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 100.8 | 77.4  | 116.2 |
| 160     | 50.8  | 38.2  | 57.4  |





#7

2-Fluorobiphenyl

Concen: 5.85 ng

RT: 9.85 min Scan# 1948

Delta R.T. 0.00 min

Lab File: BE089351.D

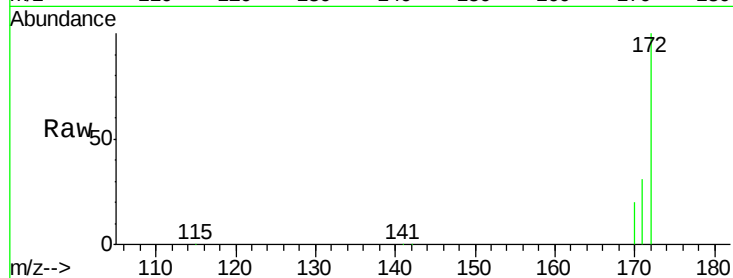
Acq: 8 Jan 2015 6:56

Instrument :

BNA\_E

ClientSampleId :

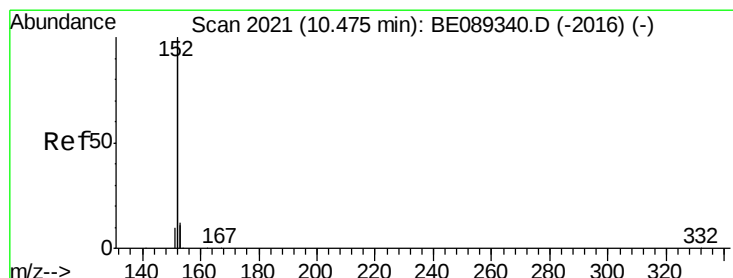
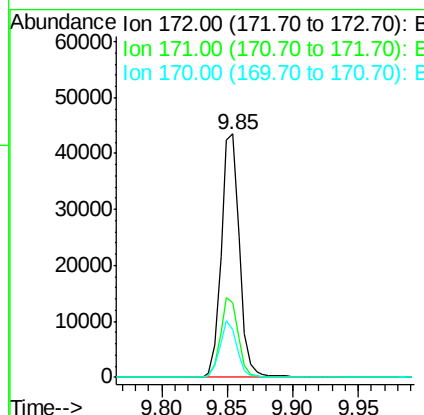
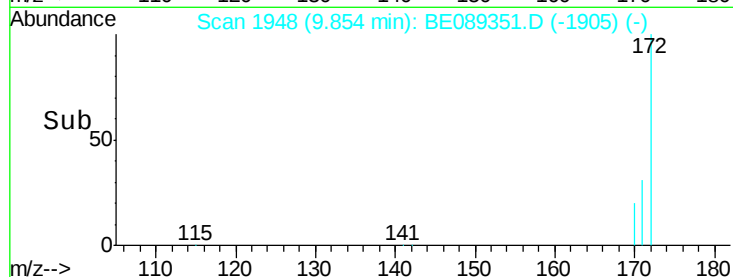
PB81203BL



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 30.6  | 26.4  | 39.6  |
| 170     | 19.7  | 18.0  | 27.0  |

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#8

Acenaphthylene

Concen: 0.11 ng

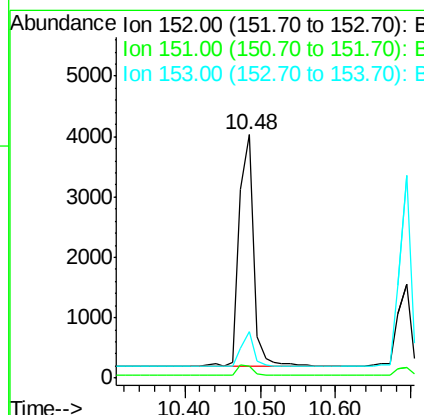
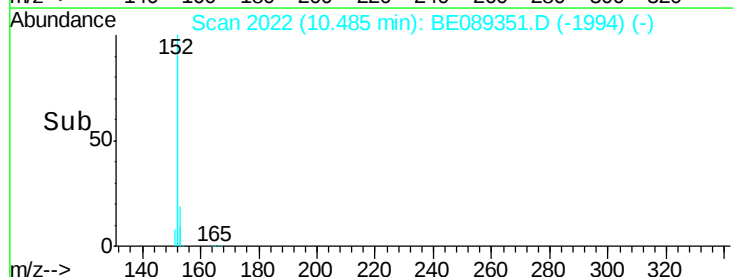
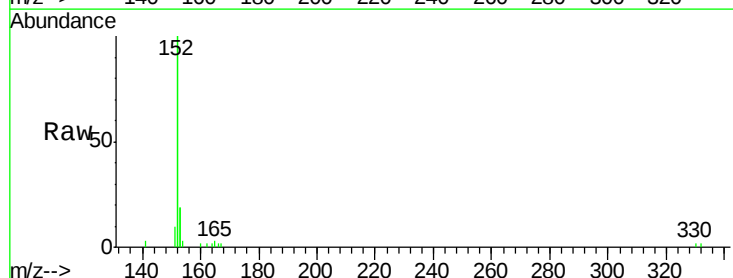
RT: 10.48 min Scan# 2022

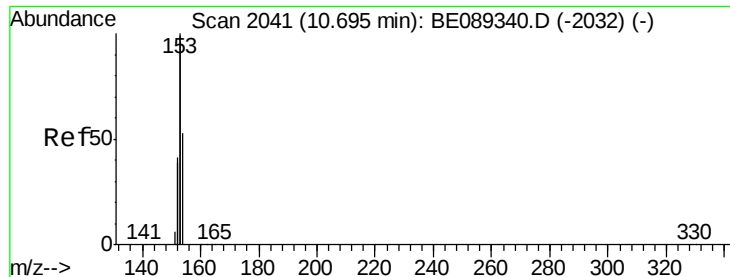
Delta R.T. 0.01 min

Lab File: BE089351.D

Acq: 8 Jan 2015 6:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 5.1   | 4.1   | 6.1   |
| 153     | 18.8  | 9.8   | 14.6  |





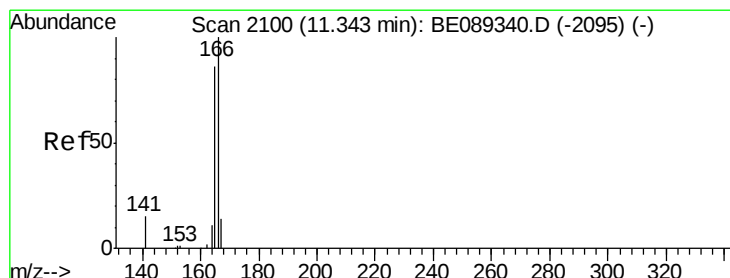
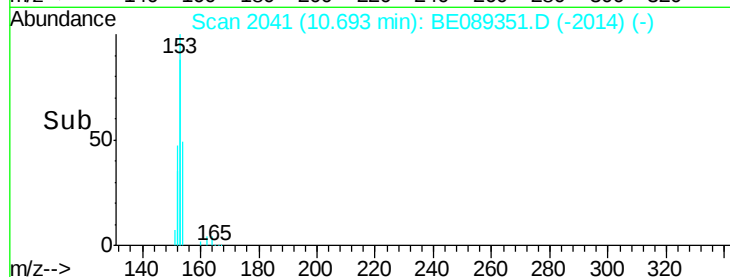
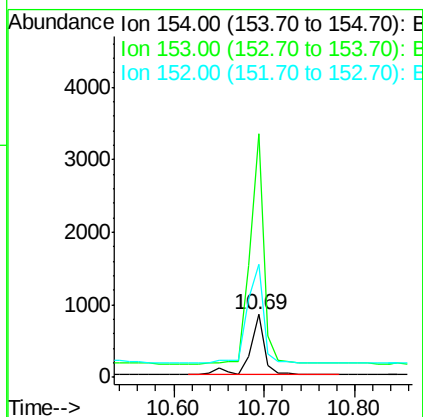
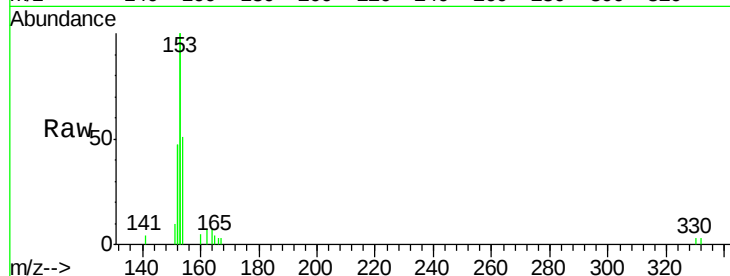
#9  
Acenaphthene  
Concen: 0.13 ng  
RT: 10.69 min Scan# 2041  
Delta R.T. -0.00 min  
Lab File: BE089351.D  
Acq: 8 Jan 2015 6:56

Instrument :  
BNA\_E  
ClientSampleId :  
PB81203BL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 389.3 | 300.6 | 450.8 |
| 152     | 181.2 | 123.3 | 184.9 |

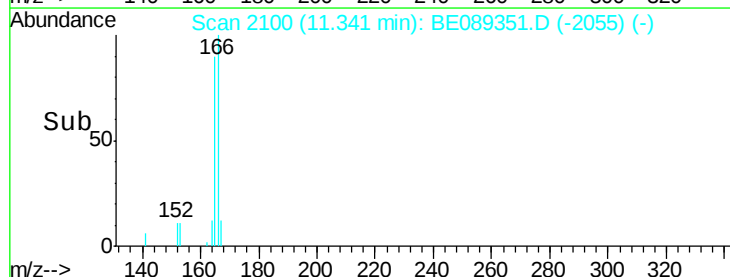
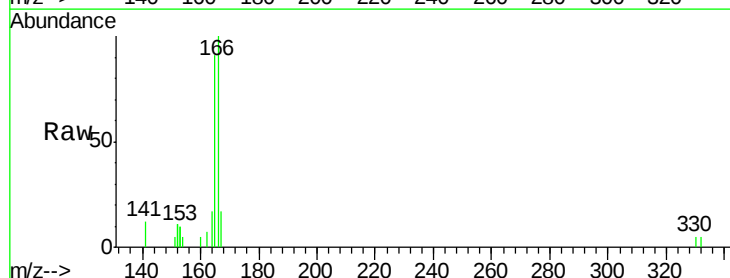
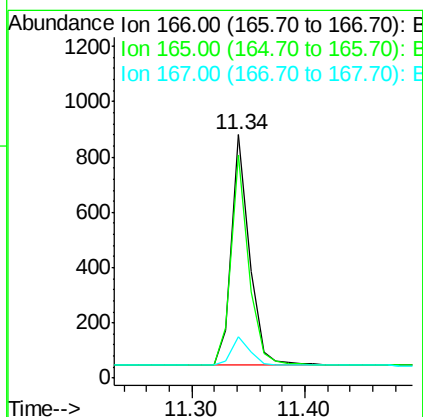
Manual Integrations  
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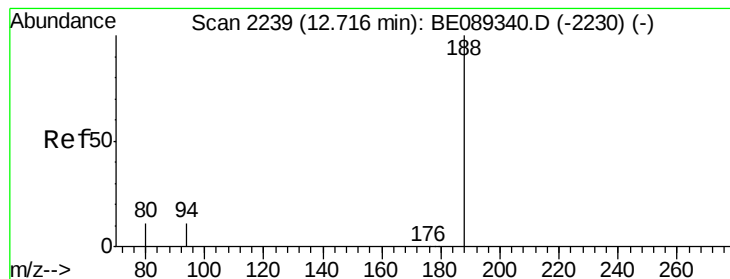
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#10  
Fluorene  
Concen: 0.12 ng  
RT: 11.34 min Scan# 2100  
Delta R.T. -0.00 min  
Lab File: BE089351.D  
Acq: 8 Jan 2015 6:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 89.8  | 72.1  | 108.1 |
| 167     | 13.5  | 11.0  | 16.4  |





#11

Phenanthrene-d10

Concen: 5.00 ng

RT: 12.72 min Scan# 2240

Delta R.T. 0.00 min

Lab File: BE089351.D

Acq: 8 Jan 2015 6:56

Instrument :

BNA\_E

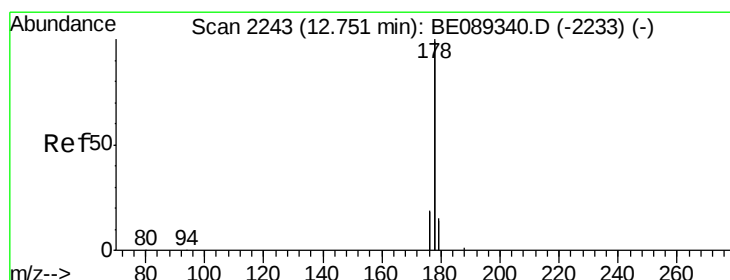
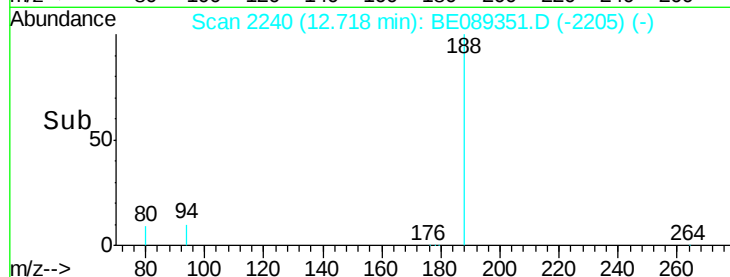
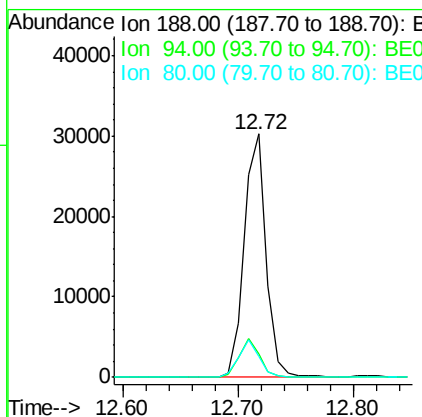
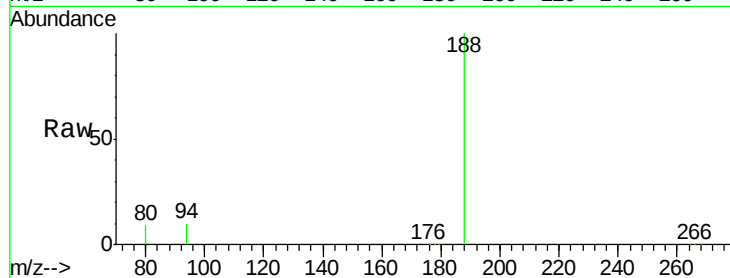
ClientSampleId :

PB81203BL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 9.8   | 11.0  | 12.2# |
| 80      | 8.7   | 10.1  | 11.1# |

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#12

Phenanthrene

Concen: 0.13 ng

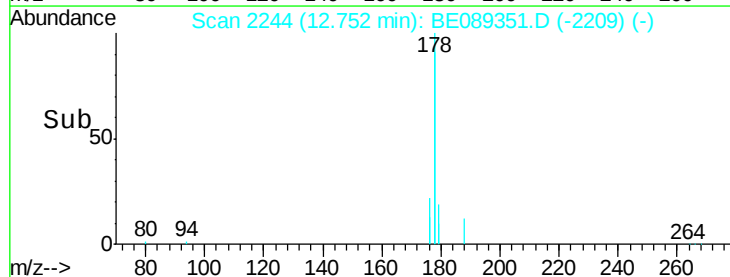
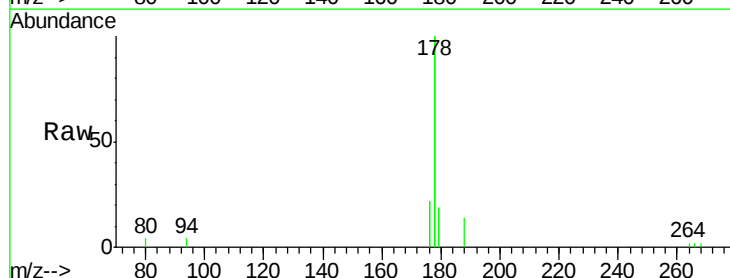
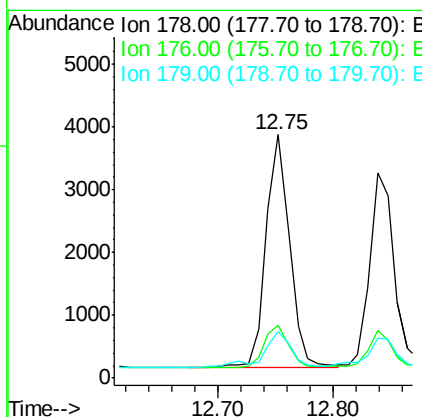
RT: 12.75 min Scan# 2244

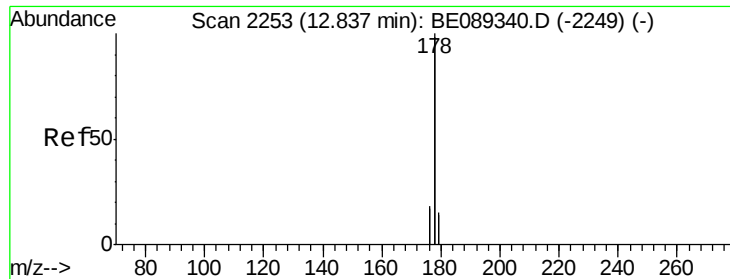
Delta R.T. 0.00 min

Lab File: BE089351.D

Acq: 8 Jan 2015 6:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 21.9  | 15.1  | 22.7  |
| 179     | 19.0  | 12.2  | 18.2# |





#13

Anthracene

Concen: 0.12 ng

RT: 12.84 min Scan# 2254

Delta R.T. 0.00 min

Lab File: BE089351.D

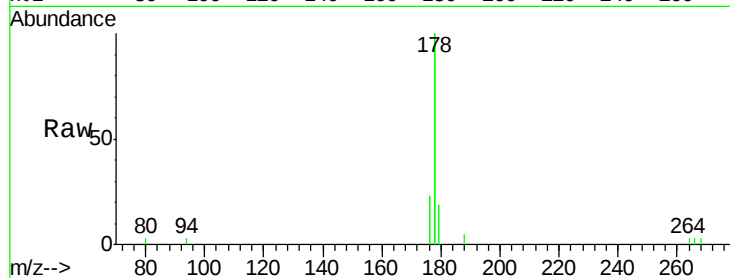
Acq: 8 Jan 2015 6:56

Instrument :

BNA\_E

ClientSampleId :

PB81203BL



Tgt Ion:178 Resp: 4696

Ion Ratio Lower Upper

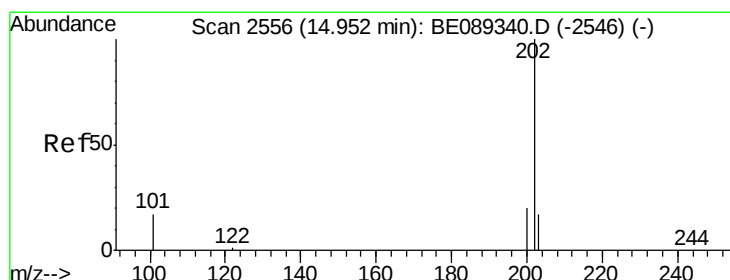
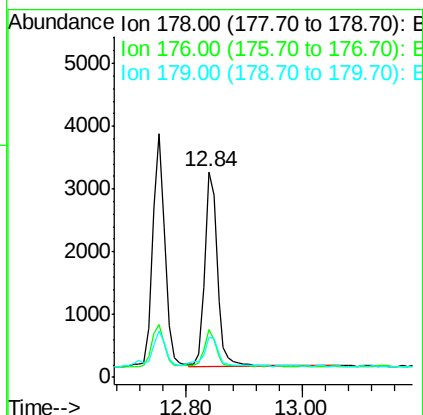
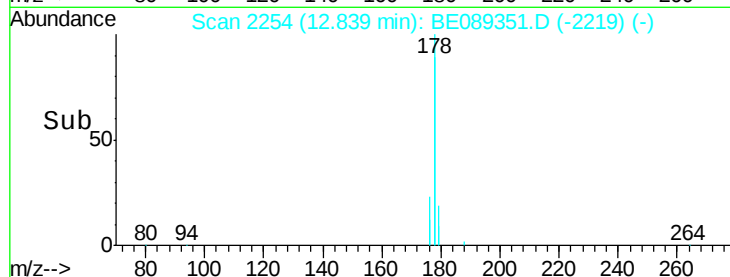
178 100

176 23.2 14.7 22.1#

179 19.5 12.0 18.0#

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#14

Fluoranthene

Concen: 0.11 ng

RT: 14.96 min Scan# 2559

Delta R.T. 0.01 min

Lab File: BE089351.D

Acq: 8 Jan 2015 6:56

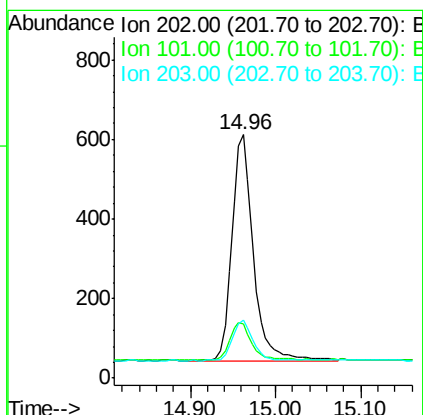
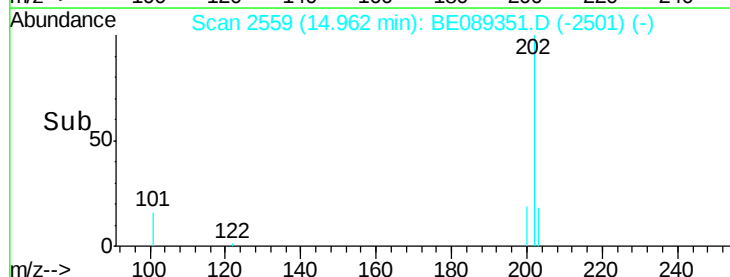
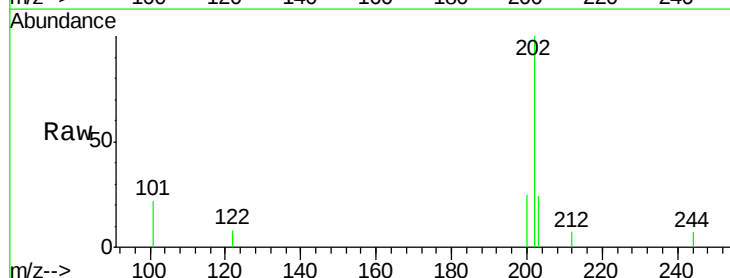
Tgt Ion:202 Resp: 996

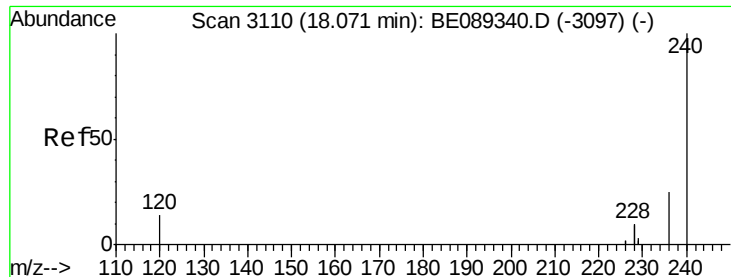
Ion Ratio Lower Upper

202 100

101 22.4 0.0 37.9

203 23.7 0.0 37.5





#15

Chrysene-d12

Concen: 5.00 ng

RT: 18.06 min Scan# 3110

Delta R.T. -0.01 min

Lab File: BE089351.D

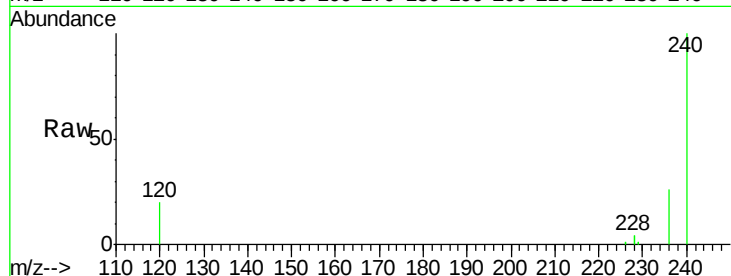
Acq: 8 Jan 2015 6:56

Instrument :

BNA\_E

ClientSampleId :

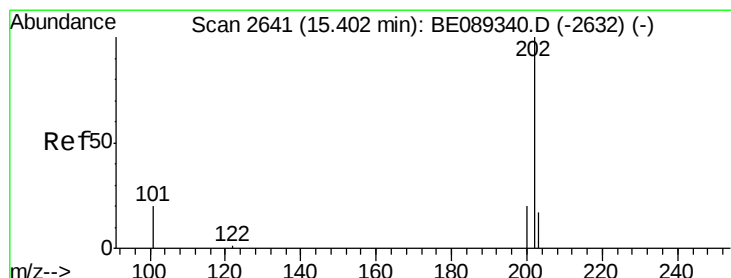
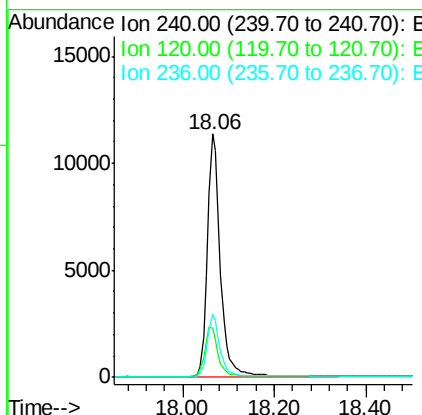
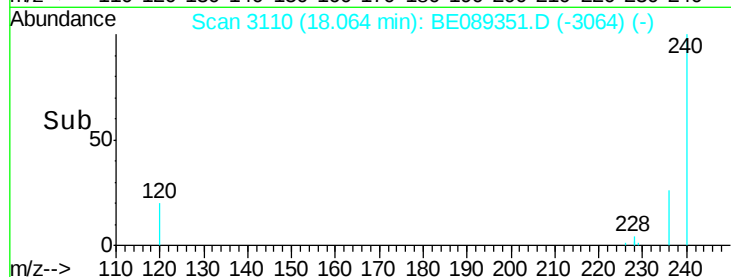
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|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 240   | Resp: | 22145 |
| Ion Ratio | Lower | Upper |       |
| 240       | 100   |       |       |
| 120       | 20.1  | 11.8  | 17.6# |
| 236       | 26.0  | 20.0  | 30.0  |

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#16

Pyrene

Concen: 0.14 ng

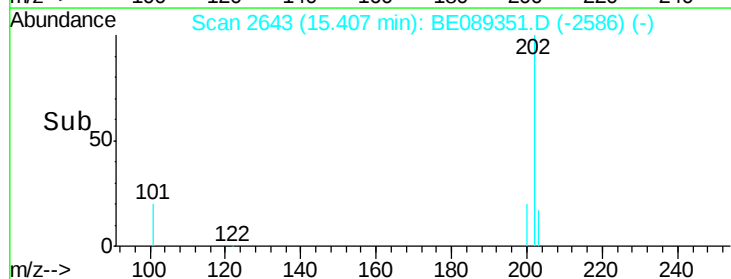
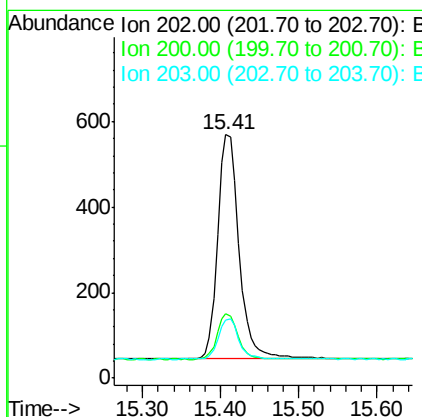
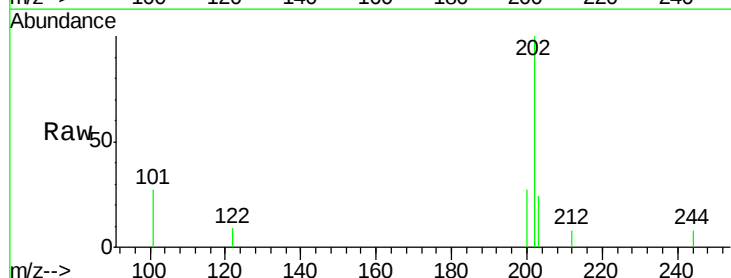
RT: 15.41 min Scan# 2643

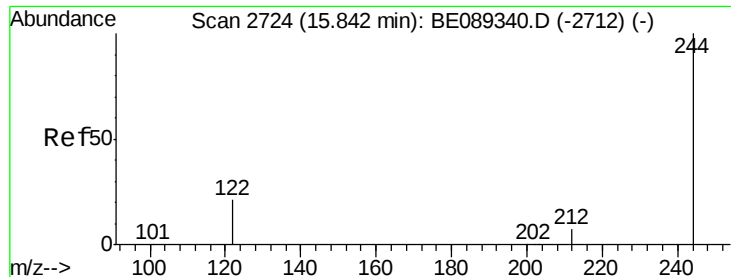
Delta R.T. 0.00 min

Lab File: BE089351.D

Acq: 8 Jan 2015 6:56

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 202   | Resp: | 1000  |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 200       | 26.7  | 16.8  | 25.2# |
| 203       | 23.9  | 14.0  | 21.0# |





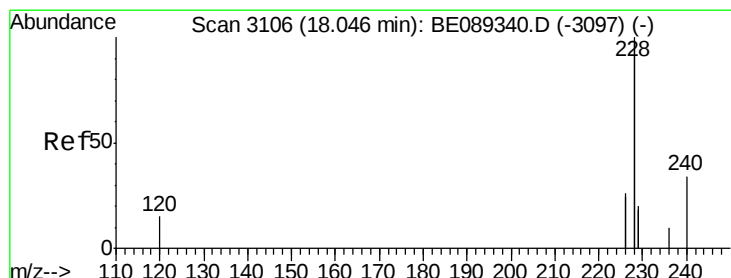
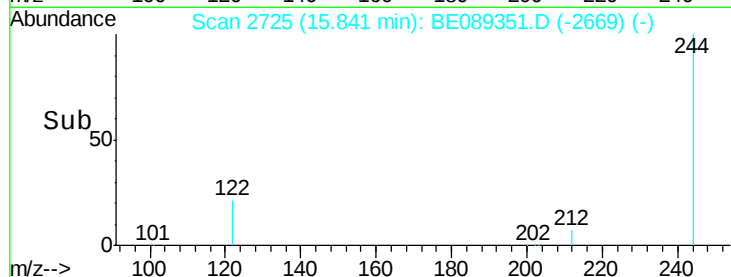
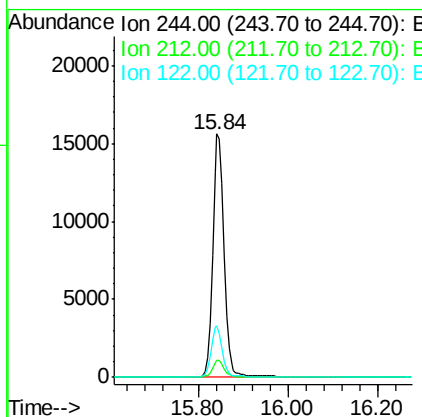
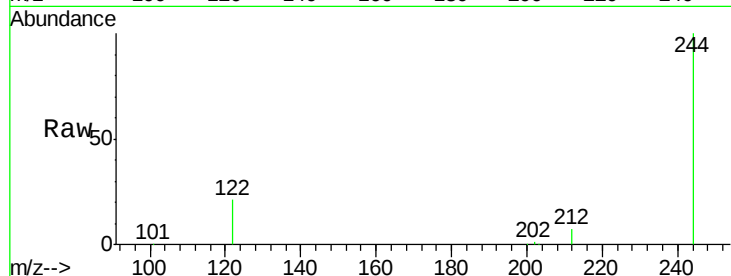
#17  
 Terphenyl-d14  
 Concen: 6.94 ng  
 RT: 15.84 min Scan# 2725  
 Delta R.T. -0.00 min  
 Lab File: BE089351.D  
 Acq: 8 Jan 2015 6:56

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PB81203BL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.1   | 6.3   | 9.5   |
| 122     | 21.2  | 17.7  | 26.5  |

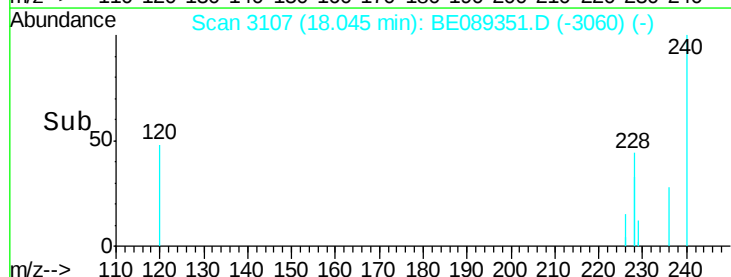
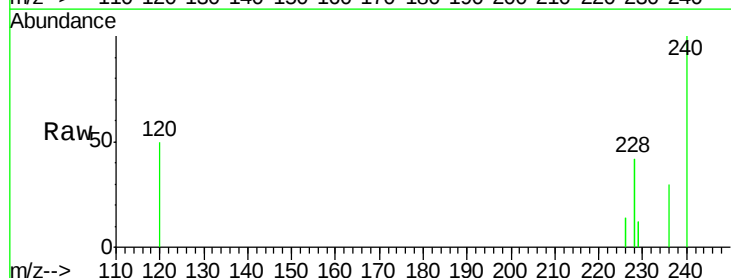
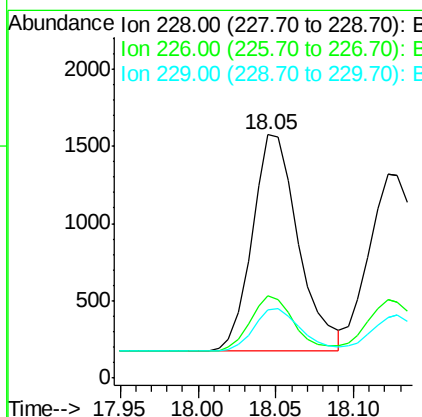
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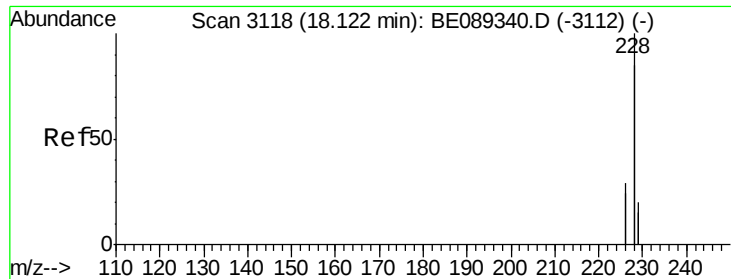
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#18  
 Benzo(a)anthracene  
 Concen: 0.13 ng  
 RT: 18.05 min Scan# 3107  
 Delta R.T. -0.00 min  
 Lab File: BE089351.D  
 Acq: 8 Jan 2015 6:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 34.1  | 21.0  | 31.6# |
| 229     | 27.8  | 16.0  | 24.0# |





#19

Chrysene

Concen: 0.12 ng

RT: 18.12 min Scan# 3119

Delta R.T. -0.00 min

Lab File: BE089351.D

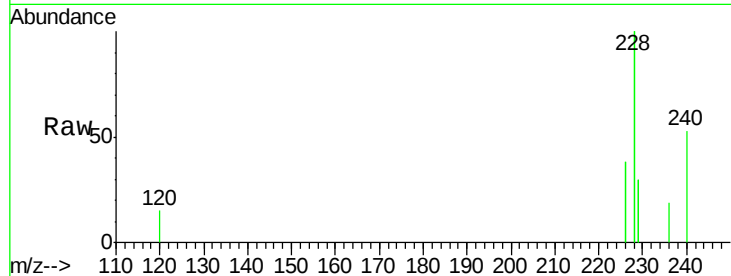
Acq: 8 Jan 2015 6:56

Instrument :

BNA\_E

ClientSampleId :

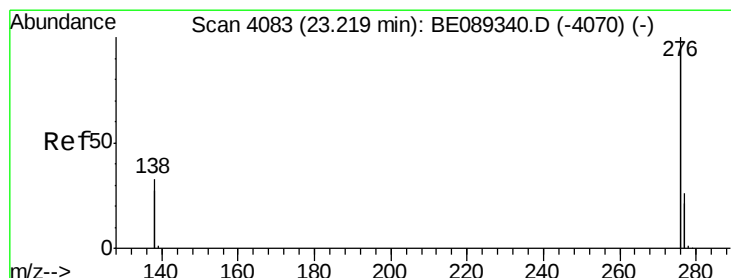
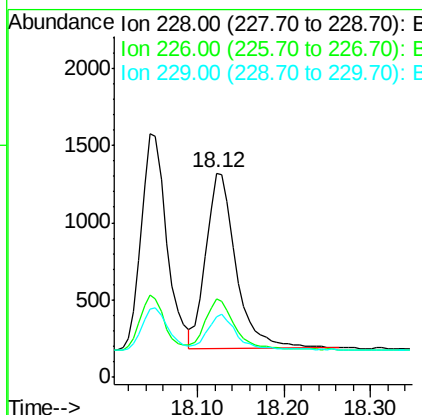
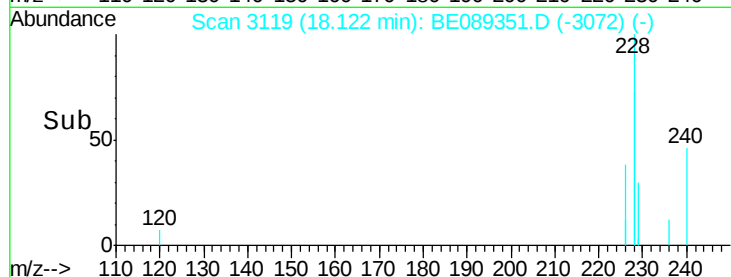
PB81203BL



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 228   | Resp: | 2784  |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 38.3  | 23.5  | 35.3# |
| 229       | 29.7  | 16.1  | 24.1# |

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#20

Indeno(1,2,3-cd)pyrene

Concen: 0.11 ng m

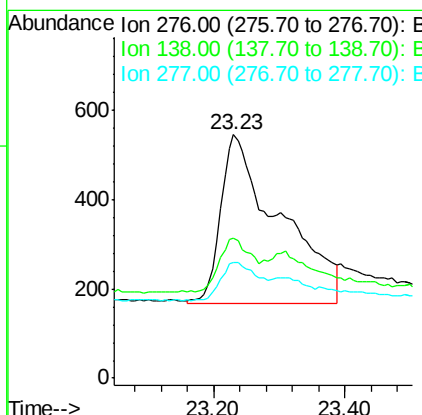
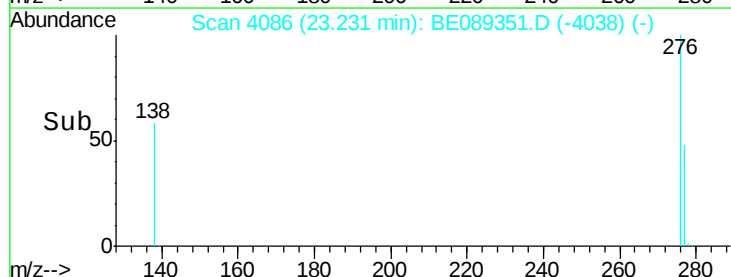
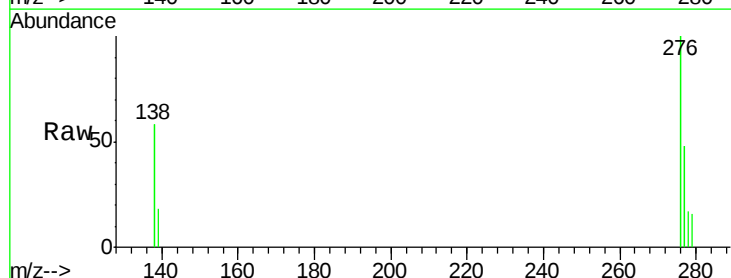
RT: 23.23 min Scan# 4086

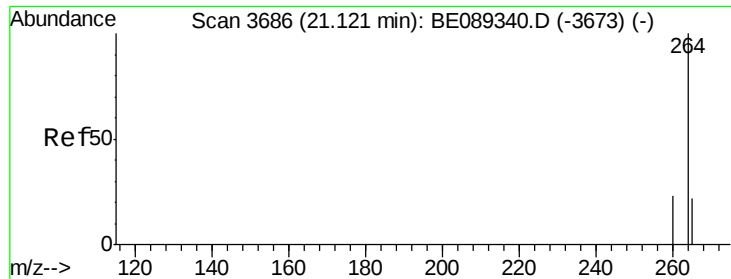
Delta R.T. 0.01 min

Lab File: BE089351.D

Acq: 8 Jan 2015 6:56

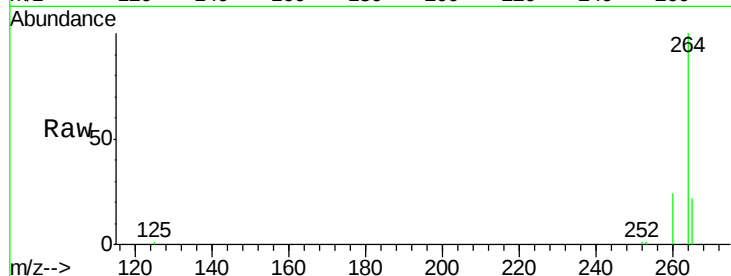
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 2337  |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 17.9  | 23.8  | 35.8# |
| 277       | 14.2  | 18.2  | 27.4# |





#21  
 Perylene-d12  
 Concen: 5.00 ng  
 RT: 21.12 min Scan# 3686  
 Delta R.T. -0.01 min  
 Lab File: BE089351.D  
 Acq: 8 Jan 2015 6:56

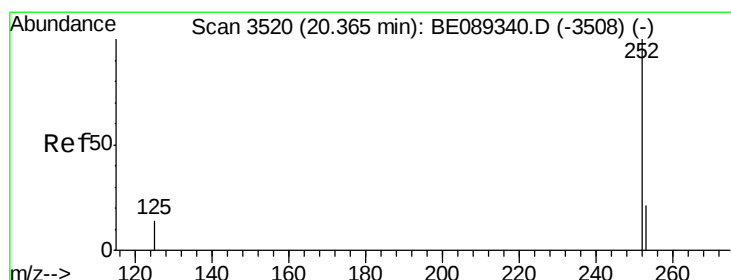
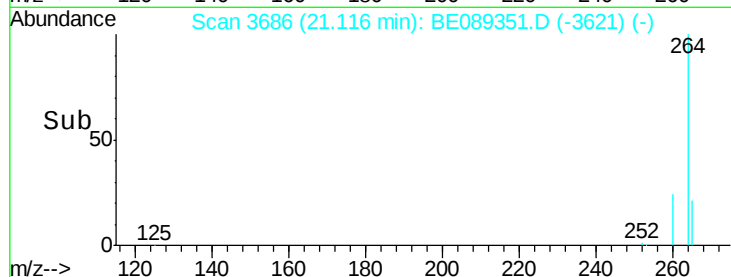
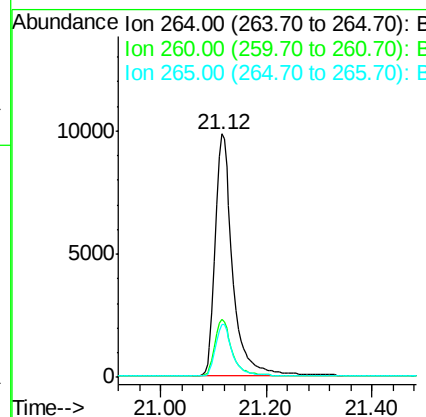
Instrument :  
 BNA\_E  
 ClientSampleId :  
 PB81203BL



Tgt Ion: 264 Resp: 22868  
 Ion Ratio Lower Upper  
 264 100  
 260 23.9 18.9 28.3  
 265 21.9 17.4 26.2

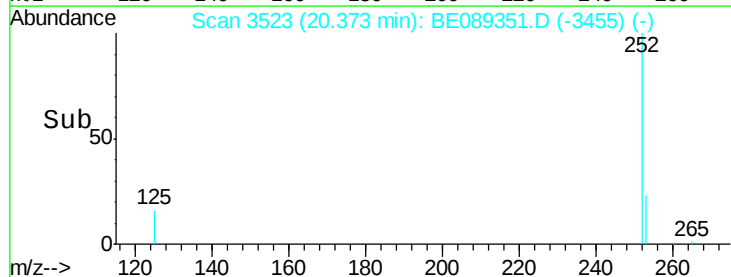
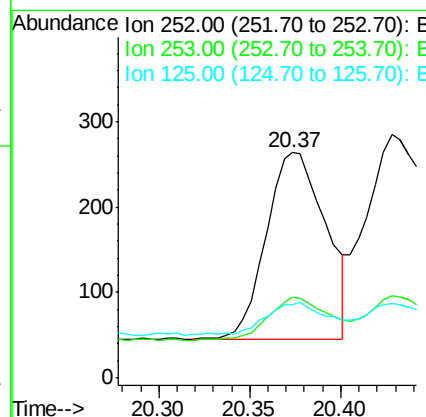
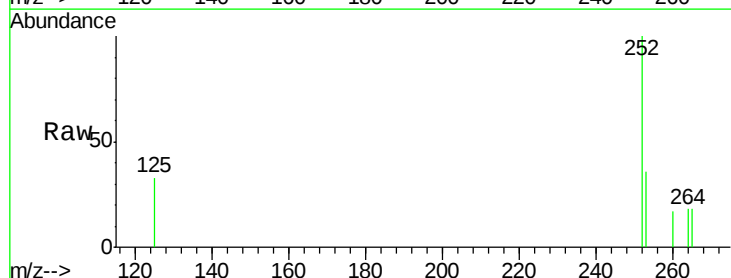
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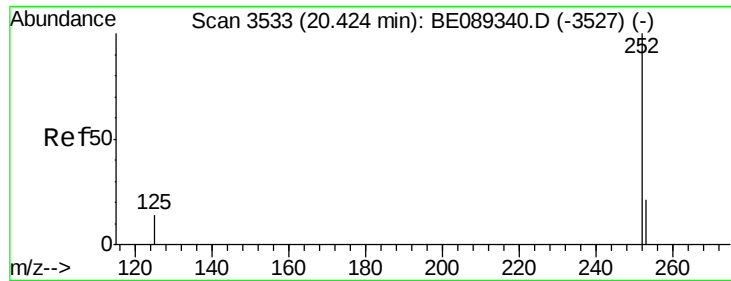
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#22  
 Benzo(b)fluoranthene  
 Concen: 0.10 ng  
 RT: 20.37 min Scan# 3523  
 Delta R.T. 0.01 min  
 Lab File: BE089351.D  
 Acq: 8 Jan 2015 6:56

Tgt Ion: 252 Resp: 498  
 Ion Ratio Lower Upper  
 252 100  
 253 35.6 17.8 26.6#  
 125 32.6 12.6 18.8#





#23

Benzo(k)fluoranthene

Concen: 0.11 ng

RT: 20.43 min Scan# 3535

Delta R.T. 0.00 min

Lab File: BE089351.D

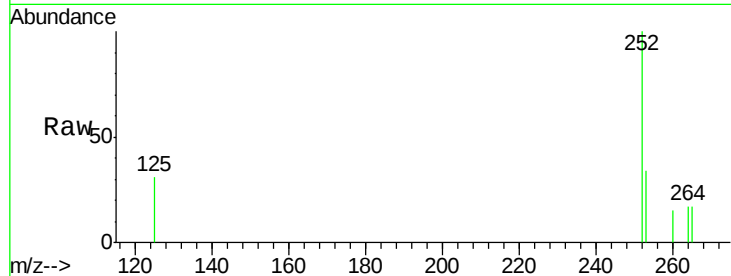
Acq: 8 Jan 2015 6:56

Instrument :

BNA\_E

ClientSampleId :

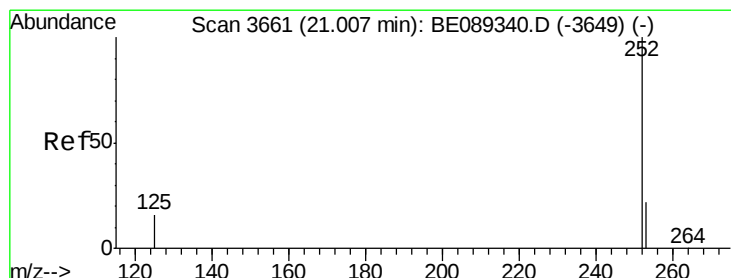
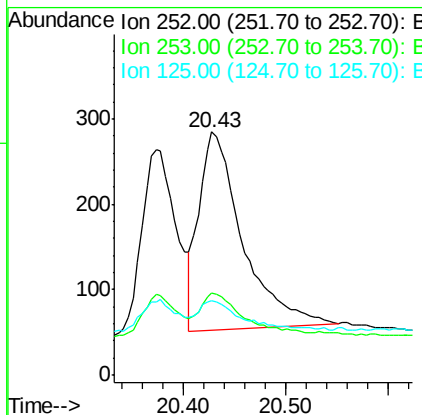
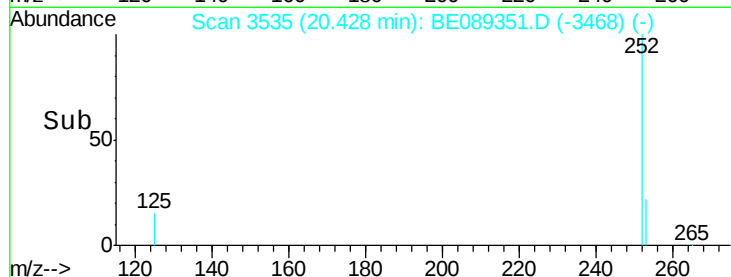
PB81203BL



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 33.7  | 18.0  | 27.0# |
| 125     | 30.5  | 12.4  | 18.6# |

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#24

Benzo(a)pyrene

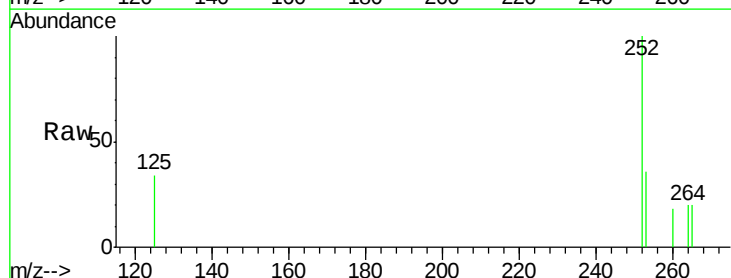
Concen: 0.11 ng

RT: 21.01 min Scan# 3663

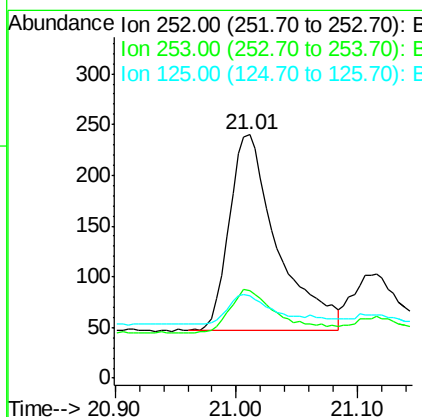
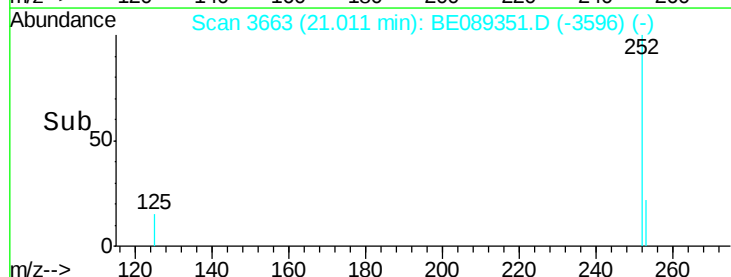
Delta R.T. 0.00 min

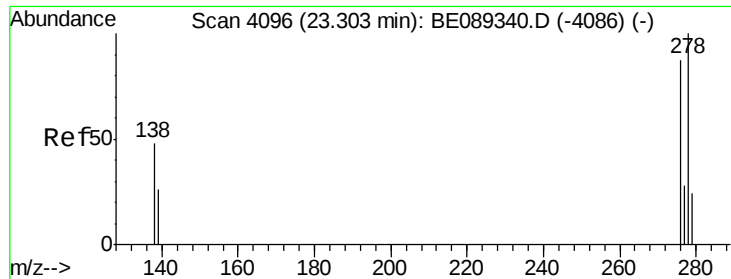
Lab File: BE089351.D

Acq: 8 Jan 2015 6:56



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 35.8  | 18.3  | 27.5# |
| 125     | 33.8  | 13.8  | 20.8# |





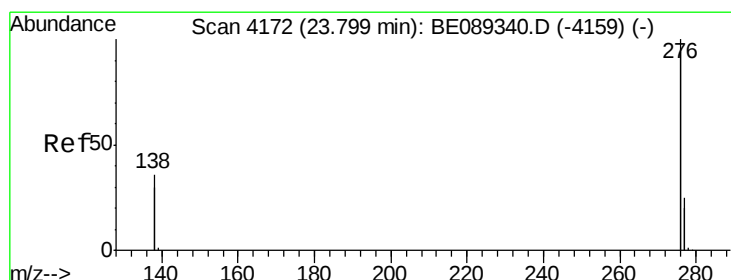
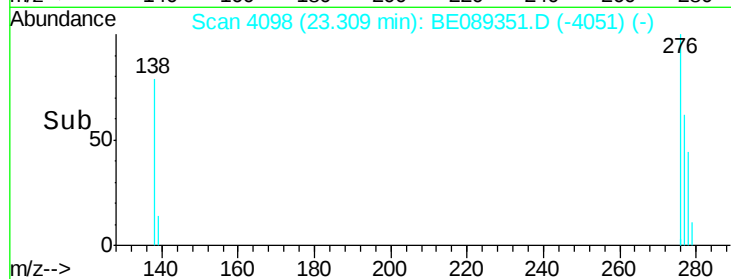
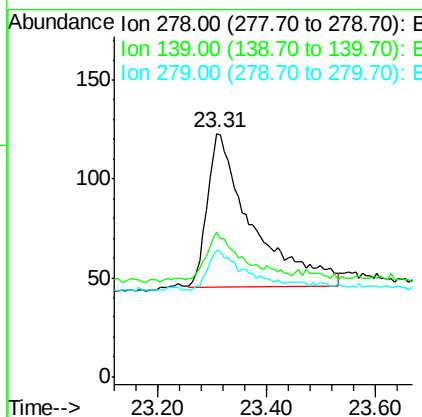
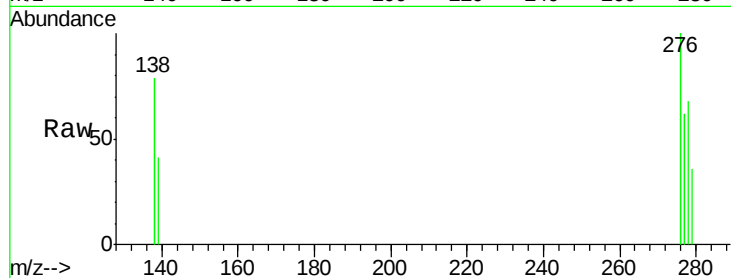
#25  
Dibenzo(a,h)anthracene  
Concen: 0.10 ng  
RT: 23.31 min Scan# 4098  
Delta R.T. 0.01 min  
Lab File: BE089351.D  
Acq: 8 Jan 2015 6:56

Instrument :  
BNA\_E  
ClientSampleId :  
PB81203BL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 59.3  | 22.9  | 34.3# |
| 279     | 52.0  | 20.8  | 31.2# |

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#26  
Benzo(g,h,i)perylene  
Concen: 0.12 ng  
RT: 23.82 min Scan# 4176  
Delta R.T. 0.02 min  
Lab File: BE089351.D  
Acq: 8 Jan 2015 6:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 44.5  | 20.0  | 30.0# |
| 138     | 55.8  | 28.5  | 42.7# |

