

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF050716\  
 Data File : BF086805.D  
 Acq On : 8 May 2016 6:13  
 Operator : UM/SJ  
 Sample : H2720-15  
 Misc :  
 ALS Vial : 73 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EUT01-TD-B3(5-9)-CRE

Manual Integrations  
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 5/9/2016 7:20:20 PM

Quant Time: May 09 17:59:51 2016  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF050416.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed May 04 15:12:53 2016  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.70  | 152  | 209439   | 40.00  | ng    | -0.03    |
| 21) Naphthalene-d8          | 7.98  | 136  | 821086   | 40.00  | ng    | -0.05    |
| 38) Acenaphthene-d10        | 9.73  | 164  | 362304   | 40.00  | ng    | -0.05    |
| 63) Phenanthrene-d10        | 11.22 | 188  | 644743   | 40.00  | ng    | -0.03    |
| 75) Chrysene-d12            | 13.85 | 240  | 352325   | 40.00  | ng    | -0.03    |
| 86) Perylene-d12            | 15.23 | 264  | 366239   | 40.00  | ng    | -0.03    |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.31  | 112  | 1230666  | 97.28  | ng    | -0.01    |
| 7) Phenol-d6                | 6.37  | 99   | 1880789  | 110.36 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.28  | 82   | 1168056  | 73.10  | ng    | -0.03    |
| 41) 2,4,6-Tribromophenol    | 10.53 | 330  | 420069   | 118.52 | ng    | -0.03    |
| 44) 2-Fluorobiphenyl        | 9.07  | 172  | 1755976  | 79.45  | ng    | -0.03    |
| 78) Terphenyl-d14           | 12.81 | 244  | 1294155  | 74.24  | ng    | -0.03    |
| Target Compounds            |       |      |          |        |       | Qvalue   |
| 48) Acenaphthylene          | 9.60  | 152  | 170145   | 5.01   | ng    | 98       |
| 49) Dimethylphthalate       | 9.47  | 163  | 189000   | 7.00   | ng    | 98       |
| 70) Phenanthrene            | 11.24 | 178  | 665531   | 19.22  | ng    | 100      |
| 71) Anthracene              | 11.29 | 178  | 216593   | 5.97   | ng    | 98       |
| 74) Fluoranthene            | 12.43 | 202  | 1766960  | 50.91  | ng    | 98       |
| 77) Pyrene                  | 12.66 | 202  | 1948438  | 69.37  | ng    | 98       |
| 80) Benzo(a)anthracene      | 13.84 | 228  | 1000651  | 50.22  | ng    | 95       |
| 82) Chrysene                | 13.87 | 228  | 740035m  | 34.81  | ng    |          |
| 85) Indeno(1,2,3-cd)pyrene  | 16.53 | 276  | 554717   | 30.41  | ng    | # 89     |
| 87) Benzo(b)fluoranthene    | 14.85 | 252  | 1090803m | 49.57  | ng    |          |
| 88) Benzo(k)fluoranthene    | 14.88 | 252  | 338646m  | 16.33  | ng    |          |
| 89) Benzo(a)pyrene          | 15.17 | 252  | 807939m  | 39.86  | ng    |          |
| 90) Dibenzo(a,h)anthracene  | 16.53 | 278  | 127068m  | 6.53   | ng    |          |
| 91) Benzo(g,h,i)perylene    | 16.92 | 276  | 520833   | 25.48  | ng    | 94       |

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

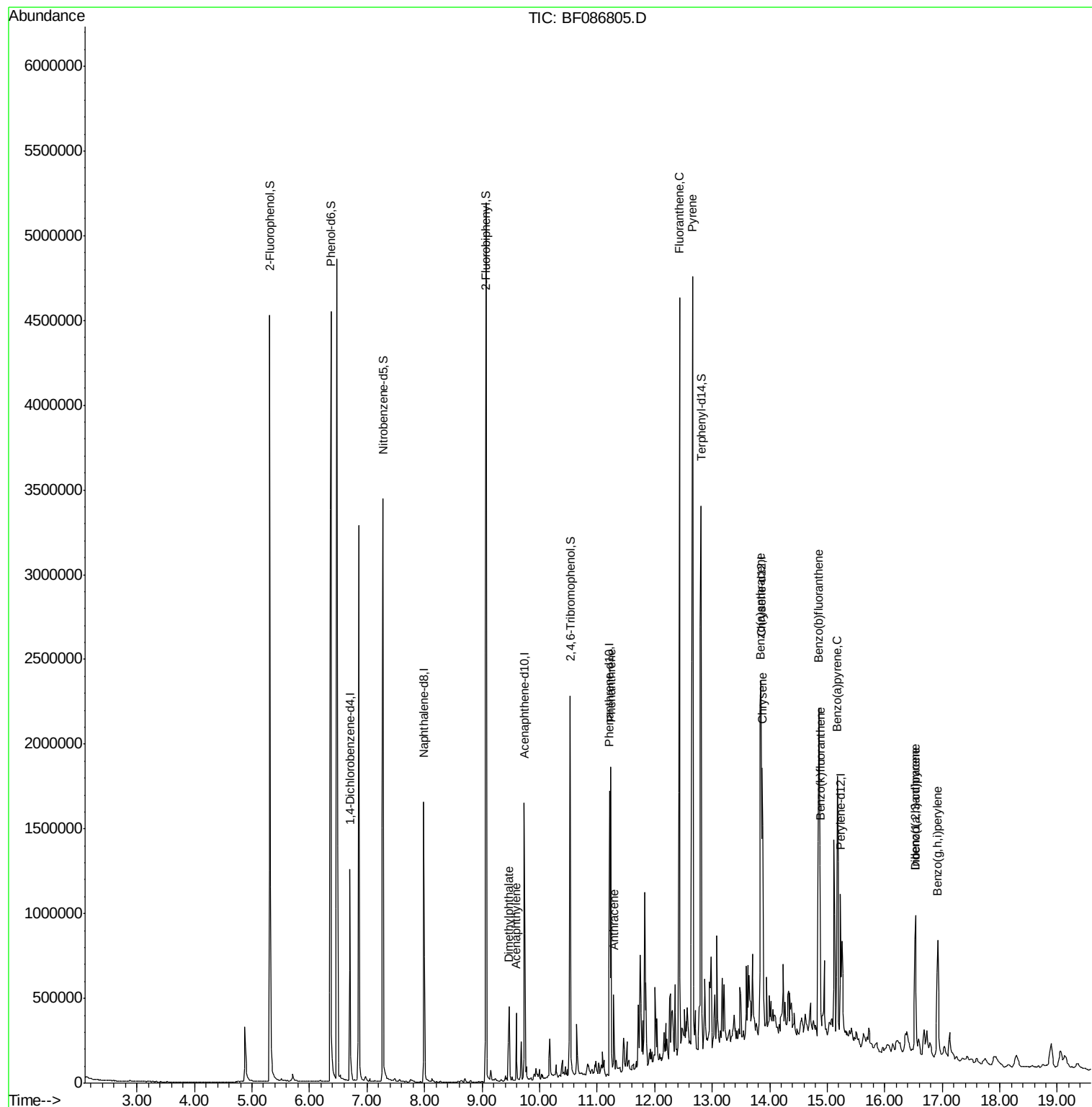
Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF050716\  
Data File : BF086805.D  
Acq On : 8 May 2016 6:13  
Operator : UM/SJ  
Sample : H2720-15  
Misc :  
ALS Vial : 73 Sample Multiplier: 1

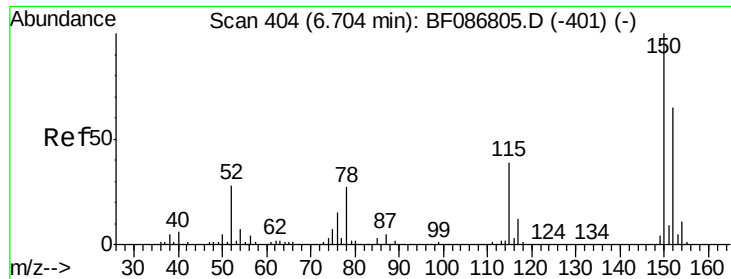
Instrument :  
BNA\_F  
ClientSampleId :  
EUT01-TD-B3(5-9)-CRE

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Quant Time: May 09 17:59:51 2016  
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF050416.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed May 04 15:12:53 2016  
Response via : Initial Calibration





#1

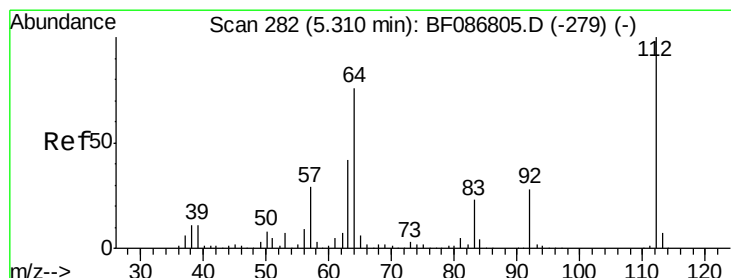
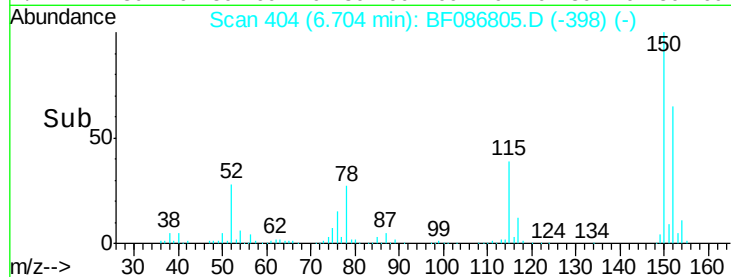
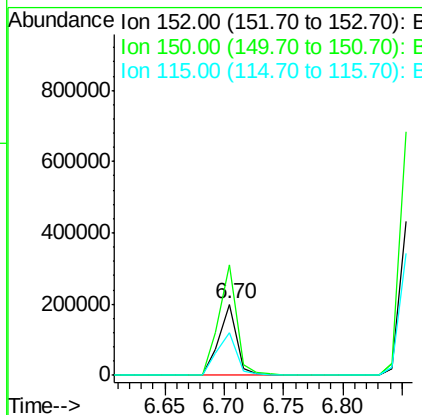
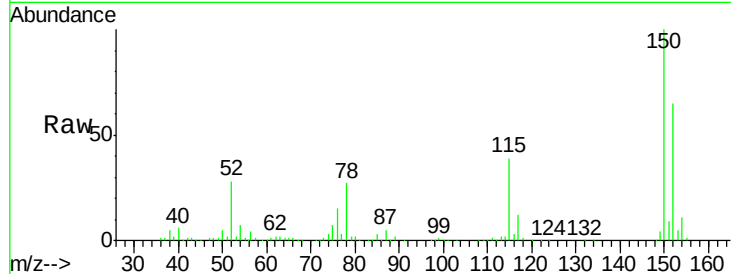
1,4-Dichlorobenzene-d4  
Concen: 40.00 ng  
RT: 6.70 min Scan# 404  
Delta R.T. -0.03 min  
Lab File: BF086805.D  
Acq: 8 May 2016 6:13

Instrument :  
BNA\_F  
ClientSampleId :  
EUT01-TD-B3(5-9)-CRE

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 154.7 | 125.8 | 188.6 |
| 115     | 60.3  | 51.5  | 77.3  |

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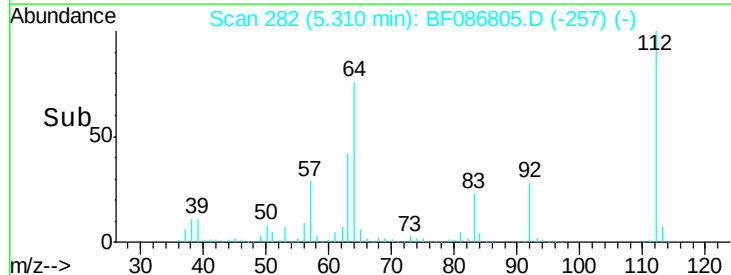
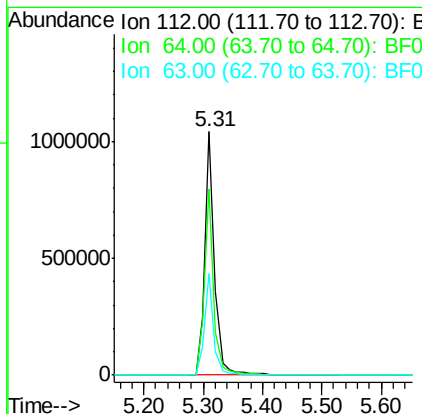
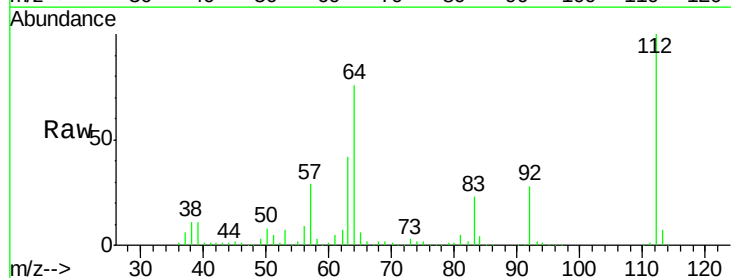
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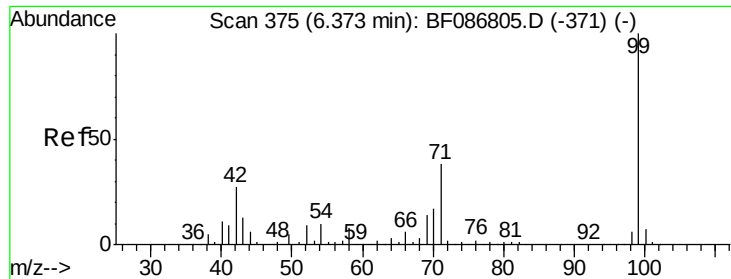


#5

2-Fluorophenol  
Concen: 97.28 ng  
RT: 5.31 min Scan# 282  
Delta R.T. -0.01 min  
Lab File: BF086805.D  
Acq: 8 May 2016 6:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 76.4  | 52.1  | 78.1  |
| 63      | 41.5  | 25.7  | 38.5  |





#7

Phenol-d6

Concen: 110.36 ng

RT: 6.37 min Scan# 375

Delta R.T. 0.00 min

Lab File: BF086805.D

Acq: 8 May 2016 6:13

Instrument :

BNA\_F

ClientSampleId :

EUT01-TD-B3(5-9)-CRE

Tgt Ion: 99 Resp: 1880789

Ion Ratio Lower Upper

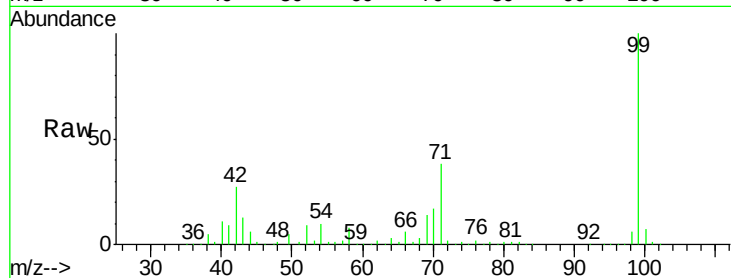
99 100

42 27.4 13.6 20.4#

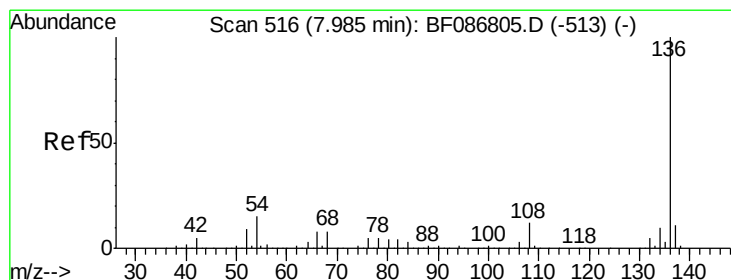
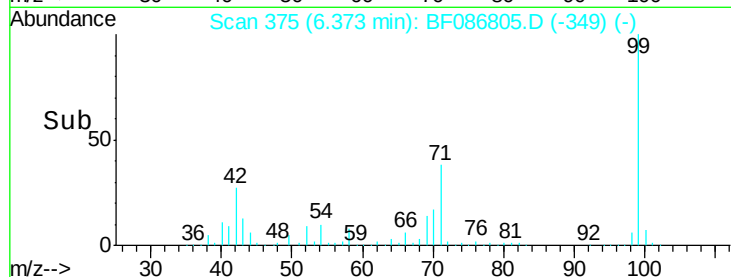
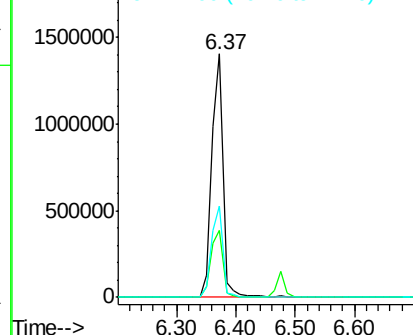
71 37.5 24.6 36.8#

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Abundance Ion 99.00 (98.70 to 99.70): BF0  
Ion 42.00 (41.70 to 42.70): BF0  
Ion 71.00 (70.70 to 71.70): BF0



#21

Naphthalene-d8

Concen: 40.00 ng

RT: 7.98 min Scan# 516

Delta R.T. -0.05 min

Lab File: BF086805.D

Acq: 8 May 2016 6:13

Tgt Ion: 136 Resp: 821086

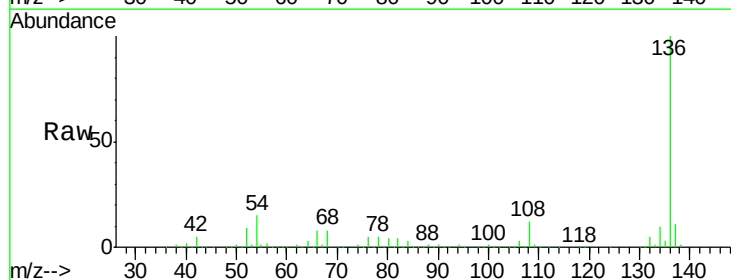
Ion Ratio Lower Upper

136 100

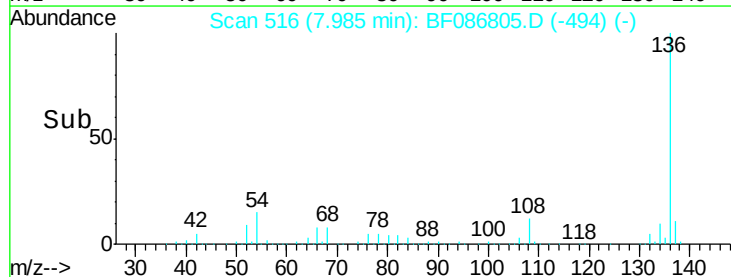
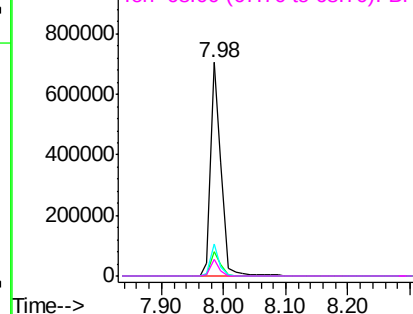
137 11.3 8.8 13.2

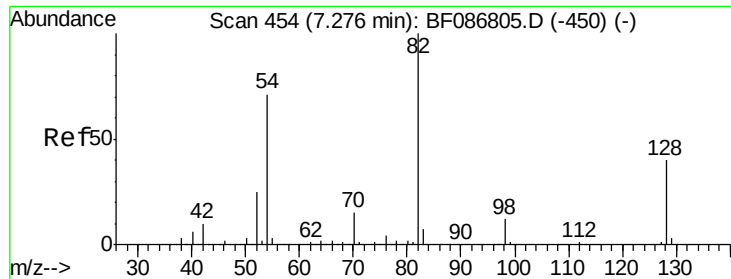
54 14.7 5.0 7.4#

68 7.9 4.4 6.6#



Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF0  
Ion 68.00 (67.70 to 68.70): BF0





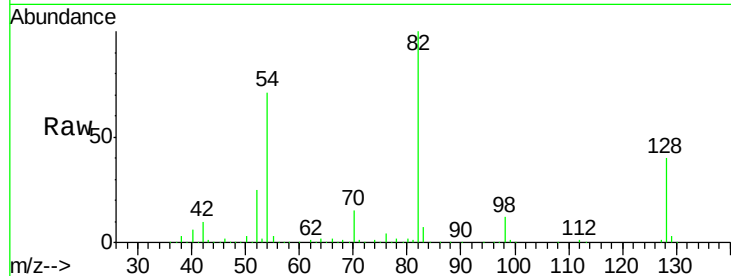
#23  
 Nitrobenzene-d5  
 Concen: 73.10 ng  
 RT: 7.28 min Scan# 454  
 Delta R.T. -0.03 min  
 Lab File: BF086805.D  
 Acq: 8 May 2016 6:13

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EUT01-TD-B3(5-9)-CRE

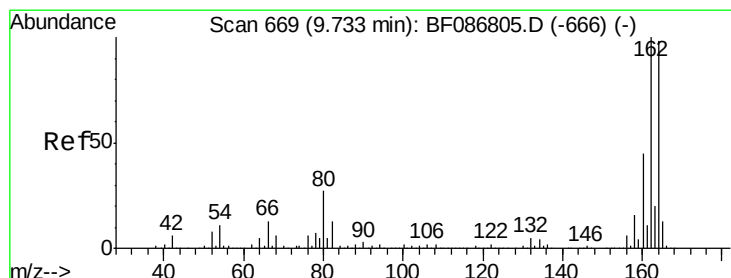
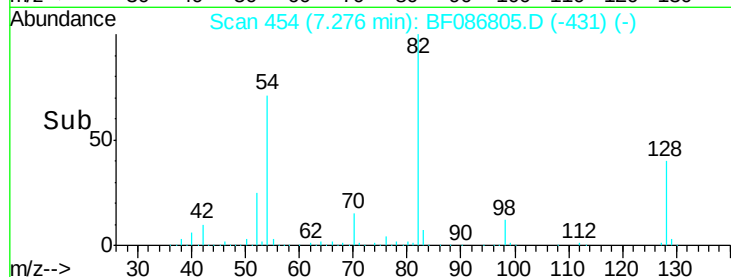
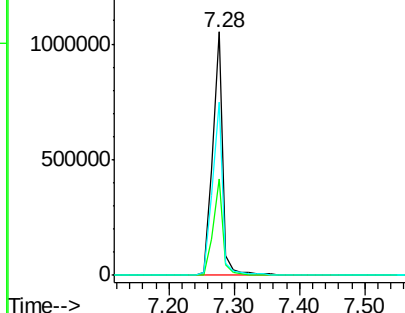
Tgt Ion: 82 Resp: 1168056  
 Ion Ratio Lower Upper  
 82 100  
 128 39.5 40.6 61.0#  
 54 71.1 38.1 57.1#

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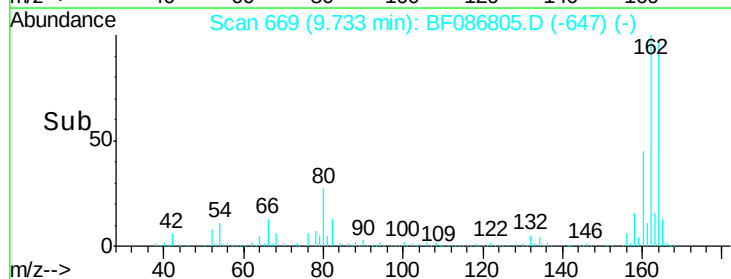
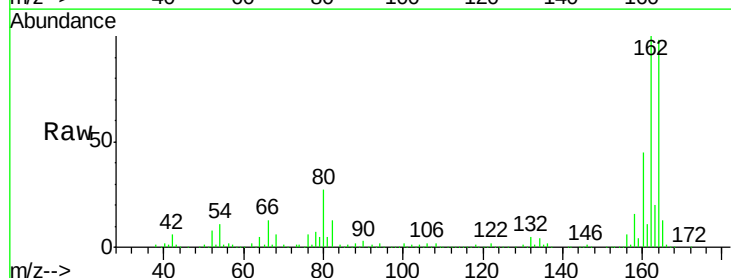
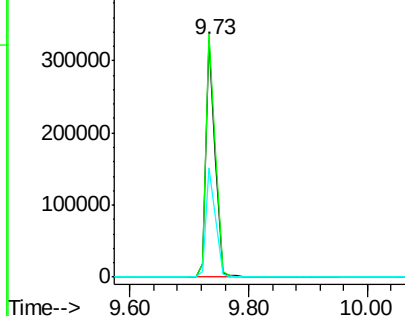
Abundance Ion 82.00 (81.70 to 82.70): BF0  
 Ion 128.00 (127.70 to 128.70): E  
 Ion 54.00 (53.70 to 54.70): BF0

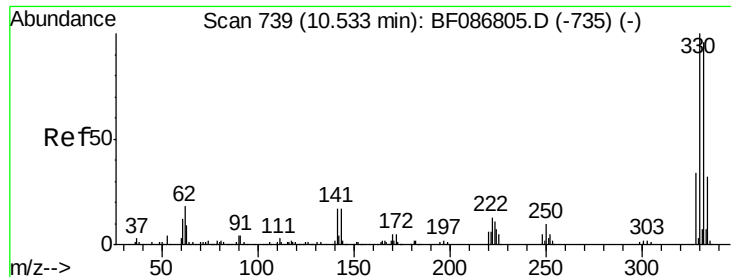


#38  
 Acenaphthene-d10  
 Concen: 40.00 ng  
 RT: 9.73 min Scan# 669  
 Delta R.T. -0.05 min  
 Lab File: BF086805.D  
 Acq: 8 May 2016 6:13

Tgt Ion: 164 Resp: 362304  
 Ion Ratio Lower Upper  
 164 100  
 162 102.4 82.8 124.2  
 160 45.7 36.9 55.3

Abundance Ion 164.00 (163.70 to 164.70): E  
 Ion 162.00 (161.70 to 162.70): E  
 Ion 160.00 (159.70 to 160.70): E





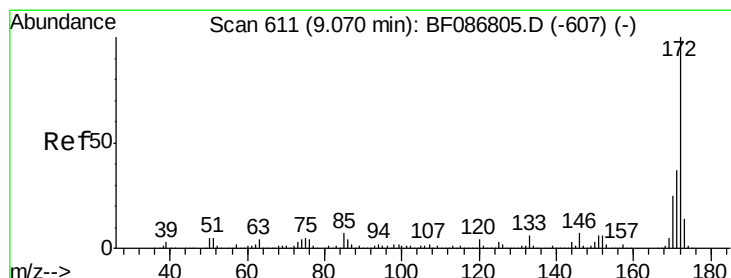
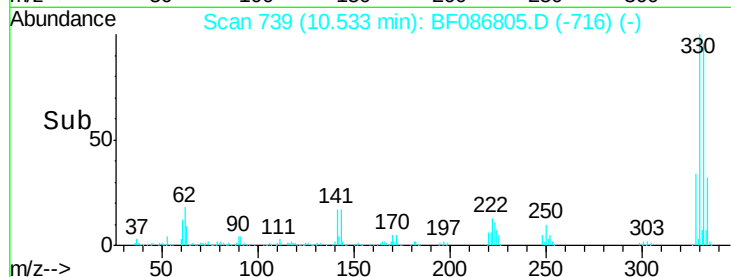
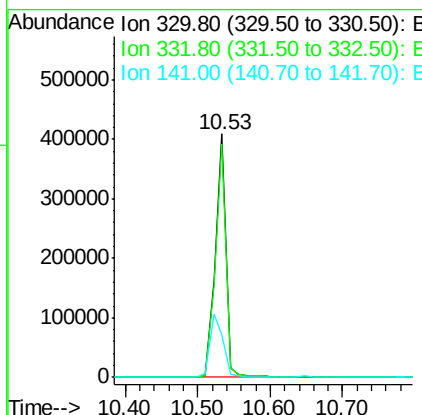
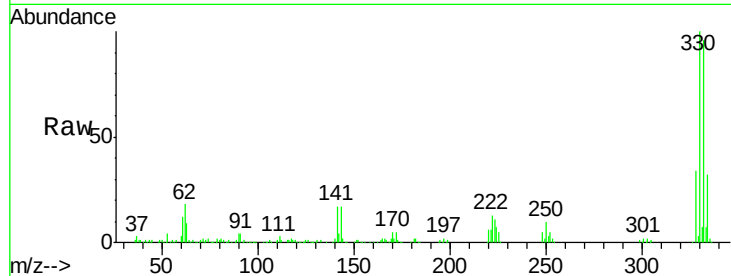
#41  
 2,4,6-Tribromophenol  
 Concen: 118.52 ng  
 RT: 10.53 min Scan# 739  
 Delta R.T. -0.03 min  
 Lab File: BF086805.D  
 Acq: 8 May 2016 6:13

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EUT01-TD-B3(5-9)-CRE

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 420069 |       |       |
| 332     | 96.3  | 79.0   | 118.4 |       |
| 141     | 32.6  | 31.2   | 46.8  |       |

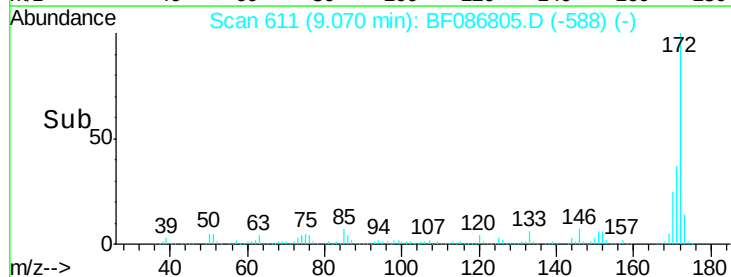
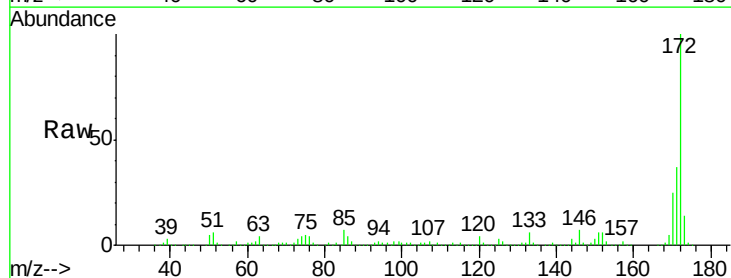
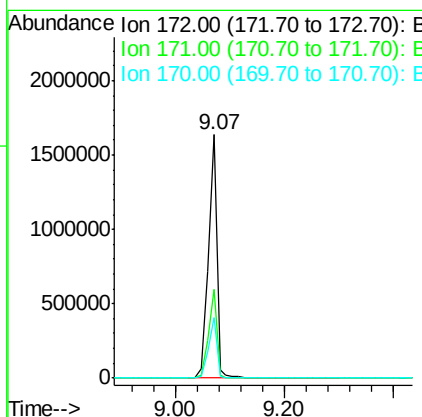
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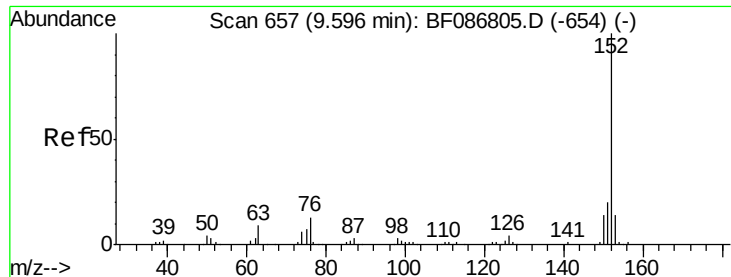
Sohil  
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#44  
 2-Fluorobiphenyl  
 Concen: 79.45 ng  
 RT: 9.07 min Scan# 611  
 Delta R.T. -0.03 min  
 Lab File: BF086805.D  
 Acq: 8 May 2016 6:13

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 172     | 100   | 1755976 |       |       |
| 171     | 36.6  | 29.0    | 43.6  |       |
| 170     | 25.1  | 19.8    | 29.8  |       |





#48

Acenaphthylene

Concen: 5.01 ng

RT: 9.60 min Scan# 657

Delta R.T. -0.05 min

Lab File: BF086805.D

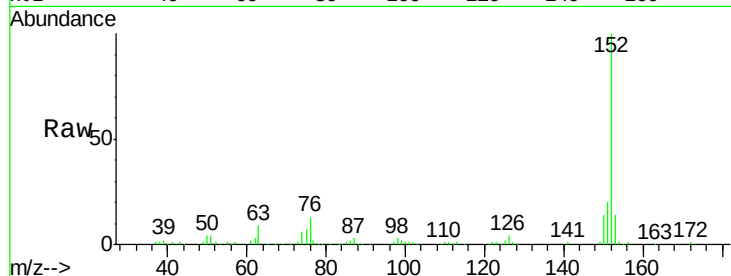
Acq: 8 May 2016 6:13

Instrument :

BNA\_F

ClientSampleId :

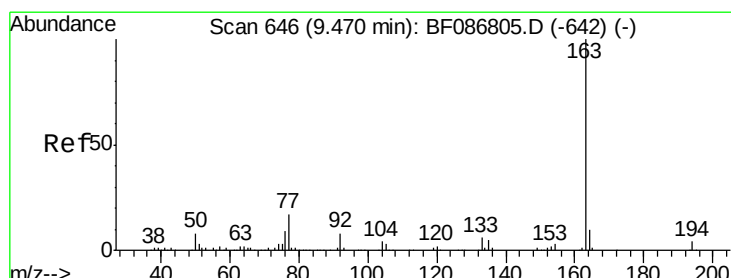
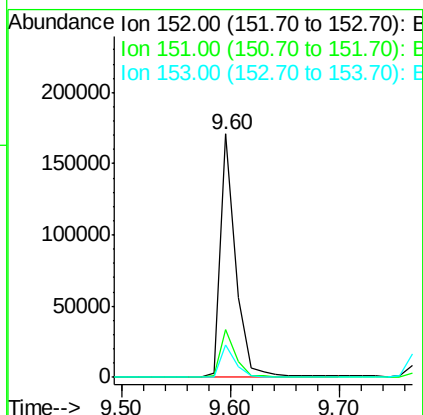
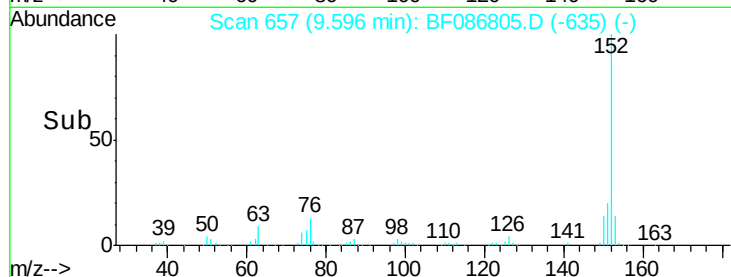
EUT01-TD-B3(5-9)-CRE



| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 152     | 100   | 170145 |       |       |
| 151     | 19.8  | 16.8   | 25.2  |       |
| 153     | 13.5  | 10.9   | 16.3  |       |

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#49

Dimethylphthalate

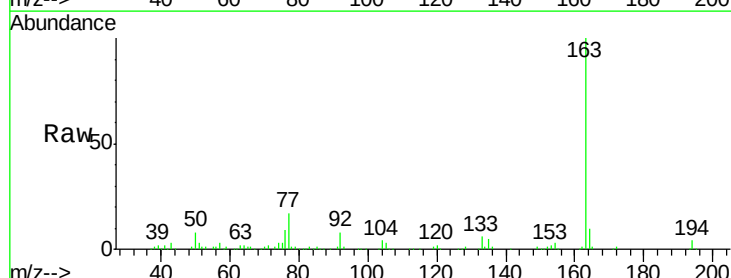
Concen: 7.00 ng

RT: 9.47 min Scan# 646

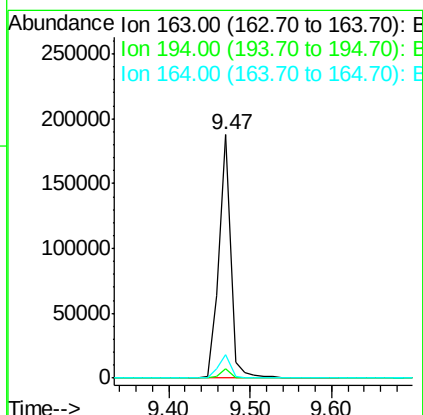
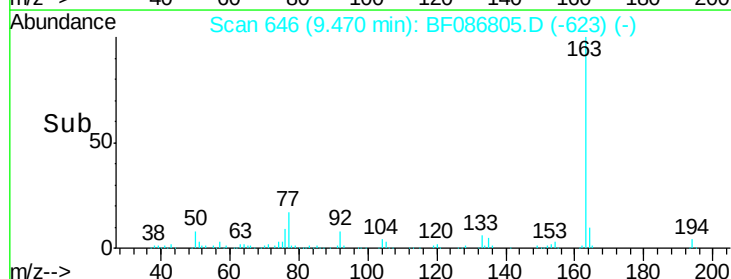
Delta R.T. -0.03 min

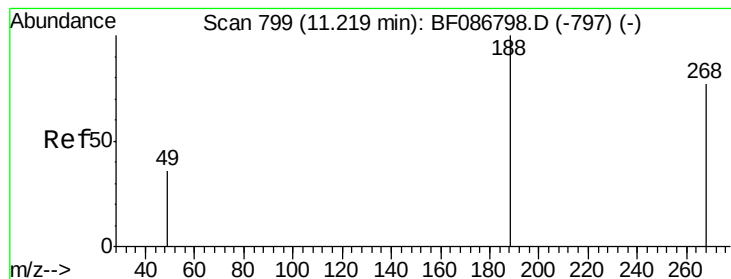
Lab File: BF086805.D

Acq: 8 May 2016 6:13



| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 189000 |       |       |
| 194     | 3.6   | 2.6    | 4.0   |       |
| 164     | 9.5   | 8.2    | 12.4  |       |





#63

Phenanthrene-d10

Concen: 40.00 ng

RT: 11.22 min Scan# 799

Delta R.T. -0.03 min

Lab File: BF086805.D

Acq: 8 May 2016 6:13

Instrument :

BNA\_F

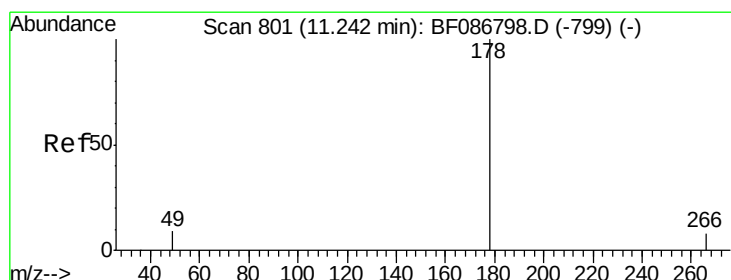
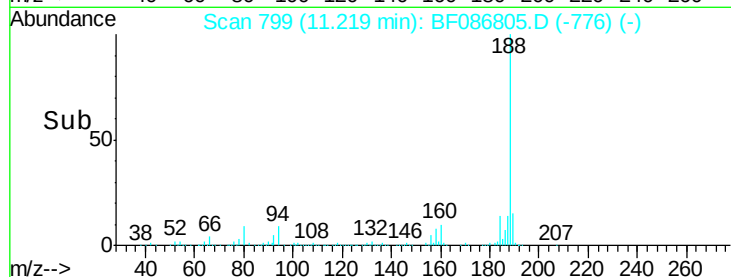
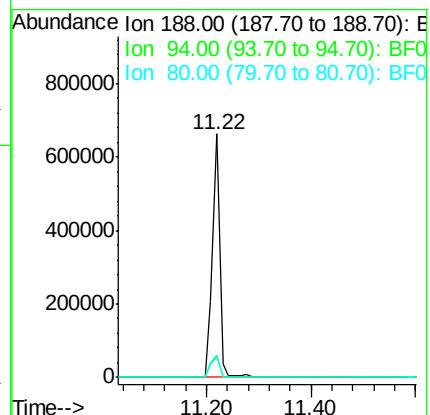
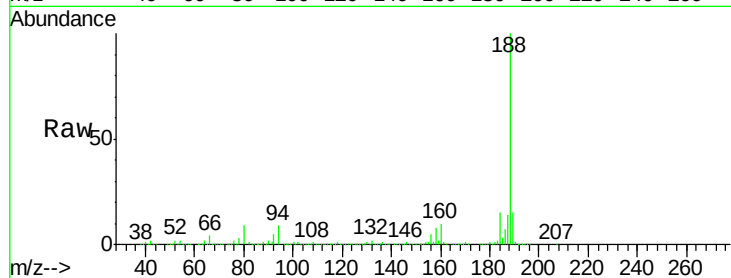
ClientSampleId :

EUT01-TD-B3(5-9)-CRE

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 188   | Resp: | 644743 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 8.8   | 6.8   | 10.2   |
| 80        | 9.4   | 7.1   | 10.7   |

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#70

Phenanthrene

Concen: 19.22 ng

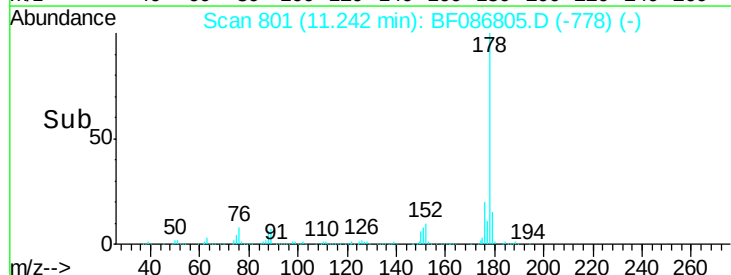
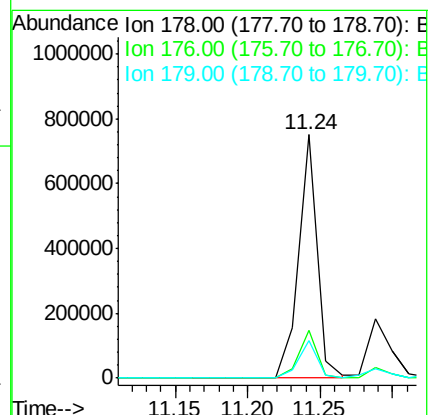
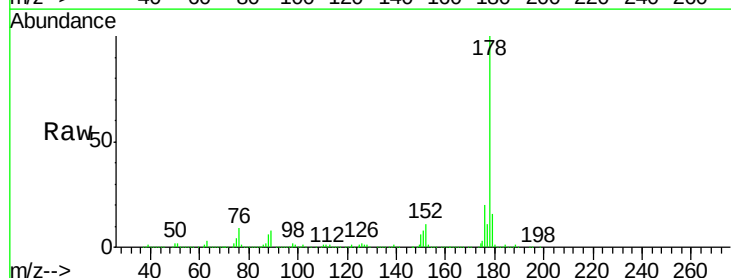
RT: 11.24 min Scan# 801

Delta R.T. -0.03 min

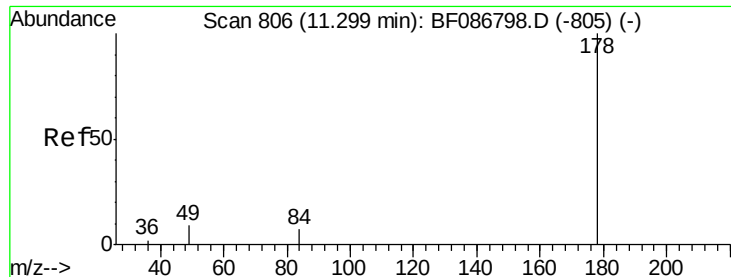
Lab File: BF086805.D

Acq: 8 May 2016 6:13

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 665531 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 19.7  | 16.0  | 24.0   |
| 179       | 15.6  | 12.6  | 18.8   |







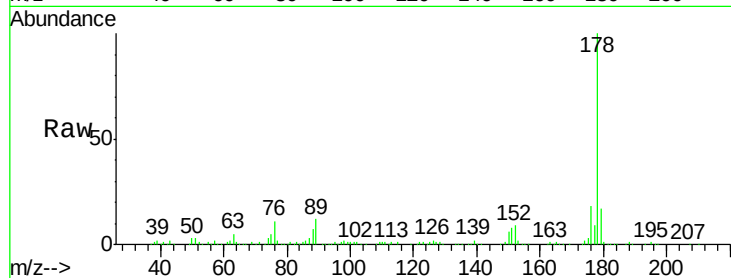
#71  
 Anthracene  
 Concen: 5.97 ng  
 RT: 11.29 min Scan# 805  
 Delta R.T. -0.05 min  
 Lab File: BF086805.D  
 Acq: 8 May 2016 6:13

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EUT01-TD-B3(5-9)-CRE

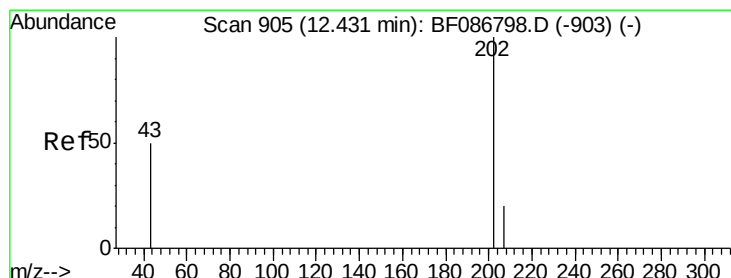
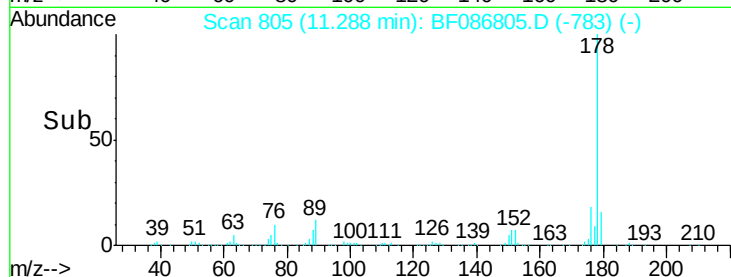
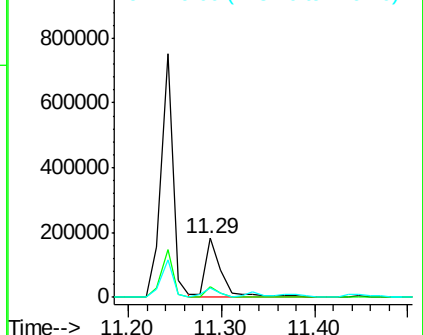
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.3  | 15.6  | 23.4  |
| 179     | 16.6  | 12.7  | 19.1  |

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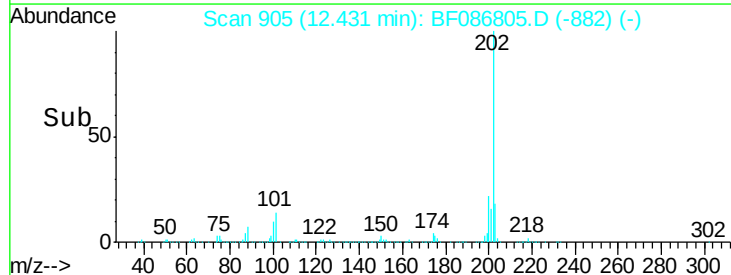
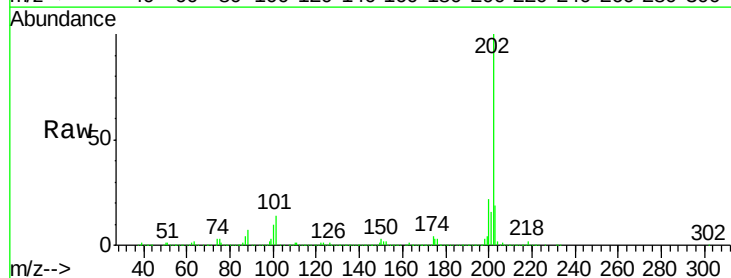
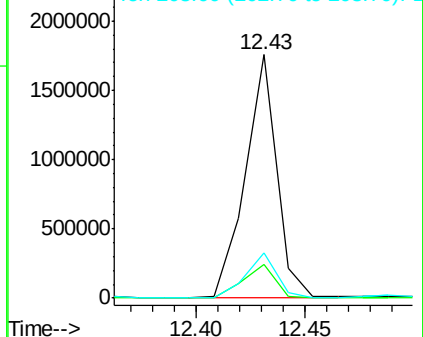
Abundance Ion 178.00 (177.70 to 178.70): E  
 Ion 176.00 (175.70 to 176.70): E  
 Ion 179.00 (178.70 to 179.70): E

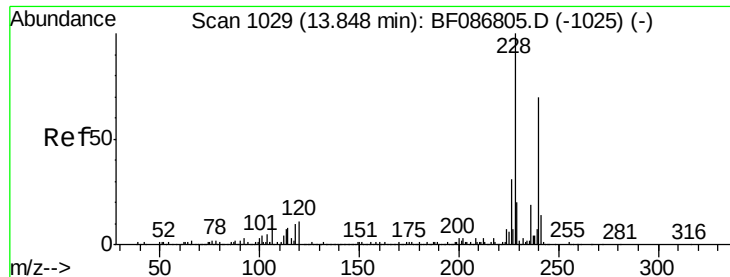


#74  
 Fluoranthene  
 Concen: 50.91 ng  
 RT: 12.43 min Scan# 905  
 Delta R.T. -0.03 min  
 Lab File: BF086805.D  
 Acq: 8 May 2016 6:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 13.7  | 0.0   | 35.4  |
| 203     | 18.6  | 0.0   | 38.1  |

Abundance Ion 202.00 (201.70 to 202.70): E  
 Ion 101.00 (100.70 to 101.70): E  
 Ion 203.00 (202.70 to 203.70): E





#75

Chrysene-d12

Concen: 40.00 ng

RT: 13.85 min Scan# 1029

Delta R.T. -0.03 min

Lab File: BF086805.D

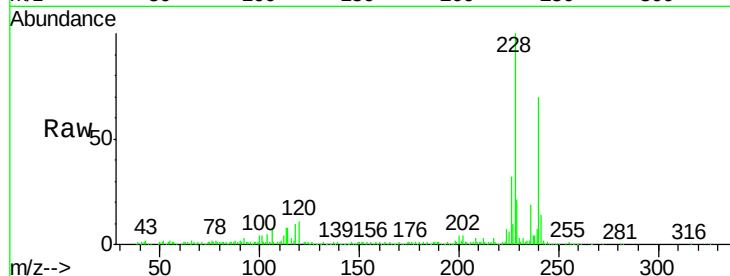
Acq: 8 May 2016 6:13

Instrument :

BNA\_F

ClientSampleId :

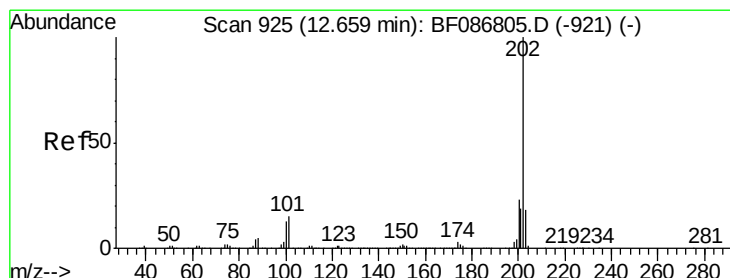
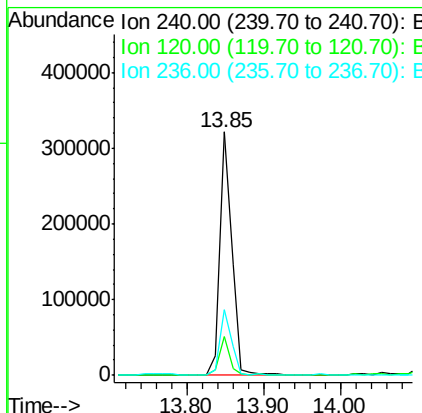
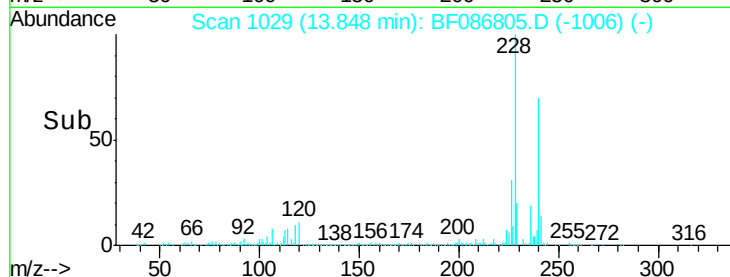
EUT01-TD-B3(5-9)-CRE



| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 352325 |       |       |
| 120     | 16.0  | 11.2   | 16.8  |       |
| 236     | 27.0  | 21.2   | 31.8  |       |

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#77

Pyrene

Concen: 69.37 ng

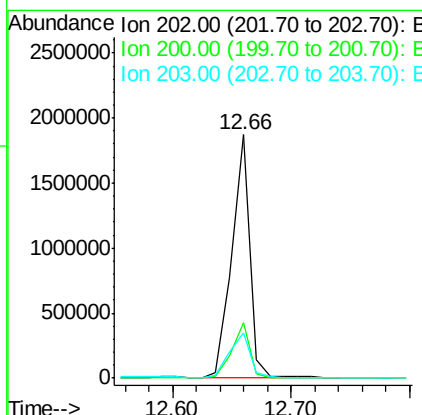
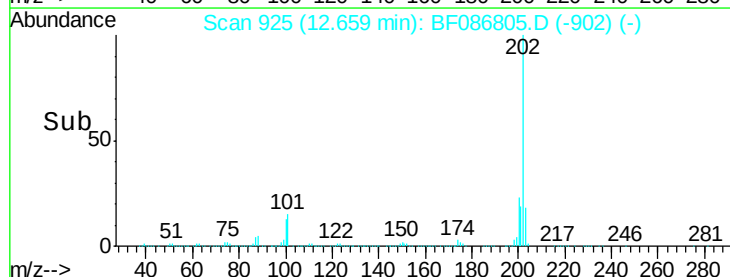
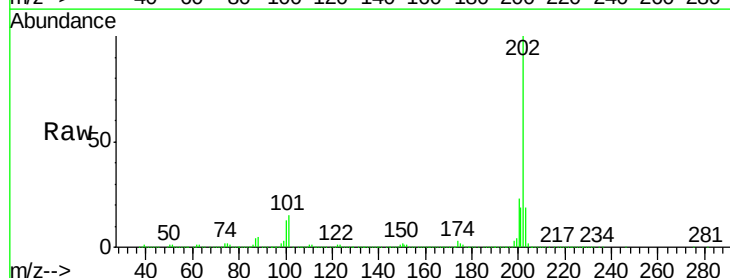
RT: 12.66 min Scan# 925

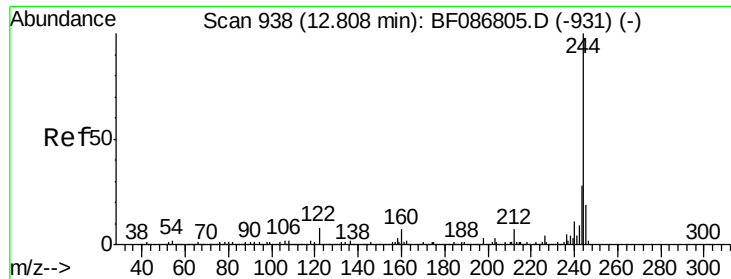
Delta R.T. -0.03 min

Lab File: BF086805.D

Acq: 8 May 2016 6:13

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 202     | 100   | 1948438 |       |       |
| 200     | 22.9  | 17.7    | 26.5  |       |
| 203     | 18.5  | 14.2    | 21.4  |       |





#78

Terphenyl-d14

Concen: 74.24 ng

RT: 12.81 min Scan# 938

Delta R.T. -0.03 min

Lab File: BF086805.D

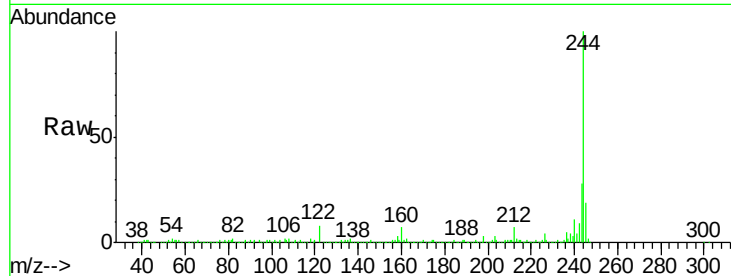
Acq: 8 May 2016 6:13

Instrument :

BNA\_F

ClientSampleId :

EUT01-TD-B3(5-9)-CRE



Tgt Ion:244 Resp: 1294155

Ion Ratio Lower Upper

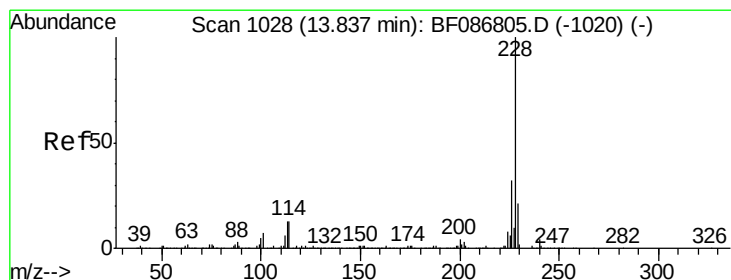
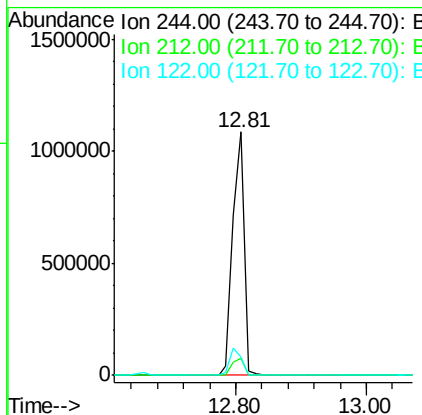
244 100

212 7.2 6.2 9.2

122 7.6 12.0 18.0#

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#80

Benzo(a)anthracene

Concen: 50.22 ng

RT: 13.84 min Scan# 1028

Delta R.T. -0.03 min

Lab File: BF086805.D

Acq: 8 May 2016 6:13

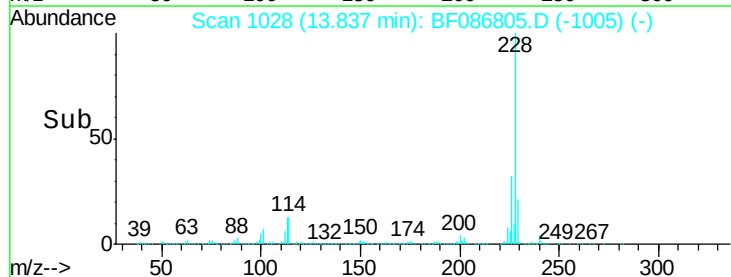
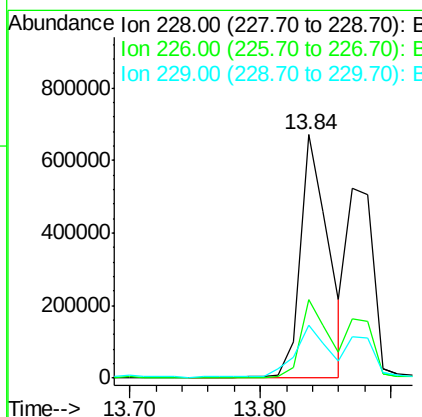
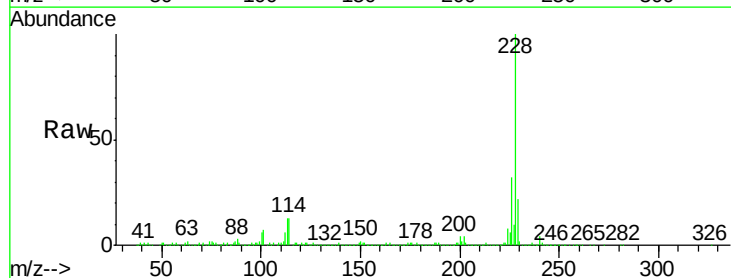
Tgt Ion:228 Resp: 1000651

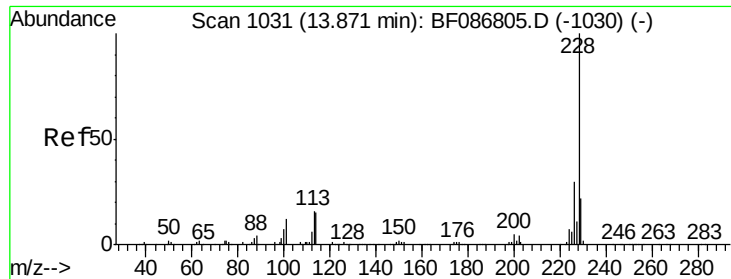
Ion Ratio Lower Upper

228 100

226 32.2 22.5 33.7

229 21.6 16.6 25.0





#82

Chrysene

Concen: 34.81 ng m

RT: 13.87 min Scan# 1031

Delta R.T. -0.05 min

Lab File: BF086805.D

Acq: 8 May 2016 6:13

Instrument :

BNA\_F

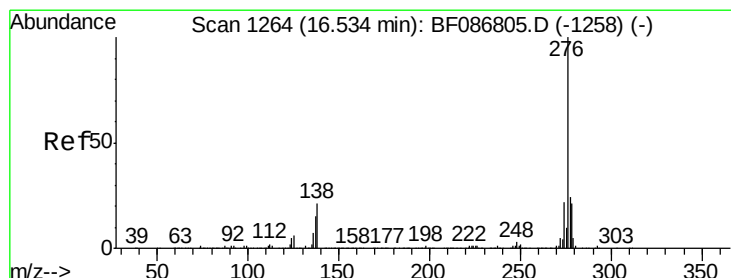
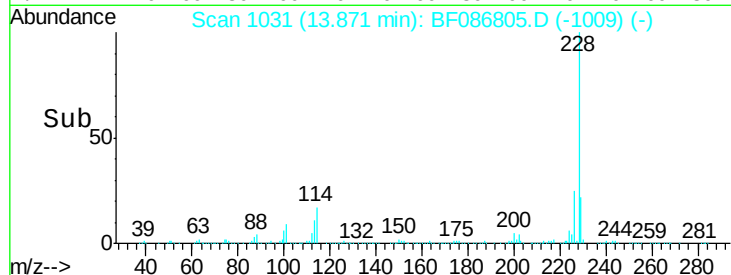
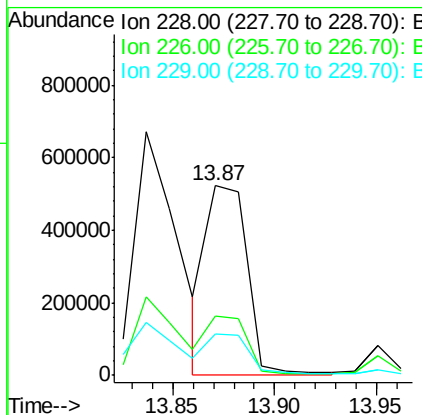
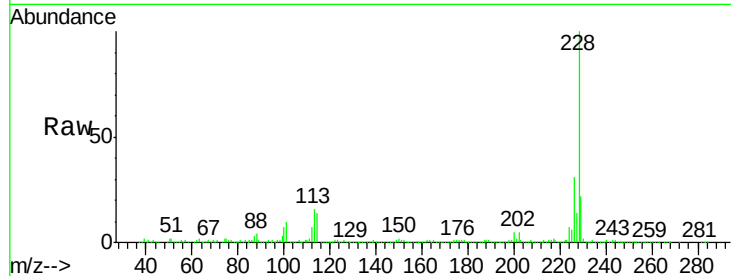
ClientSampleId :

EUT01-TD-B3(5-9)-CRE

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 228   | Resp: | 740035 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 31.2  | 24.4  | 36.6   |
| 229       | 21.6  | 15.8  | 23.8   |

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#85

Indeno(1,2,3-cd)pyrene

Concen: 30.41 ng

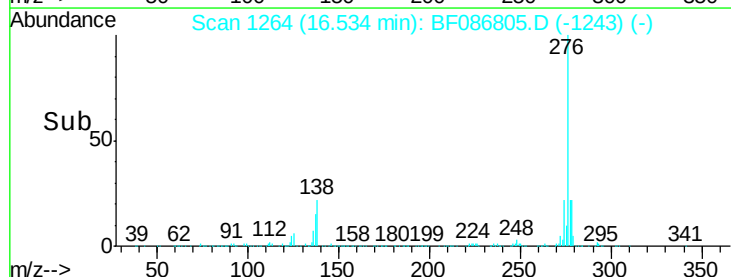
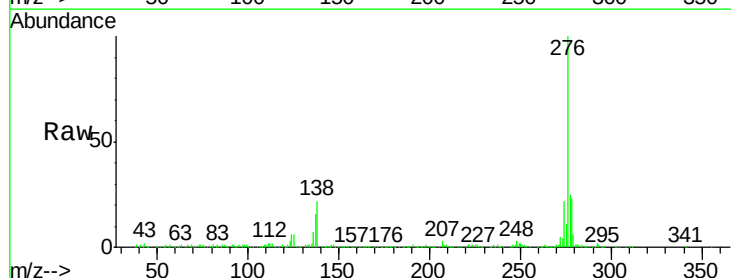
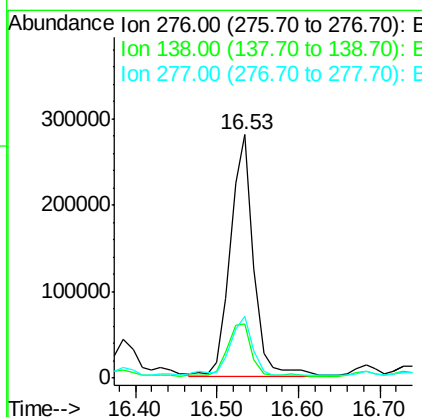
RT: 16.53 min Scan# 1264

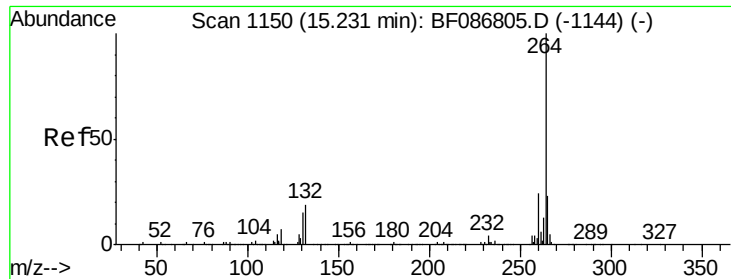
Delta R.T. -0.06 min

Lab File: BF086805.D

Acq: 8 May 2016 6:13

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 554717 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 22.4  | 25.6  | 38.4#  |
| 277       | 24.5  | 20.5  | 30.7   |





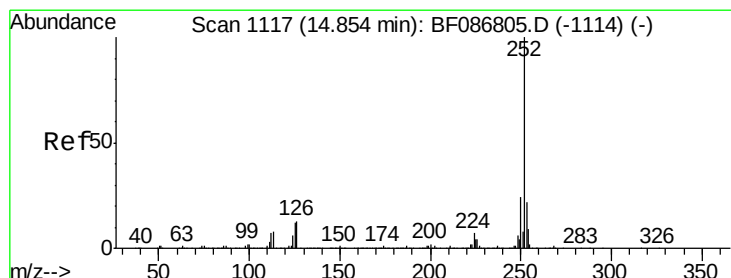
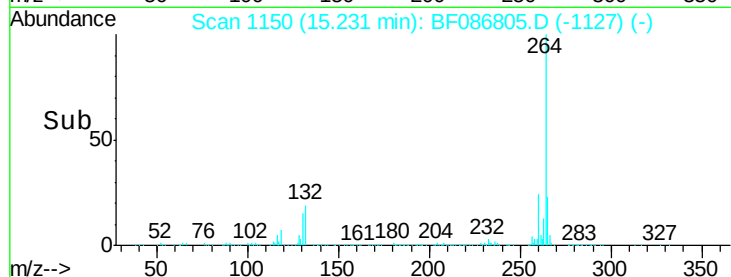
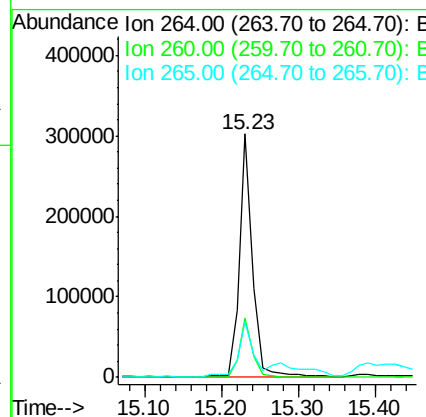
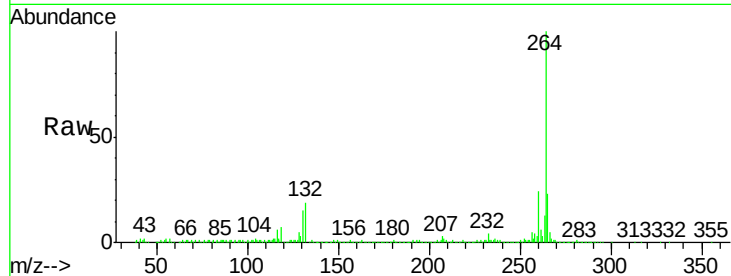
#86  
Perylene-d12  
Concen: 40.00 ng  
RT: 15.23 min Scan# 1150  
Delta R.T. -0.03 min  
Lab File: BF086805.D  
Acq: 8 May 2016 6:13

Instrument :  
BNA\_F  
ClientSampleId :  
EUT01-TD-B3(5-9)-CRE

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.5  | 19.5  | 29.3  |
| 265     | 22.9  | 17.3  | 25.9  |

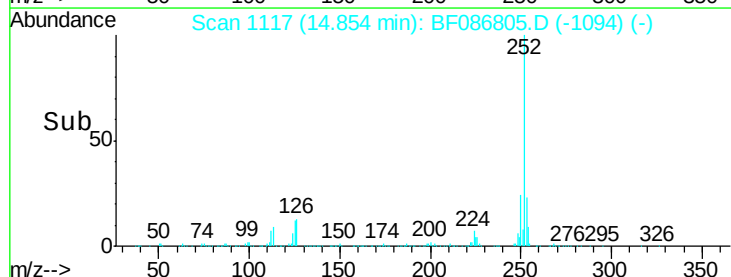
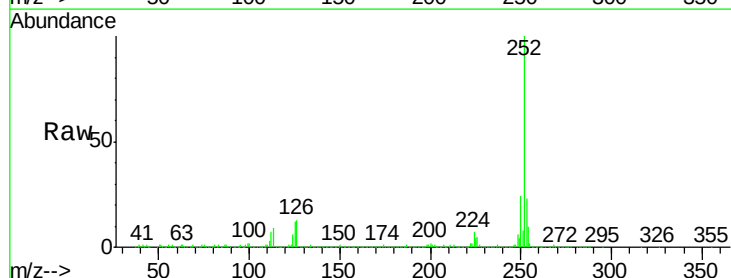
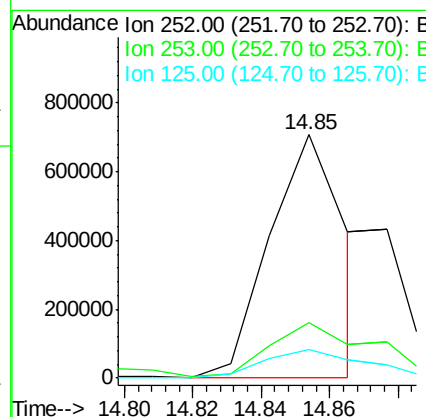
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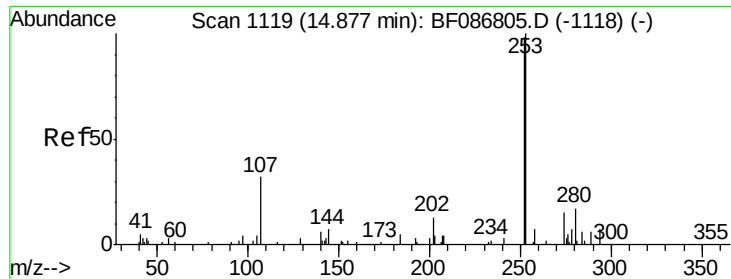
Sohil  
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#87  
Benzo(b)fluoranthene  
Concen: 49.57 ng m  
RT: 14.85 min Scan# 1117  
Delta R.T. -0.03 min  
Lab File: BF086805.D  
Acq: 8 May 2016 6:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.0  | 17.8  | 26.6  |
| 125     | 12.0  | 11.4  | 17.0  |





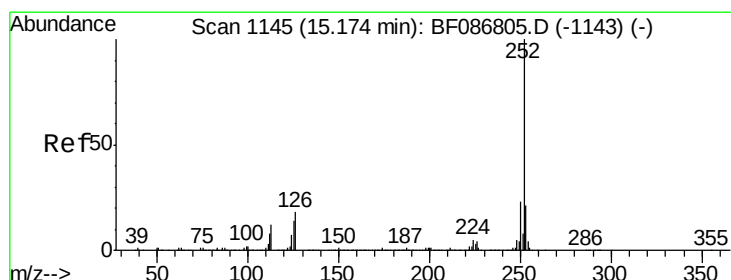
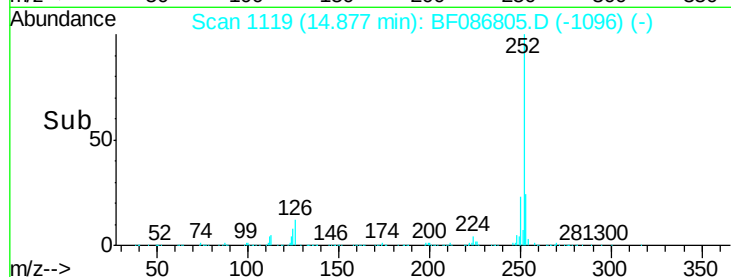
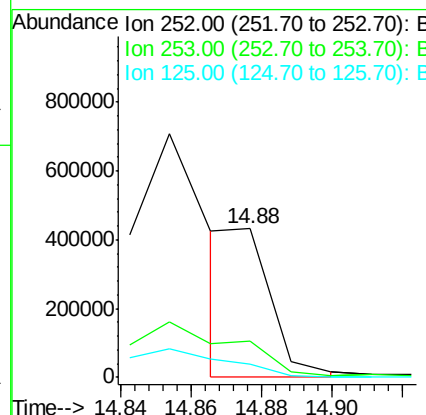
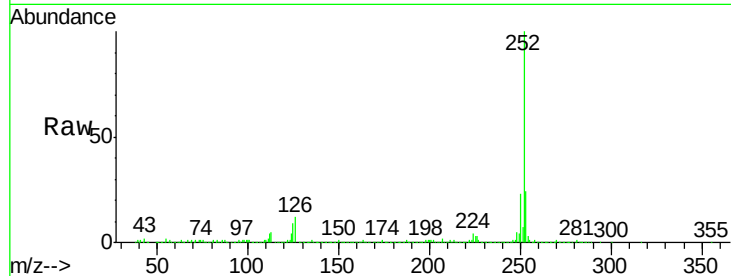
#88  
Benzo(k)fluoranthene  
Concen: 16.33 ng m  
RT: 14.88 min Scan# 1119  
Delta R.T. -0.03 min  
Lab File: BF086805.D  
Acq: 8 May 2016 6:13

Instrument :  
BNA\_F  
ClientSampleId :  
EUT01-TD-B3(5-9)-CRE

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 24.2  | 17.8       | 26.6  |
| 125     | 8.5   | 9.1        | 13.7# |

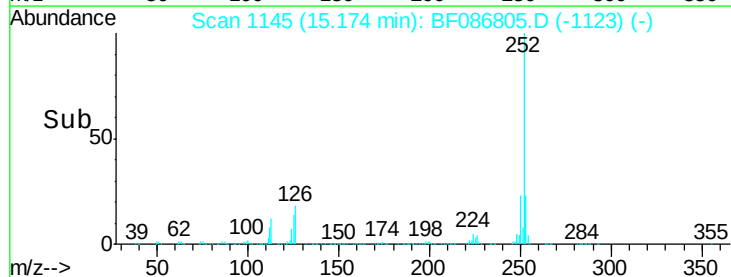
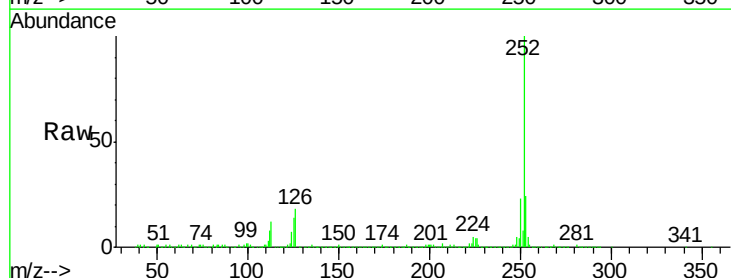
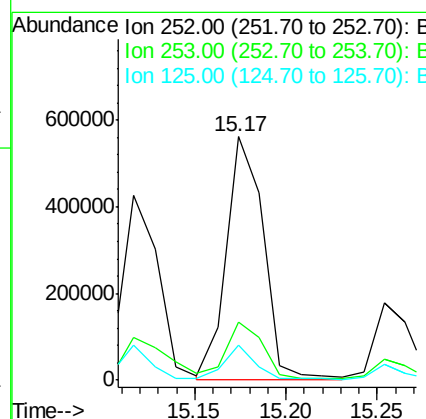
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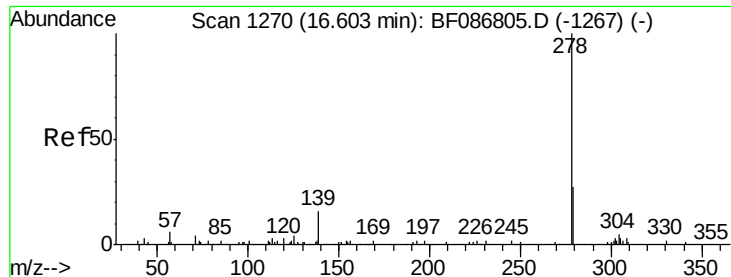
Sohil  
5/9/2016 7:20:20 PM



#89  
Benzo(a)pyrene  
Concen: 39.86 ng m  
RT: 15.17 min Scan# 1145  
Delta R.T. -0.05 min  
Lab File: BF086805.D  
Acq: 8 May 2016 6:13

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 23.7  | 17.2       | 25.8  |
| 125     | 14.2  | 9.0        | 13.6# |





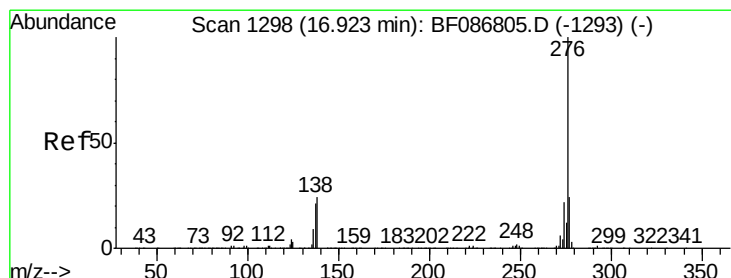
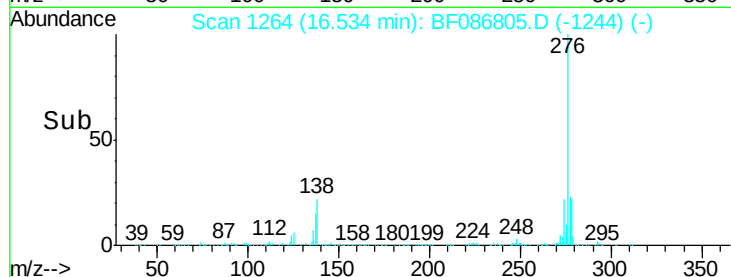
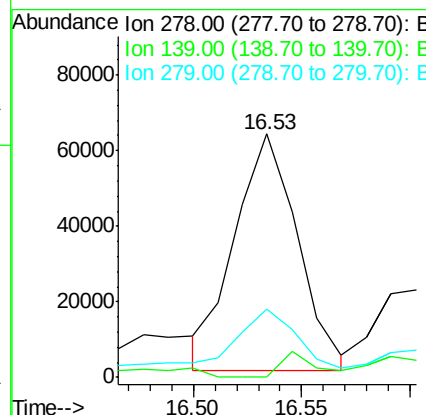
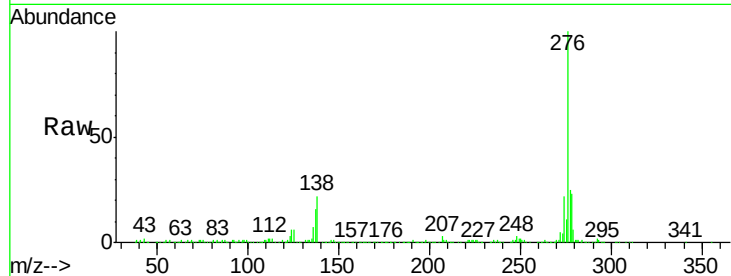
#90  
Dibenzo(a,h)anthracene  
Concen: 6.53 ng m  
RT: 16.53 min Scan# 1264  
Delta R.T. -0.07 min  
Lab File: BF086805.D  
Acq: 8 May 2016 6:13

Instrument :  
BNA\_F  
ClientSampleId :  
EUT01-TD-B3(5-9)-CRE

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 16.6  | 24.8# |
| 279     | 28.2  | 19.6  | 29.4  |

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#91  
Benzo(g,h,i)perylene  
Concen: 25.48 ng  
RT: 16.92 min Scan# 1298  
Delta R.T. -0.07 min  
Lab File: BF086805.D  
Acq: 8 May 2016 6:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.7  | 19.6  | 29.4  |
| 138     | 23.9  | 23.6  | 35.4  |

