

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF031116\  
 Data File : BF085384.D  
 Acq On : 11 Mar 2016 20:58  
 Operator : UM/SJ  
 Sample : H1758-02  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 POST-EX-16-20160309

Manual Integrations  
 APPROVED

UMANGI  
 3/14/2016 10:45:29 AM

Quant Time: Mar 14 02:48:29 2016  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF030316.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Mar 04 00:54:58 2016  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.94  | 152  | 156950   | 20.00  | ng    | -0.05    |
| 21) Naphthalene-d8          | 8.22  | 136  | 590671   | 20.00  | ng    | -0.05    |
| 38) Acenaphthene-d10        | 9.98  | 164  | 262111   | 20.00  | ng    | -0.05    |
| 63) Phenanthrene-d10        | 11.46 | 188  | 394312   | 20.00  | ng    | -0.05    |
| 75) Chrysene-d12            | 14.11 | 240  | 282533   | 20.00  | ng    | -0.05    |
| 86) Perylene-d12            | 15.58 | 264  | 299751   | 20.00  | ng    | -0.03    |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.53  | 112  | 1048749  | 112.08 | ng    | -0.05    |
| 7) Phenol-d6                | 6.56  | 99   | 1226749  | 100.07 | ng    | -0.05    |
| 23) Nitrobenzene-d5         | 7.50  | 82   | 815345   | 73.87  | ng    | -0.05    |
| 41) 2,4,6-Tribromophenol    | 10.77 | 330  | 216637   | 96.59  | ng    | -0.05    |
| 44) 2-Fluorobiphenyl        | 9.30  | 172  | 1336415  | 77.54  | ng    | -0.05    |
| 78) Terphenyl-d14           | 13.05 | 244  | 847694   | 69.65  | ng    | -0.03    |
| Target Compounds            |       |      |          |        |       | Qvalue   |
| 49) Dimethylphthalate       | 9.69  | 163  | 134169   | 6.67   | ng    | 98       |
| 70) Phenanthrene            | 11.49 | 178  | 457226   | 22.13  | ng    | 98       |
| 71) Anthracene              | 11.53 | 178  | 111636   | 5.09   | ng    | 97       |
| 72) Carbazole               | 11.69 | 167  | 42300    | 2.20   | ng    | 98       |
| 74) Fluoranthene            | 12.68 | 202  | 565482   | 27.27  | ng    | 97       |
| 77) Pyrene                  | 12.91 | 202  | 530898   | 24.97  | ng    | 99       |
| 80) Benzo(a)anthracene      | 14.09 | 228  | 306653   | 18.13  | ng    | 97       |
| 82) Chrysene                | 14.13 | 228  | 222547   | 14.24  | ng    | 97       |
| 85) Indeno(1,2,3-cd)pyrene  | 17.03 | 276  | 144601   | 11.86  | ng    | 92       |
| 87) Benzo(b)fluoranthene    | 15.15 | 252  | 316350m  | 15.83  | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.16 | 252  | 147233m  | 9.14   | ng    |          |
| 89) Benzo(a)pyrene          | 15.51 | 252  | 254401   | 15.37  | ng    | # 94     |
| 90) Dibenzo(a,h)anthracene  | 17.04 | 278  | 33971m   | 2.40   | ng    |          |
| 91) Benzo(g,h,i)perylene    | 17.48 | 276  | 137342   | 9.66   | ng    | 97       |

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

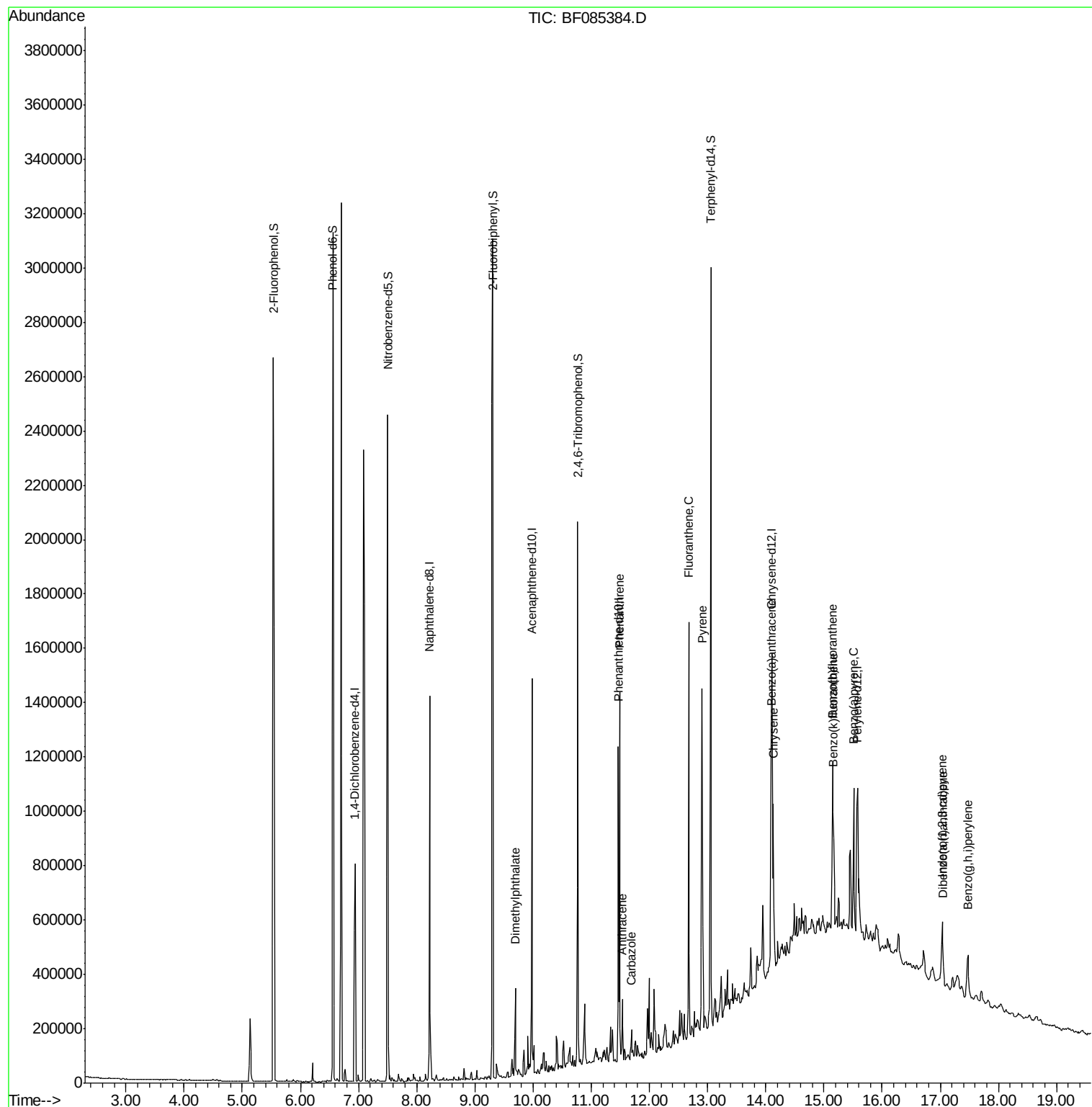
Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF031116\  
Data File : BF085384.D  
Acq On : 11 Mar 2016 20:58  
Operator : UM/SJ  
Sample : H1758-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

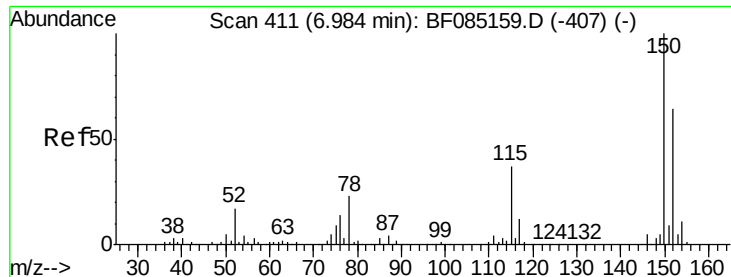
Instrument :  
BNA\_F  
ClientSampleId :  
POST-EX-16-20160309

Manual Integrations  
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3/14/2016 10:45:29 AM

Quant Time: Mar 14 02:48:29 2016  
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF030316.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Mar 04 00:54:58 2016  
Response via : Initial Calibration





#1

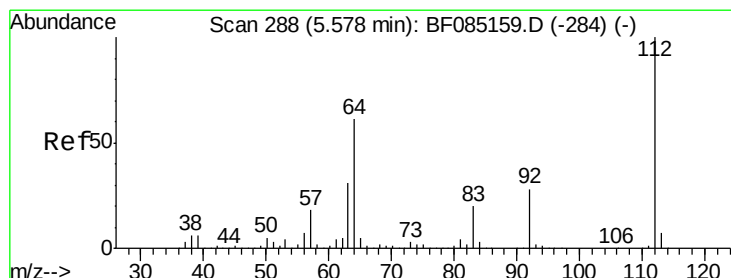
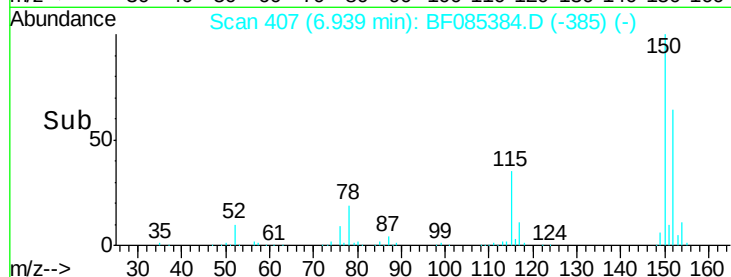
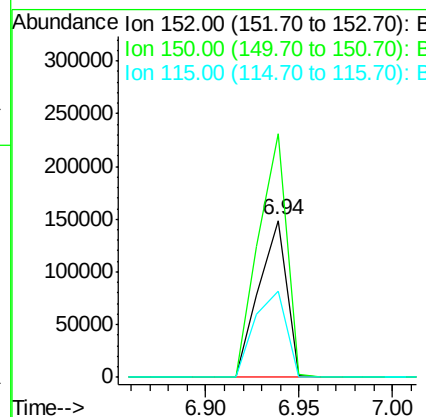
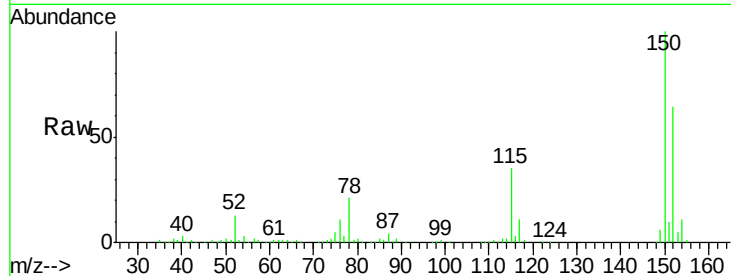
1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 6.94 min Scan# 407  
 Delta R.T. -0.05 min  
 Lab File: BF085384.D  
 Acq: 11 Mar 2016 20:58

Instrument :  
 BNA\_F  
 ClientSampleId :  
 POST-EX-16-20160309

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 152     | 100   | 156950 |       |       |
| 150     | 155.1 | 124.6  | 186.8 |       |
| 115     | 54.7  | 46.6   | 70.0  |       |

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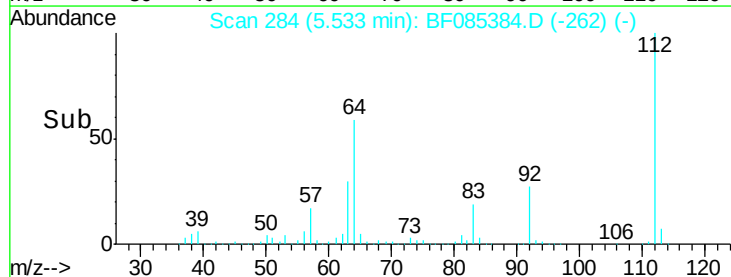
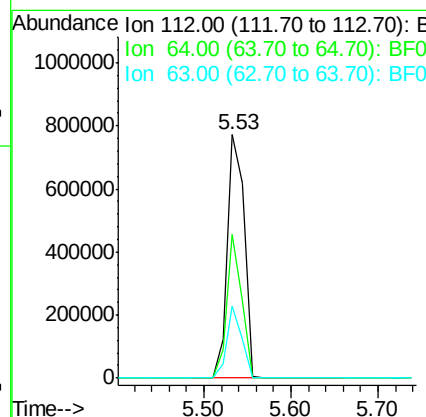
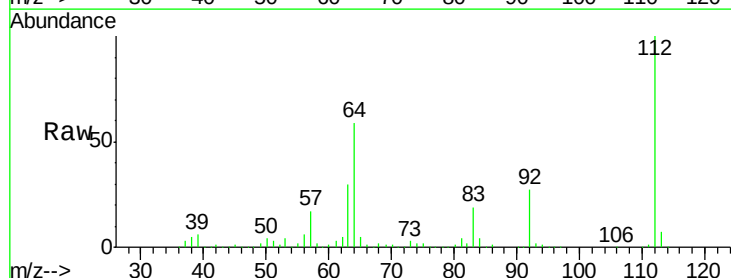
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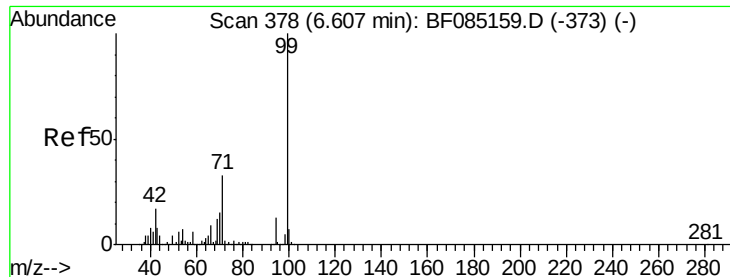


#5

2-Fluorophenol  
 Concen: 112.08 ng  
 RT: 5.53 min Scan# 284  
 Delta R.T. -0.05 min  
 Lab File: BF085384.D  
 Acq: 11 Mar 2016 20:58

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 112     | 100   | 1048749 |       |       |
| 64      | 59.2  | 49.0    | 73.4  |       |
| 63      | 29.9  | 24.8    | 37.2  |       |





#7

Phenol-d6

Concen: 100.07 ng

RT: 6.56 min Scan# 374

Delta R.T. -0.05 min

Lab File: BF085384.D

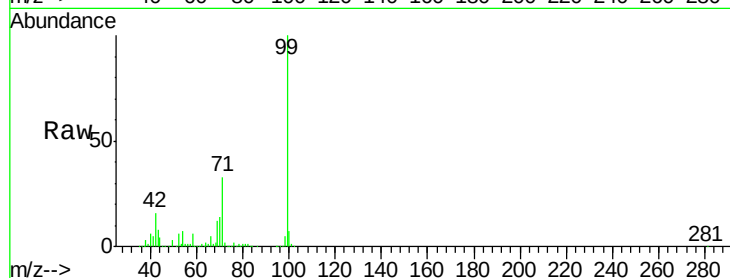
Acq: 11 Mar 2016 20:58

Instrument :

BNA\_F

ClientSampleId :

POST-EX-16-20160309



Tgt Ion: 99 Resp: 1226749

Ion Ratio Lower Upper

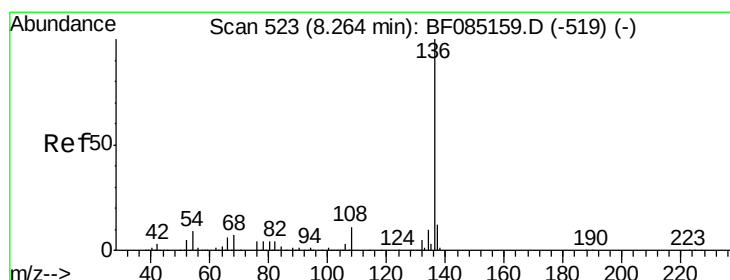
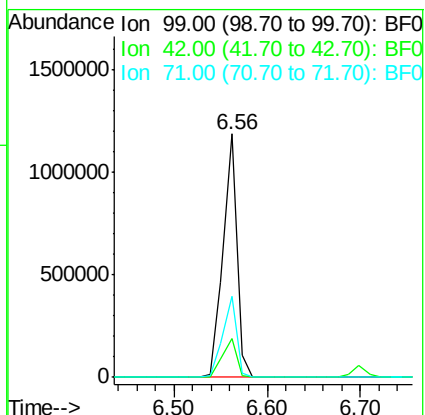
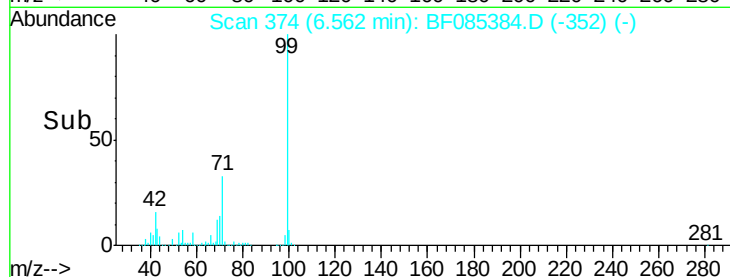
99 100

42 15.9 13.6 20.4

71 33.4 26.7 40.1

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#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.22 min Scan# 519

Delta R.T. -0.05 min

Lab File: BF085384.D

Acq: 11 Mar 2016 20:58

Tgt Ion: 136 Resp: 590671

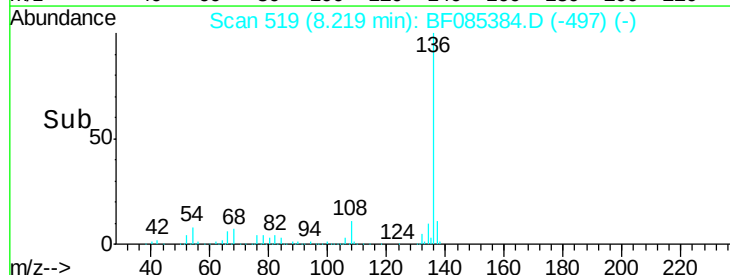
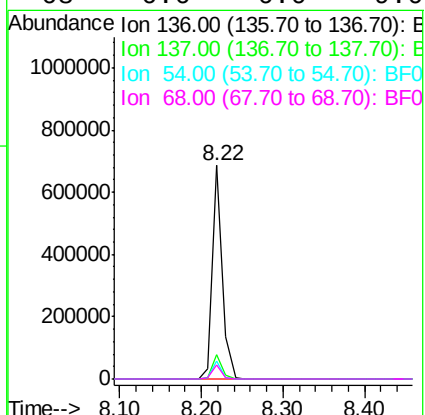
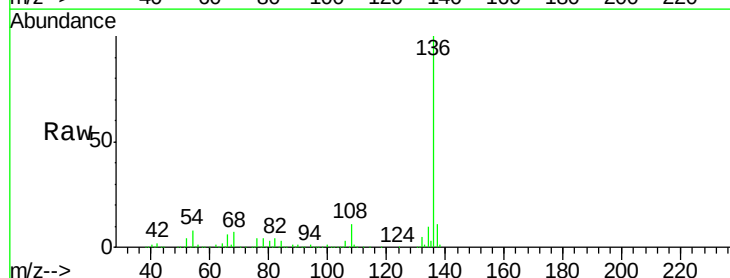
Ion Ratio Lower Upper

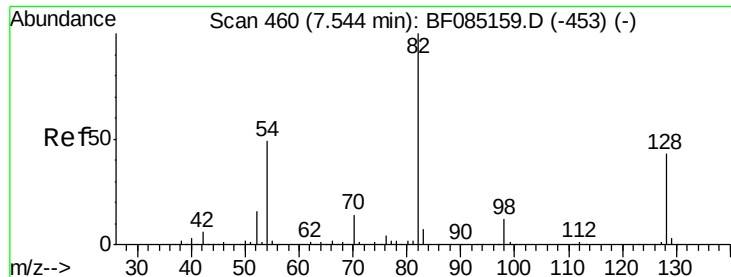
136 100

137 11.4 9.3 13.9

54 8.2 7.4 11.2

68 6.6 6.0 9.0





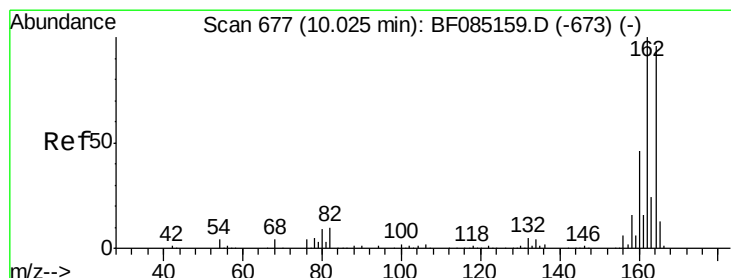
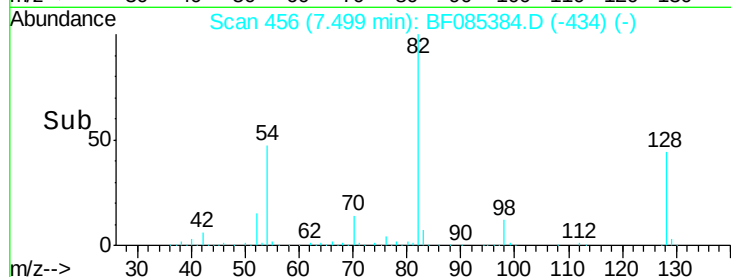
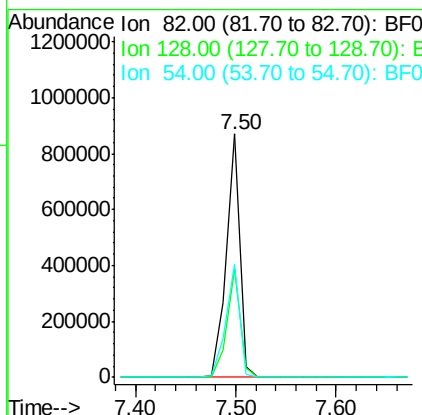
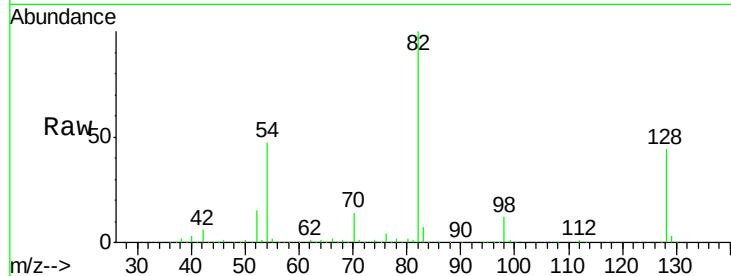
#23  
 Nitrobenzene-d5  
 Concen: 73.87 ng  
 RT: 7.50 min Scan# 456  
 Delta R.T. -0.05 min  
 Lab File: BF085384.D  
 Acq: 11 Mar 2016 20:58

Instrument :  
 BNA\_F  
 ClientSampleId :  
 POST-EX-16-20160309

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 82      | 100   |      |       |       |
| 128     | 44.3  | 34.5 | 51.7  |       |
| 54      | 46.7  | 39.3 | 58.9  |       |

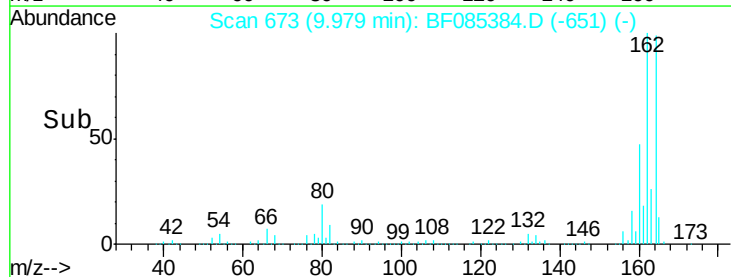
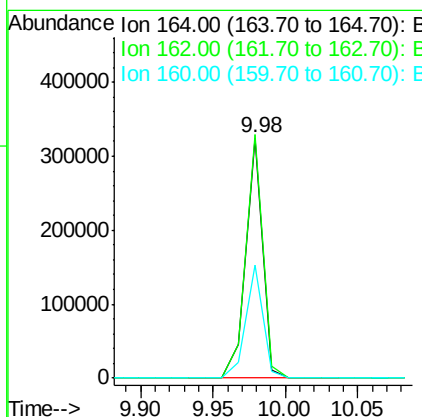
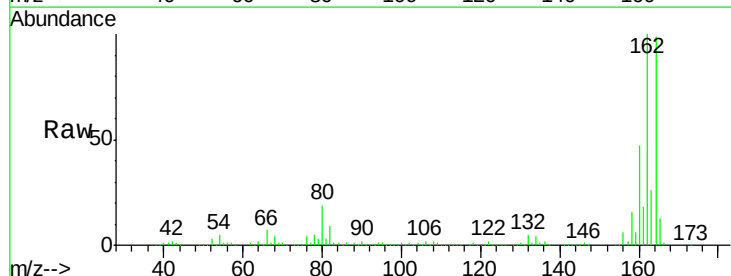
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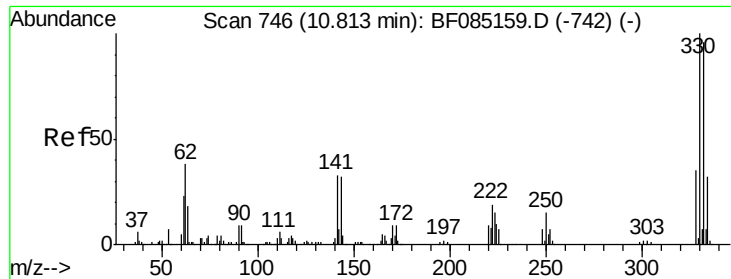
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#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.98 min Scan# 673  
 Delta R.T. -0.05 min  
 Lab File: BF085384.D  
 Acq: 11 Mar 2016 20:58

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 164     | 100   |      |       |       |
| 162     | 101.3 | 83.3 | 124.9 |       |
| 160     | 47.1  | 37.9 | 56.9  |       |





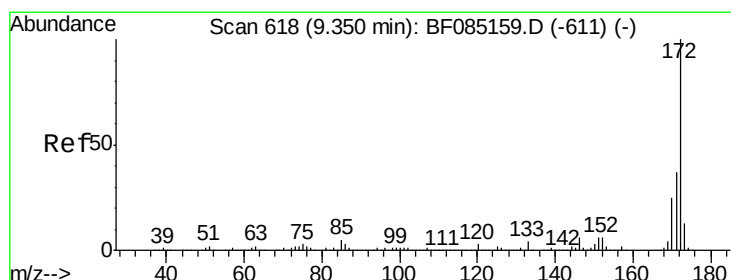
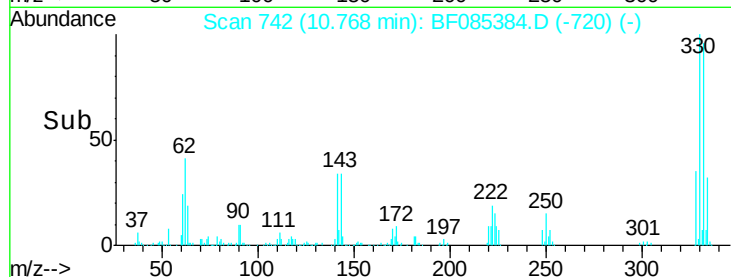
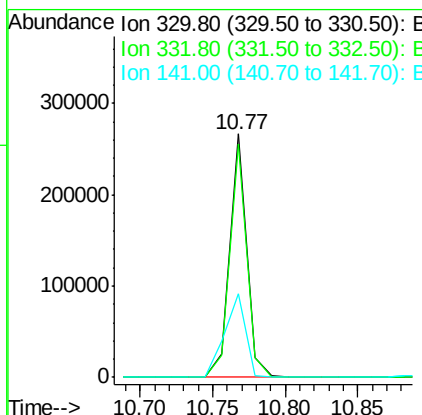
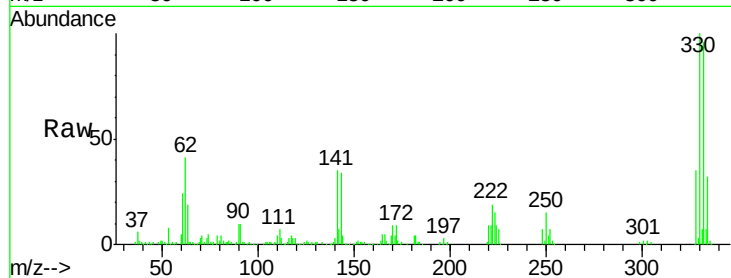
#41  
 2,4,6-Tribromophenol  
 Concen: 96.59 ng  
 RT: 10.77 min Scan# 742  
 Delta R.T. -0.05 min  
 Lab File: BF085384.D  
 Acq: 11 Mar 2016 20:58

Instrument :  
 BNA\_F  
 ClientSampleId :  
 POST-EX-16-20160309

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 216637 |       |       |
| 332     | 96.0  | 77.1   | 115.7 |       |
| 141     | 42.2  | 35.0   | 52.6  |       |

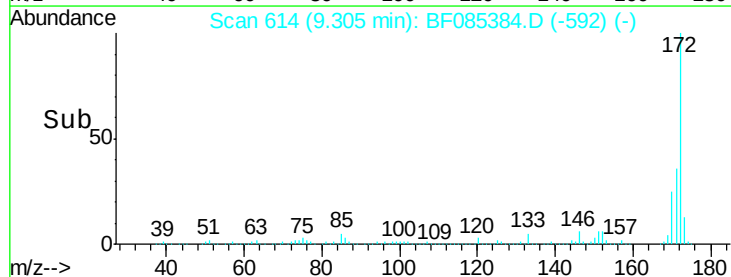
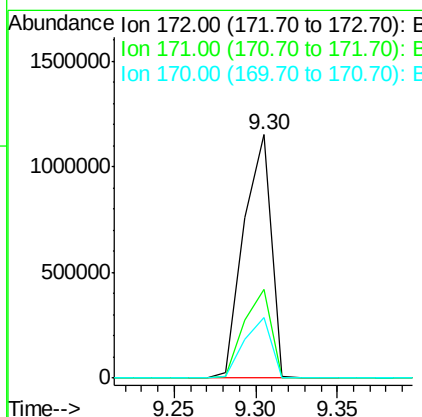
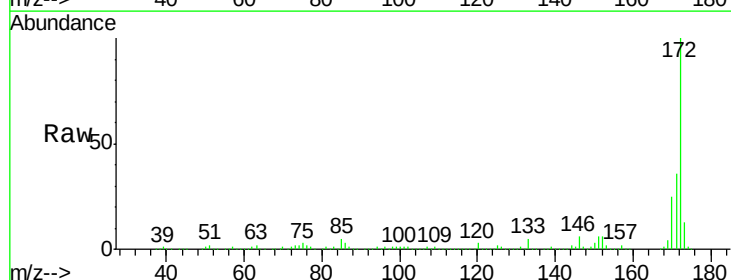
Manual Integrations  
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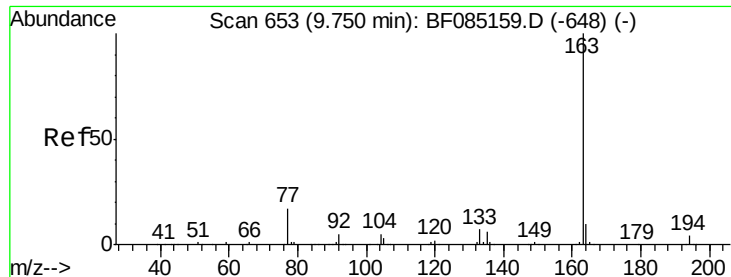
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#44  
 2-Fluorobiphenyl  
 Concen: 77.54 ng  
 RT: 9.30 min Scan# 614  
 Delta R.T. -0.05 min  
 Lab File: BF085384.D  
 Acq: 11 Mar 2016 20:58

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 172     | 100   | 1336415 |       |       |
| 171     | 36.2  | 29.3    | 43.9  |       |
| 170     | 24.8  | 20.0    | 30.0  |       |





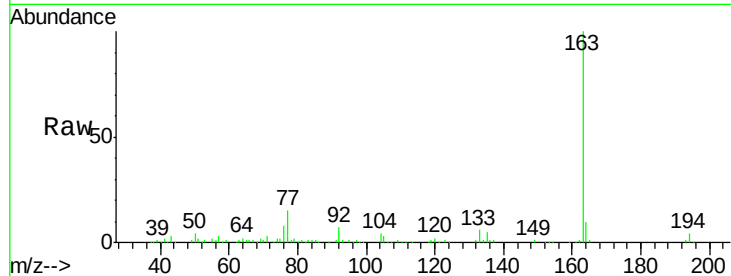
#49  
Dimethylphthalate  
Concen: 6.67 ng  
RT: 9.69 min Scan# 648  
Delta R.T. -0.06 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

Instrument :  
BNA\_F  
ClientSampleId :  
POST-EX-16-20160309

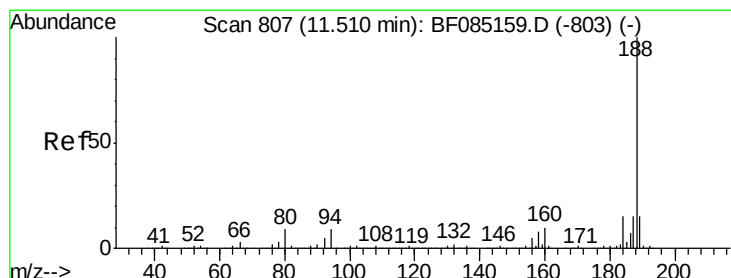
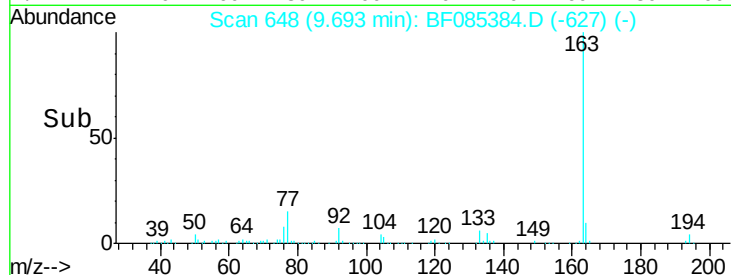
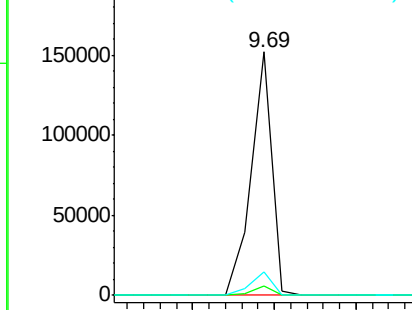
| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 163     | 100   |            |            |
| 194     | 3.9   | 3.1        | 4.7        |
| 164     | 9.5   | 8.2        | 12.4       |

Manual Integrations  
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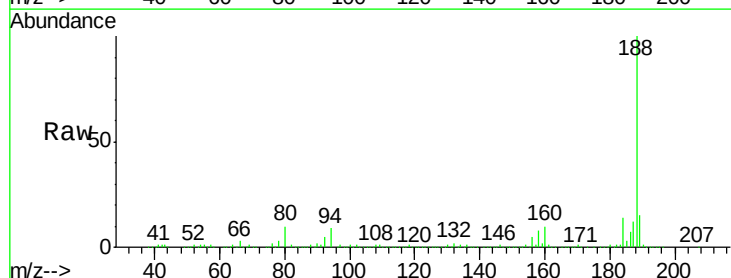


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

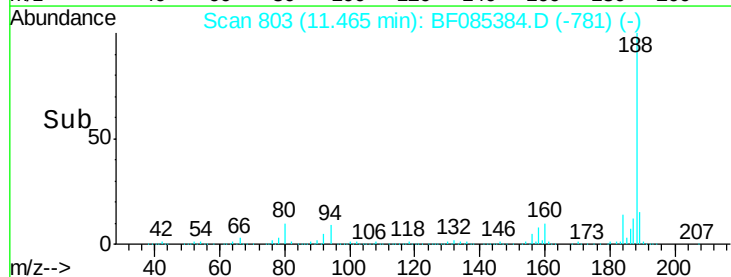
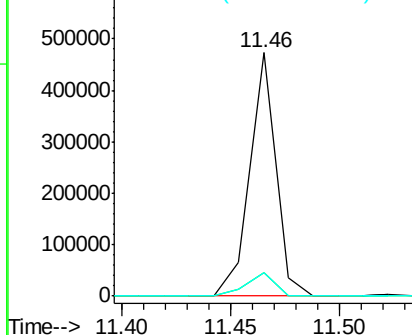


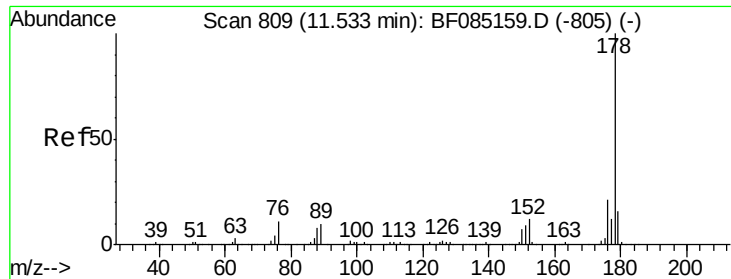
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Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.46 min Scan# 803  
Delta R.T. -0.05 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 188     | 100   |            |            |
| 94      | 9.5   | 7.0        | 10.6       |
| 80      | 9.7   | 7.4        | 11.0       |



Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF0  
Ion 80.00 (79.70 to 80.70): BF0





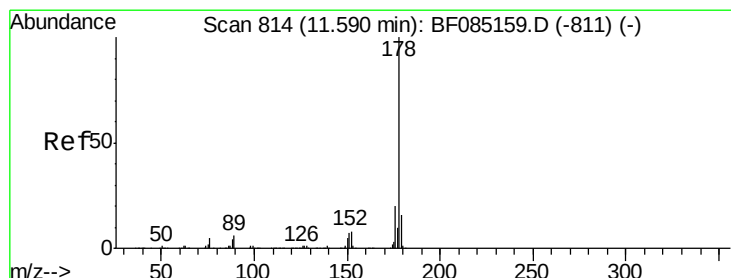
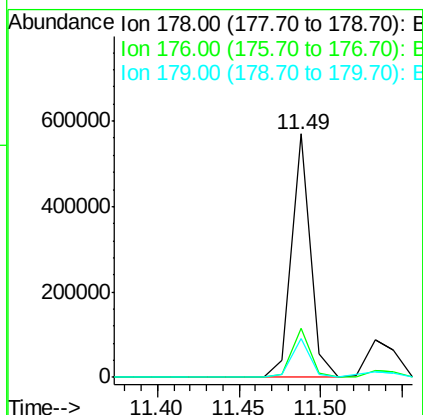
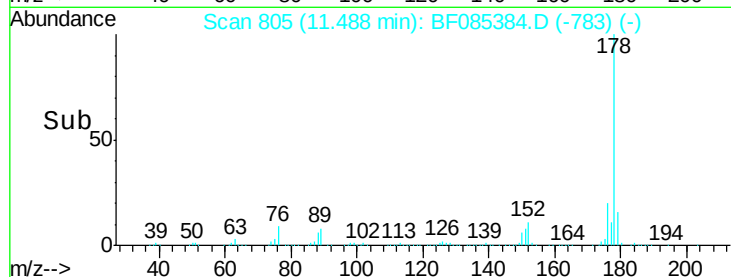
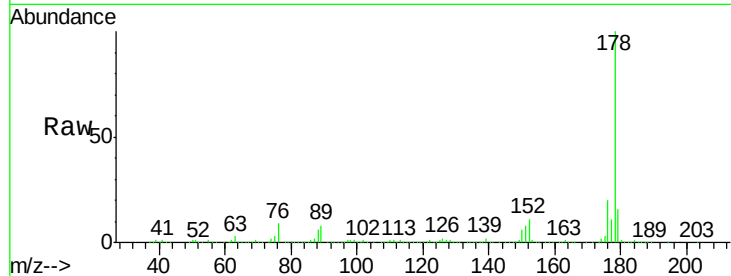
#70  
Phenanthrene  
Concen: 22.13 ng  
RT: 11.49 min Scan# 805  
Delta R.T. -0.05 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

Instrument :  
BNA\_F  
ClientSampleId :  
POST-EX-16-20160309

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 20.1  | 16.8  | 25.2  |
| 179     | 15.7  | 13.1  | 19.7  |

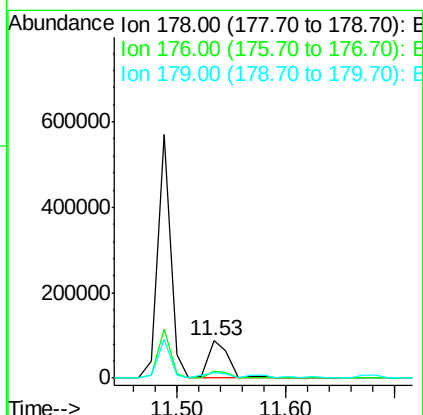
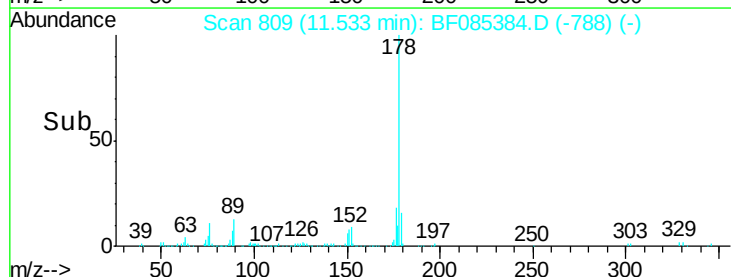
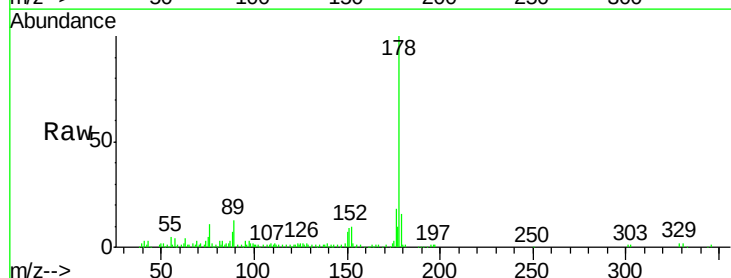
Manual Integrations  
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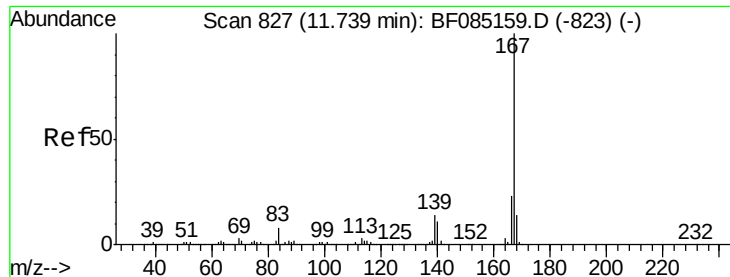


#71  
Anthracene  
Concen: 5.09 ng  
RT: 11.53 min Scan# 809  
Delta R.T. -0.06 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.4  | 15.9  | 23.9  |
| 179     | 16.2  | 12.5  | 18.7  |







#72

Carbazole

Concen: 2.20 ng

RT: 11.69 min Scan# 823

Delta R.T. -0.05 min

Lab File: BF085384.D

Acq: 11 Mar 2016 20:58

Instrument :

BNA\_F

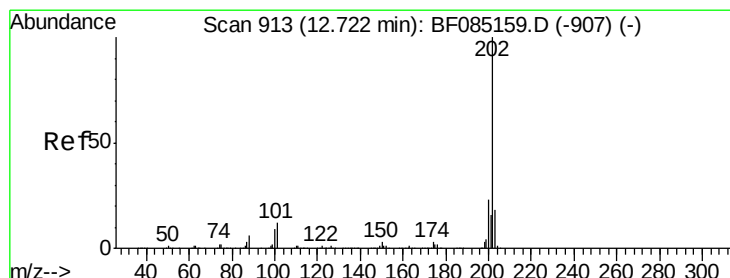
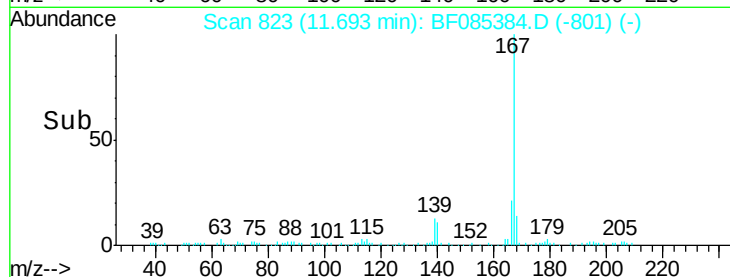
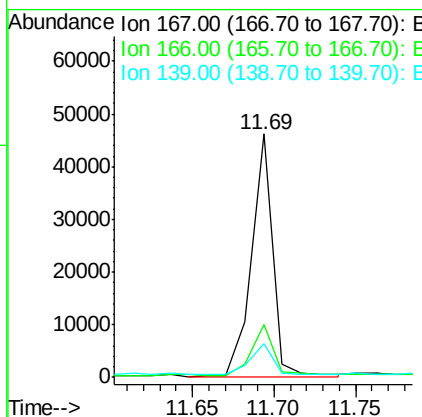
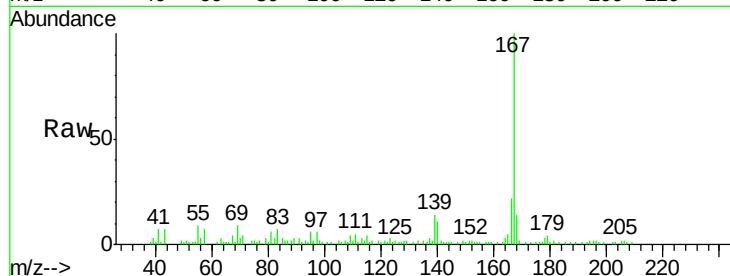
ClientSampleId :

POST-EX-16-20160309

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 167   | Resp: | 42300 |
| Ion Ratio | Lower | Upper |       |
| 167       | 100   |       |       |
| 166       | 21.6  | 18.2  | 27.2  |
| 139       | 13.7  | 11.4  | 17.0  |

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#74

Fluoranthene

Concen: 27.27 ng

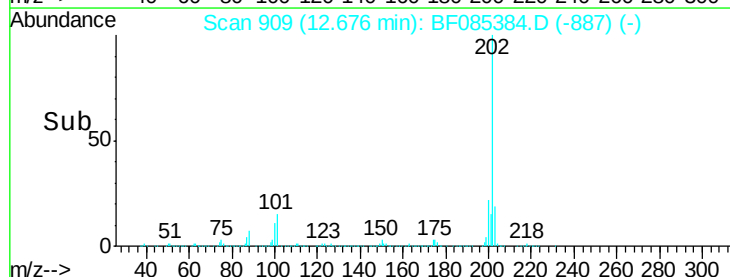
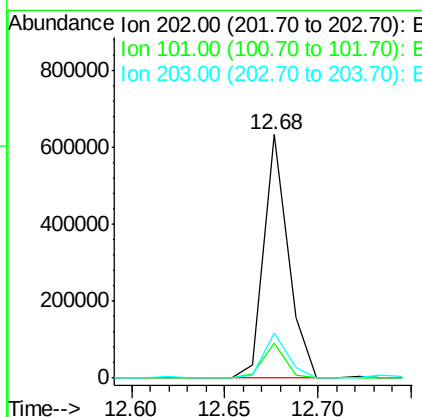
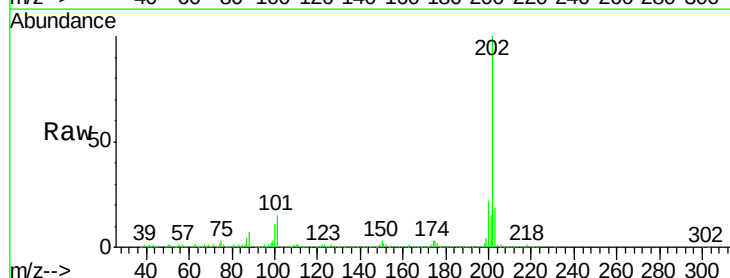
RT: 12.68 min Scan# 909

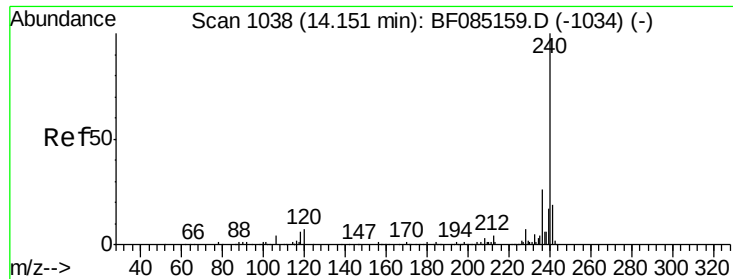
Delta R.T. -0.05 min

Lab File: BF085384.D

Acq: 11 Mar 2016 20:58

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 565482 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 14.6  | 0.0   | 31.8   |
| 203       | 18.6  | 0.0   | 38.4   |





#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.11 min Scan# 1034

Delta R.T. -0.05 min

Lab File: BF085384.D

Acq: 11 Mar 2016 20:58

Instrument :

BNA\_F

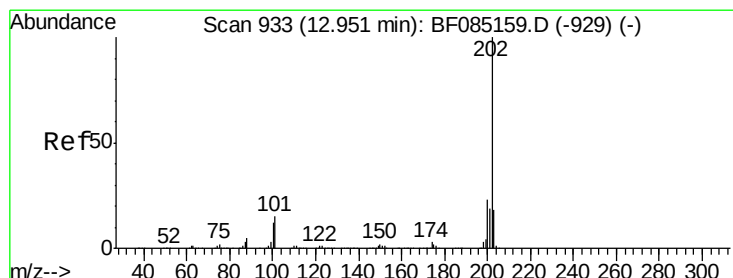
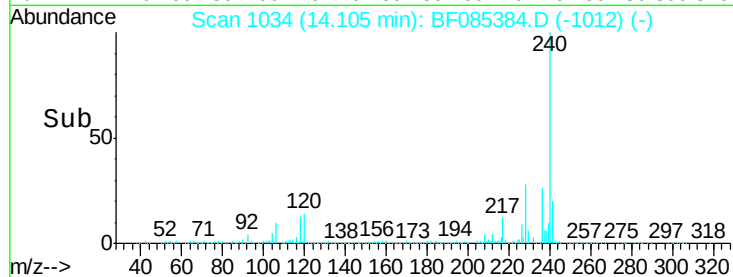
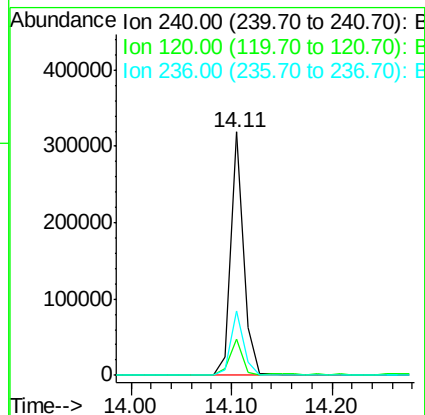
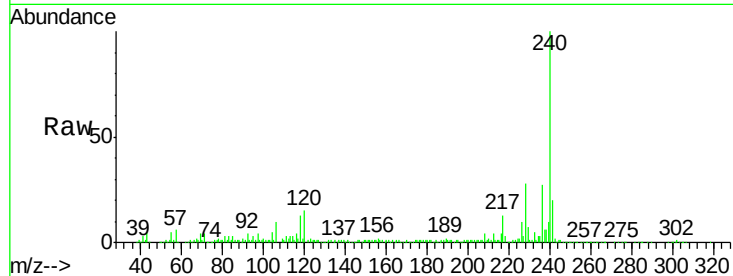
ClientSampleId :

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| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 282533 |       |       |
| 120     | 14.7  | 5.3    | 7.9#  |       |
| 236     | 26.7  | 20.7   | 31.1  |       |

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#77

Pyrene

Concen: 24.97 ng

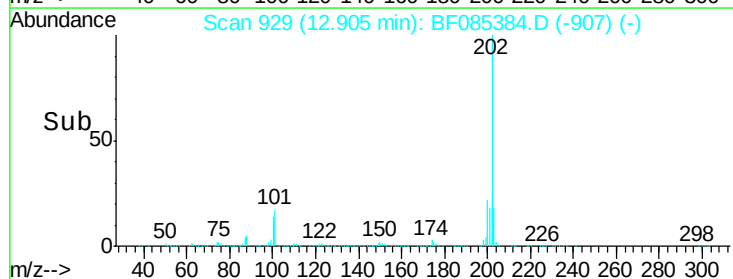
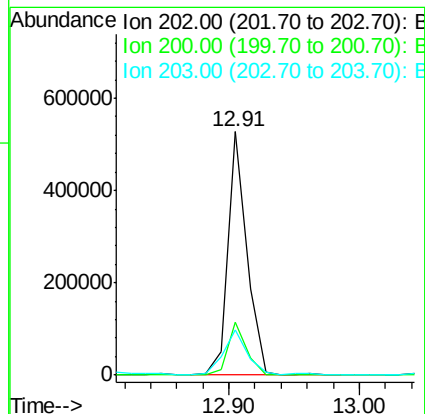
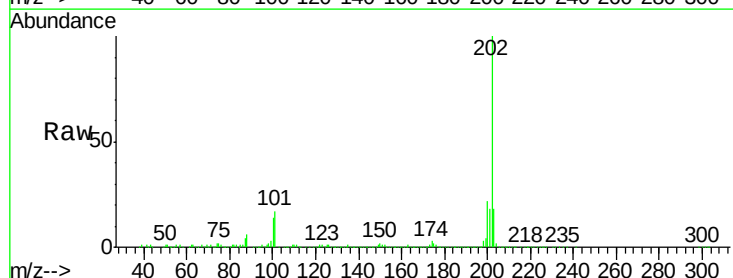
RT: 12.91 min Scan# 929

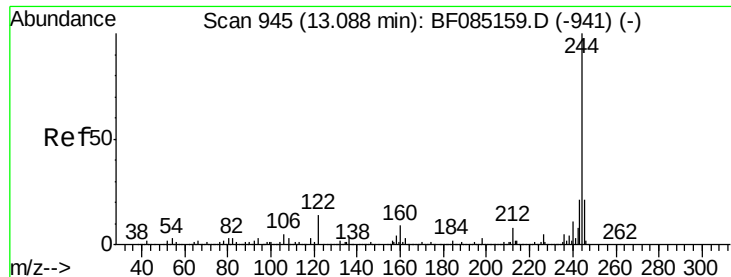
Delta R.T. -0.05 min

Lab File: BF085384.D

Acq: 11 Mar 2016 20:58

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 530898 |       |       |
| 200     | 21.9  | 18.2   | 27.4  |       |
| 203     | 18.4  | 14.7   | 22.1  |       |





#78

Terphenyl-d14

Concen: 69.65 ng

RT: 13.05 min Scan# 942

Delta R.T. -0.03 min

Lab File: BF085384.D

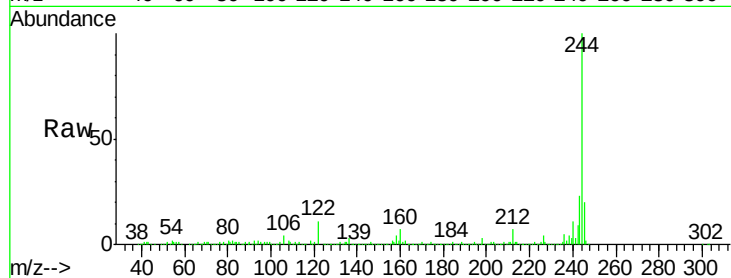
Acq: 11 Mar 2016 20:58

Instrument :

BNA\_F

ClientSampleId :

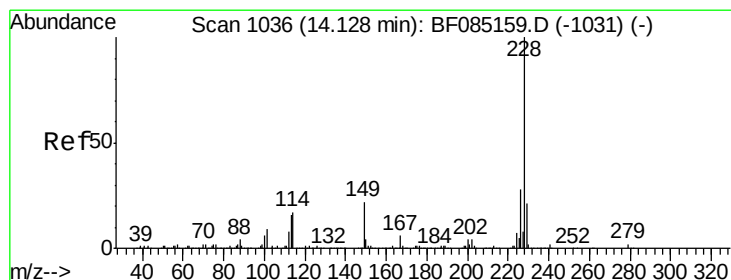
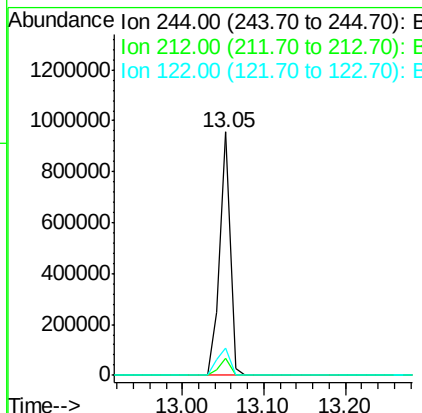
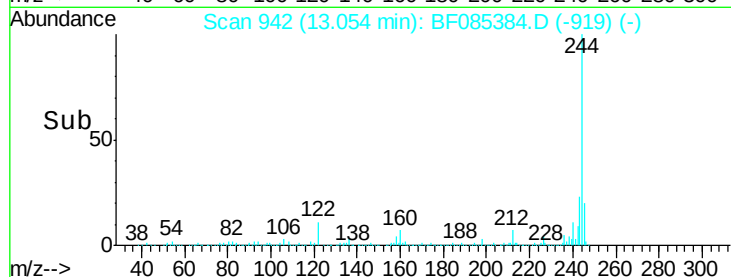
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| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 244     | 100   | 847694 |       |       |
| 212     | 7.2   | 6.4    | 9.6   |       |
| 122     | 11.0  | 11.4   | 17.2  |       |

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#80

Benzo(a)anthracene

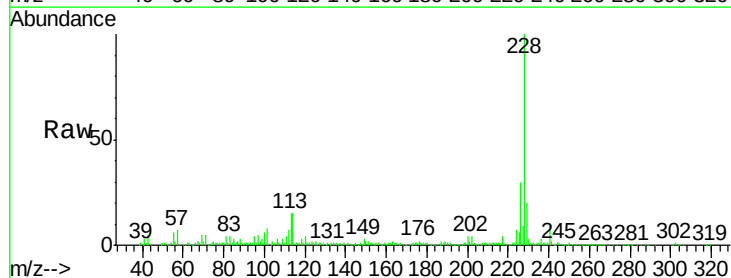
Concen: 18.13 ng

RT: 14.09 min Scan# 1033

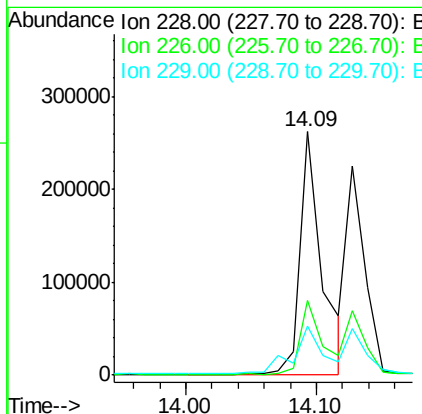
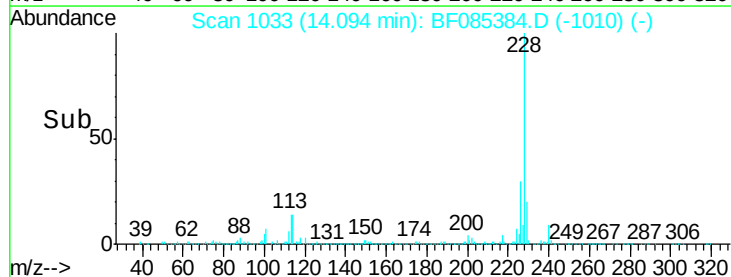
Delta R.T. -0.03 min

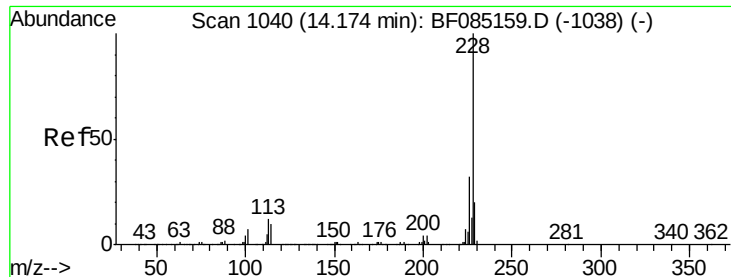
Lab File: BF085384.D

Acq: 11 Mar 2016 20:58



| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 228     | 100   | 306653 |       |       |
| 226     | 30.5  | 22.8   | 34.2  |       |
| 229     | 20.3  | 16.6   | 24.8  |       |





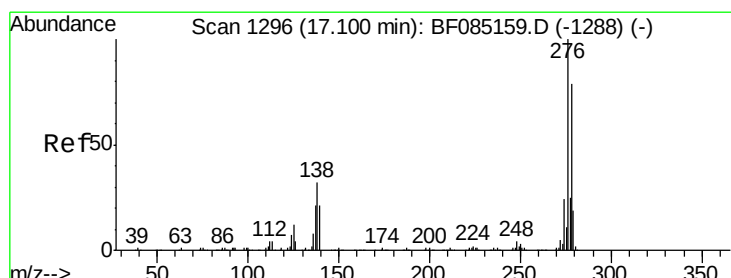
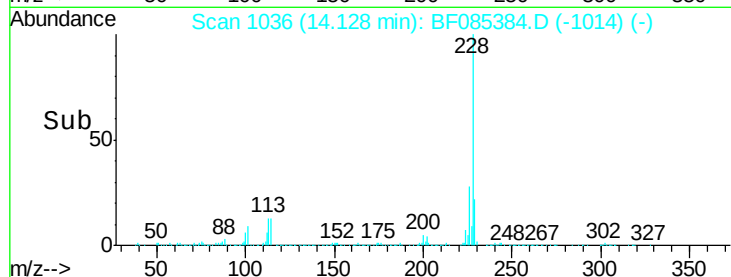
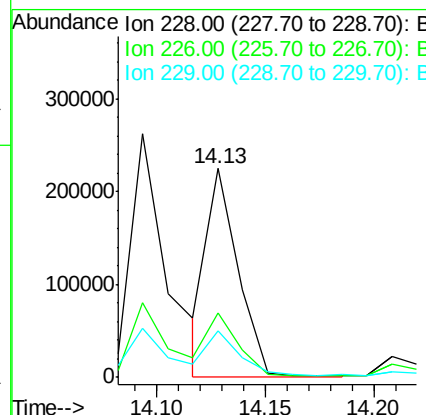
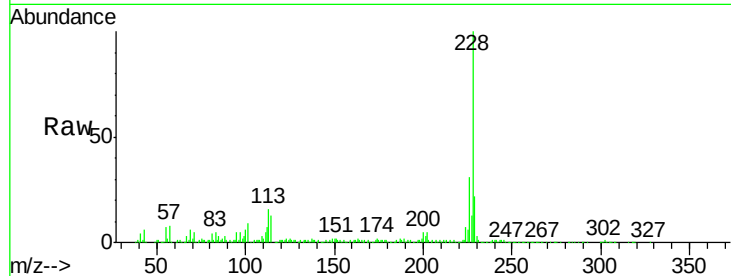
#82  
Chrysene  
Concen: 14.24 ng  
RT: 14.13 min Scan# 1036  
Delta R.T. -0.05 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

Instrument :  
BNA\_F  
ClientSampleId :  
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| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 228     | 100   | 222547 |       |       |
| 226     | 30.7  | 25.2   | 37.8  |       |
| 229     | 22.2  | 16.0   | 24.0  |       |

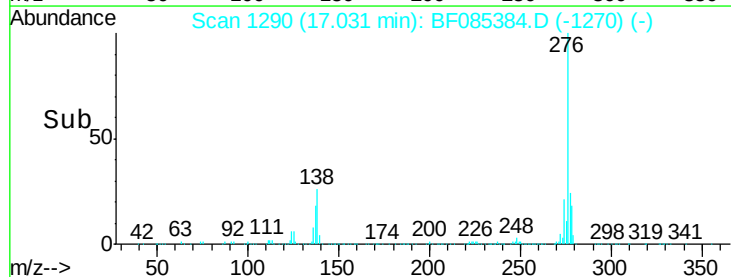
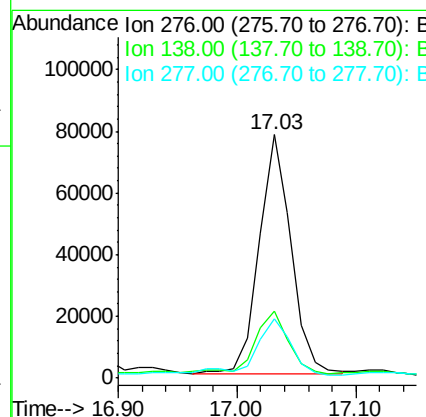
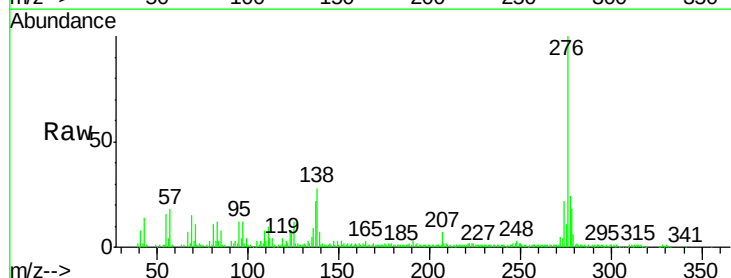
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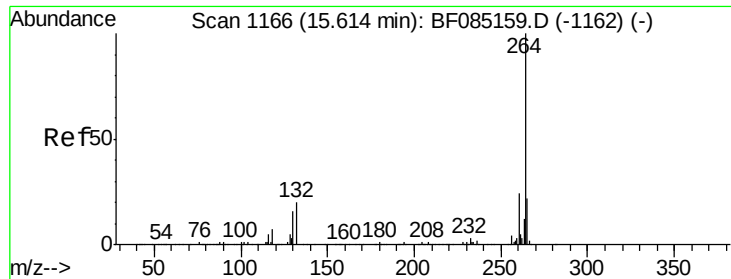
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#85  
Indeno(1,2,3-cd)pyrene  
Concen: 11.86 ng  
RT: 17.03 min Scan# 1290  
Delta R.T. -0.07 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 276     | 100   | 144601 |       |       |
| 138     | 27.5  | 26.4   | 39.6  |       |
| 277     | 27.9  | 20.2   | 30.2  |       |





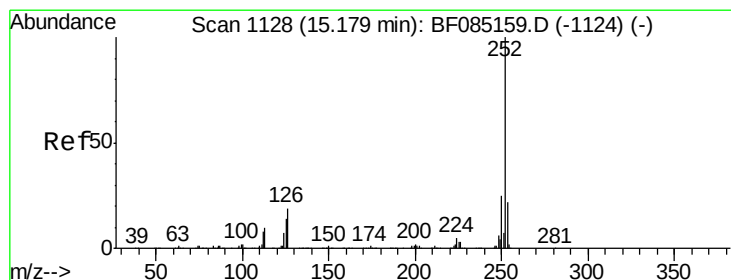
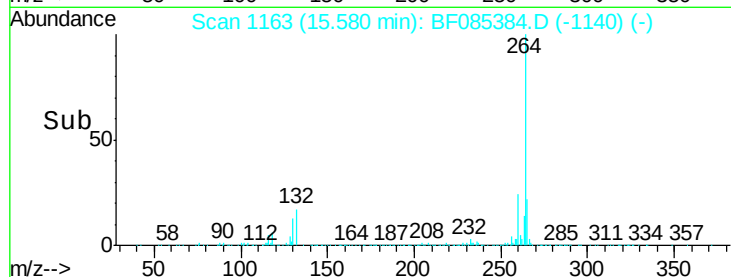
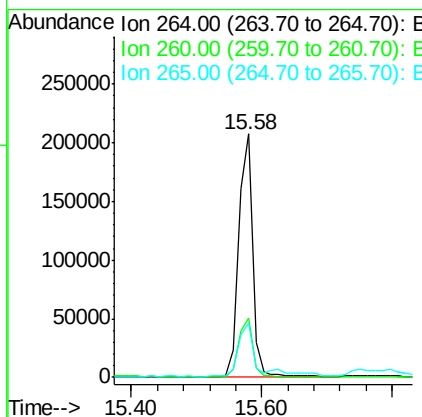
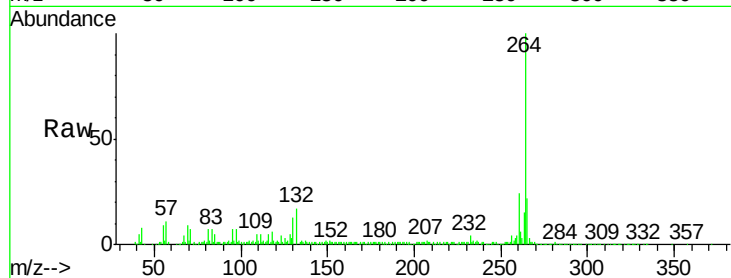
#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 15.58 min Scan# 1163  
Delta R.T. -0.03 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

Instrument :  
BNA\_F  
ClientSampleId :  
POST-EX-16-20160309

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 264     | 100   | 299751 |       |       |
| 260     | 24.3  | 19.2   | 28.8  |       |
| 265     | 22.4  | 17.3   | 25.9  |       |

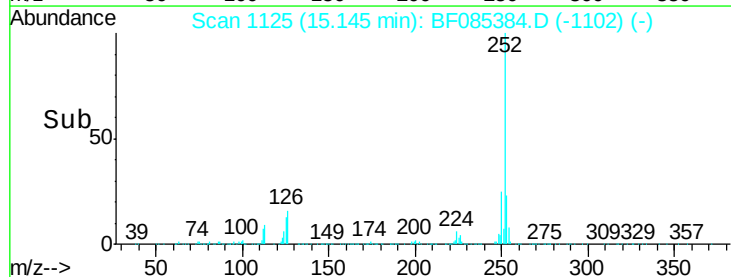
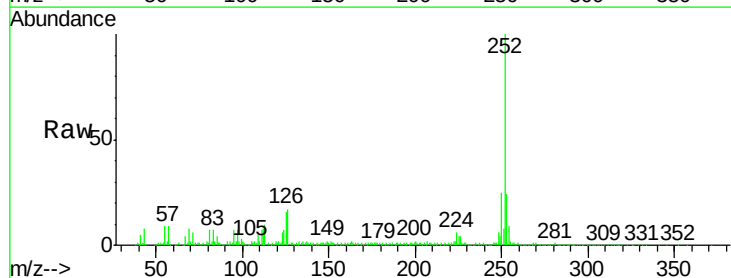
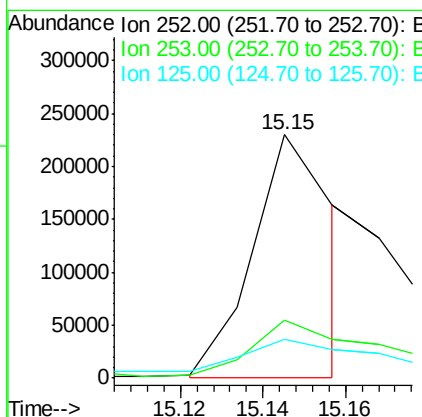
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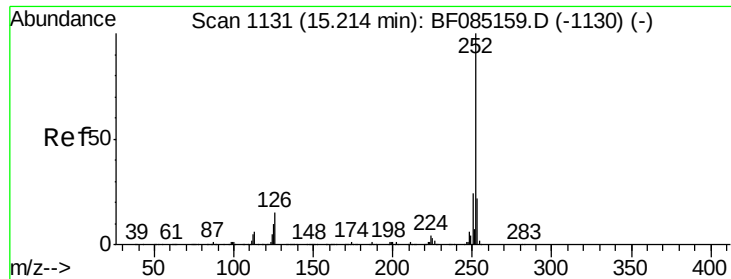
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#87  
Benzo(b)fluoranthene  
Concen: 15.83 ng m  
RT: 15.15 min Scan# 1125  
Delta R.T. -0.03 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 252     | 100   | 316350 |       |       |
| 253     | 23.6  | 17.8   | 26.6  |       |
| 125     | 16.2  | 11.3   | 16.9  |       |





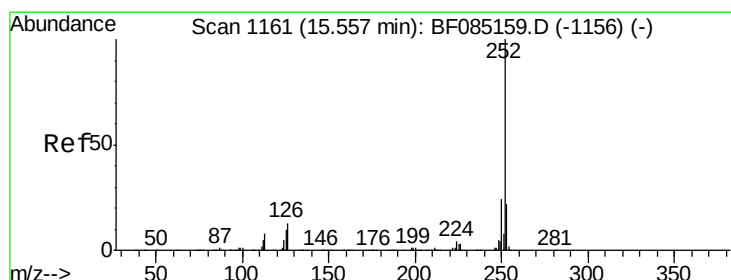
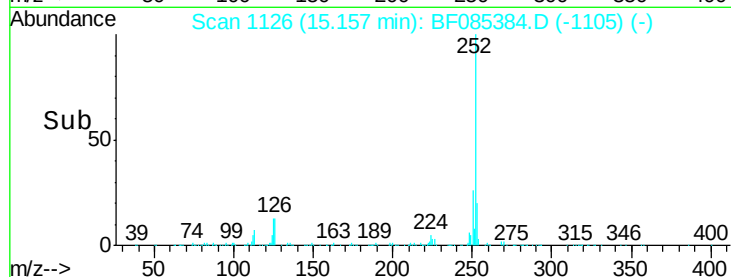
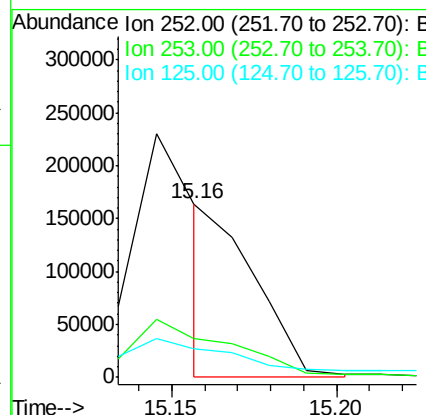
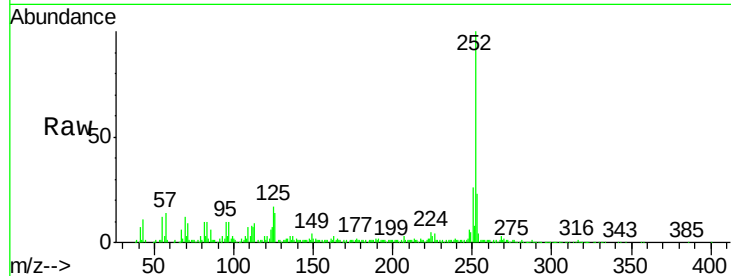
#88  
Benzo(k)fluoranthene  
Concen: 9.14 ng m  
RT: 15.16 min Scan# 1126  
Delta R.T. -0.06 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

Instrument :  
BNA\_F  
ClientSampleId :  
POST-EX-16-20160309

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 17.8  | 26.6  |
| 125     | 16.5  | 10.4  | 15.6  |

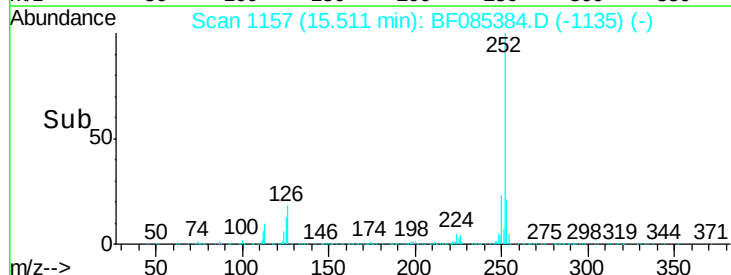
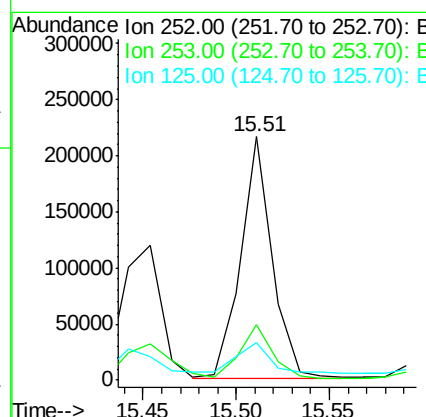
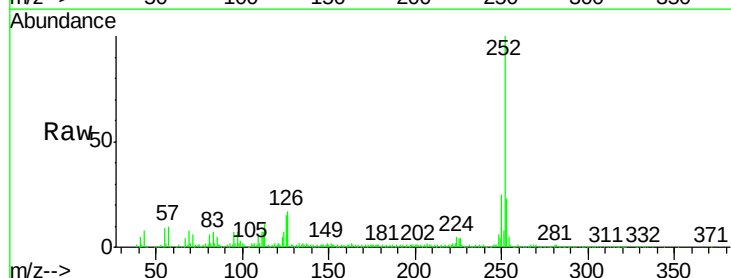
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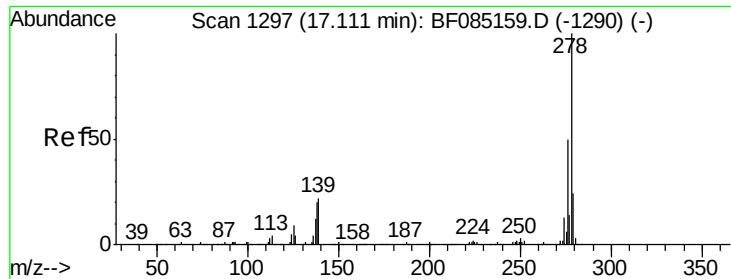
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#89  
Benzo(a)pyrene  
Concen: 15.37 ng  
RT: 15.51 min Scan# 1157  
Delta R.T. -0.05 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.8  | 17.4  | 26.0  |
| 125     | 15.2  | 8.2   | 12.4  |





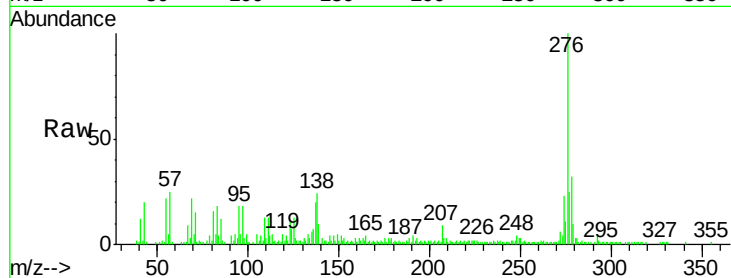
#90  
Dibenzo(a,h)anthracene  
Concen: 2.40 ng m  
RT: 17.04 min Scan# 1291  
Delta R.T. -0.07 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

Instrument :  
BNA\_F  
ClientSampleId :  
POST-EX-16-20160309

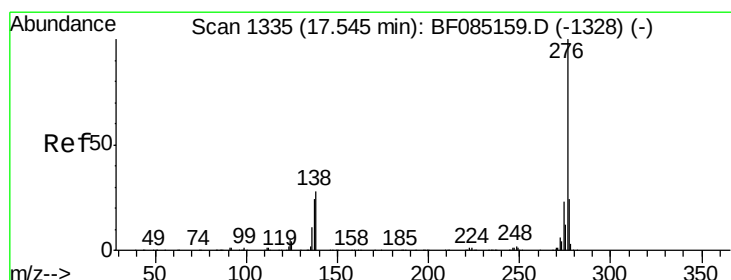
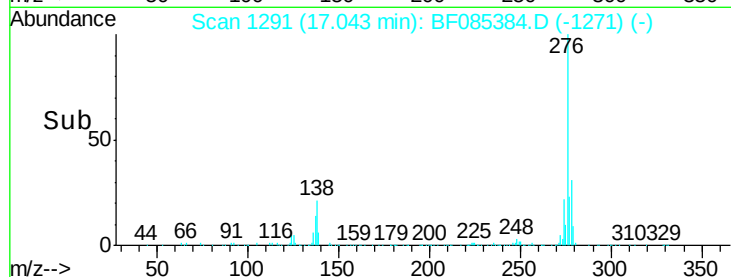
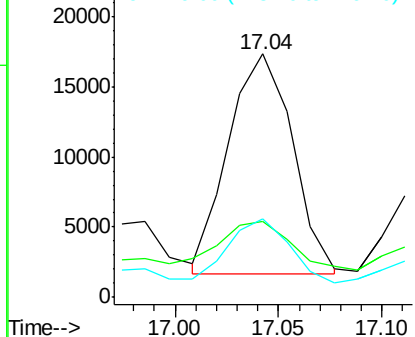
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 31.0  | 17.3  | 25.9# |
| 279     | 32.1  | 19.2  | 28.8# |

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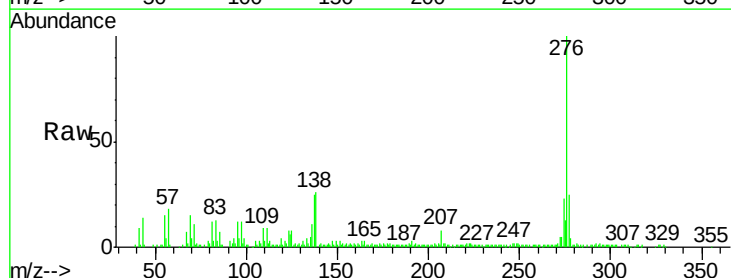


Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E



#91  
Benzo(g,h,i)perylene  
Concen: 9.66 ng  
RT: 17.48 min Scan# 1329  
Delta R.T. -0.07 min  
Lab File: BF085384.D  
Acq: 11 Mar 2016 20:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.7  | 19.0  | 28.4  |
| 138     | 26.1  | 22.5  | 33.7  |



Abundance Ion 276.00 (275.70 to 276.70): E  
Ion 277.00 (276.70 to 277.70): E  
Ion 138.00 (137.70 to 138.70): E

