

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF071015\  
 Data File : BF080423.D  
 Acq On : 11 Jul 2015 8:53  
 Operator : TP/UM  
 Sample : G2925-03 2X  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TEC-E4

Manual Integrations  
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apatel  
 7/13/2015 3:31:59 PM

Quant Time: Jul 13 01:46:29 2015  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF071015.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 11 05:35:30 2015  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.14  | 152  | 22790    | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8          | 8.43  | 136  | 90126    | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10        | 10.19 | 164  | 44374    | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.69 | 188  | 81450    | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12            | 14.57 | 240  | 96091    | 20.00 | ng    | 0.03     |
| 86) Perylene-d12            | 16.35 | 264  | 97723    | 20.00 | ng    | 0.07     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.79  | 112  | 52468    | 39.45 | ng    | 0.00     |
| 7) Phenol-d6                | 6.78  | 99   | 66481    | 37.52 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.71  | 82   | 38940    | 24.64 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.98 | 330  | 14103    | 32.56 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.50  | 172  | 82748    | 25.12 | ng    | 0.00     |
| 78) Terphenyl-d14           | 13.33 | 244  | 95716    | 21.63 | ng    | 0.01     |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 48) Acenaphthylene          | 10.05 | 152  | 10474    | 2.14  | ng    | 97       |
| 49) Dimethylphthalate       | 9.90  | 163  | 7759     | 2.31  | ng    | 99       |
| 70) Phenanthrene            | 11.71 | 178  | 54733    | 11.18 | ng    | 98       |
| 71) Anthracene              | 11.76 | 178  | 23302    | 5.14  | ng    | 99       |
| 74) Fluoranthene            | 12.93 | 202  | 142451   | 28.07 | ng    | 93       |
| 77) Pyrene                  | 13.19 | 202  | 148142   | 24.06 | ng    | 99       |
| 80) Benzo(a)anthracene      | 14.56 | 228  | 96762    | 15.98 | ng    | 99       |
| 82) Chrysene                | 14.60 | 228  | 66203    | 11.87 | ng    | 97       |
| 85) Indeno(1,2,3-cd)pyrene  | 18.01 | 276  | 58415    | 8.43  | ng    | 98       |
| 87) Benzo(b)fluoranthene    | 15.86 | 252  | 134284m  | 19.78 | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.88 | 252  | 28642m   | 5.16  | ng    |          |
| 89) Benzo(a)pyrene          | 16.28 | 252  | 86723    | 14.58 | ng    | 98       |
| 90) Dibenzo(a,h)anthracene  | 18.02 | 278  | 14147    | 2.40  | ng    | # 83     |
| 91) Benzo(g,h,i)perylene    | 18.51 | 276  | 62131    | 10.61 | ng    | 99       |

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

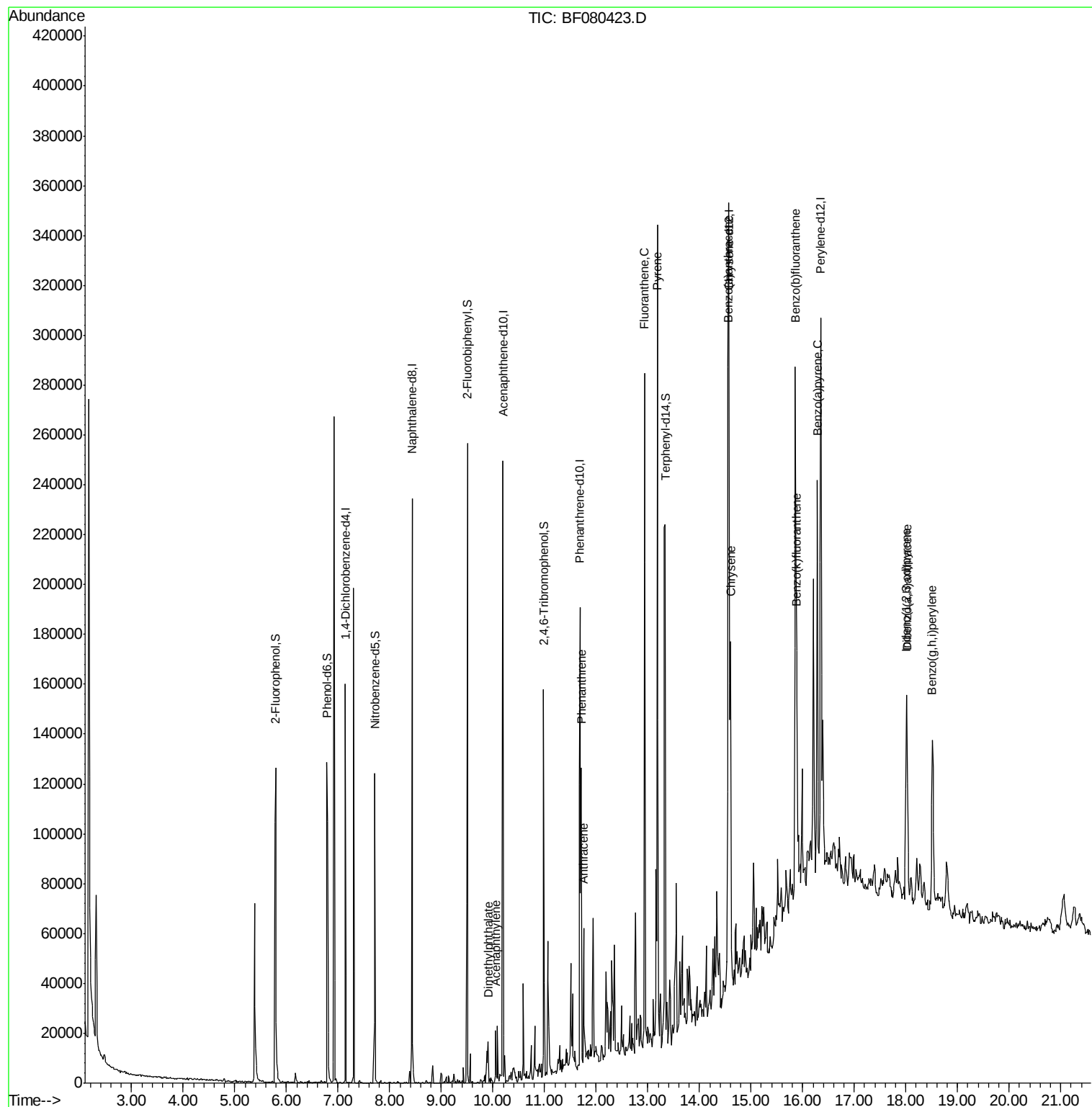
Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF071015\  
Data File : BF080423.D  
Acq On : 11 Jul 2015 8:53  
Operator : TP/UM  
Sample : G2925-03 2X  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

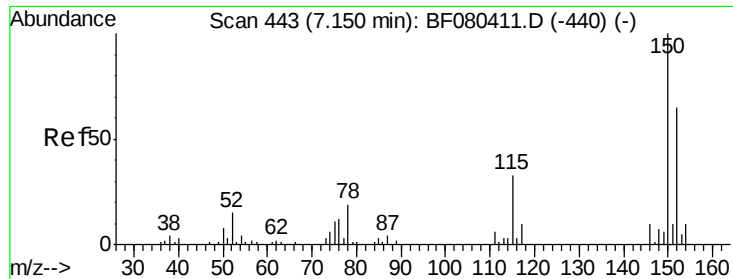
Instrument :  
BNA\_F  
ClientSampleId :  
TEC-E4

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Quant Time: Jul 13 01:46:29 2015  
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF071015.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 11 05:35:30 2015  
Response via : Initial Calibration





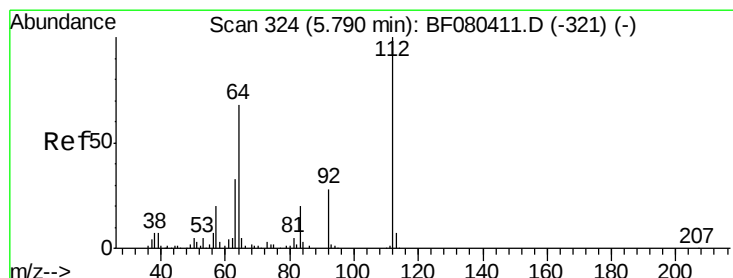
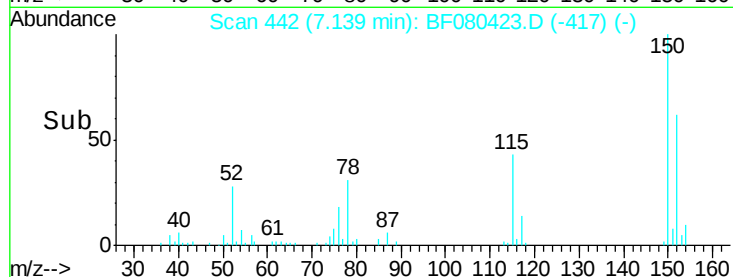
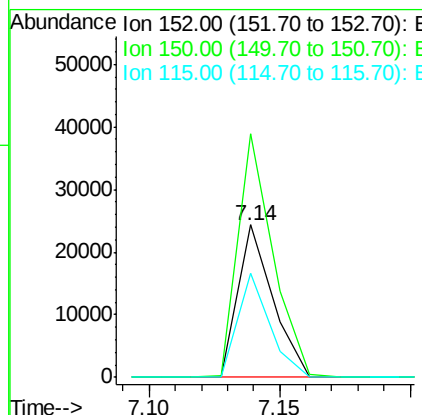
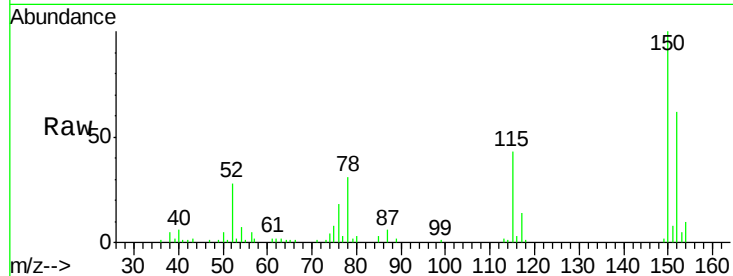
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 7.14 min Scan# 442  
 Delta R.T. -0.01 min  
 Lab File: BF080423.D  
 Acq: 11 Jul 2015 8:53

Instrument :  
 BNA\_F  
 ClientSampled :  
 TEC-E4

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 152     | 100   | 22790 |       |       |
| 150     | 160.1 | 122.3 | 183.5 |       |
| 115     | 68.0  | 41.0  | 61.4  |       |

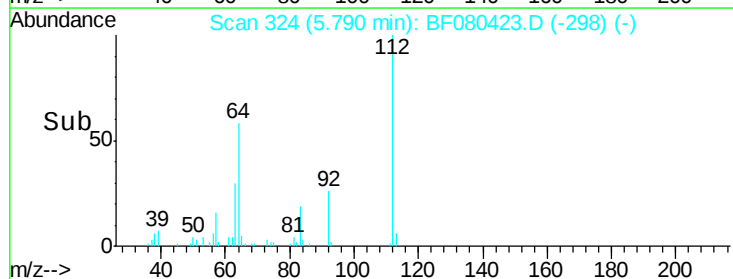
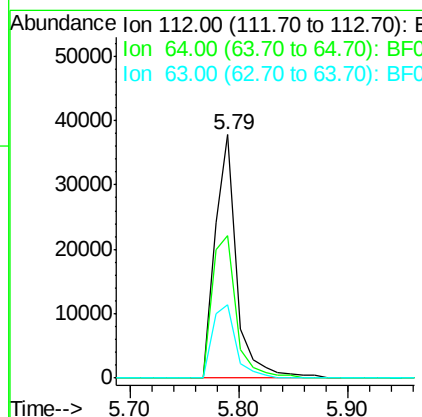
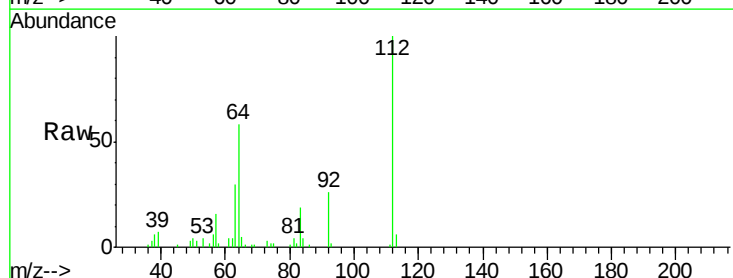
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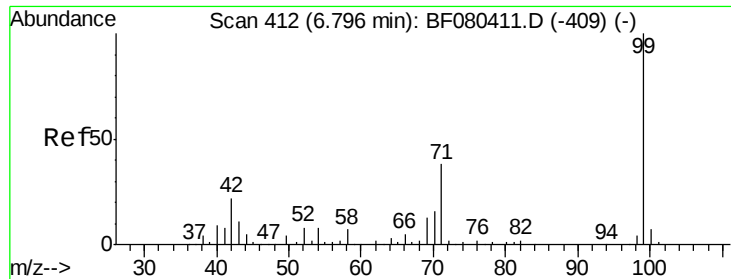
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#5  
 2-Fluorophenol  
 Concen: 39.45 ng  
 RT: 5.79 min Scan# 324  
 Delta R.T. 0.00 min  
 Lab File: BF080423.D  
 Acq: 11 Jul 2015 8:53

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 112     | 100   | 52468 |       |       |
| 64      | 58.3  | 54.3  | 81.5  |       |
| 63      | 30.4  | 26.7  | 40.1  |       |





#7

Phenol-d6

Concen: 37.52 ng

RT: 6.78 min Scan# 411

Delta R.T. -0.01 min

Lab File: BF080423.D

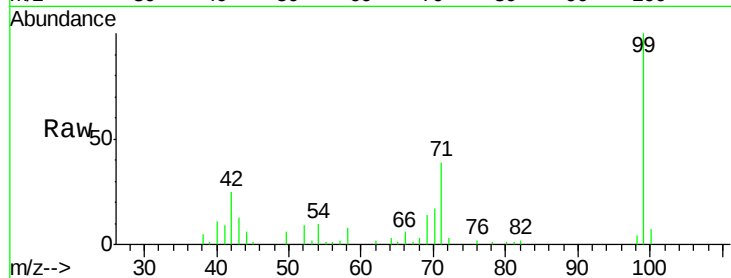
Acq: 11 Jul 2015 8:53

Instrument :

BNA\_F

ClientSampled :

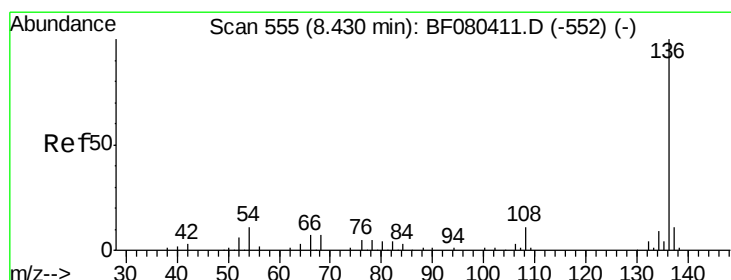
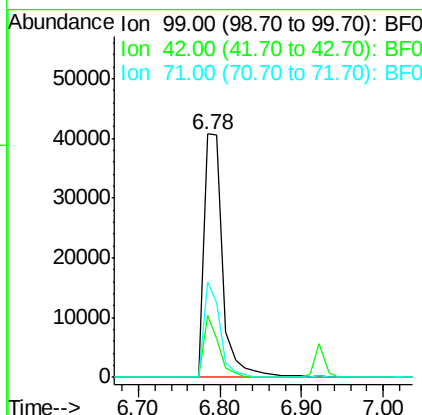
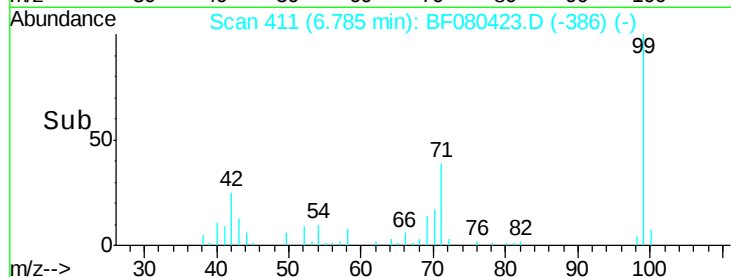
TEC-E4



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 99    | Resp: | 66481 |
| Ion Ratio | Lower | Upper |       |
| 99        | 100   |       |       |
| 42        | 25.2  | 17.9  | 26.9  |
| 71        | 39.2  | 30.1  | 45.1  |

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#21

Naphthalene-d8

Concen: 20.00 ng

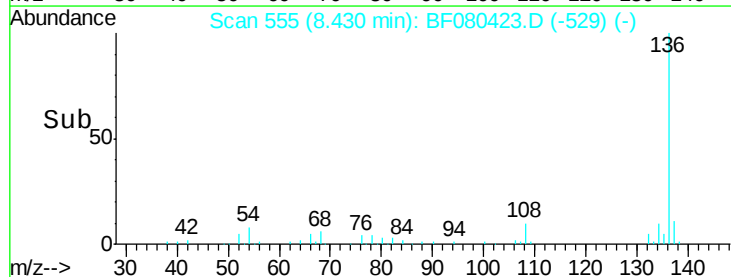
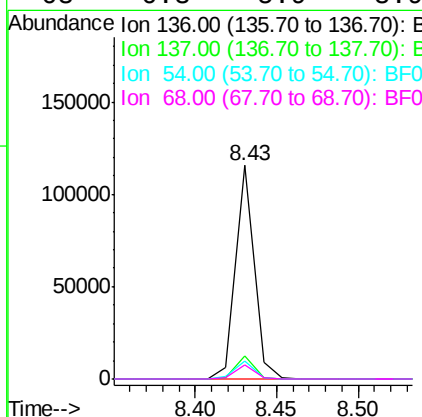
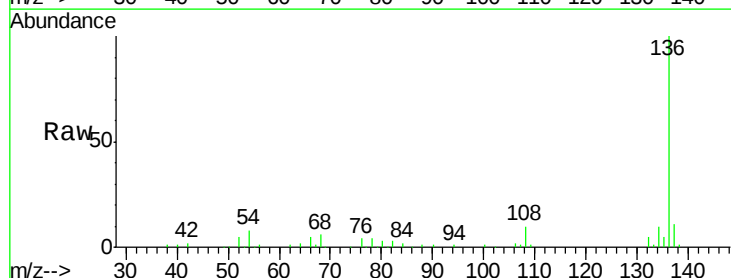
RT: 8.43 min Scan# 555

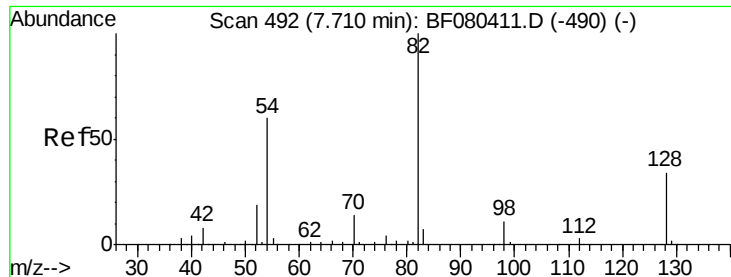
Delta R.T. 0.00 min

Lab File: BF080423.D

Acq: 11 Jul 2015 8:53

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 136   | Resp: | 90126 |
| Ion Ratio | Lower | Upper |       |
| 136       | 100   |       |       |
| 137       | 10.5  | 9.0   | 13.4  |
| 54        | 8.5   | 9.1   | 13.7# |
| 68        | 6.3   | 5.9   | 8.9   |





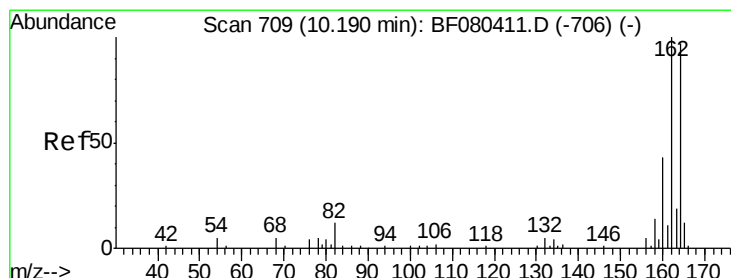
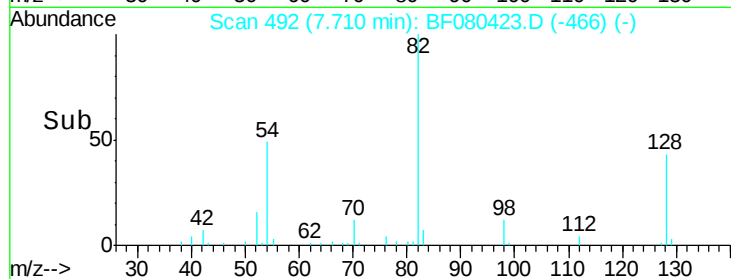
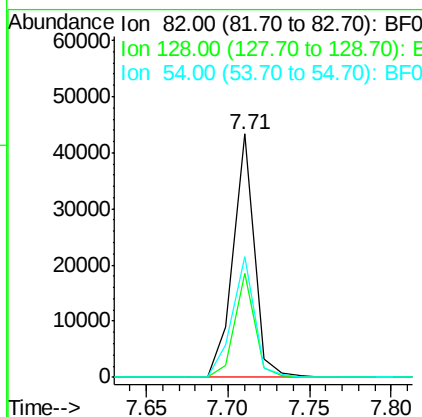
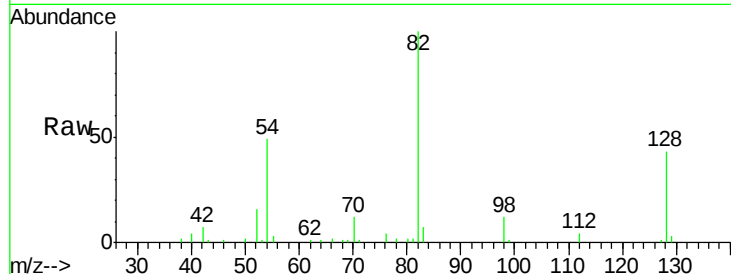
#23  
 Nitrobenzene-d5  
 Concen: 24.64 ng  
 RT: 7.71 min Scan# 492  
 Delta R.T. 0.00 min  
 Lab File: BF080423.D  
 Acq: 11 Jul 2015 8:53

Instrument :  
 BNA\_F  
 ClientSampled :  
 TEC-E4

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 82      | 100   |            |       |
| 128     | 42.7  | 26.9       | 40.3# |
| 54      | 49.5  | 47.7       | 71.5  |

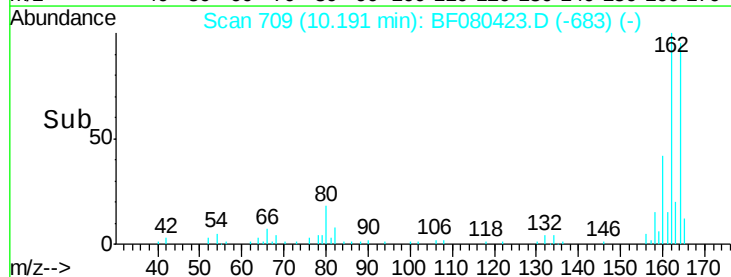
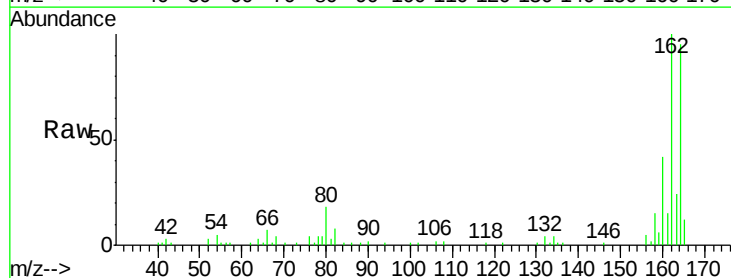
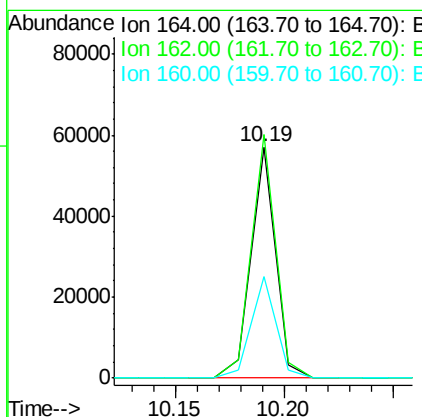
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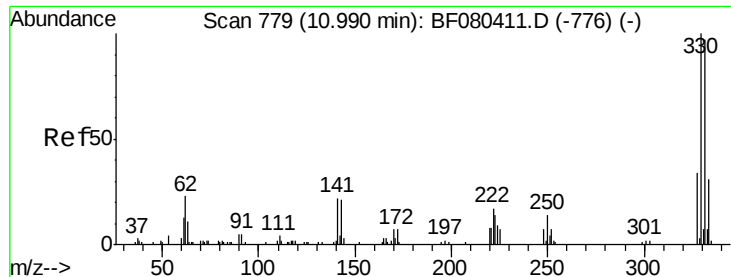
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#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 10.19 min Scan# 709  
 Delta R.T. 0.00 min  
 Lab File: BF080423.D  
 Acq: 11 Jul 2015 8:53

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 164     | 100   |            |       |
| 162     | 105.5 | 82.7       | 124.1 |
| 160     | 44.1  | 35.5       | 53.3  |





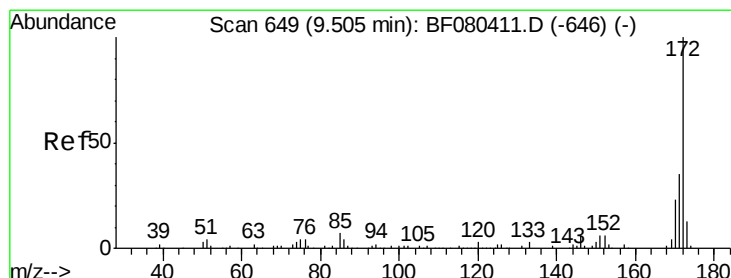
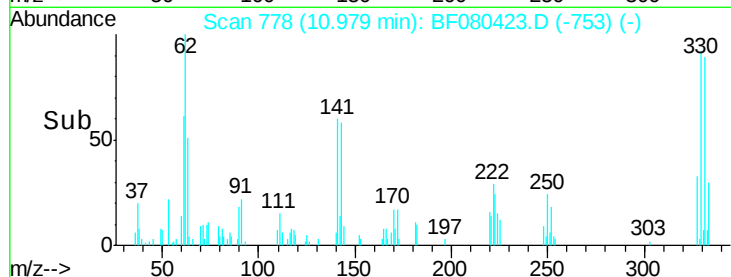
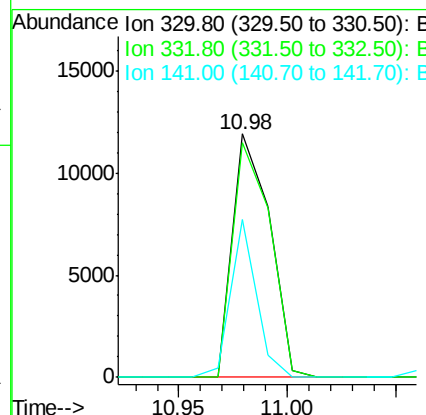
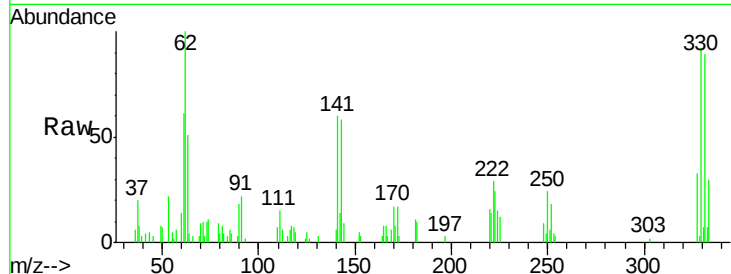
#41  
 2,4,6-Tribromophenol  
 Concen: 32.56 ng  
 RT: 10.98 min Scan# 778  
 Delta R.T. -0.01 min  
 Lab File: BF080423.D  
 Acq: 11 Jul 2015 8:53

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TEC-E4

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 330     | 100   | 14103 |       |       |
| 332     | 97.6  | 78.0  | 117.0 |       |
| 141     | 45.2  | 28.6  | 43.0  |       |

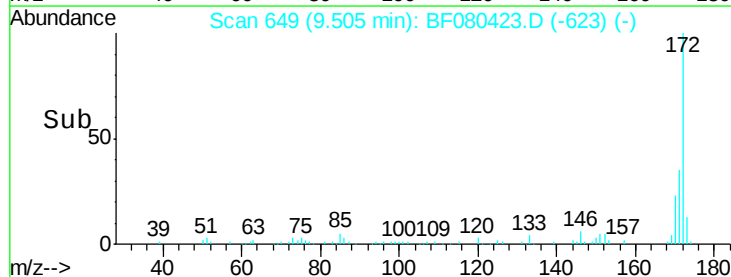
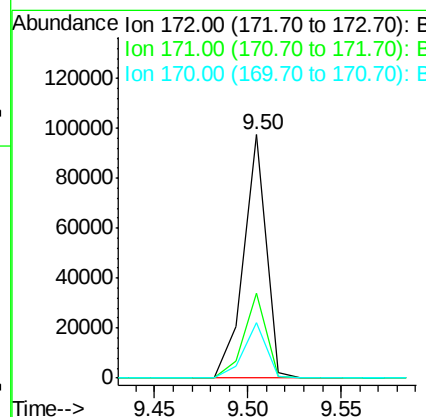
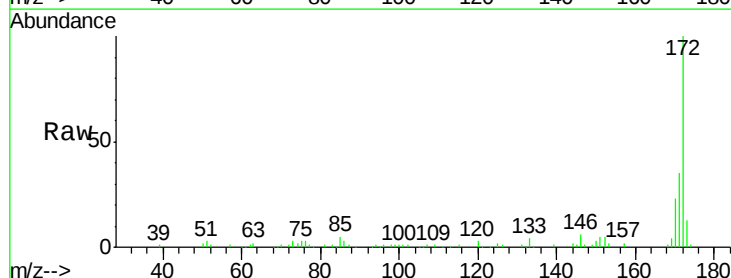
Manual Integrations  
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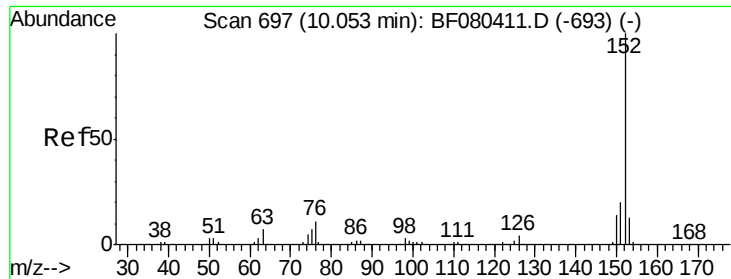
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#44  
 2-Fluorobiphenyl  
 Concen: 25.12 ng  
 RT: 9.50 min Scan# 649  
 Delta R.T. 0.00 min  
 Lab File: BF080423.D  
 Acq: 11 Jul 2015 8:53

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 172     | 100   | 82748 |       |       |
| 171     | 35.1  | 28.4  | 42.6  |       |
| 170     | 22.8  | 18.6  | 28.0  |       |





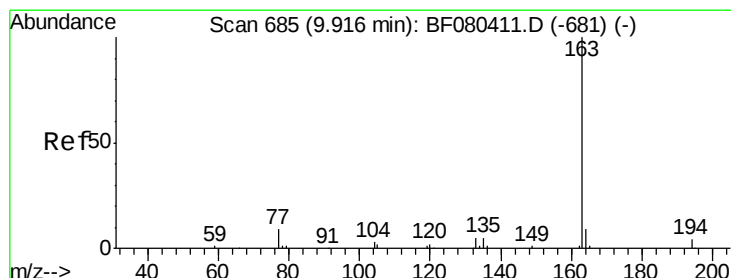
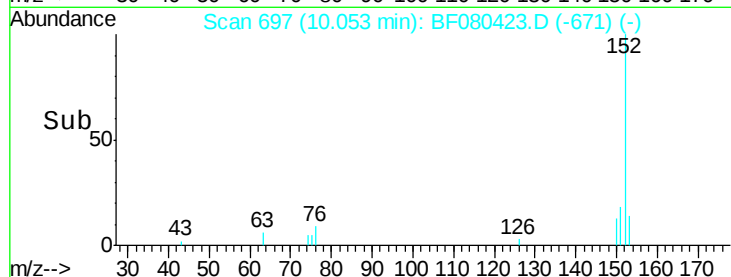
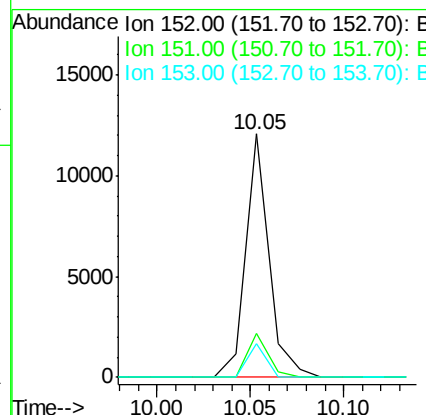
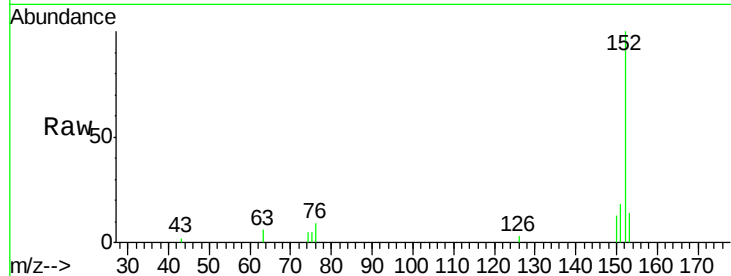
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Acenaphthylene  
Concen: 2.14 ng  
RT: 10.05 min Scan# 697  
Delta R.T. 0.00 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

Instrument :  
BNA\_F  
ClientSampleId :  
TEC-E4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 18.0  | 15.8  | 23.8  |
| 153     | 13.7  | 10.2  | 15.4  |

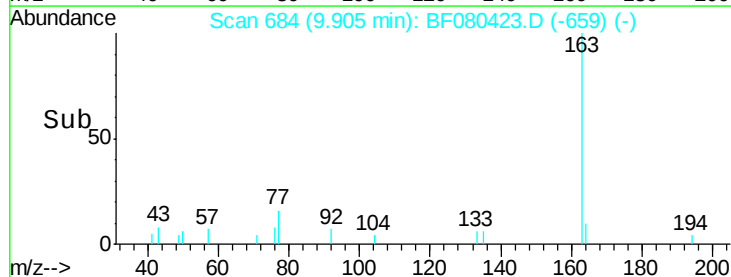
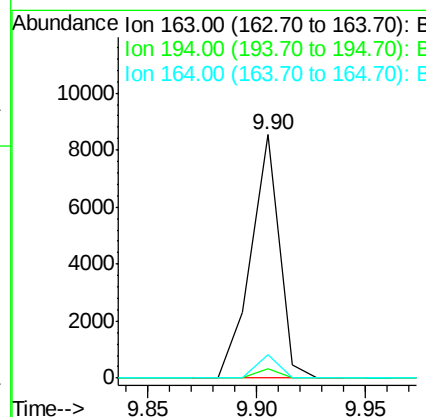
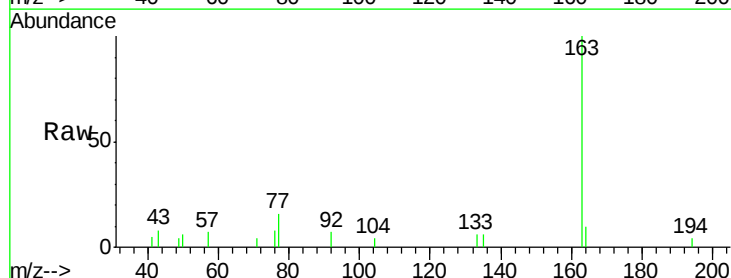
Manual Integrations  
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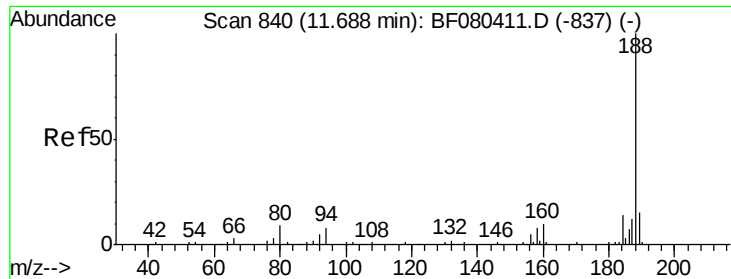
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#49  
Dimethylphthalate  
Concen: 2.31 ng  
RT: 9.90 min Scan# 684  
Delta R.T. -0.01 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.0   | 3.4   | 5.2   |
| 164     | 9.8   | 7.4   | 11.0  |





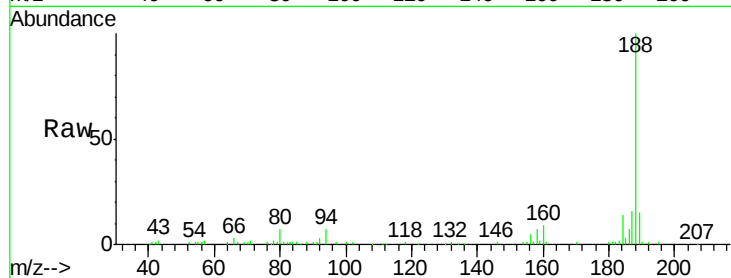
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Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.69 min Scan# 840  
Delta R.T. 0.00 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

Instrument :  
BNA\_F  
ClientSampled :  
TEC-E4

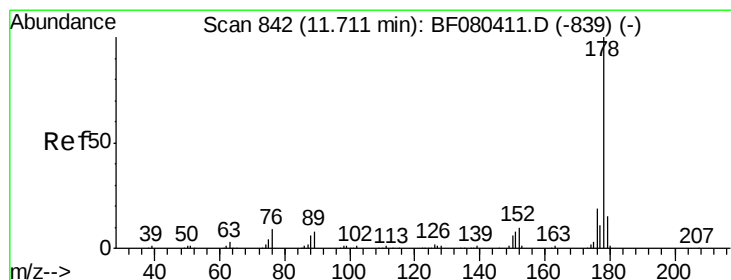
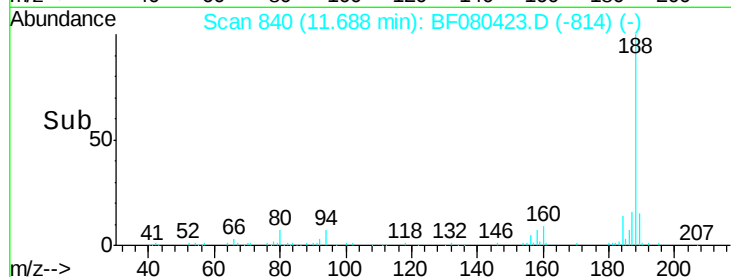
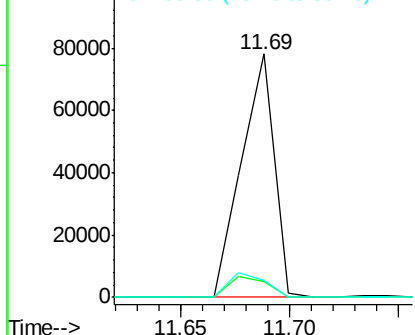
| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 188     | 100   |            |            |
| 94      | 6.7   | 6.7        | 10.1#      |
| 80      | 7.2   | 7.5        | 11.3#      |

Manual Integrations  
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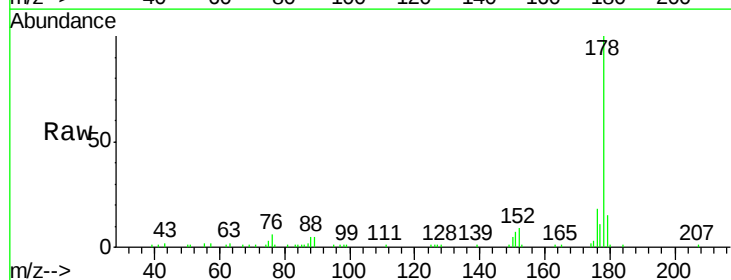


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF0  
Ion 80.00 (79.70 to 80.70): BF0

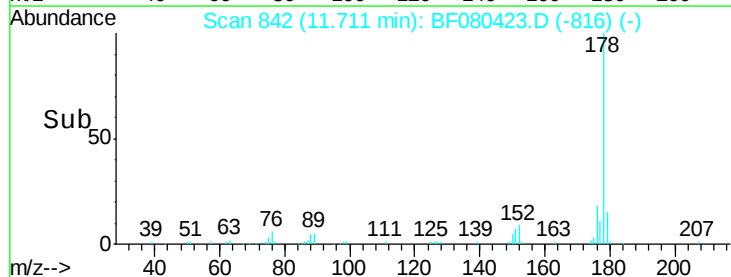
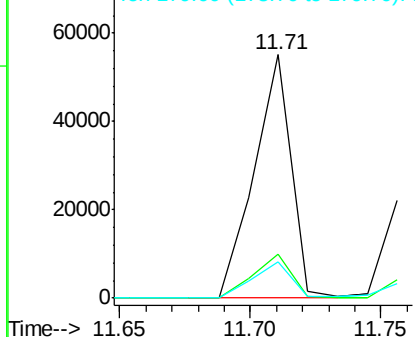


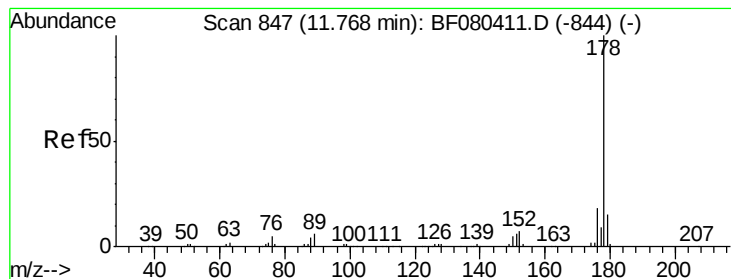
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Phenanthrene  
Concen: 11.18 ng  
RT: 11.71 min Scan# 842  
Delta R.T. 0.00 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 178     | 100   |            |            |
| 176     | 18.1  | 15.2       | 22.8       |
| 179     | 15.0  | 12.4       | 18.6       |



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





#71

Anthracene

Concen: 5.14 ng

RT: 11.76 min Scan# 846

Delta R.T. -0.01 min

Lab File: BF080423.D

Acq: 11 Jul 2015 8:53

Instrument :

BNA\_F

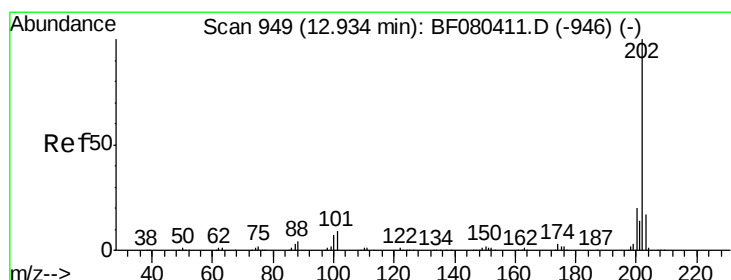
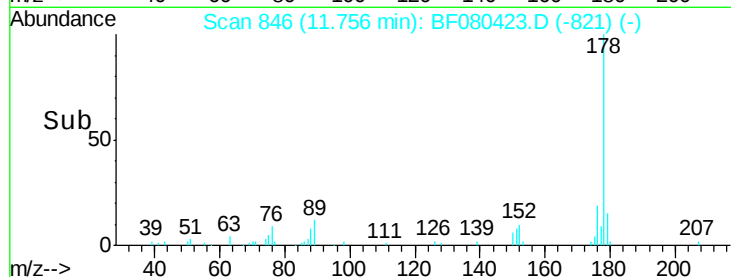
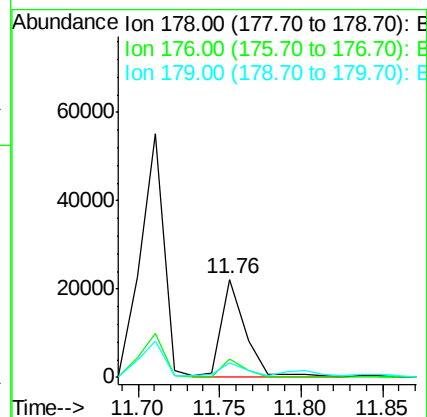
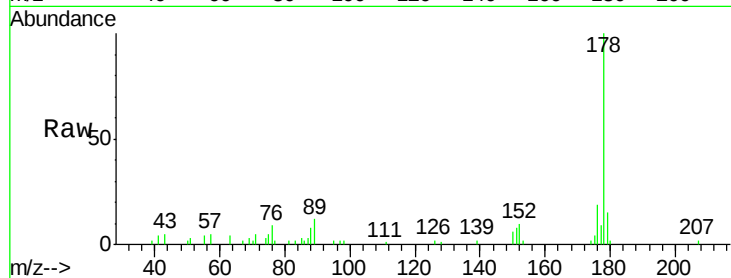
ClientSampleId :

TEC-E4

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 23302 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 18.5  | 14.2  | 21.4  |
| 179       | 15.0  | 11.6  | 17.4  |

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#74

Fluoranthene

Concen: 28.07 ng

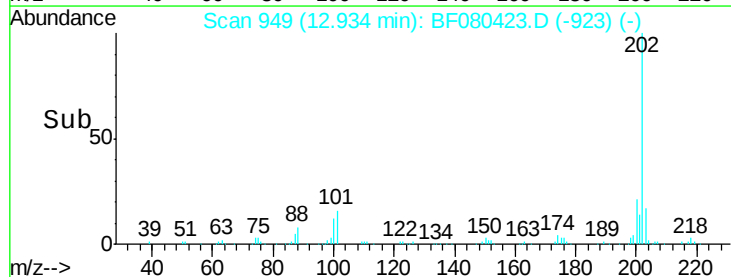
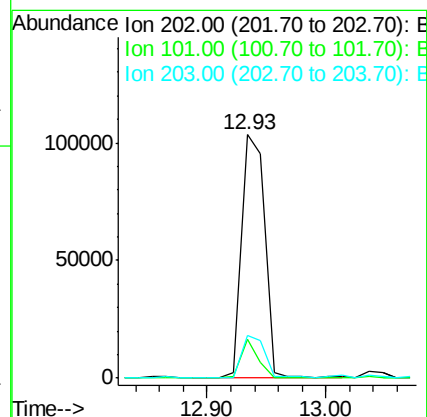
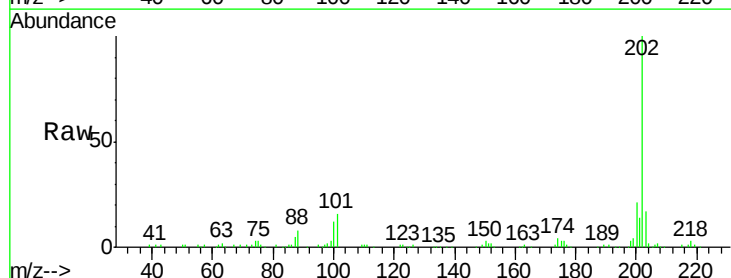
RT: 12.93 min Scan# 949

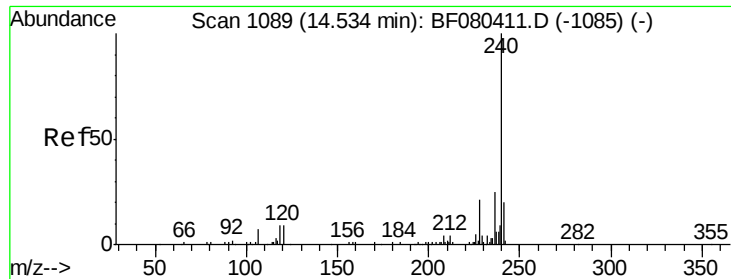
Delta R.T. 0.00 min

Lab File: BF080423.D

Acq: 11 Jul 2015 8:53

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 142451 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 15.9  | 0.0   | 28.8   |
| 203       | 17.4  | 0.0   | 37.3   |





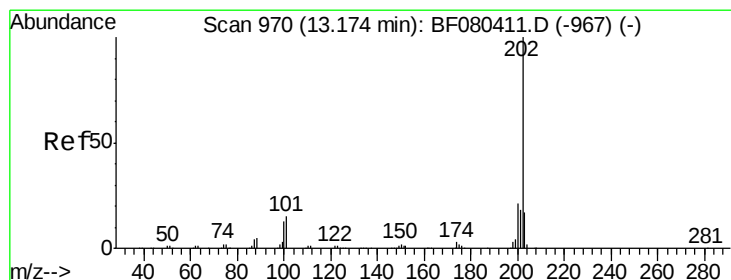
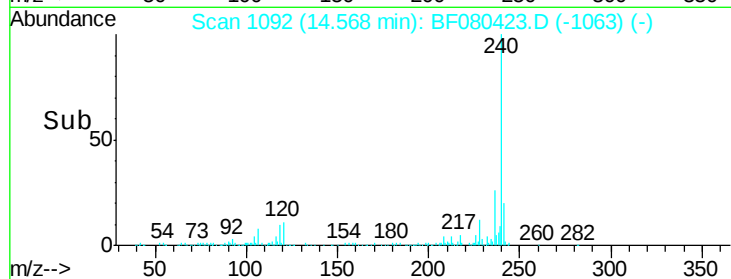
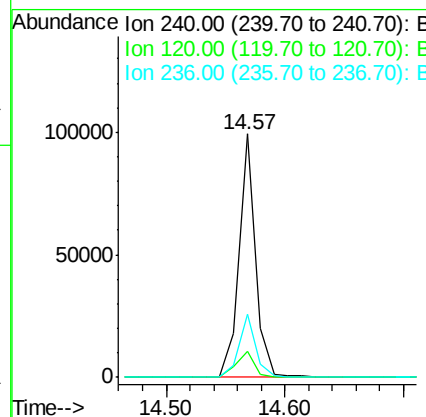
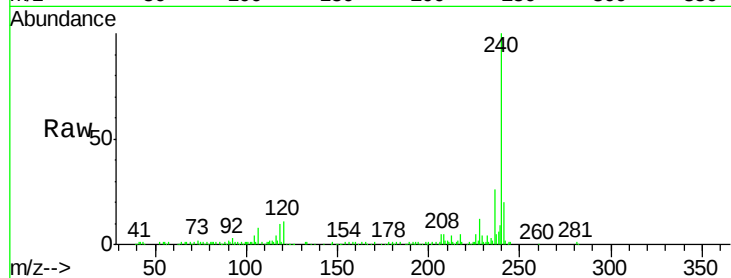
#75  
Chrysene-d12  
Concen: 20.00 ng  
RT: 14.57 min Scan# 1092  
Delta R.T. 0.03 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

Instrument :  
BNA\_F  
ClientSampled :  
TEC-E4

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 240     | 100   |            |            |
| 120     | 10.6  | 7.4        | 11.2       |
| 236     | 25.8  | 19.7       | 29.5       |

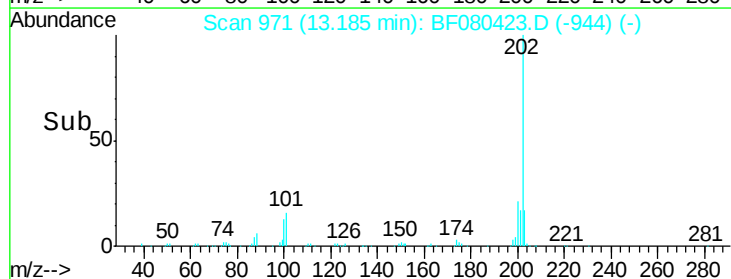
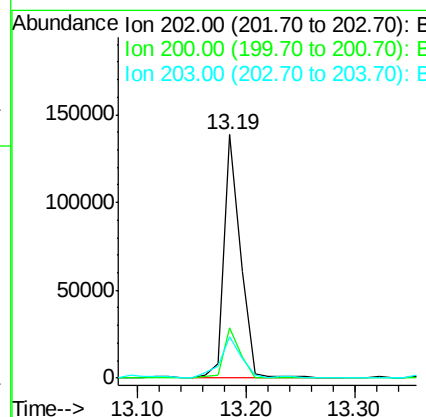
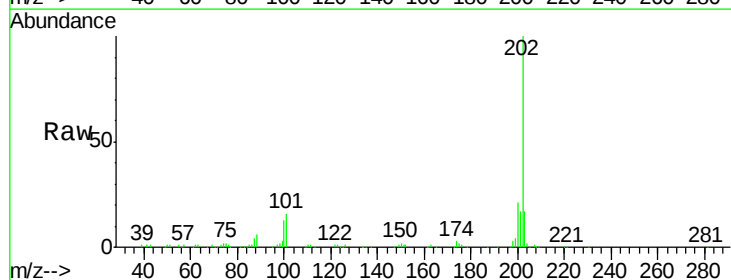
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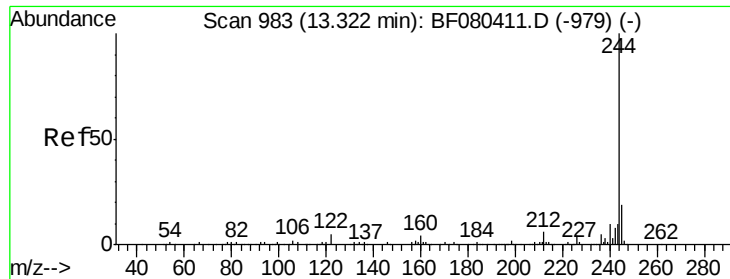
apatel  
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#77  
Pyrene  
Concen: 24.06 ng  
RT: 13.19 min Scan# 971  
Delta R.T. 0.01 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 202     | 100   |            |            |
| 200     | 20.7  | 17.0       | 25.6       |
| 203     | 17.3  | 13.8       | 20.8       |





#78

Terphenyl-d14

Concen: 21.63 ng

RT: 13.33 min Scan# 984

Delta R.T. 0.01 min

Lab File: BF080423.D

Acq: 11 Jul 2015 8:53

Instrument :

BNA\_F

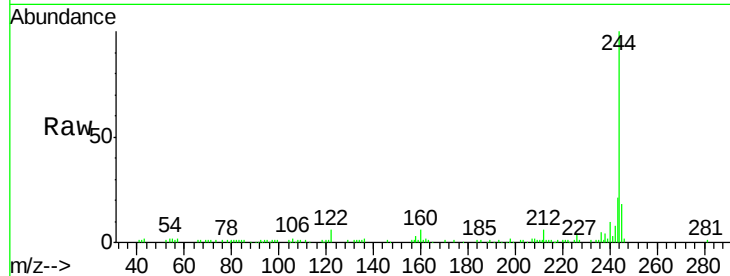
ClientSampled :

TEC-E4

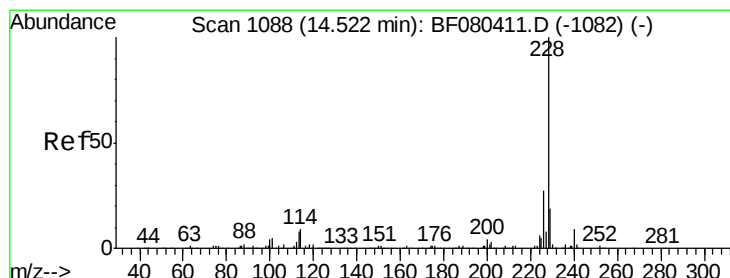
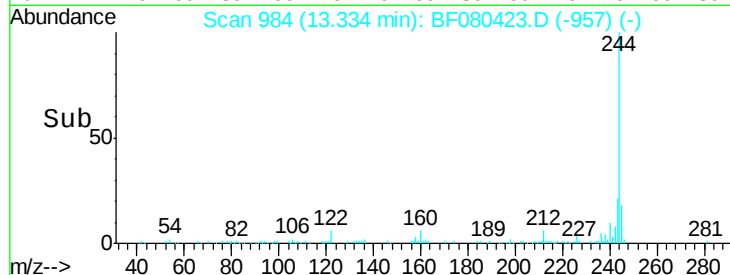
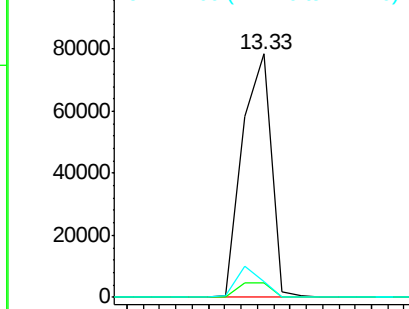
|           |     |       |       |
|-----------|-----|-------|-------|
| Tgt Ion:  | 244 | Resp: | 95716 |
| Ion Ratio |     | Lower | Upper |
| 244       | 100 |       |       |
| 212       | 6.1 | 4.9   | 7.3   |
| 122       | 6.5 | 4.1   | 6.1#  |

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Abundance Ion 244.00 (243.70 to 244.70): E  
Ion 212.00 (211.70 to 212.70): E  
Ion 122.00 (121.70 to 122.70): E



#80

Benzo(a)anthracene

Concen: 15.98 ng

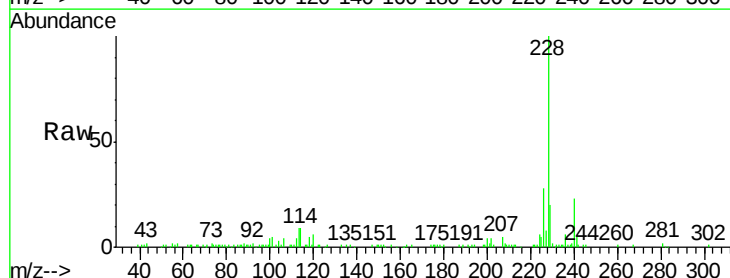
RT: 14.56 min Scan# 1091

Delta R.T. 0.03 min

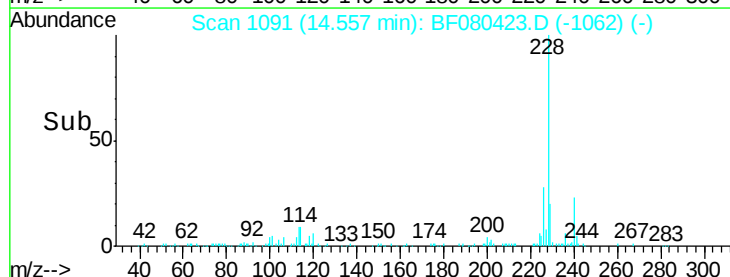
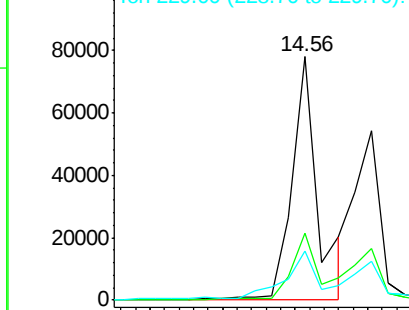
Lab File: BF080423.D

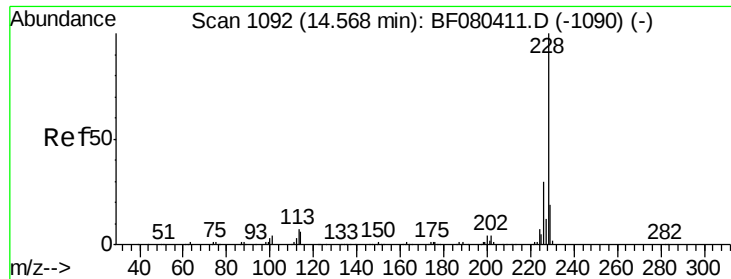
Acq: 11 Jul 2015 8:53

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 228  | Resp: | 96762 |
| Ion Ratio |      | Lower | Upper |
| 228       | 100  |       |       |
| 226       | 27.6 | 21.7  | 32.5  |
| 229       | 20.0 | 15.5  | 23.3  |



Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E





#82

Chrysene

Concen: 11.87 ng

RT: 14.60 min Scan# 1095

Delta R.T. 0.03 min

Lab File: BF080423.D

Acq: 11 Jul 2015 8:53

Instrument :

BNA\_F

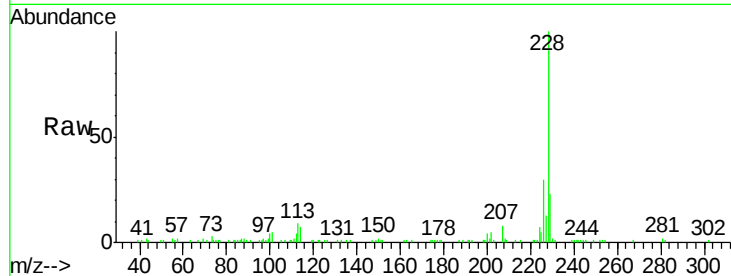
ClientSampleId :

TEC-E4

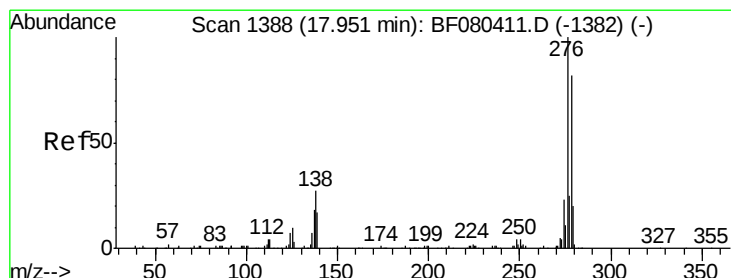
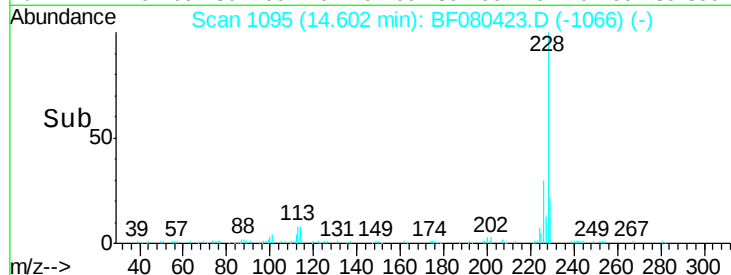
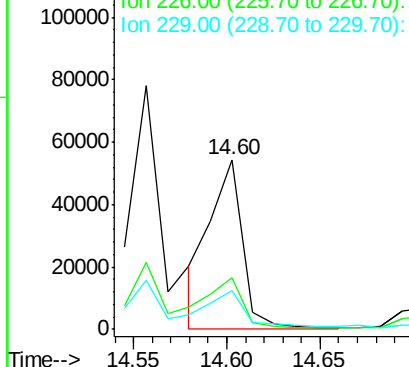
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 228   | Resp: | 66203 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 30.4  | 24.3  | 36.5  |
| 229       | 22.8  | 15.5  | 23.3  |

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Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E



#85

Indeno(1,2,3-cd)pyrene

Concen: 8.43 ng

RT: 18.01 min Scan# 1393

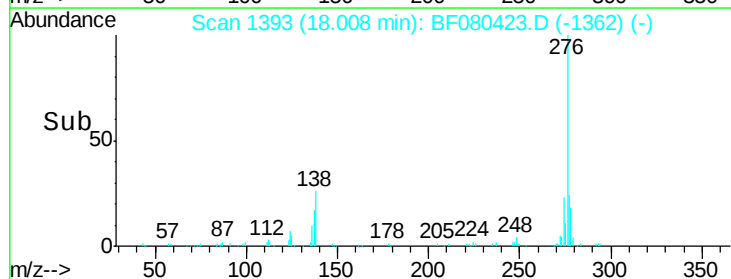
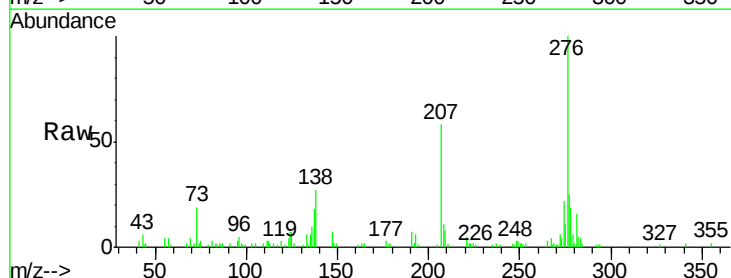
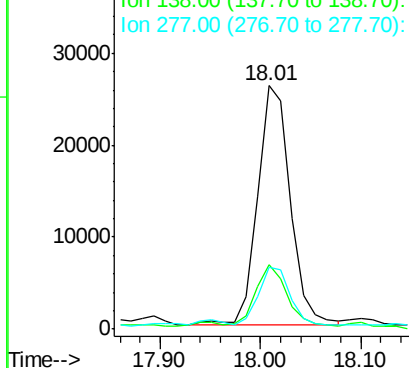
Delta R.T. 0.06 min

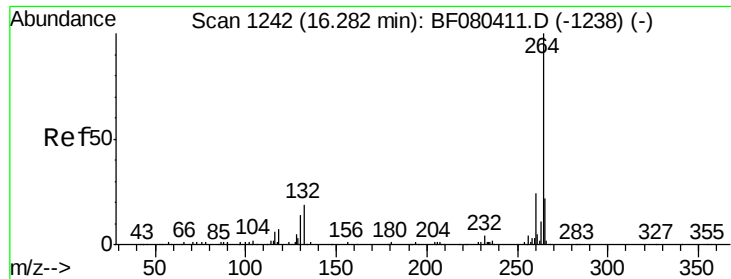
Lab File: BF080423.D

Acq: 11 Jul 2015 8:53

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 58415 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 25.6  | 21.4  | 32.0  |
| 277       | 23.9  | 19.5  | 29.3  |

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





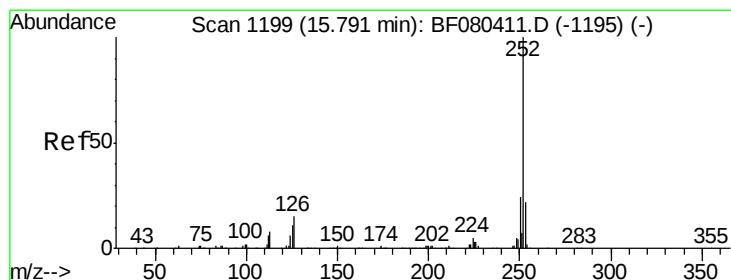
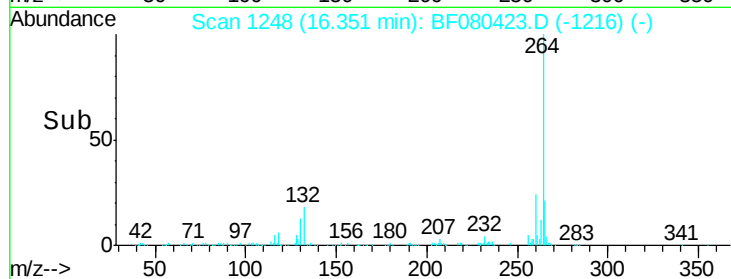
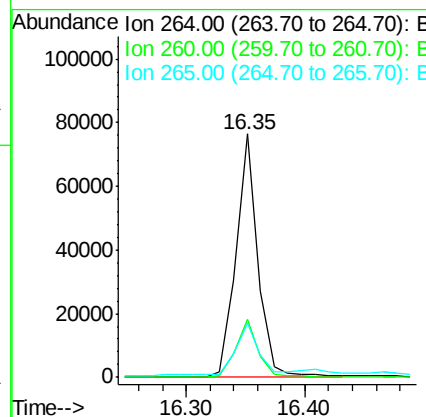
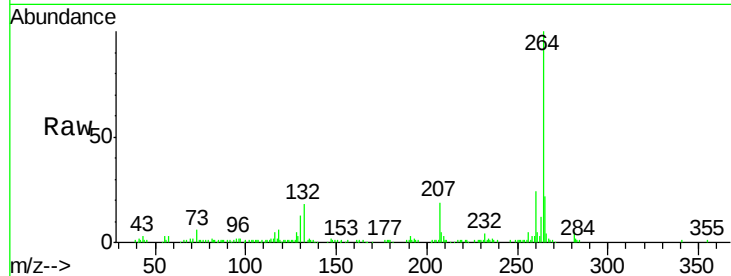
#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 16.35 min Scan# 1248  
Delta R.T. 0.07 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

Instrument :  
BNA\_F  
ClientSampleId :  
TEC-E4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.6  | 19.4  | 29.2  |
| 265     | 22.3  | 17.8  | 26.8  |

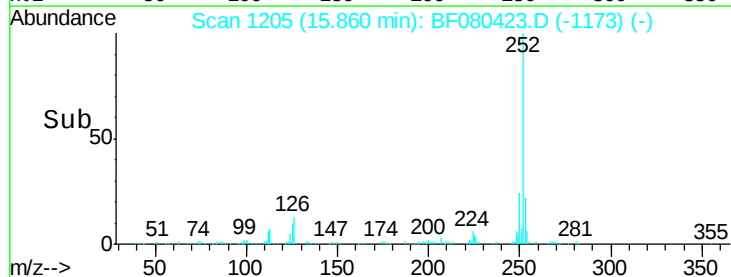
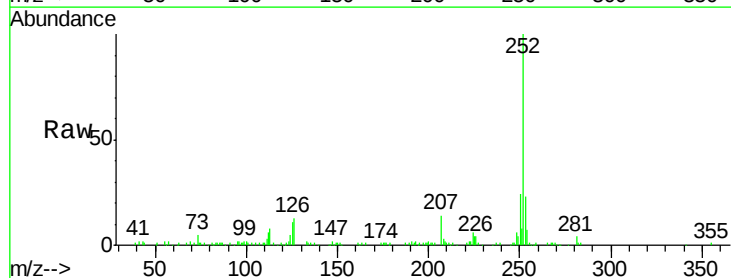
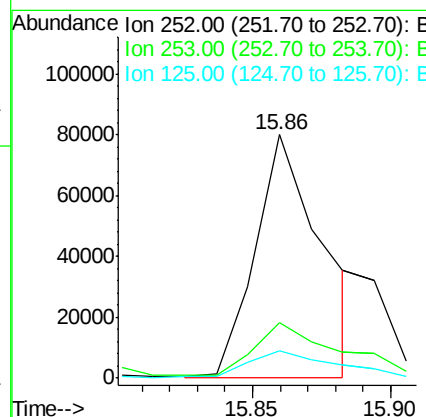
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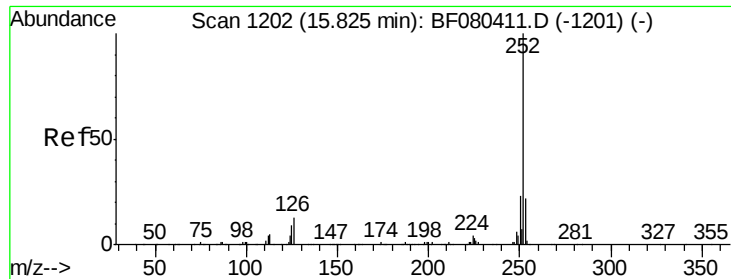
apatel  
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#87  
Benzo(b)fluoranthene  
Concen: 19.78 ng m  
RT: 15.86 min Scan# 1205  
Delta R.T. 0.07 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 17.8  | 26.8  |
| 125     | 11.0  | 8.6   | 12.8  |





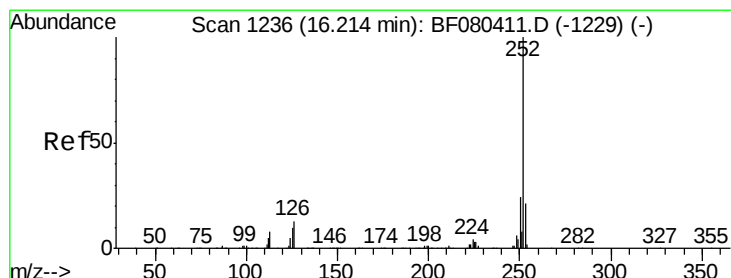
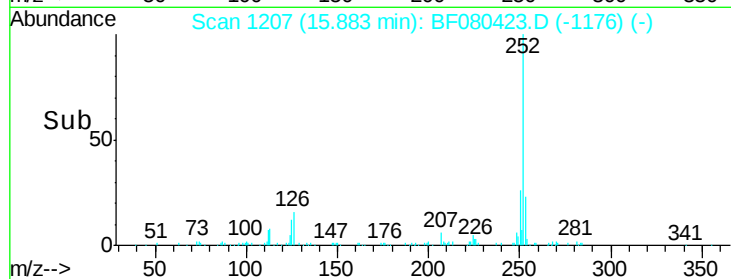
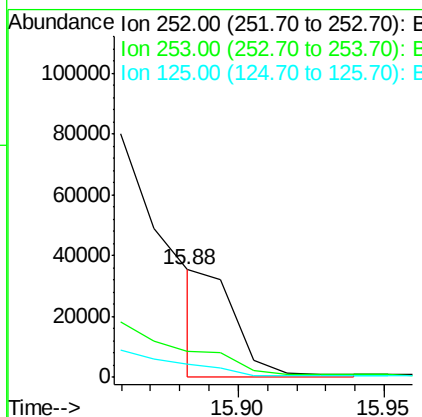
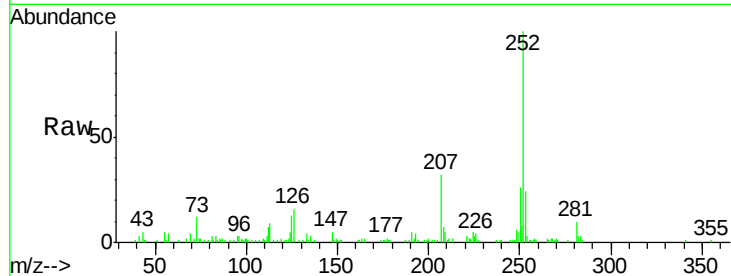
#88  
Benzo(k)fluoranthene  
Concen: 5.16 ng m  
RT: 15.88 min Scan# 1207  
Delta R.T. 0.06 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

Instrument :  
BNA\_F  
ClientSampled :  
TEC-E4

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 24.0  | 17.7       | 26.5  |
| 125     | 12.8  | 8.4        | 12.6  |

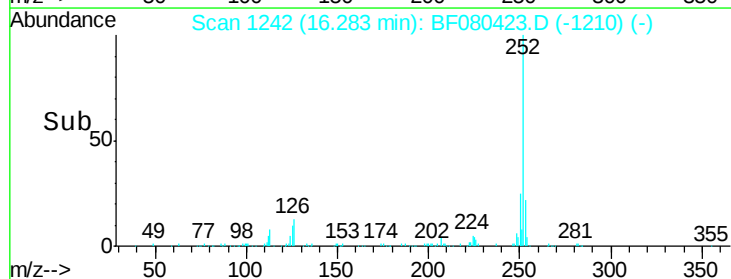
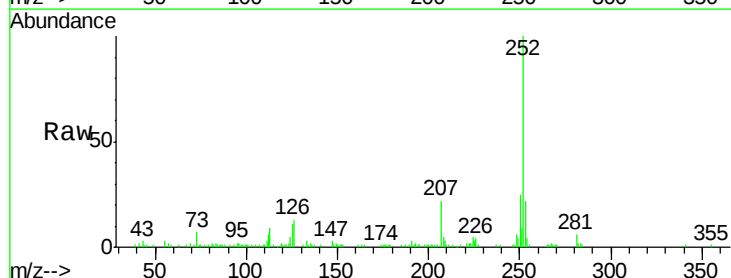
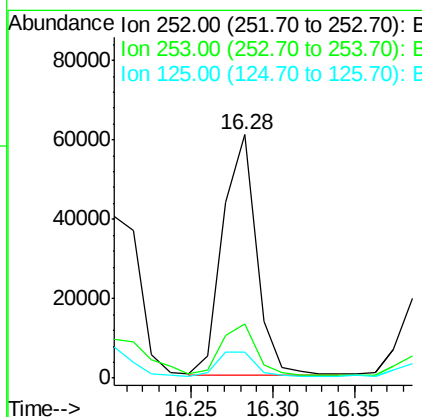
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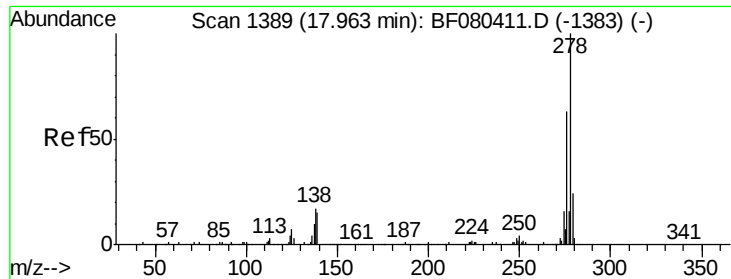
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#89  
Benzo(a)pyrene  
Concen: 14.58 ng  
RT: 16.28 min Scan# 1242  
Delta R.T. 0.07 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 22.4  | 17.0       | 25.6  |
| 125     | 10.7  | 8.1        | 12.1  |





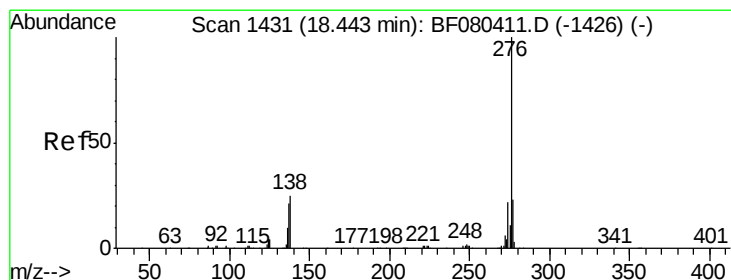
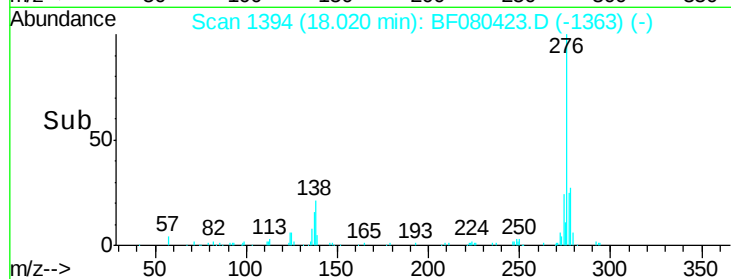
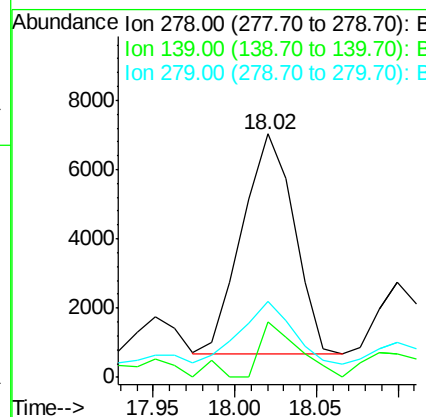
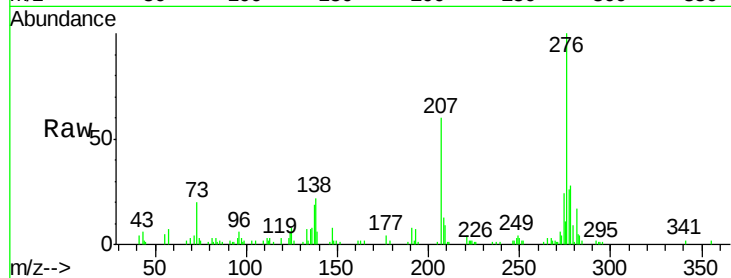
#90  
Dibenzo(a,h)anthracene  
Concen: 2.40 ng  
RT: 18.02 min Scan# 1394  
Delta R.T. 0.06 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

Instrument :  
BNA\_F  
ClientSampleId :  
TEC-E4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 22.8  | 11.8  | 17.8# |
| 279     | 31.1  | 18.8  | 28.2# |

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#91  
Benzo(g,h,i)perylene  
Concen: 10.61 ng  
RT: 18.51 min Scan# 1437  
Delta R.T. 0.07 min  
Lab File: BF080423.D  
Acq: 11 Jul 2015 8:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.2  | 18.2  | 27.4  |
| 138     | 25.3  | 20.3  | 30.5  |

