

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
 Data File : BF103253.D  
 Acq On : 27 Feb 2018 8:35  
 Operator : SJ/JU  
 Sample : J1691-41DL 20X  
 Misc :  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 B11DL

Manual Integrations  
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Sohil  
 2/27/2018 12:23:26 PM

Quant Time: Feb 27 10:00:27 2018  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF022218.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Feb 23 02:43:46 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.87  | 152  | 120266   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.16  | 136  | 488328   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10        | 9.91  | 164  | 188565   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.40 | 188  | 286198   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12            | 14.05 | 240  | 194745   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12            | 15.55 | 264  | 144385   | 20.00  | ng    | 0.01     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.50  | 112  | 40455    | 5.09   | ng    | 0.01     |
| 7) Phenol-d6                | 6.51  | 99   | 46744    | 4.80   | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.44  | 82   | 23468    | 2.74   | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.71 | 330  | 5677     | 3.56   | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.23  | 172  | 47363    | 0.98   | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.98 | 244  | 37615    | 4.64   | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 48) Acenaphthylene          | 9.77  | 152  | 58350    | 3.034  | ng    | 99       |
| 70) Phenanthrene            | 11.43 | 178  | 170842   | 10.847 | ng    | 98       |
| 71) Anthracene              | 11.48 | 178  | 54971    | 3.404  | ng    | 99       |
| 74) Fluoranthene            | 12.62 | 202  | 394070   | 24.898 | ng    | 99       |
| 77) Pyrene                  | 12.85 | 202  | 361685   | 23.821 | ng    | 99       |
| 80) Benzo(a)anthracene      | 14.04 | 228  | 181969   | 14.401 | ng    | 96       |
| 82) Chrysene                | 14.07 | 228  | 164232   | 13.386 | ng    | 99       |
| 85) Indeno(1,2,3-cd)pyrene  | 17.07 | 276  | 65936    | 6.788  | ng    | 97       |
| 87) Benzo(b)fluoranthene    | 15.12 | 252  | 168196m  | 17.718 | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.13 | 252  | 63946m   | 7.153  | ng    |          |
| 89) Benzo(a)pyrene          | 15.49 | 252  | 113689   | 13.411 | ng    | # 96     |
| 90) Dibenzo(a,h)anthracene  | 17.07 | 278  | 17016    | 2.598  | ng    | # 82     |
| 91) Benzo(a,h,i)perylene    | 17.53 | 276  | 61600    | 9.622  | ng    | 94       |

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

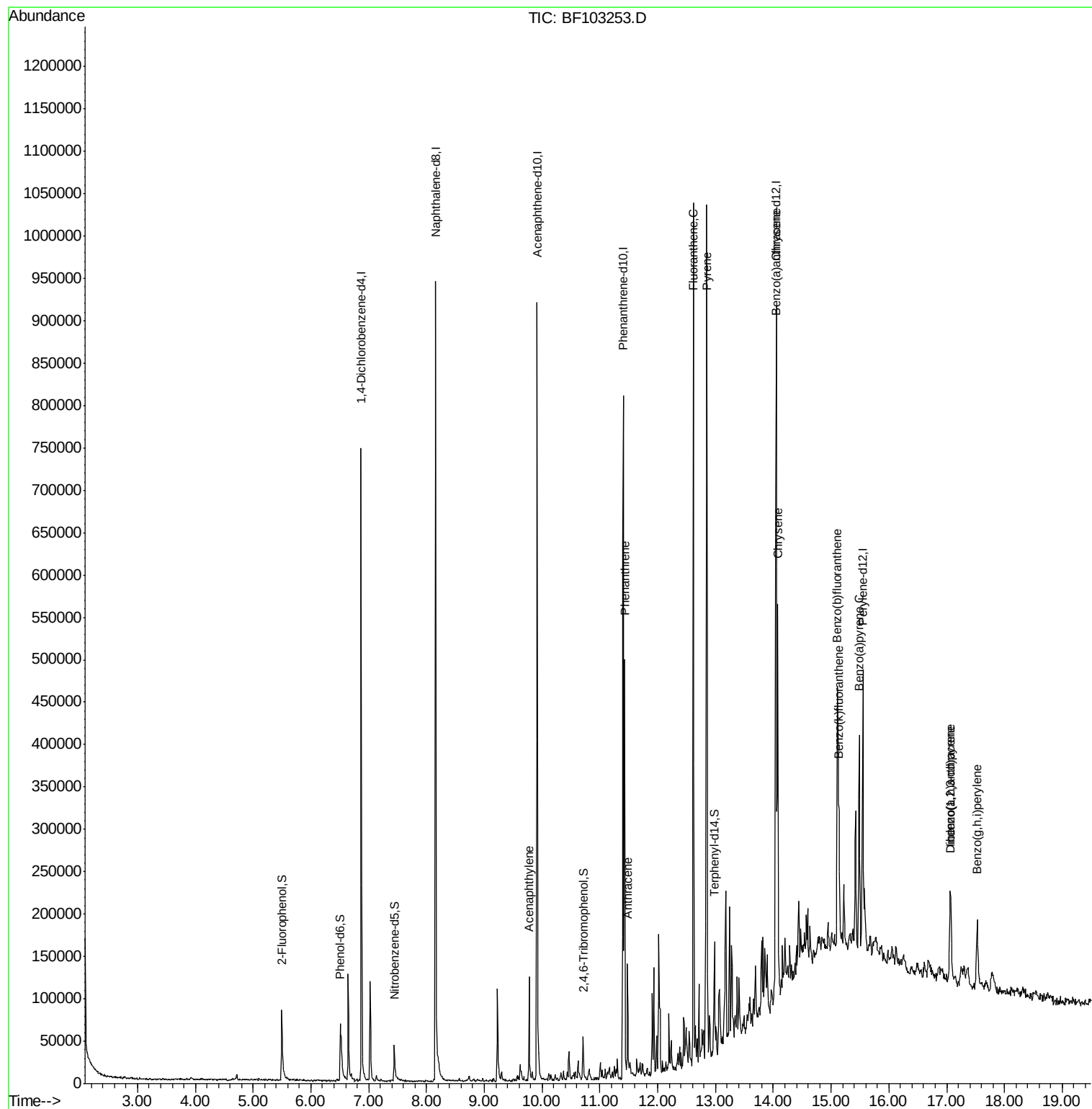
Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
Data File : BF103253.D  
Acq On : 27 Feb 2018 8:35  
Operator : SJ/JU  
Sample : J1691-41DL 20X  
Misc :  
ALS Vial : 32 Sample Multiplier: 1

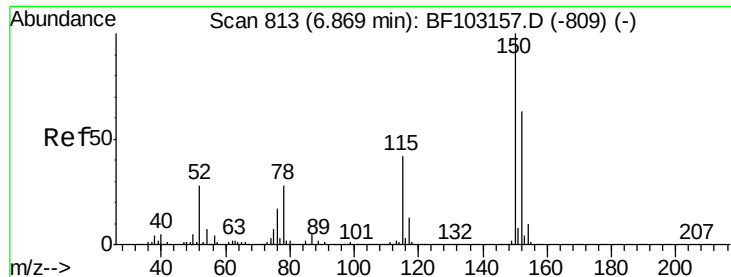
Instrument :  
BNA\_F  
ClientSampleID :  
B11DL

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Quant Time: Feb 27 10:00:27 2018  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Feb 23 02:43:46 2018  
Response via : Initial Calibration





#1

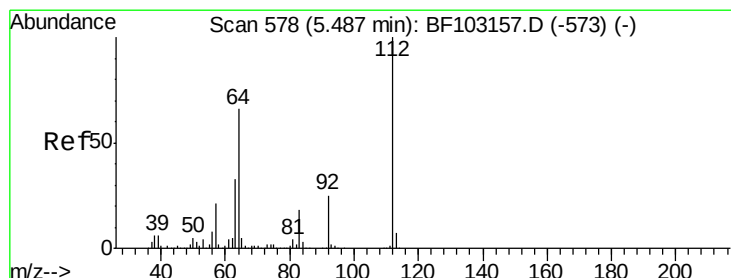
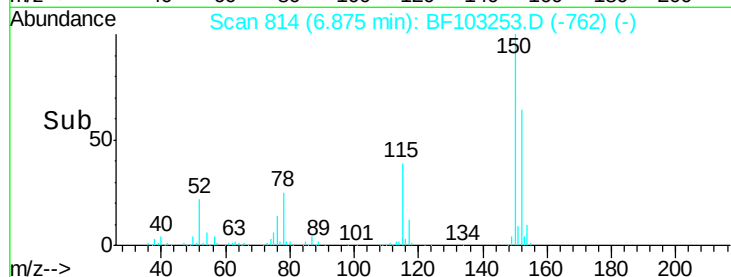
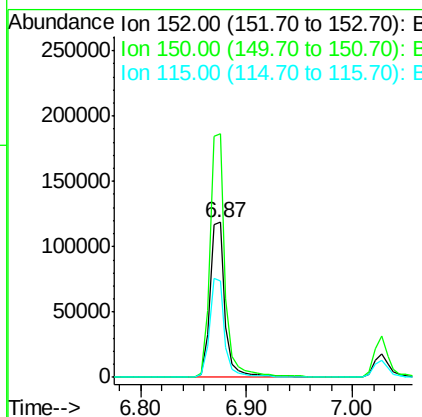
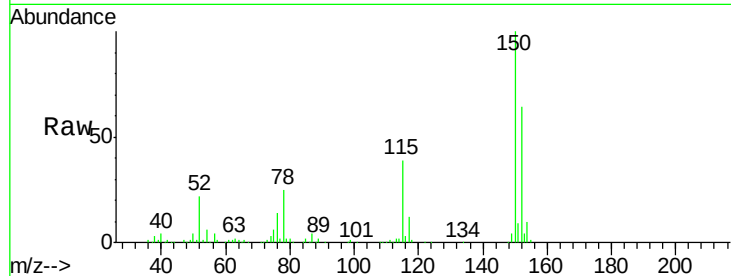
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.87 min Scan# 814  
Delta R.T. 0.01 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

Instrument :  
BNA\_F  
ClientSampled :  
B11DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 156.9 | 124.6 | 186.8 |
| 115     | 61.9  | 50.1  | 75.1  |

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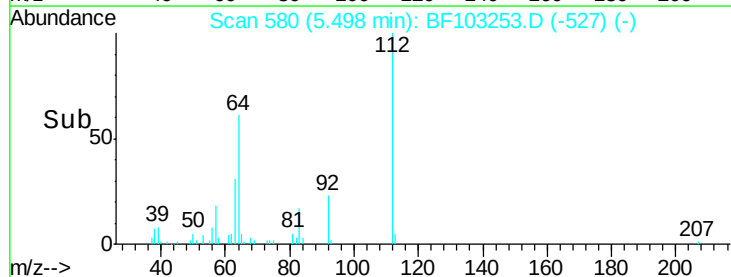
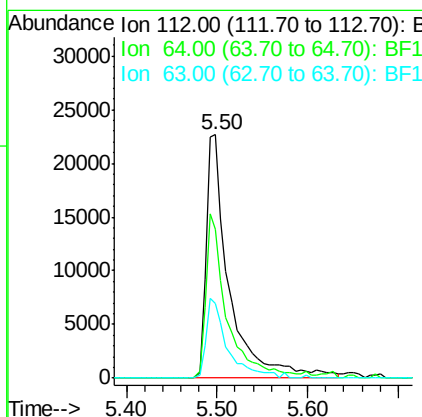
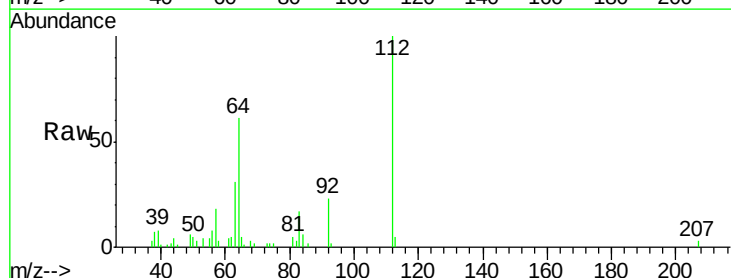
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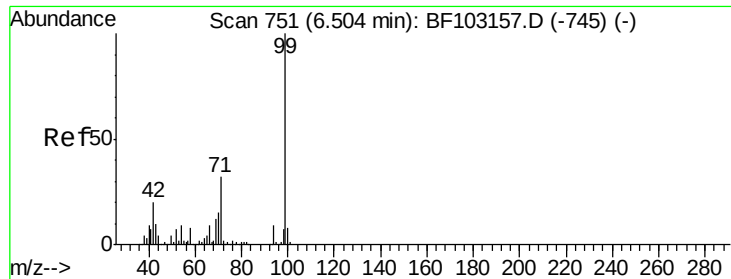


#5

2-Fluorophenol  
Concen: 5.087 ng  
RT: 5.50 min Scan# 580  
Delta R.T. 0.01 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 61.4  | 47.9  | 71.9  |
| 63      | 30.9  | 23.7  | 35.5  |





#7

Phenol-d6

Concen: 4.804 ng

RT: 6.51 min Scan# 752

Delta R.T. 0.01 min

Lab File: BF103253.D

Acq: 27 Feb 2018 8:35

Instrument :

BNA\_F

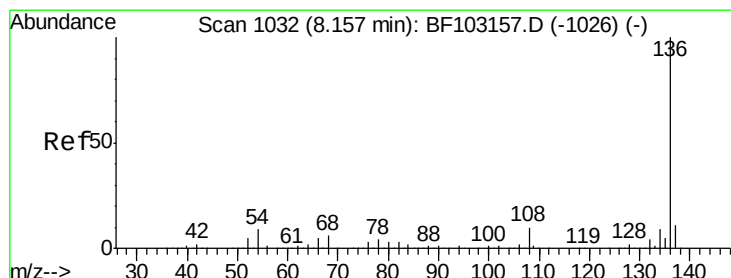
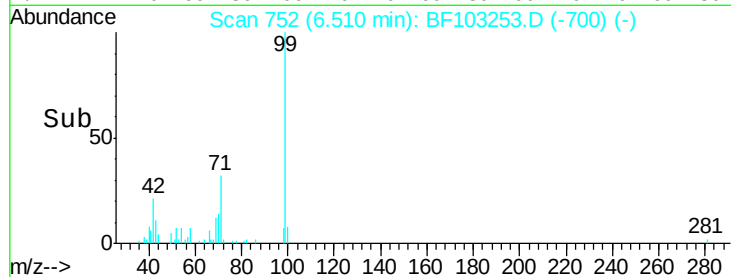
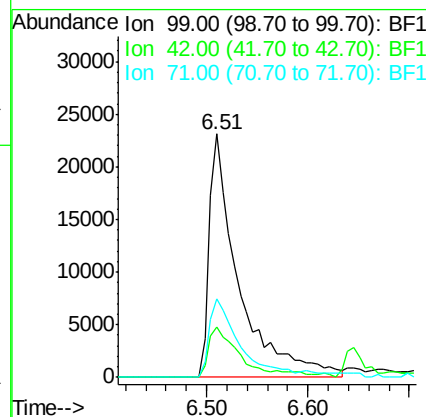
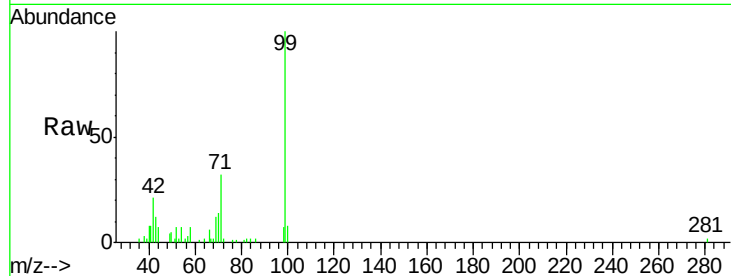
ClientSampleId :

B11DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 99    | Resp: | 46744 |
| Ion Ratio | Lower | Upper |       |
| 99        | 100   |       |       |
| 42        | 20.9  | 14.5  | 21.7  |
| 71        | 32.3  | 25.4  | 38.0  |

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#21

Naphthalene-d8

Concen: 20.000 ng

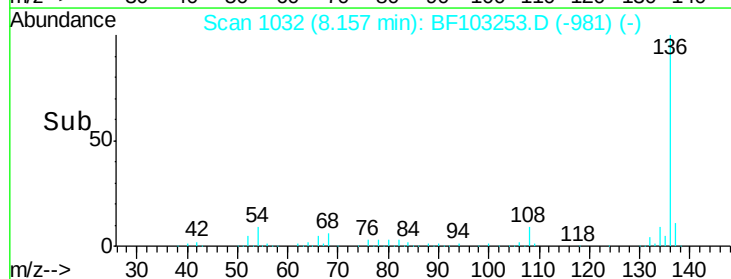
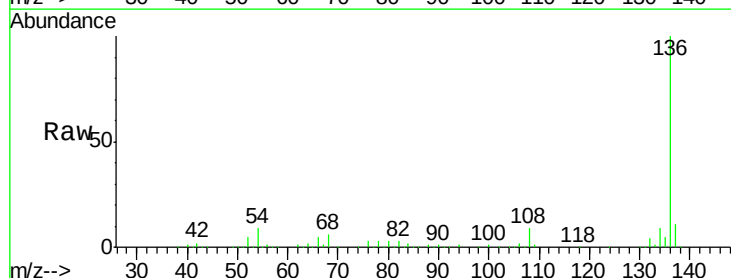
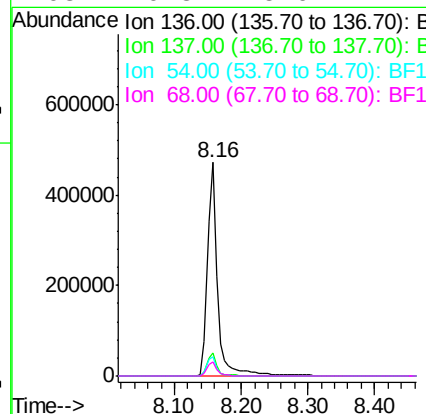
RT: 8.16 min Scan# 1032

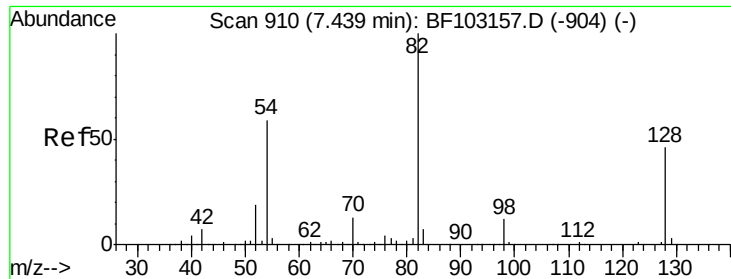
Delta R.T. -0.00 min

Lab File: BF103253.D

Acq: 27 Feb 2018 8:35

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 488328 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 11.0  | 8.9   | 13.3   |
| 54        | 8.9   | 6.6   | 9.8    |
| 68        | 6.3   | 5.0   | 7.4    |





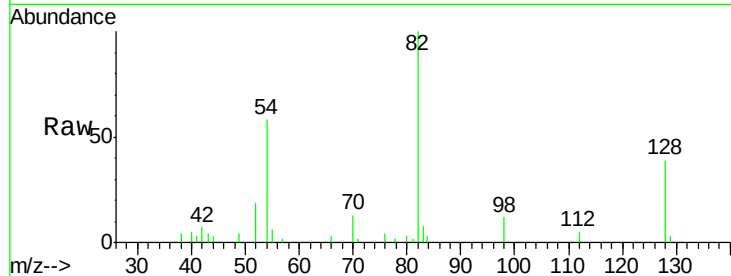
#23  
 Nitrobenzene-d5  
 Concen: 2.745 ng  
 RT: 7.44 min Scan# 910  
 Delta R.T. -0.00 min  
 Lab File: BF103253.D  
 Acq: 27 Feb 2018 8:35

Instrument :  
 BNA\_F  
 ClientSampled :  
 B11DL

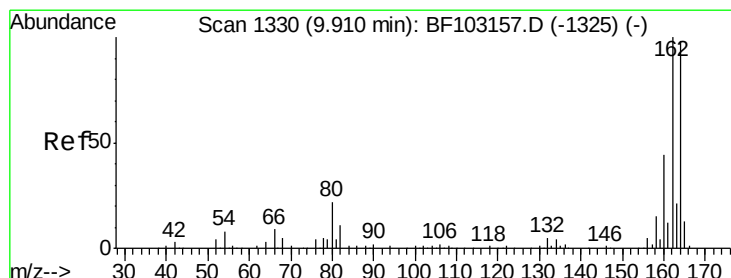
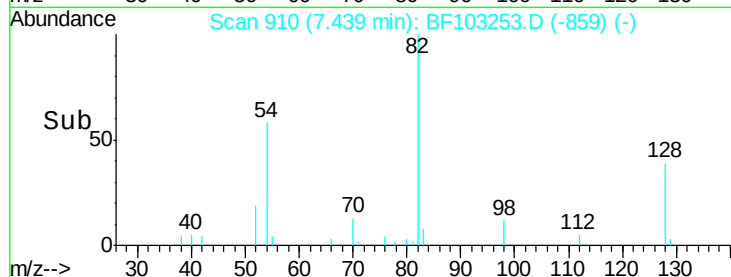
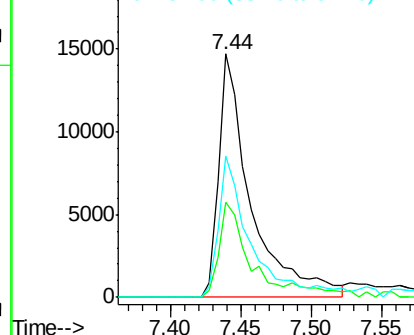
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 39.0  | 36.1  | 54.1  |
| 54      | 58.2  | 41.4  | 62.2  |

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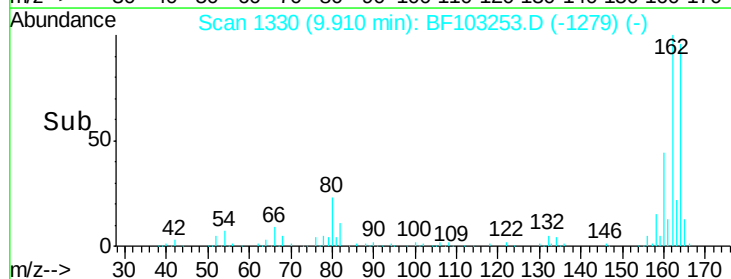
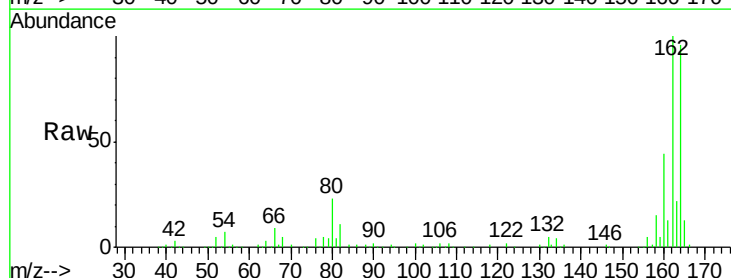
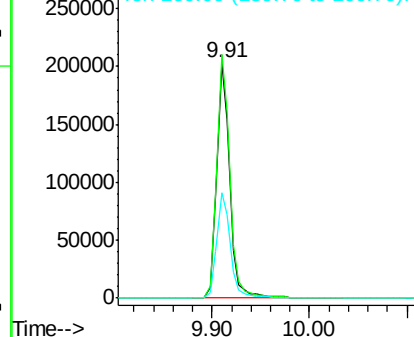
Abundance Ion 82.00 (81.70 to 82.70): BF1  
 Ion 128.00 (127.70 to 128.70): BF1  
 Ion 54.00 (53.70 to 54.70): BF1

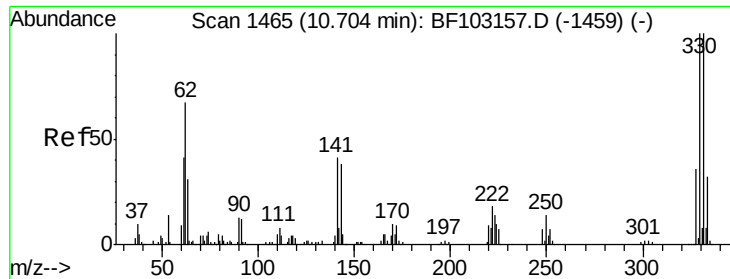


#38  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.91 min Scan# 1330  
 Delta R.T. -0.00 min  
 Lab File: BF103253.D  
 Acq: 27 Feb 2018 8:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 103.7 | 86.1  | 129.1 |
| 160     | 45.2  | 38.3  | 57.5  |

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: 3.557 ng

RT: 10.71 min Scan# 1466

Delta R.T. 0.01 min

Lab File: BF103253.D

Acq: 27 Feb 2018 8:35

Instrument :

BNA\_F

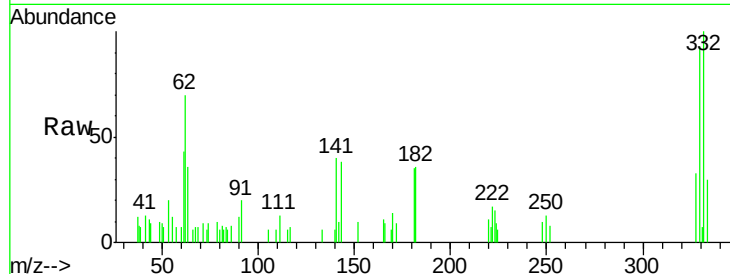
ClientSampled :

B11DL

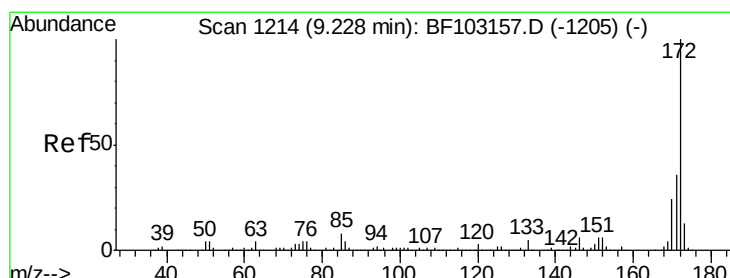
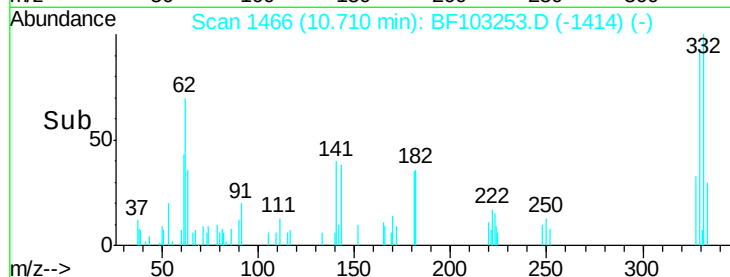
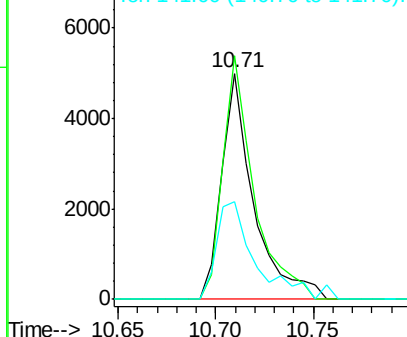
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 105.4 | 77.0  | 115.6 |
| 141     | 53.5  | 29.9  | 44.9  |

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Abundance Ion 329.80 (329.50 to 330.50): E  
Ion 331.80 (331.50 to 332.50): E  
Ion 141.00 (140.70 to 141.70): E



#44

2-Fluorobiphenyl

Concen: 0.984 ng

RT: 9.23 min Scan# 1214

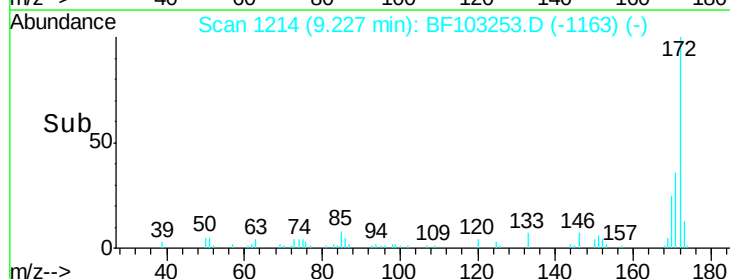
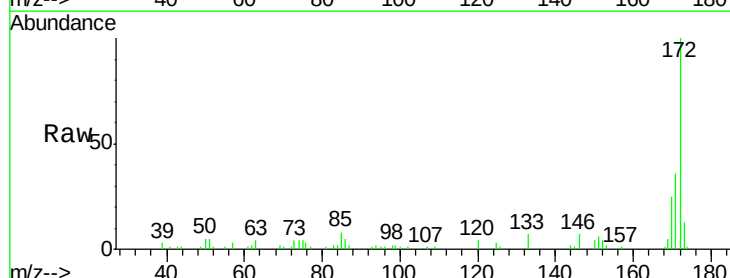
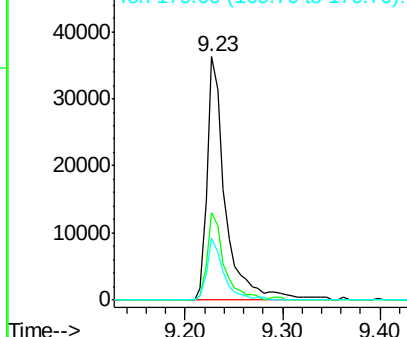
Delta R.T. 0.00 min

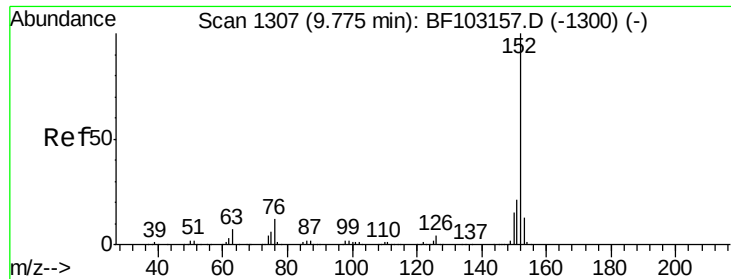
Lab File: BF103253.D

Acq: 27 Feb 2018 8:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.1  | 29.7  | 44.5  |
| 170     | 25.4  | 19.6  | 29.4  |

Abundance Ion 172.00 (171.70 to 172.70): E  
Ion 171.00 (170.70 to 171.70): E  
Ion 170.00 (169.70 to 170.70): E





#48

Acenaphthylene

Concen: 3.034 ng

RT: 9.77 min Scan# 1307

Delta R.T. -0.00 min

Lab File: BF103253.D

Acq: 27 Feb 2018 8:35

Instrument :

BNA\_F

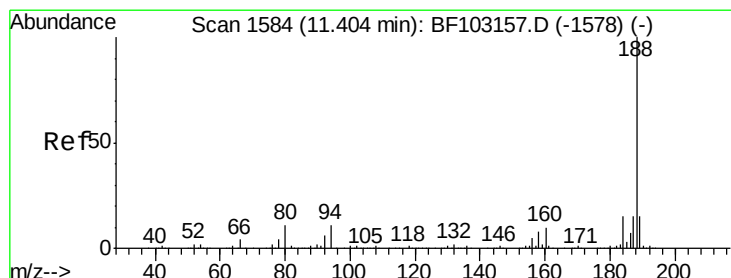
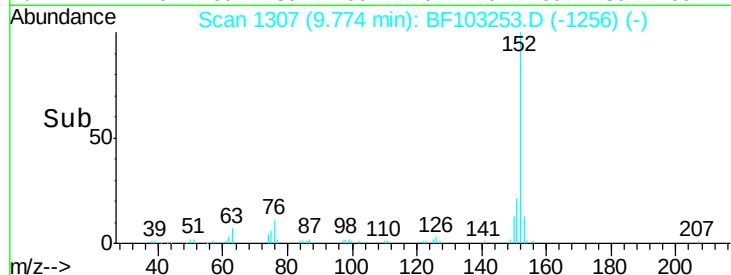
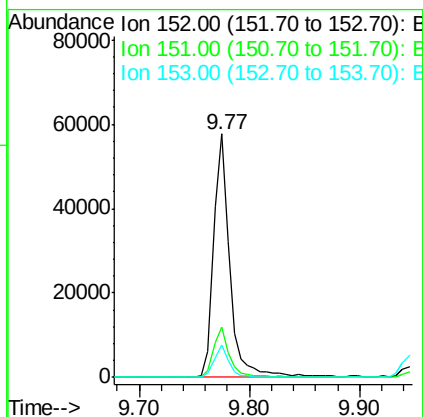
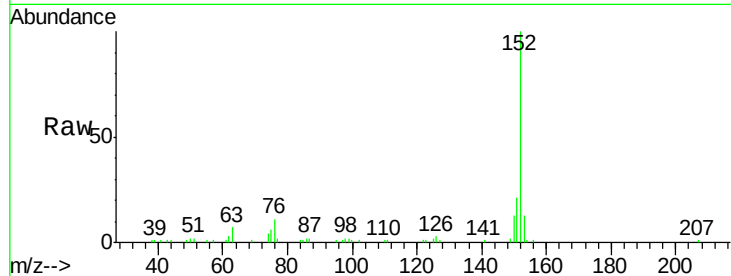
ClientSampleId :

B11DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 58350 |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 20.7  | 16.3  | 24.5  |
| 153       | 13.1  | 10.7  | 16.1  |

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#63

Phenanthrene-d10

Concen: 20.000 ng

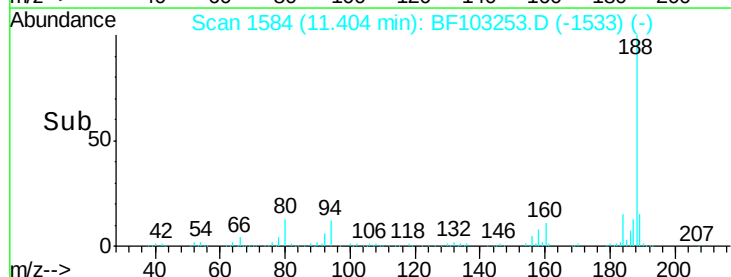
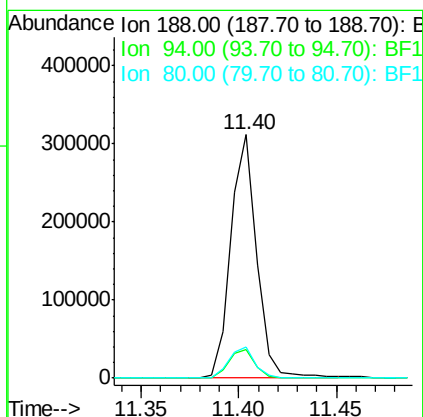
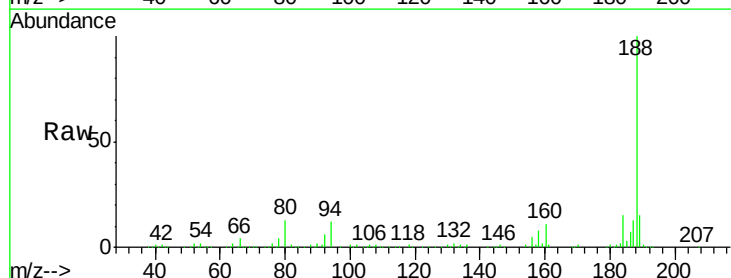
RT: 11.40 min Scan# 1584

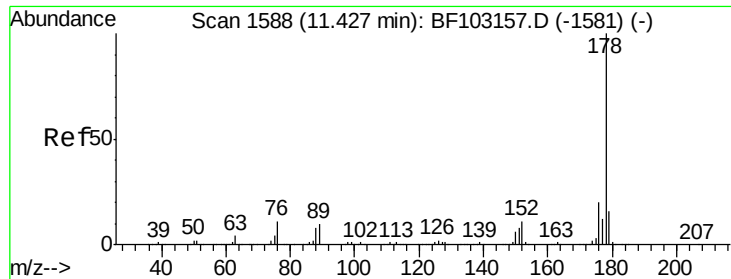
Delta R.T. -0.00 min

Lab File: BF103253.D

Acq: 27 Feb 2018 8:35

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 188   | Resp: | 286198 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 11.6  | 8.5   | 12.7   |
| 80        | 12.6  | 9.2   | 13.8   |





#70

Phenanthrene

Concen: 10.847 ng

RT: 11.43 min Scan# 1588

Delta R.T. -0.00 min

Lab File: BF103253.D

Acq: 27 Feb 2018 8:35

Instrument :

BNA\_F

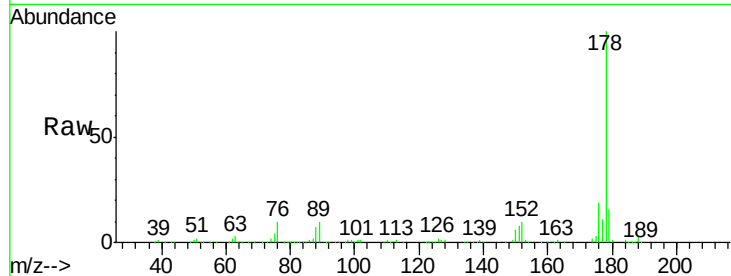
ClientSampled :

B11DL

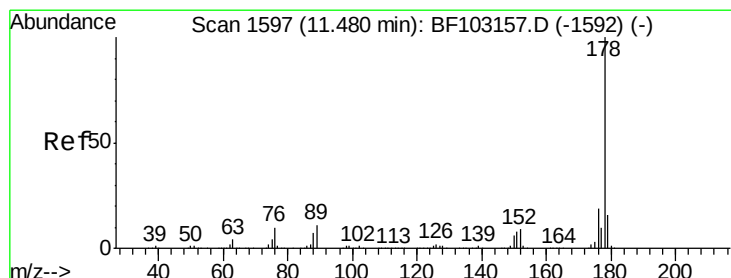
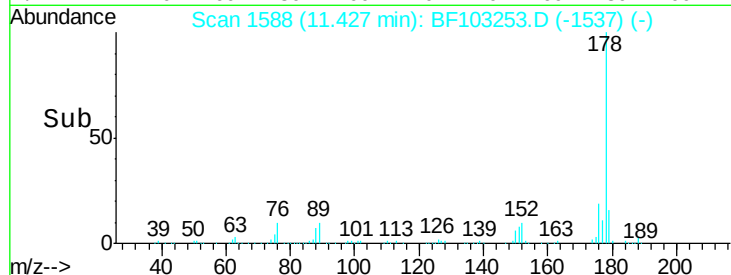
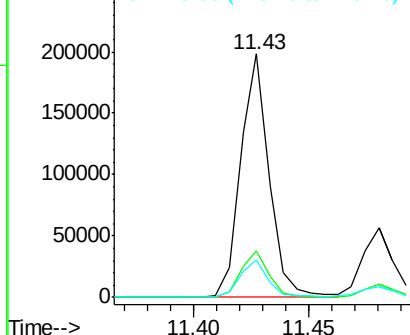
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 178   | Resp: | 170842 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 19.2  | 15.8  | 23.8   |
| 179       | 15.5  | 13.0  | 19.6   |

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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



#71

Anthracene

Concen: 3.404 ng

RT: 11.48 min Scan# 1597

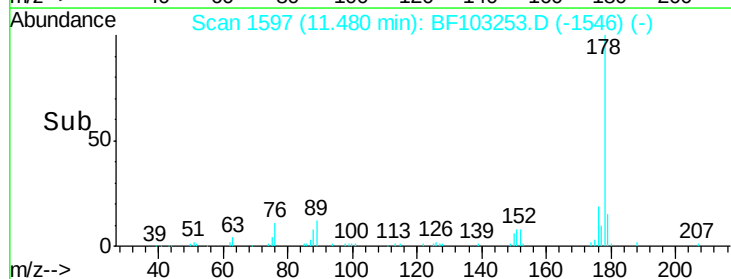
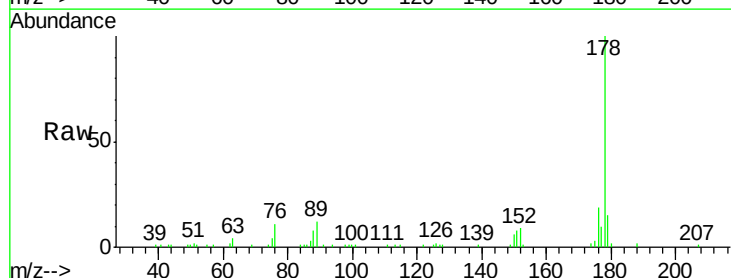
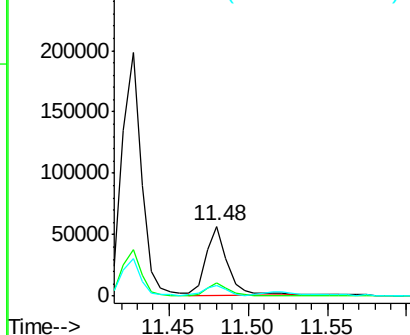
Delta R.T. -0.00 min

Lab File: BF103253.D

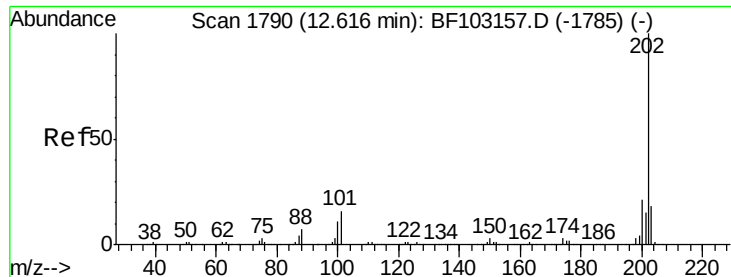
Acq: 27 Feb 2018 8:35

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 54971 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 19.0  | 15.4  | 23.2  |
| 179       | 15.3  | 12.6  | 19.0  |

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: 24.898 ng

RT: 12.62 min Scan# 1791

Delta R.T. 0.01 min

Lab File: BF103253.D

Acq: 27 Feb 2018 8:35

Instrument :

BNA\_F

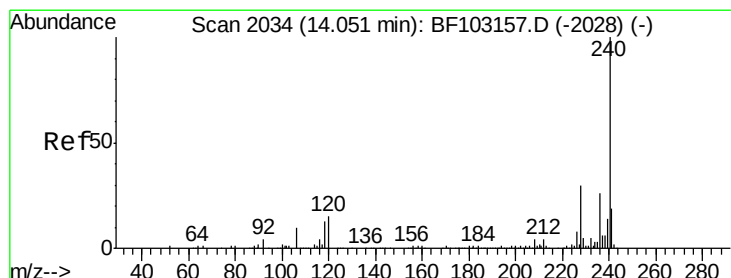
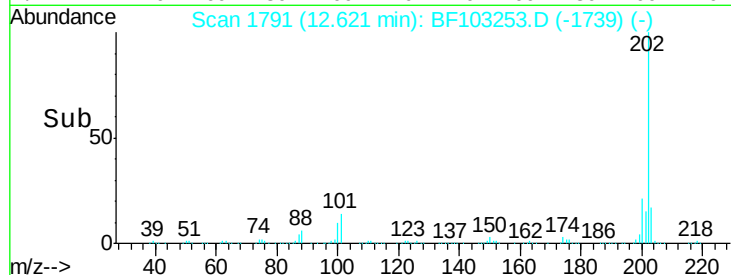
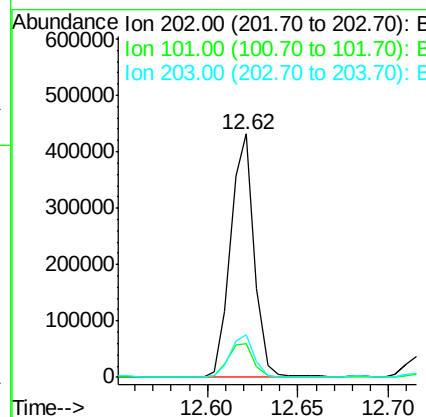
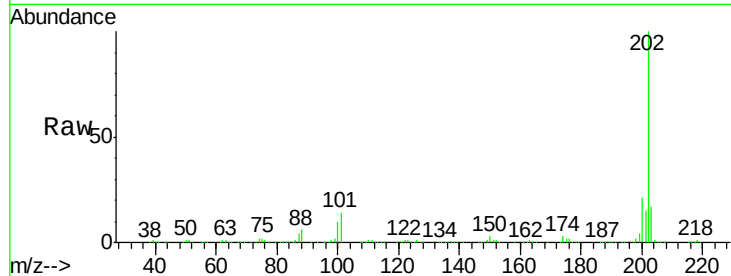
ClientSampled :

B11DL

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 202     | 100  |       | 394070 |       |       |
| 101     | 14.0 | 0.0   | 34.1   |       |       |
| 203     | 17.5 | 0.0   | 38.1   |       |       |

Manual Integrations  
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Sohil  
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#75

Chrysene-d12

Concen: 20.000 ng

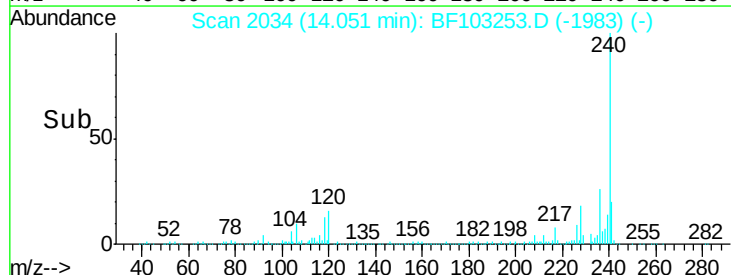
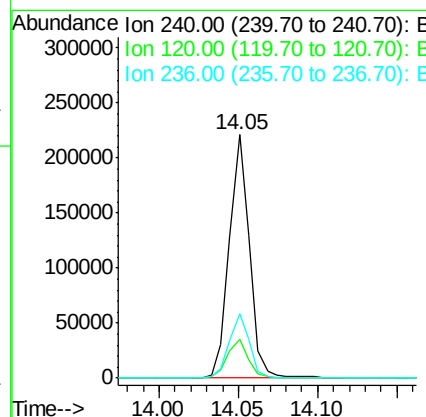
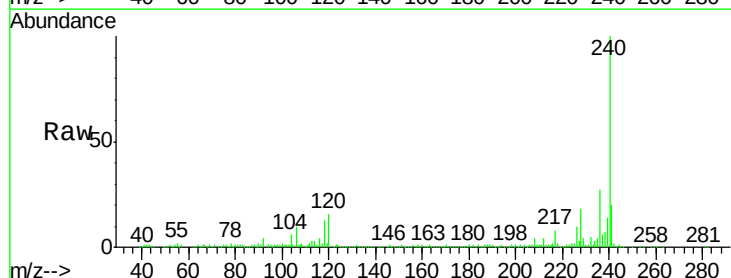
RT: 14.05 min Scan# 2034

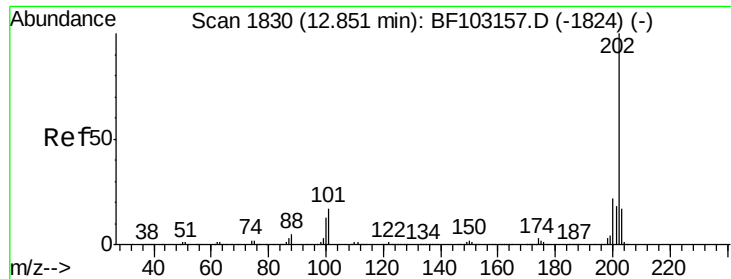
Delta R.T. -0.00 min

Lab File: BF103253.D

Acq: 27 Feb 2018 8:35

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 240     | 100  |       | 194745 |       |       |
| 120     | 15.9 | 9.5   | 14.3#  |       |       |
| 236     | 26.6 | 20.7  | 31.1   |       |       |





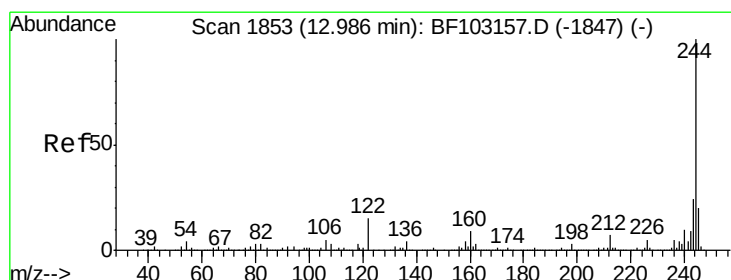
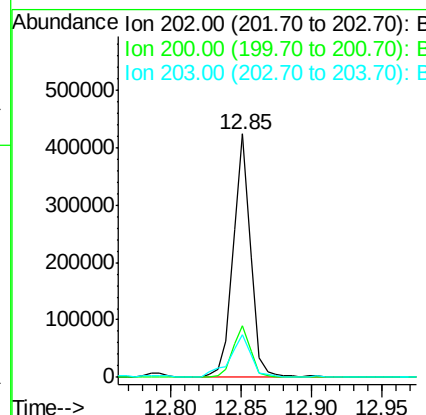
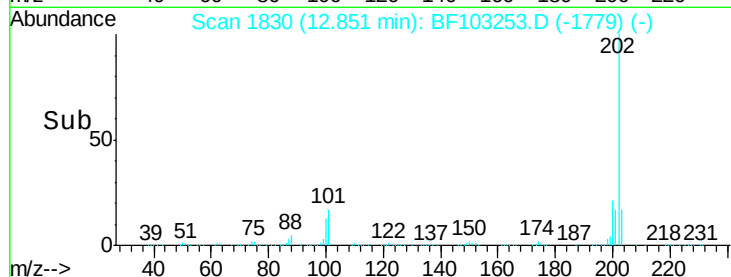
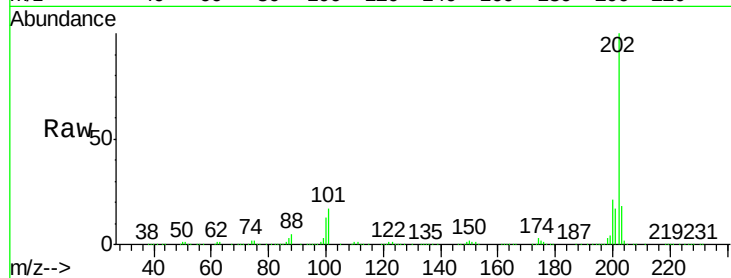
#77  
Pvrene  
Concen: 23.821 ng  
RT: 12.85 min Scan# 1830  
Delta R.T. -0.00 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

Instrument :  
BNA\_F  
ClientSampleID :  
B11DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.1  | 17.4  | 26.2  |
| 203     | 17.6  | 14.3  | 21.5  |

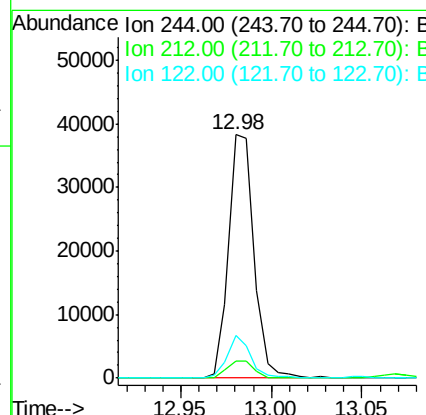
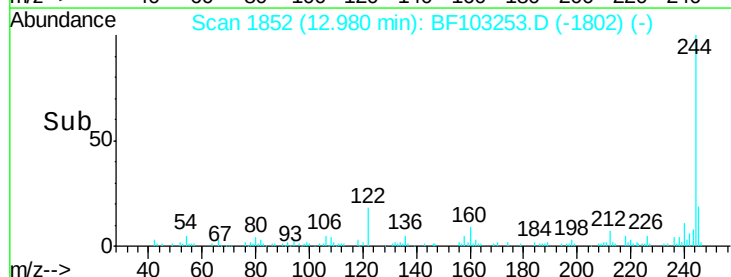
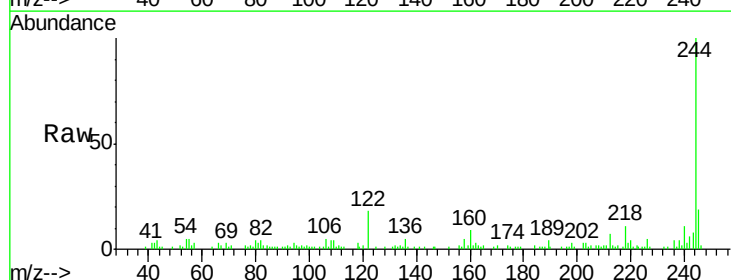
Manual Integrations  
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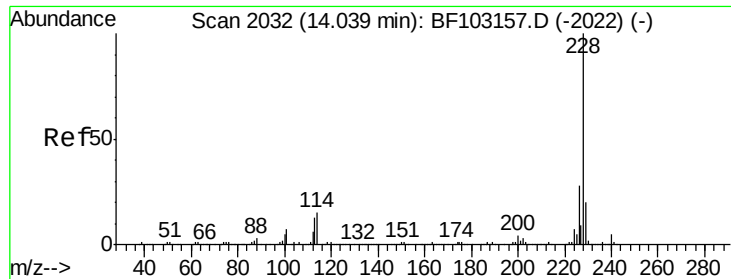
Sohil  
2/27/2018 12:23:26 PM



#78  
Terphenyl-d14  
Concen: 4.643 ng  
RT: 12.98 min Scan# 1852  
Delta R.T. -0.01 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.9   | 5.4   | 8.0   |
| 122     | 17.8  | 11.0  | 16.4  |





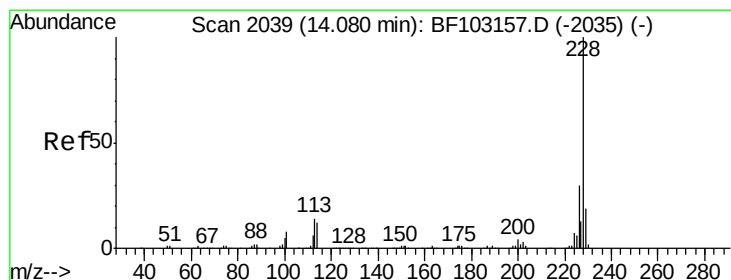
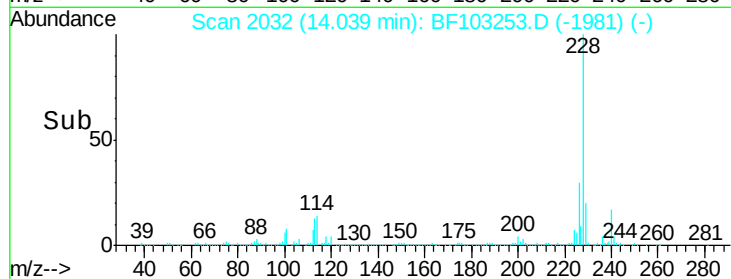
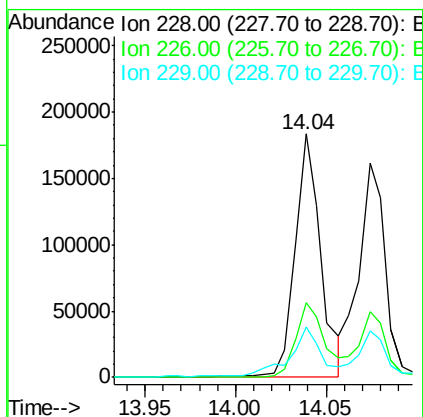
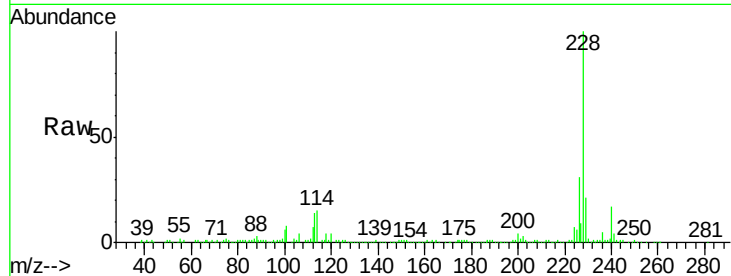
#80  
Benzo(a)anthracene  
Concen: 14.401 ng  
RT: 14.04 min Scan# 2032  
Delta R.T. -0.00 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

Instrument :  
BNA\_F  
ClientSampled :  
B11DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.7  | 22.6  | 33.8  |
| 229     | 20.6  | 15.8  | 23.6  |

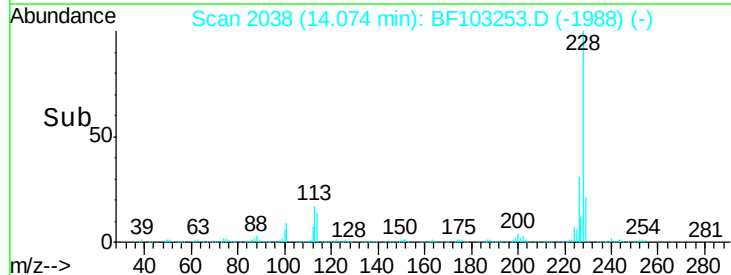
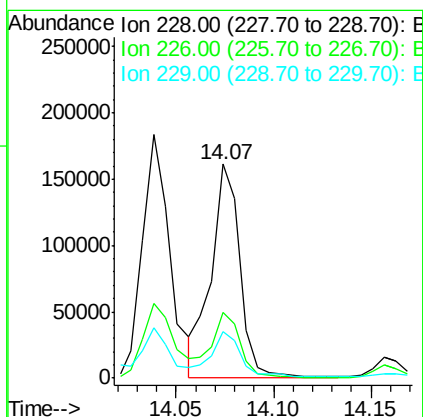
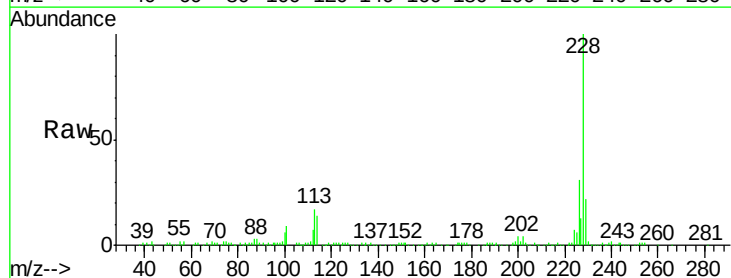
Manual Integrations  
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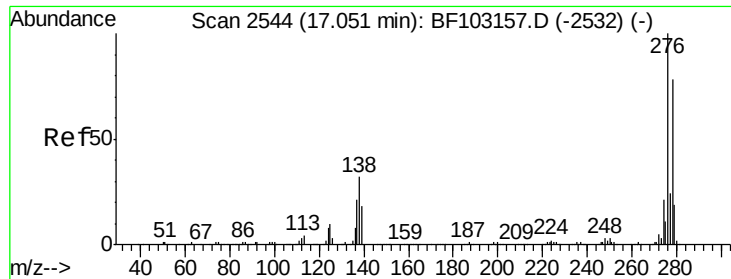
Sohil  
2/27/2018 12:23:26 PM



#82  
Chrysene  
Concen: 13.386 ng  
RT: 14.07 min Scan# 2038  
Delta R.T. -0.01 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.0  | 25.0  | 37.6  |
| 229     | 21.7  | 16.2  | 24.4  |





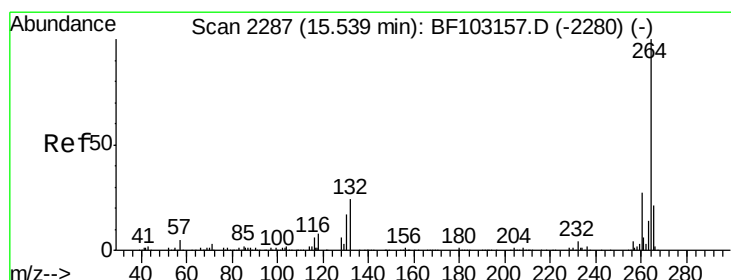
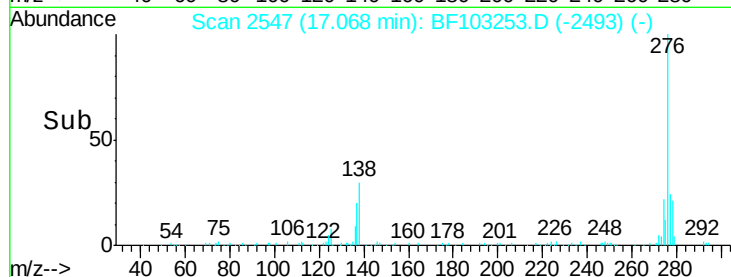
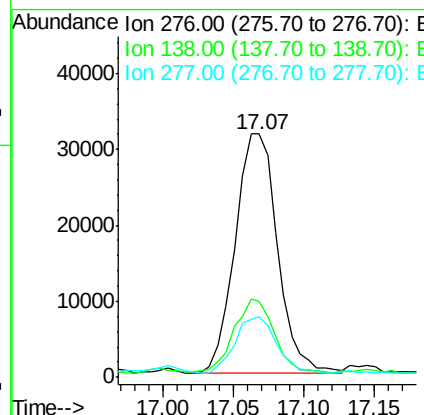
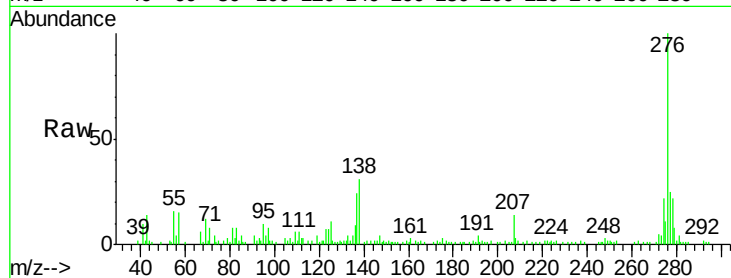
#85  
Indeno(1,2,3-cd)pyrene  
Concen: 6.788 ng  
RT: 17.07 min Scan# 2547  
Delta R.T. 0.02 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

Instrument :  
BNA\_F  
ClientSampleId :  
B11DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 29.5  | 25.0  | 37.6  |
| 277     | 23.5  | 20.1  | 30.1  |

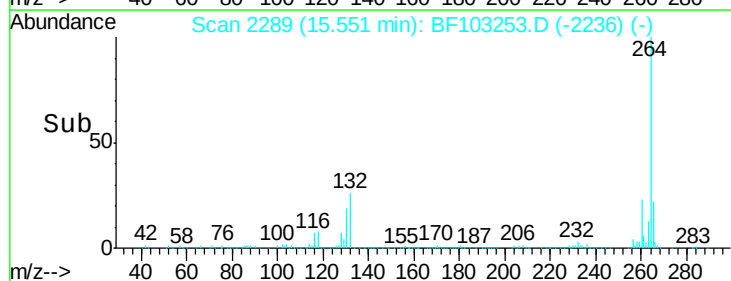
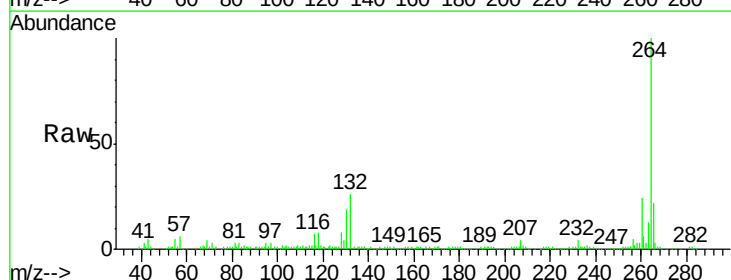
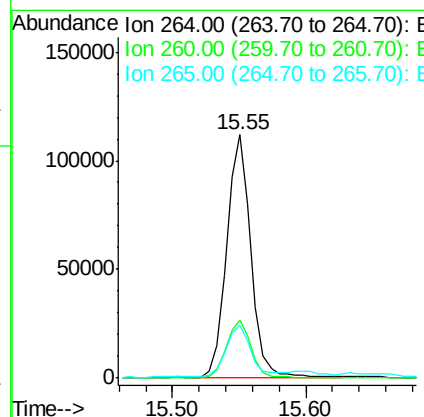
Manual Integrations  
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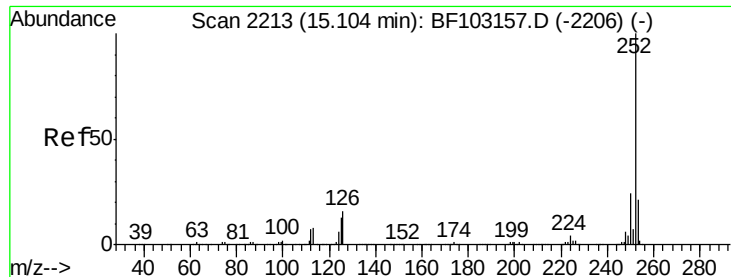
Sohil  
2/27/2018 12:23:26 PM



#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.55 min Scan# 2289  
Delta R.T. 0.01 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.8  | 19.2  | 28.8  |
| 265     | 21.8  | 17.5  | 26.3  |





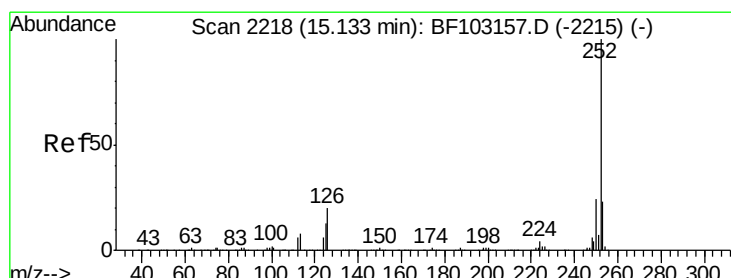
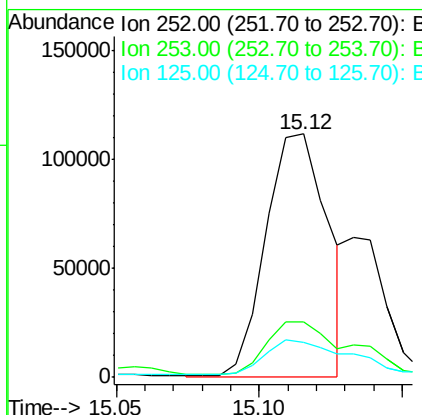
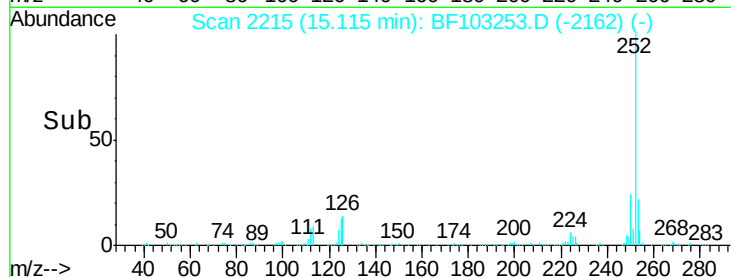
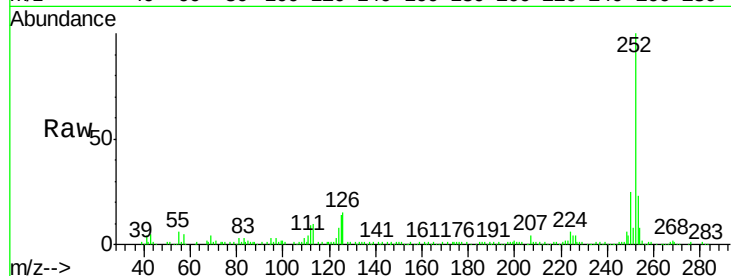
#87  
Benzo(b)fluoranthene  
Concen: 17.718 ng m  
RT: 15.12 min Scan# 2215  
Delta R.T. 0.01 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

Instrument :  
BNA\_F  
ClientSampled :  
B11DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 17.0  | 25.6  |
| 125     | 14.1  | 9.0   | 13.6  |

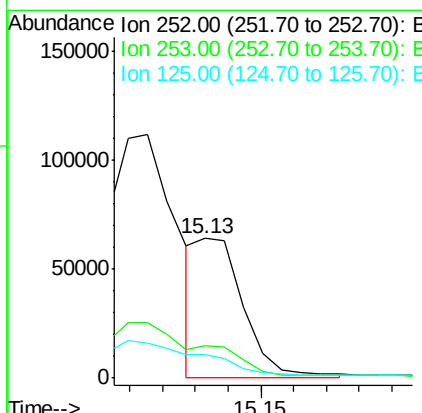
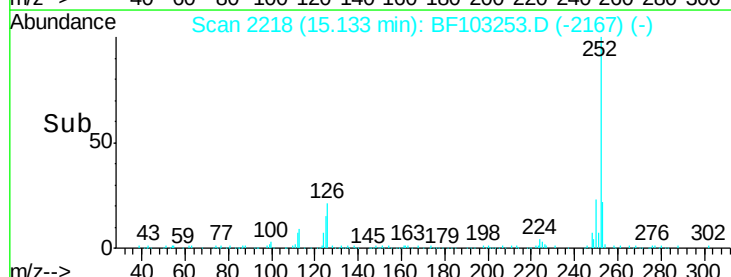
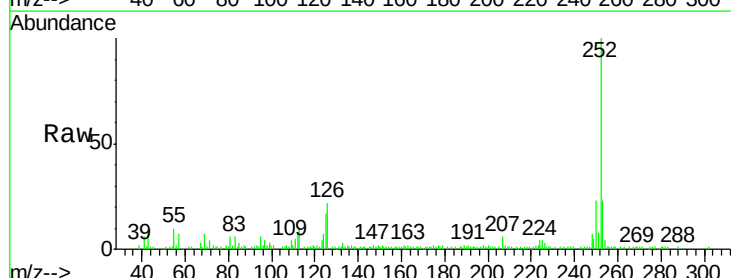
Manual Integrations  
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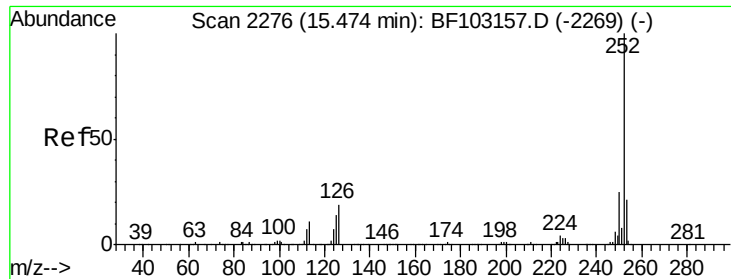
Sohil  
2/27/2018 12:23:26 PM



#88  
Benzo(k)fluoranthene  
Concen: 7.153 ng m  
RT: 15.13 min Scan# 2218  
Delta R.T. -0.00 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.3  | 17.9  | 26.9  |
| 125     | 17.2  | 10.2  | 15.2  |





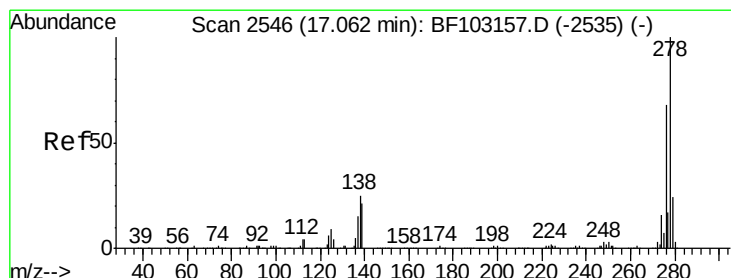
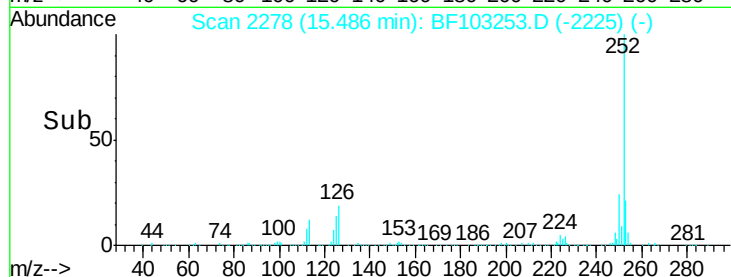
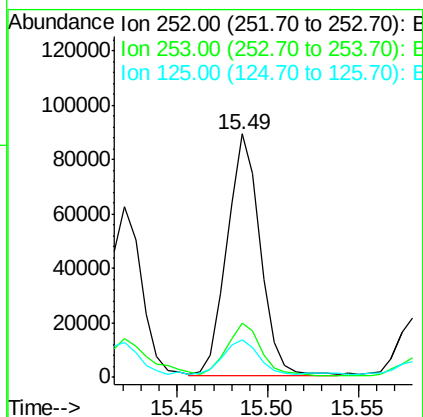
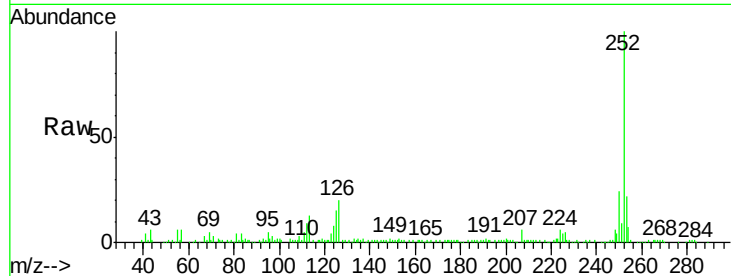
#89  
Benzo(a)pyrene  
Concen: 13.411 ng  
RT: 15.49 min Scan# 2278  
Delta R.T. 0.01 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

Instrument :  
BNA\_F  
ClientSampleID :  
B11DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.2  | 17.1  | 25.7  |
| 125     | 15.3  | 9.8   | 14.6  |

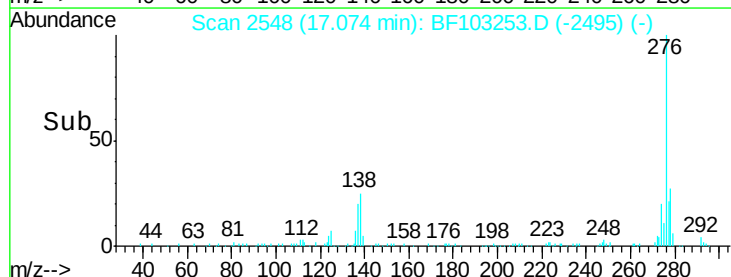
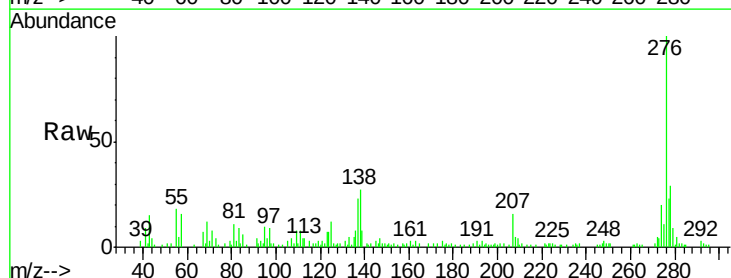
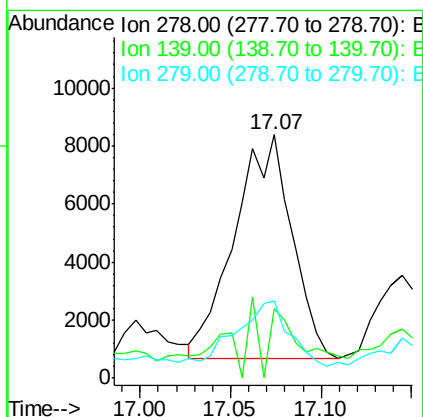
Manual Integrations  
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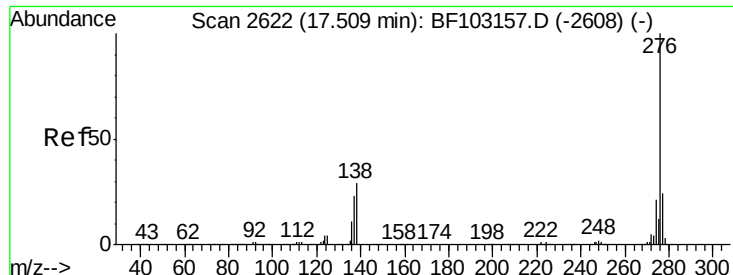
Sohil  
2/27/2018 12:23:26 PM



#90  
Dibenzo(a,h)anthracene  
Concen: 2.598 ng  
RT: 17.07 min Scan# 2548  
Delta R.T. 0.01 min  
Lab File: BF103253.D  
Acq: 27 Feb 2018 8:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 28.5  | 15.9  | 23.9  |
| 279     | 31.8  | 19.0  | 28.4  |





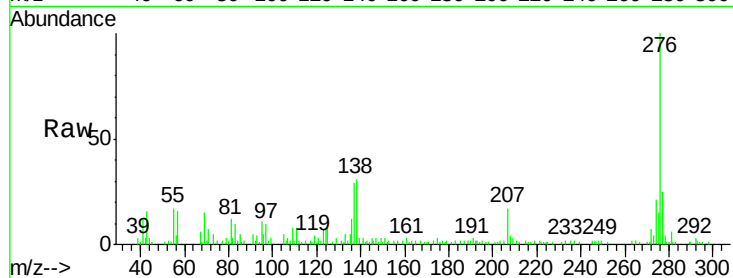
#91  
 Benzo(a,h,i)perylene  
 Concen: 9.622 ng  
 RT: 17.53 min Scan# 2625  
 Delta R.T. 0.02 min  
 Lab File: BF103253.D  
 Acq: 27 Feb 2018 8:35

Instrument :  
 BNA\_F  
 ClientSampleId :  
 B11DL

|           |      |       |       |
|-----------|------|-------|-------|
| Tot Ion:  | 276  | Resp: | 61600 |
| Ion Ratio |      | Lower | Upper |
| 276       | 100  |       |       |
| 277       | 25.1 | 17.9  | 26.9  |
| 138       | 30.9 | 21.8  | 32.8  |

Manual Integrations  
 APPROVED

Sohil  
 2/27/2018 12:23:26 PM



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

