

Data Path : Z:\HPCHEM1\BNA F\DATA\BF020618\  
 Data File : BF102790.D  
 Acq On : 6 Feb 2018 18:02  
 Operator : SJ/JU  
 Sample : J1457-01  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 BROOK-101

Manual Integrations  
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Quant Time: Feb 06 19:04:28 2018  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF020318.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Feb 05 12:44:16 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.88  | 152  | 203537   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.16  | 136  | 807853   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10        | 9.92  | 164  | 318061   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.41 | 188  | 424486   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12            | 14.04 | 240  | 379670   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12            | 15.53 | 264  | 348066   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.50  | 112  | 1390329  | 103.74 | ng    | 0.01     |
| 7) Phenol-d6                | 6.51  | 99   | 1621821  | 100.50 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.45  | 82   | 966242   | 82.97  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.71 | 330  | 231857   | 90.57  | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.24  | 172  | 1227451  | 64.04  | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.99 | 244  | 866222   | 54.02  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 10) Phenol                  | 6.52  | 94   | 61220    | 3.540  | ng    | 99       |
| 49) Dimethylphthalate       | 9.63  | 163  | 158733   | 6.401  | ng    | 99       |
| 70) Phenanthrene            | 11.43 | 178  | 147884   | 6.255  | ng    | 97       |
| 74) Fluoranthene            | 12.62 | 202  | 241841   | 10.167 | ng    | 97       |
| 77) Pyrene                  | 12.85 | 202  | 220787   | 7.416  | ng    | 99       |
| 80) Benzo(a)anthracene      | 14.03 | 228  | 119745   | 5.015  | ng    | 99       |
| 82) Chrysene                | 14.07 | 228  | 111952   | 4.651  | ng    | 97       |
| 85) Indeno(1,2,3-cd)pyrene  | 17.01 | 276  | 46015    | 2.305  | ng    | 96       |
| 87) Benzo(b)fluoranthene    | 15.09 | 252  | 137986m  | 6.115  | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.12 | 252  | 59015m   | 2.737  | ng    |          |
| 89) Benzo(a)pyrene          | 15.46 | 252  | 92333    | 4.546  | ng    | # 94     |
| 91) Benzo(a,h,i)perylene    | 17.46 | 276  | 45058    | 2.792  | ng    | 94       |

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

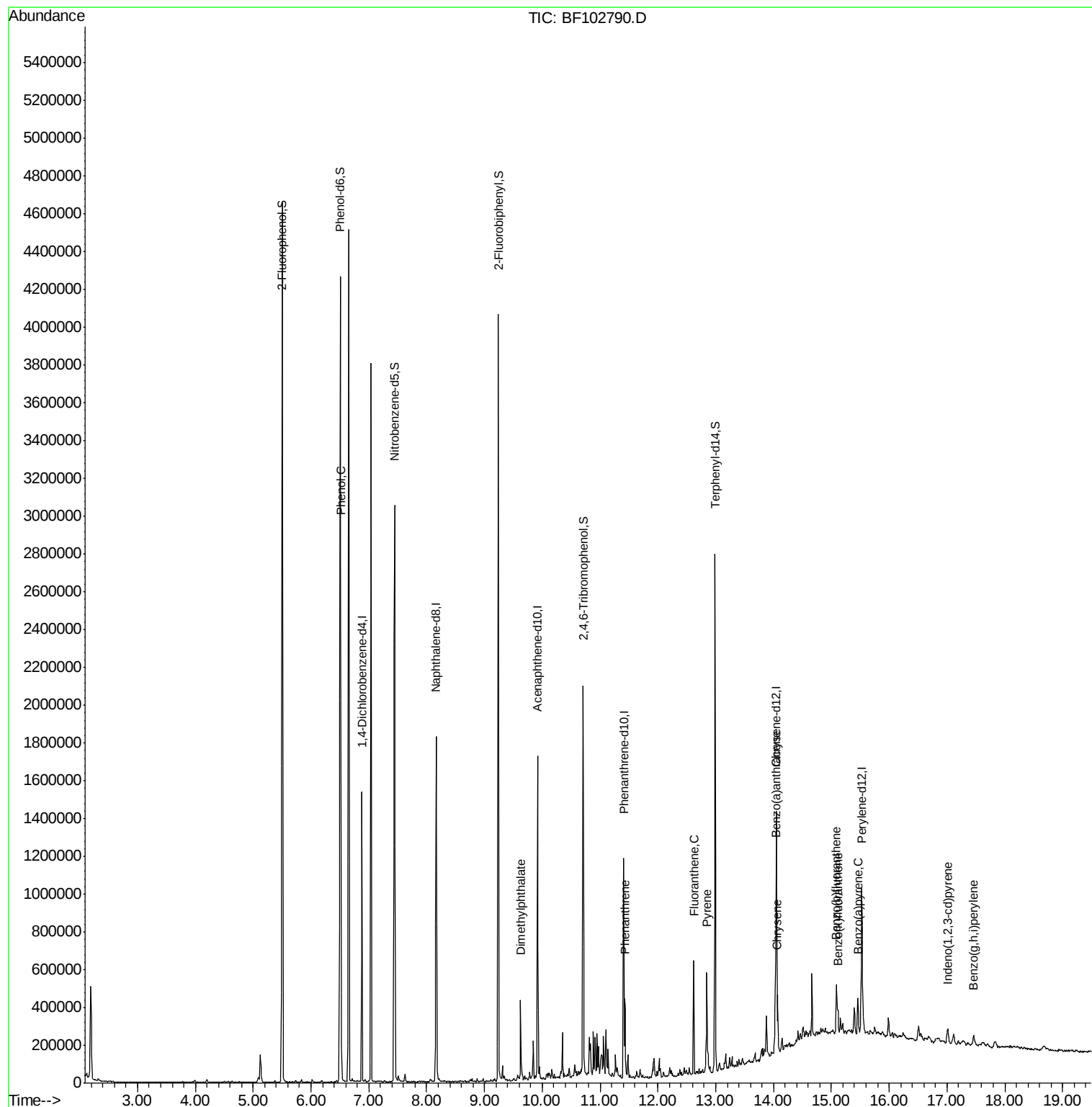
Data Path : Z:\HPCHEM1\BNA F\DATA\BF020618\  
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Operator : SJ/JU  
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Misc :  
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Instrument :  
BNA\_F  
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Manual Integrations  
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Quant Time: Feb 06 19:04:28 2018  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF020318.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
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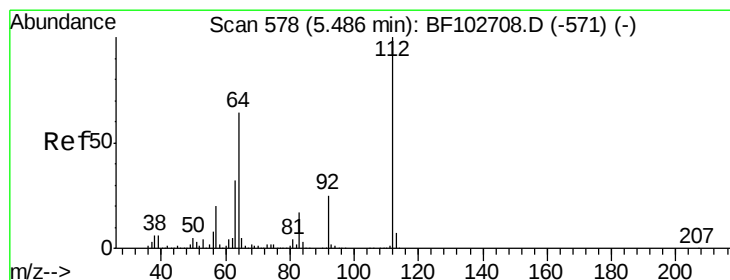
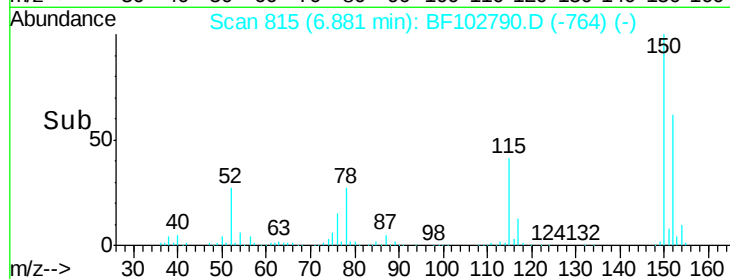
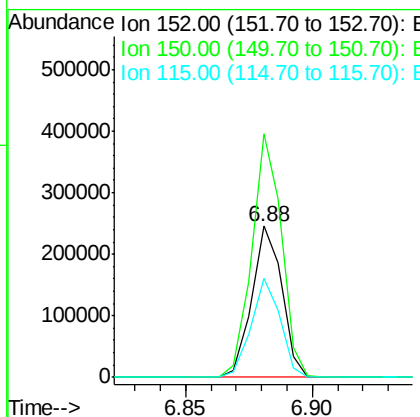
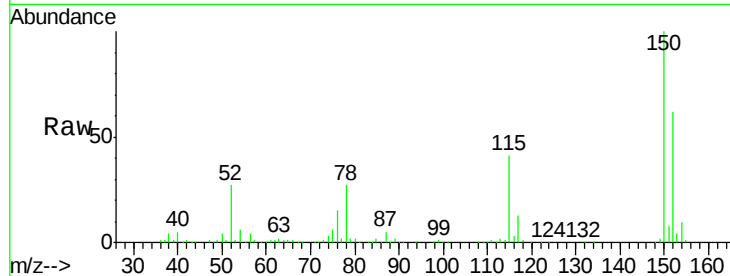
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.88 min Scan# 815  
 Delta R.T. 0.00 min  
 Lab File: BF102790.D  
 Acq: 6 Feb 2018 18:02

Instrument :  
 BNA\_F  
 ClientSampleId :  
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| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 160.8 | 124.6 | 186.8 |
| 115     | 65.5  | 50.1  | 75.1  |

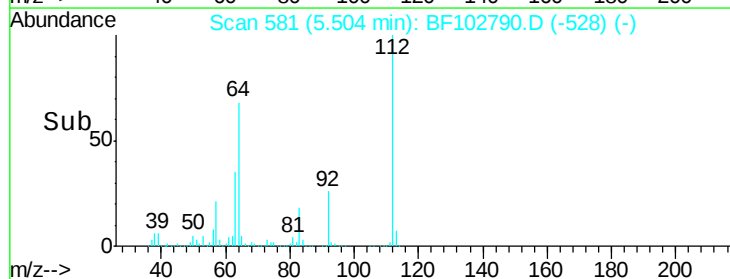
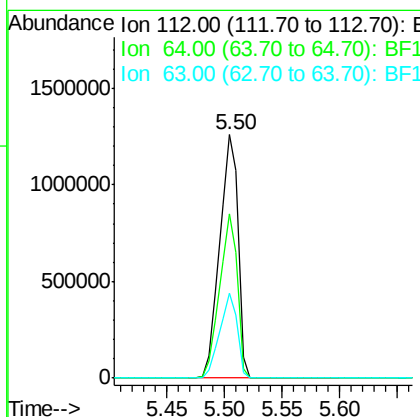
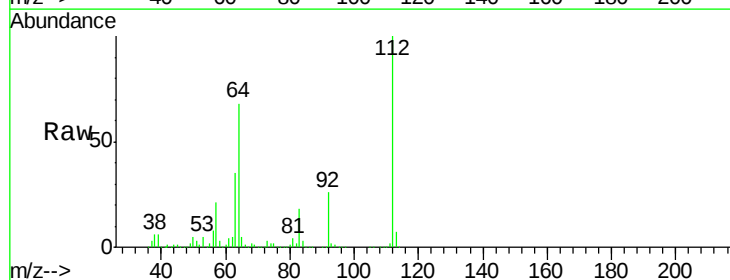
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#5  
 2-Fluorophenol  
 Concen: 103.738 ng  
 RT: 5.50 min Scan# 581  
 Delta R.T. 0.01 min  
 Lab File: BF102790.D  
 Acq: 6 Feb 2018 18:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 67.7  | 47.9  | 71.9  |
| 63      | 34.6  | 23.7  | 35.5  |





#7

Phenol-d6

Concen: 100.501 ng

RT: 6.51 min Scan# 752

Delta R.T. 0.01 min

Lab File: BF102790.D

Acq: 6 Feb 2018 18:02

Instrument :

BNA\_F

ClientSampleId :

BROOK-101

Tot Ion: 99 Resp: 1621821

Ion Ratio Lower Upper

99 100

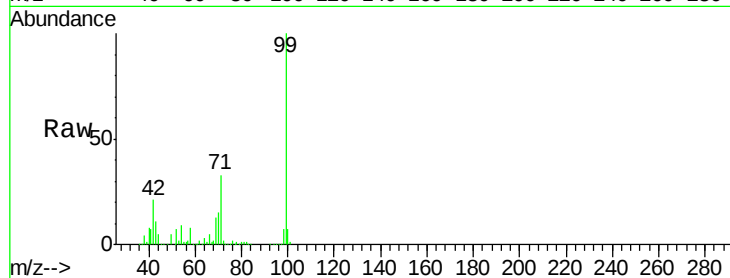
42 20.7 14.5 21.7

71 33.5 25.4 38.0

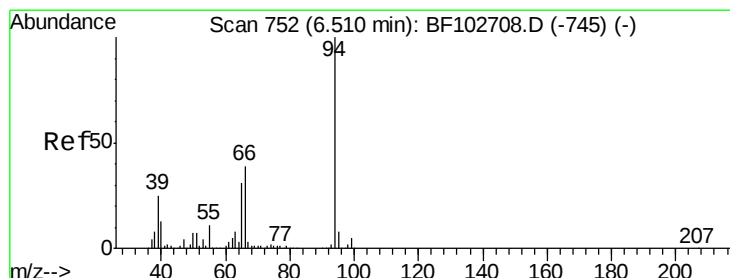
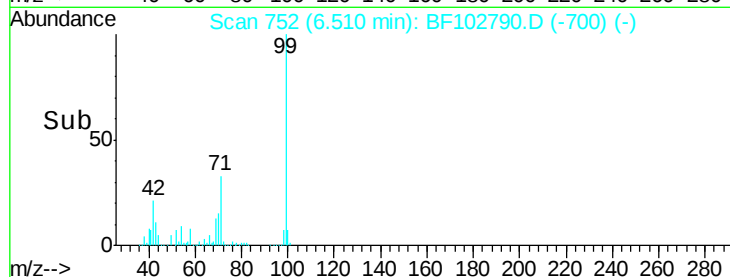
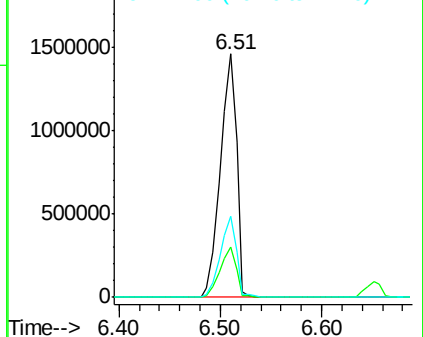
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Abundance Ion 99.00 (98.70 to 99.70): BF1  
Ion 42.00 (41.70 to 42.70): BF1  
Ion 71.00 (70.70 to 71.70): BF1



#10

Phenol

Concen: 3.540 ng

RT: 6.52 min Scan# 754

Delta R.T. 0.00 min

Lab File: BF102790.D

Acq: 6 Feb 2018 18:02

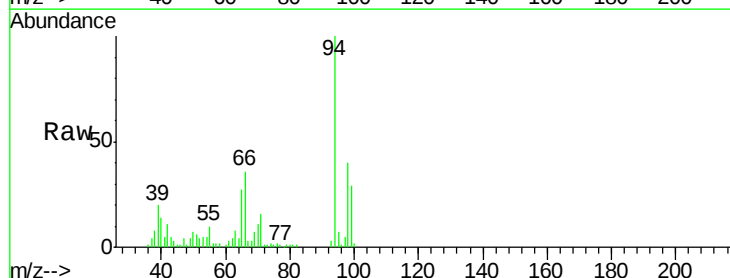
Tgt Ion: 94 Resp: 61220

Ion Ratio Lower Upper

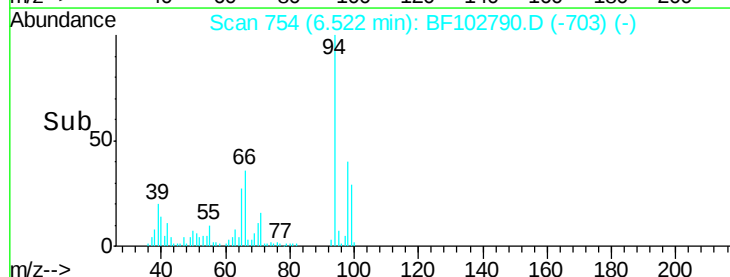
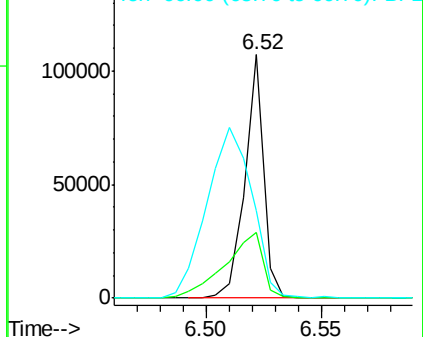
94 100

65 27.1 7.9 47.9

66 35.9 16.2 56.2



Abundance Ion 94.00 (93.70 to 94.70): BF1  
Ion 65.00 (64.70 to 65.70): BF1  
Ion 66.00 (65.70 to 66.70): BF1





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.16 min Scan# 1033

Delta R.T. -0.01 min

Lab File: BF102790.D

Acq: 6 Feb 2018 18:02

Instrument :

BNA\_F

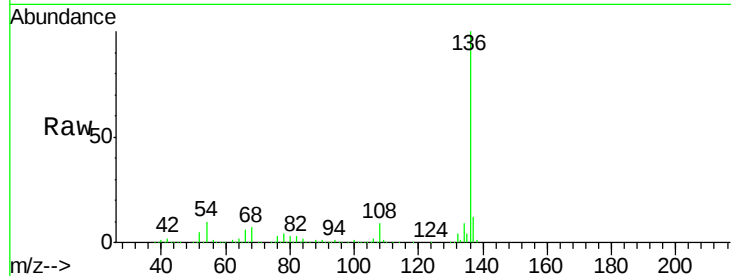
ClientSampled :

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| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 136     | 100   |            |       |
| 137     | 11.7  | 8.9        | 13.3  |
| 54      | 10.4  | 6.6        | 9.8   |
| 68      | 6.7   | 5.0        | 7.4   |

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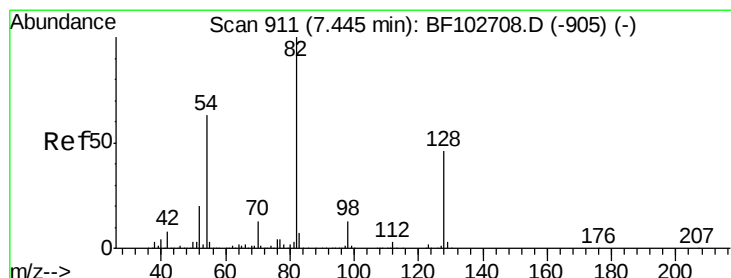
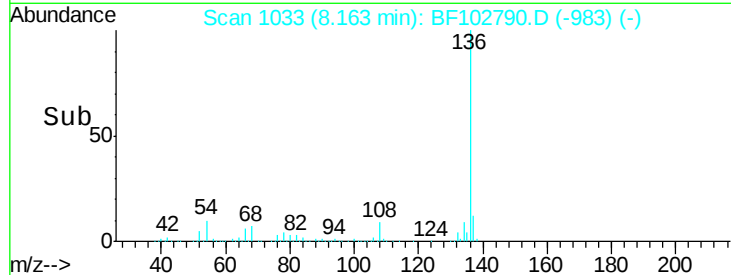
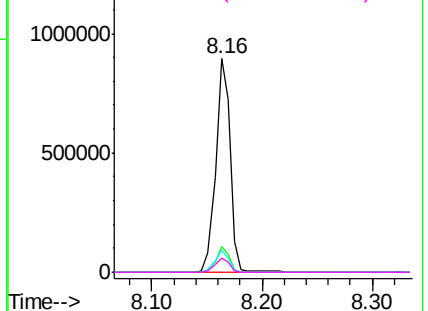


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1



#23

Nitrobenzene-d5

Concen: 82.972 ng

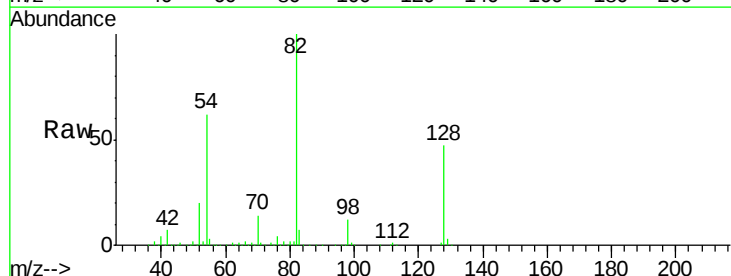
RT: 7.45 min Scan# 911

Delta R.T. -0.01 min

Lab File: BF102790.D

Acq: 6 Feb 2018 18:02

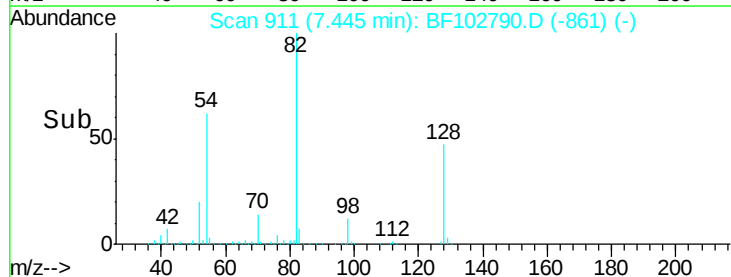
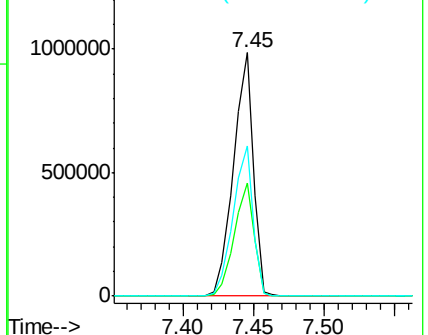
| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 82      | 100   |            |       |
| 128     | 46.6  | 36.1       | 54.1  |
| 54      | 61.7  | 41.4       | 62.2  |



Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF1





#38

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.92 min Scan# 1332

Delta R.T. 0.00 min

Lab File: BF102790.D

Acq: 6 Feb 2018 18:02

Instrument :

BNA\_F

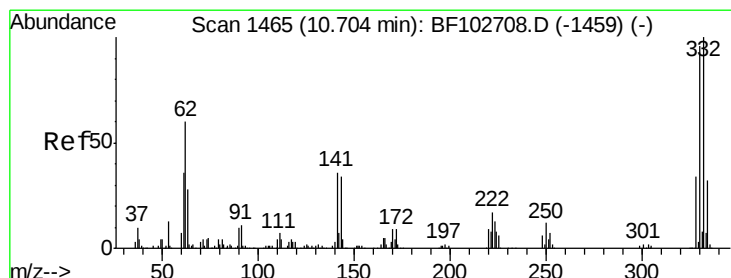
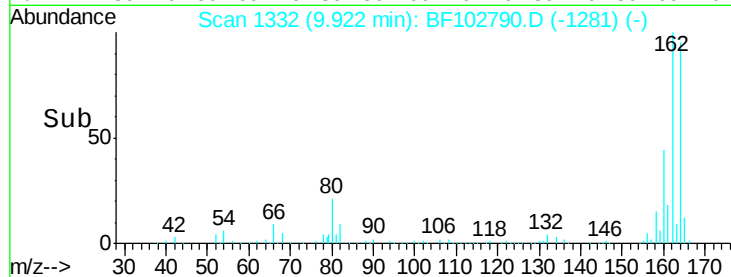
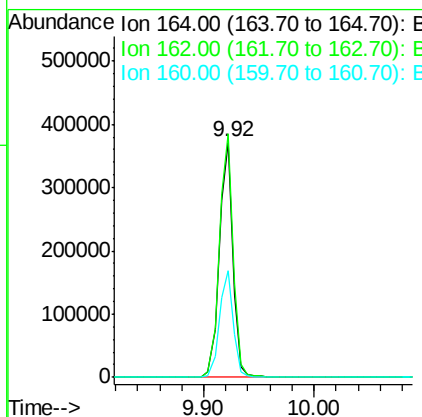
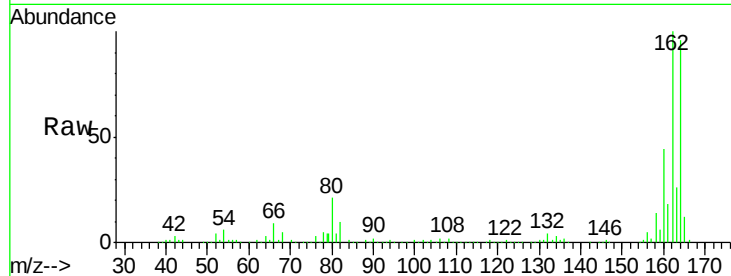
ClientSampleId :

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|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 164   | Resp: | 318061 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 103.7 | 86.1  | 129.1  |
| 160       | 45.6  | 38.3  | 57.5   |

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#41

2,4,6-Tribromophenol

Concen: 90.568 ng

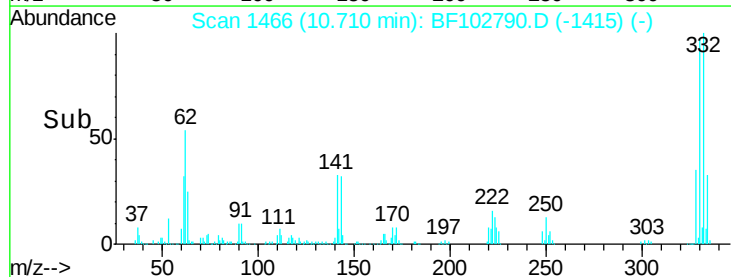
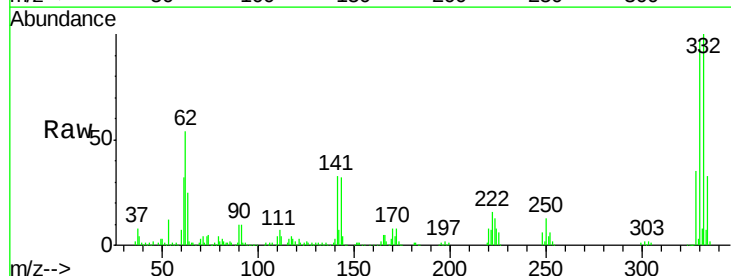
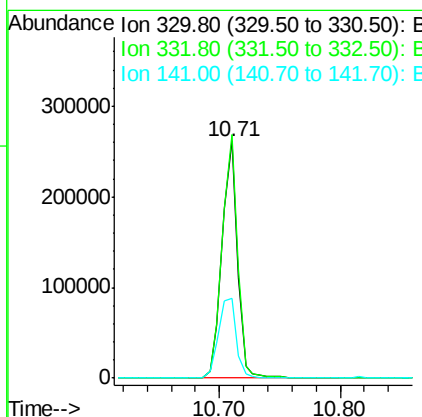
RT: 10.71 min Scan# 1466

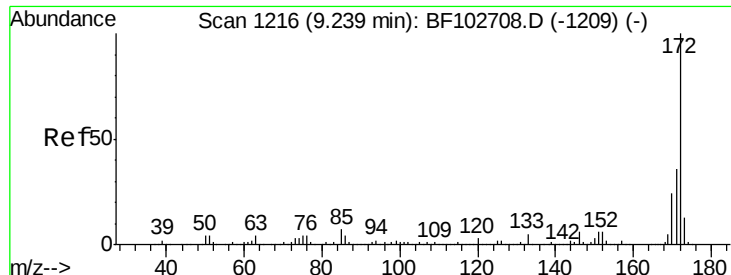
Delta R.T. 0.00 min

Lab File: BF102790.D

Acq: 6 Feb 2018 18:02

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 330   | Resp: | 231857 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 103.3 | 77.0  | 115.6  |
| 141       | 39.0  | 29.9  | 44.9   |





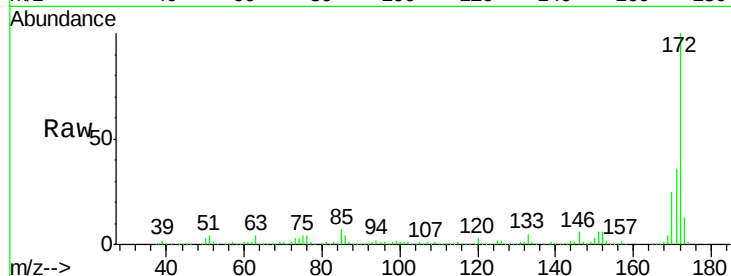
#44  
2-Fluorobiphenyl  
Concen: 64.037 ng  
RT: 9.24 min Scan# 1216  
Delta R.T. -0.01 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

Instrument :  
BNA\_F  
ClientSampleId :  
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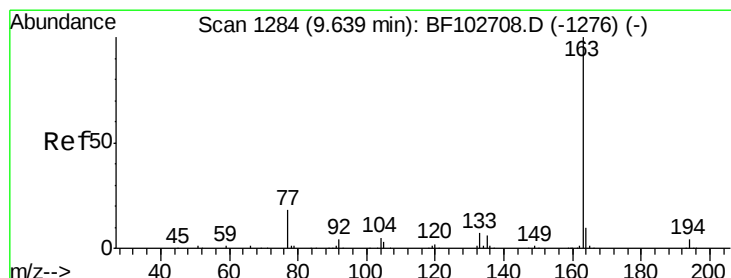
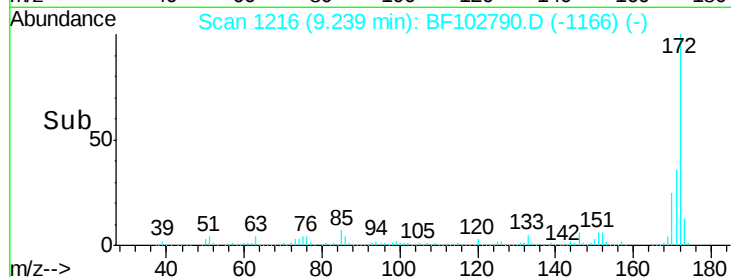
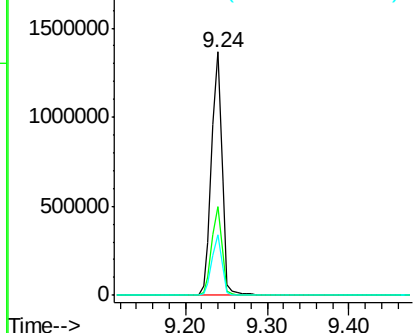
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.3  | 29.7  | 44.5  |
| 170     | 24.7  | 19.6  | 29.4  |

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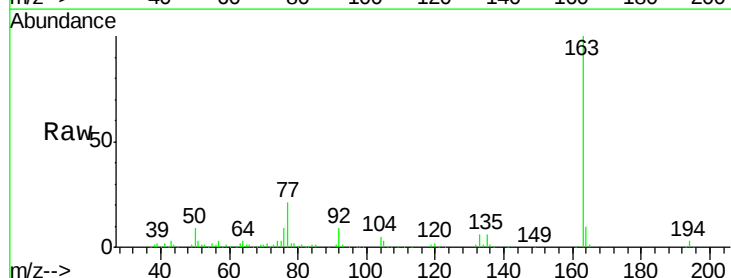


Abundance Ion 172.00 (171.70 to 172.70): E  
Ion 171.00 (170.70 to 171.70): E  
Ion 170.00 (169.70 to 170.70): E

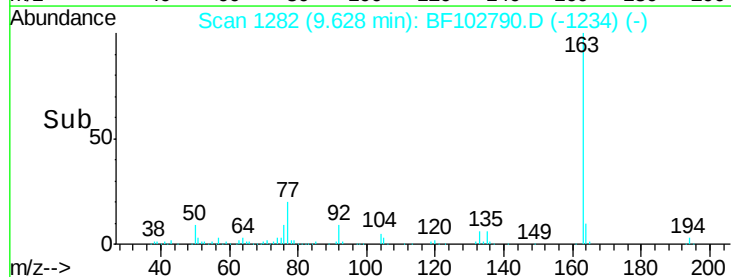
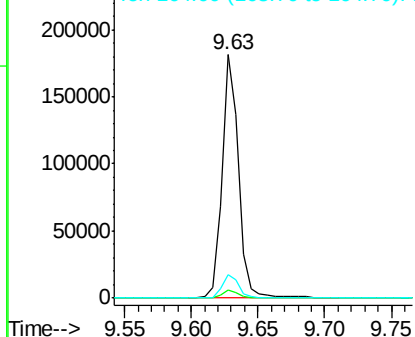


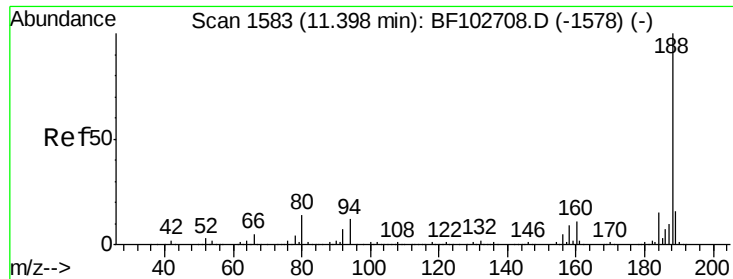
#49  
Dimethylphthalate  
Concen: 6.401 ng  
RT: 9.63 min Scan# 1282  
Delta R.T. -0.02 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 3.2   | 2.7   | 4.1   |
| 164     | 9.8   | 8.2   | 12.2  |



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





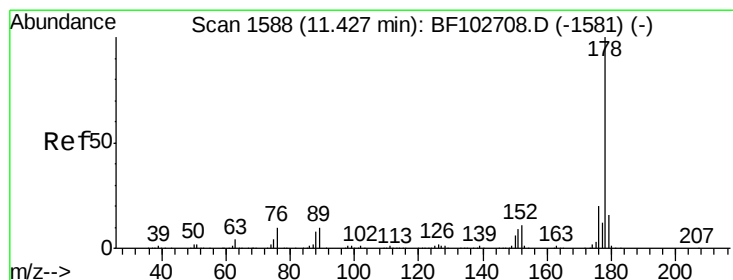
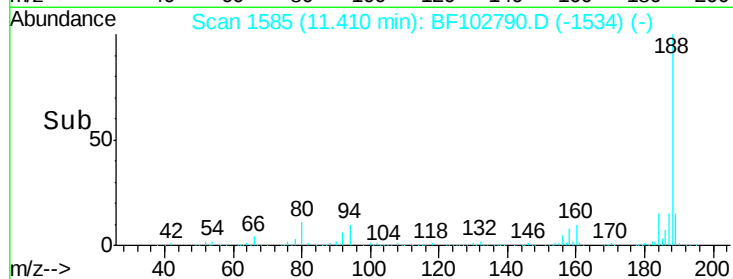
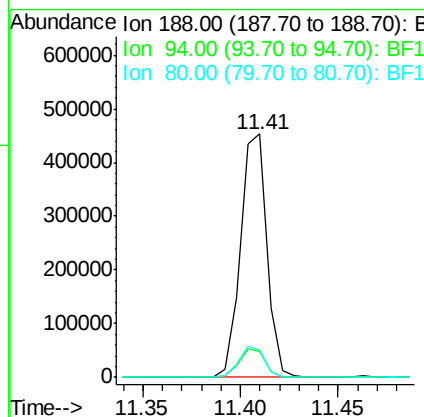
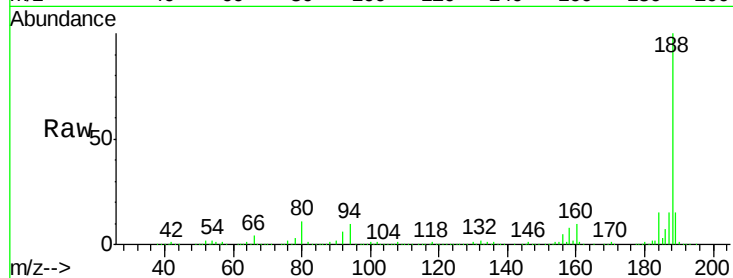
#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.41 min Scan# 1585  
Delta R.T. 0.00 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

Instrument :  
BNA\_F  
ClientSampleId :  
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| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 424486 |       |       |
| 94      | 10.5  |        | 8.5   | 12.7  |
| 80      | 11.4  |        | 9.2   | 13.8  |

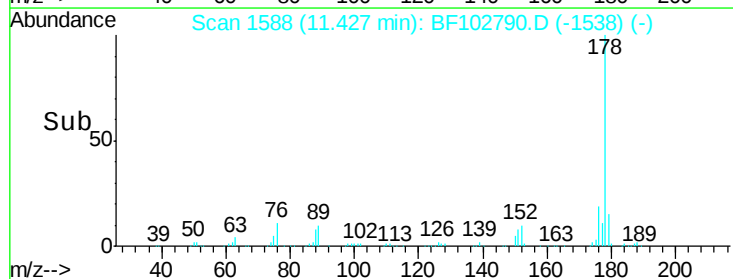
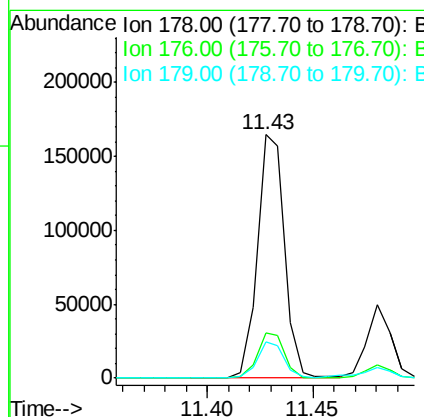
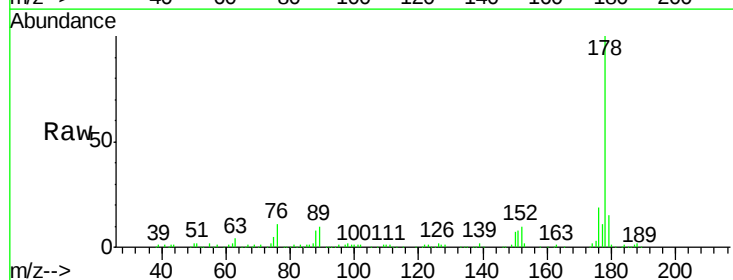
Manual Integrations  
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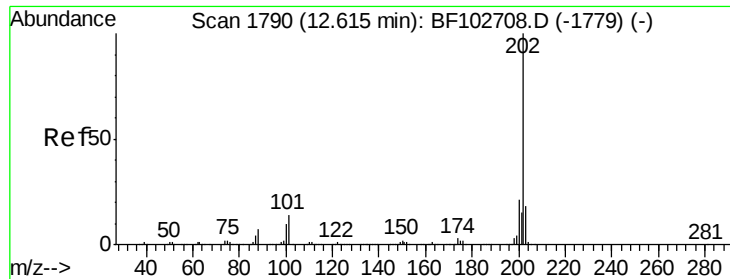
Sohil  
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#70  
Phenanthrene  
Concen: 6.255 ng  
RT: 11.43 min Scan# 1588  
Delta R.T. -0.01 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 178     | 100   | 147884 |       |       |
| 176     | 18.6  |        | 15.8  | 23.8  |
| 179     | 15.1  |        | 13.0  | 19.6  |





#74

Fluoranthene

Concen: 10.167 ng

RT: 12.62 min Scan# 1791

Delta R.T. 0.00 min

Lab File: BF102790.D

Acq: 6 Feb 2018 18:02

Instrument :

BNA\_F

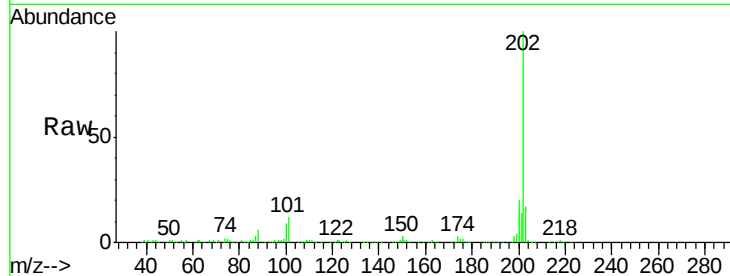
ClientSampleId :

BROOK-101

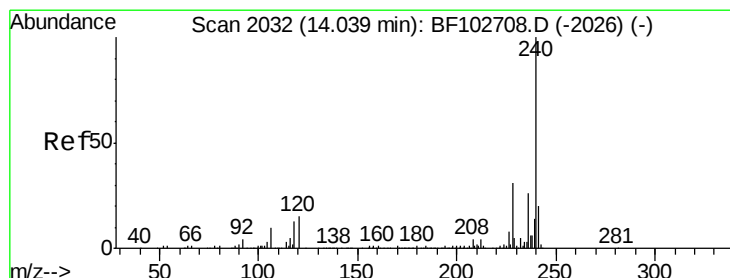
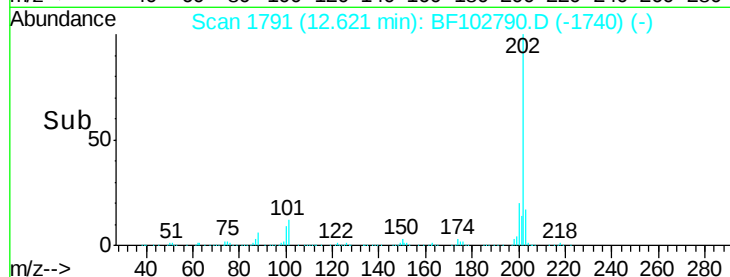
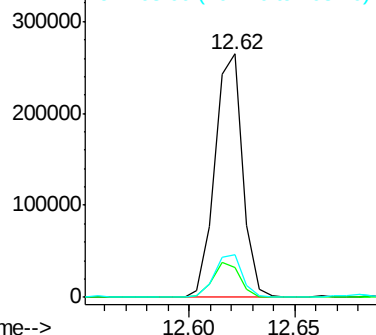
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 241841 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 12.1  | 0.0   | 34.1   |
| 203       | 17.3  | 0.0   | 38.1   |

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



#75

Chrysene-d12

Concen: 20.000 ng

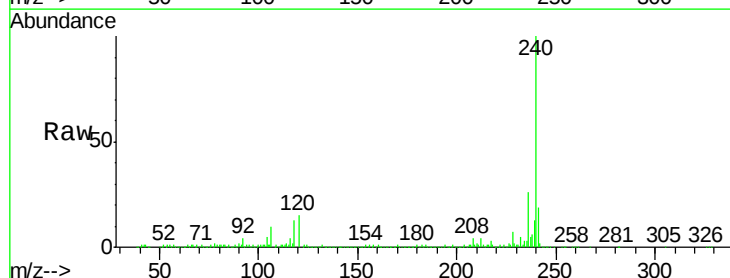
RT: 14.04 min Scan# 2033

Delta R.T. -0.01 min

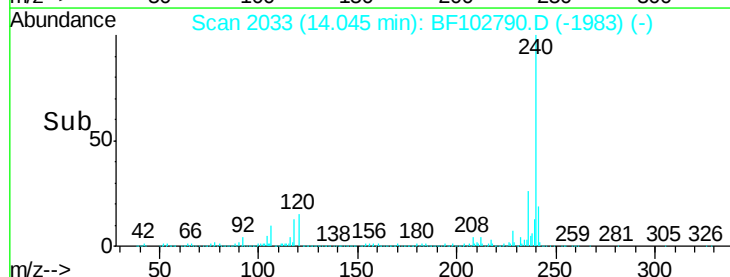
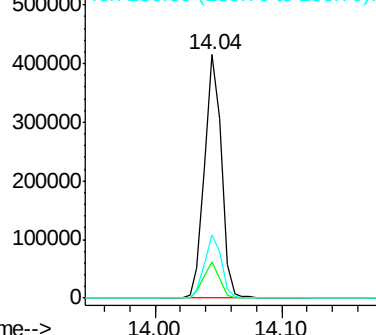
Lab File: BF102790.D

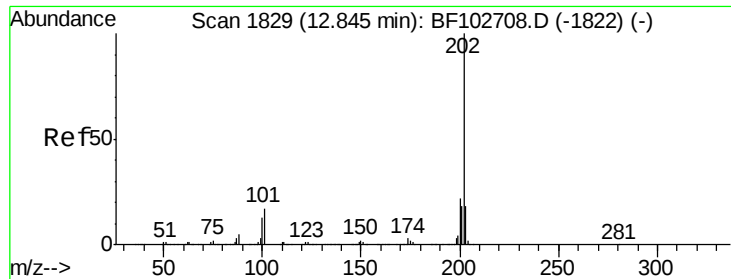
Acq: 6 Feb 2018 18:02

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 379670 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 14.9  | 9.5   | 14.3#  |
| 236       | 25.8  | 20.7  | 31.1   |



Abundance Ion 240.00 (239.70 to 240.70): E  
Ion 120.00 (119.70 to 120.70): E  
Ion 236.00 (235.70 to 236.70): E





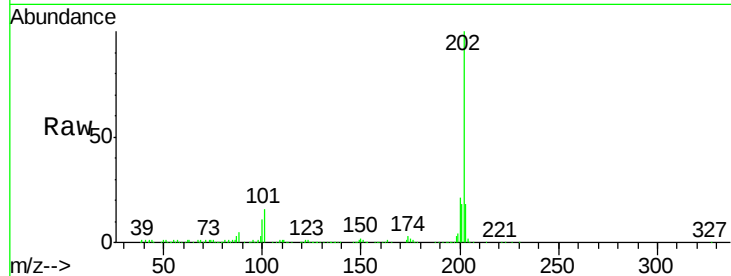
#77  
Pvrene  
Concen: 7.416 ng  
RT: 12.85 min Scan# 1830  
Delta R.T. 0.00 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

Instrument :  
BNA\_F  
ClientSampleId :  
BROOK-101

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 200     | 21.4  | 17.4       | 26.2  |
| 203     | 18.2  | 14.3       | 21.5  |

Manual Integrations  
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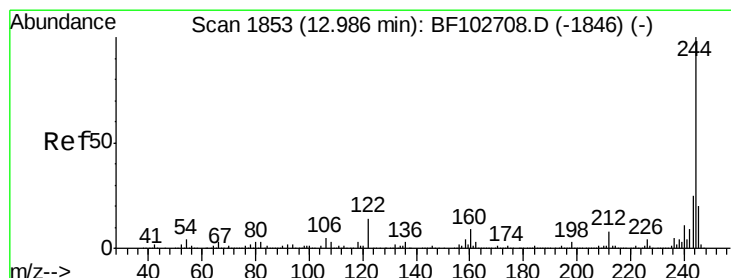
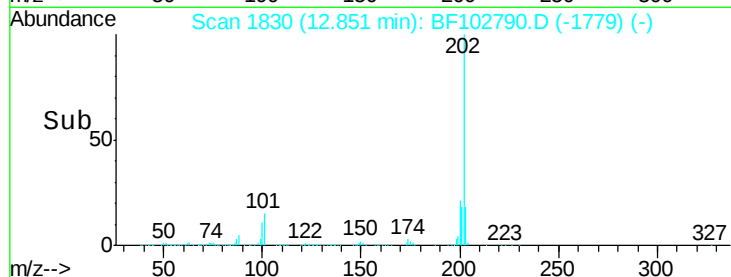
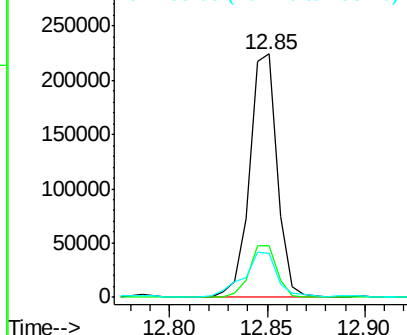


Abundance

Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



#78  
Terphenyl-d14  
Concen: 54.021 ng  
RT: 12.99 min Scan# 1854  
Delta R.T. -0.01 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

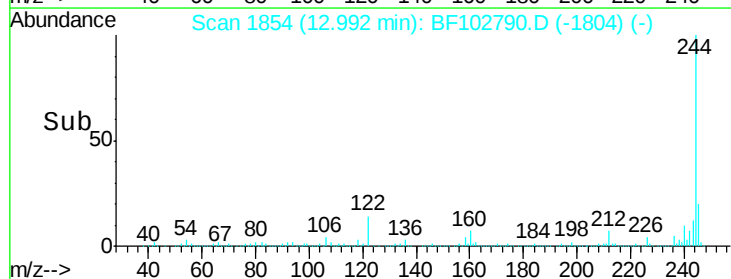
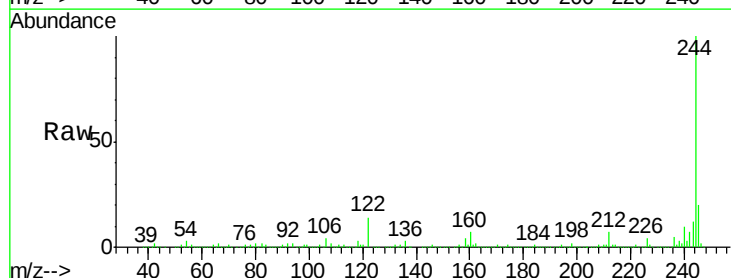
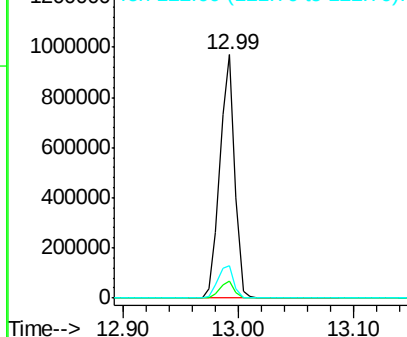
| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 244     | 100   |            |       |
| 212     | 6.8   | 5.4        | 8.0   |
| 122     | 13.5  | 11.0       | 16.4  |

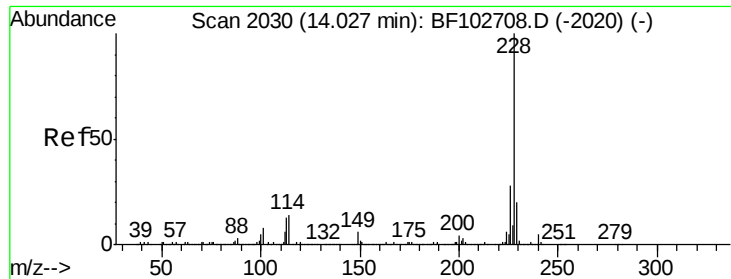
Abundance

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





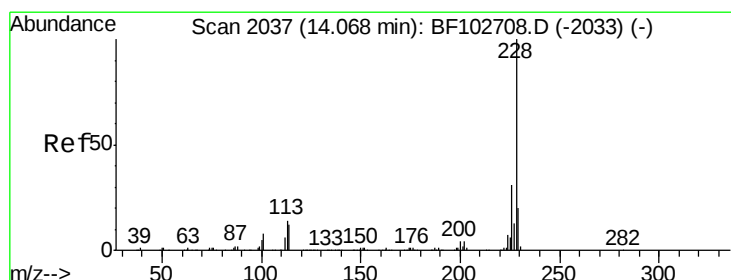
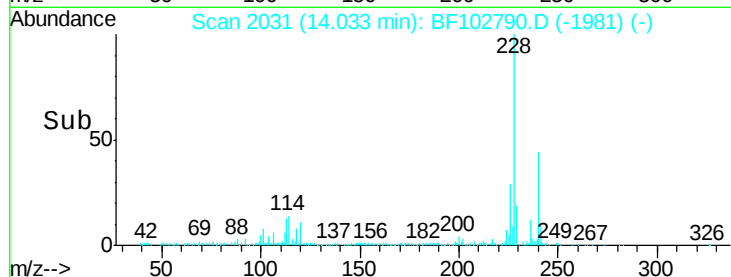
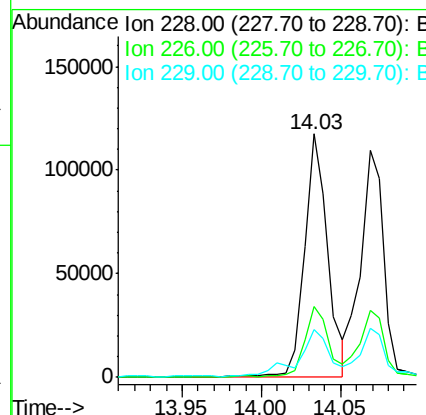
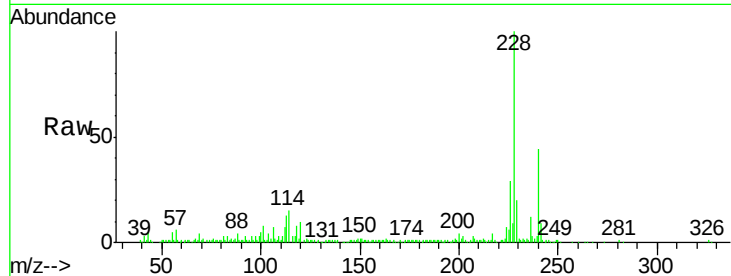
#80  
Benzo(a)anthracene  
Concen: 5.015 ng  
RT: 14.03 min Scan# 2031  
Delta R.T. -0.01 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

Instrument :  
BNA\_F  
ClientSampleId :  
BROOK-101

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.9  | 22.6  | 33.8  |
| 229     | 19.7  | 15.8  | 23.6  |

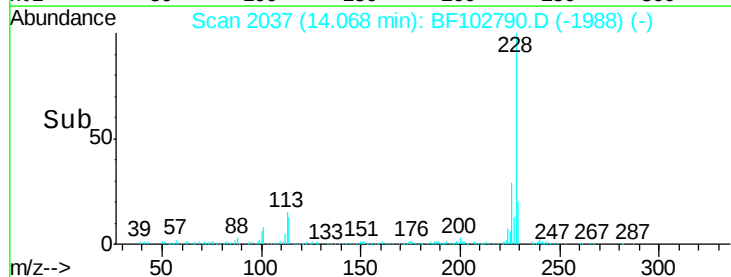
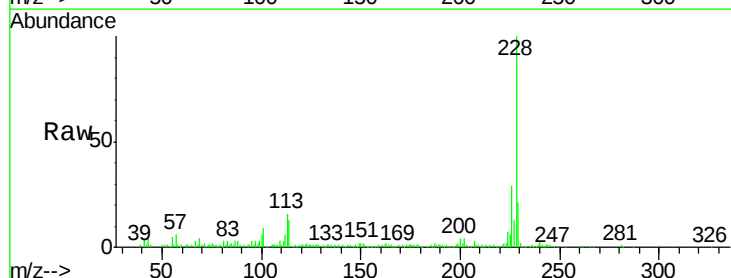
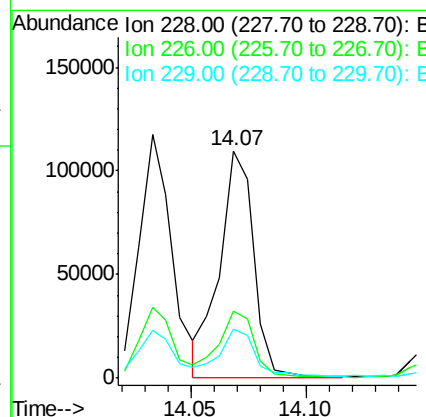
Manual Integrations  
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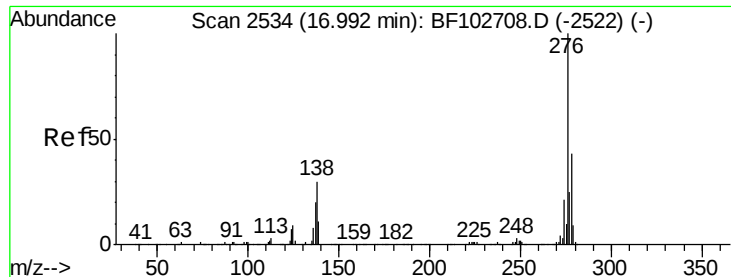
Sohil  
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#82  
Chrysene  
Concen: 4.651 ng  
RT: 14.07 min Scan# 2037  
Delta R.T. -0.01 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.4  | 25.0  | 37.6  |
| 229     | 21.3  | 16.2  | 24.4  |





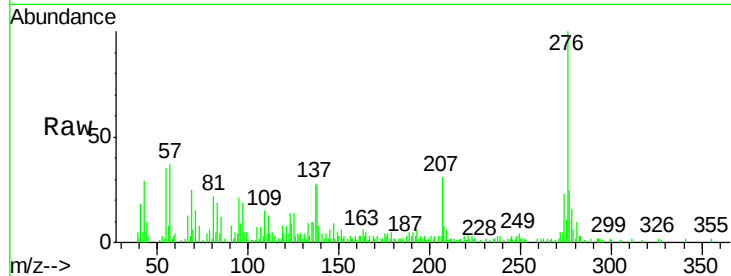
#85  
Indeno(1,2,3-cd)pyrene  
Concen: 2.305 ng  
RT: 17.01 min Scan# 2537  
Delta R.T. -0.01 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

Instrument :  
BNA\_F  
ClientSampleId :  
BROOK-101

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 28.9  | 25.0  | 37.6  |
| 277     | 23.7  | 20.1  | 30.1  |

Manual Integrations  
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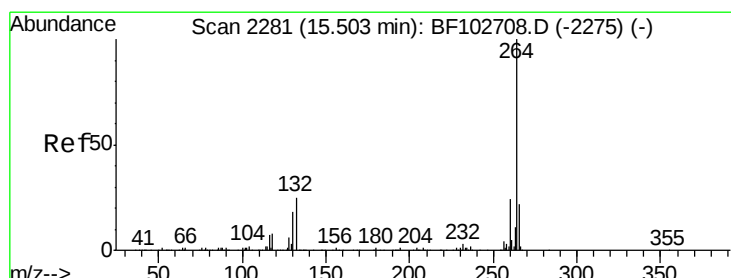
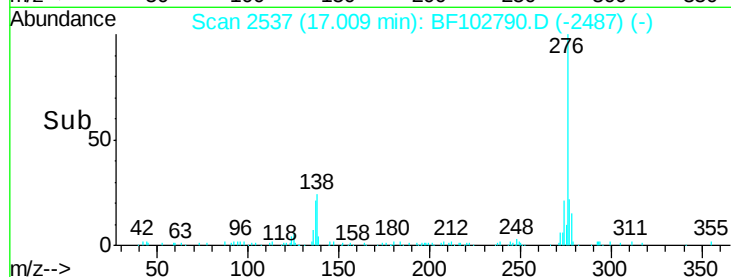
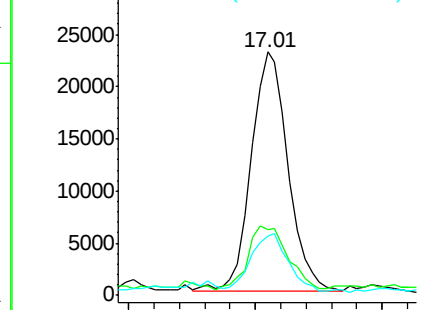


Abundance

Ion 276.00 (275.70 to 276.70): E

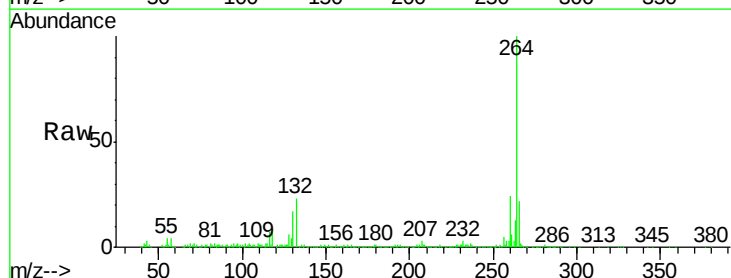
Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.53 min Scan# 2285  
Delta R.T. 0.00 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.3  | 19.2  | 28.8  |
| 265     | 22.2  | 17.5  | 26.3  |

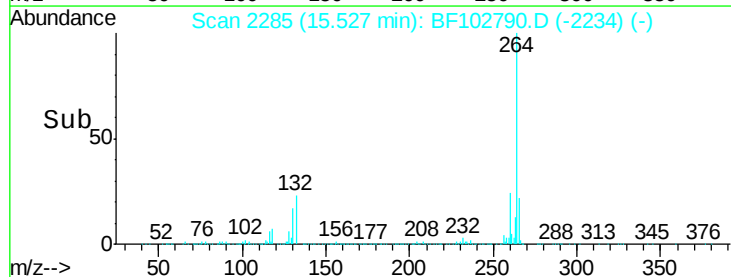
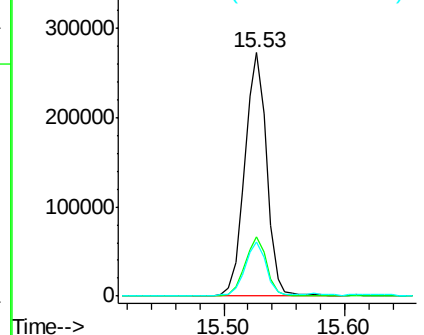


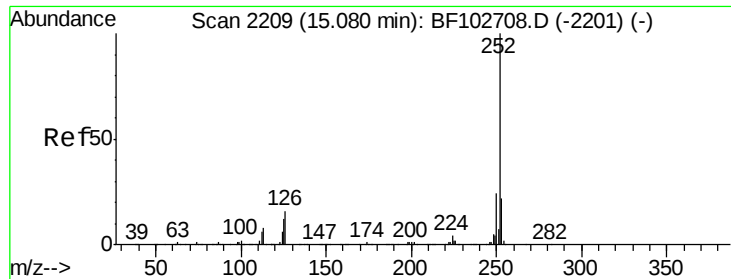
Abundance

Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





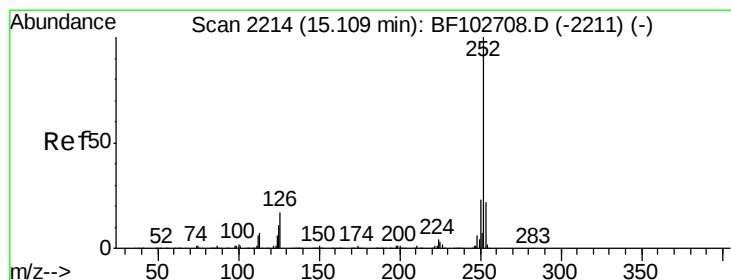
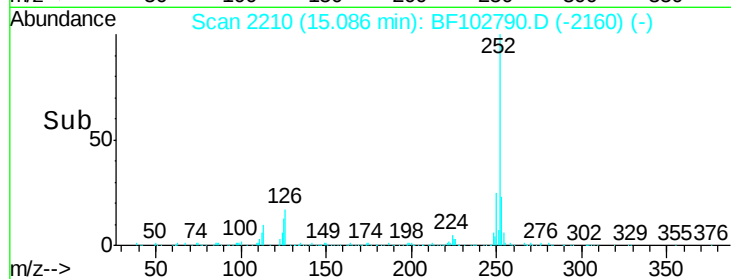
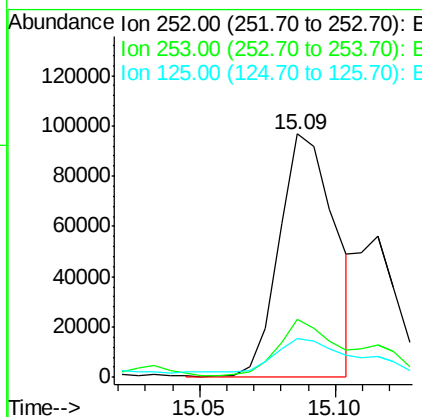
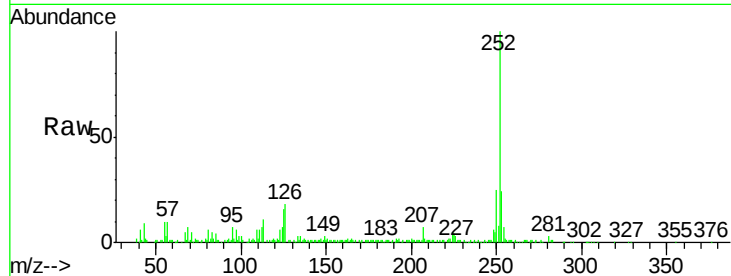
#87  
Benzo(b)fluoranthene  
Concen: 6.115 ng m  
RT: 15.09 min Scan# 2210  
Delta R.T. -0.01 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

Instrument :  
BNA\_F  
ClientSampleId :  
BROOK-101

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.7  | 17.0  | 25.6  |
| 125     | 16.1  | 9.0   | 13.6  |

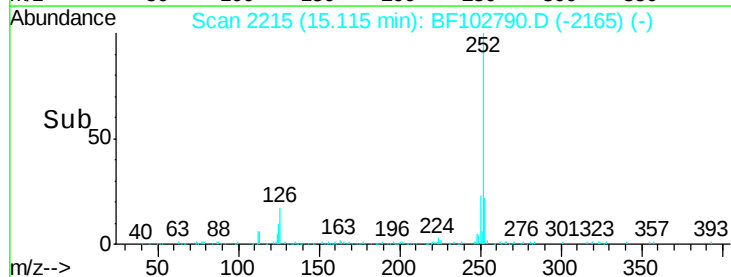
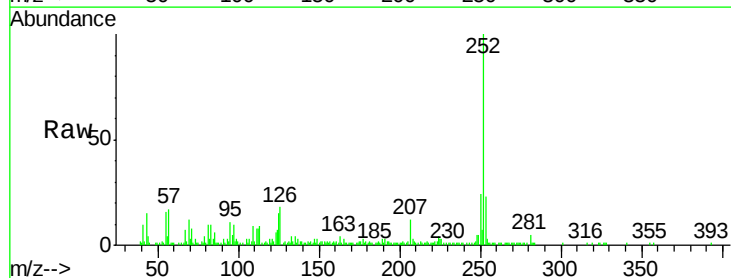
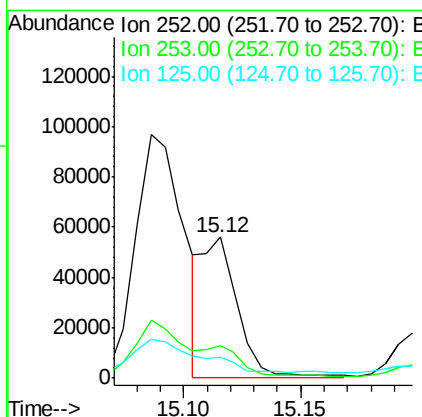
Manual Integrations  
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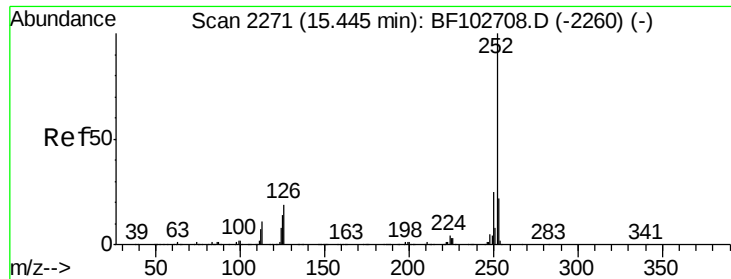
Sohil  
2/7/2018 4:18:05 PM



#88  
Benzo(k)fluoranthene  
Concen: 2.737 ng m  
RT: 15.12 min Scan# 2215  
Delta R.T. -0.01 min  
Lab File: BF102790.D  
Acq: 6 Feb 2018 18:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.3  | 17.9  | 26.9  |
| 125     | 14.9  | 10.2  | 15.2  |





#89

Benzo(a)pyrene

Concen: 4.546 ng

RT: 15.46 min Scan# 2274

Delta R.T. 0.00 min

Lab File: BF102790.D

Acq: 6 Feb 2018 18:02

Instrument :

BNA\_F

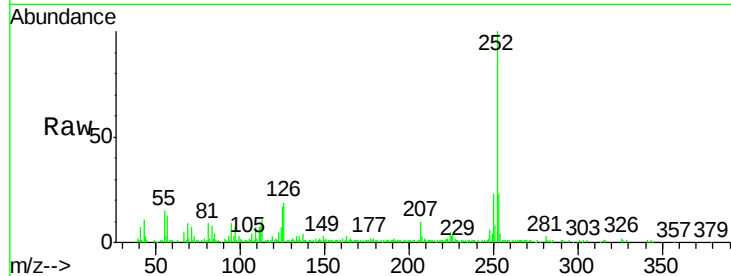
ClientSampled :

BROOK-101

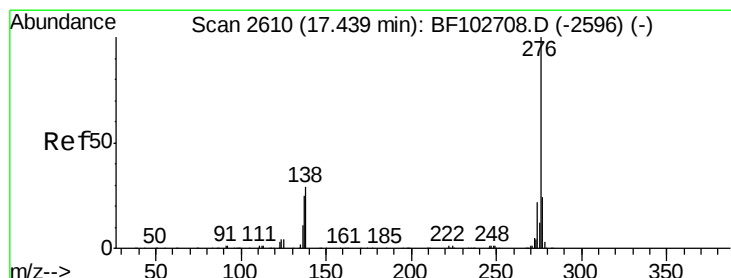
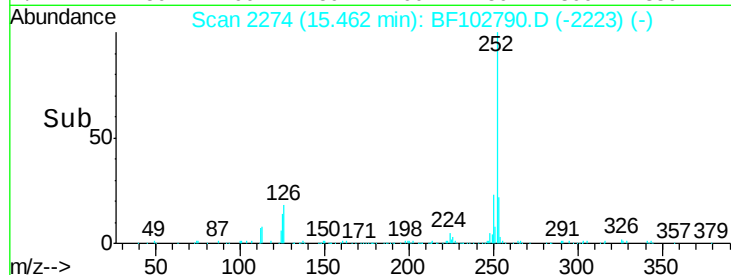
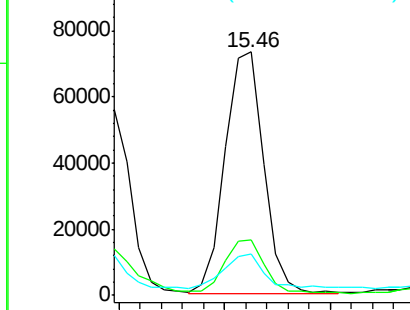
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 92333 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 22.6  | 17.1  | 25.7  |
| 125       | 17.0  | 9.8   | 14.6  |

Manual Integrations  
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Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



#91

Benzo(g,h,i)perylene

Concen: 2.792 ng

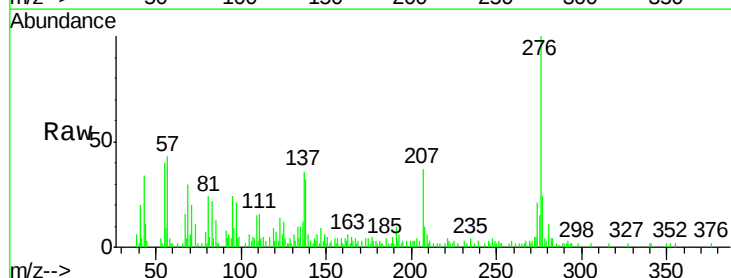
RT: 17.46 min Scan# 2614

Delta R.T. -0.01 min

Lab File: BF102790.D

Acq: 6 Feb 2018 18:02

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 45058 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 277       | 24.1  | 17.9  | 26.9  |
| 138       | 31.6  | 21.8  | 32.8  |



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

