

Data Path : Z:\HPCHEM1\BNA F\DATA\BF071017\  
 Data File : BF096622.D  
 Acq On : 11 Jul 2017 1:01  
 Operator : SJ/JU  
 Sample : I4108-04  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 BU-01-070617-B

Manual Integrations  
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Quant Time: Jul 11 05:36:27 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF070117.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Jul 07 13:02:33 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.69  | 152  | 109791   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8          | 7.97  | 136  | 413421   | 20.00 | ng    | -0.02    |
| 38) Acenaphthene-d10        | 9.72  | 164  | 148536   | 20.00 | ng    | -0.02    |
| 63) Phenanthrene-d10        | 11.19 | 188  | 221387   | 20.00 | ng    | -0.02    |
| 75) Chrysene-d12            | 13.82 | 240  | 226391   | 20.00 | ng    | -0.02    |
| 86) Perylene-d12            | 15.23 | 264  | 184863   | 20.00 | ng    | -0.02    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.30  | 112  | 640393   | 86.09 | ng    | -0.01    |
| 7) Phenol-d6                | 6.33  | 99   | 744589   | 81.42 | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.25  | 82   | 433325   | 62.98 | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol    | 10.50 | 330  | 107205   | 92.40 | ng    | -0.02    |
| 44) 2-Fluorobiphenyl        | 9.05  | 172  | 679470   | 78.21 | ng    | -0.02    |
| 78) Terphenyl-d14           | 12.78 | 244  | 456831   | 43.12 | ng    | -0.02    |
| Target Compounds            |       |      |          |       |       |          |
| 49) Dimethylphthalate       | 9.43  | 163  | 130042   | 11.73 | ng    | 99       |
| 70) Phenanthrene            | 11.22 | 178  | 63527    | 5.31  | ng    | 98       |
| 74) Fluoranthene            | 12.40 | 202  | 146995   | 12.53 | ng    | 98       |
| 77) Pyrene                  | 12.63 | 202  | 141624   | 7.79  | ng    | 98       |
| 80) Benzo(a)anthracene      | 13.81 | 228  | 63707    | 4.86  | ng    | 97       |
| 82) Chrysene                | 13.84 | 228  | 60447    | 4.40  | ng    | 97       |
| 87) Benzo(b)fluoranthene    | 14.83 | 252  | 63490m   | 5.48  | ng    |          |
| 88) Benzo(k)fluoranthene    | 14.86 | 252  | 23396m   | 2.26  | ng    |          |
| 89) Benzo(a)pyrene          | 15.17 | 252  | 42234    | 4.08  | ng    | # 84     |
| 91) Benzo(g,h,i)perylene    | 16.97 | 276  | 19894    | 2.36  | ng    | # 88     |

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

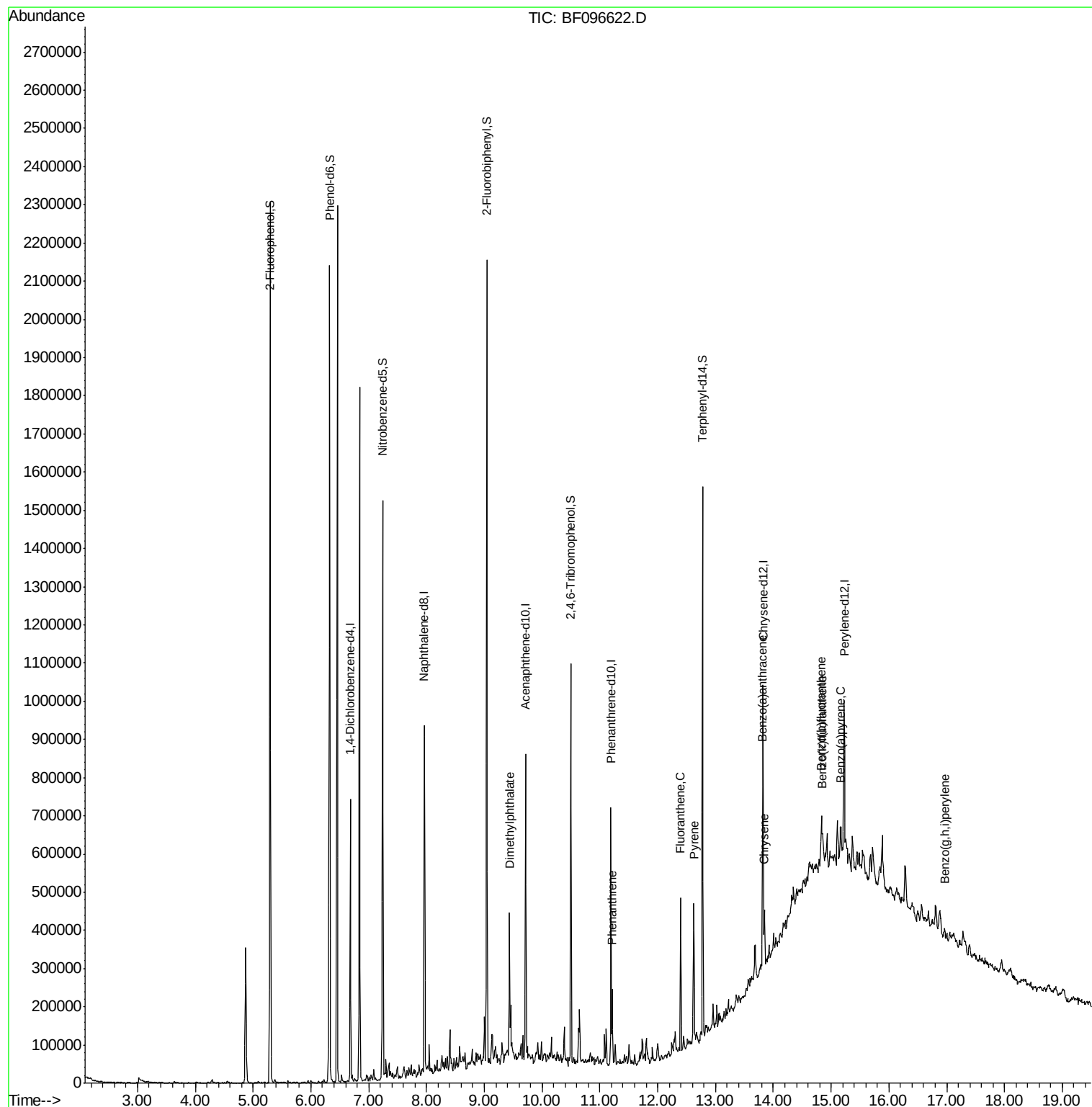
Data Path : Z:\HPCHEM1\BNA F\DATA\BF071017\  
Data File : BF096622.D  
Acq On : 11 Jul 2017 1:01  
Operator : SJ/JU  
Sample : I4108-04  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

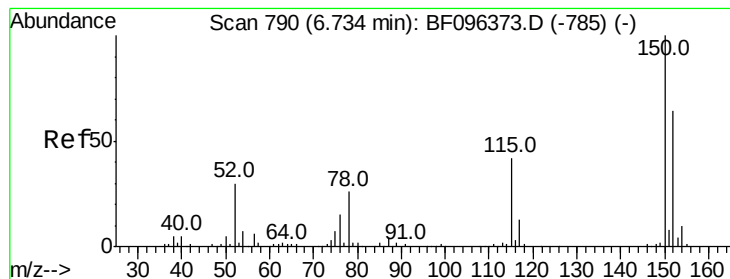
Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-070617-B

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Quant Time: Jul 11 05:36:27 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF070117.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Jul 07 13:02:33 2017  
Response via : Initial Calibration





#1

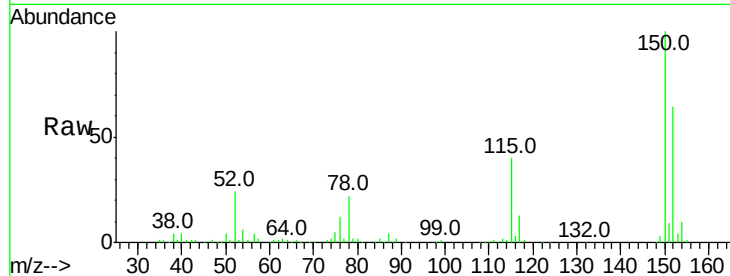
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.69 min Scan# 782  
Delta R.T. -0.01 min  
Lab File: BF096622.D  
Acq: 11 Jul 2017 1:01

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-070617-B

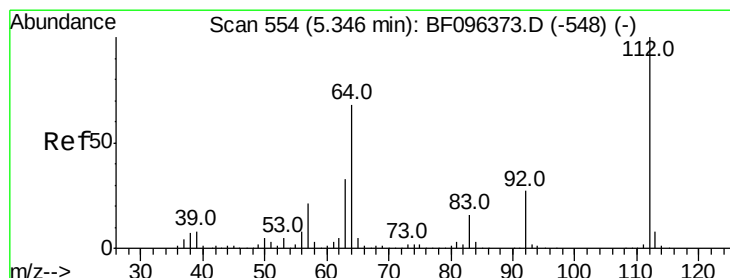
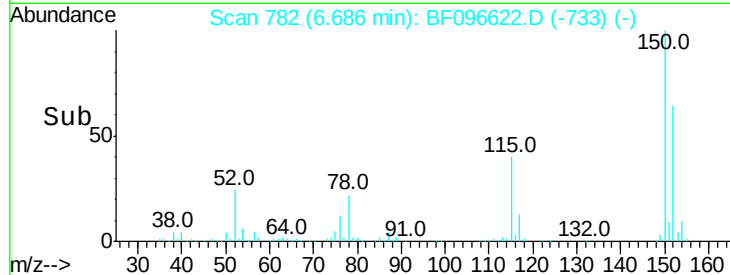
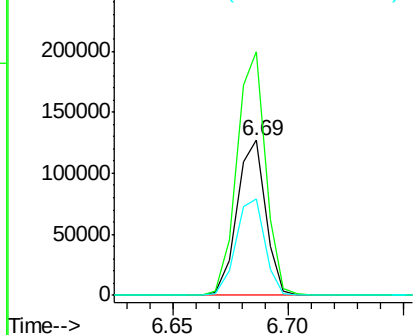
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 157.2 | 126.2 | 189.2 |
| 115     | 62.6  | 52.2  | 78.2  |

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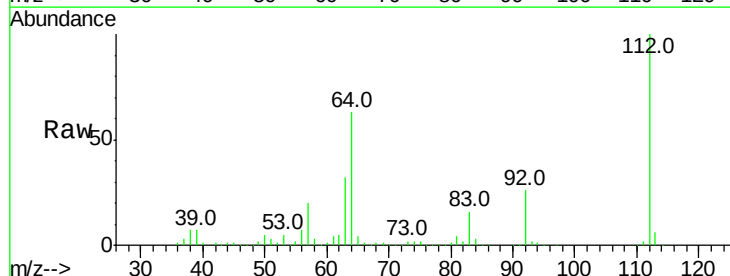
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



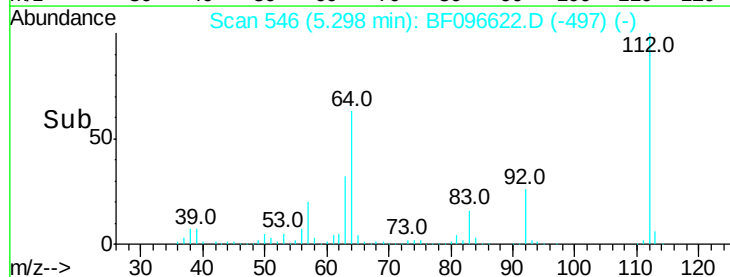
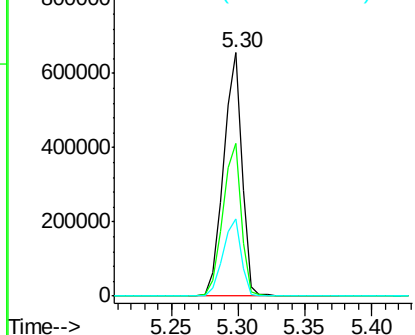
#5

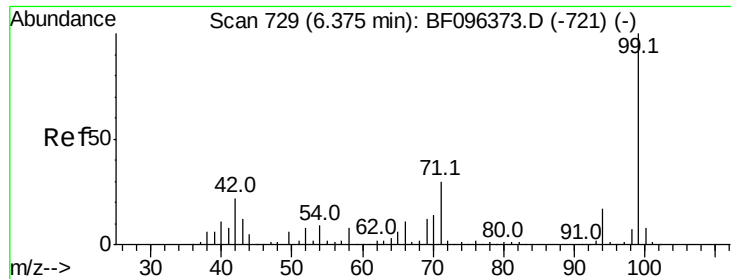
2-Fluorophenol  
Concen: 86.09 ng  
RT: 5.30 min Scan# 546  
Delta R.T. -0.01 min  
Lab File: BF096622.D  
Acq: 11 Jul 2017 1:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 62.8  | 46.0  | 69.0  |
| 63      | 31.8  | 23.4  | 35.0  |



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BF0  
Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 81.42 ng

RT: 6.33 min Scan# 721

Delta R.T. -0.02 min

Lab File: BF096622.D

Acq: 11 Jul 2017 1:01

Instrument :

BNA\_F

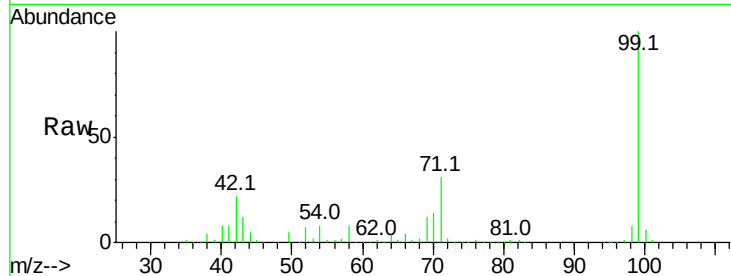
ClientSampleId :

BU-01-070617-B

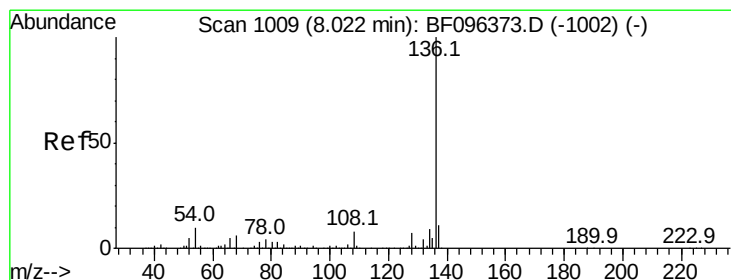
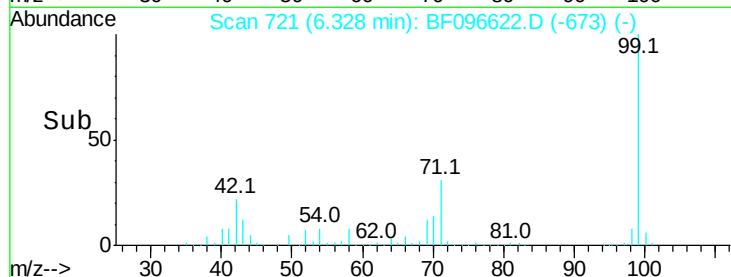
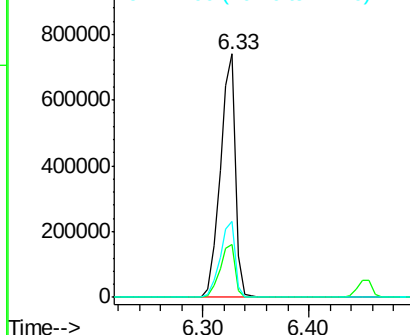
| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 99      | 100  |       | 744589 |       |       |
| 42      | 21.6 | 13.5  | 20.3#  |       |       |
| 71      | 31.1 | 24.5  | 36.7   |       |       |

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



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.97 min Scan# 1000

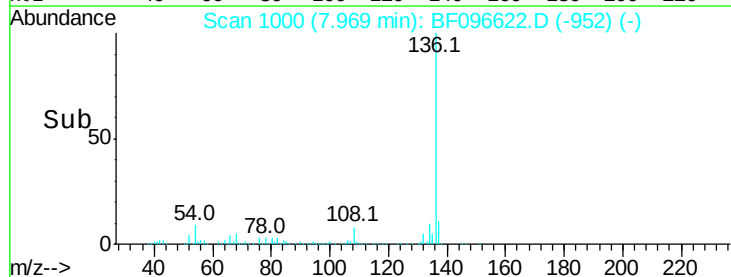
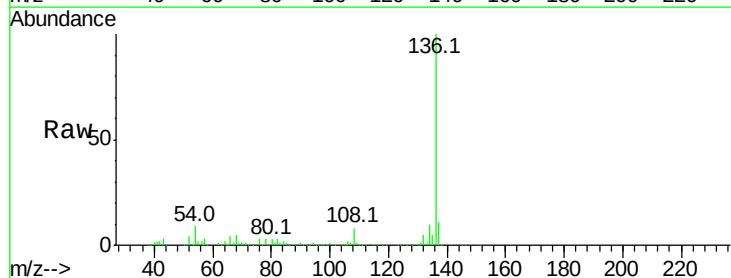
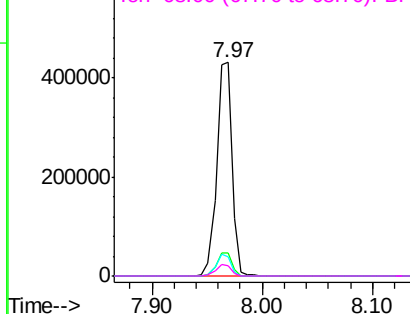
Delta R.T. -0.02 min

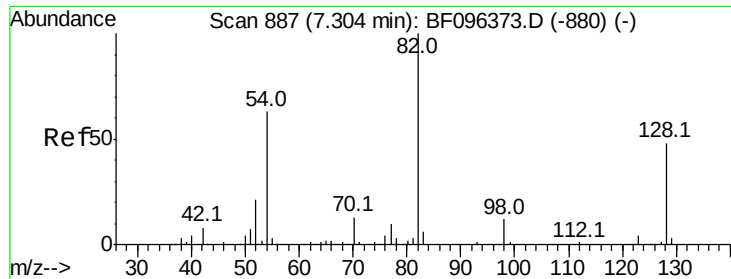
Lab File: BF096622.D

Acq: 11 Jul 2017 1:01

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 136     | 100  |       | 413421 |       |       |
| 137     | 10.9 | 8.5   | 12.7   |       |       |
| 54      | 9.2  | 4.9   | 7.3#   |       |       |
| 68      | 4.6  | 4.1   | 6.1    |       |       |

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





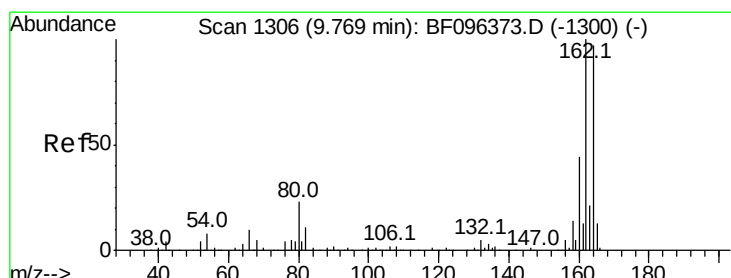
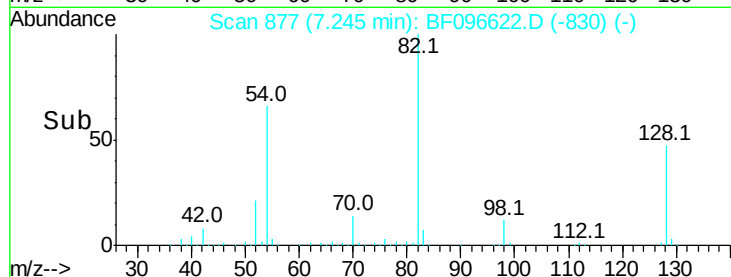
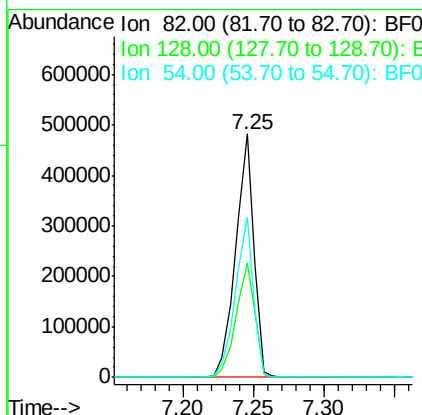
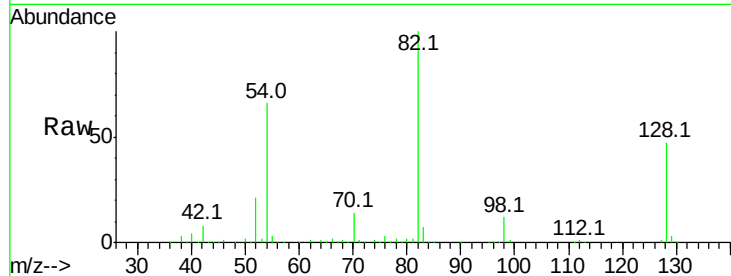
#23  
 Nitrobenzene-d5  
 Concen: 62.98 ng  
 RT: 7.25 min Scan# 877  
 Delta R.T. -0.02 min  
 Lab File: BF096622.D  
 Acq: 11 Jul 2017 1:01

Instrument :  
 BNA\_F  
 ClientSampleId :  
 BU-01-070617-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 46.9  | 34.0  | 51.0  |
| 54      | 66.1  | 42.2  | 63.2  |

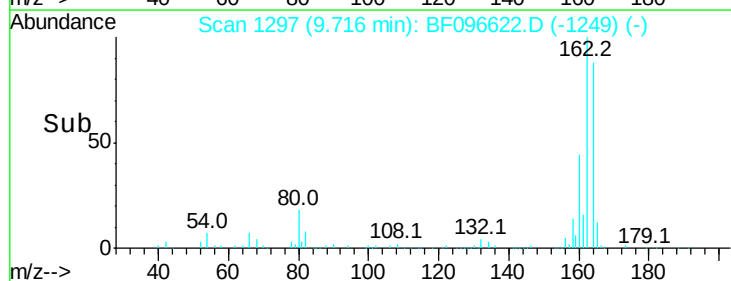
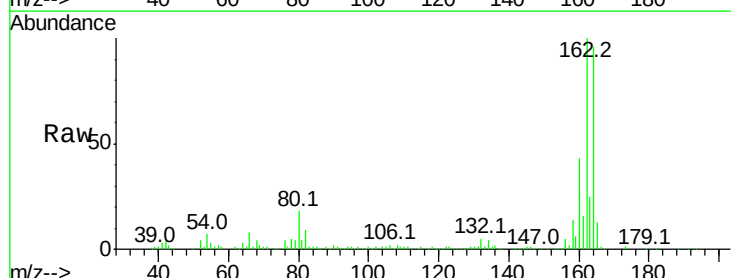
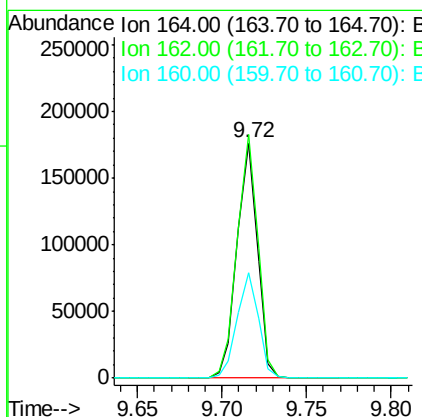
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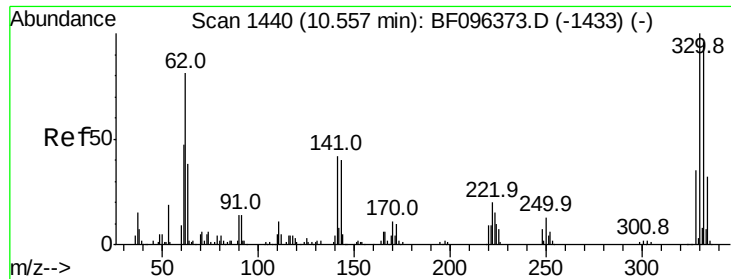
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#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.72 min Scan# 1297  
 Delta R.T. -0.02 min  
 Lab File: BF096622.D  
 Acq: 11 Jul 2017 1:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 103.6 | 82.6  | 123.8 |
| 160     | 44.7  | 36.2  | 54.2  |





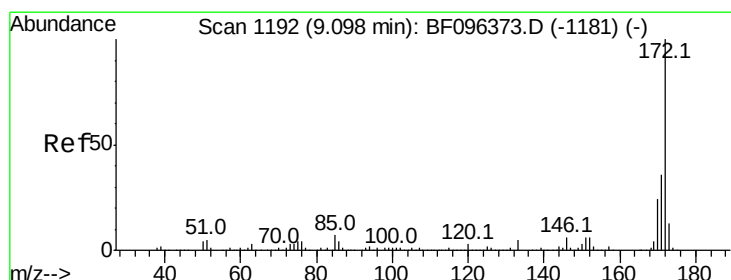
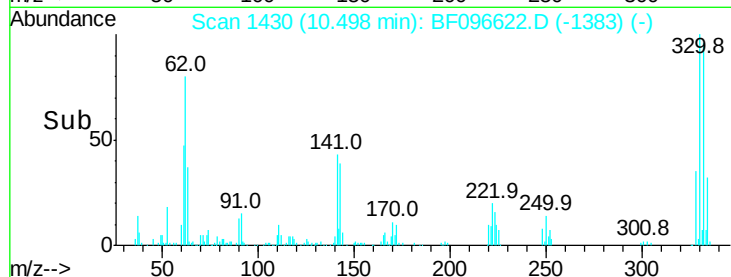
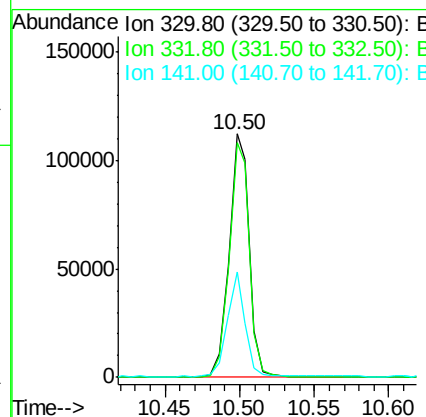
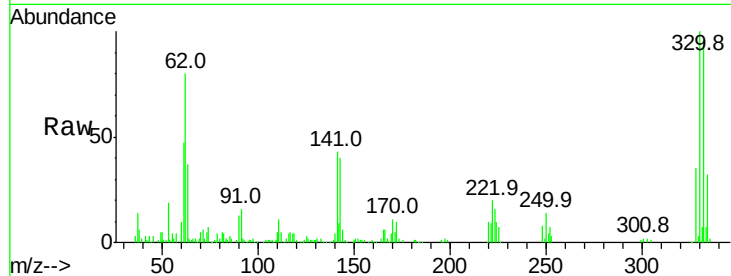
#41  
 2,4,6-Tribromophenol  
 Concen: 92.40 ng  
 RT: 10.50 min Scan# 1430  
 Delta R.T. -0.02 min  
 Lab File: BF096622.D  
 Acq: 11 Jul 2017 1:01

Instrument :  
 BNA\_F  
 ClientSampleId :  
 BU-01-070617-B

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 107205 |       |       |
| 332     | 96.5  | 76.6   | 115.0 |       |
| 141     | 39.5  | 31.4   | 47.2  |       |

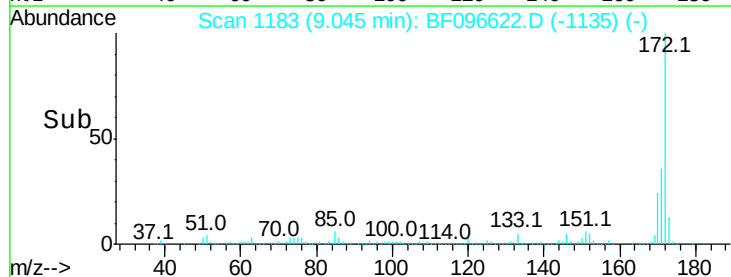
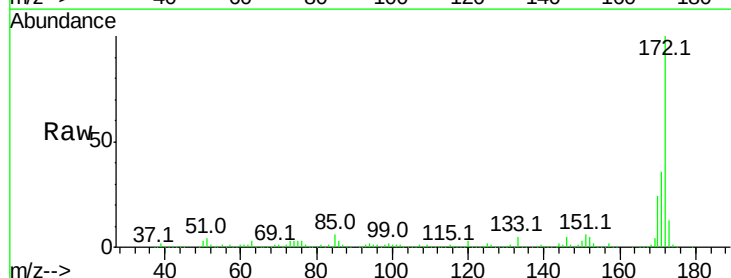
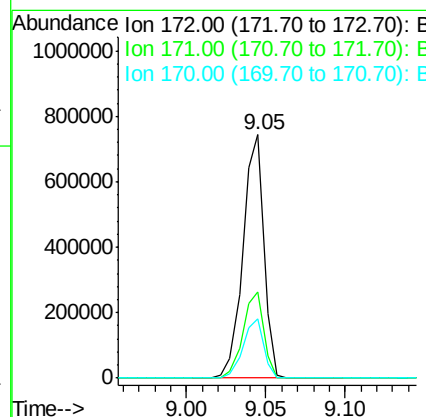
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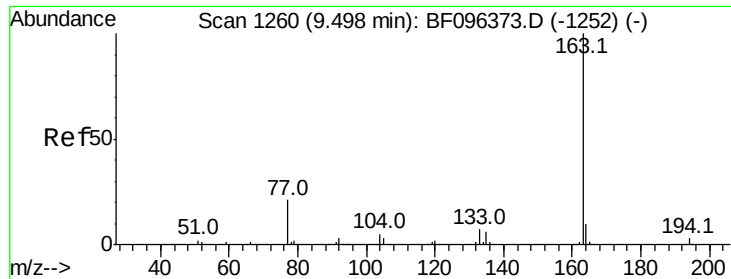
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#44  
 2-Fluorobiphenyl  
 Concen: 78.21 ng  
 RT: 9.05 min Scan# 1183  
 Delta R.T. -0.02 min  
 Lab File: BF096622.D  
 Acq: 11 Jul 2017 1:01

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 172     | 100   | 679470 |       |       |
| 171     | 35.6  | 29.6   | 44.4  |       |
| 170     | 24.5  | 19.8   | 29.8  |       |





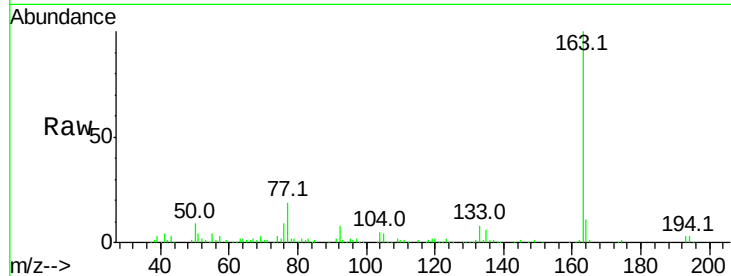
#49  
Dimethylphthalate  
Concen: 11.73 ng  
RT: 9.43 min Scan# 1249  
Delta R.T. -0.04 min  
Lab File: BF096622.D  
Acq: 11 Jul 2017 1:01

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-070617-B

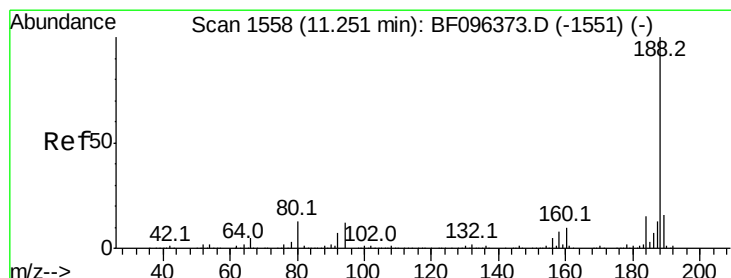
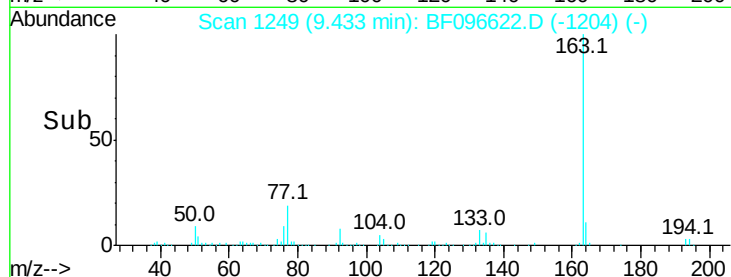
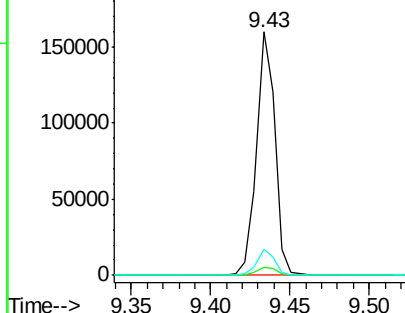
| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 163     | 100   |      |       |       |
| 194     | 3.3   | 2.6  | 4.0   |       |
| 164     | 10.8  | 8.4  | 12.6  |       |

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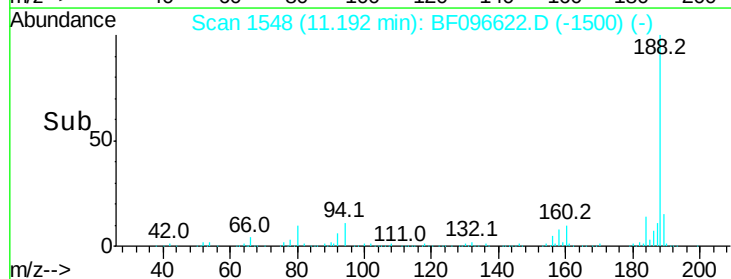
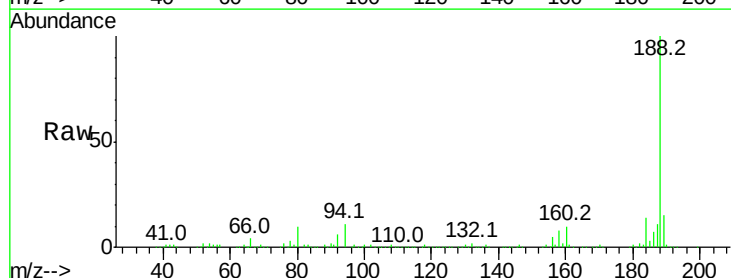
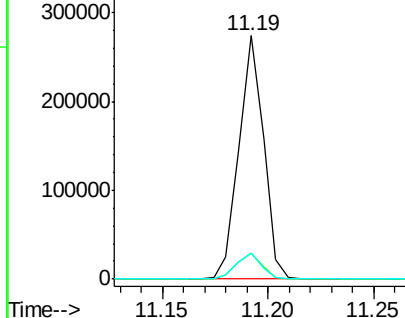
Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

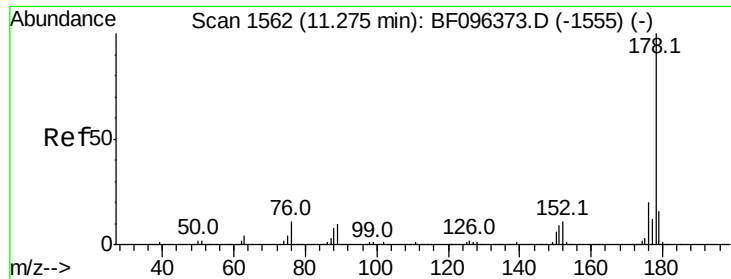


#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.19 min Scan# 1548  
Delta R.T. -0.02 min  
Lab File: BF096622.D  
Acq: 11 Jul 2017 1:01

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 188     | 100   |      |       |       |
| 94      | 10.6  | 9.4  | 14.2  |       |
| 80      | 10.5  | 10.2 | 15.2  |       |

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





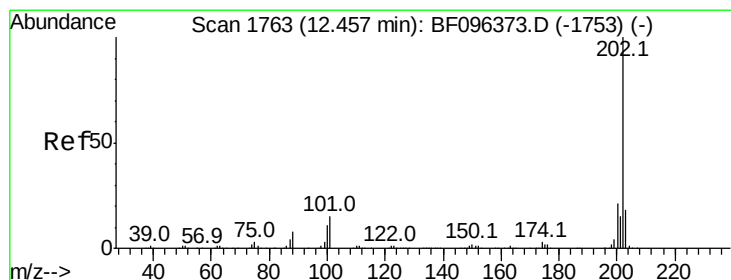
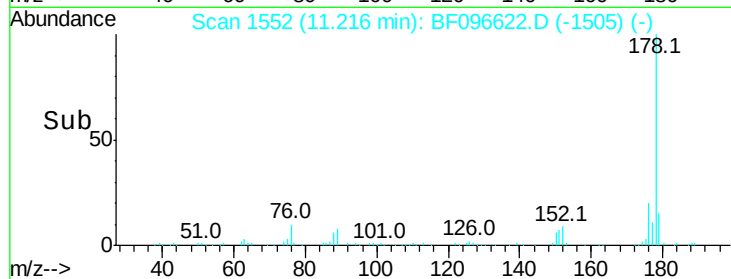
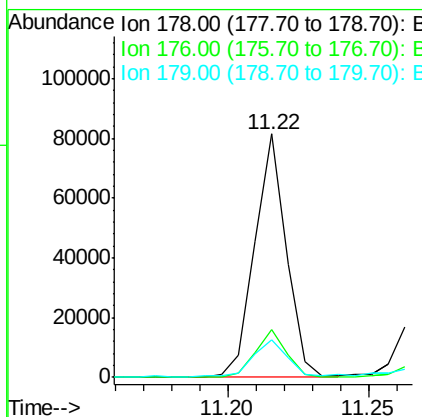
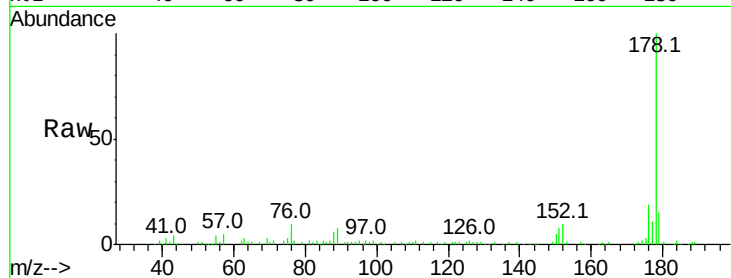
#70  
Phenanthrene  
Concen: 5.31 ng  
RT: 11.22 min Scan# 1552  
Delta R.T. -0.02 min  
Lab File: BF096622.D  
Acq: 11 Jul 2017 1:01

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-070617-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.5  | 16.2  | 24.4  |
| 179     | 15.2  | 12.6  | 19.0  |

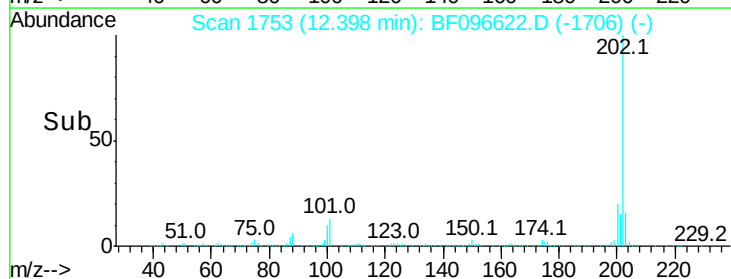
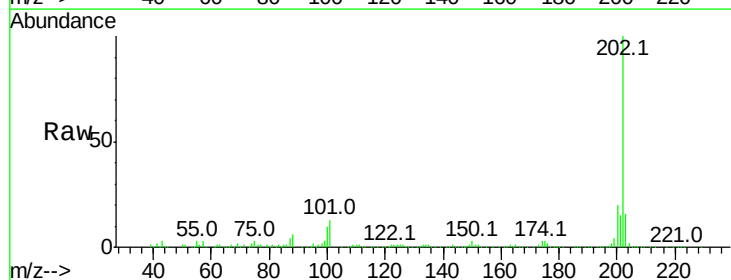
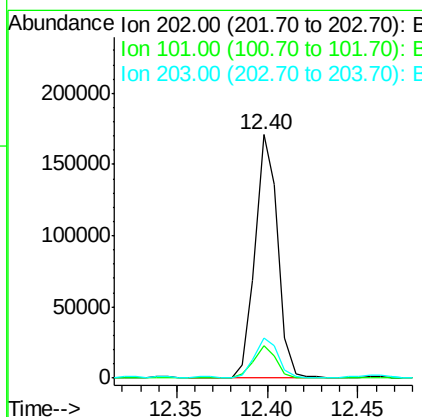
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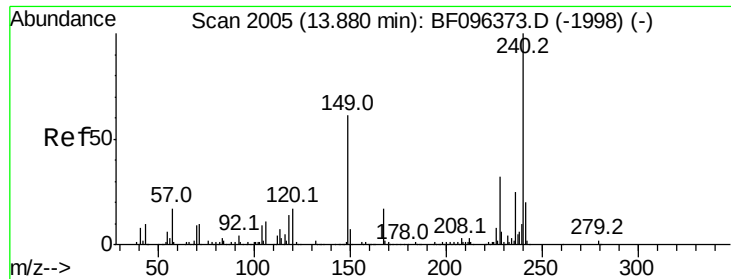


#74  
Fluoranthene  
Concen: 12.53 ng  
RT: 12.40 min Scan# 1753  
Delta R.T. -0.02 min  
Lab File: BF096622.D  
Acq: 11 Jul 2017 1:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 13.2  | 0.0   | 33.2  |
| 203     | 16.2  | 0.0   | 38.1  |







#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.82 min Scan# 1995

Delta R.T. -0.02 min

Lab File: BF096622.D

Acq: 11 Jul 2017 1:01

Instrument :

BNA\_F

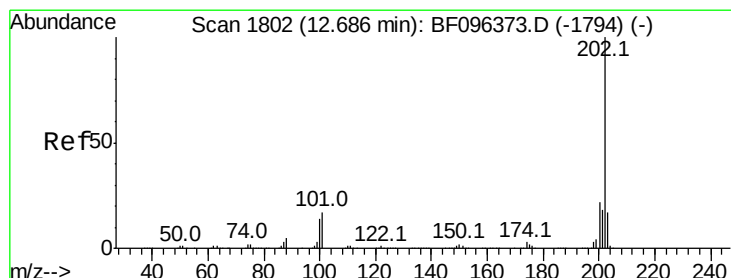
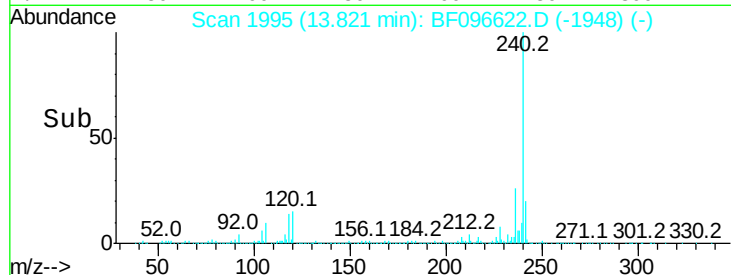
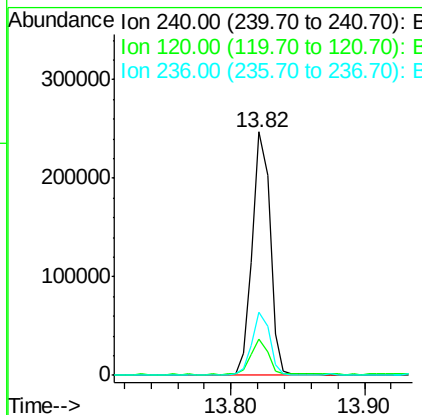
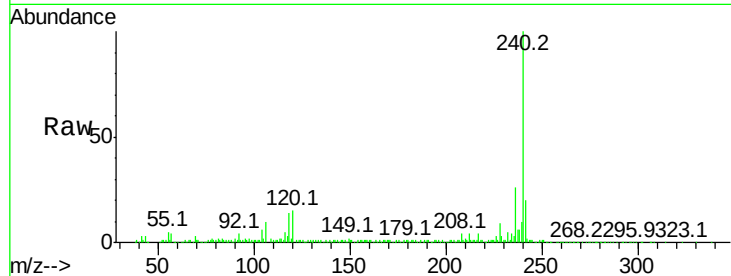
ClientSampleId :

BU-01-070617-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 15.0  | 5.8   | 8.8#  |
| 236     | 26.1  | 20.5  | 30.7  |

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#77

Pyrene

Concen: 7.79 ng

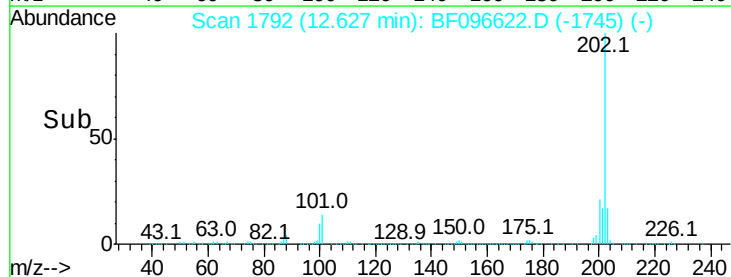
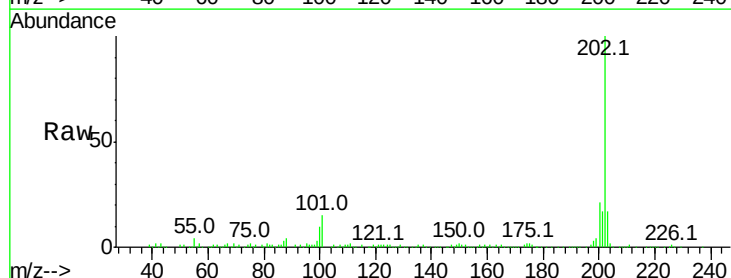
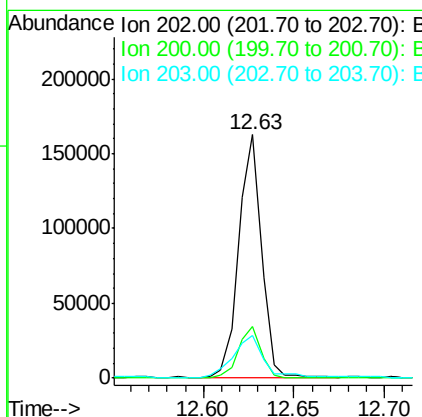
RT: 12.63 min Scan# 1792

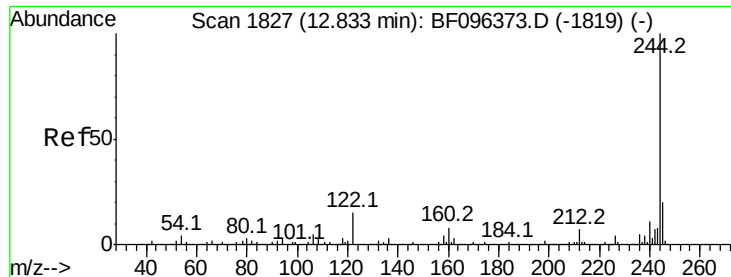
Delta R.T. -0.02 min

Lab File: BF096622.D

Acq: 11 Jul 2017 1:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.2  | 17.6  | 26.4  |
| 203     | 17.3  | 14.4  | 21.6  |





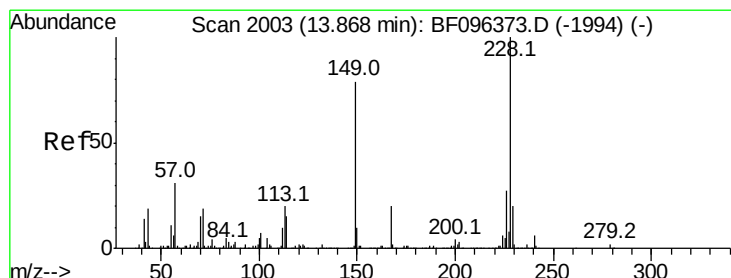
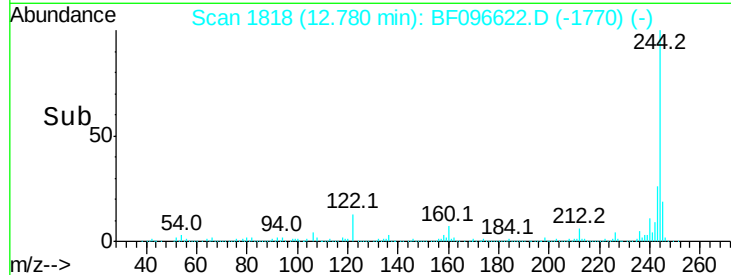
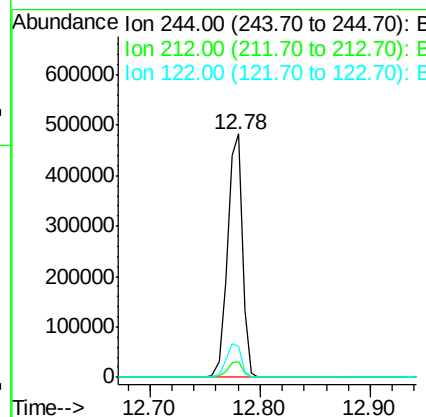
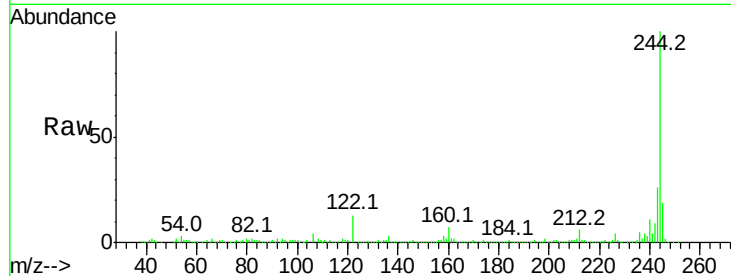
#78  
 Terphenyl-d14  
 Concen: 43.12 ng  
 RT: 12.78 min Scan# 1818  
 Delta R.T. -0.02 min  
 Lab File: BF096622.D  
 Acq: 11 Jul 2017 1:01

Instrument :  
 BNA\_F  
 ClientSampleId :  
 BU-01-070617-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.3   | 6.0   | 9.0   |
| 122     | 12.9  | 10.3  | 15.5  |

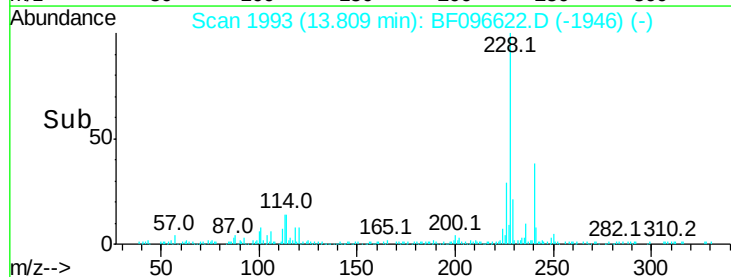
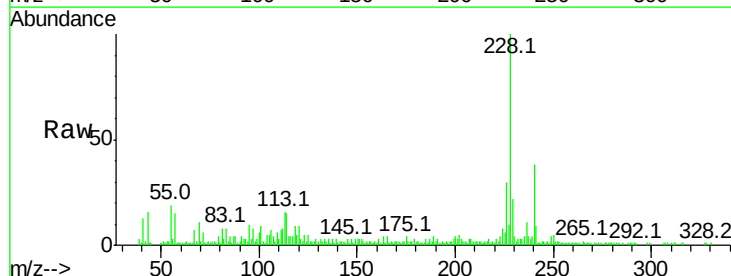
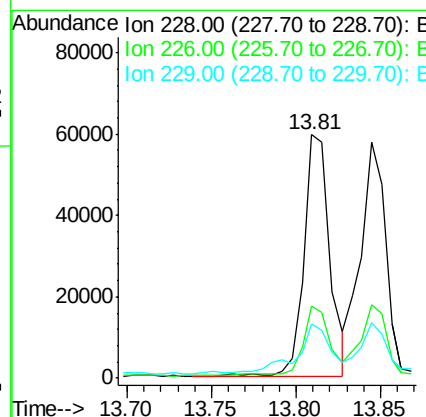
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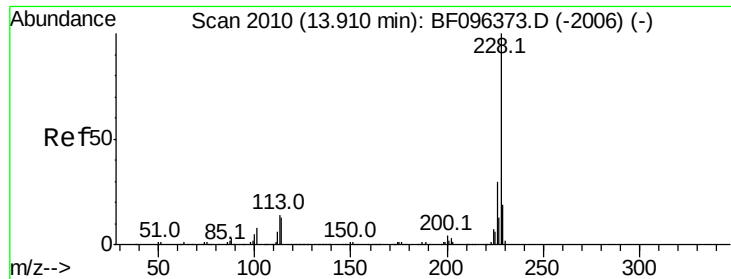
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#80  
 Benzo(a)anthracene  
 Concen: 4.86 ng  
 RT: 13.81 min Scan# 1993  
 Delta R.T. -0.02 min  
 Lab File: BF096622.D  
 Acq: 11 Jul 2017 1:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.7  | 22.6  | 33.8  |
| 229     | 22.3  | 16.3  | 24.5  |





#82

Chrysene

Concen: 4.40 ng

RT: 13.84 min Scan# 1999

Delta R.T. -0.03 min

Lab File: BF096622.D

Acq: 11 Jul 2017 1:01

Instrument :

BNA\_F

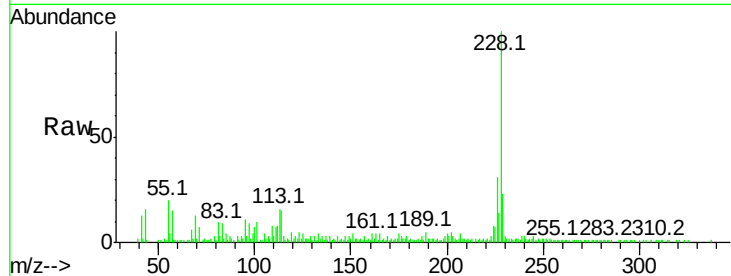
ClientSampleId :

BU-01-070617-B

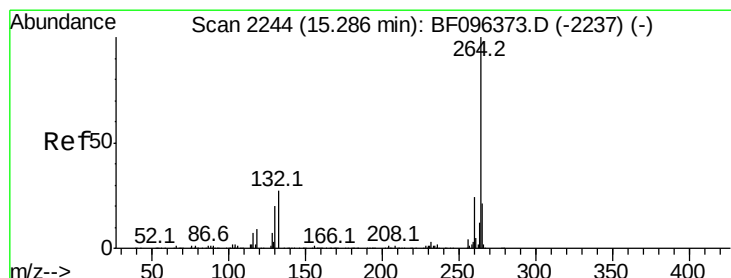
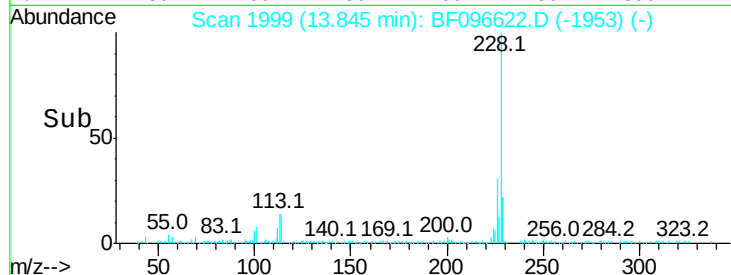
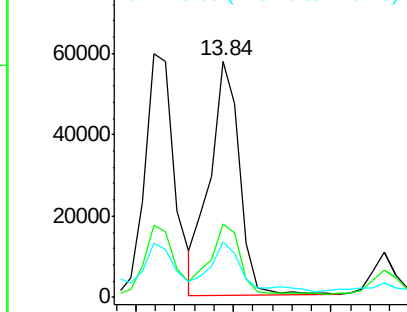
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 60447 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 31.2  | 24.9  | 37.3  |
| 229       | 23.3  | 15.8  | 23.6  |

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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



#86

Perylene-d12

Concen: 20.00 ng

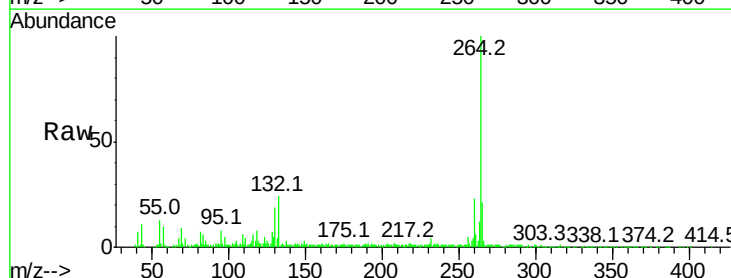
RT: 15.23 min Scan# 2234

Delta R.T. -0.02 min

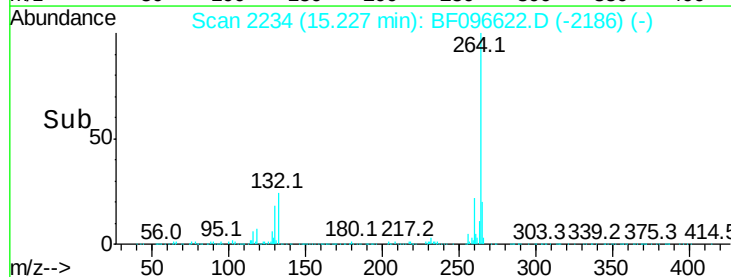
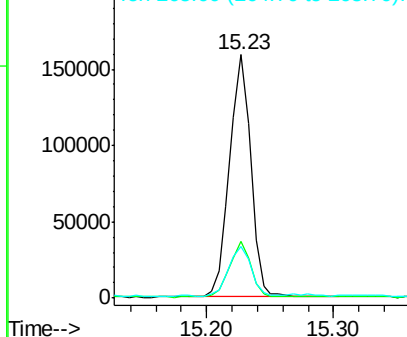
Lab File: BF096622.D

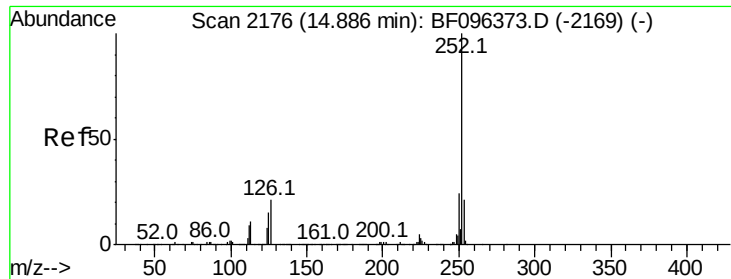
Acq: 11 Jul 2017 1:01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 264   | Resp: | 184863 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 23.1  | 19.5  | 29.3   |
| 265       | 21.1  | 17.2  | 25.8   |



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: 5.48 ng m

RT: 14.83 min Scan# 2167

Delta R.T. -0.02 min

Lab File: BF096622.D

Acq: 11 Jul 2017 1:01

Instrument :

BNA\_F

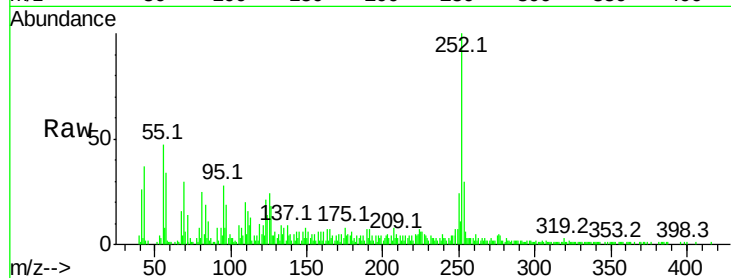
ClientSampleId :

BU-01-070617-B

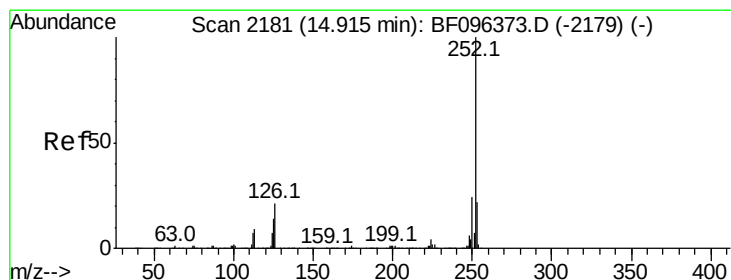
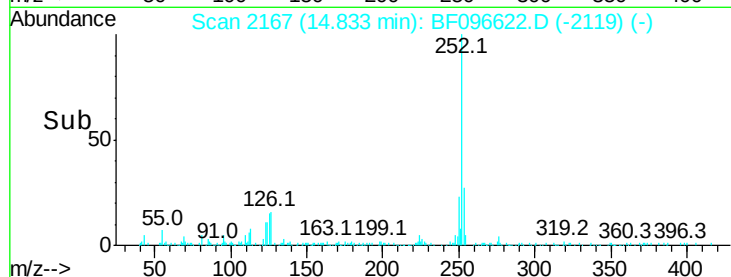
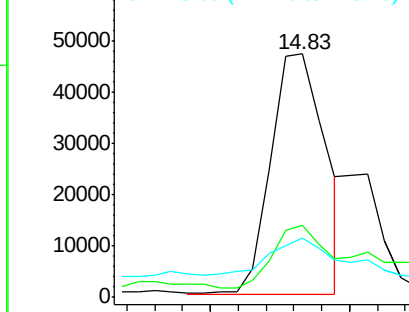
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 63490 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 29.7  | 18.1  | 27.1# |
| 125       | 24.4  | 9.8   | 14.8# |

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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



#88

Benzo(k)fluoranthene

Concen: 2.26 ng m

RT: 14.86 min Scan# 2171

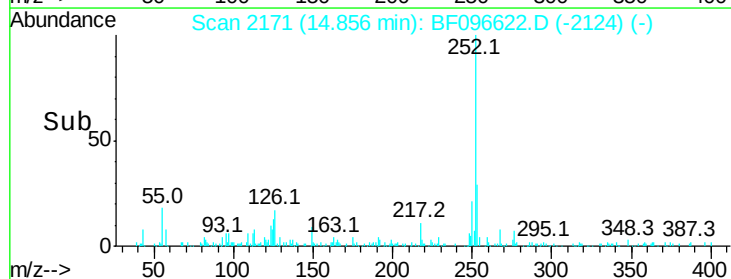
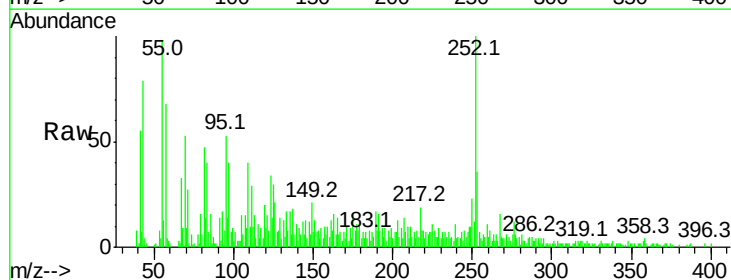
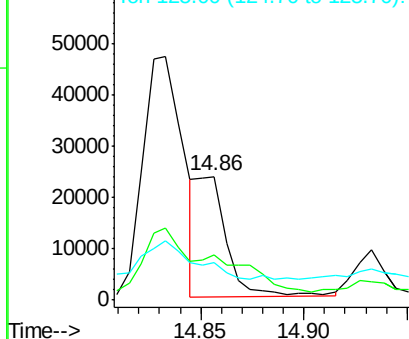
Delta R.T. -0.02 min

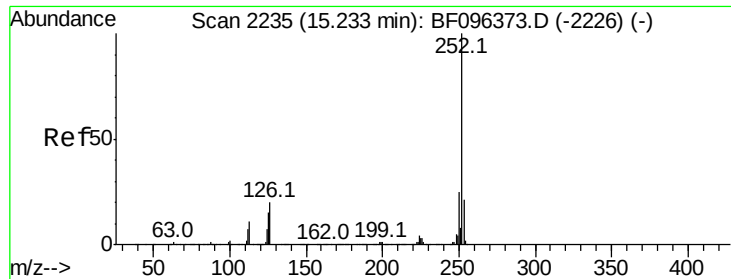
Lab File: BF096622.D

Acq: 11 Jul 2017 1:01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 23396 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 36.0  | 18.4  | 27.6# |
| 125       | 30.1  | 13.1  | 19.7# |

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





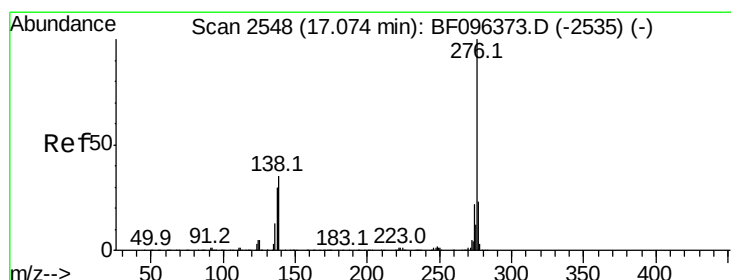
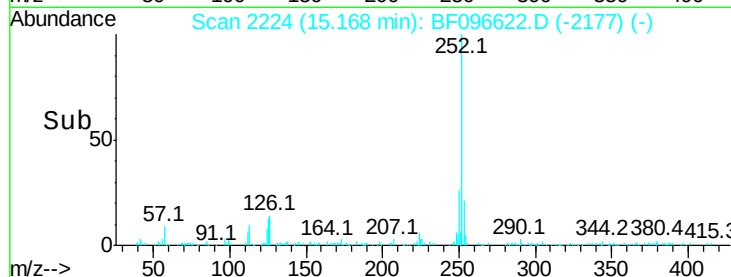
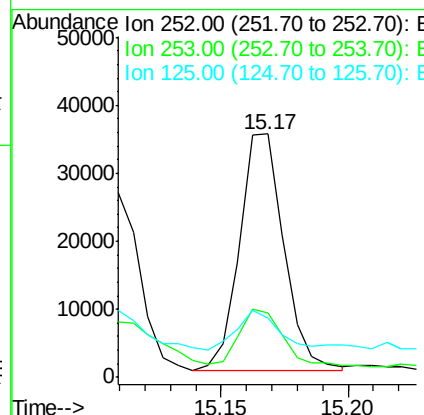
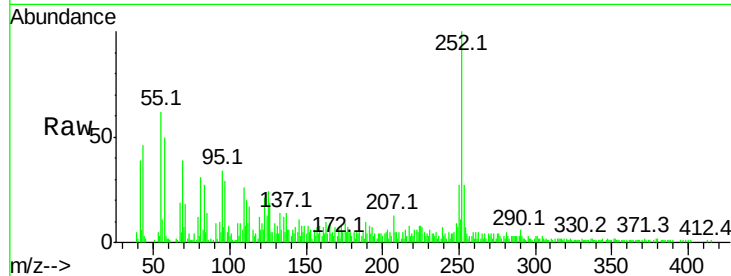
#89  
Benzo(a)pyrene  
Concen: 4.08 ng  
RT: 15.17 min Scan# 2224  
Delta R.T. -0.02 min  
Lab File: BF096622.D  
Acq: 11 Jul 2017 1:01

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-070617-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 26.5  | 17.5  | 26.3# |
| 125     | 24.3  | 11.0  | 16.4# |

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#91  
Benzo(g,h,i)perylene  
Concen: 2.36 ng  
RT: 16.97 min Scan# 2530  
Delta R.T. -0.04 min  
Lab File: BF096622.D  
Acq: 11 Jul 2017 1:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 30.6  | 18.6  | 28.0# |
| 138     | 37.4  | 25.4  | 38.0  |

