

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102218\  
 Data File : BF110049.D  
 Acq On : 22 Oct 2018 15:24  
 Operator : JU/SJ  
 Sample : J5605-07 4X  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-B

Manual Integrations  
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Quant Time: Oct 23 13:13:09 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF101518.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Oct 16 14:58:24 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.97  | 152  | 200664   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8          | 8.25  | 136  | 791928   | 20.00 | ng    | -0.02    |
| 39) Acenaphthene-d10        | 10.01 | 164  | 322610   | 20.00 | ng    | -0.02    |
| 64) Phenanthrene-d10        | 11.50 | 188  | 491871   | 20.00 | ng    | -0.01    |
| 76) Chrysene-d12            | 14.14 | 240  | 392276   | 20.00 | ng    | -0.02    |
| 87) Perylene-d12            | 15.67 | 264  | 297930   | 20.00 | ng    | -0.02    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.58  | 112  | 243267   | 19.22 | ng    | -0.02    |
| 7) Phenol-d6                | 6.58  | 99   | 311322   | 19.81 | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.53  | 82   | 179587   | 15.28 | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol    | 10.80 | 330  | 44379    | 15.89 | ng    | -0.02    |
| 45) 2-Fluorobiphenyl        | 9.32  | 172  | 325750   | 16.11 | ng    | -0.02    |
| 79) Terphenyl-d14           | 13.08 | 244  | 228272   | 12.22 | ng    | -0.02    |
| Target Compounds            |       |      |          |       |       |          |
| 71) Phenanthrene            | 11.53 | 178  | 221874   | 8.713 | ng    | 98       |
| 72) Anthracene              | 11.57 | 178  | 72759    | 2.842 | ng    | 98       |
| 75) Fluoranthene            | 12.72 | 202  | 192084   | 7.551 | ng    | 99       |
| 78) Pyrene                  | 12.94 | 202  | 173886   | 6.035 | ng    | 98       |
| 81) Benzo(a)anthracene      | 14.13 | 228  | 82458    | 3.569 | ng    | 98       |
| 83) Chrysene                | 14.17 | 228  | 75803    | 3.447 | ng    | 96       |
| 86) Indeno(1,2,3-cd)pyrene  | 17.22 | 276  | 36936    | 2.086 | ng    | # 92     |
| 88) Benzo(b)fluoranthene    | 15.22 | 252  | 88808m   | 5.170 | ng    |          |
| 90) Benzo(a)pyrene          | 15.60 | 252  | 68350    | 4.327 | ng    | # 95     |
| 92) Benzo(g,h,i)perylene    | 17.69 | 276  | 38467    | 2.719 | ng    | # 91     |

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

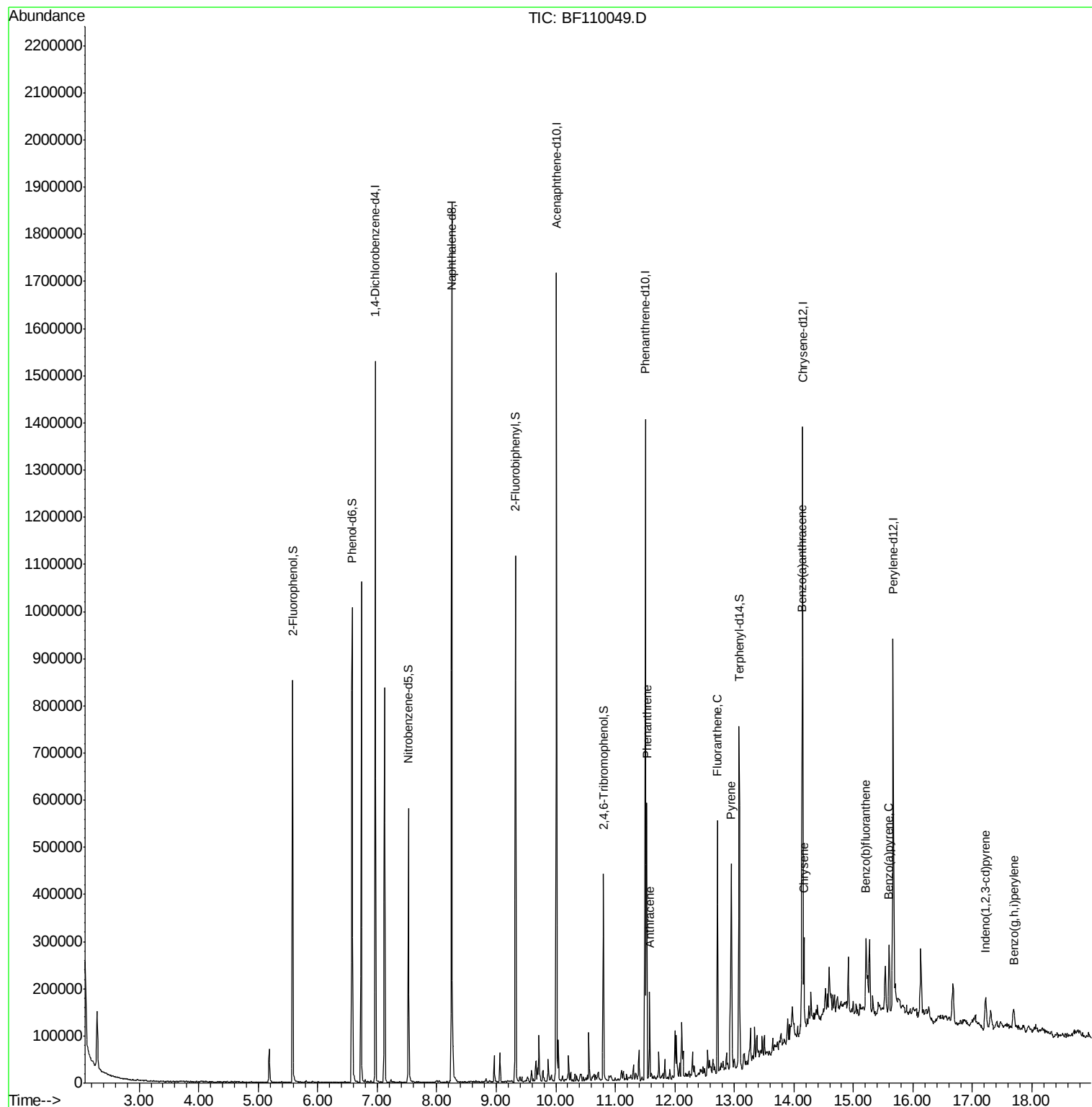
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102218\  
Data File : BF110049.D  
Acq On : 22 Oct 2018 15:24  
Operator : JU/SJ  
Sample : J5605-07 4X  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

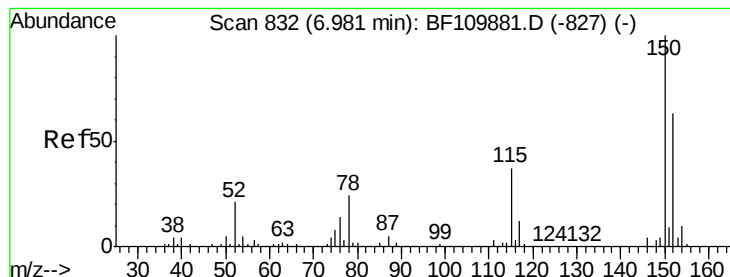
Instrument :  
BNA\_F  
ClientSampleId :  
TP-B

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Quant Time: Oct 23 13:13:09 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF101518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Oct 16 14:58:24 2018  
Response via : Initial Calibration





#1

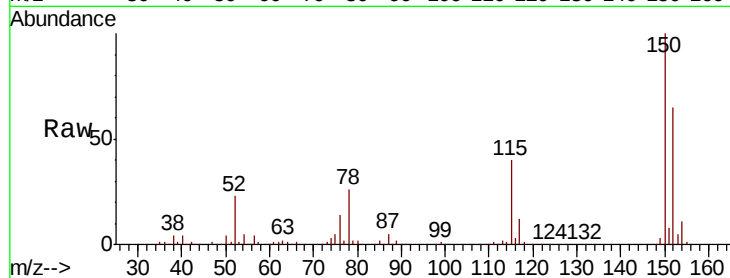
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.97 min Scan# 830  
Delta R.T. -0.01 min  
Lab File: BF110049.D  
Acq: 22 Oct 2018 15:24

Instrument :  
BNA\_F  
ClientSampled :  
TP-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 154.9 | 122.7 | 184.1 |
| 115     | 62.2  | 49.1  | 73.7  |

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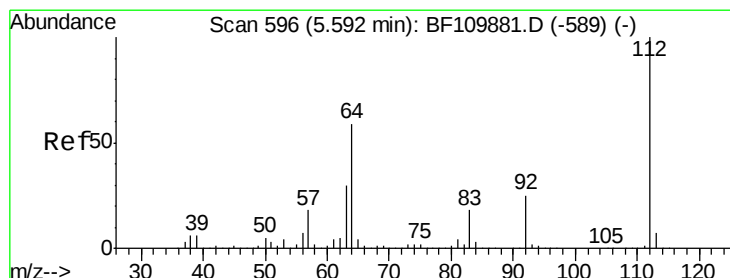
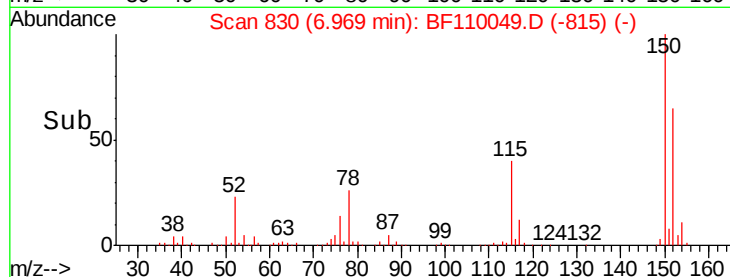
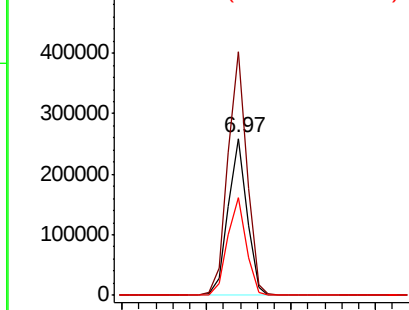


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

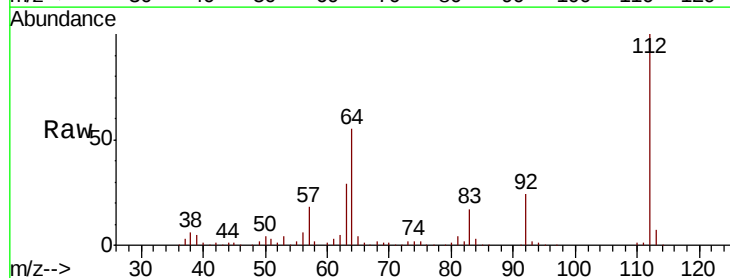
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 19.217 ng  
RT: 5.58 min Scan# 594  
Delta R.T. -0.02 min  
Lab File: BF110049.D  
Acq: 22 Oct 2018 15:24

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 55.4  | 44.1  | 66.1  |
| 63      | 29.1  | 23.7  | 35.5  |

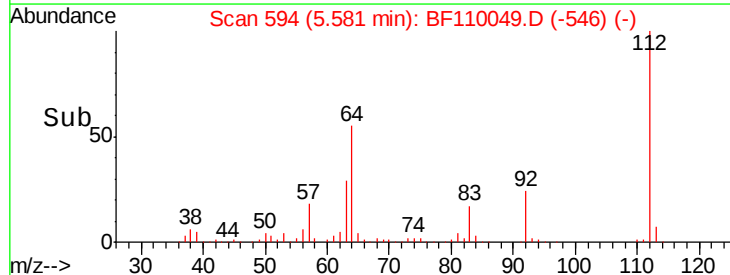
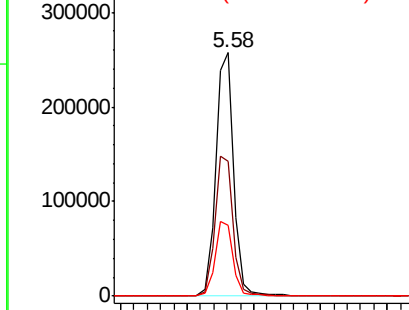


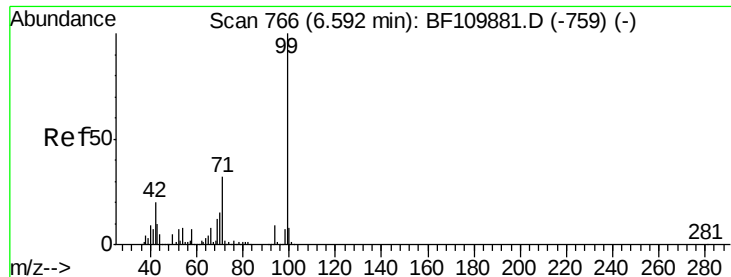
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 19.805 ng

RT: 6.58 min Scan# 764

Delta R.T. -0.02 min

Lab File: BF110049.D

Acq: 22 Oct 2018 15:24

Instrument :

BNA\_F

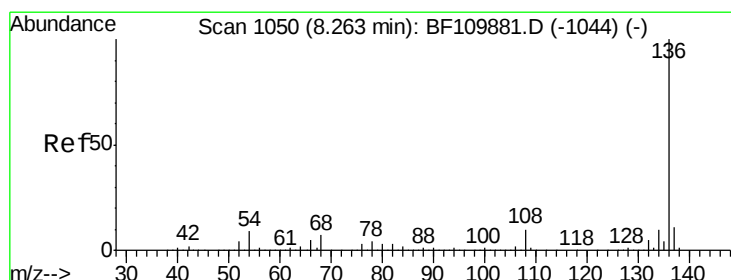
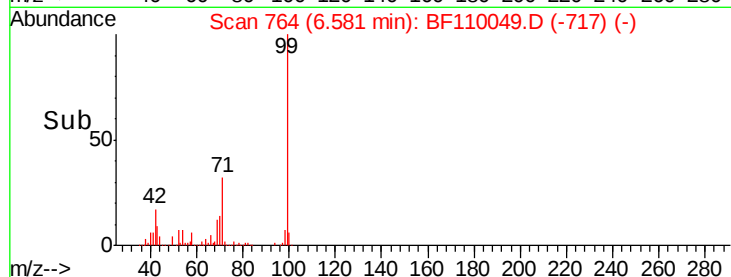
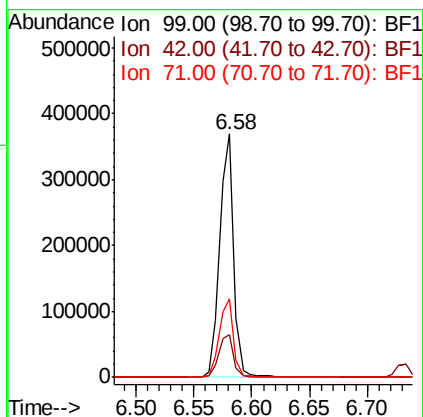
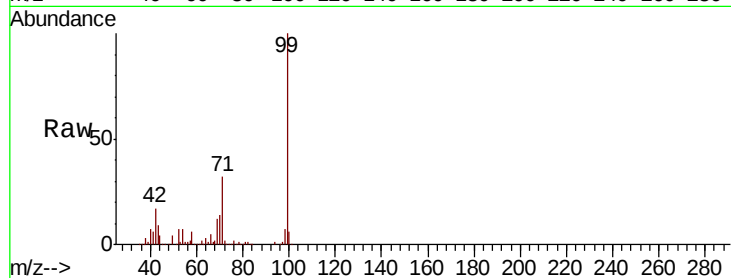
ClientSampled :

TP-B

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 99    | Resp: | 311322 |
| Ion      | Ratio | Lower | Upper  |
| 99       | 100   |       |        |
| 42       | 17.3  | 15.8  | 23.6   |
| 71       | 32.2  | 28.0  | 42.0   |

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#21

Naphthalene-d8

Concen: 20.000 ng

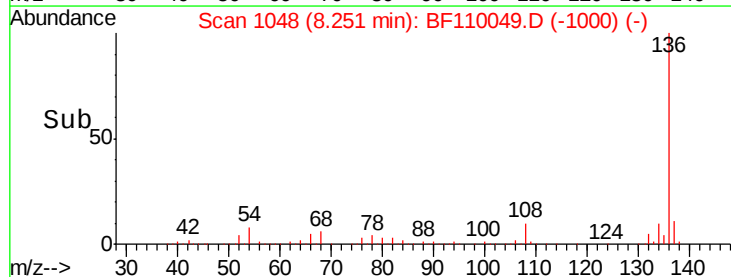
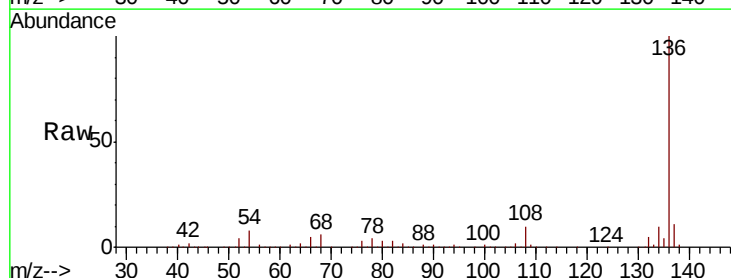
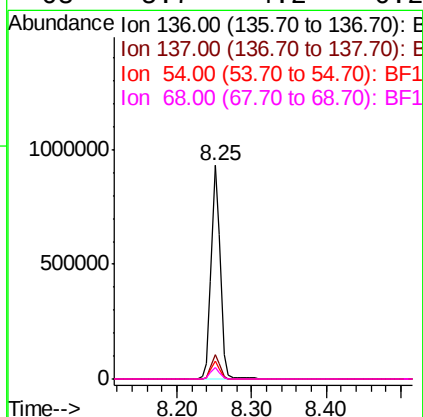
RT: 8.25 min Scan# 1048

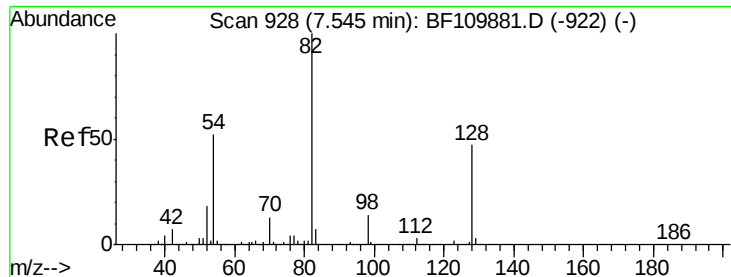
Delta R.T. -0.02 min

Lab File: BF110049.D

Acq: 22 Oct 2018 15:24

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 791928 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 11.1  | 8.8   | 13.2   |
| 54       | 8.3   | 5.4   | 8.2#   |
| 68       | 5.7   | 4.2   | 6.2    |





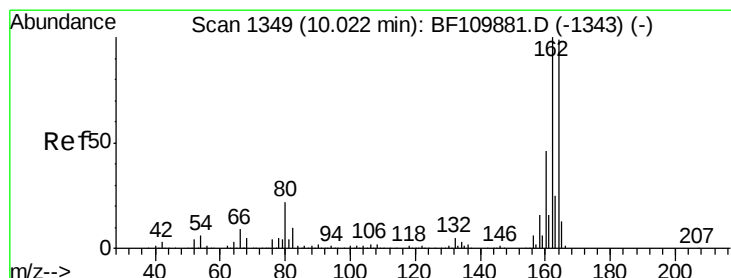
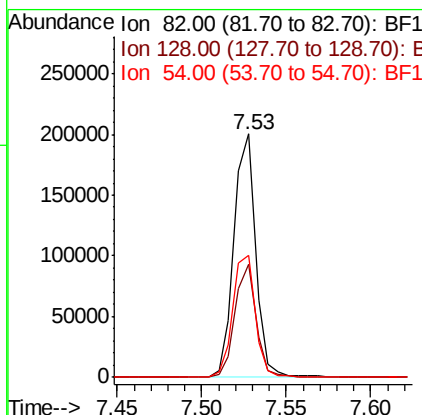
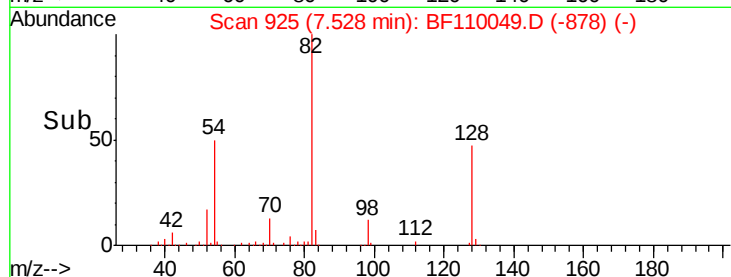
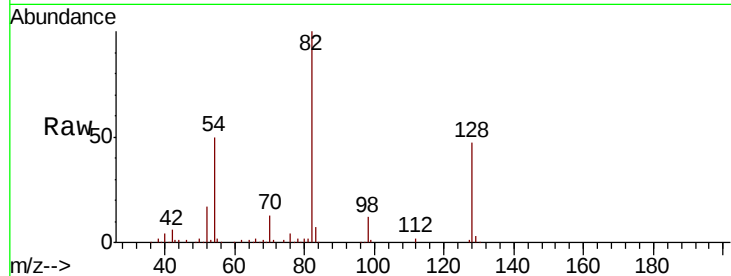
#23  
 Nitrobenzene-d5  
 Concen: 15.276 ng  
 RT: 7.53 min Scan# 925  
 Delta R.T. -0.02 min  
 Lab File: BF110049.D  
 Acq: 22 Oct 2018 15:24

Instrument :  
 BNA\_F  
 ClientSampled :  
 TP-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 46.5  | 34.2  | 51.2  |
| 54      | 50.0  | 38.6  | 58.0  |

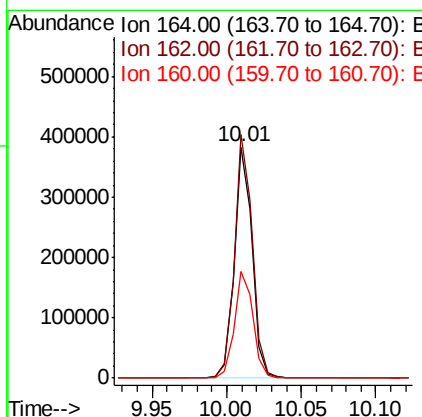
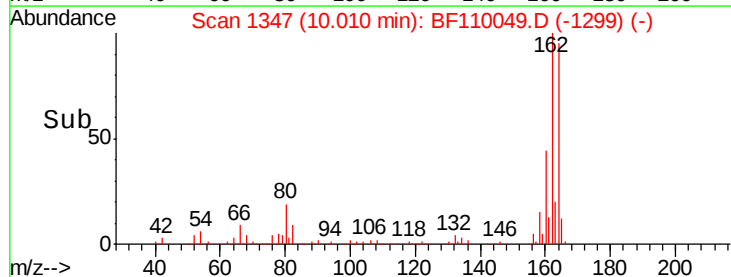
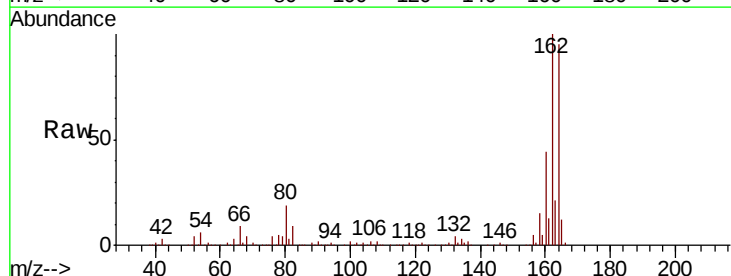
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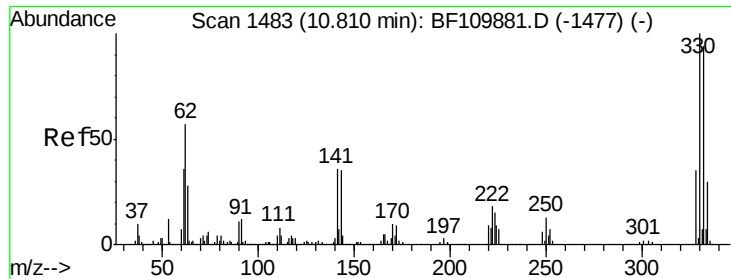
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#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 10.01 min Scan# 1347  
 Delta R.T. -0.02 min  
 Lab File: BF110049.D  
 Acq: 22 Oct 2018 15:24

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 105.3 | 83.0  | 124.6 |
| 160     | 46.2  | 37.0  | 55.6  |





#42

2,4,6-Tribromophenol

Concen: 15.889 ng

RT: 10.80 min Scan# 1481

Delta R.T. -0.02 min

Lab File: BF110049.D

Acq: 22 Oct 2018 15:24

Instrument :

BNA\_F

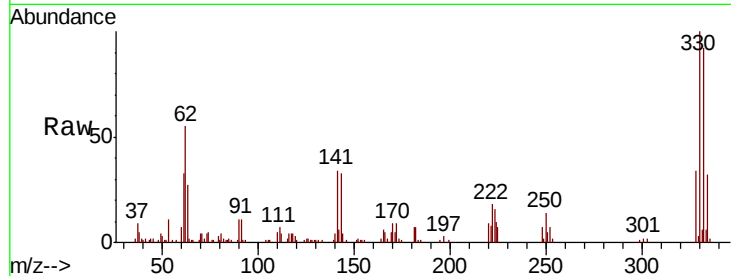
ClientSampled :

TP-B

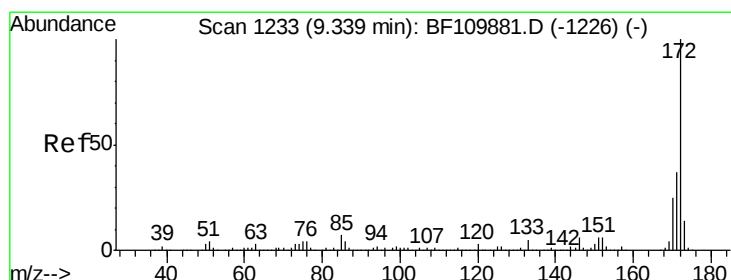
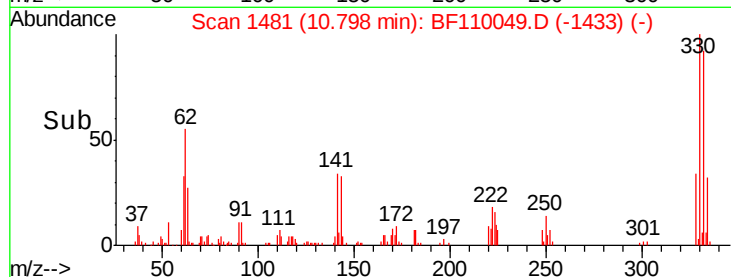
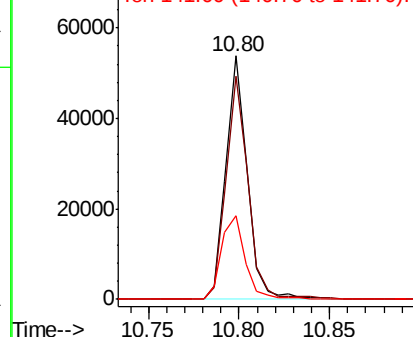
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 93.9  | 77.1  | 115.7 |
| 141     | 37.7  | 27.0  | 40.4  |

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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



#45

2-Fluorobiphenyl

Concen: 16.112 ng

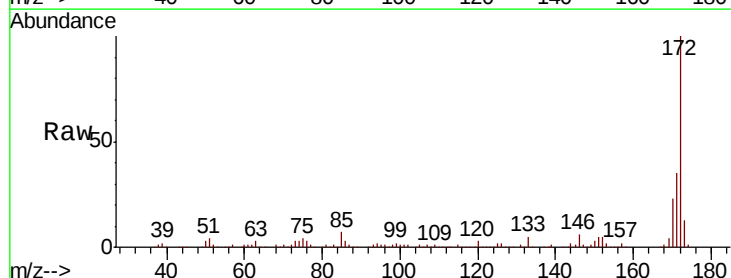
RT: 9.32 min Scan# 1230

Delta R.T. -0.02 min

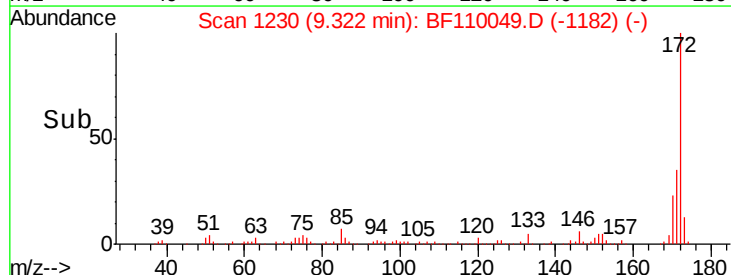
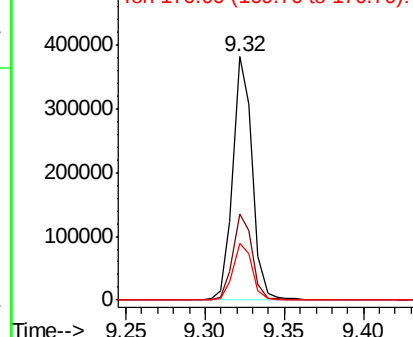
Lab File: BF110049.D

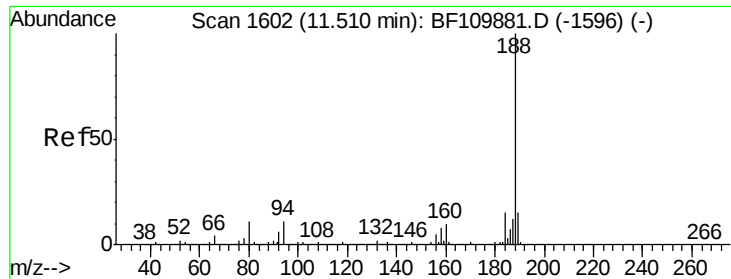
Acq: 22 Oct 2018 15:24

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.4  | 28.6  | 43.0  |
| 170     | 23.1  | 19.7  | 29.5  |



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





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.50 min Scan# 1601

Delta R.T. -0.01 min

Lab File: BF110049.D

Acq: 22 Oct 2018 15:24

Instrument :

BNA\_F

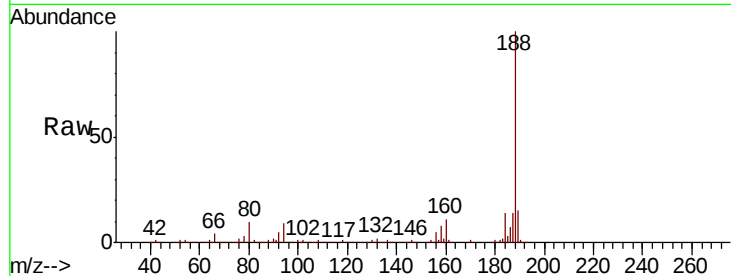
ClientSampled :

TP-B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 188   | Resp: | 491871 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 9.0   | 7.2   | 10.8   |
| 80        | 9.7   | 7.9   | 11.9   |

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Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF1

Ion 80.00 (79.70 to 80.70): BF1

600000

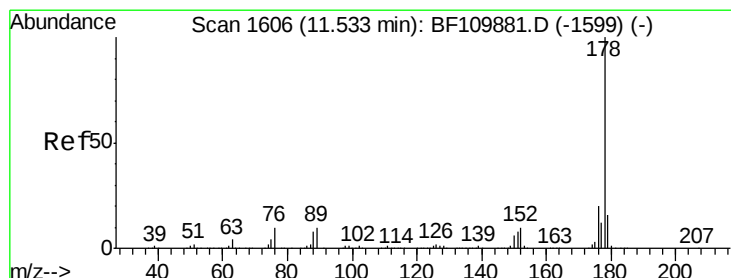
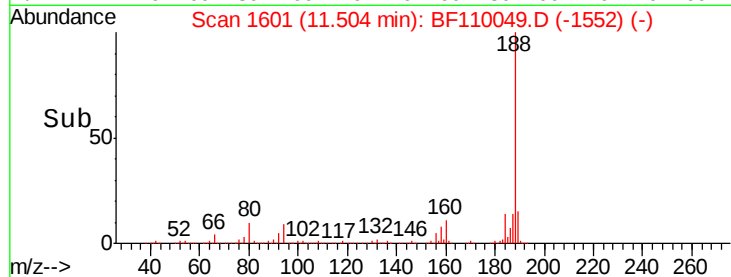
400000

200000

0

11.45 11.50 11.55

Time-->



#71

Phenanthrene

Concen: 8.713 ng

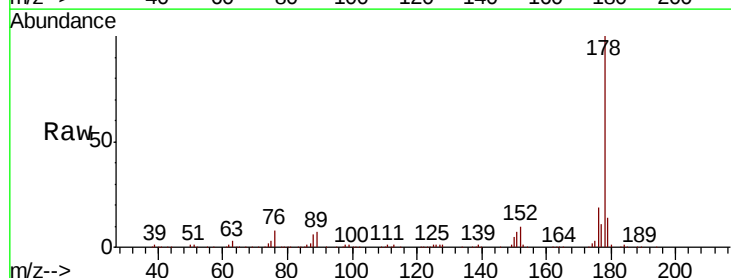
RT: 11.53 min Scan# 1605

Delta R.T. -0.02 min

Lab File: BF110049.D

Acq: 22 Oct 2018 15:24

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 221874 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 18.9  | 15.5  | 23.3   |
| 179       | 14.4  | 12.5  | 18.7   |



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

300000

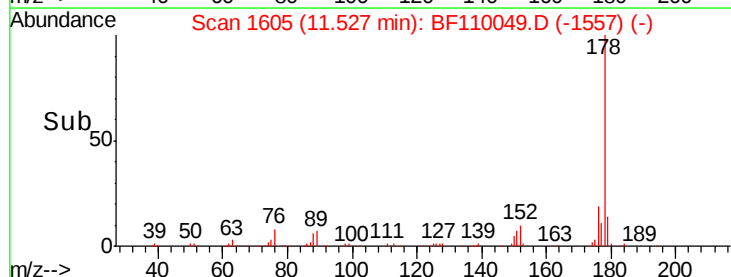
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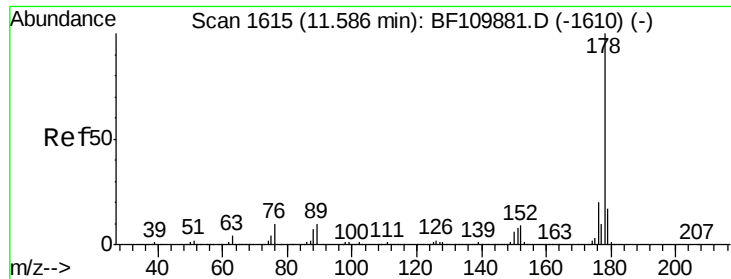
100000

0

11.50 11.53 11.55

Time-->





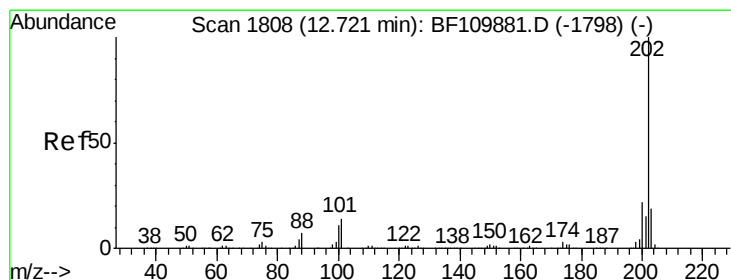
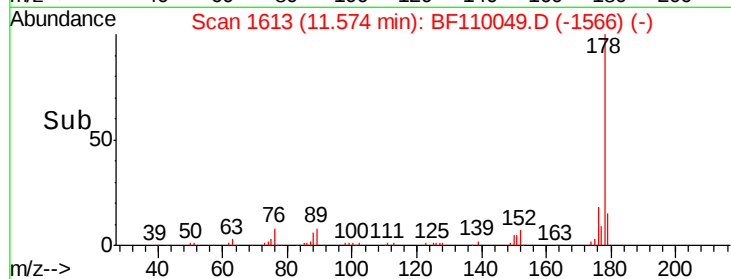
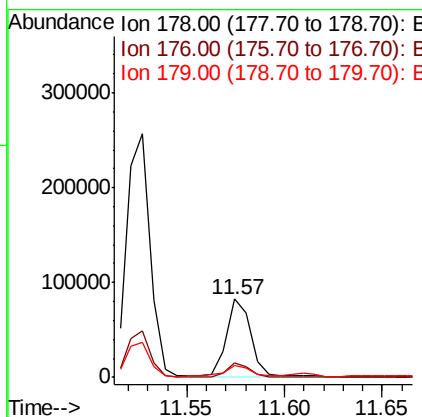
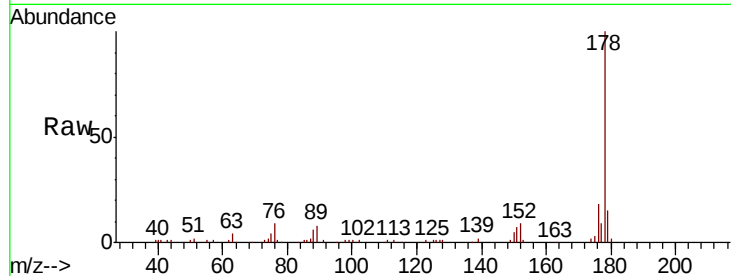
#72  
 Anthracene  
 Concen: 2.842 ng  
 RT: 11.57 min Scan# 1613  
 Delta R.T. -0.02 min  
 Lab File: BF110049.D  
 Acq: 22 Oct 2018 15:24

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.0  | 15.4  | 23.2  |
| 179     | 15.4  | 12.6  | 18.8  |

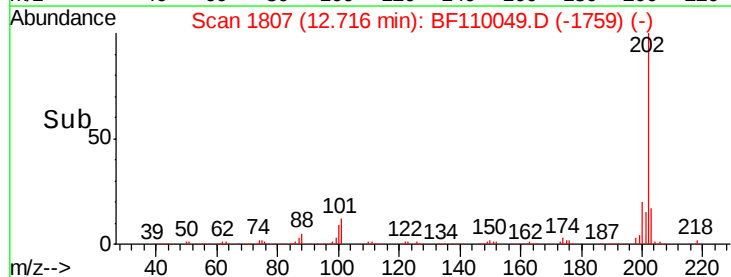
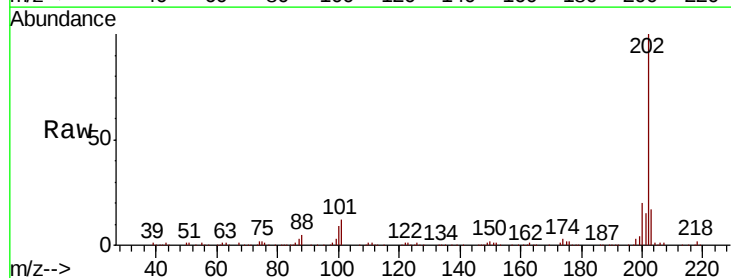
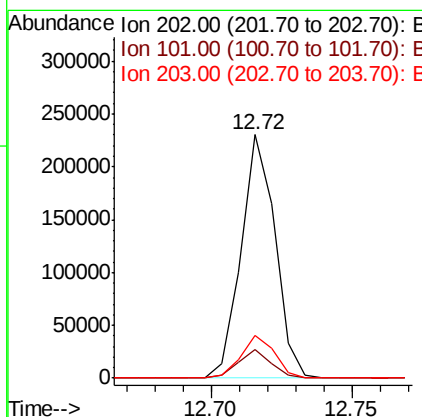
Manual Integrations  
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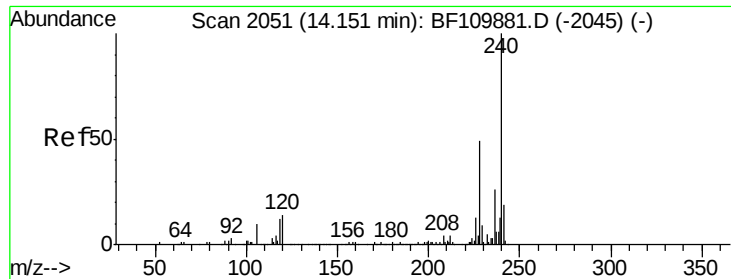
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#75  
 Fluoranthene  
 Concen: 7.551 ng  
 RT: 12.72 min Scan# 1807  
 Delta R.T. -0.02 min  
 Lab File: BF110049.D  
 Acq: 22 Oct 2018 15:24

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.6  | 0.0   | 31.4  |
| 203     | 17.4  | 0.0   | 37.7  |





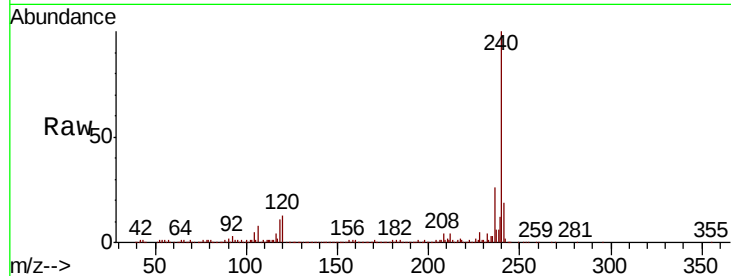
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.14 min Scan# 2050  
Delta R.T. -0.02 min  
Lab File: BF110049.D  
Acq: 22 Oct 2018 15:24

Instrument :  
BNA\_F  
ClientSampled :  
TP-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 12.7  | 8.3   | 12.5  |
| 236     | 25.8  | 21.2  | 31.8  |

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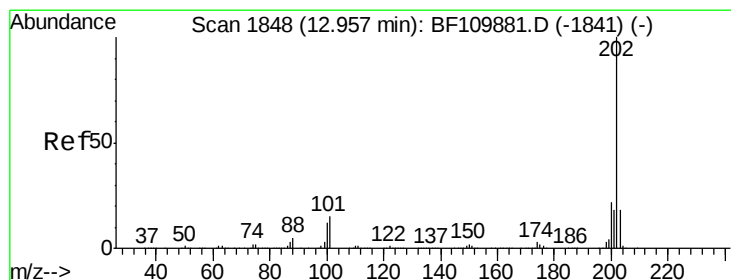
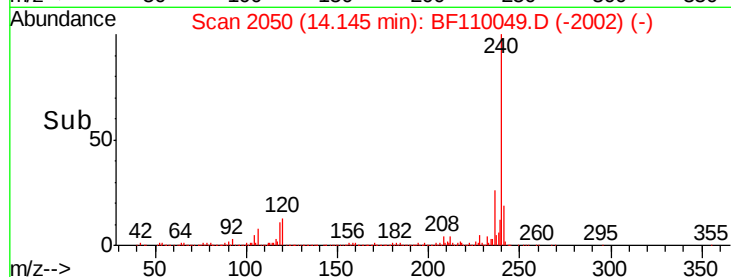
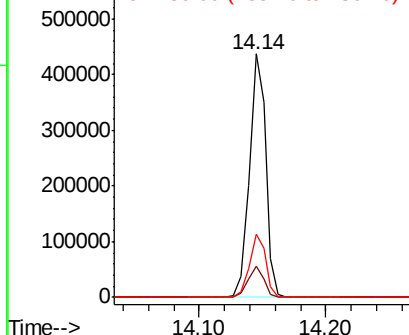


Abundance

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



#78  
Pyrene  
Concen: 6.035 ng  
RT: 12.94 min Scan# 1846  
Delta R.T. -0.02 min  
Lab File: BF110049.D  
Acq: 22 Oct 2018 15:24

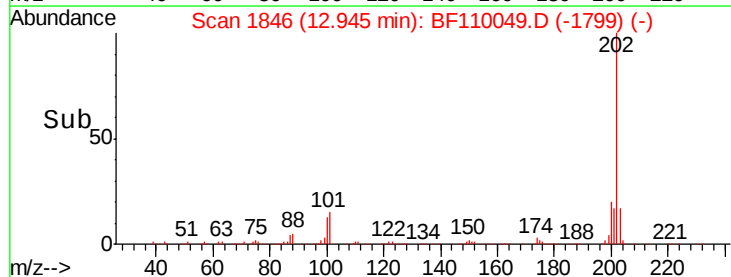
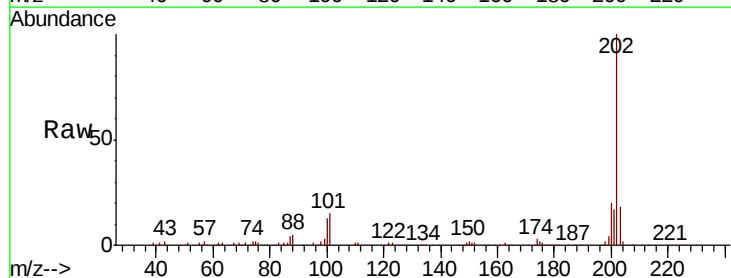
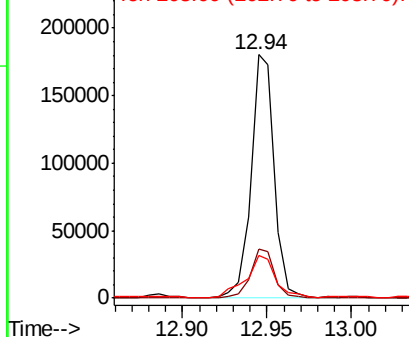
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 20.3  | 17.8  | 26.6  |
| 203     | 17.5  | 14.2  | 21.4  |

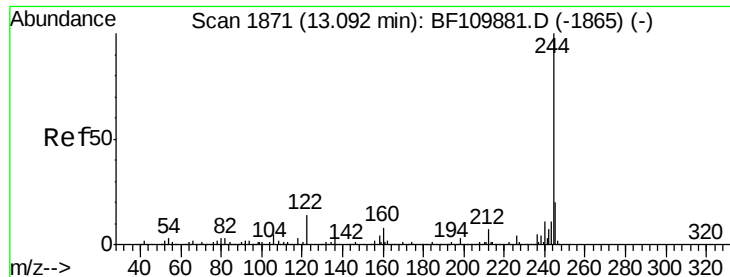
Abundance

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





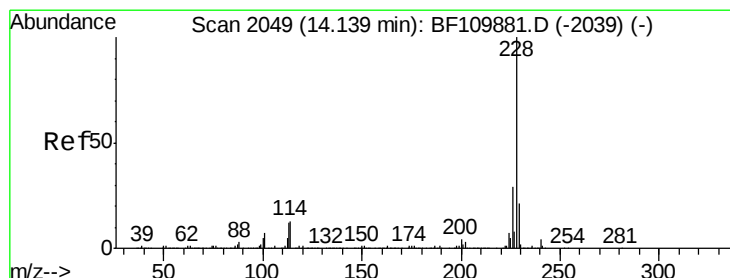
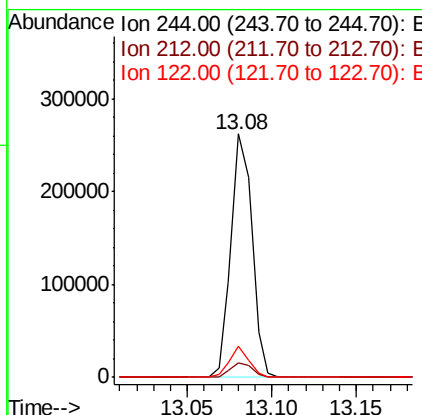
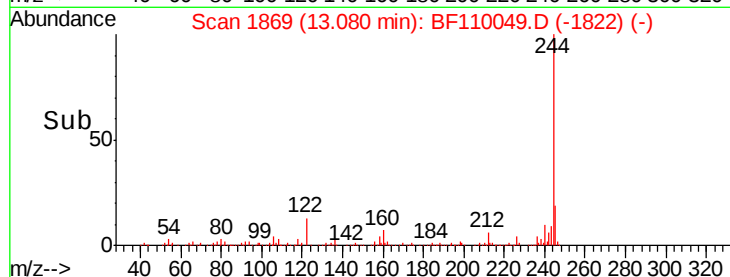
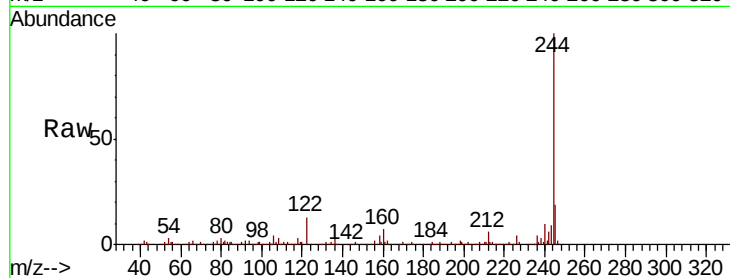
#79  
 Terphenyl-d14  
 Concen: 12.220 ng  
 RT: 13.08 min Scan# 1869  
 Delta R.T. -0.02 min  
 Lab File: BF110049.D  
 Acq: 22 Oct 2018 15:24

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.2   | 5.8   | 8.8   |
| 122     | 13.0  | 8.7   | 13.1  |

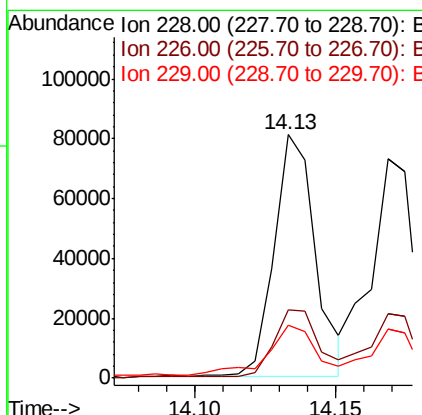
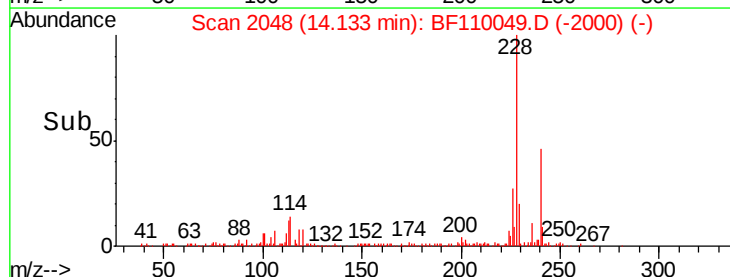
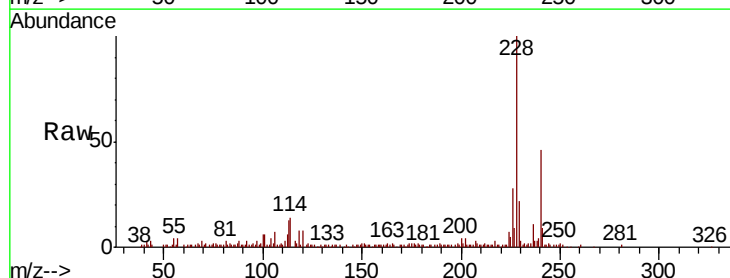
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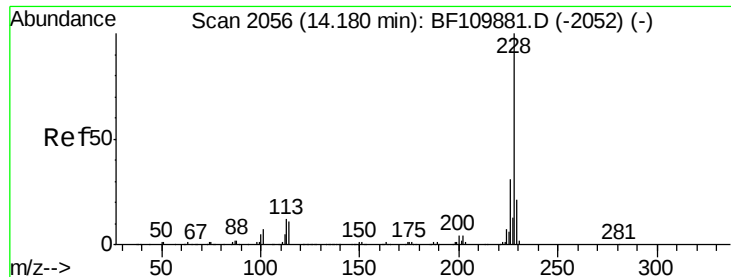
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#81  
 Benzo(a)anthracene  
 Concen: 3.569 ng  
 RT: 14.13 min Scan# 2048  
 Delta R.T. -0.02 min  
 Lab File: BF110049.D  
 Acq: 22 Oct 2018 15:24

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.9  | 22.1  | 33.1  |
| 229     | 21.5  | 15.6  | 23.4  |





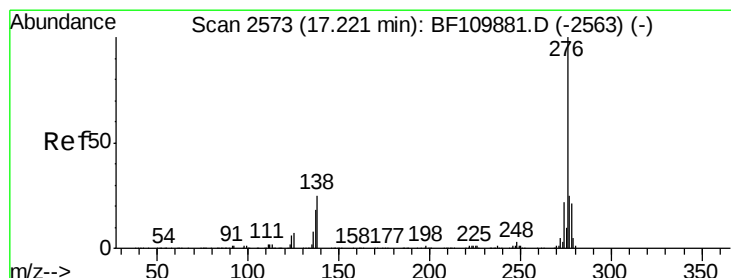
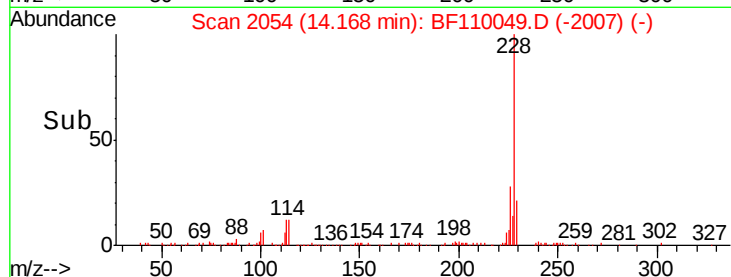
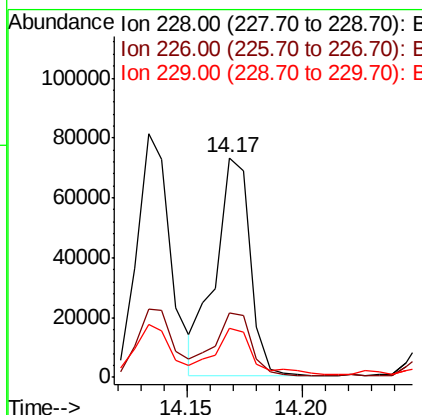
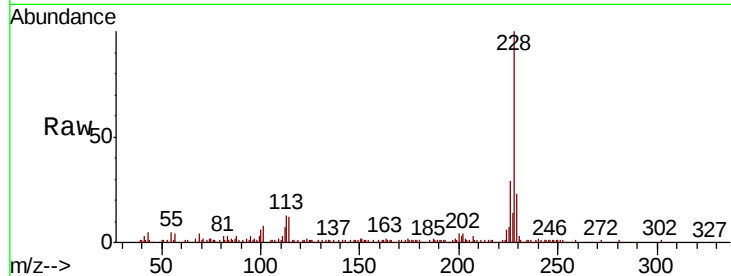
#83  
Chrysene  
Concen: 3.447 ng  
RT: 14.17 min Scan# 2054  
Delta R.T. -0.02 min  
Lab File: BF110049.D  
Acq: 22 Oct 2018 15:24

Instrument :  
BNA\_F  
ClientSampled :  
TP-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.2  | 24.7  | 37.1  |
| 229     | 22.6  | 15.9  | 23.9  |

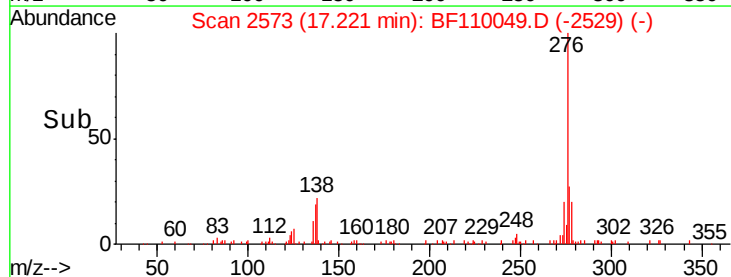
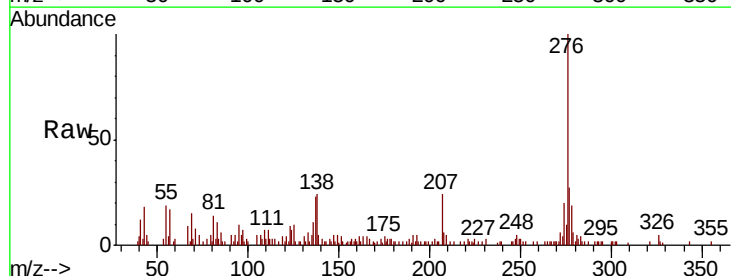
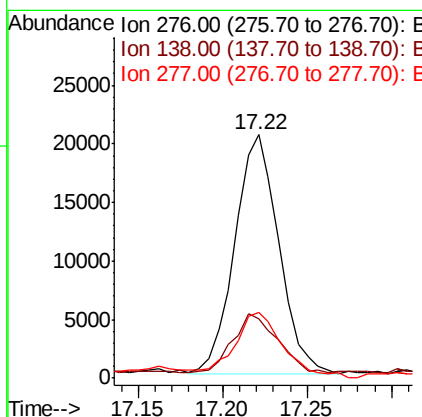
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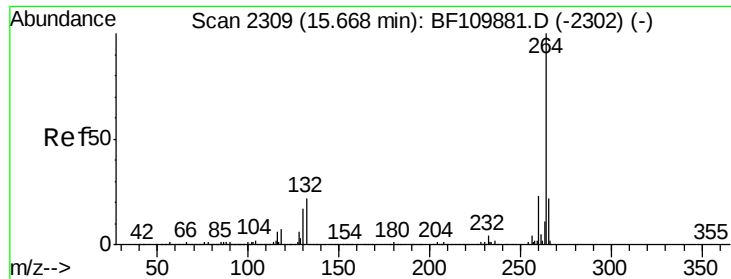
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#86  
Indeno(1,2,3-cd)pyrene  
Concen: 2.086 ng  
RT: 17.22 min Scan# 2573  
Delta R.T. -0.04 min  
Lab File: BF110049.D  
Acq: 22 Oct 2018 15:24

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 25.1  | 18.5  | 27.7  |
| 277     | 31.1  | 20.0  | 30.0# |





#87

Pervlene-d12

Concen: 20.000 ng

RT: 15.67 min Scan# 2309

Delta R.T. -0.02 min

Lab File: BF110049.D

Acq: 22 Oct 2018 15:24

Instrument :

BNA\_F

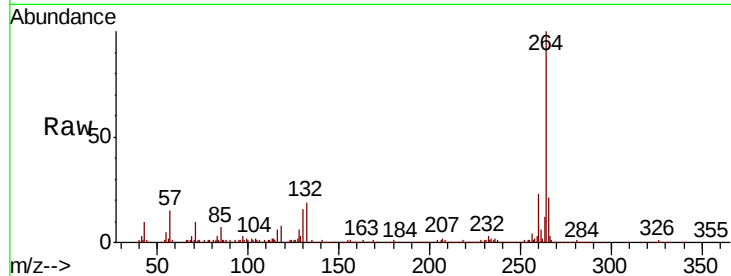
ClientSampled :

TP-B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 264   | Resp: | 297930 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 23.1  | 18.7  | 28.1   |
| 265       | 21.4  | 16.7  | 25.1   |

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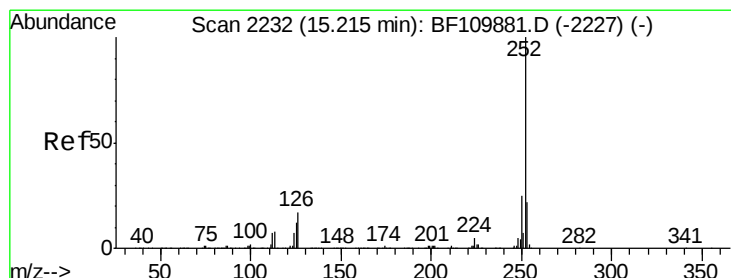
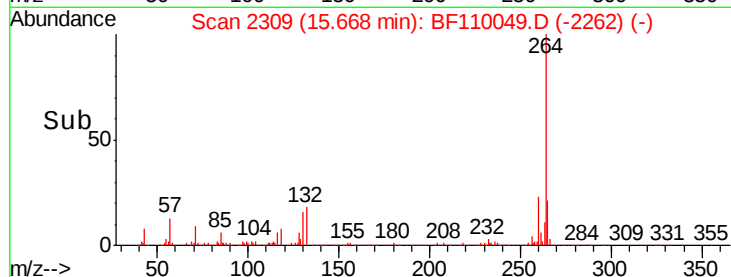
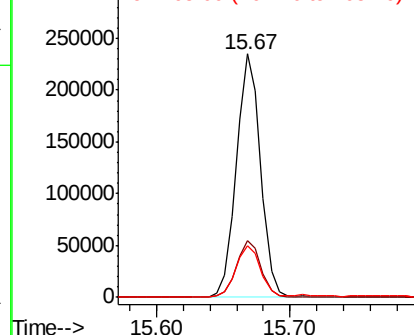


Abundance

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



#88

Benzo(b)fluoranthene

Concen: 5.170 ng m

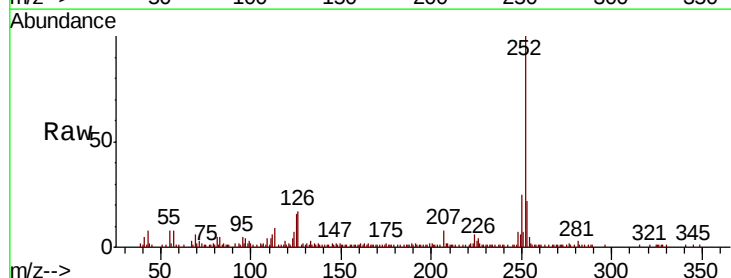
RT: 15.22 min Scan# 2232

Delta R.T. -0.02 min

Lab File: BF110049.D

Acq: 22 Oct 2018 15:24

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 88808 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 22.0  | 17.2  | 25.8  |
| 125       | 15.7  | 8.2   | 12.4# |

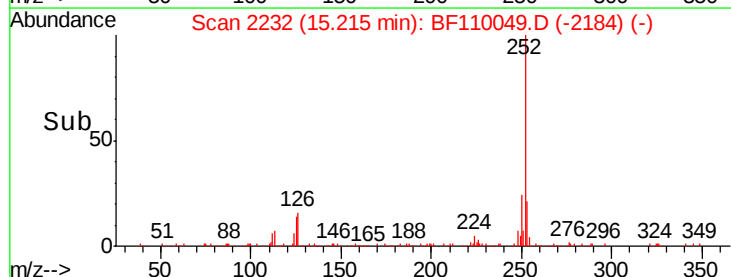
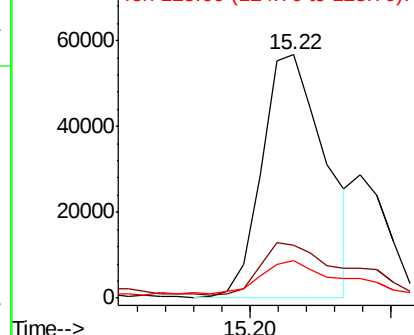


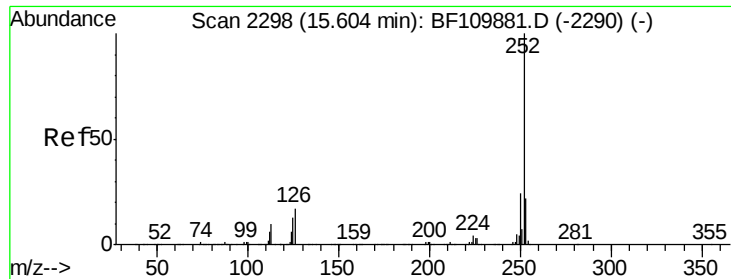
Abundance

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





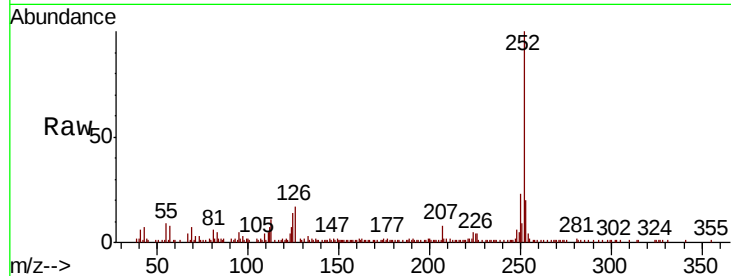
#90  
Benzo(a)pyrene  
Concen: 4.327 ng  
RT: 15.60 min Scan# 2297  
Delta R.T. -0.03 min  
Lab File: BF110049.D  
Acq: 22 Oct 2018 15:24

Instrument :  
BNA\_F  
ClientSampled :  
TP-B

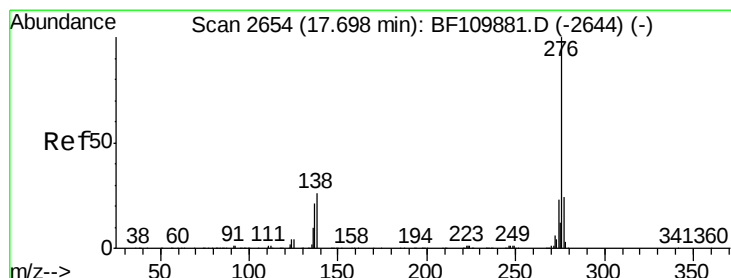
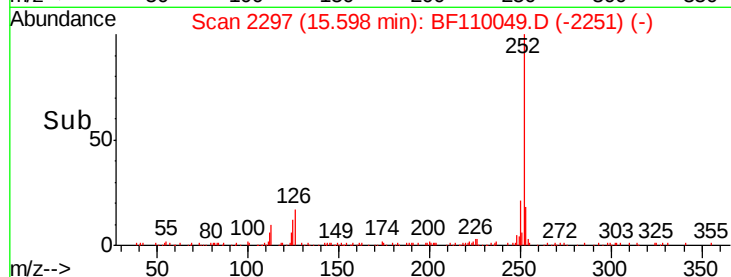
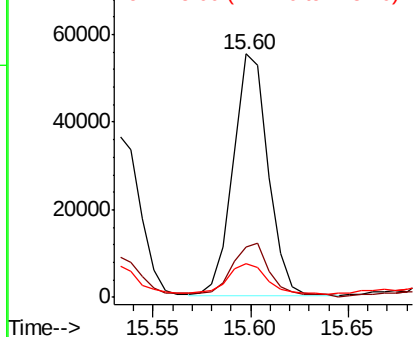
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 20.4  | 18.2  | 27.4  |
| 125     | 13.6  | 9.0   | 13.6# |

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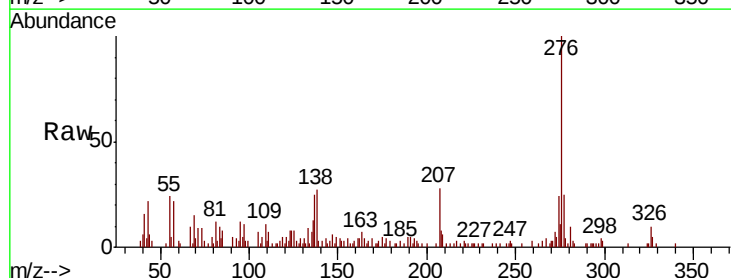


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



#92  
Benzo(g,h,i)perylene  
Concen: 2.719 ng  
RT: 17.69 min Scan# 2653  
Delta R.T. -0.05 min  
Lab File: BF110049.D  
Acq: 22 Oct 2018 15:24

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.1  | 18.8  | 28.2  |
| 138     | 27.4  | 16.0  | 24.0# |



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

