

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF101518\  
 Data File : BF109890.D  
 Acq On : 15 Oct 2018 20:20  
 Operator : JU/SJ  
 Sample : J5193-01  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 BU-01-101118

Manual Integrations  
 APPROVED

Sohil  
 10/16/2018 9:57:33 AM

Quant Time: Oct 16 08:53:30 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF101518.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Oct 15 18:09:48 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.97  | 152  | 236155   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.26  | 136  | 827017   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 10.02 | 164  | 312321   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.50 | 188  | 538977   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12            | 14.14 | 240  | 575694   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12            | 15.67 | 264  | 430341   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.59  | 112  | 1391533  | 93.40  | ng    | 0.00     |
| 7) Phenol-d6                | 6.59  | 99   | 1683685  | 91.01  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.54  | 82   | 1021862  | 83.23  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.80 | 330  | 270973   | 100.21 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.33  | 172  | 1592395  | 81.36  | ng    | 0.00     |
| 79) Terphenyl-d14           | 13.09 | 244  | 1486231  | 54.21  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 10) Phenol                  | 6.60  | 94   | 49993    | 2.503  | ng    | 88       |
| 50) Dimethylphthalate       | 9.72  | 163  | 205733   | 9.303  | ng    | 100      |
| 71) Phenanthrene            | 11.53 | 178  | 112050   | 4.016  | ng    | 97       |
| 75) Fluoranthene            | 12.72 | 202  | 335208   | 12.025 | ng    | 100      |
| 78) Pyrene                  | 12.95 | 202  | 315026   | 7.450  | ng    | 97       |
| 81) Benzo(a)anthracene      | 14.14 | 228  | 161442   | 4.761  | ng    | 96       |
| 83) Chrysene                | 14.17 | 228  | 170166   | 5.272  | ng    | 98       |
| 86) Indeno(1,2,3-cd)pyrene  | 17.22 | 276  | 65070    | 2.504  | ng    | 96       |
| 88) Benzo(b)fluoranthene    | 15.22 | 252  | 180221m  | 7.264  | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.24 | 252  | 63466m   | 2.595  | ng    |          |
| 90) Benzo(a)pyrene          | 15.60 | 252  | 114490   | 5.017  | ng    | # 92     |
| 92) Benzo(a,h,i)perylene    | 17.70 | 276  | 67970    | 3.327  | ng    | # 90     |

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

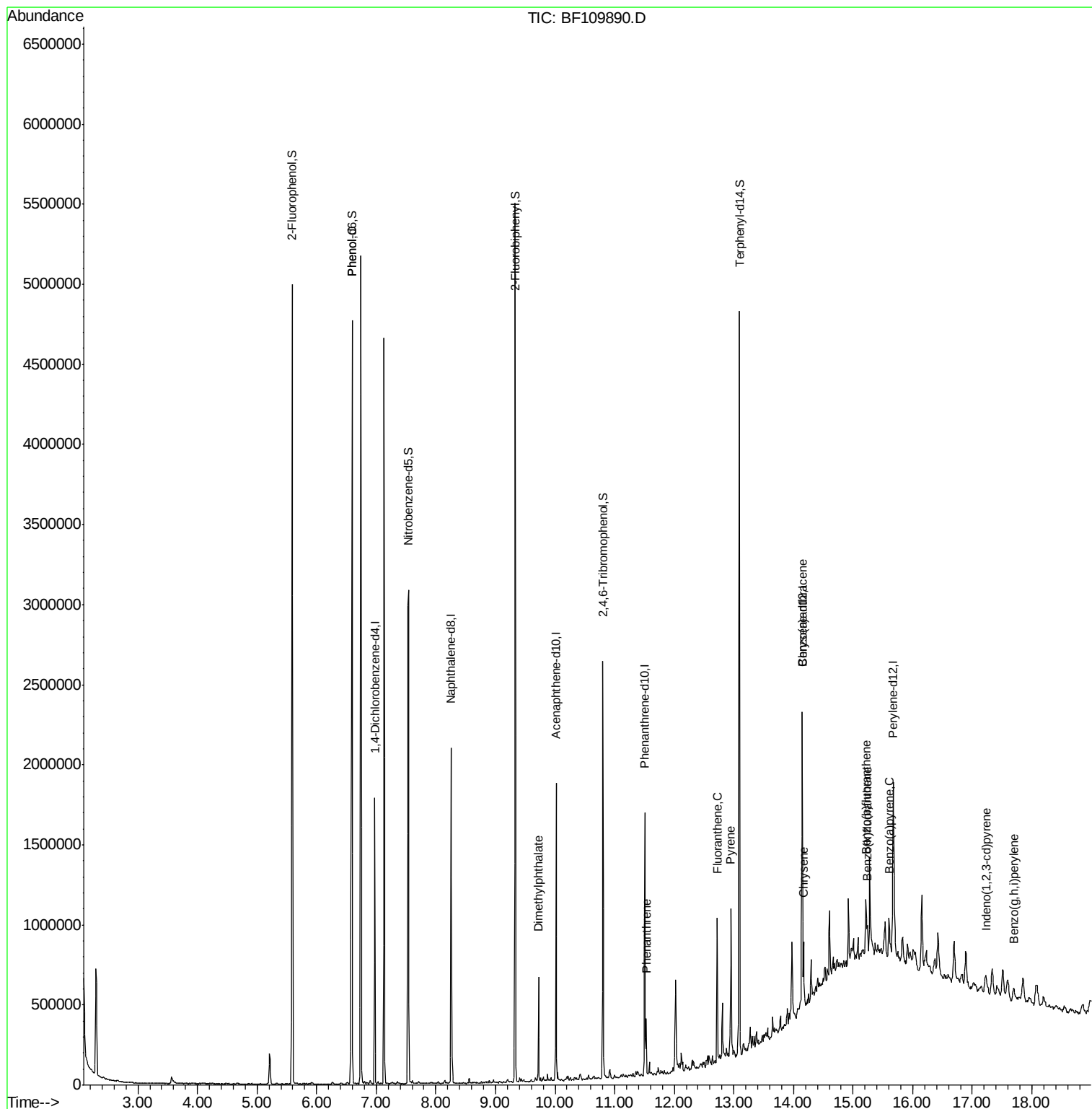
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF101518\  
Data File : BF109890.D  
Acq On : 15 Oct 2018 20:20  
Operator : JU/SJ  
Sample : J5193-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

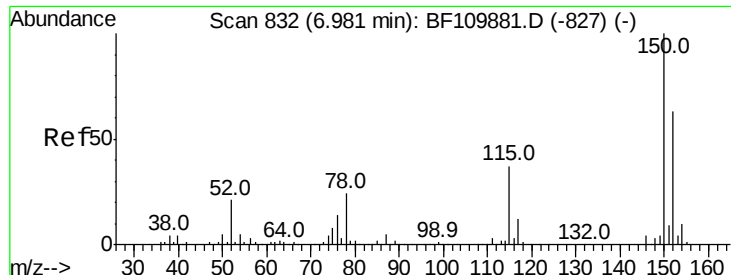
Instrument :  
BNA\_F  
ClientSampleID :  
BU-01-101118

Manual Integrations  
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10/16/2018 9:57:33 AM

Quant Time: Oct 16 08:53:30 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF101518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Oct 15 18:09:48 2018  
Response via : Initial Calibration





#1

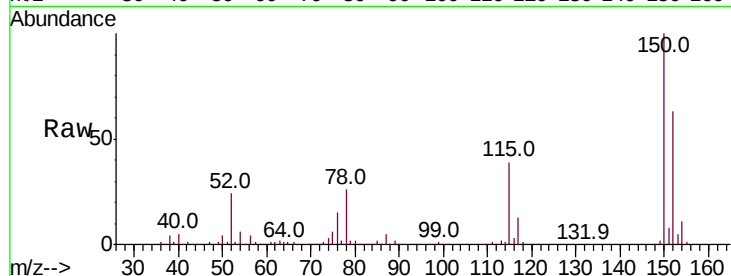
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.97 min Scan# 831  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-101118

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 158.5 | 122.7 | 184.1 |
| 115     | 61.7  | 49.1  | 73.7  |

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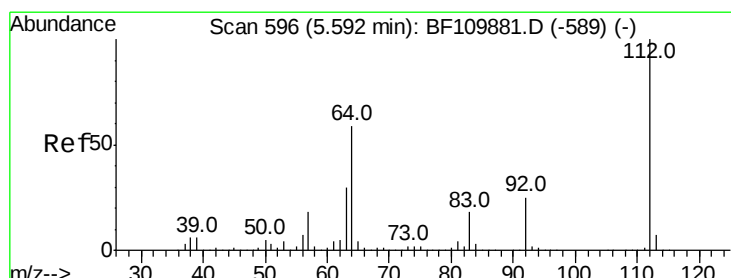
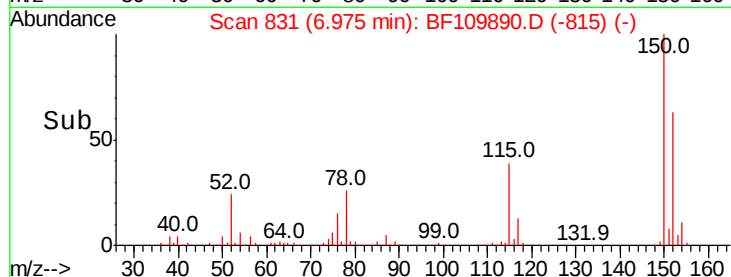
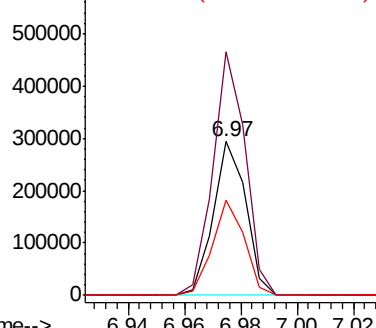


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

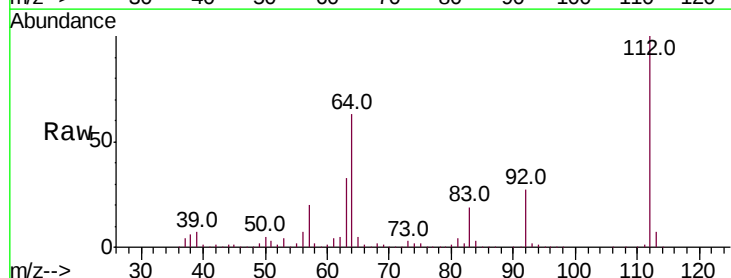
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 93.403 ng  
RT: 5.59 min Scan# 596  
Delta R.T. 0.00 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 62.6  | 44.1  | 66.1  |
| 63      | 32.8  | 23.7  | 35.5  |

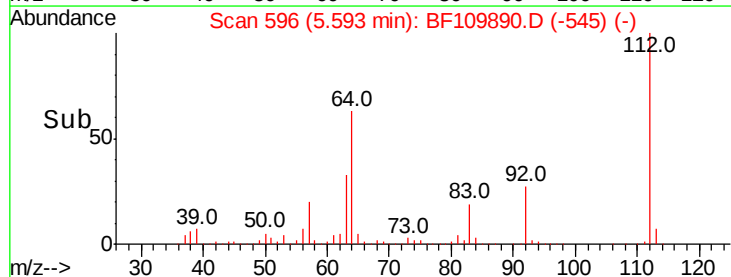
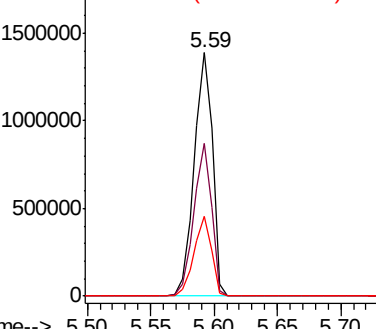


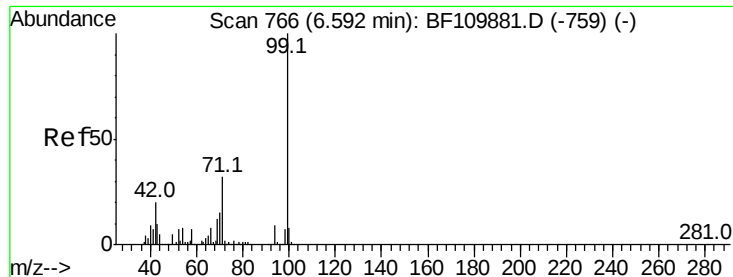
Abundance

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: 91.012 ng

RT: 6.59 min Scan# 766

Delta R.T. 0.00 min

Lab File: BF109890.D

Acq: 15 Oct 2018 20:20

Instrument :

BNA\_F

ClientSampleId :

BU-01-101118

Tot Ion: 99 Resp: 1683685

Ion Ratio Lower Upper

99 100

42 19.2 15.8 23.6

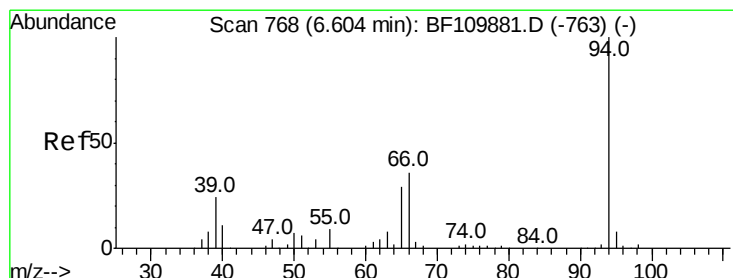
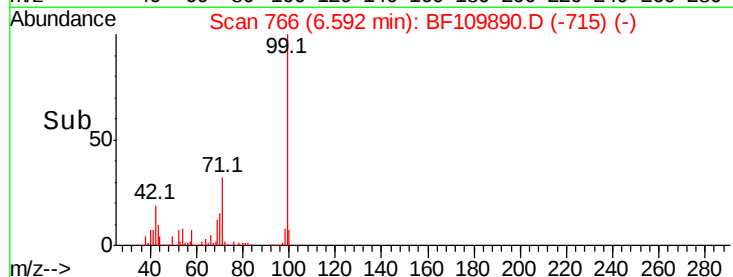
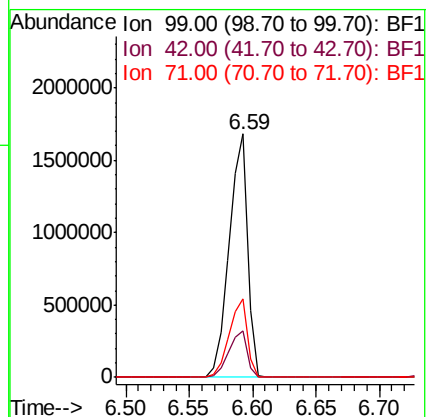
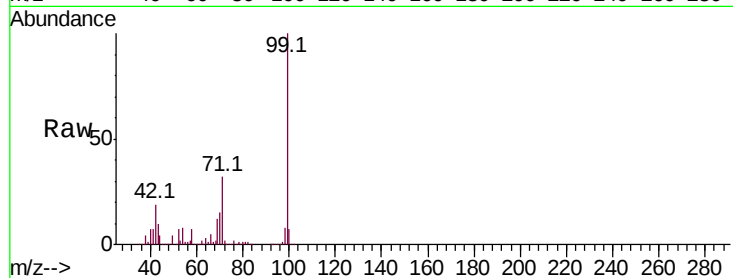
71 32.4 28.0 42.0

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#10

Phenol

Concen: 2.503 ng

RT: 6.60 min Scan# 767

Delta R.T. -0.01 min

Lab File: BF109890.D

Acq: 15 Oct 2018 20:20

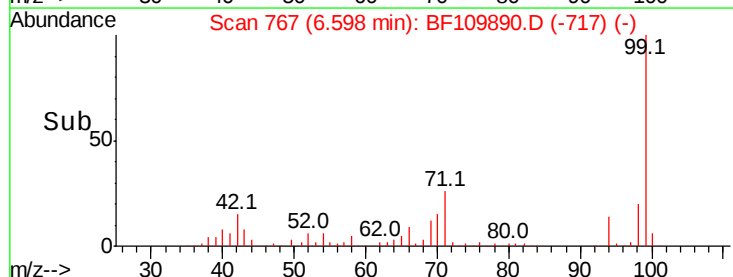
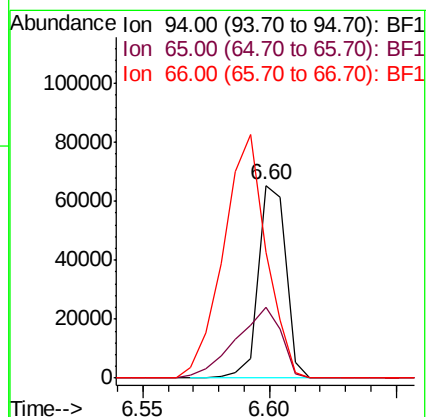
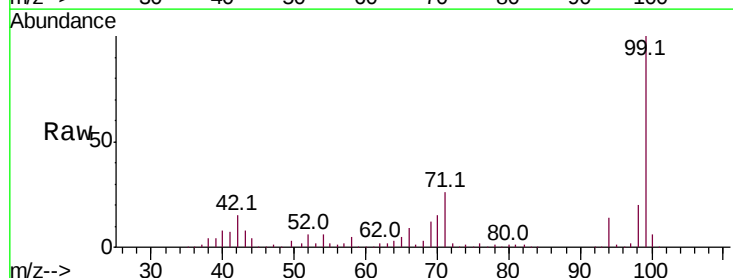
Tgt Ion: 94 Resp: 49993

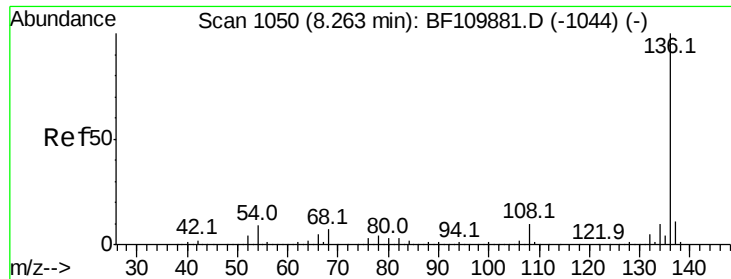
Ion Ratio Lower Upper

94 100

65 37.0 25.3 65.3

66 65.2 54.5 94.5





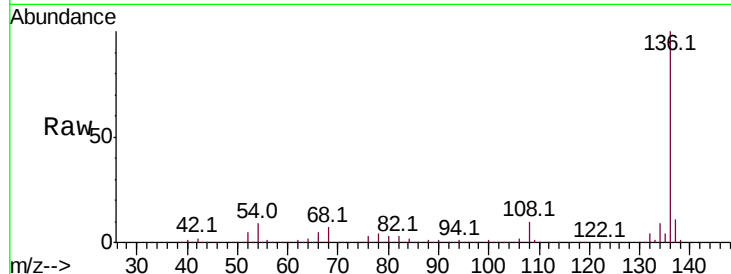
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.26 min Scan# 1049  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-101118

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 136     | 100   |      |       |       |
| 137     | 11.3  | 8.8  | 13.2  |       |
| 54      | 9.1   | 5.4  | 8.2#  |       |
| 68      | 6.9   | 4.2  | 6.2#  |       |

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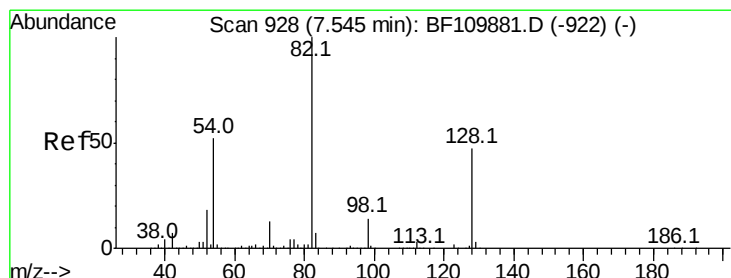
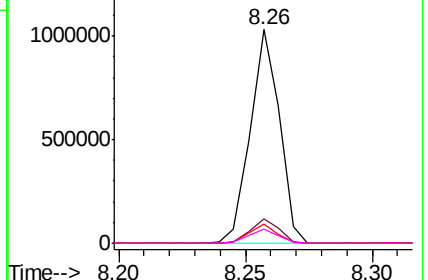
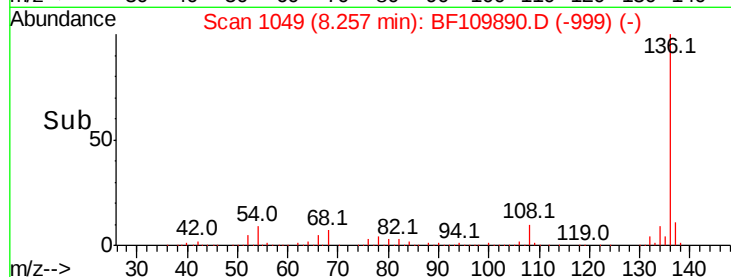
Abundance

Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

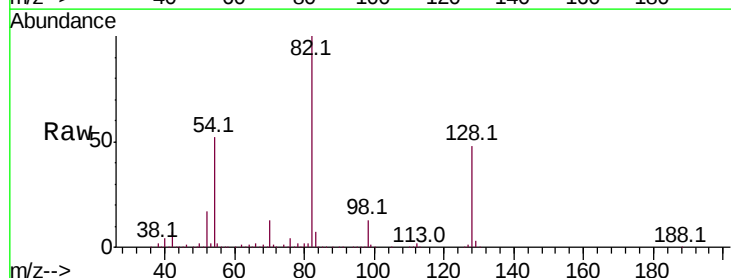
Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1



#23  
Nitrobenzene-d5  
Concen: 83.235 ng  
RT: 7.54 min Scan# 927  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 82      | 100   |      |       |       |
| 128     | 47.6  | 34.2 | 51.2  |       |
| 54      | 52.0  | 38.6 | 58.0  |       |

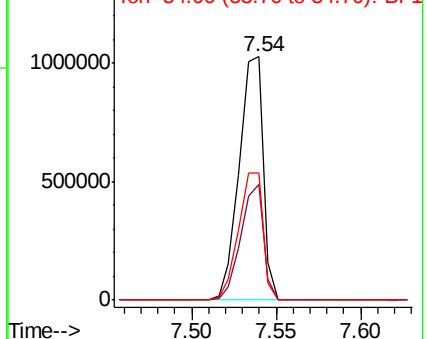
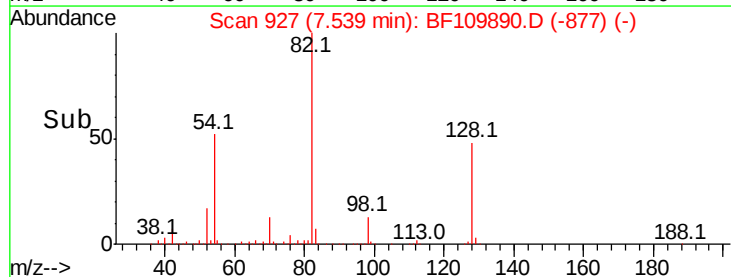


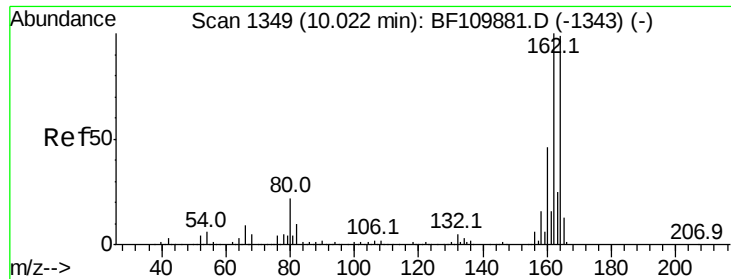
Abundance

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





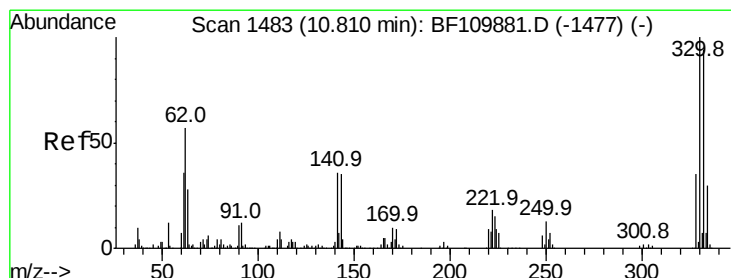
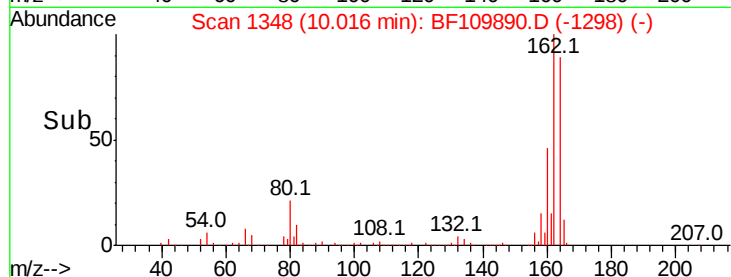
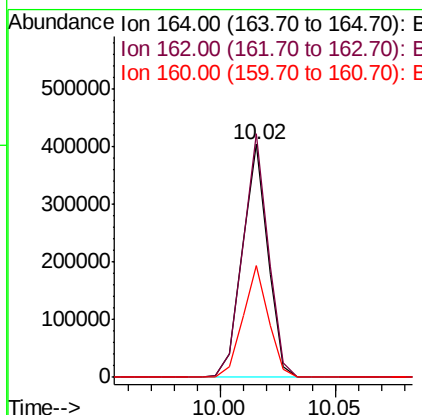
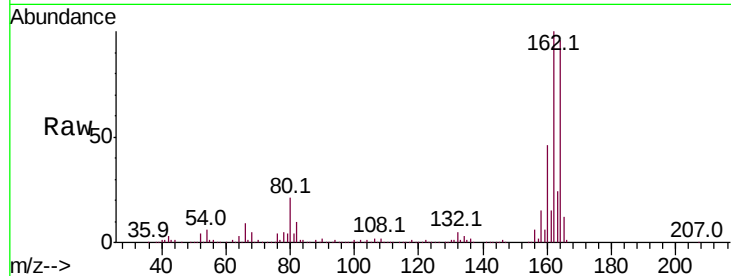
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 10.02 min Scan# 1348  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-101118

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 164     | 100   |      |       |       |
| 162     | 104.4 | 83.0 | 124.6 |       |
| 160     | 47.8  | 37.0 | 55.6  |       |

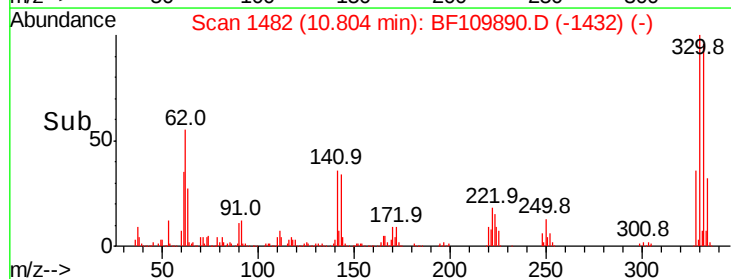
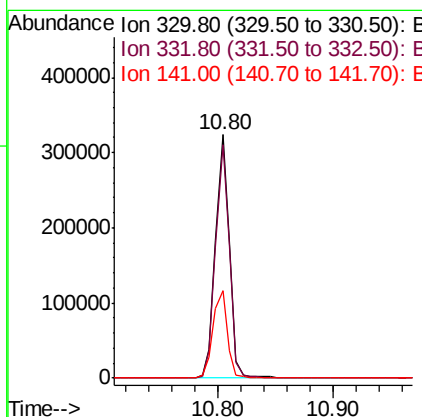
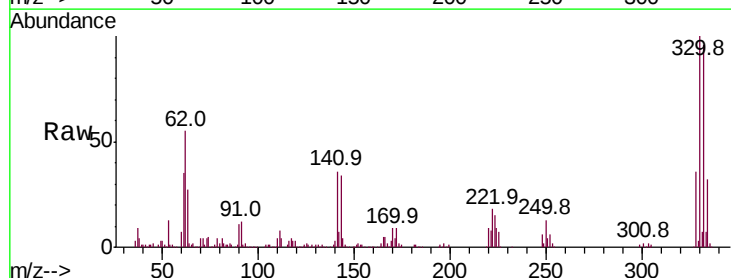
Manual Integrations  
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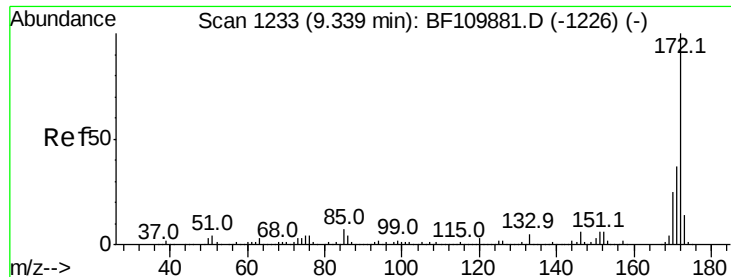
Sohil  
10/16/2018 9:57:33 AM



#42  
2,4,6-Tribromophenol  
Concen: 100.212 ng  
RT: 10.80 min Scan# 1482  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 330     | 100   |      |       |       |
| 332     | 95.7  | 77.1 | 115.7 |       |
| 141     | 37.8  | 27.0 | 40.4  |       |





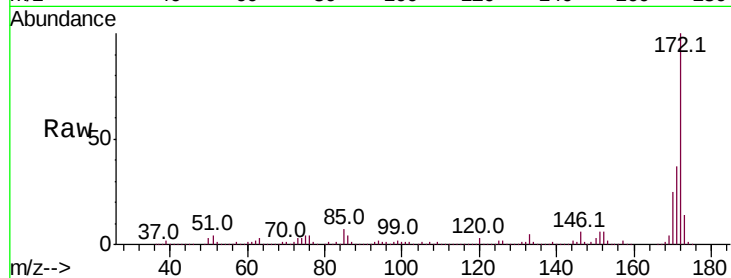
#45  
2-Fluorobiphenyl  
Concen: 81.356 ng  
RT: 9.33 min Scan# 1232  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-101118

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.7  | 28.6  | 43.0  |
| 170     | 24.8  | 19.7  | 29.5  |

Manual Integrations  
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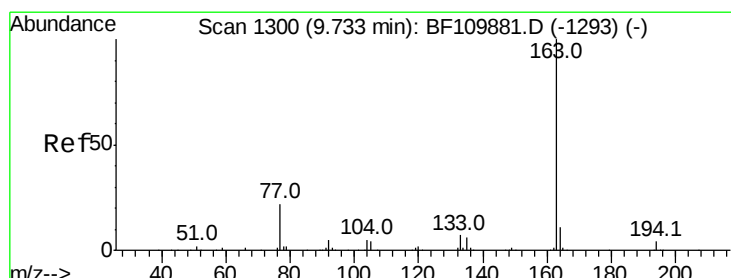
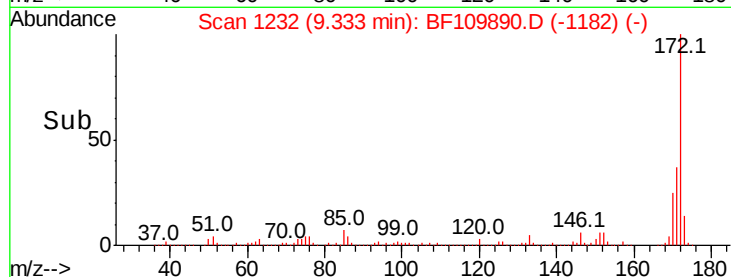
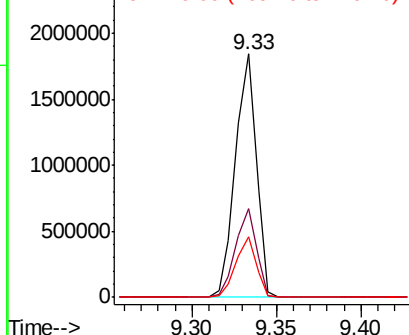


Abundance

Ion 172.00 (171.70 to 172.70): E

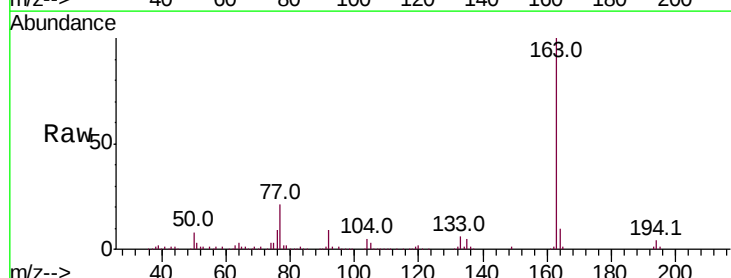
Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E



#50  
Dimethylphthalate  
Concen: 9.303 ng  
RT: 9.72 min Scan# 1298  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 3.7   | 3.2   | 4.8   |
| 164     | 10.1  | 8.1   | 12.1  |

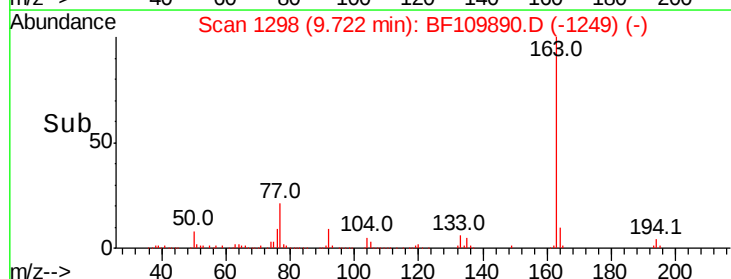
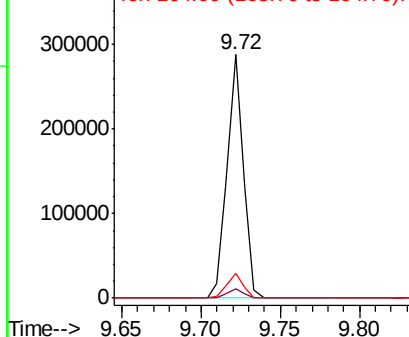


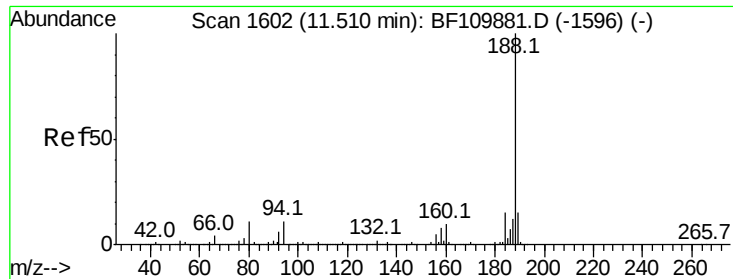
Abundance

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





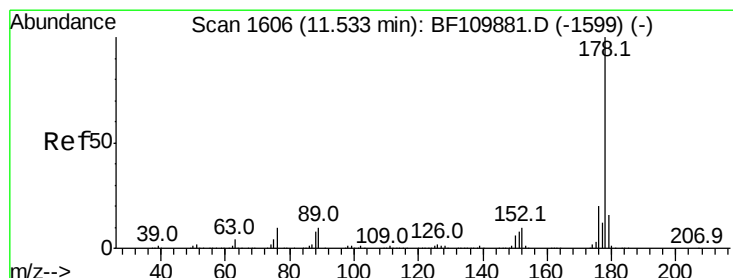
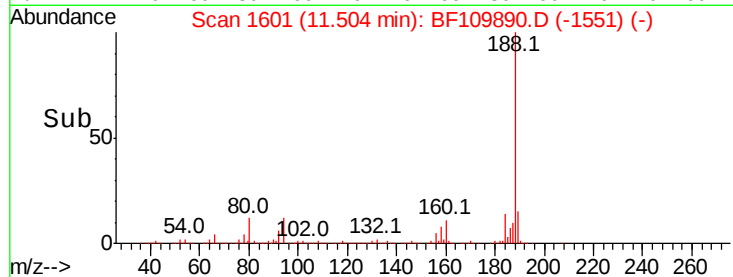
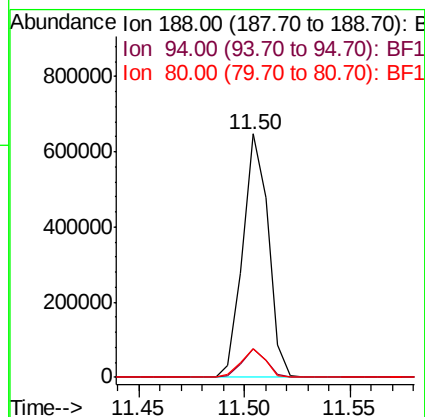
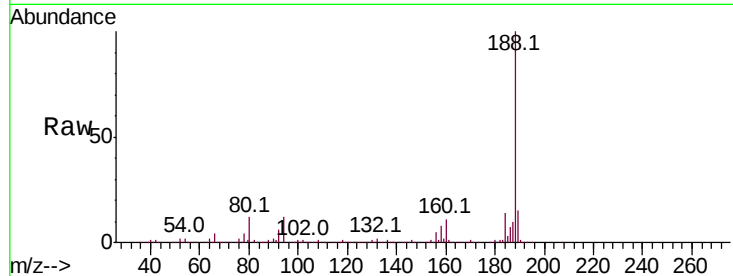
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.50 min Scan# 1601  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-101118

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 188     | 100   |      |       |       |
| 94      | 11.7  | 7.2  | 10.8# |       |
| 80      | 12.0  | 7.9  | 11.9# |       |

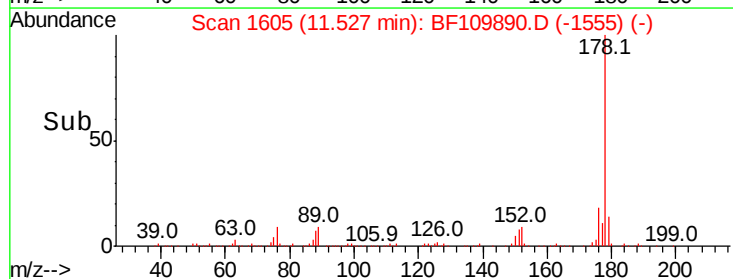
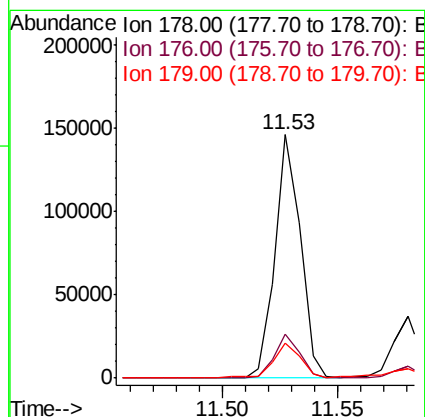
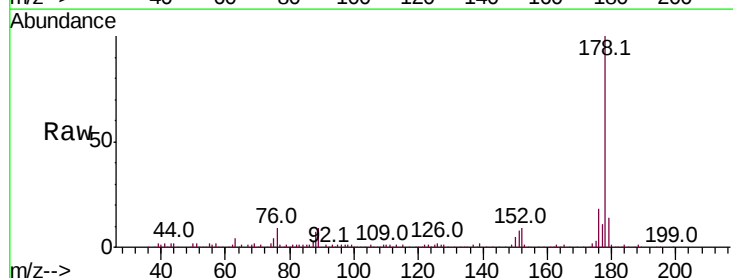
Manual Integrations  
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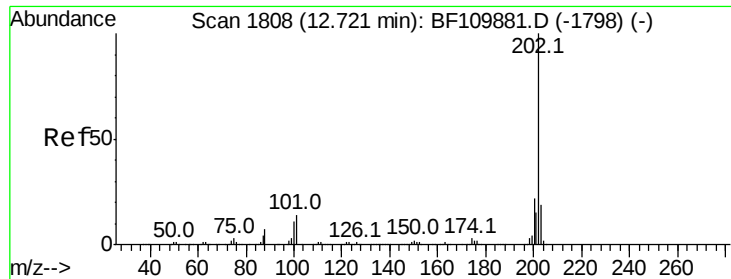
Sohil  
10/16/2018 9:57:33 AM



#71  
Phenanthrene  
Concen: 4.016 ng  
RT: 11.53 min Scan# 1605  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 178     | 100   |      |       |       |
| 176     | 17.9  | 15.5 | 23.3  |       |
| 179     | 14.4  | 12.5 | 18.7  |       |





#75

Fluoranthene

Concen: 12.025 ng

RT: 12.72 min Scan# 1808

Delta R.T. 0.00 min

Lab File: BF109890.D

Acq: 15 Oct 2018 20:20

Instrument :

BNA\_F

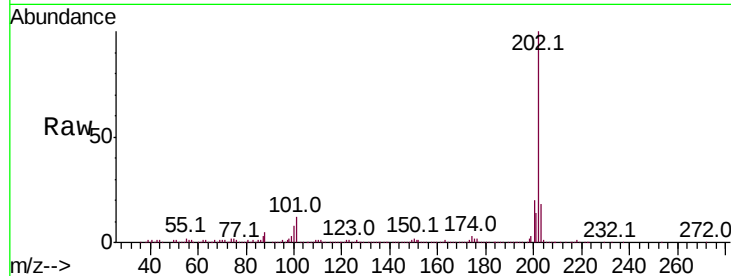
ClientSampleId :

BU-01-101118

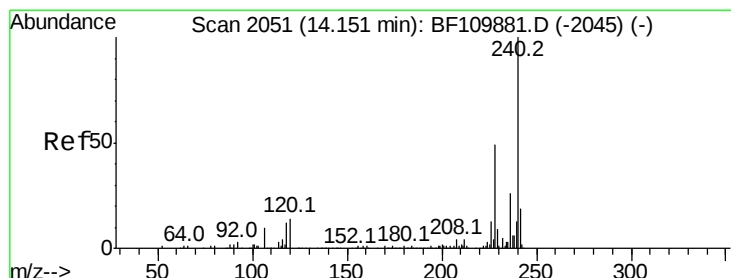
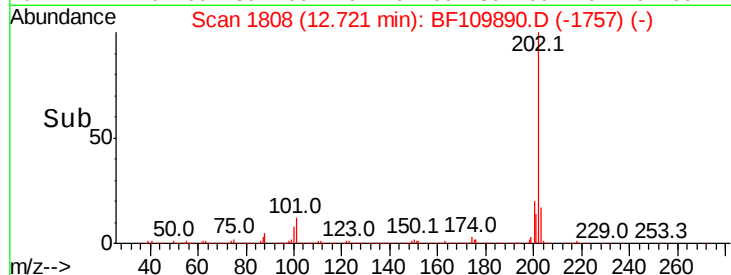
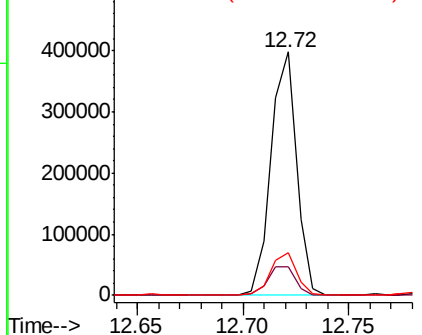
| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 202     | 100   |      |       |       |
| 101     | 11.6  | 0.0  | 31.4  |       |
| 203     | 17.5  | 0.0  | 37.7  |       |

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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



#76

Chrysene-d12

Concen: 20.000 ng

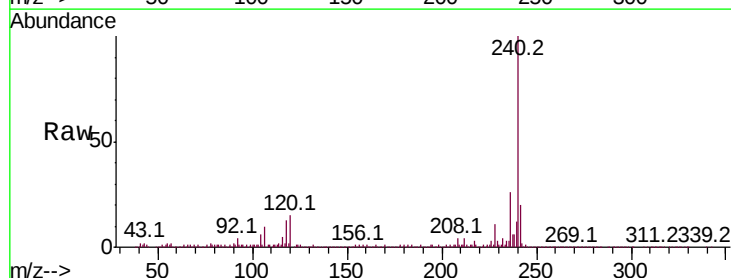
RT: 14.14 min Scan# 2050

Delta R.T. -0.01 min

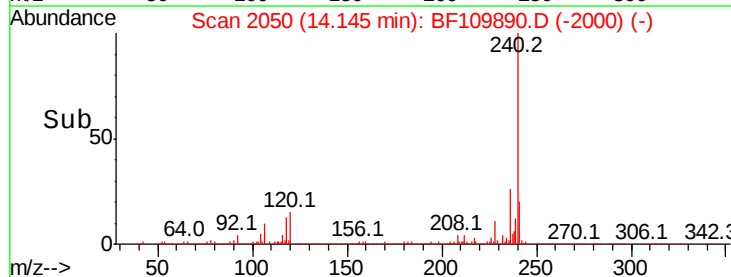
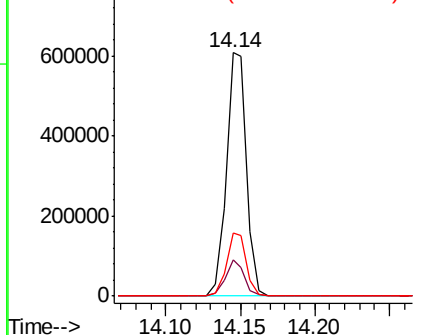
Lab File: BF109890.D

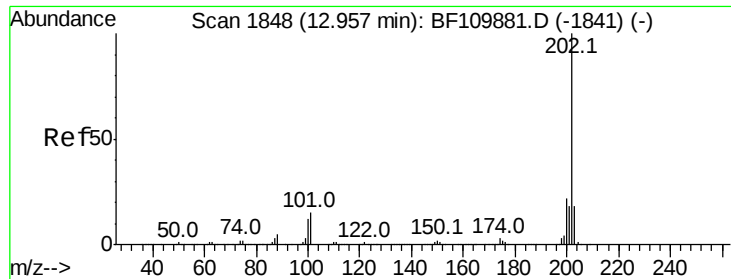
Acq: 15 Oct 2018 20:20

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 240     | 100   |      |       |       |
| 120     | 15.0  | 8.3  | 12.5# |       |
| 236     | 25.7  | 21.2 | 31.8  |       |



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

Pvrene

Concen: 7.450 ng

RT: 12.95 min Scan# 1847

Delta R.T. -0.01 min

Lab File: BF109890.D

Acq: 15 Oct 2018 20:20

Instrument :

BNA\_F

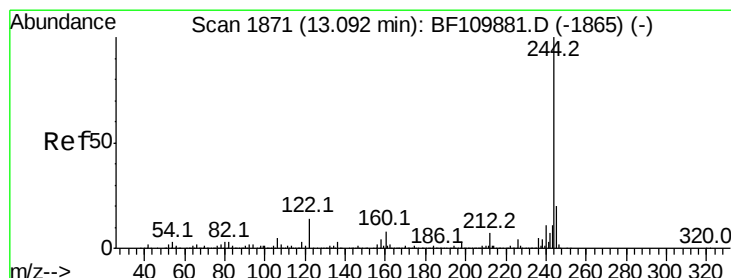
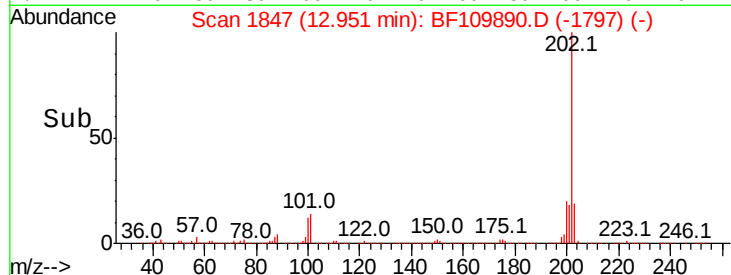
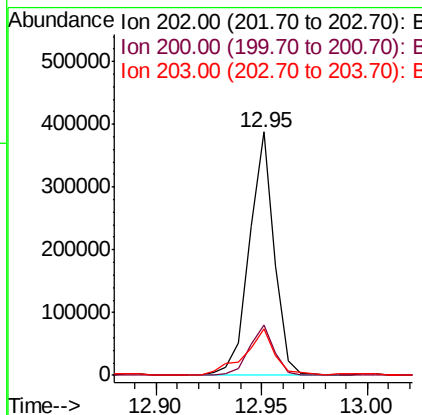
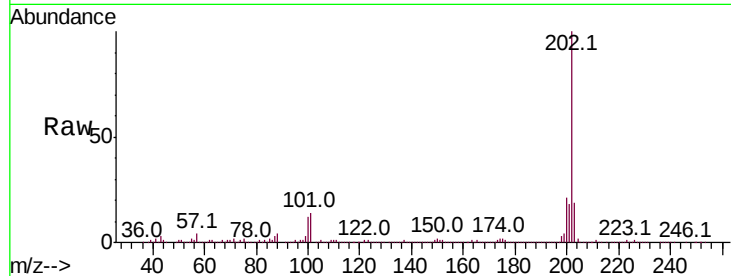
ClientSampleId :

BU-01-101118

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 315026 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 20.5  | 17.8  | 26.6   |
| 203       | 19.0  | 14.2  | 21.4   |

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#79

Terphenyl-d14

Concen: 54.212 ng

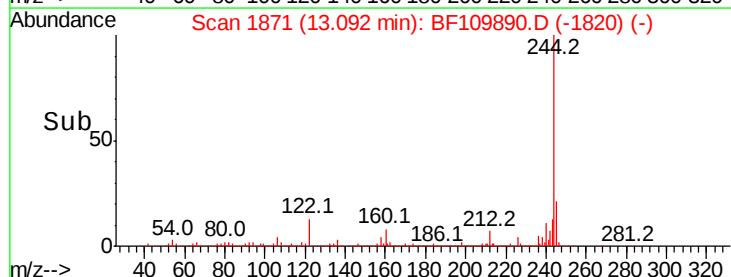
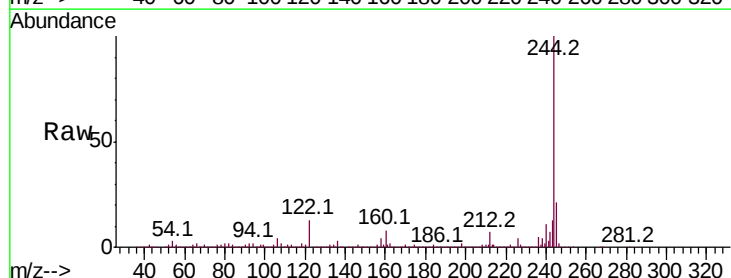
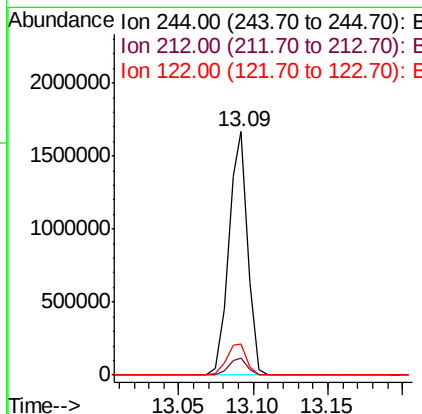
RT: 13.09 min Scan# 1871

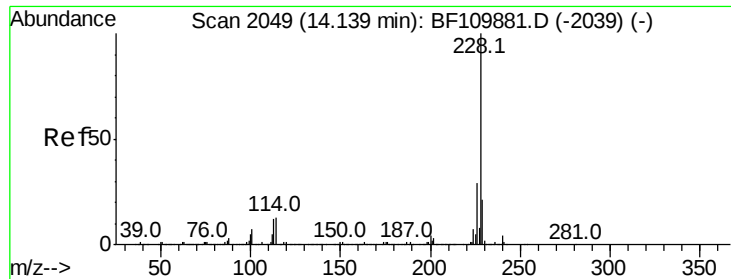
Delta R.T. 0.00 min

Lab File: BF109890.D

Acq: 15 Oct 2018 20:20

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 244   | Resp: | 1486231 |
| Ion Ratio | Lower | Upper |         |
| 244       | 100   |       |         |
| 212       | 7.0   | 5.8   | 8.8     |
| 122       | 12.8  | 8.7   | 13.1    |





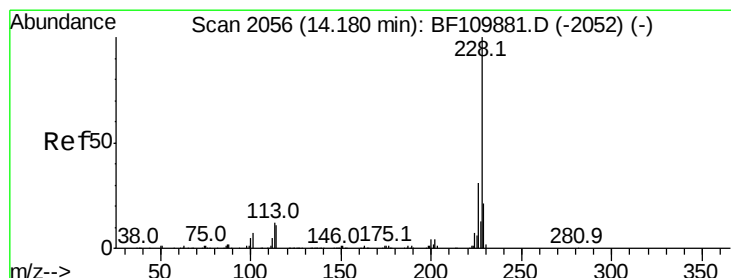
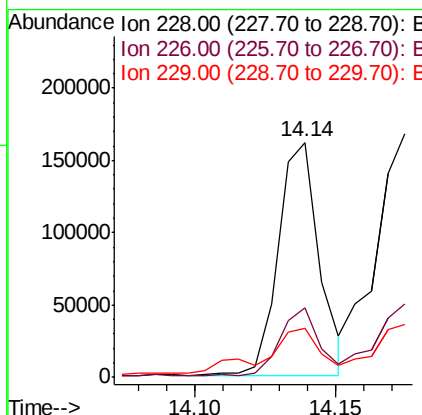
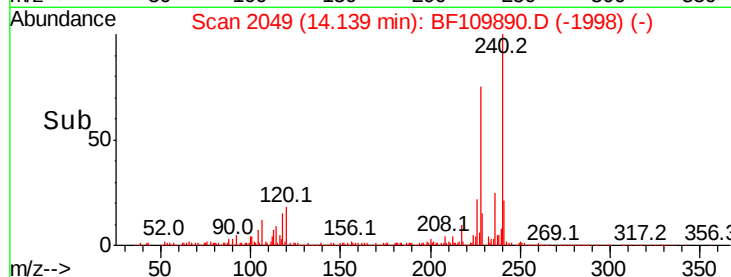
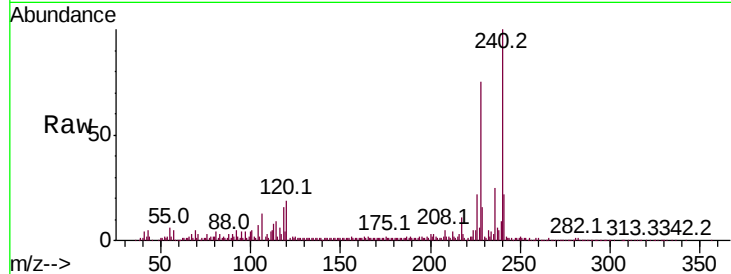
#81  
Benzo(a)anthracene  
Concen: 4.761 ng  
RT: 14.14 min Scan# 2049  
Delta R.T. 0.00 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-101118

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.7  | 22.1  | 33.1  |
| 229     | 21.1  | 15.6  | 23.4  |

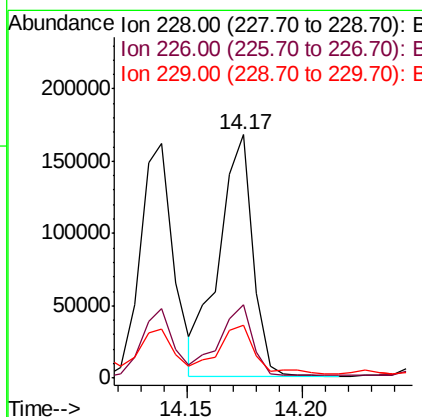
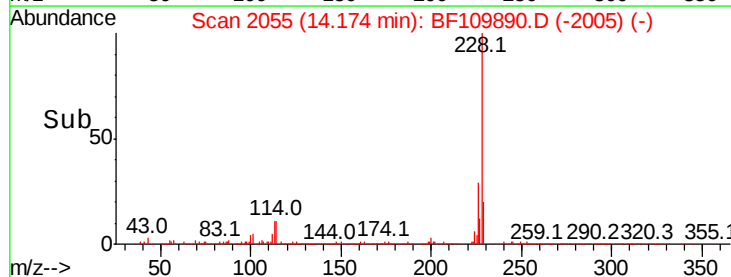
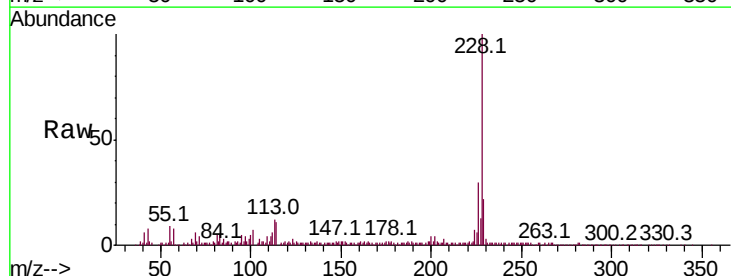
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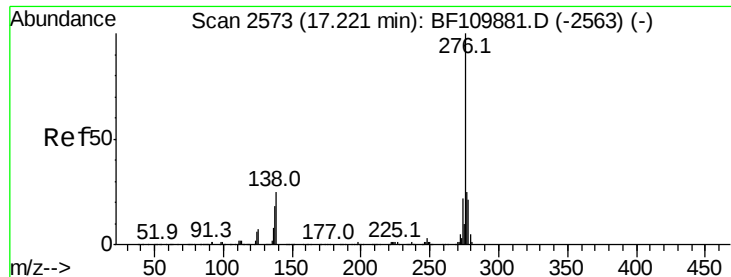
Sohil  
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#83  
Chrysene  
Concen: 5.272 ng  
RT: 14.17 min Scan# 2055  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.2  | 24.7  | 37.1  |
| 229     | 21.7  | 15.9  | 23.9  |





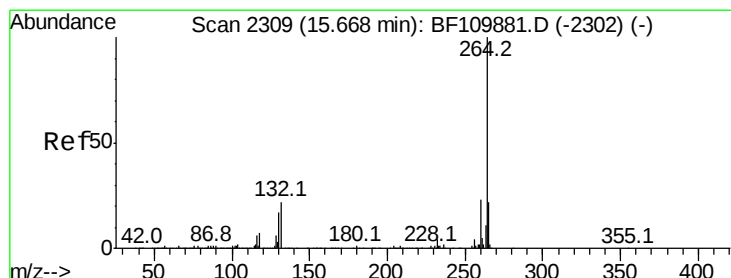
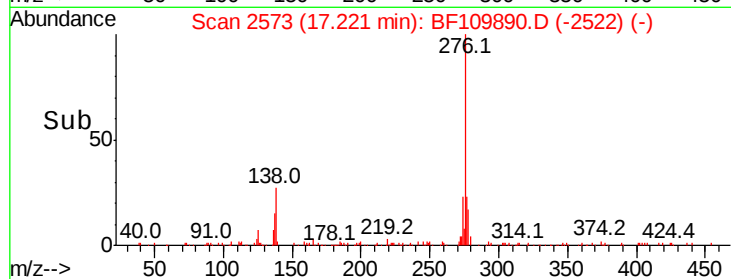
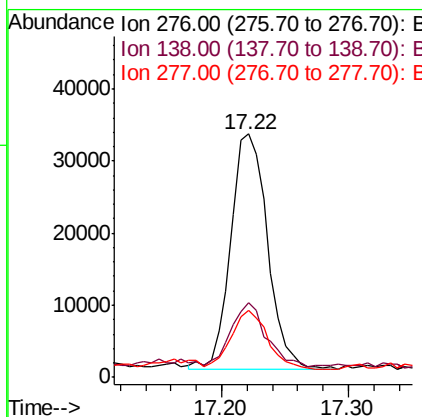
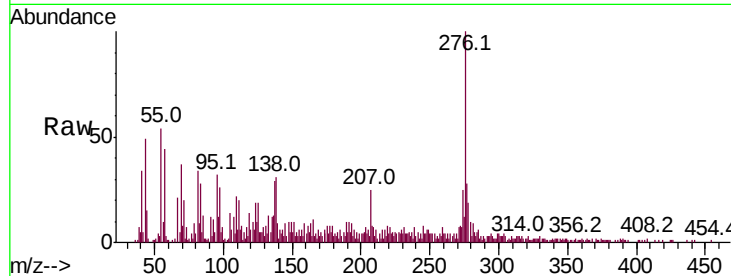
#86  
Indeno(1,2,3-cd)pyrene  
Concen: 2.504 ng  
RT: 17.22 min Scan# 2573  
Delta R.T. 0.00 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-101118

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 26.6  | 18.5  | 27.7  |
| 277     | 25.1  | 20.0  | 30.0  |

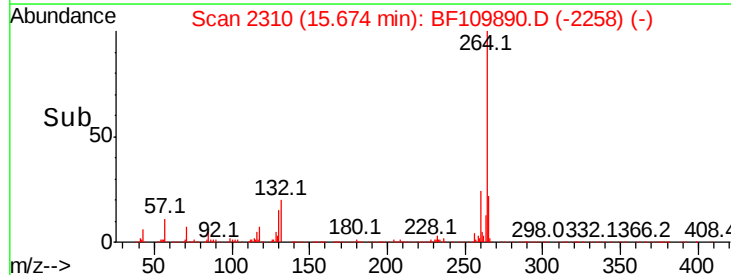
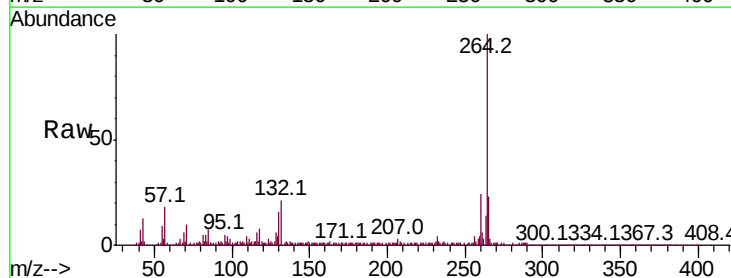
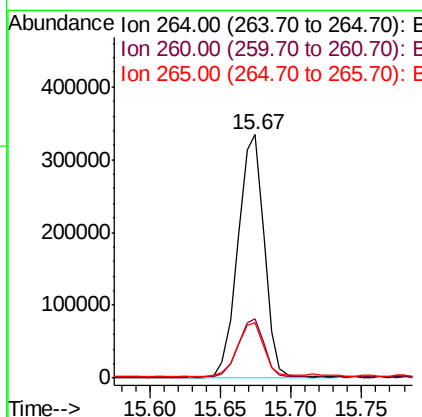
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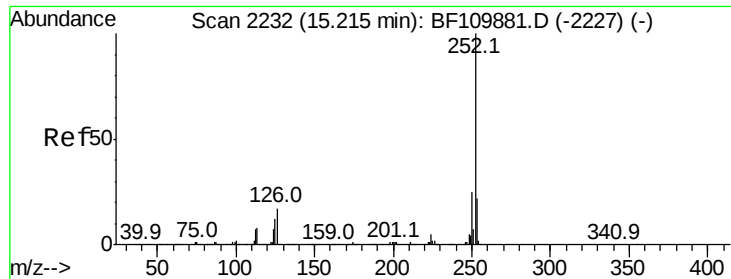
Sohil  
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#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.67 min Scan# 2310  
Delta R.T. 0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.2  | 18.7  | 28.1  |
| 265     | 22.9  | 16.7  | 25.1  |





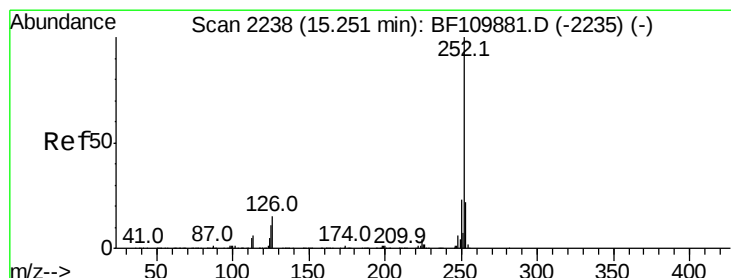
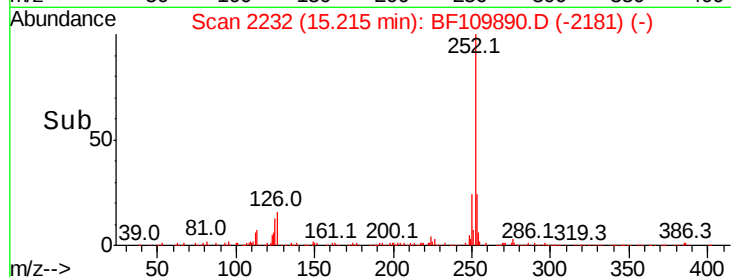
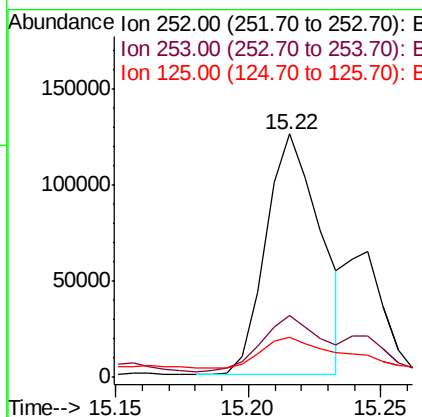
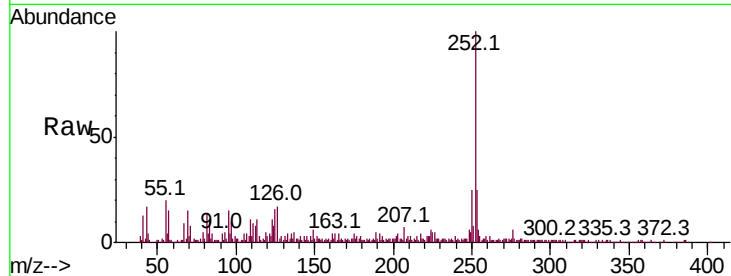
#88  
Benzo(b)fluoranthene  
Concen: 7.264 ng m  
RT: 15.22 min Scan# 2232  
Delta R.T. 0.00 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-101118

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.4  | 17.2  | 25.8  |
| 125     | 16.4  | 8.2   | 12.4  |

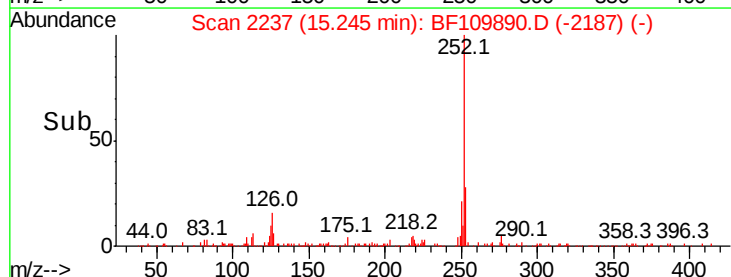
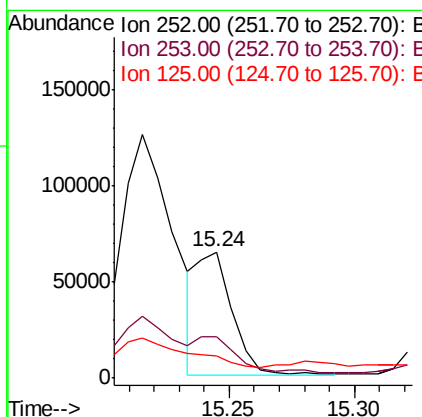
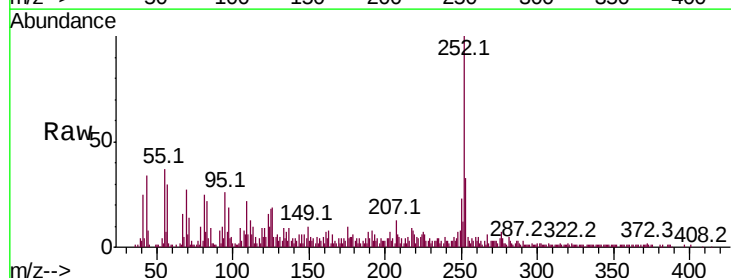
Manual Integrations  
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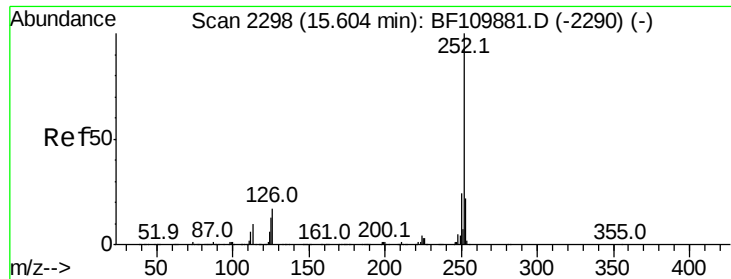
Sohil  
10/16/2018 9:57:33 AM



#89  
Benzo(k)fluoranthene  
Concen: 2.595 ng m  
RT: 15.24 min Scan# 2237  
Delta R.T. -0.01 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 33.2  | 17.2  | 25.8  |
| 125     | 17.6  | 7.4   | 11.0  |





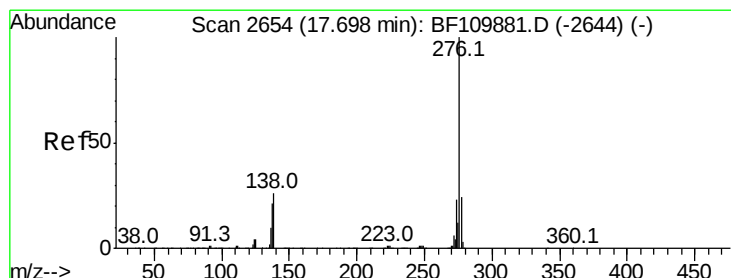
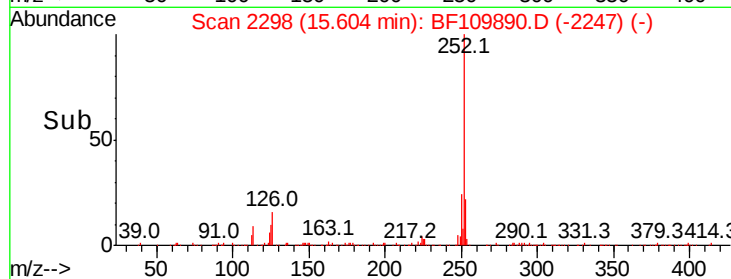
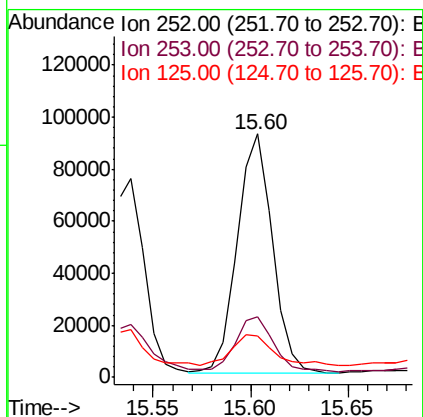
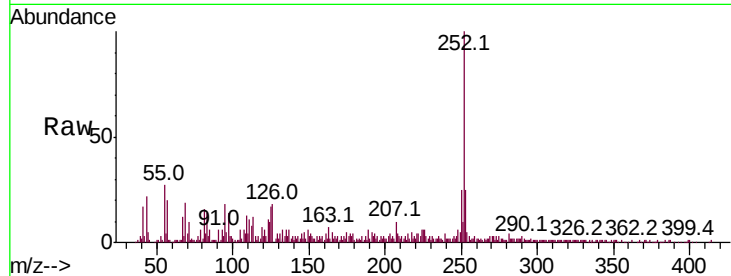
#90  
Benzo(a)pyrene  
Concen: 5.017 ng  
RT: 15.60 min Scan# 2298  
Delta R.T. 0.00 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

Instrument :  
BNA\_F  
ClientSampleId :  
BU-01-101118

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.1  | 18.2  | 27.4  |
| 125     | 17.1  | 9.0   | 13.6  |

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#92  
Benzo(g,h,i)perylene  
Concen: 3.327 ng  
RT: 17.70 min Scan# 2654  
Delta R.T. 0.00 min  
Lab File: BF109890.D  
Acq: 15 Oct 2018 20:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 26.1  | 18.8  | 28.2  |
| 138     | 27.3  | 16.0  | 24.0  |

