

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091418\  
 Data File : BF108995.D  
 Acq On : 14 Sep 2018 15:29  
 Operator : JU/SJ  
 Sample : J4898-01 10X  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 ROLLOFF01-COMP-FILL

Manual Integrations  
 APPROVED

Sohil  
 9/17/2018 1:59:27 PM

Quant Time: Sep 14 16:39:19 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Sep 14 13:26:52 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.72  | 152  | 149359   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.01  | 136  | 569503   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.75  | 164  | 284746   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.23 | 188  | 548919   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.86 | 240  | 342015   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.27 | 264  | 402983   | 20.00 | ng    | 0.01     |

## System Monitoring Compounds

|                          |       |     |        |      |    |       |
|--------------------------|-------|-----|--------|------|----|-------|
| 5) 2-Fluorophenol        | 5.31  | 112 | 78851  | 8.77 | ng | -0.01 |
| 7) Phenol-d6             | 6.34  | 99  | 105533 | 9.10 | ng | -0.02 |
| 23) Nitrobenzene-d5      | 7.27  | 82  | 61374  | 6.04 | ng | -0.02 |
| 41) 2,4,6-Tribromophenol | 10.54 | 330 | 24491  | 7.93 | ng | 0.00  |
| 44) 2-Fluorobiphenyl     | 9.08  | 172 | 118884 | 6.54 | ng | 0.00  |
| 78) Terphenyl-d14        | 12.81 | 244 | 119585 | 8.29 | ng | 0.00  |

## Target Compounds

|                            |       |     |         |         |    | Qvalue |
|----------------------------|-------|-----|---------|---------|----|--------|
| 31) Naphthalene            | 8.04  | 128 | 4931410 | 186.564 | ng | # 93   |
| 37) 2-Methylnaphthalene    | 8.72  | 142 | 1603549 | 93.064  | ng | 97     |
| 45) 1,1'-Biphenyl          | 9.18  | 154 | 512080  | 22.479  | ng | 97     |
| 48) Acenaphthylene         | 9.61  | 152 | 658936  | 23.955  | ng | 97     |
| 51) Acenaphthene           | 9.79  | 154 | 1083571 | 63.262  | ng | 99     |
| 54) Dibenzofuran           | 9.96  | 168 | 1440792 | 58.209  | ng | 95     |
| 57) Fluorene               | 10.31 | 166 | 1460022 | 88.514  | ng | 99     |
| 70) Phenanthrene           | 11.28 | 178 | 4331195 | 160.963 | ng | 95     |
| 71) Anthracene             | 11.32 | 178 | 2211239 | 81.067  | ng | 97     |
| 72) Carbazole              | 11.46 | 167 | 689378  | 25.531  | ng | 99     |
| 74) Fluoranthene           | 12.45 | 202 | 2939651 | 103.483 | ng | 97     |
| 77) Pyrene                 | 12.68 | 202 | 2453399 | 96.574  | ng | 97     |
| 80) Benzo(a)anthracene     | 13.85 | 228 | 1210523 | 58.460  | ng | 93     |
| 82) Chrysene               | 13.89 | 228 | 979675  | 47.288  | ng | 97     |
| 85) Indeno(1,2,3-cd)pyrene | 16.62 | 276 | 466468  | 28.163  | ng | # 89   |
| 87) Benzo(b)fluoranthene   | 14.87 | 252 | 989213m | 44.372  | ng |        |
| 88) Benzo(k)fluoranthene   | 14.89 | 252 | 382362m | 18.363  | ng |        |
| 89) Benzo(a)pyrene         | 15.21 | 252 | 839466  | 42.400  | ng | 97     |
| 90) Dibenzo(a,h)anthracene | 16.62 | 278 | 130639m | 7.854   | ng |        |
| 91) Benzo(a,h,i)perylene   | 17.02 | 276 | 388423m | 23.357  | ng |        |

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

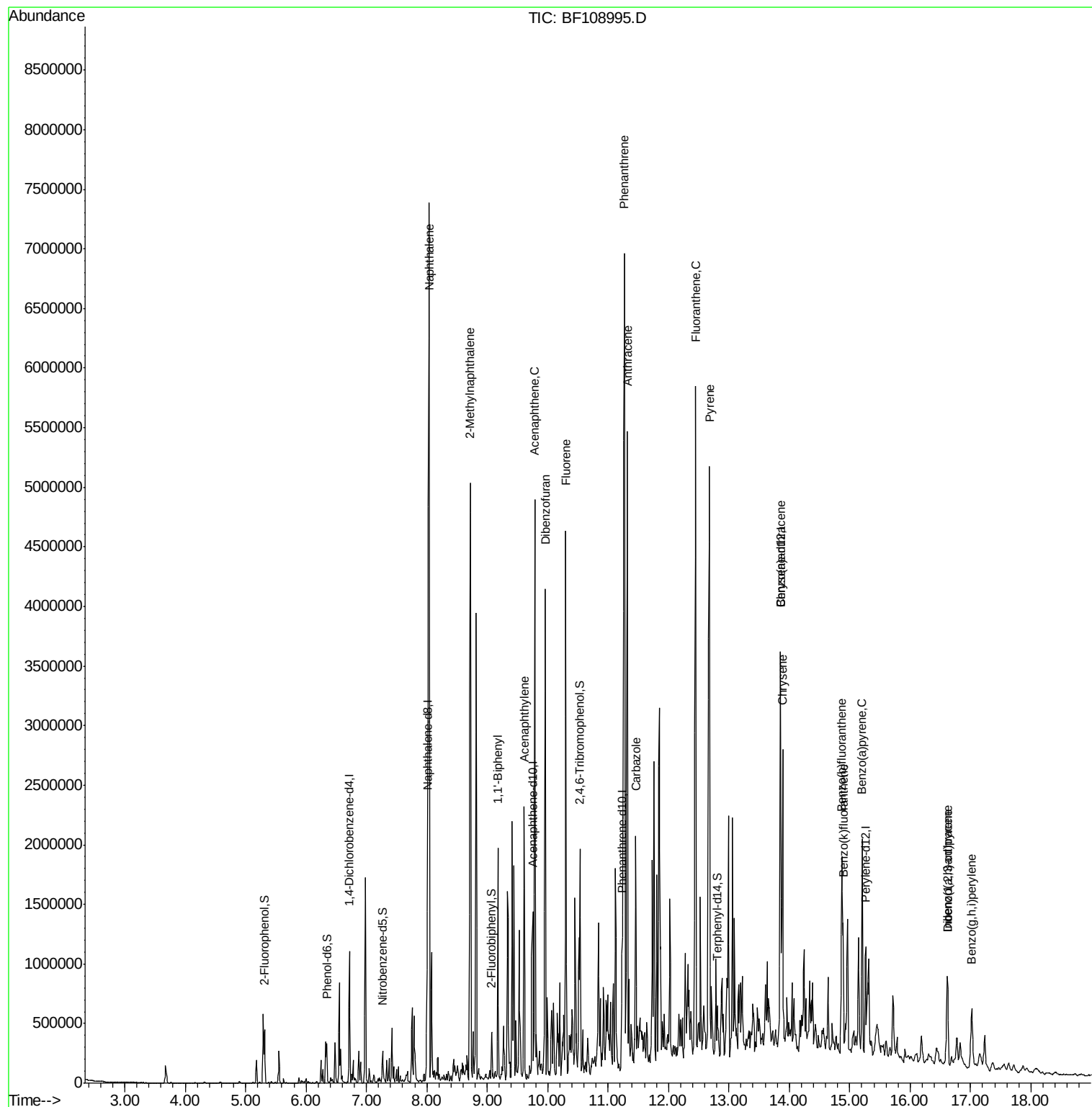
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091418\  
Data File : BF108995.D  
Acq On : 14 Sep 2018 15:29  
Operator : JU/SJ  
Sample : J4898-01 10X  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

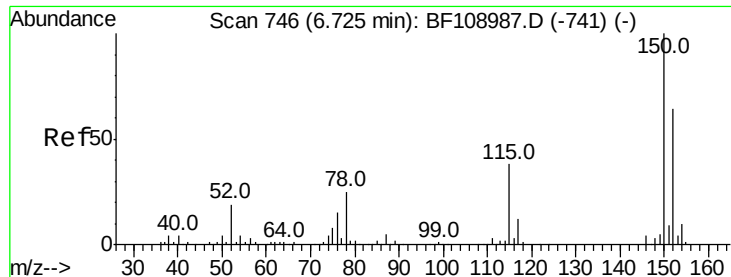
Instrument :  
BNA\_F  
ClientSampleId :  
ROLLOFF01-COMP-FILL

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Quant Time: Sep 14 16:39:19 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Sep 14 13:26:52 2018  
Response via : Initial Calibration





#1

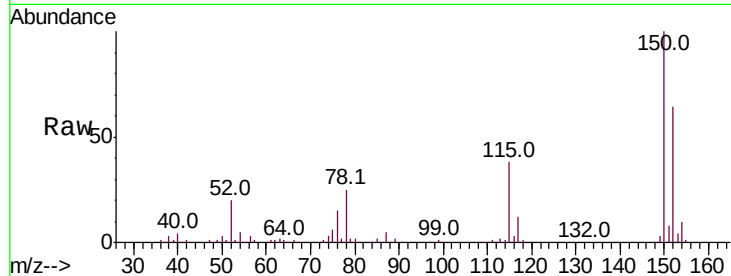
1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.72 min Scan# 745  
 Delta R.T. -0.01 min  
 Lab File: BF108995.D  
 Acq: 14 Sep 2018 15:29

Instrument :  
 BNA\_F  
 ClientSampleId :  
 ROLLOFF01-COMP-FILL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 155.1 | 124.6 | 186.8 |
| 115     | 59.3  | 50.1  | 75.1  |

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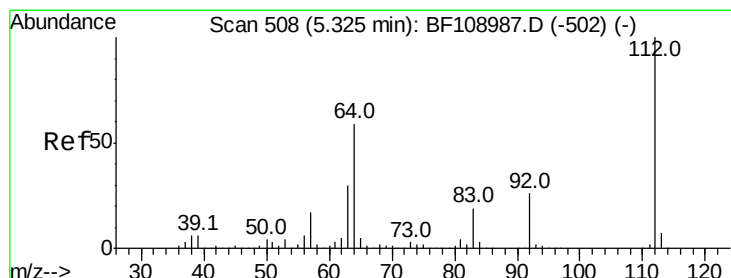
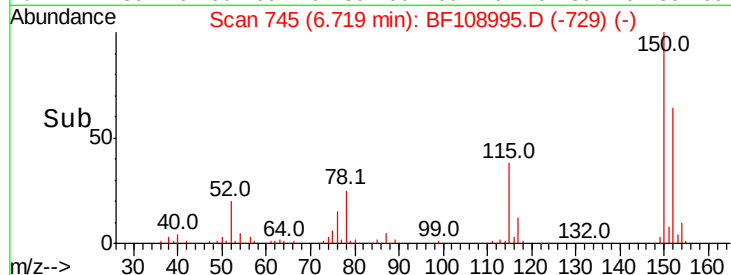
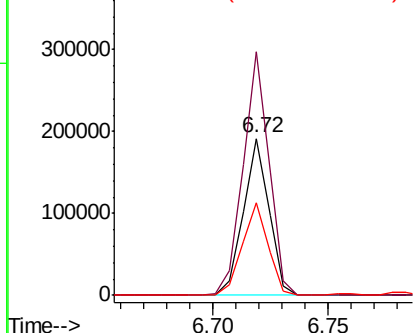


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

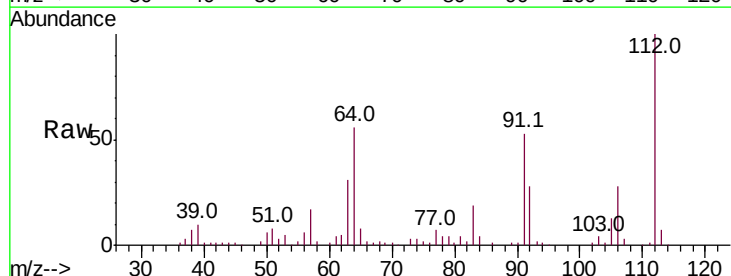
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
 Concen: 8.768 ng  
 RT: 5.31 min Scan# 506  
 Delta R.T. -0.01 min  
 Lab File: BF108995.D  
 Acq: 14 Sep 2018 15:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 56.5  | 47.9  | 71.9  |
| 63      | 30.8  | 23.7  | 35.5  |

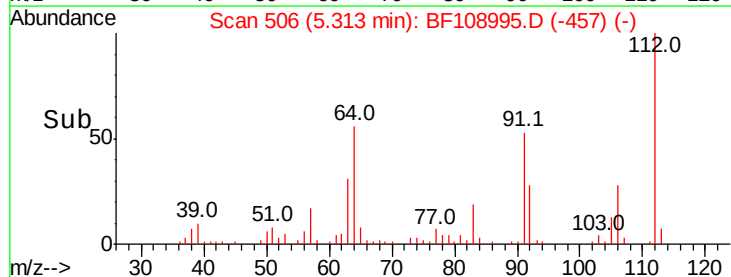
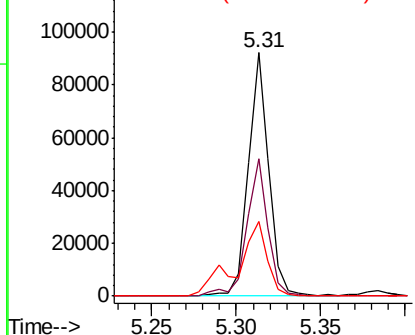


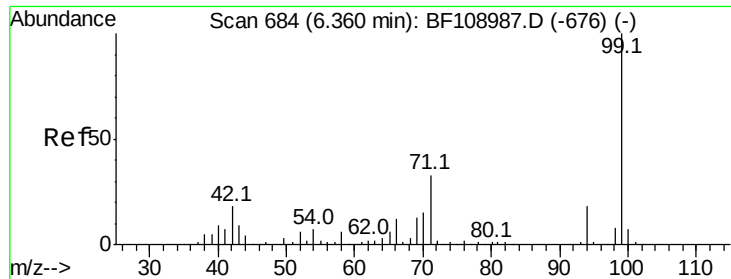
Abundance

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: 9.101 ng

RT: 6.34 min Scan# 681

Delta R.T. -0.02 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

Instrument :

BNA\_F

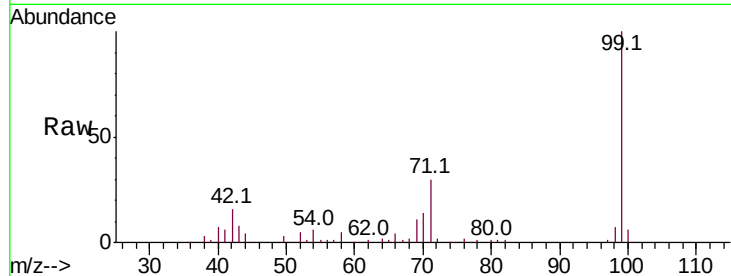
ClientSampleId :

ROLLOFF01-COMP-FILL

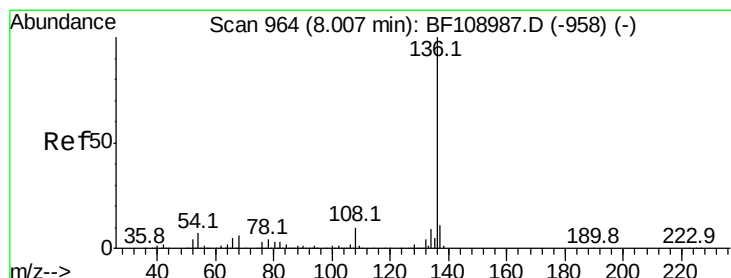
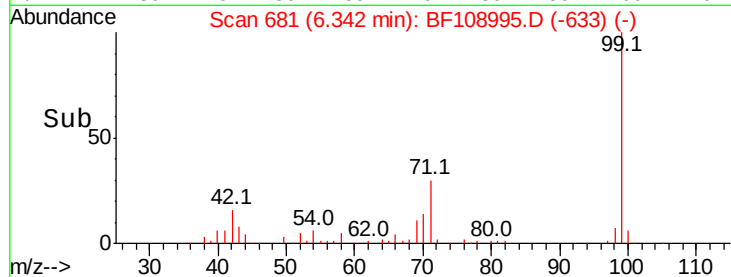
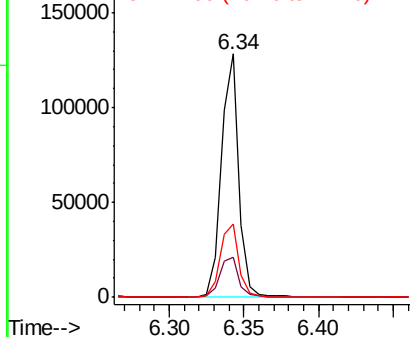
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 105533 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 16.2  | 14.5  | 21.7   |
| 71        | 30.3  | 25.4  | 38.0   |

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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



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.01 min Scan# 964

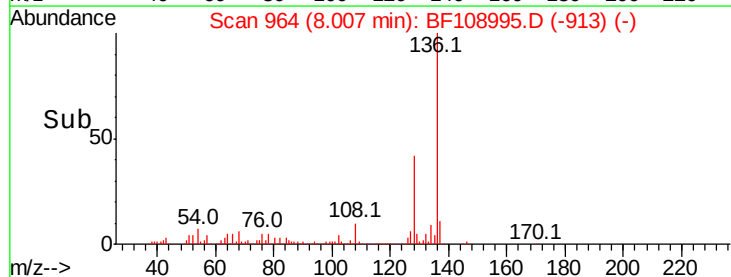
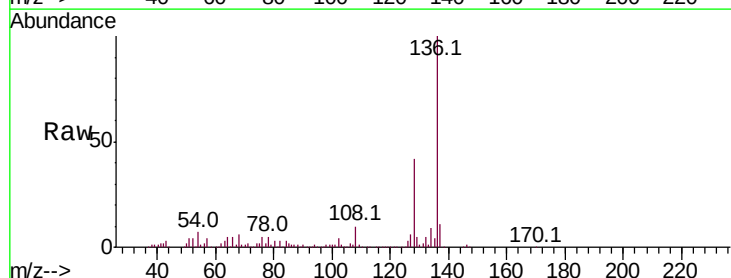
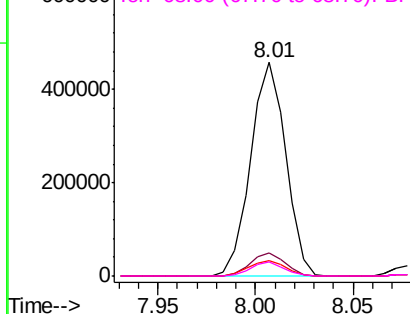
Delta R.T. -0.00 min

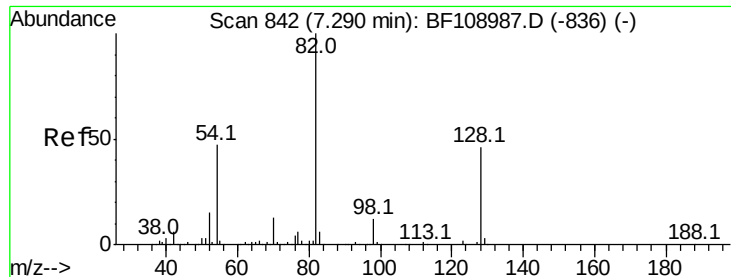
Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 569503 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 11.0  | 8.9   | 13.3   |
| 54        | 7.0   | 6.6   | 9.8    |
| 68        | 6.3   | 5.0   | 7.4    |

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: 6.044 ng

RT: 7.27 min Scan# 839

Delta R.T. -0.02 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

Instrument :

BNA\_F

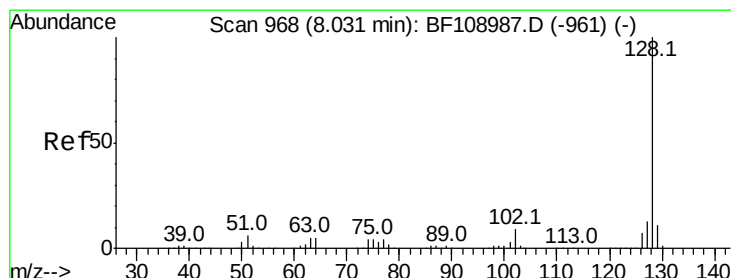
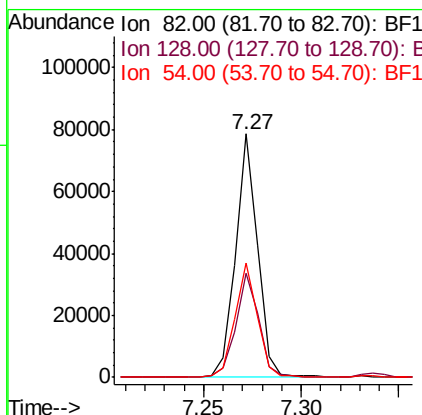
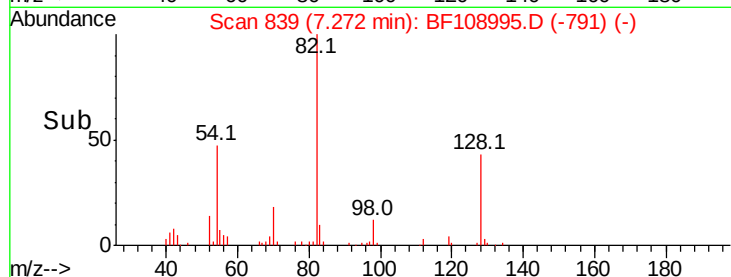
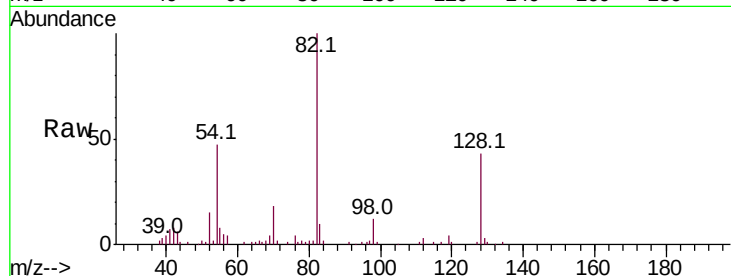
ClientSampleId :

ROLLOFF01-COMP-FILL

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 82    | Resp: | 61374 |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 42.8  | 36.1  | 54.1  |
| 54       | 46.8  | 41.4  | 62.2  |

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#31

Naphthalene

Concen: 186.564 ng

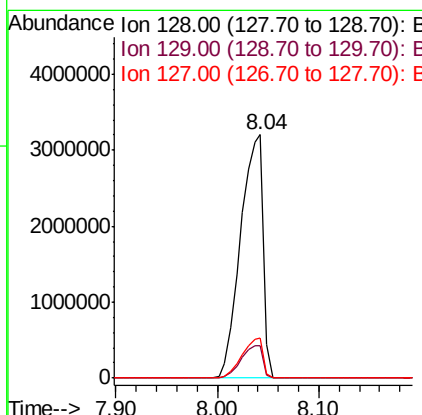
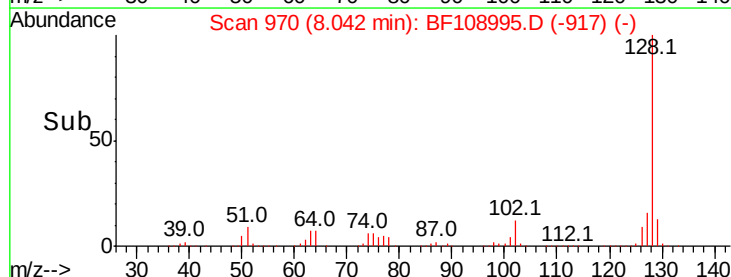
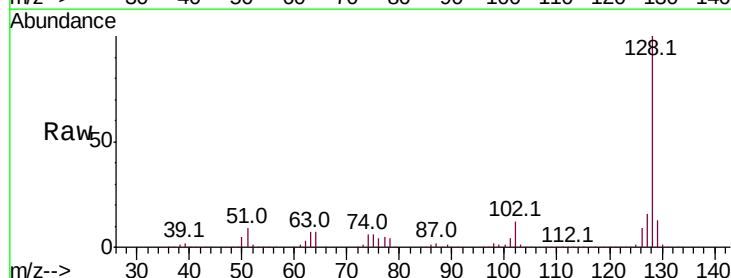
RT: 8.04 min Scan# 970

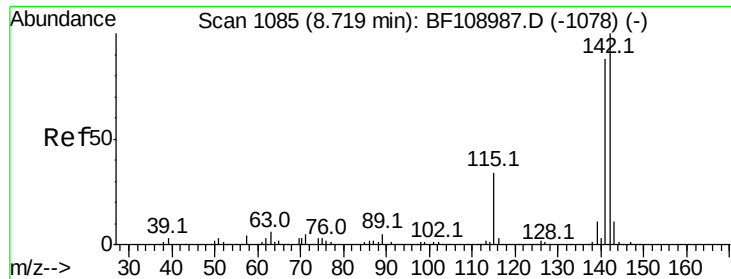
Delta R.T. 0.01 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 128   | Resp: | 4931410 |
| Ion      | Ratio | Lower | Upper   |
| 128      | 100   |       |         |
| 129      | 13.2  | 8.8   | 13.2#   |
| 127      | 16.5  | 10.9  | 16.3#   |





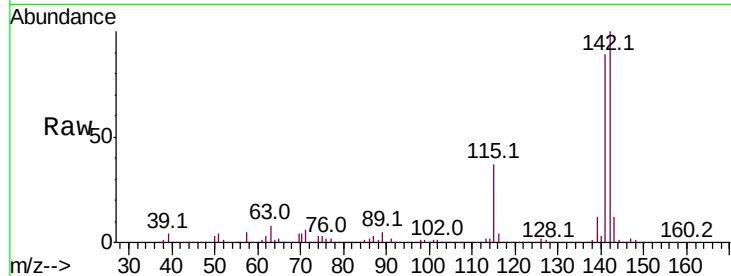
#37  
2-Methylnaphthalene  
Concen: 93.064 ng  
RT: 8.72 min Scan# 1085  
Delta R.T. -0.00 min  
Lab File: BF108995.D  
Acq: 14 Sep 2018 15:29

Instrument :  
BNA\_F  
ClientSampleId :  
ROLLOFF01-COMP-FILL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 88.8  | 70.8  | 106.2 |
| 115     | 37.3  | 26.1  | 39.1  |

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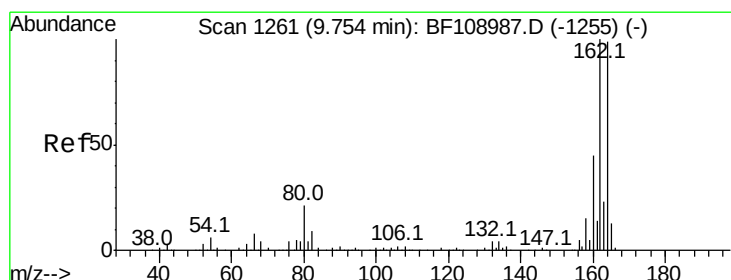
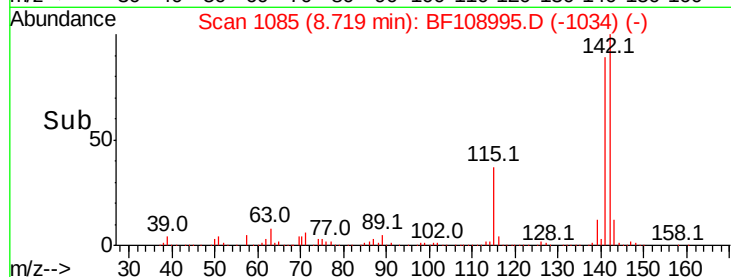
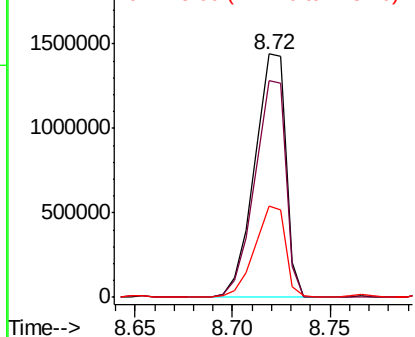


Abundance

Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E



#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.75 min Scan# 1261  
Delta R.T. -0.00 min  
Lab File: BF108995.D  
Acq: 14 Sep 2018 15:29

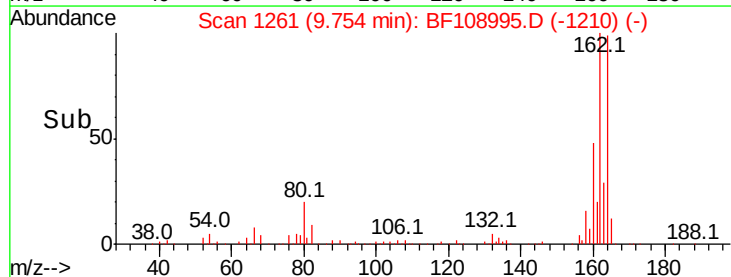
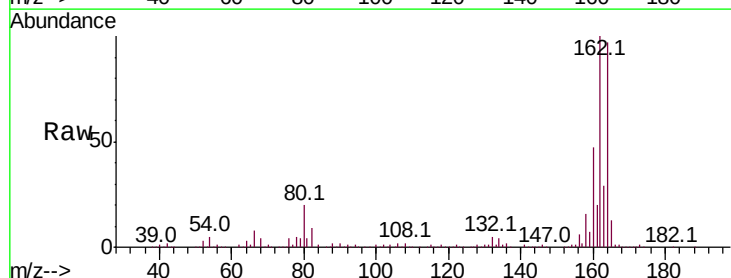
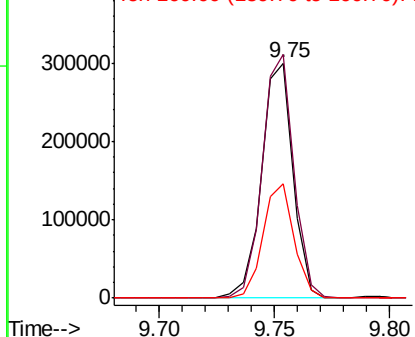
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 103.6 | 86.1  | 129.1 |
| 160     | 48.7  | 38.3  | 57.5  |

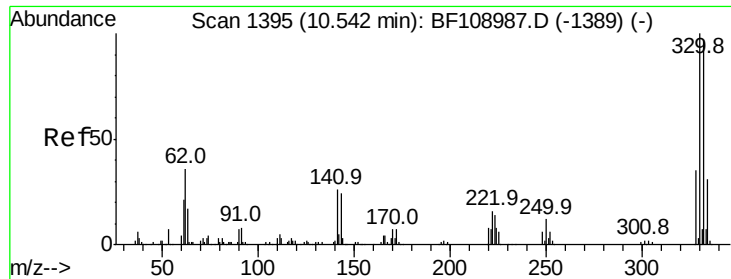
Abundance

Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





#41

2,4,6-Tribromophenol

Concen: 7.925 ng

RT: 10.54 min Scan# 1394

Delta R.T. -0.01 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

Instrument :

BNA\_F

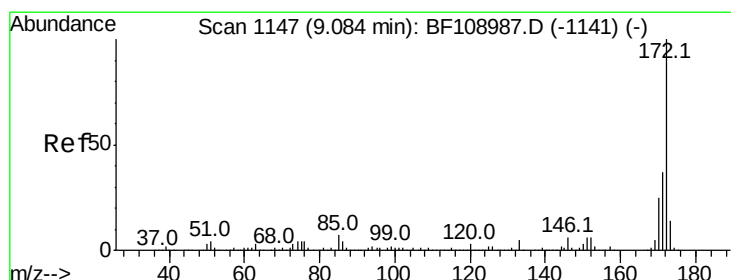
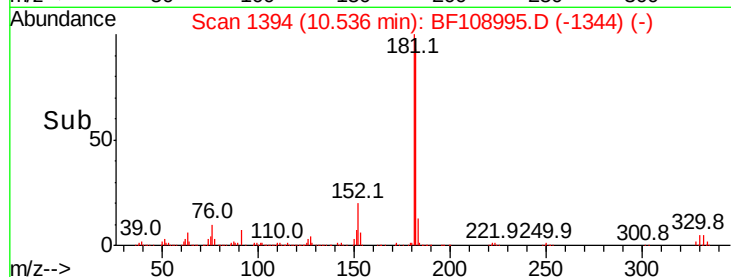
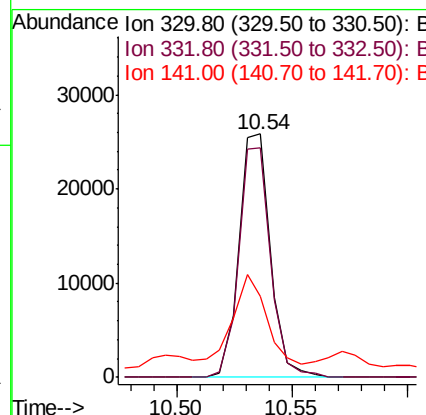
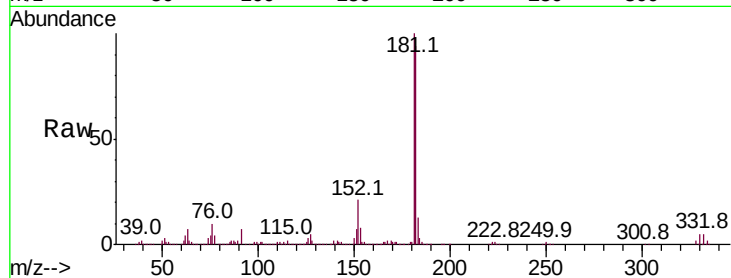
ClientSampleId :

ROLLOFF01-COMP-FILL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 330   | Resp: | 24491 |
| Ion Ratio | Lower | Upper |       |
| 330       | 100   |       |       |
| 332       | 95.4  | 77.0  | 115.6 |
| 141       | 38.7  | 29.9  | 44.9  |

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#44

2-Fluorobiphenyl

Concen: 6.541 ng

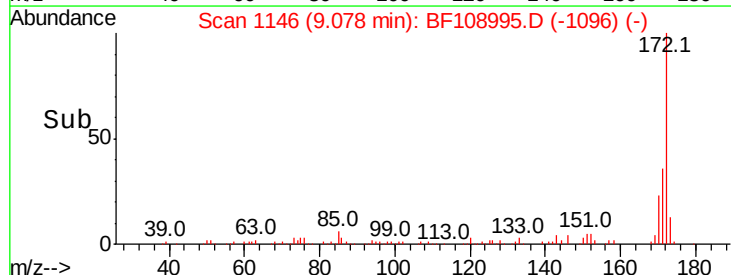
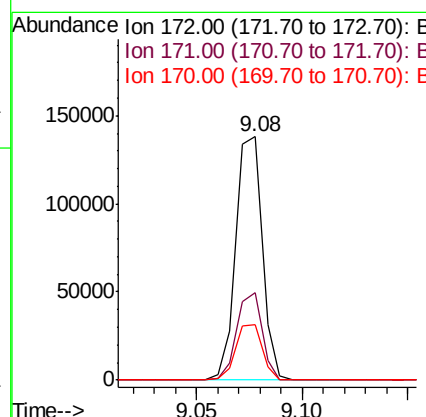
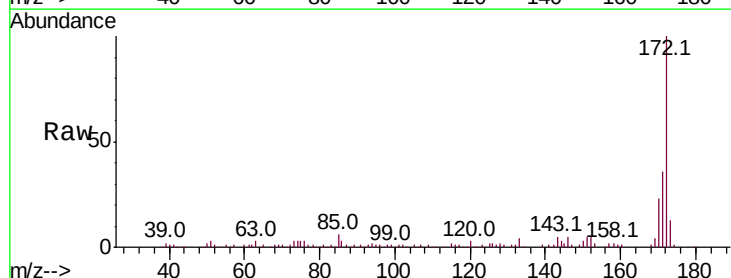
RT: 9.08 min Scan# 1146

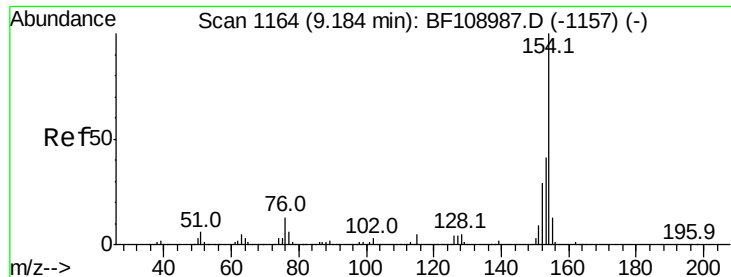
Delta R.T. -0.01 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 172   | Resp: | 118884 |
| Ion Ratio | Lower | Upper |        |
| 172       | 100   |       |        |
| 171       | 36.0  | 29.7  | 44.5   |
| 170       | 22.6  | 19.6  | 29.4   |





#45

1,1'-Biphenyl

Concen: 22.479 ng

RT: 9.18 min Scan# 1163

Delta R.T. -0.01 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

Instrument :

BNA\_F

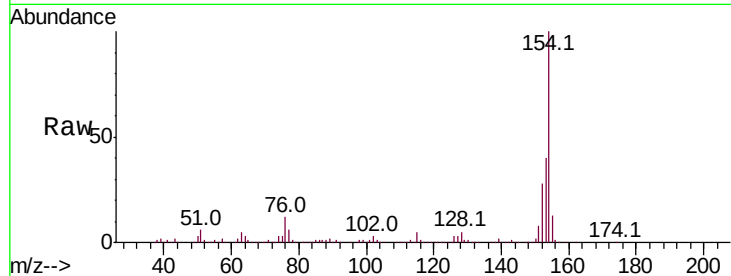
ClientSampleId :

ROLLOFF01-COMP-FILL

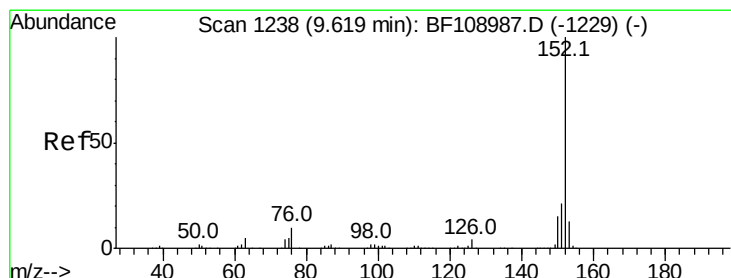
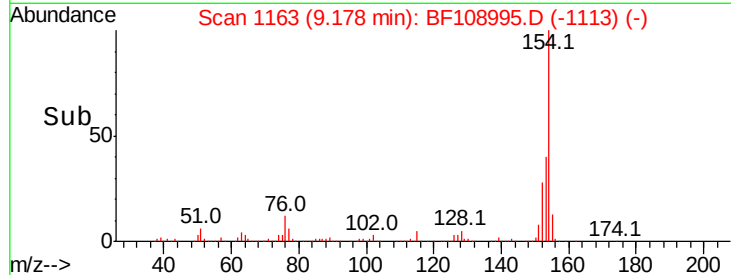
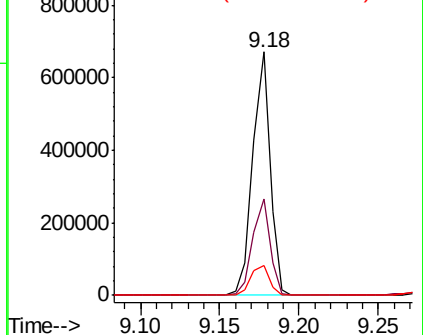
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 154   | Resp: | 512080 |
| Ion Ratio | Lower | Upper |        |
| 154       | 100   |       |        |
| 153       | 39.8  | 21.3  | 61.3   |
| 76        | 12.4  | 0.0   | 34.0   |

Manual Integrations  
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Abundance Ion 154.00 (153.70 to 154.70): E  
Ion 153.00 (152.70 to 153.70): E  
Ion 76.00 (75.70 to 76.70): BF1



#48

Acenaphthylene

Concen: 23.955 ng

RT: 9.61 min Scan# 1237

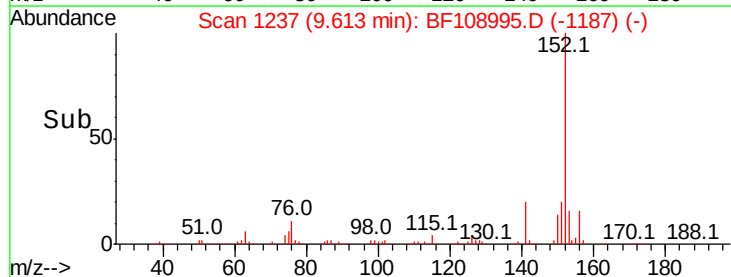
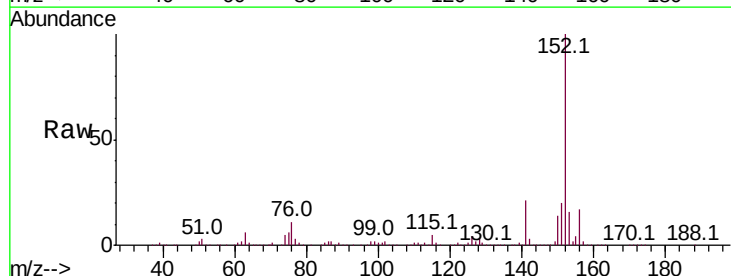
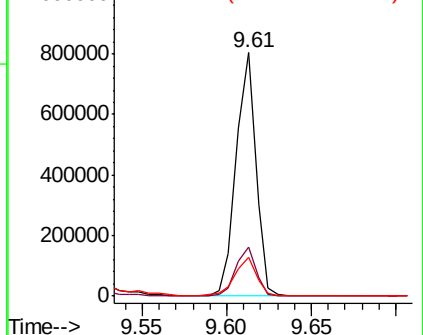
Delta R.T. -0.01 min

Lab File: BF108995.D

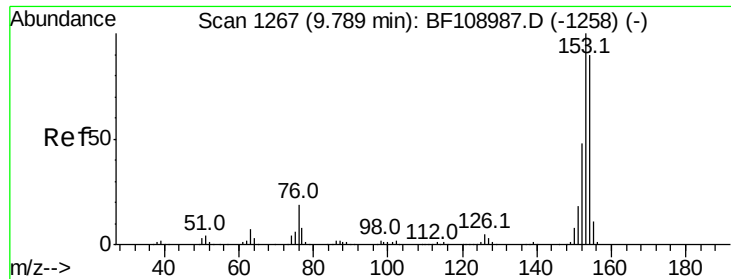
Acq: 14 Sep 2018 15:29

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 658936 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 151       | 20.2  | 16.3  | 24.5   |
| 153       | 16.0  | 10.7  | 16.1   |

Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 151.00 (150.70 to 151.70): E  
Ion 153.00 (152.70 to 153.70): E







#51

Acenaphthene

Concen: 63.262 ng

RT: 9.79 min Scan# 1267

Delta R.T. -0.00 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

Instrument :

BNA\_F

ClientSampleId :

ROLLOFF01-COMP-FILL

Tot Ion:154 Resp: 1083571

Ion Ratio Lower Upper

154 100

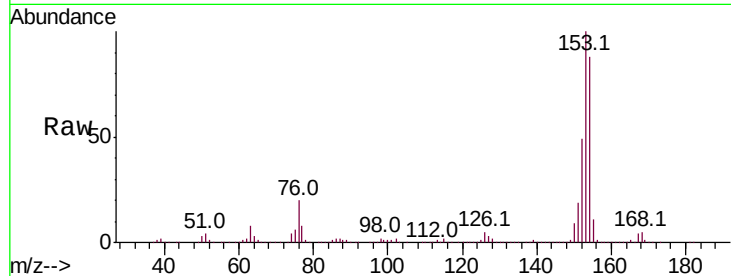
153 113.3 91.2 136.8

152 55.6 43.8 65.8

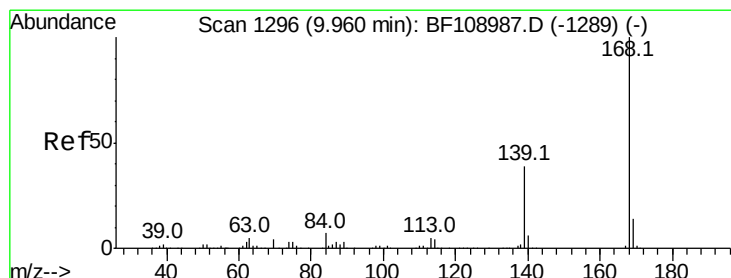
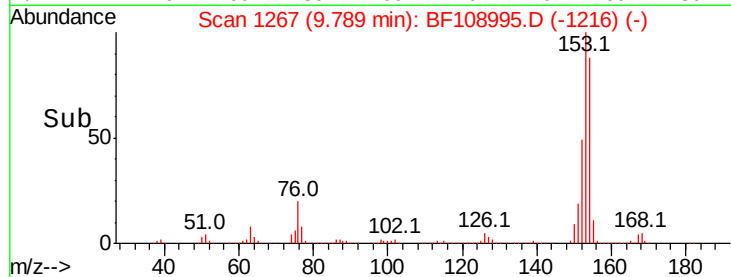
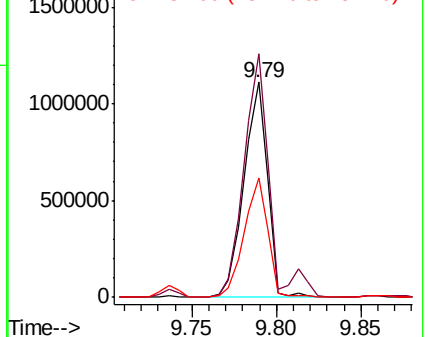
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Abundance Ion 154.00 (153.70 to 154.70): E  
Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E



#54

Dibenzofuran

Concen: 58.209 ng

RT: 9.96 min Scan# 1296

Delta R.T. -0.00 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

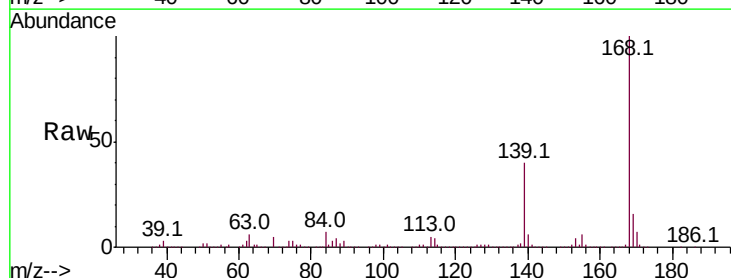
Tgt Ion:168 Resp: 1440792

Ion Ratio Lower Upper

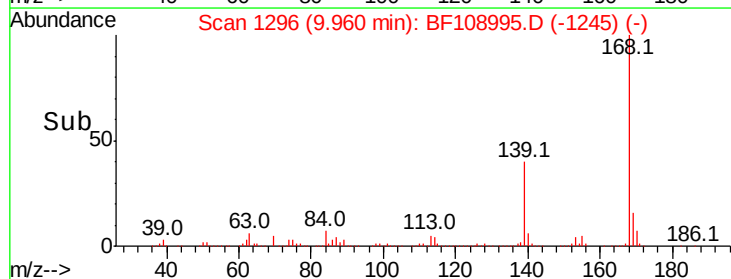
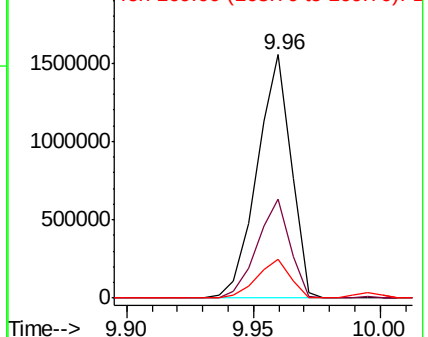
168 100

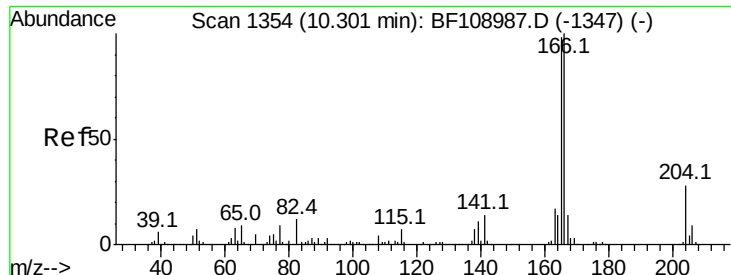
139 40.5 30.1 45.1

169 16.1 10.9 16.3



Abundance Ion 168.00 (167.70 to 168.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 169.00 (168.70 to 169.70): E





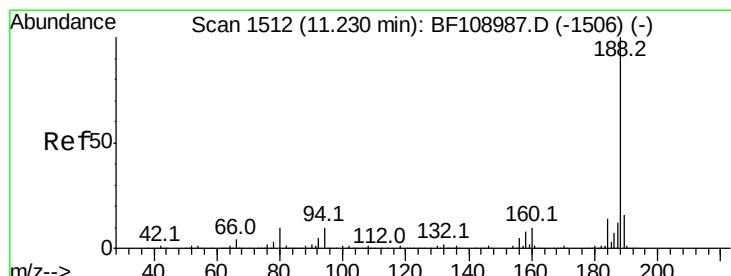
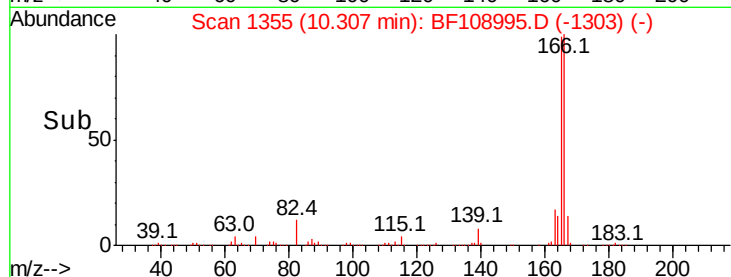
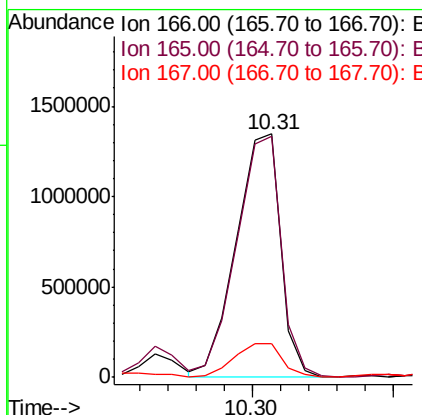
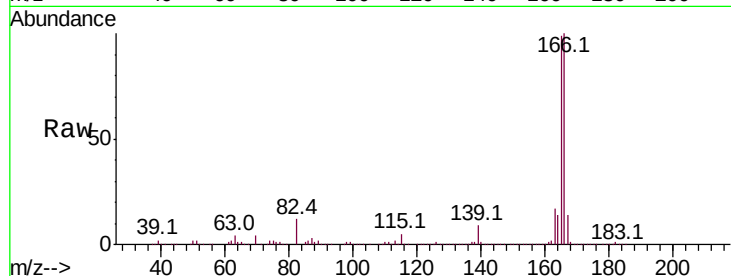
#57  
**Fluorene**  
 Concen: 88.514 ng  
 RT: 10.31 min Scan# 1355  
 Delta R.T. 0.01 min  
 Lab File: BF108995.D  
 Acq: 14 Sep 2018 15:29

Instrument :  
 BNA\_F  
 ClientSampleId :  
 ROLLOFF01-COMP-FILL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 99.1  | 79.8  | 119.8 |
| 167     | 13.9  | 10.6  | 16.0  |

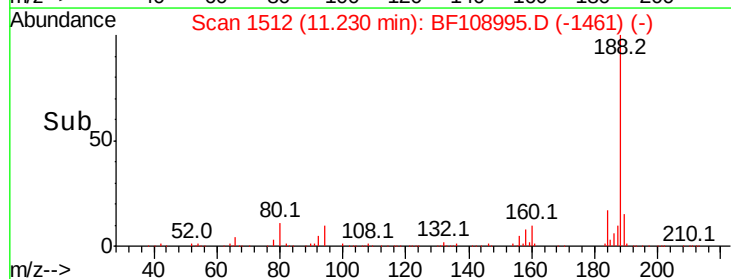
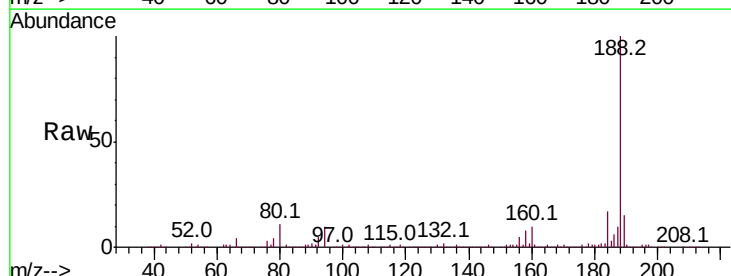
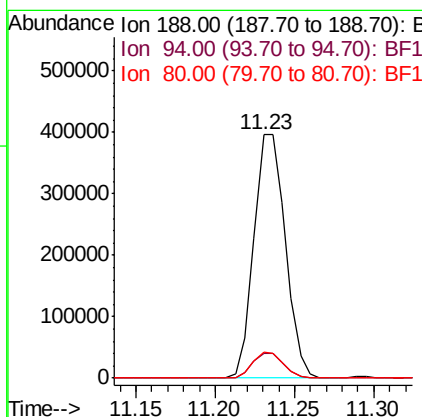
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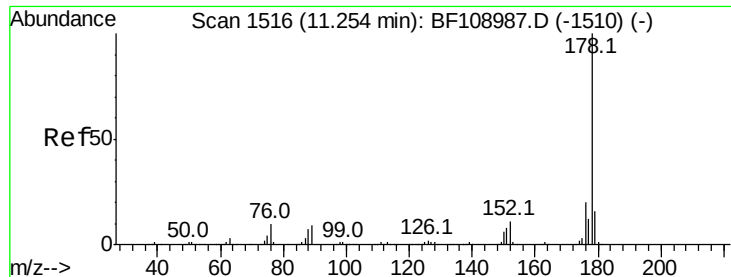
Sohil  
 9/17/2018 1:59:27 PM



#63  
**Phenanthrene-d10**  
 Concen: 20.000 ng  
 RT: 11.23 min Scan# 1512  
 Delta R.T. -0.00 min  
 Lab File: BF108995.D  
 Acq: 14 Sep 2018 15:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 10.0  | 8.5   | 12.7  |
| 80      | 10.7  | 9.2   | 13.8  |





#70

Phenanthrene

Concen: 160.963 ng

RT: 11.28 min Scan# 1520

Delta R.T. 0.02 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

Instrument :

BNA\_F

ClientSampleId :

ROLLOFF01-COMP-FILL

Tot Ion:178 Resp: 4331195

Ion Ratio Lower Upper

178 100

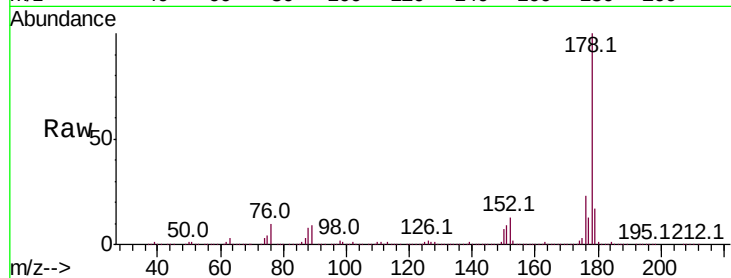
176 22.7 15.8 23.8

179 17.4 13.0 19.6

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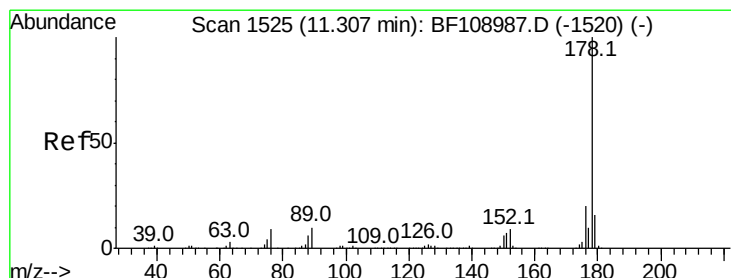
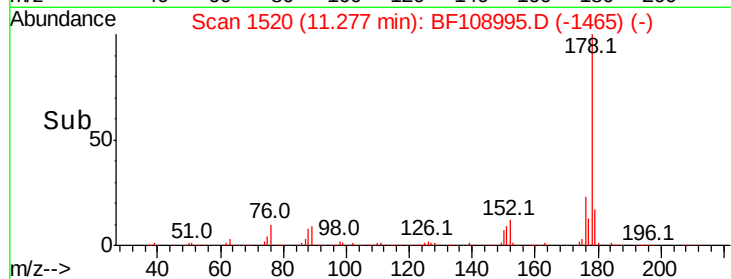
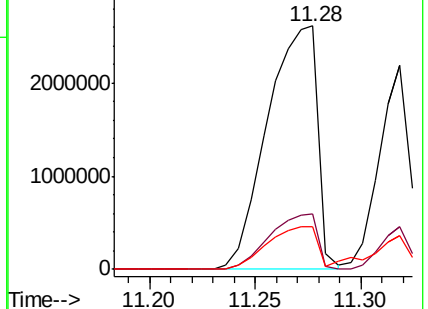
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Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#71

Anthracene

Concen: 81.067 ng

RT: 11.32 min Scan# 1527

Delta R.T. 0.01 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

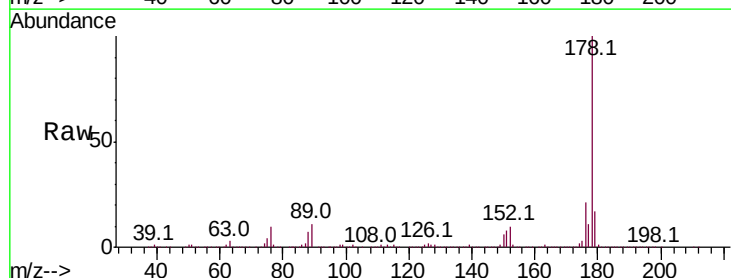
Tgt Ion:178 Resp: 2211239

Ion Ratio Lower Upper

178 100

176 20.9 15.4 23.2

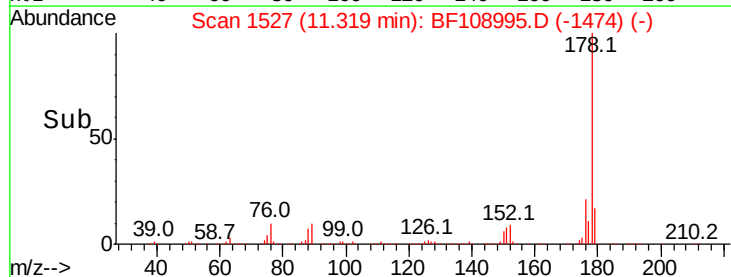
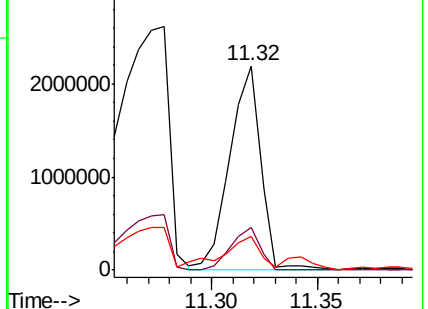
179 16.8 12.6 19.0

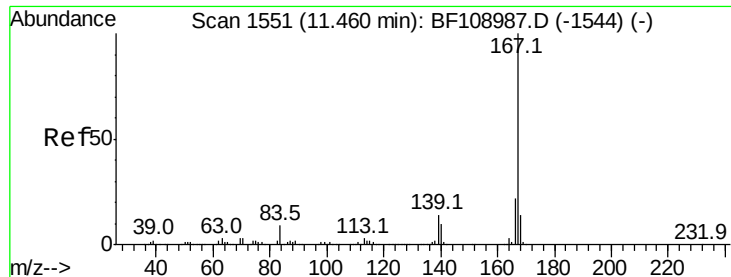


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#72

Carbazole

Concen: 25.531 ng

RT: 11.46 min Scan# 1551

Delta R.T. -0.00 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

Instrument :

BNA\_F

ClientSampleId :

ROLLOFF01-COMP-FILL

Tot Ion:167 Resp: 689378

Ion Ratio Lower Upper

167 100

166 21.8 17.6 26.4

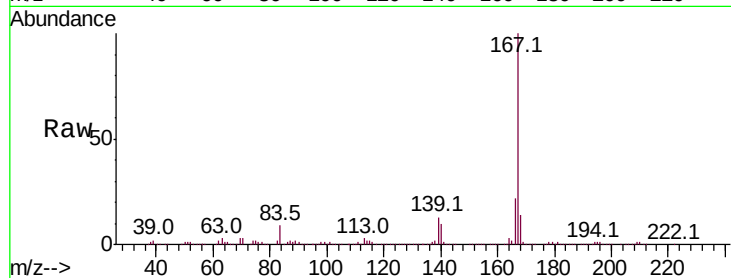
139 13.2 10.9 16.3

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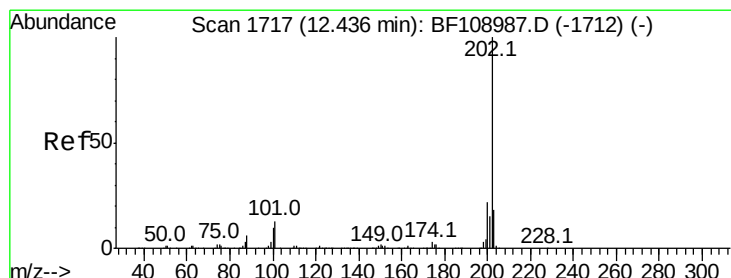
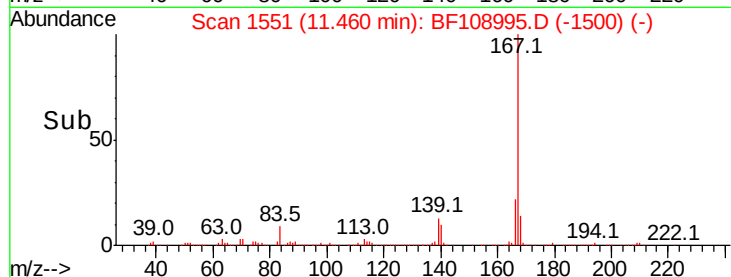
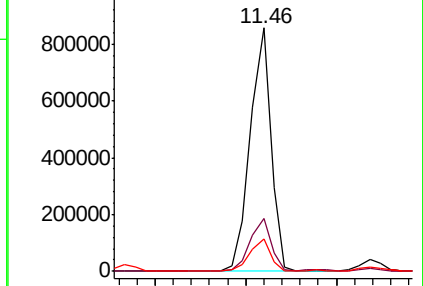
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Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E



#74

Fluoranthene

Concen: 103.483 ng

RT: 12.45 min Scan# 1720

Delta R.T. 0.02 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

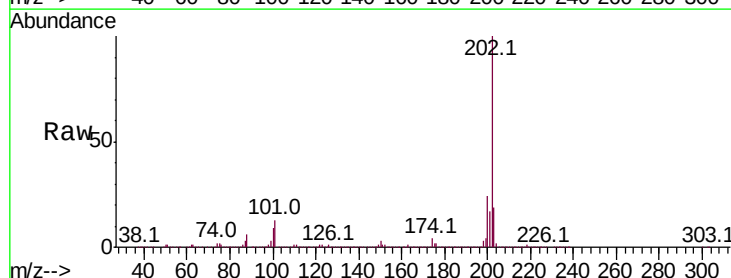
Tgt Ion:202 Resp: 2939651

Ion Ratio Lower Upper

202 100

101 12.6 0.0 34.1

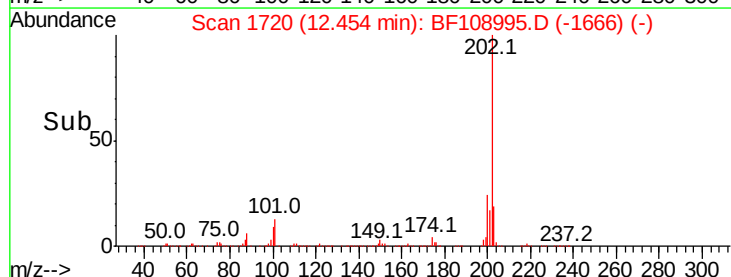
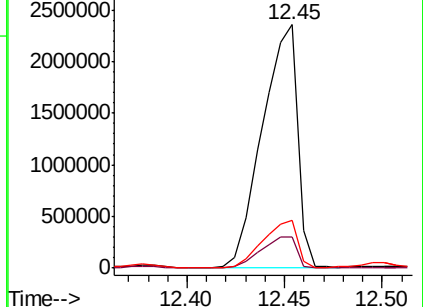
203 19.4 0.0 38.1

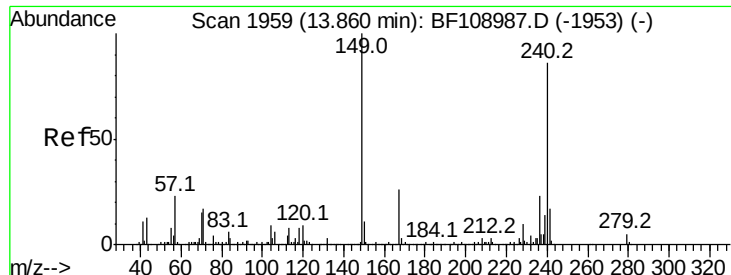


Abundance Ion 202.00 (201.70 to 202.70): E

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: 13.86 min Scan# 1959

Delta R.T. -0.00 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

Instrument :

BNA\_F

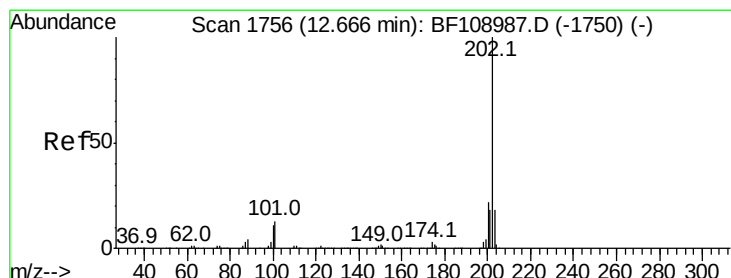
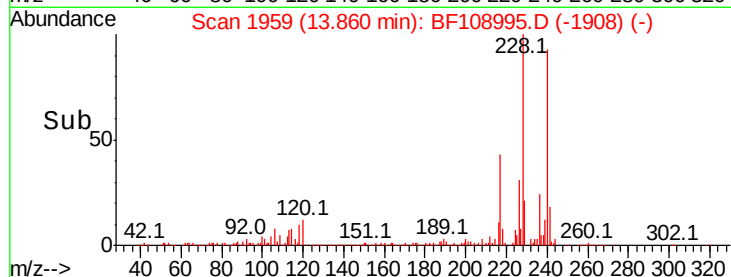
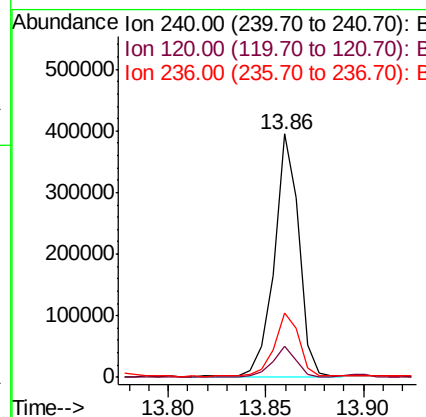
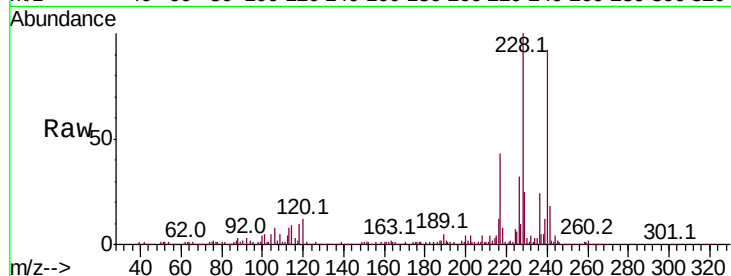
ClientSampleId :

ROLLOFF01-COMP-FILL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 240   | Resp: | 342015 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 12.6  | 9.5   | 14.3   |
| 236       | 26.5  | 20.7  | 31.1   |

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#77

Pyrene

Concen: 96.574 ng

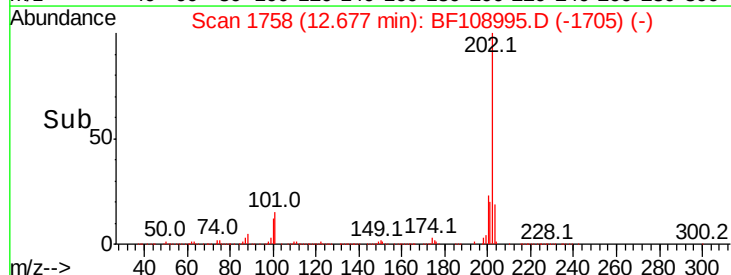
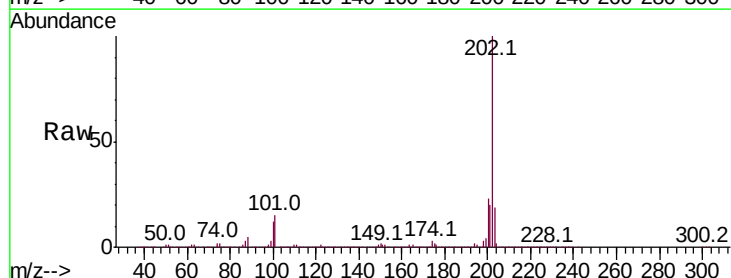
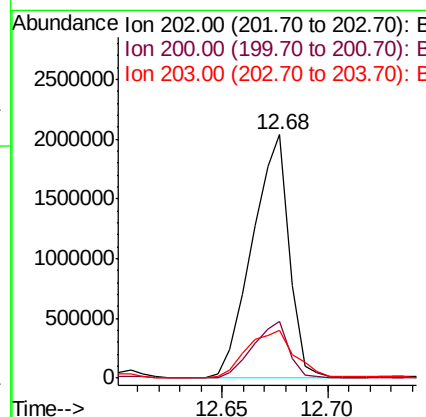
RT: 12.68 min Scan# 1758

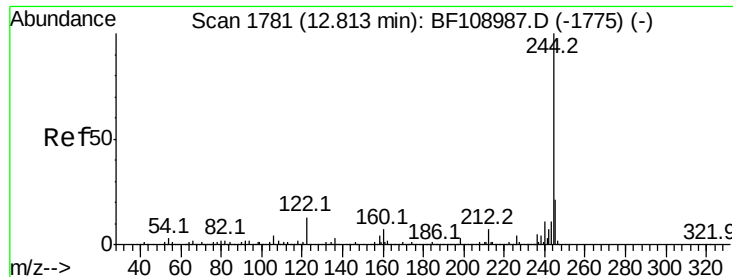
Delta R.T. 0.01 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 2453399 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 200       | 23.4  | 17.4  | 26.2    |
| 203       | 19.5  | 14.3  | 21.5    |





#78

Terphenyl-d14

Concen: 8.288 ng

RT: 12.81 min Scan# 1780

Delta R.T. -0.01 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

Instrument :

BNA\_F

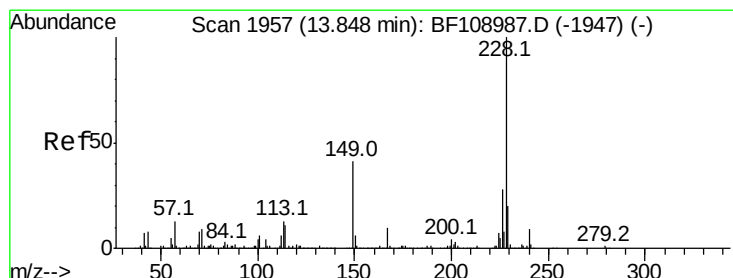
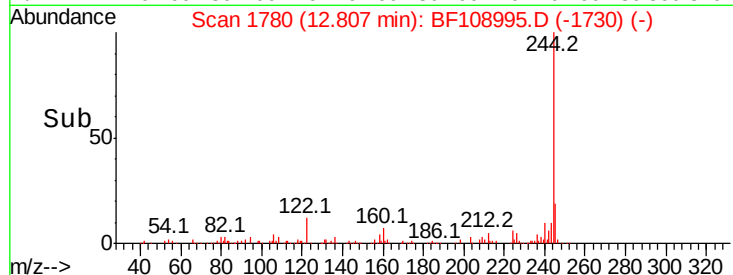
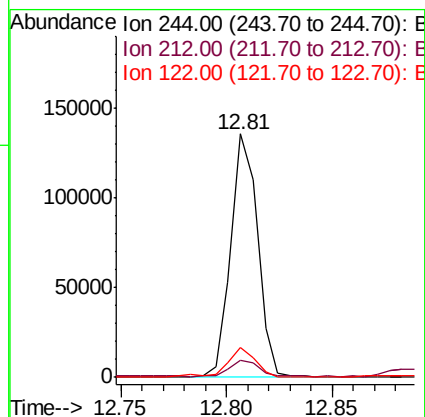
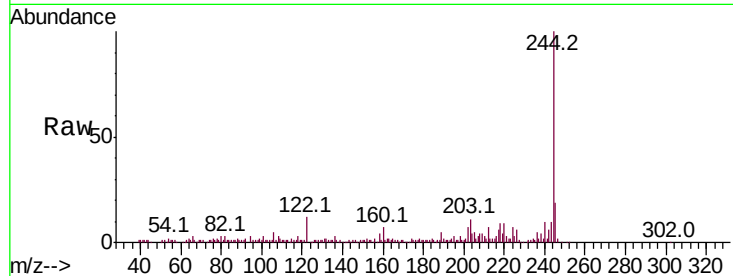
ClientSampleId :

ROLLOFF01-COMP-FILL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 244   | Resp: | 119585 |
| Ion Ratio | Lower | Upper |        |
| 244       | 100   |       |        |
| 212       | 6.9   | 5.4   | 8.0    |
| 122       | 12.3  | 11.0  | 16.4   |

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#80

Benzo(a)anthracene

Concen: 58.460 ng

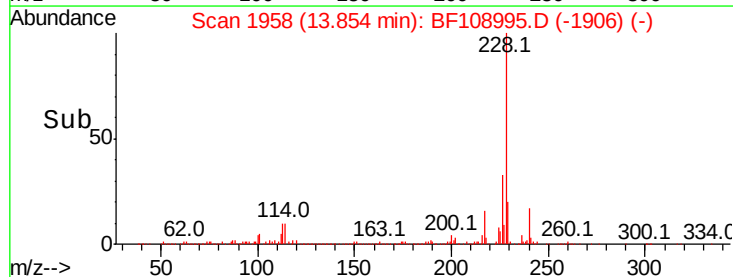
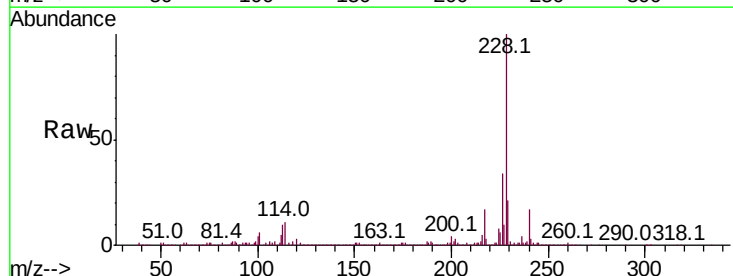
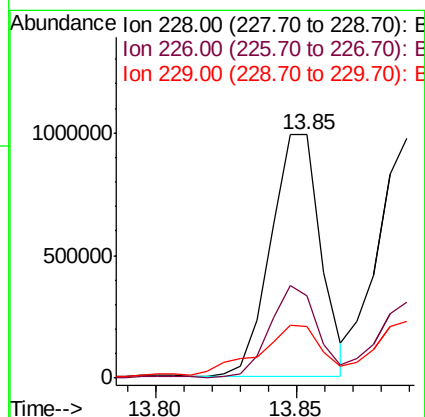
RT: 13.85 min Scan# 1958

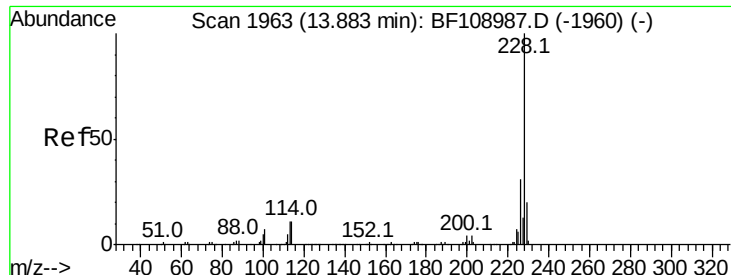
Delta R.T. 0.01 min

Lab File: BF108995.D

Acq: 14 Sep 2018 15:29

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 228   | Resp: | 1210523 |
| Ion Ratio | Lower | Upper |         |
| 228       | 100   |       |         |
| 226       | 33.6  | 22.6  | 33.8    |
| 229       | 21.2  | 15.8  | 23.6    |





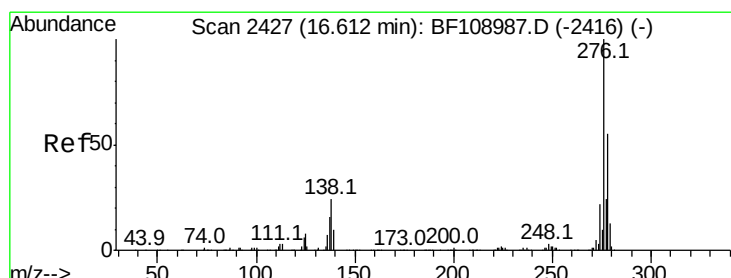
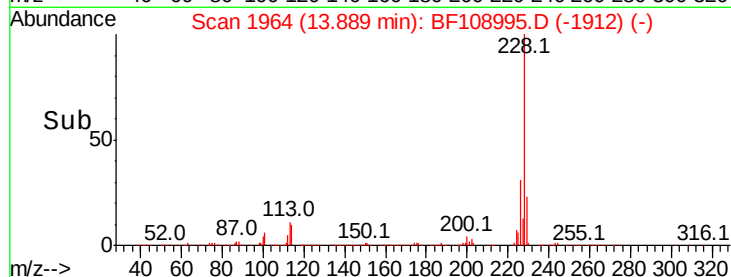
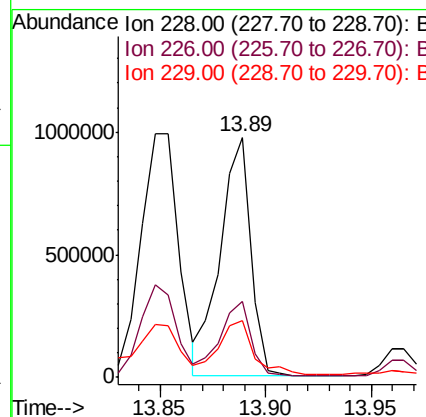
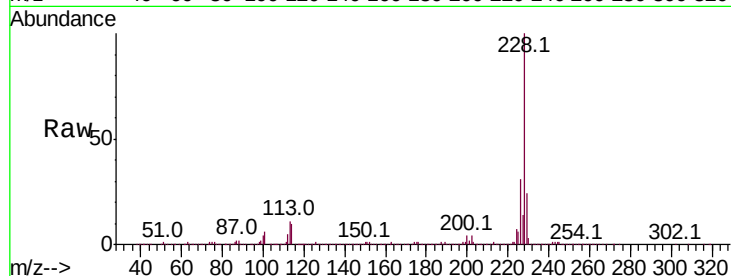
#82  
Chrysene  
Concen: 47.288 ng  
RT: 13.89 min Scan# 1964  
Delta R.T. 0.01 min  
Lab File: BF108995.D  
Acq: 14 Sep 2018 15:29

Instrument :  
BNA\_F  
ClientSampleId :  
ROLLOFF01-COMP-FILL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.5  | 25.0  | 37.6  |
| 229     | 23.6  | 16.2  | 24.4  |

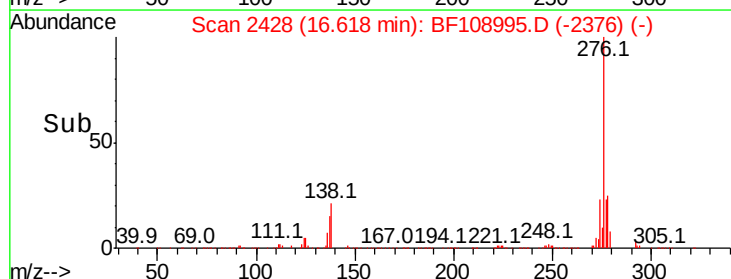
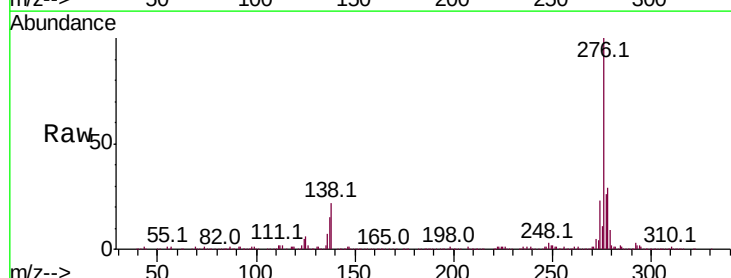
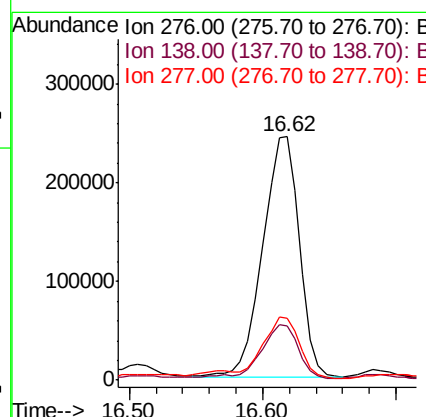
Manual Integrations  
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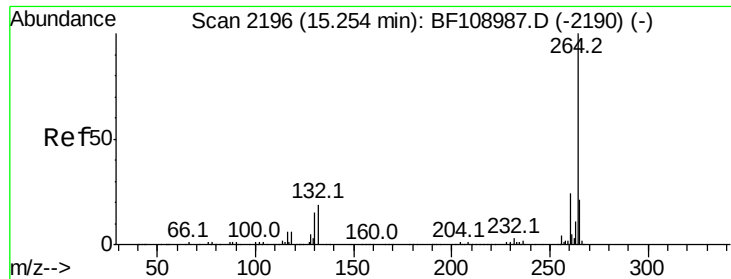
Sohil  
9/17/2018 1:59:27 PM



#85  
Indeno(1,2,3-cd)pyrene  
Concen: 28.163 ng  
RT: 16.62 min Scan# 2428  
Delta R.T. 0.01 min  
Lab File: BF108995.D  
Acq: 14 Sep 2018 15:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 22.7  | 25.0  | 37.6# |
| 277     | 28.3  | 20.1  | 30.1  |





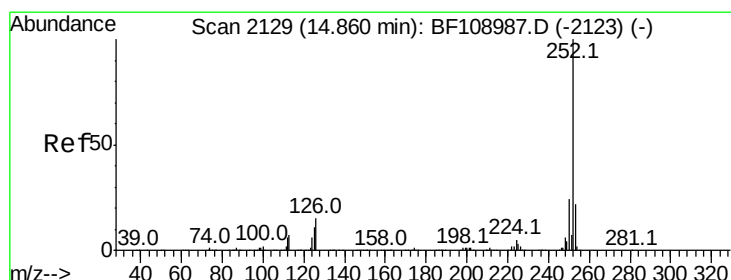
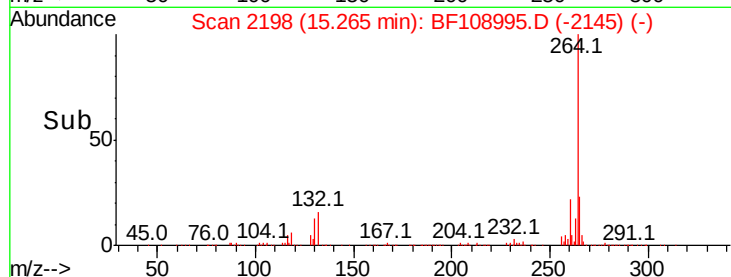
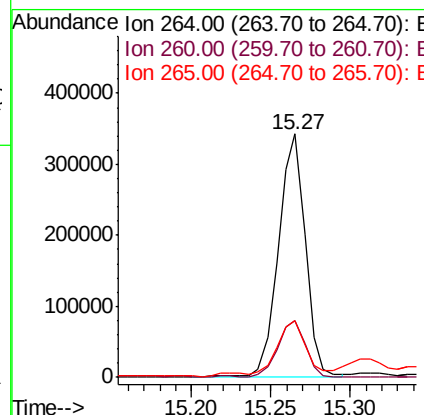
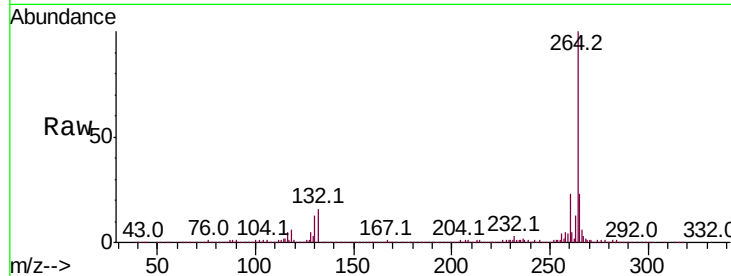
#86  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.27 min Scan# 2198  
Delta R.T. 0.01 min  
Lab File: BF108995.D  
Acq: 14 Sep 2018 15:29

Instrument :  
BNA\_F  
ClientSampleId :  
ROLLOFF01-COMP-FILL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.1  | 19.2  | 28.8  |
| 265     | 23.4  | 17.5  | 26.3  |

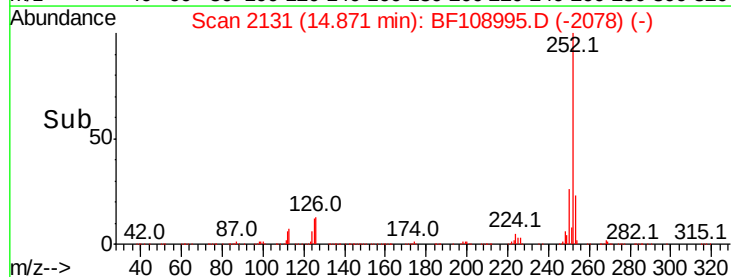
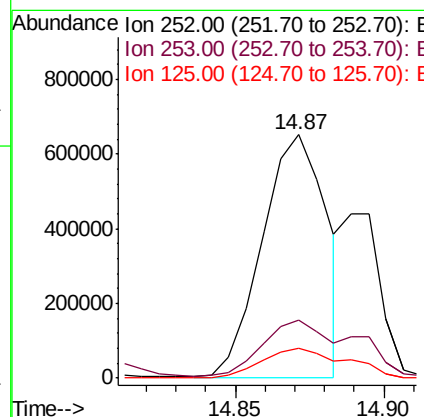
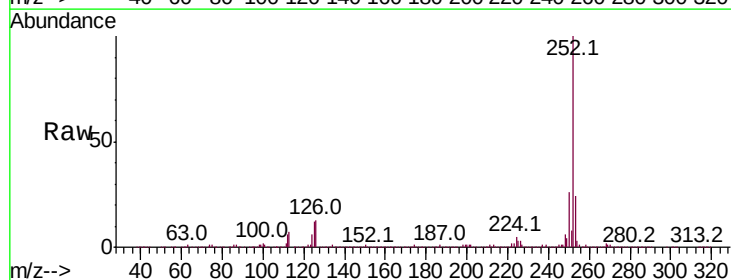
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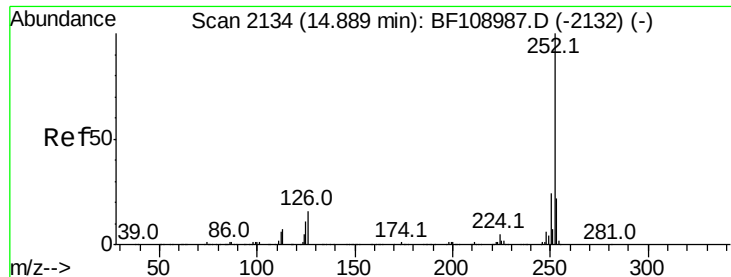


#87  
Benzo(b)fluoranthene  
Concen: 44.372 ng m  
RT: 14.87 min Scan# 2131  
Delta R.T. 0.01 min  
Lab File: BF108995.D  
Acq: 14 Sep 2018 15:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.9  | 17.0  | 25.6  |
| 125     | 12.2  | 9.0   | 13.6  |







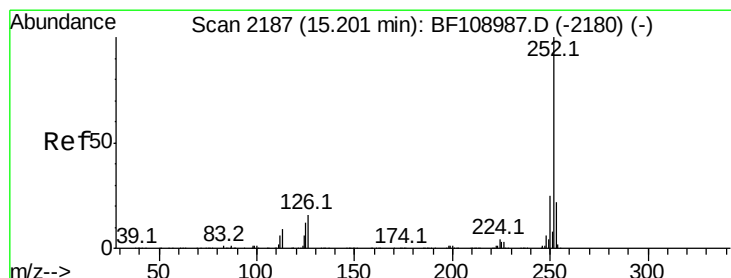
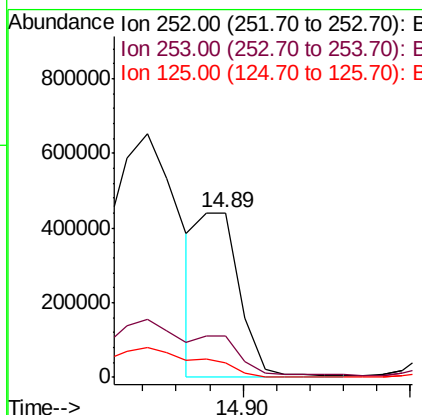
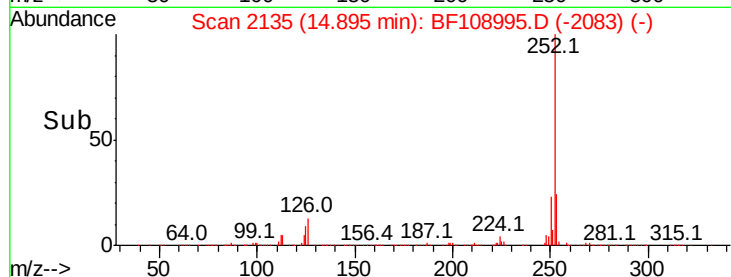
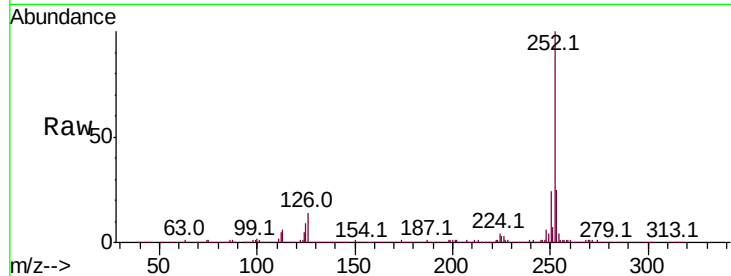
#88  
Benzo(k)fluoranthene  
Concen: 18.363 ng m  
RT: 14.89 min Scan# 2135  
Delta R.T. 0.01 min  
Lab File: BF108995.D  
Acq: 14 Sep 2018 15:29

Instrument :  
BNA\_F  
ClientSampleId :  
ROLLOFF01-COMP-FILL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.4  | 17.9  | 26.9  |
| 125     | 9.0   | 10.2  | 15.2  |

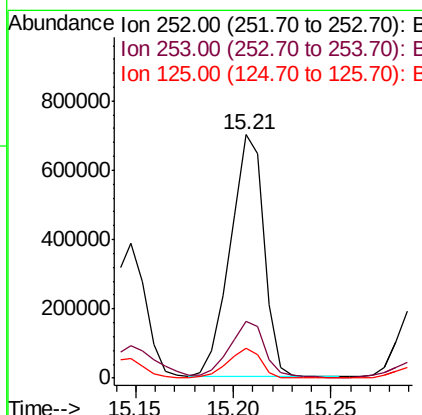
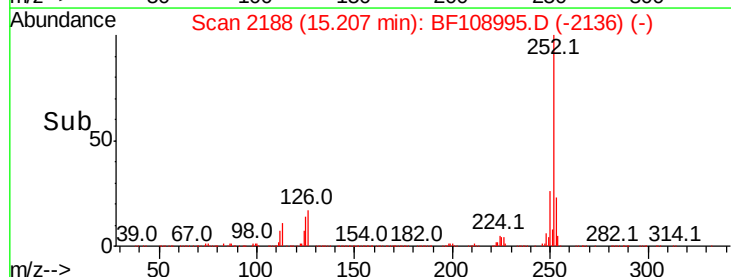
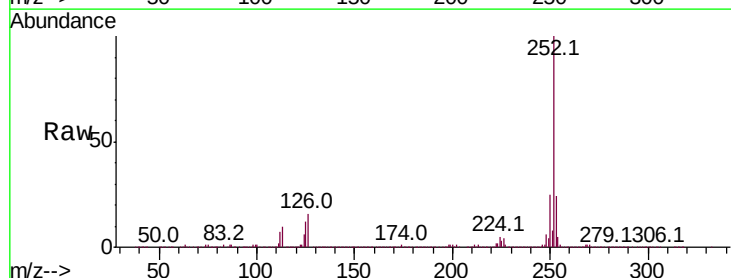
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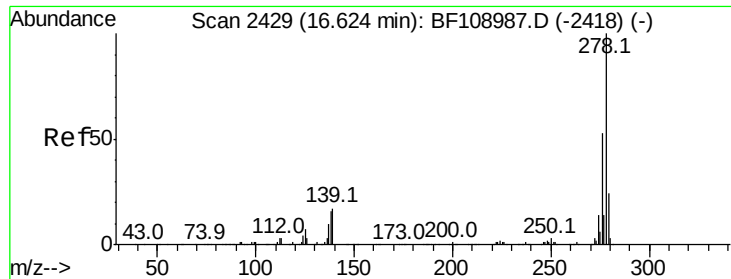
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#89  
Benzo(a)pyrene  
Concen: 42.400 ng  
RT: 15.21 min Scan# 2188  
Delta R.T. 0.01 min  
Lab File: BF108995.D  
Acq: 14 Sep 2018 15:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.6  | 17.1  | 25.7  |
| 125     | 12.1  | 9.8   | 14.6  |





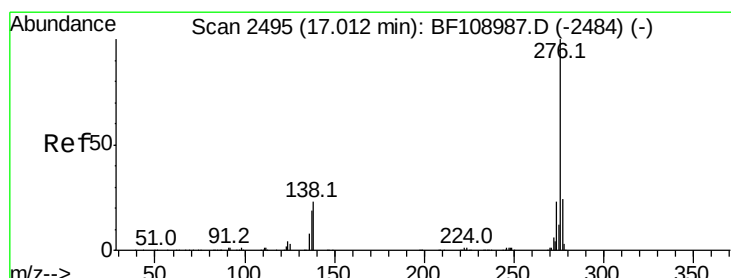
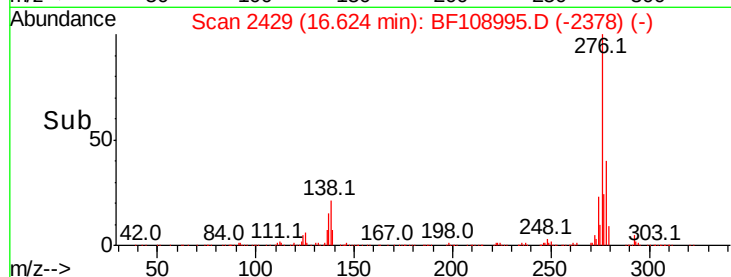
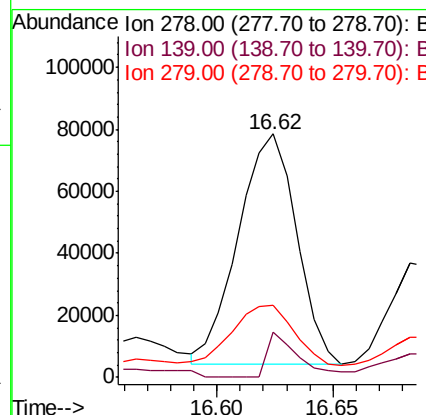
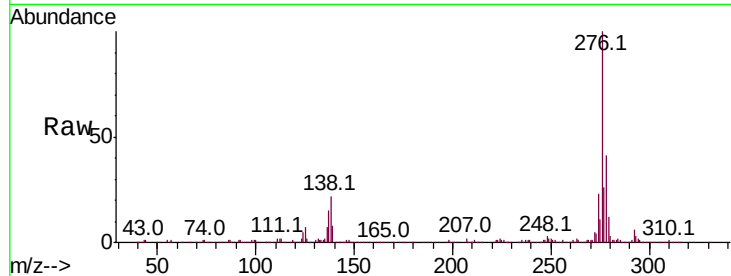
#90  
Dibenzo(a,h)anthracene  
Concen: 7.854 ng m  
RT: 16.62 min Scan# 2429  
Delta R.T. -0.00 min  
Lab File: BF108995.D  
Acq: 14 Sep 2018 15:29

Instrument :  
BNA\_F  
ClientSampleId :  
ROLLOFF01-COMP-FILL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 18.5  | 15.9  | 23.9  |
| 279     | 29.6  | 19.0  | 28.4  |

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#91  
Benzo(g,h,i)perylene  
Concen: 23.357 ng m  
RT: 17.02 min Scan# 2497  
Delta R.T. 0.01 min  
Lab File: BF108995.D  
Acq: 14 Sep 2018 15:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.9  | 17.9  | 26.9  |
| 138     | 21.8  | 21.8  | 32.8  |

