

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF103118\  
 Data File : BF110353.D  
 Acq On : 1 Nov 2018 1:29  
 Operator : JU/SJ  
 Sample : J5630-02 10X  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Nov 01 04:54:35 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF102318.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Oct 31 14:18:16 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.97  | 152  | 60383    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.26  | 136  | 219075   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 10.02 | 164  | 84086    | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.52 | 188  | 153208   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.16 | 240  | 170330   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.70 | 264  | 103514   | 20.00 | ng    | 0.00     |

|                             |       |     |       |       |    |       |
|-----------------------------|-------|-----|-------|-------|----|-------|
| System Monitoring Compounds |       |     |       |       |    |       |
| 5) 2-Fluorophenol           | 5.59  | 112 | 37691 | 10.16 | ng | 0.00  |
| 7) Phenol-d6                | 6.59  | 99  | 47507 | 10.02 | ng | -0.02 |
| 23) Nitrobenzene-d5         | 7.53  | 82  | 24676 | 6.68  | ng | 0.00  |
| 42) 2,4,6-Tribromophenol    | 10.82 | 330 | 7808  | 9.37  | ng | 0.00  |
| 45) 2-Fluorobiphenyl        | 9.33  | 172 | 47816 | 8.93  | ng | 0.00  |
| 79) Terphenyl-d14           | 13.09 | 244 | 58159 | 7.10  | ng | -0.01 |

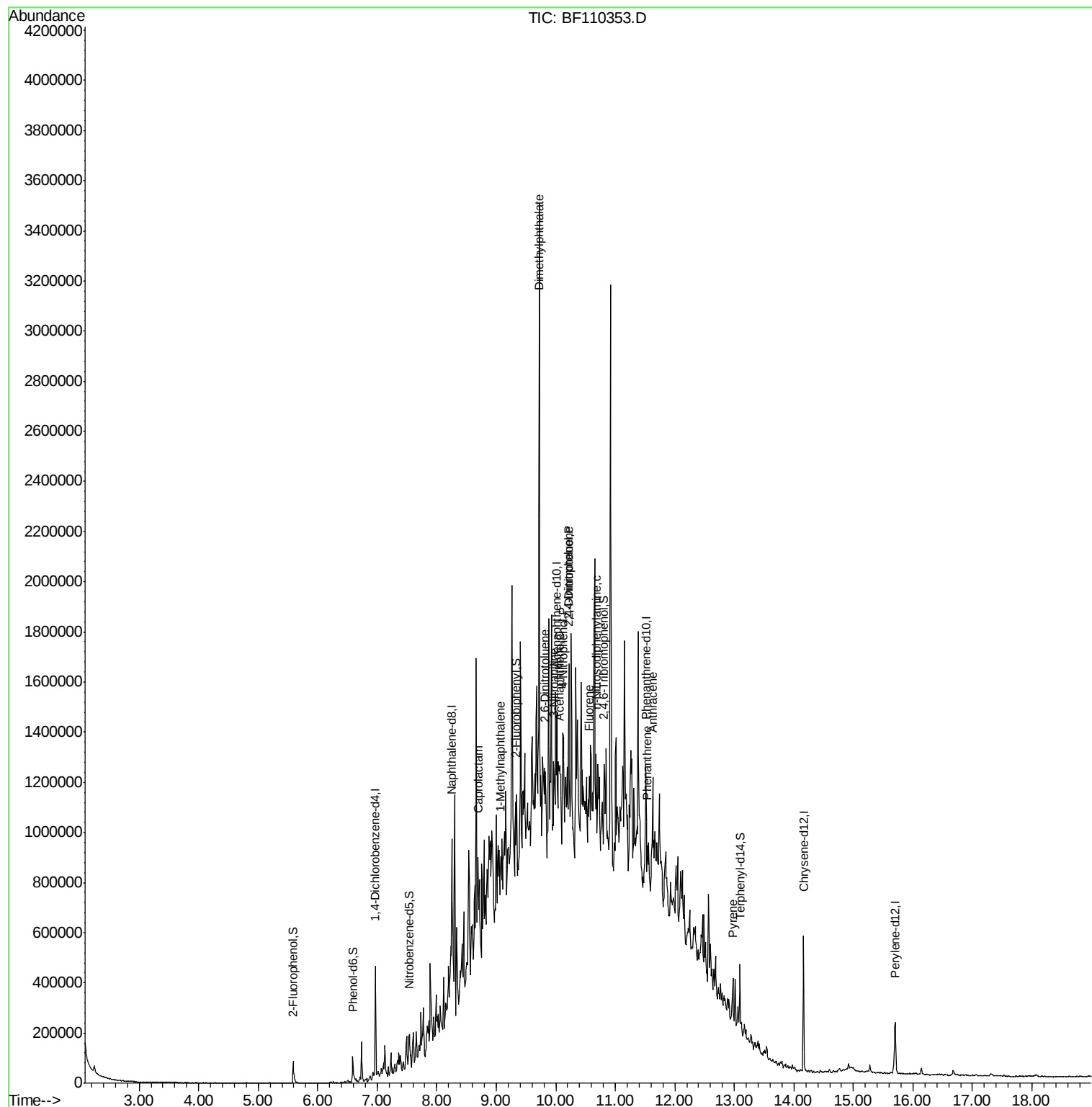
|                            |       |     |       |           |   |    |
|----------------------------|-------|-----|-------|-----------|---|----|
| Target Compounds           |       |     |       | Qvalue    |   |    |
| 9) Benzaldehyde            | 6.74  | 77  | 844   | Below Cal | # | 56 |
| 35) Caprolactam            | 8.69  | 113 | 3626  | 3.423 ng  | # | 1  |
| 38) 1-Methylnaphthalene    | 9.07  | 142 | 27326 | 4.233 ng  | # | 90 |
| 50) Dimethylphthalate      | 9.72  | 163 | 13548 | 2.183 ng  | # | 1  |
| 51) 2,6-Dinitrotoluene     | 9.81  | 165 | 2942  | 2.200 ng  | # | 66 |
| 52) Acenaphthene           | 10.06 | 154 | 13679 | 2.567 ng  | # | 63 |
| 53) 3-Nitroaniline         | 9.97  | 138 | 7466  | 4.696 ng  | # | 18 |
| 54) 2,4-Dinitrophenol      | 10.21 | 184 | 652   | 6.324 ng  | # | 1  |
| 56) 4-Nitrophenol          | 10.12 | 139 | 12935 | 10.992 ng | # | 9  |
| 57) 2,4-Dinitrotoluene     | 10.22 | 165 | 10208 | 6.011 ng  | # | 64 |
| 58) Fluorene               | 10.57 | 166 | 15399 | 2.773 ng  | # | 76 |
| 66) n-Nitrosodiphenylamine | 10.67 | 169 | 94224 | 18.750 ng | # | 40 |
| 71) Phenanthrene           | 11.54 | 178 | 35179 | 4.388 ng  | # | 82 |
| 72) Anthracene             | 11.63 | 178 | 34180 | 4.254 ng  | # | 1  |
| 77) Benzidine              | 12.86 | 184 | 199   | Below Cal | # | 1  |
| 78) Pyrene                 | 12.96 | 202 | 34663 | 2.839 ng  | # | 95 |

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

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Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF102318.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
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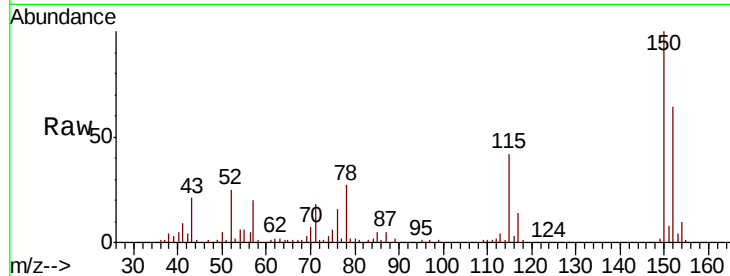


#1

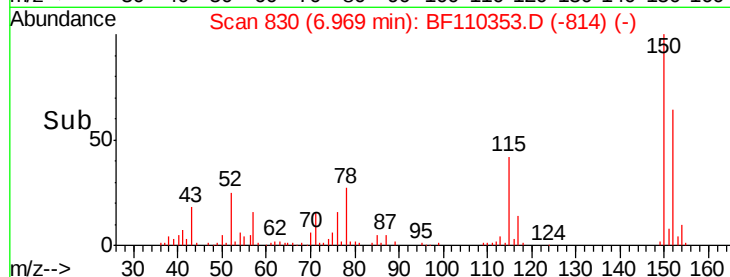
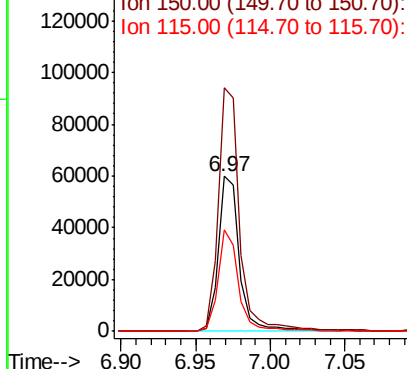
1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.97 min Scan# 830  
 Delta R.T. -0.01 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:152 Resp: 60383  
 Ion Ratio Lower Upper  
 152 100  
 150 157.1 122.7 184.1  
 115 65.2 49.1 73.7



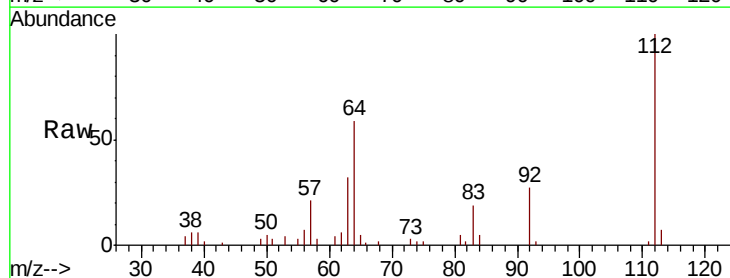
Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E



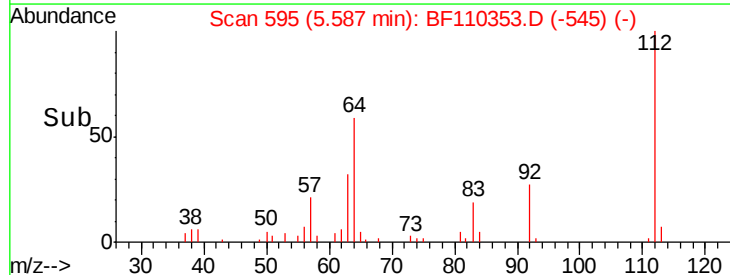
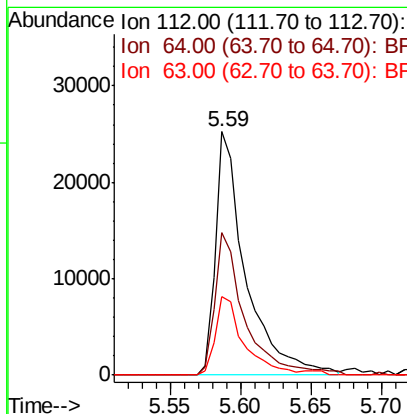
#5

2-Fluorophenol  
 Concen: 10.165 ng  
 RT: 5.59 min Scan# 595  
 Delta R.T. -0.01 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

Tgt Ion:112 Resp: 37691  
 Ion Ratio Lower Upper  
 112 100  
 64 58.6 44.1 66.1  
 63 32.4 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: 10.017 ng

RT: 6.59 min Scan# 765

Delta R.T. -0.02 min

Lab File: BF110353.D

Acq: 1 Nov 2018 1:29

Instrument :

BNA\_F

ClientSampled :

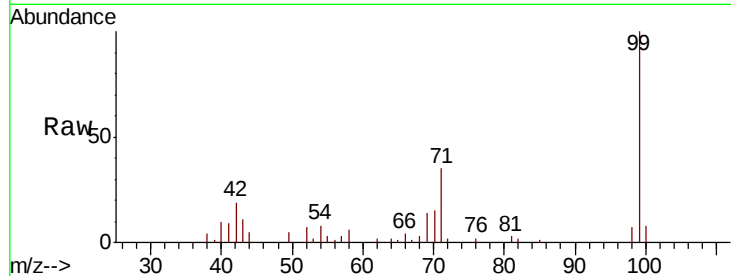
Tot Ion: 99 Resp: 47507

Ion Ratio Lower Upper

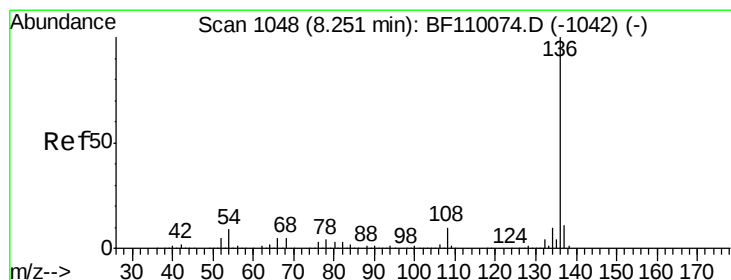
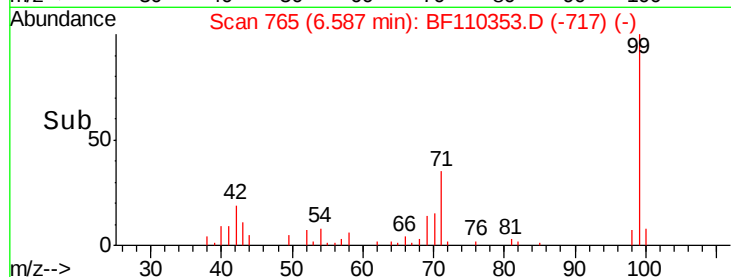
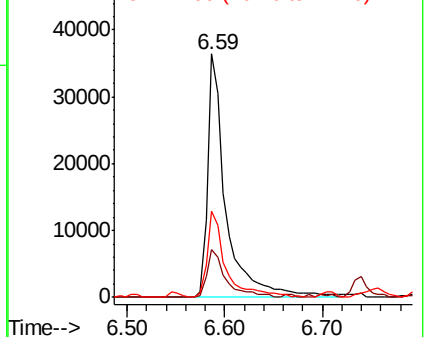
99 100

42 19.5 15.8 23.6

71 35.5 28.0 42.0



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: 8.26 min Scan# 1049

Delta R.T. 0.00 min

Lab File: BF110353.D

Acq: 1 Nov 2018 1:29

Tgt Ion: 136 Resp: 219075

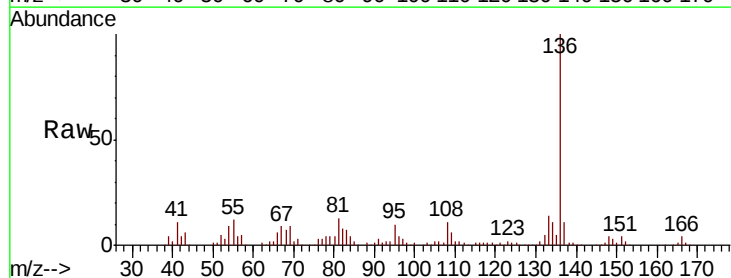
Ion Ratio Lower Upper

136 100

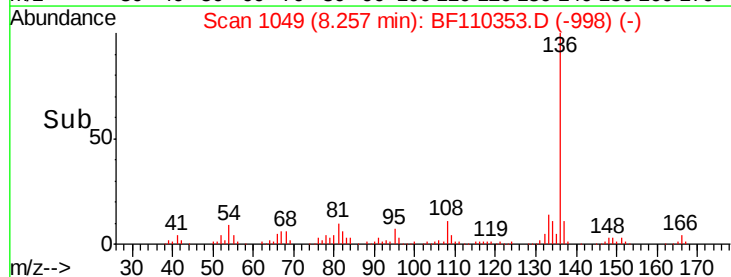
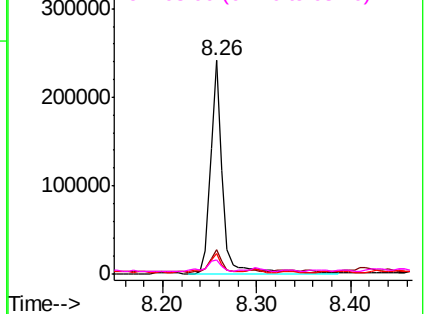
137 11.3 8.8 13.2

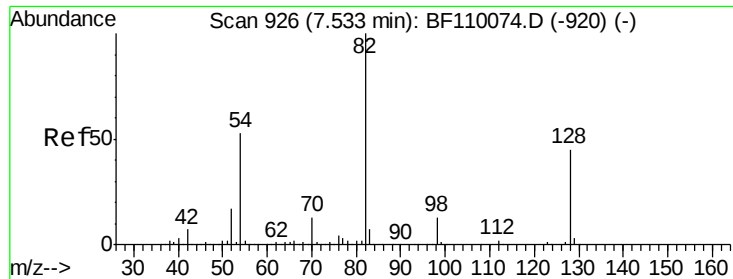
54 9.4 5.4 8.2#

68 6.8 4.2 6.2#



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

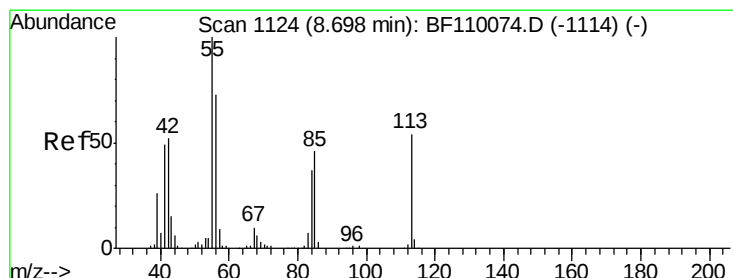
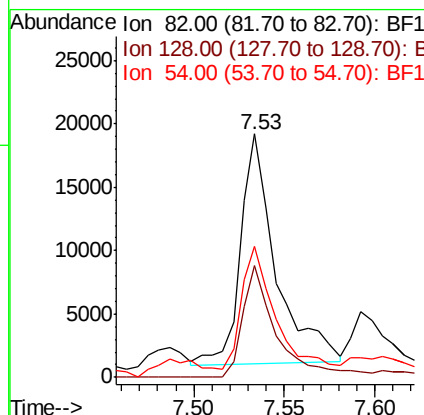
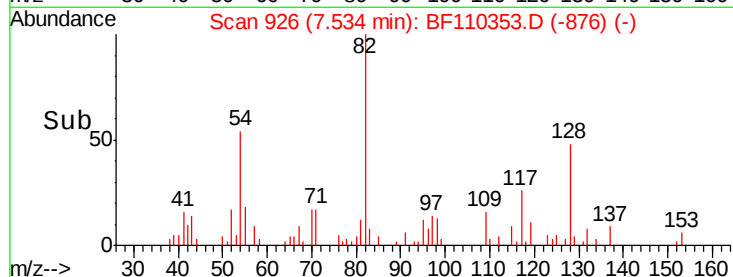
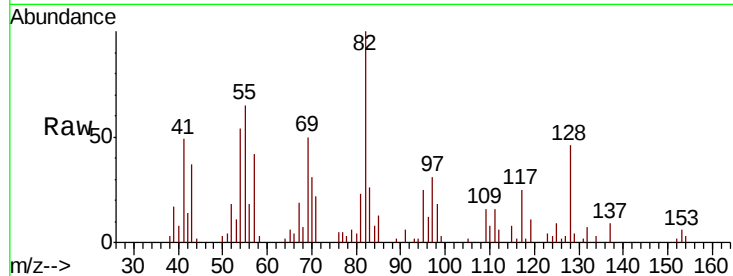




#23  
 Nitrobenzene-d5  
 Concen: 6.681 ng  
 RT: 7.53 min Scan# 926  
 Delta R.T. -0.01 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

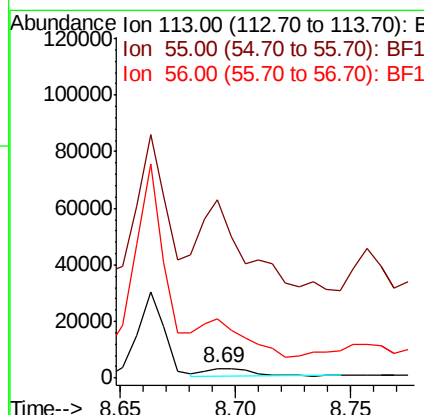
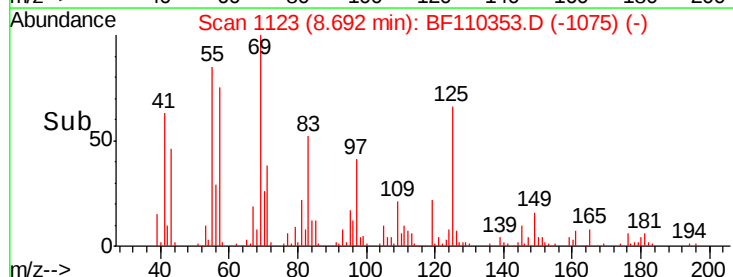
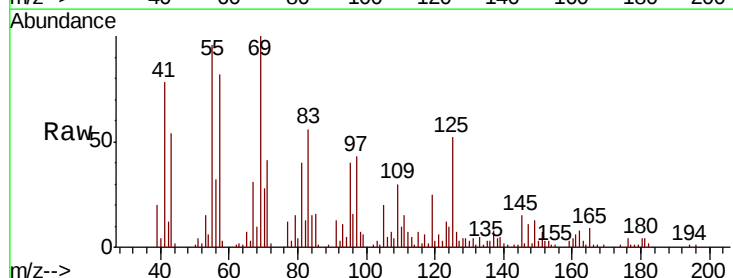
Instrument :  
 BNA\_F  
 ClientSampleId :

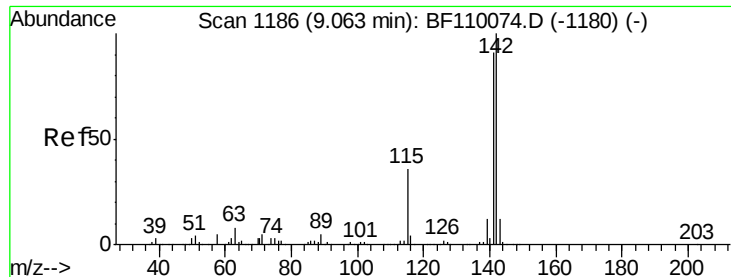
Tot Ion: 82 Resp: 24676  
 Ion Ratio Lower Upper  
 82 100  
 128 45.9 34.2 51.2  
 54 53.9 38.6 58.0



#35  
 Caprolactam  
 Concen: 3.423 ng  
 RT: 8.69 min Scan# 1123  
 Delta R.T. -0.02 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

Tgt Ion: 113 Resp: 3626  
 Ion Ratio Lower Upper  
 113 100  
 55 1810.5 142.8 182.8#  
 56 605.4 105.0 145.0#

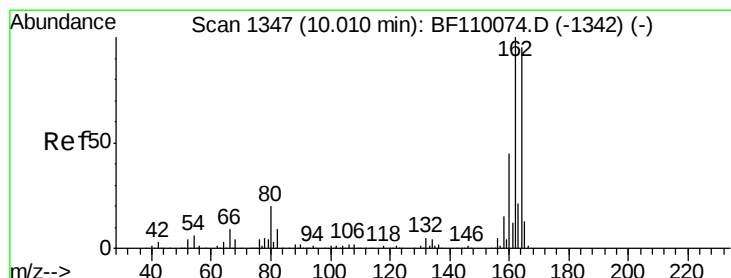
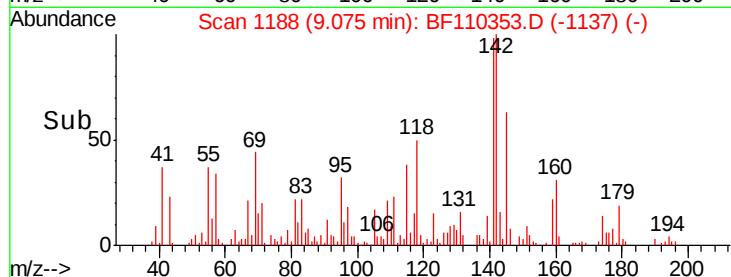
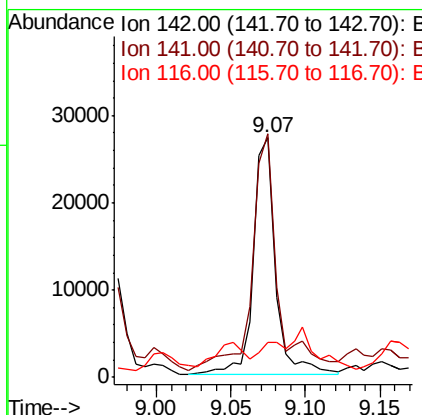
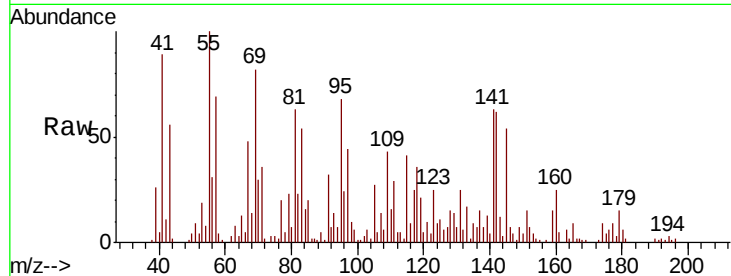




#38  
 1-Methylnaphthalene  
 Concen: 4.233 ng  
 RT: 9.07 min Scan# 1188  
 Delta R.T. 0.00 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

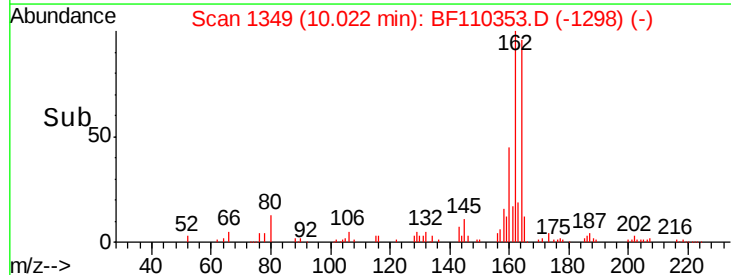
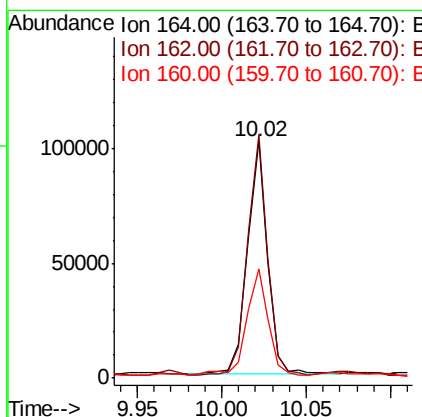
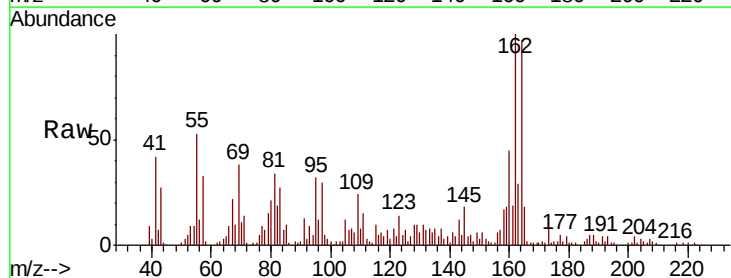
Instrument :  
 BNA\_F  
 ClientSampleId :

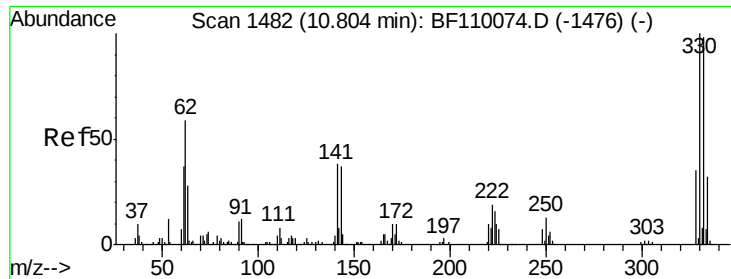
Tot Ion:142 Resp: 27326  
 Ion Ratio Lower Upper  
 142 100  
 141 101.7 74.2 111.4  
 116 14.5 2.6 4.0#



#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 10.02 min Scan# 1349  
 Delta R.T. 0.00 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

Tgt Ion:164 Resp: 84086  
 Ion Ratio Lower Upper  
 164 100  
 162 102.8 83.0 124.6  
 160 46.4 37.0 55.6

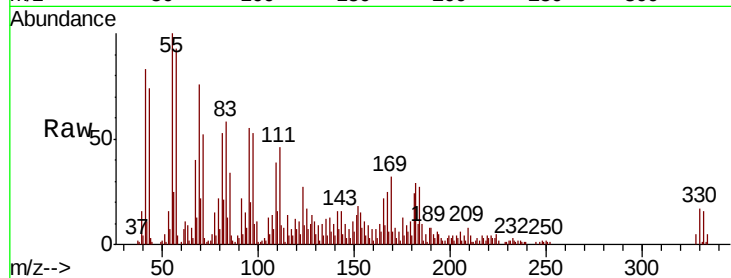




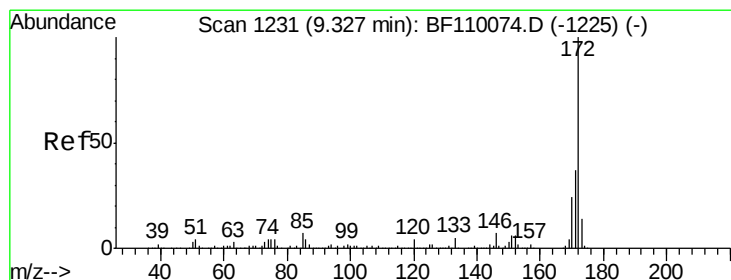
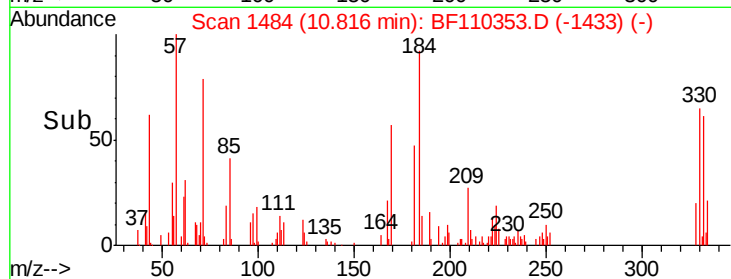
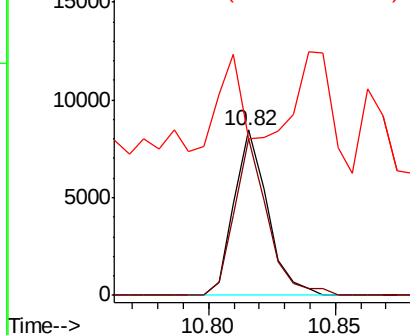
#42  
 2,4,6-Tribromophenol  
 Concen: 9.374 ng  
 RT: 10.82 min Scan# 1484  
 Delta R.T. 0.00 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:330 Resp: 7808  
 Ion Ratio Lower Upper  
 330 100  
 332 93.0 77.1 115.7  
 141 109.2 27.0 40.4#

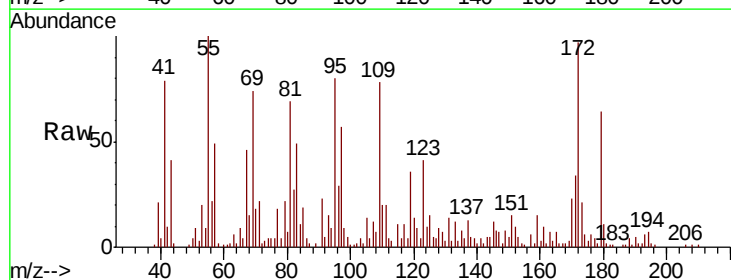


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

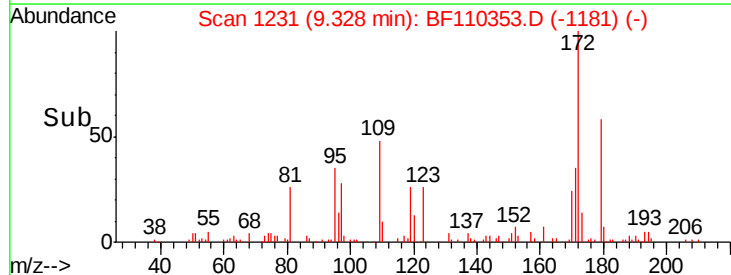
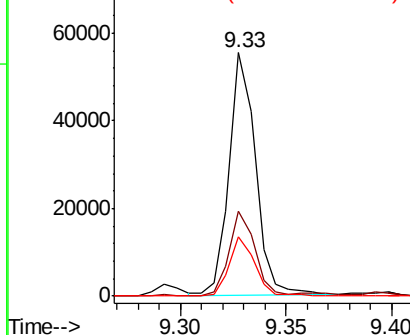


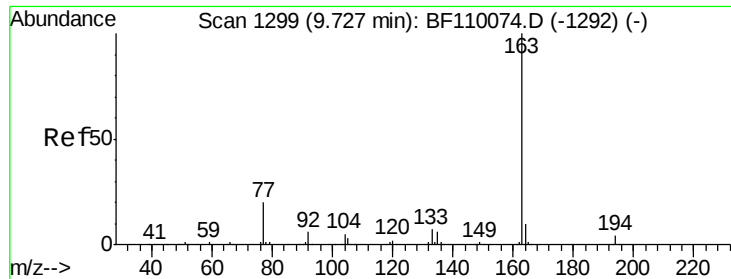
#45  
 2-Fluorobiphenyl  
 Concen: 8.929 ng  
 RT: 9.33 min Scan# 1231  
 Delta R.T. -0.01 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

Tgt Ion:172 Resp: 47816  
 Ion Ratio Lower Upper  
 172 100  
 171 34.8 28.6 43.0  
 170 24.1 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

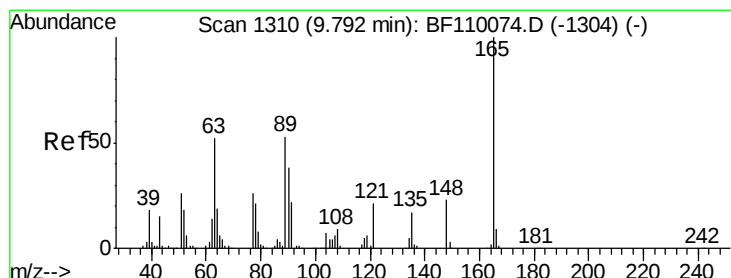
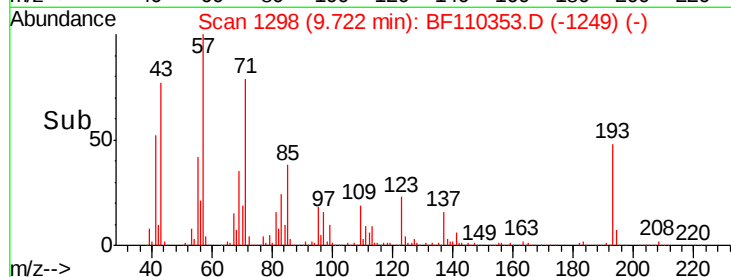
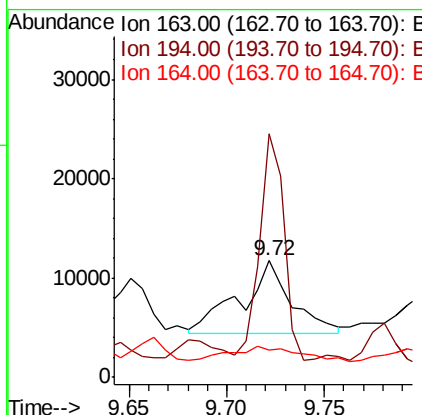
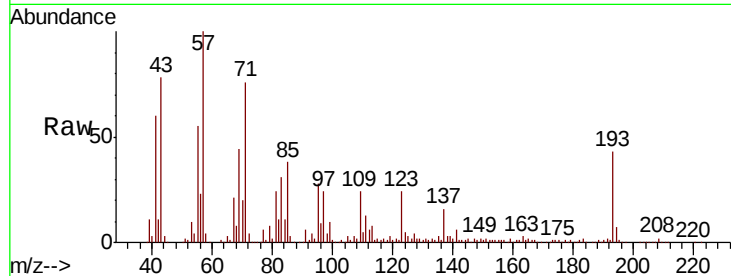




#50  
Dimethylphthalate  
Concen: 2.183 ng  
RT: 9.72 min Scan# 1298  
Delta R.T. -0.01 min  
Lab File: BF110353.D  
Acq: 1 Nov 2018 1:29

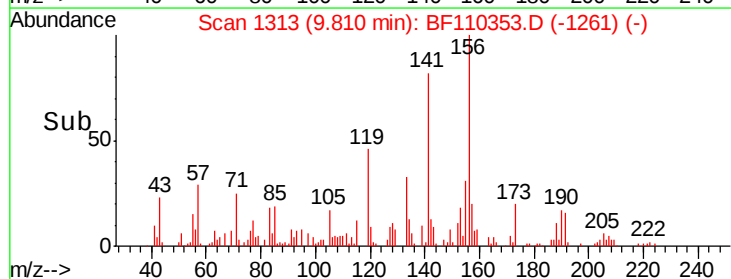
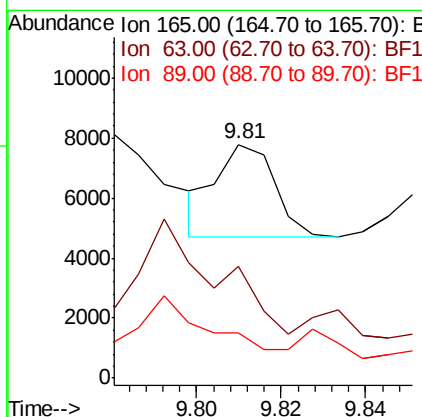
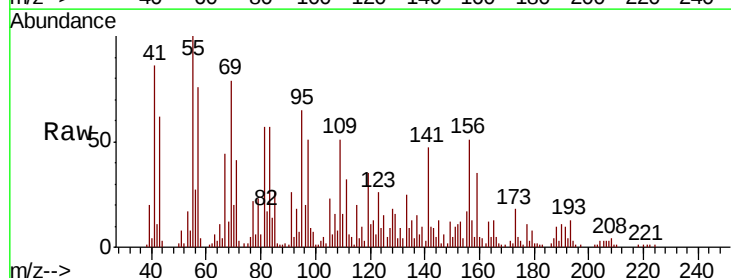
Instrument :  
BNA\_F  
ClientSampled :

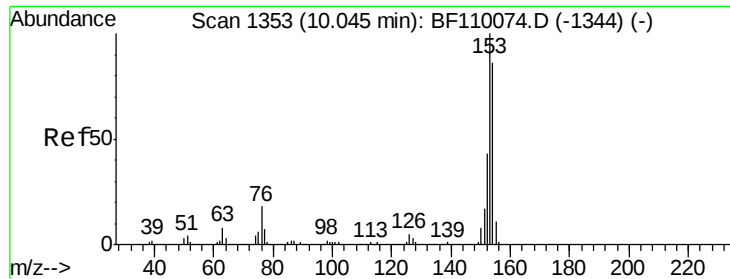
Tot Ion:163 Resp: 13548  
Ion Ratio Lower Upper  
163 100  
194 208.8 3.2 4.8#  
164 23.8 8.1 12.1#



#51  
2,6-Dinitrotoluene  
Concen: 2.200 ng  
RT: 9.81 min Scan# 1313  
Delta R.T. 0.01 min  
Lab File: BF110353.D  
Acq: 1 Nov 2018 1:29

Tgt Ion:165 Resp: 2942  
Ion Ratio Lower Upper  
165 100  
63 47.7 48.9 73.3#  
89 19.6 46.6 69.8#





#52

Acenaphthene

Concen: 2.567 ng

RT: 10.06 min Scan# 1355

Delta R.T. 0.00 min

Lab File: BF110353.D

Acq: 1 Nov 2018 1:29

Instrument :

BNA\_F

ClientSampled :

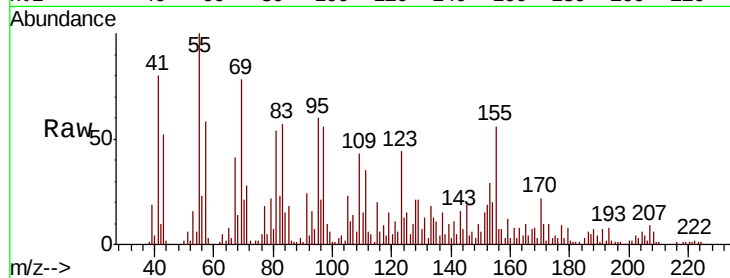
Tot Ion:154 Resp: 13679

Ion Ratio Lower Upper

154 100

153 142.9 90.1 135.1#

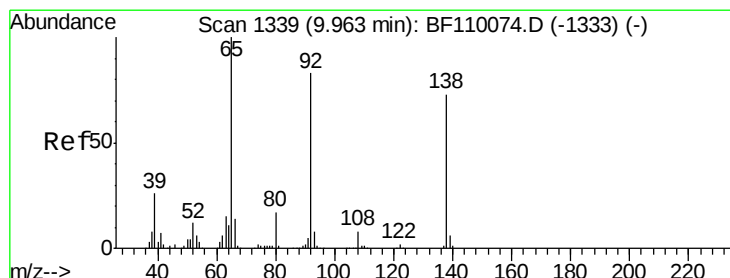
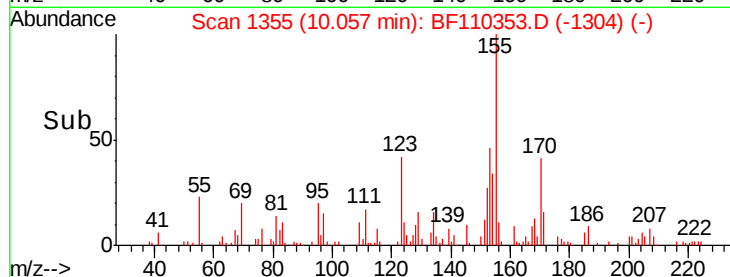
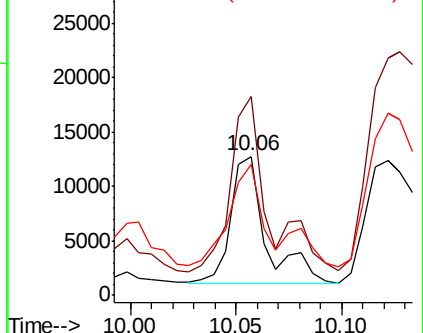
152 94.1 43.4 65.2#



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



#53

3-Nitroaniline

Concen: 4.696 ng

RT: 9.97 min Scan# 1340

Delta R.T. -0.01 min

Lab File: BF110353.D

Acq: 1 Nov 2018 1:29

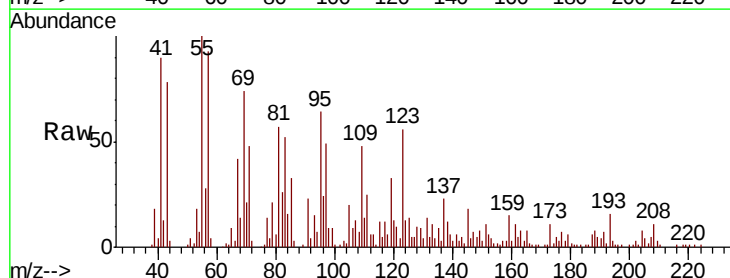
Tgt Ion:138 Resp: 7466

Ion Ratio Lower Upper

138 100

108 58.6 8.7 13.1#

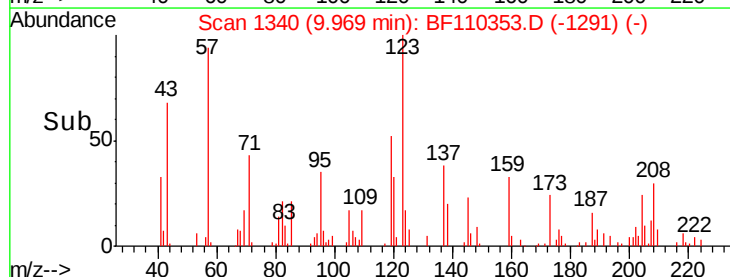
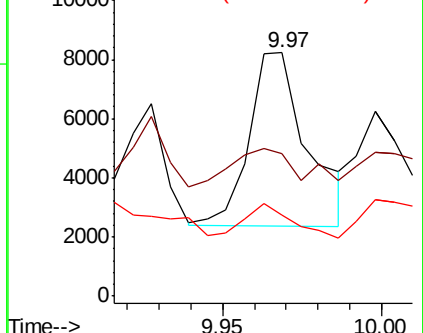
92 33.4 97.0 145.4#

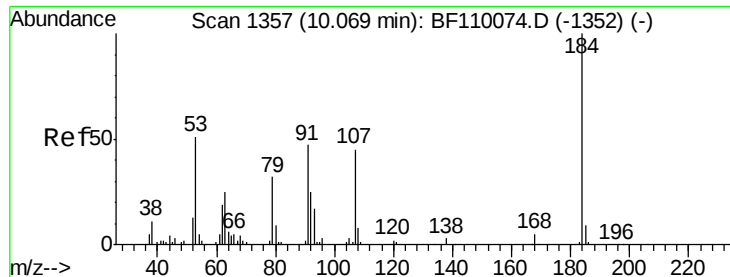


Abundance Ion 138.00 (137.70 to 138.70): E

Ion 108.00 (107.70 to 108.70): E

Ion 92.00 (91.70 to 92.70): BF1

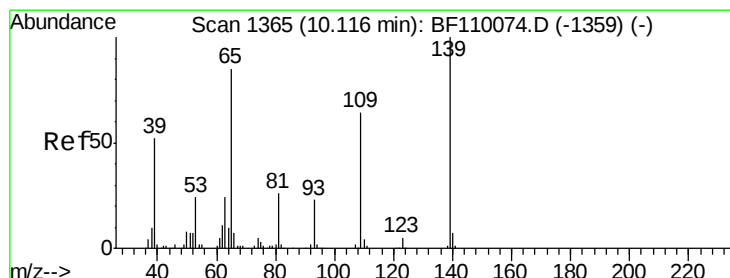
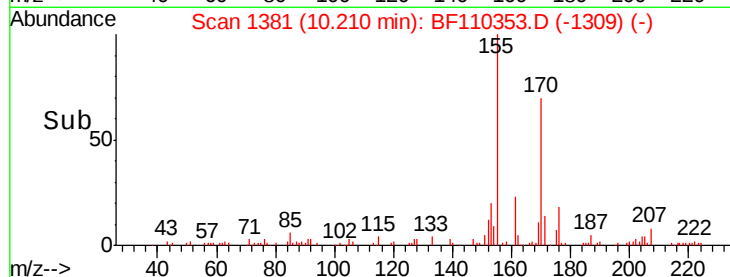
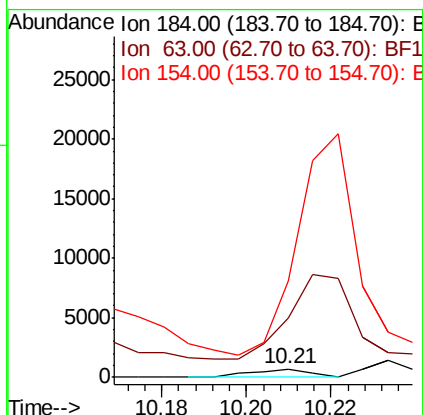
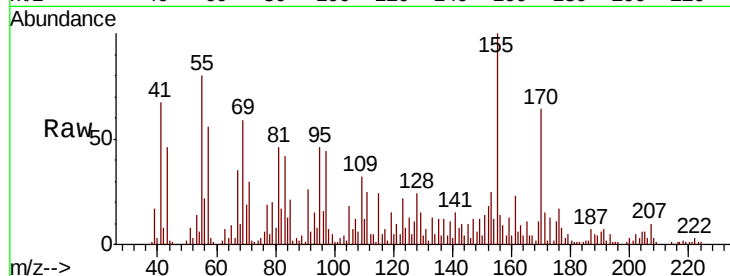




#54  
 2,4-Dinitrophenol  
 Concen: 6.324 ng  
 RT: 10.21 min Scan# 1381  
 Delta R.T. 0.12 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

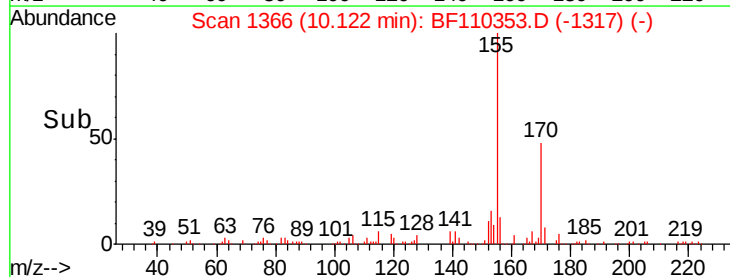
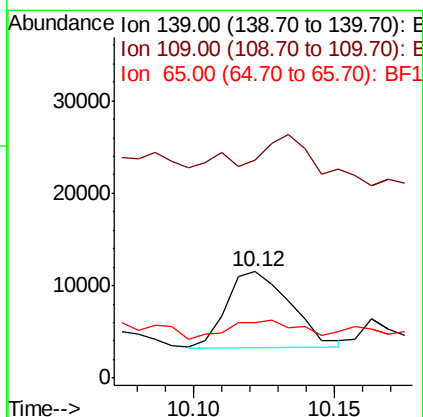
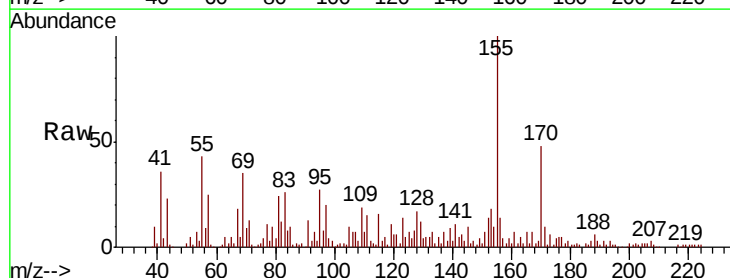
Instrument :  
 BNA\_F  
 ClientSampled :

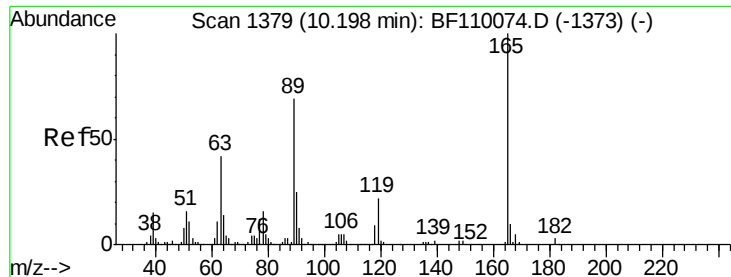
Tot Ion:184 Resp: 652  
 Ion Ratio Lower Upper  
 184 100  
 63 721.9 55.8 83.6#  
 154 1179.3 63.2 94.8#



#56  
 4-Nitrophenol  
 Concen: 10.992 ng  
 RT: 10.12 min Scan# 1366  
 Delta R.T. -0.01 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

Tgt Ion:139 Resp: 12935  
 Ion Ratio Lower Upper  
 139 100  
 109 204.2 55.8 95.8#  
 65 52.3 77.9 117.9#





#57

2,4-Dinitrotoluene

Concen: 6.011 ng

RT: 10.22 min Scan# 1383

Delta R.T. 0.01 min

Lab File: BF110353.D

Acq: 1 Nov 2018 1:29

Instrument :

BNA\_F

ClientSampleId :

Tot Ion:165 Resp: 10208

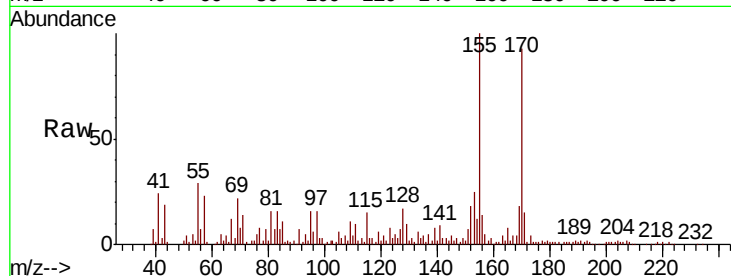
Ion Ratio Lower Upper

165 100

63 62.7 44.8 67.2

89 29.4 62.2 93.4#

182 12.5 2.1 3.1#

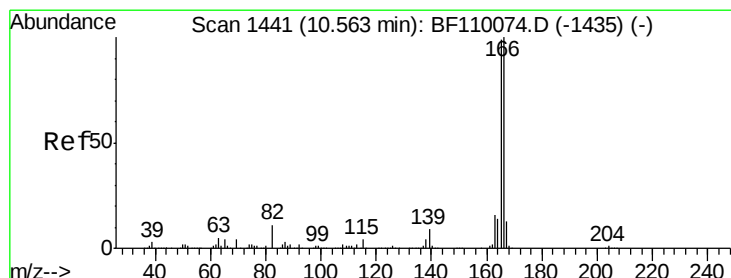
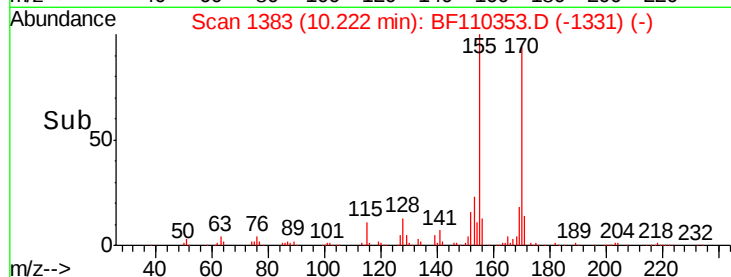
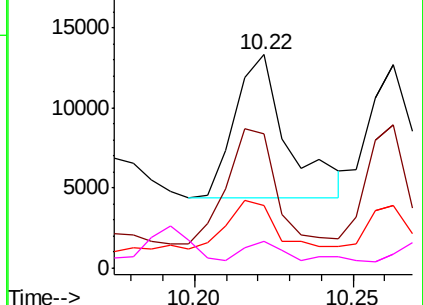


Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF1

Ion 89.00 (88.70 to 89.70): BF1

Ion 182.00 (181.70 to 182.70): E



#58

Fluorene

Concen: 2.773 ng

RT: 10.57 min Scan# 1442

Delta R.T. -0.01 min

Lab File: BF110353.D

Acq: 1 Nov 2018 1:29

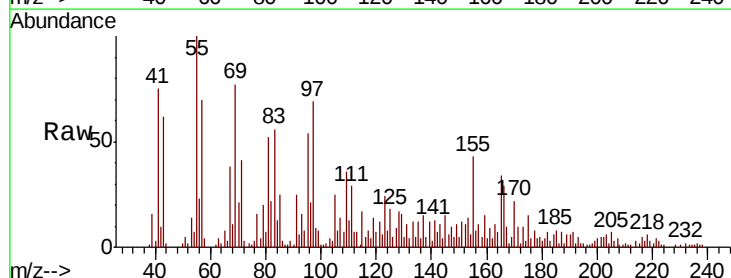
Tgt Ion:166 Resp: 15399

Ion Ratio Lower Upper

166 100

165 117.8 78.6 117.8

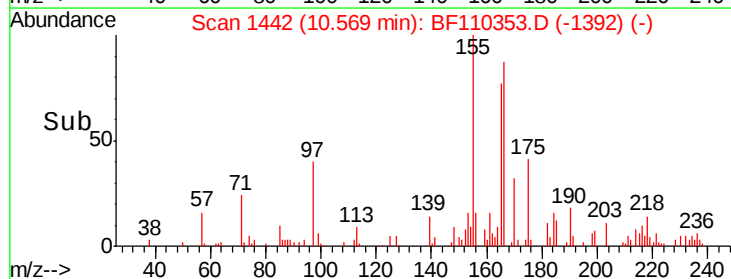
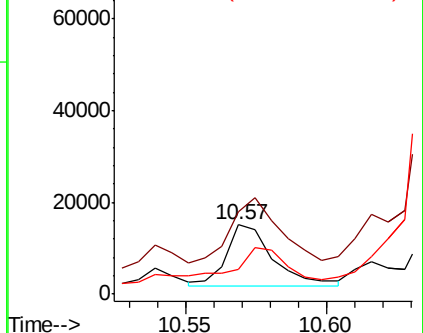
167 35.4 10.8 16.2#

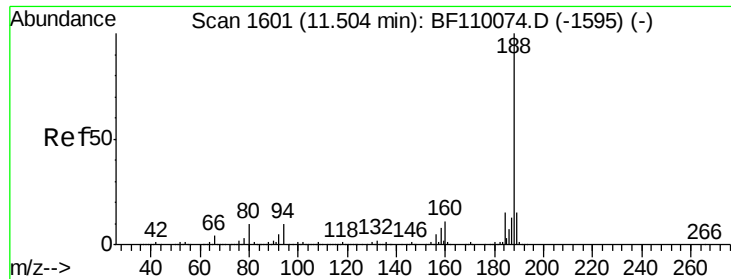


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E

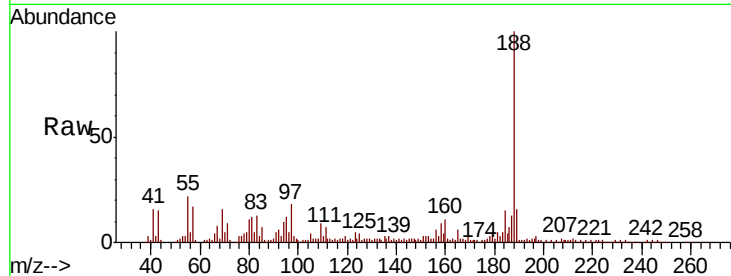




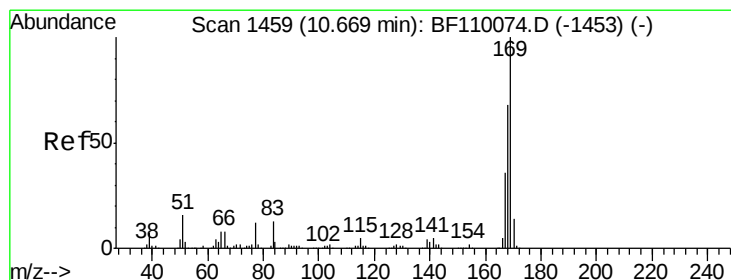
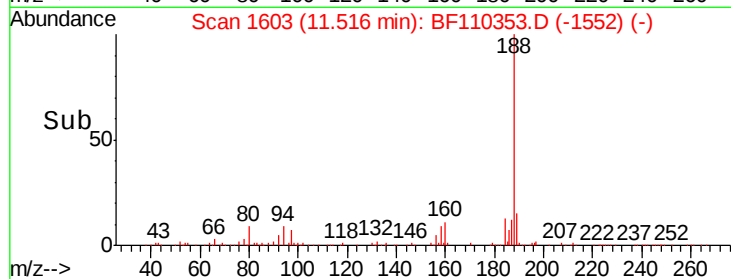
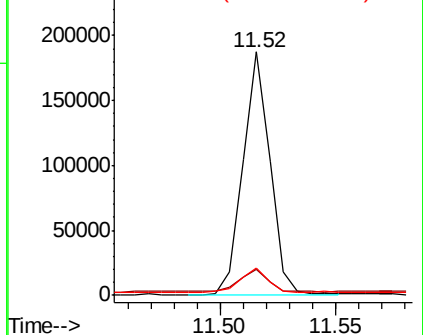
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.52 min Scan# 1603  
Delta R.T. 0.00 min  
Lab File: BF110353.D  
Acq: 1 Nov 2018 1:29

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:188 Resp: 153208  
Ion Ratio Lower Upper  
188 100  
94 10.4 7.2 10.8  
80 11.1 7.9 11.9

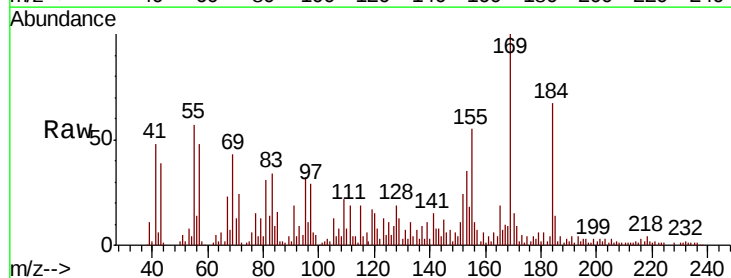


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF1  
Ion 80.00 (79.70 to 80.70): BF1

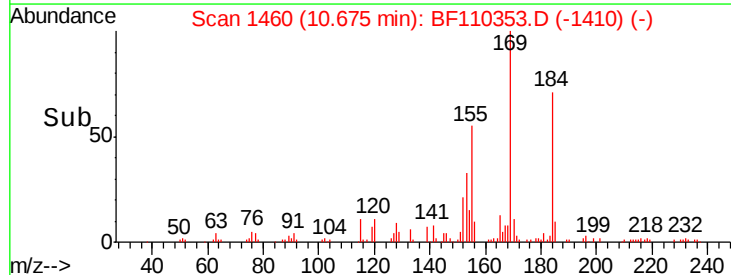
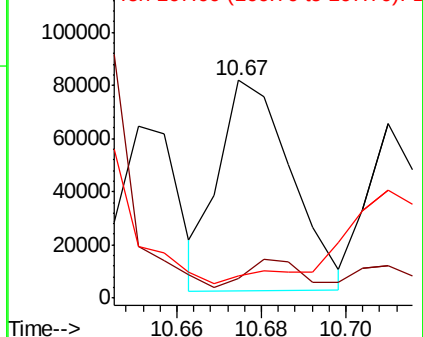


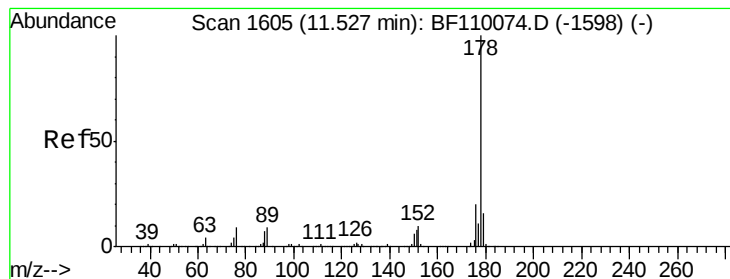
#66  
n-Nitrosodiphenylamine  
Concen: 18.750 ng  
RT: 10.67 min Scan# 1460  
Delta R.T. -0.01 min  
Lab File: BF110353.D  
Acq: 1 Nov 2018 1:29

Tgt Ion:169 Resp: 94224  
Ion Ratio Lower Upper  
169 100  
168 9.1 51.2 76.8#  
167 10.0 27.8 41.6#



Abundance Ion 169.00 (168.70 to 169.70): E  
Ion 168.00 (167.70 to 168.70): E  
Ion 167.00 (166.70 to 167.70): E





#71

Phenanthrene

Concen: 4.388 ng

RT: 11.54 min Scan# 1607

Delta R.T. -0.01 min

Lab File: BF110353.D

Acq: 1 Nov 2018 1:29

Instrument :

BNA\_F

ClientSampleId :

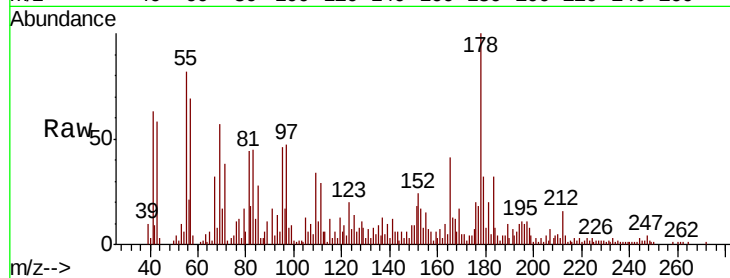
Tot Ion:178 Resp: 35179

Ion Ratio Lower Upper

178 100

176 20.2 15.5 23.3

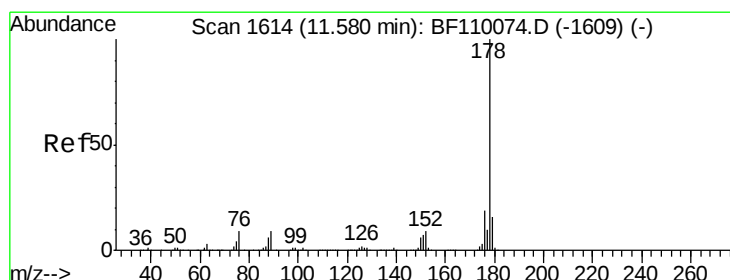
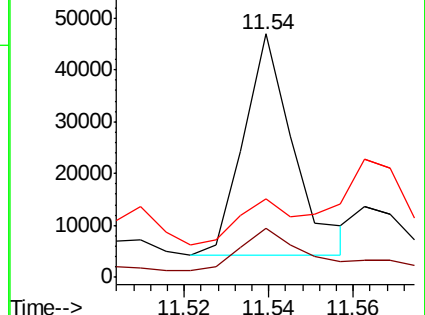
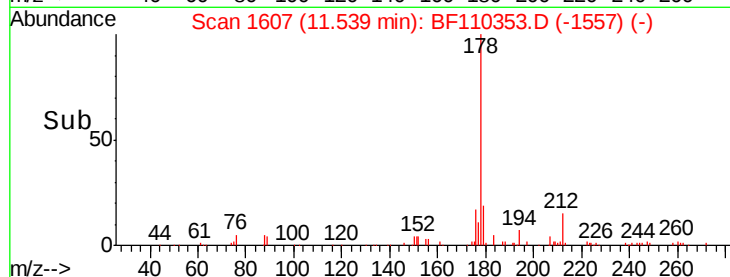
179 32.1 12.5 18.7#



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



#72

Anthracene

Concen: 4.254 ng

RT: 11.63 min Scan# 1622

Delta R.T. 0.04 min

Lab File: BF110353.D

Acq: 1 Nov 2018 1:29

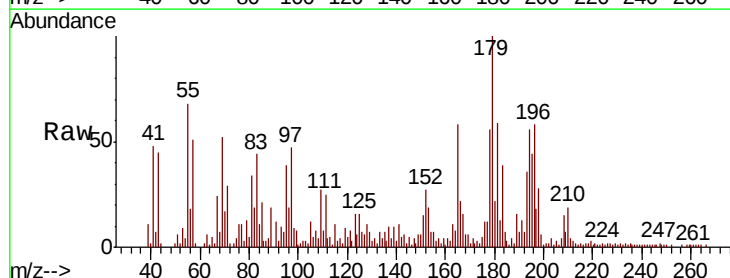
Tgt Ion:178 Resp: 34180

Ion Ratio Lower Upper

178 100

176 22.0 15.4 23.2

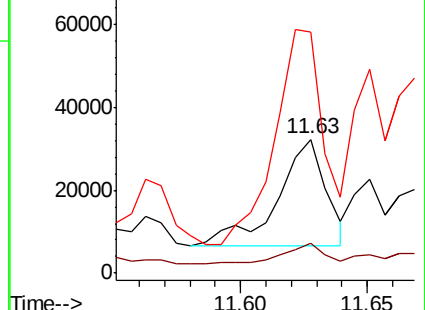
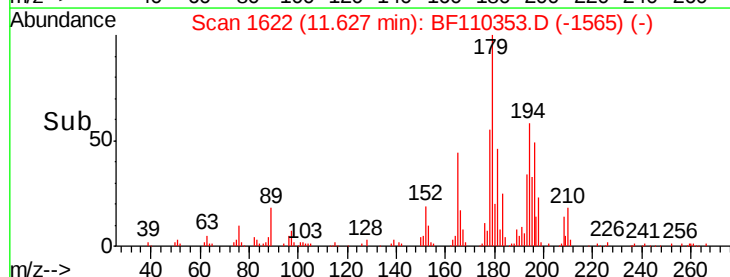
179 179.7 12.6 18.8#

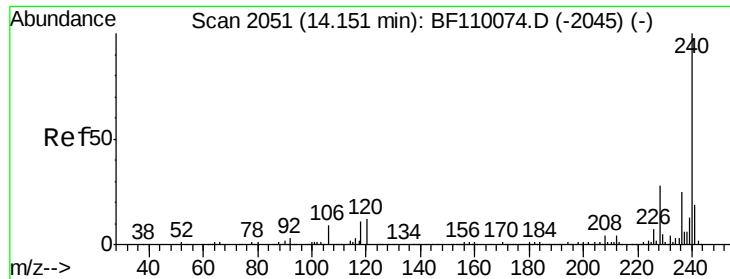


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E

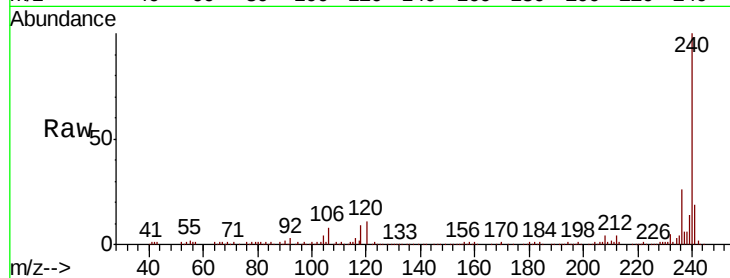




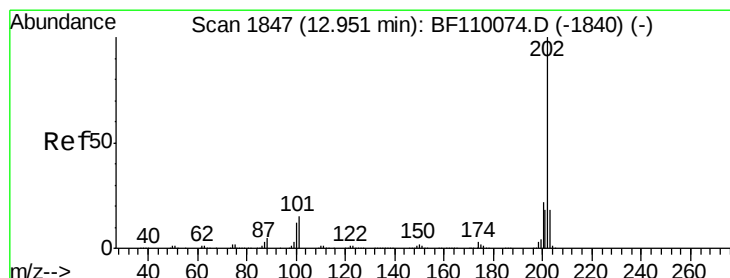
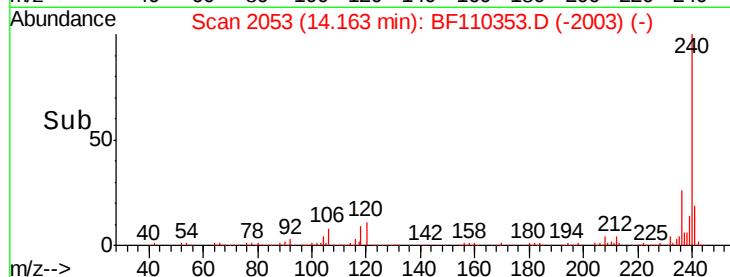
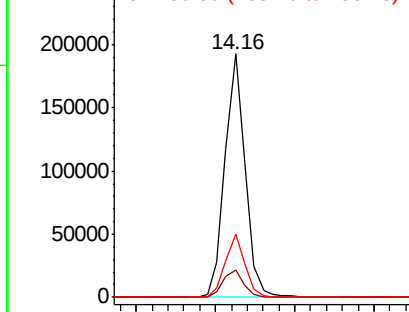
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.16 min Scan# 2053  
Delta R.T. -0.01 min  
Lab File: BF110353.D  
Acq: 1 Nov 2018 1:29

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:240 Resp: 170330  
Ion Ratio Lower Upper  
240 100  
120 11.1 8.3 12.5  
236 26.0 21.2 31.8

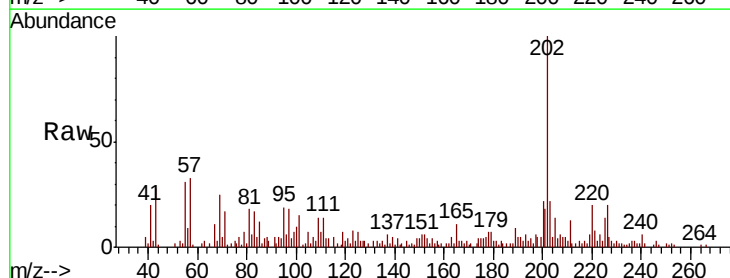


Abundance Ion 240.00 (239.70 to 240.70): E  
Ion 120.00 (119.70 to 120.70): E  
Ion 236.00 (235.70 to 236.70): E

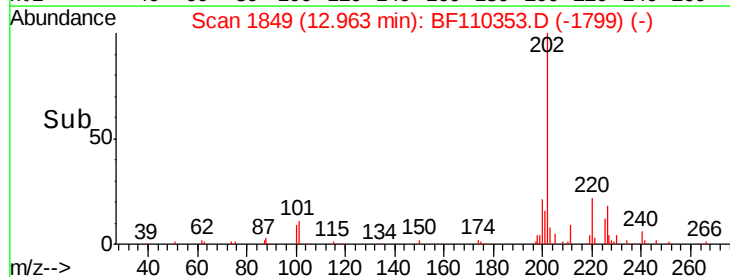
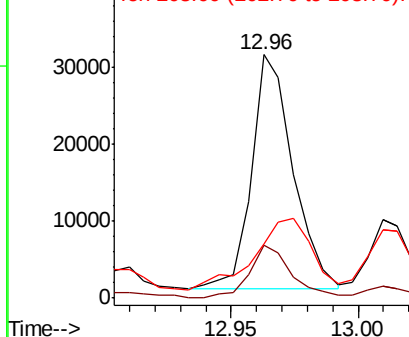


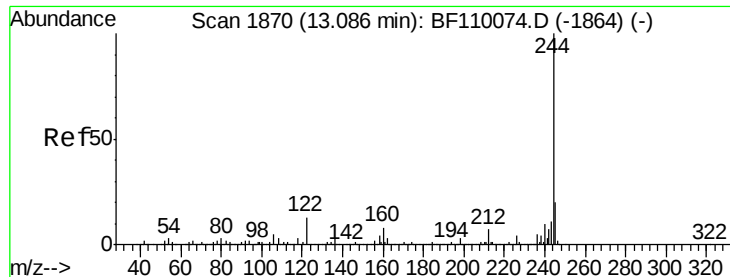
#78  
Pyrene  
Concen: 2.839 ng  
RT: 12.96 min Scan# 1849  
Delta R.T. -0.01 min  
Lab File: BF110353.D  
Acq: 1 Nov 2018 1:29

Tgt Ion:202 Resp: 34663  
Ion Ratio Lower Upper  
202 100  
200 21.6 17.8 26.6  
203 22.0 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

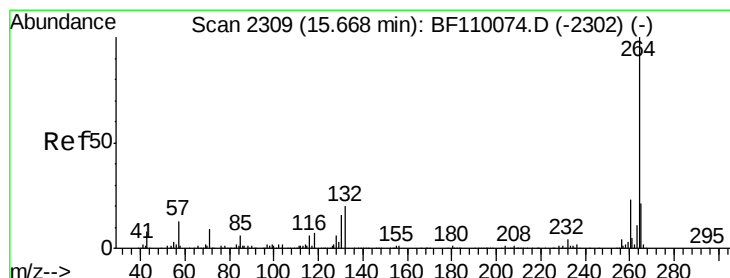
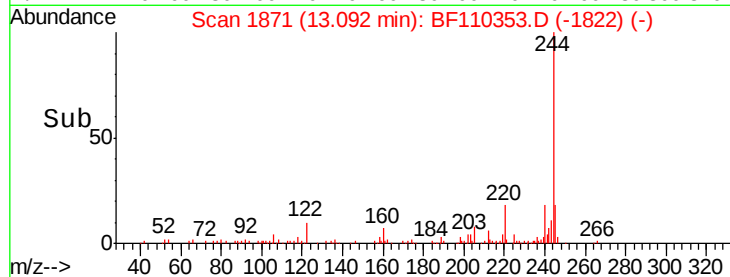
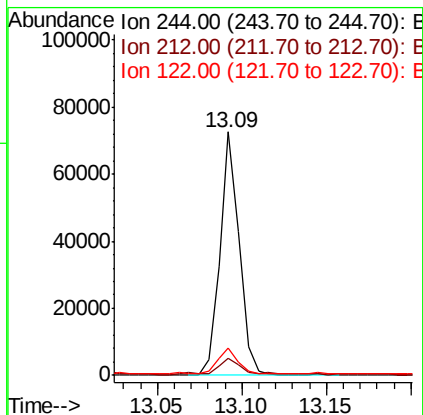
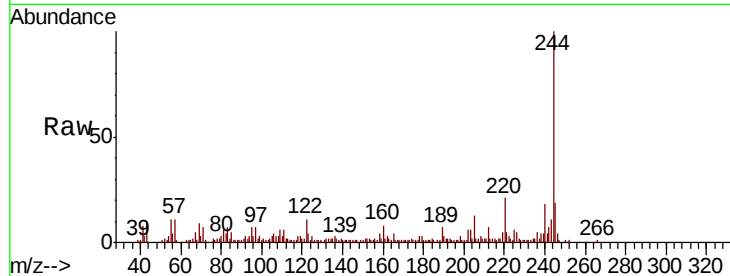




#79  
 Terphenyl-d14  
 Concen: 7.101 ng  
 RT: 13.09 min Scan# 1871  
 Delta R.T. -0.01 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.9   | 5.8   | 8.8   |
| 122     | 11.1  | 8.7   | 13.1  |



#87  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 15.70 min Scan# 2315  
 Delta R.T. 0.00 min  
 Lab File: BF110353.D  
 Acq: 1 Nov 2018 1:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.9  | 18.7  | 28.1  |
| 265     | 21.6  | 16.7  | 25.1  |

