

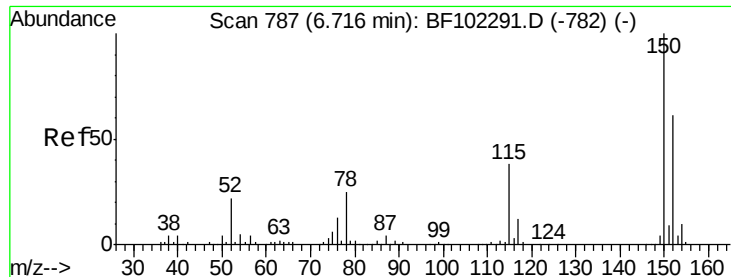
Data Path : Z:\HPCHEM1\BNA F\DATA\BF013018\  
 Data File : BF102646.D  
 Acq On : 30 Jan 2018 18:20  
 Operator : SJ/JU  
 Sample : J1365-01  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-CUTTINGS

Quant Time: Jan 31 02:48:18 2018  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF012218.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jan 27 20:48:40 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.71  | 152  | 147273   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 7.99  | 136  | 605670   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10        | 9.75  | 164  | 276753   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.23 | 188  | 487042   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12            | 13.87 | 240  | 366469   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12            | 15.30 | 264  | 262857   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.34  | 112  | 1137010  | 117.06 | ng    | 0.02     |
| 7) Phenol-d6                | 6.36  | 99   | 1251060  | 106.84 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.28  | 82   | 990005   | 93.93  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.54 | 330  | 327711   | 119.51 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.07  | 172  | 1673362  | 88.90  | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.82 | 244  | 1570724  | 96.62  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 31) Naphthalene             | 8.02  | 128  | 818586   | 27.069 | ng    | 100      |
| 37) 2-Methylnaphthalene     | 8.71  | 142  | 41351    | 2.053  | ng    | 98       |

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

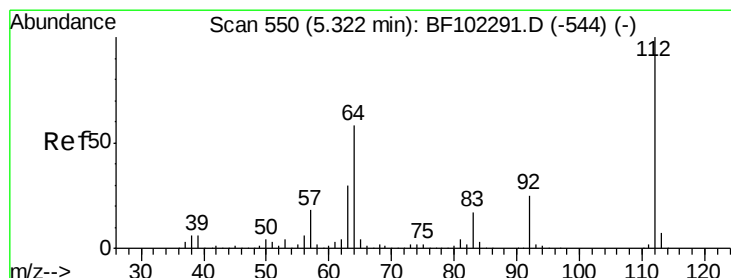
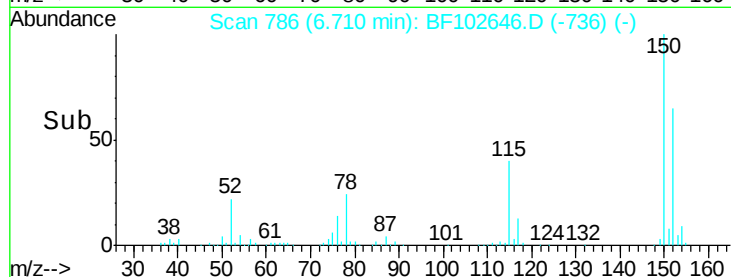
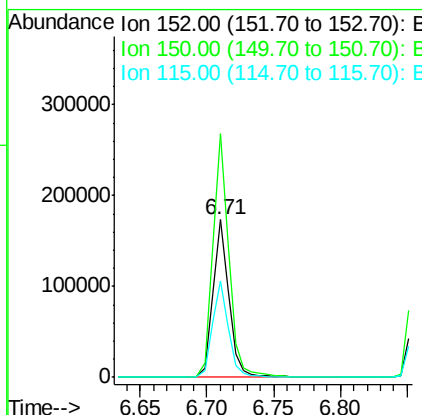
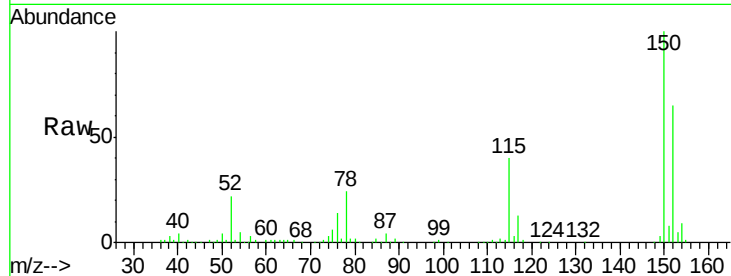


#1

1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.71 min Scan# 786  
 Delta R.T. -0.01 min  
 Lab File: BF102646.D  
 Acq: 30 Jan 2018 18:20

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-CUTTINGS

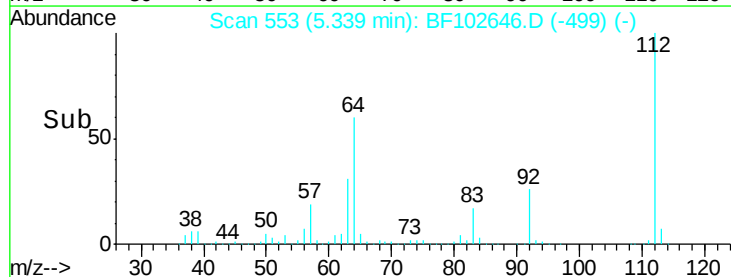
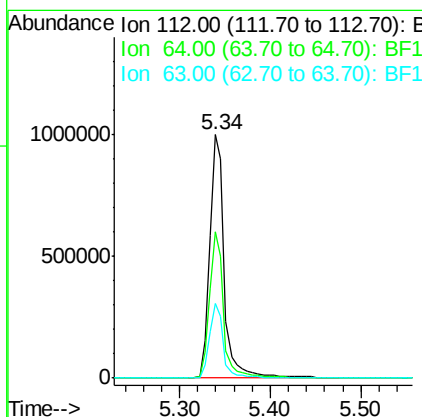
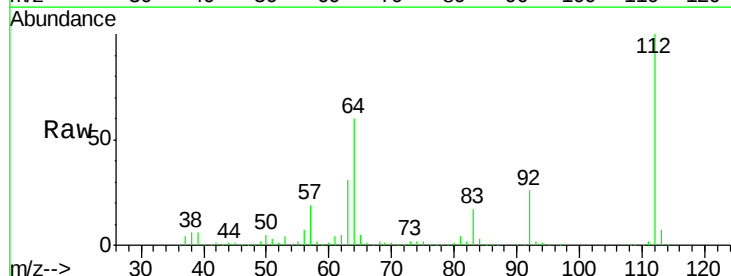
Tot Ion:152 Resp: 147273  
 Ion Ratio Lower Upper  
 152 100  
 150 154.8 124.6 186.8  
 115 61.2 50.1 75.1

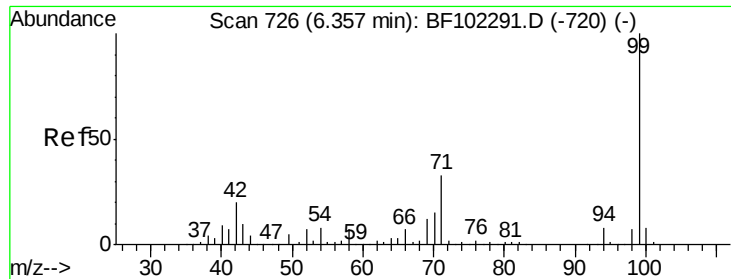


#5

2-Fluorophenol  
 Concen: 117.062 ng  
 RT: 5.34 min Scan# 553  
 Delta R.T. 0.02 min  
 Lab File: BF102646.D  
 Acq: 30 Jan 2018 18:20

Tgt Ion:112 Resp: 1137010  
 Ion Ratio Lower Upper  
 112 100  
 64 60.0 47.9 71.9  
 63 30.8 23.7 35.5





#7

Phenol-d6

Concen: 106.839 ng

RT: 6.36 min Scan# 727

Delta R.T. -0.00 min

Lab File: BF102646.D

Acq: 30 Jan 2018 18:20

Instrument :

BNA\_F

ClientSampleId :

SOIL-CUTTINGS

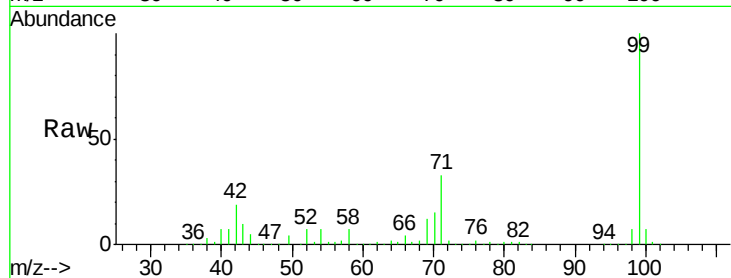
Tot Ion: 99 Resp: 1251060

Ion Ratio Lower Upper

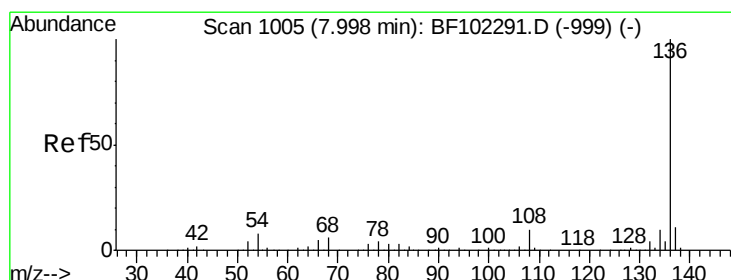
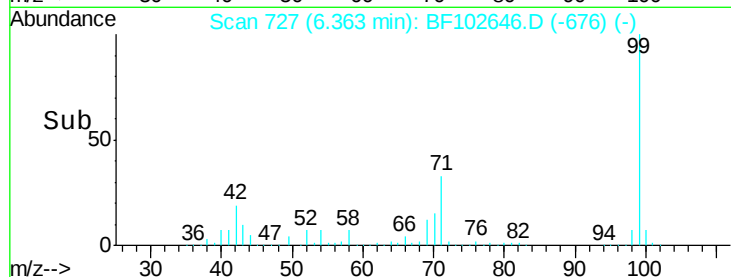
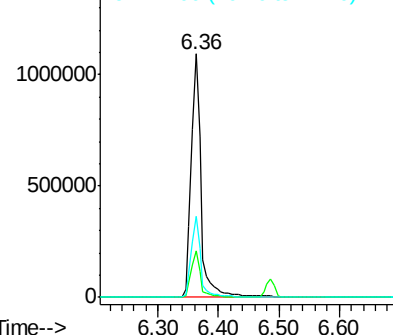
99 100

42 19.2 14.5 21.7

71 33.4 25.4 38.0



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: 7.99 min Scan# 1004

Delta R.T. -0.01 min

Lab File: BF102646.D

Acq: 30 Jan 2018 18:20

Tgt Ion:136 Resp: 605670

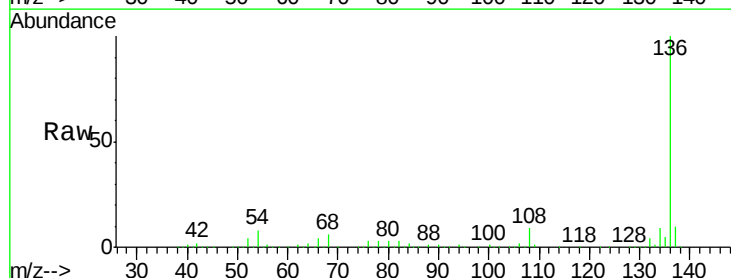
Ion Ratio Lower Upper

136 100

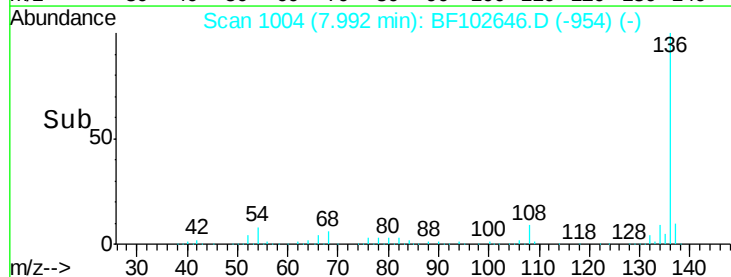
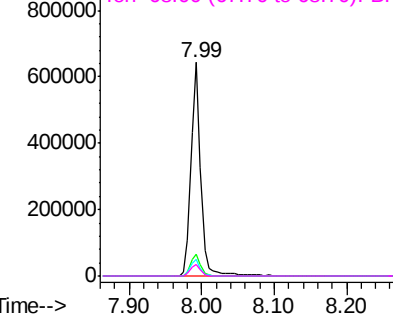
137 10.4 8.9 13.3

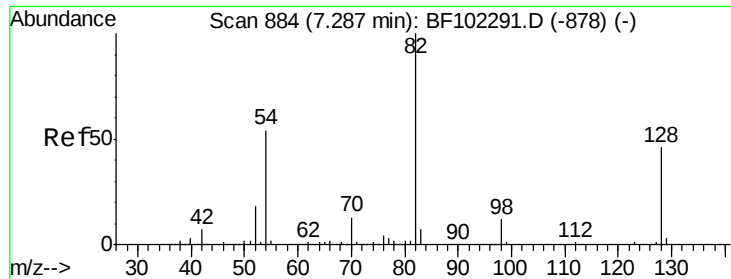
54 7.8 6.6 9.8

68 5.7 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

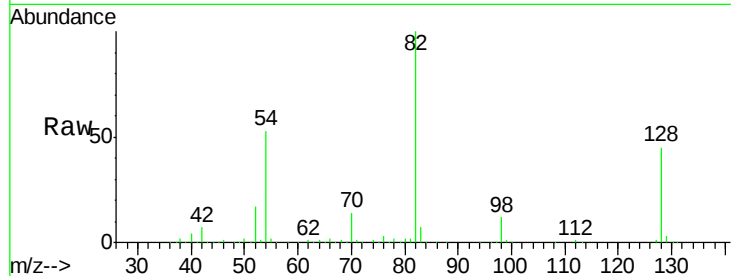




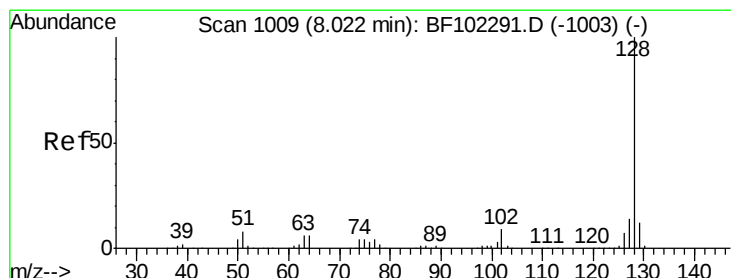
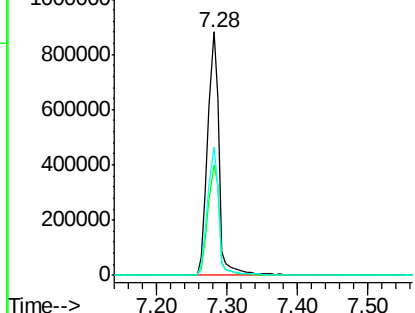
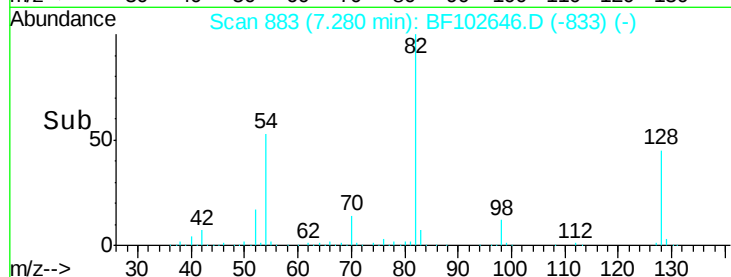
#23  
 Nitrobenzene-d5  
 Concen: 93.933 ng  
 RT: 7.28 min Scan# 883  
 Delta R.T. -0.01 min  
 Lab File: BF102646.D  
 Acq: 30 Jan 2018 18:20

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-CUTTINGS

Tot Ion: 82 Resp: 990005  
 Ion Ratio Lower Upper  
 82 100  
 128 45.2 36.1 54.1  
 54 52.7 41.4 62.2

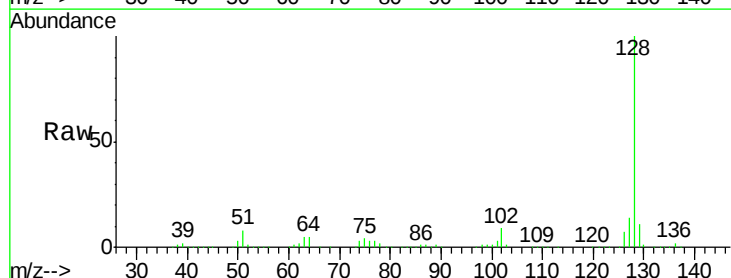


Abundance Ion 82.00 (81.70 to 82.70): BF1  
 Ion 128.00 (127.70 to 128.70): BF1  
 Ion 54.00 (53.70 to 54.70): BF1

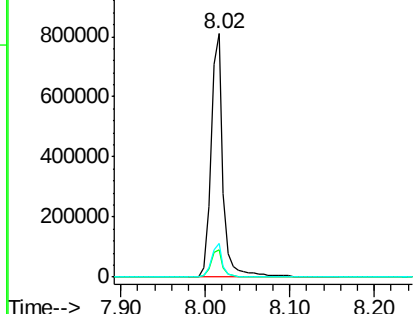
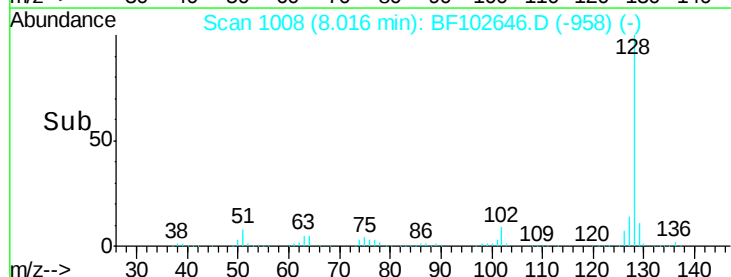


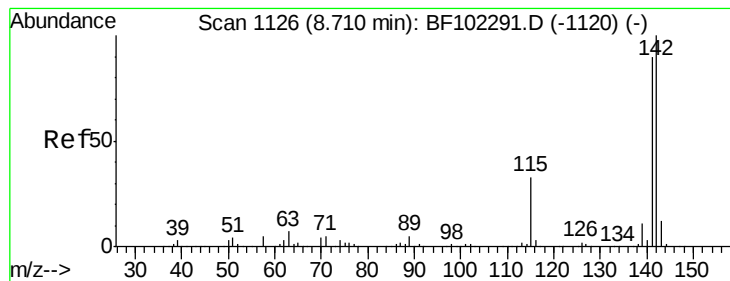
#31  
 Naphthalene  
 Concen: 27.069 ng  
 RT: 8.02 min Scan# 1008  
 Delta R.T. -0.01 min  
 Lab File: BF102646.D  
 Acq: 30 Jan 2018 18:20

Tgt Ion: 128 Resp: 818586  
 Ion Ratio Lower Upper  
 128 100  
 129 11.0 8.8 13.2  
 127 13.8 10.9 16.3



Abundance Ion 128.00 (127.70 to 128.70): BF1  
 Ion 129.00 (128.70 to 129.70): BF1  
 Ion 127.00 (126.70 to 127.70): BF1





#37

2-Methylnaphthalene

Concen: 2.053 ng

RT: 8.71 min Scan# 1126

Delta R.T. -0.01 min

Lab File: BF102646.D

Acq: 30 Jan 2018 18:20

Instrument :

BNA\_F

ClientSampleId :

SOIL-CUTTINGS

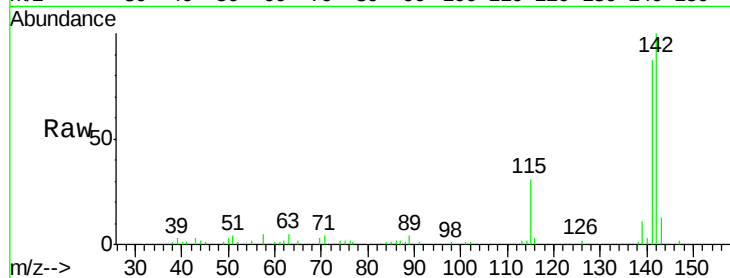
Tot Ion:142 Resp: 41351

Ion Ratio Lower Upper

142 100

141 86.6 70.8 106.2

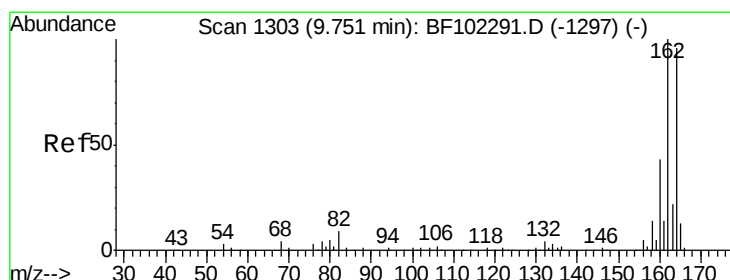
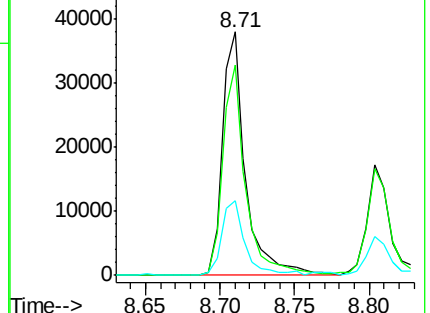
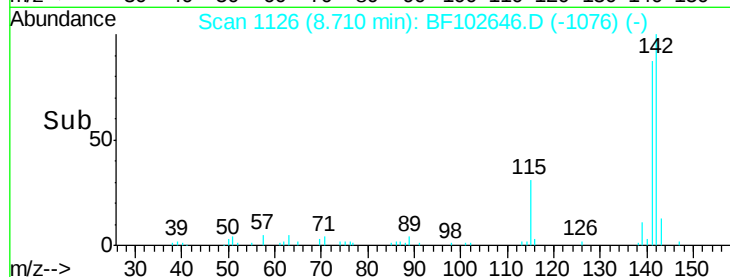
115 30.7 26.1 39.1



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# 1302

Delta R.T. -0.01 min

Lab File: BF102646.D

Acq: 30 Jan 2018 18:20

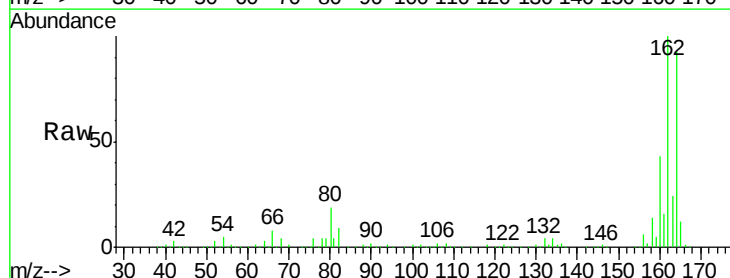
Tgt Ion:164 Resp: 276753

Ion Ratio Lower Upper

164 100

162 107.0 86.1 129.1

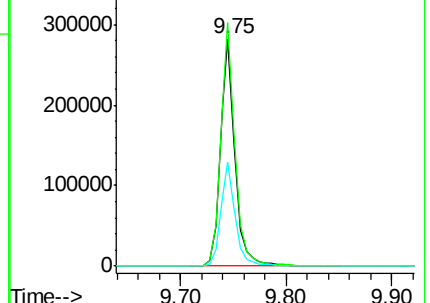
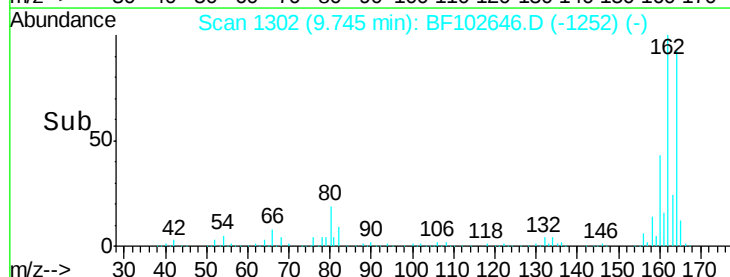
160 45.7 38.3 57.5

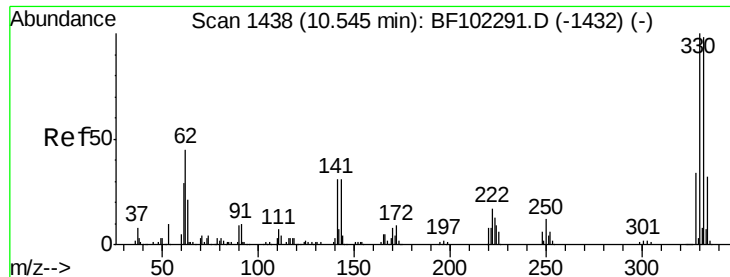


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E

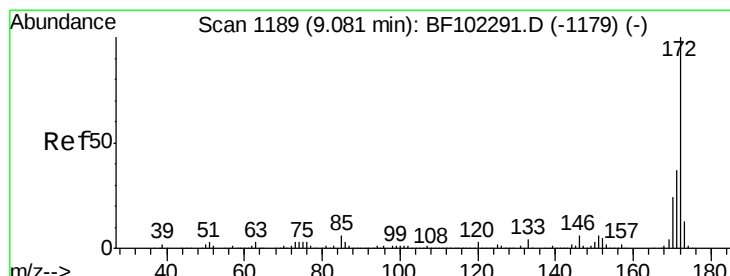
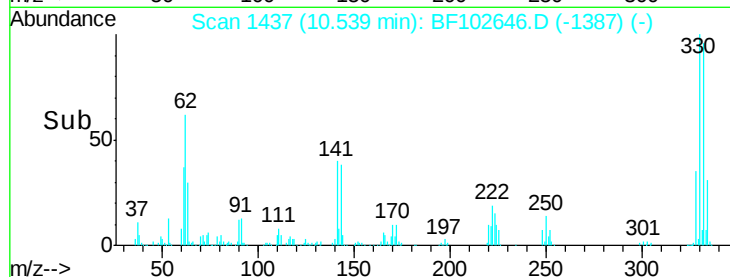
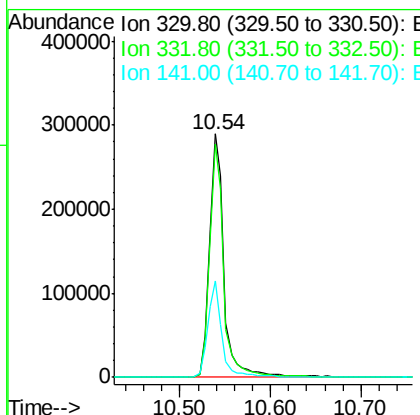
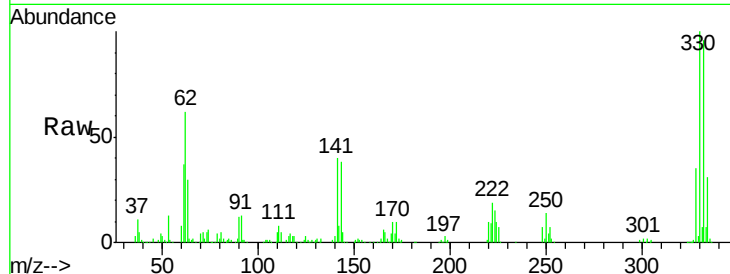




#41  
 2,4,6-Tribromophenol  
 Concen: 119.506 ng  
 RT: 10.54 min Scan# 1437  
 Delta R.T. -0.01 min  
 Lab File: BF102646.D  
 Acq: 30 Jan 2018 18:20

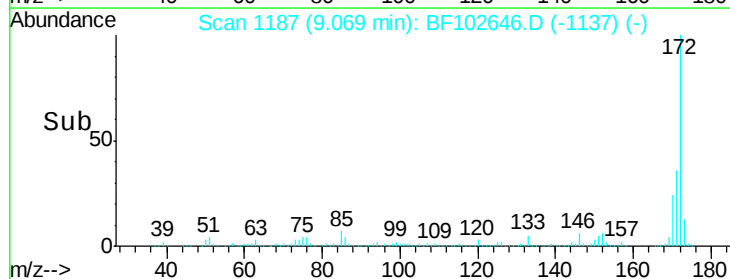
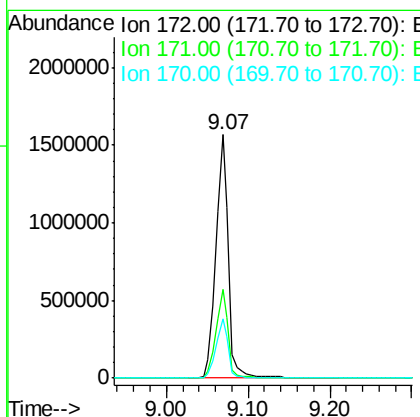
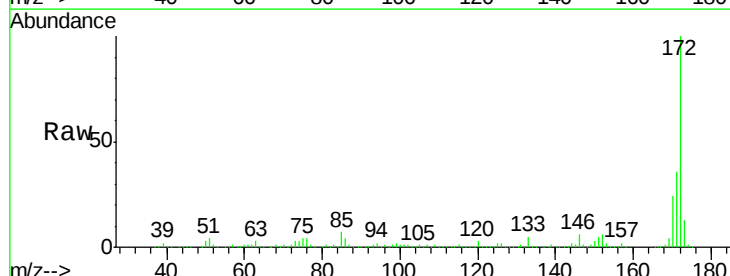
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-CUTTINGS

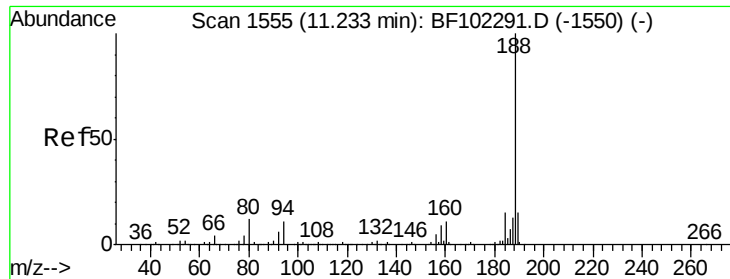
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 94.6  | 77.0  | 115.6 |
| 141     | 38.5  | 29.9  | 44.9  |



#44  
 2-Fluorobiphenyl  
 Concen: 88.904 ng  
 RT: 9.07 min Scan# 1187  
 Delta R.T. -0.01 min  
 Lab File: BF102646.D  
 Acq: 30 Jan 2018 18:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.4  | 29.7  | 44.5  |
| 170     | 24.3  | 19.6  | 29.4  |





#63

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.23 min Scan# 1555

Delta R.T. -0.01 min

Lab File: BF102646.D

Acq: 30 Jan 2018 18:20

Instrument :

BNA\_F

ClientSampleId :

SOIL-CUTTINGS

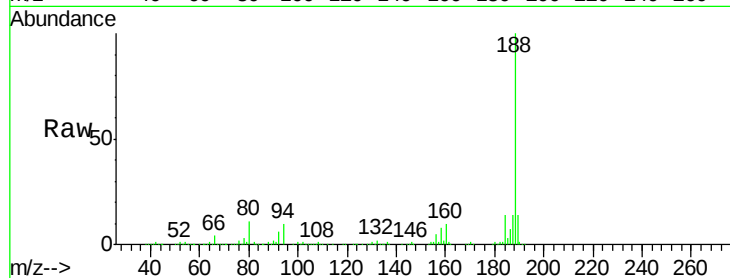
Tot Ion:188 Resp: 487042

Ion Ratio Lower Upper

188 100

94 10.5 8.5 12.7

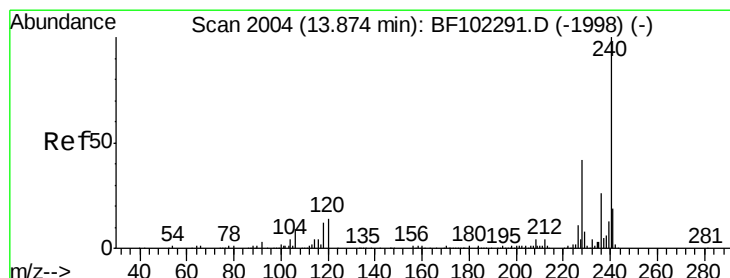
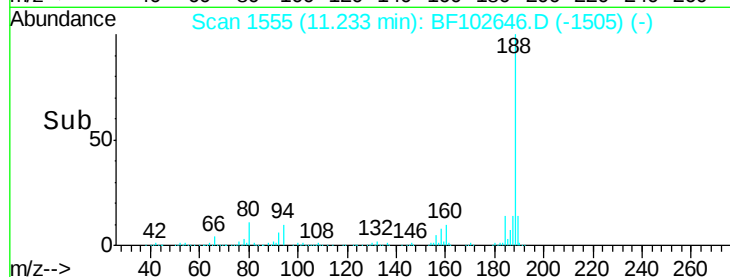
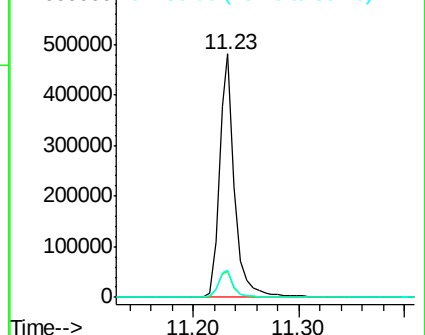
80 11.3 9.2 13.8



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



#75

Chrysene-d12

Concen: 20.000 ng

RT: 13.87 min Scan# 2004

Delta R.T. -0.01 min

Lab File: BF102646.D

Acq: 30 Jan 2018 18:20

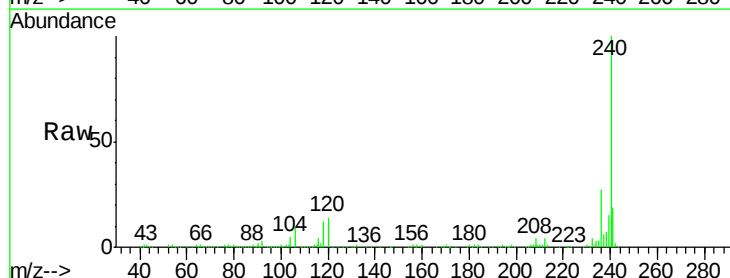
Tgt Ion:240 Resp: 366469

Ion Ratio Lower Upper

240 100

120 13.5 9.5 14.3

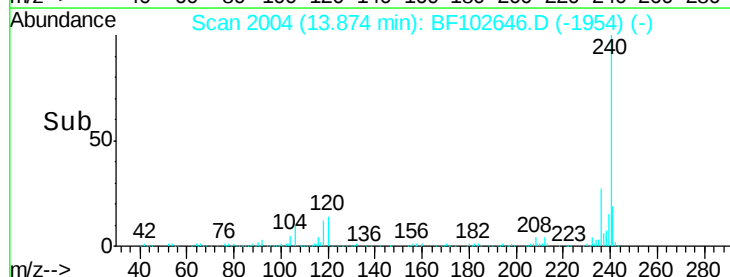
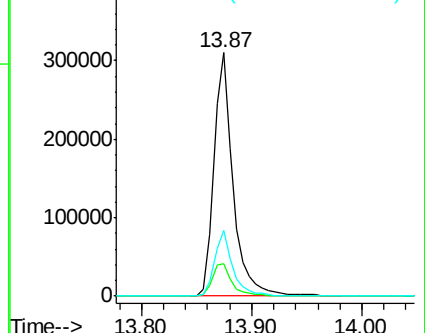
236 26.9 20.7 31.1

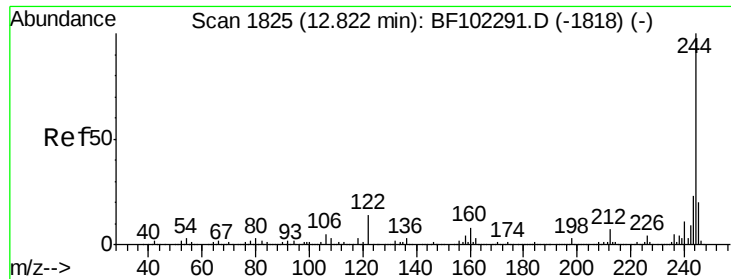


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



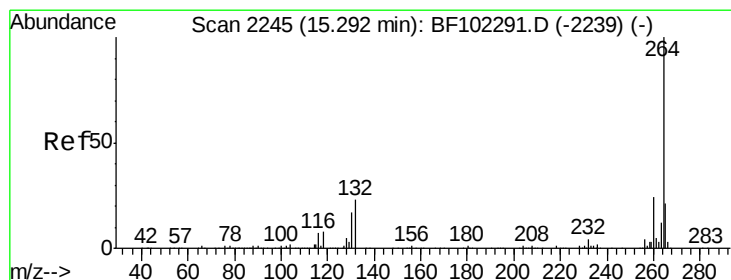
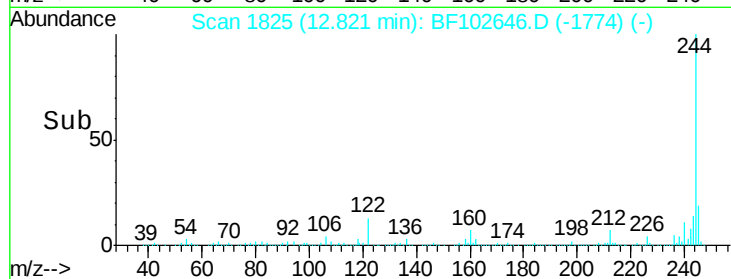
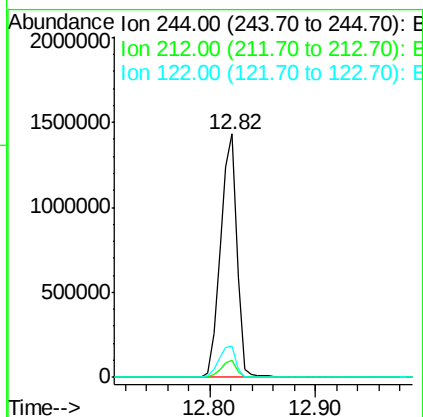
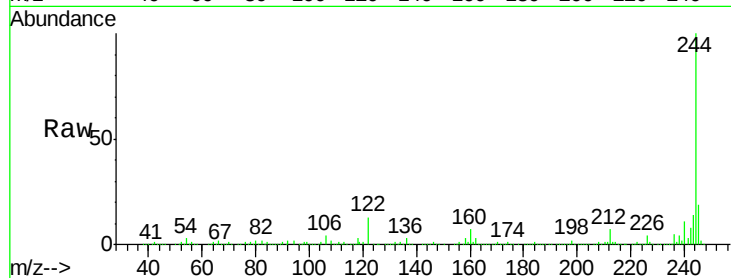


#78  
 Terphenyl-d14  
 Concen: 96.624 ng  
 RT: 12.82 min Scan# 1825  
 Delta R.T. -0.00 min  
 Lab File: BF102646.D  
 Acq: 30 Jan 2018 18:20

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-CUTTINGS

Tot Ion:244 Resp: 1570724  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 244 | 100   |       |       |
| 212 | 6.7   | 5.4   | 8.0   |
| 122 | 12.8  | 11.0  | 16.4  |



#86  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 15.30 min Scan# 2247  
 Delta R.T. -0.00 min  
 Lab File: BF102646.D  
 Acq: 30 Jan 2018 18:20

Tgt Ion:264 Resp: 262857  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 24.1  | 19.2  | 28.8  |
| 265 | 21.9  | 17.5  | 26.3  |

