

Data Path : Z:\HPCHEM1\BNA M\DATA\BM122315\  
 Data File : BM003736.D  
 Acq On : 23 Dec 2015 08:07  
 Operator : UM/SJ  
 Sample : G4869-16  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :

Quant Time: Dec 23 10:35:33 2015  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\8270-BM120915.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 09 18:52:47 2015  
 Response via : Initial Calibration

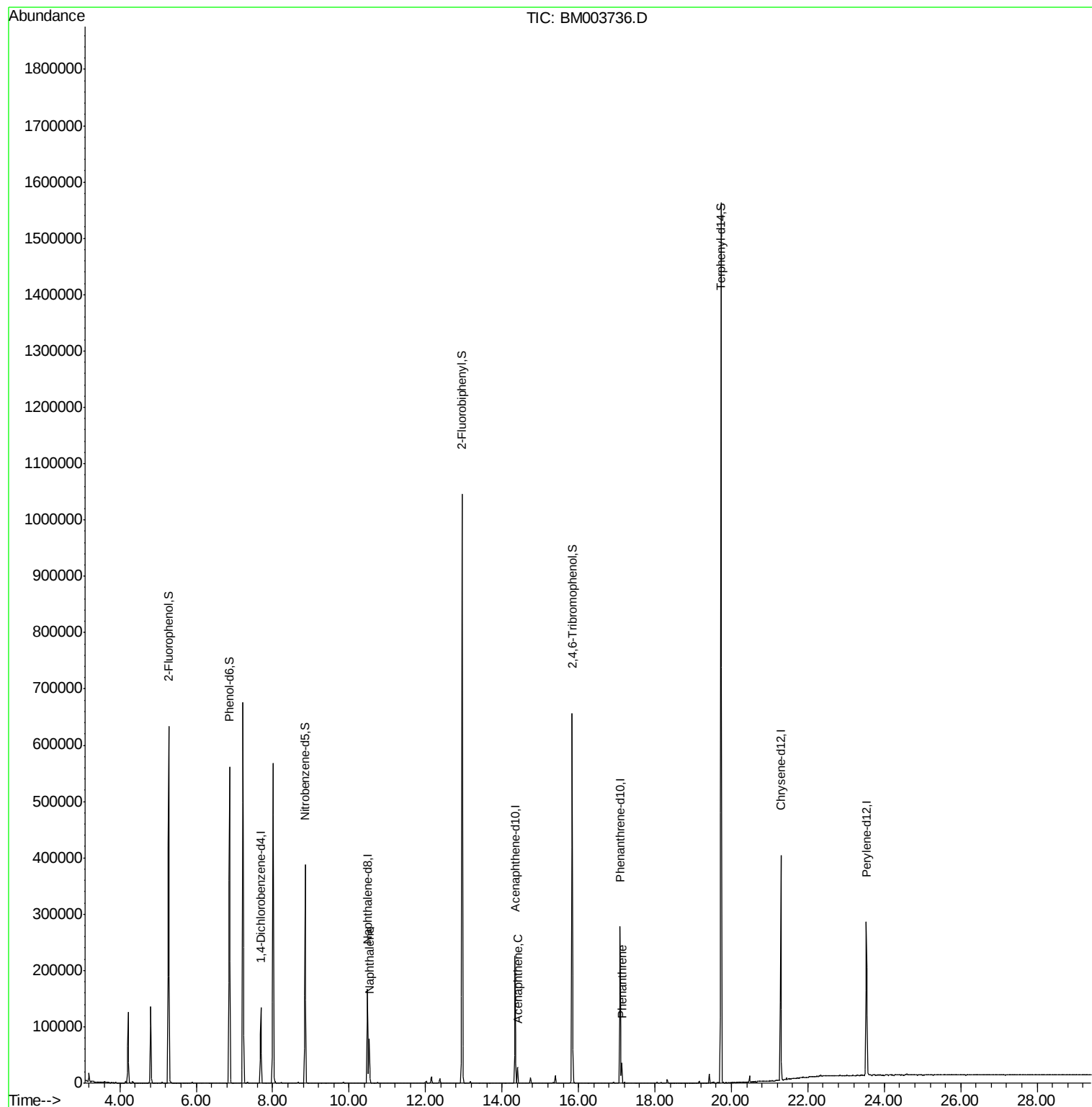
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.69  | 152  | 37218    | 20.00  | ng    | -0.03    |
| 21) Naphthalene-d8          | 10.48 | 136  | 144824   | 20.00  | ng    | -0.04    |
| 38) Acenaphthene-d10        | 14.35 | 164  | 73019    | 20.00  | ng    | -0.03    |
| 63) Phenanthrene-d10        | 17.09 | 188  | 158608   | 20.00  | ng    | -0.03    |
| 75) Chrysene-d12            | 21.29 | 240  | 180457   | 20.00  | ng    | -0.03    |
| 86) Perylene-d12            | 23.53 | 264  | 185692   | 20.00  | ng    | -0.04    |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.28  | 112  | 291853   | 139.42 | ng    | -0.02    |
| 7) Phenol-d6                | 6.87  | 99   | 344178   | 118.40 | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 8.85  | 82   | 235906   | 101.00 | ng    | -0.04    |
| 41) 2,4,6-Tribromophenol    | 15.84 | 330  | 108876   | 149.30 | ng    | -0.03    |
| 44) 2-Fluorobiphenyl        | 12.96 | 172  | 534859   | 99.80  | ng    | -0.04    |
| 78) Terphenyl-d14           | 19.73 | 244  | 666417   | 87.09  | ng    | -0.03    |
| Target Compounds            |       |      |          |        |       |          |
| 31) Naphthalene             | 10.53 | 128  | 68275    | 9.01   | ng    | 99       |
| 51) Acenaphthene            | 14.41 | 154  | 11079    | 2.41   | ng    | 100      |
| 70) Phenanthrene            | 17.13 | 178  | 23991    | 2.70   | ng    | 99       |

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

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BNA\_M  
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Quant Method : Z:\HPCHEM1\BNA M\METHODS\8270-BM120915.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Dec 09 18:52:47 2015  
Response via : Initial Calibration



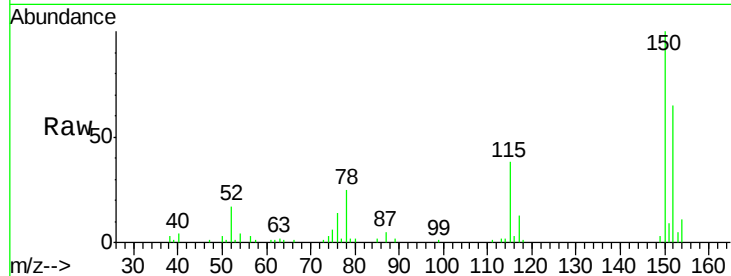


#1

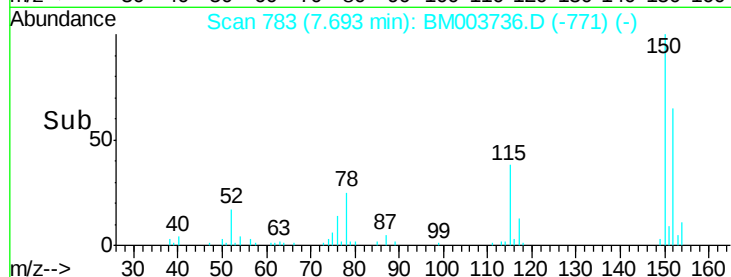
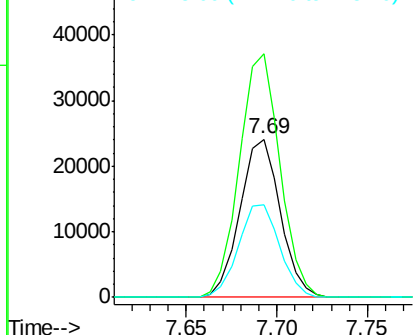
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.69 min Scan# 783  
Delta R.T. -0.03 min  
Lab File: BM003736.D  
Acq: 23 Dec 2015 08:07

Instrument :  
BNA\_M  
ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 153.8 | 119.5 | 179.3 |
| 115     | 58.6  | 43.0  | 64.4  |



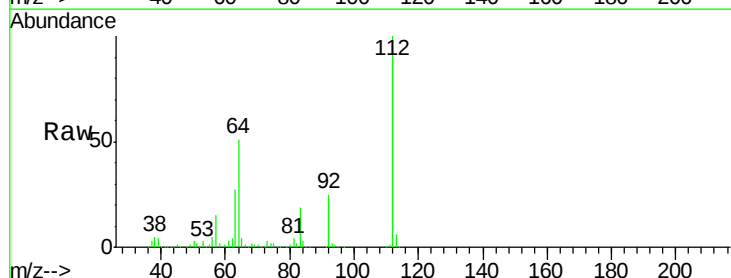
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



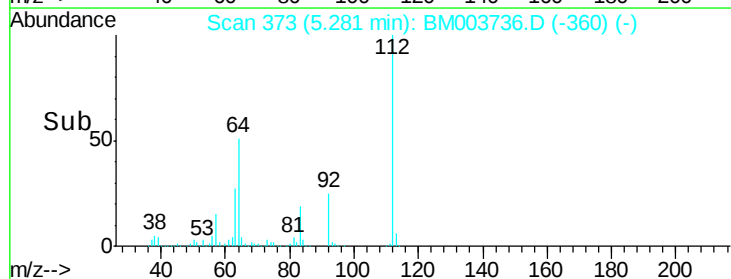
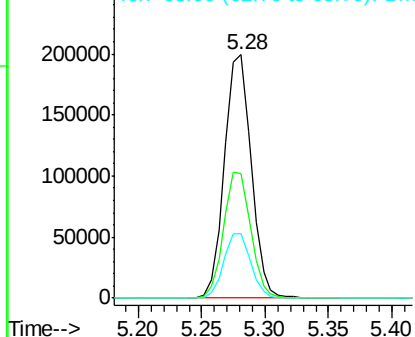
#5

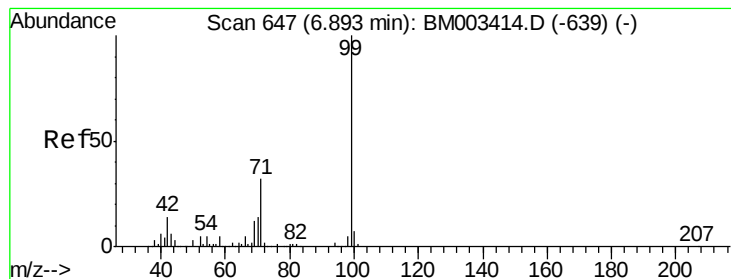
2-Fluorophenol  
Concen: 139.42 ng  
RT: 5.28 min Scan# 373  
Delta R.T. -0.02 min  
Lab File: BM003736.D  
Acq: 23 Dec 2015 08:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 51.1  | 38.6  | 57.8  |
| 63      | 26.6  | 19.3  | 28.9  |



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BM0  
Ion 63.00 (62.70 to 63.70): BM0





#7

Phenol-d6

Concen: 118.40 ng

RT: 6.87 min Scan# 643

Delta R.T. -0.02 min

Lab File: BM003736.D

Acq: 23 Dec 2015 08:07

Instrument :

BNA\_M

ClientSampleId :

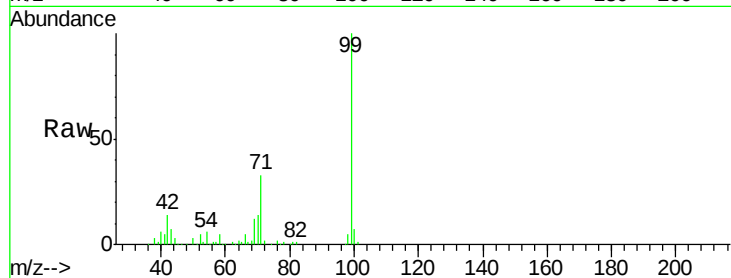
Tot Ion: 99 Resp: 344178

Ion Ratio Lower Upper

99 100

42 14.0 11.0 16.4

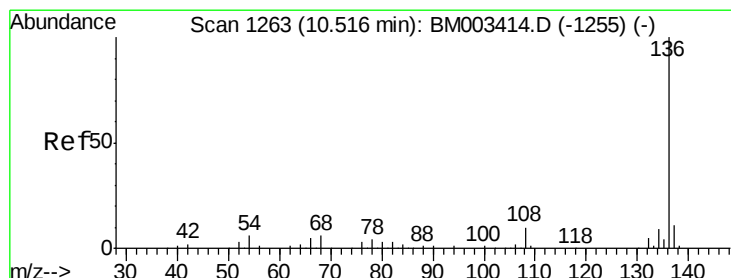
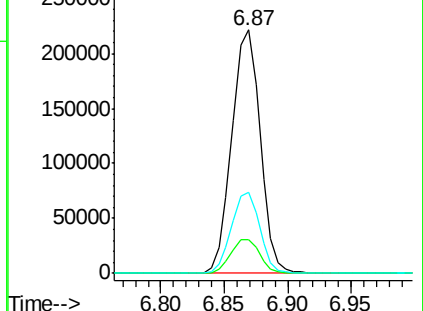
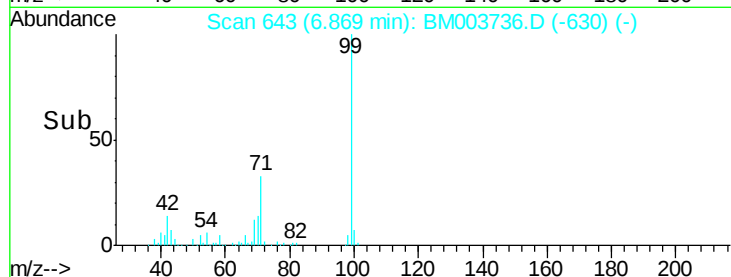
71 33.4 23.4 35.2



Abundance Ion 99.00 (98.70 to 99.70): BM003736.D (-639) (-)

Ion 42.00 (41.70 to 42.70): BM003736.D (-639) (-)

Ion 71.00 (70.70 to 71.70): BM003736.D (-639) (-)



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 10.48 min Scan# 1257

Delta R.T. -0.04 min

Lab File: BM003736.D

Acq: 23 Dec 2015 08:07

Tgt Ion: 136 Resp: 144824

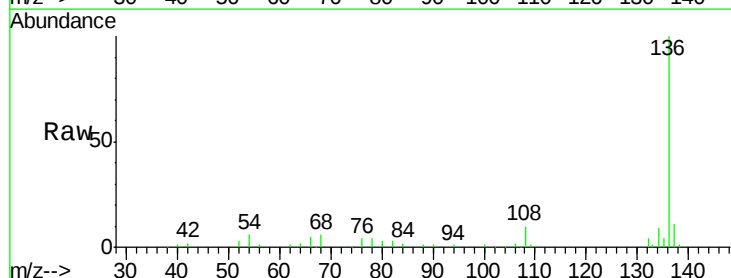
Ion Ratio Lower Upper

136 100

137 10.6 8.7 13.1

54 6.4 4.6 6.8

68 5.6 3.7 5.5#

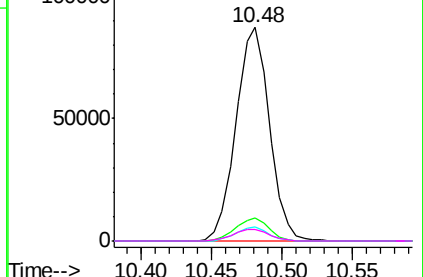
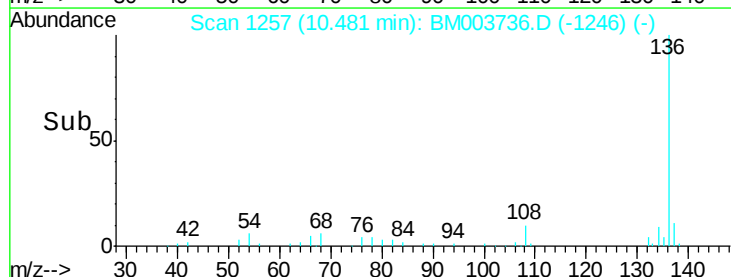


Abundance Ion 136.00 (135.70 to 136.70): BM003736.D (-1246) (-)

Ion 137.00 (136.70 to 137.70): BM003736.D (-1246) (-)

Ion 54.00 (53.70 to 54.70): BM003736.D (-1246) (-)

Ion 68.00 (67.70 to 68.70): BM003736.D (-1246) (-)

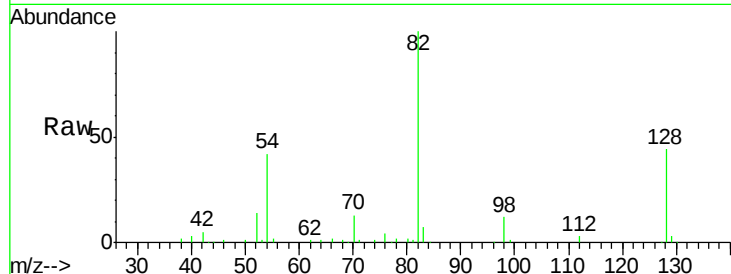




#23  
 Nitrobenzene-d5  
 Concen: 101.00 ng  
 RT: 8.85 min Scan# 979  
 Delta R.T. -0.04 min  
 Lab File: BM003736.D  
 Acq: 23 Dec 2015 08:07

Instrument :  
 BNA\_M  
 ClientSampleID :

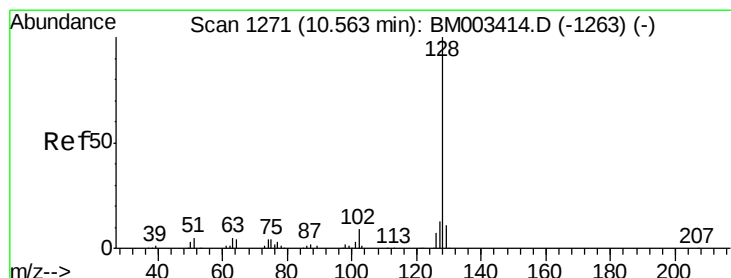
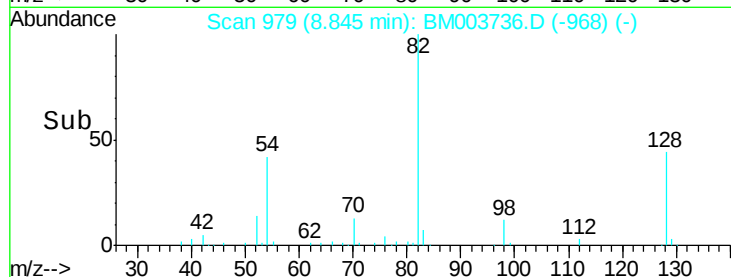
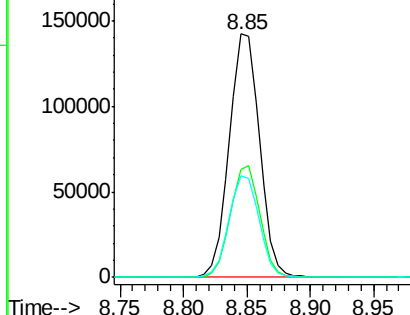
| Tot Ion   | 82   | Resp  | 235906 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 128       | 44.2 | 32.8  | 49.2   |
| 54        | 41.8 | 40.6  | 60.8   |



Abundance Ion 82.00 (81.70 to 82.70): BM003414.D (-978) (-)

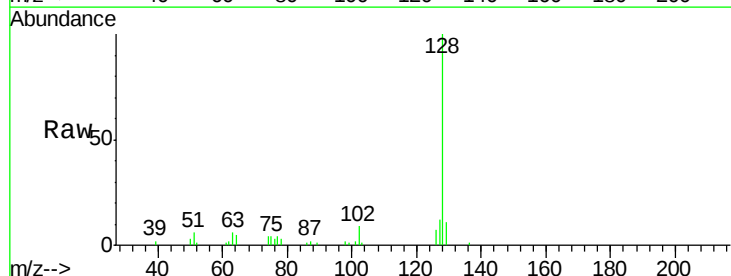
Ion 128.00 (127.70 to 128.70): BM003414.D (-978) (-)

Ion 54.00 (53.70 to 54.70): BM003414.D (-978) (-)



#31  
 Naphthalene  
 Concen: 9.01 ng  
 RT: 10.53 min Scan# 1265  
 Delta R.T. -0.04 min  
 Lab File: BM003736.D  
 Acq: 23 Dec 2015 08:07

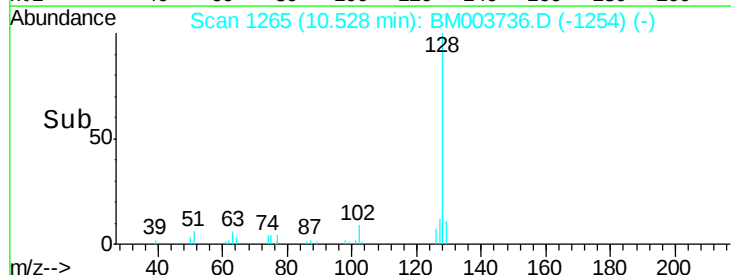
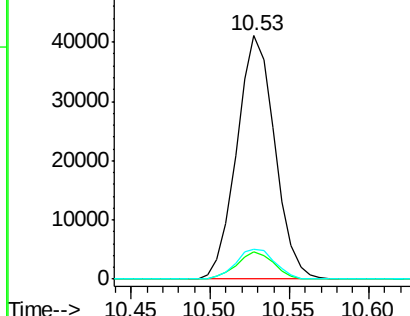
| Tgt Ion   | 128  | Resp  | 68275 |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 129       | 11.1 | 8.9   | 13.3  |
| 127       | 12.4 | 10.4  | 15.6  |

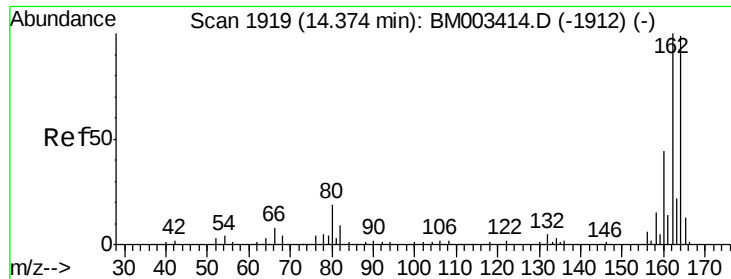


Abundance Ion 128.00 (127.70 to 128.70): BM003414.D (-1263) (-)

Ion 129.00 (128.70 to 129.70): BM003414.D (-1263) (-)

Ion 127.00 (126.70 to 127.70): BM003414.D (-1263) (-)





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 14.35 min Scan# 1914

Delta R.T. -0.03 min

Lab File: BM003736.D

Acq: 23 Dec 2015 08:07

Instrument :

BNA\_M

ClientSampleId :

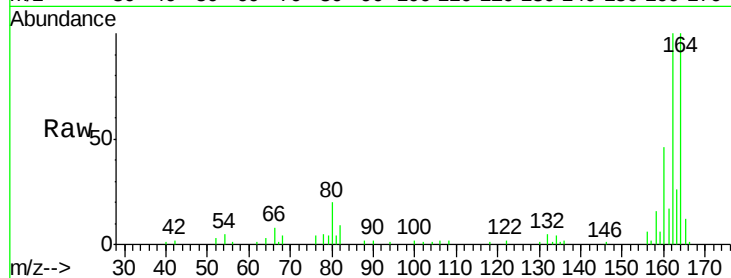
Tot Ion:164 Resp: 73019

Ion Ratio Lower Upper

164 100

162 99.7 82.4 123.6

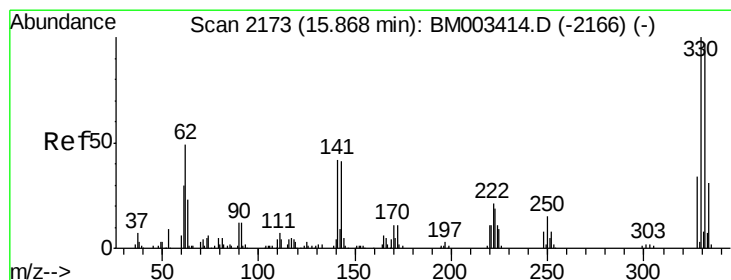
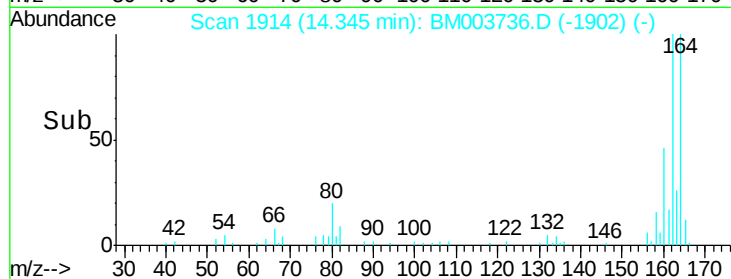
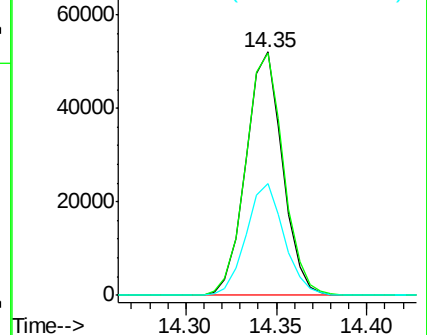
160 45.8 35.8 53.6



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: 149.30 ng

RT: 15.84 min Scan# 2168

Delta R.T. -0.03 min

Lab File: BM003736.D

Acq: 23 Dec 2015 08:07

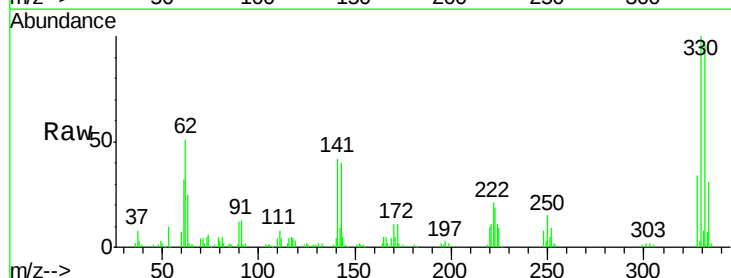
Tgt Ion:330 Resp: 108876

Ion Ratio Lower Upper

330 100

332 96.3 0.0 0.0#

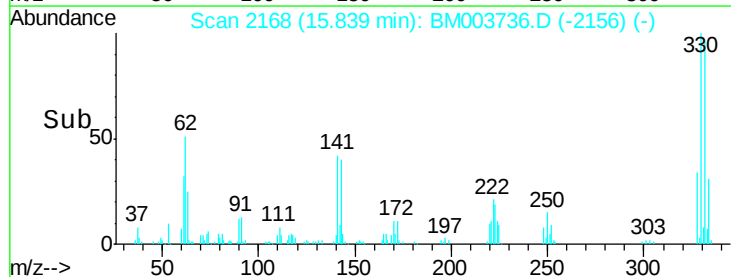
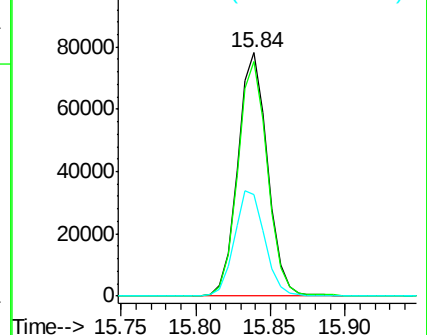
141 44.0 0.0 0.0#

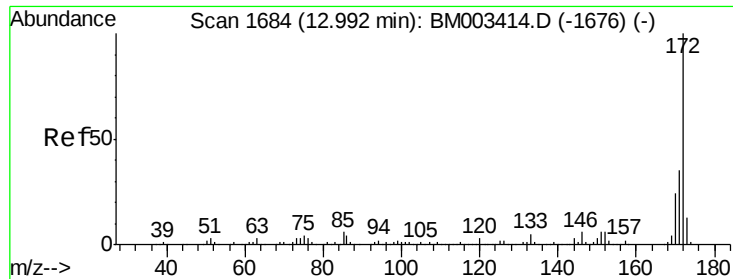


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

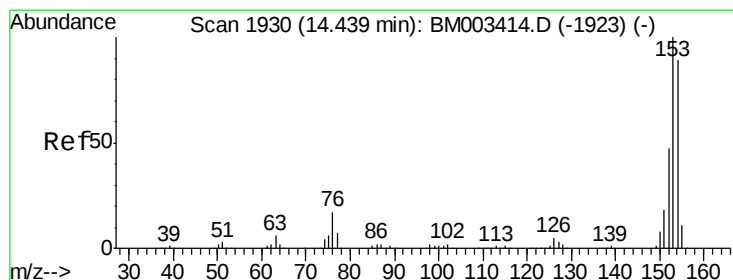
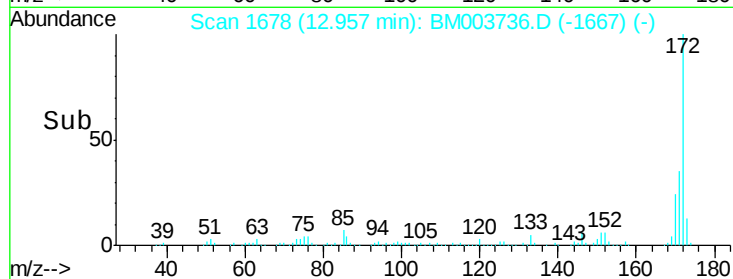
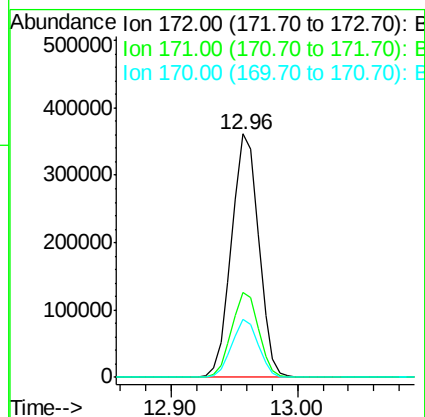
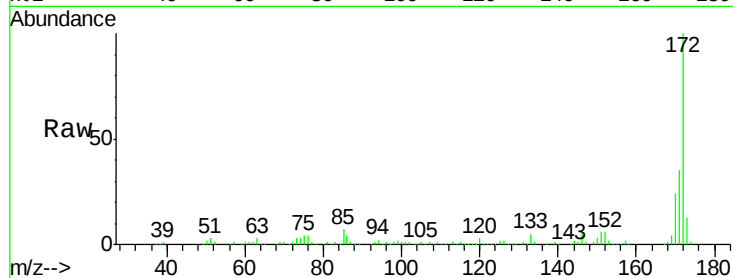




#44  
2-Fluorobiphenyl  
Concen: 99.80 ng  
RT: 12.96 min Scan# 1678  
Delta R.T. -0.04 min  
Lab File: BM003736.D  
Acq: 23 Dec 2015 08:07

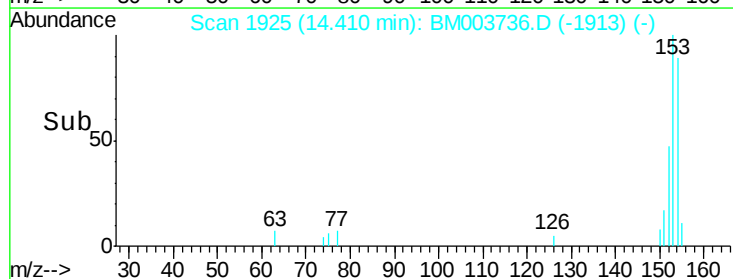
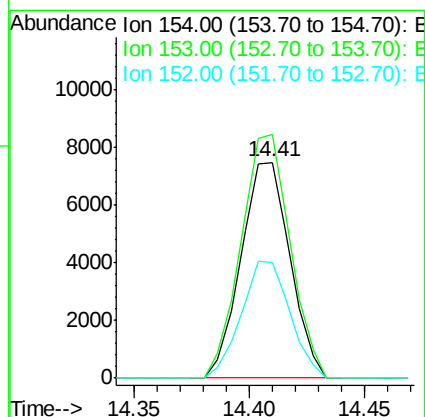
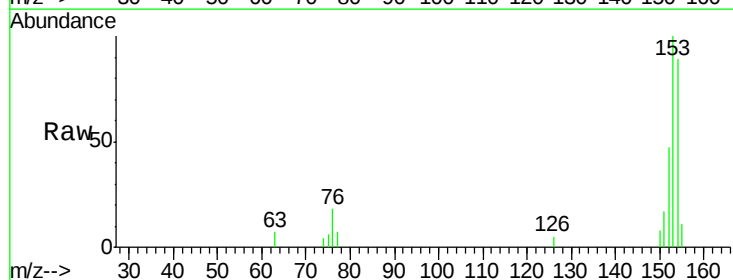
Instrument :  
BNA\_M  
ClientSampled :

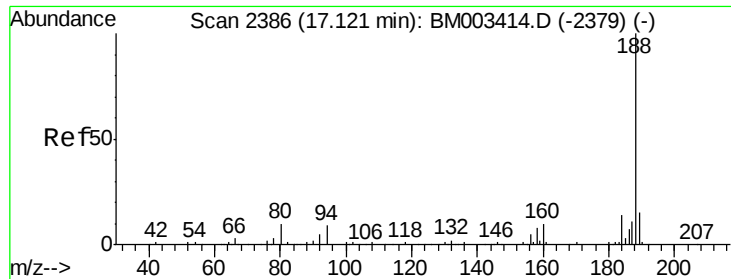
Tot Ion:172 Resp: 534859  
Ion Ratio Lower Upper  
172 100  
171 34.9 28.5 42.7  
170 23.6 18.8 28.2



#51  
Acenaphthene  
Concen: 2.41 ng  
RT: 14.41 min Scan# 1925  
Delta R.T. -0.03 min  
Lab File: BM003736.D  
Acq: 23 Dec 2015 08:07

Tgt Ion:154 Resp: 11079  
Ion Ratio Lower Upper  
154 100  
153 112.7 90.0 135.0  
152 53.5 42.6 63.8





#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 17.09 min Scan# 2381

Delta R.T. -0.03 min

Lab File: BM003736.D

Acq: 23 Dec 2015 08:07

Instrument :

BNA\_M

ClientSampleId :

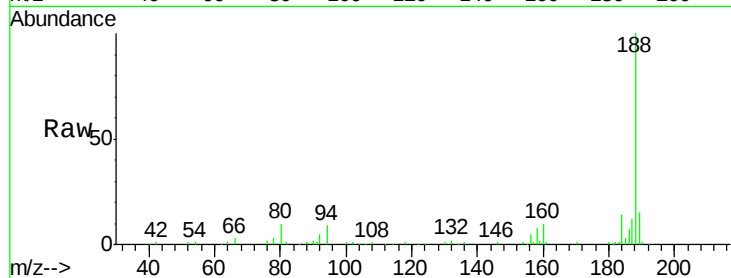
Tot Ion:188 Resp: 158608

Ion Ratio Lower Upper

188 100

94 9.1 8.7 13.1

80 10.5 9.3 13.9



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BM

Ion 80.00 (79.70 to 80.70): BM

150000

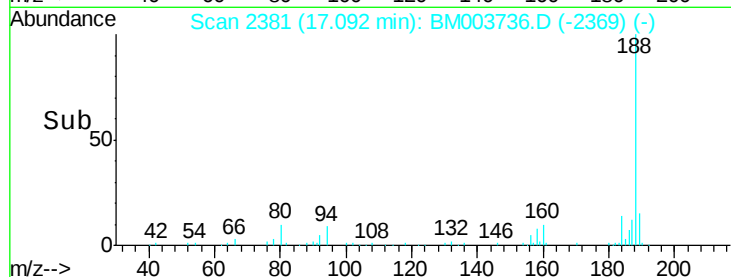
100000

50000

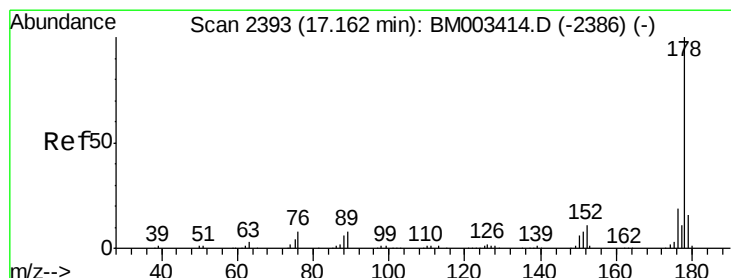
0

17.09

17.05 17.10 17.15



Time-->



#70

Phenanthrene

Concen: 2.70 ng

RT: 17.13 min Scan# 2388

Delta R.T. -0.03 min

Lab File: BM003736.D

Acq: 23 Dec 2015 08:07

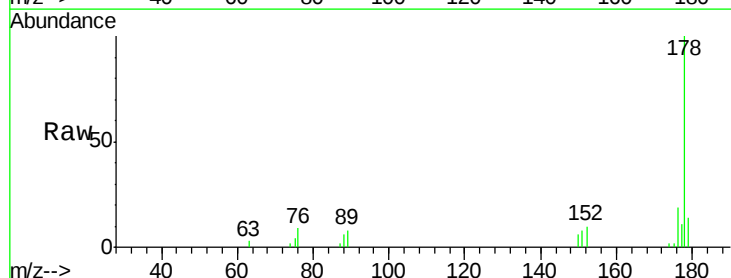
Tgt Ion:178 Resp: 23991

Ion Ratio Lower Upper

178 100

176 18.6 15.2 22.8

179 14.2 12.1 18.1



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

20000

15000

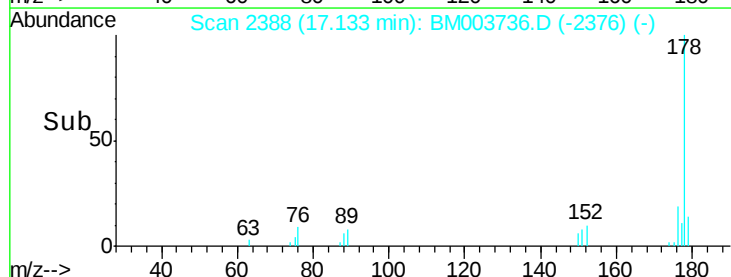
10000

5000

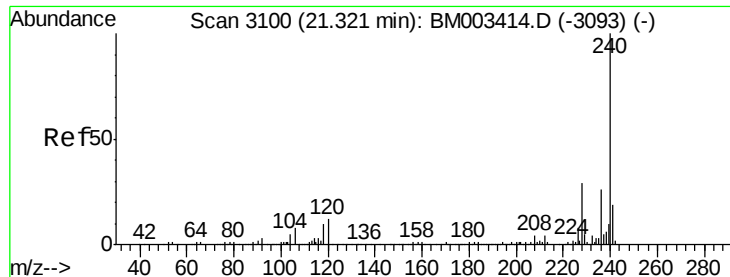
0

17.13

17.10 17.15



Time-->



#75

Chrysene-d12

Concen: 20.00 ng

RT: 21.29 min Scan# 3095

Delta R.T. -0.03 min

Lab File: BM003736.D

Acq: 23 Dec 2015 08:07

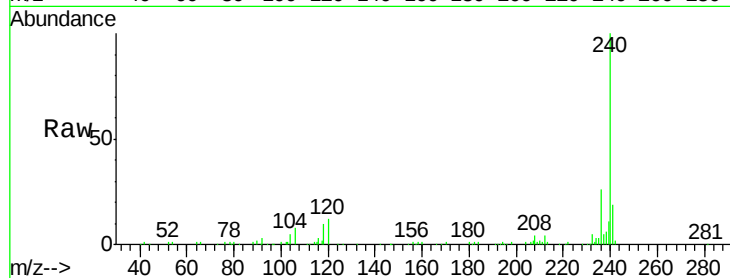
Instrument :

BNA\_M

ClientSampleId :

Tot Ion:240 Resp: 180457

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 240 | 100   |       |       |
| 120 | 11.9  | 8.2   | 12.2  |
| 236 | 25.8  | 20.0  | 30.0  |



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

21.29

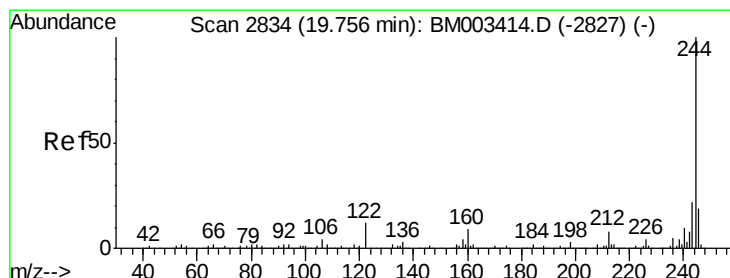
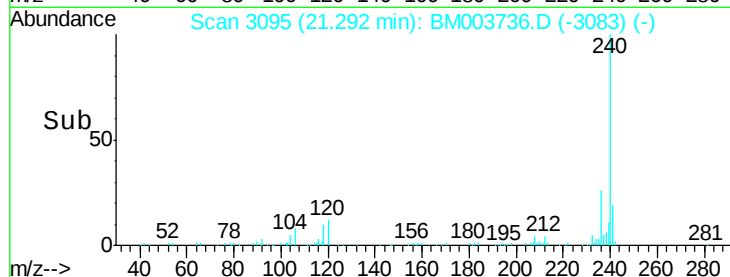
150000

100000

50000

0

Time-->



#78

Terphenyl-d14

Concen: 87.09 ng

RT: 19.73 min Scan# 2829

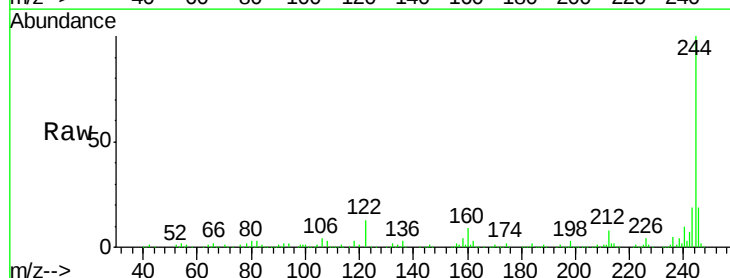
Delta R.T. -0.03 min

Lab File: BM003736.D

Acq: 23 Dec 2015 08:07

Tgt Ion:244 Resp: 666417

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 244 | 100   |       |       |
| 212 | 8.0   | 4.9   | 7.3#  |
| 122 | 12.7  | 6.2   | 9.4#  |



Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

19.73

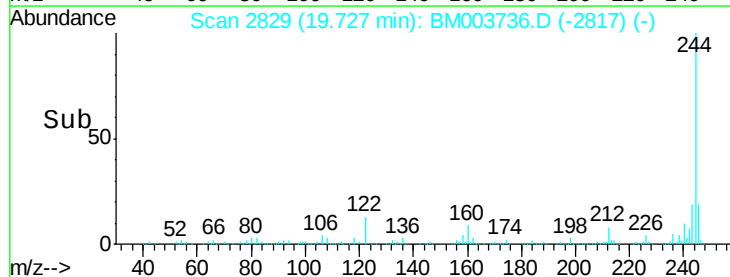
600000

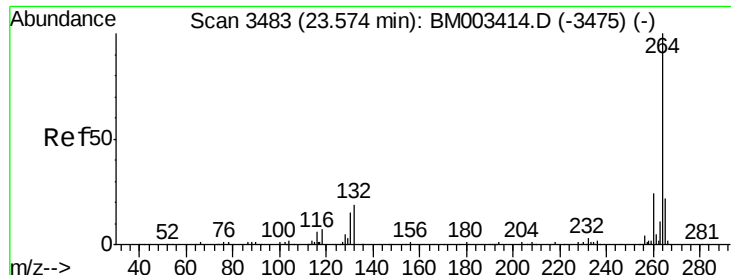
400000

200000

0

Time-->

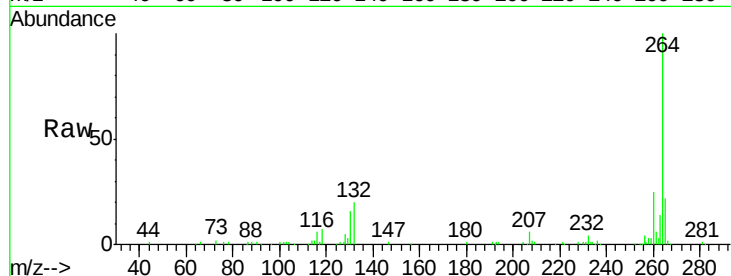




#86  
 Pervlene-d12  
 Concen: 20.00 ng  
 RT: 23.53 min Scan# 3476  
 Delta R.T. -0.04 min  
 Lab File: BM003736.D  
 Acq: 23 Dec 2015 08:07

Instrument :  
 BNA\_M  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.6  | 18.6  | 27.8  |
| 265     | 21.7  | 17.3  | 25.9  |



Abundance Ion 264.00 (263.70 to 264.70): E  
 Ion 260.00 (259.70 to 260.70): E  
 Ion 265.00 (264.70 to 265.70): E

