

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM050619\  
 Data File : BM020166.D  
 Acq On : 07 May 2019 12:28  
 Operator : JU/SJ  
 Sample : K2672-12 10X  
 Misc :  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :

Quant Time: May 07 13:11:28 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM043019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed May 01 03:58:37 2019  
 Response via : Initial Calibration

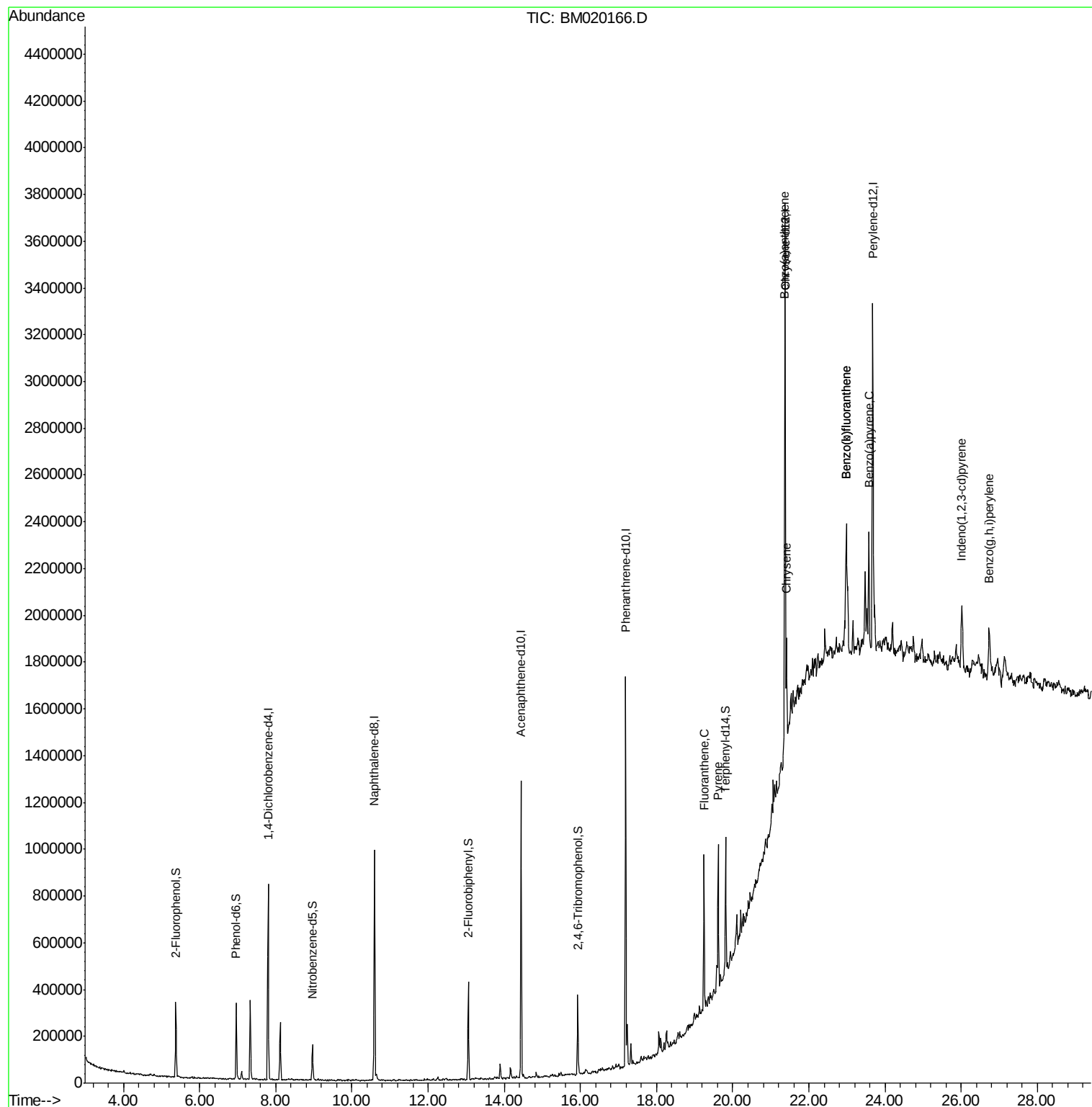
| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.80  | 152  | 210392   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 10.59 | 136  | 753558   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10        | 14.44 | 164  | 415140   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10        | 17.19 | 188  | 942258   | 20.00 | ng    | 0.01     |
| 76) Chrysene-d12            | 21.37 | 240  | 932461   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12            | 23.68 | 264  | 1082336  | 20.00 | ng    | 0.02     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.37  | 112  | 120581   | 9.37  | ng    | 0.00     |
| 7) Phenol-d6                | 6.96  | 99   | 168245   | 9.57  | ng    | 0.01     |
| 23) Nitrobenzene-d5         | 8.96  | 82   | 96716    | 5.07  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 15.93 | 330  | 56845    | 8.82  | ng    | 0.01     |
| 45) 2-Fluorobiphenyl        | 13.06 | 172  | 195007   | 5.78  | ng    | 0.00     |
| 79) Terphenyl-d14           | 19.81 | 244  | 273331   | 5.11  | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       |          |
| 75) Fluoranthene            | 19.25 | 202  | 395004   | 6.002 | ng    | 99       |
| 78) Pyrene                  | 19.62 | 202  | 392103   | 6.263 | ng    | 99       |
| 81) Benzo(a)anthracene      | 21.36 | 228  | 293561   | 4.489 | ng    | 97       |
| 83) Chrysene                | 21.41 | 228  | 256698   | 4.048 | ng    | 95       |
| 86) Indeno(1,2,3-cd)pyrene  | 26.01 | 276  | 278081   | 3.686 | ng    | # 100    |
| 88) Benzo(b)fluoranthene    | 22.98 | 252  | 651949   | 9.122 | ng    | # 91     |
| 89) Benzo(k)fluoranthene    | 22.98 | 252  | 648655   | 9.949 | ng    | # 92     |
| 90) Benzo(a)pyrene          | 23.57 | 252  | 365237   | 5.626 | ng    | # 93     |
| 92) Benzo(g,h,i)perylene    | 26.73 | 276  | 261218   | 4.075 | ng    | # 91     |

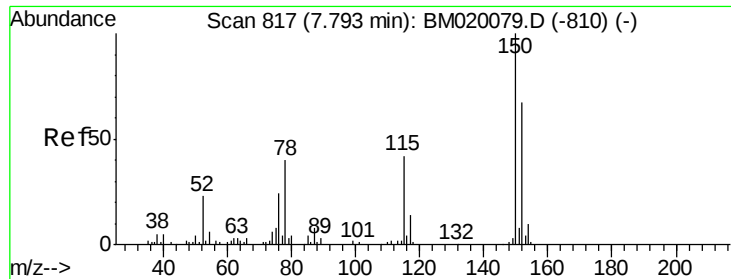
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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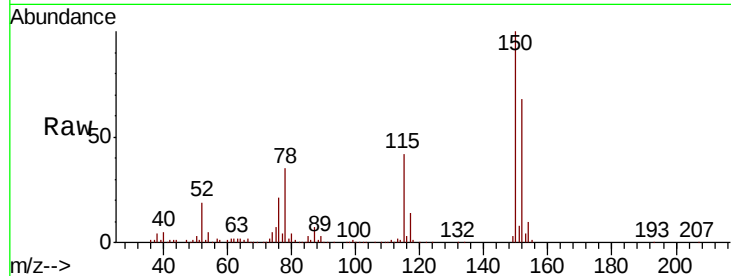


#1

1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.80 min Scan# 818  
Delta R.T. 0.01 min  
Lab File: BM020166.D  
Acq: 07 May 2019 12:28

Instrument :  
BNA\_M  
ClientSampled :

| Tot Ion   | 152   | Resp  | 210392 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 150       | 146.1 | 119.8 | 179.8  |
| 115       | 61.5  | 50.8  | 76.2   |

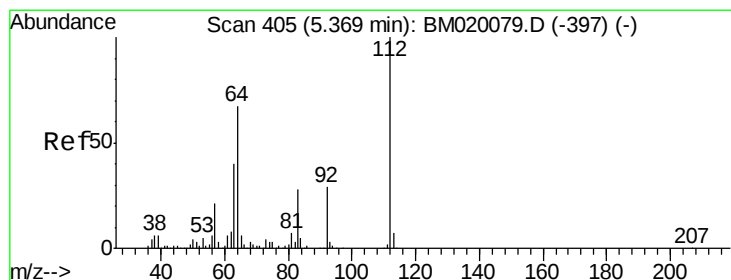
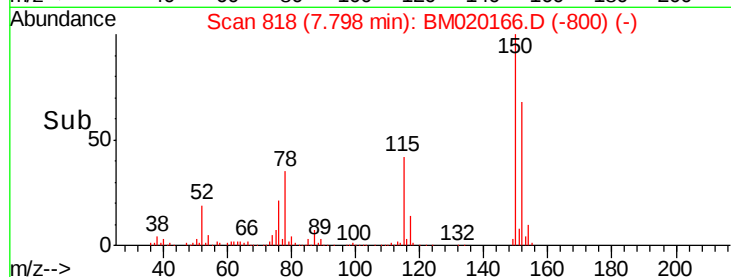
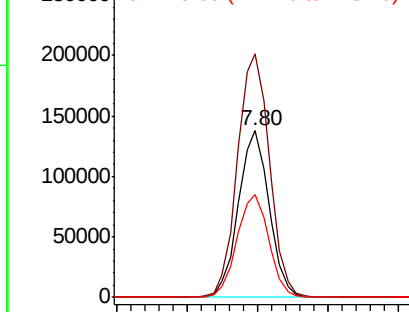


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

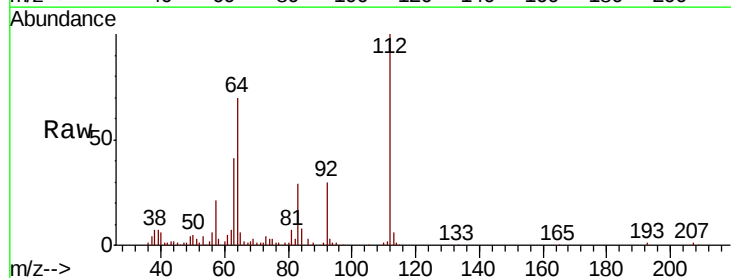
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 9.368 ng  
RT: 5.37 min Scan# 406  
Delta R.T. 0.01 min  
Lab File: BM020166.D  
Acq: 07 May 2019 12:28

| Tgt Ion   | 112   | Resp  | 120581 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 112       | 100   |       |        |
| 64        | 70.4  | 53.8  | 80.6   |
| 63        | 41.3  | 32.3  | 48.5   |

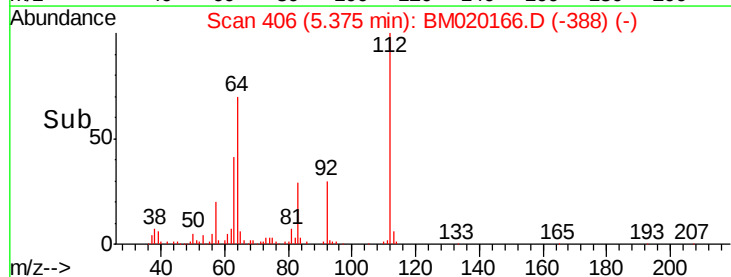
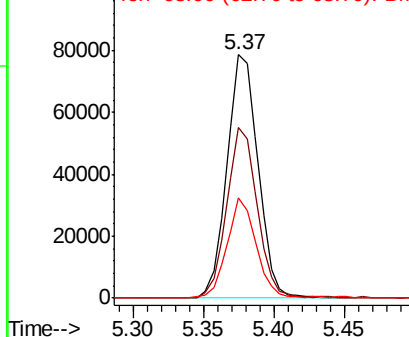


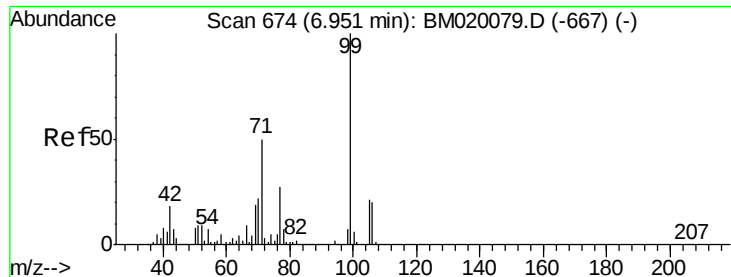
Abundance

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: 9.568 ng

RT: 6.96 min Scan# 676

Delta R.T. 0.01 min

Lab File: BM020166.D

Acq: 07 May 2019 12:28

Instrument :

BNA\_M

ClientSampled :

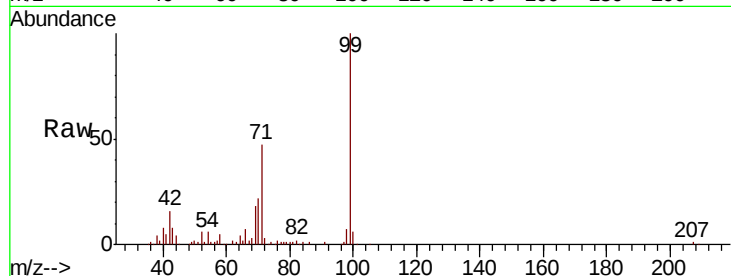
Tot Ion: 99 Resp: 168245

Ion Ratio Lower Upper

99 100

42 16.0 14.2 21.2

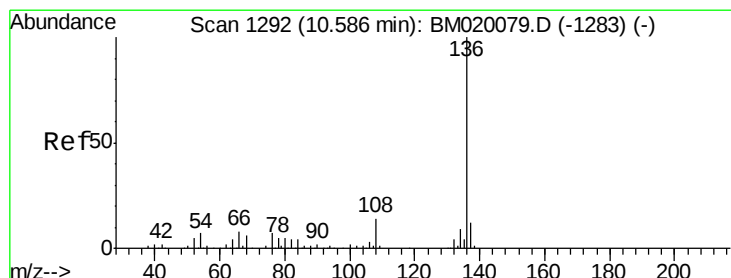
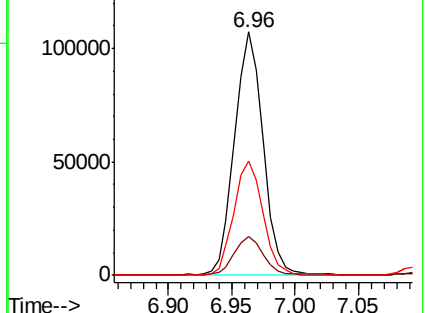
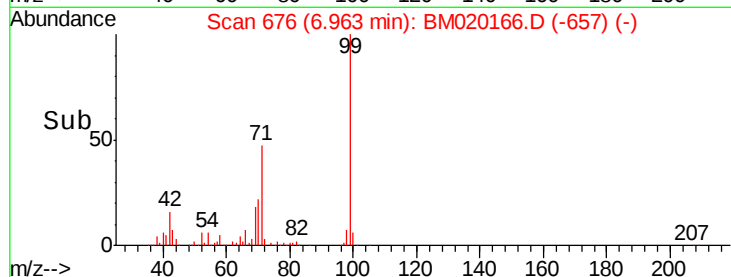
71 47.0 40.3 60.5



Abundance Ion 99.00 (98.70 to 99.70): BM020079.D (-667) (-)

Ion 42.00 (41.70 to 42.70): BM020079.D (-667) (-)

Ion 71.00 (70.70 to 71.70): BM020079.D (-667) (-)



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 10.59 min Scan# 1293

Delta R.T. 0.01 min

Lab File: BM020166.D

Acq: 07 May 2019 12:28

Tgt Ion: 136 Resp: 753558

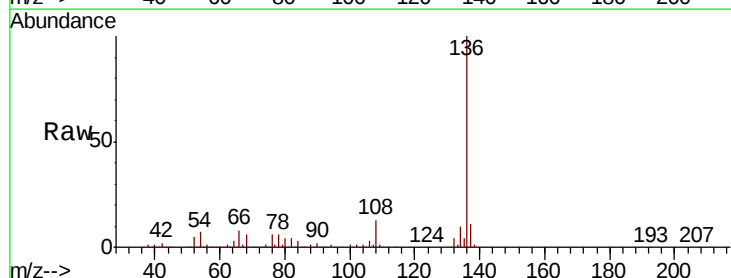
Ion Ratio Lower Upper

136 100

137 11.0 9.6 14.4

54 6.8 5.5 8.3

68 6.3 4.6 6.8

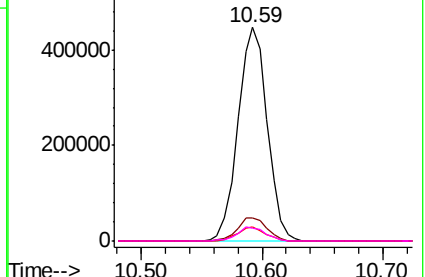
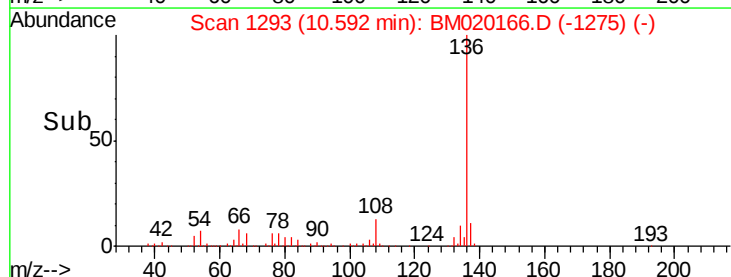


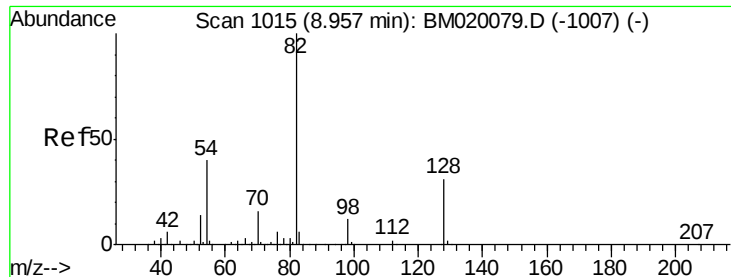
Abundance Ion 136.00 (135.70 to 136.70): BM020079.D (-1283) (-)

Ion 137.00 (136.70 to 137.70): BM020079.D (-1283) (-)

Ion 54.00 (53.70 to 54.70): BM020079.D (-1283) (-)

Ion 68.00 (67.70 to 68.70): BM020079.D (-1283) (-)

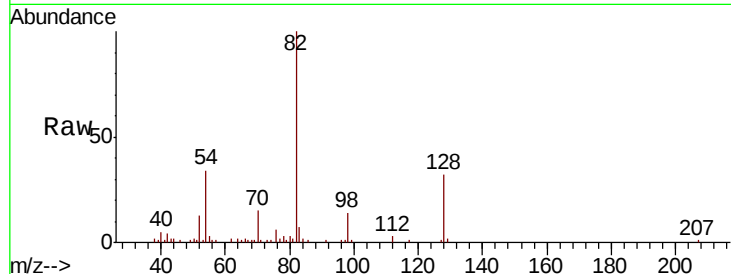




#23  
Nitrobenzene-d5  
Concen: 5.067 ng  
RT: 8.96 min Scan# 1016  
Delta R.T. 0.01 min  
Lab File: BM020166.D  
Acq: 07 May 2019 12:28

Instrument :  
BNA\_M  
ClientSampleId :

| Tot Ion   | 82   | Resp  | 96716 |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 128       | 31.8 | 25.2  | 37.8  |
| 54        | 34.0 | 31.9  | 47.9  |

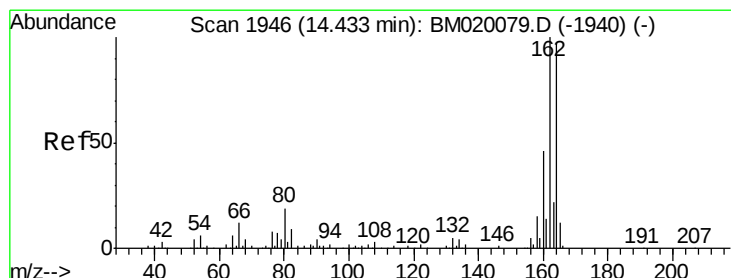
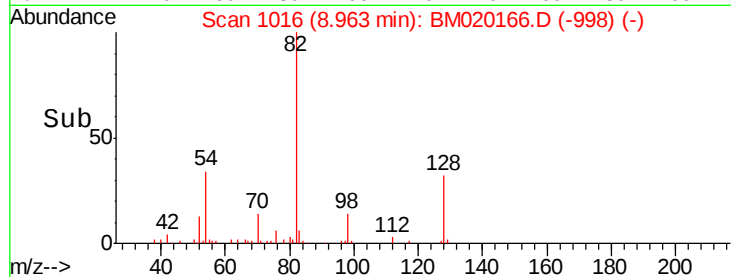
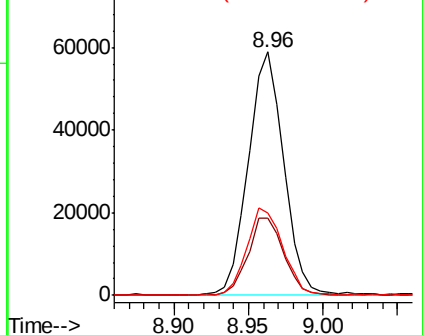


Abundance

Ion 82.00 (81.70 to 82.70): BM020079.D (-1007) (-)

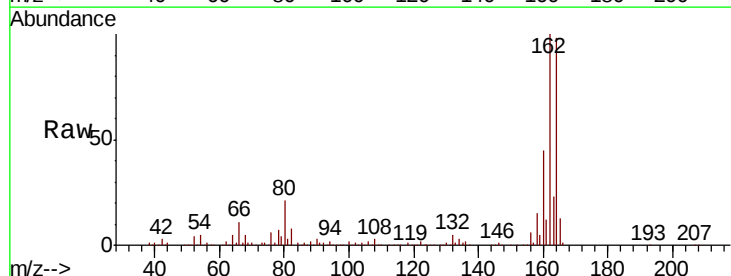
Ion 128.00 (127.70 to 128.70): BM020079.D (-1007) (-)

Ion 54.00 (53.70 to 54.70): BM020079.D (-1007) (-)



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.44 min Scan# 1947  
Delta R.T. 0.01 min  
Lab File: BM020166.D  
Acq: 07 May 2019 12:28

| Tgt Ion   | 164   | Resp  | 415140 |
|-----------|-------|-------|--------|
| Ion Ratio | 100   | Lower | Upper  |
| 162       | 102.3 | 82.2  | 123.2  |
| 160       | 45.6  | 37.6  | 56.4   |

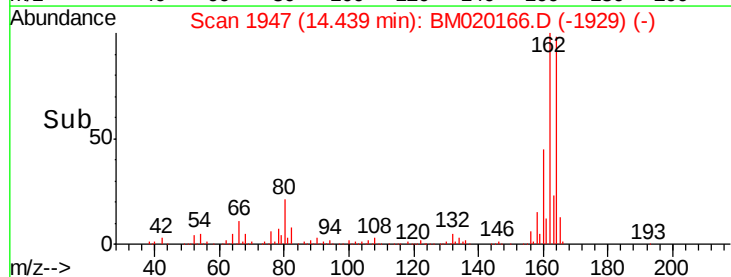
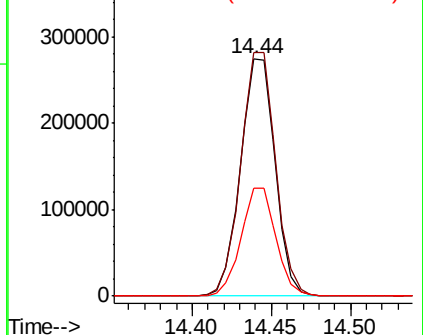


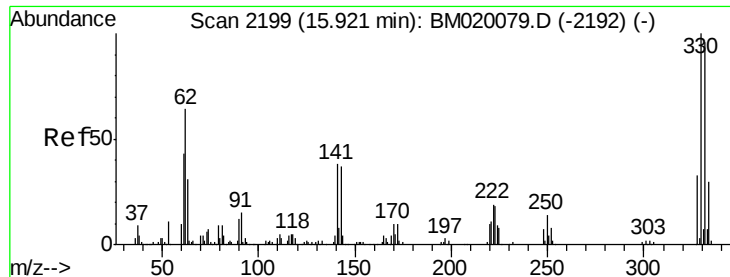
Abundance

Ion 164.00 (163.70 to 164.70): BM020079.D (-1940) (-)

Ion 162.00 (161.70 to 162.70): BM020079.D (-1940) (-)

Ion 160.00 (159.70 to 160.70): BM020079.D (-1940) (-)

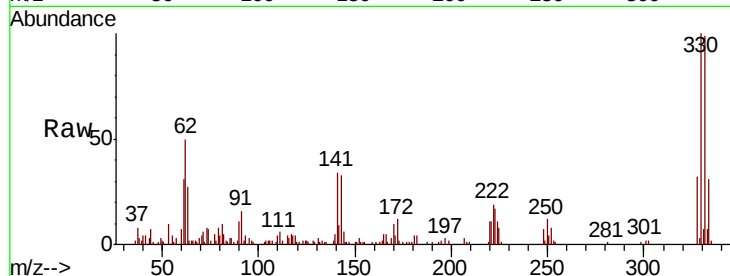




#42  
 2,4,6-Tribromophenol  
 Concen: 8.822 ng  
 RT: 15.93 min Scan# 2201  
 Delta R.T. 0.01 min  
 Lab File: BM020166.D  
 Acq: 07 May 2019 12:28

Instrument :  
 BNA\_M  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 98.9  | 76.8  | 115.2 |
| 141     | 35.3  | 29.2  | 43.8  |

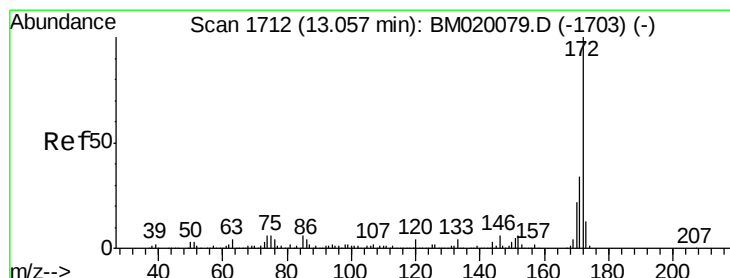
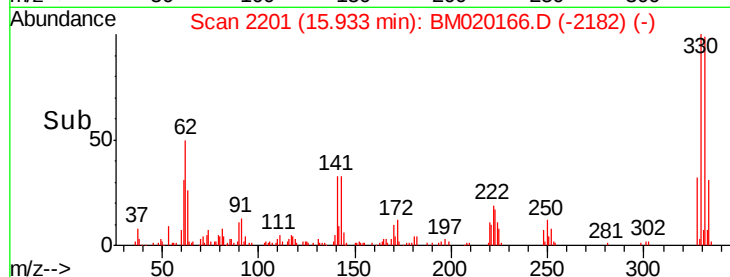
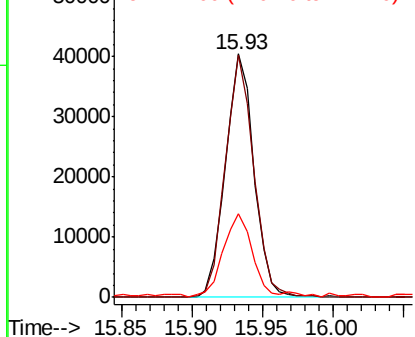


Abundance

Ion 329.80 (329.50 to 330.50): E

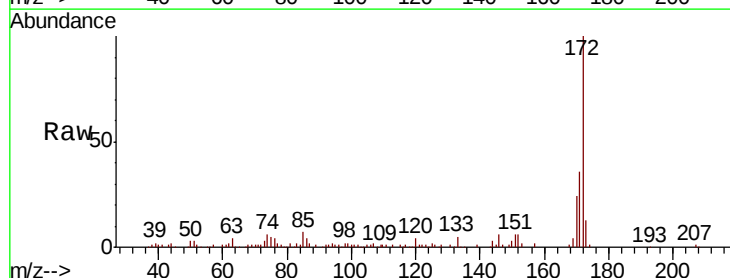
Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#45  
 2-Fluorobiphenyl  
 Concen: 5.779 ng  
 RT: 13.06 min Scan# 1712  
 Delta R.T. -0.00 min  
 Lab File: BM020166.D  
 Acq: 07 May 2019 12:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.1  | 27.3  | 40.9  |
| 170     | 24.0  | 17.9  | 26.9  |

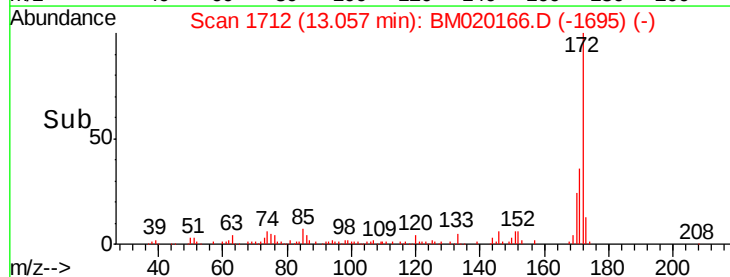
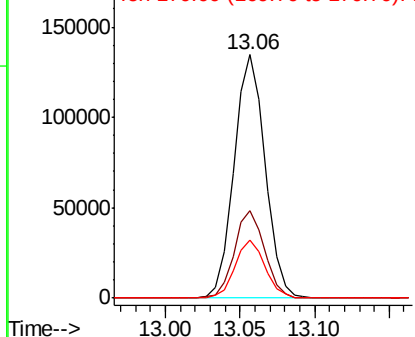


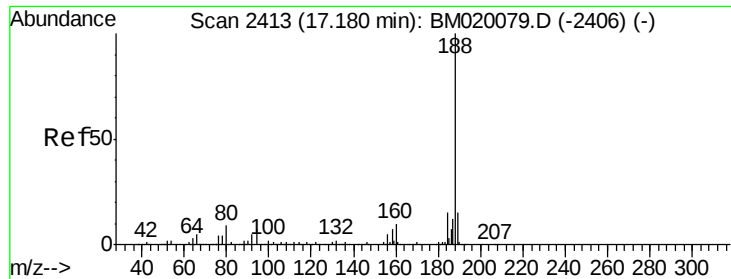
Abundance

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

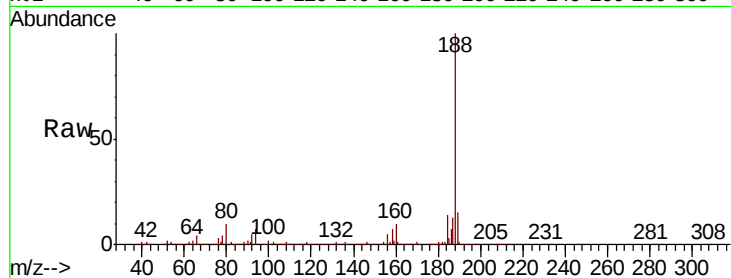




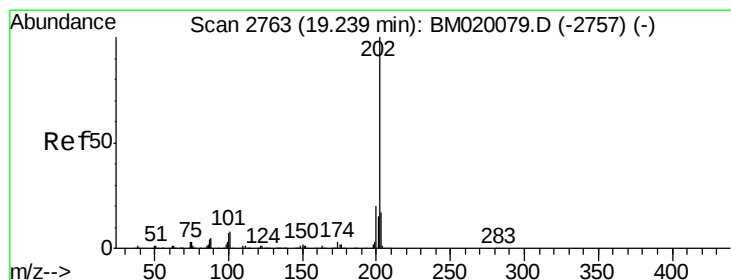
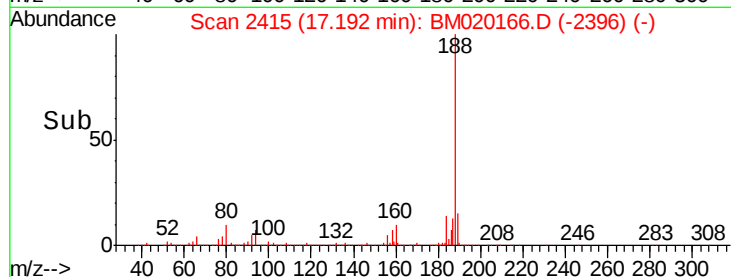
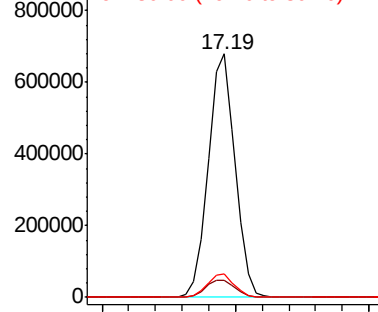
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.19 min Scan# 2415  
Delta R.T. 0.01 min  
Lab File: BM020166.D  
Acq: 07 May 2019 12:28

Instrument :  
BNA\_M  
ClientSampled :

Tot Ion:188 Resp: 942258  
Ion Ratio Lower Upper  
188 100  
94 6.8 5.8 8.6  
80 9.6 7.4 11.2

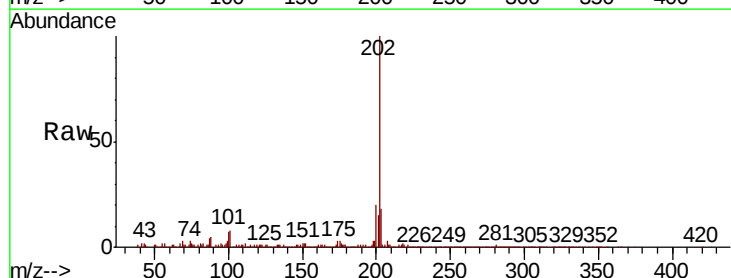


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BM  
Ion 80.00 (79.70 to 80.70): BM

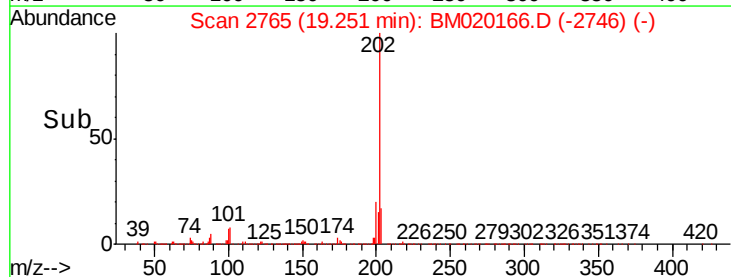
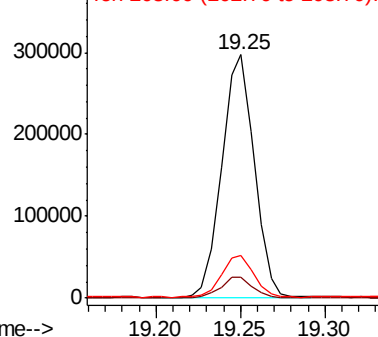


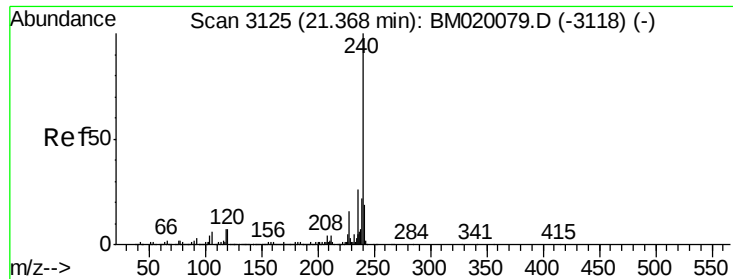
#75  
Fluoranthene  
Concen: 6.002 ng  
RT: 19.25 min Scan# 2765  
Delta R.T. 0.01 min  
Lab File: BM020166.D  
Acq: 07 May 2019 12:28

Tgt Ion:202 Resp: 395004  
Ion Ratio Lower Upper  
202 100  
101 8.4 0.0 28.4  
203 17.7 0.0 37.4



Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 203.00 (202.70 to 203.70): E

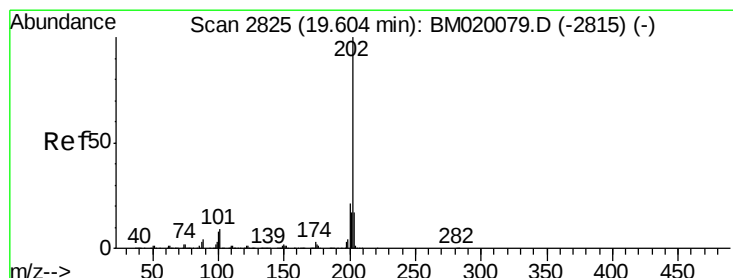
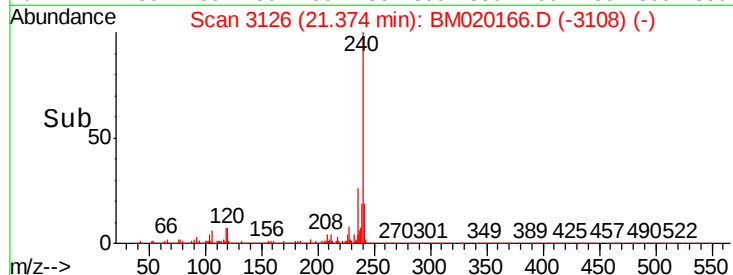
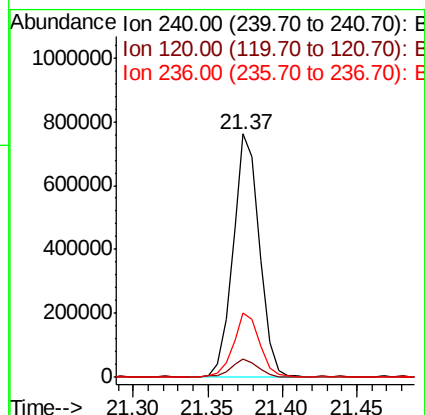
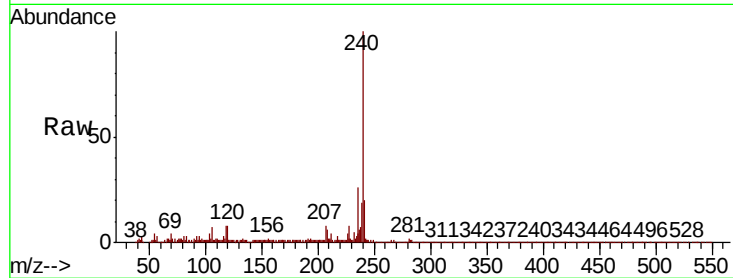




#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.37 min Scan# 3126  
Delta R.T. 0.01 min  
Lab File: BM020166.D  
Acq: 07 May 2019 12:28

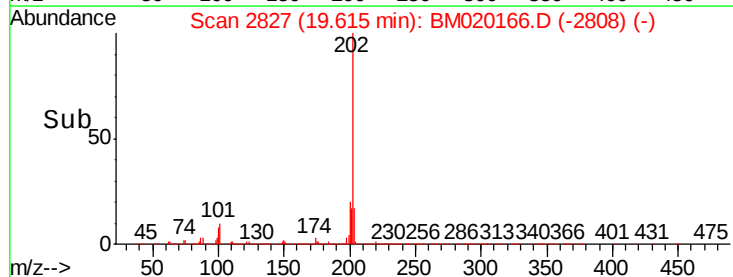
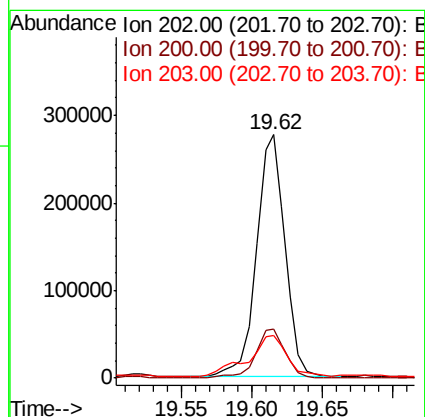
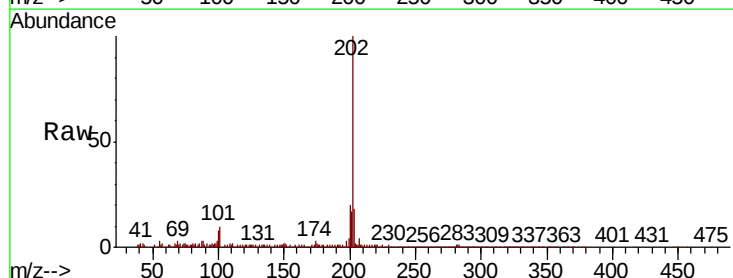
Instrument :  
BNA\_M  
ClientSampleId :

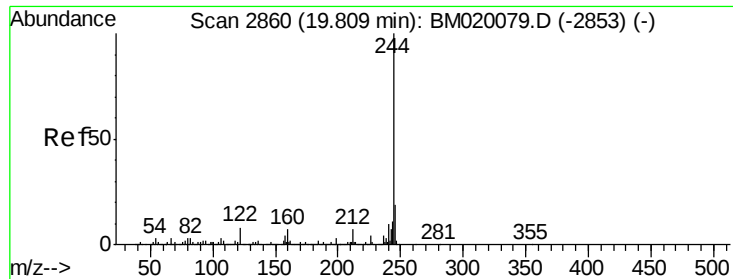
Tot Ion:240 Resp: 932461  
Ion Ratio Lower Upper  
240 100  
120 7.7 5.6 8.4  
236 26.4 20.9 31.3



#78  
Pyrene  
Concen: 6.263 ng  
RT: 19.62 min Scan# 2827  
Delta R.T. 0.01 min  
Lab File: BM020166.D  
Acq: 07 May 2019 12:28

Tgt Ion:202 Resp: 392103  
Ion Ratio Lower Upper  
202 100  
200 20.4 16.5 24.7  
203 17.7 13.9 20.9





#79

Terphenyl-d14

Concen: 5.113 ng

RT: 19.81 min Scan# 2860

Delta R.T. -0.00 min

Lab File: BM020166.D

Acq: 07 May 2019 12:28

Instrument :

BNA\_M

ClientSampleId :

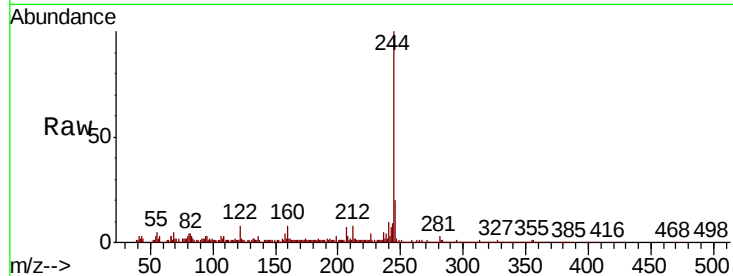
Tot Ion:244 Resp: 273331

Ion Ratio Lower Upper

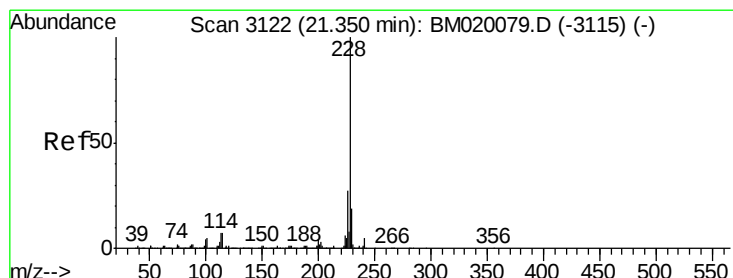
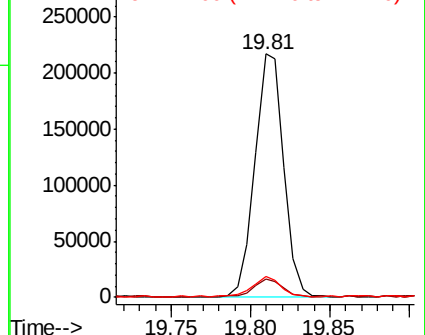
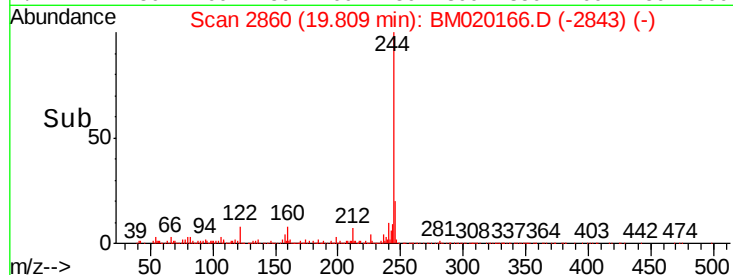
244 100

212 7.7 5.7 8.5

122 8.4 6.2 9.2



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



#81

Benzo(a)anthracene

Concen: 4.489 ng

RT: 21.36 min Scan# 3124

Delta R.T. 0.01 min

Lab File: BM020166.D

Acq: 07 May 2019 12:28

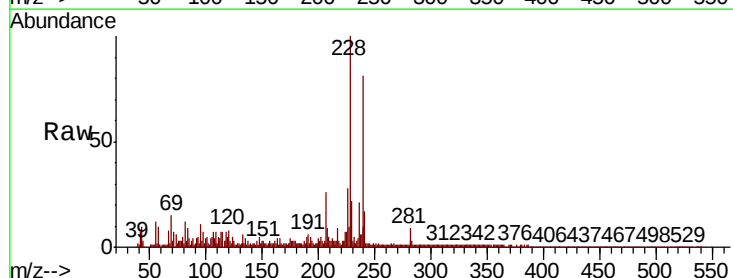
Tgt Ion:228 Resp: 293561

Ion Ratio Lower Upper

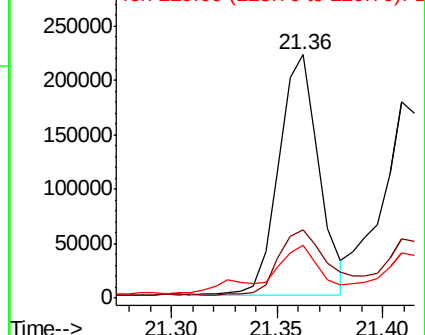
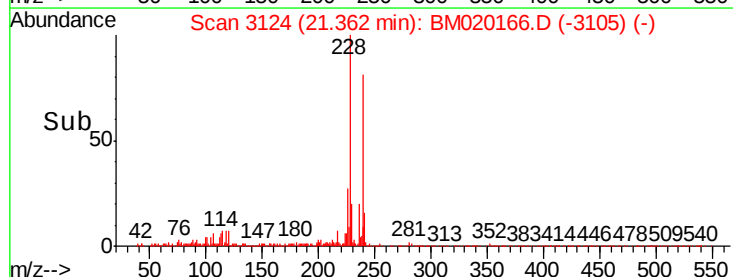
228 100

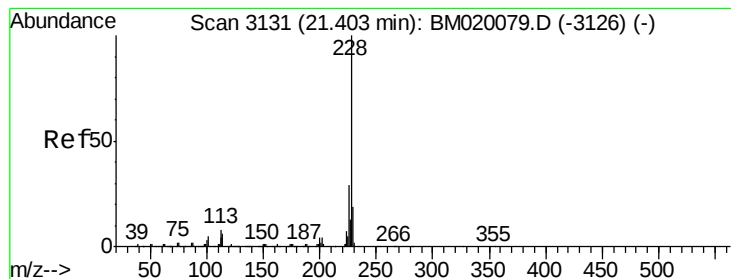
226 27.8 21.3 31.9

229 21.6 15.5 23.3



Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E





#83

Chrysene

Concen: 4.048 ng

RT: 21.41 min Scan# 3132

Delta R.T. 0.01 min

Lab File: BM020166.D

Acq: 07 May 2019 12:28

Instrument :

BNA\_M

ClientSampled :

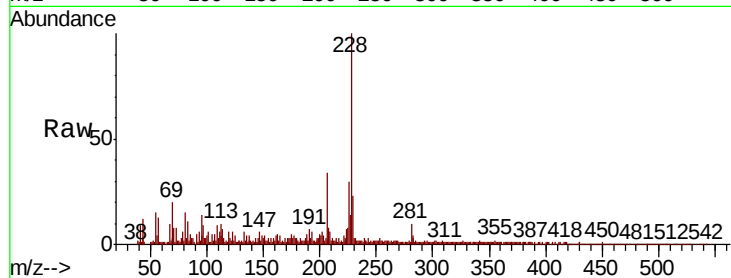
Tot Ion:228 Resp: 256698

Ion Ratio Lower Upper

228 100

226 30.0 23.0 34.6

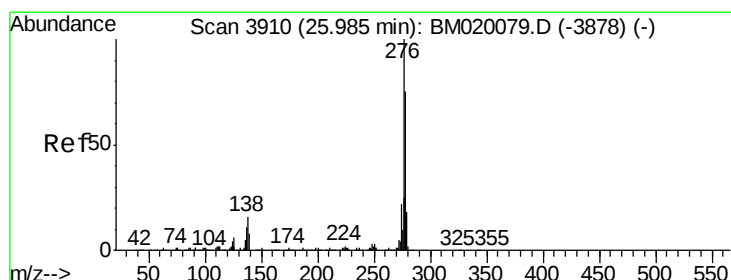
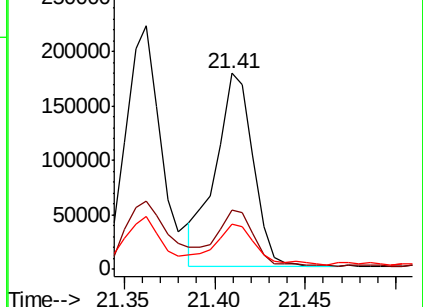
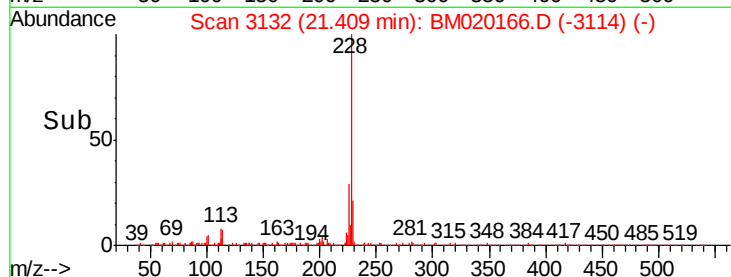
229 23.2 15.5 23.3



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#86

Indeno(1,2,3-cd)pyrene

Concen: 3.686 ng

RT: 26.01 min Scan# 3915

Delta R.T. 0.03 min

Lab File: BM020166.D

Acq: 07 May 2019 12:28

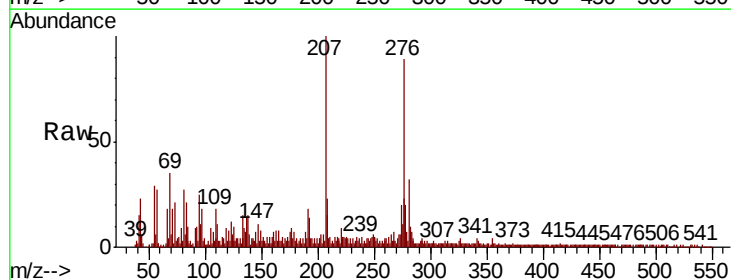
Tgt Ion:276 Resp: 278081

Ion Ratio Lower Upper

276 100

138 13.8 0.0 0.0#

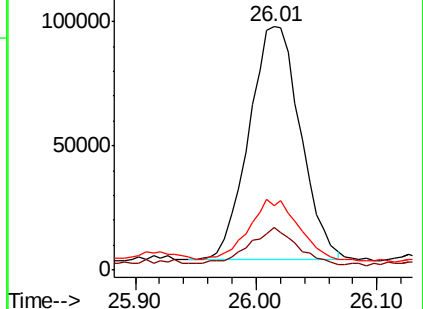
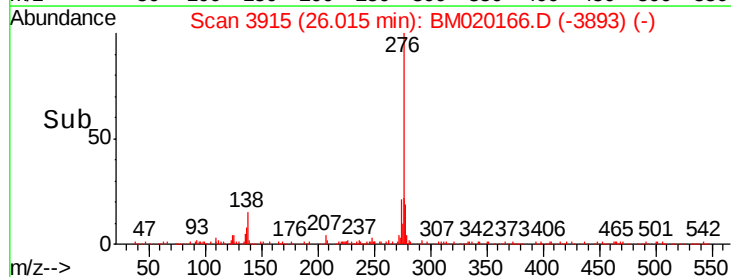
277 24.8 0.0 0.0#

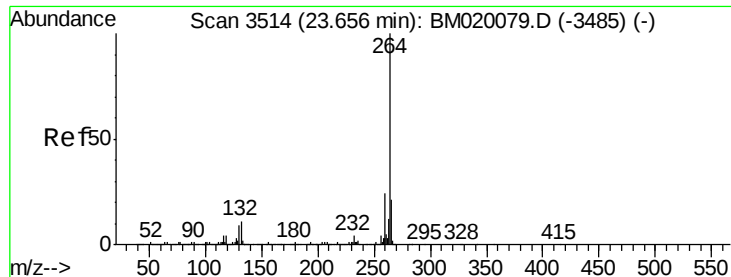


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E





#87

Pervlene-d12

Concen: 20.000 ng

RT: 23.68 min Scan# 3518

Delta R.T. 0.02 min

Lab File: BM020166.D

Acq: 07 May 2019 12:28

Instrument :

BNA\_M

ClientSampleId :

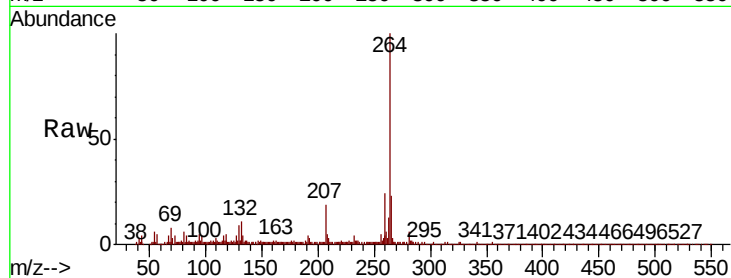
Tot Ion:264 Resp: 1082336

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 24.0  | 19.2  | 28.8  |
| 265 | 22.8  | 16.9  | 25.3  |

264 100

260 24.0 19.2 28.8

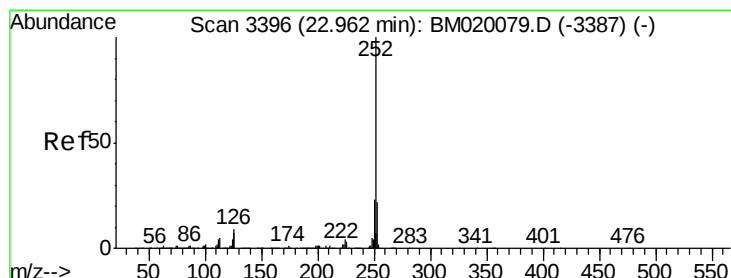
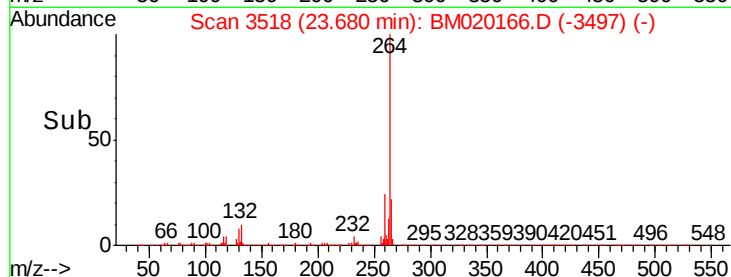
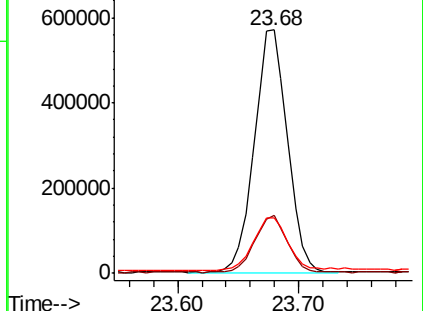
265 22.8 16.9 25.3



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



#88

Benzo(b)fluoranthene

Concen: 9.122 ng

RT: 22.98 min Scan# 3399

Delta R.T. 0.02 min

Lab File: BM020166.D

Acq: 07 May 2019 12:28

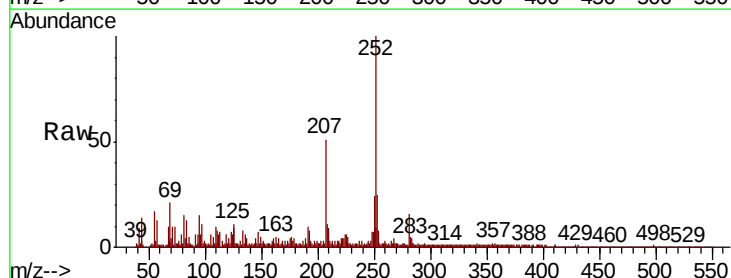
Tgt Ion:252 Resp: 651949

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 25.2  | 17.5  | 26.3  |
| 125 | 11.5  | 5.4   | 8.2   |

252 100

253 25.2 17.5 26.3

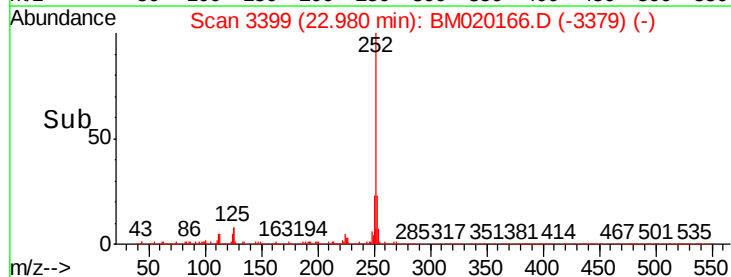
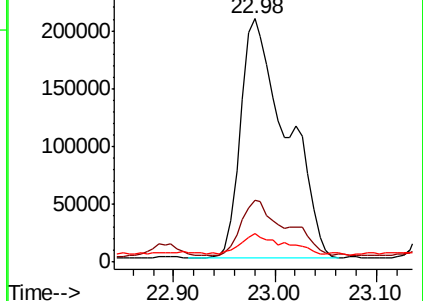
125 11.5 5.4 8.2

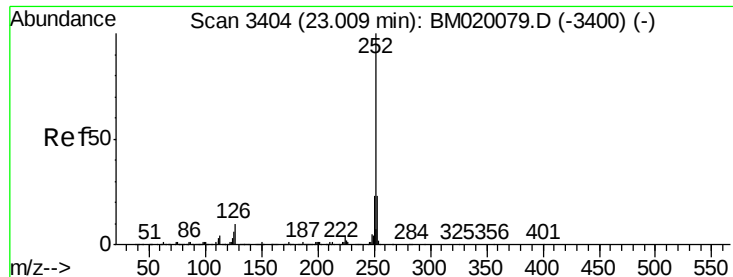


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

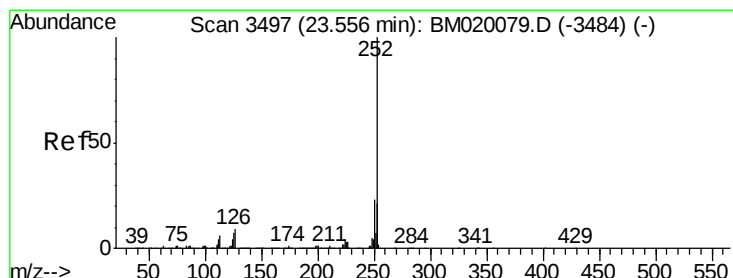
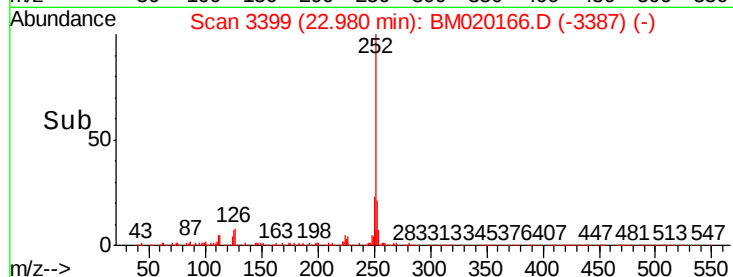
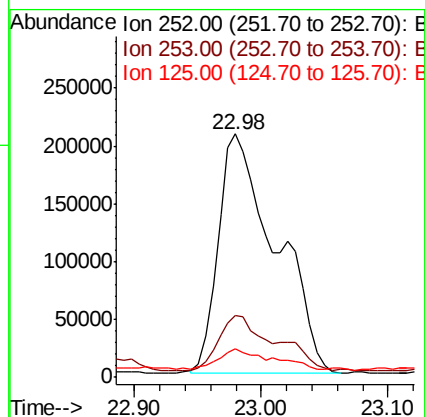
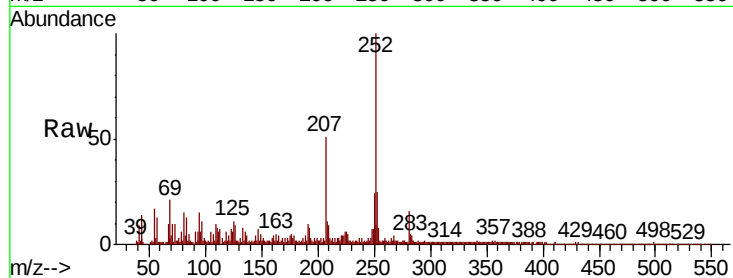




#89  
Benzo(k)fluoranthene  
Concen: 9.949 ng  
RT: 22.98 min Scan# 3399  
Delta R.T. -0.03 min  
Lab File: BM020166.D  
Acq: 07 May 2019 12:28

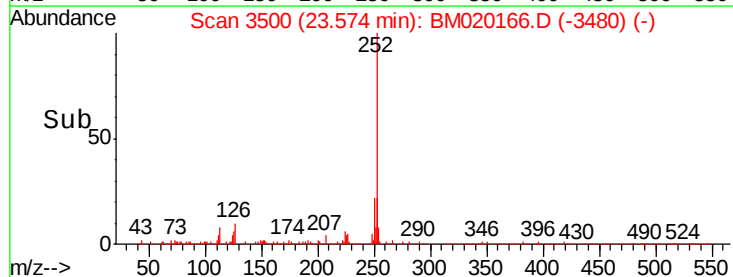
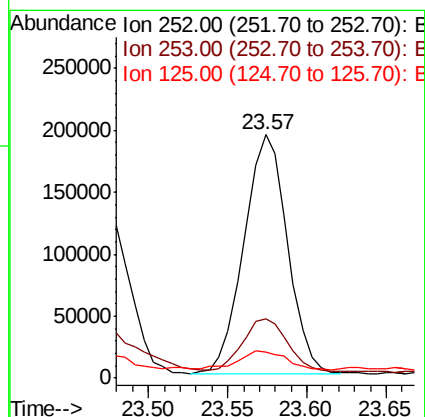
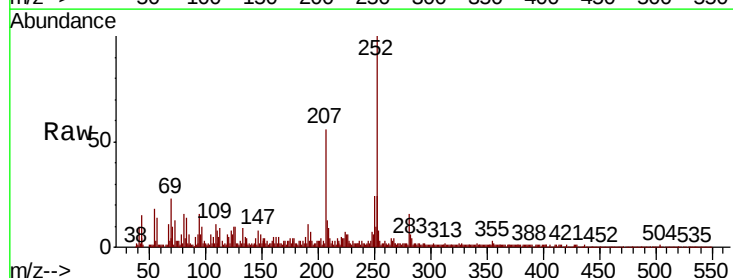
Instrument :  
BNA\_M  
ClientSampleId :

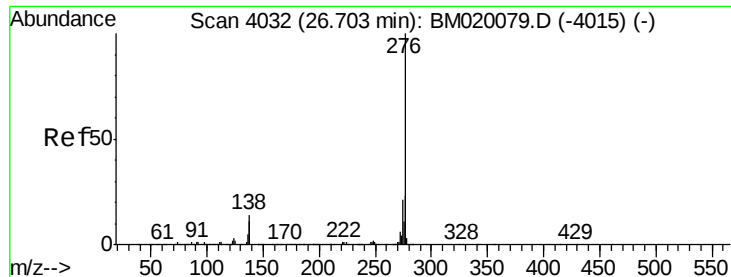
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.2  | 17.8  | 26.8  |
| 125     | 11.5  | 5.4   | 8.0   |



#90  
Benzo(a)pyrene  
Concen: 5.626 ng  
RT: 23.57 min Scan# 3500  
Delta R.T. 0.02 min  
Lab File: BM020166.D  
Acq: 07 May 2019 12:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.2  | 17.0  | 25.6  |
| 125     | 10.5  | 5.5   | 8.3   |





#92

Benzo(a,h,i)perylene

Concen: 4.075 ng

RT: 26.73 min Scan# 4037

Delta R.T. 0.03 min

Lab File: BM020166.D

Acq: 07 May 2019 12:28

Instrument :

BNA\_M

ClientSampleId :

Tot Ion:276 Resp: 261218

Ion Ratio Lower Upper

276 100

277 27.7 18.4 27.6#

138 17.6 11.1 16.7#

