

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM083019\  
 Data File : BM022459.D  
 Acq On : 31 Aug 2019 02:13  
 Operator : HP/JU  
 Sample : K4618-03  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :

Quant Time: Aug 31 05:33:28 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM082919.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Aug 29 16:51:32 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.52  | 152  | 16858    | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 10.29 | 136  | 60419    | 20.00 | ng    | -0.01    |
| 39) Acenaphthene-d10      | 14.18 | 164  | 37983    | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 16.95 | 188  | 88697    | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 21.17 | 240  | 218168   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 23.37 | 264  | 191848   | 20.00 | ng    | 0.00     |

|                             |       |     |        |       |    |      |
|-----------------------------|-------|-----|--------|-------|----|------|
| System Monitoring Compounds |       |     |        |       |    |      |
| 5) 2-Fluorophenol           | 5.14  | 112 | 89004  | 92.67 | ng | 0.00 |
| 7) Phenol-d6                | 6.72  | 99  | 110156 | 85.77 | ng | 0.00 |
| 23) Nitrobenzene-d5         | 8.69  | 82  | 70167  | 50.87 | ng | 0.00 |
| 42) 2,4,6-Tribromophenol    | 15.70 | 330 | 59155  | 76.11 | ng | 0.00 |
| 45) 2-Fluorobiphenyl        | 12.79 | 172 | 111211 | 33.17 | ng | 0.00 |
| 79) Terphenyl-d14           | 19.60 | 244 | 255509 | 15.46 | ng | 0.00 |

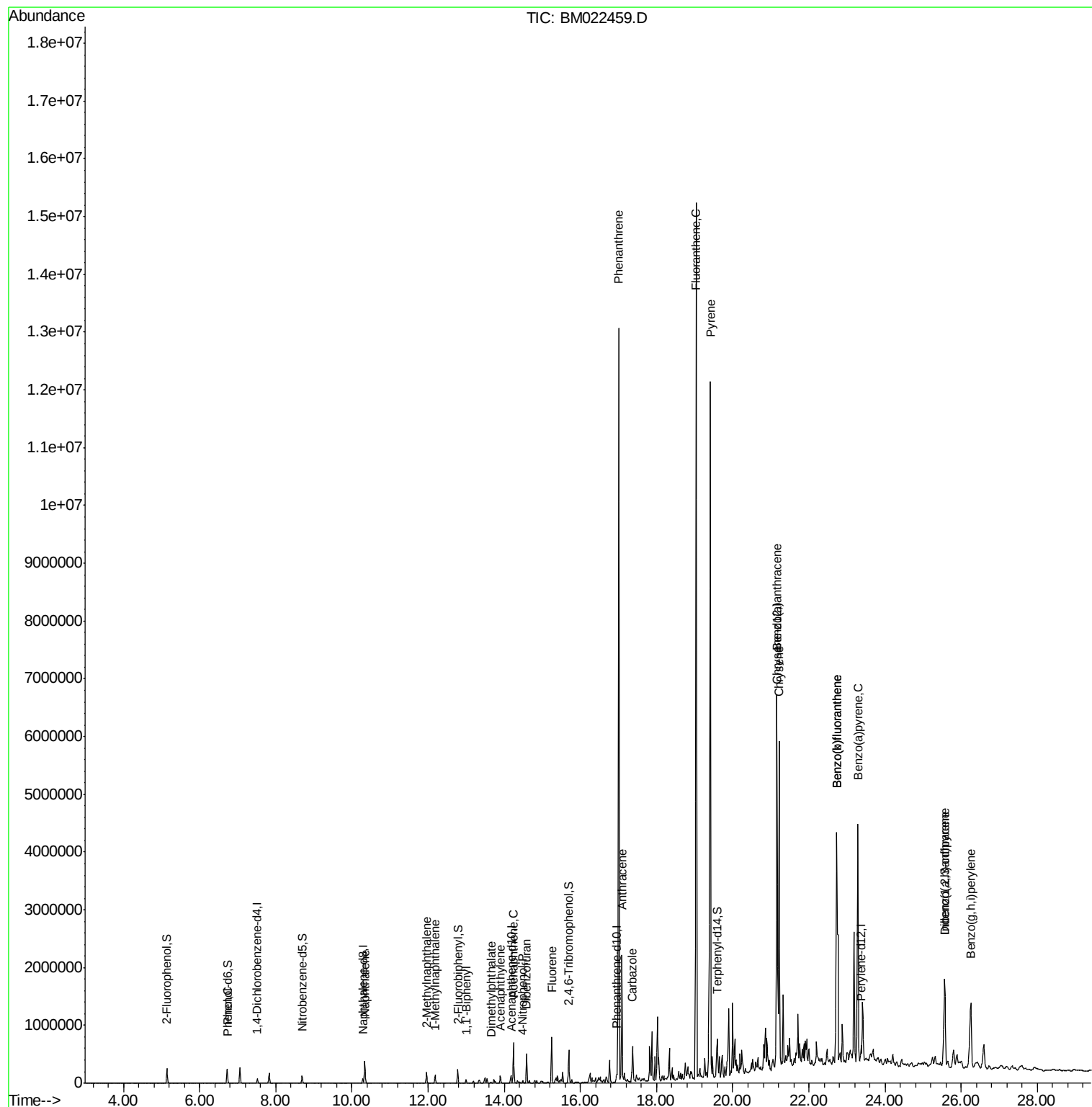
|                            |       |     |         |          |    |      |
|----------------------------|-------|-----|---------|----------|----|------|
| Target Compounds           |       |     |         | Qvalue   |    |      |
| 10) Phenol                 | 6.75  | 94  | 9616    | 7.453    | ng | 94   |
| 31) Naphthalene            | 10.34 | 128 | 256024  | 81.468   | ng | 100  |
| 37) 2-Methylnaphthalene    | 11.96 | 142 | 74147   | 31.048   | ng | 98   |
| 38) 1-Methylnaphthalene    | 12.19 | 142 | 55126   | 23.916   | ng | 99   |
| 46) 1,1'-Biphenyl          | 13.00 | 154 | 29808   | 9.604    | ng | 99   |
| 49) Acenaphthylene         | 13.90 | 152 | 64716   | 17.400   | ng | # 97 |
| 50) Dimethylphthalate      | 13.66 | 163 | 14806   | 4.482    | ng | 99   |
| 52) Acenaphthene           | 14.24 | 154 | 211622  | 94.872   | ng | 97   |
| 55) Dibenzofuran           | 14.59 | 168 | 246133  | 65.501   | ng | 98   |
| 56) 4-Nitrophenol          | 14.49 | 139 | 1459    | 9.415    | ng | # 1  |
| 58) Fluorene               | 15.24 | 166 | 301115  | 89.695   | ng | 97   |
| 71) Phenanthrene           | 17.01 | 178 | 7219432 | 1396.376 | ng | 98   |
| 72) Anthracene             | 17.09 | 178 | 1127683 | 221.688  | ng | 99   |
| 73) Carbazole              | 17.37 | 167 | 297726  | 70.808   | ng | 99   |
| 75) Fluoranthene           | 19.04 | 202 | 9174253 | 1332.477 | ng | 97   |
| 78) Pyrene                 | 19.42 | 202 | 7932626 | 533.531  | ng | 97   |
| 81) Benzo(a)anthracene     | 21.16 | 228 | 3359885 | 214.562  | ng | 99   |
| 83) Chrysene               | 21.22 | 228 | 2664404 | 178.761  | ng | 96   |
| 86) Indeno(1,2,3-cd)pyrene | 25.57 | 276 | 1430297 | 95.402   | ng | 97   |
| 88) Benzo(b)fluoranthene   | 22.73 | 252 | 3427983 | 257.204  | ng | 99   |
| 89) Benzo(k)fluoranthene   | 22.73 | 252 | 3427983 | 259.274  | ng | 97   |
| 90) Benzo(a)pyrene         | 23.29 | 252 | 2965758 | 250.702  | ng | 98   |
| 91) Dibenz(a,h)anthracene  | 25.56 | 278 | 338910  | 28.731   | ng | # 90 |
| 92) Benzo(g,h,i)perylene   | 26.25 | 276 | 1338466 | 130.191  | ng | 96   |

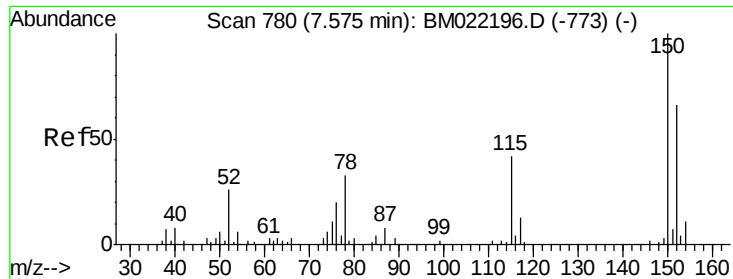
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM083019\  
Data File : BM022459.D  
Acq On : 31 Aug 2019 02:13  
Operator : HP/JU  
Sample : K4618-03  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :

Quant Time: Aug 31 05:33:28 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM082919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Aug 29 16:51:32 2019  
Response via : Initial Calibration



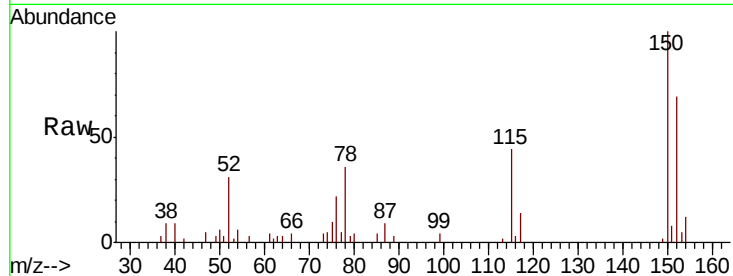


#1

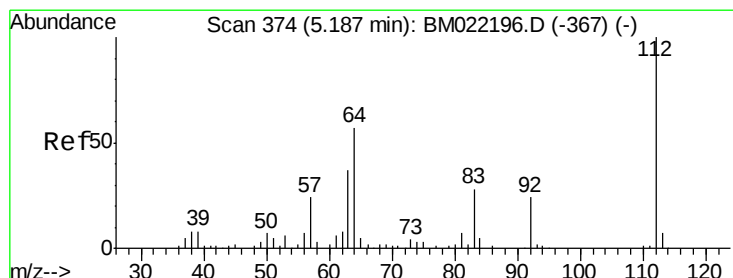
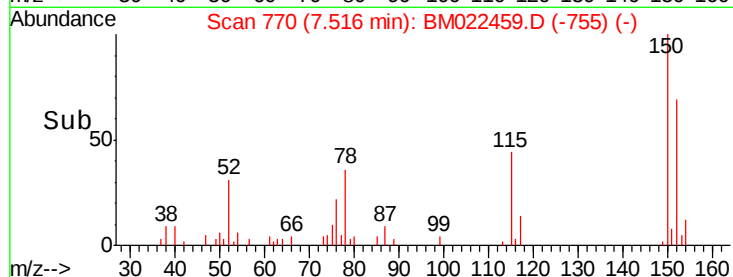
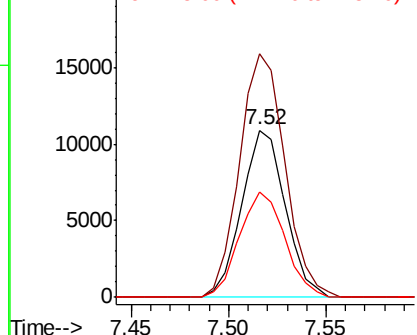
1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 7.52 min Scan# 770  
 Delta R.T. -0.01 min  
 Lab File: BM022459.D  
 Acq: 31 Aug 2019 02:13

Instrument :  
 BNA\_M  
 ClientSampleId :

Tot Ion:152 Resp: 16858  
 Ion Ratio Lower Upper  
 152 100  
 150 145.6 125.4 188.0  
 115 63.4 50.3 75.5



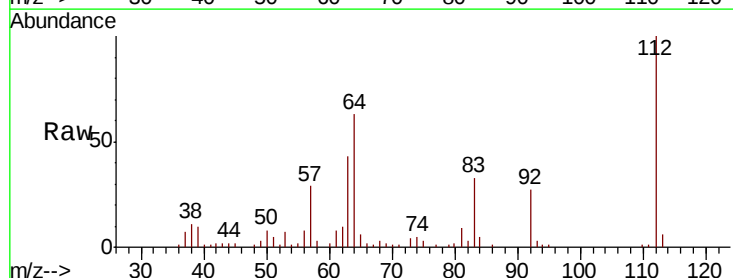
Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E



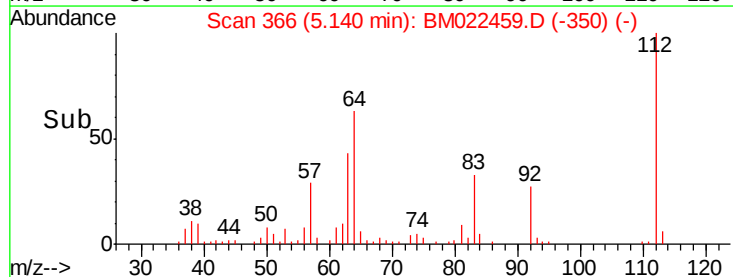
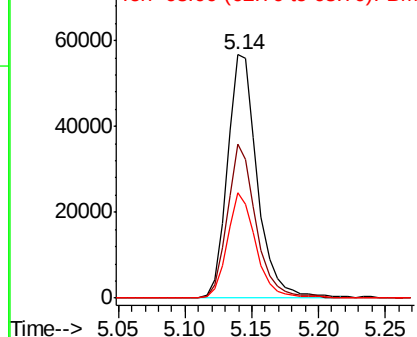
#5

2-Fluorophenol  
 Concen: 92.675 ng  
 RT: 5.14 min Scan# 366  
 Delta R.T. -0.01 min  
 Lab File: BM022459.D  
 Acq: 31 Aug 2019 02:13

Tgt Ion:112 Resp: 89004  
 Ion Ratio Lower Upper  
 112 100  
 64 63.4 45.4 68.2  
 63 43.3 34.5 51.7



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: 85.772 ng

RT: 6.72 min Scan# 635

Delta R.T. -0.00 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

Instrument :

BNA\_M

ClientSampled :

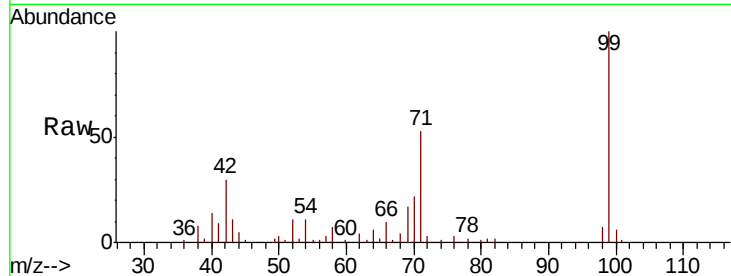
Tot Ion: 99 Resp: 110156

Ion Ratio Lower Upper

99 100

42 29.8 26.3 39.5

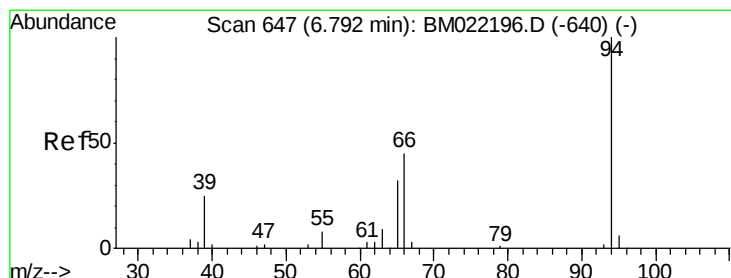
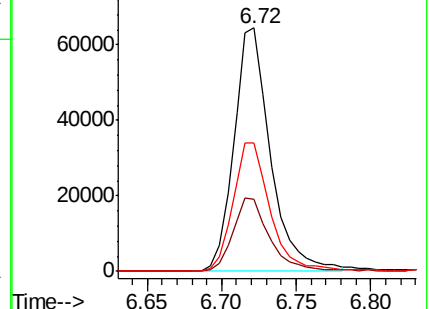
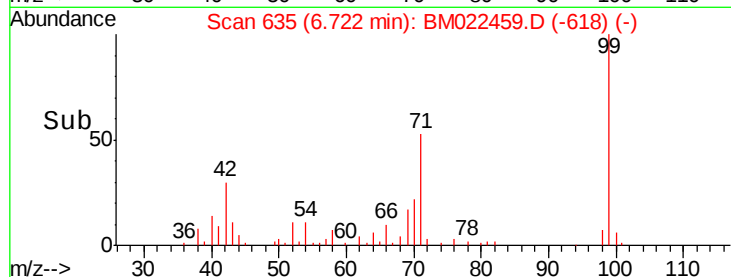
71 52.8 46.6 69.8



Abundance Ion 99.00 (98.70 to 99.70): BM022196.D (-635) (-)

Ion 42.00 (41.70 to 42.70): BM022196.D (-635) (-)

Ion 71.00 (70.70 to 71.70): BM022196.D (-635) (-)



#10

Phenol

Concen: 7.453 ng

RT: 6.75 min Scan# 640

Delta R.T. -0.00 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

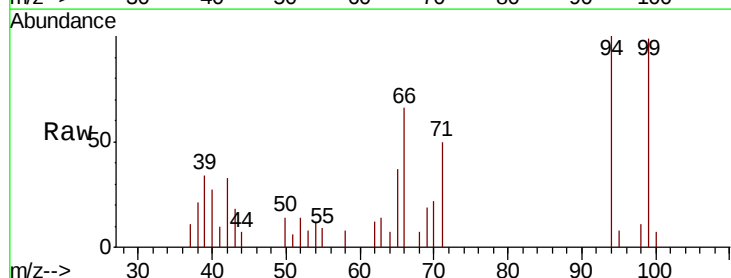
Tgt Ion: 94 Resp: 9616

Ion Ratio Lower Upper

94 100

65 36.8 17.7 57.7

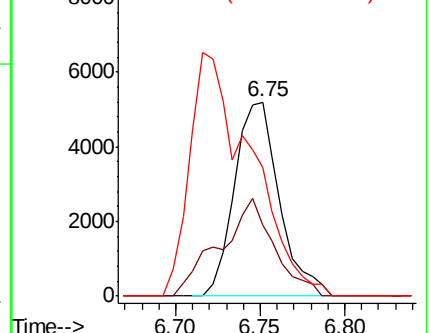
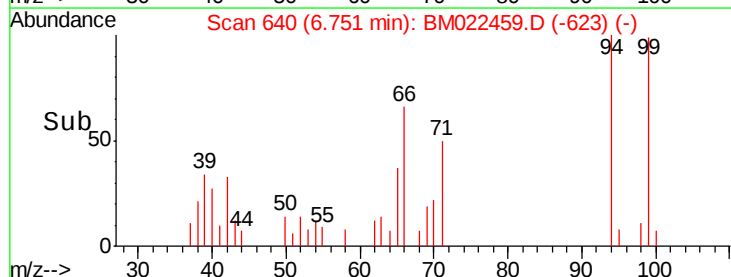
66 66.0 39.6 79.6

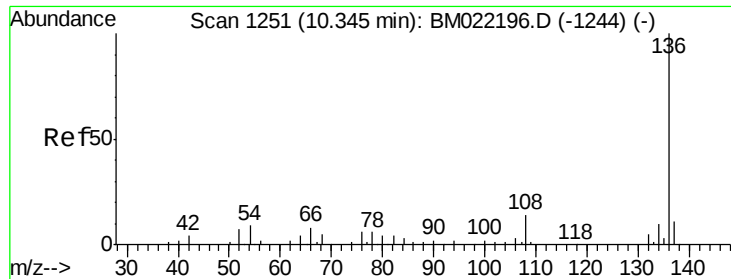


Abundance Ion 94.00 (93.70 to 94.70): BM022196.D (-640) (-)

Ion 65.00 (64.70 to 65.70): BM022196.D (-640) (-)

Ion 66.00 (65.70 to 66.70): BM022196.D (-640) (-)

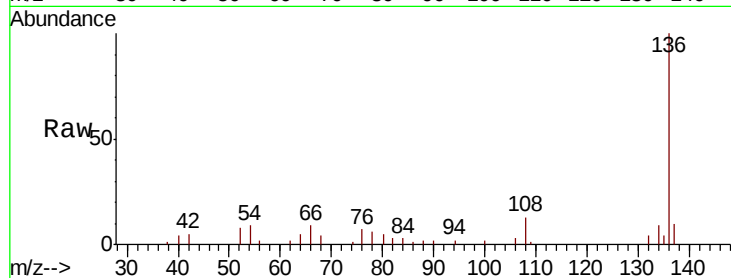




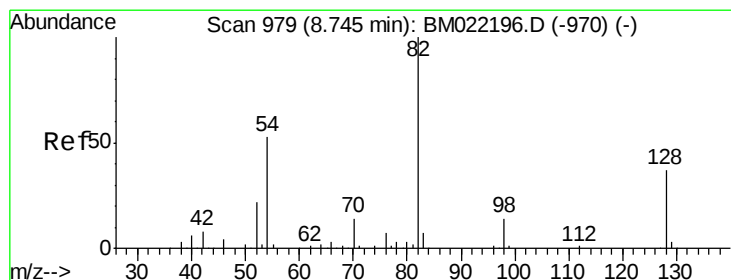
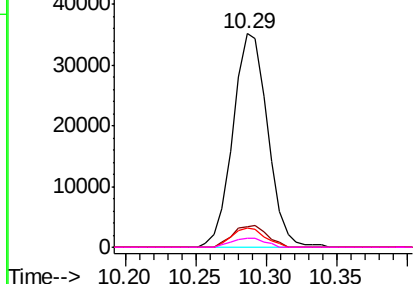
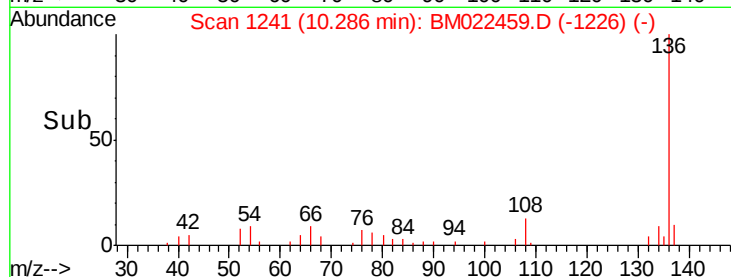
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.29 min Scan# 1241  
Delta R.T. -0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

Instrument :  
BNA\_M  
ClientSampled :

Tot Ion:136 Resp: 60419  
Ion Ratio Lower Upper  
136 100  
137 9.8 8.6 13.0  
54 8.9 7.0 10.6  
68 4.0 2.9 4.3

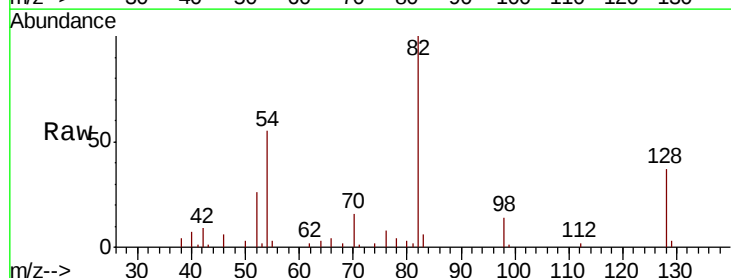


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BM  
Ion 68.00 (67.70 to 68.70): BM

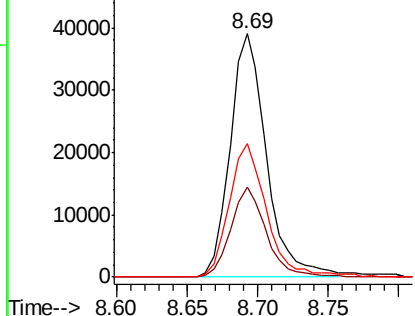
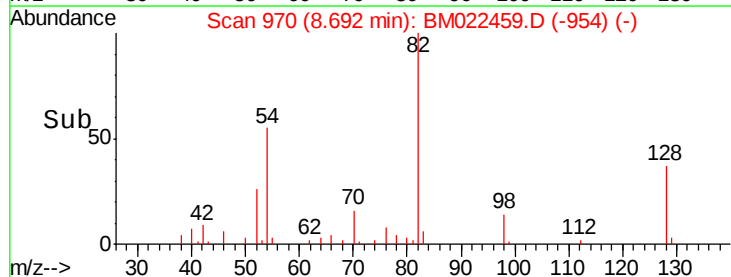


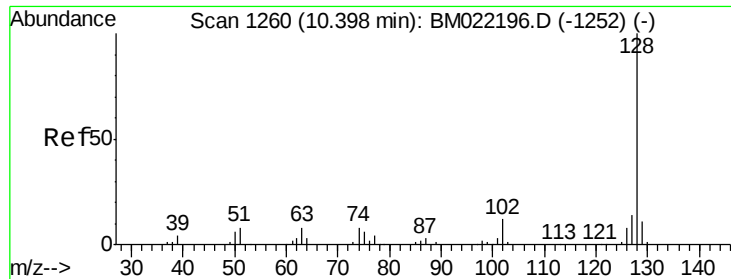
#23  
Nitrobenzene-d5  
Concen: 50.867 ng  
RT: 8.69 min Scan# 970  
Delta R.T. -0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

Tgt Ion: 82 Resp: 70167  
Ion Ratio Lower Upper  
82 100  
128 37.0 27.9 41.9  
54 55.0 45.2 67.8



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

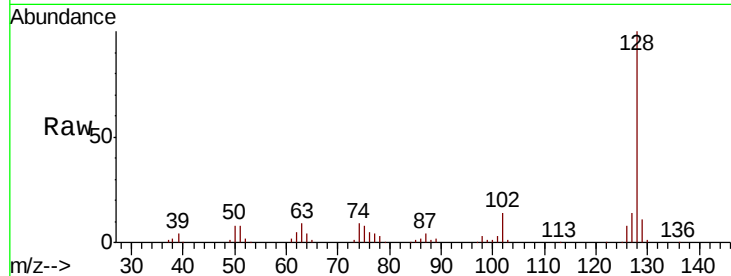




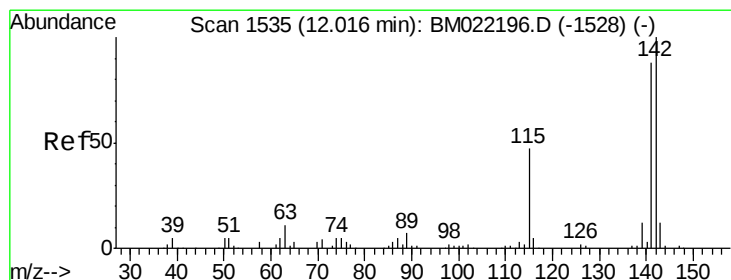
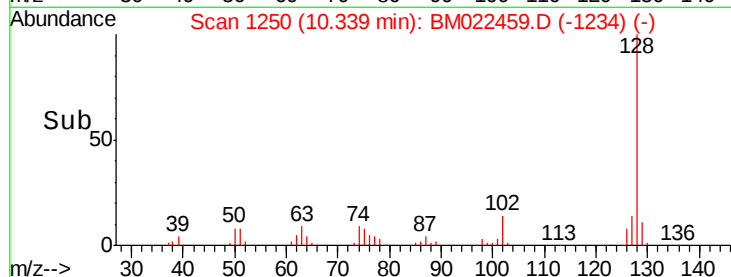
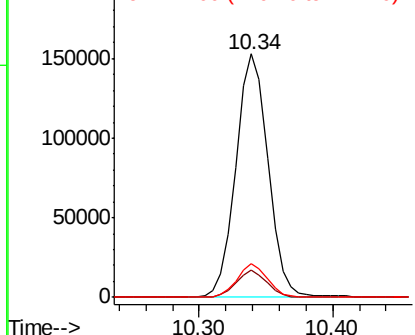
#31  
Naphthalene  
Concen: 81.468 ng  
RT: 10.34 min Scan# 1250  
Delta R.T. -0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

Instrument :  
BNA\_M  
ClientSampleId :

Tot Ion:128 Resp: 256024  
Ion Ratio Lower Upper  
128 100  
129 11.0 9.0 13.4  
127 13.9 11.0 16.4

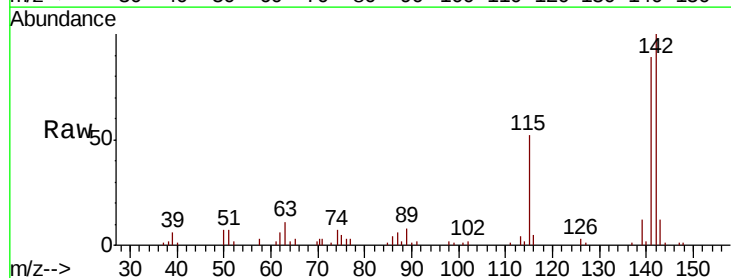


Abundance Ion 128.00 (127.70 to 128.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 127.00 (126.70 to 127.70): E

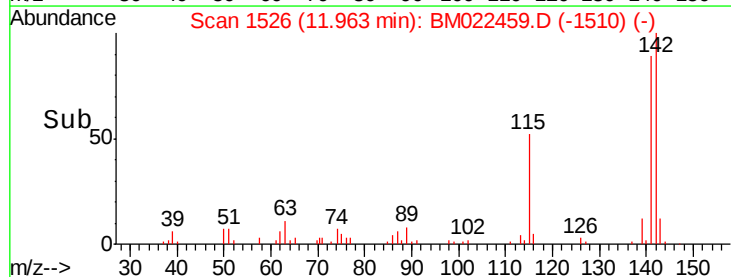
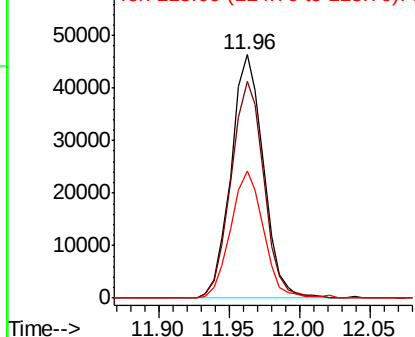


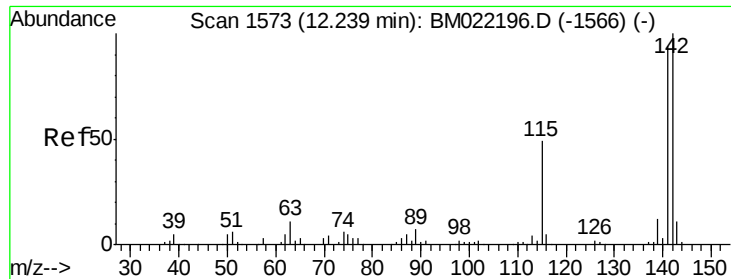
#37  
2-Methylnaphthalene  
Concen: 31.048 ng  
RT: 11.96 min Scan# 1526  
Delta R.T. -0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

Tgt Ion:142 Resp: 74147  
Ion Ratio Lower Upper  
142 100  
141 88.9 72.2 108.2  
115 52.3 43.2 64.8



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

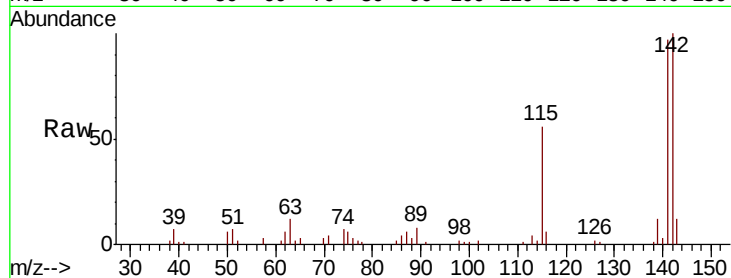




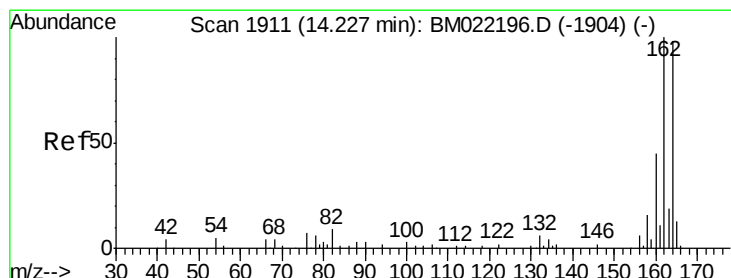
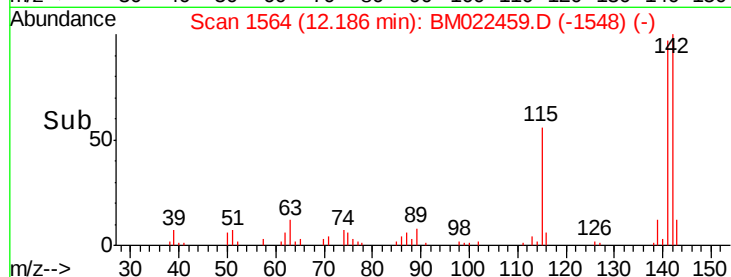
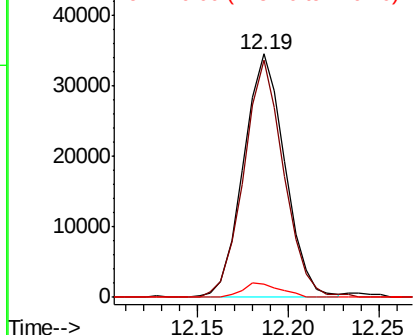
#38  
1-Methylnaphthalene  
Concen: 23.916 ng  
RT: 12.19 min Scan# 1564  
Delta R.T. -0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

Instrument :  
BNA\_M  
ClientSampled :

Tot Ion:142 Resp: 55126  
Ion Ratio Lower Upper  
142 100  
141 97.3 77.3 115.9  
116 5.6 4.9 7.3

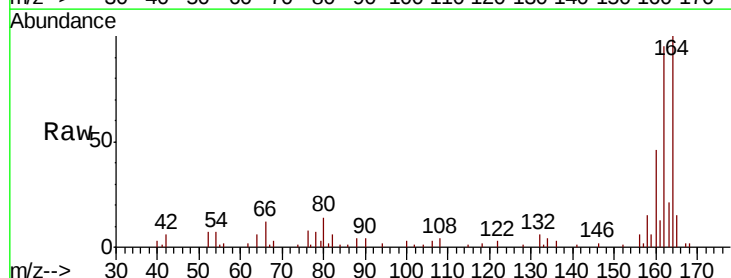


Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E  
Ion 116.00 (115.70 to 116.70): E

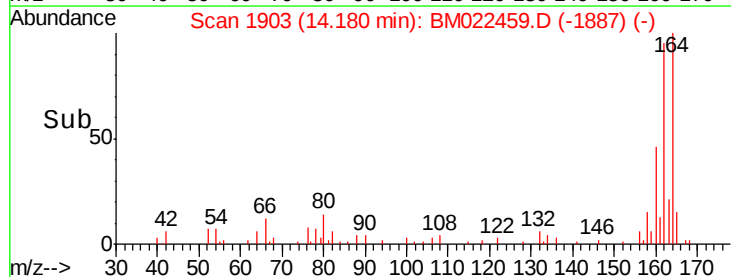
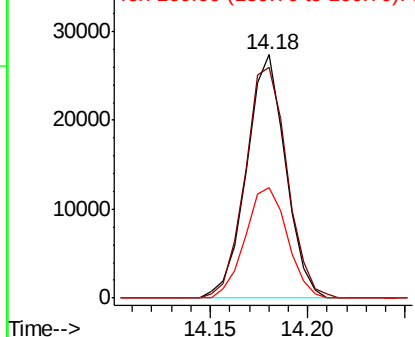


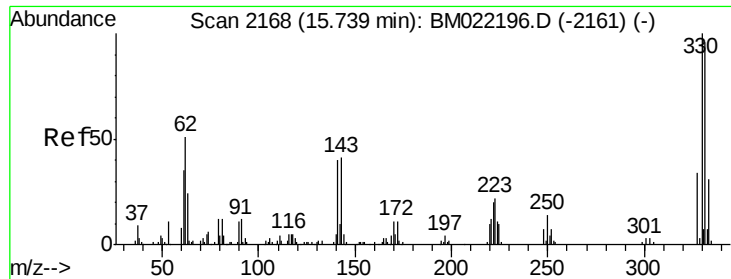
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.18 min Scan# 1903  
Delta R.T. -0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

Tgt Ion:164 Resp: 37983  
Ion Ratio Lower Upper  
164 100  
162 95.1 80.6 121.0  
160 45.5 37.3 55.9



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





#42

2,4,6-Tribromophenol

Concen: 76.109 ng

RT: 15.70 min Scan# 2161

Delta R.T. -0.00 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

Instrument :

BNA\_M

ClientSampleId :

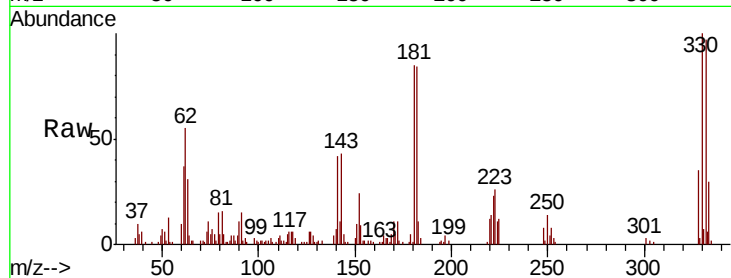
Tot Ion:330 Resp: 59155

Ion Ratio Lower Upper

330 100

332 95.3 77.8 116.8

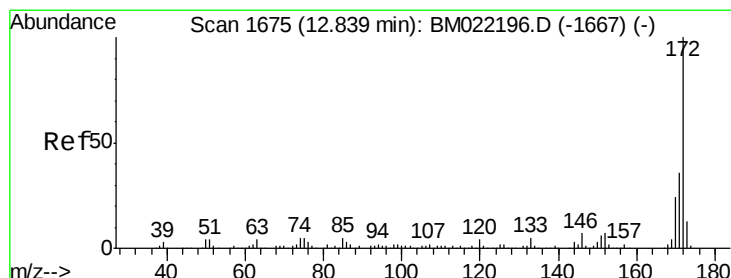
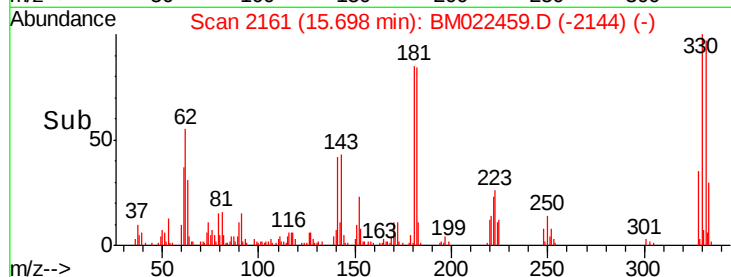
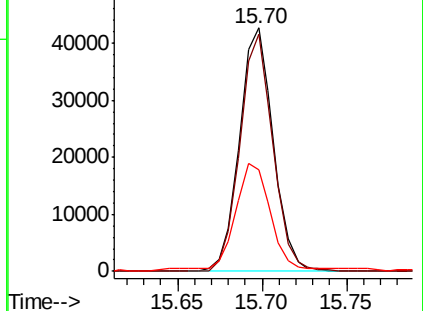
141 47.4 35.6 53.4



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: 33.169 ng

RT: 12.79 min Scan# 1666

Delta R.T. -0.01 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

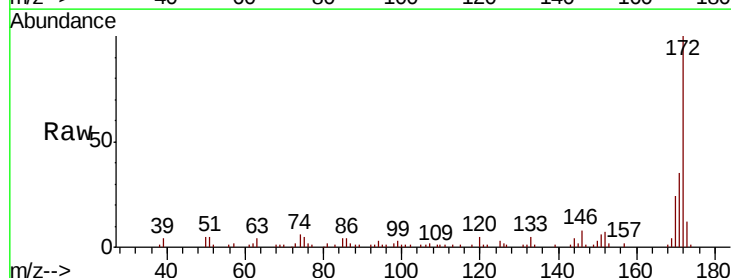
Tgt Ion:172 Resp: 111211

Ion Ratio Lower Upper

172 100

171 34.9 28.5 42.7

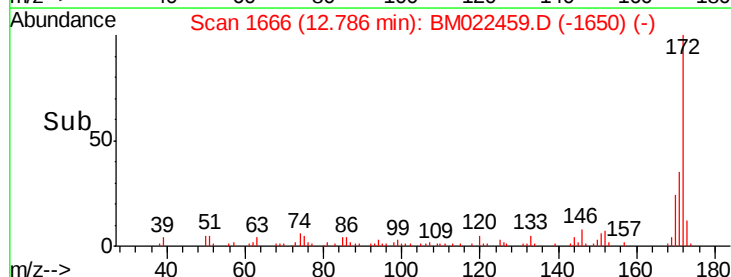
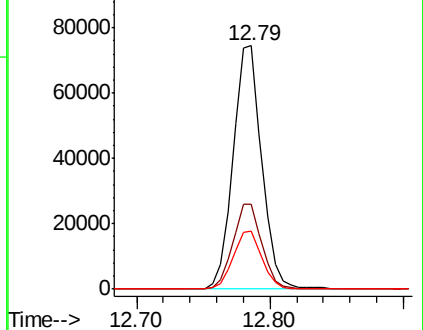
170 23.8 18.9 28.3

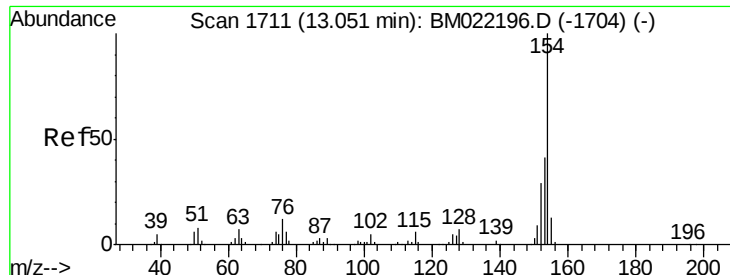


Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E

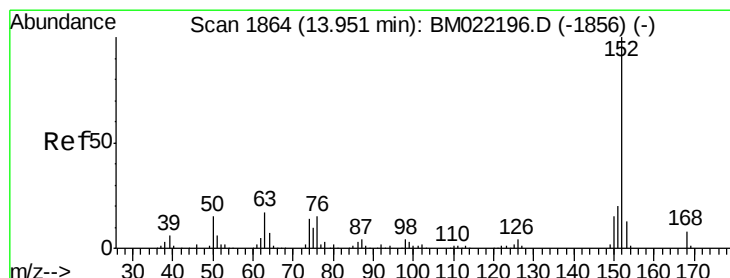
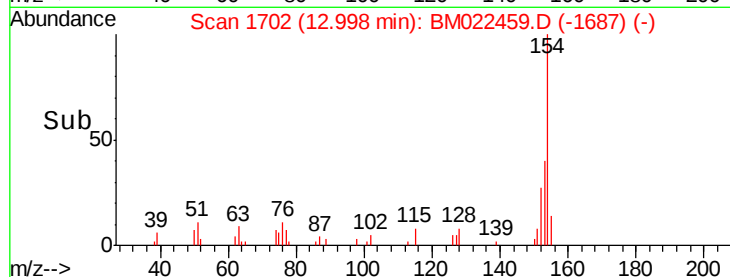
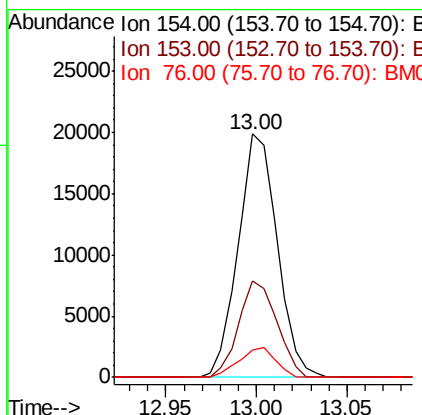
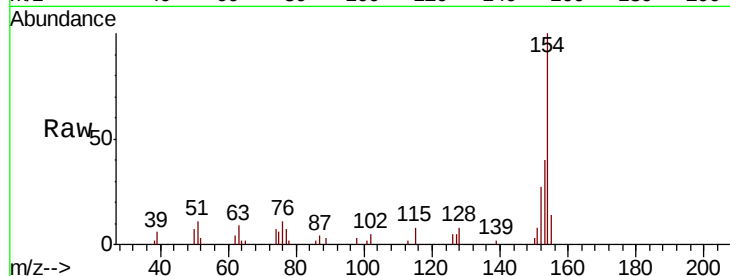




#46  
 1,1'-Biphenyl  
 Concen: 9.604 ng  
 RT: 13.00 min Scan# 1702  
 Delta R.T. -0.01 min  
 Lab File: BM022459.D  
 Acq: 31 Aug 2019 02:13

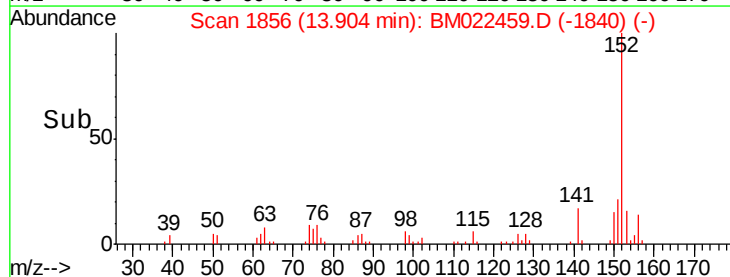
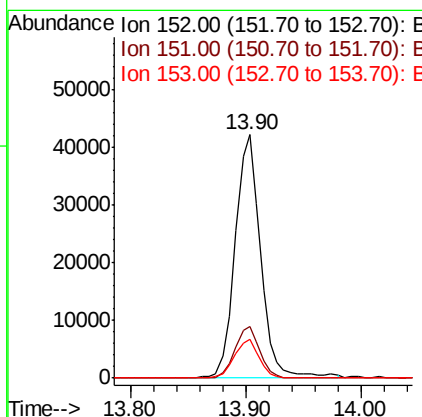
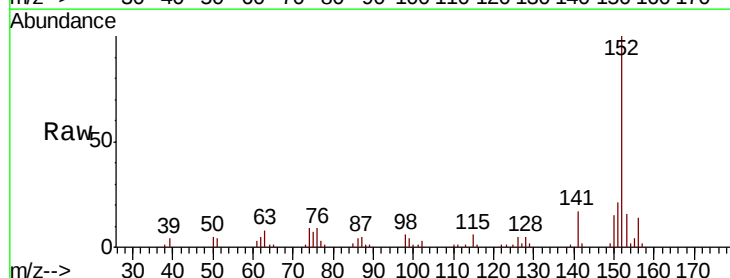
Instrument :  
 BNA\_M  
 ClientSampleId :

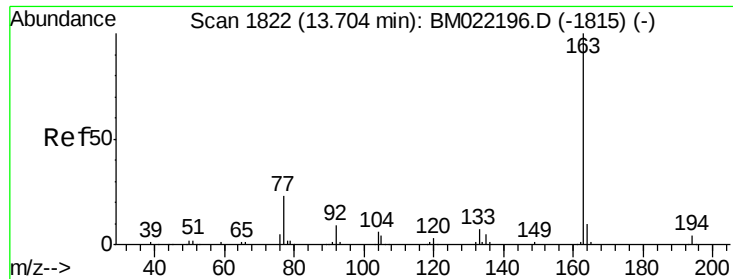
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 39.7  | 20.4  | 60.4  |
| 76      | 11.0  | 0.0   | 30.9  |



#49  
 Acenaphthylene  
 Concen: 17.400 ng  
 RT: 13.90 min Scan# 1856  
 Delta R.T. -0.01 min  
 Lab File: BM022459.D  
 Acq: 31 Aug 2019 02:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 21.0  | 16.9  | 25.3  |
| 153     | 15.9  | 10.4  | 15.6# |

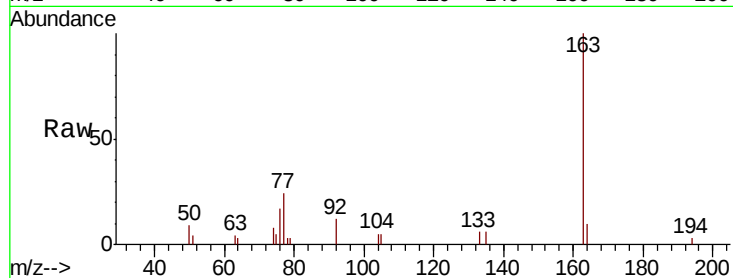




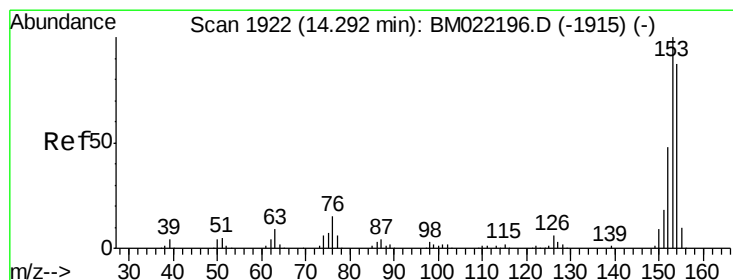
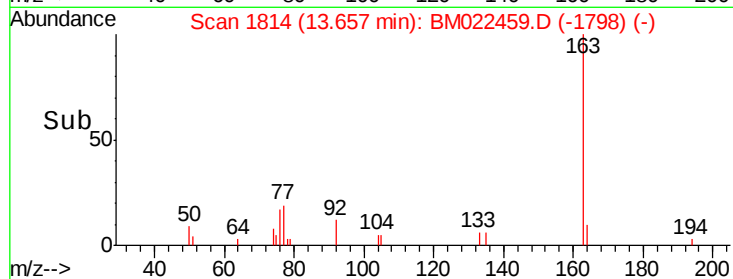
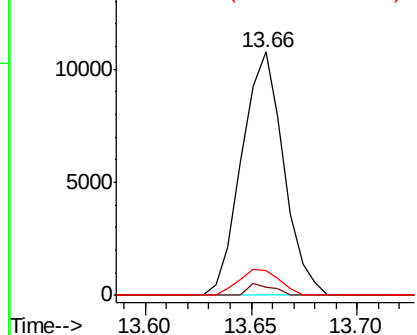
#50  
Dimethylphthalate  
Concen: 4.482 ng  
RT: 13.66 min Scan# 1814  
Delta R.T. -0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

Instrument :  
BNA\_M  
ClientSampled :

Tot Ion:163 Resp: 14806  
Ion Ratio Lower Upper  
163 100  
194 3.4 3.4 5.2  
164 10.1 8.2 12.2

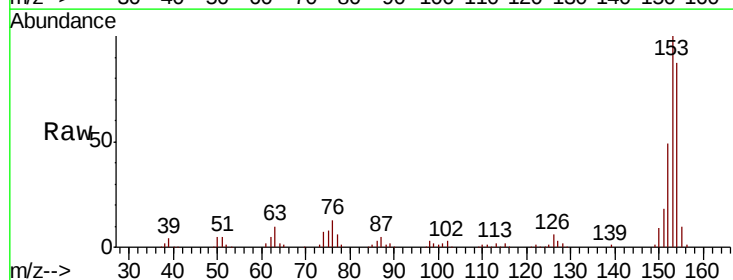


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

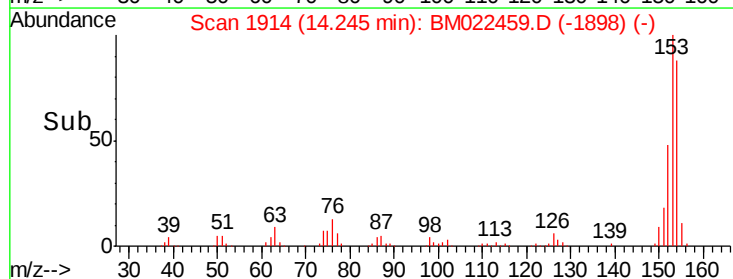
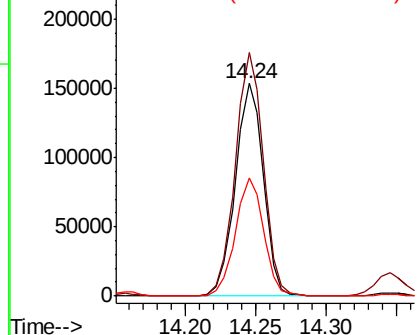


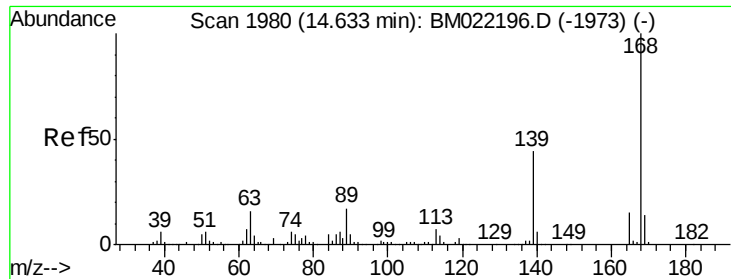
#52  
Acenaphthene  
Concen: 94.872 ng  
RT: 14.24 min Scan# 1914  
Delta R.T. -0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

Tgt Ion:154 Resp: 211622  
Ion Ratio Lower Upper  
154 100  
153 114.5 94.3 141.5  
152 55.7 45.4 68.2



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

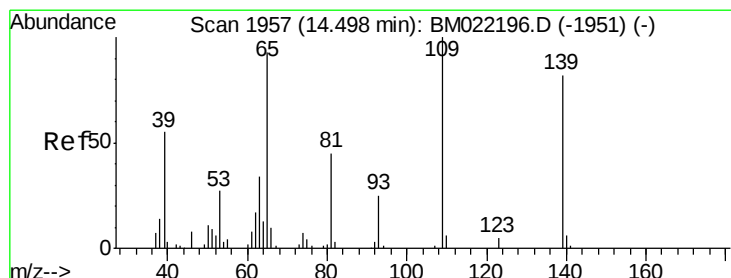
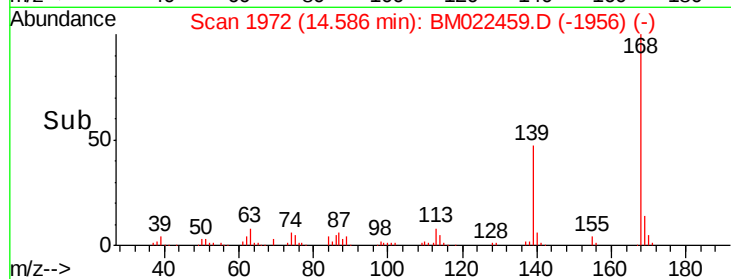
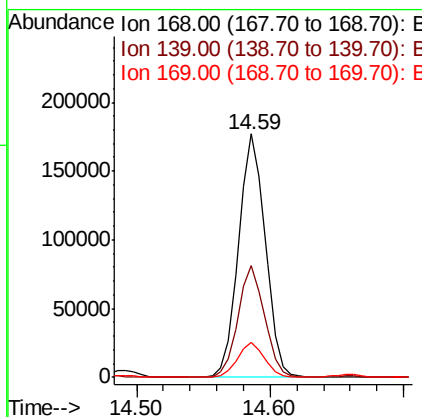
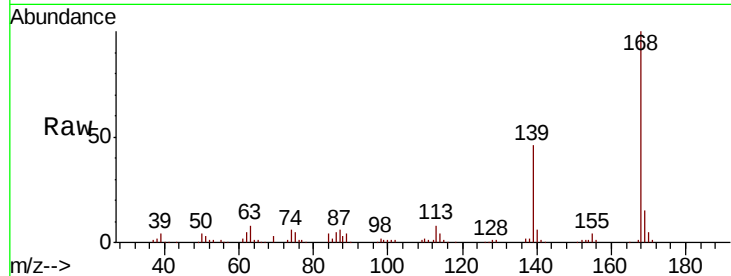




#55  
Dibenzenofuran  
Concen: 65.501 ng  
RT: 14.59 min Scan# 1972  
Delta R.T. -0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

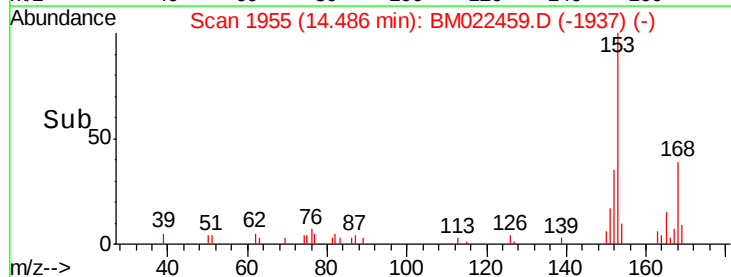
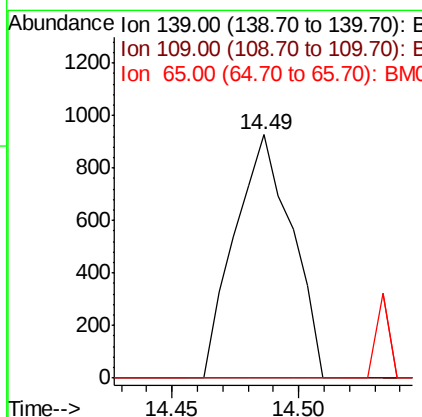
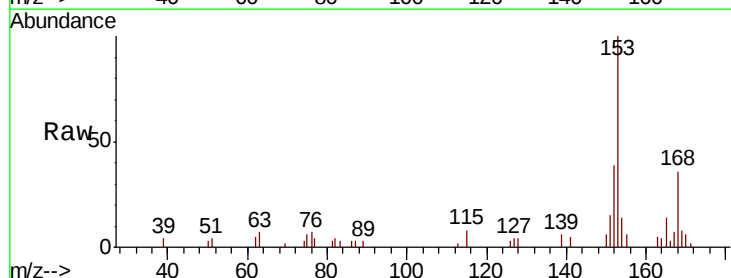
Instrument :  
BNA\_M  
ClientSampleId :

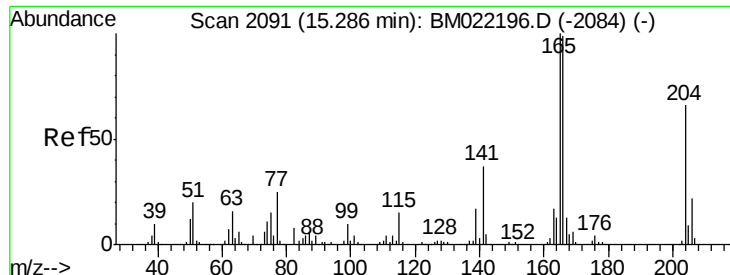
Tot Ion:168 Resp: 246133  
Ion Ratio Lower Upper  
168 100  
139 46.0 36.1 54.1  
169 14.5 10.4 15.6



#56  
4-Nitrophenol  
Concen: 9.415 ng  
RT: 14.49 min Scan# 1955  
Delta R.T. 0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

Tgt Ion:139 Resp: 1459  
Ion Ratio Lower Upper  
139 100  
109 0.0 128.0 168.0#  
65 0.0 104.3 144.3#





#58

Fluorene

Concen: 89.695 ng

RT: 15.24 min Scan# 2084

Delta R.T. -0.01 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

Instrument :

BNA\_M

ClientSampleId :

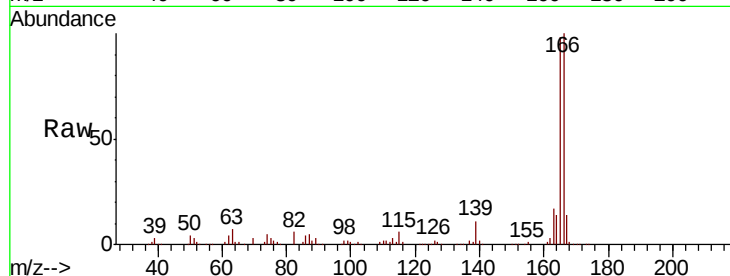
Tot Ion:166 Resp: 301115

Ion Ratio Lower Upper

166 100

165 98.5 81.1 121.7

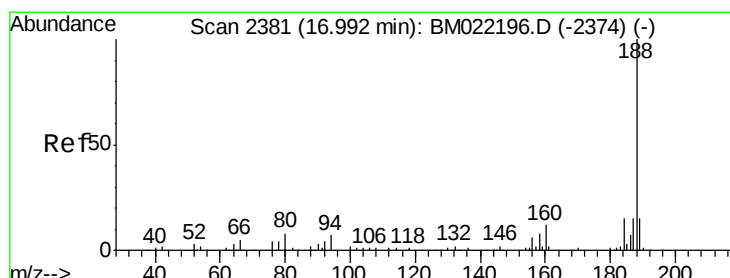
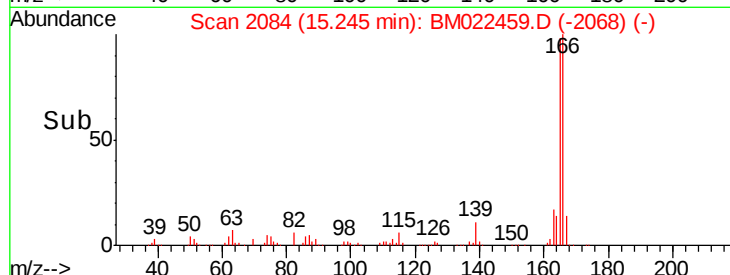
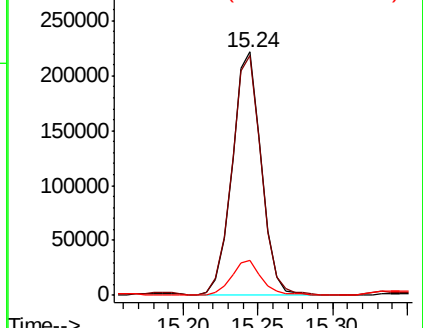
167 14.2 11.1 16.7



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: 16.95 min Scan# 2374

Delta R.T. -0.00 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

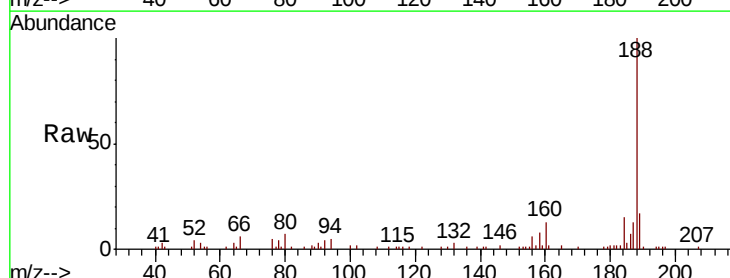
Tgt Ion:188 Resp: 88697

Ion Ratio Lower Upper

188 100

94 5.4 4.4 6.6

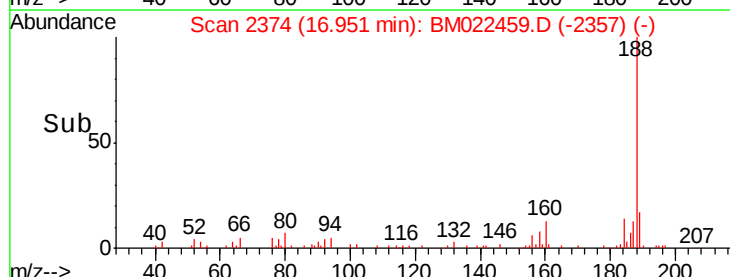
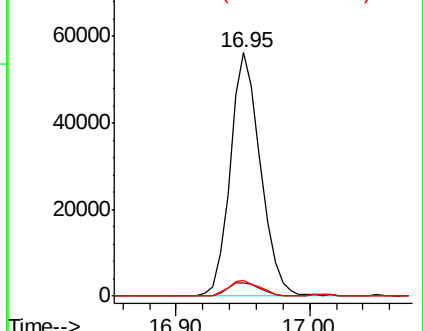
80 6.7 5.0 7.6

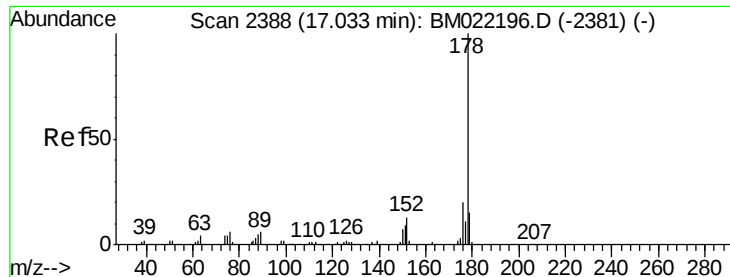


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BM

Ion 80.00 (79.70 to 80.70): BM





#71

Phenanthrene

Concen: 1396.376 ng

RT: 17.01 min Scan# 2384

Delta R.T. 0.01 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

Instrument :

BNA\_M

ClientSampleId :

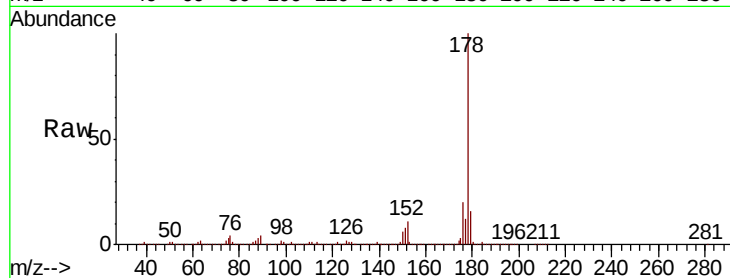
Tot Ion:178 Resp: 7219432

Ion Ratio Lower Upper

178 100

176 20.4 15.4 23.2

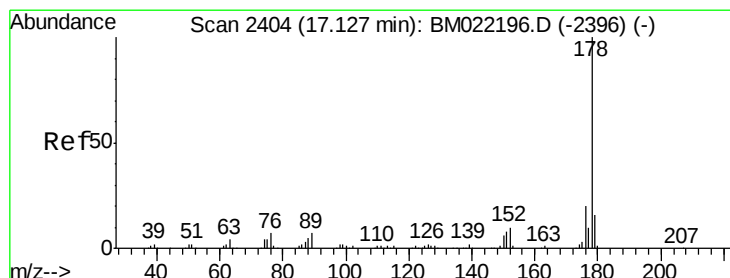
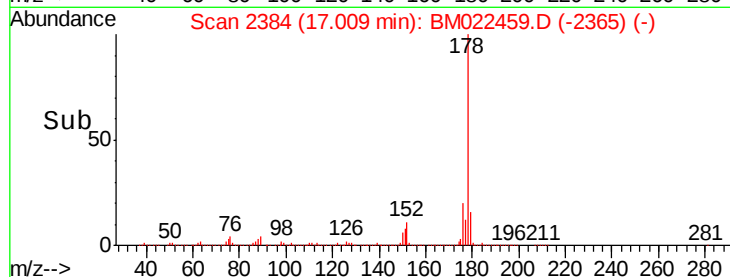
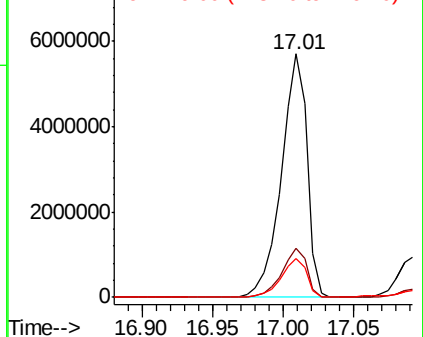
179 16.1 12.3 18.5



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: 221.688 ng

RT: 17.09 min Scan# 2398

Delta R.T. -0.00 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

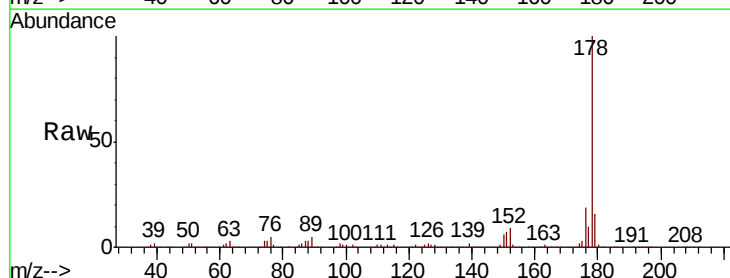
Tgt Ion:178 Resp: 1127683

Ion Ratio Lower Upper

178 100

176 18.9 15.0 22.4

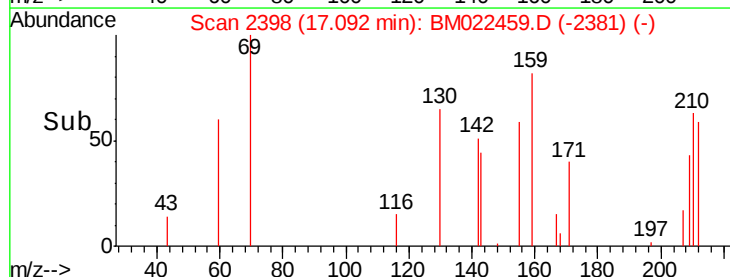
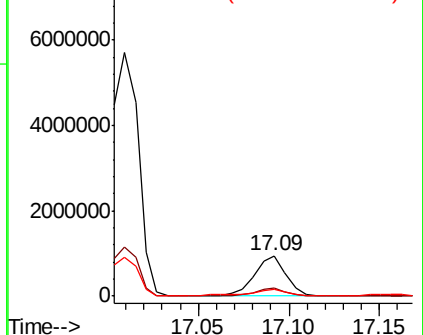
179 15.6 11.8 17.6

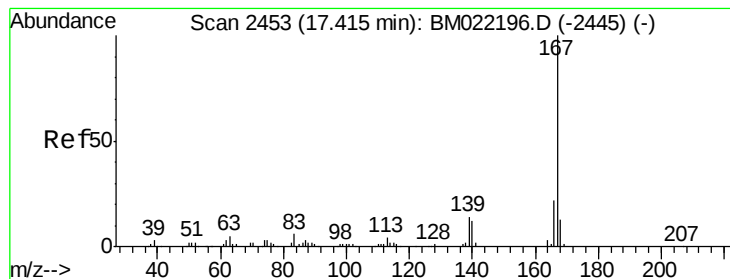


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#73

Carbazole

Concen: 70.808 ng

RT: 17.37 min Scan# 2446

Delta R.T. -0.01 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

Instrument :

BNA\_M

ClientSampleId :

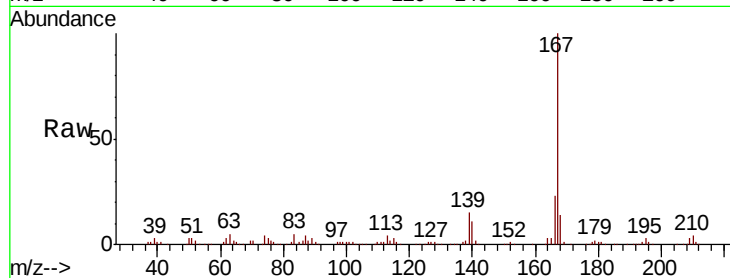
Tot Ion:167 Resp: 297726

Ion Ratio Lower Upper

167 100

166 22.8 17.8 26.6

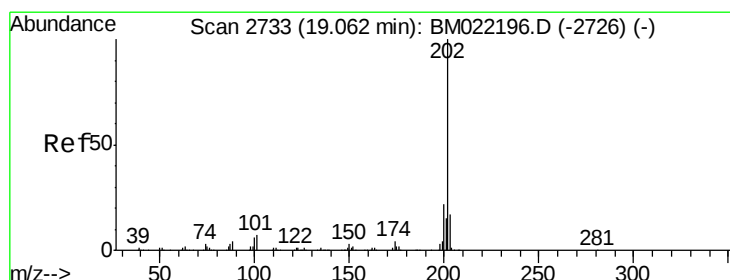
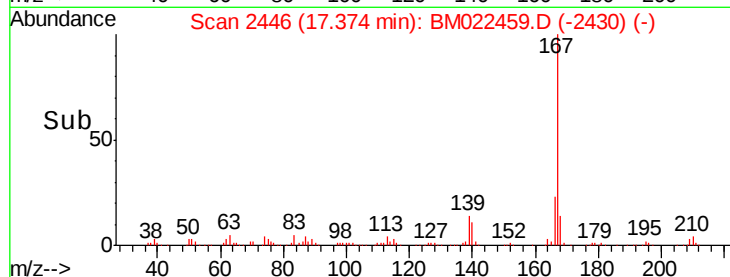
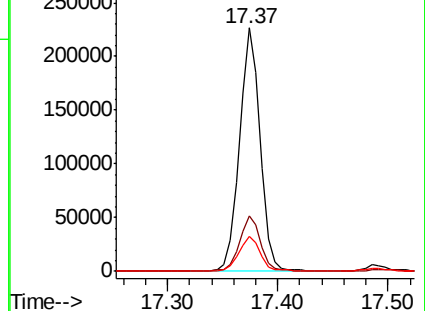
139 14.6 11.6 17.4



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



#75

Fluoranthene

Concen: 1332.477 ng

RT: 19.04 min Scan# 2730

Delta R.T. 0.02 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

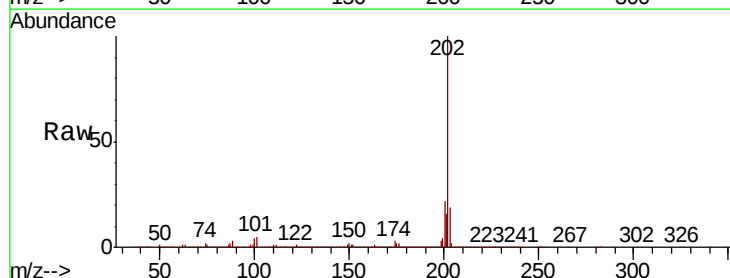
Tgt Ion:202 Resp: 9174253

Ion Ratio Lower Upper

202 100

101 4.9 0.0 25.1

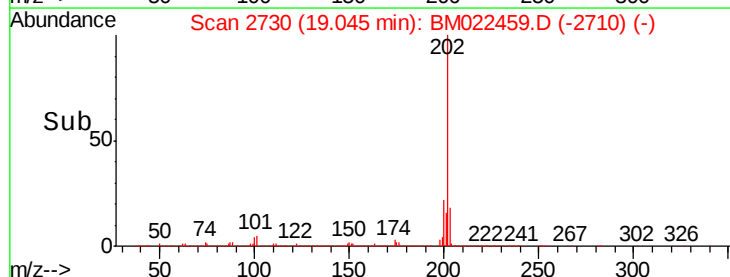
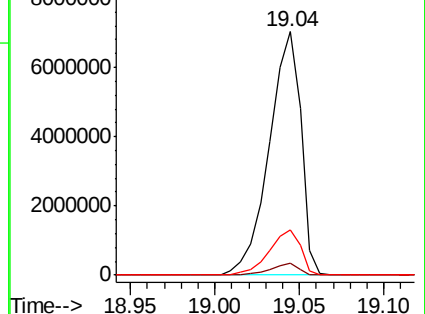
203 18.5 0.0 37.1

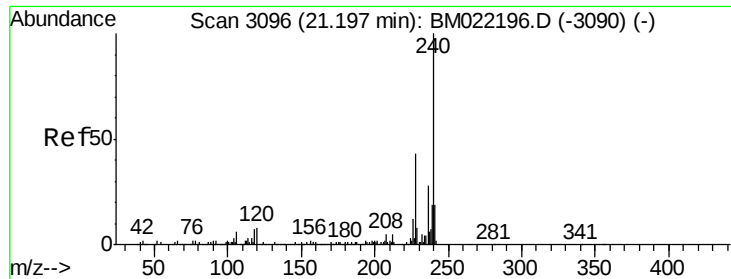


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E





#76

Chrysene-d12

Concen: 20.000 ng

RT: 21.17 min Scan# 3092

Delta R.T. -0.00 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

Instrument :

BNA\_M

ClientSampleId :

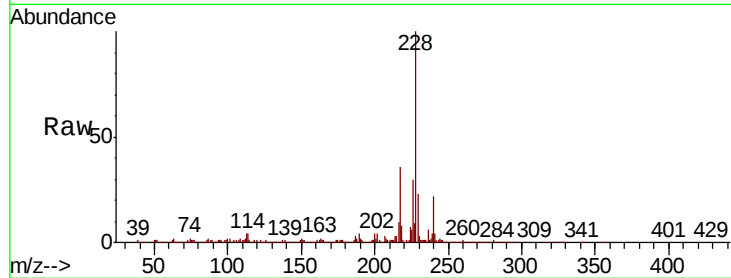
Tot Ion:240 Resp: 218168

Ion Ratio Lower Upper

240 100

120 4.8 3.9 5.9

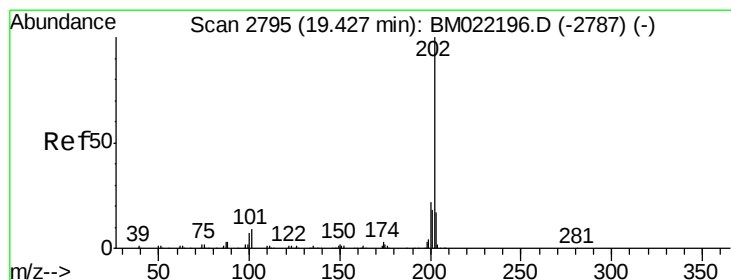
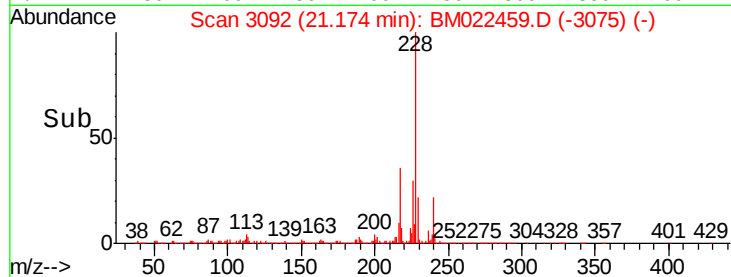
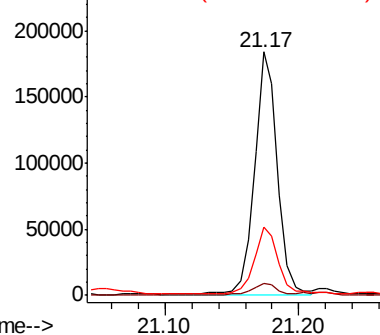
236 27.9 21.4 32.2



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: 533.531 ng

RT: 19.42 min Scan# 2793

Delta R.T. 0.02 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

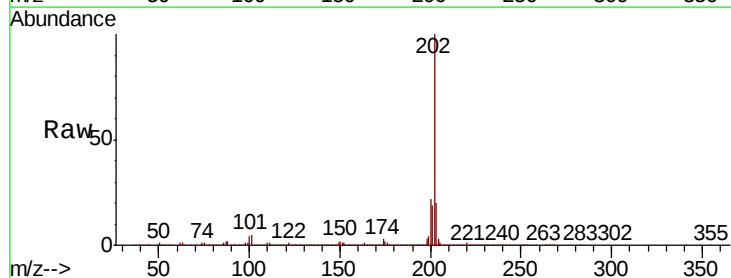
Tgt Ion:202 Resp: 7932626

Ion Ratio Lower Upper

202 100

200 22.2 17.7 26.5

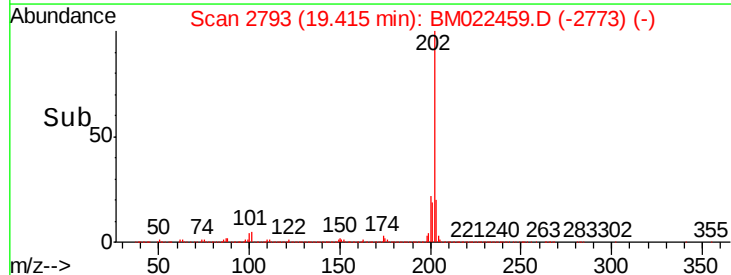
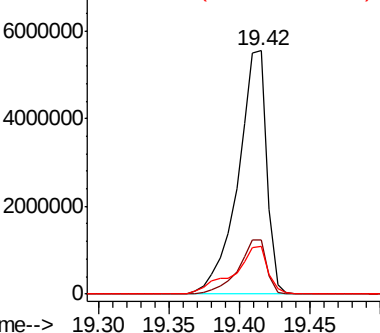
203 19.8 13.8 20.8

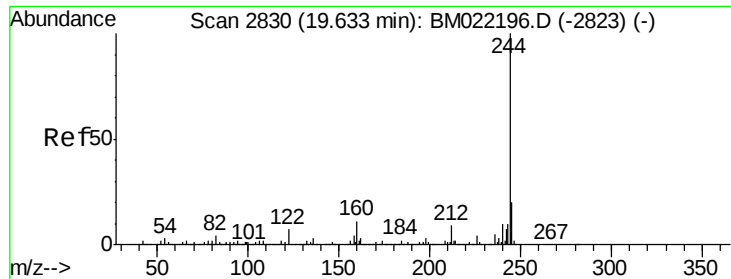


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

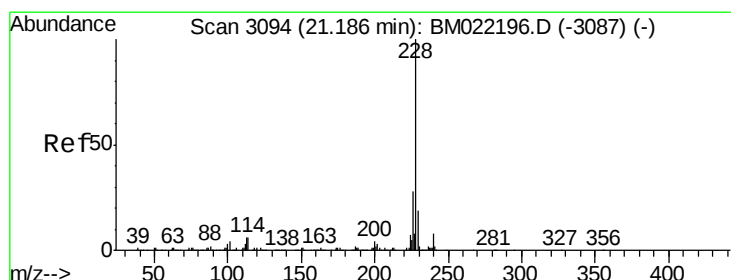
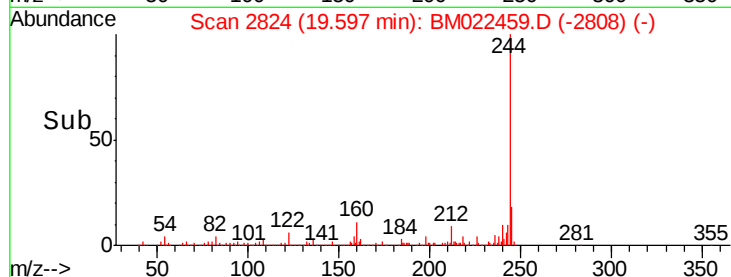
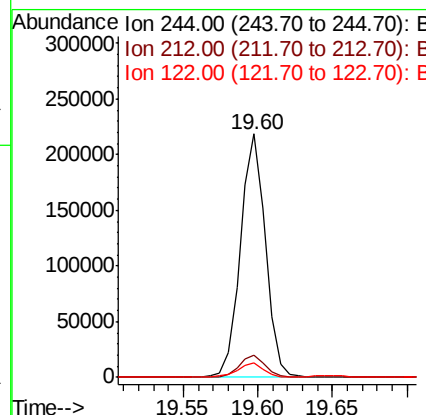
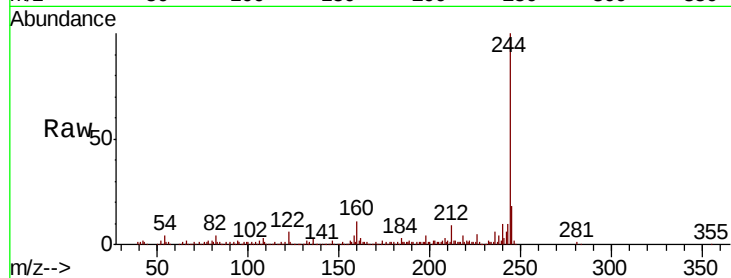




#79  
 Terphenyl-d14  
 Concen: 15.456 ng  
 RT: 19.60 min Scan# 2824  
 Delta R.T. -0.01 min  
 Lab File: BM022459.D  
 Acq: 31 Aug 2019 02:13

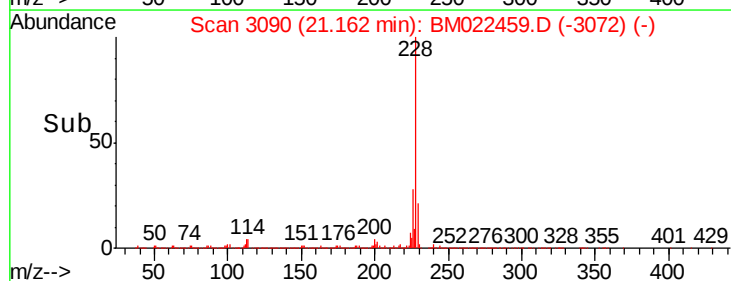
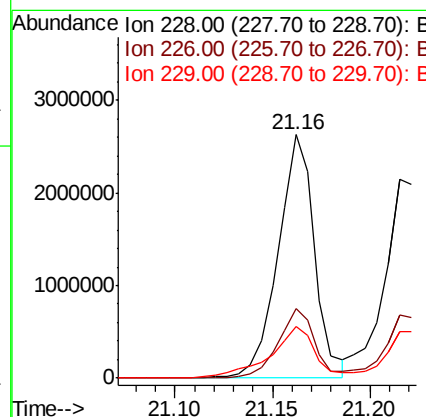
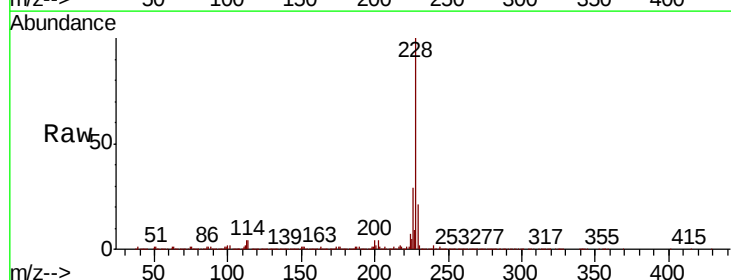
Instrument :  
 BNA\_M  
 ClientSampled :

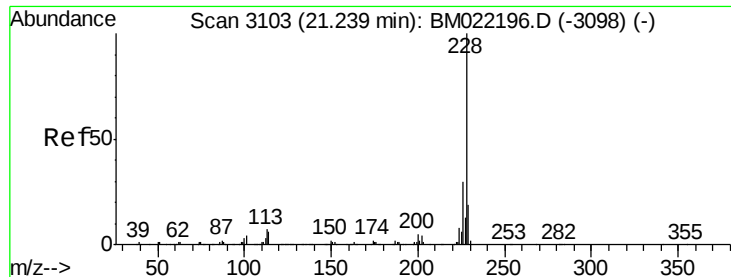
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 9.3   | 7.0   | 10.4  |
| 122     | 5.9   | 3.9   | 5.9#  |



#81  
 Benzo(a)anthracene  
 Concen: 214.562 ng  
 RT: 21.16 min Scan# 3090  
 Delta R.T. 0.01 min  
 Lab File: BM022459.D  
 Acq: 31 Aug 2019 02:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.5  | 22.6  | 34.0  |
| 229     | 21.0  | 15.9  | 23.9  |

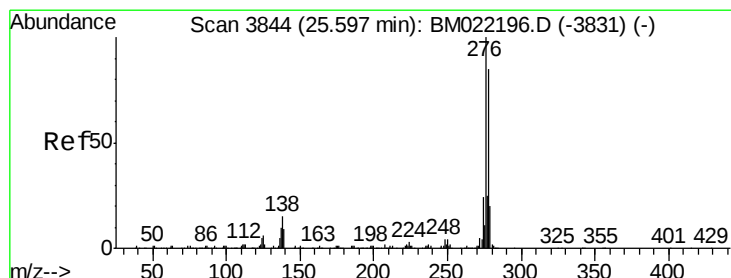
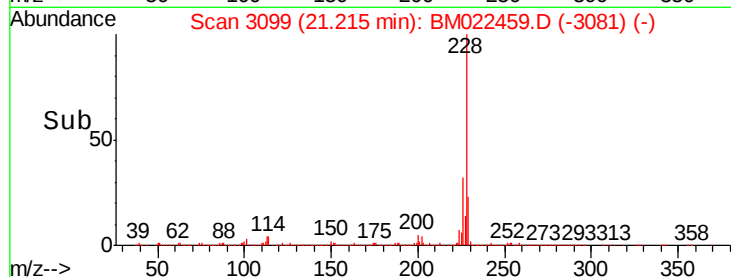
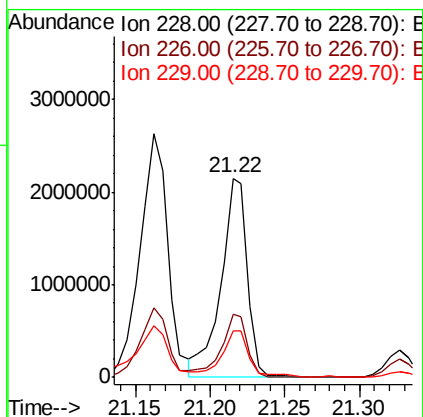
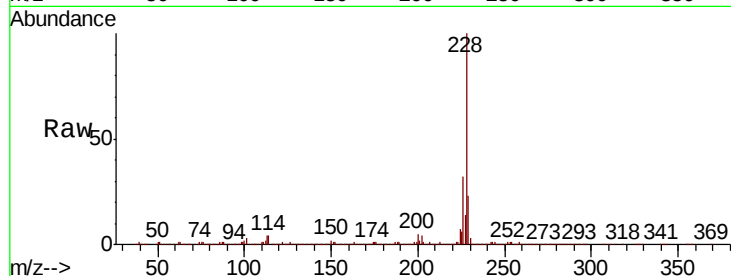




#83  
Chrysene  
Concen: 178.761 ng  
RT: 21.22 min Scan# 3099  
Delta R.T. 0.01 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

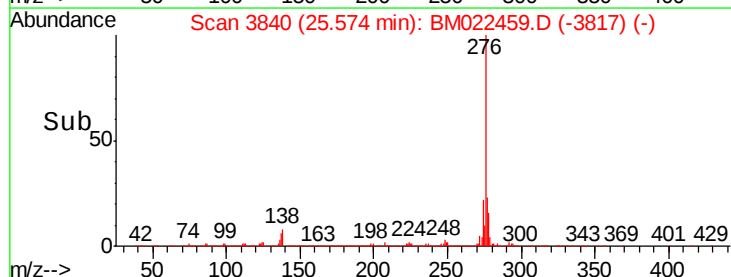
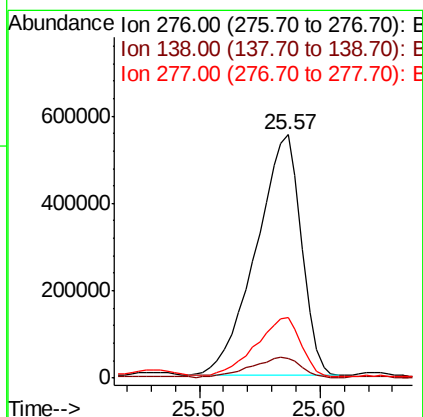
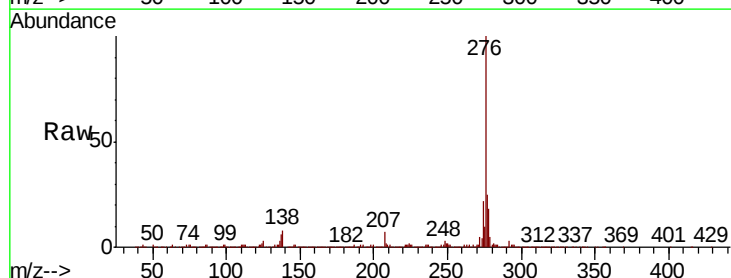
Instrument :  
BNA\_M  
ClientSampleId :

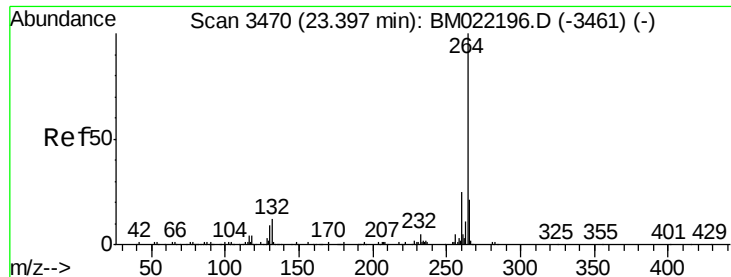
Tot Ion:228 Resp: 2664404  
Ion Ratio Lower Upper  
228 100  
226 31.6 24.5 36.7  
229 23.5 15.7 23.5



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 95.402 ng  
RT: 25.57 min Scan# 3840  
Delta R.T. 0.03 min  
Lab File: BM022459.D  
Acq: 31 Aug 2019 02:13

Tgt Ion:276 Resp: 1430297  
Ion Ratio Lower Upper  
276 100  
138 9.1 9.1 13.7  
277 24.3 20.0 30.0





#87

Pervlene-d12

Concen: 20.000 ng

RT: 23.37 min Scan# 3465

Delta R.T. 0.01 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

Instrument :

BNA\_M

ClientSampleId :

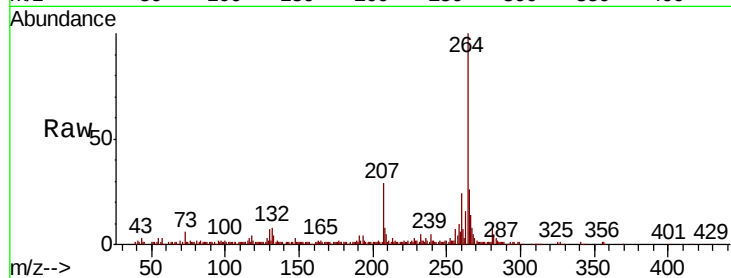
Tot Ion:264 Resp: 191848

Ion Ratio Lower Upper

264 100

260 24.4 20.2 30.2

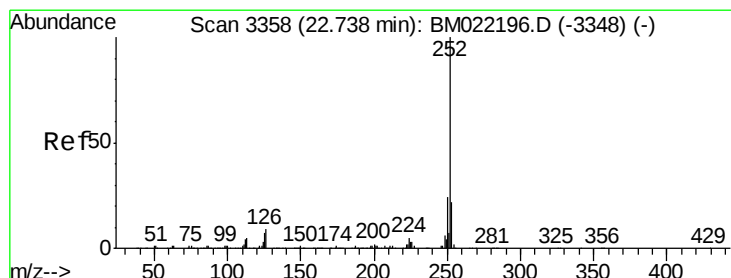
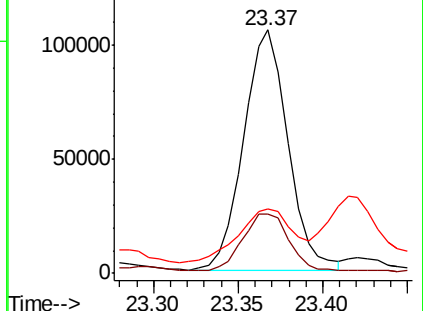
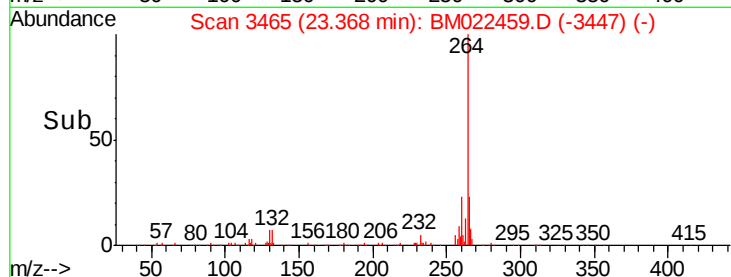
265 26.5 18.2 27.2



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: 257.204 ng

RT: 22.73 min Scan# 3356

Delta R.T. 0.02 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

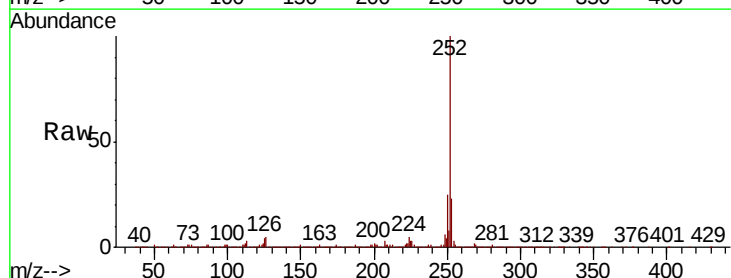
Tgt Ion:252 Resp: 3427983

Ion Ratio Lower Upper

252 100

253 22.7 17.9 26.9

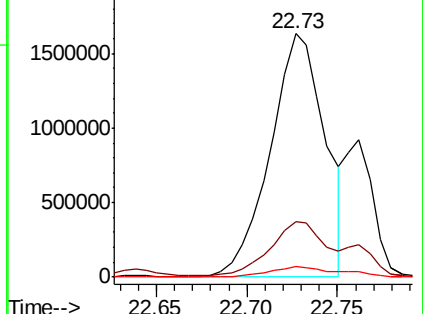
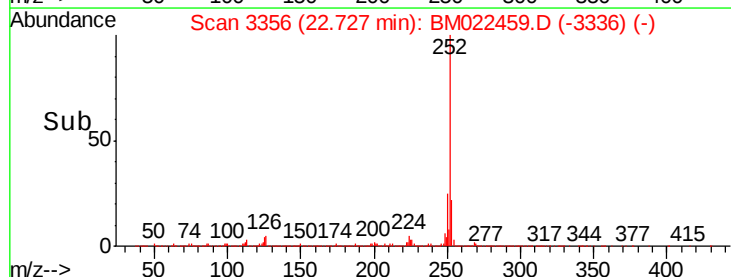
125 4.1 3.5 5.3

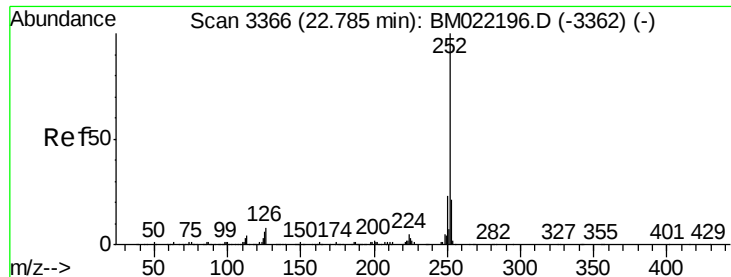


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#89

Benzo(k)fluoranthene

Concen: 259.274 ng

RT: 22.73 min Scan# 3356

Delta R.T. -0.02 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

Instrument :

BNA\_M

ClientSampleId :

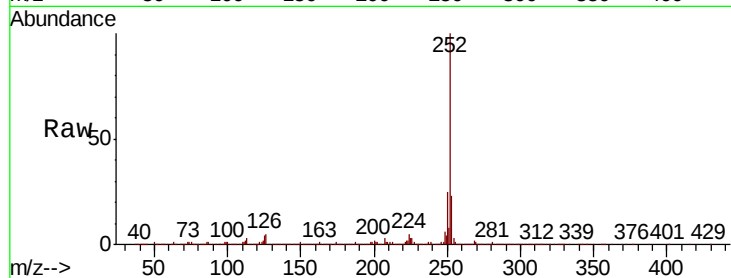
Tot Ion:252 Resp: 3427983

Ion Ratio Lower Upper

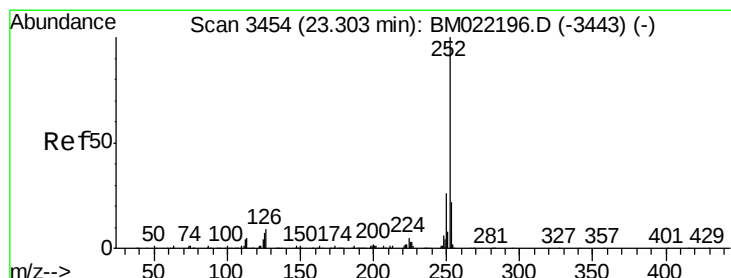
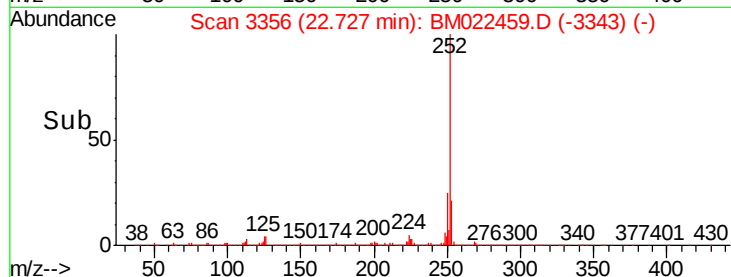
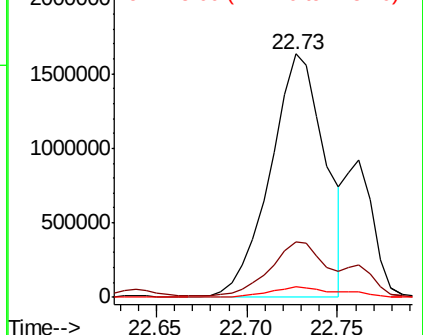
252 100

253 22.7 17.0 25.4

125 4.1 3.7 5.5



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



#90

Benzo(a)pyrene

Concen: 250.702 ng

RT: 23.29 min Scan# 3451

Delta R.T. 0.02 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

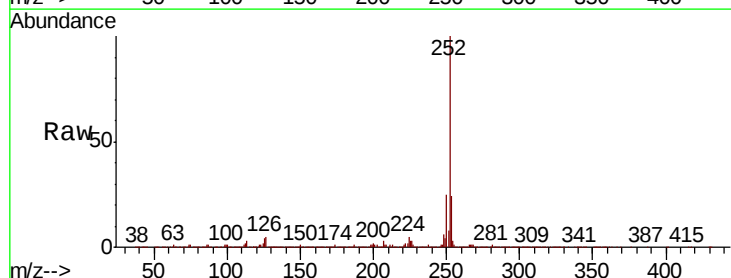
Tgt Ion:252 Resp: 2965758

Ion Ratio Lower Upper

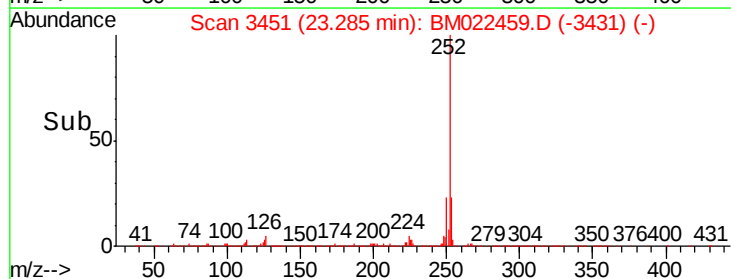
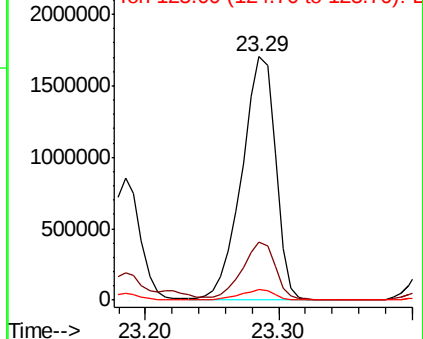
252 100

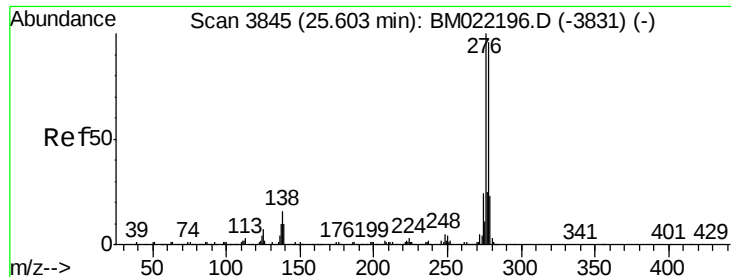
253 23.6 18.2 27.2

125 4.2 3.8 5.8



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





#91

Dibenzo(a,h)anthracene

Concen: 28.731 ng

RT: 25.56 min Scan# 3838

Delta R.T. 0.02 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

Instrument :

BNA\_M

ClientSampleId :

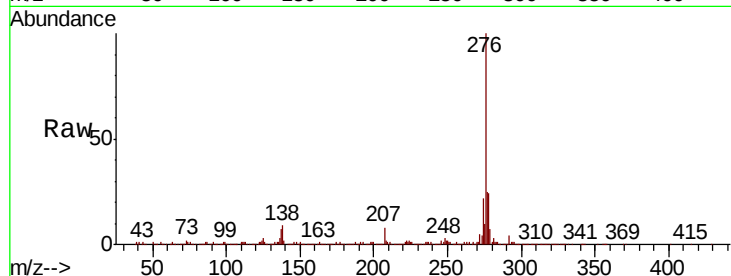
Tot Ion:278 Resp: 338910

Ion Ratio Lower Upper

278 100

139 9.4 6.6 9.8

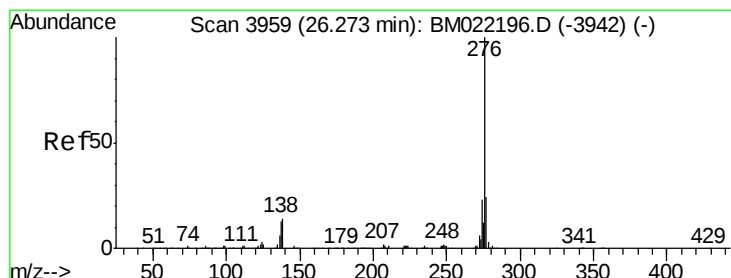
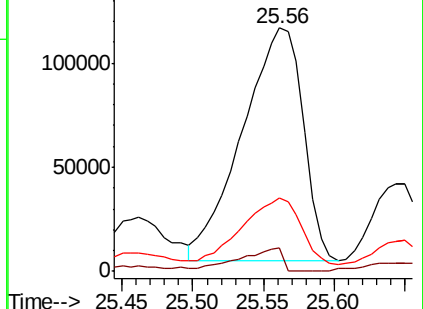
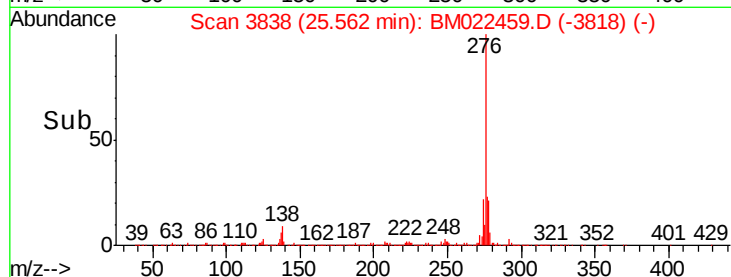
279 30.3 19.3 28.9#



Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E



#92

Benzo(g,h,i)perylene

Concen: 130.191 ng

RT: 26.25 min Scan# 3955

Delta R.T. 0.03 min

Lab File: BM022459.D

Acq: 31 Aug 2019 02:13

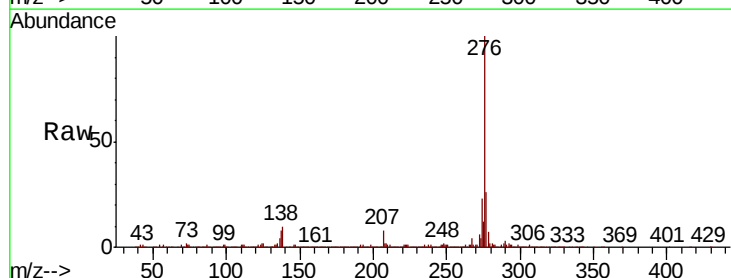
Tgt Ion:276 Resp: 1338466

Ion Ratio Lower Upper

276 100

277 26.1 19.4 29.0

138 9.7 8.8 13.2



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

