

Data Path : Z:\HPCHEM1\BNA N\DATA\BN050218\  
 Data File : BN001095.D  
 Acq On : 03 May 2018 05:29  
 Operator : JU/SJ  
 Sample : SSTDCCC020EC  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :

Quant Time: May 03 08:29:17 2018  
 Quant Method : Z:\HPCHEM1\BNA N\METHODS\SOM-EPA-BN042418MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu May 03 08:25:51 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.62  | 152  | 136918   | 20.00 | ng/ul | 0.00     |
| 2) Naphthalene-d8         | 10.39 | 136  | 580110   | 20.00 | ng/ul | 0.00     |
| 6) Acenaphthene-d10       | 14.26 | 164  | 281661   | 20.00 | ng/ul | 0.00     |
| 12) Phenanthrene-d10      | 17.01 | 188  | 512795   | 20.00 | ng/ul | 0.00     |
| 17) Chrysene-d12          | 21.22 | 240  | 425672   | 20.00 | ng/ul | 0.00     |
| 22) Perylene-d12          | 23.42 | 264  | 462021   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                        |       |     |        |       |       |      |
|------------------------|-------|-----|--------|-------|-------|------|
| 7) Acenaphthylene-d8   | 13.95 | 160 | 569670 | 21.06 | ng/ul | 0.00 |
| 10) Fluorene-d10       | 15.26 | 176 | 362138 | 20.06 | ng/ul | 0.00 |
| 14) Anthracene-d10     | 17.11 | 188 | 485810 | 20.72 | ng/ul | 0.00 |
| 18) Pyrene-d10         | 19.41 | 212 | 454036 | 20.82 | ng/ul | 0.00 |
| 25) Benzo(a)pyrene-d12 | 23.28 | 264 | 449057 | 20.58 | ng/ul | 0.01 |

## Target Compounds

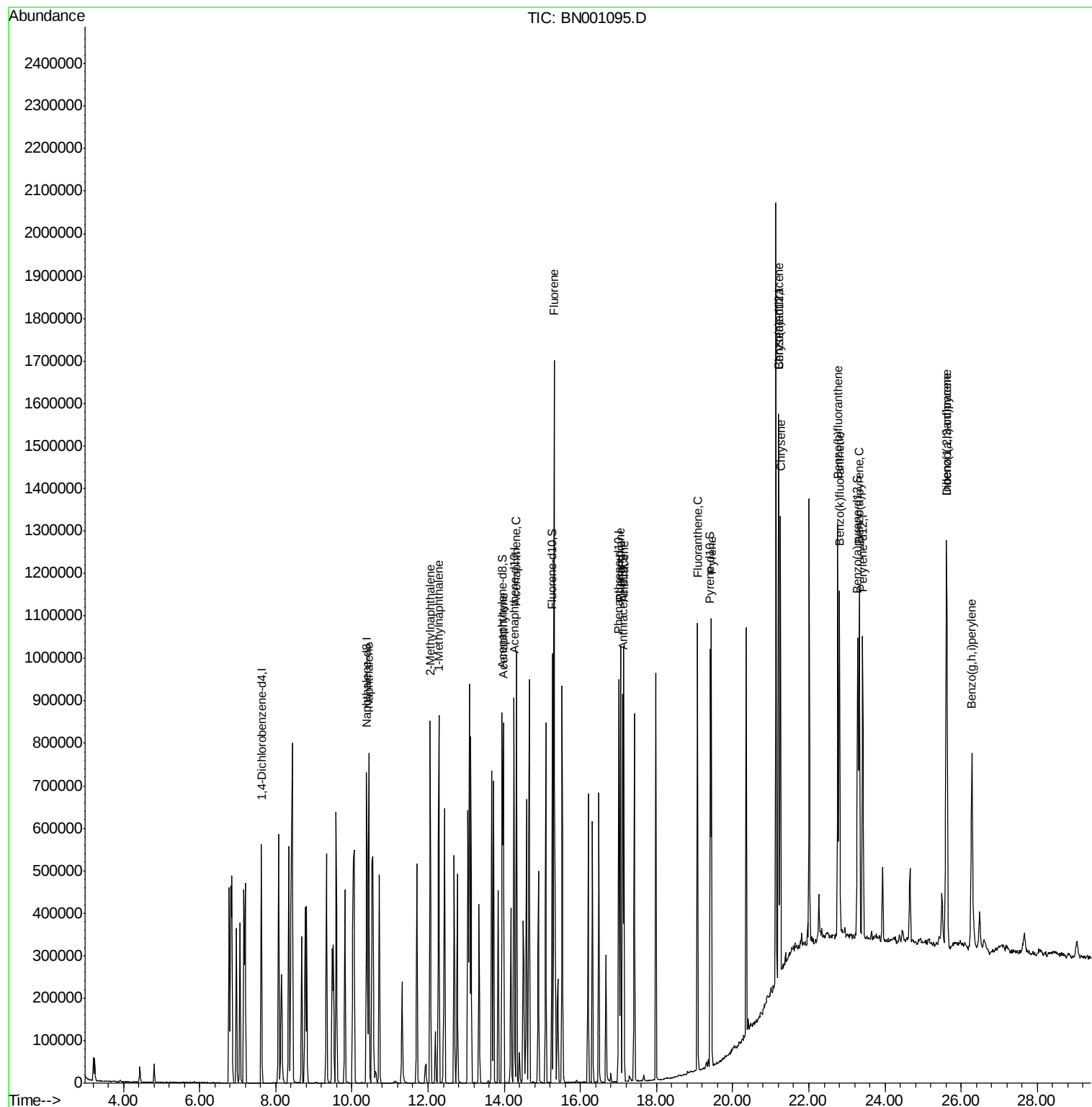
|                            |       |     |        |        |        | Ovalue |
|----------------------------|-------|-----|--------|--------|--------|--------|
| 3) Naphthalene             | 10.44 | 128 | 590561 | 20.199 | ng/ul  | 99     |
| 4) 2-Methylnaphthalene     | 12.06 | 142 | 388750 | 19.929 | ng/ul  | 99     |
| 5) 1-Methylnaphthalene     | 12.28 | 142 | 381404 | 19.934 | ng/ul  | 92     |
| 8) Acenaphthylene          | 13.97 | 152 | 554500 | 20.711 | ng/ul  | 99     |
| 9) Acenaphthene            | 14.32 | 153 | 374433 | 20.242 | ng/ul  | 95     |
| 11) Fluorene               | 15.31 | 166 | 397852 | 20.204 | ng/ul  | 93     |
| 13) Phenanthrene           | 17.05 | 178 | 556007 | 19.880 | ng/ul  | 100    |
| 15) Anthracene             | 17.14 | 178 | 569483 | 20.300 | ng/ul  | 99     |
| 16) Fluoranthene           | 19.07 | 202 | 566747 | 19.973 | ng/ul# | 93     |
| 19) Pyrene                 | 19.44 | 202 | 557298 | 20.383 | ng/ul# | 88     |
| 20) Benzo(a)anthracene     | 21.20 | 228 | 529638 | 20.814 | ng/ul  | 100    |
| 21) Chrysene               | 21.25 | 228 | 485008 | 20.279 | ng/ul  | 99     |
| 23) Benzo(b)fluoranthene   | 22.76 | 252 | 511578 | 19.484 | ng/ul# | 98     |
| 24) Benzo(k)fluoranthene   | 22.80 | 252 | 487118 | 18.959 | ng/ul# | 97     |
| 26) Benzo(a)pyrene         | 23.32 | 252 | 505207 | 20.133 | ng/ul# | 96     |
| 27) Indeno(1,2,3-cd)pyrene | 25.62 | 276 | 611701 | 20.182 | ng/ul# | 86     |
| 28) Dibenzo(a,h)anthracene | 25.62 | 278 | 516743 | 20.457 | ng/ul# | 97     |
| 29) Benzo(g,h,i)perylene   | 26.28 | 276 | 509236 | 20.089 | ng/ul# | 95     |

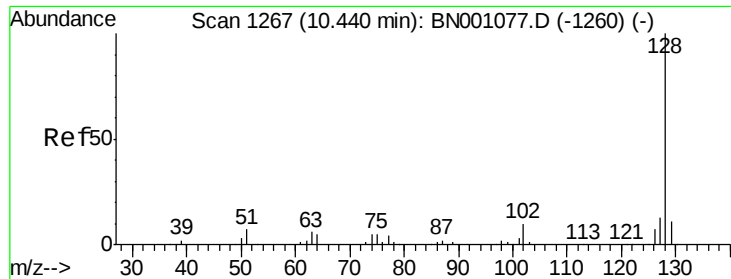
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA N\DATA\BN050218\  
Data File : BN001095.D  
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ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :

Quant Time: May 03 08:29:17 2018  
Quant Method : Z:\HPCHEM1\BNA N\METHODS\SOM-EPA-BN042418MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu May 03 08:25:51 2018  
Response via : Initial Calibration





#3

Naphthalene

Concen: 20.199 ng/ul

RT: 10.44 min Scan# 1267

Delta R.T. 0.00 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

Instrument :

BNA\_N

ClientSampleId :

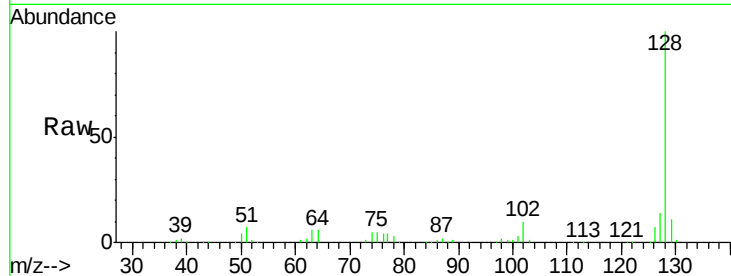
Tot Ion:128 Resp: 590561

Ion Ratio Lower Upper

128 100

129 10.8 8.7 13.1

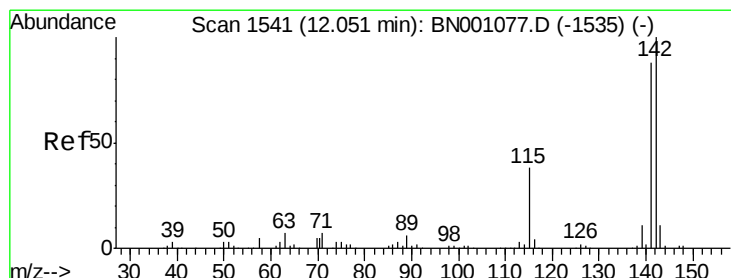
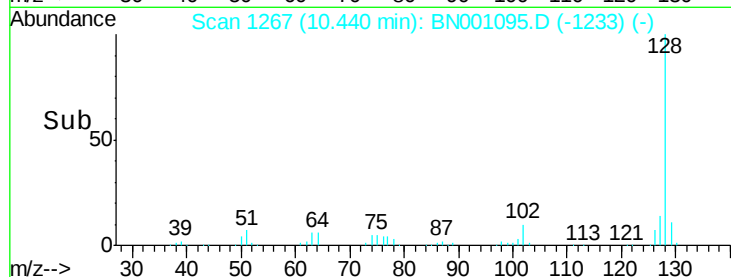
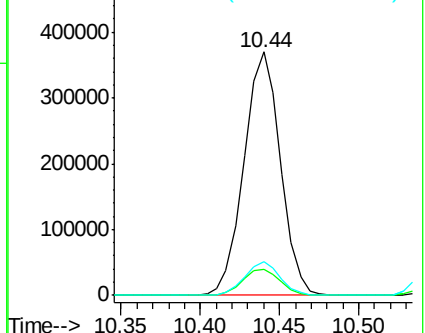
127 13.6 10.6 16.0



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



#4

2-Methylnaphthalene

Concen: 19.929 ng/ul

RT: 12.06 min Scan# 1542

Delta R.T. 0.01 min

Lab File: BN001095.D

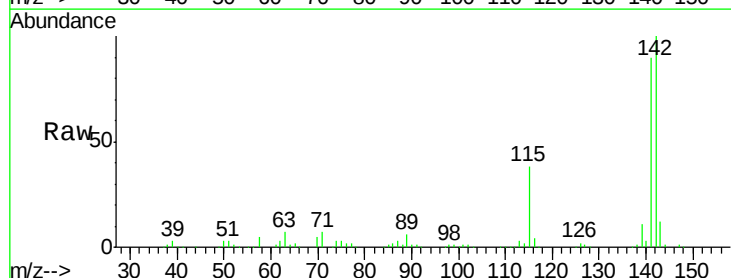
Acq: 03 May 2018 05:29

Tgt Ion:142 Resp: 388750

Ion Ratio Lower Upper

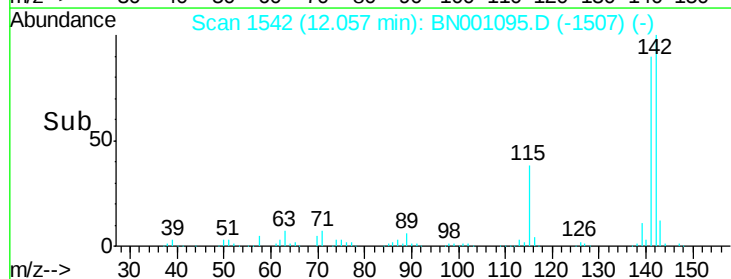
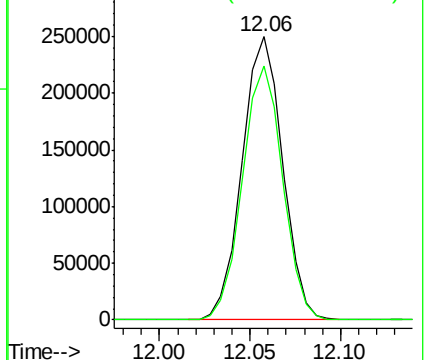
142 100

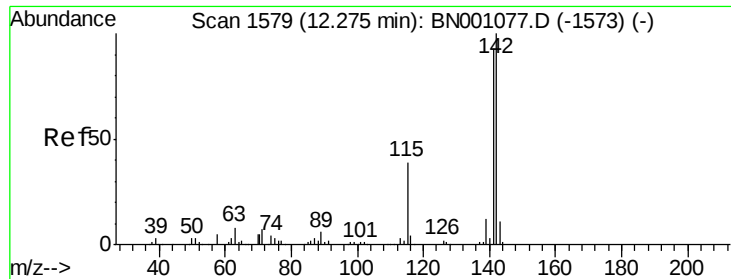
141 89.6 72.7 109.1



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#5

1-Methylnaphthalene

Concen: 19.934 ng/ul

RT: 12.28 min Scan# 1580

Delta R.T. 0.01 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

Instrument :

BNA\_N

ClientSampleId :

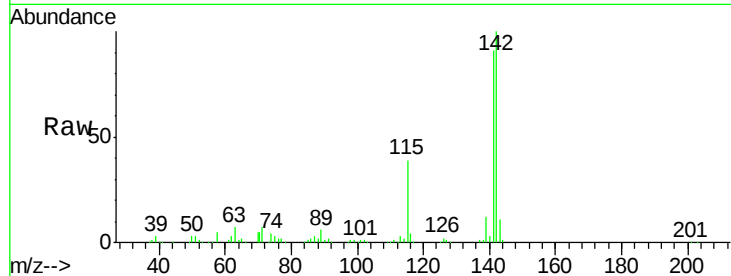
Tot Ion:142 Resp: 381404

Ion Ratio Lower Upper

142 100

141 91.1 79.3 118.9

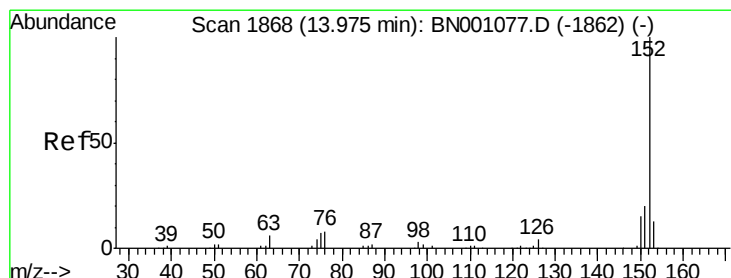
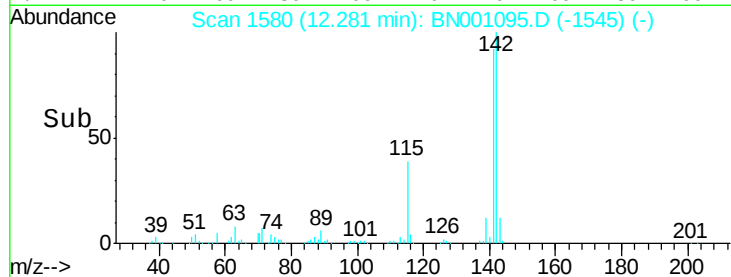
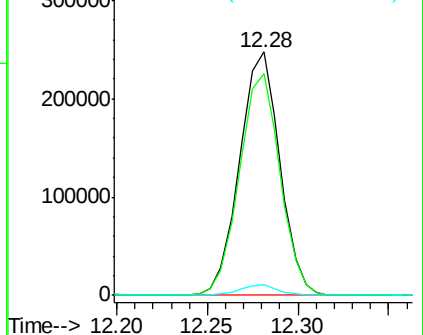
116 4.2 4.2 6.2



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



#8

Acenaphthylene

Concen: 20.711 ng/ul

RT: 13.97 min Scan# 1868

Delta R.T. 0.00 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

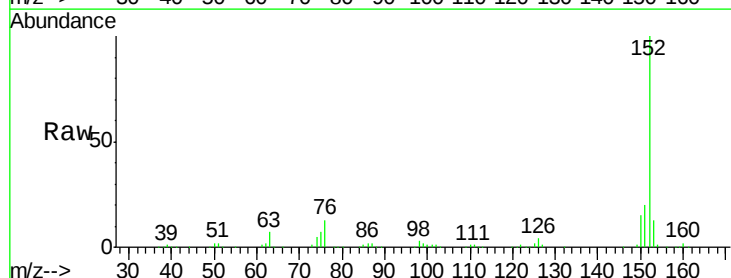
Tgt Ion:152 Resp: 554500

Ion Ratio Lower Upper

152 100

151 20.1 16.7 25.1

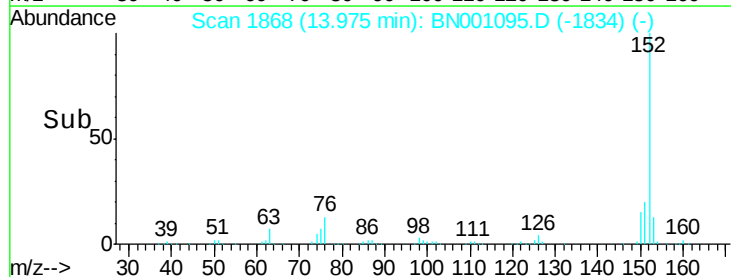
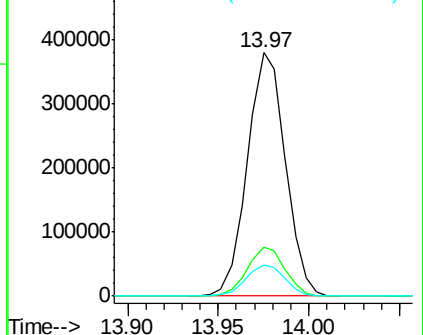
153 13.0 10.2 15.4

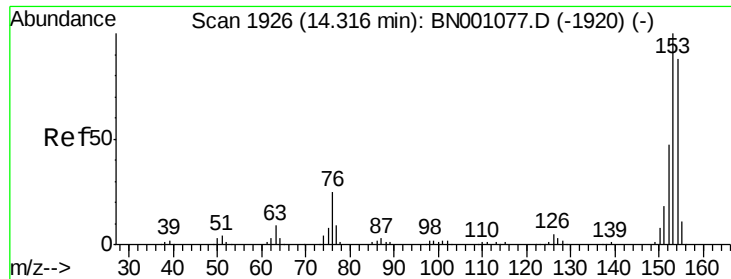


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#9

Acenaphthene

Concen: 20.242 ng/ul

RT: 14.32 min Scan# 1927

Delta R.T. 0.01 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

Instrument :

BNA\_N

ClientSampleId :

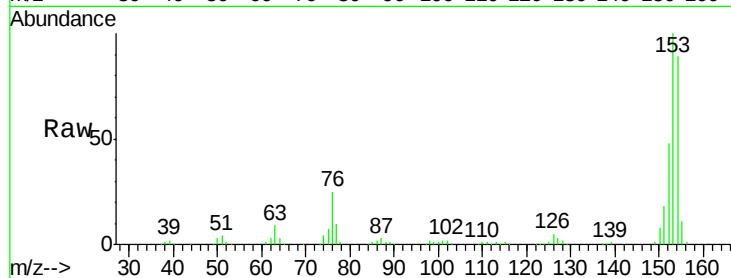
Tot Ion:153 Resp: 374433

Ion Ratio Lower Upper

153 100

152 47.8 39.0 58.6

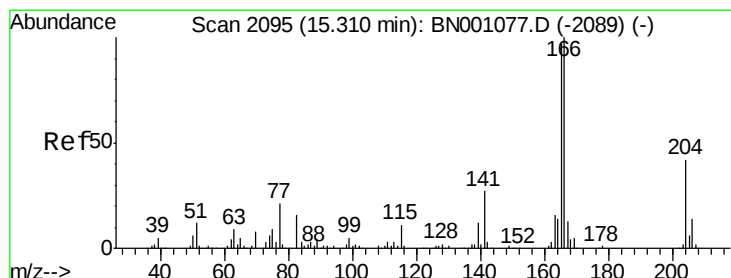
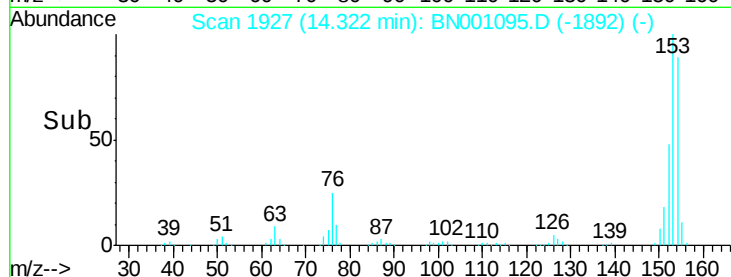
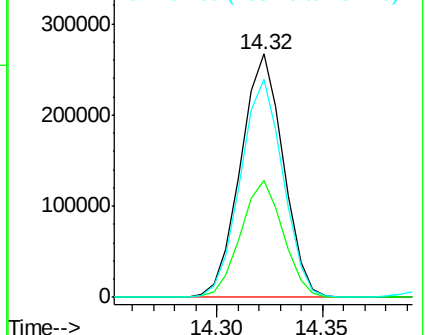
154 89.3 66.8 100.2



Abundance Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E

Ion 154.00 (153.70 to 154.70): E



#11

Fluorene

Concen: 20.204 ng/ul

RT: 15.31 min Scan# 2095

Delta R.T. 0.00 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

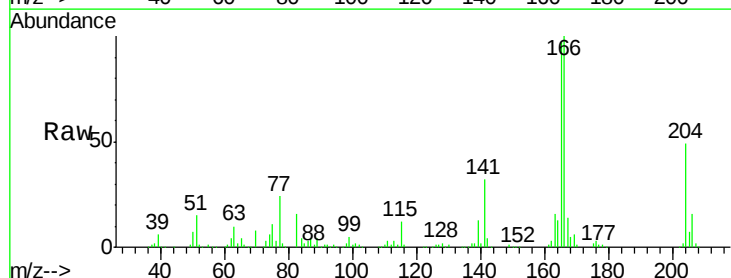
Tgt Ion:166 Resp: 397852

Ion Ratio Lower Upper

166 100

165 97.1 83.8 125.8

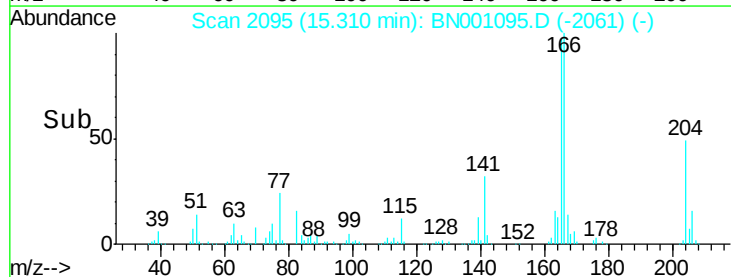
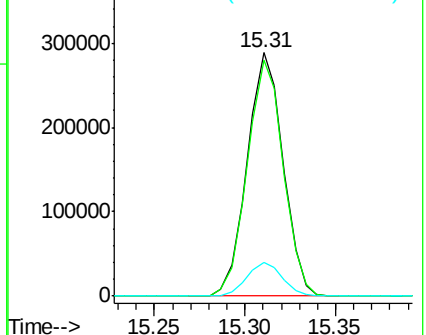
167 13.7 11.5 17.3

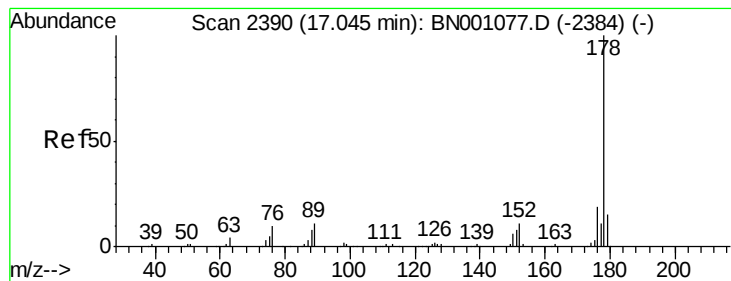


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#13

Phenanthrene

Concen: 19.880 ng/ul

RT: 17.05 min Scan# 2391

Delta R.T. 0.01 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

Instrument :

BNA\_N

ClientSampled :

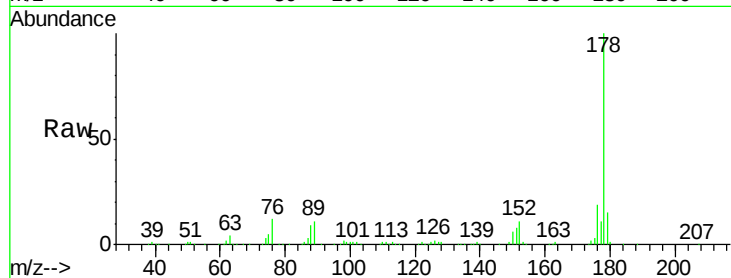
Tot Ion:178 Resp: 556007

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 178 | 100   |       |       |
| 179 | 15.4  | 12.3  | 18.5  |
| 176 | 18.9  | 15.1  | 22.7  |

178 100

179 15.4 12.3 18.5

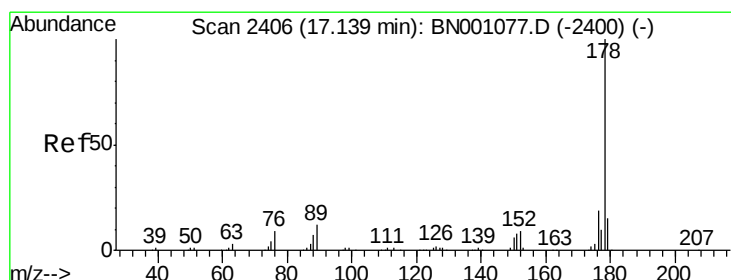
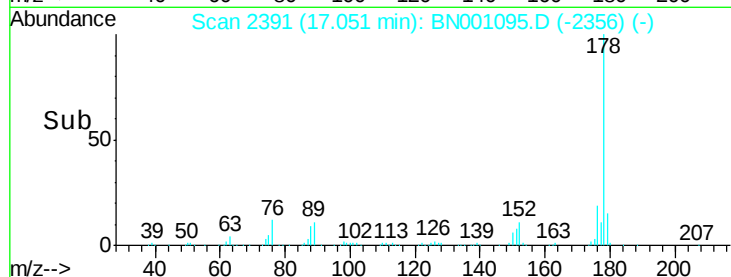
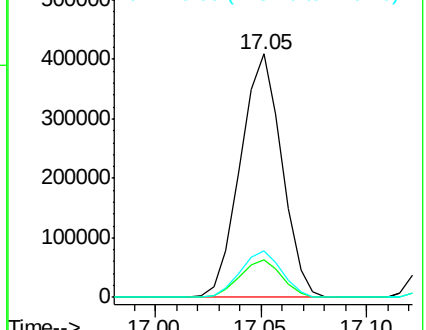
176 18.9 15.1 22.7



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#15

Anthracene

Concen: 20.300 ng/ul

RT: 17.14 min Scan# 2406

Delta R.T. 0.00 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

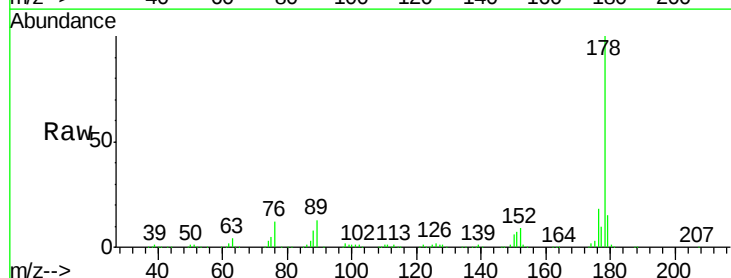
Tgt Ion:178 Resp: 569483

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 178 | 100   |       |       |
| 179 | 15.4  | 11.8  | 17.8  |
| 176 | 18.4  | 15.2  | 22.8  |

178 100

179 15.4 11.8 17.8

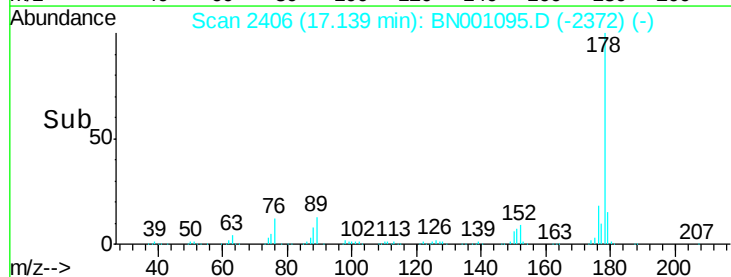
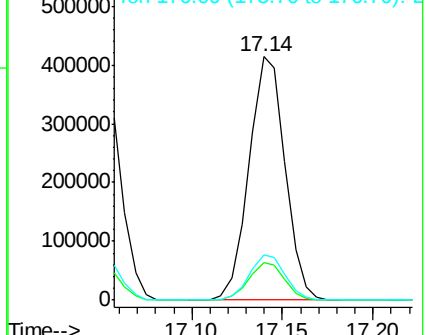
176 18.4 15.2 22.8

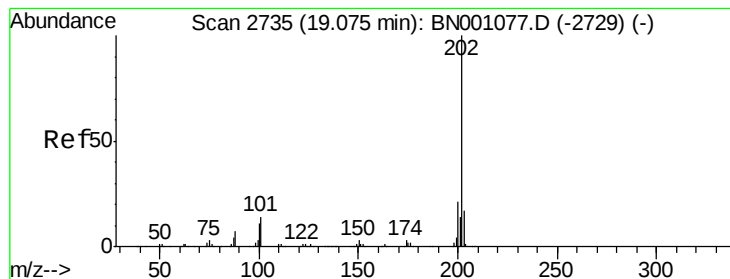


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E





#16

Fluoranthene

Concen: 19.973 ng/ul

RT: 19.07 min Scan# 2735

Delta R.T. 0.00 min

Lab File: BN001095.D

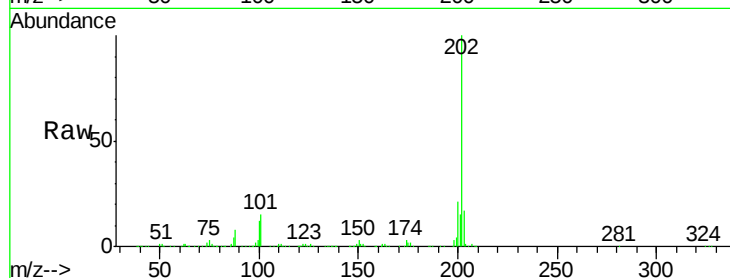
Acq: 03 May 2018 05:29

Instrument :

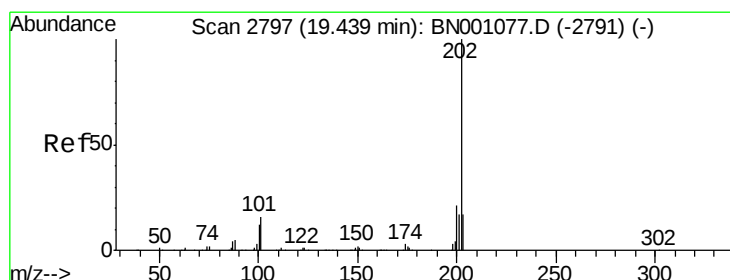
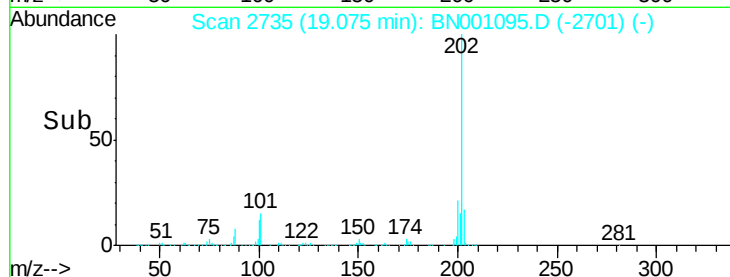
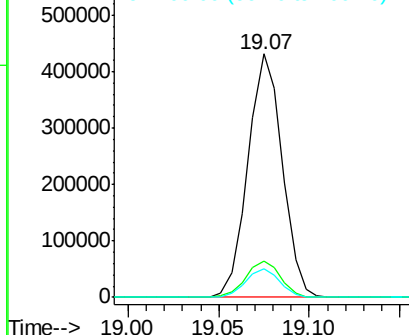
BNA\_N

ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 202   | Resp: | 566747 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 101      | 15.1  | 9.9   | 14.9#  |
| 100      | 11.9  | 7.4   | 11.0#  |



Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 100.00 (99.70 to 100.70): B



#19

Pyrene

Concen: 20.383 ng/ul

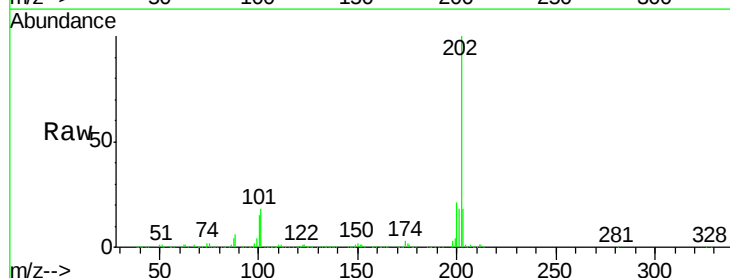
RT: 19.44 min Scan# 2797

Delta R.T. 0.00 min

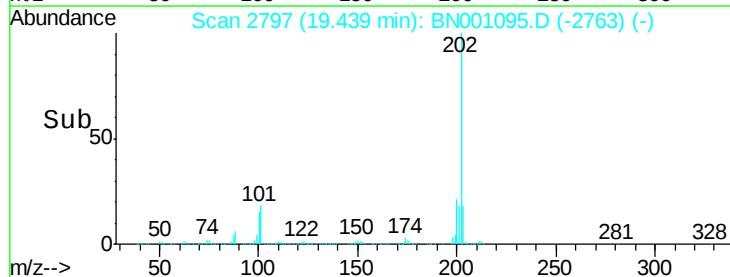
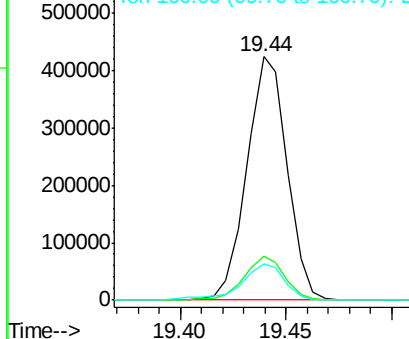
Lab File: BN001095.D

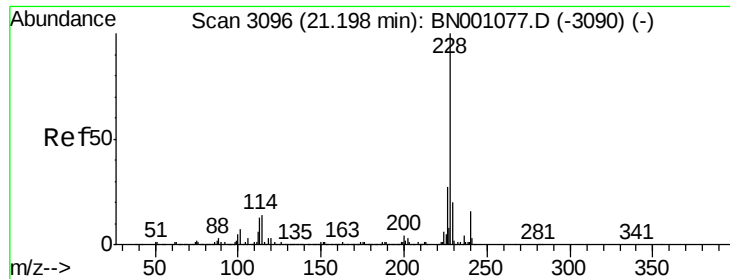
Acq: 03 May 2018 05:29

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 202   | Resp: | 557298 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 101      | 18.1  | 11.0  | 16.4#  |
| 100      | 14.7  | 8.1   | 12.1#  |



Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 100.00 (99.70 to 100.70): B





#20

Benzo(a)anthracene

Concen: 20.814 ng/ul

RT: 21.20 min Scan# 3097

Delta R.T. 0.01 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

Instrument :

BNA\_N

ClientSampled :

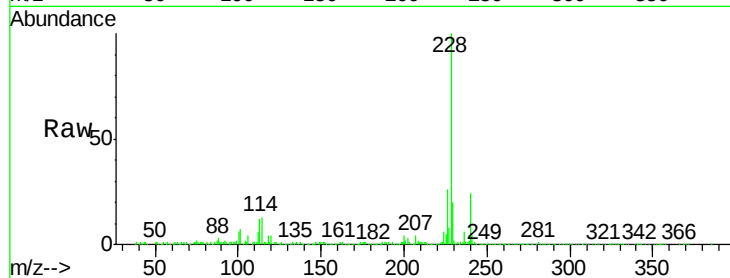
Tot Ion:228 Resp: 529638

Ion Ratio Lower Upper

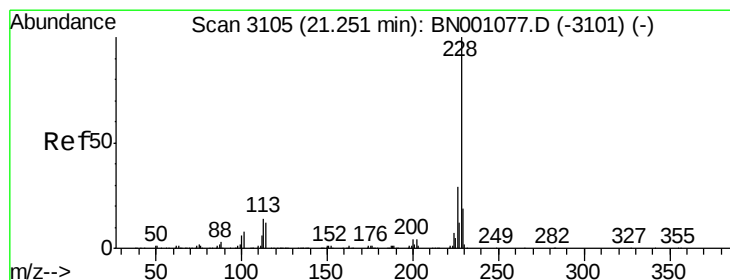
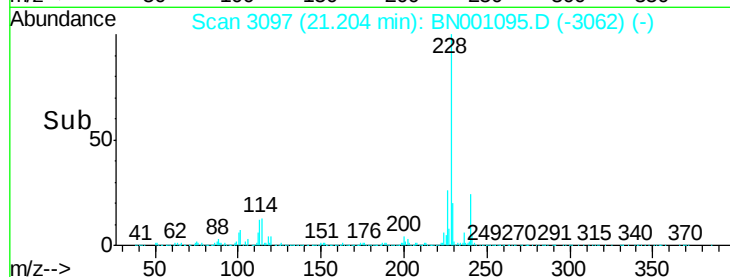
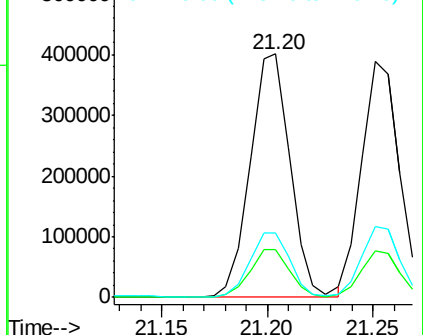
228 100

229 19.8 15.7 23.5

226 26.3 21.1 31.7



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



#21

Chrysene

Concen: 20.279 ng/ul

RT: 21.25 min Scan# 3105

Delta R.T. 0.00 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

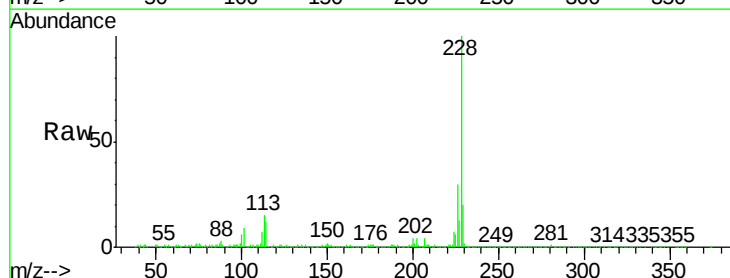
Tgt Ion:228 Resp: 485008

Ion Ratio Lower Upper

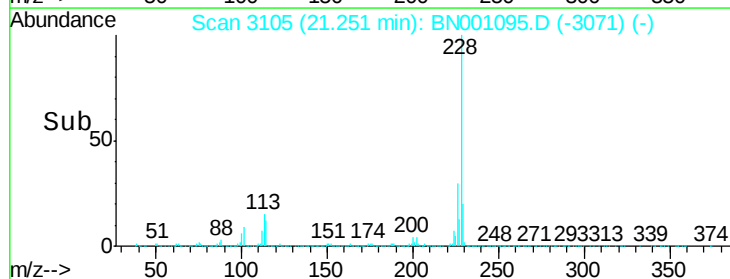
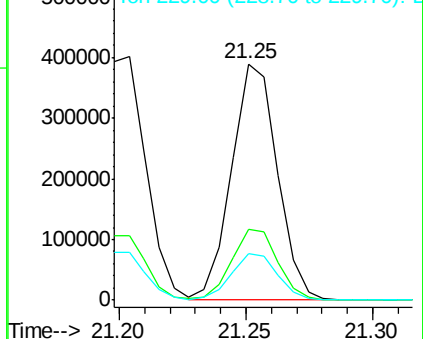
228 100

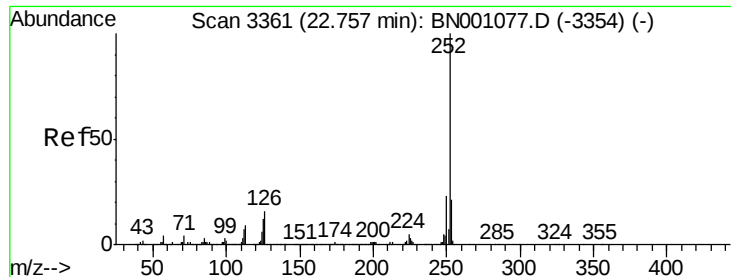
226 30.0 24.5 36.7

229 19.7 15.8 23.8



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





#23

Benzo(b)fluoranthene

Concen: 19.484 ng/ul

RT: 22.76 min Scan# 3362

Delta R.T. 0.01 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

Instrument :

BNA\_N

ClientSampleId :

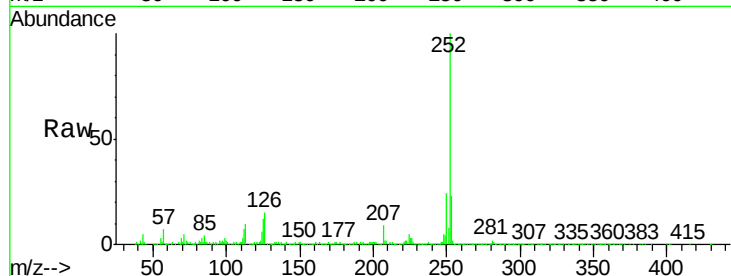
Tot Ion:252 Resp: 511578

Ion Ratio Lower Upper

252 100

253 22.5 18.0 27.0

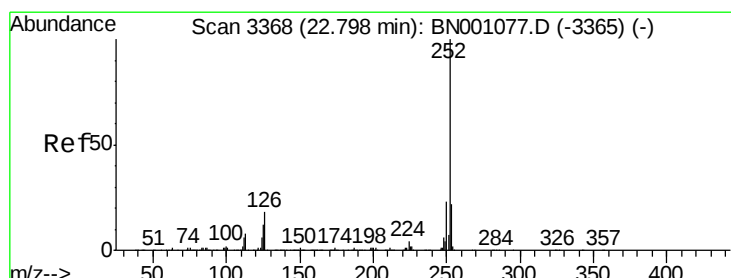
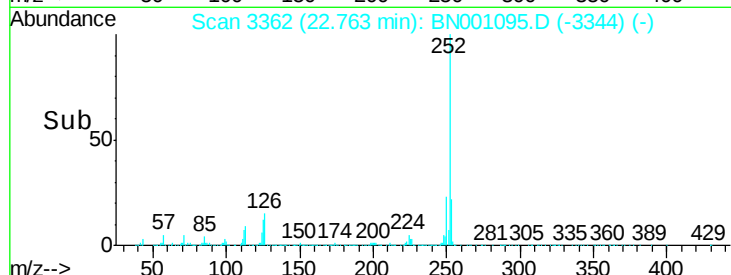
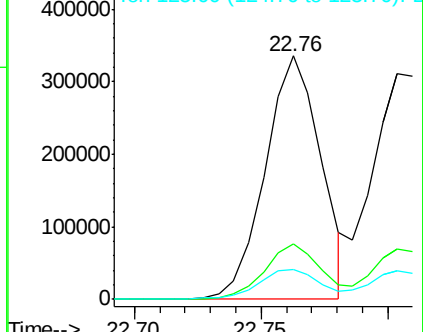
125 12.2 8.0 12.0#



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



#24

Benzo(k)fluoranthene

Concen: 18.959 ng/ul

RT: 22.80 min Scan# 3369

Delta R.T. 0.01 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

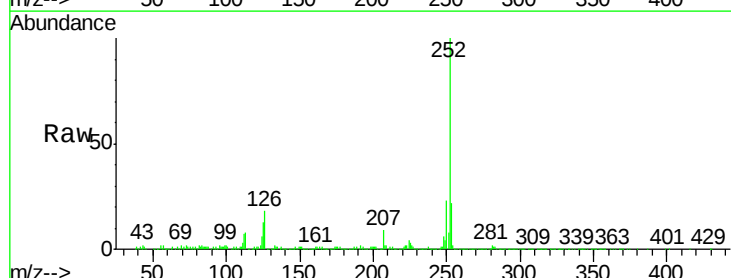
Tgt Ion:252 Resp: 487118

Ion Ratio Lower Upper

252 100

253 22.2 18.0 27.0

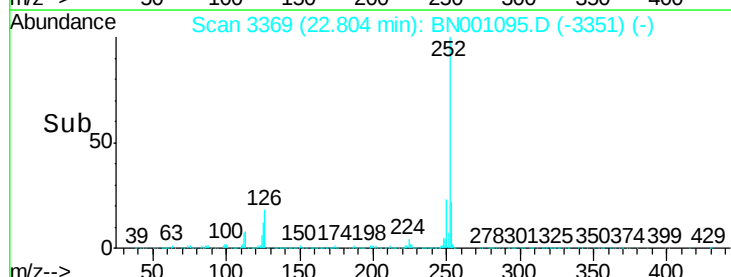
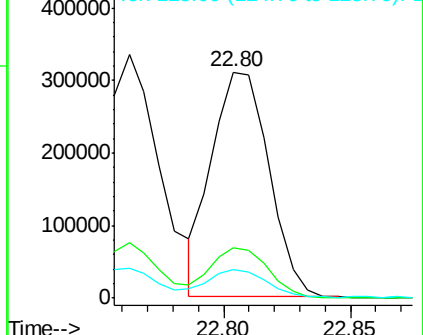
125 12.8 8.1 12.1#

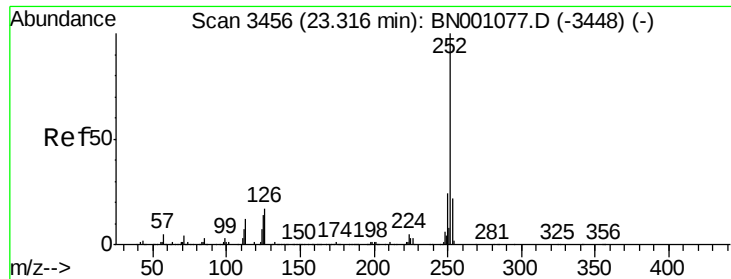


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#26

Benzo(a)pyrene

Concen: 20.133 ng/u1

RT: 23.32 min Scan# 3457

Delta R.T. 0.01 min

Lab File: BN001095.D

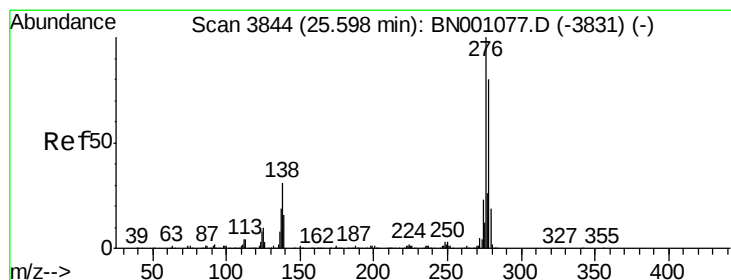
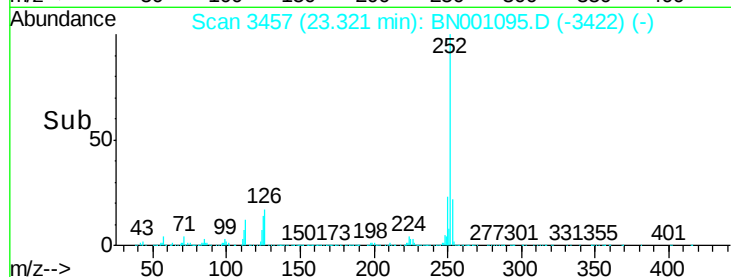
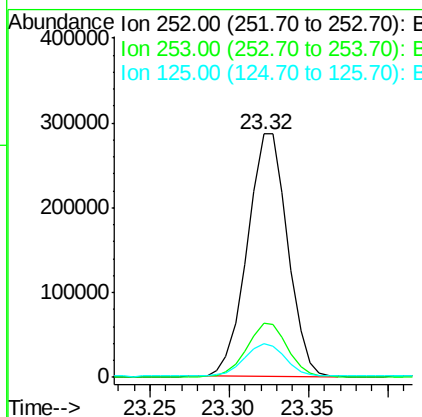
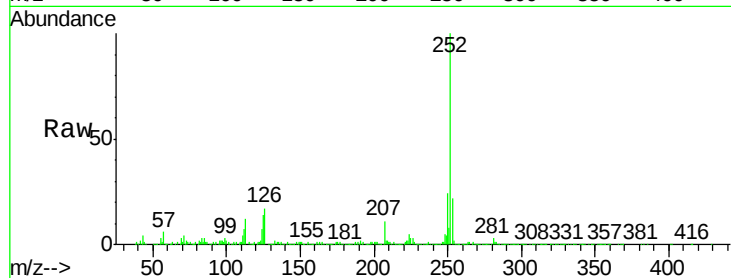
Acq: 03 May 2018 05:29

Instrument :

BNA\_N

ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 252   | Resp: | 505207 |
| Ion      | Ratio | Lower | Upper  |
| 252      | 100   |       |        |
| 253      | 22.1  | 17.2  | 25.8   |
| 125      | 14.0  | 8.2   | 12.4   |



#27

Indeno(1,2,3-cd)pyrene

Concen: 20.182 ng/u1

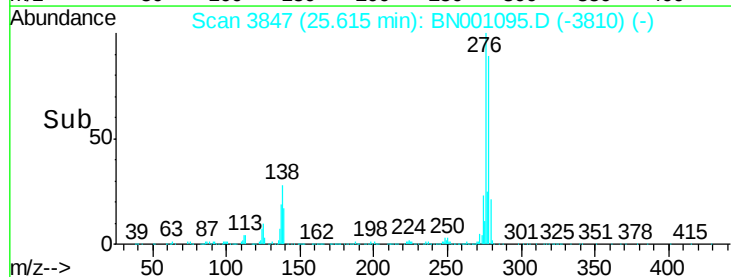
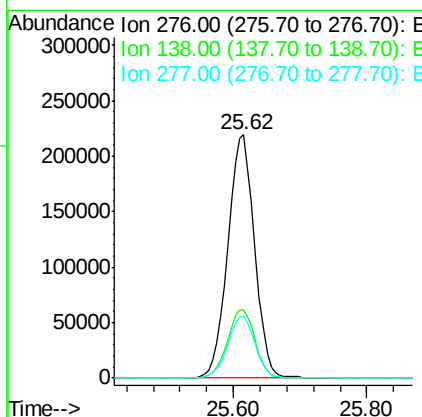
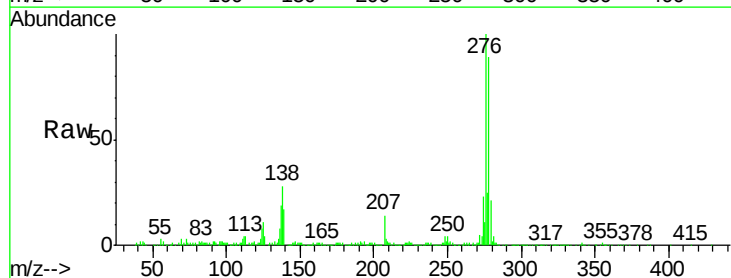
RT: 25.62 min Scan# 3847

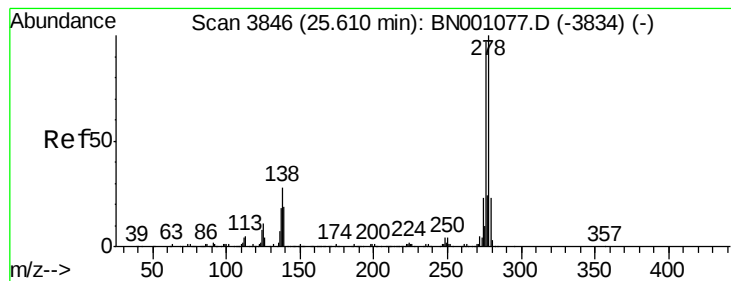
Delta R.T. 0.02 min

Lab File: BN001095.D

Acq: 03 May 2018 05:29

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 276   | Resp: | 611701 |
| Ion      | Ratio | Lower | Upper  |
| 276      | 100   |       |        |
| 138      | 28.3  | 14.4  | 21.6   |
| 277      | 25.5  | 18.0  | 27.0   |



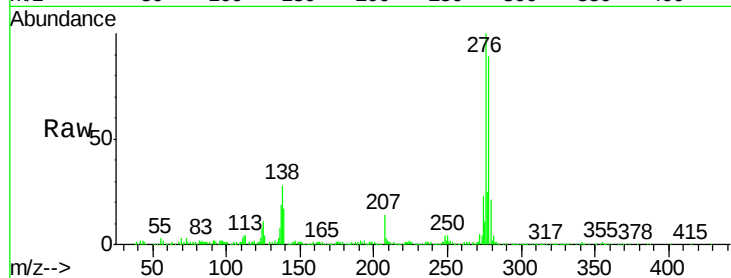


#28

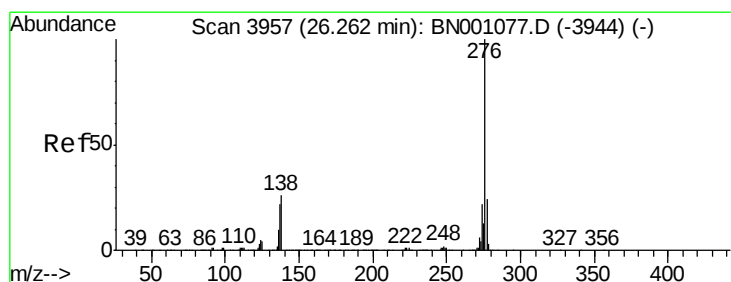
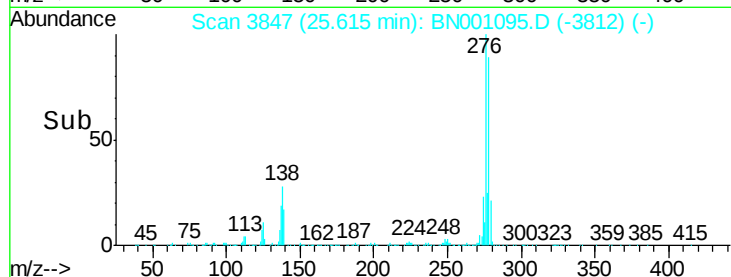
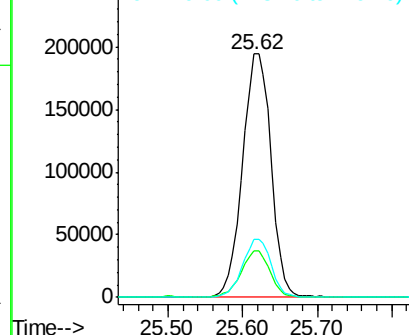
Dibenzo(a,h)anthracene  
Concen: 20.457 ng/ul  
RT: 25.62 min Scan# 3847  
Delta R.T. 0.01 min  
Lab File: BN001095.D  
Acq: 03 May 2018 05:29

Instrument :  
BNA\_N  
ClientSampled :

Tot Ion:278 Resp: 516743  
Ion Ratio Lower Upper  
278 100  
139 18.9 12.2 18.4#  
279 24.0 19.2 28.8



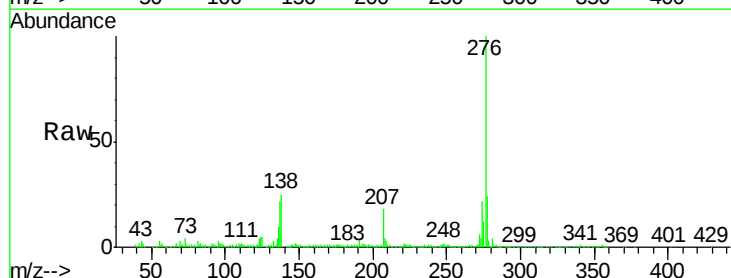
Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E



#29

Benzo(g,h,i)perylene  
Concen: 20.089 ng/ul  
RT: 26.28 min Scan# 3960  
Delta R.T. 0.02 min  
Lab File: BN001095.D  
Acq: 03 May 2018 05:29

Tgt Ion:276 Resp: 509236  
Ion Ratio Lower Upper  
276 100  
138 24.6 15.3 22.9#  
277 23.7 19.0 28.4



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

