

Data Path : Z:\HPCHEM1\BNA N\DATA\BN031318\  
 Data File : BN000351.D  
 Acq On : 13 Mar 2018 16:24  
 Operator : JU/SJ  
 Sample : SSTDC0020  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTD02099

Quant Time: Mar 14 05:44:46 2018  
 Quant Method : Z:\HPCHEM1\BNA N\METHODS\SOM-EPA-BN030918MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Mar 14 05:40:51 2018  
 Response via : Initial Calibration

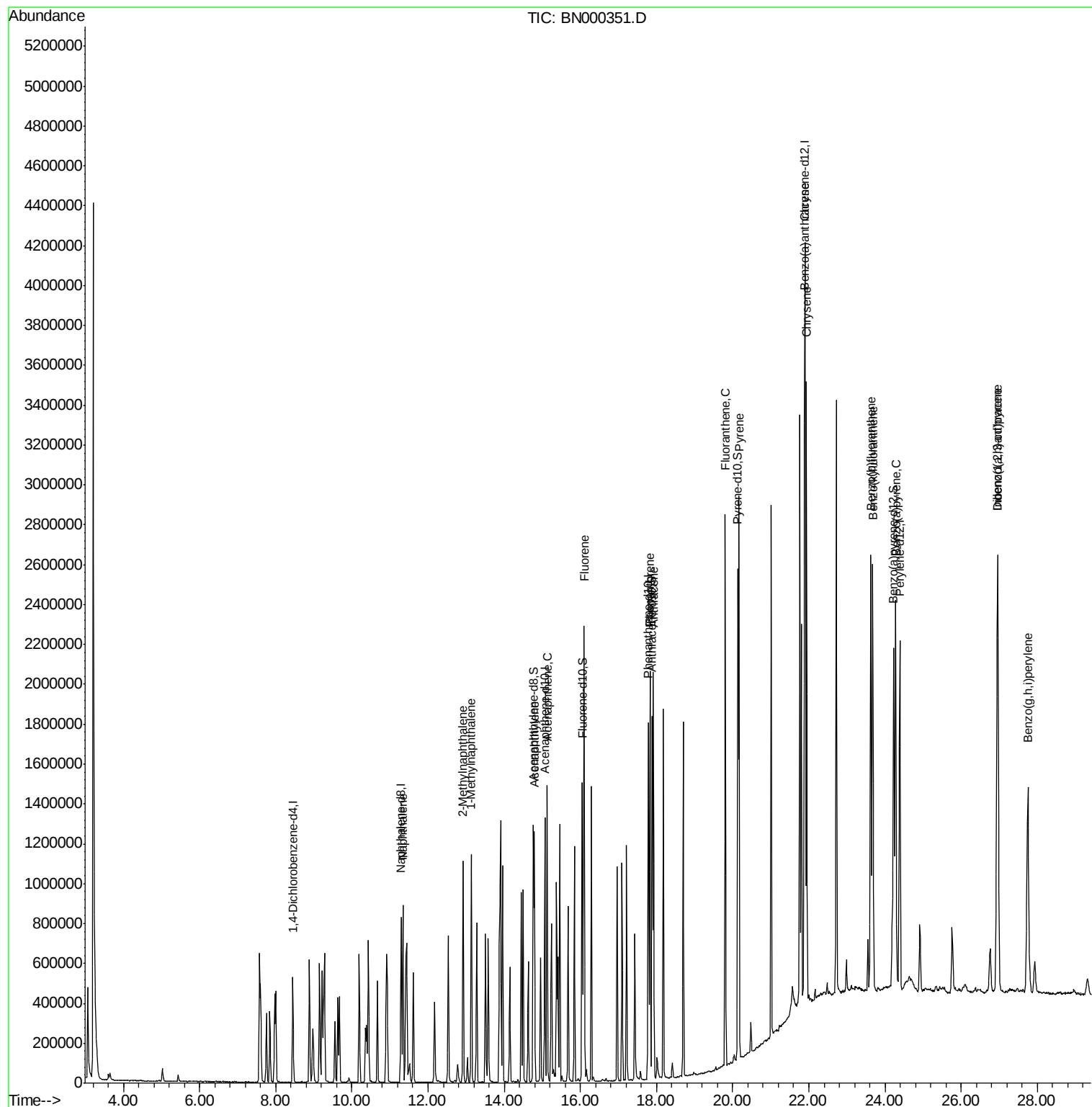
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 8.45  | 152  | 141126   | 20.00  | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 11.29 | 136  | 694783   | 20.00  | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 15.06 | 164  | 410137   | 20.00  | ng/ul  | 0.00     |
| 12) Phenanthrene-d10        | 17.79 | 188  | 969669   | 20.00  | ng/ul  | 0.00     |
| 17) Chrysene-d12            | 21.90 | 240  | 1218237  | 20.00  | ng/ul  | 0.00     |
| 22) Perylene-d12            | 24.39 | 264  | 1202640  | 20.00  | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |        |        |          |
| 7) Acenaphthylene-d8        | 14.76 | 160  | 857309   | 21.06  | ng/ul  | 0.00     |
| 10) Fluorene-d10            | 16.05 | 176  | 584629   | 21.21  | ng/ul  | 0.00     |
| 14) Anthracene-d10          | 17.88 | 188  | 952125   | 21.02  | ng/ul  | 0.00     |
| 18) Pyrene-d10              | 20.13 | 212  | 1173264  | 19.69  | ng/ul  | 0.00     |
| 25) Benzo(a)pyrene-d12      | 24.23 | 264  | 1154935  | 21.03  | ng/ul  | 0.00     |
| Target Compounds            |       |      |          | Ovalue |        |          |
| 3) Naphthalene              | 11.34 | 128  | 741237   | 20.217 | ng/ul  | 99       |
| 4) 2-Methylnaphthalene      | 12.92 | 142  | 517436   | 20.049 | ng/ul  | 96       |
| 5) 1-Methylnaphthalene      | 13.13 | 142  | 519861   | 20.071 | ng/ul# | 93       |
| 8) Acenaphthylene           | 14.79 | 152  | 854139   | 20.881 | ng/ul  | 98       |
| 9) Acenaphthene             | 15.13 | 153  | 577976   | 20.301 | ng/ul  | 95       |
| 11) Fluorene                | 16.10 | 166  | 662774   | 21.107 | ng/ul  | 94       |
| 13) Phenanthrene            | 17.83 | 178  | 1121204  | 20.162 | ng/ul  | 99       |
| 15) Anthracene              | 17.92 | 178  | 1181016  | 20.930 | ng/ul  | 99       |
| 16) Fluoranthene            | 19.80 | 202  | 1443594  | 24.026 | ng/ul# | 94       |
| 19) Pyrene                  | 20.16 | 202  | 1510169  | 19.635 | ng/ul# | 89       |
| 20) Benzo(a)anthracene      | 21.89 | 228  | 1565302  | 20.668 | ng/ul  | 99       |
| 21) Chrysene                | 21.94 | 228  | 1471743  | 20.477 | ng/ul  | 100      |
| 23) Benzo(b)fluoranthene    | 23.63 | 252  | 1485494  | 20.714 | ng/ul# | 96       |
| 24) Benzo(k)fluoranthene    | 23.68 | 252  | 1383401  | 20.608 | ng/ul# | 96       |
| 26) Benzo(a)pyrene          | 24.28 | 252  | 1412251  | 20.691 | ng/ul# | 94       |
| 27) Indeno(1,2,3-cd)pyrene  | 26.96 | 276  | 1548199  | 21.038 | ng/ul# | 81       |
| 28) Dibenzo(a,h)anthracene  | 26.96 | 278  | 1296291  | 21.490 | ng/ul# | 91       |
| 29) Benzo(g,h,i)perylene    | 27.75 | 276  | 1285610  | 20.922 | ng/ul# | 89       |

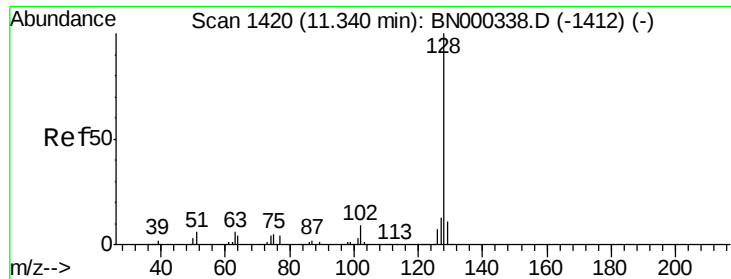
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA N\DATA\BN031318\  
Data File : BN000351.D  
Acq On : 13 Mar 2018 16:24  
Operator : JU/SJ  
Sample : SSTDCCC020  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTD02099

Quant Time: Mar 14 05:44:46 2018  
Quant Method : Z:\HPCHEM1\BNA N\METHODS\SOM-EPA-BN030918MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed Mar 14 05:40:51 2018  
Response via : Initial Calibration





#3

Naphthalene

Concen: 20.217 ng/ul

RT: 11.34 min Scan# 1420

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

Instrument :

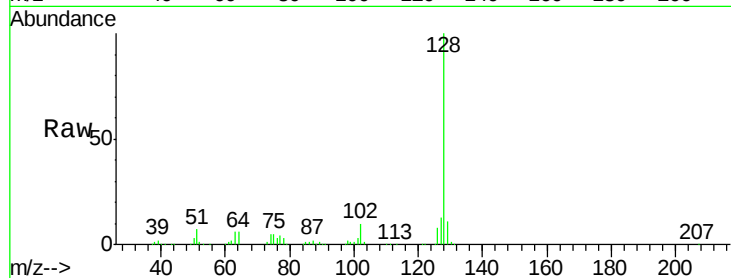
BNA\_N

ClientSampleId :

SSTD02099

Tot Ion:128 Resp: 741237

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 128 | 100   |       |       |
| 129 | 11.1  | 8.7   | 13.1  |
| 127 | 12.8  | 10.6  | 16.0  |

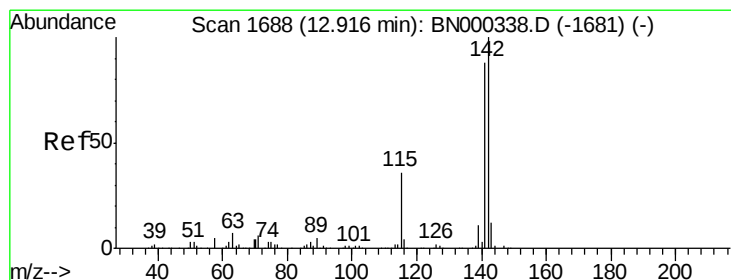
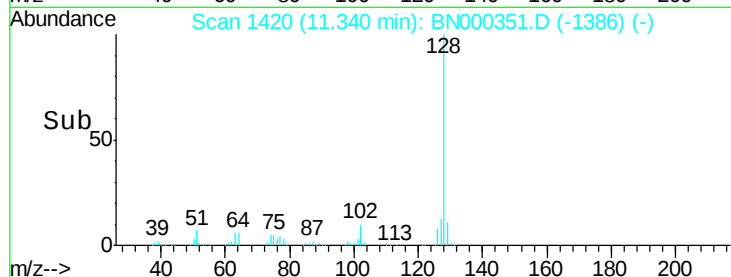
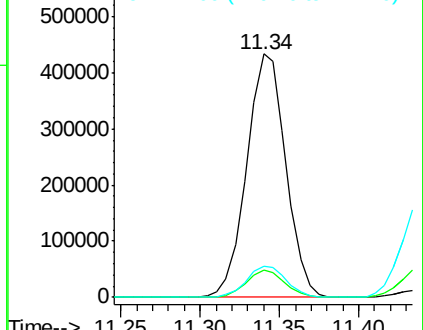


Abundance

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: 20.049 ng/ul

RT: 12.92 min Scan# 1688

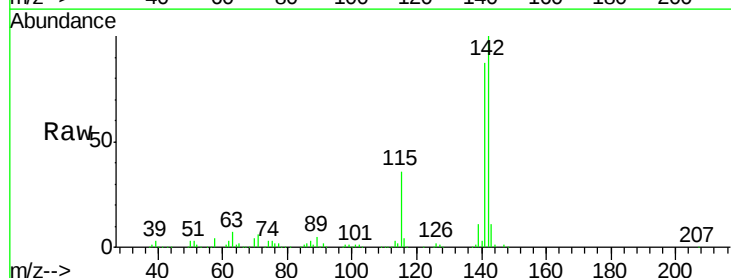
Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

Tgt Ion:142 Resp: 517436

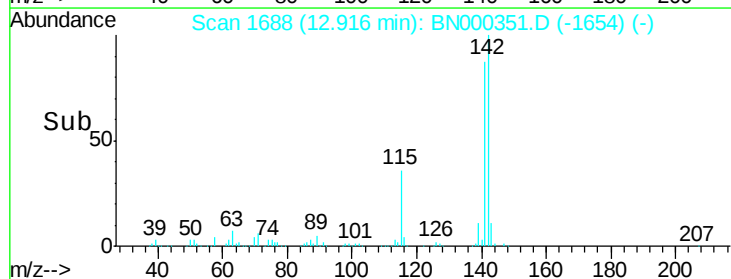
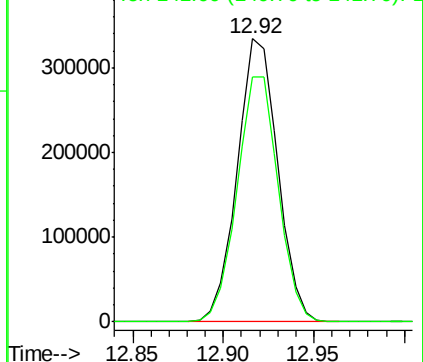
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 142 | 100   |       |       |
| 141 | 86.8  | 72.7  | 109.1 |

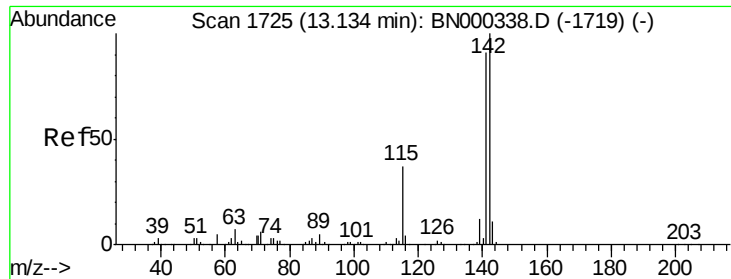


Abundance

Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#5

1-Methylnaphthalene

Concen: 20.071 ng/ul

RT: 13.13 min Scan# 1725

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

Instrument :

BNA\_N

ClientSampleId :

SSTD02099

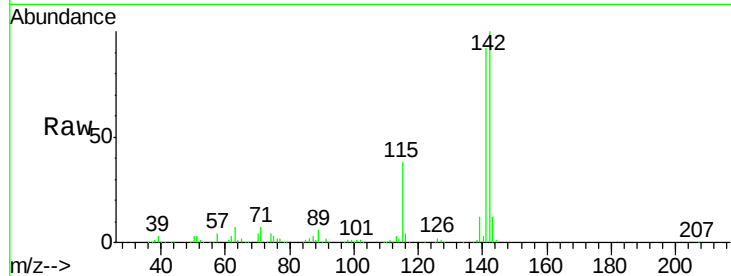
Tot Ion:142 Resp: 519861

Ion Ratio Lower Upper

142 100

141 91.8 79.3 118.9

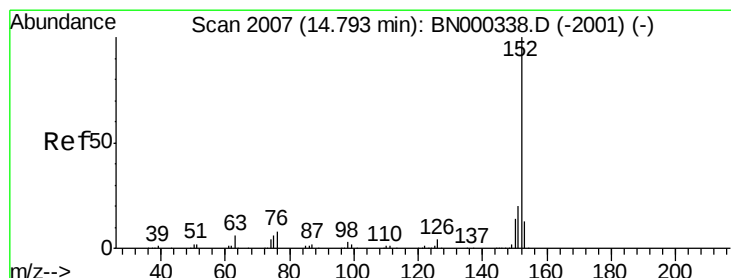
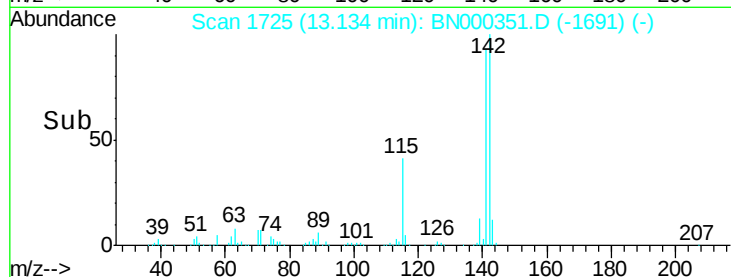
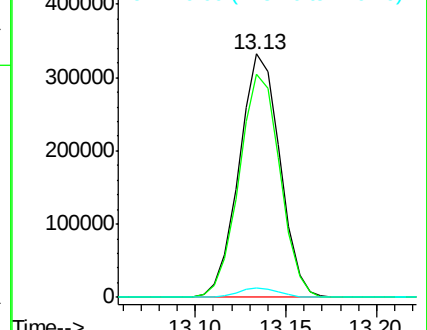
116 4.1 4.2 6.2#



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: 20.881 ng/ul

RT: 14.79 min Scan# 2007

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

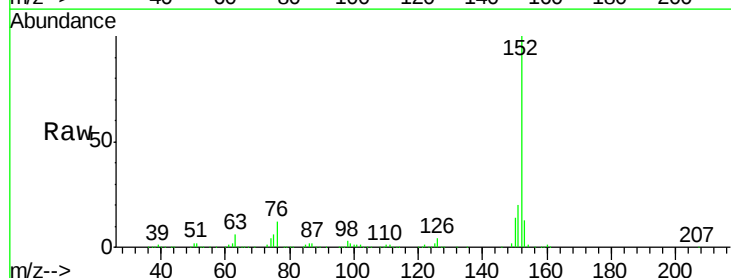
Tgt Ion:152 Resp: 854139

Ion Ratio Lower Upper

152 100

151 19.8 16.7 25.1

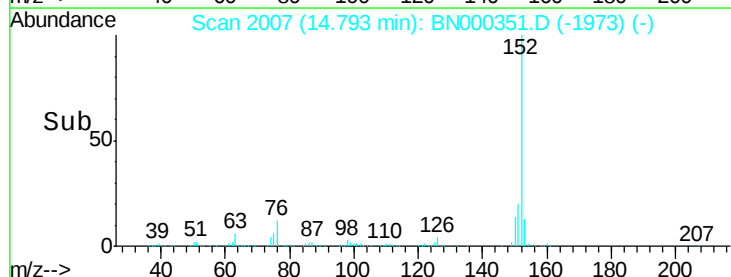
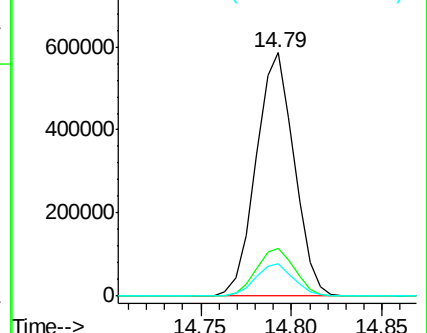
153 13.1 10.2 15.4

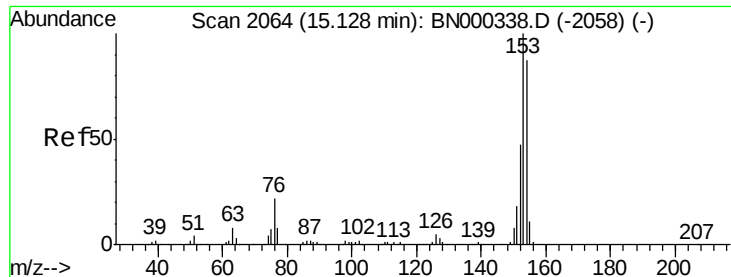


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#9

Acenaphthene

Concen: 20.301 ng/ul

RT: 15.13 min Scan# 2064

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

Instrument :

BNA\_N

ClientSampleId :

SSTD02099

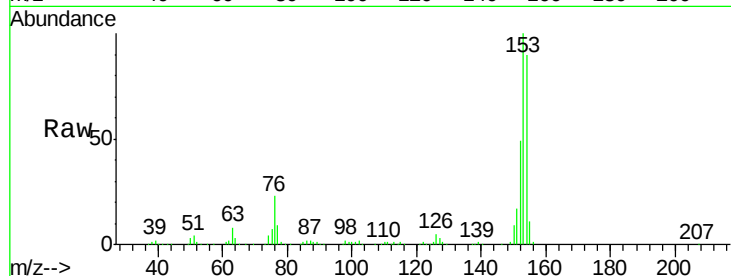
Tot Ion:153 Resp: 577976

Ion Ratio Lower Upper

153 100

152 48.6 39.0 58.6

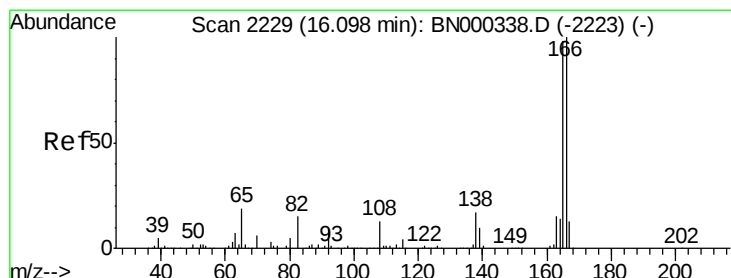
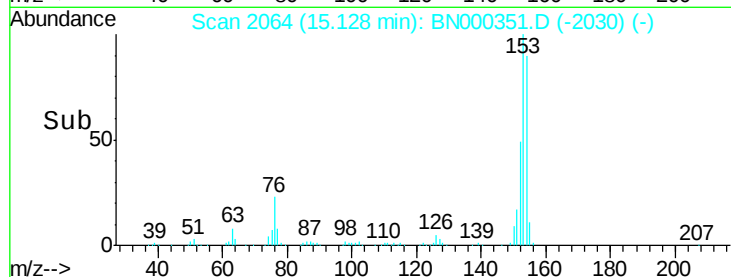
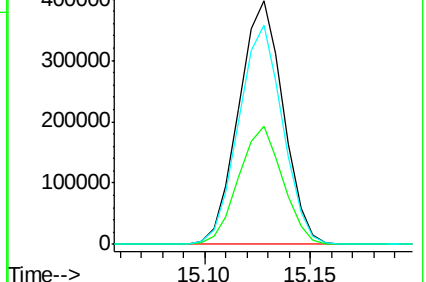
154 89.9 66.8 100.2



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: 21.107 ng/ul

RT: 16.10 min Scan# 2229

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

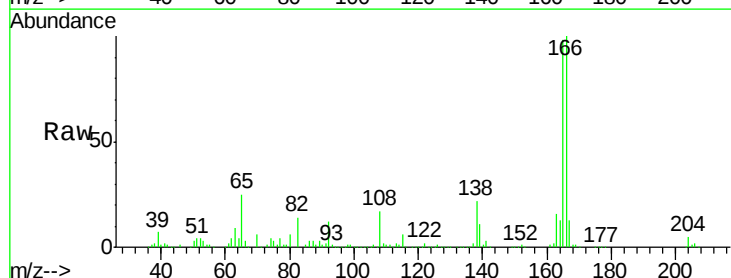
Tgt Ion:166 Resp: 662774

Ion Ratio Lower Upper

166 100

165 98.3 83.8 125.8

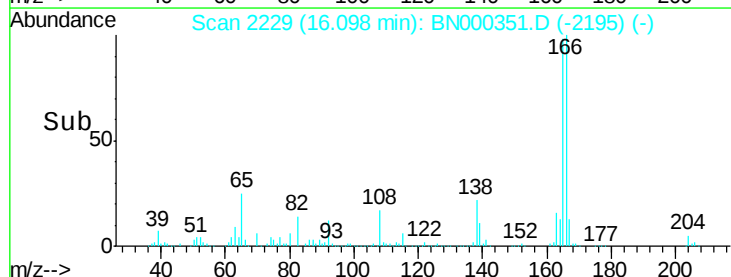
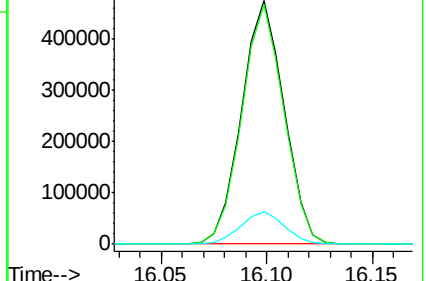
167 13.4 11.5 17.3

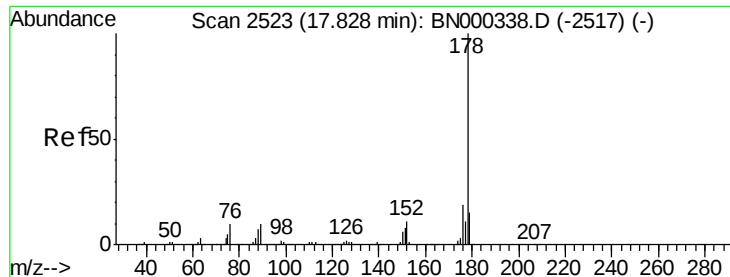


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#13

Phenanthrene

Concen: 20.162 ng/ul

RT: 17.83 min Scan# 2523

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

Instrument :

BNA\_N

ClientSampleId :

SSTD02099

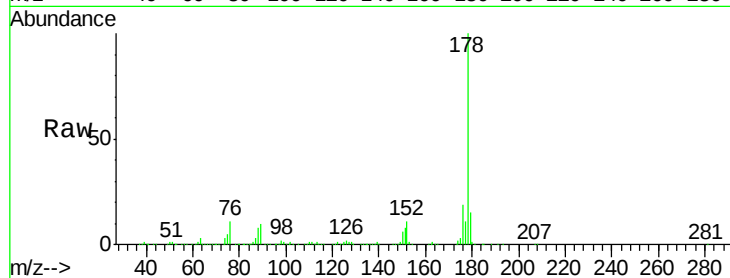
Tot Ion:178 Resp: 1121204

Ion Ratio Lower Upper

178 100

179 15.3 12.3 18.5

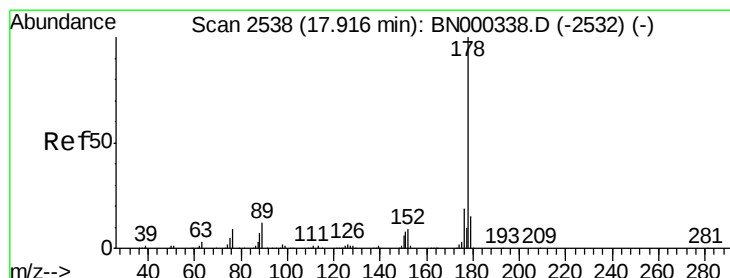
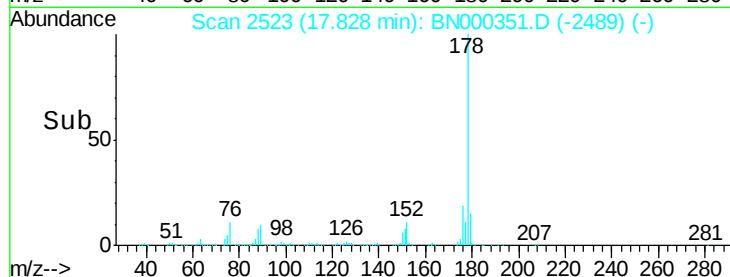
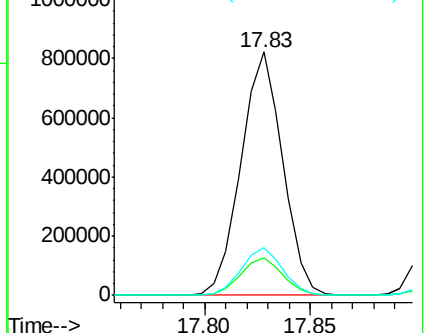
176 19.4 15.1 22.7



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: 20.930 ng/ul

RT: 17.92 min Scan# 2538

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

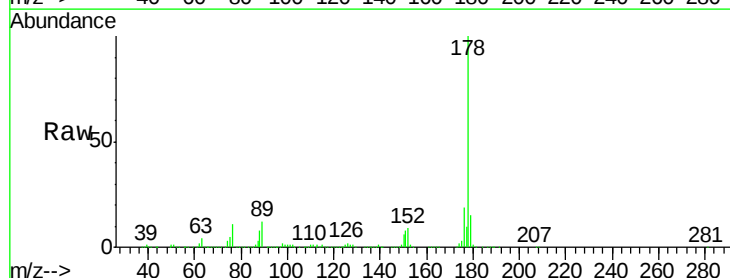
Tgt Ion:178 Resp: 1181016

Ion Ratio Lower Upper

178 100

179 15.3 11.8 17.8

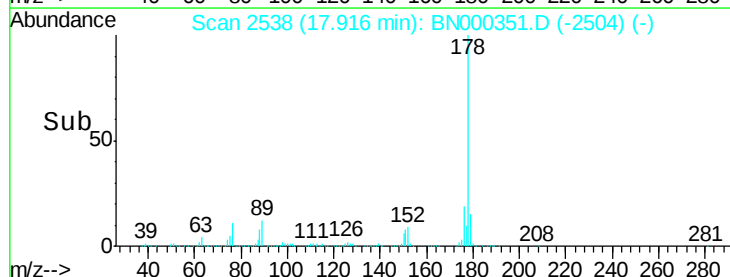
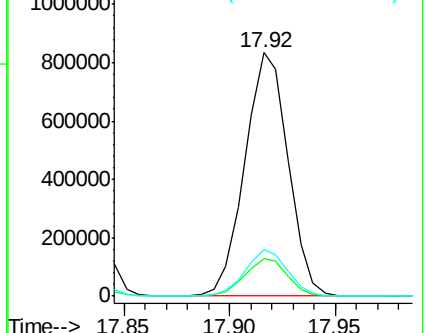
176 18.9 15.2 22.8

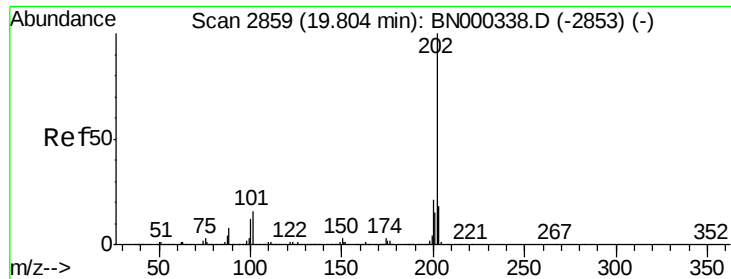


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E

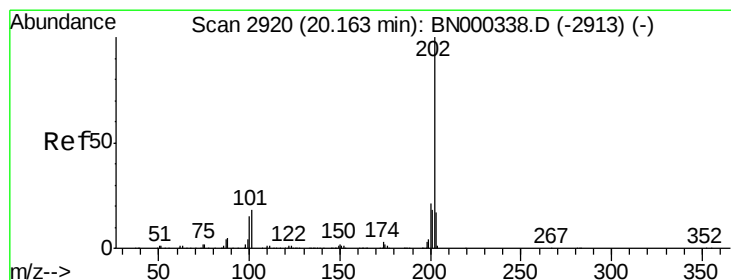
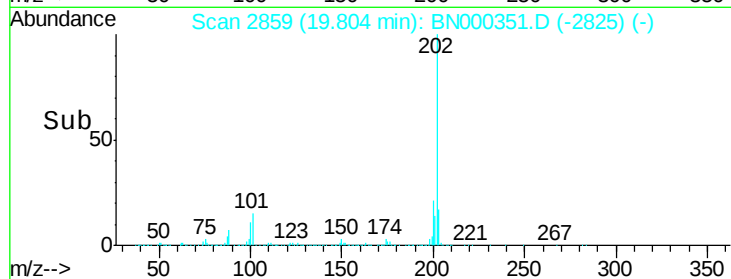
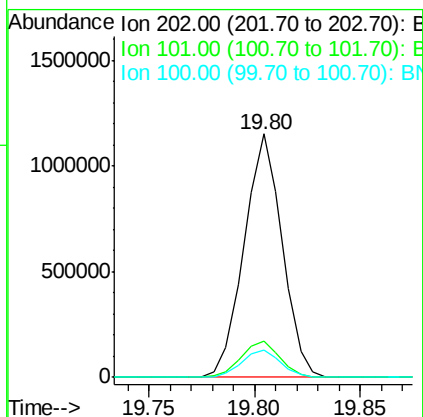
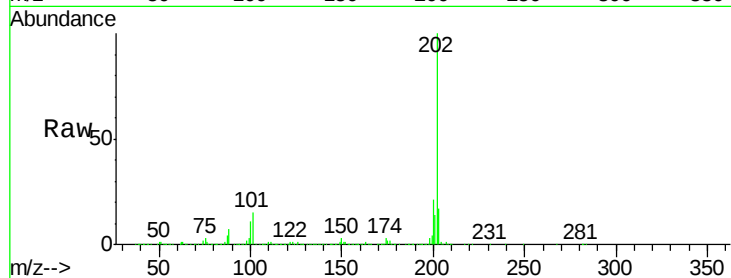




#16  
 Fluoranthene  
 Concen: 24.026 ng/ul  
 RT: 19.80 min Scan# 2859  
 Delta R.T. 0.00 min  
 Lab File: BN000351.D  
 Acq: 13 Mar 2018 16:24

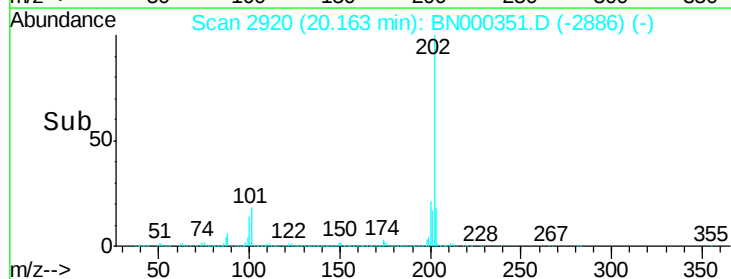
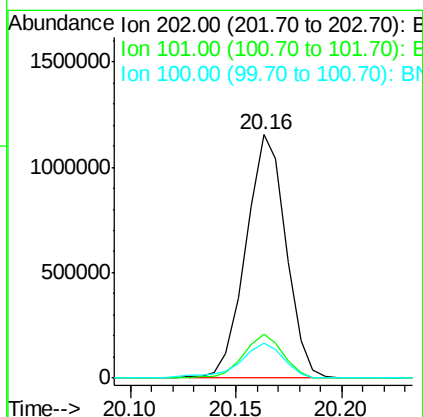
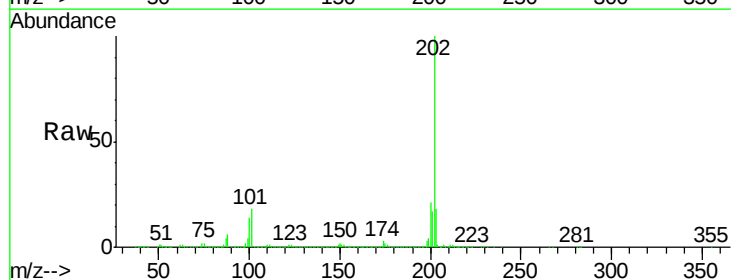
Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTD02099

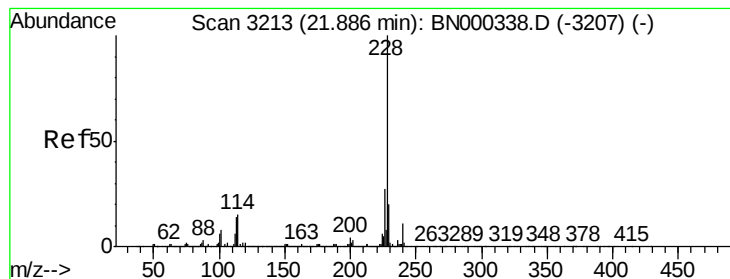
Tot Ion:202 Resp: 1443594  
 Ion Ratio Lower Upper  
 202 100  
 101 14.6 9.9 14.9  
 100 11.3 7.4 11.0#



#19  
 Pyrene  
 Concen: 19.635 ng/ul  
 RT: 20.16 min Scan# 2920  
 Delta R.T. 0.00 min  
 Lab File: BN000351.D  
 Acq: 13 Mar 2018 16:24

Tgt Ion:202 Resp: 1510169  
 Ion Ratio Lower Upper  
 202 100  
 101 17.9 11.0 16.4#  
 100 14.4 8.1 12.1#





#20

Benzo(a)anthracene

Concen: 20.668 ng/ul

RT: 21.89 min Scan# 3213

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

Instrument :

BNA\_N

ClientSampleId :

SSTD02099

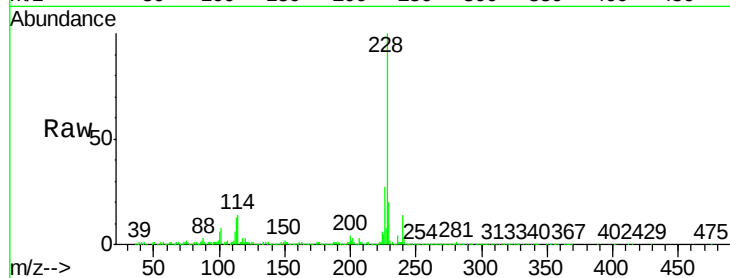
Tot Ion:228 Resp: 1565302

Ion Ratio Lower Upper

228 100

229 20.0 15.7 23.5

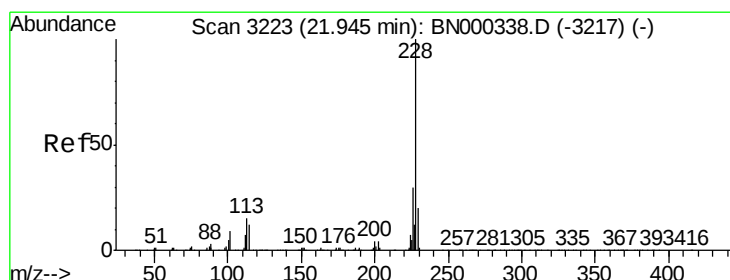
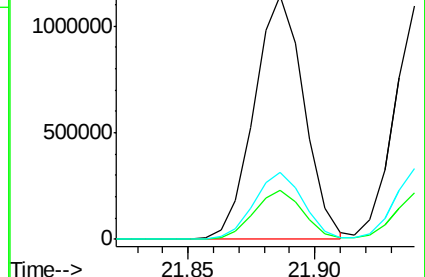
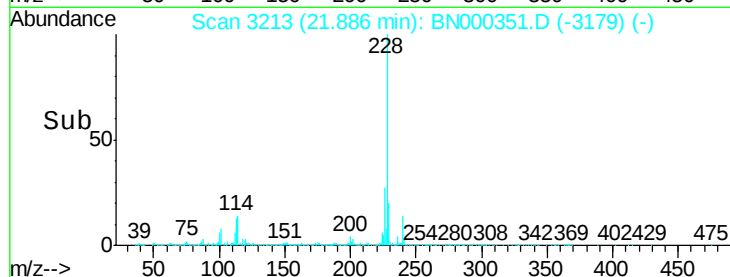
226 27.3 21.1 31.7



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: 20.477 ng/ul

RT: 21.94 min Scan# 3222

Delta R.T. -0.01 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

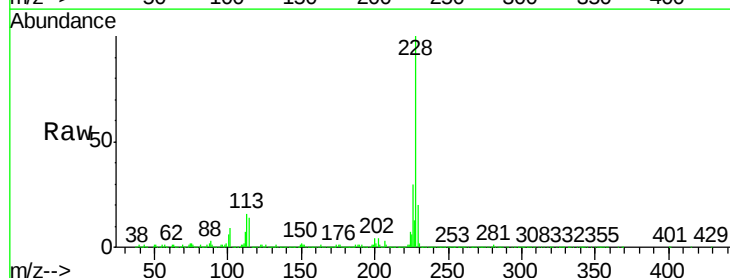
Tgt Ion:228 Resp: 1471743

Ion Ratio Lower Upper

228 100

226 30.4 24.5 36.7

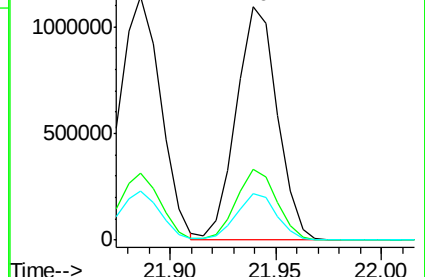
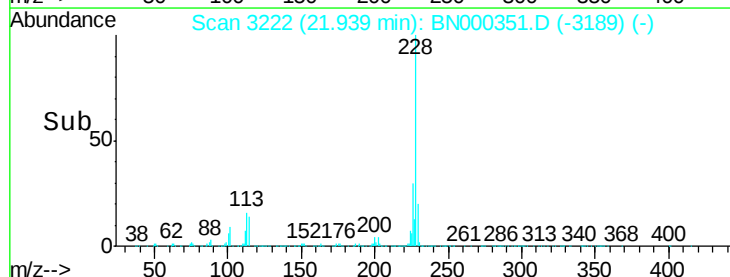
229 19.8 15.8 23.8

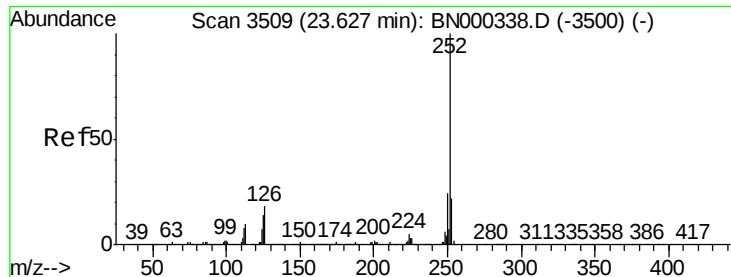


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#23

Benzo(b)fluoranthene

Concen: 20.714 ng/ul

RT: 23.63 min Scan# 3509

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

Instrument :

BNA\_N

ClientSampleId :

SSTD02099

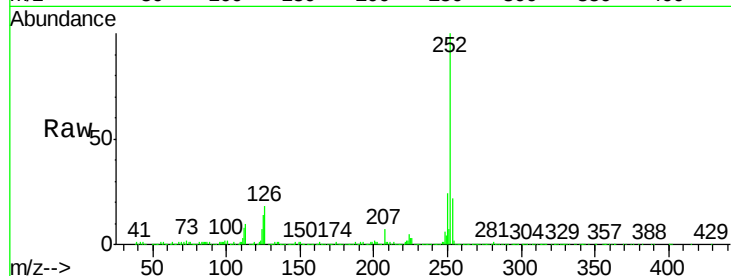
Tot Ion:252 Resp: 1485494

Ion Ratio Lower Upper

252 100

253 22.1 18.0 27.0

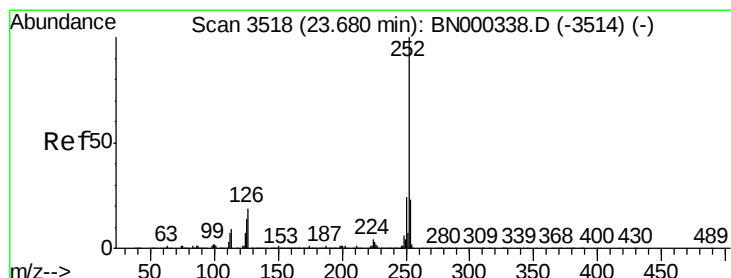
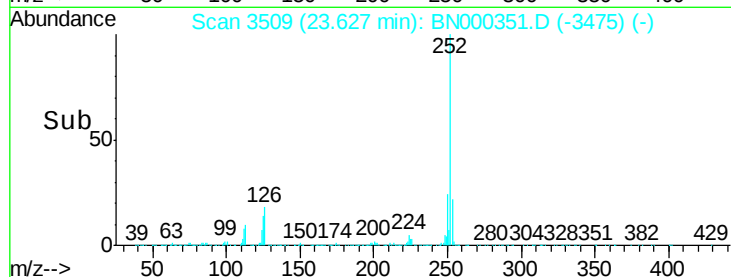
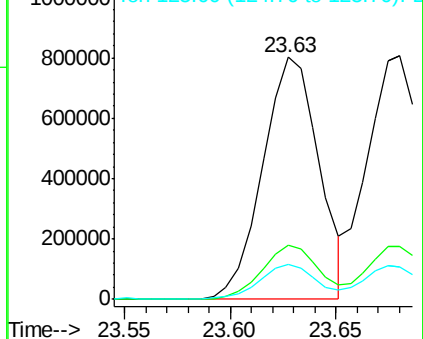
125 14.3 8.0 12.0#



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: 20.608 ng/ul

RT: 23.68 min Scan# 3518

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

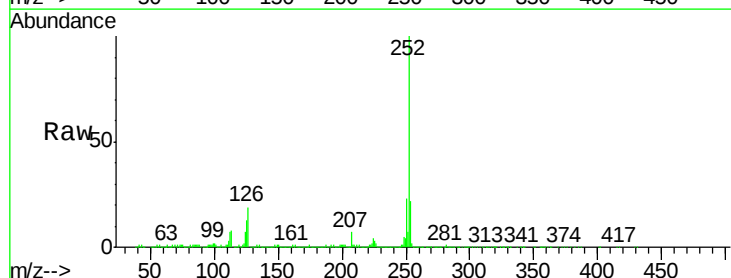
Tgt Ion:252 Resp: 1383401

Ion Ratio Lower Upper

252 100

253 21.9 18.0 27.0

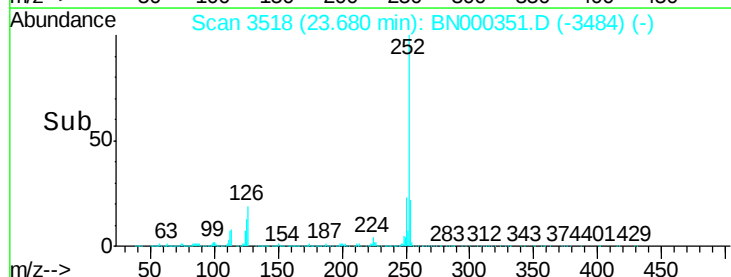
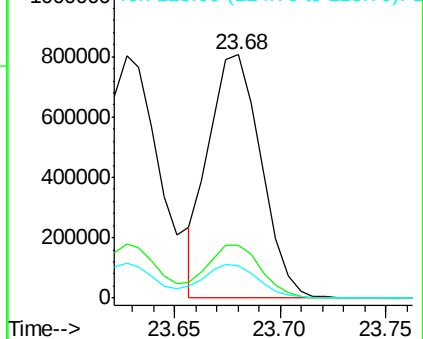
125 13.4 8.1 12.1#

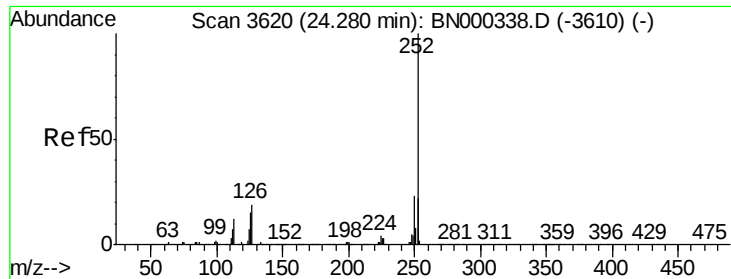


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

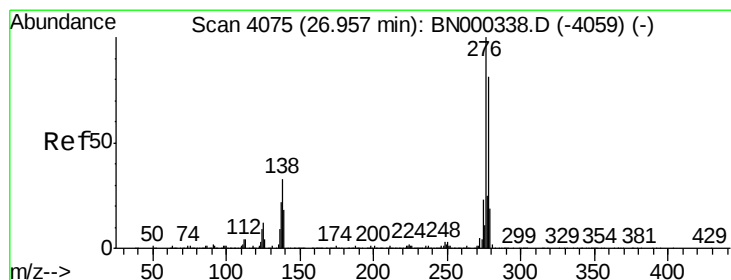
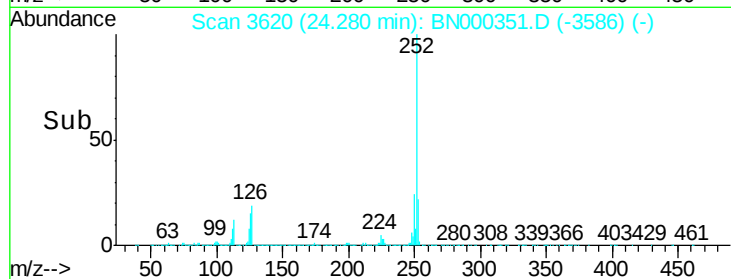
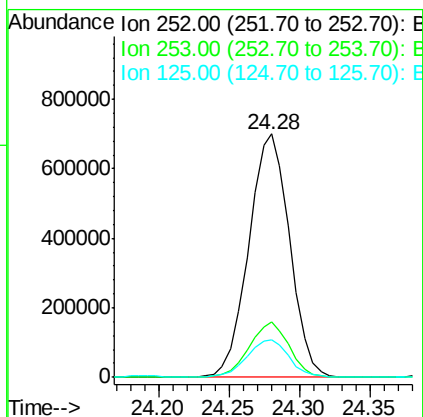
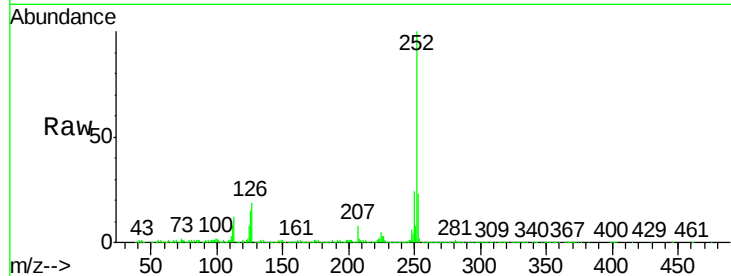




#26  
Benzo(a)pyrene  
Concen: 20.691 ng/ul  
RT: 24.28 min Scan# 3620  
Delta R.T. 0.00 min  
Lab File: BN000351.D  
Acq: 13 Mar 2018 16:24

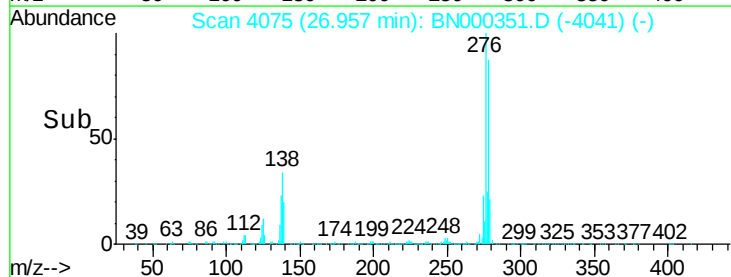
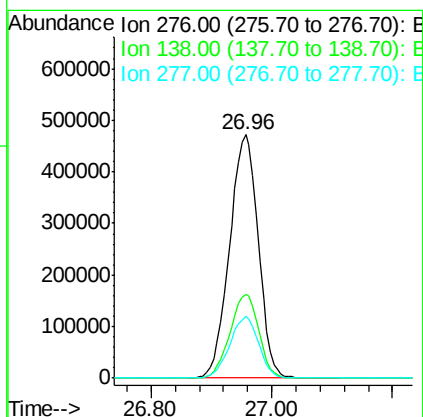
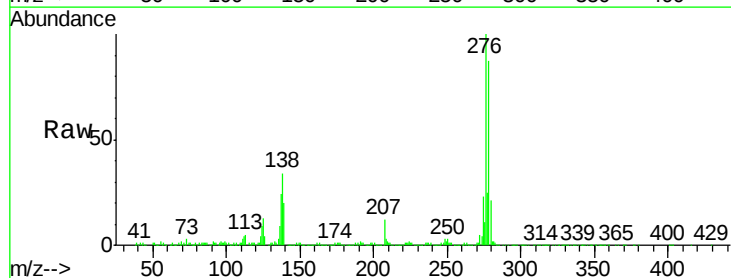
Instrument :  
BNA\_N  
ClientSampleId :  
SSTD02099

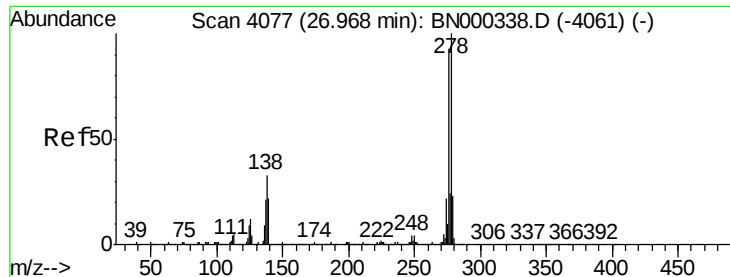
Tot Ion:252 Resp: 1412251  
Ion Ratio Lower Upper  
252 100  
253 22.5 17.2 25.8  
125 15.2 8.2 12.4#



#27  
Indeno(1,2,3-cd)pyrene  
Concen: 21.038 ng/ul  
RT: 26.96 min Scan# 4075  
Delta R.T. 0.00 min  
Lab File: BN000351.D  
Acq: 13 Mar 2018 16:24

Tgt Ion:276 Resp: 1548199  
Ion Ratio Lower Upper  
276 100  
138 34.1 14.4 21.6#  
277 25.2 18.0 27.0





#28

Dibenzo(a,h)anthracene

Concen: 21.490 ng/ul

RT: 26.96 min Scan# 4076

Delta R.T. -0.01 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

Instrument :

BNA\_N

ClientSampleId :

SSTD02099

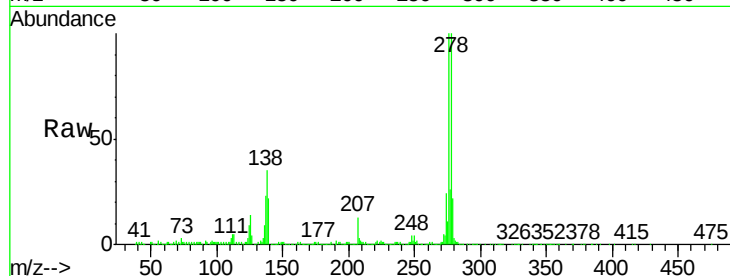
Tot Ion:278 Resp: 1296291

Ion Ratio Lower Upper

278 100

139 22.5 12.2 18.4#

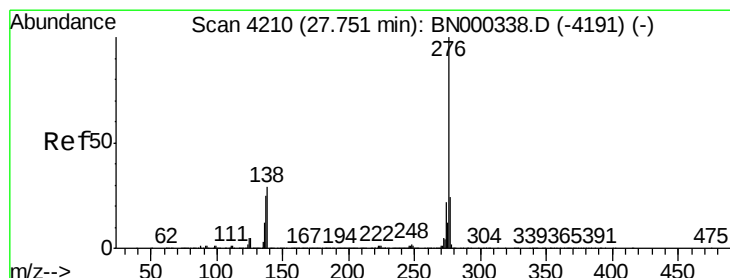
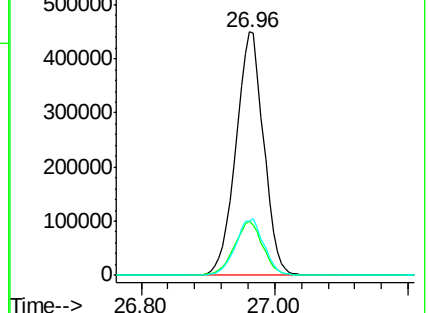
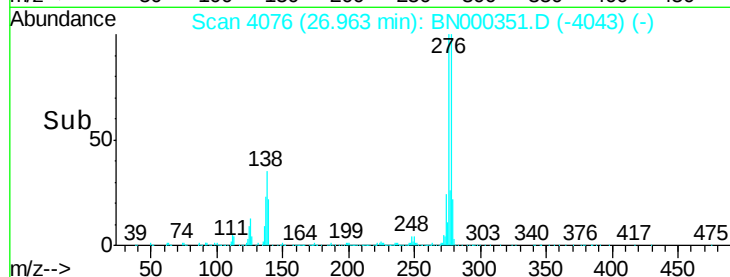
279 22.5 19.2 28.8



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: 20.922 ng/ul

RT: 27.75 min Scan# 4210

Delta R.T. 0.00 min

Lab File: BN000351.D

Acq: 13 Mar 2018 16:24

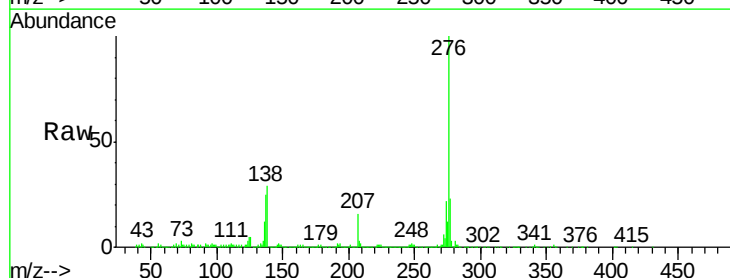
Tgt Ion:276 Resp: 1285610

Ion Ratio Lower Upper

276 100

138 29.4 15.3 22.9#

277 23.4 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

