

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_E\DATA\BE070219\  
 Data File : BE100315.D  
 Acq On : 2 Jul 2019 22:53  
 Operator : JU/SJ  
 Sample : K3504-17 10X  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PST-013-SW105-062019

Quant Time: Jul 03 02:14:52 2019

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_E\METHODS\8270-SIM-BE062819.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Jun 28 14:06:53 2019

Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.65  | 152  | 806      | 0.40 | ng    | 0.00     |
| 7) Naphthalene-d8         | 10.43 | 136  | 3019     | 0.40 | ng    | -0.01    |
| 13) Acenaphthene-d10      | 14.33 | 164  | 2243     | 0.40 | ng    | 0.01     |
| 19) Phenanthrene-d10      | 17.07 | 188  | 6333     | 0.40 | ng    | 0.01     |
| 27) Chrysene-d12          | 21.25 | 240  | 8332     | 0.40 | ng    | 0.00     |
| 34) Perylene-d12          | 23.68 | 264  | 9786     | 0.40 | ng    | 0.01     |

#### System Monitoring Compounds

|                             |       |     |      |      |    |      |
|-----------------------------|-------|-----|------|------|----|------|
| 4) 2-Fluorophenol           | 5.23  | 112 | 58   | 0.03 | ng | 0.01 |
| 5) Phenol-d6                | 6.85  | 99  | 64   | 0.02 | ng | 0.01 |
| 8) Nitrobenzene-d5          | 8.82  | 82  | 68   | 0.02 | ng | 0.00 |
| 11) 2-Methylnaphthalene-d10 | 12.05 | 152 | 139  | 0.02 | ng | 0.00 |
| 14) 2,4,6-Tribromophenol    | 15.82 | 330 | 65   | 0.04 | ng | 0.00 |
| 15) 2-Fluorobiphenyl        | 12.94 | 172 | 197  | 0.02 | ng | 0.00 |
| 25) Fluoranthene-d10        | 19.10 | 212 | 1437 | 0.02 | ng | 0.00 |
| 29) Terphenyl-d14           | 19.70 | 244 | 814  | 0.05 | ng | 0.00 |

#### Target Compounds

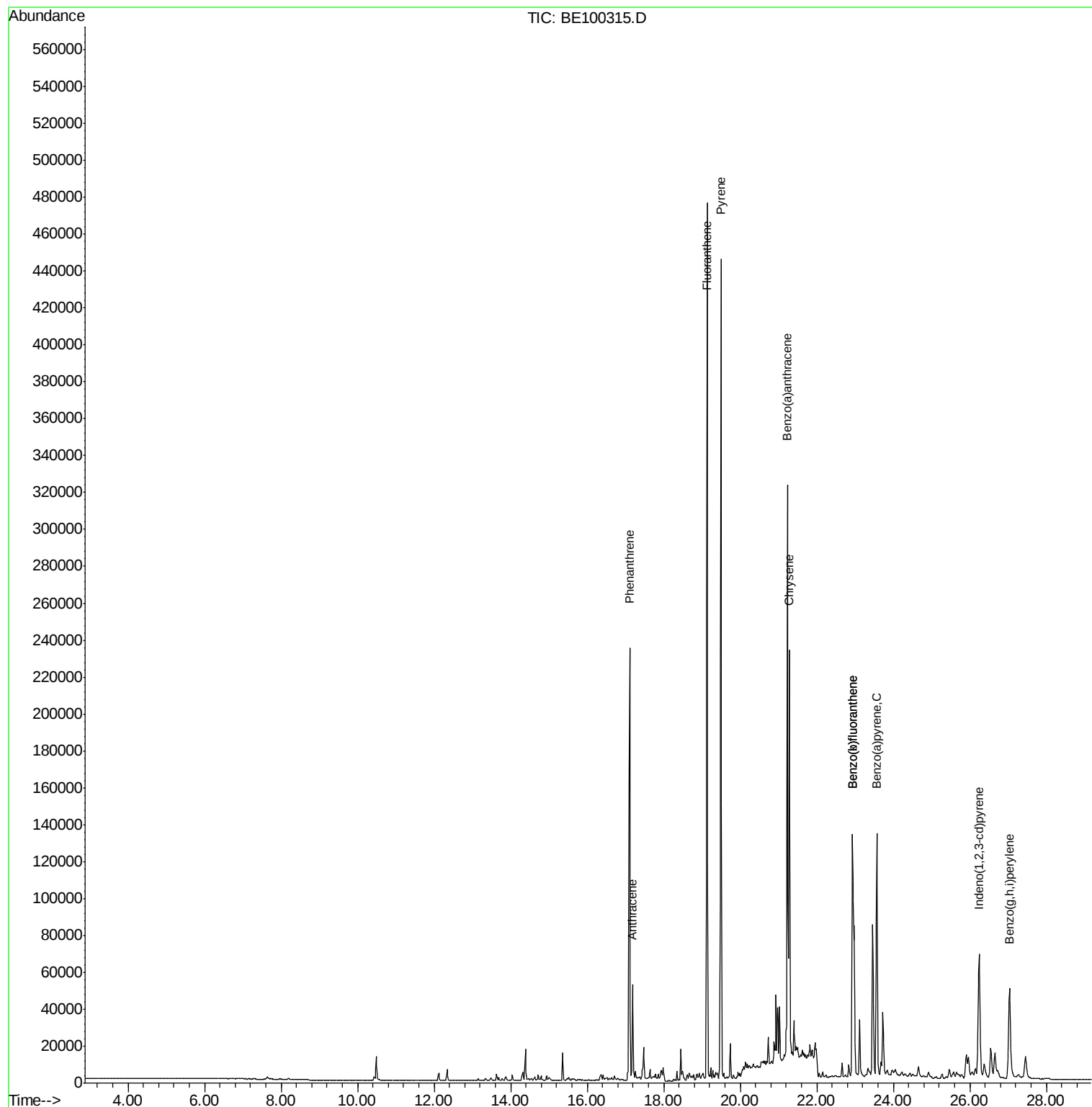
|                                |       |     |        |           |    | Qvalue |
|--------------------------------|-------|-----|--------|-----------|----|--------|
| 23) Phenanthrene               | 17.11 | 178 | 256266 | 16.696    | ng | 100    |
| 24) Anthracene                 | 17.19 | 178 | 56786  | 4.108     | ng | # 93   |
| 26) Fluoranthene               | 19.13 | 202 | 434494 | 17.772    | ng | 99     |
| 28) Pyrene                     | 19.49 | 202 | 412700 | 18.709    | ng | # 95   |
| 30) Benzo(a)anthracene         | 21.23 | 228 | 262111 | 9.568     | ng | 98     |
| 31) Chrysene                   | 21.28 | 228 | 207765 | 7.552     | ng | 97     |
| 32) Bis(2-ethylhexyl)phthalate | 21.15 | 149 | 1121   | Below Cal | #  | 77     |
| 33) Indeno(1,2,3-cd)pyrene     | 26.24 | 276 | 133761 | 3.676     | ng | # 97   |
| 35) Benzo(b)fluoranthene       | 22.93 | 252 | 251532 | 9.480     | ng | # 96   |
| 36) Benzo(k)fluoranthene       | 22.93 | 252 | 251532 | 8.493     | ng | 98     |
| 37) Benzo(a)pyrene             | 23.57 | 252 | 204642 | 7.696     | ng | # 93   |
| 39) Benzo(g,h,i)perylene       | 27.04 | 276 | 135817 | 4.760     | ng | 99     |

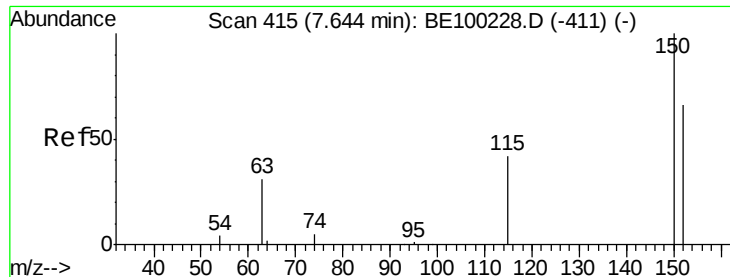
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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PST-013-SW105-062019

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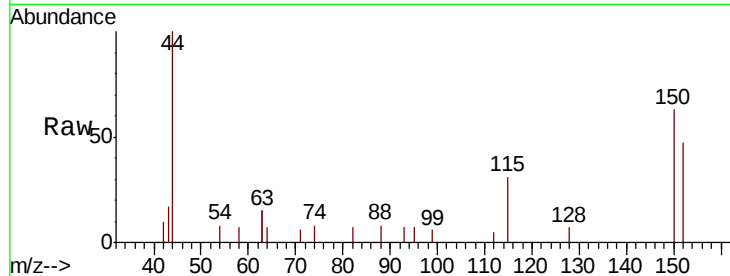


#1

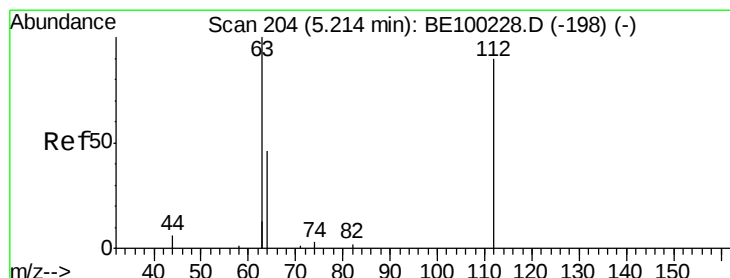
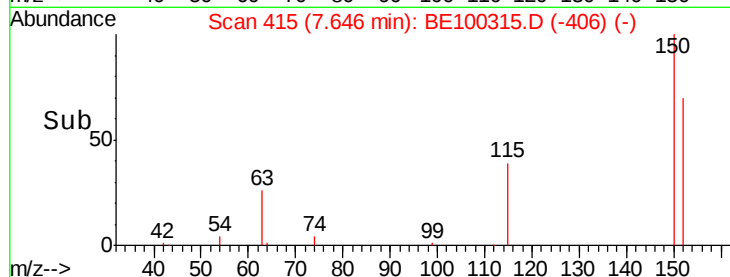
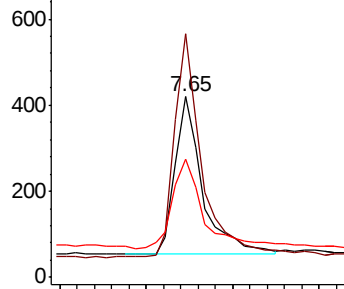
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.65 min Scan# 415  
Delta R.T. 0.00 min  
Lab File: BE100315.D  
Acq: 2 Jul 2019 22:53

Instrument :  
BNA\_E  
ClientSampleId :  
PST-013-SW105-062019

Tgt Ion:152 Resp: 806  
Ion Ratio Lower Upper  
152 100  
150 135.1 114.5 171.7  
115 65.9 57.1 85.7



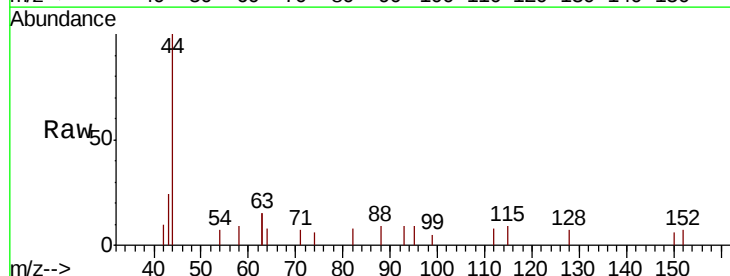
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



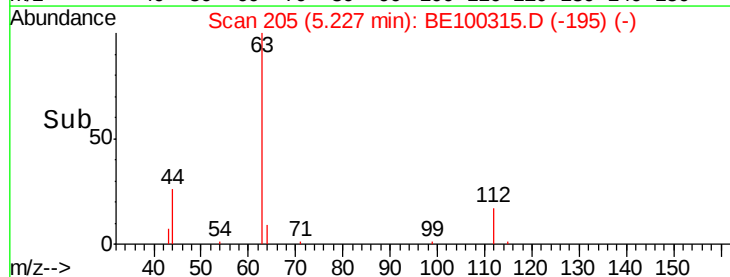
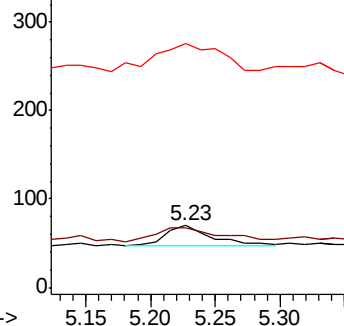
#4

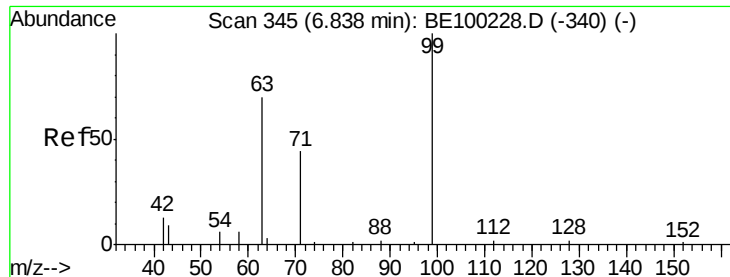
2-Fluorophenol  
Concen: 0.028 ng  
RT: 5.23 min Scan# 205  
Delta R.T. 0.01 min  
Lab File: BE100315.D  
Acq: 2 Jul 2019 22:53

Tgt Ion:112 Resp: 58  
Ion Ratio Lower Upper  
112 100  
64 106.9 39.4 59.0#  
63 198.3 104.5 156.7#



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BE1  
Ion 63.00 (62.70 to 63.70): BE1





#5

Phenol-d6

Concen: 0.024 ng

RT: 6.85 min Scan# 346

Delta R.T. 0.01 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

Instrument :

BNA\_E

ClientSampleId :

PST-013-SW105-062019

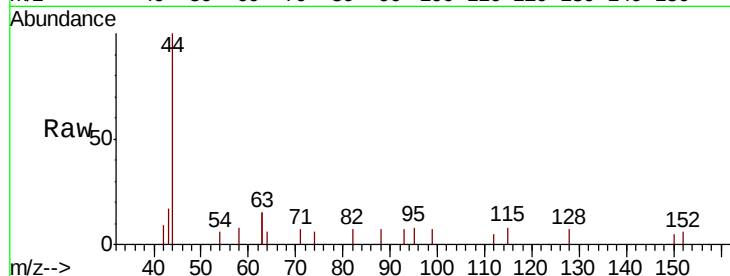
Tgt Ion: 99 Resp: 64

Ion Ratio Lower Upper

99 100

42 59.4 11.2 16.8#

71 42.2 37.2 55.8



Abundance Ion 99.00 (98.70 to 99.70): BE1

Ion 42.00 (41.70 to 42.70): BE1

Ion 71.00 (70.70 to 71.70): BE1

120

100

80

60

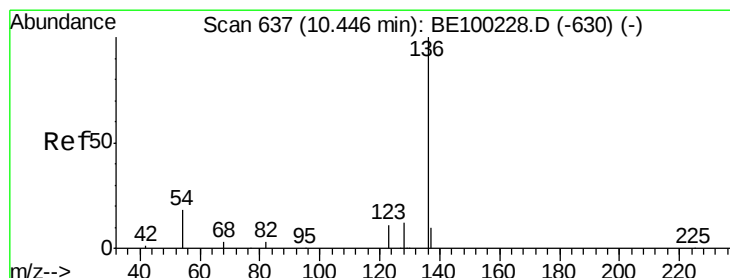
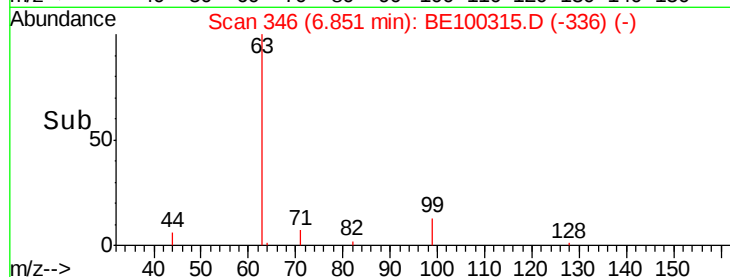
40

20

0

6.70 6.80 6.90 7.00

Time-->



#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.43 min Scan# 636

Delta R.T. -0.01 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

Tgt Ion: 136 Resp: 3019

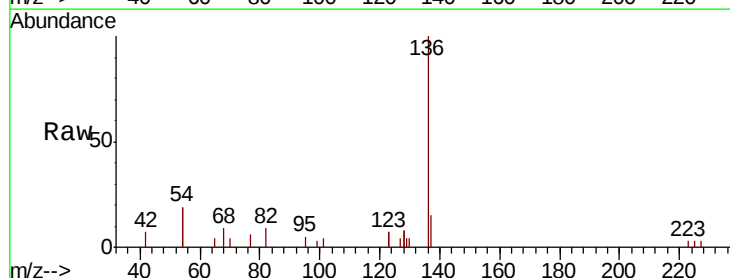
Ion Ratio Lower Upper

136 100

137 14.6 11.8 17.8

54 37.0 27.7 41.5

68 8.6 6.8 10.2



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): BE1

Ion 68.00 (67.70 to 68.70): BE1

2000

1500

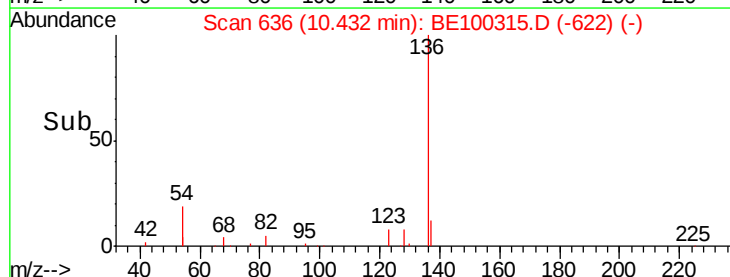
1000

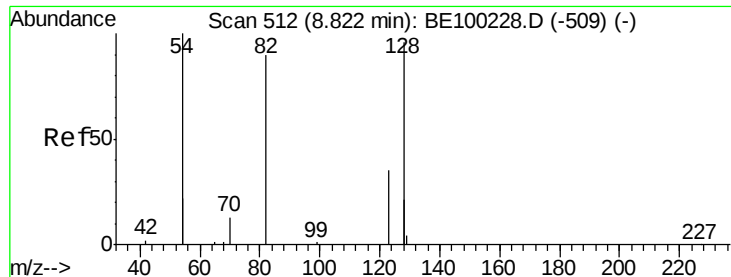
500

0

10.40 10.60

Time-->





#8

Nitrobenzene-d5

Concen: 0.023 ng

RT: 8.82 min Scan# 512

Delta R.T. -0.00 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

Instrument :

BNA\_E

ClientSampleId :

PST-013-SW105-062019

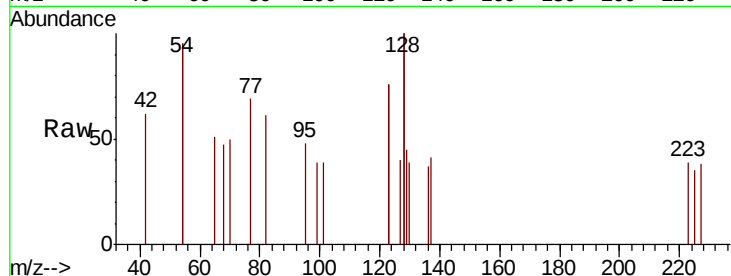
Tgt Ion: 82 Resp: 68

Ion Ratio Lower Upper

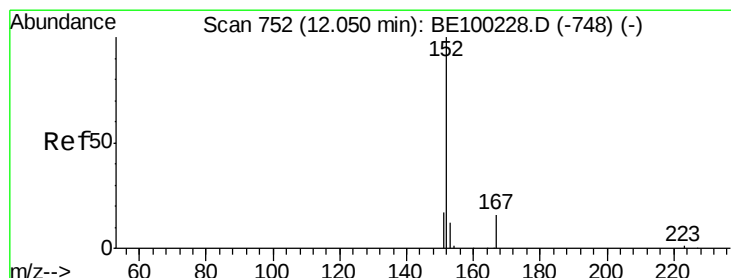
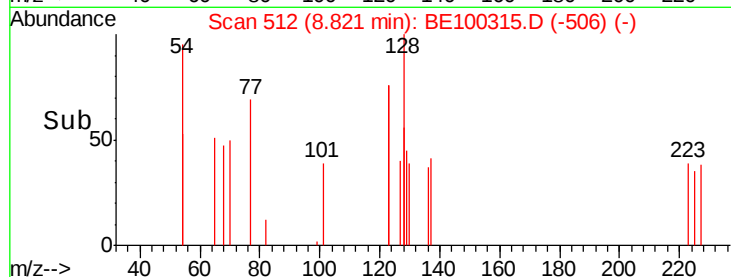
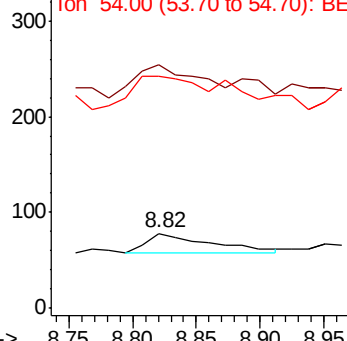
82 100

128 325.6 140.9 211.3#

54 310.3 146.2 219.2#



Abundance Ion 82.00 (81.70 to 82.70): BE1  
Ion 128.00 (127.70 to 128.70): BE1  
Ion 54.00 (53.70 to 54.70): BE1



#11

2-Methylnaphthalene-d10

Concen: 0.024 ng

RT: 12.05 min Scan# 752

Delta R.T. -0.00 min

Lab File: BE100315.D

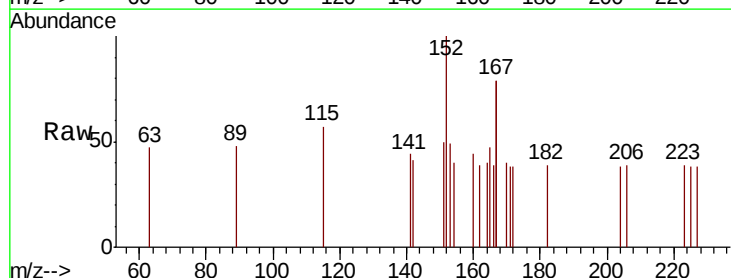
Acq: 2 Jul 2019 22:53

Tgt Ion: 152 Resp: 139

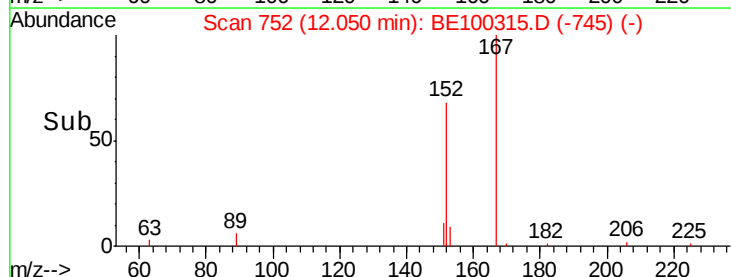
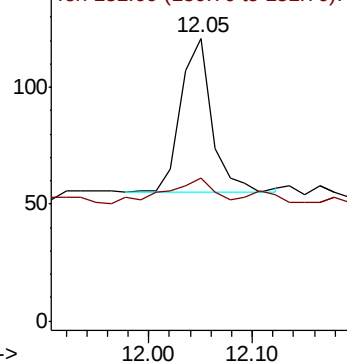
Ion Ratio Lower Upper

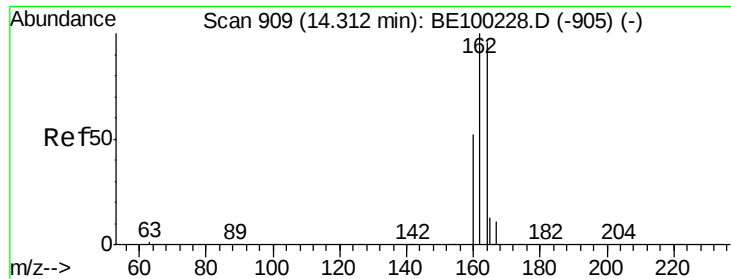
152 100

151 25.9 15.1 22.7#



Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 151.00 (150.70 to 151.70): E





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.33 min Scan# 910

Delta R.T. 0.01 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

Instrument :

BNA\_E

ClientSampleId :

PST-013-SW105-062019

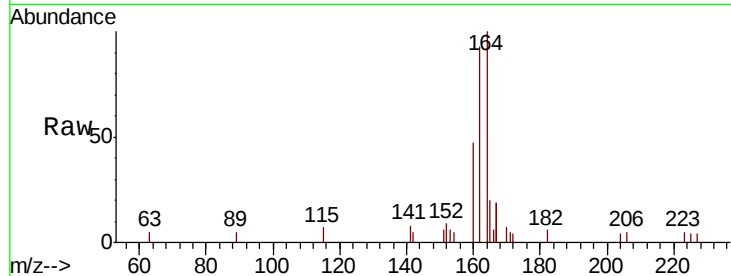
Tgt Ion:164 Resp: 2243

Ion Ratio Lower Upper

164 100

162 93.1 83.4 125.0

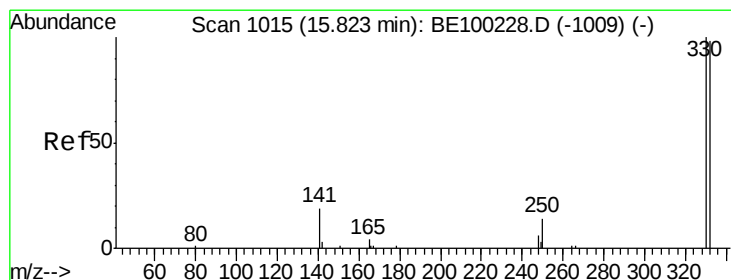
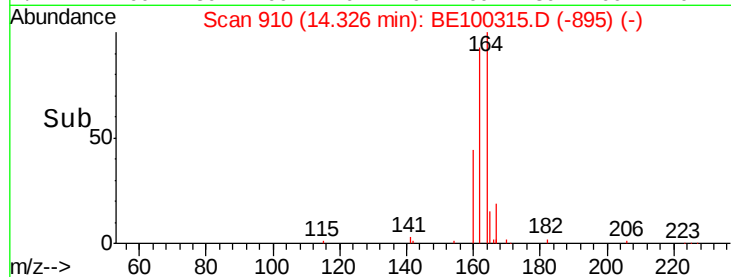
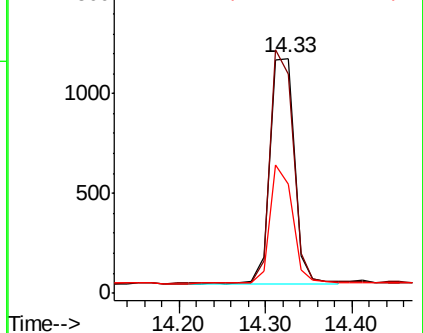
160 46.5 45.0 67.6



Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E



#14

2,4,6-Tribromophenol

Concen: 0.041 ng

RT: 15.82 min Scan# 1015

Delta R.T. -0.00 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

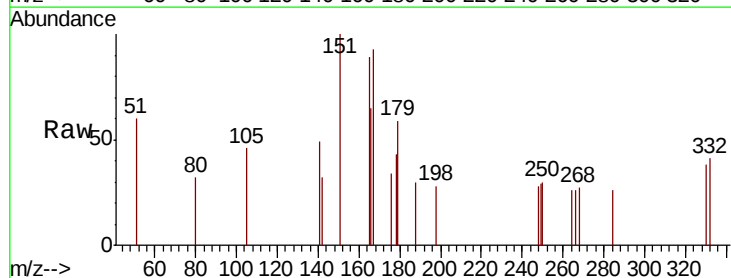
Tgt Ion:330 Resp: 65

Ion Ratio Lower Upper

330 100

332 103.1 77.0 115.4

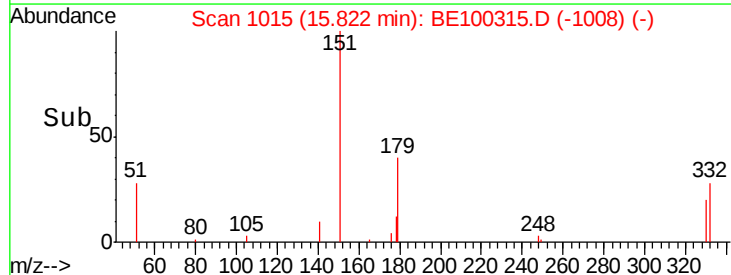
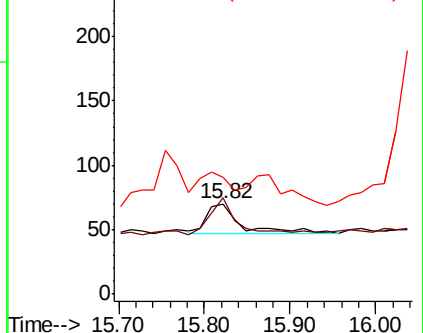
141 55.4 22.0 33.0#

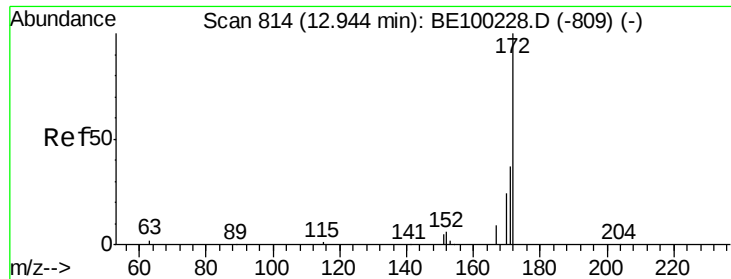


Abundance Ion 330.00 (329.70 to 330.70): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

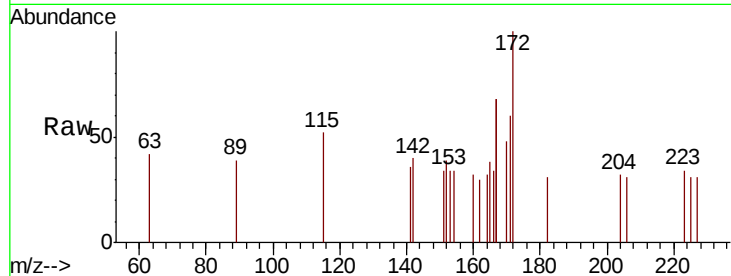




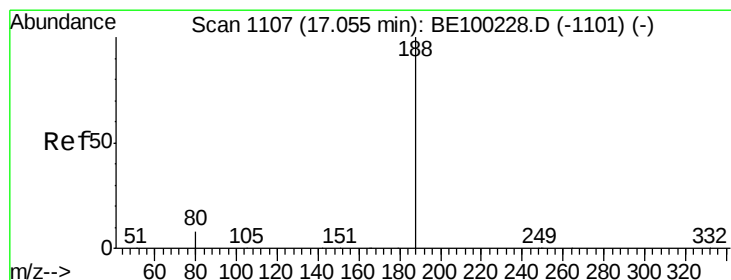
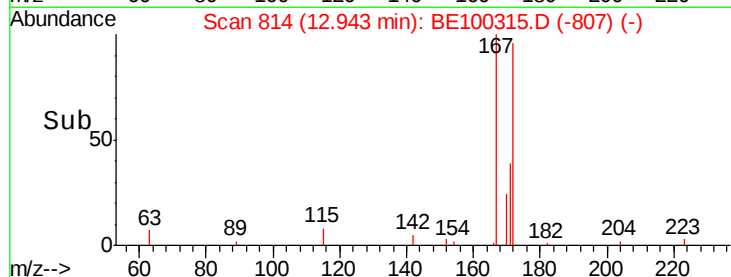
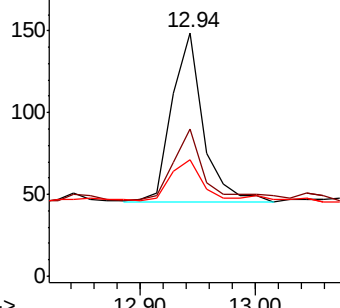
#15  
2-Fluorobiphenyl  
Concen: 0.023 ng  
RT: 12.94 min Scan# 814  
Delta R.T. -0.00 min  
Lab File: BE100315.D  
Acq: 2 Jul 2019 22:53

Instrument :  
BNA\_E  
ClientSampleId :  
PST-013-SW105-062019

Tgt Ion:172 Resp: 197  
Ion Ratio Lower Upper  
172 100  
171 60.4 31.9 47.9#  
170 47.7 22.2 33.2#

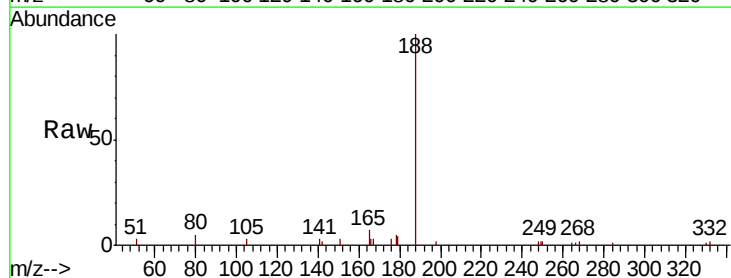


Abundance Ion 172.00 (171.70 to 172.70): E  
Ion 171.00 (170.70 to 171.70): E  
Ion 170.00 (169.70 to 170.70): E

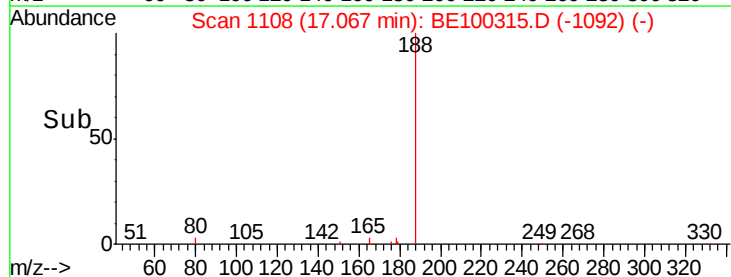
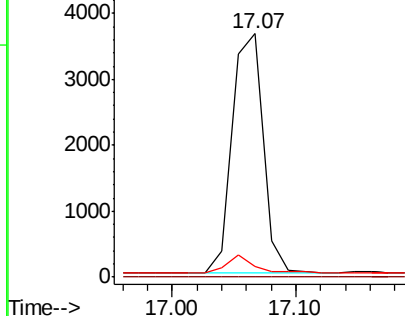


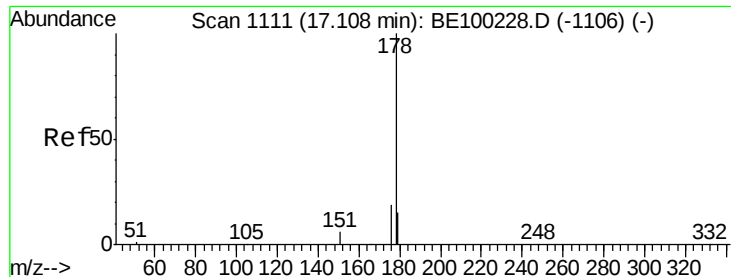
#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.07 min Scan# 1108  
Delta R.T. 0.01 min  
Lab File: BE100315.D  
Acq: 2 Jul 2019 22:53

Tgt Ion:188 Resp: 6333  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 4.6 7.6 11.4#



Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BE1  
Ion 80.00 (79.70 to 80.70): BE1





#23

Phenanthrene

Concen: 16.696 ng

RT: 17.11 min Scan# 1111

Delta R.T. -0.00 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

Instrument :

BNA\_E

ClientSampleId :

PST-013-SW105-062019

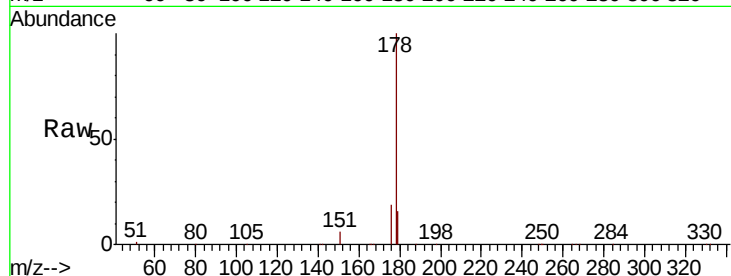
Tgt Ion:178 Resp: 256266

Ion Ratio Lower Upper

178 100

176 19.9 15.9 23.9

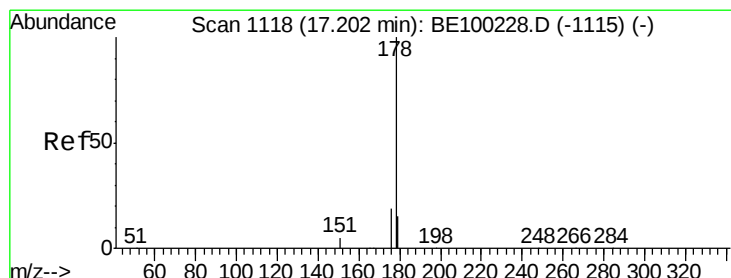
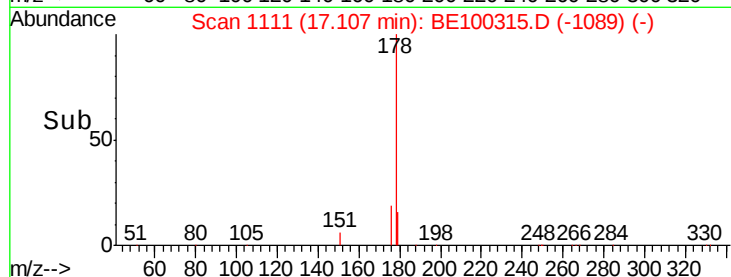
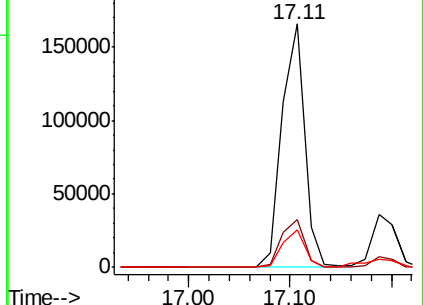
179 15.6 12.2 18.2



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



#24

Anthracene

Concen: 4.108 ng

RT: 17.19 min Scan# 1117

Delta R.T. -0.01 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

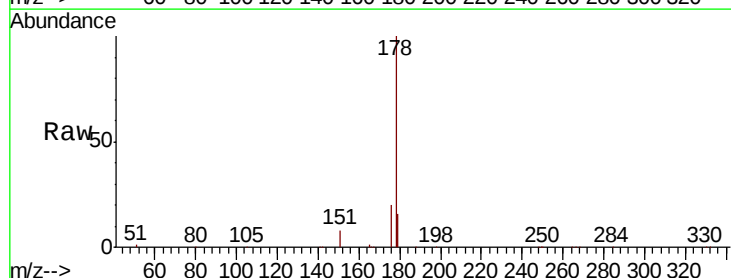
Tgt Ion:178 Resp: 56786

Ion Ratio Lower Upper

178 100

176 19.7 15.3 22.9

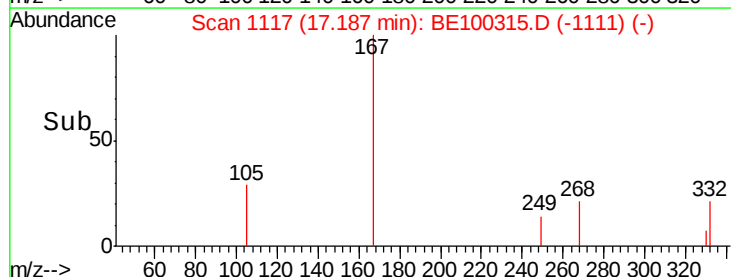
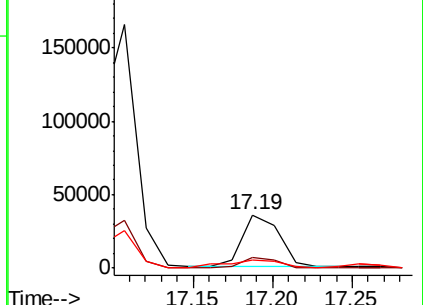
179 20.9 12.2 18.2#

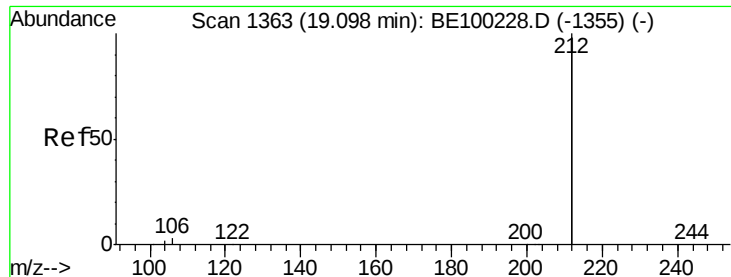


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#25

Fluoranthene-d10

Concen: 0.016 ng

RT: 19.10 min Scan# 1363

Delta R.T. 0.00 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

Instrument :

BNA\_E

ClientSampleId :

PST-013-SW105-062019

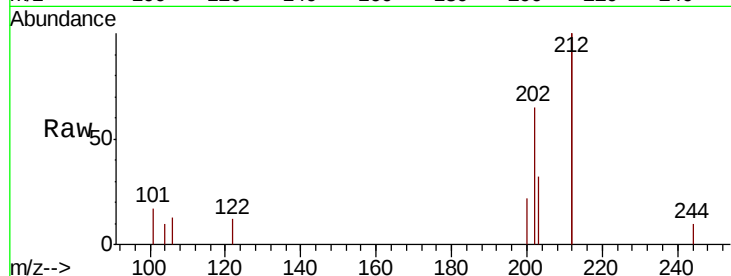
Tgt Ion:212 Resp: 1437

Ion Ratio Lower Upper

212 100

106 1.9 1.3 1.9#

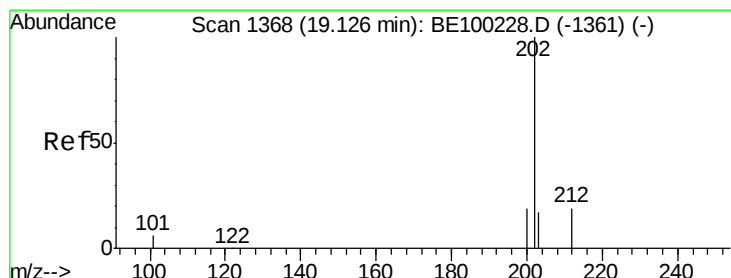
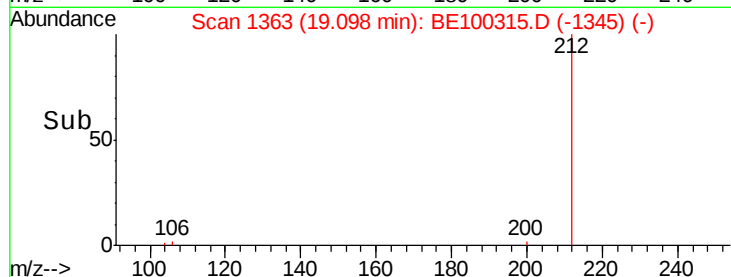
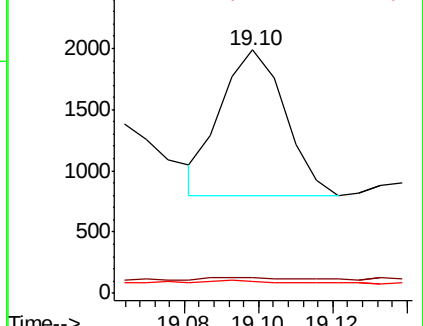
104 2.3 0.8 1.2#



Abundance Ion 212.00 (211.70 to 212.70): E

Ion 106.00 (105.70 to 106.70): E

Ion 104.00 (103.70 to 104.70): E



#26

Fluoranthene

Concen: 17.772 ng

RT: 19.13 min Scan# 1369

Delta R.T. 0.01 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

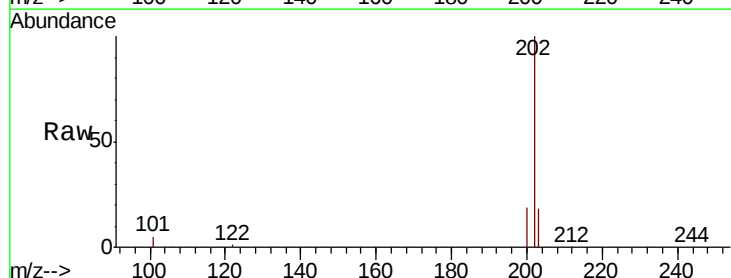
Tgt Ion:202 Resp: 434494

Ion Ratio Lower Upper

202 100

101 5.3 4.6 7.0

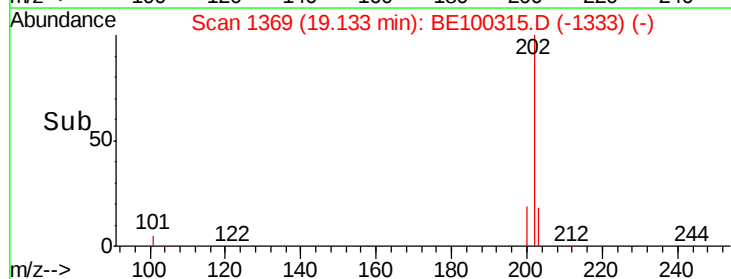
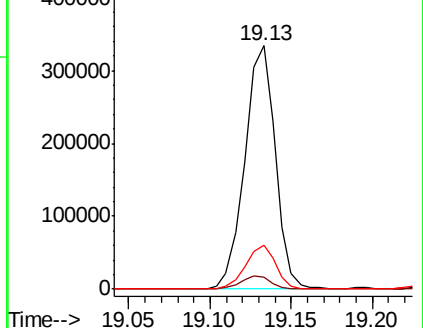
203 17.7 13.7 20.5

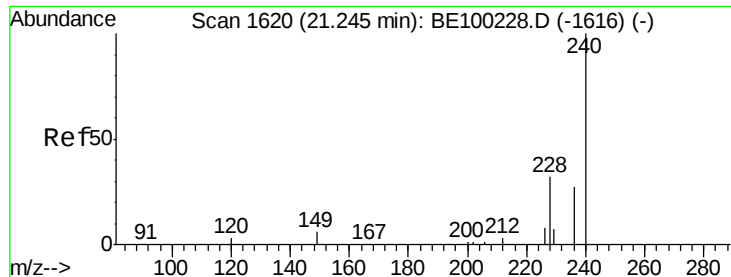


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E





#27

Chrysene-d12

Concen: 0.400 ng

RT: 21.25 min Scan# 1620

Delta R.T. 0.00 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

Instrument :

BNA\_E

ClientSampleId :

PST-013-SW105-062019

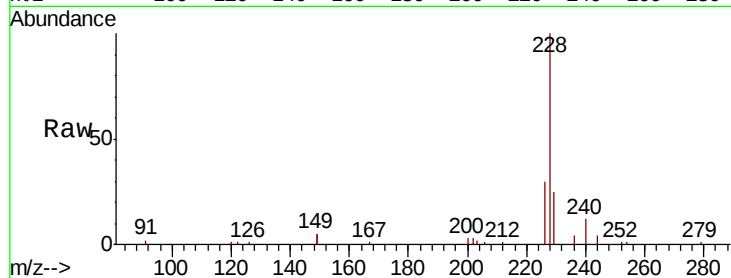
Tgt Ion:240 Resp: 8332

Ion Ratio Lower Upper

240 100

120 8.8 3.3 4.9#

236 33.2 22.6 34.0

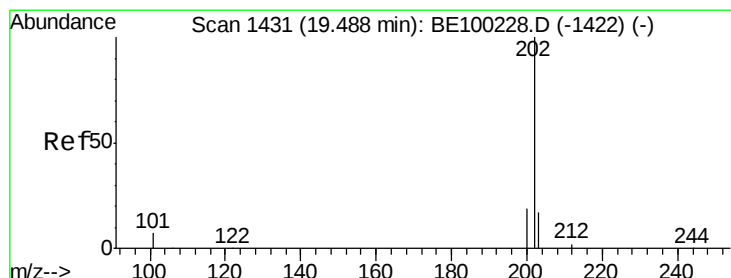
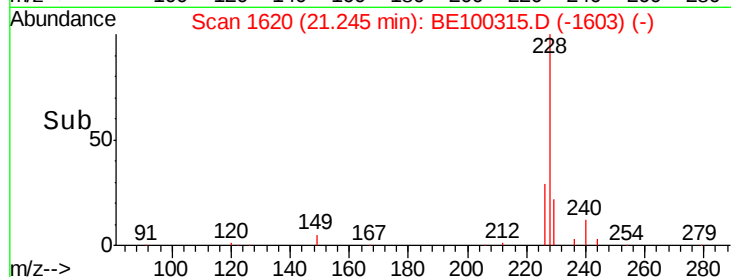
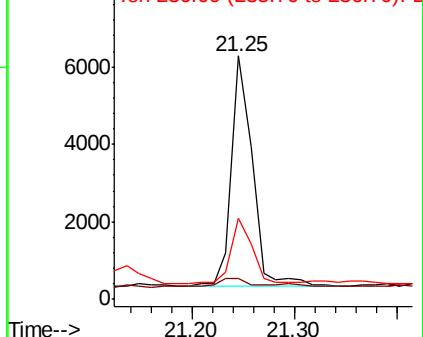


Abundance

Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#28

Pyrene

Concen: 18.709 ng

RT: 19.49 min Scan# 1432

Delta R.T. 0.01 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

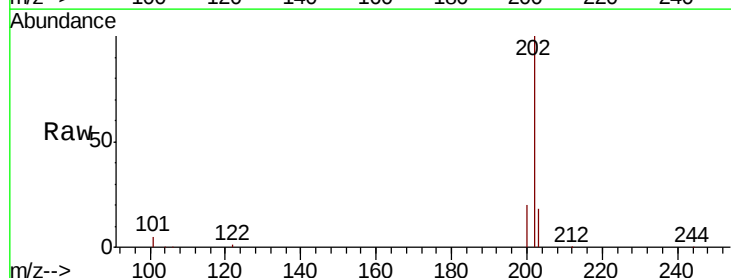
Tgt Ion:202 Resp: 412700

Ion Ratio Lower Upper

202 100

200 20.1 15.6 23.4

203 21.2 14.0 21.0#

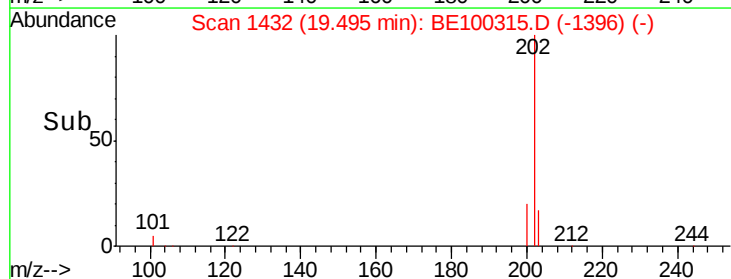
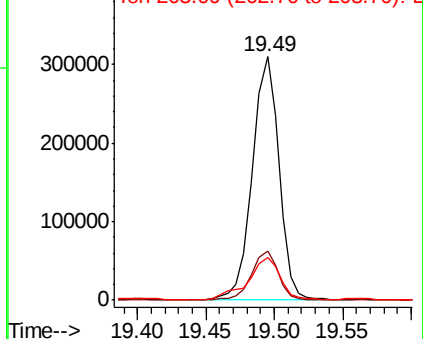


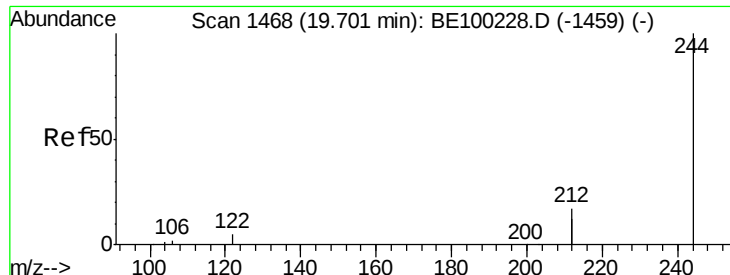
Abundance

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





#29

Terphenyl-d14

Concen: 0.047 ng

RT: 19.70 min Scan# 1467

Delta R.T. -0.00 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

Instrument :

BNA\_E

ClientSampleId :

PST-013-SW105-062019

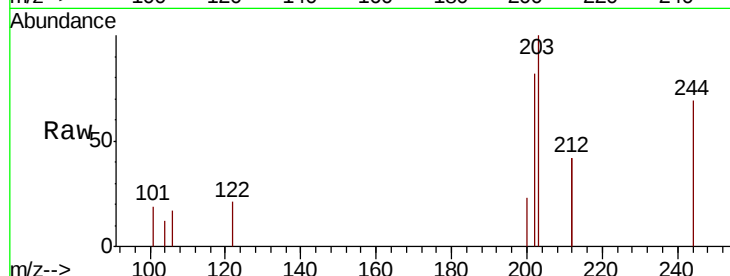
Tgt Ion:244 Resp: 814

Ion Ratio Lower Upper

244 100

212 123.5 27.3 40.9#

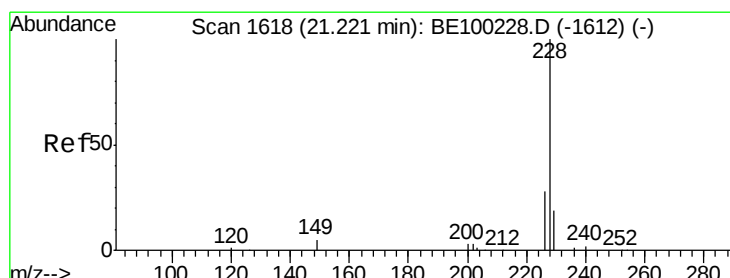
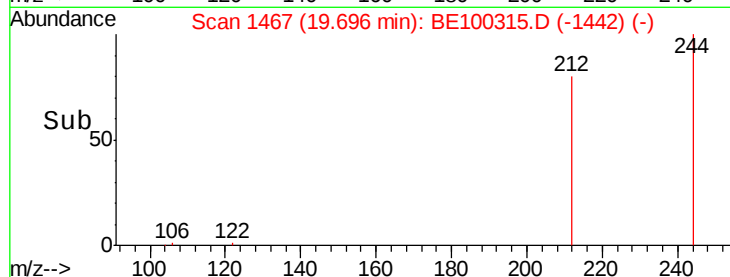
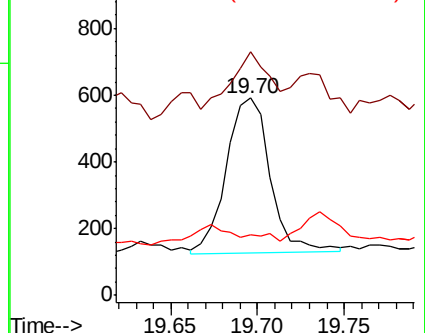
122 31.0 4.7 7.1#



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



#30

Benzo(a)anthracene

Concen: 9.568 ng

RT: 21.23 min Scan# 1619

Delta R.T. 0.01 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

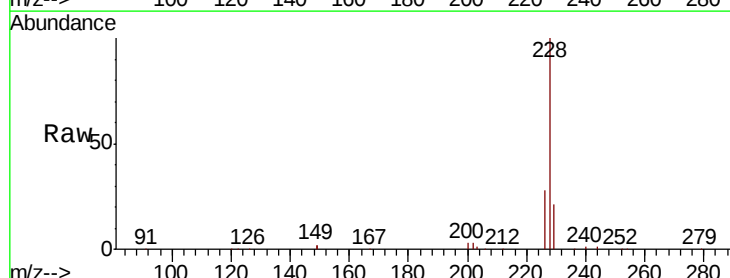
Tgt Ion:228 Resp: 262111

Ion Ratio Lower Upper

228 100

226 27.7 23.2 34.8

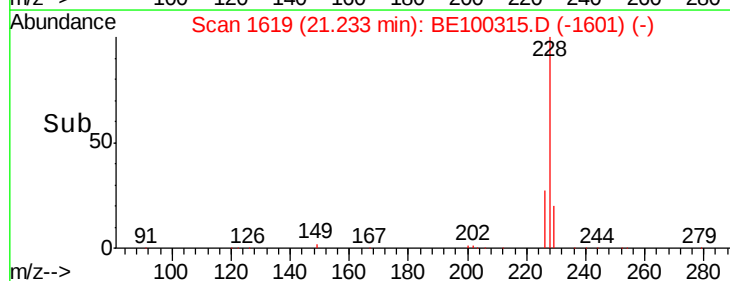
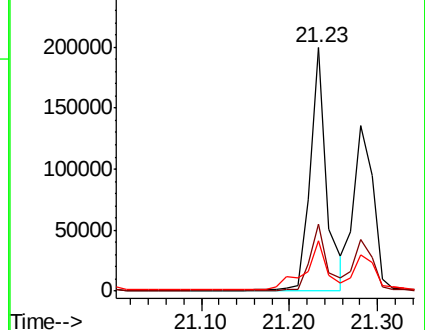
229 20.7 15.7 23.5

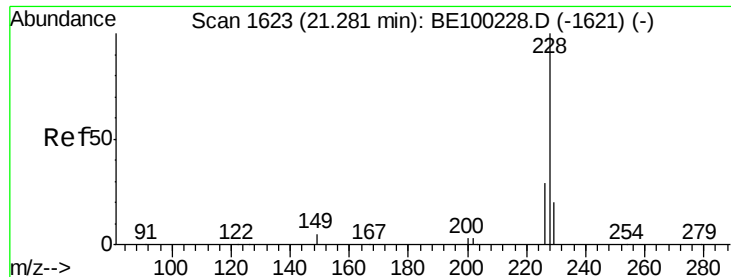


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

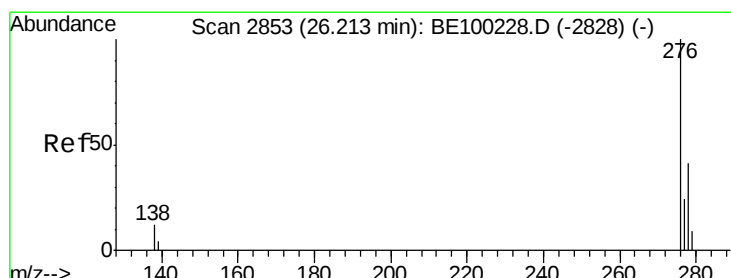
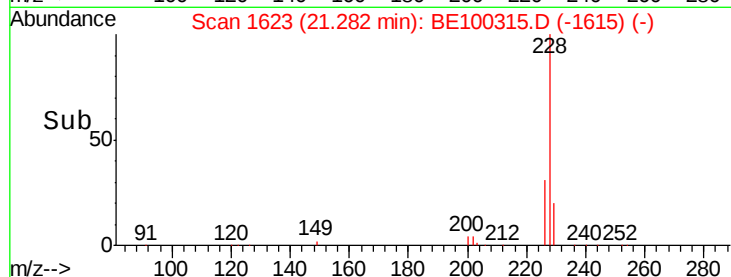
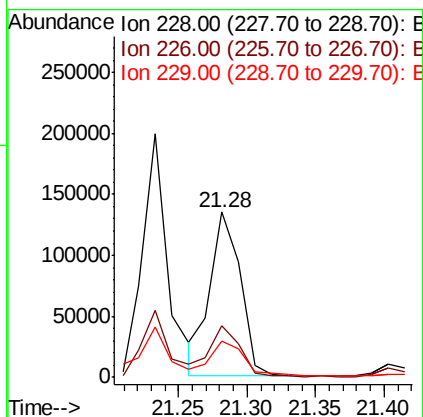
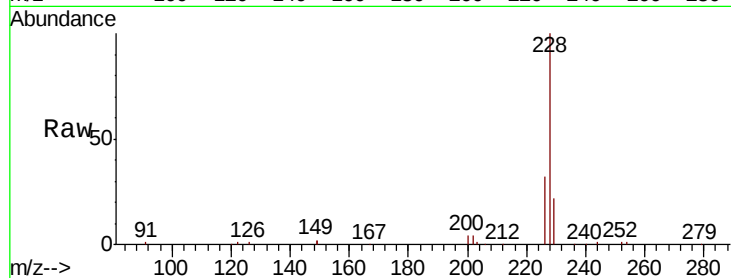




#31  
Chrysene  
Concen: 7.552 ng  
RT: 21.28 min Scan# 1623  
Delta R.T. 0.00 min  
Lab File: BE100315.D  
Acq: 2 Jul 2019 22:53

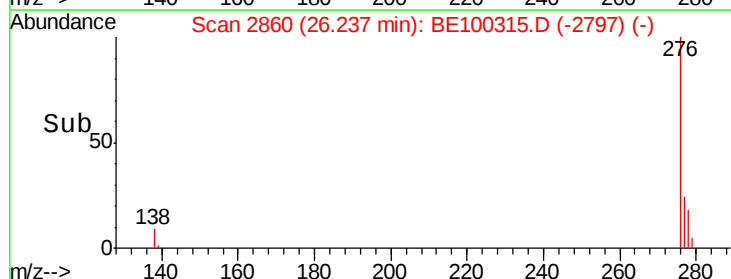
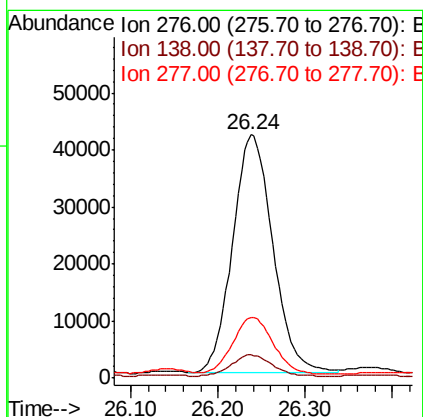
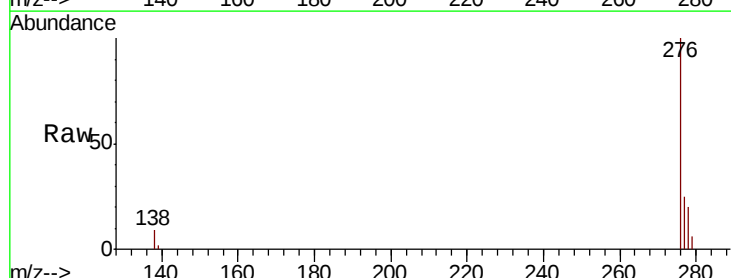
Instrument :  
BNA\_E  
ClientSampleId :  
PST-013-SW105-062019

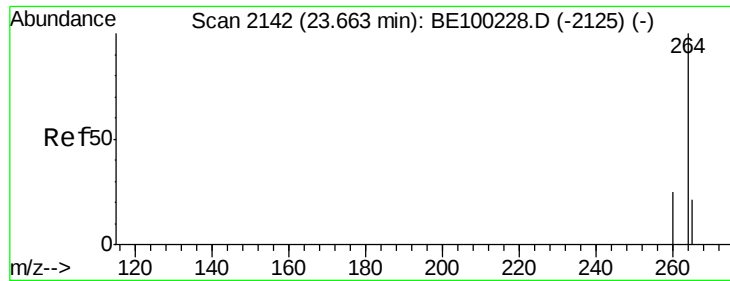
Tgt Ion: 228 Resp: 207765  
Ion Ratio Lower Upper  
228 100  
226 31.6 23.9 35.9  
229 22.3 16.5 24.7



#33  
Indeno(1,2,3-cd)pyrene  
Concen: 3.676 ng  
RT: 26.24 min Scan# 2860  
Delta R.T. 0.02 min  
Lab File: BE100315.D  
Acq: 2 Jul 2019 22:53

Tgt Ion: 276 Resp: 133761  
Ion Ratio Lower Upper  
276 100  
138 8.8 9.4 14.0#  
277 24.1 19.2 28.8

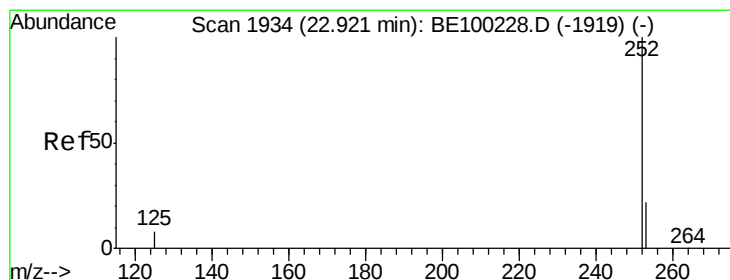
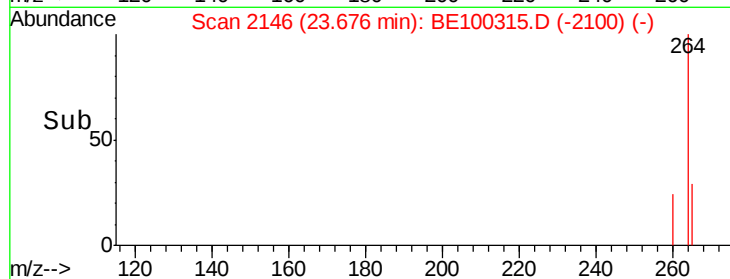
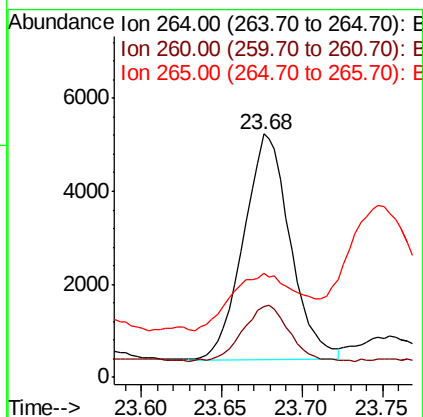
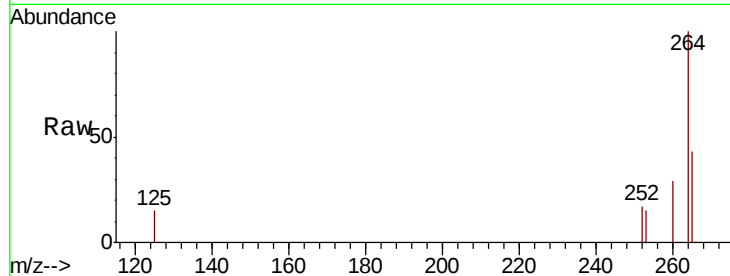




#34  
 Perylene-d12  
 Concen: 0.400 ng  
 RT: 23.68 min Scan# 2146  
 Delta R.T. 0.01 min  
 Lab File: BE100315.D  
 Acq: 2 Jul 2019 22:53

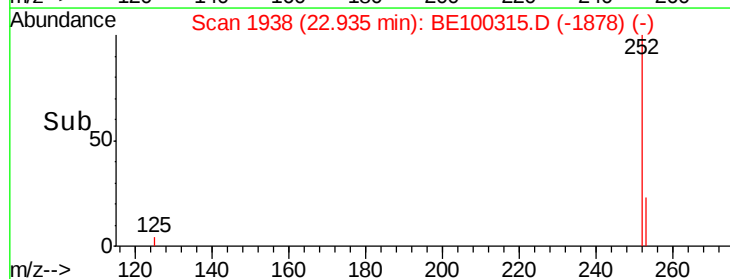
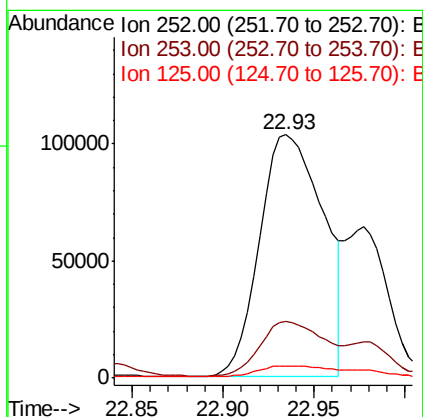
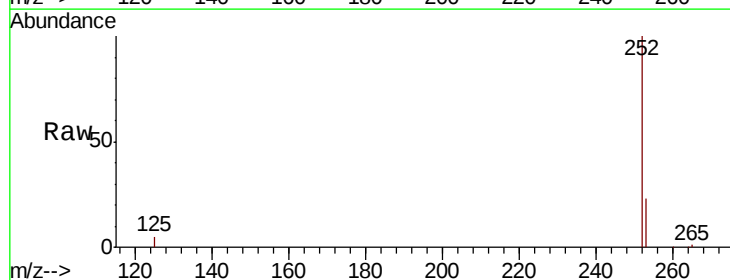
Instrument :  
 BNA\_E  
 ClientSampleId :  
 PST-013-SW105-062019

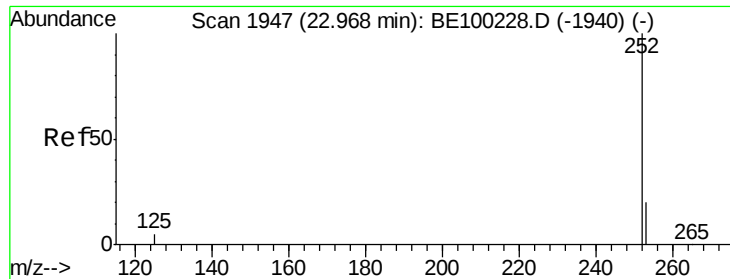
Tgt Ion: 264 Resp: 9786  
 Ion Ratio Lower Upper  
 264 100  
 260 29.1 20.8 31.2  
 265 42.6 21.8 32.6#



#35  
 Benzo(b)fluoranthene  
 Concen: 9.480 ng  
 RT: 22.93 min Scan# 1938  
 Delta R.T. 0.01 min  
 Lab File: BE100315.D  
 Acq: 2 Jul 2019 22:53

Tgt Ion: 252 Resp: 251532  
 Ion Ratio Lower Upper  
 252 100  
 253 23.4 19.2 28.8  
 125 5.1 7.4 11.0#





#36

Benzo(k)fluoranthene

Concen: 8.493 ng

RT: 22.93 min Scan# 1938

Delta R.T. -0.03 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

Instrument :

BNA\_E

ClientSampleId :

PST-013-SW105-062019

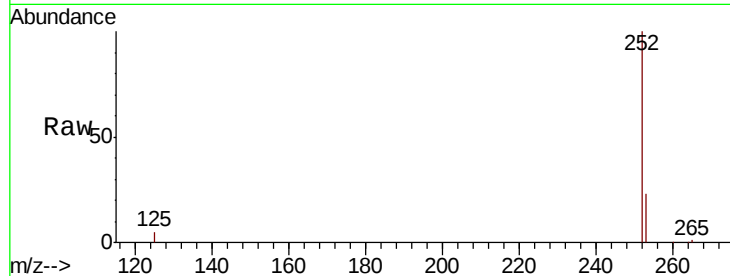
Tgt Ion: 252 Resp: 251532

Ion Ratio Lower Upper

252 100

253 23.4 17.9 26.9

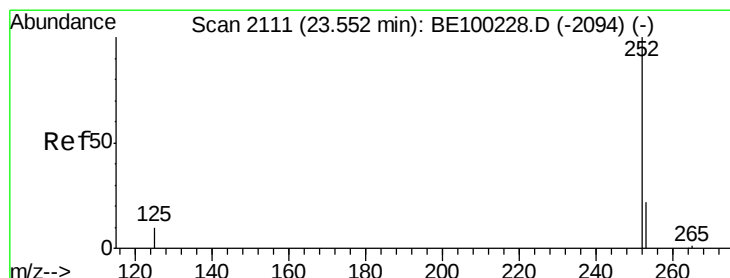
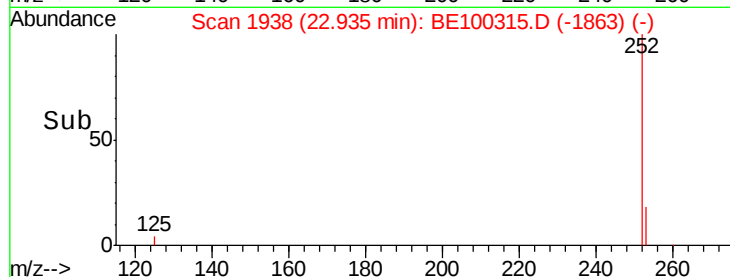
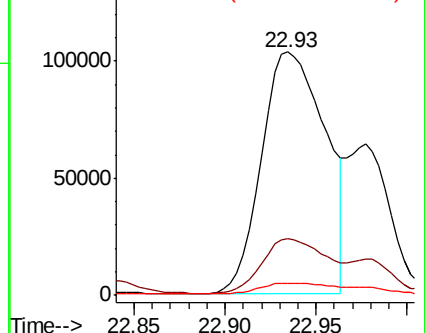
125 5.1 5.0 7.4



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



#37

Benzo(a)pyrene

Concen: 7.696 ng

RT: 23.57 min Scan# 2115

Delta R.T. 0.01 min

Lab File: BE100315.D

Acq: 2 Jul 2019 22:53

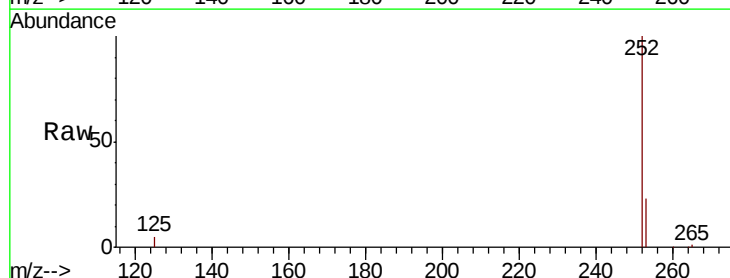
Tgt Ion: 252 Resp: 204642

Ion Ratio Lower Upper

252 100

253 23.1 19.6 29.4

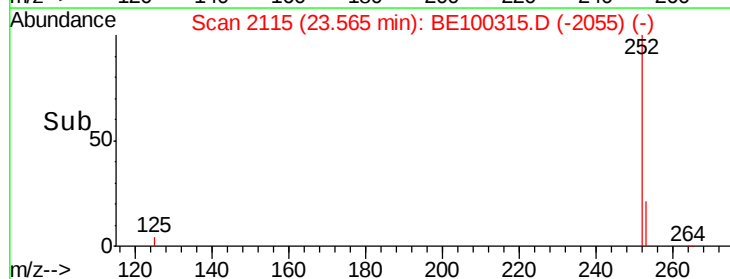
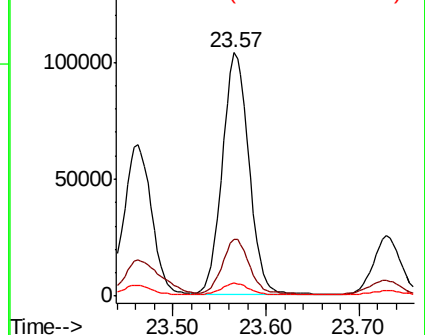
125 5.2 9.0 13.6#

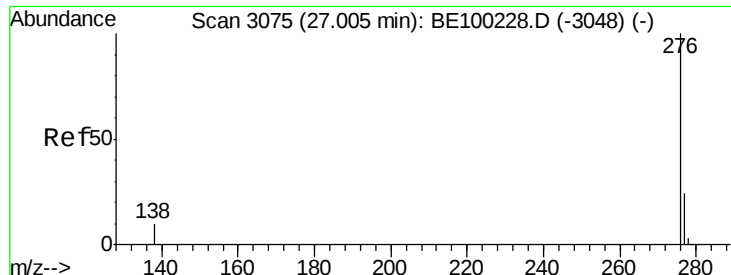


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#39

Benzo(g,h,i)perylene

Concen: 4.760 ng

RT: 27.04 min Scan# 3084

Delta R.T. 0.03 min

Lab File: BE100315.D

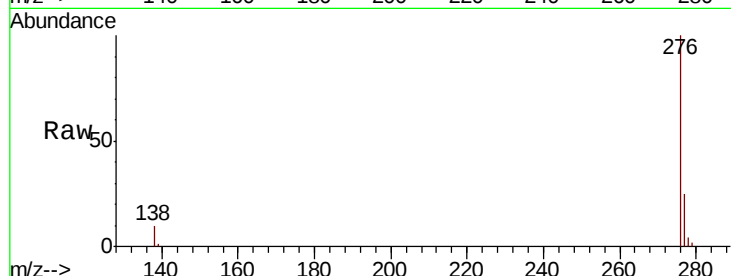
Acq: 2 Jul 2019 22:53

Instrument :

BNA\_E

ClientSampleId :

PST-013-SW105-062019



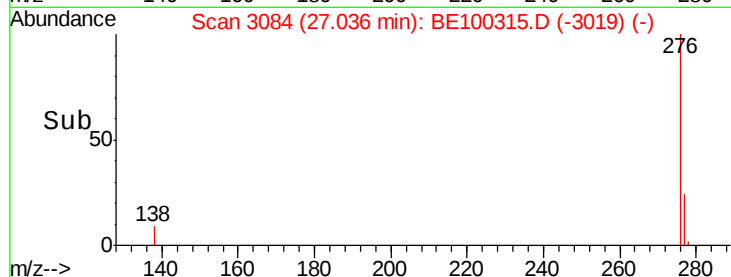
Tgt Ion: 276 Resp: 135817

Ion Ratio Lower Upper

276 100

277 25.1 20.2 30.2

138 9.8 9.0 13.6



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

