

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN032119\  
 Data File : BN004864.D  
 Acq On : 21 Mar 2019 23:31  
 Operator : JU/SJ  
 Sample : K1817-17  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PST-028-SW012-1-030619

Quant Time: Mar 22 02:03:02 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN032019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Mar 20 16:06:20 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.70  | 152  | 2100     | 0.40 | ng    | 0.00     |
| 7) Naphthalene-d8         | 10.48 | 136  | 9679     | 0.40 | ng    | -0.01    |
| 13) Acenaphthene-d10      | 14.34 | 164  | 6211     | 0.40 | ng    | 0.00     |
| 19) Phenanthrene-d10      | 17.09 | 188  | 16416    | 0.40 | ng    | 0.00     |
| 27) Chrysene-d12          | 21.29 | 240  | 22038    | 0.40 | ng    | 0.00     |
| 34) Perylene-d12          | 23.54 | 264  | 24121    | 0.40 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 4) 2-Fluorophenol           | 5.29  | 112  | 1785     | 0.31 | ng    | 0.00     |
| 5) Phenol-d6                | 6.87  | 99   | 2410     | 0.34 | ng    | 0.00     |
| 8) Nitrobenzene-d5          | 8.87  | 82   | 1693     | 0.26 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10 | 12.08 | 152  | 4538     | 0.27 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol    | 15.85 | 330  | 1097     | 0.26 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl        | 12.95 | 172  | 7005     | 0.27 | ng    | -0.01    |
| 25) Fluoranthene-d10        | 19.13 | 212  | 13683    | 0.25 | ng    | 0.00     |
| 29) Terphenyl-d14           | 19.72 | 244  | 11029    | 0.24 | ng    | 0.00     |

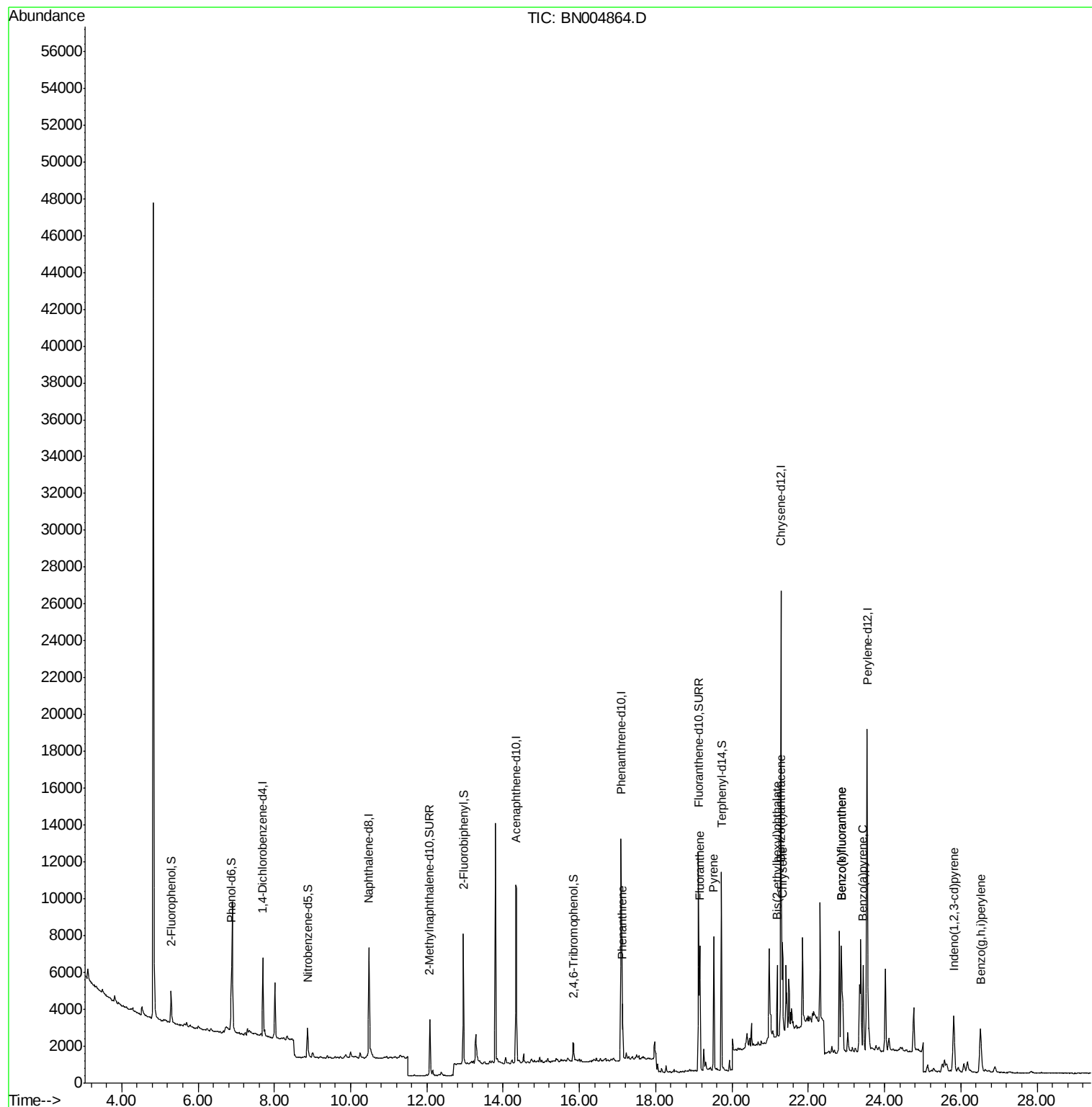
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|--------------------------------|-------|------|----------|-------|-------|--------|
| 23) Phenanthrene               | 17.13 | 178  | 3155     | 0.060 | ng    | 98     |
| 26) Fluoranthene               | 19.16 | 202  | 6349     | 0.093 | ng    | # 98   |
| 28) Pyrene                     | 19.52 | 202  | 6673     | 0.099 | ng    | 97     |
| 30) Benzo(a)anthracene         | 21.27 | 228  | 4419     | 0.061 | ng    | 94     |
| 31) Chrysene                   | 21.32 | 228  | 5118     | 0.067 | ng    | 94     |
| 32) Bis(2-ethylhexyl)phthalate | 21.18 | 149  | 3224     | 0.112 | ng    | 99     |
| 33) Indeno(1,2,3-cd)pyrene     | 25.82 | 276  | 5165     | 0.047 | ng    | 97     |
| 35) Benzo(b)fluoranthene       | 22.87 | 252  | 12423    | 0.142 | ng    | # 79   |
| 36) Benzo(k)fluoranthene       | 22.87 | 252  | 12423    | 0.145 | ng    | # 79   |
| 37) Benzo(a)pyrene             | 23.44 | 252  | 6349     | 0.079 | ng    | # 82   |
| 39) Benzo(a,h,i)perylene       | 26.52 | 276  | 5354     | 0.057 | ng    | # 92   |

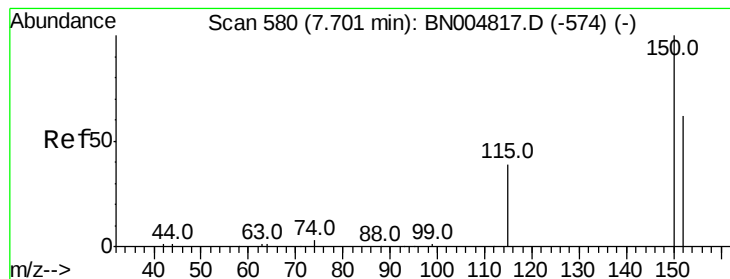
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration



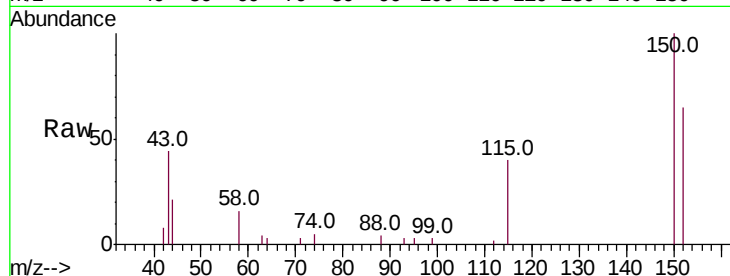


#1

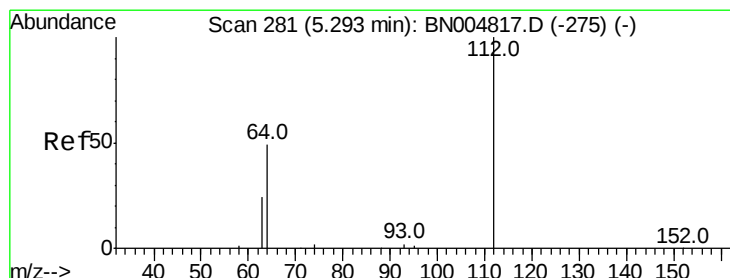
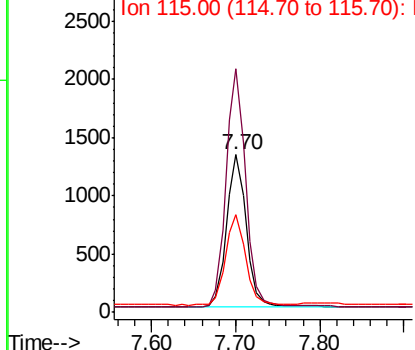
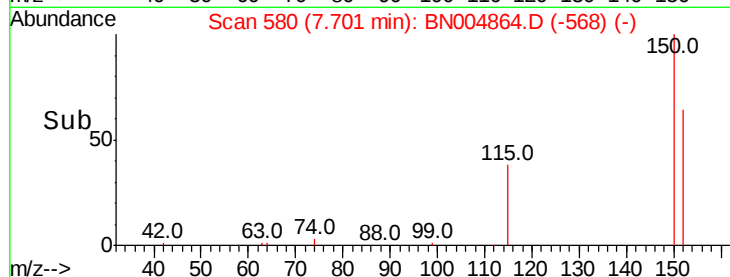
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.70 min Scan# 580  
Delta R.T. -0.00 min  
Lab File: BN004864.D  
Acq: 21 Mar 2019 23:31

Instrument :  
BNA\_N  
ClientSampleId :  
PST-028-SW012-1-030619

Tot Ion:152 Resp: 2100  
Ion Ratio Lower Upper  
152 100  
150 154.5 126.2 189.4  
115 62.3 52.6 79.0



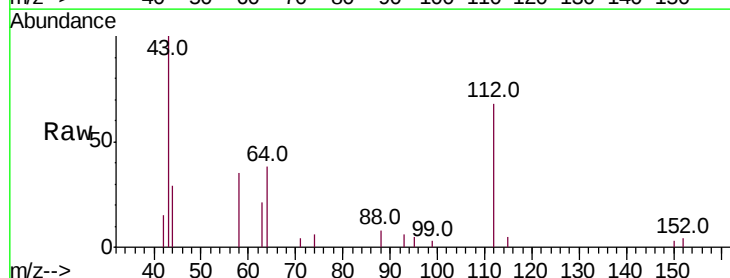
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



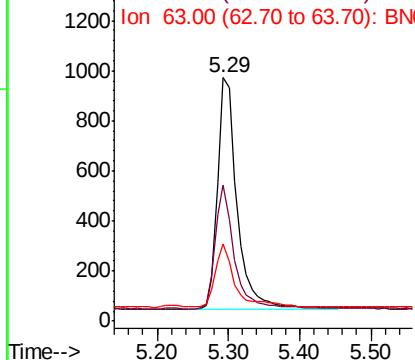
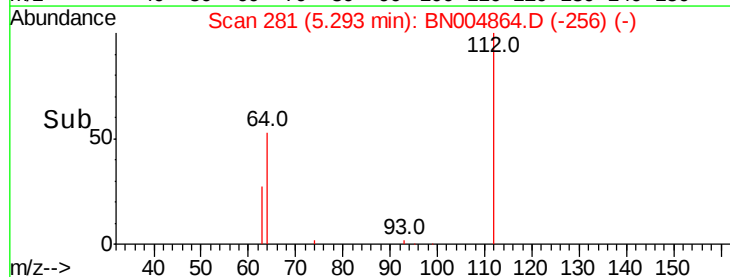
#4

2-Fluorophenol  
Concen: 0.313 ng  
RT: 5.29 min Scan# 281  
Delta R.T. -0.00 min  
Lab File: BN004864.D  
Acq: 21 Mar 2019 23:31

Tgt Ion:112 Resp: 1785  
Ion Ratio Lower Upper  
112 100  
64 50.5 40.0 60.0  
63 27.4 20.2 30.2



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





#5

Phenol-d6

Concen: 0.339 ng

RT: 6.87 min Scan# 477

Delta R.T. -0.01 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

Instrument :

BNA\_N

ClientSampleId :

PST-028-SW012-1-030619

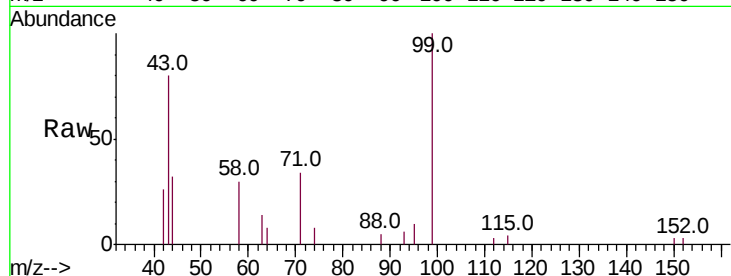
Tot Ion: 99 Resp: 2410

Ion Ratio Lower Upper

99 100

42 0.0 12.7 19.1#

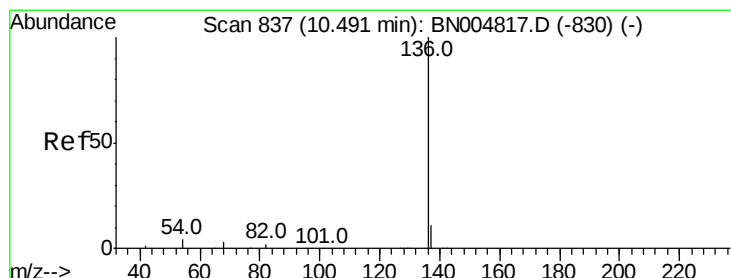
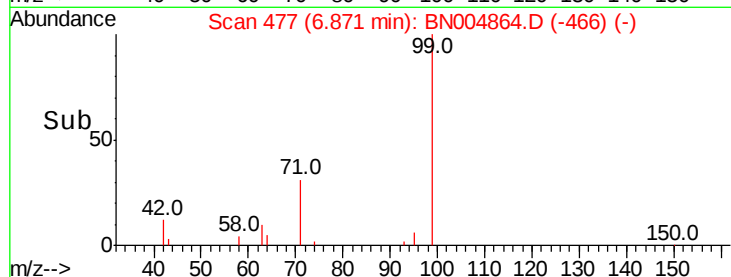
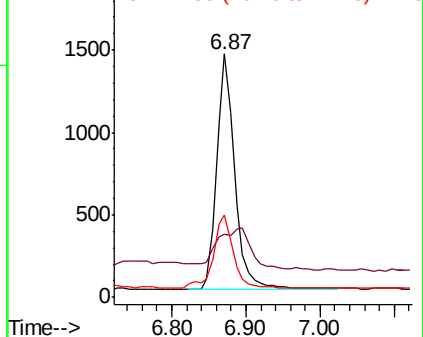
71 34.5 26.6 40.0



Abundance Ion 99.00 (98.70 to 99.70): BN004817.D (-471) (-)

Ion 42.00 (41.70 to 42.70): BN004817.D (-471) (-)

Ion 71.00 (70.70 to 71.70): BN004817.D (-471) (-)



#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.48 min Scan# 836

Delta R.T. -0.01 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

Tgt Ion:136 Resp: 9679

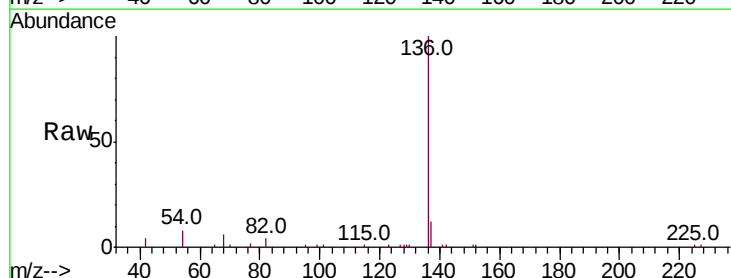
Ion Ratio Lower Upper

136 100

137 11.7 9.6 14.4

54 7.8 4.2 6.2#

68 6.5 3.9 5.9#

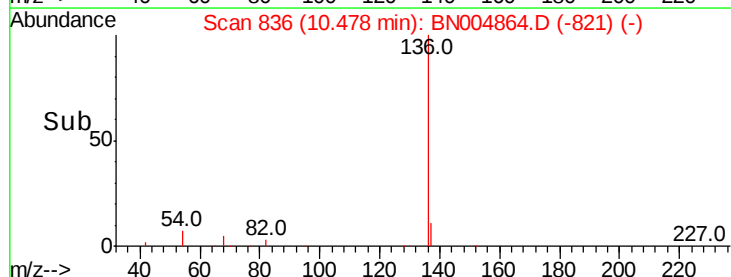
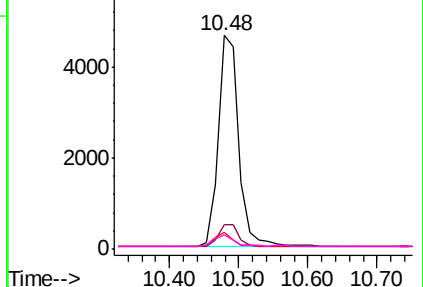


Abundance Ion 136.00 (135.70 to 136.70): BN004817.D (-830) (-)

Ion 137.00 (136.70 to 137.70): BN004817.D (-830) (-)

Ion 54.00 (53.70 to 54.70): BN004817.D (-830) (-)

Ion 68.00 (67.70 to 68.70): BN004817.D (-830) (-)





#8

Nitrobenzene-d5

Concen: 0.264 ng

RT: 8.87 min Scan# 709

Delta R.T. -0.00 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

Instrument :

BNA\_N

ClientSampleId :

PST-028-SW012-1-030619

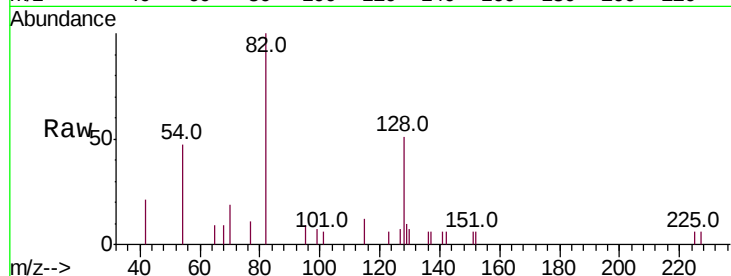
Tot Ion: 82 Resp: 1693

Ion Ratio Lower Upper

82 100

128 51.3 43.0 64.6

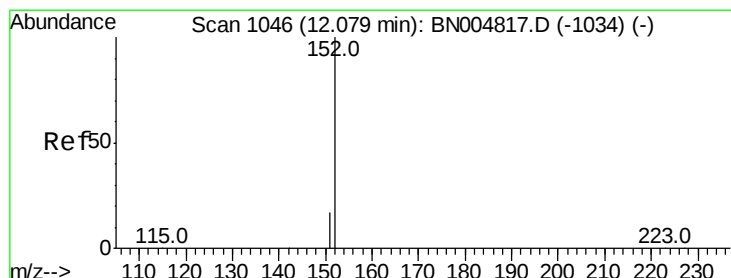
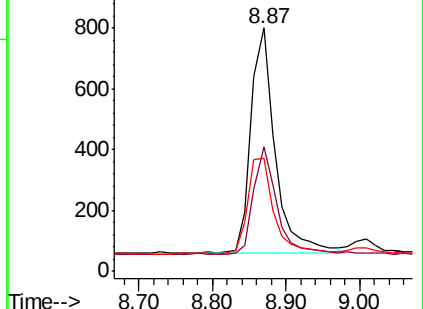
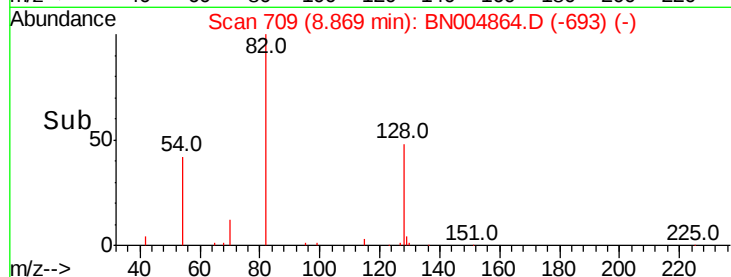
54 46.5 35.3 52.9



Abundance Ion 82.00 (81.70 to 82.70): BN004817.D (-704) (-)

Ion 128.00 (127.70 to 128.70): BN004817.D (-704) (-)

Ion 54.00 (53.70 to 54.70): BN004817.D (-704) (-)



#11

2-Methylnaphthalene-d10

Concen: 0.269 ng

RT: 12.08 min Scan# 1046

Delta R.T. -0.00 min

Lab File: BN004864.D

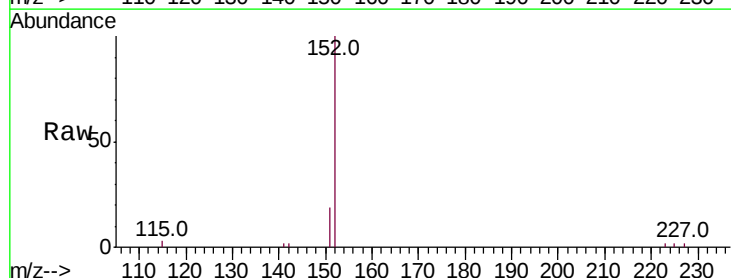
Acq: 21 Mar 2019 23:31

Tgt Ion: 152 Resp: 4538

Ion Ratio Lower Upper

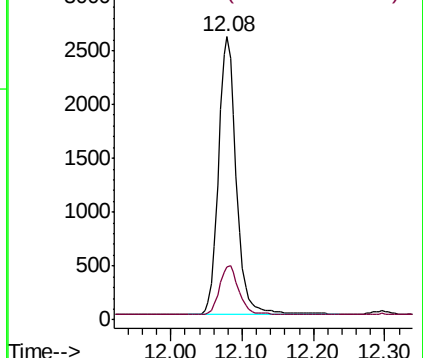
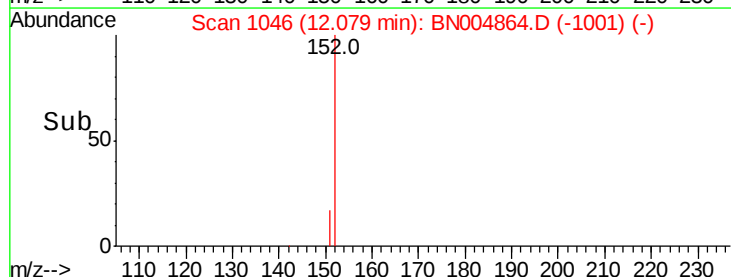
152 100

151 19.4 15.5 23.3



Abundance Ion 152.00 (151.70 to 152.70): BN004817.D (-1034) (-)

Ion 151.00 (150.70 to 151.70): BN004817.D (-1034) (-)





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.34 min Scan# 1334

Delta R.T. -0.00 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

Instrument :

BNA\_N

ClientSampleId :

PST-028-SW012-1-030619

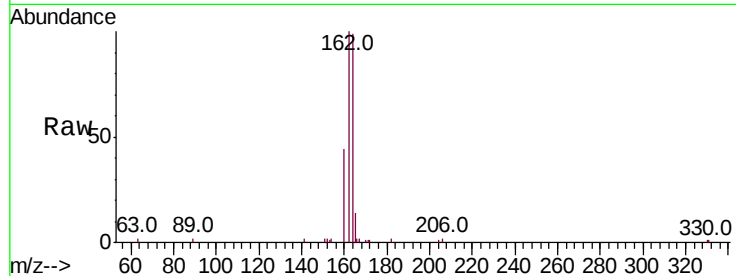
Tot Ion:164 Resp: 6211

Ion Ratio Lower Upper

164 100

162 101.4 81.9 122.9

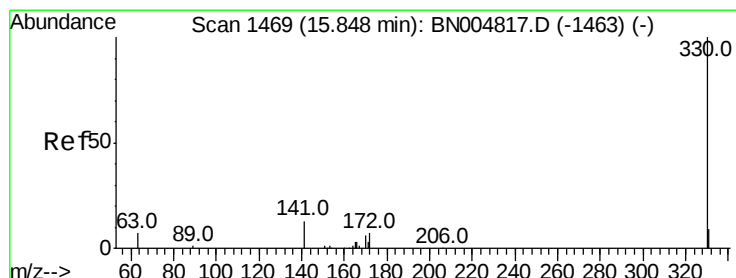
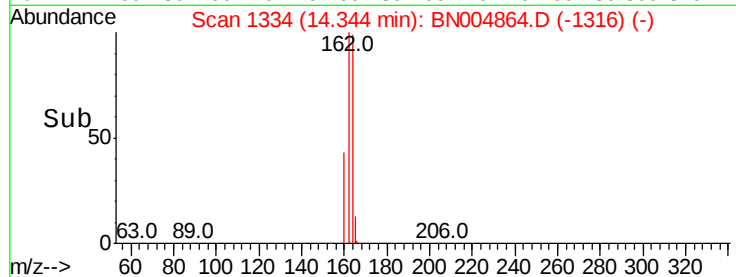
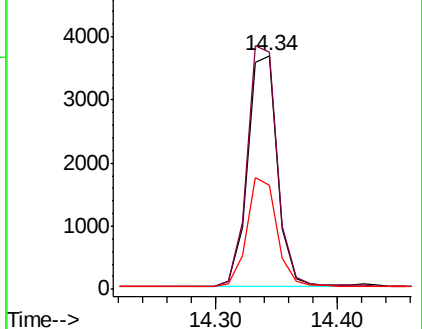
160 44.4 36.6 54.8



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: 0.256 ng

RT: 15.85 min Scan# 1469

Delta R.T. -0.00 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

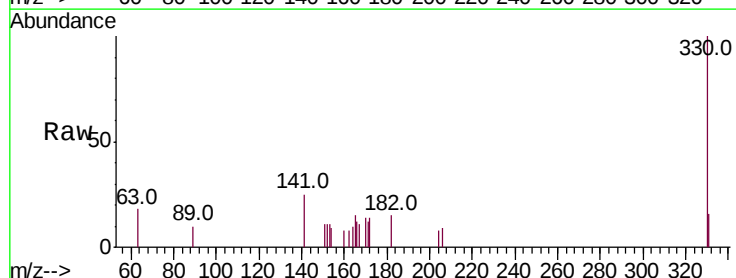
Tgt Ion:330 Resp: 1097

Ion Ratio Lower Upper

330 100

332 0.0 0.0 0.0

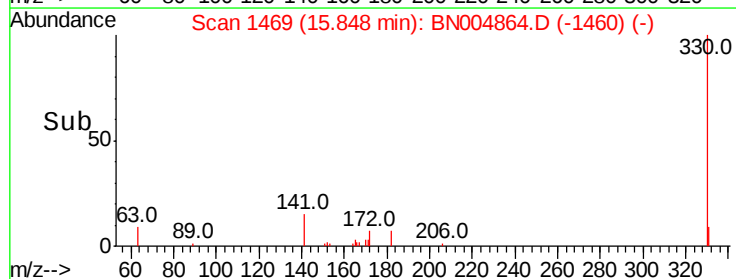
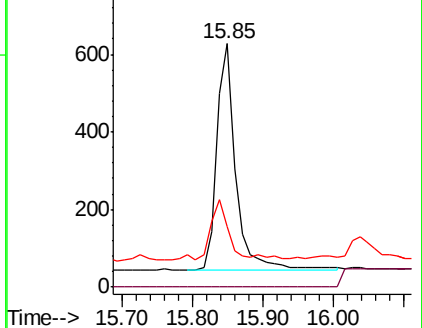
141 25.9 20.9 31.3



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

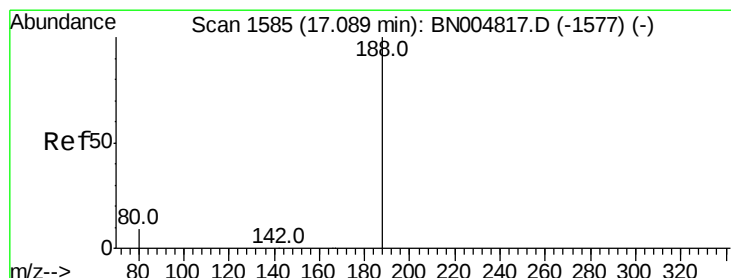
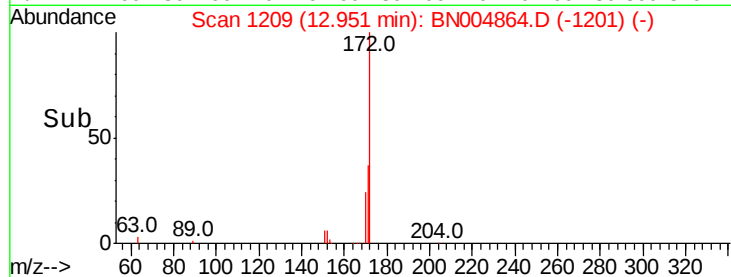
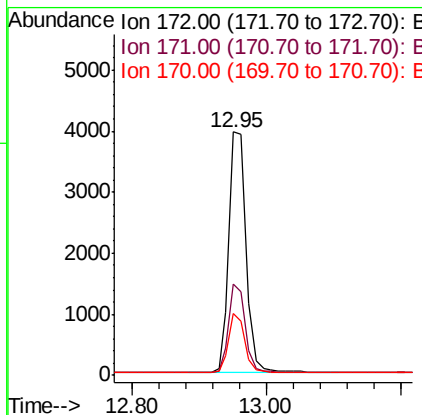
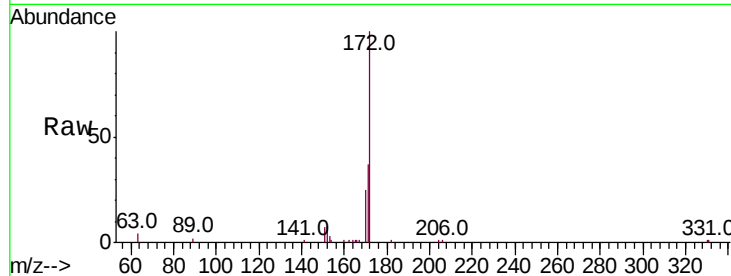




#15  
2-Fluorobiphenyl  
Concen: 0.273 ng  
RT: 12.95 min Scan# 1209  
Delta R.T. -0.01 min  
Lab File: BN004864.D  
Acq: 21 Mar 2019 23:31

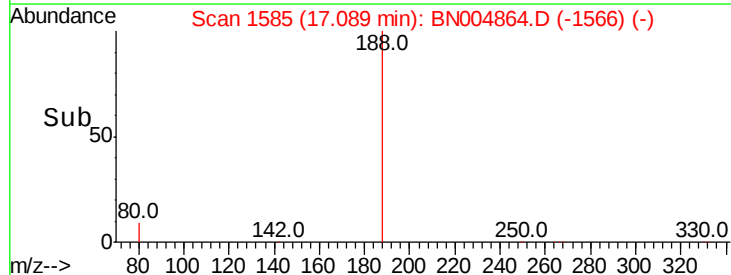
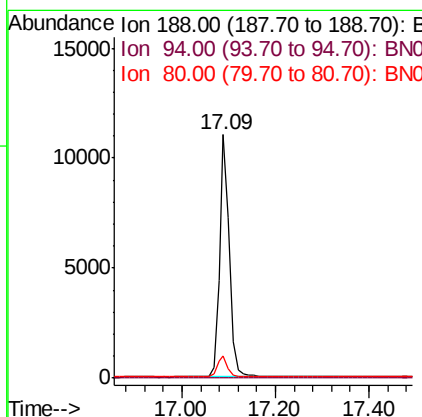
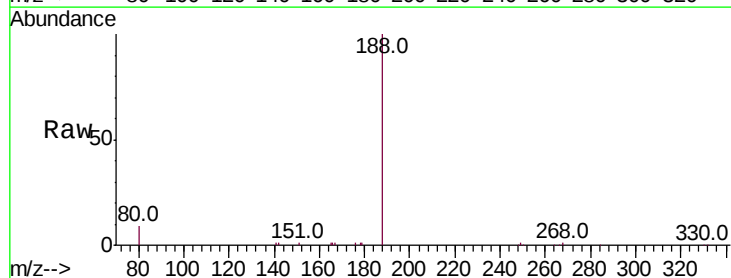
Instrument :  
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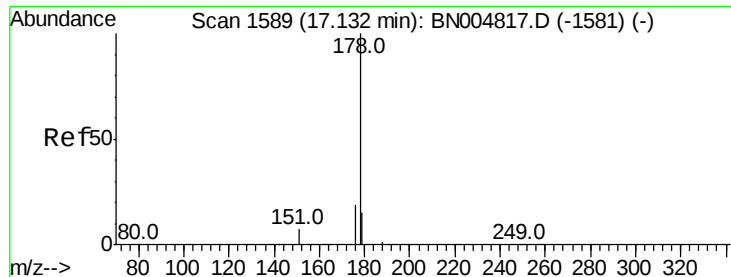
Tot Ion:172 Resp: 7005  
Ion Ratio Lower Upper  
172 100  
171 37.3 28.7 43.1  
170 25.2 18.7 28.1



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.09 min Scan# 1585  
Delta R.T. -0.00 min  
Lab File: BN004864.D  
Acq: 21 Mar 2019 23:31

Tgt Ion:188 Resp: 16416  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 9.1 7.4 11.2





#23

Phenanthrene

Concen: 0.060 ng

RT: 17.13 min Scan# 1589

Delta R.T. -0.00 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

Instrument :

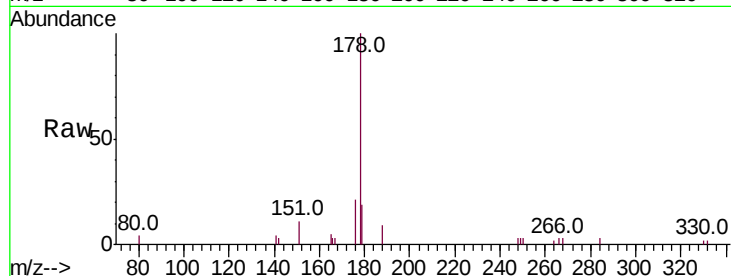
BNA\_N

ClientSampleId :

PST-028-SW012-1-030619

Tot Ion:178 Resp: 3155

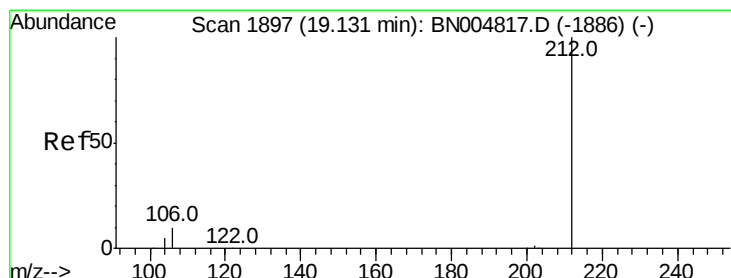
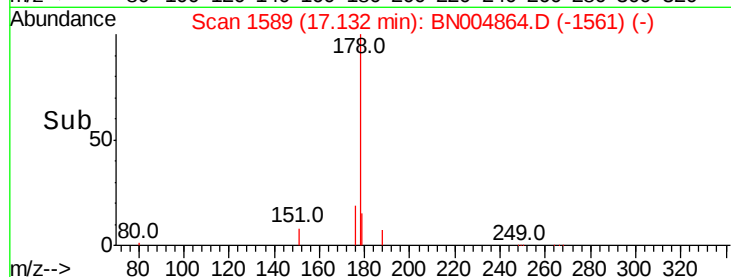
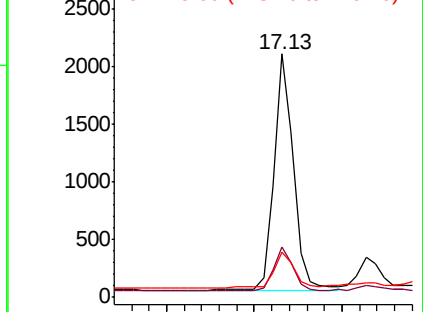
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 178 | 100   |       |       |
| 176 | 18.7  | 14.9  | 22.3  |
| 179 | 17.1  | 12.1  | 18.1  |



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: 0.249 ng

RT: 19.13 min Scan# 1896

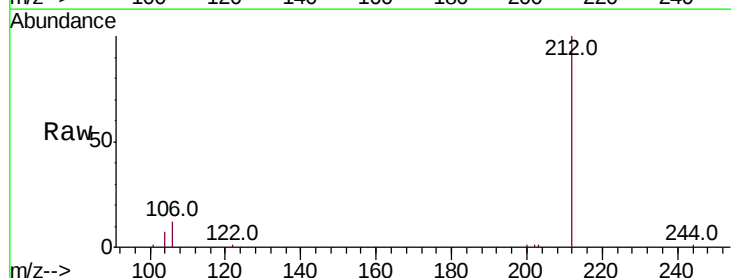
Delta R.T. -0.01 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

Tgt Ion:212 Resp: 13683

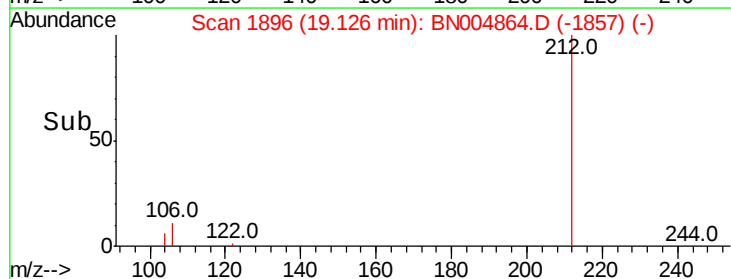
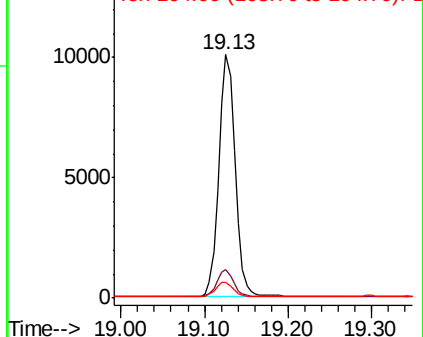
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 212 | 100   |       |       |
| 106 | 11.2  | 8.6   | 13.0  |
| 104 | 6.3   | 4.7   | 7.1   |

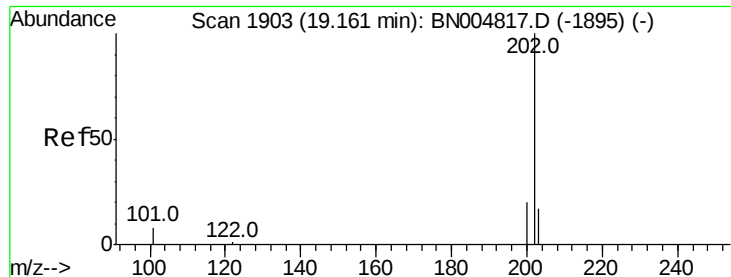


Abundance Ion 212.00 (211.70 to 212.70): E

Ion 106.00 (105.70 to 106.70): E

Ion 104.00 (103.70 to 104.70): E

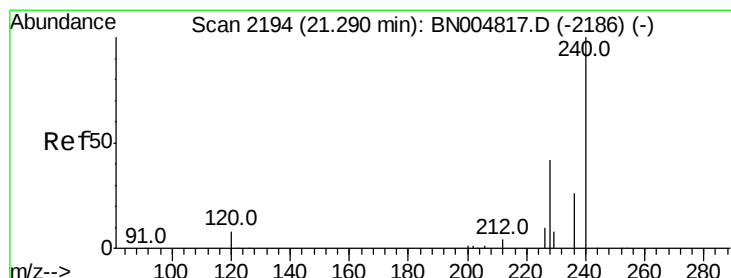
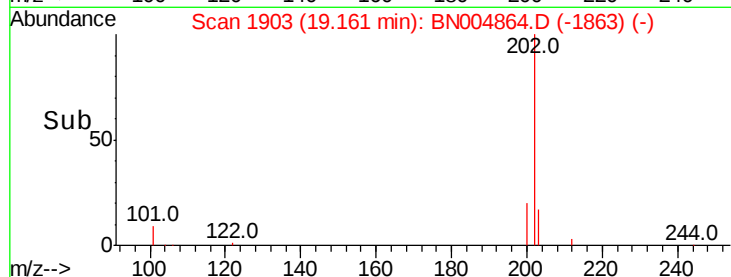
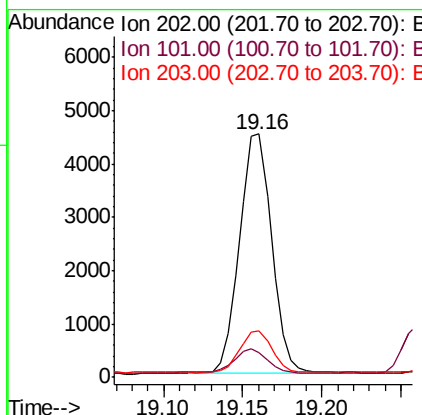
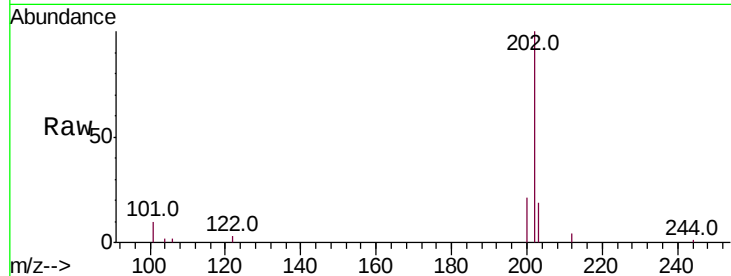




#26  
 Fluoranthene  
 Concen: 0.093 ng  
 RT: 19.16 min Scan# 1903  
 Delta R.T. -0.00 min  
 Lab File: BN004864.D  
 Acq: 21 Mar 2019 23:31

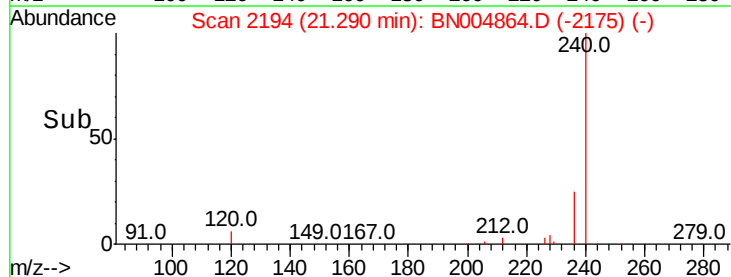
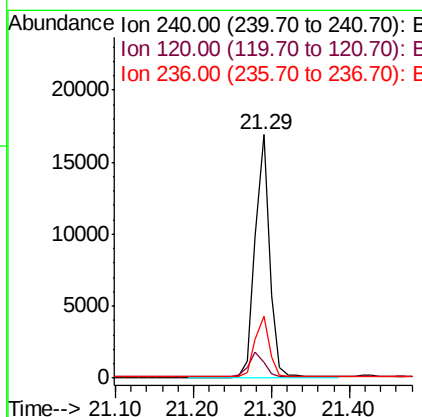
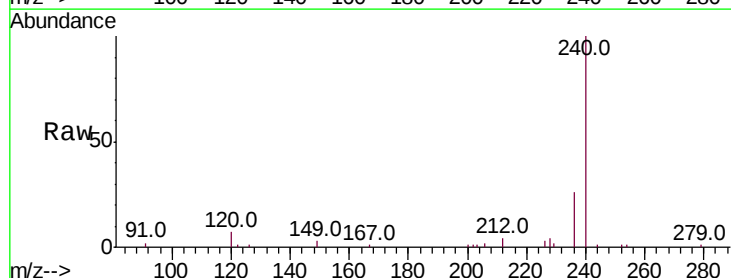
Instrument :  
 BNA\_N  
 ClientSampleId :  
 PST-028-SW012-1-030619

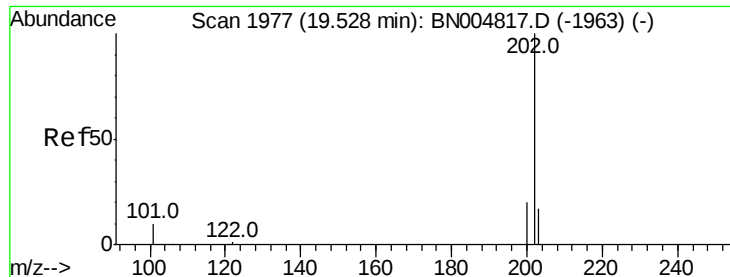
Tot Ion:202 Resp: 6349  
 Ion Ratio Lower Upper  
 202 100  
 101 11.4 7.5 11.3#  
 203 17.3 13.8 20.6



#27  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.29 min Scan# 2194  
 Delta R.T. -0.00 min  
 Lab File: BN004864.D  
 Acq: 21 Mar 2019 23:31

Tgt Ion:240 Resp: 22038  
 Ion Ratio Lower Upper  
 240 100  
 120 6.6 7.2 10.8#  
 236 25.5 20.9 31.3

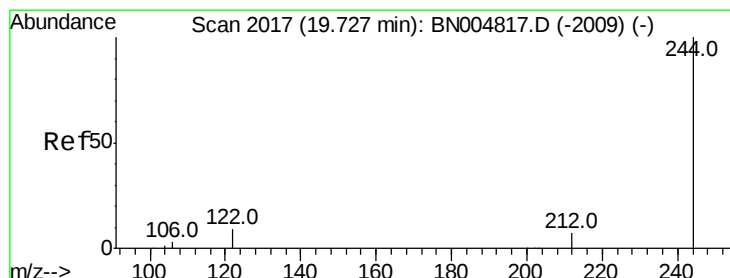
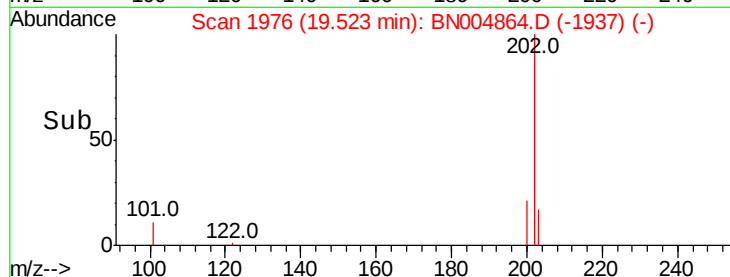
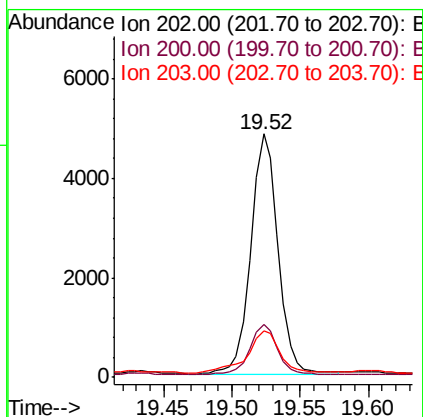
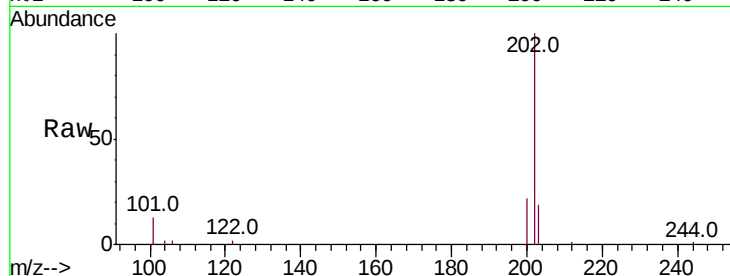




#28  
Pvrene  
Concen: 0.099 ng  
RT: 19.52 min Scan# 1976  
Delta R.T. -0.01 min  
Lab File: BN004864.D  
Acq: 21 Mar 2019 23:31

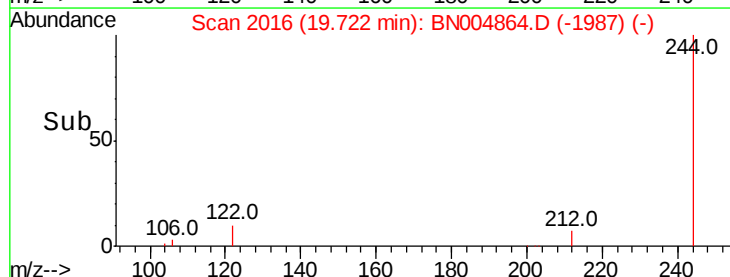
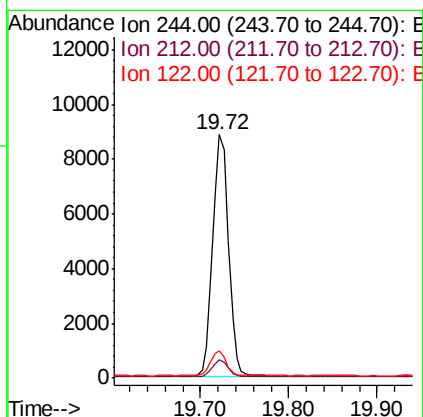
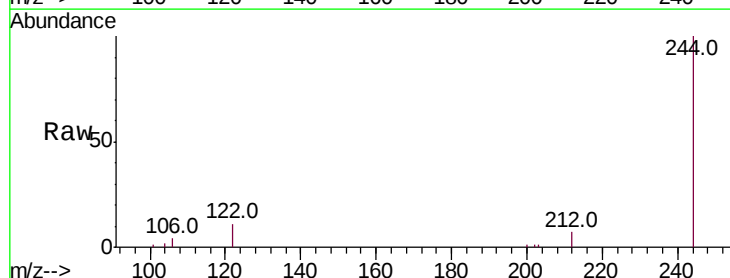
Instrument :  
BNA\_N  
ClientSampleId :  
PST-028-SW012-1-030619

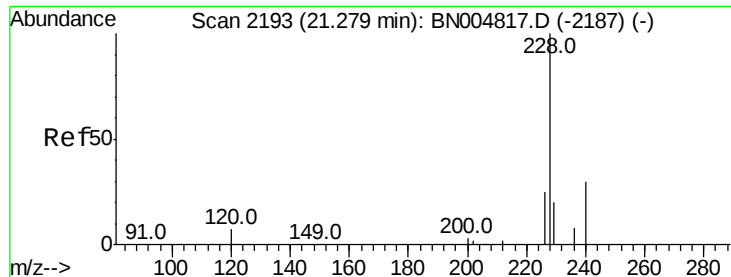
Tot Ion:202 Resp: 6673  
Ion Ratio Lower Upper  
202 100  
200 20.4 16.3 24.5  
203 20.6 14.0 21.0



#29  
Terphenyl-d14  
Concen: 0.245 ng  
RT: 19.72 min Scan# 2016  
Delta R.T. -0.01 min  
Lab File: BN004864.D  
Acq: 21 Mar 2019 23:31

Tgt Ion:244 Resp: 11029  
Ion Ratio Lower Upper  
244 100  
212 7.5 5.8 8.6  
122 11.0 7.9 11.9





#30

Benzo(a)anthracene

Concen: 0.061 ng

RT: 21.27 min Scan# 2192

Delta R.T. -0.01 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

Instrument :

BNA\_N

ClientSampleId :

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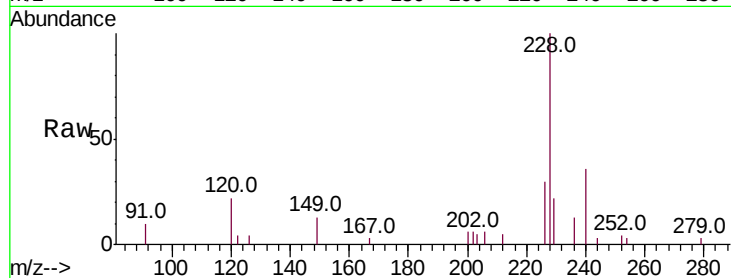
Tot Ion:228 Resp: 4419

Ion Ratio Lower Upper

228 100

226 29.5 20.6 31.0

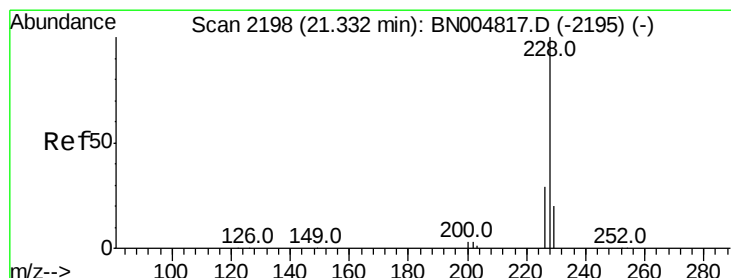
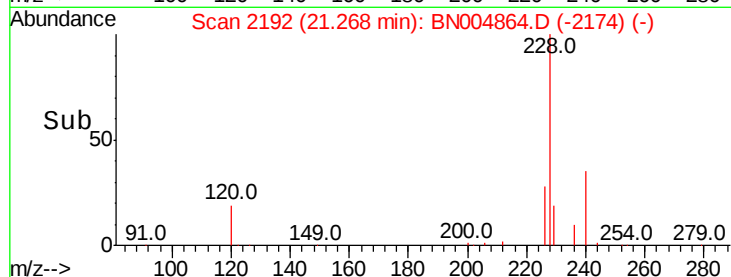
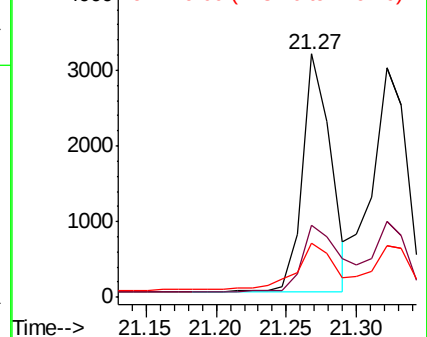
229 22.5 16.2 24.4



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: 0.067 ng

RT: 21.32 min Scan# 2197

Delta R.T. -0.01 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

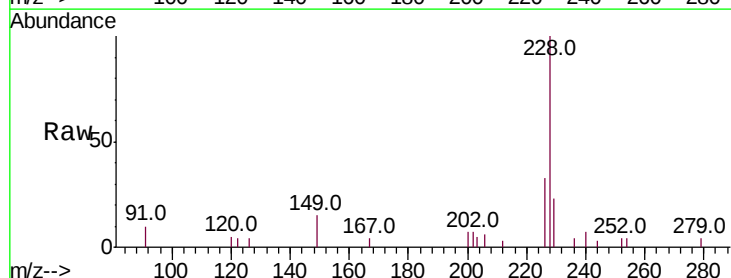
Tgt Ion:228 Resp: 5118

Ion Ratio Lower Upper

228 100

226 32.7 23.0 34.6

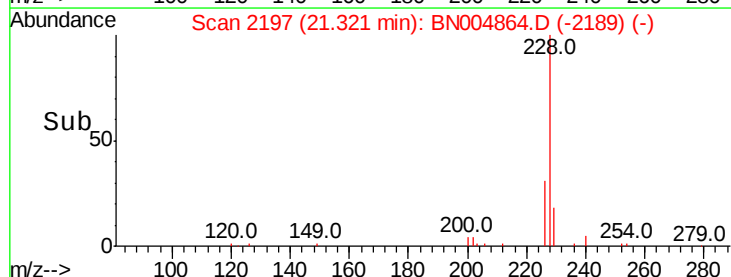
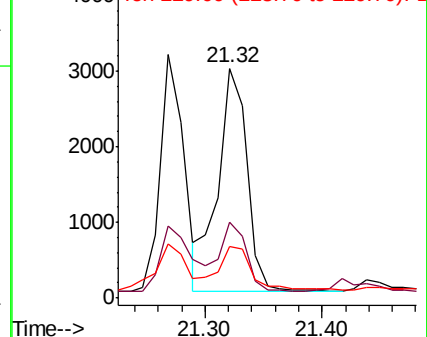
229 22.6 16.2 24.2

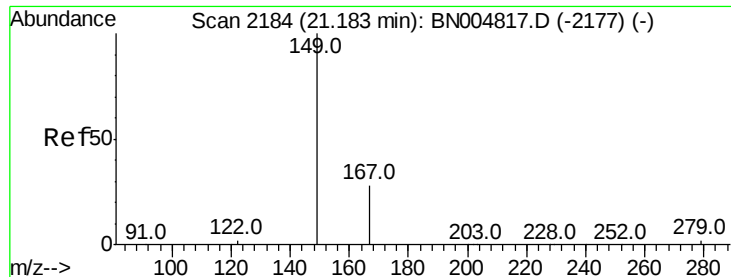


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#32

Bis(2-ethylhexyl)phthalate

Concen: 0.112 ng

RT: 21.18 min Scan# 2184

Delta R.T. -0.00 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

Instrument :

BNA\_N

ClientSampleId :

PST-028-SW012-1-030619

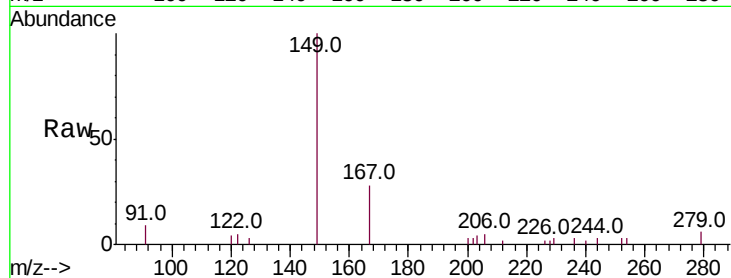
Tot Ion:149 Resp: 3224

Ion Ratio Lower Upper

149 100

167 28.9 23.0 34.4

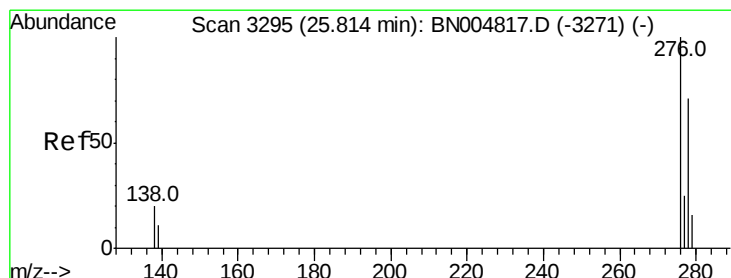
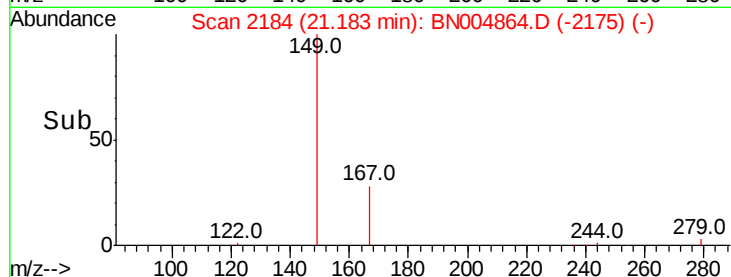
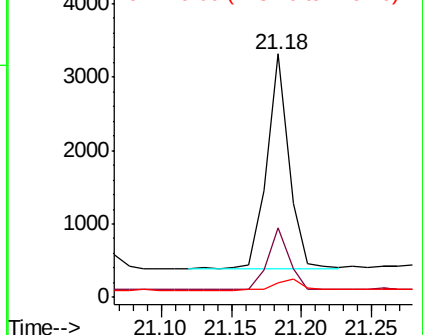
279 6.7 4.6 6.8



Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E



#33

Indeno(1,2,3-cd)pyrene

Concen: 0.047 ng

RT: 25.82 min Scan# 3296

Delta R.T. 0.00 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

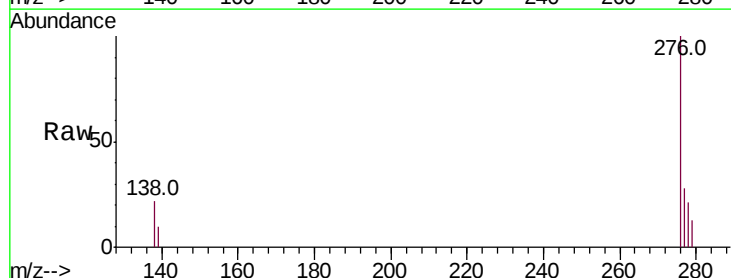
Tgt Ion:276 Resp: 5165

Ion Ratio Lower Upper

276 100

138 19.0 16.6 24.8

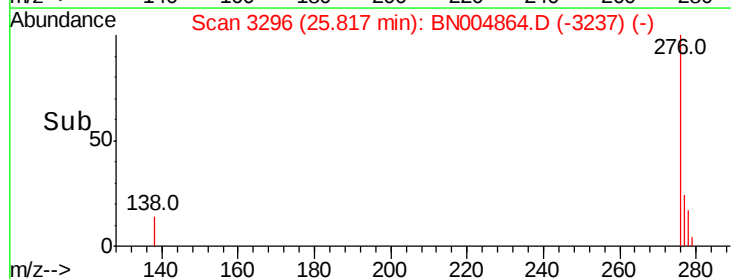
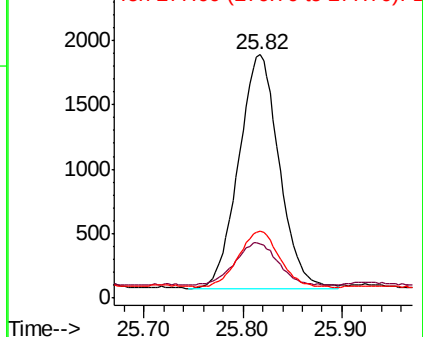
277 24.0 20.3 30.5

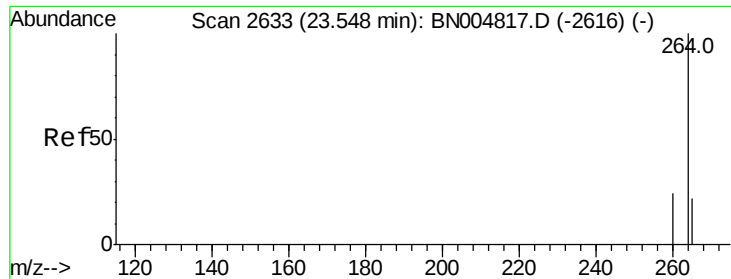


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

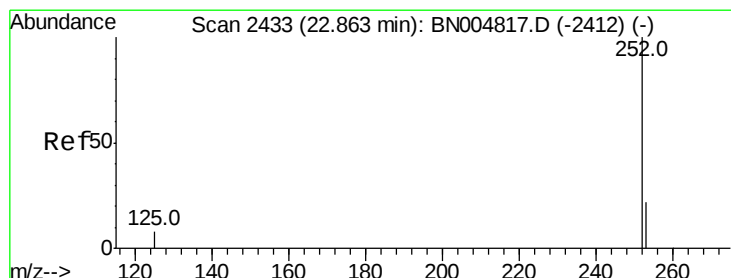
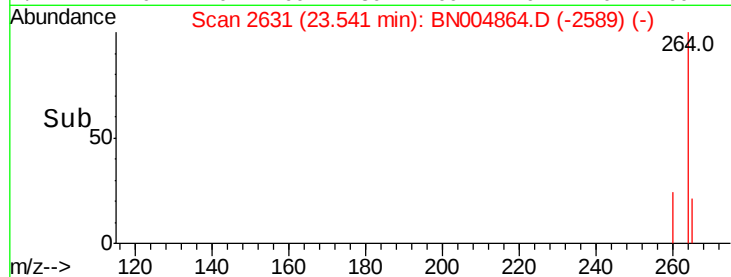
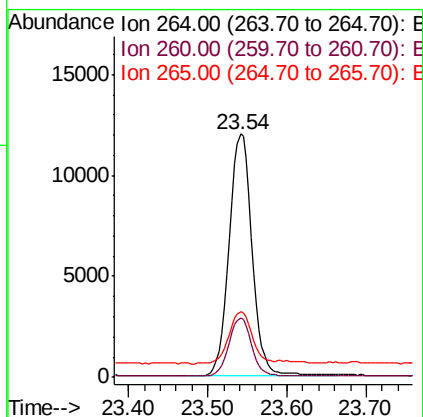
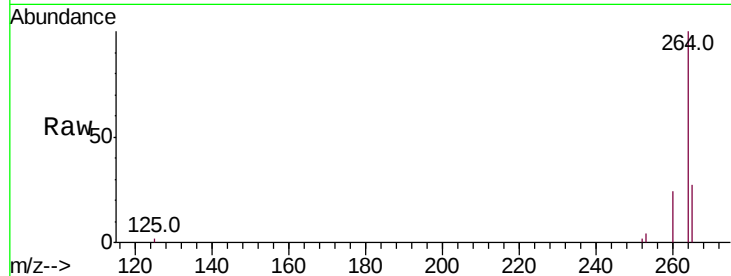




#34  
Pervlene-d12  
Concen: 0.400 ng  
RT: 23.54 min Scan# 2631  
Delta R.T. -0.01 min  
Lab File: BN004864.D  
Acq: 21 Mar 2019 23:31

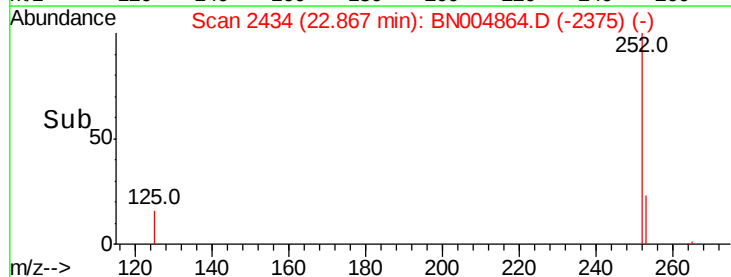
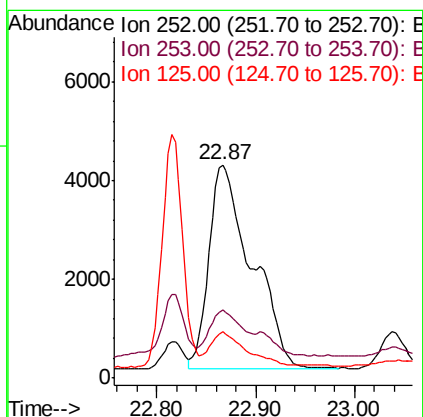
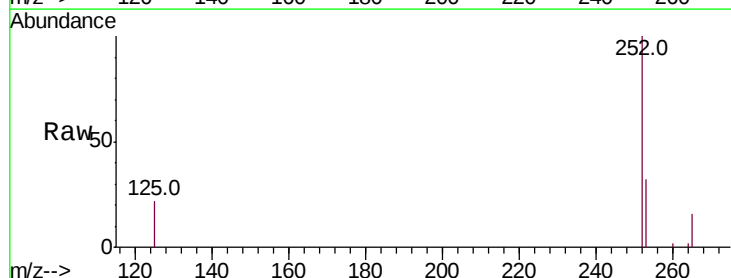
Instrument :  
BNA\_N  
ClientSampleId :  
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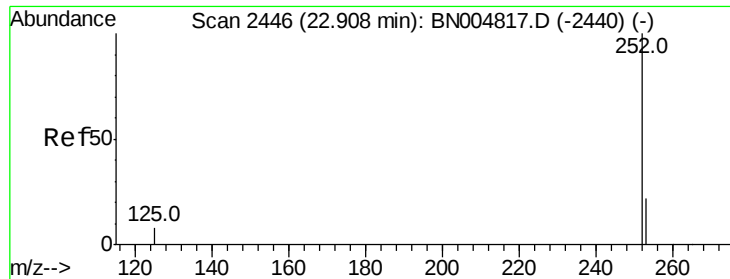
Tot Ion:264 Resp: 24121  
Ion Ratio Lower Upper  
264 100  
260 24.3 19.5 29.3  
265 26.9 23.1 34.7



#35  
Benzo(b)fluoranthene  
Concen: 0.142 ng  
RT: 22.87 min Scan# 2434  
Delta R.T. 0.00 min  
Lab File: BN004864.D  
Acq: 21 Mar 2019 23:31

Tgt Ion:252 Resp: 12423  
Ion Ratio Lower Upper  
252 100  
253 31.8 19.0 28.4#  
125 21.6 7.4 11.2#

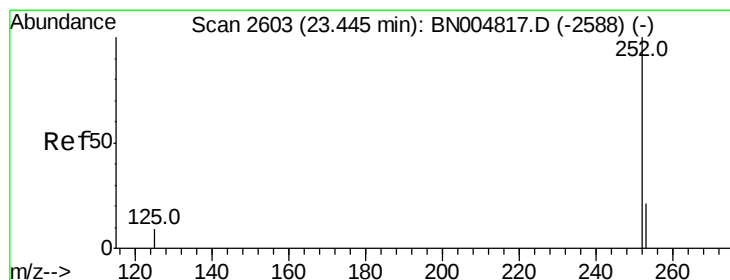
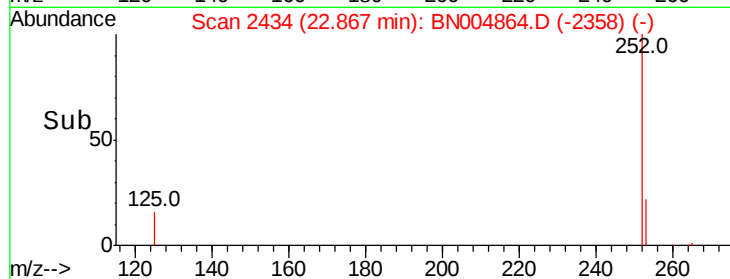
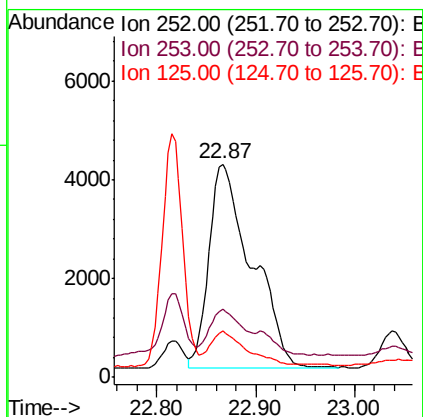
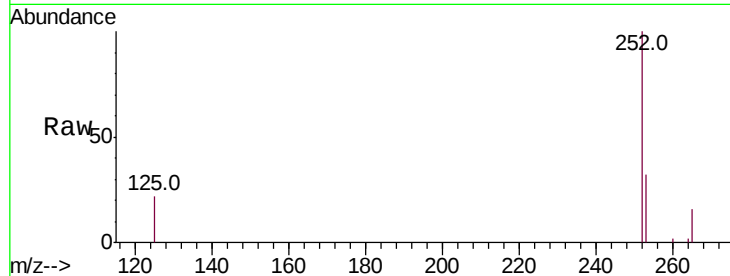




#36  
Benzo(k)fluoranthene  
Concen: 0.145 ng  
RT: 22.87 min Scan# 2434  
Delta R.T. -0.04 min  
Lab File: BN004864.D  
Acq: 21 Mar 2019 23:31

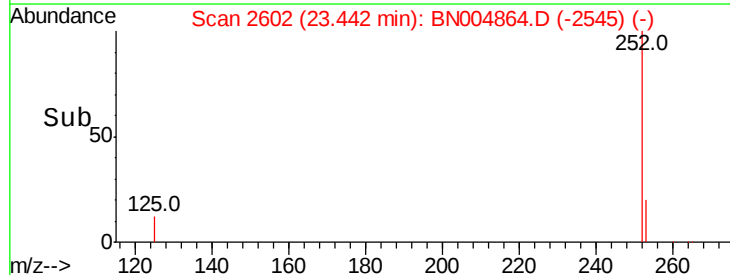
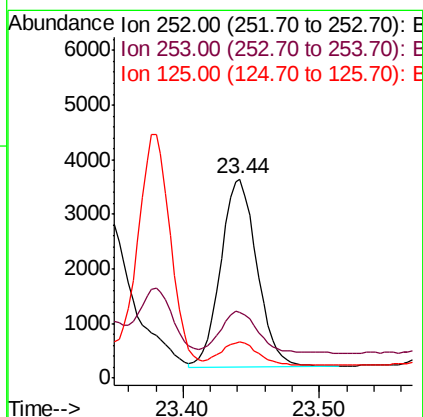
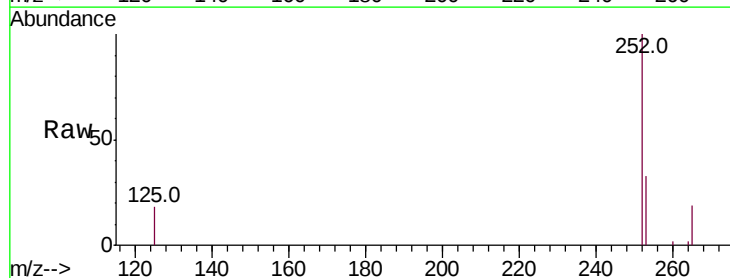
Instrument :  
BNA\_N  
ClientSampleId :  
PST-028-SW012-1-030619

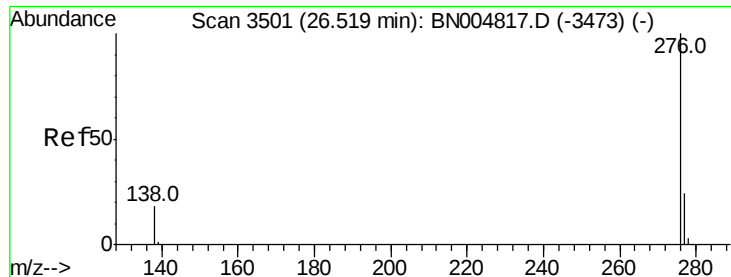
Tot Ion:252 Resp: 12423  
Ion Ratio Lower Upper  
252 100  
253 31.8 19.3 28.9#  
125 21.6 7.4 11.0#



#37  
Benzo(a)pyrene  
Concen: 0.079 ng  
RT: 23.44 min Scan# 2602  
Delta R.T. -0.00 min  
Lab File: BN004864.D  
Acq: 21 Mar 2019 23:31

Tgt Ion:252 Resp: 6349  
Ion Ratio Lower Upper  
252 100  
253 33.0 19.7 29.5#  
125 18.4 8.3 12.5#





#39

Benzo(a,h,i)perylene

Concen: 0.057 ng

RT: 26.52 min Scan# 3500

Delta R.T. -0.00 min

Lab File: BN004864.D

Acq: 21 Mar 2019 23:31

Instrument :

BNA\_N

ClientSampleId :

PST-028-SW012-1-030619

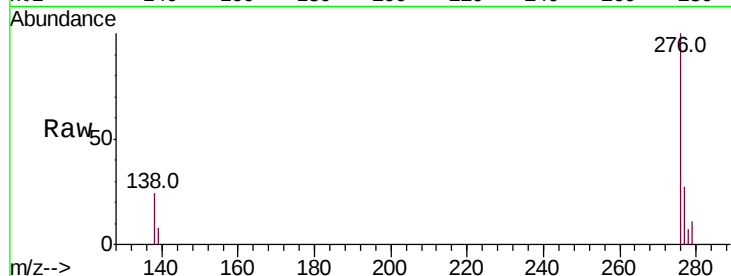
Tot Ion:276 Resp: 5354

Ion Ratio Lower Upper

276 100

277 27.3 19.7 29.5

138 23.5 14.6 22.0#



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

