

Data Path : Z:\svoasrv\HPCHEM1\BNA N\Data\BN041520\  
 Data File : BN010508.D  
 Acq On : 15 Apr 2020 15:11  
 Operator : CG/JU  
 Sample : L2178-06RE  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 MW-2FRE

Quant Time: Apr 15 16:40:21 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN041320.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Apr 13 18:04:22 2020  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.61  | 152  | 3413     | 0.40 | ng    | 0.00     |
| 7) Naphthalene-d8         | 10.35 | 136  | 14364    | 0.40 | ng    | -0.01    |
| 13) Acenaphthene-d10      | 14.22 | 164  | 9599     | 0.40 | ng    | -0.01    |
| 19) Phenanthrene-d10      | 16.97 | 188  | 22879    | 0.40 | ng    | -0.01    |
| 27) Chrysene-d12          | 21.18 | 240  | 23864    | 0.40 | ng    | -0.01    |
| 34) Perylene-d12          | 23.35 | 264  | 21243    | 0.40 | ng    | -0.01    |

|                             |       |     |       |      |    |       |
|-----------------------------|-------|-----|-------|------|----|-------|
| System Monitoring Compounds |       |     |       |      |    |       |
| 4) 2-Fluorophenol           | 5.25  | 112 | 1635  | 0.22 | ng | 0.00  |
| 5) Phenol-d6                | 6.79  | 99  | 1280  | 0.13 | ng | 0.00  |
| 8) Nitrobenzene-d5          | 8.73  | 82  | 7738  | 0.77 | ng | -0.01 |
| 11) 2-Methylnaphthalene-d10 | 11.95 | 152 | 9392  | 0.40 | ng | 0.00  |
| 14) 2,4,6-Tribromophenol    | 15.72 | 330 | 2616  | 0.58 | ng | 0.00  |
| 15) 2-Fluorobiphenyl        | 12.84 | 172 | 27857 | 0.80 | ng | -0.01 |
| 25) Fluoranthene-d10        | 19.01 | 212 | 29030 | 0.42 | ng | 0.00  |
| 29) Terphenyl-d14           | 19.62 | 244 | 46397 | 0.85 | ng | 0.00  |

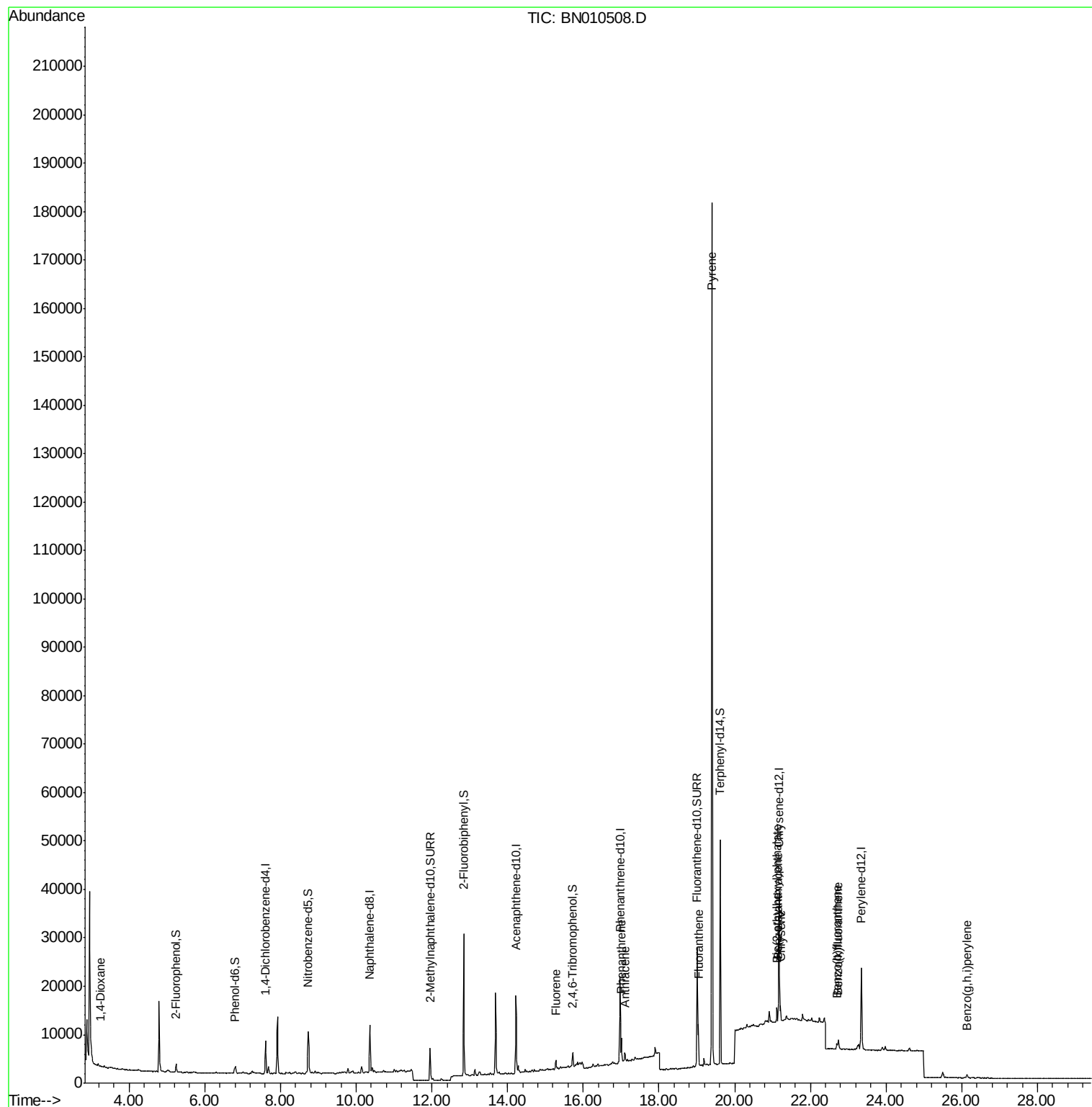
|                                |       |     |        |       |    |        |
|--------------------------------|-------|-----|--------|-------|----|--------|
| Target Compounds               |       |     |        |       |    | Qvalue |
| 2) 1,4-Dioxane                 | 3.24  | 88  | 69     | 0.027 | ng | # 1    |
| 18) Fluorene                   | 15.28 | 166 | 922    | 0.026 | ng | # 79   |
| 23) Phenanthrene               | 17.01 | 178 | 5429   | 0.088 | ng | # 96   |
| 24) Anthracene                 | 17.10 | 178 | 1825   | 0.032 | ng | # 89   |
| 26) Fluoranthene               | 19.04 | 202 | 7886   | 0.103 | ng | # 97   |
| 28) Pyrene                     | 19.40 | 202 | 154411 | 1.922 | ng | 100    |
| 30) Benzo(a)anthracene         | 21.16 | 228 | 2077   | 0.027 | ng | # 58   |
| 31) Chrysene                   | 21.21 | 228 | 2298   | 0.030 | ng | # 65   |
| 32) Bis(2-ethylhexyl)phthalate | 21.11 | 149 | 2528   | 0.063 | ng | # 99   |
| 35) Benzo(b)fluoranthene       | 22.70 | 252 | 1633   | 0.023 | ng | # 1    |
| 36) Benzo(k)fluoranthene       | 22.75 | 252 | 1662   | 0.024 | ng | # 1    |
| 39) Benzo(a,h,i)perylene       | 26.14 | 276 | 1286   | 0.023 | ng | # 57   |

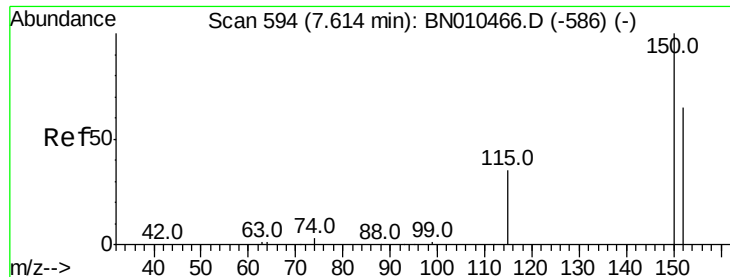
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Mon Apr 13 18:04:22 2020  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 0.400 ng

RT: 7.61 min Scan# 593

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

Instrument :

BNA\_N

ClientSampleId :

MW-2FRE

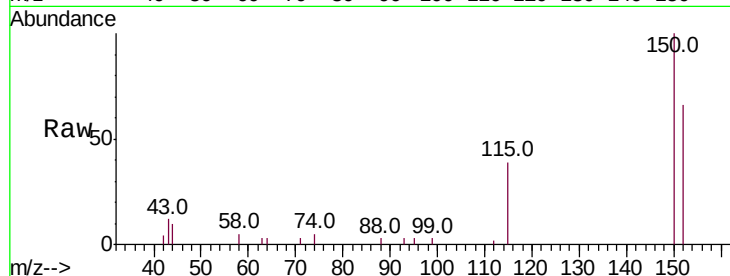
Tot Ion:152 Resp: 3413

Ion Ratio Lower Upper

152 100

150 152.5 121.8 182.6

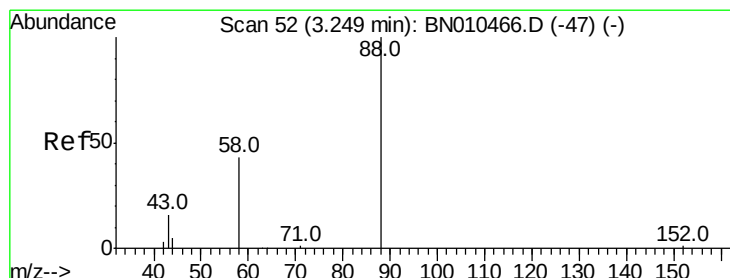
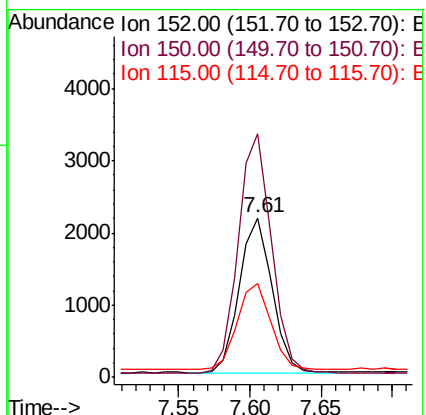
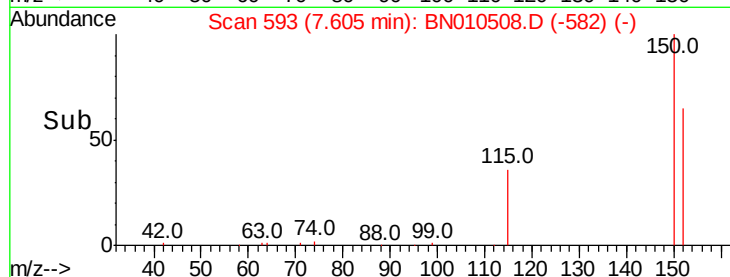
115 59.1 45.5 68.3



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



#2

1,4-Dioxane

Concen: 0.027 ng

RT: 3.24 min Scan# 51

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

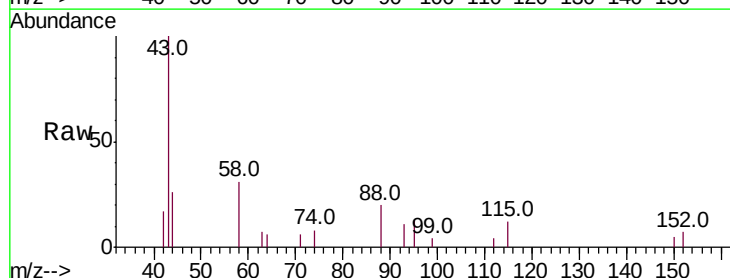
Tgt Ion: 88 Resp: 69

Ion Ratio Lower Upper

88 100

58 0.0 36.5 54.7#

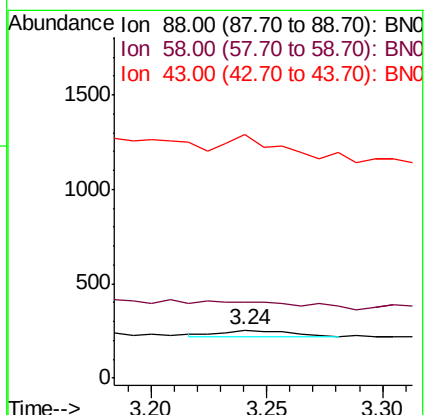
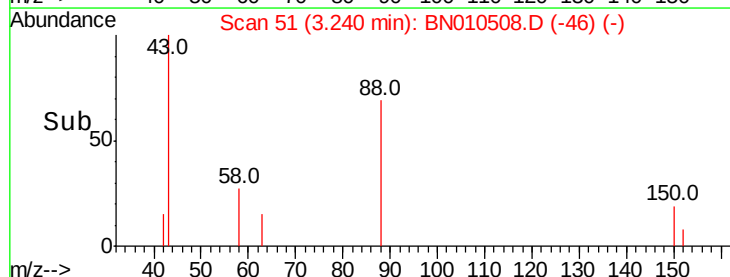
43 255.1 13.2 19.8#

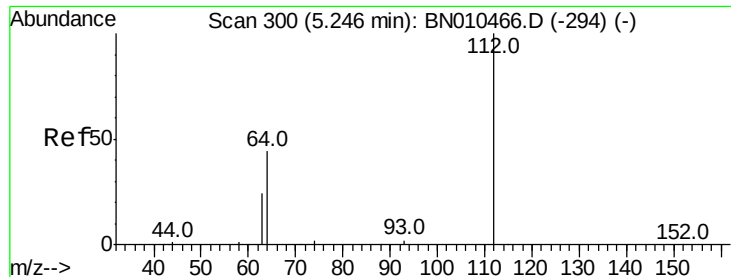


Abundance Ion 88.00 (87.70 to 88.70): BNC

Ion 58.00 (57.70 to 58.70): BNC

Ion 43.00 (42.70 to 43.70): BNC





#4

2-Fluorophenol

Concen: 0.219 ng

RT: 5.25 min Scan# 300

Delta R.T. -0.00 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

Instrument :

BNA\_N

ClientSampleId :

MW-2FRE

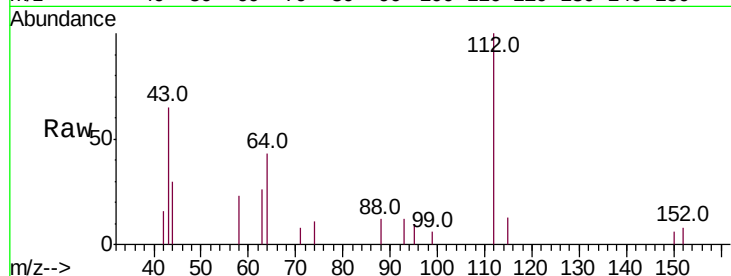
Tot Ion:112 Resp: 1635

Ion Ratio Lower Upper

112 100

64 45.9 35.8 53.8

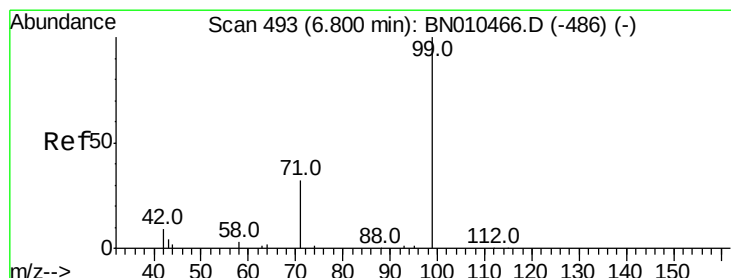
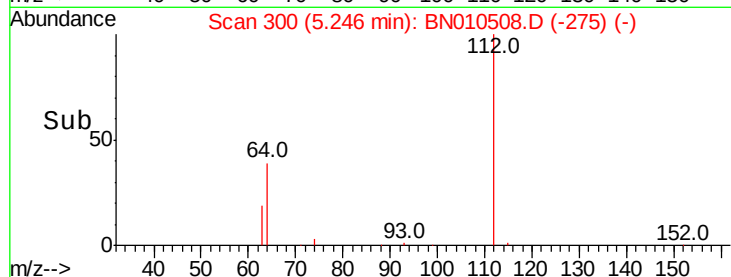
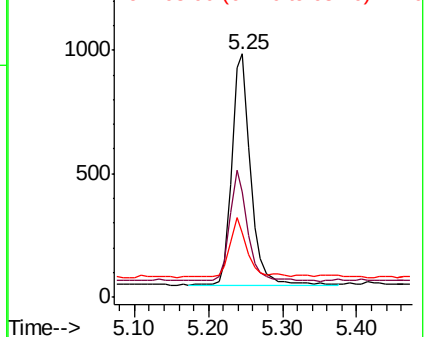
63 23.5 19.9 29.9



Abundance Ion 112.00 (111.70 to 112.70): B

Ion 64.00 (63.70 to 64.70): BNO

Ion 63.00 (62.70 to 63.70): BNO



#5

Phenol-d6

Concen: 0.131 ng

RT: 6.79 min Scan# 492

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

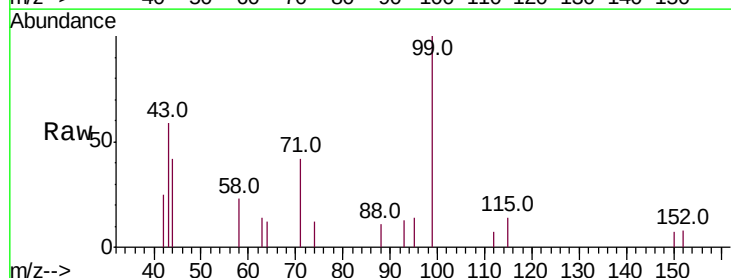
Tgt Ion: 99 Resp: 1280

Ion Ratio Lower Upper

99 100

42 18.6 9.8 14.6#

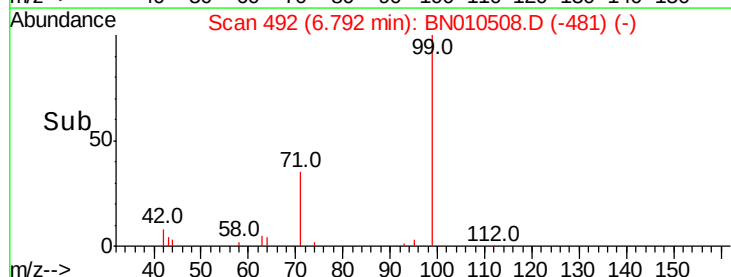
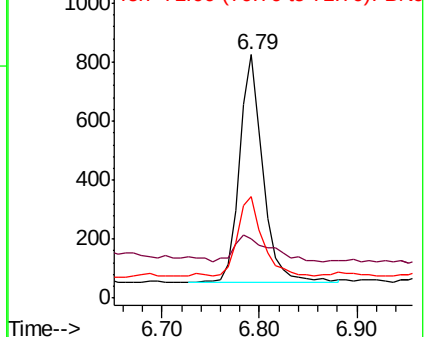
71 37.6 27.8 41.8

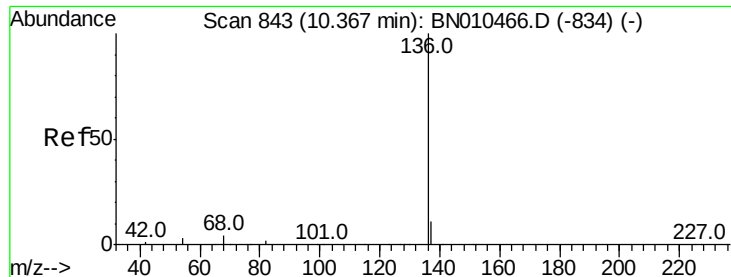


Abundance Ion 99.00 (98.70 to 99.70): BNO

Ion 42.00 (41.70 to 42.70): BNO

Ion 71.00 (70.70 to 71.70): BNO





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.35 min Scan# 842

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

Instrument :

BNA\_N

ClientSampleId :

MW-2FRE

Tot Ion:136 Resp: 14364

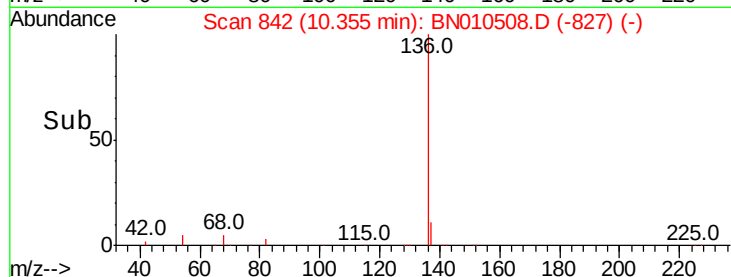
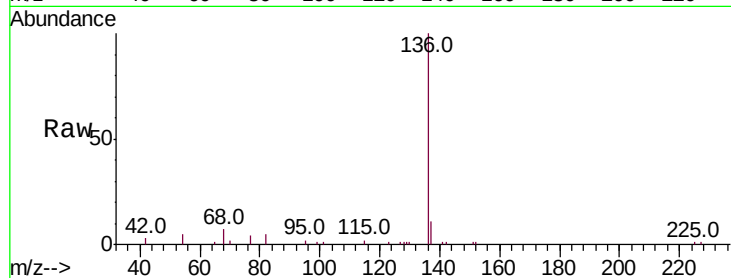
Ion Ratio Lower Upper

136 100

137 11.5 8.9 13.3

54 5.5 2.6 4.0#

68 6.5 3.4 5.2#

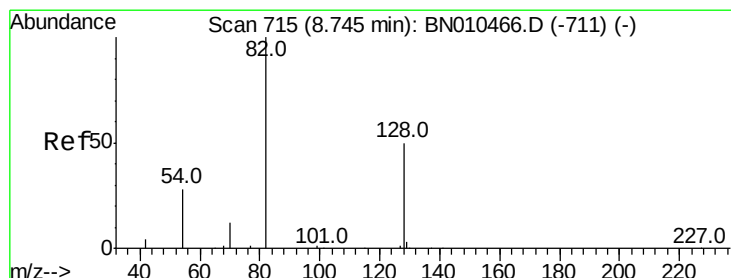
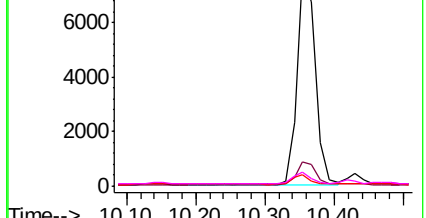


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BNC

Ion 68.00 (67.70 to 68.70): BNC



#8

Nitrobenzene-d5

Concen: 0.771 ng

RT: 8.73 min Scan# 714

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

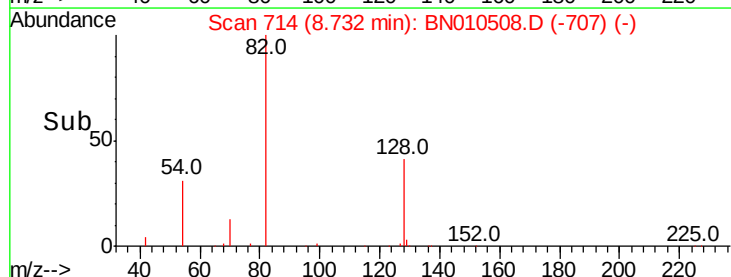
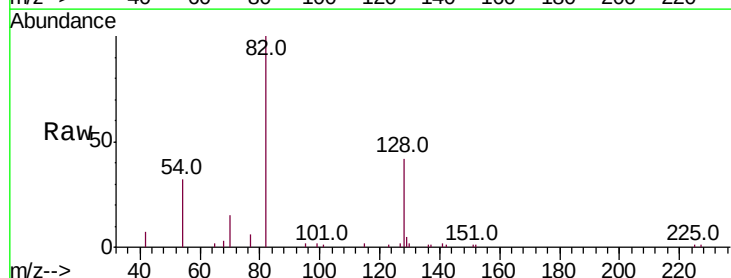
Tgt Ion: 82 Resp: 7738

Ion Ratio Lower Upper

82 100

128 41.9 41.3 61.9

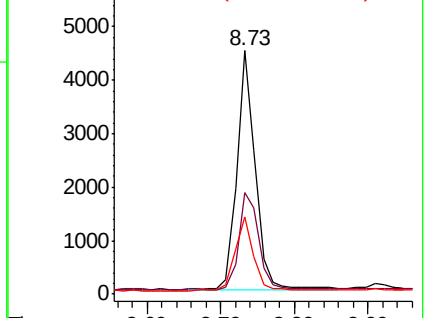
54 31.8 23.4 35.0

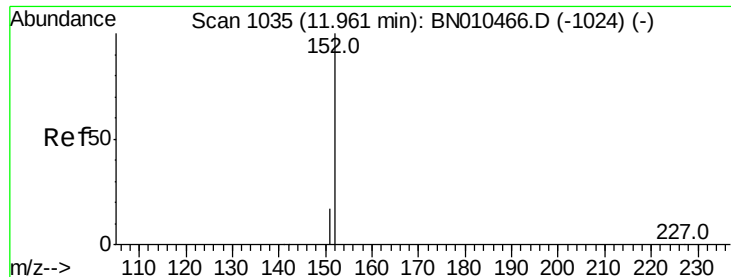


Abundance Ion 82.00 (81.70 to 82.70): BNC

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BNC

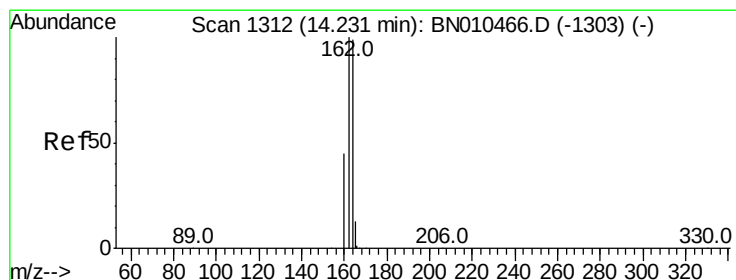
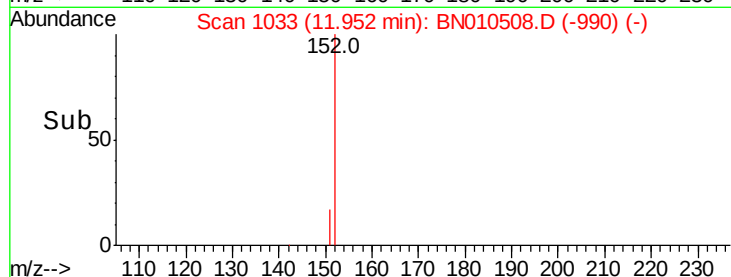
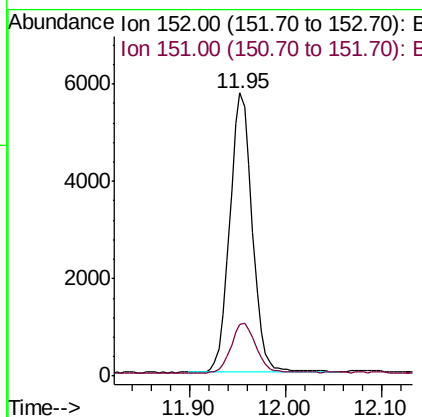
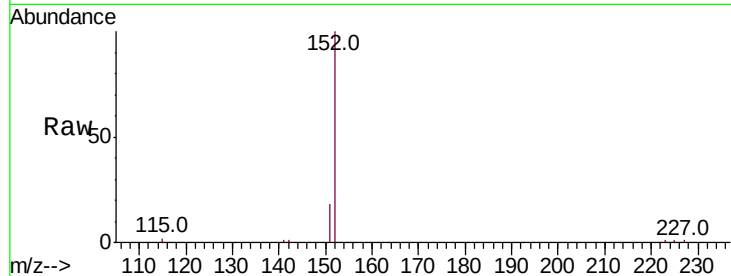




#11  
2-Methylnaphthalene-d10  
Concen: 0.398 ng  
RT: 11.95 min Scan# 1033  
Delta R.T. -0.01 min  
Lab File: BN010508.D  
Acq: 15 Apr 2020 15:11

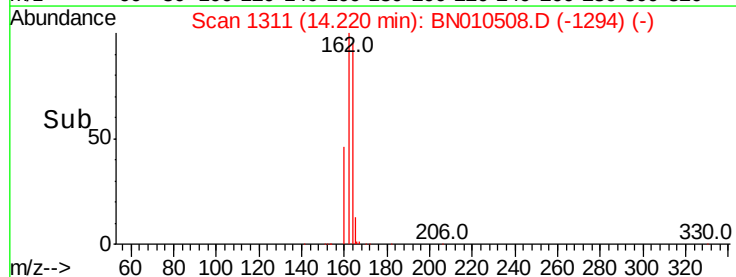
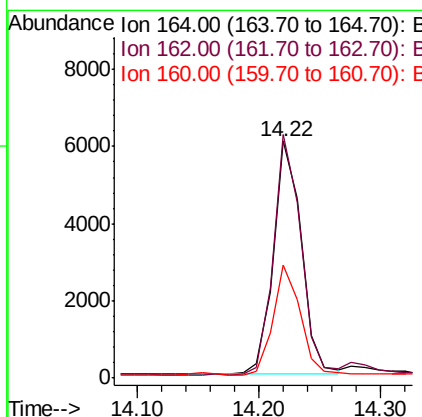
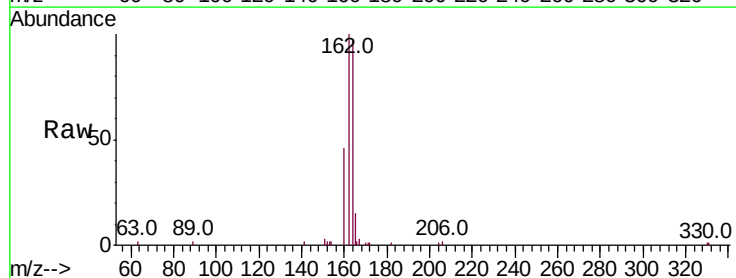
Instrument :  
BNA\_N  
ClientSampleId :  
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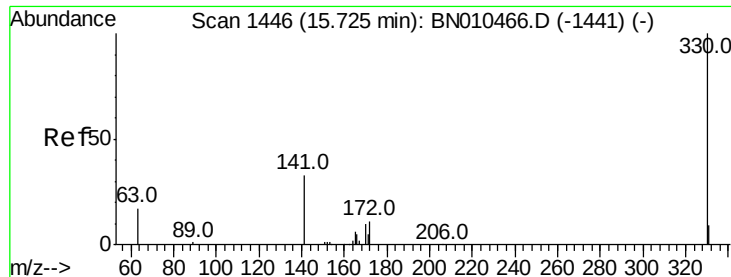
Tot Ion:152 Resp: 9392  
Ion Ratio Lower Upper  
152 100  
151 19.7 15.3 22.9



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.22 min Scan# 1311  
Delta R.T. -0.01 min  
Lab File: BN010508.D  
Acq: 15 Apr 2020 15:11

Tgt Ion:164 Resp: 9599  
Ion Ratio Lower Upper  
164 100  
162 102.8 80.6 121.0  
160 47.8 36.5 54.7

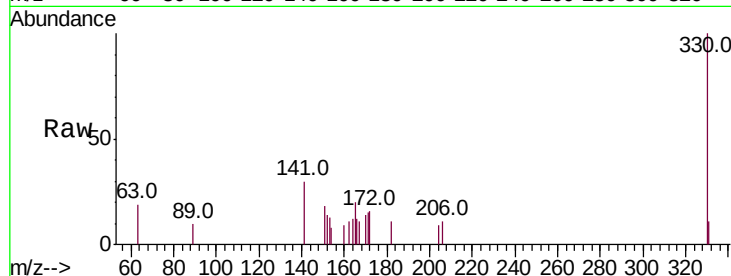




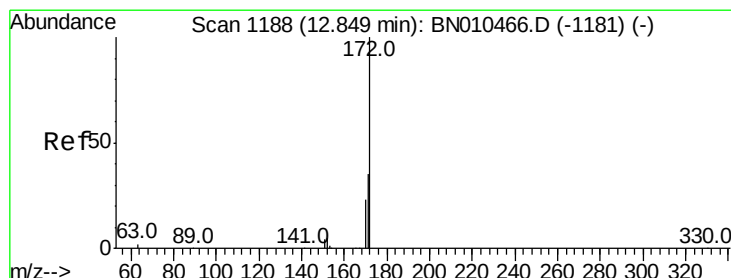
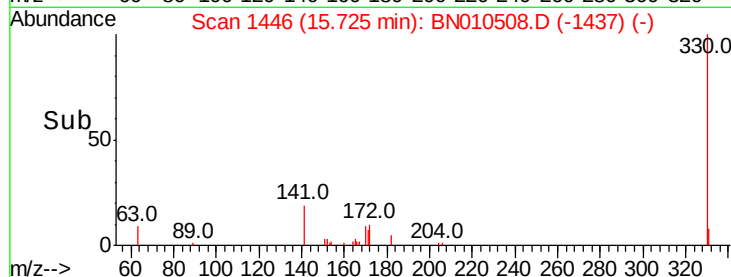
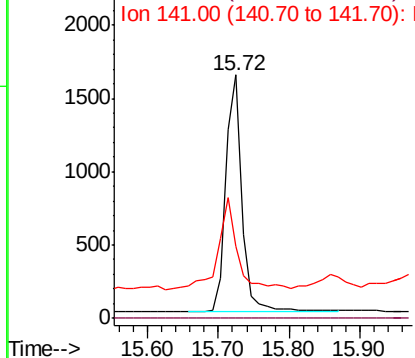
#14  
 2,4,6-Tribromophenol  
 Concen: 0.578 ng  
 RT: 15.72 min Scan# 1446  
 Delta R.T. -0.00 min  
 Lab File: BN010508.D  
 Acq: 15 Apr 2020 15:11

Instrument :  
 BNA\_N  
 ClientSampleId :  
 MW-2FRE

Tot Ion:330 Resp: 2616  
 Ion Ratio Lower Upper  
 330 100  
 332 0.0 0.0 0.0  
 141 43.5 28.1 42.1#

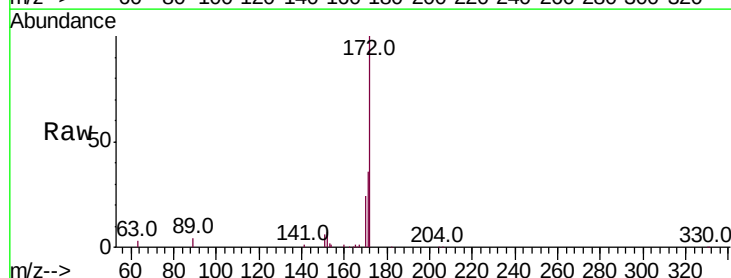


Abundance Ion 330.00 (329.70 to 330.70): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

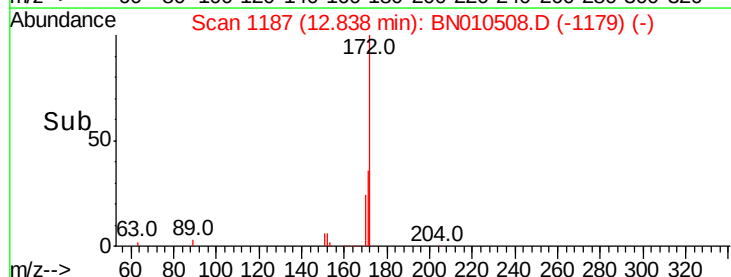
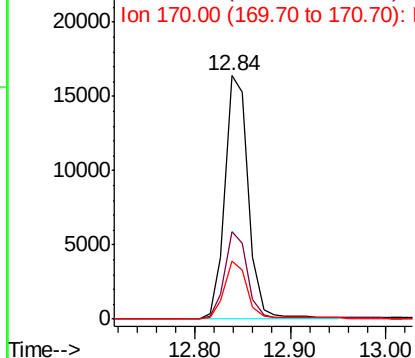


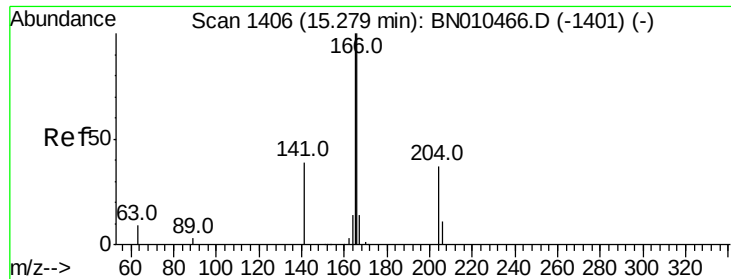
#15  
 2-Fluorobiphenyl  
 Concen: 0.797 ng  
 RT: 12.84 min Scan# 1187  
 Delta R.T. -0.01 min  
 Lab File: BN010508.D  
 Acq: 15 Apr 2020 15:11

Tgt Ion:172 Resp: 27857  
 Ion Ratio Lower Upper  
 172 100  
 171 35.9 28.2 42.2  
 170 23.9 18.4 27.6



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

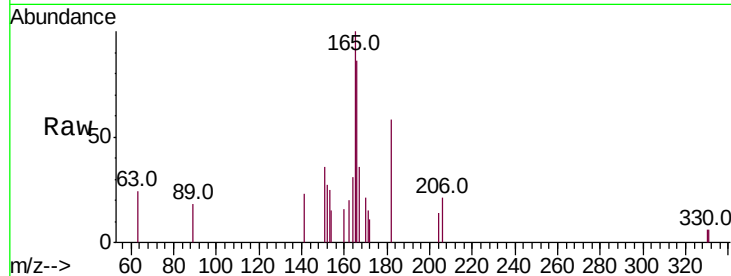




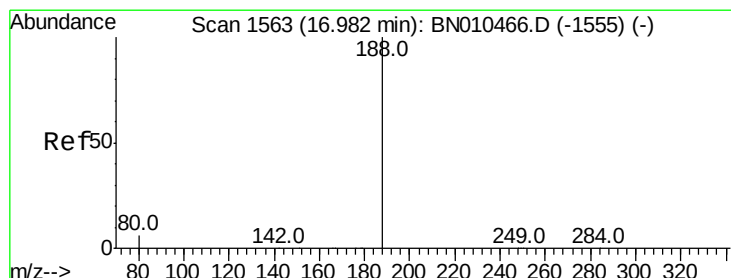
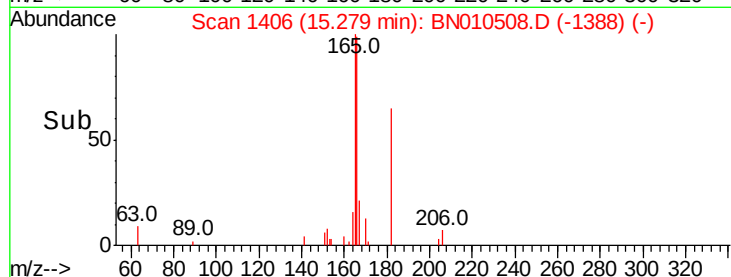
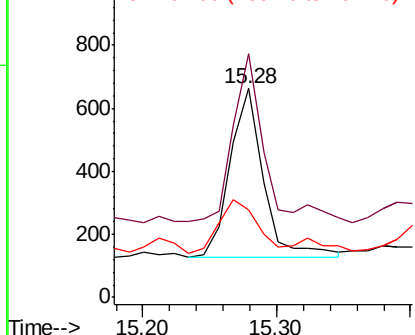
#18  
Fluorene  
Concen: 0.026 ng  
RT: 15.28 min Scan# 1406  
Delta R.T. -0.00 min  
Lab File: BN010508.D  
Acq: 15 Apr 2020 15:11

Instrument :  
BNA\_N  
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Tot Ion:166 Resp: 922  
Ion Ratio Lower Upper  
166 100  
165 83.1 78.4 117.6  
167 38.2 10.9 16.3#

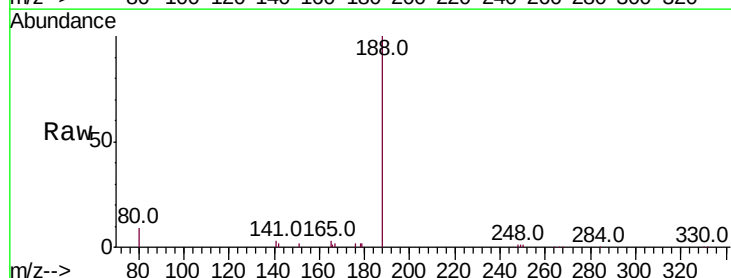


Abundance Ion 166.00 (165.70 to 166.70): E  
Ion 165.00 (164.70 to 165.70): E  
Ion 167.00 (166.70 to 167.70): E

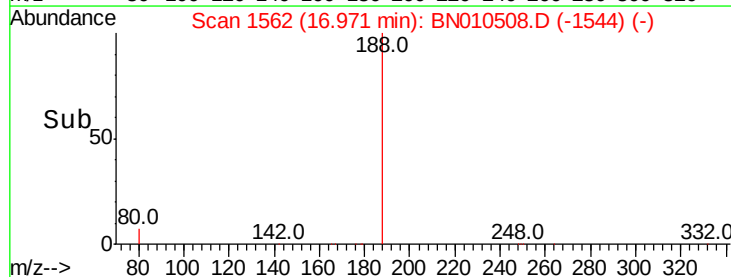
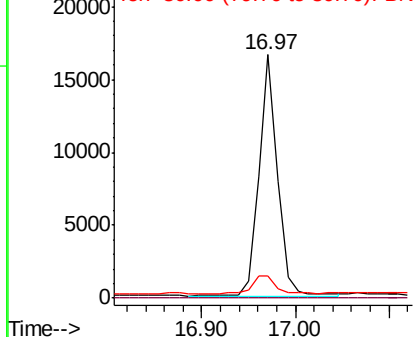


#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.97 min Scan# 1562  
Delta R.T. -0.01 min  
Lab File: BN010508.D  
Acq: 15 Apr 2020 15:11

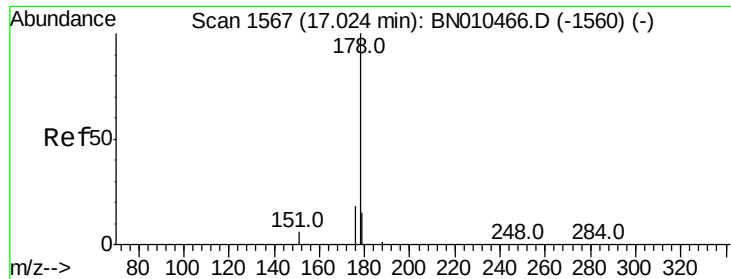
Tgt Ion:188 Resp: 22879  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 9.0 5.0 7.6#



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







#23

Phenanthrene

Concen: 0.088 ng

RT: 17.01 min Scan# 1566

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

Instrument :

BNA\_N

ClientSampleId :

MW-2FRE

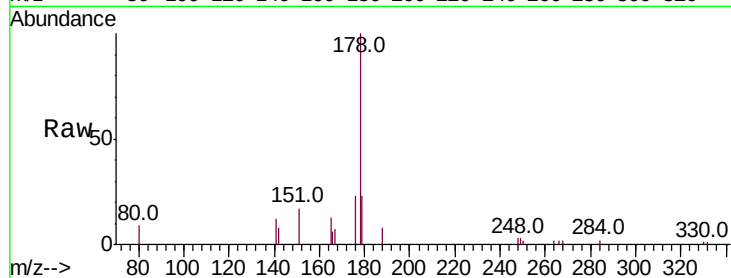
Tot Ion:178 Resp: 5429

Ion Ratio Lower Upper

178 100

176 19.2 15.0 22.4

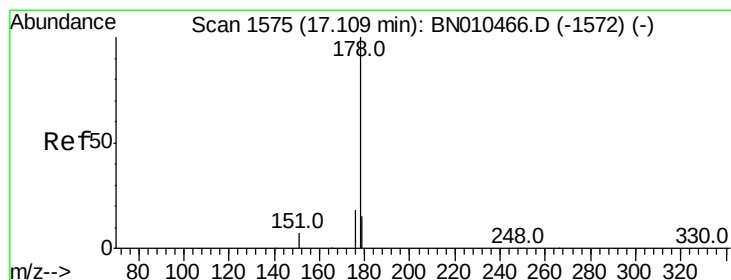
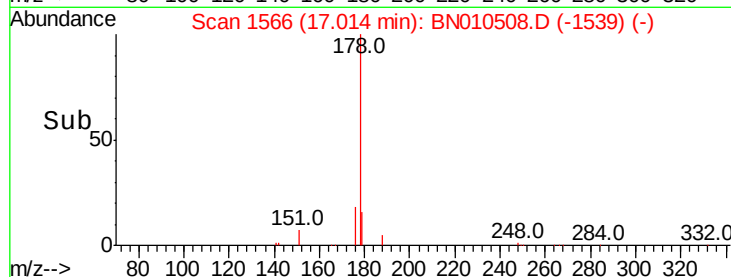
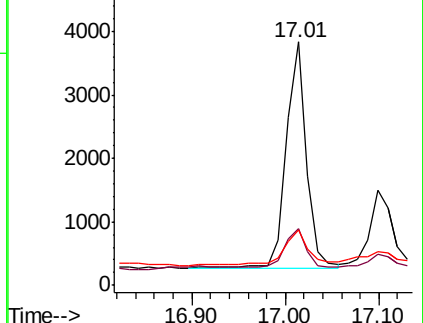
179 18.5 12.6 18.8



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: 0.032 ng

RT: 17.10 min Scan# 1574

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

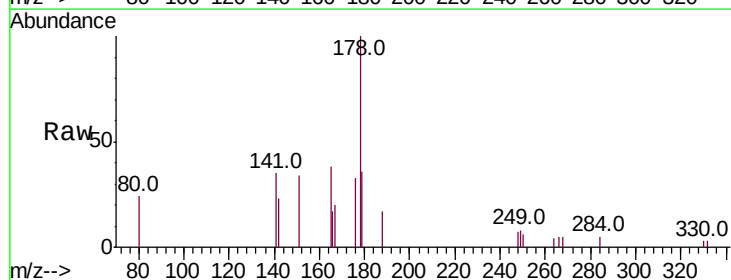
Tgt Ion:178 Resp: 1825

Ion Ratio Lower Upper

178 100

176 21.1 14.6 21.8

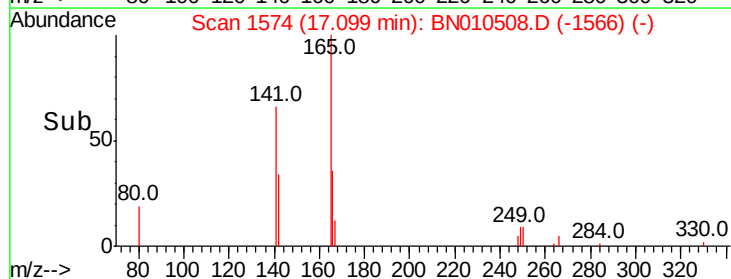
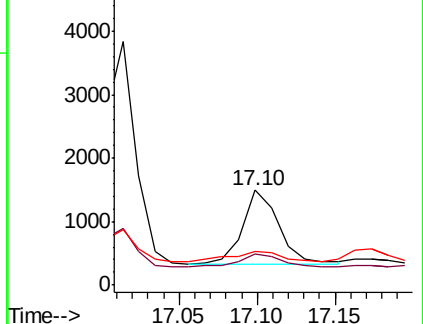
179 21.6 12.2 18.2#

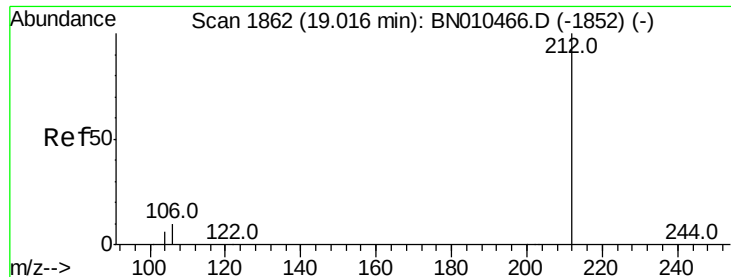


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#25

Fluoranthene-d10

Concen: 0.418 ng

RT: 19.01 min Scan# 1861

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

Instrument :

BNA\_N

ClientSampleId :

MW-2FRE

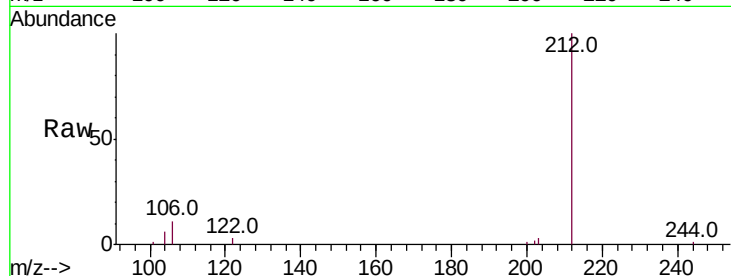
Tot Ion:212 Resp: 29030

Ion Ratio Lower Upper

212 100

106 10.4 7.8 11.6

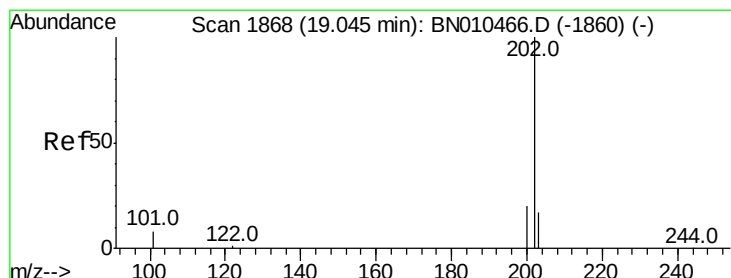
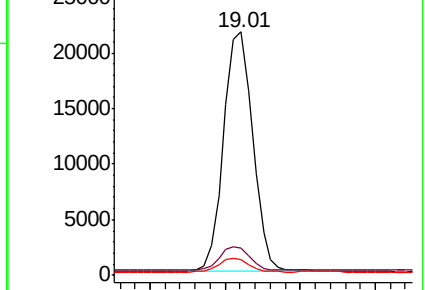
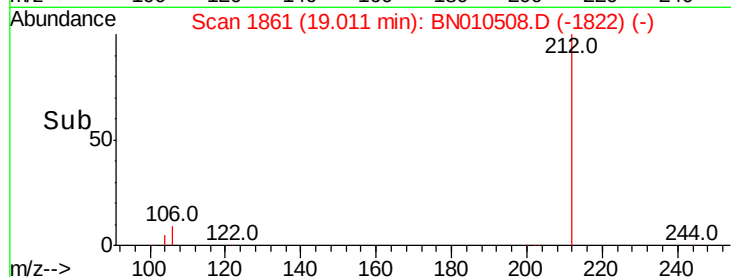
104 5.8 4.5 6.7



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: 0.103 ng

RT: 19.04 min Scan# 1867

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

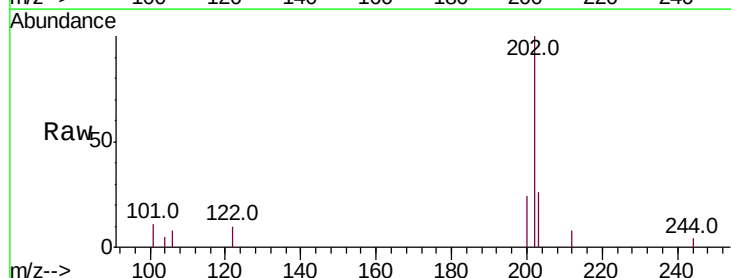
Tgt Ion:202 Resp: 7886

Ion Ratio Lower Upper

202 100

101 11.5 6.9 10.3#

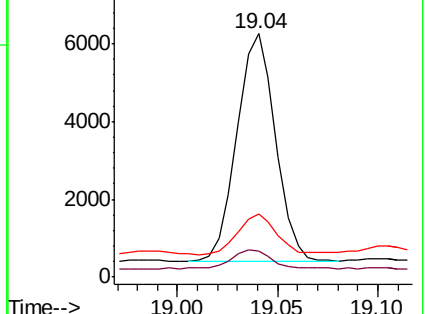
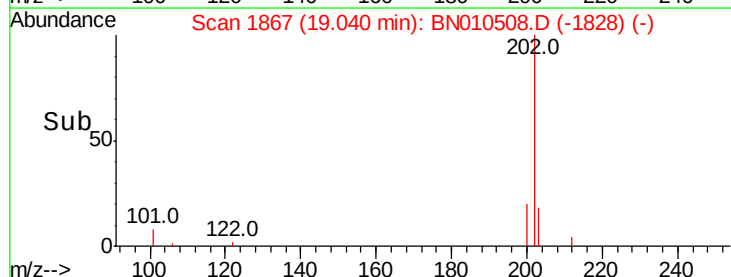
203 17.6 13.9 20.9

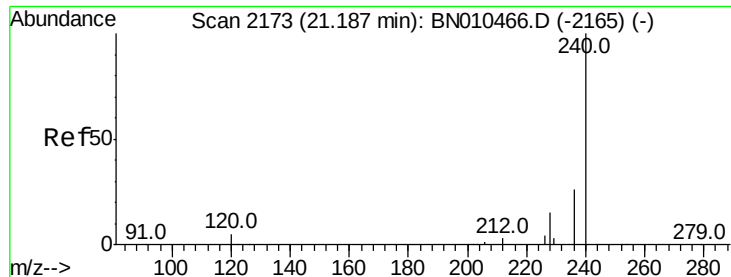


Abundance Ion 202.00 (201.70 to 202.70): E

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: 21.18 min Scan# 2172

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

Instrument :

BNA\_N

ClientSampleId :

MW-2FRE

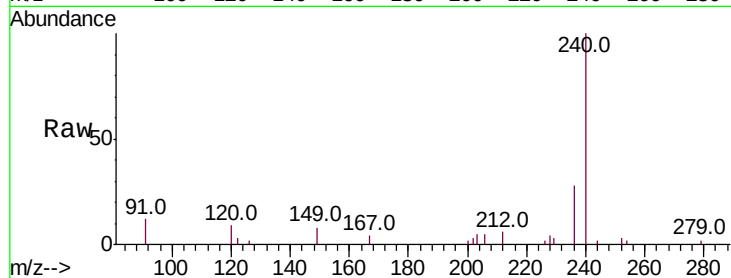
Tot Ion:240 Resp: 23864

Ion Ratio Lower Upper

240 100

120 8.8 4.8 7.2#

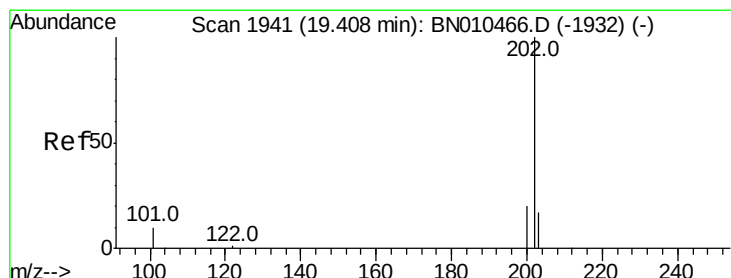
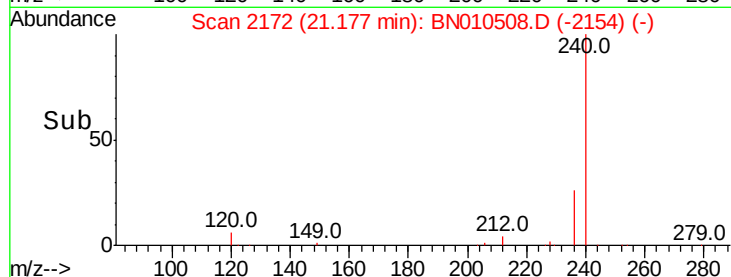
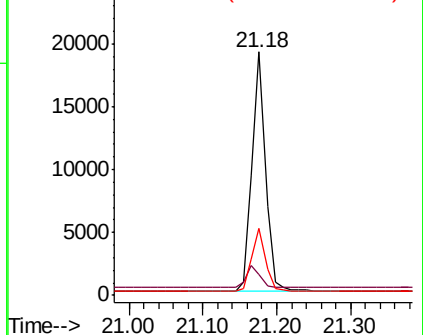
236 27.5 21.4 32.0



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: 1.922 ng

RT: 19.40 min Scan# 1940

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

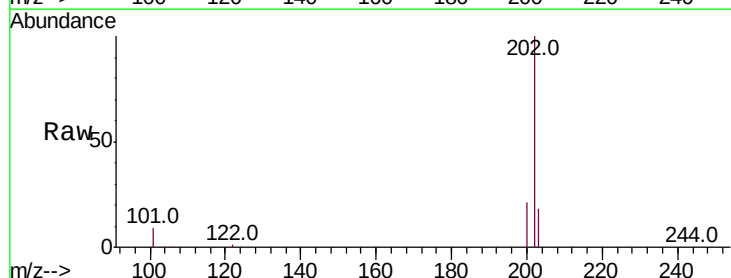
Tgt Ion:202 Resp: 154411

Ion Ratio Lower Upper

202 100

200 20.6 16.3 24.5

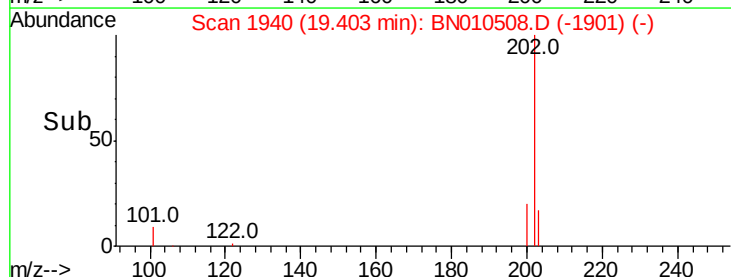
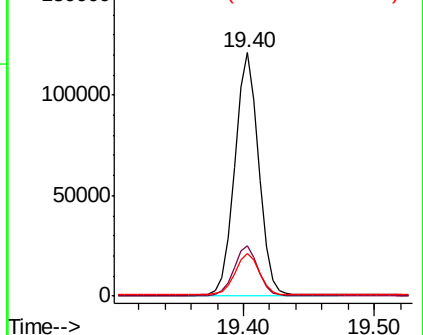
203 17.6 14.0 21.0

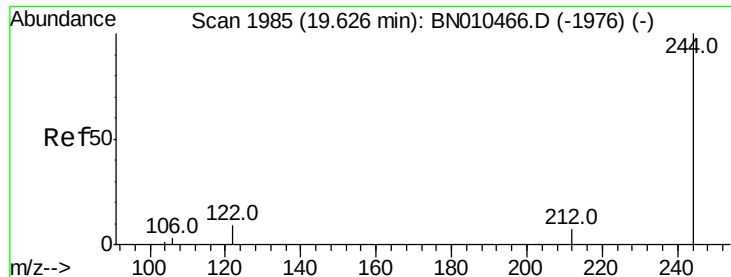


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#29

Terphenyl-d14

Concen: 0.849 ng

RT: 19.62 min Scan# 1984

Delta R.T. -0.00 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

Instrument :

BNA\_N

ClientSampleId :

MW-2FRE

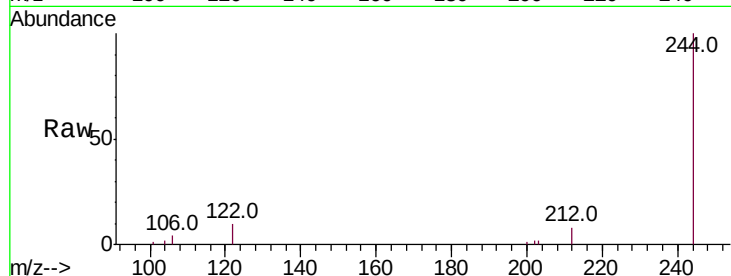
Tot Ion:244 Resp: 46397

Ion Ratio Lower Upper

244 100

212 8.1 6.2 9.4

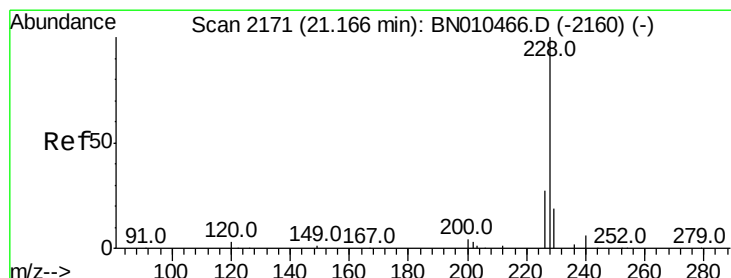
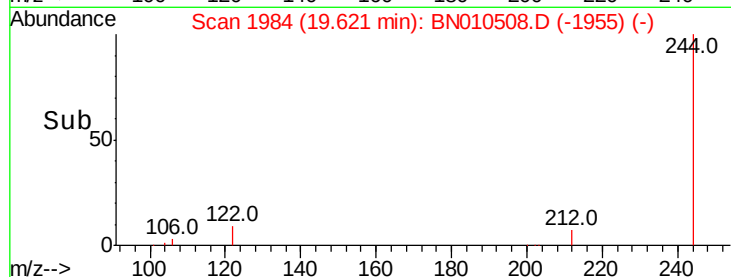
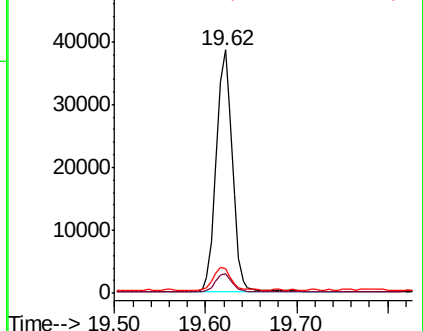
122 10.3 7.8 11.8



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: 0.027 ng

RT: 21.16 min Scan# 2170

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

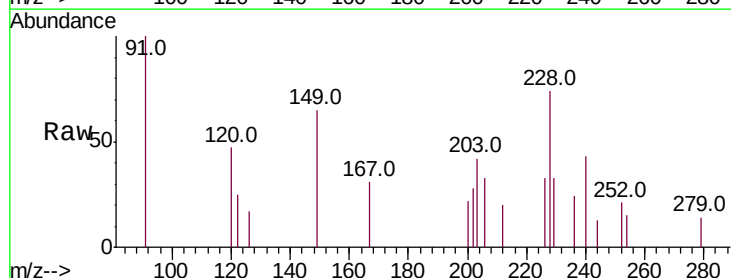
Tgt Ion:228 Resp: 2077

Ion Ratio Lower Upper

228 100

226 44.3 21.7 32.5#

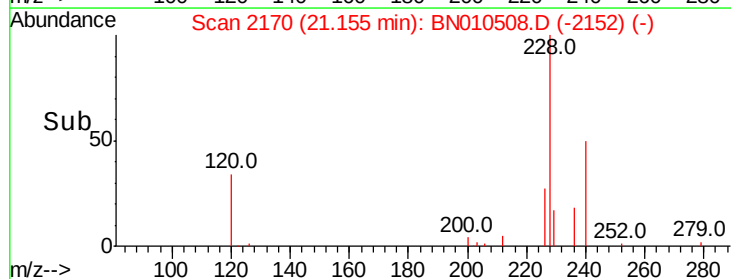
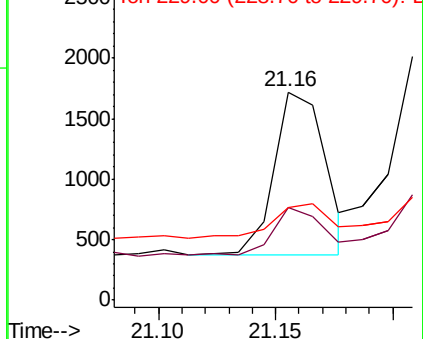
229 44.5 15.6 23.4#

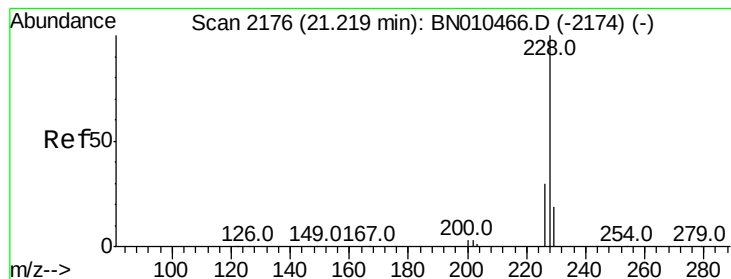


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#31

Chrysene

Concen: 0.030 ng

RT: 21.21 min Scan# 2175

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

Instrument :

BNA\_N

ClientSampleId :

MW-2FRE

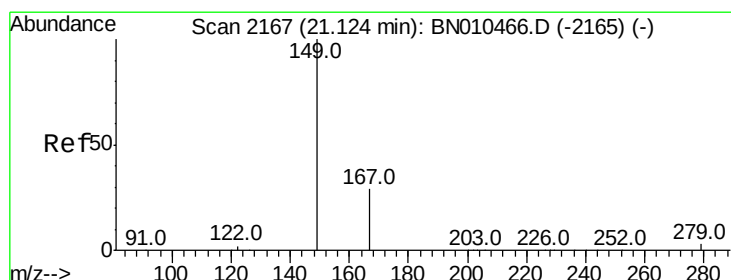
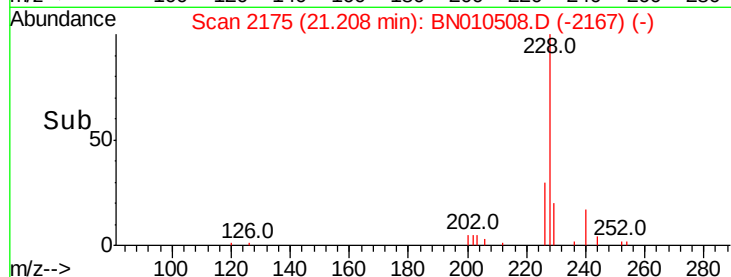
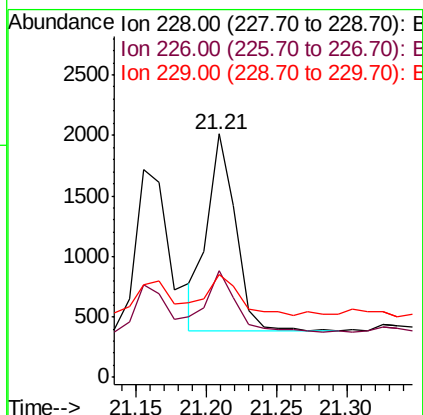
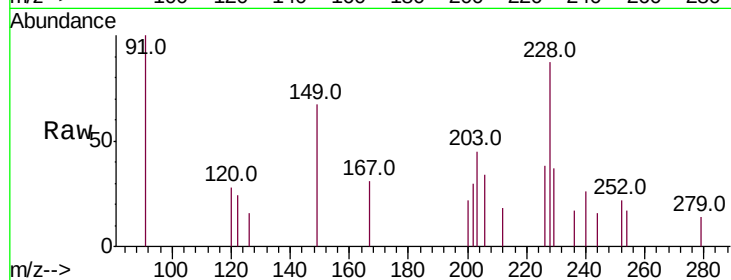
Tot Ion:228 Resp: 2298

Ion Ratio Lower Upper

228 100

226 43.6 24.0 36.0#

229 42.4 15.8 23.6#



#32

Bis(2-ethylhexyl)phthalate

Concen: 0.063 ng

RT: 21.11 min Scan# 2166

Delta R.T. -0.01 min

Lab File: BN010508.D

Acq: 15 Apr 2020 15:11

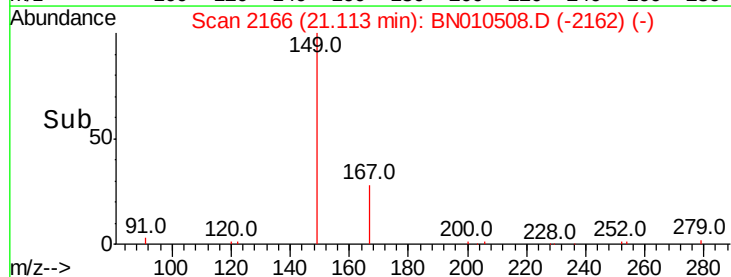
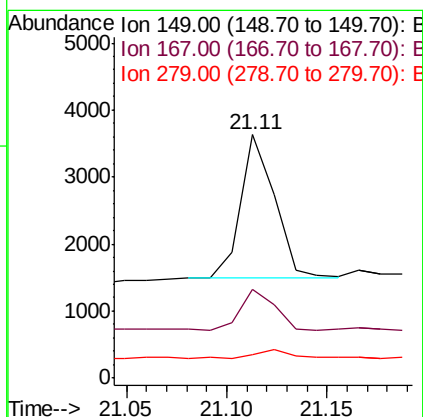
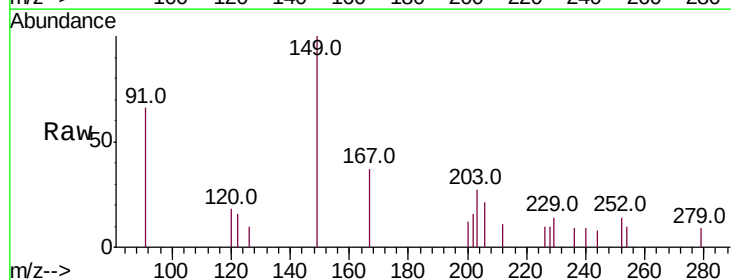
Tgt Ion:149 Resp: 2528

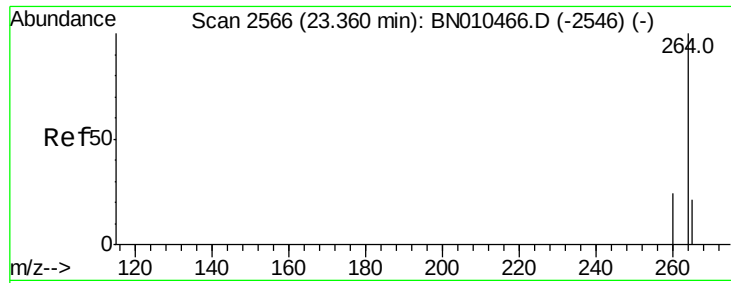
Ion Ratio Lower Upper

149 100

167 29.3 23.4 35.0

279 5.9 4.0 6.0



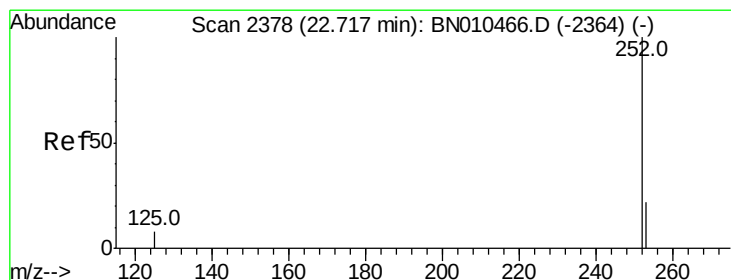
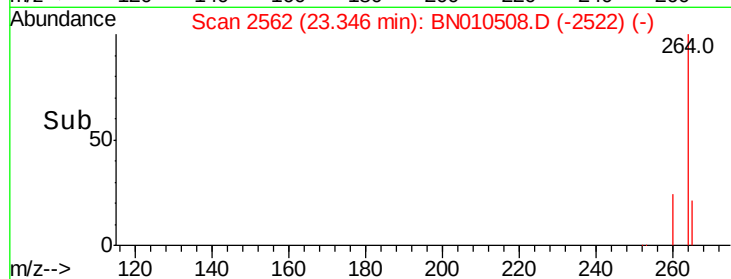
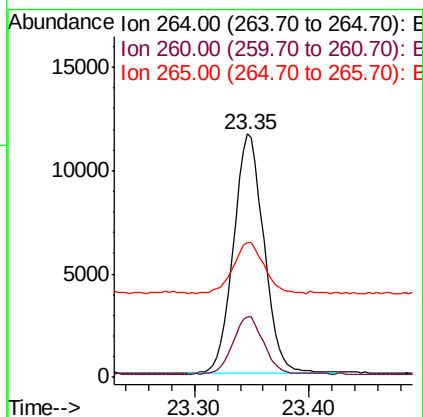
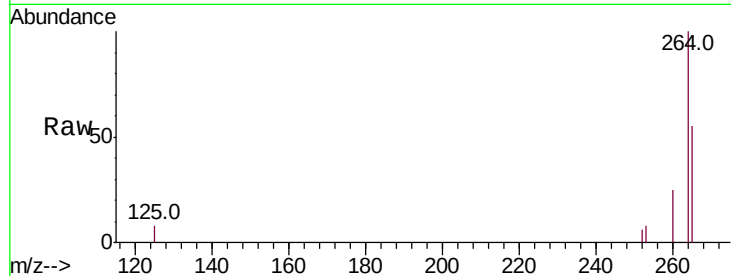


#34  
Pervlene-d12  
Concen: 0.400 ng  
RT: 23.35 min Scan# 2562  
Delta R.T. -0.01 min  
Lab File: BN010508.D  
Acq: 15 Apr 2020 15:11

Instrument :  
BNA\_N  
ClientSampleId :  
MW-2FRE

Tot Ion:264 Resp: 21243  

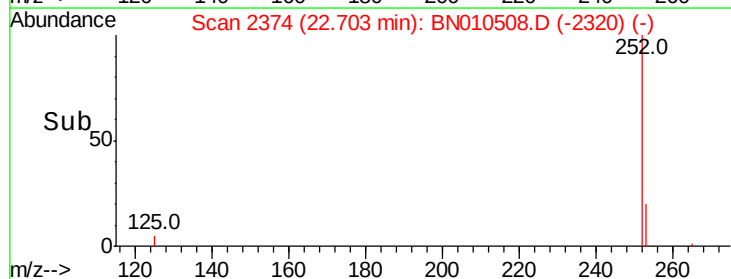
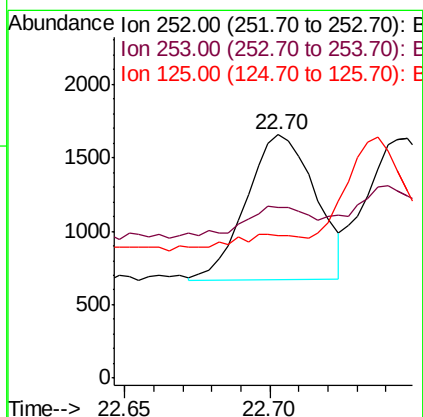
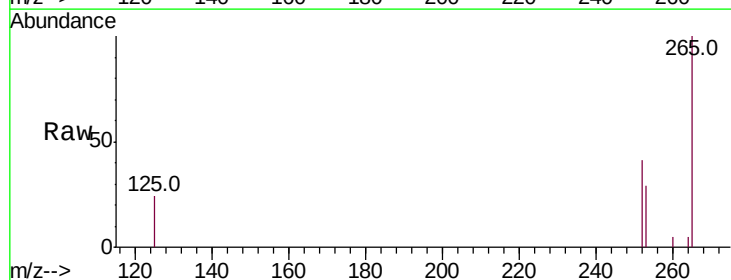
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 24.9  | 19.8  | 29.8  |
| 265 | 55.3  | 42.3  | 63.5  |

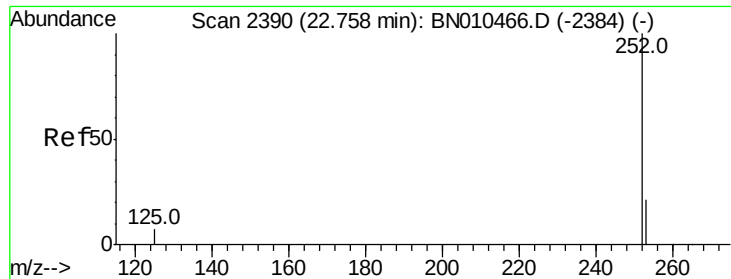


#35  
Benzo(b)fluoranthene  
Concen: 0.023 ng  
RT: 22.70 min Scan# 2374  
Delta R.T. -0.01 min  
Lab File: BN010508.D  
Acq: 15 Apr 2020 15:11

Tgt Ion:252 Resp: 1633  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 70.1  | 20.2  | 30.4# |
| 125 | 58.6  | 9.2   | 13.8# |

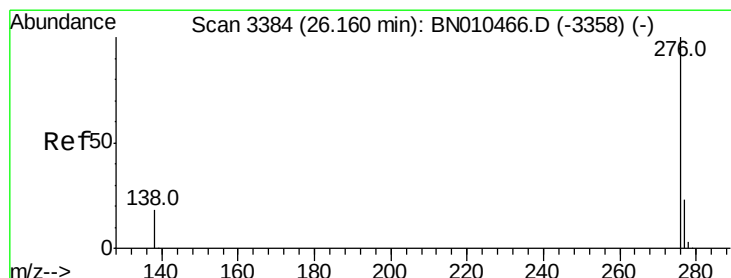
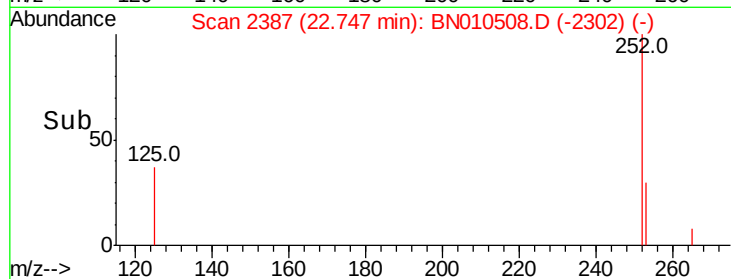
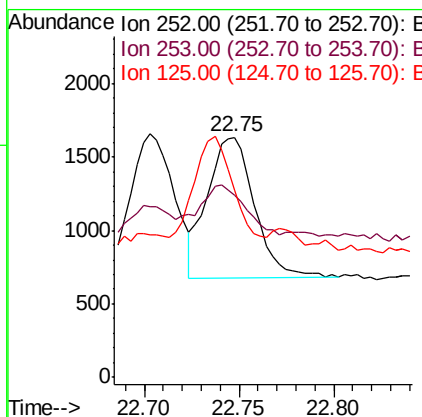
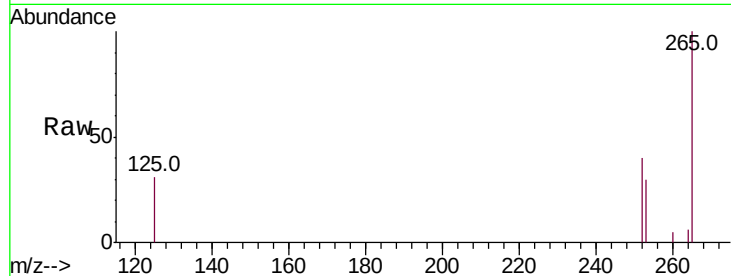




#36  
Benzo(k)fluoranthene  
Concen: 0.024 ng  
RT: 22.75 min Scan# 2387  
Delta R.T. -0.01 min  
Lab File: BN010508.D  
Acq: 15 Apr 2020 15:11

Instrument :  
BNA\_N  
ClientSampleId :  
MW-2FRE

Tot Ion:252 Resp: 1662  
Ion Ratio Lower Upper  
252 100  
253 76.2 20.1 30.1#  
125 78.0 9.6 14.4#



#39  
Benzo(g,h,i)perylene  
Concen: 0.023 ng  
RT: 26.14 min Scan# 3379  
Delta R.T. -0.02 min  
Lab File: BN010508.D  
Acq: 15 Apr 2020 15:11

Tgt Ion:276 Resp: 1286  
Ion Ratio Lower Upper  
276 100  
277 44.2 20.2 30.2#  
138 41.7 15.4 23.2#

