

Data Path : Z:\HPCHEM1\BNA E\DATA\BE120817\  
 Data File : BE094953.D  
 Acq On : 8 Dec 2017 17:47  
 Operator : SJ/JU  
 Sample : PB104842BL  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :

Quant Time: Dec 09 00:26:51 2017  
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-SIM-BE113017.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 01 13:33:28 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.48  | 152  | 7265     | 0.40 | ng    | 0.00     |
| 7) Naphthalene-d8         | 11.33 | 136  | 15072    | 0.40 | ng    | 0.00     |
| 13) Acenaphthene-d10      | 15.06 | 164  | 7388     | 0.40 | ng    | -0.01    |
| 19) Phenanthrene-d10      | 17.77 | 188  | 18507    | 0.40 | ng    | 0.00     |
| 27) Chrysene-d12          | 21.89 | 240  | 19773    | 0.40 | ng    | 0.00     |
| 34) Perylene-d12          | 24.56 | 264  | 16001    | 0.40 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 4) 2-Fluorophenol           | 5.95  | 112  | 3244     | 0.28 | ng    | 0.00     |
| 5) Phenol-d6                | 7.60  | 99   | 4634     | 0.27 | ng    | 0.00     |
| 8) Nitrobenzene-d5          | 9.66  | 82   | 3788     | 0.42 | ng    | 0.00     |
| 11) 2-Methylnaphthalene-d10 | 12.86 | 152  | 7004     | 0.29 | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol    | 16.53 | 330  | 425      | 0.32 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl        | 13.71 | 172  | 10943    | 0.35 | ng    | 0.00     |
| 25) Fluoranthene-d10        | 19.76 | 212  | 72098    | 0.29 | ng    | 0.00     |
| 29) Terphenyl-d14           | 20.33 | 244  | 13500    | 0.37 | ng    | 0.00     |

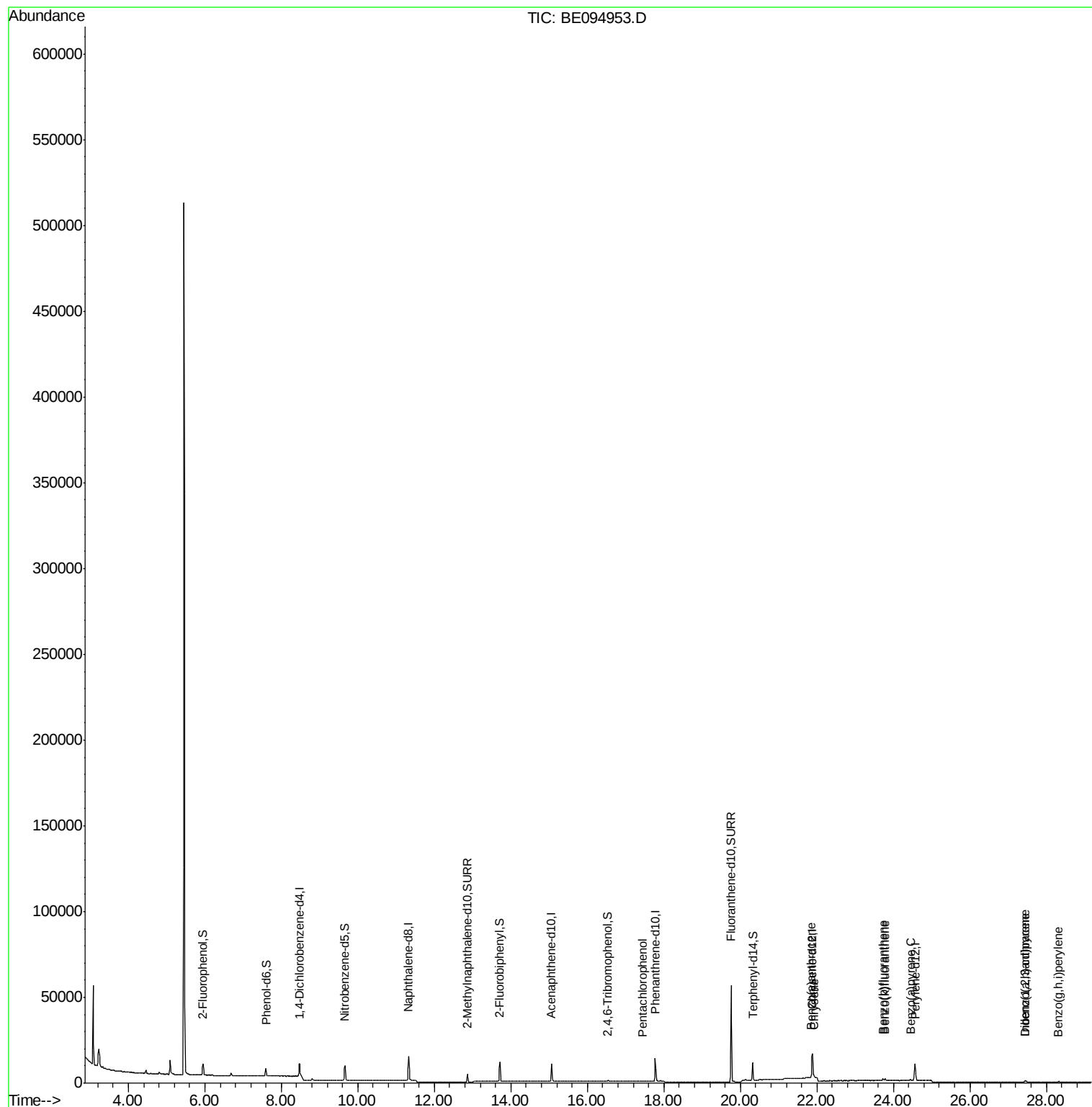
| Target Compounds           | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|----------------------------|-------|------|----------|-------|-------|--------|
| 22) Pentachlorophenol      | 17.43 | 266  | 7        | 0.135 | ng    | 96     |
| 30) Benzo(a)anthracene     | 21.85 | 228  | 1650     | 0.027 | ng    | # 66   |
| 31) Chrysene               | 21.92 | 228  | 2347     | 0.035 | ng    | # 66   |
| 33) Indeno(1,2,3-cd)pyrene | 27.43 | 276  | 1689     | 0.031 | ng    | # 86   |
| 35) Benzo(b)fluoranthene   | 23.73 | 252  | 1736     | 0.030 | ng    | # 61   |
| 36) Benzo(k)fluoranthene   | 23.78 | 252  | 1592     | 0.027 | ng    | # 62   |
| 37) Benzo(a)pyrene         | 24.44 | 252  | 1487     | 0.029 | ng    | # 66   |
| 38) Dibenzo(a,h)anthracene | 27.45 | 278  | 1409     | 0.030 | ng    | # 67   |
| 39) Benzo(g,h,i)perylene   | 28.32 | 276  | 1502     | 0.032 | ng    | # 62   |

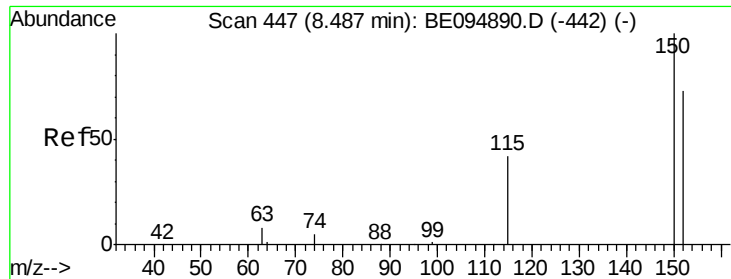
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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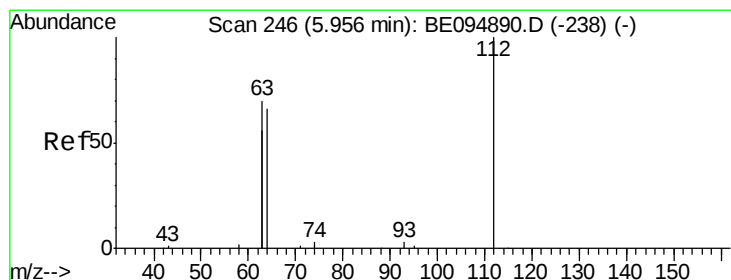
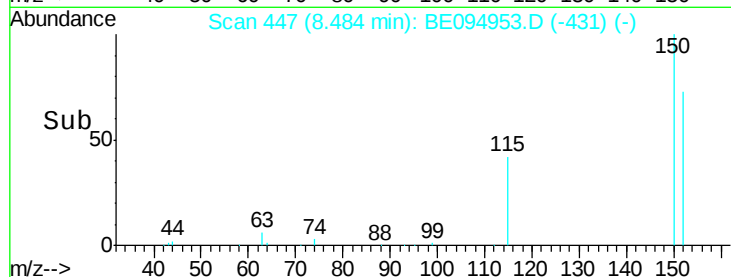
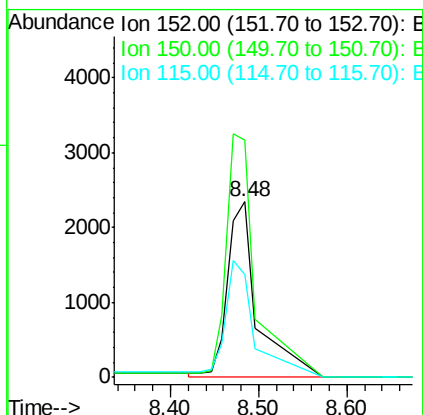
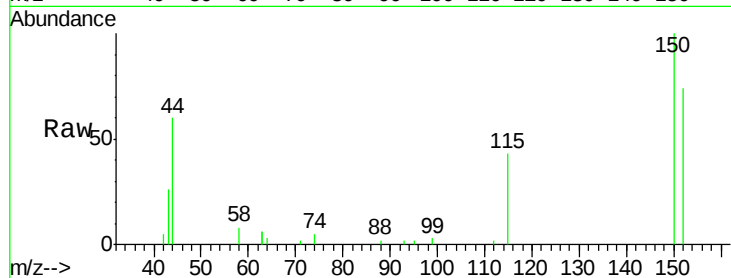


#1

1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 8.48 min Scan# 447  
Delta R.T. -0.00 min  
Lab File: BE094953.D  
Acq: 8 Dec 2017 17:47

Instrument :  
BNA\_E  
ClientSampleId :

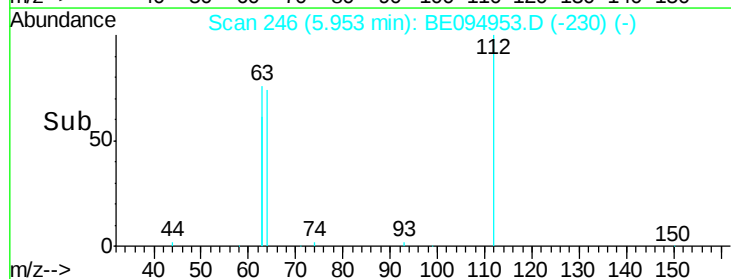
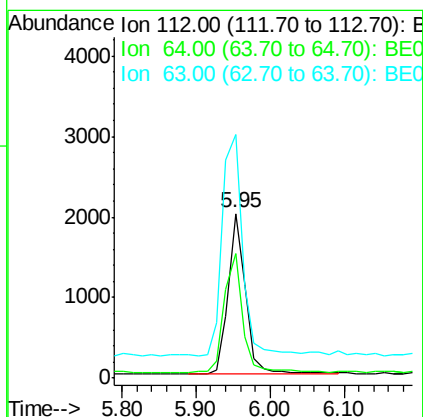
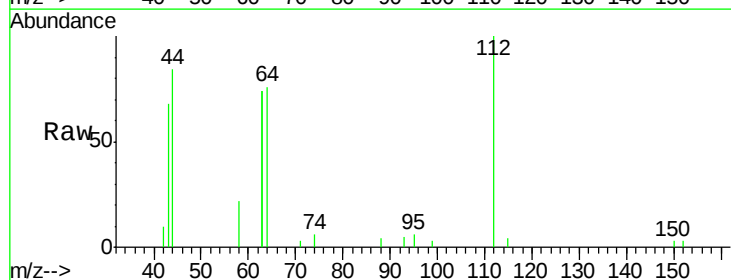
Tot Ion:152 Resp: 7265  
Ion Ratio Lower Upper  
152 100  
150 135.6 117.2 175.8  
115 58.8 57.0 85.6

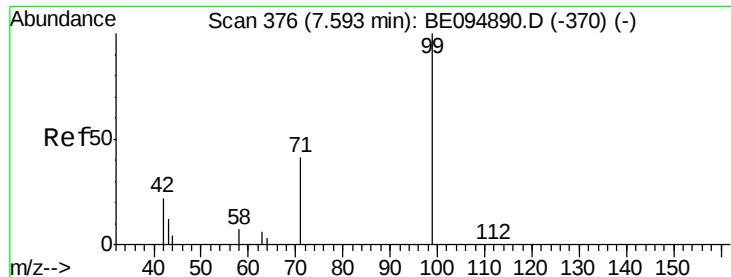


#4

2-Fluorophenol  
Concen: 0.282 ng  
RT: 5.95 min Scan# 246  
Delta R.T. -0.00 min  
Lab File: BE094953.D  
Acq: 8 Dec 2017 17:47

Tgt Ion:112 Resp: 3244  
Ion Ratio Lower Upper  
112 100  
64 78.6 60.1 90.1  
63 162.9 116.8 175.2





#5

Phenol-d6

Concen: 0.272 ng

RT: 7.60 min Scan# 377

Delta R.T. 0.01 min

Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

Instrument :

BNA\_E

ClientSampleId :

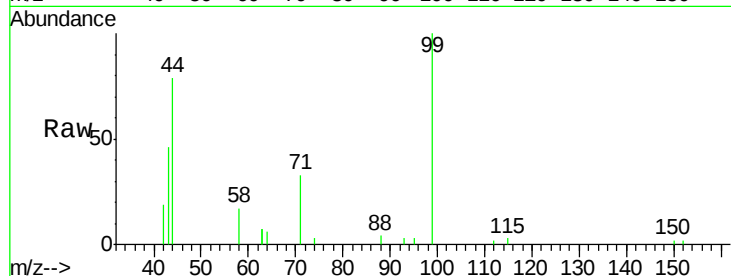
Tot Ion: 99 Resp: 4634

Ion Ratio Lower Upper

99 100

42 24.5 20.2 30.2

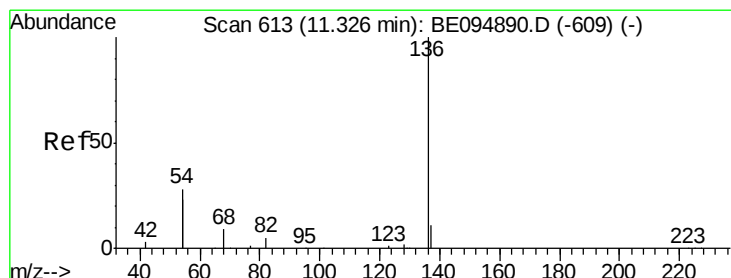
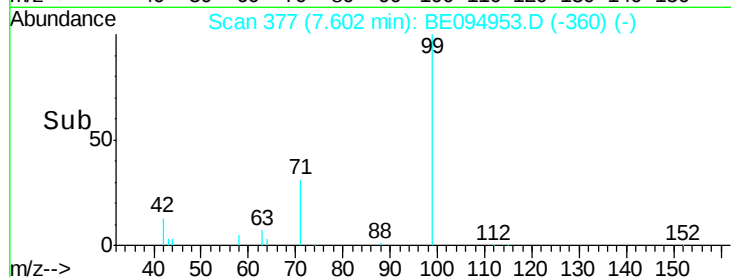
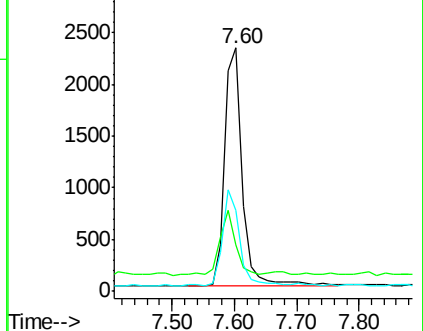
71 37.9 28.4 42.6



Abundance Ion 99.00 (98.70 to 99.70): BE0

Ion 42.00 (41.70 to 42.70): BE0

Ion 71.00 (70.70 to 71.70): BE0



#7

Naphthalene-d8

Concen: 0.400 ng

RT: 11.33 min Scan# 613

Delta R.T. -0.00 min

Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

Tgt Ion: 136 Resp: 15072

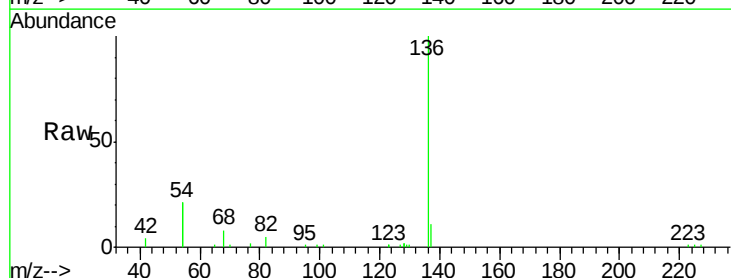
Ion Ratio Lower Upper

136 100

137 11.5 9.5 14.3

54 42.1 29.1 43.7

68 8.2 6.2 9.2

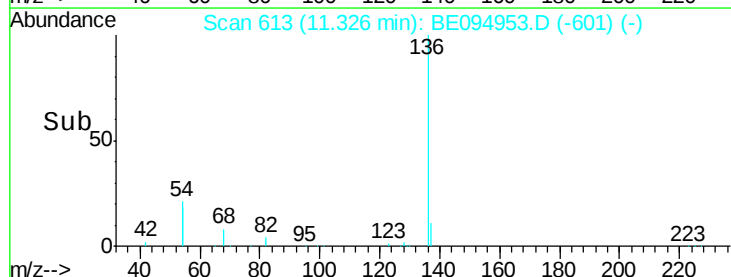
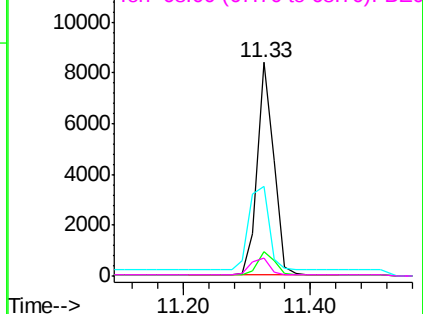


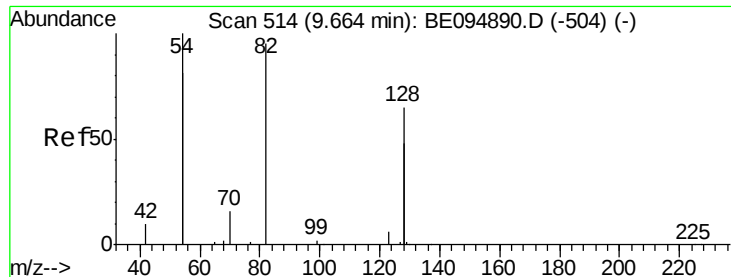
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0

Ion 68.00 (67.70 to 68.70): BE0





#8

Nitrobenzene-d5

Concen: 0.425 ng

RT: 9.66 min Scan# 514

Delta R.T. -0.00 min

Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

Instrument :

BNA\_E

ClientSampleId :

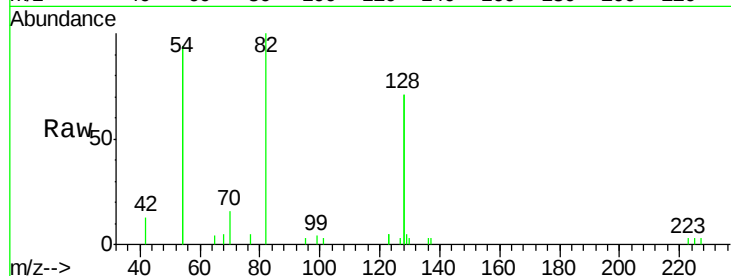
Tot Ion: 82 Resp: 3788

Ion Ratio Lower Upper

82 100

128 141.5 150.0 225.0#

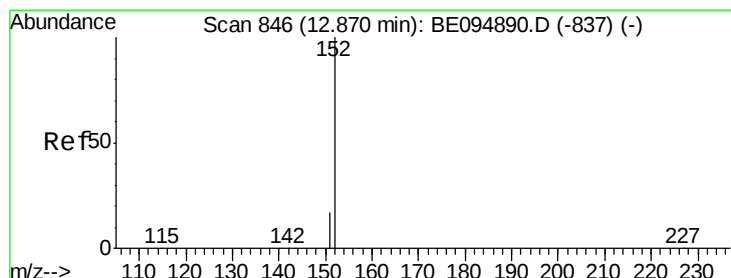
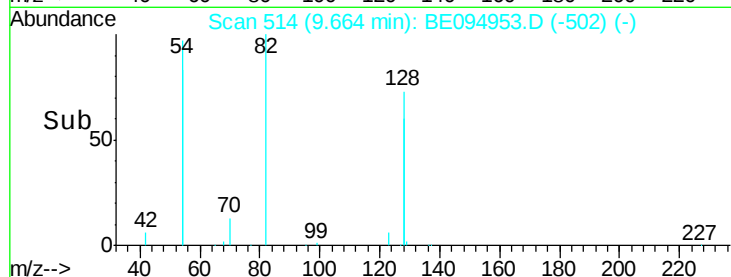
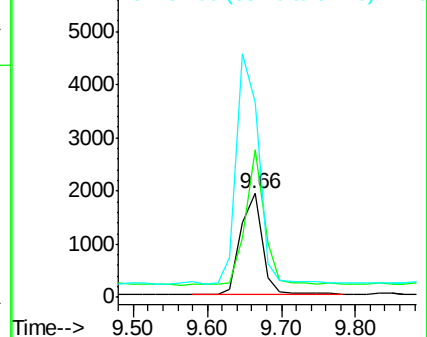
54 188.1 154.2 231.4



Abundance Ion 82.00 (81.70 to 82.70): BE0

Ion 128.00 (127.70 to 128.70): BE0

Ion 54.00 (53.70 to 54.70): BE0



#11

2-Methylnaphthalene-d10

Concen: 0.291 ng

RT: 12.86 min Scan# 845

Delta R.T. -0.01 min

Lab File: BE094953.D

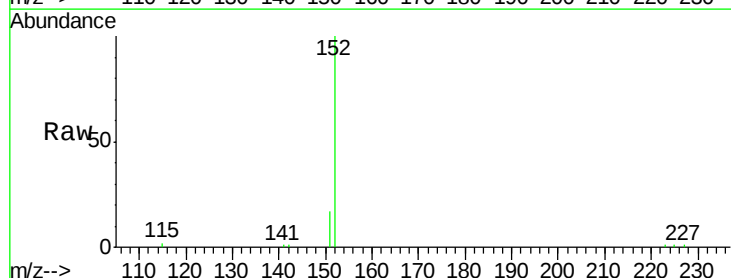
Acq: 8 Dec 2017 17:47

Tgt Ion: 152 Resp: 7004

Ion Ratio Lower Upper

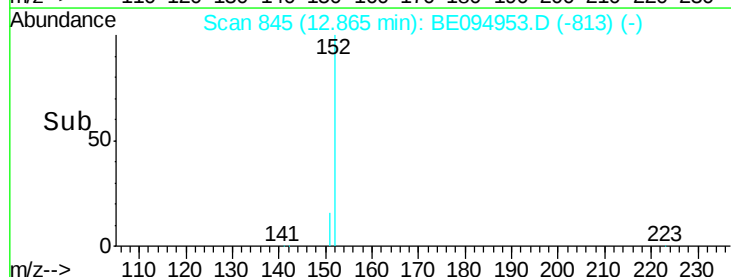
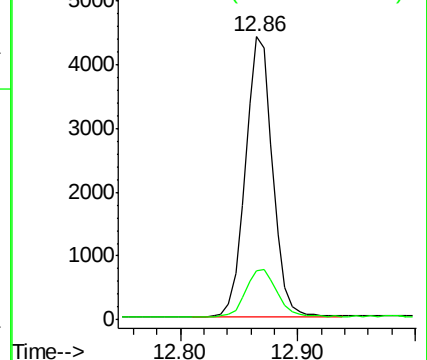
152 100

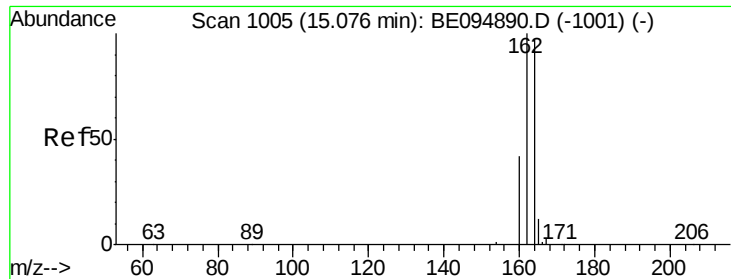
151 19.0 15.4 23.0



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

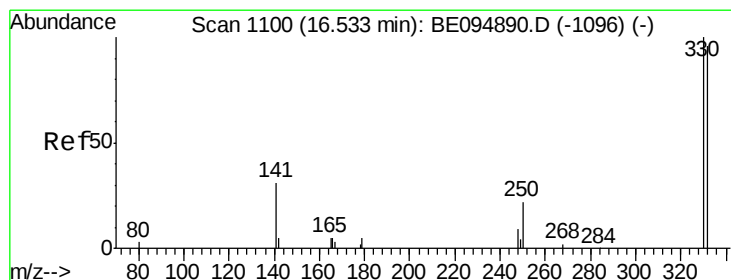
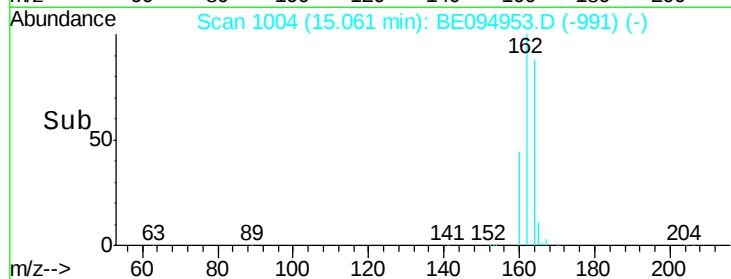
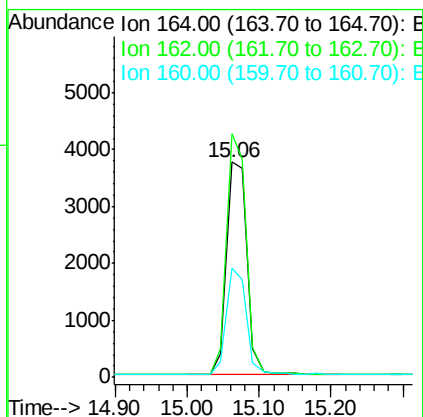
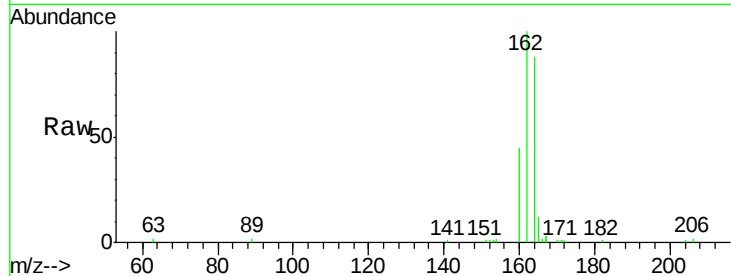




#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 15.06 min Scan# 1004  
 Delta R.T. -0.01 min  
 Lab File: BE094953.D  
 Acq: 8 Dec 2017 17:47

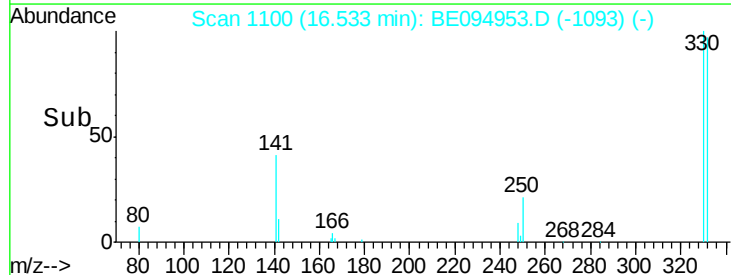
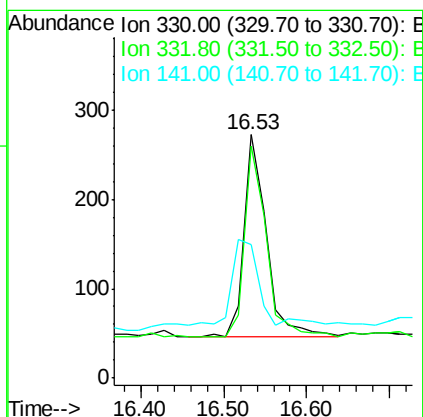
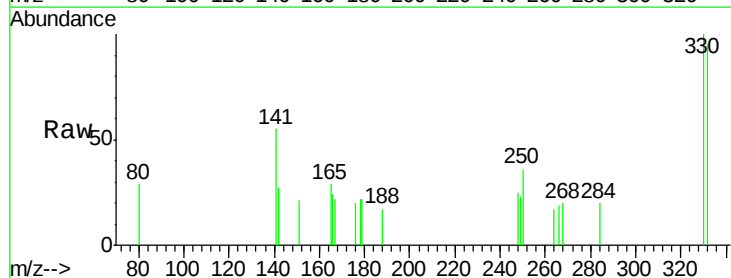
Instrument :  
 BNA\_E  
 ClientSampleId :

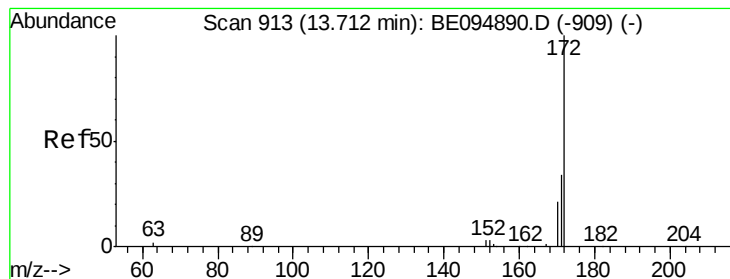
Tot Ion:164 Resp: 7388  
 Ion Ratio Lower Upper  
 164 100  
 162 113.3 83.1 124.7  
 160 50.8 37.1 55.7



#14  
 2,4,6-Tribromophenol  
 Concen: 0.320 ng  
 RT: 16.53 min Scan# 1100  
 Delta R.T. 0.00 min  
 Lab File: BE094953.D  
 Acq: 8 Dec 2017 17:47

Tgt Ion:330 Resp: 425  
 Ion Ratio Lower Upper  
 330 100  
 332 91.1 152.7 229.1#  
 141 49.6 33.7 50.5

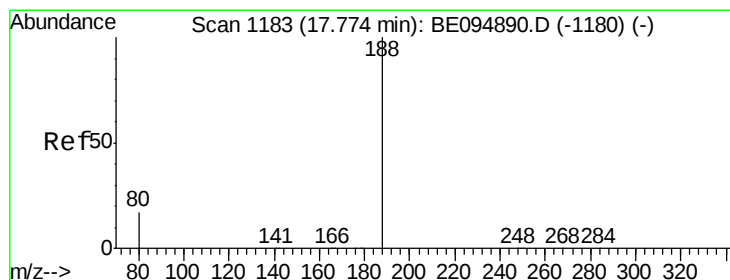
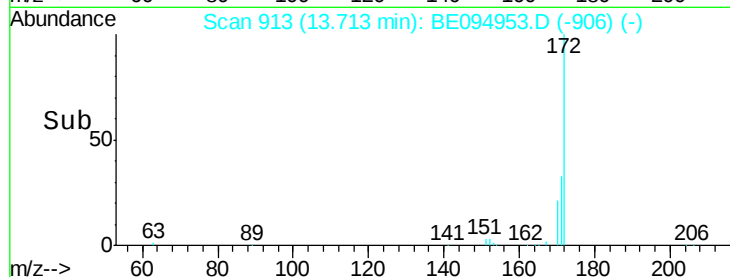
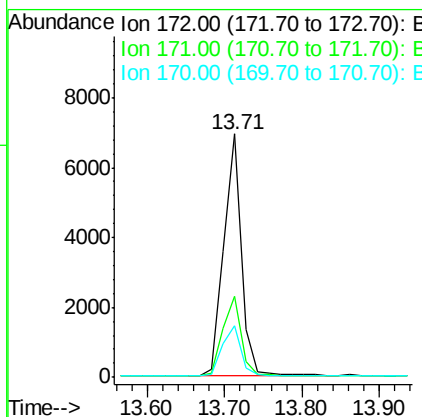
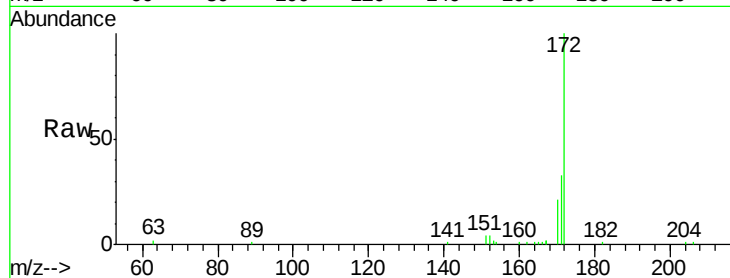




#15  
2-Fluorobiphenyl  
Concen: 0.346 ng  
RT: 13.71 min Scan# 913  
Delta R.T. 0.00 min  
Lab File: BE094953.D  
Acq: 8 Dec 2017 17:47

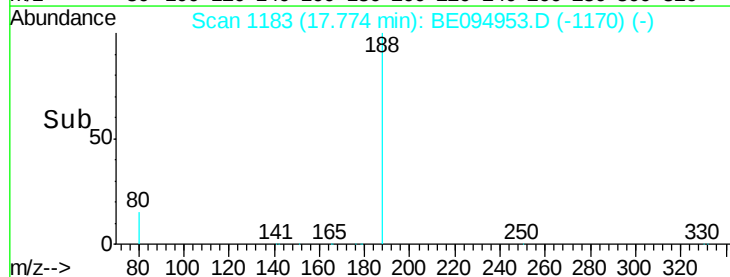
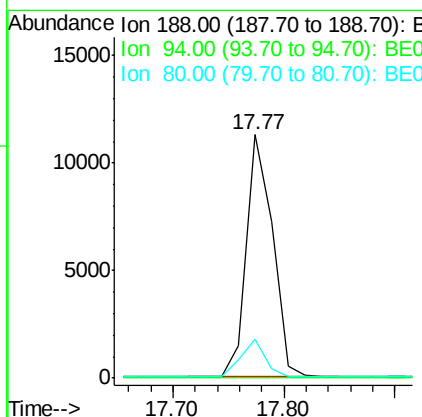
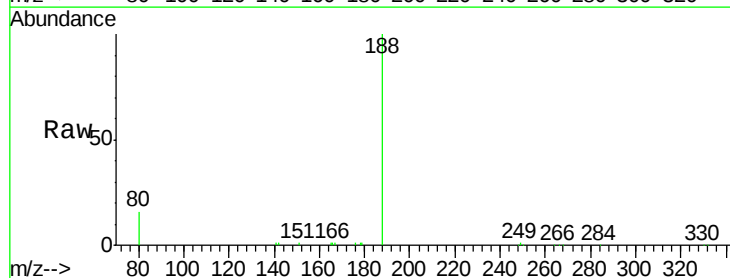
Instrument :  
BNA\_E  
ClientSampleId :

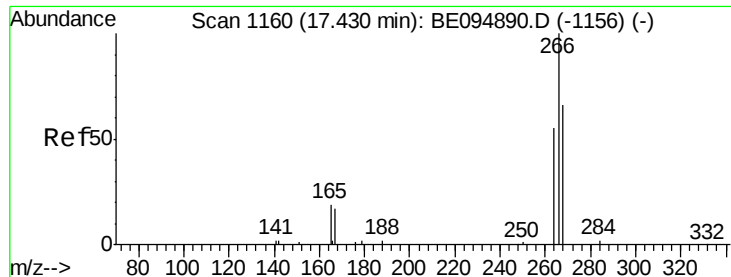
Tot Ion:172 Resp: 10943  
Ion Ratio Lower Upper  
172 100  
171 33.5 29.9 44.9  
170 21.1 21.8 32.8#



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.77 min Scan# 1183  
Delta R.T. 0.00 min  
Lab File: BE094953.D  
Acq: 8 Dec 2017 17:47

Tgt Ion:188 Resp: 18507  
Ion Ratio Lower Upper  
188 100  
94 0.0 3.9 5.9#  
80 15.9 3.6 5.4#

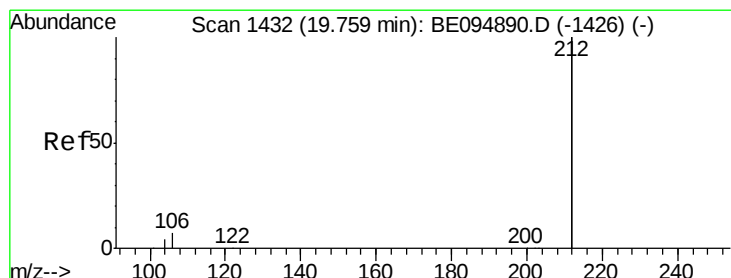
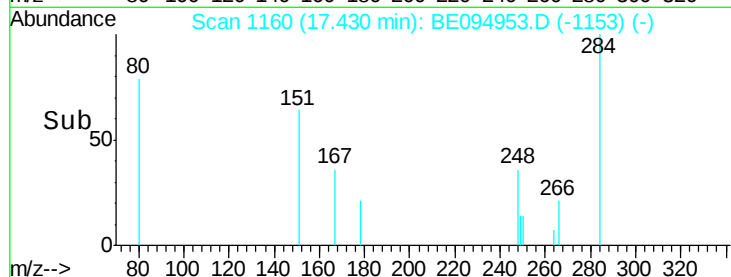
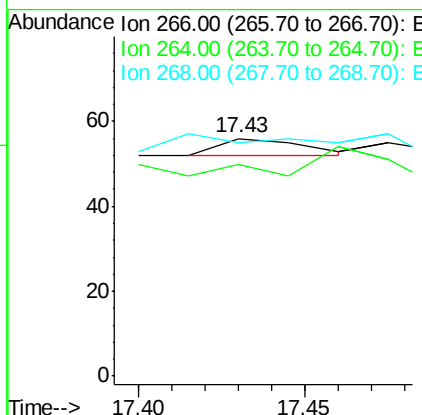
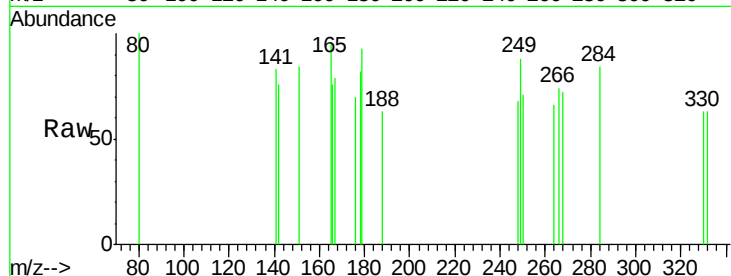




#22  
 Pentachlorophenol  
 Concen: 0.135 ng  
 RT: 17.43 min Scan# 1160  
 Delta R.T. 0.00 min  
 Lab File: BE094953.D  
 Acq: 8 Dec 2017 17:47

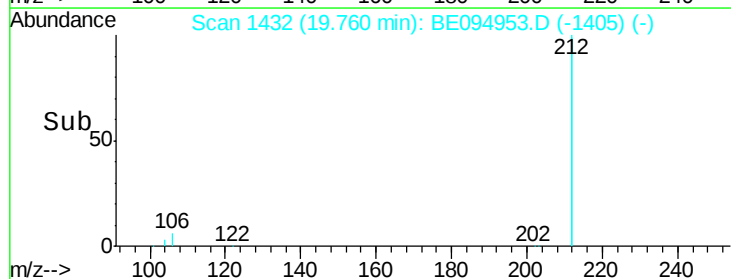
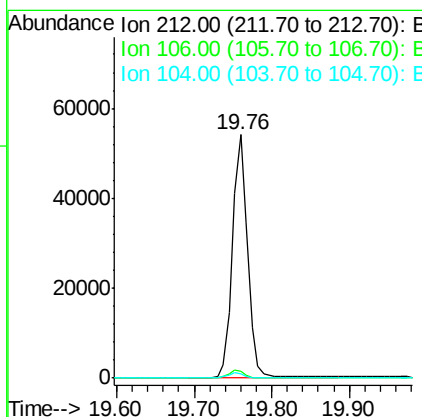
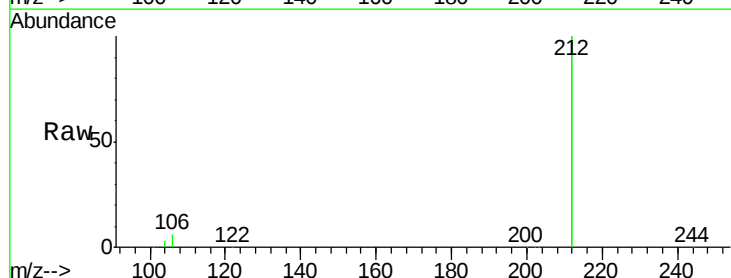
Instrument :  
 BNA\_E  
 ClientSampleId :

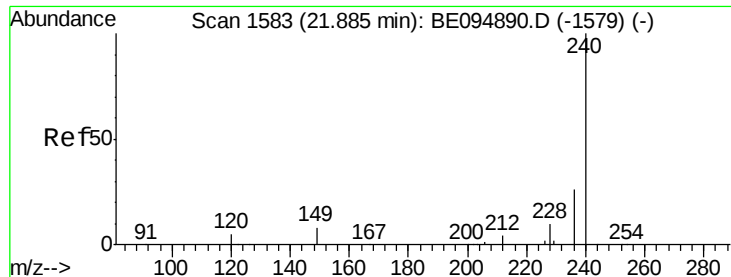
Tot Ion:266 Resp: 7  
 Ion Ratio Lower Upper  
 266 100  
 264 89.3 72.5 108.7  
 268 98.2 73.8 110.6



#25  
 Fluoranthene-d10  
 Concen: 0.285 ng  
 RT: 19.76 min Scan# 1432  
 Delta R.T. 0.00 min  
 Lab File: BE094953.D  
 Acq: 8 Dec 2017 17:47

Tgt Ion:212 Resp: 72098  
 Ion Ratio Lower Upper  
 212 100  
 106 3.3 2.8 4.2  
 104 2.0 1.6 2.4





#27

Chrysene-d12

Concen: 0.400 ng

RT: 21.89 min Scan# 1583

Delta R.T. 0.00 min

Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

Instrument :

BNA\_E

ClientSampleId :

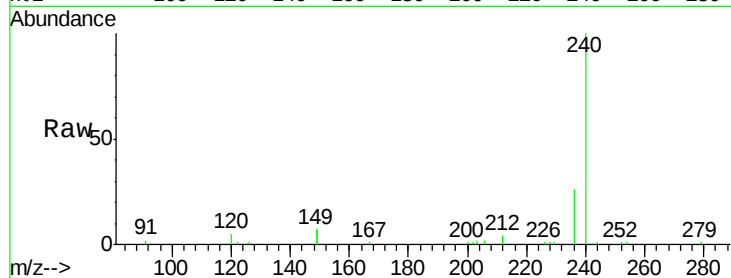
Tot Ion:240 Resp: 19773

Ion Ratio Lower Upper

240 100

120 4.8 5.5 8.3#

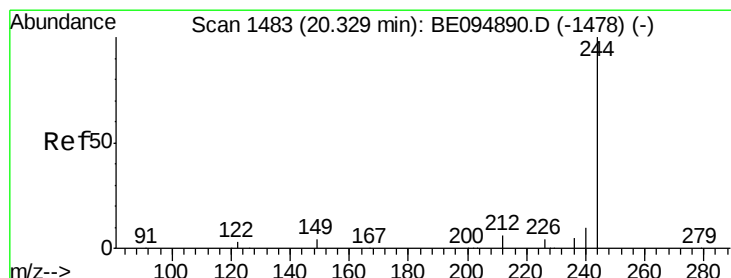
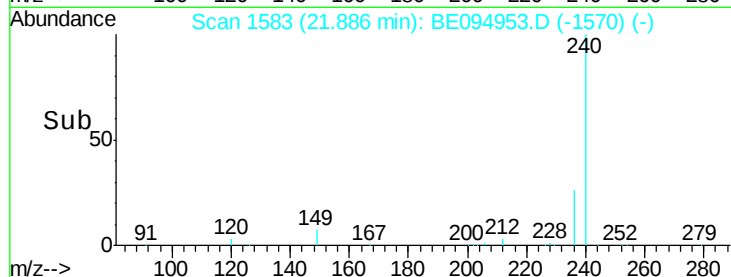
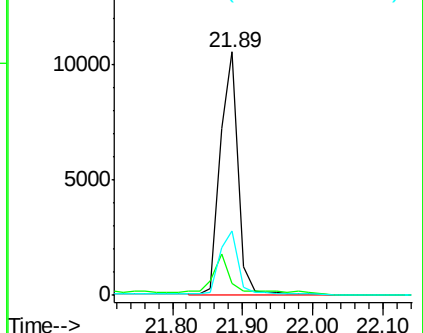
236 26.5 20.7 31.1



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



#29

Terphenyl-d14

Concen: 0.370 ng

RT: 20.33 min Scan# 1483

Delta R.T. 0.00 min

Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

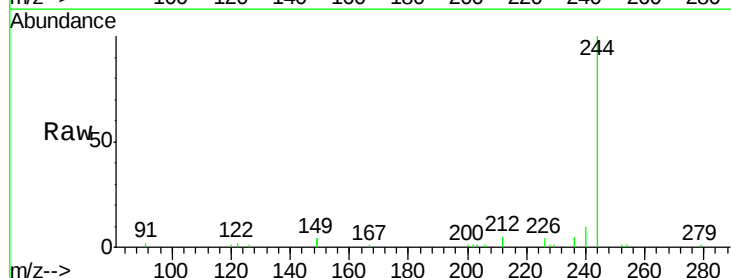
Tgt Ion:244 Resp: 13500

Ion Ratio Lower Upper

244 100

212 5.1 25.4 38.0#

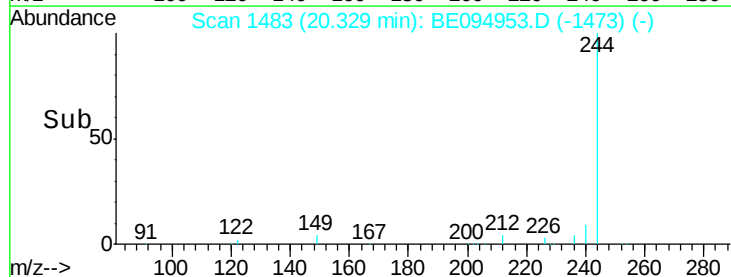
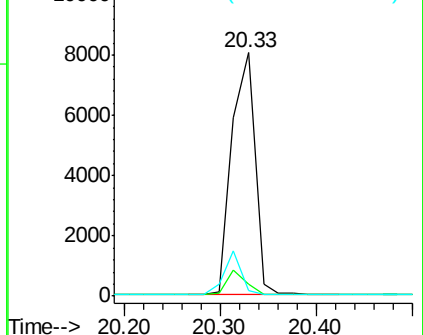
122 2.4 8.1 12.1#

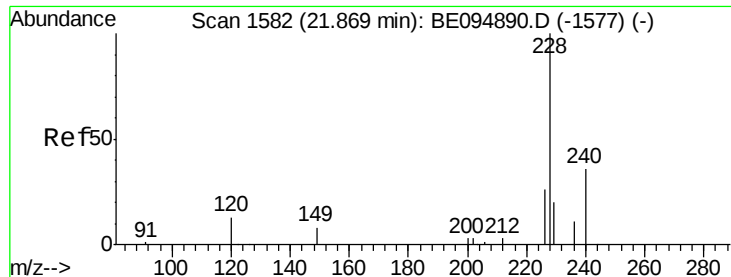


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#30

Benzo(a)anthracene

Concen: 0.027 ng

RT: 21.85 min Scan# 1581

Delta R.T. -0.02 min

Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

Instrument :

BNA\_E

ClientSampleId :

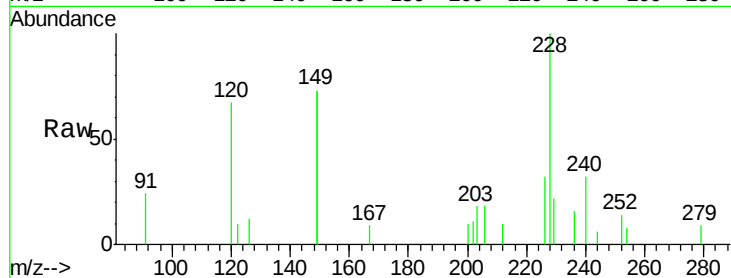
Tot Ion:228 Resp: 1650

Ion Ratio Lower Upper

228 100

226 31.7 40.0 60.0#

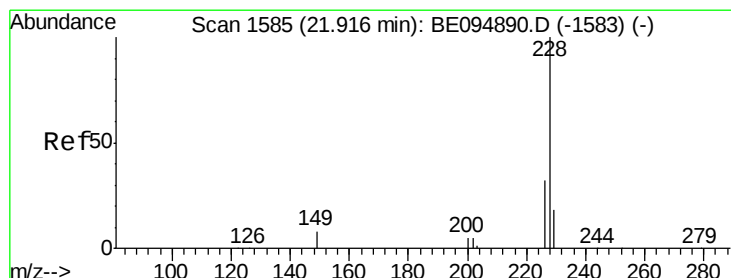
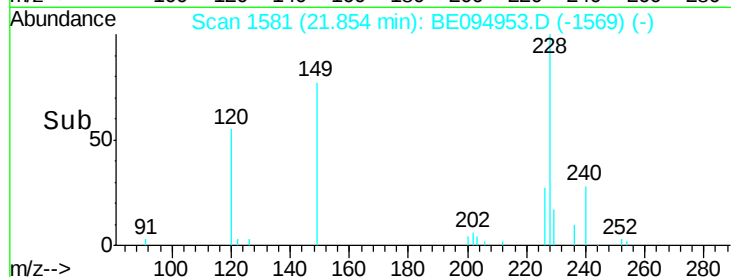
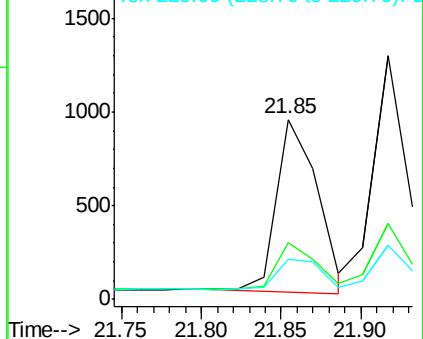
229 22.0 40.0 60.0#



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: 0.035 ng

RT: 21.92 min Scan# 1585

Delta R.T. 0.00 min

Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

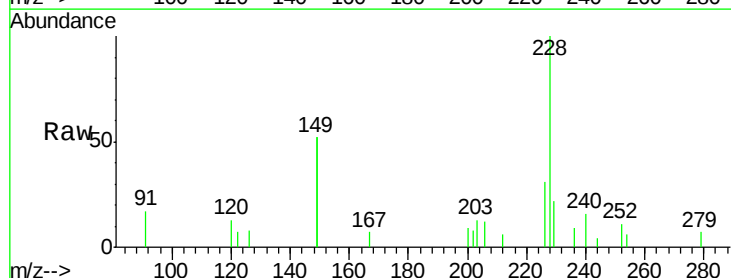
Tgt Ion:228 Resp: 2347

Ion Ratio Lower Upper

228 100

226 31.2 40.0 60.0#

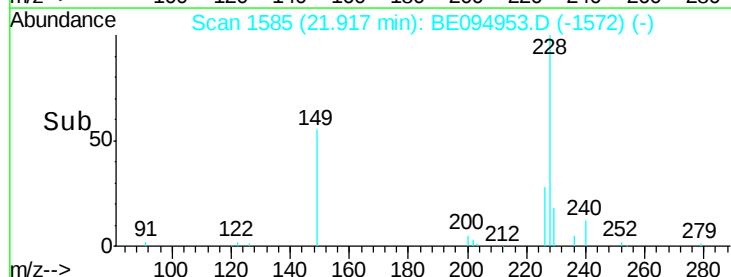
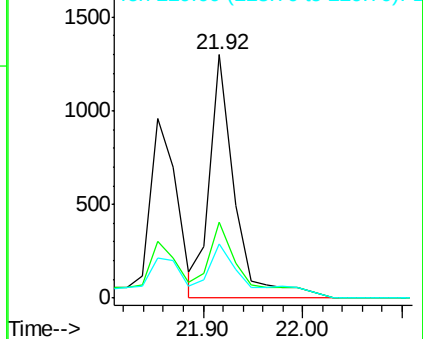
229 22.0 40.0 60.0#

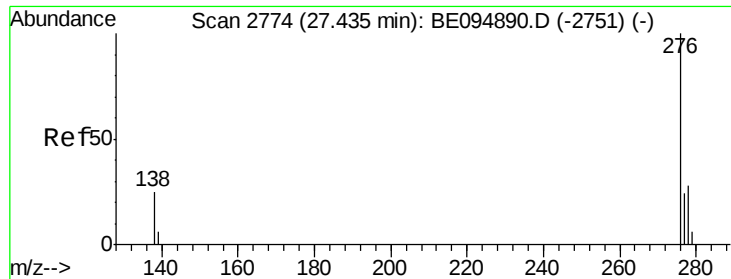


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

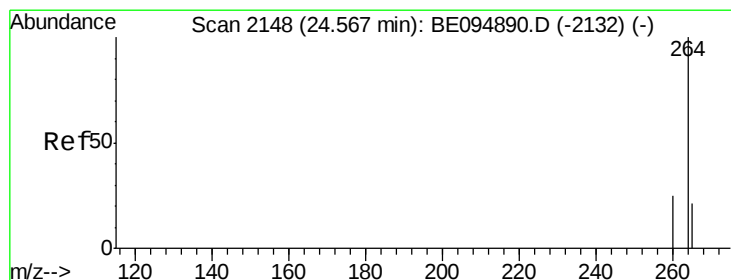
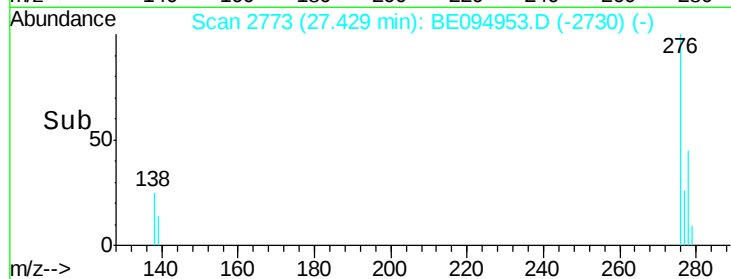
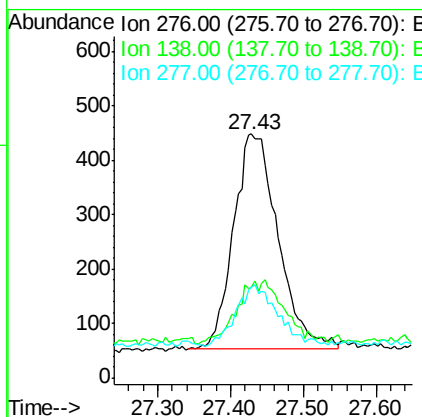
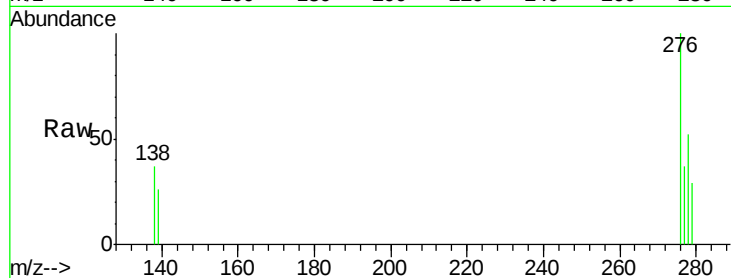




#33  
Indeno(1,2,3-cd)pyrene  
Concen: 0.031 ng  
RT: 27.43 min Scan# 2773  
Delta R.T. -0.01 min  
Lab File: BE094953.D  
Acq: 8 Dec 2017 17:47

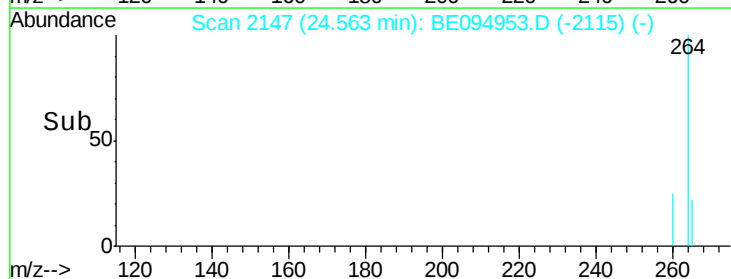
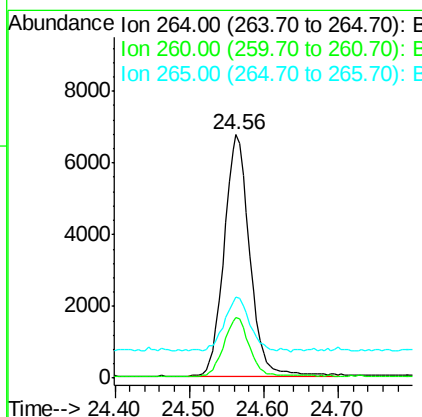
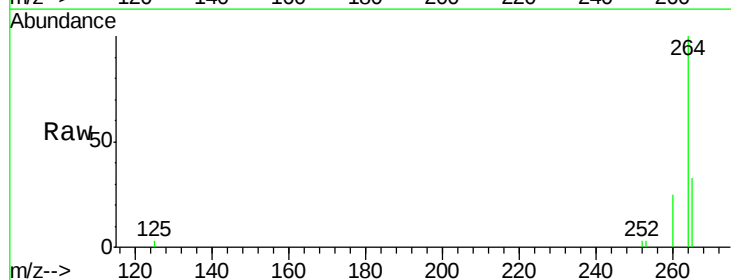
Instrument :  
BNA\_E  
ClientSampleId :

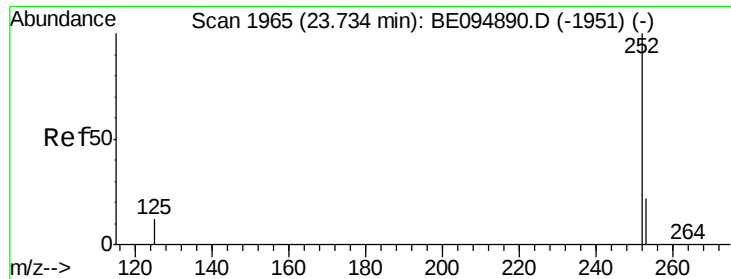
Tot Ion:276 Resp: 1689  
Ion Ratio Lower Upper  
276 100  
138 14.7 22.5 33.7#  
277 25.9 19.9 29.9



#34  
Perylene-d12  
Concen: 0.400 ng  
RT: 24.56 min Scan# 2147  
Delta R.T. -0.00 min  
Lab File: BE094953.D  
Acq: 8 Dec 2017 17:47

Tgt Ion:264 Resp: 16001  
Ion Ratio Lower Upper  
264 100  
260 25.1 20.5 30.7  
265 33.0 22.8 34.2





#35

Benzo(b)fluoranthene

Concen: 0.030 ng

RT: 23.73 min Scan# 1964

Delta R.T. -0.00 min

Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

Instrument :

BNA\_E

ClientSampleId :

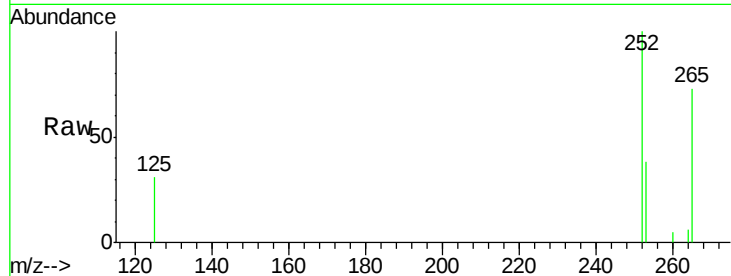
Tot Ion:252 Resp: 1736

Ion Ratio Lower Upper

252 100

253 38.3 48.0 72.0#

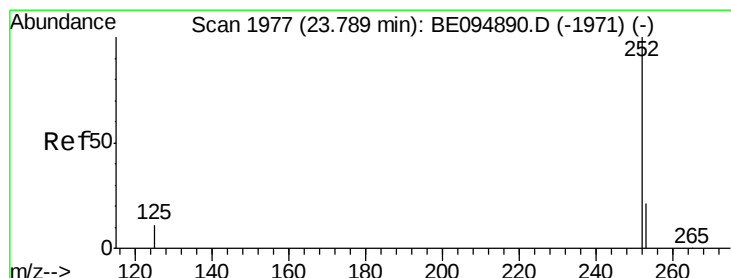
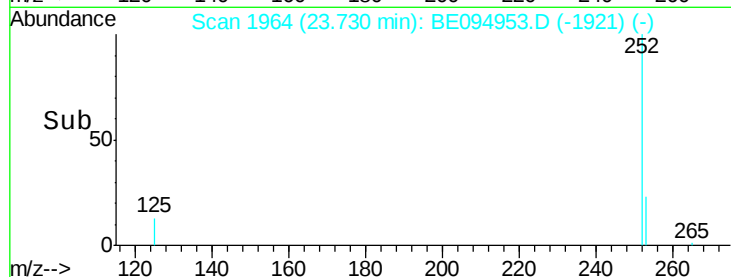
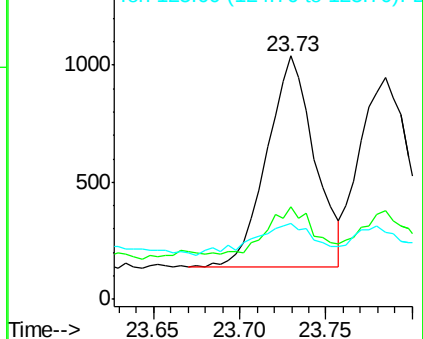
125 31.4 56.0 84.0#



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



#36

Benzo(k)fluoranthene

Concen: 0.027 ng

RT: 23.78 min Scan# 1976

Delta R.T. -0.00 min

Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

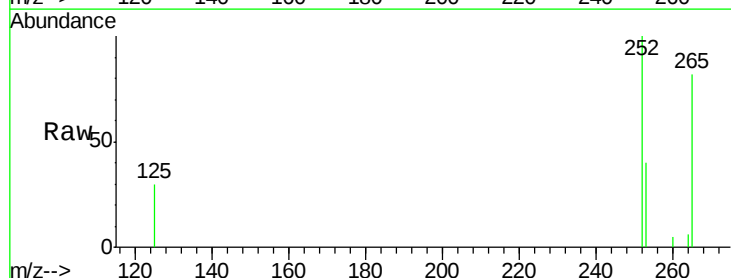
Tgt Ion:252 Resp: 1592

Ion Ratio Lower Upper

252 100

253 40.3 48.0 72.0#

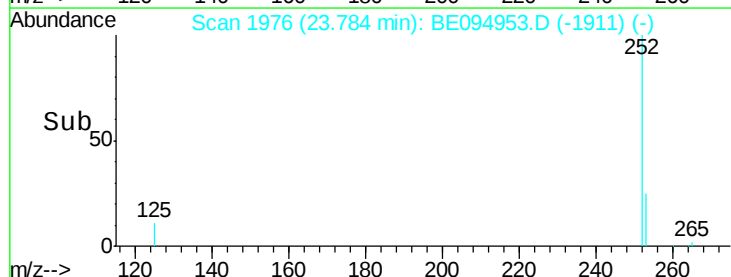
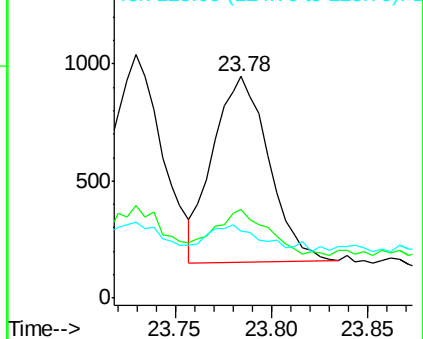
125 30.4 56.0 84.0#

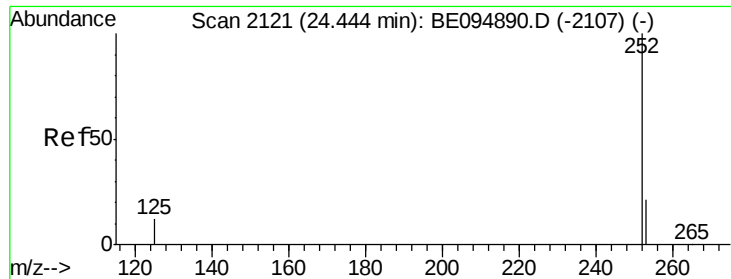


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#37

Benzo(a)pyrene

Concen: 0.029 ng

RT: 24.44 min Scan# 2120

Delta R.T. -0.00 min

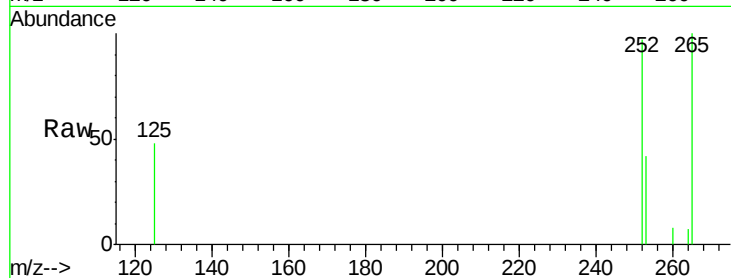
Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

Instrument :

BNA\_E

ClientSampleId :



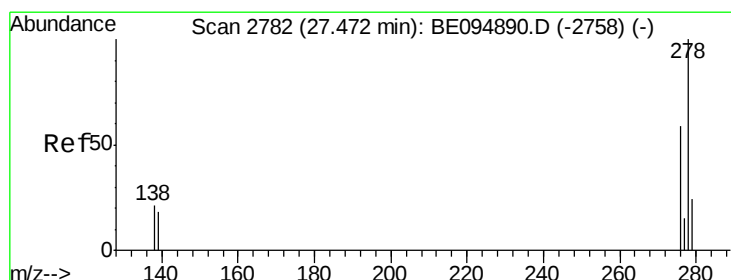
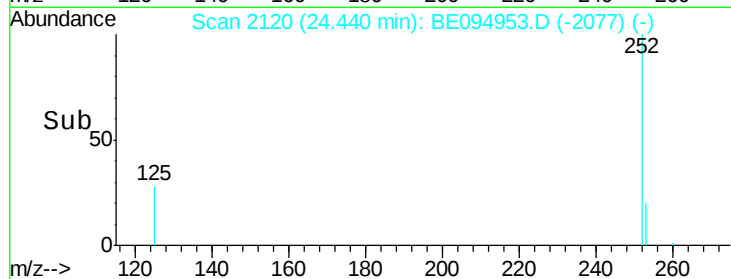
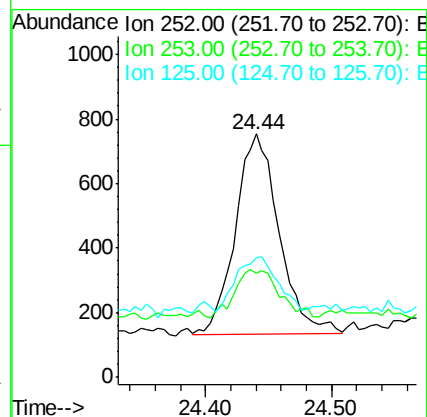
Tot Ion:252 Resp: 1487

Ion Ratio Lower Upper

252 100

253 42.7 52.0 78.0#

125 49.2 68.0 102.0#



#38

Dibenzo(a,h)anthracene

Concen: 0.030 ng

RT: 27.45 min Scan# 2778

Delta R.T. -0.02 min

Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

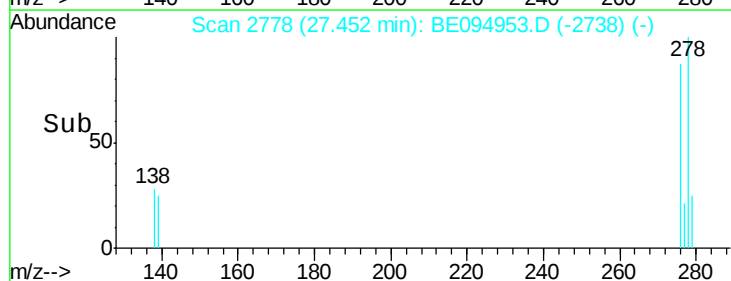
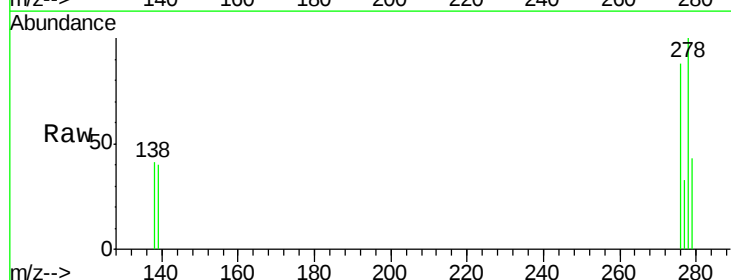
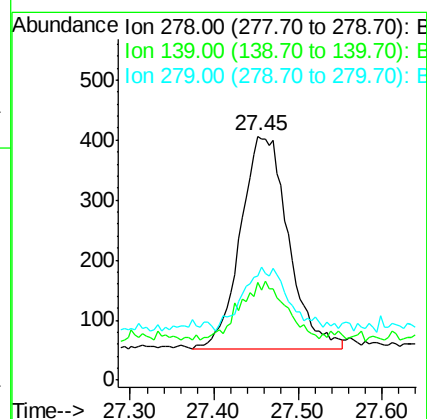
Tgt Ion:278 Resp: 1409

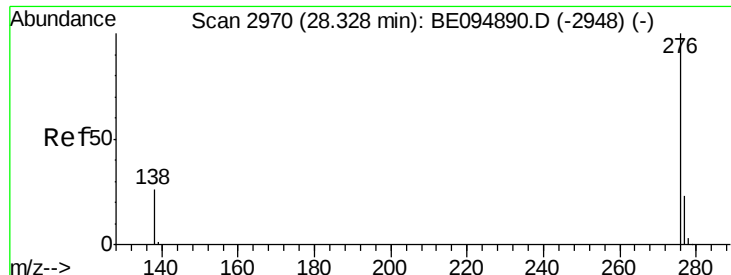
Ion Ratio Lower Upper

278 100

139 39.9 56.0 84.0#

279 42.6 52.0 78.0#





#39

Benzo(a,h,i)perylene

Concen: 0.032 ng

RT: 28.32 min Scan# 2968

Delta R.T. -0.01 min

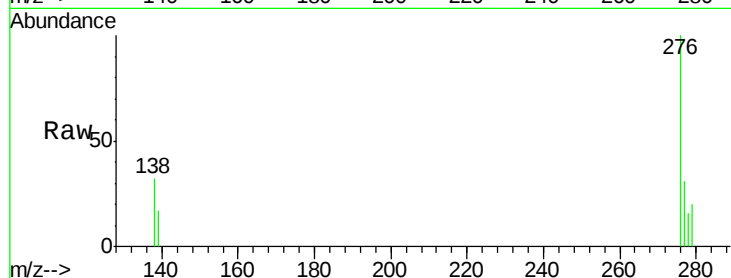
Lab File: BE094953.D

Acq: 8 Dec 2017 17:47

Instrument :

BNA\_E

ClientSampleId :



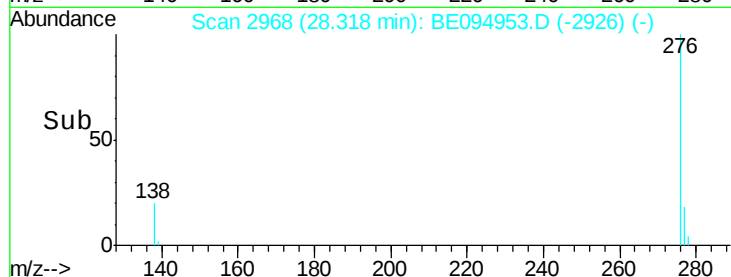
Tot Ion: 276 Resp: 1502

Ion Ratio Lower Upper

276 100

277 31.5 52.0 78.0#

138 32.0 44.0 66.0#



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

