

Data Path : Z:\HPCHEM1\BNA F\DATA\BF070517\  
 Data File : BF096500.D  
 Acq On : 5 Jul 2017 23:40  
 Operator : SJ/MA  
 Sample : I4029-05 5X  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-P4-NSW

Quant Time: Jul 06 03:44:50 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF070117.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jul 05 13:27:10 2017  
 Response via : Initial Calibration

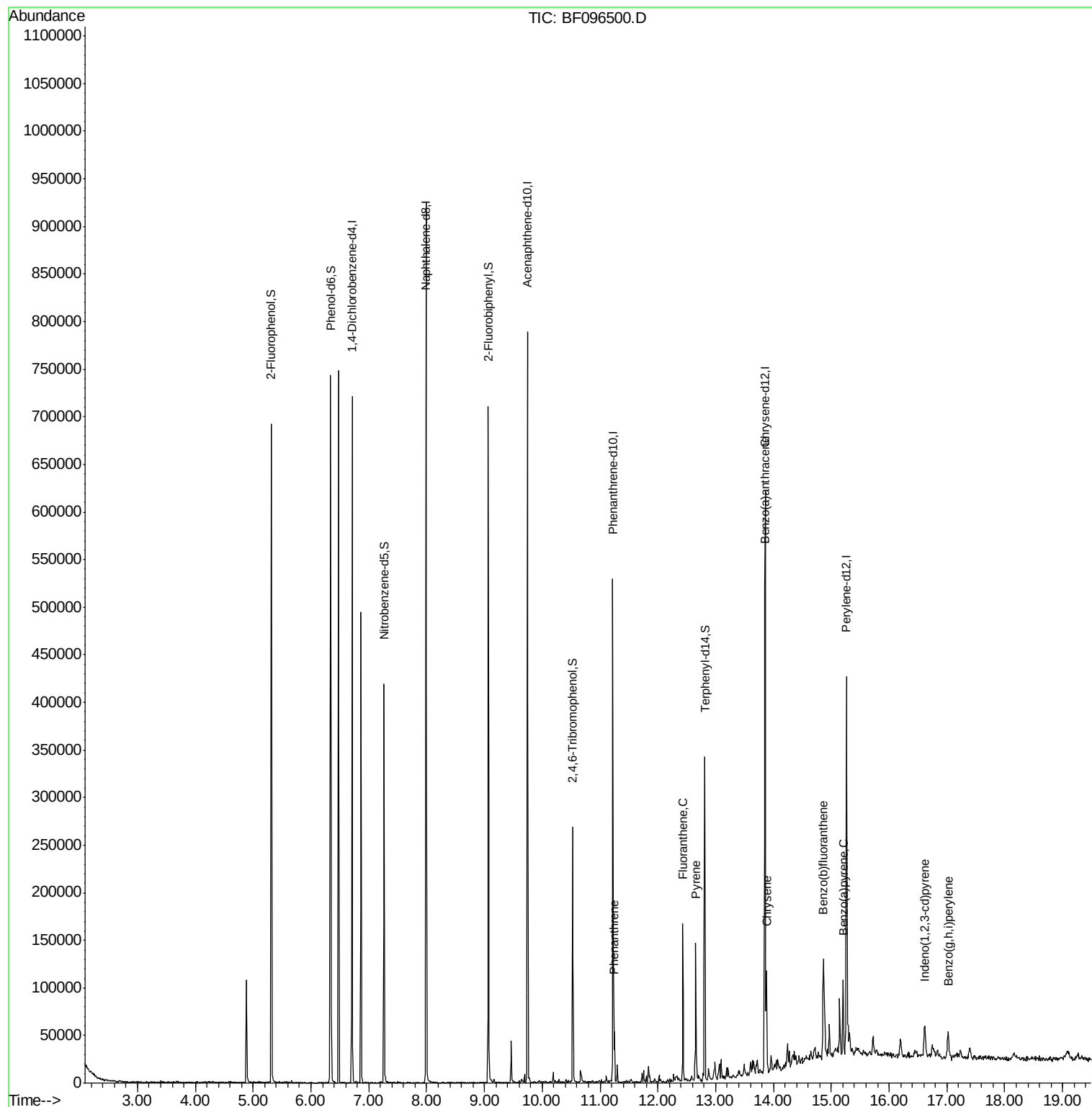
| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.71  | 152  | 96833    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 7.99  | 136  | 382095   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10        | 9.75  | 164  | 144578   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.22 | 188  | 197421   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12            | 13.86 | 240  | 183716   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12            | 15.26 | 264  | 157669   | 20.00 | ng    | -0.01    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.32  | 112  | 199010   | 30.33 | ng    | 0.00     |
| 7) Phenol-d6                | 6.34  | 99   | 207254   | 25.70 | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.26  | 82   | 110847   | 17.43 | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol    | 10.53 | 330  | 27808    | 24.62 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.07  | 172  | 199358   | 23.58 | ng    | -0.01    |
| 78) Terphenyl-d14           | 12.81 | 244  | 106195   | 12.35 | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 70) Phenanthrene            | 11.25 | 178  | 23683    | 2.22  | ng    | 99       |
| 74) Fluoranthene            | 12.43 | 202  | 62493    | 5.97  | ng    | 97       |
| 77) Pyrene                  | 12.66 | 202  | 58375    | 3.96  | ng    | 97       |
| 80) Benzo(a)anthracene      | 13.85 | 228  | 41801    | 3.93  | ng    | 96       |
| 82) Chrysene                | 13.88 | 228  | 35013    | 3.14  | ng    | 98       |
| 85) Indeno(1,2,3-cd)pyrene  | 16.62 | 276  | 21620    | 2.46  | ng    | # 95     |
| 87) Benzo(b)fluoranthene    | 14.86 | 252  | 50420m   | 5.10  | ng    |          |
| 89) Benzo(a)pyrene          | 15.20 | 252  | 38096    | 4.32  | ng    | 99       |
| 91) Benzo(g,h,i)perylene    | 17.02 | 276  | 18958    | 2.64  | ng    | 93       |

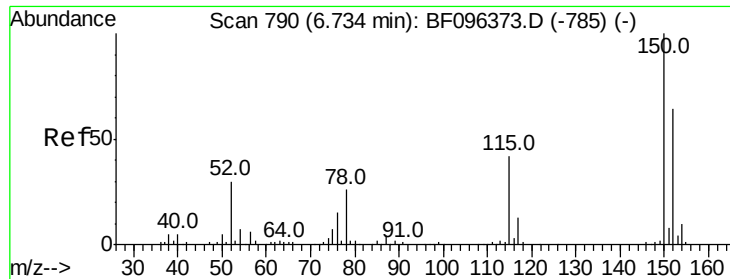
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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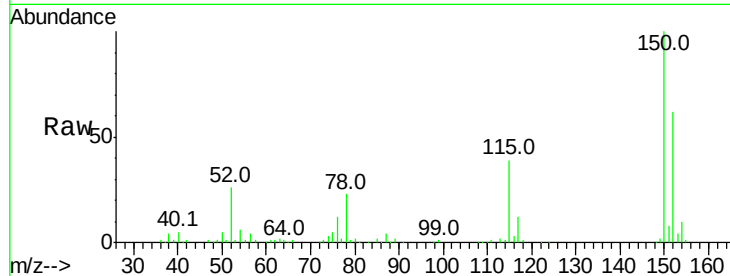


#1

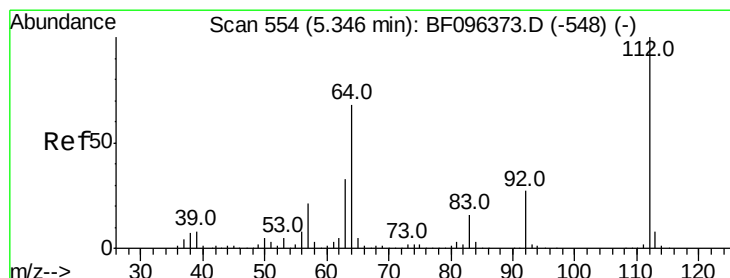
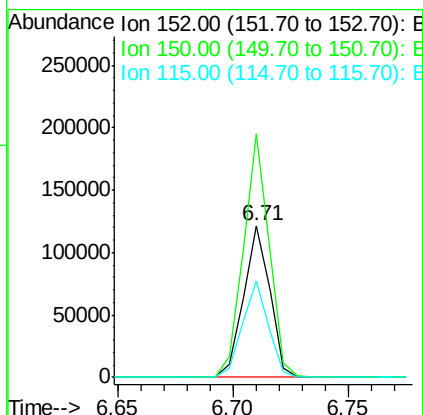
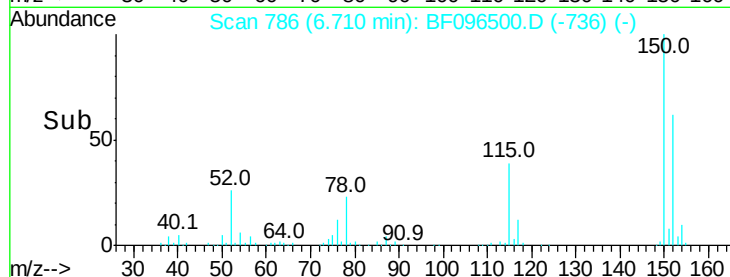
1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 6.71 min Scan# 786  
 Delta R.T. -0.01 min  
 Lab File: BF096500.D  
 Acq: 5 Jul 2017 23:40

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-P4-NSW

Tot Ion:152 Resp: 96833  
 Ion Ratio Lower Upper  
 152 100  
 150 160.2 126.2 189.2  
 115 63.1 52.2 78.2



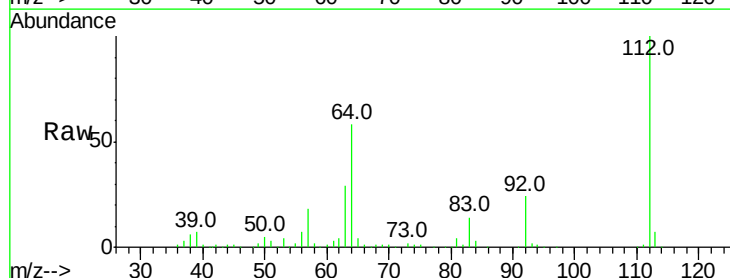
Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E



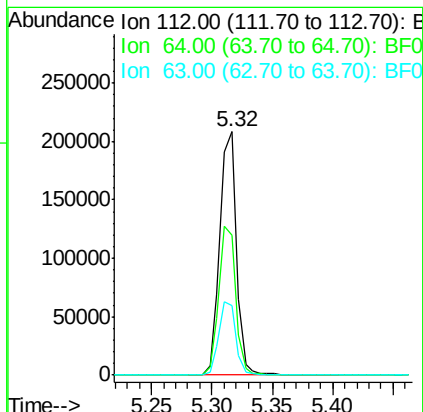
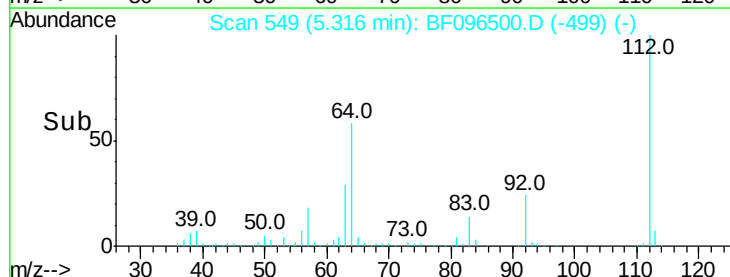
#5

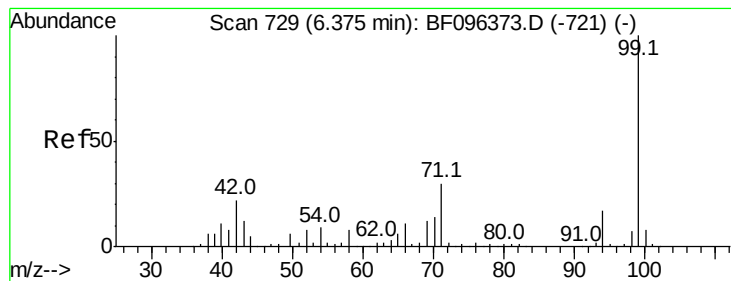
2-Fluorophenol  
 Concen: 30.33 ng  
 RT: 5.32 min Scan# 549  
 Delta R.T. -0.01 min  
 Lab File: BF096500.D  
 Acq: 5 Jul 2017 23:40

Tgt Ion:112 Resp: 199010  
 Ion Ratio Lower Upper  
 112 100  
 64 57.7 46.0 69.0  
 63 28.6 23.4 35.0



Abundance Ion 112.00 (111.70 to 112.70): E  
 Ion 64.00 (63.70 to 64.70): BF0  
 Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 25.70 ng

RT: 6.34 min Scan# 723

Delta R.T. -0.02 min

Lab File: BF096500.D

Acq: 5 Jul 2017 23:40

Instrument :

BNA\_F

ClientSampleId :

E2-P4-NSW

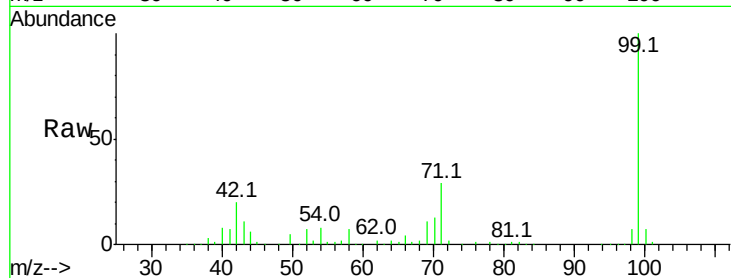
Tot Ion: 99 Resp: 207254

Ion Ratio Lower Upper

99 100

42 20.2 13.5 20.3

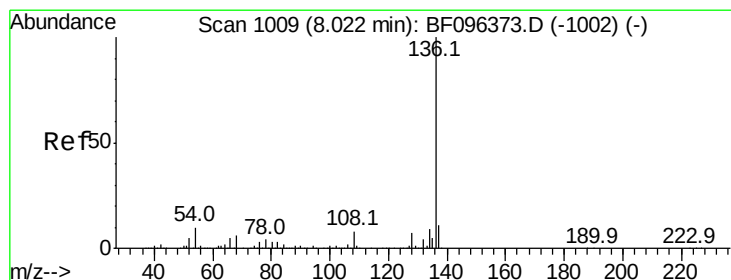
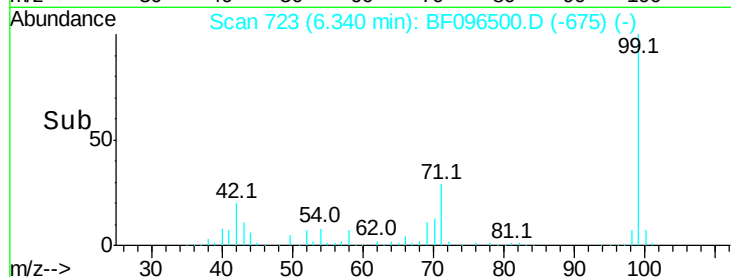
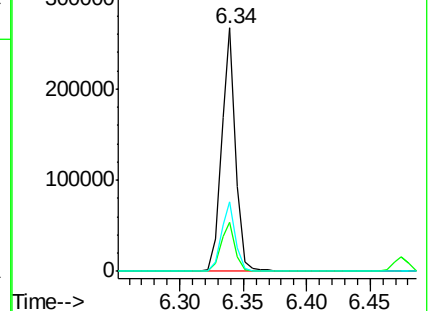
71 28.5 24.5 36.7



Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.99 min Scan# 1004

Delta R.T. -0.01 min

Lab File: BF096500.D

Acq: 5 Jul 2017 23:40

Tgt Ion: 136 Resp: 382095

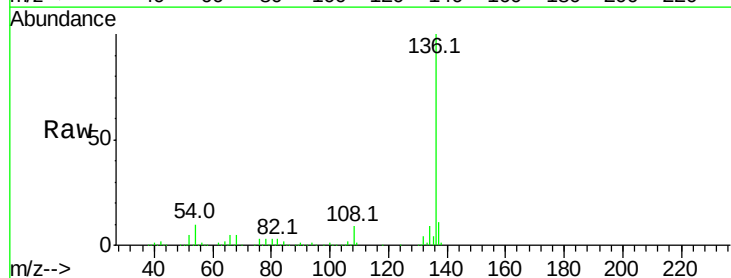
Ion Ratio Lower Upper

136 100

137 10.9 8.5 12.7

54 9.6 4.9 7.3#

68 5.0 4.1 6.1

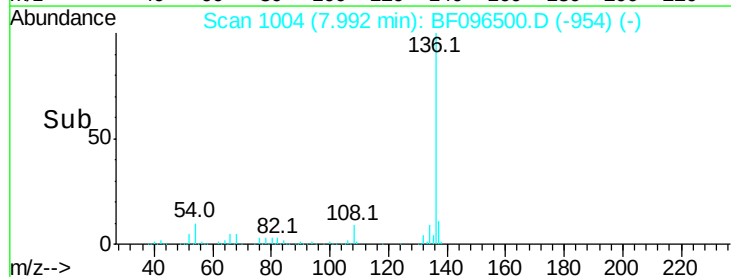
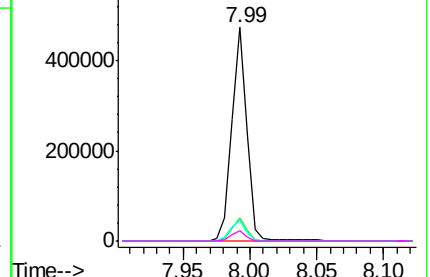


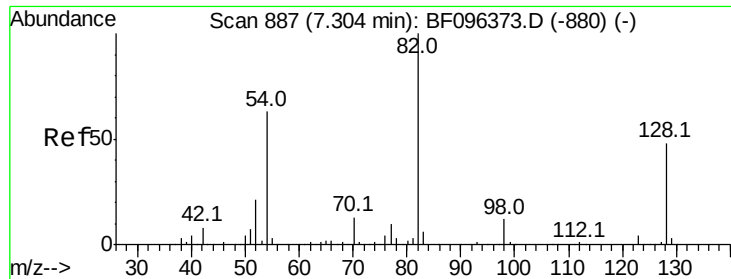
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF0

Ion 68.00 (67.70 to 68.70): BF0

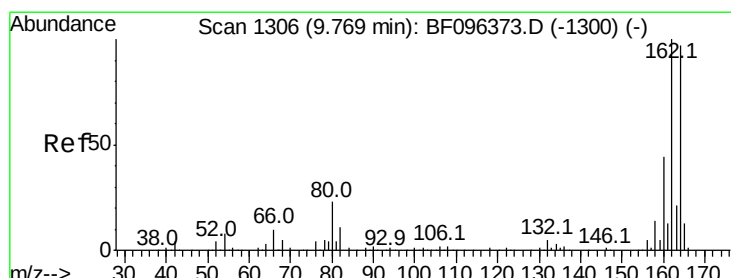
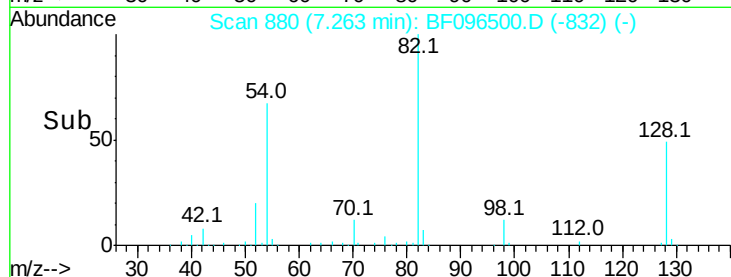
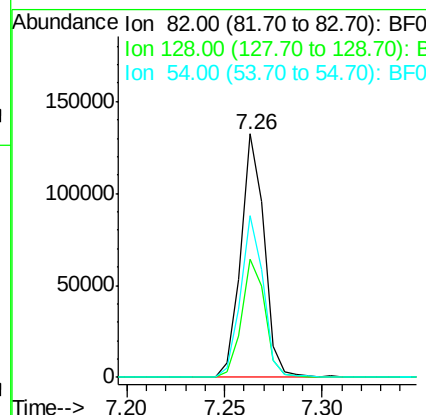
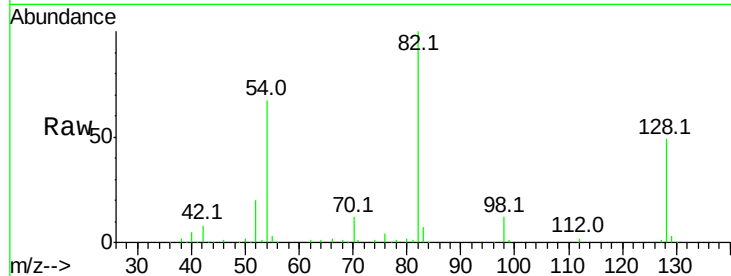




#23  
 Nitrobenzene-d5  
 Concen: 17.43 ng  
 RT: 7.26 min Scan# 880  
 Delta R.T. -0.02 min  
 Lab File: BF096500.D  
 Acq: 5 Jul 2017 23:40

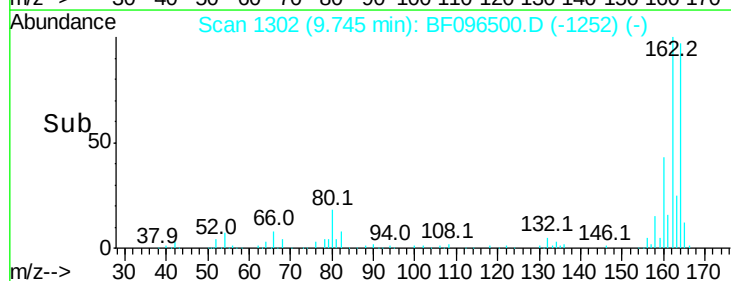
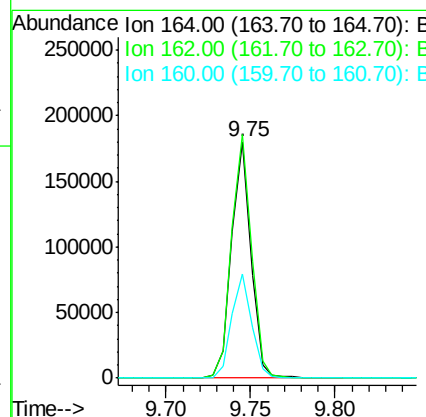
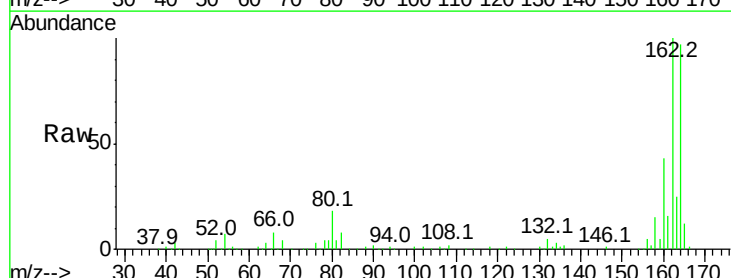
Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-P4-NSW

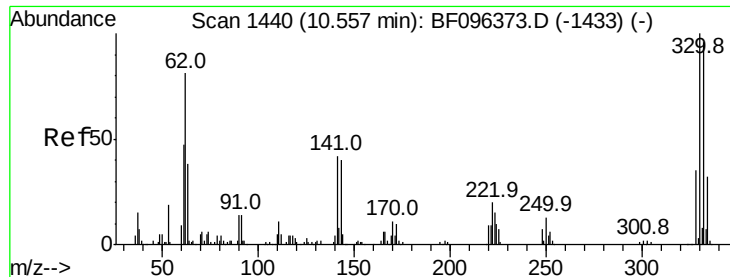
Tot Ion: 82 Resp: 110847  
 Ion Ratio Lower Upper  
 82 100  
 128 48.6 34.0 51.0  
 54 66.6 42.2 63.2#



#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.75 min Scan# 1302  
 Delta R.T. -0.01 min  
 Lab File: BF096500.D  
 Acq: 5 Jul 2017 23:40

Tgt Ion:164 Resp: 144578  
 Ion Ratio Lower Upper  
 164 100  
 162 103.0 82.6 123.8  
 160 44.0 36.2 54.2

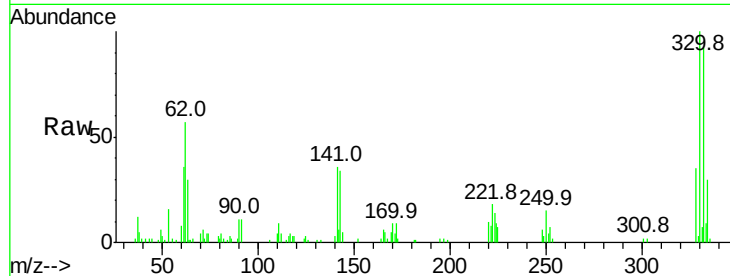




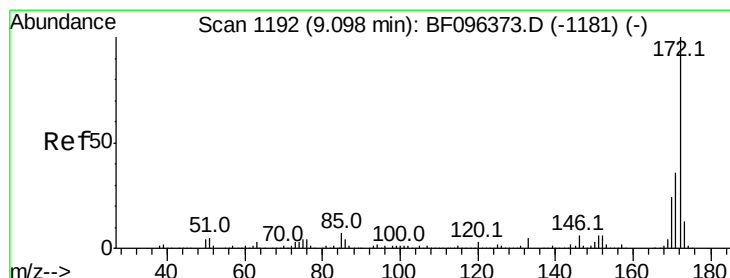
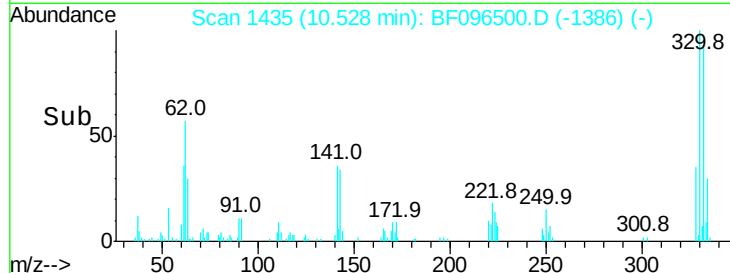
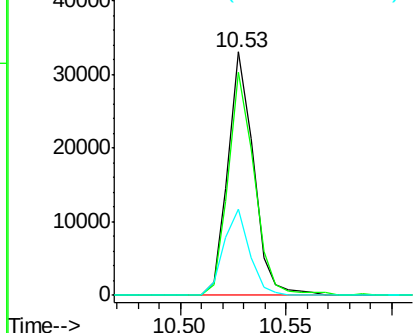
#41  
 2,4,6-Tribromophenol  
 Concen: 24.62 ng  
 RT: 10.53 min Scan# 1435  
 Delta R.T. -0.01 min  
 Lab File: BF096500.D  
 Acq: 5 Jul 2017 23:40

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-P4-NSW

Tot Ion:330 Resp: 27808  
 Ion Ratio Lower Upper  
 330 100  
 332 93.5 76.6 115.0  
 141 35.7 31.4 47.2

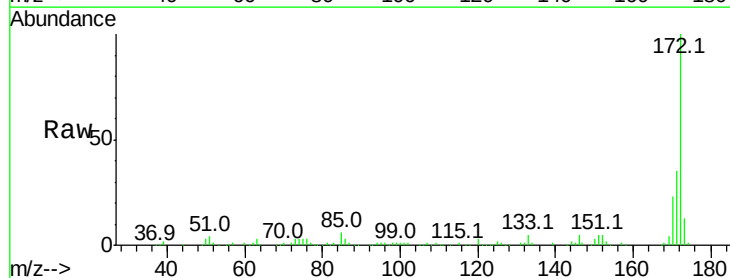


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

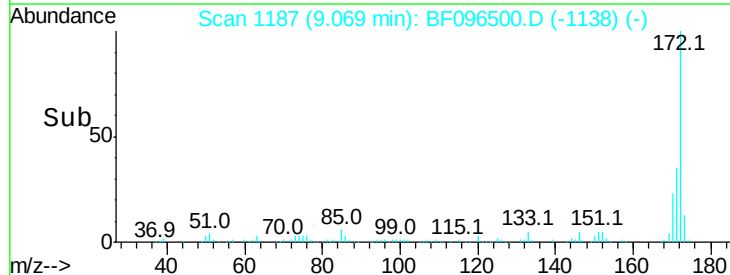
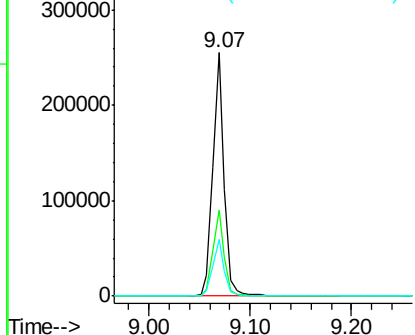


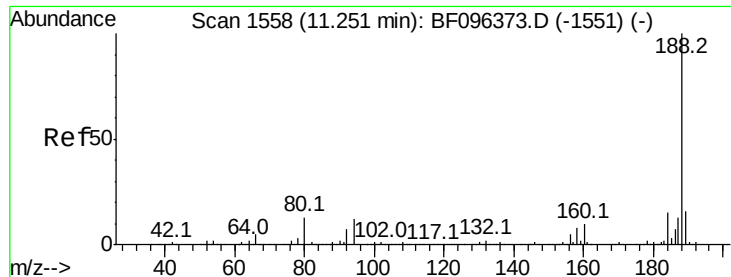
#44  
 2-Fluorobiphenyl  
 Concen: 23.58 ng  
 RT: 9.07 min Scan# 1187  
 Delta R.T. -0.01 min  
 Lab File: BF096500.D  
 Acq: 5 Jul 2017 23:40

Tgt Ion:172 Resp: 199358  
 Ion Ratio Lower Upper  
 172 100  
 171 35.3 29.6 44.4  
 170 23.4 19.8 29.8



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

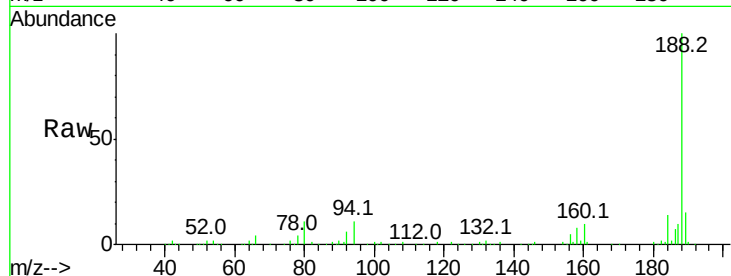




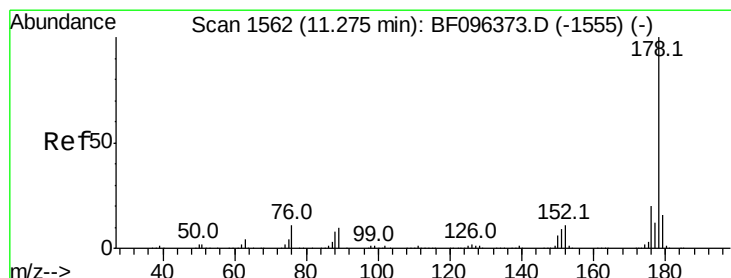
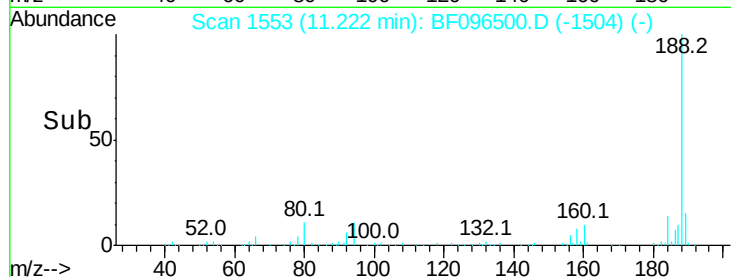
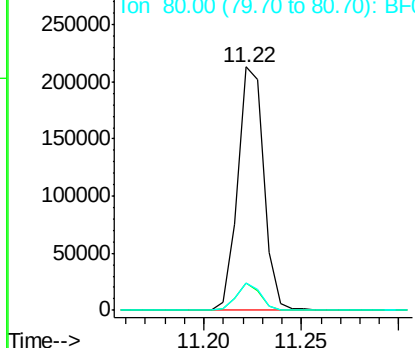
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.22 min Scan# 1553  
Delta R.T. -0.01 min  
Lab File: BF096500.D  
Acq: 5 Jul 2017 23:40

Instrument :  
BNA\_F  
ClientSampled :  
E2-P4-NSW

Tot Ion:188 Resp: 197421  
Ion Ratio Lower Upper  
188 100  
94 11.3 9.4 14.2  
80 11.2 10.2 15.2

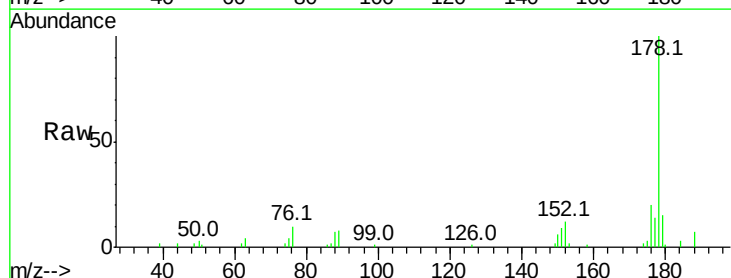


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF0  
Ion 80.00 (79.70 to 80.70): BF0

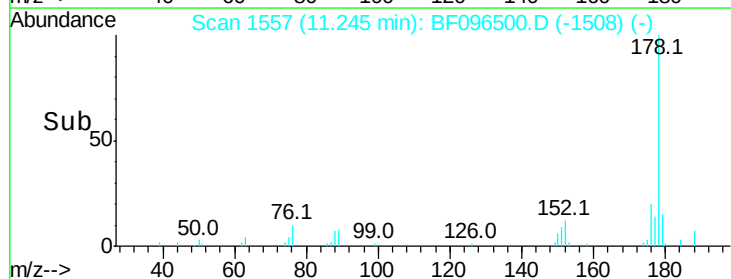
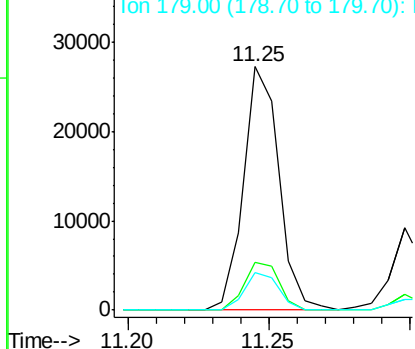


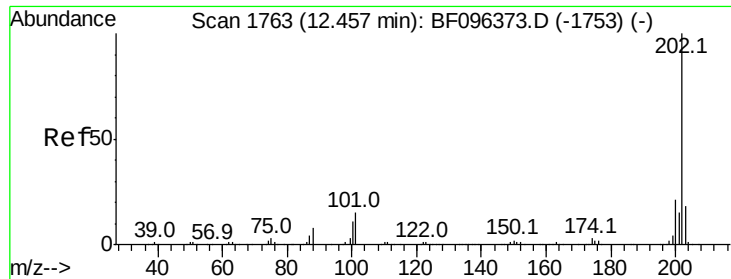
#70  
Phenanthrene  
Concen: 2.22 ng  
RT: 11.25 min Scan# 1557  
Delta R.T. -0.01 min  
Lab File: BF096500.D  
Acq: 5 Jul 2017 23:40

Tgt Ion:178 Resp: 23683  
Ion Ratio Lower Upper  
178 100  
176 19.8 16.2 24.4  
179 15.2 12.6 19.0



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

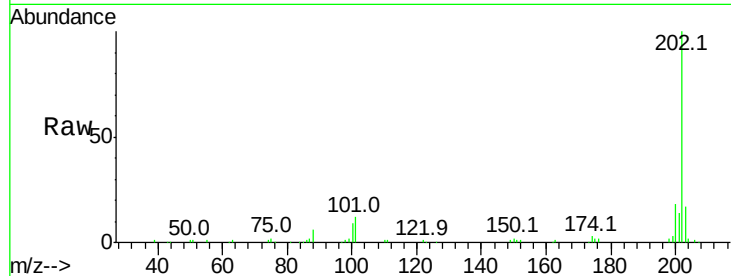




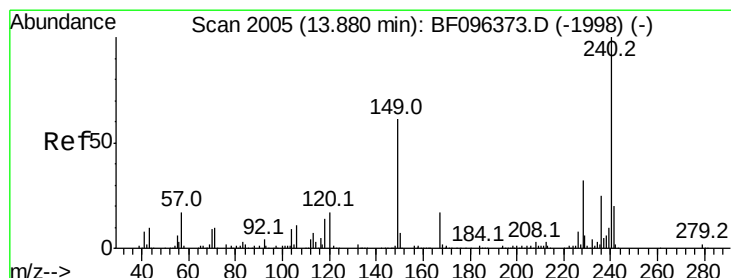
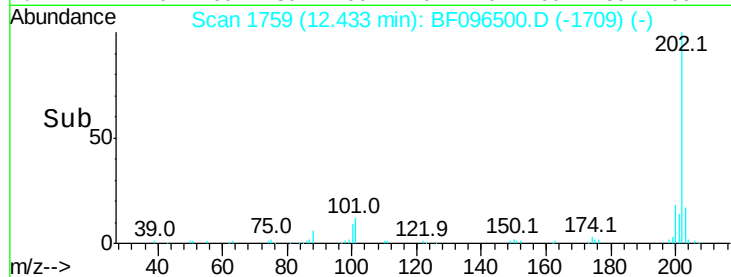
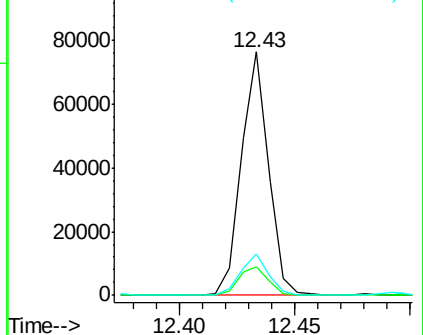
#74  
Fluoranthene  
Concen: 5.97 ng  
RT: 12.43 min Scan# 1759  
Delta R.T. -0.01 min  
Lab File: BF096500.D  
Acq: 5 Jul 2017 23:40

Instrument :  
BNA\_F  
ClientSampleId :  
E2-P4-NSW

Tot Ion:202 Resp: 62493  
Ion Ratio Lower Upper  
202 100  
101 11.8 0.0 33.2  
203 16.8 0.0 38.1

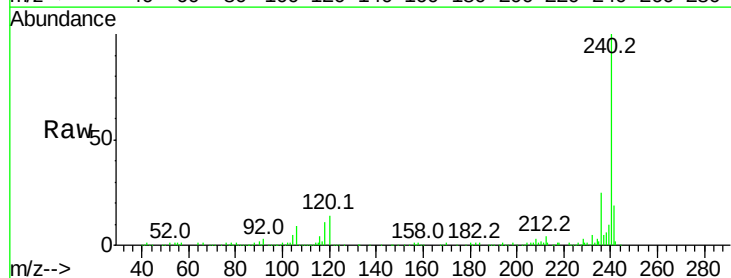


Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 203.00 (202.70 to 203.70): E

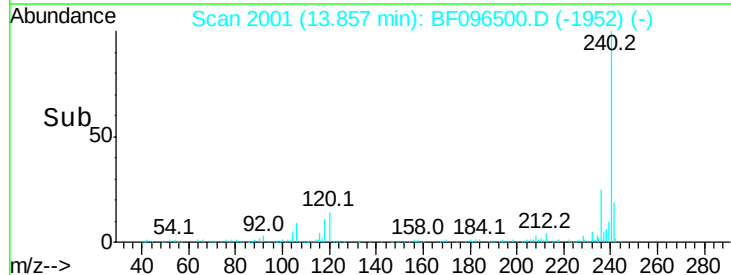
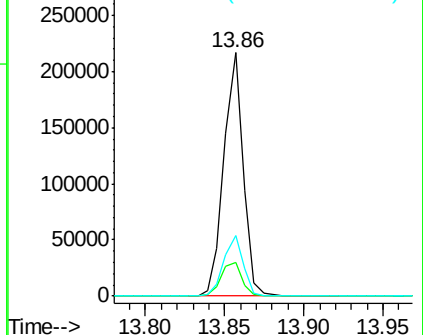


#75  
Chrysene-d12  
Concen: 20.00 ng  
RT: 13.86 min Scan# 2001  
Delta R.T. -0.01 min  
Lab File: BF096500.D  
Acq: 5 Jul 2017 23:40

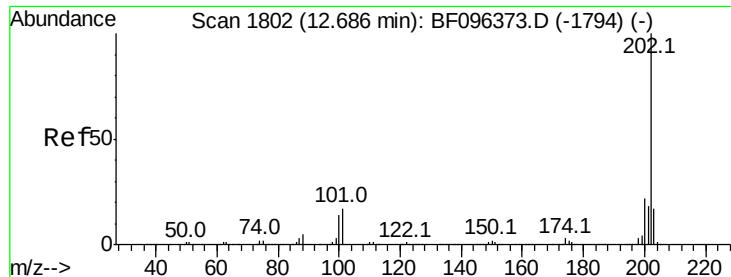
Tgt Ion:240 Resp: 183716  
Ion Ratio Lower Upper  
240 100  
120 13.6 5.8 8.8#  
236 25.1 20.5 30.7



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







#77

Pvrene

Concen: 3.96 ng

RT: 12.66 min Scan# 1797

Delta R.T. -0.01 min

Lab File: BF096500.D

Acq: 5 Jul 2017 23:40

Instrument :

BNA\_F

ClientSampleId :

E2-P4-NSW

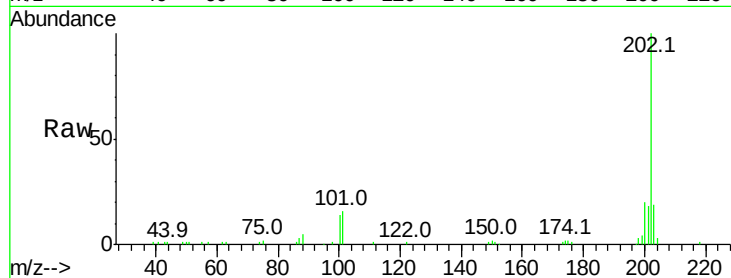
Tot Ion:202 Resp: 58375

Ion Ratio Lower Upper

202 100

200 19.8 17.6 26.4

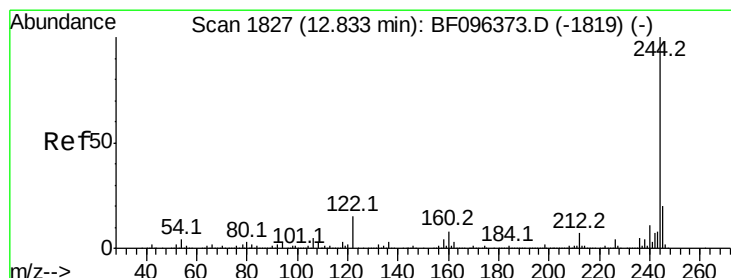
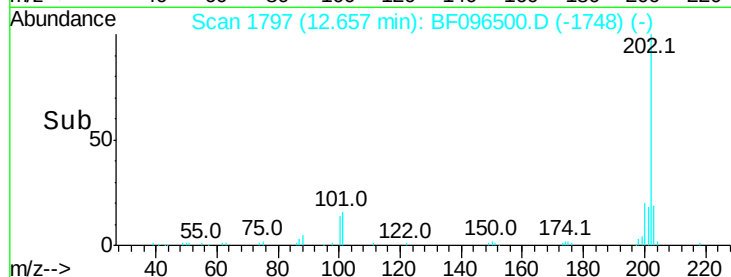
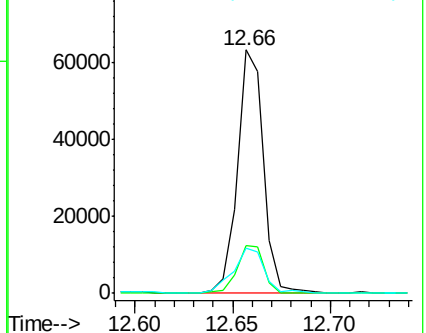
203 18.7 14.4 21.6



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



#78

Terphenyl-d14

Concen: 12.35 ng

RT: 12.81 min Scan# 1823

Delta R.T. -0.01 min

Lab File: BF096500.D

Acq: 5 Jul 2017 23:40

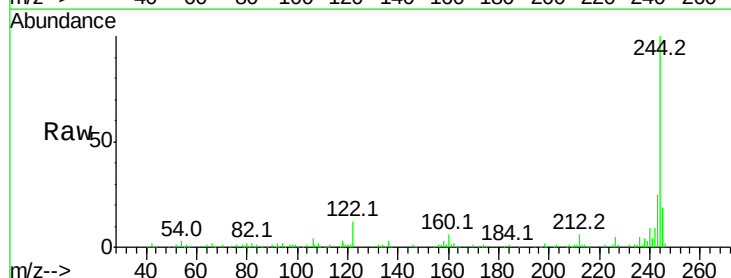
Tgt Ion:244 Resp: 106195

Ion Ratio Lower Upper

244 100

212 6.3 6.0 9.0

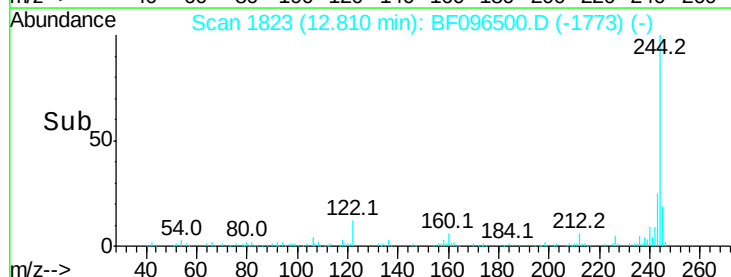
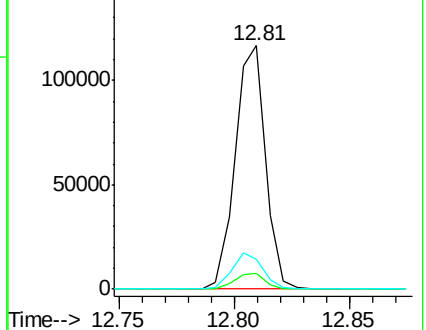
122 12.3 10.3 15.5

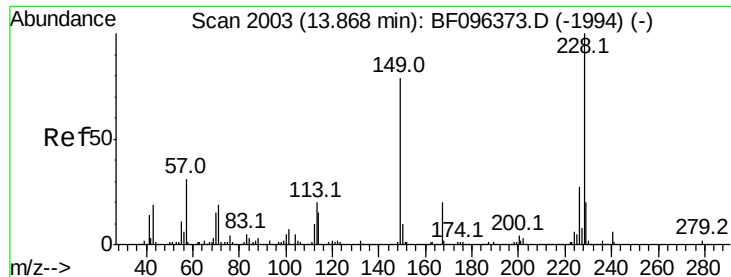


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

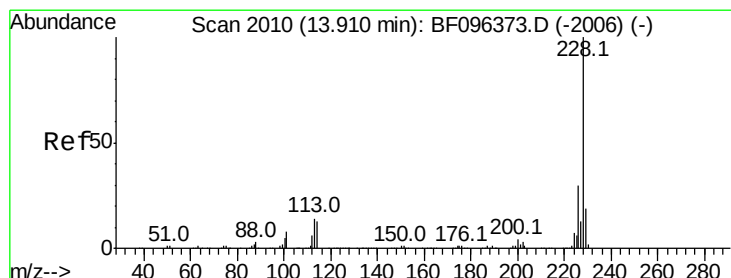
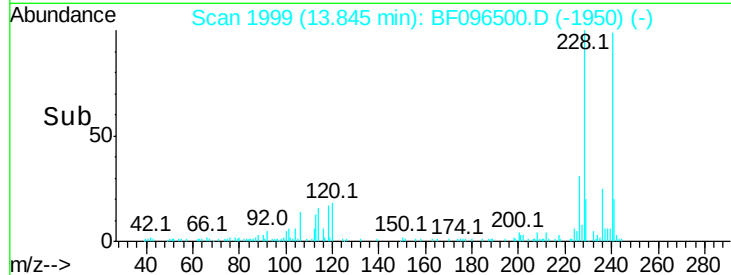
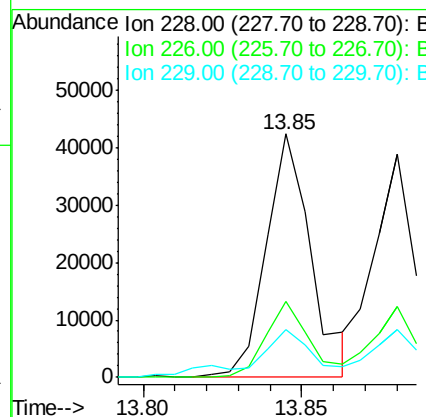
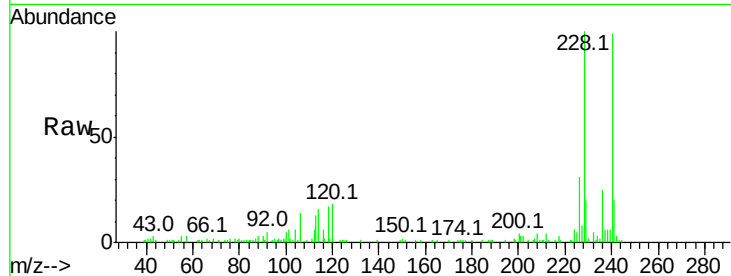




#80  
 Benzo(a)anthracene  
 Concen: 3.93 ng  
 RT: 13.85 min Scan# 1999  
 Delta R.T. -0.01 min  
 Lab File: BF096500.D  
 Acq: 5 Jul 2017 23:40

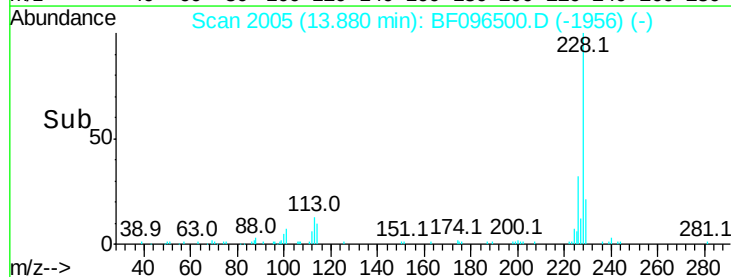
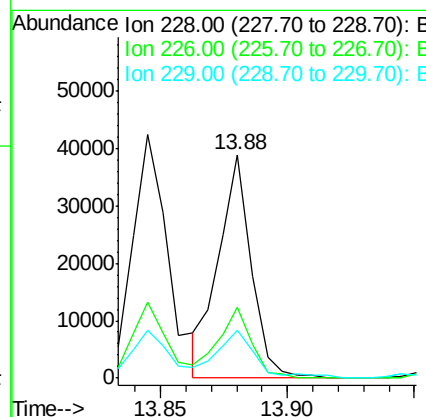
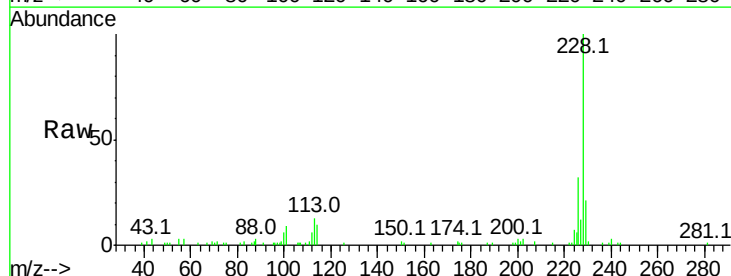
Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-P4-NSW

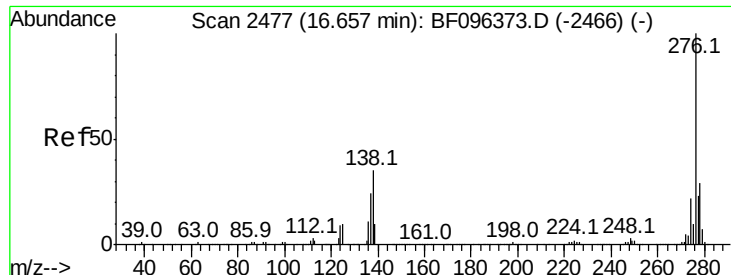
|     |         |       |       |
|-----|---------|-------|-------|
| Tot | Ion:228 | Resp: | 41801 |
| Ion | Ratio   | Lower | Upper |
| 228 | 100     |       |       |
| 226 | 31.2    | 22.6  | 33.8  |
| 229 | 19.8    | 16.3  | 24.5  |



#82  
 Chrysene  
 Concen: 3.14 ng  
 RT: 13.88 min Scan# 2005  
 Delta R.T. -0.01 min  
 Lab File: BF096500.D  
 Acq: 5 Jul 2017 23:40

|     |         |       |       |
|-----|---------|-------|-------|
| Tgt | Ion:228 | Resp: | 35013 |
| Ion | Ratio   | Lower | Upper |
| 228 | 100     |       |       |
| 226 | 31.7    | 24.9  | 37.3  |
| 229 | 21.3    | 15.8  | 23.6  |

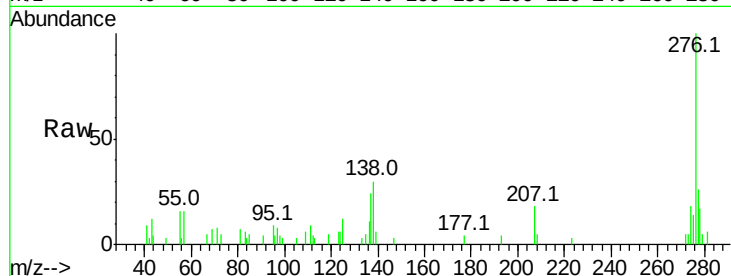




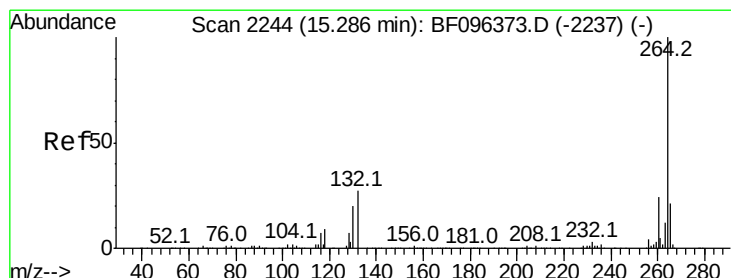
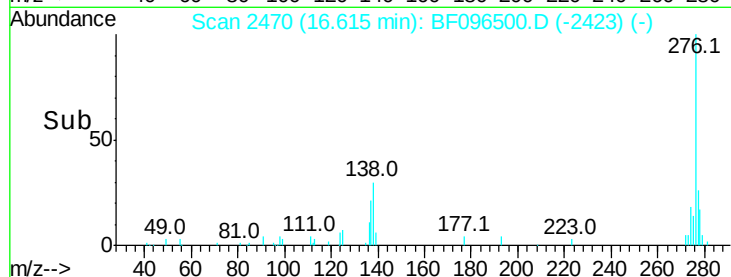
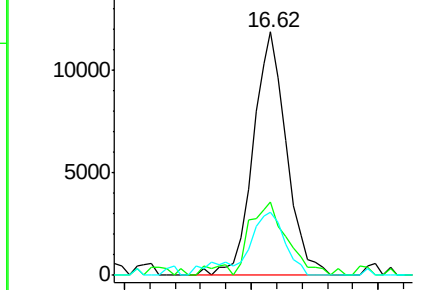
#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 2.46 ng  
 RT: 16.62 min Scan# 2470  
 Delta R.T. -0.02 min  
 Lab File: BF096500.D  
 Acq: 5 Jul 2017 23:40

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-P4-NSW

Tot Ion:276 Resp: 21620  
 Ion Ratio Lower Upper  
 276 100  
 138 33.8 27.8 41.6  
 277 30.4 20.2 30.4#

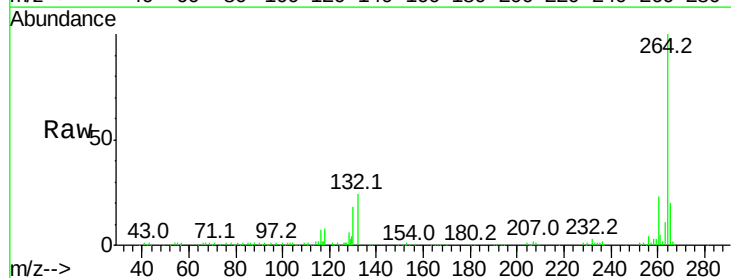


Abundance Ion 276.00 (275.70 to 276.70): E  
 Ion 138.00 (137.70 to 138.70): E  
 Ion 277.00 (276.70 to 277.70): E

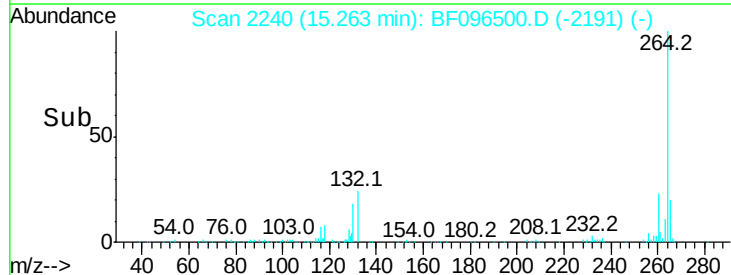
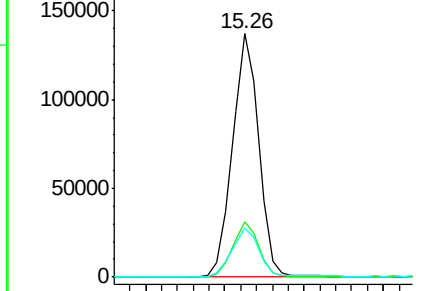


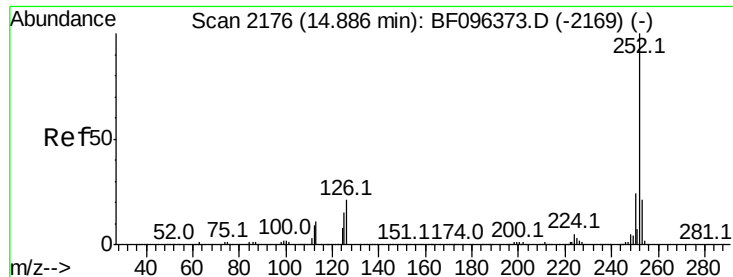
#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 15.26 min Scan# 2240  
 Delta R.T. -0.01 min  
 Lab File: BF096500.D  
 Acq: 5 Jul 2017 23:40

Tgt Ion:264 Resp: 157669  
 Ion Ratio Lower Upper  
 264 100  
 260 22.6 19.5 29.3  
 265 20.4 17.2 25.8



Abundance Ion 264.00 (263.70 to 264.70): E  
 Ion 260.00 (259.70 to 260.70): E  
 Ion 265.00 (264.70 to 265.70): E





#87

Benzo(b)fluoranthene

Concen: 5.10 ng m

RT: 14.86 min Scan# 2172

Delta R.T. -0.01 min

Lab File: BF096500.D

Acq: 5 Jul 2017 23:40

Instrument :

BNA\_F

ClientSampleId :

E2-P4-NSW

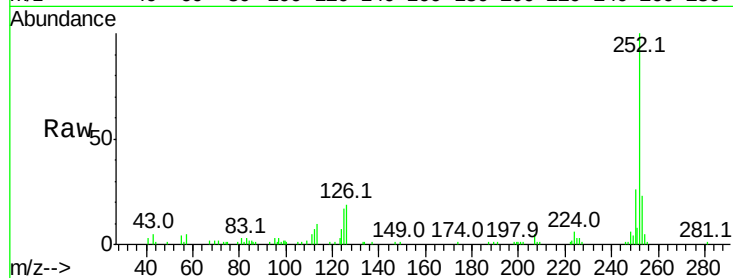
Tot Ion:252 Resp: 50420

Ion Ratio Lower Upper

252 100

253 23.0 18.1 27.1

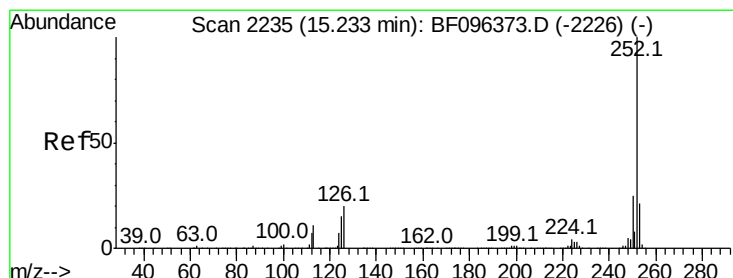
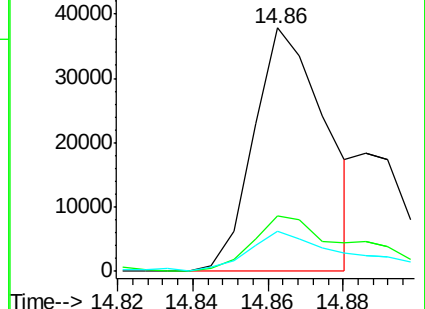
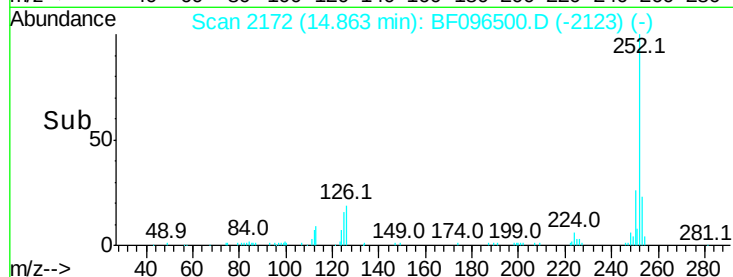
125 16.7 9.8 14.8#



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



#89

Benzo(a)pyrene

Concen: 4.32 ng

RT: 15.20 min Scan# 2230

Delta R.T. -0.01 min

Lab File: BF096500.D

Acq: 5 Jul 2017 23:40

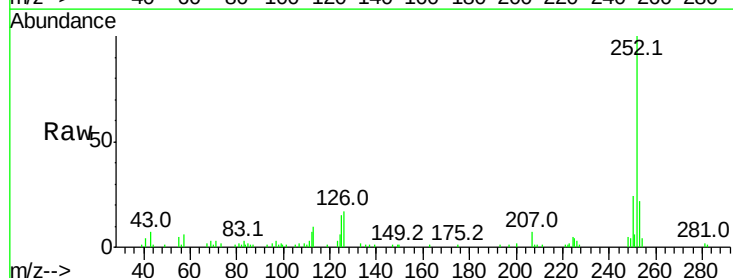
Tgt Ion:252 Resp: 38096

Ion Ratio Lower Upper

252 100

253 22.4 17.5 26.3

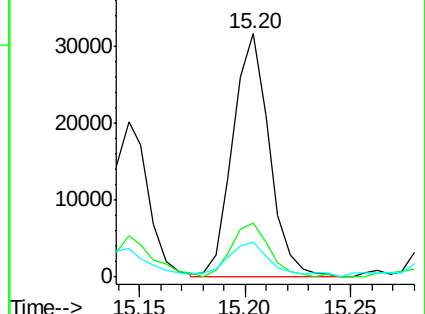
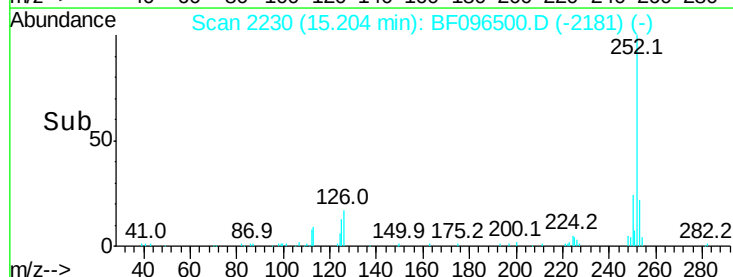
125 14.5 11.0 16.4

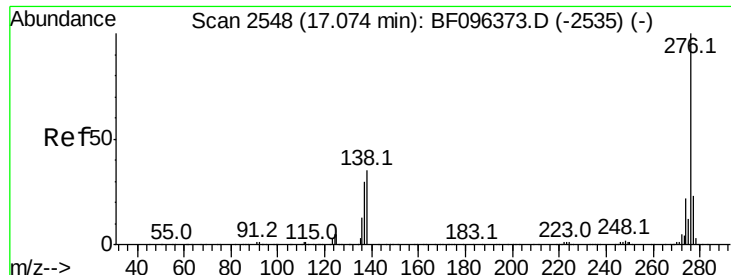


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#91

Benzo(a,h,i)perylene

Concen: 2.64 ng

RT: 17.02 min Scan# 2539

Delta R.T. -0.03 min

Lab File: BF096500.D

Acq: 5 Jul 2017 23:40

Instrument :

BNA\_F

ClientSampleId :

E2-P4-NSW

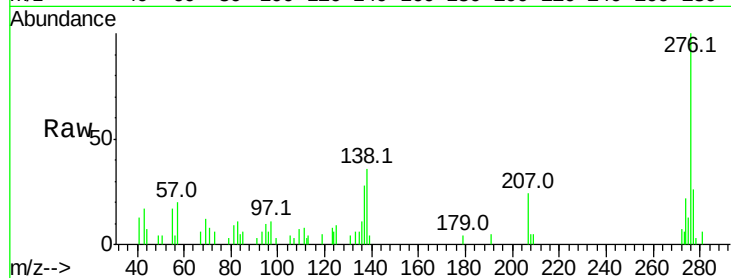
Tot Ion: 276 Resp: 18958

Ion Ratio Lower Upper

276 100

277 26.5 18.6 28.0

138 35.7 25.4 38.0



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

