

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_E\DATA\BE111218\  
 Data File : BE098194.D  
 Acq On : 12 Nov 2018 17:36  
 Operator : SJ/JU  
 Sample : J5807-13DL 500X  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PT-BNA-SoilDL

Quant Time: Nov 13 03:49:54 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_E\METHODS\8270-SIM-BE111218.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Nov 12 13:32:15 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.87  | 152  | 1086     | 0.40 | ng    | 0.01     |
| 7) Naphthalene-d8         | 10.67 | 136  | 5328     | 0.40 | ng    | 0.00     |
| 13) Acenaphthene-d10      | 14.53 | 164  | 3448     | 0.40 | ng    | 0.00     |
| 19) Phenanthrene-d10      | 17.28 | 188  | 8258     | 0.40 | ng    | 0.00     |
| 27) Chrysene-d12          | 21.46 | 240  | 9150     | 0.40 | ng    | 0.00     |
| 34) Perylene-d12          | 24.01 | 264  | 8782     | 0.40 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 4) 2-Fluorophenol           | 5.45  | 112  | 768      | 0.25 | ng    | 0.00     |
| 5) Phenol-d6                | 7.04  | 99   | 1382     | 0.28 | ng    | 0.00     |
| 8) Nitrobenzene-d5          | 9.03  | 82   | 1016     | 0.19 | ng    | 0.01     |
| 11) 2-Methylnaphthalene-d10 | 12.22 | 152  | 8        | 0.00 | ng    | -0.04    |
| 14) 2,4,6-Tribromophenol    | 16.03 | 330  | 366      | 0.24 | ng    | 0.01     |
| 15) 2-Fluorobiphenyl        | 13.15 | 172  | 2705     | 0.19 | ng    | 0.00     |
| 25) Fluoranthene-d10        | 19.31 | 212  | 24       | 0.00 | ng    | 0.00     |
| 29) Terphenyl-d14           | 19.91 | 244  | 4067     | 0.20 | ng    | 0.00     |

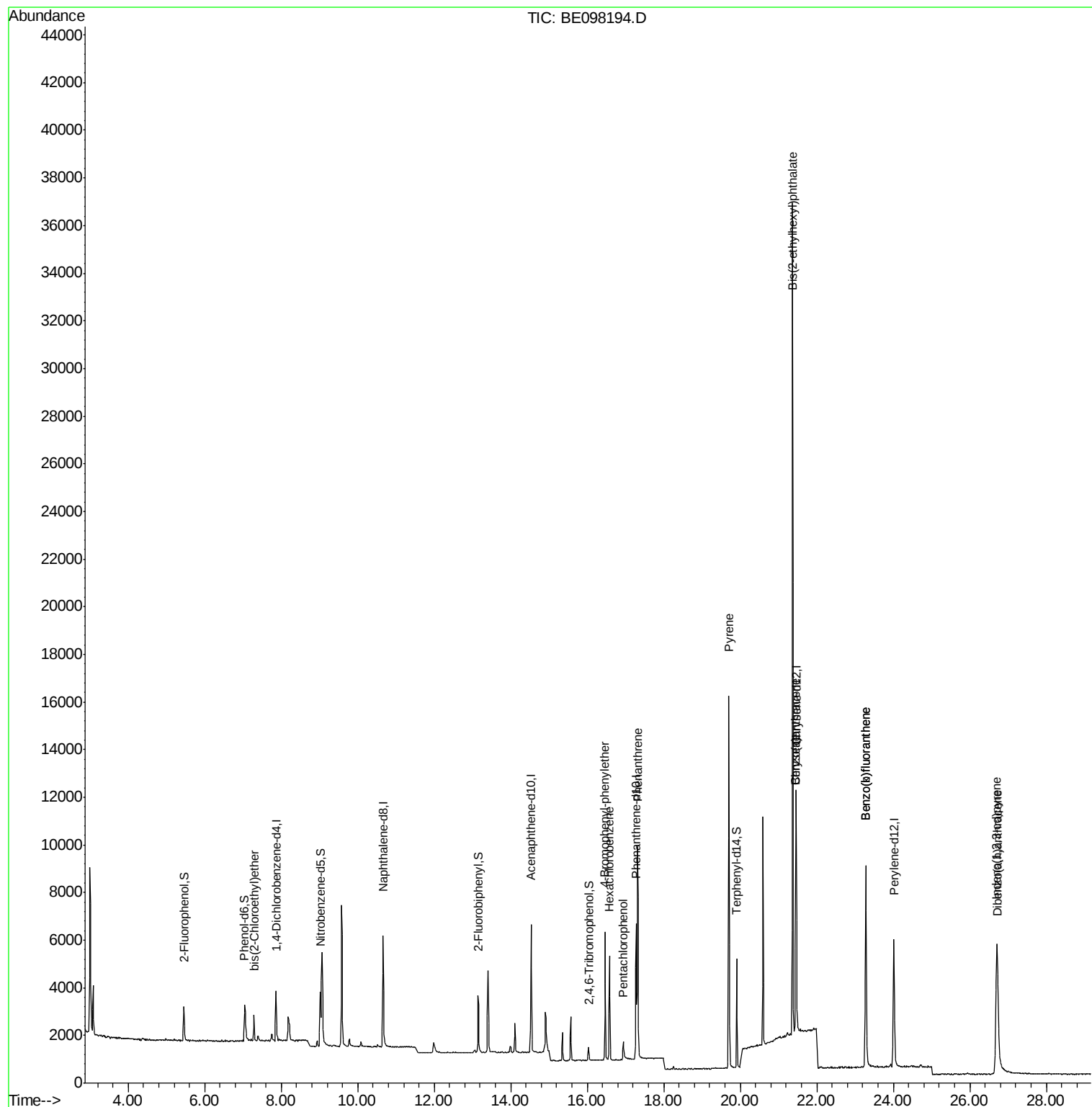
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|--------------------------------|-------|------|----------|-------|-------|--------|
| 6) bis(2-Chloroethyl)ether     | 7.29  | 93   | 398      | 0.100 | ng    | 96     |
| 20) 4-Bromophenyl-phenylether  | 16.46 | 248  | 2672     | 0.531 | ng    | 95     |
| 21) Hexachlorobenzene          | 16.58 | 284  | 3531     | 0.675 | ng    | 98     |
| 22) Pentachlorophenol          | 16.94 | 266  | 540      | 0.543 | ng    | 98     |
| 23) Phenanthrene               | 17.32 | 178  | 10009    | 0.487 | ng    | 99     |
| 28) Pyrene                     | 19.70 | 202  | 15271    | 0.606 | ng    | 99     |
| 30) Benzo(a)anthracene         | 21.45 | 228  | 5469     | 0.210 | ng    | 99     |
| 31) Chrysene                   | 21.45 | 228  | 5223     | 0.198 | ng    | 95     |
| 32) Bis(2-ethylhexyl)phthalate | 21.37 | 149  | 39869    | 0.738 | ng    | 100    |
| 33) Indeno(1,2,3-cd)pyrene     | 26.70 | 276  | 12736    | 0.526 | ng    | # 93   |
| 35) Benzo(b)fluoranthene       | 23.28 | 252  | 13012    | 0.522 | ng    | 97     |
| 36) Benzo(k)fluoranthene       | 23.28 | 252  | 13012    | 0.495 | ng    | 100    |
| 38) Dibenzo(a,h)anthracene     | 26.73 | 278  | 5278     | 0.259 | ng    | 94     |

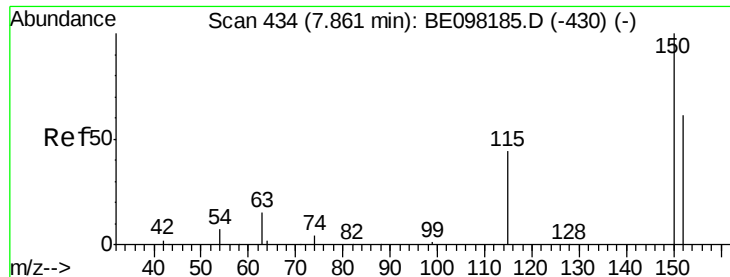
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Mon Nov 12 13:32:15 2018  
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#1

1,4-Dichlorobenzene-d4

Concen: 0.400 ng

RT: 7.87 min Scan# 435

Delta R.T. 0.01 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

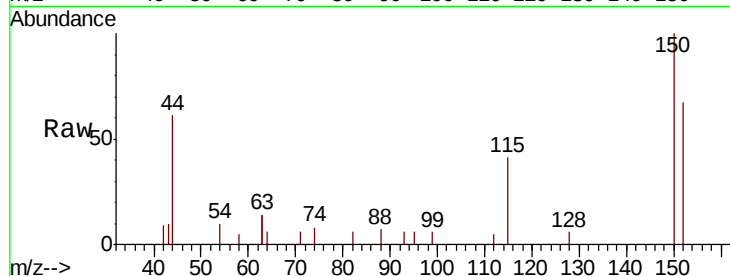
Tgt Ion:152 Resp: 1086

Ion Ratio Lower Upper

152 100

150 148.2 127.5 191.3

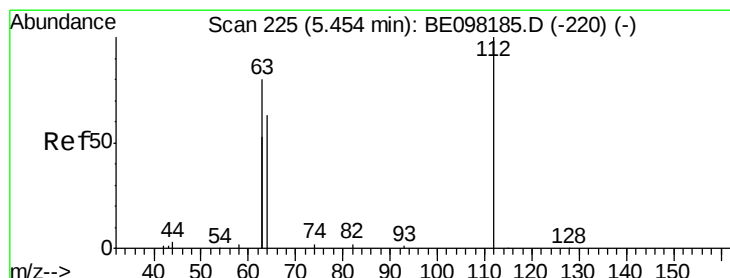
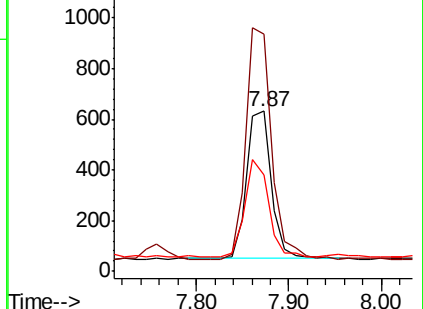
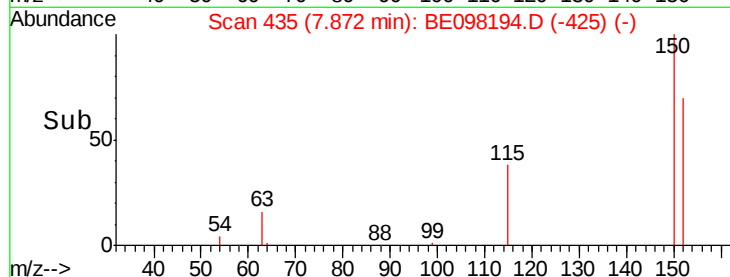
115 60.1 60.3 90.5#



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: 0.251 ng

RT: 5.45 min Scan# 225

Delta R.T. -0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

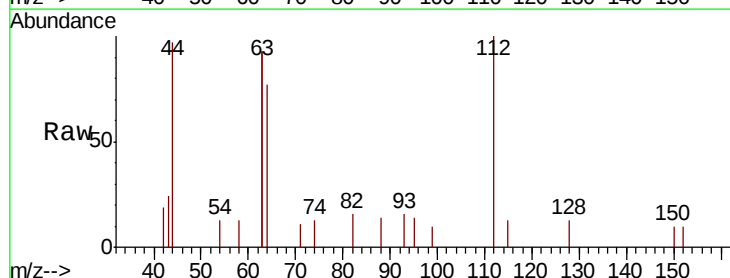
Tgt Ion:112 Resp: 768

Ion Ratio Lower Upper

112 100

64 83.3 61.7 92.5

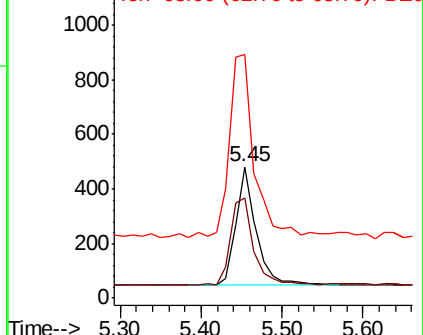
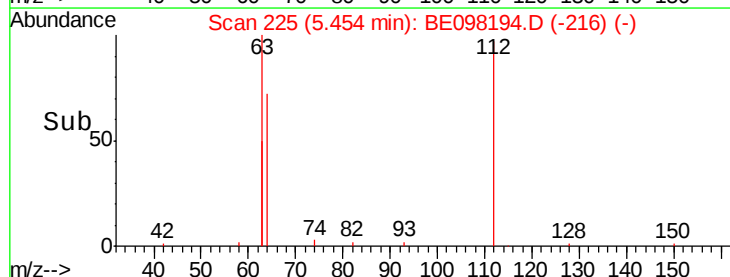
63 189.8 136.2 204.2

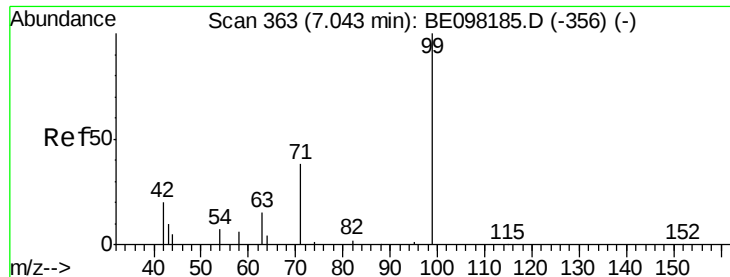


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BE0

Ion 63.00 (62.70 to 63.70): BE0





#5

Phenol-d6

Concen: 0.281 ng

RT: 7.04 min Scan# 363

Delta R.T. -0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

Instrument :

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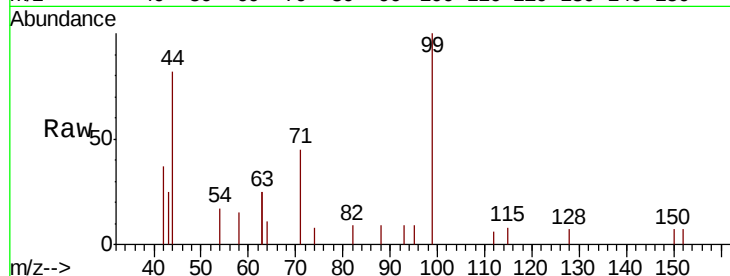
Tgt Ion: 99 Resp: 1382

Ion Ratio Lower Upper

99 100

42 36.0 27.1 40.7

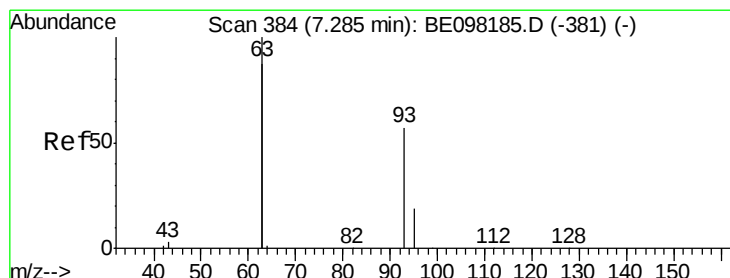
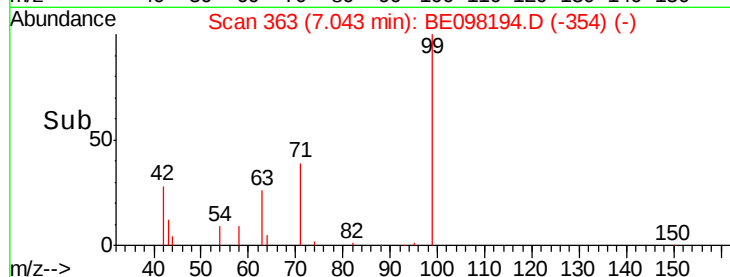
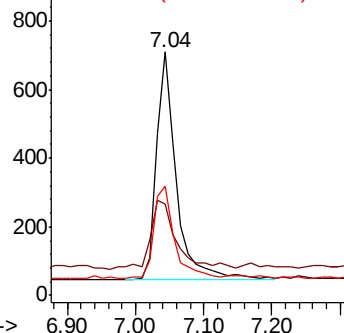
71 41.5 37.0 55.6



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



#6

bis(2-Chloroethyl)ether

Concen: 0.100 ng

RT: 7.29 min Scan# 384

Delta R.T. -0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

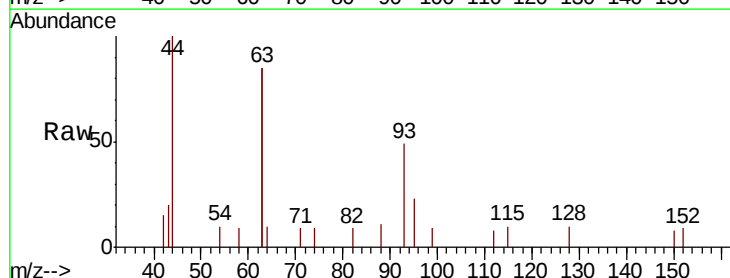
Tgt Ion: 93 Resp: 398

Ion Ratio Lower Upper

93 100

63 333.2 272.6 409.0

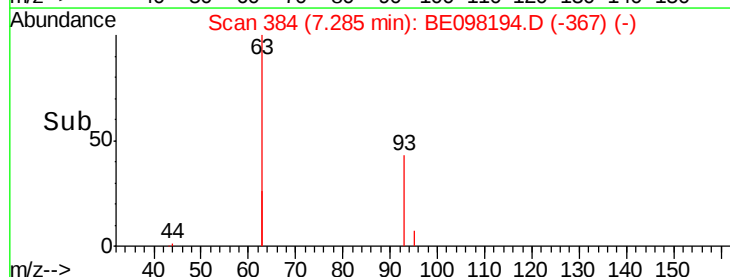
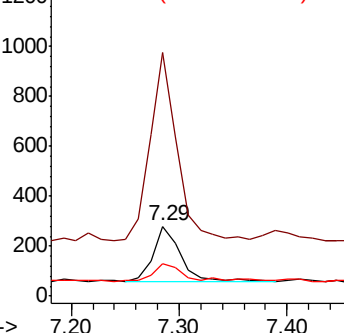
95 37.9 27.1 40.7

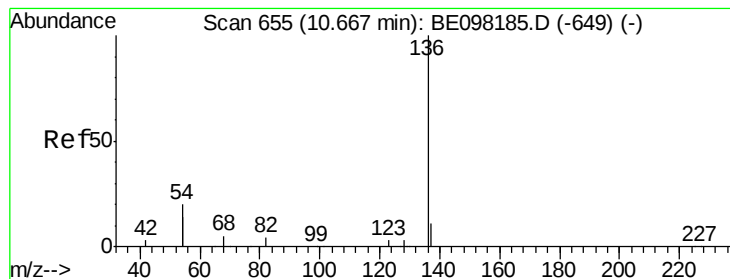


Abundance Ion 93.00 (92.70 to 93.70): BE0

Ion 63.00 (62.70 to 63.70): BE0

Ion 95.00 (94.70 to 95.70): BE0





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.67 min Scan# 654

Delta R.T. -0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

Tgt Ion:136 Resp: 5328

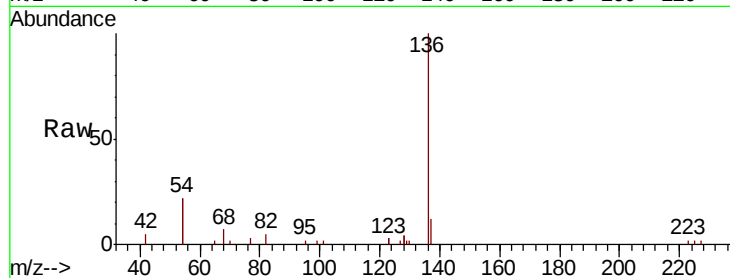
Ion Ratio Lower Upper

136 100

137 12.3 9.5 14.3

54 43.5 31.3 46.9

68 7.1 4.8 7.2

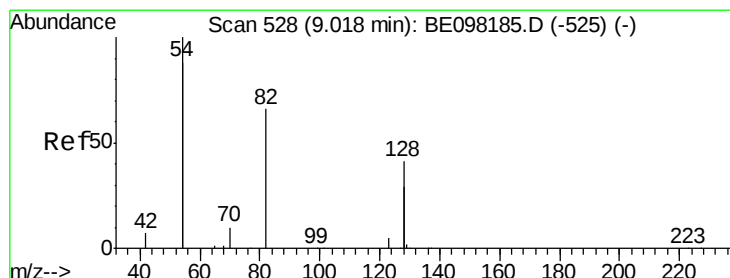
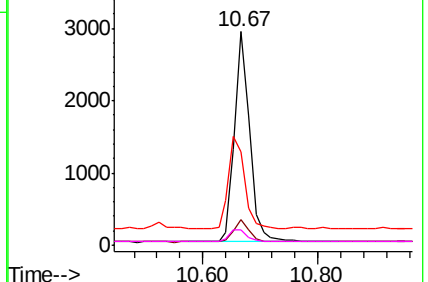
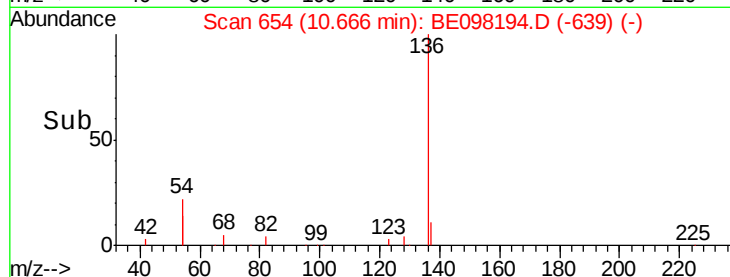


Abundance Ion 136.00 (135.70 to 136.70): E

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: 0.191 ng

RT: 9.03 min Scan# 528

Delta R.T. 0.01 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

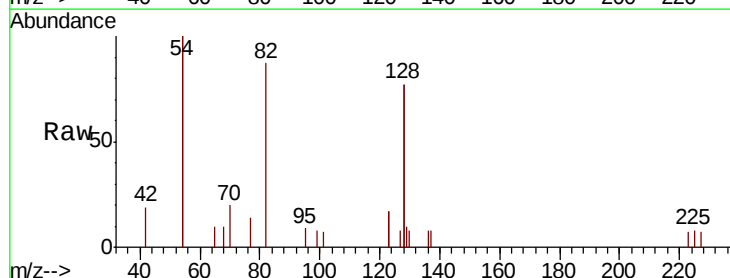
Tgt Ion: 82 Resp: 1016

Ion Ratio Lower Upper

82 100

128 175.4 96.1 144.1#

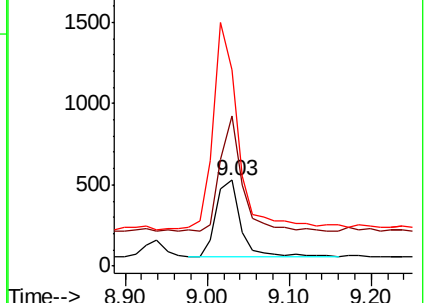
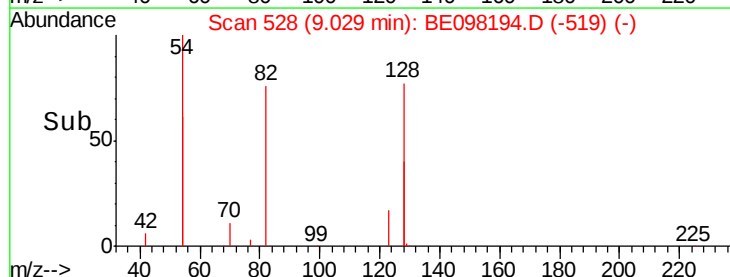
54 229.2 232.0 348.0#

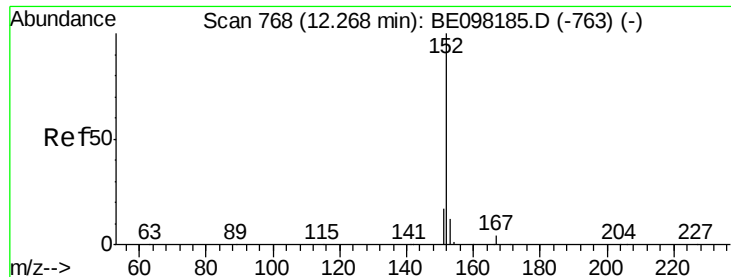


Abundance Ion 82.00 (81.70 to 82.70): BE0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BE0

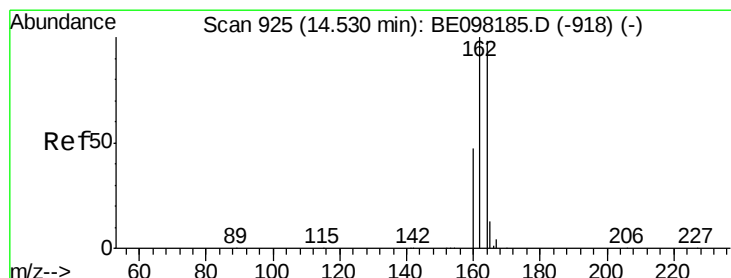
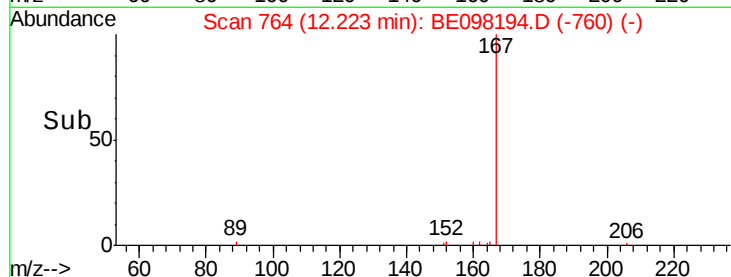
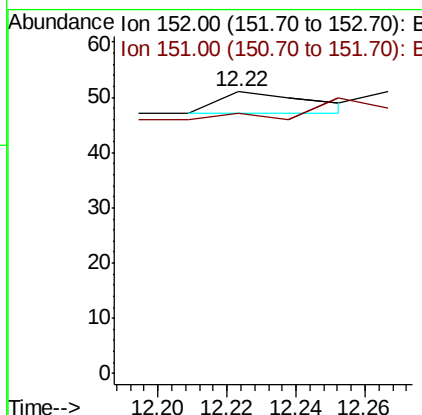
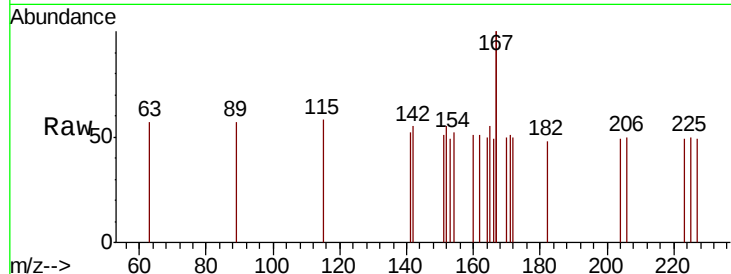




#11  
 2-Methylnaphthalene-d10  
 Concen: 0.001 ng  
 RT: 12.22 min Scan# 764  
 Delta R.T. -0.04 min  
 Lab File: BE098194.D  
 Acq: 12 Nov 2018 17:36

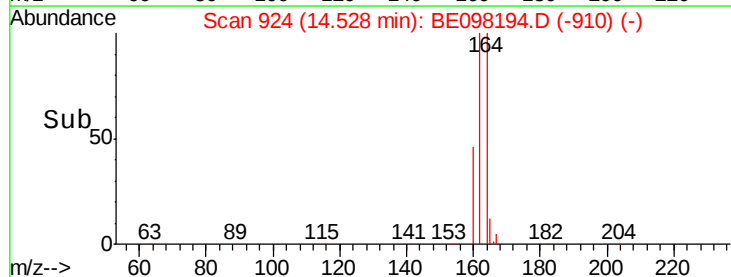
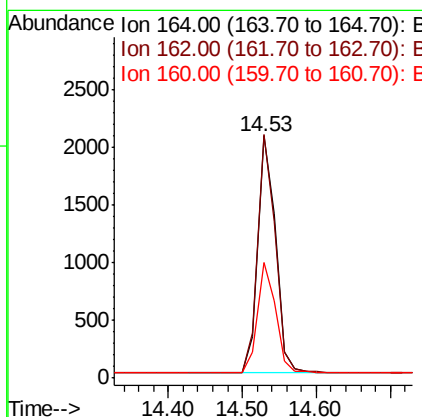
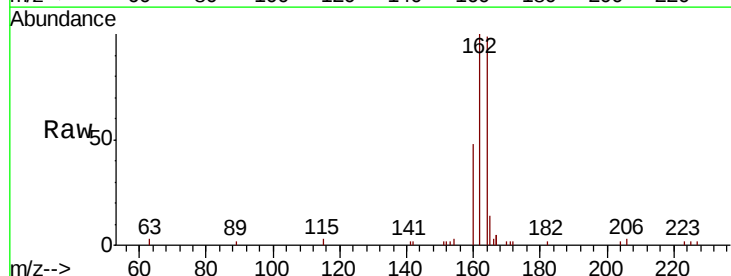
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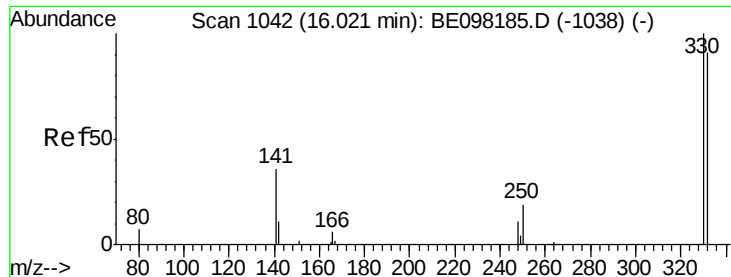
Tgt Ion:152 Resp: 8  
 Ion Ratio Lower Upper  
 152 100  
 151 0.0 15.4 23.2#



#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.53 min Scan# 924  
 Delta R.T. -0.00 min  
 Lab File: BE098194.D  
 Acq: 12 Nov 2018 17:36

Tgt Ion:164 Resp: 3448  
 Ion Ratio Lower Upper  
 164 100  
 162 100.6 81.8 122.6  
 160 47.8 39.4 59.0

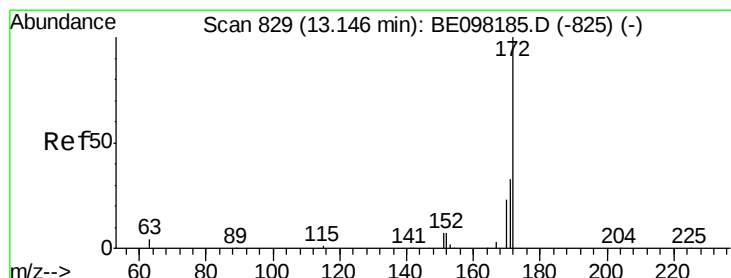
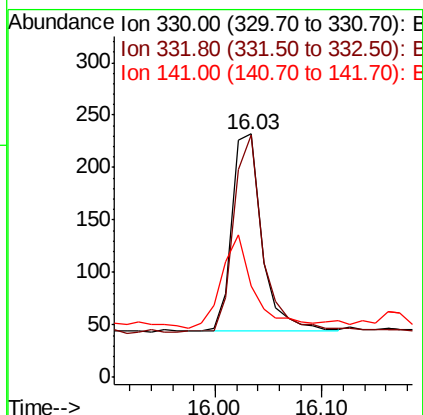
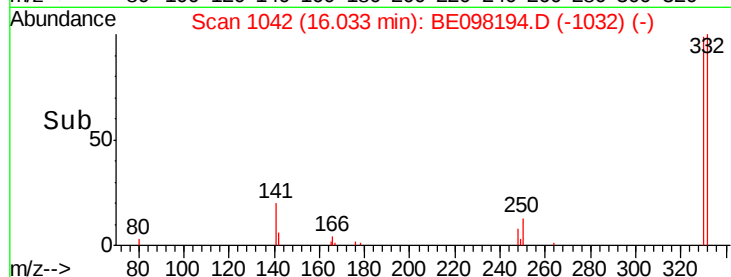
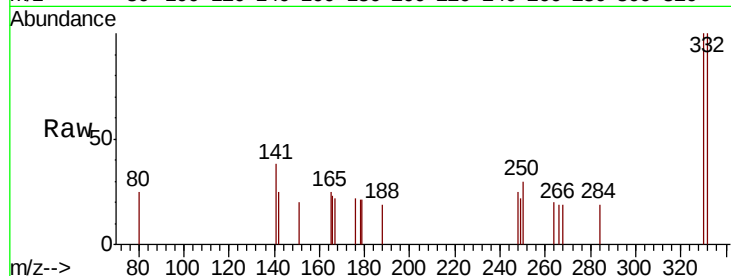




#14  
 2,4,6-Tribromophenol  
 Concen: 0.243 ng  
 RT: 16.03 min Scan# 1042  
 Delta R.T. 0.01 min  
 Lab File: BE098194.D  
 Acq: 12 Nov 2018 17:36

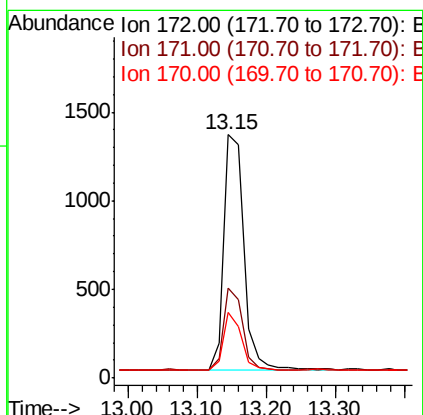
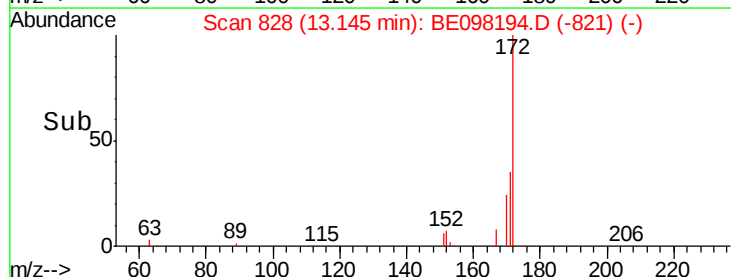
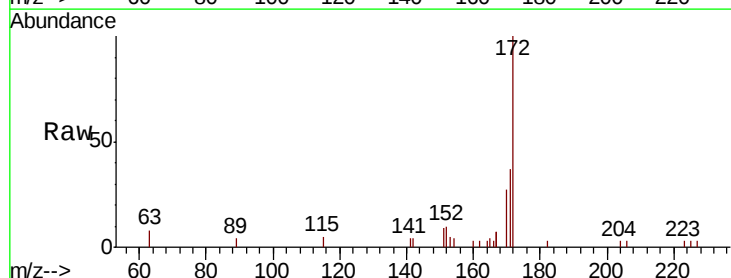
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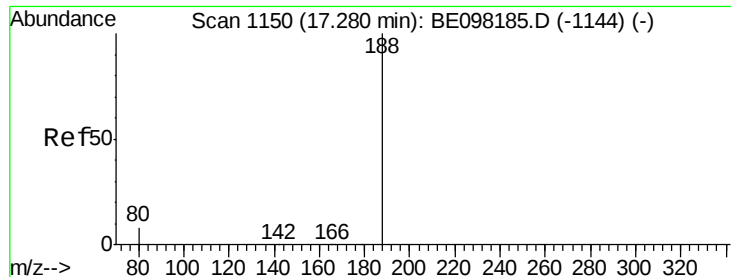
Tgt Ion:330 Resp: 366  
 Ion Ratio Lower Upper  
 330 100  
 332 100.8 77.7 116.5  
 141 50.8 33.6 50.4#



#15  
 2-Fluorobiphenyl  
 Concen: 0.187 ng  
 RT: 13.15 min Scan# 828  
 Delta R.T. -0.00 min  
 Lab File: BE098194.D  
 Acq: 12 Nov 2018 17:36

Tgt Ion:172 Resp: 2705  
 Ion Ratio Lower Upper  
 172 100  
 171 36.9 27.3 40.9  
 170 26.9 19.4 29.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.28 min Scan# 1149

Delta R.T. 0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

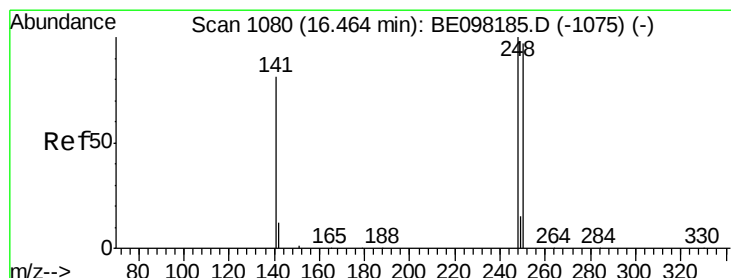
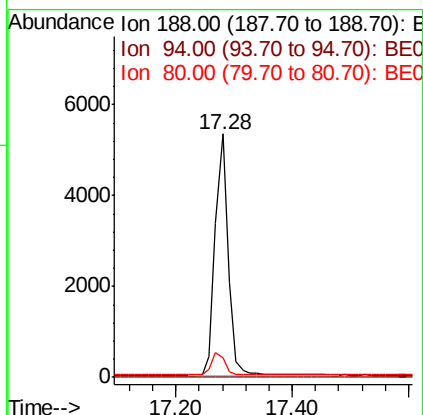
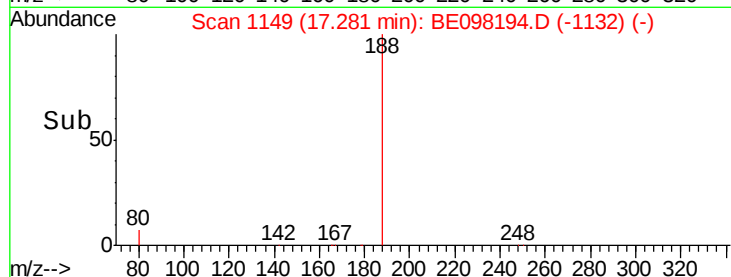
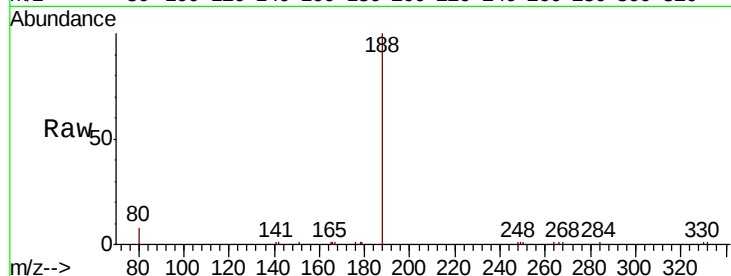
Tgt Ion:188 Resp: 8258

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.0 6.7 10.1



#20

4-Bromophenyl-phenylether

Concen: 0.531 ng

RT: 16.46 min Scan# 1079

Delta R.T. 0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

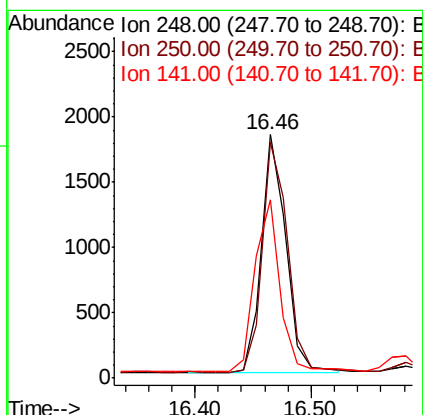
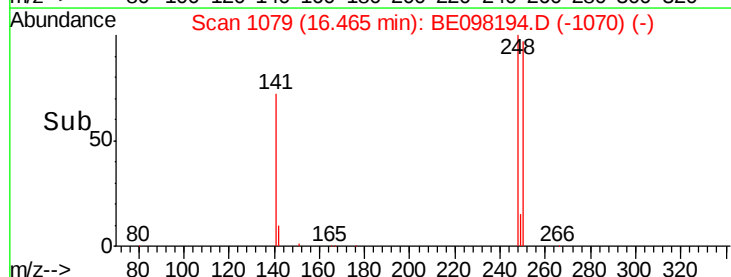
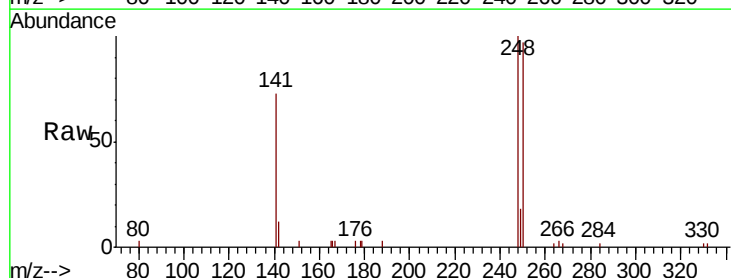
Tgt Ion:248 Resp: 2672

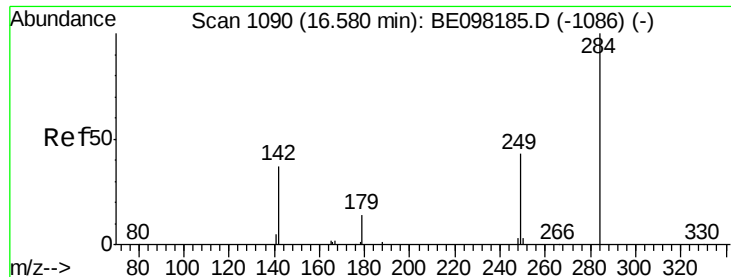
Ion Ratio Lower Upper

248 100

250 96.9 77.6 116.4

141 73.5 65.8 98.8





#21

Hexachlorobenzene

Concen: 0.675 ng

RT: 16.58 min Scan# 1089

Delta R.T. 0.00 min

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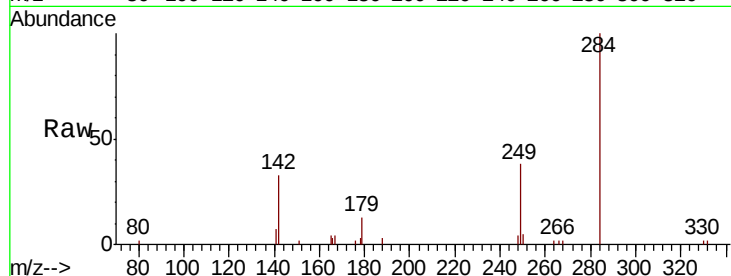
Tgt Ion:284 Resp: 3531

Ion Ratio Lower Upper

284 100

142 32.8 26.5 39.7

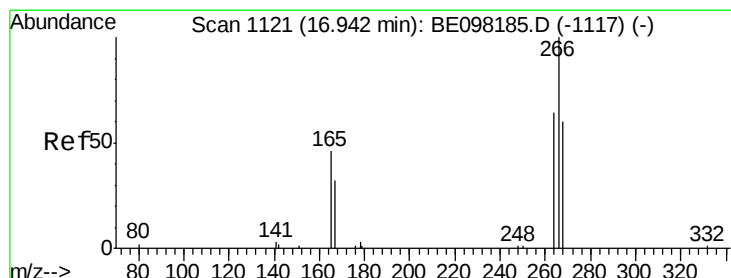
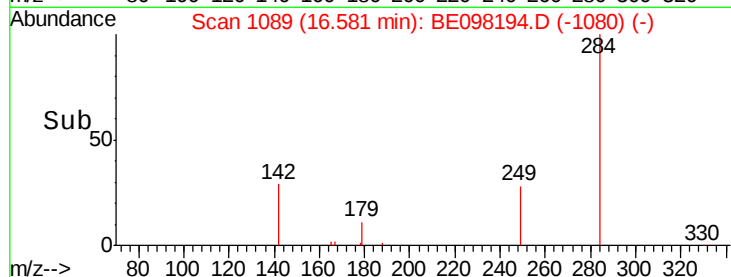
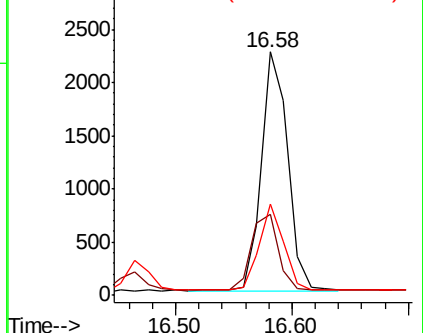
249 33.8 28.4 42.6



Abundance Ion 283.80 (283.50 to 284.50): E

Ion 142.00 (141.70 to 142.70): E

Ion 249.00 (248.70 to 249.70): E



#22

Pentachlorophenol

Concen: 0.543 ng

RT: 16.94 min Scan# 1120

Delta R.T. 0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

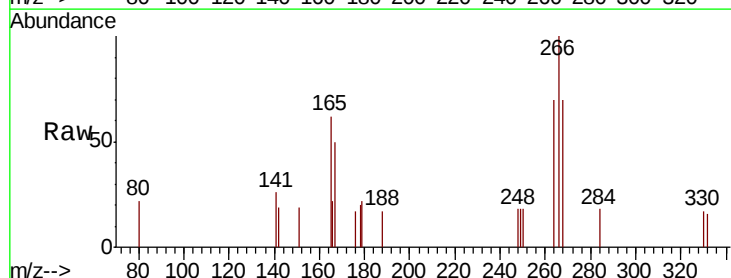
Tgt Ion:266 Resp: 540

Ion Ratio Lower Upper

266 100

264 69.9 57.6 86.4

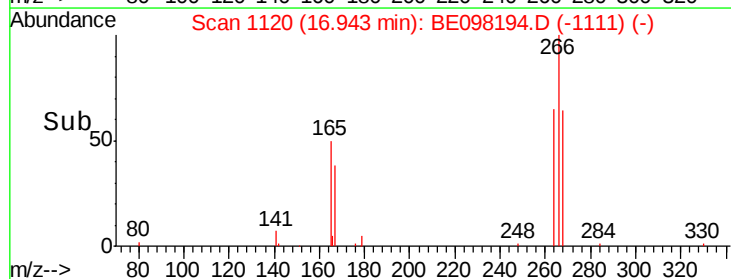
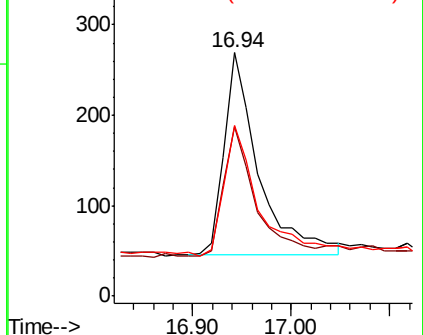
268 70.3 56.8 85.2

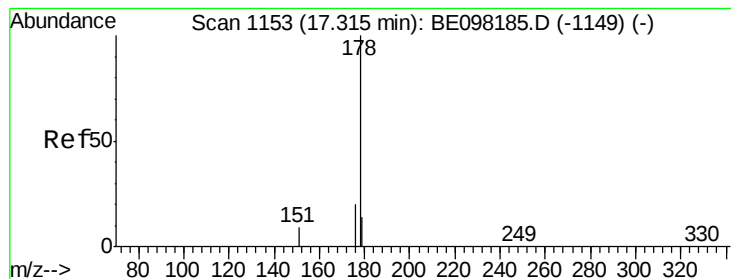


Abundance Ion 266.00 (265.70 to 266.70): E

Ion 264.00 (263.70 to 264.70): E

Ion 268.00 (267.70 to 268.70): E





#23

Phenanthrene

Concen: 0.487 ng

RT: 17.32 min Scan# 1152

Delta R.T. 0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

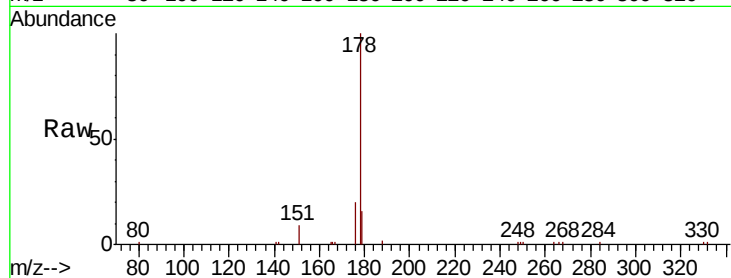
Tgt Ion:178 Resp: 10009

Ion Ratio Lower Upper

178 100

176 18.9 15.8 23.8

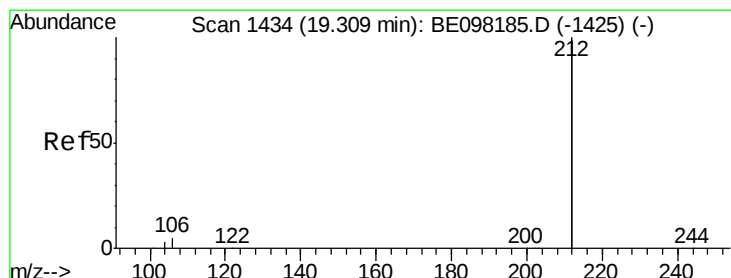
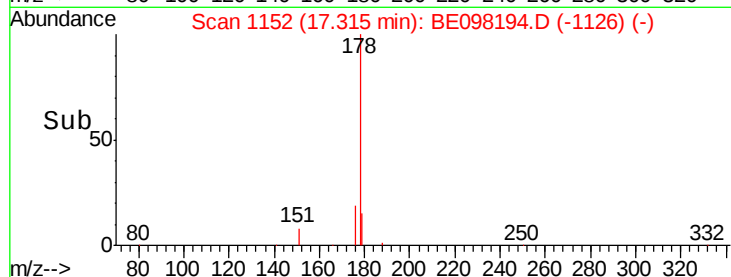
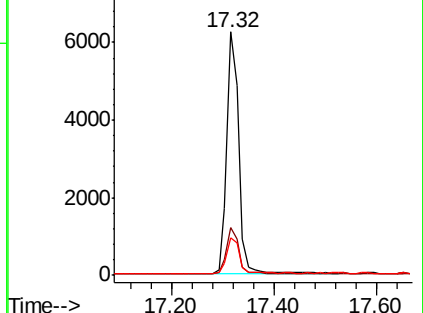
179 15.5 12.3 18.5



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: 0.000 ng

RT: 19.31 min Scan# 1434

Delta R.T. 0.01 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

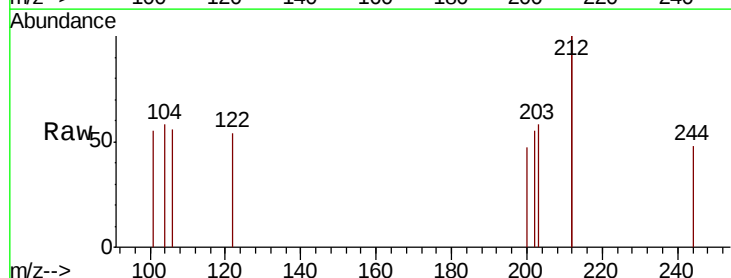
Tgt Ion:212 Resp: 24

Ion Ratio Lower Upper

212 100

106 0.0 1.8 2.8#

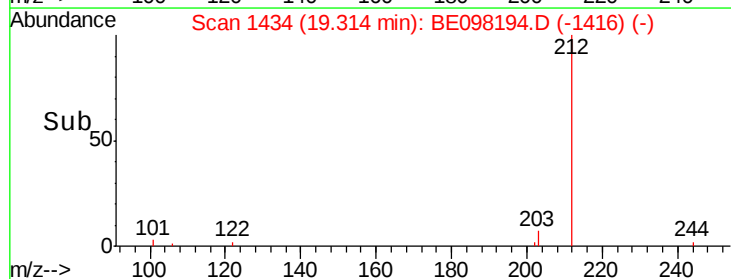
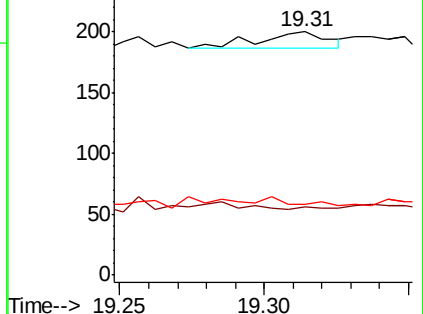
104 0.0 1.1 1.7#

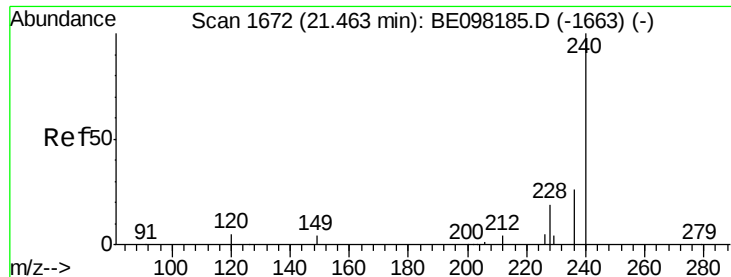


Abundance Ion 212.00 (211.70 to 212.70): E

Ion 106.00 (105.70 to 106.70): E

Ion 104.00 (103.70 to 104.70): E

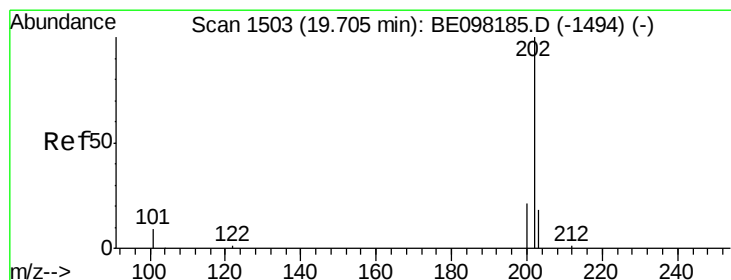
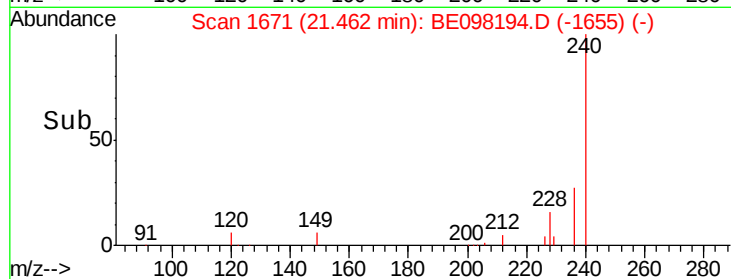
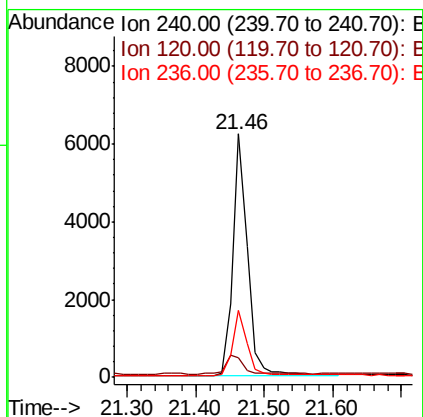
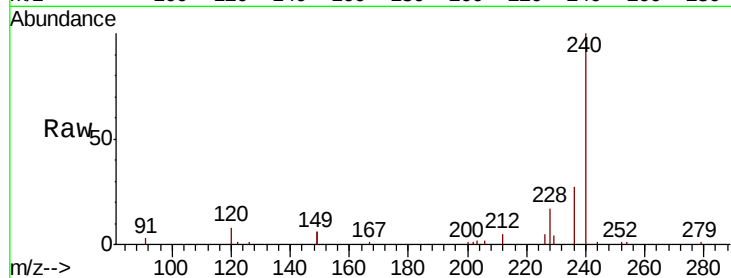




#27  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.46 min Scan# 1671  
 Delta R.T. -0.00 min  
 Lab File: BE098194.D  
 Acq: 12 Nov 2018 17:36

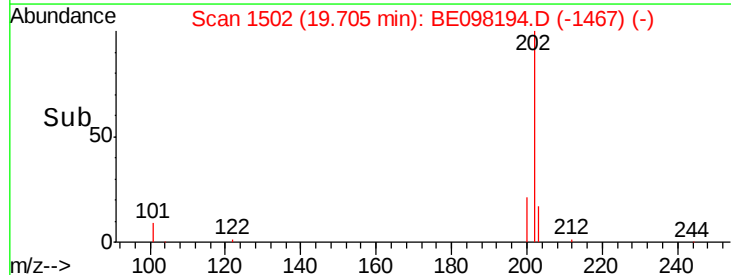
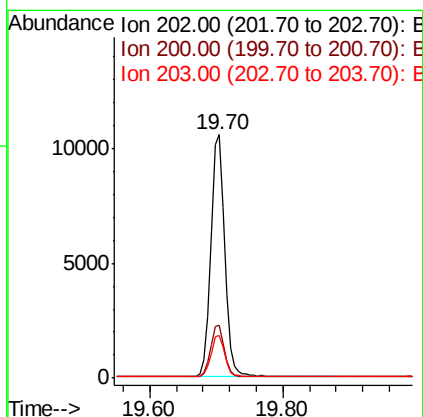
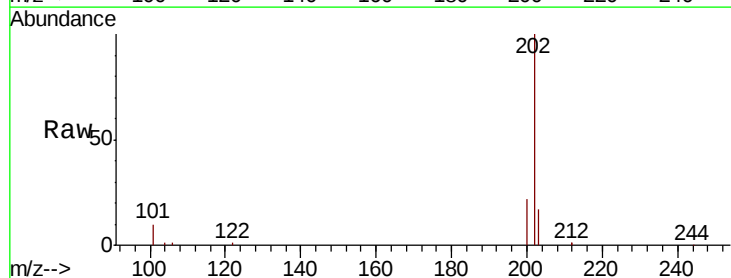
Instrument :  
 BNA\_E  
 ClientSampleId :  
 PT-BNA-SoilDL

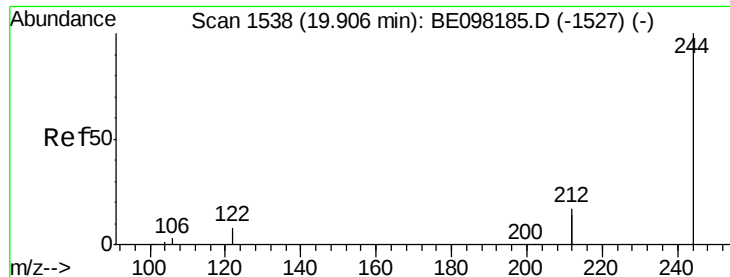
Tgt Ion:240 Resp: 9150  
 Ion Ratio Lower Upper  
 240 100  
 120 7.8 4.8 7.2#  
 236 27.3 21.4 32.0



#28  
 Pyrene  
 Concen: 0.606 ng  
 RT: 19.70 min Scan# 1502  
 Delta R.T. -0.00 min  
 Lab File: BE098194.D  
 Acq: 12 Nov 2018 17:36

Tgt Ion:202 Resp: 15271  
 Ion Ratio Lower Upper  
 202 100  
 200 21.2 17.2 25.8  
 203 17.0 14.2 21.4





#29

Terphenyl-d14

Concen: 0.196 ng

RT: 19.91 min Scan# 1537

Delta R.T. -0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

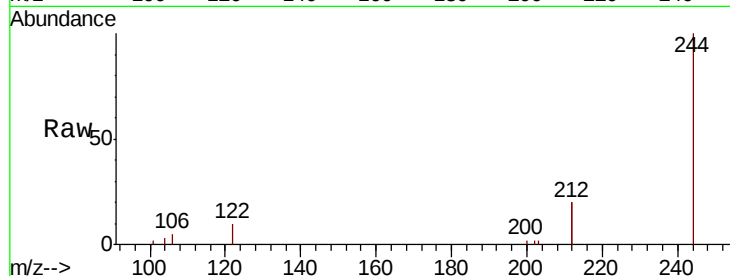
Tgt Ion:244 Resp: 4067

Ion Ratio Lower Upper

244 100

212 39.0 26.8 40.2

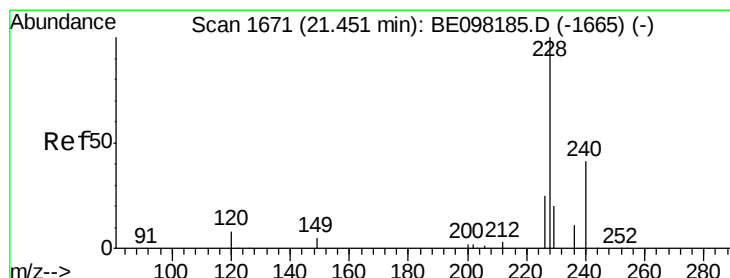
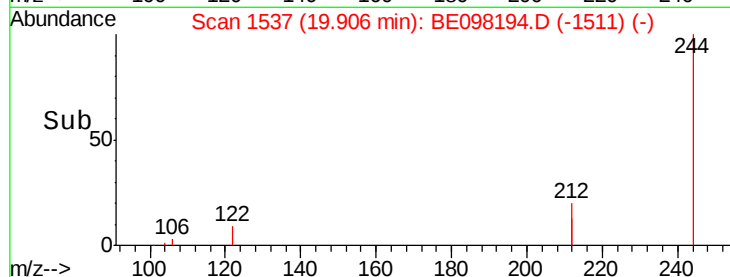
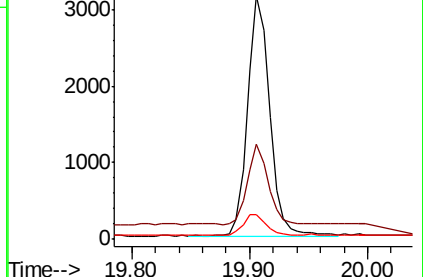
122 10.1 7.0 10.6



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: 0.210 ng

RT: 21.45 min Scan# 1670

Delta R.T. -0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

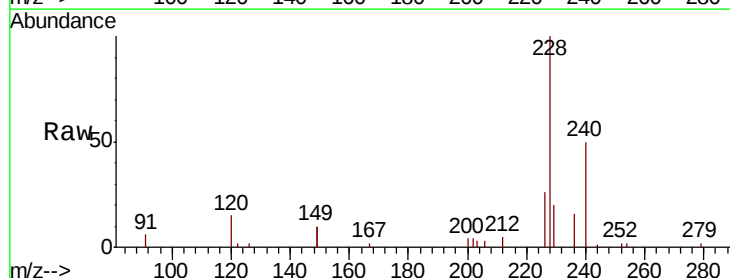
Tgt Ion:228 Resp: 5469

Ion Ratio Lower Upper

228 100

226 26.4 20.7 31.1

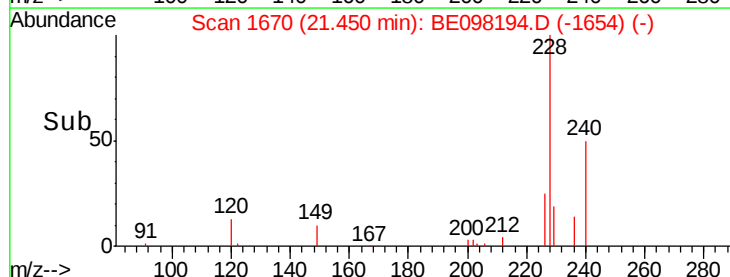
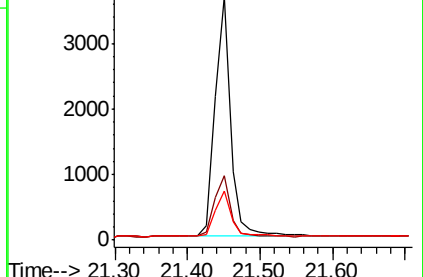
229 20.0 16.2 24.4

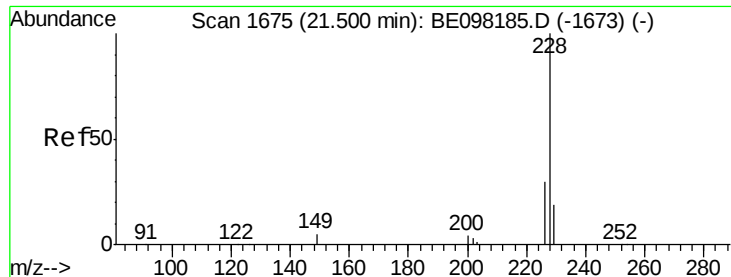


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#31

Chrysene

Concen: 0.198 ng

RT: 21.45 min Scan# 1670

Delta R.T. -0.05 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

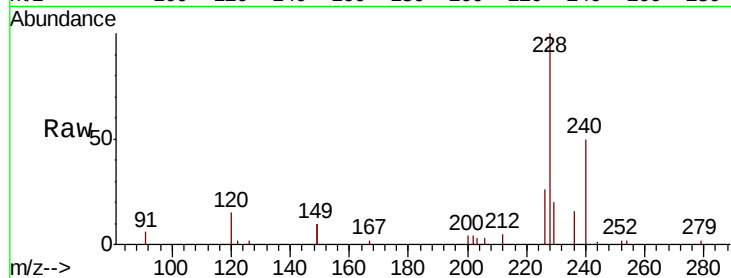
Tgt Ion:228 Resp: 5223

Ion Ratio Lower Upper

228 100

226 26.4 24.6 36.8

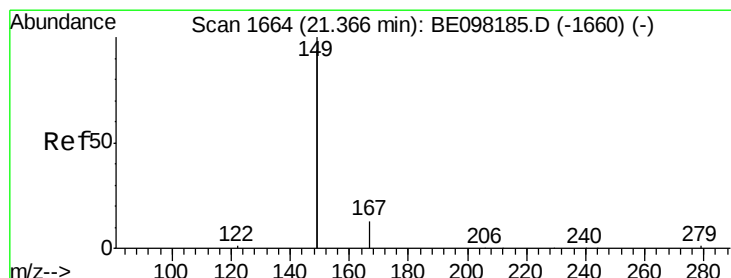
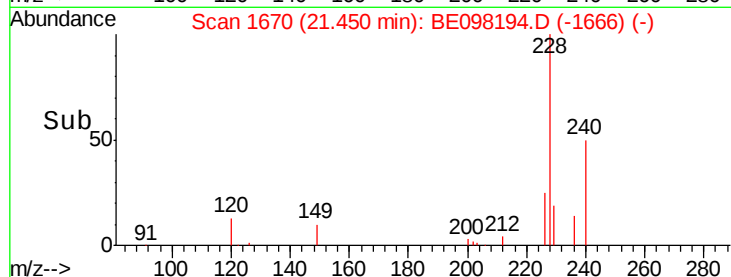
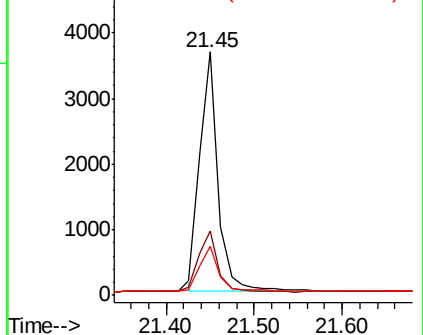
229 20.0 16.0 24.0



Abundance Ion 228.00 (227.70 to 228.70): E

5000 Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#32

Bis(2-ethylhexyl)phthalate

Concen: 0.738 ng

RT: 21.37 min Scan# 1663

Delta R.T. -0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

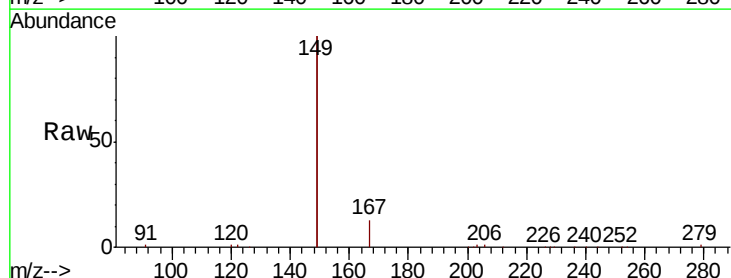
Tgt Ion:149 Resp: 39869

Ion Ratio Lower Upper

149 100

167 7.0 5.6 8.4

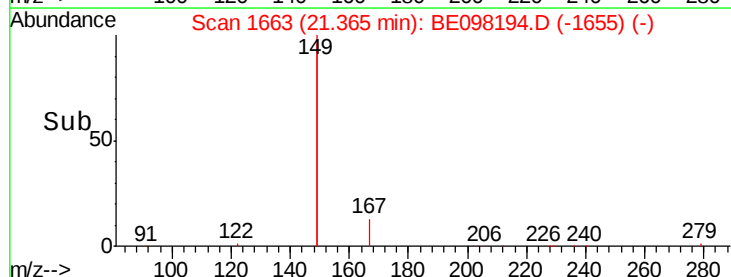
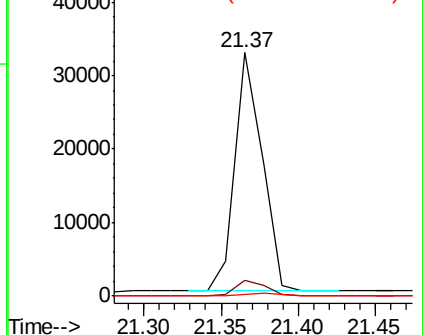
279 1.1 0.9 1.3

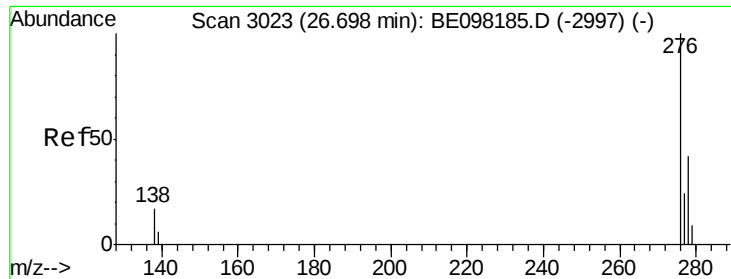


Abundance Ion 149.00 (148.70 to 149.70): E

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: 0.526 ng

RT: 26.70 min Scan# 3024

Delta R.T. 0.01 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

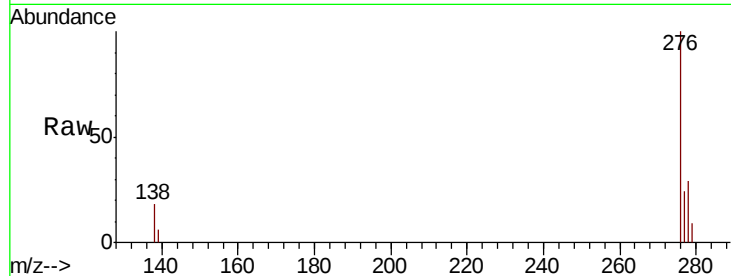
Tgt Ion:276 Resp: 12736

Ion Ratio Lower Upper

276 100

138 15.5 6.4 9.6#

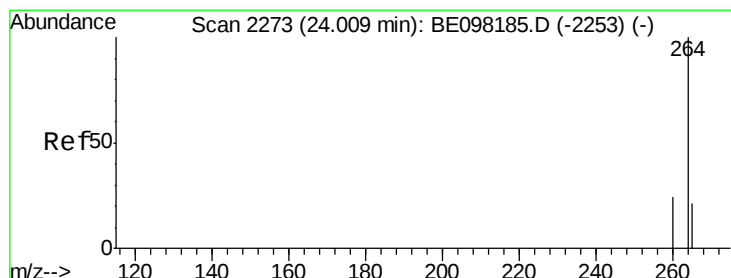
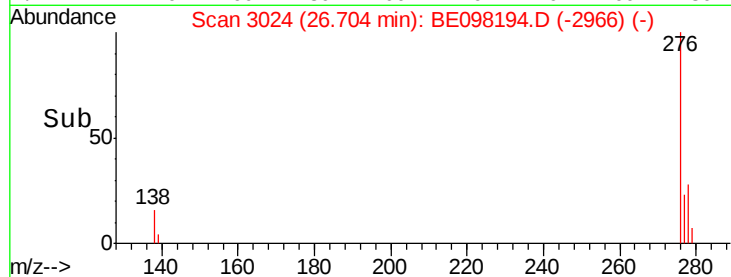
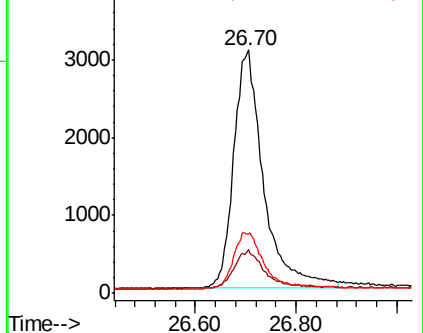
277 22.7 18.9 28.3



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

Perylene-d12

Concen: 0.400 ng

RT: 24.01 min Scan# 2273

Delta R.T. 0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

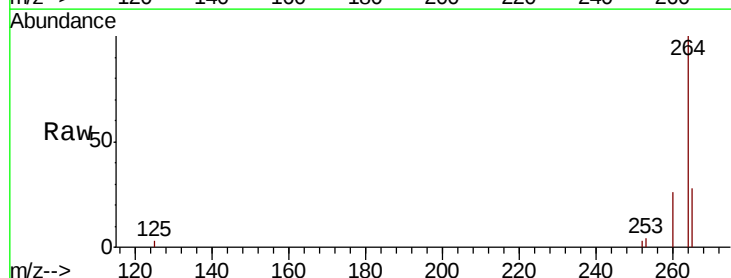
Tgt Ion:264 Resp: 8782

Ion Ratio Lower Upper

264 100

260 25.9 19.9 29.9

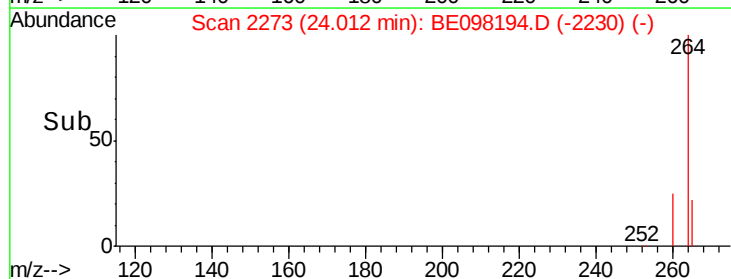
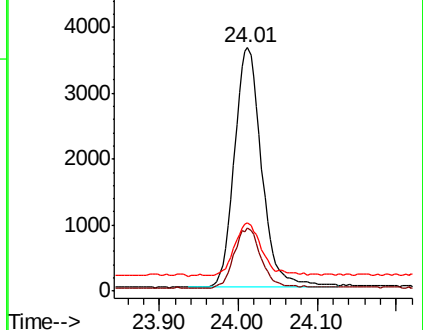
265 28.0 21.3 31.9

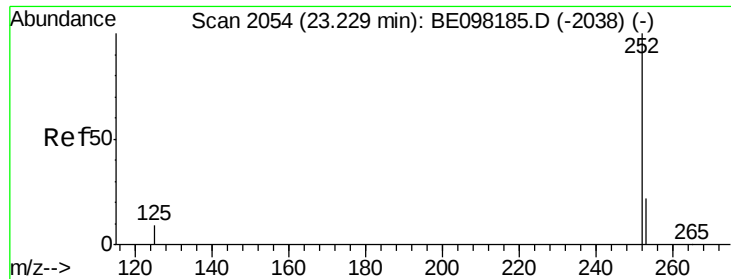


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





#35

Benzo(b)fluoranthene

Concen: 0.522 ng

RT: 23.28 min Scan# 2067

Delta R.T. 0.05 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

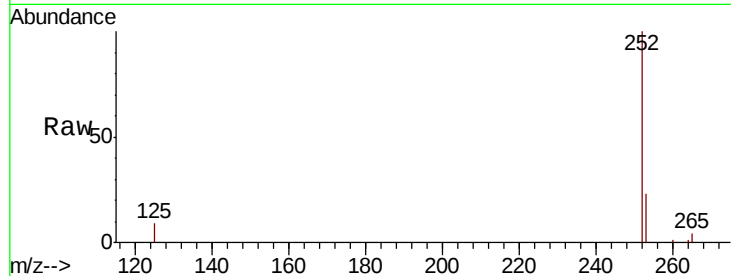
Tgt Ion:252 Resp: 13012

Ion Ratio Lower Upper

252 100

253 23.2 19.4 29.0

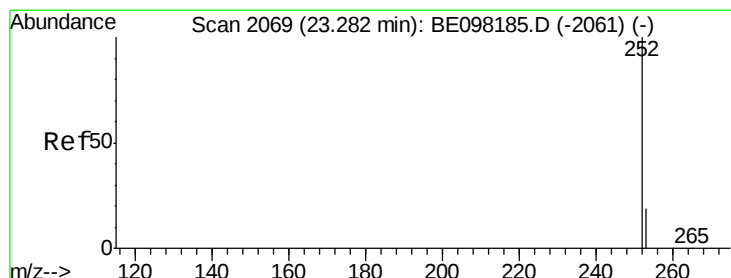
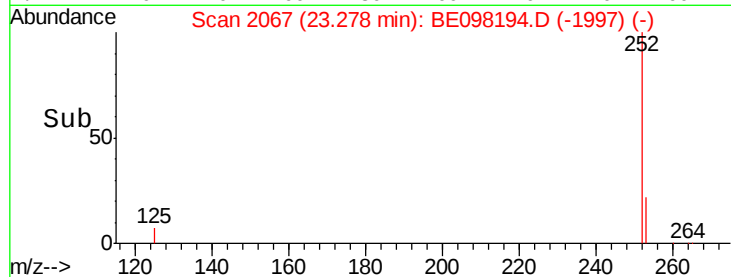
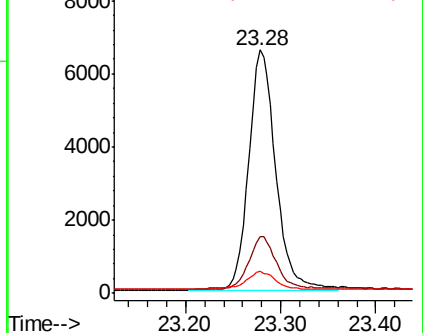
125 8.9 8.6 12.8



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



#36

Benzo(k)fluoranthene

Concen: 0.495 ng

RT: 23.28 min Scan# 2067

Delta R.T. -0.00 min

Lab File: BE098194.D

Acq: 12 Nov 2018 17:36

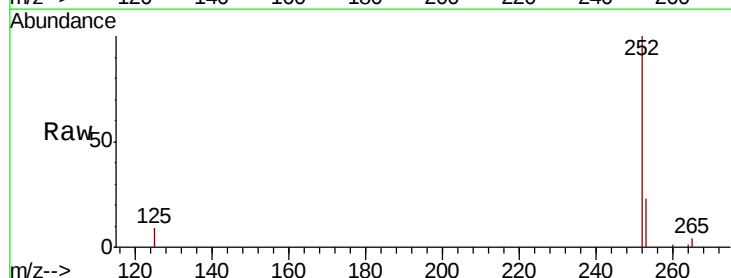
Tgt Ion:252 Resp: 13012

Ion Ratio Lower Upper

252 100

253 23.2 18.6 28.0

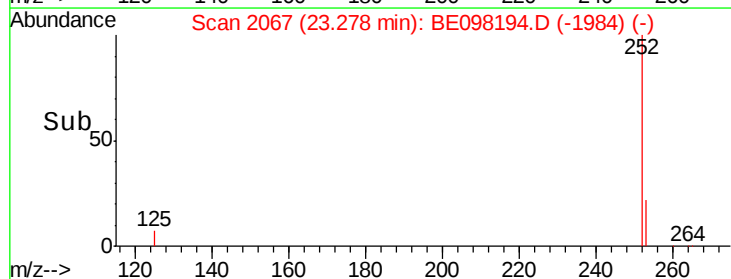
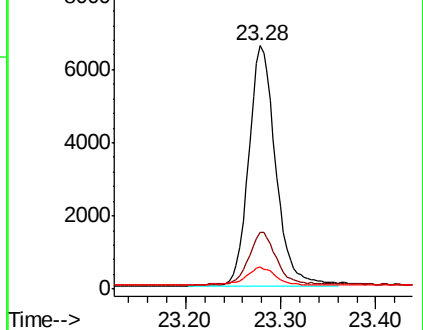
125 8.9 7.4 11.0

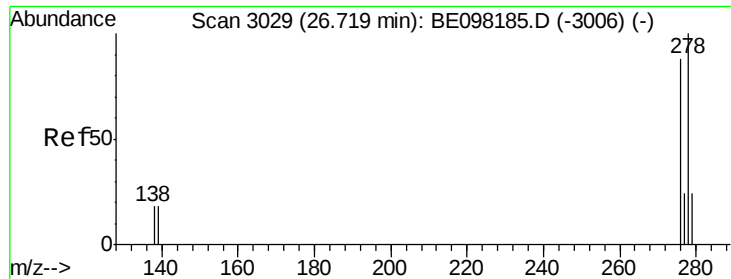


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#38

Dibenzo(a,h)anthracene

Concen: 0.259 ng

RT: 26.73 min Scan# 3031

Delta R.T. 0.01 min

Lab File: BE098194.D

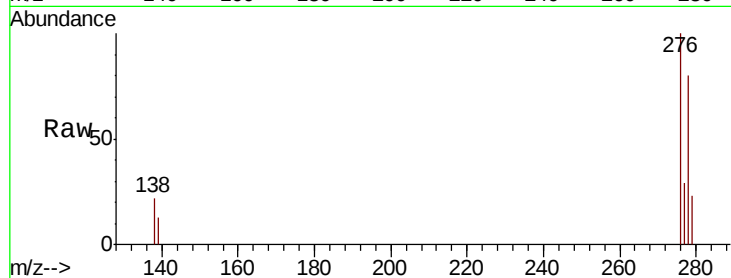
Acq: 12 Nov 2018 17:36

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL



Tgt Ion: 278 Resp: 5278

Ion Ratio Lower Upper

278 100

139 16.6 16.4 24.6

279 28.8 21.3 31.9

Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E

