

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA E\DATA\BE120117\  
 Data File : BE094899.D  
 Acq On : 1 Dec 2017 11:09  
 Operator : SJ/JU  
 Sample : I6298-15DL 100X  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

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

Quant Time: Dec 01 17:51:56 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 | 8.49  | 152  | 7620     | 0.40 | ng    | 0.00     |
| 7) Naphthalene-d8         | 11.33 | 136  | 17123    | 0.40 | ng    | 0.00     |
| 13) Acenaphthene-d10      | 15.08 | 164  | 9891     | 0.40 | ng    | 0.00     |
| 19) Phenanthrene-d10      | 17.77 | 188  | 24643    | 0.40 | ng    | 0.00     |
| 27) Chrysene-d12          | 21.89 | 240  | 29732    | 0.40 | ng    | 0.00     |
| 34) Perylene-d12          | 24.57 | 264  | 23089    | 0.40 | ng    | 0.00     |

|                             |       |     |       |      |    |      |
|-----------------------------|-------|-----|-------|------|----|------|
| System Monitoring Compounds |       |     |       |      |    |      |
| 4) 2-Fluorophenol           | 5.96  | 112 | 10894 | 0.90 | ng | 0.00 |
| 5) Phenol-d6                | 7.59  | 99  | 17084 | 0.96 | ng | 0.00 |
| 8) Nitrobenzene-d5          | 9.66  | 82  | 7503  | 0.74 | ng | 0.00 |
| 11) 2-Methylnaphthalene-d10 | 0.00  | 152 | 0d    | 0.00 | ng |      |
| 14) 2,4,6-Tribromophenol    | 16.53 | 330 | 1632  | 0.71 | ng | 0.00 |
| 15) 2-Fluorobiphenyl        | 13.71 | 172 | 26018 | 0.61 | ng | 0.00 |
| 25) Fluoranthene-d10        | 0.00  | 212 | 0d    | 0.00 | ng |      |
| 29) Terphenyl-d14           | 20.33 | 244 | 36403 | 0.66 | ng | 0.00 |

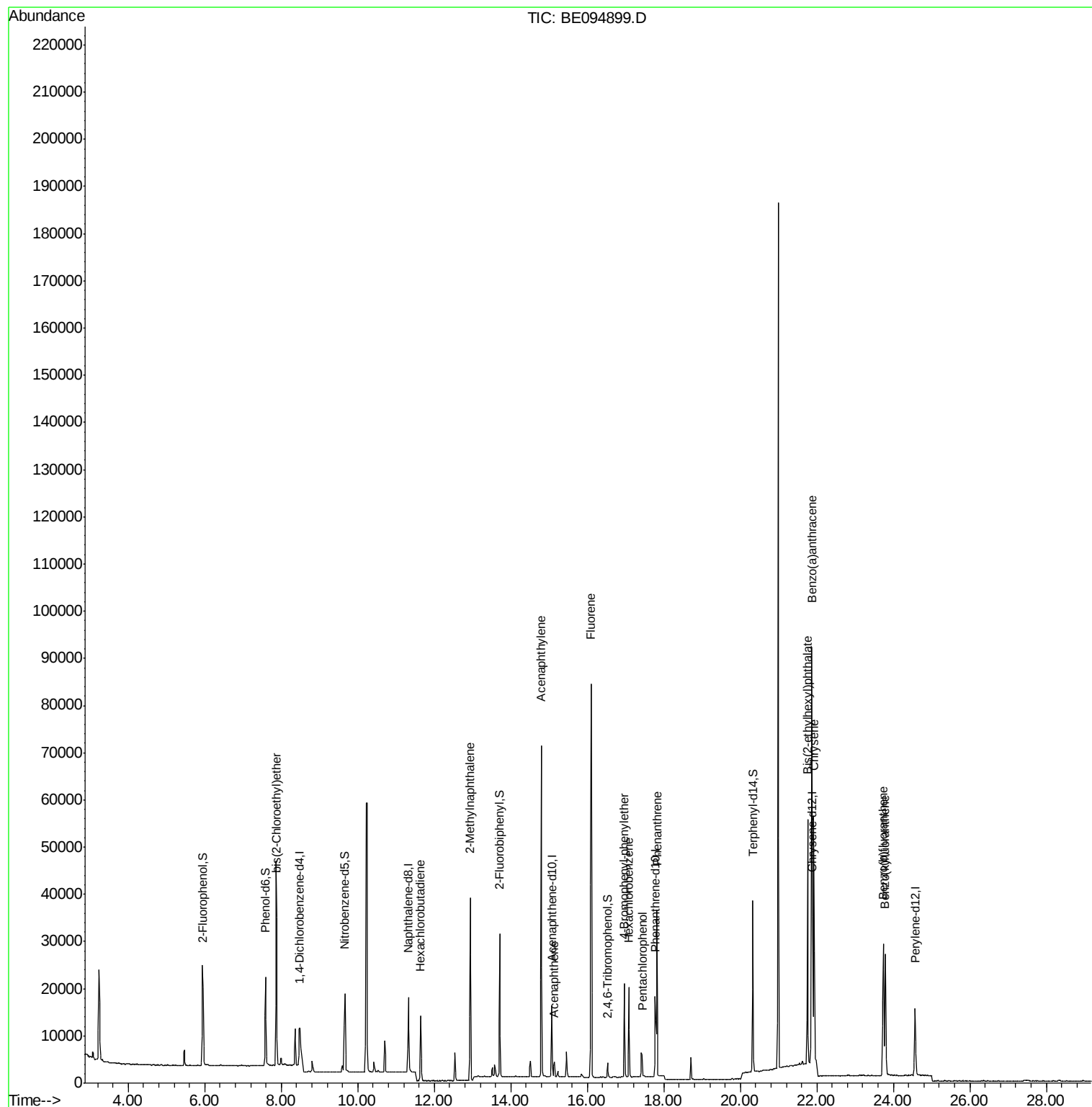
|                                |       |     |       |        |    |      |
|--------------------------------|-------|-----|-------|--------|----|------|
| Target Compounds               |       |     |       | Qvalue |    |      |
| 6) bis(2-Chloroethyl)ether     | 7.88  | 93  | 14305 | 0.808  | ng | 92   |
| 10) Hexachlorobutadiene        | 11.64 | 225 | 8965  | 1.058  | ng | 97   |
| 12) 2-Methylnaphthalene        | 12.94 | 142 | 39259 | 0.787  | ng | 98   |
| 16) Acenaphthylene             | 14.79 | 152 | 72981 | 1.306  | ng | 99   |
| 17) Acenaphthene               | 15.14 | 154 | 1735  | 0.048  | ng | 95   |
| 18) Fluorene                   | 16.10 | 166 | 53551 | 1.165  | ng | # 78 |
| 20) 4-Bromophenyl-phenylether  | 16.97 | 248 | 10143 | 0.738  | ng | # 58 |
| 21) Hexachlorobenzene          | 17.09 | 284 | 14440 | 1.077  | ng | # 79 |
| 22) Pentachlorophenol          | 17.43 | 266 | 3039  | 0.818  | ng | # 71 |
| 23) Phenanthrene               | 17.82 | 178 | 35037 | 0.446  | ng | 99   |
| 30) Benzo(a)anthracene         | 21.87 | 228 | 89446 | 0.981  | ng | # 61 |
| 31) Chrysene                   | 21.92 | 228 | 49641 | 0.493  | ng | # 64 |
| 32) Bis(2-ethylhexyl)phthalate | 21.76 | 149 | 58622 | 0.388  | ng | 100  |
| 35) Benzo(b)fluoranthene       | 23.73 | 252 | 41838 | 0.496  | ng | # 40 |
| 36) Benzo(k)fluoranthene       | 23.79 | 252 | 38230 | 0.445  | ng | # 40 |

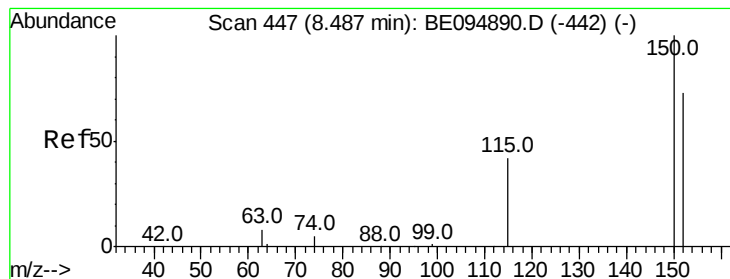
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Fri Dec 01 13:33:28 2017  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 0.400 ng

RT: 8.49 min Scan# 447

Delta R.T. -0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

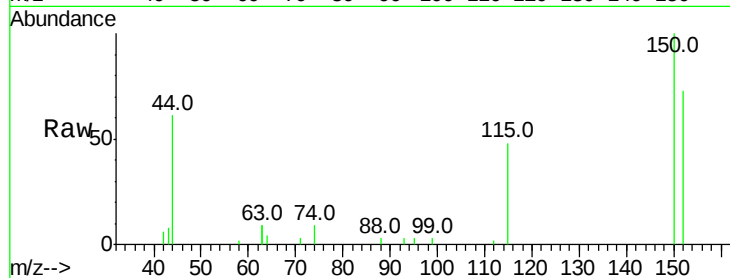
Tot Ion:152 Resp: 7620

Ion Ratio Lower Upper

152 100

150 136.3 117.2 175.8

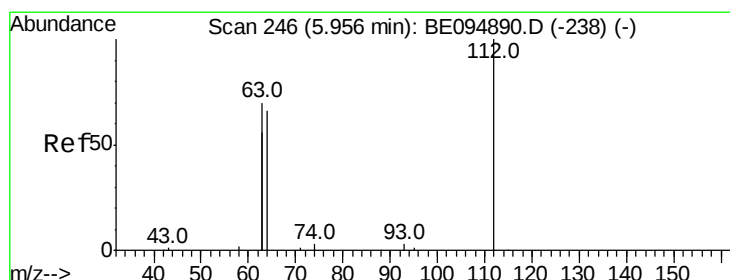
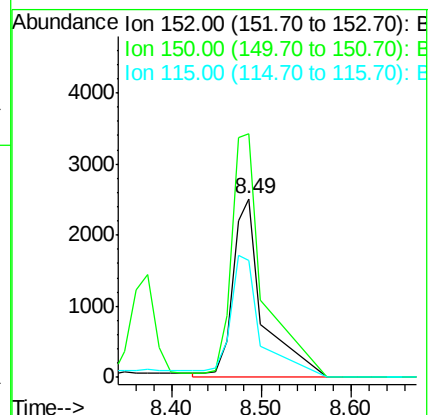
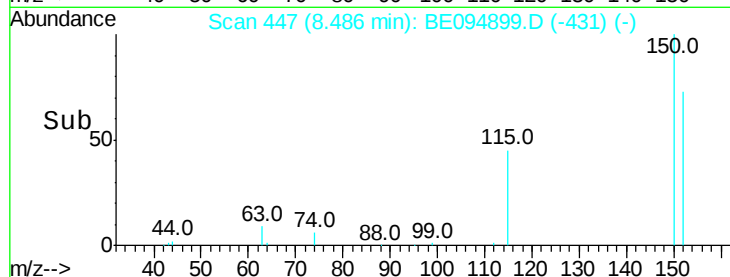
115 65.2 57.0 85.6



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: 0.903 ng

RT: 5.96 min Scan# 246

Delta R.T. -0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

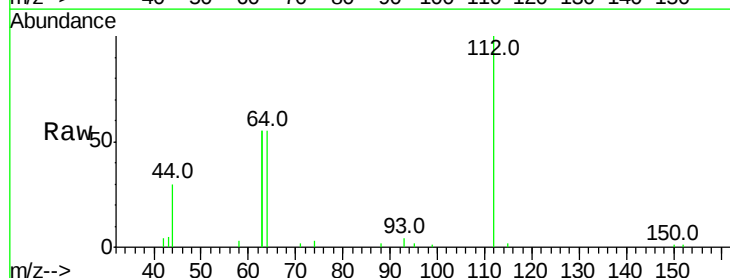
Tgt Ion:112 Resp: 10894

Ion Ratio Lower Upper

112 100

64 79.1 60.1 90.1

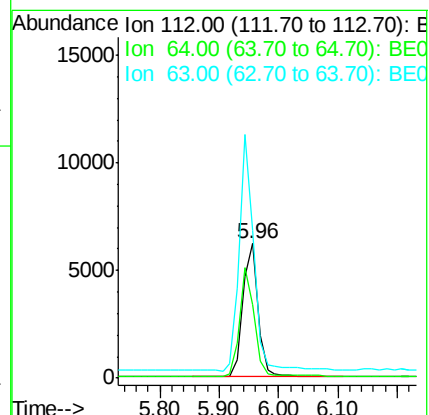
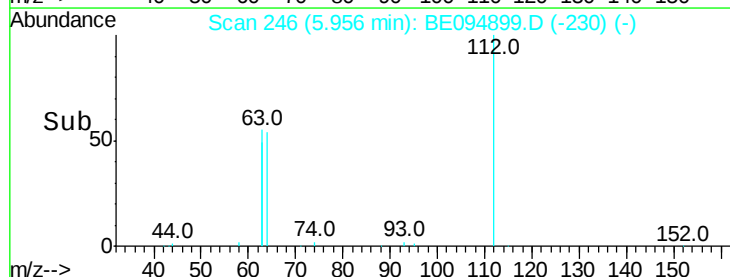
63 168.1 116.8 175.2

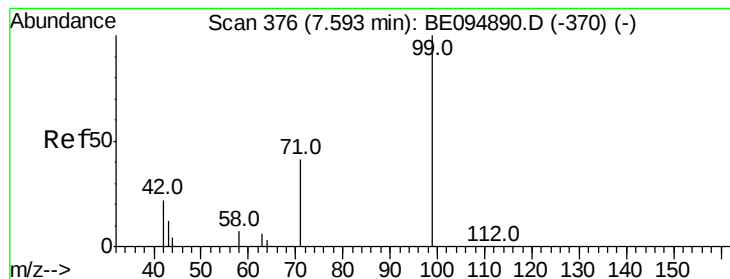


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BE0

Ion 63.00 (62.70 to 63.70): BE0





#5

Phenol-d6

Concen: 0.956 ng

RT: 7.59 min Scan# 376

Delta R.T. -0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

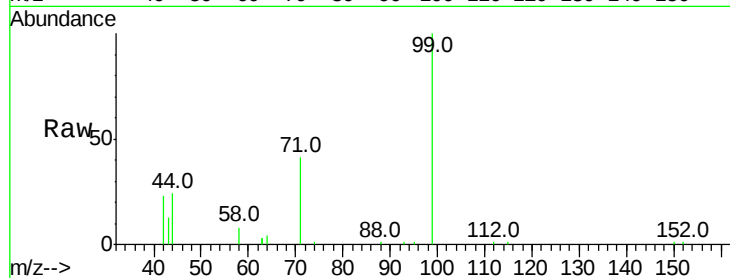
Tot Ion: 99 Resp: 17084

Ion Ratio Lower Upper

99 100

42 24.7 20.2 30.2

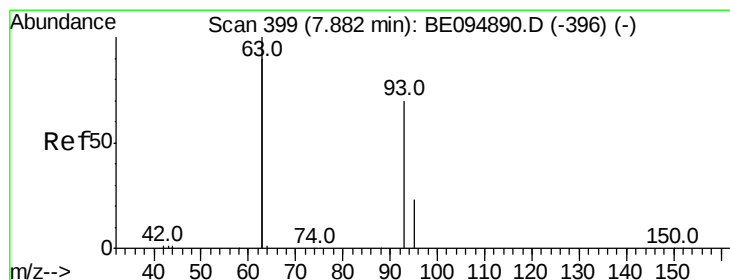
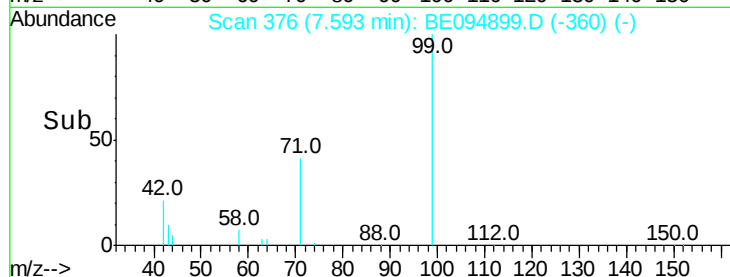
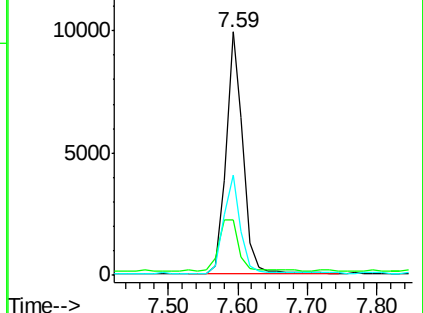
71 40.6 28.4 42.6



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



#6

bis(2-Chloroethyl)ether

Concen: 0.808 ng

RT: 7.88 min Scan# 399

Delta R.T. -0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

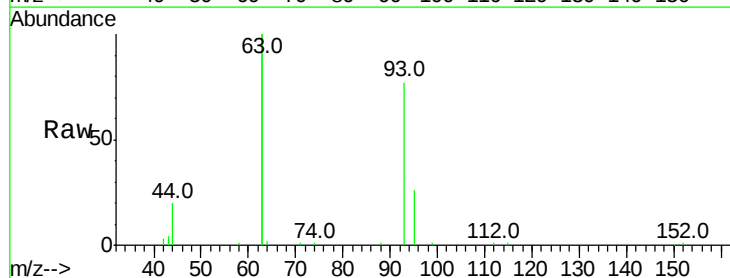
Tgt Ion: 93 Resp: 14305

Ion Ratio Lower Upper

93 100

63 361.7 275.3 412.9

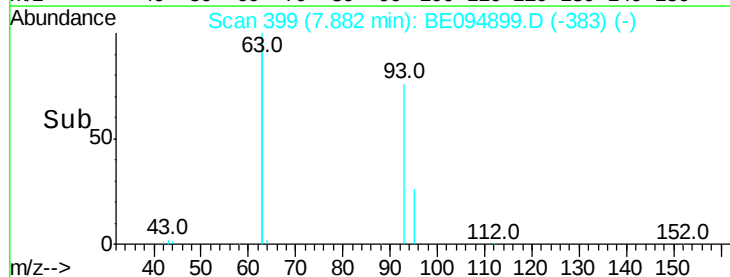
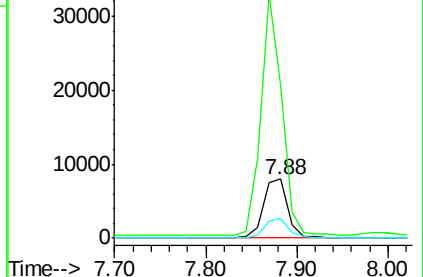
95 32.1 25.2 37.8

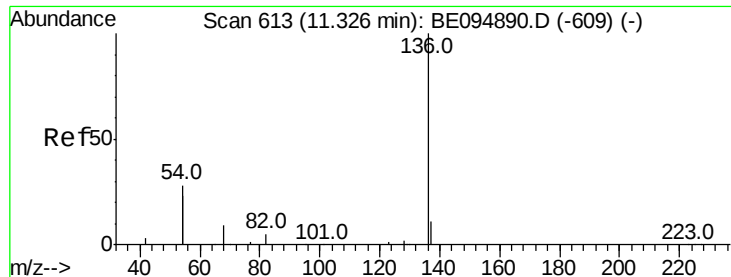


Abundance Ion 93.00 (92.70 to 93.70): BE0

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: 11.33 min Scan# 613

Delta R.T. -0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

Tot Ion:136 Resp: 17123

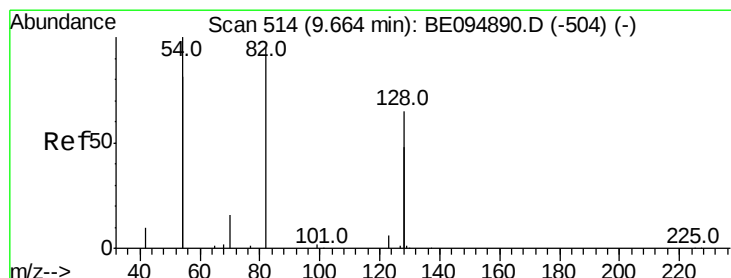
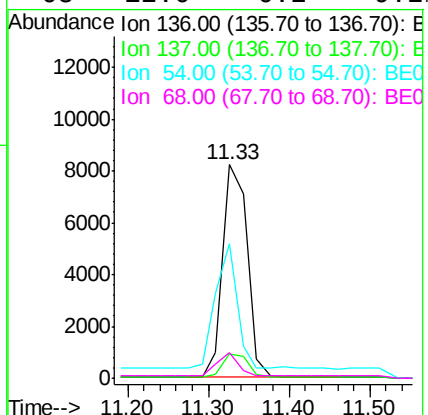
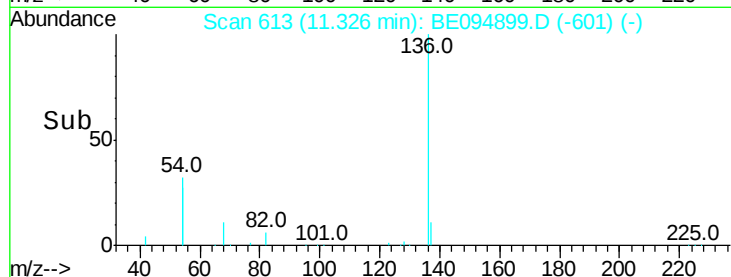
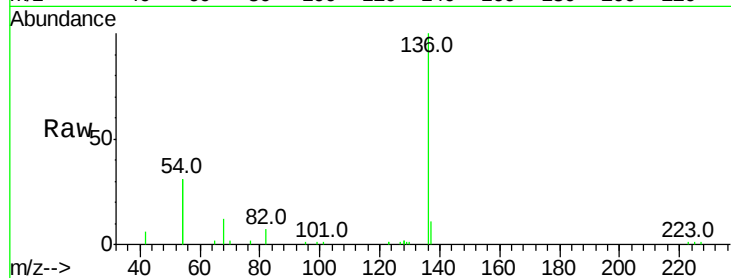
Ion Ratio Lower Upper

136 100

137 11.3 9.5 14.3

54 62.9 29.1 43.7#

68 12.0 6.2 9.2#



#8

Nitrobenzene-d5

Concen: 0.740 ng

RT: 9.66 min Scan# 514

Delta R.T. -0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

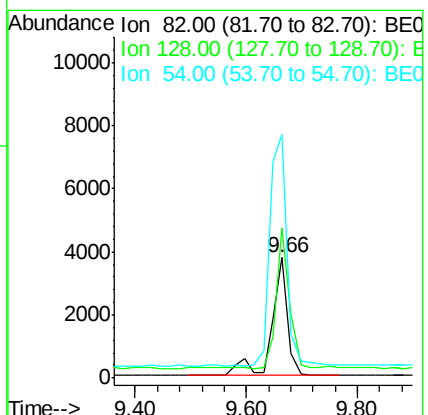
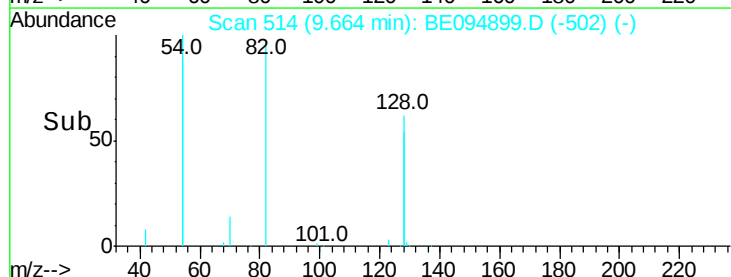
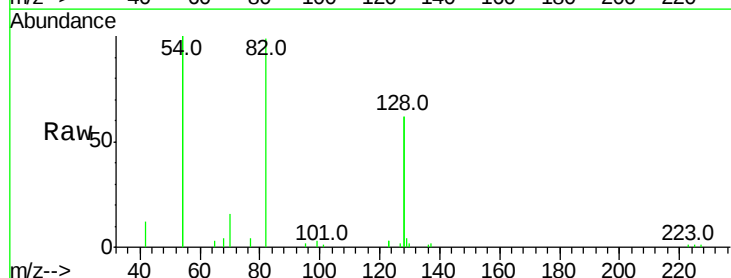
Tgt Ion: 82 Resp: 7503

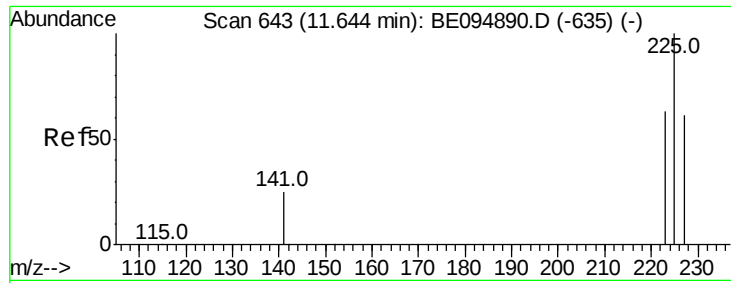
Ion Ratio Lower Upper

82 100

128 125.0 150.0 225.0#

54 202.3 154.2 231.4

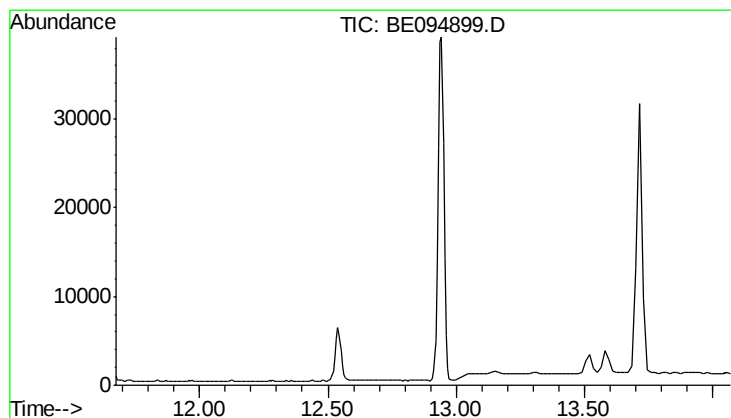
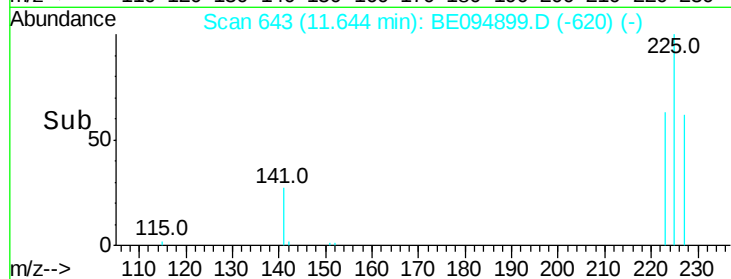
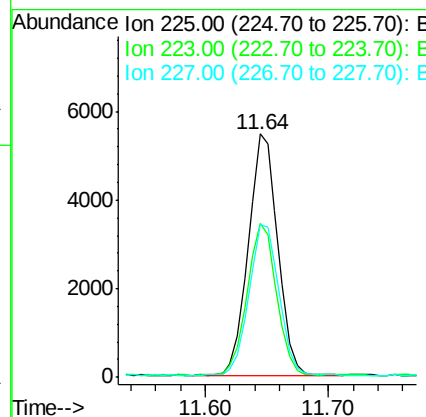
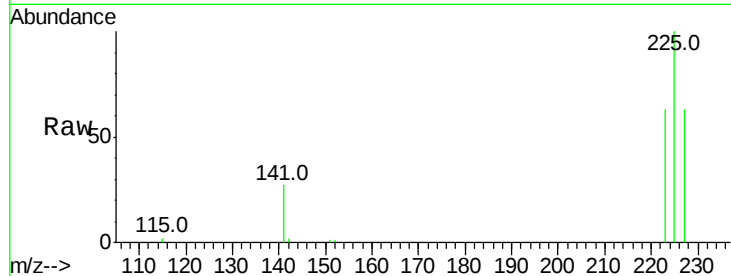




#10  
 Hexachlorobutadiene  
 Concen: 1.058 ng  
 RT: 11.64 min Scan# 643  
 Delta R.T. 0.00 min  
 Lab File: BE094899.D  
 Acq: 1 Dec 2017 11:09

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

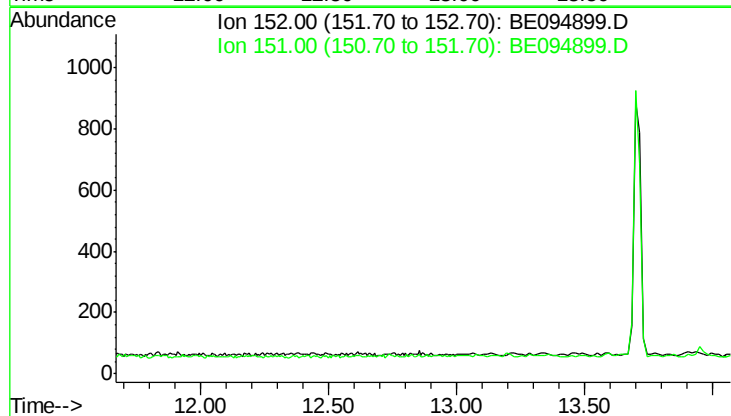
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 225   | Resp: | 8965  |
| Ion      | Ratio | Lower | Upper |
| 225      | 100   |       |       |
| 223      | 62.4  | 53.0  | 79.6  |
| 227      | 63.9  | 51.4  | 77.2  |

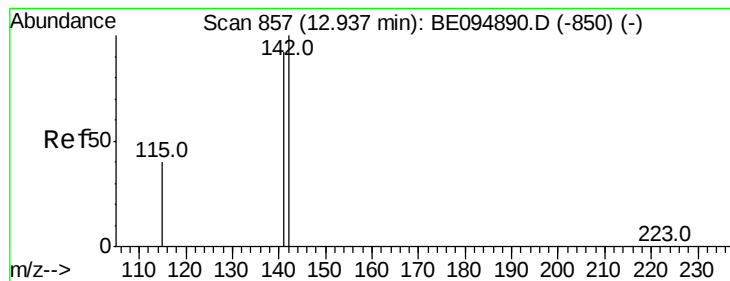


#11  
 2-Methylnaphthalene-d10  
 Concen: 0.000 ng  
 Expected RT: 12.87 min

Lab File: BE094899.D  
 Acq: 1 Dec 2017 11:09

|          |           |
|----------|-----------|
| Tgt Ion: | 152       |
| Sig      | Exp Ratio |
| 152      | 100       |
| 151      | 19.2      |





#12

2-Methylnaphthalene

Concen: 0.787 ng

RT: 12.94 min Scan# 858

Delta R.T. 0.01 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

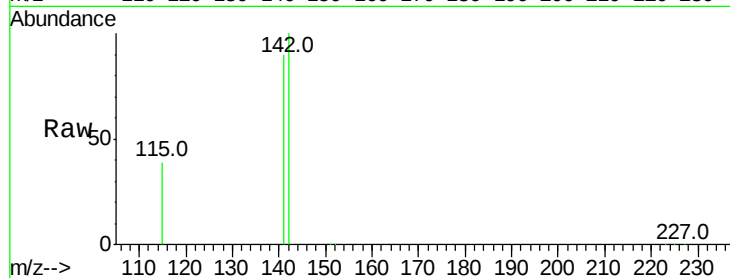
Tot Ion:142 Resp: 39259

Ion Ratio Lower Upper

142 100

141 90.0 70.4 105.6

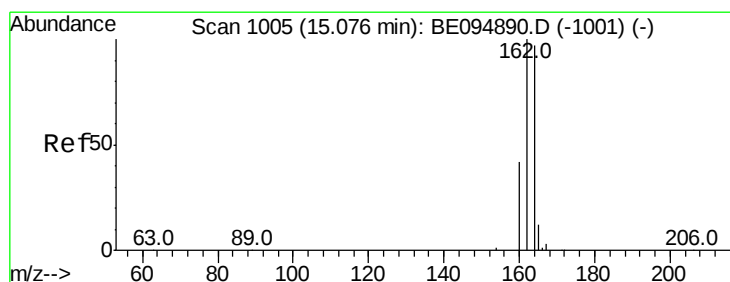
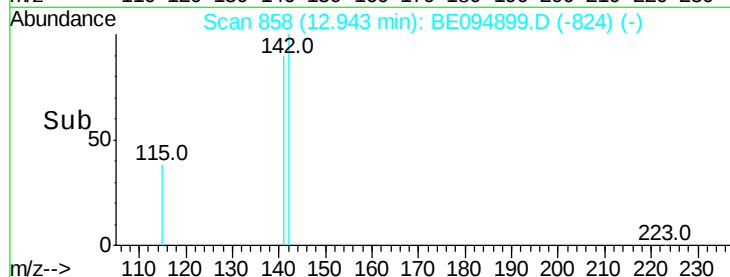
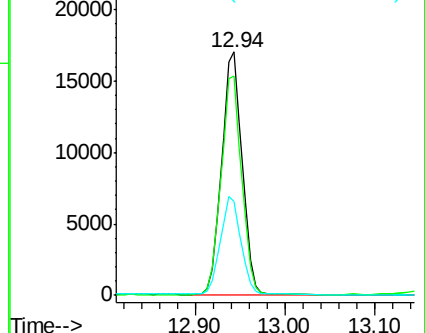
115 38.6 31.7 47.5



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 15.08 min Scan# 1005

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

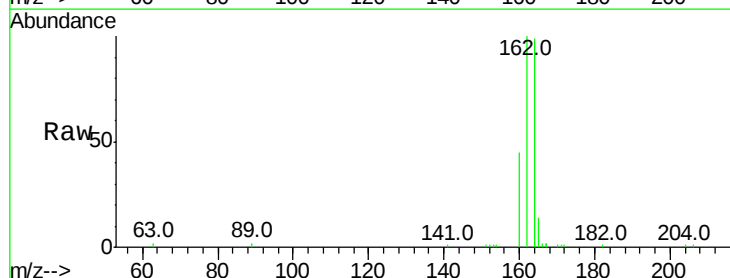
Tgt Ion:164 Resp: 9891

Ion Ratio Lower Upper

164 100

162 101.1 83.1 124.7

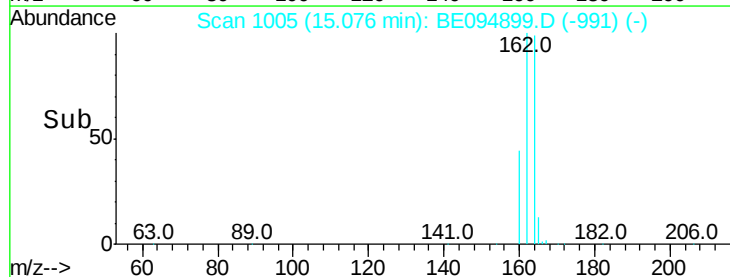
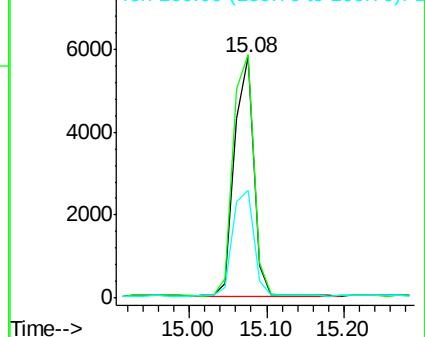
160 45.0 37.1 55.7

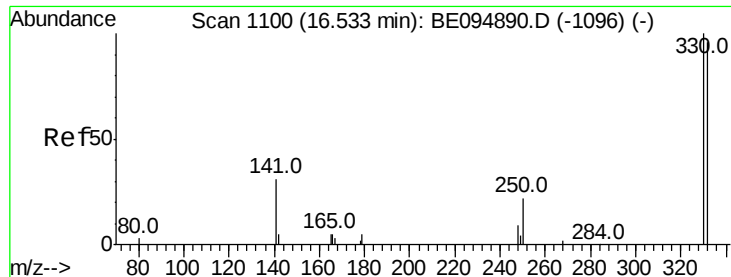


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





#14

2,4,6-Tribromophenol

Concen: 0.708 ng

RT: 16.53 min Scan# 1100

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

Instrument :

BNA\_E

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PT-BNA-SoilDL

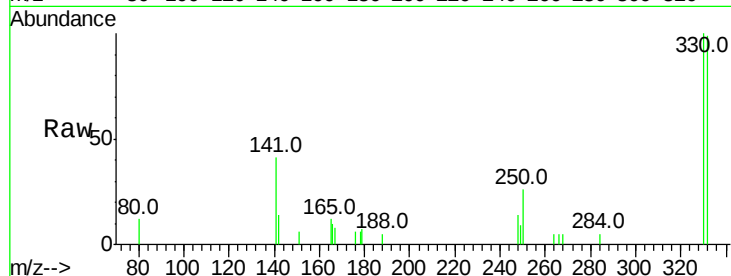
Tot Ion:330 Resp: 1632

Ion Ratio Lower Upper

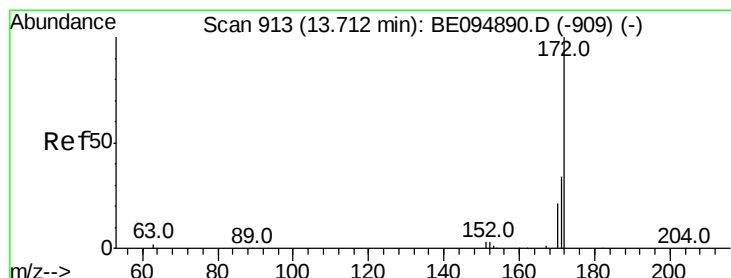
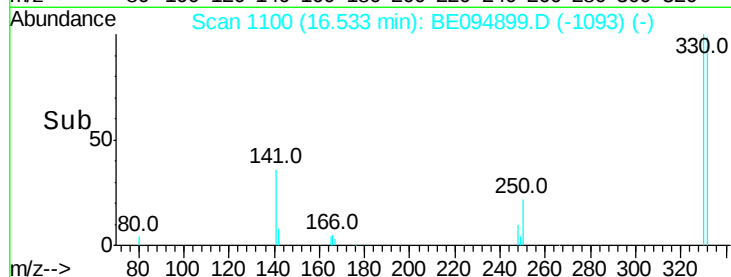
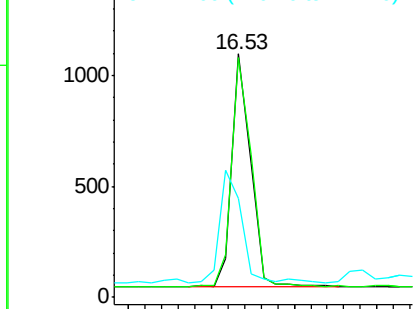
330 100

332 102.8 152.7 229.1#

141 55.8 33.7 50.5#



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: 0.614 ng

RT: 13.71 min Scan# 913

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

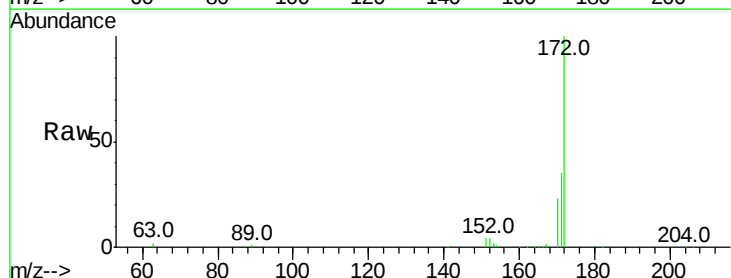
Tgt Ion:172 Resp: 26018

Ion Ratio Lower Upper

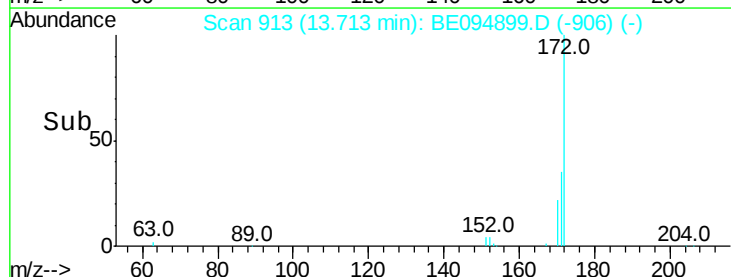
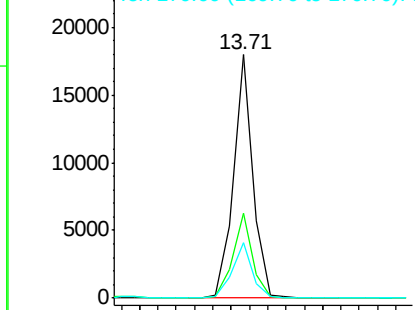
172 100

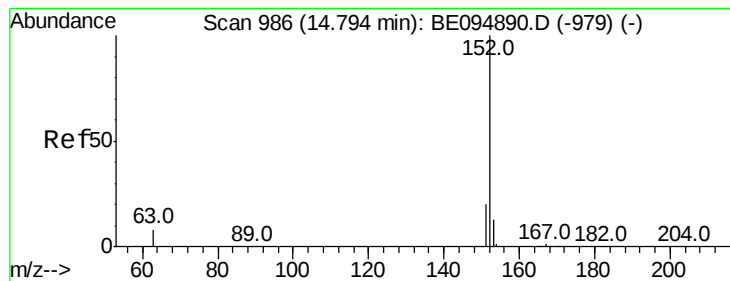
171 34.8 29.9 44.9

170 22.7 21.8 32.8



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





#16

Acenaphthylene

Concen: 1.306 ng

RT: 14.79 min Scan# 986

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

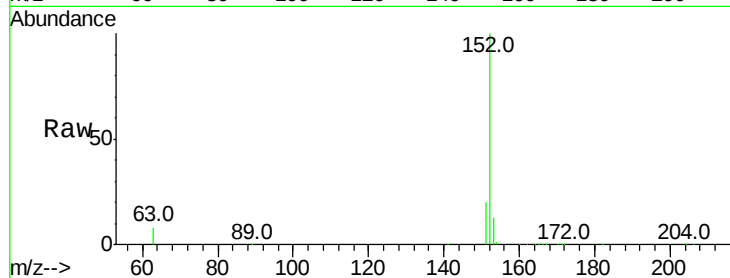
Tot Ion:152 Resp: 72981

Ion Ratio Lower Upper

152 100

151 19.9 15.7 23.5

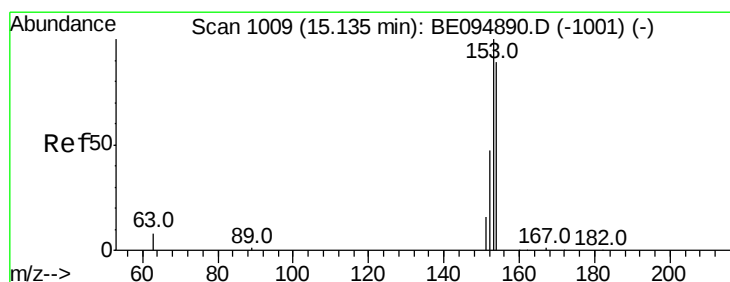
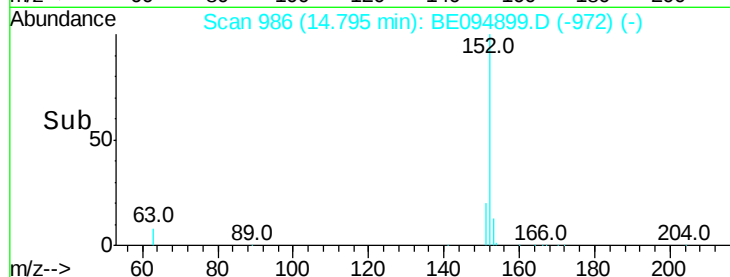
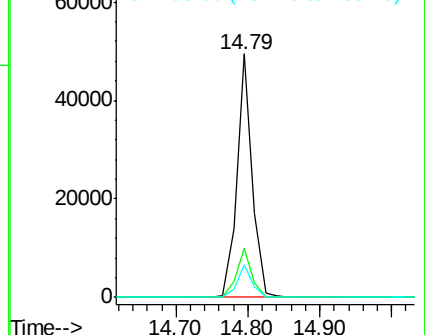
153 12.9 10.5 15.7



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E



#17

Acenaphthene

Concen: 0.048 ng

RT: 15.14 min Scan# 1009

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

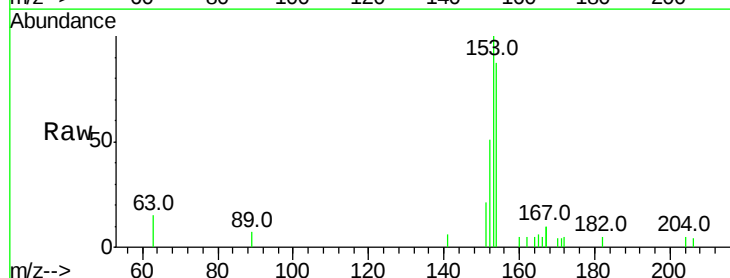
Tgt Ion:154 Resp: 1735

Ion Ratio Lower Upper

154 100

153 115.6 89.2 133.8

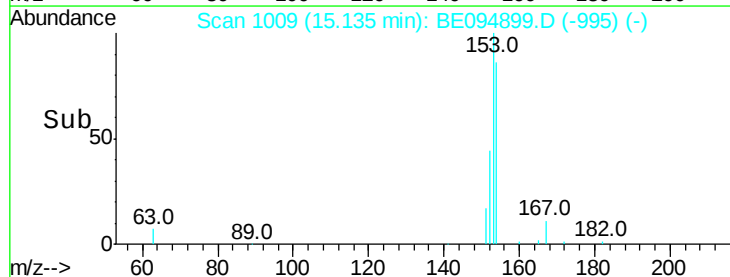
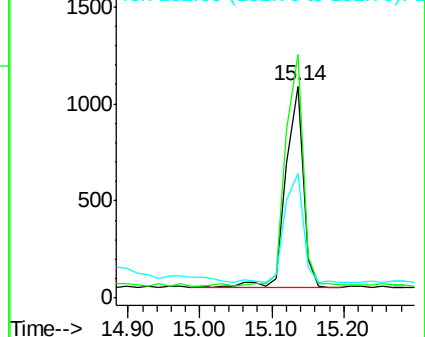
152 57.2 42.0 63.0

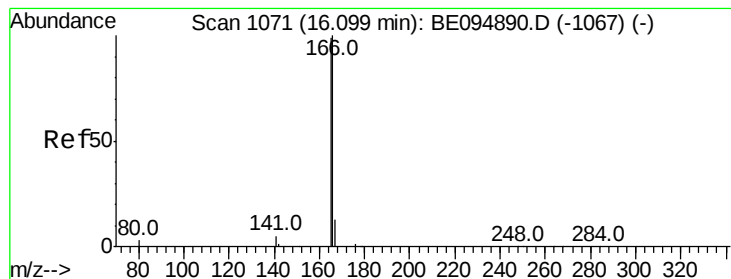


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E





#18

Fluorene

Concen: 1.165 ng

RT: 16.10 min Scan# 1071

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

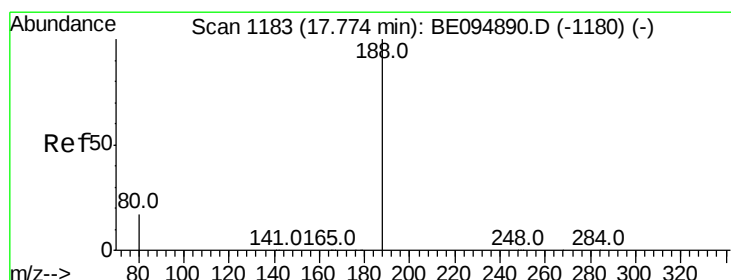
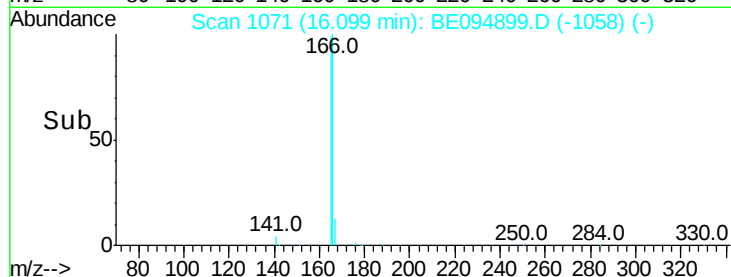
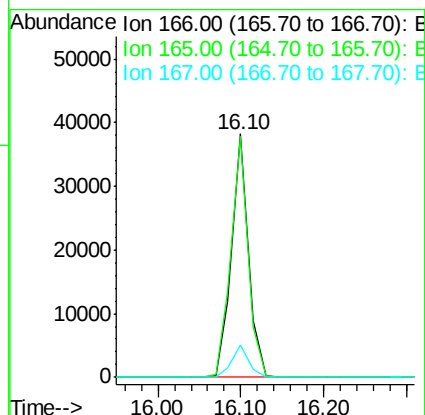
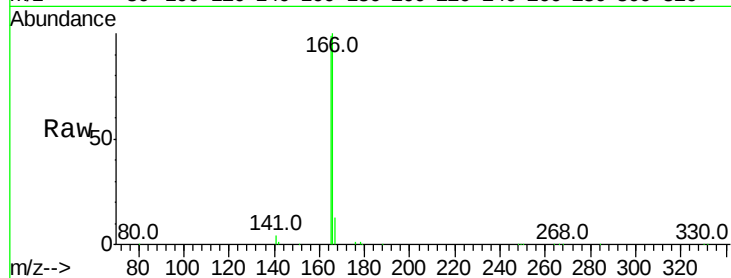
Tot Ion:166 Resp: 53551

Ion Ratio Lower Upper

166 100

165 100.5 77.8 116.6

167 13.2 42.4 63.6#



#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.77 min Scan# 1183

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

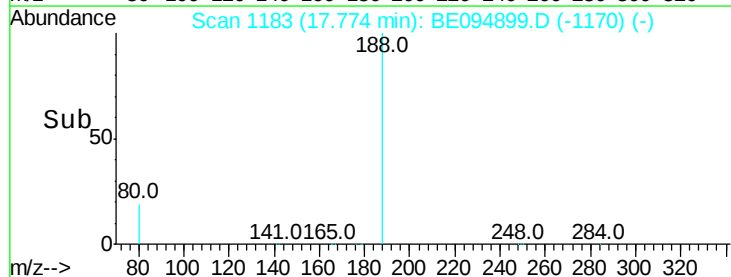
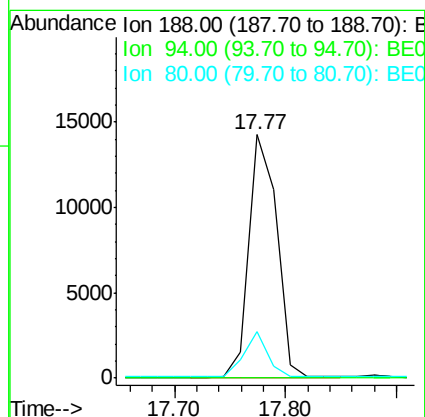
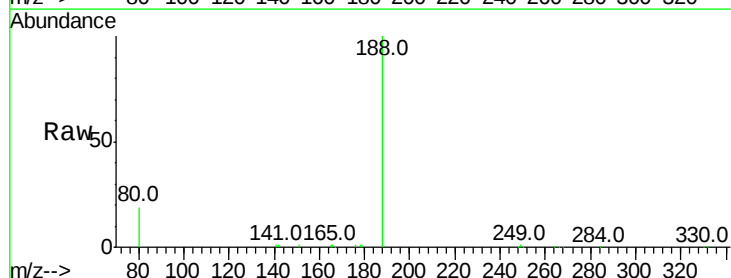
Tgt Ion:188 Resp: 24643

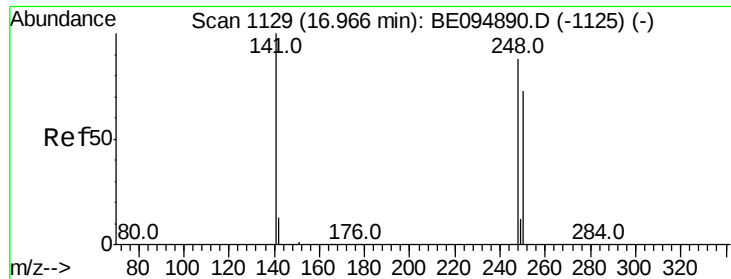
Ion Ratio Lower Upper

188 100

94 0.0 3.9 5.9#

80 19.3 3.6 5.4#

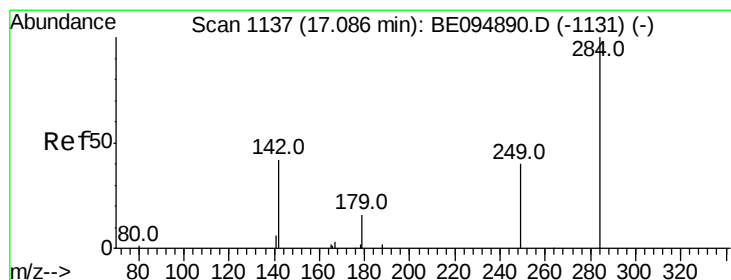
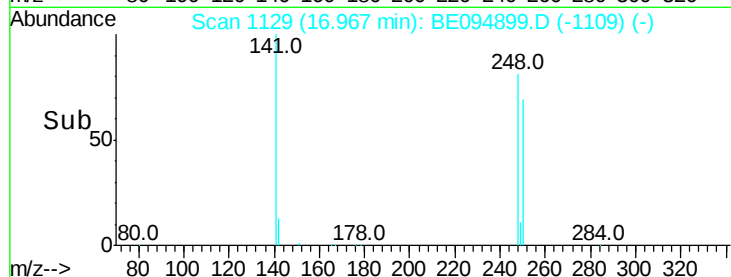
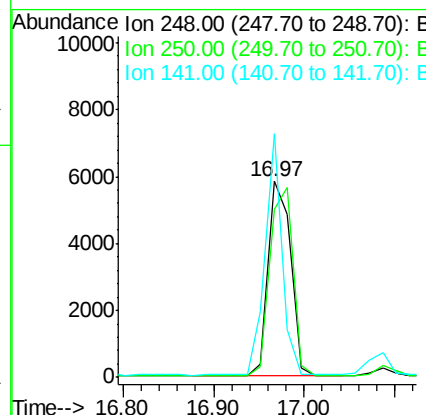
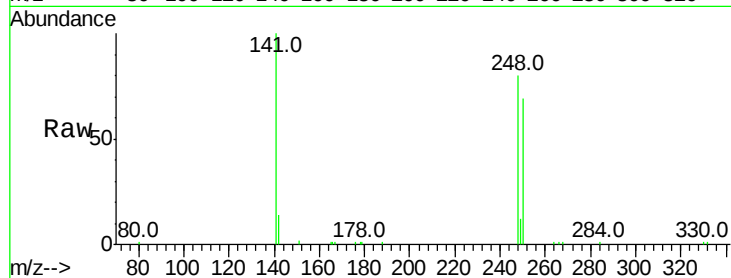




#20  
4-Bromophenyl-phenylether  
Concen: 0.738 ng  
RT: 16.97 min Scan# 1129  
Delta R.T. 0.00 min  
Lab File: BE094899.D  
Acq: 1 Dec 2017 11:09

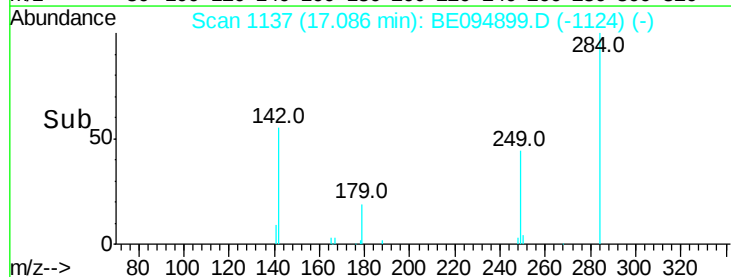
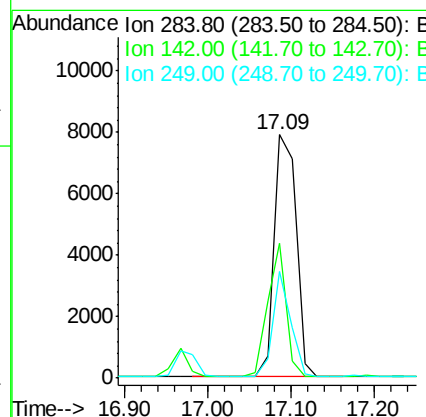
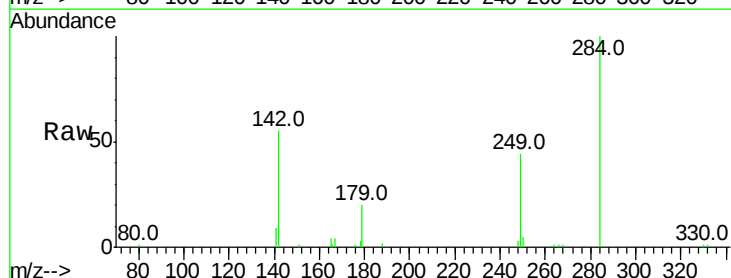
Instrument :  
BNA\_E  
ClientSampleID :  
PT-BNA-SoilDL

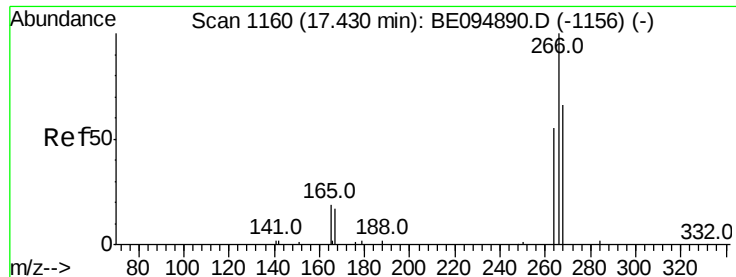
Tot Ion:248 Resp: 10143  
Ion Ratio Lower Upper  
248 100  
250 86.1 62.7 94.1  
141 124.4 48.2 72.2#



#21  
Hexachlorobenzene  
Concen: 1.077 ng  
RT: 17.09 min Scan# 1137  
Delta R.T. 0.00 min  
Lab File: BE094899.D  
Acq: 1 Dec 2017 11:09

Tgt Ion:284 Resp: 14440  
Ion Ratio Lower Upper  
284 100  
142 46.1 22.1 33.1#  
249 35.5 34.8 52.2

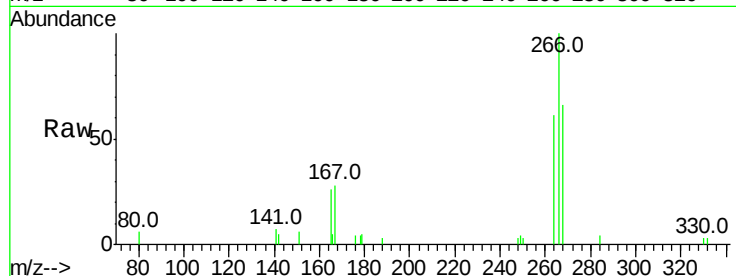




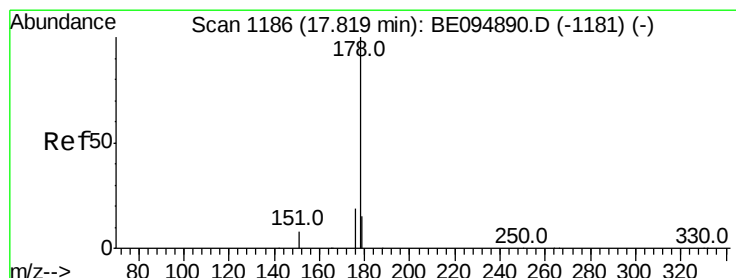
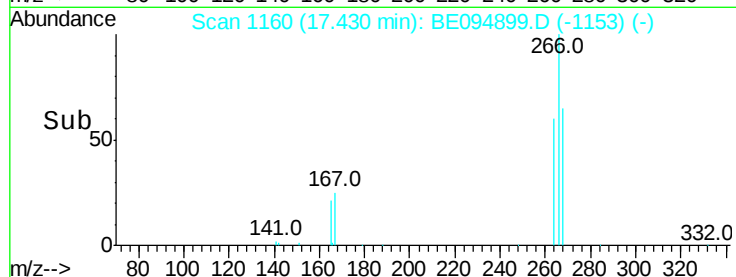
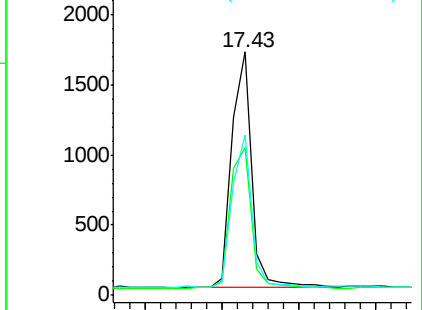
#22  
 Pentachlorophenol  
 Concen: 0.818 ng  
 RT: 17.43 min Scan# 1160  
 Delta R.T. 0.00 min  
 Lab File: BE094899.D  
 Acq: 1 Dec 2017 11:09

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

Tot Ion:266 Resp: 3039  
 Ion Ratio Lower Upper  
 266 100  
 264 60.7 72.5 108.7#  
 268 66.1 73.8 110.6#

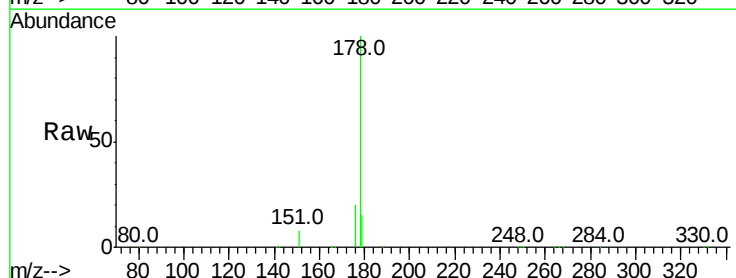


Abundance Ion 266.00 (265.70 to 266.70): E  
 Ion 264.00 (263.70 to 264.70): E  
 Ion 268.00 (267.70 to 268.70): E

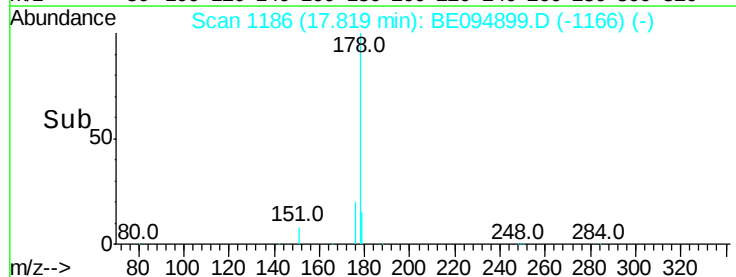
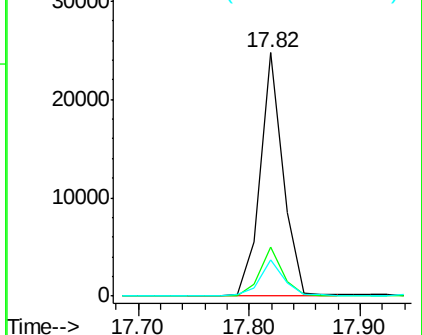


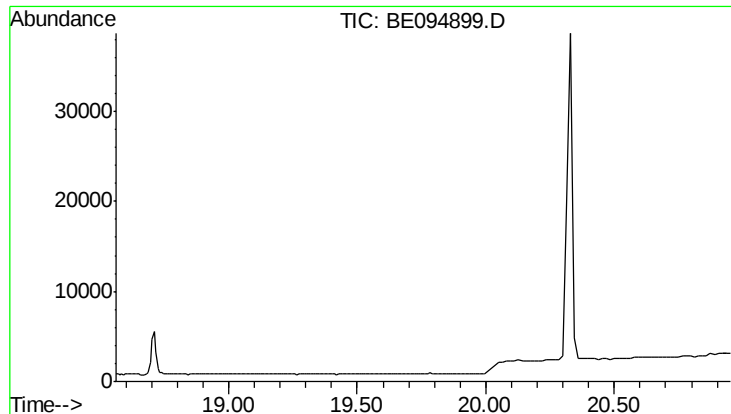
#23  
 Phenanthrene  
 Concen: 0.446 ng  
 RT: 17.82 min Scan# 1186  
 Delta R.T. 0.00 min  
 Lab File: BE094899.D  
 Acq: 1 Dec 2017 11:09

Tgt Ion:178 Resp: 35037  
 Ion Ratio Lower Upper  
 178 100  
 176 19.4 15.1 22.7  
 179 14.9 11.8 17.6



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

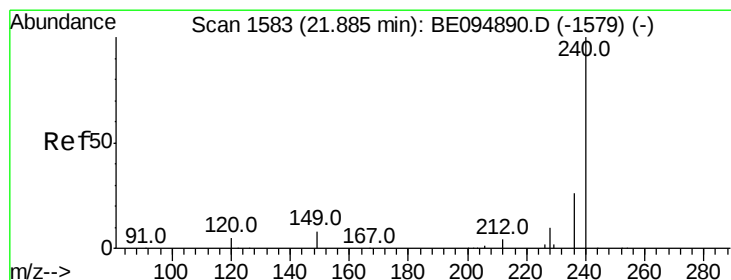
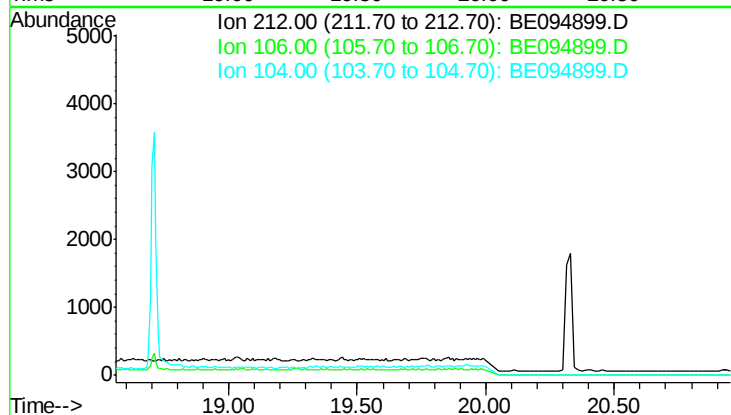




#25  
 Fluoranthene-d10  
 Concen: 0.000 ng  
 Expected RT: 19.76 min  
 Lab File: BE094899.D  
 Acq: 1 Dec 2017 11:09

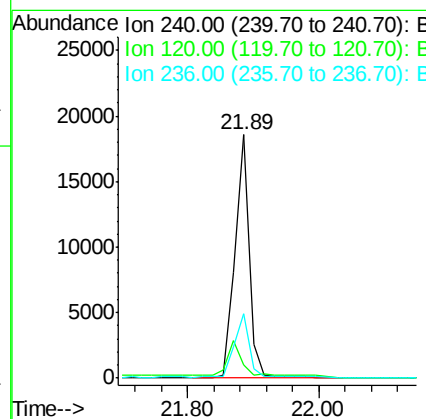
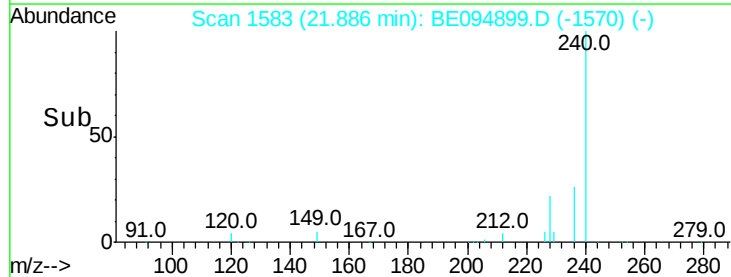
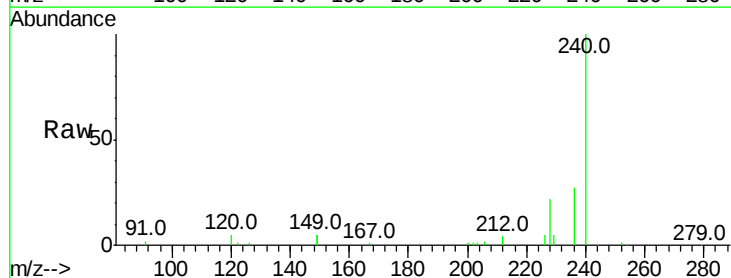
Instrument :  
 BNA\_E  
 ClientSampleId :  
 PT-BNA-SoilDL

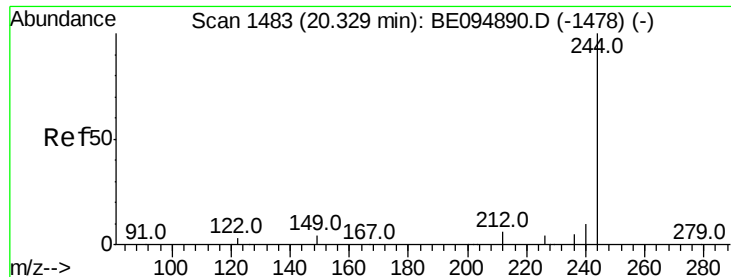
Tot Ion: 212  
 Sig Exp Ratio  
 212 100  
 106 3.5  
 104 2.0



#27  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.89 min Scan# 1583  
 Delta R.T. 0.00 min  
 Lab File: BE094899.D  
 Acq: 1 Dec 2017 11:09

Tgt Ion: 240 Resp: 29732  
 Ion Ratio Lower Upper  
 240 100  
 120 5.3 5.5 8.3#  
 236 26.7 20.7 31.1





#29

Terphenyl-d14

Concen: 0.663 ng

RT: 20.33 min Scan# 1483

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

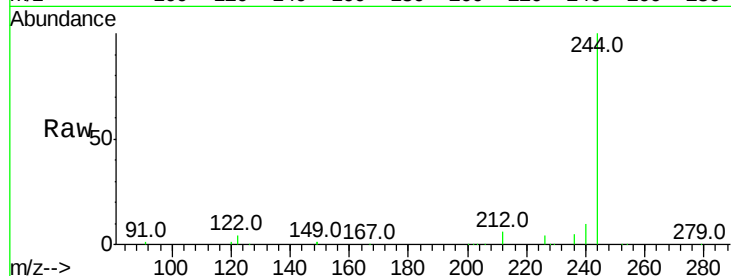
Tot Ion:244 Resp: 36403

Ion Ratio Lower Upper

244 100

212 6.4 25.4 38.0#

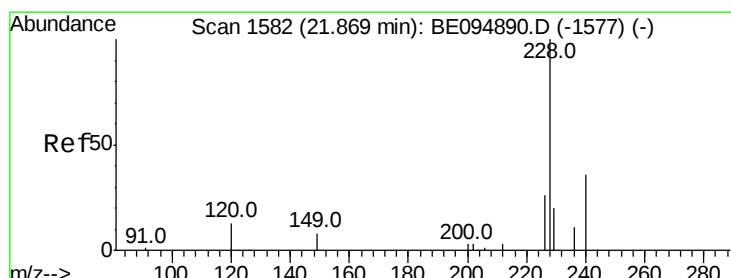
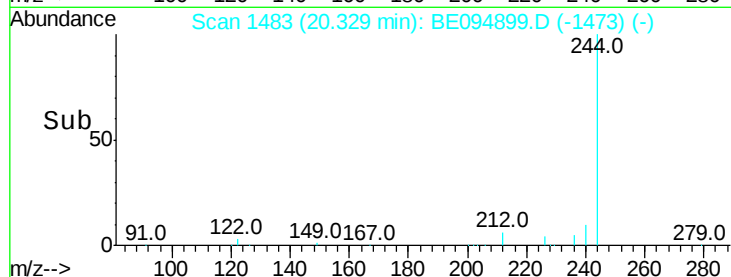
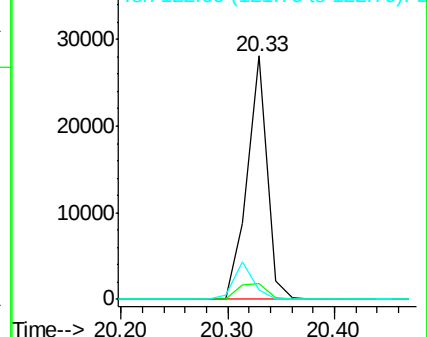
122 3.7 8.1 12.1#



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: 0.981 ng

RT: 21.87 min Scan# 1582

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

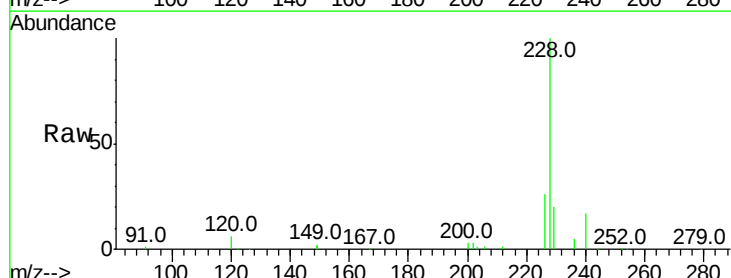
Tgt Ion:228 Resp: 89446

Ion Ratio Lower Upper

228 100

226 26.0 40.0 60.0#

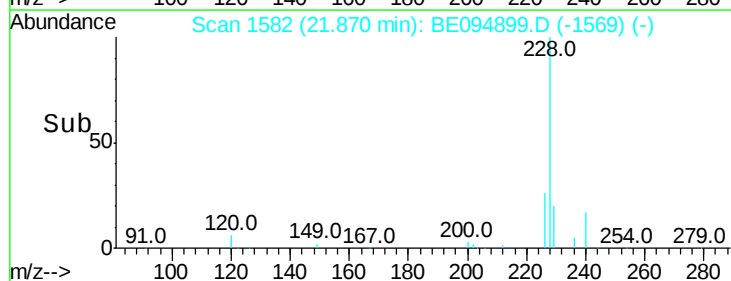
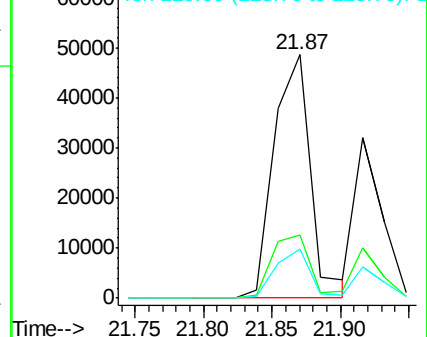
229 20.2 40.0 60.0#

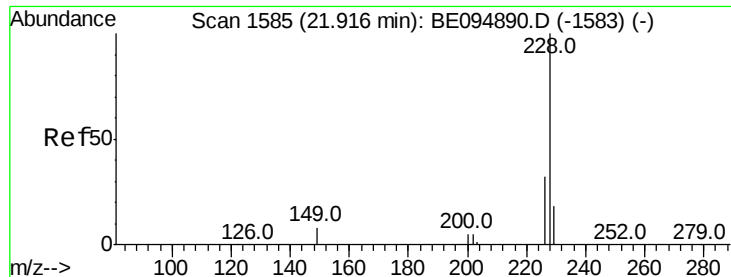


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#31

Chrysene

Concen: 0.493 ng

RT: 21.92 min Scan# 1585

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

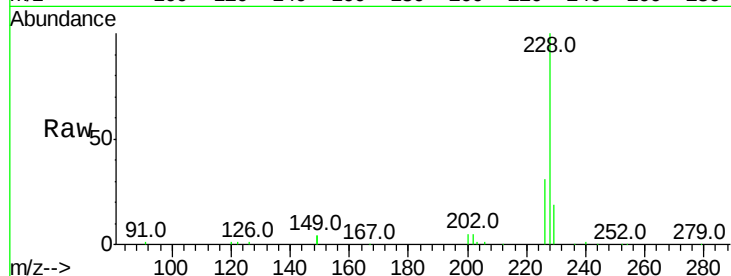
Tot Ion:228 Resp: 49641

Ion Ratio Lower Upper

228 100

226 31.3 40.0 60.0#

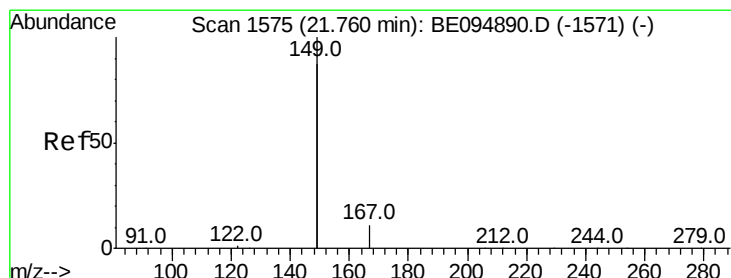
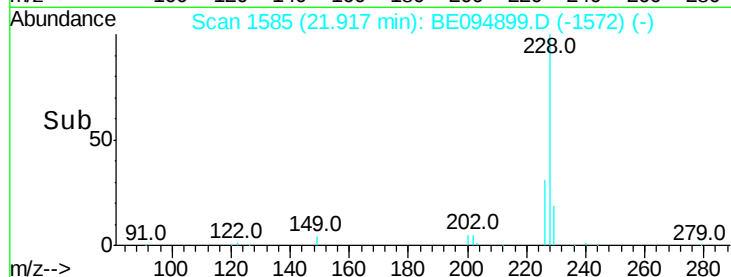
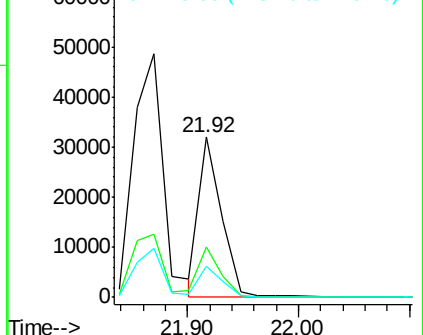
229 19.1 40.0 60.0#



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



#32

Bis(2-ethylhexyl)phthalate

Concen: 0.388 ng

RT: 21.76 min Scan# 1575

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

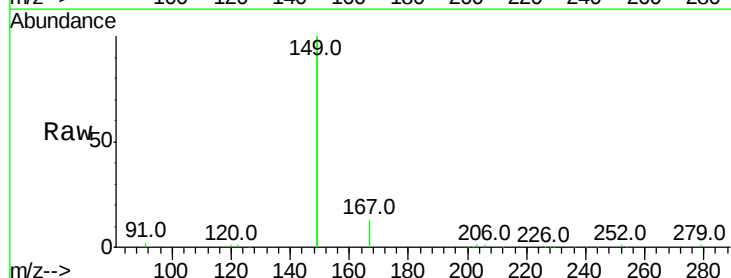
Tgt Ion:149 Resp: 58622

Ion Ratio Lower Upper

149 100

167 6.7 5.4 8.0

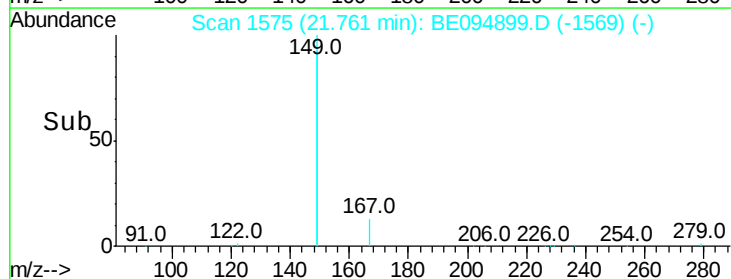
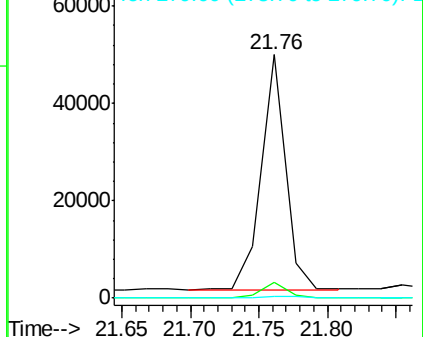
279 0.8 0.7 1.1

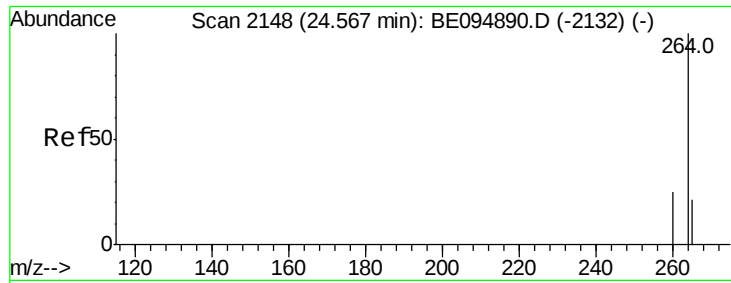


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E

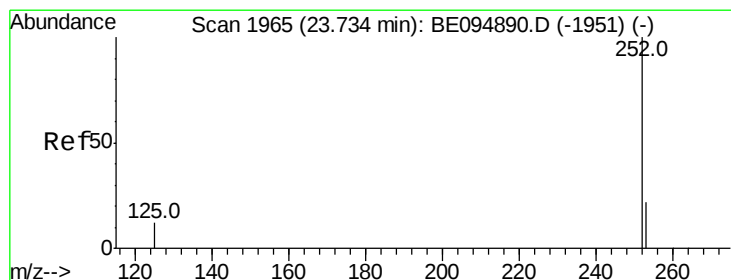
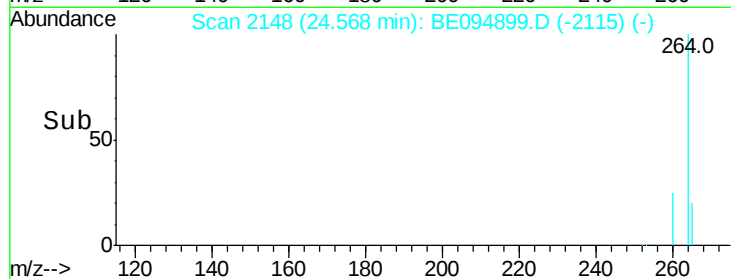
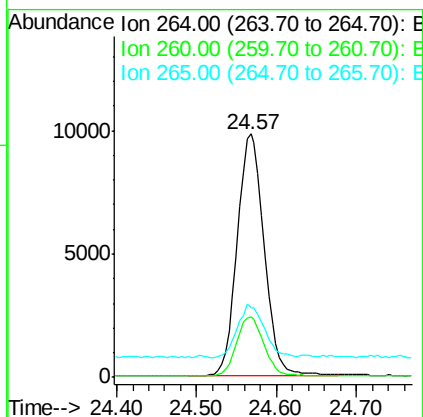
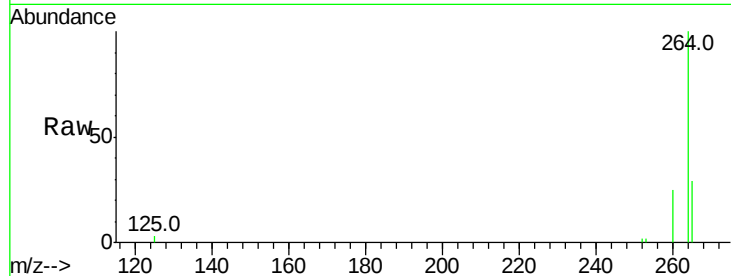




#34  
 Pervlene-d12  
 Concen: 0.400 ng  
 RT: 24.57 min Scan# 2148  
 Delta R.T. 0.00 min  
 Lab File: BE094899.D  
 Acq: 1 Dec 2017 11:09

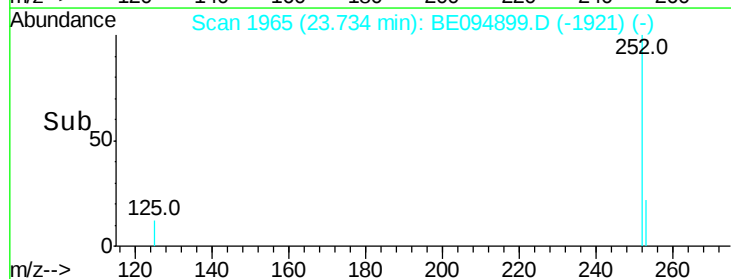
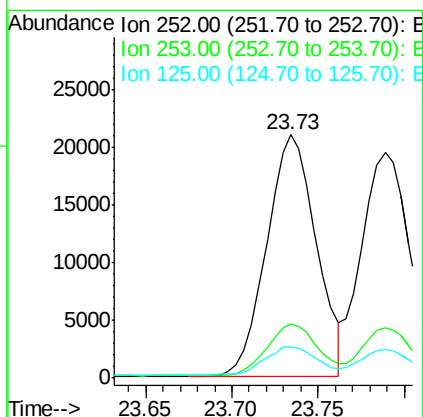
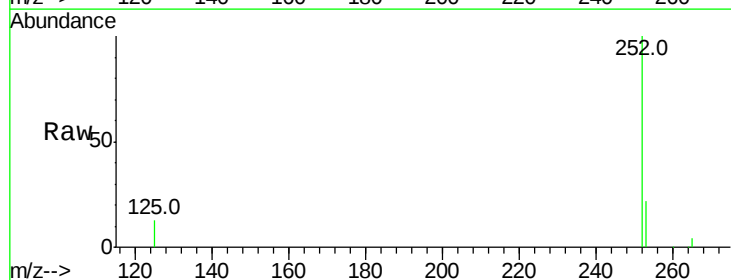
Instrument :  
 BNA\_E  
 ClientSampleId :  
 PT-BNA-SoilDL

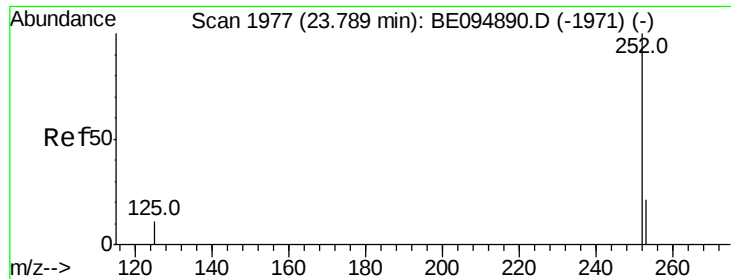
Tot Ion:264 Resp: 23089  
 Ion Ratio Lower Upper  
 264 100  
 260 25.1 20.5 30.7  
 265 28.8 22.8 34.2



#35  
 Benzo(b)fluoranthene  
 Concen: 0.496 ng  
 RT: 23.73 min Scan# 1965  
 Delta R.T. 0.00 min  
 Lab File: BE094899.D  
 Acq: 1 Dec 2017 11:09

Tgt Ion:252 Resp: 41838  
 Ion Ratio Lower Upper  
 252 100  
 253 22.4 48.0 72.0#  
 125 12.9 56.0 84.0#





#36

Benzo(k)fluoranthene

Concen: 0.445 ng

RT: 23.79 min Scan# 1977

Delta R.T. 0.00 min

Lab File: BE094899.D

Acq: 1 Dec 2017 11:09

Instrument :

BNA\_E

ClientSampleId :

PT-BNA-SoilDL

Tot Ion:252 Resp: 38230

Ion Ratio Lower Upper

252 100

253 22.4 48.0 72.0#

125 12.8 56.0 84.0#

