

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM120715\  
 Data File : BM003408.D  
 Acq On : 07 Dec 2015 16:22  
 Operator : UM/IZ  
 Sample : G4221-15 25X  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 PT-BNA-SOIL

Quant Time: Dec 08 06:01:18 2015  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SIM-BM120715.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Dec 07 15:08:30 2015  
 Response via : Initial Calibration

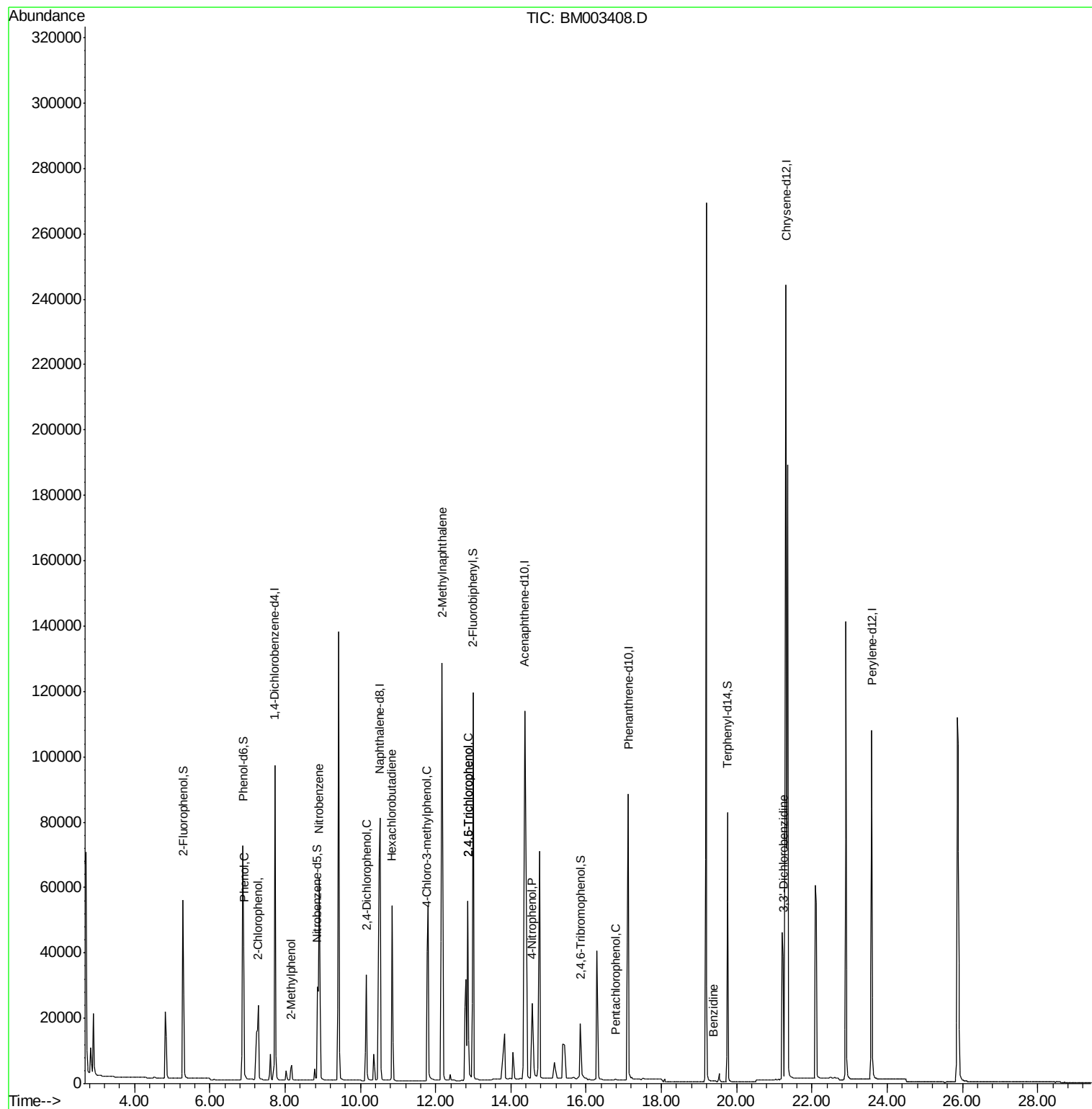
| Internal Standards          | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.72  | 152  | 53356    | 5.00 | ng    | 0.00     |
| 11) Naphthalene-d8          | 10.52 | 136  | 191157   | 5.00 | ng    | 0.00     |
| 20) Acenaphthene-d10        | 14.37 | 164  | 118031   | 5.00 | ng    | 0.00     |
| 27) Phenanthrene-d10        | 17.12 | 188  | 191248   | 5.00 | ng    | 0.00     |
| 31) Chrysene-d12            | 21.31 | 240  | 173203   | 5.00 | ng    | 0.00     |
| 35) Perylene-d12            | 23.59 | 264  | 143080   | 5.00 | ng    | 0.01     |
| System Monitoring Compounds |       |      |          |      |       |          |
| 4) 2-Fluorophenol           | 5.29  | 112  | 55379    | 6.05 | ng    | -0.02    |
| 5) Phenol-d6                | 6.88  | 99   | 85194    | 6.64 | ng    | 0.00     |
| 12) Nitrobenzene-d5         | 8.86  | 82   | 42816    | 4.24 | ng    | 0.00     |
| 21) 2,4,6-Tribromophenol    | 15.85 | 330  | 16265    | 4.12 | ng    | 0.00     |
| 24) 2-Fluorobiphenyl        | 13.00 | 172  | 146703   | 3.53 | ng    | 0.00     |
| 33) Terphenyl-d14           | 19.75 | 244  | 113301   | 4.84 | ng    | 0.00     |
| Target Compounds            |       |      |          |      |       | Qvalue   |
| 6) 2-Chlorophenol           | 7.29  | 128  | 27730    | 2.32 | ng    | 90       |
| 7) Phenol                   | 6.91  | 94   | 45460    | 3.39 | ng    | 97       |
| 9) 2-Methylphenol           | 8.17  | 107  | 3855     | 0.51 | ng    | # 96     |
| 13) Nitrobenzene            | 8.91  | 77   | 75153    | 7.14 | ng    | # 44     |
| 16) 2,4-Dichlorophenol      | 10.16 | 162  | 35617    | 3.79 | ng    | 96       |
| 17) Hexachlorobutadiene     | 10.84 | 225  | 45459    | 6.50 | ng    | 97       |
| 18) 4-Chloro-3-methylphenol | 11.77 | 107  | 68368    | 6.50 | ng    | # 67     |
| 19) 2-Methylnaphthalene     | 12.18 | 142  | 129372   | 4.38 | ng    | 94       |
| 22) 2,4,6-Trichlorophenol   | 12.86 | 196  | 63597    | 8.03 | ng    | # 83     |
| 23) 2,4,5-Trichlorophenol   | 12.86 | 196  | 65041    | 5.65 | ng    | # 92     |
| 26) 4-Nitrophenol           | 14.57 | 139  | 24470    | 4.04 | ng    | # 66     |
| 30) Pentachlorophenol       | 16.78 | 266  | 121      | 0.37 | ng    | # 85     |
| 32) Benzidine               | 19.39 | 184  | 62       | 0.38 | ng    | # 1      |
| 34) 3,3'-Dichlorobenzidine  | 21.24 | 252  | 107      | 0.27 | ng    | # 74     |

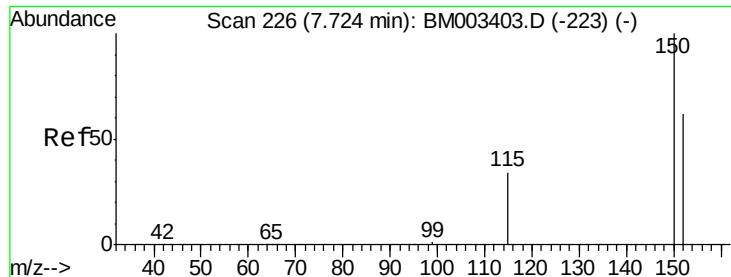
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 7.72 min Scan# 226

Delta R.T. 0.00 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

Instrument :

BNA\_M

ClientSampleId :

PT-BNA-SOIL

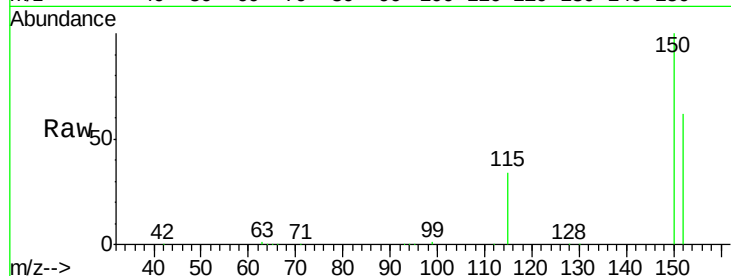
Tgt Ion:152 Resp: 53356

Ion Ratio Lower Upper

152 100

150 161.8 116.3 174.5

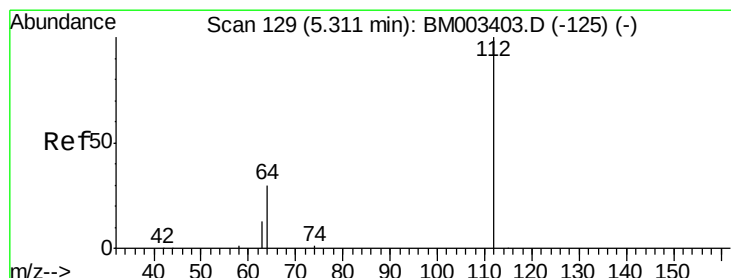
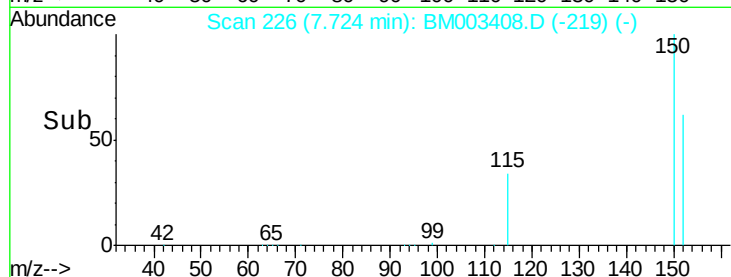
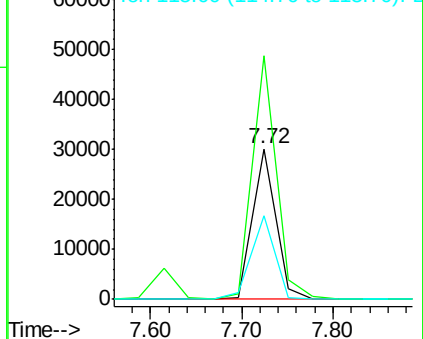
115 55.4 31.9 47.9#



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: 6.05 ng

RT: 5.29 min Scan# 128

Delta R.T. -0.02 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

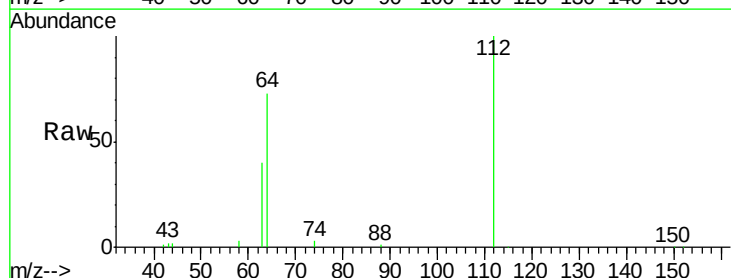
Tgt Ion:112 Resp: 55379

Ion Ratio Lower Upper

112 100

64 72.8 49.3 73.9

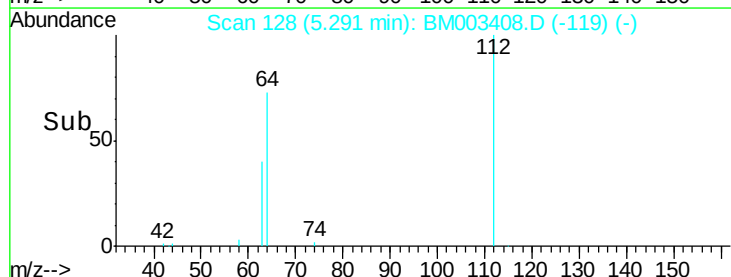
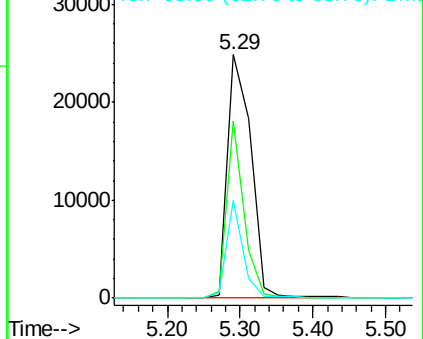
63 39.9 26.2 39.4#

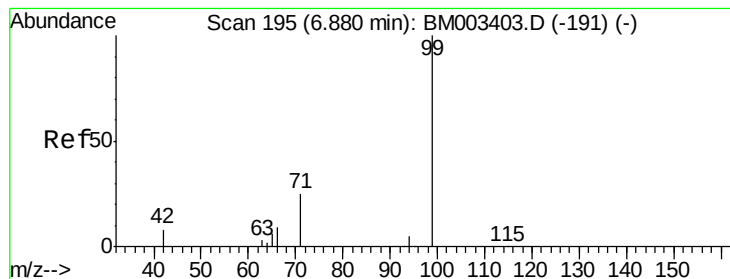


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BM0

Ion 63.00 (62.70 to 63.70): BM0





#5

Phenol-d6

Concen: 6.64 ng

RT: 6.88 min Scan# 195

Delta R.T. 0.00 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

Instrument :

BNA\_M

ClientSampleId :

PT-BNA-SOIL

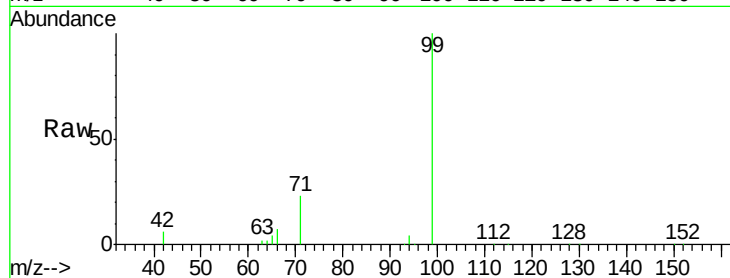
Tgt Ion: 99 Resp: 85194

Ion Ratio Lower Upper

99 100

42 6.4 12.1 18.1#

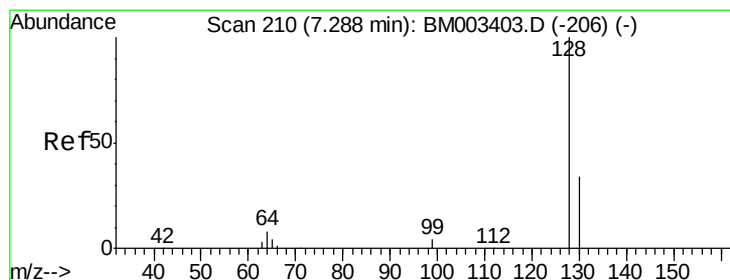
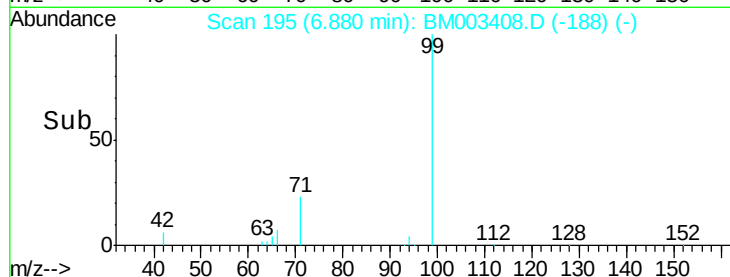
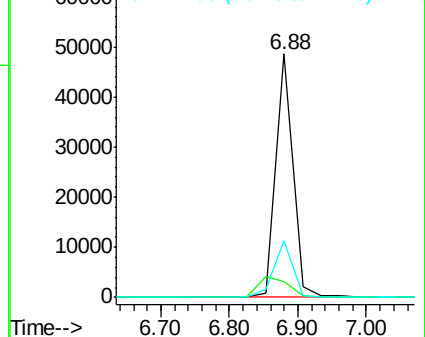
71 23.1 26.4 39.6#



Abundance Ion 99.00 (98.70 to 99.70): BM003408.D (-191) (-)

Ion 42.00 (41.70 to 42.70): BM003408.D (-191) (-)

Ion 71.00 (70.70 to 71.70): BM003408.D (-191) (-)



#6

2-Chlorophenol

Concen: 2.32 ng

RT: 7.29 min Scan# 210

Delta R.T. 0.00 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

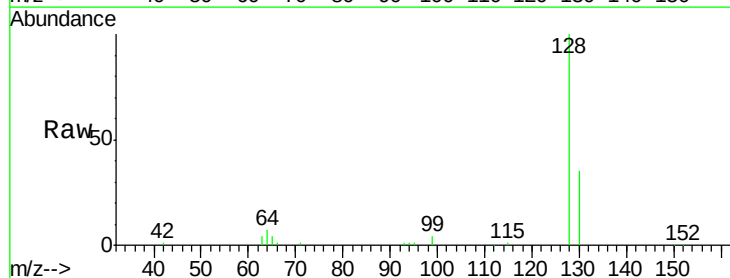
Tgt Ion: 128 Resp: 27730

Ion Ratio Lower Upper

128 100

130 34.9 22.2 62.2

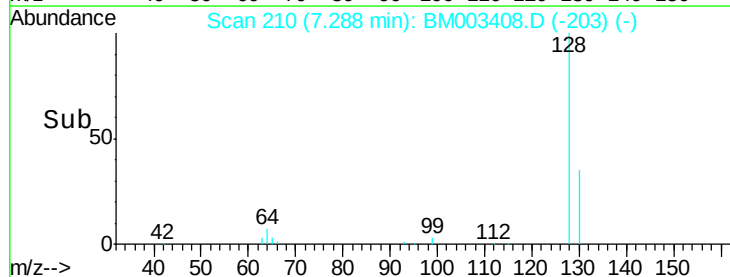
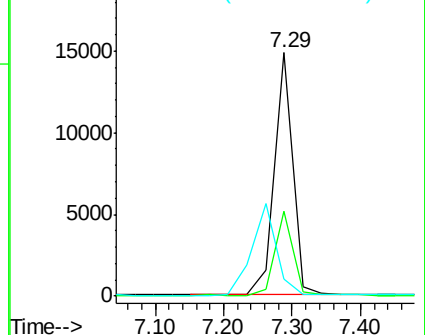
64 7.2 0.0 28.7

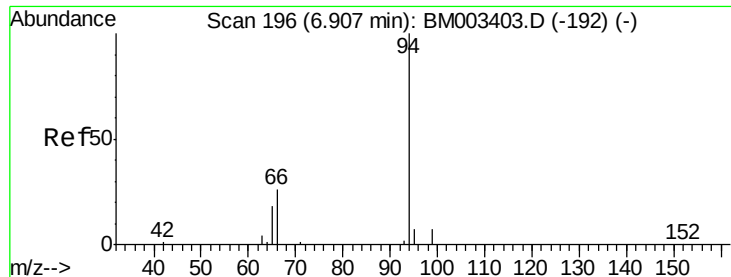


Abundance Ion 128.00 (127.70 to 128.70): BM003408.D (-206) (-)

Ion 130.00 (129.70 to 130.70): BM003408.D (-206) (-)

Ion 64.00 (63.70 to 64.70): BM003408.D (-206) (-)





#7

Phenol

Concen: 3.39 ng

RT: 6.91 min Scan# 196

Delta R.T. 0.00 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

Instrument :

BNA\_M

ClientSampleId :

PT-BNA-SOIL

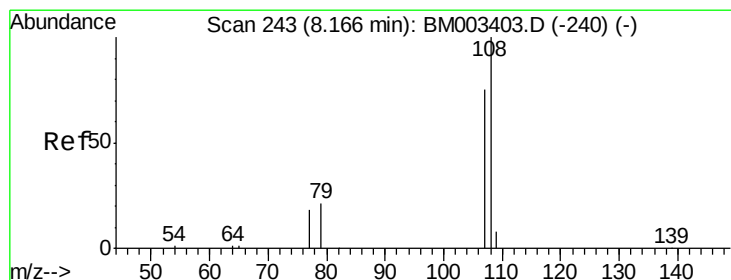
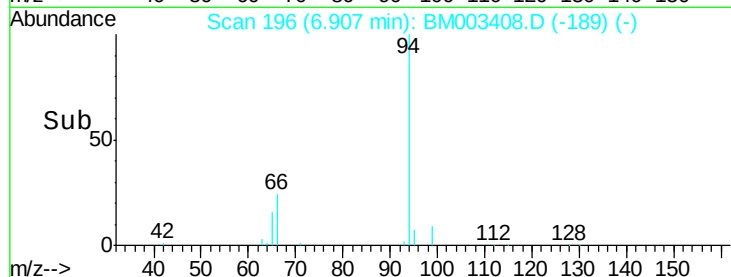
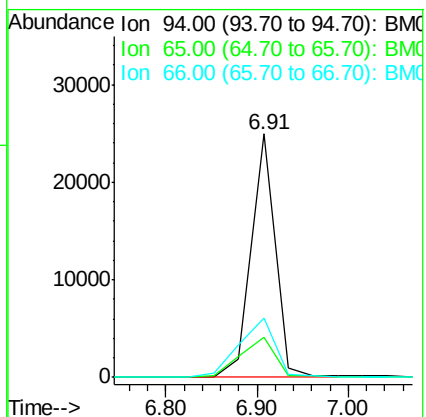
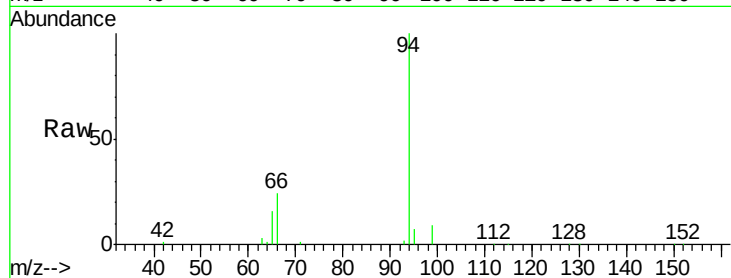
Tgt Ion: 94 Resp: 45460

Ion Ratio Lower Upper

94 100

65 16.5 0.0 37.7

66 24.5 6.3 46.3



#9

2-Methylphenol

Concen: 0.51 ng

RT: 8.17 min Scan# 243

Delta R.T. 0.00 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

Tgt Ion: 107 Resp: 3855

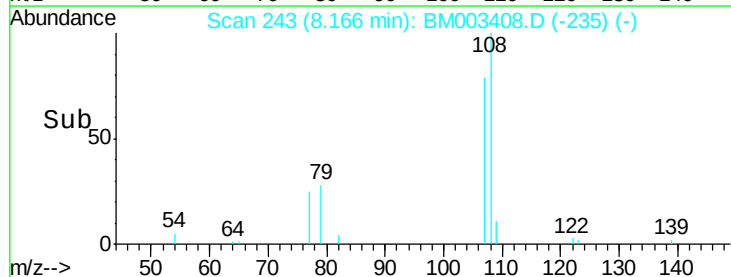
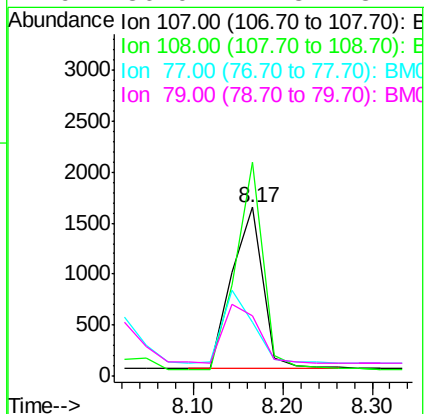
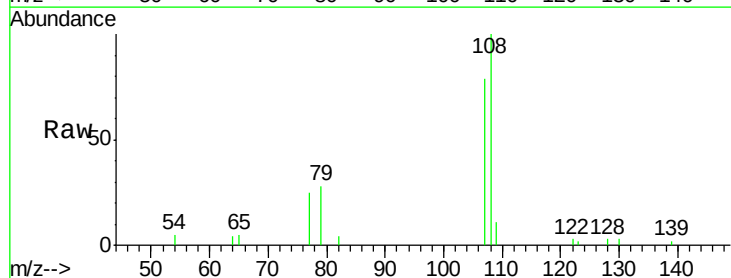
Ion Ratio Lower Upper

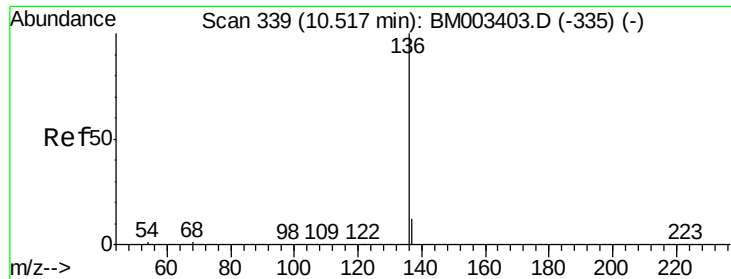
107 100

108 126.6 100.9 151.3

77 32.0 20.3 30.5#

79 36.0 22.8 34.2#

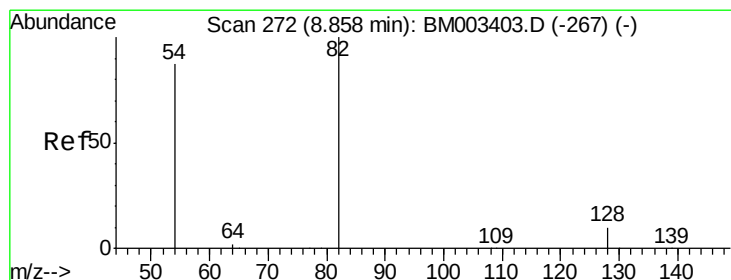
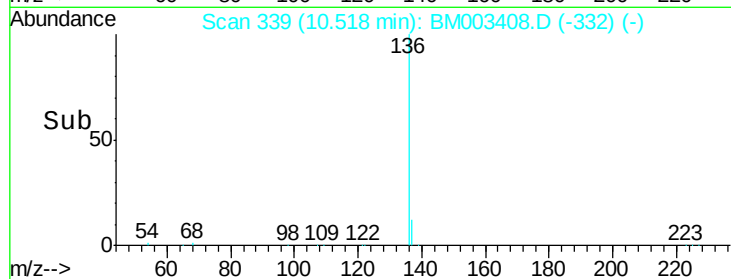
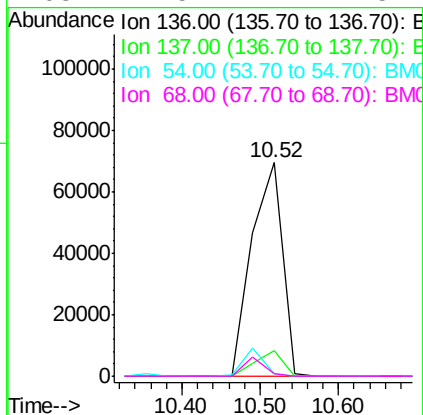
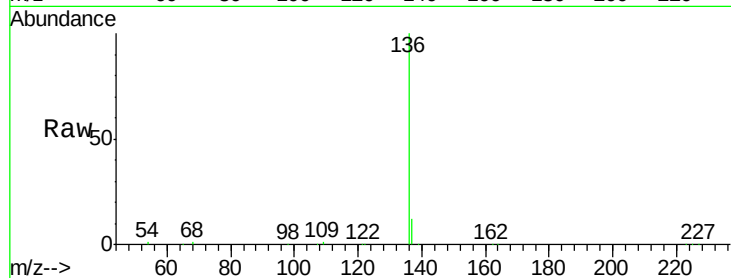




#11  
Naphthalene-d8  
Concen: 5.00 ng  
RT: 10.52 min Scan# 339  
Delta R.T. 0.00 min  
Lab File: BM003408.D  
Acq: 07 Dec 2015 16:22

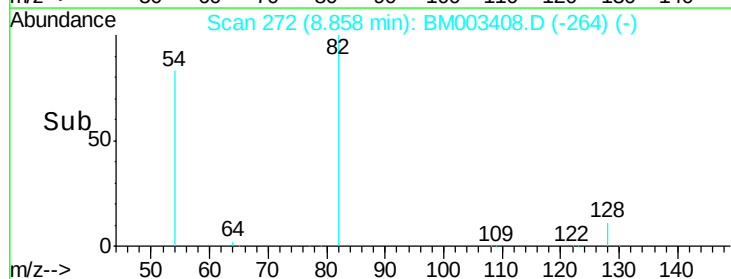
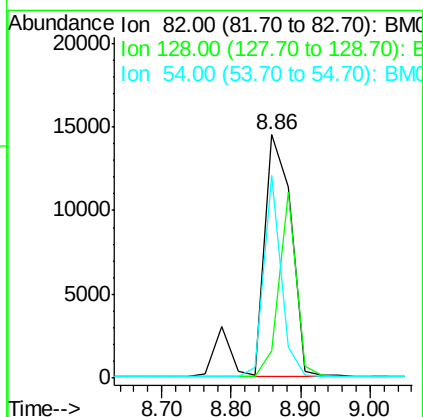
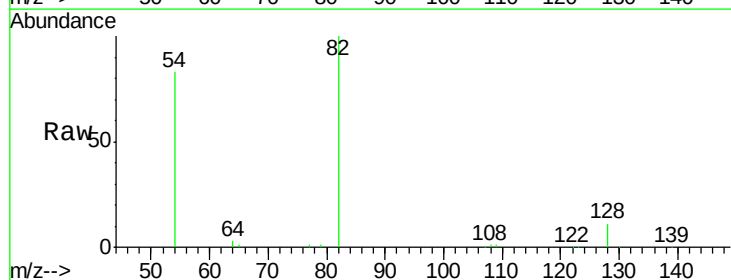
Instrument :  
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ClientSampleId :  
PT-BNA-SOIL

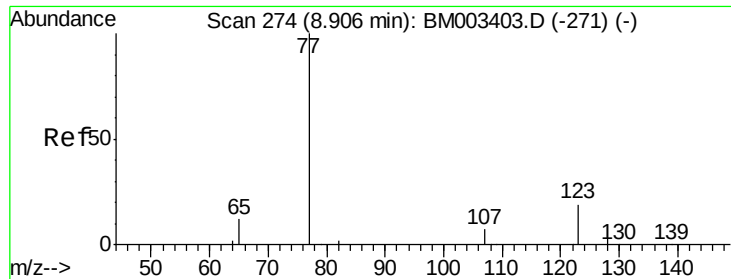
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 191157 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 12.2  | 9.1   | 13.7   |
| 54       | 1.1   | 2.6   | 3.8#   |
| 68       | 1.5   | 2.2   | 3.2#   |



#12  
Nitrobenzene-d5  
Concen: 4.24 ng  
RT: 8.86 min Scan# 272  
Delta R.T. 0.00 min  
Lab File: BM003408.D  
Acq: 07 Dec 2015 16:22

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 82    | Resp: | 42816 |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 0.0   | 0.0   | 0.0   |
| 54       | 48.7  | 59.0  | 88.6# |

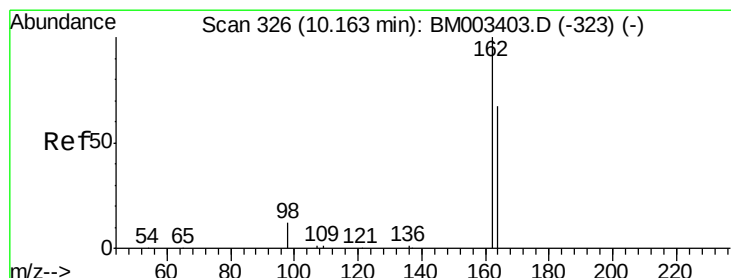
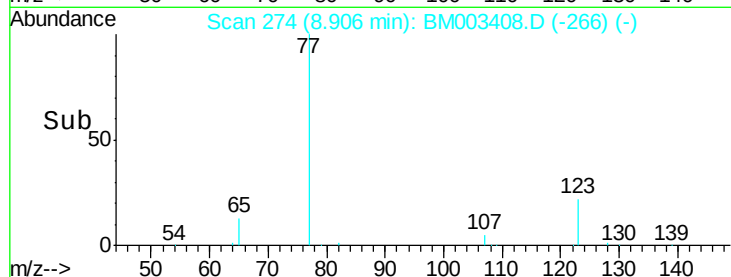
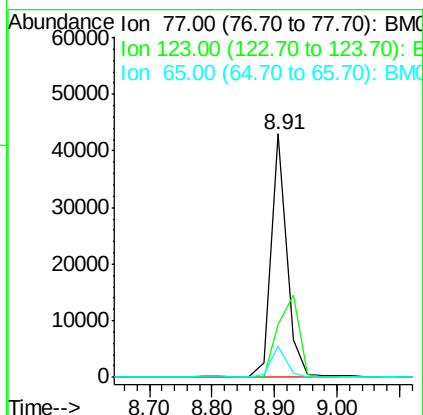
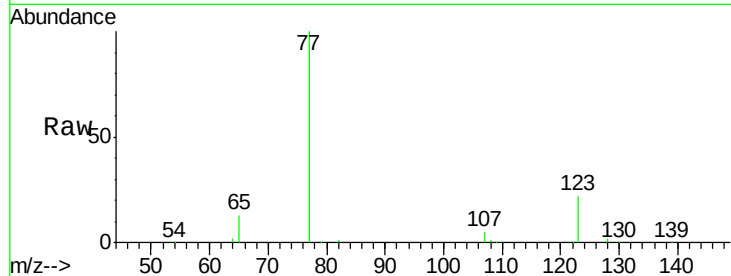




#13  
 Nitrobenzene  
 Concen: 7.14 ng  
 RT: 8.91 min Scan# 274  
 Delta R.T. 0.00 min  
 Lab File: BM003408.D  
 Acq: 07 Dec 2015 16:22

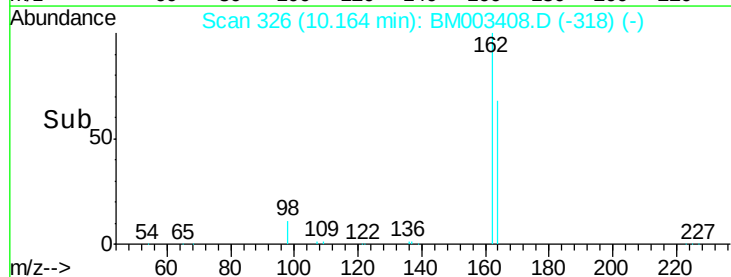
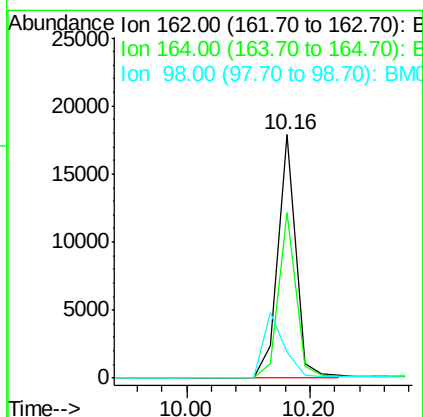
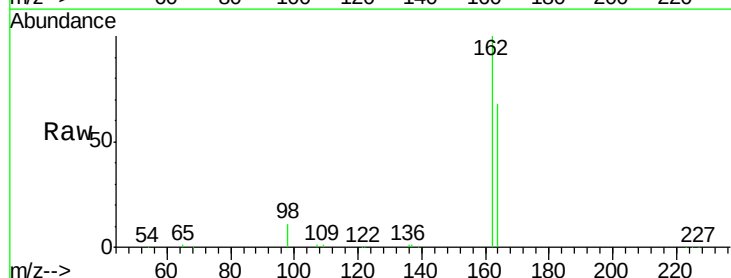
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 ClientSampleId :  
 PT-BNA-SOIL

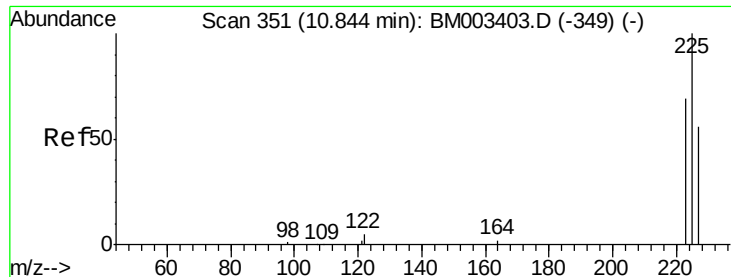
Tgt Ion: 77 Resp: 75153  
 Ion Ratio Lower Upper  
 77 100  
 123 0.0 37.7 56.5#  
 65 12.5 9.8 14.6



#16  
 2,4-Dichlorophenol  
 Concen: 3.79 ng  
 RT: 10.16 min Scan# 326  
 Delta R.T. 0.00 min  
 Lab File: BM003408.D  
 Acq: 07 Dec 2015 16:22

Tgt Ion: 162 Resp: 35617  
 Ion Ratio Lower Upper  
 162 100  
 164 68.0 49.2 89.2  
 98 10.6 0.0 37.4

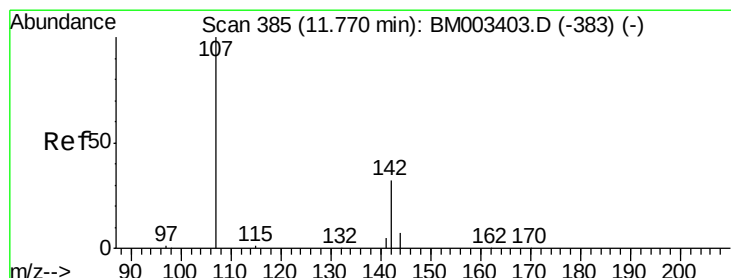
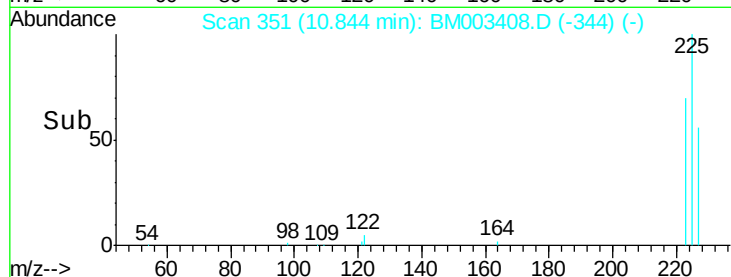
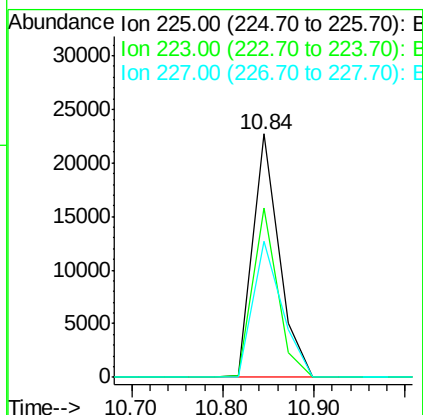
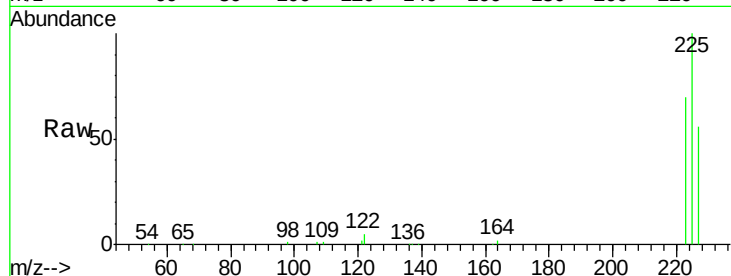




#17  
Hexachlorobutadiene  
Concen: 6.50 ng  
RT: 10.84 min Scan# 351  
Delta R.T. 0.00 min  
Lab File: BM003408.D  
Acq: 07 Dec 2015 16:22

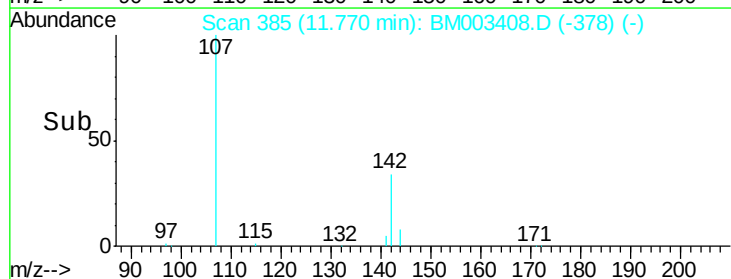
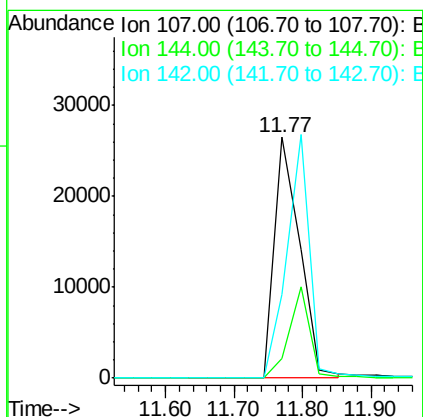
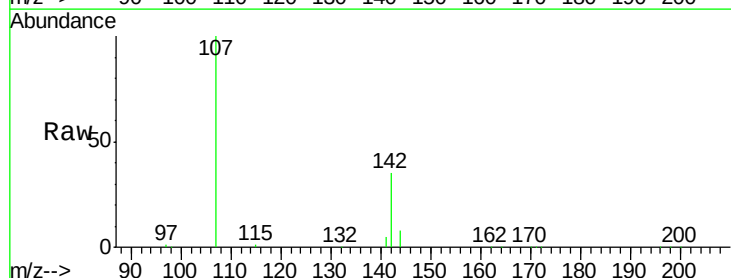
Instrument :  
BNA\_M  
ClientSampleId :  
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Tgt Ion: 225 Resp: 45459  
Ion Ratio Lower Upper  
225 100  
223 65.5 53.0 79.4  
227 61.3 52.2 78.4

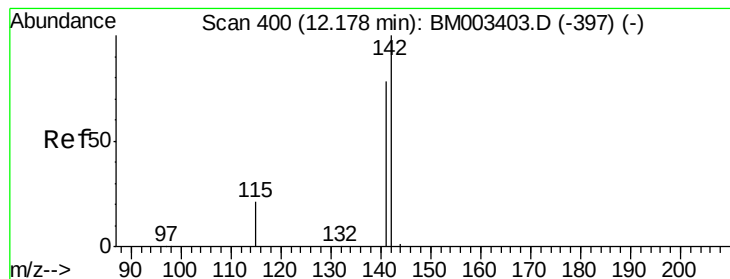


#18  
4-Chloro-3-methylphenol  
Concen: 6.50 ng  
RT: 11.77 min Scan# 385  
Delta R.T. 0.00 min  
Lab File: BM003408.D  
Acq: 07 Dec 2015 16:22

Tgt Ion: 107 Resp: 68368  
Ion Ratio Lower Upper  
107 100  
144 8.3 16.2 24.2#  
142 34.6 49.8 74.6#







#19

2-Methylnaphthalene

Concen: 4.38 ng

RT: 12.18 min Scan# 400

Delta R.T. 0.00 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

Instrument :

BNA\_M

ClientSampleId :

PT-BNA-SOIL

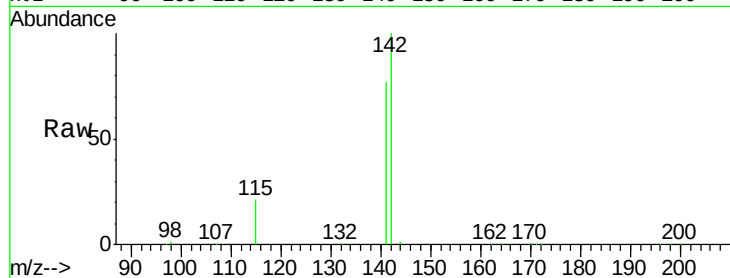
Tgt Ion:142 Resp: 129372

Ion Ratio Lower Upper

142 100

141 84.8 71.4 107.0

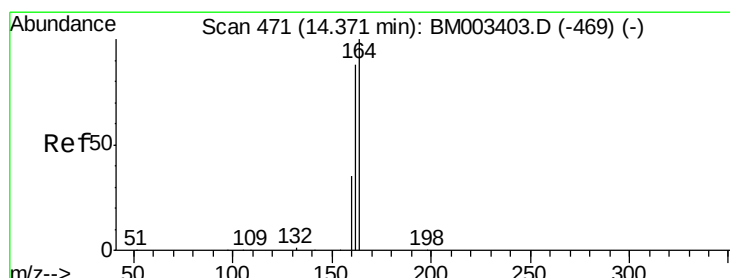
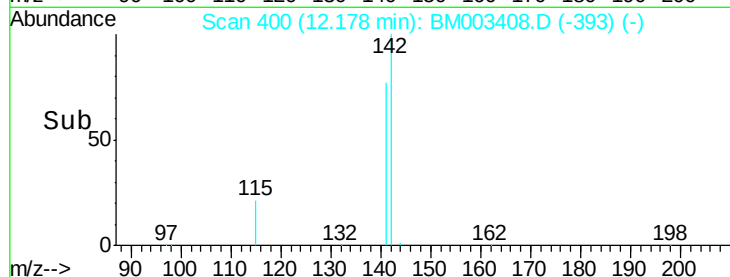
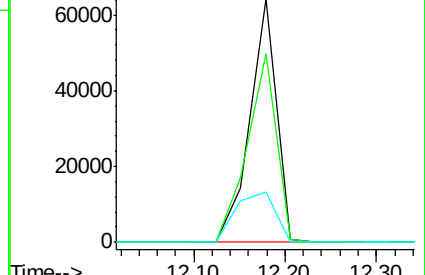
115 31.0 29.3 43.9



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



#20

Acenaphthene-d10

Concen: 5.00 ng

RT: 14.37 min Scan# 471

Delta R.T. 0.00 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

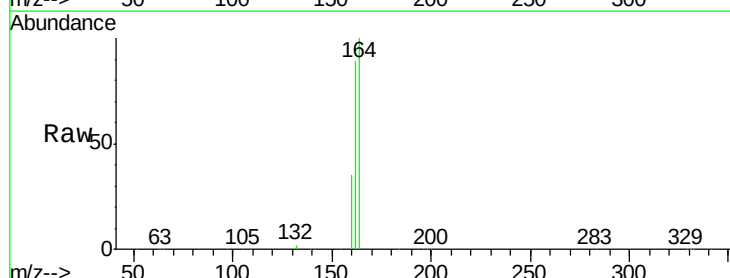
Tgt Ion:164 Resp: 118031

Ion Ratio Lower Upper

164 100

162 89.4 79.2 118.8

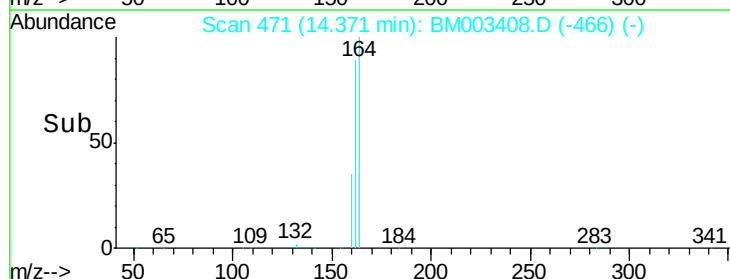
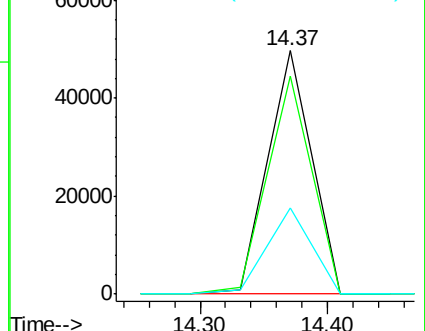
160 35.4 33.7 50.5

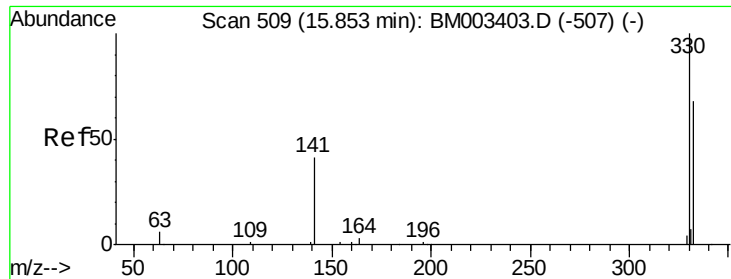


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E

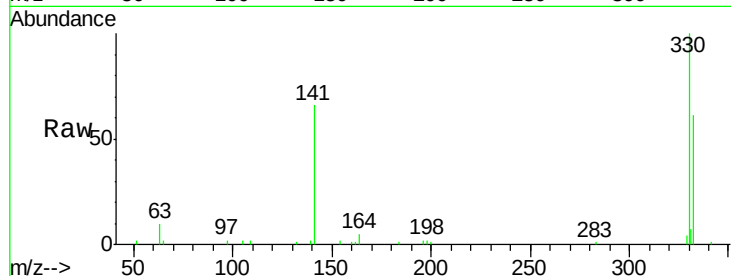




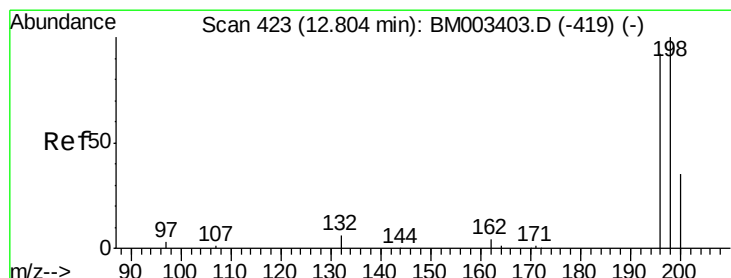
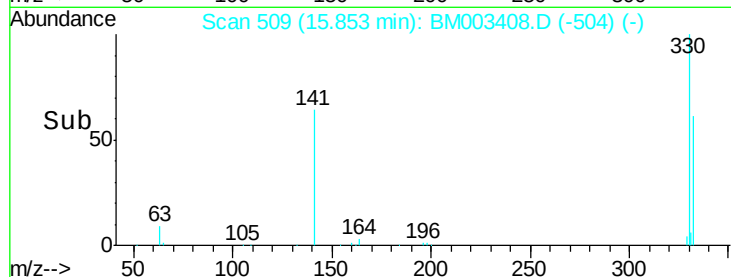
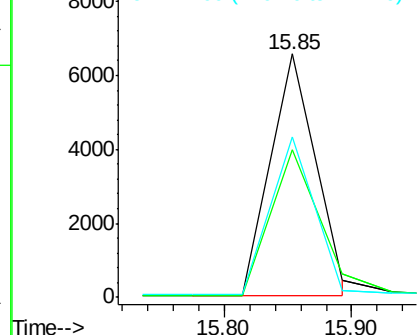
#21  
 2,4,6-Tribromophenol  
 Concen: 4.12 ng  
 RT: 15.85 min Scan# 509  
 Delta R.T. 0.00 min  
 Lab File: BM003408.D  
 Acq: 07 Dec 2015 16:22

Instrument :  
 BNA\_M  
 ClientSampleId :  
 PT-BNA-SOIL

Tgt Ion:330 Resp: 16265  
 Ion Ratio Lower Upper  
 330 100  
 332 65.4 74.0 111.0#  
 141 63.5 24.1 36.1#

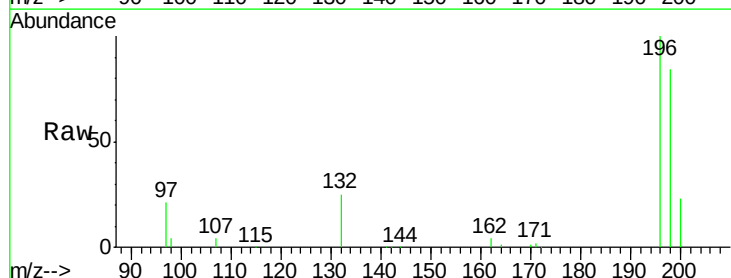


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

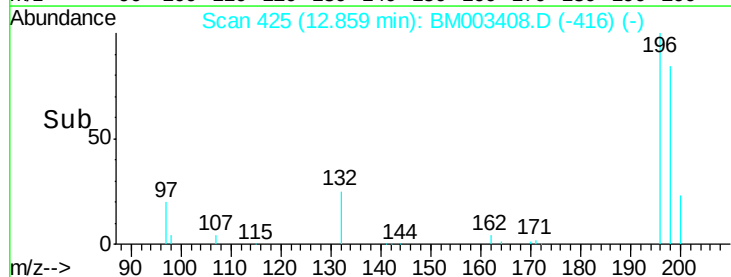
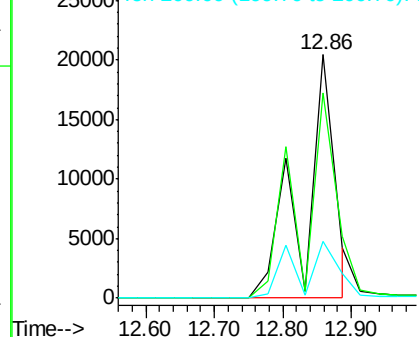


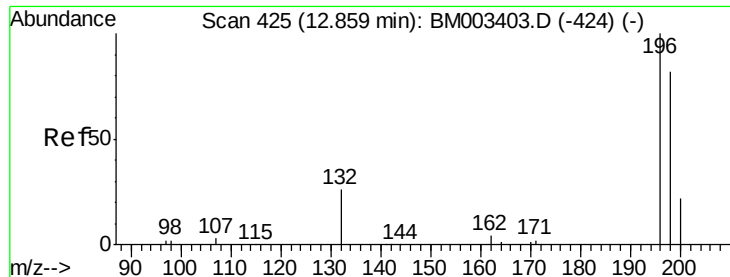
#22  
 2,4,6-Trichlorophenol  
 Concen: 8.03 ng  
 RT: 12.86 min Scan# 425  
 Delta R.T. 0.05 min  
 Lab File: BM003408.D  
 Acq: 07 Dec 2015 16:22

Tgt Ion:196 Resp: 63597  
 Ion Ratio Lower Upper  
 196 100  
 198 84.4 54.2 81.2#  
 200 23.4 17.1 25.7



Abundance Ion 196.00 (195.70 to 196.70): E  
 Ion 198.00 (197.70 to 198.70): E  
 Ion 200.00 (199.70 to 200.70): E

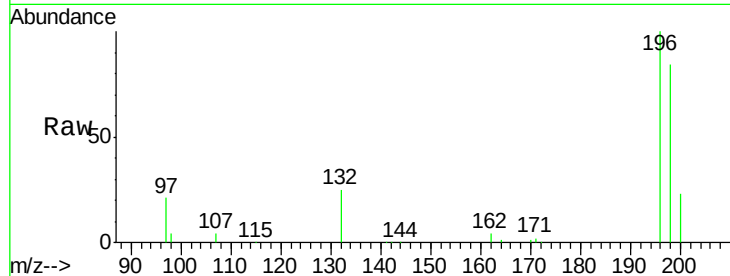




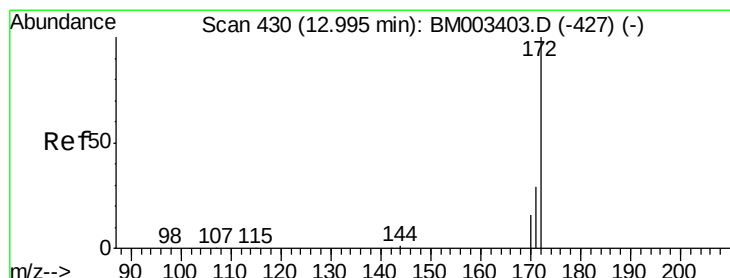
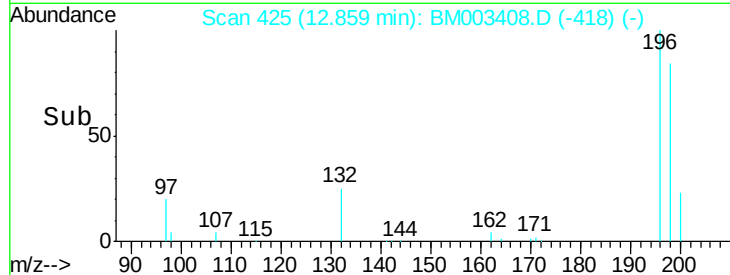
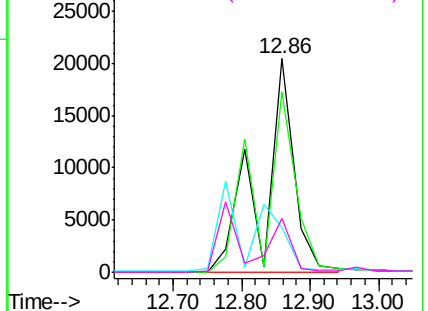
#23  
 2,4,5-Trichlorophenol  
 Concen: 5.65 ng  
 RT: 12.86 min Scan# 425  
 Delta R.T. 0.00 min  
 Lab File: BM003408.D  
 Acq: 07 Dec 2015 16:22

Instrument :  
 BNA\_M  
 ClientSampleId :  
 PT-BNA-SOIL

Tgt Ion:196 Resp: 65041  
 Ion Ratio Lower Upper  
 196 100  
 198 84.4 73.6 110.4  
 97 20.8 0.0 0.0#  
 132 25.2 0.0 0.0#

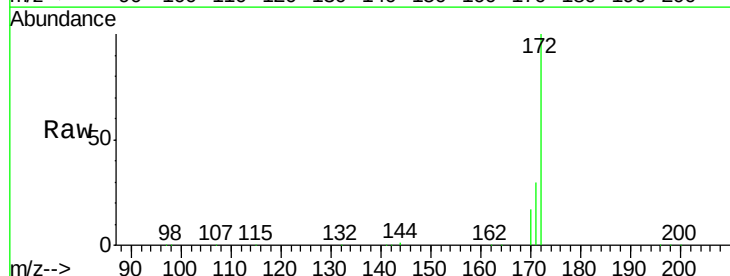


Abundance Ion 196.00 (195.70 to 196.70): E  
 Ion 198.00 (197.70 to 198.70): E  
 Ion 97.00 (96.70 to 97.70): BM  
 Ion 132.00 (131.70 to 132.70): E

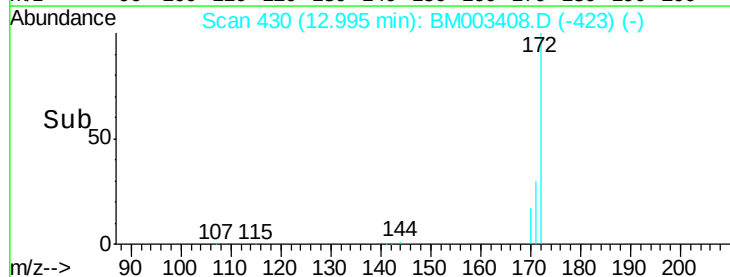
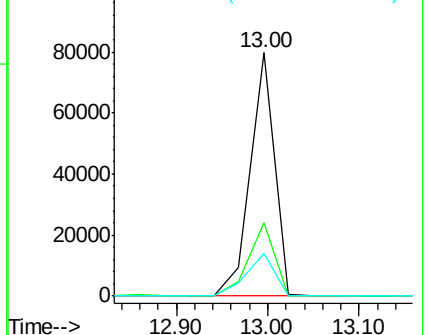


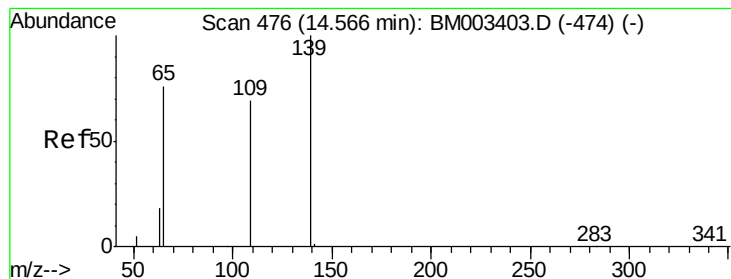
#24  
 2-Fluorobiphenyl  
 Concen: 3.53 ng  
 RT: 13.00 min Scan# 430  
 Delta R.T. 0.00 min  
 Lab File: BM003408.D  
 Acq: 07 Dec 2015 16:22

Tgt Ion:172 Resp: 146703  
 Ion Ratio Lower Upper  
 172 100  
 171 31.9 28.0 42.0  
 170 20.4 18.9 28.3



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

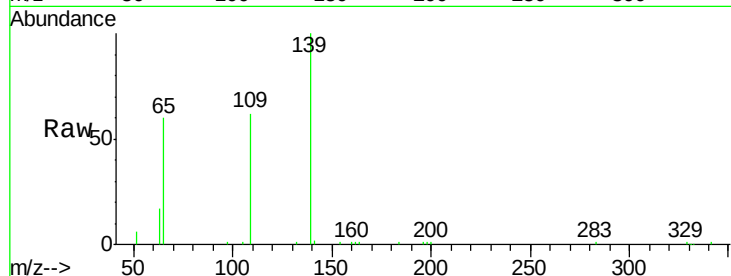




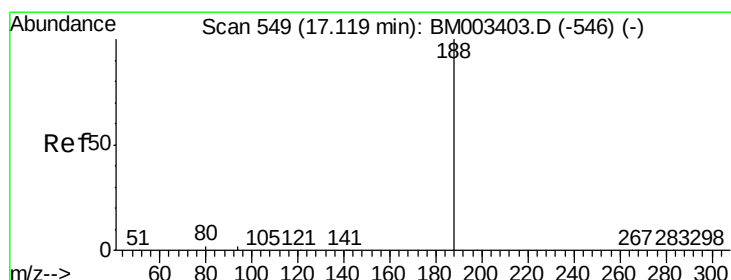
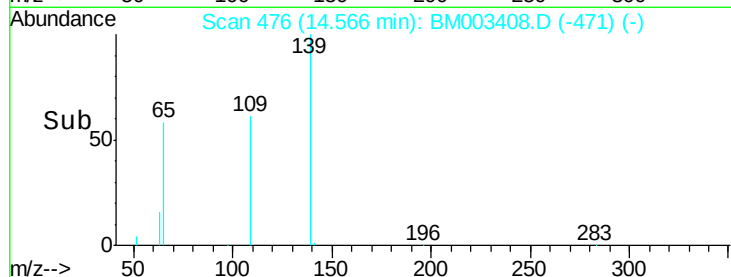
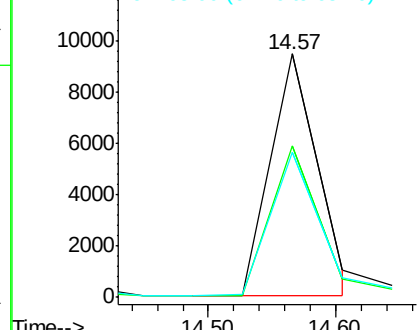
#26  
4-Nitrophenol  
Concen: 4.04 ng  
RT: 14.57 min Scan# 476  
Delta R.T. 0.00 min  
Lab File: BM003408.D  
Acq: 07 Dec 2015 16:22

Instrument :  
BNA\_M  
ClientSampleId :  
PT-BNA-SOIL

Tgt Ion:139 Resp: 24470  
Ion Ratio Lower Upper  
139 100  
109 62.0 60.0 100.0  
65 59.5 85.7 125.7#

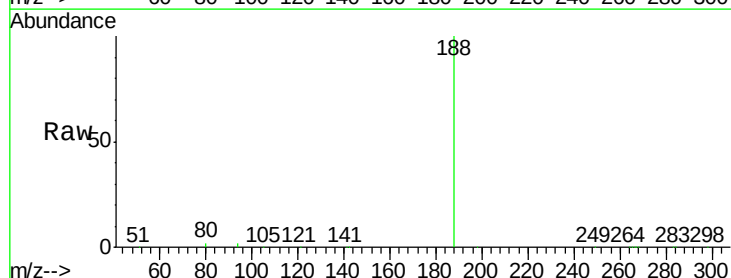


Abundance Ion 139.00 (138.70 to 139.70): E  
Ion 109.00 (108.70 to 109.70): E  
Ion 65.00 (64.70 to 65.70): BM0

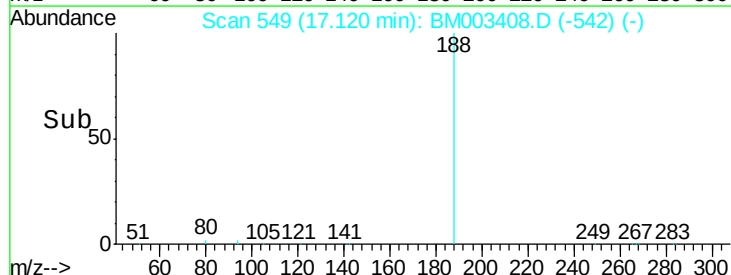
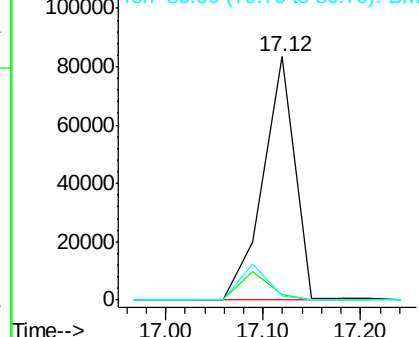


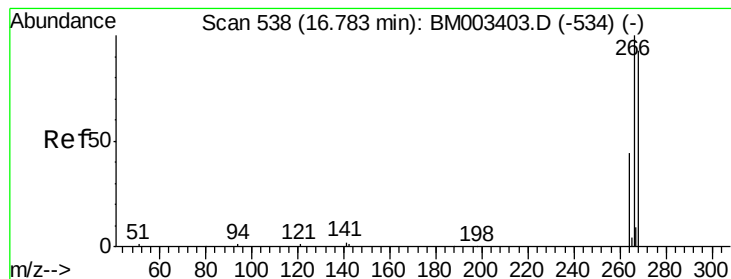
#27  
Phenanthrene-d10  
Concen: 5.00 ng  
RT: 17.12 min Scan# 549  
Delta R.T. 0.00 min  
Lab File: BM003408.D  
Acq: 07 Dec 2015 16:22

Tgt Ion:188 Resp: 191248  
Ion Ratio Lower Upper  
188 100  
94 2.4 2.9 4.3#  
80 1.9 2.5 3.7#



Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BM0  
Ion 80.00 (79.70 to 80.70): BM0





#30

Pentachlorophenol

Concen: 0.37 ng

RT: 16.78 min Scan# 538

Delta R.T. 0.00 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

Instrument :

BNA\_M

ClientSampleId :

PT-BNA-SOIL

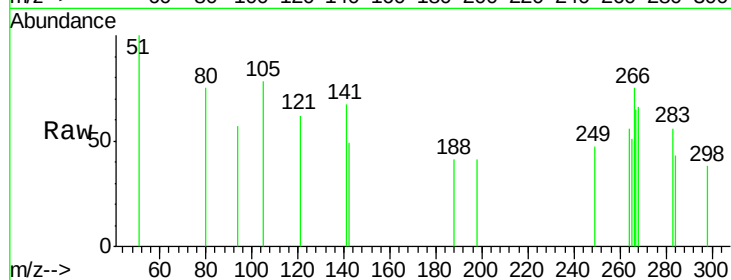
Tgt Ion:266 Resp: 121

Ion Ratio Lower Upper

266 100

268 88.2 62.6 94.0

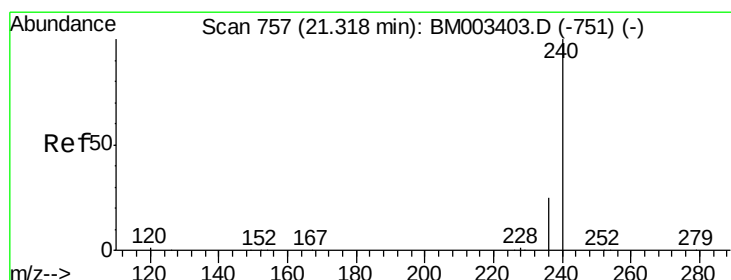
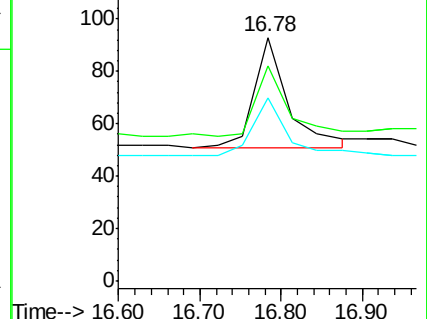
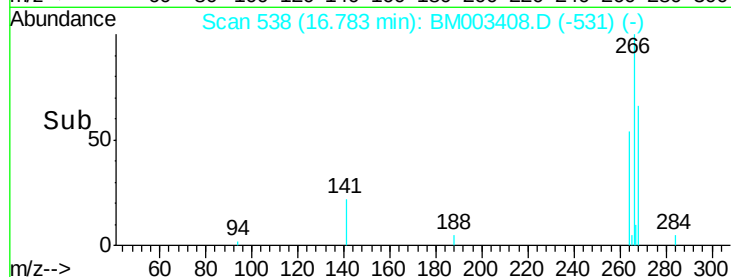
264 75.3 47.9 71.9#



Abundance Ion 265.70 (265.40 to 266.40): E

Ion 268.00 (267.70 to 268.70): E

Ion 264.00 (263.70 to 264.70): E



#31

Chrysene-d12

Concen: 5.00 ng

RT: 21.31 min Scan# 757

Delta R.T. -0.01 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

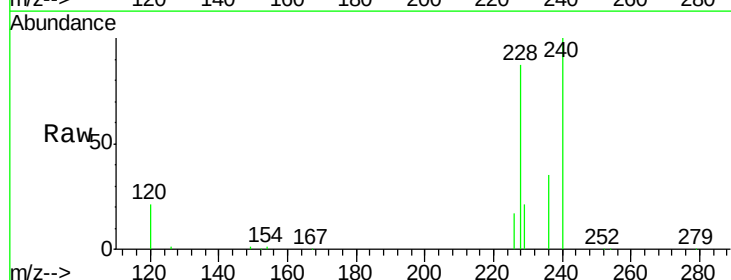
Tgt Ion:240 Resp: 173203

Ion Ratio Lower Upper

240 100

120 20.6 10.4 15.6#

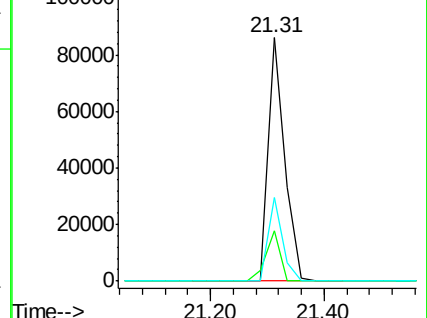
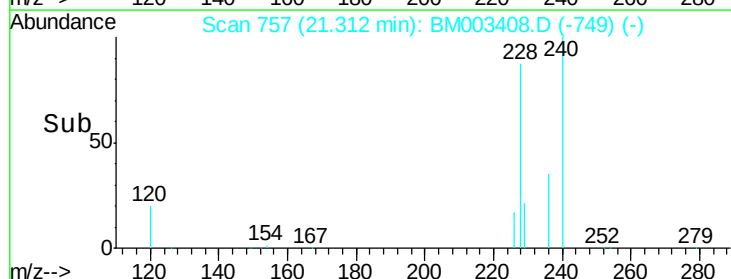
236 34.6 22.0 33.0#

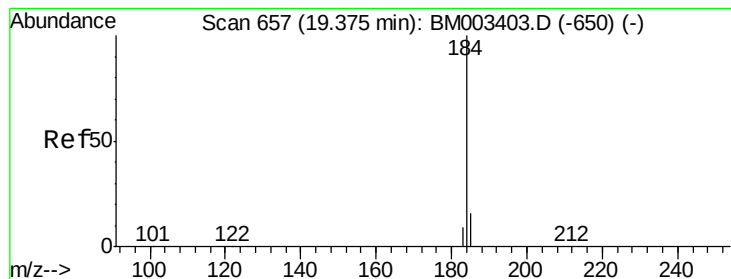


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#32

Benzidine

Concen: 0.38 ng

RT: 19.39 min Scan# 658

Delta R.T. 0.02 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

Instrument :

BNA\_M

ClientSampleId :

PT-BNA-SOIL

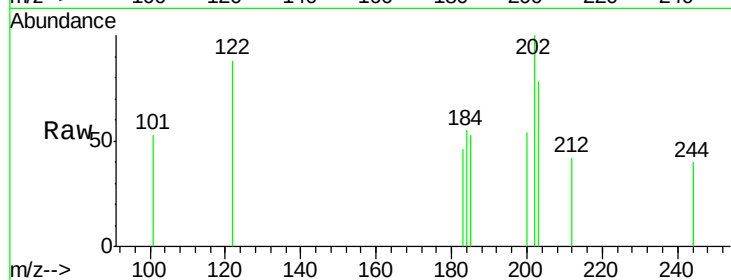
Tgt Ion:184 Resp: 62

Ion Ratio Lower Upper

184 100

185 95.7 11.6 17.4#

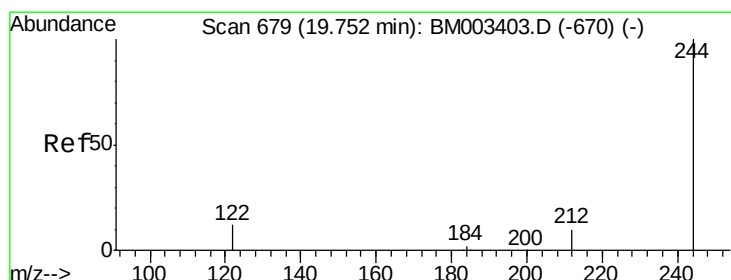
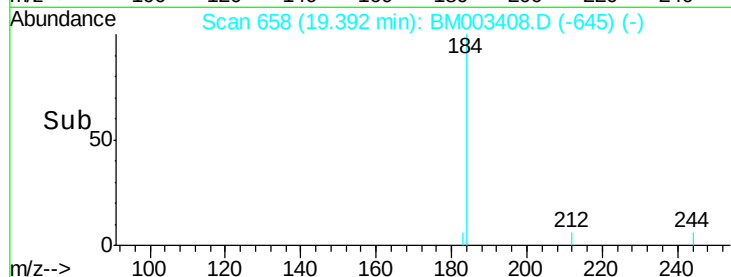
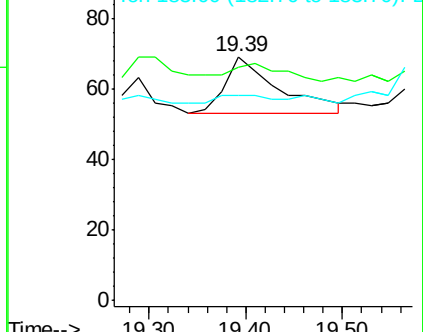
183 84.1 8.6 13.0#



Abundance Ion 184.00 (183.70 to 184.70): E

Ion 185.00 (184.70 to 185.70): E

Ion 183.00 (182.70 to 183.70): E



#33

Terphenyl-d14

Concen: 4.84 ng

RT: 19.75 min Scan# 679

Delta R.T. 0.00 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

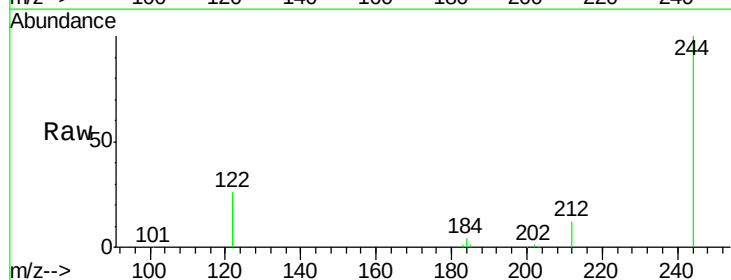
Tgt Ion:244 Resp: 113301

Ion Ratio Lower Upper

244 100

212 9.8 7.3 10.9

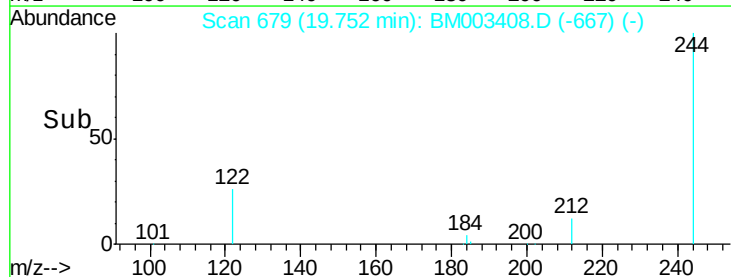
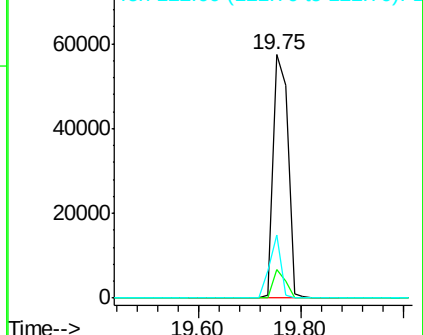
122 19.9 14.8 22.2

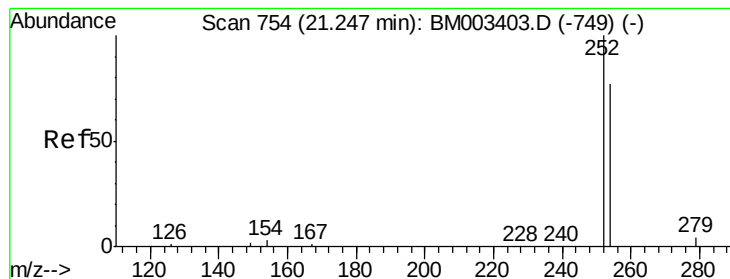


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#34

3,3'-Dichlorobenzidine

Concen: 0.27 ng

RT: 21.24 min Scan# 754

Delta R.T. -0.01 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

Instrument :

BNA\_M

ClientSampleId :

PT-BNA-SOIL

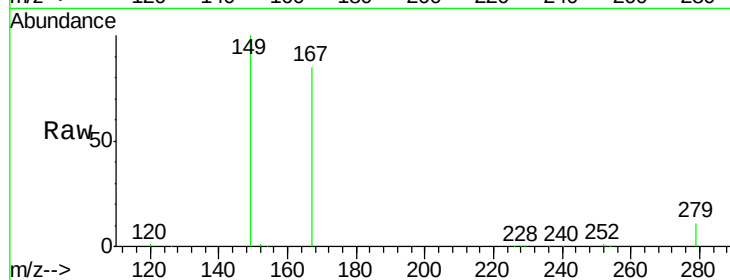
Tgt Ion:252 Resp: 107

Ion Ratio Lower Upper

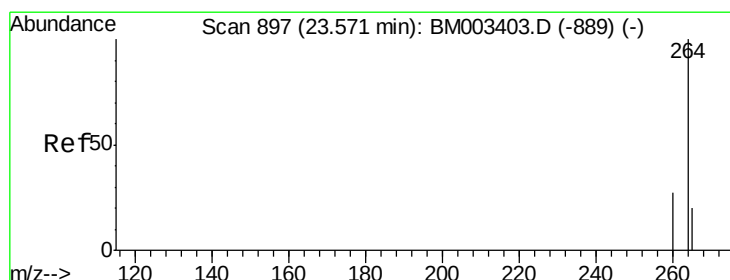
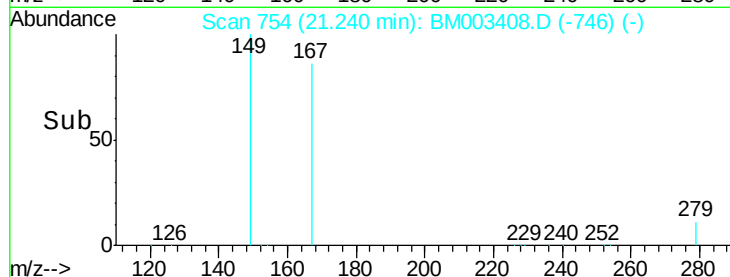
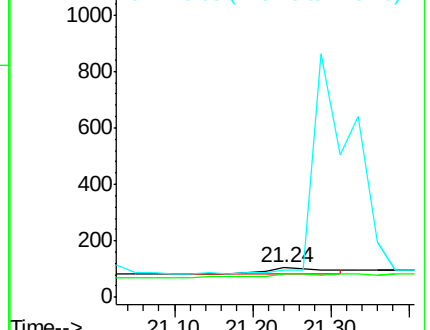
252 100

254 78.1 53.7 80.5

126 90.5 2.8 4.2#



Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 254.00 (253.70 to 254.70): E  
Ion 126.00 (125.70 to 126.70): E



#35

Perylene-d12

Concen: 5.00 ng

RT: 23.59 min Scan# 899

Delta R.T. 0.01 min

Lab File: BM003408.D

Acq: 07 Dec 2015 16:22

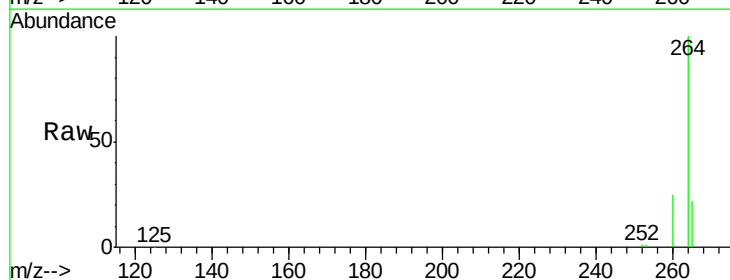
Tgt Ion:264 Resp: 143080

Ion Ratio Lower Upper

264 100

260 25.2 19.7 29.5

265 22.1 17.4 26.2



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

