

Data Path : Z:\HPCHEM1\BNA F\DATA\BF042216\  
 Data File : BF086408.D  
 Acq On : 23 Apr 2016 23:45  
 Operator : UM/SJ  
 Sample : H2652-09  
 Misc :  
 ALS Vial : 52 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 WPG-B23(0-4.5)-C

Manual Integrations  
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 4/25/2016 12:36:16 PM

Quant Time: Apr 25 07:16:37 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF042216.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Apr 23 00:24:02 2016  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min)   |
|-----------------------------|-------|------|----------|--------|-------|------------|
| 1) 1,4-Dichlorobenzene-d4   | 6.84  | 152  | 172885   | 20.00  | ng    | 0.00       |
| 21) Naphthalene-d8          | 8.13  | 136  | 671317   | 20.00  | ng    | 0.00       |
| 38) Acenaphthene-d10        | 9.88  | 164  | 276022   | 20.00  | ng    | 0.00       |
| 63) Phenanthrene-d10        | 11.37 | 188  | 444209   | 20.00  | ng    | 0.00       |
| 75) Chrysene-d12            | 14.00 | 240  | 348018   | 20.00  | ng    | 0.00       |
| 86) Perylene-d12            | 15.41 | 264  | 250004   | 20.00  | ng    | 0.00       |
| System Monitoring Compounds |       |      |          |        |       |            |
| 5) 2-Fluorophenol           | 5.45  | 112  | 1131233  | 113.00 | ng    | 0.02       |
| 7) Phenol-d6                | 6.49  | 99   | 1456723  | 107.03 | ng    | 0.01       |
| 23) Nitrobenzene-d5         | 7.41  | 82   | 859936   | 75.88  | ng    | 0.00       |
| 41) 2,4,6-Tribromophenol    | 10.67 | 330  | 226452   | 90.63  | ng    | 0.00       |
| 44) 2-Fluorobiphenyl        | 9.21  | 172  | 1298227  | 80.26  | ng    | 0.00       |
| 78) Terphenyl-d14           | 12.95 | 244  | 926707   | 66.16  | ng    | 0.00       |
| Target Compounds            |       |      |          |        |       |            |
| 49) Dimethylphthalate       | 9.60  | 163  | 167776   | 8.41   | ng    | Qvalue 100 |
| 70) Phenanthrene            | 11.39 | 178  | 98219    | 4.40   | ng    | 98         |
| 74) Fluoranthene            | 12.57 | 202  | 141442   | 5.88   | ng    | 98         |
| 77) Pyrene                  | 12.80 | 202  | 137425   | 5.66   | ng    | 97         |
| 80) Benzo(a)anthracene      | 13.99 | 228  | 64846    | 3.59   | ng    | 96         |
| 82) Chrysene                | 14.02 | 228  | 48553m   | 2.39   | ng    |            |
| 87) Benzo(b)fluoranthene    | 15.01 | 252  | 53805m   | 3.92   | ng    |            |
| 88) Benzo(k)fluoranthene    | 15.03 | 252  | 29769m   | 2.21   | ng    |            |
| 89) Benzo(a)pyrene          | 15.36 | 252  | 42593    | 3.15   | ng    | # 81       |
| 91) Benzo(g,h,i)perylene    | 17.21 | 276  | 24758    | 2.15   | ng    | # 92       |

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

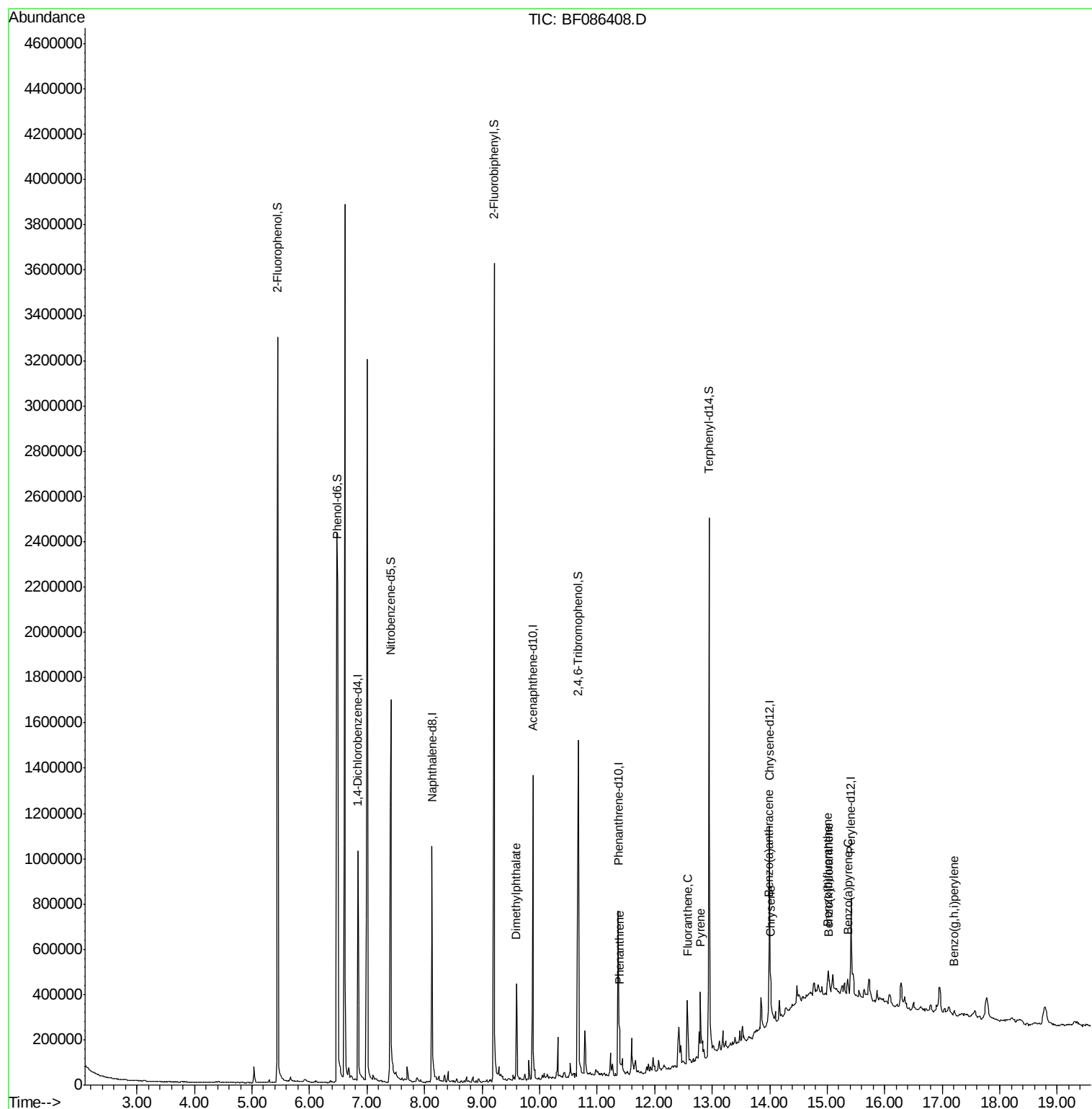
Data Path : Z:\HPCHEM1\BNA F\DATA\BF042216\  
Data File : BF086408.D  
Acq On : 23 Apr 2016 23:45  
Operator : UM/SJ  
Sample : H2652-09  
Misc :  
ALS Vial : 52 Sample Multiplier: 1

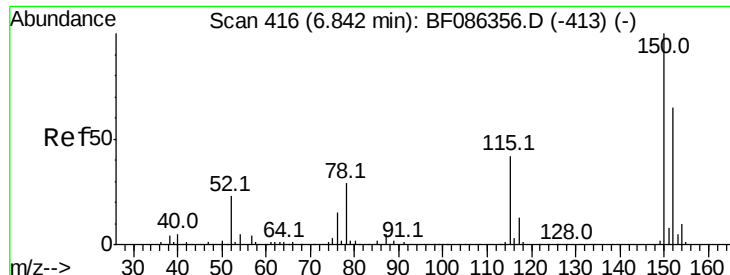
Instrument :  
BNA\_F  
ClientSampleId :  
WPG-B23(0-4.5)-C

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Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF042216.M  
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QLast Update : Sat Apr 23 00:24:02 2016  
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#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.84 min Scan# 416

Delta R.T. 0.00 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

Instrument :

BNA\_F

ClientSampleId :

WPG-B23(0-4.5)-C

Tot Ion:152 Resp: 172885

Ion Ratio Lower Upper

152 100

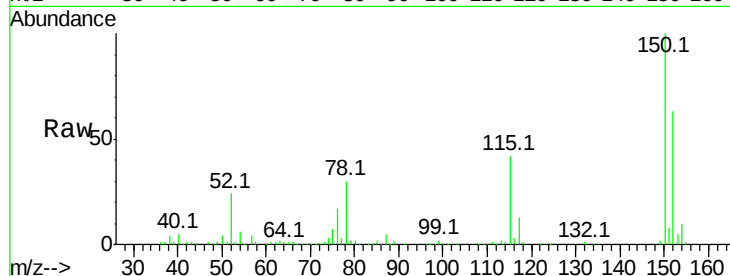
150 158.5 125.8 188.6

115 66.4 51.5 77.3

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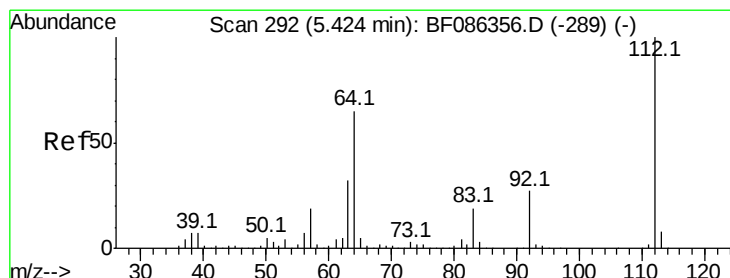
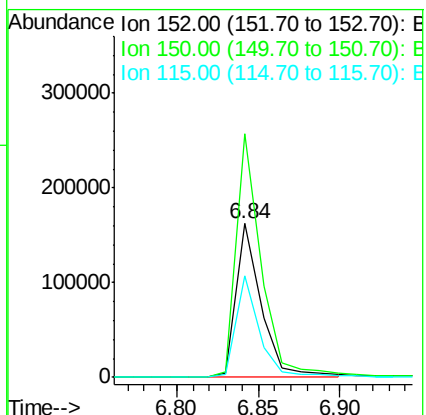
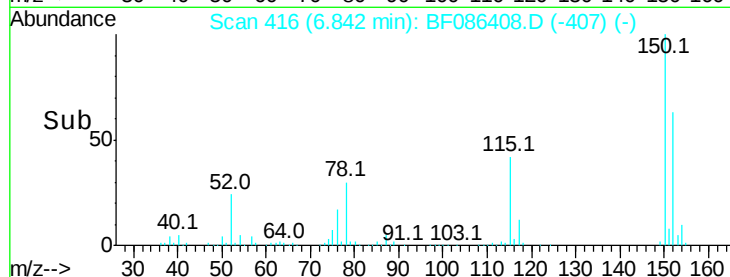
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Abundance Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol

Concen: 113.00 ng

RT: 5.45 min Scan# 294

Delta R.T. 0.02 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

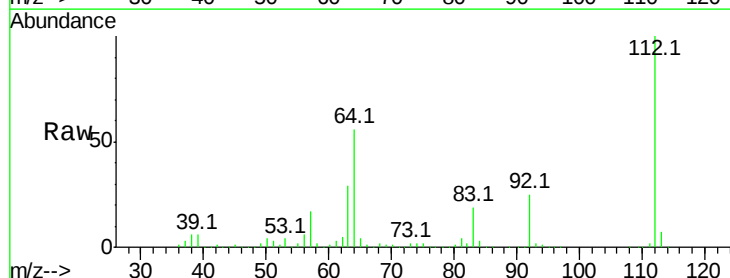
Tgt Ion:112 Resp: 1131233

Ion Ratio Lower Upper

112 100

64 56.0 52.1 78.1

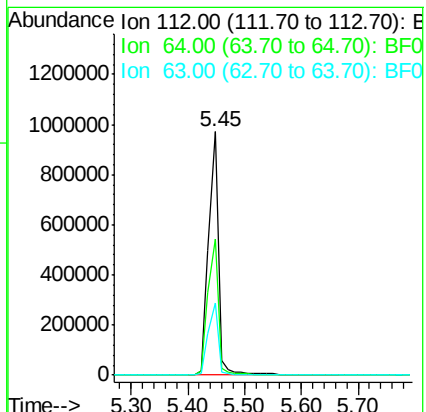
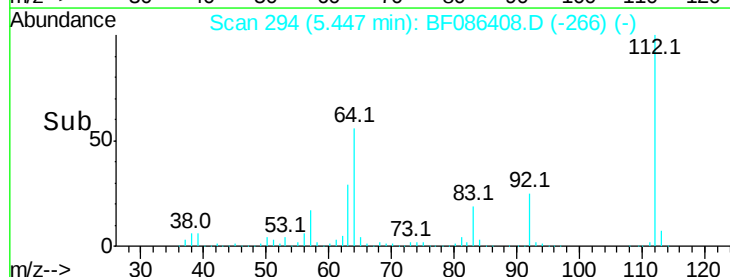
63 29.4 25.7 38.5

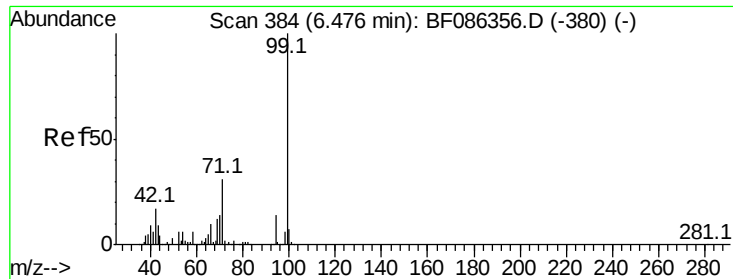


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 107.03 ng

RT: 6.49 min Scan# 385

Delta R.T. 0.01 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

Instrument :

BNA\_F

ClientSampleId :

WPG-B23(0-4.5)-C

Tot Ion: 99 Resp: 1456723

Ion Ratio Lower Upper

99 100

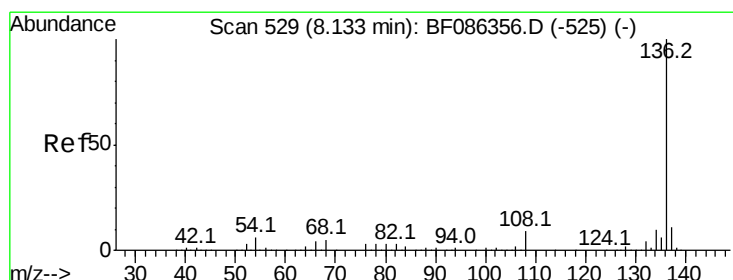
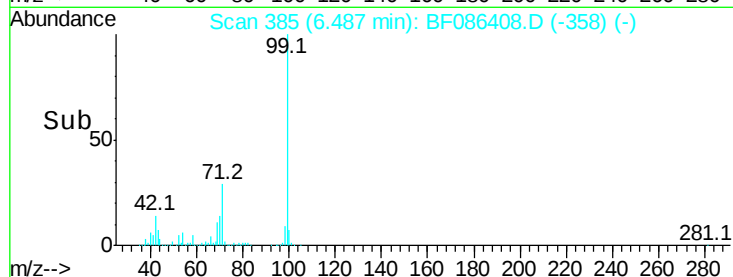
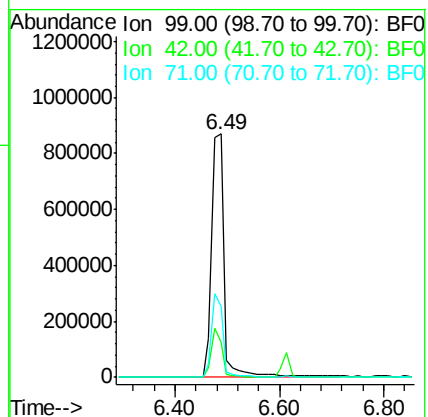
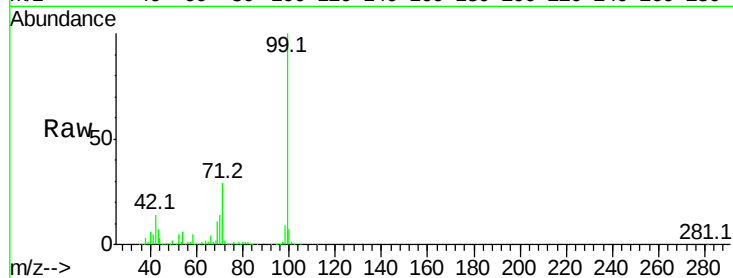
42 14.2 13.6 20.4

71 29.2 24.6 36.8

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#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.13 min Scan# 529

Delta R.T. 0.00 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

Tgt Ion: 136 Resp: 671317

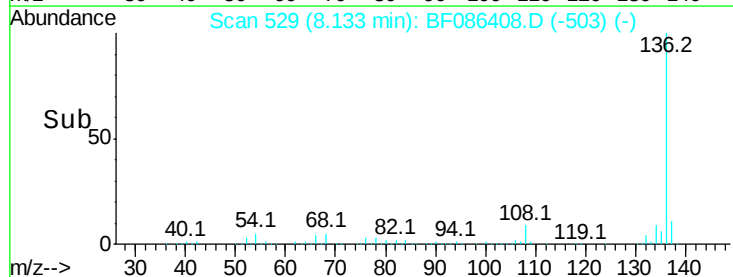
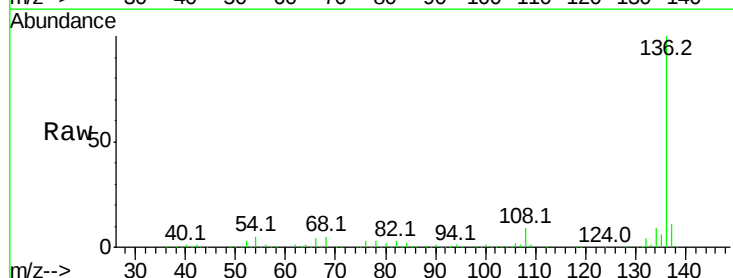
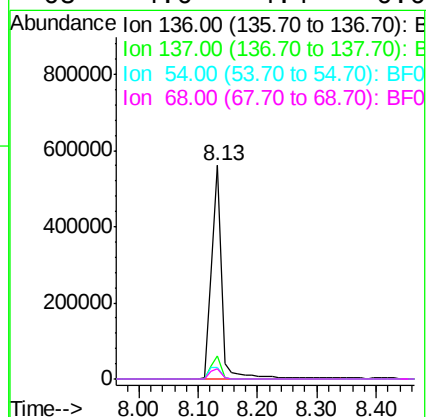
Ion Ratio Lower Upper

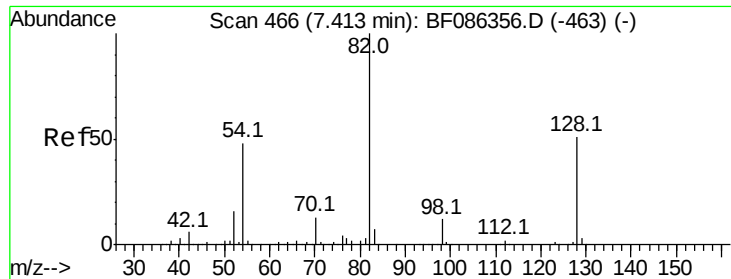
136 100

137 10.5 8.8 13.2

54 5.4 5.0 7.4

68 4.6 4.4 6.6





#23

Nitrobenzene-d5

Concen: 75.88 ng

RT: 7.41 min Scan# 466

Delta R.T. 0.00 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

Instrument :

BNA\_F

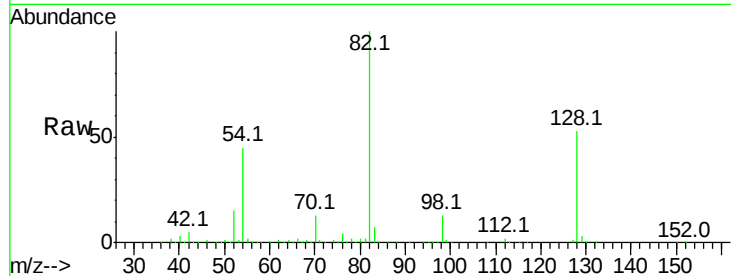
ClientSampleId :

WPG-B23(0-4.5)-C

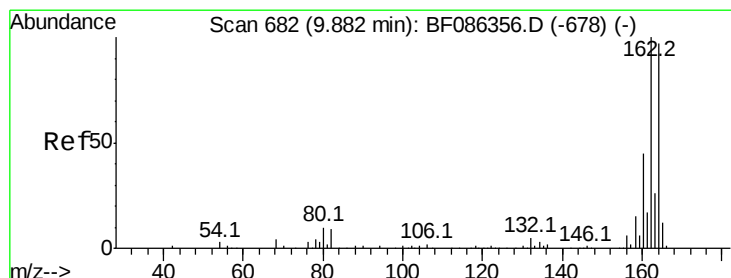
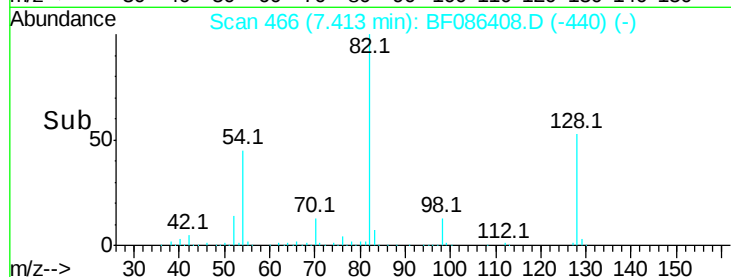
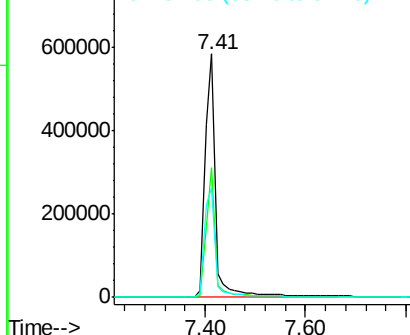
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 82    | Resp: | 859936 |
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 53.2  | 40.6  | 61.0   |
| 54        | 45.0  | 38.1  | 57.1   |

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Abundance Ion 82.00 (81.70 to 82.70): BF0  
Ion 128.00 (127.70 to 128.70): E  
Ion 54.00 (53.70 to 54.70): BF0



#38

Acenaphthene-d10

Concen: 20.00 ng

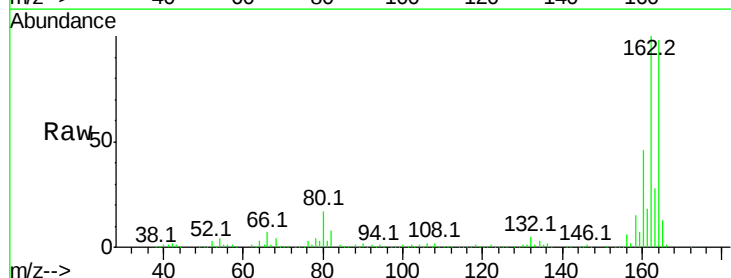
RT: 9.88 min Scan# 682

Delta R.T. 0.00 min

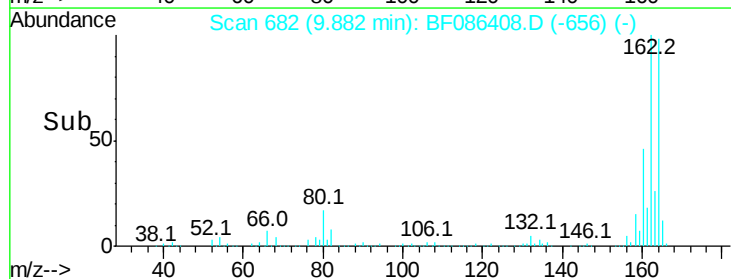
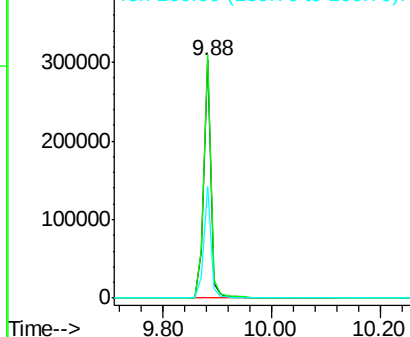
Lab File: BF086408.D

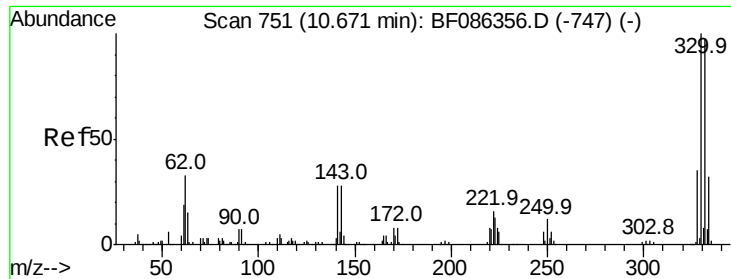
Acq: 23 Apr 2016 23:45

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 164   | Resp: | 276022 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 102.1 | 82.8  | 124.2  |
| 160       | 46.7  | 36.9  | 55.3   |



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





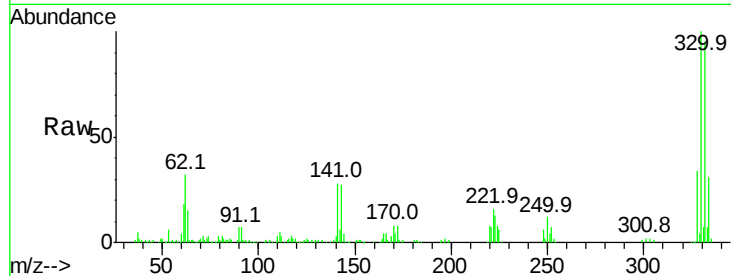
#41  
 2,4,6-Tribromophenol  
 Concen: 90.63 ng  
 RT: 10.67 min Scan# 751  
 Delta R.T. 0.00 min  
 Lab File: BF086408.D  
 Acq: 23 Apr 2016 23:45

Instrument :  
 BNA\_F  
 ClientSampleId :  
 WPG-B23(0-4.5)-C

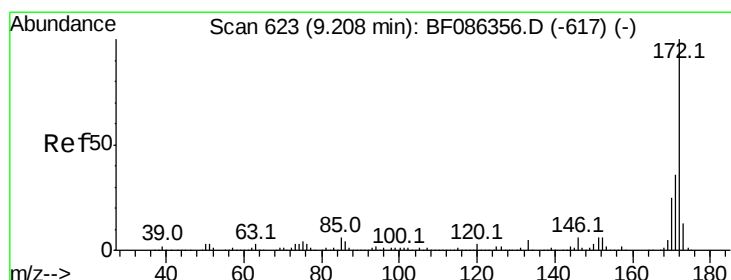
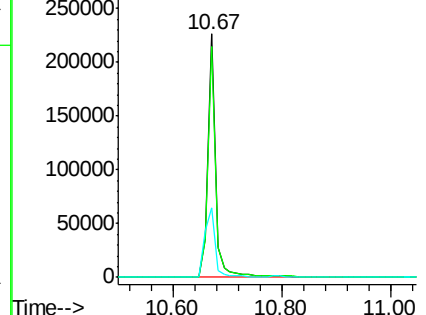
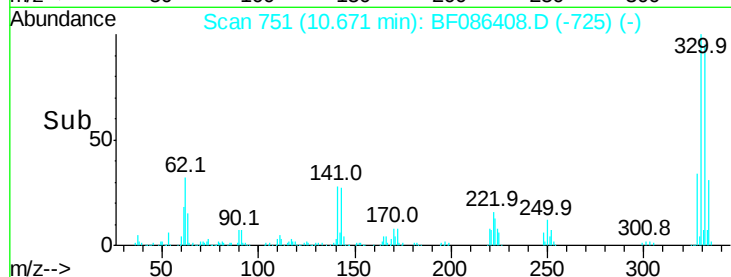
| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 226452 |       |       |
| 332     | 95.3  | 79.0   | 118.4 |       |
| 141     | 38.1  | 31.2   | 46.8  |       |

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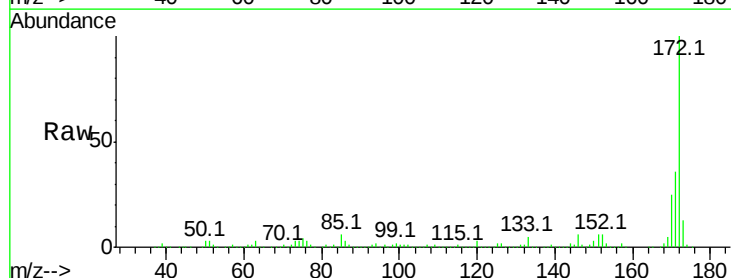


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

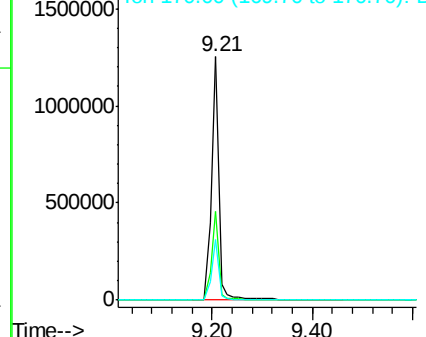
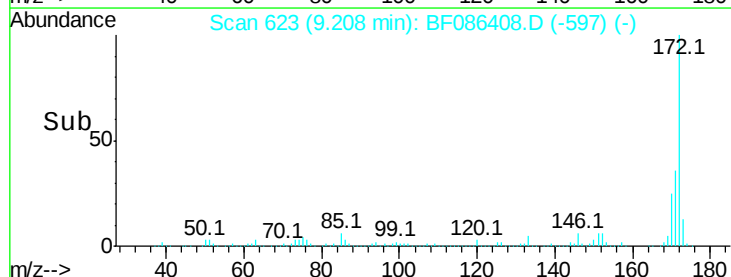


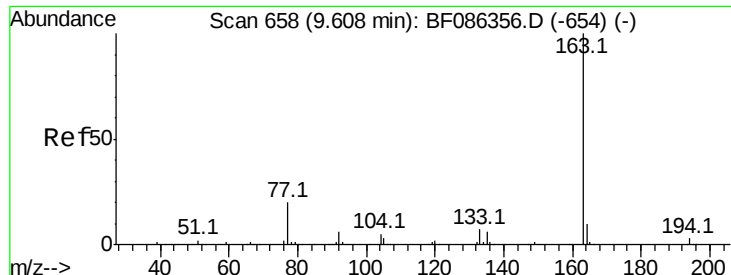
#44  
 2-Fluorobiphenyl  
 Concen: 80.26 ng  
 RT: 9.21 min Scan# 623  
 Delta R.T. 0.00 min  
 Lab File: BF086408.D  
 Acq: 23 Apr 2016 23:45

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 172     | 100   | 1298227 |       |       |
| 171     | 36.4  | 29.0    | 43.6  |       |
| 170     | 24.8  | 19.8    | 29.8  |       |



Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E





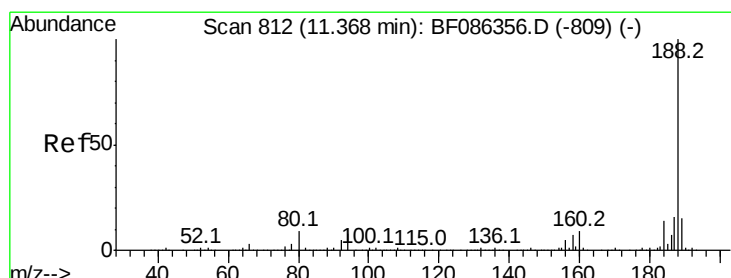
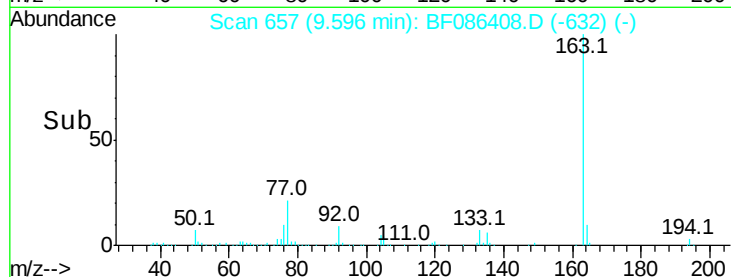
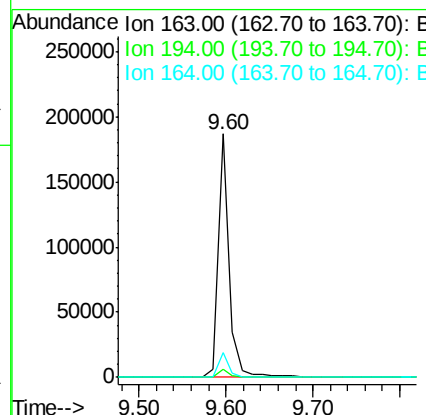
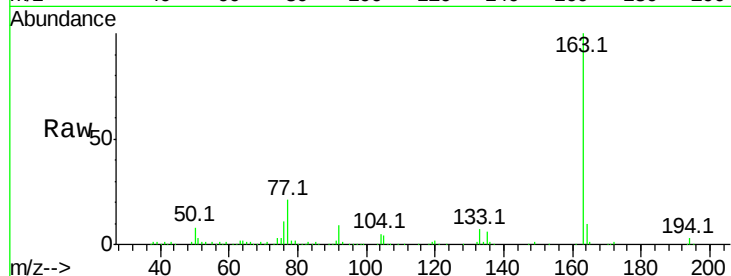
#49  
Dimethylphthalate  
Concen: 8.41 ng  
RT: 9.60 min Scan# 657  
Delta R.T. -0.01 min  
Lab File: BF086408.D  
Acq: 23 Apr 2016 23:45

Instrument :  
BNA\_F  
ClientSampleId :  
WPG-B23(0-4.5)-C

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 167776 |       |       |
| 194     | 3.3   | 2.6    | 4.0   |       |
| 164     | 10.1  | 8.2    | 12.4  |       |

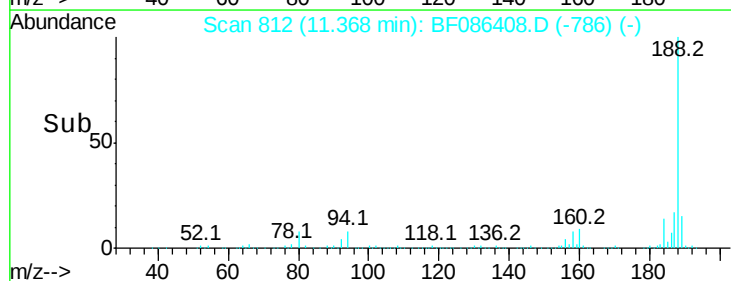
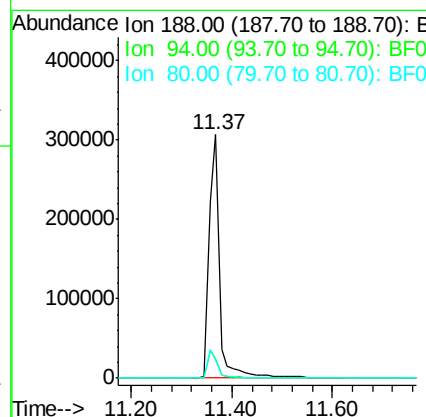
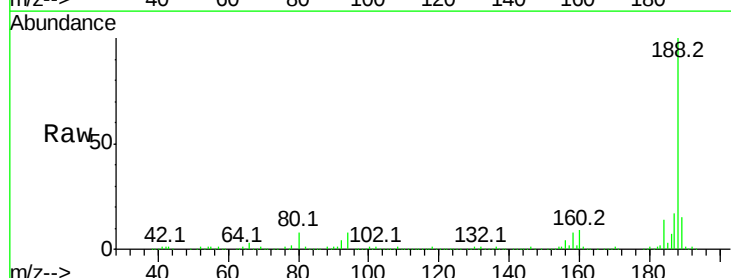
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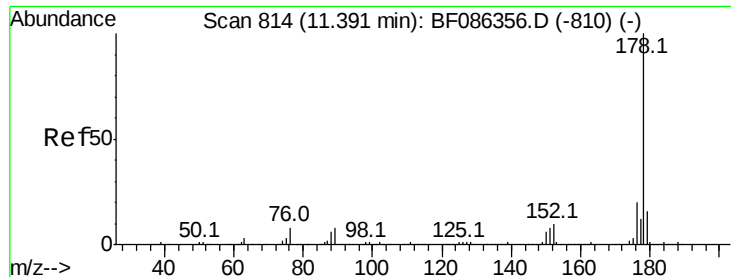
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#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.37 min Scan# 812  
Delta R.T. 0.00 min  
Lab File: BF086408.D  
Acq: 23 Apr 2016 23:45

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 444209 |       |       |
| 94      | 7.9   | 6.8    | 10.2  |       |
| 80      | 7.7   | 7.1    | 10.7  |       |





#70

Phenanthrene

Concen: 4.40 ng

RT: 11.39 min Scan# 814

Delta R.T. 0.00 min

Lab File: BF086408.D

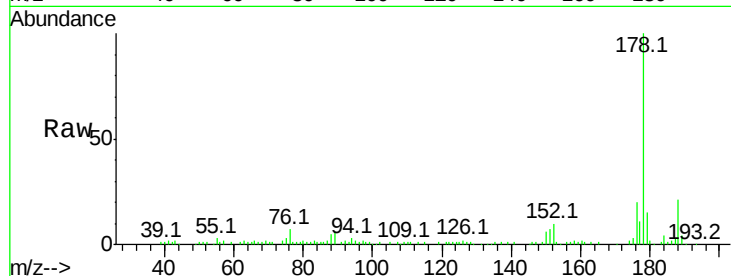
Acq: 23 Apr 2016 23:45

Instrument :

BNA\_F

ClientSampleId :

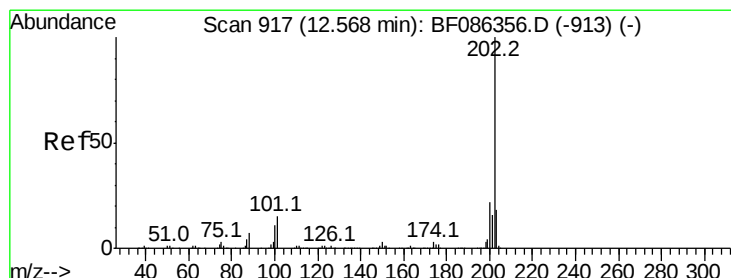
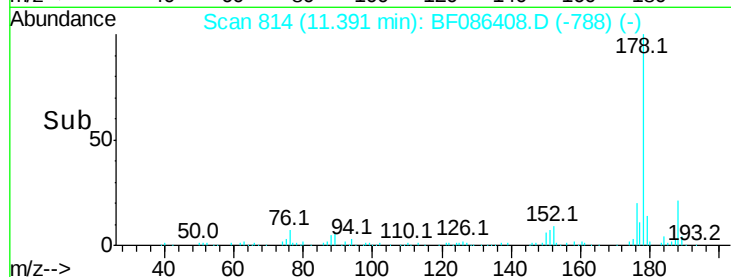
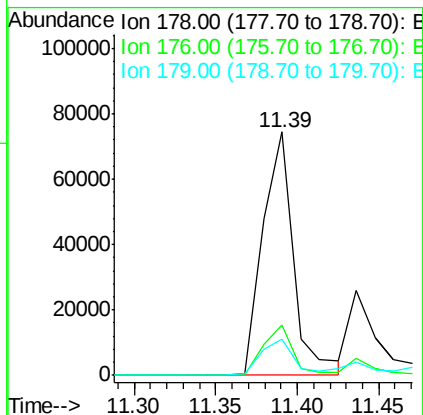
WPG-B23(0-4.5)-C



| Tot Ion | 178 | 176  | 179  |
|---------|-----|------|------|
| Ratio   | 100 | 20.5 | 14.6 |
| Lower   |     | 16.0 | 12.6 |
| Upper   |     | 24.0 | 18.8 |

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#74

Fluoranthene

Concen: 5.88 ng

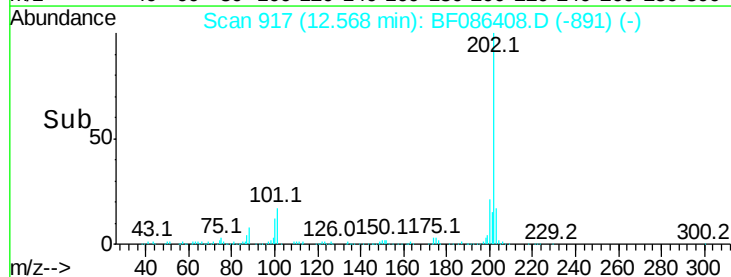
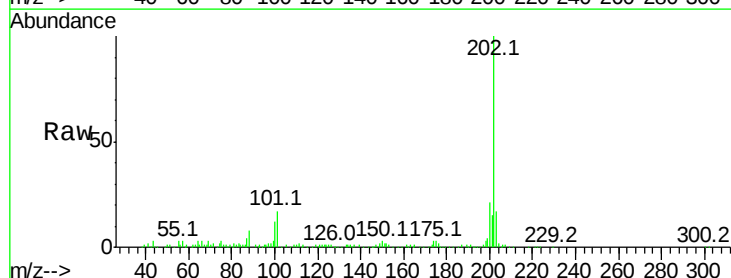
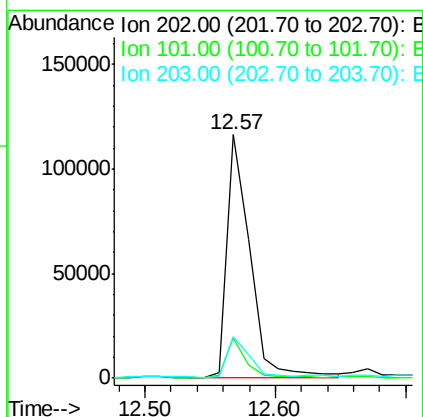
RT: 12.57 min Scan# 917

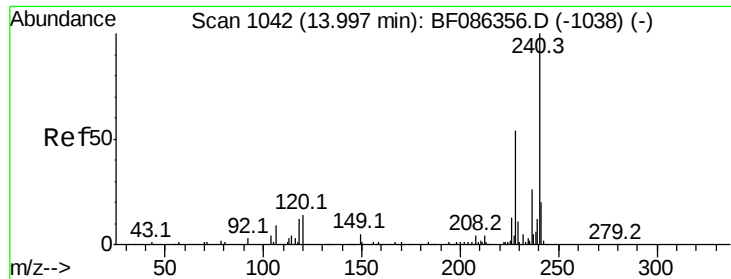
Delta R.T. 0.00 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

| Tgt Ion | 202 | 201  | 203  |
|---------|-----|------|------|
| Ratio   | 100 | 16.6 | 17.2 |
| Lower   |     | 0.0  | 0.0  |
| Upper   |     | 35.4 | 38.1 |





#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.00 min Scan# 1042

Delta R.T. 0.00 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

Instrument :

BNA\_F

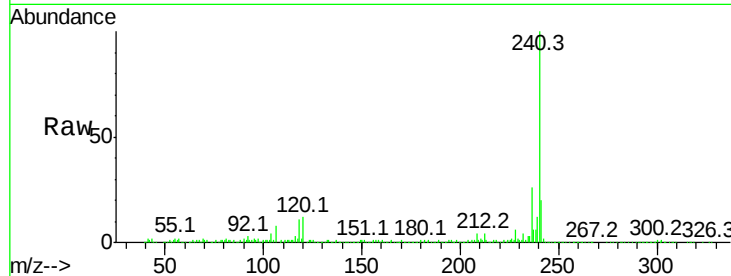
ClientSampleId :

WPG-B23(0-4.5)-C

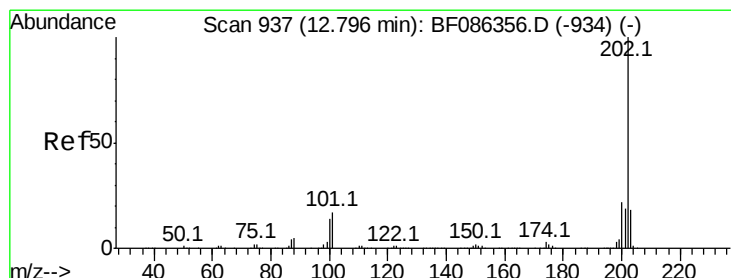
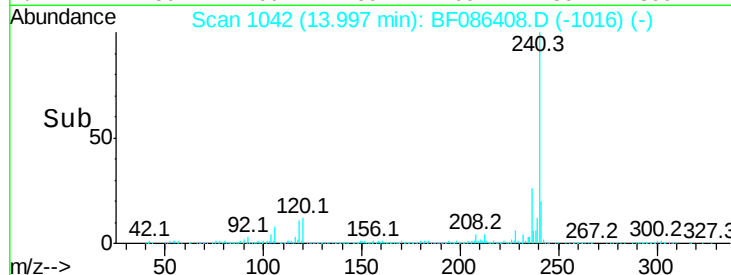
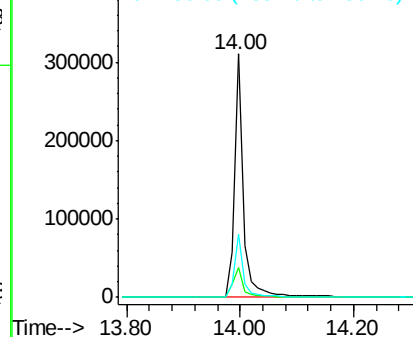
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 240   | Resp: | 348018 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 12.3  | 11.2  | 16.8   |
| 236       | 25.8  | 21.2  | 31.8   |

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Abundance Ion 240.00 (239.70 to 240.70): E  
Ion 120.00 (119.70 to 120.70): E  
Ion 236.00 (235.70 to 236.70): E



#77

Pyrene

Concen: 5.66 ng

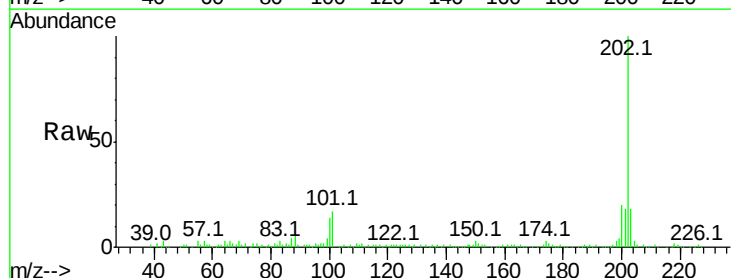
RT: 12.80 min Scan# 937

Delta R.T. 0.00 min

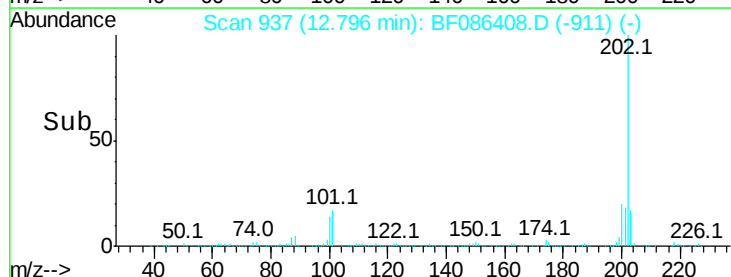
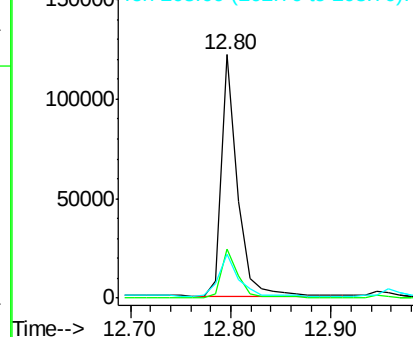
Lab File: BF086408.D

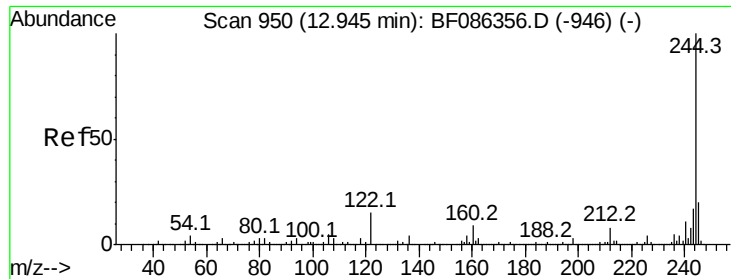
Acq: 23 Apr 2016 23:45

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 137425 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 20.1  | 17.7  | 26.5   |
| 203       | 18.0  | 14.2  | 21.4   |



Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 200.00 (199.70 to 200.70): E  
Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 66.16 ng

RT: 12.95 min Scan# 950

Delta R.T. 0.00 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

Instrument :

BNA\_F

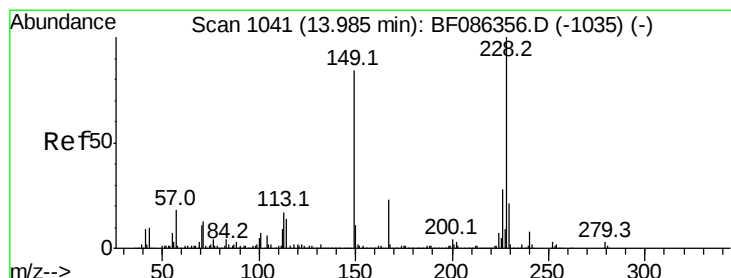
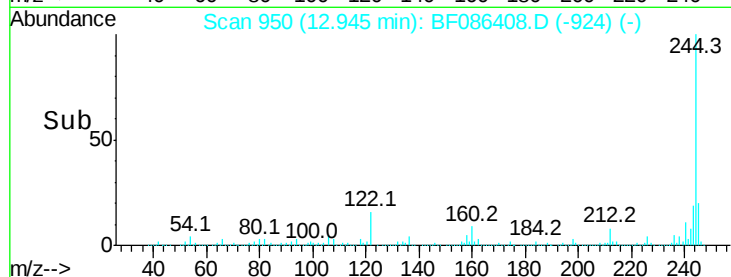
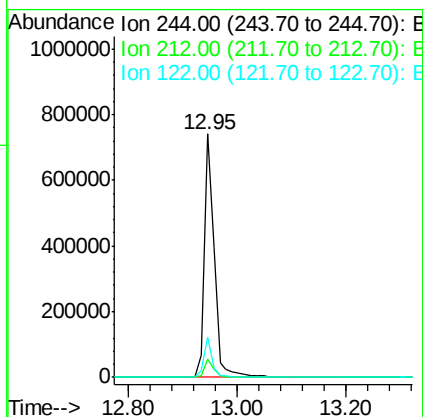
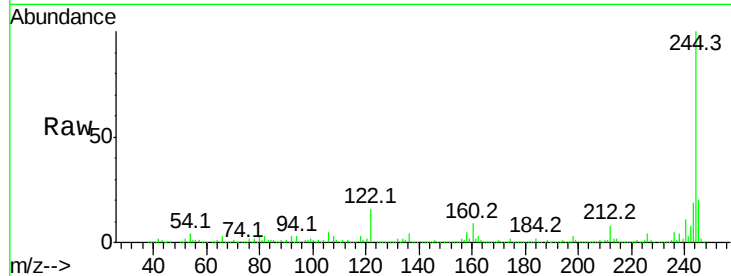
ClientSampleId :

WPG-B23(0-4.5)-C

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 244   | Resp: | 926707 |
| Ion Ratio | Lower | Upper |        |
| 244       | 100   |       |        |
| 212       | 7.7   | 6.2   | 9.2    |
| 122       | 16.3  | 12.0  | 18.0   |

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#80

Benzo(a)anthracene

Concen: 3.59 ng

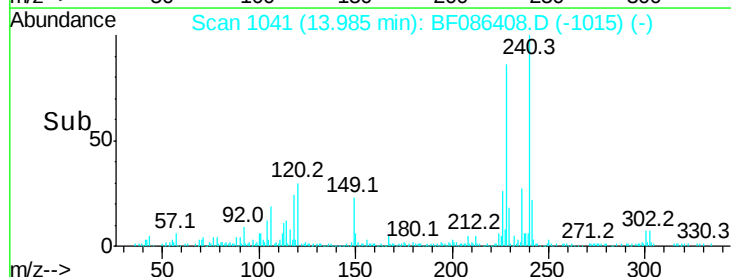
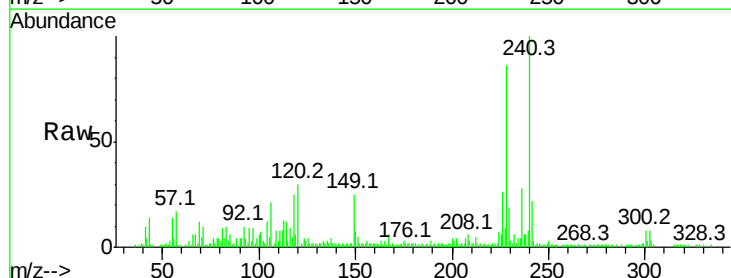
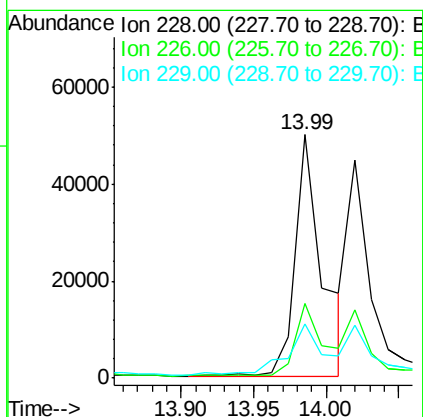
RT: 13.99 min Scan# 1041

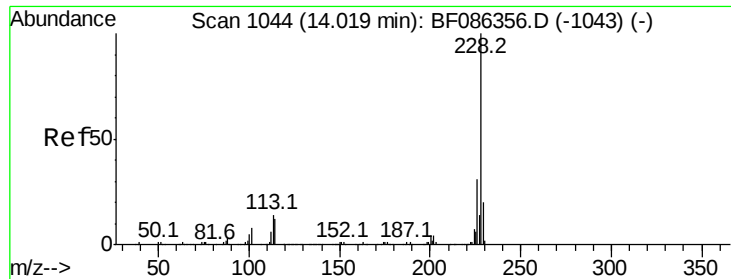
Delta R.T. 0.00 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 228   | Resp: | 64846 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 30.5  | 22.5  | 33.7  |
| 229       | 22.4  | 16.6  | 25.0  |





#82

Chrysene

Concen: 2.39 ng/mL

RT: 14.02 min Scan# 1044

Delta R.T. 0.00 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

Instrument :

BNA\_F

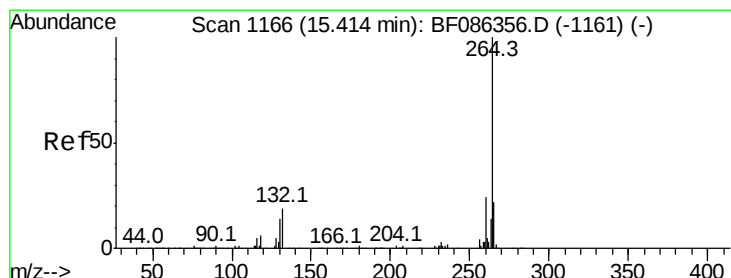
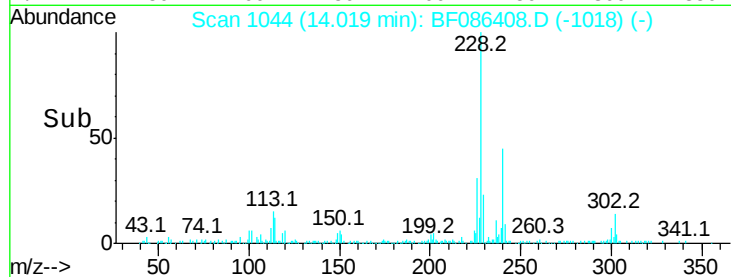
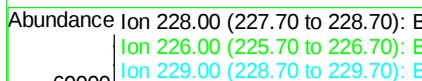
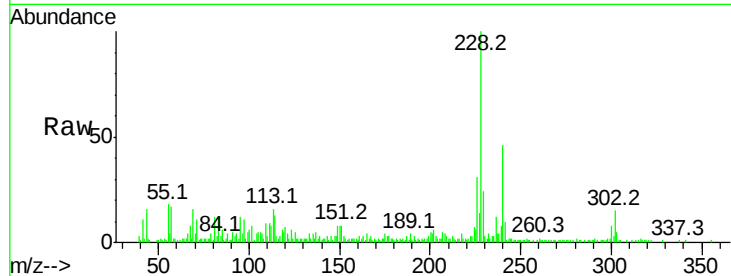
ClientSampleId :

WPG-B23(0-4.5)-C

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 48553 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 31.4  | 24.4  | 36.6  |
| 229       | 24.1  | 15.8  | 23.8  |

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#86

Perylene-d12

Concen: 20.00 ng

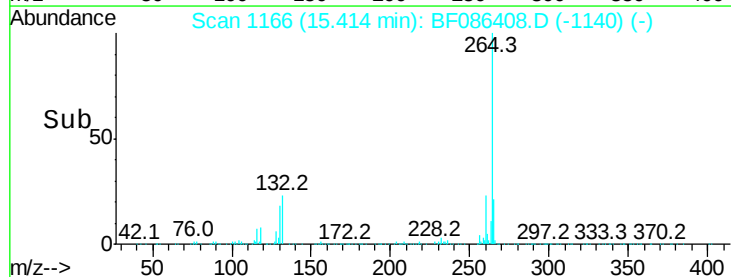
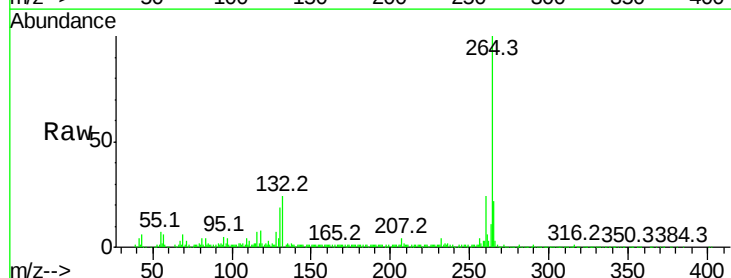
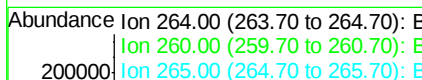
RT: 15.41 min Scan# 1166

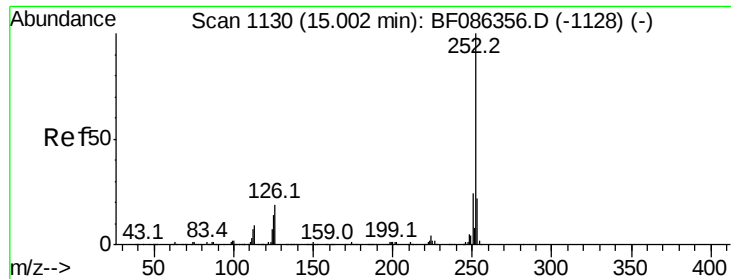
Delta R.T. 0.00 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 264   | Resp: | 250004 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 23.5  | 19.5  | 29.3   |
| 265       | 21.8  | 17.3  | 25.9   |





#87

Benzo(b)fluoranthene

Concen: 3.92 ng m

RT: 15.01 min Scan# 1131

Delta R.T. 0.01 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

Instrument :

BNA\_F

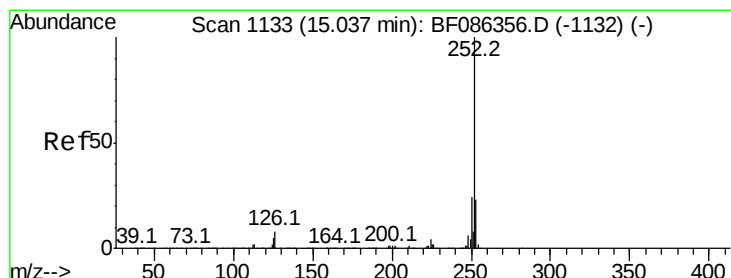
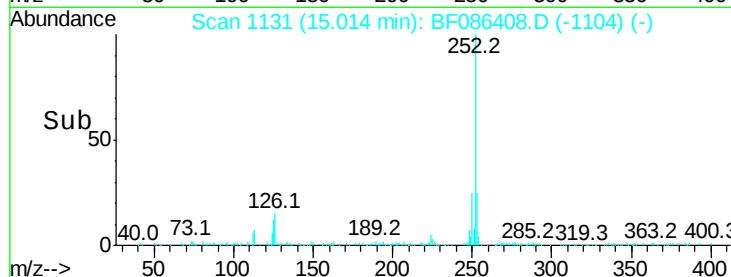
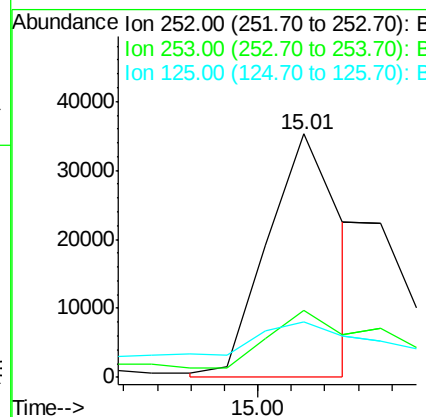
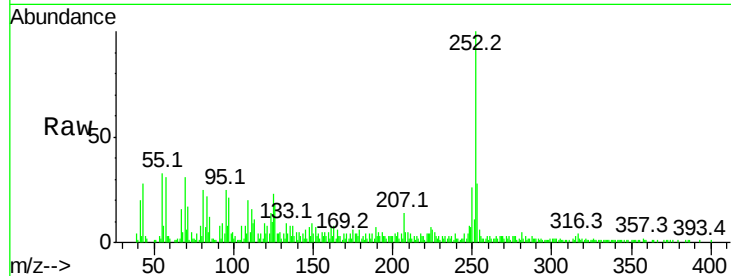
ClientSampleId :

WPG-B23(0-4.5)-C

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 53805 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 27.6  | 17.8  | 26.6# |
| 125       | 22.6  | 11.4  | 17.0# |

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#88

Benzo(k)fluoranthene

Concen: 2.21 ng m

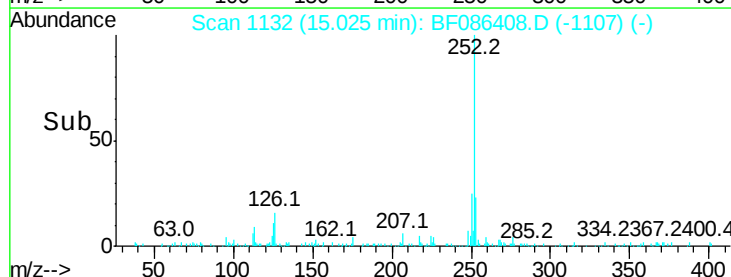
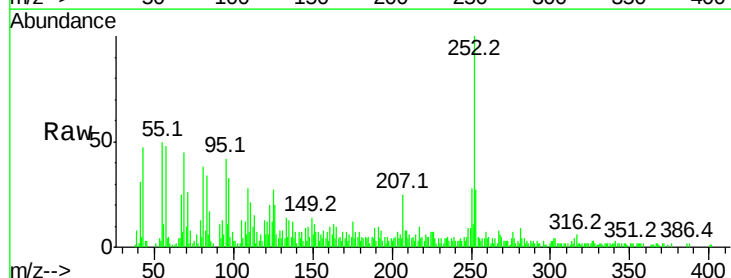
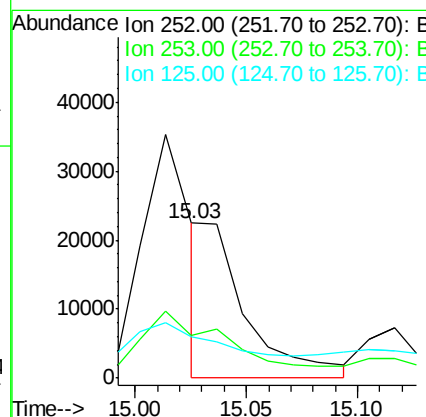
RT: 15.03 min Scan# 1132

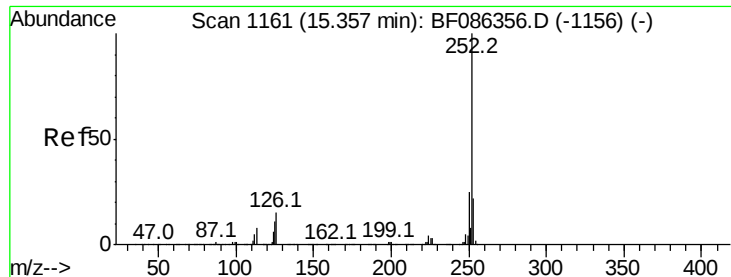
Delta R.T. -0.01 min

Lab File: BF086408.D

Acq: 23 Apr 2016 23:45

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 29769 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 27.3  | 17.8  | 26.6# |
| 125       | 26.9  | 9.1   | 13.7# |





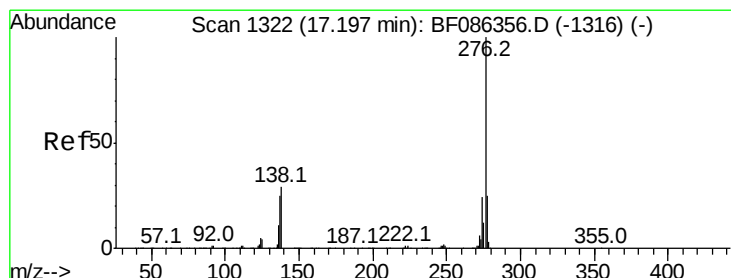
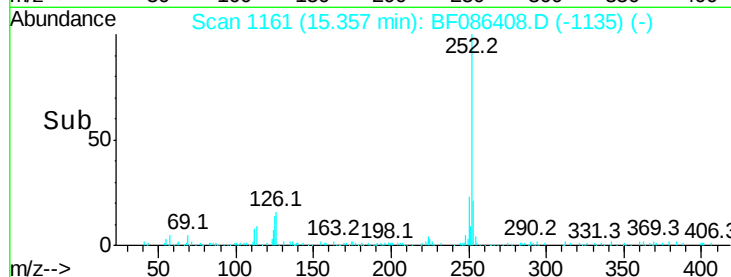
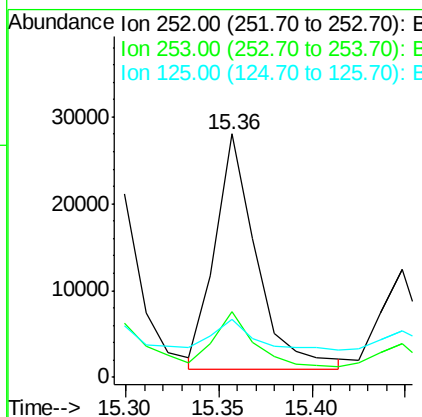
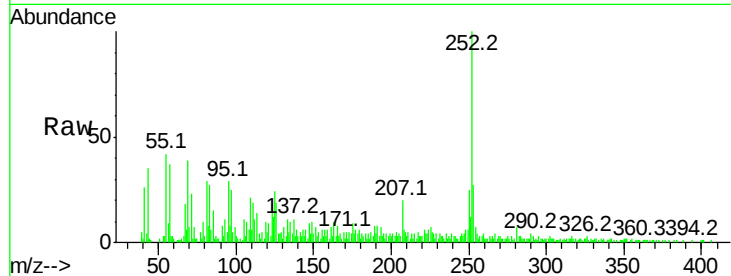
#89  
Benzo(a)pyrene  
Concen: 3.15 ng  
RT: 15.36 min Scan# 1161  
Delta R.T. 0.00 min  
Lab File: BF086408.D  
Acq: 23 Apr 2016 23:45

Instrument :  
BNA\_F  
ClientSampleId :  
WPG-B23(0-4.5)-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 26.7  | 17.2  | 25.8# |
| 125     | 24.0  | 9.0   | 13.6# |

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#91  
Benzo(g,h,i)perylene  
Concen: 2.15 ng  
RT: 17.21 min Scan# 1323  
Delta R.T. 0.01 min  
Lab File: BF086408.D  
Acq: 23 Apr 2016 23:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 32.6  | 19.6  | 29.4# |
| 138     | 30.3  | 23.6  | 35.4  |

