

Data Path : Z:\HPCHEM1\BNA F\DATA\BF121516\  
 Data File : BF091633.D  
 Acq On : 15 Dec 2016 17:28  
 Operator : UM/SJ  
 Sample : H6012-03  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-4-5.5-6.5

Manual Integrations  
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 12/16/2016 6:23:34 PM

Quant Time: Dec 16 00:46:17 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF120916.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 16 00:35:41 2016  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min)       |
|-----------------------------|-------|------|----------|-------|-------|----------------|
| 1) 1,4-Dichlorobenzene-d4   | 6.78  | 152  | 327487   | 20.00 | ng    | 0.00           |
| 21) Naphthalene-d8          | 8.06  | 136  | 1239058  | 20.00 | ng    | -0.01          |
| 38) Acenaphthene-d10        | 9.82  | 164  | 655489   | 20.00 | ng    | 0.00           |
| 63) Phenanthrene-d10        | 11.30 | 188  | 941446   | 20.00 | ng    | -0.01          |
| 75) Chrysene-d12            | 13.94 | 240  | 606909   | 20.00 | ng    | 0.00           |
| 86) Perylene-d12            | 15.35 | 264  | 601505   | 20.00 | ng    | 0.00           |
| System Monitoring Compounds |       |      |          |       |       |                |
| 5) 2-Fluorophenol           | 5.38  | 112  | 1336443  | 68.75 | ng    | 0.00           |
| 7) Phenol-d6                | 6.42  | 99   | 1923632  | 79.38 | ng    | -0.01          |
| 23) Nitrobenzene-d5         | 7.34  | 82   | 1172778  | 52.83 | ng    | -0.01          |
| 41) 2,4,6-Tribromophenol    | 10.61 | 330  | 211986   | 38.94 | ng    | 0.00           |
| 44) 2-Fluorobiphenyl        | 9.15  | 172  | 2074278  | 54.68 | ng    | 0.00           |
| 78) Terphenyl-d14           | 12.89 | 244  | 1383802  | 51.74 | ng    | -0.01          |
| Target Compounds            |       |      |          |       |       |                |
| 10) Phenol                  | 6.43  | 94   | 90694    | 3.20  | ng    | Qvalue<br># 48 |
| 49) Dimethylphthalate       | 9.54  | 163  | 217299   | 5.24  | ng    | 99             |
| 70) Phenanthrene            | 11.32 | 178  | 441253   | 9.46  | ng    | 99             |
| 71) Anthracene              | 11.38 | 178  | 122098   | 2.43  | ng    | 97             |
| 74) Fluoranthene            | 12.51 | 202  | 722777   | 14.81 | ng    | 97             |
| 77) Pyrene                  | 12.74 | 202  | 569292   | 11.82 | ng    | 99             |
| 80) Benzo(a)anthracene      | 13.93 | 228  | 246925   | 7.01  | ng    | # 91           |
| 82) Chrysene                | 13.96 | 228  | 201916m  | 5.48  | ng    |                |
| 85) Indeno(1,2,3-cd)pyrene  | 16.69 | 276  | 103405   | 3.12  | ng    | 96             |
| 87) Benzo(b)fluoranthene    | 14.95 | 252  | 242295m  | 6.76  | ng    |                |
| 88) Benzo(k)fluoranthene    | 14.97 | 252  | 89036m   | 2.82  | ng    |                |
| 89) Benzo(a)pyrene          | 15.28 | 252  | 163756   | 5.07  | ng    | # 97           |
| 91) Benzo(a,h,i)perylene    | 17.09 | 276  | 90414    | 3.07  | ng    | # 94           |

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

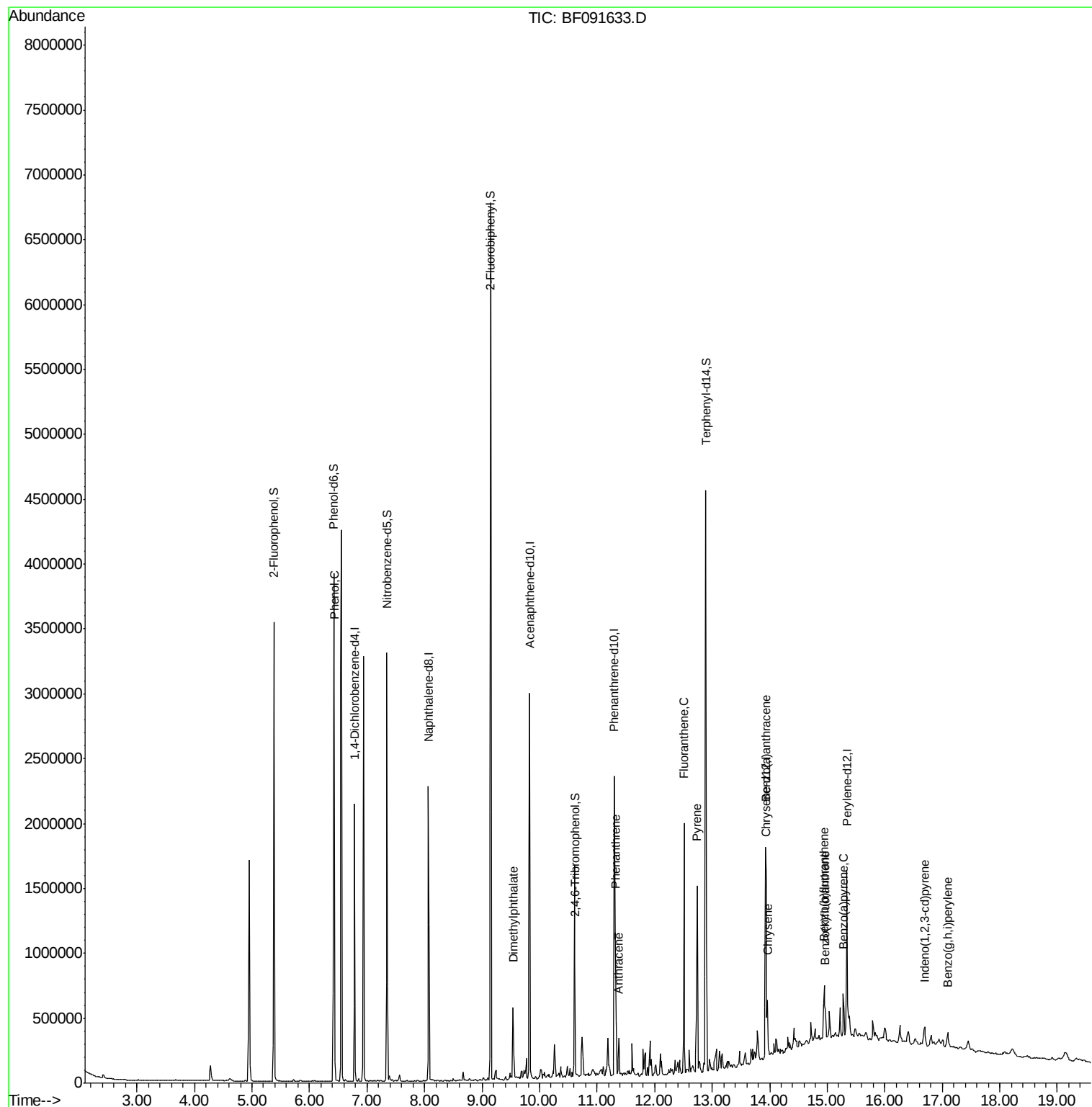
Data Path : Z:\HPCHEM1\BNA F\DATA\BF121516\  
Data File : BF091633.D  
Acq On : 15 Dec 2016 17:28  
Operator : UM/SJ  
Sample : H6012-03  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

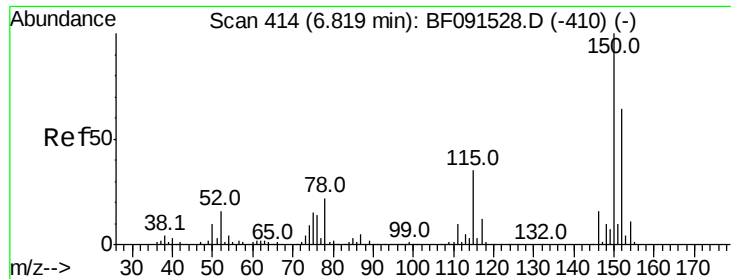
Instrument :  
BNA\_F  
ClientSampleId :  
SB-4-5.5-6.5

Manual Integrations  
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Quant Time: Dec 16 00:46:17 2016  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF120916.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Dec 16 00:35:41 2016  
Response via : Initial Calibration





#1

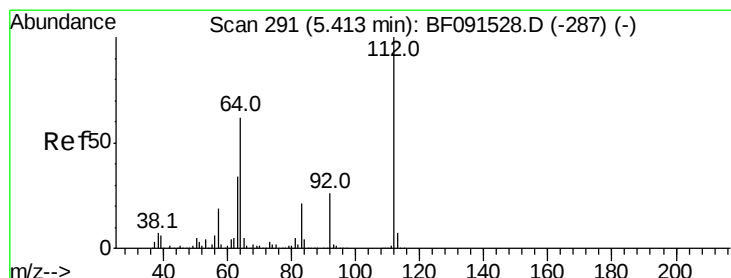
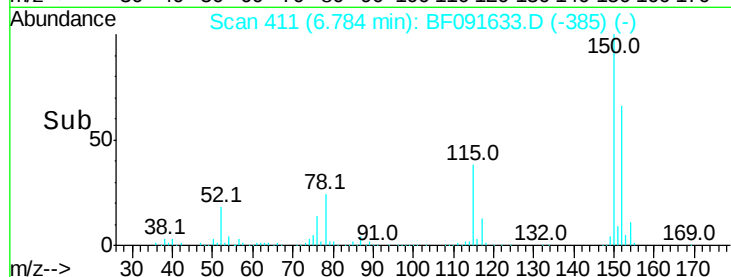
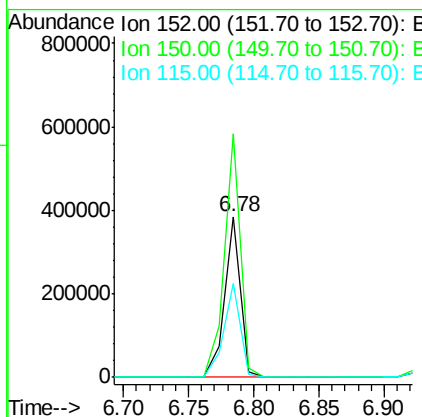
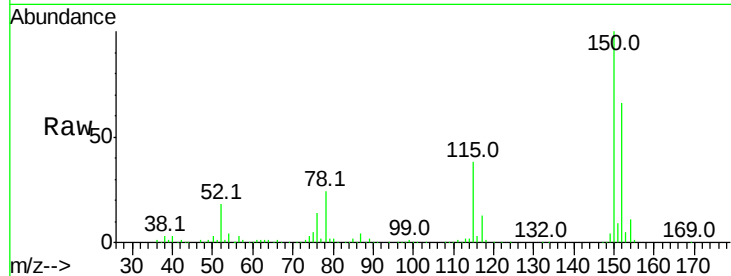
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.78 min Scan# 411  
Delta R.T. 0.00 min  
Lab File: BF091633.D  
Acq: 15 Dec 2016 17:28

Instrument :  
BNA\_F  
ClientSampleId :  
SB-4-5.5-6.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 151.4 | 122.5 | 183.7 |
| 115     | 58.0  | 51.8  | 77.8  |

Manual Integrations  
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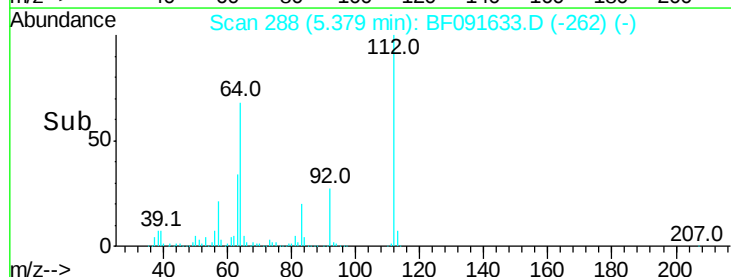
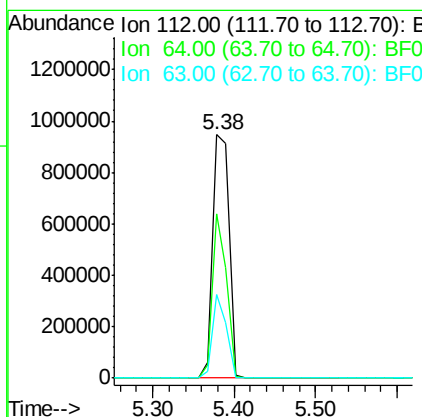
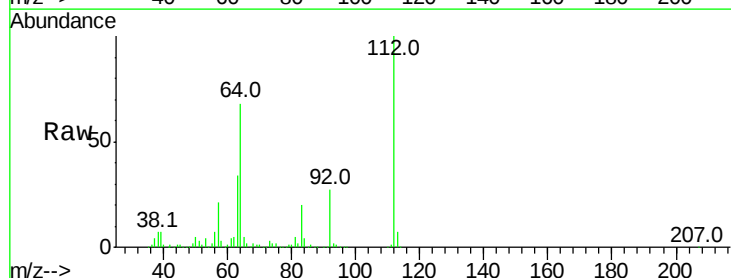
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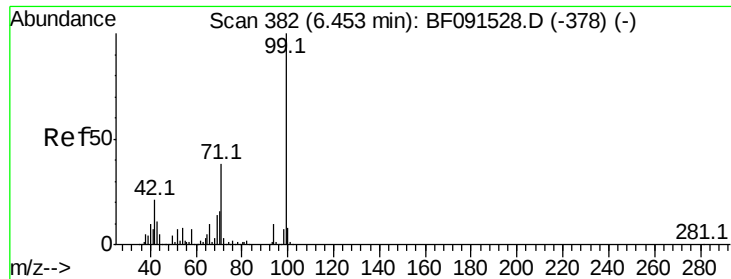


#5

2-Fluorophenol  
Concen: 68.75 ng  
RT: 5.38 min Scan# 288  
Delta R.T. 0.00 min  
Lab File: BF091633.D  
Acq: 15 Dec 2016 17:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 67.5  | 61.5  | 92.3  |
| 63      | 34.5  | 33.3  | 49.9  |





#7

Phenol-d6

Concen: 79.38 ng

RT: 6.42 min Scan# 379

Delta R.T. -0.01 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SB-4-5.5-6.5

Tot Ion: 99 Resp: 1923632

Ion Ratio Lower Upper

99 100

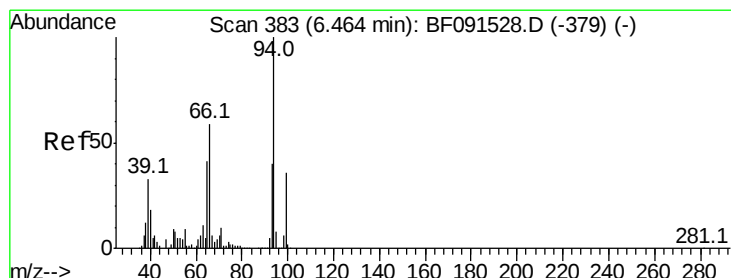
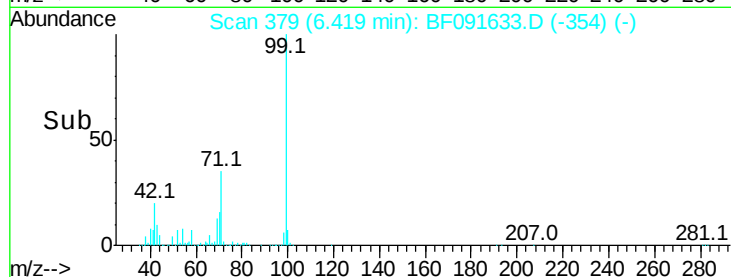
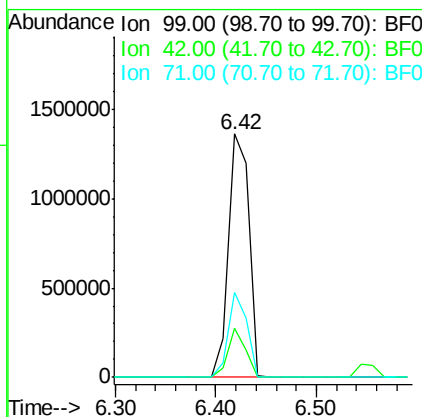
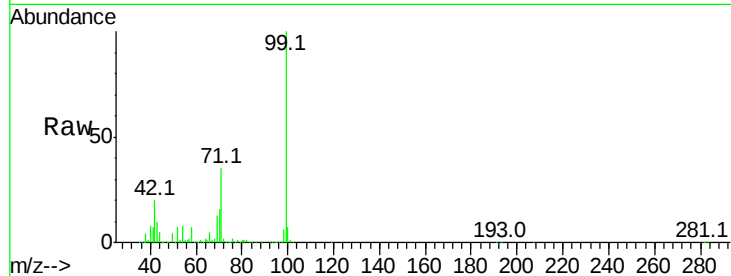
42 20.1 20.6 31.0#

71 34.8 29.9 44.9

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#10

Phenol

Concen: 3.20 ng

RT: 6.43 min Scan# 380

Delta R.T. -0.01 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

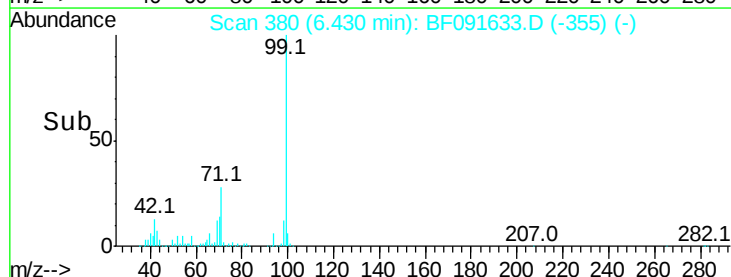
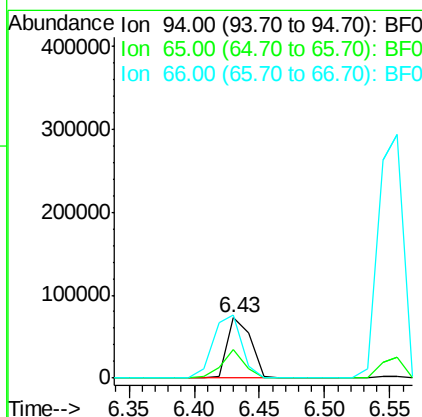
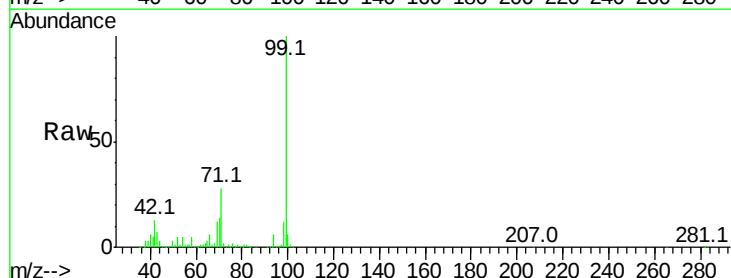
Tgt Ion: 94 Resp: 90694

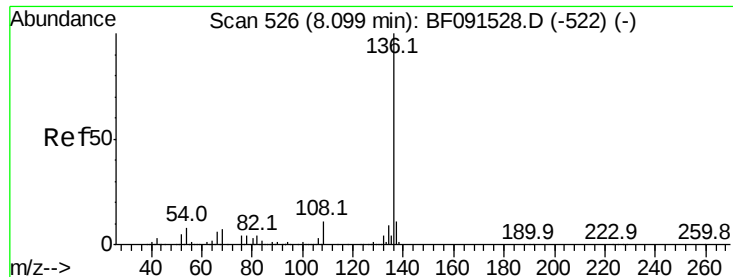
Ion Ratio Lower Upper

94 100

65 47.0 16.9 56.9

66 104.7 30.6 70.6#





#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.06 min Scan# 523

Delta R.T. -0.01 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SB-4-5.5-6.5

Tot Ion:136 Resp: 1239058

Ion Ratio Lower Upper

136 100

137 11.6 9.1 13.7

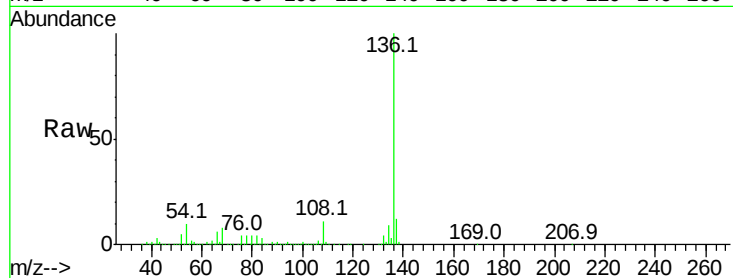
54 9.9 9.1 13.7

68 7.7 5.9 8.9

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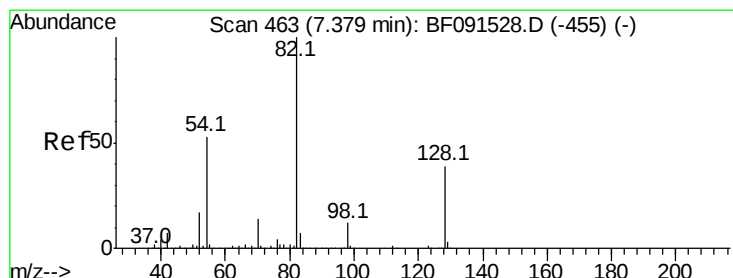
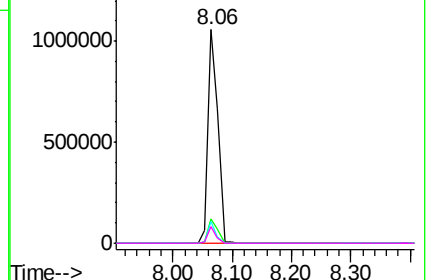
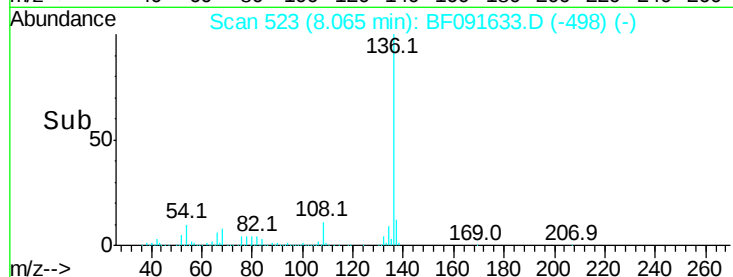


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF0

Ion 68.00 (67.70 to 68.70): BF0



#23

Nitrobenzene-d5

Concen: 52.83 ng

RT: 7.34 min Scan# 460

Delta R.T. -0.01 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

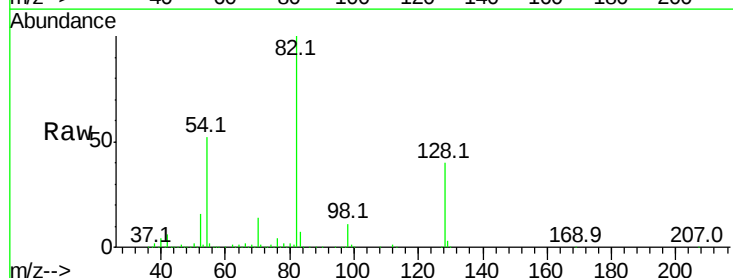
Tgt Ion: 82 Resp: 1172778

Ion Ratio Lower Upper

82 100

128 40.2 31.8 47.6

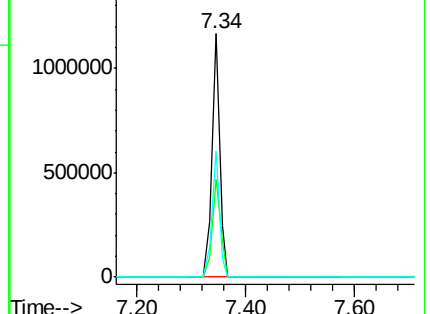
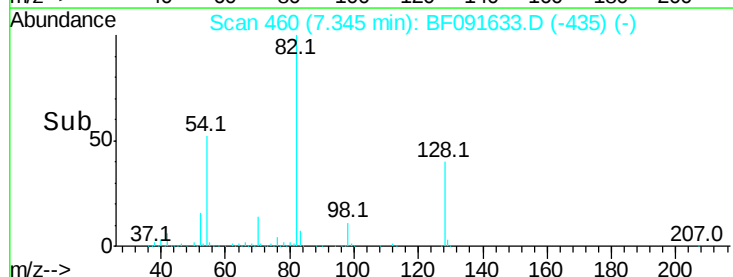
54 51.8 49.1 73.7

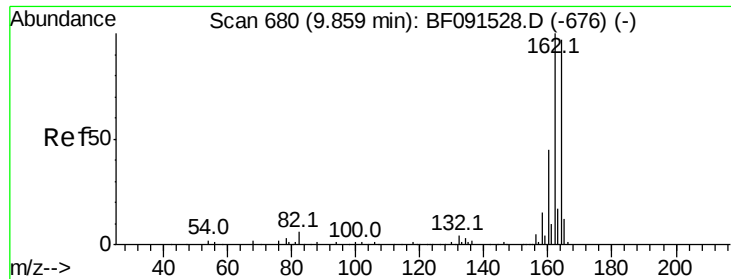


Abundance Ion 82.00 (81.70 to 82.70): BF0

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: 9.82 min Scan# 677

Delta R.T. 0.00 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

Instrument :

BNA\_F

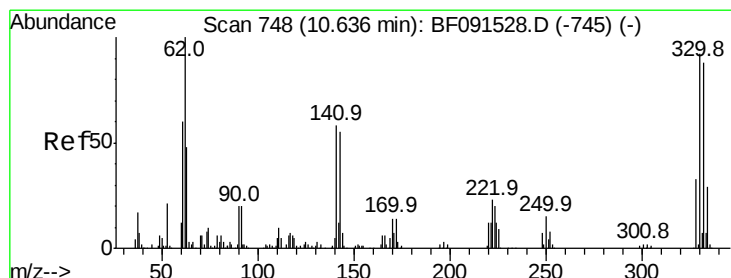
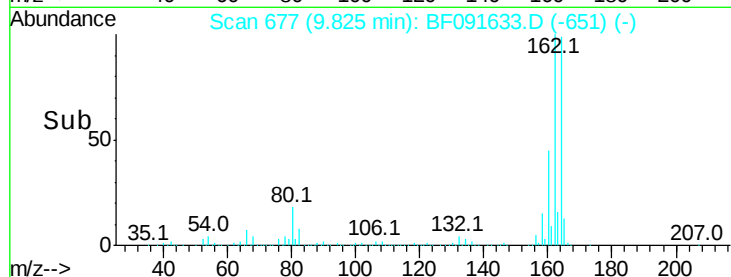
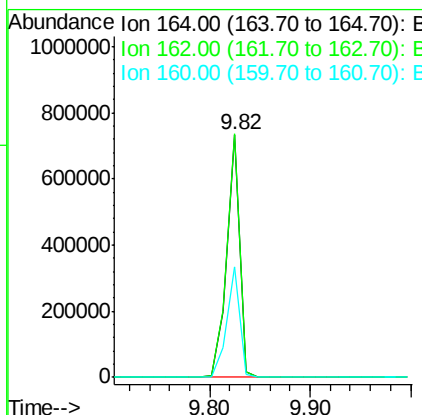
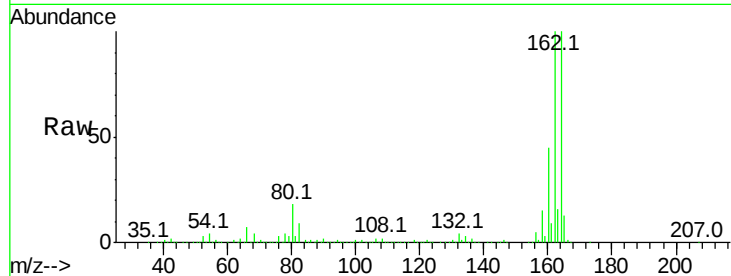
ClientSampleId :

SB-4-5.5-6.5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 164   | Resp: | 655489 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 100.5 | 82.6  | 124.0  |
| 160       | 45.4  | 36.7  | 55.1   |

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#41

2,4,6-Tribromophenol

Concen: 38.94 ng

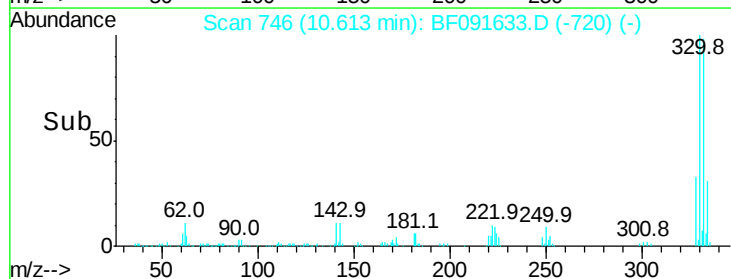
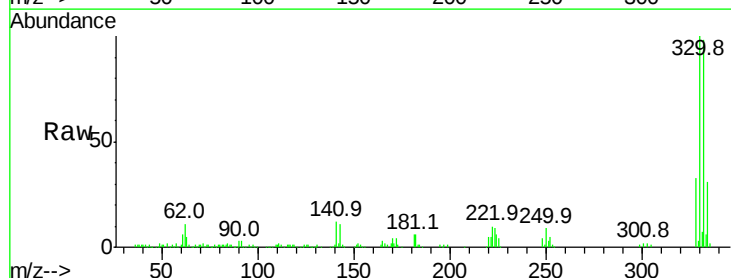
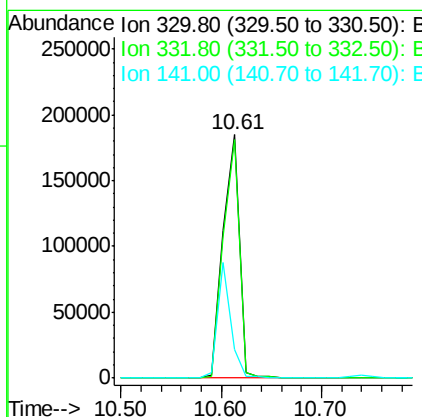
RT: 10.61 min Scan# 746

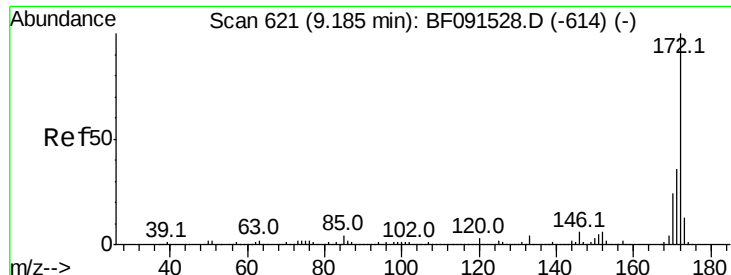
Delta R.T. 0.00 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 330   | Resp: | 211986 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 96.7  | 76.2  | 114.4  |
| 141       | 38.5  | 33.6  | 50.4   |





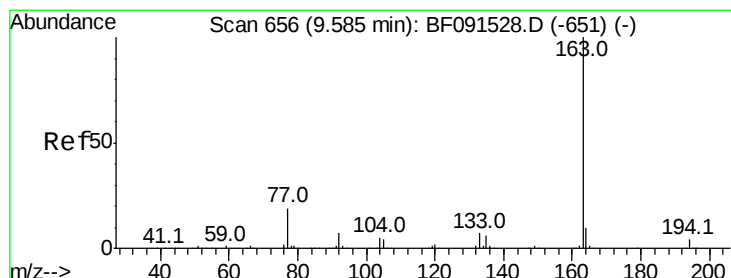
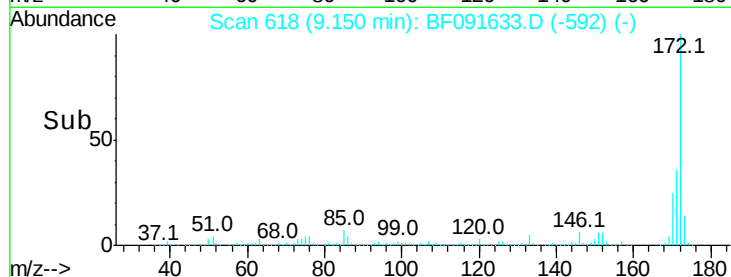
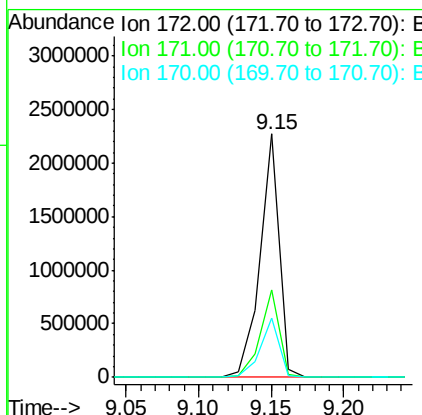
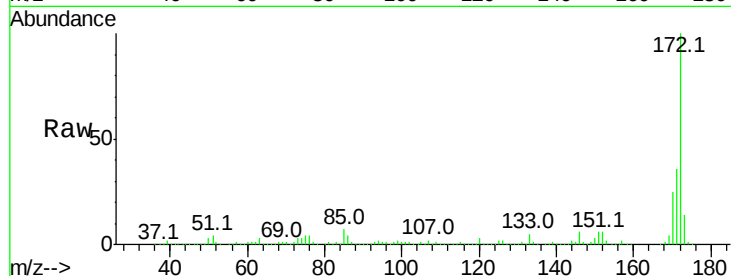
#44  
2-Fluorobiphenyl  
Concen: 54.68 ng  
RT: 9.15 min Scan# 618  
Delta R.T. 0.00 min  
Lab File: BF091633.D  
Acq: 15 Dec 2016 17:28

Instrument :  
BNA\_F  
ClientSampleId :  
SB-4-5.5-6.5

Tot Ion:172 Resp: 2074278  
Ion Ratio Lower Upper  
172 100  
171 35.8 29.4 44.0  
170 24.5 19.7 29.5

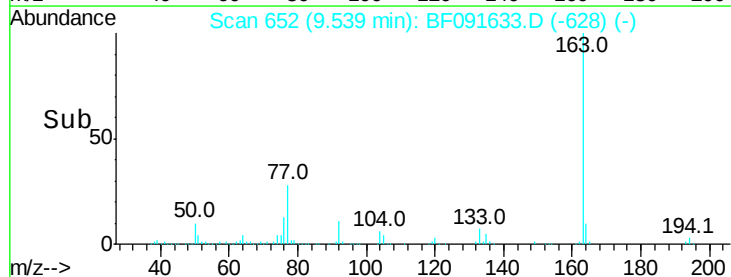
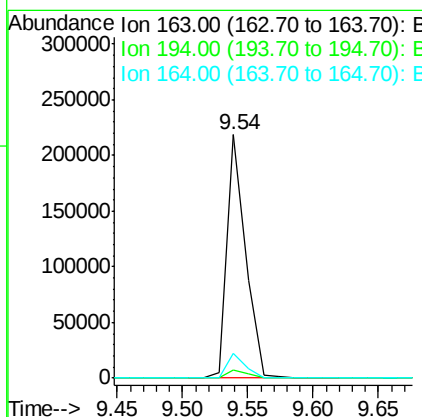
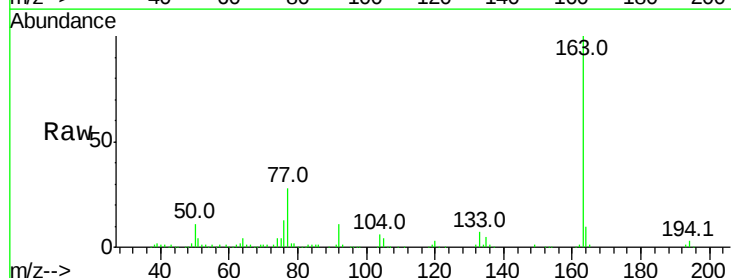
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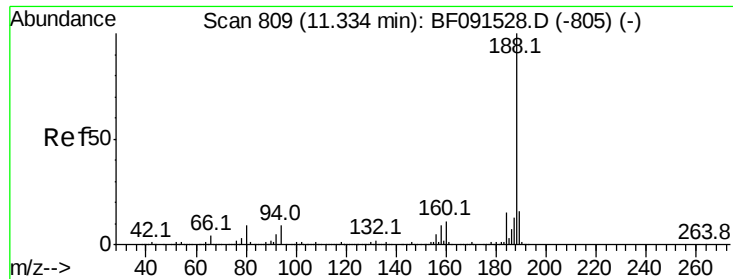
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#49  
Dimethylphthalate  
Concen: 5.24 ng  
RT: 9.54 min Scan# 652  
Delta R.T. -0.02 min  
Lab File: BF091633.D  
Acq: 15 Dec 2016 17:28

Tgt Ion:163 Resp: 217299  
Ion Ratio Lower Upper  
163 100  
194 3.2 3.0 4.4  
164 10.3 7.8 11.8





#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.30 min Scan# 806

Delta R.T. -0.01 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

Instrument :

BNA\_F

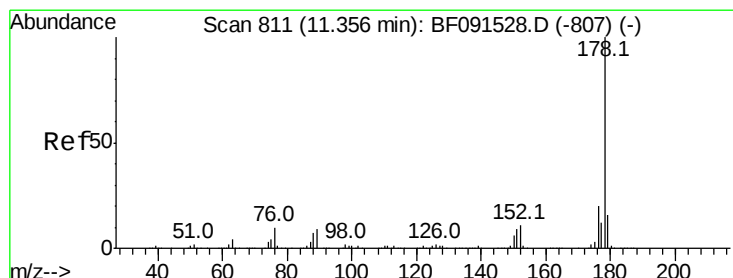
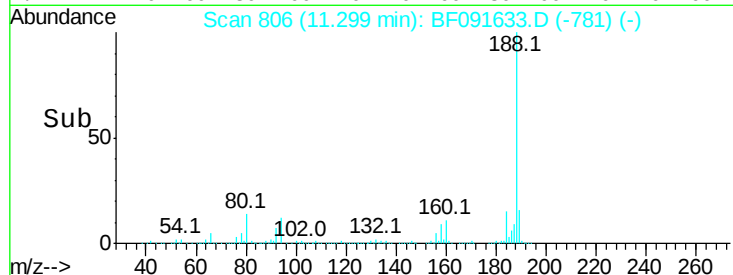
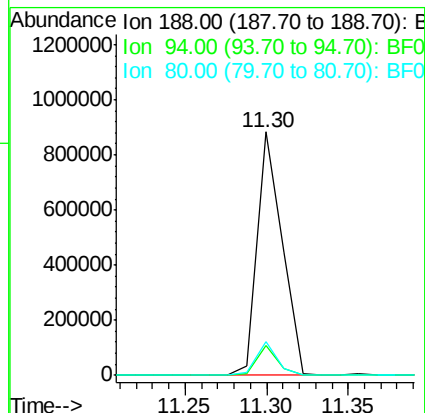
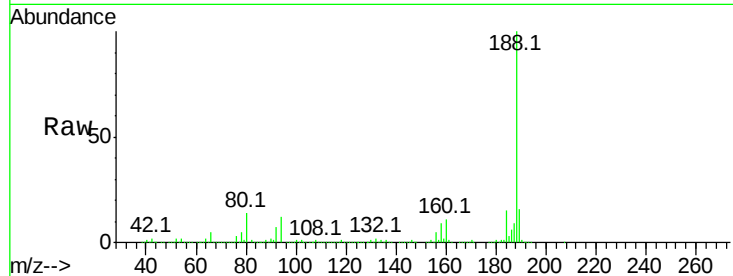
ClientSampleId :

SB-4-5.5-6.5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 188   | Resp: | 941446 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 12.5  | 9.2   | 13.8   |
| 80        | 14.1  | 10.5  | 15.7   |

Manual Integrations  
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#70

Phenanthrene

Concen: 9.46 ng

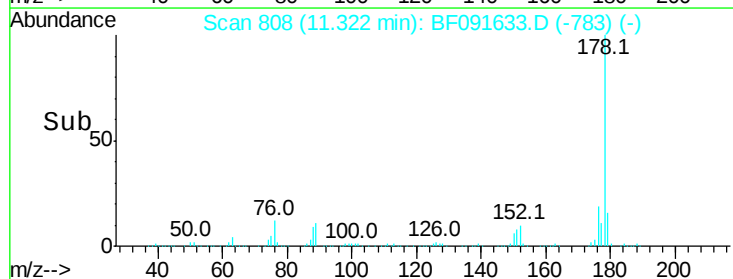
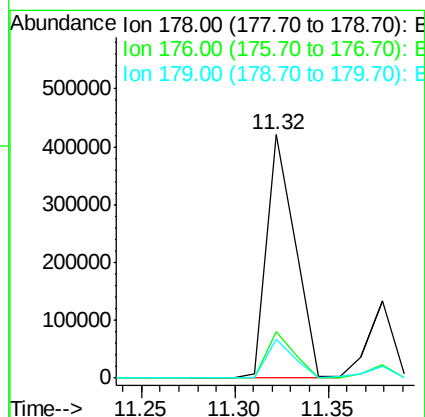
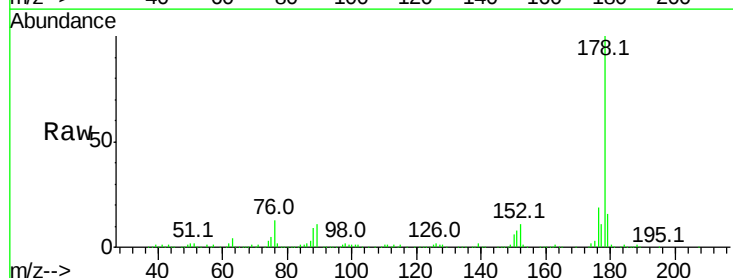
RT: 11.32 min Scan# 808

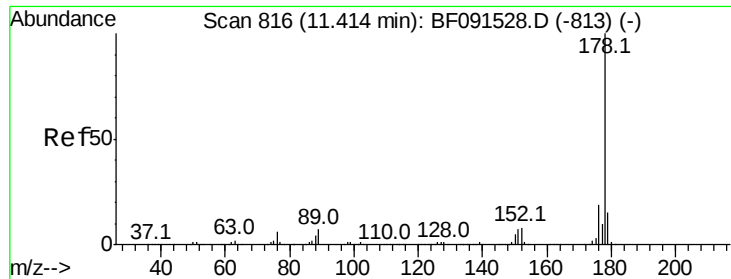
Delta R.T. -0.01 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 441253 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 19.1  | 15.9  | 23.9   |
| 179       | 16.1  | 12.6  | 18.8   |





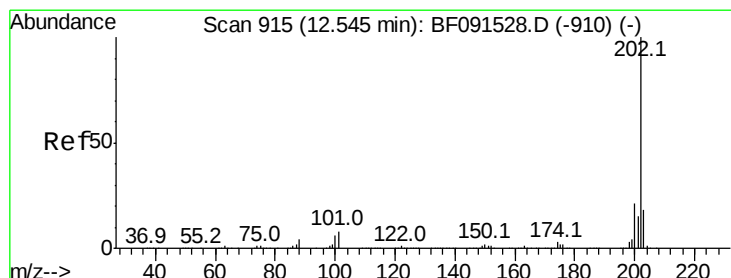
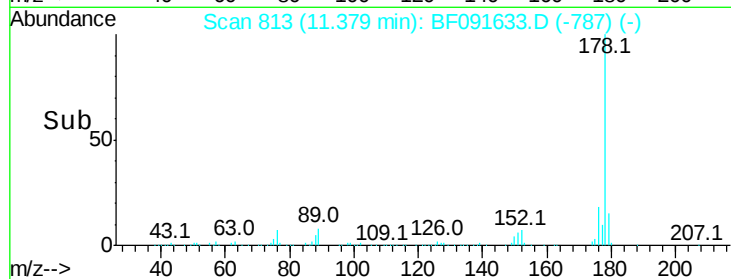
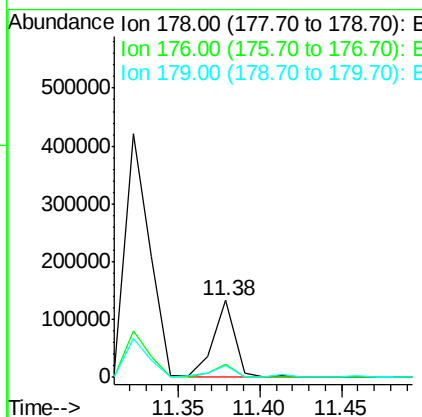
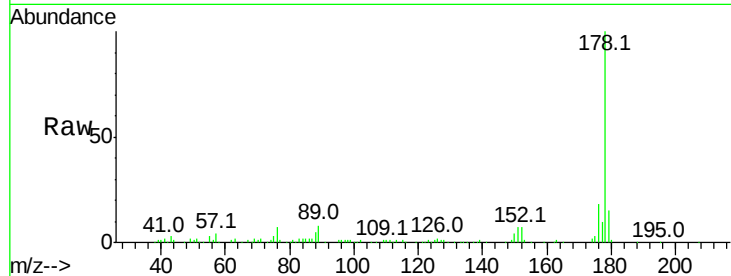
#71  
 Anthracene  
 Concen: 2.43 ng  
 RT: 11.38 min Scan# 813  
 Delta R.T. 0.00 min  
 Lab File: BF091633.D  
 Acq: 15 Dec 2016 17:28

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-4-5.5-6.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 17.8  | 15.8  | 23.6  |
| 179     | 15.2  | 12.7  | 19.1  |

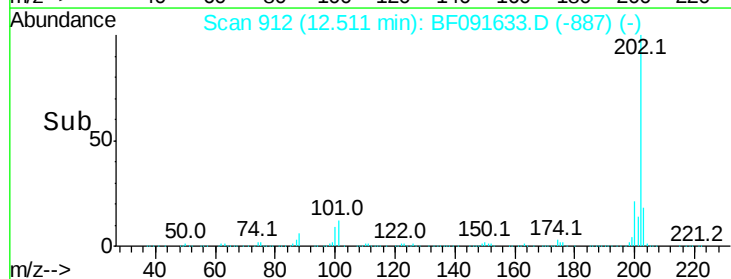
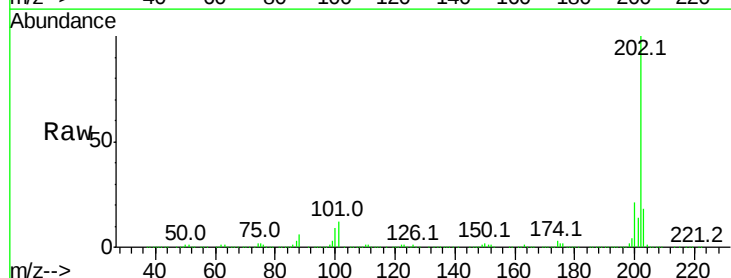
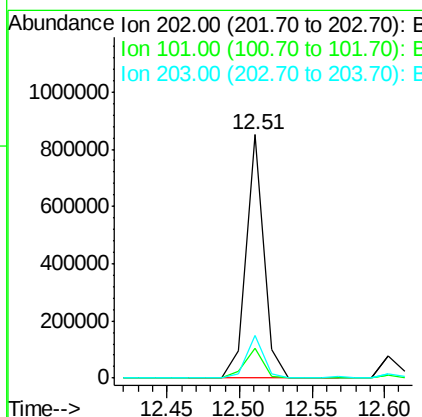
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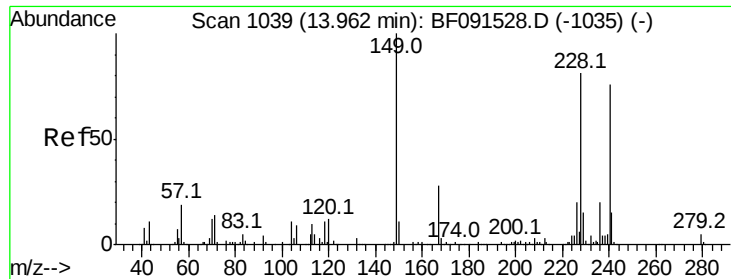
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#74  
 Fluoranthene  
 Concen: 14.81 ng  
 RT: 12.51 min Scan# 912  
 Delta R.T. -0.01 min  
 Lab File: BF091633.D  
 Acq: 15 Dec 2016 17:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 12.4  | 0.0   | 29.5  |
| 203     | 17.6  | 0.0   | 37.8  |





#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.94 min Scan# 1037

Delta R.T. 0.00 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SB-4-5.5-6.5

Tot Ion:240 Resp: 606909

Ion Ratio Lower Upper

240 100

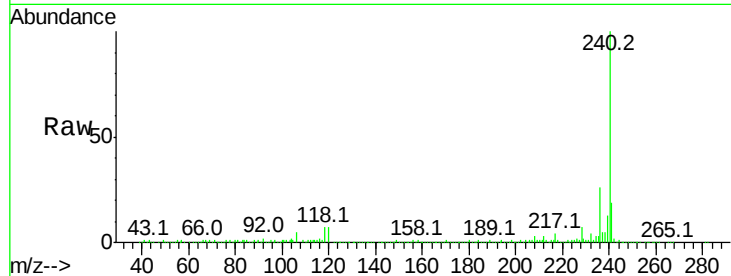
120 7.3 12.1 18.1#

236 25.8 21.0 31.6

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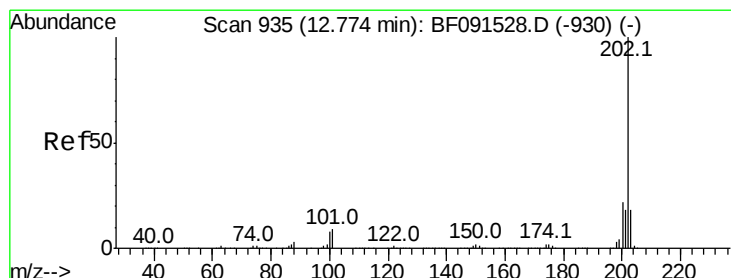
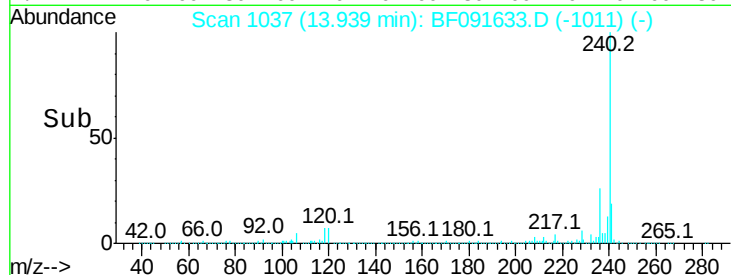
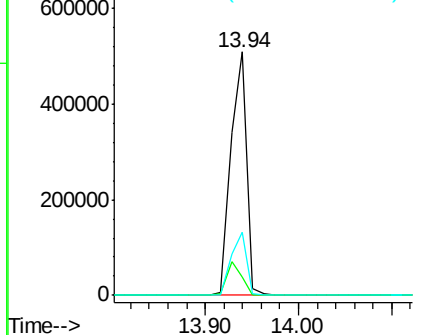
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Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#77

Pyrene

Concen: 11.82 ng

RT: 12.74 min Scan# 932

Delta R.T. 0.00 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

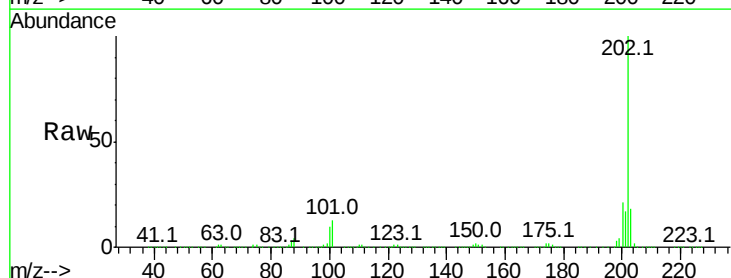
Tgt Ion:202 Resp: 569292

Ion Ratio Lower Upper

202 100

200 20.9 17.6 26.4

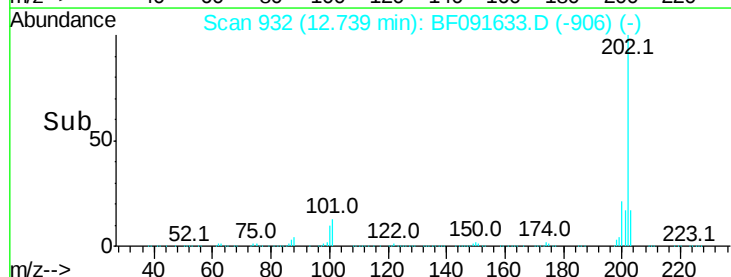
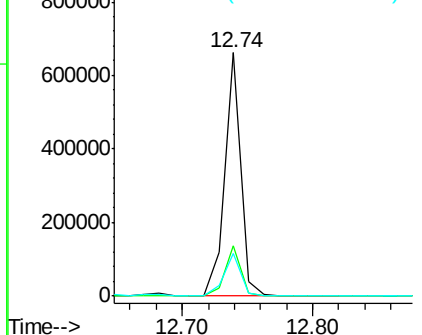
203 17.6 14.0 21.0

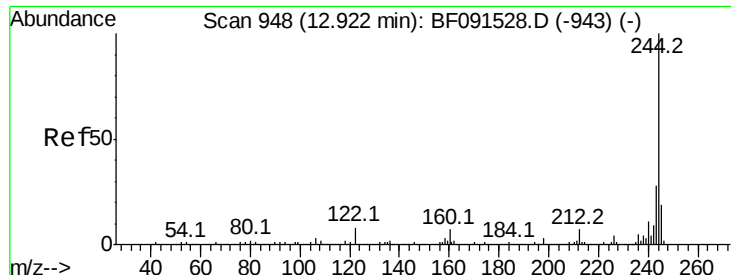


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 51.74 ng

RT: 12.89 min Scan# 945

Delta R.T. -0.01 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

Instrument :

BNA\_F

ClientSampleId :

SB-4-5.5-6.5

Tot Ion:244 Resp: 1383802

Ion Ratio Lower Upper

244 100

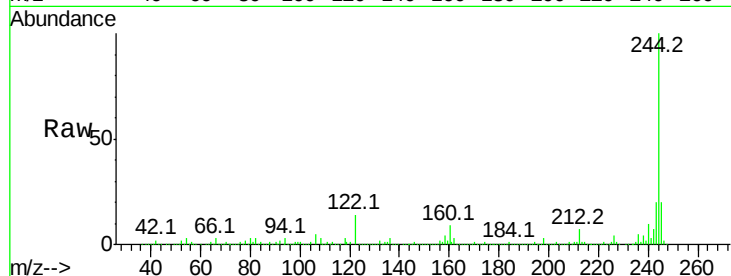
212 7.4 6.5 9.7

122 13.9 9.5 14.3

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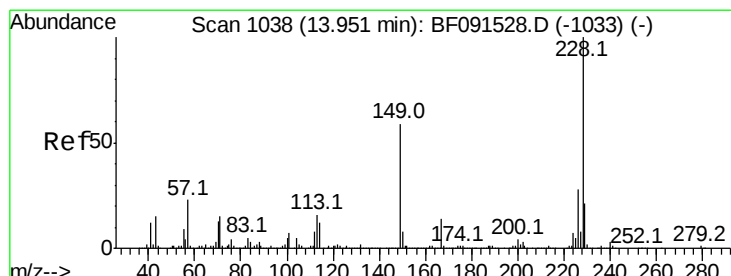
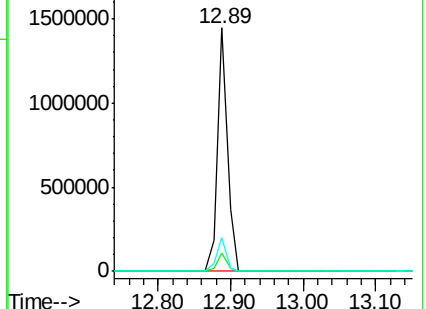
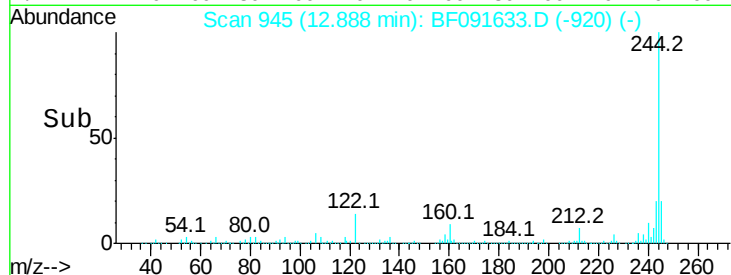
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Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



#80

Benzo(a)anthracene

Concen: 7.01 ng

RT: 13.93 min Scan# 1036

Delta R.T. 0.00 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

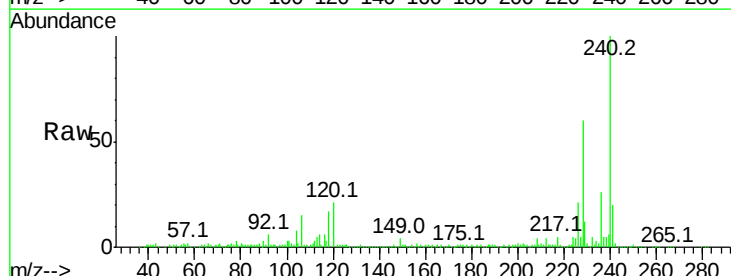
Tgt Ion:228 Resp: 246925

Ion Ratio Lower Upper

228 100

226 35.5 22.5 33.7#

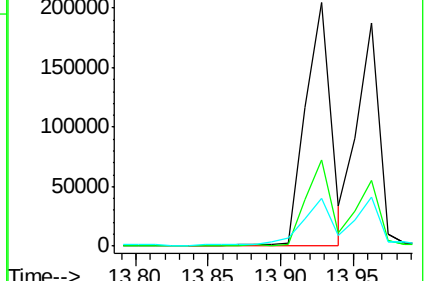
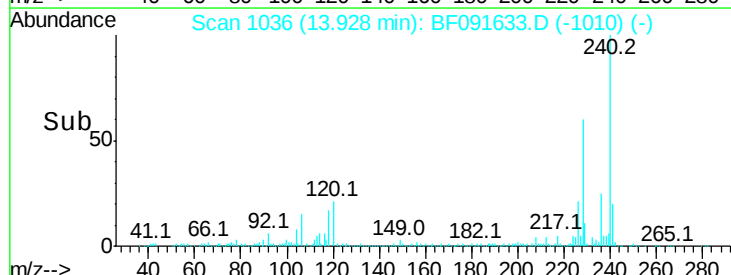
229 19.9 16.4 24.6

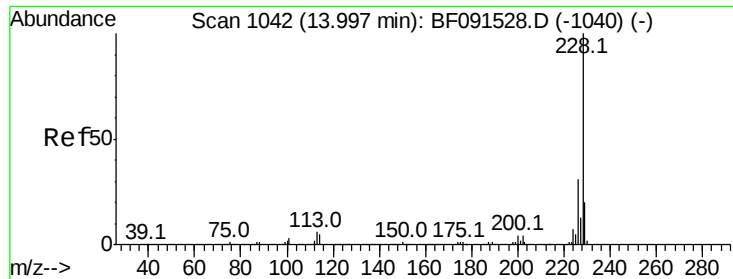


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#82

Chrysene

Concen: 5.48 ng/mL

RT: 13.96 min Scan# 1039

Delta R.T. 0.00 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

Instrument :

BNA\_F

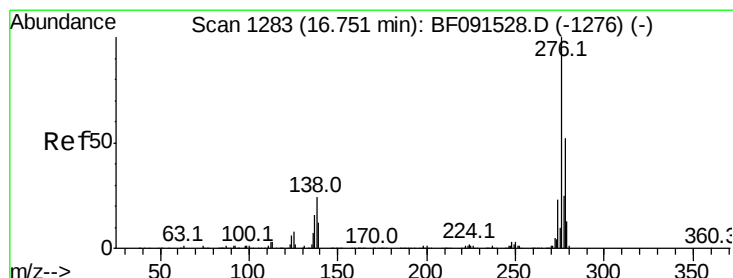
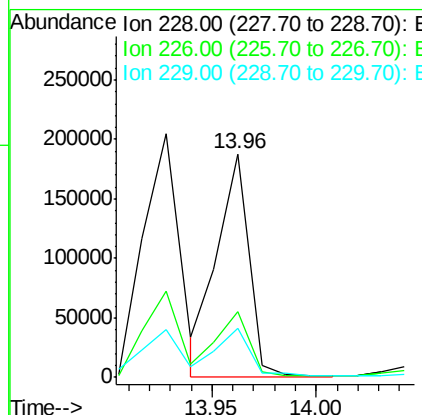
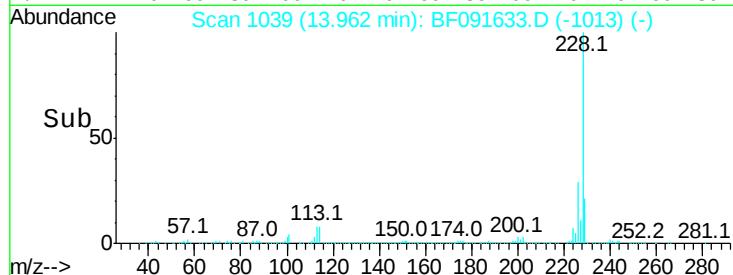
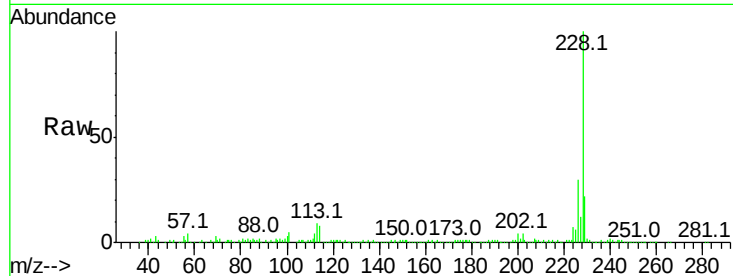
ClientSampleID :

SB-4-5.5-6.5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 201916 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 29.5  | 25.0  | 37.4   |
| 229       | 21.9  | 16.0  | 24.0   |

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#85

Indeno(1,2,3-cd)pyrene

Concen: 3.12 ng/mL

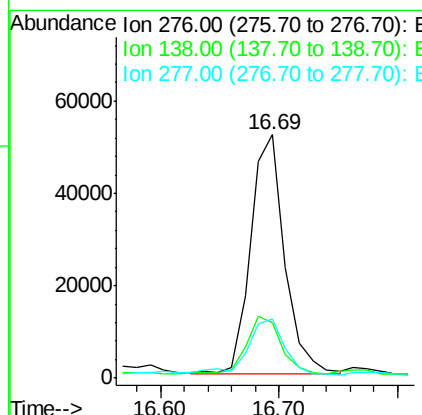
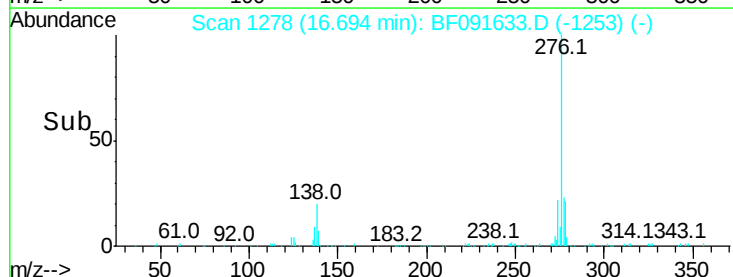
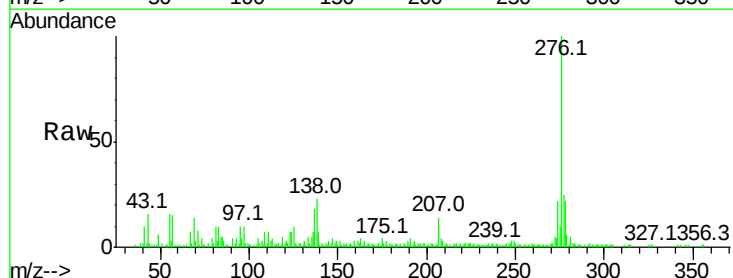
RT: 16.69 min Scan# 1278

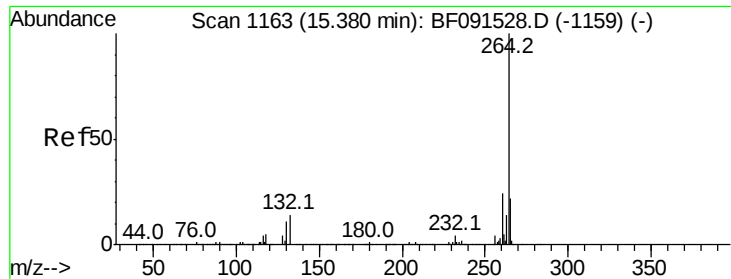
Delta R.T. -0.01 min

Lab File: BF091633.D

Acq: 15 Dec 2016 17:28

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 103405 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 25.1  | 21.0  | 31.4   |
| 277       | 28.4  | 20.2  | 30.2   |





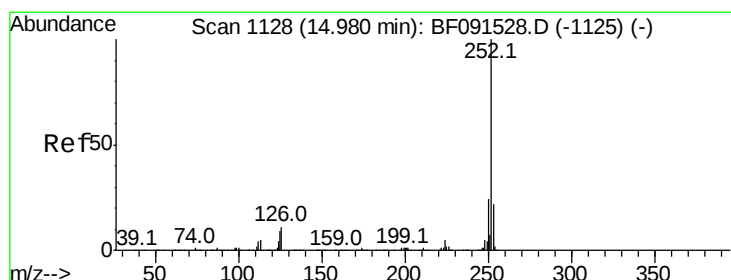
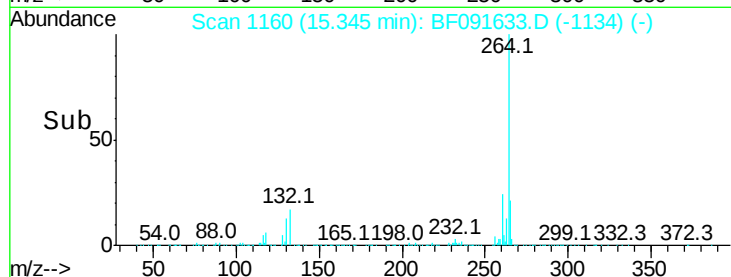
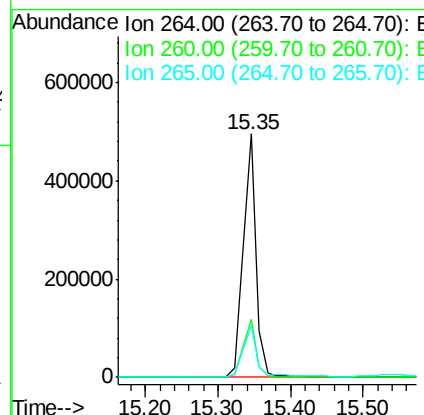
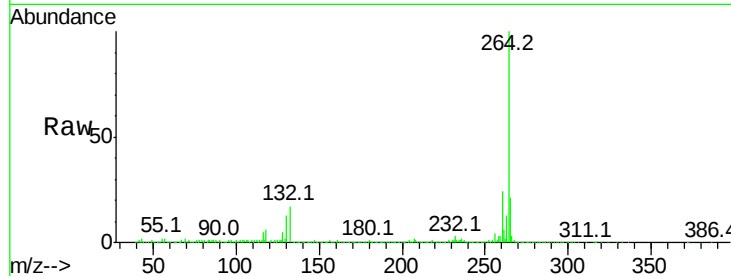
#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 15.35 min Scan# 1160  
Delta R.T. 0.00 min  
Lab File: BF091633.D  
Acq: 15 Dec 2016 17:28

Instrument :  
BNA\_F  
ClientSampleId :  
SB-4-5.5-6.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.9  | 18.8  | 28.2  |
| 265     | 21.4  | 17.0  | 25.6  |

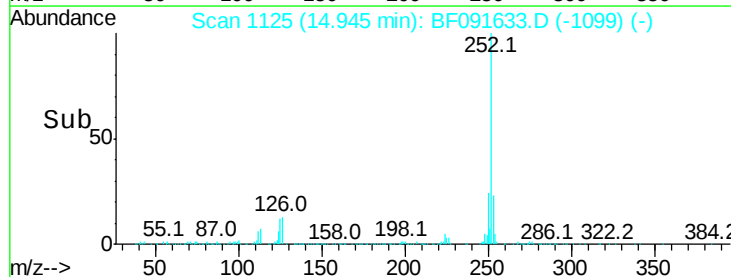
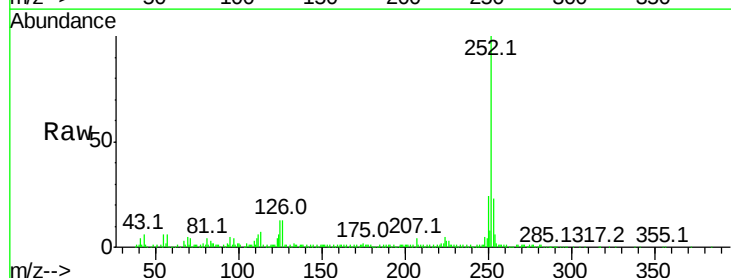
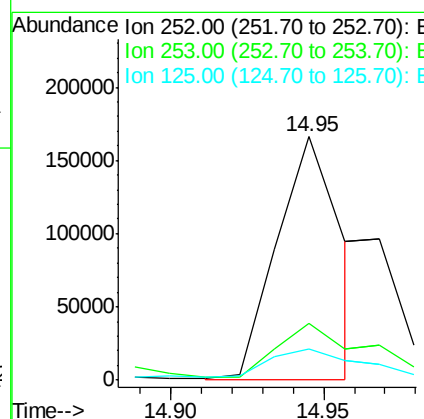
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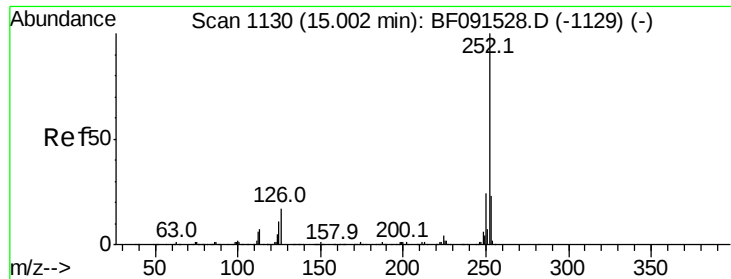
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#87  
Benzo(b)fluoranthene  
Concen: 6.76 ng m  
RT: 14.95 min Scan# 1125  
Delta R.T. 0.00 min  
Lab File: BF091633.D  
Acq: 15 Dec 2016 17:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.3  | 18.2  | 27.2  |
| 125     | 12.8  | 8.6   | 13.0  |





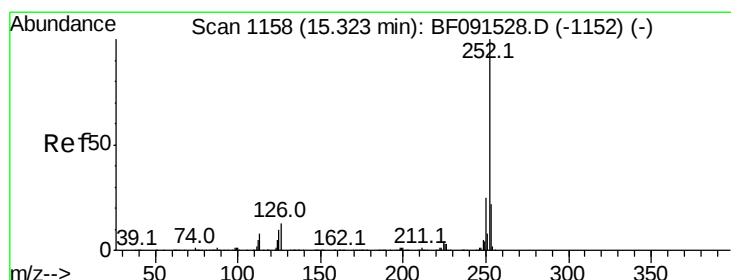
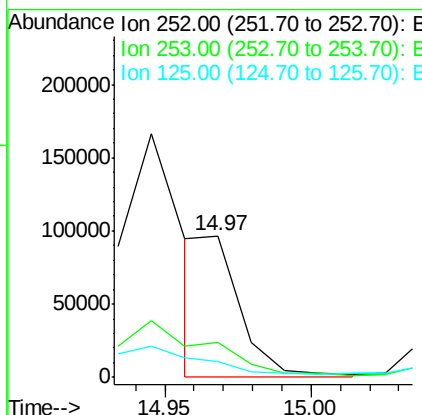
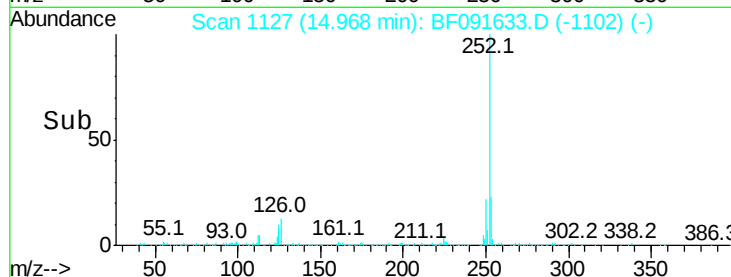
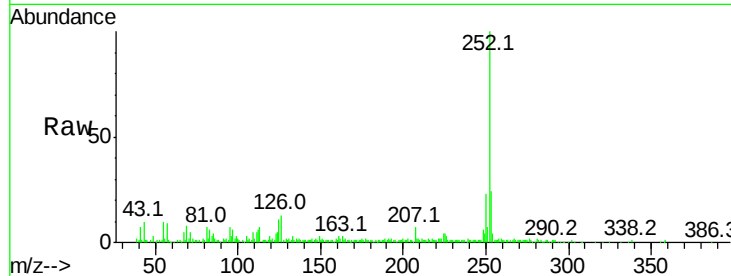
#88  
Benzo(k)fluoranthene  
Concen: 2.82 ng m  
RT: 14.97 min Scan# 1127  
Delta R.T. -0.01 min  
Lab File: BF091633.D  
Acq: 15 Dec 2016 17:28

Instrument :  
BNA\_F  
ClientSampleId :  
SB-4-5.5-6.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.4  | 17.8  | 26.8  |
| 125     | 11.4  | 9.6   | 14.4  |

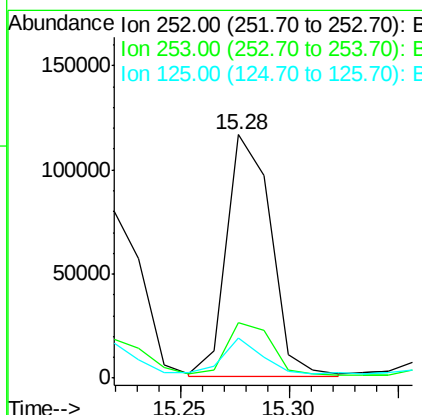
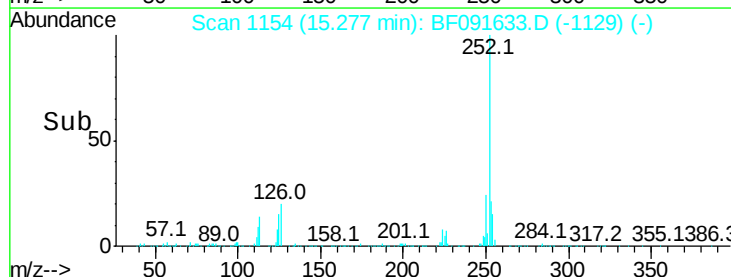
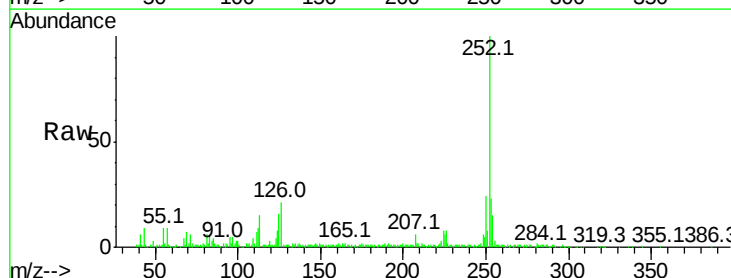
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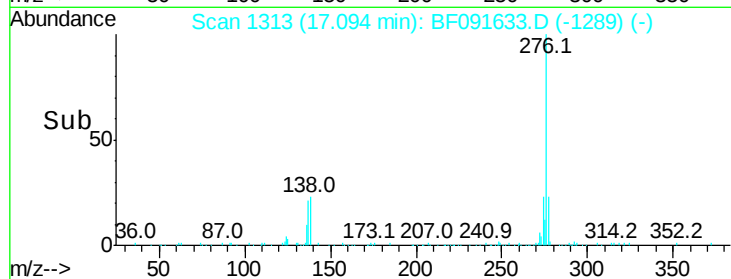
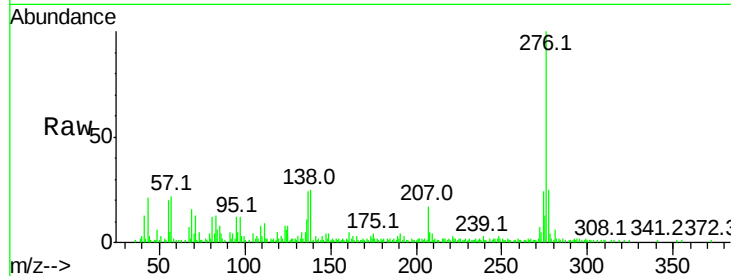
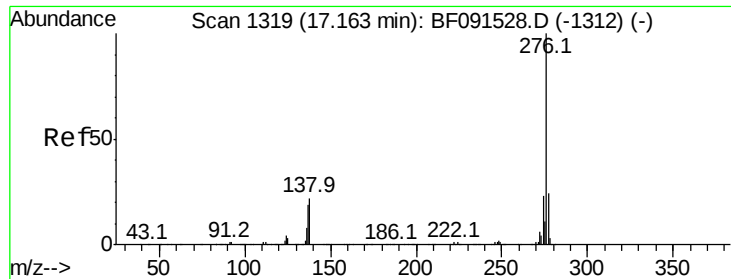
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#89  
Benzo(a)pyrene  
Concen: 5.07 ng  
RT: 15.28 min Scan# 1154  
Delta R.T. -0.01 min  
Lab File: BF091633.D  
Acq: 15 Dec 2016 17:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 18.2  | 27.4  |
| 125     | 16.4  | 10.4  | 15.6  |





#91  
 Benzo(a,h,i)perylene  
 Concen: 3.07 ng  
 RT: 17.09 min Scan# 1313  
 Delta R.T. -0.02 min  
 Lab File: BF091633.D  
 Acq: 15 Dec 2016 17:28

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-4-5.5-6.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.6  | 19.0  | 28.4  |
| 138     | 24.7  | 15.4  | 23.0  |

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