

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF021016\  
 Data File : BF084988.D  
 Acq On : 10 Feb 2016 12:56  
 Operator : SJ/IZ  
 Sample : H1329-02  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 S4-B007(5-7)

Manual Integrations  
 APPROVED

UMANGI  
 2/11/2016 10:46:34 AM

Quant Time: Feb 10 15:19:57 2016  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF020116.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Feb 10 13:28:51 2016  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.62  | 152  | 160356   | 20.00  | ng    | -0.01    |
| 21) Naphthalene-d8          | 7.91  | 136  | 661903   | 20.00  | ng    | -0.01    |
| 38) Acenaphthene-d10        | 9.66  | 164  | 295796   | 20.00  | ng    | -0.01    |
| 63) Phenanthrene-d10        | 11.13 | 188  | 474046   | 20.00  | ng    | -0.01    |
| 75) Chrysene-d12            | 13.76 | 240  | 310921   | 20.00  | ng    | -0.01    |
| 86) Perylene-d12            | 15.13 | 264  | 296734   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.21  | 112  | 1394025  | 135.41 | ng    | 0.01     |
| 7) Phenol-d6                | 6.28  | 99   | 1841244  | 144.26 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.20  | 82   | 1272912  | 108.33 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.44 | 330  | 320749   | 103.96 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 8.99  | 172  | 1828152  | 121.40 | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.73 | 244  | 1603175  | 116.84 | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 49) Dimethylphthalate       | 9.39  | 163  | 267907   | 11.89  | ng    | # 91     |
| 57) Fluorene                | 10.20 | 166  | 42146    | 2.15   | ng    | # 93     |
| 70) Phenanthrene            | 11.15 | 178  | 332469   | 12.64  | ng    | 99       |
| 71) Anthracene              | 11.21 | 178  | 73185    | 2.76   | ng    | 98       |
| 74) Fluoranthene            | 12.34 | 202  | 265421   | 9.97   | ng    | 97       |
| 77) Pyrene                  | 12.57 | 202  | 331304   | 13.92  | ng    | 98       |
| 79) Butylbenzylphthalate    | 13.20 | 149  | 22284    | 2.06   | ng    | 91       |
| 80) Benzo(a)anthracene      | 13.75 | 228  | 128177   | 6.64   | ng    | # 90     |
| 82) Chrysene                | 13.78 | 228  | 101093m  | 5.40   | ng    |          |
| 85) Indeno(1,2,3-cd)pyrene  | 16.38 | 276  | 46505    | 3.16   | ng    | 91       |
| 87) Benzo(b)fluoranthene    | 14.75 | 252  | 116694m  | 5.85   | ng    |          |
| 89) Benzo(a)pyrene          | 15.07 | 252  | 83275    | 4.90   | ng    | # 90     |
| 91) Benzo(g,h,i)perylene    | 16.75 | 276  | 53524    | 3.72   | ng    | 98       |

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

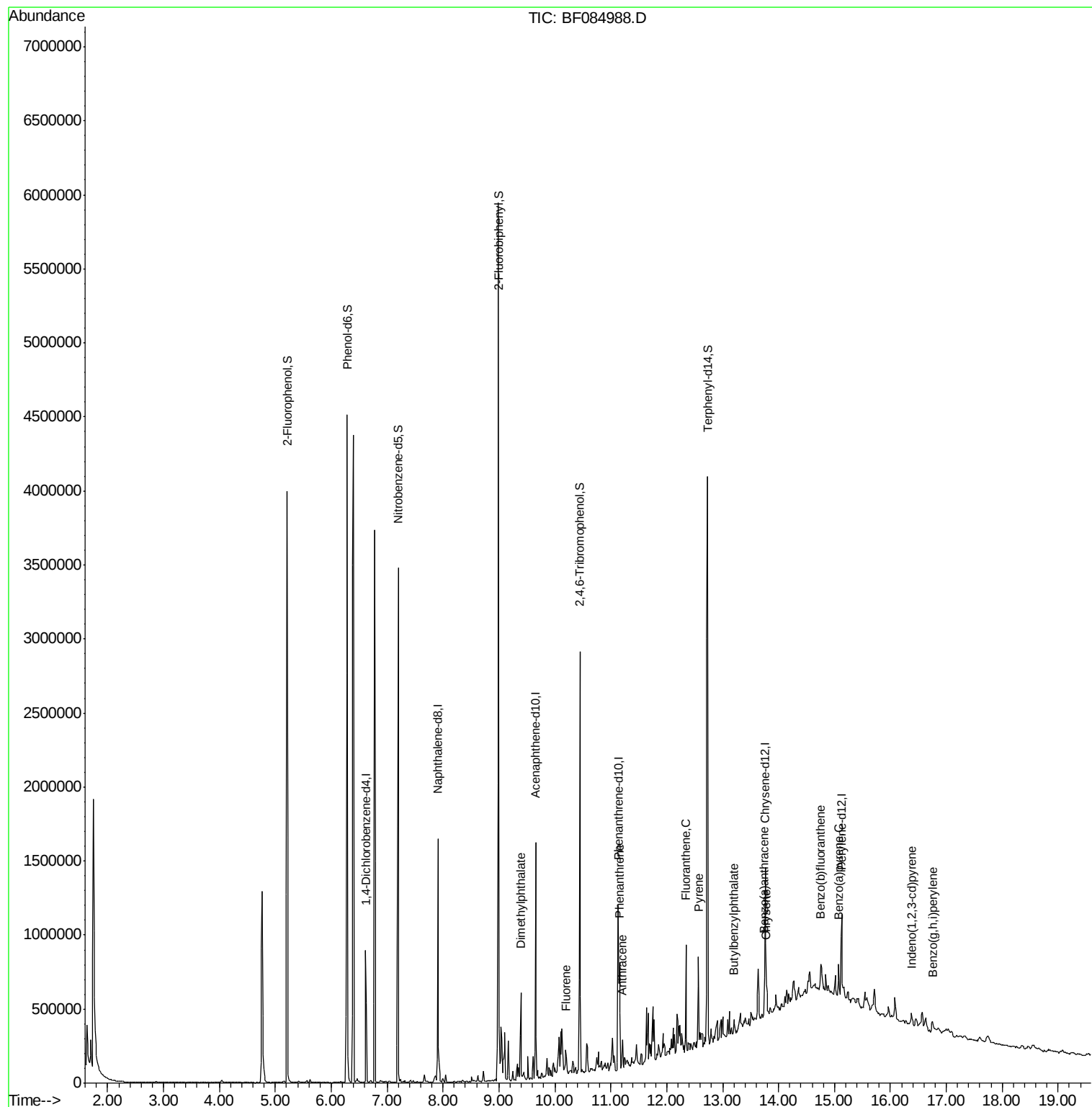
Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF021016\  
Data File : BF084988.D  
Acq On : 10 Feb 2016 12:56  
Operator : SJ/IZ  
Sample : H1329-02  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

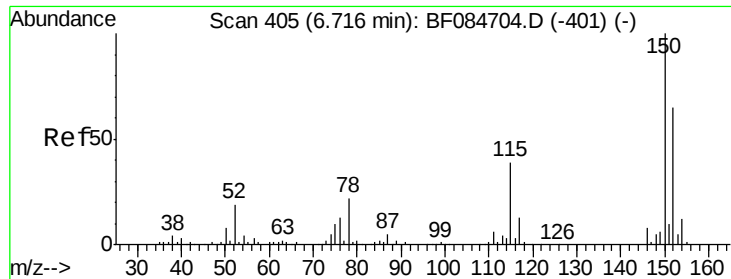
Instrument :  
BNA\_F  
ClientSampleId :  
S4-B007(5-7)

Manual Integrations  
APPROVED

UMANGI  
2/11/2016 10:46:34 AM

Quant Time: Feb 10 15:19:57 2016  
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF020116.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Feb 10 13:28:51 2016  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.62 min Scan# 440

Delta R.T. -0.01 min

Lab File: BF084988.D

Acq: 10 Feb 2016 12:56

Instrument :

BNA\_F

ClientSampleId :

S4-B007(5-7)

Tgt Ion:152 Resp: 160356  
Ion Ratio Lower Upper

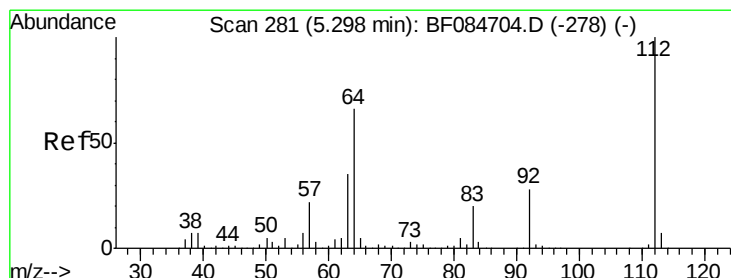
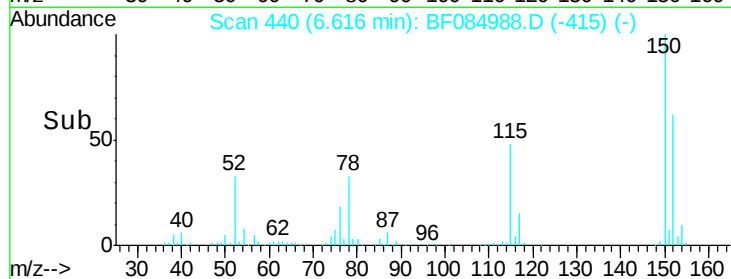
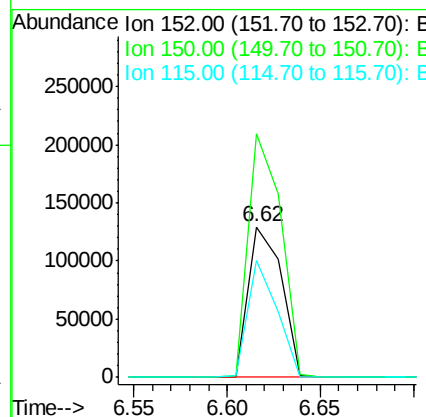
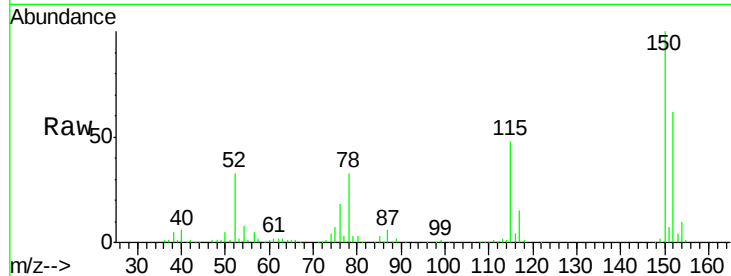
152 100

150 161.7 123.0 184.4

115 77.4 51.4 77.2#

Manual Integrations  
APPROVED

UMANGI  
2/11/2016 10:46:34 AM



#5

2-Fluorophenol

Concen: 135.41 ng

RT: 5.21 min Scan# 317

Delta R.T. 0.01 min

Lab File: BF084988.D

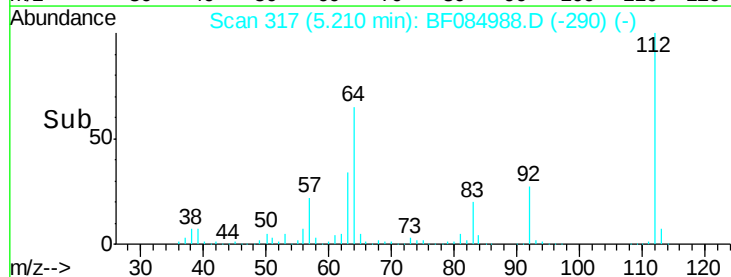
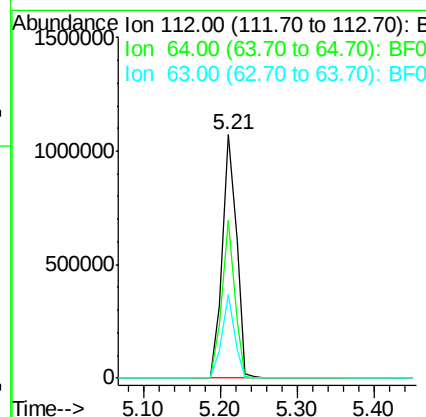
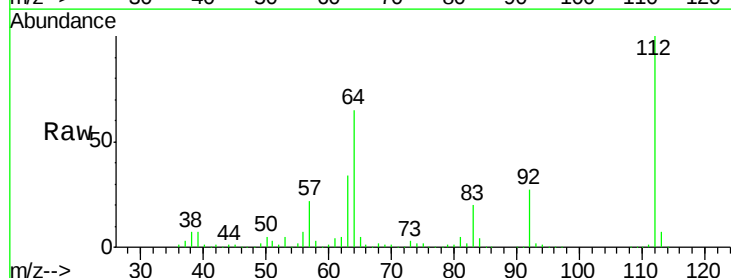
Acq: 10 Feb 2016 12:56

Tgt Ion:112 Resp: 1394025  
Ion Ratio Lower Upper

112 100

64 65.1 36.6 55.0#

63 34.1 19.4 29.0#





#7

Phenol-d6

Concen: 144.26 ng

RT: 6.28 min Scan# 411

Delta R.T. -0.00 min

Lab File: BF084988.D

Acq: 10 Feb 2016 12:56

Instrument :

BNA\_F

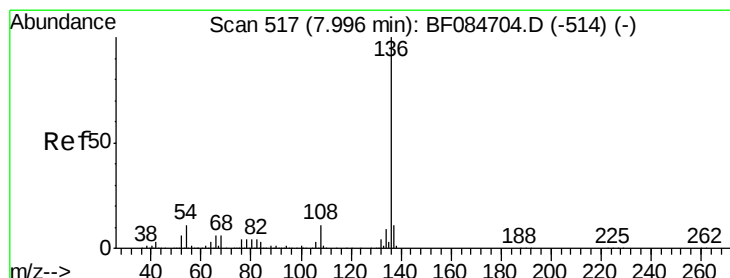
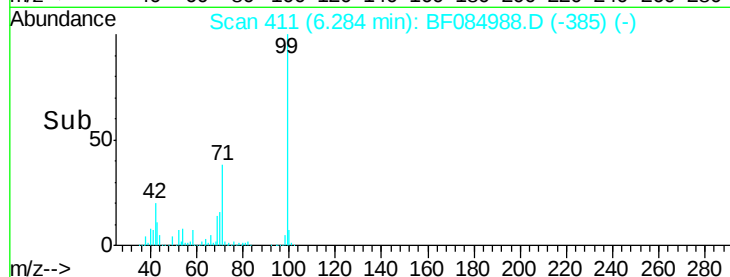
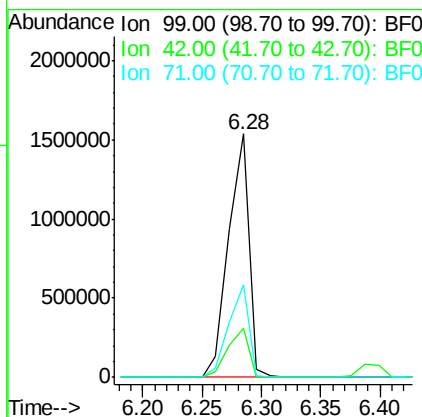
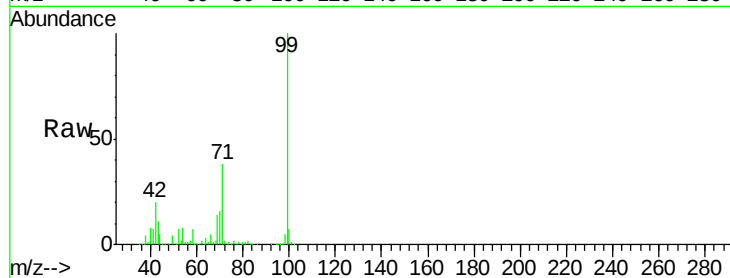
ClientSampleId :

S4-B007(5-7)

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 99    | Resp: | 1841244 |
| Ion      | Ratio | Lower | Upper   |
| 99       | 100   |       |         |
| 42       | 20.4  | 12.8  | 19.2#   |
| 71       | 38.0  | 30.9  | 46.3    |

Manual Integrations  
APPROVED

UMANGI  
2/11/2016 10:46:34 AM



#21

Naphthalene-d8

Concen: 20.00 ng

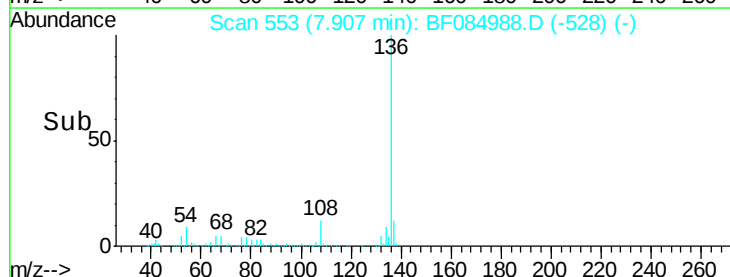
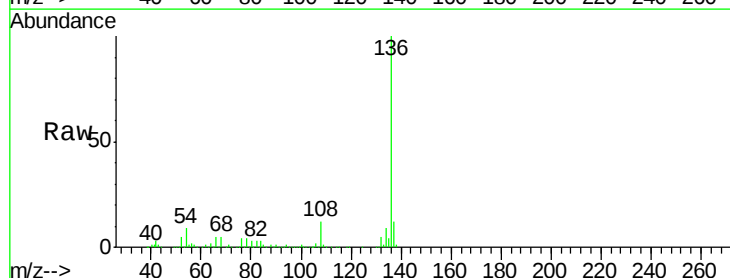
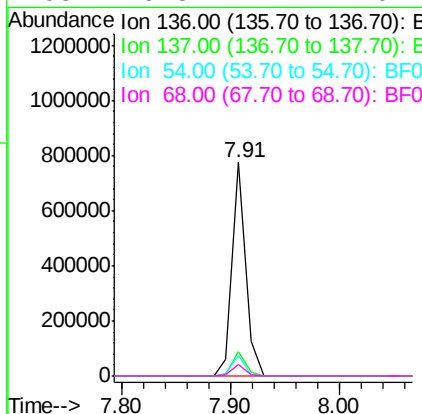
RT: 7.91 min Scan# 553

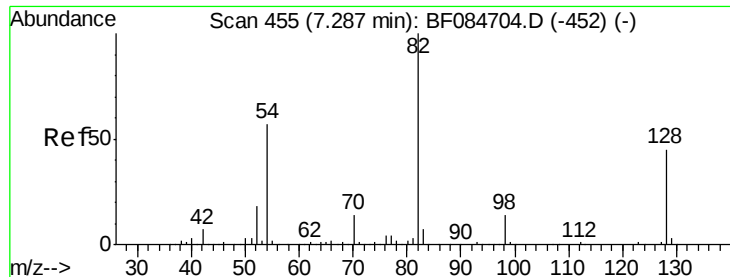
Delta R.T. -0.01 min

Lab File: BF084988.D

Acq: 10 Feb 2016 12:56

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 661903 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 11.5  | 8.7   | 13.1   |
| 54       | 9.5   | 5.8   | 8.8#   |
| 68       | 5.3   | 4.2   | 6.2    |





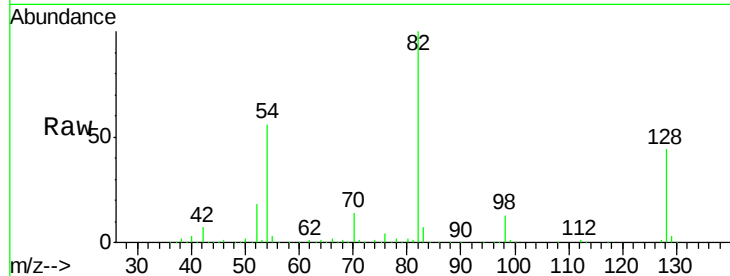
#23  
Nitrobenzene-d5  
Concen: 108.33 ng  
RT: 7.20 min Scan# 491  
Delta R.T. 0.00 min  
Lab File: BF084988.D  
Acq: 10 Feb 2016 12:56

Instrument :  
BNA\_F  
ClientSampleId :  
S4-B007(5-7)

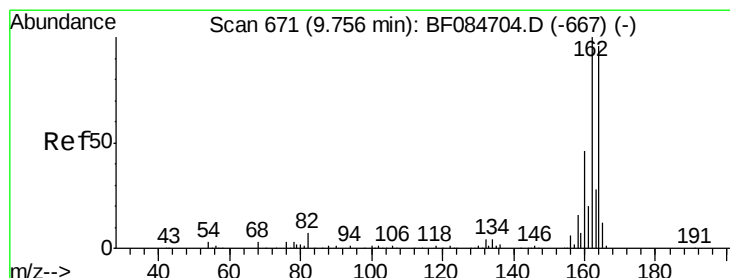
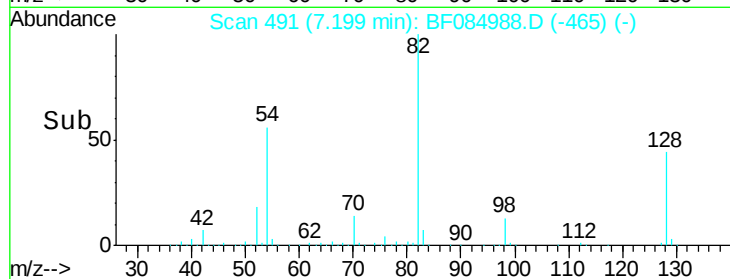
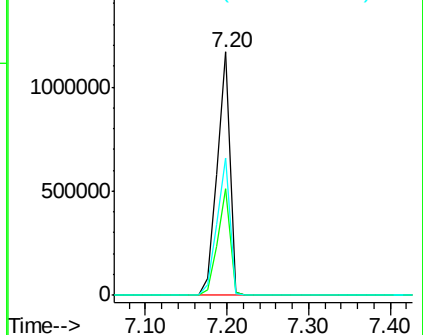
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 43.8  | 34.6  | 51.8  |
| 54      | 56.3  | 38.4  | 57.6  |

Manual Integrations  
APPROVED

UMANGI  
2/11/2016 10:46:34 AM



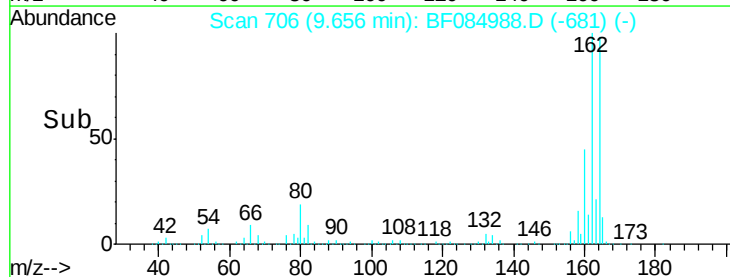
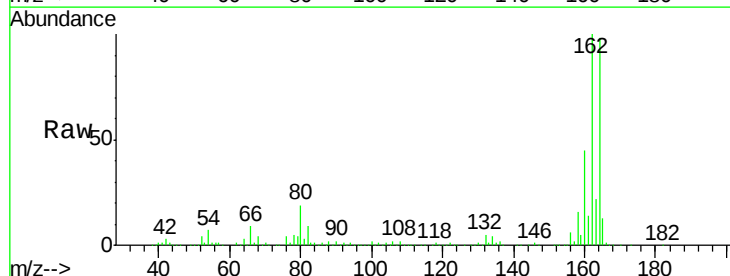
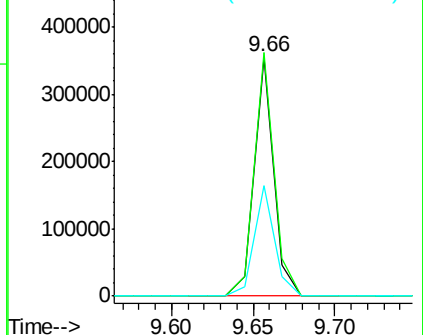
Abundance Ion 82.00 (81.70 to 82.70): BF0  
Ion 128.00 (127.70 to 128.70): E  
Ion 54.00 (53.70 to 54.70): BF0



#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 9.66 min Scan# 706  
Delta R.T. -0.01 min  
Lab File: BF084988.D  
Acq: 10 Feb 2016 12:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 102.0 | 85.1  | 127.7 |
| 160     | 46.0  | 37.5  | 56.3  |

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





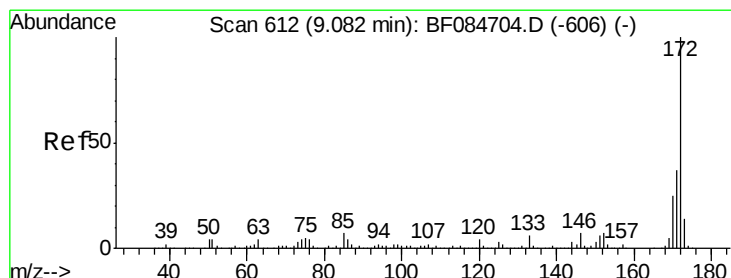
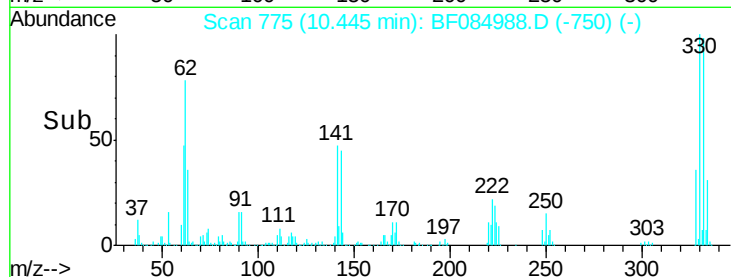
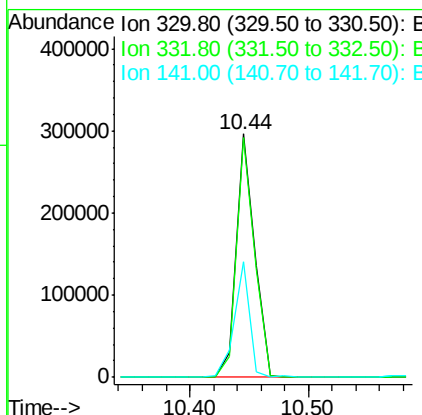
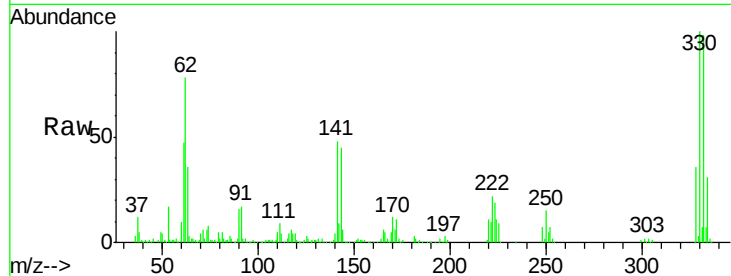
#41  
 2,4,6-Tribromophenol  
 Concen: 103.96 ng  
 RT: 10.44 min Scan# 775  
 Delta R.T. -0.01 min  
 Lab File: BF084988.D  
 Acq: 10 Feb 2016 12:56

Instrument :  
 BNA\_F  
 ClientSampleId :  
 S4-B007(5-7)

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 320749 |       |       |
| 332     | 96.8  |        | 76.6  | 114.8 |
| 141     | 39.4  |        | 27.8  | 41.6  |

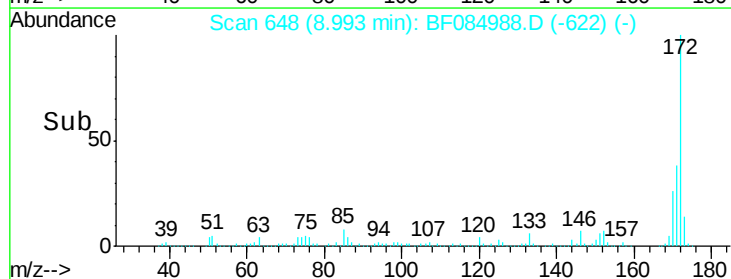
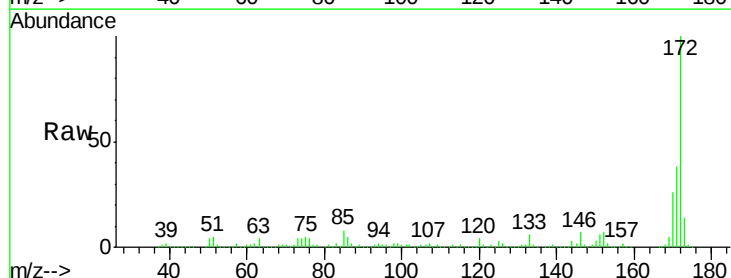
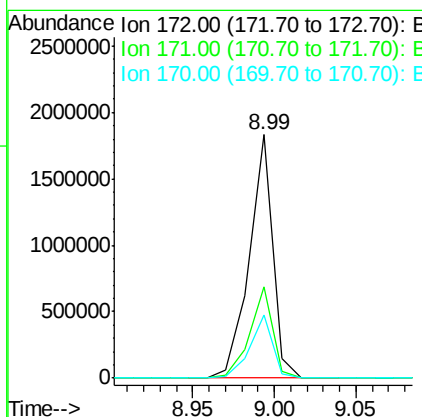
Manual Integrations  
 APPROVED

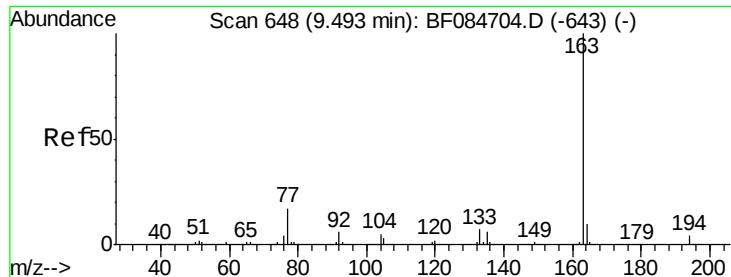
UMANGI  
 2/11/2016 10:46:34 AM



#44  
 2-Fluorobiphenyl  
 Concen: 121.40 ng  
 RT: 8.99 min Scan# 648  
 Delta R.T. 0.00 min  
 Lab File: BF084988.D  
 Acq: 10 Feb 2016 12:56

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 172     | 100   | 1828152 |       |       |
| 171     | 37.6  |         | 28.9  | 43.3  |
| 170     | 25.8  |         | 18.6  | 27.8  |





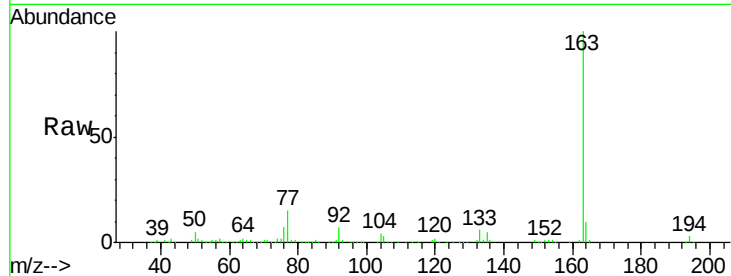
#49  
Dimethylphthalate  
Concen: 11.89 ng  
RT: 9.39 min Scan# 683  
Delta R.T. -0.01 min  
Lab File: BF084988.D  
Acq: 10 Feb 2016 12:56

Instrument :  
BNA\_F  
ClientSampleId :  
S4-B007(5-7)

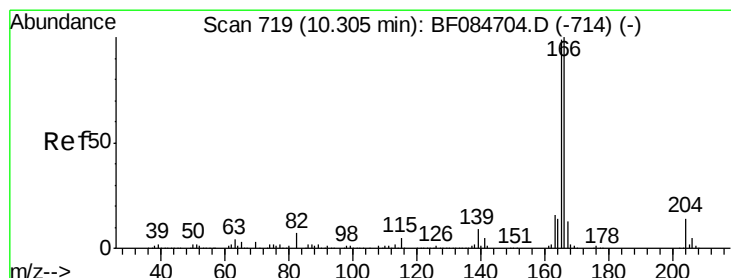
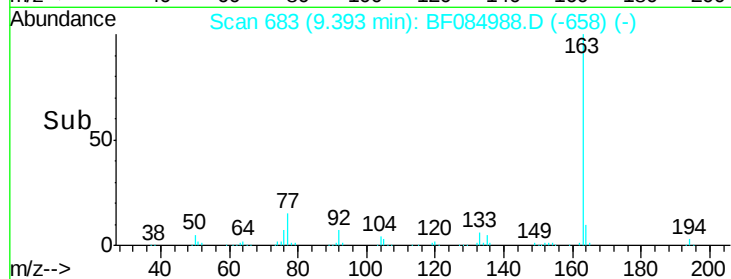
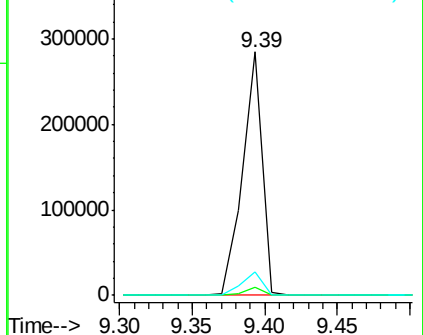
| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 163     | 100   |            |            |
| 194     | 3.4   | 8.0        | 12.0#      |
| 164     | 9.6   | 8.0        | 12.0       |

Manual Integrations  
APPROVED

UMANGI  
2/11/2016 10:46:34 AM

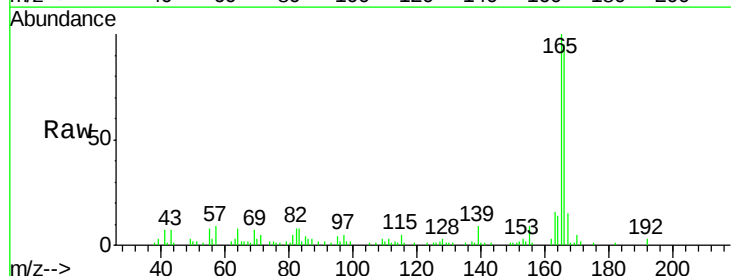


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

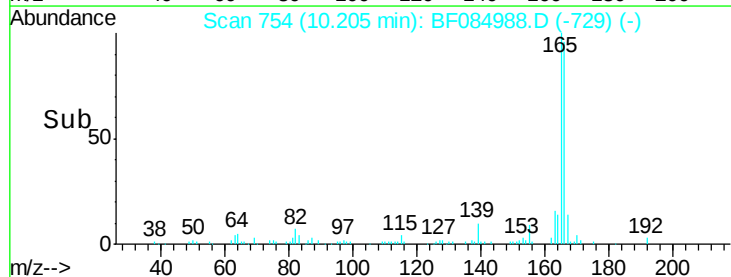
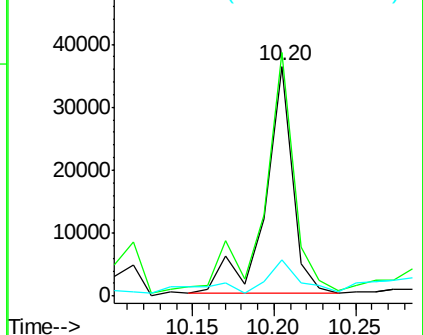


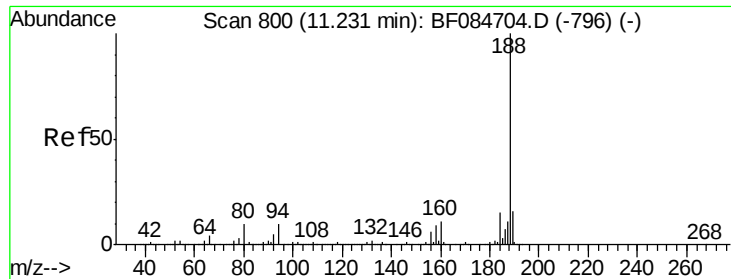
#57  
Fluorene  
Concen: 2.15 ng  
RT: 10.20 min Scan# 754  
Delta R.T. -0.01 min  
Lab File: BF084988.D  
Acq: 10 Feb 2016 12:56

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 166     | 100   |            |            |
| 165     | 105.8 | 79.1       | 118.7      |
| 167     | 16.0  | 10.4       | 15.6#      |



Abundance Ion 166.00 (165.70 to 166.70): E  
Ion 165.00 (164.70 to 165.70): E  
Ion 167.00 (166.70 to 167.70): E





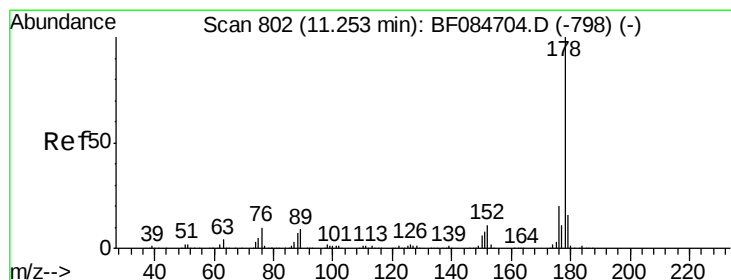
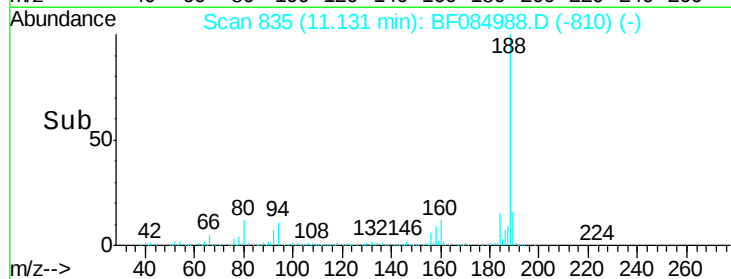
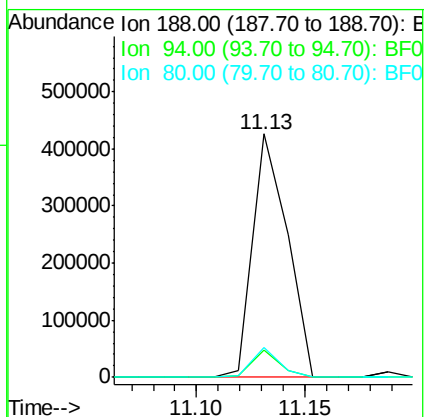
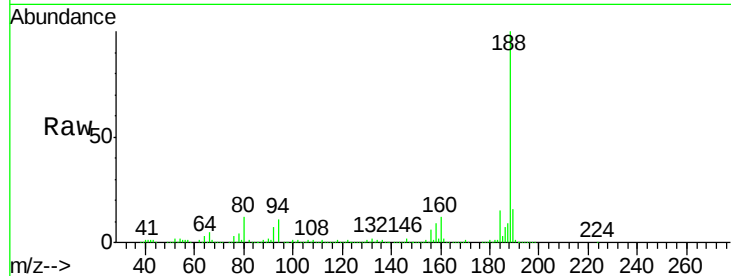
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.13 min Scan# 835  
Delta R.T. -0.01 min  
Lab File: BF084988.D  
Acq: 10 Feb 2016 12:56

Instrument :  
BNA\_F  
ClientSampleId :  
S4-B007(5-7)

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 188     | 100   |            |            |
| 94      | 11.3  | 9.0        | 13.4       |
| 80      | 12.4  | 9.6        | 14.4       |

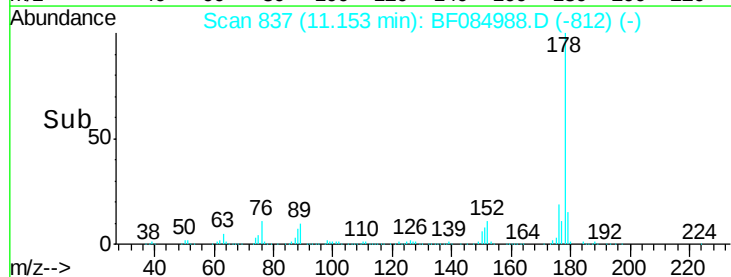
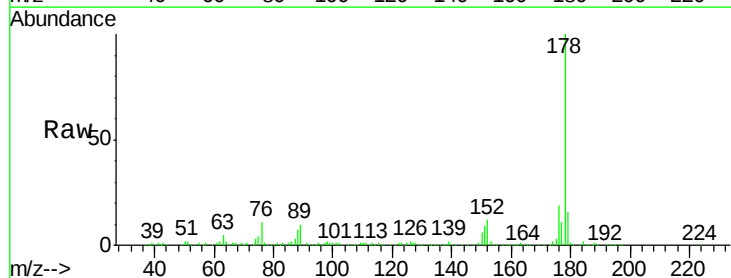
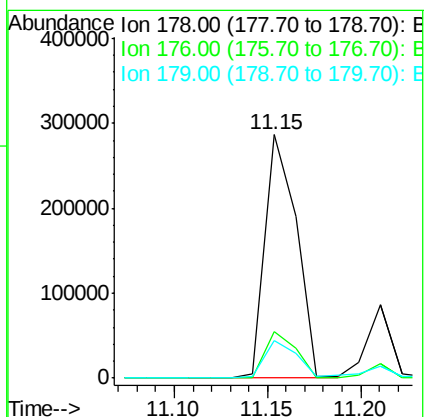
Manual Integrations  
APPROVED

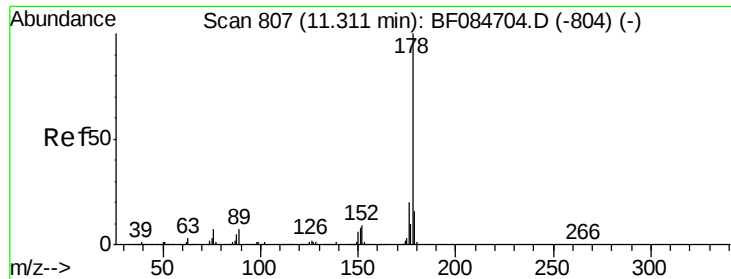
UMANGI  
2/11/2016 10:46:34 AM



#70  
Phenanthrene  
Concen: 12.64 ng  
RT: 11.15 min Scan# 837  
Delta R.T. -0.01 min  
Lab File: BF084988.D  
Acq: 10 Feb 2016 12:56

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 178     | 100   |            |            |
| 176     | 18.9  | 15.3       | 22.9       |
| 179     | 15.7  | 12.0       | 18.0       |





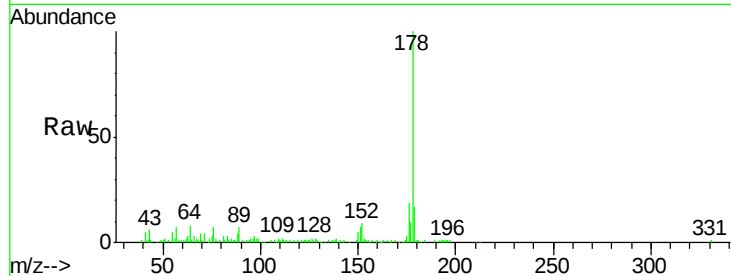
#71  
 Anthracene  
 Concen: 2.76 ng  
 RT: 11.21 min Scan# 842  
 Delta R.T. -0.01 min  
 Lab File: BF084988.D  
 Acq: 10 Feb 2016 12:56

Instrument :  
 BNA\_F  
 ClientSampleId :  
 S4-B007(5-7)

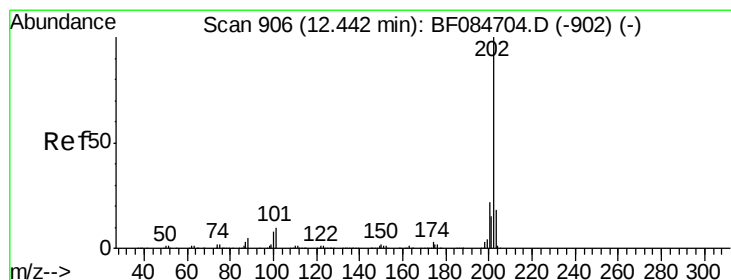
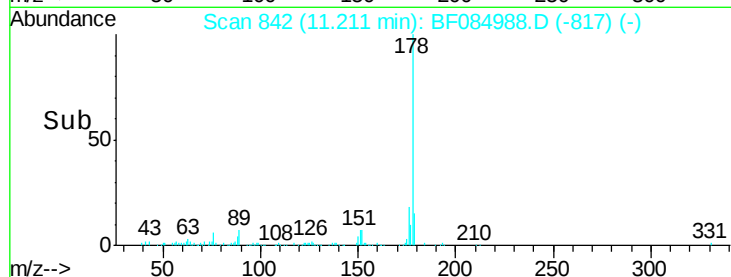
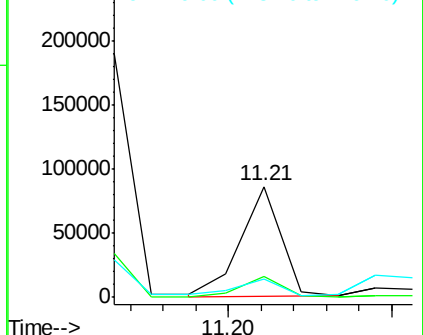
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.9  | 15.4  | 23.0  |
| 179     | 16.7  | 12.5  | 18.7  |

Manual Integrations  
 APPROVED

UMANGI  
 2/11/2016 10:46:34 AM

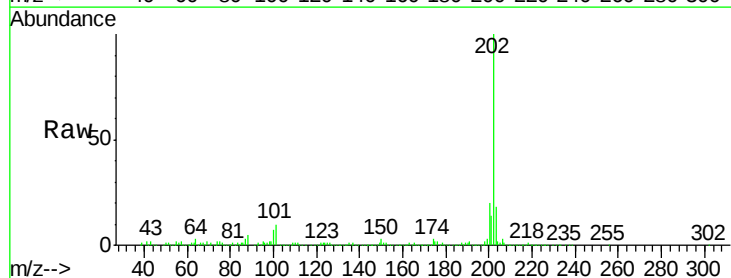


Abundance Ion 178.00 (177.70 to 178.70): E  
 Ion 176.00 (175.70 to 176.70): E  
 Ion 179.00 (178.70 to 179.70): E

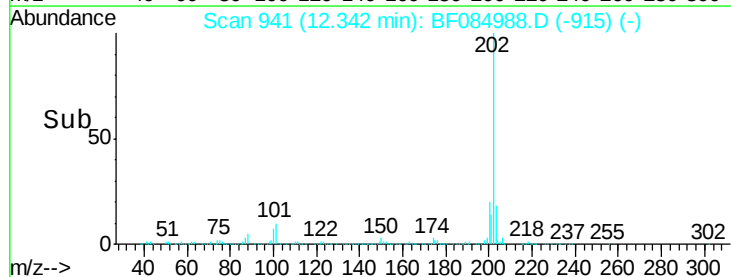
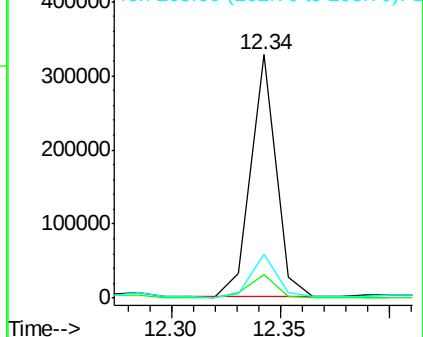


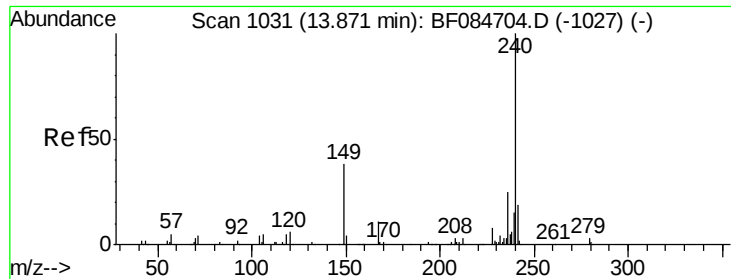
#74  
 Fluoranthene  
 Concen: 9.97 ng  
 RT: 12.34 min Scan# 941  
 Delta R.T. 0.00 min  
 Lab File: BF084988.D  
 Acq: 10 Feb 2016 12:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.7   | 0.0   | 32.8  |
| 203     | 18.0  | 0.0   | 37.9  |



Abundance Ion 202.00 (201.70 to 202.70): E  
 Ion 101.00 (100.70 to 101.70): E  
 Ion 203.00 (202.70 to 203.70): E





#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.76 min Scan# 1065

Delta R.T. -0.01 min

Lab File: BF084988.D

Acq: 10 Feb 2016 12:56

Instrument :

BNA\_F

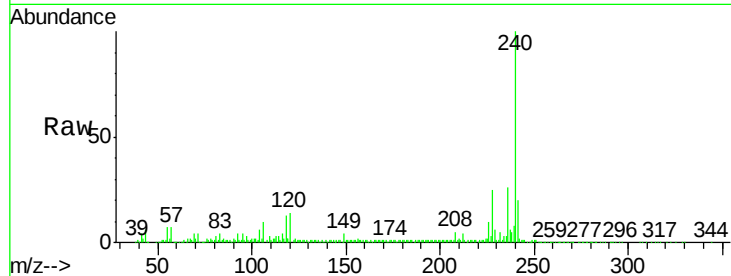
ClientSampleId :

S4-B007(5-7)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 310921 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 14.0  | 9.5   | 14.3   |
| 236       | 26.1  | 20.6  | 31.0   |

Manual Integrations  
APPROVED

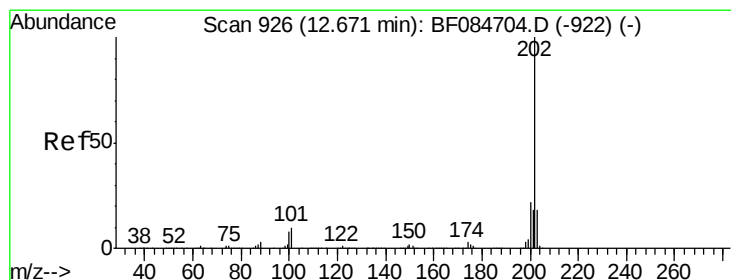
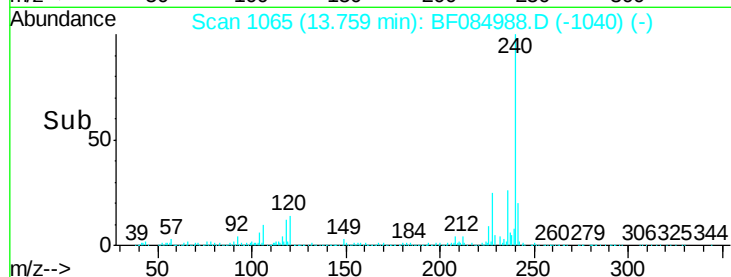
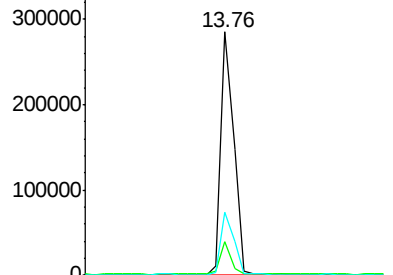
UMANGI  
2/11/2016 10:46:34 AM



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: 13.92 ng

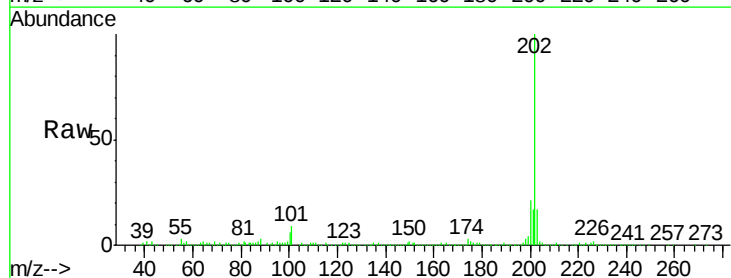
RT: 12.57 min Scan# 961

Delta R.T. -0.00 min

Lab File: BF084988.D

Acq: 10 Feb 2016 12:56

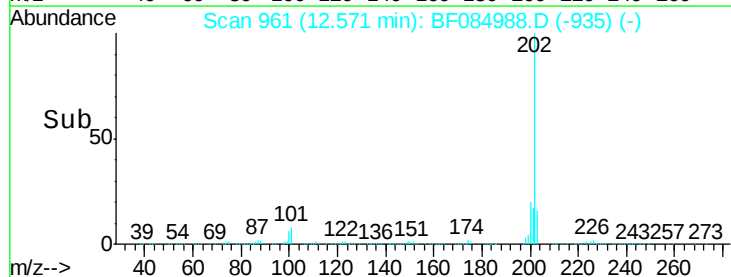
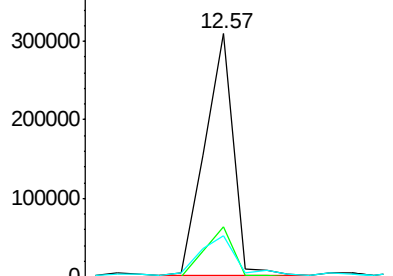
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 331304 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 20.5  | 17.2  | 25.8   |
| 203       | 17.3  | 14.3  | 21.5   |

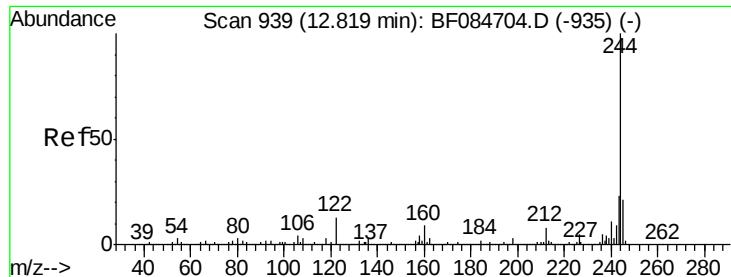


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 116.84 ng

RT: 12.73 min Scan# 975

Delta R.T. -0.00 min

Lab File: BF084988.D

Acq: 10 Feb 2016 12:56

Instrument :

BNA\_F

ClientSampleId :

S4-B007(5-7)

Tgt Ion:244 Resp: 1603175

Ion Ratio Lower Upper

244 100

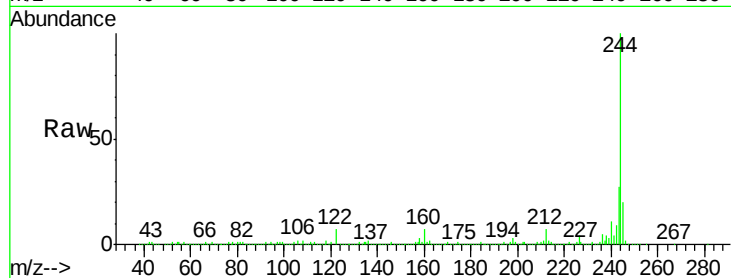
212 7.2 5.7 8.5

122 7.3 7.4 11.0#

Manual Integrations  
APPROVED

UMANGI

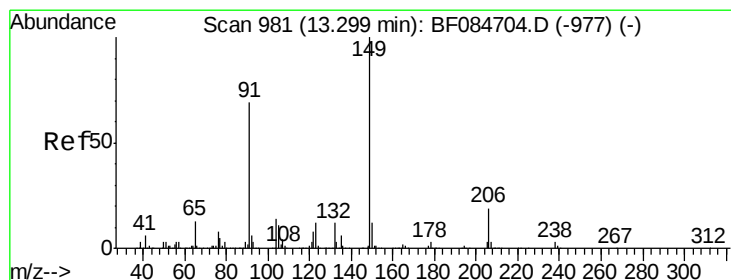
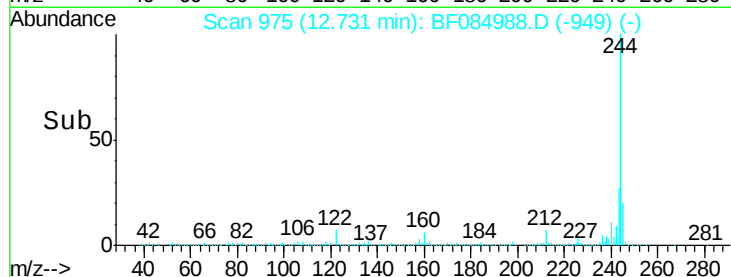
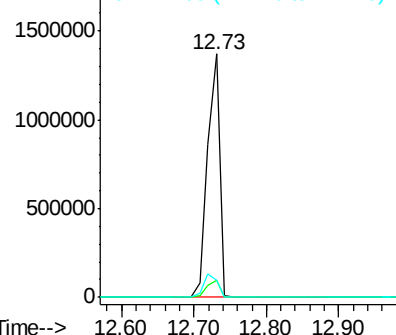
2/11/2016 10:46:34 AM



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



#79

Butylbenzylphthalate

Concen: 2.06 ng

RT: 13.20 min Scan# 1016

Delta R.T. -0.01 min

Lab File: BF084988.D

Acq: 10 Feb 2016 12:56

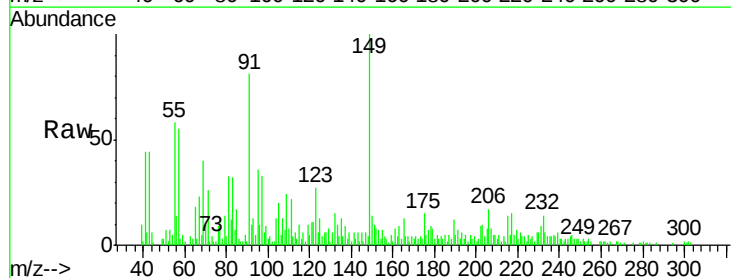
Tgt Ion:149 Resp: 22284

Ion Ratio Lower Upper

149 100

91 80.6 57.6 86.4

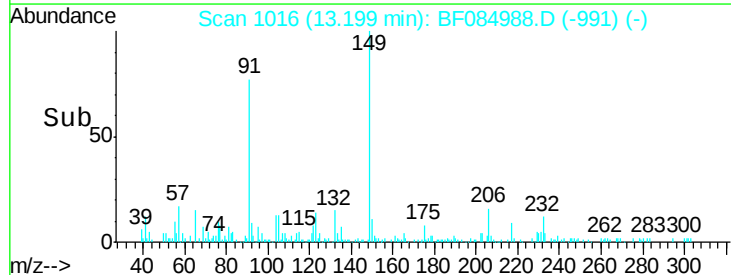
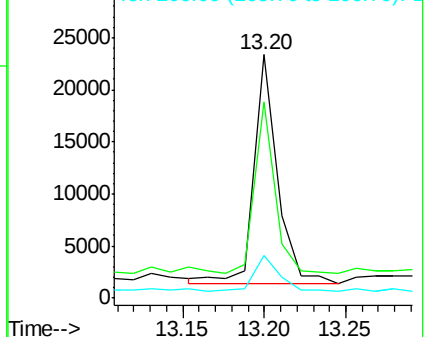
206 17.4 13.2 19.8

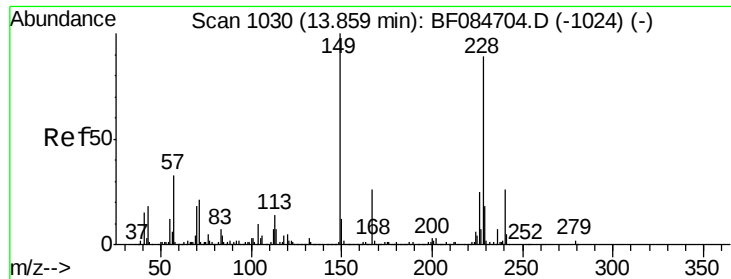


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 91.00 (90.70 to 91.70): BF0

Ion 206.00 (205.70 to 206.70): E





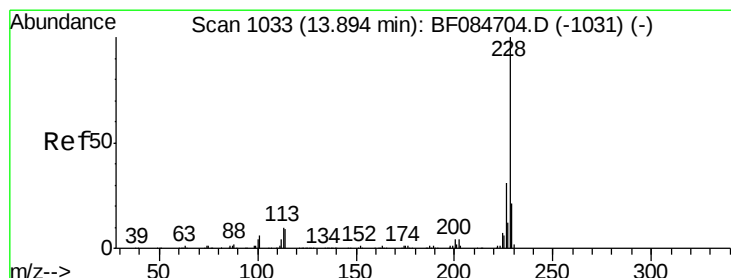
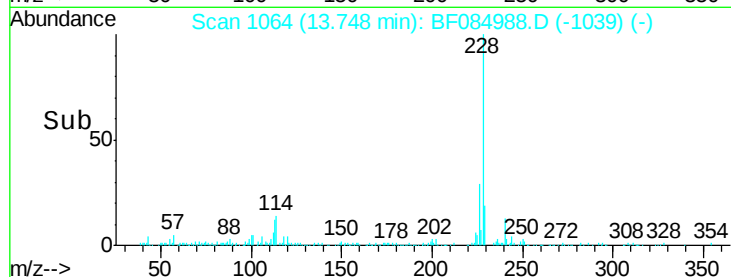
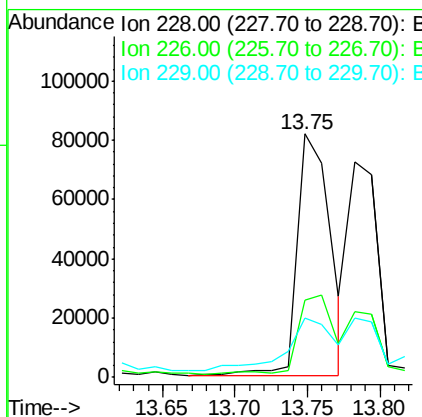
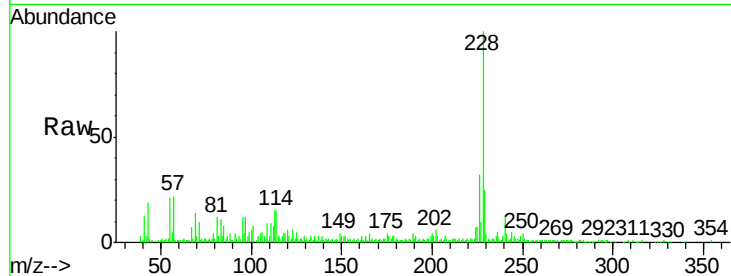
#80  
Benzo(a)anthracene  
Concen: 6.64 ng  
RT: 13.75 min Scan# 1064  
Delta R.T. -0.01 min  
Lab File: BF084988.D  
Acq: 10 Feb 2016 12:56

Instrument :  
BNA\_F  
ClientSampled :  
S4-B007(5-7)

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.9  | 21.8  | 32.6  |
| 229     | 24.6  | 15.8  | 23.8  |

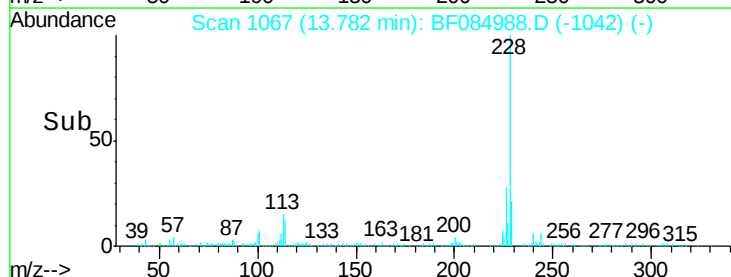
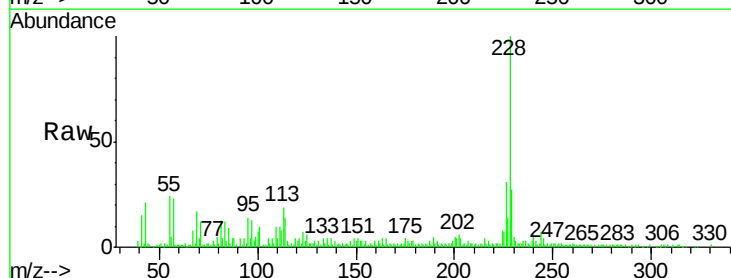
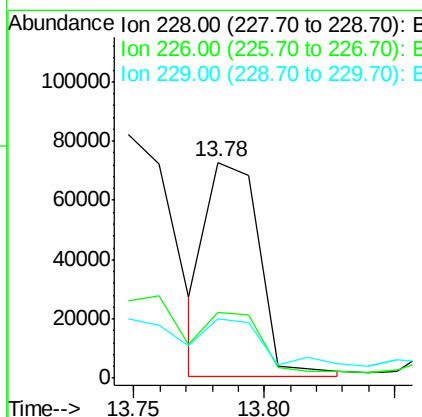
Manual Integrations  
APPROVED

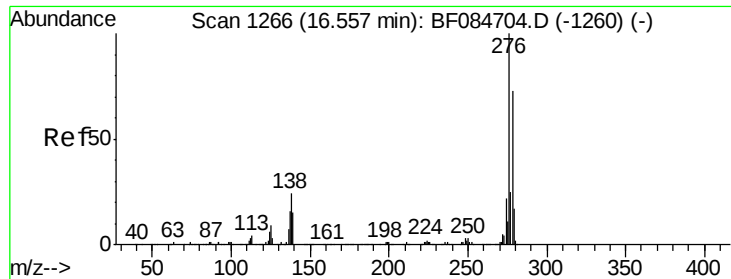
UMANGI  
2/11/2016 10:46:34 AM



#82  
Chrysene  
Concen: 5.40 ng m  
RT: 13.78 min Scan# 1067  
Delta R.T. -0.01 min  
Lab File: BF084988.D  
Acq: 10 Feb 2016 12:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.7  | 24.3  | 36.5  |
| 229     | 27.2  | 16.1  | 24.1  |





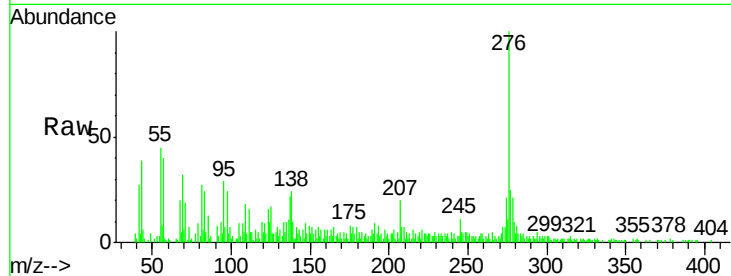
#85  
Indeno(1,2,3-cd)pyrene  
Concen: 3.16 ng  
RT: 16.38 min Scan# 1294  
Delta R.T. -0.01 min  
Lab File: BF084988.D  
Acq: 10 Feb 2016 12:56

Instrument :  
BNA\_F  
ClientSampleId :  
S4-B007(5-7)

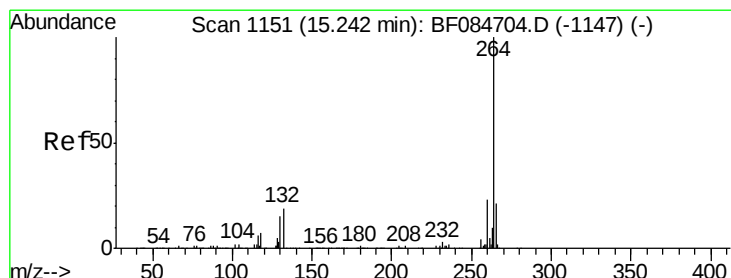
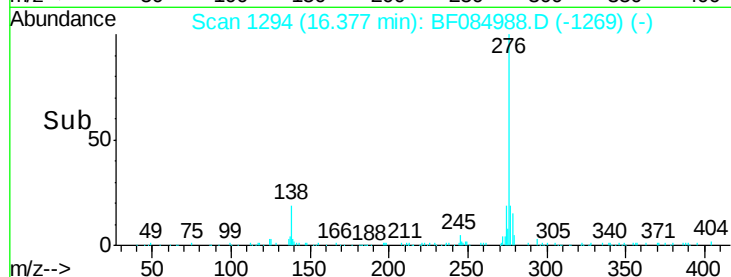
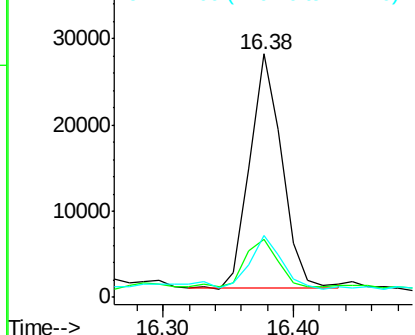
| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 276     | 100   |            |            |
| 138     | 20.7  | 20.6       | 30.8       |
| 277     | 28.8  | 20.1       | 30.1       |

Manual Integrations  
APPROVED

UMANGI  
2/11/2016 10:46:34 AM

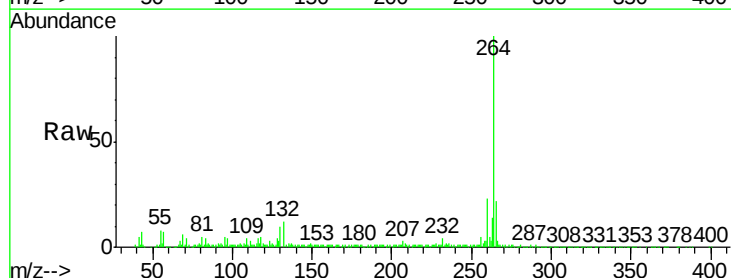


Abundance Ion 276.00 (275.70 to 276.70): E  
Ion 138.00 (137.70 to 138.70): E  
Ion 277.00 (276.70 to 277.70): E

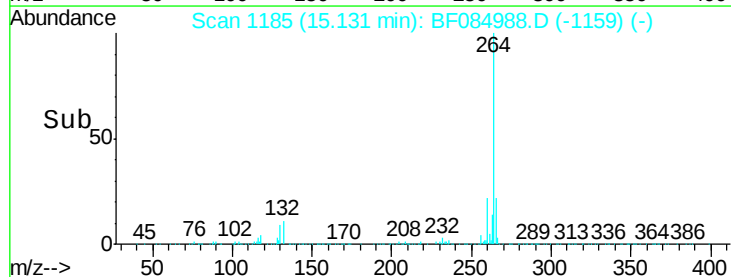
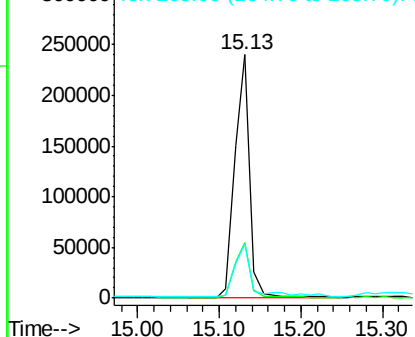


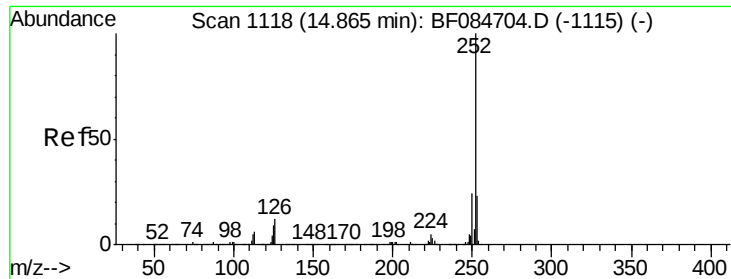
#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 15.13 min Scan# 1185  
Delta R.T. 0.00 min  
Lab File: BF084988.D  
Acq: 10 Feb 2016 12:56

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 264     | 100   |            |            |
| 260     | 22.8  | 19.4       | 29.2       |
| 265     | 22.2  | 17.8       | 26.6       |



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





#87

Benzo(b)fluoranthene

Concen: 5.85 ng m

RT: 14.75 min Scan# 1152

Delta R.T. -0.01 min

Lab File: BF084988.D

Acq: 10 Feb 2016 12:56

Instrument :

BNA\_F

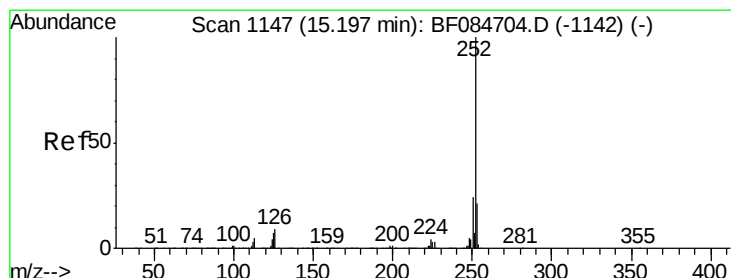
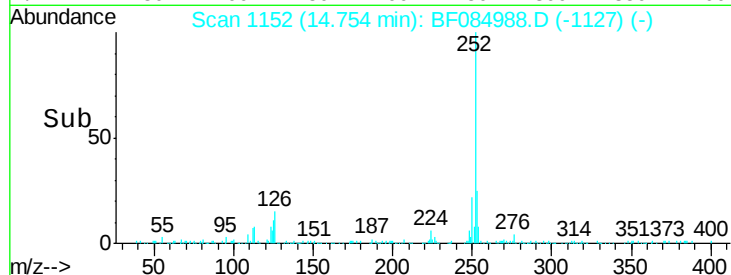
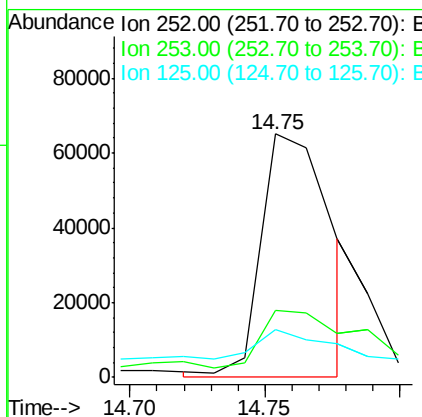
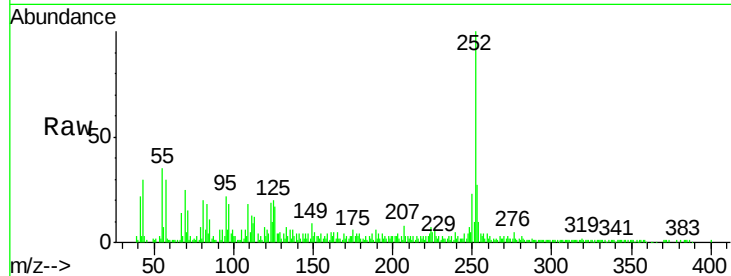
ClientSampleId :

S4-B007(5-7)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 116694 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 27.4  | 17.3  | 25.9#  |
| 125       | 19.8  | 6.5   | 9.7#   |

Manual Integrations  
APPROVED

UMANGI  
2/11/2016 10:46:34 AM



#89

Benzo(a)pyrene

Concen: 4.90 ng

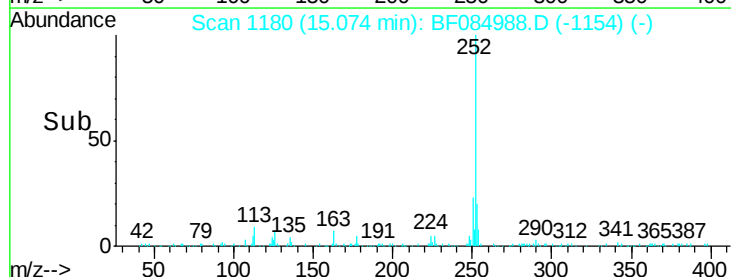
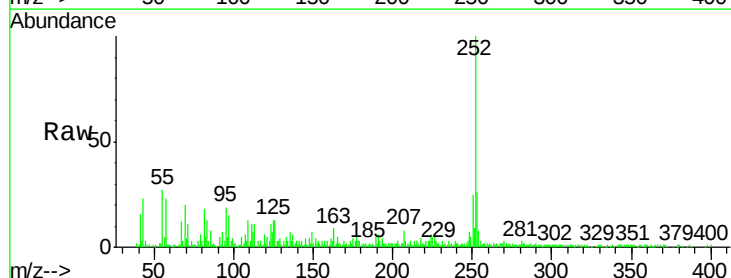
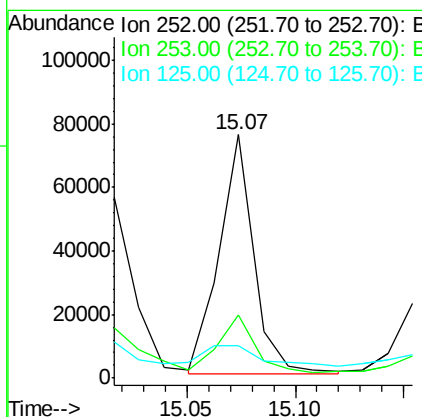
RT: 15.07 min Scan# 1180

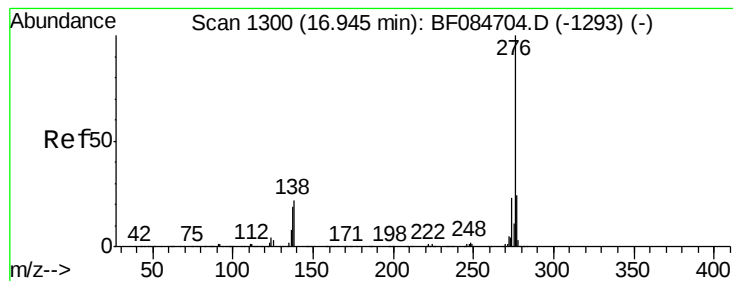
Delta R.T. 0.00 min

Lab File: BF084988.D

Acq: 10 Feb 2016 12:56

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 83275 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 25.9  | 17.3  | 25.9# |
| 125       | 13.2  | 7.0   | 10.4# |





#91

Benzo(g,h,i)perylene

Concen: 3.72 ng

RT: 16.75 min Scan# 1327

Delta R.T. 0.00 min

Lab File: BF084988.D

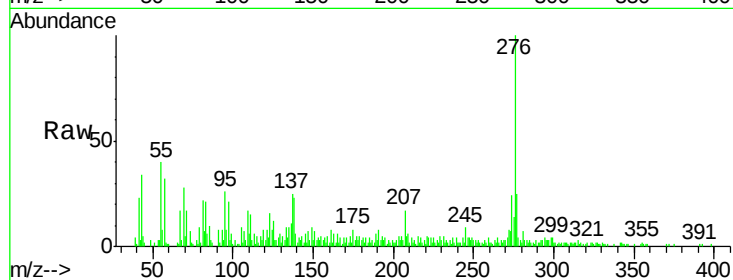
Acq: 10 Feb 2016 12:56

Instrument :

BNA\_F

ClientSampleId :

S4-B007(5-7)



Tgt Ion: 276 Resp: 53524

Ion Ratio Lower Upper

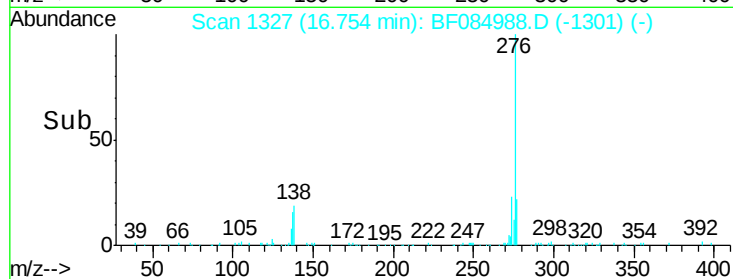
276 100

277 25.2 18.8 28.2

138 22.6 17.8 26.6

Manual Integrations  
APPROVED

UMANGI  
2/11/2016 10:46:34 AM



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

