

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF061119\  
 Data File : BF114960.D  
 Acq On : 11 Jun 2019 22:54  
 Operator : HP/JU  
 Sample : K3247-03  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 FK-GF-02-041-B

Manual Integrations  
 APPROVED

mohammad  
 6/12/2019 9:09:05 AM

Quant Time: Jun 12 05:30:03 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Jun 10 16:44:00 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min)       |
|-----------------------------|-------|------|----------|--------|-------|----------------|
| 1) 1,4-Dichlorobenzene-d4   | 6.66  | 152  | 274409   | 20.00  | ng    | 0.00           |
| 21) Naphthalene-d8          | 7.94  | 136  | 1041373  | 20.00  | ng    | 0.00           |
| 39) Acenaphthene-d10        | 9.69  | 164  | 477262   | 20.00  | ng    | 0.00           |
| 64) Phenanthrene-d10        | 11.16 | 188  | 797603   | 20.00  | ng    | 0.00           |
| 76) Chrysene-d12            | 13.79 | 240  | 601607   | 20.00  | ng    | 0.00           |
| 87) Perylene-d12            | 15.17 | 264  | 504011   | 20.00  | ng    | 0.00           |
| System Monitoring Compounds |       |      |          |        |       |                |
| 5) 2-Fluorophenol           | 5.27  | 112  | 1572985  | 97.01  | ng    | 0.00           |
| 7) Phenol-d6                | 6.31  | 99   | 1951114  | 99.76  | ng    | 0.00           |
| 23) Nitrobenzene-d5         | 7.22  | 82   | 1186520  | 70.01  | ng    | 0.00           |
| 42) 2,4,6-Tribromophenol    | 10.47 | 330  | 431645   | 83.14  | ng    | 0.00           |
| 45) 2-Fluorobiphenyl        | 9.02  | 172  | 2004153  | 66.65  | ng    | 0.00           |
| 79) Terphenyl-d14           | 12.74 | 244  | 1710586  | 56.55  | ng    | 0.00           |
| Target Compounds            |       |      |          |        |       |                |
| 10) Phenol                  | 6.32  | 94   | 54205    | 2.486  | ng    | Qvalue<br># 73 |
| 50) Dimethylphthalate       | 9.41  | 163  | 304711   | 8.495  | ng    | 97             |
| 71) Phenanthrene            | 11.19 | 178  | 322143   | 8.325  | ng    | 95             |
| 72) Anthracene              | 11.23 | 178  | 85468    | 2.176  | ng    | 95             |
| 75) Fluoranthene            | 12.37 | 202  | 616631   | 15.406 | ng    | 95             |
| 78) Pyrene                  | 12.59 | 202  | 665088   | 12.694 | ng    | 96             |
| 81) Benzo(a)anthracene      | 13.77 | 228  | 366274   | 8.234  | ng    | 97             |
| 83) Chrysene                | 13.81 | 228  | 319751   | 7.158  | ng    | 97             |
| 86) Indeno(1,2,3-cd)pyrene  | 16.47 | 276  | 106085   | 2.526  | ng    | 93             |
| 88) Benzo(b)fluoranthene    | 14.78 | 252  | 323138m  | 9.848  | ng    |                |
| 89) Benzo(k)fluoranthene    | 14.80 | 252  | 102463m  | 3.598  | ng    |                |
| 90) Benzo(a)pyrene          | 15.11 | 252  | 209190   | 7.340  | ng    | 97             |
| 92) Benzo(a,h,i)perylene    | 16.86 | 276  | 94898    | 3.955  | ng    | 97             |

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

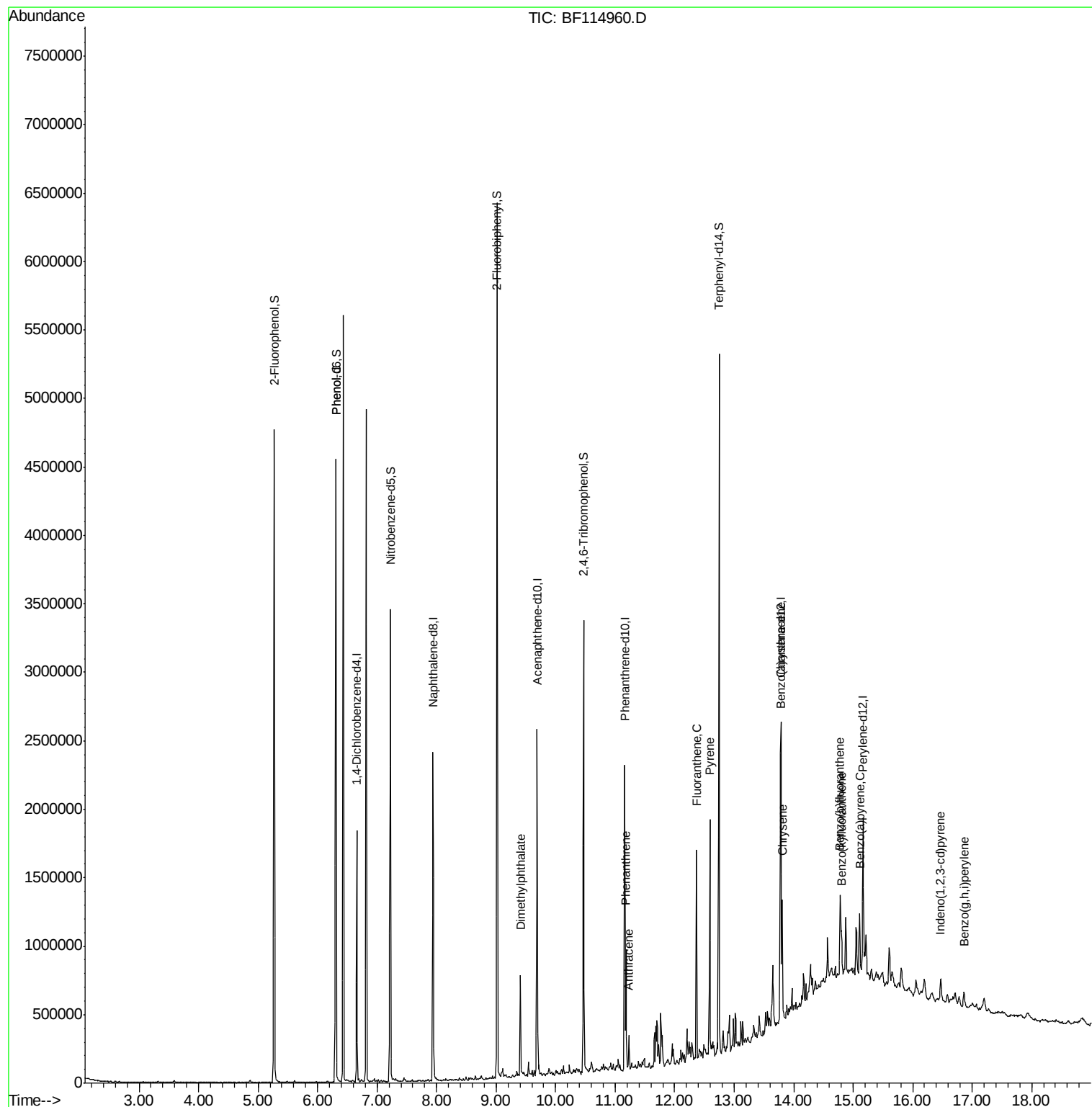
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF061119\  
Data File : BF114960.D  
Acq On : 11 Jun 2019 22:54  
Operator : HP/JU  
Sample : K3247-03  
Misc :  
ALS Vial : 13 Sample Multiplier: 1

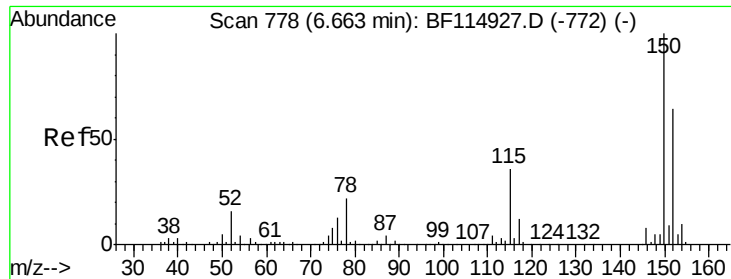
Instrument :  
BNA\_F  
ClientSampleId :  
FK-GF-02-041-B

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6/12/2019 9:09:05 AM

Quant Time: Jun 12 05:30:03 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Jun 10 16:44:00 2019  
Response via : Initial Calibration





#1

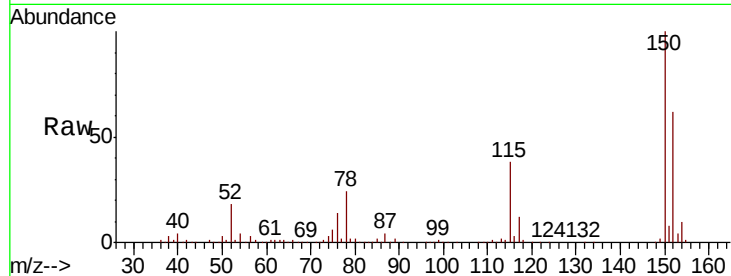
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.66 min Scan# 777  
Delta R.T. -0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

Instrument :  
BNA\_F  
ClientSampleId :  
FK-GF-02-041-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 161.3 | 125.2 | 187.8 |
| 115     | 62.0  | 45.0  | 67.4  |

Manual Integrations  
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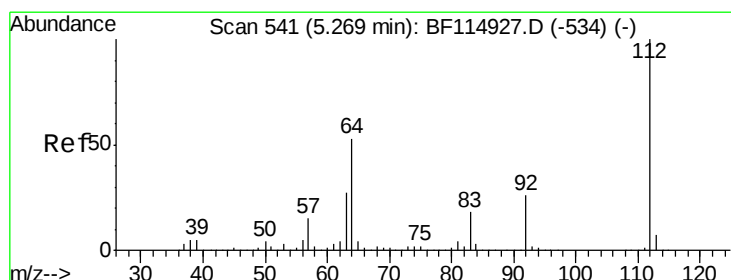
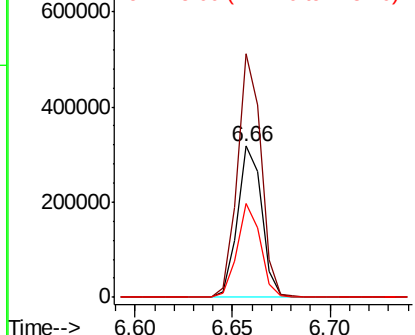
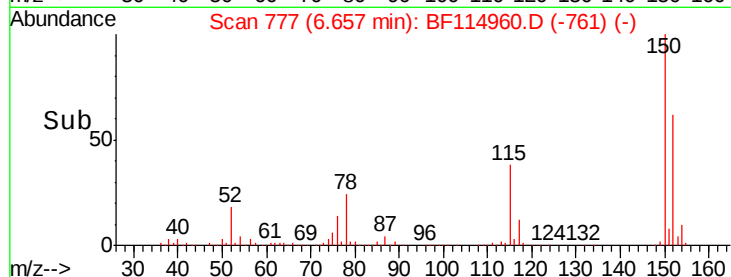


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

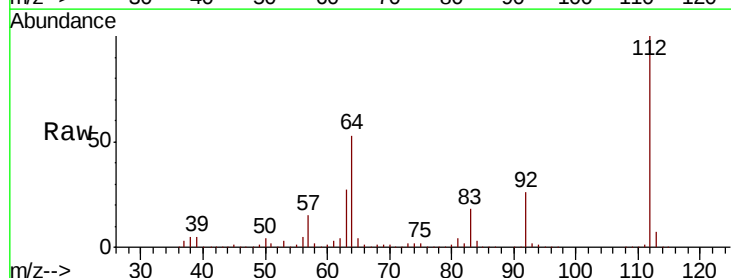
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 97.014 ng  
RT: 5.27 min Scan# 542  
Delta R.T. 0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 52.6  | 42.1  | 63.1  |
| 63      | 27.1  | 21.8  | 32.8  |

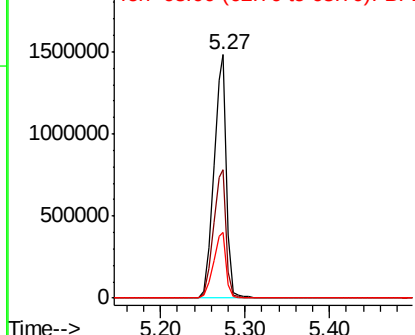
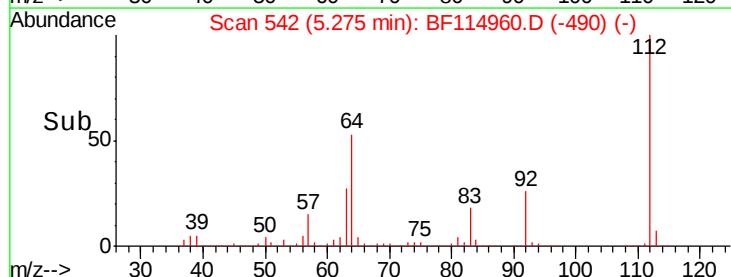


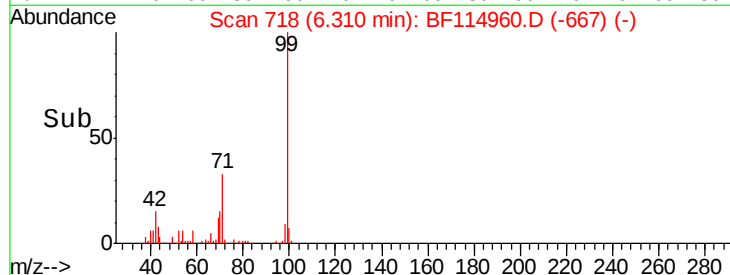
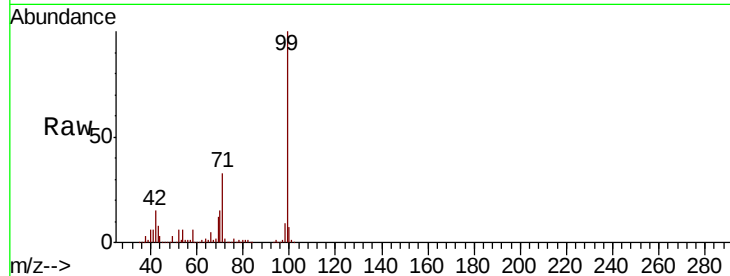
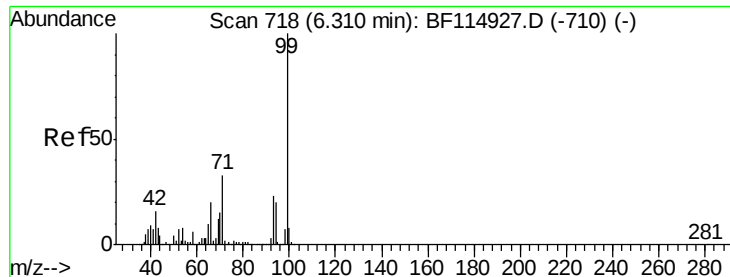
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 99.764 ng

RT: 6.31 min Scan# 718

Delta R.T. -0.00 min

Lab File: BF114960.D

Acq: 11 Jun 2019 22:54

Tot Ion: 99 Resp: 1951114

Ion Ratio Lower Upper

99 100

42 15.5 13.1 19.7

71 32.7 26.8 40.2

Instrument :

BNA\_F

ClientSampleId :

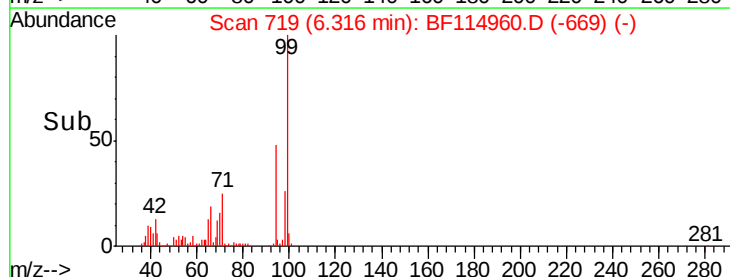
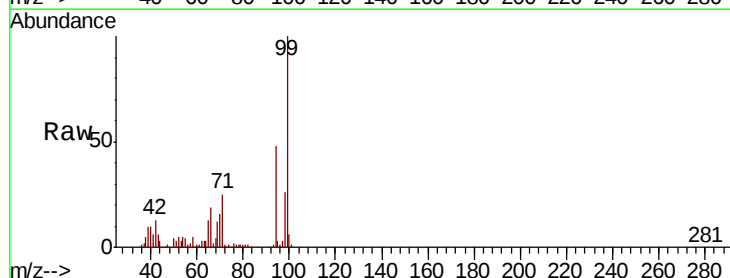
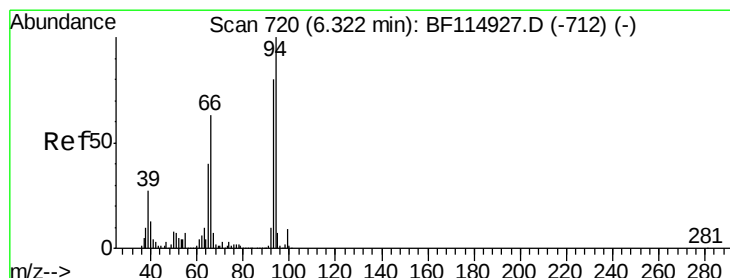
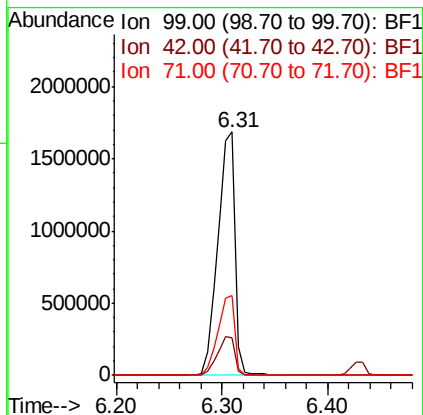
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#10

Phenol

Concen: 2.486 ng

RT: 6.32 min Scan# 719

Delta R.T. -0.01 min

Lab File: BF114960.D

Acq: 11 Jun 2019 22:54

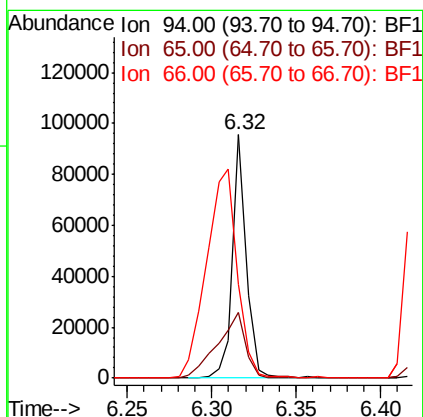
Tgt Ion: 94 Resp: 54205

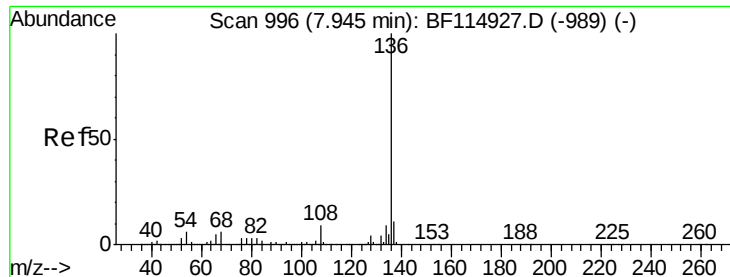
Ion Ratio Lower Upper

94 100

65 27.2 19.6 59.6

66 38.8 42.6 82.6#





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 7.94 min Scan# 995

Delta R.T. -0.01 min

Lab File: BF114960.D

Acq: 11 Jun 2019 22:54

Instrument :

BNA\_F

ClientSampleId :

FK-GF-02-041-B

Tot Ion:136 Resp: 1041373

Ion Ratio Lower Upper

136 100

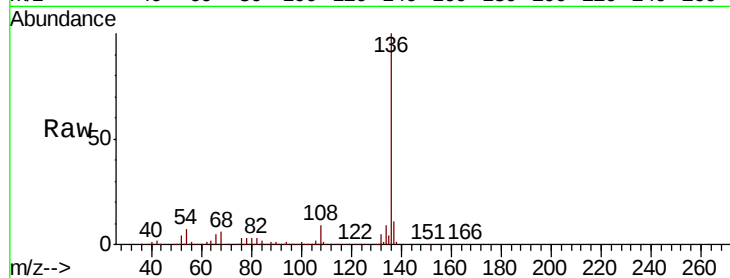
137 11.4 9.0 13.6

54 6.8 5.2 7.8

68 5.9 4.6 7.0

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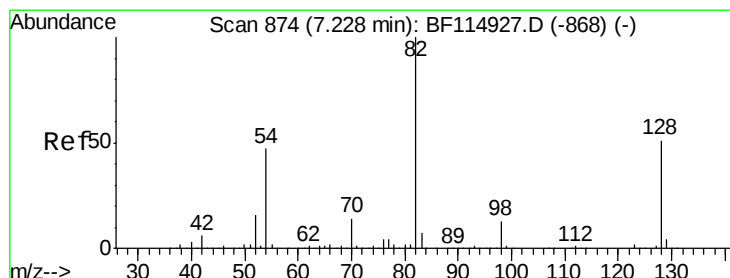
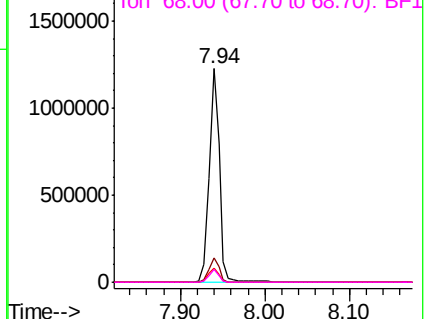
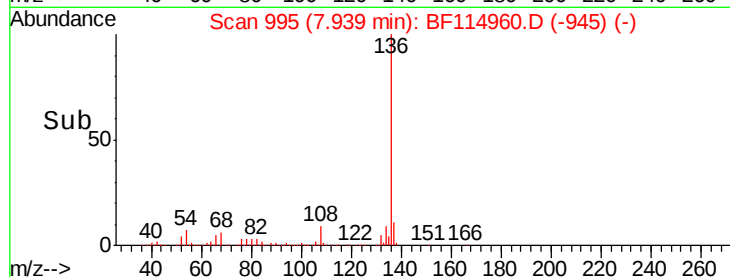


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1



#23

Nitrobenzene-d5

Concen: 70.006 ng

RT: 7.22 min Scan# 873

Delta R.T. -0.01 min

Lab File: BF114960.D

Acq: 11 Jun 2019 22:54

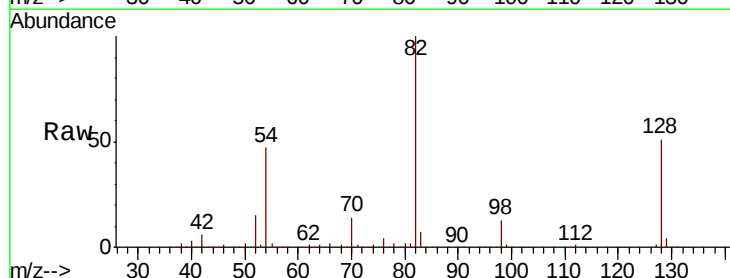
Tgt Ion: 82 Resp: 1186520

Ion Ratio Lower Upper

82 100

128 50.6 40.9 61.3

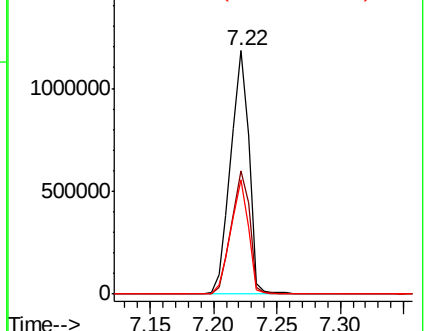
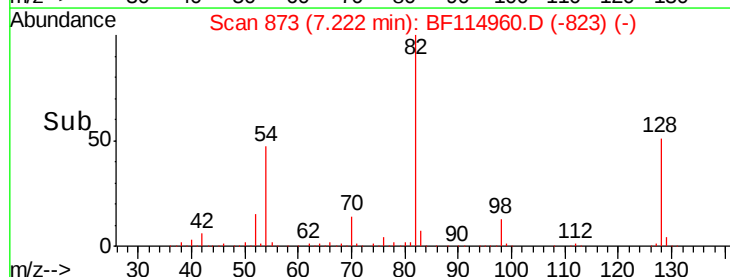
54 47.2 37.4 56.0

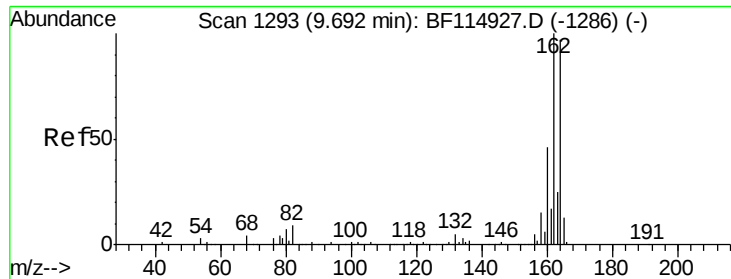


Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF1





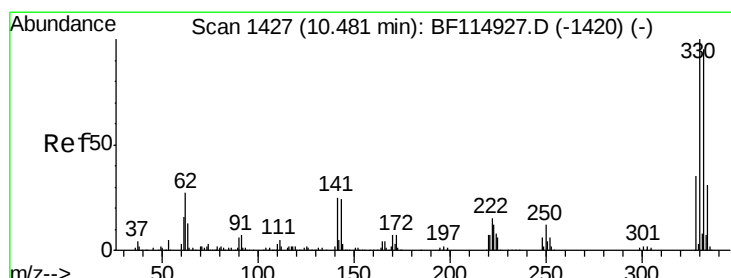
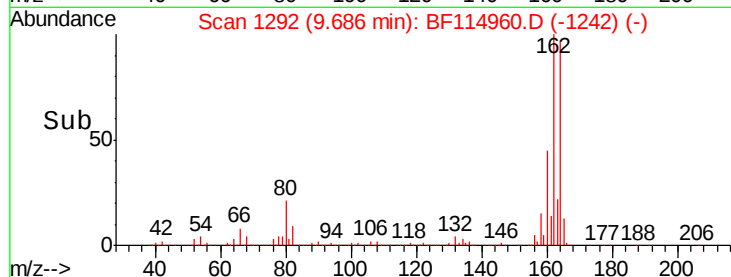
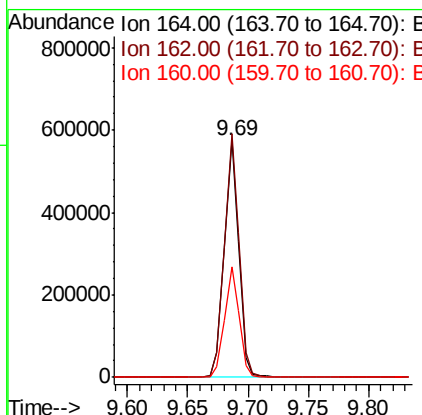
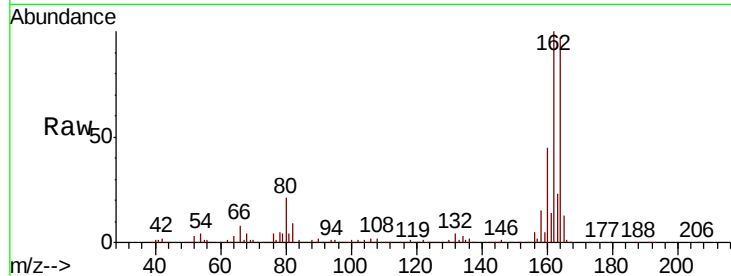
#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.69 min Scan# 1292  
 Delta R.T. -0.01 min  
 Lab File: BF114960.D  
 Acq: 11 Jun 2019 22:54

Instrument :  
 BNA\_F  
 ClientSampleId :  
 FK-GF-02-041-B

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 164     | 100   |      |       |       |
| 162     | 102.7 | 82.4 | 123.6 |       |
| 160     | 46.4  | 37.5 | 56.3  |       |

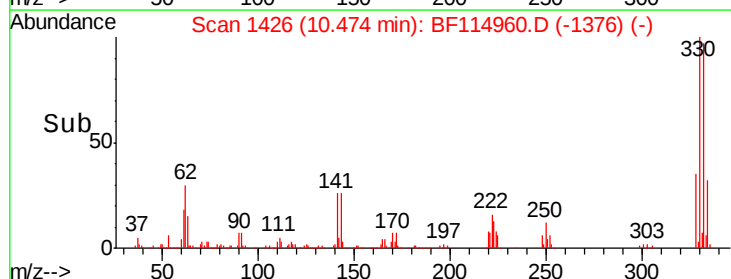
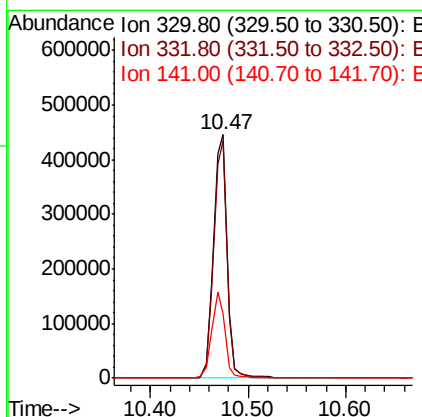
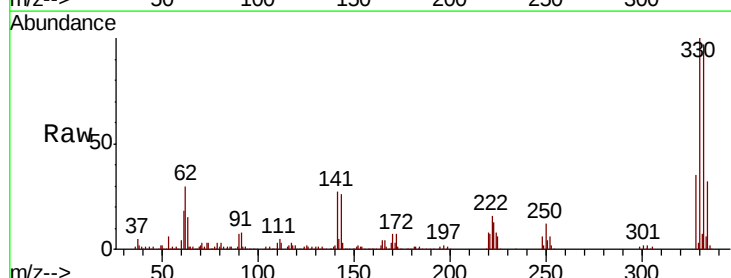
Manual Integrations  
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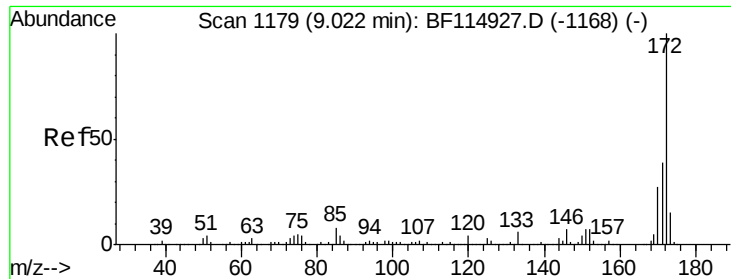
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#42  
 2,4,6-Tribromophenol  
 Concen: 83.141 ng  
 RT: 10.47 min Scan# 1426  
 Delta R.T. -0.01 min  
 Lab File: BF114960.D  
 Acq: 11 Jun 2019 22:54

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 330     | 100   |      |       |       |
| 332     | 96.5  | 76.4 | 114.6 |       |
| 141     | 34.0  | 26.8 | 40.2  |       |





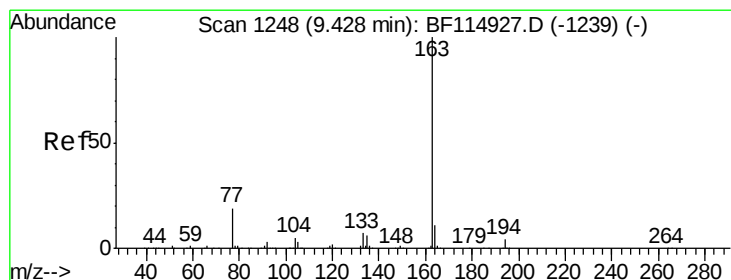
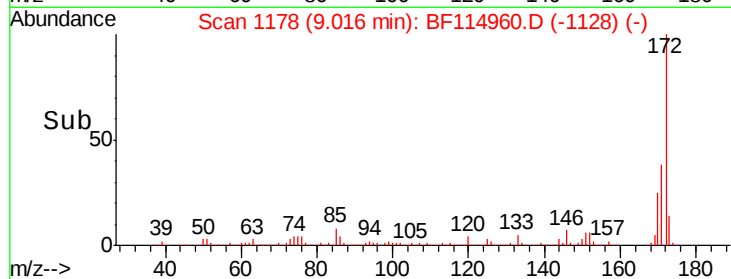
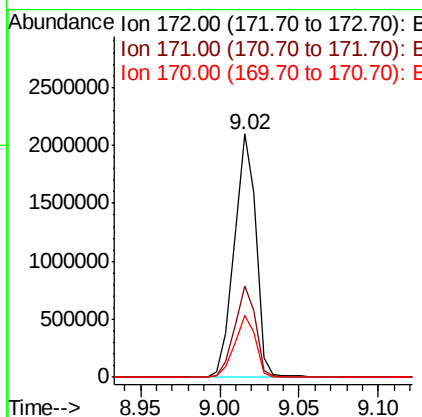
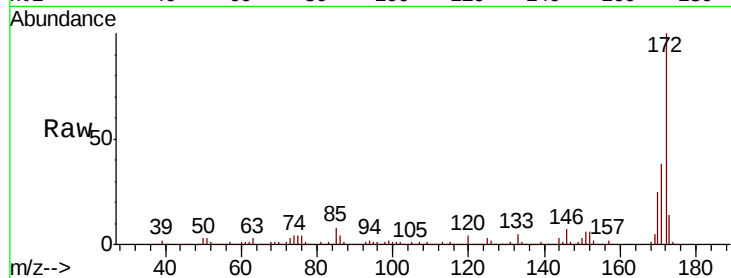
#45  
2-Fluorobiphenyl  
Concen: 66.645 ng  
RT: 9.02 min Scan# 1178  
Delta R.T. -0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

Instrument :  
BNA\_F  
ClientSampleId :  
FK-GF-02-041-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 37.6  | 31.3  | 46.9  |
| 170     | 25.4  | 21.4  | 32.0  |

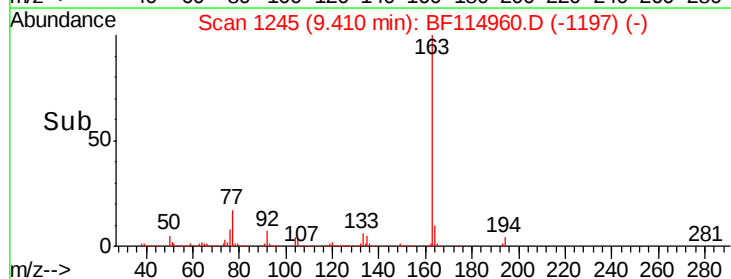
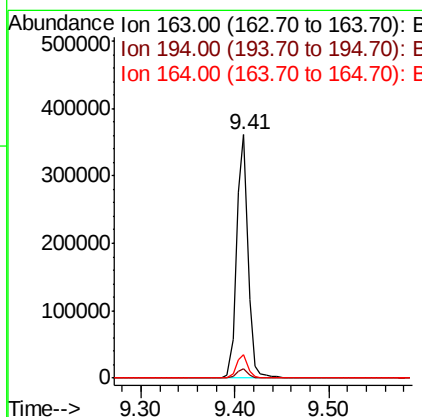
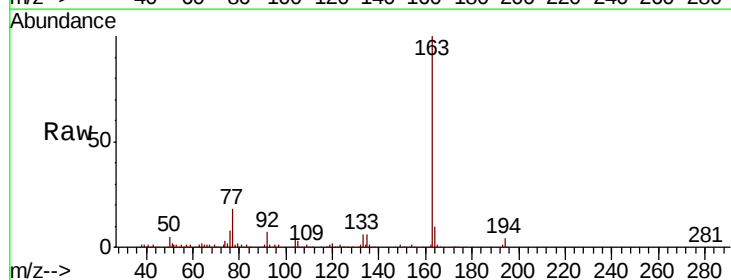
Manual Integrations  
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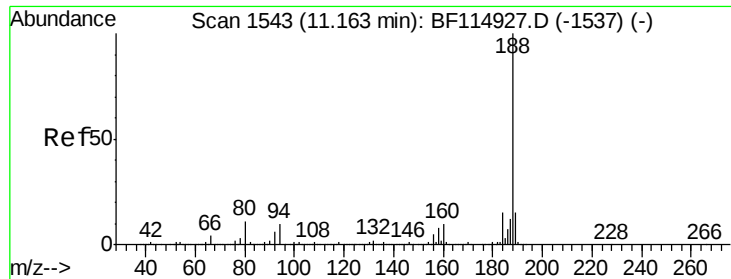
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6/12/2019 9:09:05 AM



#50  
Dimethylphthalate  
Concen: 8.495 ng  
RT: 9.41 min Scan# 1245  
Delta R.T. -0.02 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.0   | 3.4   | 5.0   |
| 164     | 9.7   | 8.7   | 13.1  |





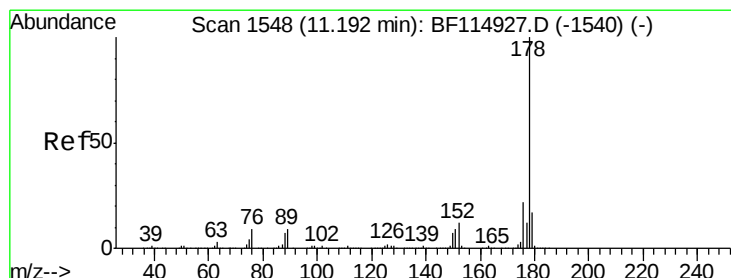
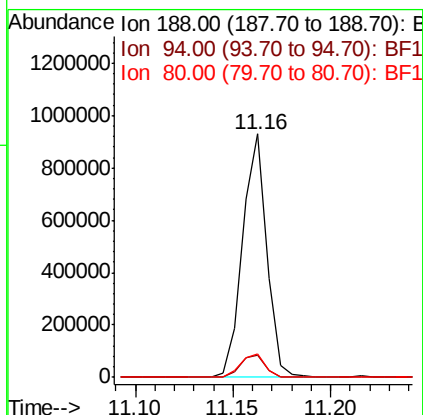
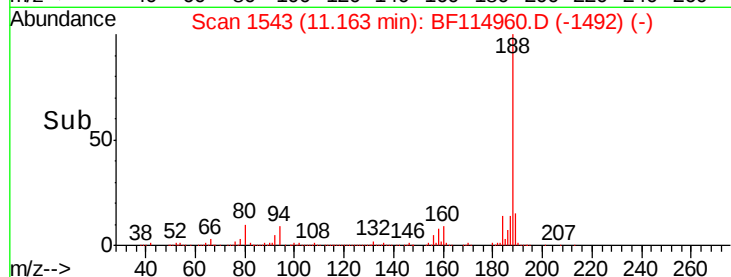
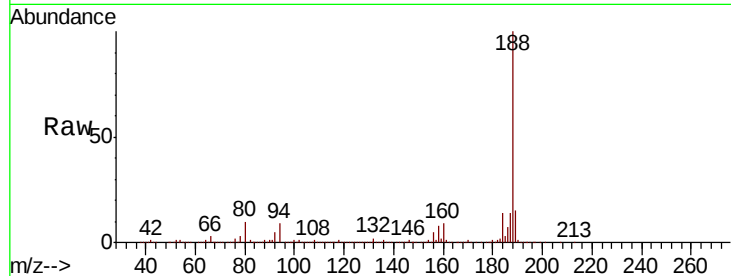
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.16 min Scan# 1543  
Delta R.T. -0.00 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

Instrument :  
BNA\_F  
ClientSampleId :  
FK-GF-02-041-B

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 188     | 100   |            |       |
| 94      | 9.3   | 8.1        | 12.1  |
| 80      | 9.7   | 8.6        | 12.8  |

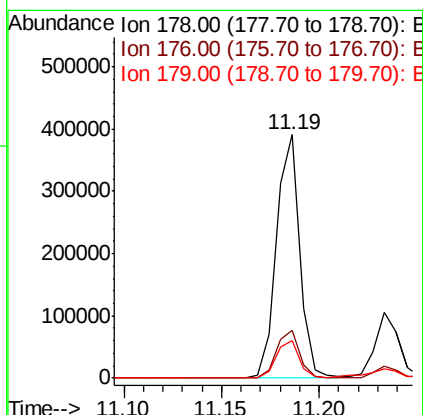
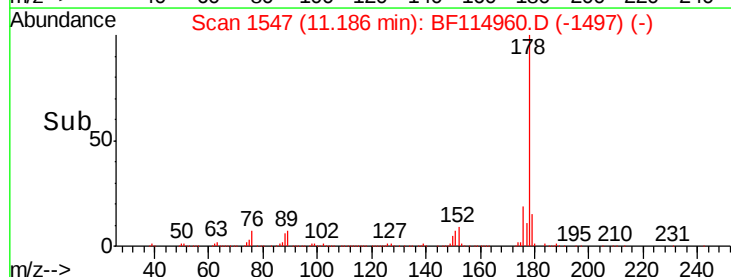
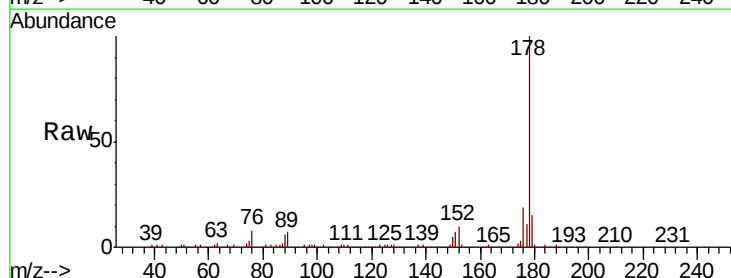
Manual Integrations  
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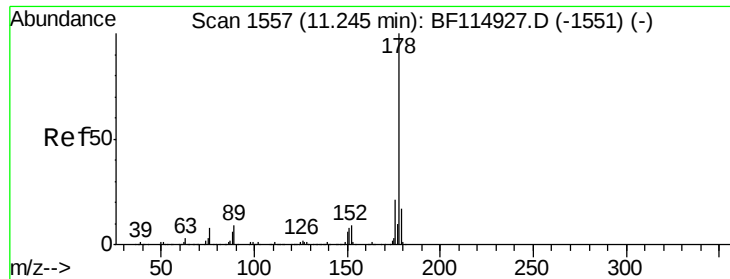
mohammad  
6/12/2019 9:09:05 AM



#71  
Phenanthrene  
Concen: 8.325 ng  
RT: 11.19 min Scan# 1547  
Delta R.T. -0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 178     | 100   |            |       |
| 176     | 19.5  | 17.4       | 26.2  |
| 179     | 15.2  | 13.6       | 20.4  |





#72

Anthracene

Concen: 2.176 ng

RT: 11.23 min Scan# 1555

Delta R.T. -0.01 min

Lab File: BF114960.D

Acq: 11 Jun 2019 22:54

Instrument :

BNA\_F

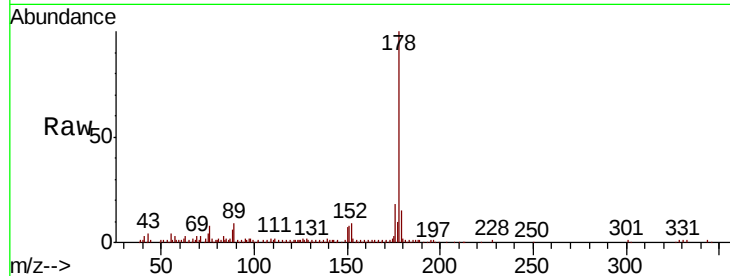
ClientSampleId :

FK-GF-02-041-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 17.7  | 16.6  | 25.0  |
| 179     | 15.2  | 13.4  | 20.2  |

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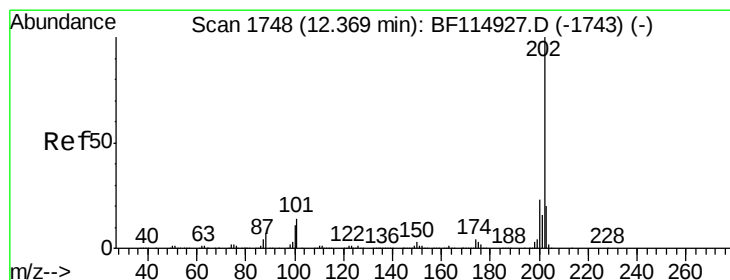
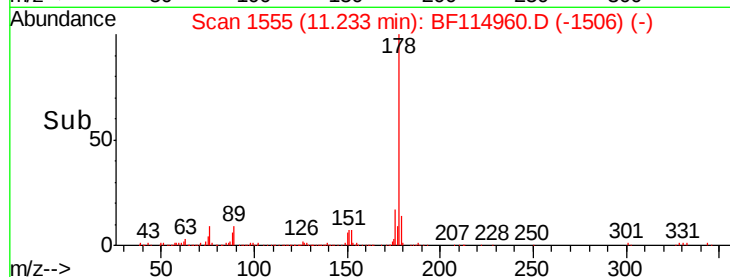
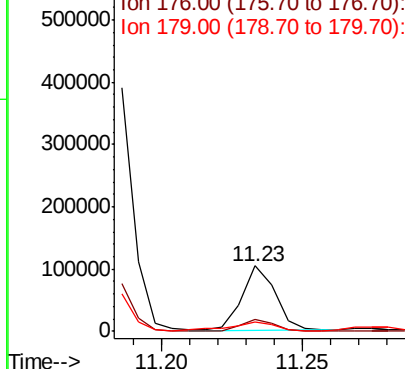


Abundance

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



#75

Fluoranthene

Concen: 15.406 ng

RT: 12.37 min Scan# 1748

Delta R.T. -0.00 min

Lab File: BF114960.D

Acq: 11 Jun 2019 22:54

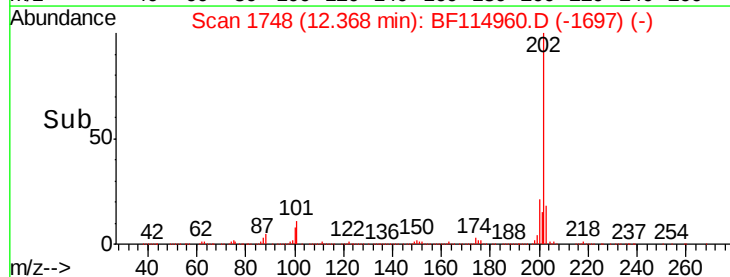
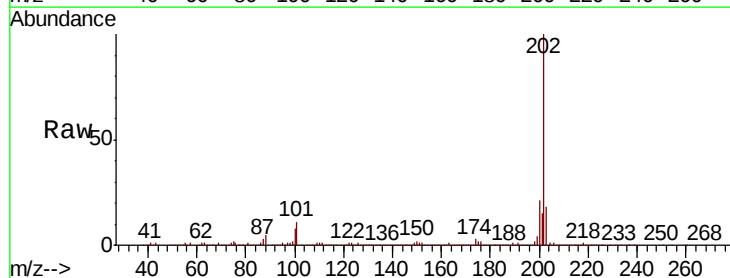
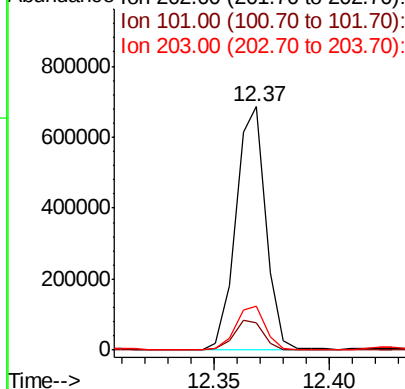
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.5  | 0.0   | 34.3  |
| 203     | 17.9  | 0.0   | 39.6  |

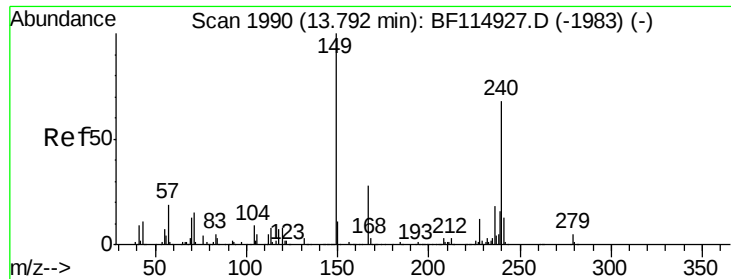
Abundance

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





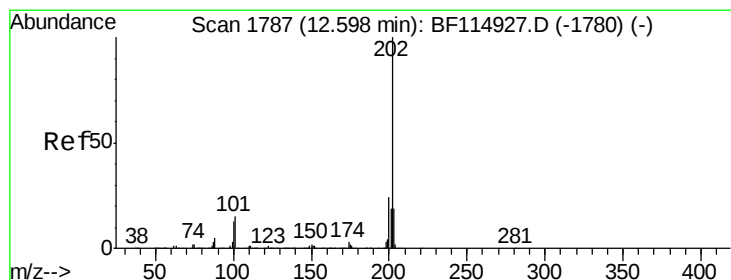
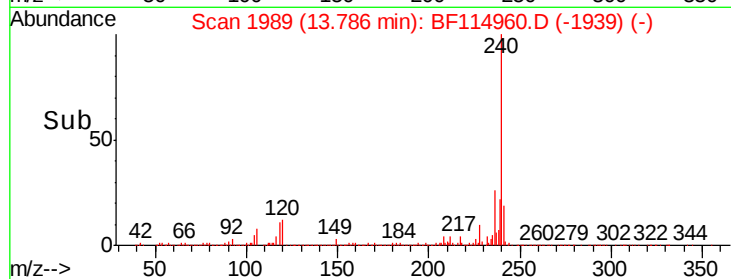
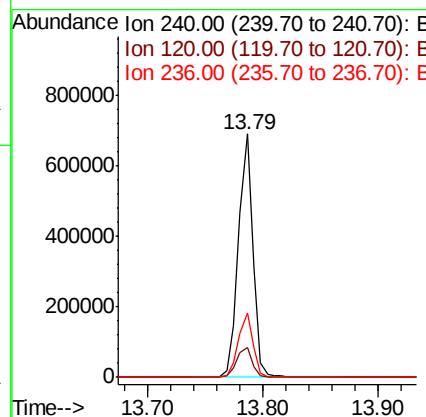
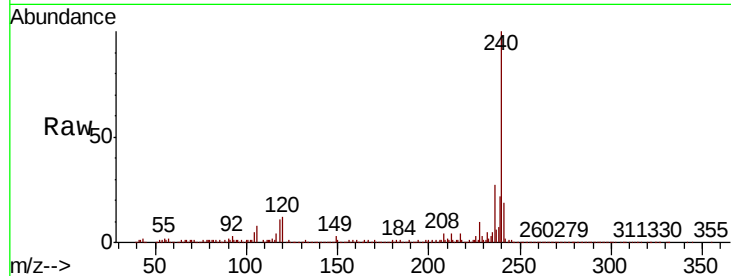
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 13.79 min Scan# 1989  
Delta R.T. -0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

Instrument :  
BNA\_F  
ClientSampleId :  
FK-GF-02-041-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 12.2  | 9.2   | 13.8  |
| 236     | 26.5  | 21.7  | 32.5  |

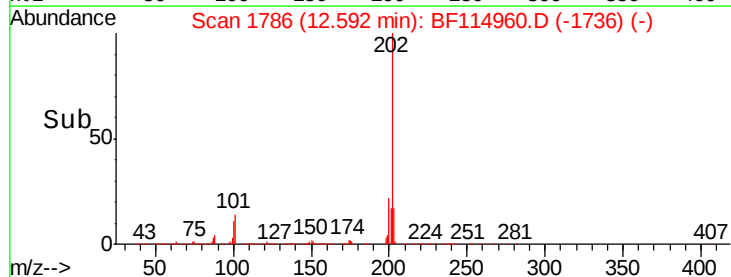
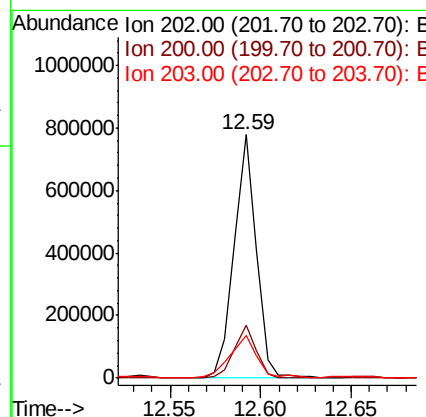
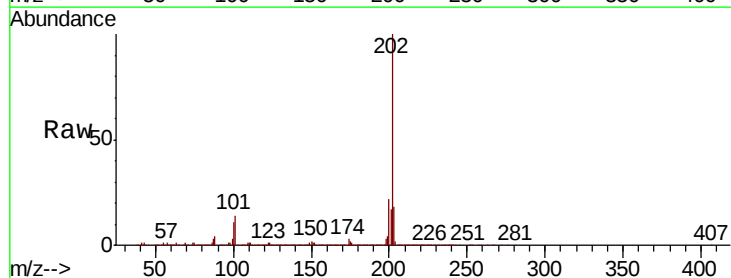
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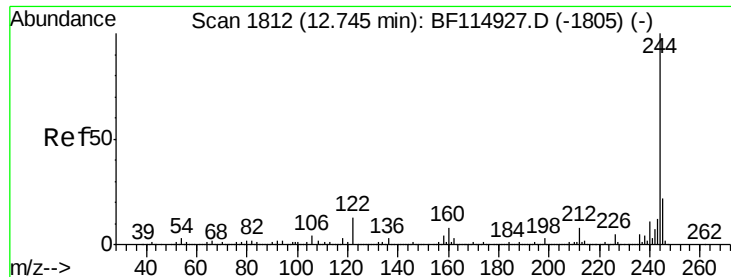
mohammad  
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#78  
Pyrene  
Concen: 12.694 ng  
RT: 12.59 min Scan# 1786  
Delta R.T. -0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.6  | 18.9  | 28.3  |
| 203     | 17.6  | 15.2  | 22.8  |





#79

Terphenyl-d14

Concen: 56.546 ng

RT: 12.74 min Scan# 1812

Delta R.T. -0.00 min

Lab File: BF114960.D

Acq: 11 Jun 2019 22:54

Instrument :

BNA\_F

ClientSampleId :

FK-GF-02-041-B

Tot Ion:244 Resp: 1710586

Ion Ratio Lower Upper

244 100

212 6.9 6.2 9.2

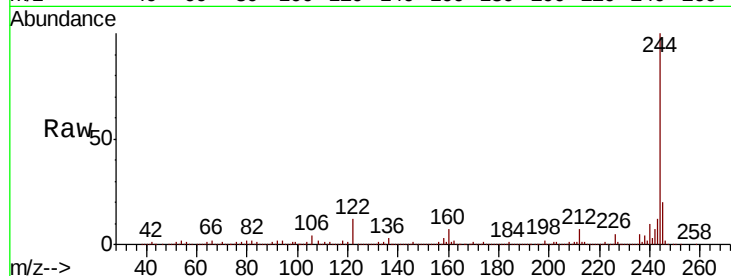
122 12.0 10.2 15.4

Manual Integrations

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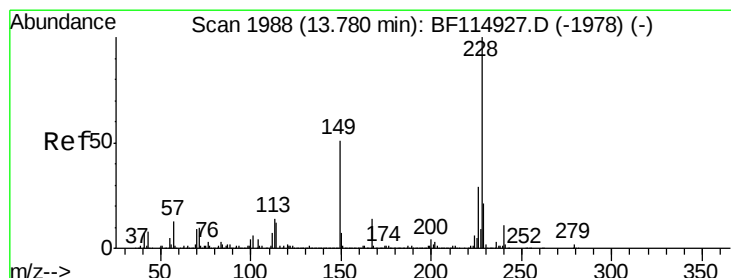
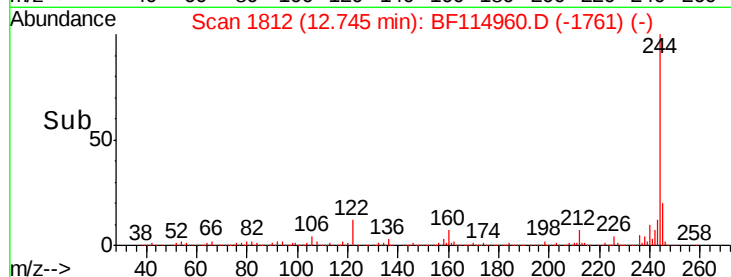
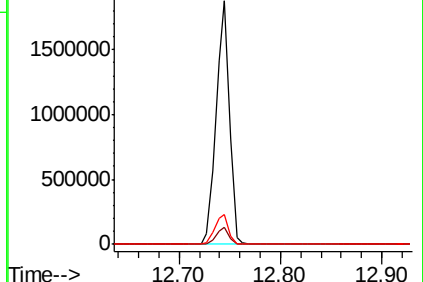
6/12/2019 9:09:05 AM



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



#81

Benzo(a)anthracene

Concen: 8.234 ng

RT: 13.77 min Scan# 1987

Delta R.T. -0.01 min

Lab File: BF114960.D

Acq: 11 Jun 2019 22:54

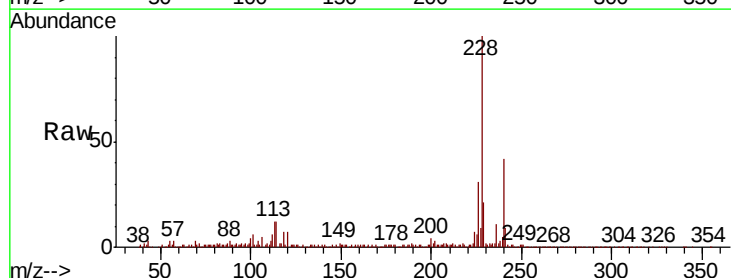
Tgt Ion:228 Resp: 366274

Ion Ratio Lower Upper

228 100

226 31.2 22.8 34.2

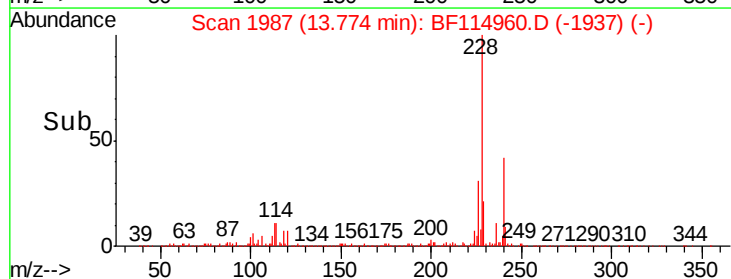
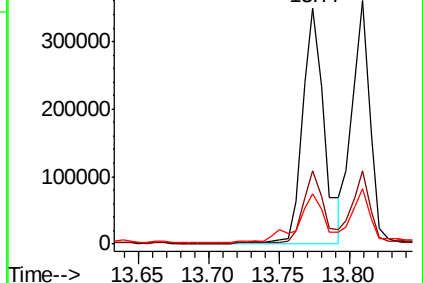
229 21.4 16.6 25.0

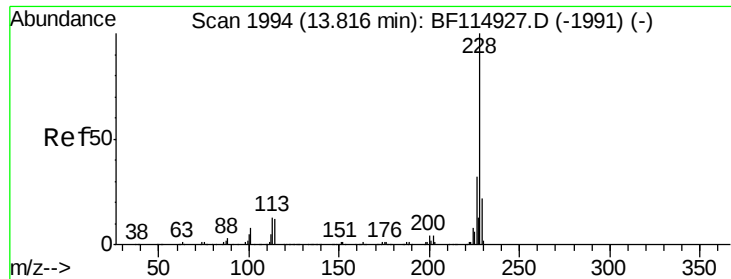


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





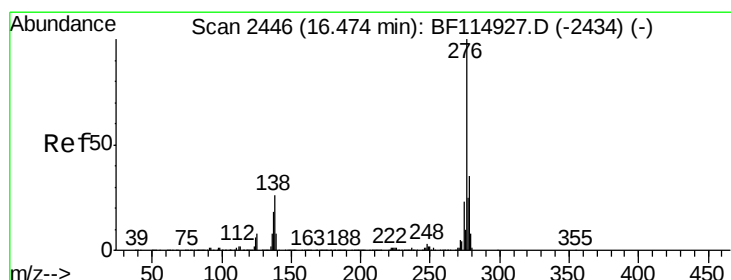
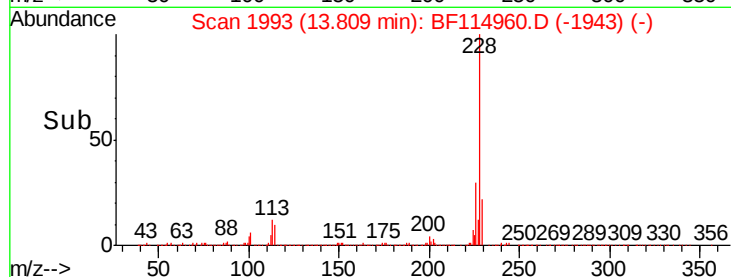
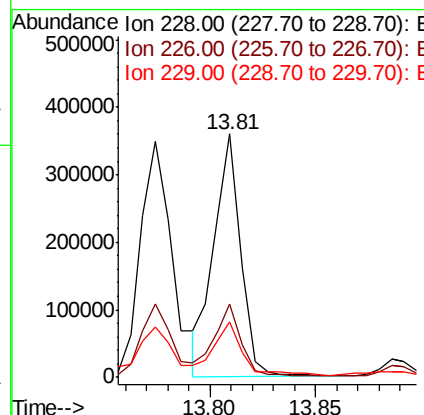
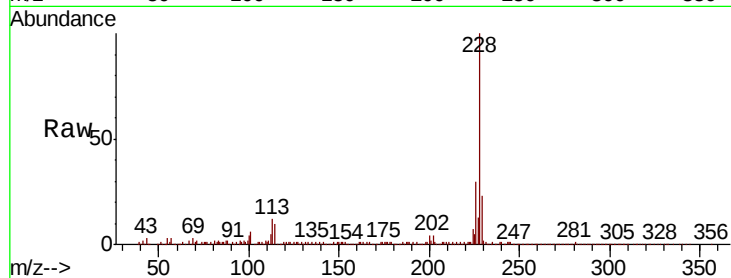
#83  
Chrysene  
Concen: 7.158 ng  
RT: 13.81 min Scan# 1993  
Delta R.T. -0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

Instrument :  
BNA\_F  
ClientSampleId :  
FK-GF-02-041-B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 319751 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 30.2  | 25.8  | 38.8   |
| 229       | 22.6  | 17.2  | 25.8   |

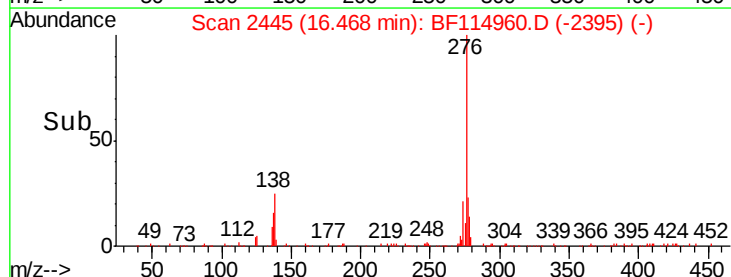
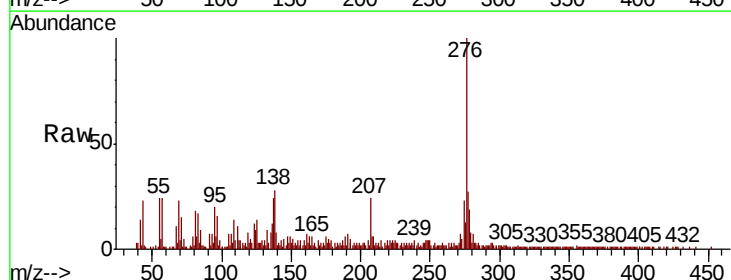
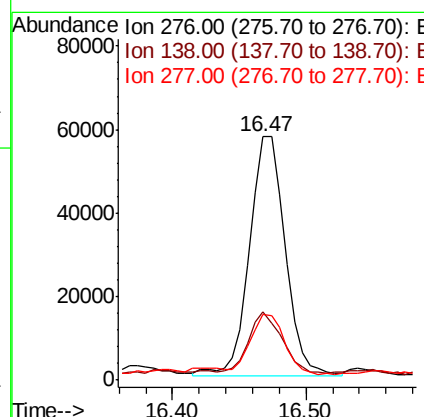
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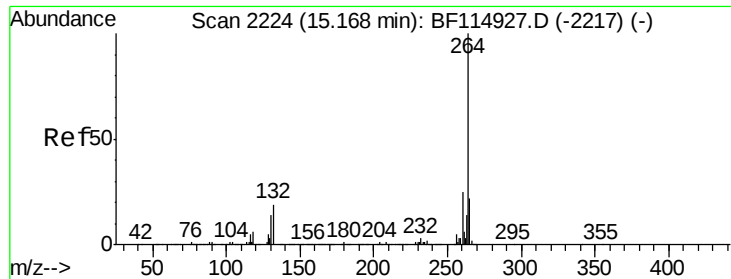
mohammad  
6/12/2019 9:09:05 AM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 2.526 ng  
RT: 16.47 min Scan# 2445  
Delta R.T. -0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 106085 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 23.9  | 23.3  | 34.9   |
| 277       | 24.1  | 20.5  | 30.7   |





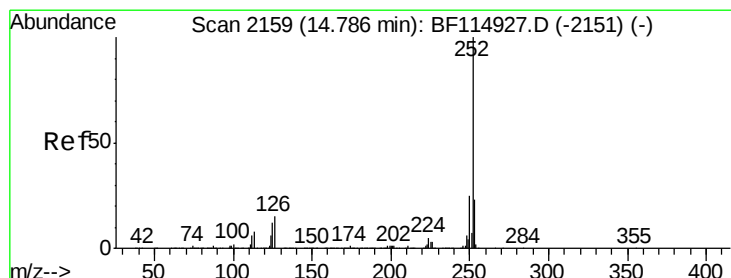
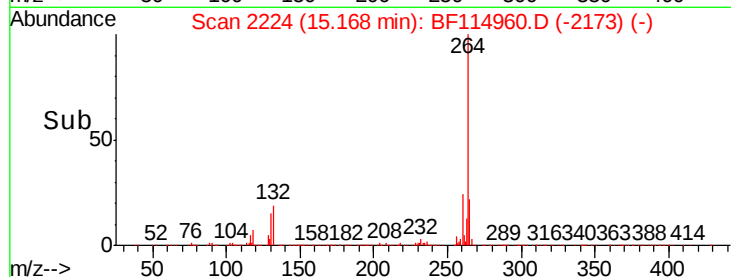
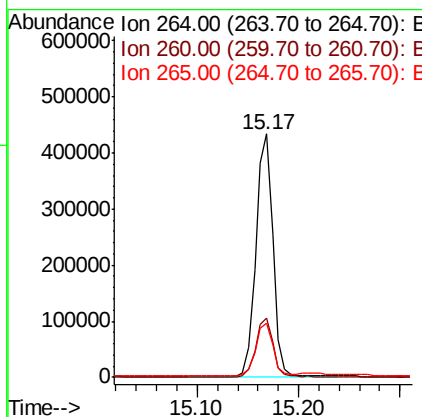
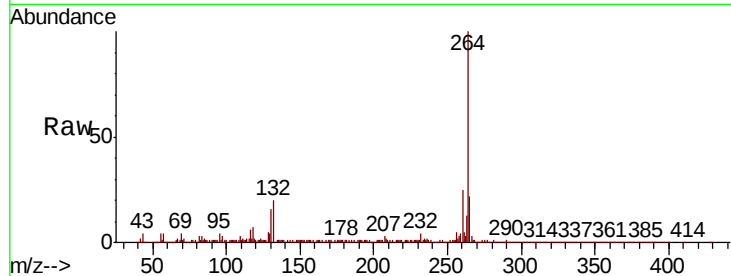
#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.17 min Scan# 2224  
Delta R.T. -0.00 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

Instrument :  
BNA\_F  
ClientSampleId :  
FK-GF-02-041-B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 264   | Resp: | 504011 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 24.6  | 19.7  | 29.5   |
| 265       | 22.5  | 17.5  | 26.3   |

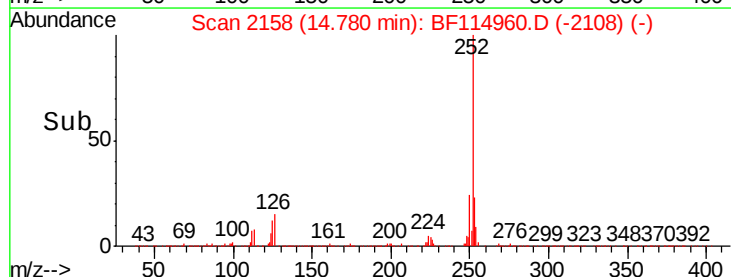
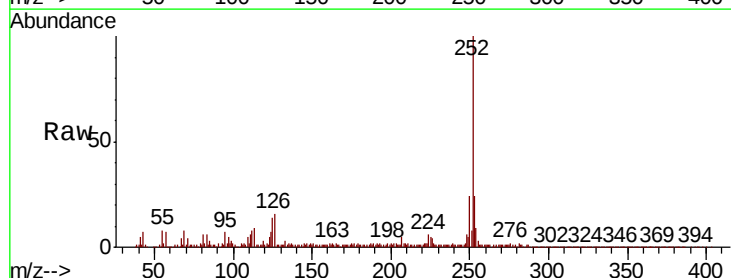
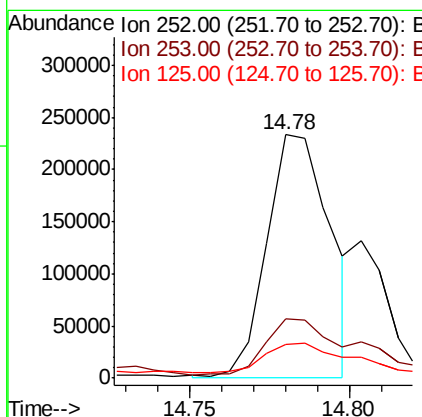
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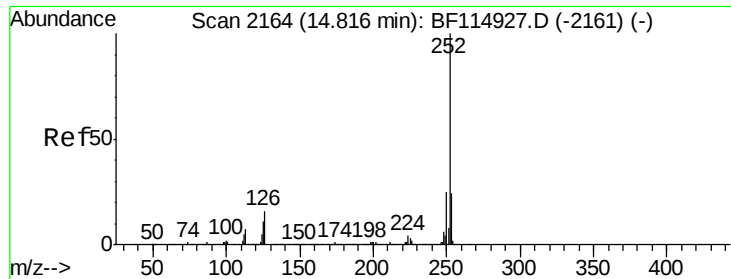
mohammad  
6/12/2019 9:09:05 AM



#88  
Benzo(b)fluoranthene  
Concen: 9.848 ng m  
RT: 14.78 min Scan# 2158  
Delta R.T. -0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 323138 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 24.3  | 18.6  | 28.0   |
| 125       | 14.0  | 9.5   | 14.3   |





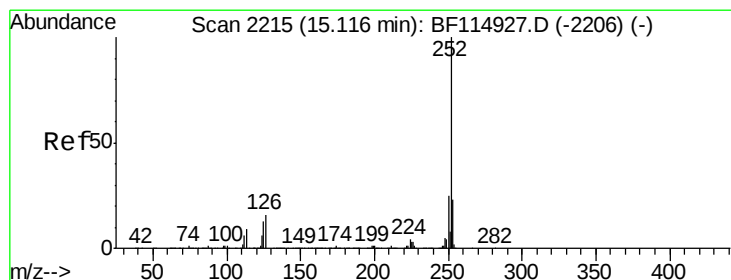
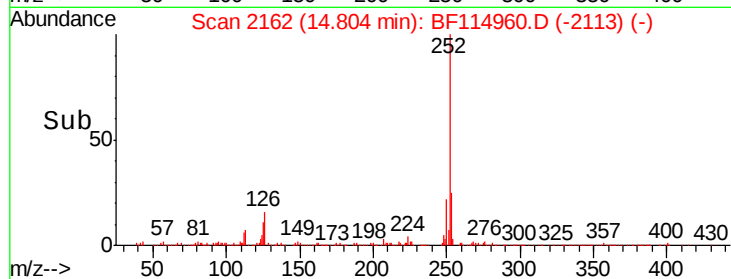
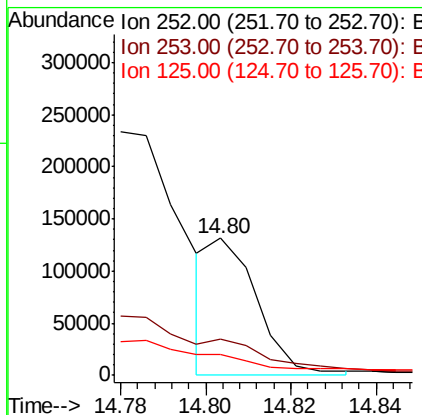
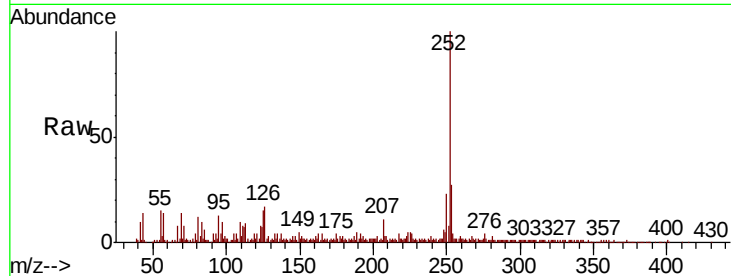
#89  
Benzo(k)fluoranthene  
Concen: 3.598 ng m  
RT: 14.80 min Scan# 2162  
Delta R.T. -0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

Instrument :  
BNA\_F  
ClientSampleId :  
FK-GF-02-041-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 26.7  | 18.6  | 28.0  |
| 125     | 15.4  | 9.2   | 13.8  |

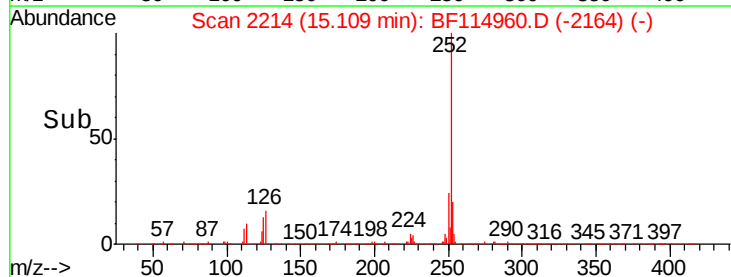
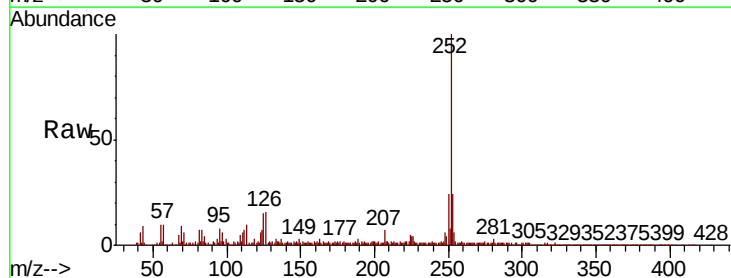
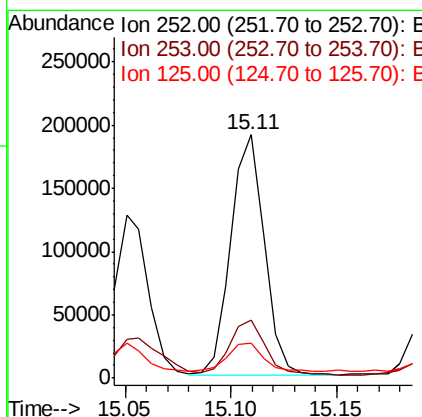
Manual Integrations  
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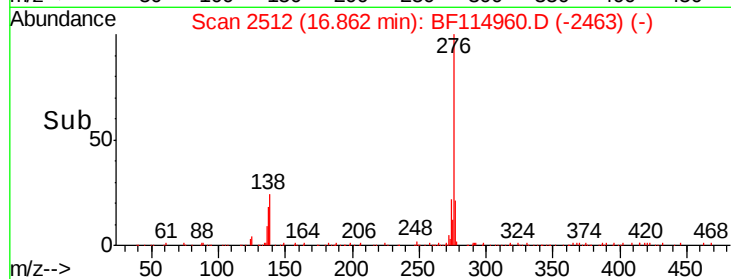
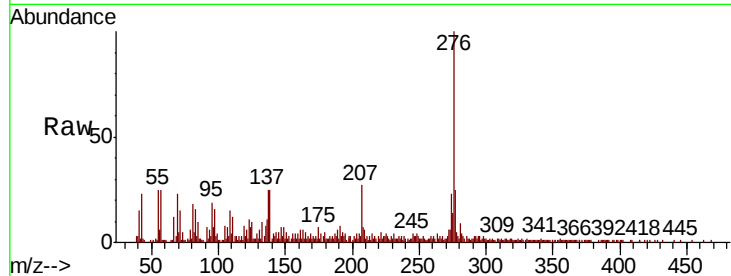
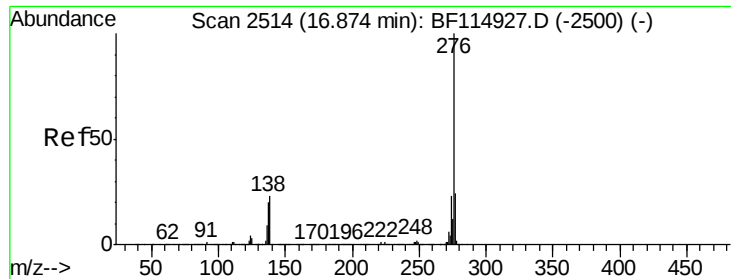
mohammad  
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#90  
Benzo(a)pyrene  
Concen: 7.340 ng  
RT: 15.11 min Scan# 2214  
Delta R.T. -0.01 min  
Lab File: BF114960.D  
Acq: 11 Jun 2019 22:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.9  | 18.2  | 27.2  |
| 125     | 14.5  | 10.1  | 15.1  |





#92  
 Benzo(a,h,i)perylene  
 Concen: 3.955 ng  
 RT: 16.86 min Scan# 2512  
 Delta R.T. -0.01 min  
 Lab File: BF114960.D  
 Acq: 11 Jun 2019 22:54

Instrument :  
 BNA\_F  
 ClientSampleId :  
 FK-GF-02-041-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.7  | 19.0  | 28.6  |
| 138     | 25.4  | 18.7  | 28.1  |

Manual Integrations  
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