

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF063018\  
 Data File : BF107010.D  
 Acq On : 30 Jun 2018 13:16  
 Operator : JU/SJ  
 Sample : J3248-09 5X  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EO-03-062818-B

Manual Integrations  
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 7/2/2018 12:29:56 PM

Quant Time: Jul 02 05:05:34 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Jun 29 14:38:29 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.95  | 152  | 63823    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.24  | 136  | 228879   | 20.00  | ng    | -0.01    |
| 38) Acenaphthene-d10        | 10.00 | 164  | 95709    | 20.00  | ng    | -0.01    |
| 63) Phenanthrene-d10        | 11.49 | 188  | 176571   | 20.00  | ng    | -0.01    |
| 75) Chrysene-d12            | 14.14 | 240  | 216174   | 20.00  | ng    | -0.02    |
| 86) Perylene-d12            | 15.69 | 264  | 173555   | 20.00  | ng    | -0.03    |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.59  | 112  | 96902    | 25.71  | ng    | -0.01    |
| 7) Phenol-d6                | 6.60  | 99   | 113481   | 24.11  | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.51  | 82   | 63886    | 15.51  | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol    | 10.79 | 330  | 24887    | 22.44  | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.31  | 172  | 113333   | 6.40   | ng    | -0.02    |
| 78) Terphenyl-d14           | 13.07 | 244  | 134338   | 15.05  | ng    | -0.01    |
| Target Compounds            |       |      |          |        |       |          |
| 70) Phenanthrene            | 11.51 | 178  | 65604    | 7.703  | ng    | 99       |
| 71) Anthracene              | 11.57 | 178  | 27490    | 3.162  | ng    | 99       |
| 74) Fluoranthene            | 12.71 | 202  | 104025   | 11.082 | ng    | 95       |
| 77) Pyrene                  | 12.94 | 202  | 141597   | 9.933  | ng    | 99       |
| 80) Benzo(a)anthracene      | 14.14 | 228  | 73034    | 5.543  | ng    | 92       |
| 82) Chrysene                | 14.17 | 228  | 72317m   | 5.966  | ng    |          |
| 85) Indeno(1,2,3-cd)pyrene  | 17.27 | 276  | 22012    | 2.140  | ng    | # 87     |
| 87) Benzo(b)fluoranthene    | 15.23 | 252  | 64351m   | 5.969  | ng    |          |
| 89) Benzo(a)pyrene          | 15.62 | 252  | 52105    | 5.437  | ng    | 94       |
| 91) Benzo(g,h,i)perylene    | 17.75 | 276  | 23032m   | 2.901  | ng    |          |

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

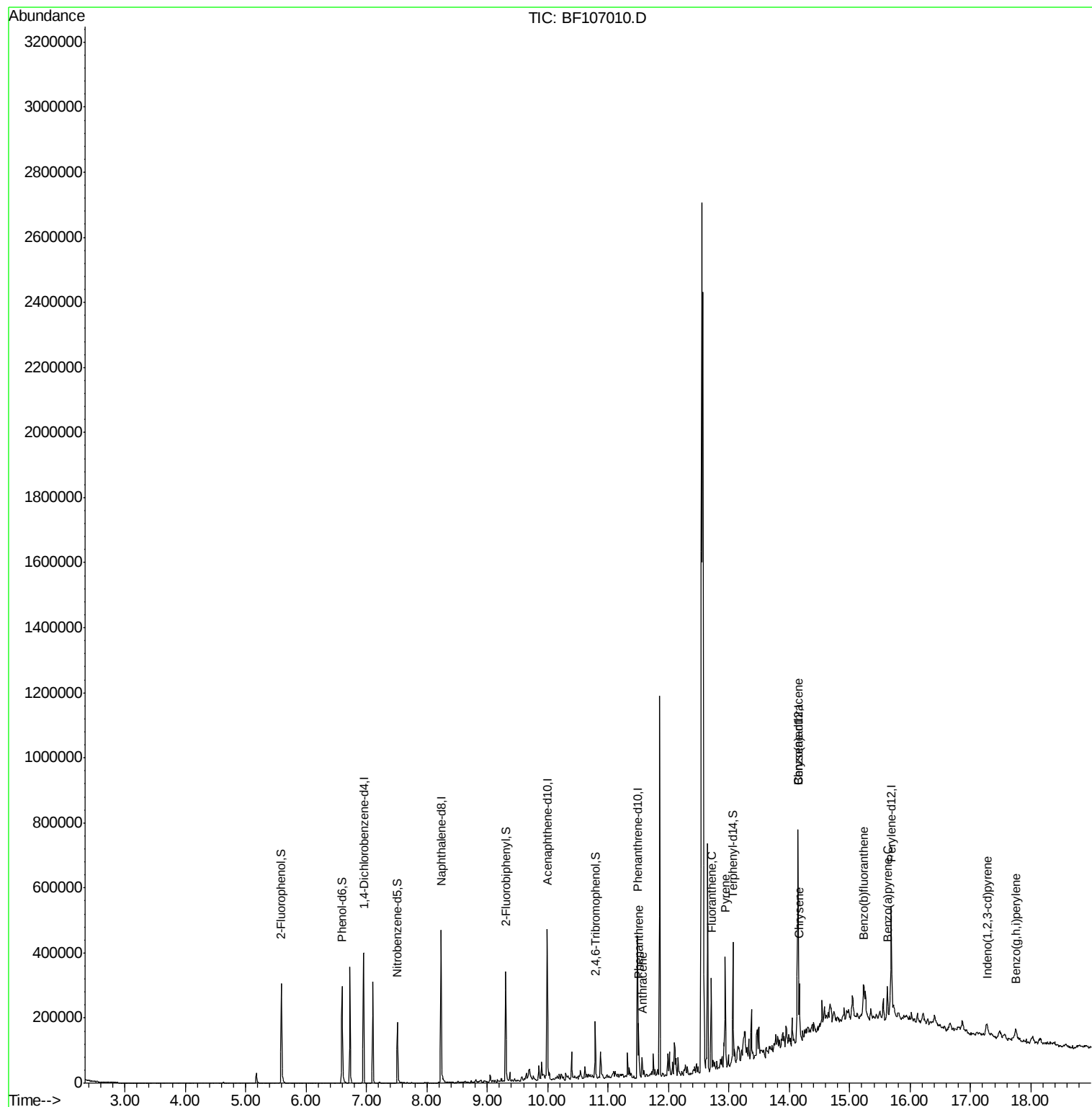
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF063018\  
Data File : BF107010.D  
Acq On : 30 Jun 2018 13:16  
Operator : JU/SJ  
Sample : J3248-09 5X  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

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BNA\_F  
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EO-03-062818-B

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Quant Time: Jul 02 05:05:34 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Jun 29 14:38:29 2018  
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#1

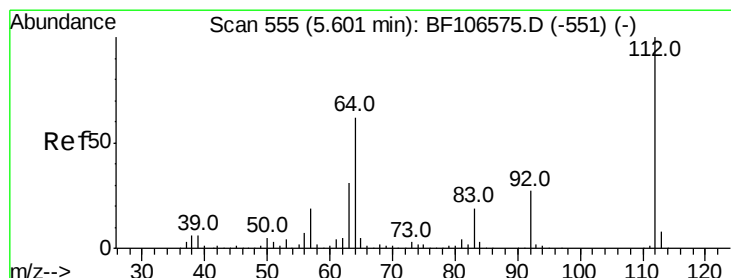
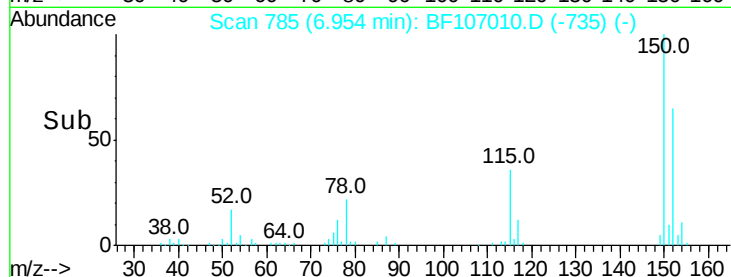
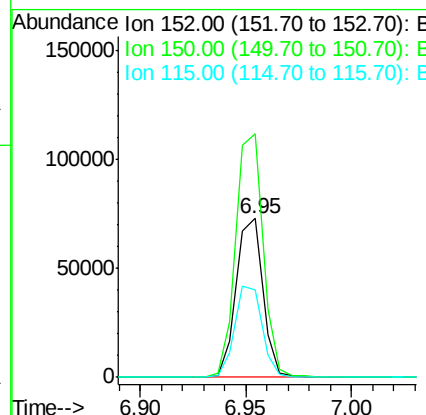
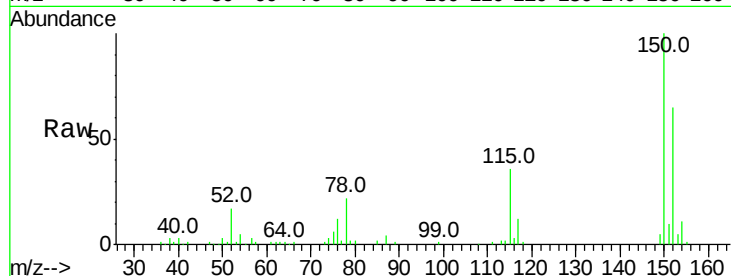
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.95 min Scan# 785  
Delta R.T. -0.01 min  
Lab File: BF107010.D  
Acq: 30 Jun 2018 13:16

Instrument :  
BNA\_F  
ClientSampleId :  
EO-03-062818-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 153.3 | 124.6 | 186.8 |
| 115     | 55.1  | 50.1  | 75.1  |

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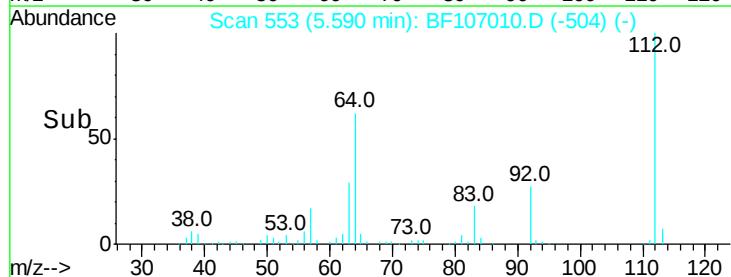
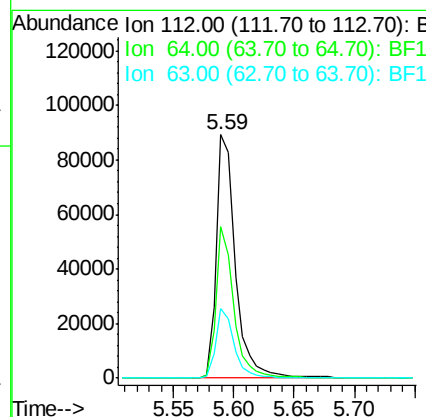
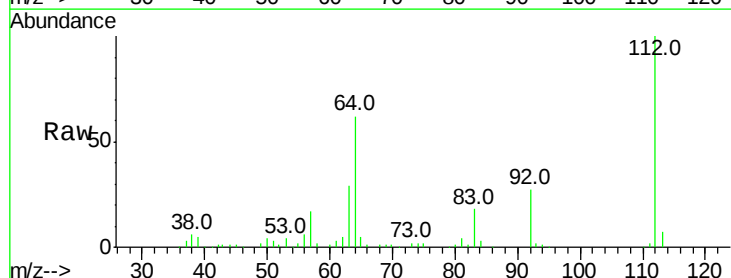
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#5

2-Fluorophenol  
Concen: 25.710 ng  
RT: 5.59 min Scan# 553  
Delta R.T. -0.01 min  
Lab File: BF107010.D  
Acq: 30 Jun 2018 13:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 62.1  | 47.9  | 71.9  |
| 63      | 28.7  | 23.7  | 35.5  |





#7

Phenol-d6

Concen: 24.110 ng

RT: 6.60 min Scan# 724

Delta R.T. -0.02 min

Lab File: BF107010.D

Acq: 30 Jun 2018 13:16

Instrument :

BNA\_F

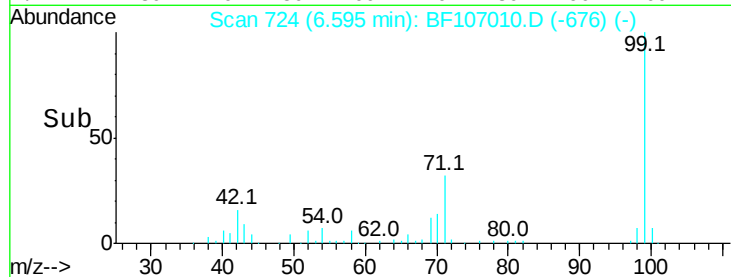
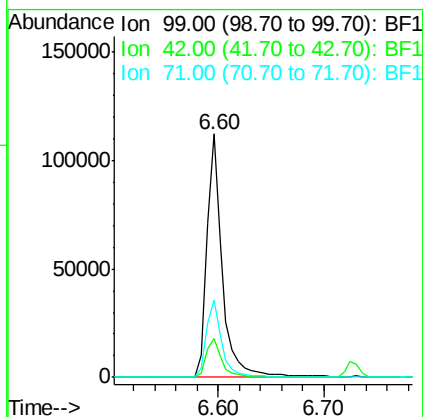
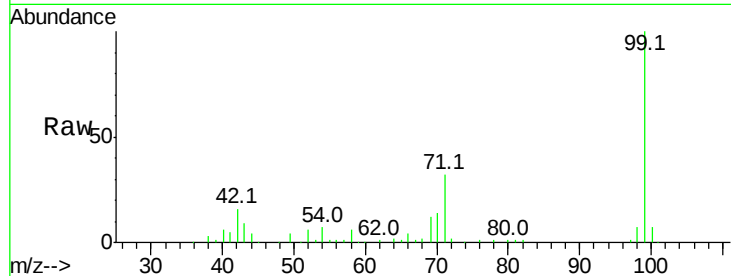
ClientSampleId :

EO-03-062818-B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 113481 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 16.2  | 14.5  | 21.7   |
| 71        | 31.7  | 25.4  | 38.0   |

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#21

Naphthalene-d8

Concen: 20.000 ng

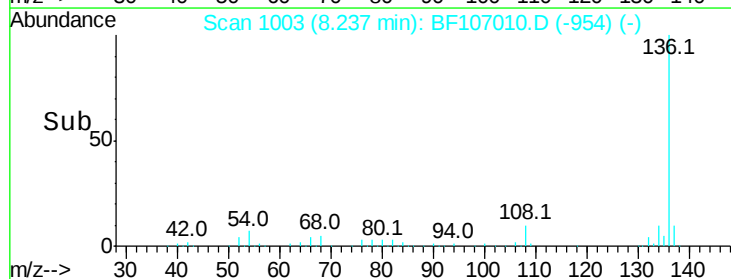
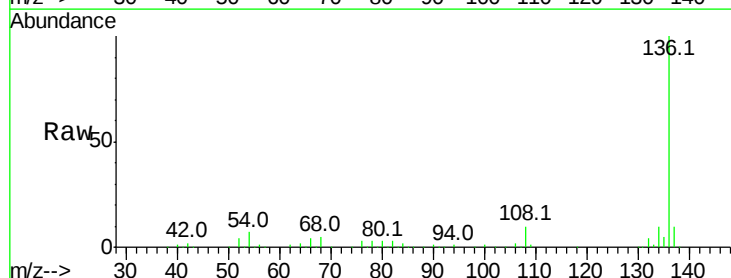
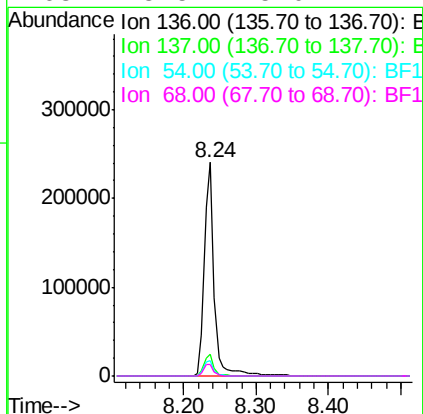
RT: 8.24 min Scan# 1003

Delta R.T. -0.01 min

Lab File: BF107010.D

Acq: 30 Jun 2018 13:16

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 228879 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.2  | 8.9   | 13.3   |
| 54        | 7.0   | 6.6   | 9.8    |
| 68        | 5.5   | 5.0   | 7.4    |





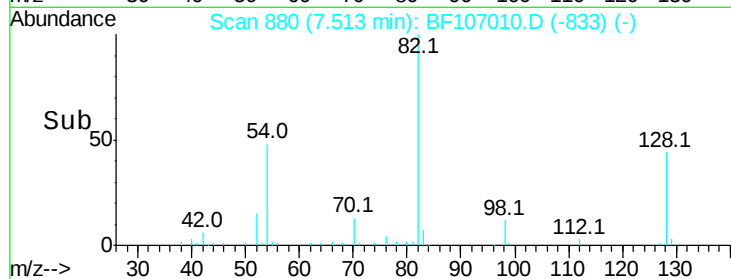
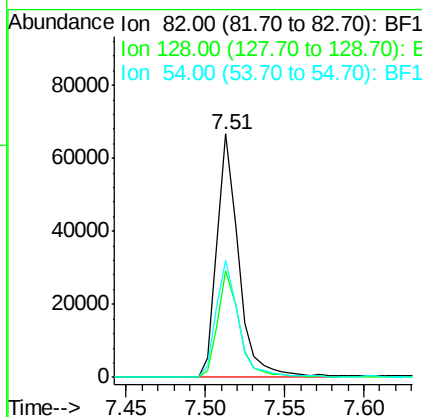
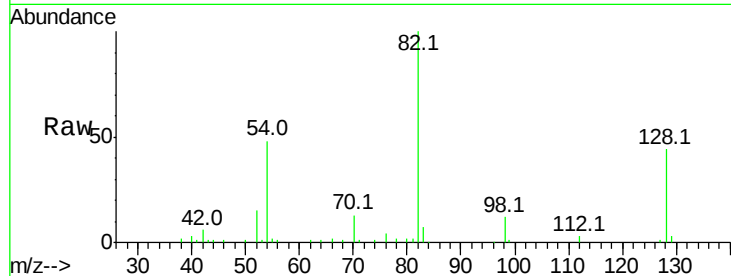
#23  
 Nitrobenzene-d5  
 Concen: 15.512 ng  
 RT: 7.51 min Scan# 880  
 Delta R.T. -0.02 min  
 Lab File: BF107010.D  
 Acq: 30 Jun 2018 13:16

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EO-03-062818-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 43.8  | 36.1  | 54.1  |
| 54      | 47.8  | 41.4  | 62.2  |

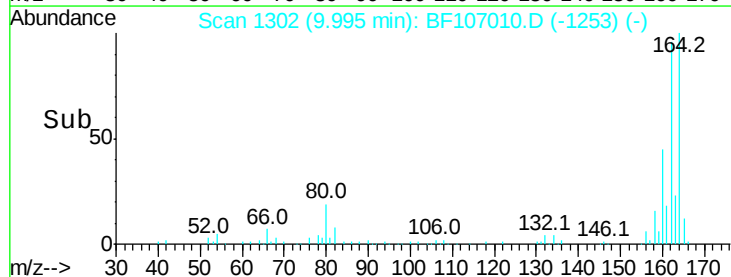
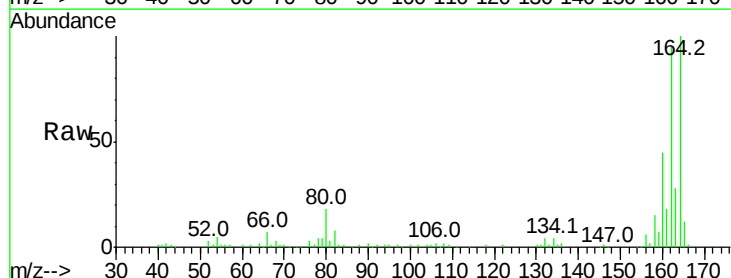
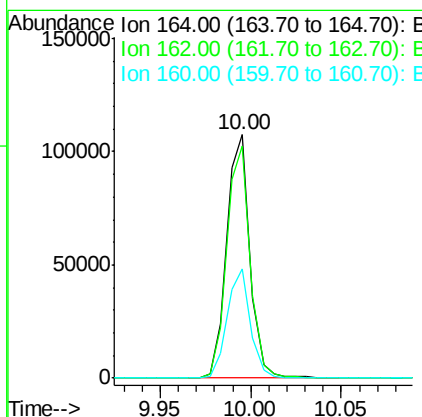
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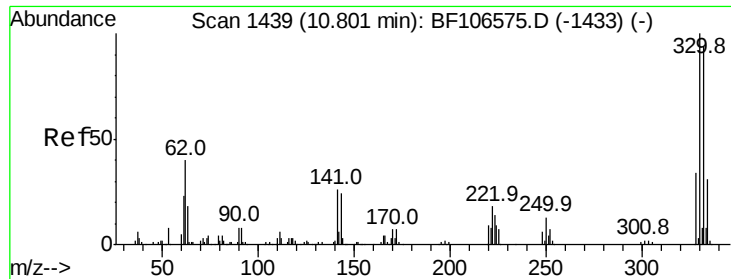
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#38  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 10.00 min Scan# 1302  
 Delta R.T. -0.01 min  
 Lab File: BF107010.D  
 Acq: 30 Jun 2018 13:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 95.4  | 86.1  | 129.1 |
| 160     | 45.0  | 38.3  | 57.5  |





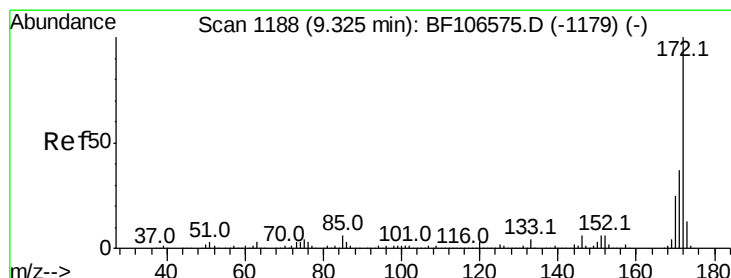
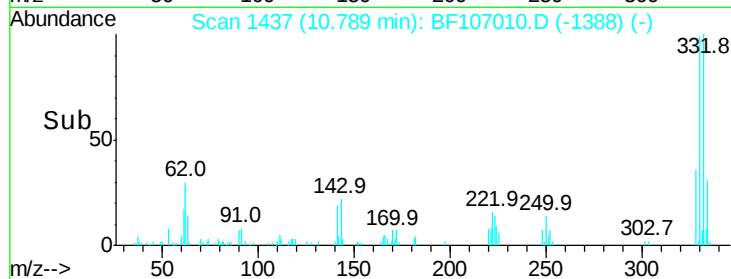
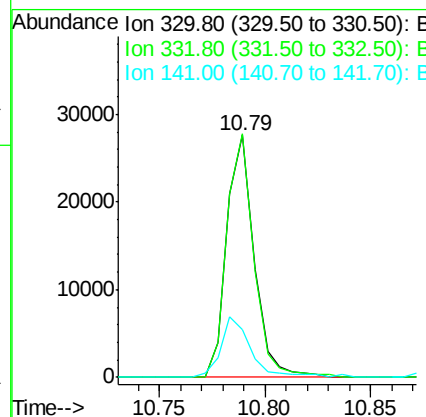
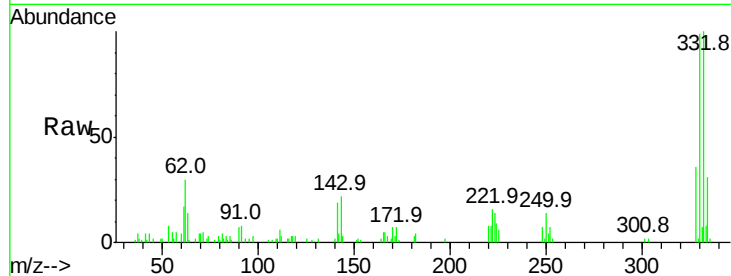
#41  
 2,4,6-Tribromophenol  
 Concen: 22.435 ng  
 RT: 10.79 min Scan# 1437  
 Delta R.T. -0.01 min  
 Lab File: BF107010.D  
 Acq: 30 Jun 2018 13:16

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EO-03-062818-B

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 330     | 100   |      |       |       |
| 332     | 99.7  | 77.0 | 115.6 |       |
| 141     | 27.7  | 29.9 | 44.9  |       |

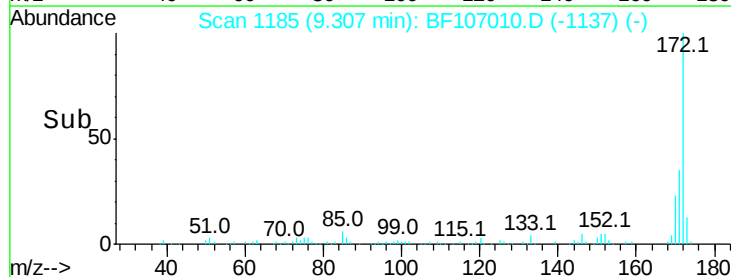
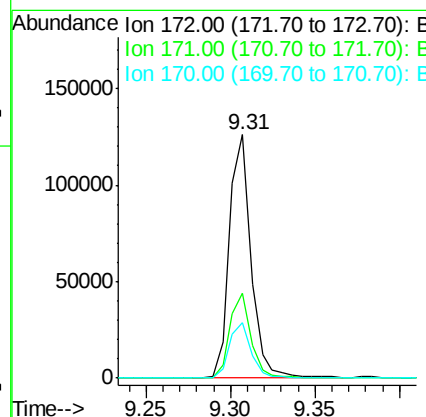
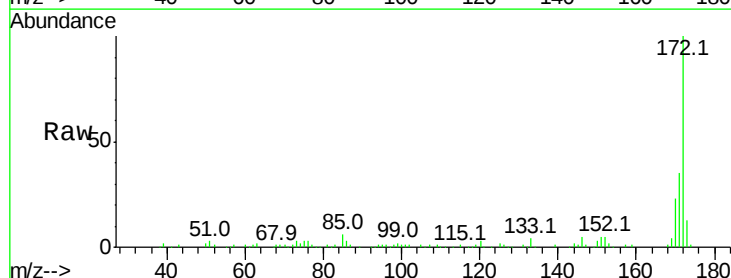
Manual Integrations  
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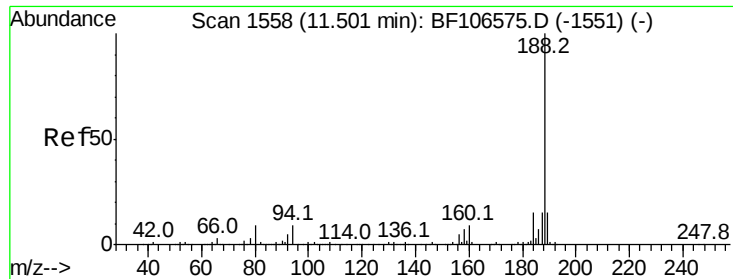
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#44  
 2-Fluorobiphenyl  
 Concen: 6.403 ng  
 RT: 9.31 min Scan# 1185  
 Delta R.T. -0.02 min  
 Lab File: BF107010.D  
 Acq: 30 Jun 2018 13:16

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 172     | 100   |      |       |       |
| 171     | 35.1  | 29.7 | 44.5  |       |
| 170     | 22.7  | 19.6 | 29.4  |       |





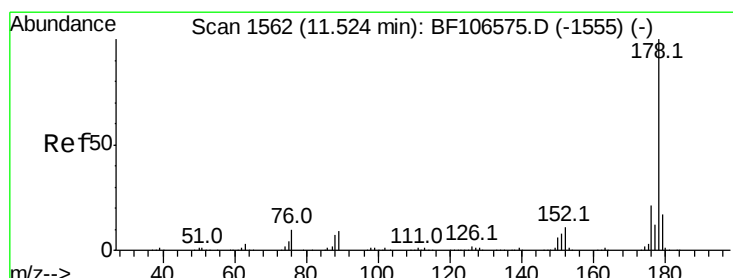
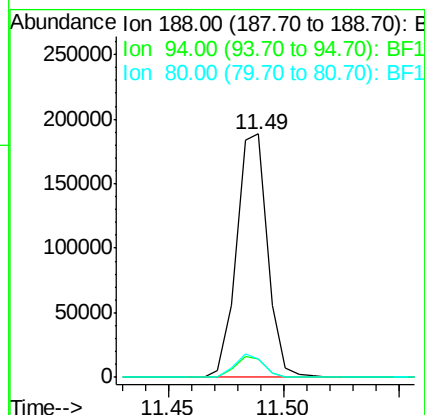
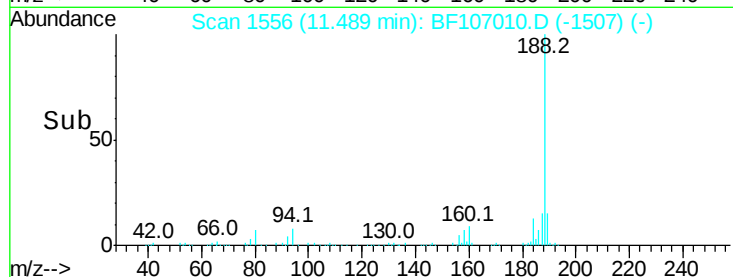
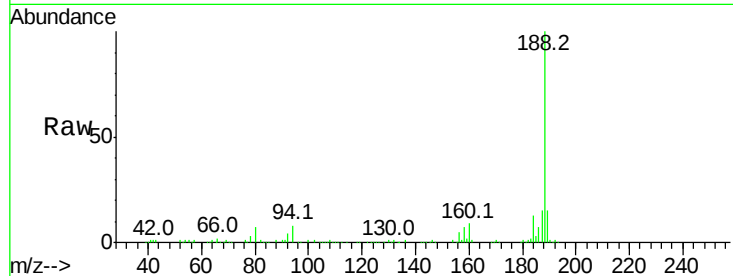
#63  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.49 min Scan# 1556  
 Delta R.T. -0.01 min  
 Lab File: BF107010.D  
 Acq: 30 Jun 2018 13:16

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EO-03-062818-B

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 188     | 100   |            |       |
| 94      | 7.6   | 8.5        | 12.7# |
| 80      | 7.5   | 9.2        | 13.8# |

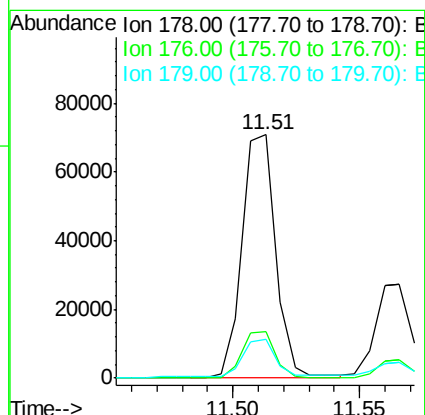
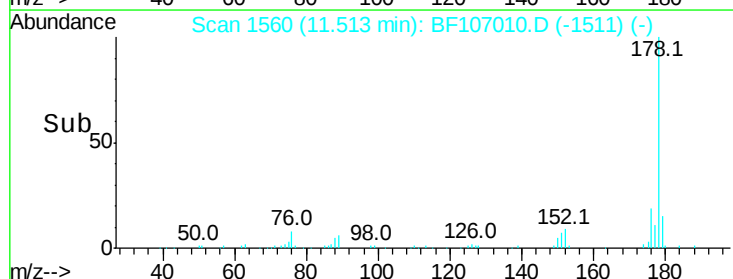
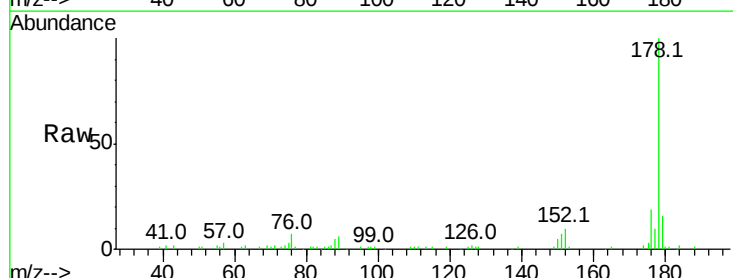
Manual Integrations  
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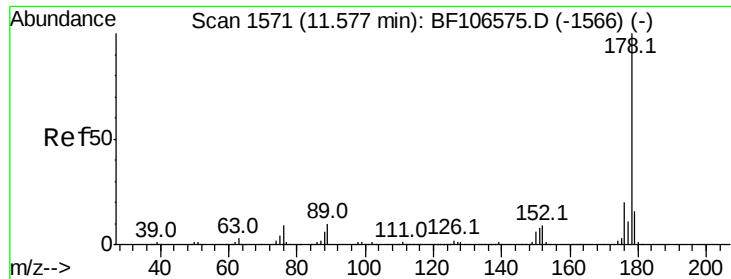
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#70  
 Phenanthrene  
 Concen: 7.703 ng  
 RT: 11.51 min Scan# 1560  
 Delta R.T. -0.01 min  
 Lab File: BF107010.D  
 Acq: 30 Jun 2018 13:16

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 178     | 100   |            |       |
| 176     | 19.3  | 15.8       | 23.8  |
| 179     | 15.8  | 13.0       | 19.6  |





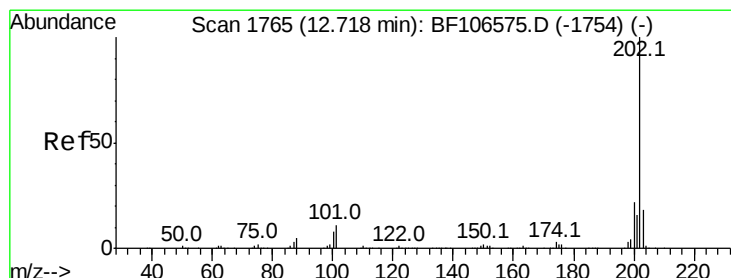
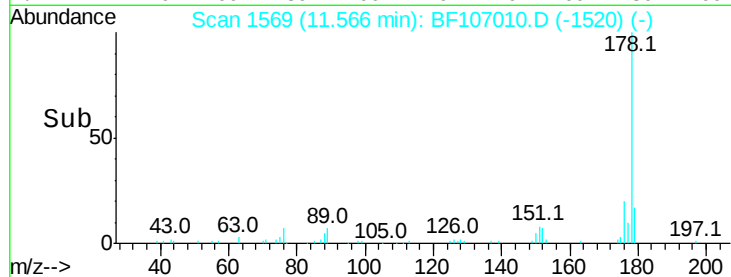
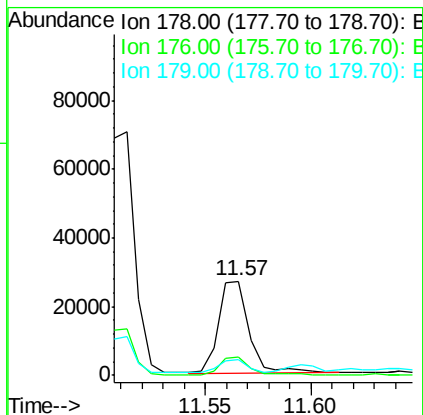
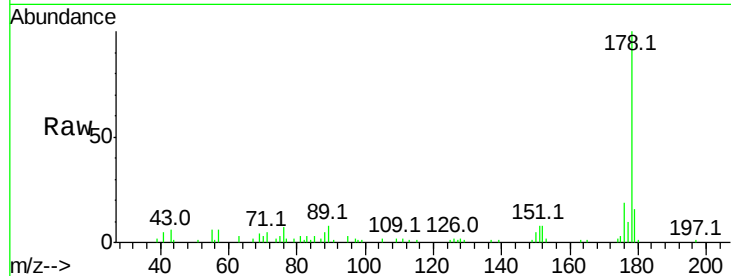
#71  
 Anthracene  
 Concen: 3.162 ng  
 RT: 11.57 min Scan# 1569  
 Delta R.T. -0.01 min  
 Lab File: BF107010.D  
 Acq: 30 Jun 2018 13:16

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EO-03-062818-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.4  | 15.4  | 23.2  |
| 179     | 16.4  | 12.6  | 19.0  |

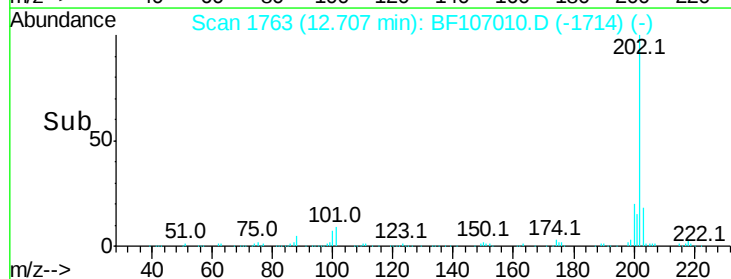
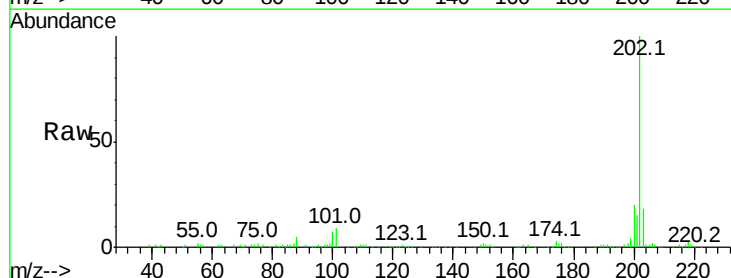
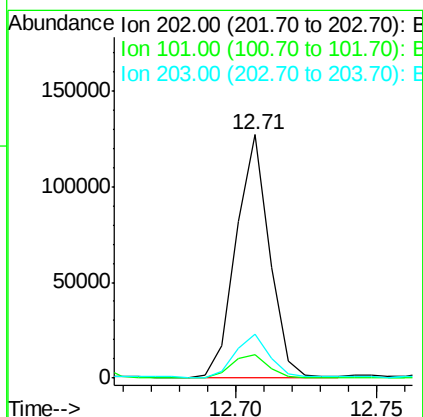
Manual Integrations  
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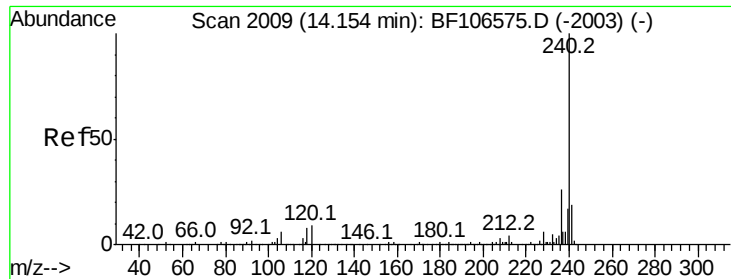
Sohil  
 7/2/2018 12:29:56 PM



#74  
 Fluoranthene  
 Concen: 11.082 ng  
 RT: 12.71 min Scan# 1763  
 Delta R.T. -0.01 min  
 Lab File: BF107010.D  
 Acq: 30 Jun 2018 13:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.4   | 0.0   | 34.1  |
| 203     | 17.9  | 0.0   | 38.1  |





#75

Chrysene-d12

Concen: 20.000 ng

RT: 14.14 min Scan# 2007

Delta R.T. -0.02 min

Lab File: BF107010.D

Acq: 30 Jun 2018 13:16

Instrument :

BNA\_F

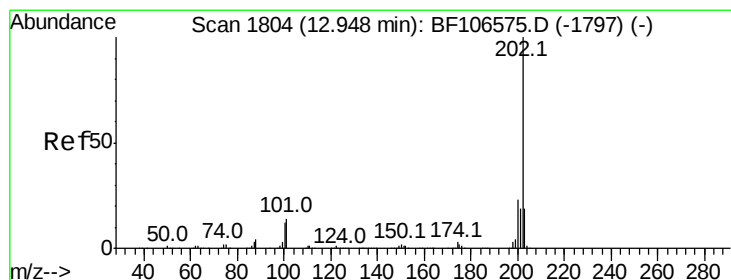
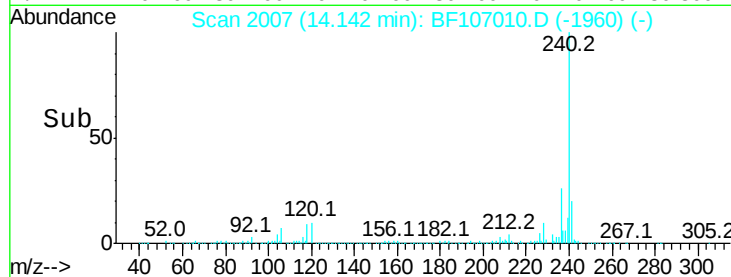
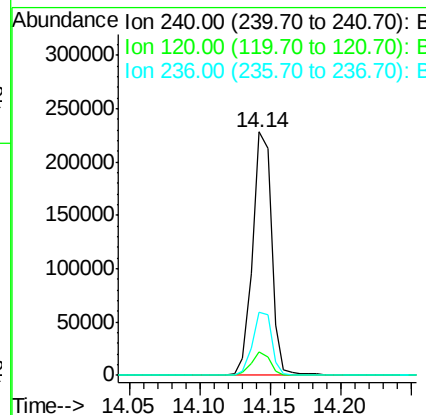
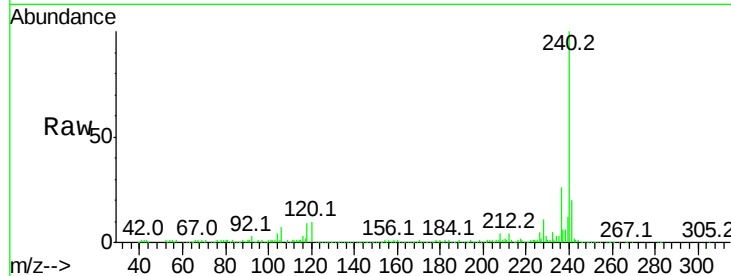
ClientSampleId :

EO-03-062818-B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 240   | Resp: | 216174 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 9.8   | 9.5   | 14.3   |
| 236       | 25.8  | 20.7  | 31.1   |

Manual Integrations  
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#77

Pyrene

Concen: 9.933 ng

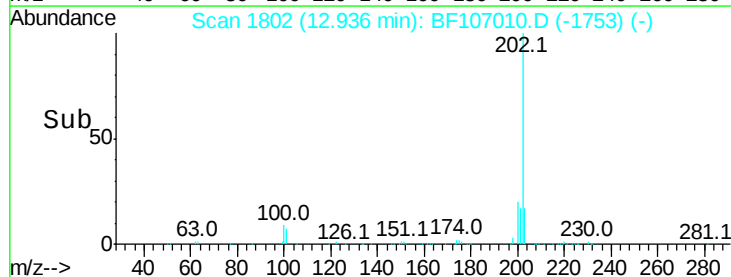
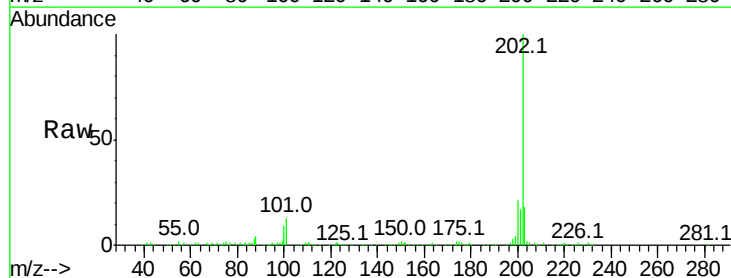
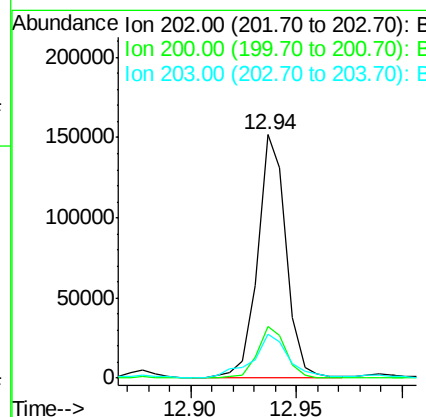
RT: 12.94 min Scan# 1802

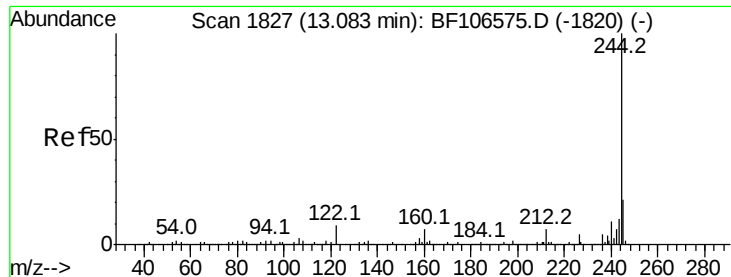
Delta R.T. -0.01 min

Lab File: BF107010.D

Acq: 30 Jun 2018 13:16

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 141597 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 21.1  | 17.4  | 26.2   |
| 203       | 17.9  | 14.3  | 21.5   |





#78

Terphenyl-d14

Concen: 15.053 ng

RT: 13.07 min Scan# 1825

Delta R.T. -0.01 min

Lab File: BF107010.D

Acq: 30 Jun 2018 13:16

Instrument :

BNA\_F

ClientSampleId :

EO-03-062818-B

Tot Ion:244 Resp: 134338

Ion Ratio Lower Upper

244 100

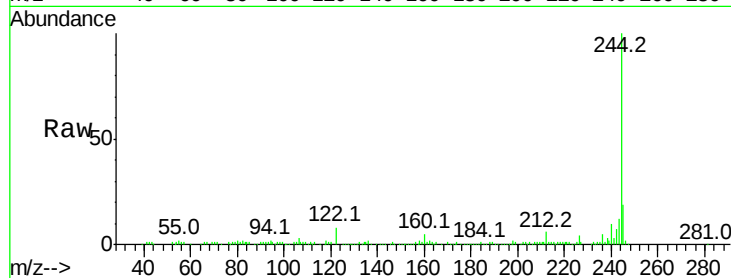
212 6.2 5.4 8.0

122 8.2 11.0 16.4#

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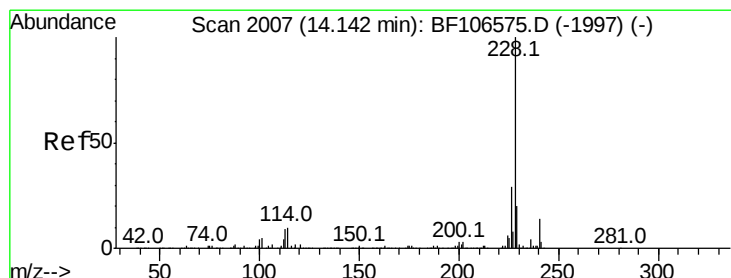
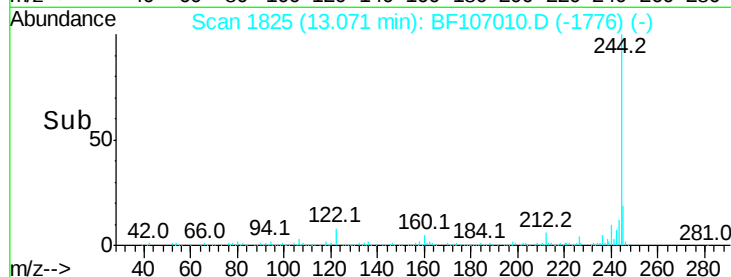
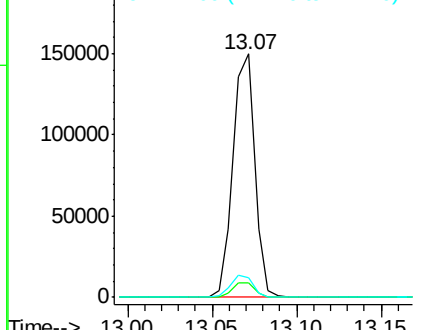
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Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



#80

Benzo(a)anthracene

Concen: 5.543 ng

RT: 14.14 min Scan# 2006

Delta R.T. -0.02 min

Lab File: BF107010.D

Acq: 30 Jun 2018 13:16

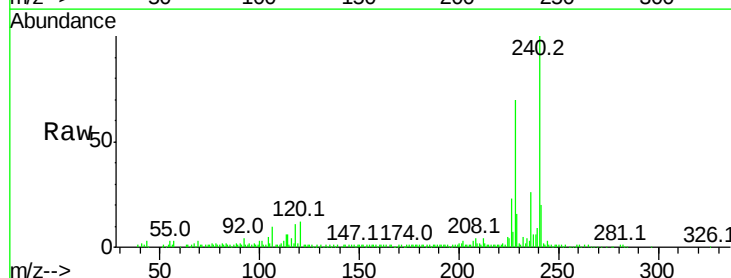
Tgt Ion:228 Resp: 73034

Ion Ratio Lower Upper

228 100

226 33.2 22.6 33.8

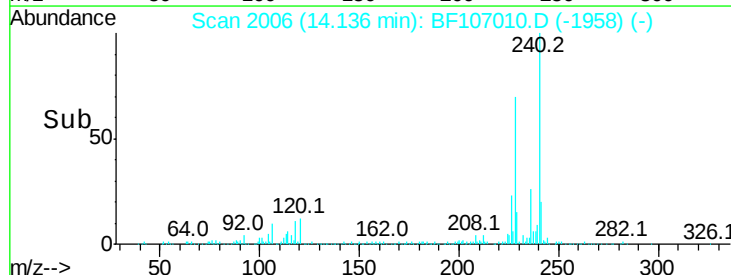
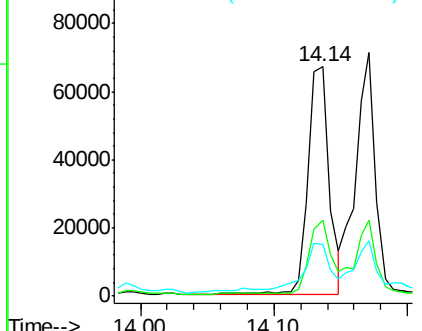
229 22.8 15.8 23.6

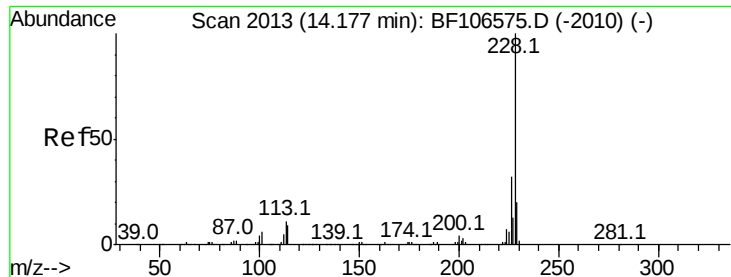


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





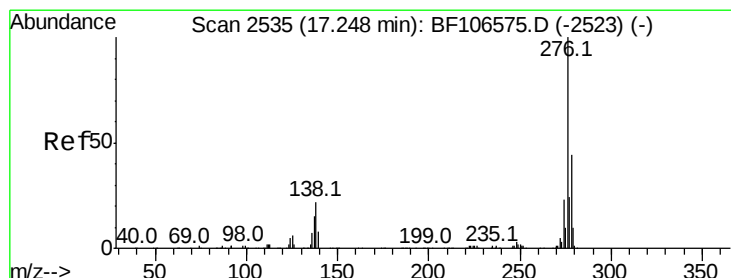
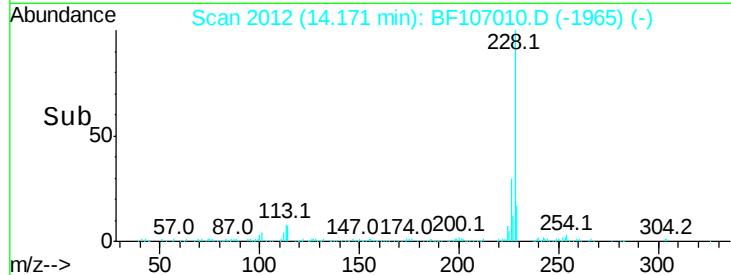
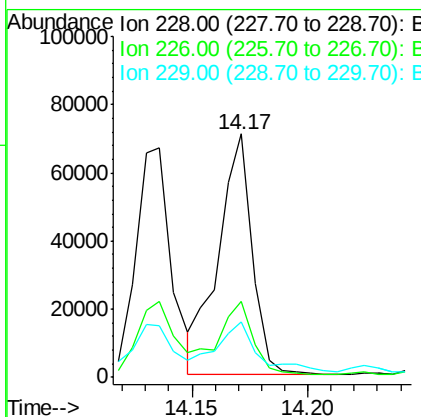
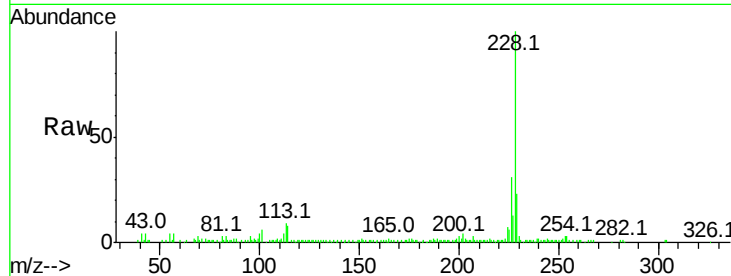
#82  
Chrysene  
Concen: 5.966 ng/mL  
RT: 14.17 min Scan# 2012  
Delta R.T. -0.02 min  
Lab File: BF107010.D  
Acq: 30 Jun 2018 13:16

Instrument :  
BNA\_F  
ClientSampleId :  
EO-03-062818-B

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 72317 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 30.9  | 25.0  | 37.6  |
| 229       | 23.0  | 16.2  | 24.4  |

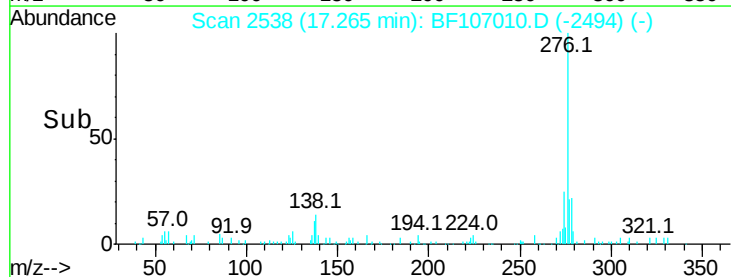
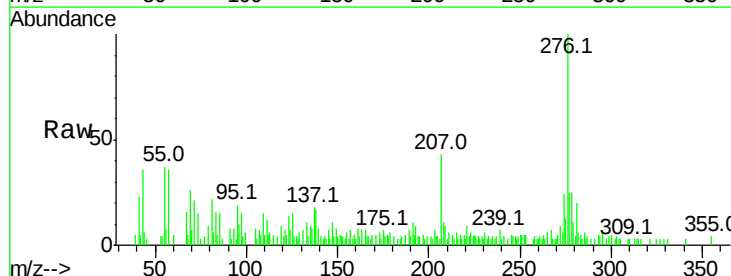
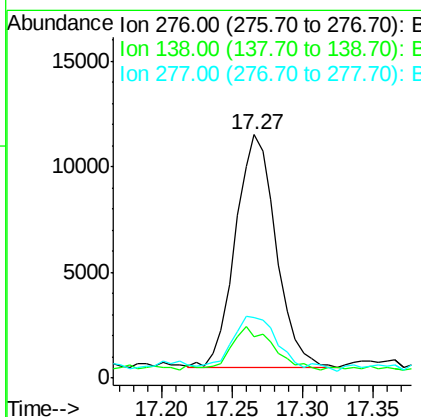
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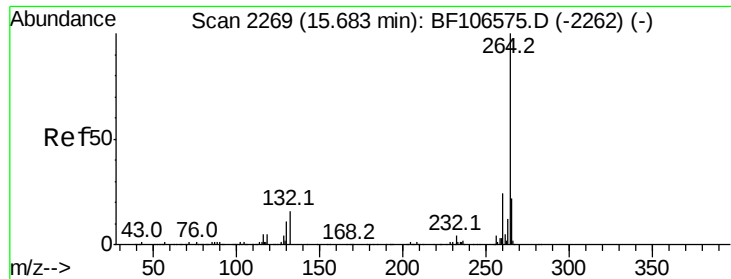
Sohil  
7/2/2018 12:29:56 PM



#85  
Indeno(1,2,3-cd)pyrene  
Concen: 2.140 ng  
RT: 17.27 min Scan# 2538  
Delta R.T. -0.04 min  
Lab File: BF107010.D  
Acq: 30 Jun 2018 13:16

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 22012 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 19.2  | 25.0  | 37.6# |
| 277       | 24.0  | 20.1  | 30.1  |





#86

Pervlene-d12

Concen: 20.000 ng

RT: 15.69 min Scan# 2270

Delta R.T. -0.03 min

Lab File: BF107010.D

Acq: 30 Jun 2018 13:16

Instrument :

BNA\_F

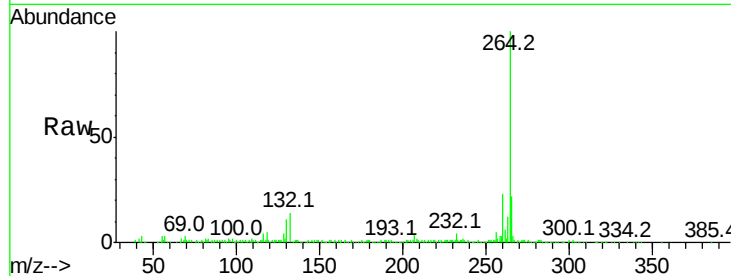
ClientSampleId :

EO-03-062818-B

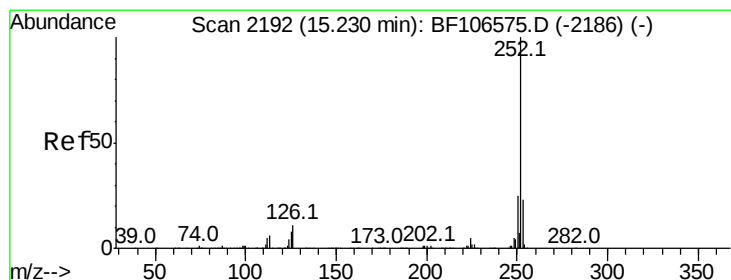
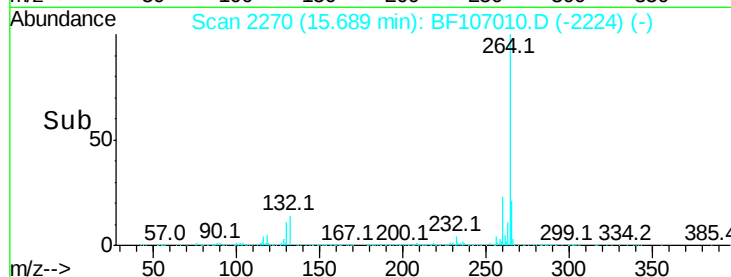
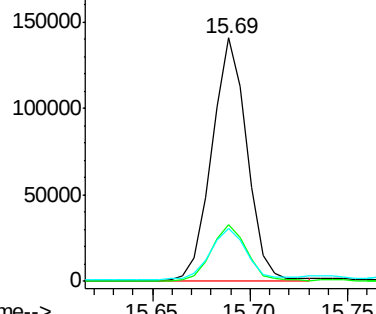
|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 264  | Resp: | 173555 |
| Ion Ratio |      | Lower | Upper  |
| 264       | 100  |       |        |
| 260       | 23.4 | 19.2  | 28.8   |
| 265       | 21.8 | 17.5  | 26.3   |

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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: 5.969 ng m

RT: 15.23 min Scan# 2192

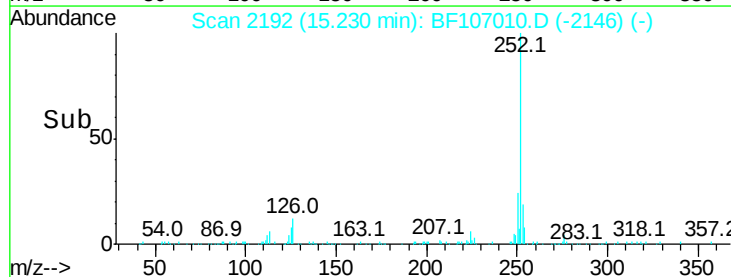
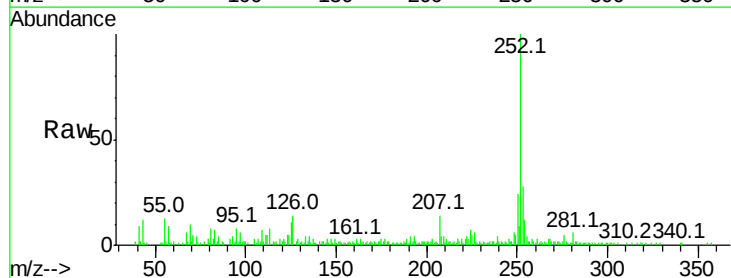
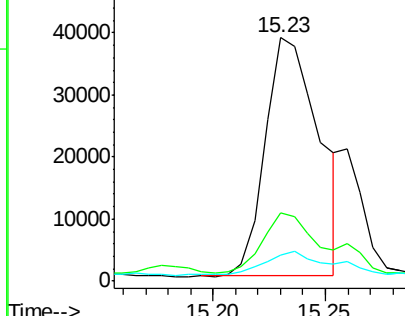
Delta R.T. -0.03 min

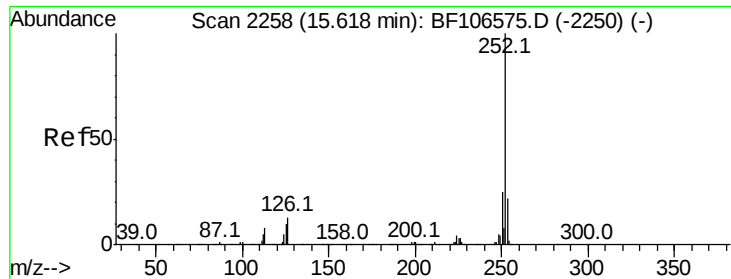
Lab File: BF107010.D

Acq: 30 Jun 2018 13:16

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 252  | Resp: | 64351 |
| Ion Ratio |      | Lower | Upper |
| 252       | 100  |       |       |
| 253       | 28.2 | 17.0  | 25.6# |
| 125       | 10.9 | 9.0   | 13.6  |

Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E





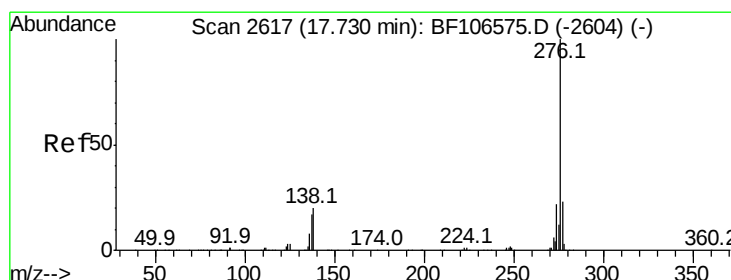
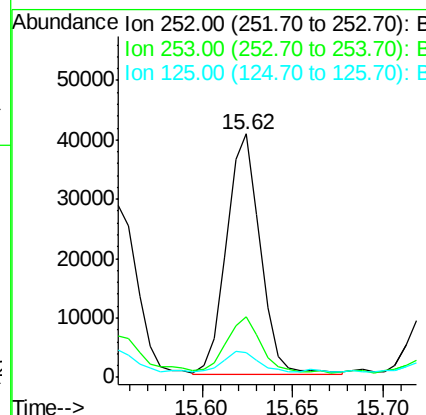
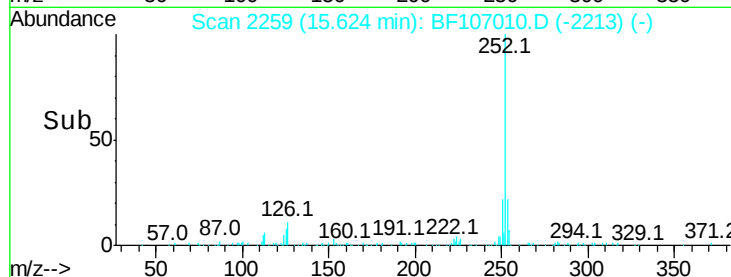
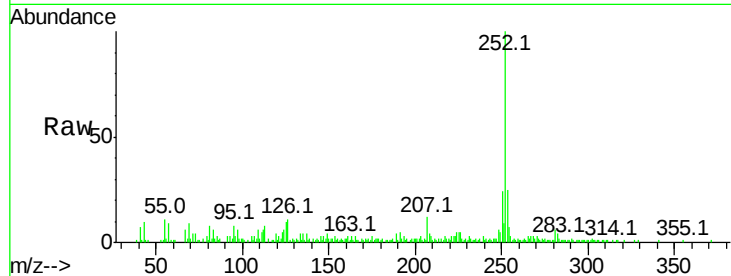
#89  
Benzo(a)pyrene  
Concen: 5.437 ng  
RT: 15.62 min Scan# 2259  
Delta R.T. -0.03 min  
Lab File: BF107010.D  
Acq: 30 Jun 2018 13:16

Instrument :  
BNA\_F  
ClientSampleId :  
EO-03-062818-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.7  | 17.1  | 25.7  |
| 125     | 10.2  | 9.8   | 14.6  |

Manual Integrations  
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#91  
Benzo(g,h,i)perylene  
Concen: 2.901 ng m  
RT: 17.75 min Scan# 2620  
Delta R.T. -0.04 min  
Lab File: BF107010.D  
Acq: 30 Jun 2018 13:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 29.2  | 17.9  | 26.9# |
| 138     | 21.2  | 21.8  | 32.8# |

