

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF031119\  
 Data File : BF112959.D  
 Acq On : 11 Mar 2019 17:20  
 Operator : JU/SJ  
 Sample : K1785-03  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 2019-03-05-DUP-SD

Manual Integrations  
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Sohil  
 3/12/2019 4:28:37 PM

Quant Time: Mar 12 05:02:20 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022719.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Mar 01 15:40:43 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.73  | 152  | 158238   | 20.00  | ng    | -0.01    |
| 21) Naphthalene-d8          | 8.01  | 136  | 626793   | 20.00  | ng    | -0.01    |
| 39) Acenaphthene-d10        | 9.76  | 164  | 329285   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.24 | 188  | 742468   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12            | 13.86 | 240  | 600705   | 20.00  | ng    | -0.01    |
| 87) Perylene-d12            | 15.27 | 264  | 555817   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.34  | 112  | 1094633  | 107.61 | ng    | 0.00     |
| 7) Phenol-d6                | 6.37  | 99   | 1422963  | 111.36 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.29  | 82   | 885745   | 84.56  | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol    | 10.55 | 330  | 476950   | 136.44 | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.09  | 172  | 1308732  | 61.15  | ng    | -0.01    |
| 79) Terphenyl-d14           | 12.82 | 244  | 1570994  | 50.70  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 10) Phenol                  | 6.38  | 94   | 35938    | 2.410  | ng    | 91       |
| 50) Dimethylphthalate       | 9.48  | 163  | 125664   | 5.176  | ng    | 97       |
| 71) Phenanthrene            | 11.26 | 178  | 424703   | 11.497 | ng    | 98       |
| 72) Anthracene              | 11.31 | 178  | 132918   | 3.437  | ng    | 98       |
| 75) Fluoranthene            | 12.44 | 202  | 1334995  | 33.731 | ng    | 98       |
| 78) Pyrene                  | 12.67 | 202  | 1216024  | 24.013 | ng    | 100      |
| 81) Benzo(a)anthracene      | 13.85 | 228  | 687429   | 16.512 | ng    | 97       |
| 83) Chrysene                | 13.89 | 228  | 587168   | 14.398 | ng    | 97       |
| 86) Indeno(1,2,3-cd)pyrene  | 16.62 | 276  | 288336m  | 8.293  | ng    |          |
| 88) Benzo(b)fluoranthene    | 14.87 | 252  | 653960m  | 18.190 | ng    |          |
| 89) Benzo(k)fluoranthene    | 14.89 | 252  | 262192m  | 8.051  | ng    |          |
| 90) Benzo(a)pyrene          | 15.21 | 252  | 486377   | 15.295 | ng    | 97       |
| 91) Dibenzo(a,h)anthracene  | 16.63 | 278  | 81925m   | 3.019  | ng    |          |
| 92) Benzo(a,h,i)perylene    | 17.03 | 276  | 256664   | 9.420  | ng    | 98       |

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

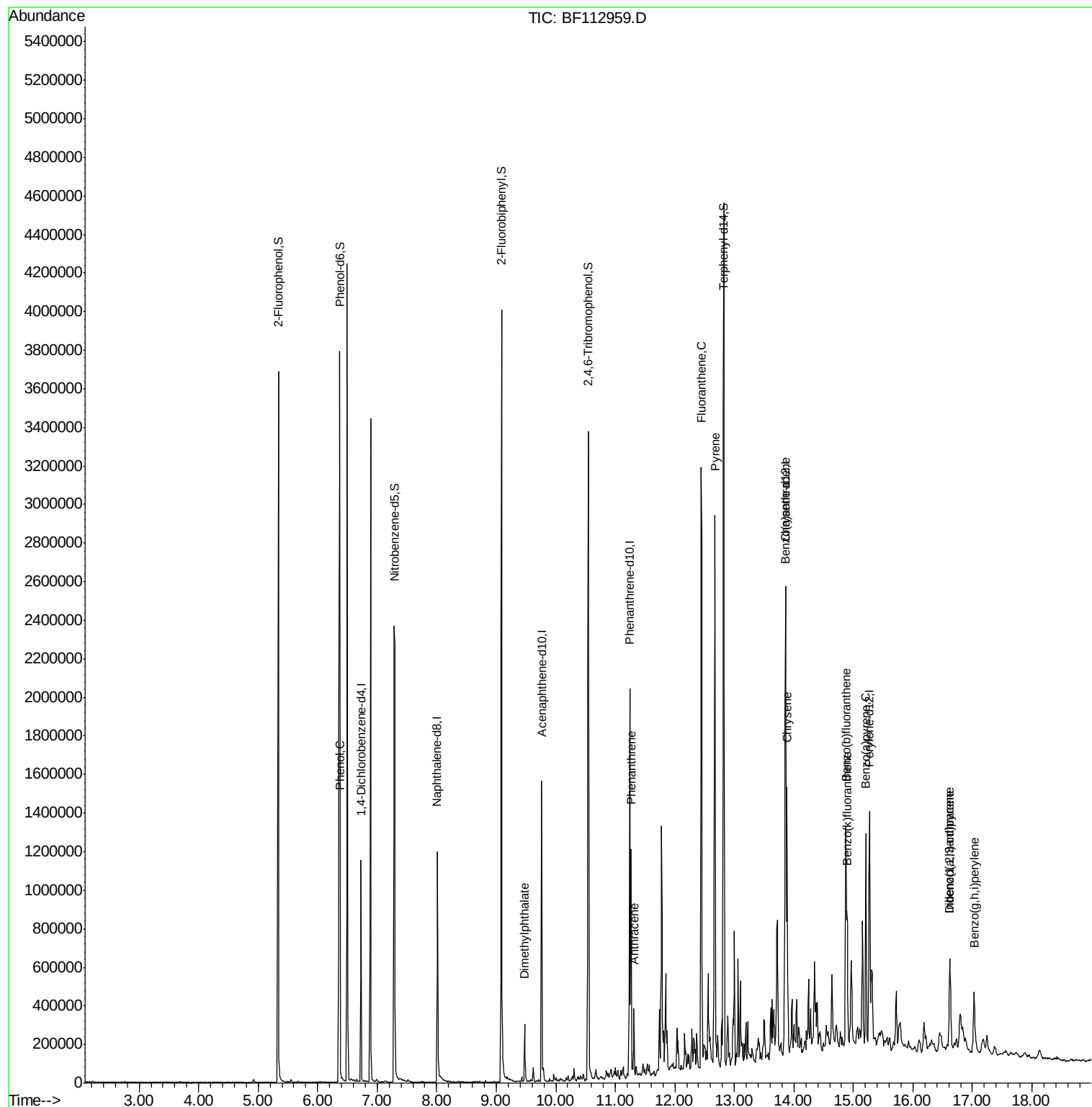
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF031119\  
Data File : BF112959.D  
Acq On : 11 Mar 2019 17:20  
Operator : JU/SJ  
Sample : K1785-03  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

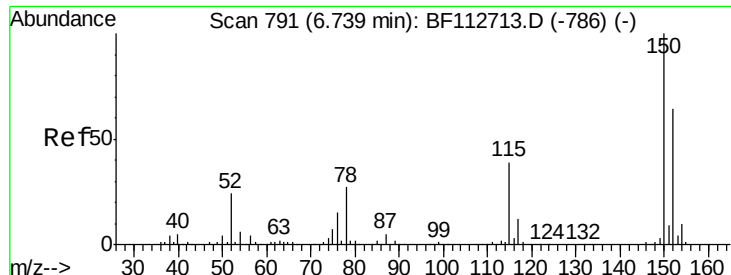
Instrument :  
BNA\_F  
ClientSampleId :  
2019-03-05-DUP-SD

Manual Integrations  
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3/12/2019 4:28:37 PM

Quant Time: Mar 12 05:02:20 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022719.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Mar 01 15:40:43 2019  
Response via : Initial Calibration





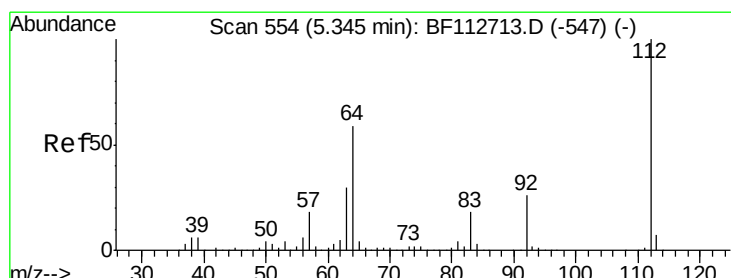
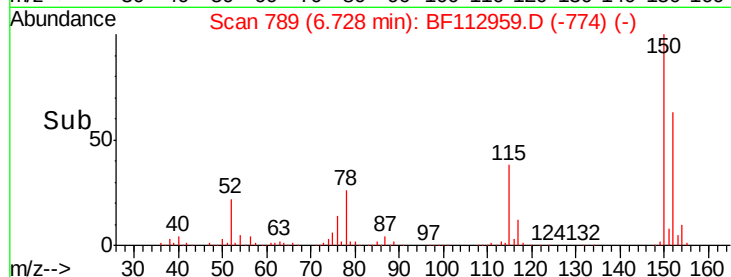
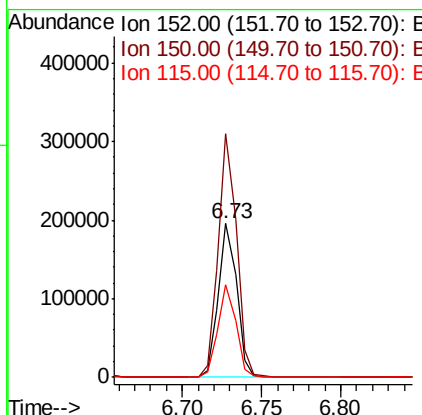
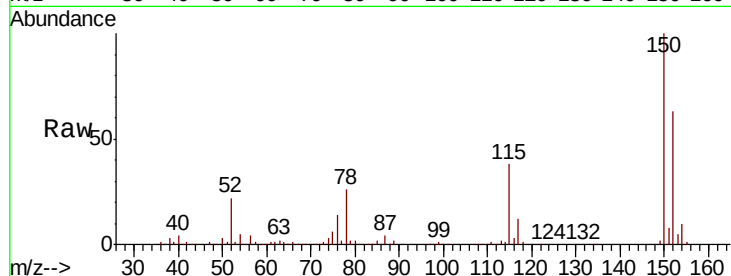
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.73 min Scan# 789  
 Delta R.T. -0.01 min  
 Lab File: BF112959.D  
 Acq: 11 Mar 2019 17:20

Instrument :  
 BNA\_F  
 ClientSampleId :  
 2019-03-05-DUP-SD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 158.4 | 124.2 | 186.2 |
| 115     | 60.3  | 48.2  | 72.4  |

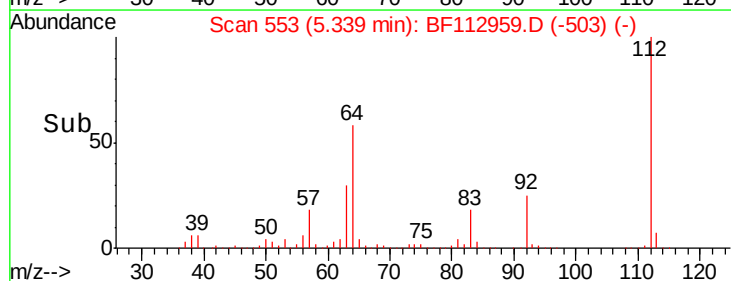
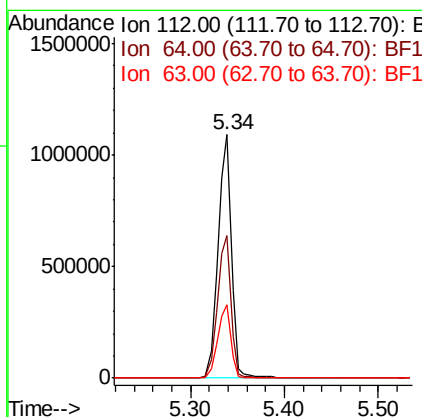
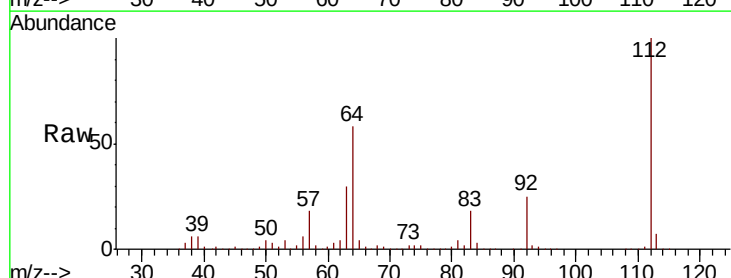
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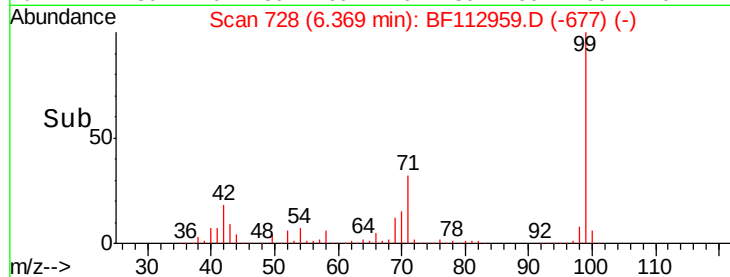
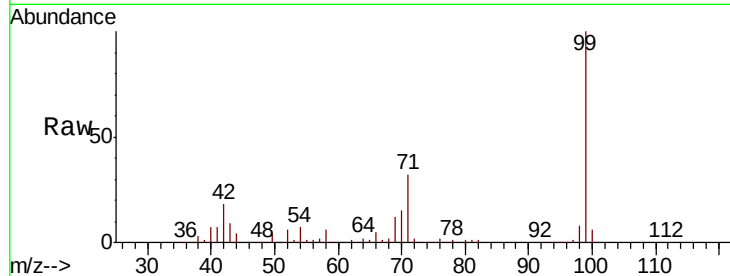
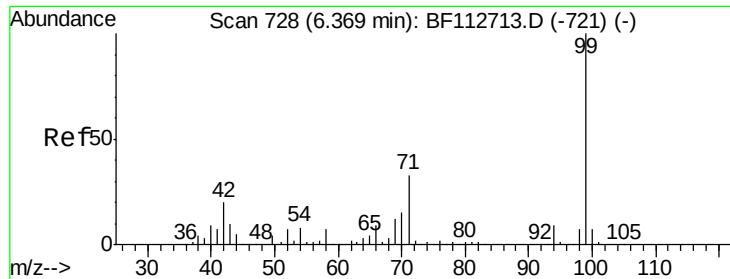
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#5  
 2-Fluorophenol  
 Concen: 107.607 ng  
 RT: 5.34 min Scan# 553  
 Delta R.T. -0.01 min  
 Lab File: BF112959.D  
 Acq: 11 Mar 2019 17:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 58.4  | 47.6  | 71.4  |
| 63      | 29.9  | 24.4  | 36.6  |





#7

Phenol-d6

Concen: 111.357 ng

RT: 6.37 min Scan# 728

Delta R.T. -0.00 min

Lab File: BF112959.D

Acq: 11 Mar 2019 17:20

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 99    | Resp: | 1422963 |
| Ion      | Ratio | Lower | Upper   |
| 99       | 100   |       |         |
| 42       | 18.3  | 16.3  | 24.5    |
| 71       | 31.6  | 26.2  | 39.4    |

Instrument :

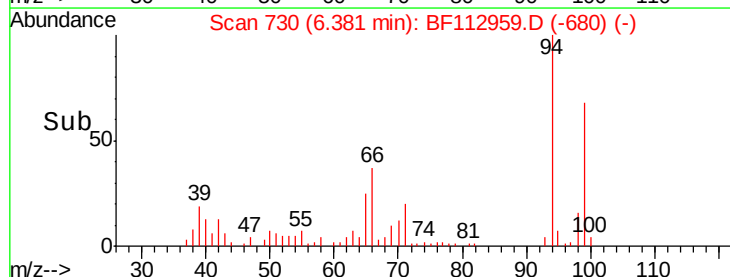
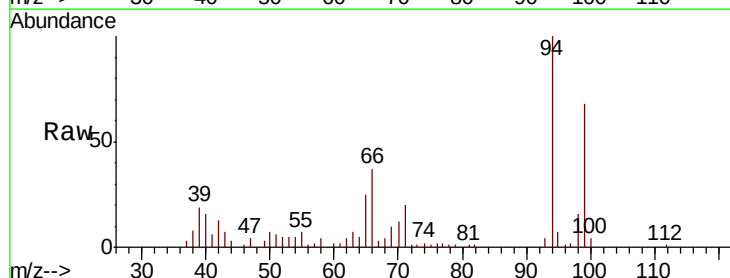
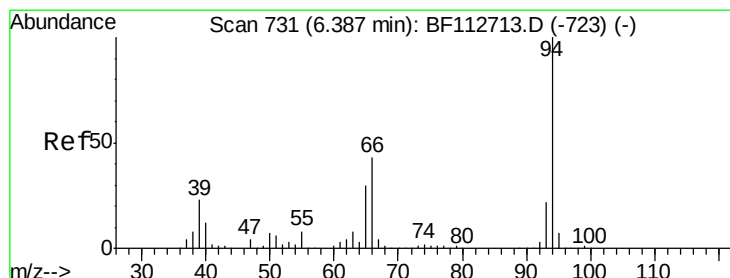
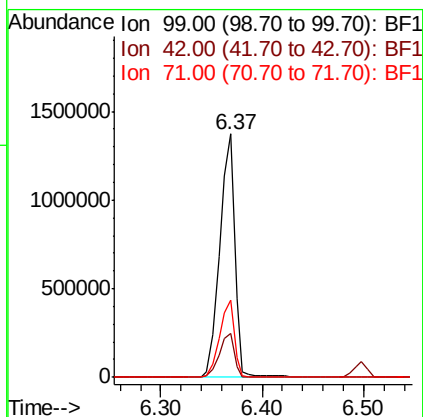
BNA\_F

ClientSampleId :

2019-03-05-DUP-SD

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#10

Phenol

Concen: 2.410 ng

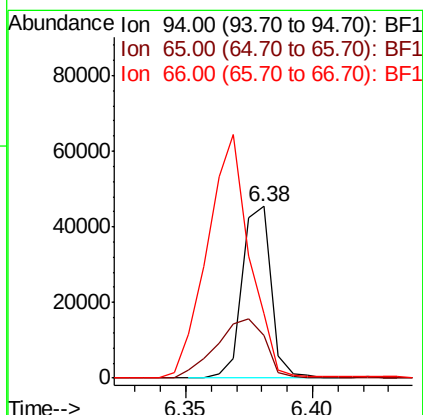
RT: 6.38 min Scan# 730

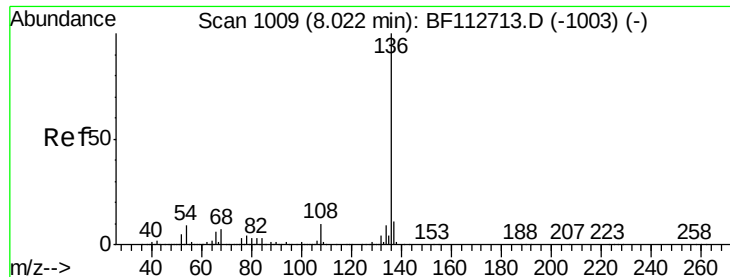
Delta R.T. -0.01 min

Lab File: BF112959.D

Acq: 11 Mar 2019 17:20

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 94    | Resp: | 35938 |
| Ion      | Ratio | Lower | Upper |
| 94       | 100   |       |       |
| 65       | 24.8  | 10.5  | 50.5  |
| 66       | 37.3  | 22.6  | 62.6  |





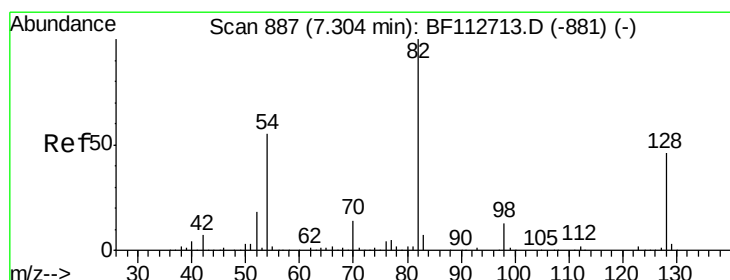
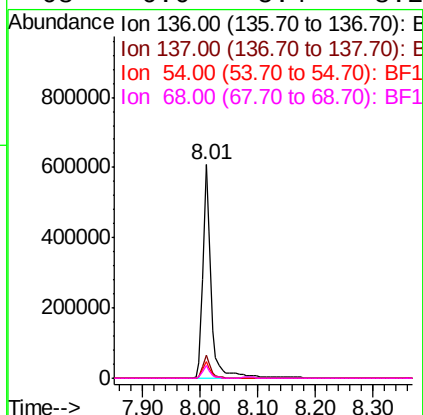
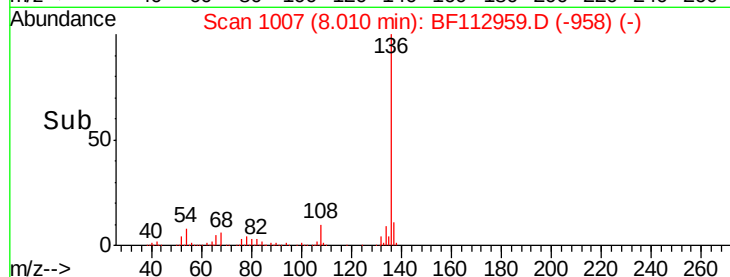
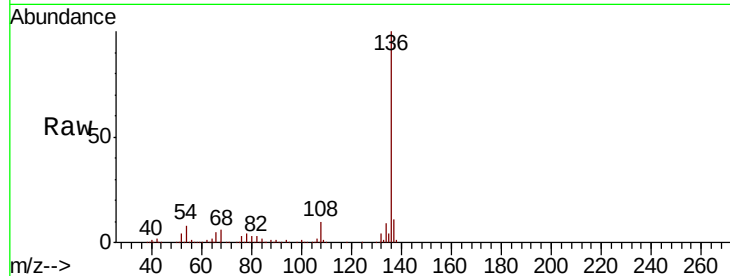
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.01 min Scan# 1007  
Delta R.T. -0.01 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

Instrument :  
BNA\_F  
ClientSampleId :  
2019-03-05-DUP-SD

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 136     | 100   | 626793 |       |       |
| 137     | 10.9  |        | 8.9   | 13.3  |
| 54      | 8.1   |        | 7.3   | 10.9  |
| 68      | 6.0   |        | 5.4   | 8.2   |

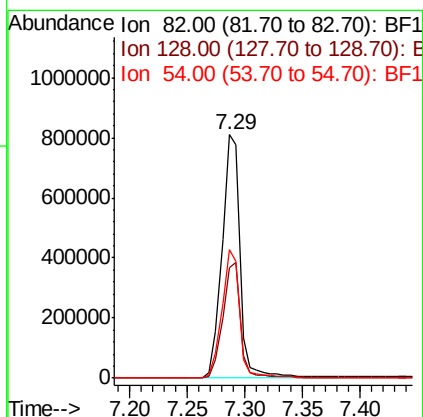
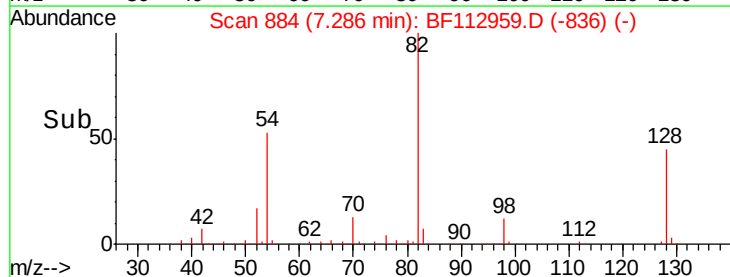
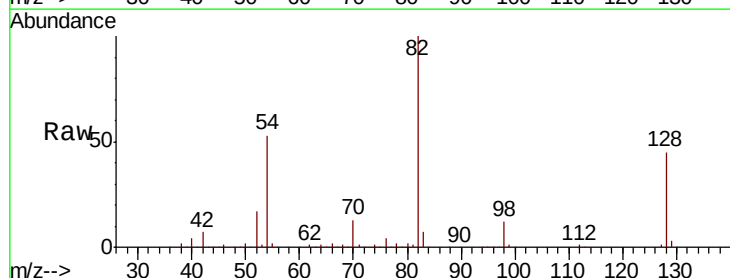
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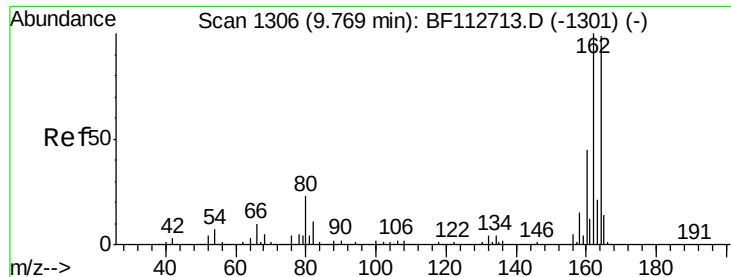
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#23  
Nitrobenzene-d5  
Concen: 84.559 ng  
RT: 7.29 min Scan# 884  
Delta R.T. -0.02 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 82      | 100   | 885745 |       |       |
| 128     | 45.4  |        | 36.3  | 54.5  |
| 54      | 52.7  |        | 43.7  | 65.5  |





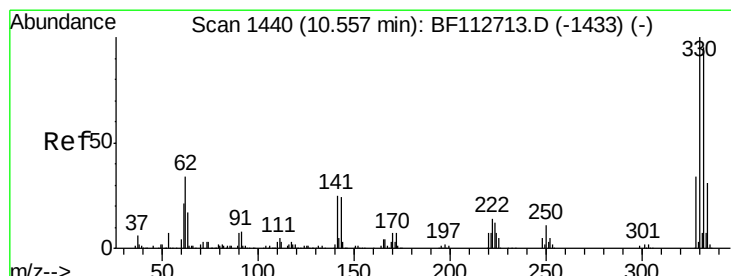
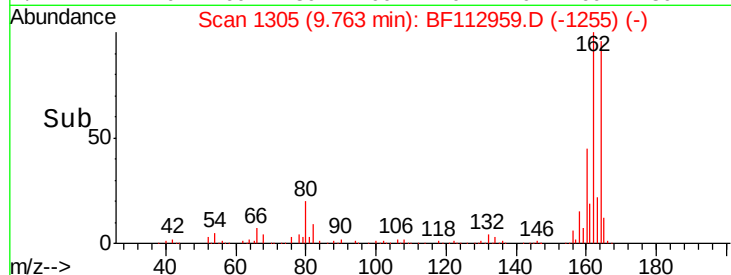
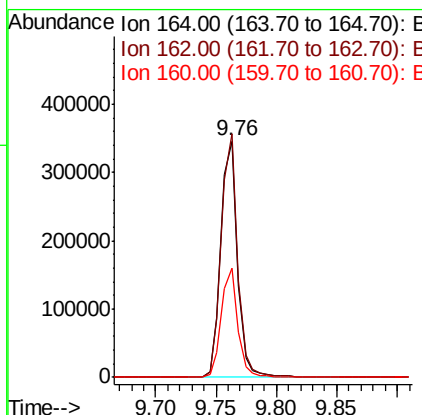
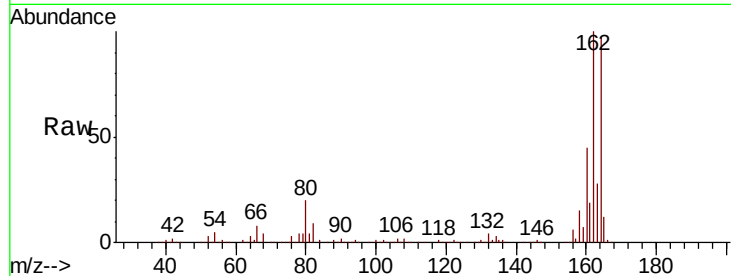
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.76 min Scan# 1305  
Delta R.T. -0.01 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

Instrument :  
BNA\_F  
ClientSampleId :  
2019-03-05-DUP-SD

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 164     | 100   |      |       |       |
| 162     | 103.2 | 80.6 | 120.8 |       |
| 160     | 46.3  | 36.0 | 54.0  |       |

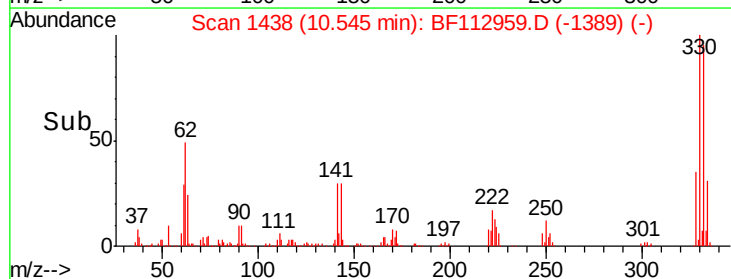
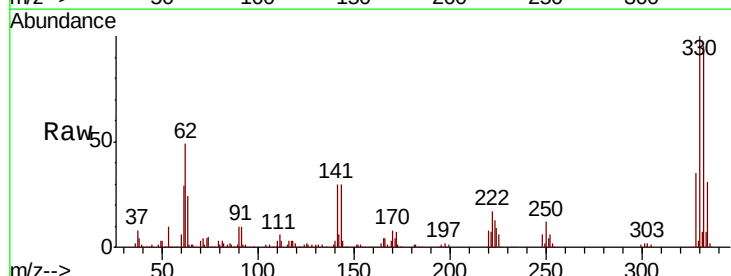
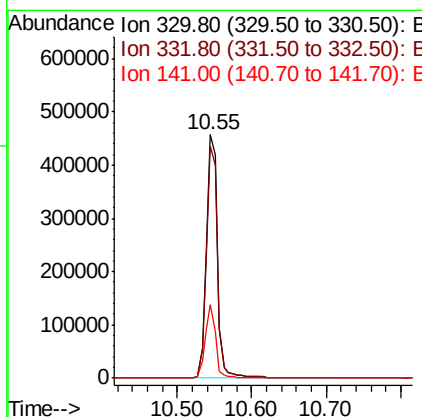
Manual Integrations  
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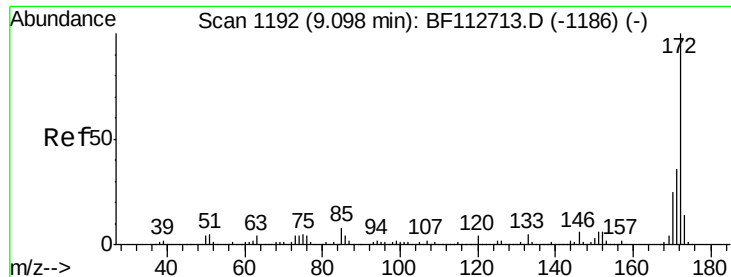
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#42  
2,4,6-Tribromophenol  
Concen: 136.436 ng  
RT: 10.55 min Scan# 1438  
Delta R.T. -0.01 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 330     | 100   |      |       |       |
| 332     | 95.4  | 76.2 | 114.4 |       |
| 141     | 28.5  | 27.0 | 40.6  |       |





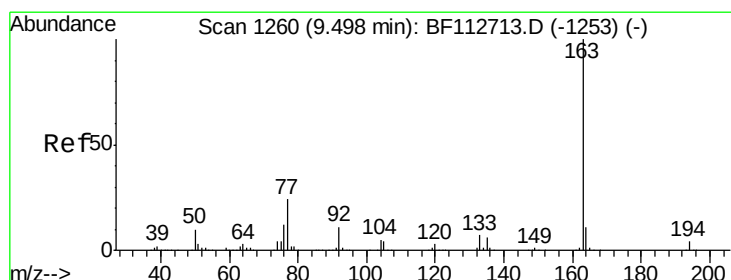
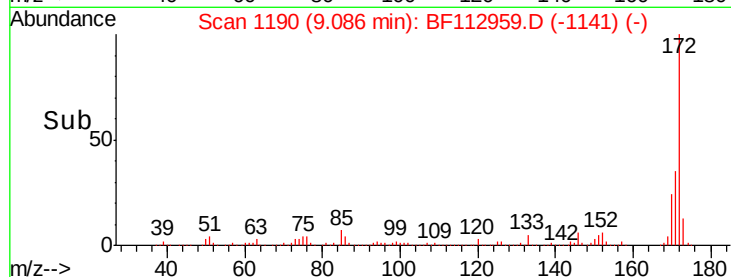
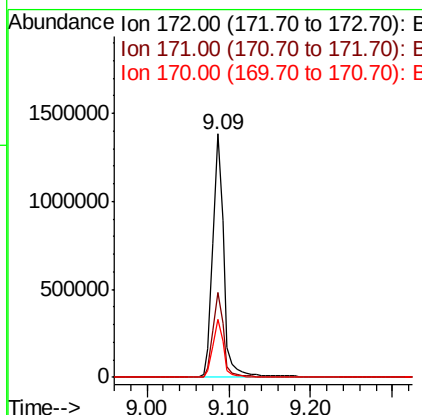
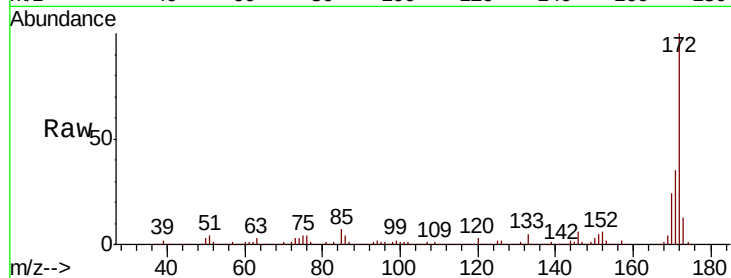
#45  
2-Fluorobiphenyl  
Concen: 61.153 ng  
RT: 9.09 min Scan# 1190  
Delta R.T. -0.01 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

Instrument :  
BNA\_F  
ClientSampleId :  
2019-03-05-DUP-SD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.1  | 29.0  | 43.4  |
| 170     | 23.7  | 20.0  | 30.0  |

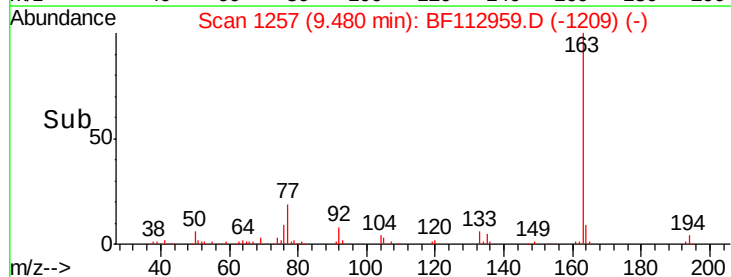
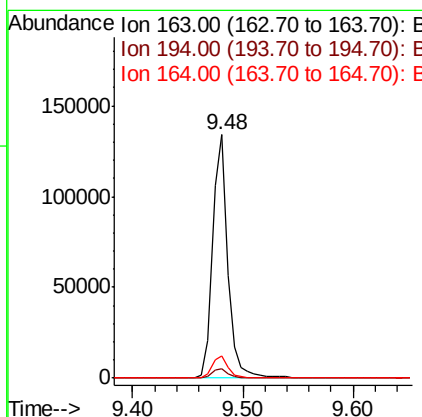
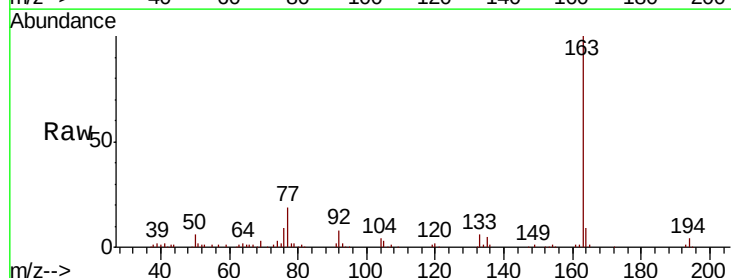
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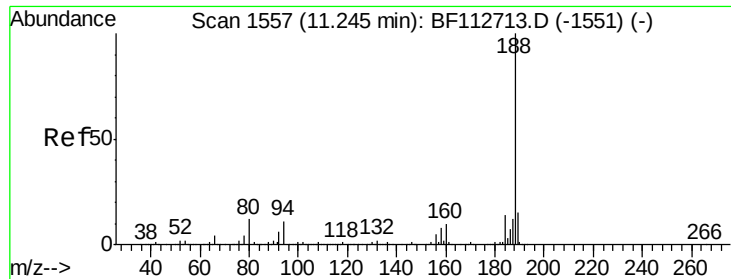
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#50  
Dimethylphthalate  
Concen: 5.176 ng  
RT: 9.48 min Scan# 1257  
Delta R.T. -0.02 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 3.8   | 3.0   | 4.4   |
| 164     | 9.2   | 8.4   | 12.6  |





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.24 min Scan# 1556

Delta R.T. -0.01 min

Lab File: BF112959.D

Acq: 11 Mar 2019 17:20

Instrument :

BNA\_F

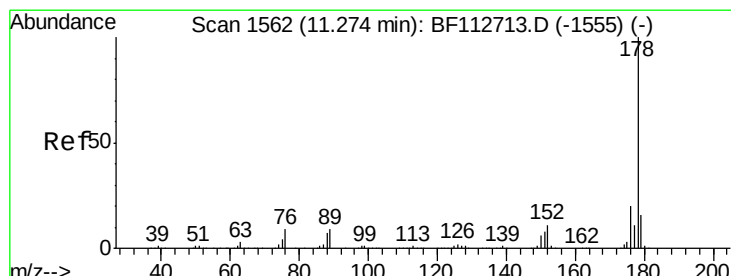
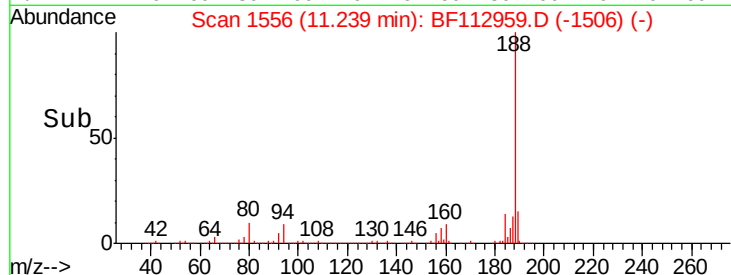
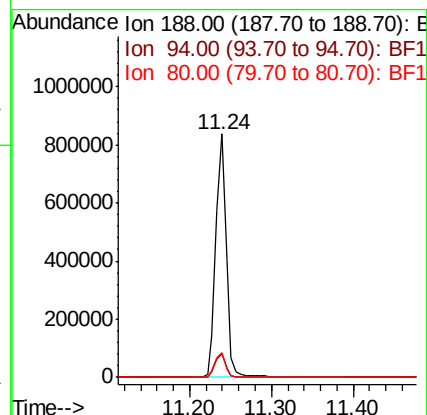
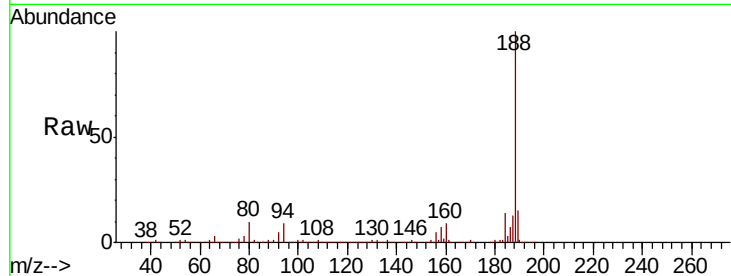
ClientSampleId :

2019-03-05-DUP-SD

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 188   | Resp: | 742468 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 9.4   | 9.0   | 13.4   |
| 80        | 10.0  | 9.2   | 13.8   |

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#71

Phenanthrene

Concen: 11.497 ng

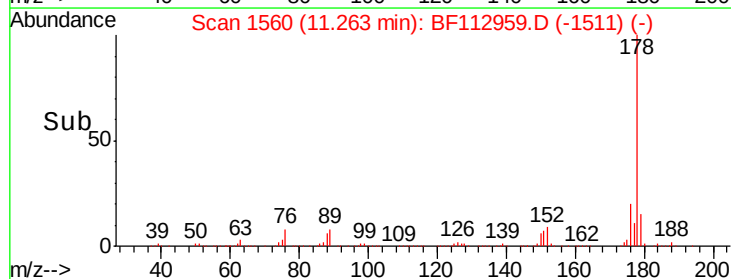
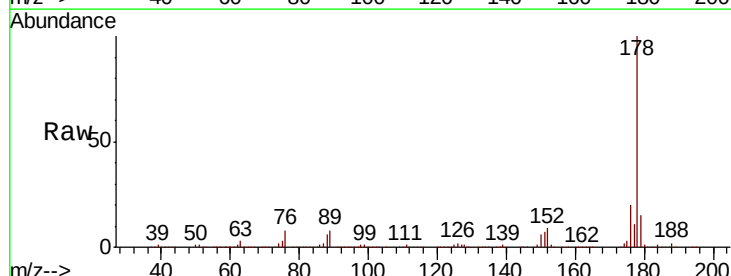
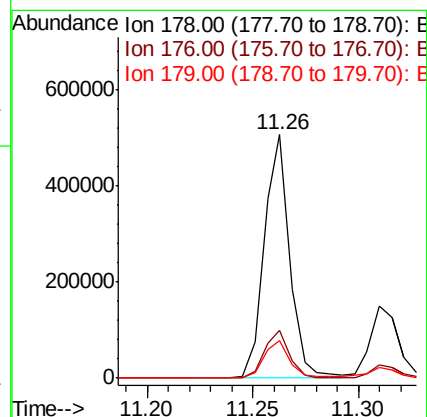
RT: 11.26 min Scan# 1560

Delta R.T. -0.01 min

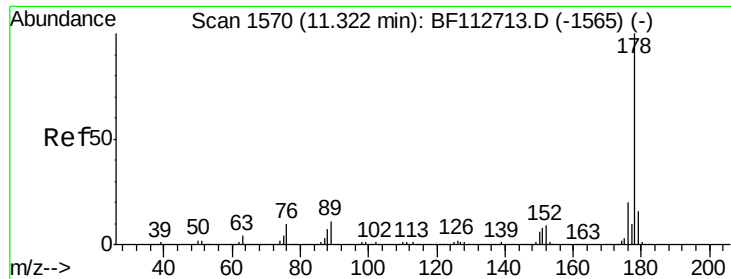
Lab File: BF112959.D

Acq: 11 Mar 2019 17:20

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 424703 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 19.6  | 16.3  | 24.5   |
| 179       | 15.3  | 12.7  | 19.1   |







#72

Anthracene

Concen: 3.437 ng

RT: 11.31 min Scan# 1568

Delta R.T. -0.01 min

Lab File: BF112959.D

Acq: 11 Mar 2019 17:20

Instrument :

BNA\_F

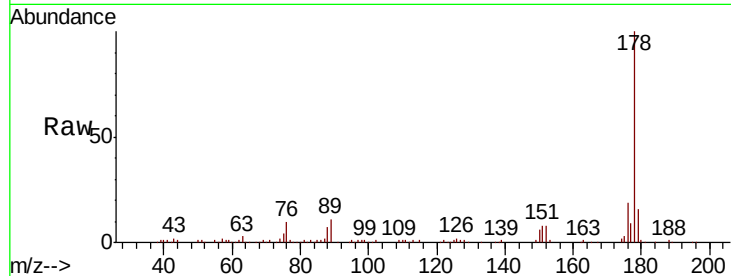
ClientSampleId :

2019-03-05-DUP-SD

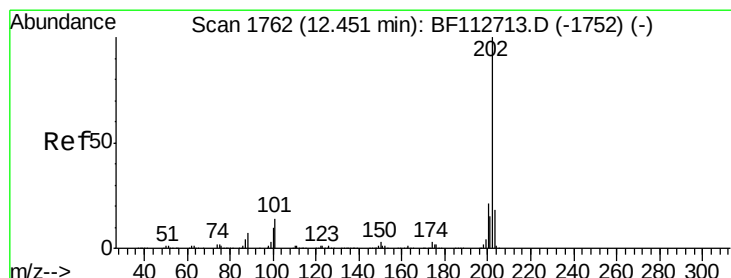
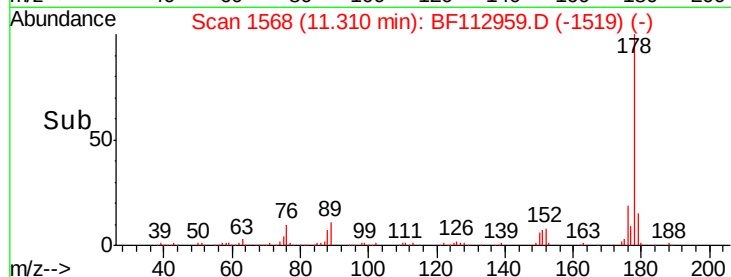
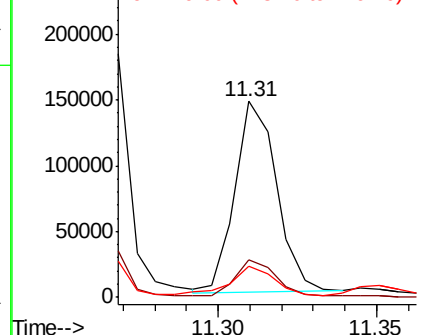
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 178   | Resp: | 132918 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 19.0  | 15.8  | 23.6   |
| 179       | 15.6  | 13.0  | 19.6   |

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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: 33.731 ng

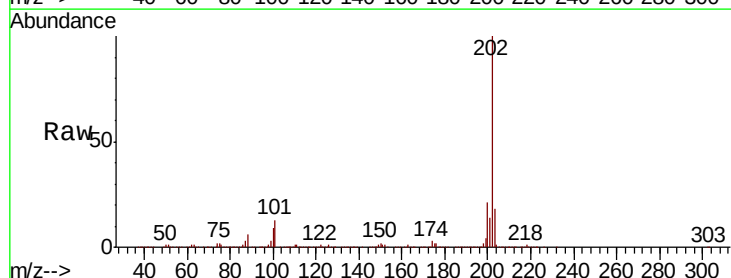
RT: 12.44 min Scan# 1761

Delta R.T. -0.01 min

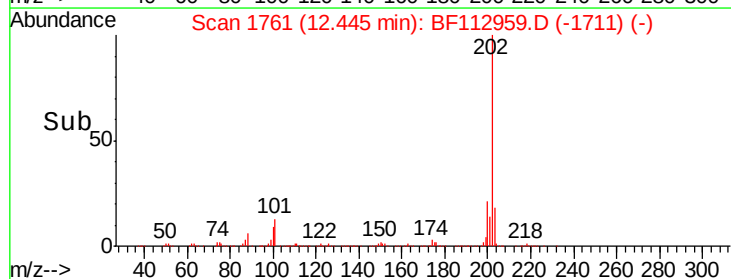
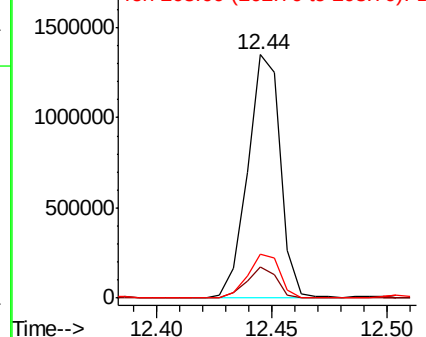
Lab File: BF112959.D

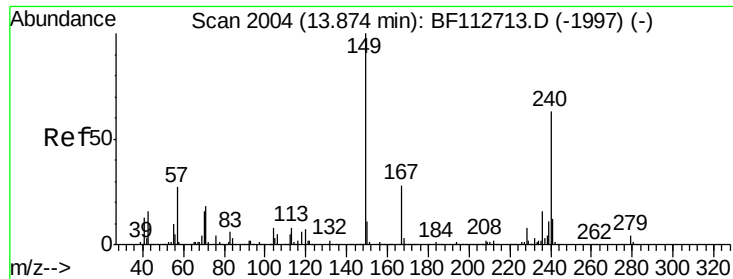
Acq: 11 Mar 2019 17:20

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 1334995 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 12.5  | 0.0   | 33.8    |
| 203       | 18.2  | 0.0   | 38.4    |



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





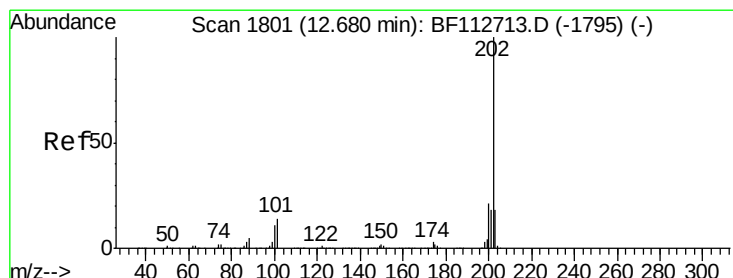
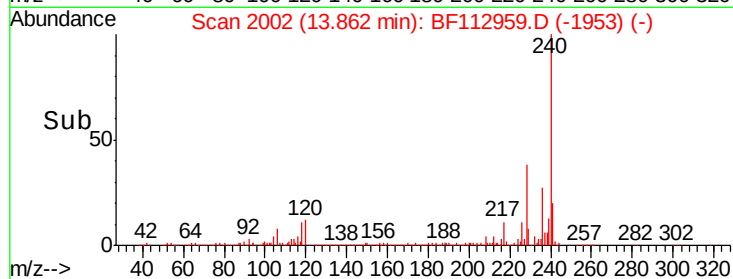
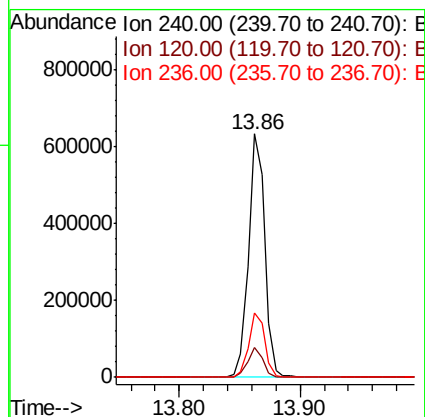
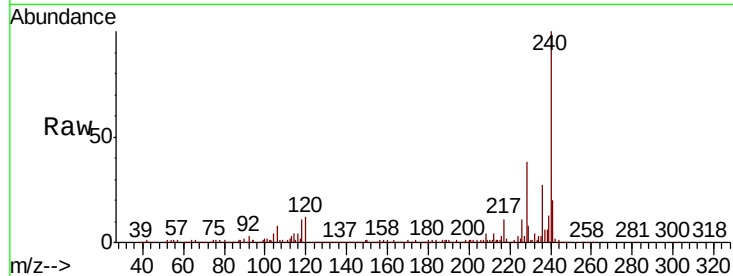
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 13.86 min Scan# 2002  
Delta R.T. -0.01 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

Instrument :  
BNA\_F  
ClientSampleId :  
2019-03-05-DUP-SD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 12.2  | 8.9   | 13.3  |
| 236     | 26.6  | 20.7  | 31.1  |

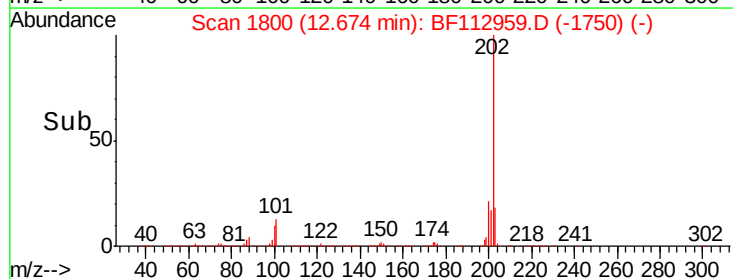
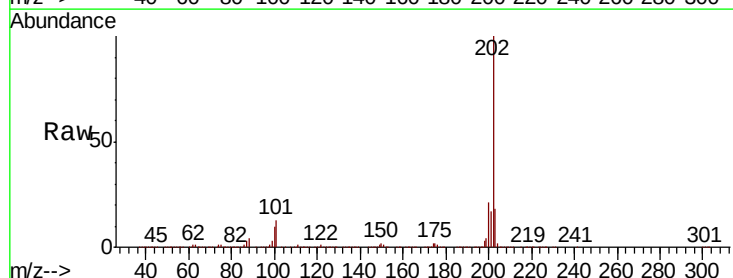
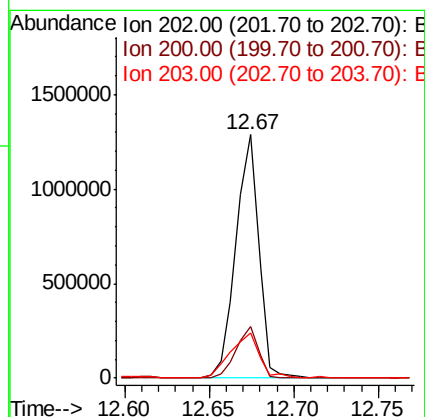
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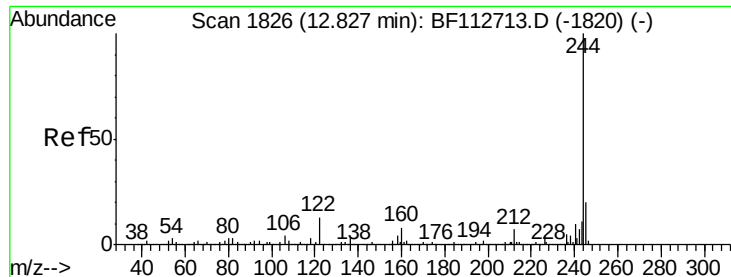
Sohil  
3/12/2019 4:28:37 PM



#78  
Pyrene  
Concen: 24.013 ng  
RT: 12.67 min Scan# 1800  
Delta R.T. -0.01 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.2  | 17.0  | 25.4  |
| 203     | 18.4  | 14.4  | 21.6  |





#79

Terphenyl-d14

Concen: 50.697 ng

RT: 12.82 min Scan# 1825

Delta R.T. -0.01 min

Lab File: BF112959.D

Acq: 11 Mar 2019 17:20

Instrument :

BNA\_F

ClientSampleId :

2019-03-05-DUP-SD

Tot Ion:244 Resp: 1570994

Ion Ratio Lower Upper

244 100

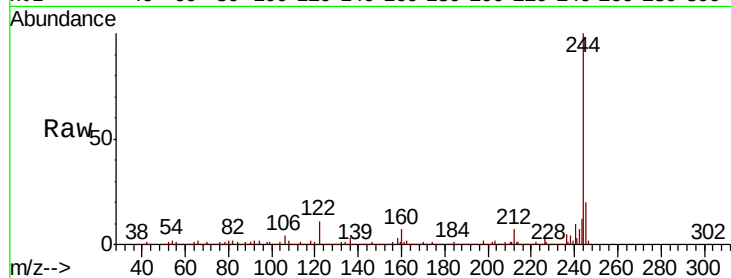
212 6.7 5.6 8.4

122 11.1 10.5 15.7

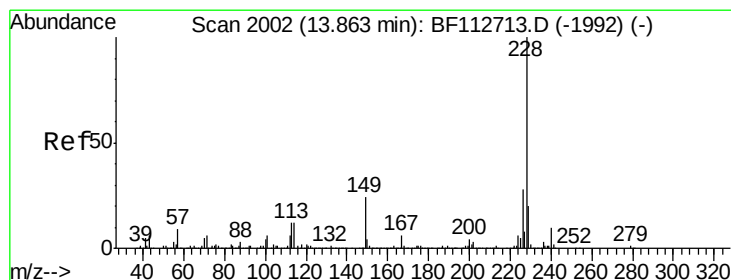
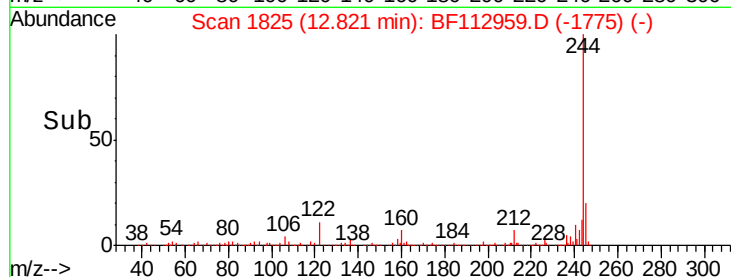
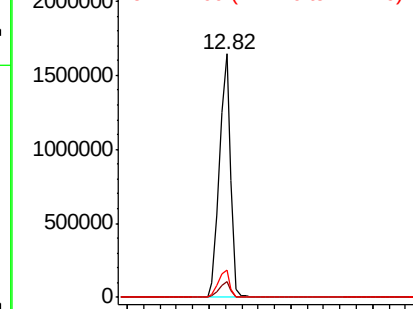
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Abundance Ion 244.00 (243.70 to 244.70): E  
Ion 212.00 (211.70 to 212.70): E  
Ion 122.00 (121.70 to 122.70): E



#81

Benzo(a)anthracene

Concen: 16.512 ng

RT: 13.85 min Scan# 2000

Delta R.T. -0.01 min

Lab File: BF112959.D

Acq: 11 Mar 2019 17:20

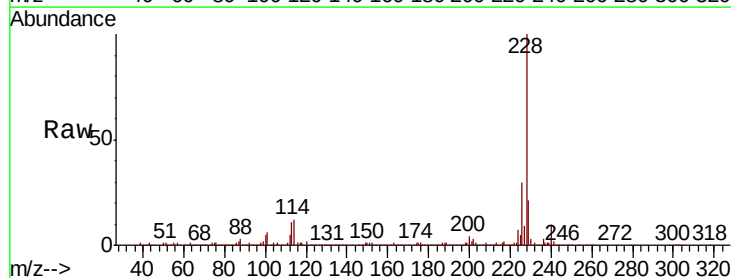
Tgt Ion:228 Resp: 687429

Ion Ratio Lower Upper

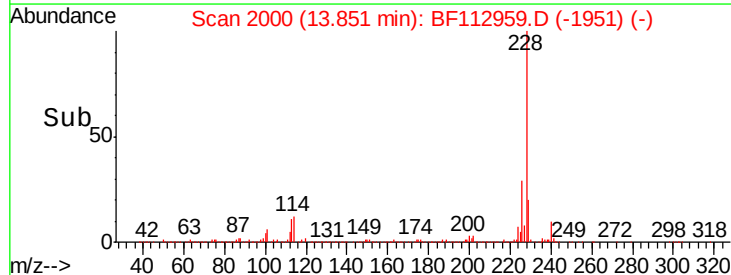
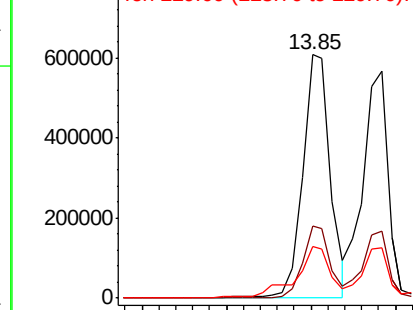
228 100

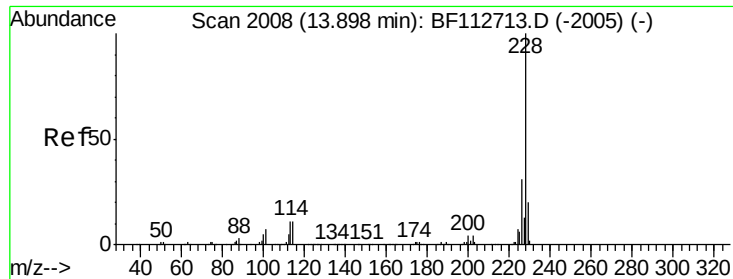
226 29.7 22.2 33.4

229 21.0 16.0 24.0



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





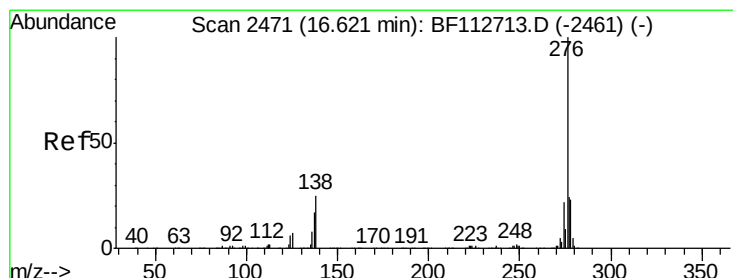
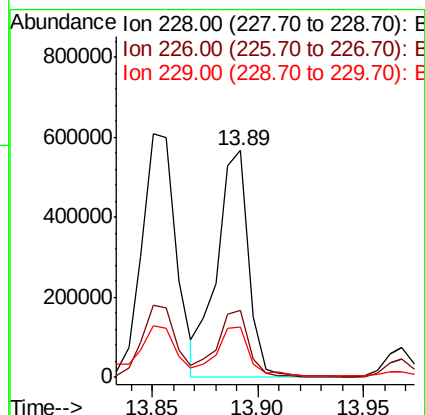
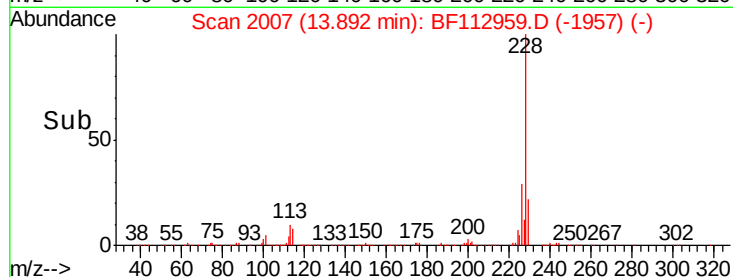
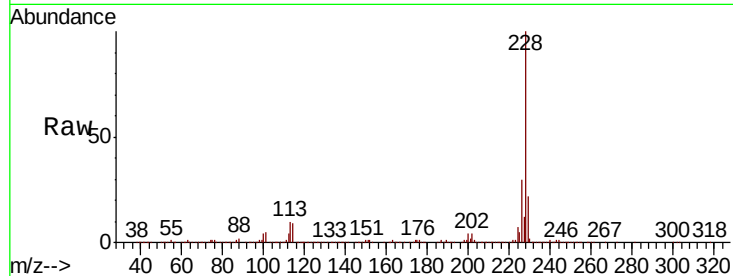
#83  
Chrysene  
Concen: 14.398 ng  
RT: 13.89 min Scan# 2007  
Delta R.T. -0.01 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

Instrument :  
BNA\_F  
ClientSampleId :  
2019-03-05-DUP-SD

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 587168 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 29.5  | 24.9  | 37.3   |
| 229       | 22.4  | 16.3  | 24.5   |

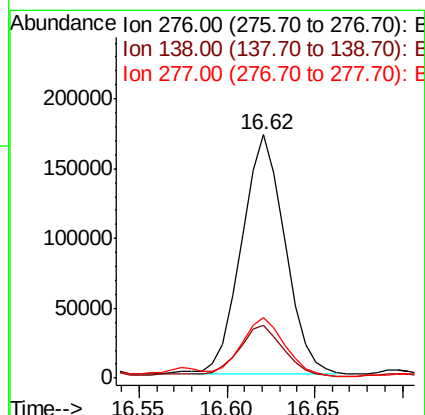
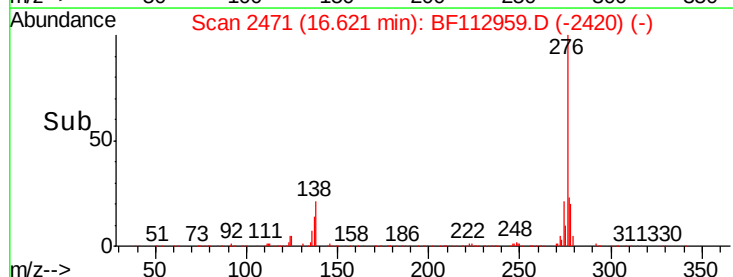
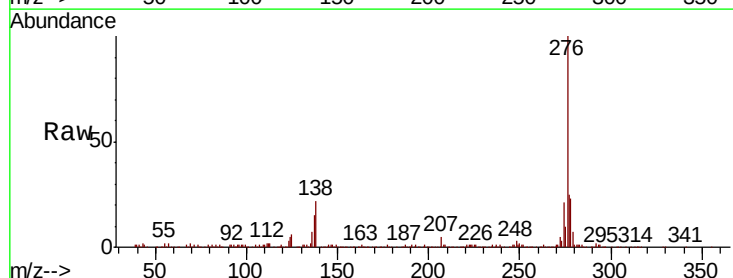
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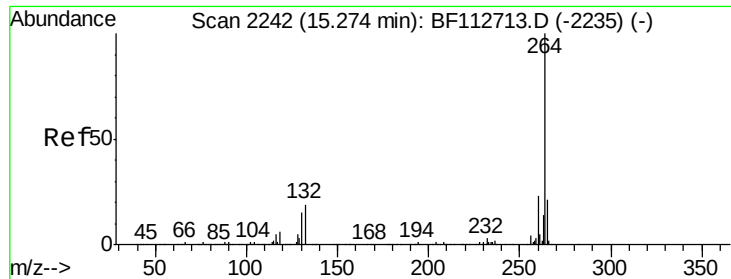
Sohil  
3/12/2019 4:28:37 PM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 8.293 ng m  
RT: 16.62 min Scan# 2471  
Delta R.T. -0.00 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 288336 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 4.6   | 23.2  | 34.8#  |
| 277       | 5.2   | 19.9  | 29.9#  |





#87

Pervlene-d12

Concen: 20.000 ng

RT: 15.27 min Scan# 2241

Delta R.T. -0.01 min

Lab File: BF112959.D

Acq: 11 Mar 2019 17:20

Instrument :

BNA\_F

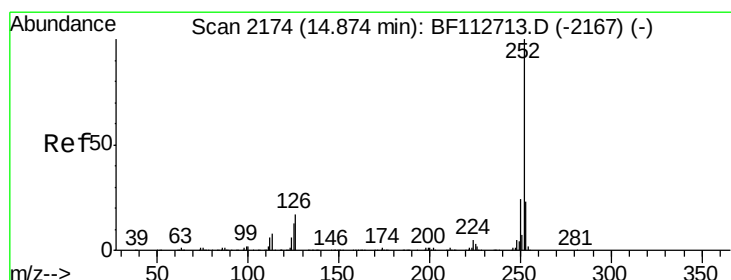
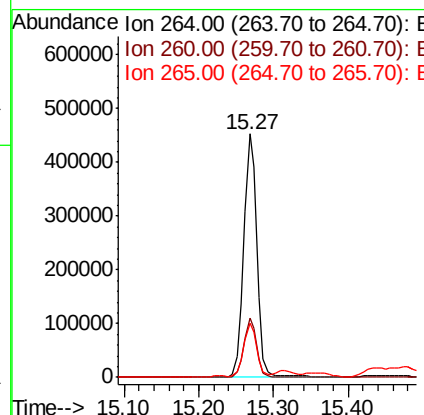
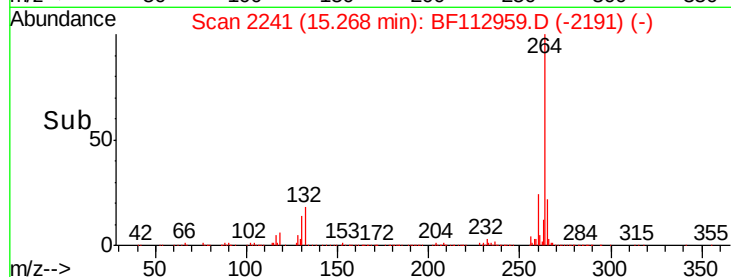
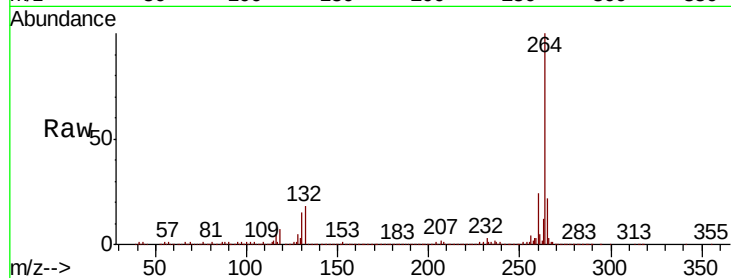
ClientSampleId :

2019-03-05-DUP-SD

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 264   | Resp: | 555817 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 24.2  | 18.7  | 28.1   |
| 265       | 22.1  | 17.2  | 25.8   |

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#88

Benzo(b)fluoranthene

Concen: 18.190 ng m

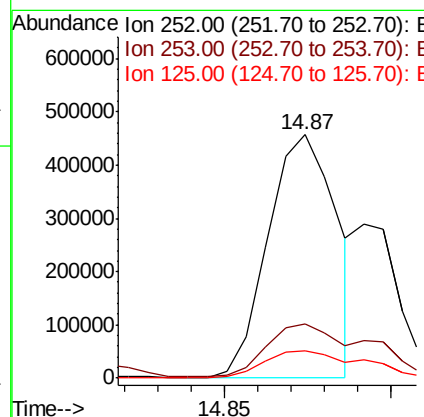
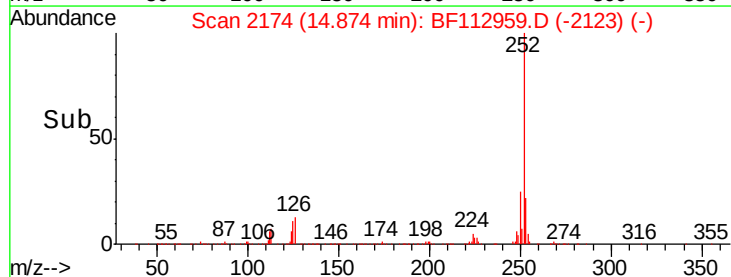
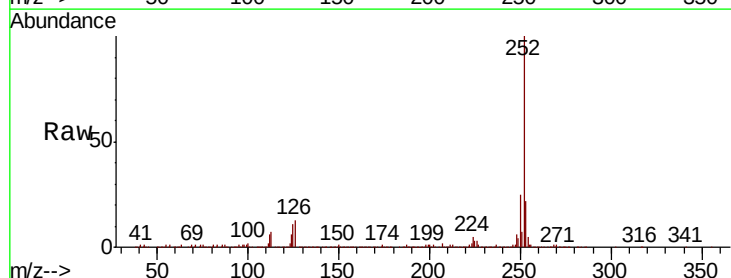
RT: 14.87 min Scan# 2174

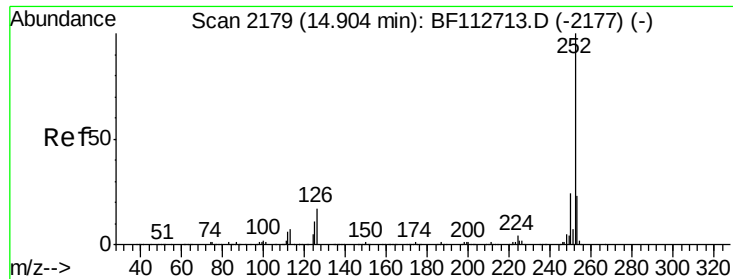
Delta R.T. -0.00 min

Lab File: BF112959.D

Acq: 11 Mar 2019 17:20

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 653960 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.4  | 18.0  | 27.0   |
| 125       | 11.2  | 10.2  | 15.2   |





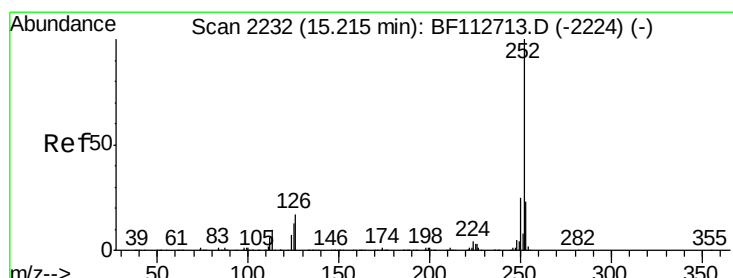
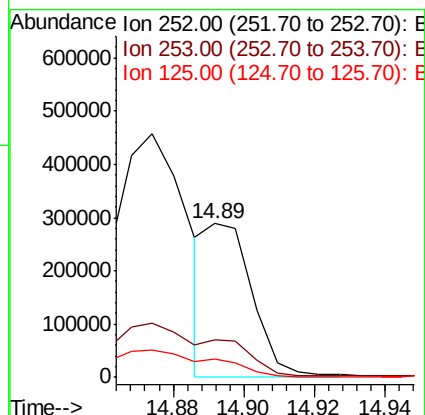
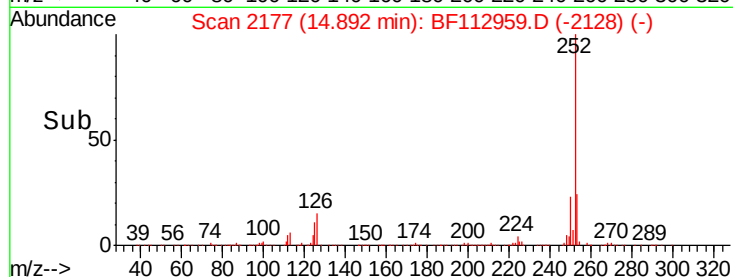
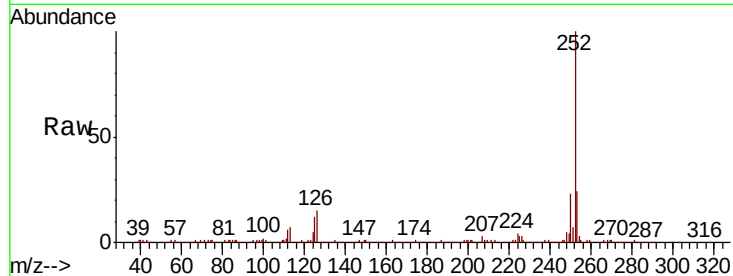
#89  
Benzo(k)fluoranthene  
Concen: 8.051 ng m  
RT: 14.89 min Scan# 2177  
Delta R.T. -0.01 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

Instrument :  
BNA\_F  
ClientSampleId :  
2019-03-05-DUP-SD

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 262192 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 24.3  | 18.2  | 27.2   |
| 125       | 11.6  | 9.8   | 14.6   |

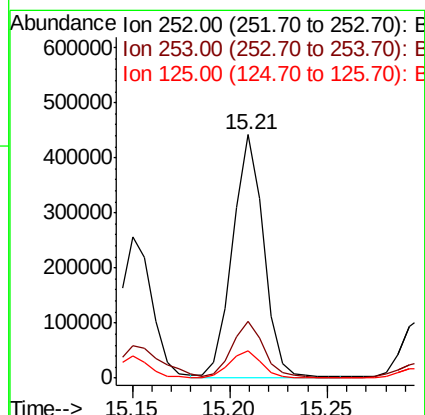
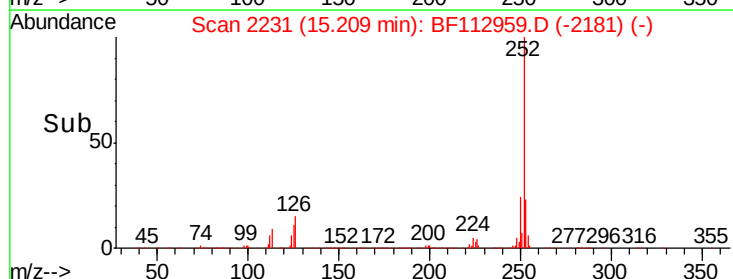
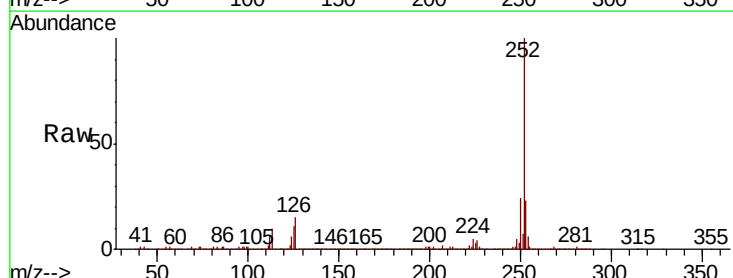
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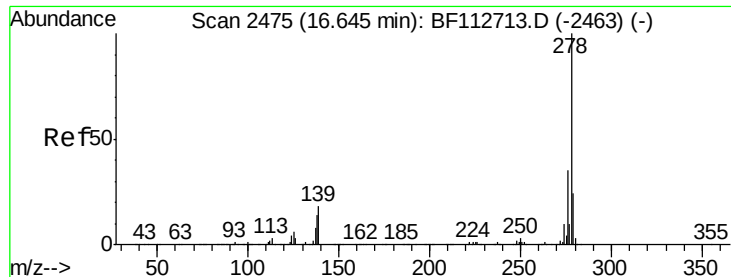
Sohil  
3/12/2019 4:28:37 PM



#90  
Benzo(a)pyrene  
Concen: 15.295 ng  
RT: 15.21 min Scan# 2231  
Delta R.T. -0.01 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 486377 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.2  | 18.0  | 27.0   |
| 125       | 11.1  | 10.7  | 16.1   |





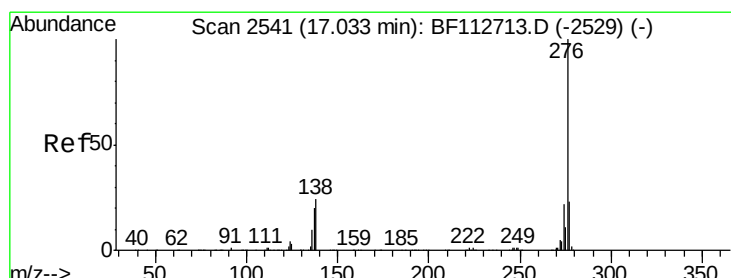
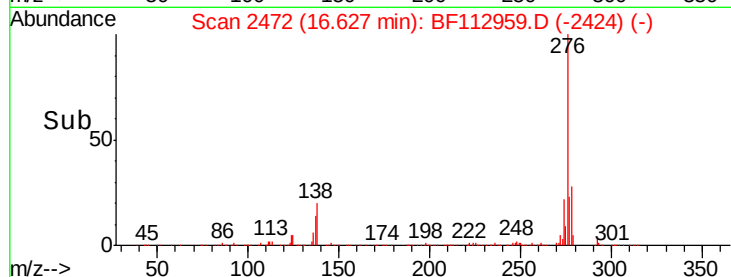
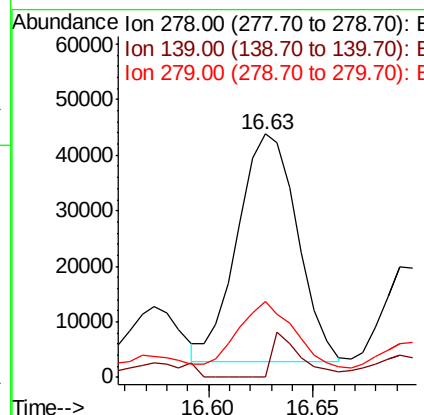
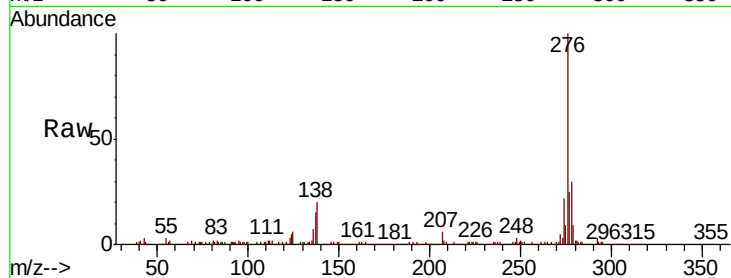
#91  
Dibenzo(a,h)anthracene  
Concen: 3.019 ng m  
RT: 16.63 min Scan# 2472  
Delta R.T. -0.02 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

Instrument :  
BNA\_F  
ClientSampleId :  
2019-03-05-DUP-SD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 14.3  | 21.5# |
| 279     | 30.9  | 19.4  | 29.0# |

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#92  
Benzo(g,h,i)perylene  
Concen: 9.420 ng  
RT: 17.03 min Scan# 2540  
Delta R.T. -0.01 min  
Lab File: BF112959.D  
Acq: 11 Mar 2019 17:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.3  | 18.6  | 27.8  |
| 138     | 23.3  | 19.4  | 29.0  |

