

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF082018\  
 Data File : BF108306.D  
 Acq On : 20 Aug 2018 22:34  
 Operator : JU/SJ  
 Sample : J4521-16  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 72-11990

Manual Integrations  
 APPROVED

Sohil  
 8/21/2018 1:43:19 PM

Quant Time: Aug 21 02:01:11 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF080818.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Aug 08 12:24:24 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min)    |
|-----------------------------|-------|------|----------|--------|-------|-------------|
| 1) 1,4-Dichlorobenzene-d4   | 7.02  | 152  | 167844   | 20.00  | ng    | 0.00        |
| 21) Naphthalene-d8          | 8.30  | 136  | 619432   | 20.00  | ng    | 0.00        |
| 38) Acenaphthene-d10        | 10.07 | 164  | 279483   | 20.00  | ng    | 0.00        |
| 63) Phenanthrene-d10        | 11.56 | 188  | 446001   | 20.00  | ng    | 0.00        |
| 75) Chrysene-d12            | 14.22 | 240  | 310841   | 20.00  | ng    | 0.00        |
| 86) Perylene-d12            | 15.79 | 264  | 277488   | 20.00  | ng    | 0.01        |
| System Monitoring Compounds |       |      |          |        |       |             |
| 5) 2-Fluorophenol           | 5.65  | 112  | 724972   | 78.20  | ng    | 0.02        |
| 7) Phenol-d6                | 6.64  | 99   | 978353   | 79.41  | ng    | 0.00        |
| 23) Nitrobenzene-d5         | 7.58  | 82   | 613264   | 55.25  | ng    | 0.00        |
| 41) 2,4,6-Tribromophenol    | 10.86 | 330  | 207693   | 74.50  | ng    | 0.00        |
| 44) 2-Fluorobiphenyl        | 9.37  | 172  | 1061085  | 60.95  | ng    | 0.00        |
| 78) Terphenyl-d14           | 13.15 | 244  | 779135   | 63.73  | ng    | 0.00        |
| Target Compounds            |       |      |          |        |       |             |
| 49) Dimethylphthalate       | 9.77  | 163  | 68149    | 3.501  | ng    | Qvalue # 96 |
| 70) Phenanthrene            | 11.58 | 178  | 412177   | 19.594 | ng    | 99          |
| 71) Anthracene              | 11.64 | 178  | 145311   | 6.740  | ng    | 98          |
| 74) Fluoranthene            | 12.78 | 202  | 973659   | 42.409 | ng    | 96          |
| 77) Pyrene                  | 13.02 | 202  | 959046   | 48.733 | ng    | 99          |
| 80) Benzo(a)anthracene      | 14.21 | 228  | 527298   | 29.559 | ng    | 98          |
| 82) Chrysene                | 14.25 | 228  | 437573   | 26.755 | ng    | 97          |
| 85) Indeno(1,2,3-cd)pyrene  | 17.42 | 276  | 209058   | 14.753 | ng    | # 86        |
| 87) Benzo(b)fluoranthene    | 15.32 | 252  | 600081m  | 36.191 | ng    |             |
| 88) Benzo(k)fluoranthene    | 15.34 | 252  | 200411m  | 13.149 | ng    |             |
| 89) Benzo(a)pyrene          | 15.72 | 252  | 423655m  | 28.533 | ng    |             |
| 90) Dibenzo(a,h)anthracene  | 17.42 | 278  | 56654    | 4.612  | ng    | # 89        |
| 91) Benzo(a,h,i)perylene    | 17.92 | 276  | 187231   | 15.477 | ng    | # 88        |

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

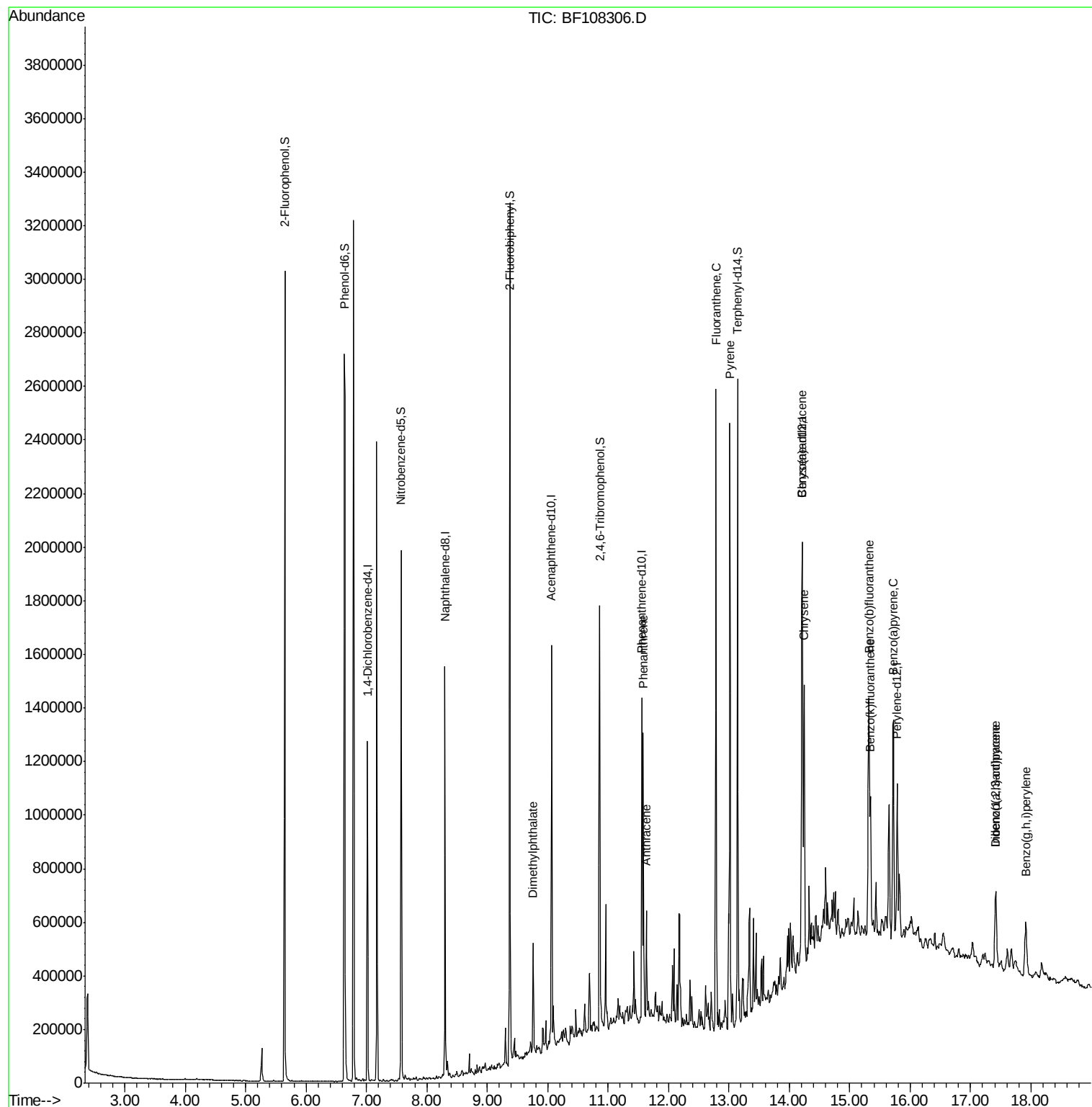
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF082018\  
Data File : BF108306.D  
Acq On : 20 Aug 2018 22:34  
Operator : JU/SJ  
Sample : J4521-16  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampled :  
72-11990

Manual Integrations  
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF080818.M  
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QLast Update : Wed Aug 08 12:24:24 2018  
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#1

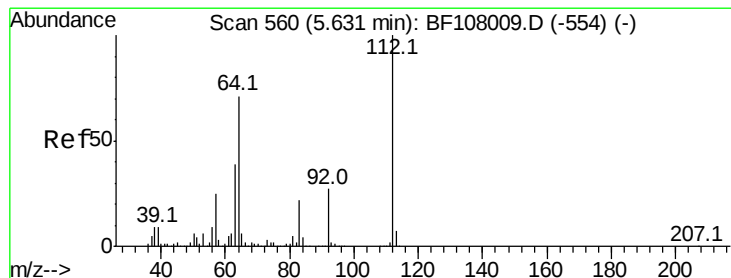
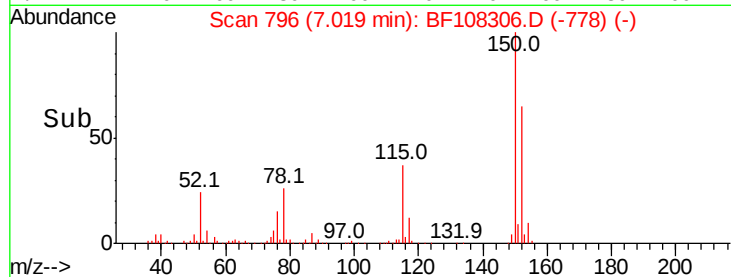
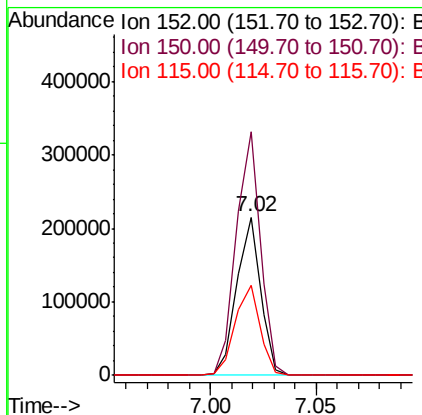
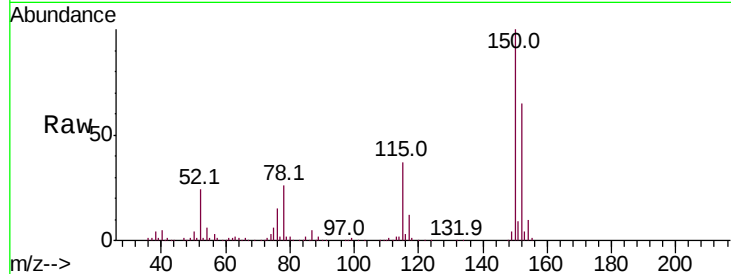
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.02 min Scan# 796  
Delta R.T. 0.01 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

Instrument :  
BNA\_F  
ClientSampleId :  
72-11990

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 154.0 | 124.6 | 186.8 |
| 115     | 57.2  | 50.1  | 75.1  |

Manual Integrations  
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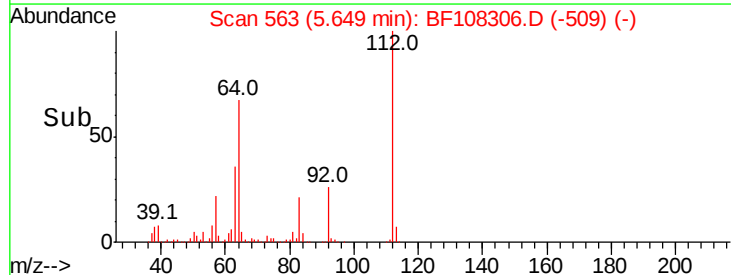
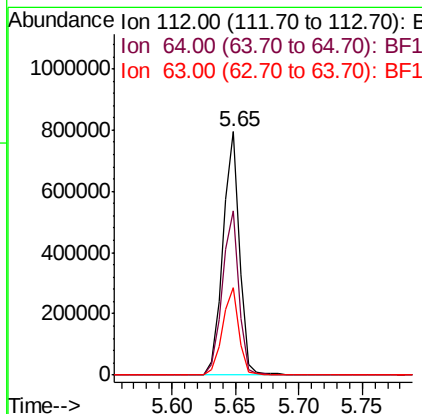
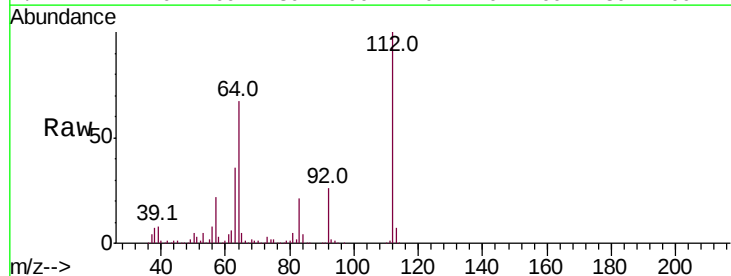
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#5

2-Fluorophenol  
Concen: 78.199 ng  
RT: 5.65 min Scan# 563  
Delta R.T. 0.02 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 67.3  | 47.9  | 71.9  |
| 63      | 35.7  | 23.7  | 35.5  |





#7

Phenol-d6

Concen: 79.414 ng

RT: 6.64 min Scan# 731

Delta R.T. 0.01 min

Lab File: BF108306.D

Acq: 20 Aug 2018 22:34

Instrument :

BNA\_F

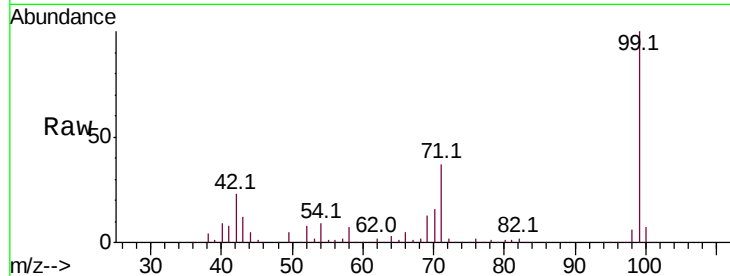
ClientSampleId :

72-11990

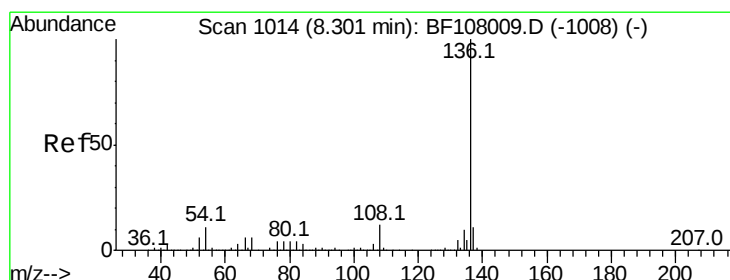
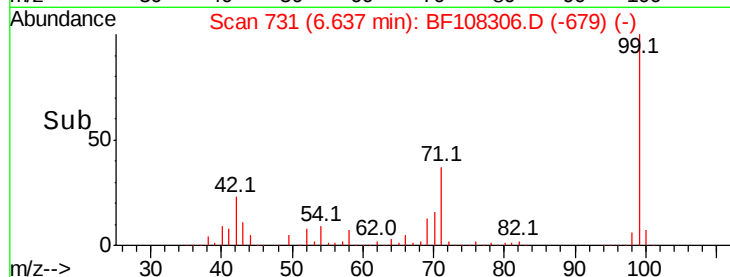
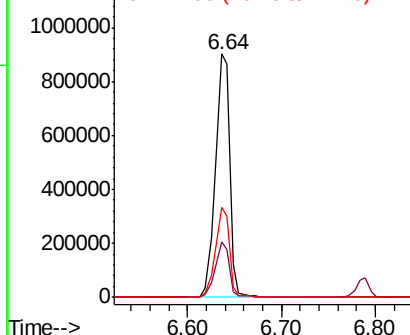
| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 99      | 100  |       | 978353 |       |       |
| 42      | 22.9 | 14.5  | 21.7#  |       |       |
| 71      | 37.0 | 25.4  | 38.0   |       |       |

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Abundance Ion 99.00 (98.70 to 99.70): BF1  
Ion 42.00 (41.70 to 42.70): BF1  
Ion 71.00 (70.70 to 71.70): BF1



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.30 min Scan# 1014

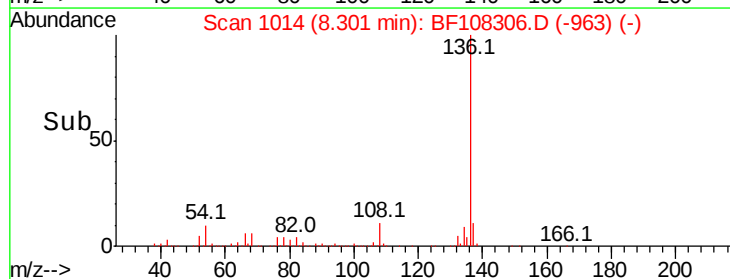
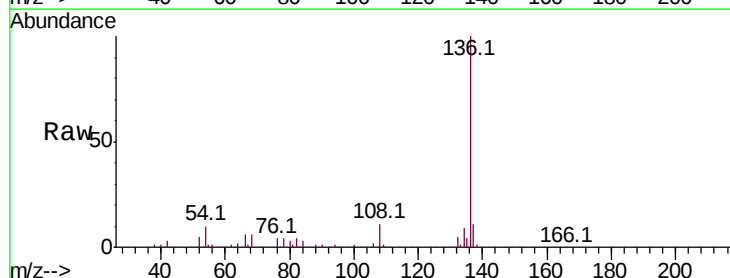
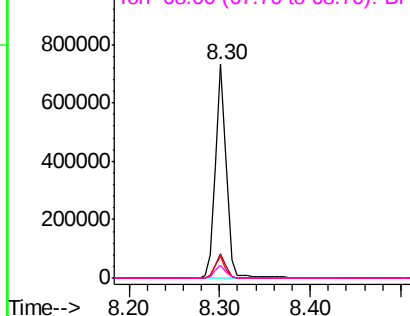
Delta R.T. 0.00 min

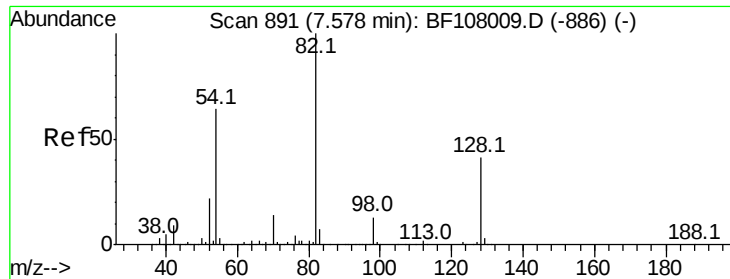
Lab File: BF108306.D

Acq: 20 Aug 2018 22:34

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 136     | 100  |       | 619432 |       |       |
| 137     | 11.3 | 8.9   | 13.3   |       |       |
| 54      | 10.0 | 6.6   | 9.8#   |       |       |
| 68      | 6.0  | 5.0   | 7.4    |       |       |

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





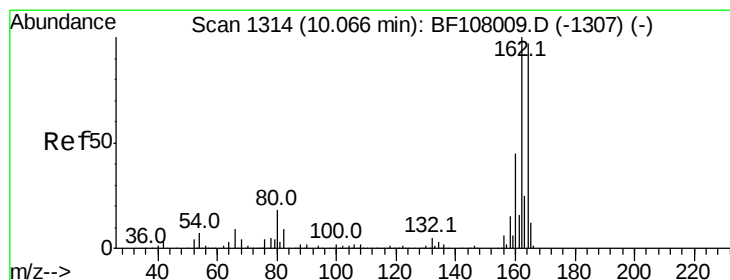
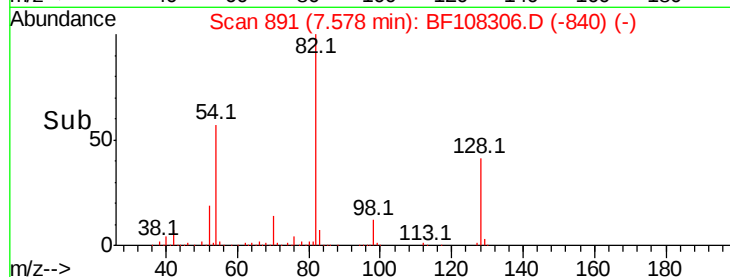
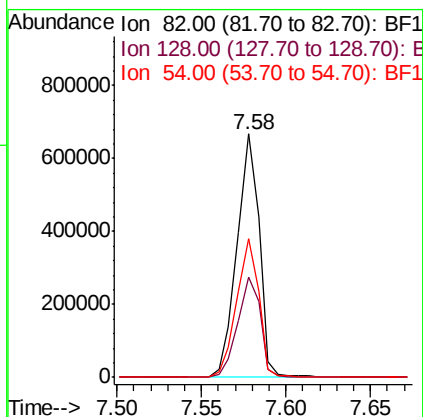
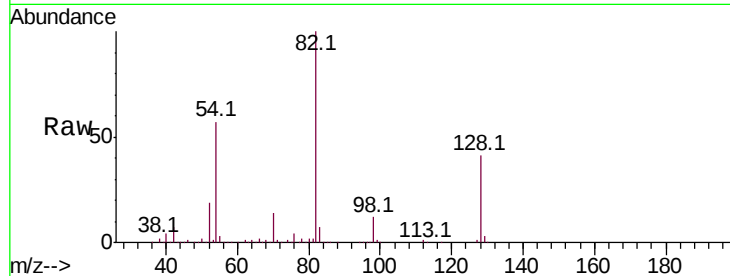
#23  
 Nitrobenzene-d5  
 Concen: 55.246 ng  
 RT: 7.58 min Scan# 891  
 Delta R.T. 0.00 min  
 Lab File: BF108306.D  
 Acq: 20 Aug 2018 22:34

Instrument :  
 BNA\_F  
 ClientSampled :  
 72-11990

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 40.9  | 36.1  | 54.1  |
| 54      | 56.8  | 41.4  | 62.2  |

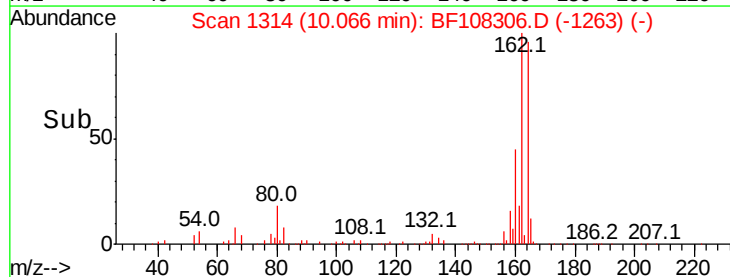
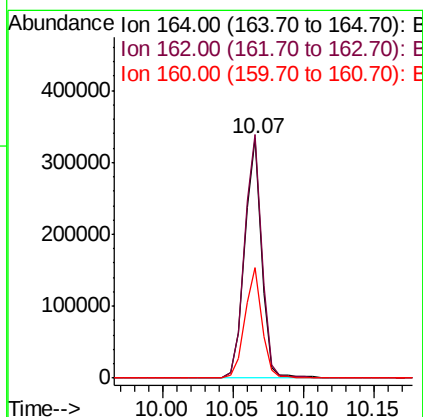
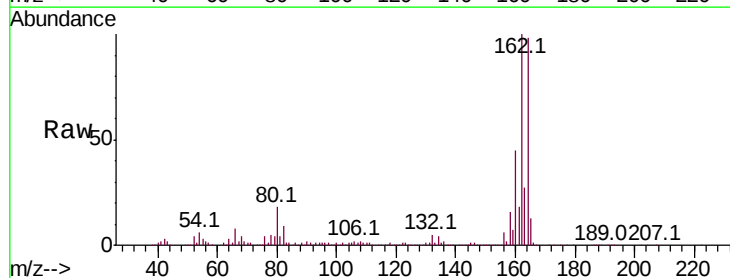
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#38  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 10.07 min Scan# 1314  
 Delta R.T. 0.00 min  
 Lab File: BF108306.D  
 Acq: 20 Aug 2018 22:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 101.7 | 86.1  | 129.1 |
| 160     | 46.2  | 38.3  | 57.5  |





#41

2,4,6-Tribromophenol

Concen: 74.501 ng

RT: 10.86 min Scan# 1449

Delta R.T. 0.00 min

Lab File: BF108306.D

Acq: 20 Aug 2018 22:34

Instrument :

BNA\_F

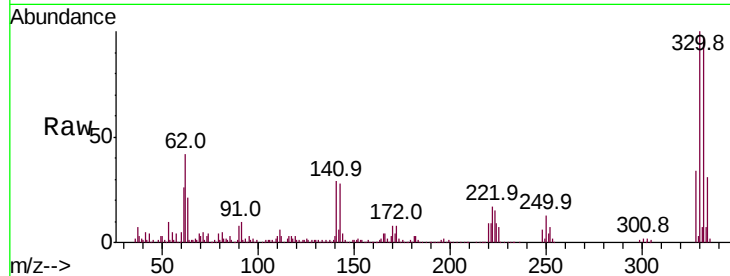
ClientSampleId :

72-11990

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 330   | Resp: | 207693 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 94.7  | 77.0  | 115.6  |
| 141       | 32.8  | 29.9  | 44.9   |

Manual Integrations  
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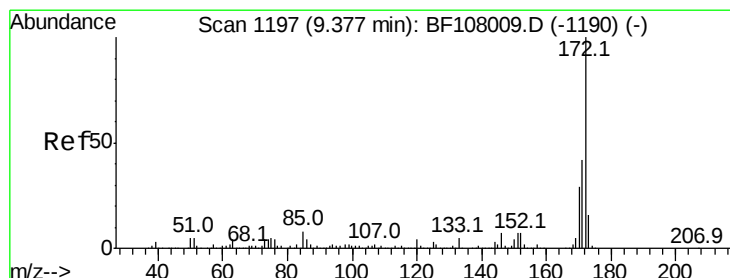
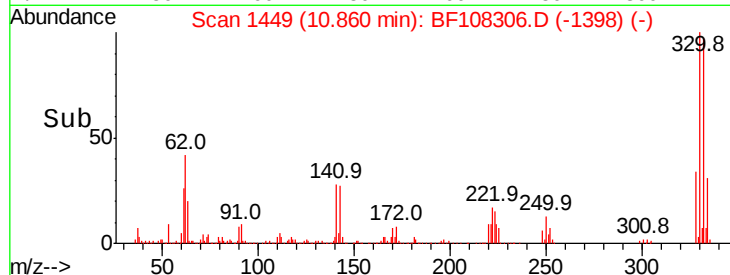
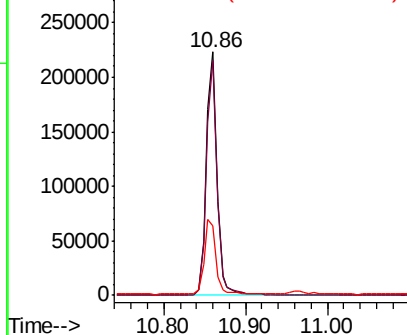


Abundance

Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#44

2-Fluorobiphenyl

Concen: 60.953 ng

RT: 9.37 min Scan# 1196

Delta R.T. -0.01 min

Lab File: BF108306.D

Acq: 20 Aug 2018 22:34

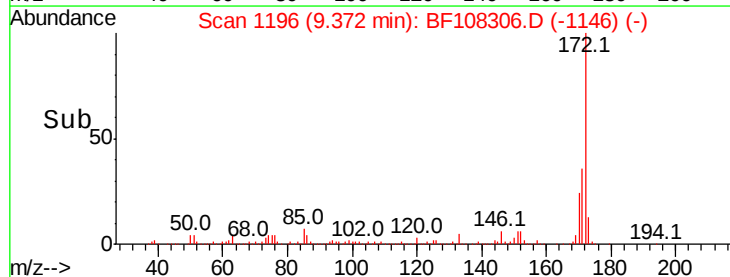
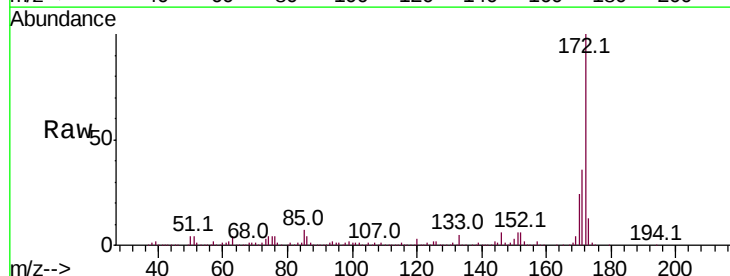
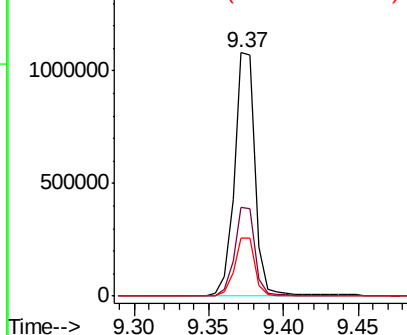
|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 172   | Resp: | 1061085 |
| Ion Ratio | Lower | Upper |         |
| 172       | 100   |       |         |
| 171       | 36.3  | 29.7  | 44.5    |
| 170       | 24.0  | 19.6  | 29.4    |

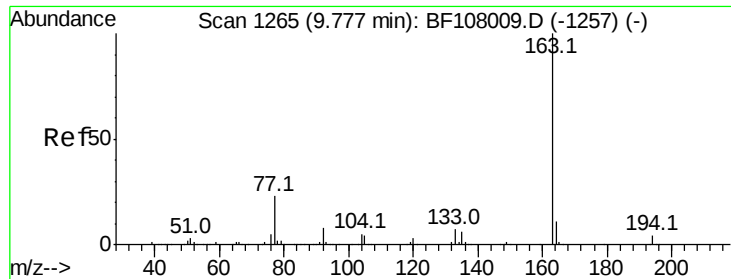
Abundance

Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





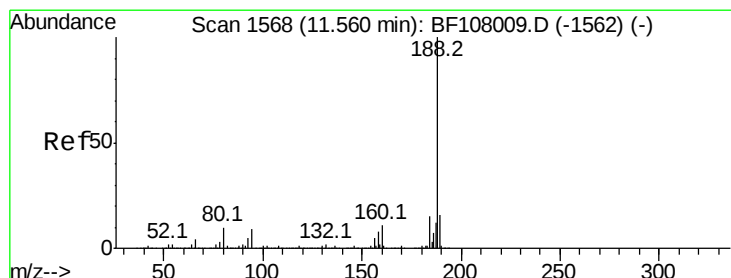
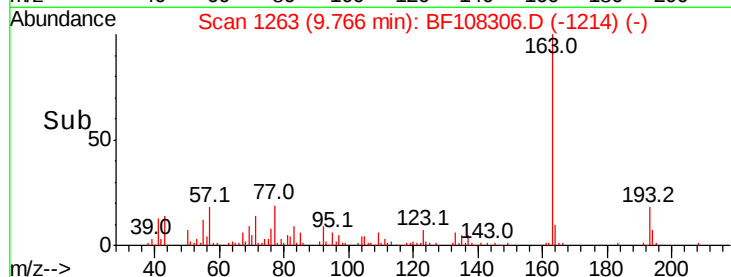
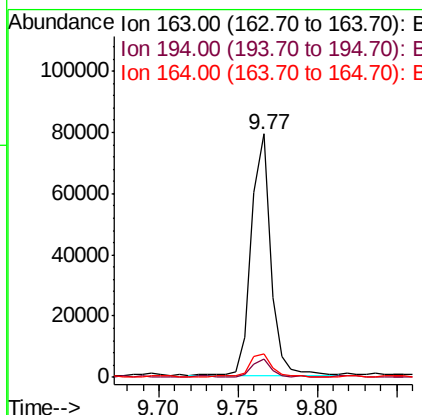
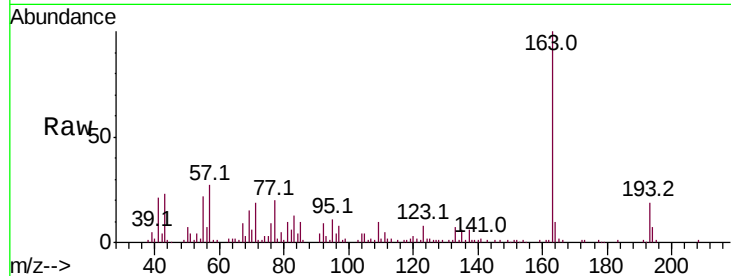
#49  
Dimethylphthalate  
Concen: 3.501 ng  
RT: 9.77 min Scan# 1263  
Delta R.T. -0.01 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

Instrument :  
BNA\_F  
ClientSampled :  
72-11990

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 7.4   | 2.7   | 4.1#  |
| 164     | 9.6   | 8.2   | 12.2  |

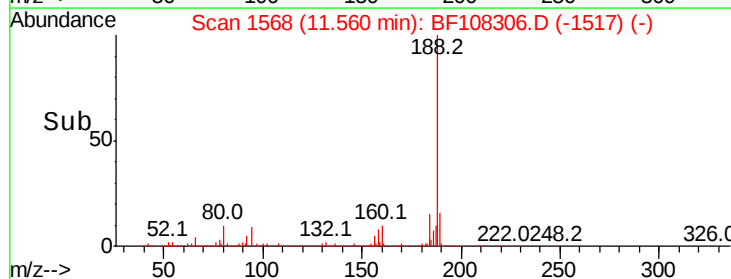
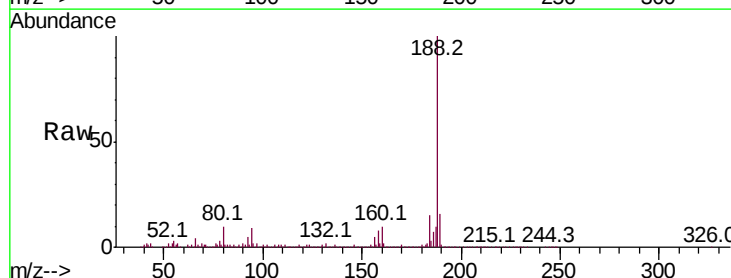
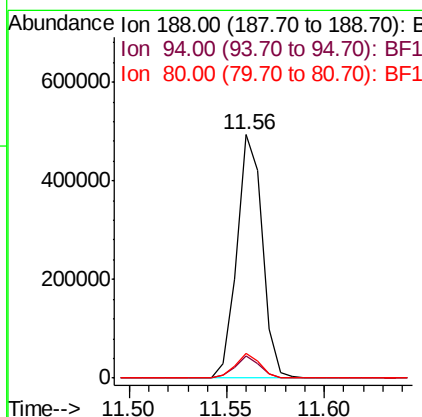
Manual Integrations  
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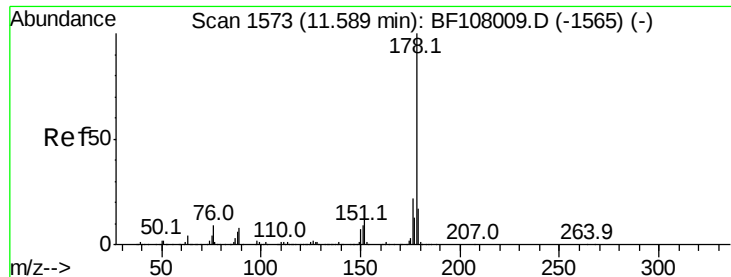
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#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.56 min Scan# 1568  
Delta R.T. 0.00 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 9.1   | 8.5   | 12.7  |
| 80      | 10.1  | 9.2   | 13.8  |





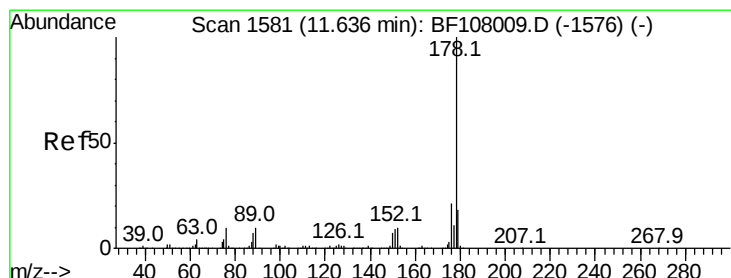
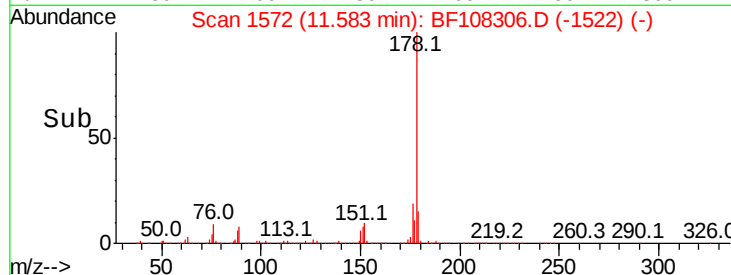
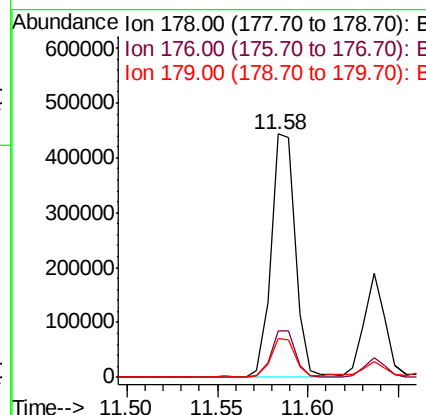
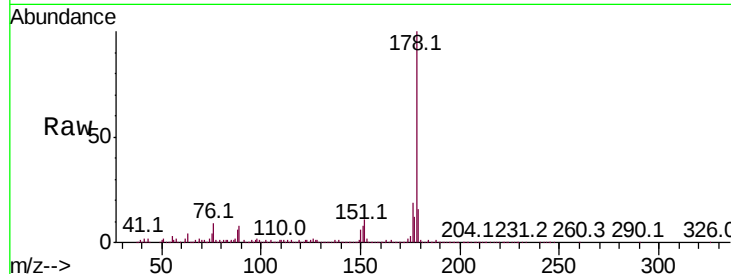
#70  
Phenanthrene  
Concen: 19.594 ng  
RT: 11.58 min Scan# 1572  
Delta R.T. -0.01 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

Instrument :  
BNA\_F  
ClientSampleId :  
72-11990

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.3  | 15.8  | 23.8  |
| 179     | 15.7  | 13.0  | 19.6  |

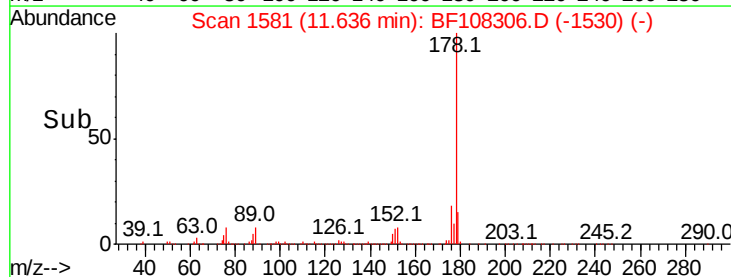
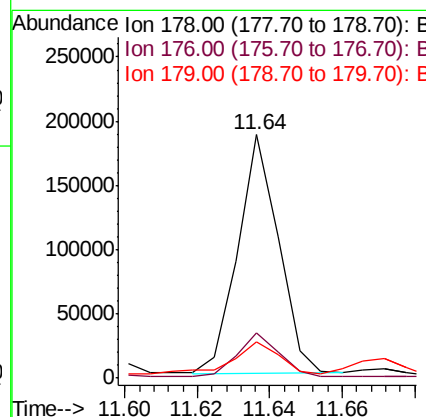
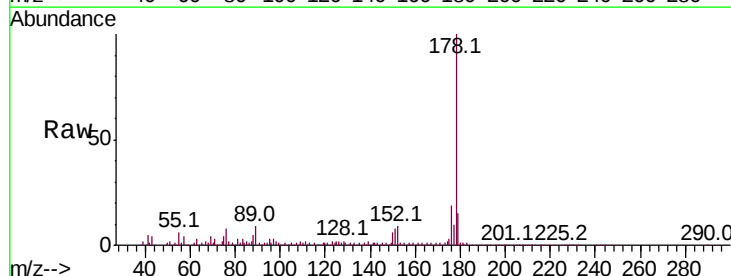
Manual Integrations  
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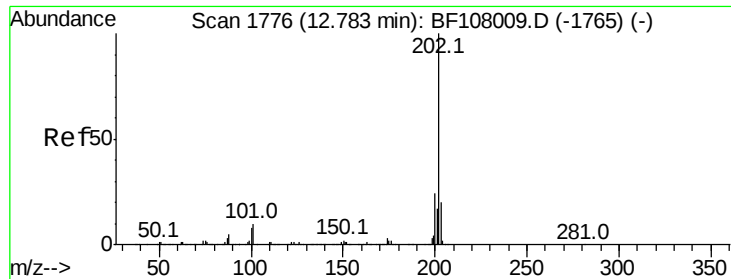
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#71  
Anthracene  
Concen: 6.740 ng  
RT: 11.64 min Scan# 1581  
Delta R.T. 0.00 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.6  | 15.4  | 23.2  |
| 179     | 15.1  | 12.6  | 19.0  |





#74

Fluoranthene

Concen: 42.409 ng

RT: 12.78 min Scan# 1776

Delta R.T. 0.00 min

Lab File: BF108306.D

Acq: 20 Aug 2018 22:34

Instrument :

BNA\_F

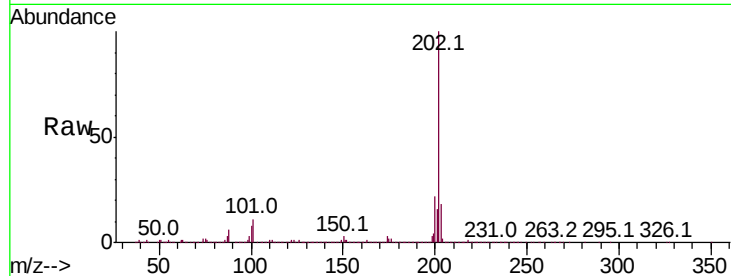
ClientSampled :

72-11990

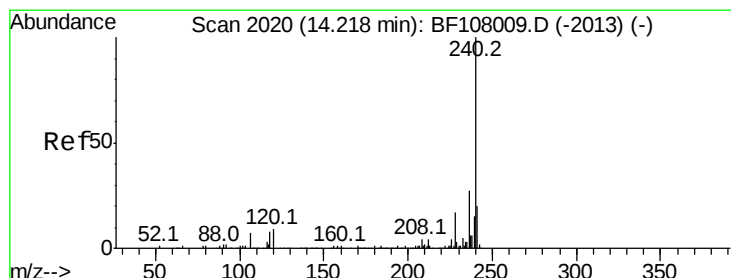
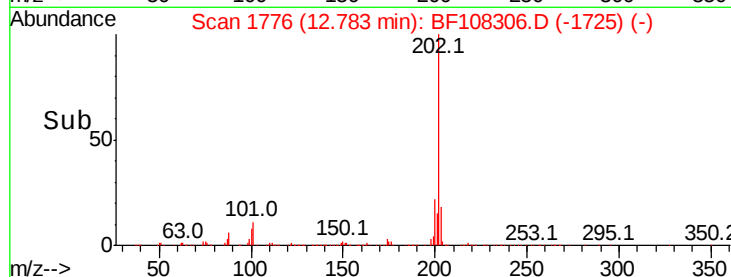
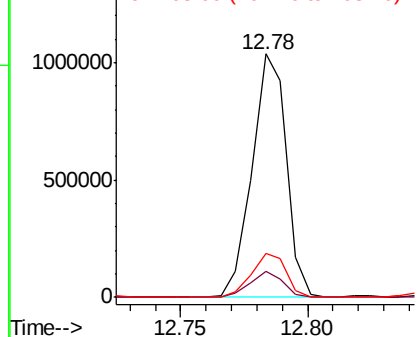
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 973659 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 10.8  | 0.0   | 34.1   |
| 203       | 18.3  | 0.0   | 38.1   |

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



#75

Chrysene-d12

Concen: 20.000 ng

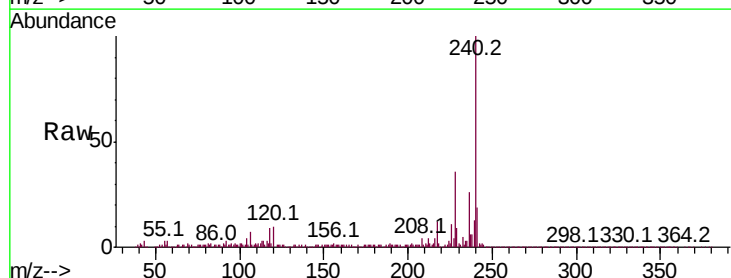
RT: 14.22 min Scan# 2020

Delta R.T. 0.00 min

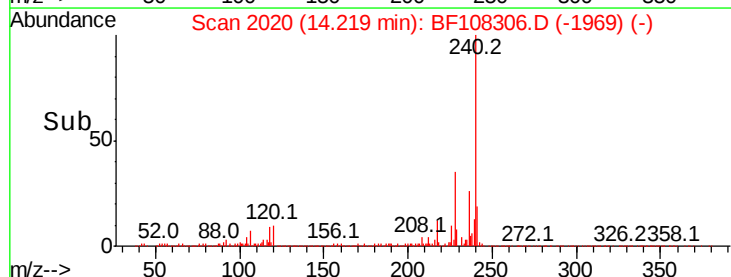
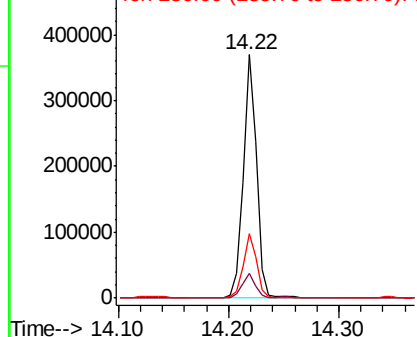
Lab File: BF108306.D

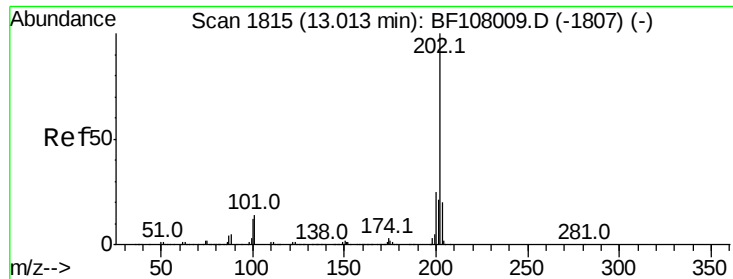
Acq: 20 Aug 2018 22:34

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 310841 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 10.3  | 9.5   | 14.3   |
| 236       | 26.5  | 20.7  | 31.1   |



Abundance Ion 240.00 (239.70 to 240.70): E  
Ion 120.00 (119.70 to 120.70): E  
Ion 236.00 (235.70 to 236.70): E





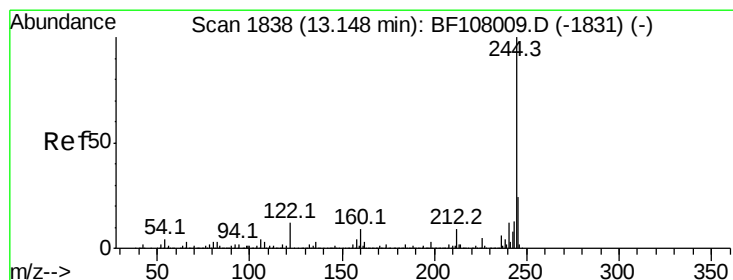
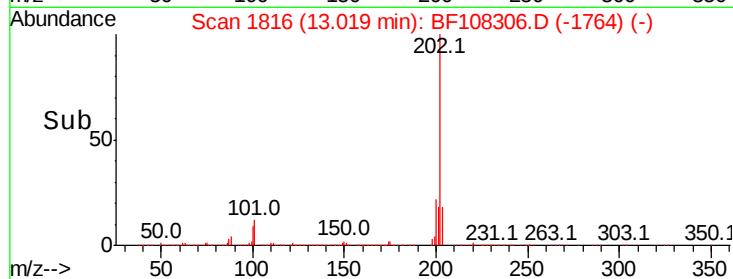
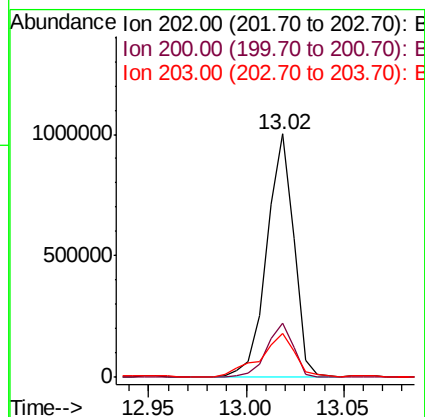
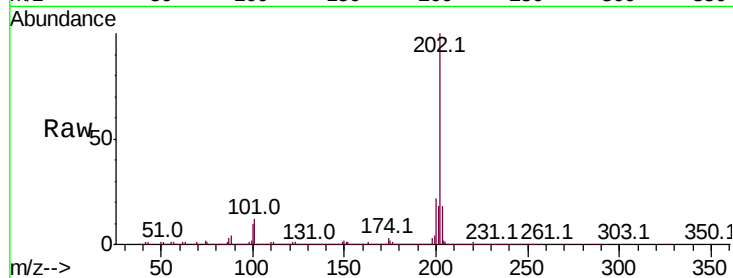
#77  
Pvrene  
Concen: 48.733 ng  
RT: 13.02 min Scan# 1816  
Delta R.T. 0.01 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

Instrument :  
BNA\_F  
ClientSampled :  
72-11990

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 200     | 22.1  | 17.4       | 26.2  |
| 203     | 18.3  | 14.3       | 21.5  |

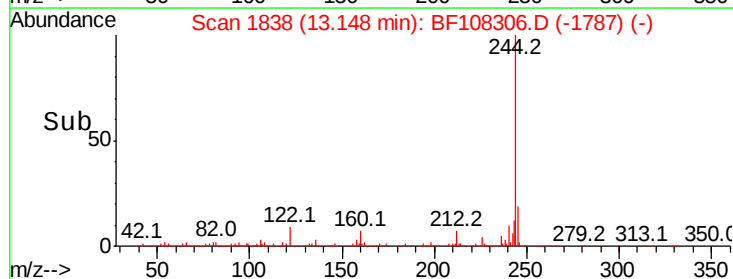
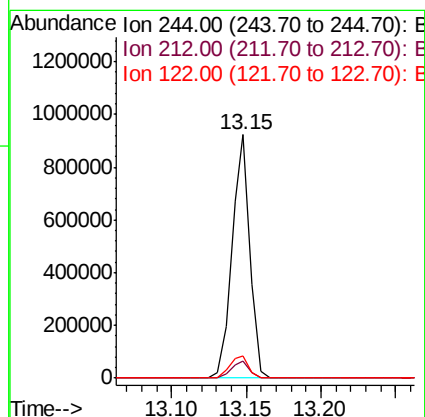
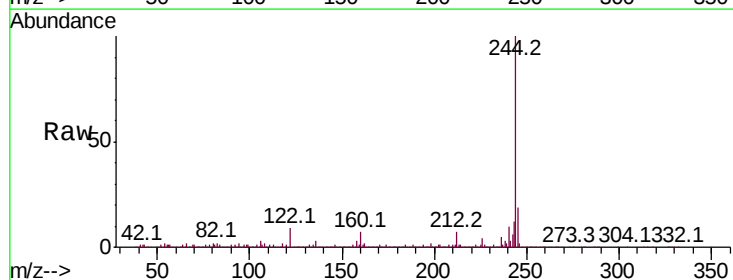
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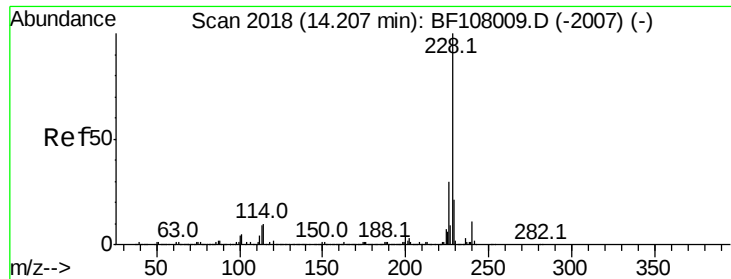
Sohil  
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#78  
Terphenyl-d14  
Concen: 63.730 ng  
RT: 13.15 min Scan# 1838  
Delta R.T. 0.00 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 244     | 100   |            |       |
| 212     | 7.1   | 5.4        | 8.0   |
| 122     | 9.0   | 11.0       | 16.4  |





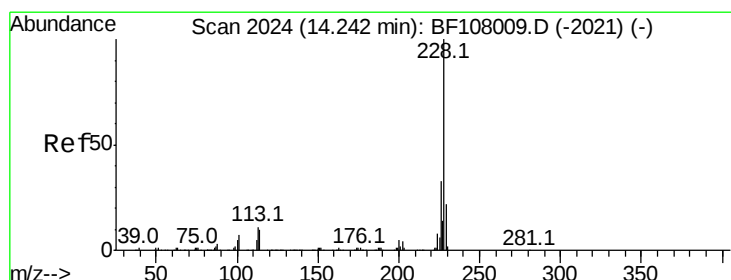
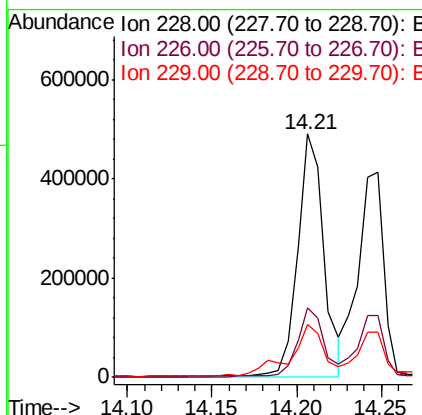
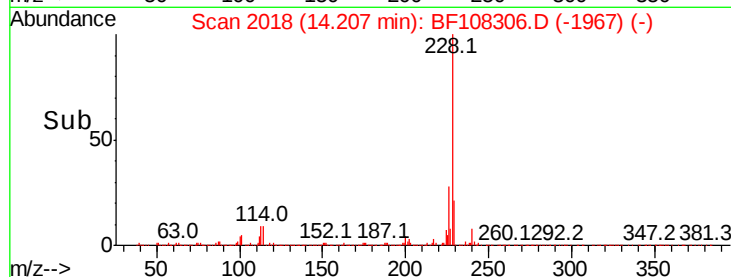
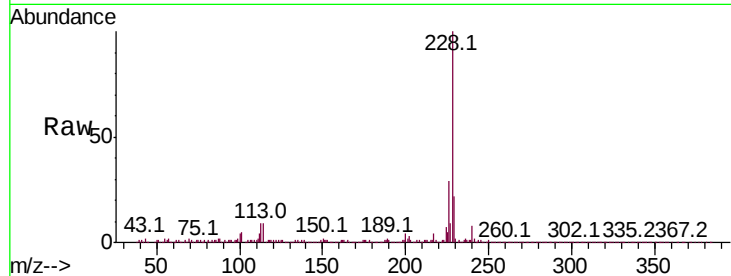
#80  
Benzo(a)anthracene  
Concen: 29.559 ng  
RT: 14.21 min Scan# 2018  
Delta R.T. 0.00 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

Instrument :  
BNA\_F  
ClientSampled :  
72-11990

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.8  | 22.6  | 33.8  |
| 229     | 21.5  | 15.8  | 23.6  |

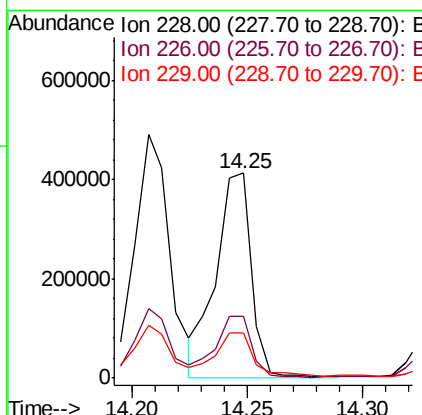
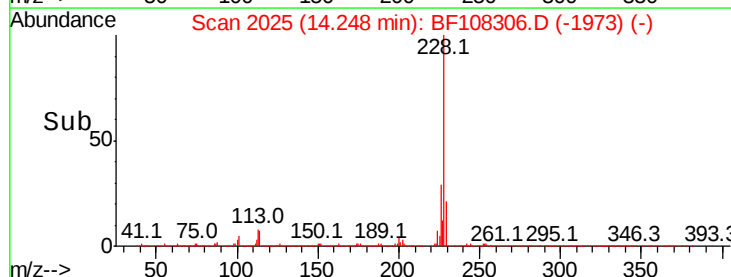
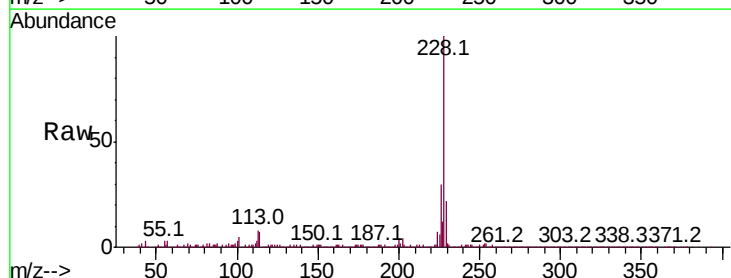
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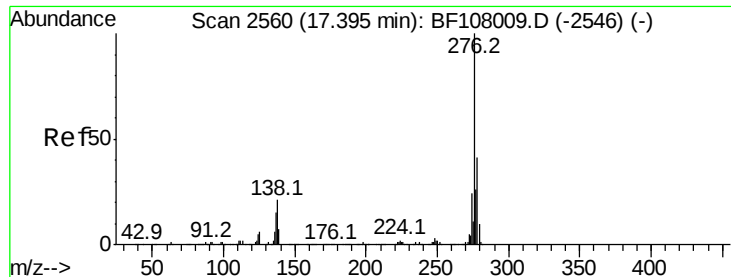
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#82  
Chrysene  
Concen: 26.755 ng  
RT: 14.25 min Scan# 2025  
Delta R.T. 0.01 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.0  | 25.0  | 37.6  |
| 229     | 21.9  | 16.2  | 24.4  |





#85

Indeno(1,2,3-cd)pyrene

Concen: 14.753 ng

RT: 17.42 min Scan# 2564

Delta R.T. 0.02 min

Lab File: BF108306.D

Acq: 20 Aug 2018 22:34

Instrument :

BNA\_F

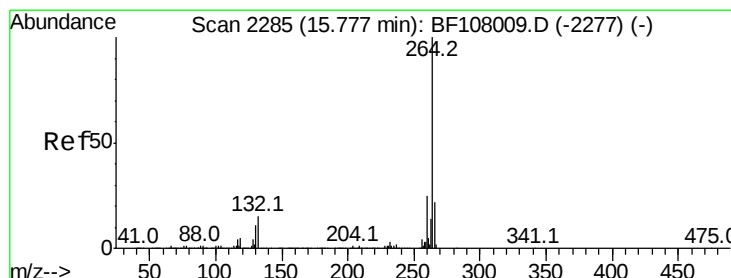
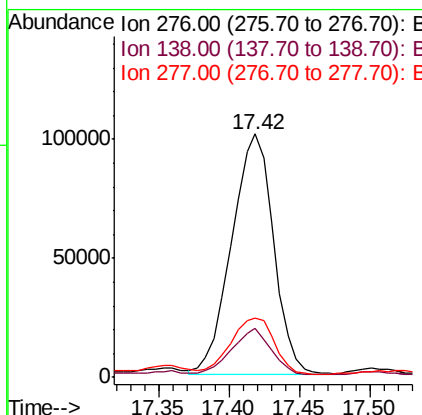
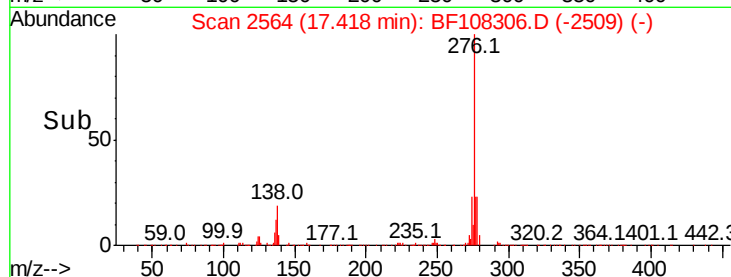
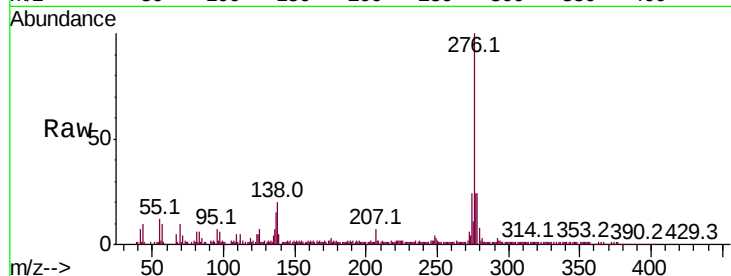
ClientSampled :

72-11990

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 209058 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 18.1  | 25.0  | 37.6#  |
| 277       | 24.5  | 20.1  | 30.1   |

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#86

Perylene-d12

Concen: 20.000 ng

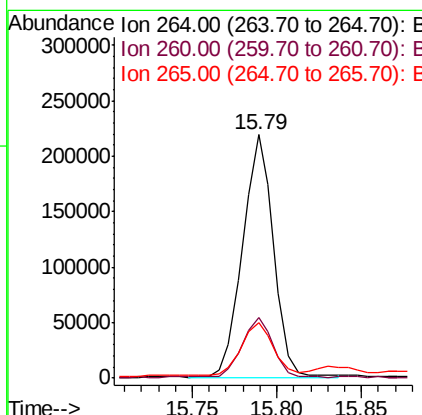
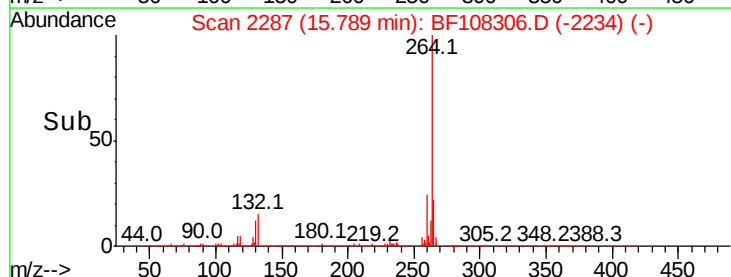
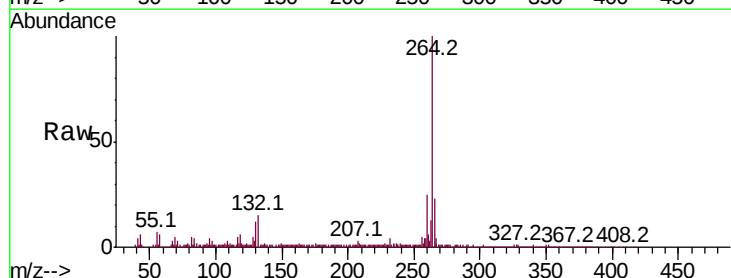
RT: 15.79 min Scan# 2287

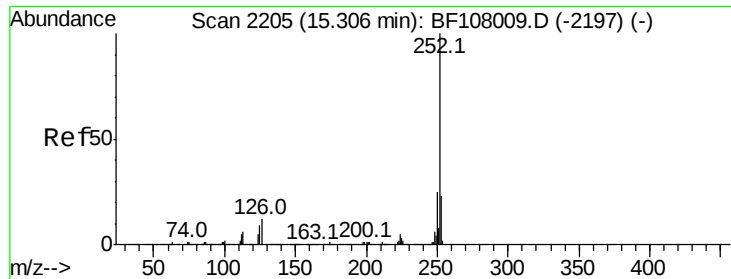
Delta R.T. 0.01 min

Lab File: BF108306.D

Acq: 20 Aug 2018 22:34

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 264   | Resp: | 277488 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 24.8  | 19.2  | 28.8   |
| 265       | 22.6  | 17.5  | 26.3   |





#87

Benzo(b)fluoranthene

Concen: 36.191 ng m

RT: 15.32 min Scan# 2207

Delta R.T. 0.01 min

Lab File: BF108306.D

Acq: 20 Aug 2018 22:34

Instrument :

BNA\_F

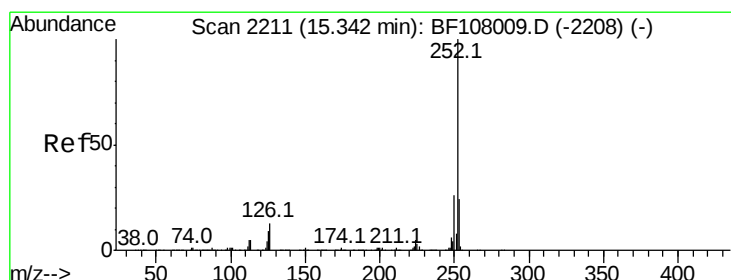
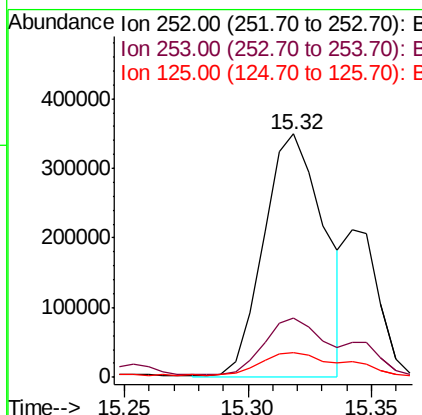
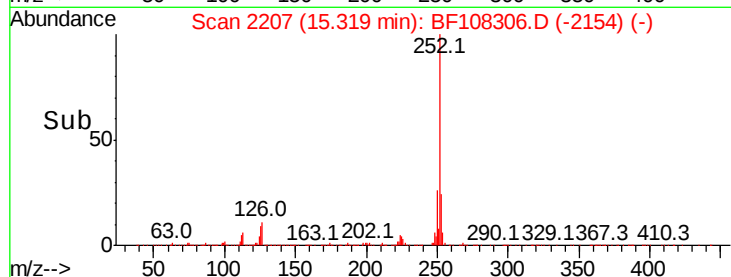
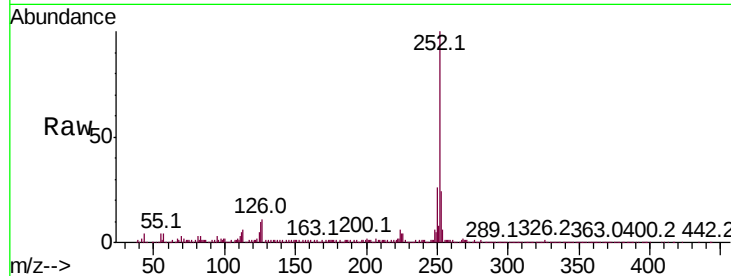
ClientSampleId :

72-11990

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 600081 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 24.3  | 17.0  | 25.6   |
| 125       | 10.2  | 9.0   | 13.6   |

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#88

Benzo(k)fluoranthene

Concen: 13.149 ng m

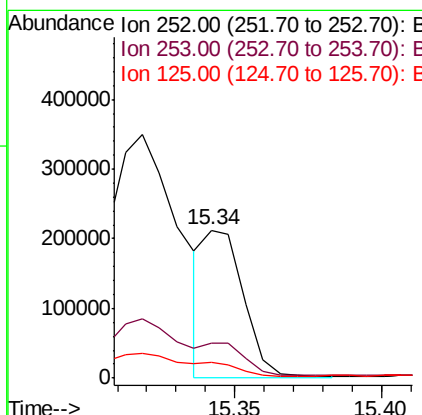
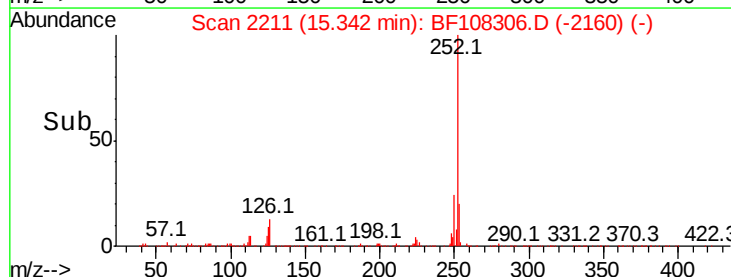
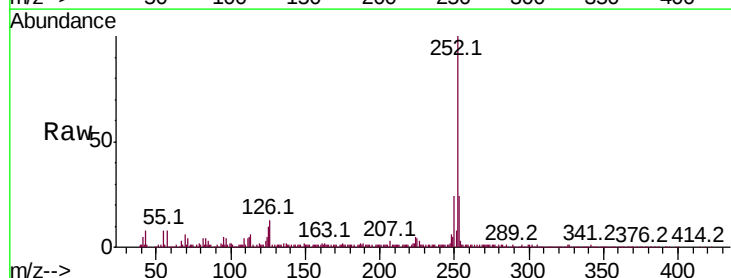
RT: 15.34 min Scan# 2211

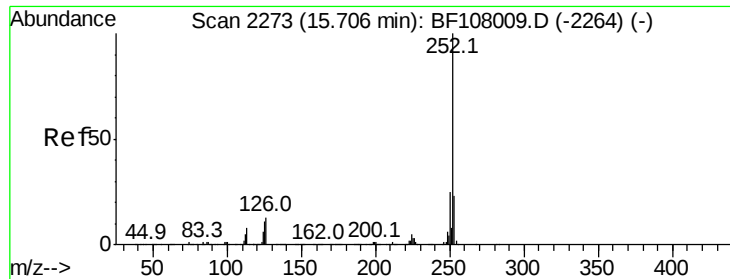
Delta R.T. 0.00 min

Lab File: BF108306.D

Acq: 20 Aug 2018 22:34

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 200411 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.7  | 17.9  | 26.9   |
| 125       | 10.4  | 10.2  | 15.2   |





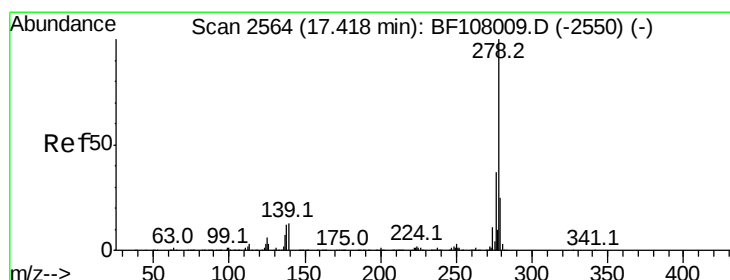
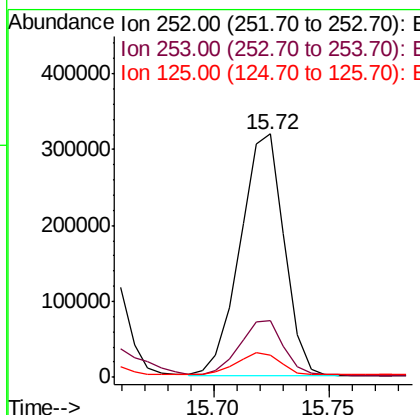
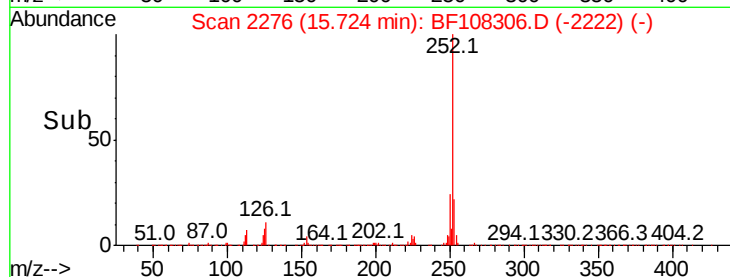
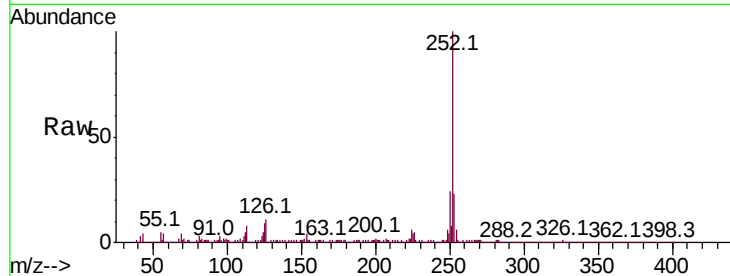
#89  
Benzo(a)pyrene  
Concen: 28.533 ng m  
RT: 15.72 min Scan# 2276  
Delta R.T. 0.02 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

Instrument :  
BNA\_F  
ClientSampleId :  
72-11990

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.4  | 17.1  | 25.7  |
| 125     | 9.3   | 9.8   | 14.6  |

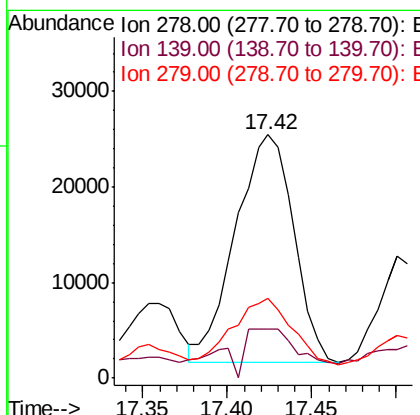
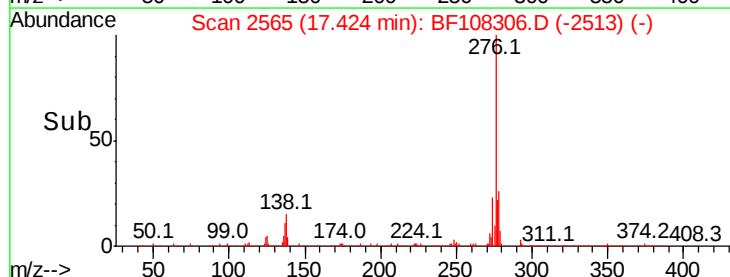
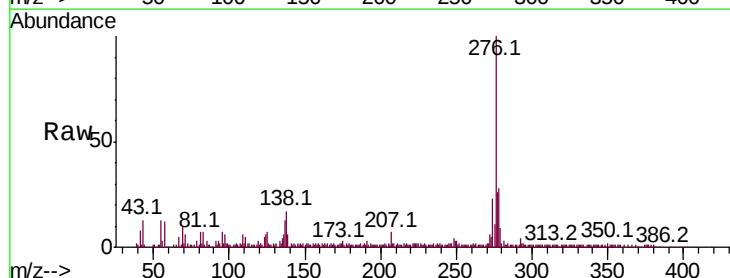
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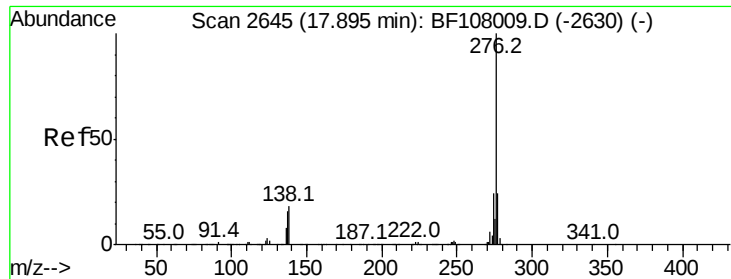
Sohil  
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#90  
Dibenzo(a,h)anthracene  
Concen: 4.612 ng  
RT: 17.42 min Scan# 2565  
Delta R.T. 0.01 min  
Lab File: BF108306.D  
Acq: 20 Aug 2018 22:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 20.4  | 15.9  | 23.9  |
| 279     | 32.8  | 19.0  | 28.4  |





#91  
 Benzo(a,h,i)perylene  
 Concen: 15.477 ng  
 RT: 17.92 min Scan# 2649  
 Delta R.T. 0.02 min  
 Lab File: BF108306.D  
 Acq: 20 Aug 2018 22:34

Instrument :  
 BNA\_F  
 ClientSampleId :  
 72-11990

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.1  | 17.9  | 26.9  |
| 138     | 18.8  | 21.8  | 32.8  |

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