

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF082519\  
 Data File : BF116553.D  
 Acq On : 26 Aug 2019 3:41  
 Operator : HP/JU  
 Sample : K4510-02  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-44-COMP

Manual Integrations  
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 8/29/2019 7:53:42 AM

Quant Time: Aug 26 08:33:11 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082319.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 13:38:31 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.88  | 152  | 130688   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.16  | 136  | 482553   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.92  | 164  | 216598   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.40 | 188  | 298751   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.03 | 240  | 203536   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.50 | 264  | 179931   | 20.00 | ng    | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.51  | 112  | 614999   | 68.76 | ng    | 0.01     |
| 7) Phenol-d6                | 6.51  | 99   | 824596   | 75.19 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.44  | 82   | 500797   | 56.78 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.70 | 330  | 75444    | 40.56 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.24  | 172  | 920596   | 68.45 | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.98 | 244  | 606232   | 55.64 | ng    | 0.00     |

| Target Compounds           | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|----------------------------|-------|------|----------|--------|-------|--------|
| 50) Dimethylphthalate      | 9.62  | 163  | 108571   | 7.184  | ng    | 99     |
| 71) Phenanthrene           | 11.42 | 178  | 219960   | 13.515 | ng    | 98     |
| 72) Anthracene             | 11.47 | 178  | 44943    | 2.748  | ng    | 98     |
| 75) Fluoranthene           | 12.61 | 202  | 301788   | 17.936 | ng    | 99     |
| 78) Pyrene                 | 12.84 | 202  | 322546   | 19.816 | ng    | 99     |
| 81) Benzo(a)anthracene     | 14.02 | 228  | 138503   | 10.507 | ng    | 97     |
| 83) Chrysene               | 14.06 | 228  | 144531   | 10.817 | ng    | 97     |
| 86) Indeno(1,2,3-cd)pyrene | 16.96 | 276  | 49811    | 4.352  | ng    | 97     |
| 88) Benzo(b)fluoranthene   | 15.07 | 252  | 132528m  | 11.923 | ng    |        |
| 89) Benzo(k)fluoranthene   | 15.09 | 252  | 40745m   | 4.046  | ng    |        |
| 90) Benzo(a)pyrene         | 15.43 | 252  | 92767    | 9.443  | ng    | 98     |
| 92) Benzo(a,h,i)perylene   | 17.40 | 276  | 47511    | 6.174  | ng    | 96     |

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

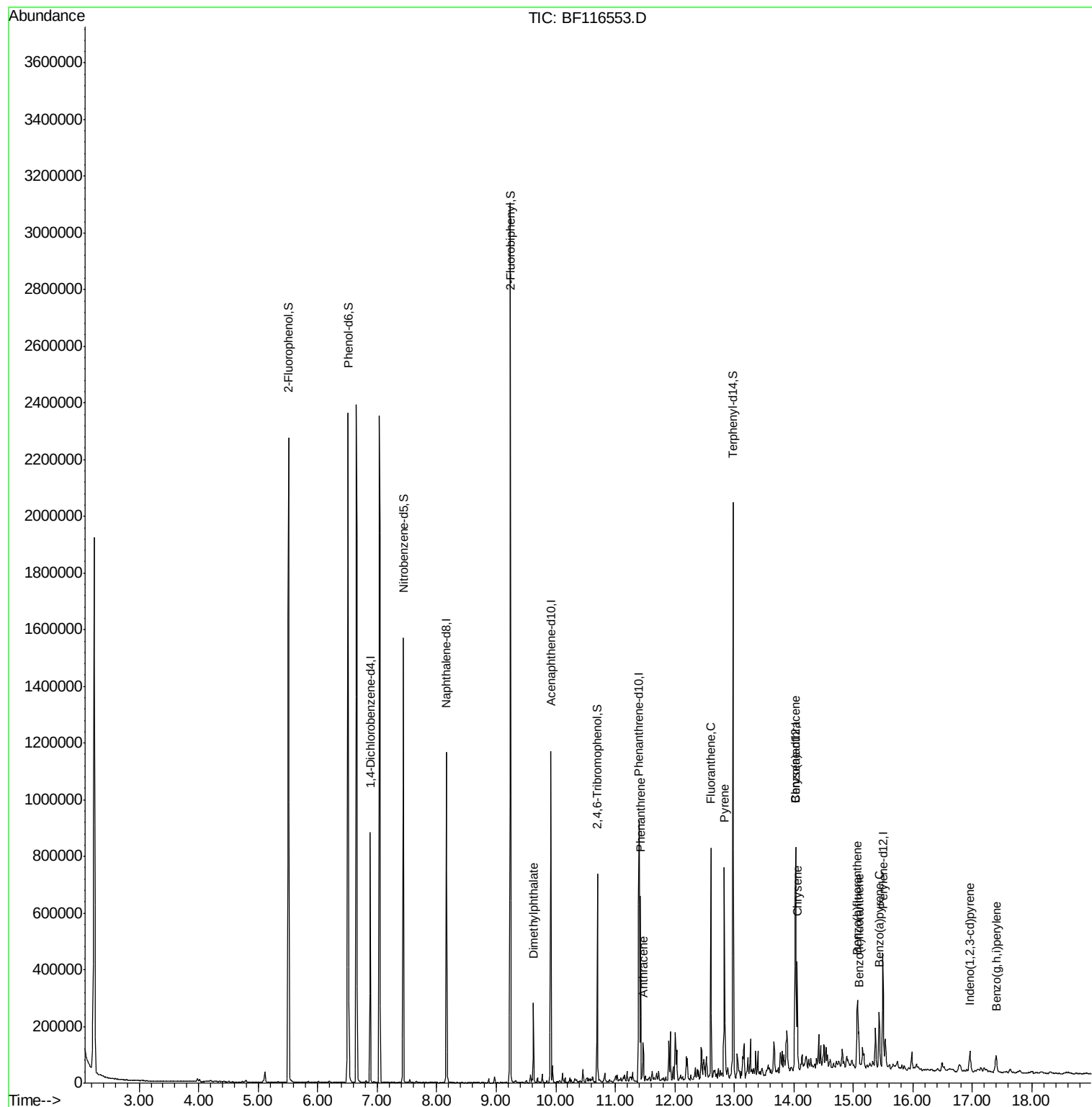
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF082519\  
Data File : BF116553.D  
Acq On : 26 Aug 2019 3:41  
Operator : HP/JU  
Sample : K4510-02  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

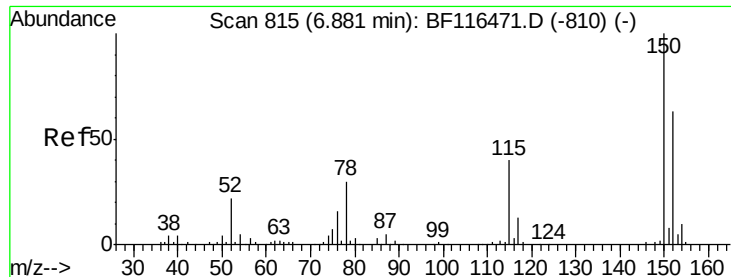
Instrument :  
BNA\_F  
ClientSampleId :  
SB-44-COMP

Quant Time: Aug 26 08:33:11 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082319.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 23 13:38:31 2019  
Response via : Initial Calibration

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#1

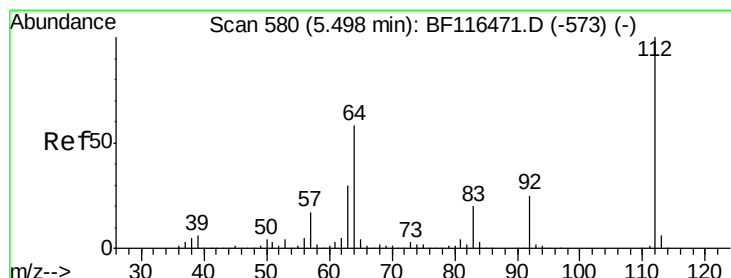
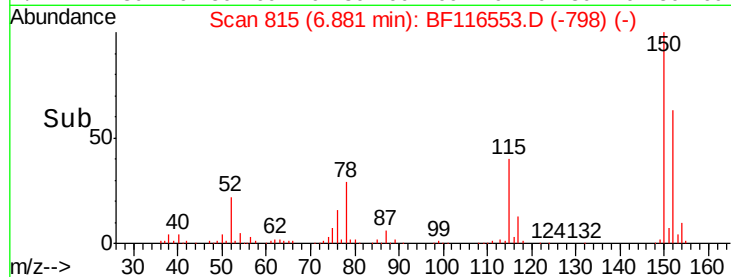
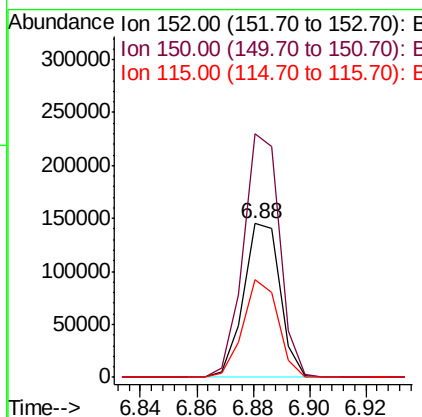
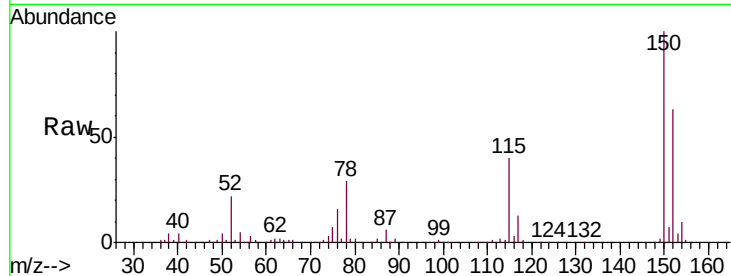
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.88 min Scan# 815  
Delta R.T. -0.00 min  
Lab File: BF116553.D  
Acq: 26 Aug 2019 3:41

Instrument :  
BNA\_F  
ClientSampleId :  
SB-44-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 158.5 | 126.7 | 190.1 |
| 115     | 63.5  | 50.9  | 76.3  |

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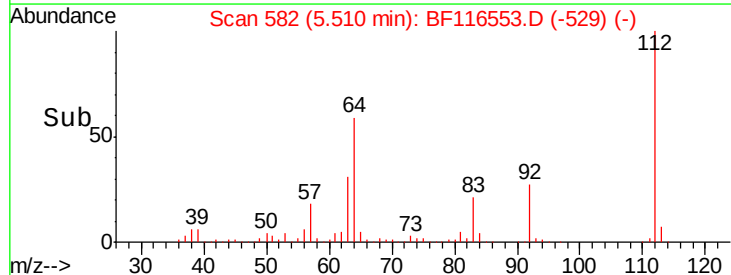
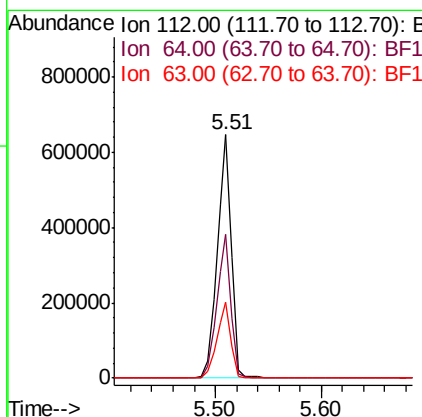
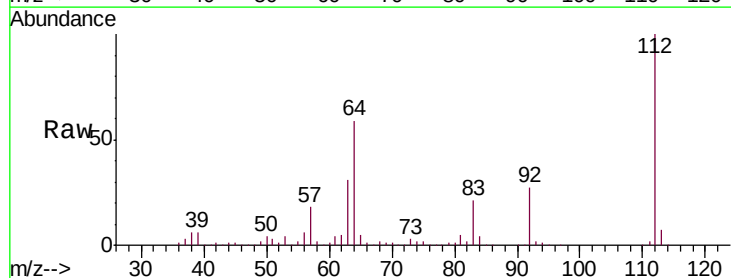
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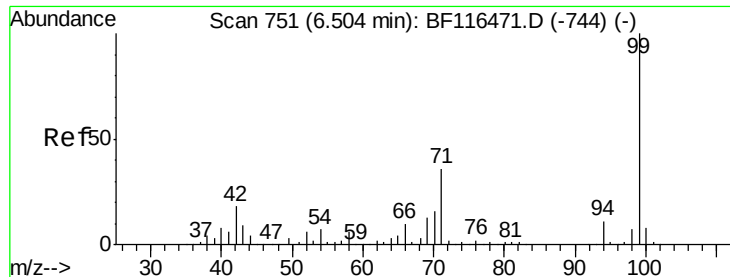


#5

2-Fluorophenol  
Concen: 68.759 ng  
RT: 5.51 min Scan# 582  
Delta R.T. 0.01 min  
Lab File: BF116553.D  
Acq: 26 Aug 2019 3:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 59.1  | 46.3  | 69.5  |
| 63      | 31.3  | 24.2  | 36.4  |





#7

Phenol-d6

Concen: 75.189 ng

RT: 6.51 min Scan# 752

Delta R.T. 0.01 min

Lab File: BF116553.D

Acq: 26 Aug 2019 3:41

Instrument :

BNA\_F

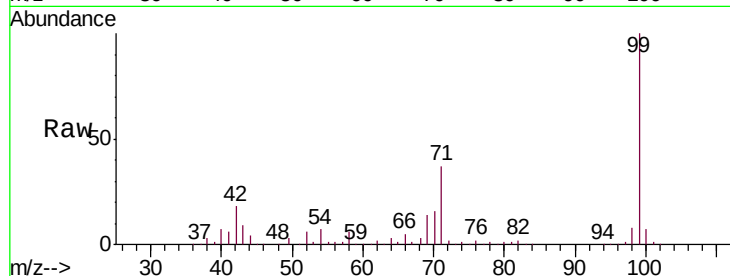
ClientSampleId :

SB-44-COMP

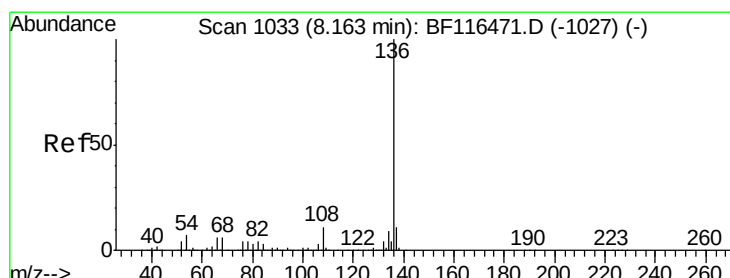
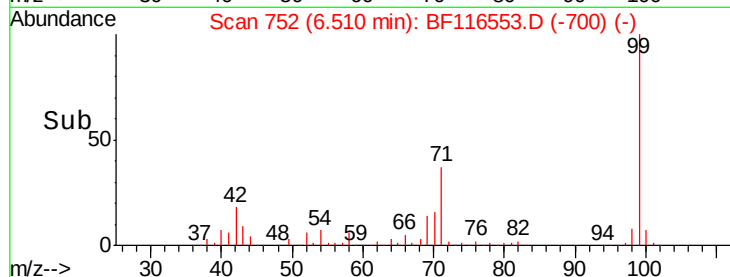
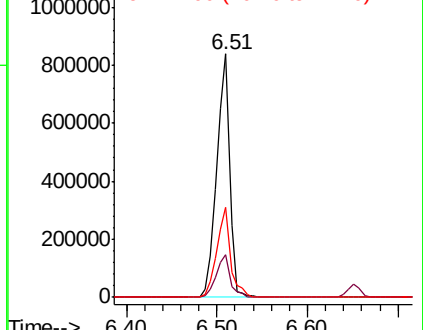
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 824596 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 17.6  | 14.6  | 21.8   |
| 71        | 37.1  | 28.5  | 42.7   |

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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: 8.16 min Scan# 1033

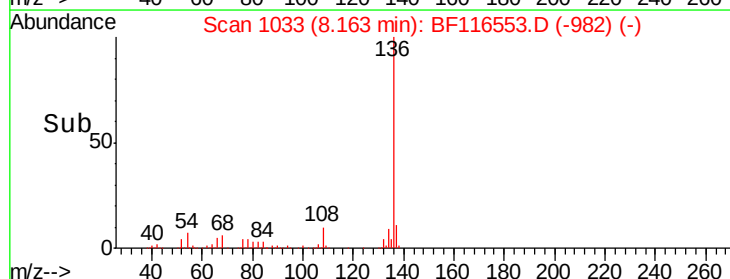
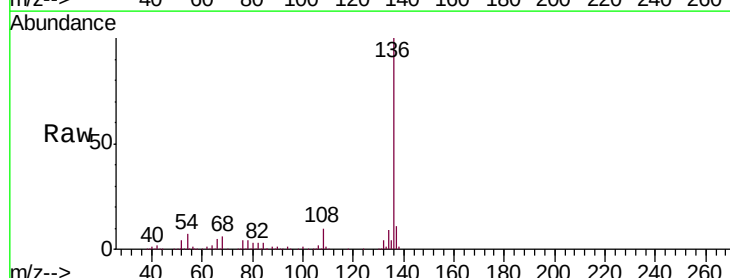
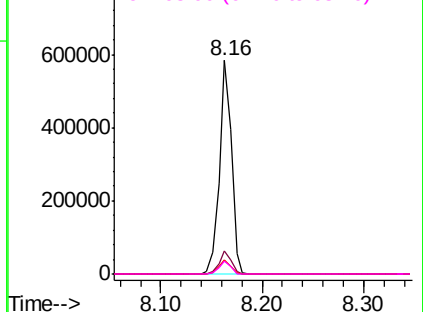
Delta R.T. -0.00 min

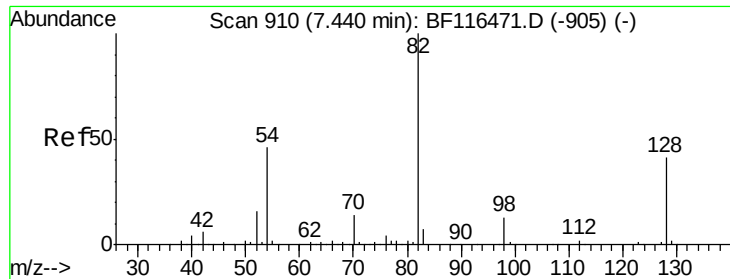
Lab File: BF116553.D

Acq: 26 Aug 2019 3:41

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 482553 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.8  | 9.0   | 13.4   |
| 54        | 6.8   | 5.8   | 8.6    |
| 68        | 6.1   | 5.1   | 7.7    |

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





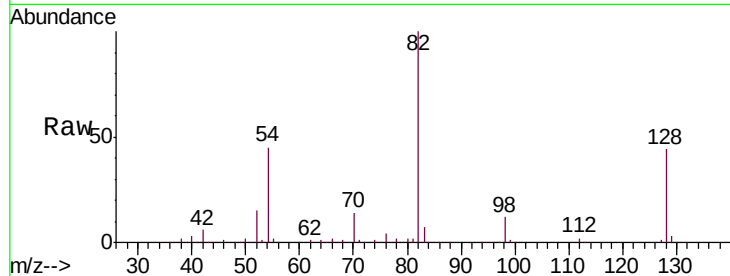
#23  
 Nitrobenzene-d5  
 Concen: 56.778 ng  
 RT: 7.44 min Scan# 910  
 Delta R.T. -0.00 min  
 Lab File: BF116553.D  
 Acq: 26 Aug 2019 3:41

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-44-COMP

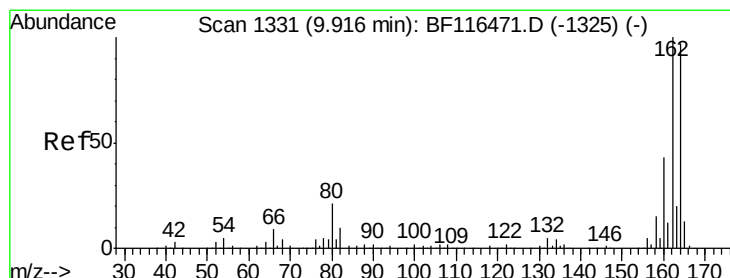
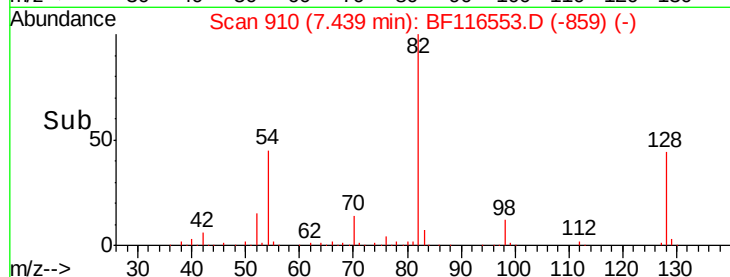
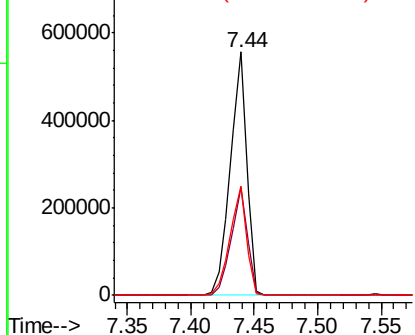
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 82    | Resp: | 500797 |
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 44.3  | 32.2  | 48.4   |
| 54        | 44.8  | 36.5  | 54.7   |

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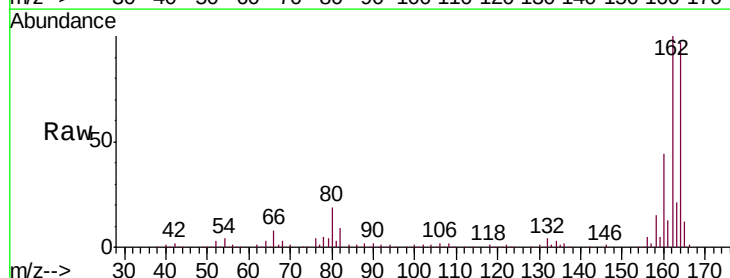


Abundance Ion 82.00 (81.70 to 82.70): BF1  
 Ion 128.00 (127.70 to 128.70): E  
 Ion 54.00 (53.70 to 54.70): BF1

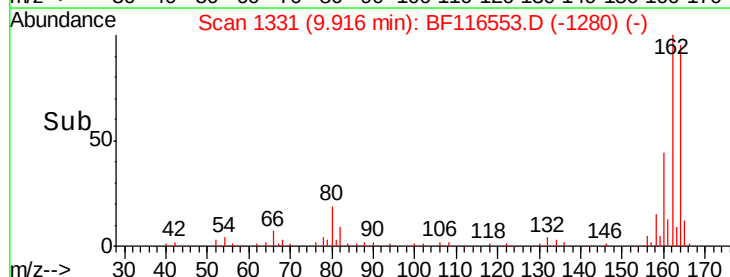
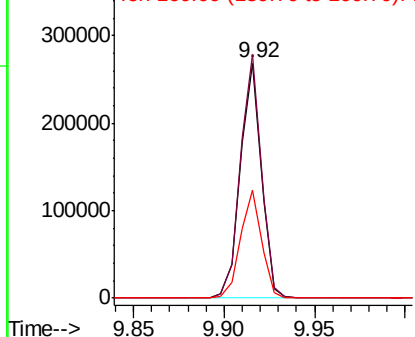


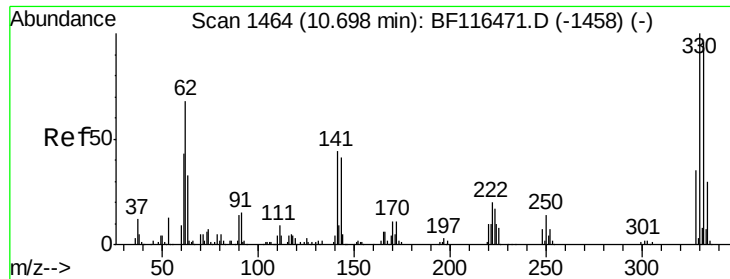
#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.92 min Scan# 1331  
 Delta R.T. -0.00 min  
 Lab File: BF116553.D  
 Acq: 26 Aug 2019 3:41

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 164   | Resp: | 216598 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 103.6 | 82.6  | 123.8  |
| 160       | 46.0  | 35.8  | 53.8   |



Abundance Ion 164.00 (163.70 to 164.70): E  
 Ion 162.00 (161.70 to 162.70): E  
 Ion 160.00 (159.70 to 160.70): E





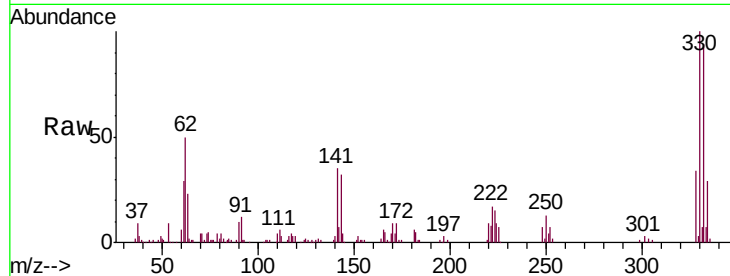
#42  
 2,4,6-Tribromophenol  
 Concen: 40.564 ng  
 RT: 10.70 min Scan# 1464  
 Delta R.T. -0.00 min  
 Lab File: BF116553.D  
 Acq: 26 Aug 2019 3:41

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-44-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 95.0  | 77.2  | 115.8 |
| 141     | 39.3  | 33.3  | 49.9  |

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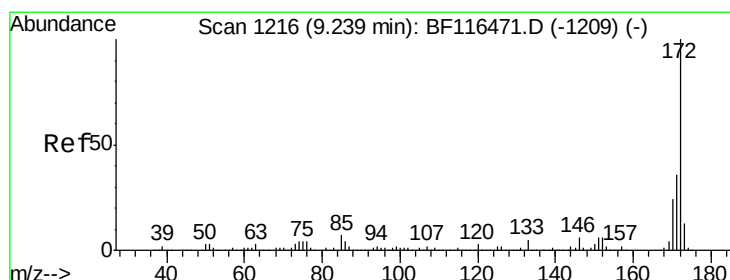
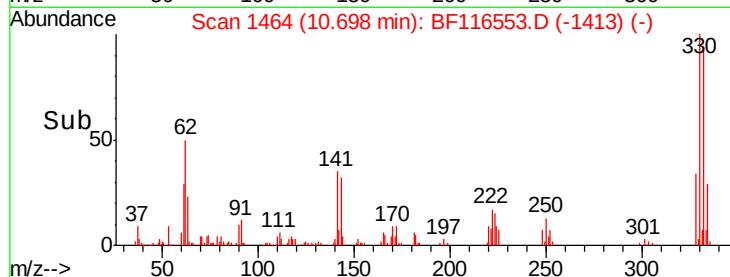
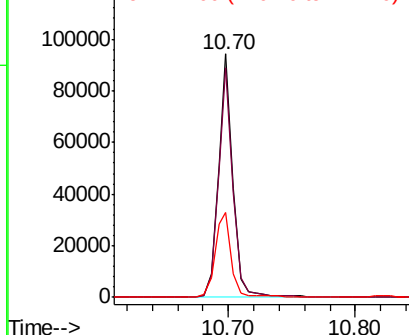


Abundance

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



#45  
 2-Fluorobiphenyl  
 Concen: 68.446 ng  
 RT: 9.24 min Scan# 1216  
 Delta R.T. -0.00 min  
 Lab File: BF116553.D  
 Acq: 26 Aug 2019 3:41

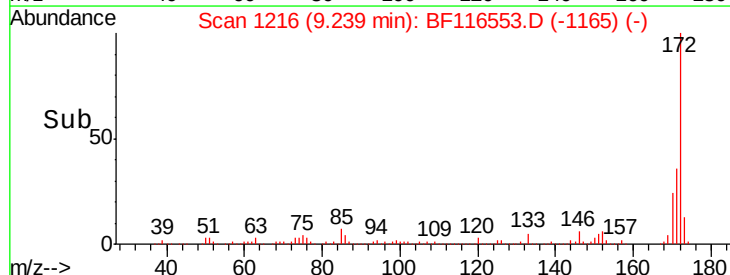
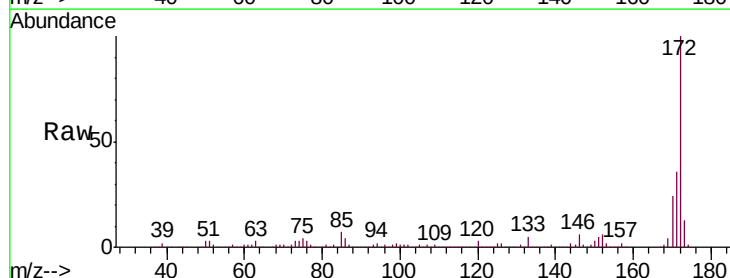
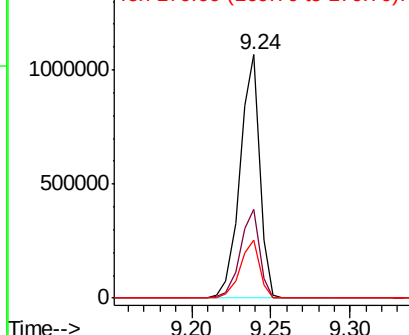
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.4  | 28.9  | 43.3  |
| 170     | 24.0  | 19.4  | 29.0  |

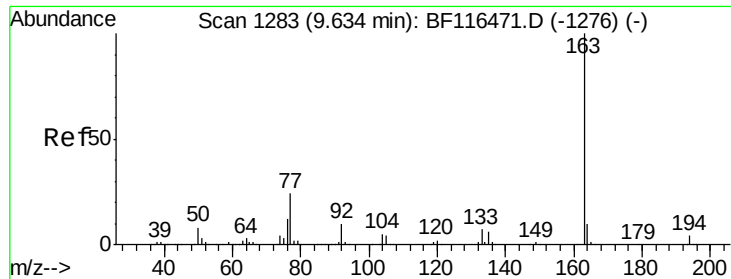
Abundance

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





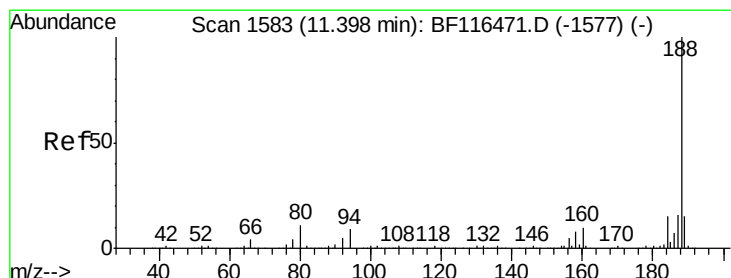
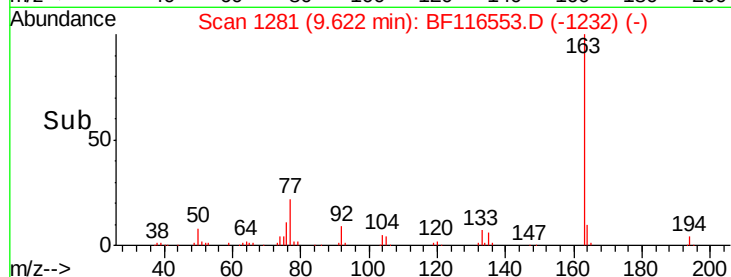
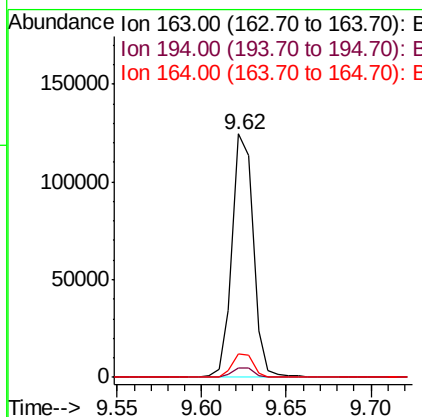
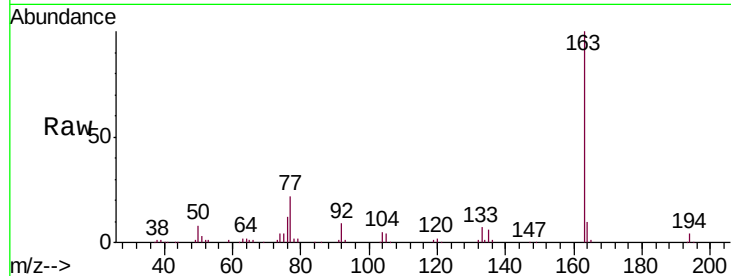
#50  
Dimethylphthalate  
Concen: 7.184 ng  
RT: 9.62 min Scan# 1281  
Delta R.T. -0.01 min  
Lab File: BF116553.D  
Acq: 26 Aug 2019 3:41

Instrument :  
BNA\_F  
ClientSampleId :  
SB-44-COMP

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 163     | 100   |            |       |
| 194     | 3.6   | 2.9        | 4.3   |
| 164     | 9.8   | 8.2        | 12.2  |

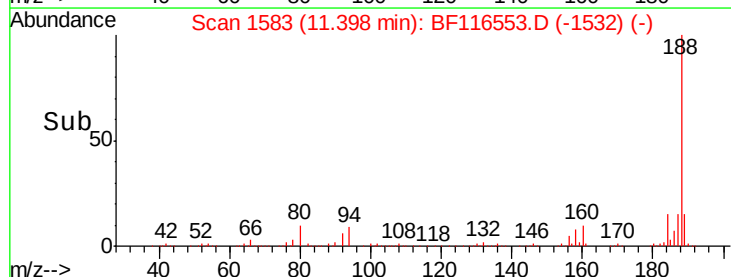
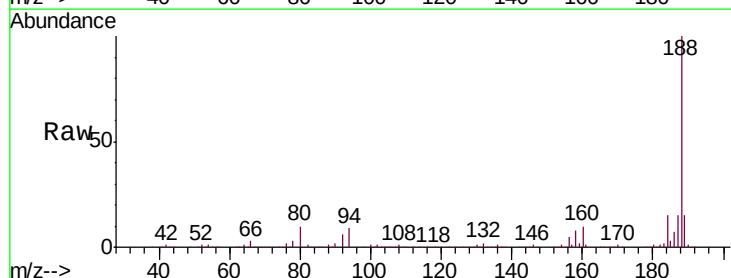
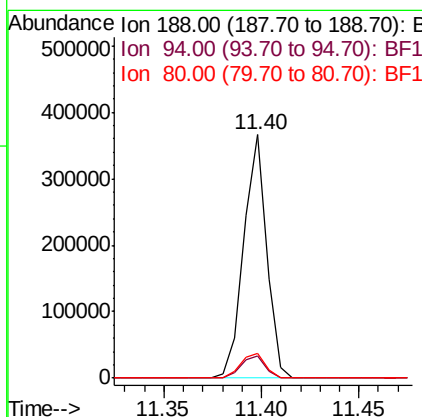
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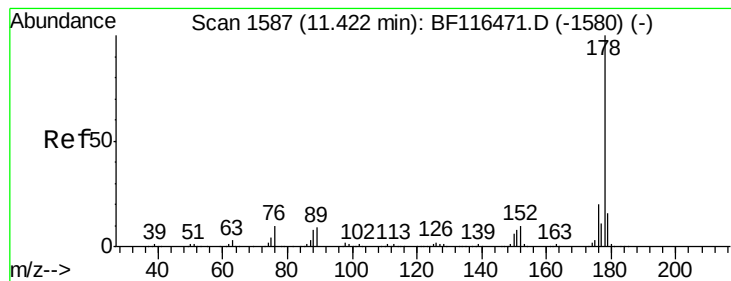
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#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.40 min Scan# 1583  
Delta R.T. -0.00 min  
Lab File: BF116553.D  
Acq: 26 Aug 2019 3:41

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 188     | 100   |            |       |
| 94      | 9.4   | 7.4        | 11.2  |
| 80      | 10.0  | 8.6        | 12.8  |





#71

Phenanthrene

Concen: 13.515 ng

RT: 11.42 min Scan# 1587

Delta R.T. -0.00 min

Lab File: BF116553.D

Acq: 26 Aug 2019 3:41

Instrument :

BNA\_F

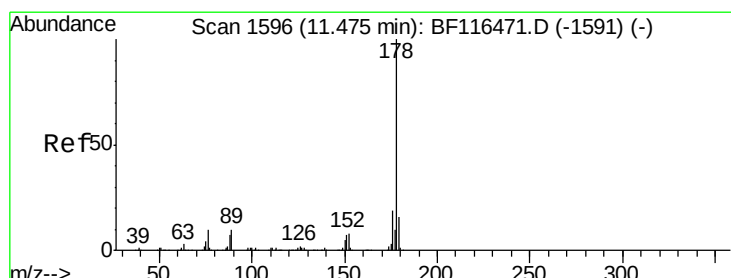
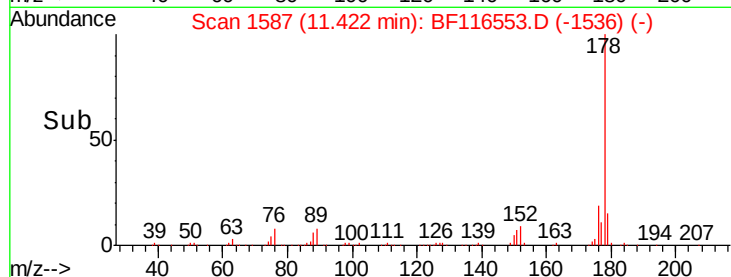
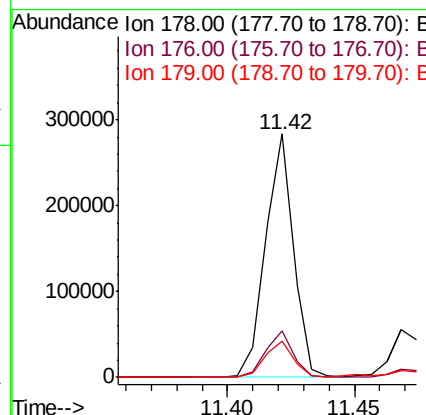
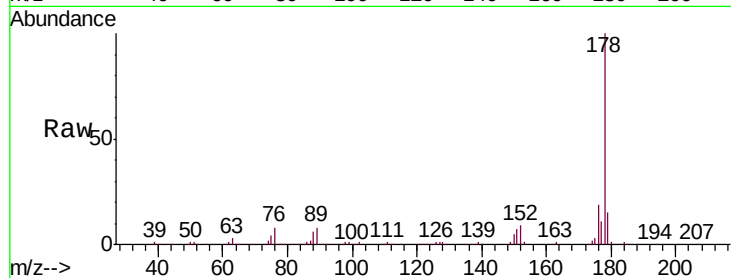
ClientSampleId :

SB-44-COMP

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 178   | Resp: | 219960 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 19.0  | 15.8  | 23.6   |
| 179       | 14.9  | 12.8  | 19.2   |

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#72

Anthracene

Concen: 2.748 ng

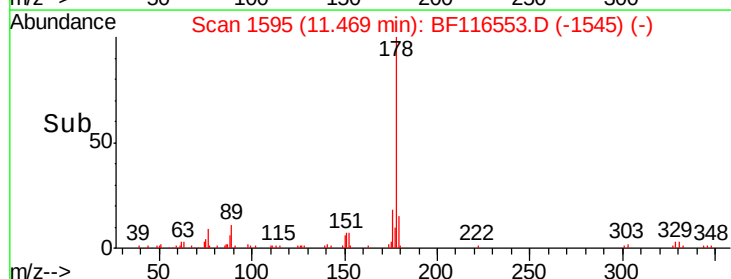
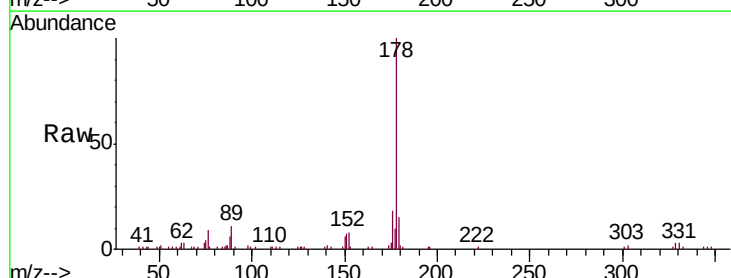
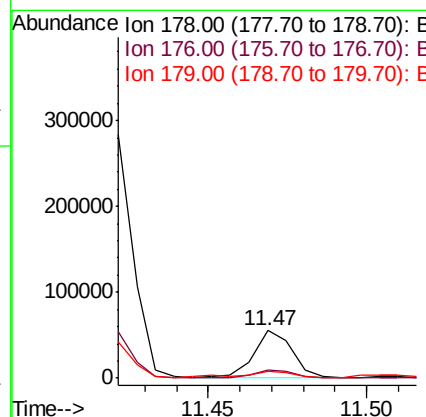
RT: 11.47 min Scan# 1595

Delta R.T. -0.01 min

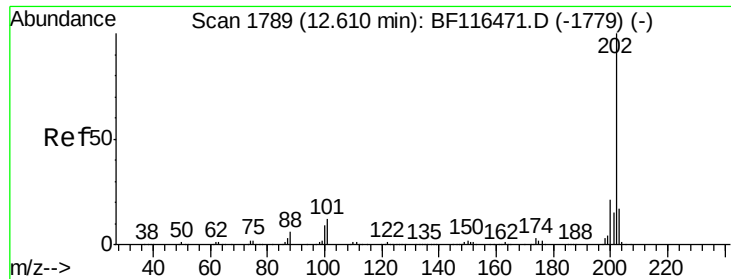
Lab File: BF116553.D

Acq: 26 Aug 2019 3:41

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 44943 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 17.9  | 15.2  | 22.8  |
| 179       | 14.5  | 12.5  | 18.7  |







#75

Fluoranthene

Concen: 17.936 ng

RT: 12.61 min Scan# 1789

Delta R.T. -0.00 min

Lab File: BF116553.D

Acq: 26 Aug 2019 3:41

Instrument :

BNA\_F

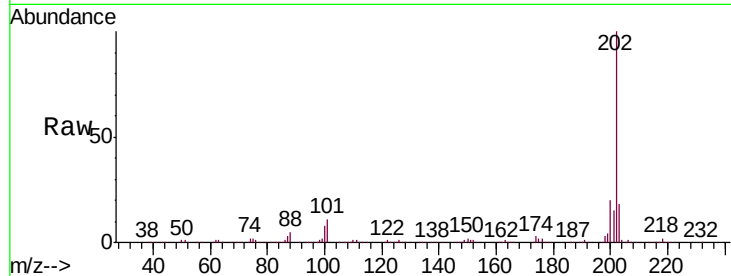
ClientSampleId :

SB-44-COMP

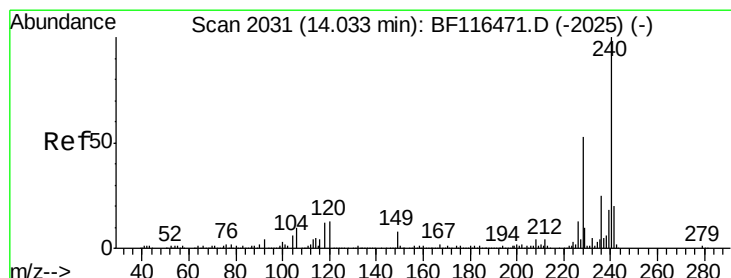
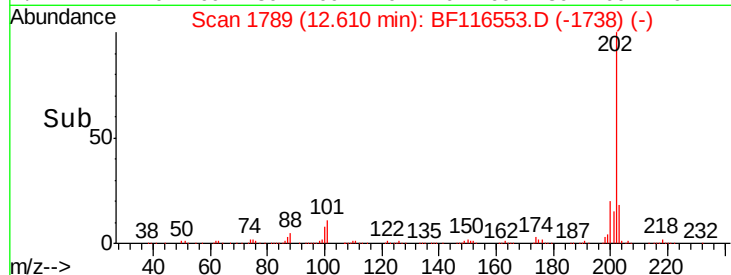
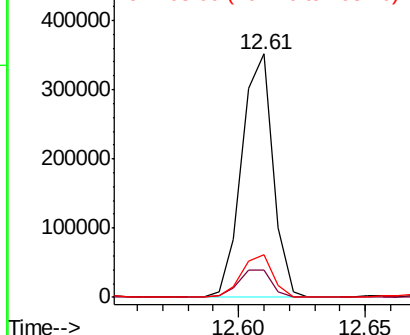
| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 11.0  | 0.0        | 31.5  |
| 203     | 17.8  | 0.0        | 37.5  |

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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



#76

Chrysene-d12

Concen: 20.000 ng

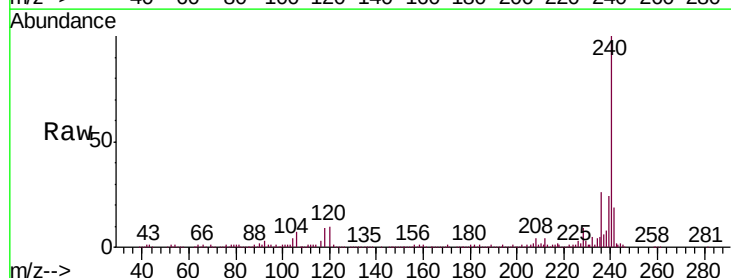
RT: 14.03 min Scan# 2031

Delta R.T. -0.00 min

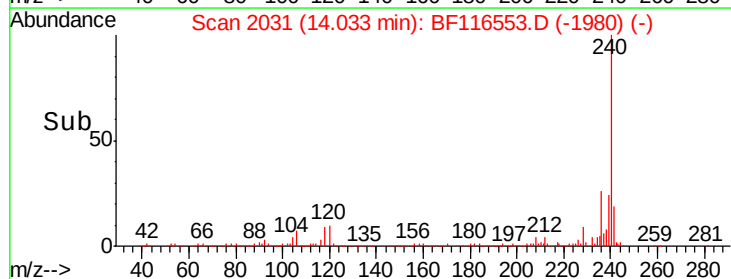
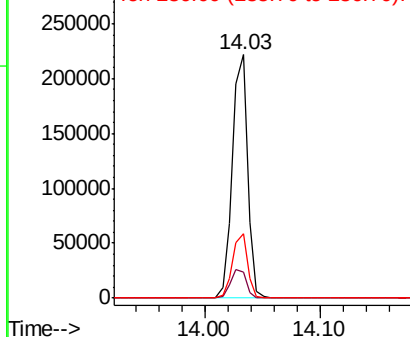
Lab File: BF116553.D

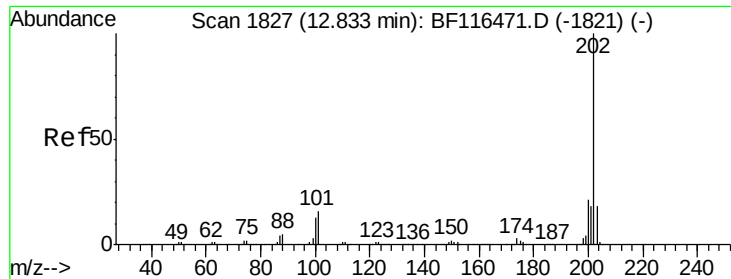
Acq: 26 Aug 2019 3:41

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 240     | 100   |            |       |
| 120     | 10.5  | 10.5       | 15.7# |
| 236     | 26.4  | 20.2       | 30.2  |



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





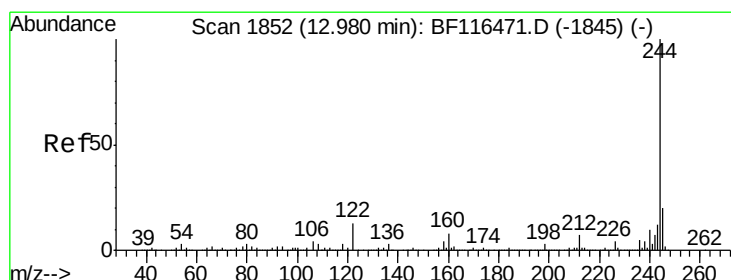
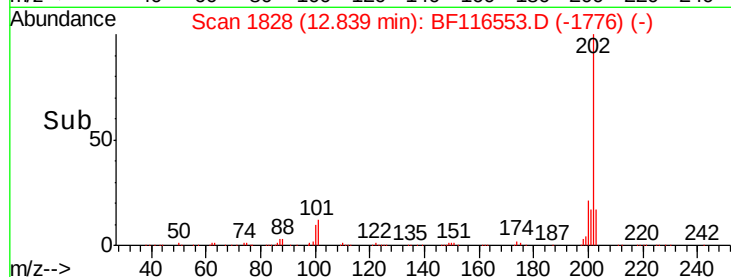
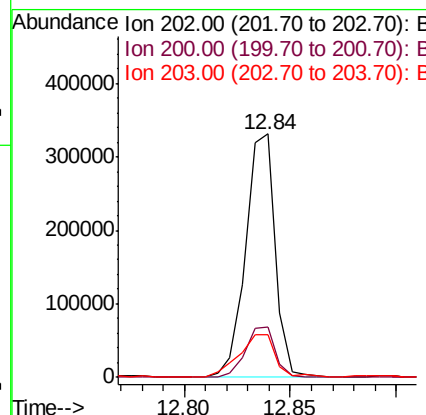
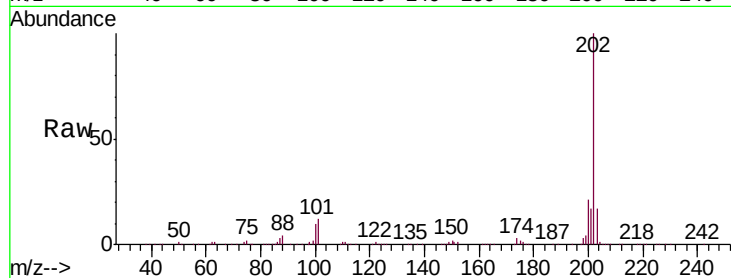
#78  
Pvrene  
Concen: 19.816 ng  
RT: 12.84 min Scan# 1828  
Delta R.T. 0.01 min  
Lab File: BF116553.D  
Acq: 26 Aug 2019 3:41

Instrument :  
BNA\_F  
ClientSampleId :  
SB-44-COMP

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 200     | 20.8  | 17.0       | 25.4  |
| 203     | 17.3  | 14.2       | 21.4  |

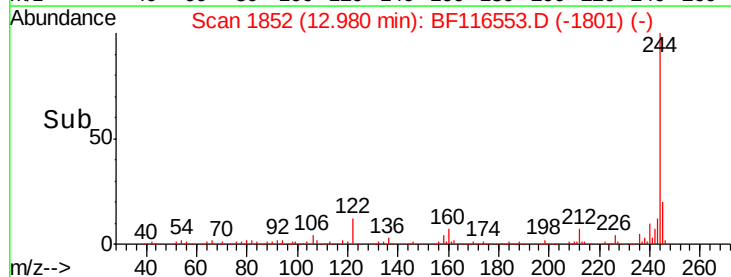
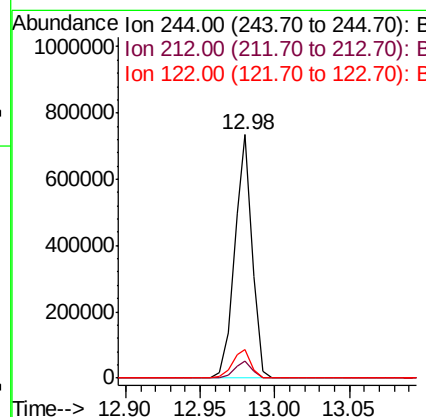
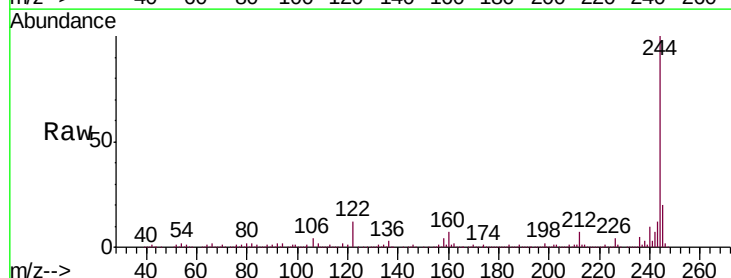
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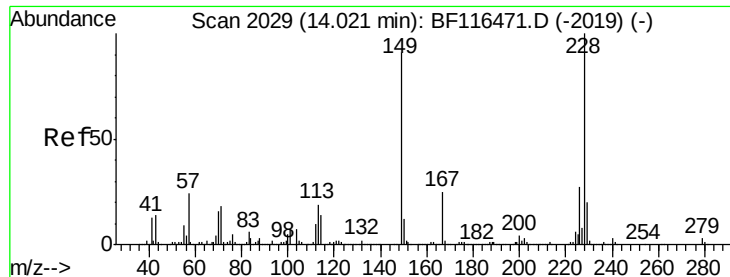
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#79  
Terphenyl-d14  
Concen: 55.635 ng  
RT: 12.98 min Scan# 1852  
Delta R.T. -0.00 min  
Lab File: BF116553.D  
Acq: 26 Aug 2019 3:41

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 244     | 100   |            |       |
| 212     | 6.8   | 5.7        | 8.5   |
| 122     | 11.6  | 10.2       | 15.4  |





#81

Benzo(a)anthracene

Concen: 10.507 ng

RT: 14.02 min Scan# 2029

Delta R.T. -0.00 min

Lab File: BF116553.D

Acq: 26 Aug 2019 3:41

Instrument :

BNA\_F

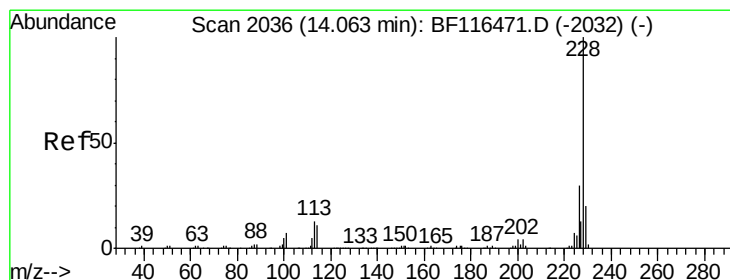
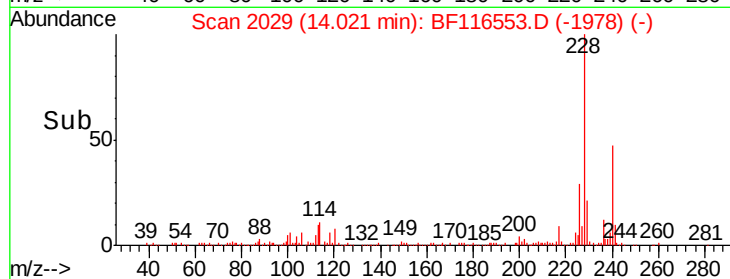
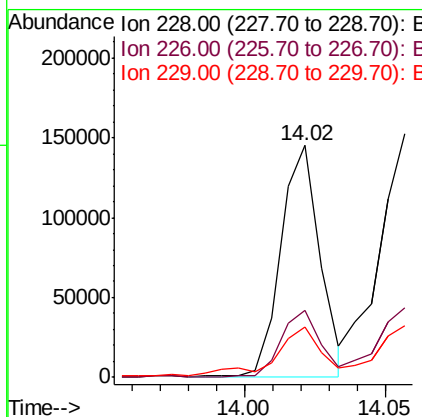
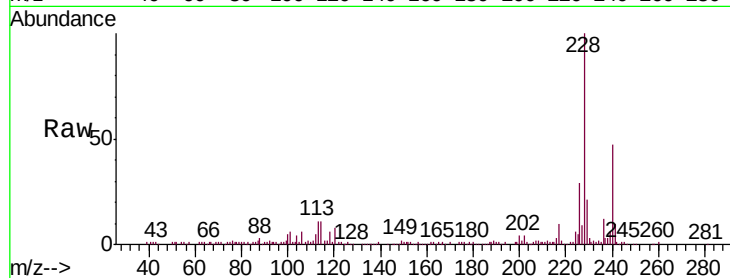
ClientSampleId :

SB-44-COMP

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 228  | Resp: | 138503 |
| Ion Ratio |      | Lower | Upper  |
| 228       | 100  |       |        |
| 226       | 29.0 | 21.8  | 32.6   |
| 229       | 21.5 | 15.9  | 23.9   |

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#83

Chrysene

Concen: 10.817 ng

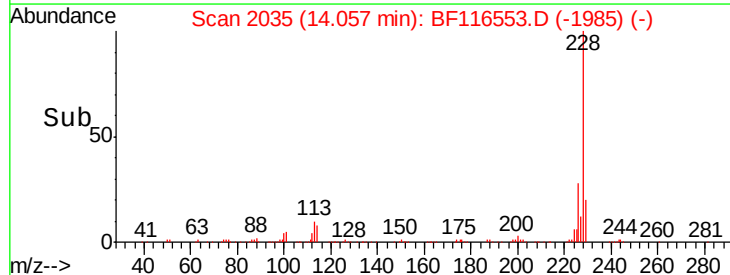
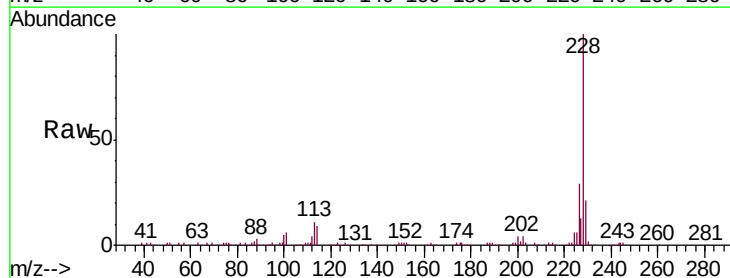
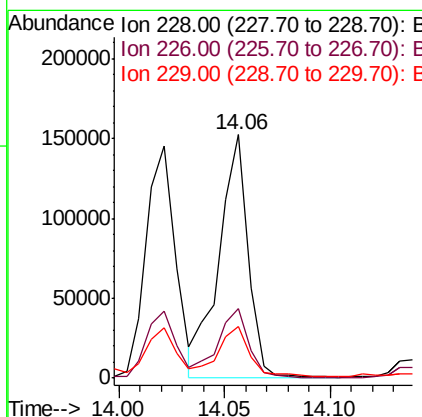
RT: 14.06 min Scan# 2035

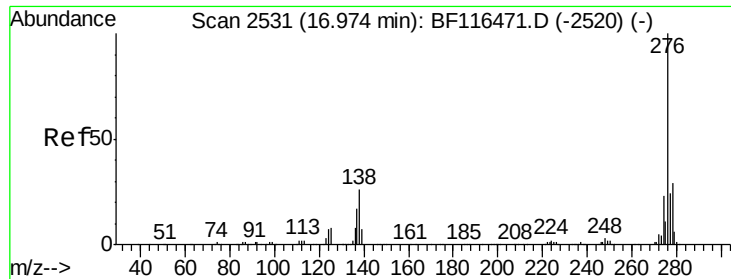
Delta R.T. -0.01 min

Lab File: BF116553.D

Acq: 26 Aug 2019 3:41

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 228  | Resp: | 144531 |
| Ion Ratio |      | Lower | Upper  |
| 228       | 100  |       |        |
| 226       | 28.7 | 24.2  | 36.2   |
| 229       | 21.5 | 15.8  | 23.6   |





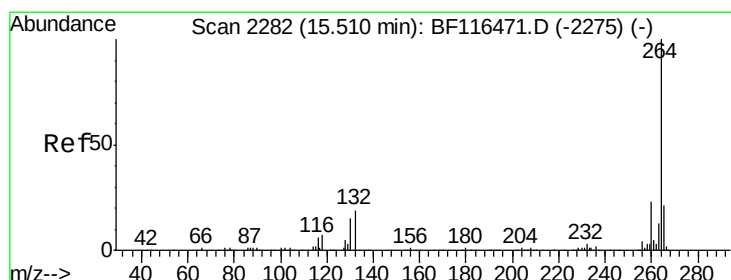
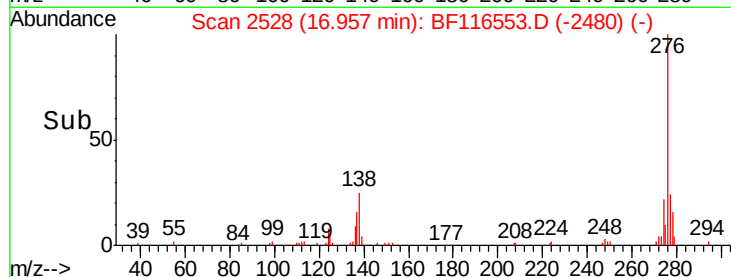
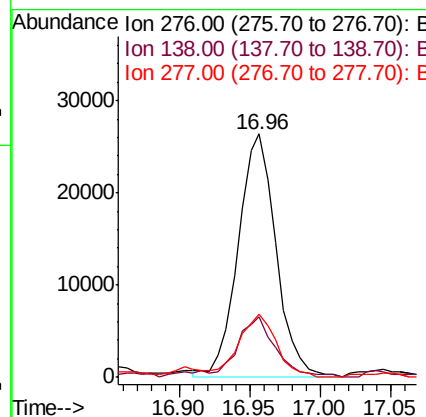
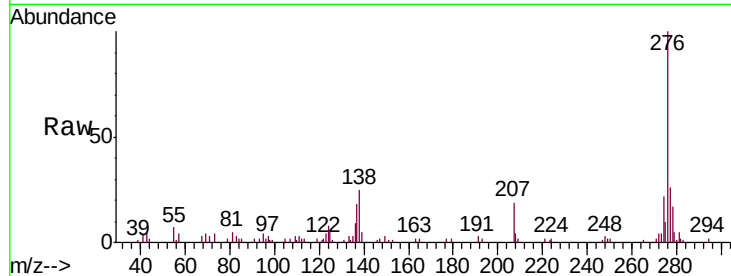
#86  
 Indeno(1,2,3-cd)pyrene  
 Concen: 4.352 ng  
 RT: 16.96 min Scan# 2528  
 Delta R.T. -0.02 min  
 Lab File: BF116553.D  
 Acq: 26 Aug 2019 3:41

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-44-COMP

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 276   | Resp: | 49811 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 26.7  | 22.9  | 34.3  |
| 277       | 26.2  | 19.9  | 29.9  |

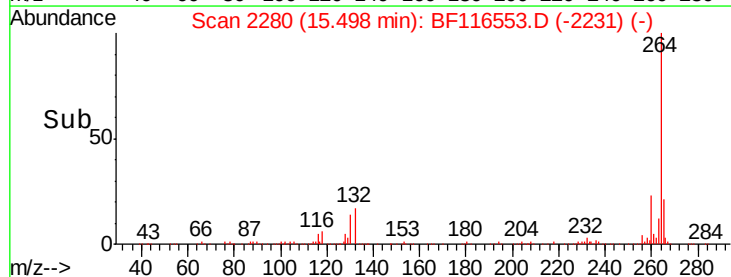
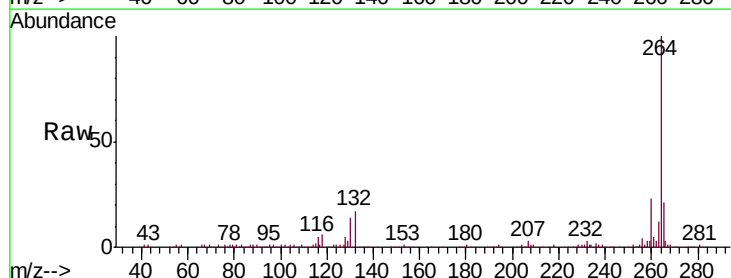
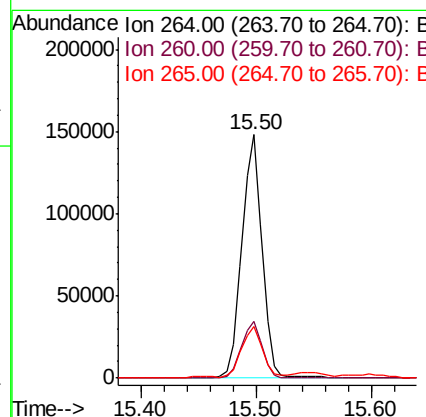
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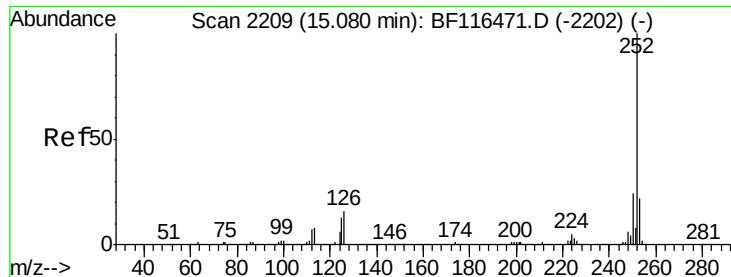
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#87  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 15.50 min Scan# 2280  
 Delta R.T. -0.01 min  
 Lab File: BF116553.D  
 Acq: 26 Aug 2019 3:41

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 264   | Resp: | 179931 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 23.4  | 18.8  | 28.2   |
| 265       | 21.3  | 17.1  | 25.7   |





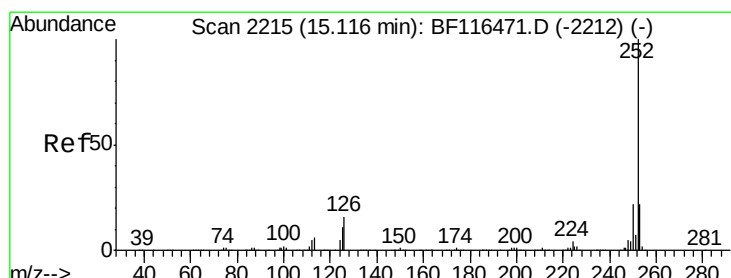
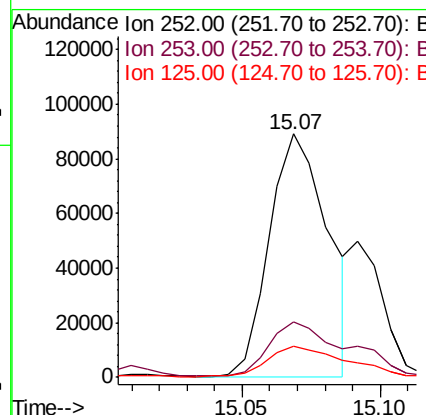
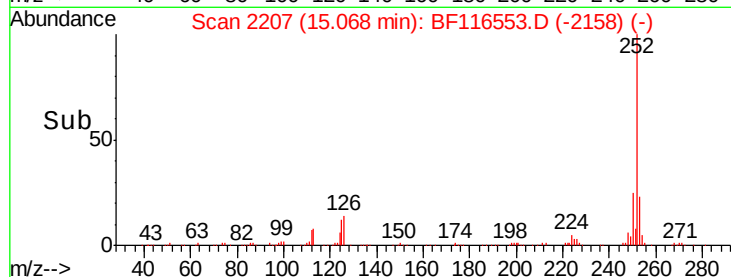
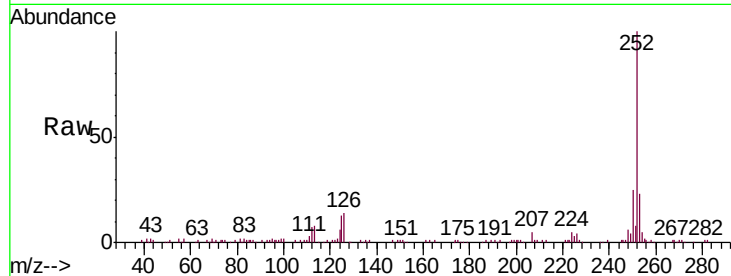
#88  
Benzo(b)fluoranthene  
Concen: 11.923 ng m  
RT: 15.07 min Scan# 2207  
Delta R.T. -0.01 min  
Lab File: BF116553.D  
Acq: 26 Aug 2019 3:41

Instrument :  
BNA\_F  
ClientSampleId :  
SB-44-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.6  | 17.5  | 26.3  |
| 125     | 12.7  | 10.1  | 15.1  |

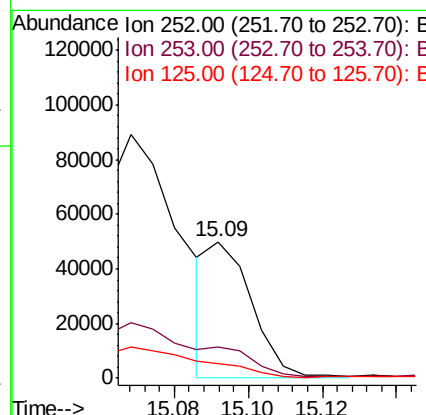
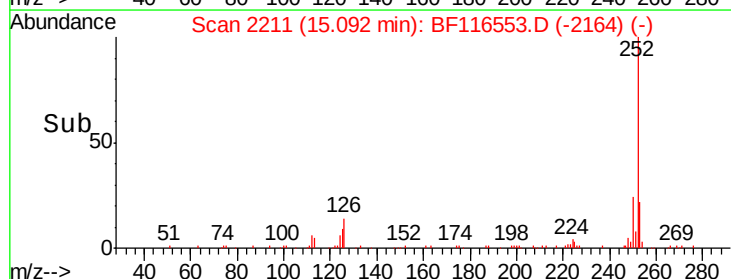
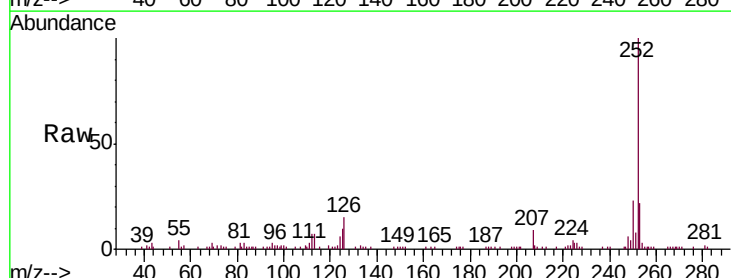
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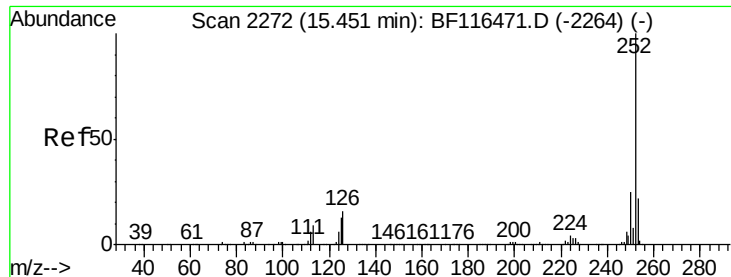
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#89  
Benzo(k)fluoranthene  
Concen: 4.046 ng m  
RT: 15.09 min Scan# 2211  
Delta R.T. -0.02 min  
Lab File: BF116553.D  
Acq: 26 Aug 2019 3:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.4  | 17.4  | 26.2  |
| 125     | 10.3  | 9.1   | 13.7  |





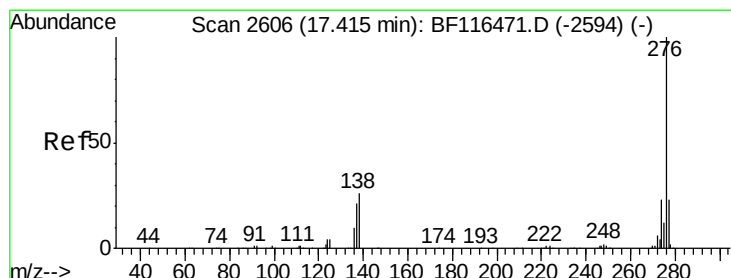
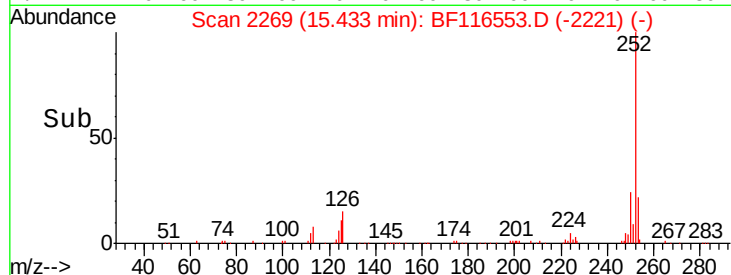
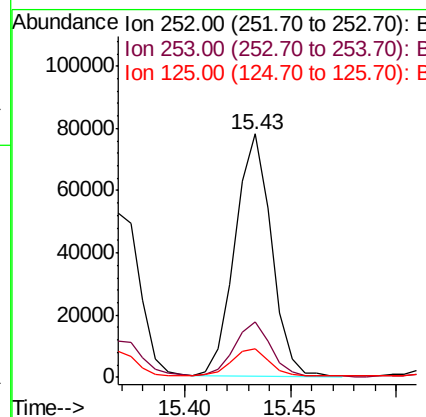
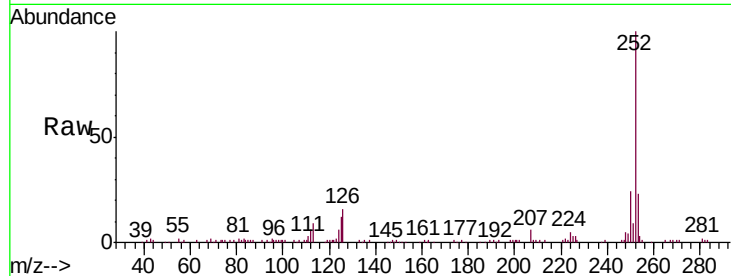
#90  
Benzo(a)pyrene  
Concen: 9.443 ng  
RT: 15.43 min Scan# 2269  
Delta R.T. -0.02 min  
Lab File: BF116553.D  
Acq: 26 Aug 2019 3:41

Instrument :  
BNA\_F  
ClientSampleId :  
SB-44-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.5  | 17.2  | 25.8  |
| 125     | 11.9  | 10.2  | 15.4  |

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#92  
Benzo(g,h,i)perylene  
Concen: 6.174 ng  
RT: 17.40 min Scan# 2603  
Delta R.T. -0.02 min  
Lab File: BF116553.D  
Acq: 26 Aug 2019 3:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 26.3  | 18.7  | 28.1  |
| 138     | 24.6  | 20.8  | 31.2  |

