

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF041620\  
 Data File : BF120026.D  
 Acq On : 16 Apr 2020 10:46  
 Operator : MA/SJ  
 Sample : L2230-51 5X  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-1-9-17

Manual Integrations  
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Quant Time: Apr 16 11:22:45 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF040820.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Apr 16 10:48:04 2020  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.72  | 152  | 158017   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.01  | 136  | 584031   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.76  | 164  | 286512   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.25 | 188  | 486478   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12            | 13.89 | 240  | 278178   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12            | 15.32 | 264  | 258021   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.32  | 112  | 190631   | 20.85  | ng    | 0.00     |
| 7) Phenol-d6                | 6.35  | 99   | 242748   | 20.60  | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.28  | 82   | 159452   | 14.12  | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol    | 10.55 | 330  | 56910    | 16.22  | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.09  | 172  | 332675   | 16.49  | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.83 | 244  | 265170   | 16.04  | ng    | -0.02    |
| Target Compounds            |       |      |          |        |       | Qvalue   |
| 50) Dimethylphthalate       | 9.48  | 163  | 47146    | 2.127  | ng    | 99       |
| 71) Phenanthrene            | 11.27 | 178  | 416138   | 16.073 | ng    | 99       |
| 72) Anthracene              | 11.32 | 178  | 100910   | 3.815  | ng    | 97       |
| 75) Fluoranthene            | 12.46 | 202  | 564805   | 20.218 | ng    | 98       |
| 78) Pyrene                  | 12.69 | 202  | 471735   | 20.116 | ng    | 100      |
| 81) Benzo(a)anthracene      | 13.88 | 228  | 216858   | 11.850 | ng    | 97       |
| 83) Chrysene                | 13.92 | 228  | 191901   | 10.320 | ng    | 98       |
| 86) Indeno(1,2,3-cd)pyrene  | 16.69 | 276  | 108409   | 6.614  | ng    | 97       |
| 88) Benzo(b)fluoranthene    | 14.91 | 252  | 235562m  | 12.691 | ng    |          |
| 89) Benzo(k)fluoranthene    | 14.93 | 252  | 54197m   | 3.384  | ng    |          |
| 90) Benzo(a)pyrene          | 15.25 | 252  | 168011   | 10.766 | ng    | 97       |
| 91) Dibenzo(a,h)anthracene  | 16.70 | 278  | 28373    | 2.052  | ng    | # 91     |
| 92) Benzo(a,h,i)perylene    | 17.11 | 276  | 103680   | 7.598  | ng    | 98       |

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

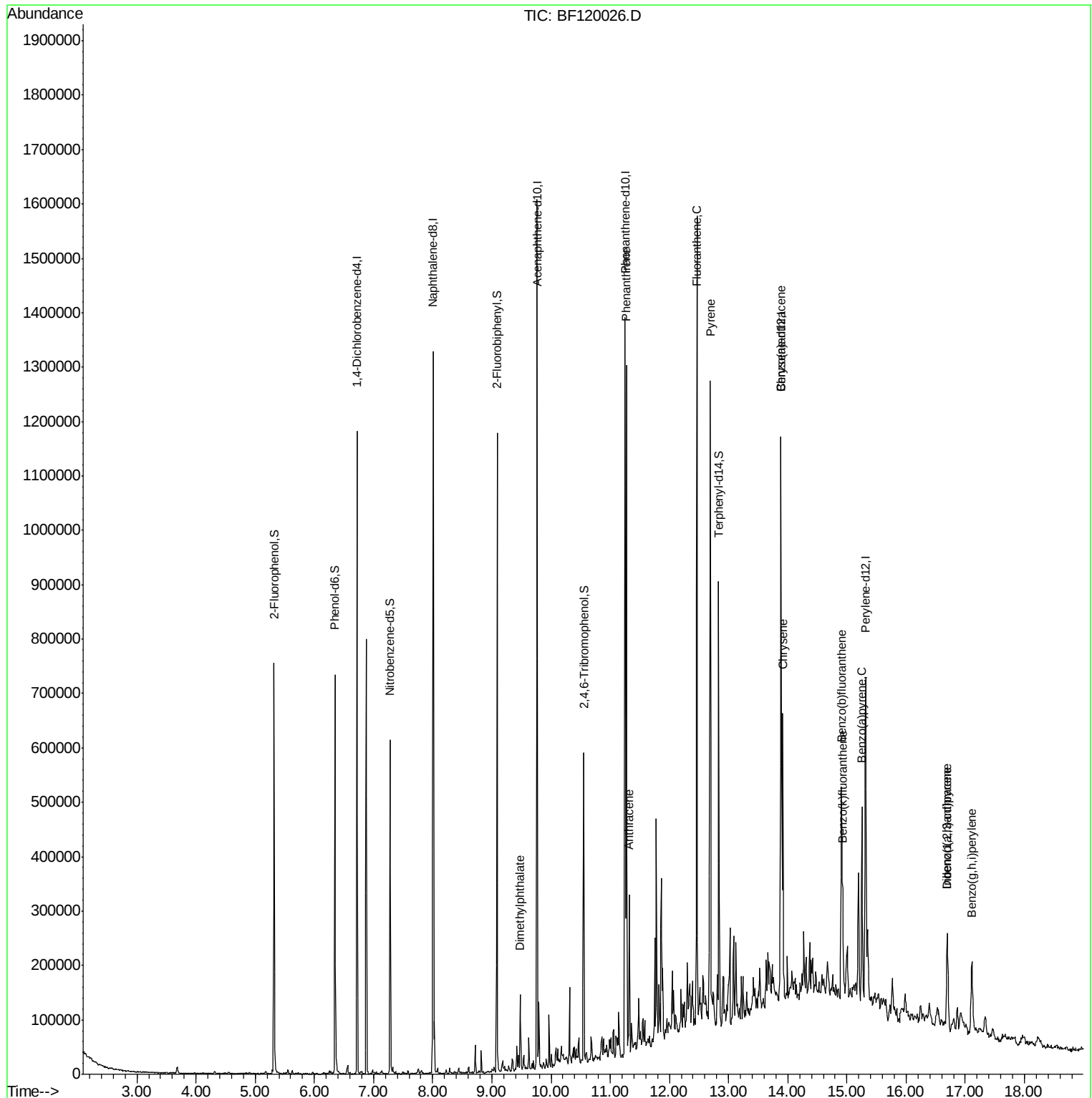
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF041620\  
Data File : BF120026.D  
Acq On : 16 Apr 2020 10:46  
Operator : MA/SJ  
Sample : L2230-51 5X  
Misc :  
ALS Vial : 34 Sample Multiplier: 1

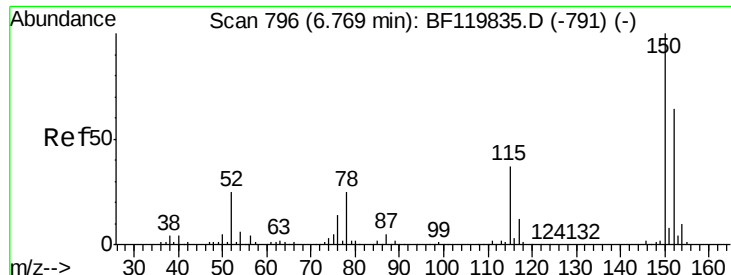
Instrument :  
BNA\_F  
ClientSampled :  
TP-1-9-17

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Quant Time: Apr 16 11:22:45 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF040820.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Apr 16 10:48:04 2020  
Response via : Initial Calibration





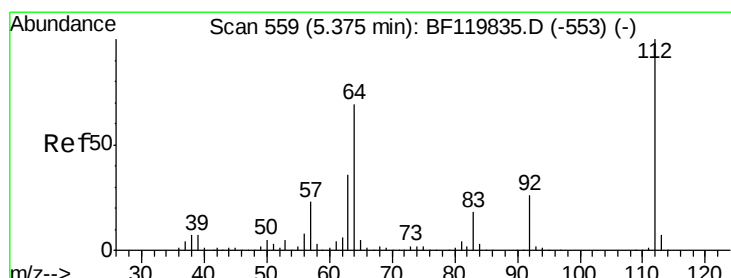
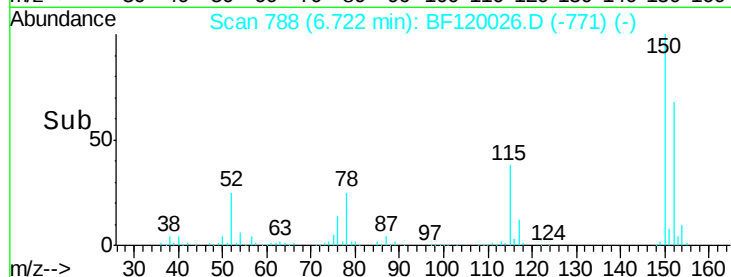
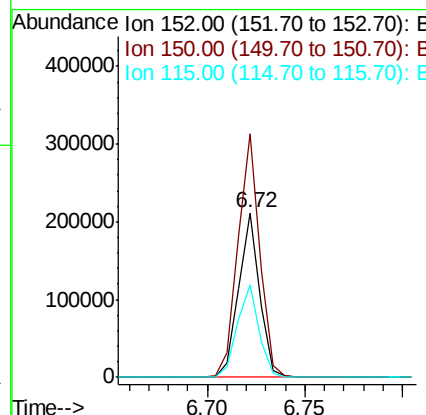
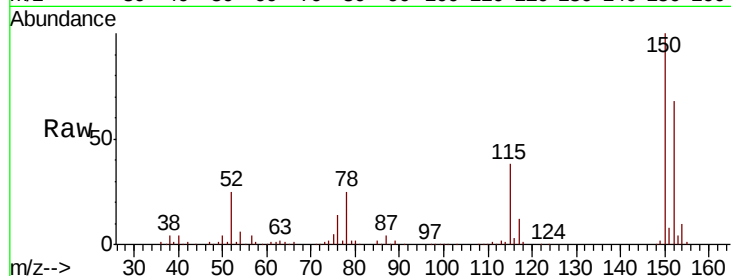
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.72 min Scan# 788  
 Delta R.T. 0.00 min  
 Lab File: BF120026.D  
 Acq: 16 Apr 2020 10:46

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-1-9-17

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 147.8 | 124.8 | 187.2 |
| 115     | 55.9  | 46.5  | 69.7  |

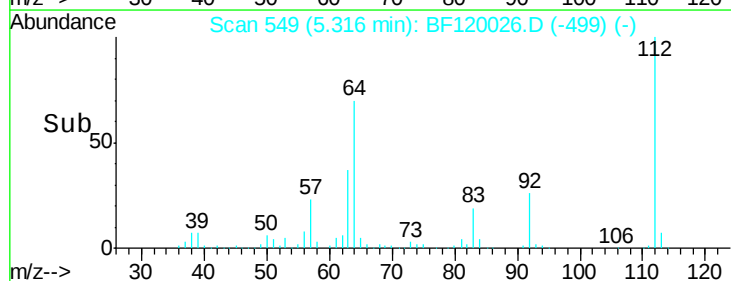
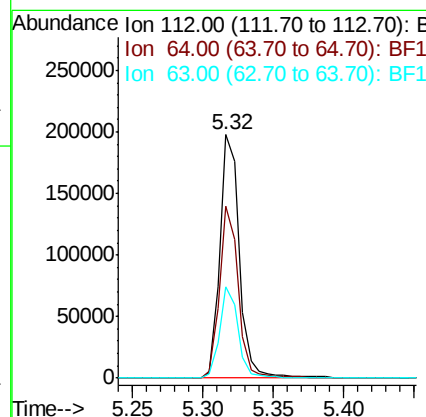
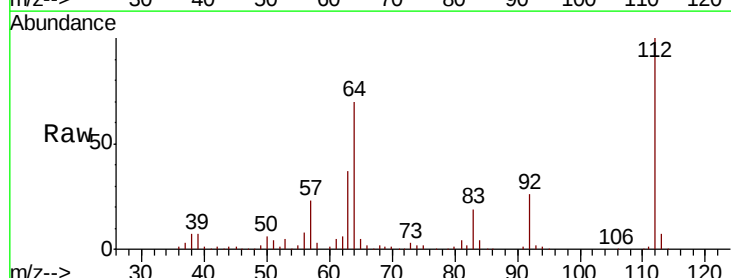
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#5  
 2-Fluorophenol  
 Concen: 20.849 ng  
 RT: 5.32 min Scan# 549  
 Delta R.T. -0.01 min  
 Lab File: BF120026.D  
 Acq: 16 Apr 2020 10:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 70.4  | 55.5  | 83.3  |
| 63      | 37.3  | 29.1  | 43.7  |





#7

Phenol-d6

Concen: 20.603 ng

RT: 6.35 min Scan# 724

Delta R.T. -0.02 min

Lab File: BF120026.D

Acq: 16 Apr 2020 10:46

Instrument :

BNA\_F

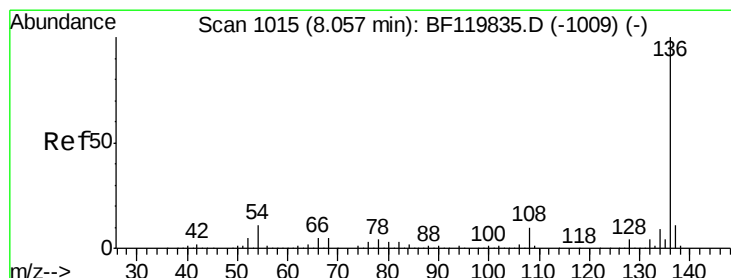
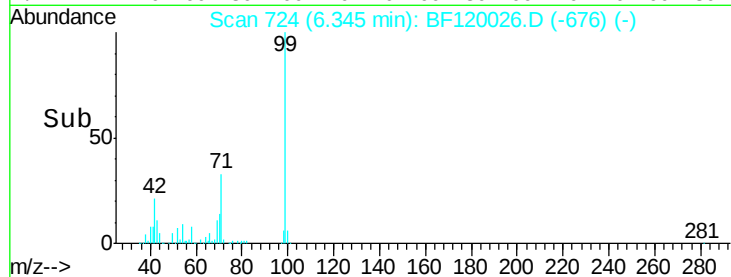
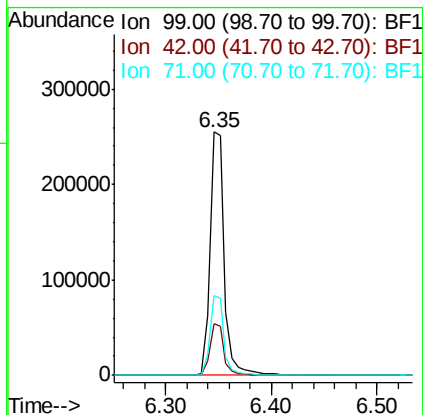
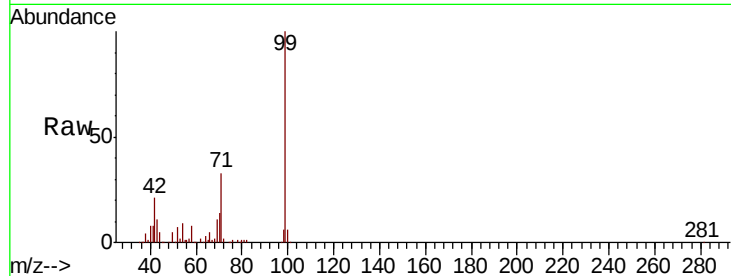
ClientSampleId :

TP-1-9-17

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 242748 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 21.2  | 16.9  | 25.3   |
| 71        | 33.0  | 26.3  | 39.5   |

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#21

Naphthalene-d8

Concen: 20.000 ng

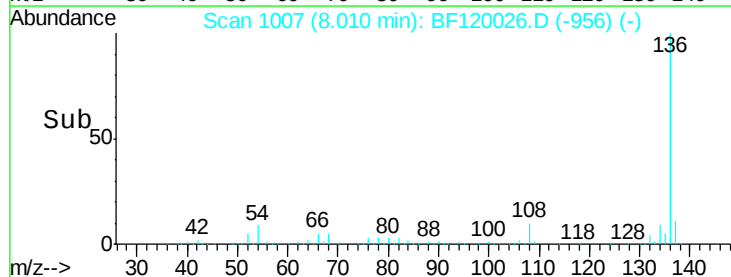
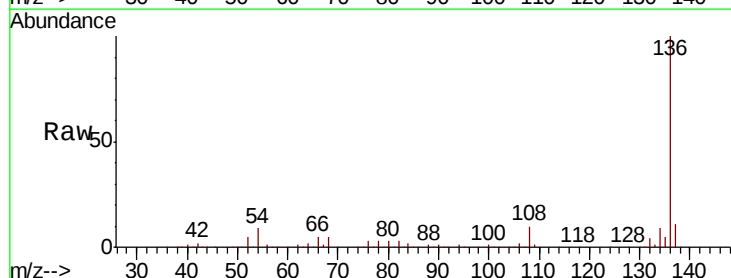
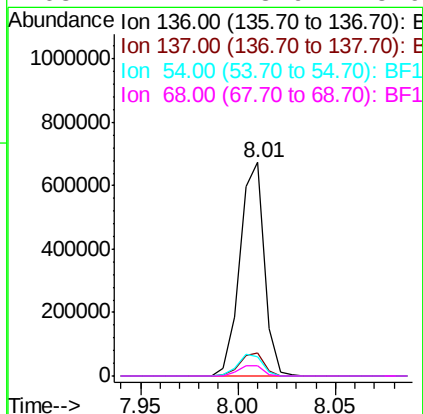
RT: 8.01 min Scan# 1007

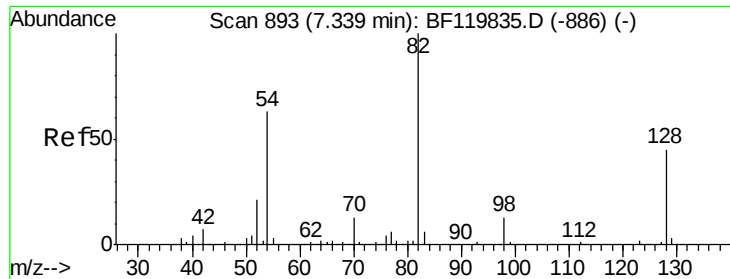
Delta R.T. 0.00 min

Lab File: BF120026.D

Acq: 16 Apr 2020 10:46

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 584031 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.7  | 8.7   | 13.1   |
| 54        | 9.1   | 8.5   | 12.7   |
| 68        | 4.7   | 3.9   | 5.9    |





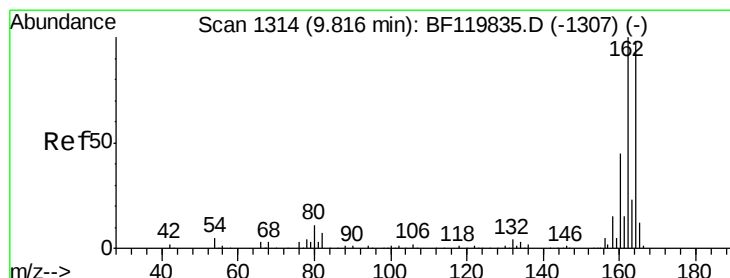
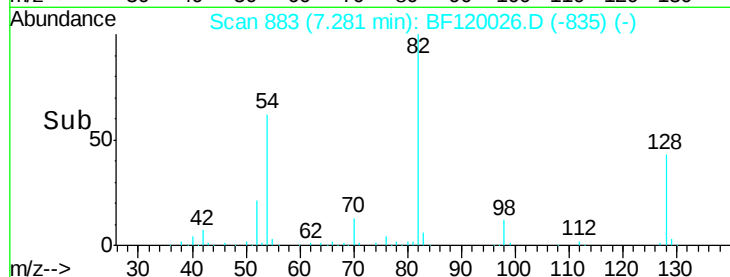
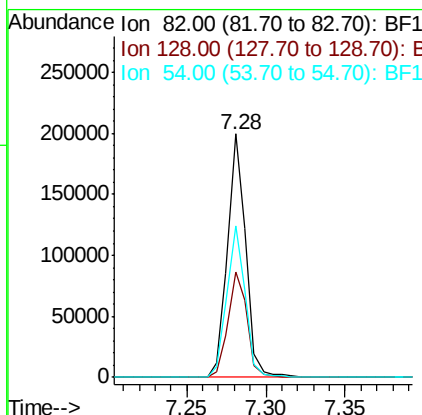
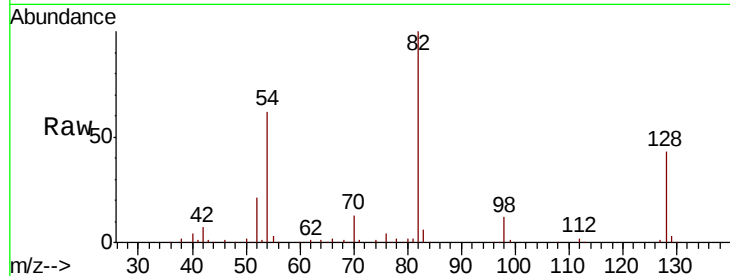
#23  
 Nitrobenzene-d5  
 Concen: 14.124 ng  
 RT: 7.28 min Scan# 883  
 Delta R.T. -0.02 min  
 Lab File: BF120026.D  
 Acq: 16 Apr 2020 10:46

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-1-9-17

| Tot Ion   | 82   | Resp  | 159452 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 128       | 43.2 | 36.2  | 54.4   |
| 54        | 62.3 | 50.4  | 75.6   |

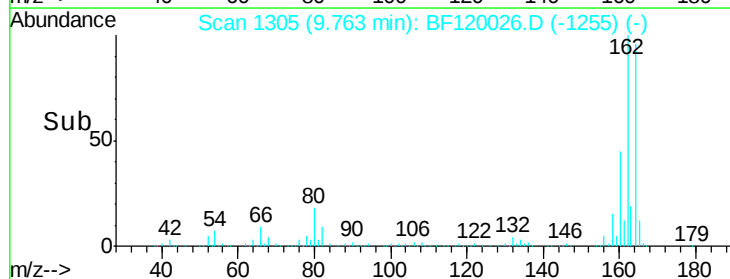
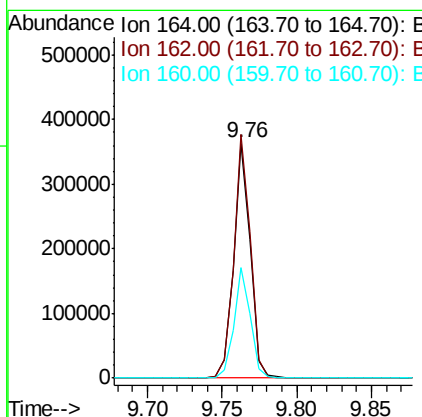
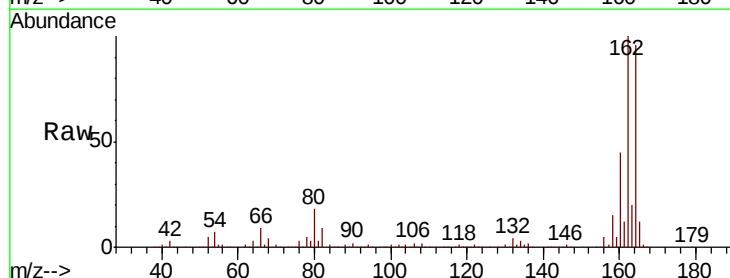
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#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.76 min Scan# 1305  
 Delta R.T. -0.01 min  
 Lab File: BF120026.D  
 Acq: 16 Apr 2020 10:46

| Tgt Ion                                              | 164   | Resp  | 286512 |
|------------------------------------------------------|-------|-------|--------|
| Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td> | 100   | Lower | Upper  |
| 162                                                  | 103.8 | 81.9  | 122.9  |
| 160                                                  | 46.8  | 36.6  | 54.8   |





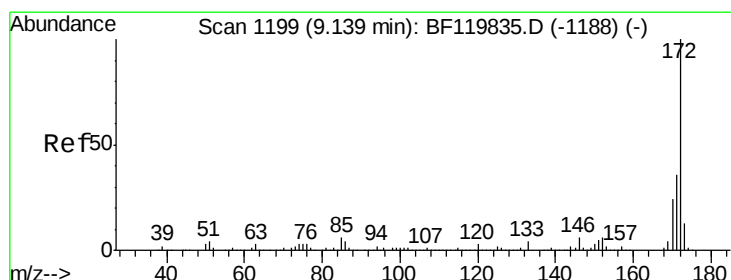
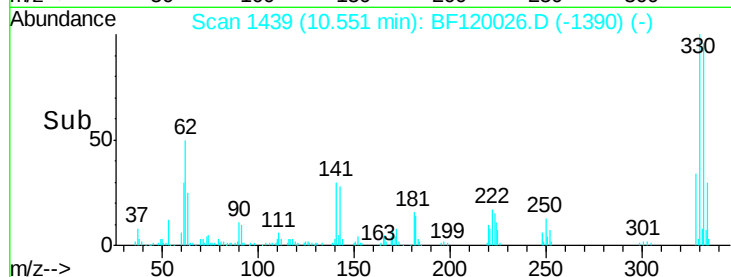
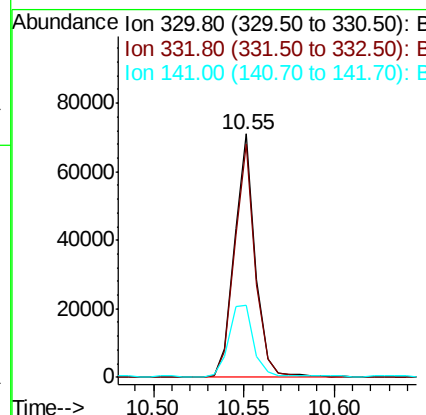
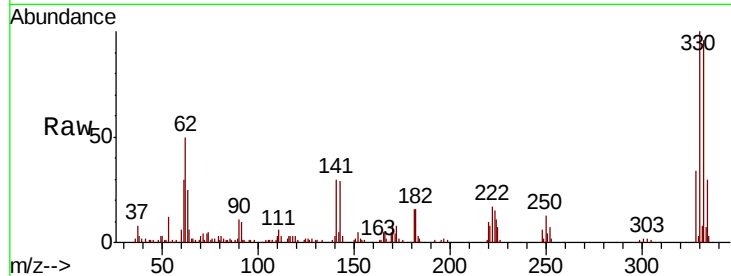
#42  
 2,4,6-Tribromophenol  
 Concen: 16.223 ng  
 RT: 10.55 min Scan# 1439  
 Delta R.T. -0.01 min  
 Lab File: BF120026.D  
 Acq: 16 Apr 2020 10:46

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-1-9-17

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 330     | 100   | 56910 |       |       |
| 332     | 95.1  | 76.8  | 115.2 |       |
| 141     | 36.9  | 25.1  | 37.7  |       |

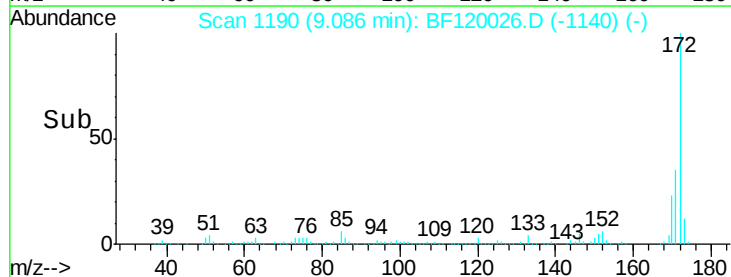
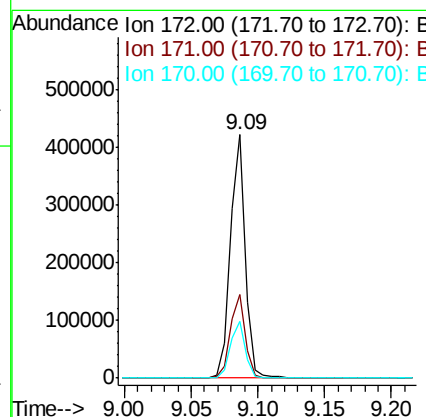
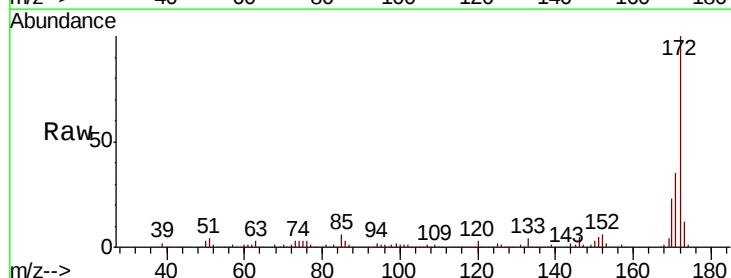
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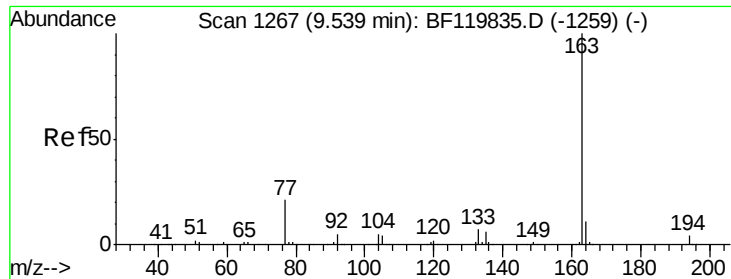
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#45  
 2-Fluorobiphenyl  
 Concen: 16.485 ng  
 RT: 9.09 min Scan# 1190  
 Delta R.T. -0.01 min  
 Lab File: BF120026.D  
 Acq: 16 Apr 2020 10:46

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 172     | 100   | 332675 |       |       |
| 171     | 34.6  | 28.9   | 43.3  |       |
| 170     | 23.5  | 19.4   | 29.2  |       |





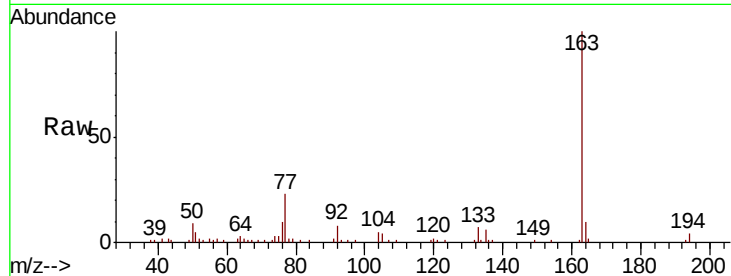
#50  
Dimethylphthalate  
Concen: 2.127 ng  
RT: 9.48 min Scan# 1257  
Delta R.T. -0.02 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

Instrument :  
BNA\_F  
ClientSampleId :  
TP-1-9-17

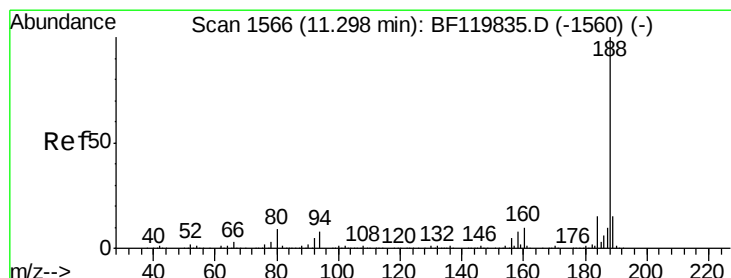
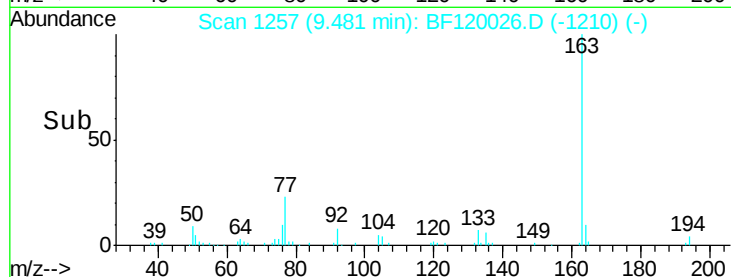
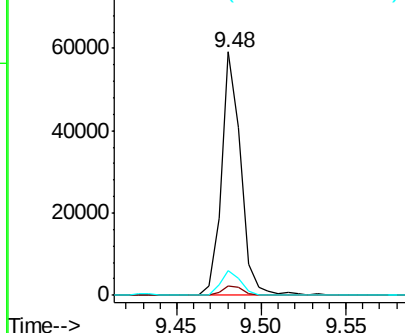
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 163   | Resp: | 47146 |
| Ion Ratio | Lower | Upper |       |
| 163       | 100   |       |       |
| 194       | 3.6   | 3.0   | 4.4   |
| 164       | 9.9   | 8.4   | 12.6  |

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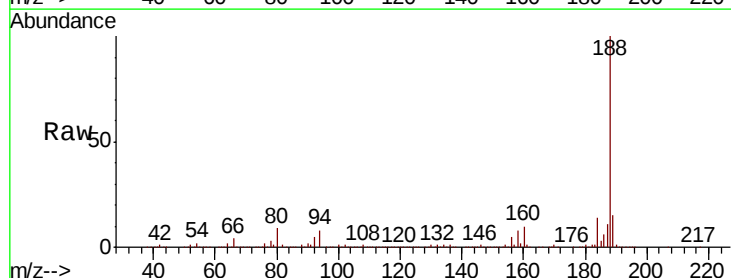


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

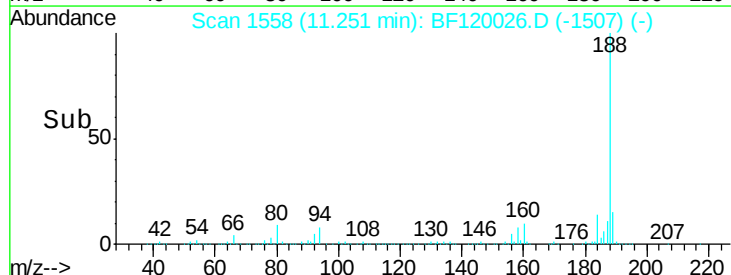
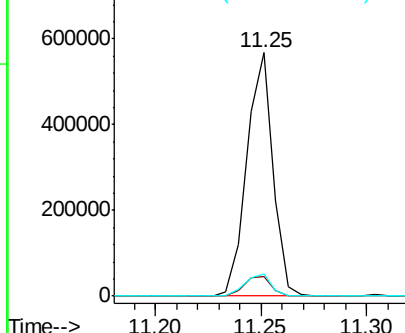


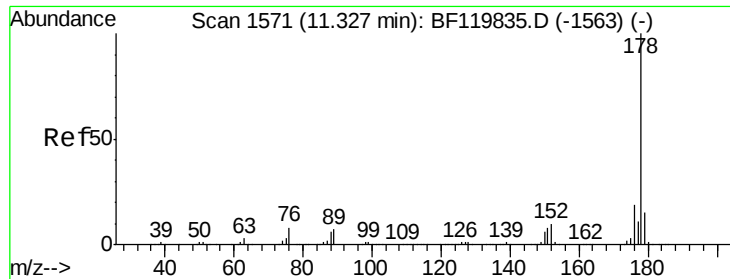
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.25 min Scan# 1558  
Delta R.T. 0.00 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 188   | Resp: | 486478 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 8.1   | 6.7   | 10.1   |
| 80        | 8.9   | 7.4   | 11.2   |



Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF1  
Ion 80.00 (79.70 to 80.70): BF1





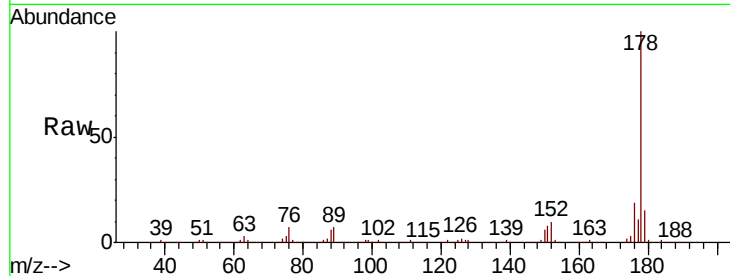
#71  
Phenanthrene  
Concen: 16.073 ng  
RT: 11.27 min Scan# 1562  
Delta R.T. -0.01 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

Instrument :  
BNA\_F  
ClientSampleId :  
TP-1-9-17

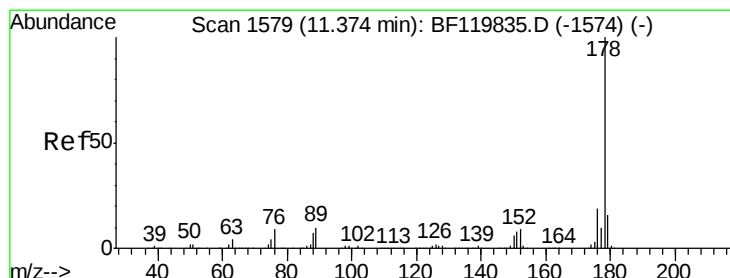
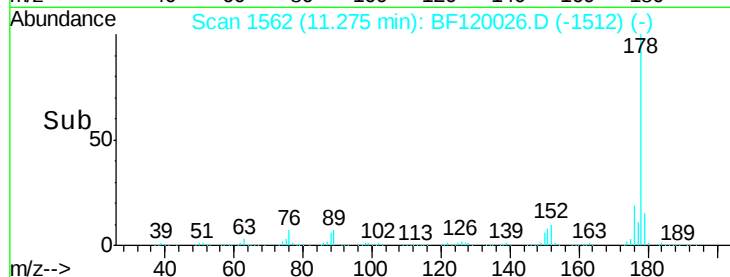
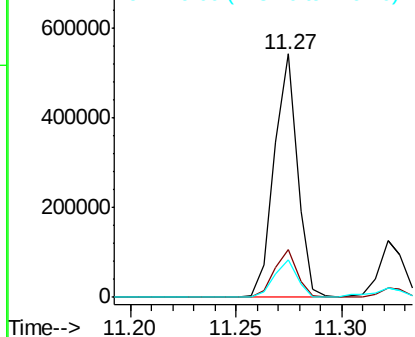
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.4  | 15.1  | 22.7  |
| 179     | 15.5  | 12.2  | 18.4  |

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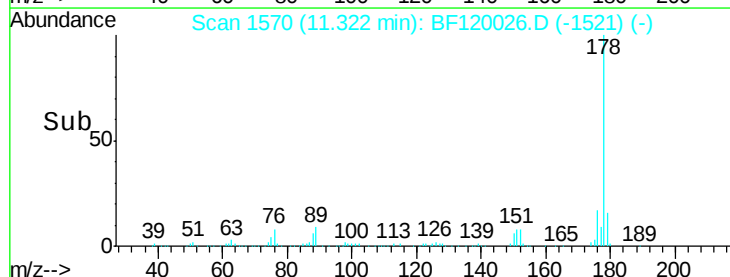
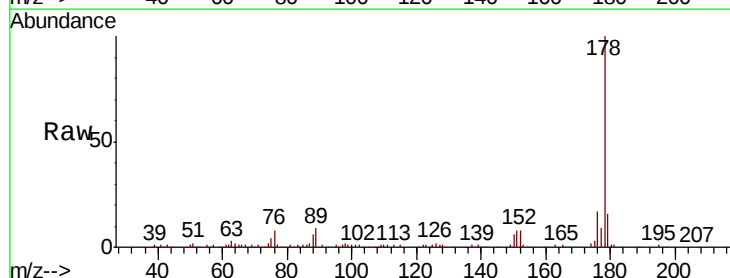
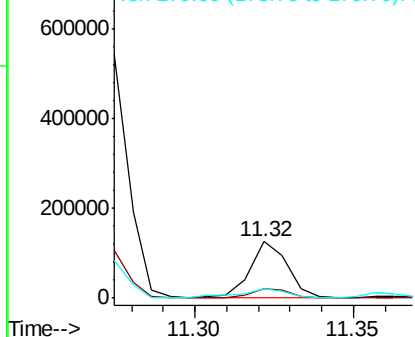
Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E

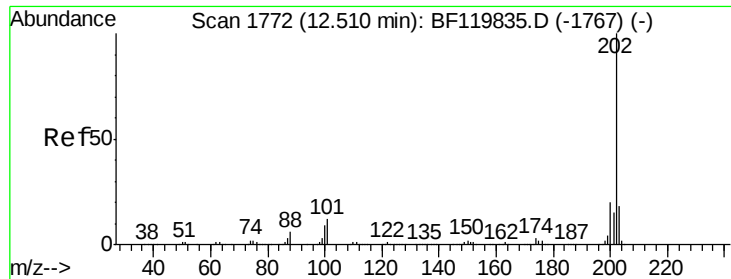


#72  
Anthracene  
Concen: 3.815 ng  
RT: 11.32 min Scan# 1570  
Delta R.T. -0.01 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 17.1  | 15.4  | 23.2  |
| 179     | 15.9  | 12.8  | 19.2  |

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: 20.218 ng

RT: 12.46 min Scan# 1764

Delta R.T. -0.01 min

Lab File: BF120026.D

Acq: 16 Apr 2020 10:46

Instrument :

BNA\_F

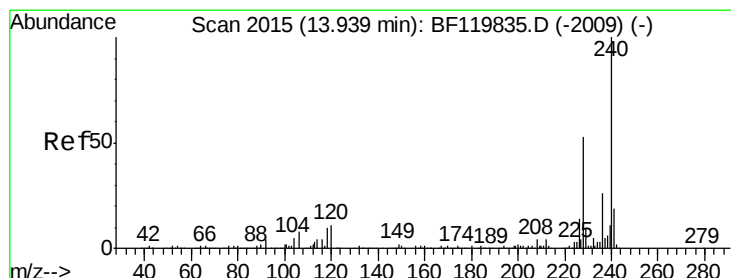
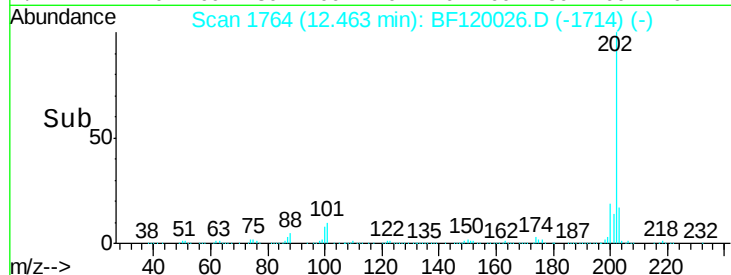
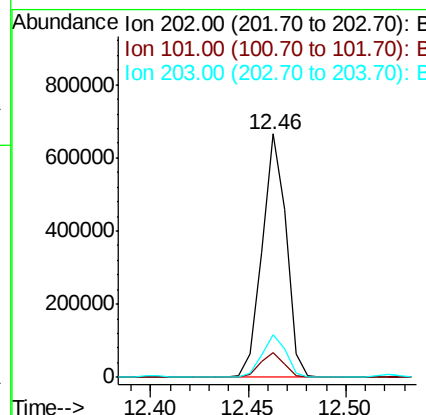
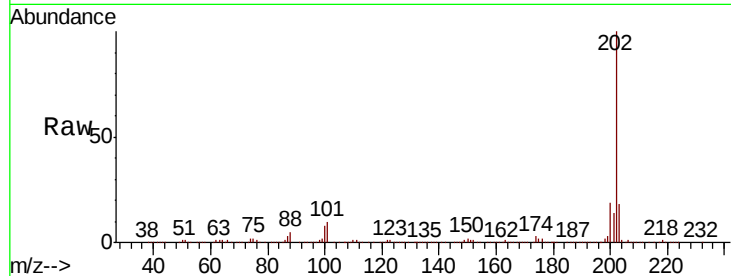
ClientSampleId :

TP-1-9-17

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 564805 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 10.2  | 0.0   | 32.3   |
| 203       | 17.5  | 0.0   | 37.6   |

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#76

Chrysene-d12

Concen: 20.000 ng

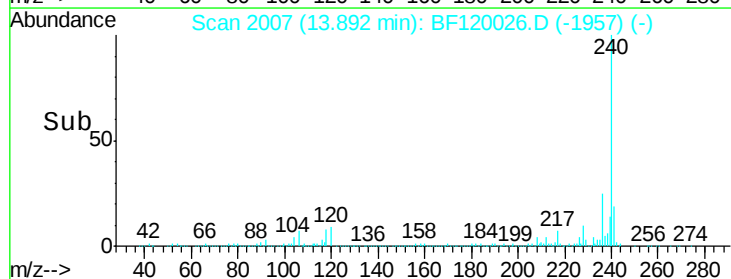
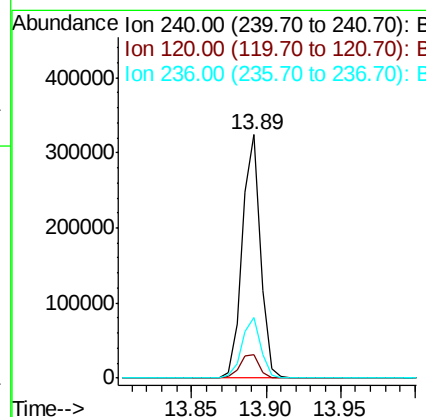
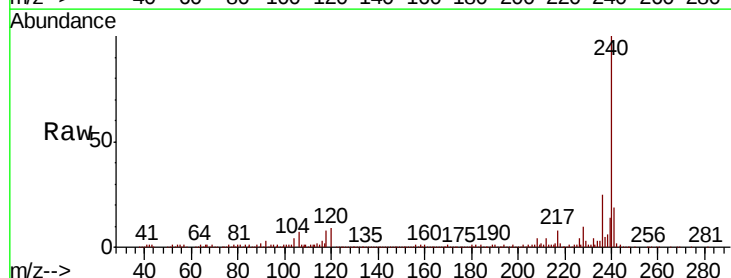
RT: 13.89 min Scan# 2007

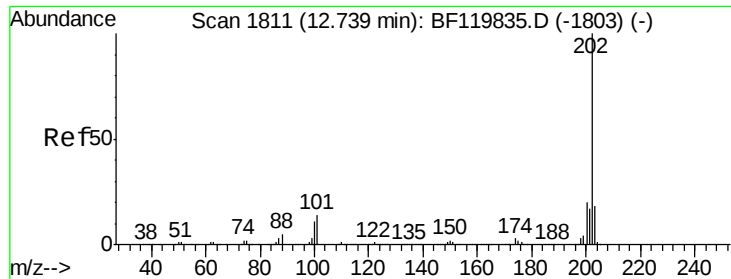
Delta R.T. -0.01 min

Lab File: BF120026.D

Acq: 16 Apr 2020 10:46

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 278178 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 9.4   | 9.0   | 13.6   |
| 236       | 25.1  | 20.7  | 31.1   |





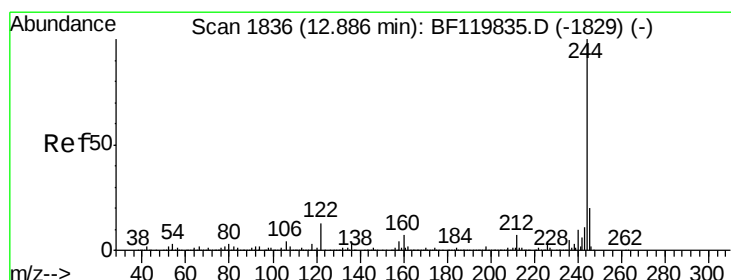
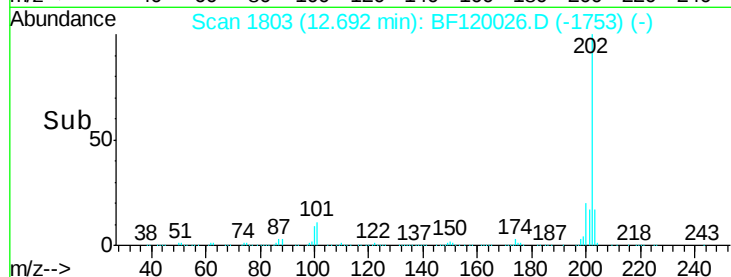
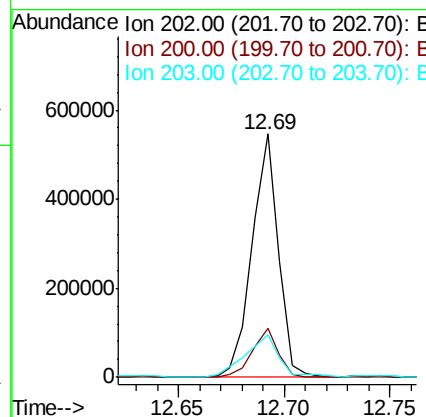
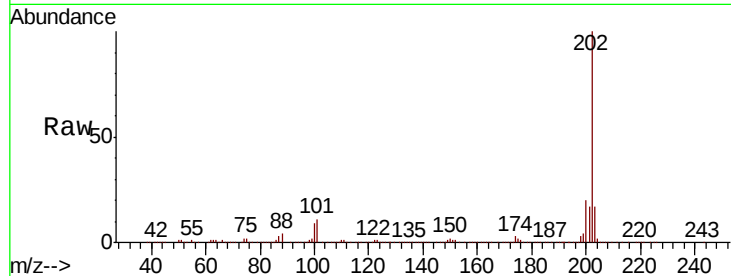
#78  
Pvrene  
Concen: 20.116 ng  
RT: 12.69 min Scan# 1803  
Delta R.T. -0.01 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

Instrument :  
BNA\_F  
ClientSampleId :  
TP-1-9-17

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 200     | 20.1  | 16.2       | 24.2  |
| 203     | 17.3  | 14.1       | 21.1  |

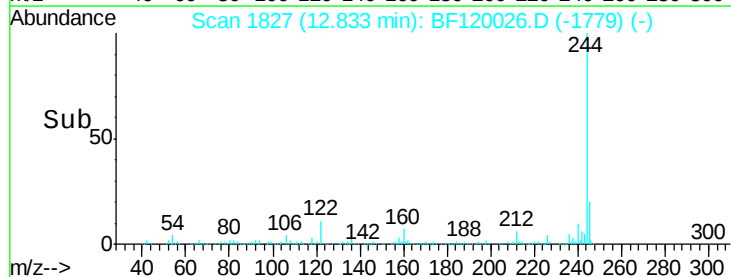
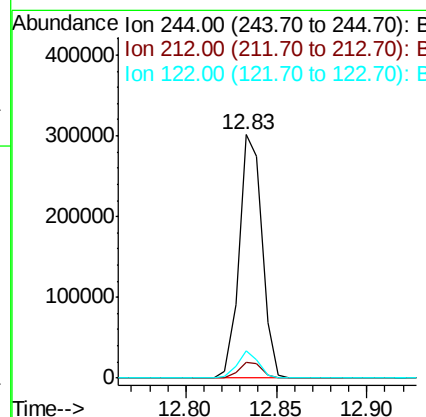
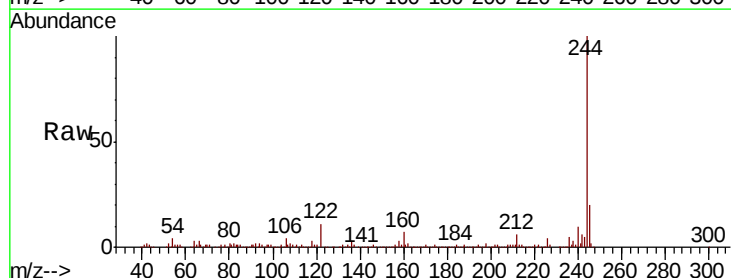
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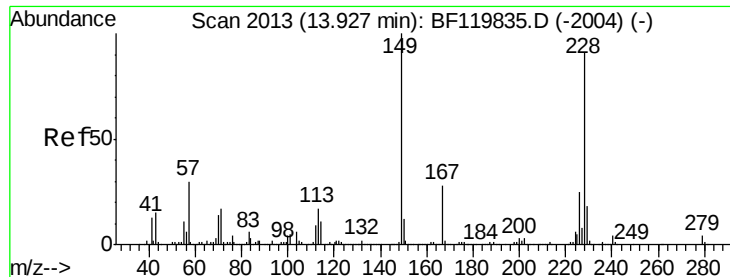
mohammad  
4/17/2020 1:47:55 PM



#79  
Terphenyl-d14  
Concen: 16.040 ng  
RT: 12.83 min Scan# 1827  
Delta R.T. -0.02 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 244     | 100   |            |       |
| 212     | 6.5   | 5.4        | 8.0   |
| 122     | 11.0  | 10.3       | 15.5  |





#81

Benzo(a)anthracene

Concen: 11.850 ng

RT: 13.88 min Scan# 2005

Delta R.T. -0.01 min

Lab File: BF120026.D

Acq: 16 Apr 2020 10:46

Instrument :

BNA\_F

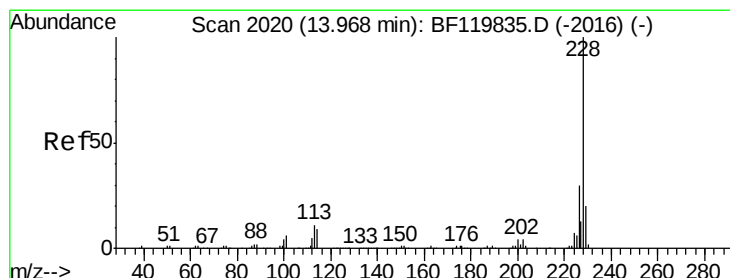
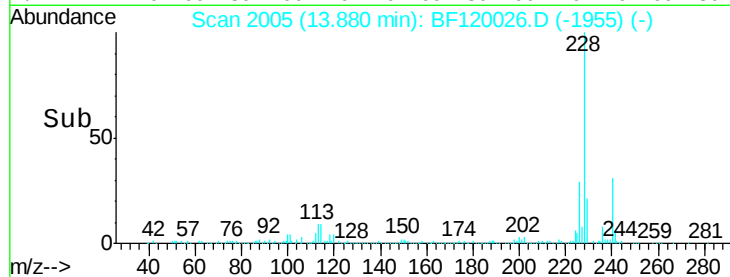
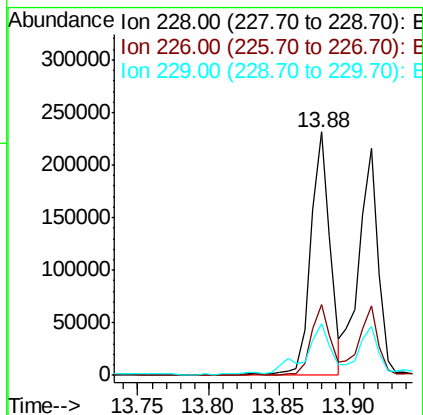
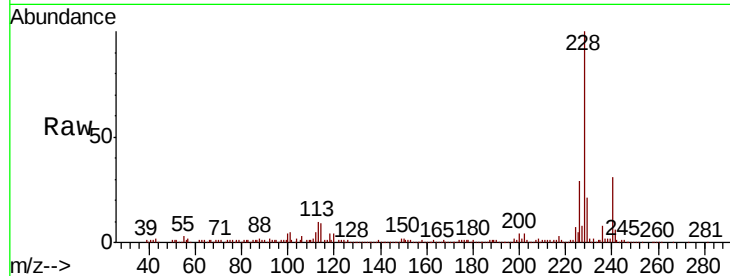
ClientSampleId :

TP-1-9-17

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 216858 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 29.1  | 21.9  | 32.9   |
| 229       | 21.4  | 15.9  | 23.9   |

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#83

Chrysene

Concen: 10.320 ng

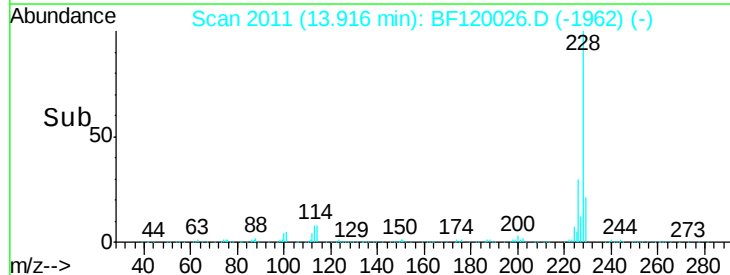
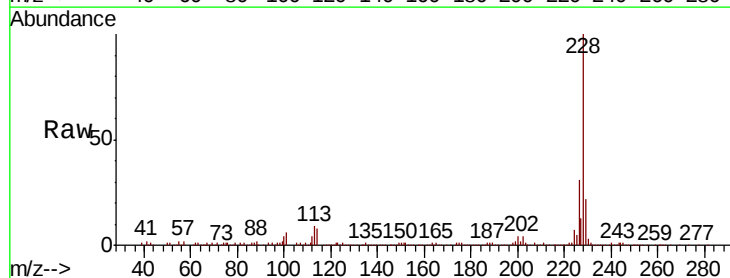
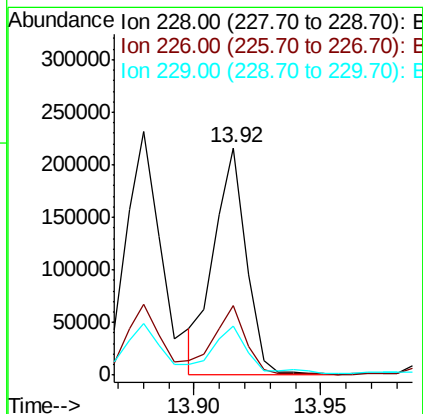
RT: 13.92 min Scan# 2011

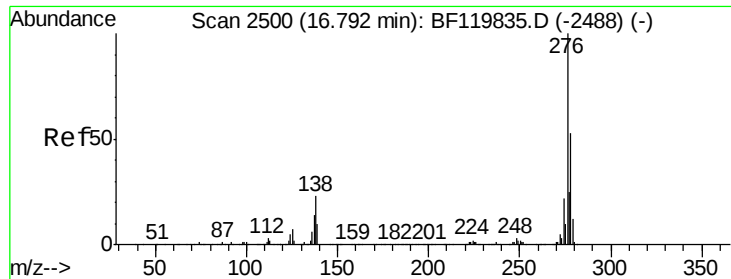
Delta R.T. -0.01 min

Lab File: BF120026.D

Acq: 16 Apr 2020 10:46

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 228   | Resp: | 191901 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 30.5  | 24.2  | 36.2   |
| 229       | 21.8  | 15.9  | 23.9   |





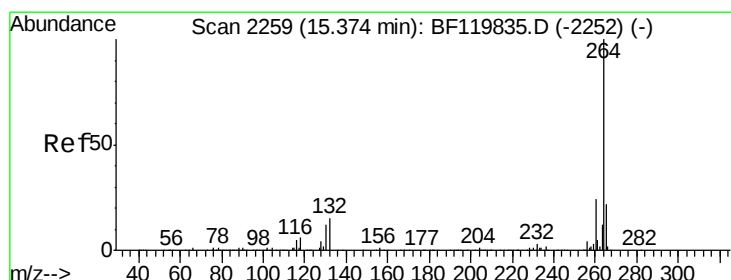
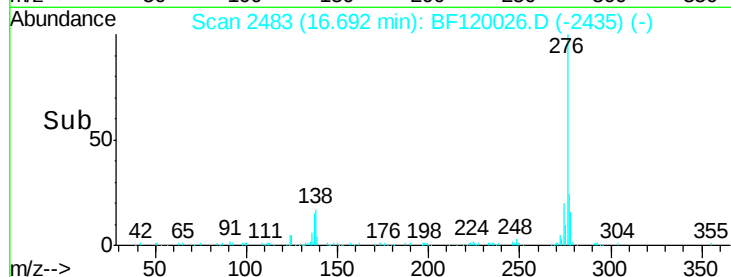
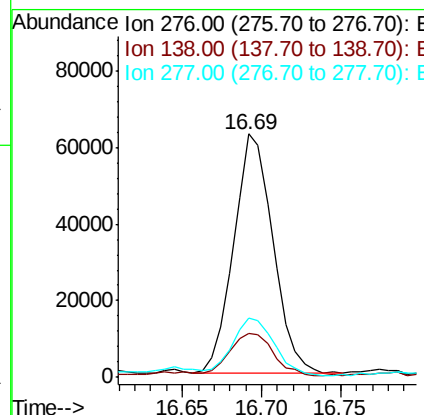
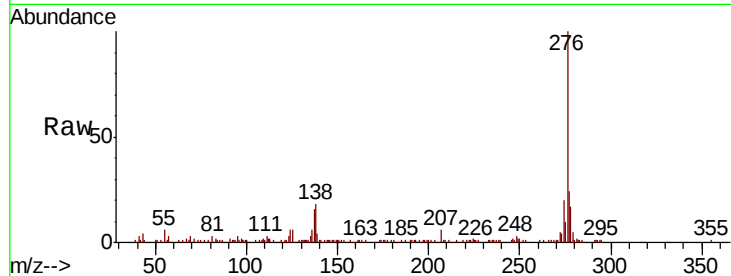
#86  
Indeno(1,2,3-cd)pyrene  
Concen: 6.614 ng  
RT: 16.69 min Scan# 2483  
Delta R.T. -0.02 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

Instrument :  
BNA\_F  
ClientSampleId :  
TP-1-9-17

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 19.3  | 18.0  | 27.0  |
| 277     | 25.3  | 20.1  | 30.1  |

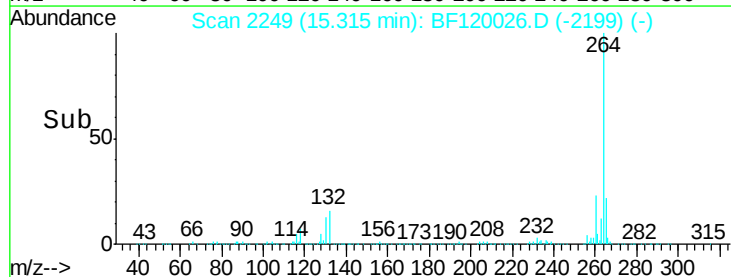
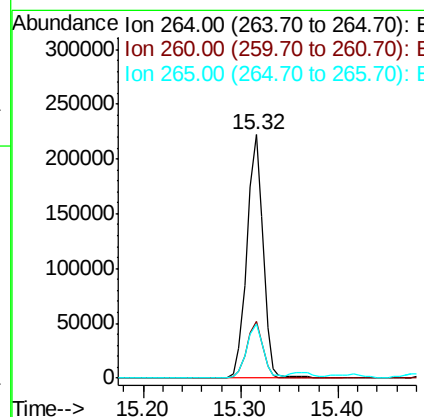
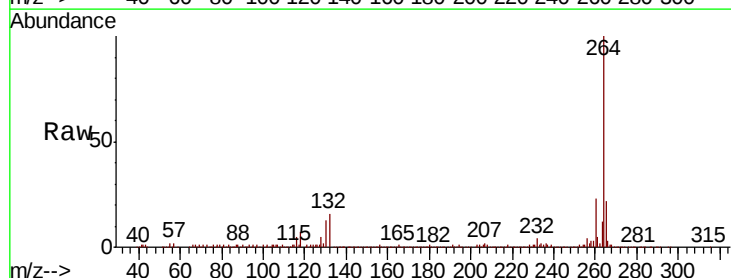
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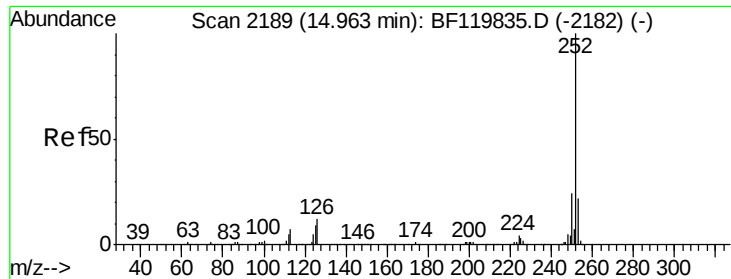
mohammad  
4/17/2020 1:47:55 PM



#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.32 min Scan# 2249  
Delta R.T. -0.01 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.4  | 19.3  | 28.9  |
| 265     | 22.3  | 17.6  | 26.4  |





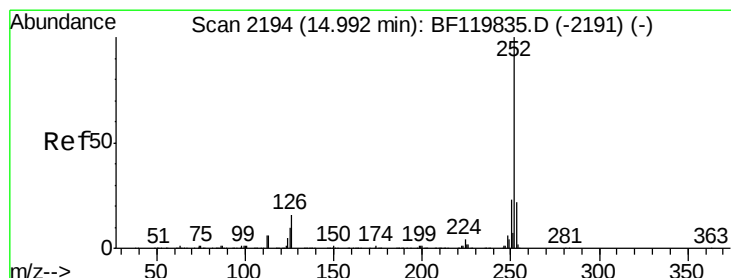
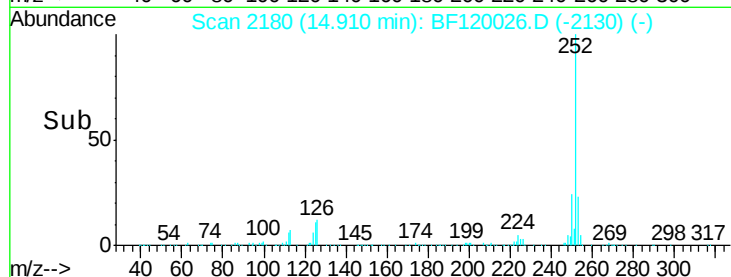
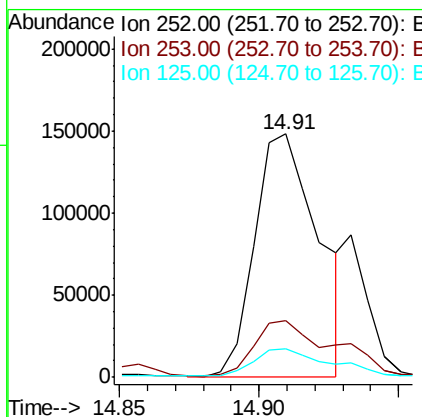
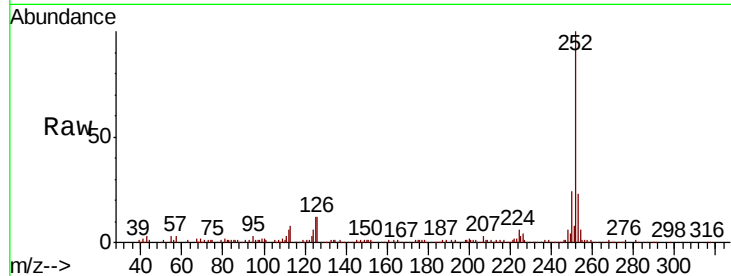
#88  
Benzo(b)fluoranthene  
Concen: 12.691 ng m  
RT: 14.91 min Scan# 2180  
Delta R.T. -0.01 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

Instrument :  
BNA\_F  
ClientSampleId :  
TP-1-9-17

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.3  | 17.7  | 26.5  |
| 125     | 11.6  | 7.4   | 11.2  |

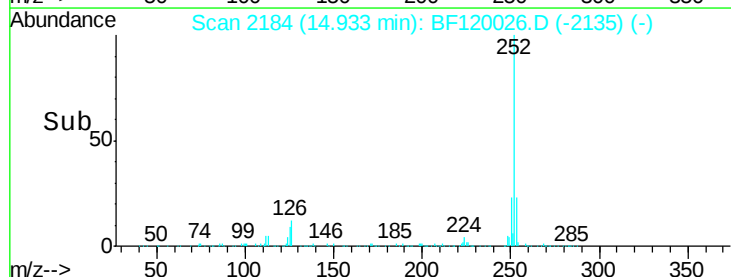
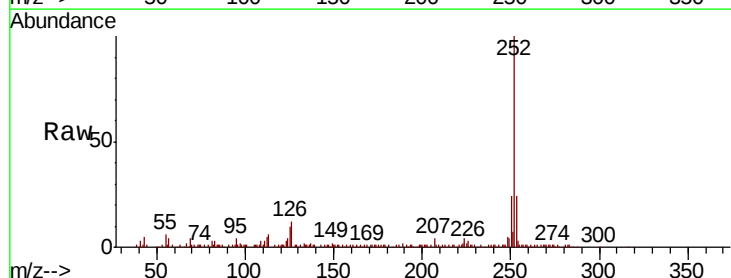
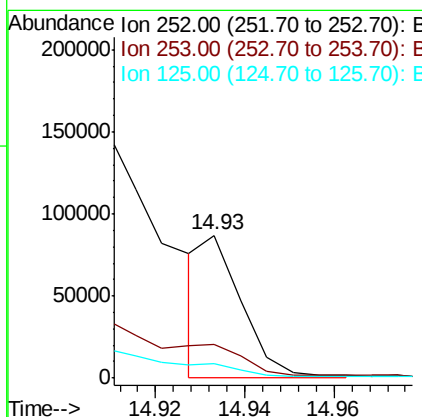
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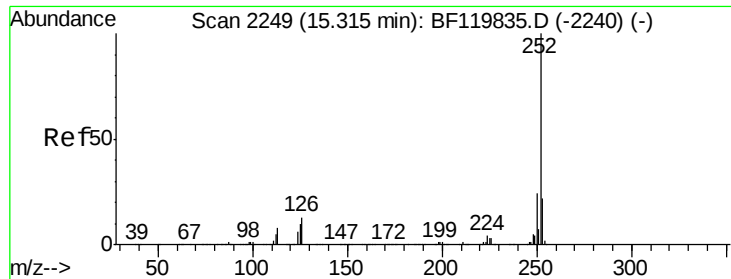
mohammad  
4/17/2020 1:47:55 PM



#89  
Benzo(k)fluoranthene  
Concen: 3.384 ng m  
RT: 14.93 min Scan# 2184  
Delta R.T. -0.01 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.8  | 17.8  | 26.8  |
| 125     | 10.0  | 7.7   | 11.5  |





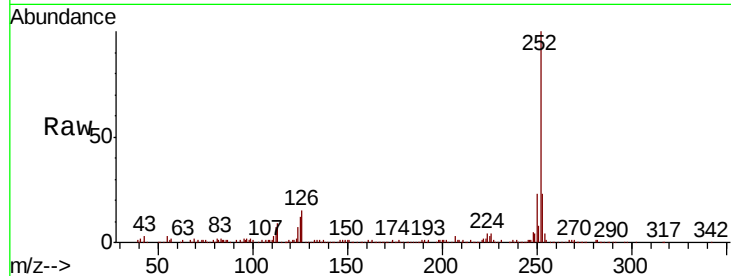
#90  
Benzo(a)pyrene  
Concen: 10.766 ng  
RT: 15.25 min Scan# 2238  
Delta R.T. -0.01 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

Instrument :  
BNA\_F  
ClientSampleId :  
TP-1-9-17

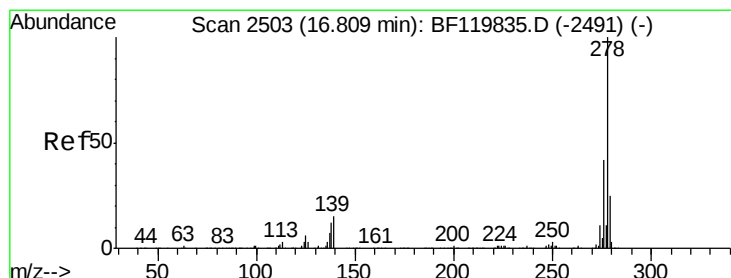
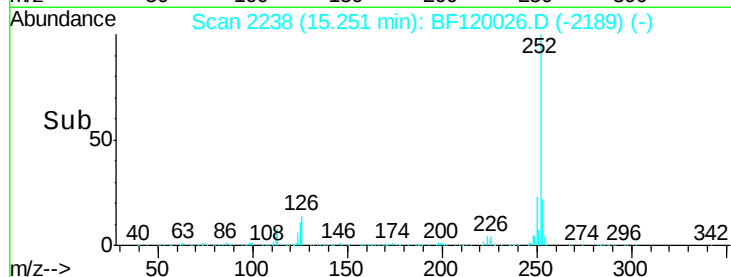
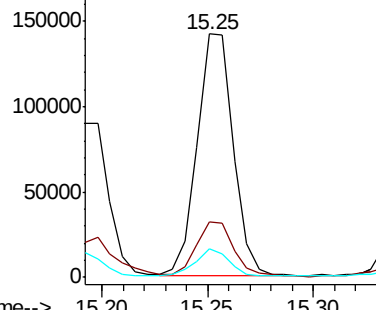
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.0  | 17.4  | 26.2  |
| 125     | 11.6  | 8.3   | 12.5  |

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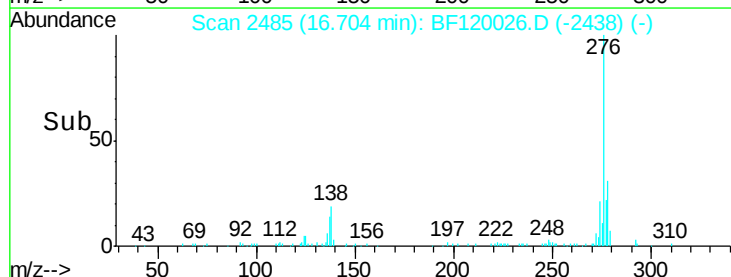
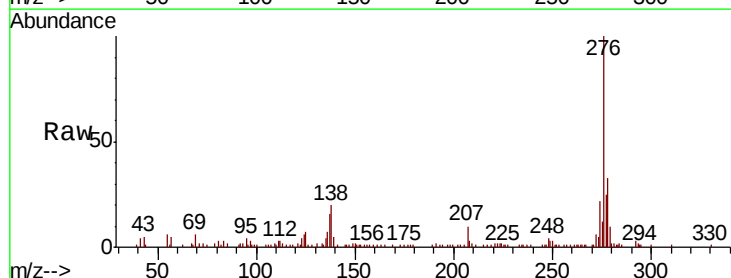
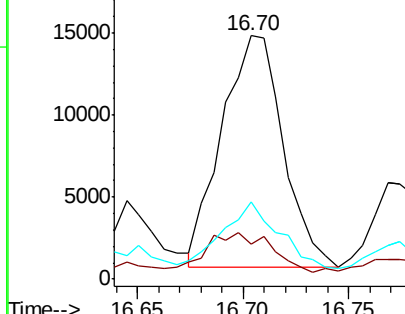
Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

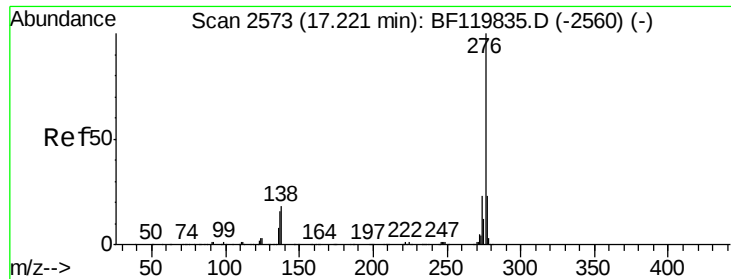


#91  
Dibenzo(a,h)anthracene  
Concen: 2.052 ng  
RT: 16.70 min Scan# 2485  
Delta R.T. -0.02 min  
Lab File: BF120026.D  
Acq: 16 Apr 2020 10:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 14.2  | 11.6  | 17.4  |
| 279     | 31.6  | 19.7  | 29.5  |

Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E





#92  
 Benzo(a,h,i)perylene  
 Concen: 7.598 ng  
 RT: 17.11 min Scan# 2554  
 Delta R.T. -0.02 min  
 Lab File: BF120026.D  
 Acq: 16 Apr 2020 10:46

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-1-9-17

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.0  | 18.5  | 27.7  |
| 138     | 19.2  | 14.6  | 22.0  |

Manual Integrations  
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