

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120919\  
 Data File : BF118152.D  
 Acq On : 9 Dec 2019 18:53  
 Operator : JU  
 Sample : K6162-02  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP2

Manual Integrations  
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 12/10/2019 11:50:23 AM

Quant Time: Dec 10 01:35:20 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF120619.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 06 17:34:43 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.87  | 152  | 102705   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.15  | 136  | 396830   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.92  | 164  | 198207   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.40 | 188  | 332217   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12            | 14.06 | 240  | 208728   | 20.00 | ng    | -0.01    |
| 87) Perylene-d12            | 15.55 | 264  | 268800   | 20.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.49  | 112  | 567070   | 96.70 | ng    | 0.00     |
| 7) Phenol-d6                | 6.50  | 99   | 706024   | 99.54 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.43  | 82   | 433801   | 61.50 | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 10.70 | 330  | 212073   | 88.08 | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.23  | 172  | 850040   | 65.26 | ng    | 0.00     |
| 79) Terphenyl-d14           | 13.00 | 244  | 726853   | 59.88 | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       |          |
| 50) Dimethylphthalate       | 9.63  | 163  | 70983    | 4.848 | ng    | 100      |
| 71) Phenanthrene            | 11.43 | 178  | 49984    | 2.830 | ng    | 99       |
| 75) Fluoranthene            | 12.62 | 202  | 105759   | 5.857 | ng    | 100      |
| 78) Pyrene                  | 12.86 | 202  | 96707    | 5.879 | ng    | 99       |
| 81) Benzo(a)anthracene      | 14.04 | 228  | 48693    | 3.374 | ng    | 95       |
| 83) Chrysene                | 14.08 | 228  | 46669    | 3.385 | ng    | 98       |
| 86) Indeno(1,2,3-cd)pyrene  | 17.05 | 276  | 33875    | 2.920 | ng    | 98       |
| 88) Benzo(b)fluoranthene    | 15.11 | 252  | 63780m   | 3.588 | ng    |          |
| 90) Benzo(a)pyrene          | 15.48 | 252  | 50102    | 3.191 | ng    | 98       |
| 92) Benzo(g,h,i)perylene    | 17.50 | 276  | 33953    | 2.624 | ng    | 99       |

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

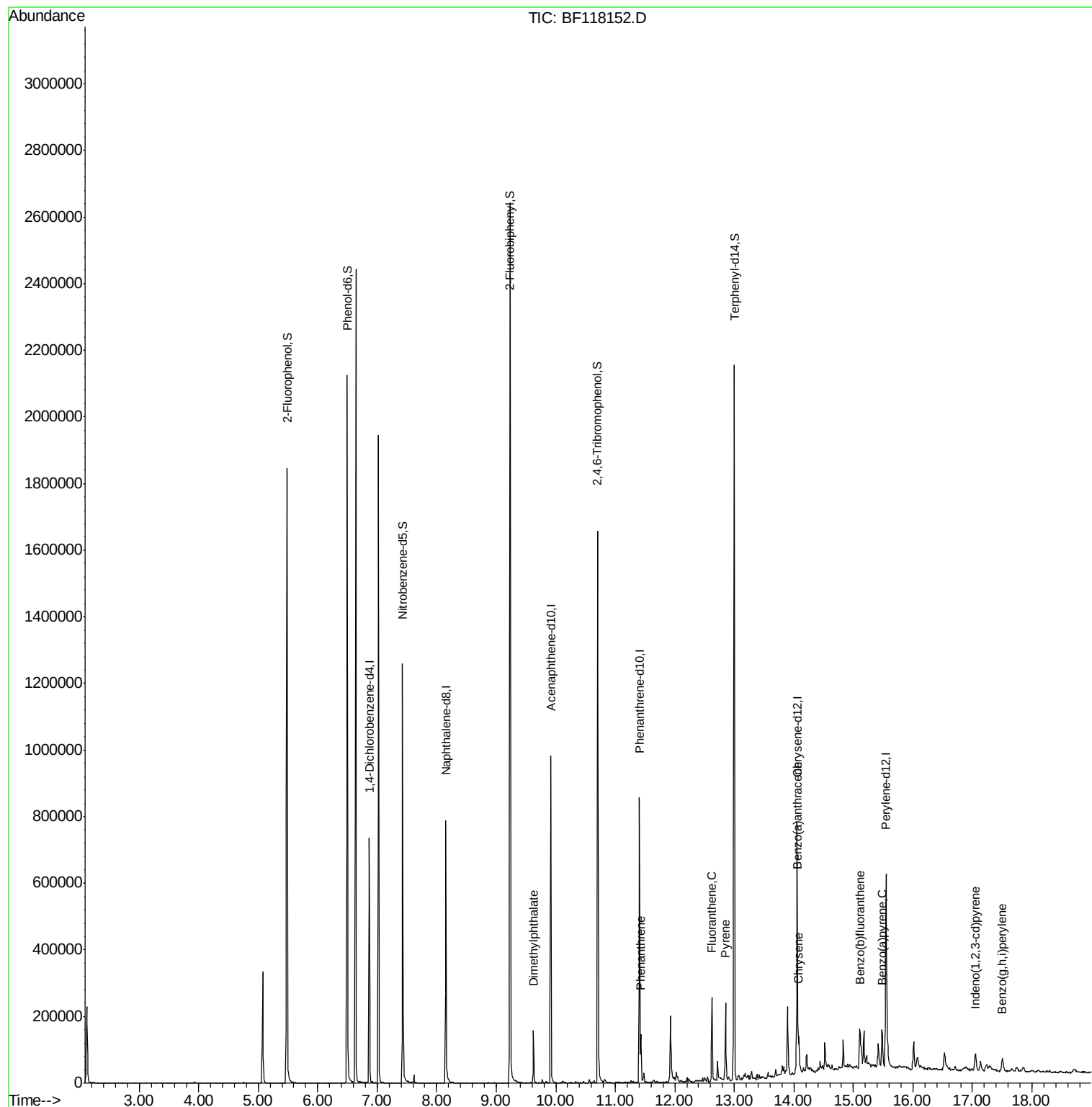
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120919\  
Data File : BF118152.D  
Acq On : 9 Dec 2019 18:53  
Operator : JU  
Sample : K6162-02  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

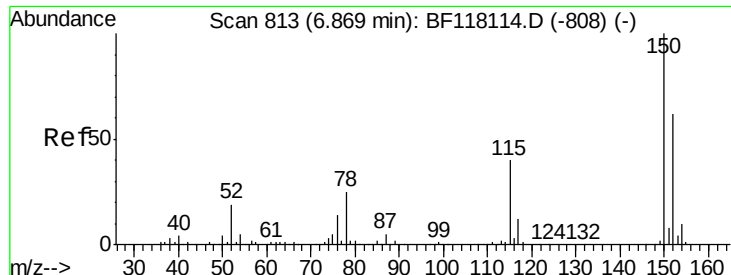
Instrument :  
BNA\_F  
ClientSampleId :  
TP2

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12/10/2019 11:50:23 AM

Quant Time: Dec 10 01:35:20 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF120619.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Dec 06 17:34:43 2019  
Response via : Initial Calibration





#1

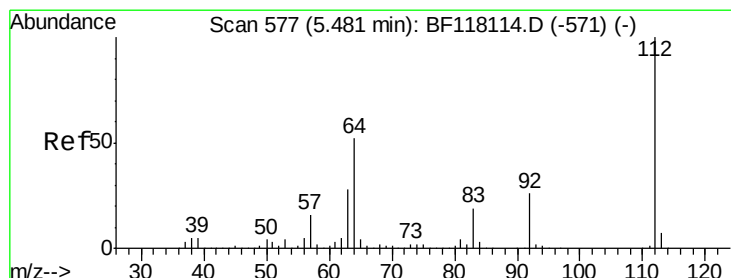
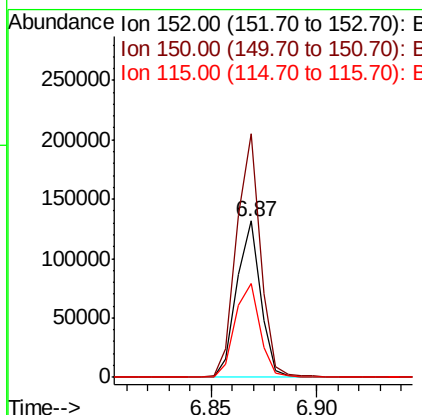
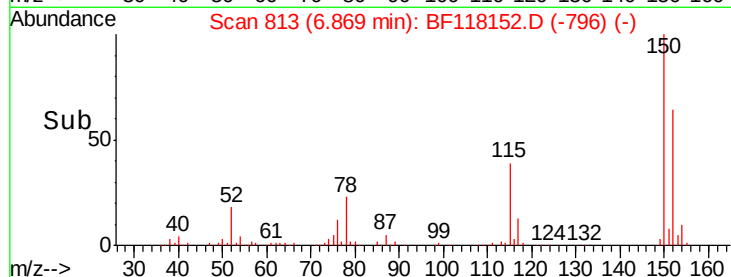
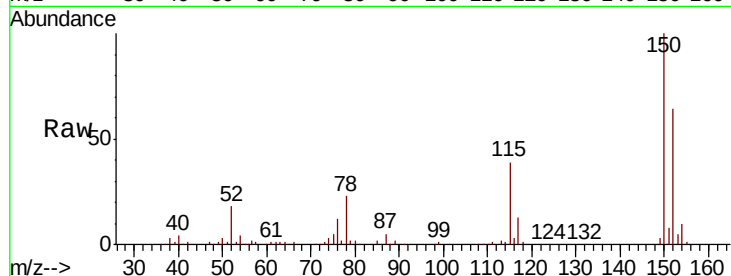
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.87 min Scan# 813  
Delta R.T. -0.00 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

Instrument :  
BNA\_F  
ClientSampleId :  
TP2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 155.8 | 128.3 | 192.5 |
| 115     | 60.1  | 51.1  | 76.7  |

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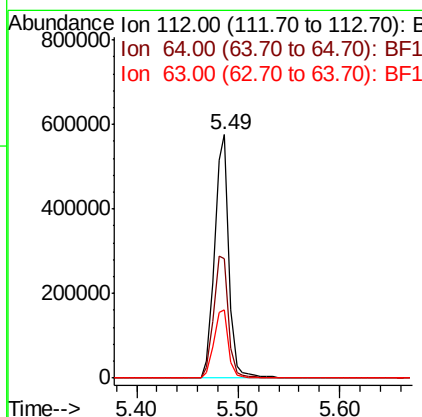
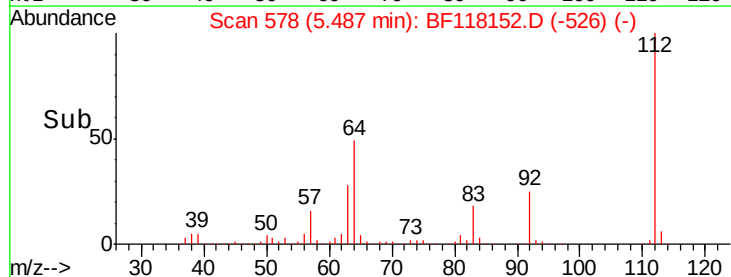
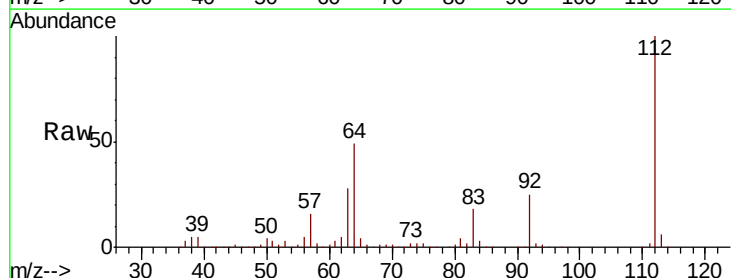
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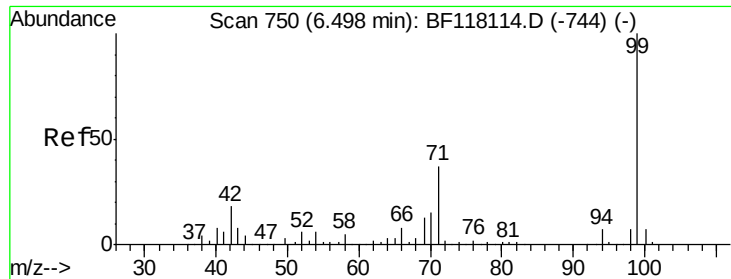


#5

2-Fluorophenol  
Concen: 96.704 ng  
RT: 5.49 min Scan# 578  
Delta R.T. 0.01 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 49.3  | 41.3  | 61.9  |
| 63      | 27.9  | 22.4  | 33.6  |





#7

Phenol-d6

Concen: 99.543 ng

RT: 6.50 min Scan# 750

Delta R.T. -0.00 min

Lab File: BF118152.D

Acq: 9 Dec 2019 18:53

Instrument :

BNA\_F

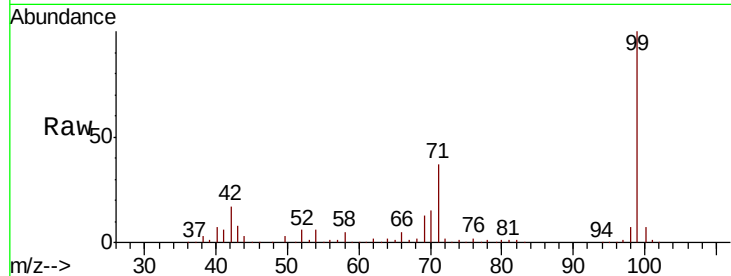
ClientSampled :

TP2

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 99      | 100  |       | 706024 |       |       |
| 42      | 17.3 | 14.1  | 21.1   |       |       |
| 71      | 37.0 | 29.7  | 44.5   |       |       |

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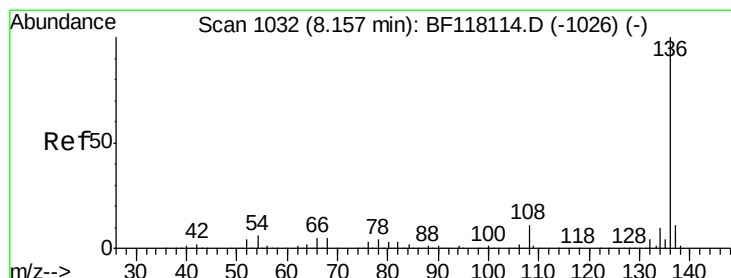
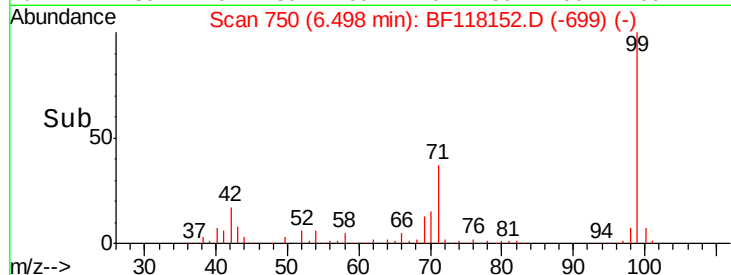
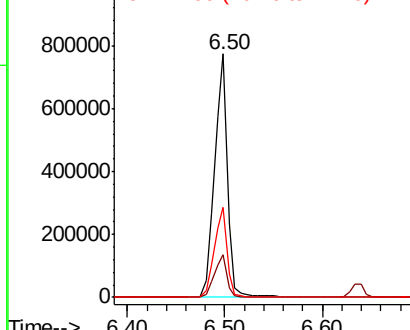


Abundance

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: 8.15 min Scan# 1031

Delta R.T. -0.01 min

Lab File: BF118152.D

Acq: 9 Dec 2019 18:53

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 136     | 100  |       | 396830 |       |       |
| 137     | 11.1 | 9.0   | 13.6   |       |       |
| 54      | 6.2  | 5.0   | 7.6    |       |       |
| 68      | 4.4  | 3.8   | 5.8    |       |       |

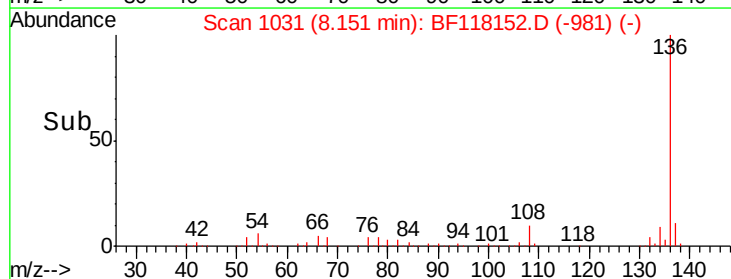
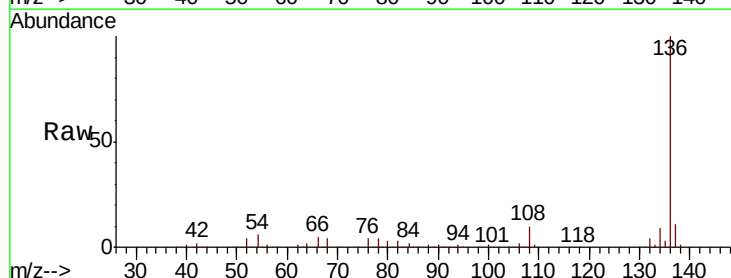
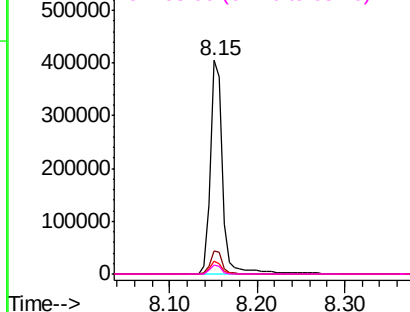
Abundance

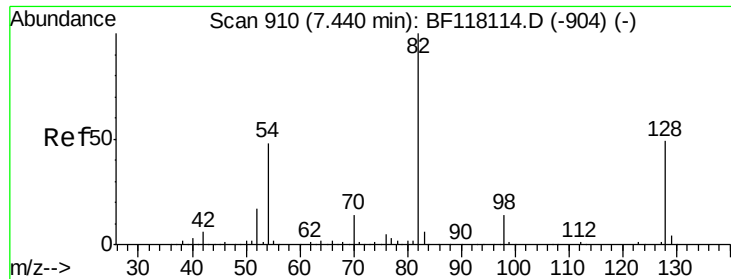
Ion 136.00 (135.70 to 136.70): E

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





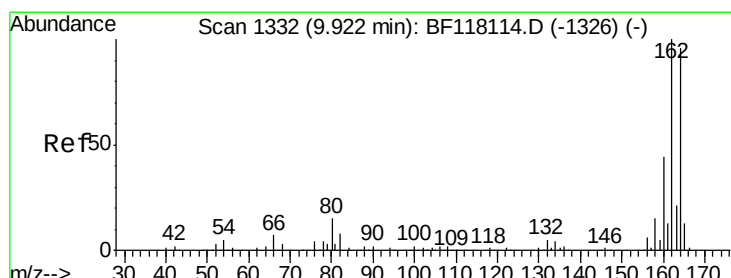
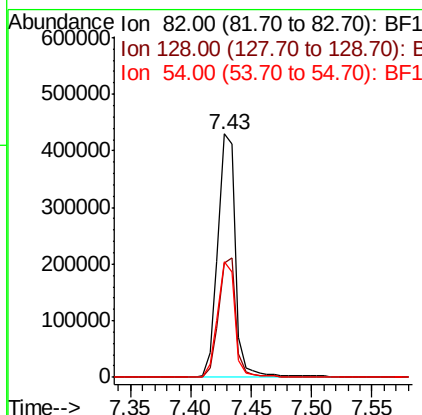
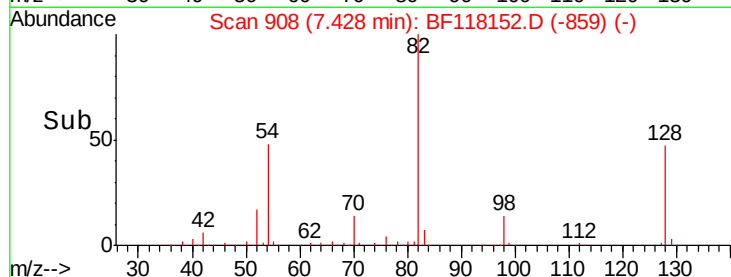
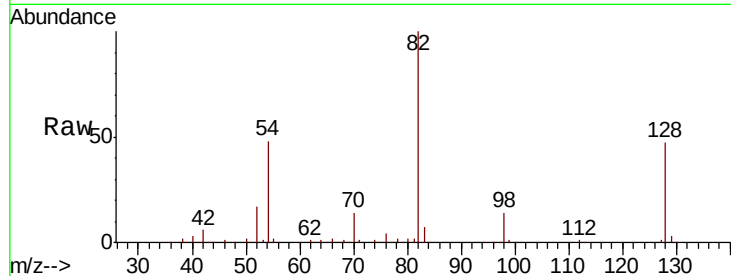
#23  
 Nitrobenzene-d5  
 Concen: 61.499 ng  
 RT: 7.43 min Scan# 908  
 Delta R.T. -0.01 min  
 Lab File: BF118152.D  
 Acq: 9 Dec 2019 18:53

Instrument :  
 BNA\_F  
 ClientSampled :  
 TP2

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 82    | Resp: | 433801 |
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 47.1  | 39.1  | 58.7   |
| 54        | 47.7  | 38.2  | 57.2   |

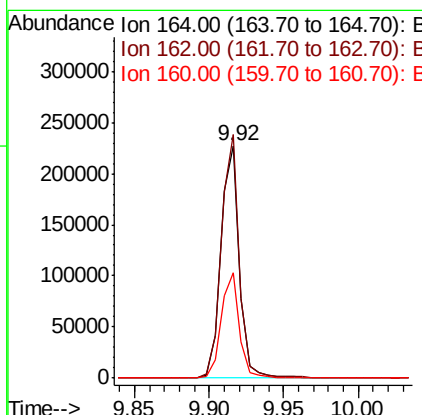
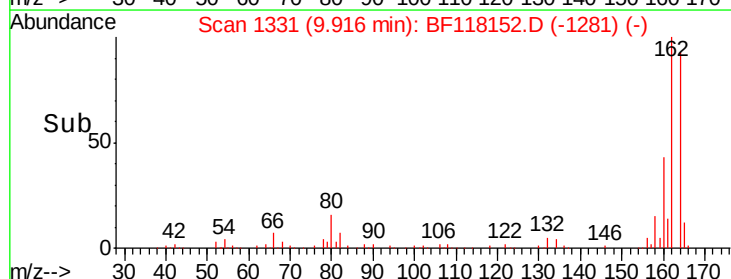
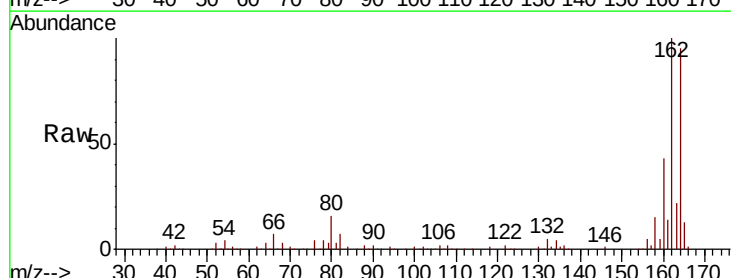
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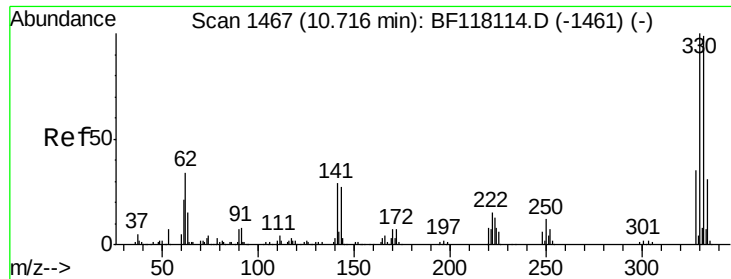
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#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.92 min Scan# 1331  
 Delta R.T. -0.01 min  
 Lab File: BF118152.D  
 Acq: 9 Dec 2019 18:53

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 164   | Resp: | 198207 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 104.8 | 83.4  | 125.0  |
| 160       | 45.1  | 36.6  | 54.8   |





#42

2,4,6-Tribromophenol

Concen: 88.076 ng

RT: 10.70 min Scan# 1465

Delta R.T. -0.01 min

Lab File: BF118152.D

Acq: 9 Dec 2019 18:53

Instrument :

BNA\_F

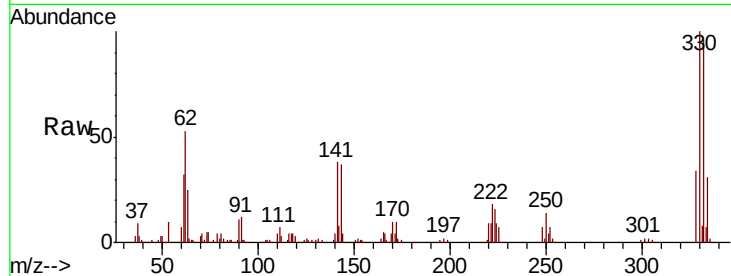
ClientSampled :

TP2

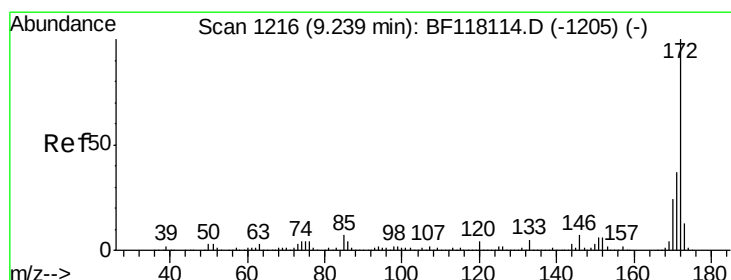
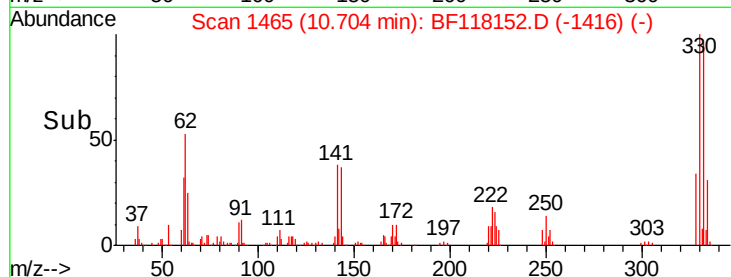
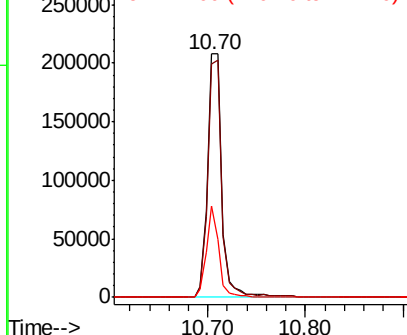
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 330   | Resp: | 212073 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 95.4  | 78.1  | 117.1  |
| 141       | 33.1  | 26.9  | 40.3   |

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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: 65.258 ng

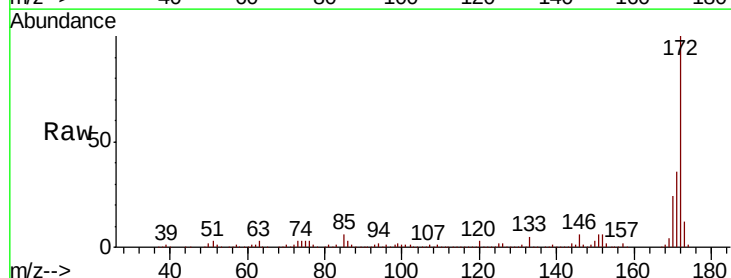
RT: 9.23 min Scan# 1215

Delta R.T. -0.01 min

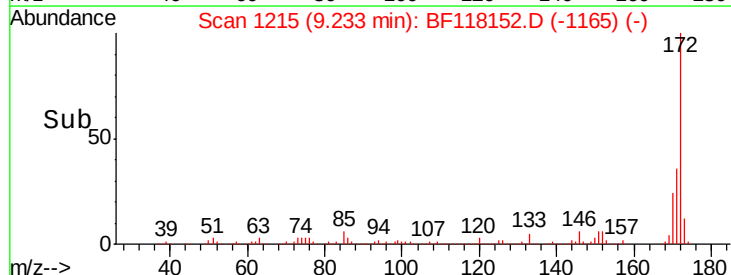
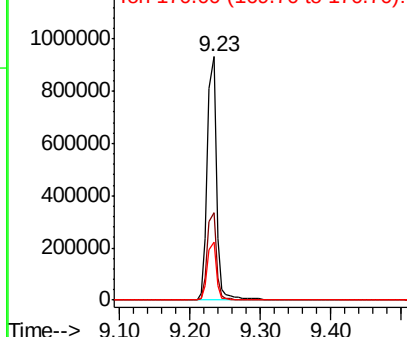
Lab File: BF118152.D

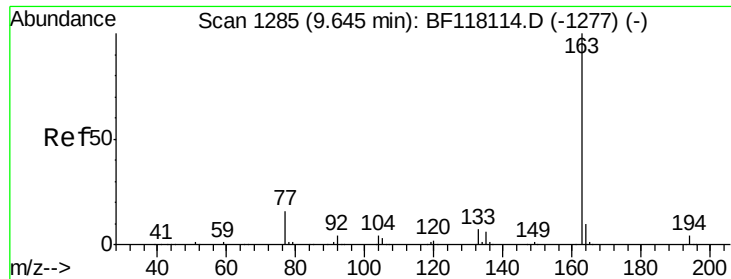
Acq: 9 Dec 2019 18:53

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 172   | Resp: | 850040 |
| Ion Ratio | Lower | Upper |        |
| 172       | 100   |       |        |
| 171       | 35.9  | 29.2  | 43.8   |
| 170       | 23.7  | 19.4  | 29.2   |



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





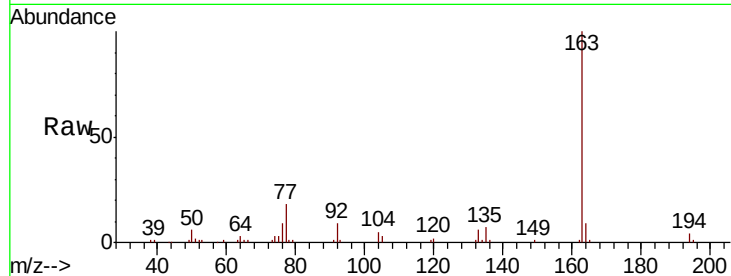
#50  
Dimethylphthalate  
Concen: 4.848 ng  
RT: 9.63 min Scan# 1282  
Delta R.T. -0.02 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

Instrument :  
BNA\_F  
ClientSampled :  
TP2

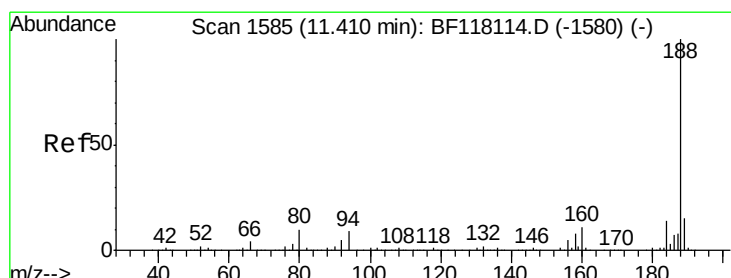
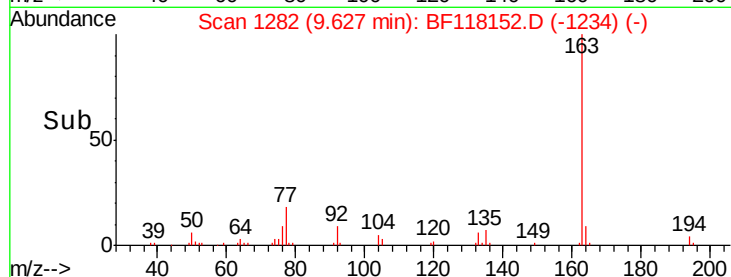
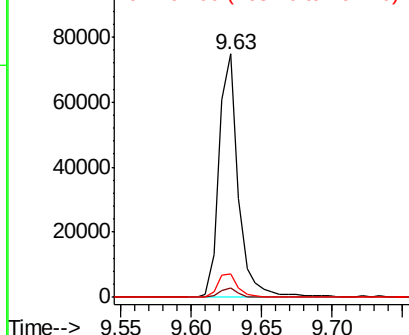
| Tot Ion | Ion | Ratio | Resp  | Lower | Upper |
|---------|-----|-------|-------|-------|-------|
| 163     | 100 |       | 70983 |       |       |
| 194     | 3.7 | 3.1   | 4.7   |       |       |
| 164     | 9.5 | 7.7   | 11.5  |       |       |

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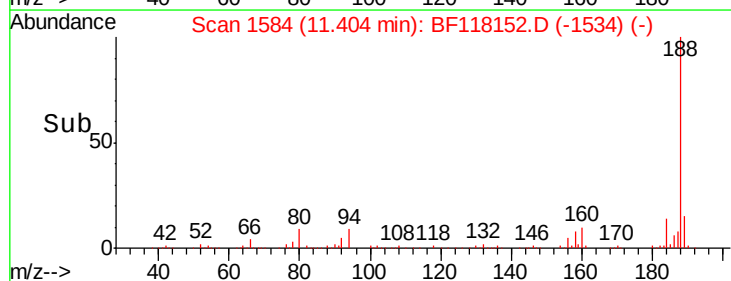
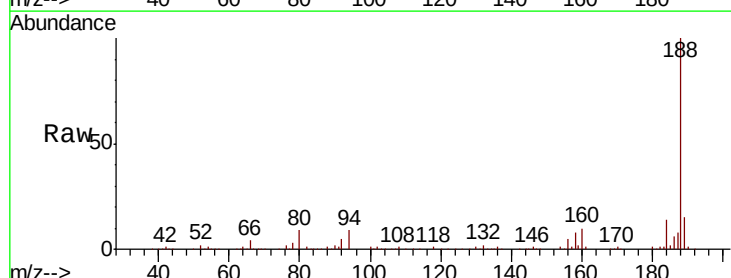
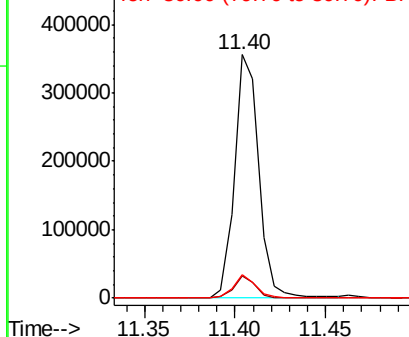
Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

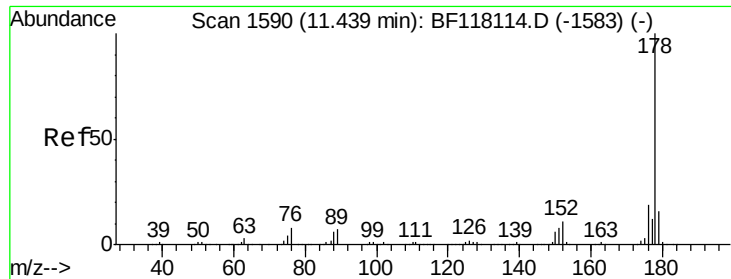


#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.40 min Scan# 1584  
Delta R.T. -0.01 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

| Tgt Ion | Ion | Ratio | Resp   | Lower | Upper |
|---------|-----|-------|--------|-------|-------|
| 188     | 100 |       | 332217 |       |       |
| 94      | 8.9 | 7.1   | 10.7   |       |       |
| 80      | 9.4 | 7.9   | 11.9   |       |       |

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





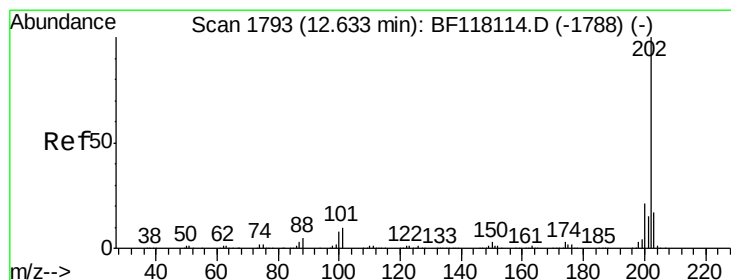
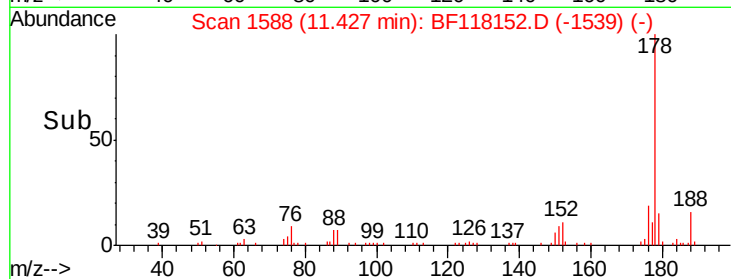
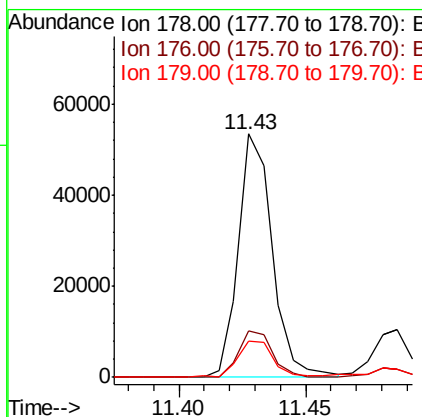
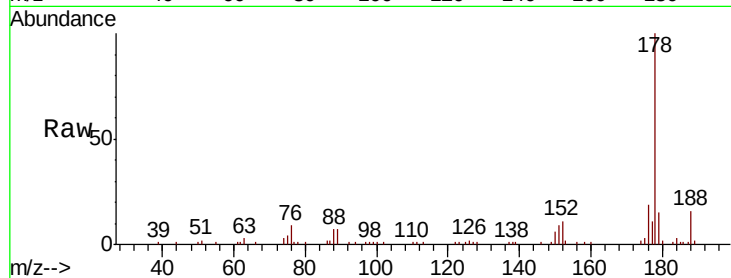
#71  
Phenanthrene  
Concen: 2.830 ng  
RT: 11.43 min Scan# 1588  
Delta R.T. -0.01 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

Instrument :  
BNA\_F  
ClientSampleId :  
TP2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.1  | 15.5  | 23.3  |
| 179     | 15.1  | 12.6  | 18.8  |

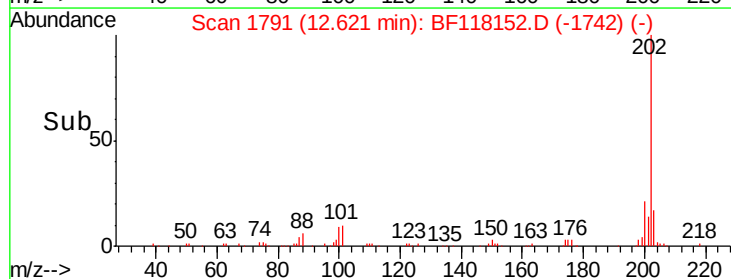
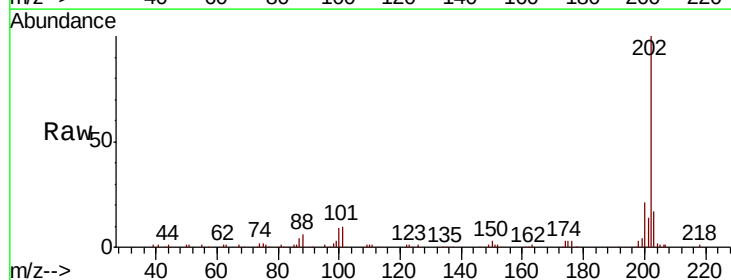
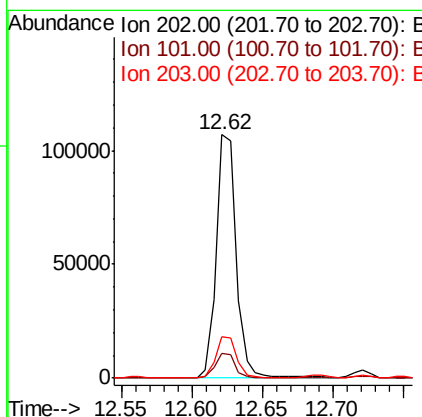
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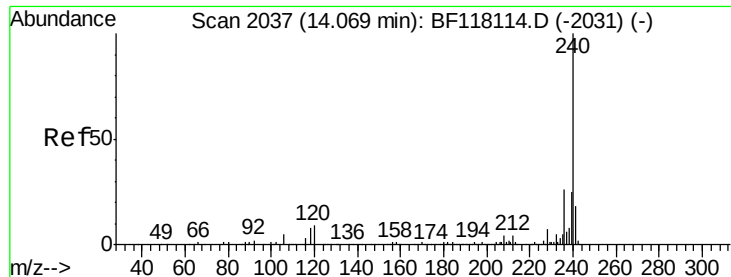


#75  
Fluoranthene  
Concen: 5.857 ng  
RT: 12.62 min Scan# 1791  
Delta R.T. -0.01 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.3  | 0.0   | 30.4  |
| 203     | 17.2  | 0.0   | 37.2  |







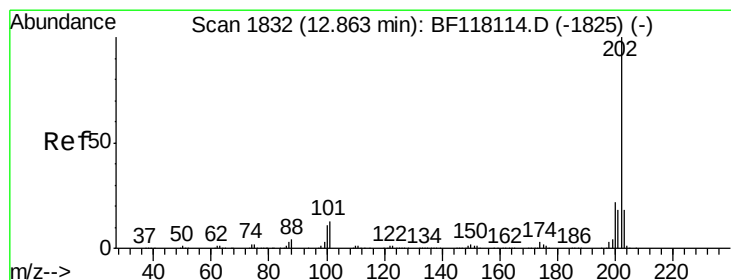
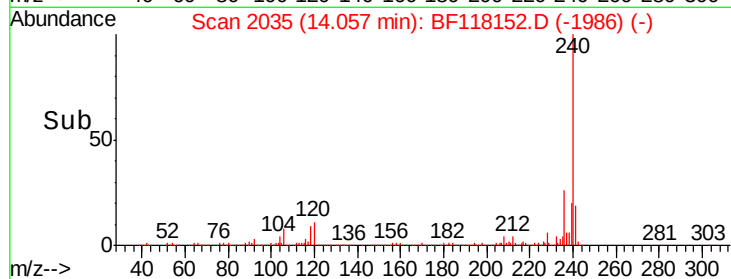
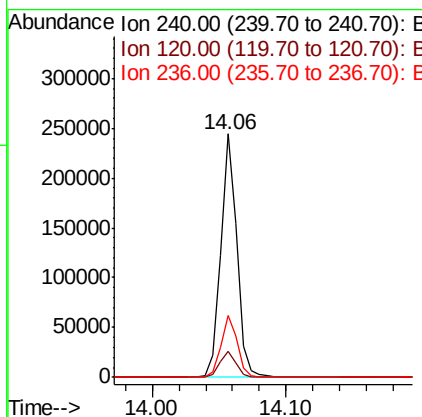
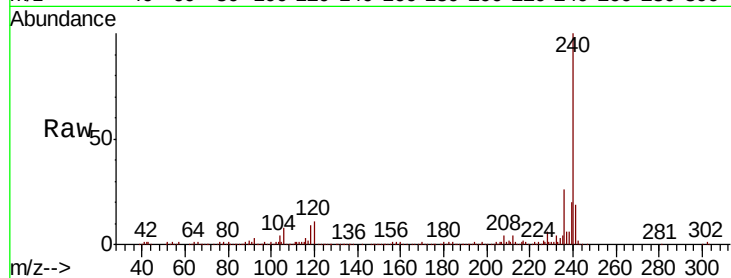
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.06 min Scan# 2035  
Delta R.T. -0.01 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

Instrument :  
BNA\_F  
ClientSampleId :  
TP2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 10.6  | 7.1   | 10.7  |
| 236     | 25.7  | 21.0  | 31.6  |

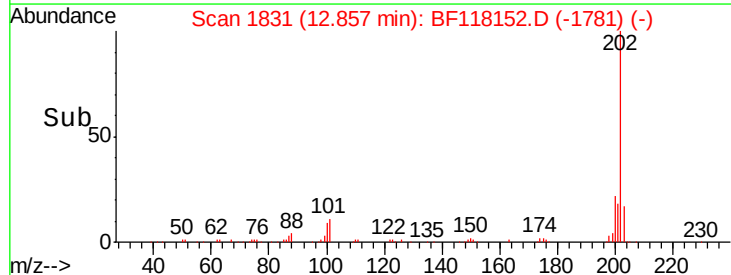
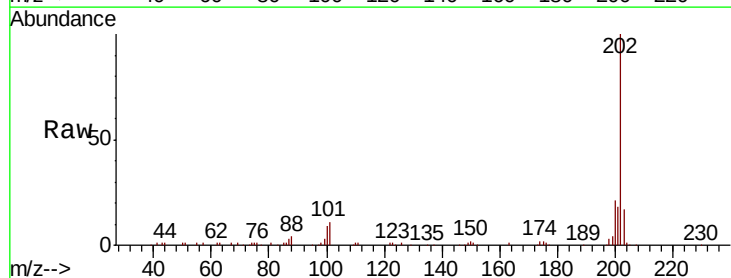
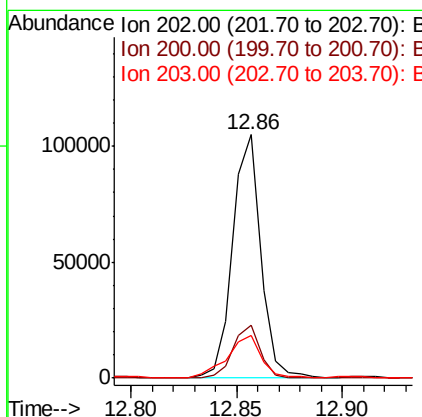
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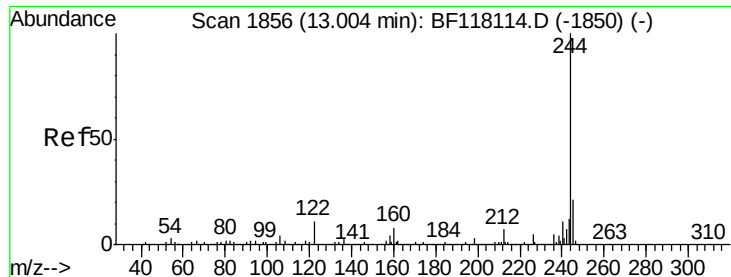
mohammad  
12/10/2019 11:50:23 AM



#78  
Pyrene  
Concen: 5.879 ng  
RT: 12.86 min Scan# 1831  
Delta R.T. -0.01 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.5  | 17.5  | 26.3  |
| 203     | 17.4  | 14.6  | 21.8  |





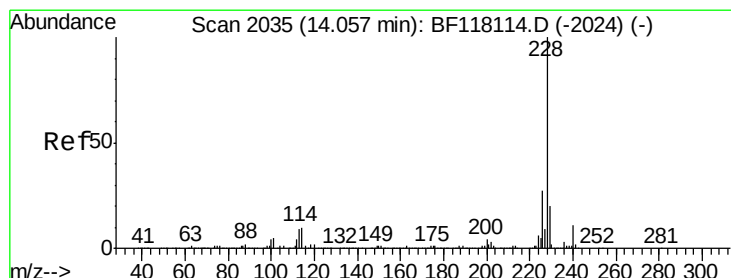
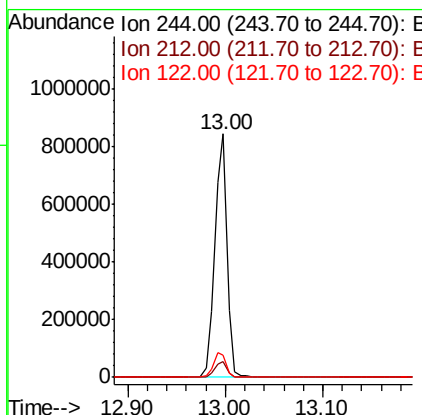
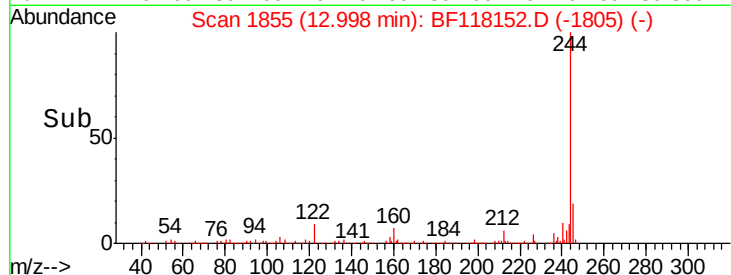
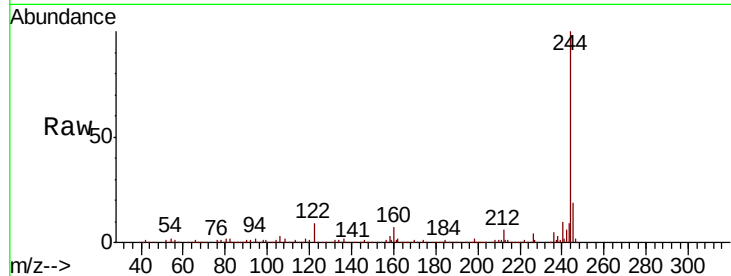
#79  
 Terphenyl-d14  
 Concen: 59.883 ng  
 RT: 13.00 min Scan# 1856  
 Delta R.T. -0.01 min  
 Lab File: BF118152.D  
 Acq: 9 Dec 2019 18:53

Instrument :  
 BNA\_F  
 ClientSampled :  
 TP2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.5   | 5.9   | 8.9   |
| 122     | 9.3   | 9.0   | 13.6  |

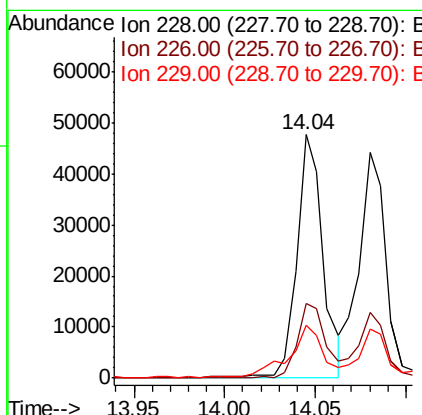
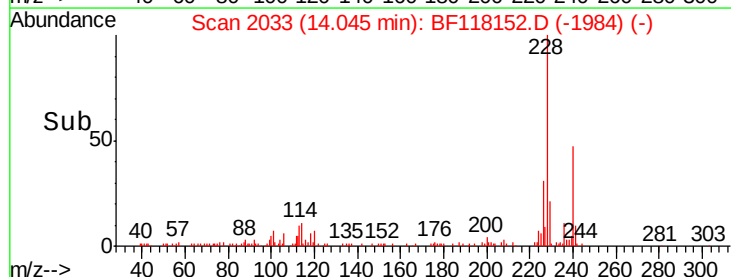
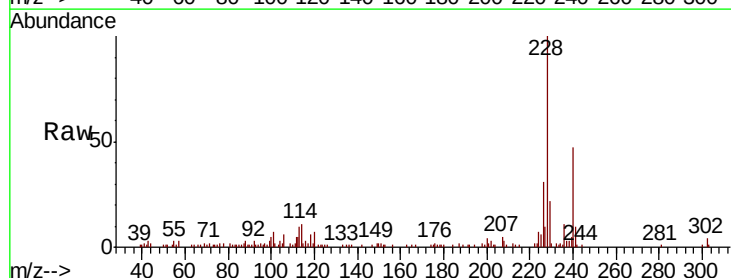
Manual Integrations  
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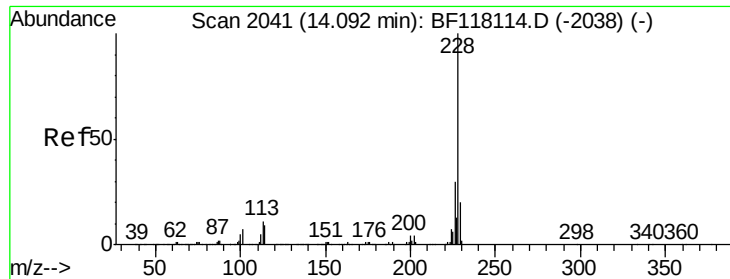
mohammad  
 12/10/2019 11:50:23 AM



#81  
 Benzo(a)anthracene  
 Concen: 3.374 ng  
 RT: 14.04 min Scan# 2033  
 Delta R.T. -0.01 min  
 Lab File: BF118152.D  
 Acq: 9 Dec 2019 18:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.6  | 21.8  | 32.8  |
| 229     | 21.6  | 15.8  | 23.8  |





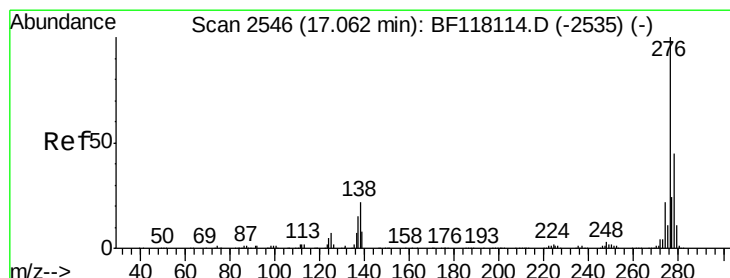
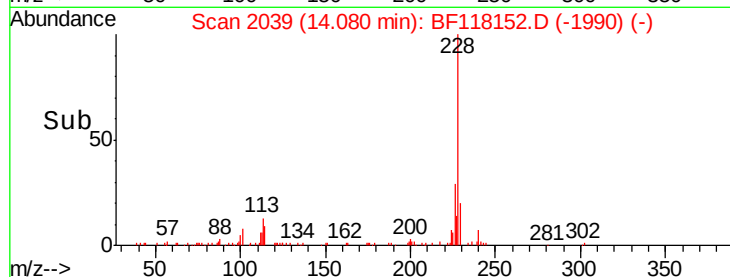
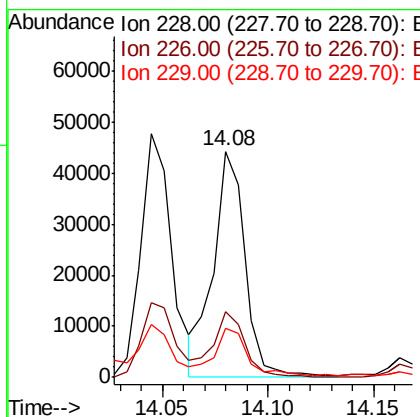
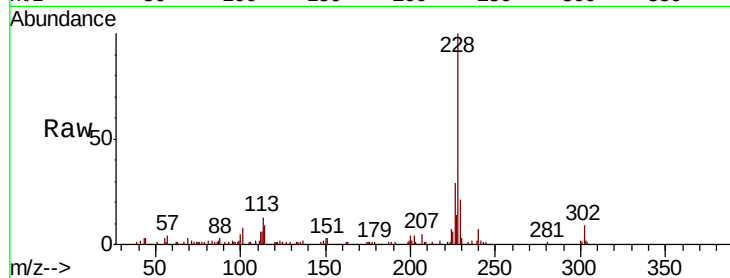
#83  
Chrysene  
Concen: 3.385 ng  
RT: 14.08 min Scan# 2039  
Delta R.T. -0.01 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

Instrument :  
BNA\_F  
ClientSampleId :  
TP2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.3  | 23.8  | 35.8  |
| 229     | 21.5  | 15.7  | 23.5  |

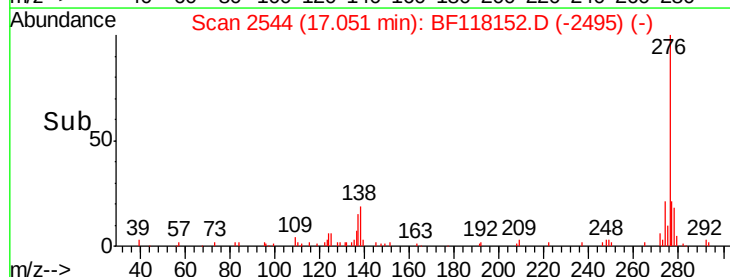
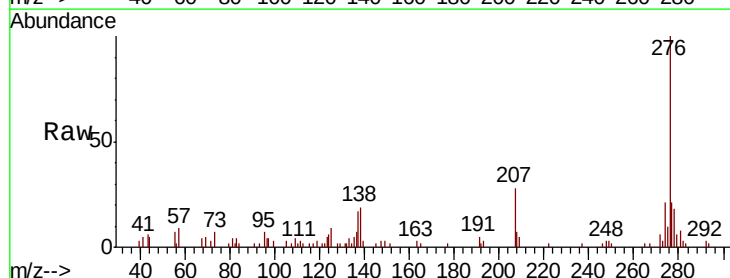
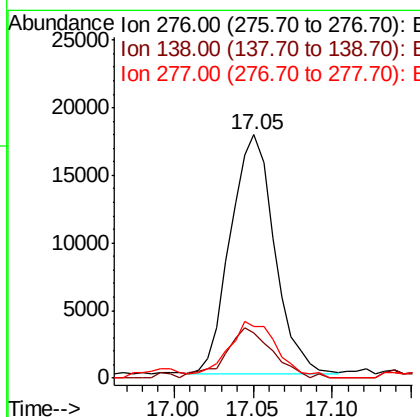
Manual Integrations  
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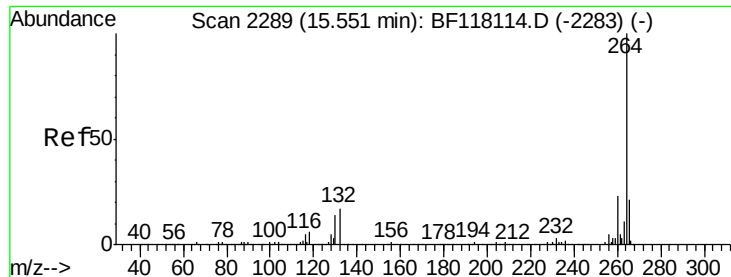
mohammad  
12/10/2019 11:50:23 AM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 2.920 ng  
RT: 17.05 min Scan# 2544  
Delta R.T. -0.01 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 22.5  | 18.9  | 28.3  |
| 277     | 26.6  | 20.4  | 30.6  |





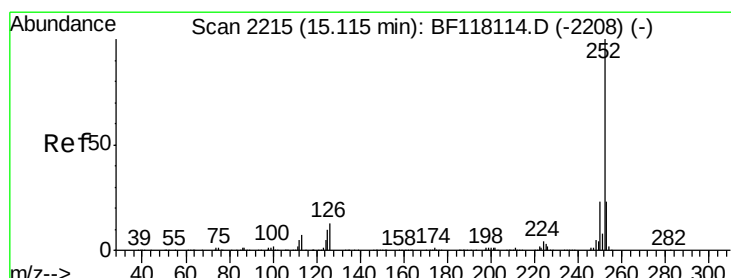
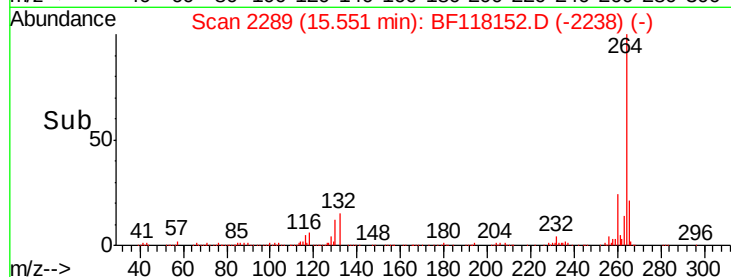
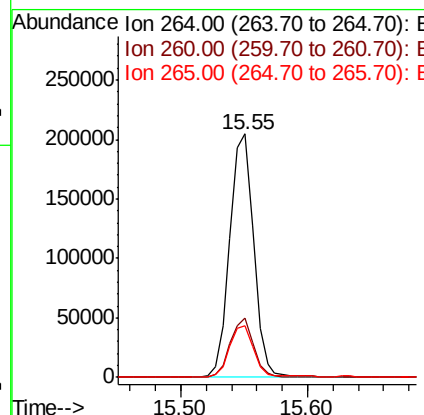
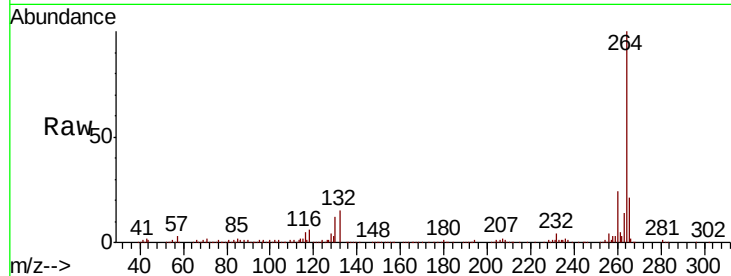
#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.55 min Scan# 2289  
Delta R.T. -0.00 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

Instrument :  
BNA\_F  
ClientSampled :  
TP2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.5  | 18.6  | 28.0  |
| 265     | 21.4  | 16.8  | 25.2  |

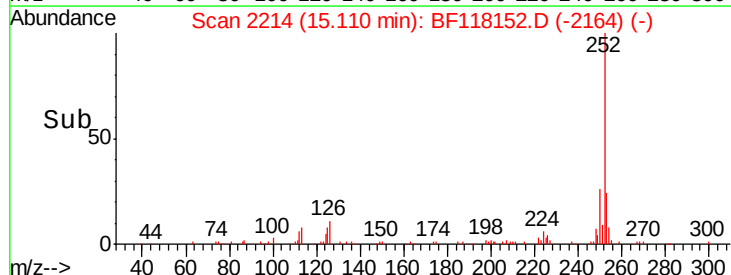
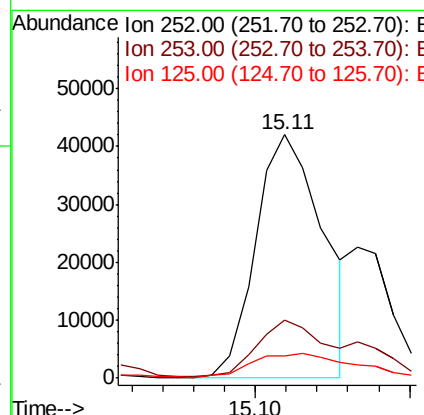
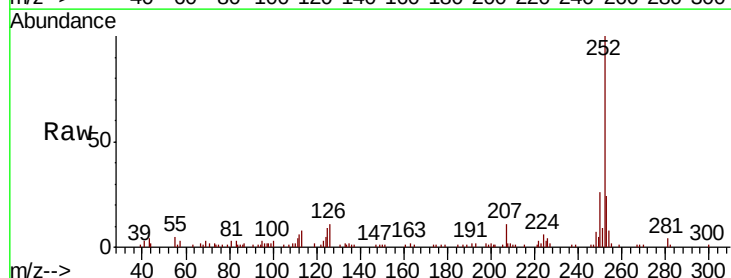
Manual Integrations  
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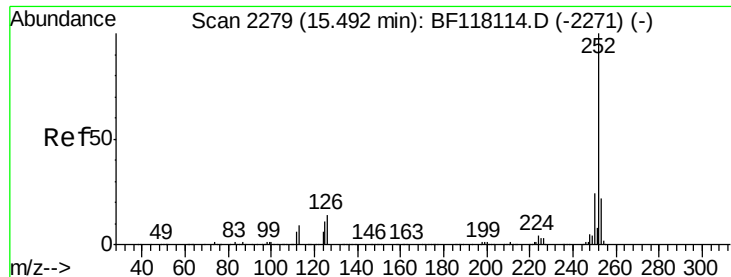
mohammad  
12/10/2019 11:50:23 AM



#88  
Benzo(b)fluoranthene  
Concen: 3.588 ng m  
RT: 15.11 min Scan# 2214  
Delta R.T. -0.01 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.9  | 18.2  | 27.4  |
| 125     | 8.9   | 8.3   | 12.5  |





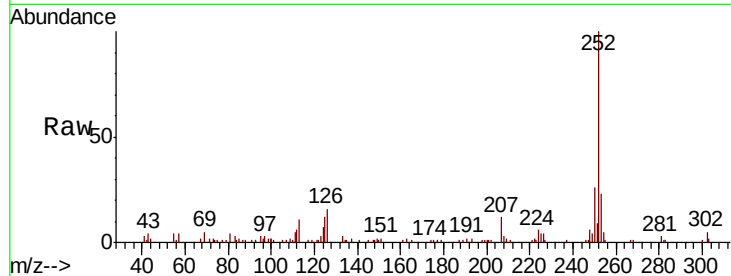
#90  
Benzo(a)pyrene  
Concen: 3.191 ng  
RT: 15.48 min Scan# 2277  
Delta R.T. -0.01 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

Instrument :  
BNA\_F  
ClientSampled :  
TP2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.5  | 17.5  | 26.3  |
| 125     | 12.2  | 9.1   | 13.7  |

Manual Integrations  
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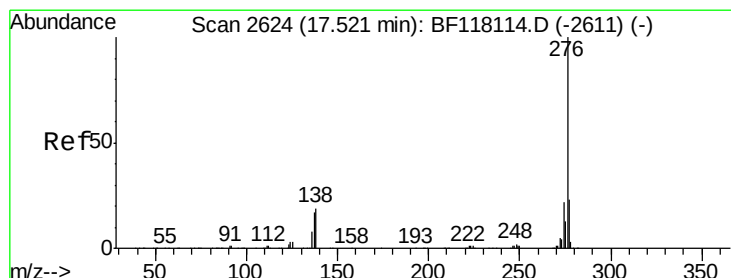
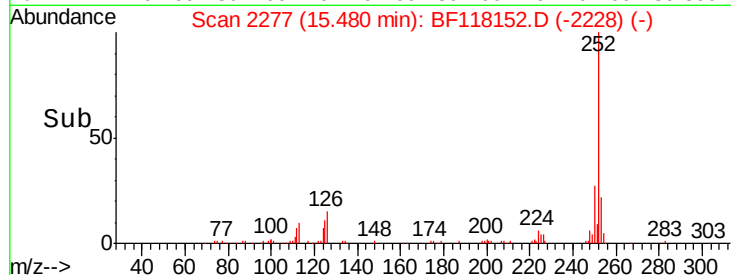
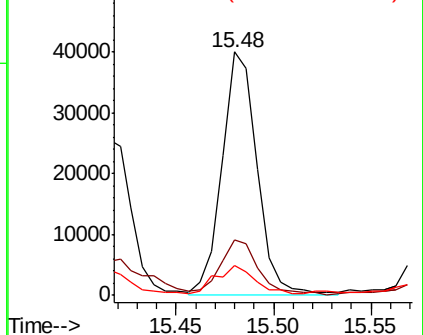


Abundance

Ion 252.00 (251.70 to 252.70): E

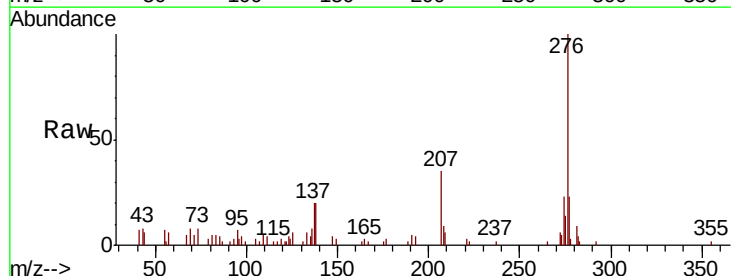
Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#92  
Benzo(g,h,i)perylene  
Concen: 2.624 ng  
RT: 17.50 min Scan# 2621  
Delta R.T. -0.02 min  
Lab File: BF118152.D  
Acq: 9 Dec 2019 18:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 23.3  | 18.2  | 27.4  |
| 138     | 19.9  | 15.5  | 23.3  |



Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

