

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF073119\  
 Data File : BF115876.D  
 Acq On : 31 Jul 2019 19:53  
 Operator : HP/JU  
 Sample : K4044-15  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-4

Manual Integrations  
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 8/1/2019 5:06:53 PM

Quant Time: Aug 01 07:23:02 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF073019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jul 31 15:31:51 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.85  | 152  | 129033   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.13  | 136  | 479241   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.89  | 164  | 233532   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.38 | 188  | 351440   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12            | 14.02 | 240  | 287590   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12            | 15.49 | 264  | 360564   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.47  | 112  | 671345   | 87.10  | ng    | 0.00     |
| 7) Phenol-d6                | 6.49  | 99   | 884628   | 90.97  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.41  | 82   | 533773   | 64.29  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.68 | 330  | 156646   | 69.19  | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.21  | 172  | 858227   | 68.84  | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.96 | 244  | 687602   | 50.38  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 49) Acenaphthylene          | 9.75  | 152  | 45669    | 2.281  | ng    | 99       |
| 50) Dimethylphthalate       | 9.60  | 163  | 148905   | 9.365  | ng    | 99       |
| 71) Phenanthrene            | 11.40 | 178  | 405696   | 22.581 | ng    | 99       |
| 72) Anthracene              | 11.45 | 178  | 103861   | 5.712  | ng    | 99       |
| 75) Fluoranthene            | 12.59 | 202  | 649705   | 34.542 | ng    | 100      |
| 78) Pyrene                  | 12.82 | 202  | 619652   | 28.583 | ng    | 100      |
| 81) Benzo(a)anthracene      | 14.01 | 228  | 351739   | 19.135 | ng    | 97       |
| 83) Chrysene                | 14.04 | 228  | 281657   | 15.783 | ng    | 98       |
| 86) Indeno(1,2,3-cd)pyrene  | 16.96 | 276  | 220553   | 14.715 | ng    | 95       |
| 88) Benzo(b)fluoranthene    | 15.06 | 252  | 565867m  | 27.142 | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.09 | 252  | 146853m  | 7.232  | ng    |          |
| 90) Benzo(a)pyrene          | 15.43 | 252  | 397510   | 21.329 | ng    | 99       |
| 91) Dibenzo(a,h)anthracene  | 16.96 | 278  | 56579m   | 3.507  | ng    |          |
| 92) Benzo(g,h,i)perylene    | 17.40 | 276  | 189053   | 11.933 | ng    | 98       |

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

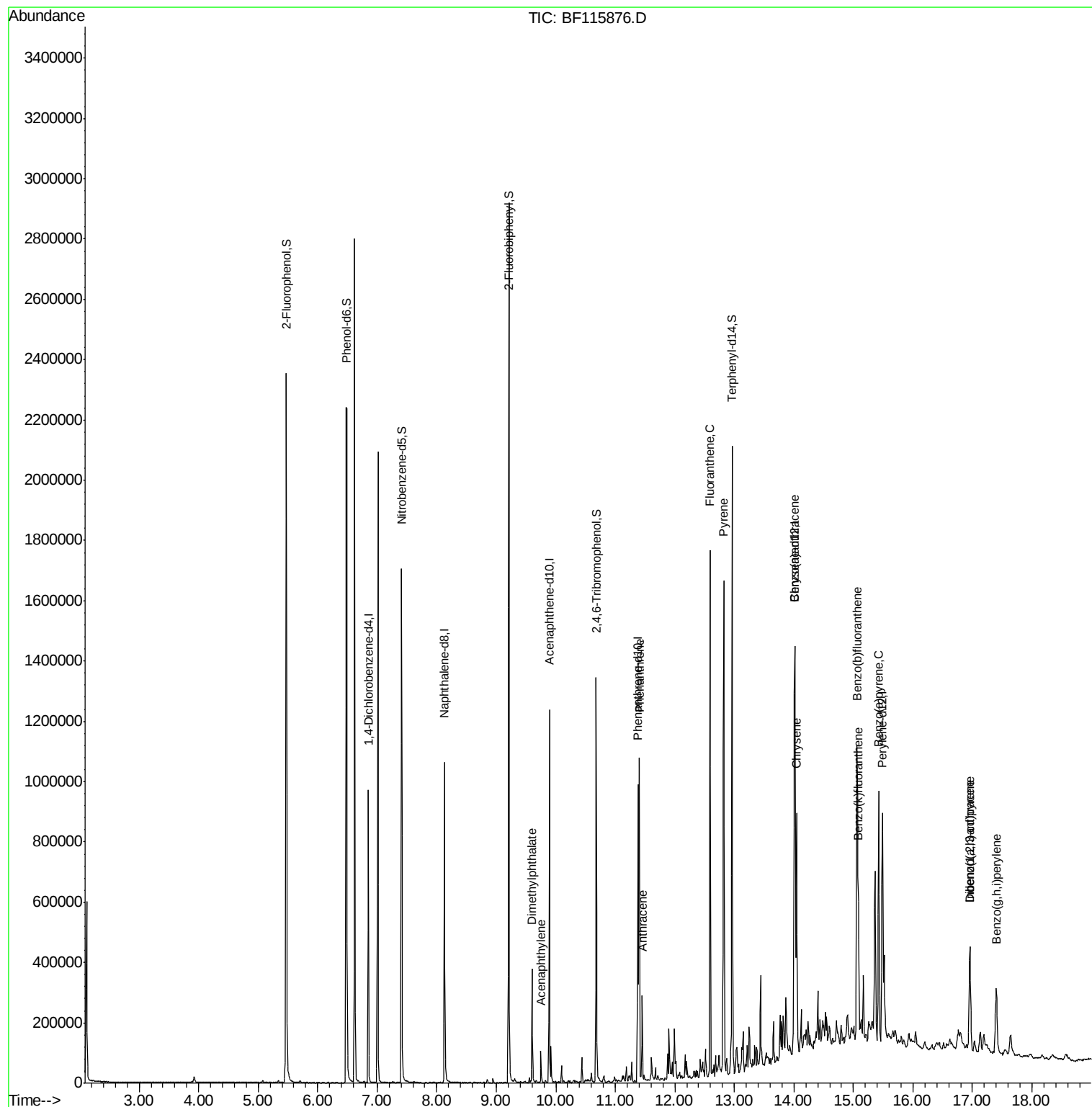
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF073119\  
Data File : BF115876.D  
Acq On : 31 Jul 2019 19:53  
Operator : HP/JU  
Sample : K4044-15  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

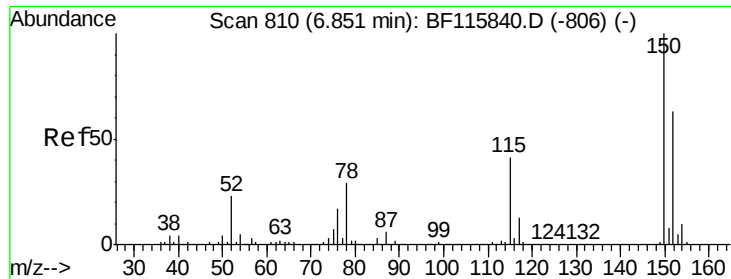
Instrument :  
BNA\_F  
ClientSampled :  
TP-4

Manual Integrations  
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Quant Time: Aug 01 07:23:02 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF073019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Jul 31 15:31:51 2019  
Response via : Initial Calibration





#1

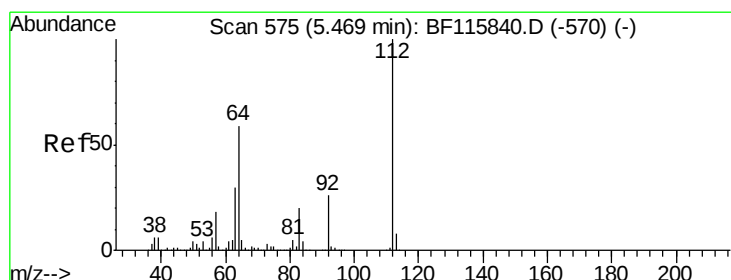
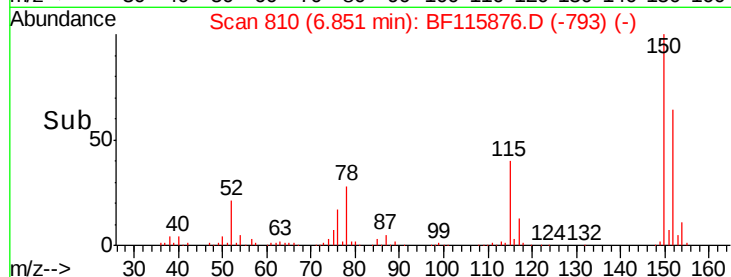
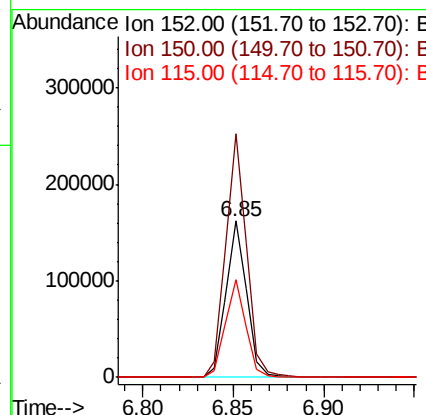
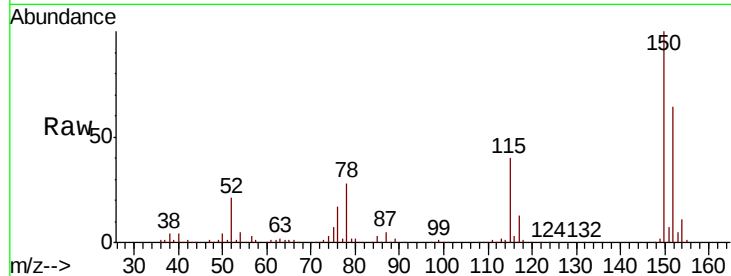
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.85 min Scan# 810  
Delta R.T. -0.00 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 155.7 | 127.4 | 191.0 |
| 115     | 62.3  | 51.8  | 77.8  |

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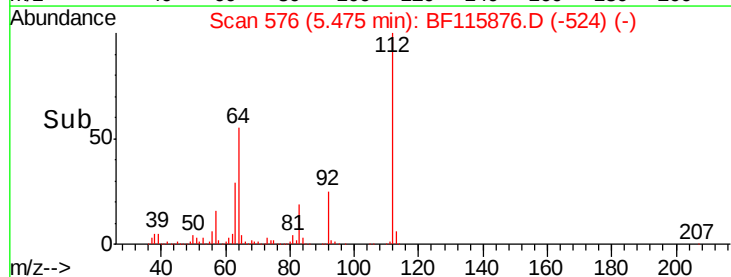
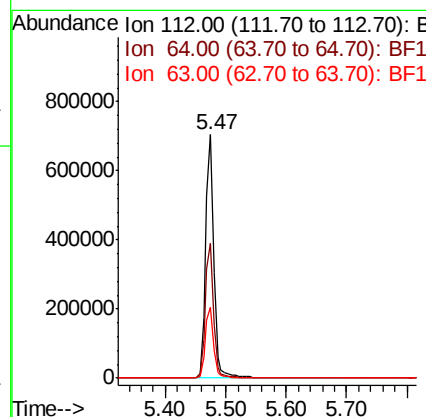
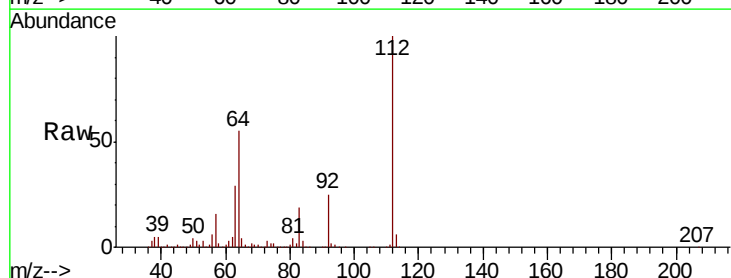
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#5

2-Fluorophenol  
Concen: 87.100 ng  
RT: 5.47 min Scan# 576  
Delta R.T. 0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 55.3  | 46.8  | 70.2  |
| 63      | 28.9  | 24.2  | 36.2  |





#7

Phenol-d6

Concen: 90.967 ng

RT: 6.49 min Scan# 748

Delta R.T. -0.00 min

Lab File: BF115876.D

Acq: 31 Jul 2019 19:53

Instrument :

BNA\_F

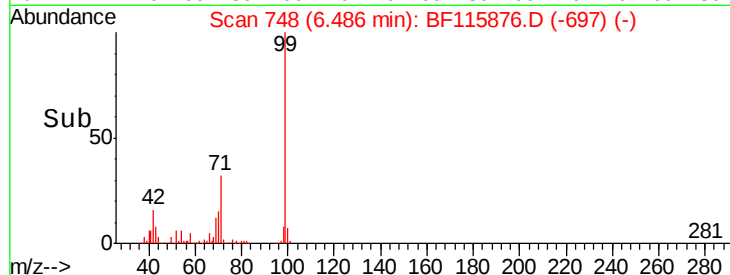
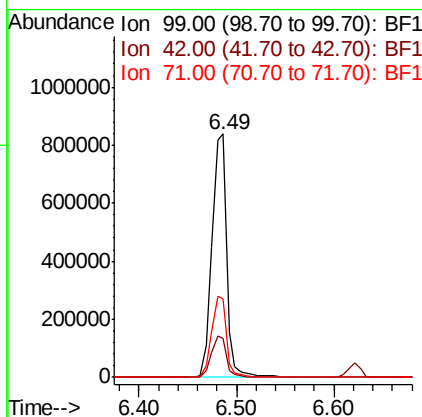
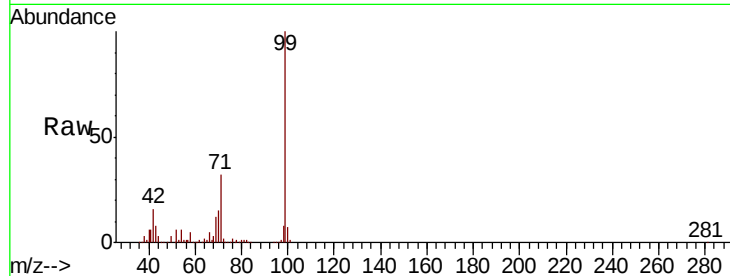
ClientSampled :

TP-4

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 99    | Resp: | 884628 |
| Ion      | Ratio | Lower | Upper  |
| 99       | 100   |       |        |
| 42       | 16.0  | 13.8  | 20.6   |
| 71       | 32.2  | 27.1  | 40.7   |

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#21

Naphthalene-d8

Concen: 20.000 ng

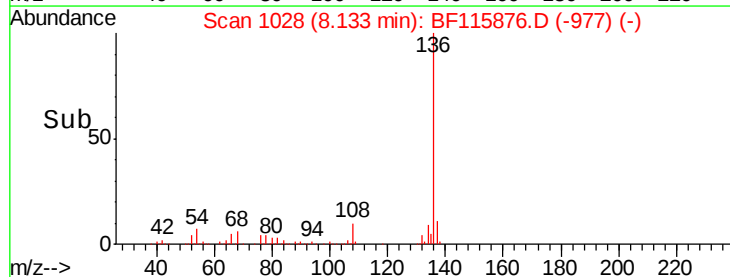
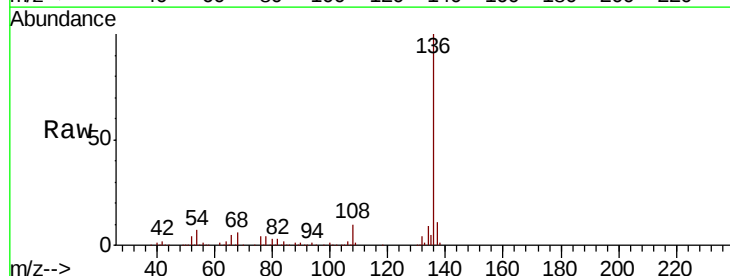
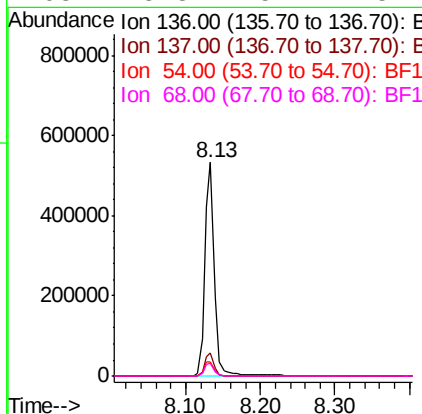
RT: 8.13 min Scan# 1028

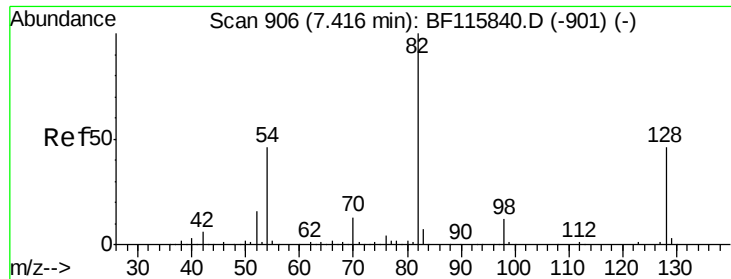
Delta R.T. -0.00 min

Lab File: BF115876.D

Acq: 31 Jul 2019 19:53

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 479241 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 10.8  | 9.1   | 13.7   |
| 54       | 6.7   | 6.1   | 9.1    |
| 68       | 5.8   | 5.4   | 8.2    |





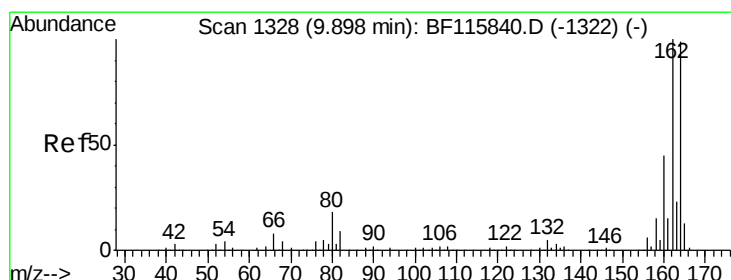
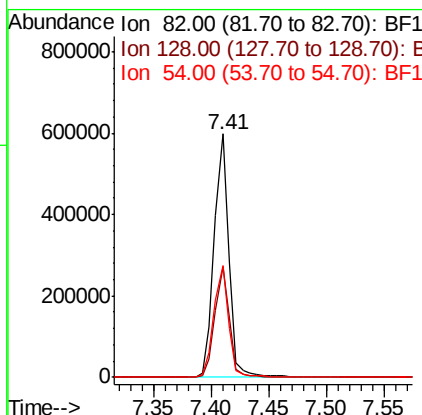
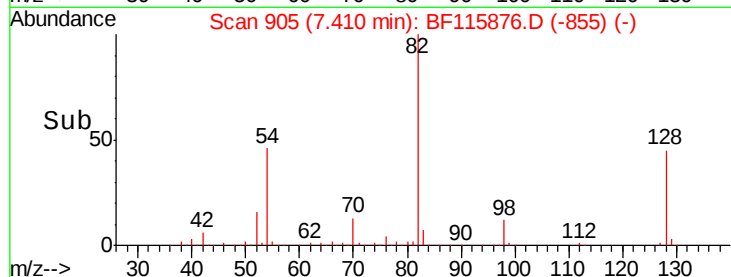
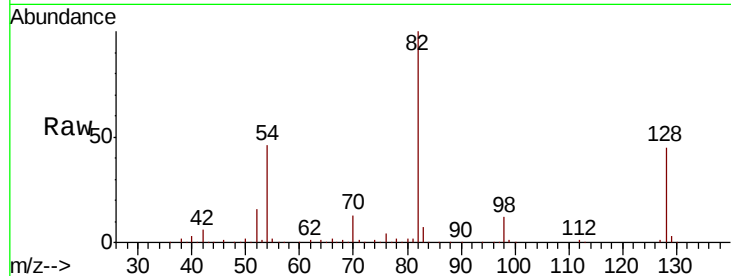
#23  
Nitrobenzene-d5  
Concen: 64.291 ng  
RT: 7.41 min Scan# 905  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

Instrument :  
BNA\_F  
ClientSampled :  
TP-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 45.2  | 36.6  | 55.0  |
| 54      | 45.8  | 36.6  | 55.0  |

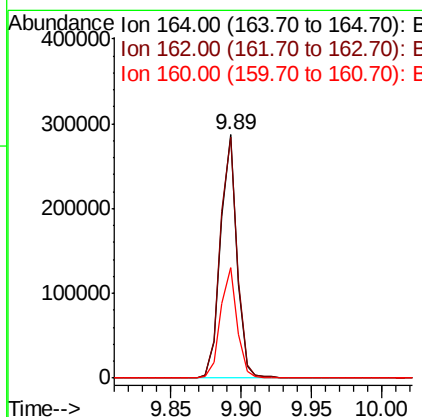
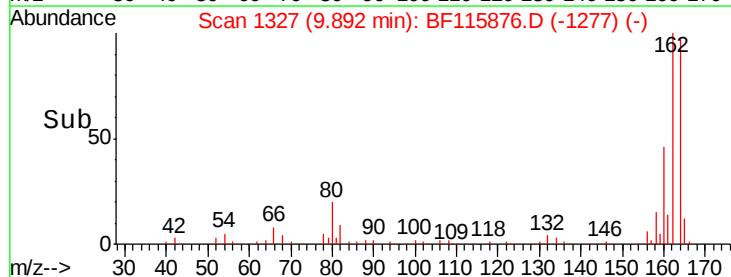
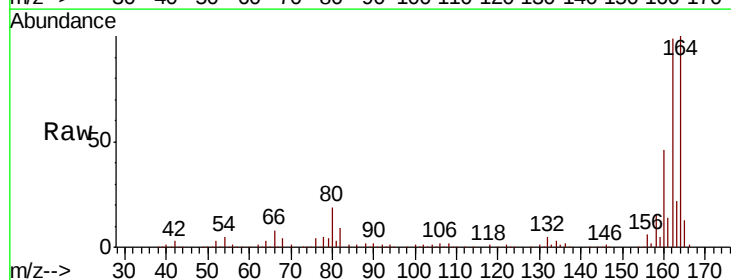
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#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.89 min Scan# 1327  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 99.0  | 80.8  | 121.2 |
| 160     | 45.5  | 36.2  | 54.4  |





#42

2,4,6-Tribromophenol

Concen: 69.185 ng

RT: 10.68 min Scan# 1461

Delta R.T. -0.01 min

Lab File: BF115876.D

Acq: 31 Jul 2019 19:53

Instrument :

BNA\_F

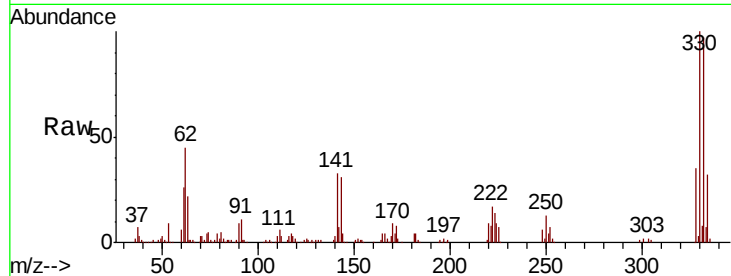
ClientSampled :

TP-4

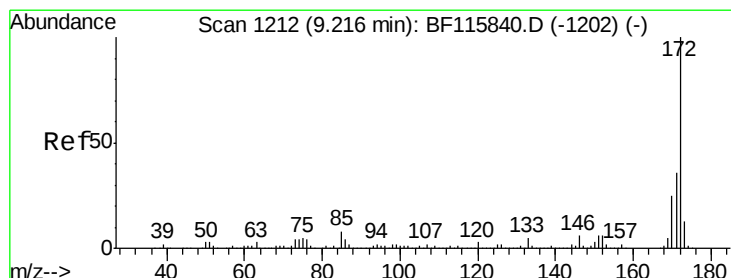
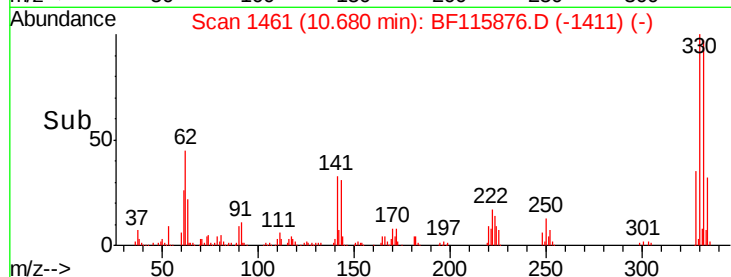
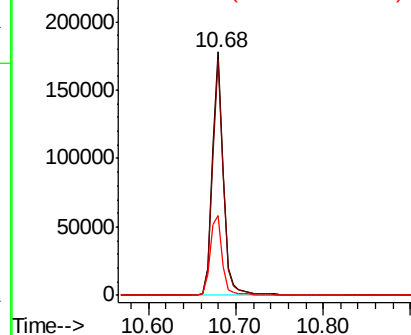
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 330   | Resp: | 156646 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 96.3  | 77.7  | 116.5  |
| 141       | 36.4  | 28.1  | 42.1   |

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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: 68.835 ng

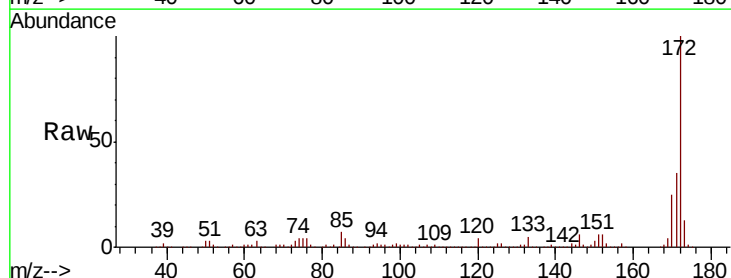
RT: 9.21 min Scan# 1211

Delta R.T. -0.01 min

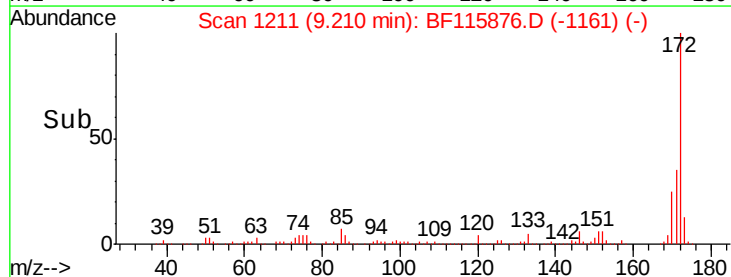
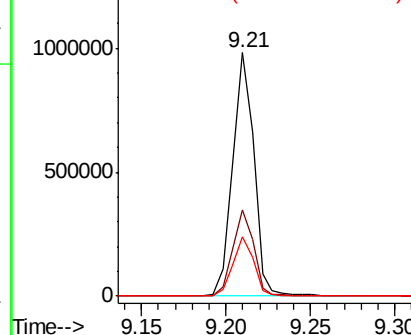
Lab File: BF115876.D

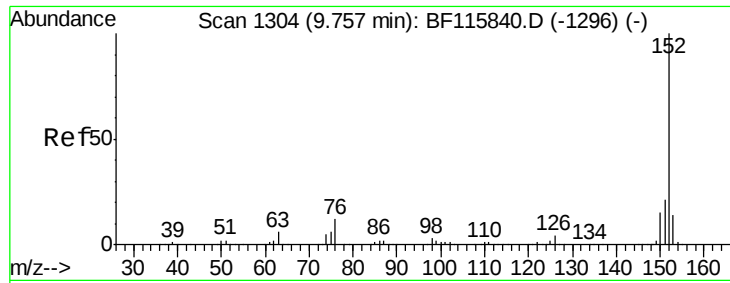
Acq: 31 Jul 2019 19:53

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 172   | Resp: | 858227 |
| Ion Ratio | Lower | Upper |        |
| 172       | 100   |       |        |
| 171       | 35.4  | 29.1  | 43.7   |
| 170       | 24.6  | 20.1  | 30.1   |



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





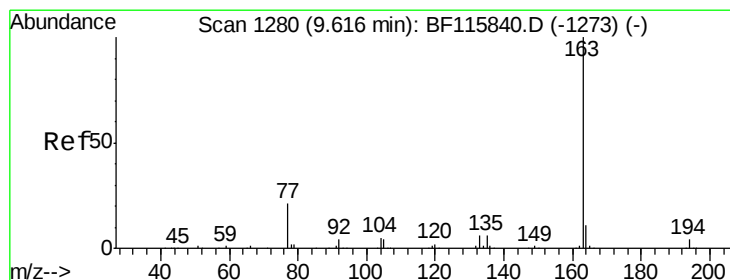
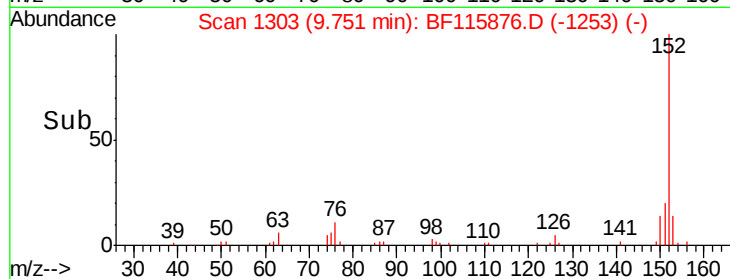
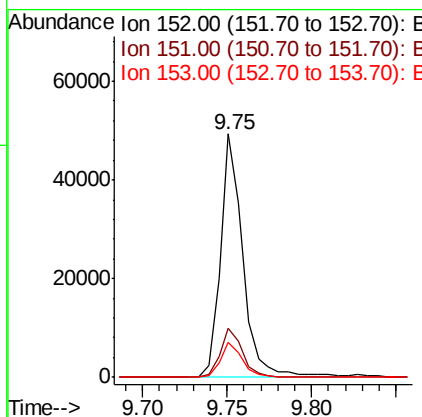
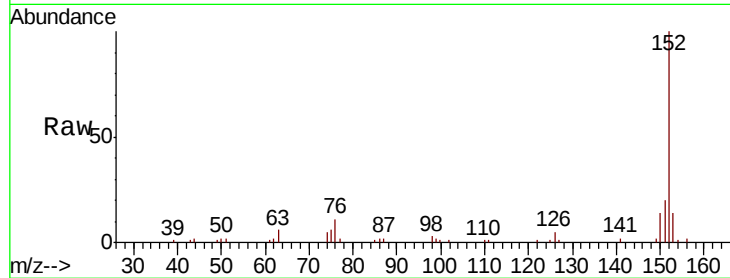
#49  
Acenaphthylene  
Concen: 2.281 ng  
RT: 9.75 min Scan# 1303  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 20.2  | 16.8  | 25.2  |
| 153     | 14.2  | 11.6  | 17.4  |

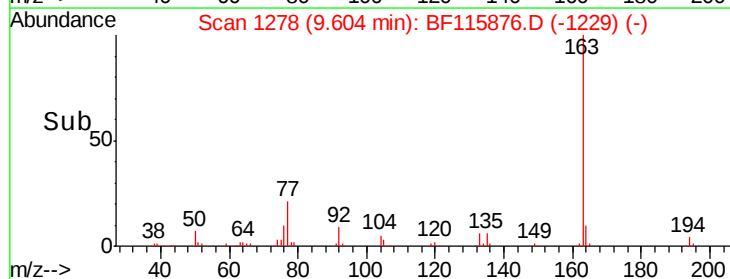
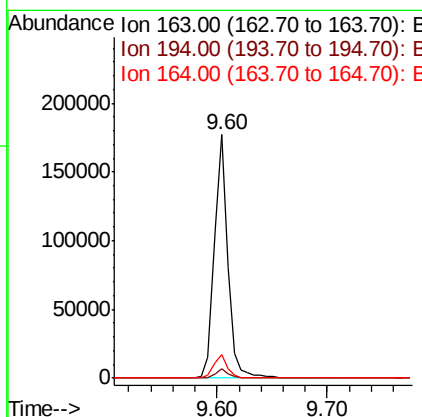
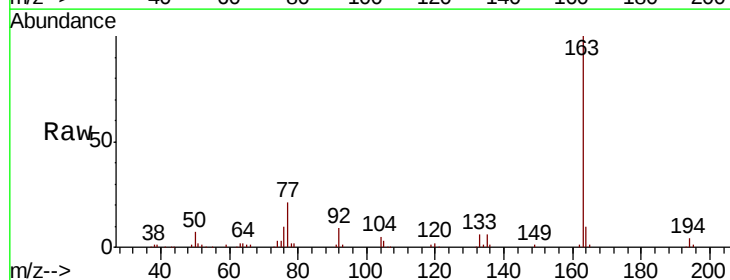
Manual Integrations  
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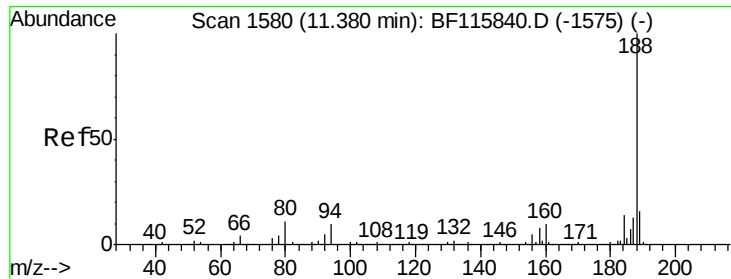
mohammad  
8/1/2019 5:06:53 PM



#50  
Dimethylphthalate  
Concen: 9.365 ng  
RT: 9.60 min Scan# 1278  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 3.7   | 3.0   | 4.6   |
| 164     | 9.8   | 8.4   | 12.6  |





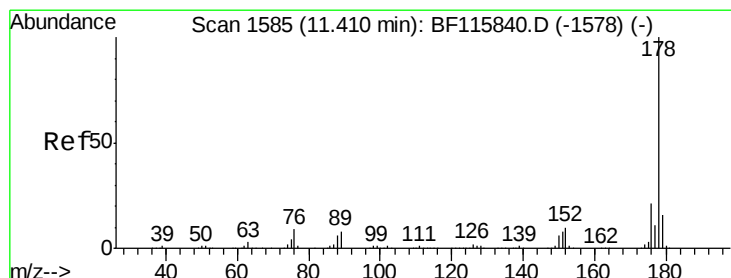
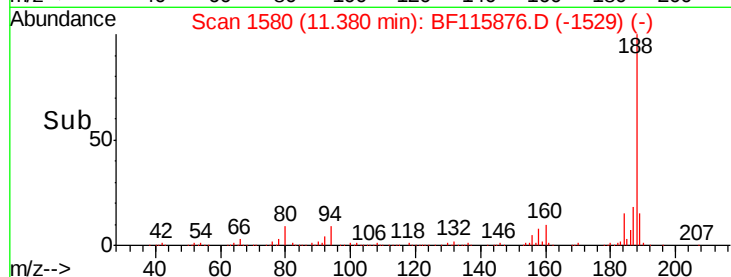
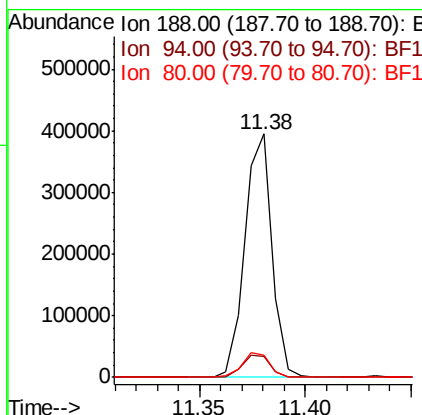
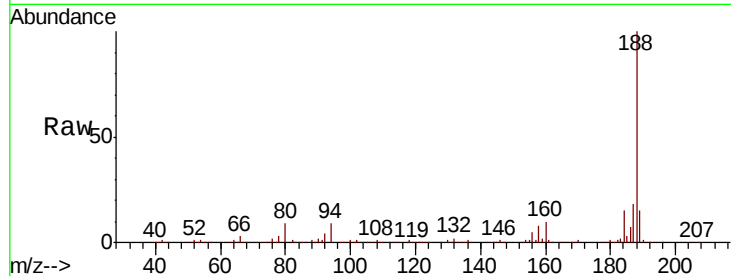
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.38 min Scan# 1580  
Delta R.T. -0.00 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

Instrument :  
BNA\_F  
ClientSampled :  
TP-4

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 351440 |       |       |
| 94      | 8.5   |        | 8.0   | 12.0  |
| 80      | 8.9   |        | 8.6   | 12.8  |

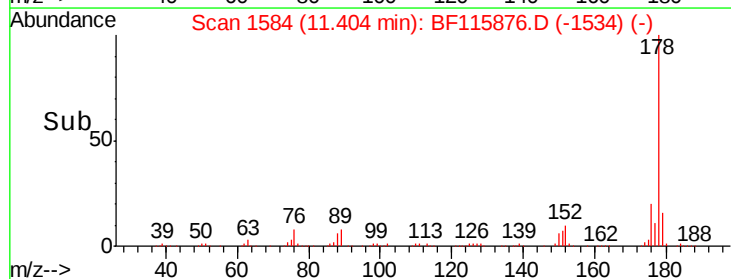
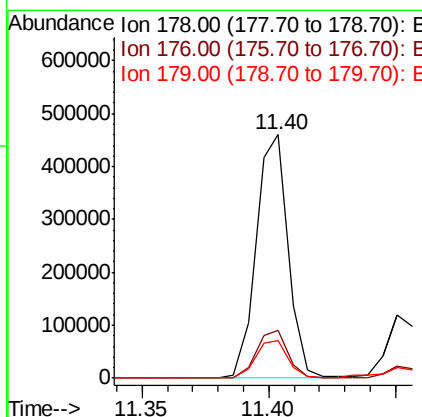
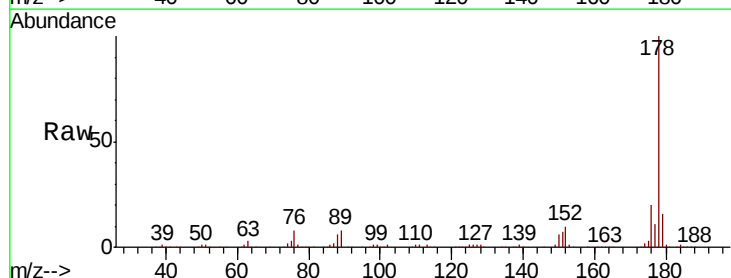
Manual Integrations  
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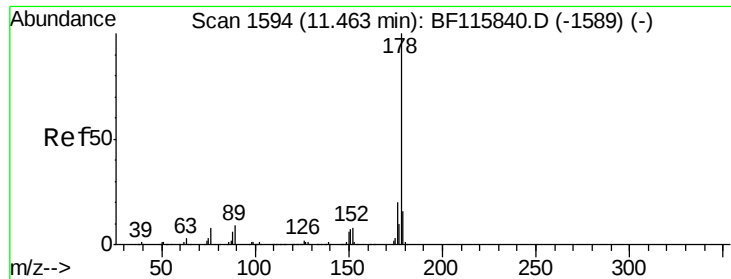
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#71  
Phenanthrene  
Concen: 22.581 ng  
RT: 11.40 min Scan# 1584  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 178     | 100   | 405696 |       |       |
| 176     | 19.8  |        | 16.5  | 24.7  |
| 179     | 15.6  |        | 12.6  | 18.8  |





#72

Anthracene

Concen: 5.712 ng

RT: 11.45 min Scan# 1592

Delta R.T. -0.01 min

Lab File: BF115876.D

Acq: 31 Jul 2019 19:53

Instrument :

BNA\_F

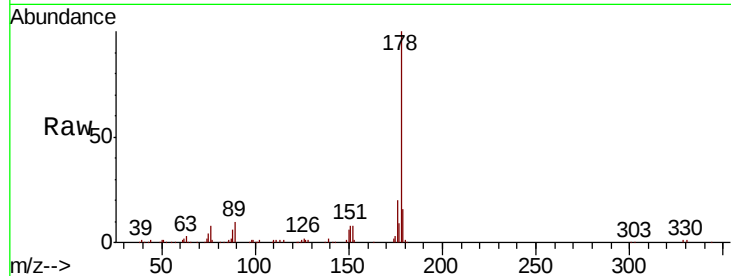
ClientSampled :

TP-4

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 178   | Resp: | 103861 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 19.6  | 15.7  | 23.5   |
| 179       | 16.1  | 12.4  | 18.6   |

Manual Integrations  
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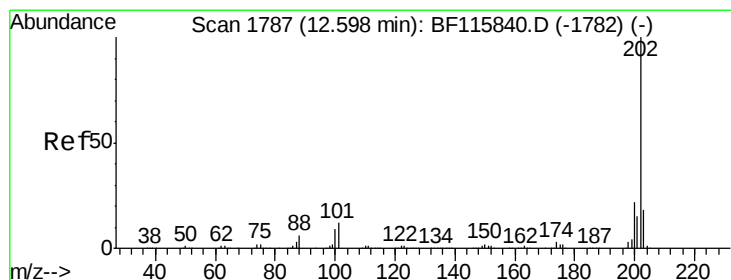
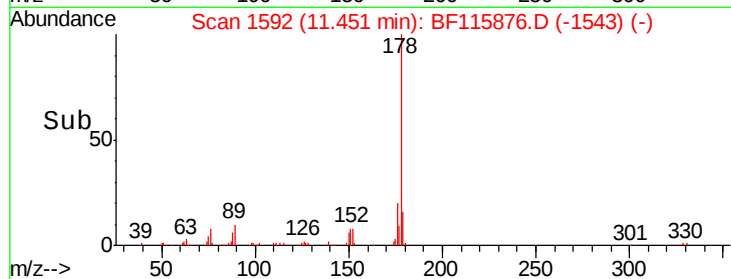
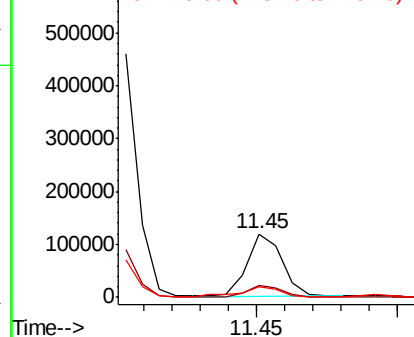


Abundance

Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#75

Fluoranthene

Concen: 34.542 ng

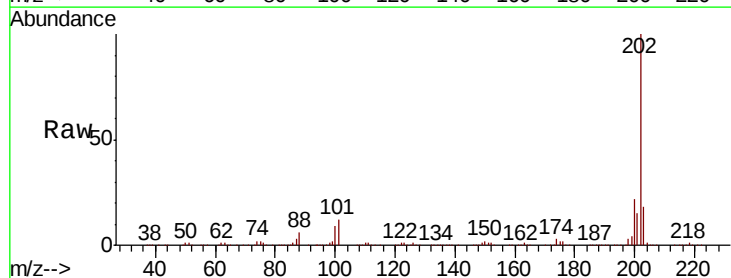
RT: 12.59 min Scan# 1786

Delta R.T. -0.01 min

Lab File: BF115876.D

Acq: 31 Jul 2019 19:53

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 649705 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 11.9  | 0.0   | 31.5   |
| 203       | 17.9  | 0.0   | 37.9   |

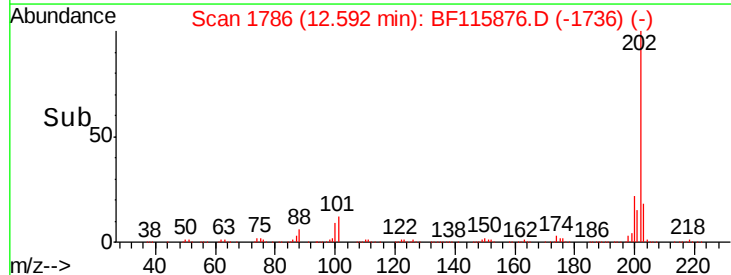
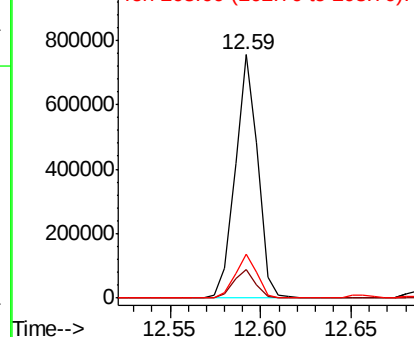


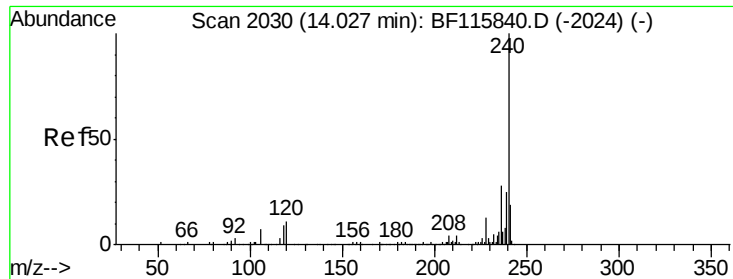
Abundance

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





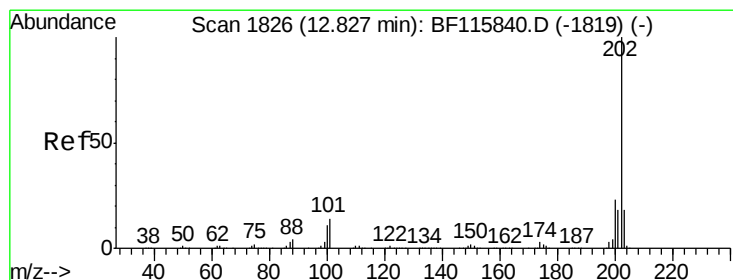
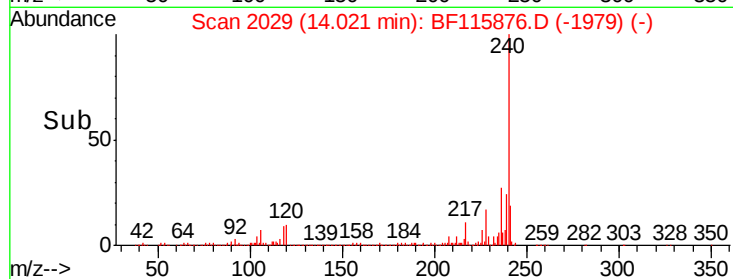
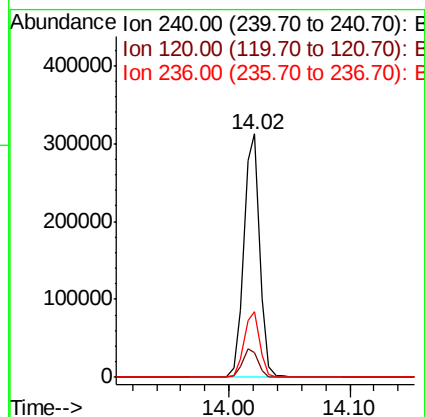
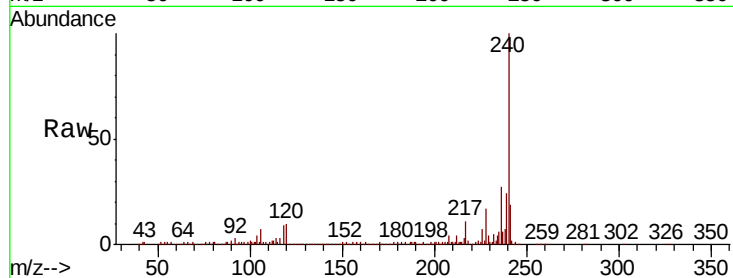
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.02 min Scan# 2029  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

Instrument :  
BNA\_F  
ClientSampled :  
TP-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 9.9   | 8.5   | 12.7  |
| 236     | 26.7  | 22.2  | 33.2  |

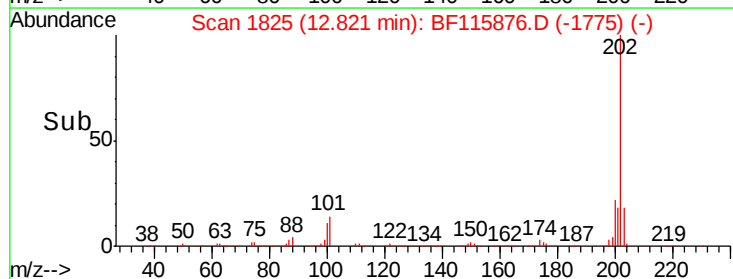
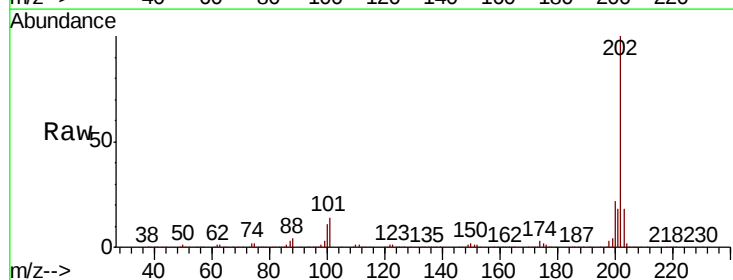
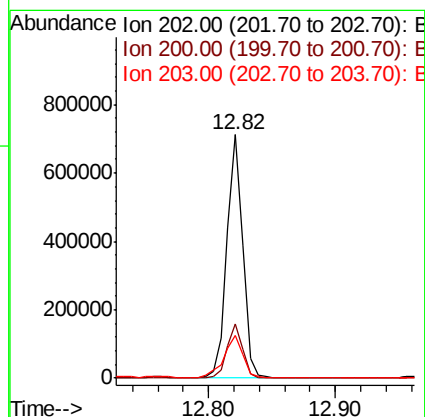
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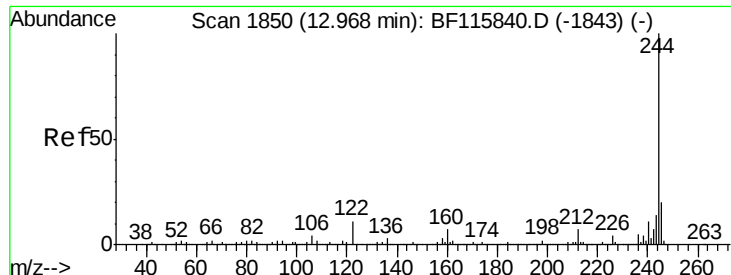
mohammad  
8/1/2019 5:06:53 PM



#78  
Pyrene  
Concen: 28.583 ng  
RT: 12.82 min Scan# 1825  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 22.5  | 18.2  | 27.2  |
| 203     | 17.7  | 14.3  | 21.5  |





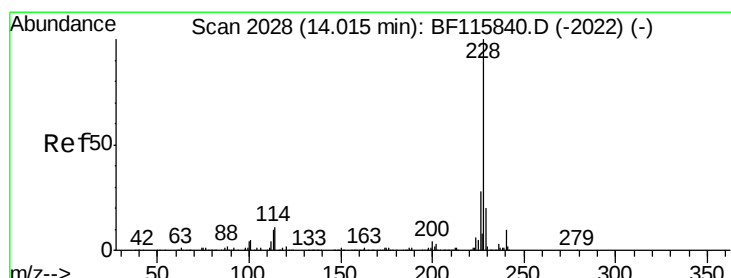
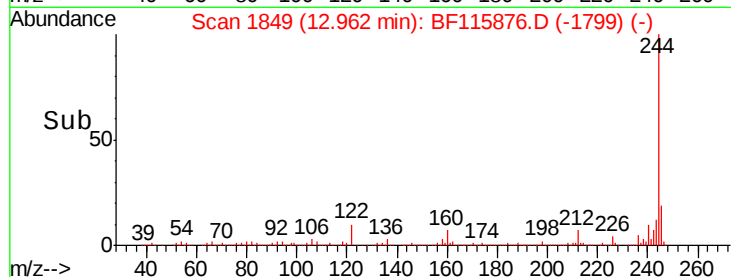
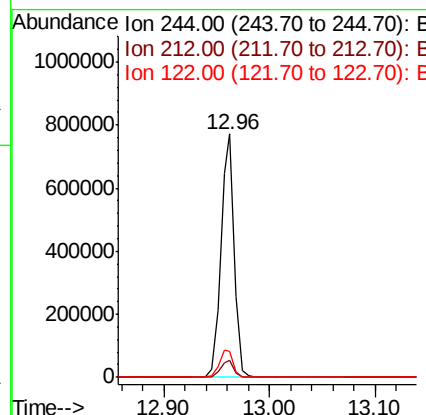
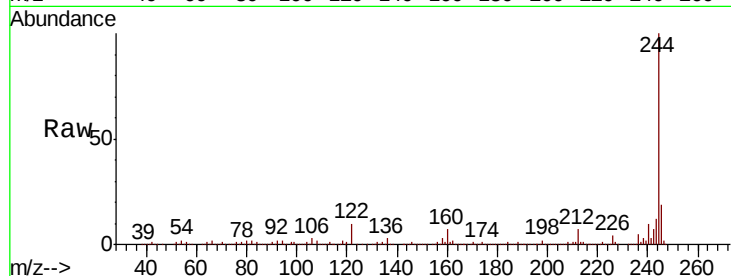
#79  
 Terphenyl-d14  
 Concen: 50.380 ng  
 RT: 12.96 min Scan# 1849  
 Delta R.T. -0.01 min  
 Lab File: BF115876.D  
 Acq: 31 Jul 2019 19:53

Instrument :  
 BNA\_F  
 ClientSampled :  
 TP-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.0   | 5.6   | 8.4   |
| 122     | 10.5  | 8.6   | 13.0  |

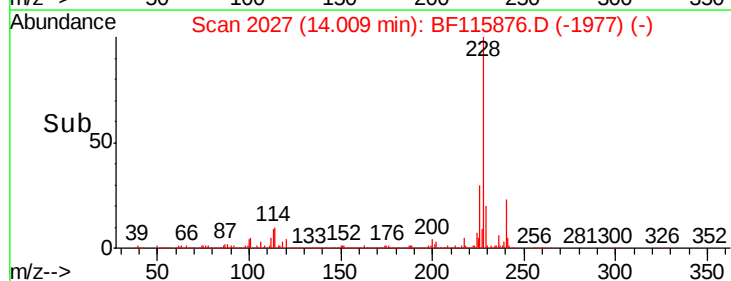
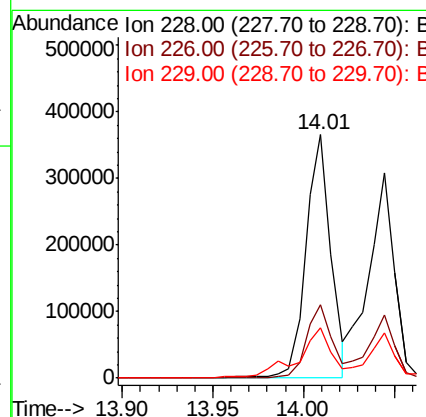
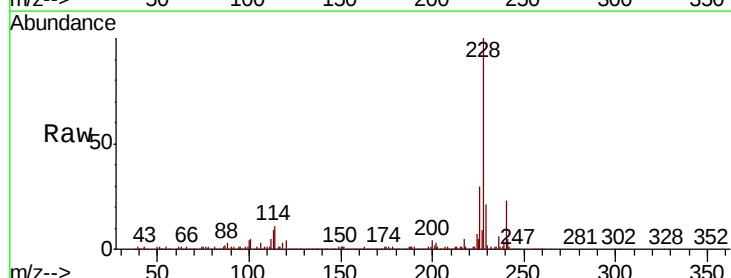
Manual Integrations  
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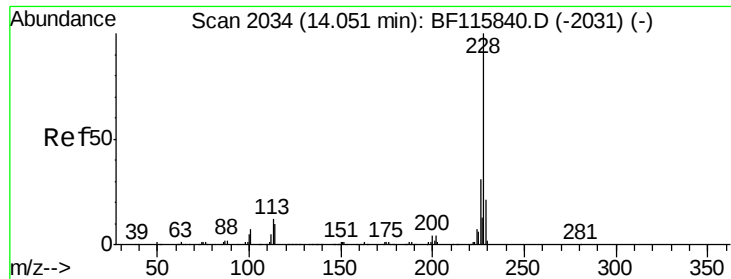
mohammad  
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#81  
 Benzo(a)anthracene  
 Concen: 19.135 ng  
 RT: 14.01 min Scan# 2027  
 Delta R.T. -0.01 min  
 Lab File: BF115876.D  
 Acq: 31 Jul 2019 19:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.1  | 22.5  | 33.7  |
| 229     | 20.6  | 16.1  | 24.1  |





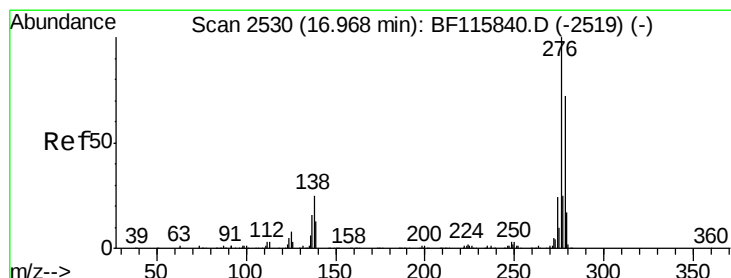
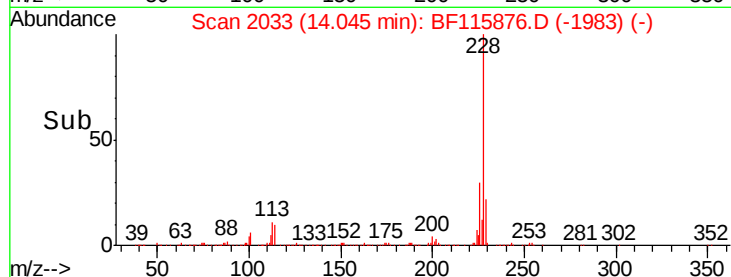
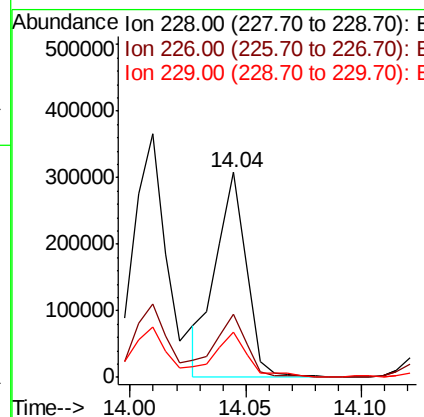
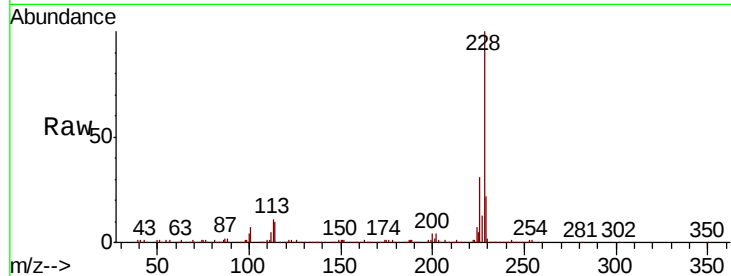
#83  
Chrysene  
Concen: 15.783 ng  
RT: 14.04 min Scan# 2033  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

Instrument :  
BNA\_F  
ClientSampled :  
TP-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.6  | 24.8  | 37.2  |
| 229     | 22.4  | 16.4  | 24.6  |

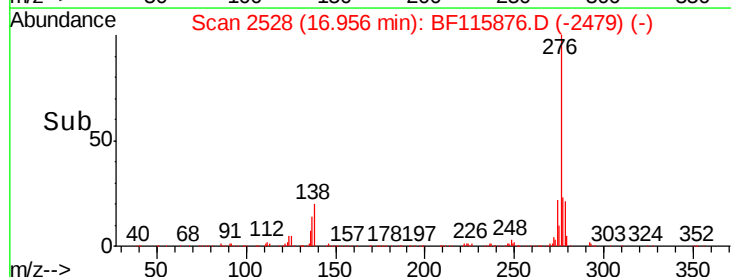
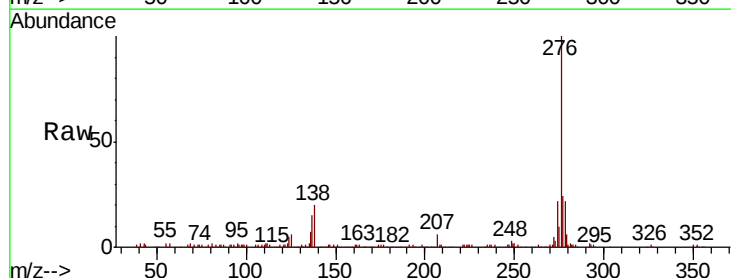
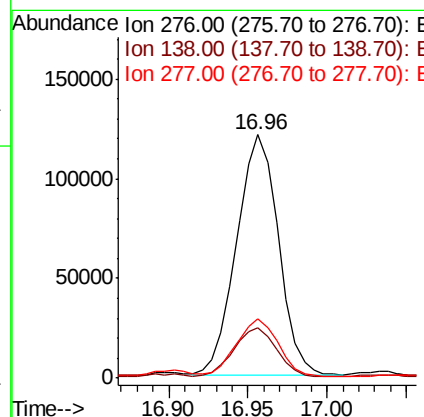
Manual Integrations  
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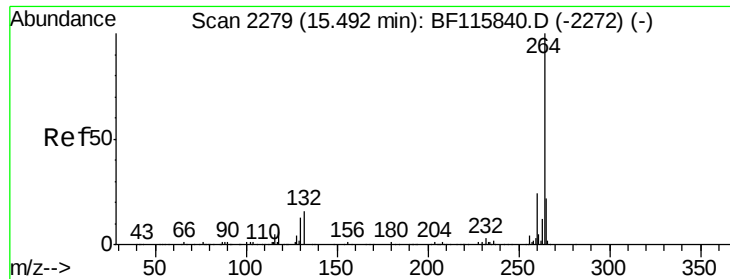
mohammad  
8/1/2019 5:06:53 PM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 14.715 ng  
RT: 16.96 min Scan# 2528  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 20.8  | 19.6  | 29.4  |
| 277     | 24.1  | 20.1  | 30.1  |





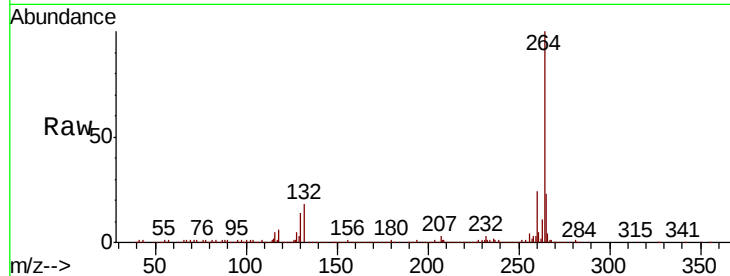
#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.49 min Scan# 2278  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.7  | 19.4  | 29.2  |
| 265     | 22.6  | 17.5  | 26.3  |

Manual Integrations  
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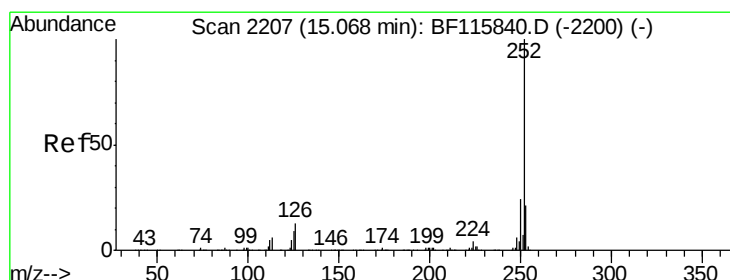
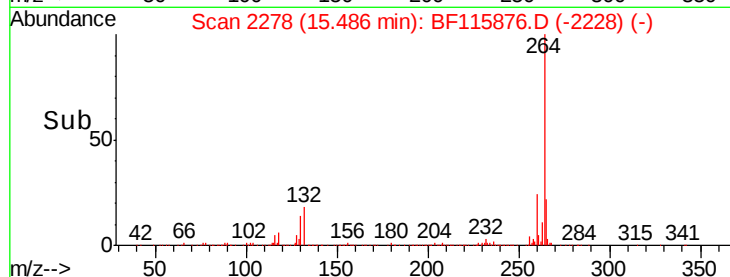
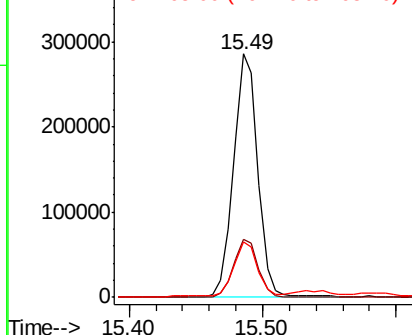


Abundance

Ion 264.00 (263.70 to 264.70): E

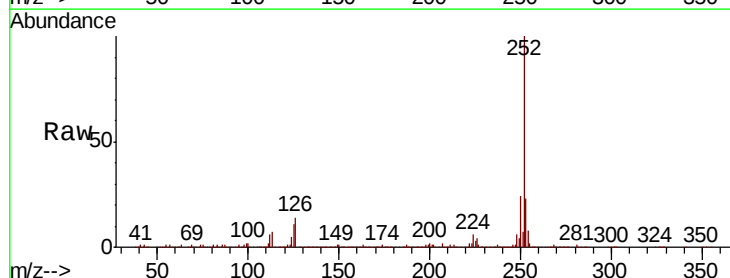
Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E



#88  
Benzo(b)fluoranthene  
Concen: 27.142 ng m  
RT: 15.06 min Scan# 2206  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 17.2  | 25.8  |
| 125     | 10.9  | 7.4   | 11.0  |

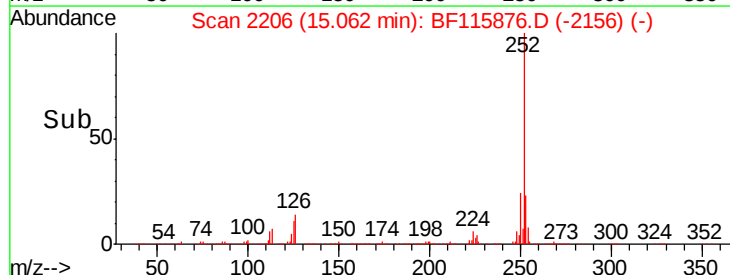
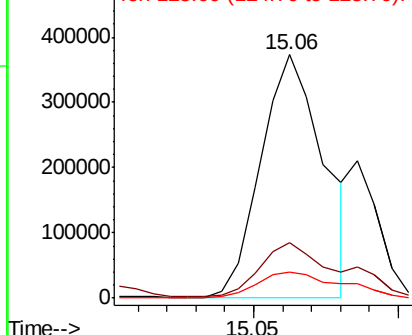


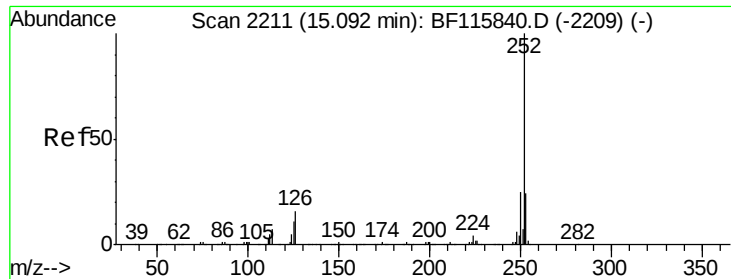
Abundance

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





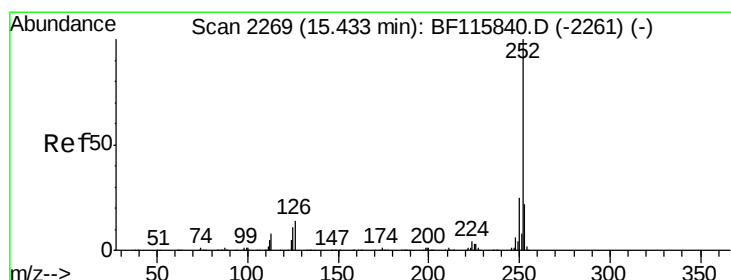
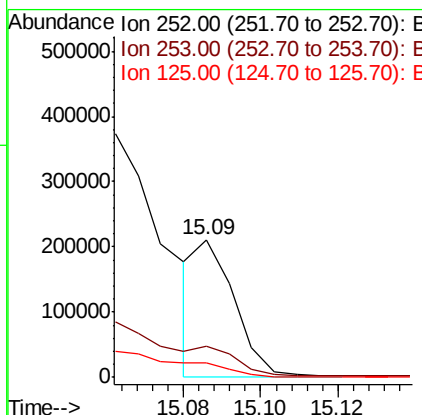
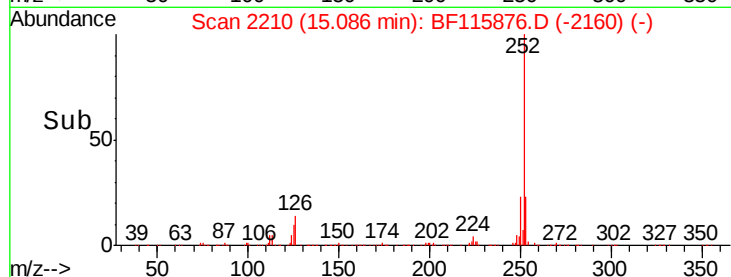
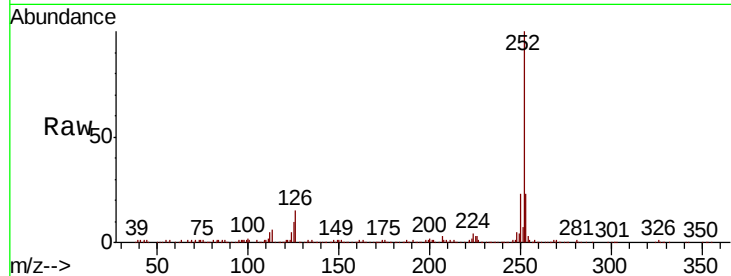
#89  
Benzo(k)fluoranthene  
Concen: 7.232 ng m  
RT: 15.09 min Scan# 2210  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

Instrument :  
BNA\_F  
ClientSampled :  
TP-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.1  | 18.2  | 27.4  |
| 125     | 10.1  | 8.9   | 13.3  |

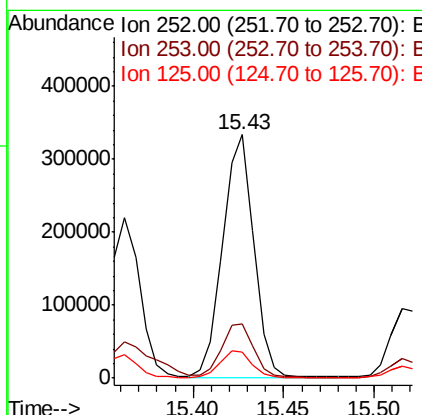
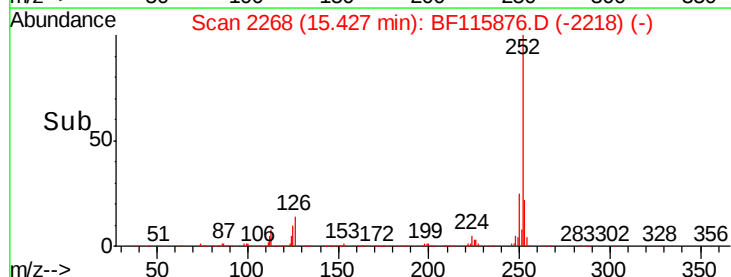
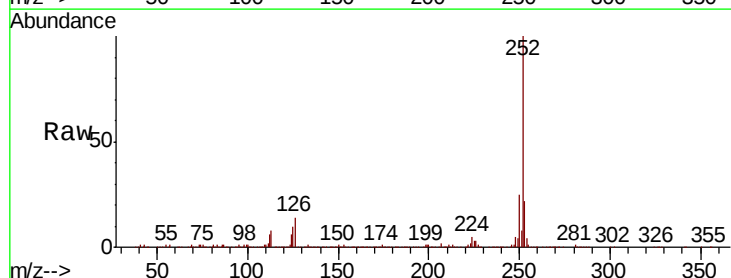
Manual Integrations  
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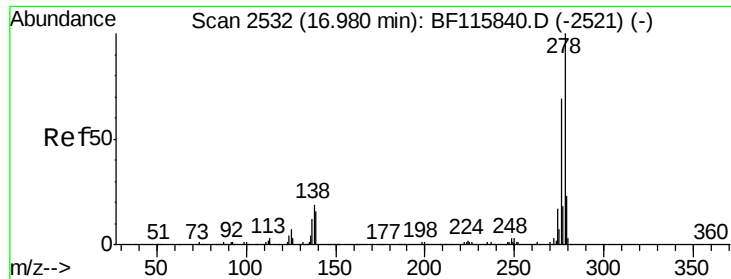
mohammad  
8/1/2019 5:06:53 PM



#90  
Benzo(a)pyrene  
Concen: 21.329 ng  
RT: 15.43 min Scan# 2268  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.4  | 17.8  | 26.6  |
| 125     | 10.5  | 8.8   | 13.2  |





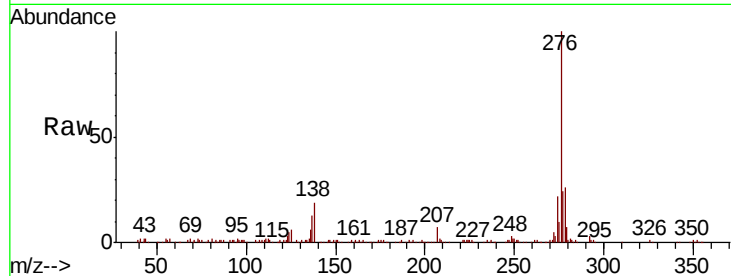
#91  
Dibenzo(a,h)anthracene  
Concen: 3.507 ng m  
RT: 16.96 min Scan# 2529  
Delta R.T. -0.02 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4

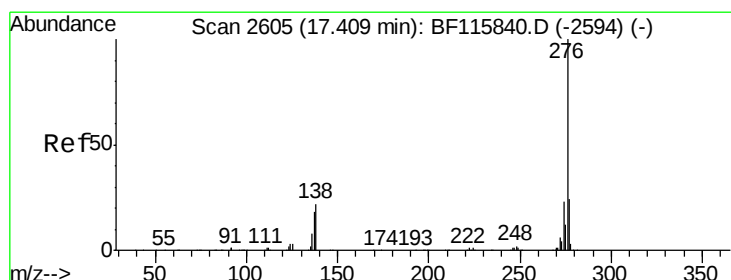
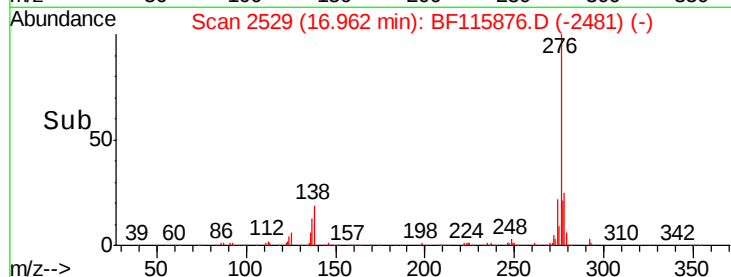
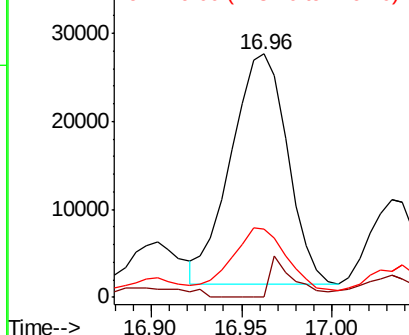
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 12.6  | 19.0# |
| 279     | 28.1  | 18.8  | 28.2  |

Manual Integrations  
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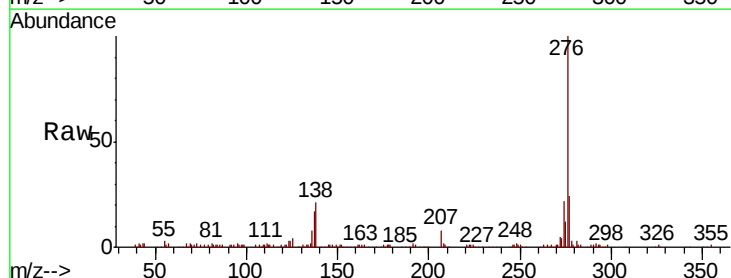


Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E



#92  
Benzo(g,h,i)perylene  
Concen: 11.933 ng  
RT: 17.40 min Scan# 2604  
Delta R.T. -0.01 min  
Lab File: BF115876.D  
Acq: 31 Jul 2019 19:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.0  | 19.5  | 29.3  |
| 138     | 20.7  | 17.8  | 26.8  |



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

