

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102419\  
 Data File : BF117520.D  
 Acq On : 24 Oct 2019 19:46  
 Operator : JU  
 Sample : K5148-09 2X  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 OR-02-102319

Manual Integrations  
 APPROVED

mohammad  
 10/26/2019 10:03:06 AM

Quant Time: Oct 25 04:08:27 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF101819.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Oct 18 18:53:31 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.73  | 152  | 48712    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.02  | 136  | 198769   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.76  | 164  | 97304    | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.25 | 188  | 140522   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12            | 13.89 | 240  | 91746    | 20.00 | ng    | 0.00     |
| 87) Perylene-d12            | 15.33 | 264  | 93341    | 20.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.36  | 112  | 153533   | 46.89 | ng    | 0.00     |
| 7) Phenol-d6                | 6.39  | 99   | 211856   | 48.17 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.30  | 82   | 125409   | 31.15 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.56 | 330  | 33976    | 40.35 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.09  | 172  | 214957   | 31.13 | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.83 | 244  | 141754   | 25.20 | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       |          |
| 50) Dimethylphthalate       | 9.49  | 163  | 24961    | 3.598 | ng    | 100      |
| 71) Phenanthrene            | 11.27 | 178  | 43377    | 5.316 | ng    | 97       |
| 75) Fluoranthene            | 12.46 | 202  | 64834    | 7.937 | ng    | 99       |
| 78) Pyrene                  | 12.69 | 202  | 60621    | 7.693 | ng    | 99       |
| 81) Benzo(a)anthracene      | 13.89 | 228  | 25871    | 4.180 | ng    | 92       |
| 83) Chrysene                | 13.92 | 228  | 26037m   | 4.293 | ng    |          |
| 86) Indeno(1,2,3-cd)pyrene  | 16.74 | 276  | 9838     | 2.173 | ng    | # 93     |
| 88) Benzo(b)fluoranthene    | 14.92 | 252  | 29981m   | 5.439 | ng    |          |
| 90) Benzo(a)pyrene          | 15.27 | 252  | 21956    | 4.381 | ng    | # 92     |
| 92) Benzo(g,h,i)perylene    | 17.17 | 276  | 8640     | 2.107 | ng    | # 88     |

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

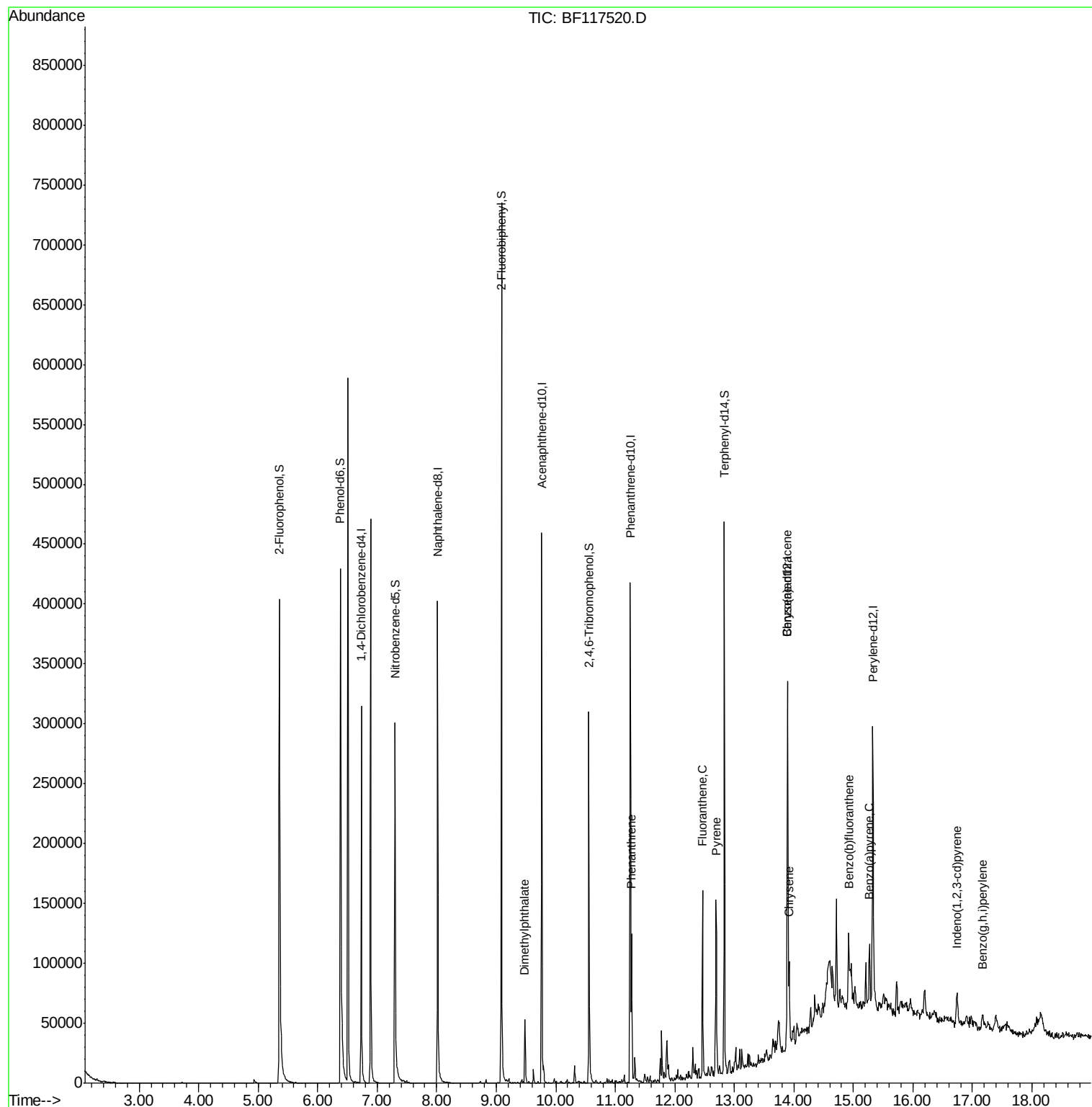
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102419\  
Data File : BF117520.D  
Acq On : 24 Oct 2019 19:46  
Operator : JU  
Sample : K5148-09 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

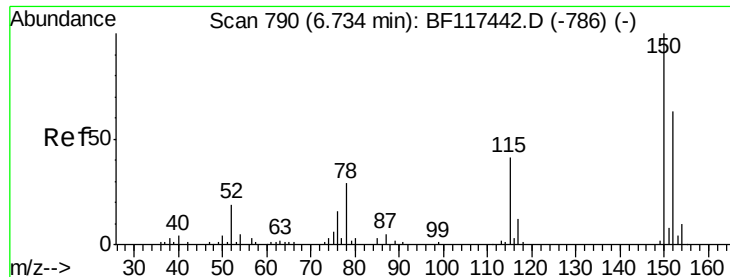
Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-102319

Manual Integrations  
APPROVED

mohammad  
10/26/2019 10:03:06 AM

Quant Time: Oct 25 04:08:27 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF101819.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Oct 18 18:53:31 2019  
Response via : Initial Calibration





#1

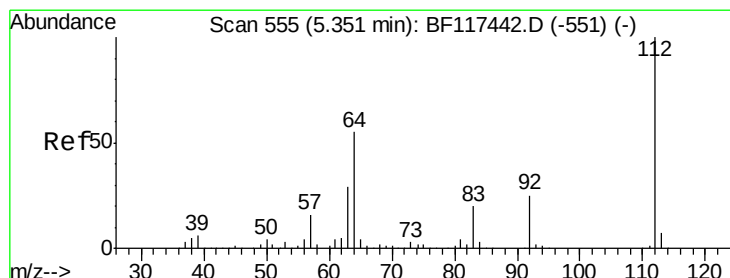
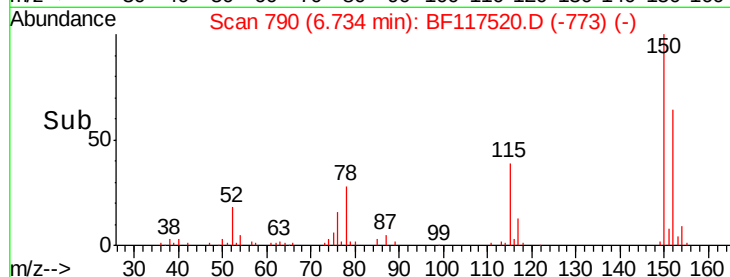
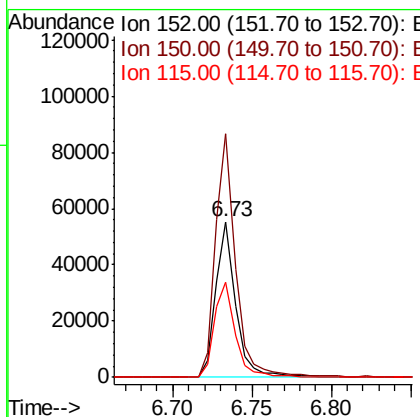
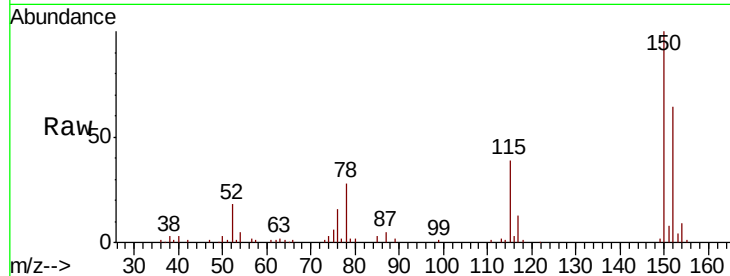
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.73 min Scan# 790  
Delta R.T. -0.00 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-102319

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 156.8 | 126.8 | 190.2 |
| 115     | 61.1  | 51.6  | 77.4  |

Manual Integrations  
APPROVED

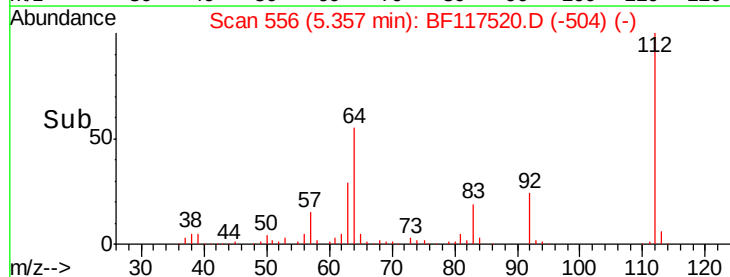
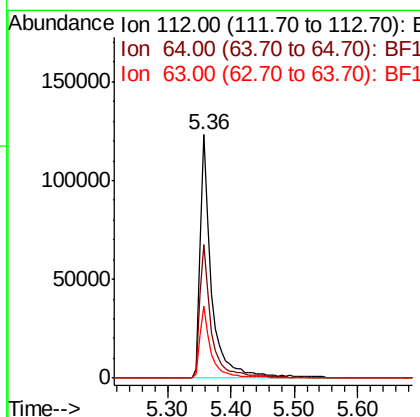
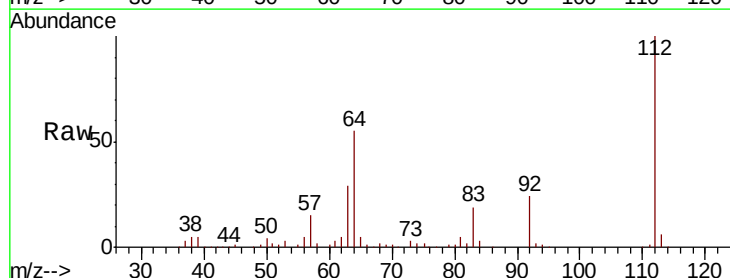
mohammad  
10/26/2019 10:03:06 AM

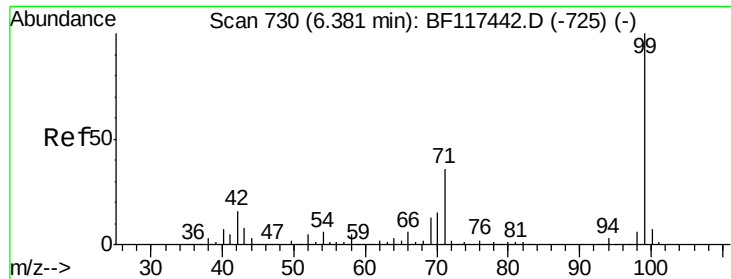


#5

2-Fluorophenol  
Concen: 46.890 ng  
RT: 5.36 min Scan# 555  
Delta R.T. 0.01 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 54.9  | 44.1  | 66.1  |
| 63      | 29.4  | 23.4  | 35.2  |





#7

Phenol-d6

Concen: 48.174 ng

RT: 6.39 min Scan# 731

Delta R.T. 0.01 min

Lab File: BF117520.D

Acq: 24 Oct 2019 19:46

Instrument :

BNA\_F

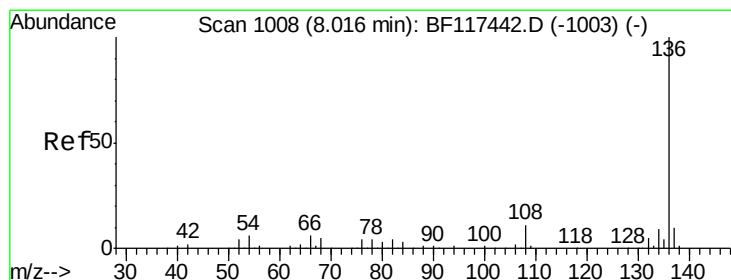
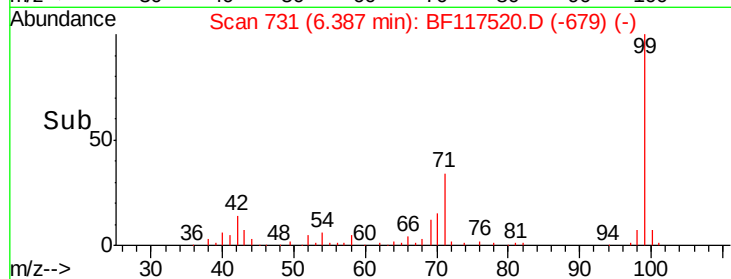
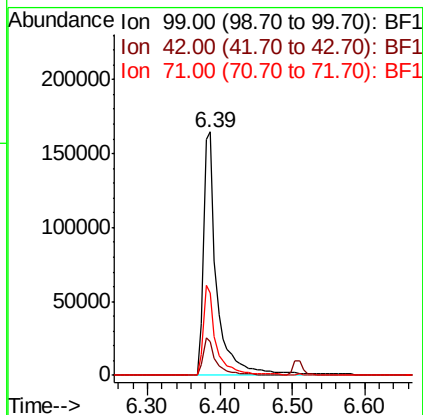
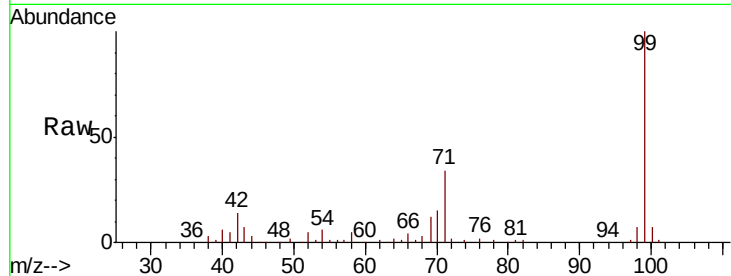
ClientSampleId :

OR-02-102319

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 99      | 100  |       | 211856 |       |       |
| 42      | 14.0 | 12.8  | 19.2   |       |       |
| 71      | 33.9 | 28.6  | 43.0   |       |       |

Manual Integrations  
APPROVED

mohammad  
10/26/2019 10:03:06 AM



#21

Naphthalene-d8

Concen: 20.000 ng

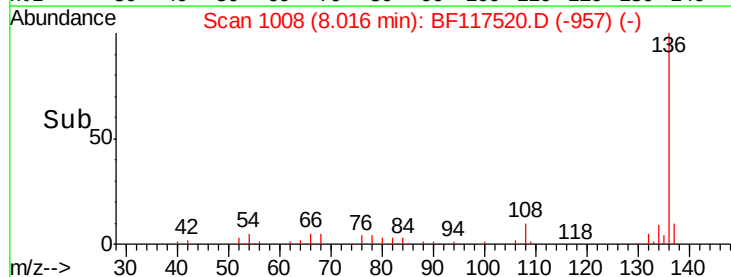
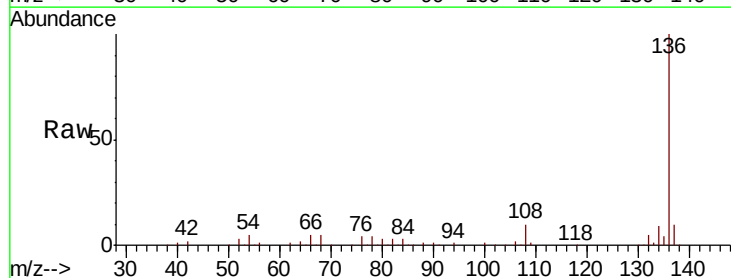
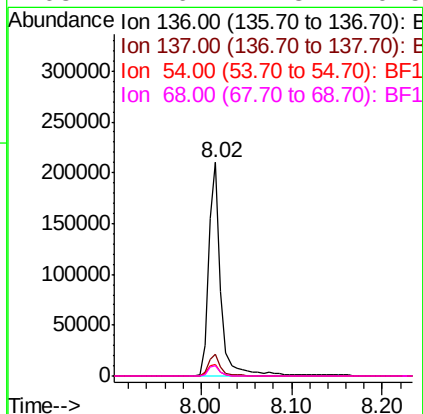
RT: 8.02 min Scan# 1008

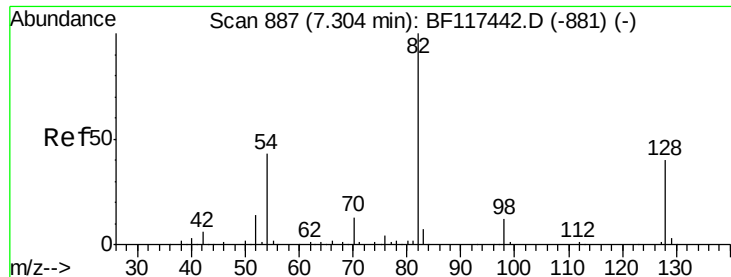
Delta R.T. -0.00 min

Lab File: BF117520.D

Acq: 24 Oct 2019 19:46

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 136     | 100  |       | 198769 |       |       |
| 137     | 10.5 | 8.2   | 12.4   |       |       |
| 54      | 5.5  | 4.5   | 6.7    |       |       |
| 68      | 4.6  | 4.3   | 6.5    |       |       |





#23

Nitrobenzene-d5

Concen: 31.148 ng

RT: 7.30 min Scan# 886

Delta R.T. -0.01 min

Lab File: BF117520.D

Acq: 24 Oct 2019 19:46

Instrument :

BNA\_F

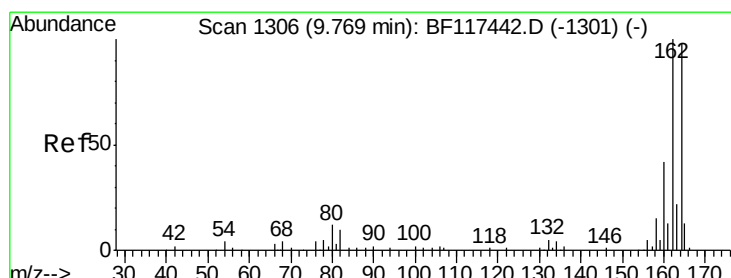
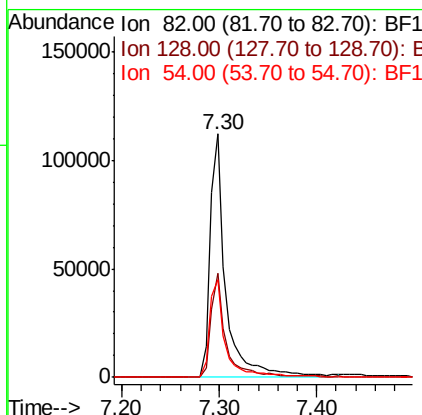
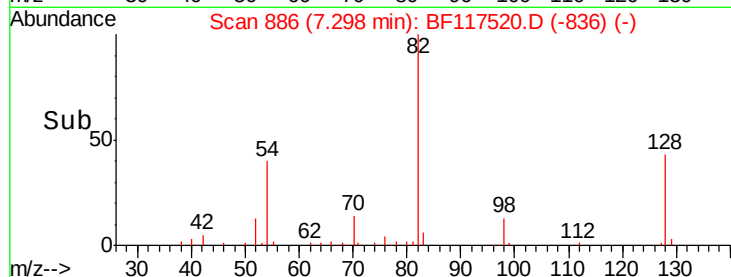
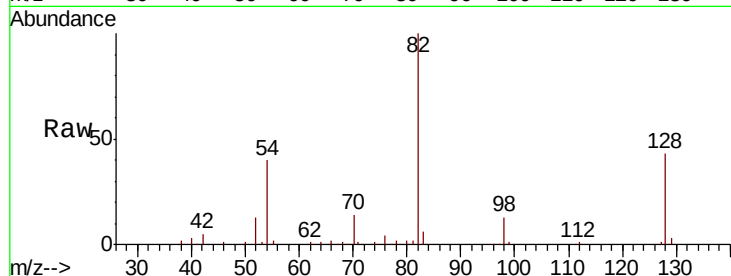
ClientSampleId :

OR-02-102319

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 82    | Resp: | 125409 |
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 42.5  | 32.2  | 48.2   |
| 54        | 39.9  | 34.2  | 51.2   |

Manual Integrations  
APPROVED

mohammad  
10/26/2019 10:03:06 AM



#39

Acenaphthene-d10

Concen: 20.000 ng

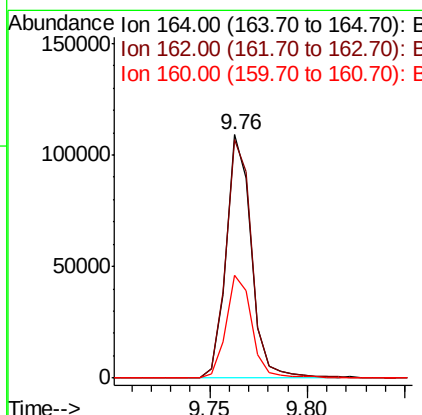
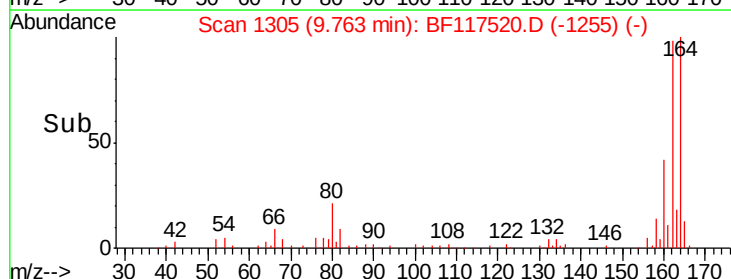
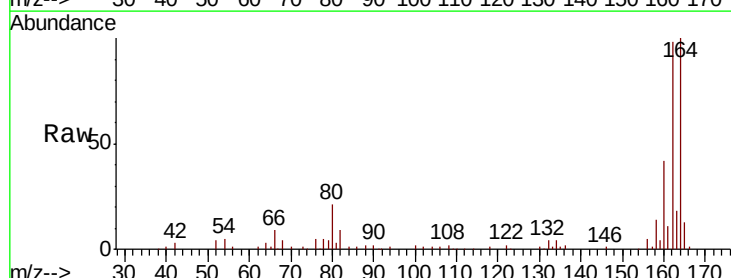
RT: 9.76 min Scan# 1305

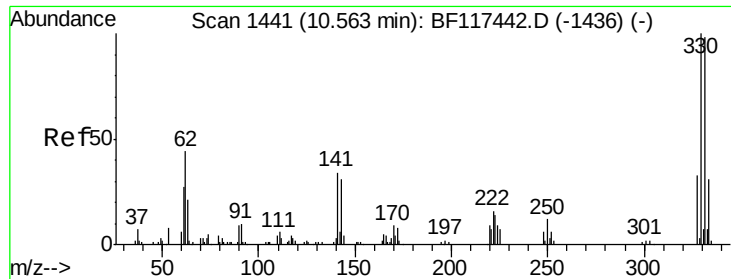
Delta R.T. -0.01 min

Lab File: BF117520.D

Acq: 24 Oct 2019 19:46

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 164   | Resp: | 97304 |
| Ion Ratio | Lower | Upper |       |
| 164       | 100   |       |       |
| 162       | 97.8  | 81.8  | 122.6 |
| 160       | 42.5  | 34.4  | 51.6  |





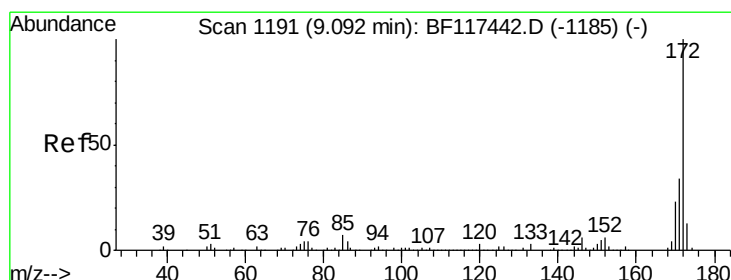
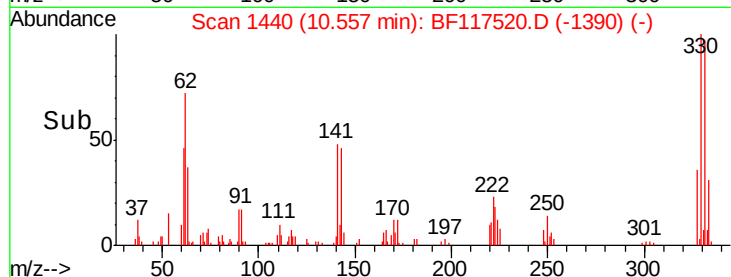
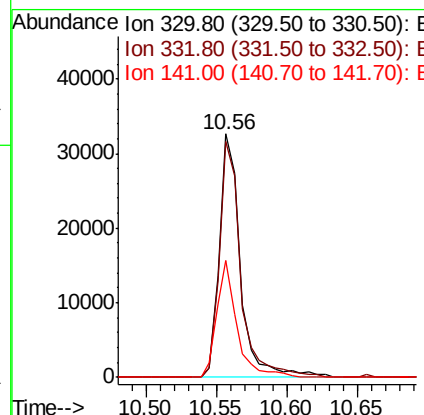
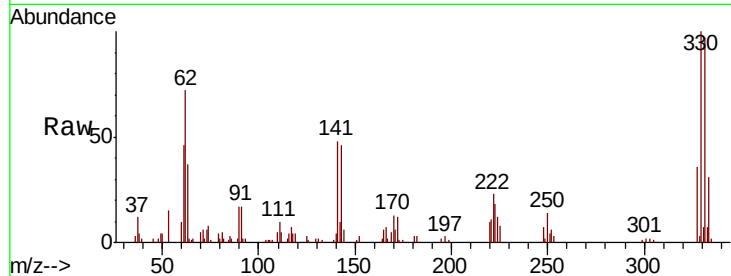
#42  
 2,4,6-Tribromophenol  
 Concen: 40.355 ng  
 RT: 10.56 min Scan# 1440  
 Delta R.T. -0.01 min  
 Lab File: BF117520.D  
 Acq: 24 Oct 2019 19:46

Instrument :  
 BNA\_F  
 ClientSampleId :  
 OR-02-102319

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 97.7  | 78.5  | 117.7 |
| 141     | 45.7  | 37.0  | 55.6  |

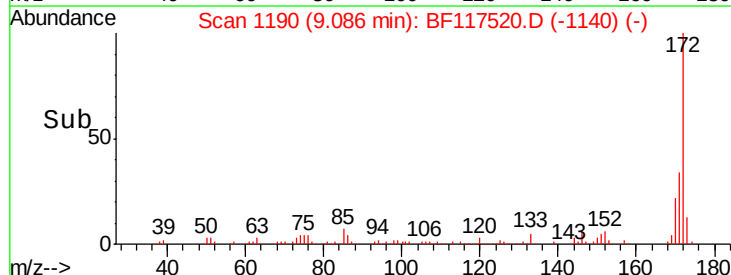
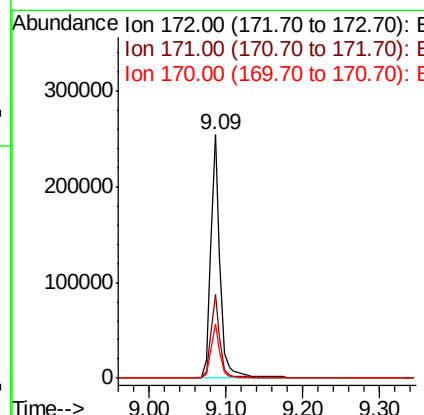
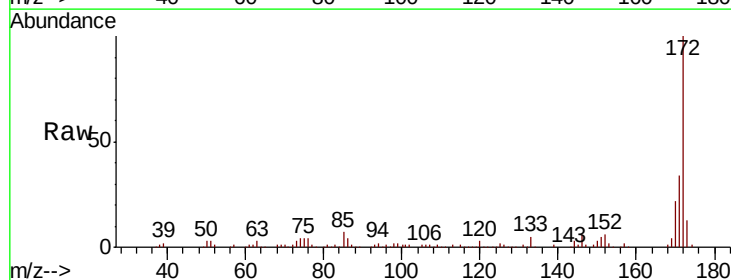
Manual Integrations  
 APPROVED

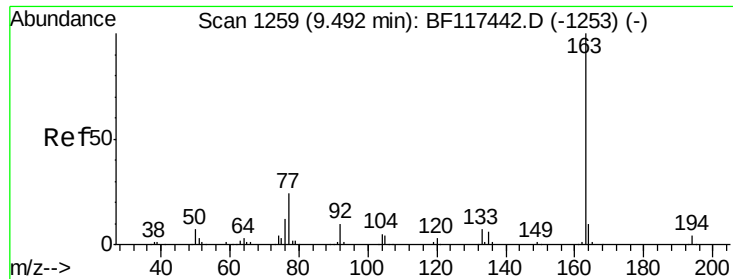
mohammad  
 10/26/2019 10:03:06 AM



#45  
 2-Fluorobiphenyl  
 Concen: 31.126 ng  
 RT: 9.09 min Scan# 1190  
 Delta R.T. -0.01 min  
 Lab File: BF117520.D  
 Acq: 24 Oct 2019 19:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.3  | 27.5  | 41.3  |
| 170     | 22.4  | 18.6  | 27.8  |





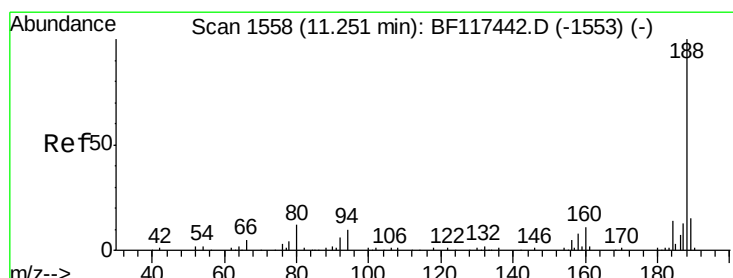
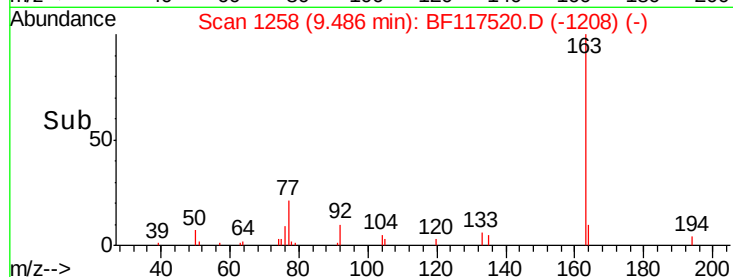
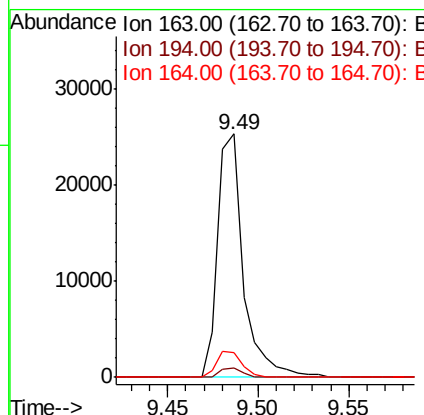
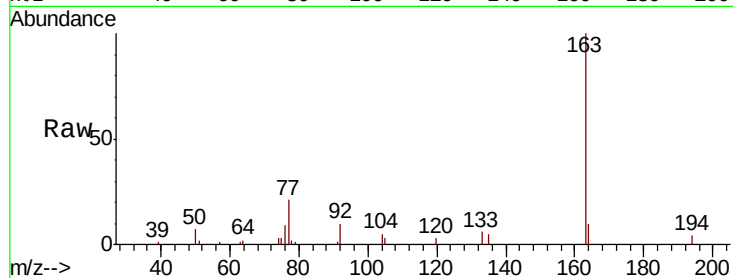
#50  
Dimethylphthalate  
Concen: 3.598 ng  
RT: 9.49 min Scan# 1258  
Delta R.T. -0.01 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-102319

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 3.6   | 2.9   | 4.3   |
| 164     | 10.0  | 8.2   | 12.2  |

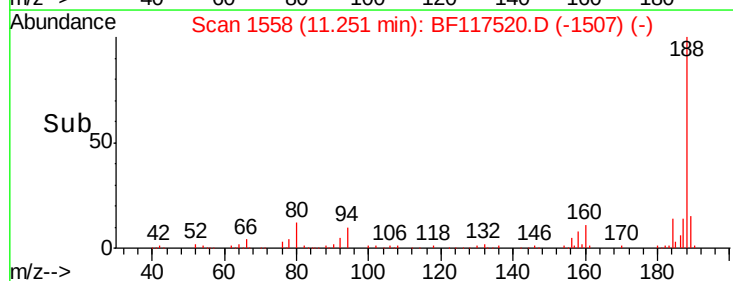
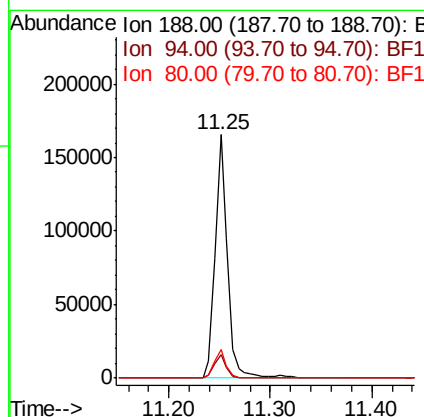
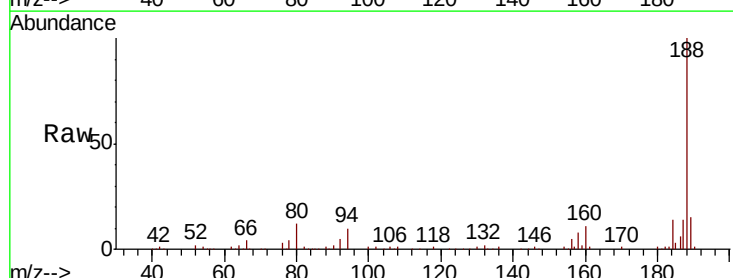
Manual Integrations  
APPROVED

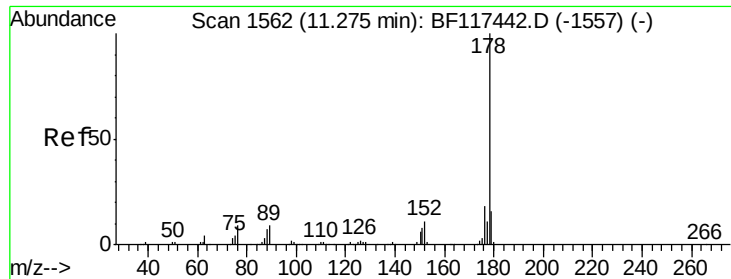
mohammad  
10/26/2019 10:03:06 AM



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.25 min Scan# 1558  
Delta R.T. -0.00 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 9.9   | 8.0   | 12.0  |
| 80      | 11.6  | 9.5   | 14.3  |





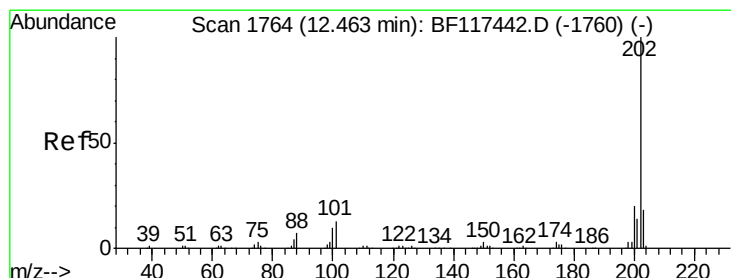
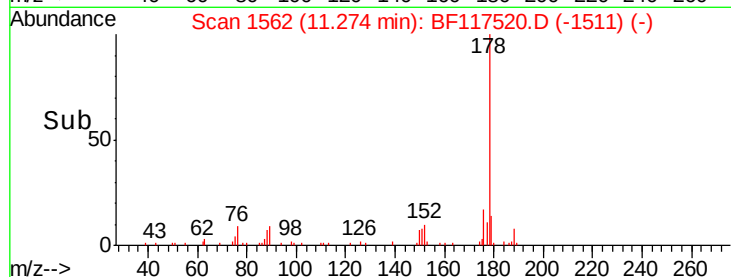
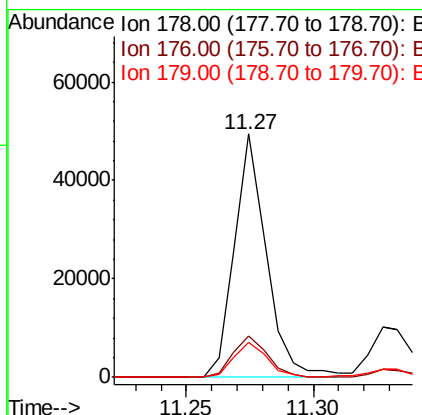
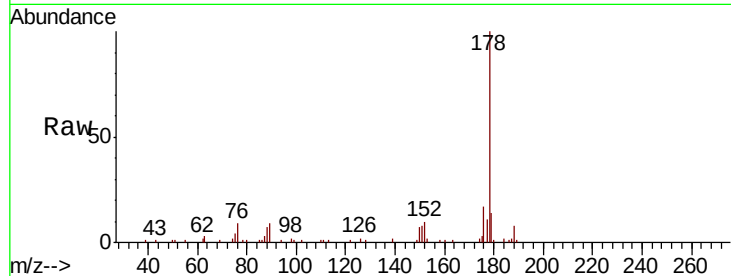
#71  
Phenanthrene  
Concen: 5.316 ng  
RT: 11.27 min Scan# 1562  
Delta R.T. -0.00 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-102319

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 16.9  | 14.6  | 22.0  |
| 179     | 14.5  | 12.6  | 19.0  |

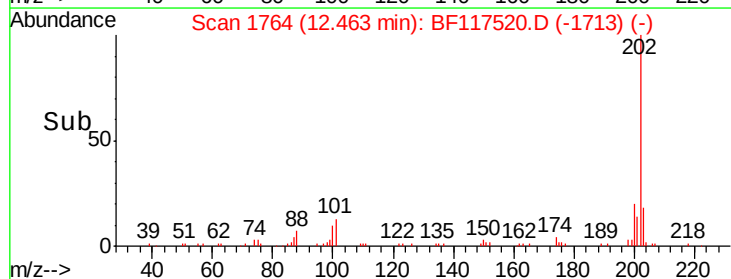
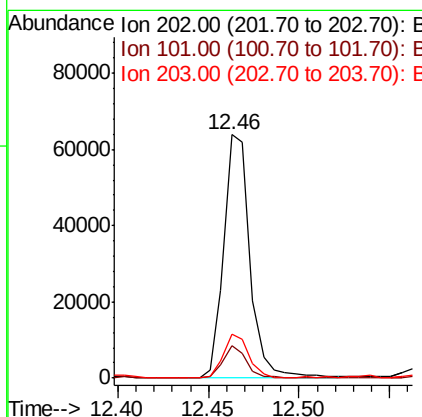
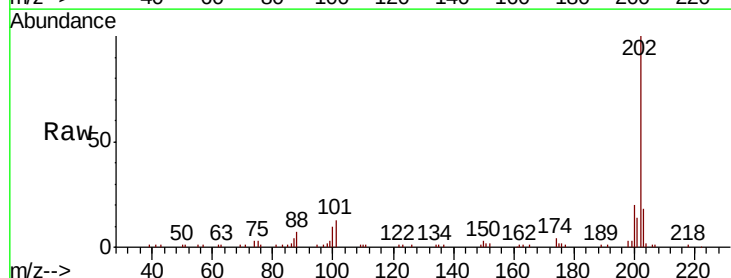
Manual Integrations  
APPROVED

mohammad  
10/26/2019 10:03:06 AM

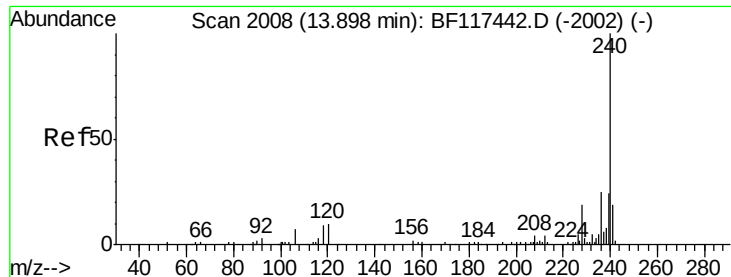


#75  
Fluoranthene  
Concen: 7.937 ng  
RT: 12.46 min Scan# 1764  
Delta R.T. -0.00 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 13.2  | 0.0   | 32.7  |
| 203     | 18.1  | 0.0   | 37.6  |







#76

Chrysene-d12

Concen: 20.000 ng

RT: 13.89 min Scan# 2007

Delta R.T. -0.01 min

Lab File: BF117520.D

Acq: 24 Oct 2019 19:46

Instrument :

BNA\_F

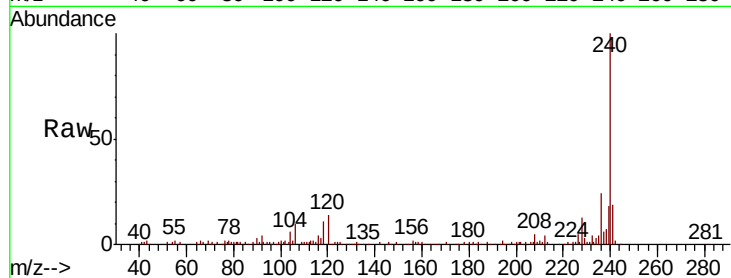
ClientSampleId :

OR-02-102319

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 13.8  | 8.4   | 12.6  |
| 236     | 24.0  | 20.0  | 30.0  |

Manual Integrations  
APPROVED

mohammad  
10/26/2019 10:03:06 AM

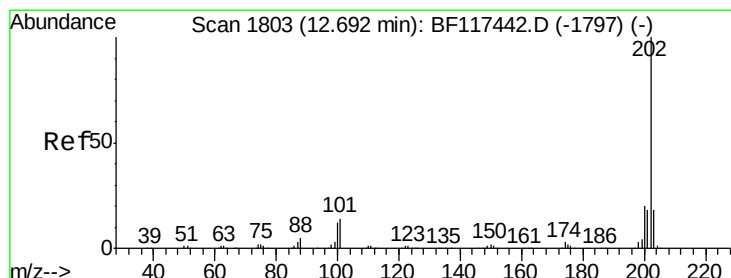
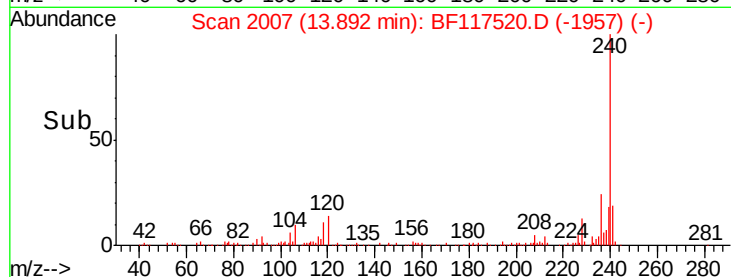
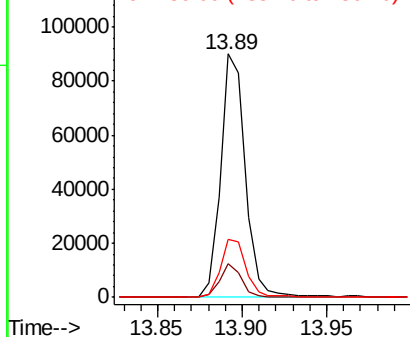


Abundance

Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#78

Pyrene

Concen: 7.693 ng

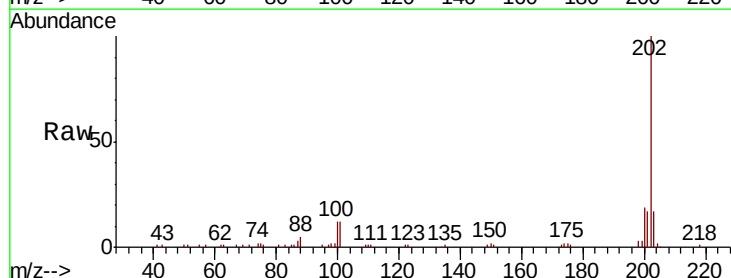
RT: 12.69 min Scan# 1803

Delta R.T. -0.00 min

Lab File: BF117520.D

Acq: 24 Oct 2019 19:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 19.0  | 16.2  | 24.2  |
| 203     | 17.4  | 14.0  | 21.0  |

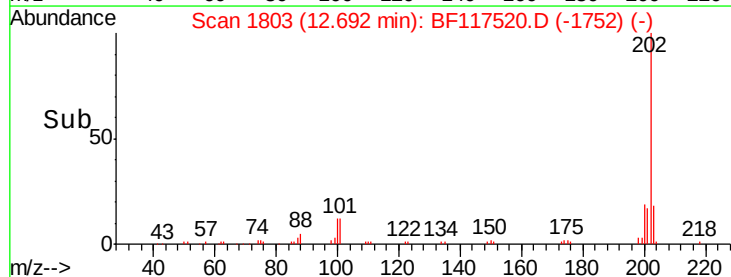
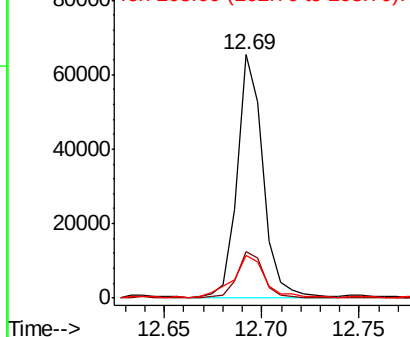


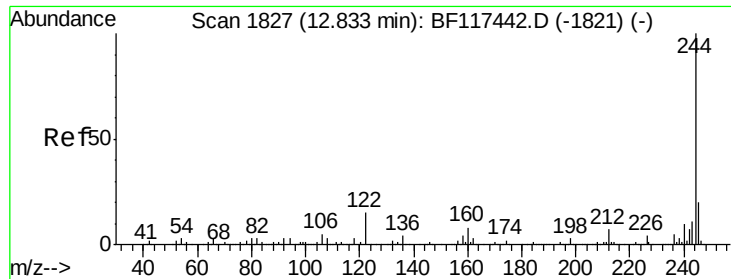
Abundance

Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





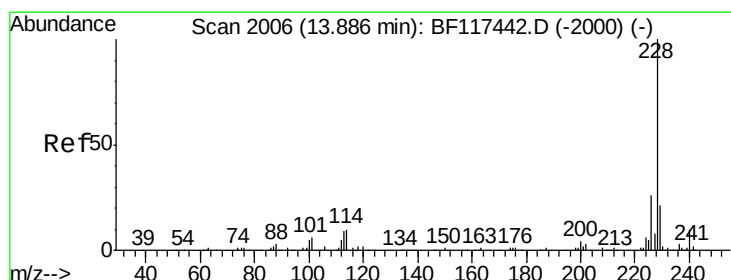
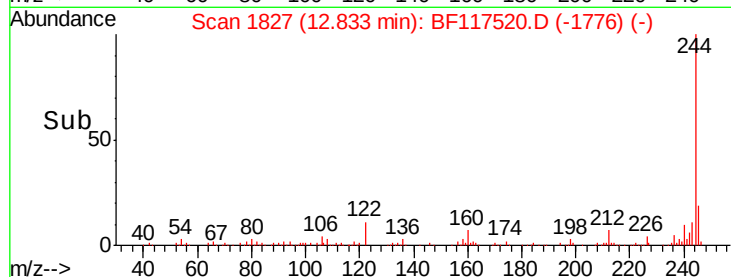
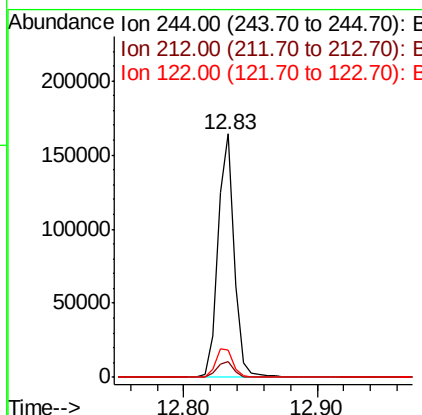
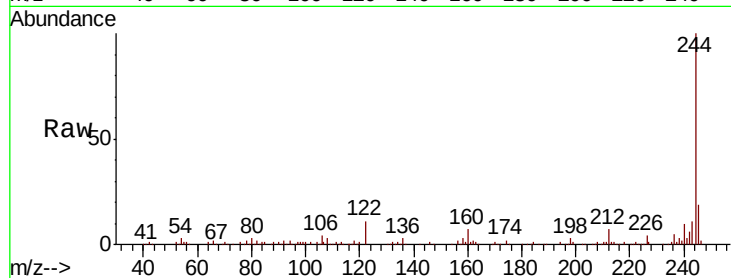
#79  
 Terphenyl-d14  
 Concen: 25.202 ng  
 RT: 12.83 min Scan# 1827  
 Delta R.T. -0.00 min  
 Lab File: BF117520.D  
 Acq: 24 Oct 2019 19:46

Instrument :  
 BNA\_F  
 ClientSampleId :  
 OR-02-102319

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.7   | 5.8   | 8.6   |
| 122     | 11.1  | 11.8  | 17.8  |

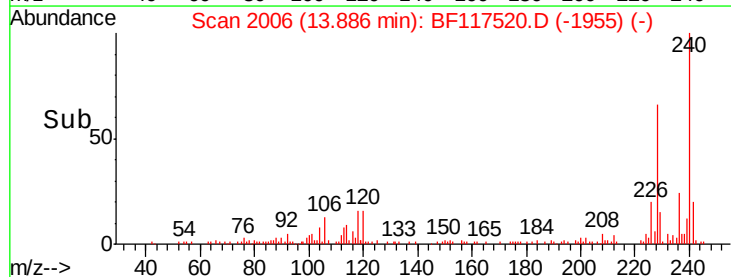
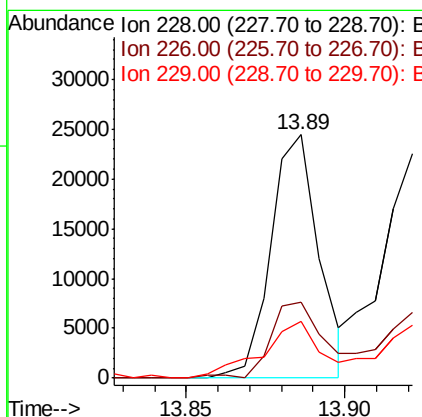
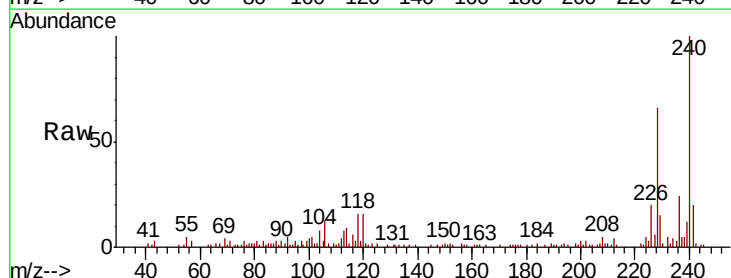
Manual Integrations  
 APPROVED

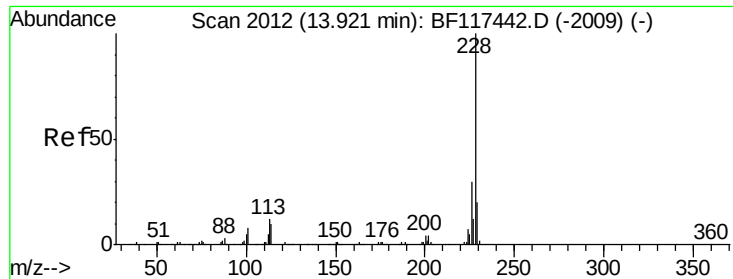
mohammad  
 10/26/2019 10:03:06 AM



#81  
 Benzo(a)anthracene  
 Concen: 4.180 ng  
 RT: 13.89 min Scan# 2006  
 Delta R.T. -0.00 min  
 Lab File: BF117520.D  
 Acq: 24 Oct 2019 19:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.9  | 21.0  | 31.4  |
| 229     | 23.5  | 16.4  | 24.6  |





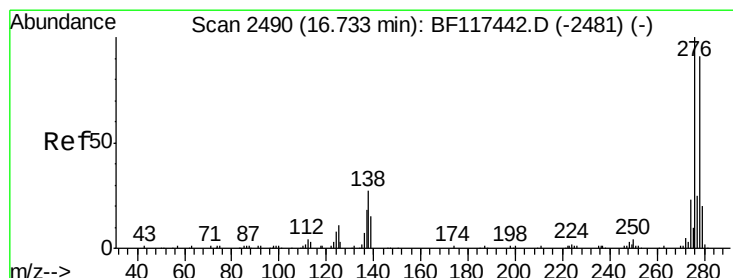
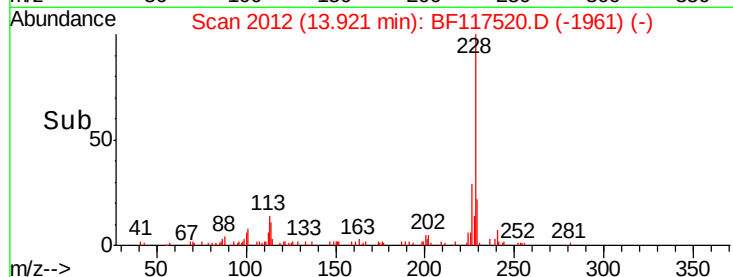
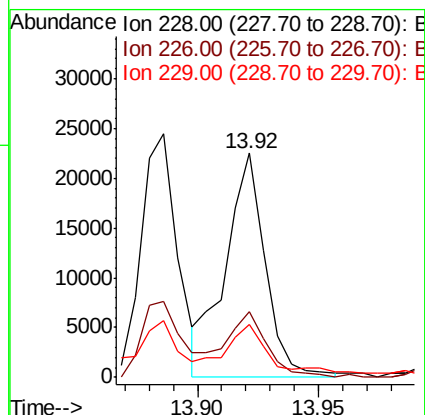
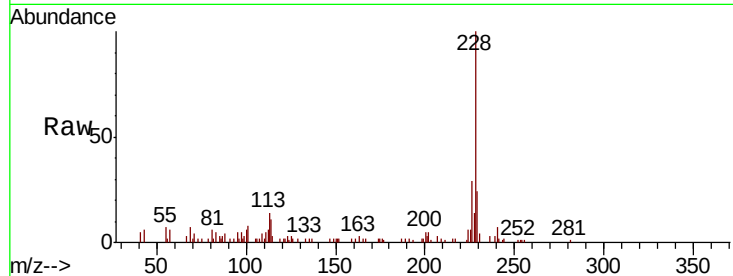
#83  
Chrysene  
Concen: 4.293 ng m  
RT: 13.92 min Scan# 2012  
Delta R.T. -0.00 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-102319

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.4  | 23.9  | 35.9  |
| 229     | 23.8  | 15.8  | 23.6  |

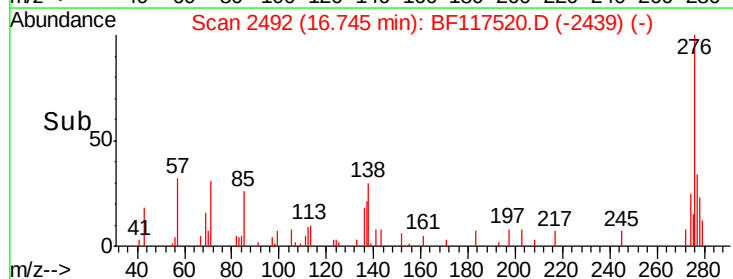
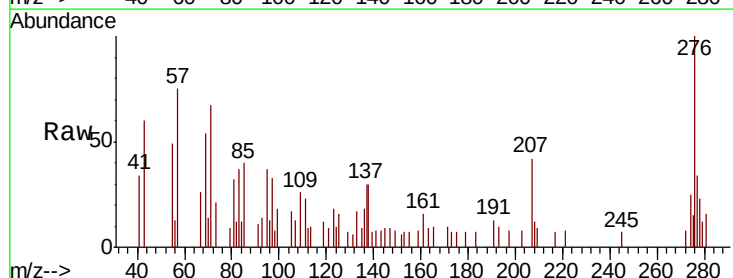
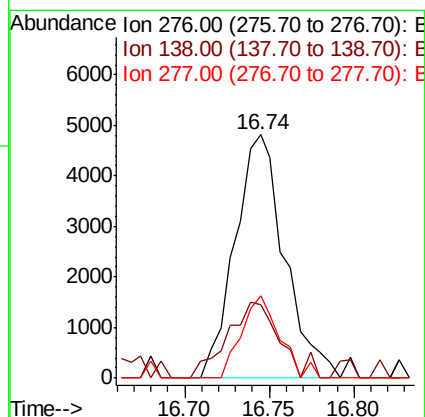
Manual Integrations  
APPROVED

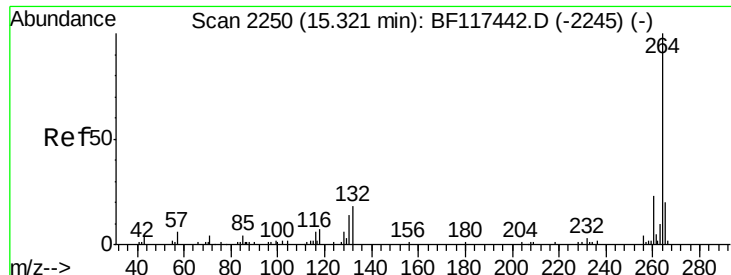
mohammad  
10/26/2019 10:03:06 AM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 2.173 ng  
RT: 16.74 min Scan# 2492  
Delta R.T. 0.01 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 33.0  | 21.8  | 32.8  |
| 277     | 25.9  | 20.0  | 30.0  |





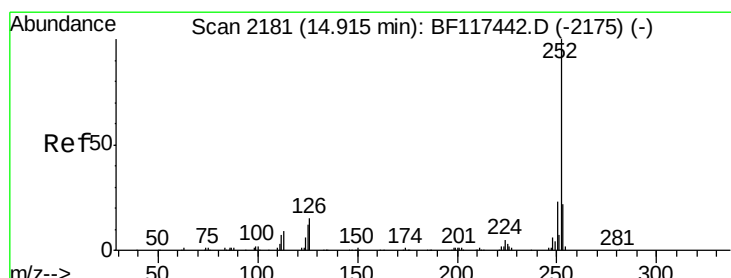
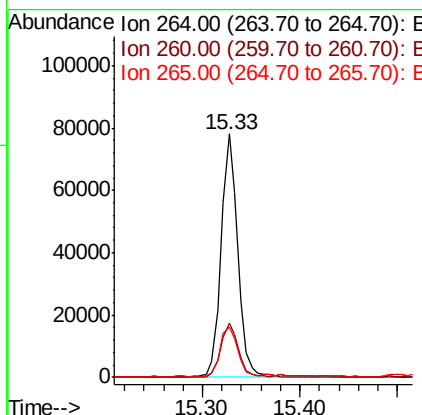
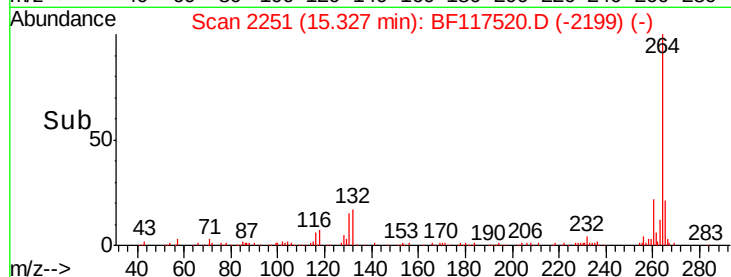
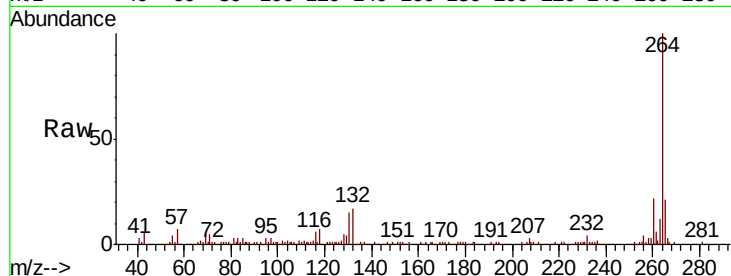
#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.33 min Scan# 2251  
Delta R.T. 0.01 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-102319

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 22.1  | 18.4  | 27.6  |
| 265     | 20.5  | 16.1  | 24.1  |

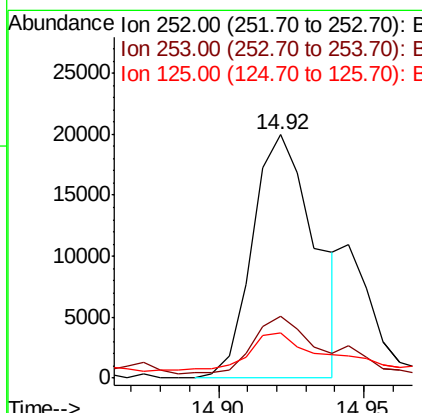
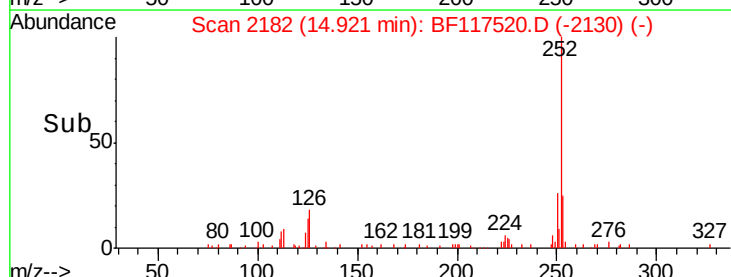
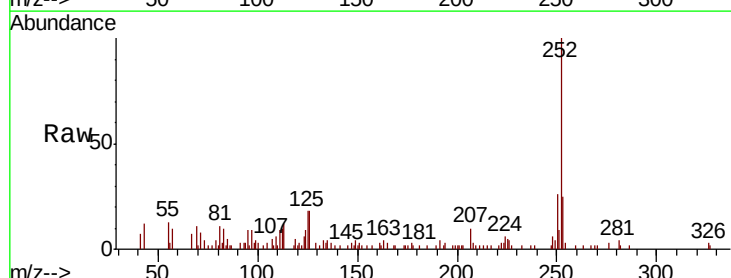
Manual Integrations  
APPROVED

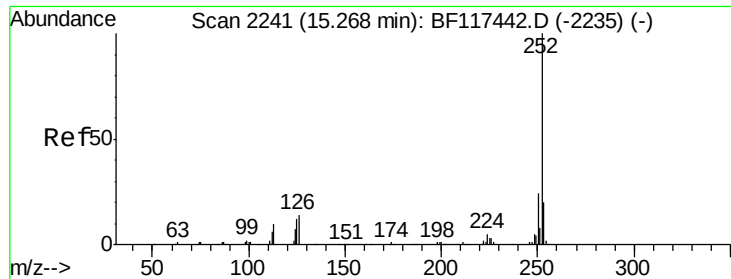
mohammad  
10/26/2019 10:03:06 AM



#88  
Benzo(b)fluoranthene  
Concen: 5.439 ng m  
RT: 14.92 min Scan# 2182  
Delta R.T. 0.01 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.2  | 17.8  | 26.6  |
| 125     | 18.4  | 9.9   | 14.9# |





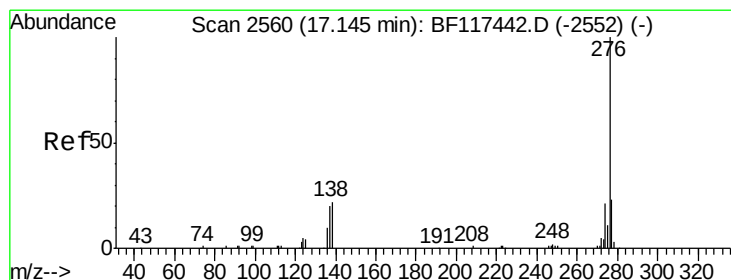
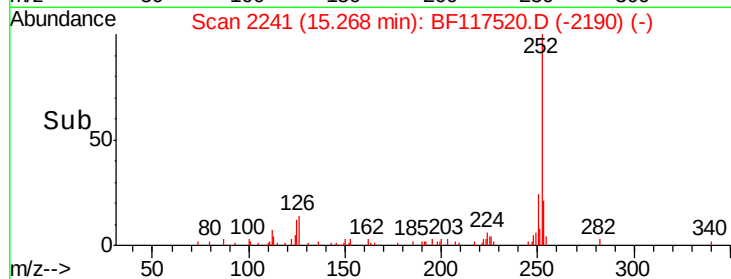
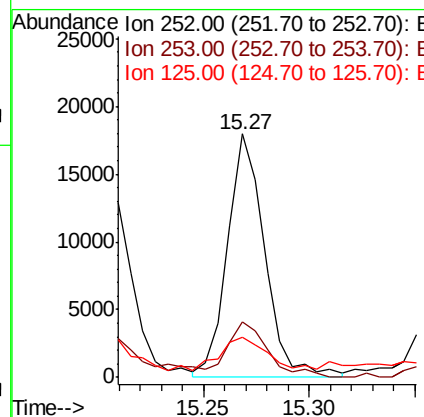
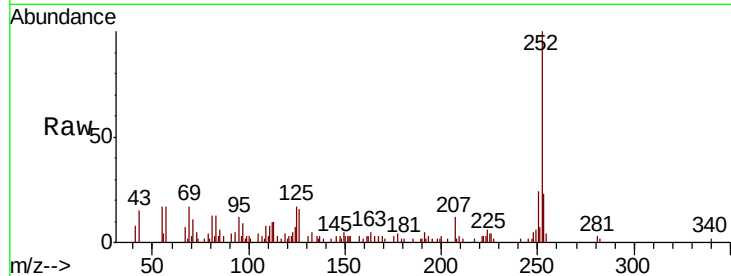
#90  
Benzo(a)pyrene  
Concen: 4.381 ng  
RT: 15.27 min Scan# 2241  
Delta R.T. -0.00 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-102319

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.6  | 16.3  | 24.5  |
| 125     | 16.7  | 9.2   | 13.8  |

Manual Integrations  
APPROVED

mohammad  
10/26/2019 10:03:06 AM



#92  
Benzo(g,h,i)perylene  
Concen: 2.107 ng  
RT: 17.17 min Scan# 2564  
Delta R.T. 0.02 min  
Lab File: BF117520.D  
Acq: 24 Oct 2019 19:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.2  | 18.4  | 27.6  |
| 138     | 31.3  | 17.8  | 26.6  |

