

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090419\  
 Data File : BF116812.D  
 Acq On : 4 Sep 2019 13:44  
 Operator : HP/JU  
 Sample : K4623-17  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PAR-11-E1-E4-(0-4)

Manual Integrations  
 APPROVED

mohammad  
 9/9/2019 9:55:47 AM

Quant Time: Sep 05 03:26:32 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF083019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 30 20:02:30 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 6.85  | 152  | 69899    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8             | 8.13  | 136  | 277242   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10           | 9.88  | 164  | 146747   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10           | 11.36 | 188  | 243648   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12               | 14.00 | 240  | 167440   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12               | 15.45 | 264  | 173198   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.46  | 112  | 370465   | 85.86  | ng    | 0.00     |
| 7) Phenol-d6                   | 6.47  | 99   | 501246   | 88.47  | ng    | 0.00     |
| 23) Nitrobenzene-d5            | 7.40  | 82   | 305873   | 62.98  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol       | 10.67 | 330  | 104107   | 106.12 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl           | 9.20  | 172  | 478983   | 55.06  | ng    | 0.00     |
| 79) Terphenyl-d14              | 12.95 | 244  | 482900   | 53.35  | ng    | 0.00     |
| Target Compounds               |       |      |          |        |       |          |
| 10) Phenol                     | 6.49  | 94   | 16929    | 2.698  | ng    | 92       |
| 50) Dimethylphthalate          | 9.59  | 163  | 115416   | 11.392 | ng    | 100      |
| 71) Phenanthrene               | 11.39 | 178  | 97121    | 7.161  | ng    | 100      |
| 75) Fluoranthene               | 12.57 | 202  | 240862   | 18.070 | ng    | 100      |
| 78) Pyrene                     | 12.80 | 202  | 199878   | 13.429 | ng    | 98       |
| 81) Benzo(a)anthracene         | 13.99 | 228  | 84025    | 7.929  | ng    | 98       |
| 83) Chrysene                   | 14.02 | 228  | 112425   | 10.297 | ng    | 98       |
| 84) Bis(2-ethylhexyl)phthalate | 13.97 | 149  | 31227    | 3.495  | ng    | # 97     |
| 86) Indeno(1,2,3-cd)pyrene     | 16.89 | 276  | 58369    | 6.656  | ng    | 99       |
| 88) Benzo(b)fluoranthene       | 15.03 | 252  | 141204m  | 13.485 | ng    |          |
| 89) Benzo(k)fluoranthene       | 15.05 | 252  | 36472m   | 3.820  | ng    |          |
| 90) Benzo(a)pyrene             | 15.39 | 252  | 80044    | 8.786  | ng    | 99       |
| 91) Dibenzo(a,h)anthracene     | 16.90 | 278  | 16101    | 2.019  | ng    | # 86     |
| 92) Benzo(a,h,i)perylene       | 17.32 | 276  | 52697    | 6.480  | ng    | 94       |

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





#1

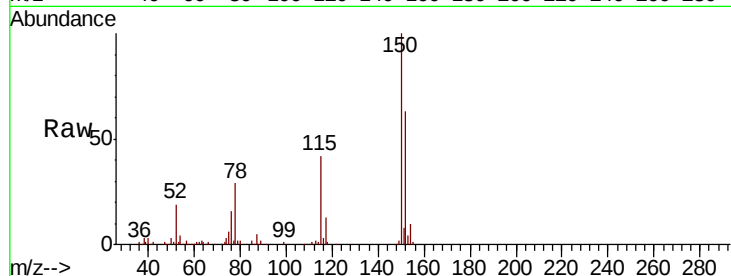
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.85 min Scan# 809  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

Instrument :  
BNA\_F  
ClientSampleId :  
PAR-11-E1-E4-(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 158.6 | 124.4 | 186.6 |
| 115     | 66.8  | 49.9  | 74.9  |

Manual Integrations  
APPROVED

mohammad  
9/9/2019 9:55:47 AM

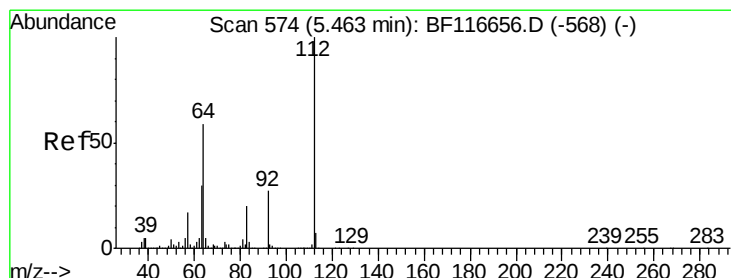
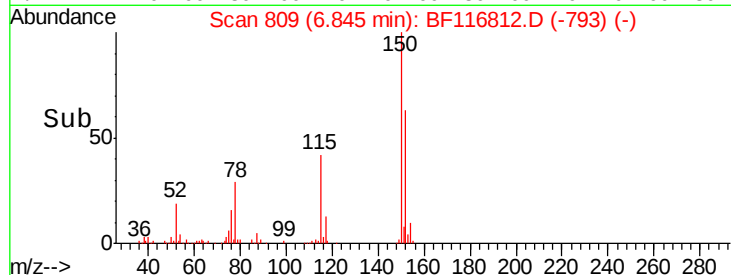
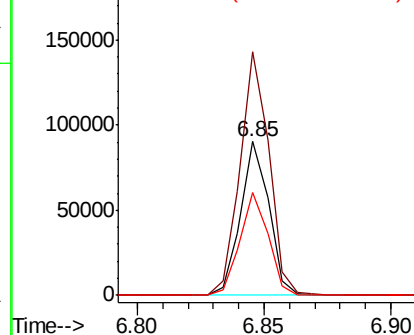


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

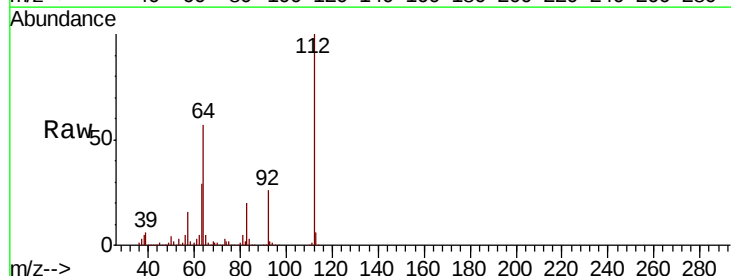
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 85.863 ng  
RT: 5.46 min Scan# 574  
Delta R.T. 0.00 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 57.4  | 47.1  | 70.7  |
| 63      | 28.9  | 24.9  | 37.3  |

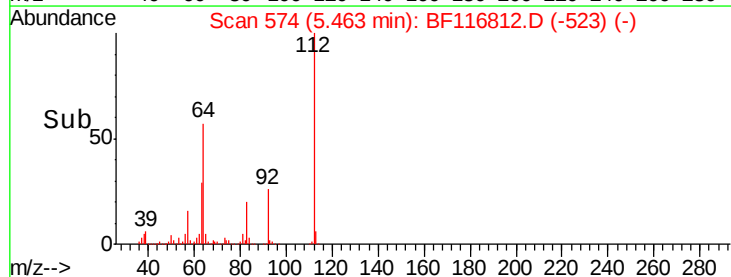
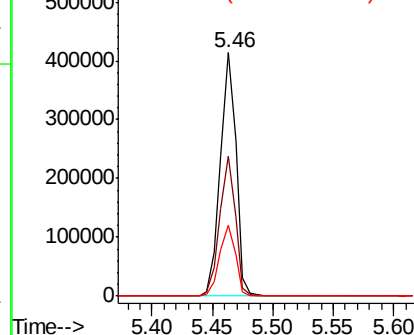


Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 88.473 ng

RT: 6.47 min Scan# 746

Delta R.T. -0.01 min

Lab File: BF116812.D

Acq: 4 Sep 2019 13:44

Instrument :

BNA\_F

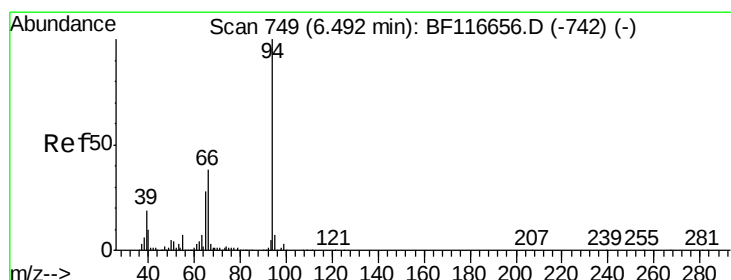
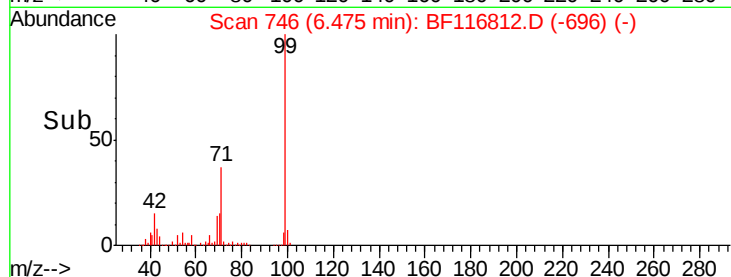
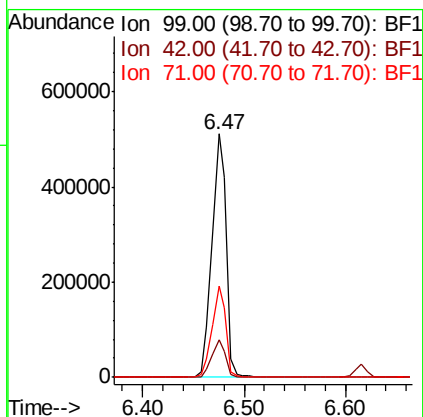
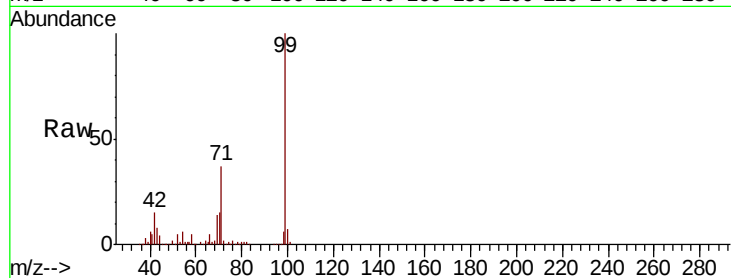
ClientSampleId :

PAR-11-E1-E4-(0-4)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 501246 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 15.4  | 13.7  | 20.5   |
| 71        | 37.4  | 30.8  | 46.2   |

Manual Integrations  
APPROVED

mohammad  
9/9/2019 9:55:47 AM



#10

Phenol

Concen: 2.698 ng

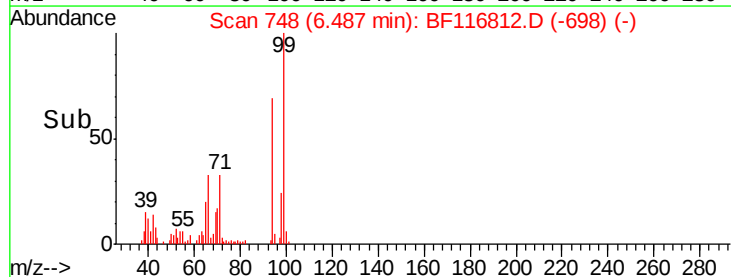
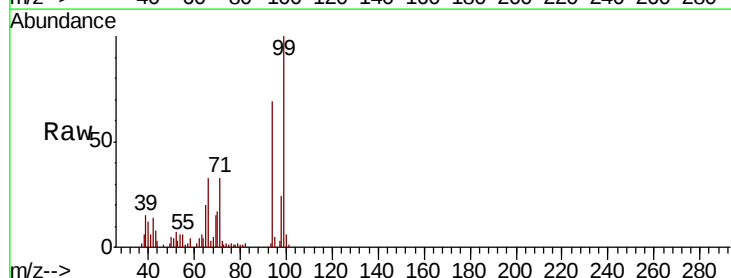
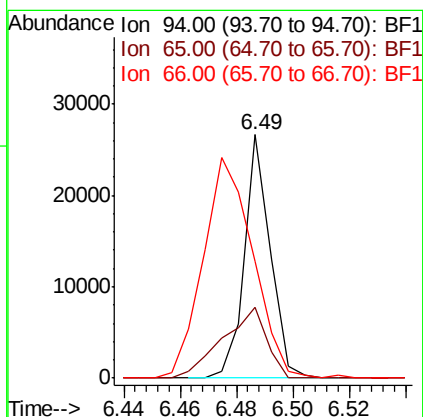
RT: 6.49 min Scan# 748

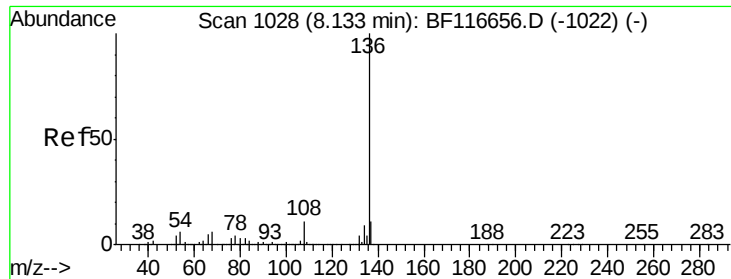
Delta R.T. -0.01 min

Lab File: BF116812.D

Acq: 4 Sep 2019 13:44

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 94    | Resp: | 16929 |
| Ion Ratio | Lower | Upper |       |
| 94        | 100   |       |       |
| 65        | 28.9  | 10.8  | 50.8  |
| 66        | 47.9  | 21.1  | 61.1  |





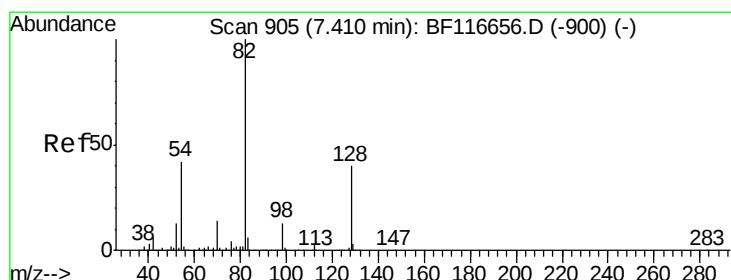
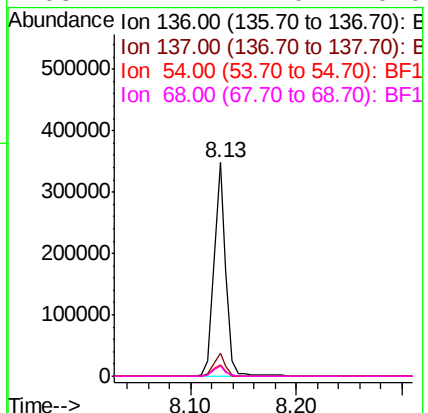
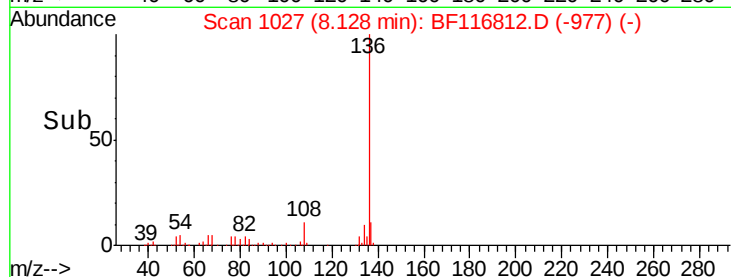
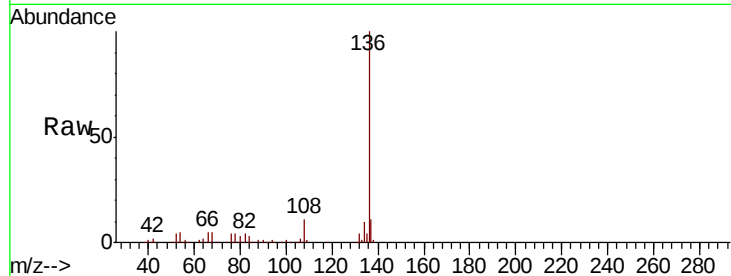
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.13 min Scan# 1027  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

Instrument :  
BNA\_F  
ClientSampleId :  
PAR-11-E1-E4-(0-4)

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 136     | 100  |       | 277242 |       |       |
| 137     | 10.7 |       | 8.9    | 13.3  |       |
| 54      | 5.2  |       | 4.8    | 7.2   |       |
| 68      | 4.7  |       | 4.0    | 6.0   |       |

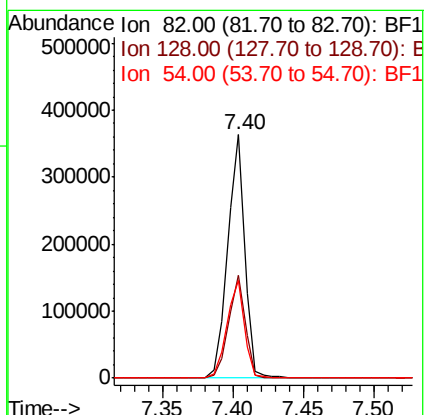
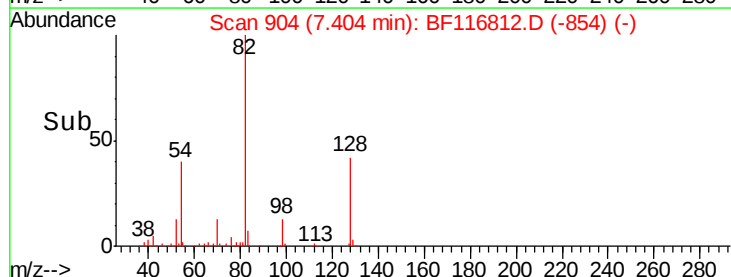
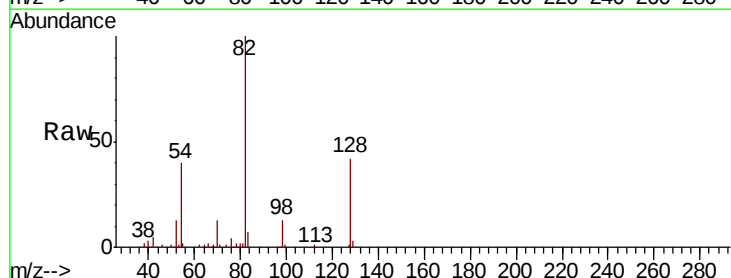
Manual Integrations  
APPROVED

mohammad  
9/9/2019 9:55:47 AM



#23  
Nitrobenzene-d5  
Concen: 62.983 ng  
RT: 7.40 min Scan# 904  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 82      | 100  |       | 305873 |       |       |
| 128     | 42.4 |       | 32.8   | 49.2  |       |
| 54      | 40.3 |       | 36.9   | 55.3  |       |





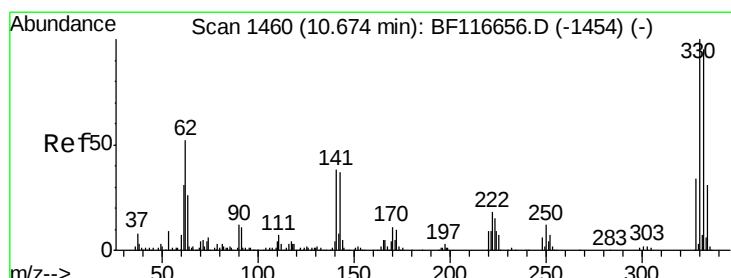
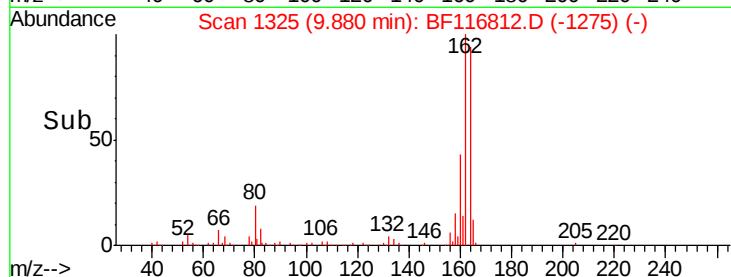
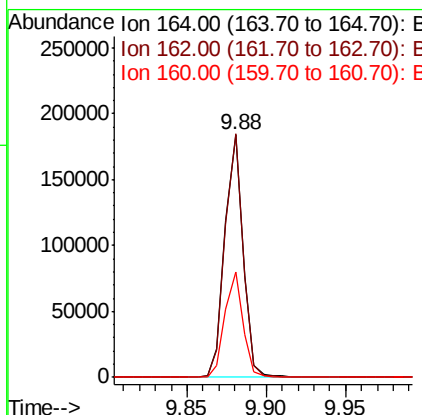
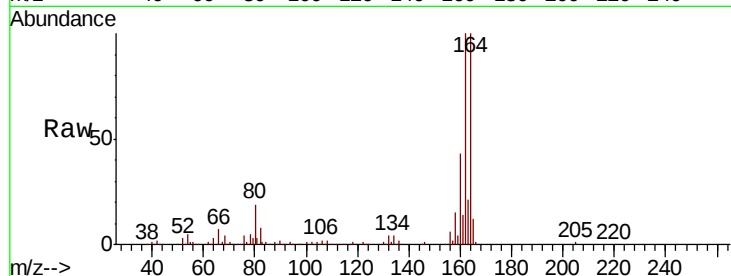
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.88 min Scan# 1325  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

Instrument :  
BNA\_F  
ClientSampleId :  
PAR-11-E1-E4-(0-4)

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 164     | 100   |      |       |       |
| 162     | 100.5 | 81.4 | 122.0 |       |
| 160     | 43.4  | 35.4 | 53.2  |       |

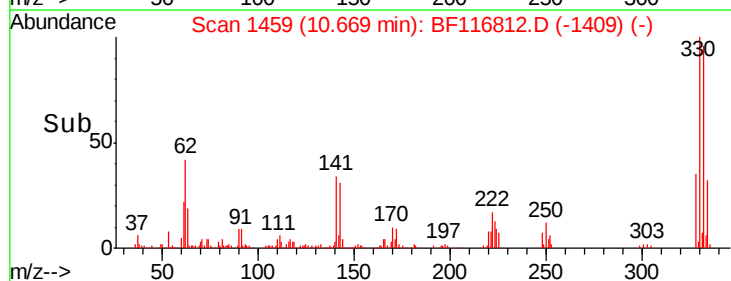
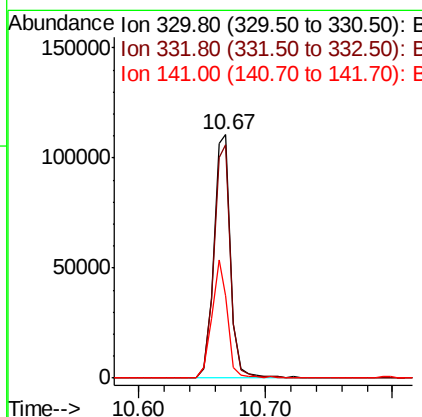
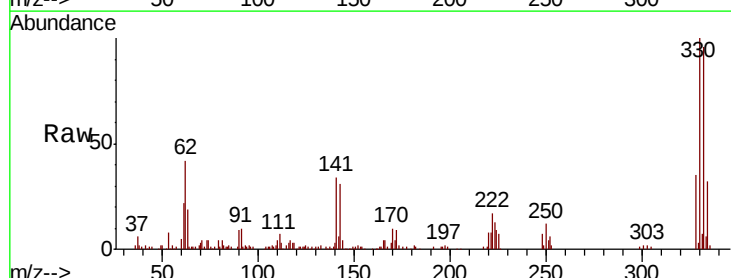
Manual Integrations  
APPROVED

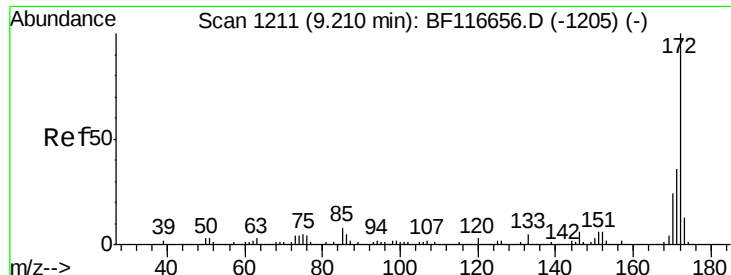
mohammad  
9/9/2019 9:55:47 AM



#42  
2,4,6-Tribromophenol  
Concen: 106.120 ng  
RT: 10.67 min Scan# 1459  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 330     | 100   |      |       |       |
| 332     | 95.5  | 76.9 | 115.3 |       |
| 141     | 44.5  | 31.4 | 47.2  |       |





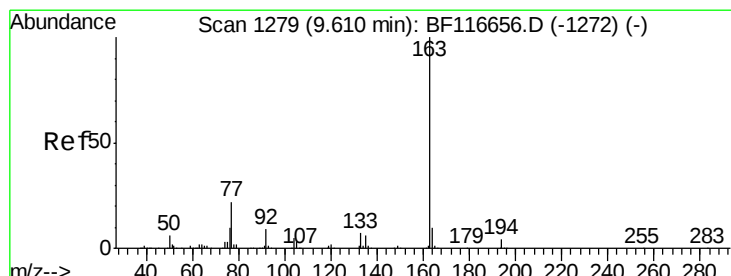
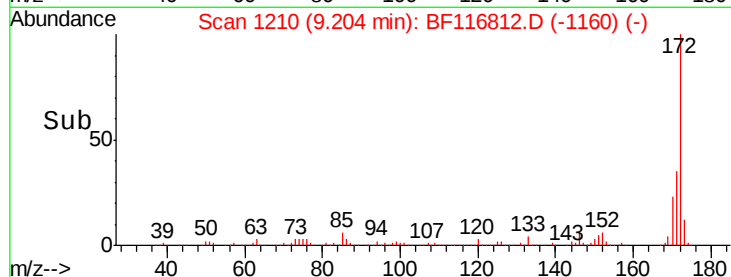
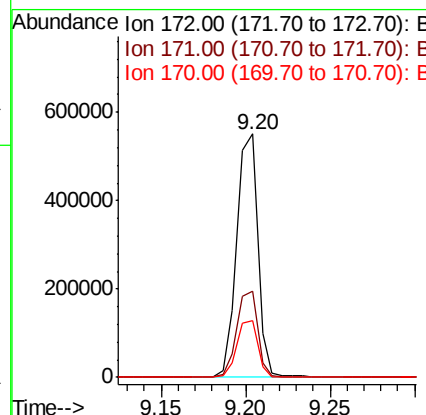
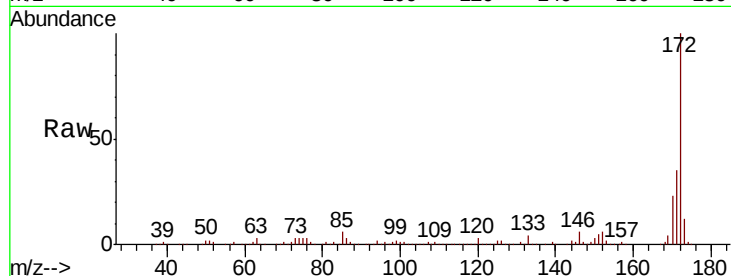
#45  
2-Fluorobiphenyl  
Concen: 55.060 ng  
RT: 9.20 min Scan# 1210  
Delta R.T. -0.00 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

Instrument :  
BNA\_F  
ClientSampleId :  
PAR-11-E1-E4-(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.2  | 27.8  | 41.6  |
| 170     | 23.1  | 18.9  | 28.3  |

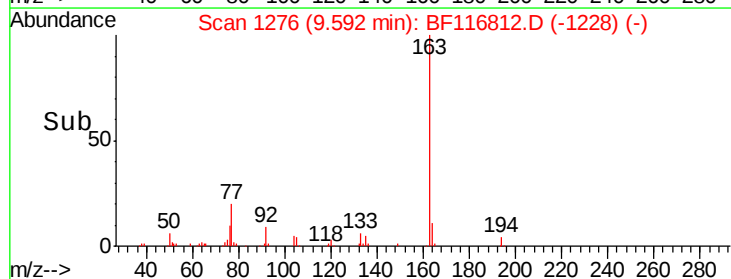
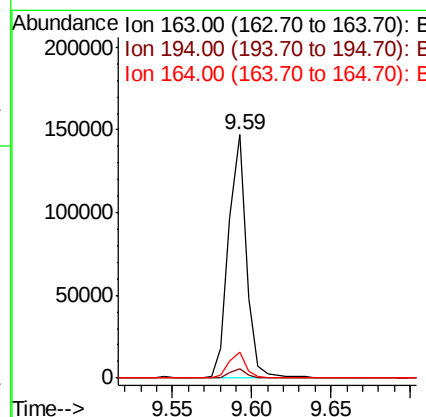
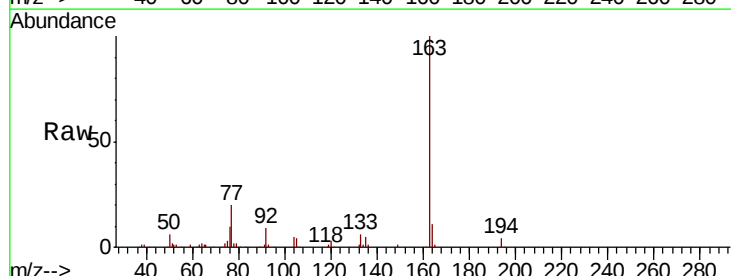
Manual Integrations  
APPROVED

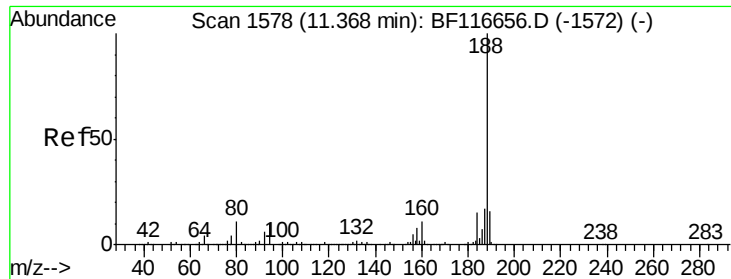
mohammad  
9/9/2019 9:55:47 AM



#50  
Dimethylphthalate  
Concen: 11.392 ng  
RT: 9.59 min Scan# 1276  
Delta R.T. -0.02 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 3.8   | 2.8   | 4.2   |
| 164     | 10.6  | 8.6   | 12.8  |





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.36 min Scan# 1577

Delta R.T. -0.01 min

Lab File: BF116812.D

Acq: 4 Sep 2019 13:44

Instrument :

BNA\_F

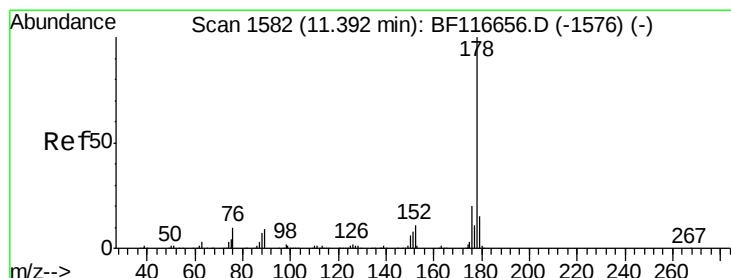
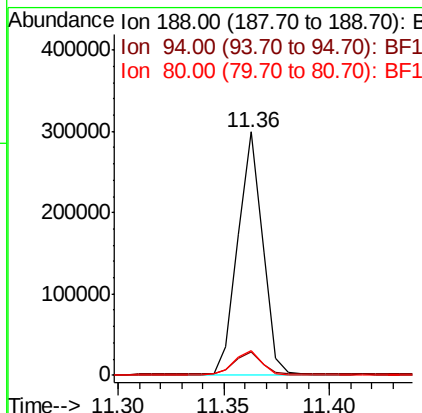
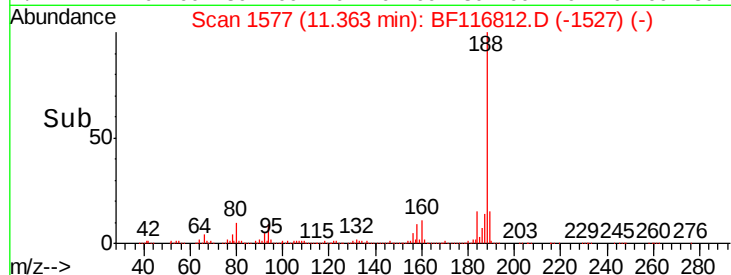
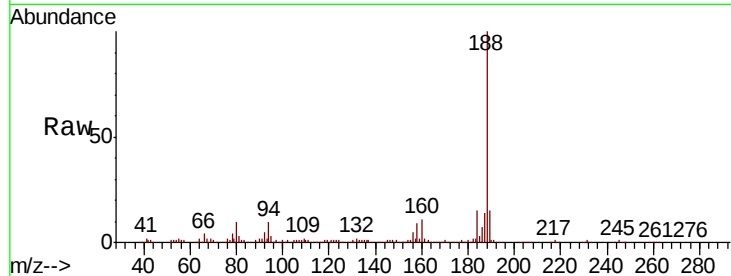
ClientSampleId :

PAR-11-E1-E4-(0-4)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 188   | Resp: | 243648 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 9.7   | 7.3   | 10.9   |
| 80        | 10.2  | 8.4   | 12.6   |

Manual Integrations  
APPROVED

mohammad  
9/9/2019 9:55:47 AM



#71

Phenanthrene

Concen: 7.161 ng

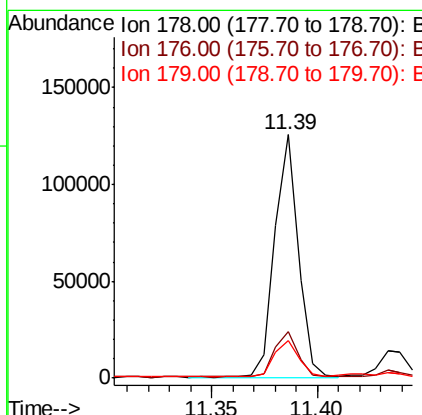
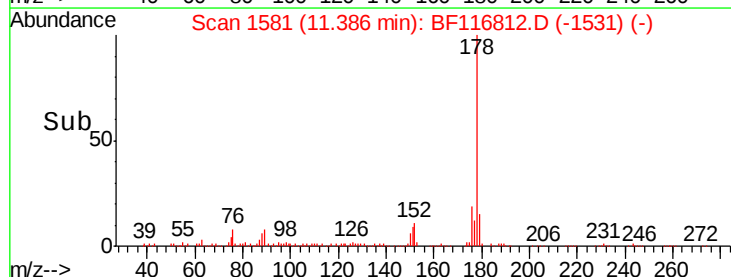
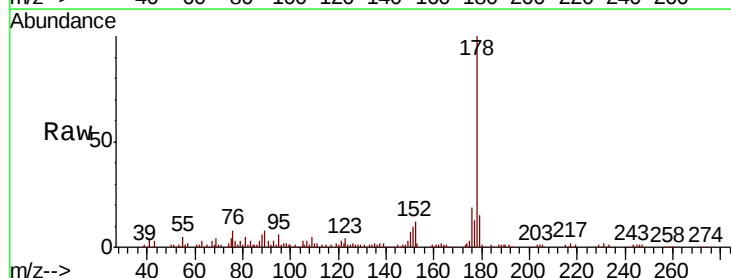
RT: 11.39 min Scan# 1581

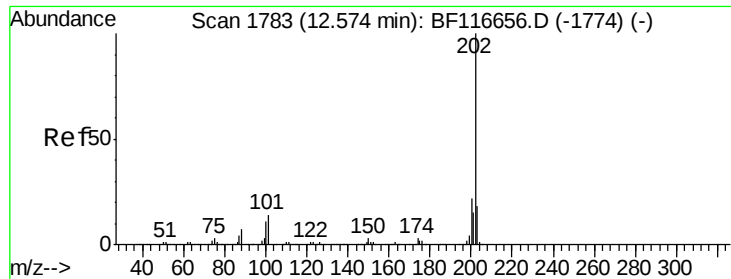
Delta R.T. -0.01 min

Lab File: BF116812.D

Acq: 4 Sep 2019 13:44

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 97121 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 19.3  | 15.4  | 23.0  |
| 179       | 15.3  | 12.2  | 18.2  |





#75

Fluoranthene

Concen: 18.070 ng

RT: 12.57 min Scan# 1783

Delta R.T. 0.00 min

Lab File: BF116812.D

Acq: 4 Sep 2019 13:44

Instrument :

BNA\_F

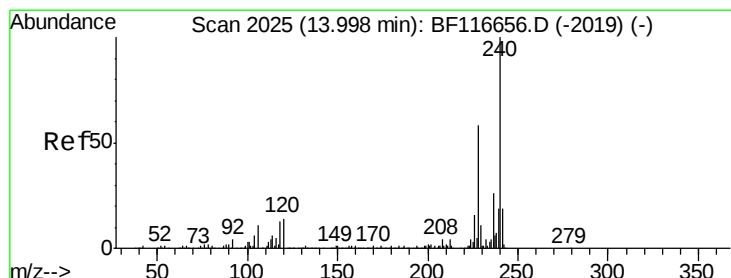
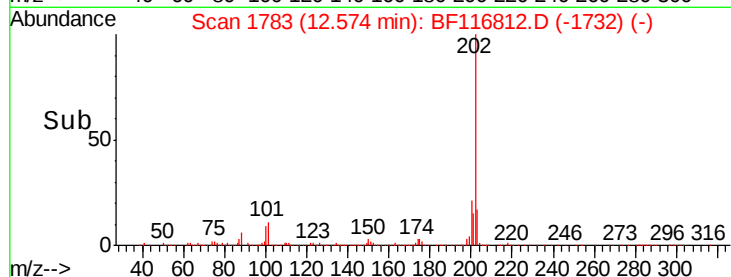
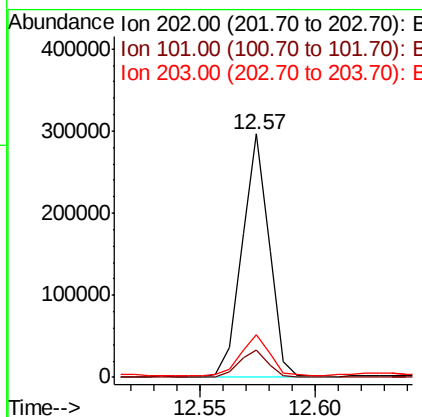
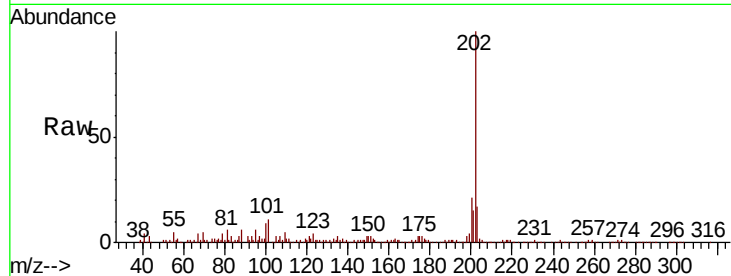
ClientSampleId :

PAR-11-E1-E4-(0-4)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 240862 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 11.3  | 0.0   | 31.3   |
| 203       | 17.4  | 0.0   | 37.6   |

Manual Integrations  
APPROVED

mohammad  
9/9/2019 9:55:47 AM



#76

Chrysene-d12

Concen: 20.000 ng

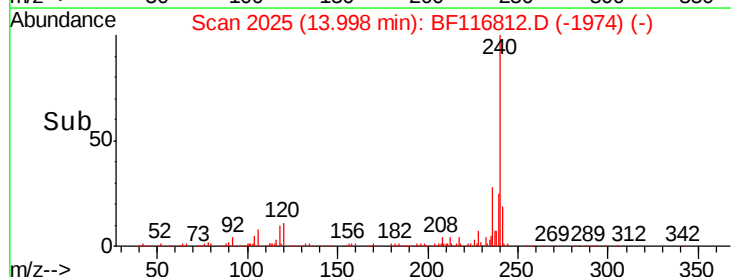
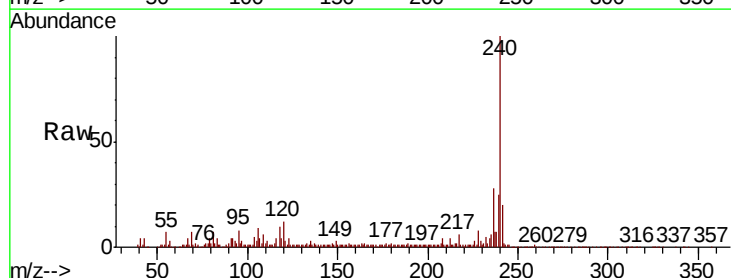
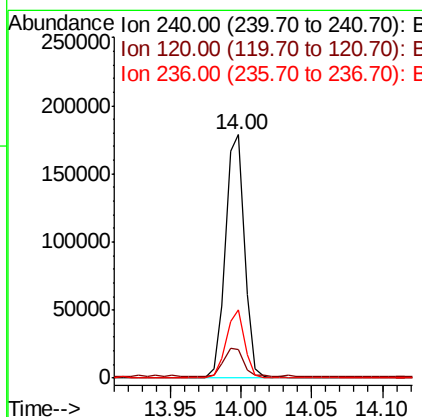
RT: 14.00 min Scan# 2025

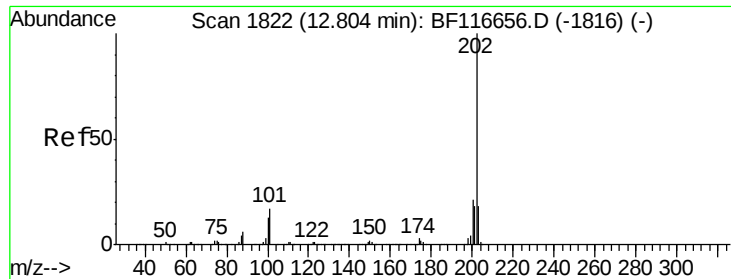
Delta R.T. 0.00 min

Lab File: BF116812.D

Acq: 4 Sep 2019 13:44

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 167440 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 11.8  | 9.1   | 13.7   |
| 236       | 28.3  | 21.1  | 31.7   |





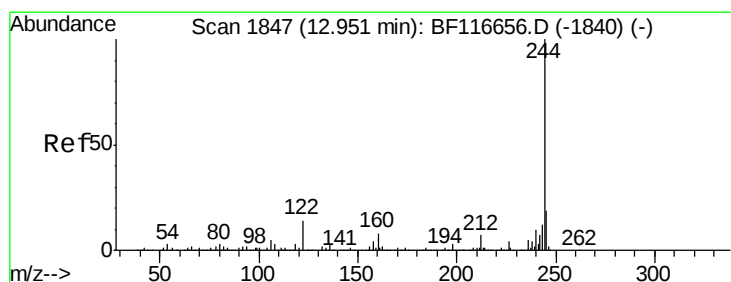
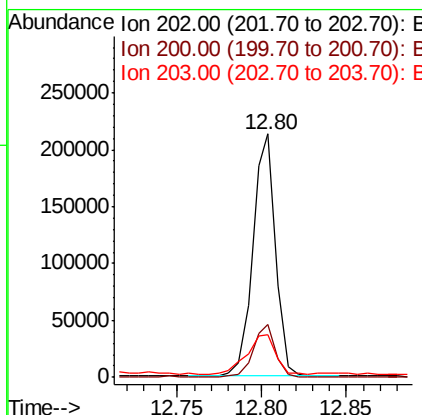
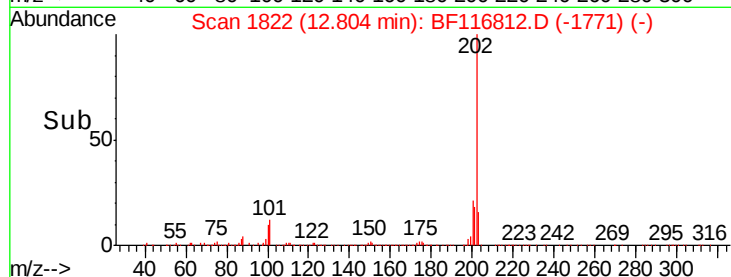
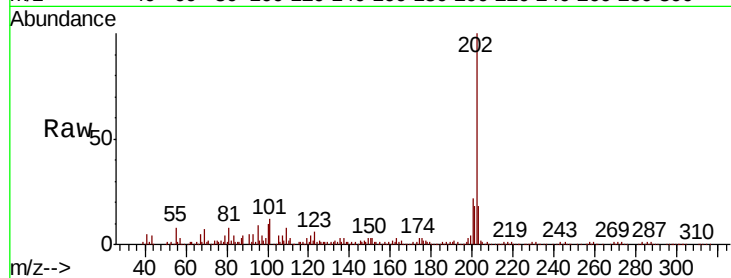
#78  
Pvrene  
Concen: 13.429 ng  
RT: 12.80 min Scan# 1822  
Delta R.T. 0.00 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

Instrument :  
BNA\_F  
ClientSampleId :  
PAR-11-E1-E4-(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.5  | 16.5  | 24.7  |
| 203     | 17.6  | 13.7  | 20.5  |

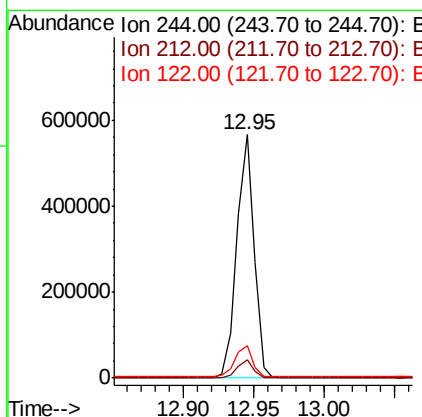
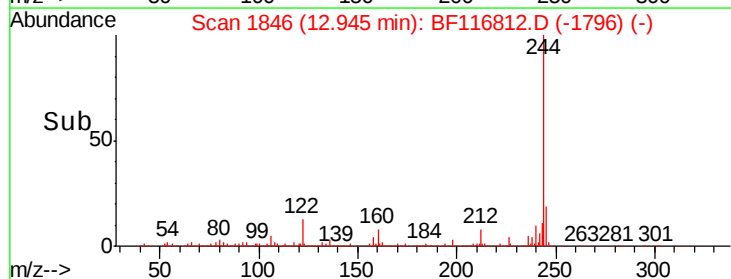
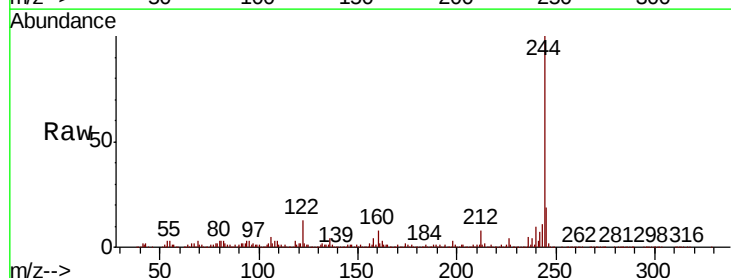
Manual Integrations  
APPROVED

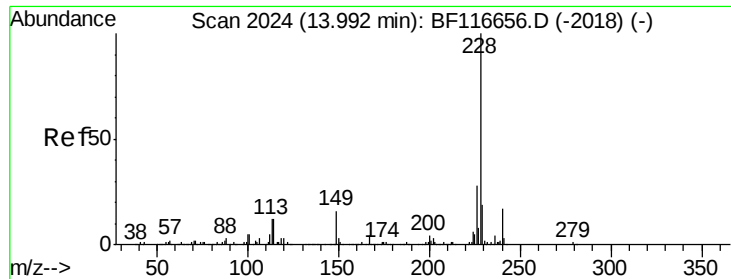
mohammad  
9/9/2019 9:55:47 AM



#79  
Terphenyl-d14  
Concen: 53.353 ng  
RT: 12.95 min Scan# 1846  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.5   | 6.1   | 9.1   |
| 122     | 13.4  | 10.2  | 15.4  |





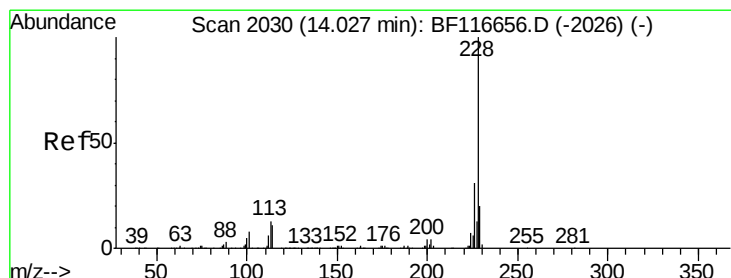
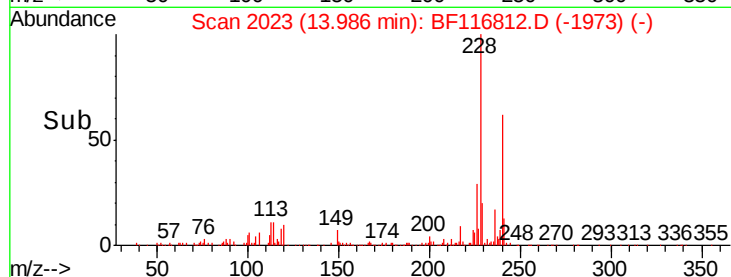
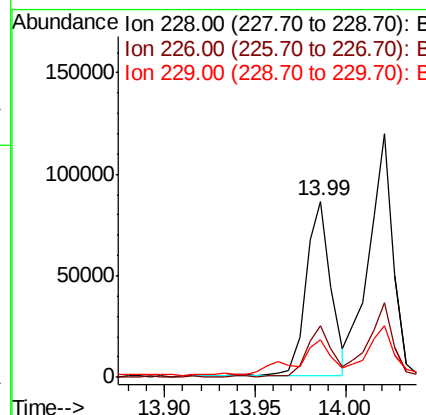
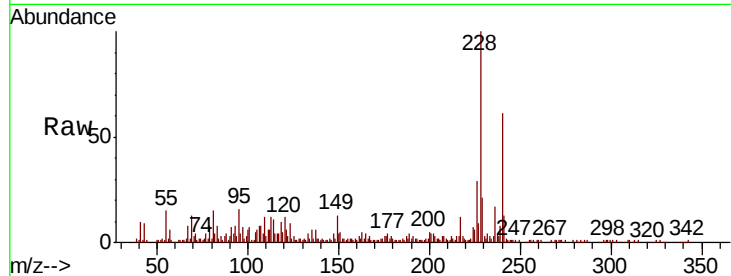
#81  
Benzo(a)anthracene  
Concen: 7.929 ng  
RT: 13.99 min Scan# 2023  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

Instrument :  
BNA\_F  
ClientSampleId :  
PAR-11-E1-E4-(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.1  | 22.0  | 33.0  |
| 229     | 21.2  | 16.4  | 24.6  |

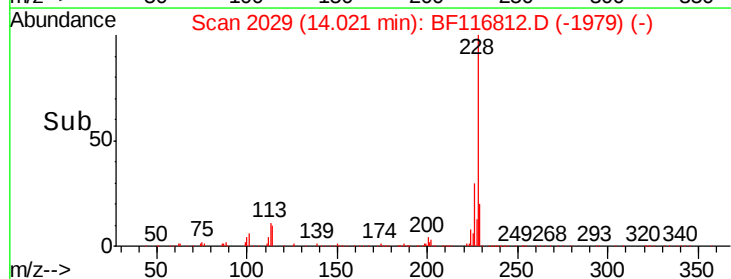
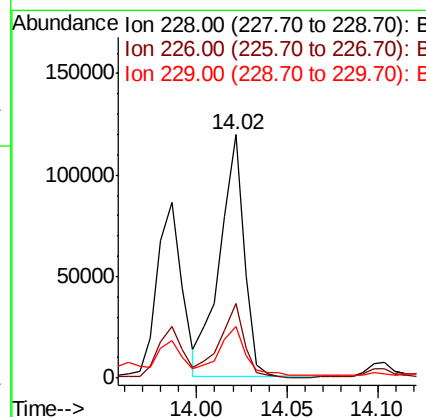
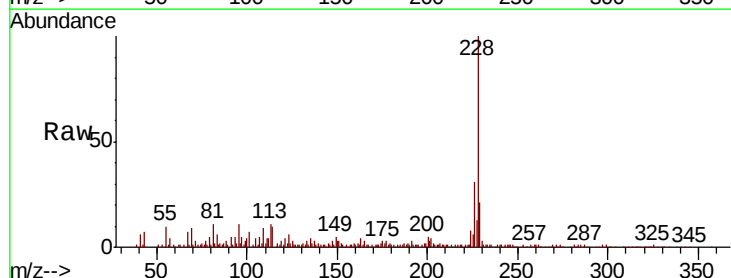
Manual Integrations  
APPROVED

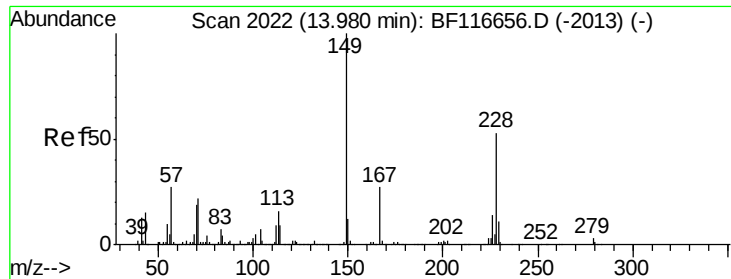
mohammad  
9/9/2019 9:55:47 AM



#83  
Chrysene  
Concen: 10.297 ng  
RT: 14.02 min Scan# 2029  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.5  | 24.0  | 36.0  |
| 229     | 21.2  | 15.4  | 23.0  |





#84

Bis(2-ethylhexyl)phthalate

Concen: 3.495 ng

RT: 13.97 min Scan# 2021

Delta R.T. -0.01 min

Lab File: BF116812.D

Acq: 4 Sep 2019 13:44

Instrument :

BNA\_F

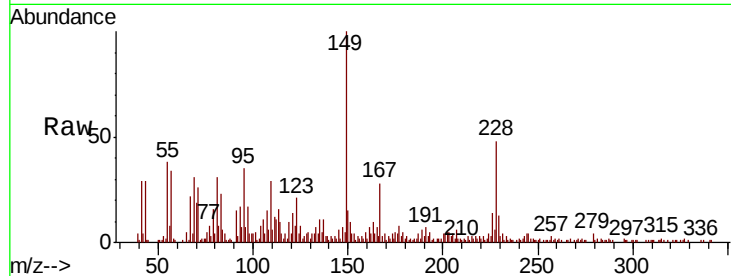
ClientSampleId :

PAR-11-E1-E4-(0-4)

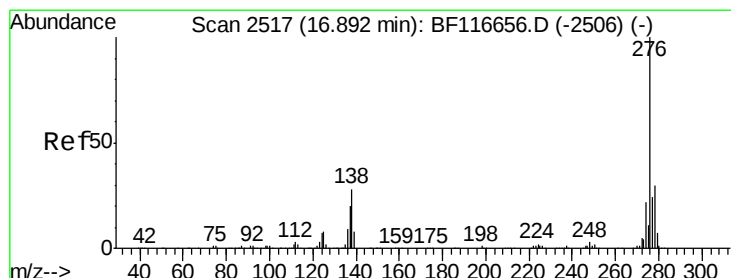
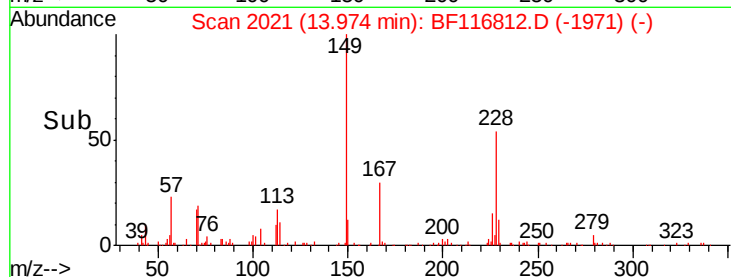
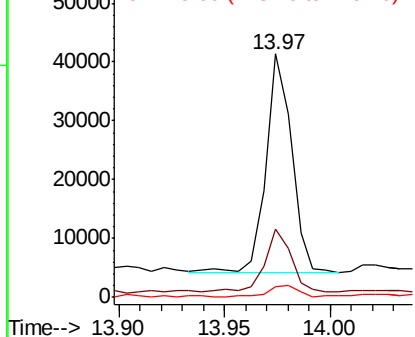
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 149   | Resp: | 31227 |
| Ion Ratio | Lower | Upper |       |
| 149       | 100   |       |       |
| 167       | 27.9  | 21.0  | 31.4  |
| 279       | 4.2   | 2.8   | 4.2#  |

Manual Integrations  
APPROVED

mohammad  
9/9/2019 9:55:47 AM



Abundance Ion 149.00 (148.70 to 149.70): E  
Ion 167.00 (166.70 to 167.70): E  
Ion 279.00 (278.70 to 279.70): E



#86

Indeno(1,2,3-cd)pyrene

Concen: 6.656 ng

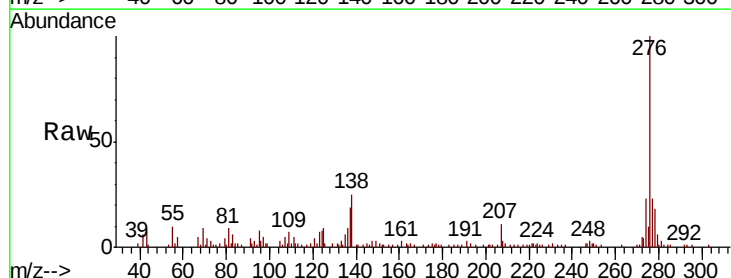
RT: 16.89 min Scan# 2516

Delta R.T. -0.01 min

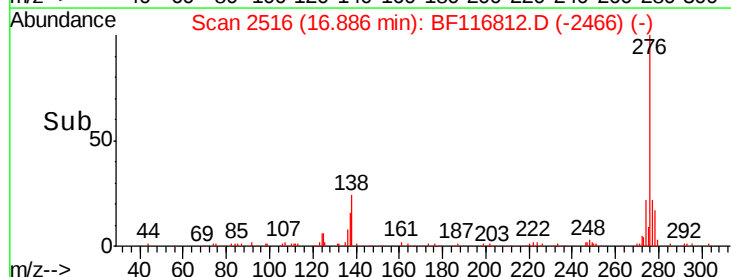
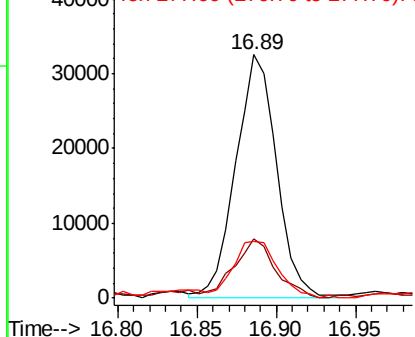
Lab File: BF116812.D

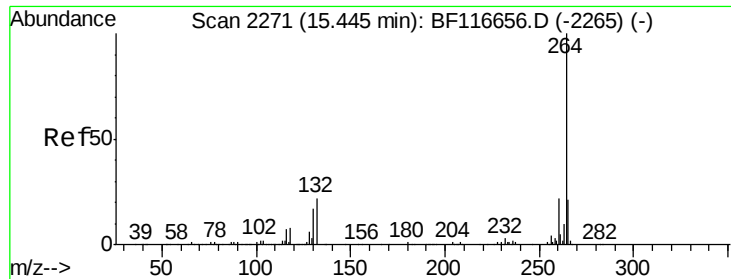
Acq: 4 Sep 2019 13:44

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 58369 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 24.7  | 19.4  | 29.2  |
| 277       | 25.7  | 20.5  | 30.7  |



Abundance Ion 276.00 (275.70 to 276.70): E  
Ion 138.00 (137.70 to 138.70): E  
Ion 277.00 (276.70 to 277.70): E





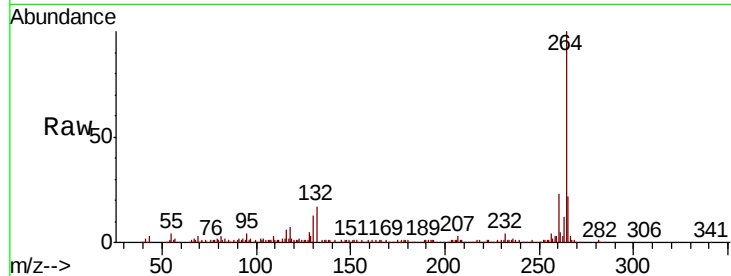
#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.45 min Scan# 2272  
Delta R.T. 0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

Instrument :  
BNA\_F  
ClientSampleId :  
PAR-11-E1-E4-(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.3  | 18.3  | 27.5  |
| 265     | 22.5  | 16.5  | 24.7  |

Manual Integrations  
APPROVED

mohammad  
9/9/2019 9:55:47 AM

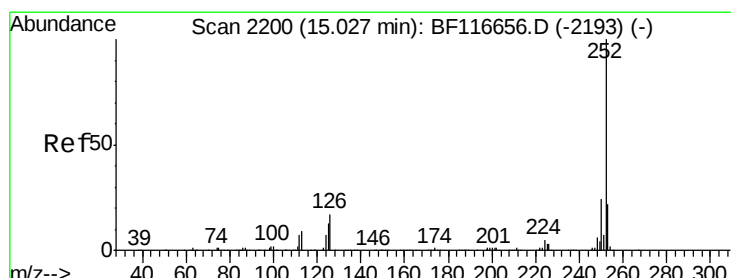
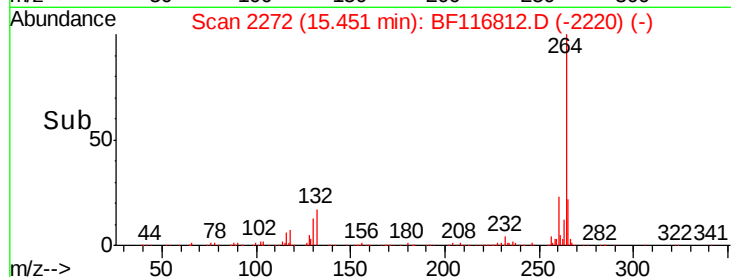
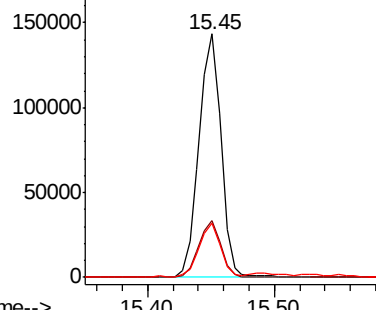


Abundance

Ion 264.00 (263.70 to 264.70): E

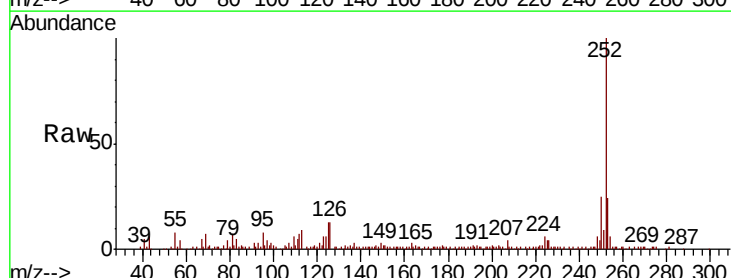
Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E



#88  
Benzo(b)fluoranthene  
Concen: 13.485 ng m  
RT: 15.03 min Scan# 2200  
Delta R.T. 0.00 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.5  | 17.7  | 26.5  |
| 125     | 12.8  | 8.2   | 12.2# |

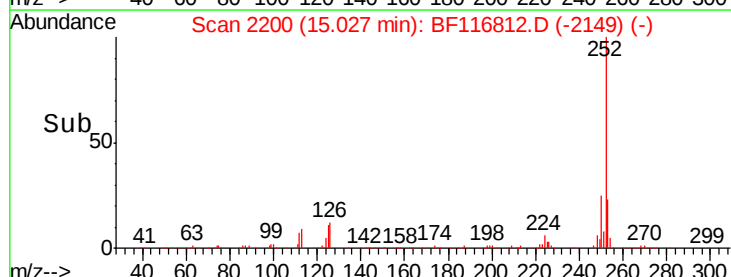
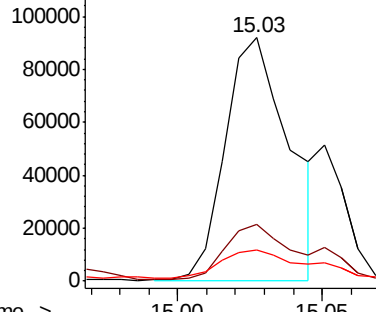


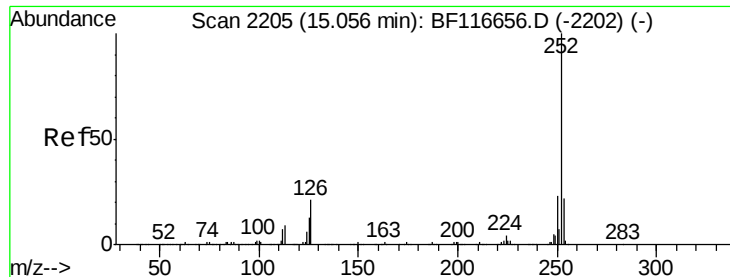
Abundance

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





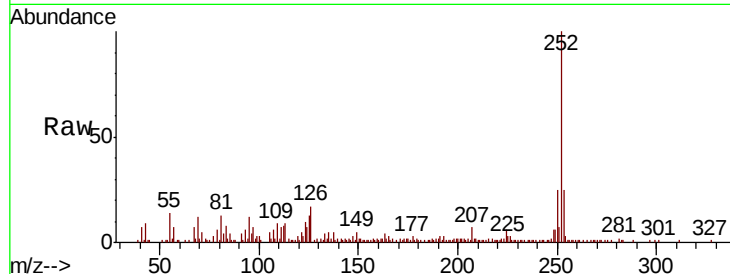
#89  
Benzo(k)fluoranthene  
Concen: 3.820 ng m  
RT: 15.05 min Scan# 2204  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

Instrument :  
BNA\_F  
ClientSampleId :  
PAR-11-E1-E4-(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.6  | 17.7  | 26.5  |
| 125     | 13.5  | 8.6   | 13.0  |

Manual Integrations  
APPROVED

mohammad  
9/9/2019 9:55:47 AM

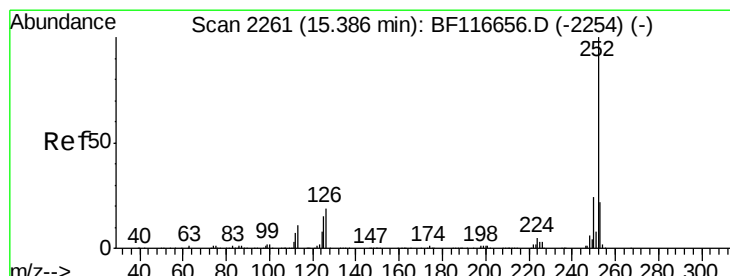
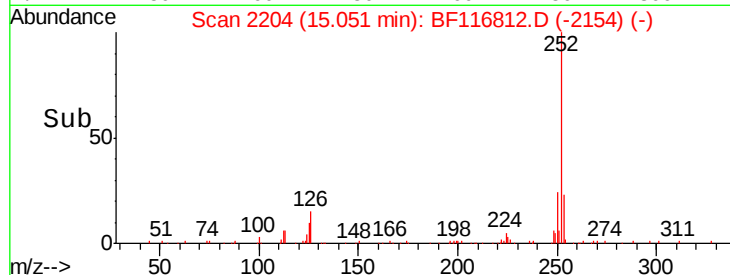
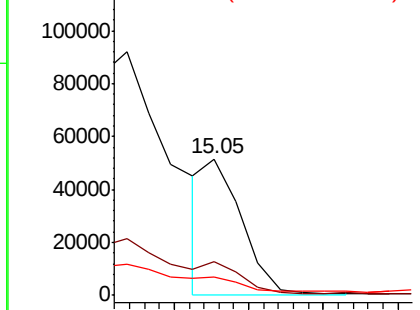


Abundance

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



#90  
Benzo(a)pyrene  
Concen: 8.786 ng  
RT: 15.39 min Scan# 2261  
Delta R.T. 0.00 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

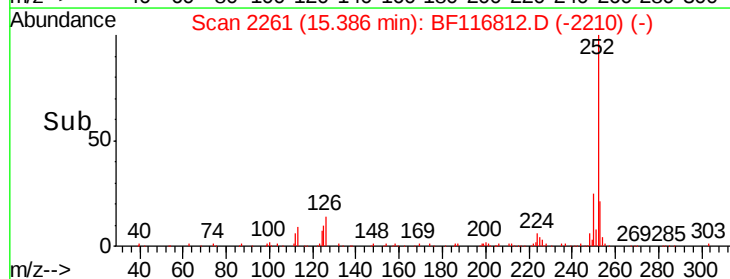
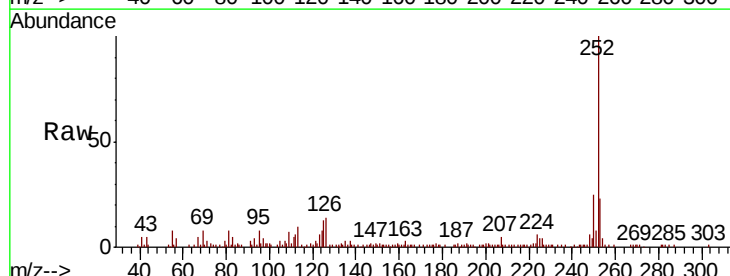
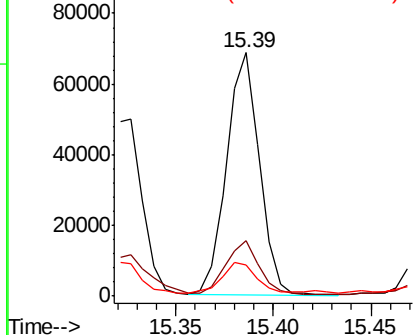
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.9  | 18.1  | 27.1  |
| 125     | 12.7  | 9.8   | 14.8  |

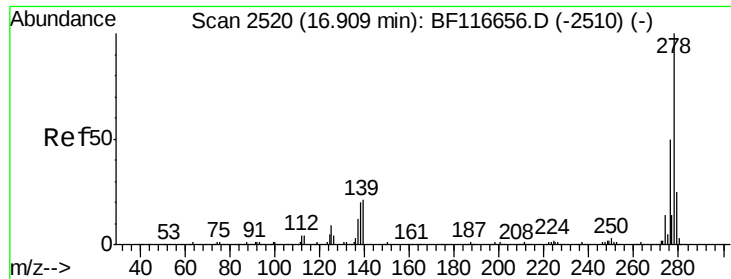
Abundance

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





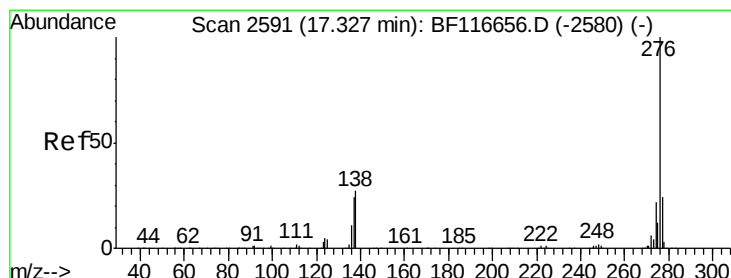
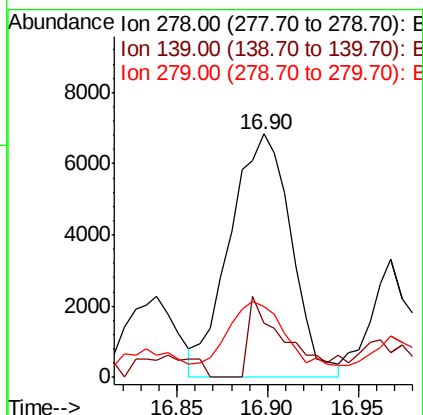
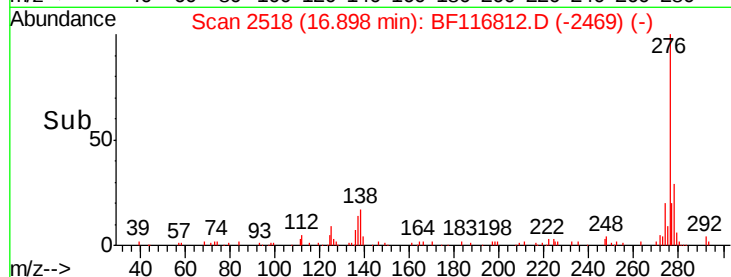
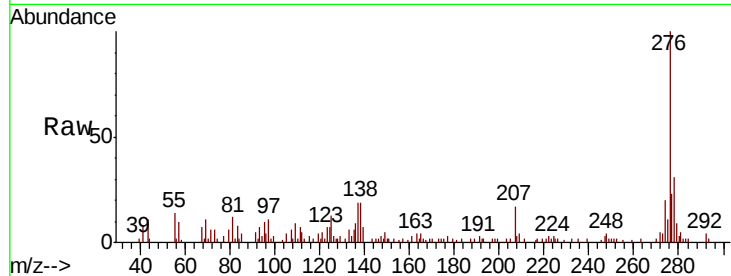
#91  
Dibenzo(a,h)anthracene  
Concen: 2.019 ng  
RT: 16.90 min Scan# 2518  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

Instrument :  
BNA\_F  
ClientSampleId :  
PAR-11-E1-E4-(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 22.5  | 12.4  | 18.6# |
| 279     | 28.9  | 18.2  | 27.4# |

Manual Integrations  
APPROVED

mohammad  
9/9/2019 9:55:47 AM



#92  
Benzo(g,h,i)perylene  
Concen: 6.480 ng  
RT: 17.32 min Scan# 2590  
Delta R.T. -0.01 min  
Lab File: BF116812.D  
Acq: 4 Sep 2019 13:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.6  | 18.5  | 27.7  |
| 138     | 23.1  | 16.2  | 24.2  |

