

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080819\  
 Data File : BF116085.D  
 Acq On : 8 Aug 2019 23:25  
 Operator : HP/JU  
 Sample : K4152-16  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 2S-E1-E4-COMP-(30)

Manual Integrations  
 APPROVED

mohammad  
 8/14/2019 9:21:25 AM

Quant Time: Aug 09 16:33:16 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF073019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Aug 07 11:13:18 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.83  | 152  | 128799   | 20.00  | ng    | -0.01    |
| 21) Naphthalene-d8          | 8.12  | 136  | 518788   | 20.00  | ng    | -0.01    |
| 39) Acenaphthene-d10        | 9.87  | 164  | 292187   | 20.00  | ng    | -0.02    |
| 64) Phenanthrene-d10        | 11.36 | 188  | 539213   | 20.00  | ng    | -0.01    |
| 76) Chrysene-d12            | 14.00 | 240  | 403238   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12            | 15.47 | 264  | 385401   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.46  | 112  | 928439   | 120.67 | ng    | 0.00     |
| 7) Phenol-d6                | 6.47  | 99   | 1217362  | 125.41 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.40  | 82   | 794129   | 88.36  | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol    | 10.66 | 330  | 326946   | 115.41 | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.19  | 172  | 1312381  | 84.13  | ng    | -0.01    |
| 79) Terphenyl-d14           | 12.95 | 244  | 1520876  | 79.48  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 50) Dimethylphthalate       | 9.59  | 163  | 311400   | 15.652 | ng    | 98       |
| 71) Phenanthrene            | 11.38 | 178  | 139041   | 5.044  | ng    | 99       |
| 75) Fluoranthene            | 12.57 | 202  | 236712   | 8.202  | ng    | 76       |
| 78) Pyrene                  | 12.80 | 202  | 197372   | 6.493  | ng    | # 77     |
| 81) Benzo(a)anthracene      | 13.99 | 228  | 98661    | 3.828  | ng    | 94       |
| 83) Chrysene                | 14.03 | 228  | 86877m   | 3.472  | ng    |          |
| 88) Benzo(b)fluoranthene    | 15.05 | 252  | 81586m   | 3.661  | ng    |          |
| 90) Benzo(a)pyrene          | 15.41 | 252  | 61324    | 3.078  | ng    | # 94     |

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

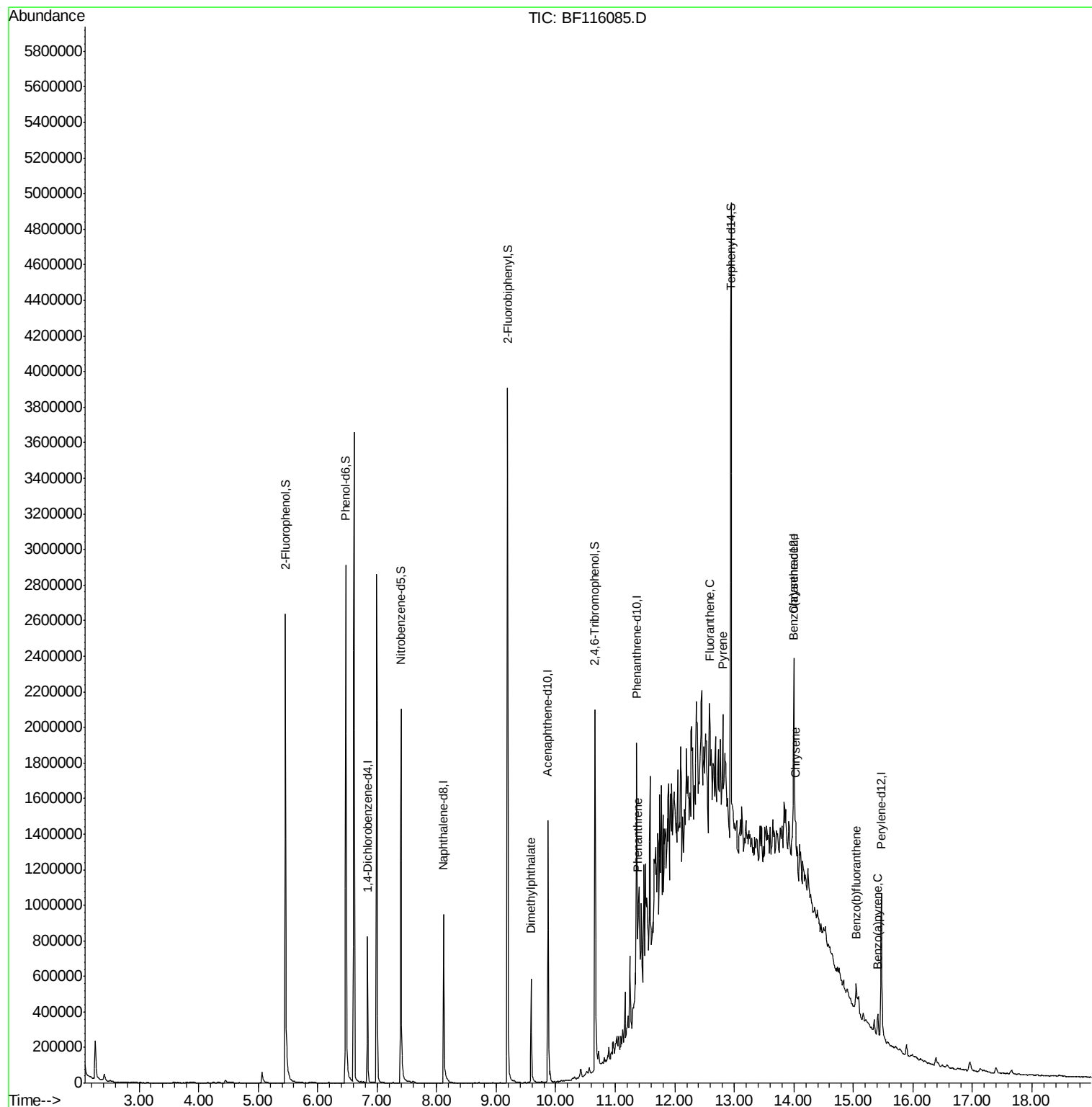
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080819\  
Data File : BF116085.D  
Acq On : 8 Aug 2019 23:25  
Operator : HP/JU  
Sample : K4152-16  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
2S-E1-E4-COMP-(30)

Manual Integrations  
APPROVED

mohammad  
8/14/2019 9:21:25 AM

Quant Time: Aug 09 16:33:16 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF073019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Aug 07 11:13:18 2019  
Response via : Initial Calibration





#1

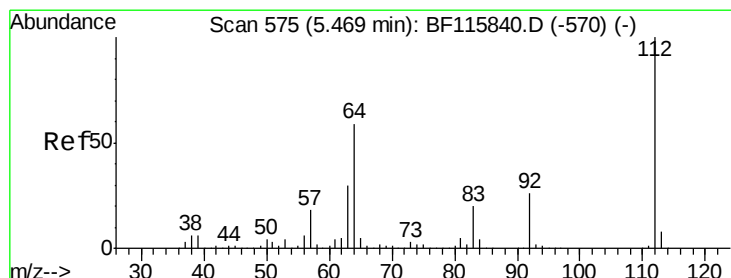
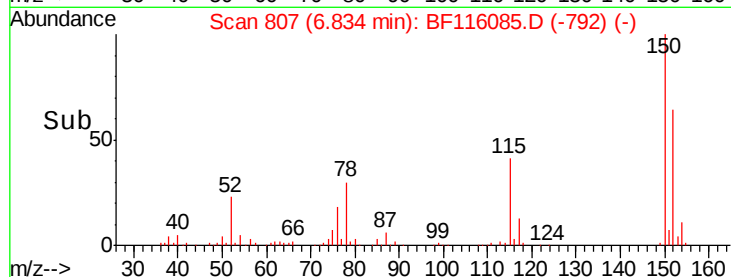
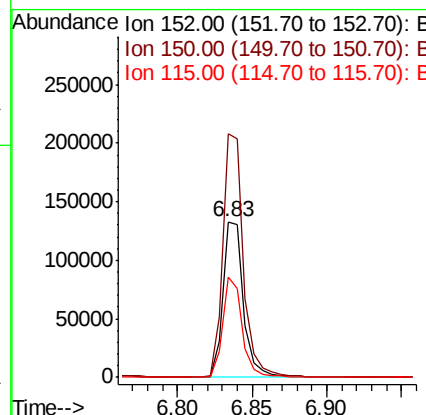
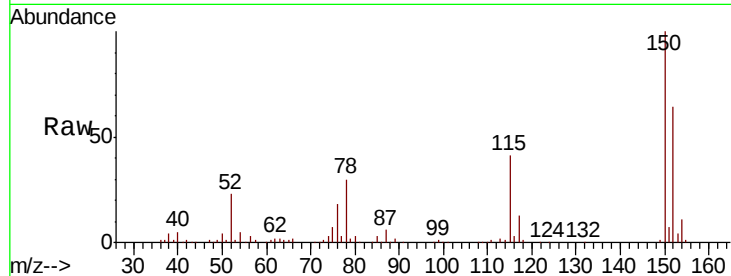
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.83 min Scan# 807  
Delta R.T. -0.01 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

Instrument :  
BNA\_F  
ClientSampleId :  
2S-E1-E4-COMP-(30)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 156.7 | 126.2 | 189.2 |
| 115     | 64.5  | 49.9  | 74.9  |

Manual Integrations  
APPROVED

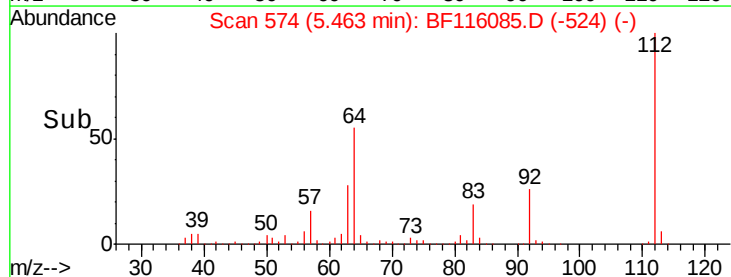
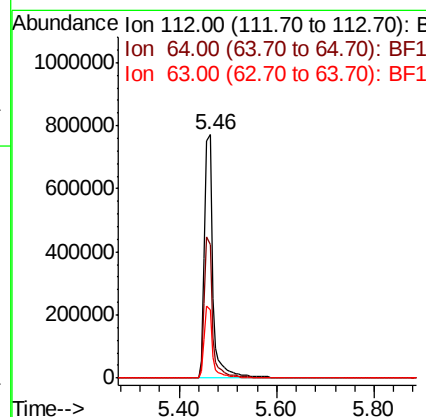
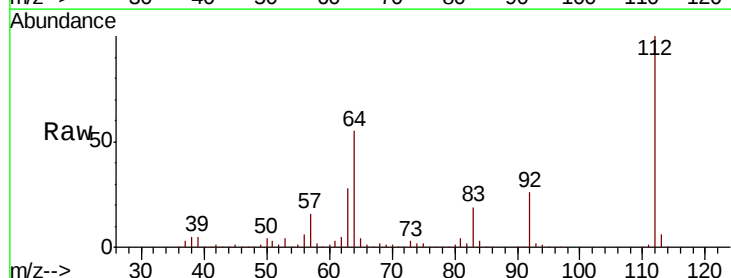
mohammad  
8/14/2019 9:21:25 AM



#5

2-Fluorophenol  
Concen: 120.674 ng  
RT: 5.46 min Scan# 574  
Delta R.T. -0.01 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 55.0  | 45.4  | 68.2  |
| 63      | 28.3  | 23.7  | 35.5  |





#7

Phenol-d6

Concen: 125.410 ng

RT: 6.47 min Scan# 746

Delta R.T. -0.01 min

Lab File: BF116085.D

Acq: 8 Aug 2019 23:25

Instrument :

BNA\_F

ClientSampleId :

2S-E1-E4-COMP-(30)

Tot Ion: 99 Resp: 1217362

Ion Ratio Lower Upper

99 100

42 17.1 13.8 20.8

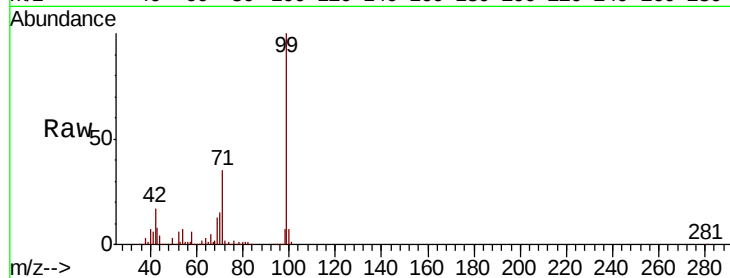
71 34.7 27.3 40.9

Manual Integrations

APPROVED

mohammad

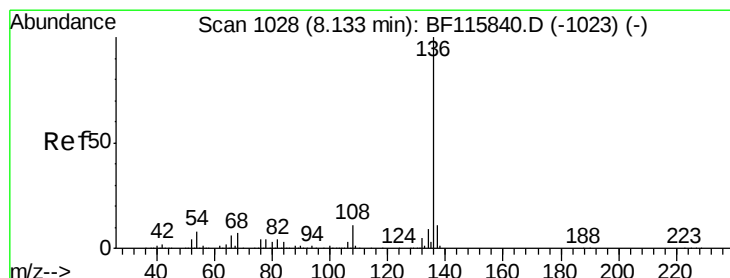
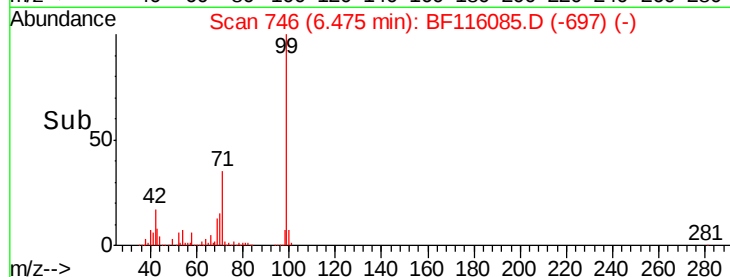
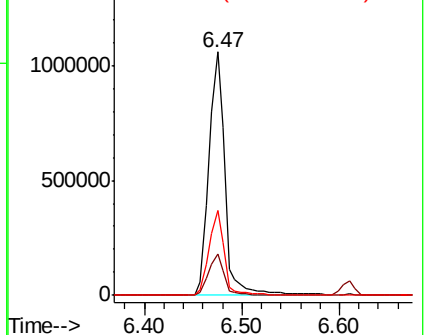
8/14/2019 9:21:25 AM



Abundance Ion 99.00 (98.70 to 99.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 71.00 (70.70 to 71.70): BF1



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.12 min Scan# 1025

Delta R.T. -0.01 min

Lab File: BF116085.D

Acq: 8 Aug 2019 23:25

Tgt Ion: 136 Resp: 518788

Ion Ratio Lower Upper

136 100

137 10.9 9.0 13.4

54 7.2 5.8 8.6

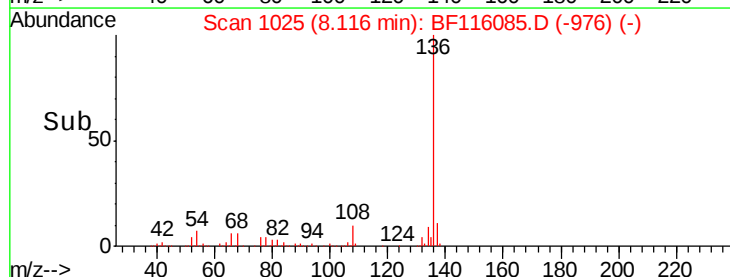
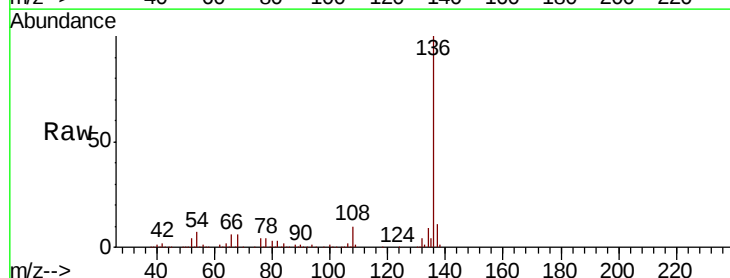
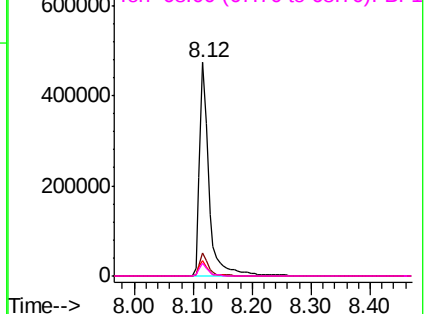
68 6.3 5.2 7.8

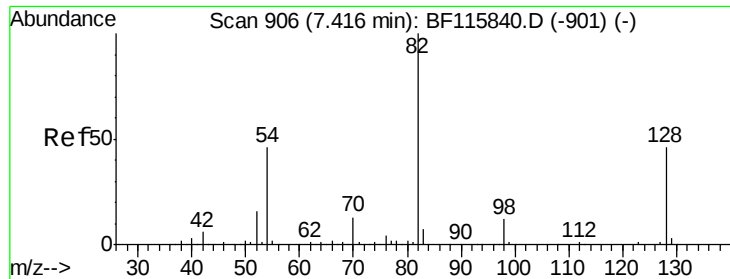
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1





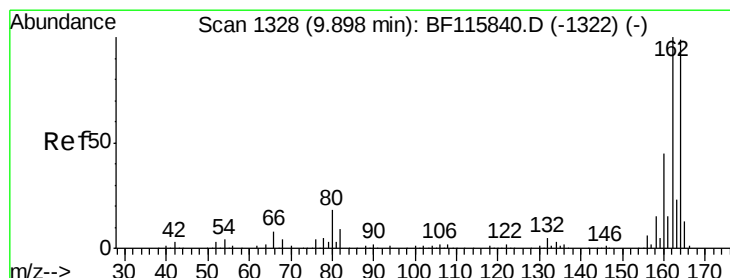
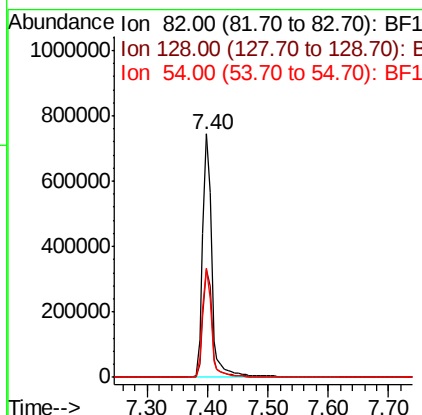
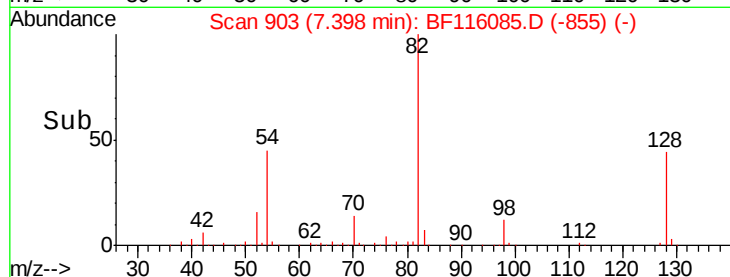
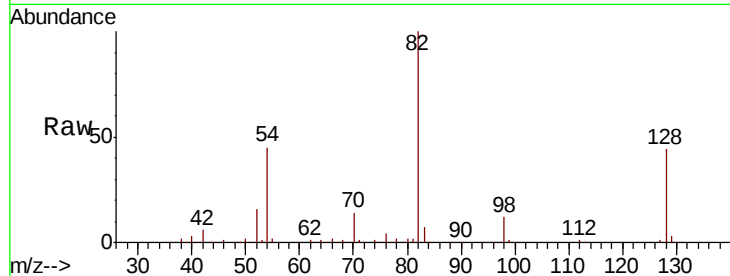
#23  
Nitrobenzene-d5  
Concen: 88.359 ng  
RT: 7.40 min Scan# 903  
Delta R.T. -0.02 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

Instrument :  
BNA\_F  
ClientSampleId :  
2S-E1-E4-COMP-(30)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 44.1  | 36.5  | 54.7  |
| 54      | 45.1  | 36.0  | 54.0  |

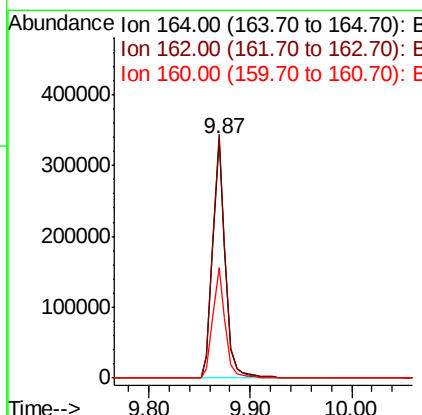
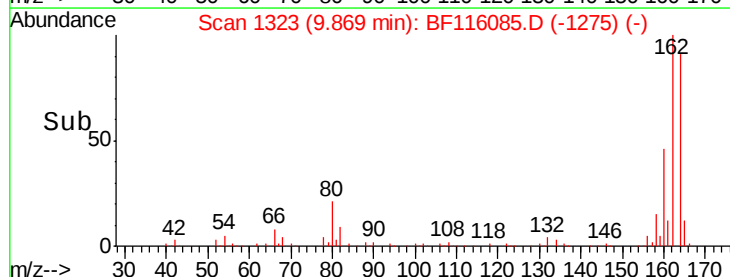
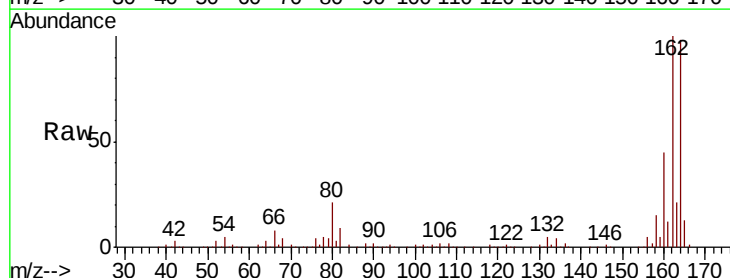
Manual Integrations  
APPROVED

mohammad  
8/14/2019 9:21:25 AM



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.87 min Scan# 1323  
Delta R.T. -0.02 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 102.0 | 82.6  | 124.0 |
| 160     | 46.4  | 37.6  | 56.4  |





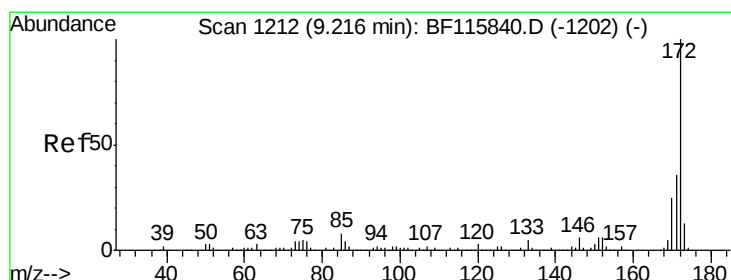
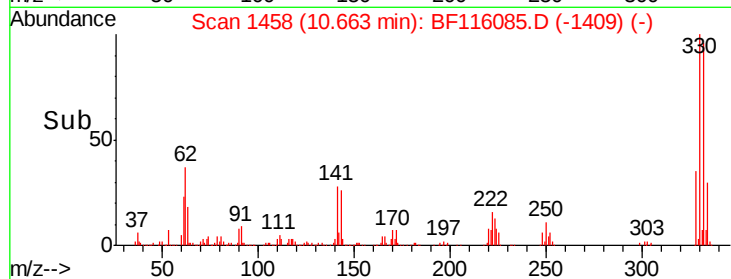
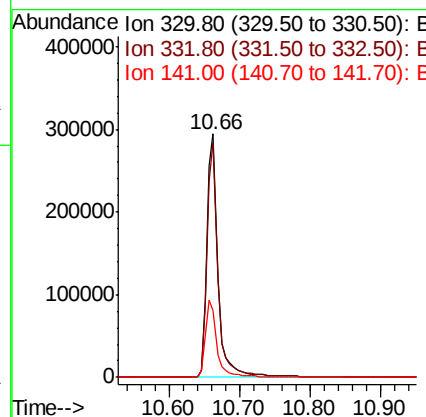
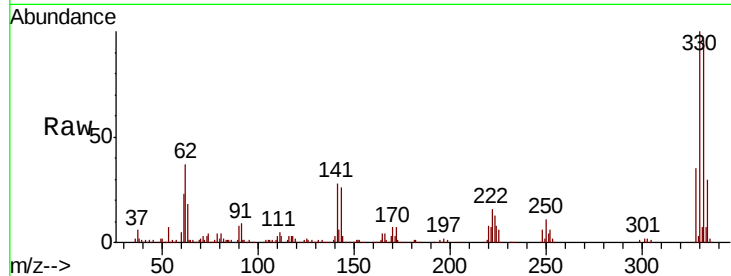
#42  
 2,4,6-Tribromophenol  
 Concen: 115.413 ng  
 RT: 10.66 min Scan# 1458  
 Delta R.T. -0.01 min  
 Lab File: BF116085.D  
 Acq: 8 Aug 2019 23:25

Instrument :  
 BNA\_F  
 ClientSampleId :  
 2S-E1-E4-COMP-(30)

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 326946 |       |       |
| 332     | 94.8  | 76.8   | 115.2 |       |
| 141     | 33.8  | 26.3   | 39.5  |       |

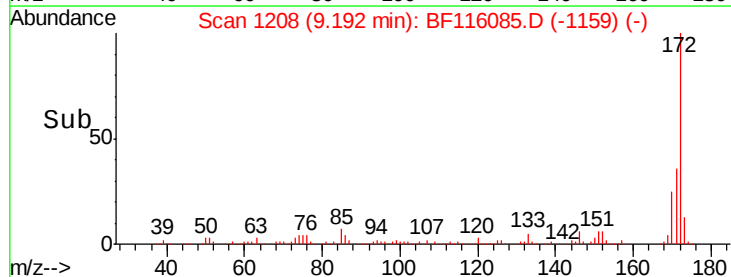
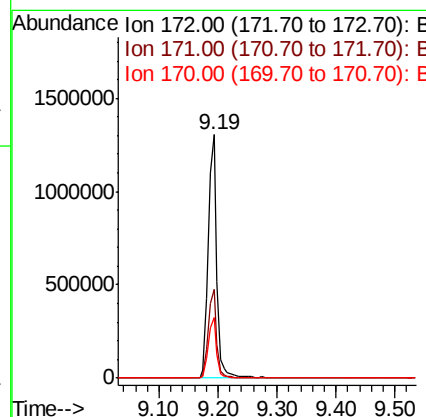
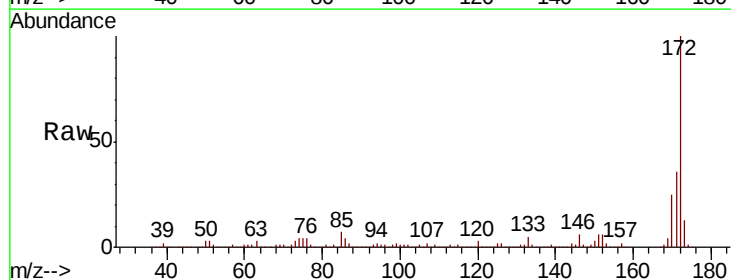
Manual Integrations  
 APPROVED

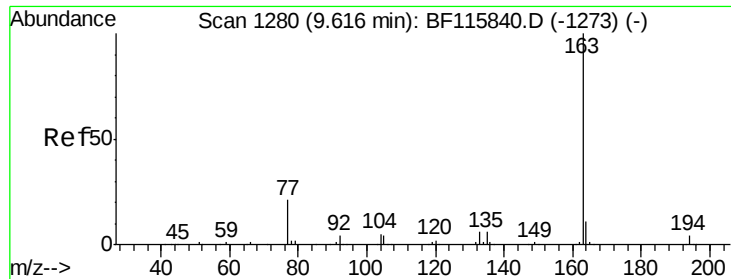
mohammad  
 8/14/2019 9:21:25 AM



#45  
 2-Fluorobiphenyl  
 Concen: 84.131 ng  
 RT: 9.19 min Scan# 1208  
 Delta R.T. -0.01 min  
 Lab File: BF116085.D  
 Acq: 8 Aug 2019 23:25

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 172     | 100   | 1312381 |       |       |
| 171     | 36.5  | 29.6    | 44.4  |       |
| 170     | 25.1  | 20.1    | 30.1  |       |





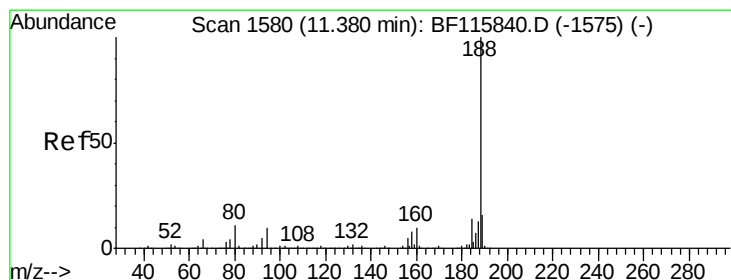
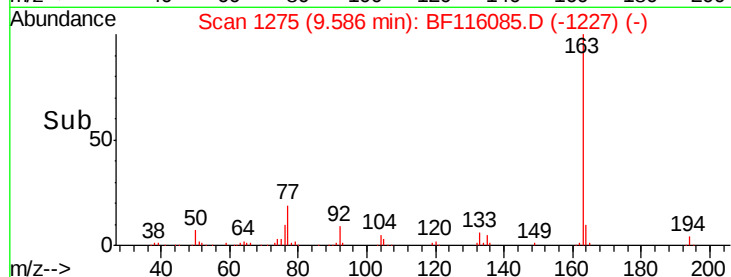
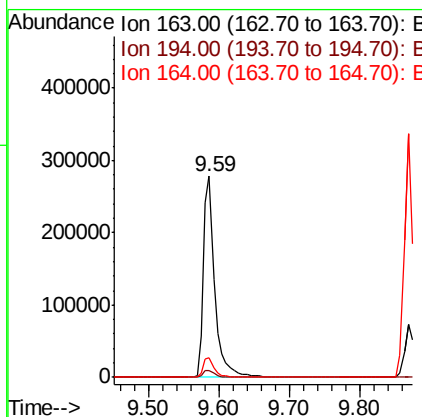
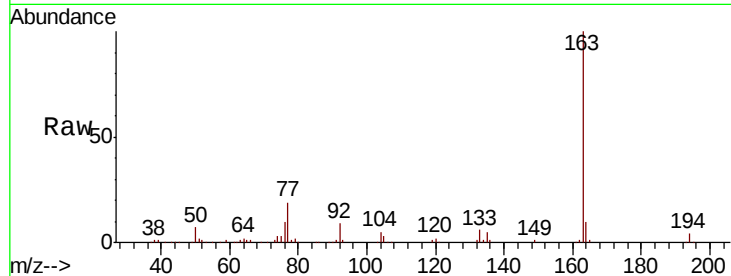
#50  
Dimethylphthalate  
Concen: 15.652 ng  
RT: 9.59 min Scan# 1275  
Delta R.T. -0.02 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

Instrument :  
BNA\_F  
ClientSampleId :  
2S-E1-E4-COMP-(30)

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 311400 |       |       |
| 194     | 3.7   |        | 3.0   | 4.6   |
| 164     | 9.7   |        | 8.4   | 12.6  |

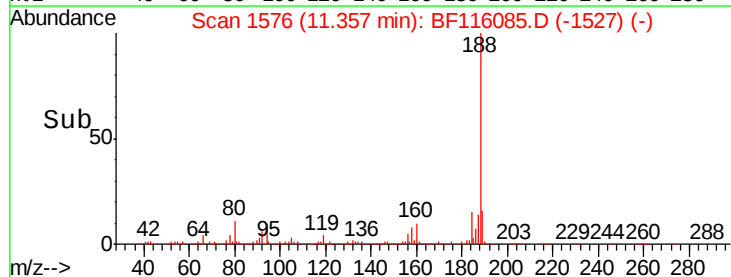
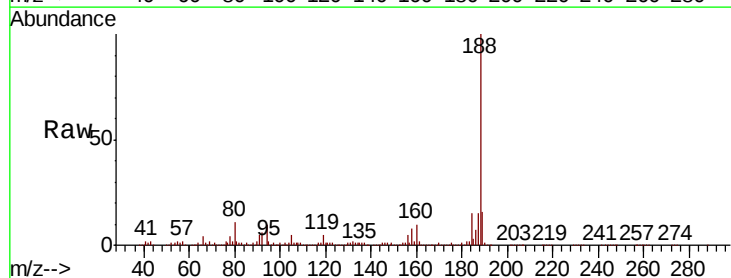
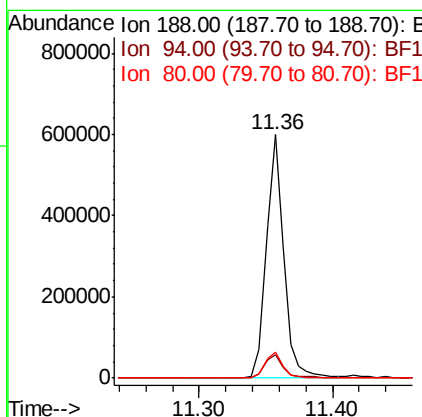
Manual Integrations  
APPROVED

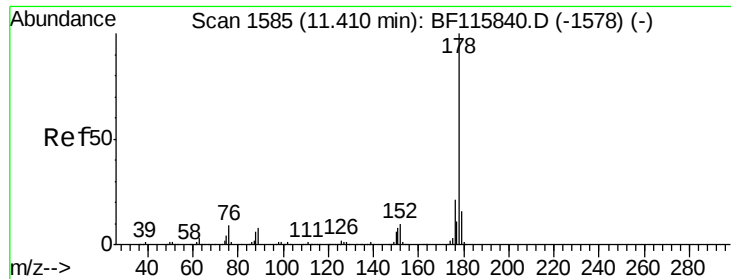
mohammad  
8/14/2019 9:21:25 AM



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.36 min Scan# 1576  
Delta R.T. -0.01 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 539213 |       |       |
| 94      | 9.8   |        | 8.1   | 12.1  |
| 80      | 10.9  |        | 8.7   | 13.1  |





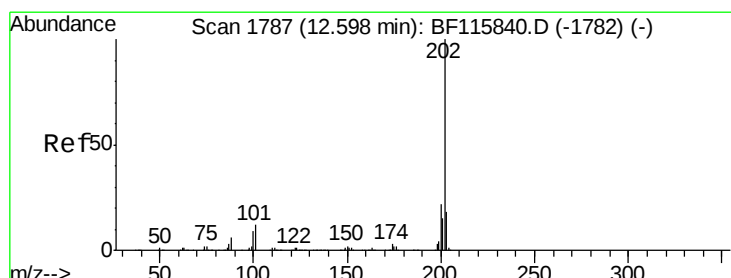
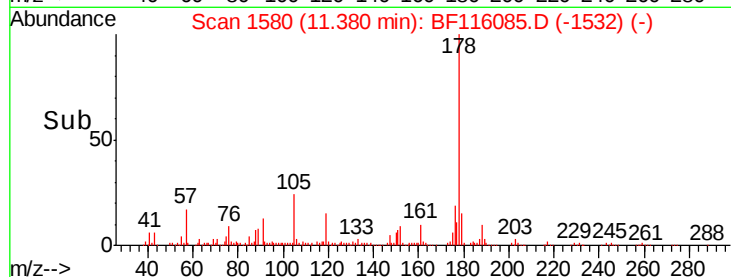
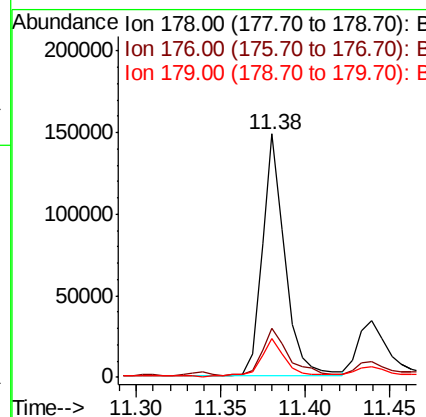
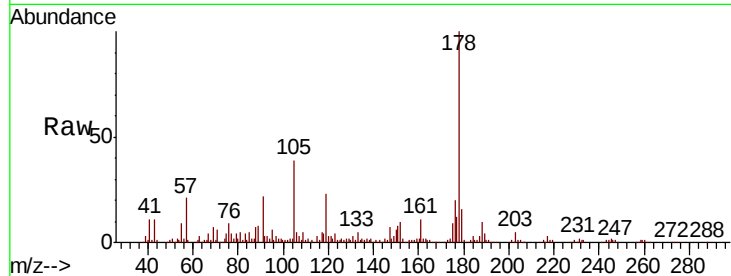
#71  
Phenanthrene  
Concen: 5.044 ng  
RT: 11.38 min Scan# 1580  
Delta R.T. -0.02 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

Instrument :  
BNA\_F  
ClientSampleId :  
2S-E1-E4-COMP-(30)

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:178 | Resp: | 139041    |
| Ion Ratio   | Lower | Upper     |
| 178         | 100   |           |
| 176         | 20.2  | 16.6 24.8 |
| 179         | 15.7  | 12.5 18.7 |

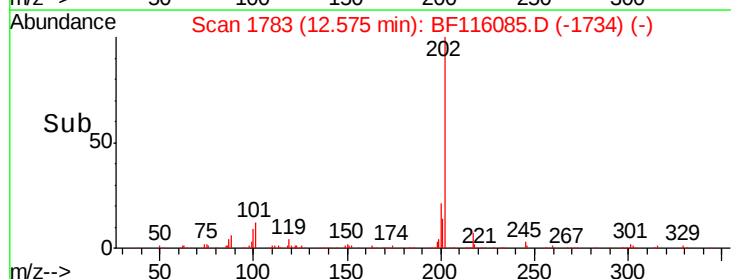
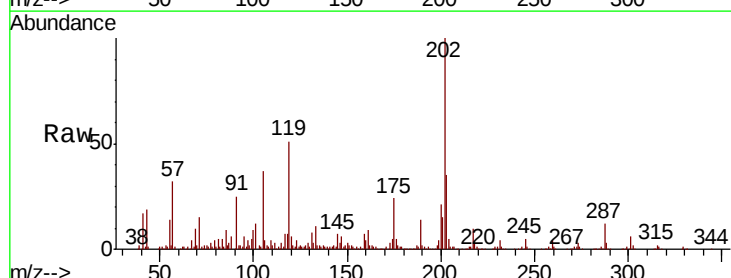
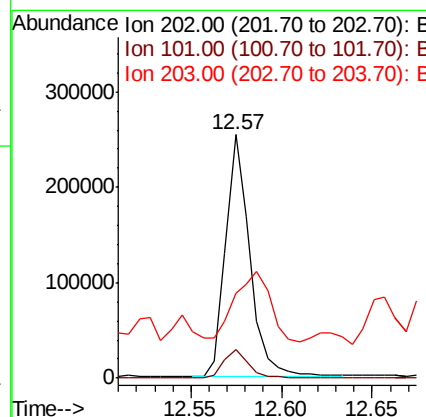
Manual Integrations  
APPROVED

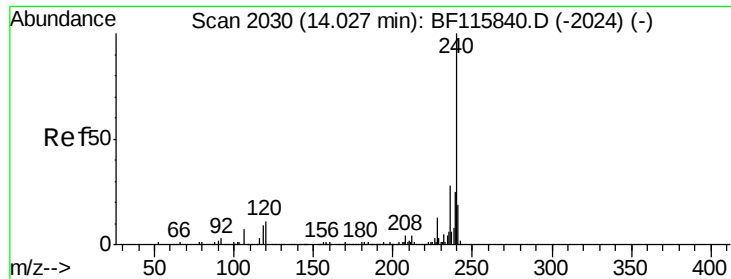
mohammad  
8/14/2019 9:21:25 AM



#75  
Fluoranthene  
Concen: 8.202 ng  
RT: 12.57 min Scan# 1783  
Delta R.T. -0.01 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

|             |       |          |
|-------------|-------|----------|
| Tgt Ion:202 | Resp: | 236712   |
| Ion Ratio   | Lower | Upper    |
| 202         | 100   |          |
| 101         | 11.6  | 0.0 31.2 |
| 203         | 34.6  | 0.0 37.8 |





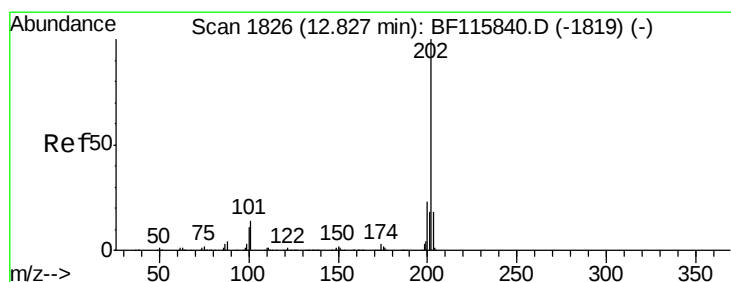
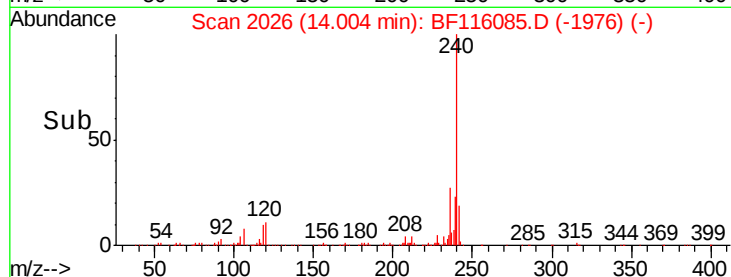
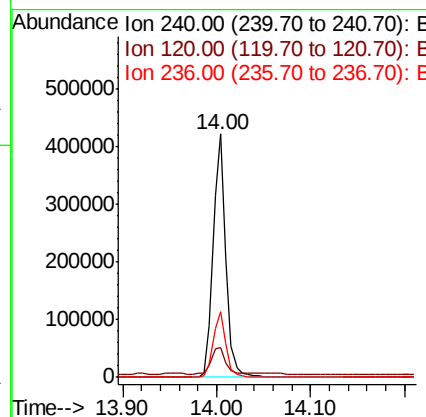
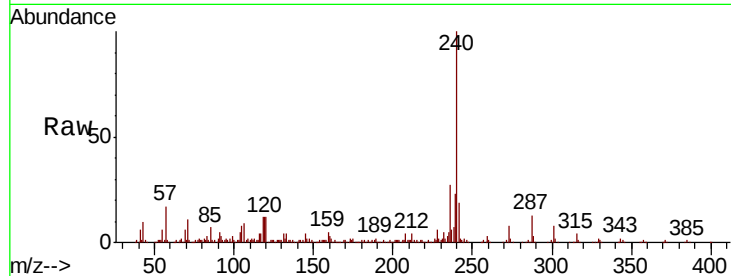
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.00 min Scan# 2026  
Delta R.T. -0.01 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

Instrument :  
BNA\_F  
ClientSampleId :  
2S-E1-E4-COMP-(30)

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 403238 |       |       |
| 120     | 12.5  | 10.7   | 16.1  |       |
| 236     | 27.2  | 22.2   | 33.2  |       |

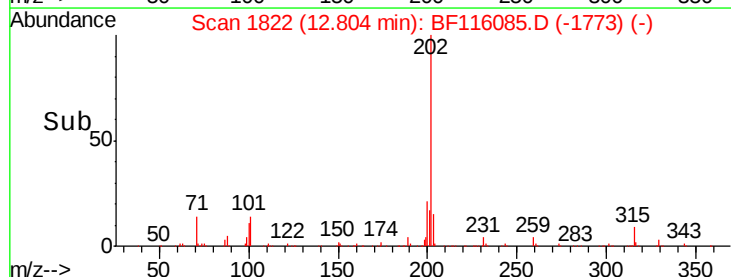
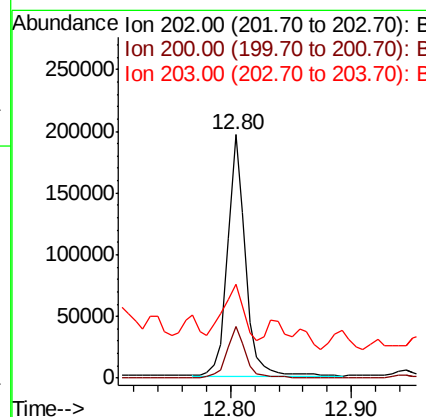
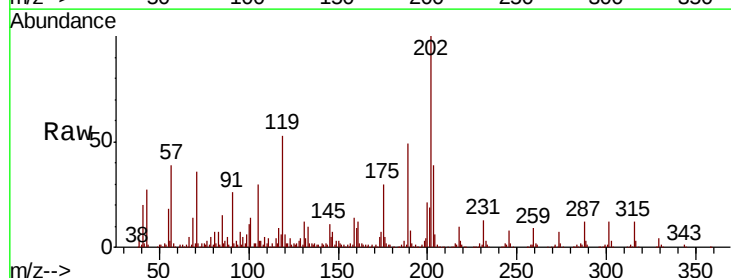
Manual Integrations  
APPROVED

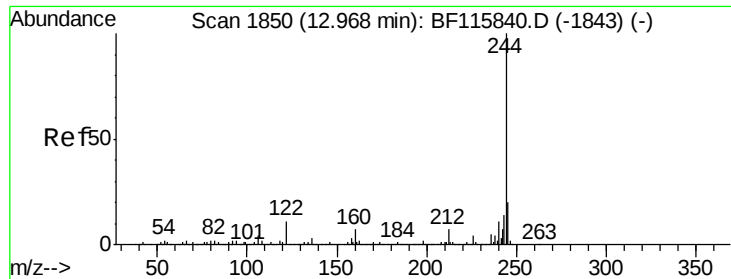
mohammad  
8/14/2019 9:21:25 AM



#78  
Pyrene  
Concen: 6.493 ng  
RT: 12.80 min Scan# 1822  
Delta R.T. -0.01 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 197372 |       |       |
| 200     | 21.1  | 18.0   | 27.0  |       |
| 203     | 38.6  | 14.1   | 21.1  |       |





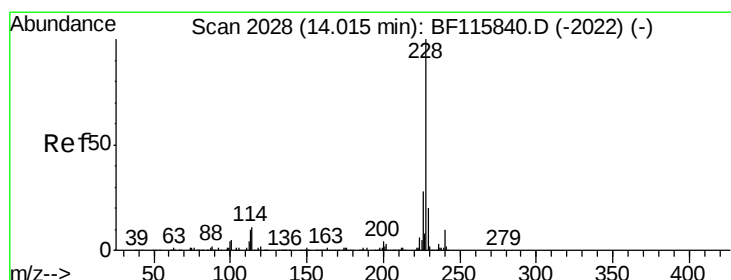
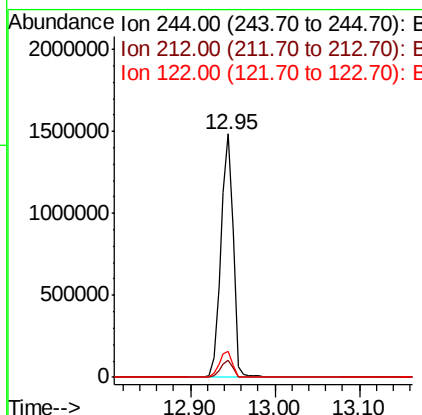
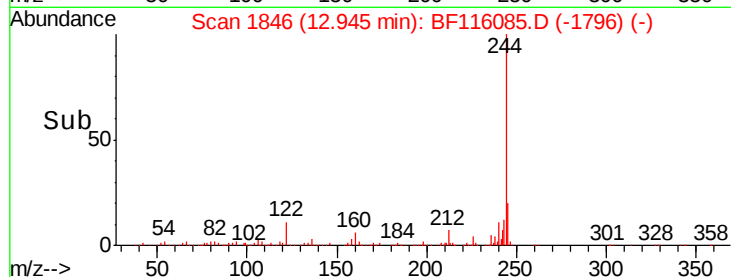
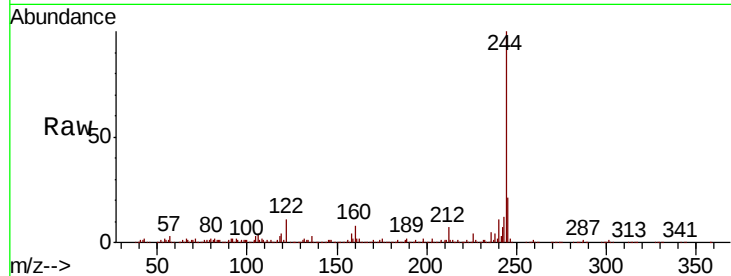
#79  
 Terphenyl-d14  
 Concen: 79.475 ng  
 RT: 12.95 min Scan# 1846  
 Delta R.T. -0.01 min  
 Lab File: BF116085.D  
 Acq: 8 Aug 2019 23:25

Instrument :  
 BNA\_F  
 ClientSampleId :  
 2S-E1-E4-COMP-(30)

Tot Ion:244 Resp: 1520876  
 Ion Ratio Lower Upper  
 244 100  
 212 7.0 5.8 8.8  
 122 10.7 9.0 13.4

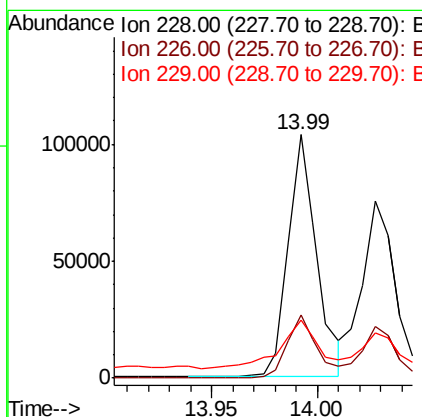
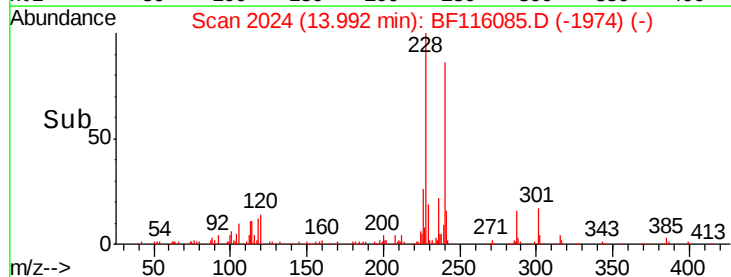
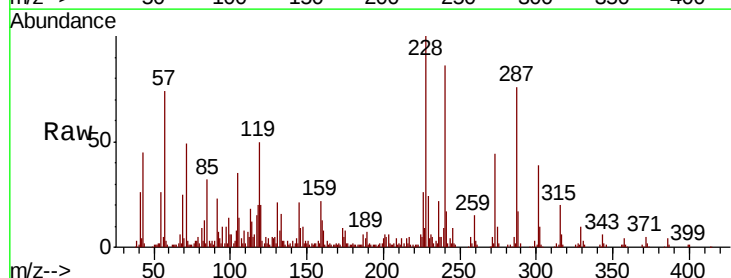
Manual Integrations  
 APPROVED

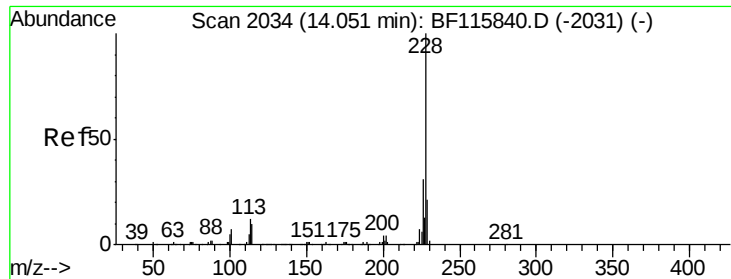
mohammad  
 8/14/2019 9:21:25 AM



#81  
 Benzo(a)anthracene  
 Concen: 3.828 ng  
 RT: 13.99 min Scan# 2024  
 Delta R.T. -0.01 min  
 Lab File: BF116085.D  
 Acq: 8 Aug 2019 23:25

Tgt Ion:228 Resp: 98661  
 Ion Ratio Lower Upper  
 228 100  
 226 26.1 22.7 34.1  
 229 23.9 16.2 24.4





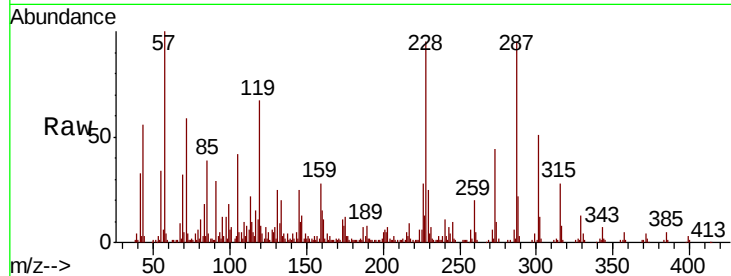
#83  
Chrysene  
Concen: 3.472 ng/mL  
RT: 14.03 min Scan# 2030  
Delta R.T. -0.01 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

Instrument :  
BNA\_F  
ClientSampleId :  
2S-E1-E4-COMP-(30)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.1  | 25.5  | 38.3  |
| 229     | 25.8  | 16.6  | 24.8  |

Manual Integrations  
APPROVED

mohammad  
8/14/2019 9:21:25 AM

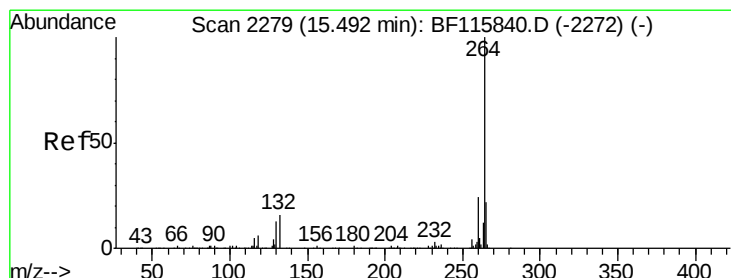
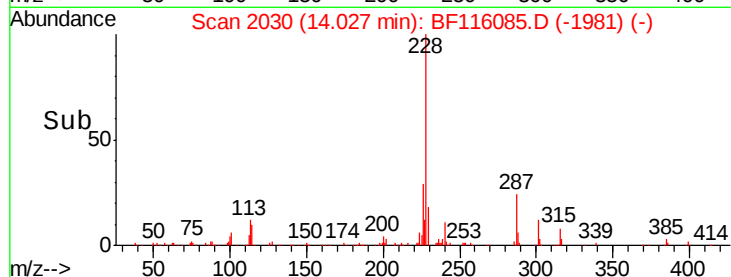
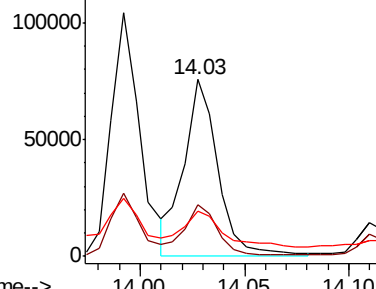


Abundance

Ion 228.00 (227.70 to 228.70): E

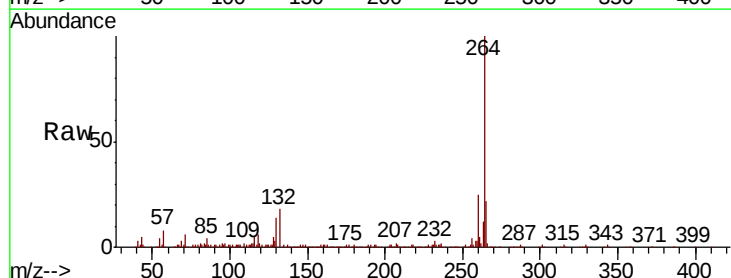
Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.47 min Scan# 2275  
Delta R.T. -0.01 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.6  | 19.7  | 29.5  |
| 265     | 22.0  | 17.4  | 26.0  |

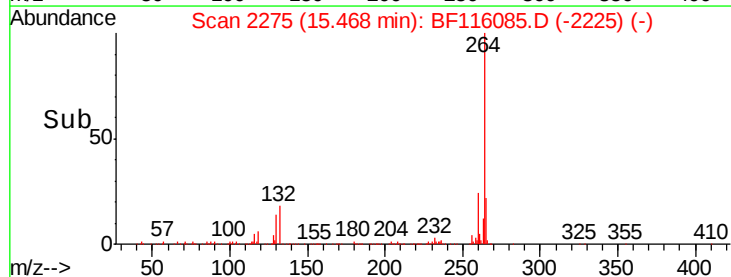
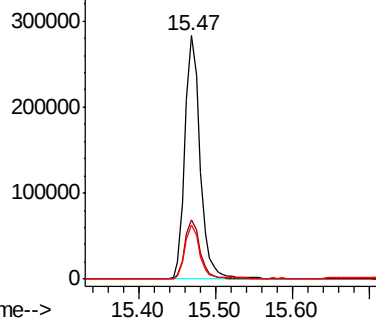


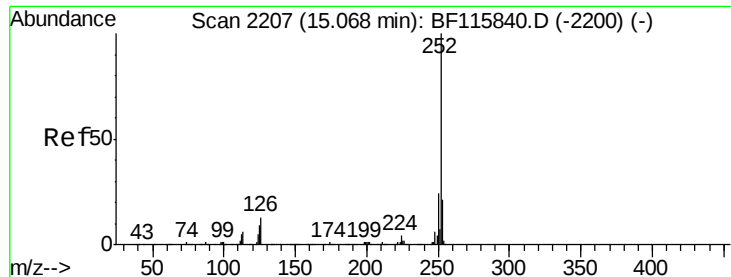
Abundance

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





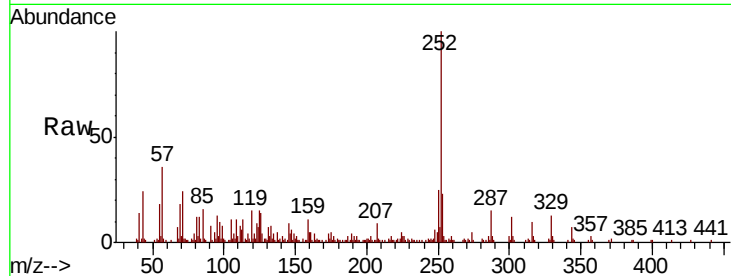
#88  
Benzo(b)fluoranthene  
Concen: 3.661 ng m  
RT: 15.05 min Scan# 2204  
Delta R.T. 0.00 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

Instrument :  
BNA\_F  
ClientSampleId :  
2S-E1-E4-COMP-(30)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.9  | 17.8  | 26.8  |
| 125     | 14.9  | 8.4   | 12.6  |

Manual Integrations  
APPROVED

mohammad  
8/14/2019 9:21:25 AM

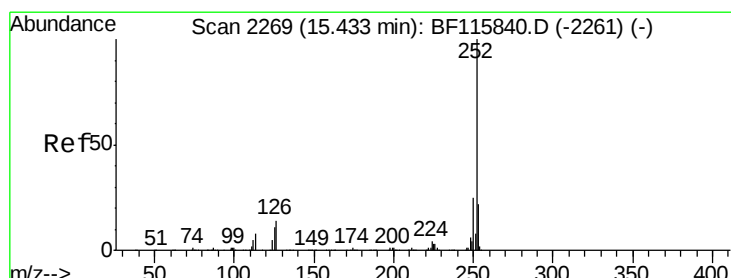
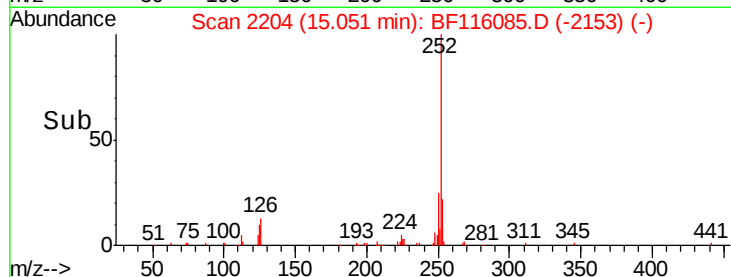
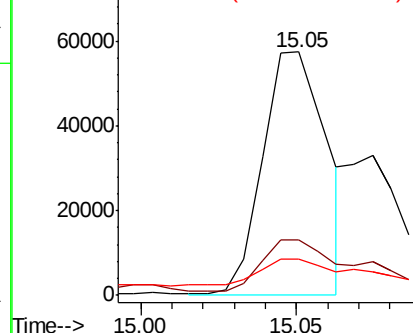


Abundance

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: 3.078 ng  
RT: 15.41 min Scan# 2265  
Delta R.T. -0.01 min  
Lab File: BF116085.D  
Acq: 8 Aug 2019 23:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.0  | 18.0  | 27.0  |
| 125     | 15.6  | 8.9   | 13.3  |

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

