

Data Path : Z:\HPCHEM1\BNA F\DATA\BF060217\  
 Data File : BF095649.D  
 Acq On : 2 Jun 2017 23:17  
 Operator : SJ/MA  
 Sample : I3440-05 5X  
 Misc :  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EO-03-RO-6703-060117

Manual Integrations  
 APPROVED

mohammad  
 6/6/2017 8:49:12 AM

Quant Time: Jun 03 04:50:28 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF050217.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jun 01 18:51:16 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.54  | 152  | 83863    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 9.57  | 136  | 315721   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10        | 12.40 | 164  | 120353   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10        | 14.80 | 188  | 181292   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12            | 18.50 | 240  | 168522   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12            | 20.17 | 264  | 119614   | 20.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.47  | 112  | 109152   | 21.70 | ng    | 0.03     |
| 7) Phenol-d6                | 7.12  | 99   | 130127   | 21.56 | ng    | 0.02     |
| 23) Nitrobenzene-d5         | 8.46  | 82   | 72851    | 14.55 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 13.70 | 330  | 18143    | 18.41 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 11.35 | 172  | 132713   | 15.87 | ng    | 0.00     |
| 78) Terphenyl-d14           | 17.14 | 244  | 85407    | 11.16 | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 70) Phenanthrene            | 14.84 | 178  | 54619    | 5.24  | ng    | 94       |
| 74) Fluoranthene            | 16.60 | 202  | 52396    | 4.90  | ng    | 98       |
| 77) Pyrene                  | 16.91 | 202  | 52060    | 4.13  | ng    | 96       |
| 80) Benzo(a)anthracene      | 18.49 | 228  | 20165    | 2.06  | ng    | 96       |
| 82) Chrysene                | 18.53 | 228  | 19295    | 2.03  | ng    | # 92     |
| 87) Benzo(b)fluoranthene    | 19.77 | 252  | 19178m   | 2.59  | ng    |          |

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

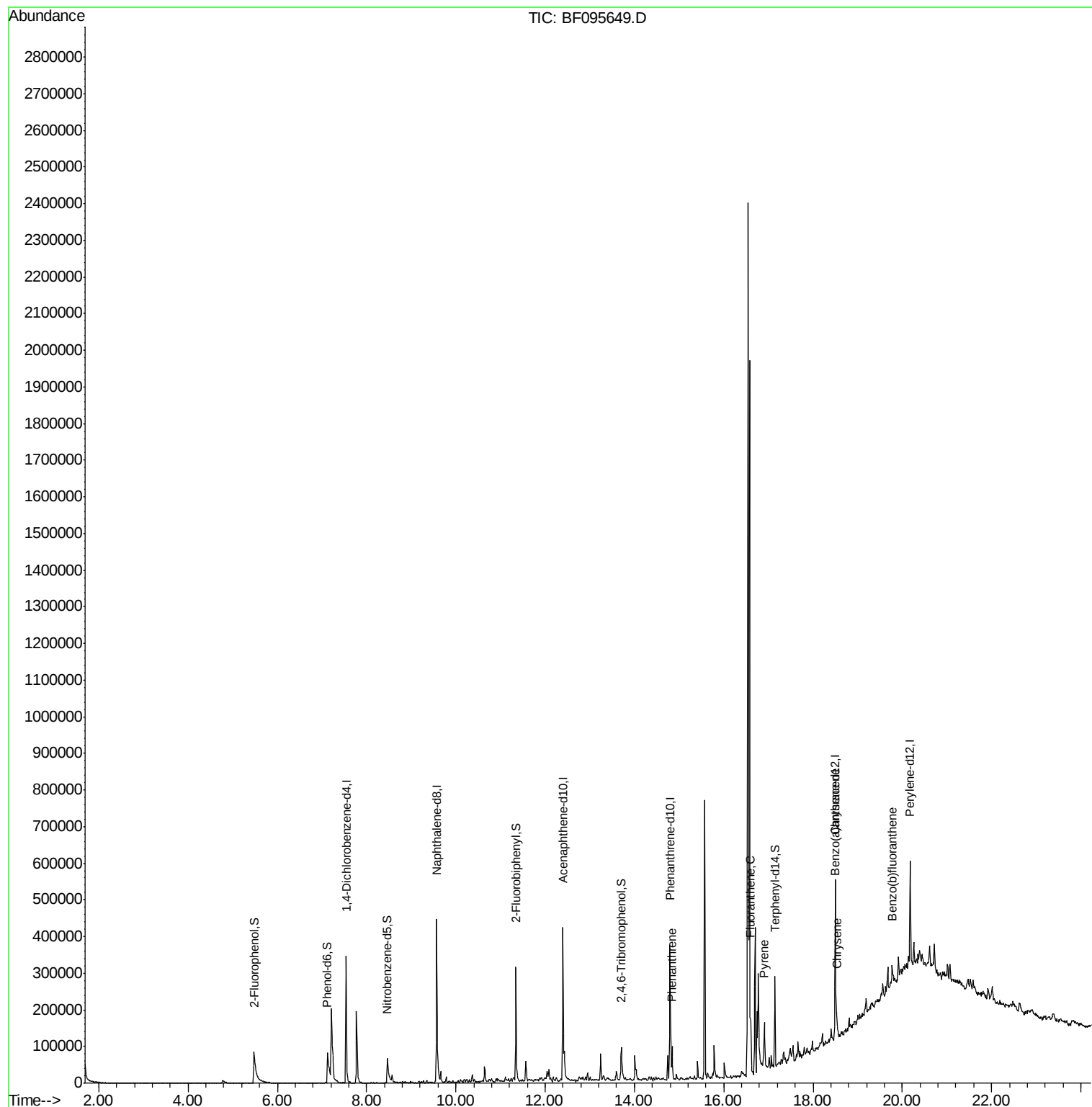
Data Path : Z:\HPCHEM1\BNA F\DATA\BF060217\  
Data File : BF095649.D  
Acq On : 2 Jun 2017 23:17  
Operator : SJ/MA  
Sample : I3440-05 5X  
Misc :  
ALS Vial : 19 Sample Multiplier: 1

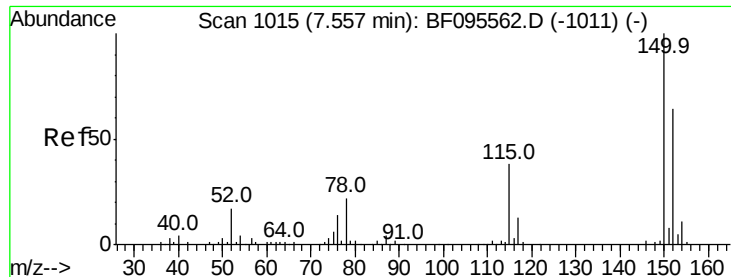
Instrument :  
BNA\_F  
ClientSampleId :  
EO-03-RO-6703-060117

Manual Integrations  
APPROVED

mohammad  
6/6/2017 8:49:12 AM

Quant Time: Jun 03 04:50:28 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF050217.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jun 01 18:51:16 2017  
Response via : Initial Calibration





#1

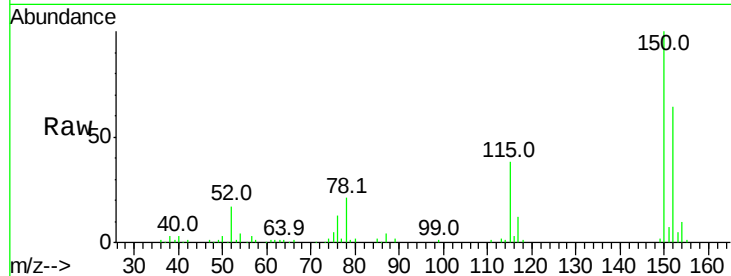
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.54 min Scan# 995  
Delta R.T. 0.00 min  
Lab File: BF095649.D  
Acq: 2 Jun 2017 23:17

Instrument :  
BNA\_F  
ClientSampleId :  
EO-03-RO-6703-060117

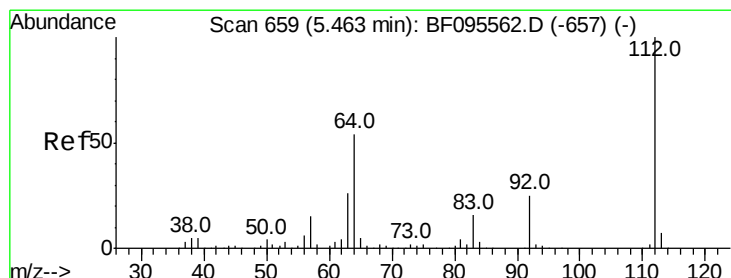
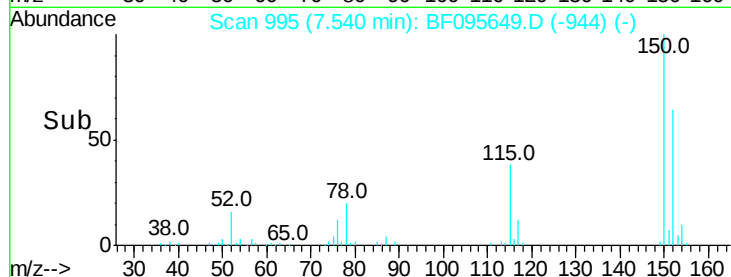
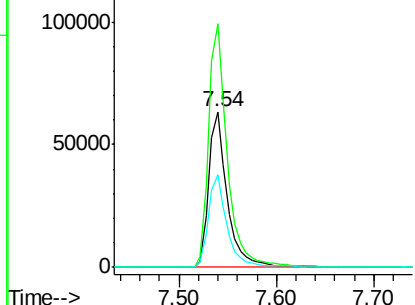
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 156.3 | 126.2 | 189.2 |
| 115     | 59.3  | 52.2  | 78.2  |

Manual Integrations  
APPROVED

mohammad  
6/6/2017 8:49:12 AM



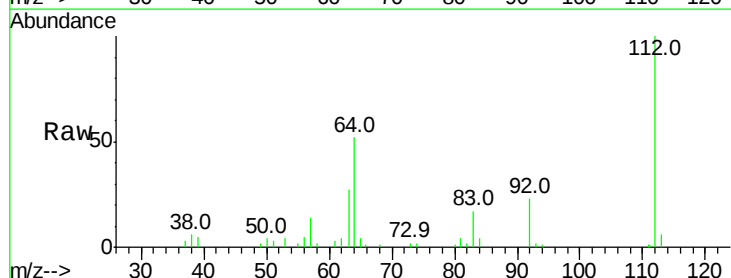
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



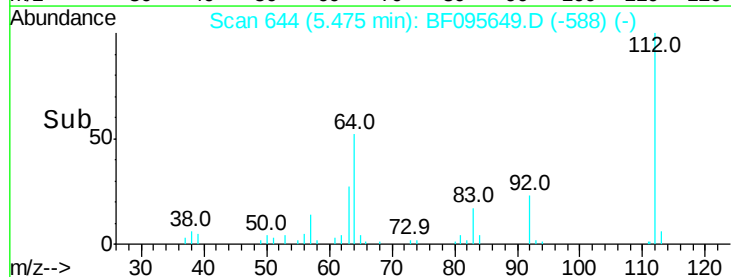
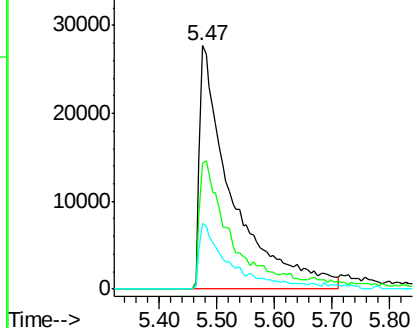
#5

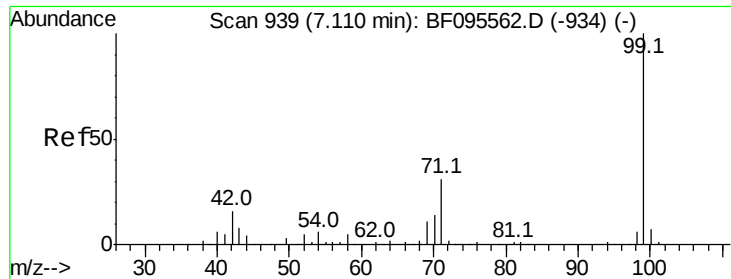
2-Fluorophenol  
Concen: 21.70 ng  
RT: 5.47 min Scan# 644  
Delta R.T. 0.03 min  
Lab File: BF095649.D  
Acq: 2 Jun 2017 23:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 51.5  | 46.0  | 69.0  |
| 63      | 26.8  | 23.4  | 35.0  |



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BF0  
Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 21.56 ng

RT: 7.12 min Scan# 924

Delta R.T. 0.02 min

Lab File: BF095649.D

Acq: 2 Jun 2017 23:17

Instrument :

BNA\_F

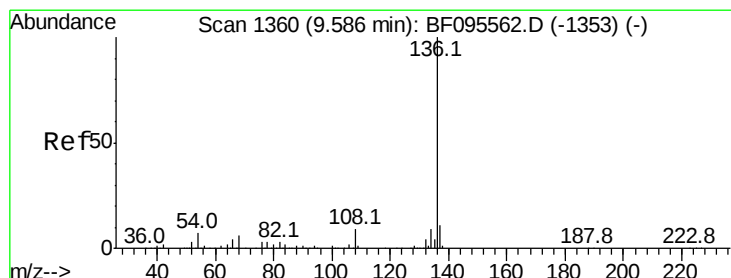
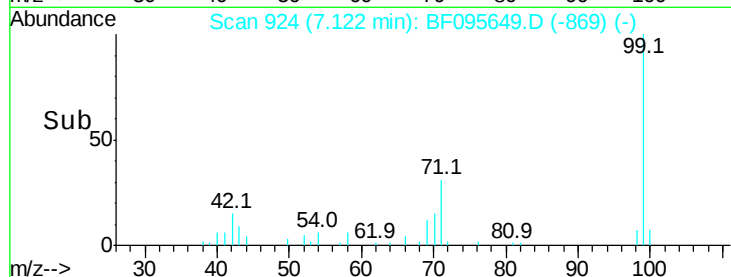
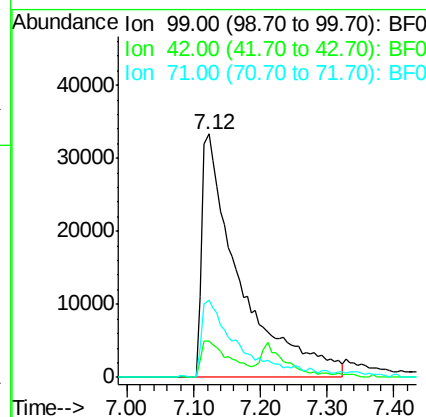
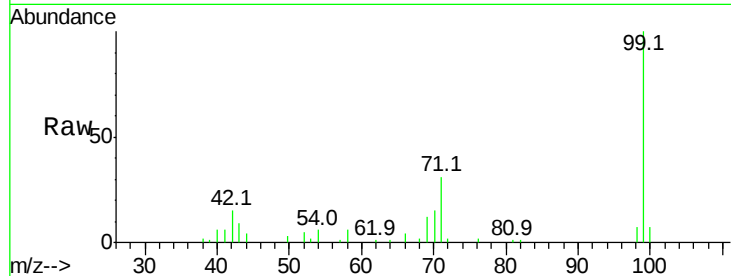
ClientSampleId :

EO-03-RO-6703-060117

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 99      | 100  |       | 130127 |       |       |
| 42      | 15.1 | 13.5  | 20.3   |       |       |
| 71      | 31.5 | 24.5  | 36.7   |       |       |

Manual Integrations  
APPROVED

mohammad  
6/6/2017 8:49:12 AM



#21

Naphthalene-d8

Concen: 20.00 ng

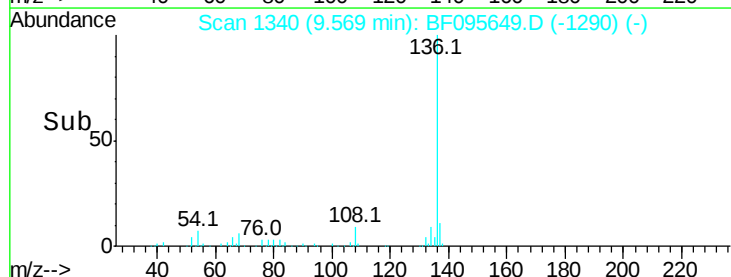
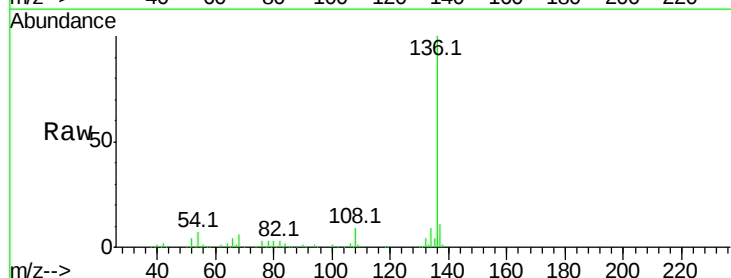
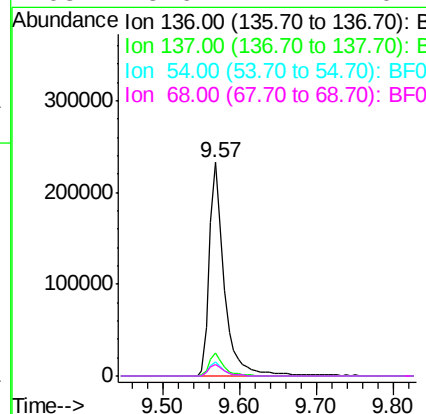
RT: 9.57 min Scan# 1340

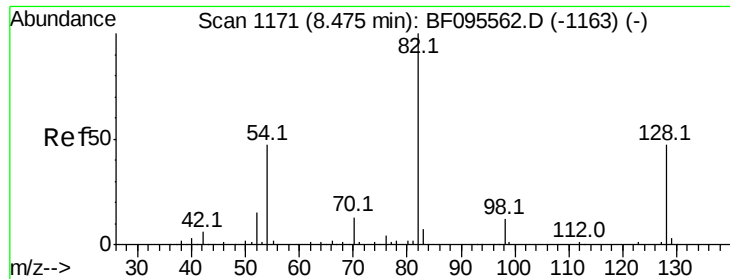
Delta R.T. -0.01 min

Lab File: BF095649.D

Acq: 2 Jun 2017 23:17

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 136     | 100  |       | 315721 |       |       |
| 137     | 10.8 | 8.5   | 12.7   |       |       |
| 54      | 6.7  | 4.9   | 7.3    |       |       |
| 68      | 5.6  | 4.1   | 6.1    |       |       |





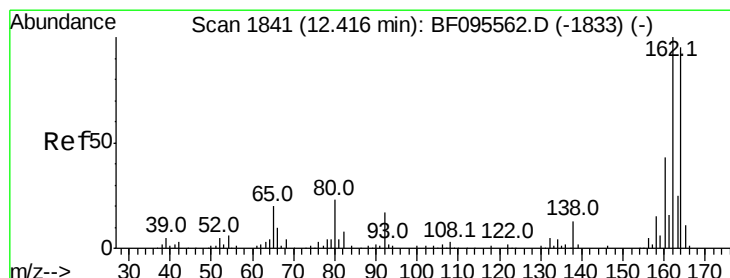
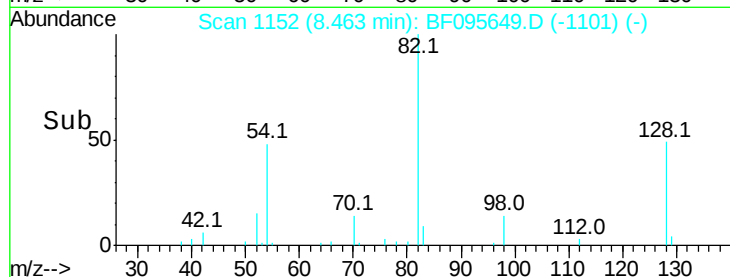
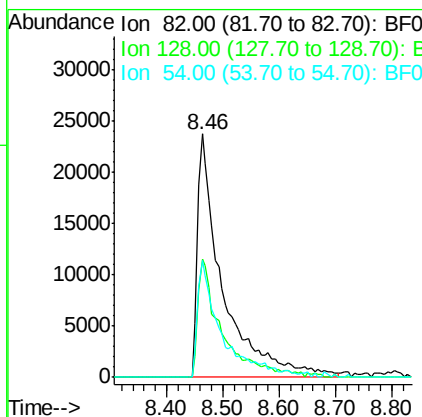
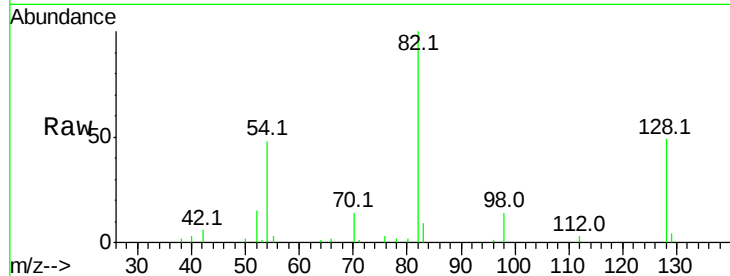
#23  
Nitrobenzene-d5  
Concen: 14.55 ng  
RT: 8.46 min Scan# 1152  
Delta R.T. 0.00 min  
Lab File: BF095649.D  
Acq: 2 Jun 2017 23:17

Instrument :  
BNA\_F  
ClientSampleId :  
EO-03-RO-6703-060117

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 48.6  | 34.0  | 51.0  |
| 54      | 47.8  | 42.2  | 63.2  |

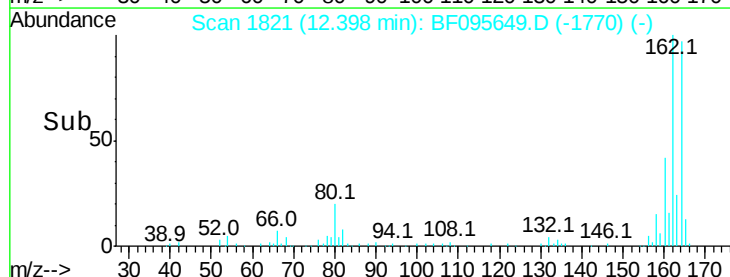
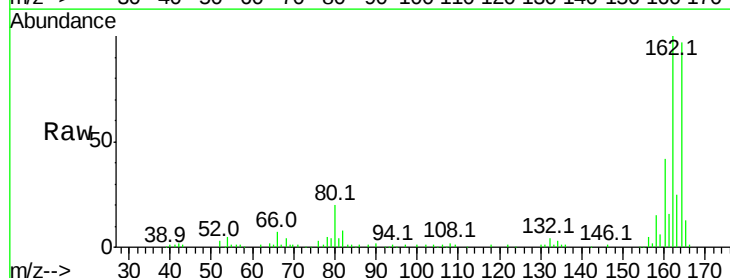
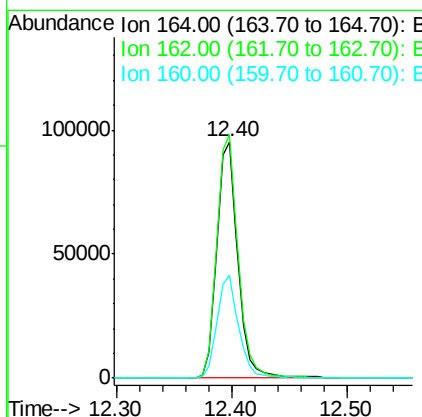
Manual Integrations  
APPROVED

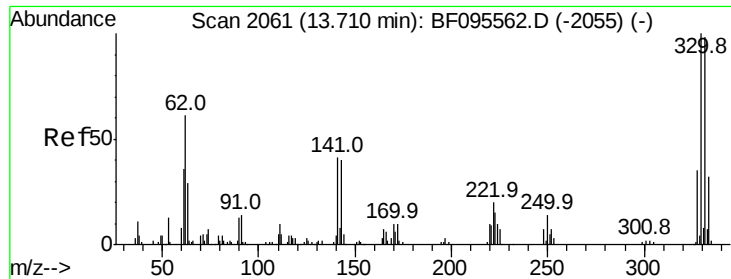
mohammad  
6/6/2017 8:49:12 AM



#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 12.40 min Scan# 1821  
Delta R.T. 0.00 min  
Lab File: BF095649.D  
Acq: 2 Jun 2017 23:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 103.1 | 82.6  | 123.8 |
| 160     | 43.4  | 36.2  | 54.2  |





#41

2,4,6-Tribromophenol

Concen: 18.41 ng

RT: 13.70 min Scan# 2043

Delta R.T. 0.01 min

Lab File: BF095649.D

Acq: 2 Jun 2017 23:17

Instrument :

BNA\_F

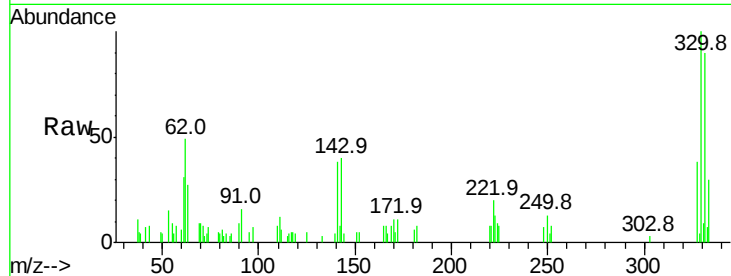
ClientSampleId :

EO-03-RO-6703-060117

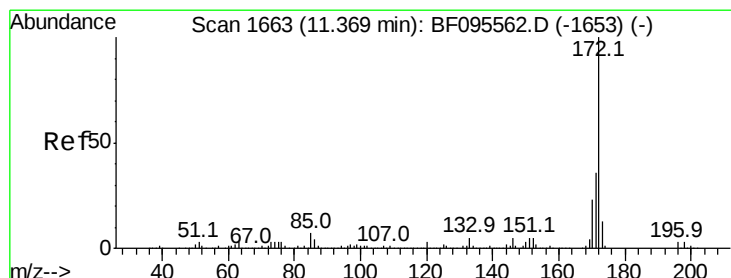
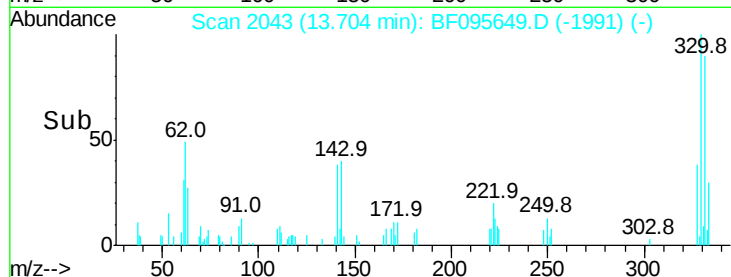
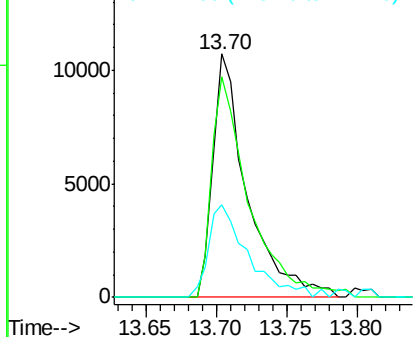
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 330   | Resp: | 18143 |
| Ion Ratio | Lower | Upper |       |
| 330       | 100   |       |       |
| 332       | 98.7  | 76.6  | 115.0 |
| 141       | 43.4  | 31.4  | 47.2  |

Manual Integrations  
APPROVED

mohammad  
6/6/2017 8:49:12 AM



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



#44

2-Fluorobiphenyl

Concen: 15.87 ng

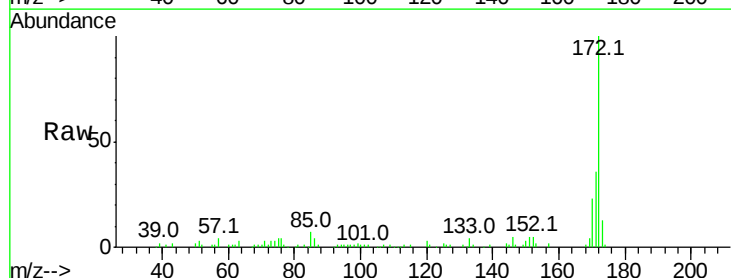
RT: 11.35 min Scan# 1642

Delta R.T. -0.01 min

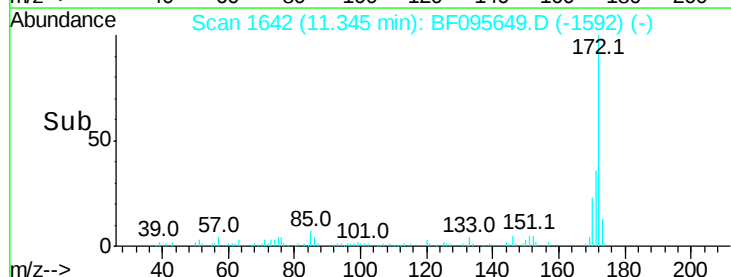
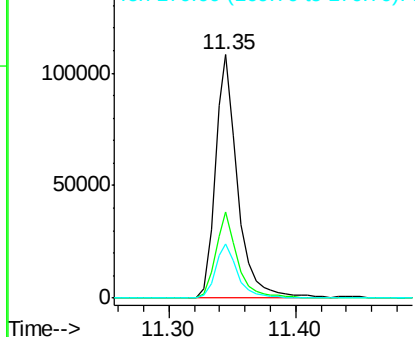
Lab File: BF095649.D

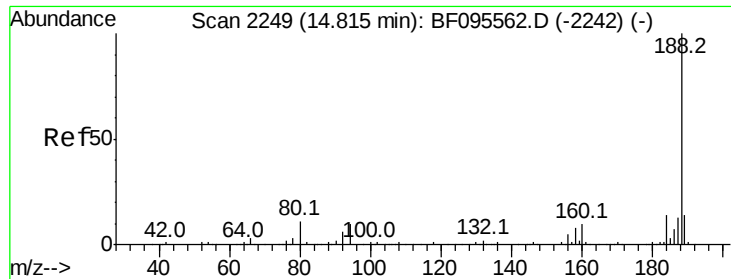
Acq: 2 Jun 2017 23:17

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 172   | Resp: | 132713 |
| Ion Ratio | Lower | Upper |        |
| 172       | 100   |       |        |
| 171       | 35.6  | 29.6  | 44.4   |
| 170       | 22.5  | 19.8  | 29.8   |



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





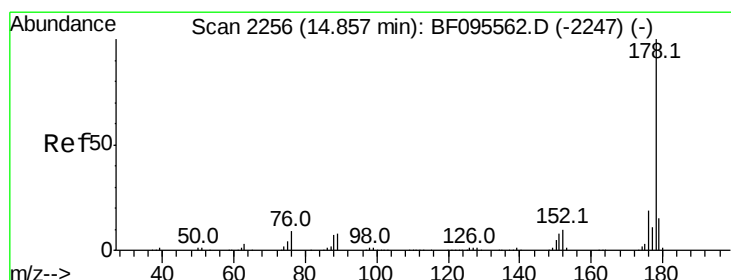
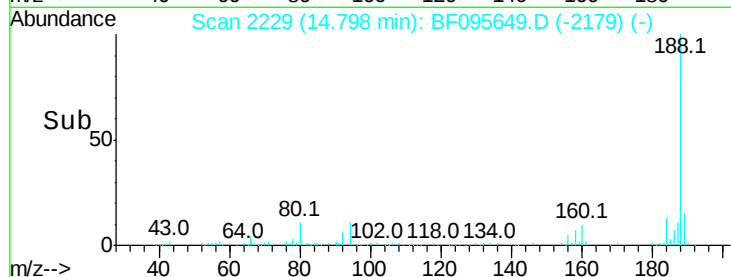
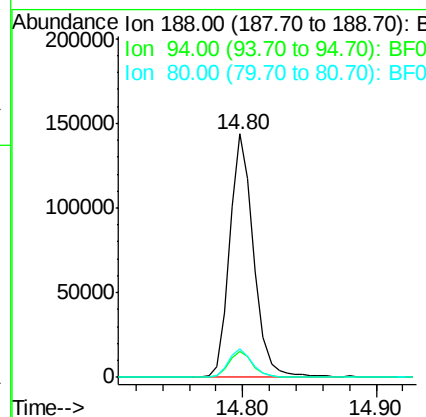
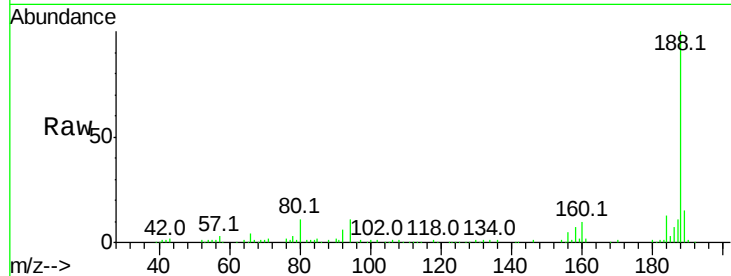
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 14.80 min Scan# 2229  
Delta R.T. -0.01 min  
Lab File: BF095649.D  
Acq: 2 Jun 2017 23:17

Instrument :  
BNA\_F  
ClientSampleId :  
EO-03-RO-6703-060117

| Tot Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 188     | 100   |            |            |
| 94      | 10.6  | 9.4        | 14.2       |
| 80      | 11.5  | 10.2       | 15.2       |

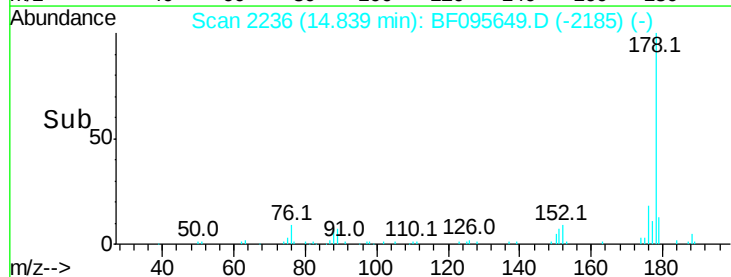
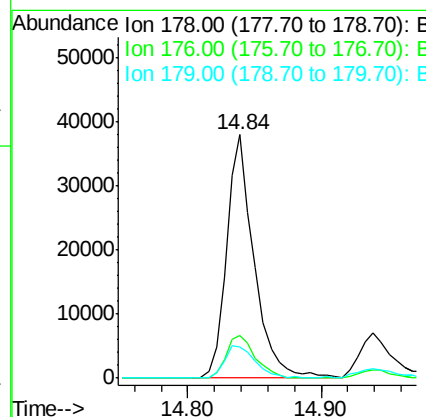
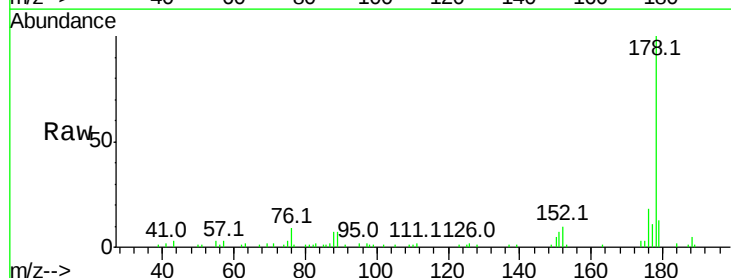
Manual Integrations  
APPROVED

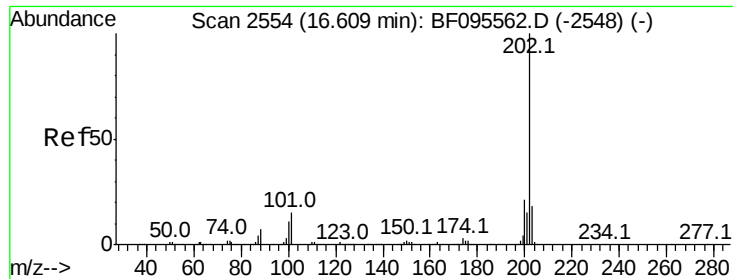
mohammad  
6/6/2017 8:49:12 AM



#70  
Phenanthrene  
Concen: 5.24 ng  
RT: 14.84 min Scan# 2236  
Delta R.T. 0.00 min  
Lab File: BF095649.D  
Acq: 2 Jun 2017 23:17

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 178     | 100   |            |            |
| 176     | 17.6  | 16.2       | 24.4       |
| 179     | 12.8  | 12.6       | 19.0       |





#74

Fluoranthene

Concen: 4.90 ng

RT: 16.60 min Scan# 2536

Delta R.T. 0.00 min

Lab File: BF095649.D

Acq: 2 Jun 2017 23:17

Instrument :

BNA\_F

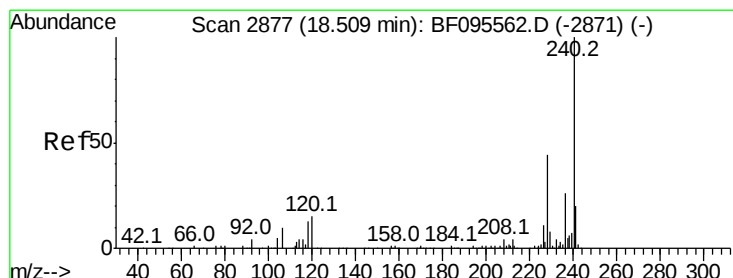
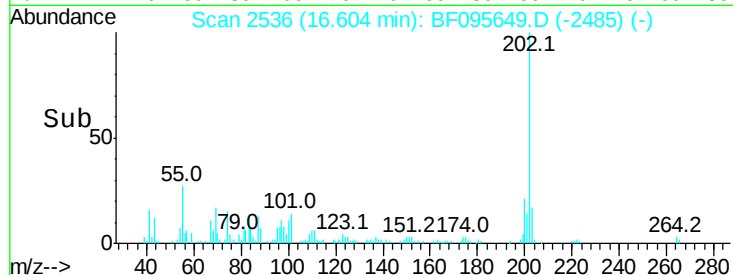
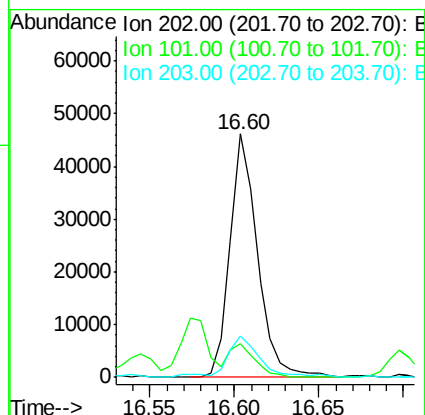
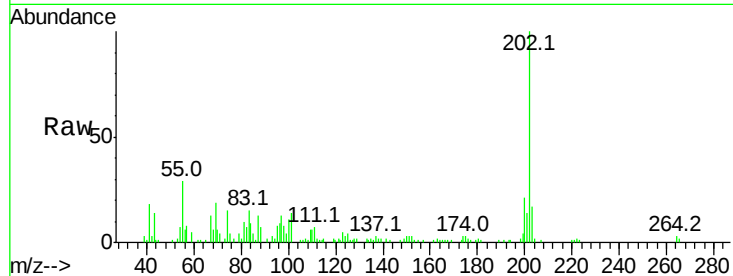
ClientSampleId :

EO-03-RO-6703-060117

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 202     | 100   | 52396 |       |       |
| 101     | 14.0  | 0.0   | 33.2  |       |
| 203     | 16.9  | 0.0   | 38.1  |       |

Manual Integrations  
APPROVED

mohammad  
6/6/2017 8:49:12 AM



#75

Chrysene-d12

Concen: 20.00 ng

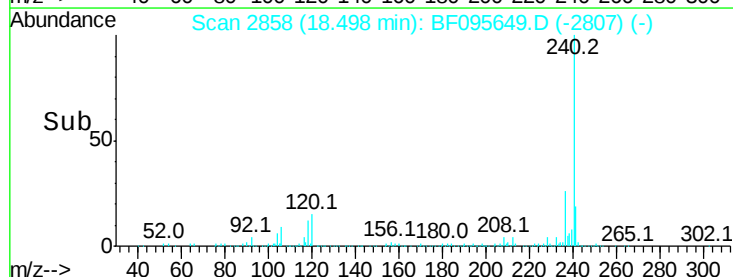
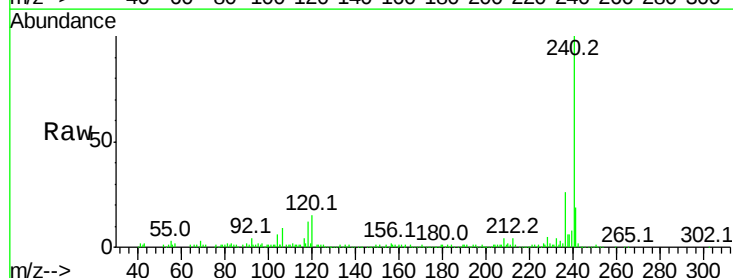
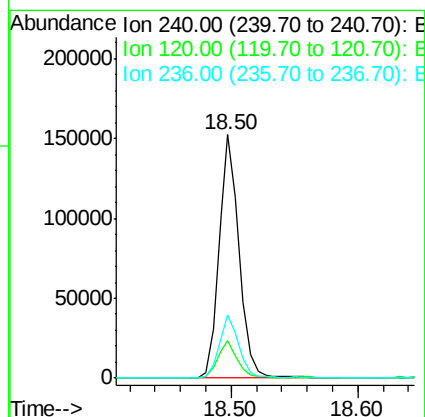
RT: 18.50 min Scan# 2858

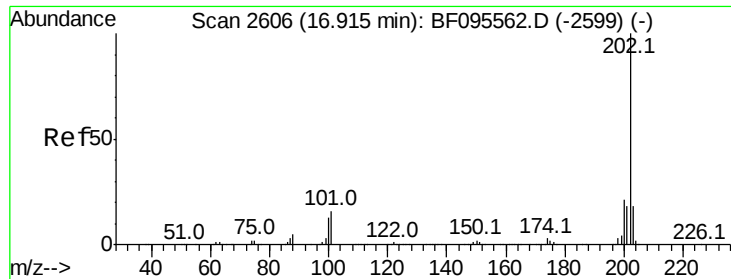
Delta R.T. 0.00 min

Lab File: BF095649.D

Acq: 2 Jun 2017 23:17

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 168522 |       |       |
| 120     | 15.5  | 5.8    | 8.8#  |       |
| 236     | 26.0  | 20.5   | 30.7  |       |





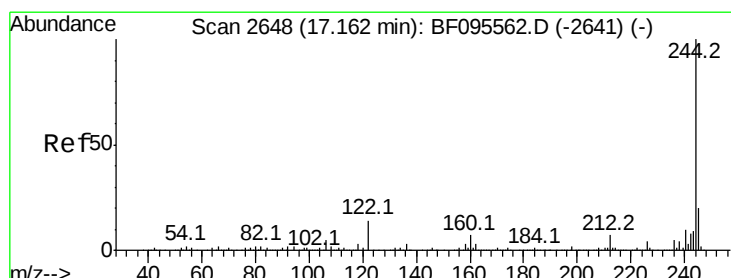
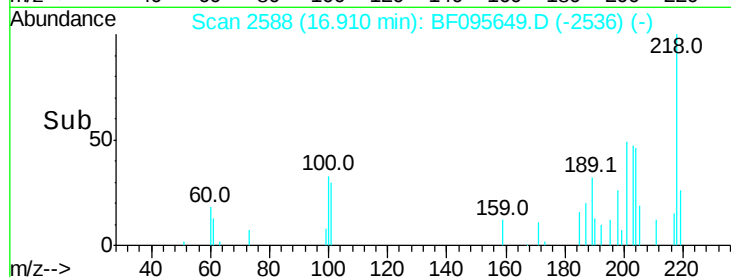
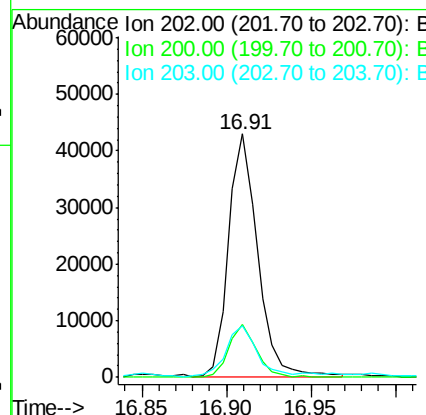
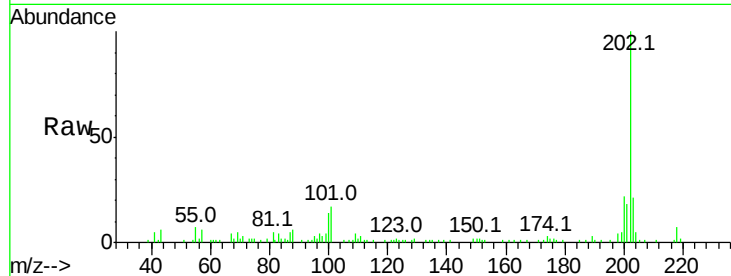
#77  
Pvrene  
Concen: 4.13 ng  
RT: 16.91 min Scan# 2588  
Delta R.T. 0.01 min  
Lab File: BF095649.D  
Acq: 2 Jun 2017 23:17

Instrument :  
BNA\_F  
ClientSampleId :  
EO-03-RO-6703-060117

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.5  | 17.6  | 26.4  |
| 203     | 21.2  | 14.4  | 21.6  |

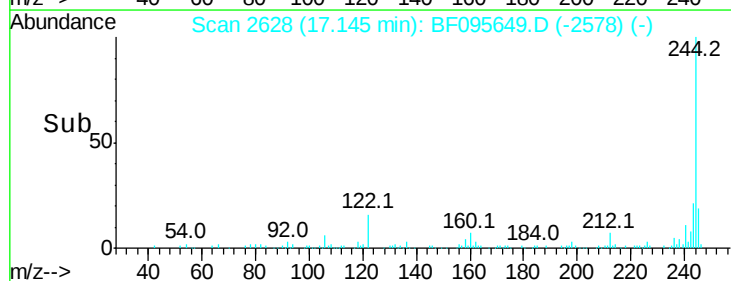
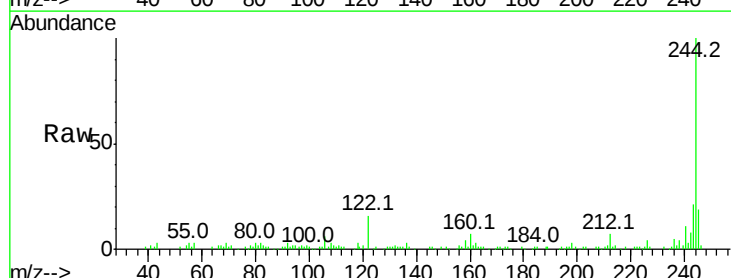
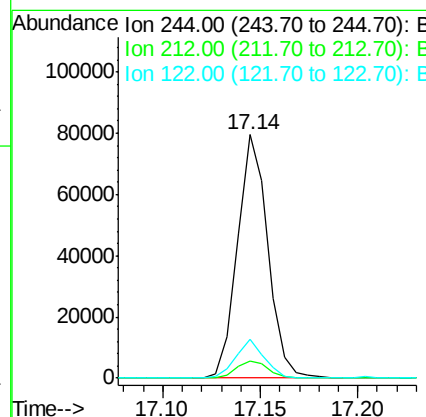
Manual Integrations  
APPROVED

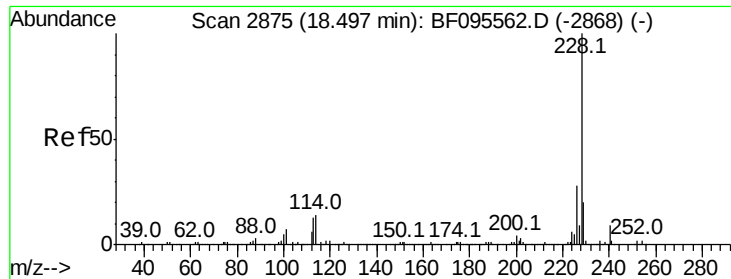
mohammad  
6/6/2017 8:49:12 AM



#78  
Terphenyl-d14  
Concen: 11.16 ng  
RT: 17.14 min Scan# 2628  
Delta R.T. -0.01 min  
Lab File: BF095649.D  
Acq: 2 Jun 2017 23:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.2   | 6.0   | 9.0   |
| 122     | 15.9  | 10.3  | 15.5  |





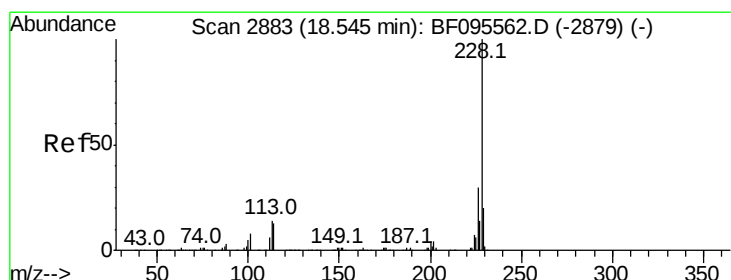
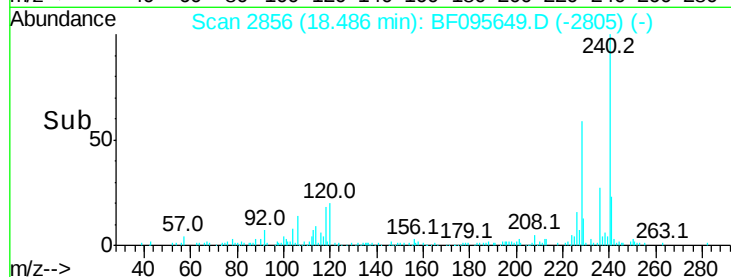
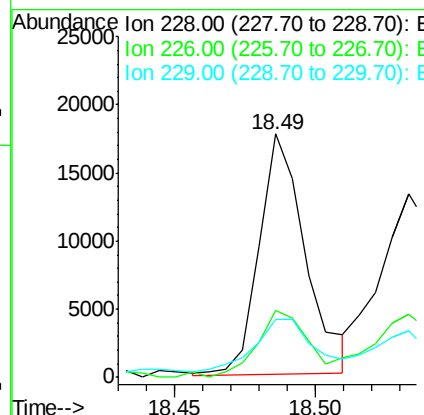
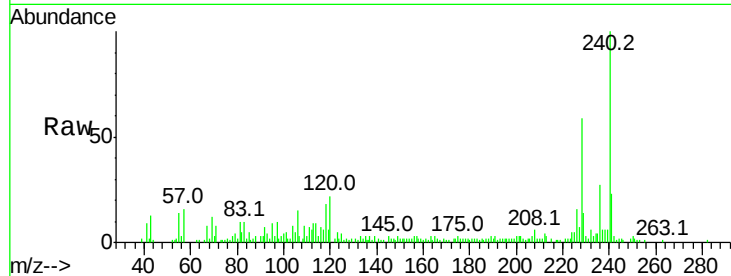
#80  
Benzo(a)anthracene  
Concen: 2.06 ng  
RT: 18.49 min Scan# 2856  
Delta R.T. 0.00 min  
Lab File: BF095649.D  
Acq: 2 Jun 2017 23:17

Instrument :  
BNA\_F  
ClientSampleId :  
EO-03-RO-6703-060117

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 20165 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 27.7  | 22.6  | 33.8  |
| 229       | 23.7  | 16.3  | 24.5  |

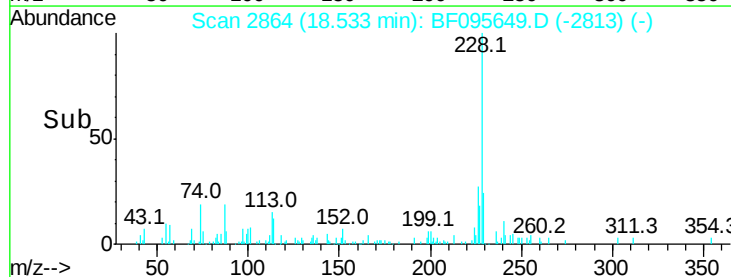
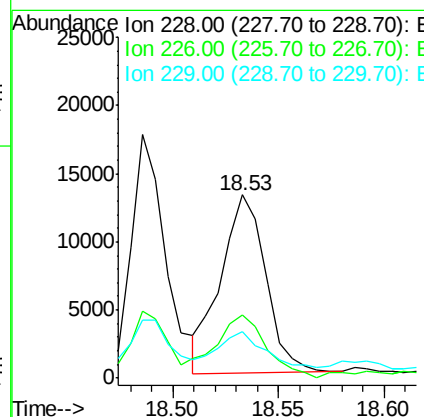
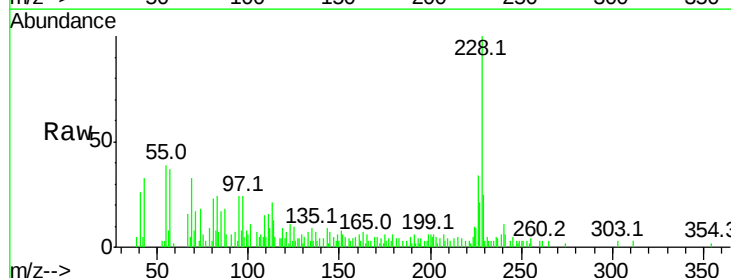
Manual Integrations  
APPROVED

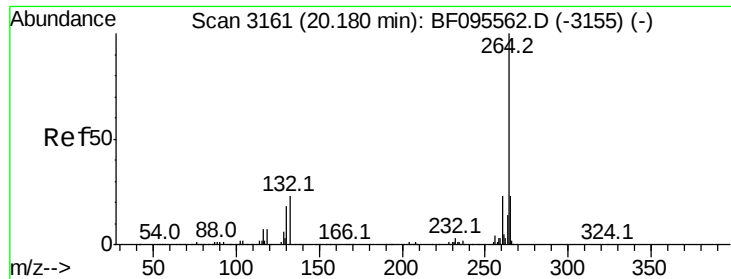
mohammad  
6/6/2017 8:49:12 AM



#82  
Chrysene  
Concen: 2.03 ng  
RT: 18.53 min Scan# 2864  
Delta R.T. 0.00 min  
Lab File: BF095649.D  
Acq: 2 Jun 2017 23:17

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 228   | Resp: | 19295 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 34.3  | 24.9  | 37.3  |
| 229       | 25.1  | 15.8  | 23.6# |





#86

Pervlene-d12

Concen: 20.00 ng

RT: 20.17 min Scan# 3143

Delta R.T. 0.01 min

Lab File: BF095649.D

Acq: 2 Jun 2017 23:17

Instrument :

BNA\_F

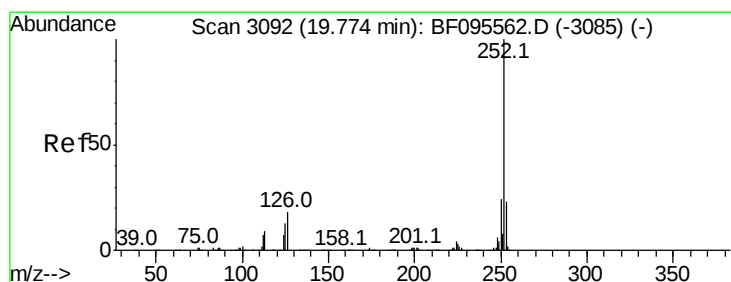
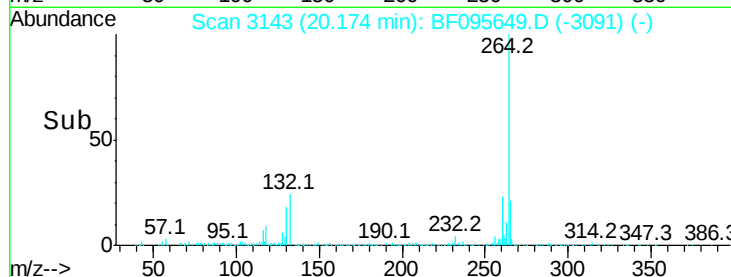
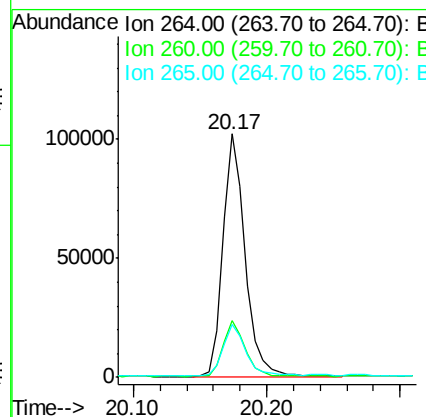
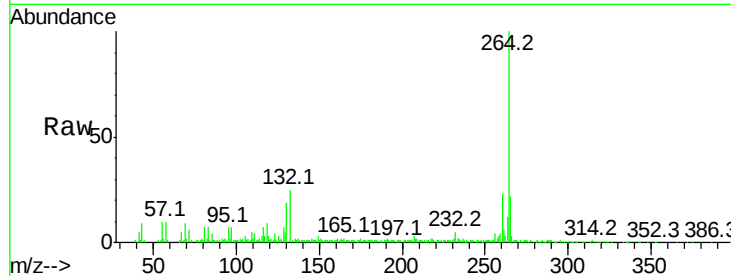
ClientSampleId :

EO-03-RO-6703-060117

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 264   | Resp: | 119614 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 23.2  | 19.5  | 29.3   |
| 265       | 21.9  | 17.2  | 25.8   |

Manual Integrations  
APPROVED

mohammad  
6/6/2017 8:49:12 AM



#87

Benzo(b)fluoranthene

Concen: 2.59 ng m

RT: 19.77 min Scan# 3075

Delta R.T. 0.01 min

Lab File: BF095649.D

Acq: 2 Jun 2017 23:17

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 19178 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 27.6  | 18.1  | 27.1# |
| 125       | 29.8  | 9.8   | 14.8# |

