

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022417\  
 Data File : BF093194.D  
 Acq On : 25 Feb 2017 15:53  
 Operator : SJ/MA  
 Sample : I1973-06  
 Misc :  
 ALS Vial : 47 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-Y6S-SW

Manual Integrations  
 APPROVED

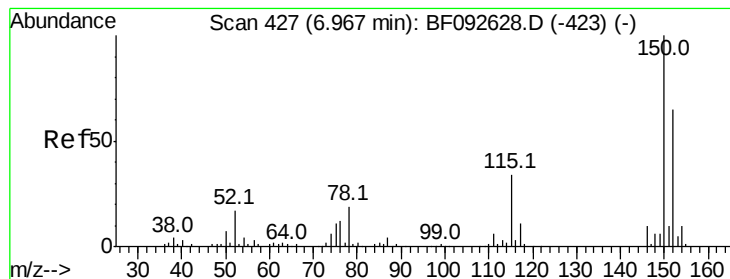
mohammad  
 2/27/2017 1:09:08 PM

Quant Time: Feb 27 10:25:40 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF013017.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Feb 17 17:31:55 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min)    |
|-----------------------------|-------|------|----------|--------|-------|-------------|
| 1) 1,4-Dichlorobenzene-d4   | 6.84  | 152  | 140282   | 20.00  | ng    | -0.01       |
| 21) Naphthalene-d8          | 8.13  | 136  | 515914   | 20.00  | ng    | -0.01       |
| 38) Acenaphthene-d10        | 9.88  | 164  | 213162   | 20.00  | ng    | -0.01       |
| 63) Phenanthrene-d10        | 11.37 | 188  | 332471   | 20.00  | ng    | -0.01       |
| 75) Chrysene-d12            | 14.02 | 240  | 325502   | 20.00  | ng    | 0.00        |
| 86) Perylene-d12            | 15.46 | 264  | 225612   | 20.00  | ng    | 0.01        |
| System Monitoring Compounds |       |      |          |        |       |             |
| 5) 2-Fluorophenol           | 5.45  | 112  | 1128616  | 138.03 | ng    | 0.00        |
| 7) Phenol-d6                | 6.50  | 99   | 1356415  | 128.93 | ng    | 0.01        |
| 23) Nitrobenzene-d5         | 7.41  | 82   | 828413   | 89.42  | ng    | -0.01       |
| 41) 2,4,6-Tribromophenol    | 10.68 | 330  | 215199   | 139.58 | ng    | 0.00        |
| 44) 2-Fluorobiphenyl        | 9.21  | 172  | 1188355  | 101.00 | ng    | -0.01       |
| 78) Terphenyl-d14           | 12.96 | 244  | 755500   | 54.54  | ng    | -0.01       |
| Target Compounds            |       |      |          |        |       |             |
| 10) Phenol                  | 6.51  | 94   | 92266    | 7.50   | ng    | Qvalue # 78 |
| 49) Dimethylphthalate       | 9.61  | 163  | 100823   | 7.02   | ng    | 99          |
| 70) Phenanthrene            | 11.39 | 178  | 62379    | 3.27   | ng    | 98          |
| 74) Fluoranthene            | 12.59 | 202  | 161129   | 8.20   | ng    | 92          |
| 77) Pyrene                  | 12.82 | 202  | 178110   | 7.31   | ng    | 97          |
| 80) Benzo(a)anthracene      | 14.01 | 228  | 174221   | 8.75   | ng    | 98          |
| 82) Chrysene                | 14.04 | 228  | 165519m  | 8.88   | ng    |             |
| 85) Indeno(1,2,3-cd)pyrene  | 16.87 | 276  | 81473    | 5.64   | ng    | 98          |
| 87) Benzo(b)fluoranthene    | 15.04 | 252  | 210328m  | 14.16  | ng    |             |
| 88) Benzo(k)fluoranthene    | 15.06 | 252  | 41607m   | 3.25   | ng    |             |
| 89) Benzo(a)pyrene          | 15.39 | 252  | 143767   | 11.19  | ng    | # 94        |
| 90) Dibenzo(a,h)anthracene  | 16.87 | 278  | 27681m   | 2.67   | ng    |             |
| 91) Benzo(a,h,i)perylene    | 17.30 | 276  | 92010    | 8.77   | ng    | # 86        |

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





#1

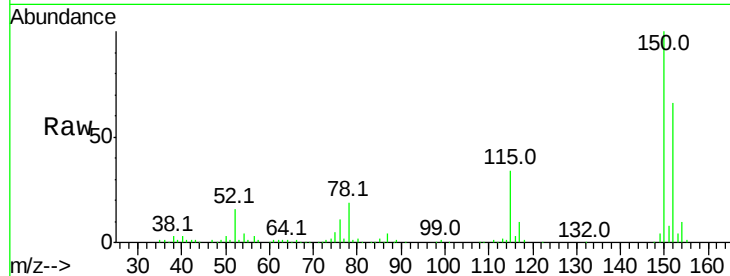
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.84 min Scan# 416  
Delta R.T. -0.01 min  
Lab File: BF093194.D  
Acq: 25 Feb 2017 15:53

Instrument :  
BNA\_F  
ClientSampled :  
E2-Y6S-SW

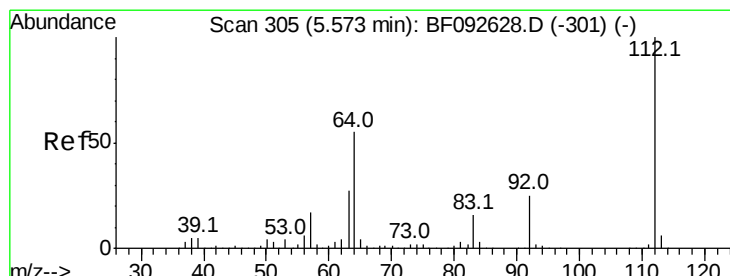
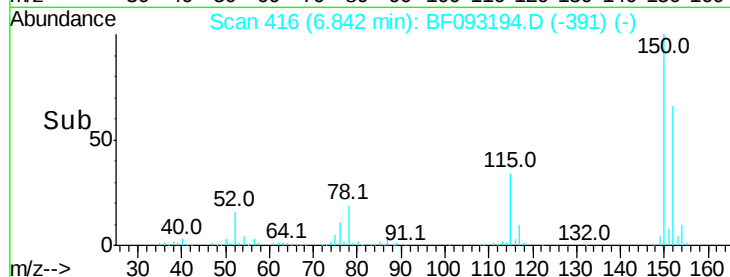
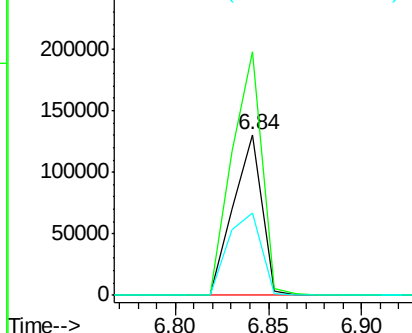
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 151.7 | 124.9 | 187.3 |
| 115     | 50.9  | 46.0  | 69.0  |

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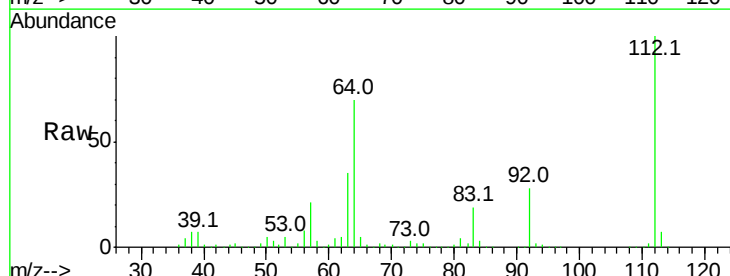
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



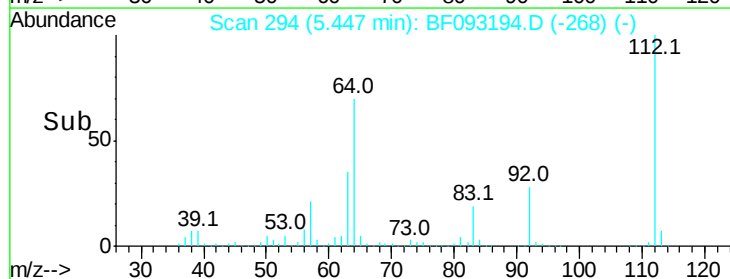
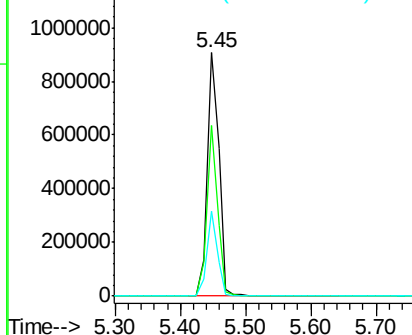
#5

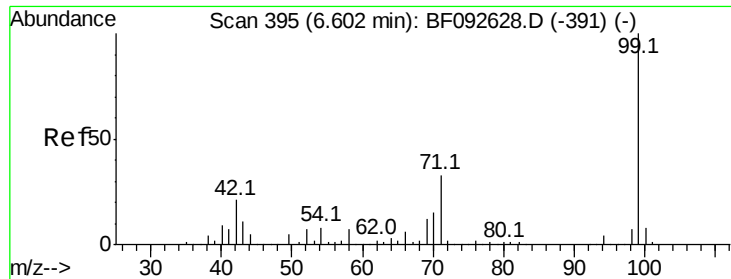
2-Fluorophenol  
Concen: 138.03 ng  
RT: 5.45 min Scan# 294  
Delta R.T. -0.00 min  
Lab File: BF093194.D  
Acq: 25 Feb 2017 15:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 70.0  | 46.1  | 69.1# |
| 63      | 34.7  | 23.8  | 35.6  |



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: 128.93 ng

RT: 6.50 min Scan# 386

Delta R.T. 0.01 min

Lab File: BF093194.D

Acq: 25 Feb 2017 15:53

Instrument :

BNA\_F

ClientSampleId :

E2-Y6S-SW

Tot Ion: 99 Resp: 1356415

Ion Ratio Lower Upper

99 100

42 20.5 15.6 23.4

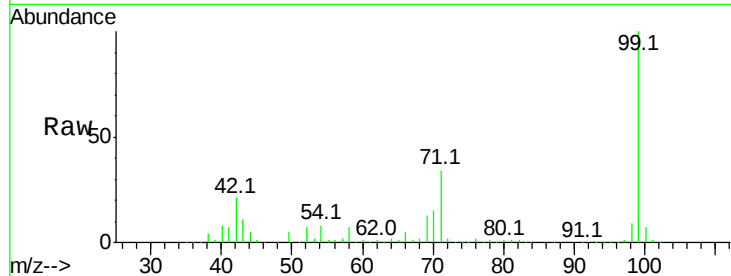
71 33.9 27.5 41.3

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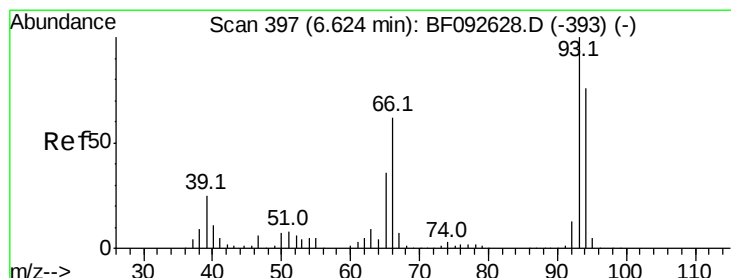
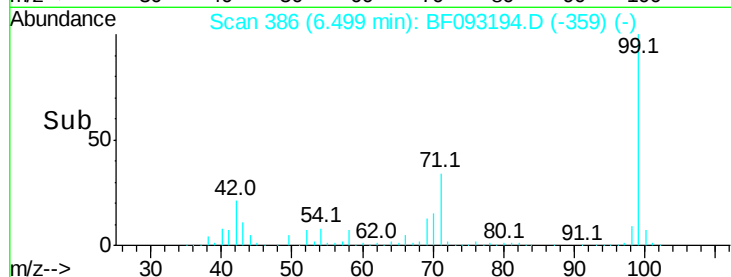
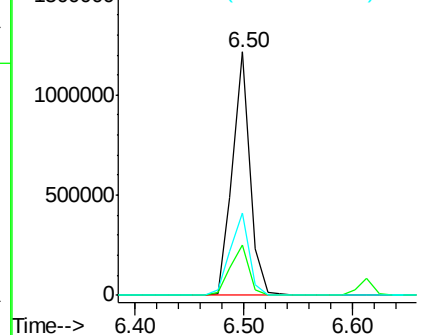
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Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0



#10

Phenol

Concen: 7.50 ng

RT: 6.51 min Scan# 387

Delta R.T. -0.00 min

Lab File: BF093194.D

Acq: 25 Feb 2017 15:53

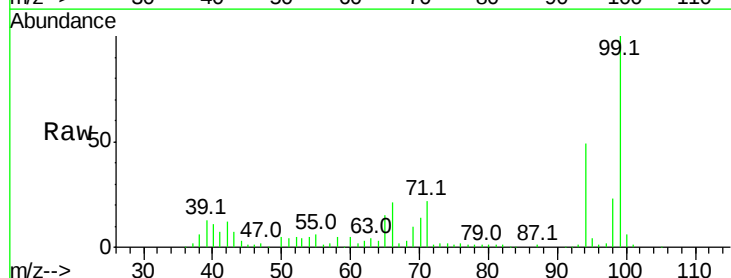
Tgt Ion: 94 Resp: 92266

Ion Ratio Lower Upper

94 100

65 30.9 21.4 61.4

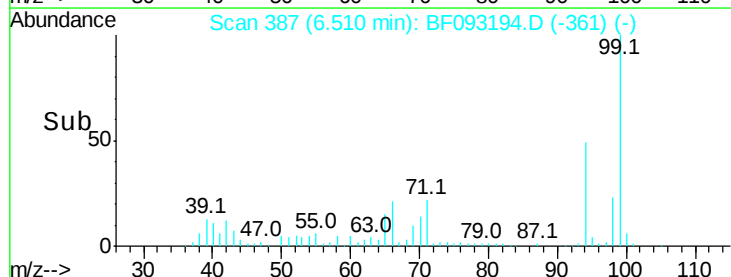
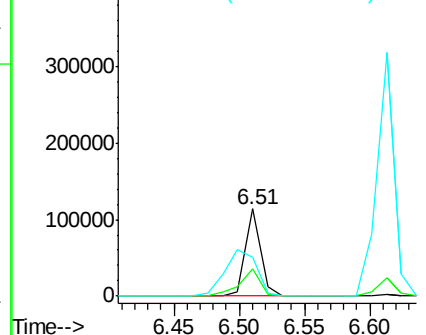
66 43.9 44.0 84.0#

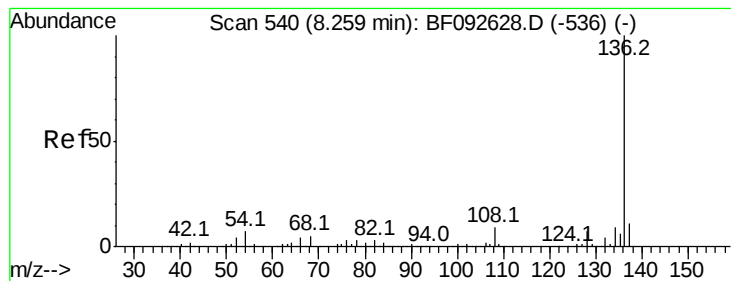


Abundance Ion 94.00 (93.70 to 94.70): BF0

Ion 65.00 (64.70 to 65.70): BF0

Ion 66.00 (65.70 to 66.70): BF0





#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.13 min Scan# 529

Delta R.T. -0.01 min

Lab File: BF093194.D

Acq: 25 Feb 2017 15:53

Instrument :

BNA\_F

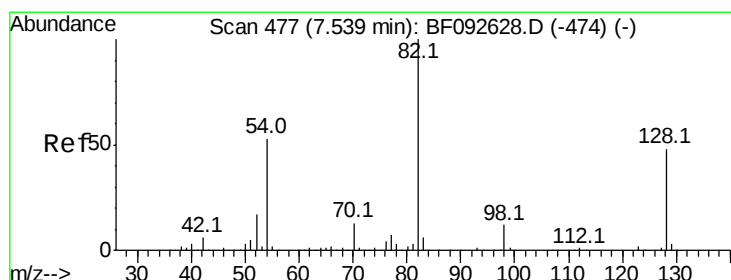
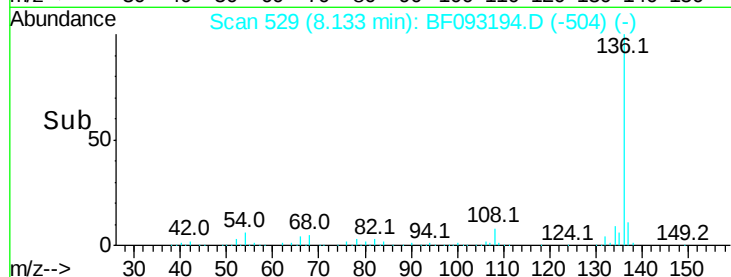
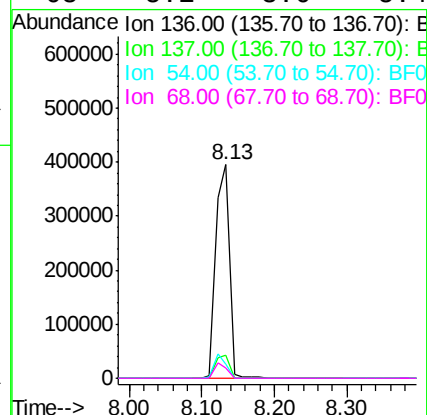
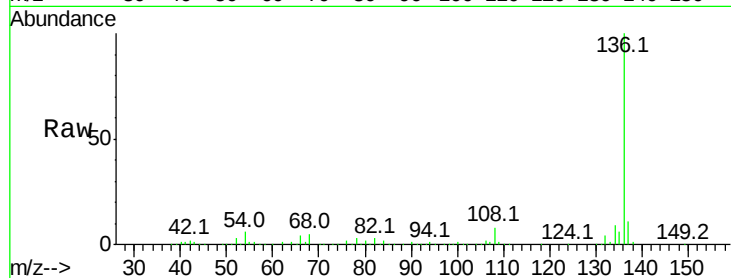
ClientSampleId :

E2-Y6S-SW

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 136     | 100   |       |       |
| 137     | 10.9  | 8.4   | 12.6  |
| 54      | 6.5   | 4.5   | 6.7   |
| 68      | 5.1   | 3.6   | 5.4   |

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#23

Nitrobenzene-d5

Concen: 89.42 ng

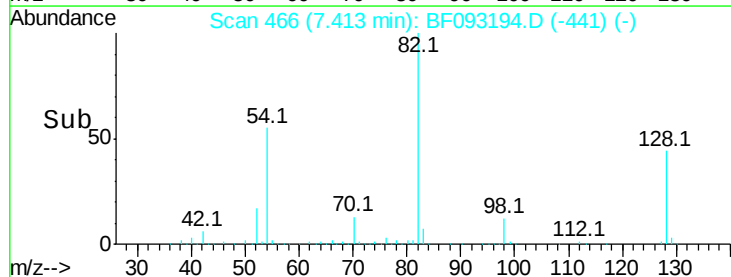
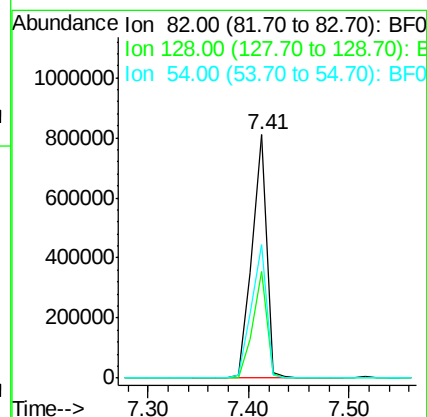
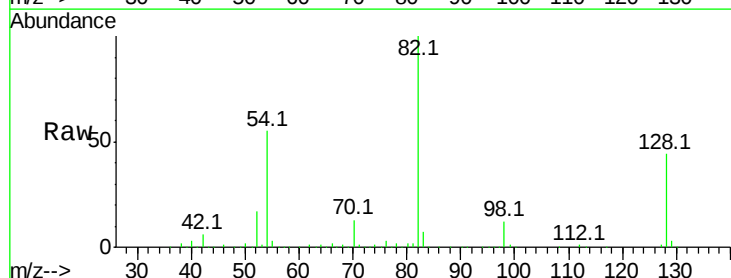
RT: 7.41 min Scan# 466

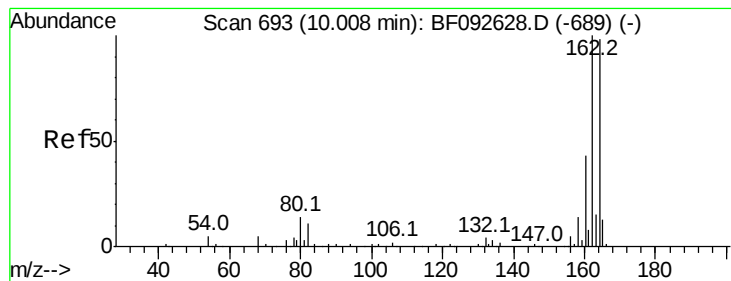
Delta R.T. -0.01 min

Lab File: BF093194.D

Acq: 25 Feb 2017 15:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 44.0  | 34.6  | 52.0  |
| 54      | 55.0  | 39.5  | 59.3  |





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.88 min Scan# 682

Delta R.T. -0.01 min

Lab File: BF093194.D

Acq: 25 Feb 2017 15:53

Instrument :

BNA\_F

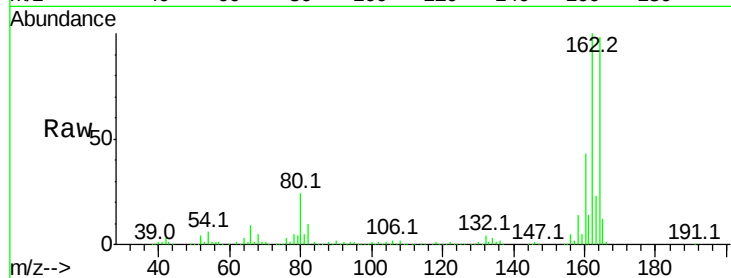
ClientSampleId :

E2-Y6S-SW

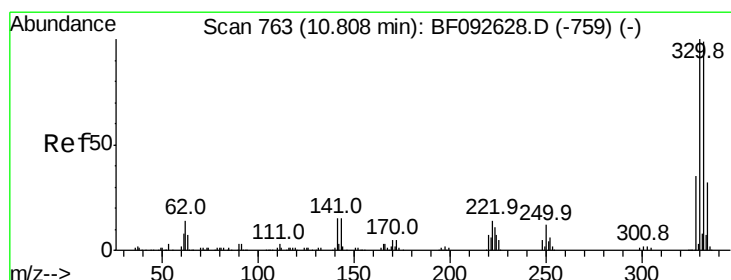
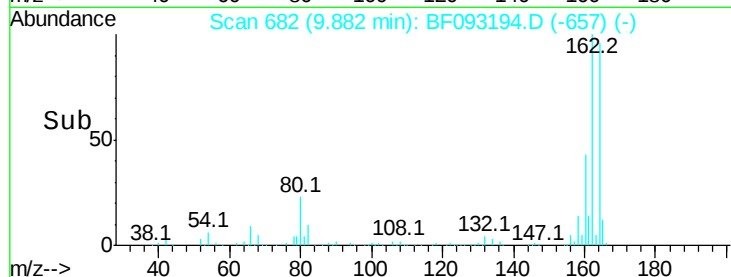
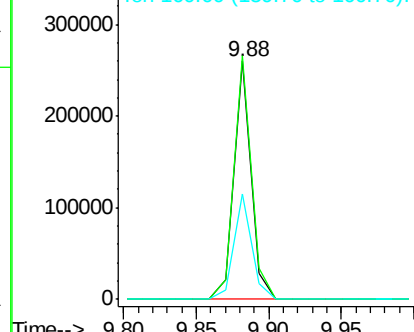
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 164   | Resp: | 213162 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 102.2 | 80.2  | 120.2  |
| 160       | 44.3  | 36.9  | 55.3   |

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Abundance Ion 164.00 (163.70 to 164.70): E  
Ion 162.00 (161.70 to 162.70): E  
Ion 160.00 (159.70 to 160.70): E



#41

2,4,6-Tribromophenol

Concen: 139.58 ng

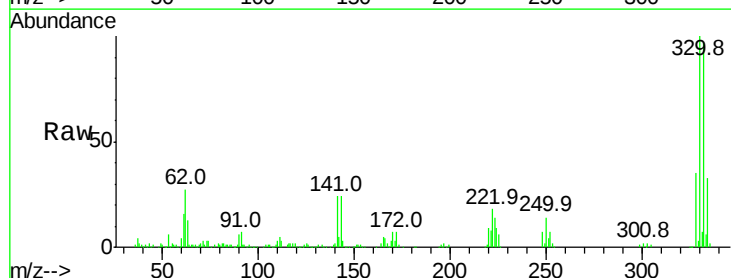
RT: 10.68 min Scan# 752

Delta R.T. -0.00 min

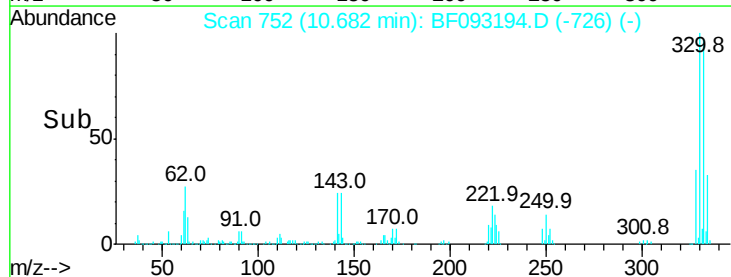
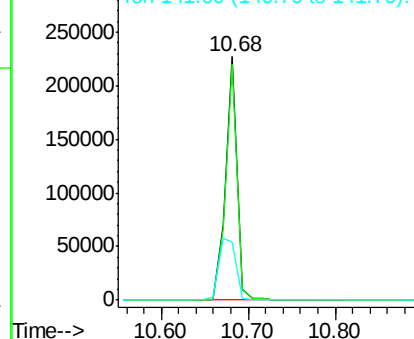
Lab File: BF093194.D

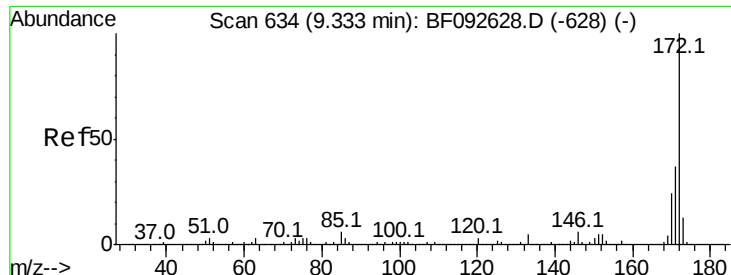
Acq: 25 Feb 2017 15:53

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 330   | Resp: | 215199 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 97.0  | 77.4  | 116.2  |
| 141       | 38.1  | 34.1  | 51.1   |



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





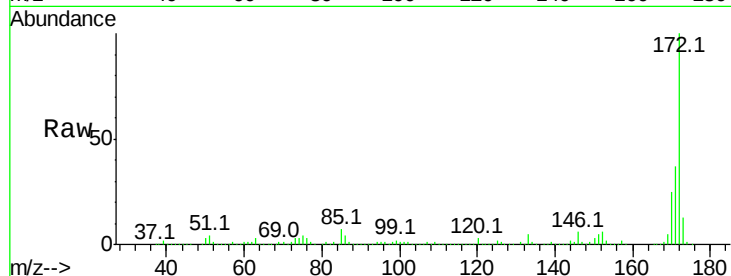
#44  
 2-Fluorobiphenyl  
 Concen: 101.00 ng  
 RT: 9.21 min Scan# 623  
 Delta R.T. -0.01 min  
 Lab File: BF093194.D  
 Acq: 25 Feb 2017 15:53

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-Y6S-SW

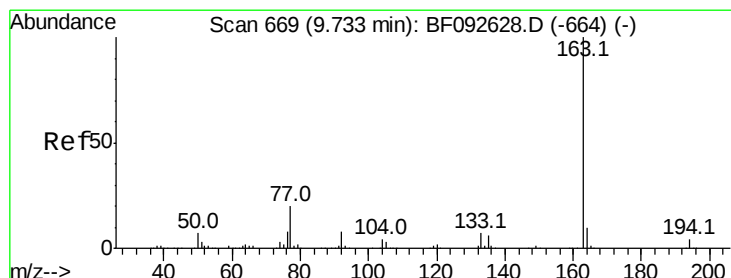
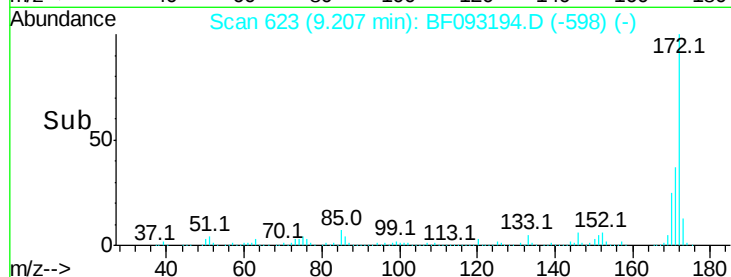
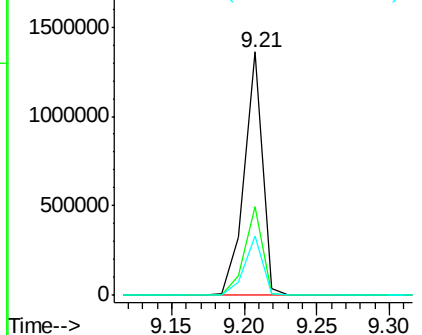
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.7  | 29.4  | 44.0  |
| 170     | 24.5  | 20.2  | 30.4  |

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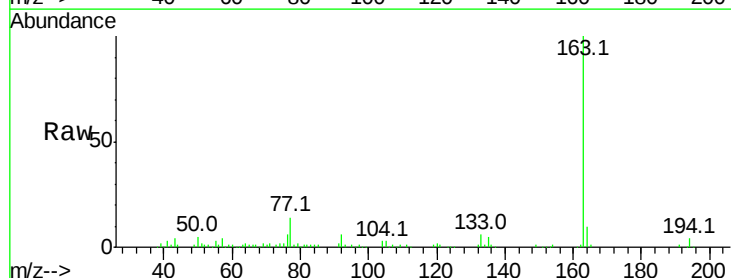


Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E

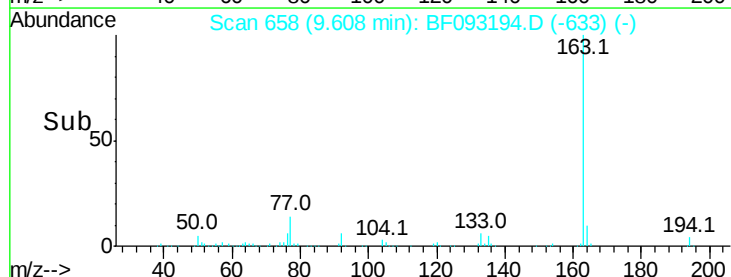
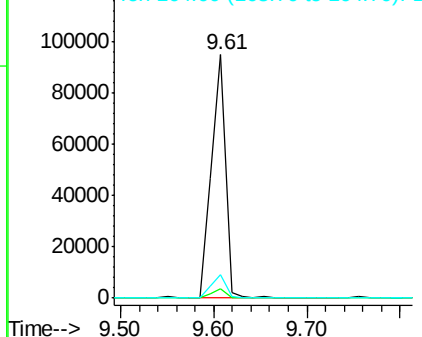


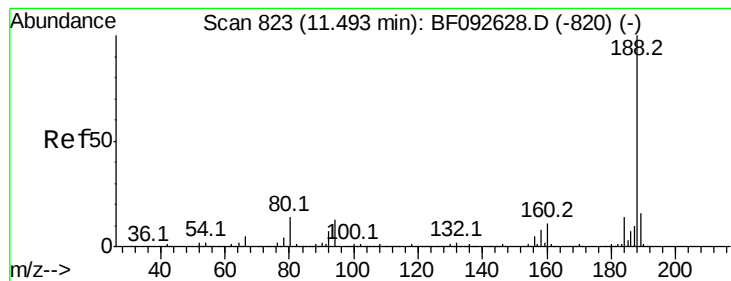
#49  
 Dimethylphthalate  
 Concen: 7.02 ng  
 RT: 9.61 min Scan# 658  
 Delta R.T. -0.01 min  
 Lab File: BF093194.D  
 Acq: 25 Feb 2017 15:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.0   | 3.0   | 4.4   |
| 164     | 9.7   | 8.0   | 12.0  |



Abundance Ion 163.00 (162.70 to 163.70): E  
 Ion 194.00 (193.70 to 194.70): E  
 Ion 164.00 (163.70 to 164.70): E





#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.37 min Scan# 812

Delta R.T. -0.01 min

Lab File: BF093194.D

Acq: 25 Feb 2017 15:53

Instrument :

BNA\_F

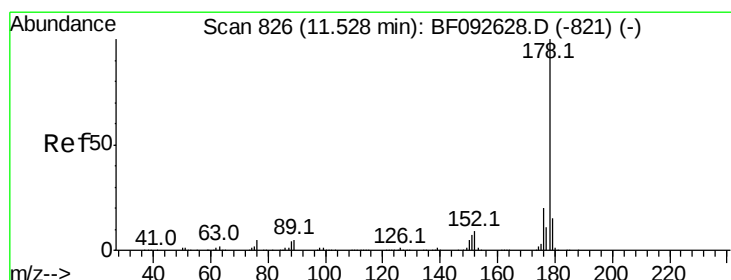
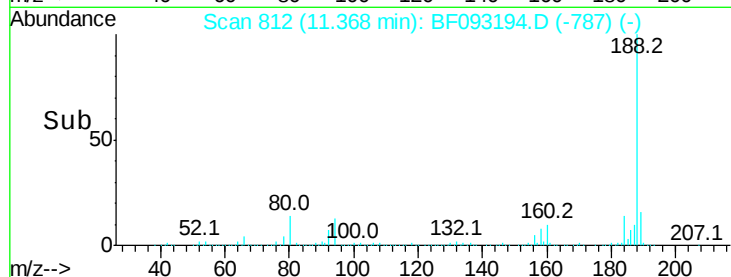
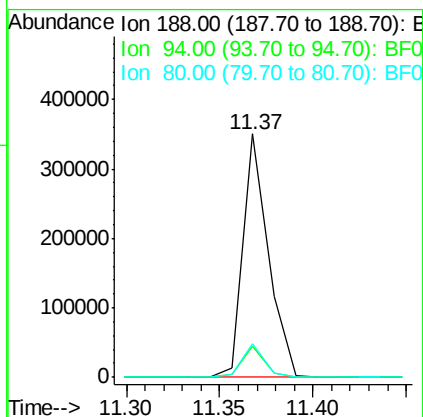
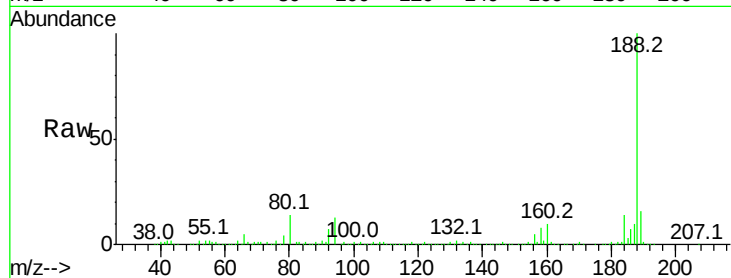
ClientSampleId :

E2-Y6S-SW

|             |       |        |
|-------------|-------|--------|
| Tot Ion:188 | Resp: | 332471 |
| Ion Ratio   | Lower | Upper  |
| 188 100     |       |        |
| 94 12.8     | 10.0  | 15.0   |
| 80 13.9     | 11.2  | 16.8   |

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#70

Phenanthrene

Concen: 3.27 ng

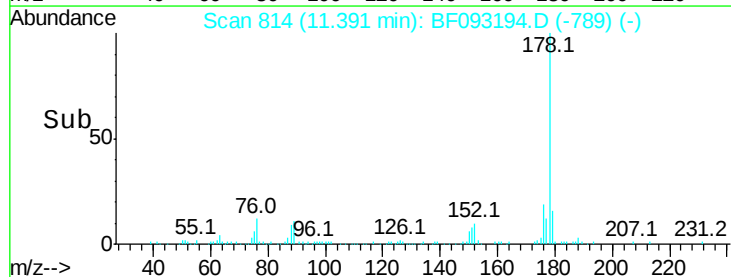
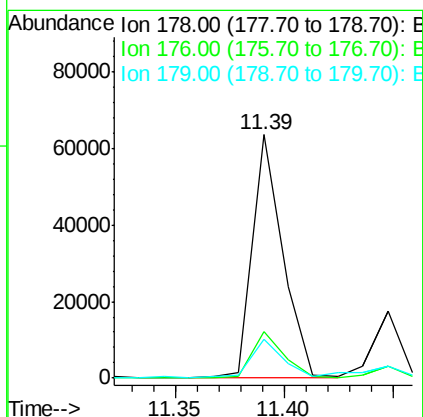
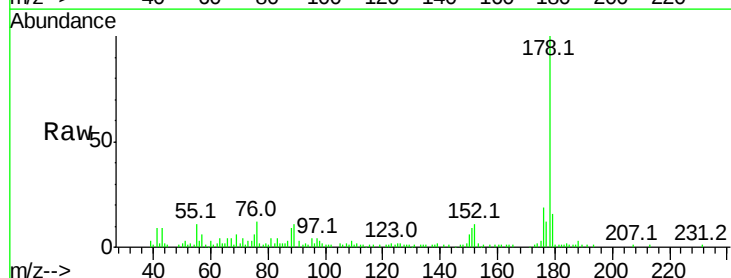
RT: 11.39 min Scan# 814

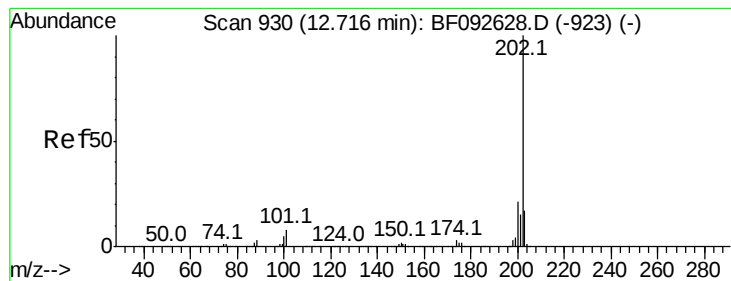
Delta R.T. -0.01 min

Lab File: BF093194.D

Acq: 25 Feb 2017 15:53

|             |       |       |
|-------------|-------|-------|
| Tgt Ion:178 | Resp: | 62379 |
| Ion Ratio   | Lower | Upper |
| 178 100     |       |       |
| 176 19.1    | 16.6  | 25.0  |
| 179 15.7    | 12.8  | 19.2  |





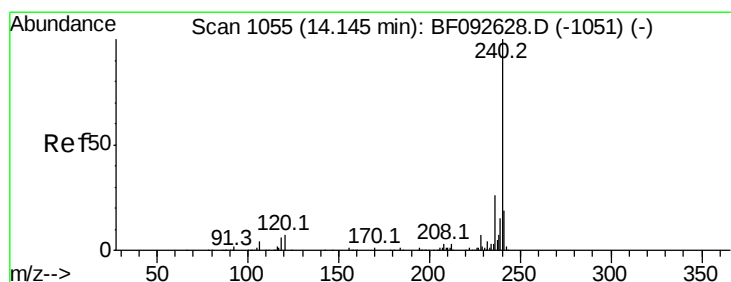
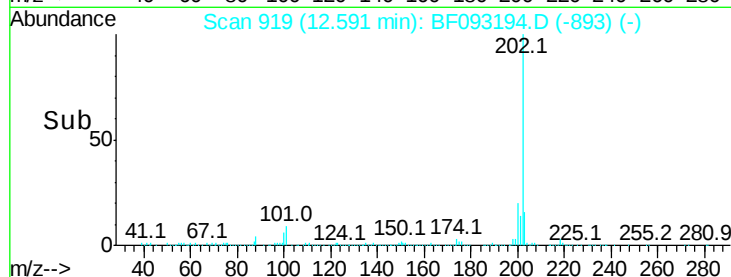
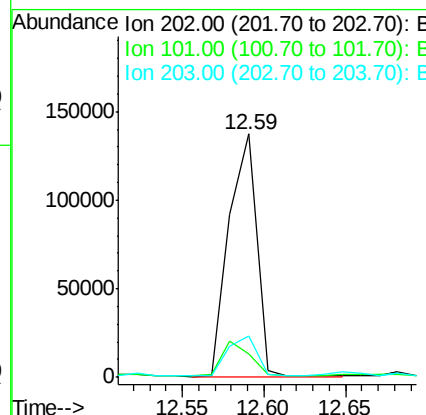
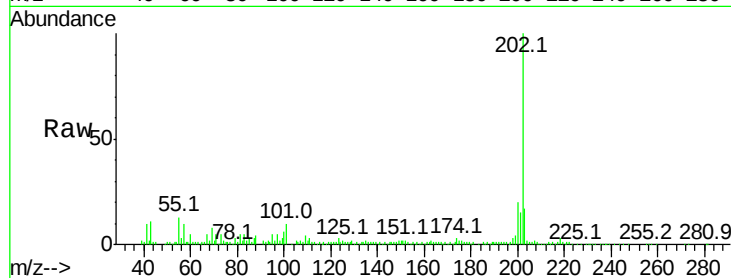
#74  
 Fluoranthene  
 Concen: 8.20 ng  
 RT: 12.59 min Scan# 919  
 Delta R.T. -0.00 min  
 Lab File: BF093194.D  
 Acq: 25 Feb 2017 15:53

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-Y6S-SW

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 9.5   | 0.0        | 34.6  |
| 203     | 16.8  | 0.0        | 38.7  |

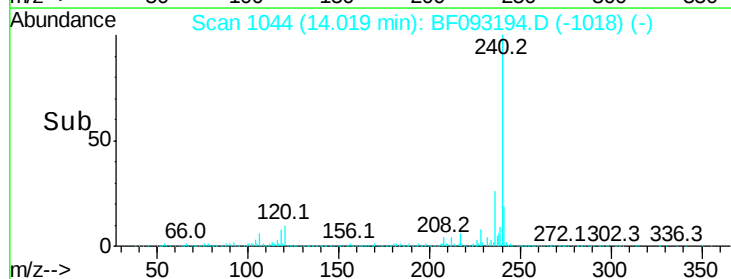
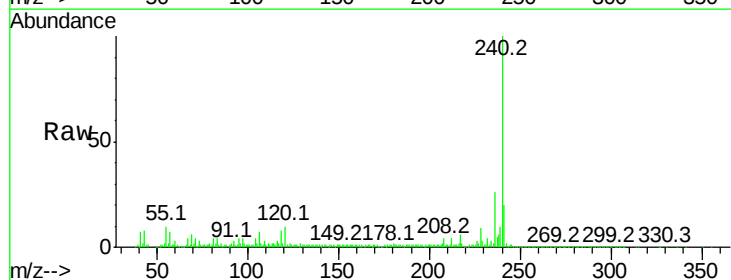
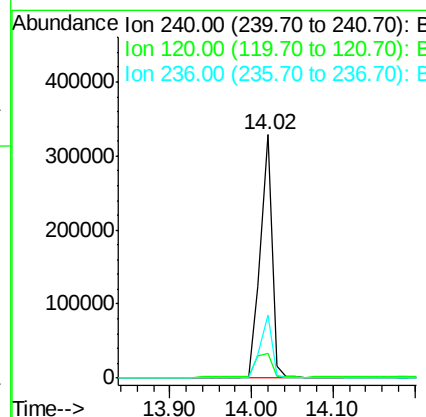
Manual Integrations  
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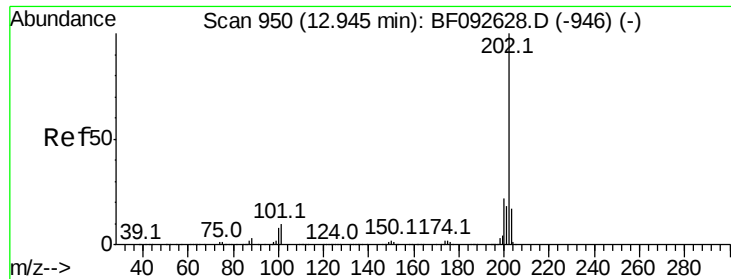
mohammad  
 2/27/2017 1:09:08 PM



#75  
 Chrysene-d12  
 Concen: 20.00 ng  
 RT: 14.02 min Scan# 1044  
 Delta R.T. -0.00 min  
 Lab File: BF093194.D  
 Acq: 25 Feb 2017 15:53

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 240     | 100   |            |       |
| 120     | 10.1  | 12.9       | 19.3# |
| 236     | 25.7  | 20.9       | 31.3  |





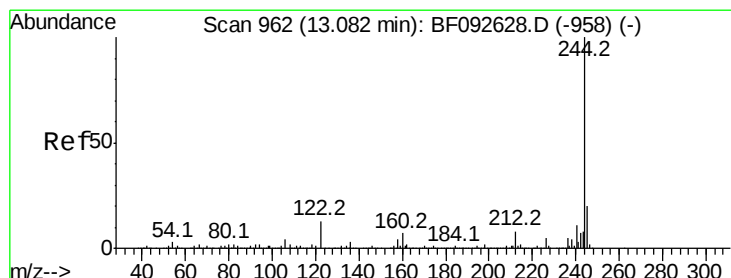
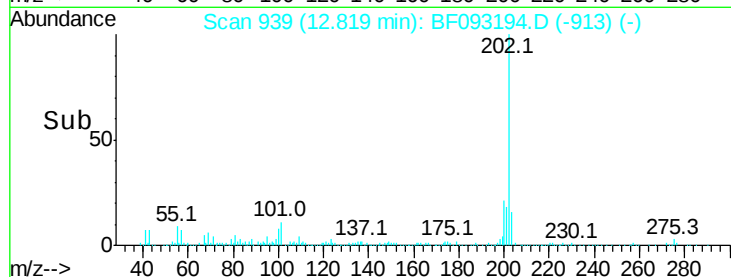
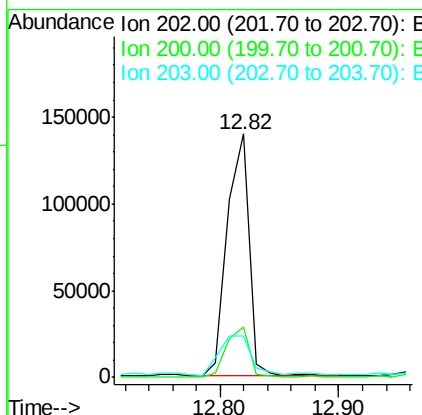
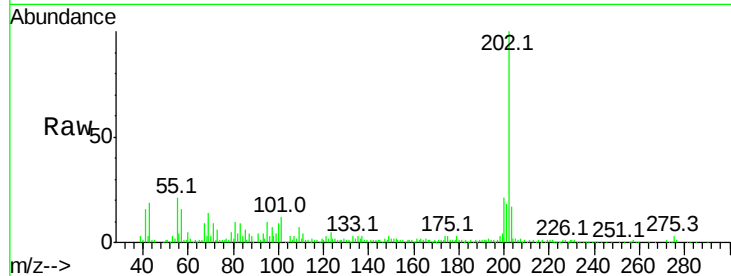
#77  
Pvrene  
Concen: 7.31 ng  
RT: 12.82 min Scan# 939  
Delta R.T. -0.00 min  
Lab File: BF093194.D  
Acq: 25 Feb 2017 15:53

Instrument :  
BNA\_F  
ClientSampleId :  
E2-Y6S-SW

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 200     | 20.9  | 17.7       | 26.5  |
| 203     | 17.2  | 14.7       | 22.1  |

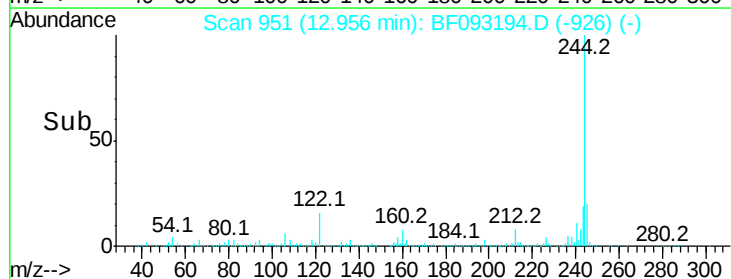
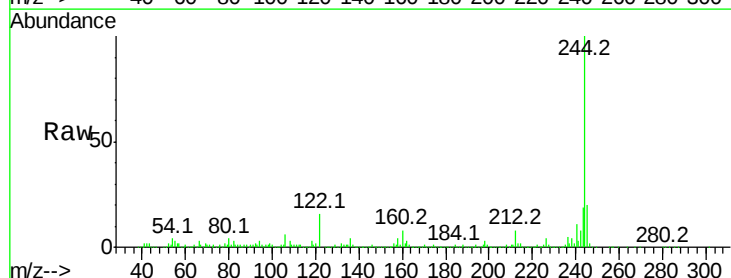
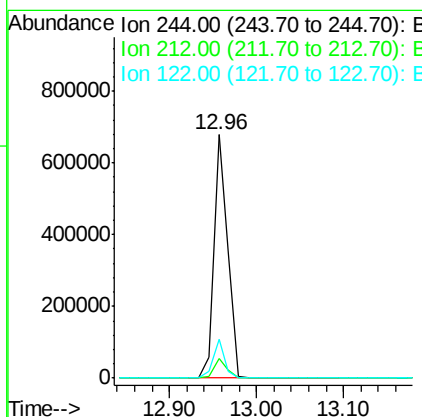
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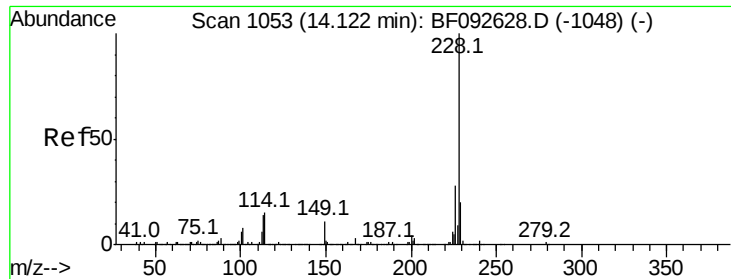
mohammad  
2/27/2017 1:09:08 PM



#78  
Terphenyl-d14  
Concen: 54.54 ng  
RT: 12.96 min Scan# 951  
Delta R.T. -0.01 min  
Lab File: BF093194.D  
Acq: 25 Feb 2017 15:53

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 244     | 100   |            |       |
| 212     | 7.8   | 6.2        | 9.2   |
| 122     | 16.0  | 11.4       | 17.2  |





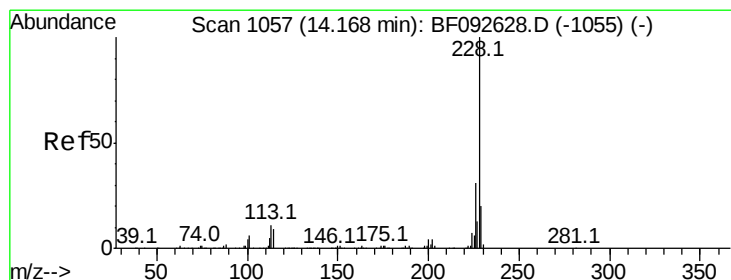
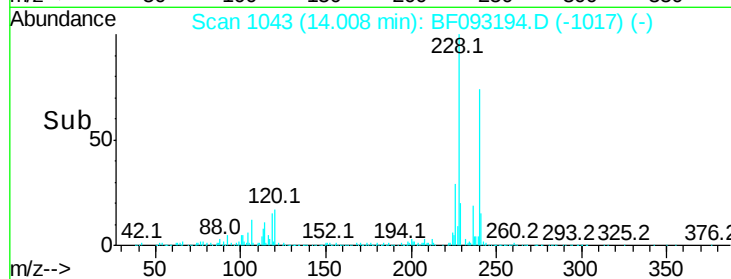
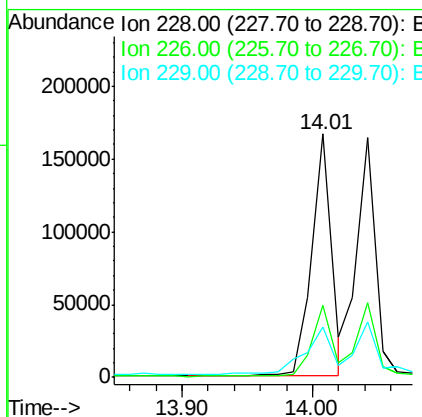
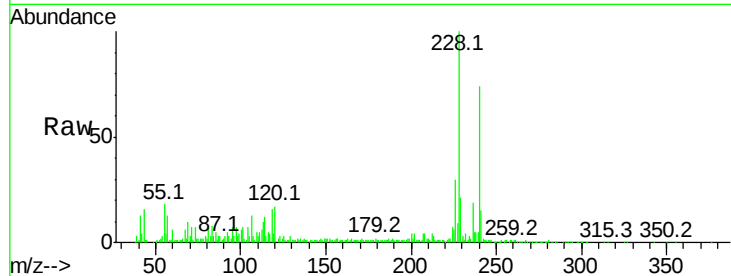
#80  
Benzo(a)anthracene  
Concen: 8.75 ng  
RT: 14.01 min Scan# 1043  
Delta R.T. -0.00 min  
Lab File: BF093194.D  
Acq: 25 Feb 2017 15:53

Instrument :  
BNA\_F  
ClientSampleId :  
E2-Y6S-SW

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.6  | 22.4  | 33.6  |
| 229     | 20.9  | 16.2  | 24.4  |

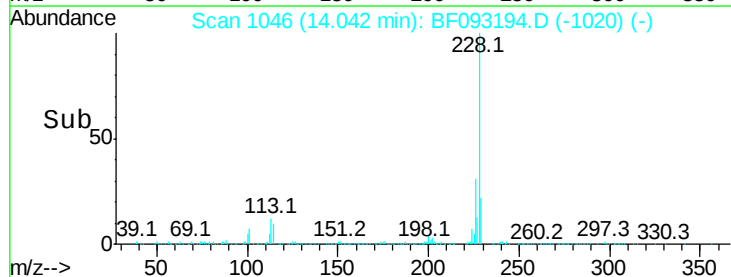
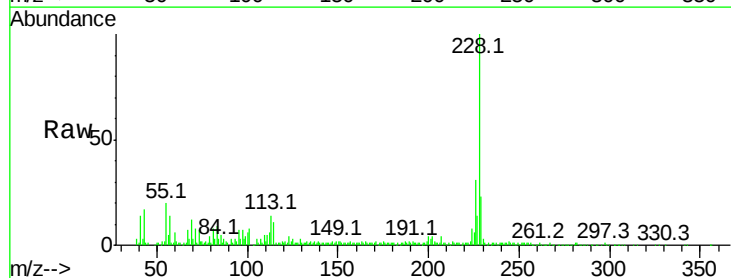
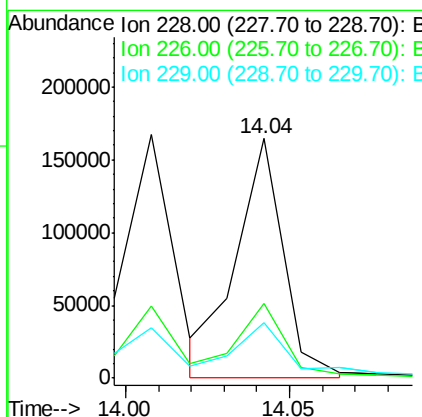
Manual Integrations  
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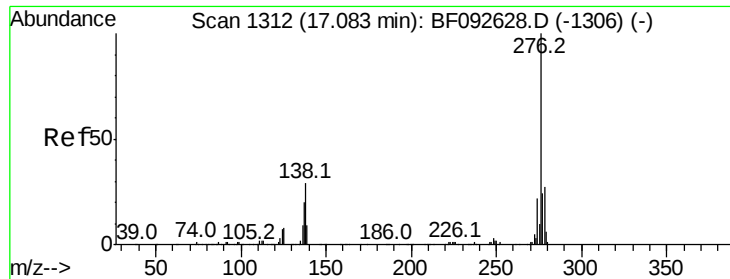
mohammad  
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#82  
Chrysene  
Concen: 8.88 ng m  
RT: 14.04 min Scan# 1046  
Delta R.T. -0.00 min  
Lab File: BF093194.D  
Acq: 25 Feb 2017 15:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.1  | 25.4  | 38.0  |
| 229     | 23.3  | 16.2  | 24.2  |





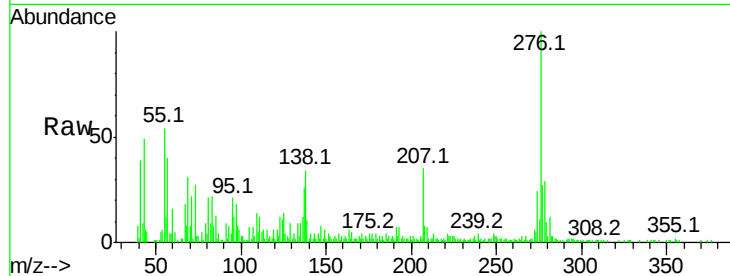
#85  
Indeno(1,2,3-cd)pyrene  
Concen: 5.64 ng  
RT: 16.87 min Scan# 1293  
Delta R.T. 0.01 min  
Lab File: BF093194.D  
Acq: 25 Feb 2017 15:53

Instrument :  
BNA\_F  
ClientSampleId :  
E2-Y6S-SW

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 28.6  | 21.8  | 32.6  |
| 277     | 24.7  | 20.2  | 30.4  |

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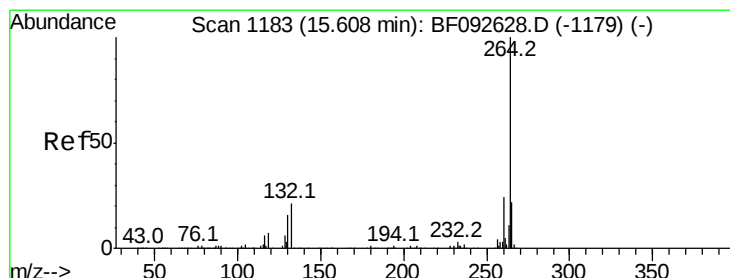
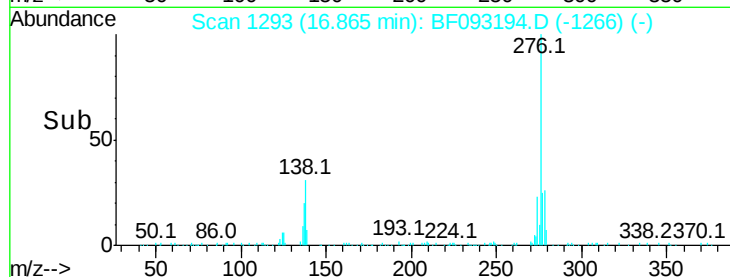
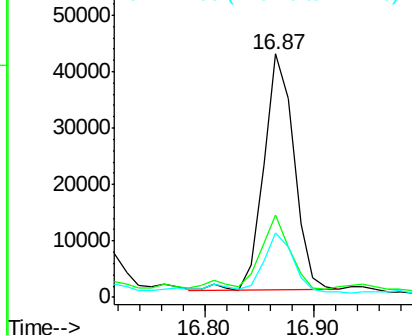


Abundance

Ion 276.00 (275.70 to 276.70): E

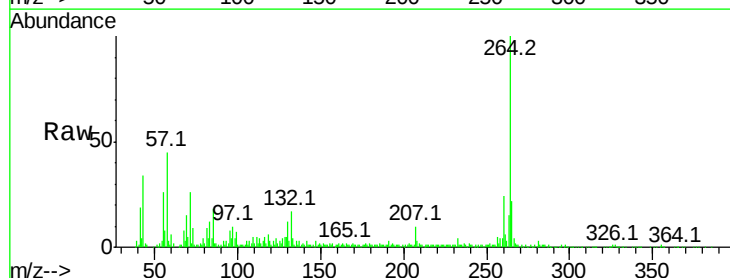
Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 15.46 min Scan# 1170  
Delta R.T. 0.01 min  
Lab File: BF093194.D  
Acq: 25 Feb 2017 15:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.7  | 19.2  | 28.8  |
| 265     | 21.8  | 17.4  | 26.0  |

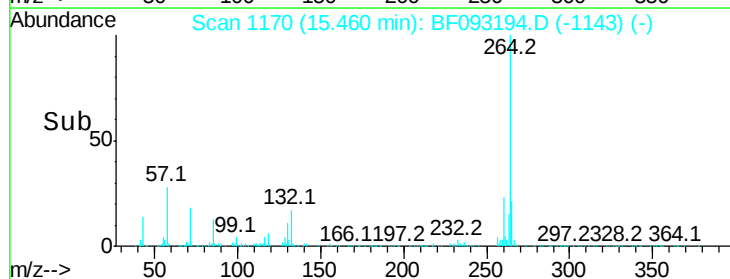
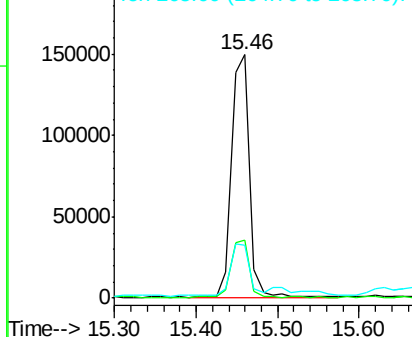


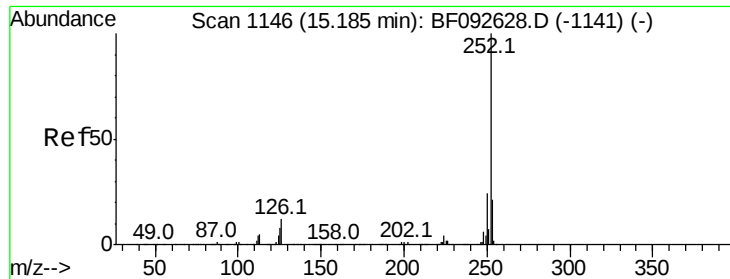
Abundance

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





#87

Benzo(b)fluoranthene

Concen: 14.16 ng m

RT: 15.04 min Scan# 1133

Delta R.T. -0.00 min

Lab File: BF093194.D

Acq: 25 Feb 2017 15:53

Instrument :

BNA\_F

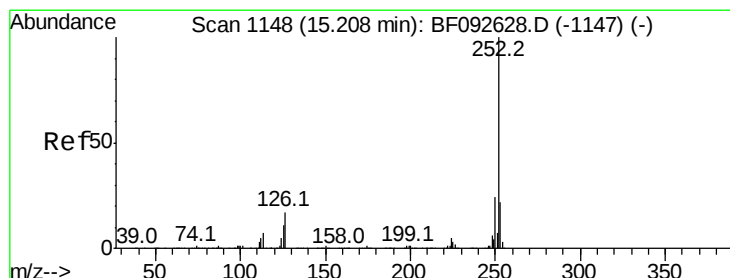
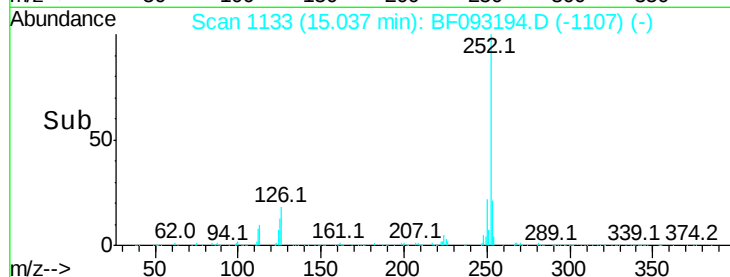
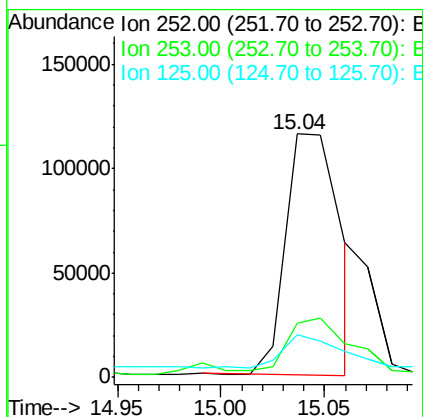
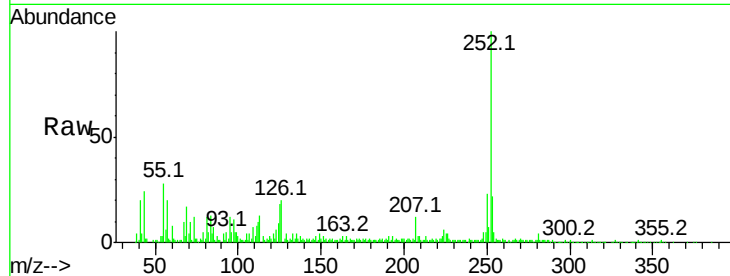
ClientSampleId :

E2-Y6S-SW

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 210328 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.4  | 18.2  | 27.4   |
| 125       | 17.5  | 9.8   | 14.6#  |

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#88

Benzo(k)fluoranthene

Concen: 3.25 ng m

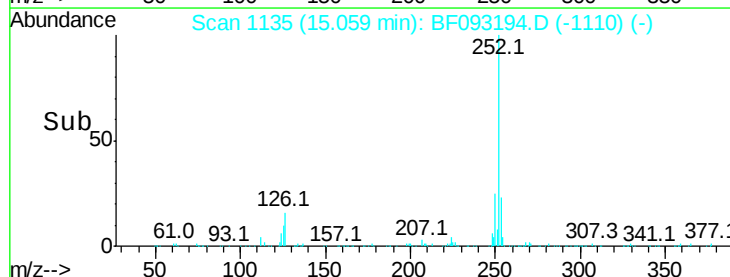
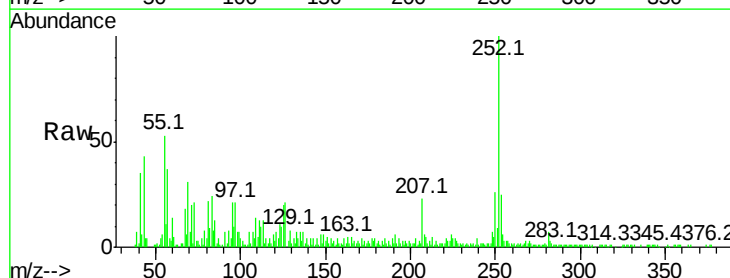
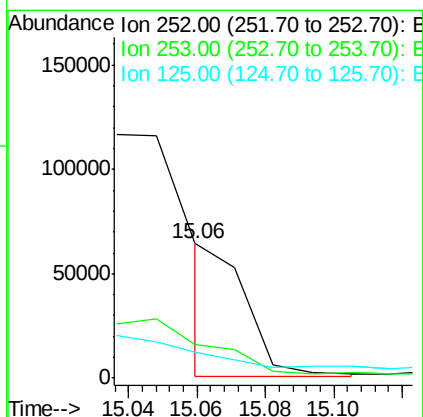
RT: 15.06 min Scan# 1135

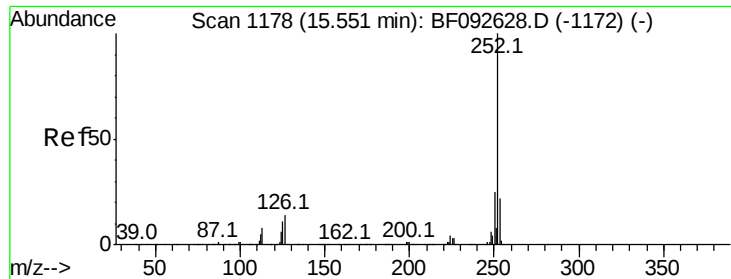
Delta R.T. -0.01 min

Lab File: BF093194.D

Acq: 25 Feb 2017 15:53

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 41607 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 25.0  | 18.5  | 27.7  |
| 125       | 19.7  | 8.9   | 13.3# |





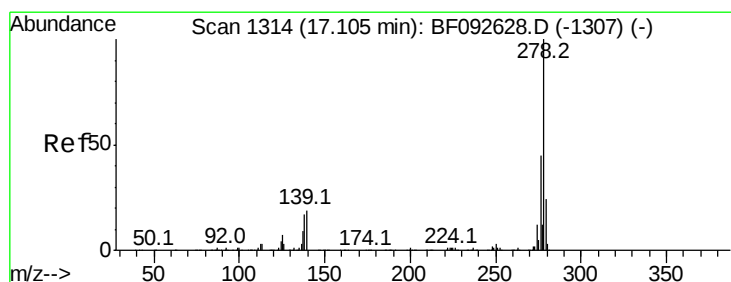
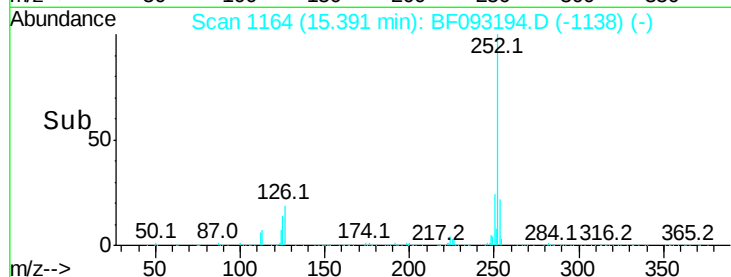
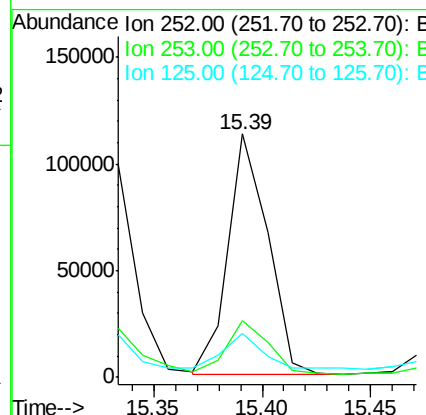
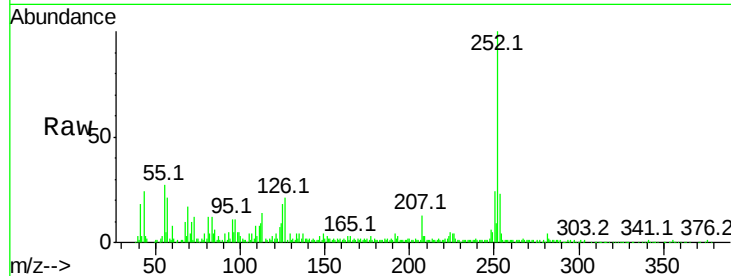
#89  
Benzo(a)pyrene  
Concen: 11.19 ng  
RT: 15.39 min Scan# 1164  
Delta R.T. -0.00 min  
Lab File: BF093194.D  
Acq: 25 Feb 2017 15:53

Instrument :  
BNA\_F  
ClientSampled :  
E2-Y6S-SW

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 252     | 100   | 143767 |       |       |
| 253     | 23.2  | 18.2   | 27.2  |       |
| 125     | 18.2  | 10.0   | 15.0  |       |

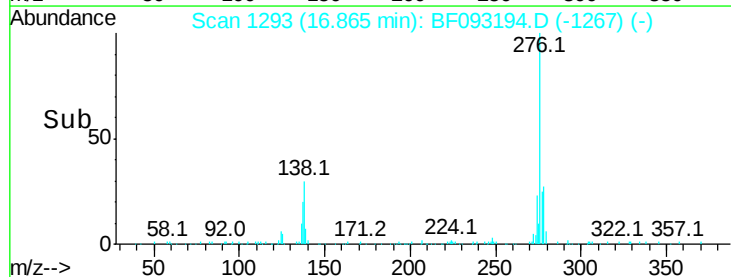
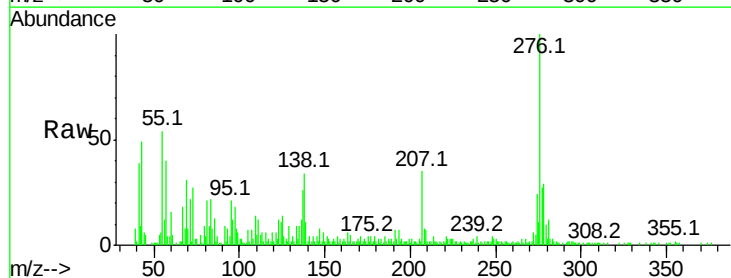
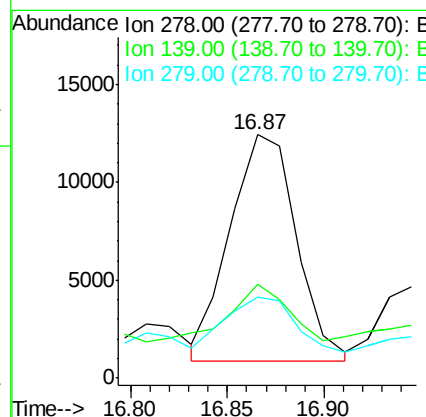
Manual Integrations  
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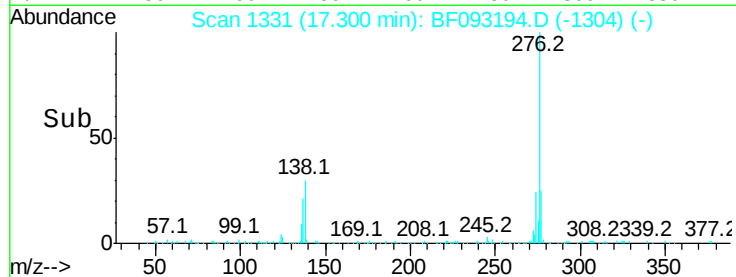
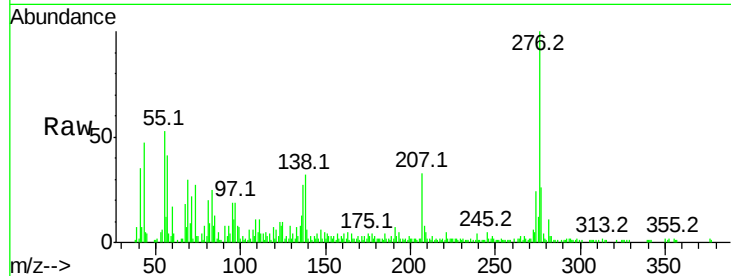
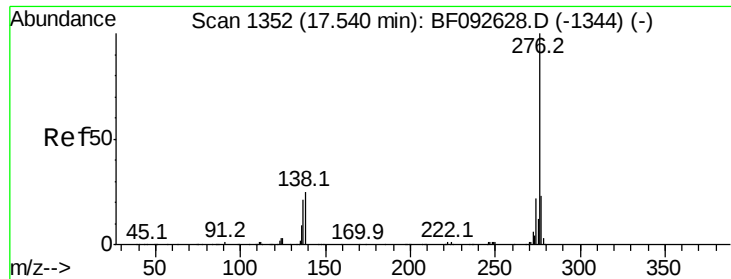
mohammad  
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#90  
Dibenzo(a,h)anthracene  
Concen: 2.67 ng m  
RT: 16.87 min Scan# 1293  
Delta R.T. -0.00 min  
Lab File: BF093194.D  
Acq: 25 Feb 2017 15:53

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 278     | 100   | 27681 |       |       |
| 139     | 38.6  | 14.8  | 22.2  |       |
| 279     | 33.4  | 19.8  | 29.6  |       |





#91

Benzo(a,h,i)perylene

Concen: 8.77 ng

RT: 17.30 min Scan# 1331

Delta R.T. 0.01 min

Lab File: BF093194.D

Acq: 25 Feb 2017 15:53

Instrument :

BNA\_F

ClientSampleId :

E2-Y6S-SW

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 26.0  | 19.2  | 28.8  |
| 138     | 32.2  | 16.0  | 24.0  |

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