

Data Path : Z:\HPCHEM1\BNA F\DATA\BF040317\  
 Data File : BF094128.D  
 Acq On : 3 Apr 2017 18:38  
 Operator : SJ/MA  
 Sample : I2500-02  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SS-2

Manual Integrations  
 APPROVED

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 4/4/2017 5:34:03 PM

Quant Time: Apr 04 01:48:11 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF032217.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Mar 31 14:38:29 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 5.89  | 152  | 185732   | 20.00  | ng    | -0.02    |
| 21) Naphthalene-d8          | 7.39  | 136  | 752388   | 20.00  | ng    | -0.02    |
| 38) Acenaphthene-d10        | 9.53  | 164  | 328736   | 20.00  | ng    | -0.02    |
| 63) Phenanthrene-d10        | 11.36 | 188  | 546822   | 20.00  | ng    | -0.02    |
| 75) Chrysene-d12            | 14.60 | 240  | 354269   | 20.00  | ng    | -0.02    |
| 86) Perylene-d12            | 16.24 | 264  | 316968   | 20.00  | ng    | -0.01    |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 4.43  | 112  | 1113446  | 101.25 | ng    | 0.00     |
| 7) Phenol-d6                | 5.50  | 99   | 1421908  | 104.52 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 6.54  | 82   | 887872   | 67.35  | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol    | 10.50 | 330  | 282841   | 108.88 | ng    | -0.02    |
| 44) 2-Fluorobiphenyl        | 8.72  | 172  | 1543947  | 71.64  | ng    | -0.02    |
| 78) Terphenyl-d14           | 13.33 | 244  | 1051511  | 66.53  | ng    | -0.02    |
| Target Compounds            |       |      |          |        |       | Qvalue   |
| 31) Naphthalene             | 7.42  | 128  | 157670   | 4.36   | ng    | 98       |
| 37) 2-Methylnaphthalene     | 8.26  | 142  | 99438    | 4.12   | ng    | 96       |
| 49) Dimethylphthalate       | 9.21  | 163  | 98769    | 4.23   | ng    | # 98     |
| 70) Phenanthrene            | 11.38 | 178  | 217348   | 7.15   | ng    | 98       |
| 74) Fluoranthene            | 12.84 | 202  | 330385   | 10.61  | ng    | 98       |
| 77) Pyrene                  | 13.12 | 202  | 284683   | 11.07  | ng    | 98       |
| 80) Benzo(a)anthracene      | 14.59 | 228  | 125437   | 6.07   | ng    | 97       |
| 82) Chrysene                | 14.64 | 228  | 116447   | 6.07   | ng    | 95       |
| 85) Indeno(1,2,3-cd)pyrene  | 17.57 | 276  | 58523    | 3.52   | ng    | 97       |
| 87) Benzo(b)fluoranthene    | 15.83 | 252  | 136440m  | 7.02   | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.86 | 252  | 50249m   | 2.64   | ng    |          |
| 89) Benzo(a)pyrene          | 16.17 | 252  | 100425   | 5.61   | ng    | # 96     |
| 91) Benzo(a,h,i)perylene    | 17.97 | 276  | 50325    | 3.30   | ng    | 93       |

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

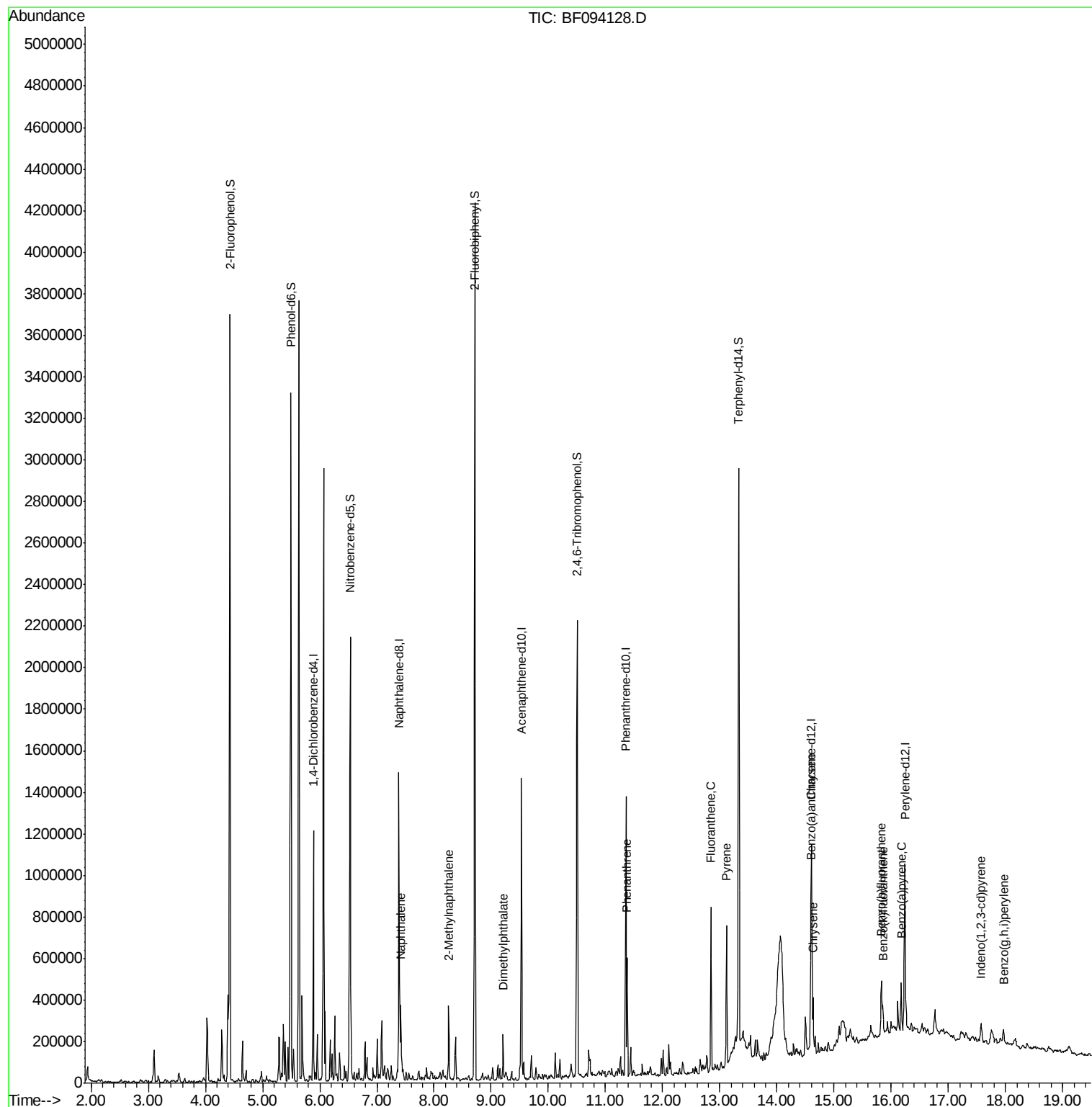
Data Path : Z:\HPCHEM1\BNA F\DATA\BF040317\  
Data File : BF094128.D  
Acq On : 3 Apr 2017 18:38  
Operator : SJ/MA  
Sample : I2500-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleID :  
SS-2

Manual Integrations  
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Quant Time: Apr 04 01:48:11 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF032217.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Mar 31 14:38:29 2017  
Response via : Initial Calibration





#1

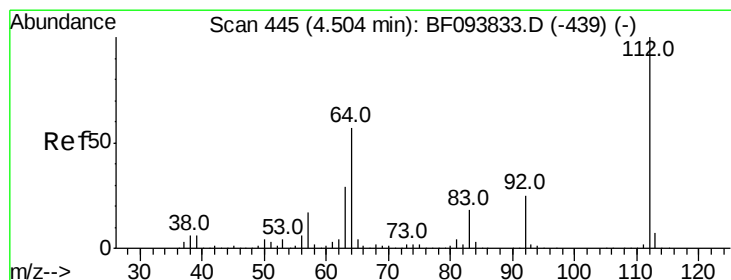
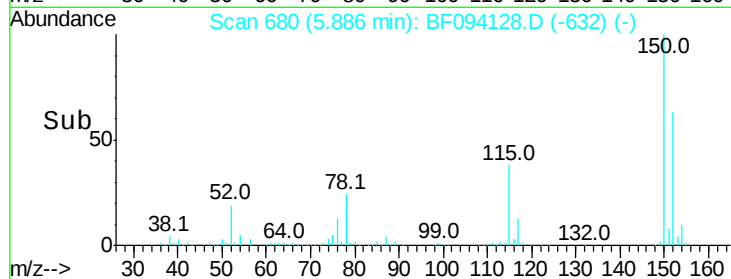
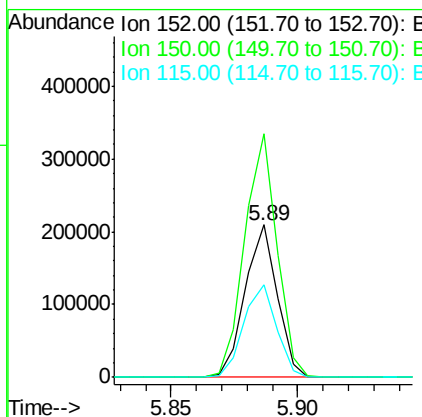
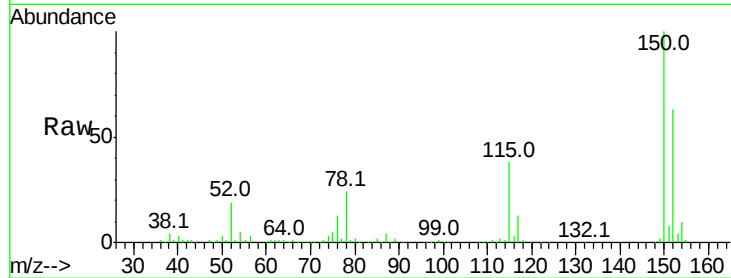
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 5.89 min Scan# 680  
Delta R.T. -0.02 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

Instrument :  
BNA\_F  
ClientSampleId :  
SS-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 159.9 | 126.2 | 189.2 |
| 115     | 61.1  | 52.2  | 78.2  |

Manual Integrations  
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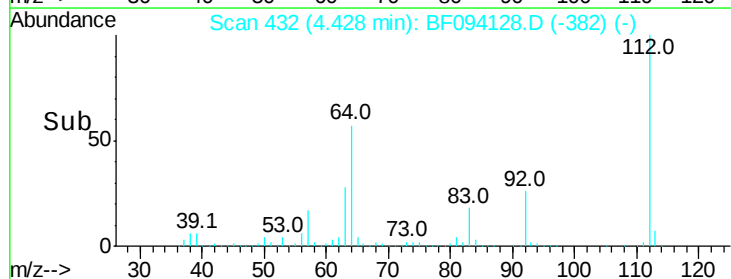
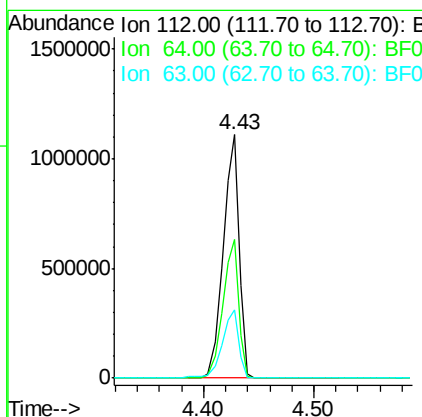
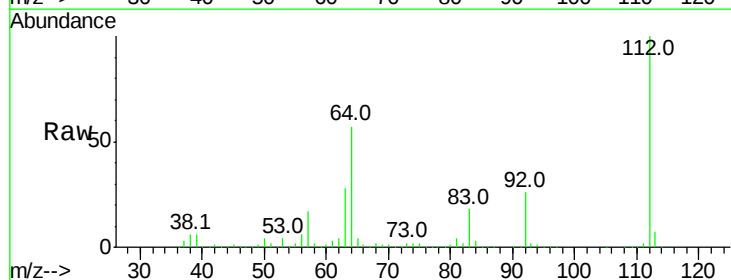
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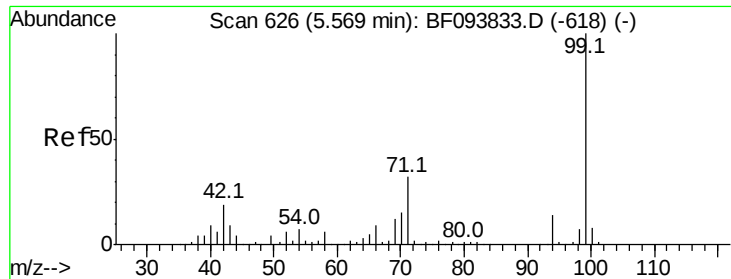


#5

2-Fluorophenol  
Concen: 101.25 ng  
RT: 4.43 min Scan# 432  
Delta R.T. -0.01 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 57.0  | 46.0  | 69.0  |
| 63      | 28.3  | 23.4  | 35.0  |





#7

Phenol-d6

Concen: 104.52 ng

RT: 5.50 min Scan# 614

Delta R.T. -0.01 min

Lab File: BF094128.D

Acq: 3 Apr 2017 18:38

Instrument :

BNA\_F

ClientSampled :

SS-2

Tot Ion: 99 Resp: 1421908

Ion Ratio Lower Upper

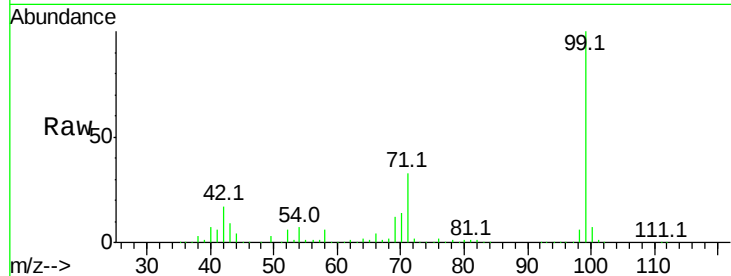
99 100

42 16.9 13.5 20.3

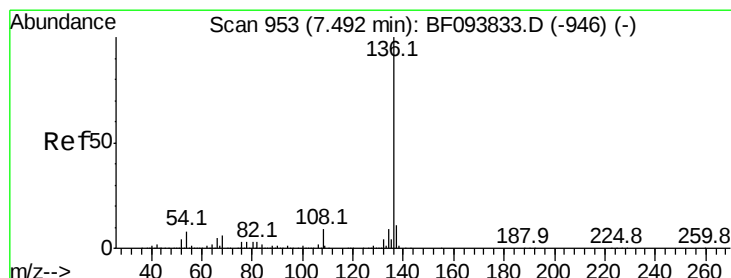
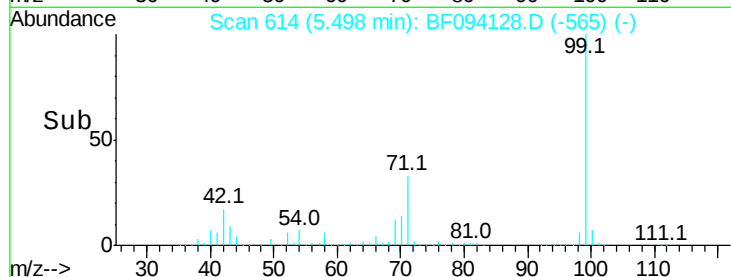
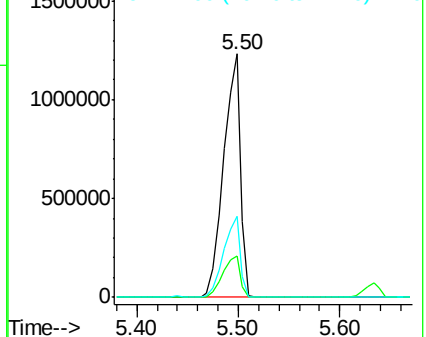
71 33.4 24.5 36.7

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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



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.39 min Scan# 935

Delta R.T. -0.02 min

Lab File: BF094128.D

Acq: 3 Apr 2017 18:38

Tgt Ion: 136 Resp: 752388

Ion Ratio Lower Upper

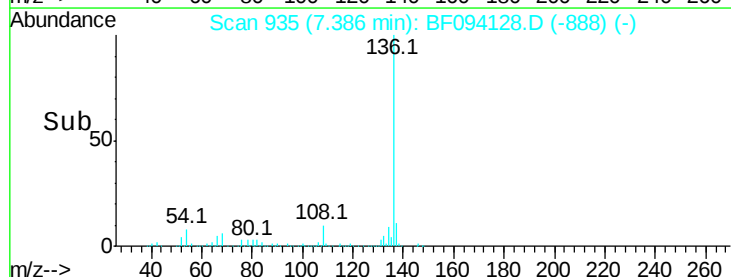
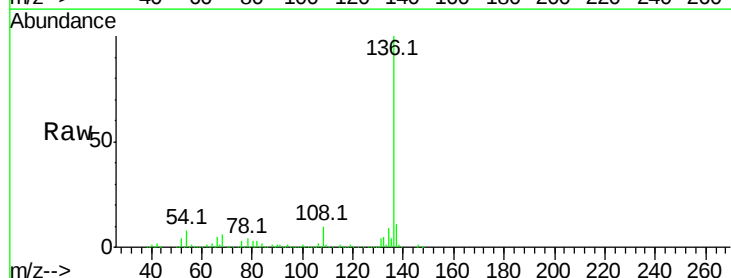
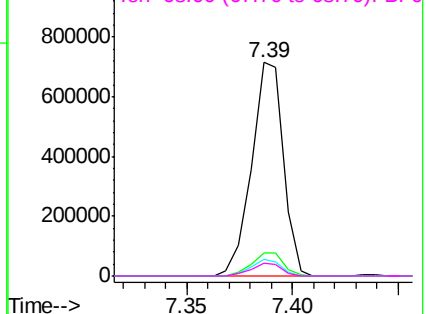
136 100

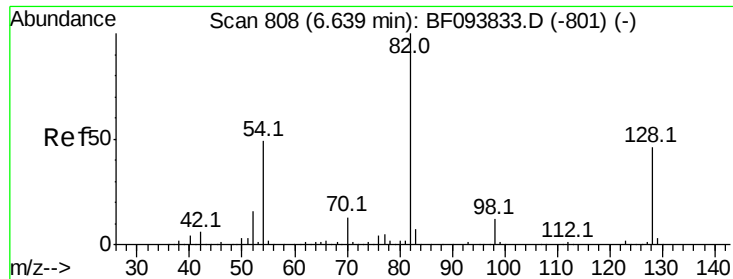
137 10.9 8.5 12.7

54 7.9 4.9 7.3#

68 6.1 4.1 6.1#

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): BF0  
Ion 68.00 (67.70 to 68.70): BF0





#23

Nitrobenzene-d5

Concen: 67.35 ng

RT: 6.54 min Scan# 791

Delta R.T. -0.02 min

Lab File: BF094128.D

Acq: 3 Apr 2017 18:38

Instrument :

BNA\_F

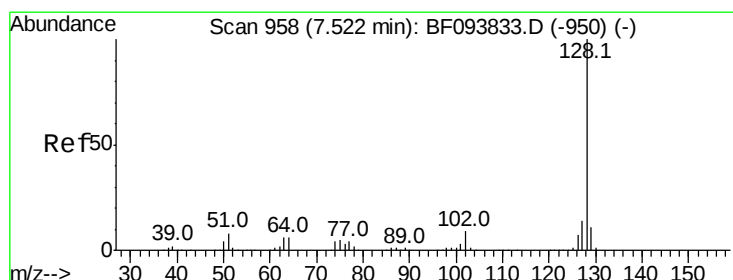
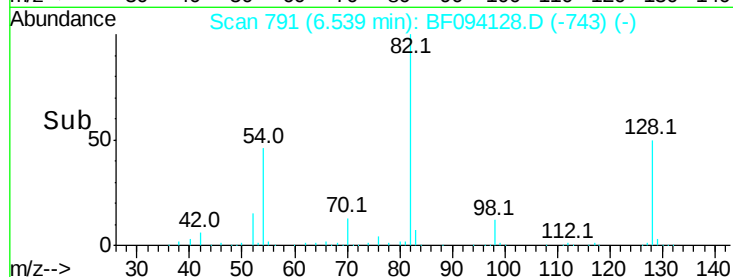
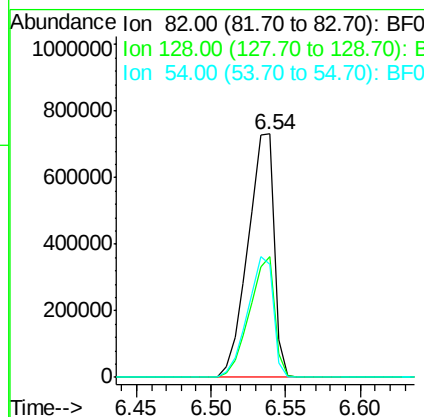
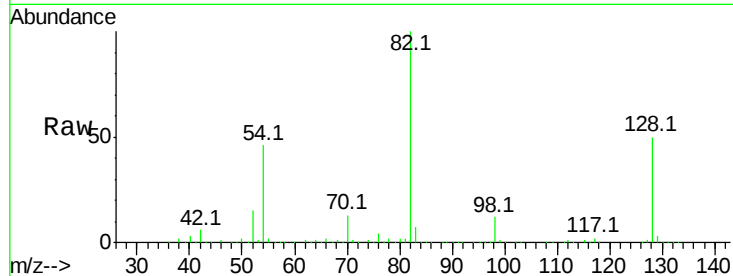
ClientSampled :

SS-2

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 82    | Resp: | 887872 |
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 49.7  | 34.0  | 51.0   |
| 54        | 46.4  | 42.2  | 63.2   |

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#31

Naphthalene

Concen: 4.36 ng

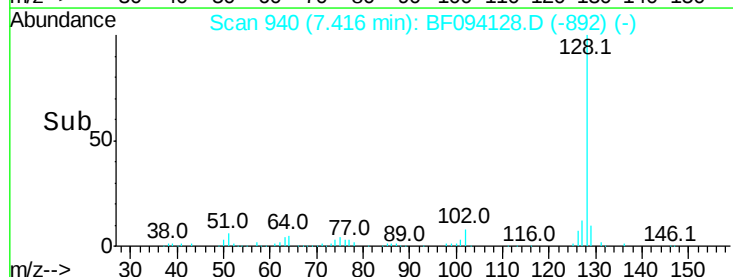
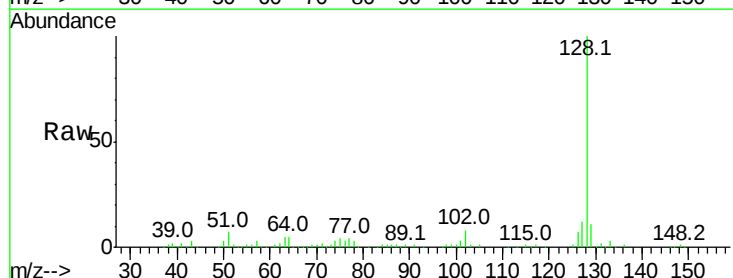
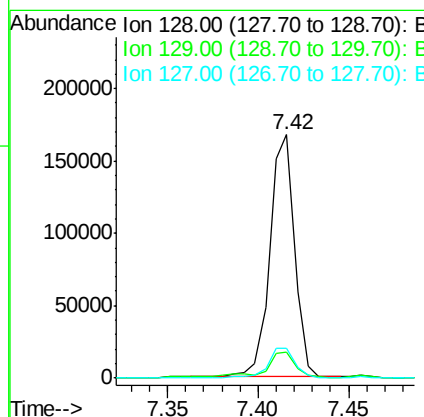
RT: 7.42 min Scan# 940

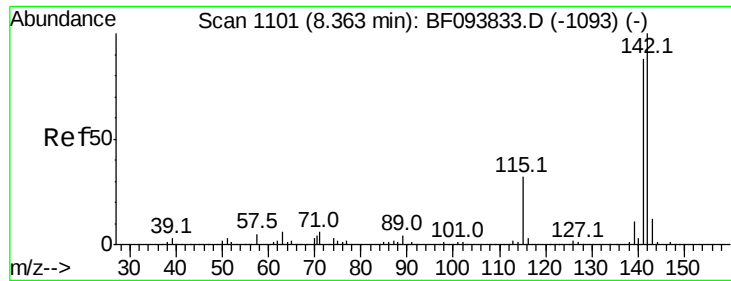
Delta R.T. -0.02 min

Lab File: BF094128.D

Acq: 3 Apr 2017 18:38

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 128   | Resp: | 157670 |
| Ion Ratio | Lower | Upper |        |
| 128       | 100   |       |        |
| 129       | 10.8  | 9.0   | 13.6   |
| 127       | 12.3  | 10.8  | 16.2   |





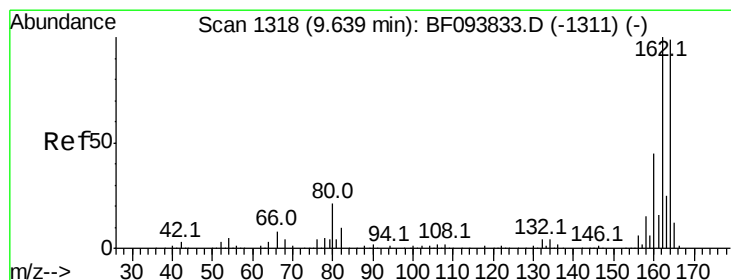
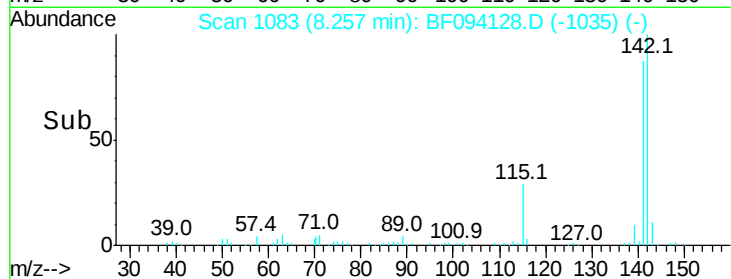
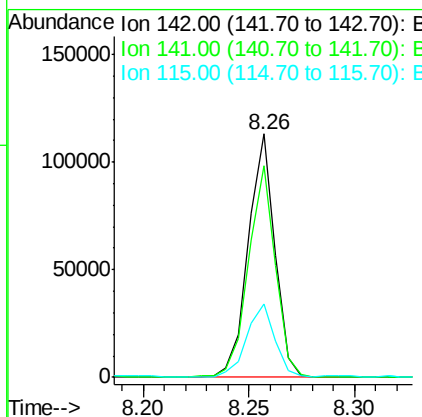
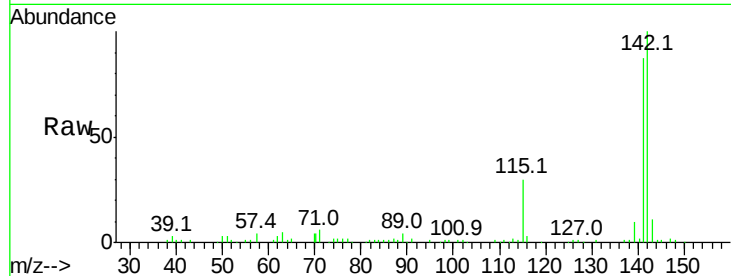
#37  
2-Methylnaphthalene  
Concen: 4.12 ng  
RT: 8.26 min Scan# 1083  
Delta R.T. -0.02 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

Instrument :  
BNA\_F  
ClientSampled :  
SS-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 86.9  | 71.3  | 106.9 |
| 115     | 30.1  | 27.1  | 40.7  |

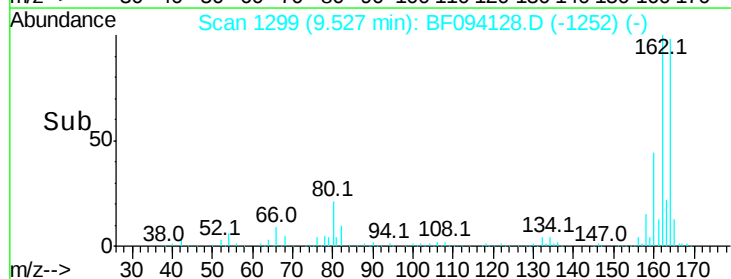
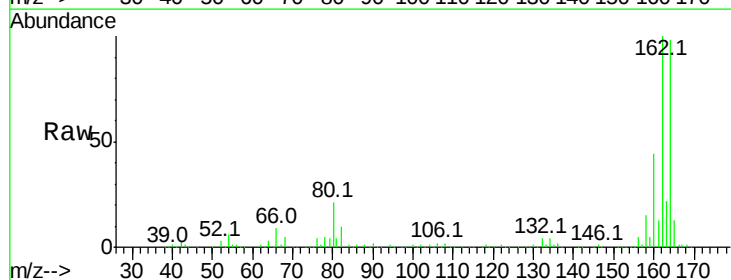
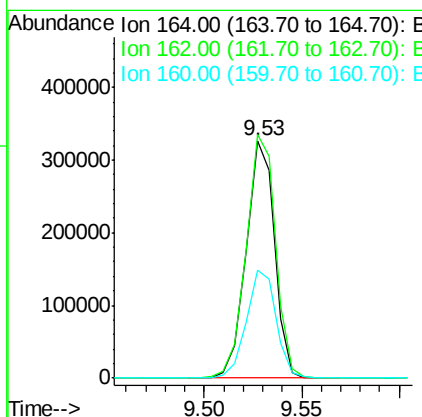
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#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 9.53 min Scan# 1299  
Delta R.T. -0.02 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 102.5 | 82.6  | 123.8 |
| 160     | 45.5  | 36.2  | 54.2  |





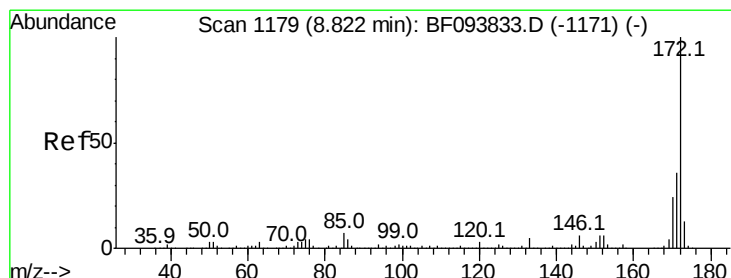
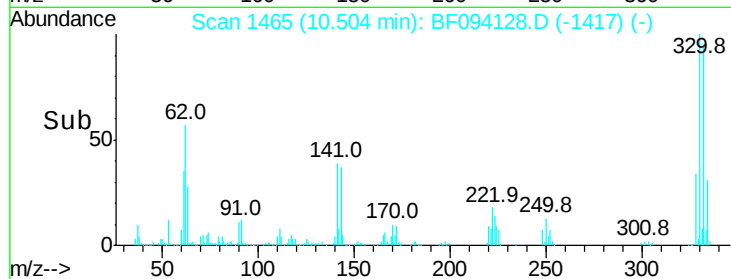
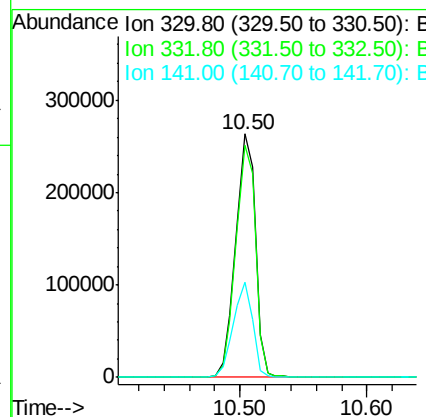
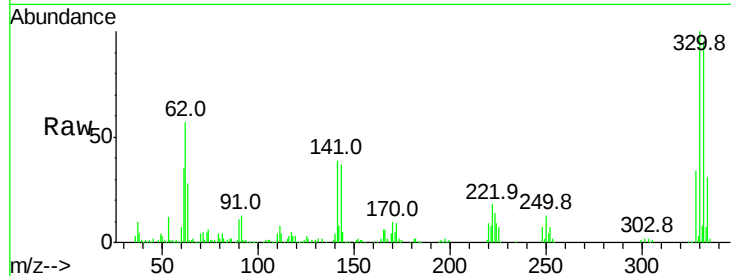
#41  
 2,4,6-Tribromophenol  
 Concen: 108.88 ng  
 RT: 10.50 min Scan# 1465  
 Delta R.T. -0.02 min  
 Lab File: BF094128.D  
 Acq: 3 Apr 2017 18:38

Instrument :  
 BNA\_F  
 ClientSampled :  
 SS-2

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 282841 |       |       |
| 332     | 95.5  | 76.6   | 115.0 |       |
| 141     | 39.2  | 31.4   | 47.2  |       |

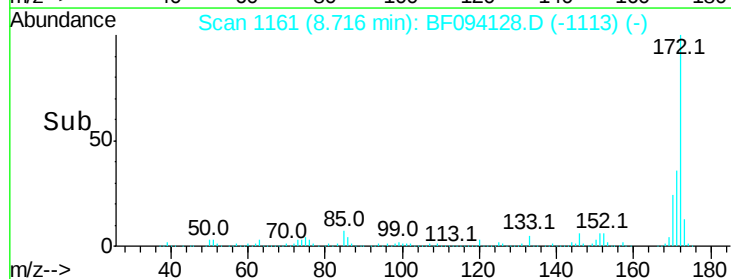
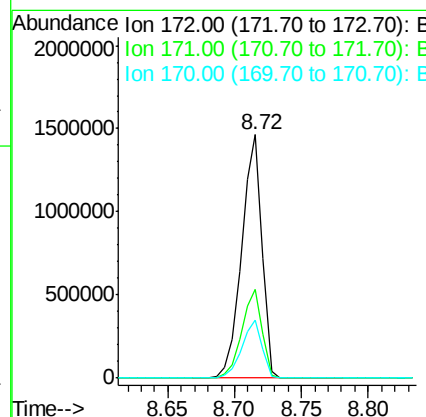
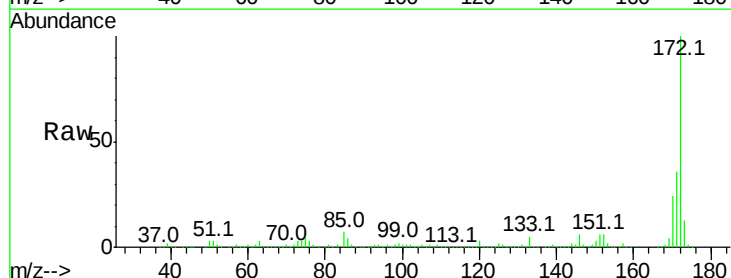
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 4/4/2017 5:34:03 PM



#44  
 2-Fluorobiphenyl  
 Concen: 71.64 ng  
 RT: 8.72 min Scan# 1161  
 Delta R.T. -0.02 min  
 Lab File: BF094128.D  
 Acq: 3 Apr 2017 18:38

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 172     | 100   | 1543947 |       |       |
| 171     | 36.2  | 29.6    | 44.4  |       |
| 170     | 24.1  | 19.8    | 29.8  |       |





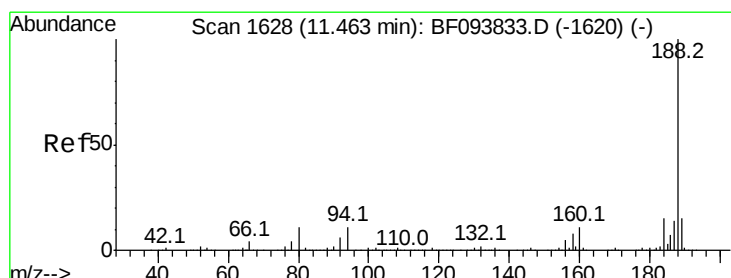
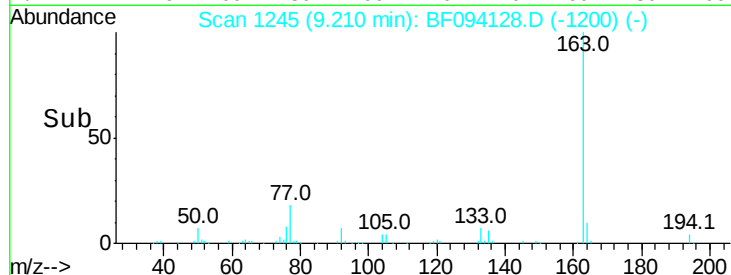
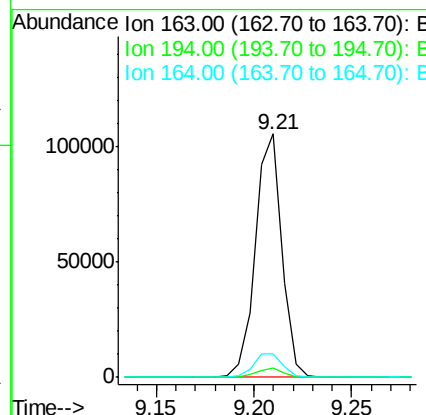
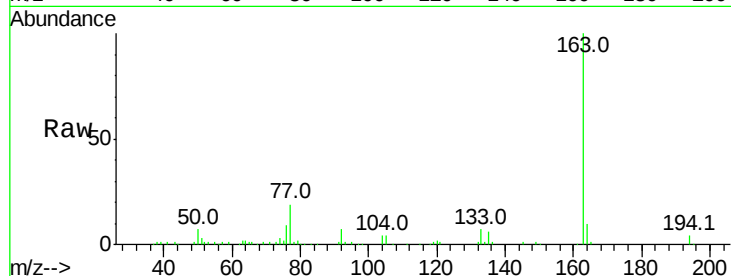
#49  
Dimethylphthalate  
Concen: 4.23 ng  
RT: 9.21 min Scan# 1245  
Delta R.T. -0.04 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

Instrument :  
BNA\_F  
ClientSampleId :  
SS-2

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 163     | 100   | 98769 |       |       |
| 194     | 4.0   |       | 2.6   | 4.0#  |
| 164     | 9.7   |       | 8.4   | 12.6  |

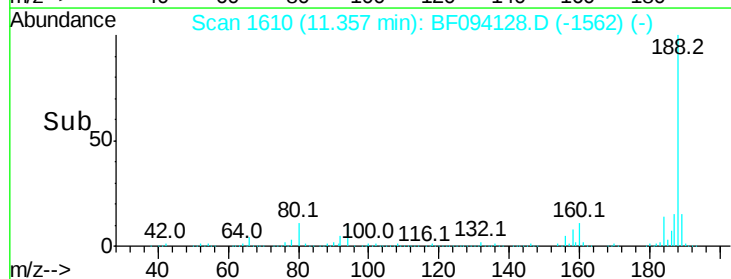
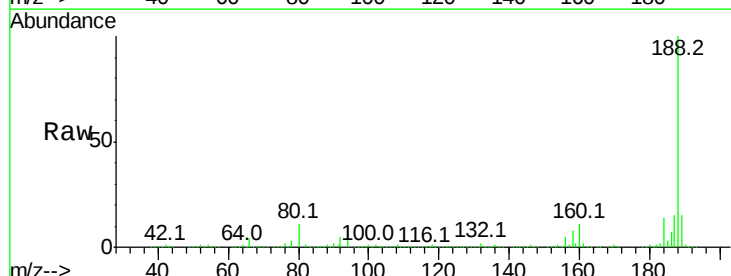
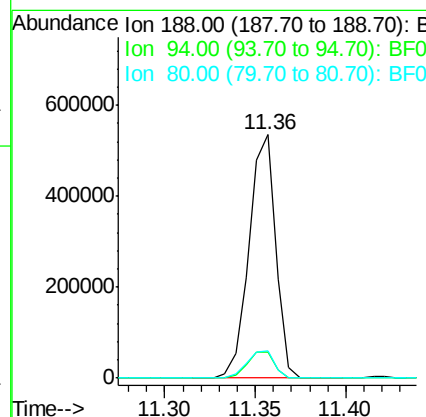
Manual Integrations  
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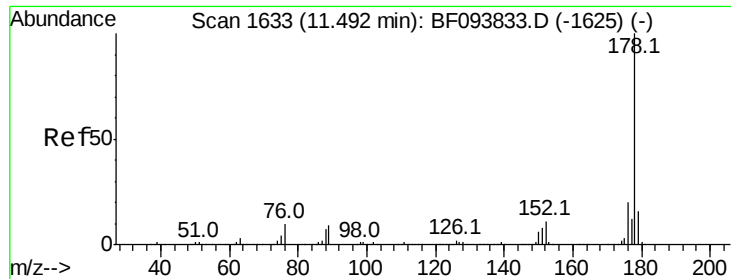
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#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.36 min Scan# 1610  
Delta R.T. -0.02 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 546822 |       |       |
| 94      | 10.4  |        | 9.4   | 14.2  |
| 80      | 11.2  |        | 10.2  | 15.2  |





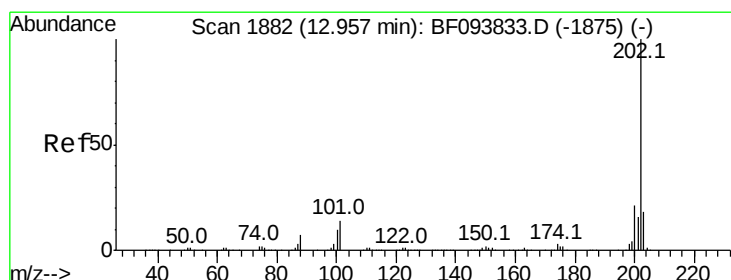
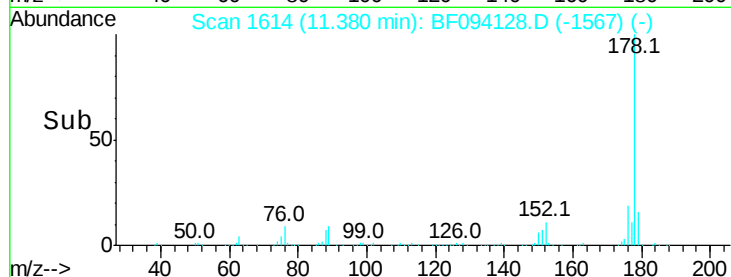
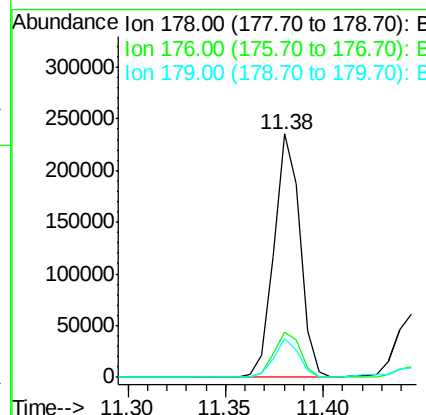
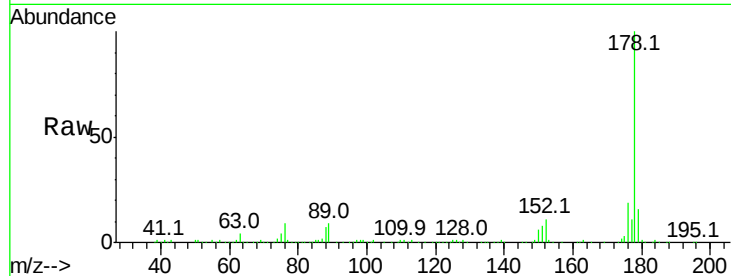
#70  
Phenanthrene  
Concen: 7.15 ng  
RT: 11.38 min Scan# 1614  
Delta R.T. -0.02 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

Instrument :  
BNA\_F  
ClientSampleId :  
SS-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.8  | 16.2  | 24.4  |
| 179     | 16.2  | 12.6  | 19.0  |

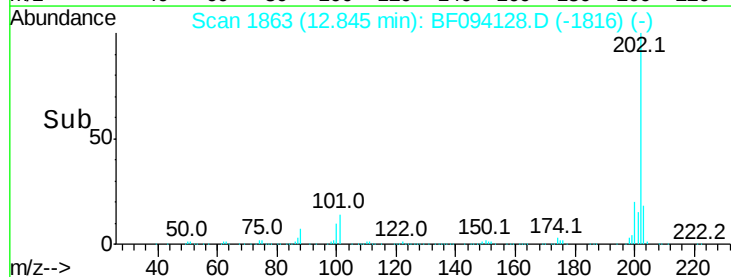
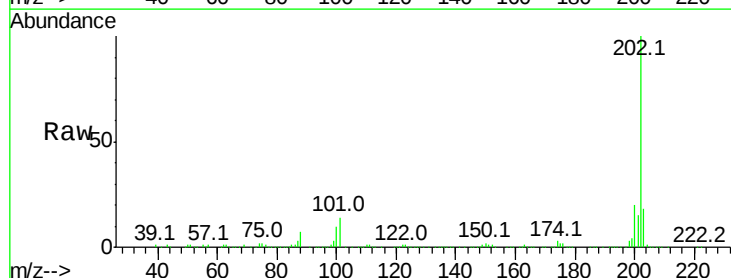
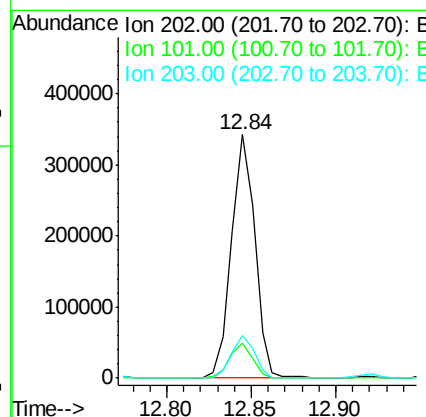
Manual Integrations  
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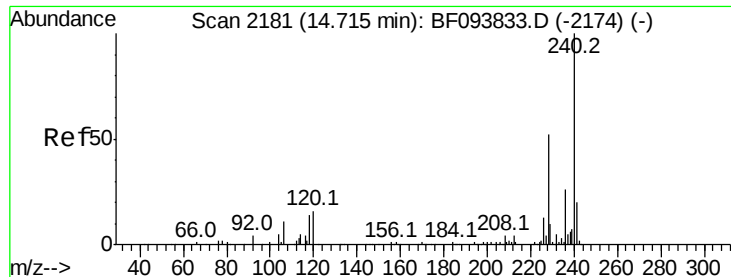
mohammad  
4/4/2017 5:34:03 PM



#74  
Fluoranthene  
Concen: 10.61 ng  
RT: 12.84 min Scan# 1863  
Delta R.T. -0.02 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 14.3  | 0.0   | 33.2  |
| 203     | 17.7  | 0.0   | 38.1  |





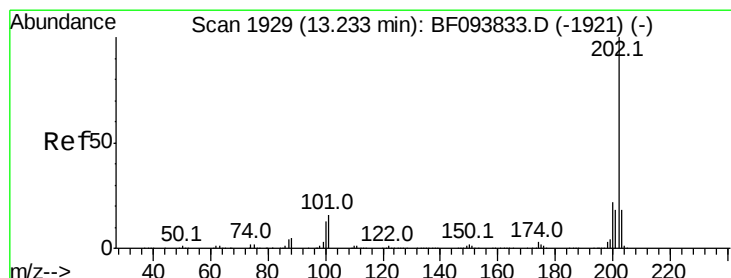
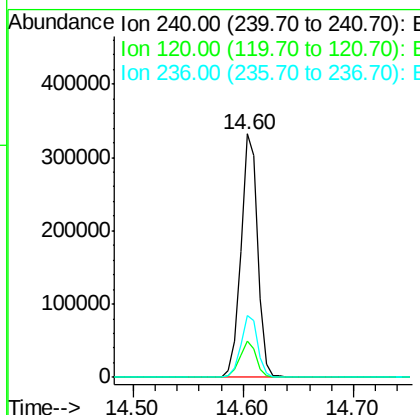
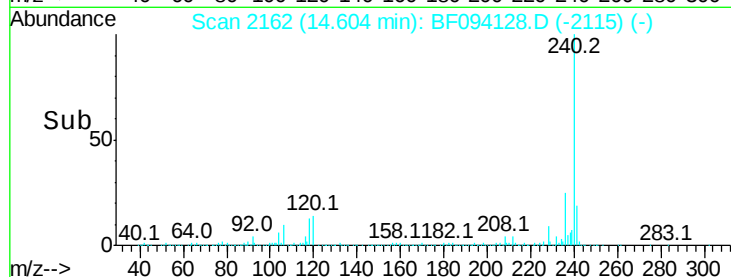
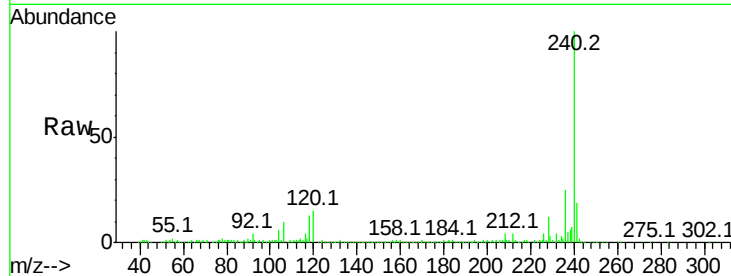
#75  
 Chrysene-d12  
 Concen: 20.00 ng  
 RT: 14.60 min Scan# 2162  
 Delta R.T. -0.02 min  
 Lab File: BF094128.D  
 Acq: 3 Apr 2017 18:38

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SS-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 14.6  | 5.8   | 8.8#  |
| 236     | 25.2  | 20.5  | 30.7  |

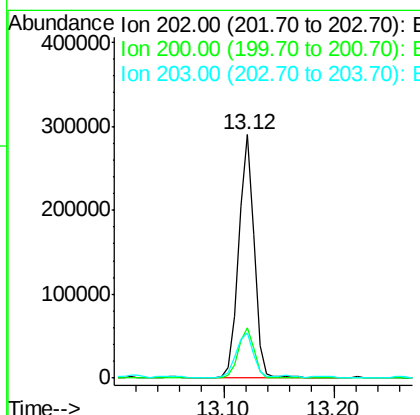
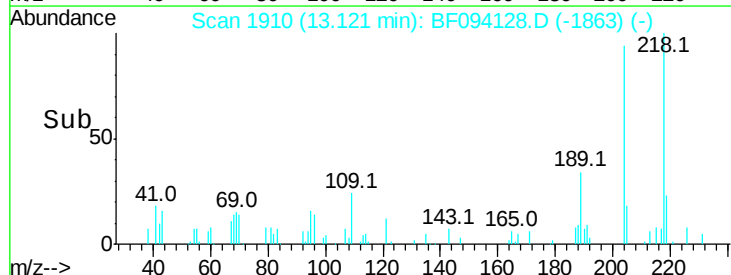
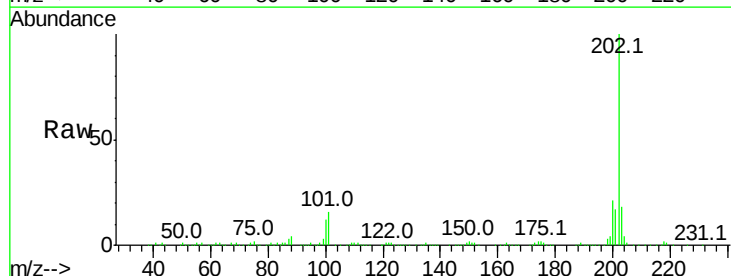
Manual Integrations  
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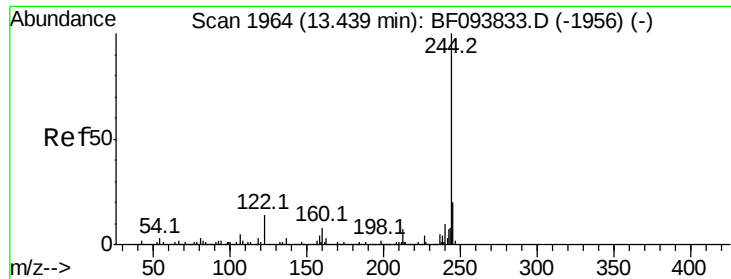
mohammad  
 4/4/2017 5:34:03 PM



#77  
 Pyrene  
 Concen: 11.07 ng  
 RT: 13.12 min Scan# 1910  
 Delta R.T. -0.02 min  
 Lab File: BF094128.D  
 Acq: 3 Apr 2017 18:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 20.7  | 17.6  | 26.4  |
| 203     | 18.4  | 14.4  | 21.6  |





#78

Terphenyl-d14

Concen: 66.53 ng

RT: 13.33 min Scan# 1946

Delta R.T. -0.02 min

Lab File: BF094128.D

Acq: 3 Apr 2017 18:38

Instrument :

BNA\_F

ClientSampleId :

SS-2

Tot Ion:244 Resp: 1051511

Ion Ratio Lower Upper

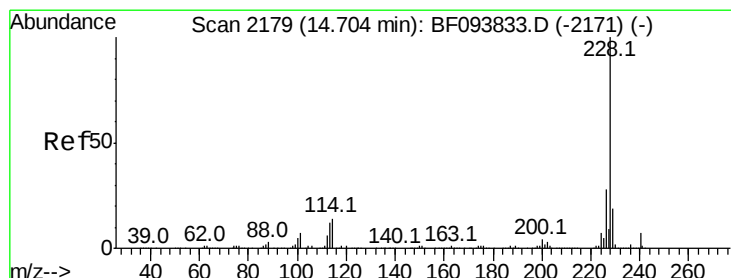
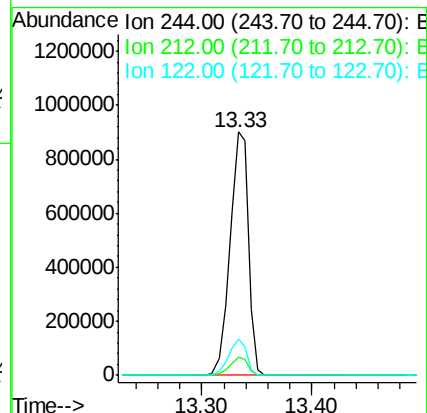
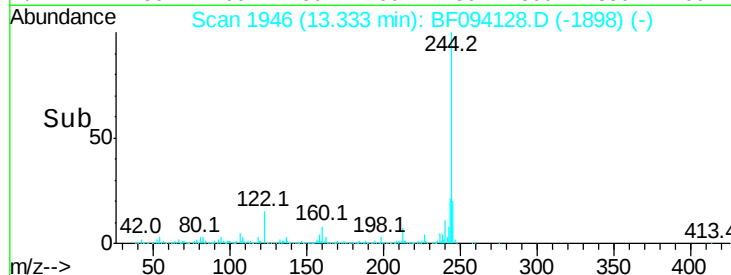
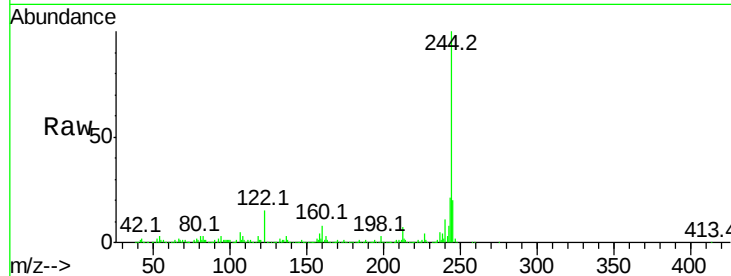
244 100

212 7.3 6.0 9.0

122 14.9 10.3 15.5

Manual Integrations  
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mohammad  
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#80

Benzo(a)anthracene

Concen: 6.07 ng

RT: 14.59 min Scan# 2160

Delta R.T. -0.02 min

Lab File: BF094128.D

Acq: 3 Apr 2017 18:38

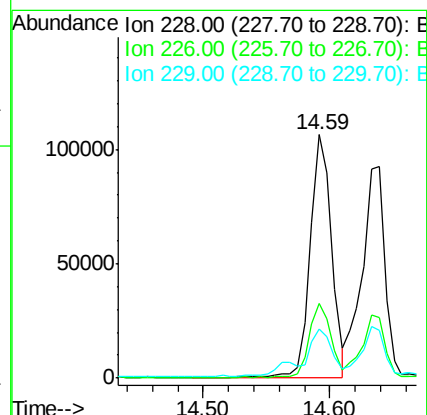
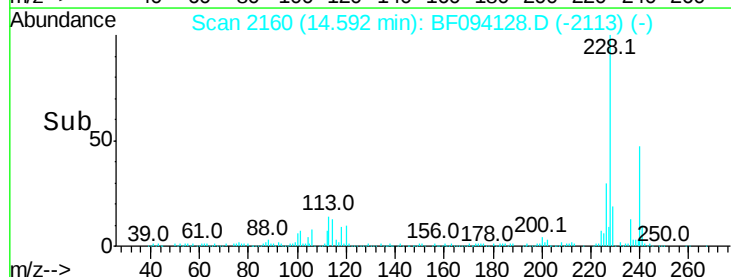
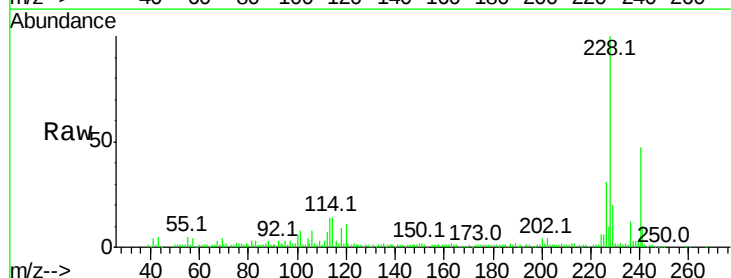
Tgt Ion:228 Resp: 125437

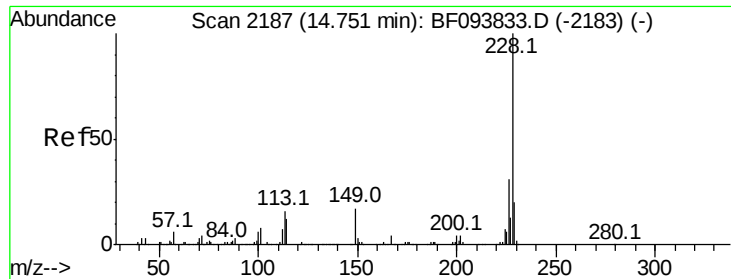
Ion Ratio Lower Upper

228 100

226 30.6 22.6 33.8

229 20.3 16.3 24.5





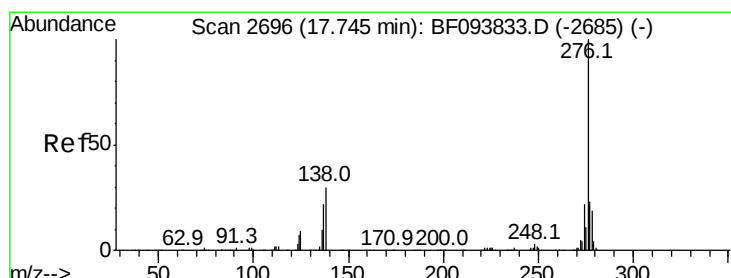
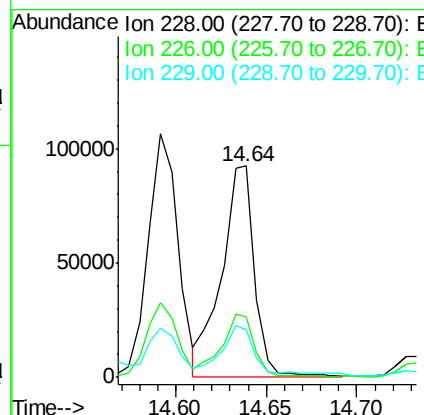
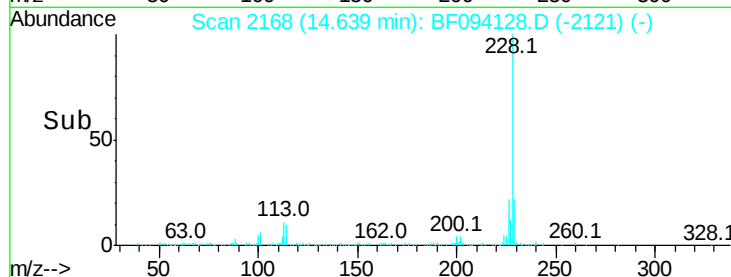
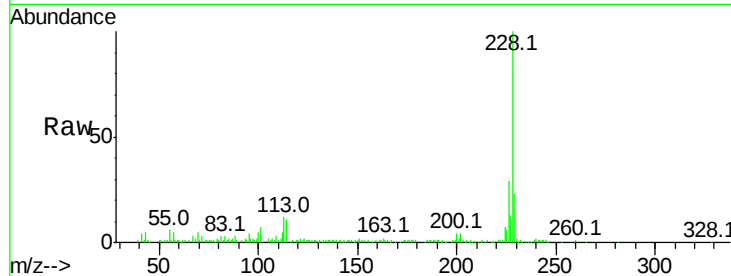
#82  
Chrysene  
Concen: 6.07 ng  
RT: 14.64 min Scan# 2168  
Delta R.T. -0.02 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

Instrument :  
BNA\_F  
ClientSampled :  
SS-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.7  | 24.9  | 37.3  |
| 229     | 22.5  | 15.8  | 23.6  |

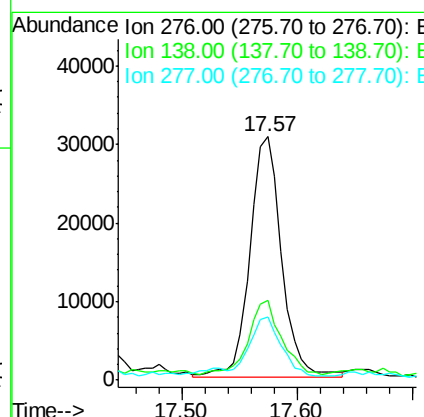
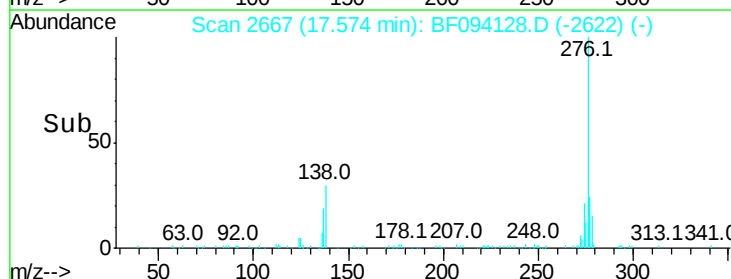
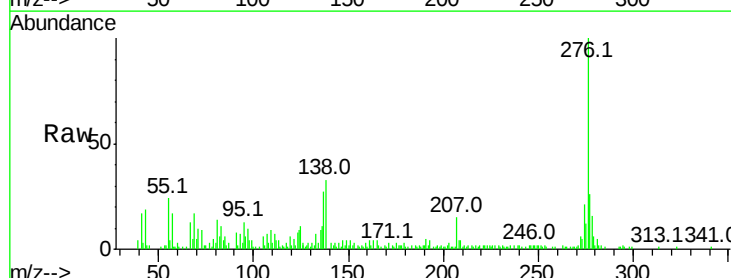
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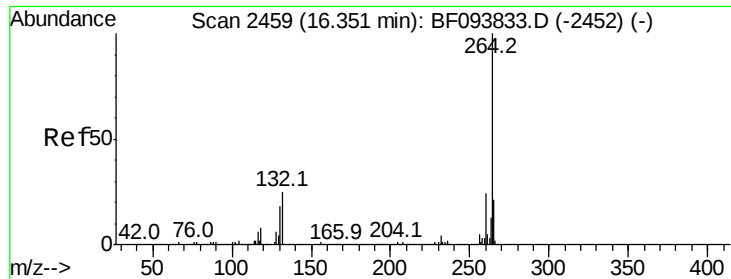
mohammad  
4/4/2017 5:34:03 PM



#85  
Indeno(1,2,3-cd)pyrene  
Concen: 3.52 ng  
RT: 17.57 min Scan# 2667  
Delta R.T. -0.04 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 32.6  | 27.8  | 41.6  |
| 277     | 24.3  | 20.2  | 30.4  |





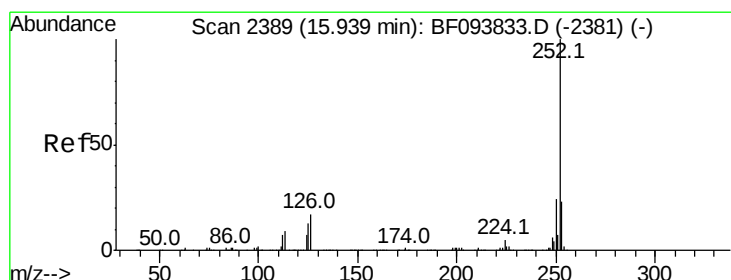
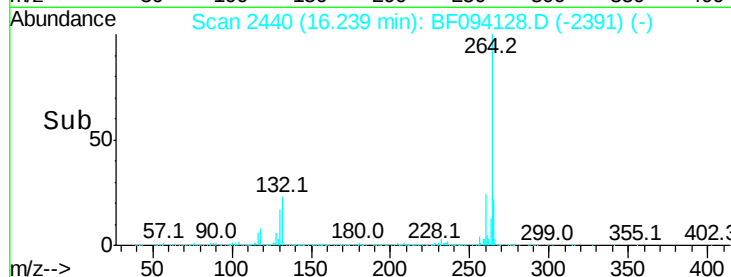
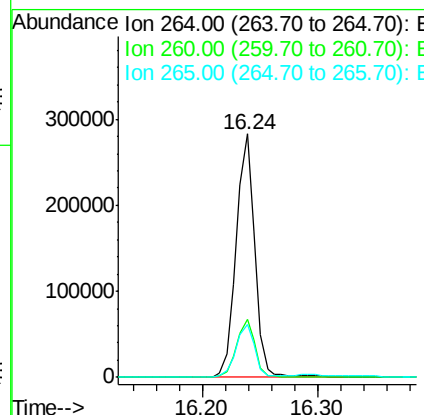
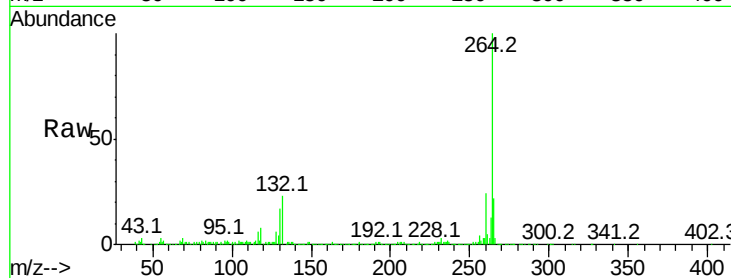
#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 16.24 min Scan# 2440  
Delta R.T. -0.01 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

Instrument :  
BNA\_F  
ClientSampled :  
SS-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.8  | 19.5  | 29.3  |
| 265     | 21.9  | 17.2  | 25.8  |

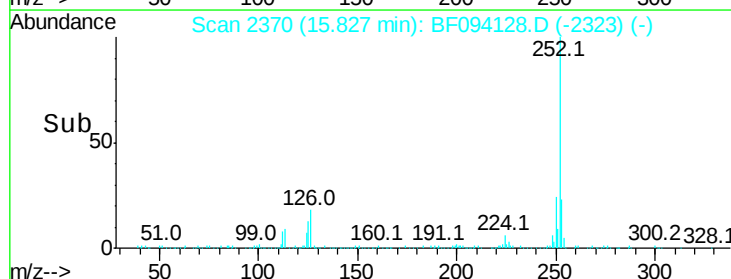
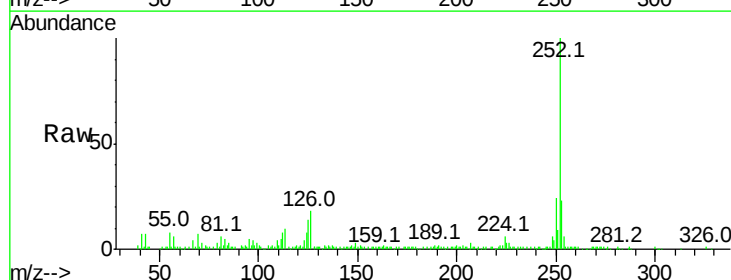
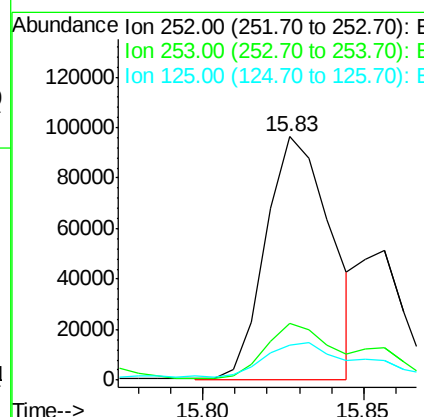
Manual Integrations  
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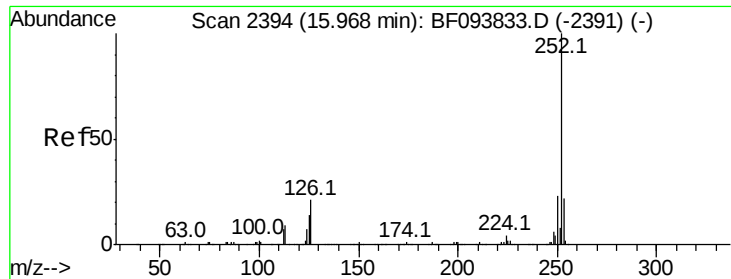
mohammad  
4/4/2017 5:34:03 PM



#87  
Benzo(b)fluoranthene  
Concen: 7.02 ng m  
RT: 15.83 min Scan# 2370  
Delta R.T. -0.02 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.2  | 18.1  | 27.1  |
| 125     | 14.2  | 9.8   | 14.8  |





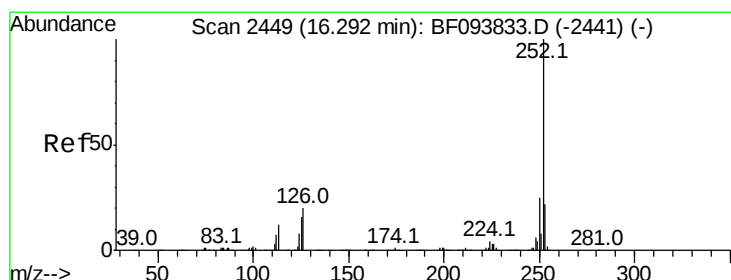
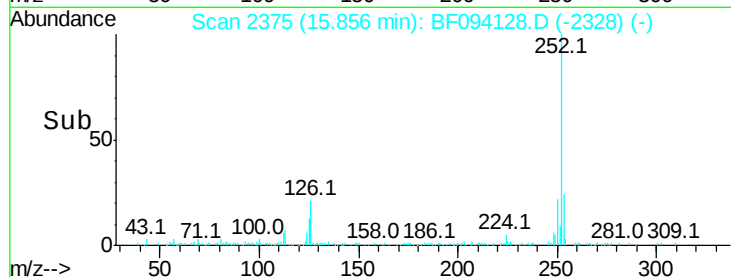
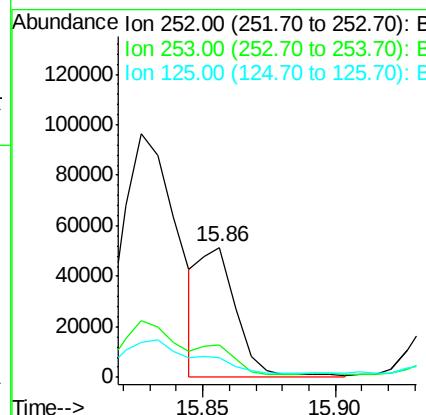
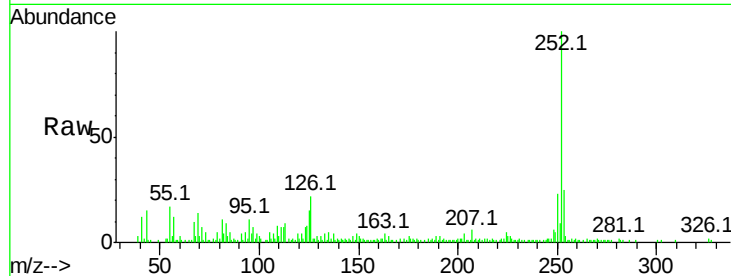
#88  
Benzo(k)fluoranthene  
Concen: 2.64 ng m  
RT: 15.86 min Scan# 2375  
Delta R.T. -0.02 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

Instrument :  
BNA\_F  
ClientSampleId :  
SS-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.7  | 18.4  | 27.6  |
| 125     | 15.3  | 13.1  | 19.7  |

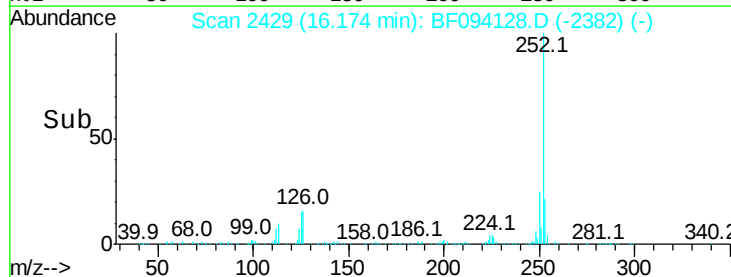
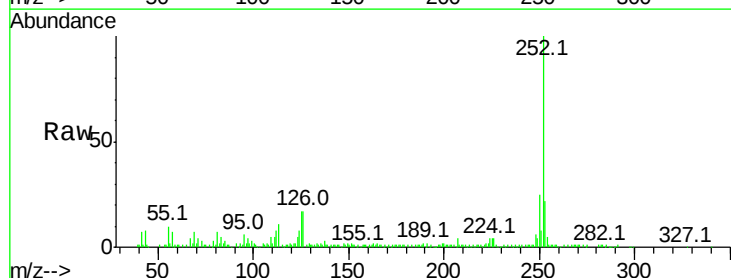
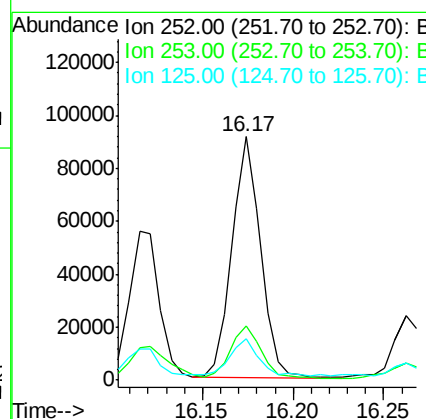
Manual Integrations  
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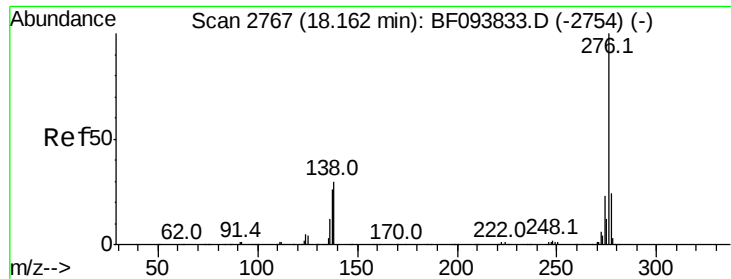
mohammad  
4/4/2017 5:34:03 PM



#89  
Benzo(a)pyrene  
Concen: 5.61 ng  
RT: 16.17 min Scan# 2429  
Delta R.T. -0.02 min  
Lab File: BF094128.D  
Acq: 3 Apr 2017 18:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.5  | 17.5  | 26.3  |
| 125     | 16.7  | 11.0  | 16.4  |





#91  
 Benzo(a,h,i)perylene  
 Concen: 3.30 ng  
 RT: 17.97 min Scan# 2734  
 Delta R.T. -0.04 min  
 Lab File: BF094128.D  
 Acq: 3 Apr 2017 18:38

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SS-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 27.8  | 18.6  | 28.0  |
| 138     | 35.0  | 25.4  | 38.0  |

Manual Integrations  
 APPROVED

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