

Data Path : Z:\HPCHEM1\BNA F\DATA\BF070316\  
 Data File : BF088688.D  
 Acq On : 4 Jul 2016 11:38  
 Operator : UM/SJ  
 Sample : H3769-07  
 Misc :  
 ALS Vial : 47 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EPCH-B3(02-04)

## Manual Integrations

umangi  
 7/5/2016 7:50:26 PM

Quant Time: Jul 05 01:32:47 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF063016.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 05 01:06:52 2016  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.79  | 152  | 108038   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.07  | 136  | 368865   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10        | 9.82  | 164  | 150465   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.30 | 188  | 243834   | 20.00 | ng    | 0.01     |
| 75) Chrysene-d12            | 13.92 | 240  | 187697   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12            | 15.33 | 264  | 160831   | 20.00 | ng    | 0.01     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.38  | 112  | 579078   | 80.33 | ng    | 0.01     |
| 7) Phenol-d6                | 6.42  | 99   | 726523   | 78.00 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.35  | 82   | 439824   | 62.49 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.60 | 330  | 118026   | 84.47 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.15  | 172  | 811415   | 85.18 | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.88 | 244  | 477855   | 56.71 | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 49) Dimethylphthalate       | 9.54  | 163  | 109913   | 10.25 | ng    | 99       |
| 70) Phenanthrene            | 11.32 | 178  | 224108   | 16.81 | ng    | 98       |
| 71) Anthracene              | 11.37 | 178  | 58161    | 4.39  | ng    | 97       |
| 74) Fluoranthene            | 12.50 | 202  | 349475   | 25.86 | ng    | 97       |
| 77) Pyrene                  | 12.73 | 202  | 331127   | 20.81 | ng    | 99       |
| 80) Benzo(a)anthracene      | 13.92 | 228  | 176315   | 14.59 | ng    | 99       |
| 82) Chrysene                | 13.95 | 228  | 141523m  | 11.84 | ng    |          |
| 85) Indeno(1,2,3-cd)pyrene  | 16.65 | 276  | 64560    | 7.02  | ng    | # 100    |
| 87) Benzo(b)fluoranthene    | 14.93 | 252  | 158384m  | 15.70 | ng    |          |
| 88) Benzo(k)fluoranthene    | 14.94 | 252  | 70336m   | 8.01  | ng    |          |
| 89) Benzo(a)pyrene          | 15.26 | 252  | 115623   | 13.54 | ng    | 97       |
| 90) Dibenzo(a,h)anthracene  | 16.66 | 278  | 15902    | 2.23  | ng    | # 84     |
| 91) Benzo(a,h,i)perylene    | 17.05 | 276  | 59992    | 8.13  | ng    | 99       |

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

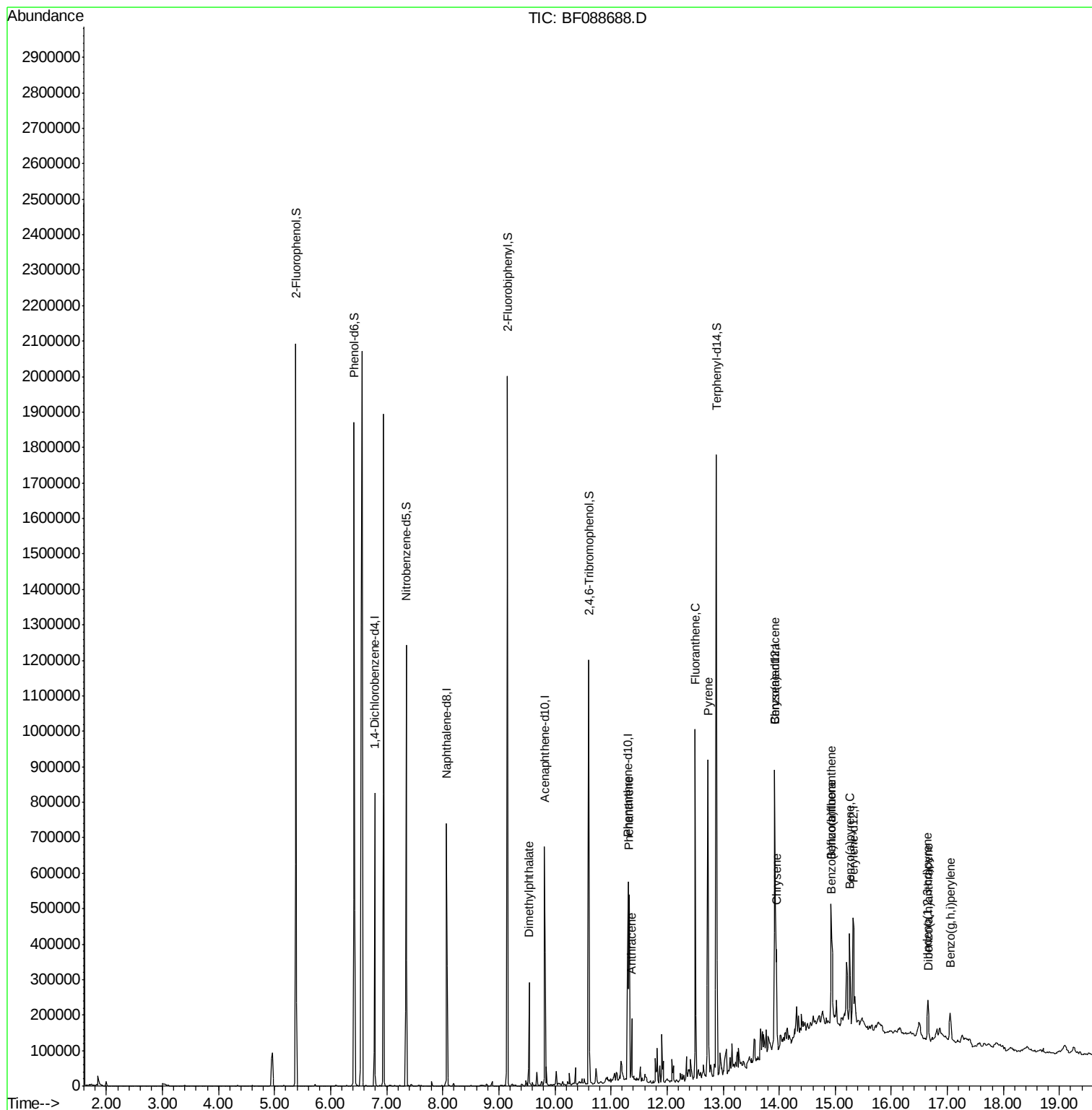
Data Path : Z:\HPCHEM1\BNA F\DATA\BF070316\  
Data File : BF088688.D  
Acq On : 4 Jul 2016 11:38  
Operator : UM/SJ  
Sample : H3769-07  
Misc :  
ALS Vial : 47 Sample Multiplier: 1

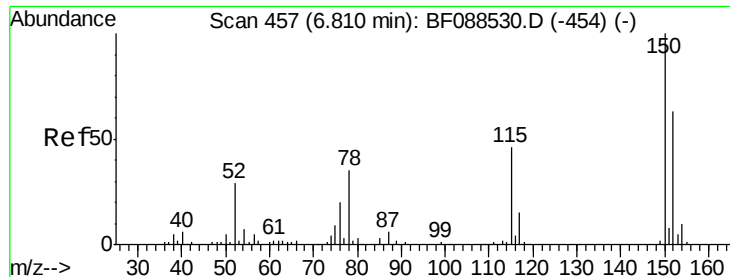
Instrument :  
BNA\_F  
ClientSampleId :  
EPCH-B3(02-04)

## Manual Integrations

umangi  
7/5/2016 7:50:26 PM

Quant Time: Jul 05 01:32:47 2016  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF063016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 05 01:06:52 2016  
Response via : Initial Calibration





#1

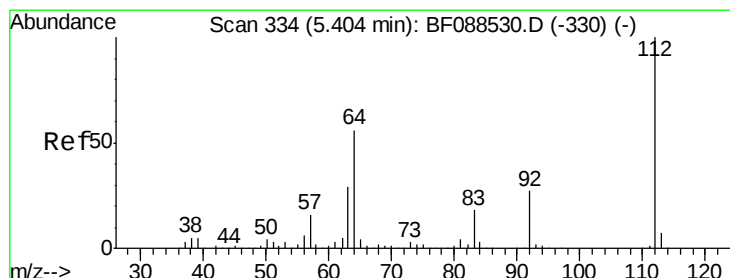
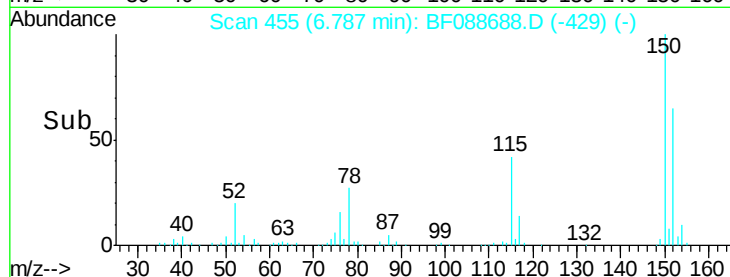
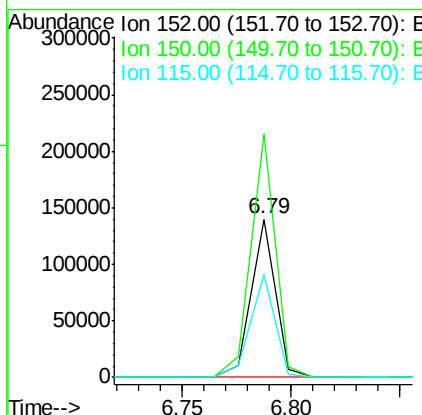
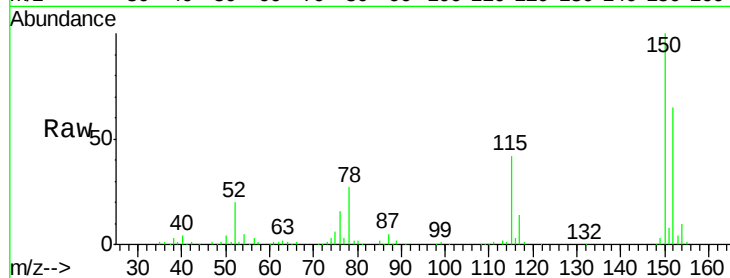
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.79 min Scan# 455  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

Instrument :  
BNA\_F  
ClientSampleId :  
EPCH-B3(02-04)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 154.1 | 123.8 | 185.6 |
| 115     | 64.8  | 39.6  | 59.4  |

Manual Integrations

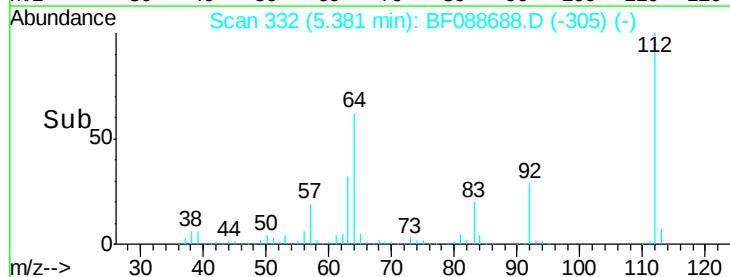
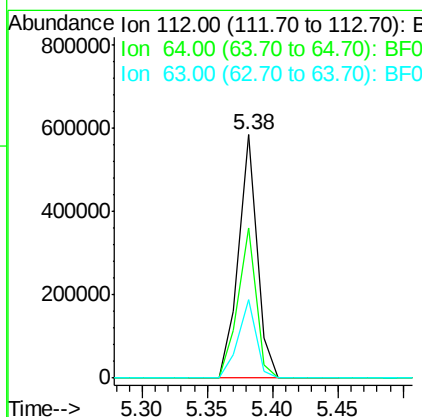
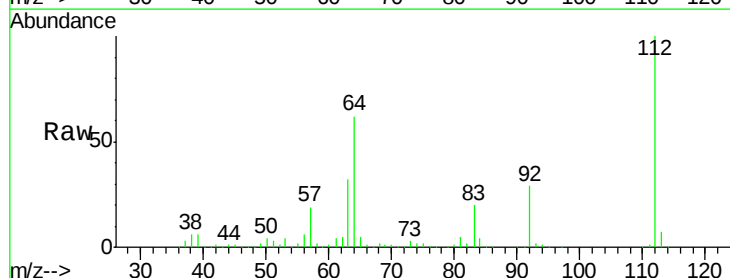
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#5

2-Fluorophenol  
Concen: 80.33 ng  
RT: 5.38 min Scan# 332  
Delta R.T. 0.01 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 61.9  | 42.2  | 63.2  |
| 63      | 32.4  | 21.8  | 32.8  |





#7

Phenol-d6

Concen: 78.00 ng

RT: 6.42 min Scan# 423

Delta R.T. 0.00 min

Lab File: BF088688.D

Acq: 4 Jul 2016 11:38

Instrument :

BNA\_F

ClientSampleId :

EPCH-B3(02-04)

Tot Ion: 99 Resp: 726523

Ion Ratio Lower Upper

99 100

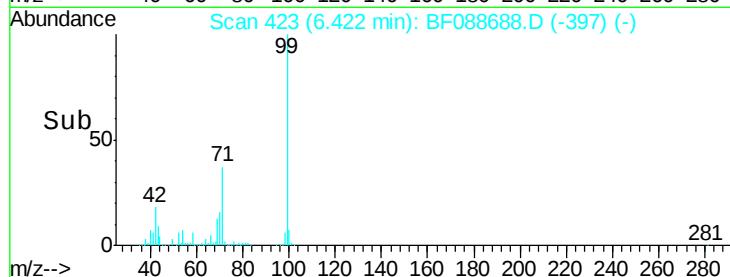
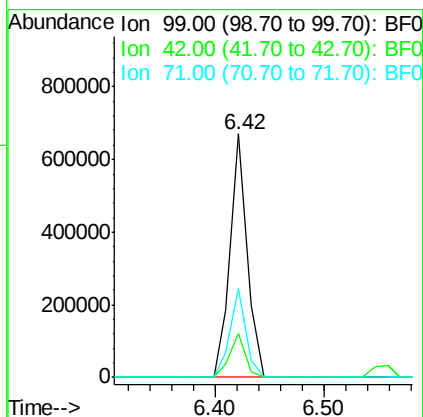
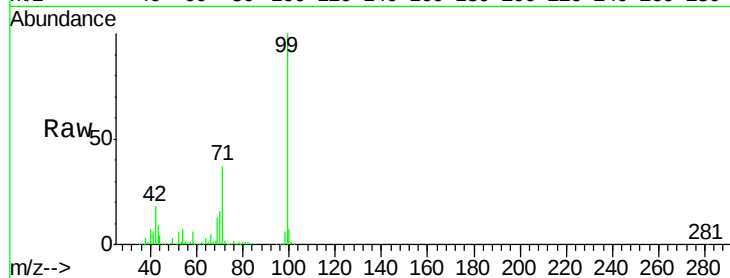
42 17.9 12.2 18.2

71 36.5 23.4 35.0#

Manual Integrations

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#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.07 min Scan# 567

Delta R.T. 0.00 min

Lab File: BF088688.D

Acq: 4 Jul 2016 11:38

Tgt Ion: 136 Resp: 368865

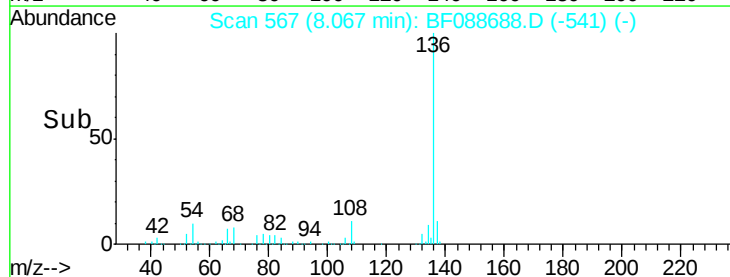
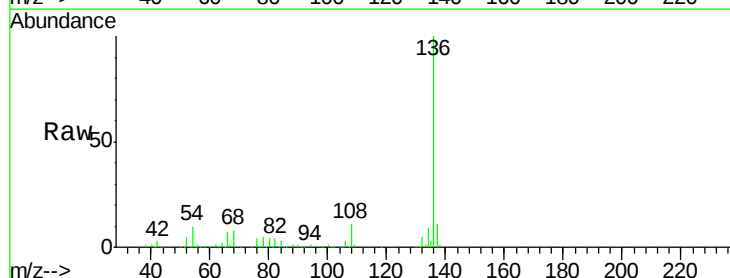
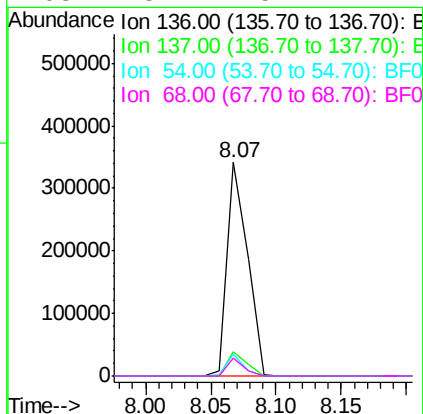
Ion Ratio Lower Upper

136 100

137 11.4 9.1 13.7

54 10.2 6.6 10.0#

68 8.1 5.1 7.7#





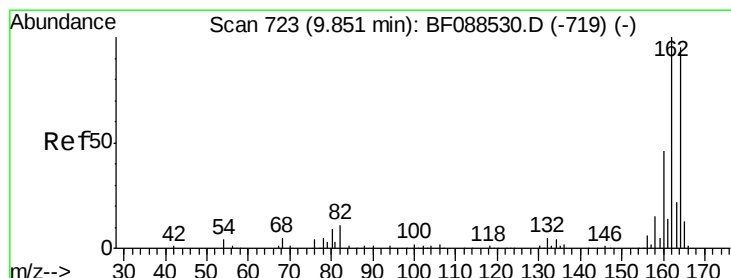
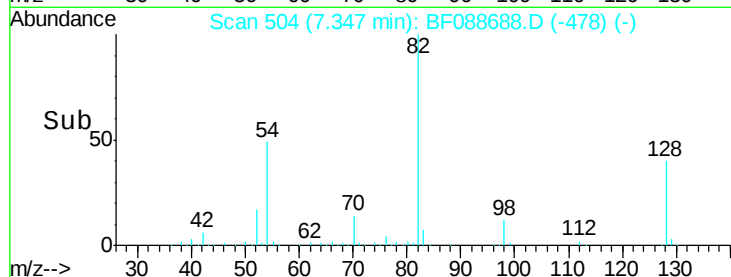
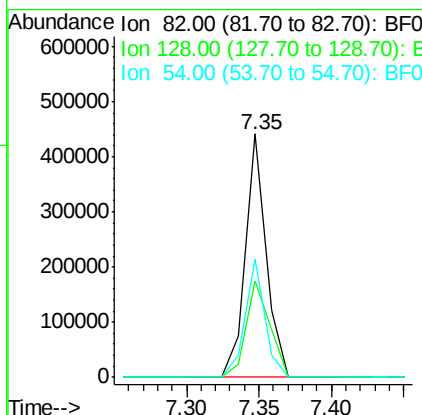
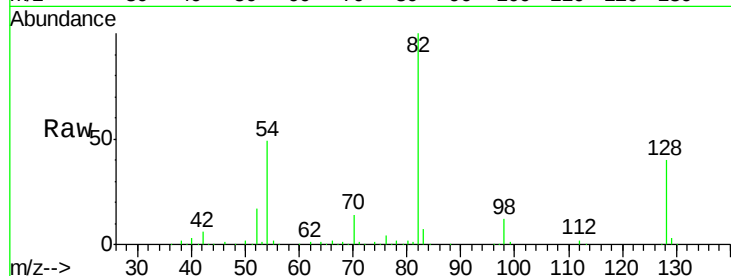
#23  
Nitrobenzene-d5  
Concen: 62.49 ng  
RT: 7.35 min Scan# 504  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

Instrument :  
BNA\_F  
ClientSampleId :  
EPCH-B3(02-04)

| Tot Ion   | 82   | Resp  | 439824 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 82        | 100  |       |        |
| 128       | 39.8 | 35.9  | 53.9   |
| 54        | 48.6 | 40.9  | 61.3   |

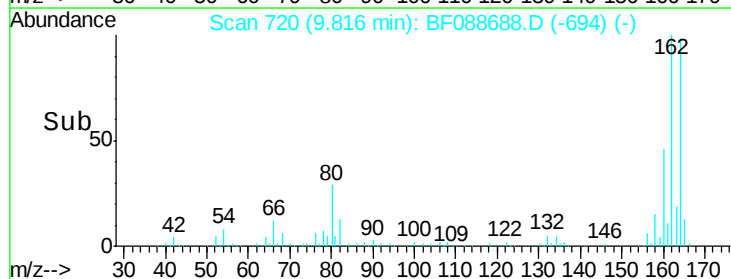
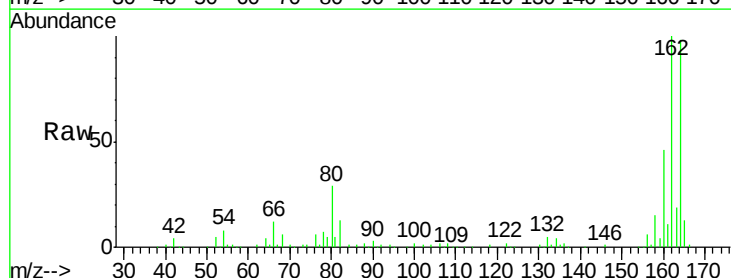
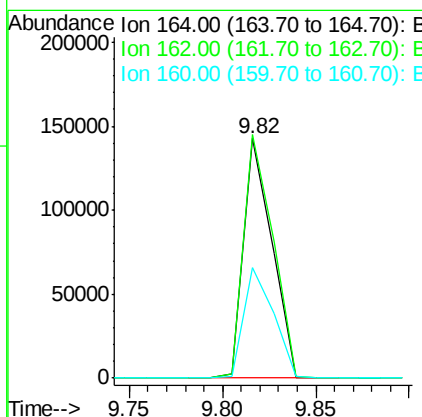
Manual Integrations

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#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 9.82 min Scan# 720  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

| Tgt Ion   | 164   | Resp  | 150465 |
|-----------|-------|-------|--------|
| Ion Ratio | 100   | Lower | Upper  |
| 164       | 100   |       |        |
| 162       | 101.7 | 85.4  | 128.2  |
| 160       | 46.3  | 39.5  | 59.3   |





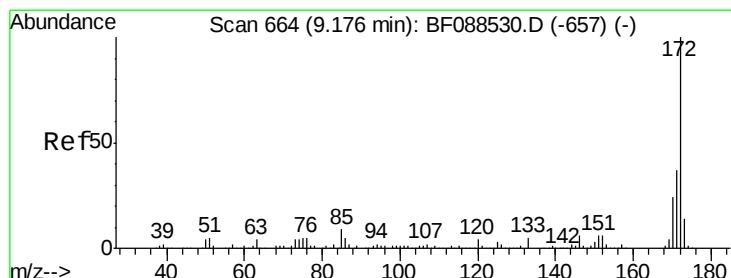
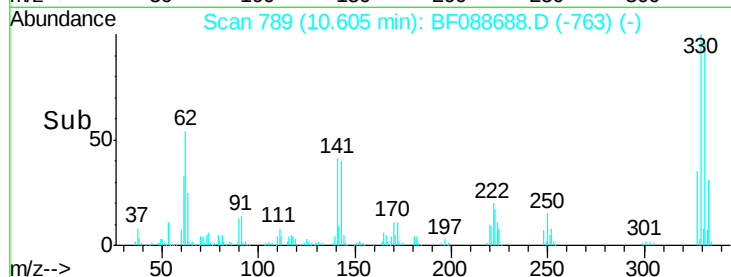
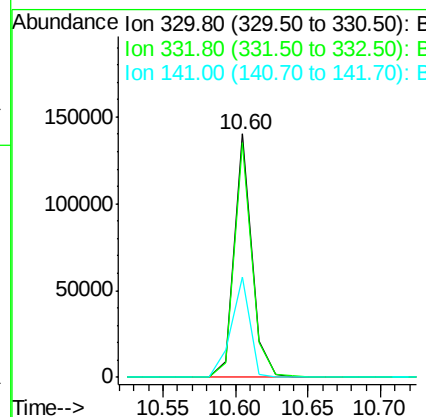
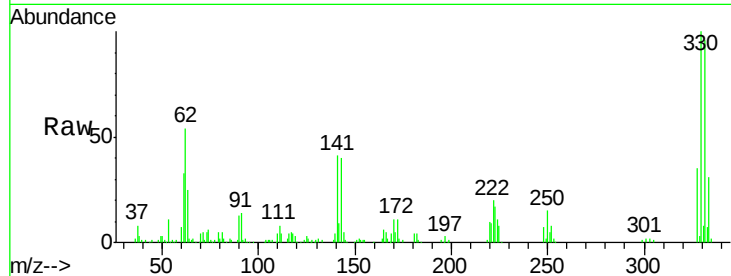
#41  
 2,4,6-Tribromophenol  
 Concen: 84.47 ng  
 RT: 10.60 min Scan# 789  
 Delta R.T. 0.00 min  
 Lab File: BF088688.D  
 Acq: 4 Jul 2016 11:38

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EPCH-B3(02-04)

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 330     | 100   |      |       |       |
| 332     | 96.5  | 0.0  | 0.0   |       |
| 141     | 44.2  | 0.0  | 0.0   |       |

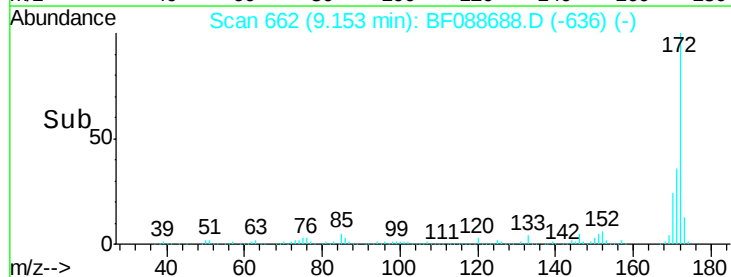
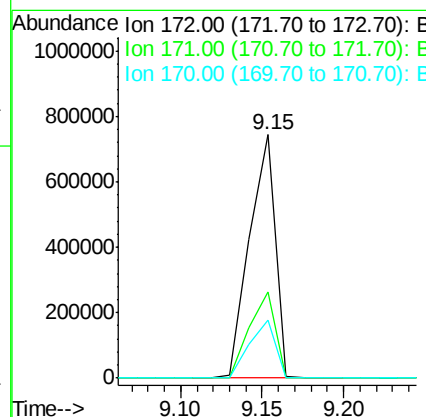
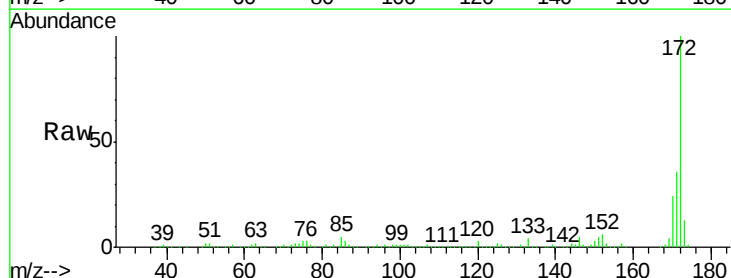
Manual Integrations

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#44  
 2-Fluorobiphenyl  
 Concen: 85.18 ng  
 RT: 9.15 min Scan# 662  
 Delta R.T. 0.00 min  
 Lab File: BF088688.D  
 Acq: 4 Jul 2016 11:38

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 172     | 100   |      |       |       |
| 171     | 35.6  | 28.6 | 43.0  |       |
| 170     | 23.6  | 19.2 | 28.8  |       |





#49

Dimethylphthalate

Concen: 10.25 ng

RT: 9.54 min Scan# 696

Delta R.T. -0.01 min

Lab File: BF088688.D

Acq: 4 Jul 2016 11:38

Instrument :

BNA\_F

ClientSampleId :

EPCH-B3(02-04)

Tot Ion:163 Resp: 109913

Ion Ratio Lower Upper

163 100

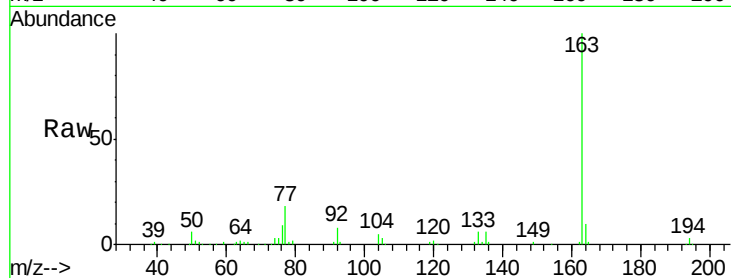
194 3.5 2.8 4.2

164 9.9 8.3 12.5

Manual Integrations

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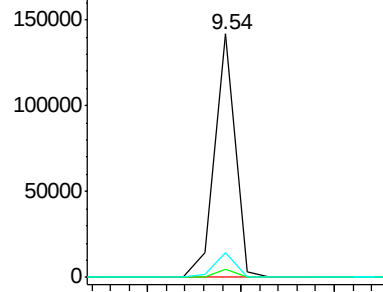
7/5/2016 7:50:26 PM



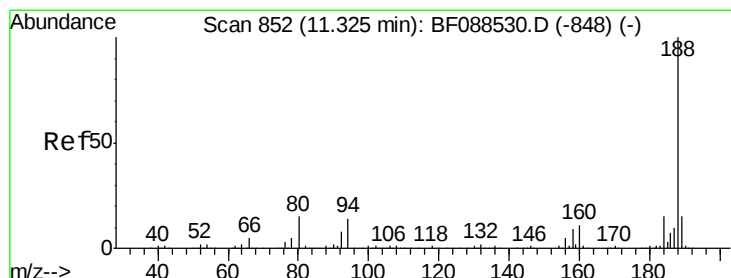
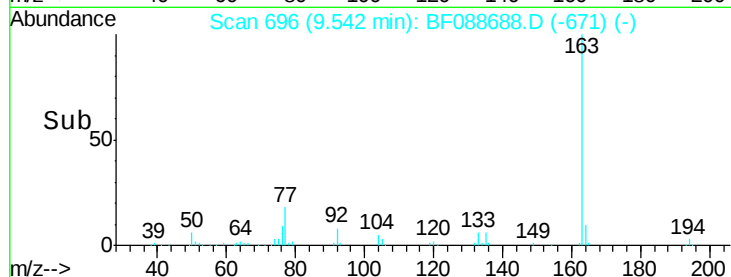
Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



Time-->



#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.30 min Scan# 850

Delta R.T. 0.01 min

Lab File: BF088688.D

Acq: 4 Jul 2016 11:38

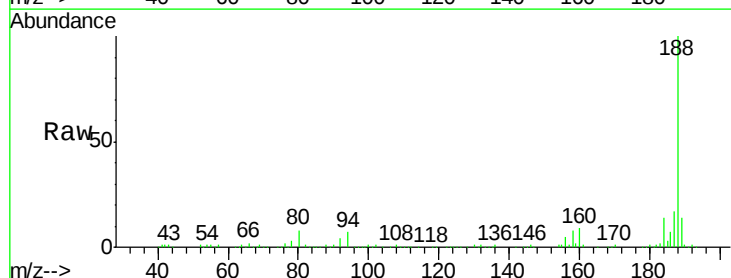
Tgt Ion:188 Resp: 243834

Ion Ratio Lower Upper

188 100

94 7.4 9.0 13.6#

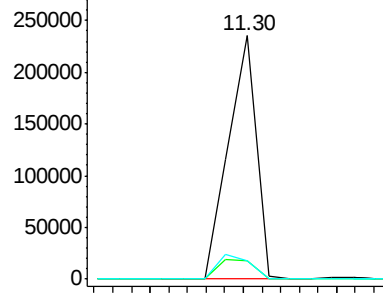
80 7.7 10.0 15.0#



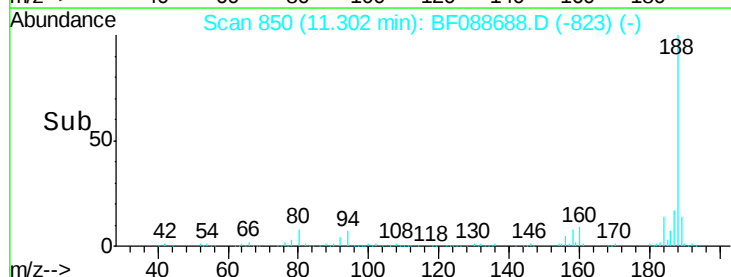
Abundance Ion 188.00 (187.70 to 188.70): E

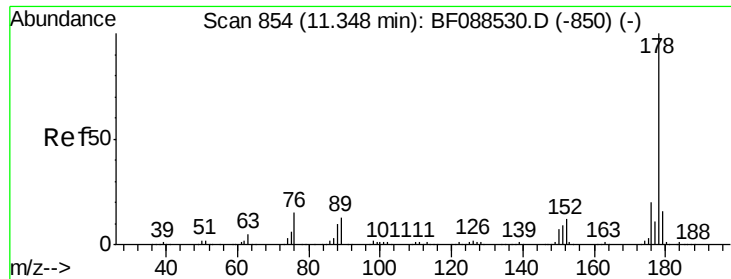
Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0



Time-->





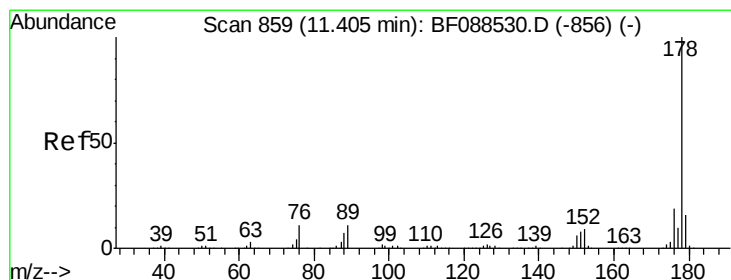
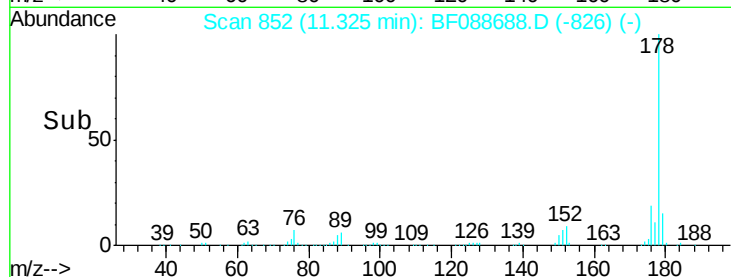
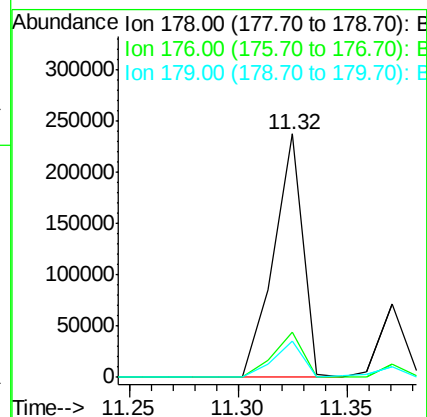
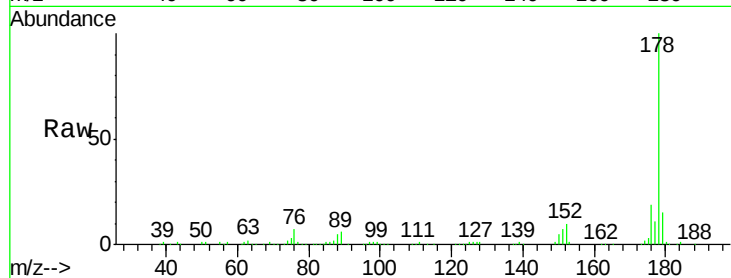
#70  
Phenanthrene  
Concen: 16.81 ng  
RT: 11.32 min Scan# 852  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

Instrument :  
BNA\_F  
ClientSampleId :  
EPCH-B3(02-04)

Tot Ion:178 Resp: 224108  
Ion Ratio Lower Upper  
178 100  
176 18.8 15.8 23.6  
179 14.9 13.0 19.4

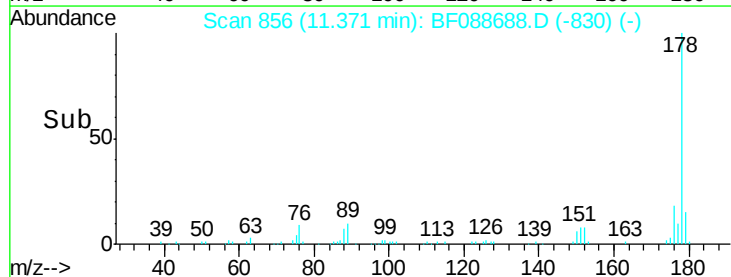
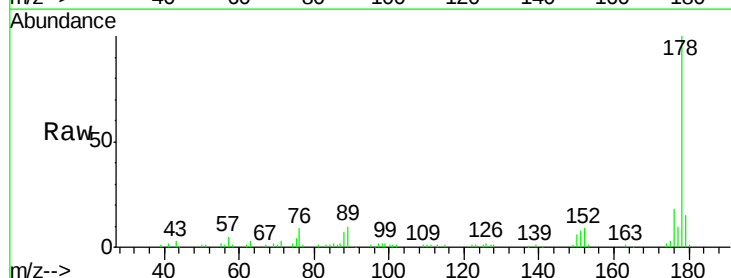
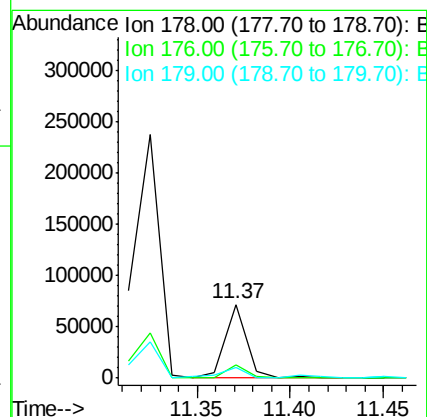
Manual Integrations

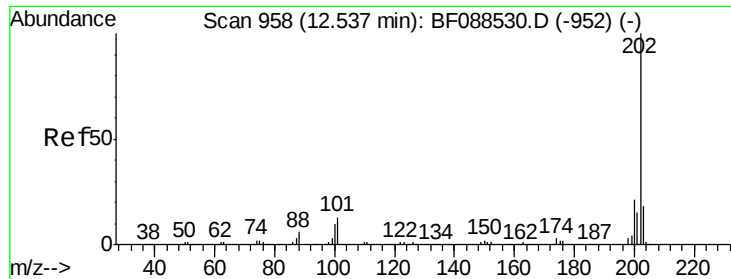
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#71  
Anthracene  
Concen: 4.39 ng  
RT: 11.37 min Scan# 856  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

Tgt Ion:178 Resp: 58161  
Ion Ratio Lower Upper  
178 100  
176 17.9 15.6 23.4  
179 15.3 12.8 19.2





#74

Fluoranthene

Concen: 25.86 ng

RT: 12.50 min Scan# 955

Delta R.T. 0.00 min

Lab File: BF088688.D

Acq: 4 Jul 2016 11:38

Instrument :

BNA\_F

ClientSampleId :

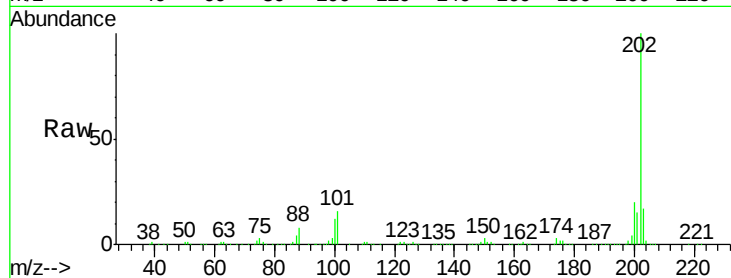
EPCH-B3(02-04)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 349475 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 15.5  | 0.0   | 33.1   |
| 203       | 17.5  | 0.0   | 38.1   |

Manual Integrations

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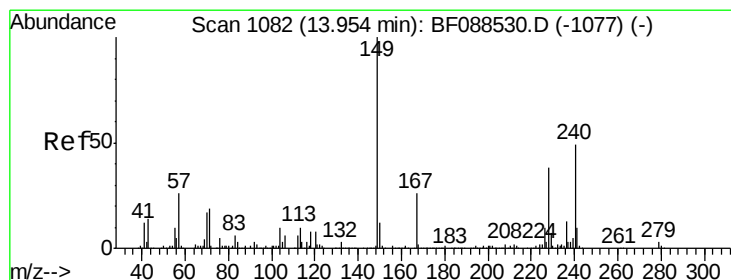
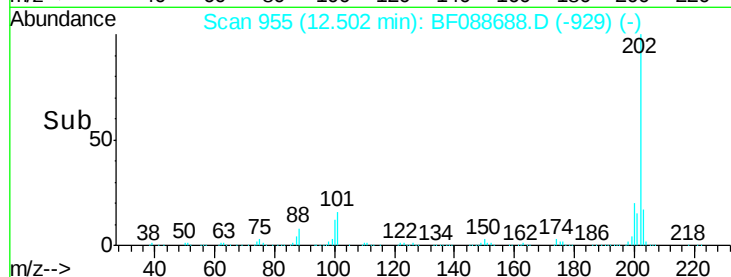
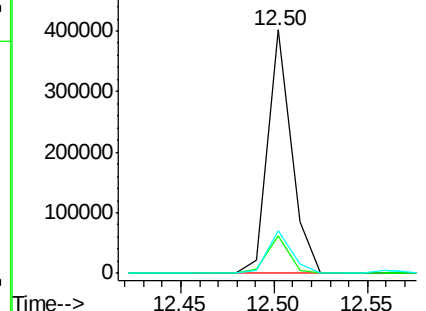
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Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.92 min Scan# 1079

Delta R.T. 0.00 min

Lab File: BF088688.D

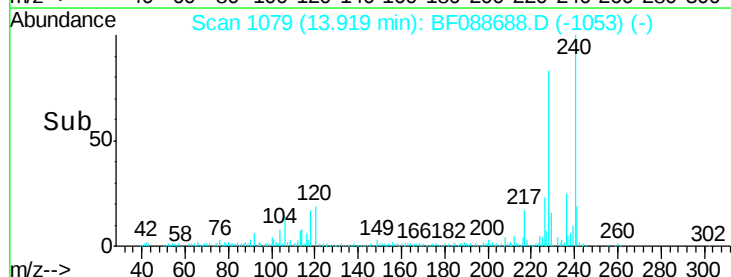
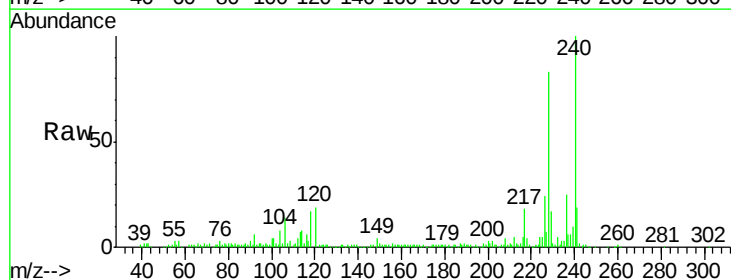
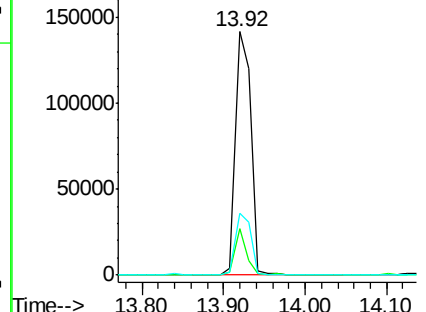
Acq: 4 Jul 2016 11:38

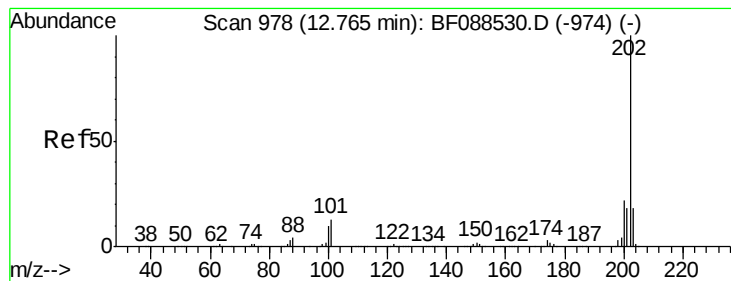
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 187697 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 19.0  | 6.8   | 10.2#  |
| 236       | 25.3  | 20.2  | 30.2   |

Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





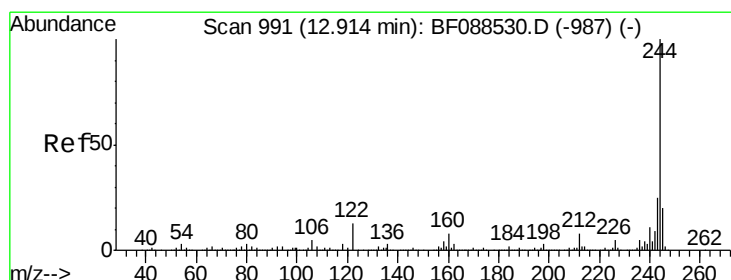
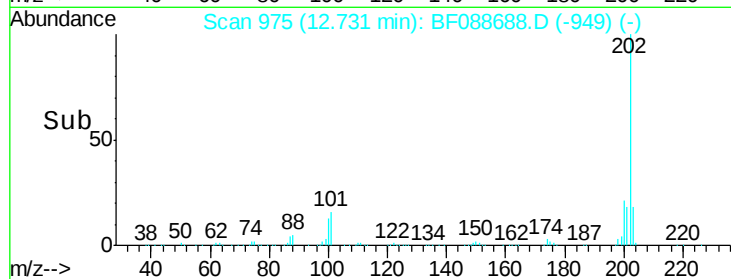
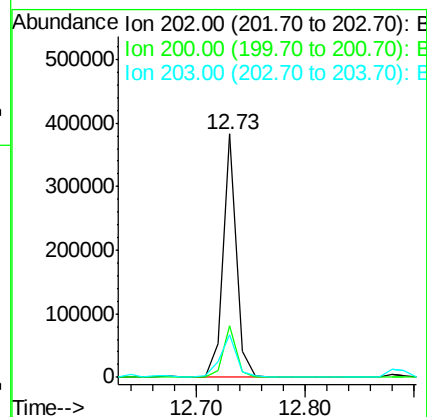
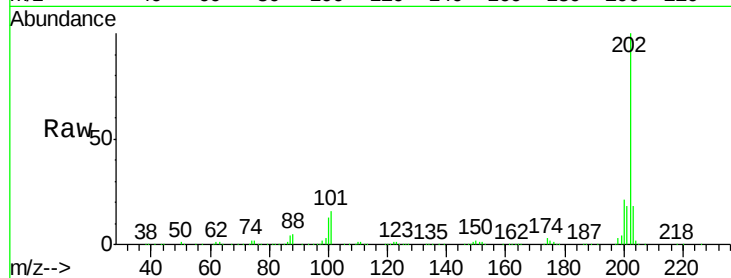
#77  
Pvrene  
Concen: 20.81 ng  
RT: 12.73 min Scan# 975  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

Instrument :  
BNA\_F  
ClientSampleId :  
EPCH-B3(02-04)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.0  | 17.4  | 26.2  |
| 203     | 17.8  | 14.5  | 21.7  |

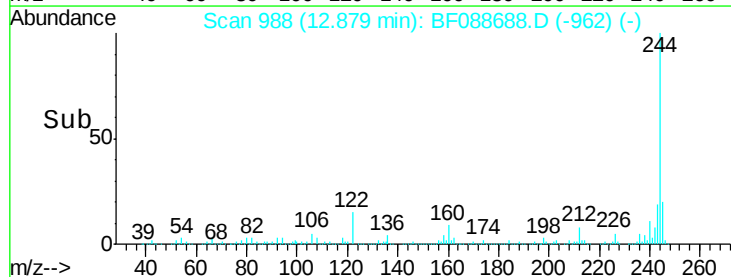
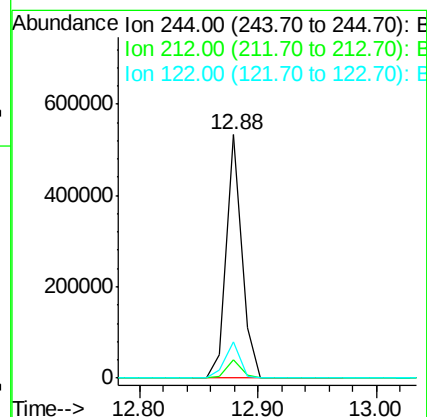
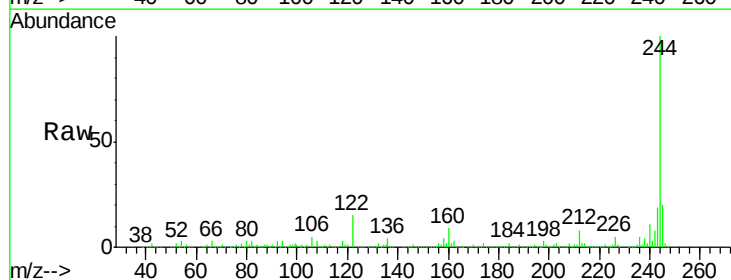
Manual Integrations

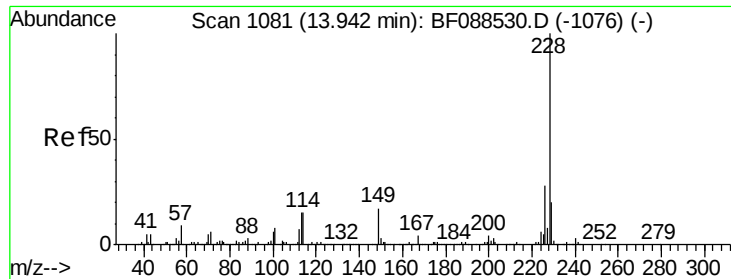
umangi  
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#78  
Terphenyl-d14  
Concen: 56.71 ng  
RT: 12.88 min Scan# 988  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.8   | 6.0   | 9.0   |
| 122     | 15.0  | 11.2  | 16.8  |





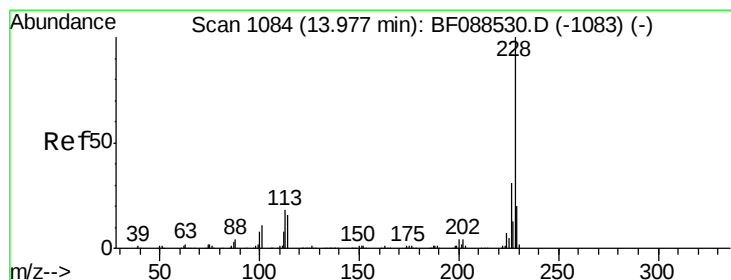
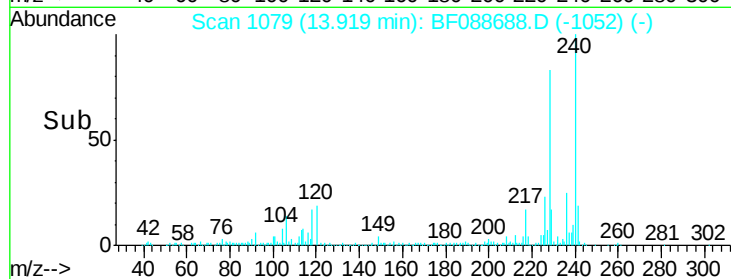
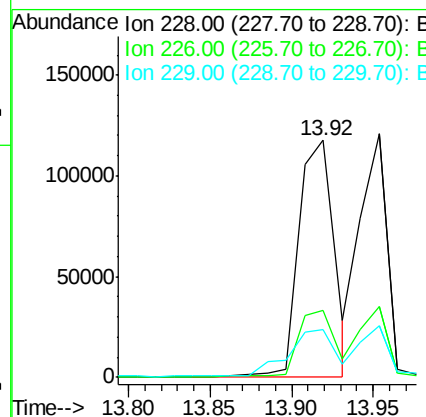
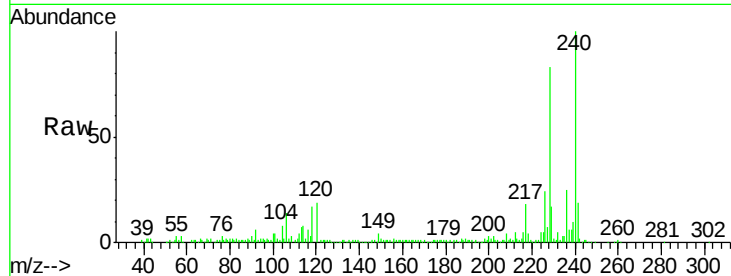
#80  
Benzo(a)anthracene  
Concen: 14.59 ng  
RT: 13.92 min Scan# 1079  
Delta R.T. 0.01 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

Instrument :  
BNA\_F  
ClientSampleId :  
EPCH-B3(02-04)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.4  | 22.3  | 33.5  |
| 229     | 20.4  | 16.0  | 24.0  |

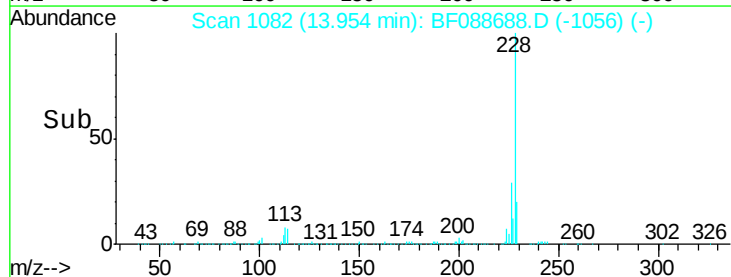
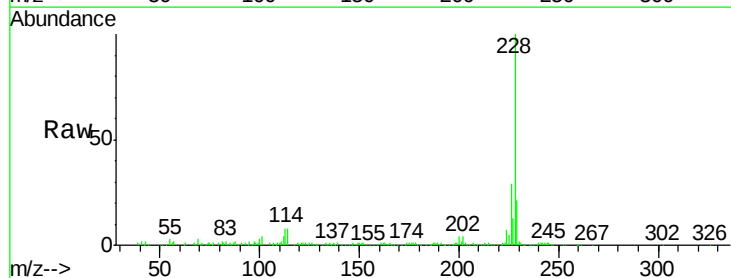
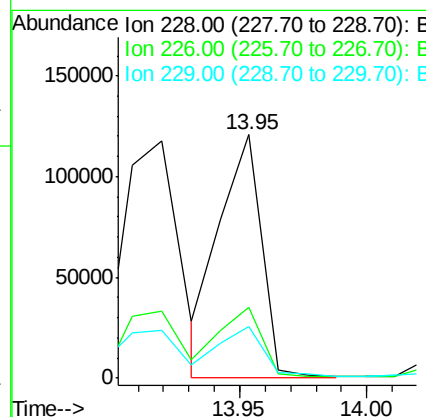
Manual Integrations

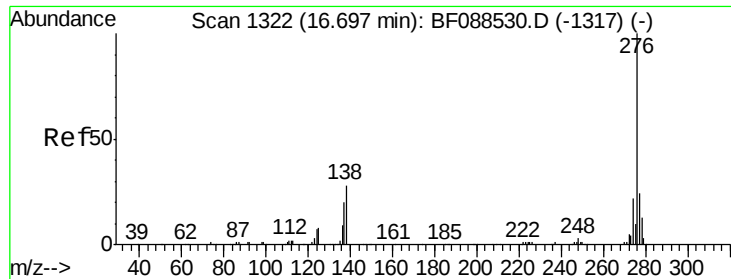
umangi  
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#82  
Chrysene  
Concen: 11.84 ng m  
RT: 13.95 min Scan# 1082  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.2  | 25.4  | 38.2  |
| 229     | 21.3  | 16.3  | 24.5  |





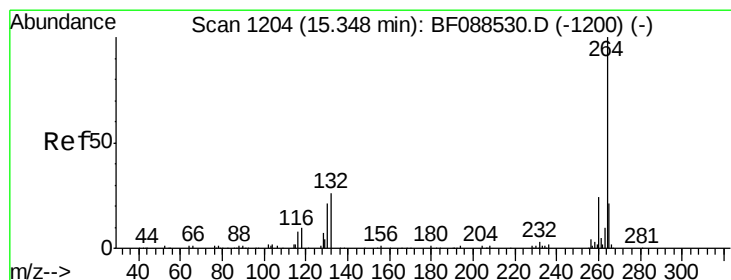
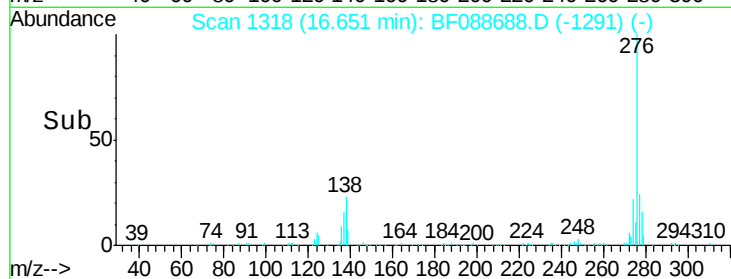
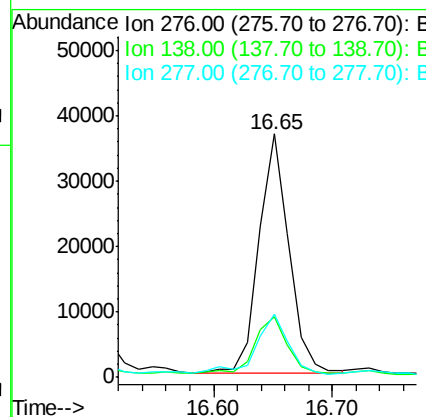
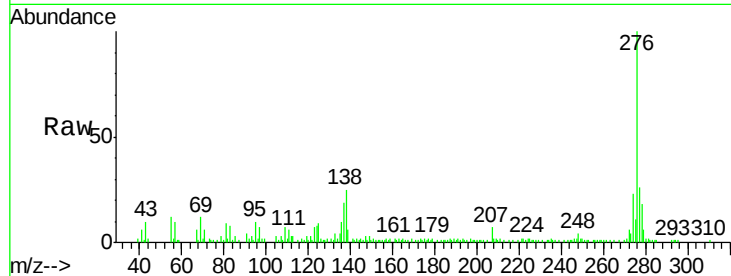
#85  
Indeno(1,2,3-cd)pyrene  
Concen: 7.02 ng  
RT: 16.65 min Scan# 1318  
Delta R.T. 0.01 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

Instrument :  
BNA\_F  
ClientSampleId :  
EPCH-B3(02-04)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 25.6  | 0.0   | 0.0#  |
| 277     | 27.0  | 0.0   | 0.0#  |

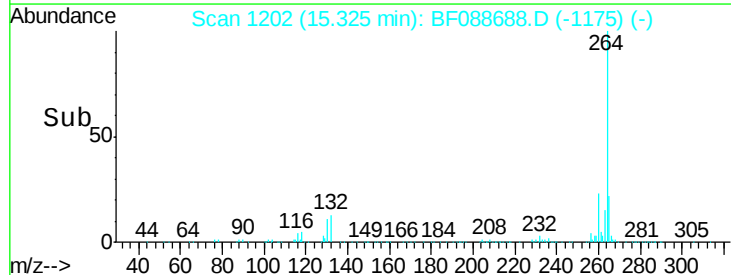
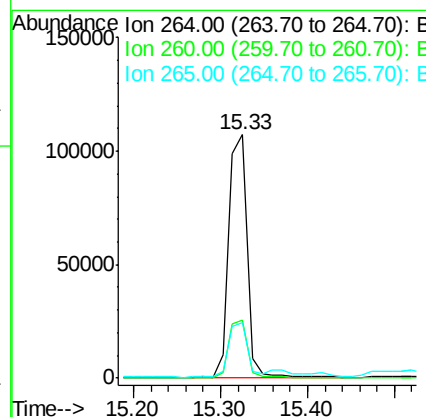
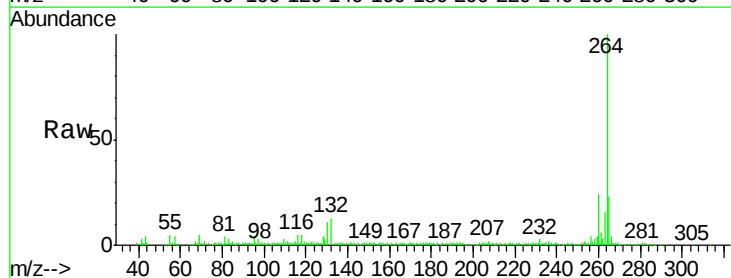
Manual Integrations

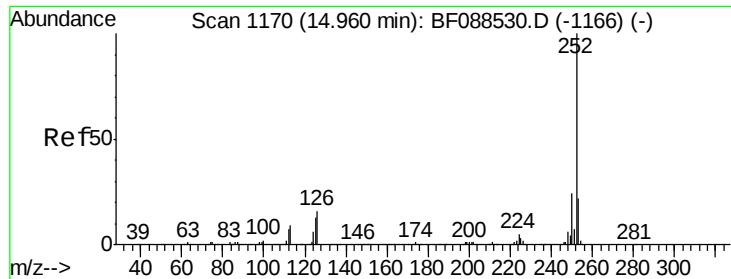
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#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 15.33 min Scan# 1202  
Delta R.T. 0.01 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.7  | 19.2  | 28.8  |
| 265     | 22.7  | 16.9  | 25.3  |





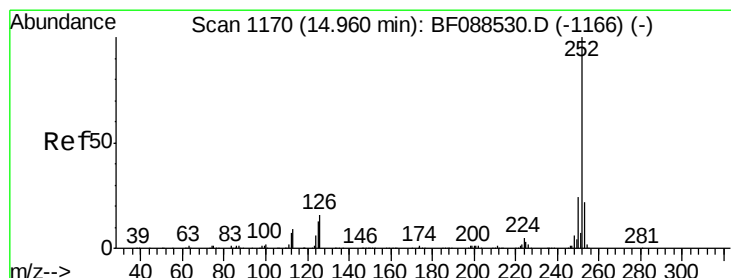
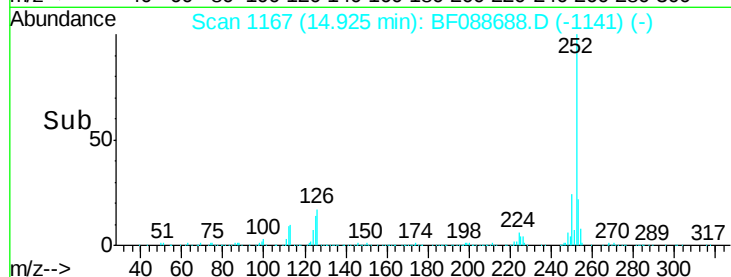
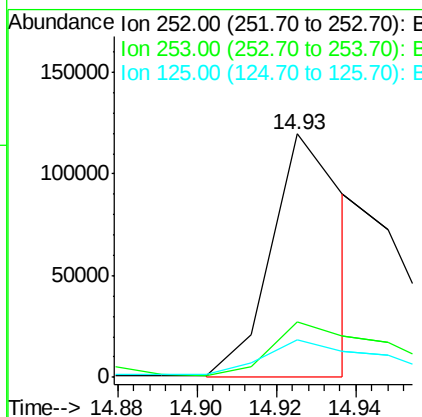
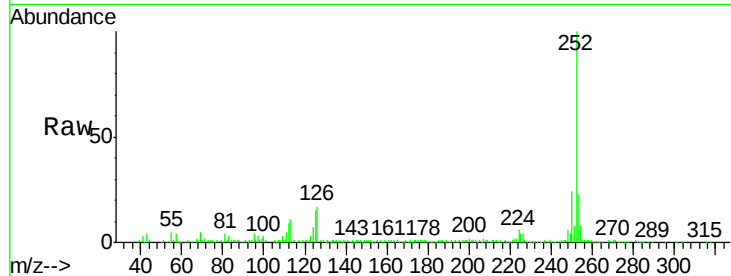
#87  
Benzo(b)fluoranthene  
Concen: 15.70 ng m  
RT: 14.93 min Scan# 1167  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

Instrument :  
BNA\_F  
ClientSampleId :  
EPCH-B3(02-04)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 17.4  | 26.2  |
| 125     | 15.4  | 7.1   | 10.7  |

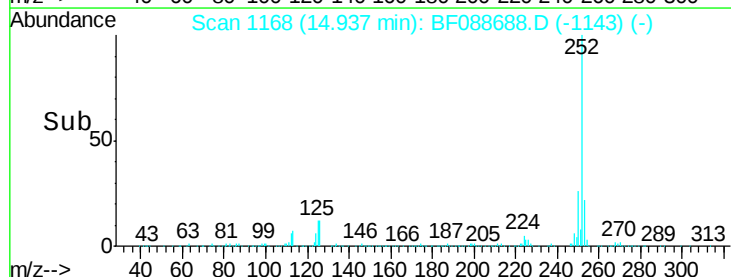
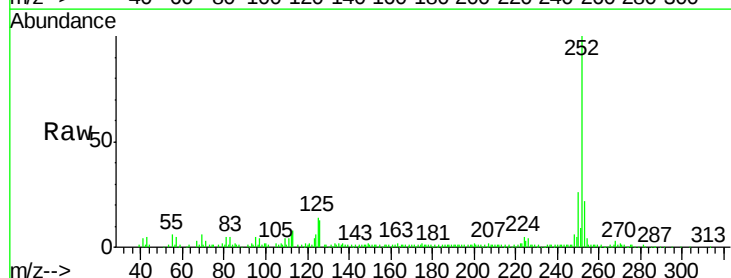
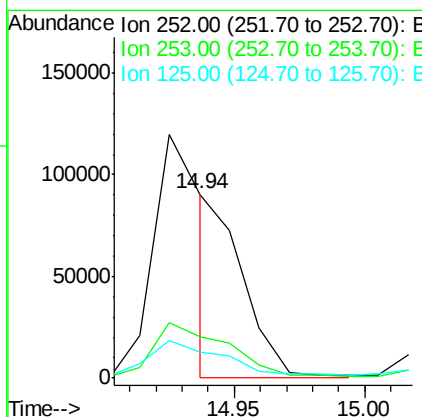
Manual Integrations

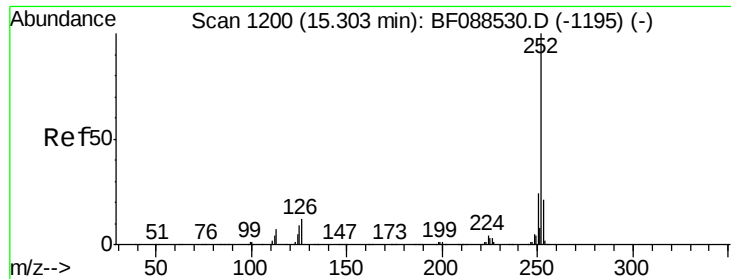
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#88  
Benzo(k)fluoranthene  
Concen: 8.01 ng m  
RT: 14.94 min Scan# 1168  
Delta R.T. -0.01 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.3  | 18.0  | 27.0  |
| 125     | 14.2  | 11.2  | 16.8  |





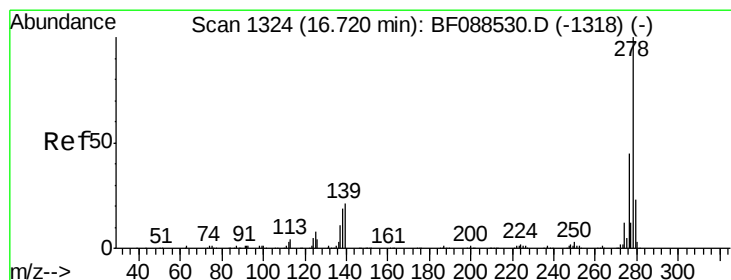
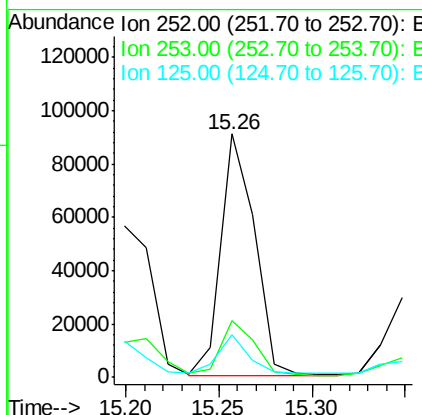
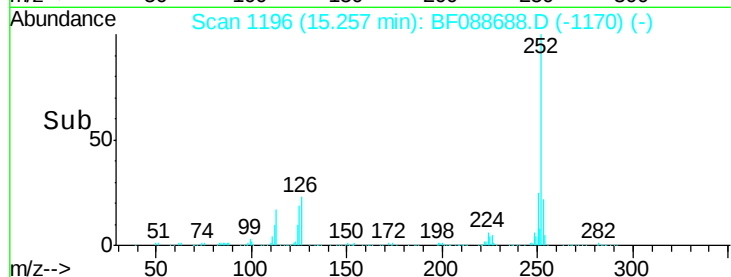
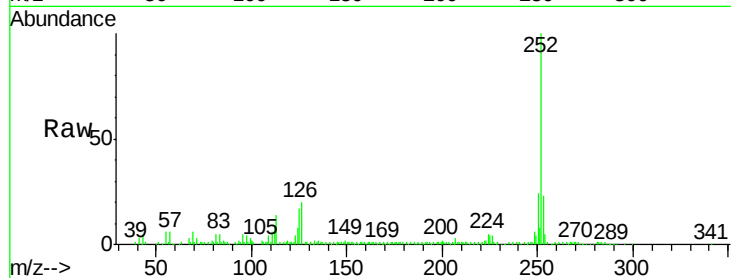
#89  
Benzo(a)pyrene  
Concen: 13.54 ng  
RT: 15.26 min Scan# 1196  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

Instrument :  
BNA\_F  
ClientSampleId :  
EPCH-B3(02-04)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.5  | 17.9  | 26.9  |
| 125     | 17.3  | 12.5  | 18.7  |

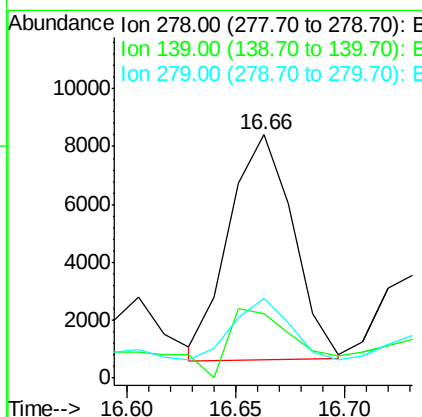
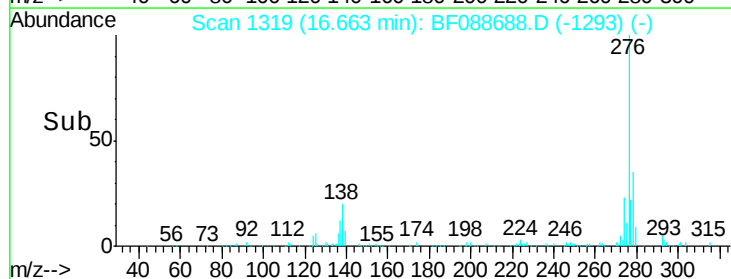
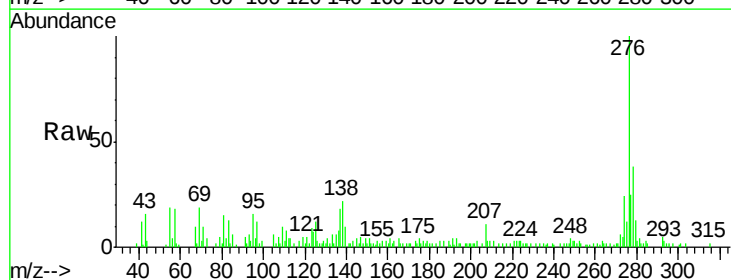
Manual Integrations

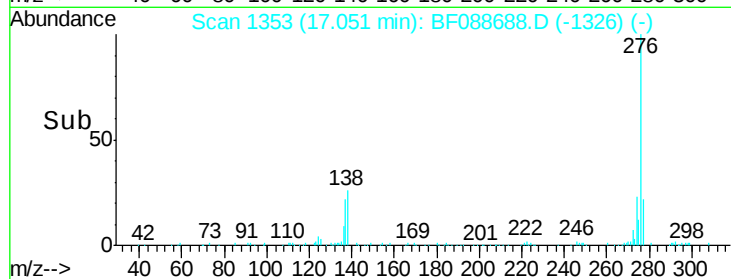
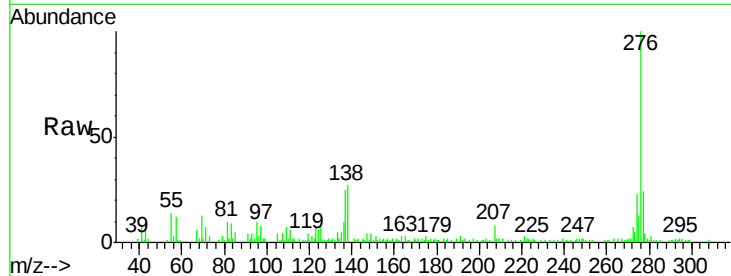
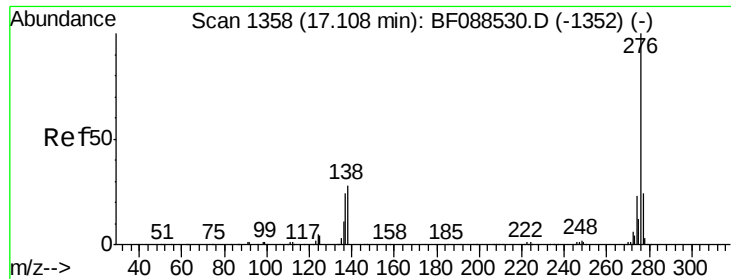
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#90  
Dibenzo(a,h)anthracene  
Concen: 2.23 ng  
RT: 16.66 min Scan# 1319  
Delta R.T. 0.00 min  
Lab File: BF088688.D  
Acq: 4 Jul 2016 11:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 26.5  | 15.7  | 23.5# |
| 279     | 32.7  | 19.4  | 29.2# |





#91  
 Benzo(a,h,i)perylene  
 Concen: 8.13 ng  
 RT: 17.05 min Scan# 1353  
 Delta R.T. 0.01 min  
 Lab File: BF088688.D  
 Acq: 4 Jul 2016 11:38

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EPCH-B3(02-04)

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 276   | Resp: | 59992 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 277       | 24.0  | 18.9  | 28.3  |
| 138       | 27.0  | 21.4  | 32.2  |

Manual Integrations

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