

Data Path : Z:\HPCHEM1\BNA F\DATA\BF041018\  
 Data File : BF104398.D  
 Acq On : 10 Apr 2018 10:10  
 Operator : JU/SJ  
 Sample : J2296-03  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 S-4-COMP

Manual Integrations  
 APPROVED

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 4/11/2018 5:16:46 PM

Quant Time: Apr 10 14:38:31 2018  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF040618.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Apr 10 12:04:31 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.80  | 152  | 149232   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.09  | 136  | 605565   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.84  | 164  | 273208   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.33 | 188  | 472553   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.97 | 240  | 315069   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12          | 15.44 | 264  | 316241   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.42  | 112  | 1199902  | 122.94 | ng    | 0.01     |
| 7) Phenol-d6                | 6.44  | 99   | 1499288  | 125.03 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.37  | 82   | 927573   | 100.02 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.64 | 330  | 358795   | 126.60 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.17  | 172  | 1321938  | 76.44  | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.93 | 244  | 1108522  | 80.21  | ng    | 0.00     |

| Target Compounds           | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|----------------------------|-------|------|----------|-------|-------|--------|
| 10) Phenol                 | 6.45  | 94   | 37964    | 2.984 | ng    | 94     |
| 49) Dimethylphthalate      | 9.56  | 163  | 195653   | 9.081 | ng    | 100    |
| 56) 2,4-Dinitrotoluene     | 10.03 | 165  | 16285    | 3.114 | ng    | # 86   |
| 70) Phenanthrene           | 11.36 | 178  | 100936   | 3.836 | ng    | 98     |
| 74) Fluoranthene           | 12.54 | 202  | 148100   | 5.386 | ng    | 97     |
| 77) Pyrene                 | 12.77 | 202  | 149741   | 6.412 | ng    | 98     |
| 80) Benzo(a)anthracene     | 13.96 | 228  | 77603    | 4.123 | ng    | 95     |
| 82) Chrysene               | 14.00 | 228  | 74499    | 3.853 | ng    | 97     |
| 85) Indeno(1,2,3-cd)pyrene | 16.87 | 276  | 49287    | 3.001 | ng    | 94     |
| 87) Benzo(b)fluoranthene   | 15.02 | 252  | 91008m   | 4.556 | ng    |        |
| 88) Benzo(k)fluoranthene   | 15.04 | 252  | 42562m   | 2.257 | ng    |        |
| 89) Benzo(a)pyrene         | 15.37 | 252  | 65598    | 3.671 | ng    | 99     |
| 91) Benzo(a,h,i)perylene   | 17.31 | 276  | 48872    | 3.437 | ng    | 94     |

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

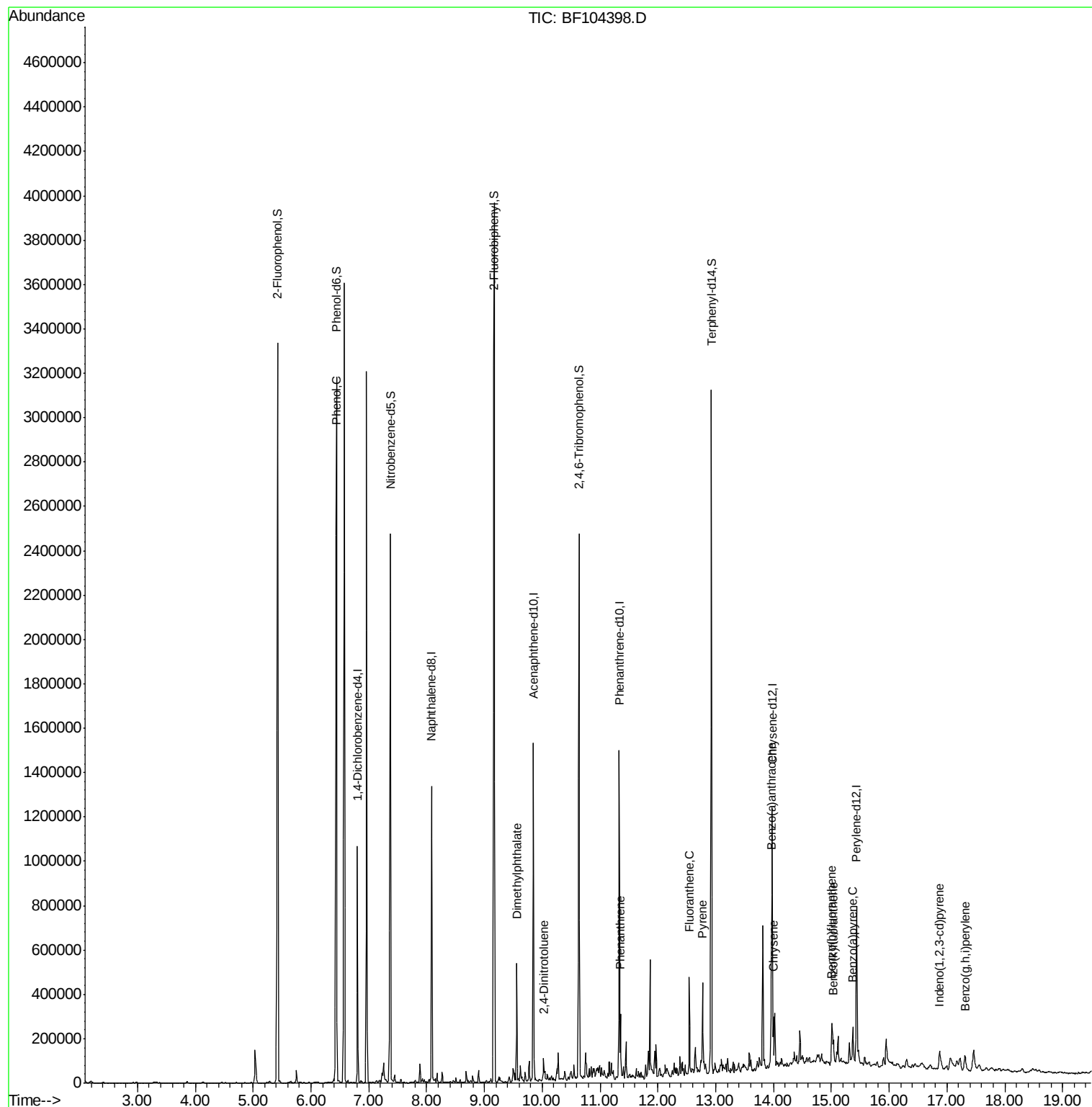
Data Path : Z:\HPCHEM1\BNA F\DATA\BF041018\  
Data File : BF104398.D  
Acq On : 10 Apr 2018 10:10  
Operator : JU/SJ  
Sample : J2296-03  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

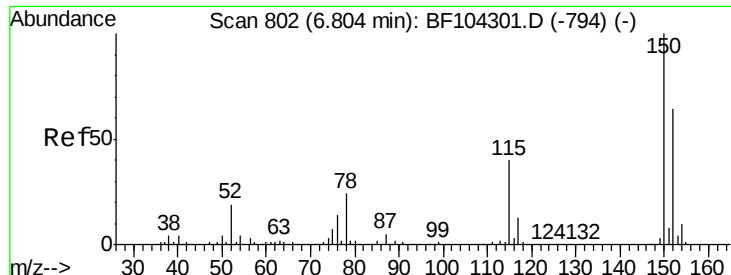
Instrument :  
BNA\_F  
ClientSampleId :  
S-4-COMP

Manual Integrations  
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Quant Time: Apr 10 14:38:31 2018  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF040618.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Apr 10 12:04:31 2018  
Response via : Initial Calibration





#1

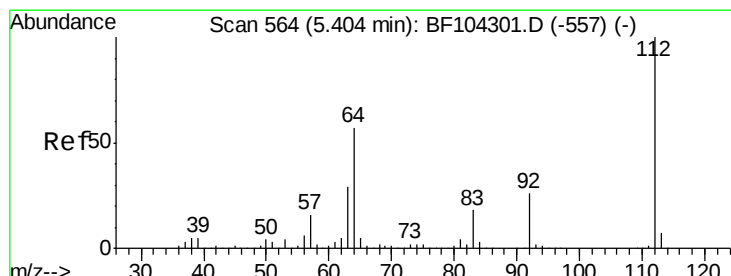
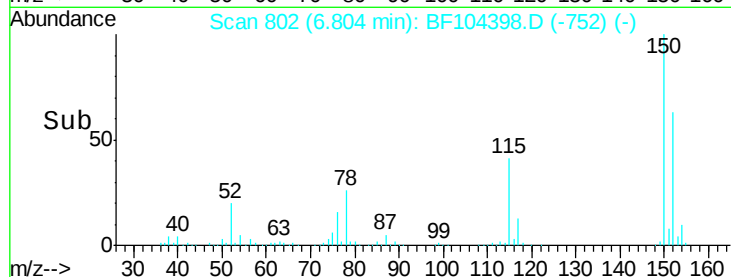
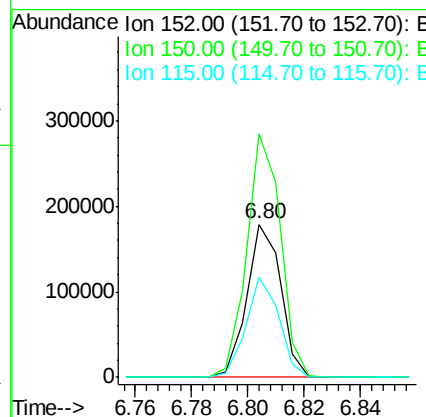
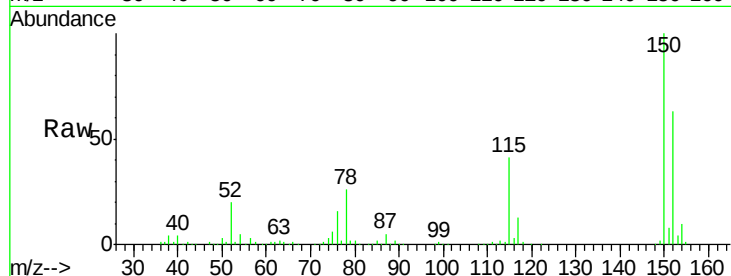
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.80 min Scan# 802  
Delta R.T. -0.01 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

Instrument :  
BNA\_F  
ClientSampleId :  
S-4-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 158.9 | 124.6 | 186.8 |
| 115     | 65.6  | 50.1  | 75.1  |

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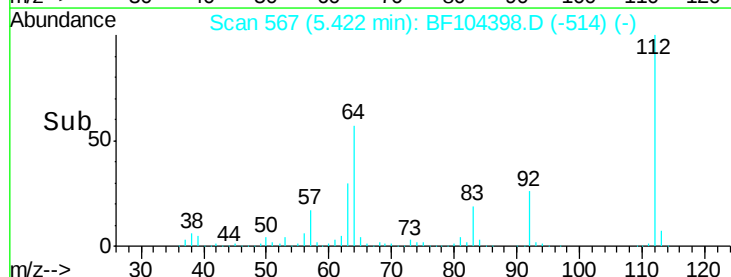
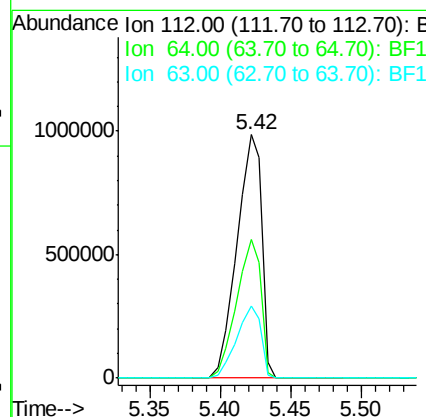
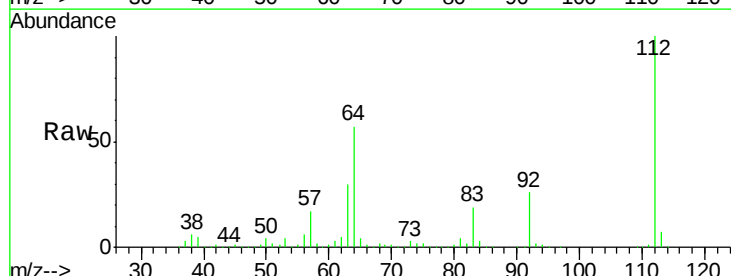
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#5

2-Fluorophenol  
Concen: 122.944 ng  
RT: 5.42 min Scan# 567  
Delta R.T. 0.01 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 57.1  | 47.9  | 71.9  |
| 63      | 29.7  | 23.7  | 35.5  |





#7

Phenol-d6

Concen: 125.029 ng

RT: 6.44 min Scan# 740

Delta R.T. -0.00 min

Lab File: BF104398.D

Acq: 10 Apr 2018 10:10

Instrument :

BNA\_F

ClientSampleId :

S-4-COMP

Tot Ion: 99 Resp: 1499288

Ion Ratio Lower Upper

99 100

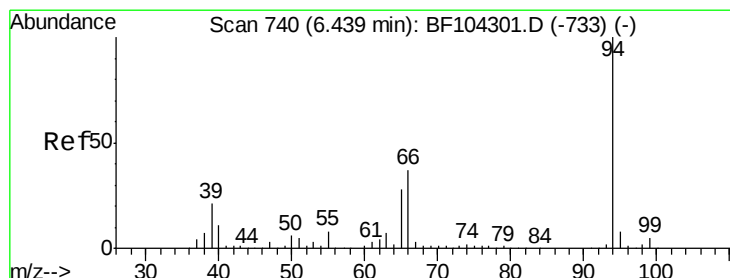
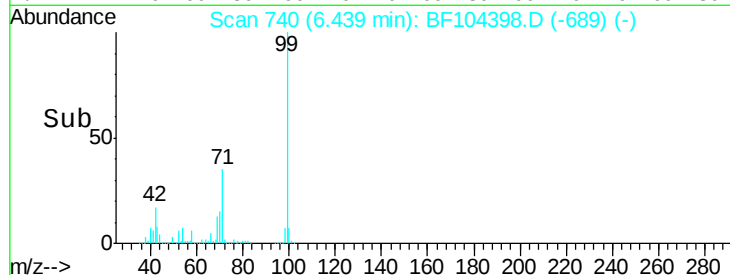
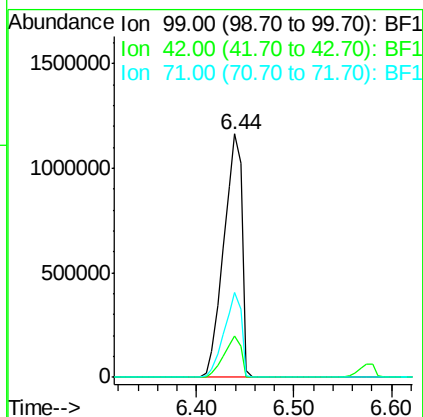
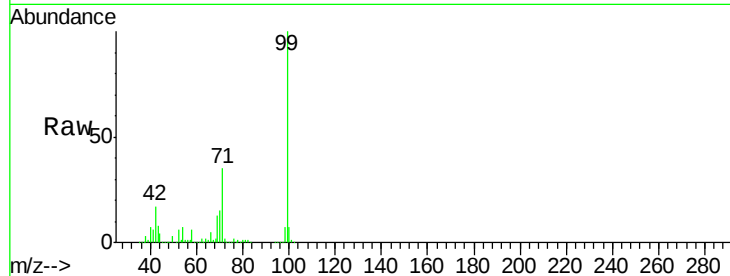
42 16.8 14.5 21.7

71 34.8 25.4 38.0

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#10

Phenol

Concen: 2.984 ng

RT: 6.45 min Scan# 742

Delta R.T. -0.00 min

Lab File: BF104398.D

Acq: 10 Apr 2018 10:10

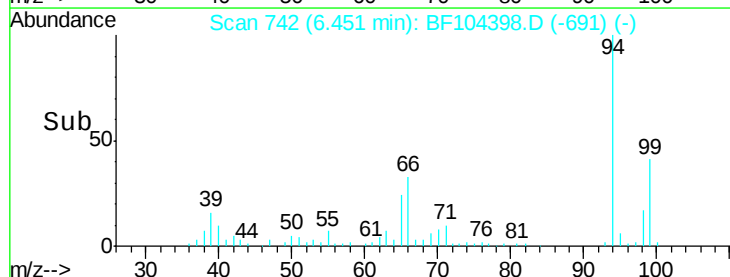
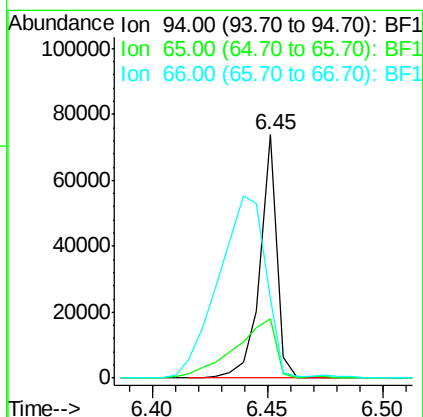
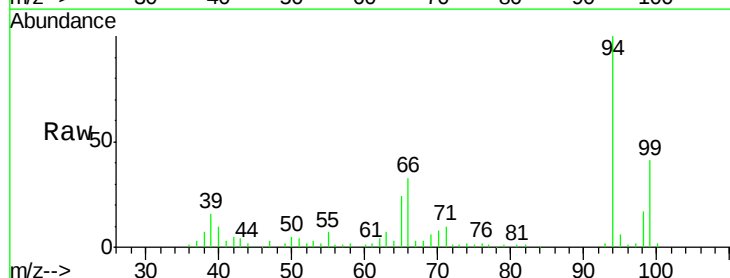
Tgt Ion: 94 Resp: 37964

Ion Ratio Lower Upper

94 100

65 24.4 7.9 47.9

66 33.0 16.2 56.2





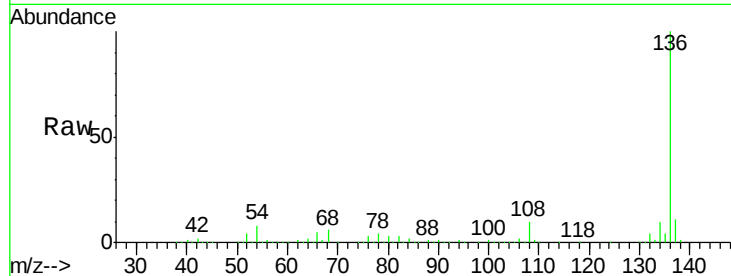
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.09 min Scan# 1020  
Delta R.T. -0.01 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

Instrument :  
BNA\_F  
ClientSampled :  
S-4-COMP

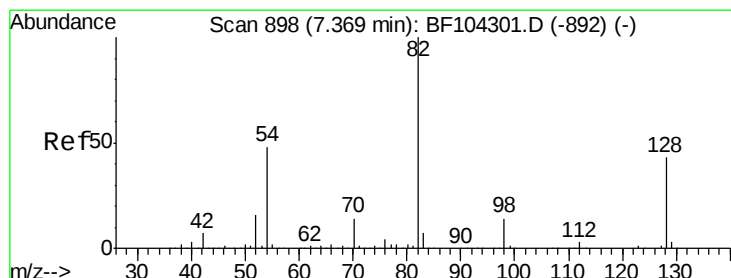
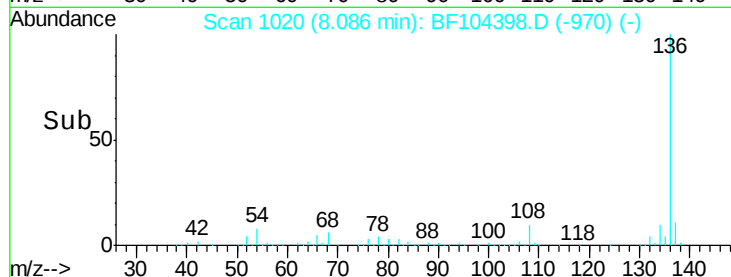
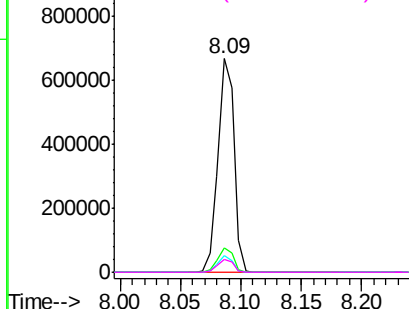
| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 136     | 100  |       | 605565 |       |       |
| 137     | 11.3 |       | 8.9    | 13.3  |       |
| 54      | 7.5  |       | 6.6    | 9.8   |       |
| 68      | 6.3  |       | 5.0    | 7.4   |       |

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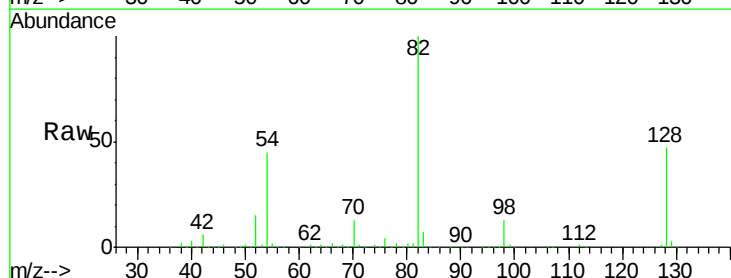


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF1  
Ion 68.00 (67.70 to 68.70): BF1

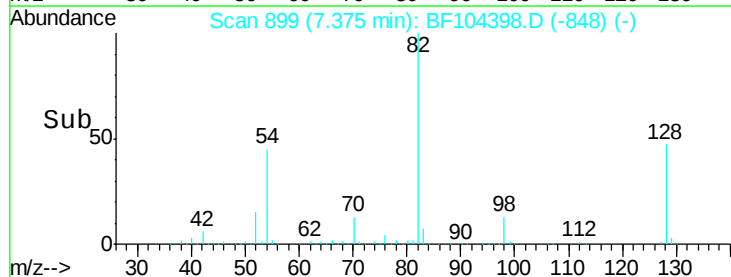
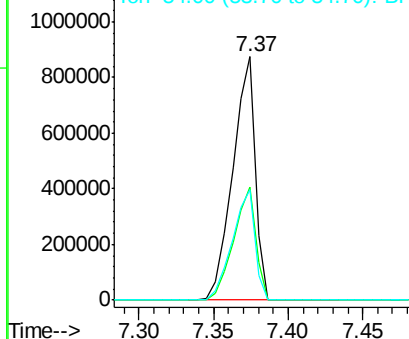


#23  
Nitrobenzene-d5  
Concen: 100.020 ng  
RT: 7.37 min Scan# 899  
Delta R.T. -0.00 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 82      | 100  |       | 927573 |       |       |
| 128     | 46.7 |       | 36.1   | 54.1  |       |
| 54      | 45.3 |       | 41.4   | 62.2  |       |



Abundance Ion 82.00 (81.70 to 82.70): BF1  
Ion 128.00 (127.70 to 128.70): E  
Ion 54.00 (53.70 to 54.70): BF1





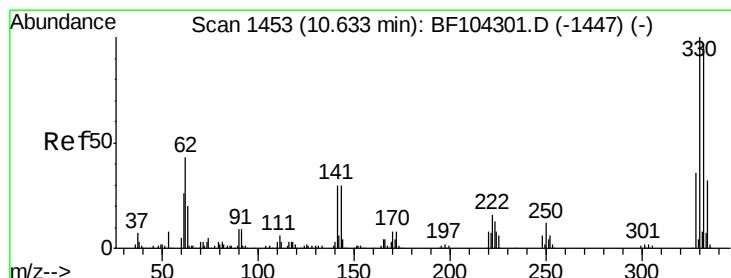
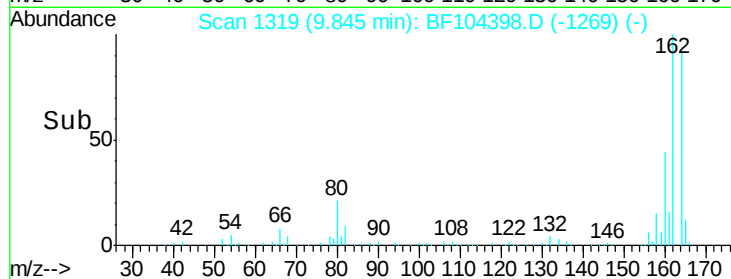
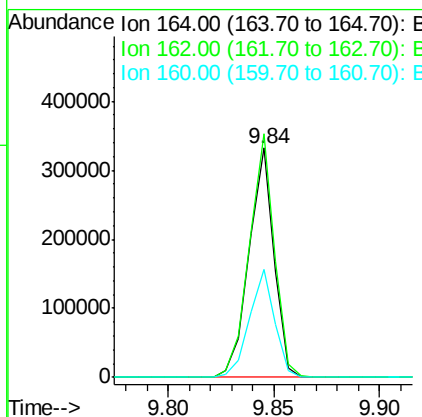
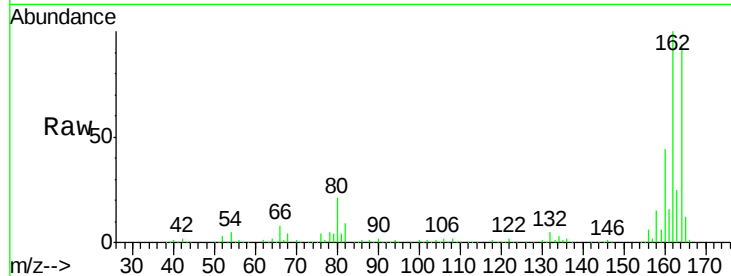
#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.84 min Scan# 1319  
Delta R.T. -0.01 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

Instrument :  
BNA\_F  
ClientSampleId :  
S-4-COMP

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 164     | 100   | 273208 |       |       |
| 162     | 106.2 | 86.1   | 129.1 |       |
| 160     | 47.0  | 38.3   | 57.5  |       |

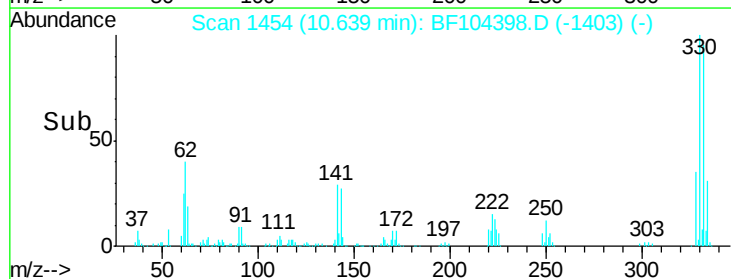
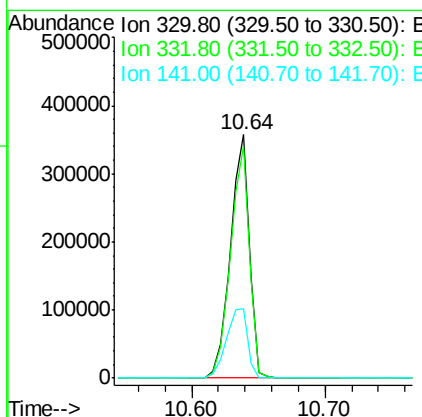
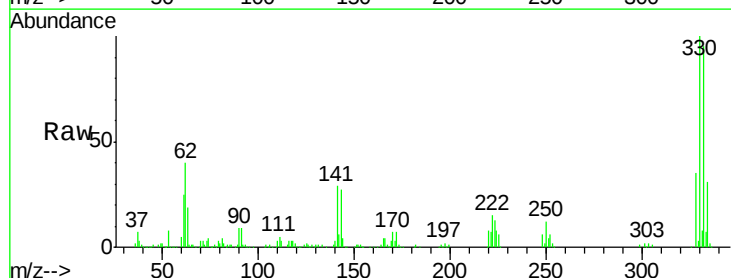
Manual Integrations  
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#41  
2,4,6-Tribromophenol  
Concen: 126.601 ng  
RT: 10.64 min Scan# 1454  
Delta R.T. -0.00 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 358795 |       |       |
| 332     | 95.3  | 77.0   | 115.6 |       |
| 141     | 32.5  | 29.9   | 44.9  |       |





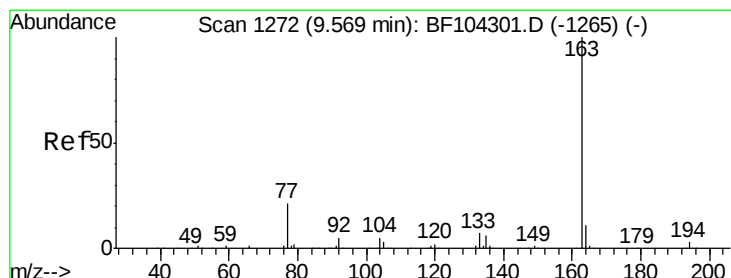
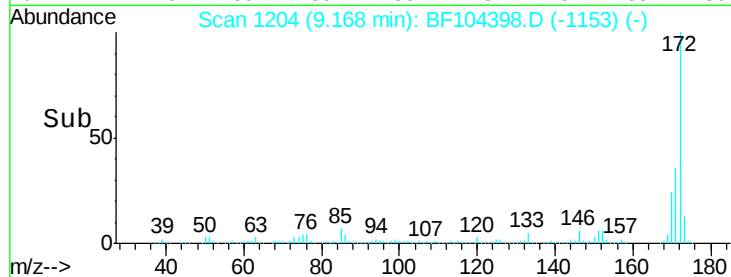
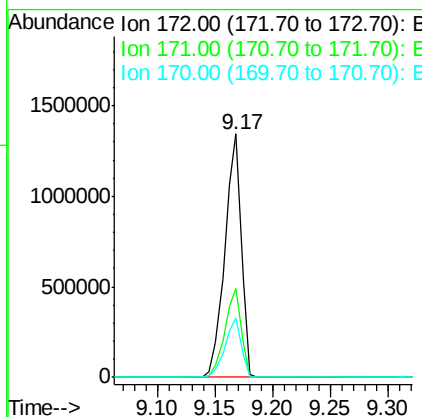
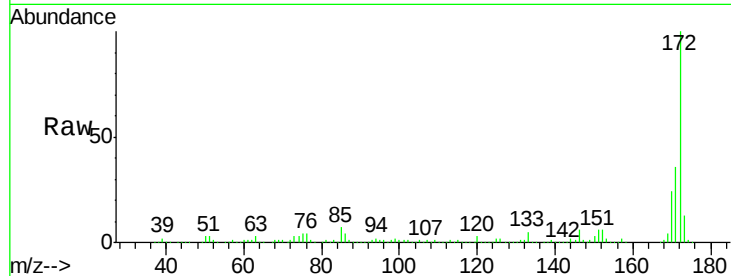
#44  
2-Fluorobiphenyl  
Concen: 76.437 ng  
RT: 9.17 min Scan# 1204  
Delta R.T. -0.00 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

Instrument :  
BNA\_F  
ClientSampleId :  
S-4-COMP

| Tot Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 172     | 172 | 100   |       |       |
| 171     | 171 | 36.4  | 29.7  | 44.5  |
| 170     | 170 | 24.2  | 19.6  | 29.4  |

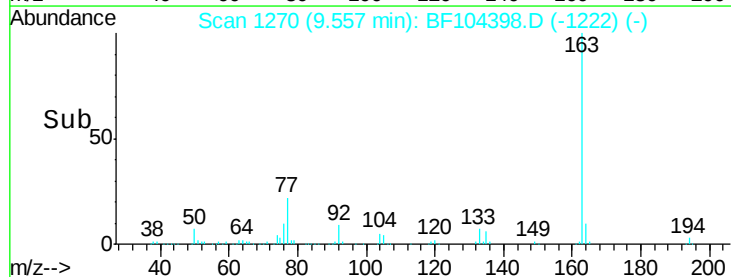
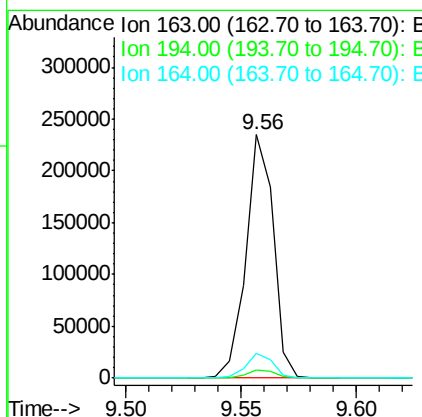
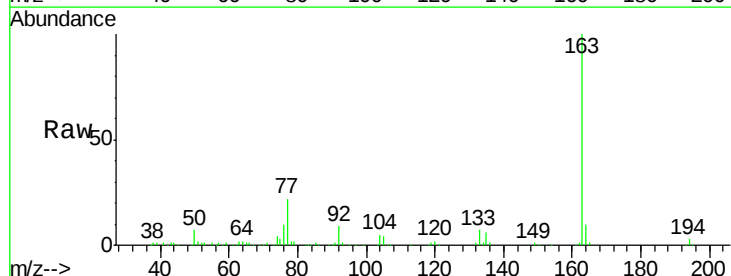
Manual Integrations  
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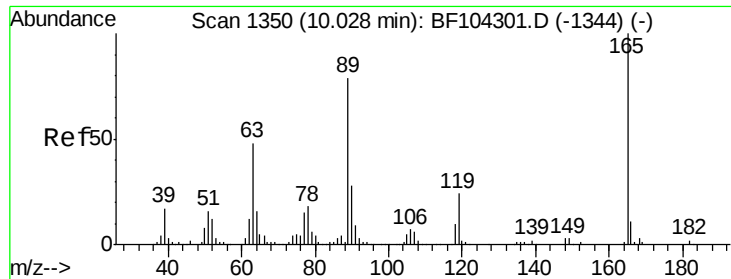
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#49  
Dimethylphthalate  
Concen: 9.081 ng  
RT: 9.56 min Scan# 1270  
Delta R.T. -0.02 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

| Tgt Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 163     | 163 | 100   |       |       |
| 194     | 194 | 3.2   | 2.7   | 4.1   |
| 164     | 164 | 10.3  | 8.2   | 12.2  |





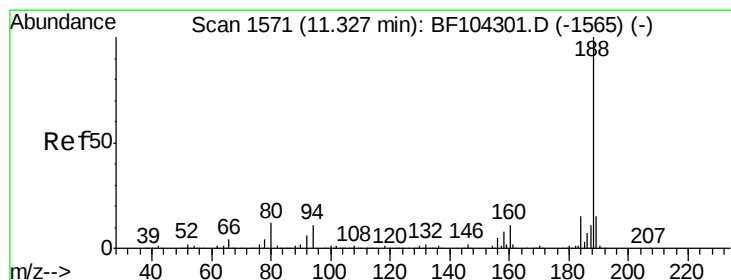
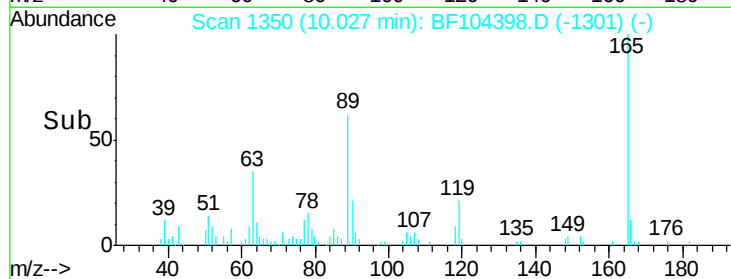
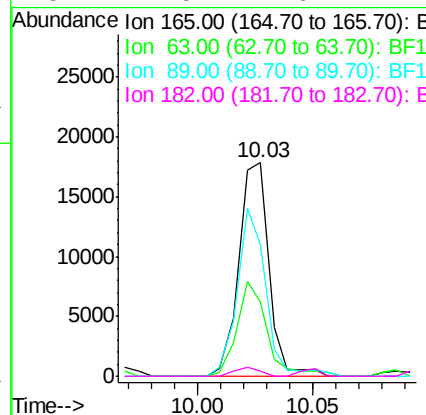
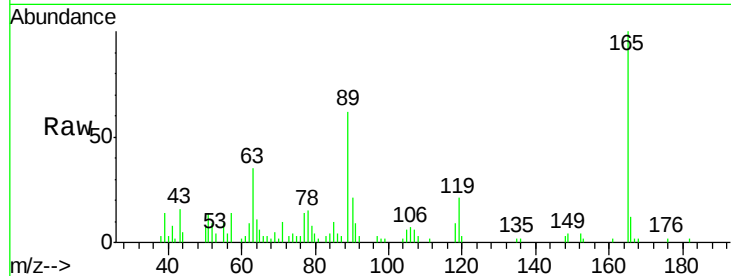
#56  
 2,4-Dinitrotoluene  
 Concen: 3.114 ng  
 RT: 10.03 min Scan# 1350  
 Delta R.T. -0.01 min  
 Lab File: BF104398.D  
 Acq: 10 Apr 2018 10:10

Instrument :  
 BNA\_F  
 ClientSampleId :  
 S-4-COMP

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 165   | Resp: | 16285 |
| Ion Ratio | Lower | Upper |       |
| 165       | 100   |       |       |
| 63        | 34.6  | 36.4  | 54.6# |
| 89        | 61.6  | 57.8  | 86.6  |
| 182       | 2.5   | 1.6   | 2.4#  |

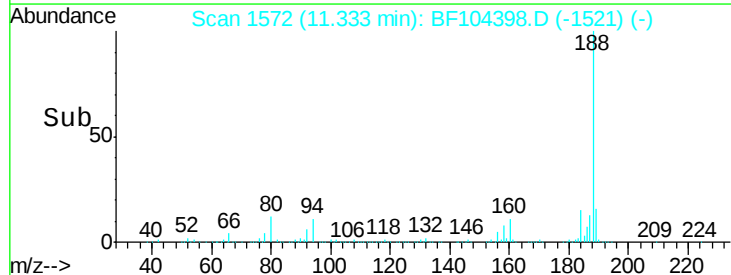
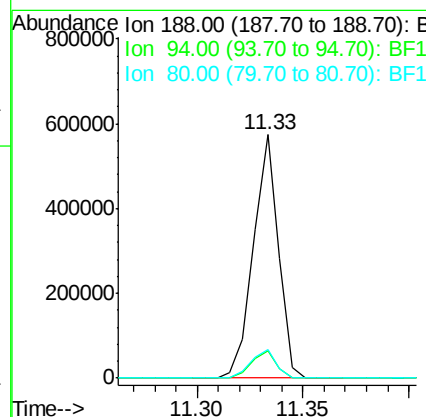
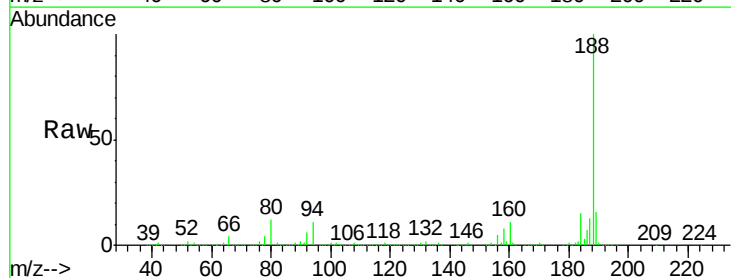
Manual Integrations  
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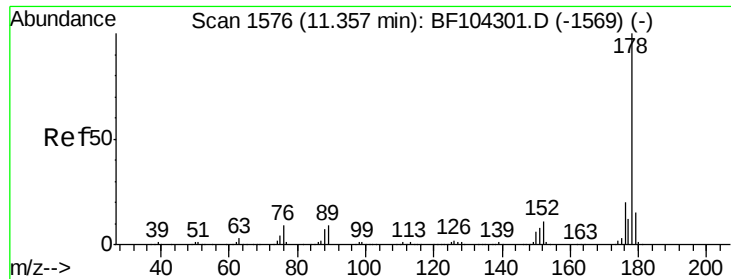
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#63  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.33 min Scan# 1572  
 Delta R.T. -0.00 min  
 Lab File: BF104398.D  
 Acq: 10 Apr 2018 10:10

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 188   | Resp: | 472553 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 11.0  | 8.5   | 12.7   |
| 80        | 11.6  | 9.2   | 13.8   |





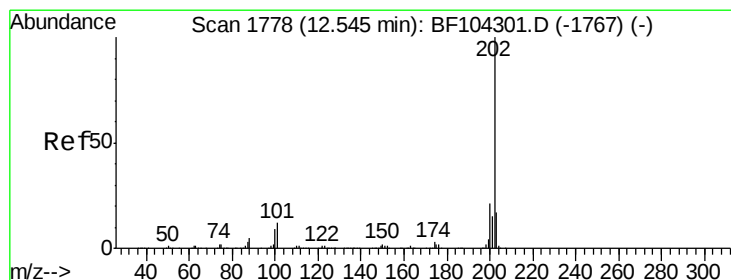
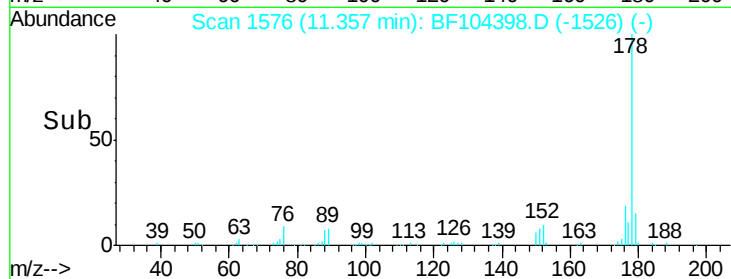
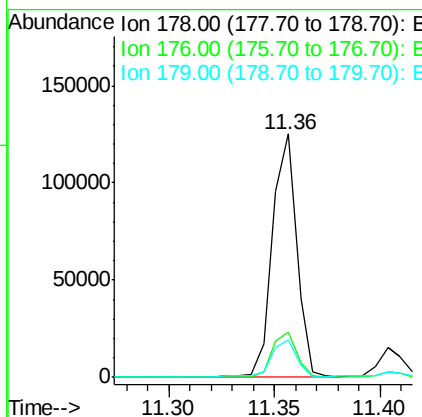
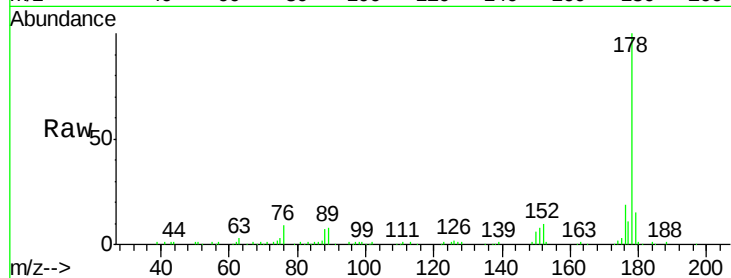
#70  
Phenanthrene  
Concen: 3.836 ng  
RT: 11.36 min Scan# 1576  
Delta R.T. -0.01 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

Instrument :  
BNA\_F  
ClientSampleId :  
S-4-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.7  | 15.8  | 23.8  |
| 179     | 15.2  | 13.0  | 19.6  |

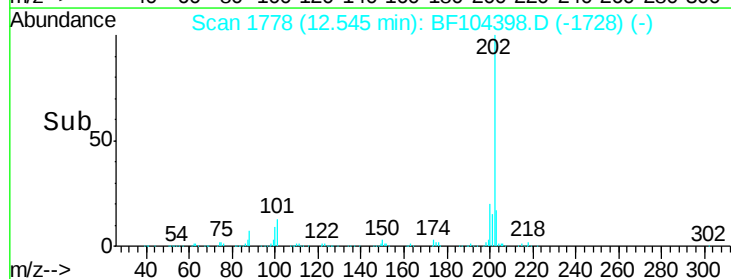
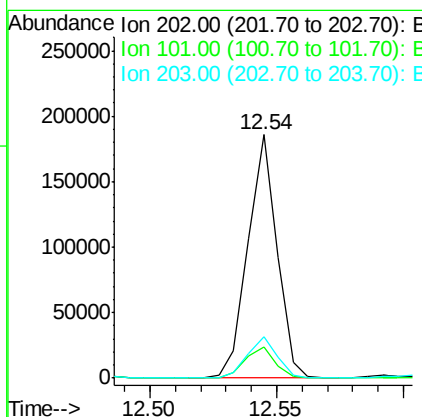
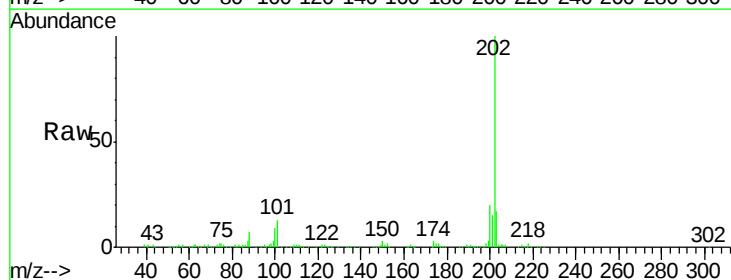
Manual Integrations  
APPROVED

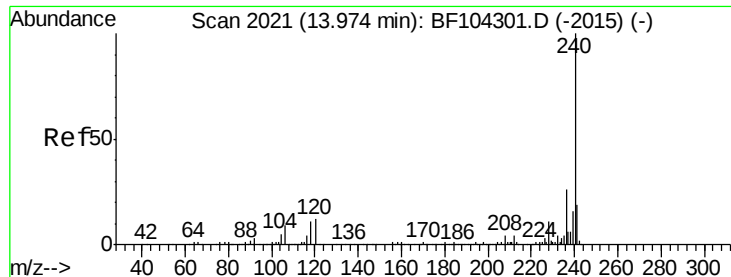
Sohil  
4/11/2018 5:16:46 PM



#74  
Fluoranthene  
Concen: 5.386 ng  
RT: 12.54 min Scan# 1778  
Delta R.T. -0.01 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 12.7  | 0.0   | 34.1  |
| 203     | 17.0  | 0.0   | 38.1  |





#75

Chrysene-d12

Concen: 20.000 ng

RT: 13.97 min Scan# 2021

Delta R.T. -0.01 min

Lab File: BF104398.D

Acq: 10 Apr 2018 10:10

Instrument :

BNA\_F

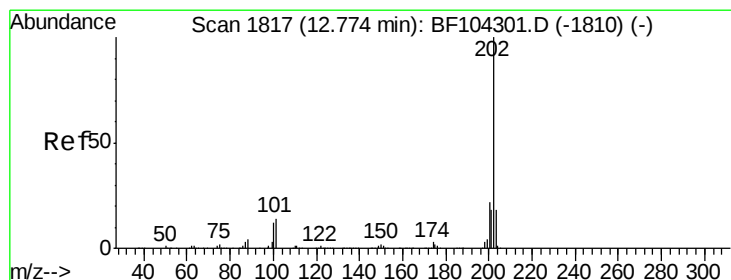
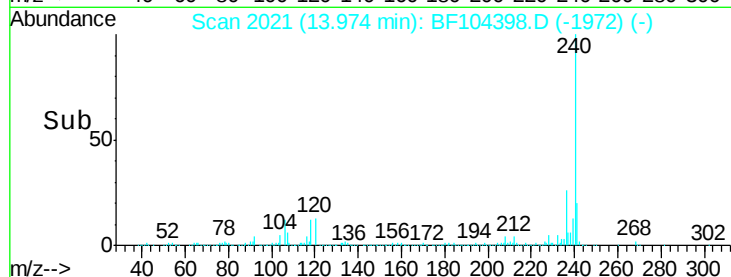
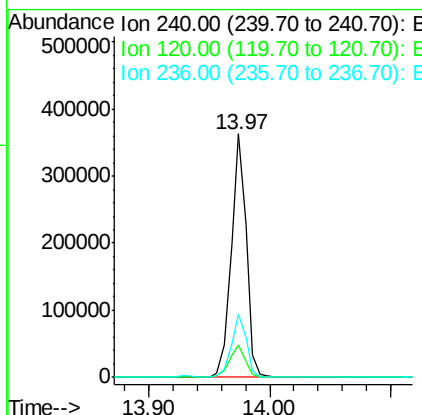
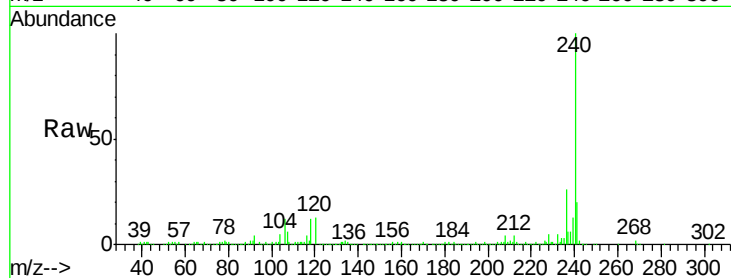
ClientSampleId :

S-4-COMP

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 240   | Resp: | 315069 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 13.4  | 9.5   | 14.3   |
| 236       | 25.9  | 20.7  | 31.1   |

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#77

Pyrene

Concen: 6.412 ng

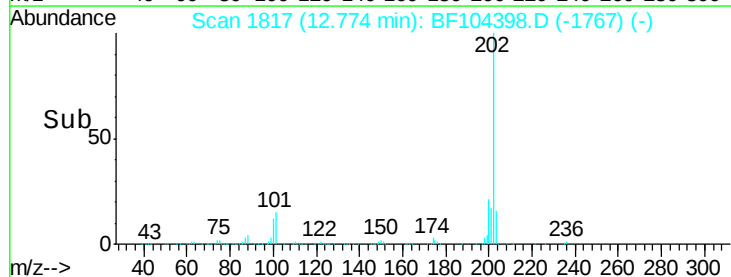
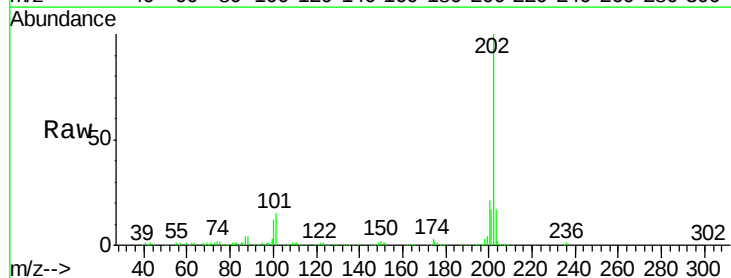
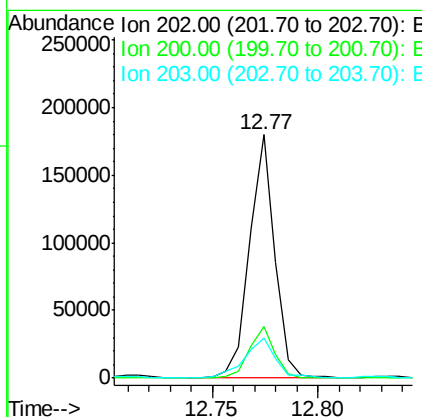
RT: 12.77 min Scan# 1817

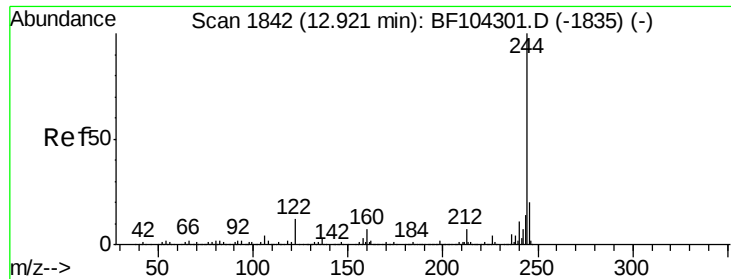
Delta R.T. -0.01 min

Lab File: BF104398.D

Acq: 10 Apr 2018 10:10

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 149741 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 21.3  | 17.4  | 26.2   |
| 203       | 16.7  | 14.3  | 21.5   |





#78

Terphenyl-d14

Concen: 80.212 ng

RT: 12.93 min Scan# 1843

Delta R.T. -0.00 min

Lab File: BF104398.D

Acq: 10 Apr 2018 10:10

Instrument :

BNA\_F

ClientSampleId :

S-4-COMP

Tot Ion:244 Resp: 1108522

Ion Ratio Lower Upper

244 100

212 6.9 5.4 8.0

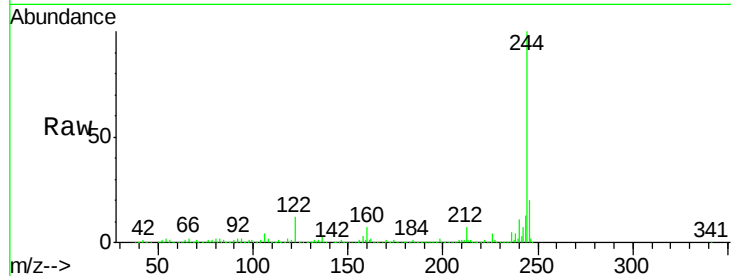
122 11.9 11.0 16.4

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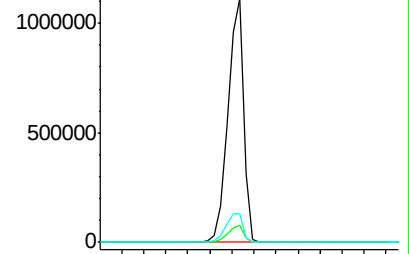
4/11/2018 5:16:46 PM



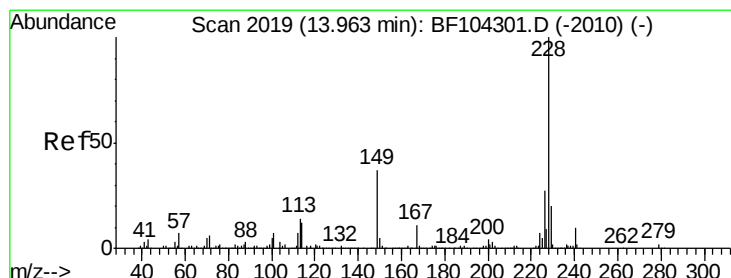
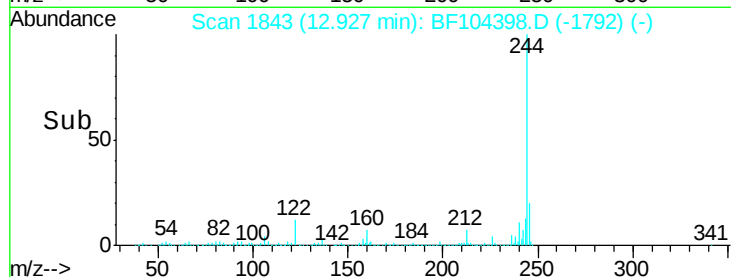
Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



Time-->



#80

Benzo(a)anthracene

Concen: 4.123 ng

RT: 13.96 min Scan# 2019

Delta R.T. -0.01 min

Lab File: BF104398.D

Acq: 10 Apr 2018 10:10

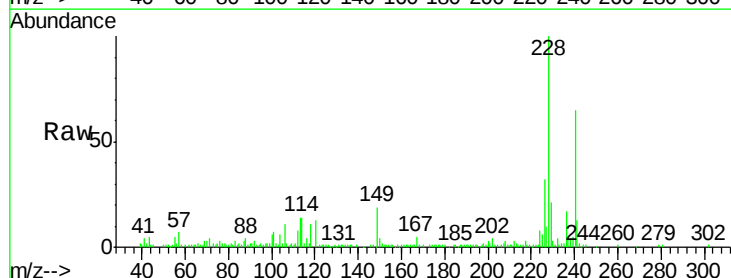
Tgt Ion:228 Resp: 77603

Ion Ratio Lower Upper

228 100

226 31.8 22.6 33.8

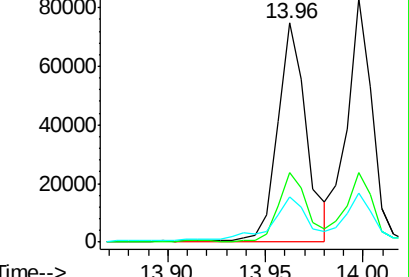
229 20.6 15.8 23.6



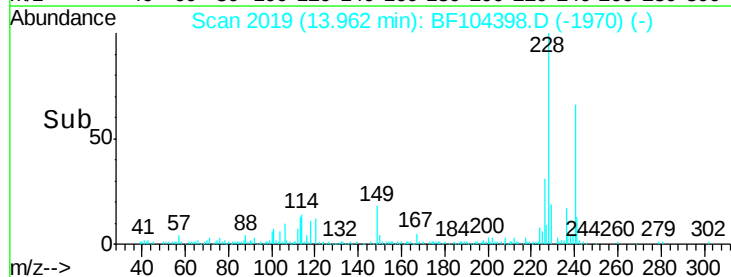
Abundance Ion 228.00 (227.70 to 228.70): E

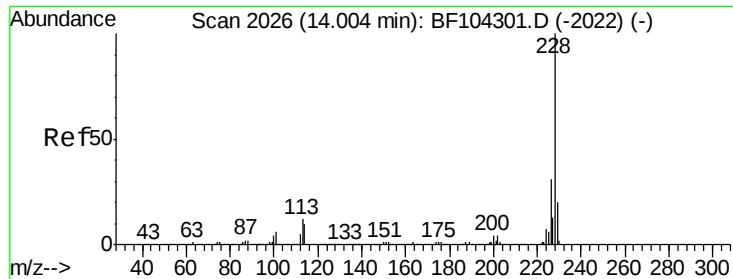
Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



Time-->





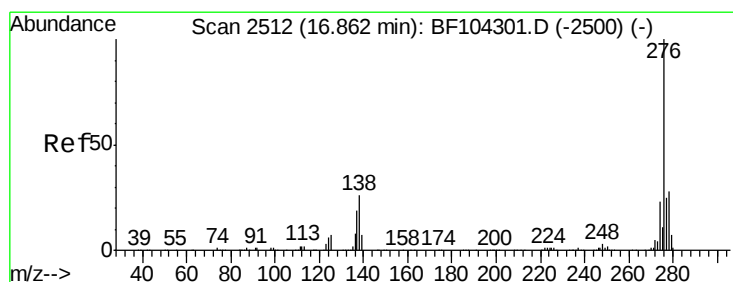
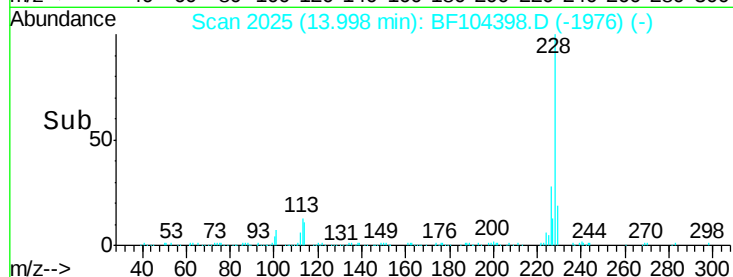
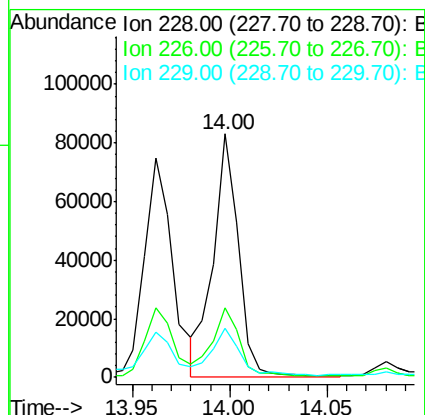
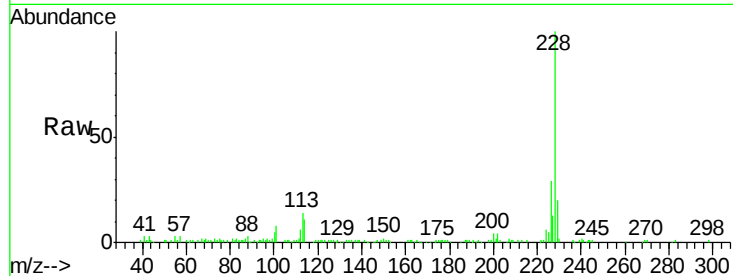
#82  
Chrysene  
Concen: 3.853 ng  
RT: 14.00 min Scan# 2025  
Delta R.T. -0.01 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

Instrument :  
BNA\_F  
ClientSampled :  
S-4-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.6  | 25.0  | 37.6  |
| 229     | 20.4  | 16.2  | 24.4  |

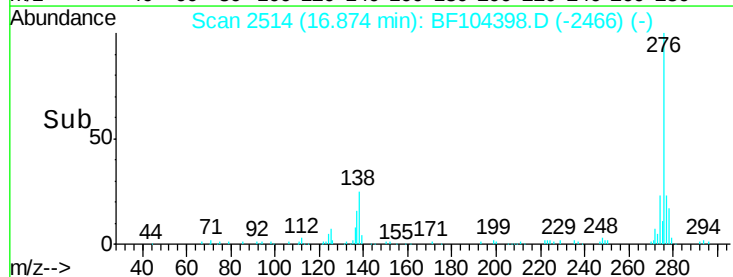
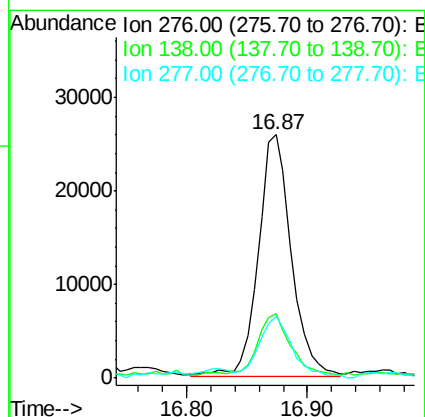
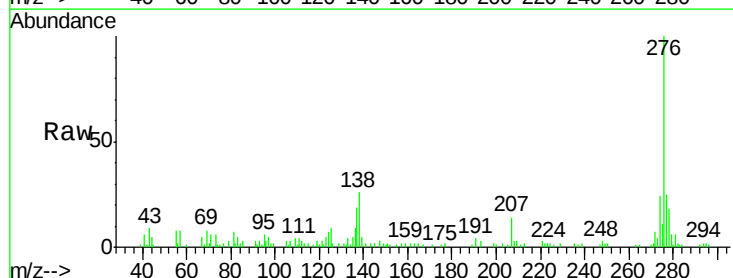
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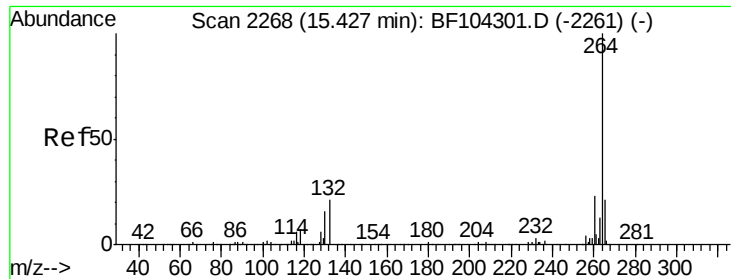
Sohil  
4/11/2018 5:16:46 PM



#85  
Indeno(1,2,3-cd)pyrene  
Concen: 3.001 ng  
RT: 16.87 min Scan# 2514  
Delta R.T. -0.02 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 26.5  | 25.0  | 37.6  |
| 277     | 26.3  | 20.1  | 30.1  |





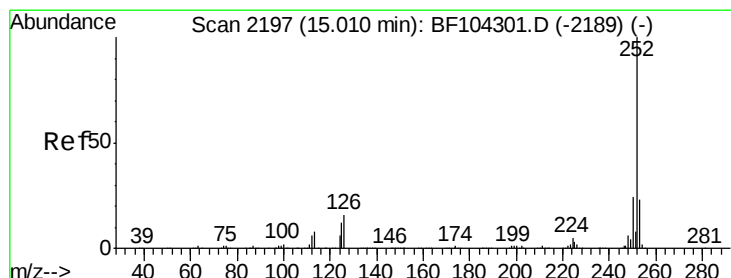
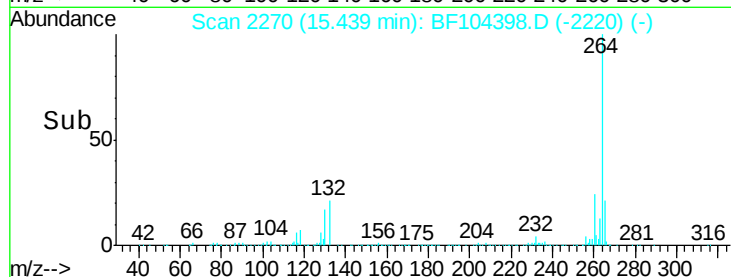
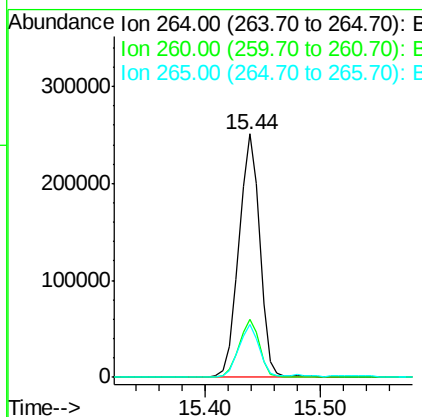
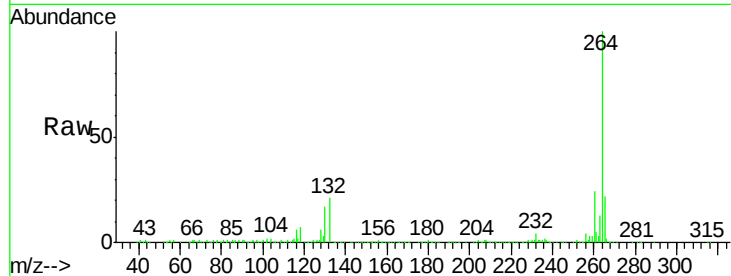
#86  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.44 min Scan# 2270  
Delta R.T. -0.01 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

Instrument :  
BNA\_F  
ClientSampleId :  
S-4-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.8  | 19.2  | 28.8  |
| 265     | 21.6  | 17.5  | 26.3  |

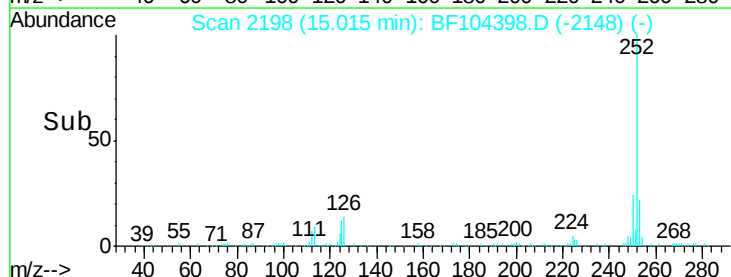
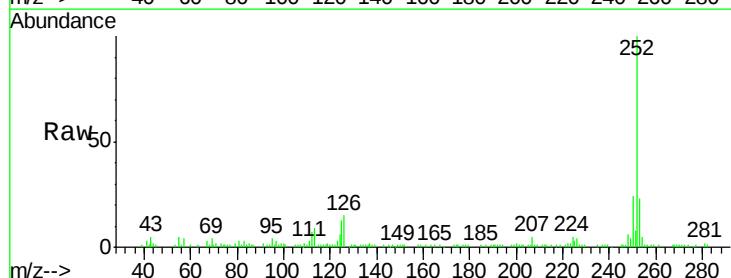
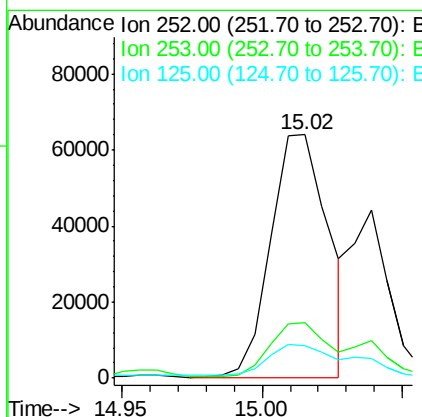
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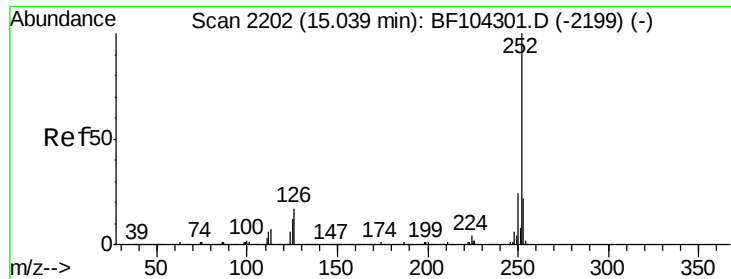
Sohil  
4/11/2018 5:16:46 PM



#87  
Benzo(b)fluoranthene  
Concen: 4.556 ng m  
RT: 15.02 min Scan# 2198  
Delta R.T. -0.01 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 17.0  | 25.6  |
| 125     | 13.2  | 9.0   | 13.6  |





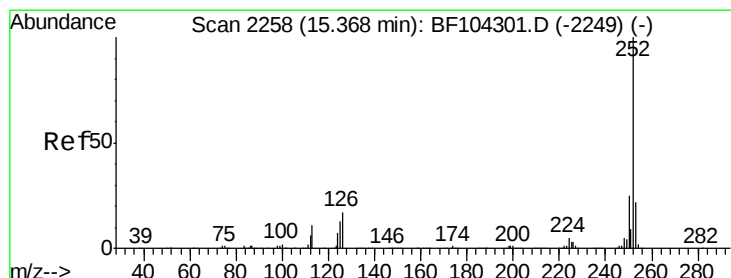
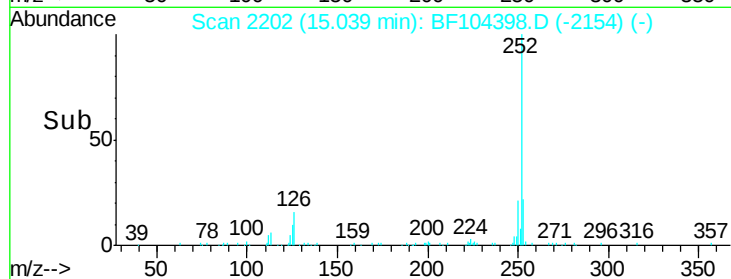
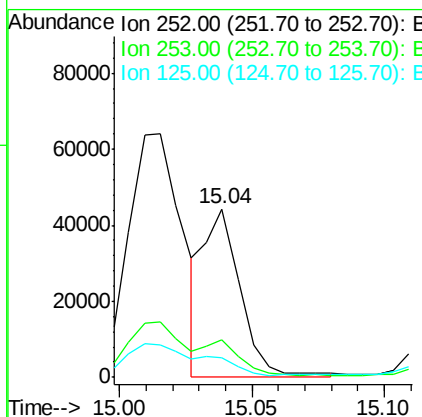
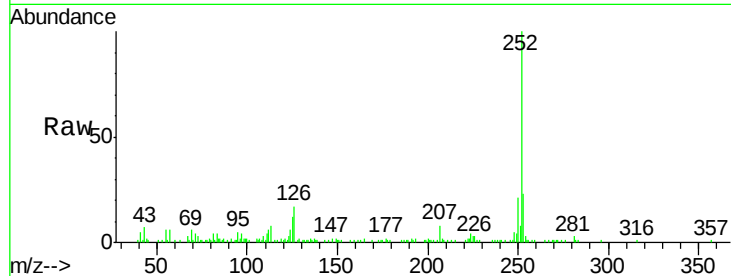
#88  
Benzo(k)fluoranthene  
Concen: 2.257 ng m  
RT: 15.04 min Scan# 2202  
Delta R.T. -0.02 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

Instrument :  
BNA\_F  
ClientSampleId :  
S-4-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.6  | 17.9  | 26.9  |
| 125     | 11.5  | 10.2  | 15.2  |

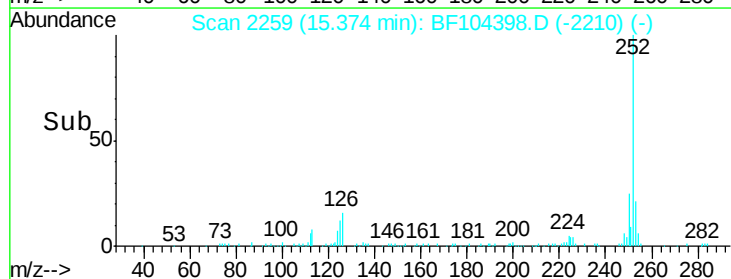
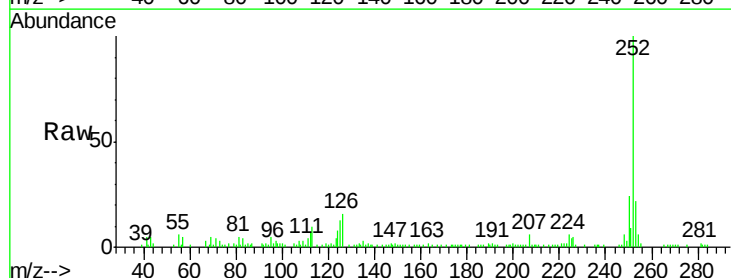
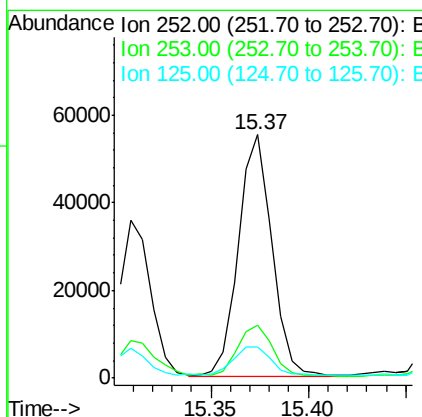
Manual Integrations  
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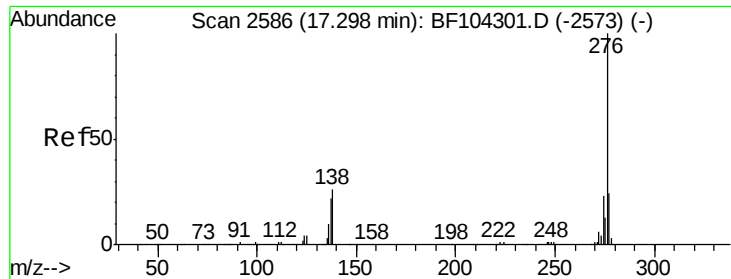
Sohil  
4/11/2018 5:16:46 PM



#89  
Benzo(a)pyrene  
Concen: 3.671 ng  
RT: 15.37 min Scan# 2259  
Delta R.T. -0.01 min  
Lab File: BF104398.D  
Acq: 10 Apr 2018 10:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.8  | 17.1  | 25.7  |
| 125     | 12.8  | 9.8   | 14.6  |





#91  
 Benzo(a,h,i)perylene  
 Concen: 3.437 ng  
 RT: 17.31 min Scan# 2588  
 Delta R.T. -0.03 min  
 Lab File: BF104398.D  
 Acq: 10 Apr 2018 10:10

Instrument :  
 BNA\_F  
 ClientSampleId :  
 S-4-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.2  | 17.9  | 26.9  |
| 138     | 24.2  | 21.8  | 32.8  |

Manual Integrations  
 APPROVED

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 4/11/2018 5:16:46 PM

