

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121418\  
 Data File : BF111426.D  
 Acq On : 14 Dec 2018 18:40  
 Operator : JU/SJ  
 Sample : J6319-07DL 5X  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 061\_SW-N-1DL

Manual Integrations  
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 12/17/2018 2:36:37 PM

Quant Time: Dec 14 19:09:29 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 14 13:26:17 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.79  | 152  | 171415   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.07  | 136  | 675982   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.83  | 164  | 280209   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.31 | 188  | 387618   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.95 | 240  | 363148   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.39 | 264  | 291080   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.41  | 112  | 240524   | 23.35 | ng    | 0.00     |
| 7) Phenol-d6                | 6.43  | 99   | 297931   | 21.74 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.35  | 82   | 174149   | 15.34 | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 10.62 | 330  | 41730    | 16.62 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.15  | 172  | 304327   | 16.78 | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.89 | 244  | 192341   | 12.44 | ng    | 0.00     |

| Target Compounds           | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|----------------------------|-------|------|----------|--------|-------|--------|
| 52) Acenaphthene           | 9.86  | 154  | 34188    | 2.019  | ng    | 97     |
| 58) Fluorene               | 10.37 | 166  | 45932    | 2.577  | ng    | 99     |
| 71) Phenanthrene           | 11.33 | 178  | 594053   | 29.742 | ng    | 93     |
| 72) Anthracene             | 11.39 | 178  | 152399   | 7.461  | ng    | 94     |
| 75) Fluoranthene           | 12.52 | 202  | 606541   | 31.041 | ng    | 98     |
| 78) Pyrene                 | 12.75 | 202  | 750831   | 29.326 | ng    | 96     |
| 81) Benzo(a)anthracene     | 13.94 | 228  | 325475   | 16.483 | ng    | 99     |
| 83) Chrysene               | 13.97 | 228  | 285932   | 13.746 | ng    | 97     |
| 86) Indeno(1,2,3-cd)pyrene | 16.80 | 276  | 80961    | 5.393  | ng    | # 91   |
| 88) Benzo(b)fluoranthene   | 14.98 | 252  | 274064m  | 16.150 | ng    |        |
| 89) Benzo(k)fluoranthene   | 15.00 | 252  | 73691m   | 4.544  | ng    |        |
| 90) Benzo(a)pyrene         | 15.33 | 252  | 202627   | 13.241 | ng    | 97     |
| 92) Benzo(a,h,i)perylene   | 17.23 | 276  | 86088m   | 7.265  | ng    |        |

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

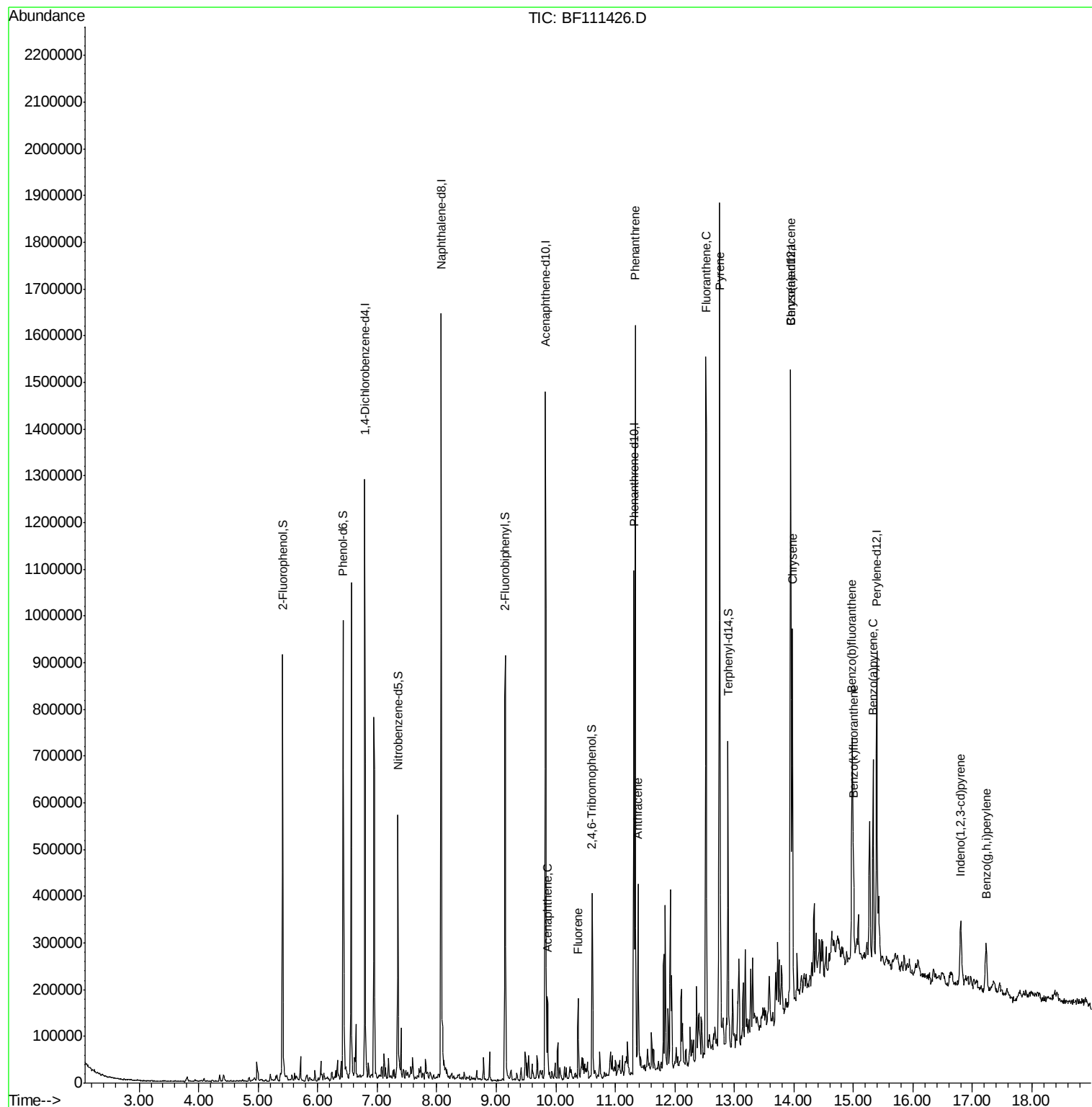
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121418\  
Data File : BF111426.D  
Acq On : 14 Dec 2018 18:40  
Operator : JU/SJ  
Sample : J6319-07DL 5X  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

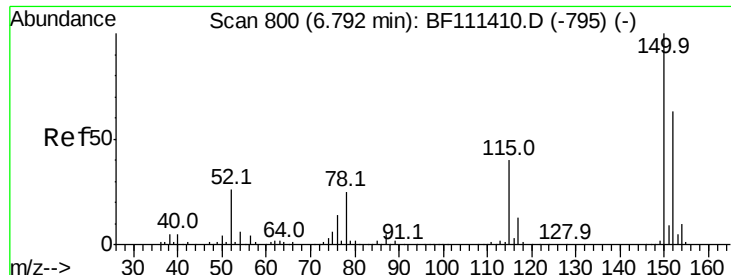
Instrument :  
BNA\_F  
ClientSampleId :  
061\_SW-N-1DL

Manual Integrations  
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12/17/2018 2:36:37 PM

Quant Time: Dec 14 19:09:29 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Dec 14 13:26:17 2018  
Response via : Initial Calibration





#1

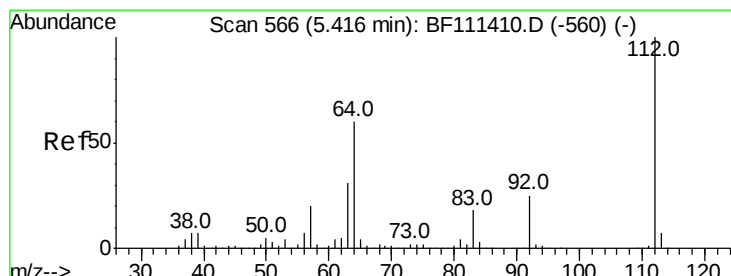
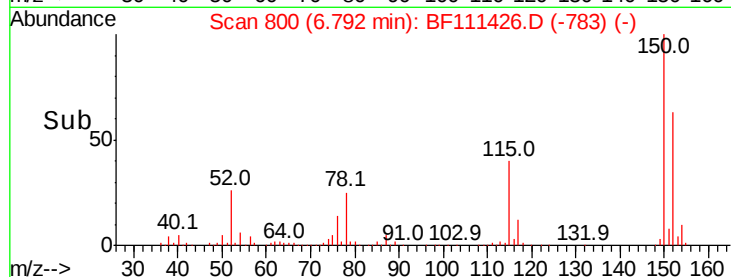
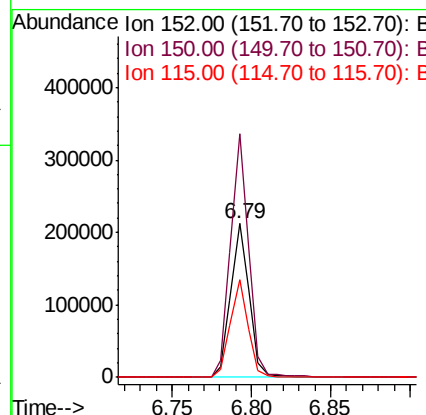
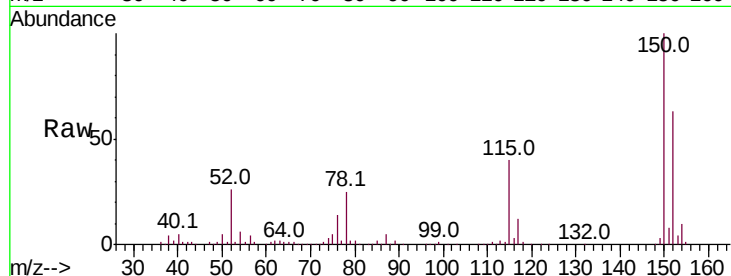
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.79 min Scan# 800  
Delta R.T. 0.00 min  
Lab File: BF111426.D  
Acq: 14 Dec 2018 18:40

Instrument :  
BNA\_F  
ClientSampleId :  
061\_SW-N-1DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 158.6 | 126.6 | 189.8 |
| 115     | 63.5  | 50.7  | 76.1  |

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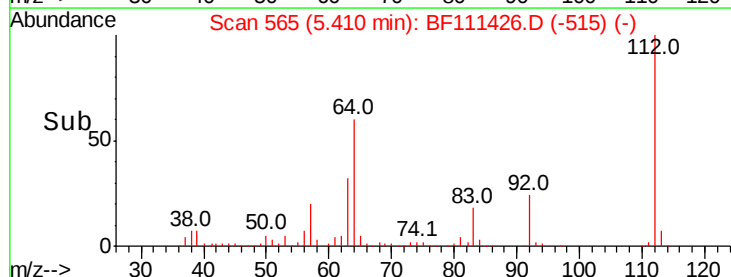
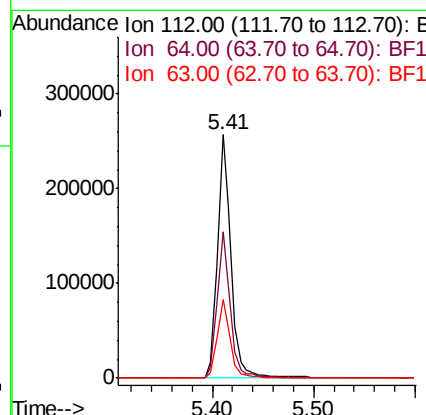
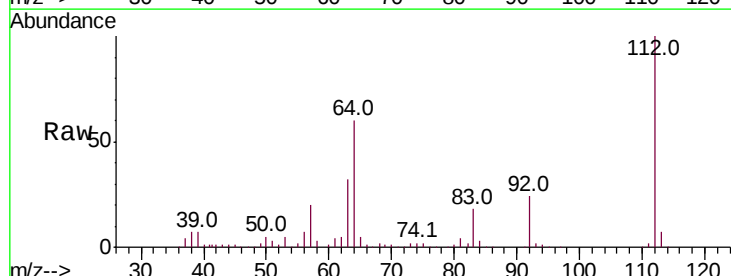
Sohil  
12/17/2018 2:36:37 PM

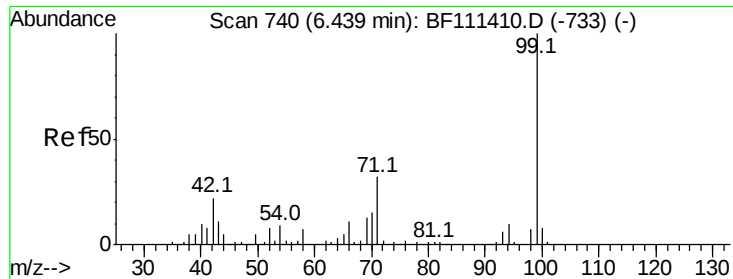


#5

2-Fluorophenol  
Concen: 23.350 ng  
RT: 5.41 min Scan# 565  
Delta R.T. -0.00 min  
Lab File: BF111426.D  
Acq: 14 Dec 2018 18:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 60.4  | 51.8  | 77.6  |
| 63      | 32.1  | 26.8  | 40.2  |





#7

Phenol-d6

Concen: 21.743 ng

RT: 6.43 min Scan# 738

Delta R.T. -0.01 min

Lab File: BF111426.D

Acq: 14 Dec 2018 18:40

Instrument :

BNA\_F

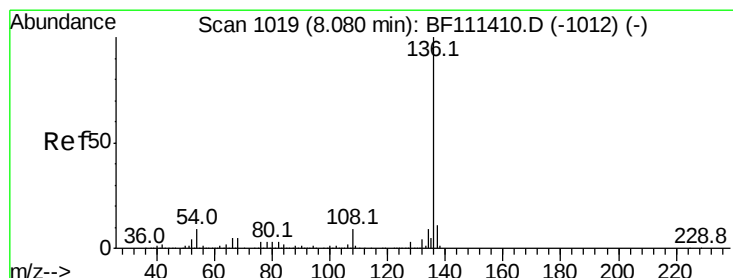
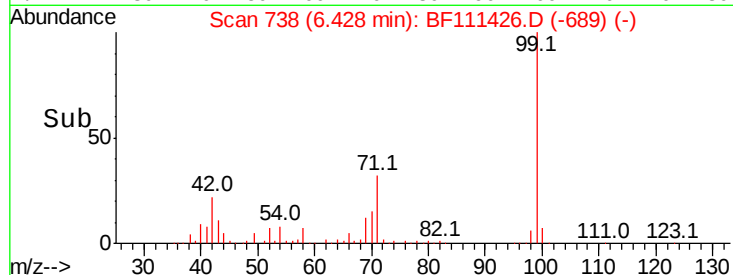
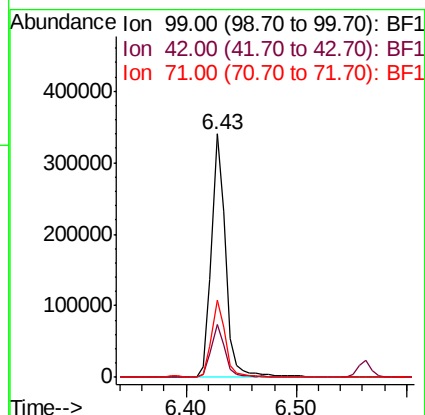
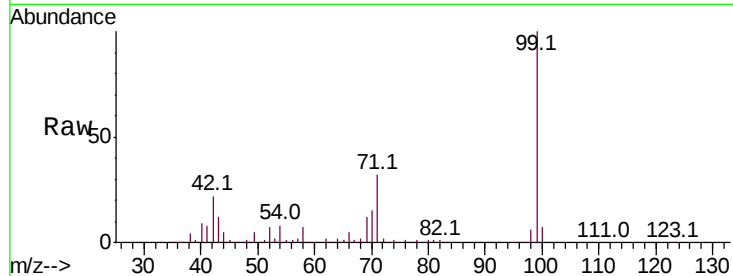
ClientSampleId :

061\_SW-N-1DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 297931 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 21.9  | 17.4  | 26.0   |
| 71        | 31.9  | 26.1  | 39.1   |

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#21

Naphthalene-d8

Concen: 20.000 ng

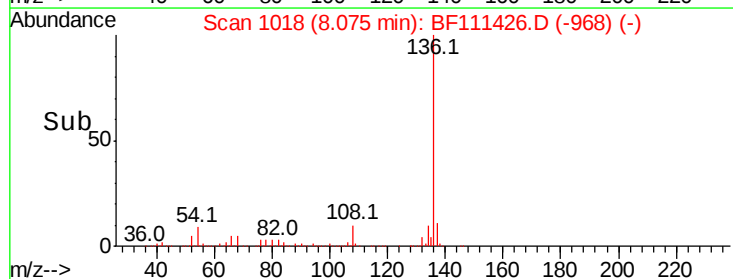
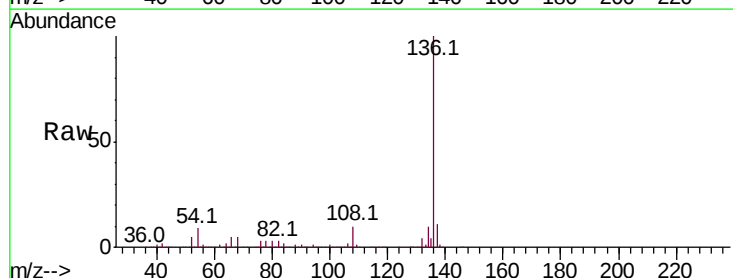
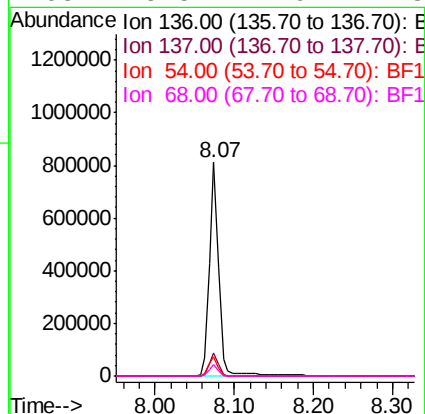
RT: 8.07 min Scan# 1018

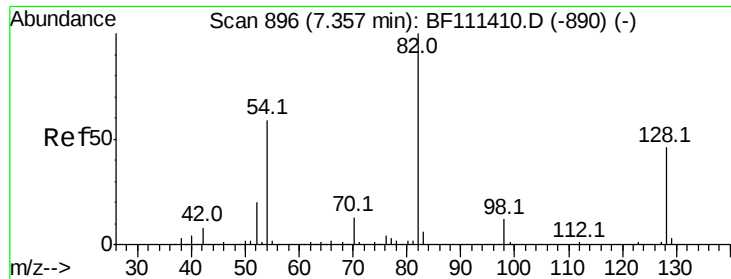
Delta R.T. -0.01 min

Lab File: BF111426.D

Acq: 14 Dec 2018 18:40

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 675982 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 11.0  | 9.1   | 13.7   |
| 54        | 9.1   | 7.7   | 11.5   |
| 68        | 5.5   | 4.9   | 7.3    |





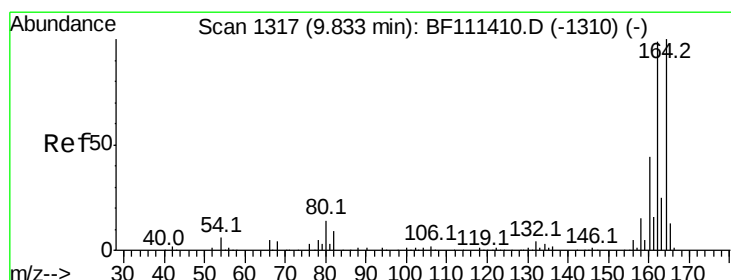
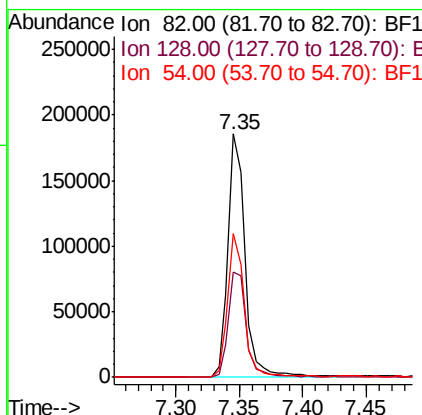
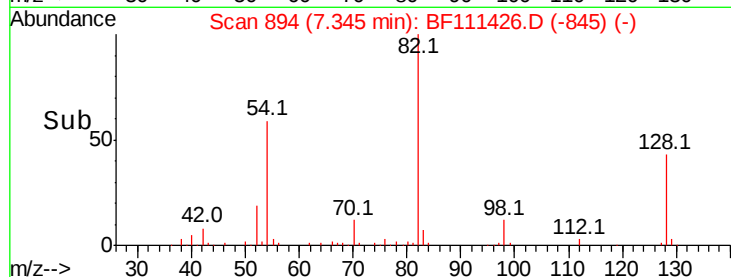
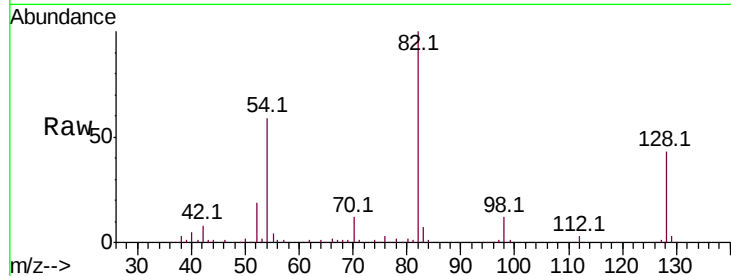
#23  
Nitrobenzene-d5  
Concen: 15.341 ng  
RT: 7.35 min Scan# 894  
Delta R.T. -0.01 min  
Lab File: BF111426.D  
Acq: 14 Dec 2018 18:40

Instrument :  
BNA\_F  
ClientSampleId :  
061\_SW-N-1DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 43.1  | 37.4  | 56.2  |
| 54      | 59.3  | 47.6  | 71.4  |

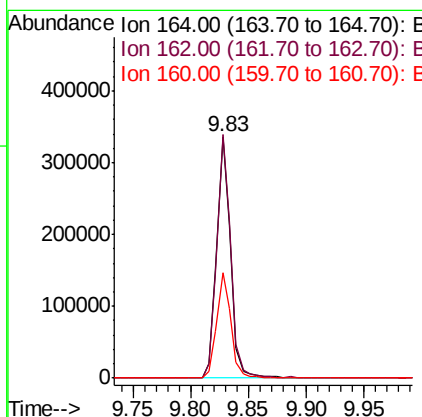
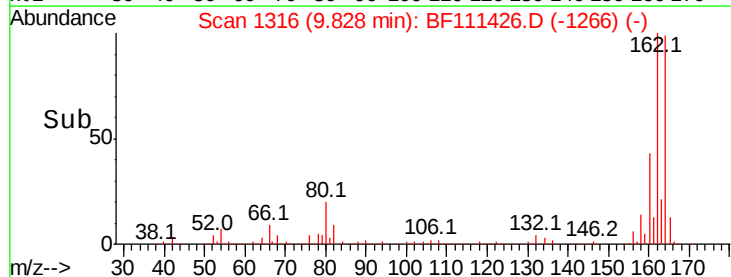
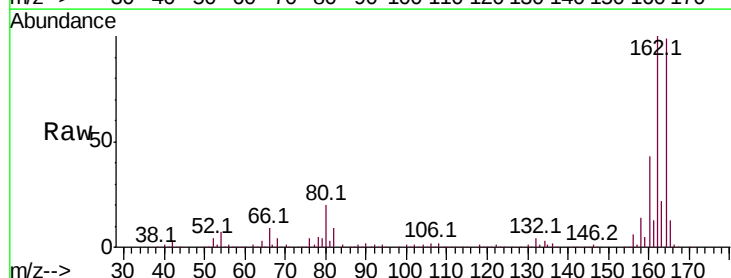
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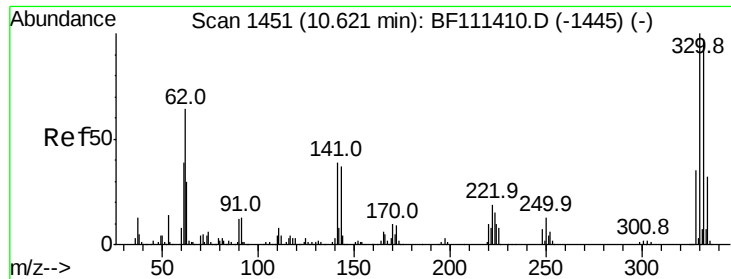
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#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.83 min Scan# 1316  
Delta R.T. -0.01 min  
Lab File: BF111426.D  
Acq: 14 Dec 2018 18:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 100.8 | 81.4  | 122.0 |
| 160     | 43.6  | 35.7  | 53.5  |





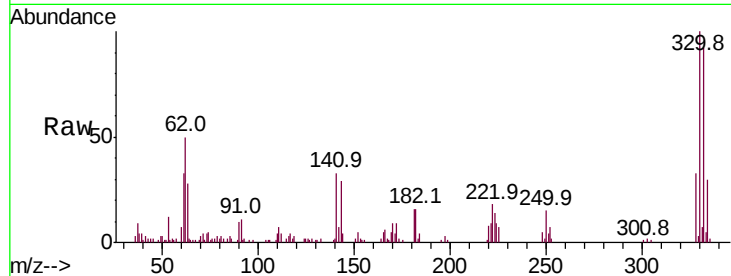
#42  
 2,4,6-Tribromophenol  
 Concen: 16.625 ng  
 RT: 10.62 min Scan# 1450  
 Delta R.T. -0.01 min  
 Lab File: BF111426.D  
 Acq: 14 Dec 2018 18:40

Instrument :  
 BNA\_F  
 ClientSampleId :  
 061\_SW-N-1DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 97.2  | 76.0  | 114.0 |
| 141     | 45.9  | 31.0  | 46.6  |

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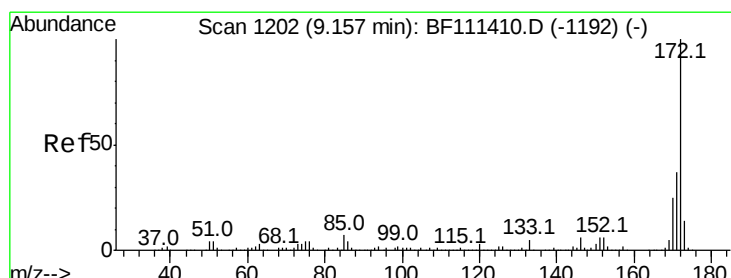
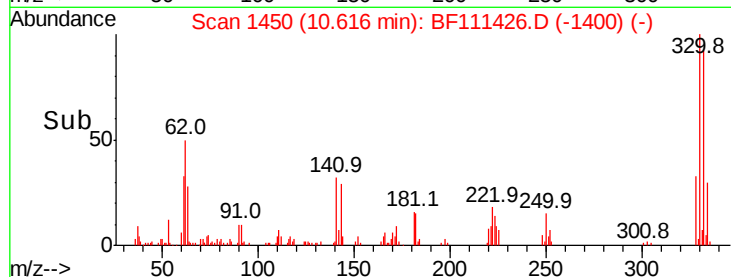
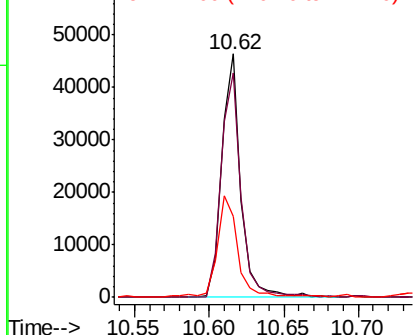


Abundance

Ion 329.80 (329.50 to 330.50): E

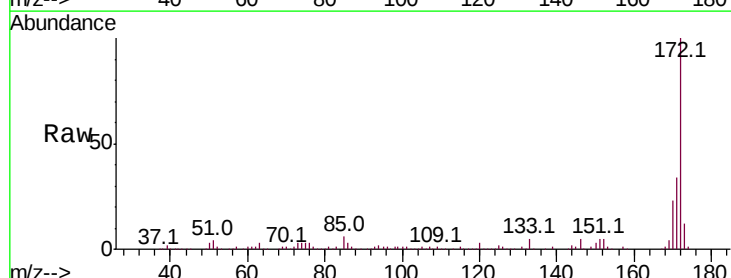
Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#45  
 2-Fluorobiphenyl  
 Concen: 16.776 ng  
 RT: 9.15 min Scan# 1201  
 Delta R.T. -0.01 min  
 Lab File: BF111426.D  
 Acq: 14 Dec 2018 18:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.1  | 33.0  | 49.4  |
| 170     | 22.7  | 22.3  | 33.5  |

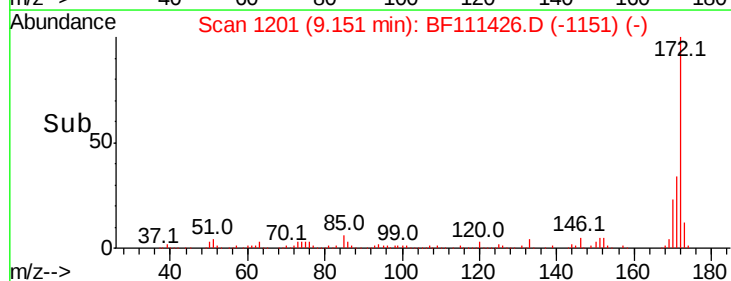
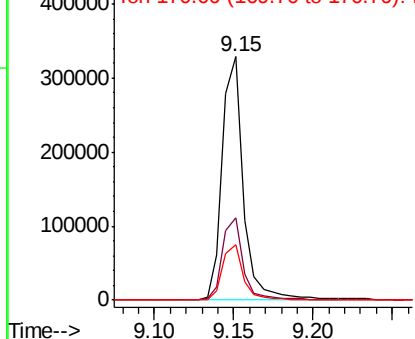


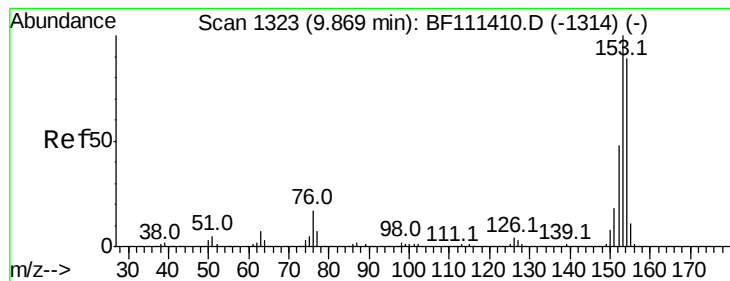
Abundance

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





#52

Acenaphthene

Concen: 2.019 ng

RT: 9.86 min Scan# 1322

Delta R.T. -0.01 min

Lab File: BF111426.D

Acq: 14 Dec 2018 18:40

Instrument :

BNA\_F

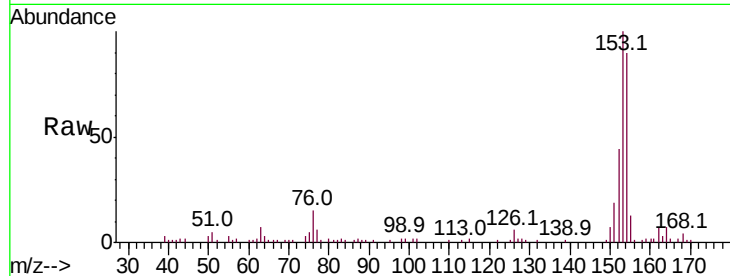
ClientSampleId :

061\_SW-N-1DL

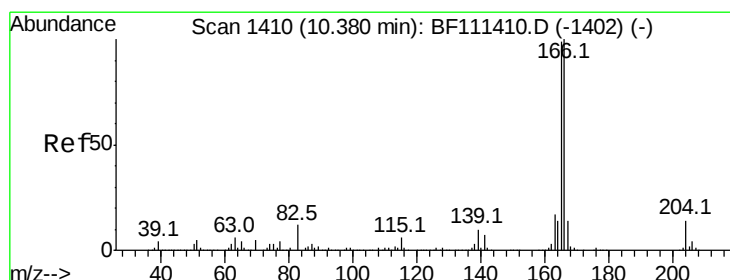
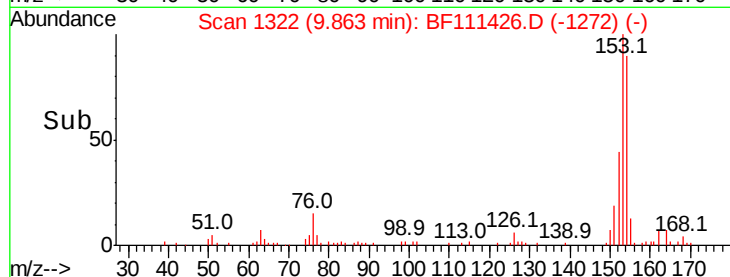
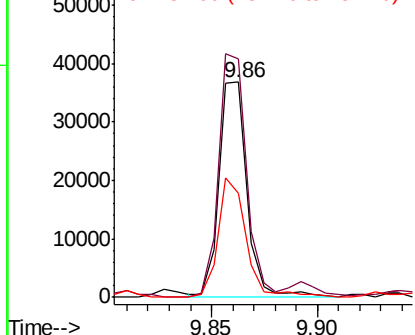
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 154   | Resp: | 34188 |
| Ion Ratio | Lower | Upper |       |
| 154       | 100   |       |       |
| 153       | 110.8 | 87.8  | 131.8 |
| 152       | 48.7  | 43.4  | 65.2  |

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Abundance Ion 154.00 (153.70 to 154.70): E  
Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E



#58

Fluorene

Concen: 2.577 ng

RT: 10.37 min Scan# 1409

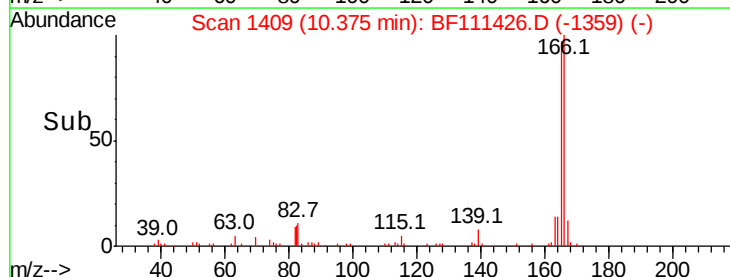
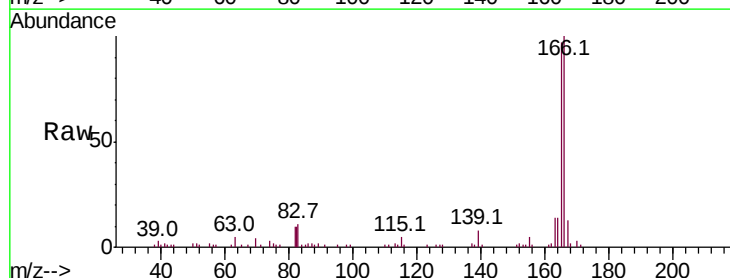
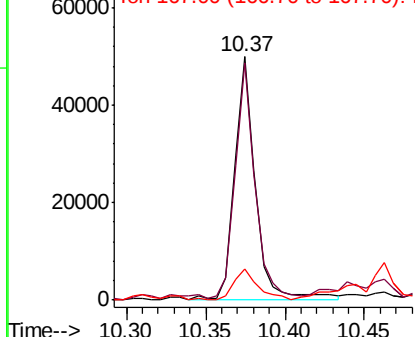
Delta R.T. -0.01 min

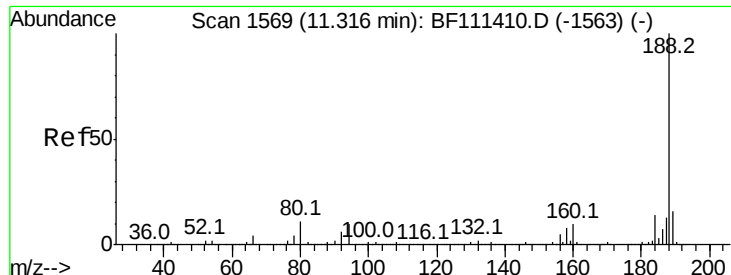
Lab File: BF111426.D

Acq: 14 Dec 2018 18:40

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 166   | Resp: | 45932 |
| Ion Ratio | Lower | Upper |       |
| 166       | 100   |       |       |
| 165       | 97.5  | 78.4  | 117.6 |
| 167       | 12.7  | 11.2  | 16.8  |

Abundance Ion 166.00 (165.70 to 166.70): E  
Ion 165.00 (164.70 to 165.70): E  
Ion 167.00 (166.70 to 167.70): E





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.31 min Scan# 1568

Delta R.T. -0.01 min

Lab File: BF111426.D

Acq: 14 Dec 2018 18:40

Instrument :

BNA\_F

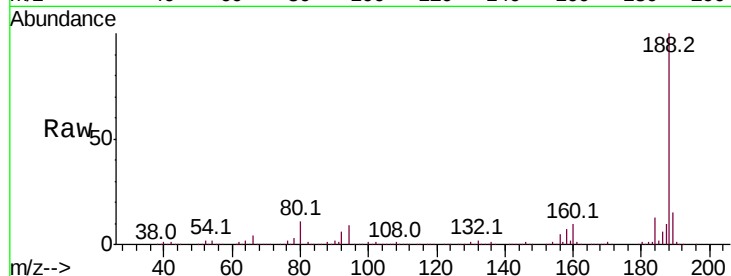
ClientSampleId :

061\_SW-N-1DL

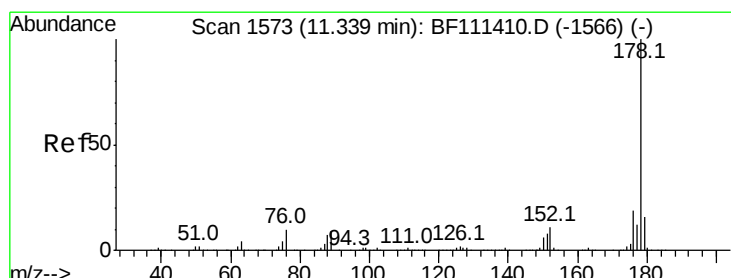
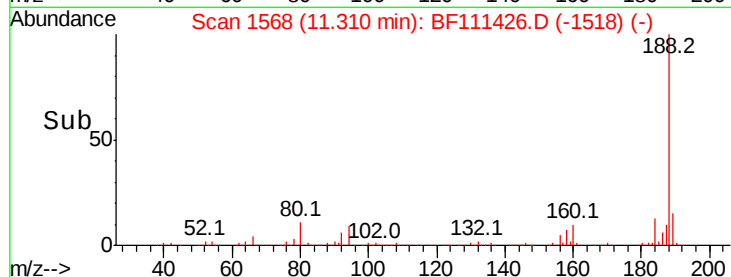
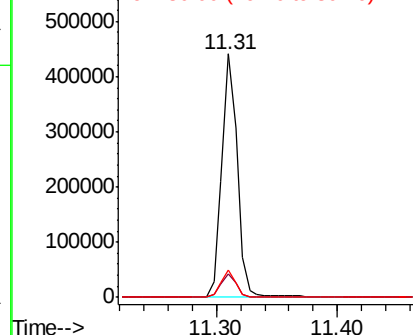
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 188   | Resp: | 387618 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 9.5   | 9.6   | 14.4#  |
| 80        | 11.5  | 9.8   | 14.6   |

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Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF1  
Ion 80.00 (79.70 to 80.70): BF1



#71

Phenanthrene

Concen: 29.742 ng

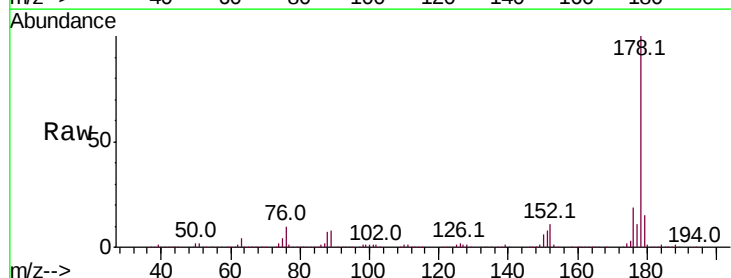
RT: 11.33 min Scan# 1572

Delta R.T. -0.01 min

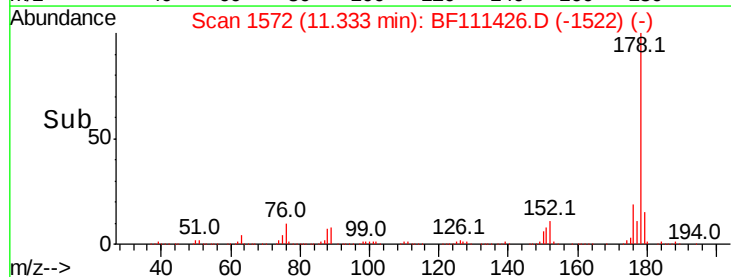
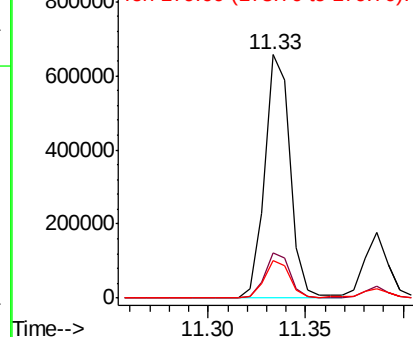
Lab File: BF111426.D

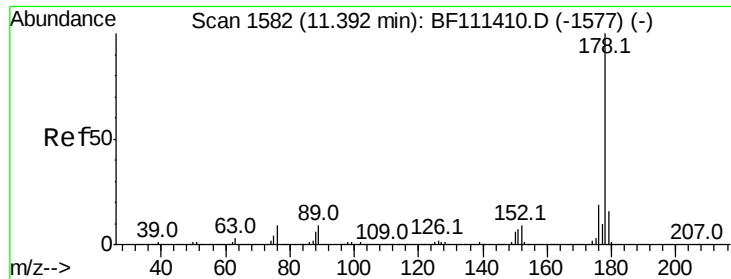
Acq: 14 Dec 2018 18:40

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 594053 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 18.8  | 18.1  | 27.1   |
| 179       | 15.4  | 14.0  | 21.0   |



Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E





#72

Anthracene

Concen: 7.461 ng

RT: 11.39 min Scan# 1581

Delta R.T. -0.01 min

Lab File: BF111426.D

Acq: 14 Dec 2018 18:40

Instrument :

BNA\_F

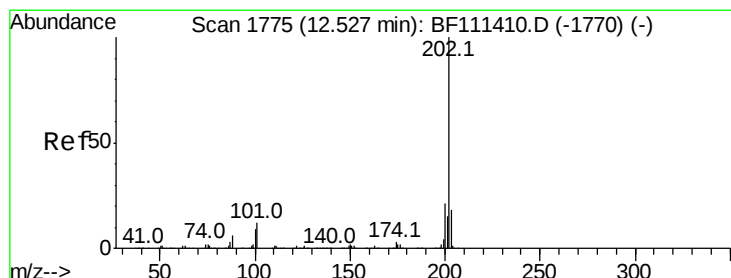
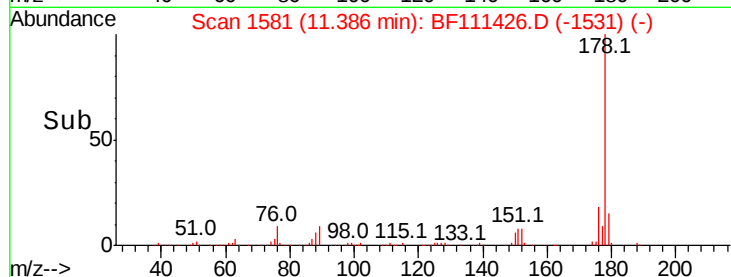
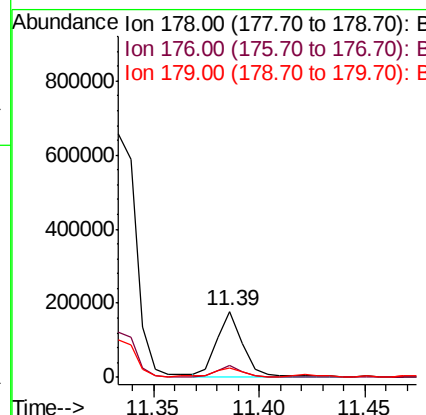
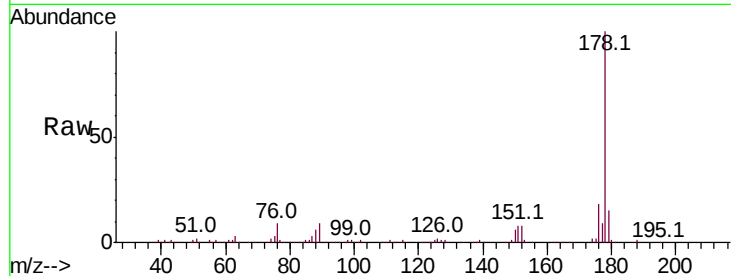
ClientSampleId :

061\_SW-N-1DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 178   | Resp: | 152399 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 18.0  | 17.2  | 25.8   |
| 179       | 14.9  | 13.8  | 20.8   |

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#75

Fluoranthene

Concen: 31.041 ng

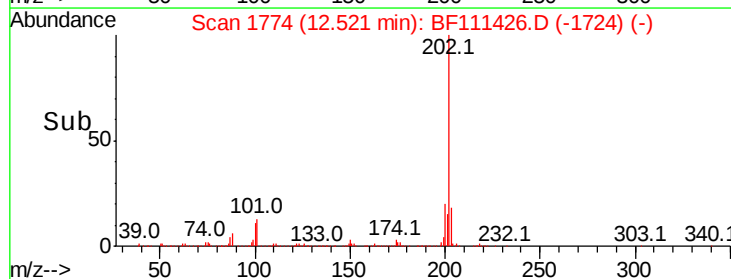
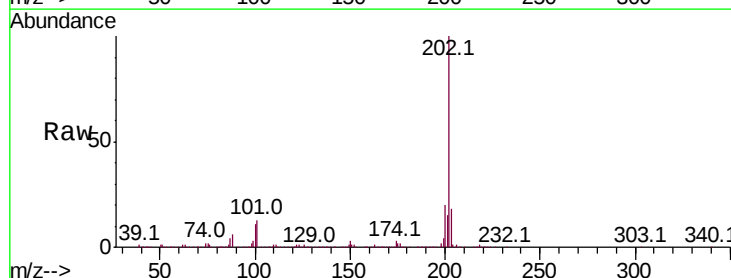
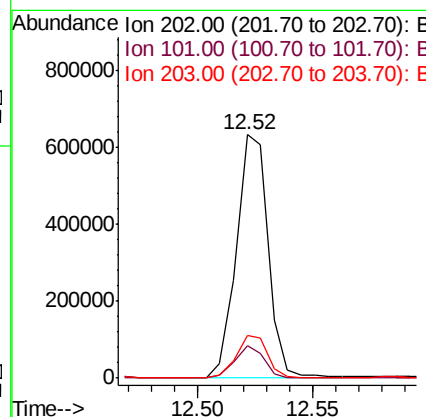
RT: 12.52 min Scan# 1774

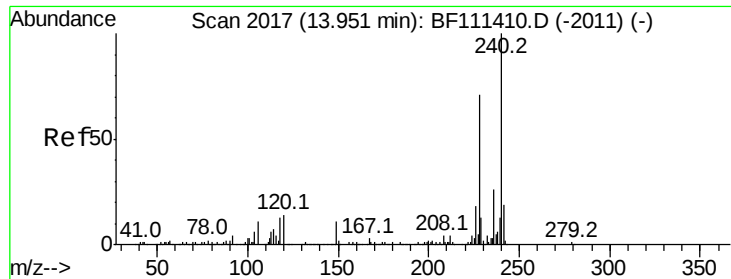
Delta R.T. -0.01 min

Lab File: BF111426.D

Acq: 14 Dec 2018 18:40

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 606541 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 13.2  | 0.0   | 33.8   |
| 203       | 17.8  | 0.0   | 38.6   |





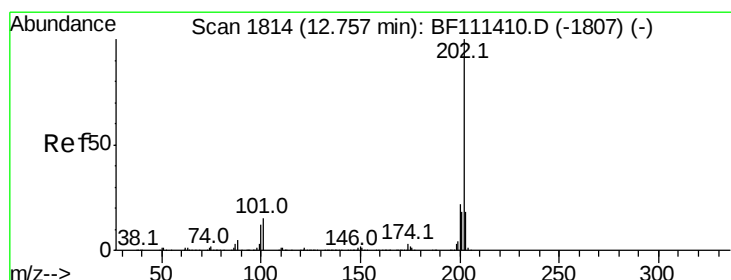
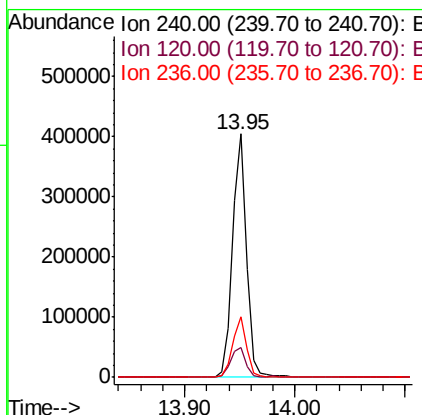
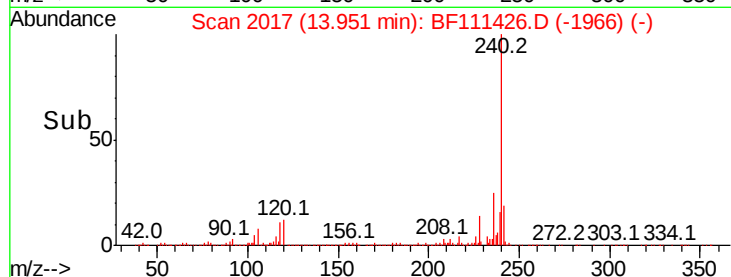
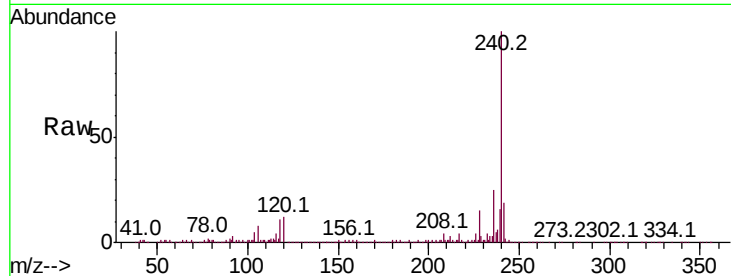
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 13.95 min Scan# 2017  
Delta R.T. 0.00 min  
Lab File: BF111426.D  
Acq: 14 Dec 2018 18:40

Instrument :  
BNA\_F  
ClientSampleId :  
061\_SW-N-1DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 12.1  | 12.2  | 18.2# |
| 236     | 25.0  | 20.2  | 30.2  |

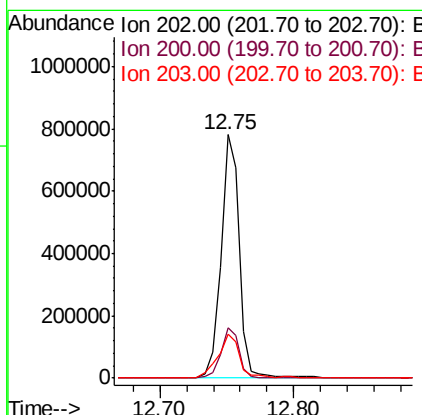
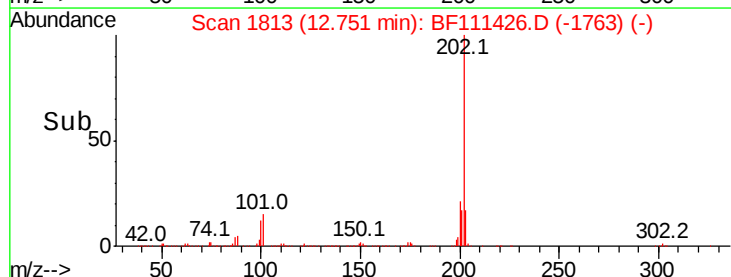
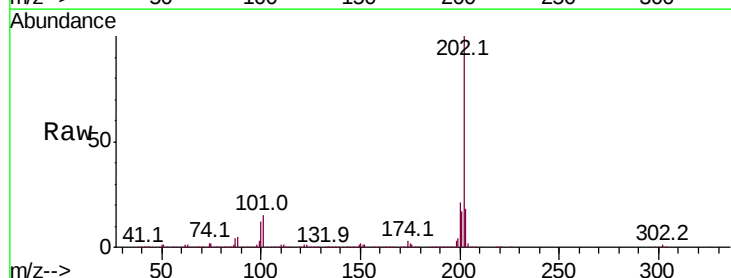
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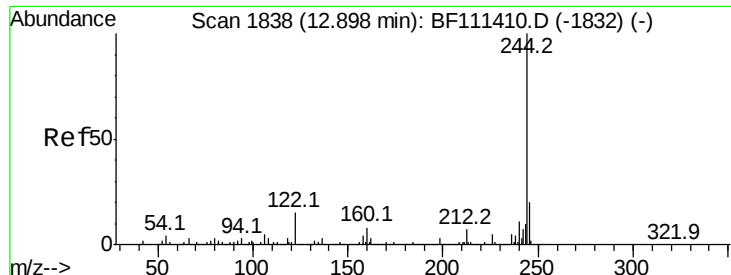
Sohil  
12/17/2018 2:36:37 PM



#78  
Pyrene  
Concen: 29.326 ng  
RT: 12.75 min Scan# 1813  
Delta R.T. -0.01 min  
Lab File: BF111426.D  
Acq: 14 Dec 2018 18:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 20.8  | 19.0  | 28.4  |
| 203     | 17.8  | 15.2  | 22.8  |





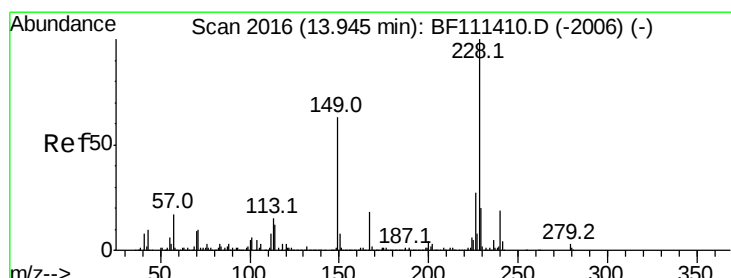
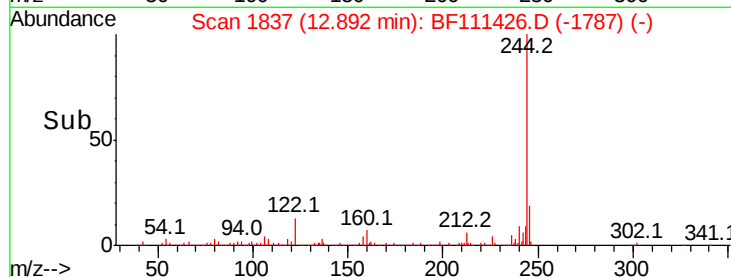
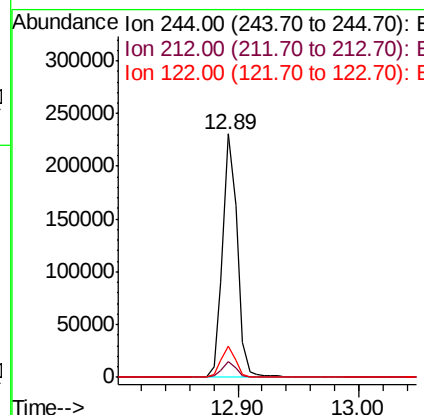
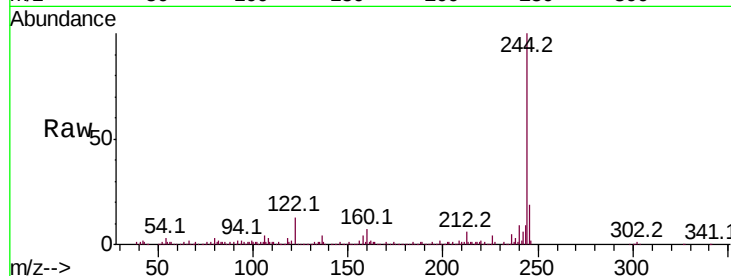
#79  
 Terphenyl-d14  
 Concen: 12.437 ng  
 RT: 12.89 min Scan# 1837  
 Delta R.T. -0.01 min  
 Lab File: BF111426.D  
 Acq: 14 Dec 2018 18:40

Instrument :  
 BNA\_F  
 ClientSampleId :  
 061\_SW-N-1DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.2   | 5.7   | 8.5   |
| 122     | 12.6  | 13.1  | 19.7  |

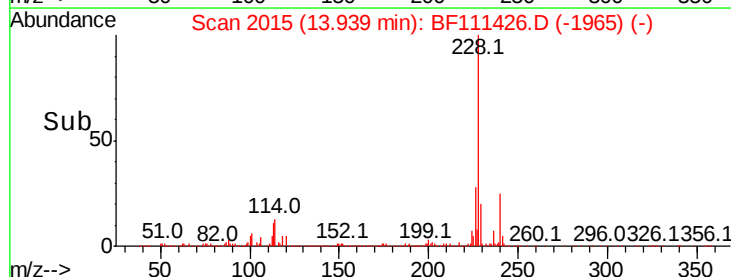
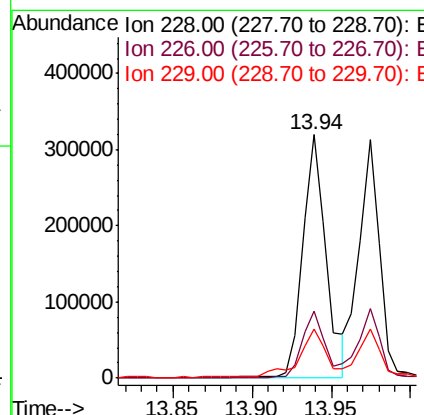
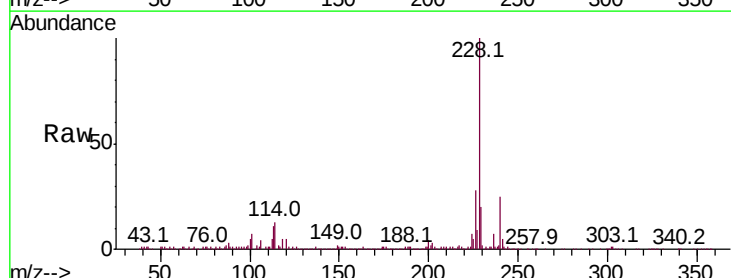
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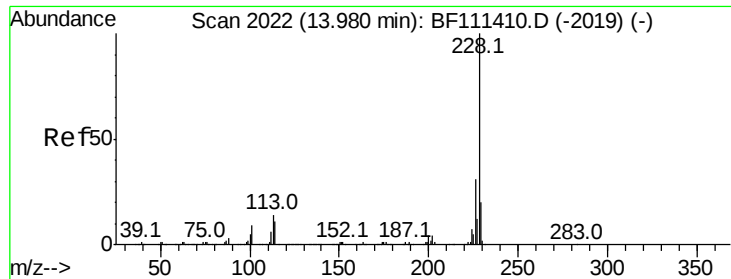
Sohil  
 12/17/2018 2:36:37 PM



#81  
 Benzo(a)anthracene  
 Concen: 16.483 ng  
 RT: 13.94 min Scan# 2015  
 Delta R.T. -0.01 min  
 Lab File: BF111426.D  
 Acq: 14 Dec 2018 18:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.8  | 22.6  | 34.0  |
| 229     | 20.4  | 16.3  | 24.5  |





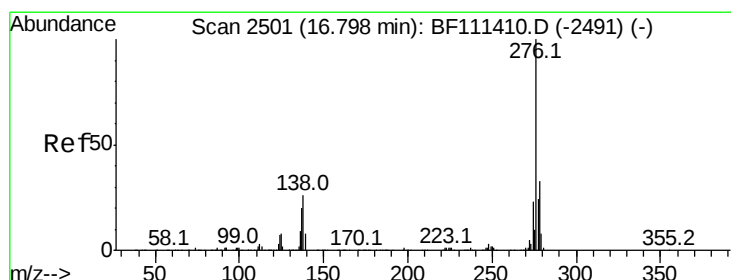
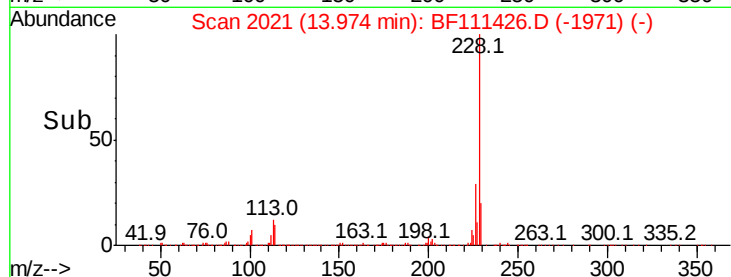
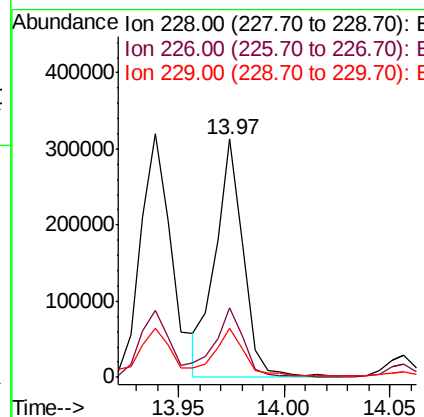
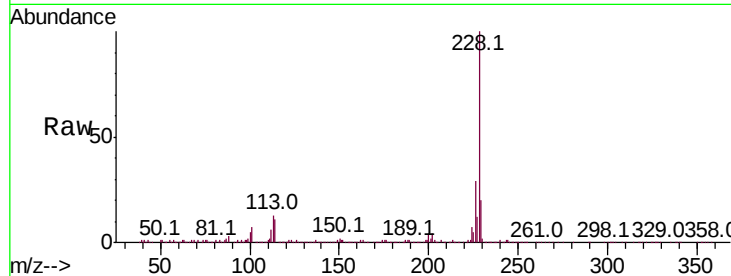
#83  
Chrysene  
Concen: 13.746 ng  
RT: 13.97 min Scan# 2021  
Delta R.T. -0.01 min  
Lab File: BF111426.D  
Acq: 14 Dec 2018 18:40

Instrument :  
BNA\_F  
ClientSampleId :  
061\_SW-N-1DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.4  | 25.3  | 37.9  |
| 229     | 20.5  | 17.2  | 25.8  |

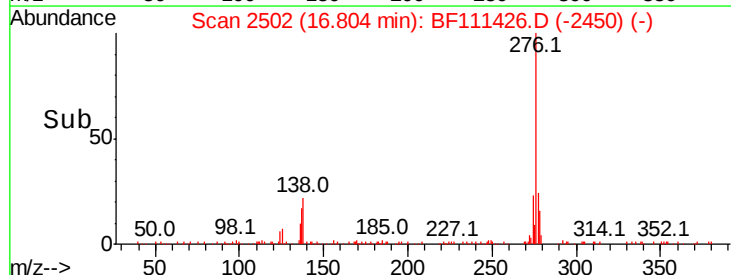
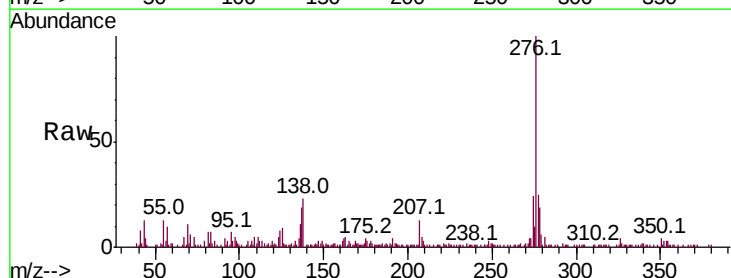
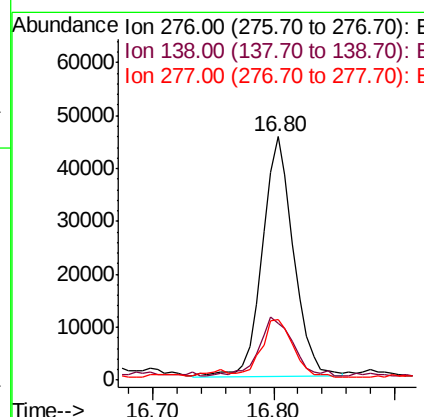
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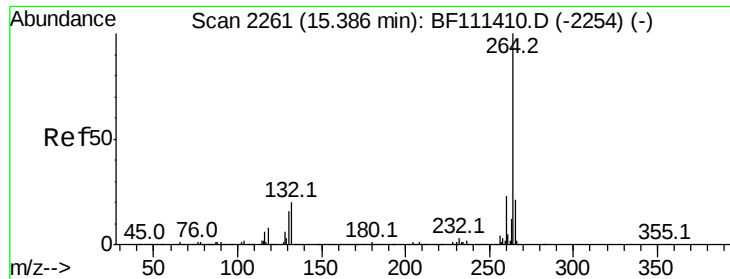
Sohil  
12/17/2018 2:36:37 PM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 5.393 ng  
RT: 16.80 min Scan# 2502  
Delta R.T. 0.01 min  
Lab File: BF111426.D  
Acq: 14 Dec 2018 18:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 26.3  | 27.8  | 41.6# |
| 277     | 24.7  | 20.1  | 30.1  |





#87

Pervlene-d12

Concen: 20.000 ng

RT: 15.39 min Scan# 2262

Delta R.T. 0.01 min

Lab File: BF111426.D

Acq: 14 Dec 2018 18:40

Instrument :

BNA\_F

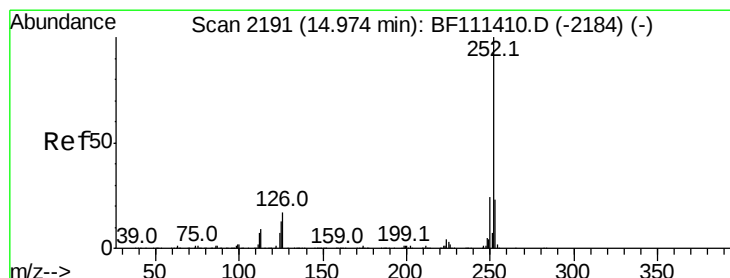
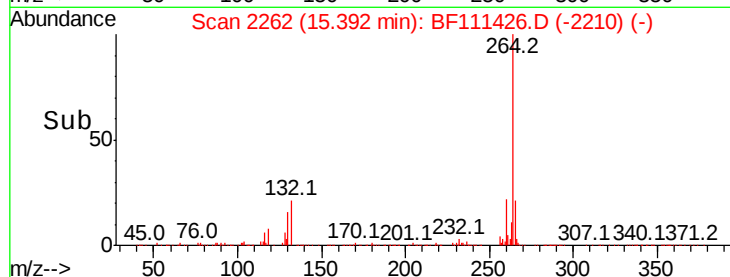
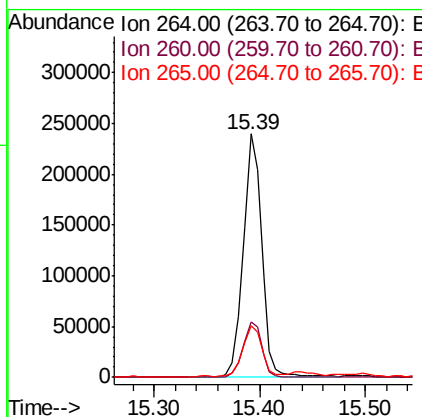
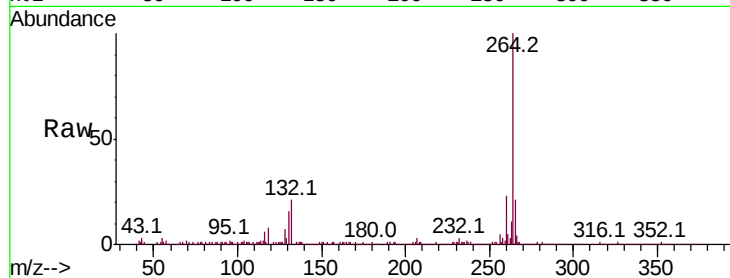
ClientSampleId :

061\_SW-N-1DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 264   | Resp: | 291080 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 22.5  | 18.3  | 27.5   |
| 265       | 21.0  | 17.7  | 26.5   |

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12/17/2018 2:36:37 PM



#88

Benzo(b)fluoranthene

Concen: 16.150 ng m

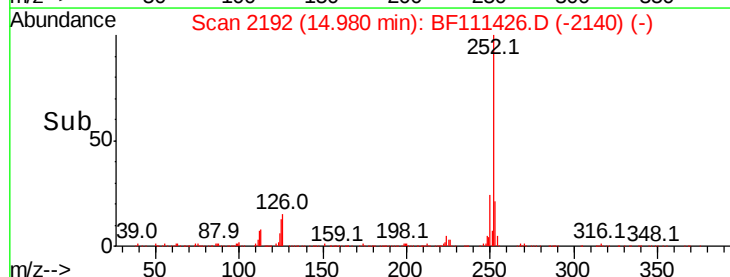
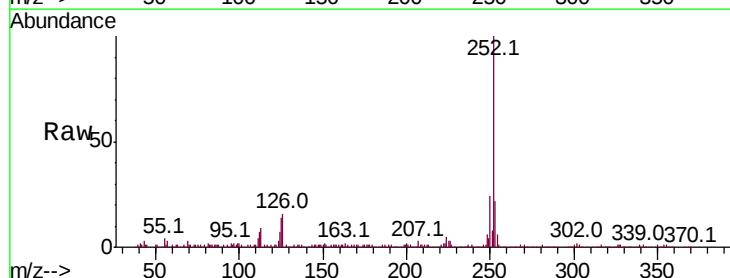
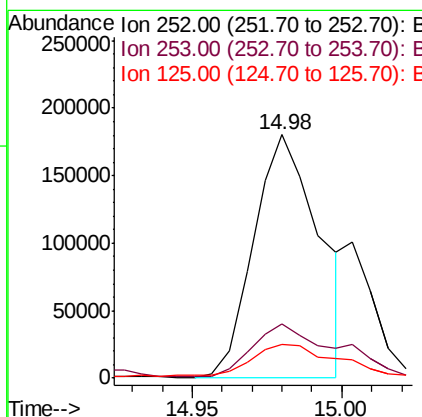
RT: 14.98 min Scan# 2192

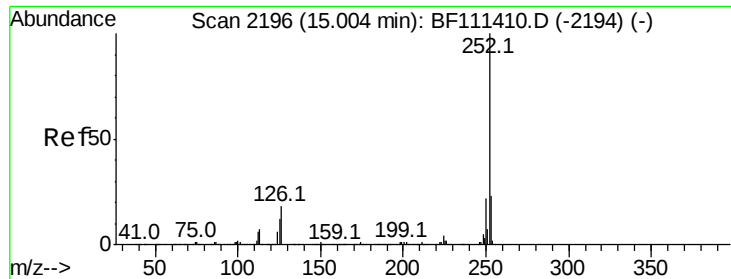
Delta R.T. 0.01 min

Lab File: BF111426.D

Acq: 14 Dec 2018 18:40

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 274064 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.0  | 18.2  | 27.2   |
| 125       | 13.7  | 10.4  | 15.6   |





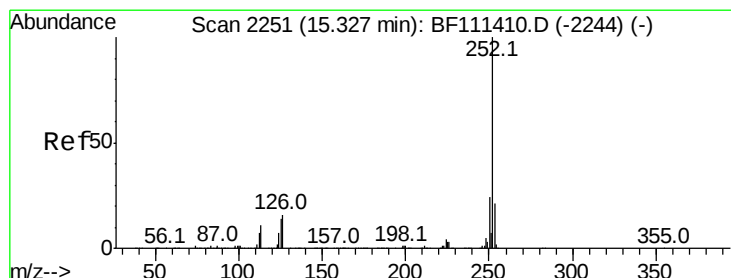
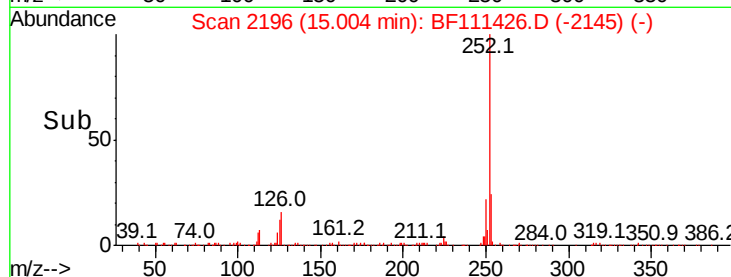
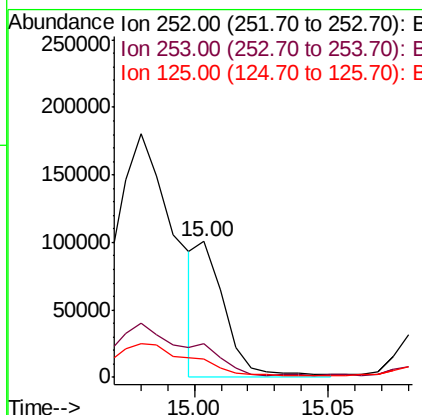
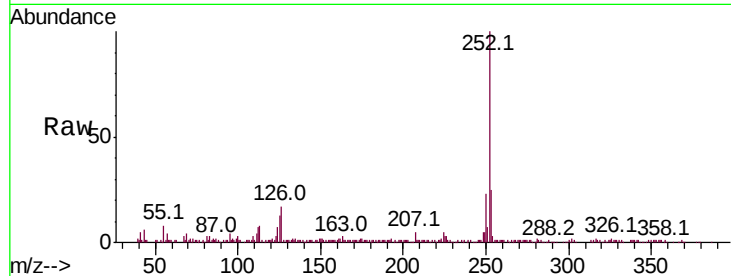
#89  
Benzo(k)fluoranthene  
Concen: 4.544 ng m  
RT: 15.00 min Scan# 2196  
Delta R.T. 0.00 min  
Lab File: BF111426.D  
Acq: 14 Dec 2018 18:40

Instrument :  
BNA\_F  
ClientSampleId :  
061\_SW-N-1DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.7  | 18.1  | 27.1  |
| 125     | 13.2  | 9.8   | 14.8  |

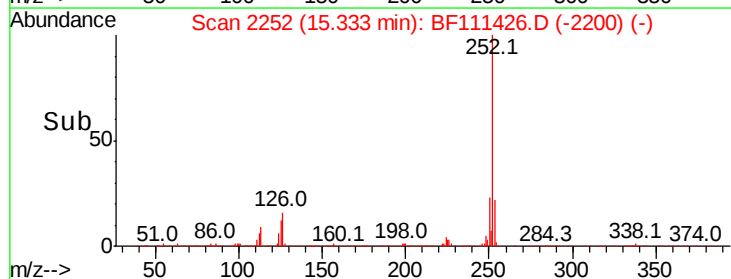
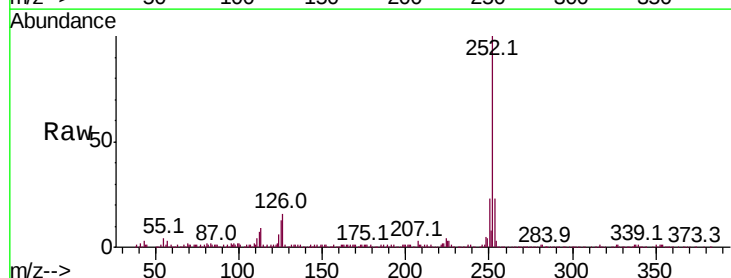
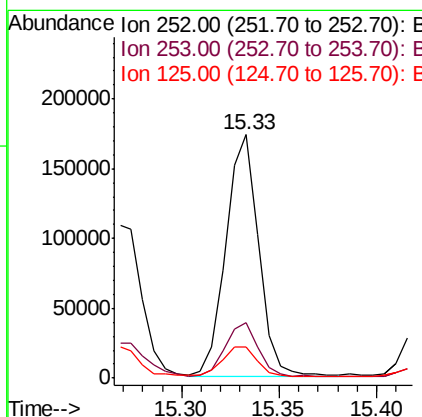
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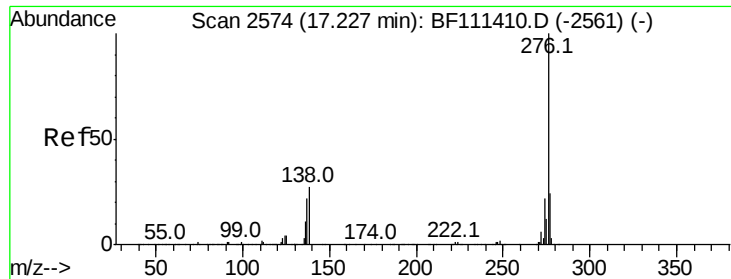
Sohil  
12/17/2018 2:36:37 PM



#90  
Benzo(a)pyrene  
Concen: 13.241 ng  
RT: 15.33 min Scan# 2252  
Delta R.T. 0.01 min  
Lab File: BF111426.D  
Acq: 14 Dec 2018 18:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.0  | 17.8  | 26.8  |
| 125     | 12.9  | 12.3  | 18.5  |





#92  
 Benzo(a,h,i)perylene  
 Concen: 7.265 ng/ml  
 RT: 17.23 min Scan# 2574  
 Delta R.T. 0.00 min  
 Lab File: BF111426.D  
 Acq: 14 Dec 2018 18:40

Instrument :  
 BNA\_F  
 ClientSampleId :  
 061\_SW-N-1DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 22.5  | 19.2  | 28.8  |
| 138     | 24.6  | 24.9  | 37.3  |

Manual Integrations  
 APPROVED

Sohil  
 12/17/2018 2:36:37 PM

