

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
 Data File : BF111538.D  
 Acq On : 17 Dec 2018 14:39  
 Operator : JU/SJ  
 Sample : J6386-15  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P001-SS007-0006-01

Manual Integrations  
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 12/18/2018 12:47:50 PM

Quant Time: Dec 18 04:53:26 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  | 176189   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.07  | 136  | 673526   | 20.00 | ng    | -0.01    |
| 39) Acenaphthene-d10      | 9.82  | 164  | 285771   | 20.00 | ng    | -0.01    |
| 64) Phenanthrene-d10      | 11.31 | 188  | 430448   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.94 | 240  | 465065   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.39 | 264  | 384822   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.42  | 112  | 915299   | 86.45 | ng    | 0.00     |
| 7) Phenol-d6                | 6.44  | 99   | 1224146  | 86.92 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.35  | 82   | 764180   | 67.56 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.62 | 330  | 195027   | 76.19 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.15  | 172  | 1110751  | 60.04 | ng    | -0.01    |
| 79) Terphenyl-d14           | 12.89 | 244  | 934489   | 47.18 | ng    | 0.00     |

| Target Compounds         | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------|-------|------|----------|--------|-------|--------|
| 10) Phenol               | 6.45  | 94   | 107532   | 6.854  | ng    | 92     |
| 20) 3+4-Methylphenols    | 7.20  | 107  | 27701    | 2.169  | ng    | # 58   |
| 49) Acenaphthylene       | 9.69  | 152  | 58044    | 2.125  | ng    | 94     |
| 50) Dimethylphthalate    | 9.54  | 163  | 78623    | 3.820  | ng    | 98     |
| 71) Phenanthrene         | 11.33 | 178  | 222619   | 10.037 | ng    | 94     |
| 75) Fluoranthene         | 12.52 | 202  | 187094   | 8.622  | ng    | 96     |
| 78) Pyrene               | 12.75 | 202  | 314373   | 9.588  | ng    | 92     |
| 81) Benzo(a)anthracene   | 13.93 | 228  | 110983m  | 4.389  | ng    |        |
| 83) Chrysene             | 13.97 | 228  | 114833   | 4.311  | ng    | 96     |
| 88) Benzo(b)fluoranthene | 14.97 | 252  | 92786m   | 4.136  | ng    |        |
| 90) Benzo(a)pyrene       | 15.32 | 252  | 85706    | 4.236  | ng    | 97     |
| 92) Benzo(a,h,i)perylene | 17.23 | 276  | 45086    | 2.878  | ng    | 96     |

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

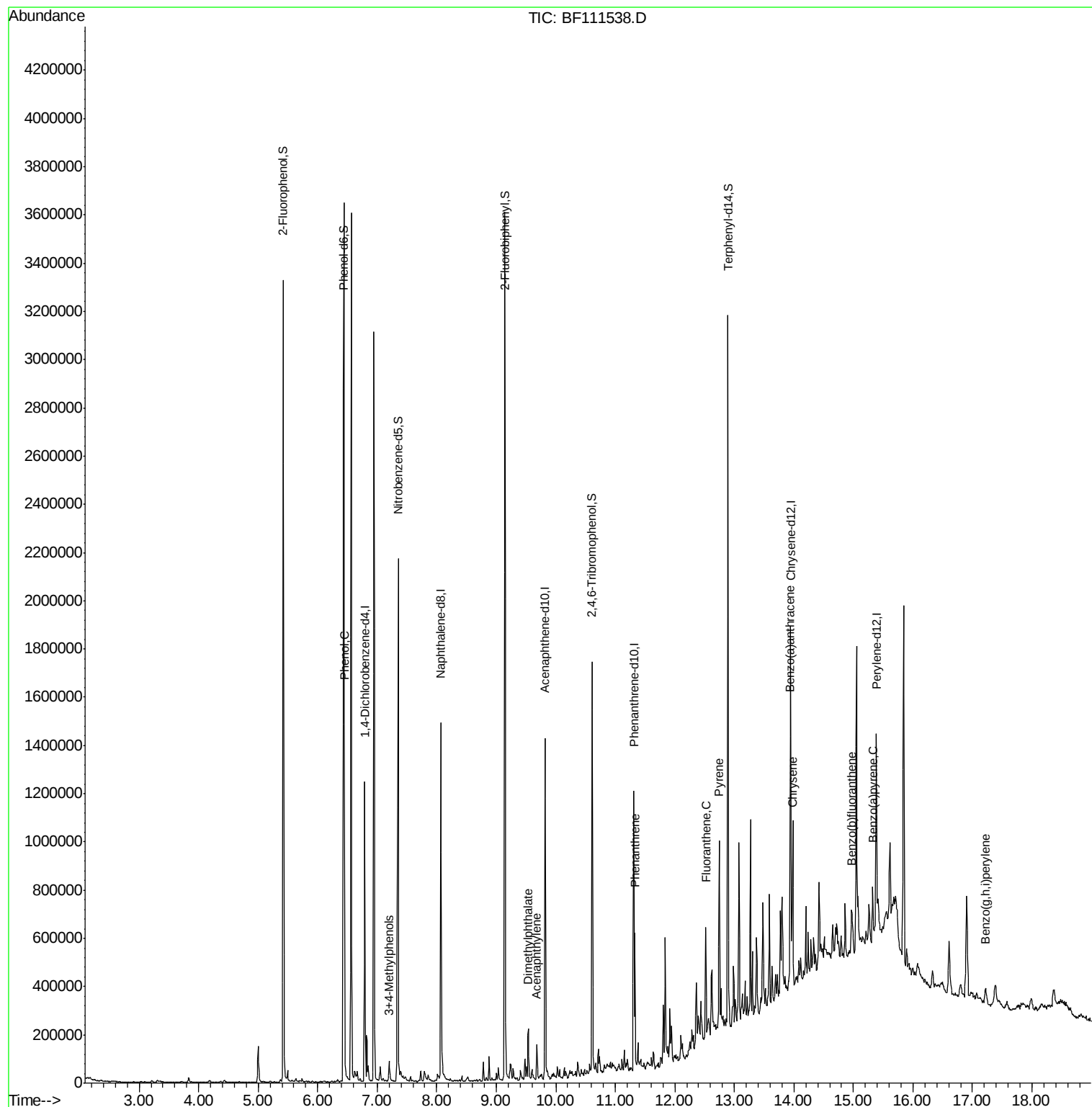
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
Data File : BF111538.D  
Acq On : 17 Dec 2018 14:39  
Operator : JU/SJ  
Sample : J6386-15  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

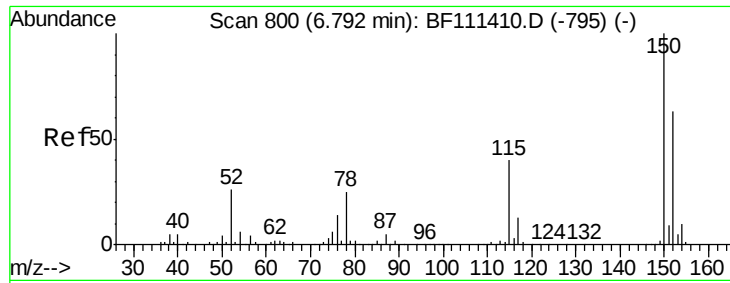
Instrument :  
BNA\_F  
ClientSampleId :  
P001-SS007-0006-01

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Quant Time: Dec 18 04:53:26 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





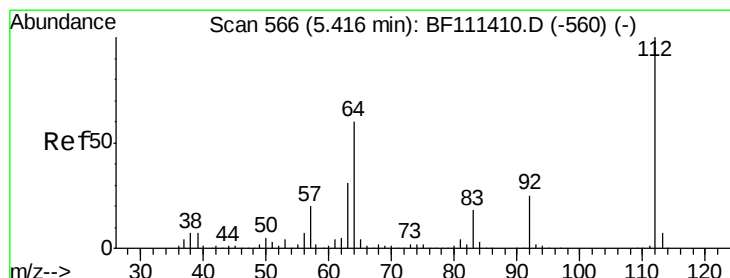
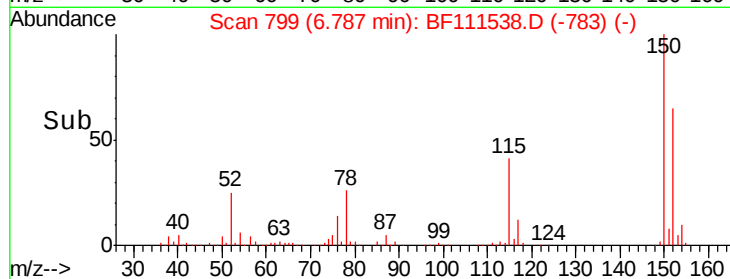
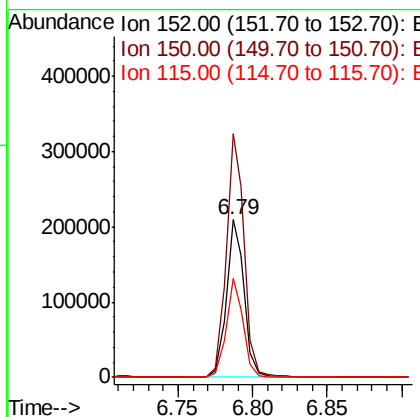
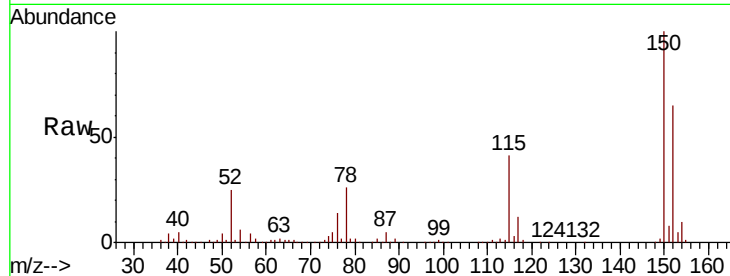
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.79 min Scan# 799  
 Delta R.T. -0.01 min  
 Lab File: BF111538.D  
 Acq: 17 Dec 2018 14:39

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P001-SS007-0006-01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 154.8 | 126.6 | 189.8 |
| 115     | 62.9  | 50.7  | 76.1  |

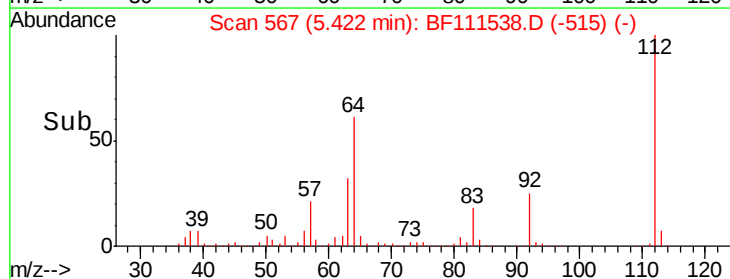
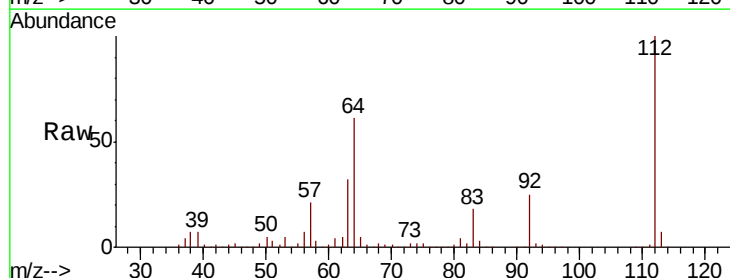
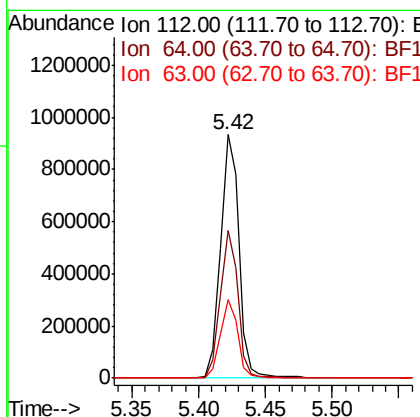
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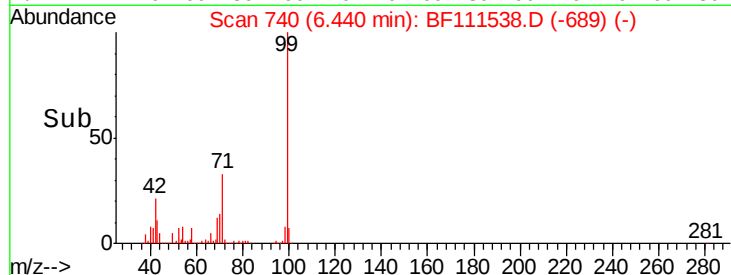
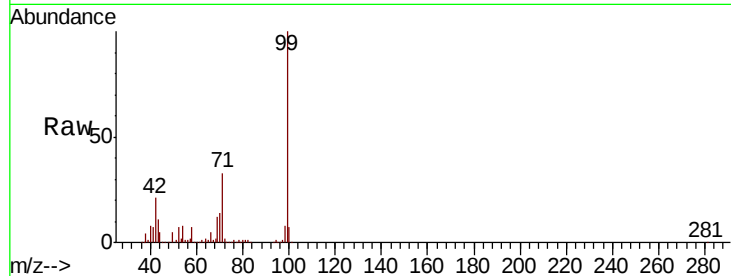
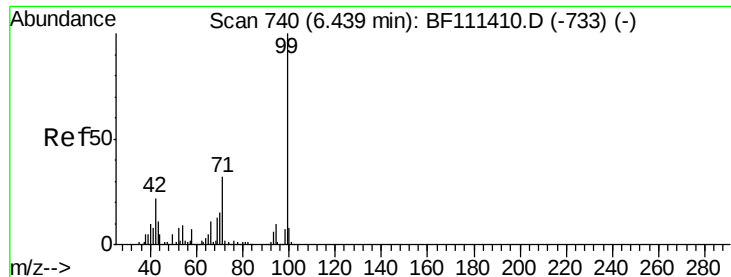
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#5  
 2-Fluorophenol  
 Concen: 86.448 ng  
 RT: 5.42 min Scan# 567  
 Delta R.T. 0.01 min  
 Lab File: BF111538.D  
 Acq: 17 Dec 2018 14:39

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 60.5  | 51.8  | 77.6  |
| 63      | 32.0  | 26.8  | 40.2  |





#7

Phenol-d6

Concen: 86.919 ng

RT: 6.44 min Scan# 740

Delta R.T. 0.00 min

Lab File: BF111538.D

Acq: 17 Dec 2018 14:39

Tot Ion: 99 Resp: 1224146

Ion Ratio Lower Upper

99 100

42 20.8 17.4 26.0

71 32.6 26.1 39.1

Instrument :

BNA\_F

ClientSampleId :

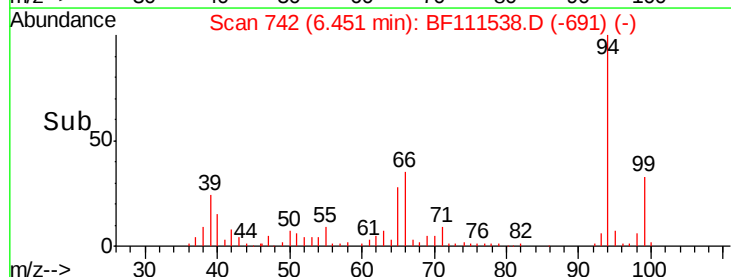
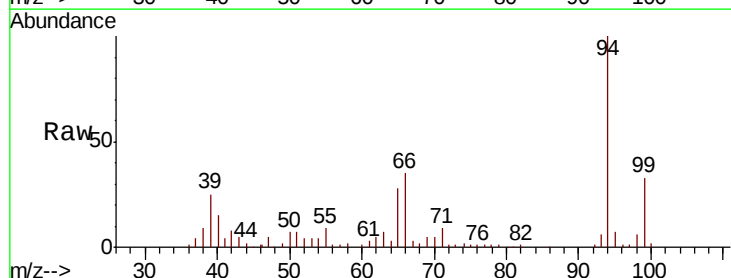
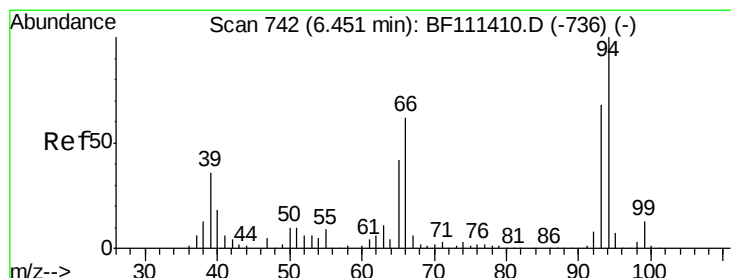
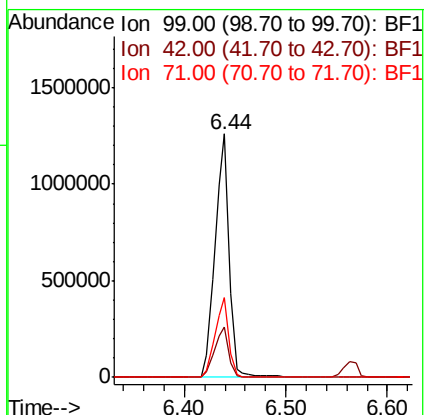
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#10

Phenol

Concen: 6.854 ng

RT: 6.45 min Scan# 742

Delta R.T. 0.00 min

Lab File: BF111538.D

Acq: 17 Dec 2018 14:39

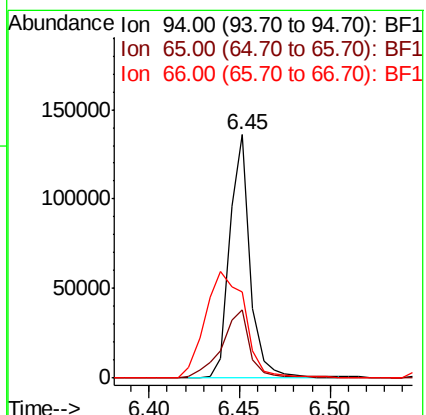
Tgt Ion: 94 Resp: 107532

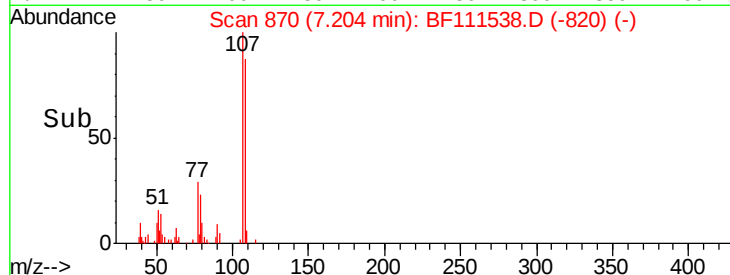
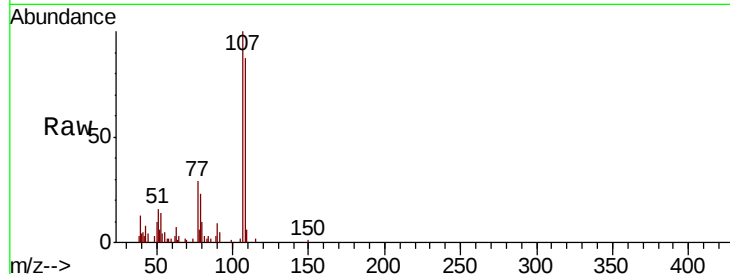
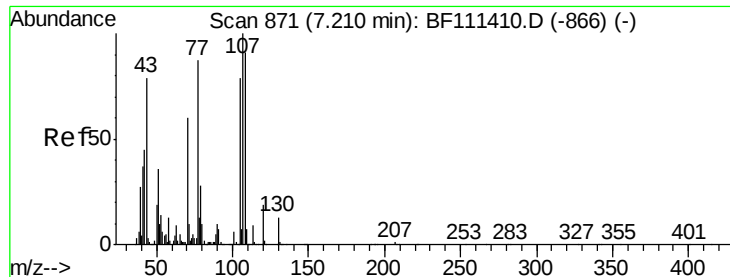
Ion Ratio Lower Upper

94 100

65 27.9 11.7 51.7

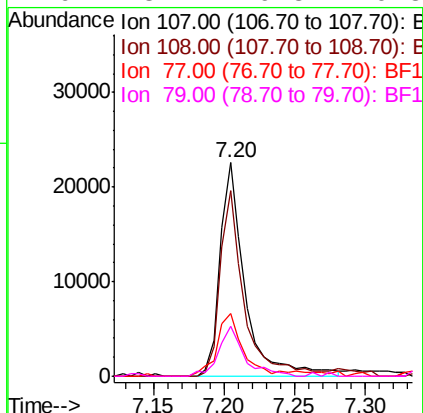
66 35.4 21.0 61.0





#20  
3+4-Methylphenols  
Concen: 2.169 ng  
RT: 7.20 min Scan# 870  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

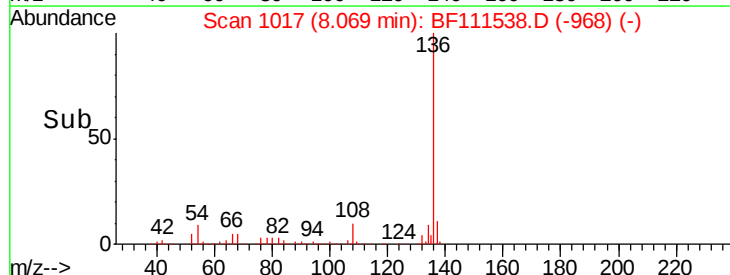
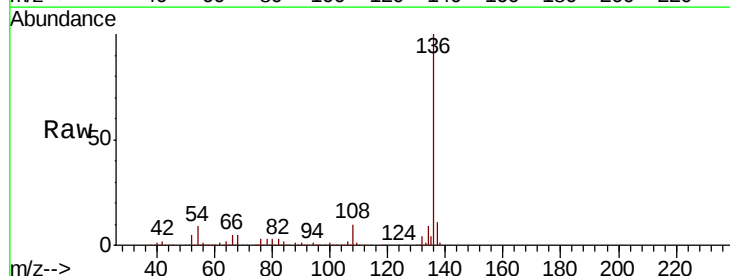
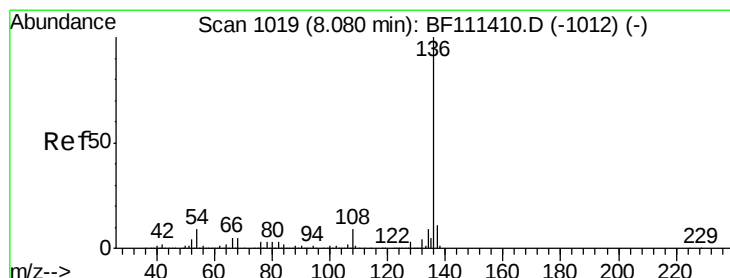
| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 107     | 100   |       |        |
| 108     | 86.9  | 72.1  | 112.1  |
| 77      | 29.2  | 94.1  | 134.1# |
| 79      | 23.1  | 9.8   | 49.8   |



Instrument :  
BNA\_F  
ClientSampleId :  
P001-SS007-0006-01

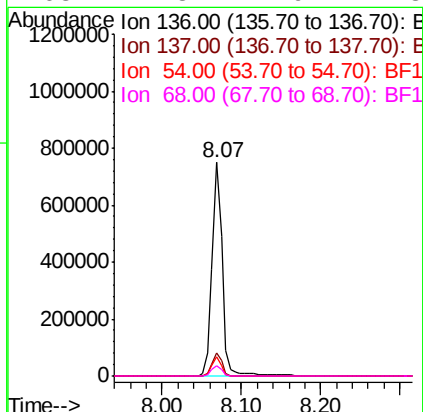
Manual Integrations  
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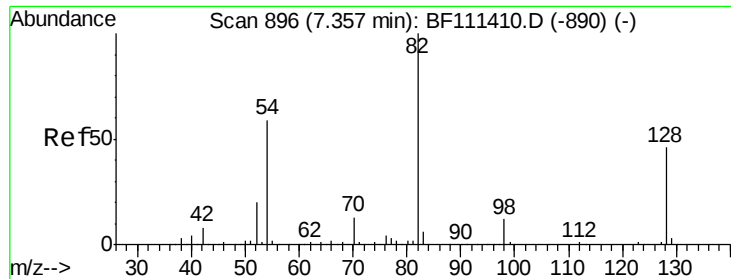
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#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.07 min Scan# 1017  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 136     | 100   |       |       |
| 137     | 10.7  | 9.1   | 13.7  |
| 54      | 9.1   | 7.7   | 11.5  |
| 68      | 4.8   | 4.9   | 7.3#  |





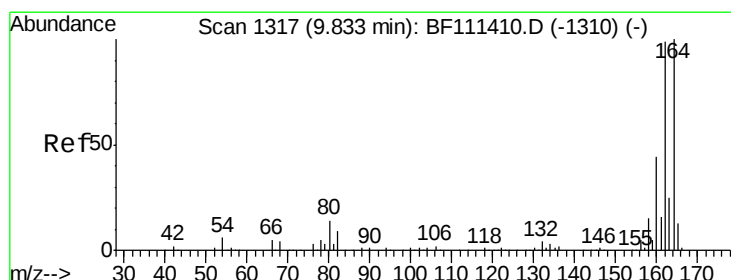
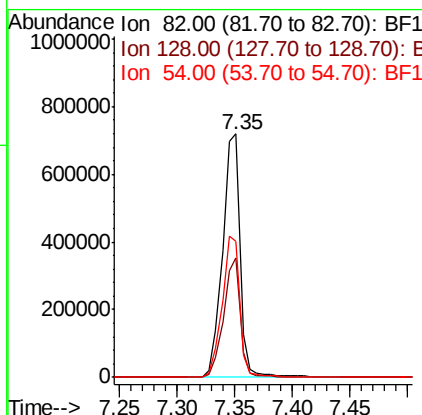
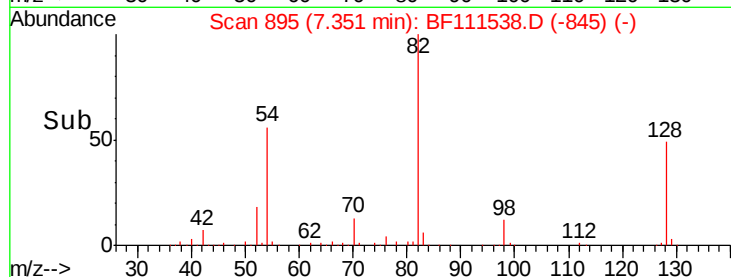
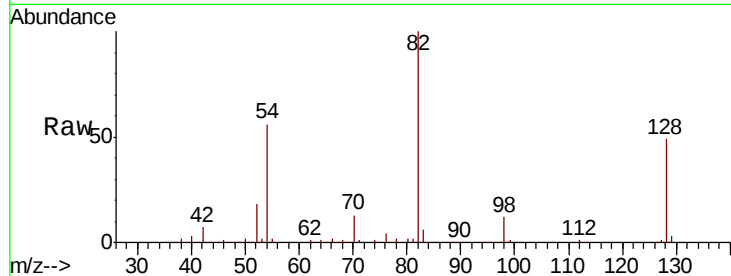
#23  
Nitrobenzene-d5  
Concen: 67.564 ng  
RT: 7.35 min Scan# 895  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

Instrument :  
BNA\_F  
ClientSampleId :  
P001-SS007-0006-01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 49.3  | 37.4  | 56.2  |
| 54      | 56.0  | 47.6  | 71.4  |

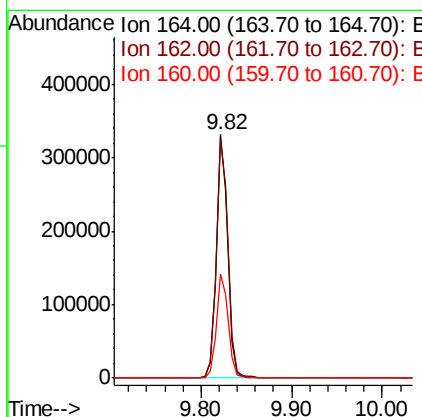
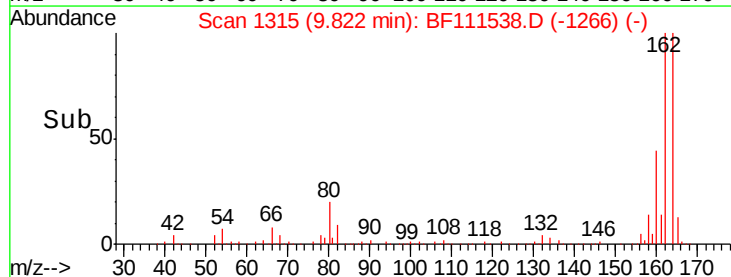
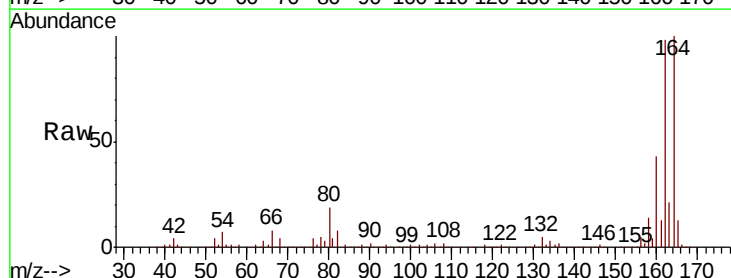
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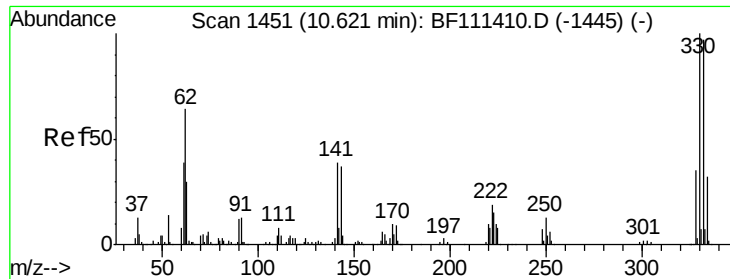
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#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.82 min Scan# 1315  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 97.9  | 81.4  | 122.0 |
| 160     | 42.7  | 35.7  | 53.5  |





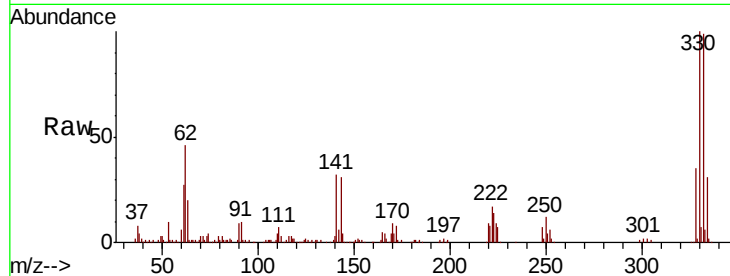
#42  
 2,4,6-Tribromophenol  
 Concen: 76.185 ng  
 RT: 10.62 min Scan# 1450  
 Delta R.T. -0.01 min  
 Lab File: BF111538.D  
 Acq: 17 Dec 2018 14:39

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P001-SS007-0006-01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 96.3  | 76.0  | 114.0 |
| 141     | 38.3  | 31.0  | 46.6  |

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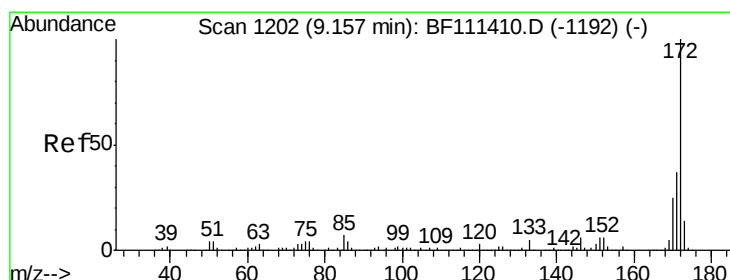
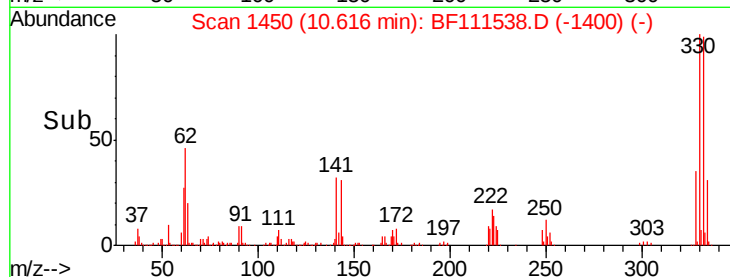
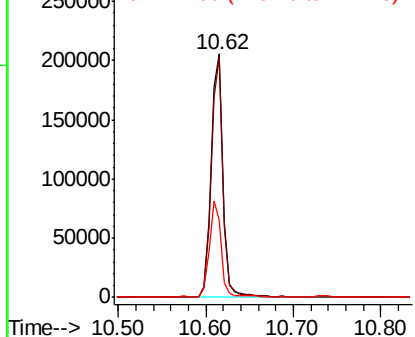


Abundance

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: 60.038 ng  
 RT: 9.15 min Scan# 1200  
 Delta R.T. -0.01 min  
 Lab File: BF111538.D  
 Acq: 17 Dec 2018 14:39

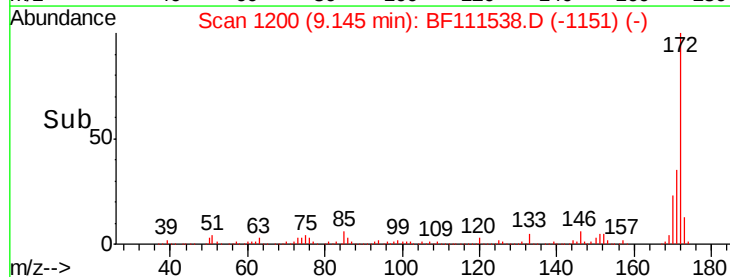
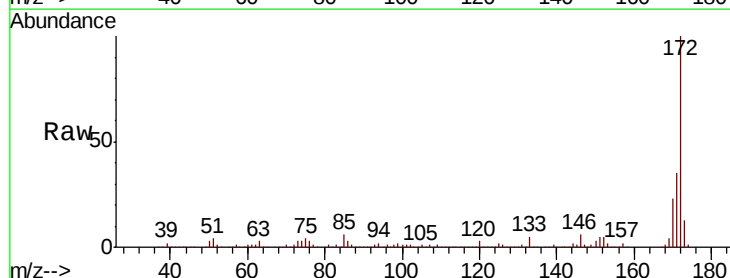
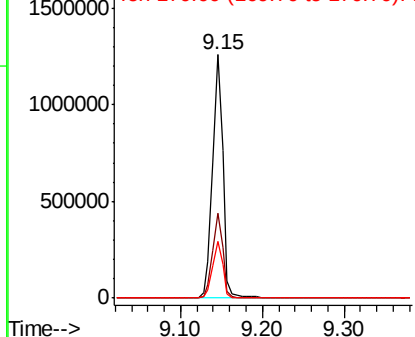
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.7  | 33.0  | 49.4  |
| 170     | 23.5  | 22.3  | 33.5  |

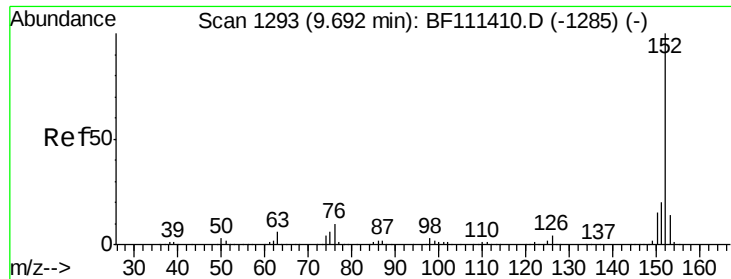
Abundance

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





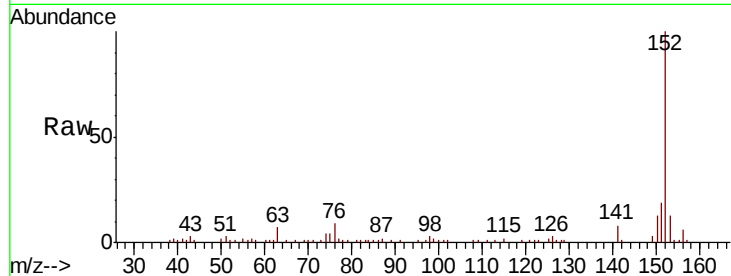
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Acenaphthylene  
Concen: 2.125 ng  
RT: 9.69 min Scan# 1292  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

Instrument :  
BNA\_F  
ClientSampleId :  
P001-SS007-0006-01

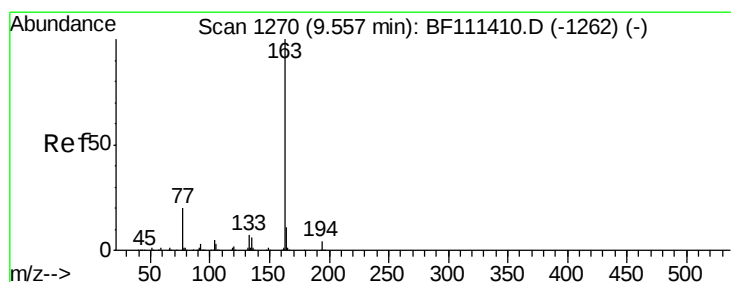
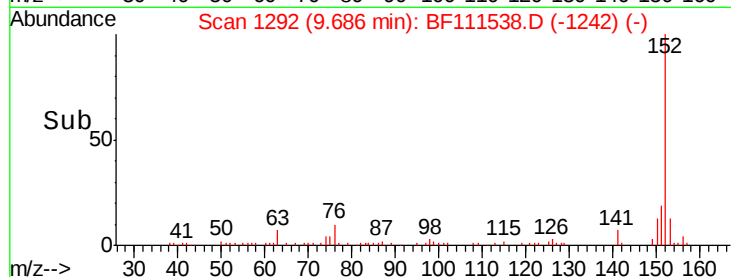
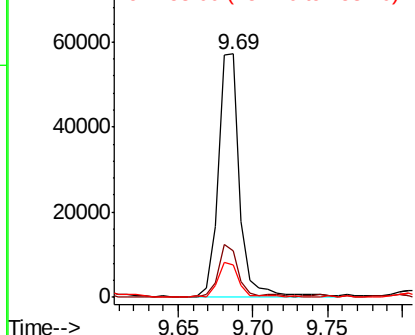
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 58044 |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 19.1  | 18.0  | 27.0  |
| 153       | 13.4  | 12.3  | 18.5  |

Manual Integrations  
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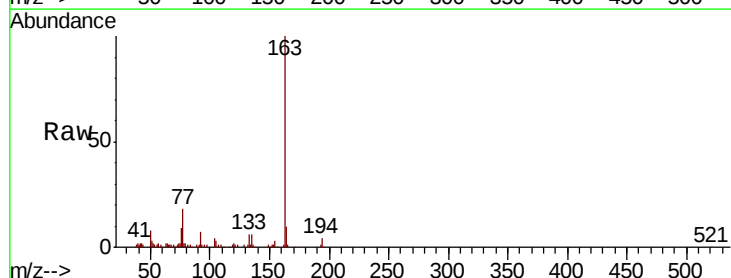


Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 151.00 (150.70 to 151.70): E  
Ion 153.00 (152.70 to 153.70): E

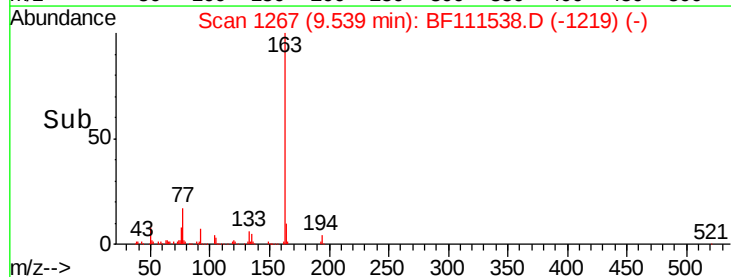
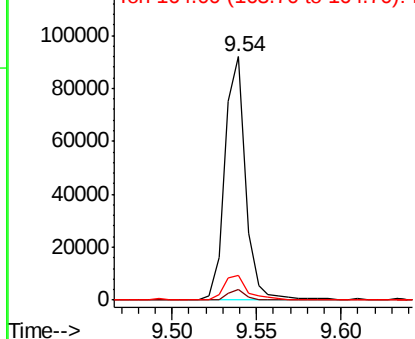


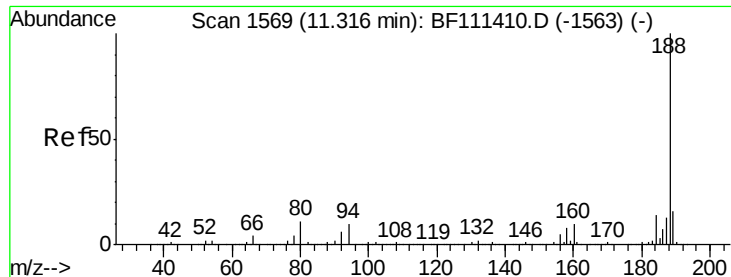
#50  
Dimethylphthalate  
Concen: 3.820 ng  
RT: 9.54 min Scan# 1267  
Delta R.T. -0.02 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 163   | Resp: | 78623 |
| Ion Ratio | Lower | Upper |       |
| 163       | 100   |       |       |
| 194       | 4.5   | 3.0   | 4.6   |
| 164       | 10.4  | 8.9   | 13.3  |



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





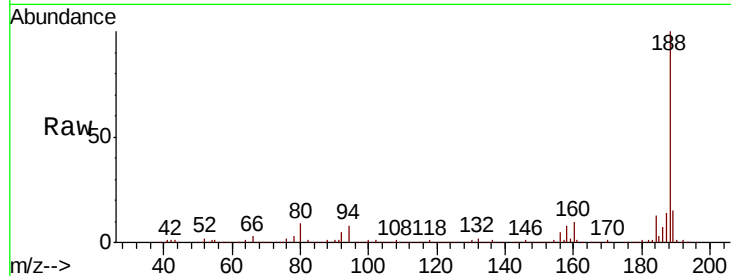
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.31 min Scan# 1568  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

Instrument :  
BNA\_F  
ClientSampleId :  
P001-SS007-0006-01

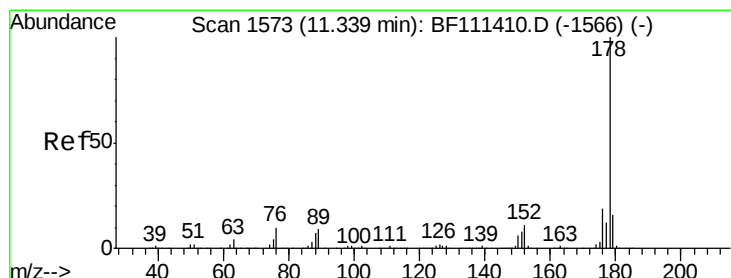
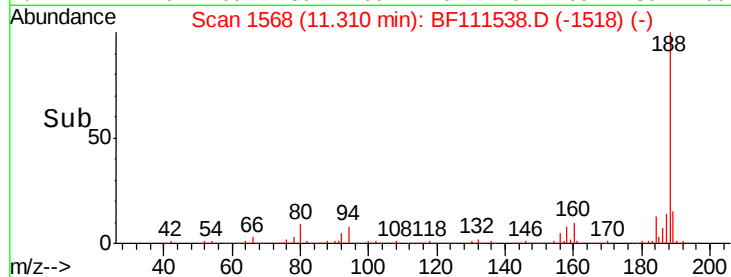
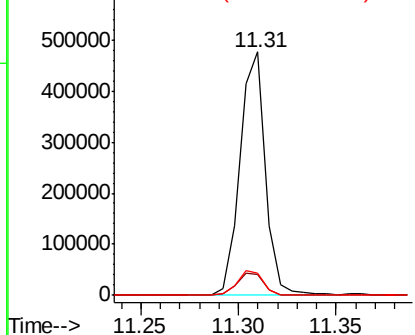
| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 430448 |       |       |
| 94      | 8.4   |        | 9.6   | 14.4# |
| 80      | 9.2   |        | 9.8   | 14.6# |

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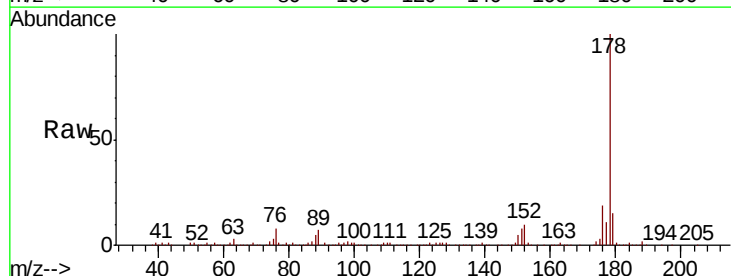


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF1  
Ion 80.00 (79.70 to 80.70): BF1

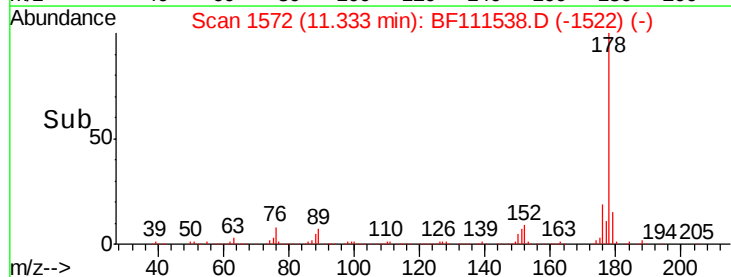
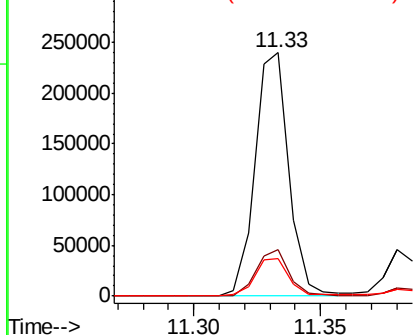


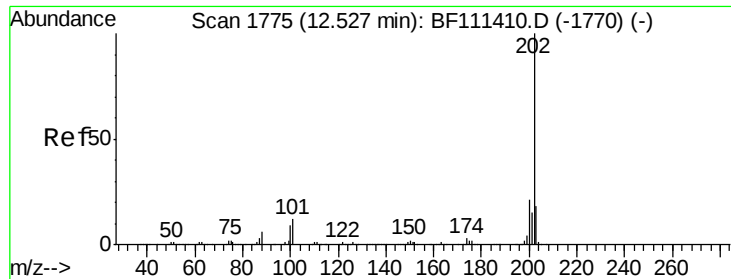
#71  
Phenanthrene  
Concen: 10.037 ng  
RT: 11.33 min Scan# 1572  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 178     | 100   | 222619 |       |       |
| 176     | 19.0  |        | 18.1  | 27.1  |
| 179     | 15.2  |        | 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





#75

Fluoranthene

Concen: 8.622 ng

RT: 12.52 min Scan# 1774

Delta R.T. -0.01 min

Lab File: BF111538.D

Acq: 17 Dec 2018 14:39

Instrument :

BNA\_F

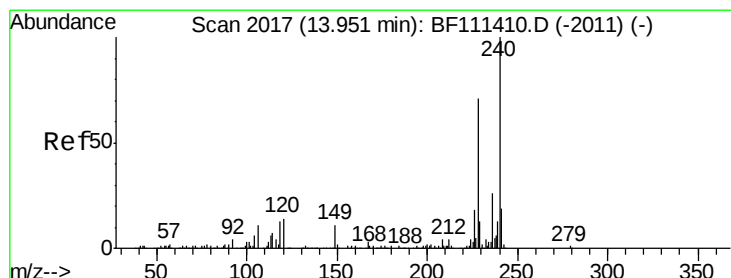
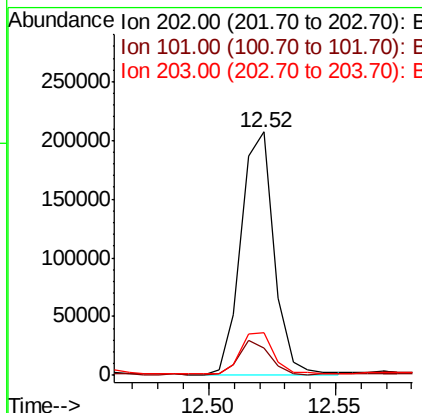
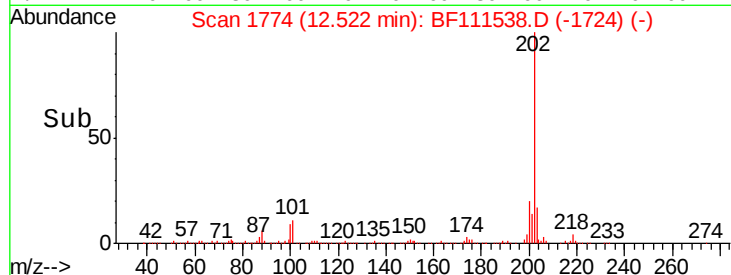
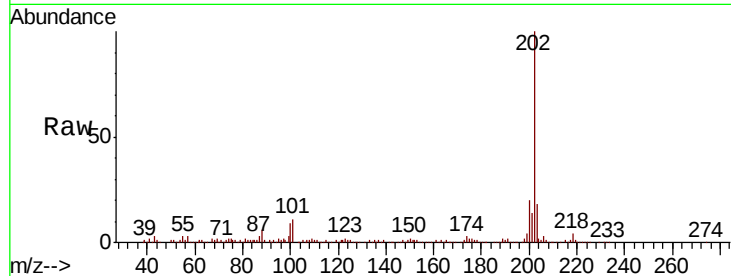
ClientSampleId :

P001-SS007-0006-01

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 202     | 100  |       | 187094 |       |       |
| 101     | 11.4 | 0.0   | 33.8   |       |       |
| 203     | 17.5 | 0.0   | 38.6   |       |       |

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#76

Chrysene-d12

Concen: 20.000 ng

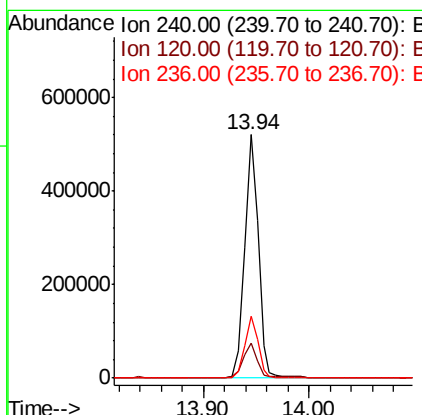
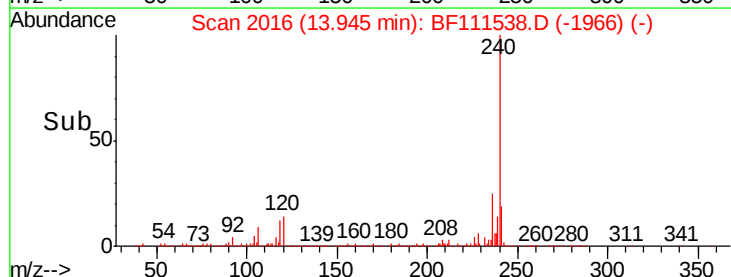
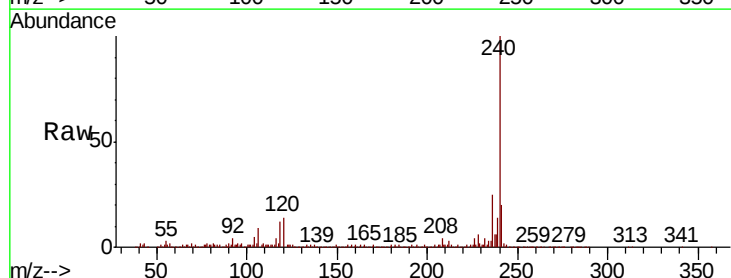
RT: 13.94 min Scan# 2016

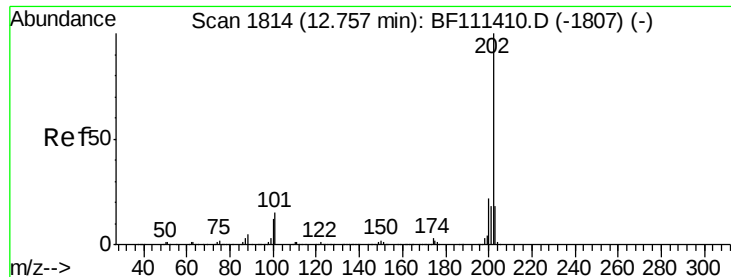
Delta R.T. -0.01 min

Lab File: BF111538.D

Acq: 17 Dec 2018 14:39

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 240     | 100  |       | 465065 |       |       |
| 120     | 14.2 | 12.2  | 18.2   |       |       |
| 236     | 25.2 | 20.2  | 30.2   |       |       |





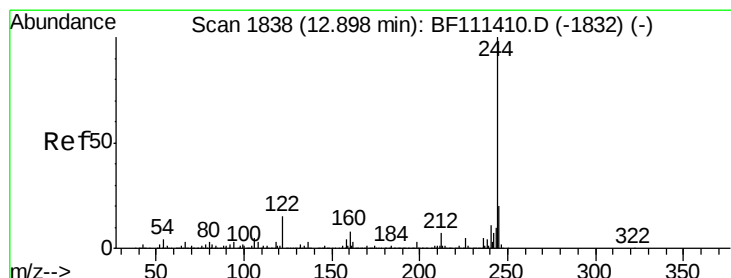
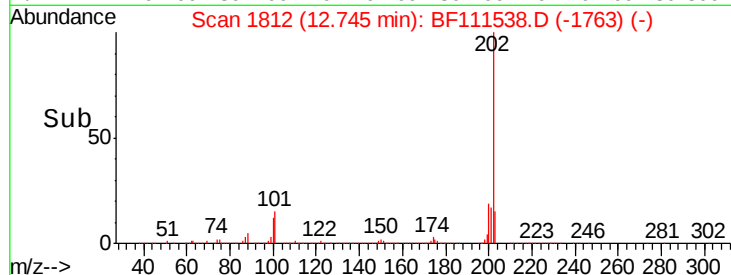
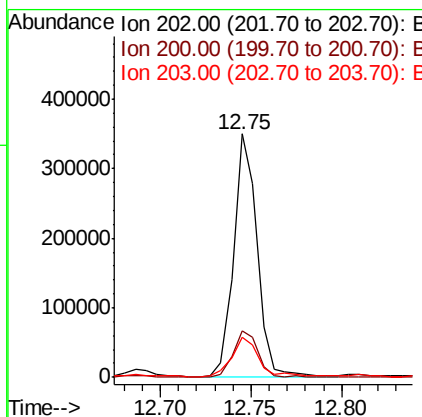
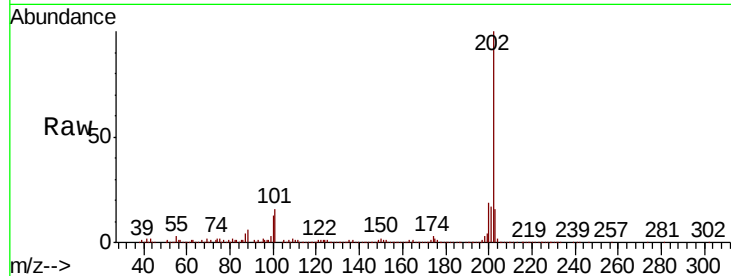
#78  
Pvrene  
Concen: 9.588 ng  
RT: 12.75 min Scan# 1812  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

Instrument :  
BNA\_F  
ClientSampleId :  
P001-SS007-0006-01

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 200     | 19.2  | 19.0       | 28.4  |
| 203     | 16.3  | 15.2       | 22.8  |

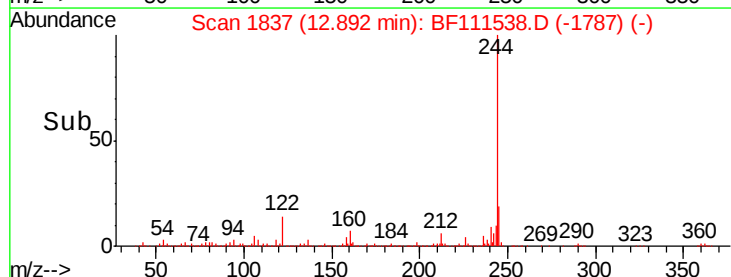
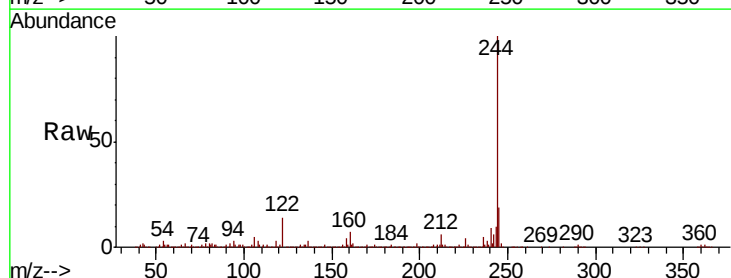
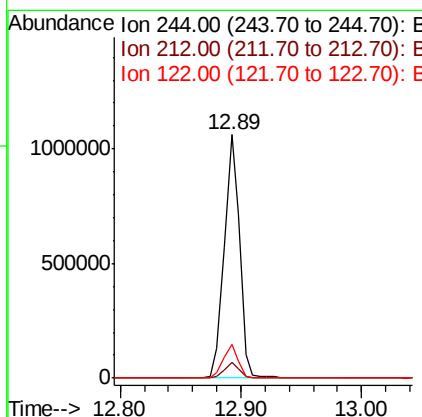
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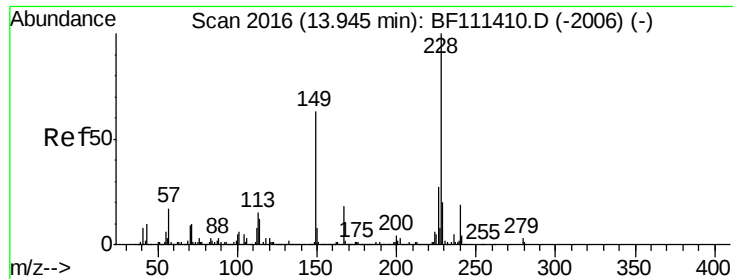
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#79  
Terphenyl-d14  
Concen: 47.185 ng  
RT: 12.89 min Scan# 1837  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 244     | 100   |            |       |
| 212     | 6.3   | 5.7        | 8.5   |
| 122     | 13.7  | 13.1       | 19.7  |





#81

Benzo(a)anthracene

Concen: 4.389 ng m

RT: 13.93 min Scan# 2014

Delta R.T. -0.01 min

Lab File: BF111538.D

Acq: 17 Dec 2018 14:39

Instrument :

BNA\_F

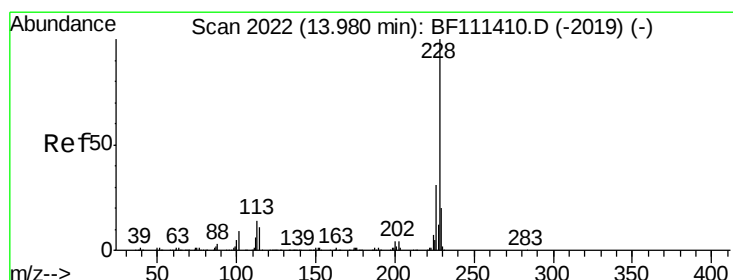
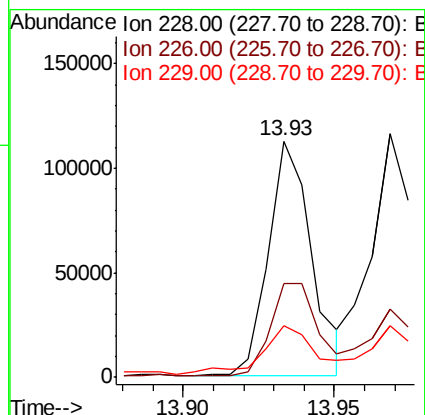
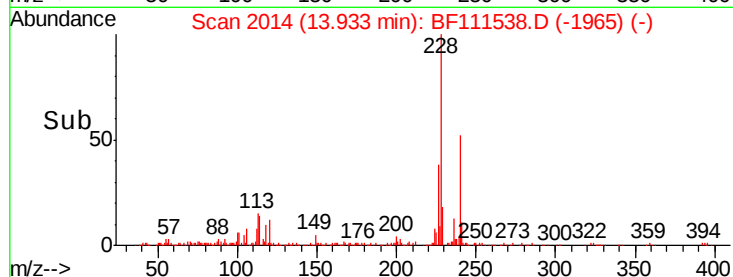
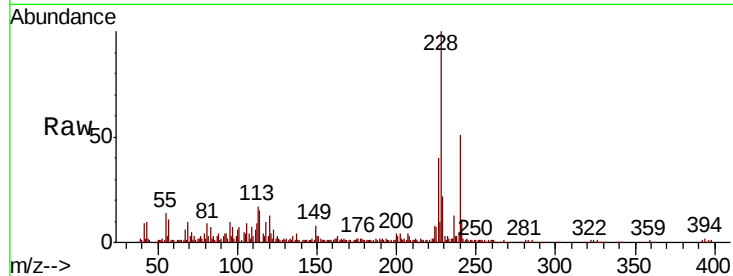
ClientSampleId :

P001-SS007-0006-01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 110983 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 39.7  | 22.6  | 34.0#  |
| 229       | 21.6  | 16.3  | 24.5   |

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#83

Chrysene

Concen: 4.311 ng

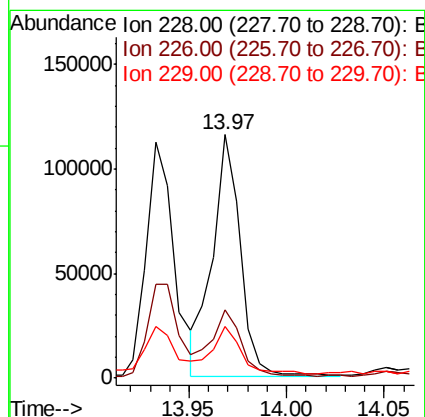
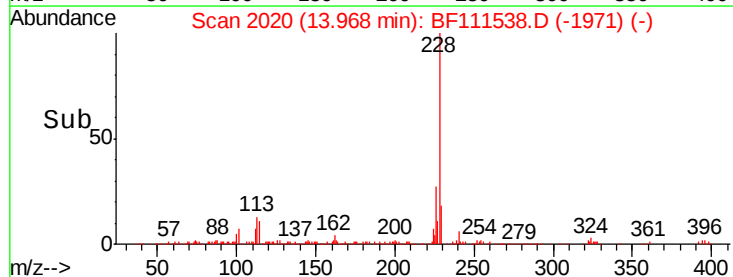
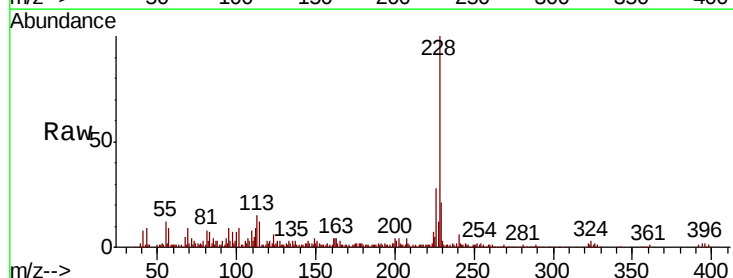
RT: 13.97 min Scan# 2020

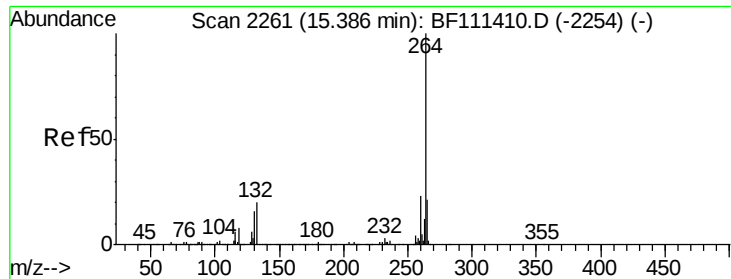
Delta R.T. -0.01 min

Lab File: BF111538.D

Acq: 17 Dec 2018 14:39

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 228   | Resp: | 114833 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 28.2  | 25.3  | 37.9   |
| 229       | 21.2  | 17.2  | 25.8   |





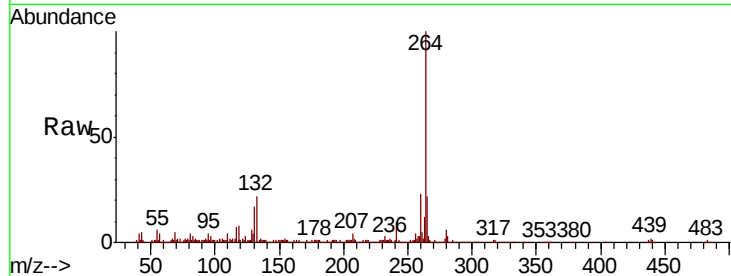
#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.39 min Scan# 2261  
Delta R.T. 0.00 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

Instrument :  
BNA\_F  
ClientSampleId :  
P001-SS007-0006-01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.1  | 18.3  | 27.5  |
| 265     | 22.4  | 17.7  | 26.5  |

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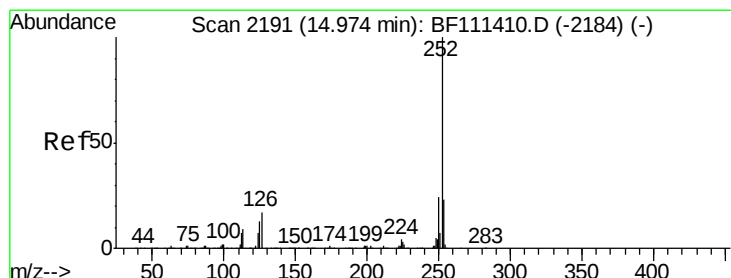
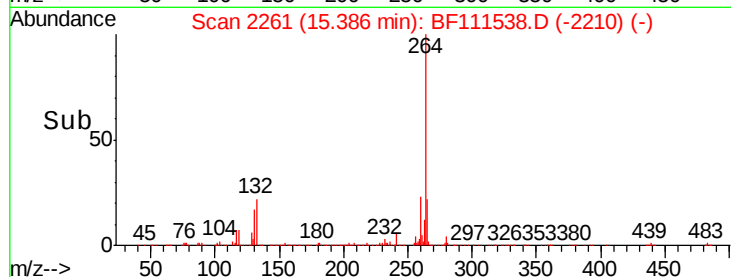
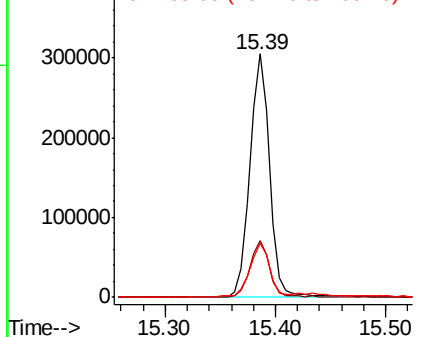


Abundance

Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E



#88  
Benzo(b)fluoranthene  
Concen: 4.136 ng m  
RT: 14.97 min Scan# 2190  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

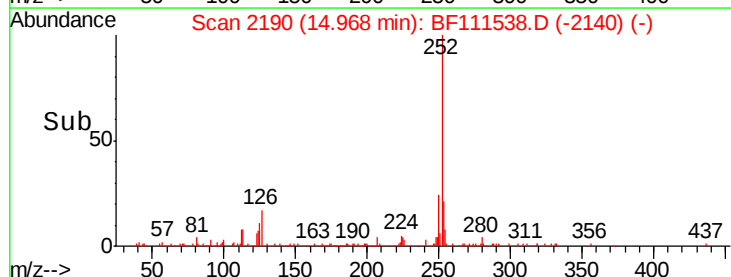
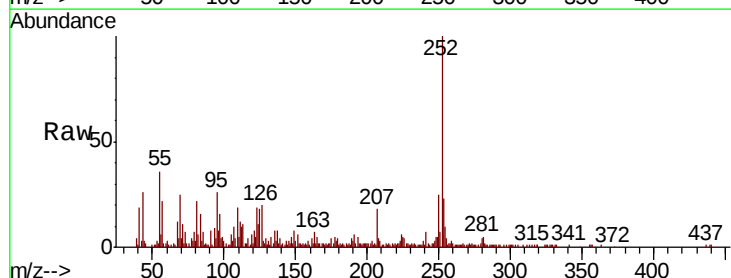
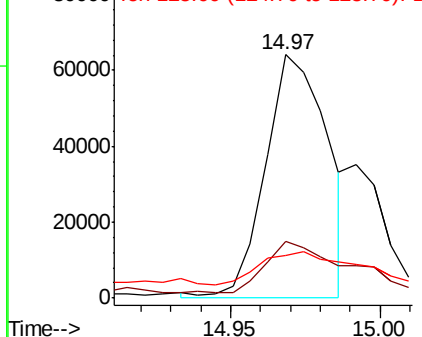
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.3  | 18.2  | 27.2  |
| 125     | 17.6  | 10.4  | 15.6# |

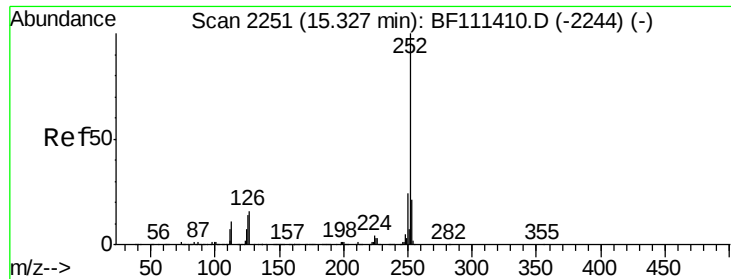
Abundance

Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





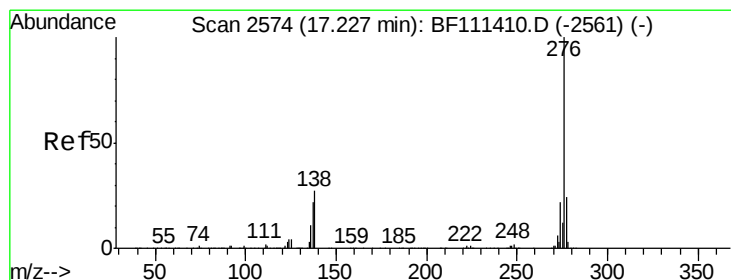
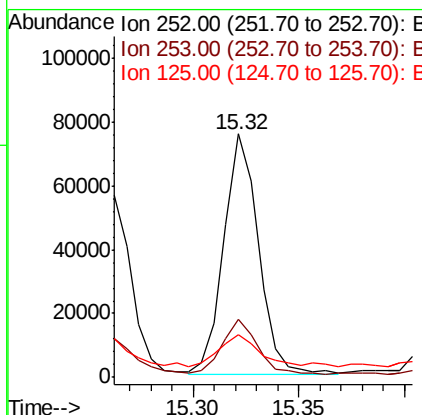
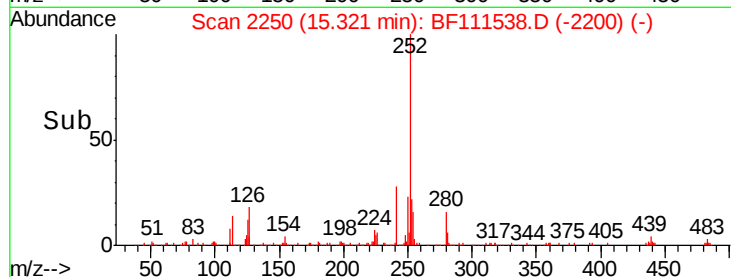
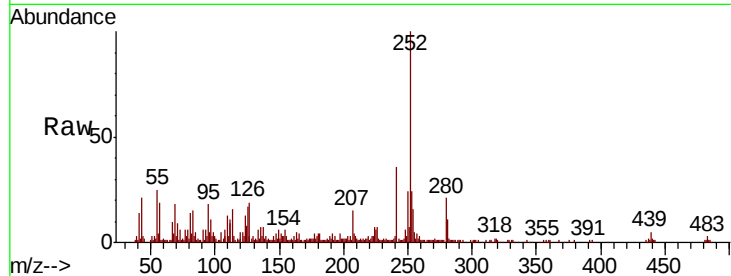
#90  
Benzo(a)pyrene  
Concen: 4.236 ng  
RT: 15.32 min Scan# 2250  
Delta R.T. -0.01 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

Instrument :  
BNA\_F  
ClientSampleId :  
P001-SS007-0006-01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 85706 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 23.6  | 17.8  | 26.8  |
| 125       | 17.3  | 12.3  | 18.5  |

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#92  
Benzo(g,h,i)perylene  
Concen: 2.878 ng  
RT: 17.23 min Scan# 2574  
Delta R.T. 0.00 min  
Lab File: BF111538.D  
Acq: 17 Dec 2018 14:39

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 45086 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 277       | 20.4  | 19.2  | 28.8  |
| 138       | 31.4  | 24.9  | 37.3  |

