

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080118\  
 Data File : BF107892.D  
 Acq On : 1 Aug 2018 16:40  
 Operator : JU/SJ  
 Sample : J3826-05 5X  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 OK-03-073118

Manual Integrations  
 APPROVED

Sohil  
 8/2/2018 9:17:12 AM

Quant Time: Aug 01 17:50:04 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF073018.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Jul 30 17:48:53 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.97  | 152  | 94851    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.24  | 136  | 430138   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10        | 10.00 | 164  | 175151   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.50 | 188  | 357937   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12            | 14.15 | 240  | 393286   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12            | 15.69 | 264  | 373861   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.62  | 112  | 97285m   | 17.43  | ng    | 0.02     |
| 7) Phenol-d6                | 6.62  | 99   | 142313m  | 19.35  | ng    | 0.02     |
| 23) Nitrobenzene-d5         | 7.57  | 82   | 83320    | 11.16  | ng    | 0.03     |
| 41) 2,4,6-Tribromophenol    | 10.80 | 330  | 38157    | 16.03  | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.31  | 172  | 183571   | 14.60  | ng    | 0.00     |
| 78) Terphenyl-d14           | 13.08 | 244  | 238067   | 13.13  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 49) Dimethylphthalate       | 9.71  | 163  | 26908    | 2.046  | ng    | 98       |
| 70) Phenanthrene            | 11.52 | 178  | 196480   | 11.560 | ng    | 98       |
| 71) Anthracene              | 11.58 | 178  | 76177    | 3.886  | ng    | 94       |
| 74) Fluoranthene            | 12.72 | 202  | 353064   | 17.682 | ng    | 96       |
| 77) Pyrene                  | 12.95 | 202  | 309632   | 10.933 | ng    | 97       |
| 80) Benzo(a)anthracene      | 14.14 | 228  | 162164   | 7.279  | ng    | 97       |
| 82) Chrysene                | 14.18 | 228  | 136379   | 5.676  | ng    | 97       |
| 85) Indeno(1,2,3-cd)pyrene  | 17.28 | 276  | 44877    | 2.455  | ng    | # 89     |
| 87) Benzo(b)fluoranthene    | 15.23 | 252  | 133057m  | 7.216  | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.25 | 252  | 80953m   | 3.576  | ng    |          |
| 89) Benzo(a)pyrene          | 15.62 | 252  | 104297   | 5.479  | ng    | 93       |
| 91) Benzo(a,h,i)perylene    | 17.76 | 276  | 40730    | 2.535  | ng    | # 78     |

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

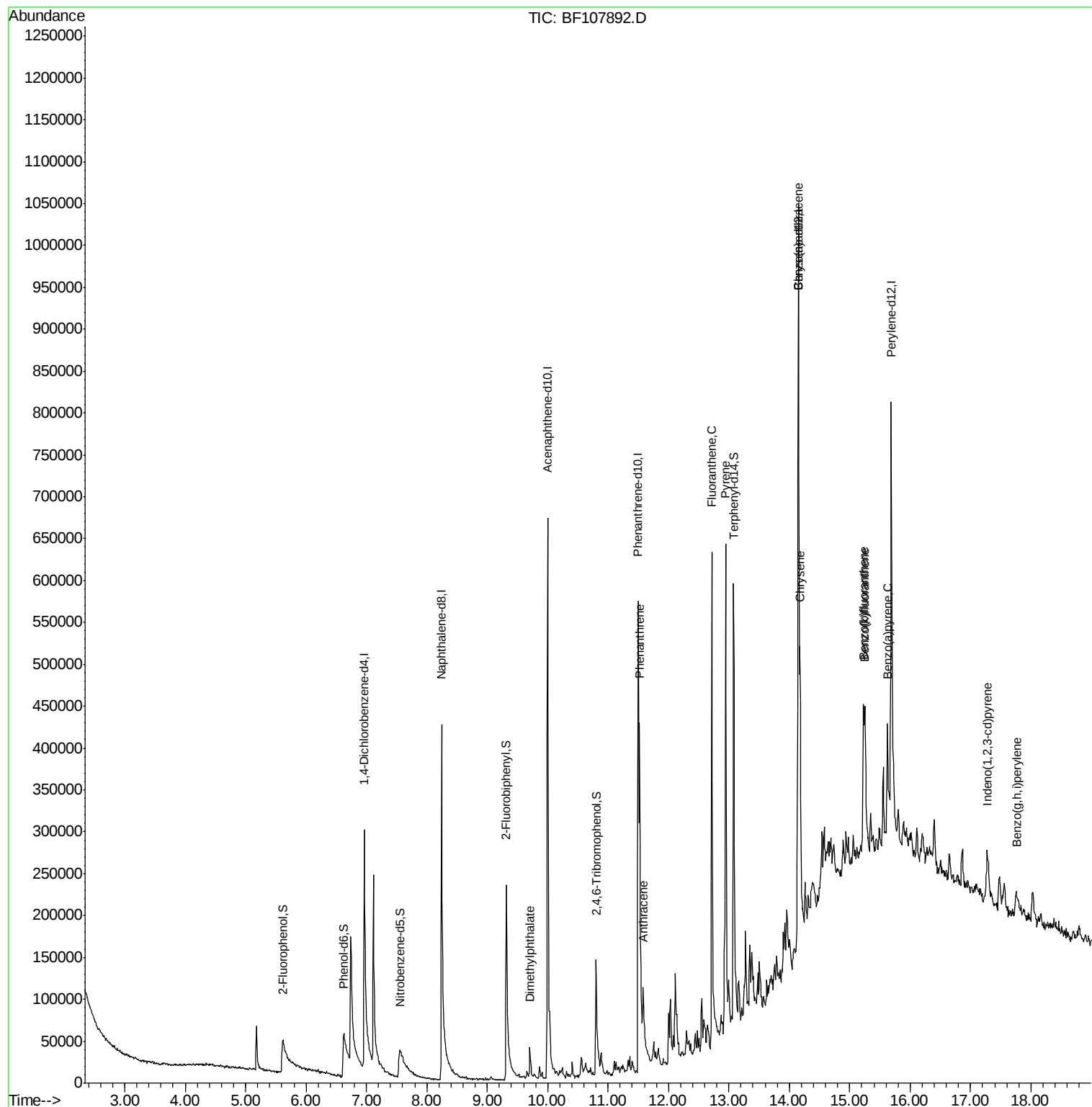
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080118\  
Data File : BF107892.D  
Acq On : 1 Aug 2018 16:40  
Operator : JU/SJ  
Sample : J3826-05 5X  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

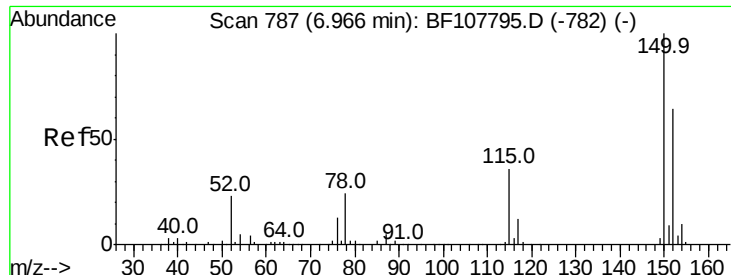
Instrument :  
BNA\_F  
ClientSampleId :  
OK-03-073118

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8/2/2018 9:17:12 AM

Quant Time: Aug 01 17:50:04 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF073018.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Jul 30 17:48:53 2018  
Response via : Initial Calibration





#1

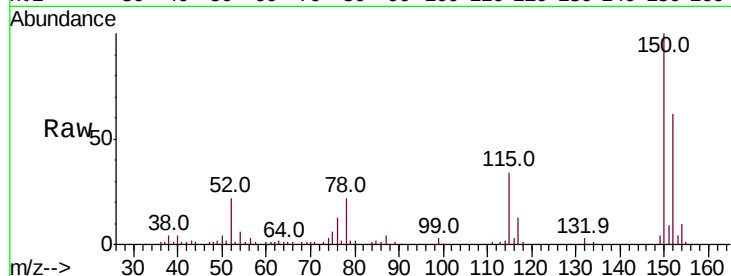
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.97 min Scan# 787  
Delta R.T. 0.00 min  
Lab File: BF107892.D  
Acq: 1 Aug 2018 16:40

Instrument :  
BNA\_F  
ClientSampled :  
OK-03-073118

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 160.2 | 124.6 | 186.8 |
| 115     | 54.3  | 50.1  | 75.1  |

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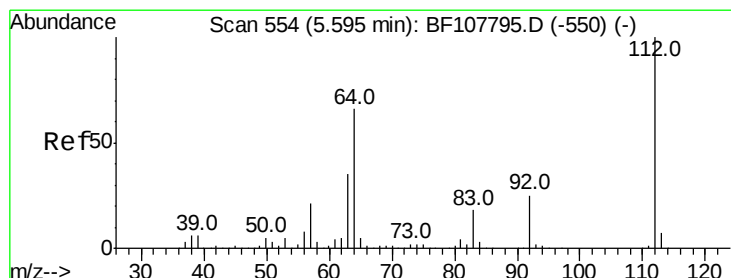
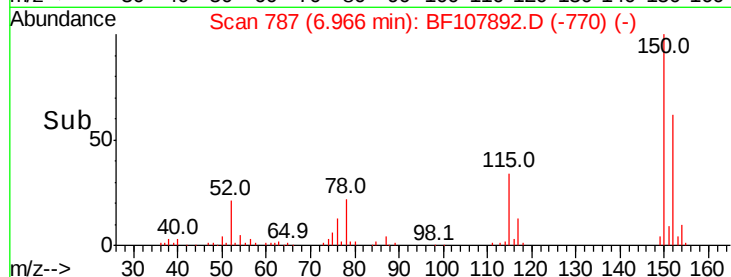
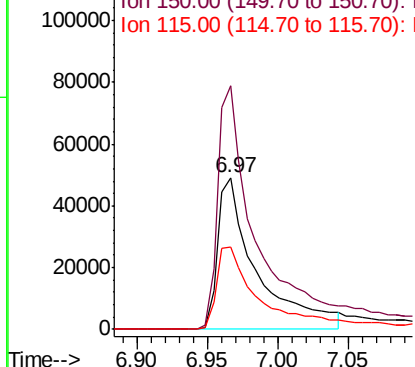


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

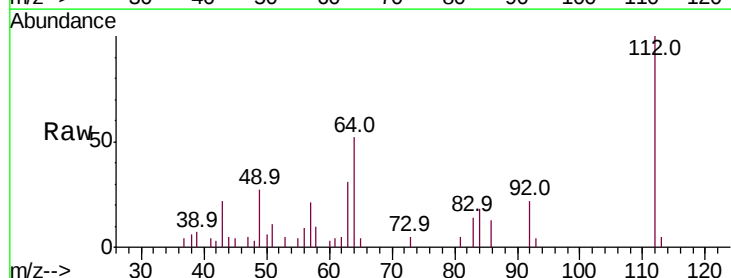
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 17.432 ng m  
RT: 5.62 min Scan# 558  
Delta R.T. 0.02 min  
Lab File: BF107892.D  
Acq: 1 Aug 2018 16:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 51.7  | 47.9  | 71.9  |
| 63      | 31.2  | 23.7  | 35.5  |

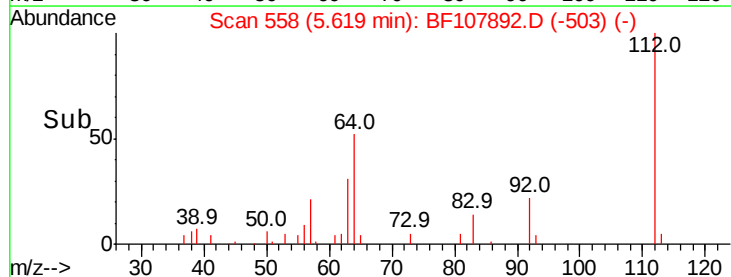
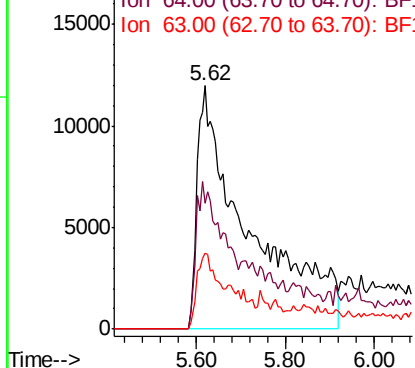


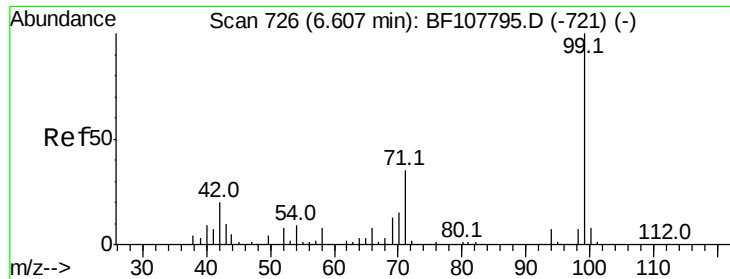
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 19.348 ng/mL

RT: 6.62 min Scan# 729

Delta R.T. 0.02 min

Lab File: BF107892.D

Acq: 1 Aug 2018 16:40

Instrument :

BNA\_F

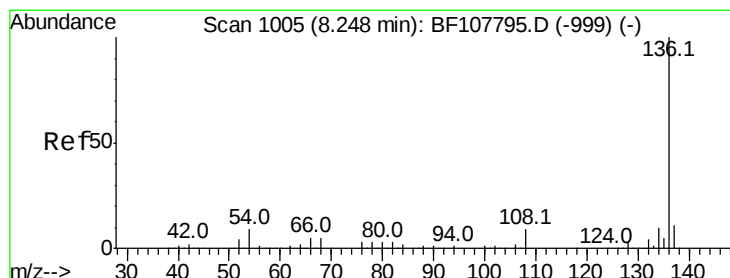
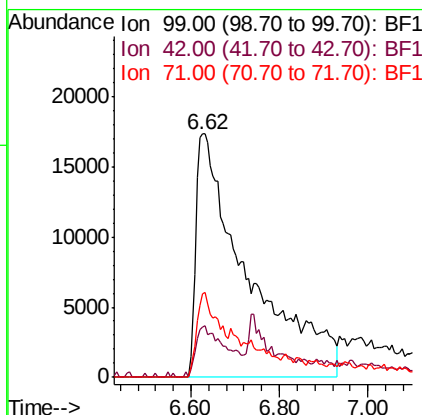
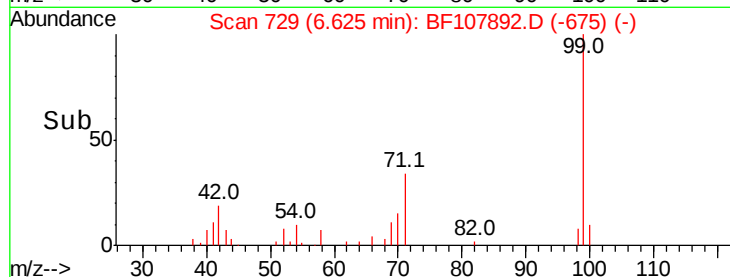
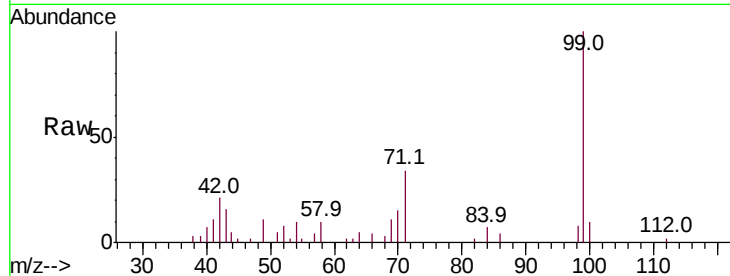
ClientSampleId :

OK-03-073118

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 142313 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 20.6  | 14.5  | 21.7   |
| 71        | 34.4  | 25.4  | 38.0   |

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#21

Naphthalene-d8

Concen: 20.000 ng/mL

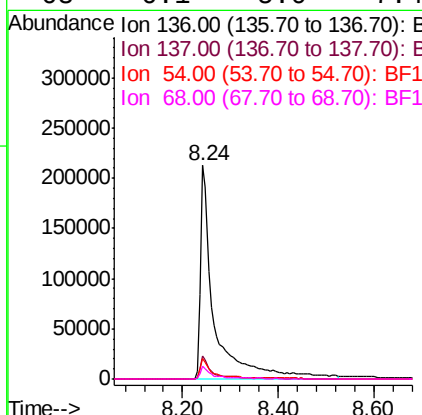
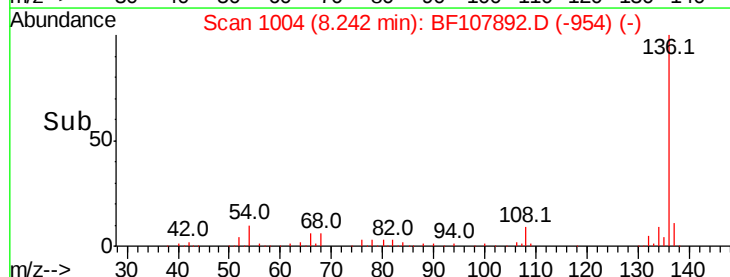
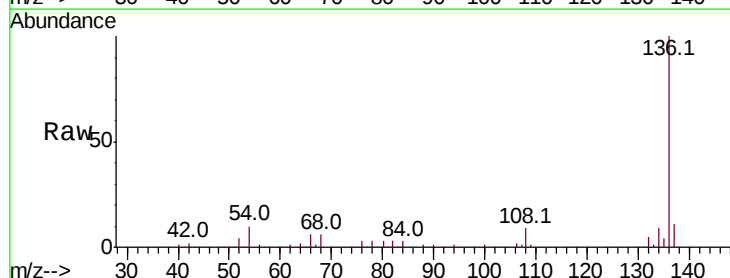
RT: 8.24 min Scan# 1004

Delta R.T. -0.01 min

Lab File: BF107892.D

Acq: 1 Aug 2018 16:40

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 430138 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 11.0  | 8.9   | 13.3   |
| 54        | 9.9   | 6.6   | 9.8    |
| 68        | 6.1   | 5.0   | 7.4    |





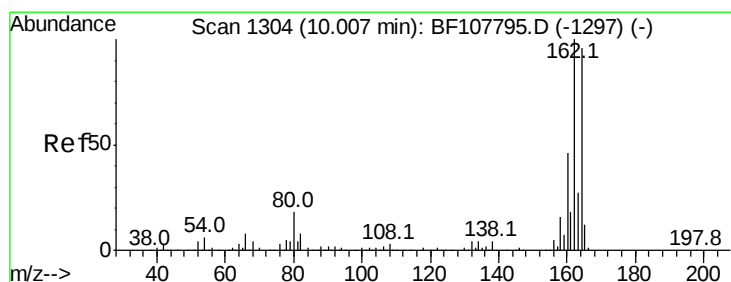
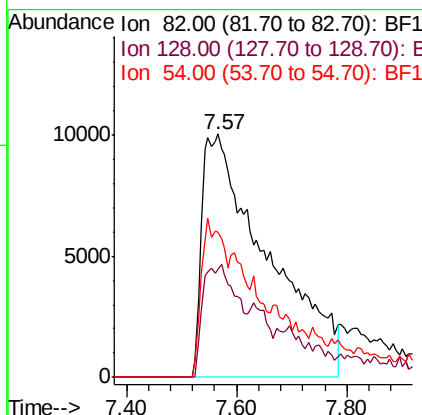
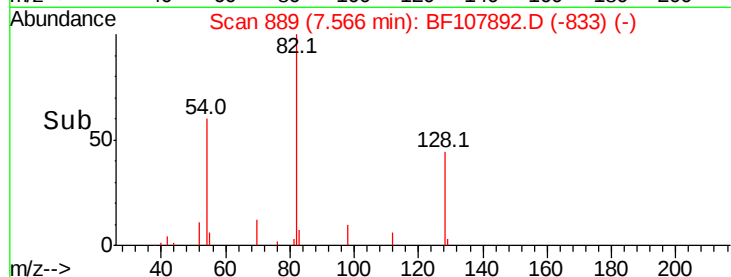
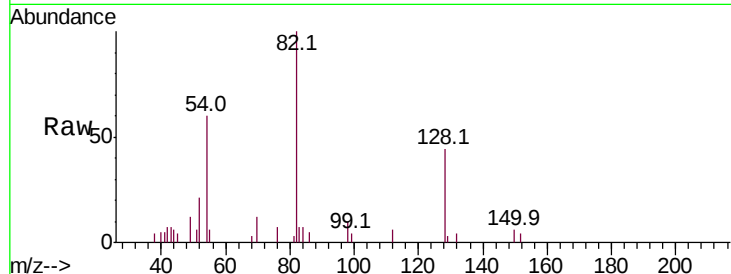
#23  
 Nitrobenzene-d5  
 Concen: 11.159 ng  
 RT: 7.57 min Scan# 889  
 Delta R.T. 0.03 min  
 Lab File: BF107892.D  
 Acq: 1 Aug 2018 16:40

Instrument :  
 BNA\_F  
 ClientSampleId :  
 OK-03-073118

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 44.4  | 36.1  | 54.1  |
| 54      | 59.5  | 41.4  | 62.2  |

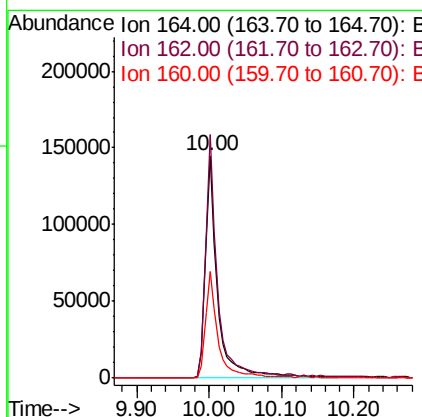
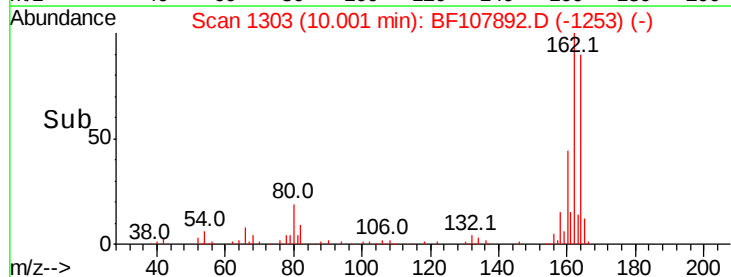
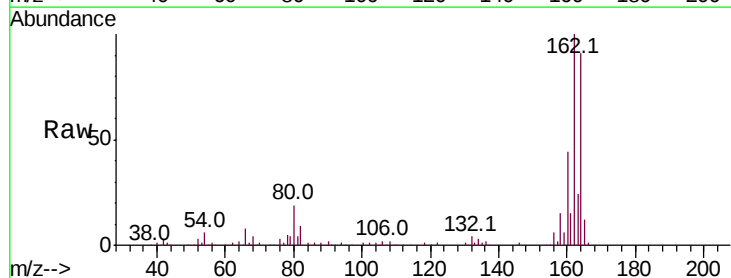
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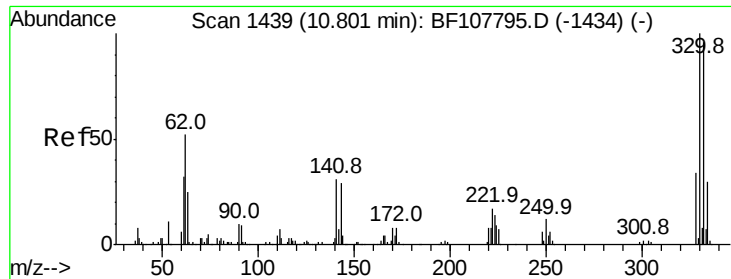
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#38  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 10.00 min Scan# 1303  
 Delta R.T. -0.01 min  
 Lab File: BF107892.D  
 Acq: 1 Aug 2018 16:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 109.4 | 86.1  | 129.1 |
| 160     | 48.2  | 38.3  | 57.5  |





#41

2,4,6-Tribromophenol

Concen: 16.033 ng

RT: 10.80 min Scan# 1439

Delta R.T. 0.00 min

Lab File: BF107892.D

Acq: 1 Aug 2018 16:40

Instrument :

BNA\_F

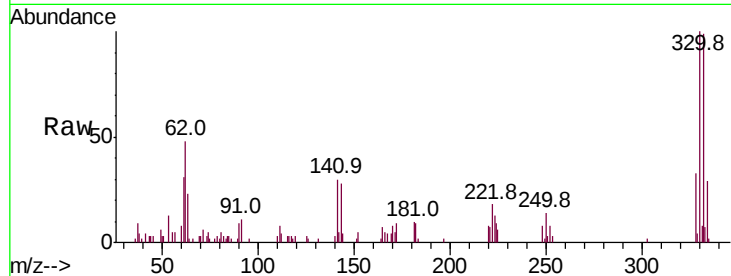
ClientSampleId :

OK-03-073118

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 330   | Resp: | 38157 |
| Ion Ratio | Lower | Upper |       |
| 330       | 100   |       |       |
| 332       | 92.1  | 77.0  | 115.6 |
| 141       | 31.7  | 29.9  | 44.9  |

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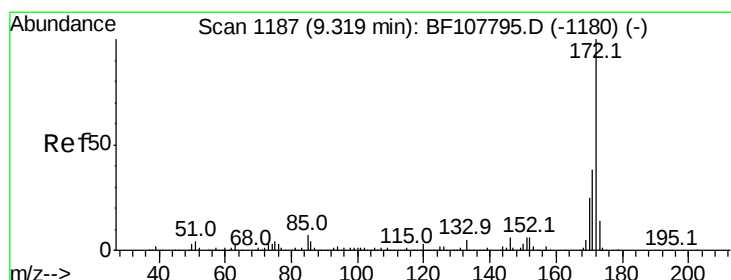
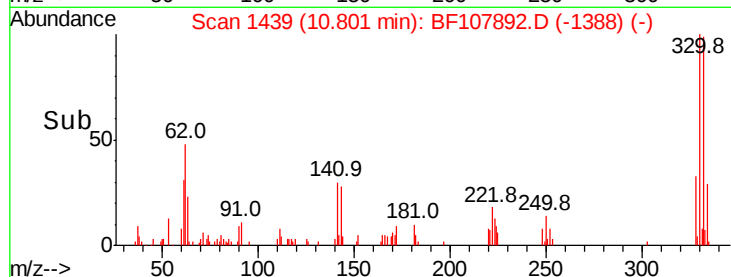
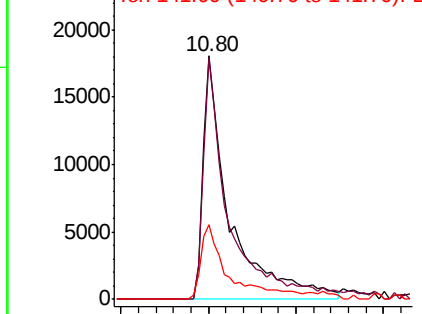


Abundance

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



#44

2-Fluorobiphenyl

Concen: 14.605 ng

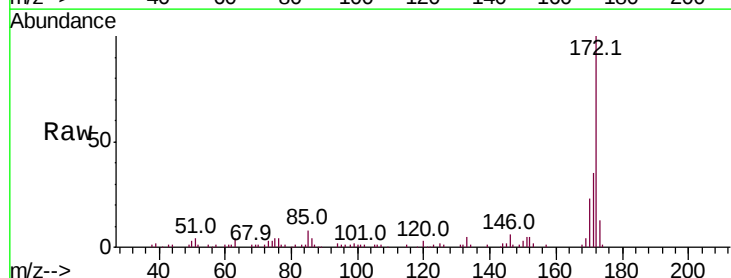
RT: 9.31 min Scan# 1186

Delta R.T. -0.01 min

Lab File: BF107892.D

Acq: 1 Aug 2018 16:40

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 172   | Resp: | 183571 |
| Ion Ratio | Lower | Upper |        |
| 172       | 100   |       |        |
| 171       | 34.9  | 29.7  | 44.5   |
| 170       | 23.1  | 19.6  | 29.4   |

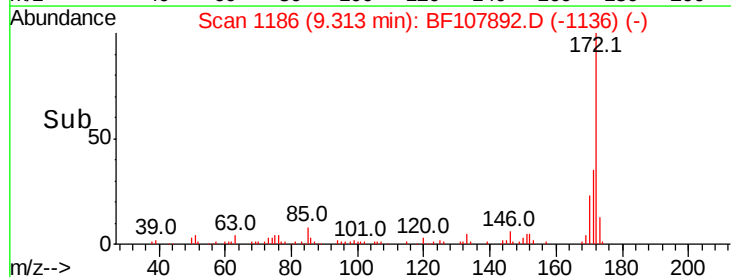
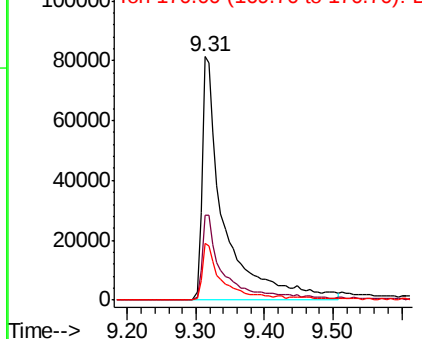


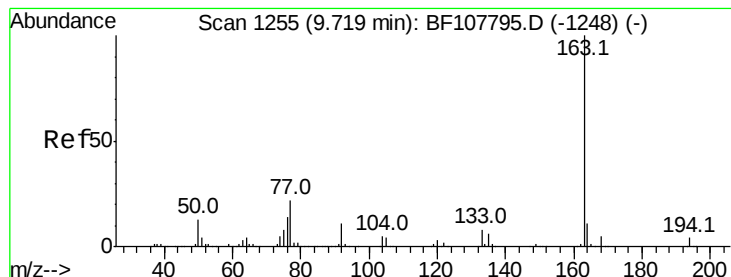
Abundance

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





#49

Dimethylphthalate

Concen: 2.046 ng

RT: 9.71 min Scan# 1254

Delta R.T. -0.01 min

Lab File: BF107892.D

Acq: 1 Aug 2018 16:40

Instrument :

BNA\_F

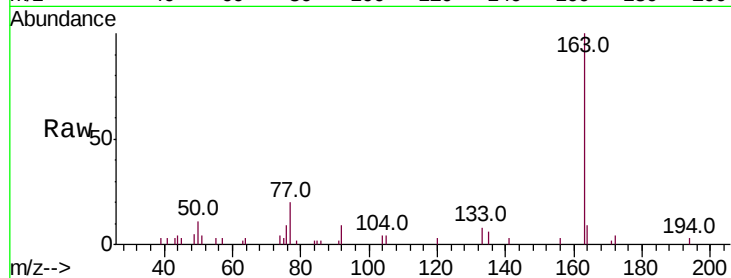
ClientSampled :

OK-03-073118

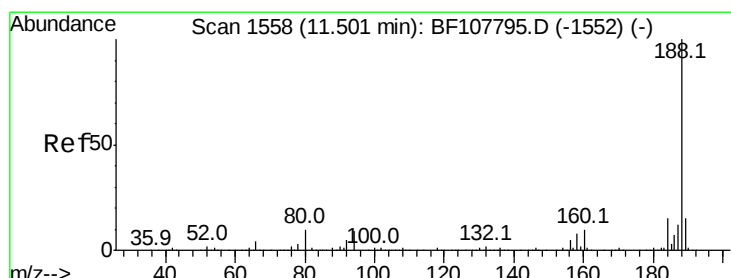
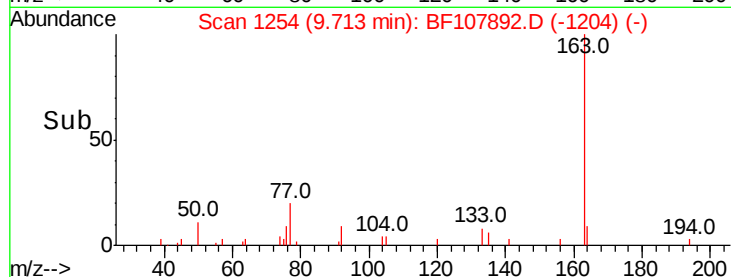
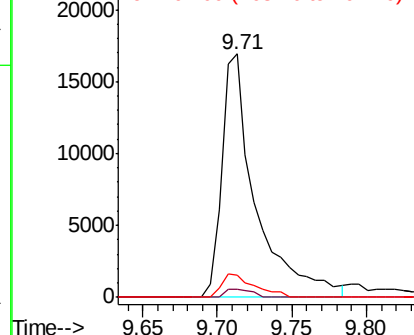
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 163   | Resp: | 26908 |
| Ion Ratio | Lower | Upper |       |
| 163       | 100   |       |       |
| 194       | 3.1   | 2.7   | 4.1   |
| 164       | 9.2   | 8.2   | 12.2  |

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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



#63

Phenanthrene-d10

Concen: 20.000 ng

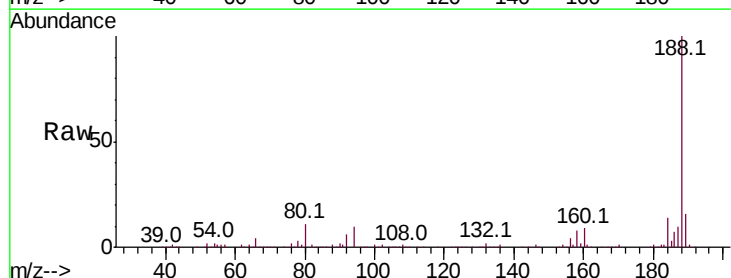
RT: 11.50 min Scan# 1557

Delta R.T. -0.01 min

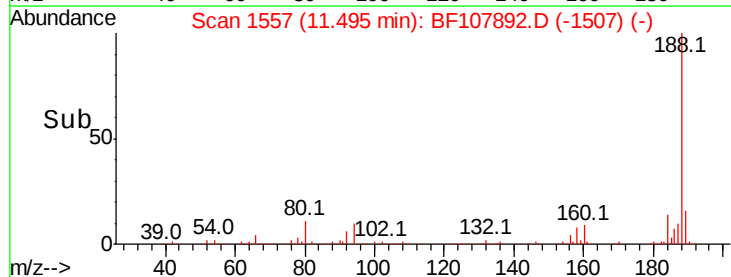
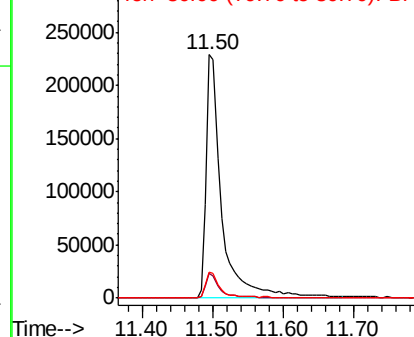
Lab File: BF107892.D

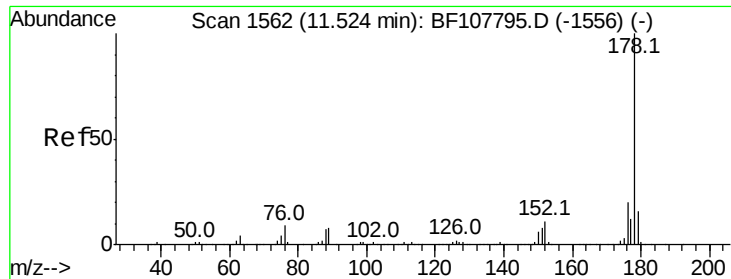
Acq: 1 Aug 2018 16:40

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 188   | Resp: | 357937 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 10.3  | 8.5   | 12.7   |
| 80        | 10.7  | 9.2   | 13.8   |



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





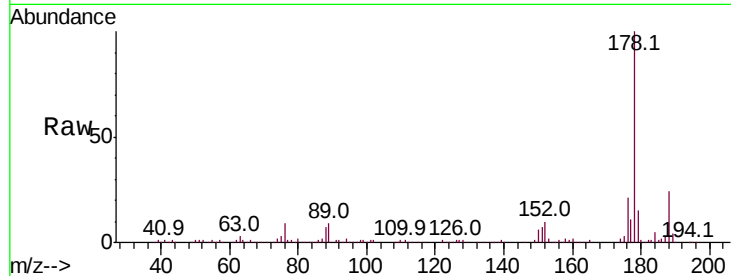
#70  
Phenanthrene  
Concen: 11.560 ng  
RT: 11.52 min Scan# 1562  
Delta R.T. 0.00 min  
Lab File: BF107892.D  
Acq: 1 Aug 2018 16:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-03-073118

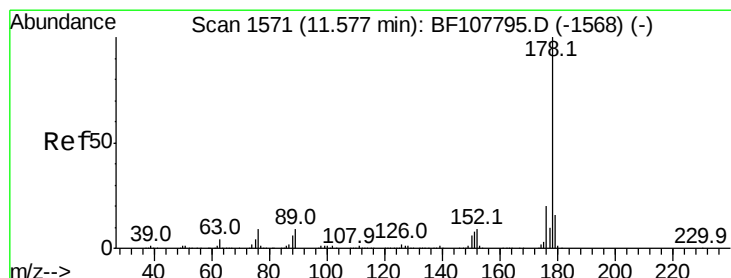
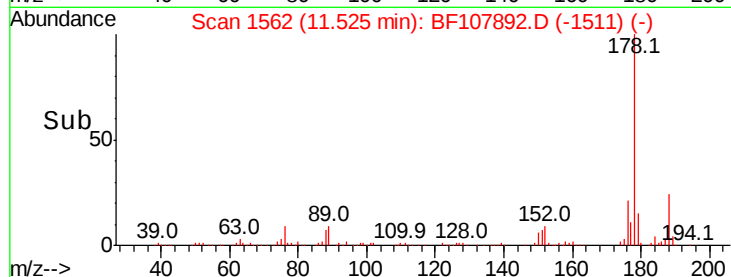
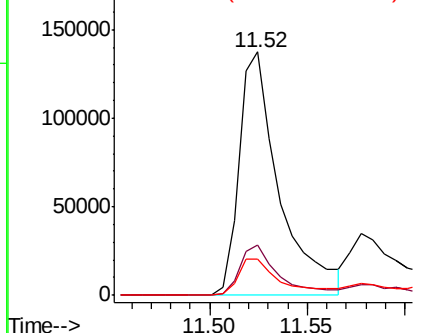
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 20.8  | 15.8  | 23.8  |
| 179     | 15.1  | 13.0  | 19.6  |

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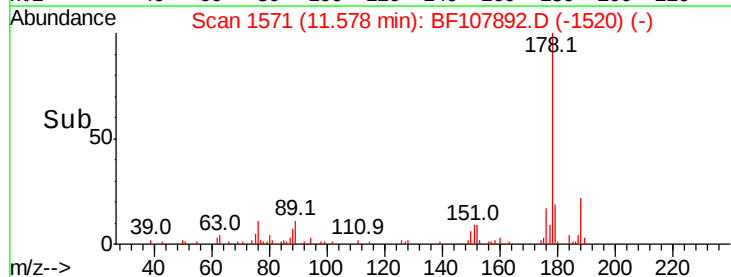
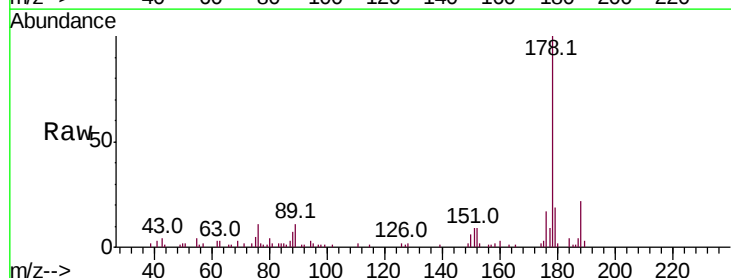
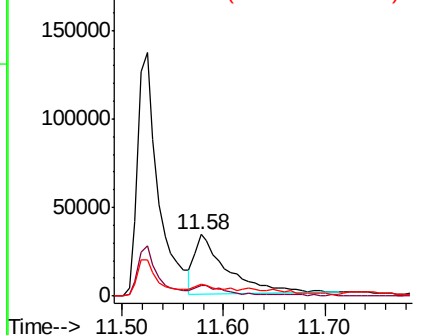
Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E

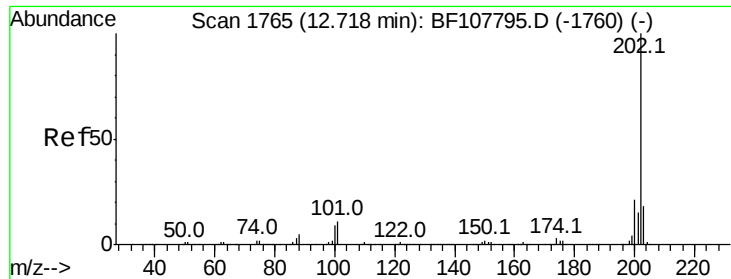


#71  
Anthracene  
Concen: 3.886 ng  
RT: 11.58 min Scan# 1571  
Delta R.T. 0.00 min  
Lab File: BF107892.D  
Acq: 1 Aug 2018 16:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 17.1  | 15.4  | 23.2  |
| 179     | 18.7  | 12.6  | 19.0  |

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





#74

Fluoranthene

Concen: 17.682 ng

RT: 12.72 min Scan# 1765

Delta R.T. 0.00 min

Lab File: BF107892.D

Acq: 1 Aug 2018 16:40

Instrument :

BNA\_F

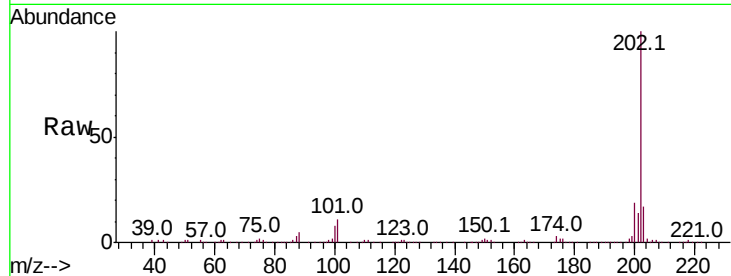
ClientSampleId :

OK-03-073118

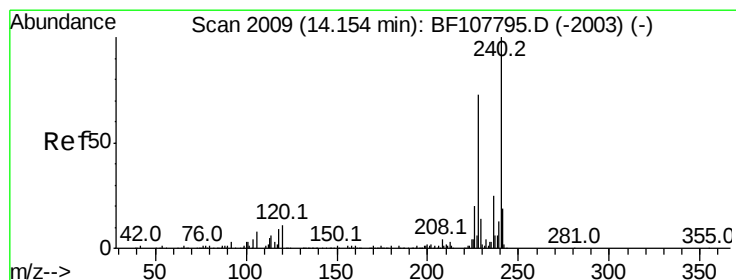
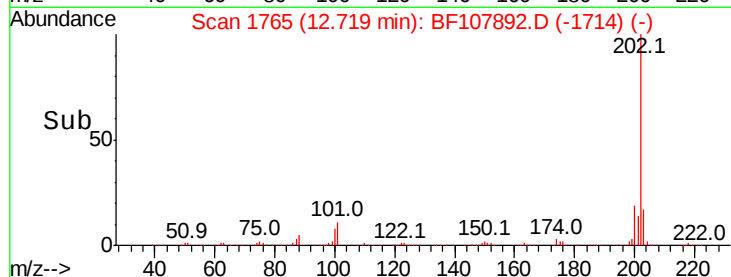
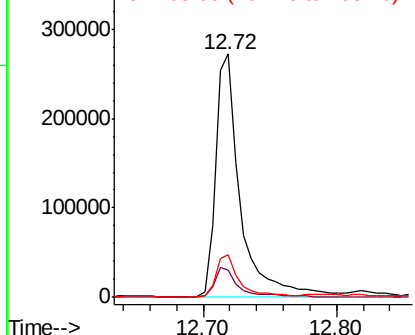
| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 353064 |       |       |
| 101     | 11.2  | 0.0    | 34.1  |       |
| 203     | 17.4  | 0.0    | 38.1  |       |

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Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 203.00 (202.70 to 203.70): E



#75

Chrysene-d12

Concen: 20.000 ng

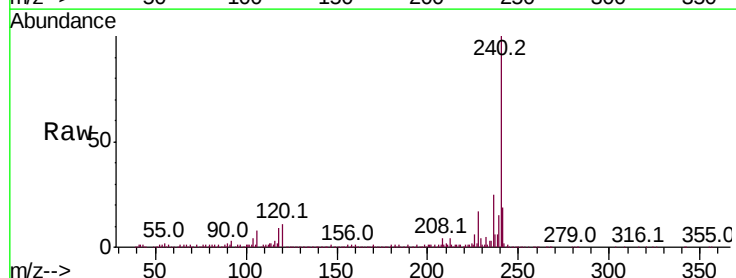
RT: 14.15 min Scan# 2009

Delta R.T. 0.00 min

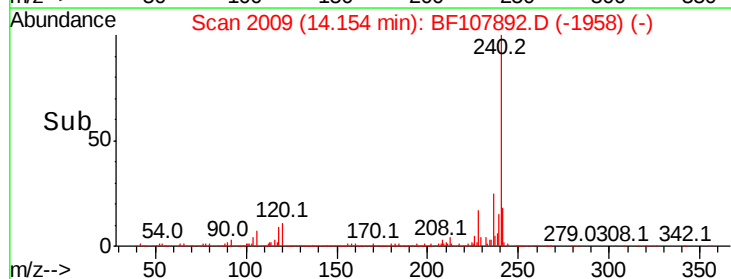
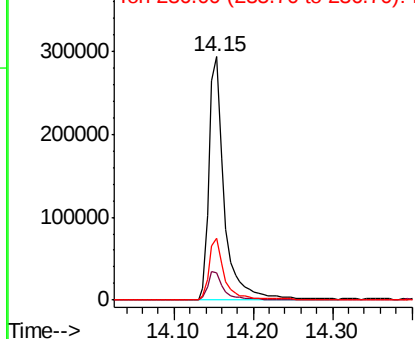
Lab File: BF107892.D

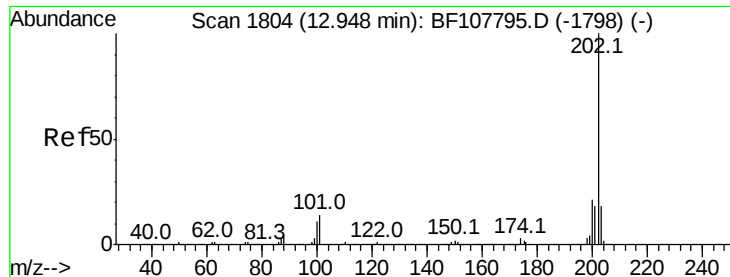
Acq: 1 Aug 2018 16:40

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 393286 |       |       |
| 120     | 11.5  | 9.5    | 14.3  |       |
| 236     | 25.2  | 20.7   | 31.1  |       |



Abundance Ion 240.00 (239.70 to 240.70): E  
Ion 120.00 (119.70 to 120.70): E  
Ion 236.00 (235.70 to 236.70): E





#77

Pvrene

Concen: 10.933 ng

RT: 12.95 min Scan# 1804

Delta R.T. 0.00 min

Lab File: BF107892.D

Acq: 1 Aug 2018 16:40

Instrument :

BNA\_F

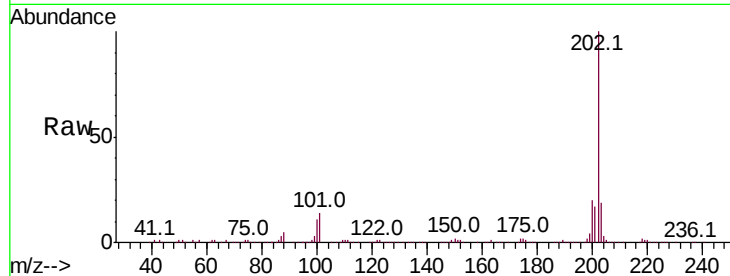
ClientSampleId :

OK-03-073118

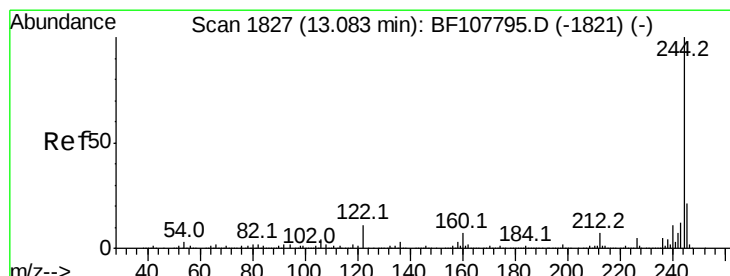
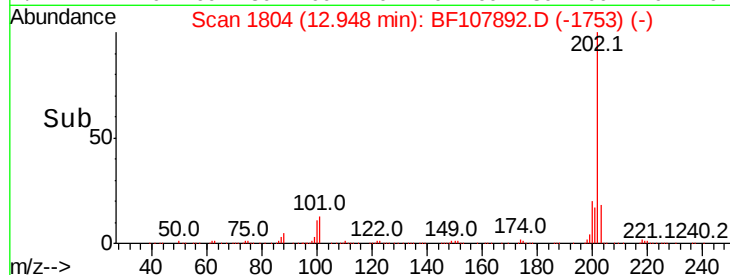
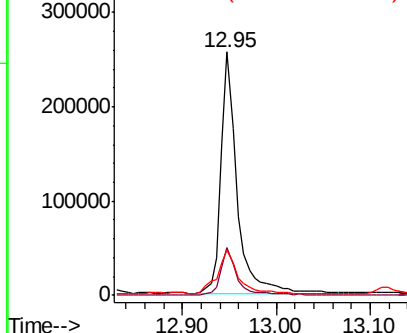
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 309632 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 19.8  | 17.4  | 26.2   |
| 203       | 18.6  | 14.3  | 21.5   |

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Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 200.00 (199.70 to 200.70): E  
Ion 203.00 (202.70 to 203.70): E



#78

Terphenyl-d14

Concen: 13.126 ng

RT: 13.08 min Scan# 1826

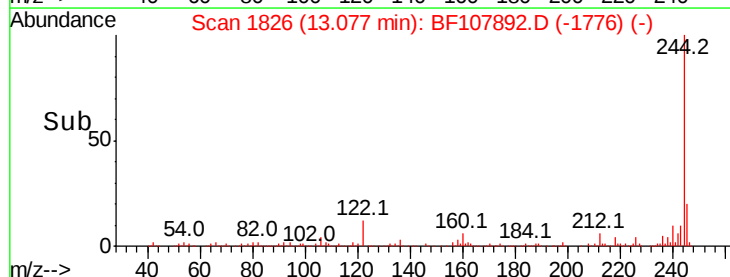
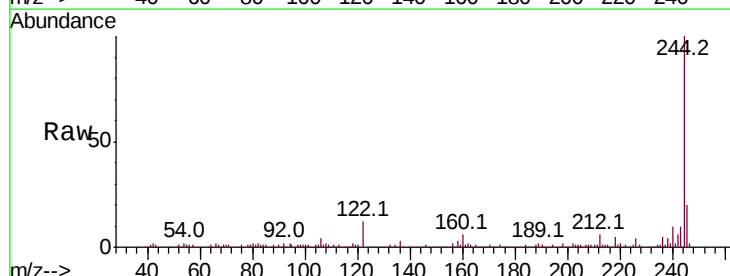
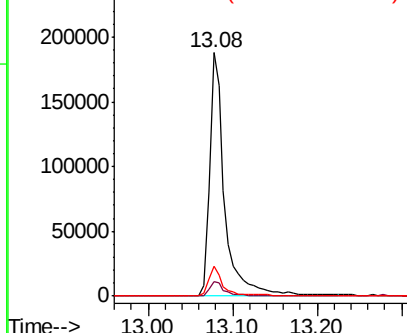
Delta R.T. -0.01 min

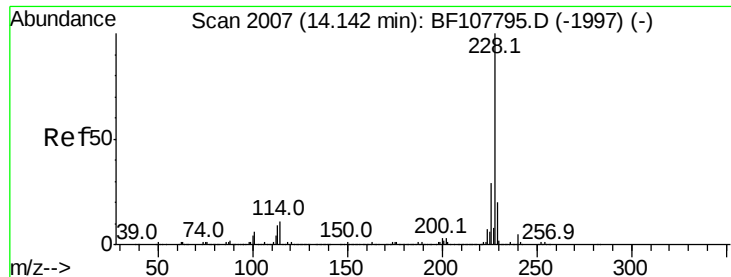
Lab File: BF107892.D

Acq: 1 Aug 2018 16:40

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 244   | Resp: | 238067 |
| Ion Ratio | Lower | Upper |        |
| 244       | 100   |       |        |
| 212       | 6.1   | 5.4   | 8.0    |
| 122       | 12.0  | 11.0  | 16.4   |

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





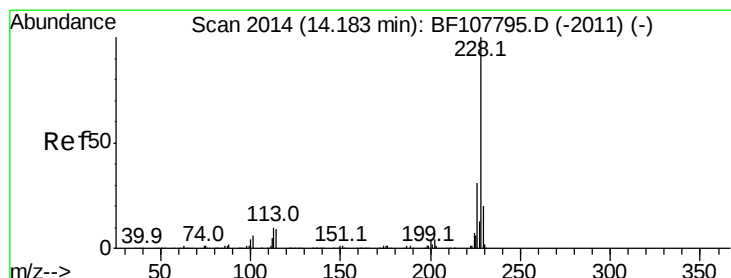
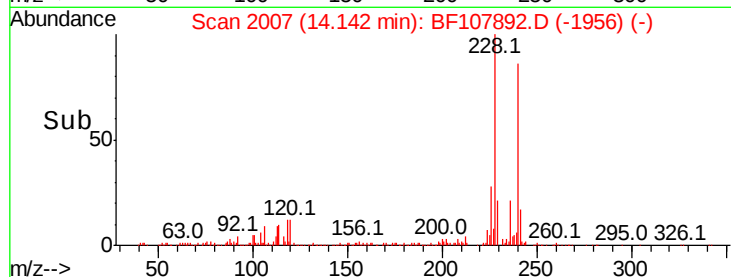
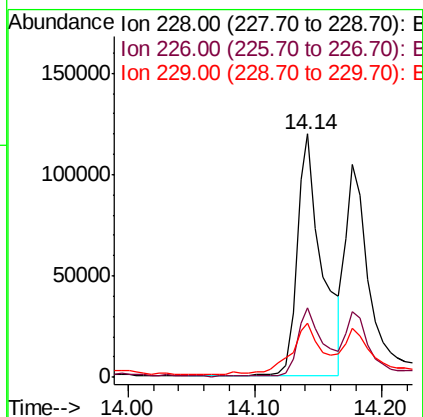
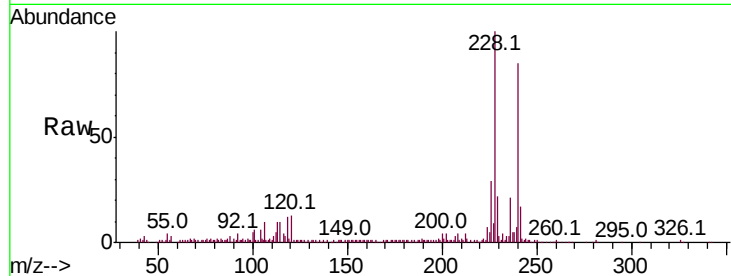
#80  
Benzo(a)anthracene  
Concen: 7.279 ng  
RT: 14.14 min Scan# 2007  
Delta R.T. 0.00 min  
Lab File: BF107892.D  
Acq: 1 Aug 2018 16:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-03-073118

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.6  | 22.6  | 33.8  |
| 229     | 22.4  | 15.8  | 23.6  |

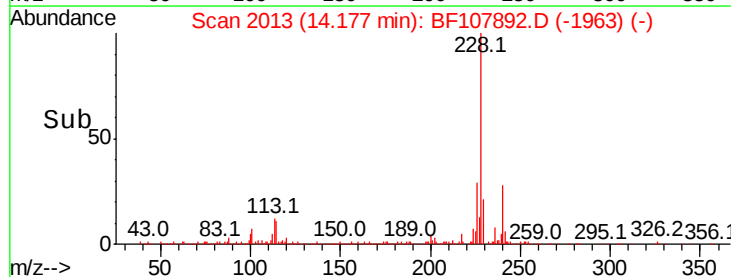
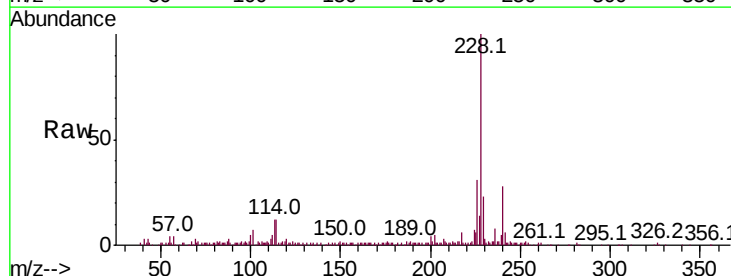
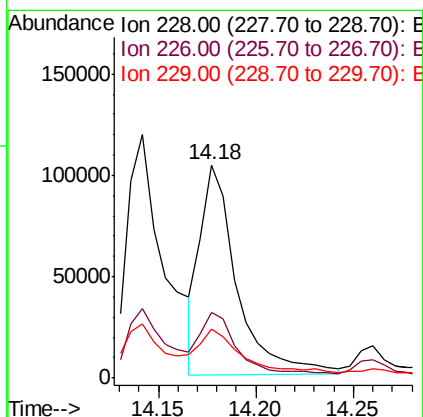
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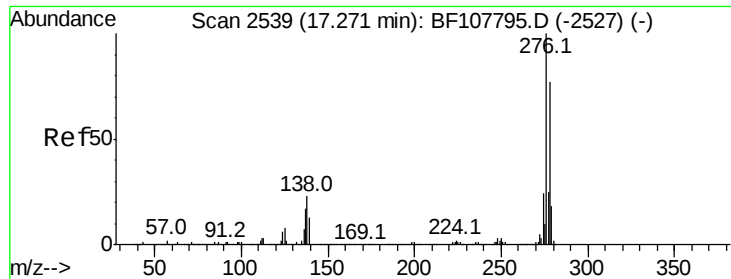
Sohil  
8/2/2018 9:17:12 AM



#82  
Chrysene  
Concen: 5.676 ng  
RT: 14.18 min Scan# 2013  
Delta R.T. -0.01 min  
Lab File: BF107892.D  
Acq: 1 Aug 2018 16:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.5  | 25.0  | 37.6  |
| 229     | 22.9  | 16.2  | 24.4  |





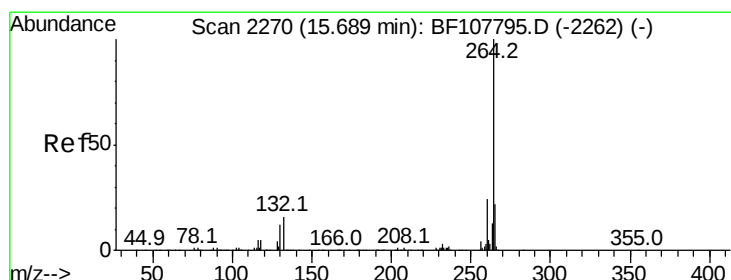
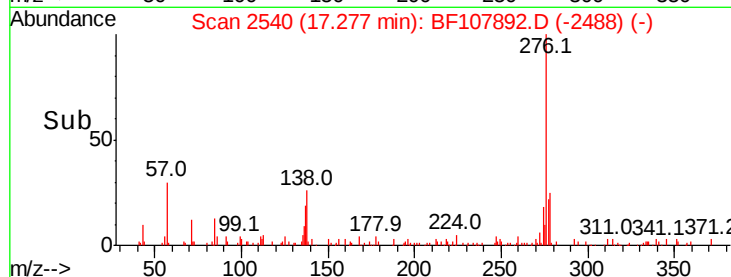
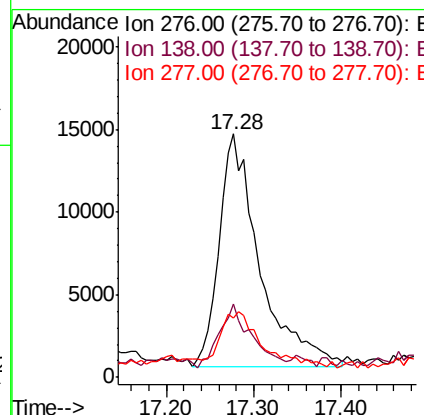
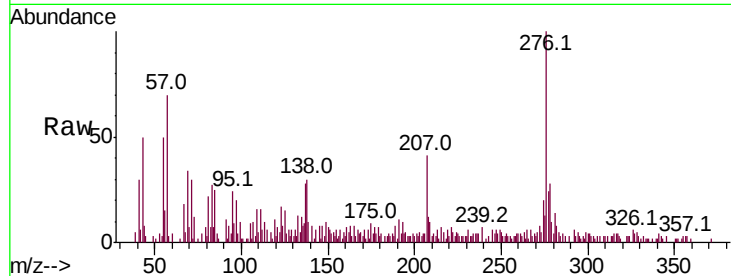
#85  
Indeno(1,2,3-cd)pyrene  
Concen: 2.455 ng  
RT: 17.28 min Scan# 2540  
Delta R.T. 0.01 min  
Lab File: BF107892.D  
Acq: 1 Aug 2018 16:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-03-073118

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 22.0  | 25.0  | 37.6# |
| 277     | 23.0  | 20.1  | 30.1  |

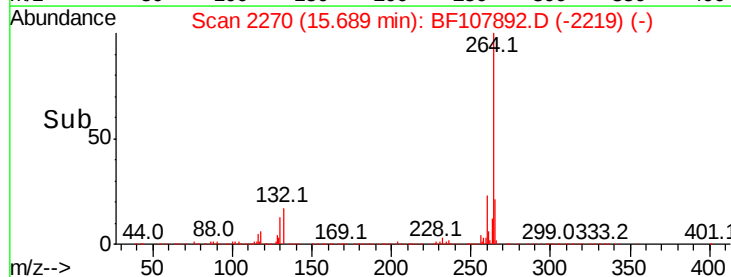
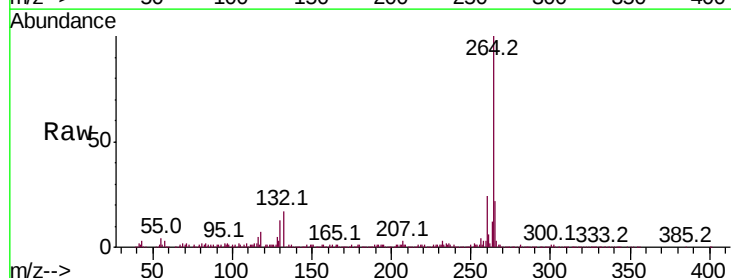
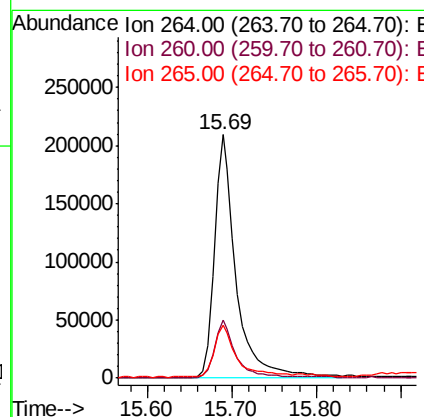
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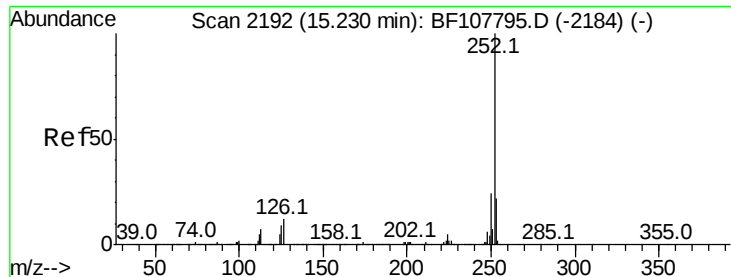
Sohil  
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#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.69 min Scan# 2270  
Delta R.T. 0.00 min  
Lab File: BF107892.D  
Acq: 1 Aug 2018 16:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.6  | 19.2  | 28.8  |
| 265     | 21.8  | 17.5  | 26.3  |





#87

Benzo(b)fluoranthene

Concen: 7.216 ng m

RT: 15.23 min Scan# 2192

Delta R.T. 0.00 min

Lab File: BF107892.D

Acq: 1 Aug 2018 16:40

Instrument :

BNA\_F

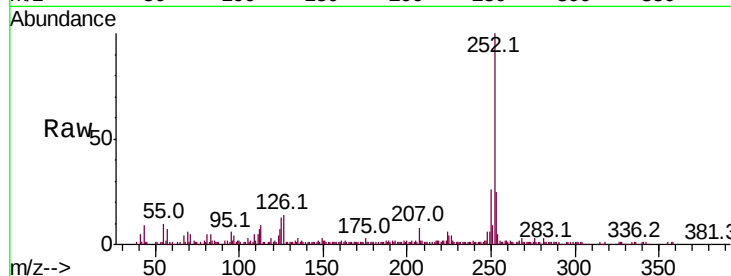
ClientSampleId :

OK-03-073118

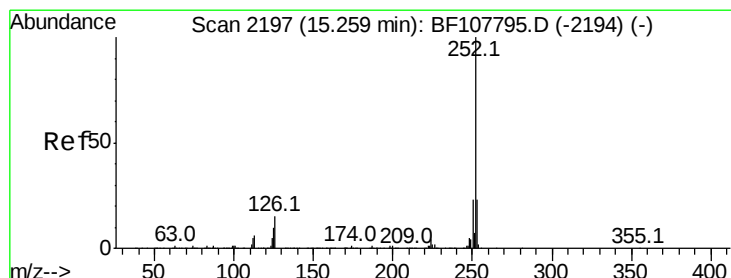
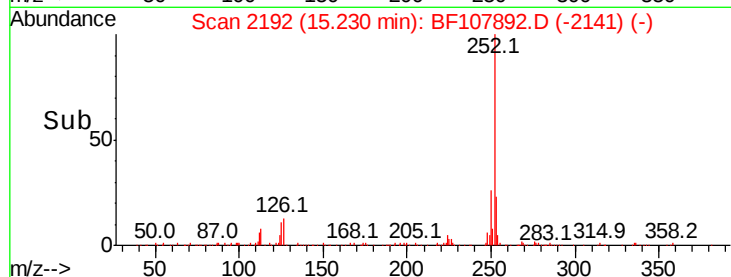
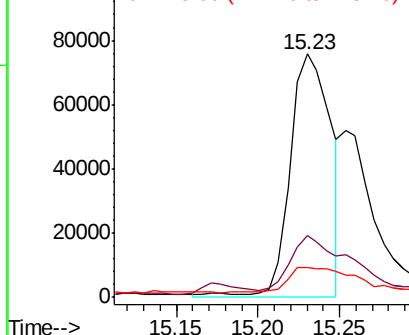
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 133057 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 25.2  | 17.0  | 25.6   |
| 125       | 12.5  | 9.0   | 13.6   |

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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



#88

Benzo(k)fluoranthene

Concen: 3.576 ng m

RT: 15.25 min Scan# 2196

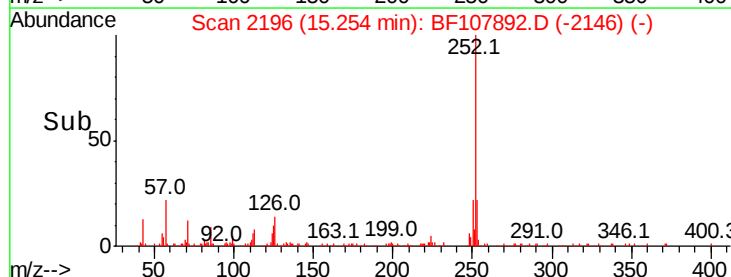
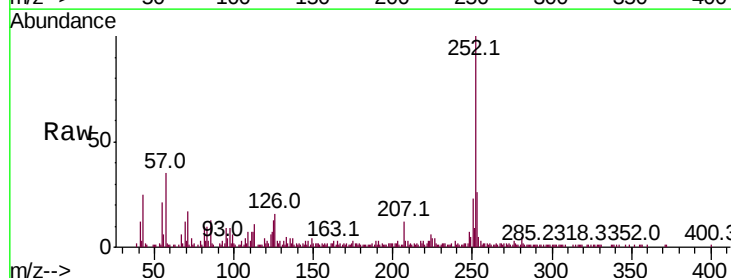
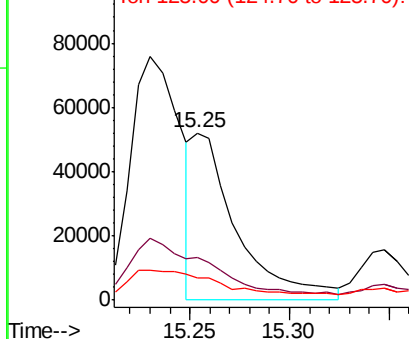
Delta R.T. -0.01 min

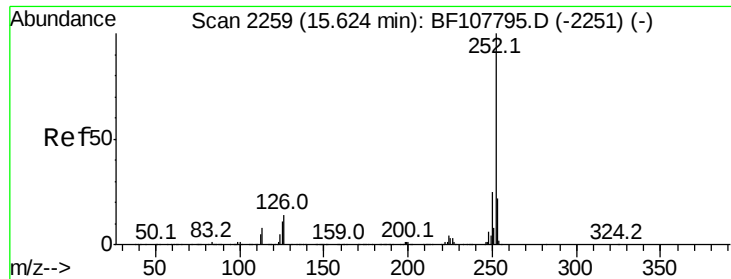
Lab File: BF107892.D

Acq: 1 Aug 2018 16:40

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 80953 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 25.7  | 17.9  | 26.9  |
| 125       | 13.3  | 10.2  | 15.2  |

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





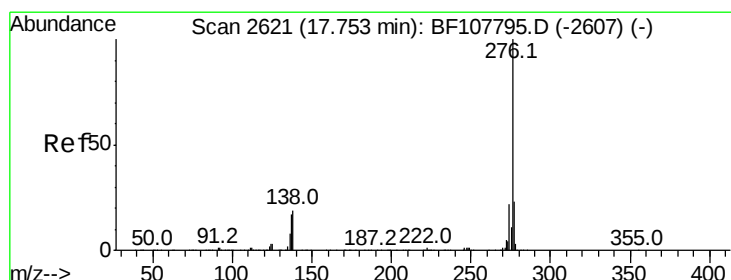
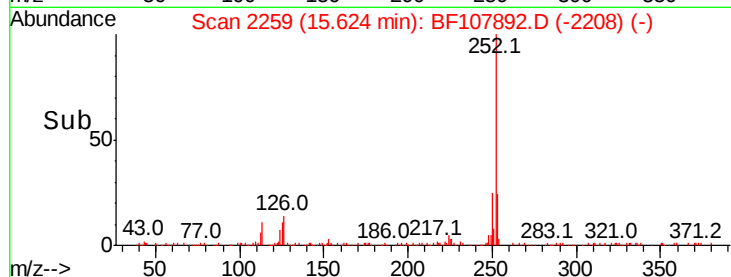
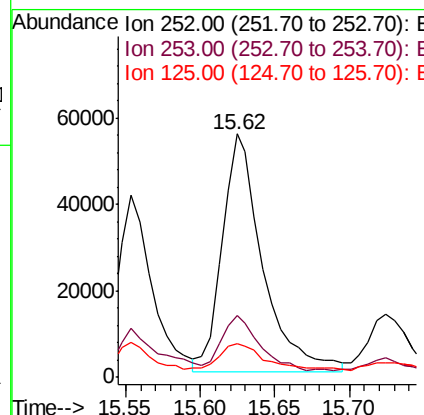
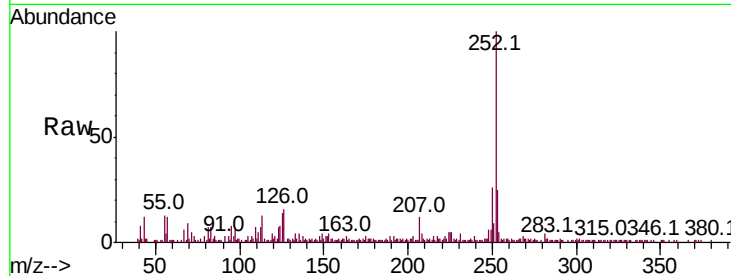
#89  
Benzo(a)pyrene  
Concen: 5.479 ng  
RT: 15.62 min Scan# 2259  
Delta R.T. 0.00 min  
Lab File: BF107892.D  
Acq: 1 Aug 2018 16:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-03-073118

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 104297 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 25.3  | 17.1  | 25.7   |
| 125       | 13.8  | 9.8   | 14.6   |

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#91  
Benzo(g,h,i)perylene  
Concen: 2.535 ng  
RT: 17.76 min Scan# 2622  
Delta R.T. 0.01 min  
Lab File: BF107892.D  
Acq: 1 Aug 2018 16:40

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 40730 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 277       | 30.1  | 17.9  | 26.9# |
| 138       | 41.3  | 21.8  | 32.8# |

