

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF092818\  
 Data File : BF109433.D  
 Acq On : 28 Sep 2018 16:46  
 Operator : JU/SJ  
 Sample : J4776-09 5X  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EO-01-092718-C

Manual Integrations  
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 10/1/2018 4:19:58 PM

Quant Time: Oct 01 08:59:47 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Sep 22 13:32:18 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.70  | 152  | 127334   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 7.99  | 136  | 461708   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10        | 9.74  | 164  | 186943   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.22 | 188  | 312383   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12            | 13.84 | 240  | 256611   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12            | 15.25 | 264  | 206876   | 20.00 | ng    | 0.01     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.31  | 112  | 113188   | 14.64 | ng    | 0.00     |
| 7) Phenol-d6                | 6.34  | 99   | 144918   | 14.69 | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.26  | 82   | 87045    | 11.13 | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol    | 10.52 | 330  | 20429    | 11.09 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.06  | 172  | 155417   | 12.54 | ng    | -0.01    |
| 78) Terphenyl-d14           | 12.80 | 244  | 119410   | 11.42 | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       |          |
| 70) Phenanthrene            | 11.24 | 178  | 61107    | 3.918 | ng    | 98       |
| 74) Fluoranthene            | 12.42 | 202  | 89234    | 5.354 | ng    | 97       |
| 77) Pyrene                  | 12.65 | 202  | 86641    | 4.711 | ng    | 99       |
| 80) Benzo(a)anthracene      | 13.83 | 228  | 38158    | 2.469 | ng    | 95       |
| 82) Chrysene                | 13.87 | 228  | 34045    | 2.222 | ng    | 97       |
| 87) Benzo(b)fluoranthene    | 14.85 | 252  | 34901m   | 3.070 | ng    |          |
| 89) Benzo(a)pyrene          | 15.19 | 252  | 23003    | 2.246 | ng    | # 80     |

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

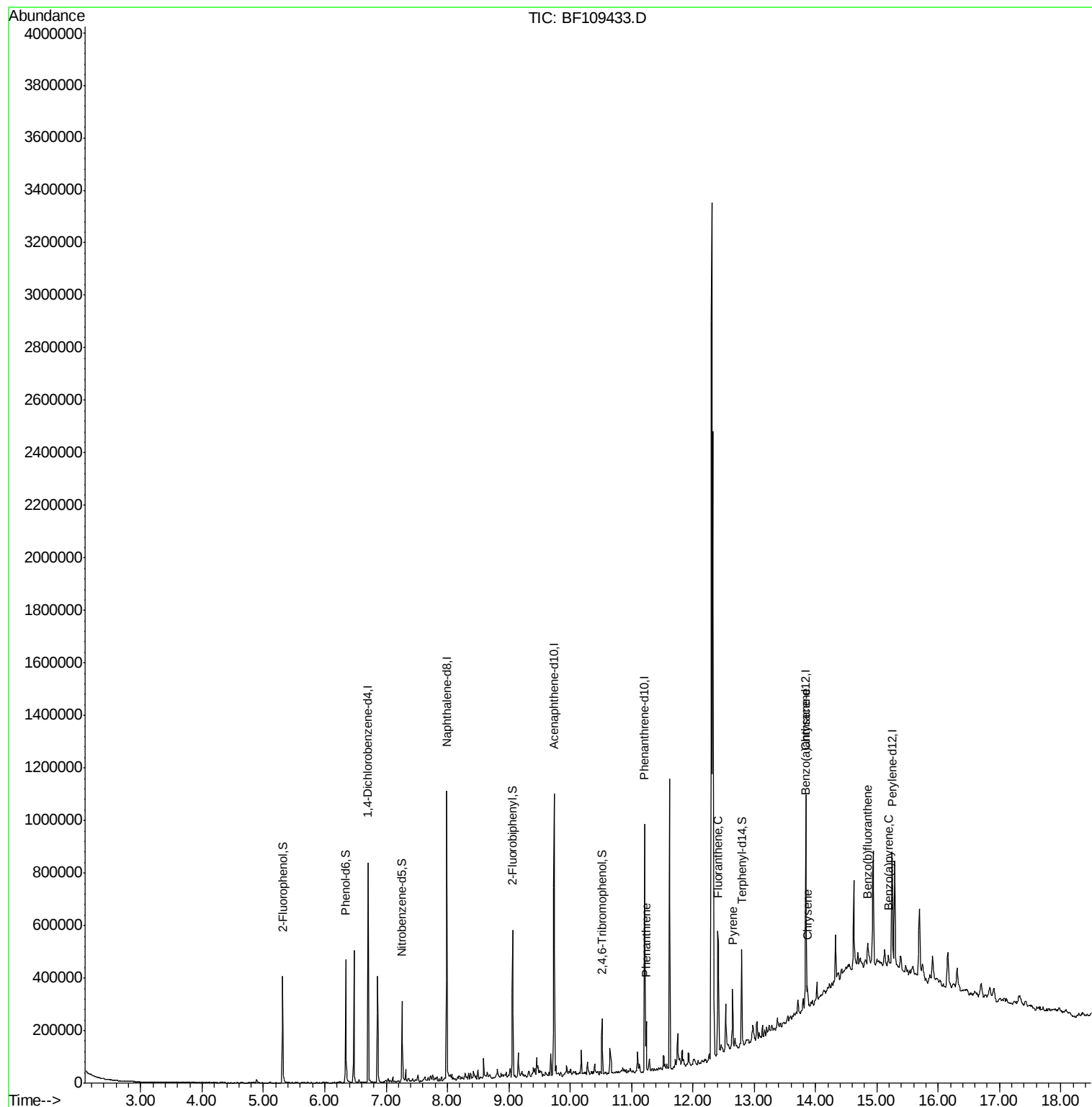
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF092818\  
Data File : BF109433.D  
Acq On : 28 Sep 2018 16:46  
Operator : JU/SJ  
Sample : J4776-09 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
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EO-01-092718-C

Manual Integrations  
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10/1/2018 4:19:58 PM

Quant Time: Oct 01 08:59:47 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Sep 22 13:32:18 2018  
Response via : Initial Calibration





#1

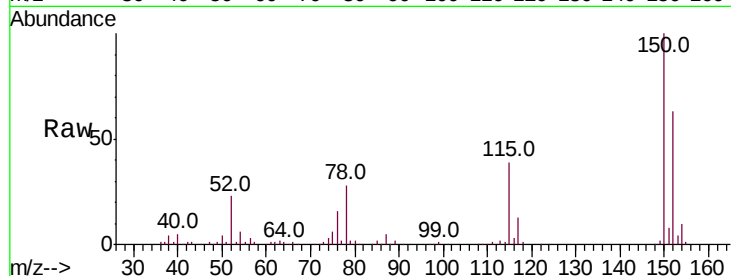
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.70 min Scan# 785  
Delta R.T. -0.01 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

Instrument :  
BNA\_F  
ClientSampleId :  
EO-01-092718-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 157.5 | 124.6 | 186.8 |
| 115     | 61.8  | 50.1  | 75.1  |

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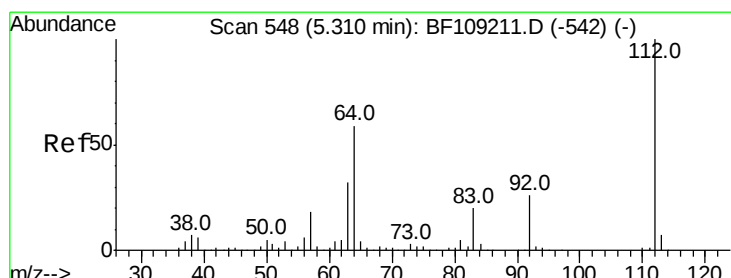
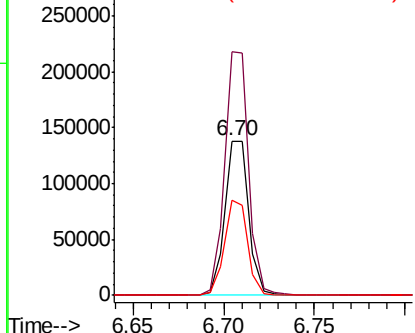
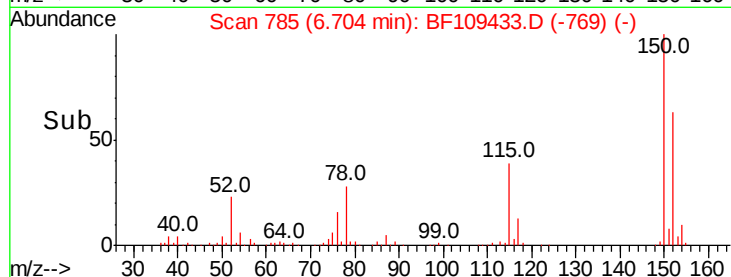


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

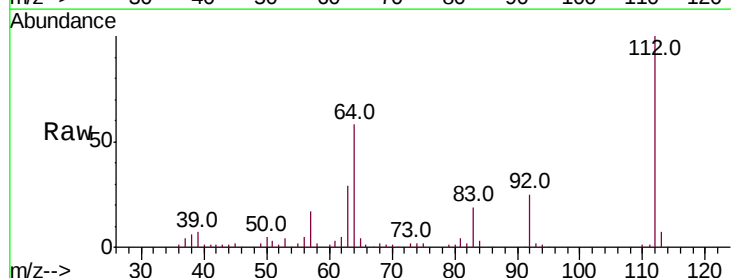
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 14.641 ng  
RT: 5.31 min Scan# 548  
Delta R.T. -0.01 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 57.9  | 47.9  | 71.9  |
| 63      | 28.7  | 23.7  | 35.5  |

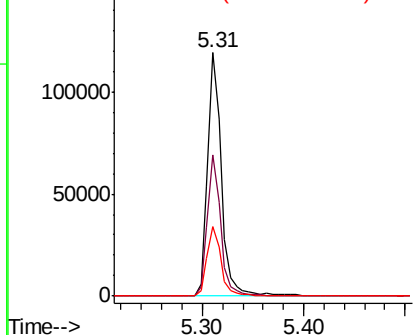
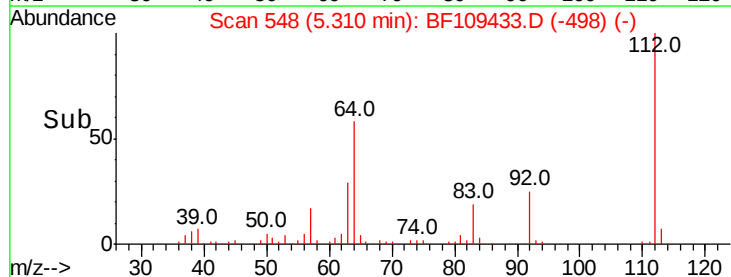


Abundance

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: 14.690 ng

RT: 6.34 min Scan# 723

Delta R.T. -0.02 min

Lab File: BF109433.D

Acq: 28 Sep 2018 16:46

Instrument :

BNA\_F

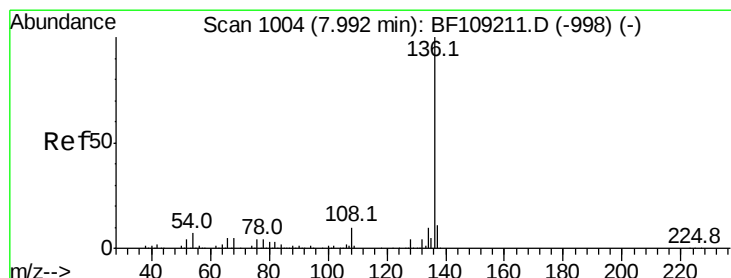
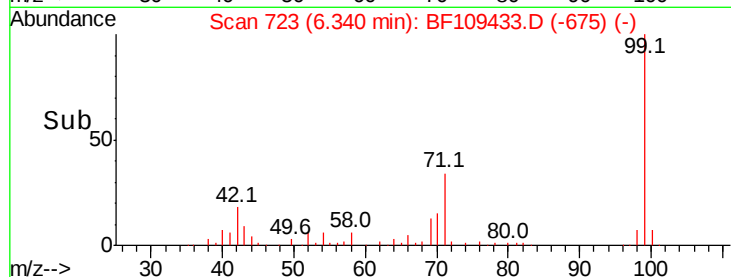
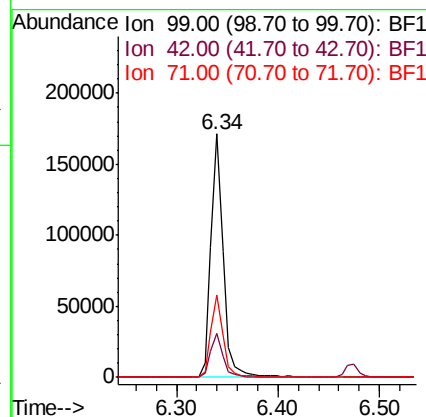
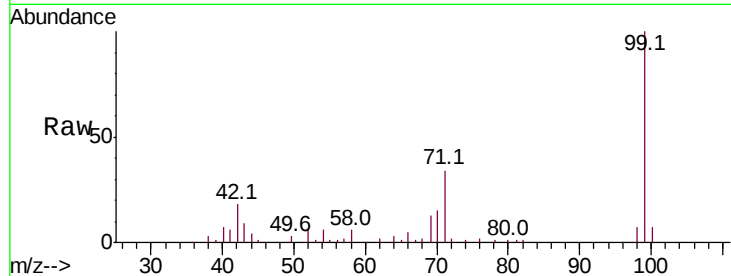
ClientSampleId :

EO-01-092718-C

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 144918 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 18.1  | 14.5  | 21.7   |
| 71        | 33.8  | 25.4  | 38.0   |

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#21

Naphthalene-d8

Concen: 20.000 ng

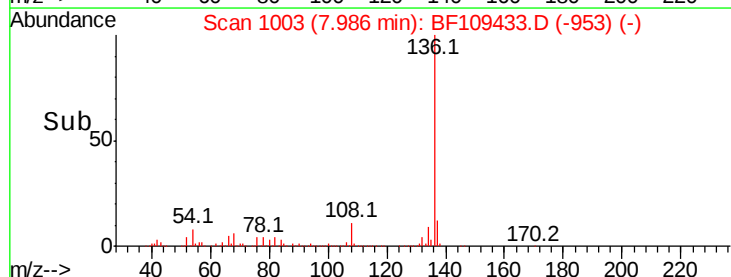
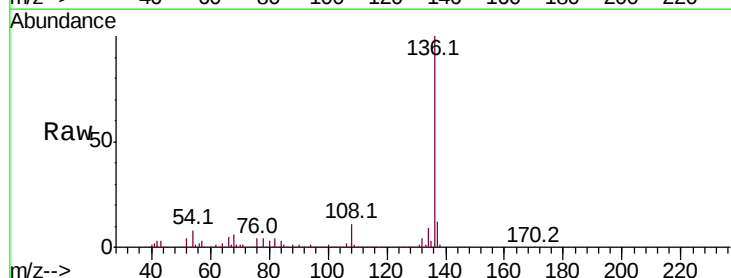
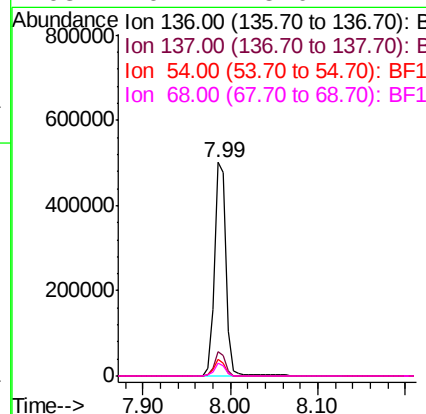
RT: 7.99 min Scan# 1003

Delta R.T. -0.01 min

Lab File: BF109433.D

Acq: 28 Sep 2018 16:46

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 461708 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 11.5  | 8.9   | 13.3   |
| 54        | 7.7   | 6.6   | 9.8    |
| 68        | 6.1   | 5.0   | 7.4    |





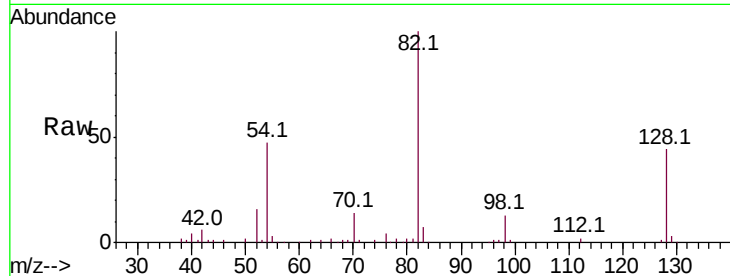
#23  
Nitrobenzene-d5  
Concen: 11.129 ng  
RT: 7.26 min Scan# 880  
Delta R.T. -0.02 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

Instrument :  
BNA\_F  
ClientSampleId :  
EO-01-092718-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 43.7  | 36.1  | 54.1  |
| 54      | 47.5  | 41.4  | 62.2  |

Manual Integrations  
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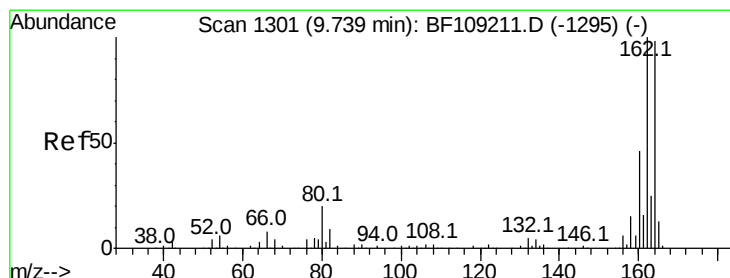
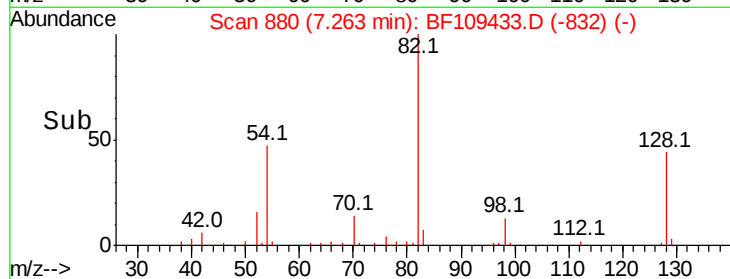
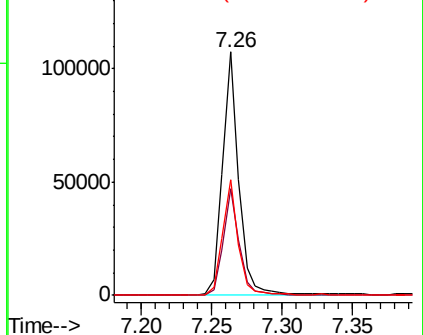


Abundance

Ion 82.00 (81.70 to 82.70): BF1

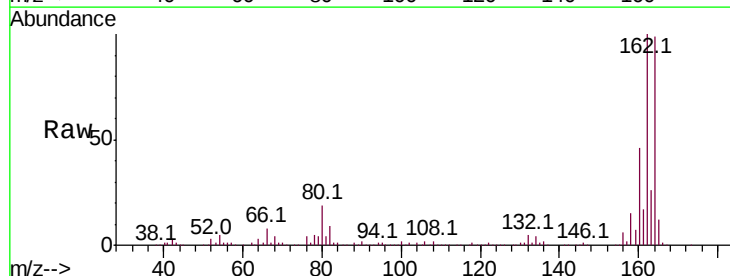
Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF1



#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.74 min Scan# 1301  
Delta R.T. 0.00 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 101.3 | 86.1  | 129.1 |
| 160     | 46.7  | 38.3  | 57.5  |

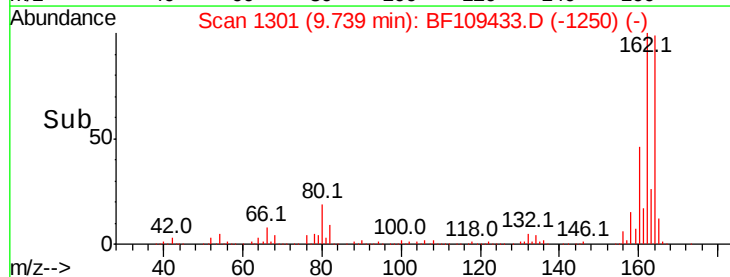
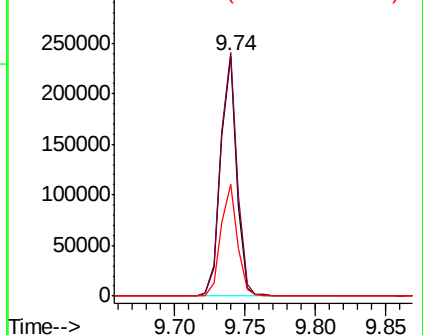


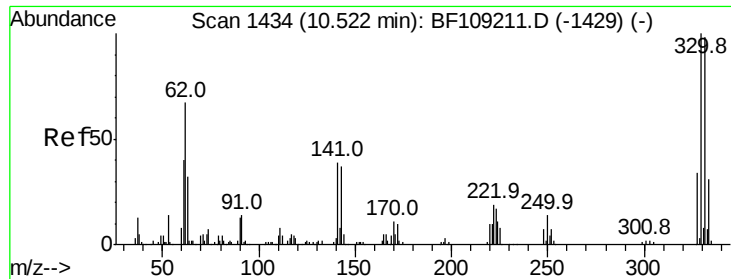
Abundance

Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





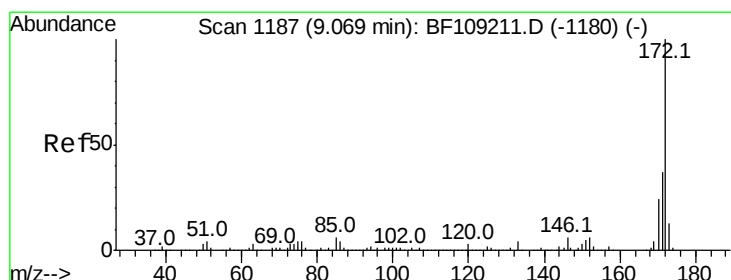
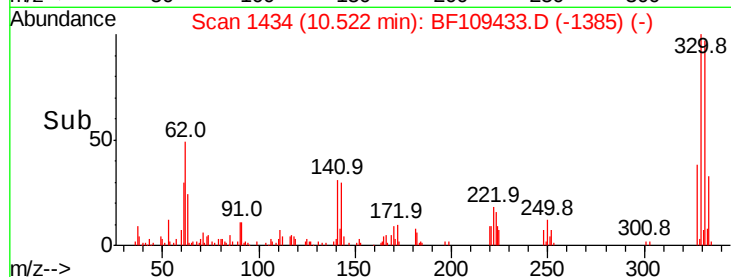
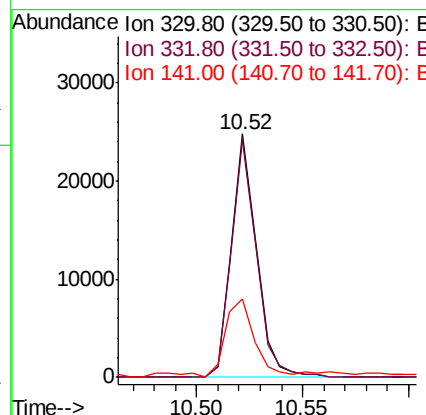
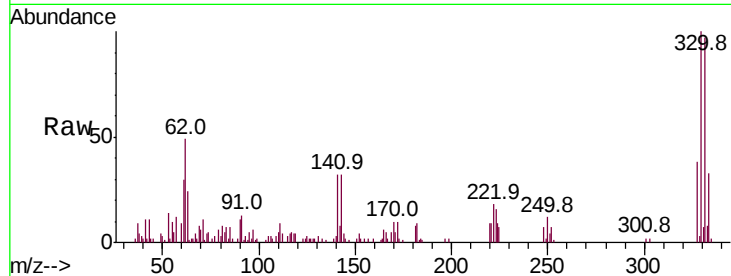
#41  
 2,4,6-Tribromophenol  
 Concen: 11.085 ng  
 RT: 10.52 min Scan# 1434  
 Delta R.T. -0.01 min  
 Lab File: BF109433.D  
 Acq: 28 Sep 2018 16:46

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EO-01-092718-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 97.5  | 77.0  | 115.6 |
| 141     | 34.5  | 29.9  | 44.9  |

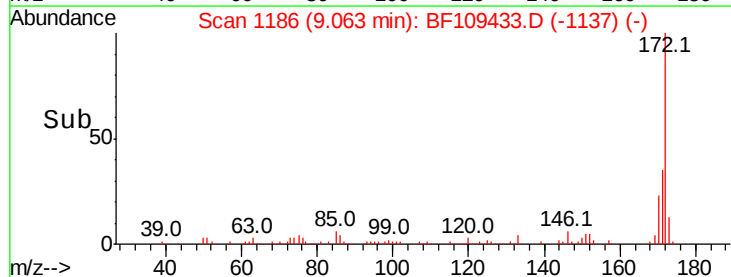
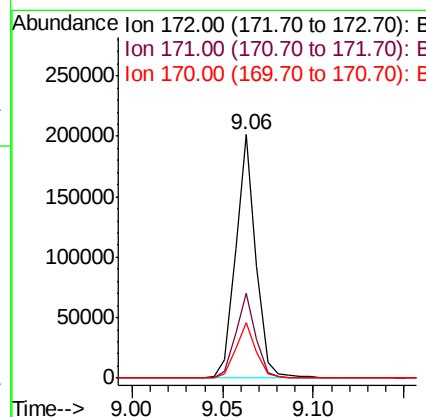
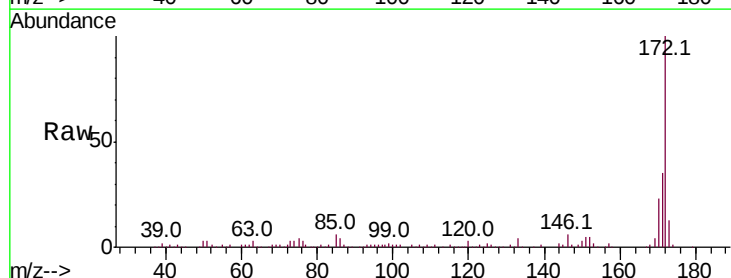
Manual Integrations  
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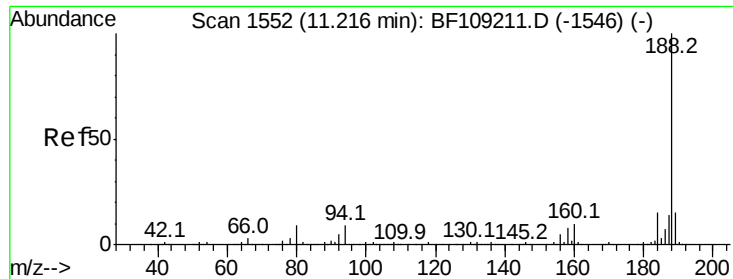
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#44  
 2-Fluorobiphenyl  
 Concen: 12.539 ng  
 RT: 9.06 min Scan# 1186  
 Delta R.T. -0.01 min  
 Lab File: BF109433.D  
 Acq: 28 Sep 2018 16:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.9  | 29.7  | 44.5  |
| 170     | 22.5  | 19.6  | 29.4  |





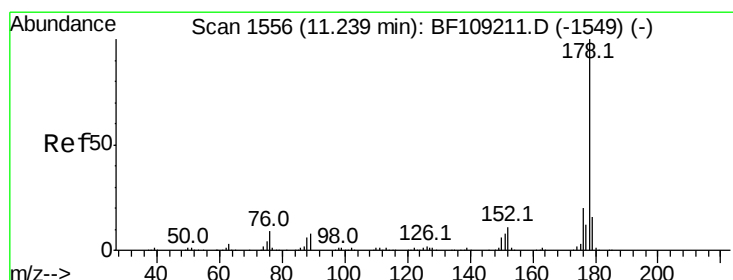
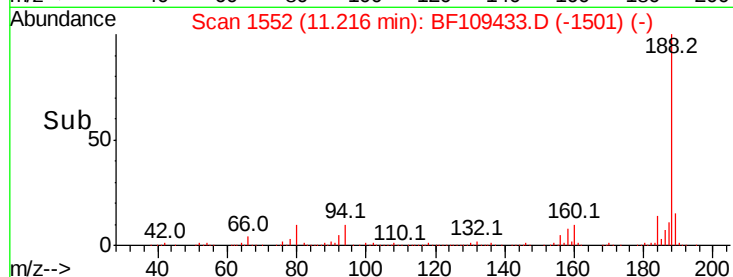
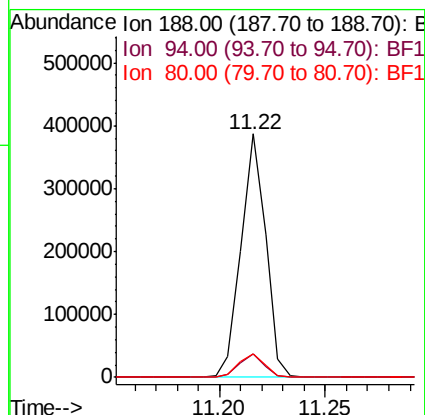
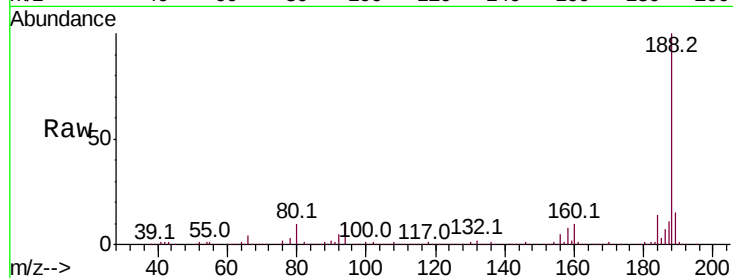
#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.22 min Scan# 1552  
Delta R.T. 0.00 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

Instrument :  
BNA\_F  
ClientSampleId :  
EO-01-092718-C

| Tot Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 188     | 100   |            |            |
| 94      | 9.6   | 8.5        | 12.7       |
| 80      | 9.9   | 9.2        | 13.8       |

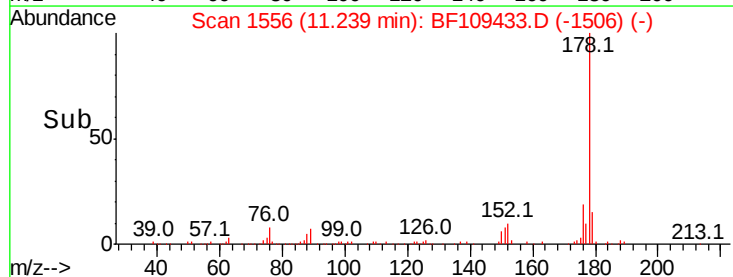
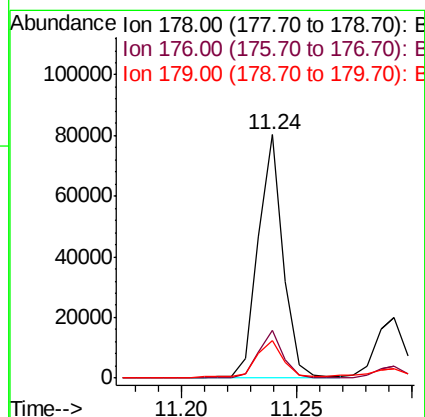
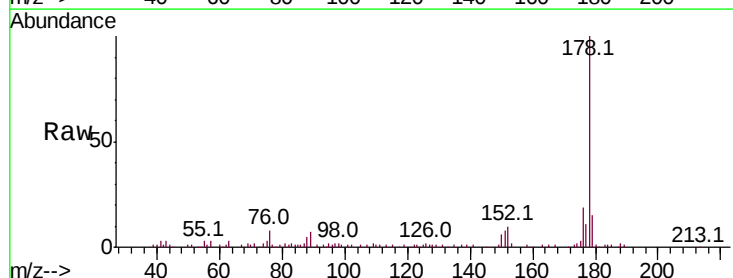
Manual Integrations  
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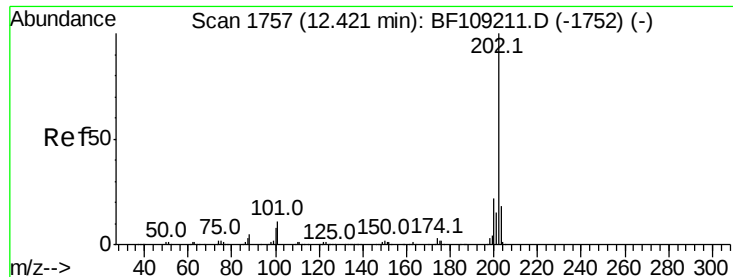
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#70  
Phenanthrene  
Concen: 3.918 ng  
RT: 11.24 min Scan# 1556  
Delta R.T. -0.01 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 178     | 100   |            |            |
| 176     | 19.4  | 15.8       | 23.8       |
| 179     | 15.2  | 13.0       | 19.6       |





#74

Fluoranthene

Concen: 5.354 ng

RT: 12.42 min Scan# 1757

Delta R.T. -0.01 min

Lab File: BF109433.D

Acq: 28 Sep 2018 16:46

Instrument :

BNA\_F

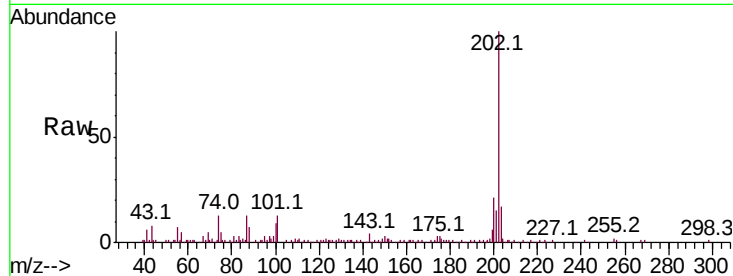
ClientSampleId :

EO-01-092718-C

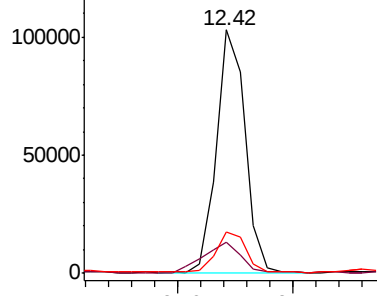
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 202   | Resp: | 89234 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 101       | 12.7  | 0.0   | 34.1  |
| 203       | 17.2  | 0.0   | 38.1  |

Manual Integrations  
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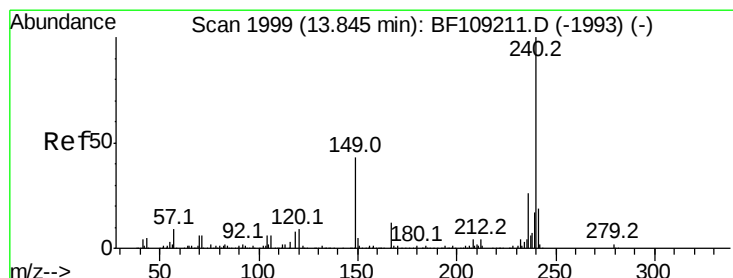
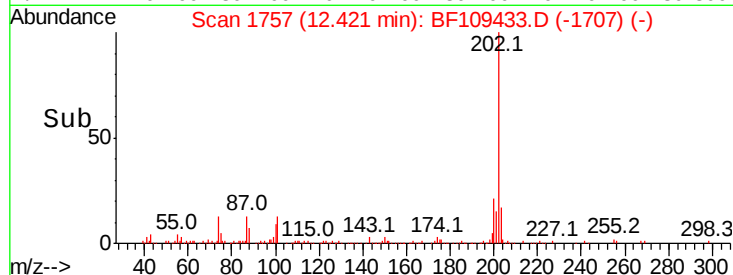
Sohil  
10/1/2018 4:19:58 PM



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



Time-->



#75

Chrysene-d12

Concen: 20.000 ng

RT: 13.84 min Scan# 1999

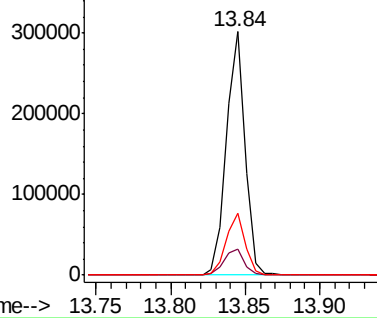
Delta R.T. 0.00 min

Lab File: BF109433.D

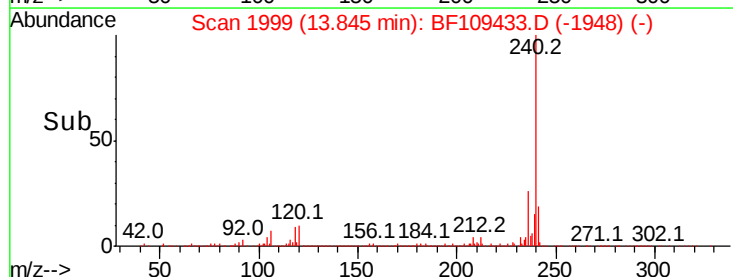
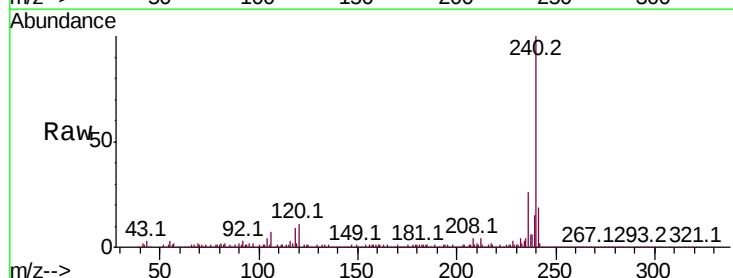
Acq: 28 Sep 2018 16:46

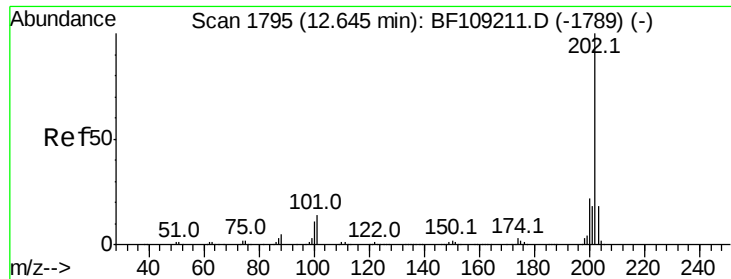
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 256611 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 10.7  | 9.5   | 14.3   |
| 236       | 25.6  | 20.7  | 31.1   |

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



Time-->





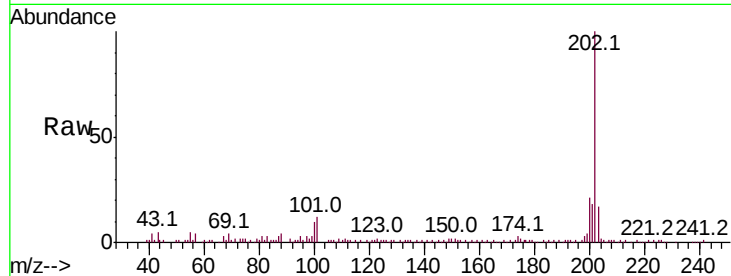
#77  
Pvrene  
Concen: 4.711 ng  
RT: 12.65 min Scan# 1796  
Delta R.T. -0.01 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

Instrument :  
BNA\_F  
ClientSampleId :  
EO-01-092718-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.2  | 17.4  | 26.2  |
| 203     | 17.4  | 14.3  | 21.5  |

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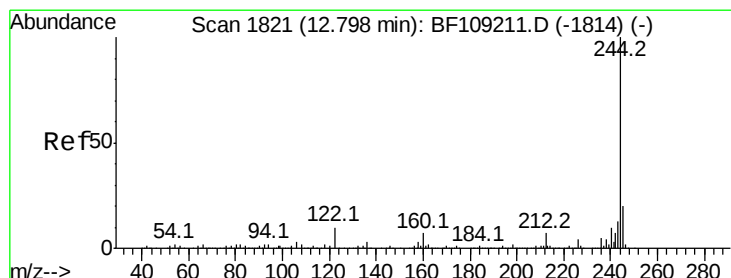
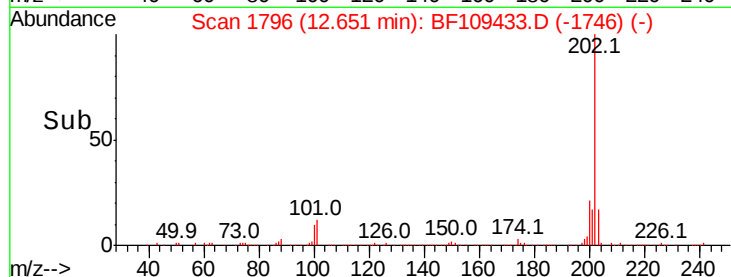
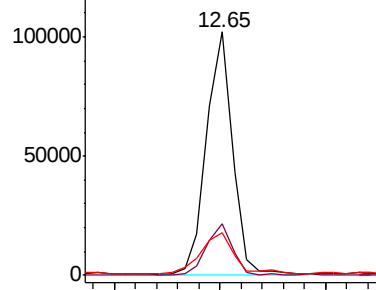


Abundance

Ion 202.00 (201.70 to 202.70): E

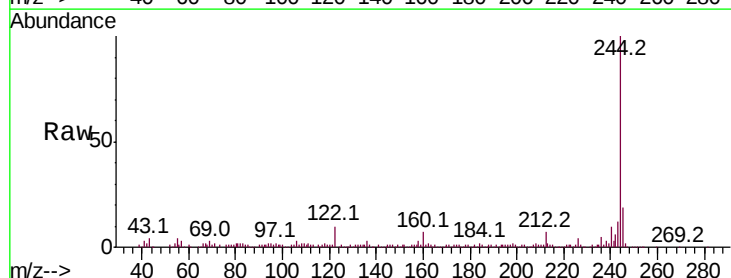
Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



#78  
Terphenyl-d14  
Concen: 11.420 ng  
RT: 12.80 min Scan# 1821  
Delta R.T. -0.01 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.6   | 5.4   | 8.0   |
| 122     | 10.1  | 11.0  | 16.4# |

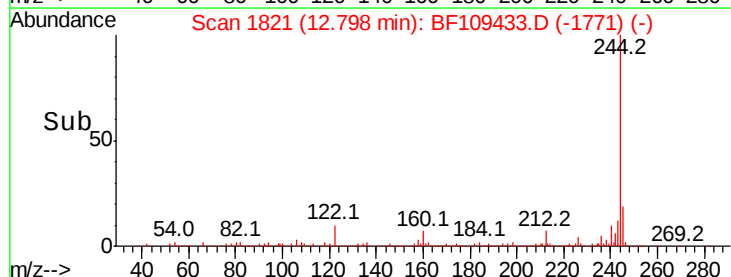
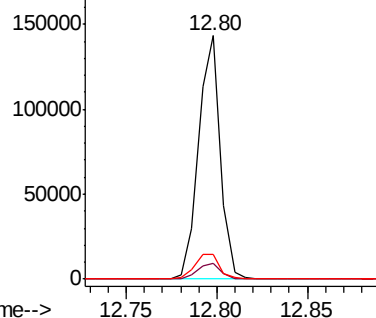


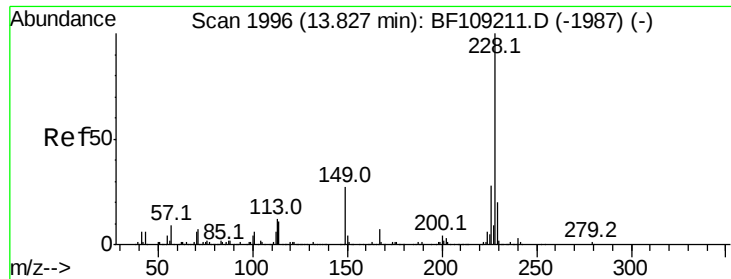
Abundance

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





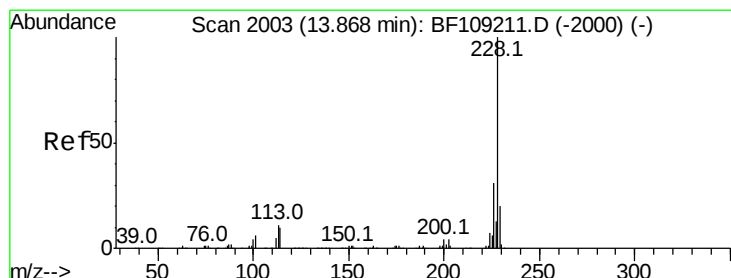
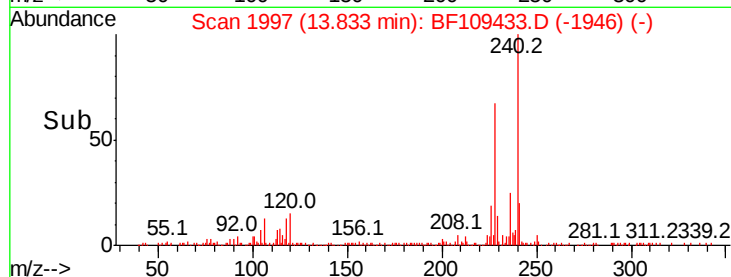
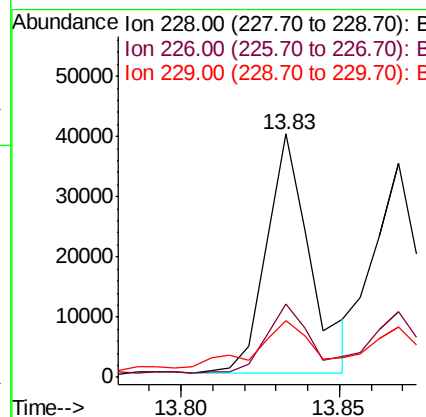
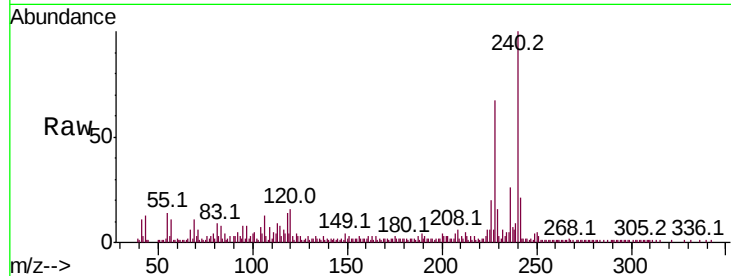
#80  
Benzo(a)anthracene  
Concen: 2.469 ng  
RT: 13.83 min Scan# 1997  
Delta R.T. 0.00 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

Instrument :  
BNA\_F  
ClientSampleId :  
EO-01-092718-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.9  | 22.6  | 33.8  |
| 229     | 23.3  | 15.8  | 23.6  |

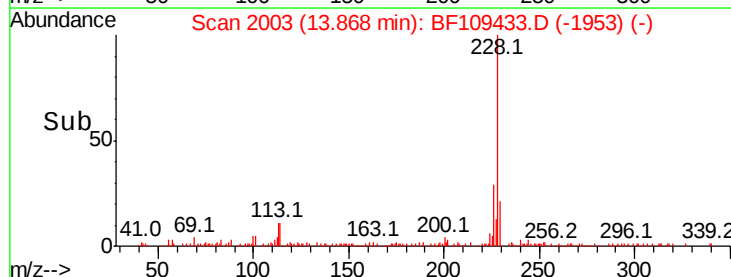
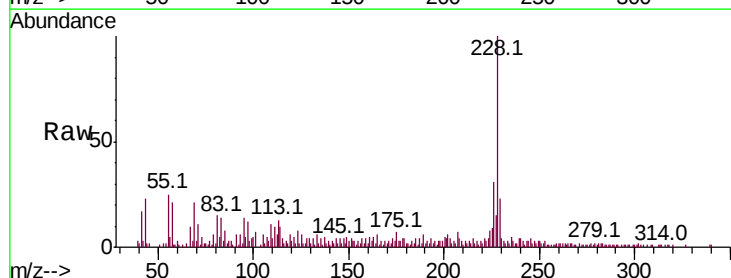
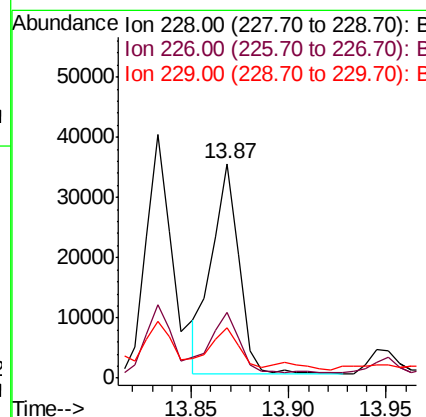
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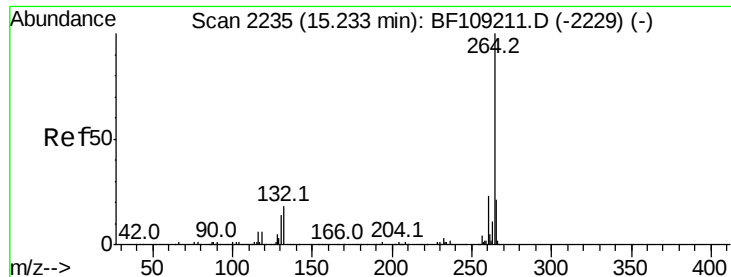
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#82  
Chrysene  
Concen: 2.222 ng  
RT: 13.87 min Scan# 2003  
Delta R.T. -0.01 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.7  | 25.0  | 37.6  |
| 229     | 23.3  | 16.2  | 24.4  |





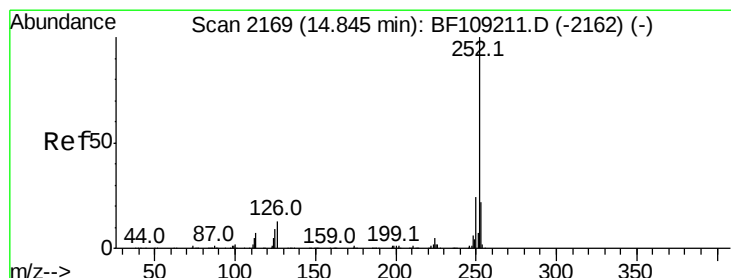
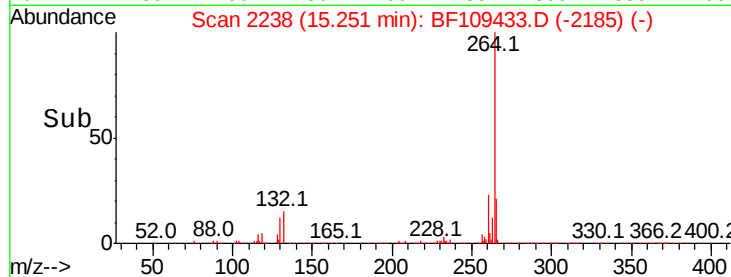
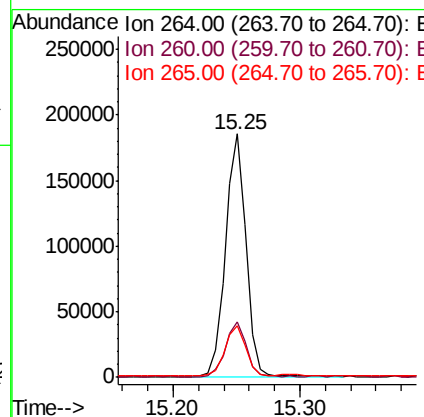
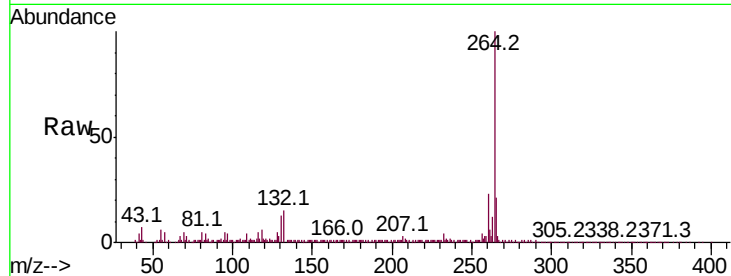
#86  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.25 min Scan# 2238  
Delta R.T. 0.01 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

Instrument :  
BNA\_F  
ClientSampleId :  
EO-01-092718-C

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 264   | Resp: | 206876 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 22.9  | 19.2  | 28.8   |
| 265       | 21.3  | 17.5  | 26.3   |

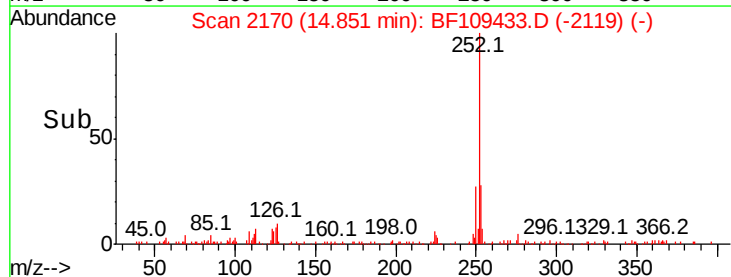
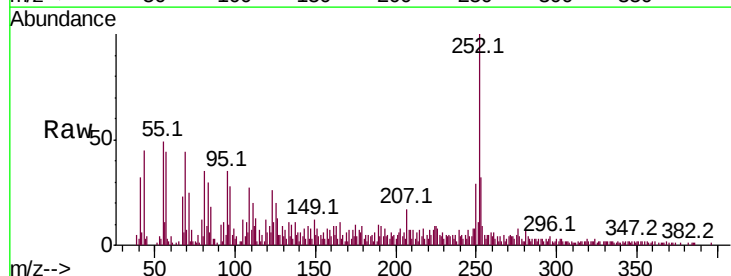
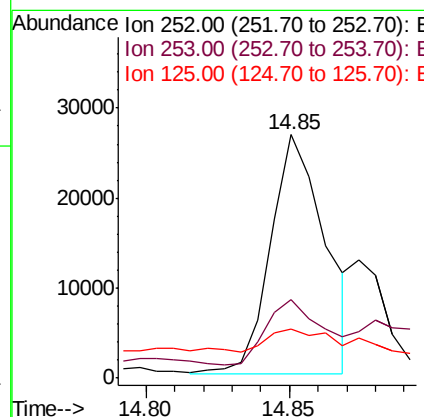
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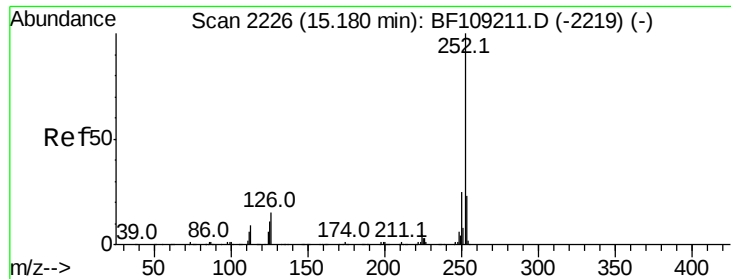
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#87  
Benzo(b)fluoranthene  
Concen: 3.070 ng m  
RT: 14.85 min Scan# 2170  
Delta R.T. 0.00 min  
Lab File: BF109433.D  
Acq: 28 Sep 2018 16:46

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 34901 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 32.3  | 17.0  | 25.6# |
| 125       | 20.2  | 9.0   | 13.6# |





#89  
 Benzo(a)pyrene  
 Concen: 2.246 ng  
 RT: 15.19 min Scan# 2228  
 Delta R.T. 0.01 min  
 Lab File: BF109433.D  
 Acq: 28 Sep 2018 16:46

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EO-01-092718-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 28.7  | 17.1  | 25.7# |
| 125     | 23.3  | 9.8   | 14.6# |

Manual Integrations  
 APPROVED

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