

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF012219\  
 Data File : BF112190.D  
 Acq On : 22 Jan 2019 13:47  
 Operator : JU/SJ  
 Sample : K1013-03 5X  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PL-01-011819-B

Manual Integrations  
 APPROVED

Sohil  
 1/23/2019 10:38:07 AM

Quant Time: Jan 22 15:22:10 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF011619.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jan 19 01:02:12 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.85  | 152  | 264667   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.13  | 136  | 1051373  | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.89  | 164  | 501338   | 20.00  | ng    | -0.01    |
| 64) Phenanthrene-d10        | 11.37 | 188  | 806529   | 20.00  | ng    | -0.01    |
| 76) Chrysene-d12            | 14.02 | 240  | 593719   | 20.00  | ng    | -0.01    |
| 87) Perylene-d12            | 15.49 | 264  | 555372   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.48  | 112  | 311826   | 21.38  | ng    | -0.01    |
| 7) Phenol-d6                | 6.49  | 99   | 399513   | 21.90  | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.40  | 82   | 241009   | 15.84  | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol    | 10.67 | 330  | 111543   | 20.62  | ng    | -0.02    |
| 45) 2-Fluorobiphenyl        | 9.20  | 172  | 542222   | 15.86  | ng    | -0.01    |
| 79) Terphenyl-d14           | 12.96 | 244  | 413666   | 14.82  | ng    | -0.01    |
| Target Compounds            |       |      |          |        |       |          |
| 58) Fluorene                | 10.43 | 166  | 67564    | 2.041  | ng    | 99       |
| 71) Phenanthrene            | 11.40 | 178  | 514773   | 12.683 | ng    | 98       |
| 72) Anthracene              | 11.45 | 178  | 162073   | 3.942  | ng    | 98       |
| 75) Fluoranthene            | 12.59 | 202  | 818924   | 19.109 | ng    | 98       |
| 78) Pyrene                  | 12.82 | 202  | 745540   | 19.033 | ng    | 98       |
| 81) Benzo(a)anthracene      | 14.00 | 228  | 392554   | 11.531 | ng    | 99       |
| 83) Chrysene                | 14.04 | 228  | 357484   | 11.098 | ng    | 95       |
| 86) Indeno(1,2,3-cd)pyrene  | 16.97 | 276  | 151149   | 5.086  | ng    | # 93     |
| 88) Benzo(b)fluoranthene    | 15.06 | 252  | 459622m  | 14.580 | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.09 | 252  | 177295m  | 5.811  | ng    |          |
| 90) Benzo(a)pyrene          | 15.43 | 252  | 328329   | 11.357 | ng    | # 97     |
| 92) Benzo(a,h,i)perylene    | 17.41 | 276  | 137861   | 5.450  | ng    | 98       |

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

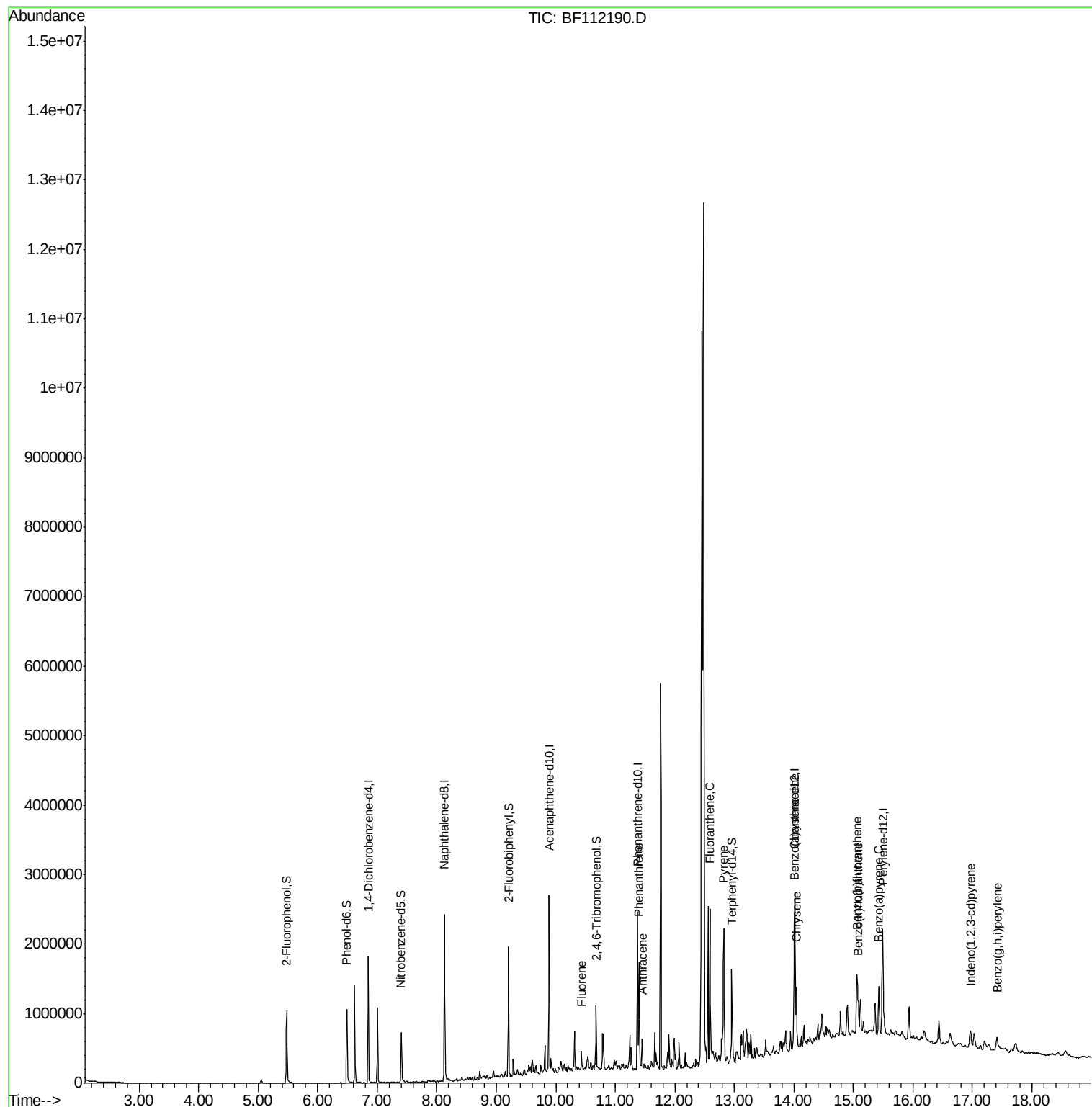
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF012219\  
Data File : BF112190.D  
Acq On : 22 Jan 2019 13:47  
Operator : JU/SJ  
Sample : K1013-03 5X  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

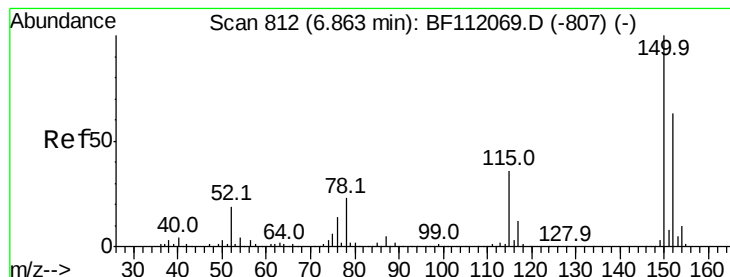
Instrument :  
BNA\_F  
ClientSampleId :  
PL-01-011819-B

Manual Integrations  
APPROVED

Sohil  
1/23/2019 10:38:07 AM

Quant Time: Jan 22 15:22:10 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF011619.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jan 19 01:02:12 2019  
Response via : Initial Calibration





#1

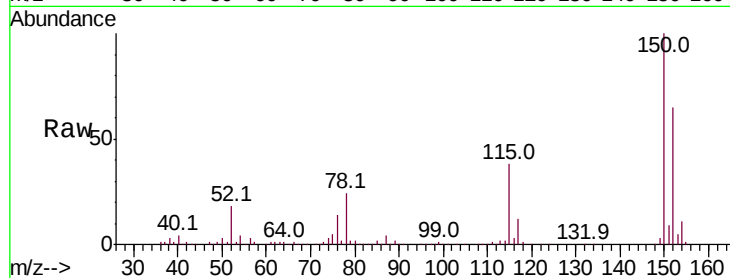
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.85 min Scan# 810  
Delta R.T. -0.01 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

Instrument :  
BNA\_F  
ClientSampleId :  
PL-01-011819-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 154.0 | 127.4 | 191.0 |
| 115     | 58.9  | 45.5  | 68.3  |

Manual Integrations  
APPROVED

Sohil  
1/23/2019 10:38:07 AM



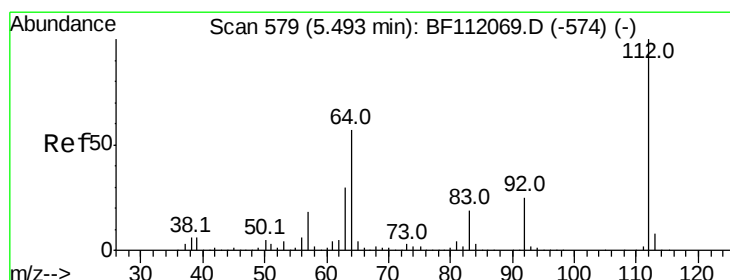
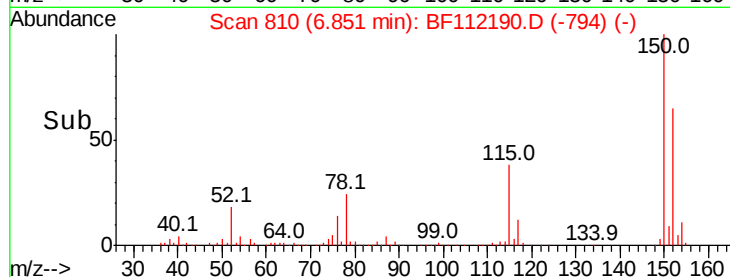
Abundance

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

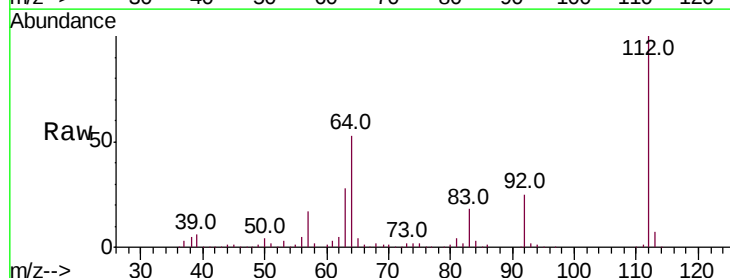
Time-->



#5

2-Fluorophenol  
Concen: 21.384 ng  
RT: 5.48 min Scan# 577  
Delta R.T. -0.01 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 52.6  | 45.7  | 68.5  |
| 63      | 28.1  | 23.6  | 35.4  |



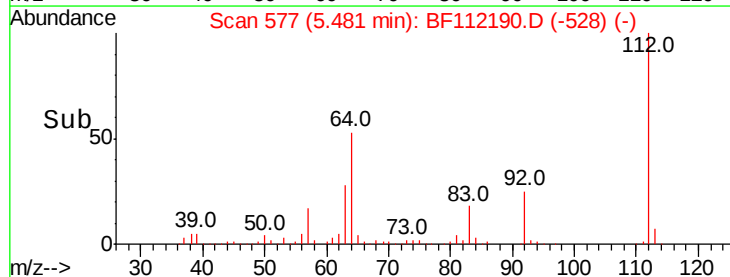
Abundance

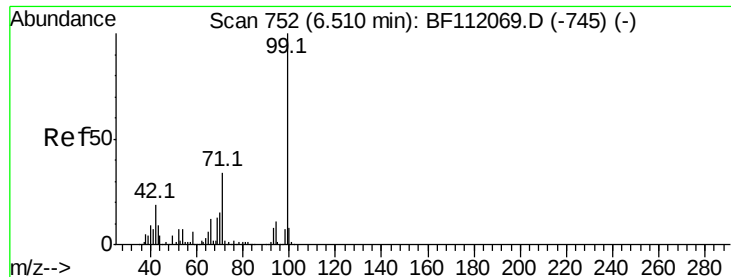
Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1

Time-->





#7

Phenol-d6

Concen: 21.898 ng

RT: 6.49 min Scan# 749

Delta R.T. -0.01 min

Lab File: BF112190.D

Acq: 22 Jan 2019 13:47

Instrument :

BNA\_F

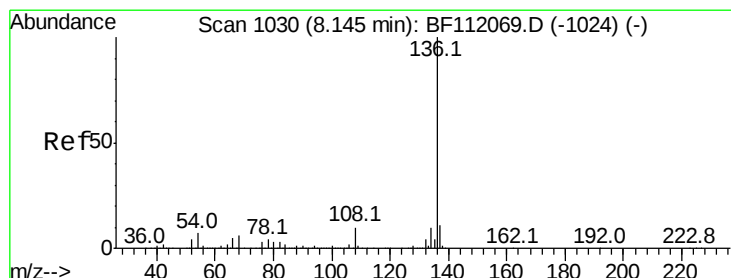
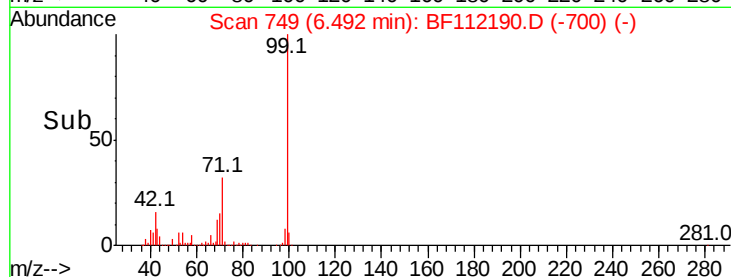
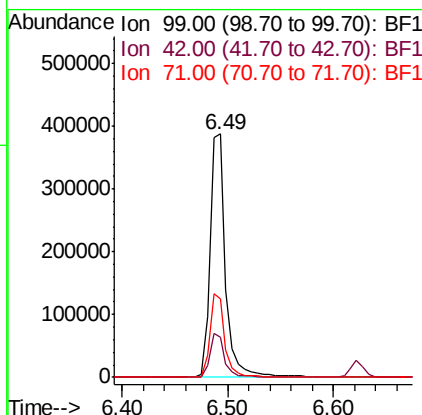
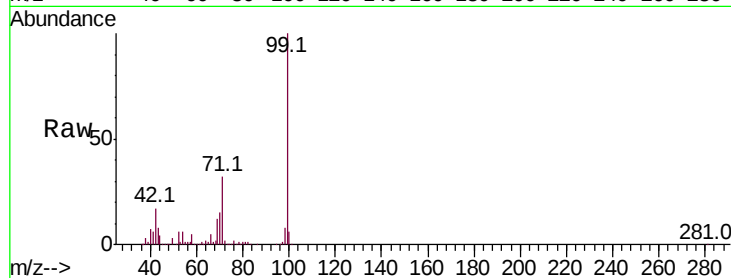
ClientSampleId :

PL-01-011819-B

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 99      | 100  |       | 399513 |       |       |
| 42      | 16.6 | 15.1  | 22.7   |       |       |
| 71      | 32.1 | 26.9  | 40.3   |       |       |

Manual Integrations  
APPROVED

Sohil  
1/23/2019 10:38:07 AM



#21

Naphthalene-d8

Concen: 20.000 ng

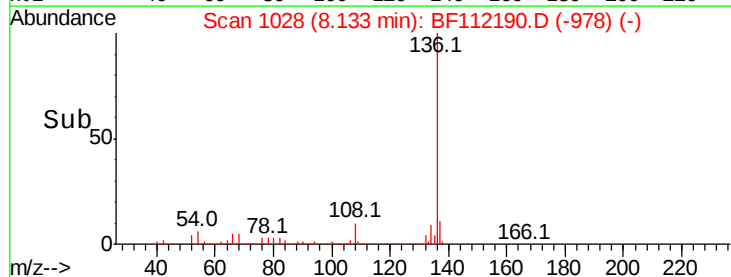
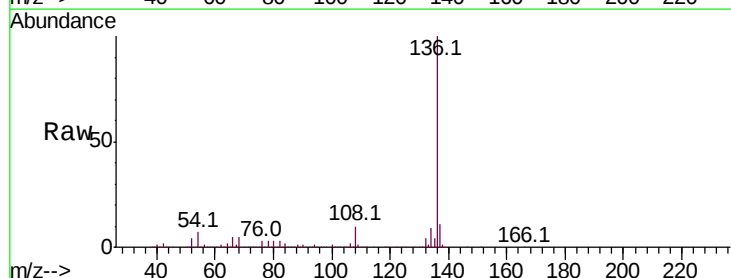
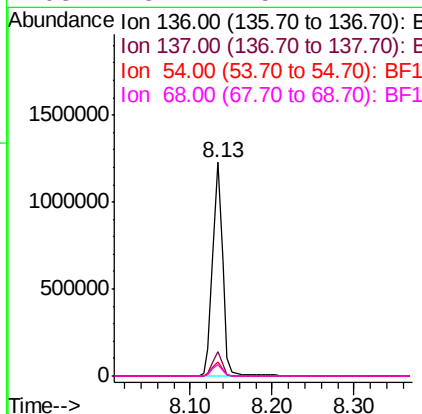
RT: 8.13 min Scan# 1028

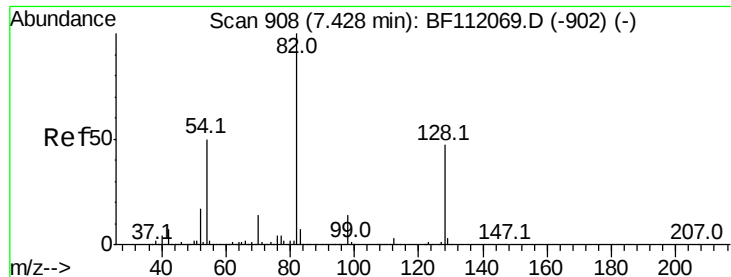
Delta R.T. -0.01 min

Lab File: BF112190.D

Acq: 22 Jan 2019 13:47

| Tgt Ion | Ion  | Ratio | Resp    | Lower | Upper |
|---------|------|-------|---------|-------|-------|
| 136     | 100  |       | 1051373 |       |       |
| 137     | 11.2 | 9.1   | 13.7    |       |       |
| 54      | 6.5  | 5.9   | 8.9     |       |       |
| 68      | 5.4  | 5.1   | 7.7     |       |       |





#23

Nitrobenzene-d5

Concen: 15.837 ng

RT: 7.40 min Scan# 904

Delta R.T. -0.02 min

Lab File: BF112190.D

Acq: 22 Jan 2019 13:47

Instrument :

BNA\_F

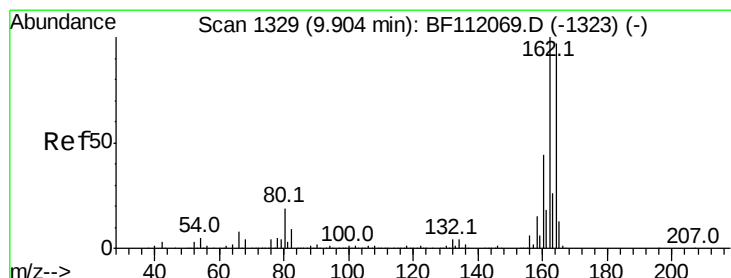
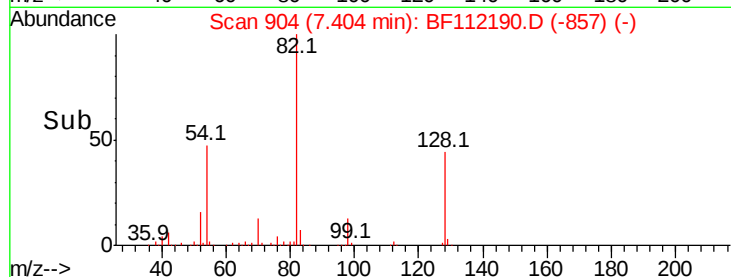
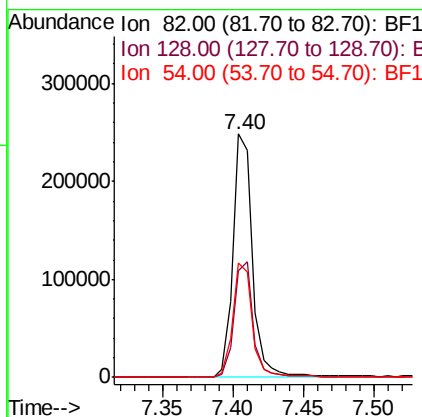
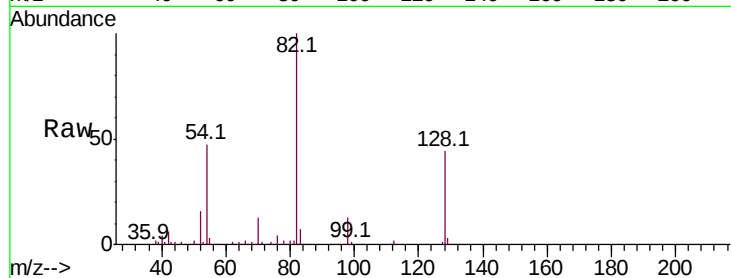
ClientSampleId :

PL-01-011819-B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 82    | Resp: | 241009 |
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 43.9  | 37.8  | 56.8   |
| 54        | 47.2  | 39.7  | 59.5   |

Manual Integrations  
APPROVED

Sohil  
1/23/2019 10:38:07 AM



#39

Acenaphthene-d10

Concen: 20.000 ng

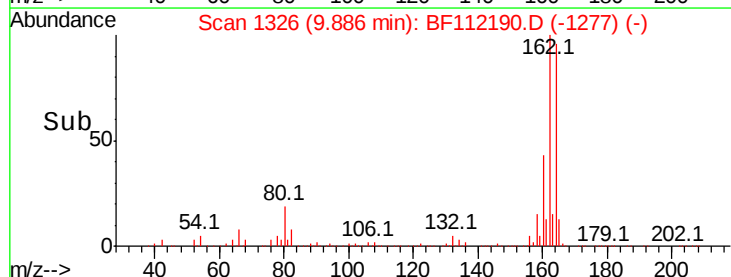
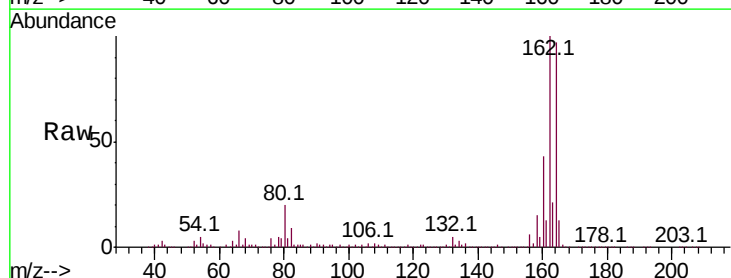
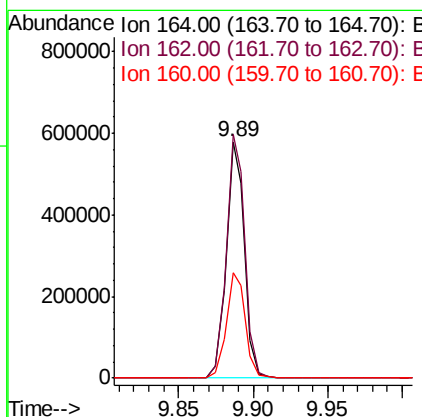
RT: 9.89 min Scan# 1326

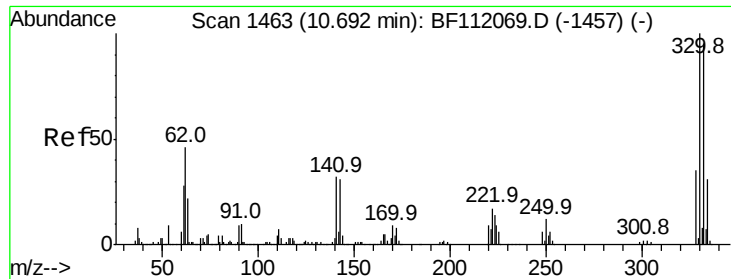
Delta R.T. -0.01 min

Lab File: BF112190.D

Acq: 22 Jan 2019 13:47

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 164   | Resp: | 501338 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 102.9 | 82.2  | 123.4  |
| 160       | 44.4  | 36.2  | 54.4   |





#42

2,4,6-Tribromophenol

Concen: 20.624 ng

RT: 10.67 min Scan# 1460

Delta R.T. -0.02 min

Lab File: BF112190.D

Acq: 22 Jan 2019 13:47

Instrument :

BNA\_F

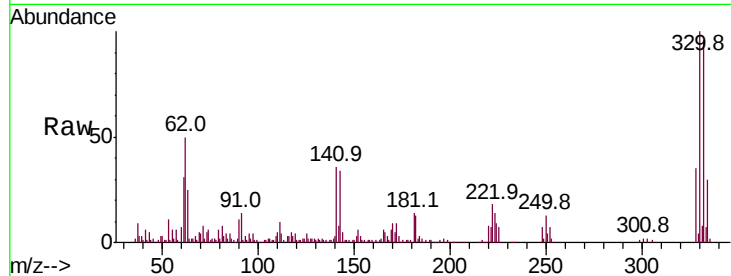
ClientSampleId :

PL-01-011819-B

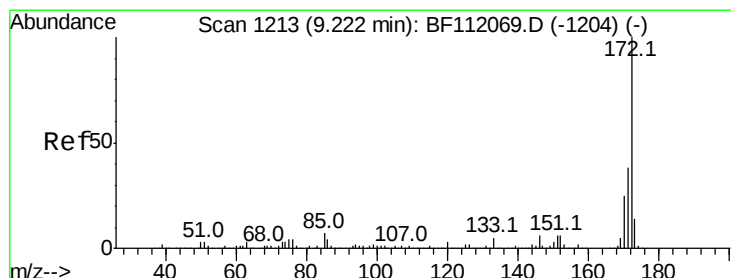
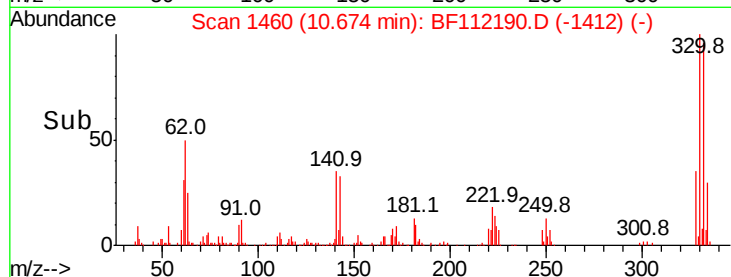
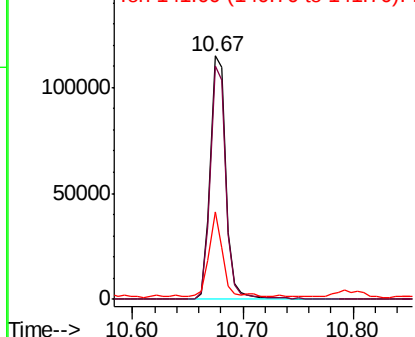
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 330   | Resp: | 111543 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 94.9  | 76.6  | 114.8  |
| 141       | 30.4  | 24.3  | 36.5   |

Manual Integrations  
APPROVED

Sohil  
1/23/2019 10:38:07 AM



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: 15.857 ng

RT: 9.20 min Scan# 1210

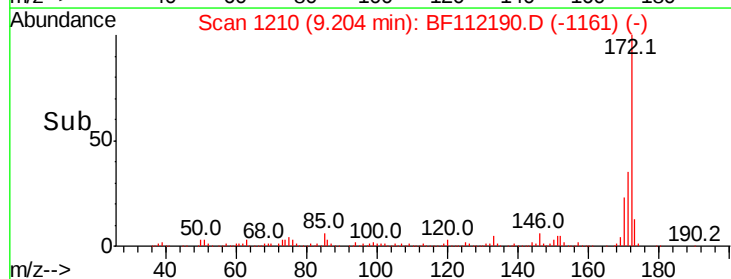
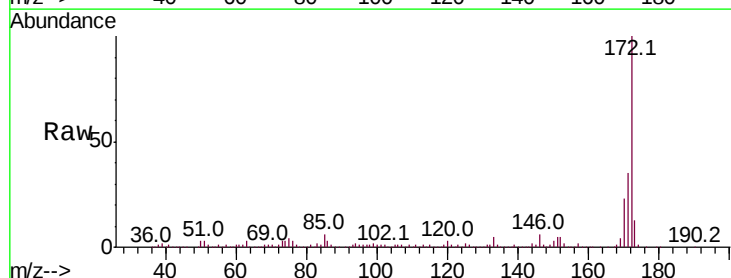
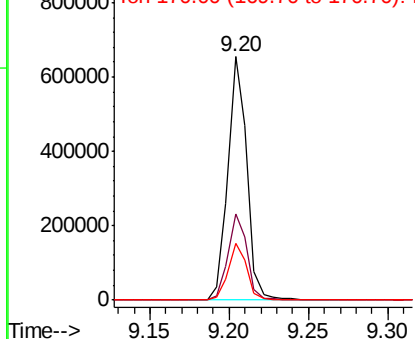
Delta R.T. -0.01 min

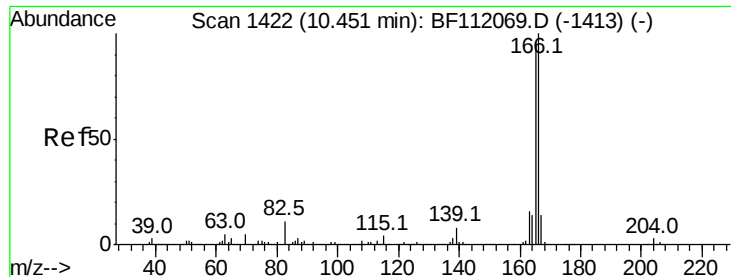
Lab File: BF112190.D

Acq: 22 Jan 2019 13:47

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 172   | Resp: | 542222 |
| Ion Ratio | Lower | Upper |        |
| 172       | 100   |       |        |
| 171       | 35.3  | 30.5  | 45.7   |
| 170       | 23.4  | 20.2  | 30.4   |

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





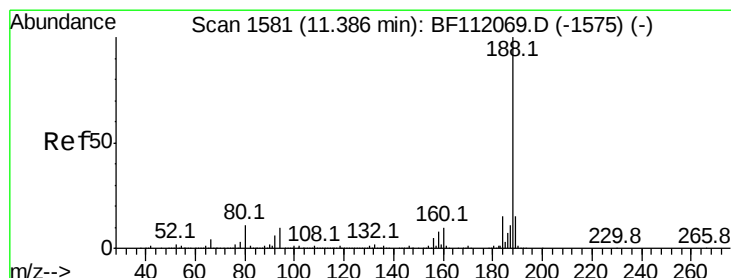
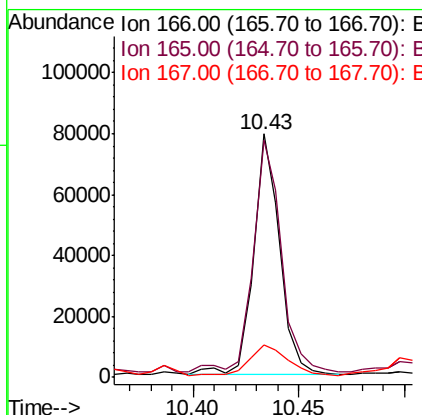
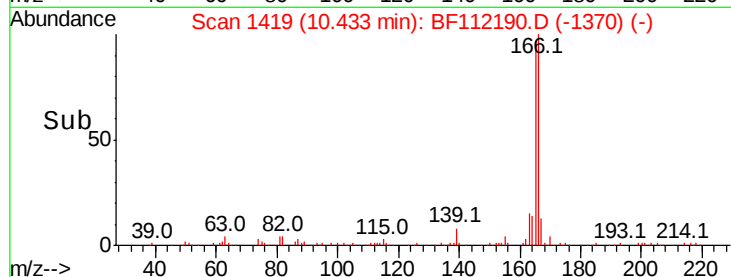
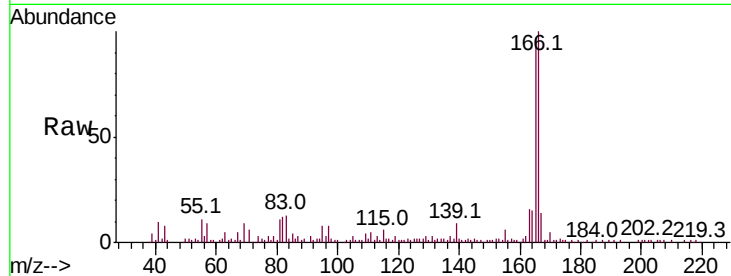
#58  
 Fluorene  
 Concen: 2.041 ng  
 RT: 10.43 min Scan# 1419  
 Delta R.T. -0.01 min  
 Lab File: BF112190.D  
 Acq: 22 Jan 2019 13:47

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PL-01-011819-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 97.4  | 77.1  | 115.7 |
| 167     | 13.5  | 11.3  | 16.9  |

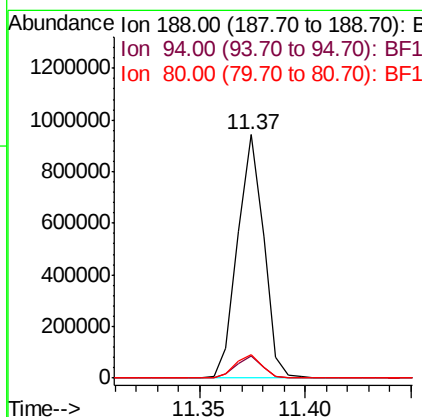
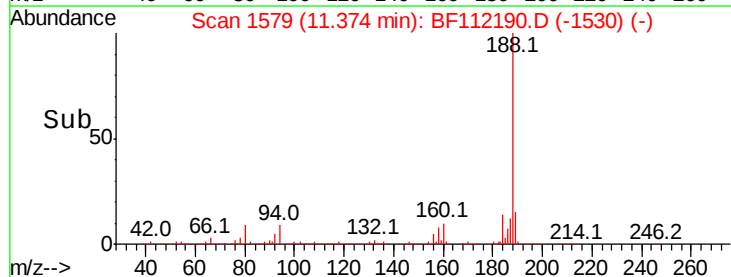
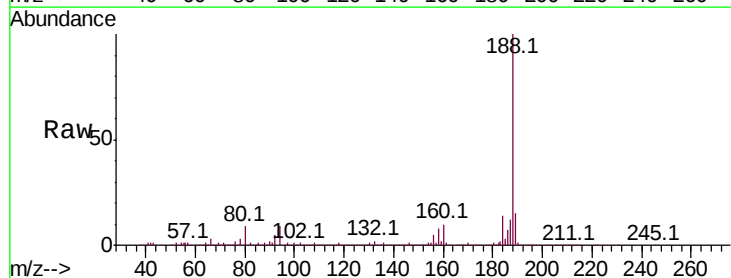
Manual Integrations  
 APPROVED

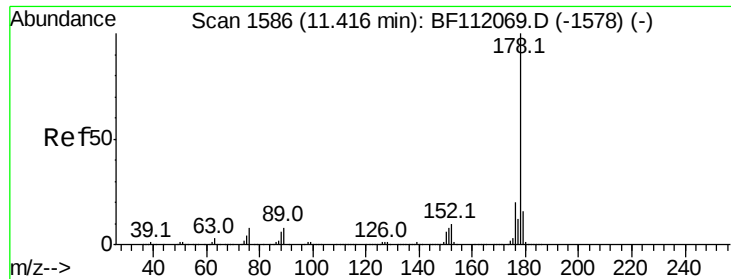
Sohil  
 1/23/2019 10:38:07 AM



#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.37 min Scan# 1579  
 Delta R.T. -0.01 min  
 Lab File: BF112190.D  
 Acq: 22 Jan 2019 13:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 9.0   | 8.2   | 12.2  |
| 80      | 9.4   | 8.9   | 13.3  |





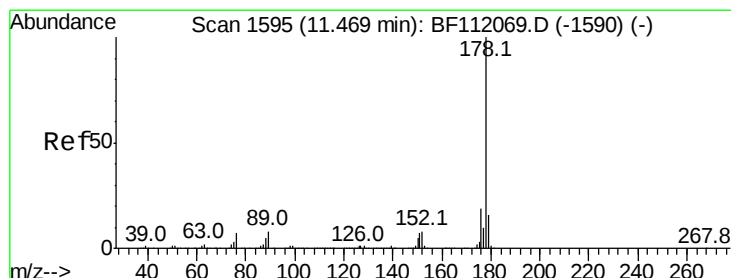
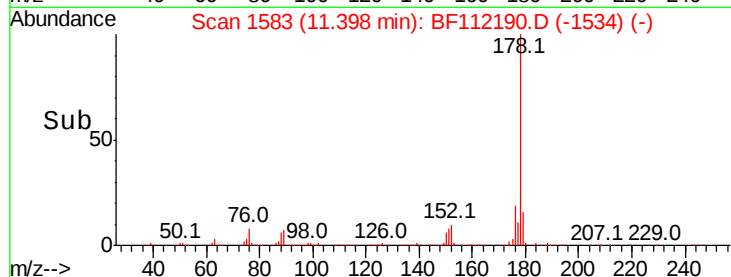
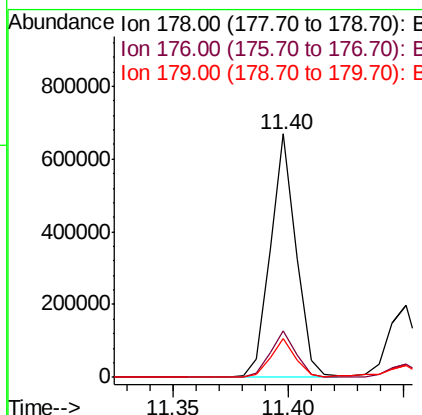
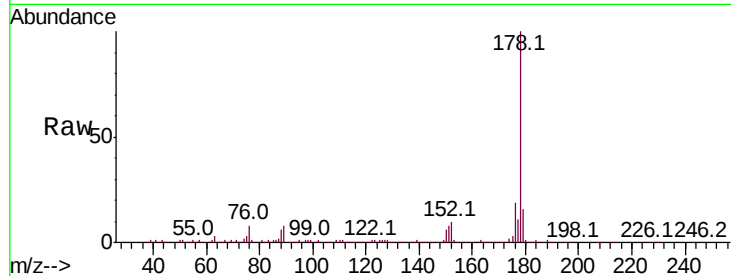
#71  
Phenanthrene  
Concen: 12.683 ng  
RT: 11.40 min Scan# 1583  
Delta R.T. -0.01 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

Instrument :  
BNA\_F  
ClientSampleId :  
PL-01-011819-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.2  | 16.3  | 24.5  |
| 179     | 15.9  | 13.0  | 19.4  |

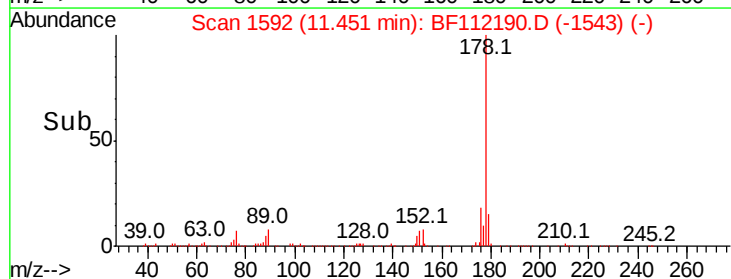
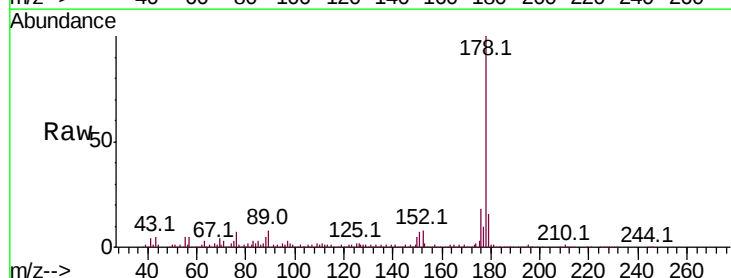
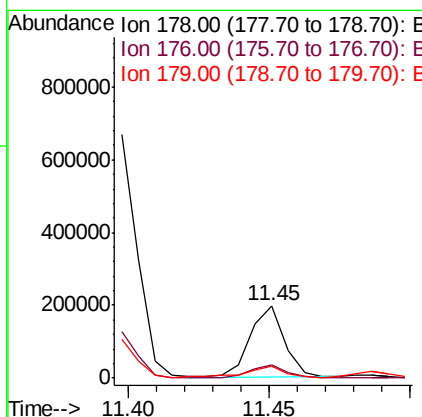
Manual Integrations  
APPROVED

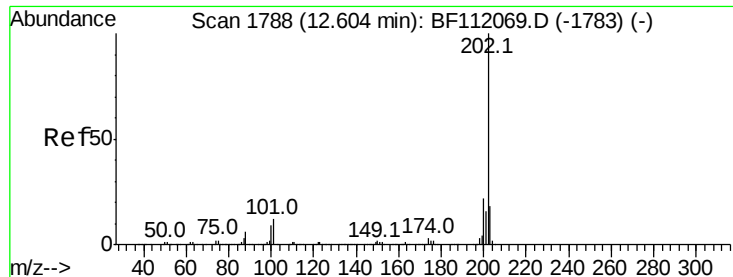
Sohil  
1/23/2019 10:38:07 AM



#72  
Anthracene  
Concen: 3.942 ng  
RT: 11.45 min Scan# 1592  
Delta R.T. -0.01 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 17.8  | 15.5  | 23.3  |
| 179     | 15.7  | 12.8  | 19.2  |





#75

Fluoranthene

Concen: 19.109 ng

RT: 12.59 min Scan# 1786

Delta R.T. -0.01 min

Lab File: BF112190.D

Acq: 22 Jan 2019 13:47

Instrument :

BNA\_F

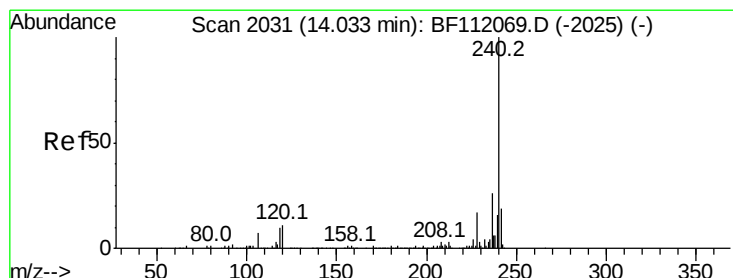
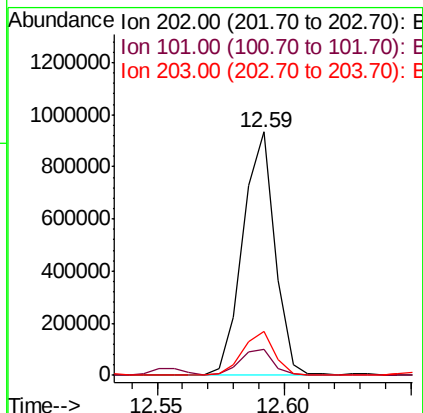
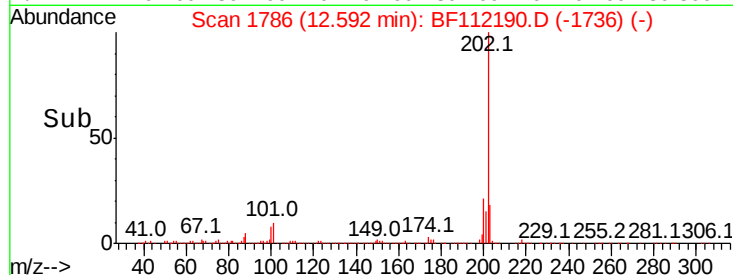
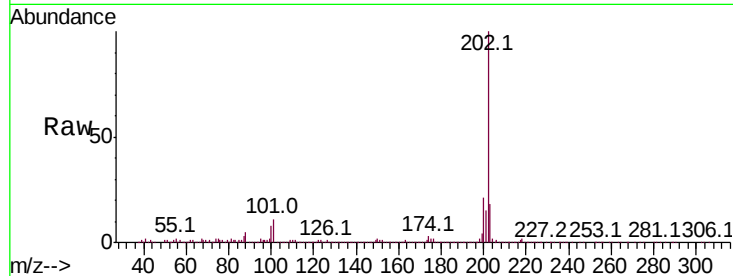
ClientSampleId :

PL-01-011819-B

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 10.5  | 0.0        | 31.8  |
| 203     | 18.0  | 0.0        | 38.4  |

Manual Integrations  
APPROVED

Sohil  
1/23/2019 10:38:07 AM



#76

Chrysene-d12

Concen: 20.000 ng

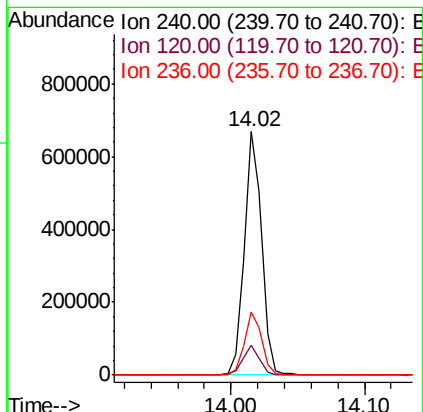
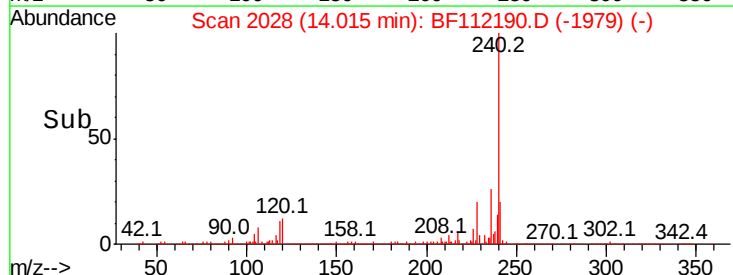
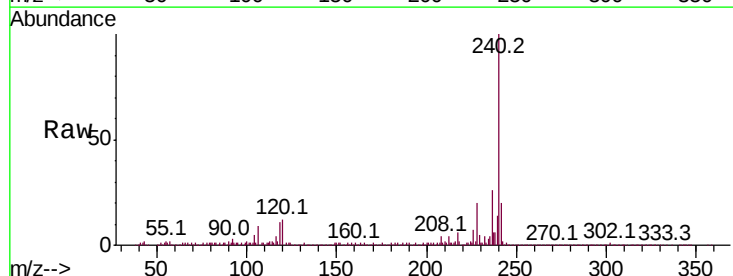
RT: 14.02 min Scan# 2028

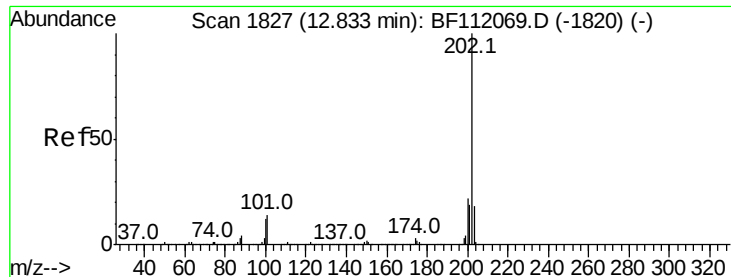
Delta R.T. -0.01 min

Lab File: BF112190.D

Acq: 22 Jan 2019 13:47

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 240     | 100   |            |       |
| 120     | 12.3  | 9.0        | 13.6  |
| 236     | 25.7  | 20.7       | 31.1  |





#78

Pvrene

Concen: 19.033 ng

RT: 12.82 min Scan# 1825

Delta R.T. -0.01 min

Lab File: BF112190.D

Acq: 22 Jan 2019 13:47

Instrument :

BNA\_F

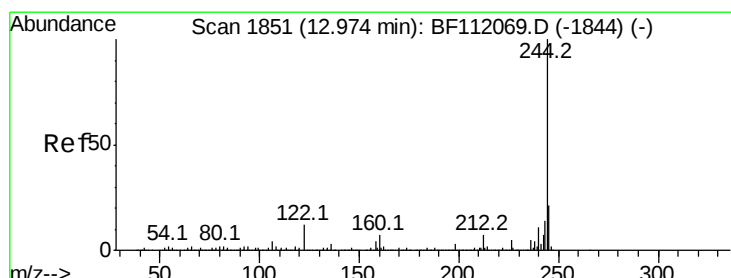
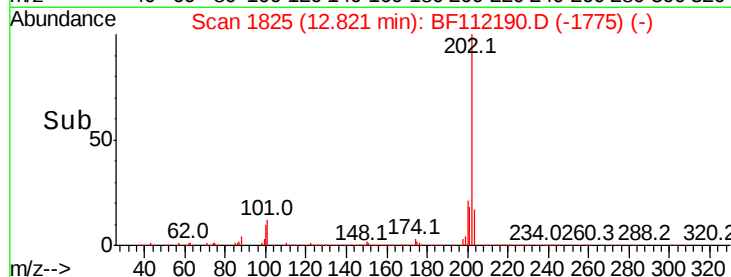
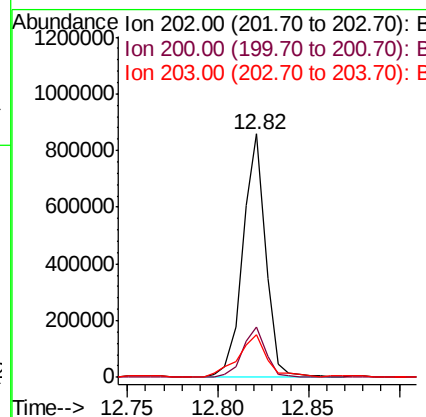
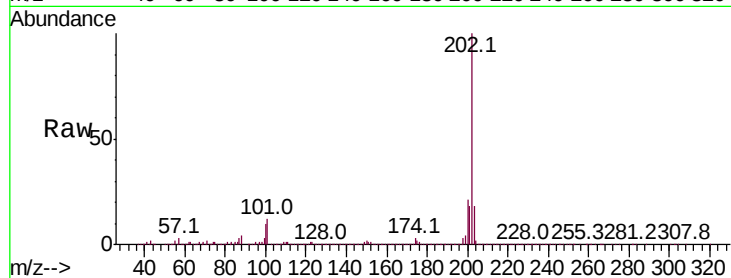
ClientSampleId :

PL-01-011819-B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 745540 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 20.9  | 17.7  | 26.5   |
| 203       | 17.7  | 14.6  | 22.0   |

Manual Integrations  
APPROVED

Sohil  
1/23/2019 10:38:07 AM



#79

Terphenyl-d14

Concen: 14.822 ng

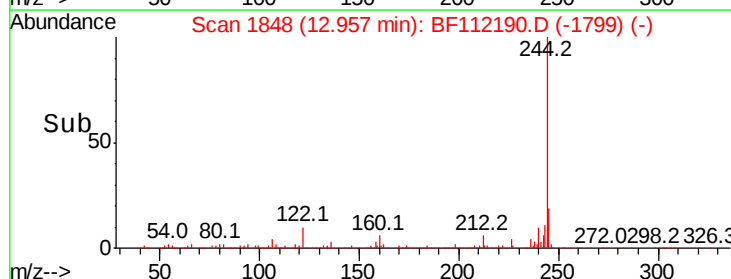
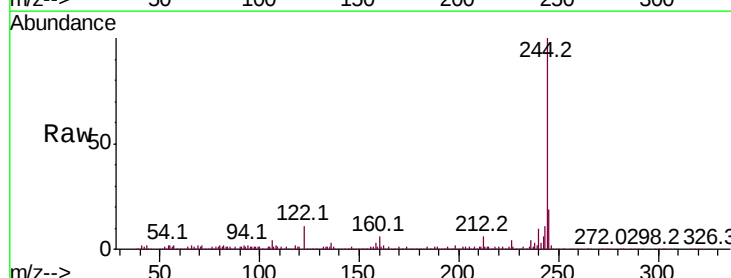
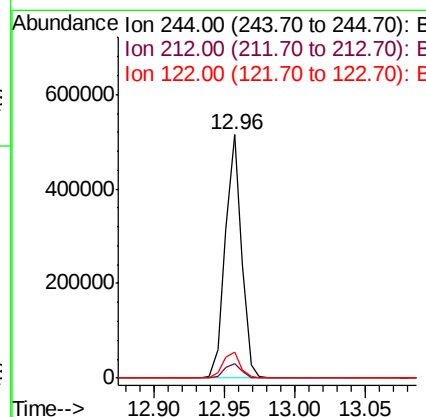
RT: 12.96 min Scan# 1848

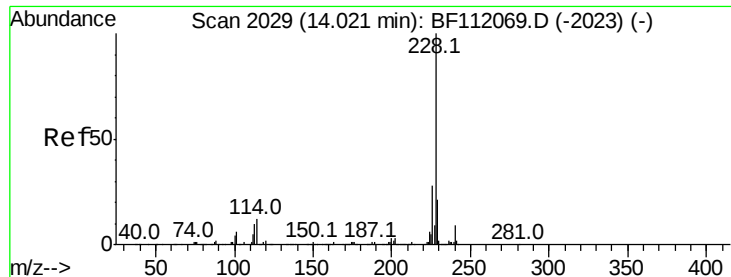
Delta R.T. -0.01 min

Lab File: BF112190.D

Acq: 22 Jan 2019 13:47

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 244   | Resp: | 413666 |
| Ion Ratio | Lower | Upper |        |
| 244       | 100   |       |        |
| 212       | 6.2   | 5.9   | 8.9    |
| 122       | 10.5  | 9.8   | 14.6   |





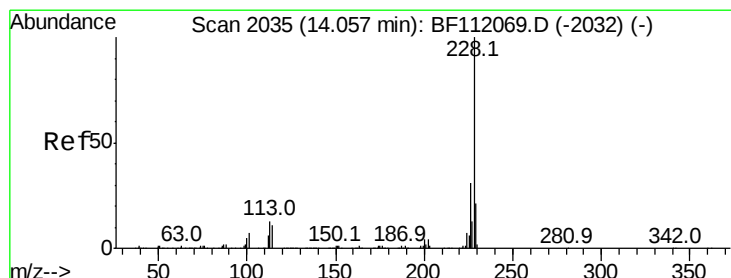
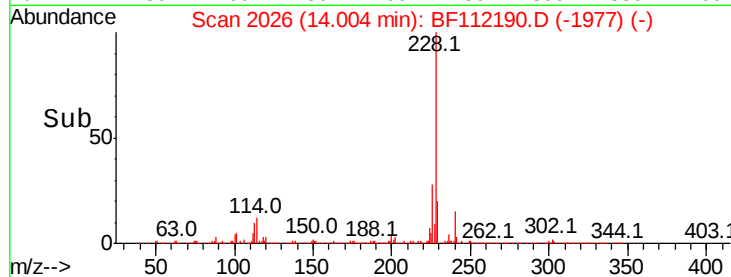
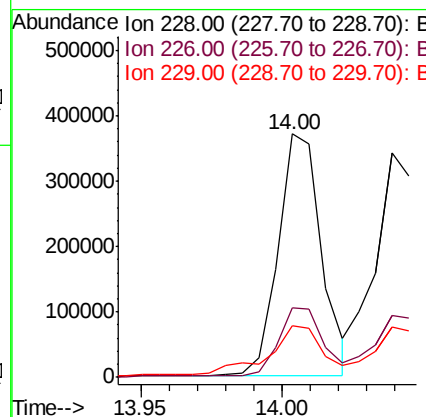
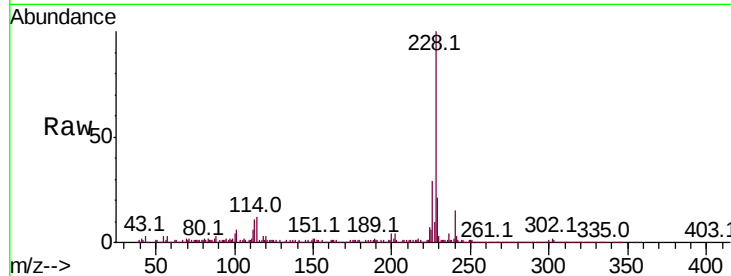
#81  
Benzo(a)anthracene  
Concen: 11.531 ng  
RT: 14.00 min Scan# 2026  
Delta R.T. -0.01 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

Instrument :  
BNA\_F  
ClientSampleId :  
PL-01-011819-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.6  | 22.6  | 34.0  |
| 229     | 21.4  | 16.5  | 24.7  |

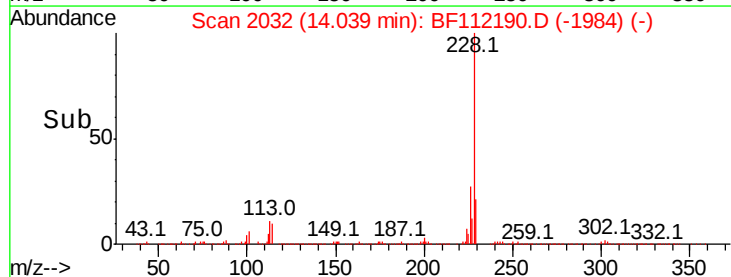
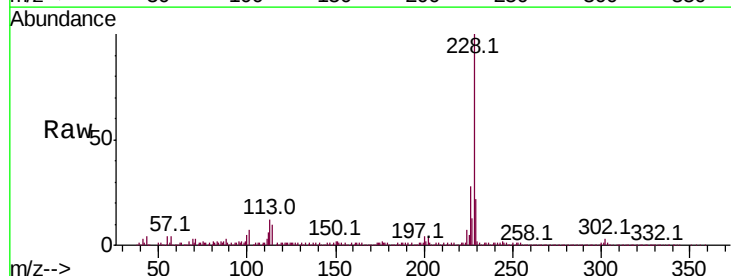
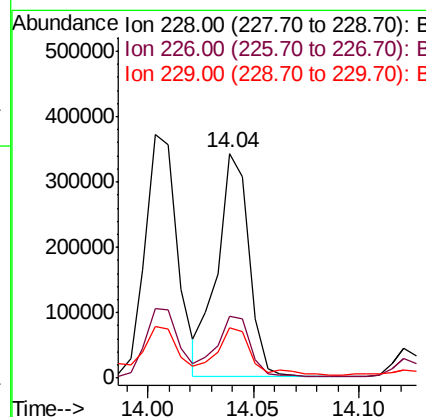
Manual Integrations  
APPROVED

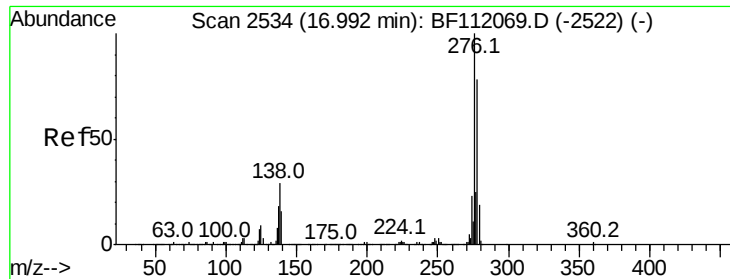
Sohil  
1/23/2019 10:38:07 AM



#83  
Chrysene  
Concen: 11.098 ng  
RT: 14.04 min Scan# 2032  
Delta R.T. -0.02 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.7  | 25.0  | 37.6  |
| 229     | 22.2  | 16.6  | 24.8  |





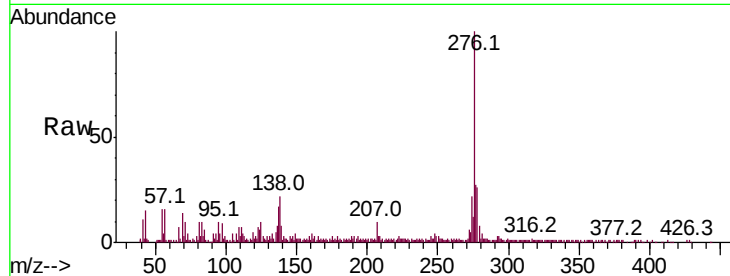
#86  
Indeno(1,2,3-cd)pyrene  
Concen: 5.086 ng  
RT: 16.97 min Scan# 2530  
Delta R.T. -0.02 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

Instrument :  
BNA\_F  
ClientSampleId :  
PL-01-011819-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 22.5  | 22.6  | 34.0# |
| 277     | 26.4  | 20.3  | 30.5  |

Manual Integrations  
APPROVED

Sohil  
1/23/2019 10:38:07 AM

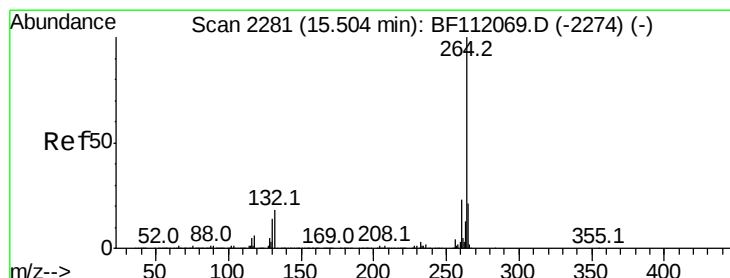
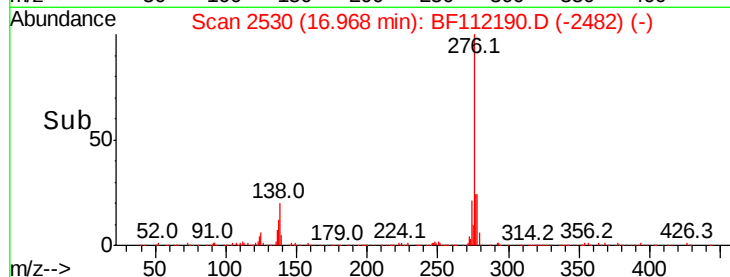
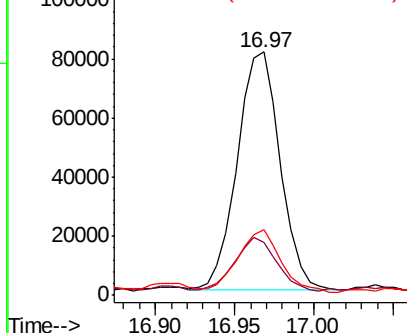


Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.49 min Scan# 2279  
Delta R.T. -0.01 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

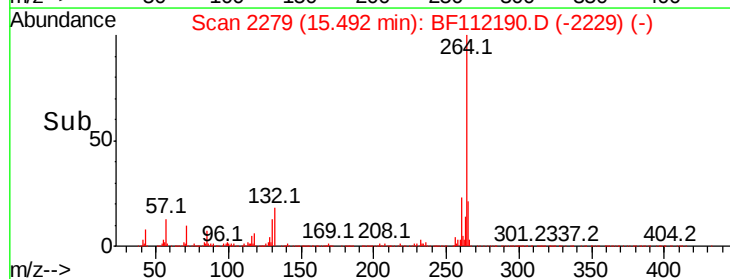
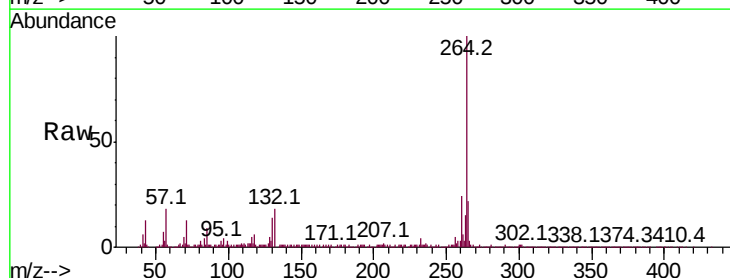
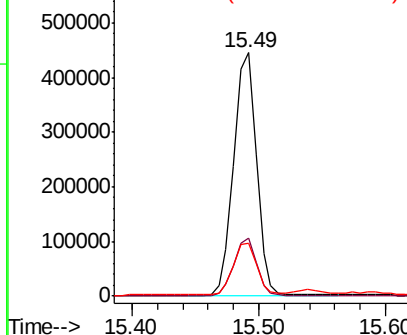
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.7  | 18.2  | 27.2  |
| 265     | 21.8  | 17.0  | 25.4  |

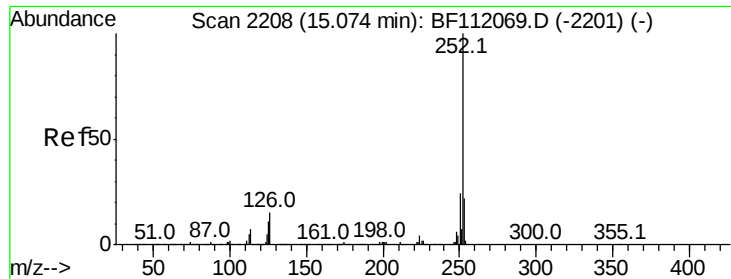
Abundance

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





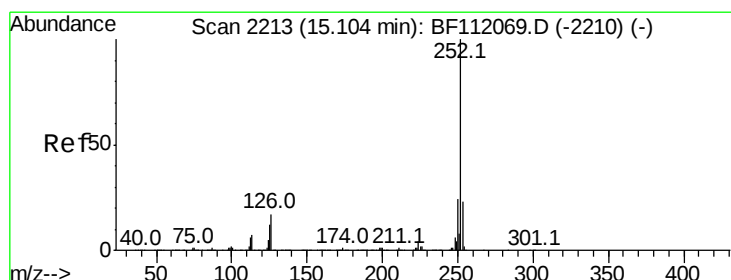
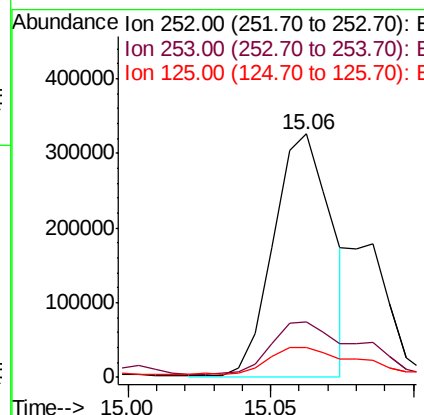
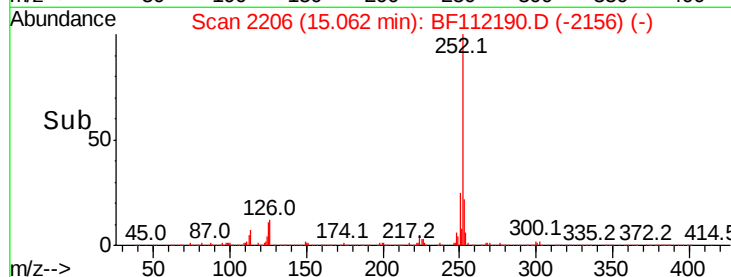
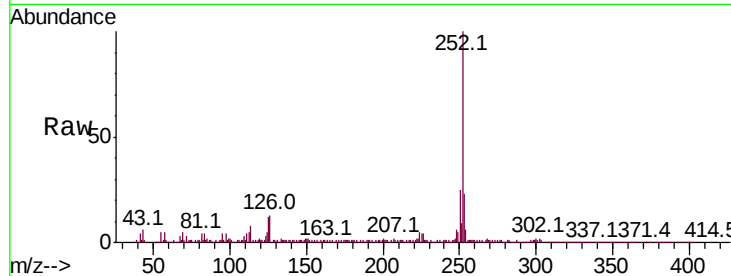
#88  
Benzo(b)fluoranthene  
Concen: 14.580 ng m  
RT: 15.06 min Scan# 2206  
Delta R.T. -0.01 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

Instrument :  
BNA\_F  
ClientSampleId :  
PL-01-011819-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.0  | 18.0  | 27.0  |
| 125     | 12.3  | 8.7   | 13.1  |

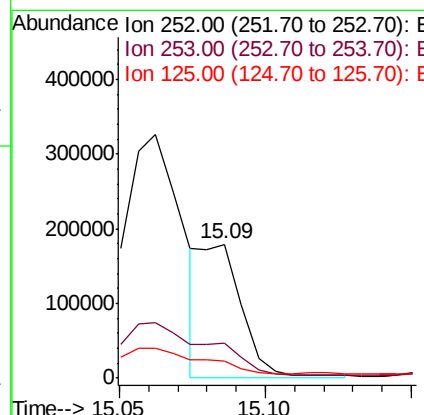
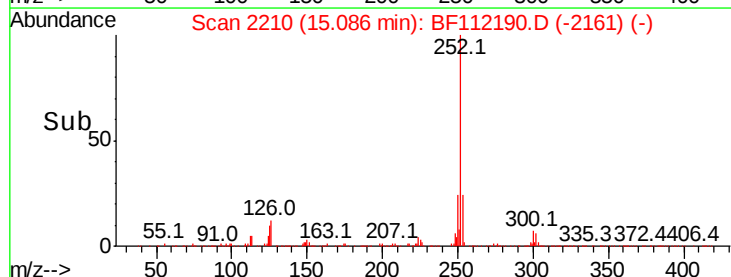
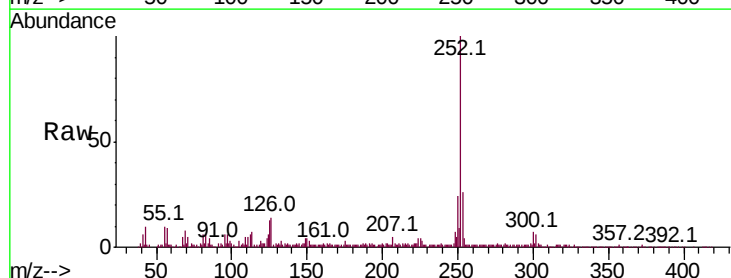
Manual Integrations  
APPROVED

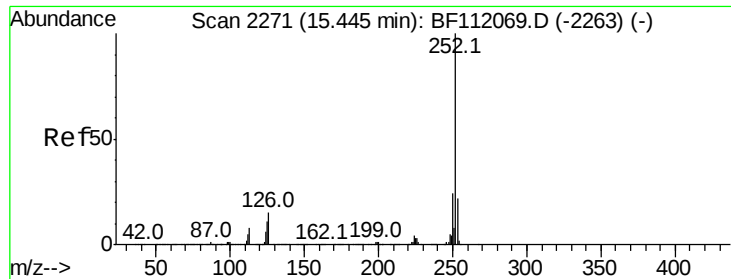
Sohil  
1/23/2019 10:38:07 AM



#89  
Benzo(k)fluoranthene  
Concen: 5.811 ng m  
RT: 15.09 min Scan# 2210  
Delta R.T. -0.01 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 26.2  | 18.0  | 27.0  |
| 125     | 12.5  | 9.1   | 13.7  |





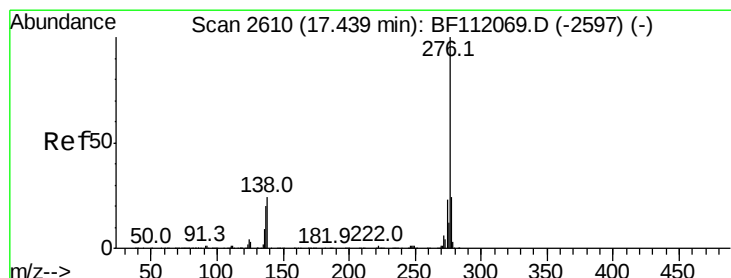
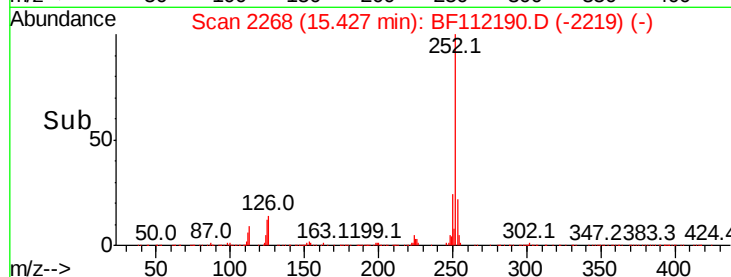
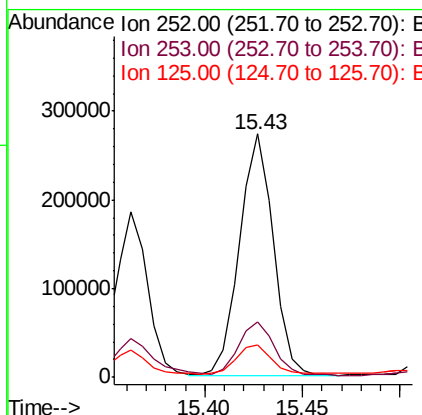
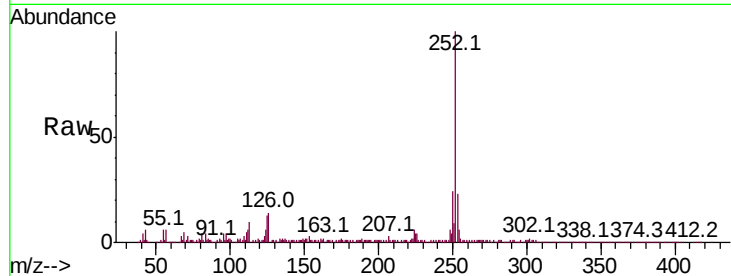
#90  
Benzo(a)pyrene  
Concen: 11.357 ng  
RT: 15.43 min Scan# 2268  
Delta R.T. -0.01 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

Instrument :  
BNA\_F  
ClientSampleId :  
PL-01-011819-B

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 22.8  | 17.5       | 26.3  |
| 125     | 13.5  | 9.0        | 13.4  |

Manual Integrations  
APPROVED

Sohil  
1/23/2019 10:38:07 AM



#92  
Benzo(g,h,i)perylene  
Concen: 5.450 ng  
RT: 17.41 min Scan# 2605  
Delta R.T. -0.02 min  
Lab File: BF112190.D  
Acq: 22 Jan 2019 13:47

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 276     | 100   |            |       |
| 277     | 25.0  | 19.4       | 29.0  |
| 138     | 22.4  | 19.1       | 28.7  |

