

Data Path : Z:\HPCHEM1\BNA F\DATA\BF120617\  
 Data File : BF101181.D  
 Acq On : 6 Dec 2017 21:19  
 Operator : SJ/JU  
 Sample : I6640-01 2X  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-11(0-2)-20171129

Manual Integrations  
 APPROVED

Sohil  
 12/7/2017 11:36:06 AM

Quant Time: Dec 07 01:08:28 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF113017.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Dec 04 13:07:49 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.85  | 152  | 43479    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.13  | 136  | 162010   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10        | 9.89  | 164  | 67553    | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.37 | 188  | 110903   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12            | 14.02 | 240  | 102199   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12            | 15.50 | 264  | 95651    | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.46  | 112  | 136235   | 51.78  | ng    | 0.00     |
| 7) Phenol-d6                | 6.47  | 99   | 156871   | 49.11  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.41  | 82   | 94100    | 34.65  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.67 | 330  | 31787    | 39.17  | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.20  | 172  | 204704   | 41.46  | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.96 | 244  | 147030   | 31.47  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 70) Phenanthrene            | 11.40 | 178  | 85452    | 13.992 | ng    | 98       |
| 71) Anthracene              | 11.45 | 178  | 17911    | 2.898  | ng    | 99       |
| 74) Fluoranthene            | 12.59 | 202  | 142396   | 21.034 | ng    | 94       |
| 77) Pyrene                  | 12.82 | 202  | 136711   | 19.386 | ng    | 97       |
| 80) Benzo(a)anthracene      | 14.01 | 228  | 77025    | 11.937 | ng    | 98       |
| 82) Chrysene                | 14.04 | 228  | 68268    | 11.392 | ng    | 98       |
| 85) Indeno(1,2,3-cd)pyrene  | 16.99 | 276  | 30825    | 5.786  | ng    | 90       |
| 87) Benzo(b)fluoranthene    | 15.07 | 252  | 88081m   | 15.374 | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.09 | 252  | 25859m   | 4.581  | ng    |          |
| 89) Benzo(a)pyrene          | 15.44 | 252  | 58147    | 11.164 | ng    | 96       |
| 91) Benzo(g,h,i)perylene    | 17.44 | 276  | 30854    | 7.130  | ng    | # 91     |

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

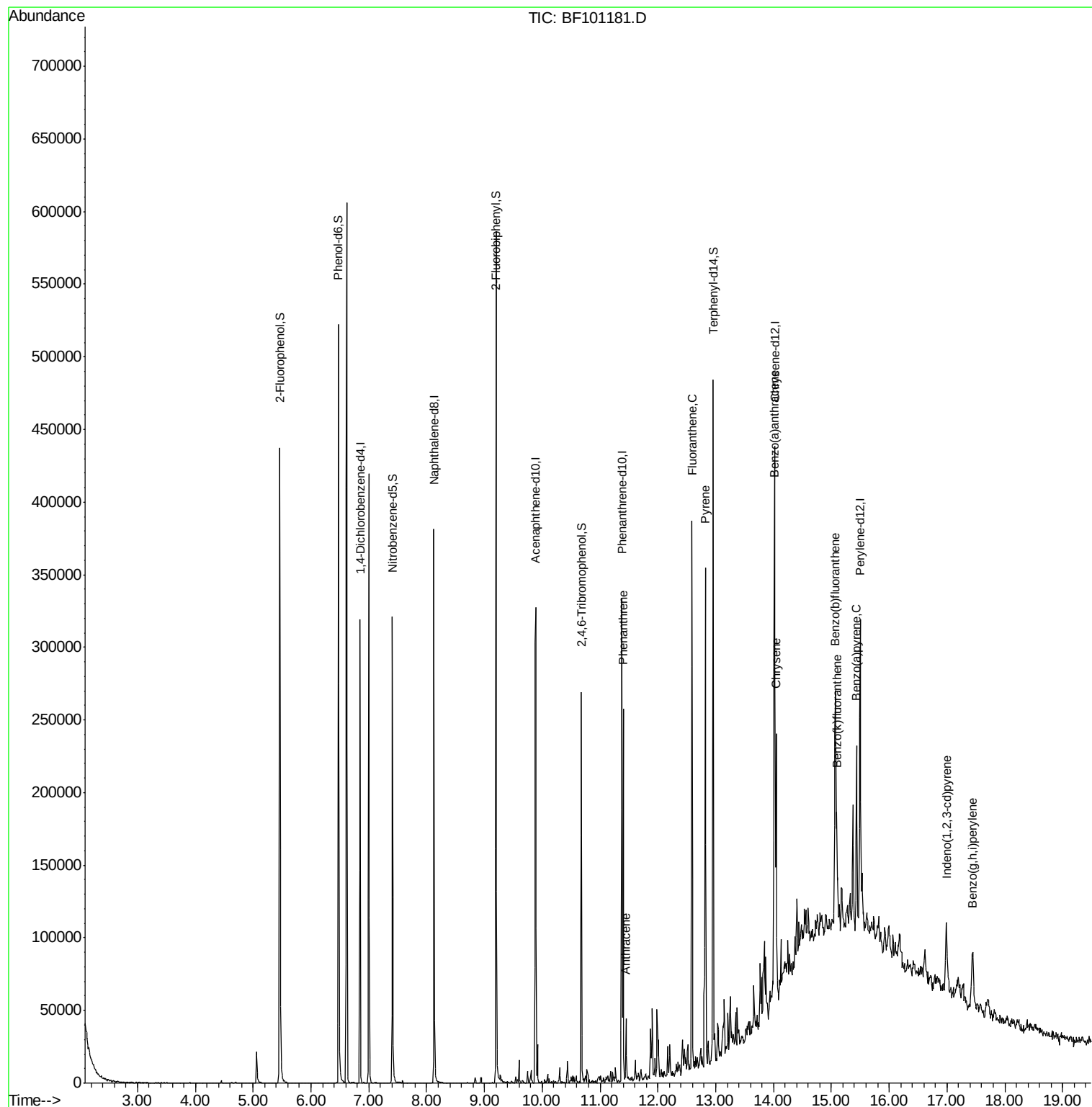
Data Path : Z:\HPCHEM1\BNA F\DATA\BF120617\  
Data File : BF101181.D  
Acq On : 6 Dec 2017 21:19  
Operator : SJ/JU  
Sample : I6640-01 2X  
Misc :  
ALS Vial : 23 Sample Multiplier: 1

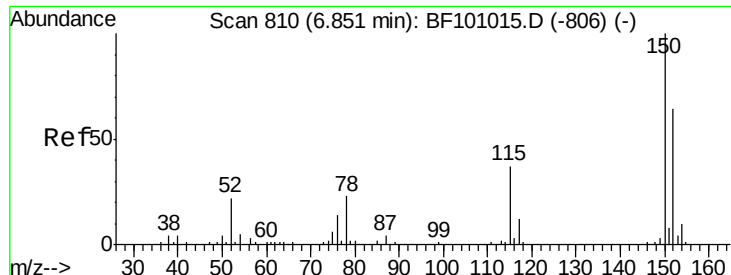
Instrument :  
BNA\_F  
ClientSampleId :  
SB-11(0-2)-20171129

Manual Integrations  
APPROVED

Sohil  
12/7/2017 11:36:06 AM

Quant Time: Dec 07 01:08:28 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF113017.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Dec 04 13:07:49 2017  
Response via : Initial Calibration





#1

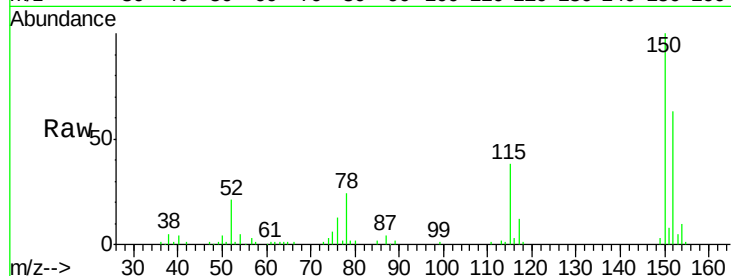
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.85 min Scan# 809  
Delta R.T. 0.00 min  
Lab File: BF101181.D  
Acq: 6 Dec 2017 21:19

Instrument :  
BNA\_F  
ClientSampleId :  
SB-11(0-2)-20171129

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 159.6 | 124.6 | 186.8 |
| 115     | 61.2  | 50.1  | 75.1  |

Manual Integrations  
APPROVED

Sohil  
12/7/2017 11:36:06 AM

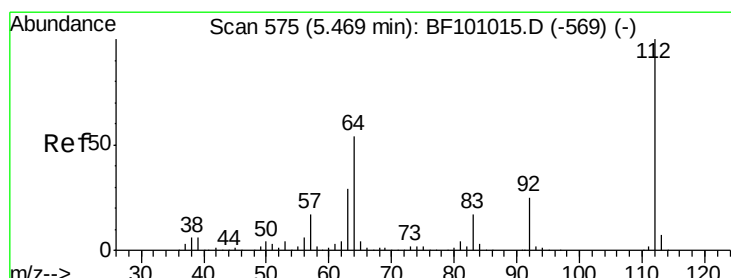
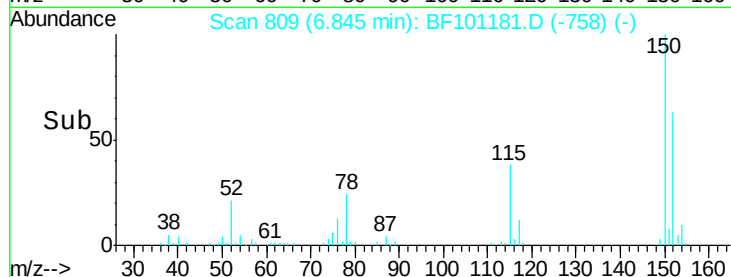
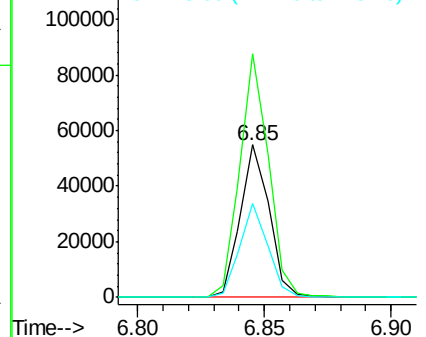


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

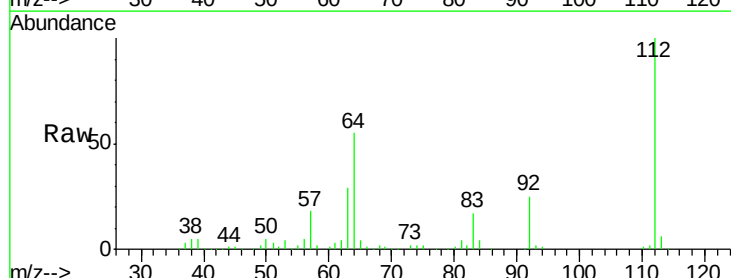
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 51.777 ng  
RT: 5.46 min Scan# 574  
Delta R.T. 0.00 min  
Lab File: BF101181.D  
Acq: 6 Dec 2017 21:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 55.1  | 47.9  | 71.9  |
| 63      | 29.2  | 23.7  | 35.5  |

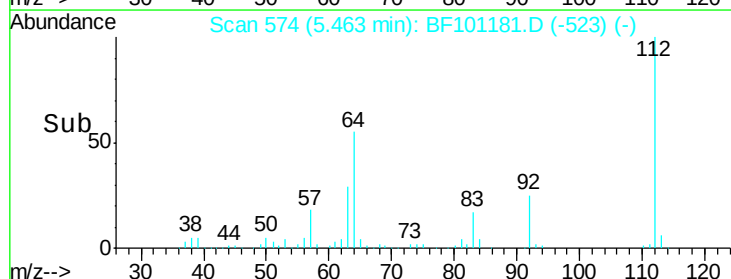
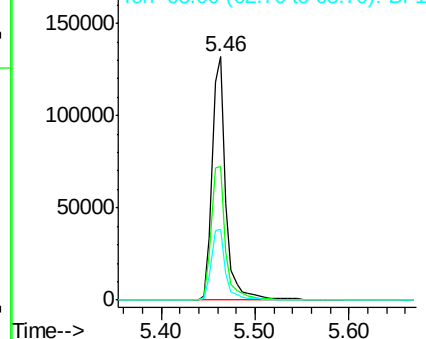


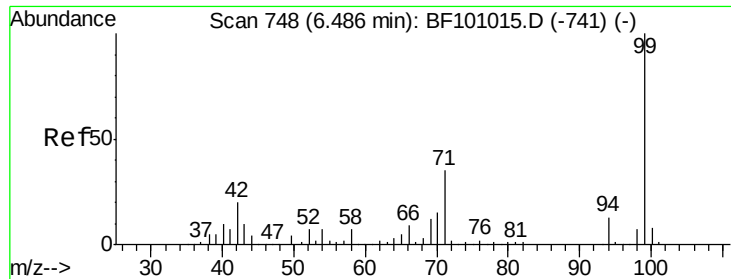
Abundance

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: 49.106 ng

RT: 6.47 min Scan# 746

Delta R.T. -0.01 min

Lab File: BF101181.D

Acq: 6 Dec 2017 21:19

Instrument :

BNA\_F

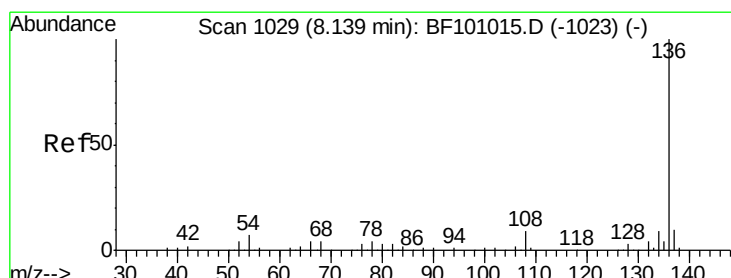
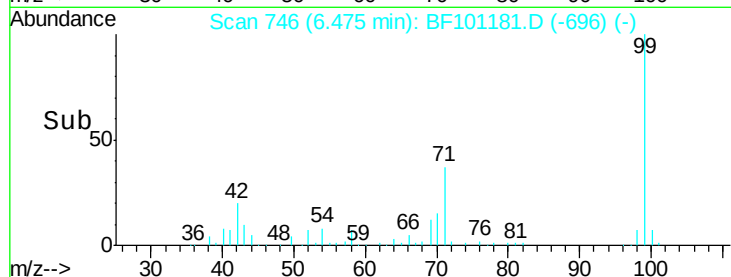
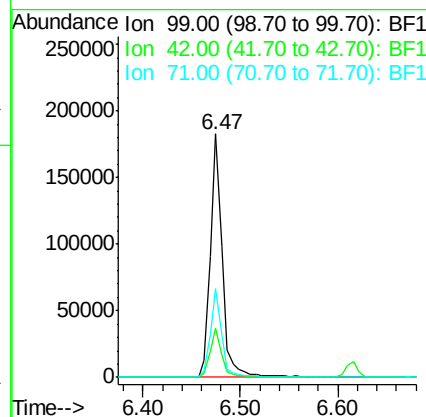
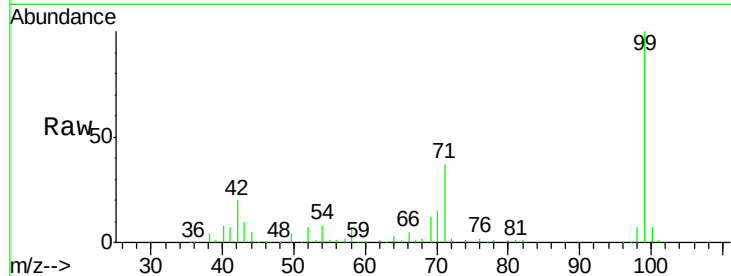
ClientSampleId :

SB-11(0-2)-20171129

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 156871 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 20.0  | 14.5  | 21.7   |
| 71        | 36.6  | 25.4  | 38.0   |

Manual Integrations  
APPROVED

Sohil  
12/7/2017 11:36:06 AM



#21

Naphthalene-d8

Concen: 20.000 ng

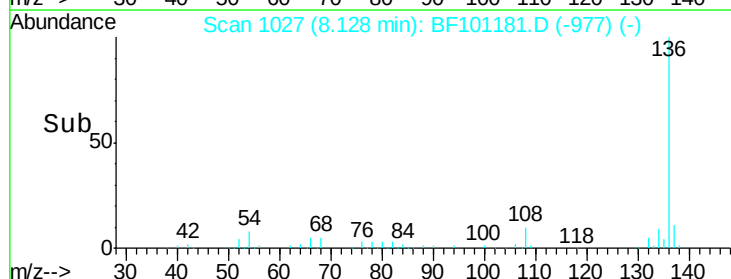
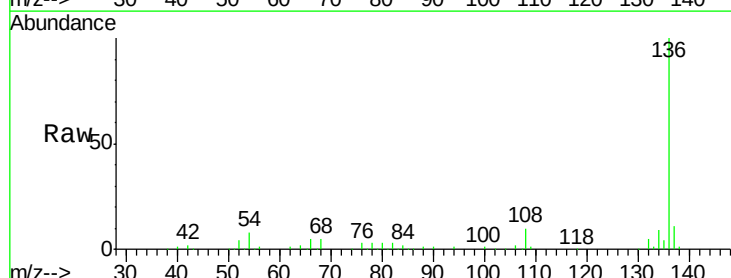
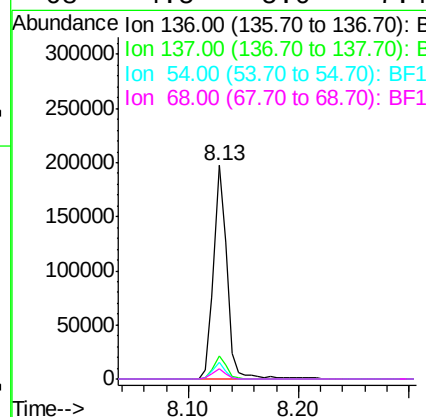
RT: 8.13 min Scan# 1027

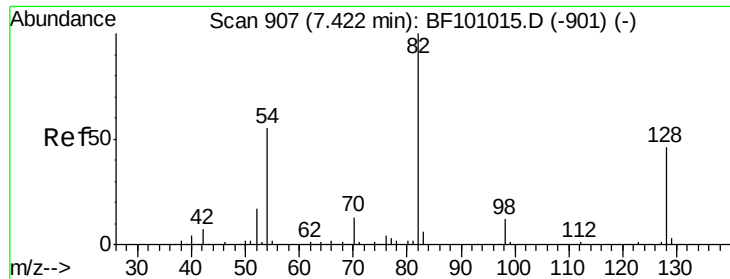
Delta R.T. -0.01 min

Lab File: BF101181.D

Acq: 6 Dec 2017 21:19

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 162010 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.6  | 8.9   | 13.3   |
| 54        | 7.8   | 6.6   | 9.8    |
| 68        | 4.5   | 5.0   | 7.4#   |





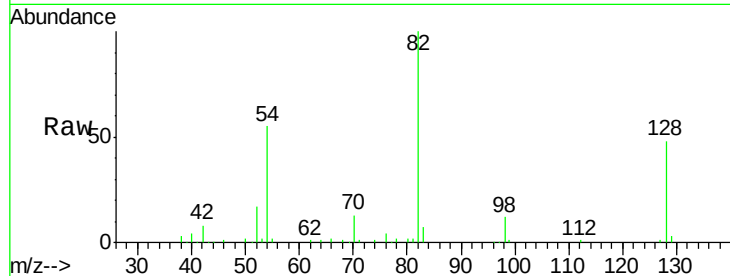
#23  
 Nitrobenzene-d5  
 Concen: 34.648 ng  
 RT: 7.41 min Scan# 905  
 Delta R.T. -0.01 min  
 Lab File: BF101181.D  
 Acq: 6 Dec 2017 21:19

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-11(0-2)-20171129

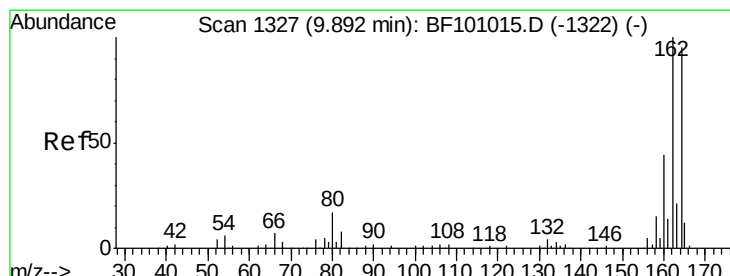
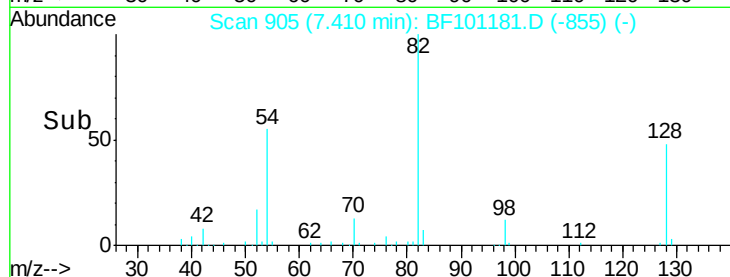
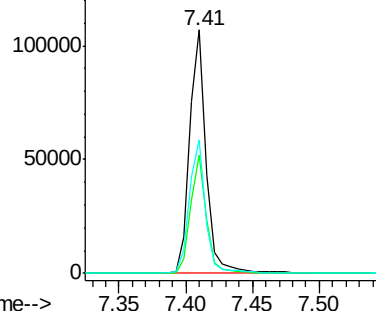
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 48.4  | 36.1  | 54.1  |
| 54      | 54.8  | 41.4  | 62.2  |

Manual Integrations  
 APPROVED

Sohil  
 12/7/2017 11:36:06 AM

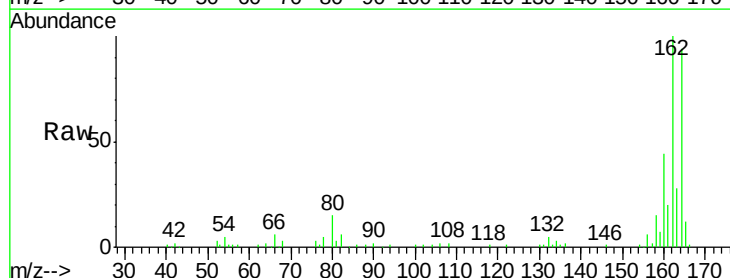


Abundance Ion 82.00 (81.70 to 82.70): BF1  
 Ion 128.00 (127.70 to 128.70): BF1  
 Ion 54.00 (53.70 to 54.70): BF1

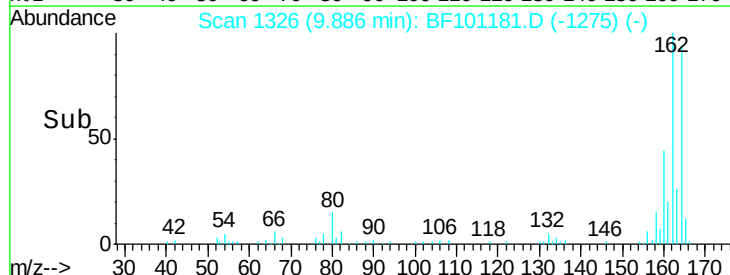
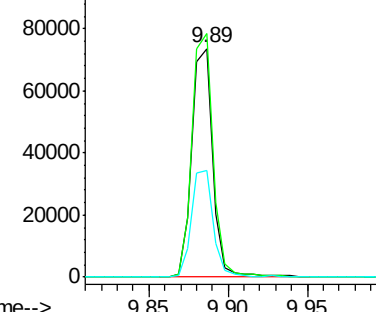


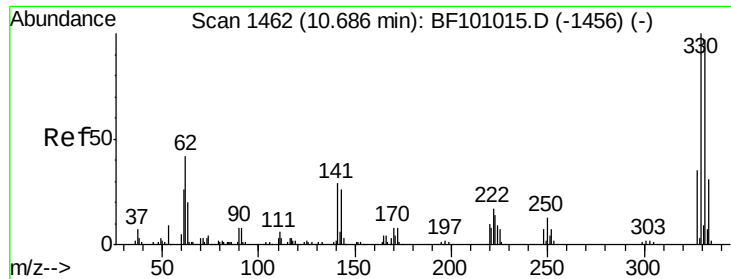
#38  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.89 min Scan# 1326  
 Delta R.T. 0.00 min  
 Lab File: BF101181.D  
 Acq: 6 Dec 2017 21:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 106.4 | 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





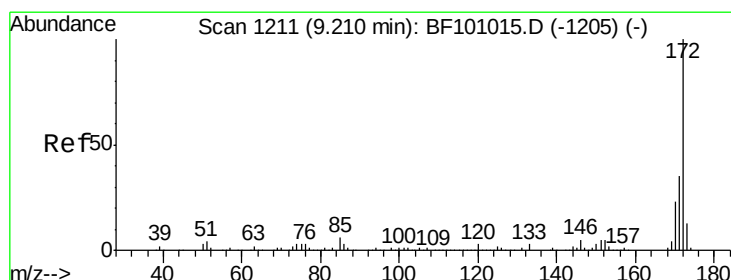
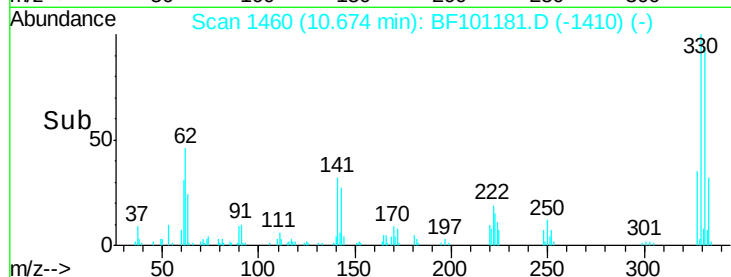
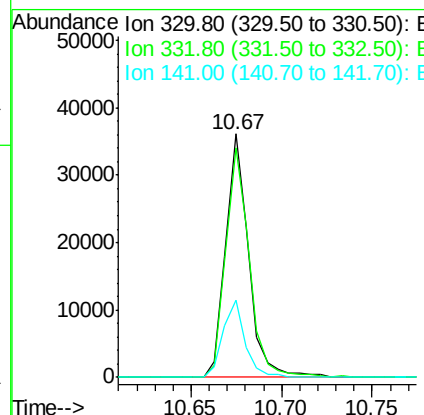
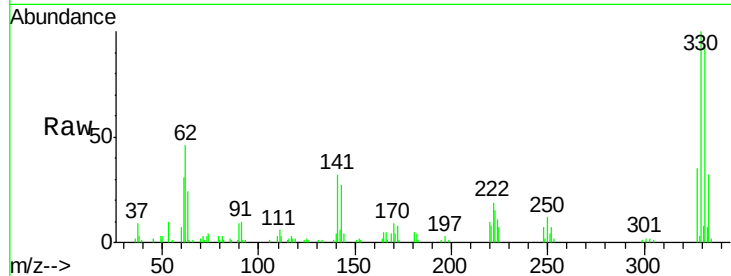
#41  
 2,4,6-Tribromophenol  
 Concen: 39.170 ng  
 RT: 10.67 min Scan# 1460  
 Delta R.T. -0.01 min  
 Lab File: BF101181.D  
 Acq: 6 Dec 2017 21:19

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-11(0-2)-20171129

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 97.3  | 77.0  | 115.6 |
| 141     | 30.4  | 29.9  | 44.9  |

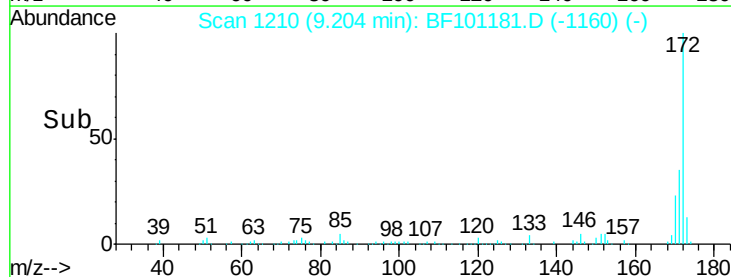
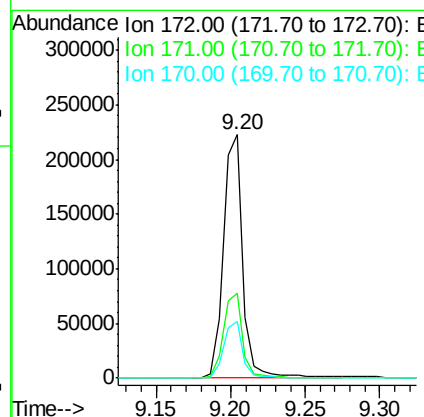
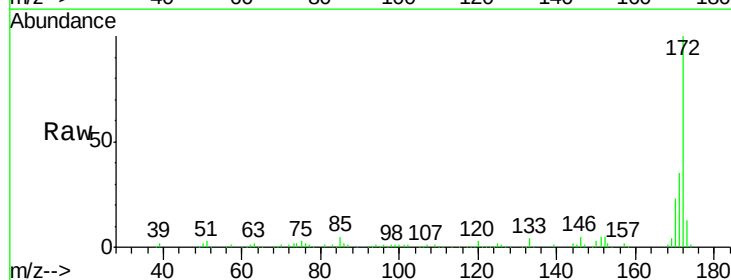
Manual Integrations  
 APPROVED

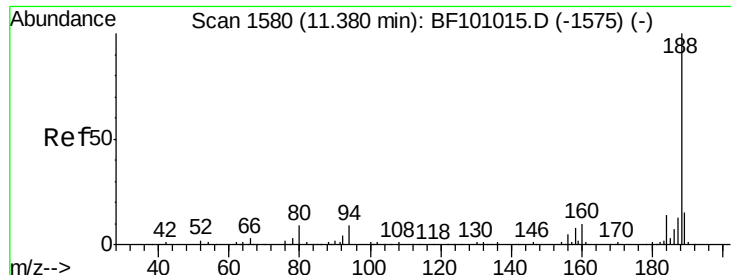
Sohil  
 12/7/2017 11:36:06 AM



#44  
 2-Fluorobiphenyl  
 Concen: 41.460 ng  
 RT: 9.20 min Scan# 1210  
 Delta R.T. -0.01 min  
 Lab File: BF101181.D  
 Acq: 6 Dec 2017 21:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.8  | 29.7  | 44.5  |
| 170     | 23.2  | 19.6  | 29.4  |





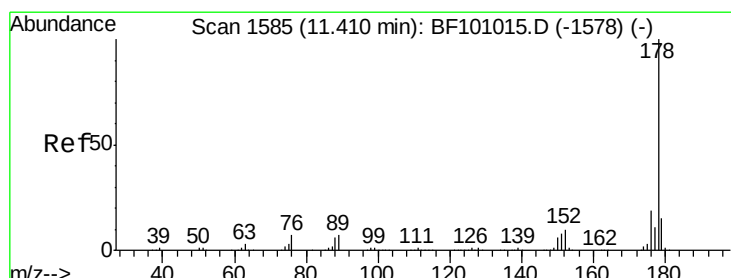
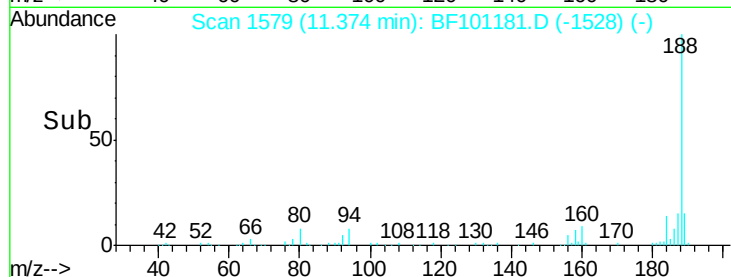
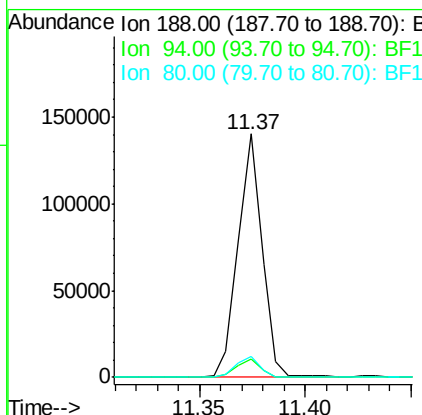
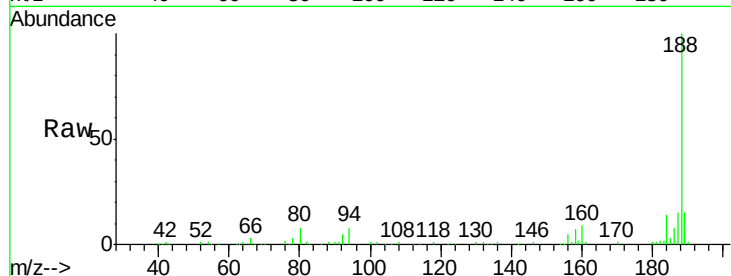
#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.37 min Scan# 1579  
Delta R.T. 0.00 min  
Lab File: BF101181.D  
Acq: 6 Dec 2017 21:19

Instrument :  
BNA\_F  
ClientSampleId :  
SB-11(0-2)-20171129

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 188     | 100   |            |       |
| 94      | 7.8   | 8.5        | 12.7# |
| 80      | 8.4   | 9.2        | 13.8# |

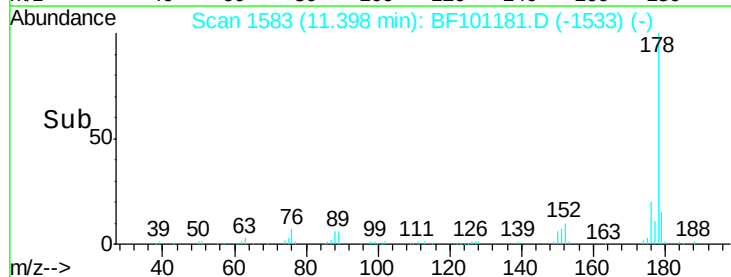
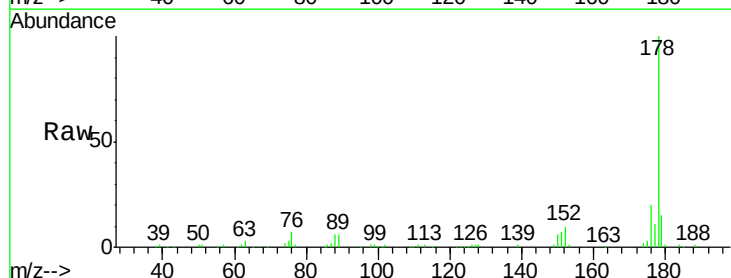
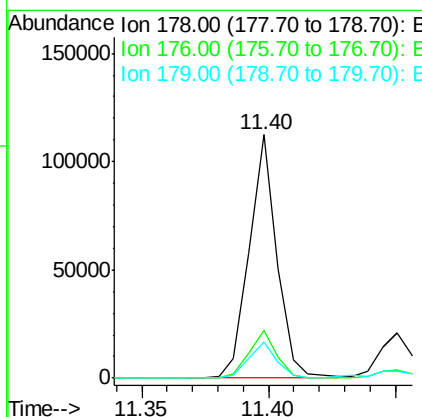
Manual Integrations  
APPROVED

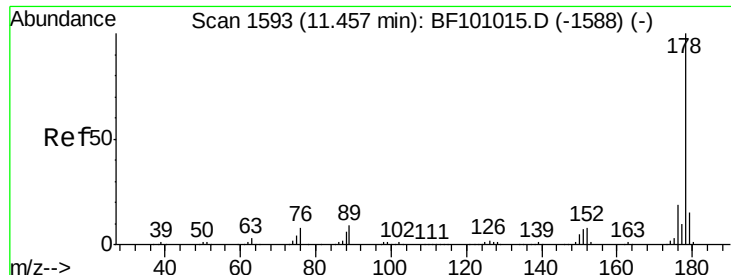
Sohil  
12/7/2017 11:36:06 AM



#70  
Phenanthrene  
Concen: 13.992 ng  
RT: 11.40 min Scan# 1583  
Delta R.T. -0.01 min  
Lab File: BF101181.D  
Acq: 6 Dec 2017 21:19

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 178     | 100   |            |       |
| 176     | 19.5  | 15.8       | 23.8  |
| 179     | 15.1  | 13.0       | 19.6  |





#71

Anthracene

Concen: 2.898 ng

RT: 11.45 min Scan# 1592

Delta R.T. 0.00 min

Lab File: BF101181.D

Acq: 6 Dec 2017 21:19

Instrument :

BNA\_F

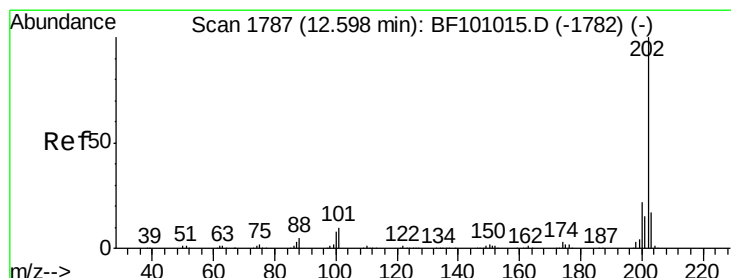
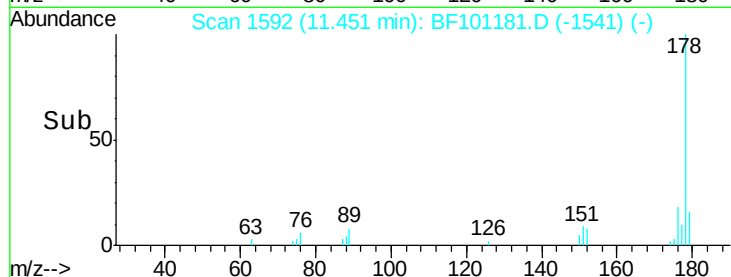
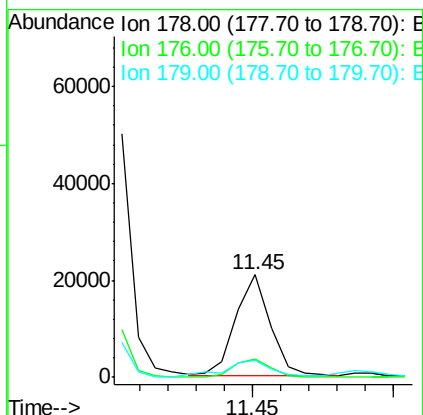
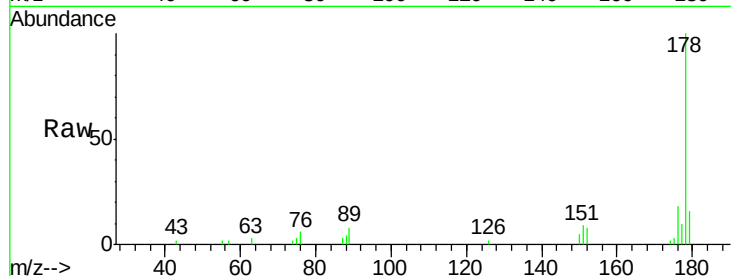
ClientSampleId :

SB-11(0-2)-20171129

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.3  | 15.4  | 23.2  |
| 179     | 16.0  | 12.6  | 19.0  |

Manual Integrations  
APPROVED

Sohil  
12/7/2017 11:36:06 AM



#74

Fluoranthene

Concen: 21.034 ng

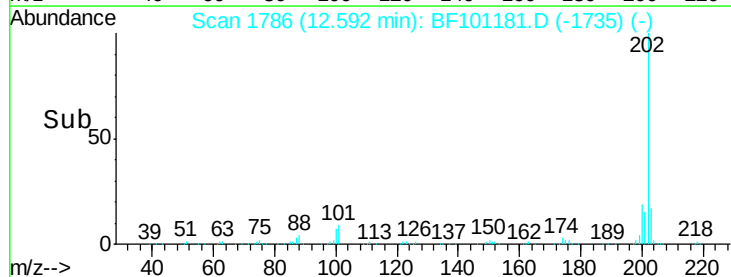
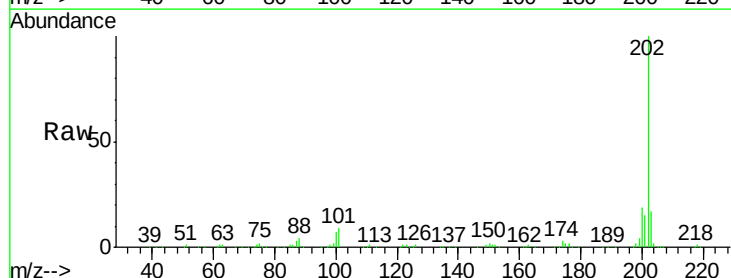
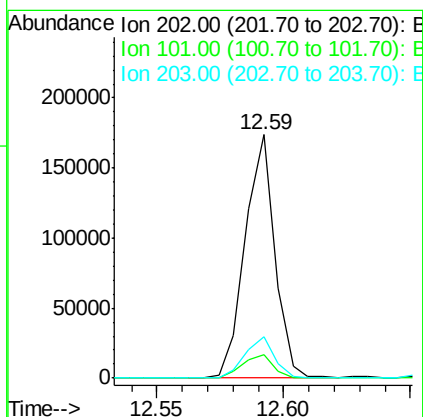
RT: 12.59 min Scan# 1786

Delta R.T. 0.00 min

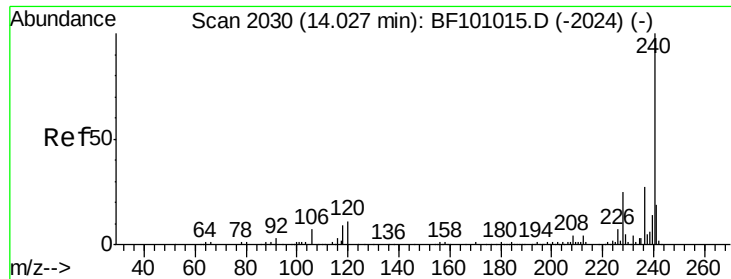
Lab File: BF101181.D

Acq: 6 Dec 2017 21:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.5   | 0.0   | 34.1  |
| 203     | 17.1  | 0.0   | 38.1  |







#75

Chrysene-d12

Concen: 20.000 ng

RT: 14.02 min Scan# 2029

Delta R.T. 0.00 min

Lab File: BF101181.D

Acq: 6 Dec 2017 21:19

Instrument :

BNA\_F

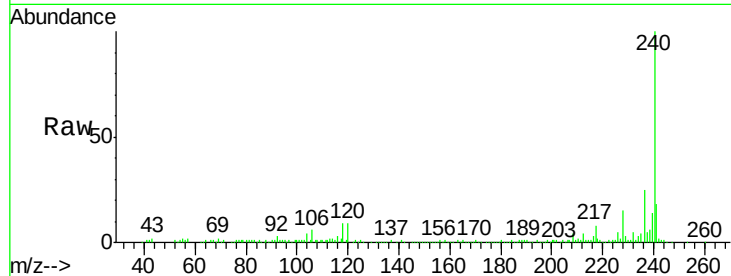
ClientSampleId :

SB-11(0-2)-20171129

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 9.0   | 9.5   | 14.3# |
| 236     | 25.2  | 20.7  | 31.1  |

Manual Integrations  
APPROVED

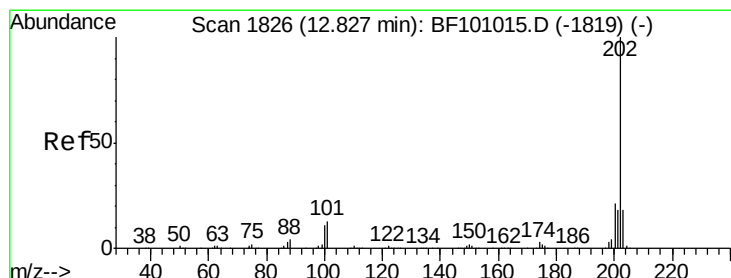
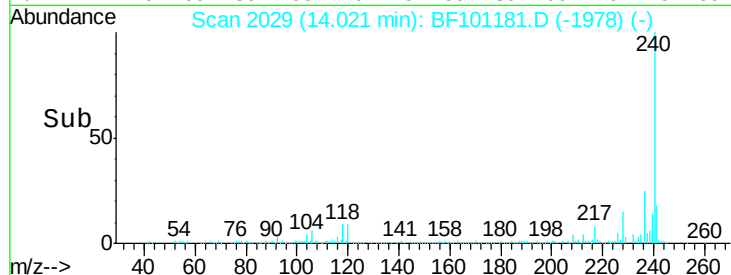
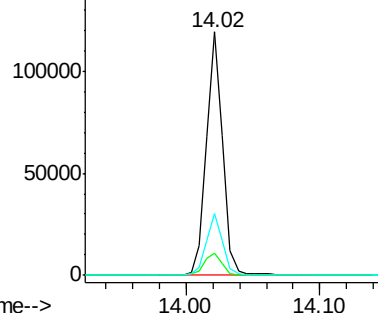
Sohil  
12/7/2017 11:36:06 AM



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

Pyrene

Concen: 19.386 ng

RT: 12.82 min Scan# 1825

Delta R.T. 0.00 min

Lab File: BF101181.D

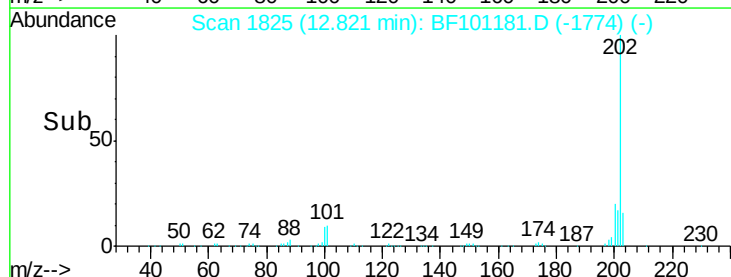
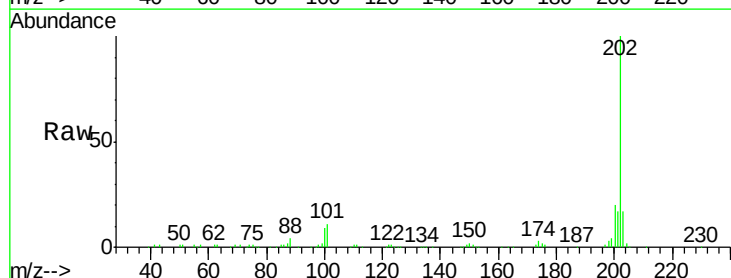
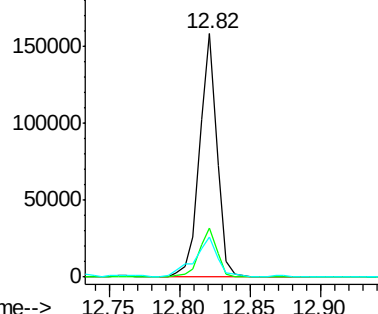
Acq: 6 Dec 2017 21:19

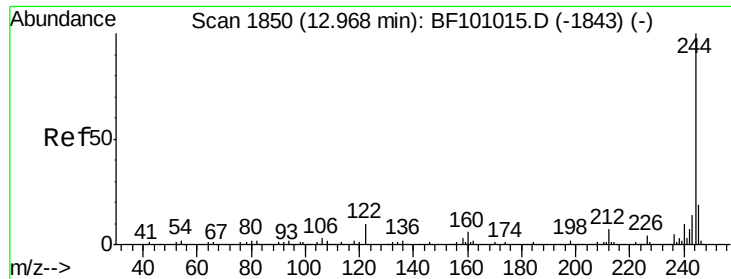
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 20.2  | 17.4  | 26.2  |
| 203     | 16.6  | 14.3  | 21.5  |

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





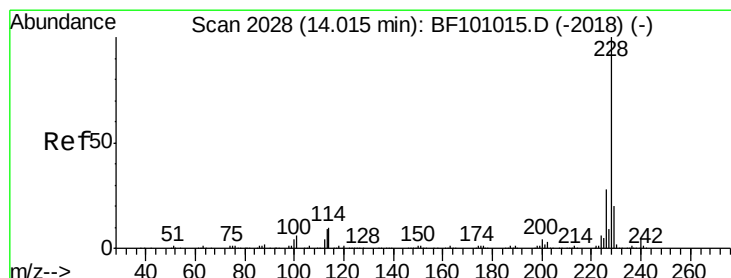
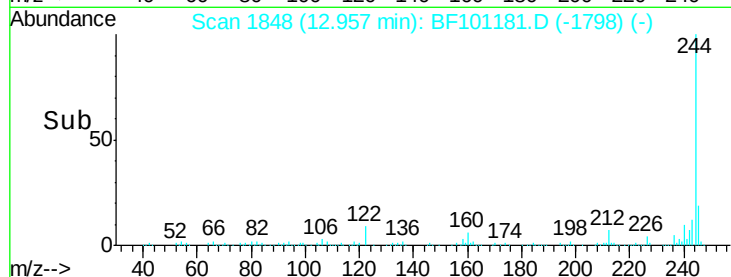
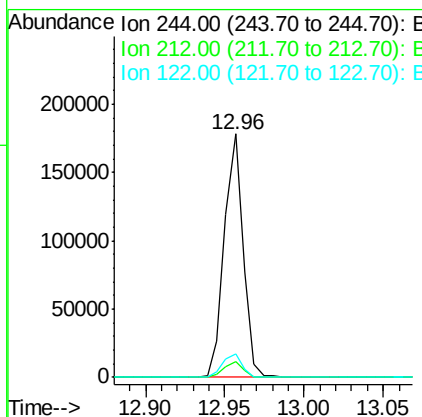
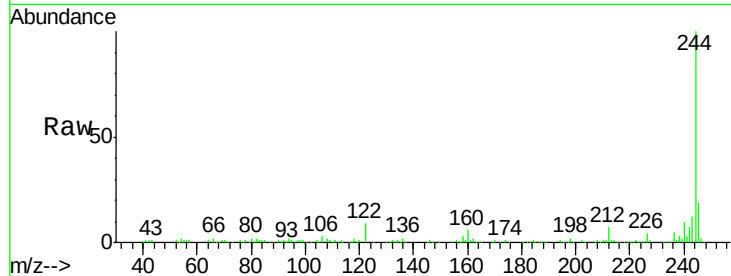
#78  
 Terphenyl-d14  
 Concen: 31.467 ng  
 RT: 12.96 min Scan# 1848  
 Delta R.T. -0.01 min  
 Lab File: BF101181.D  
 Acq: 6 Dec 2017 21:19

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-11(0-2)-20171129

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.7   | 5.4   | 8.0   |
| 122     | 9.4   | 11.0  | 16.4  |

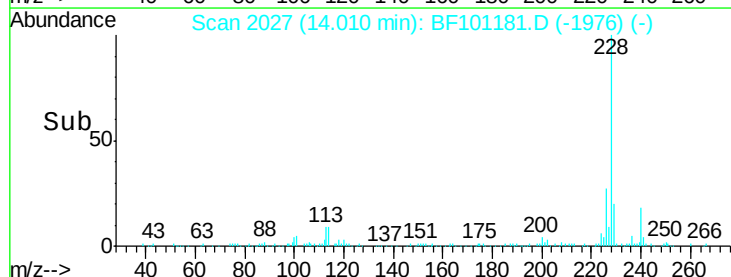
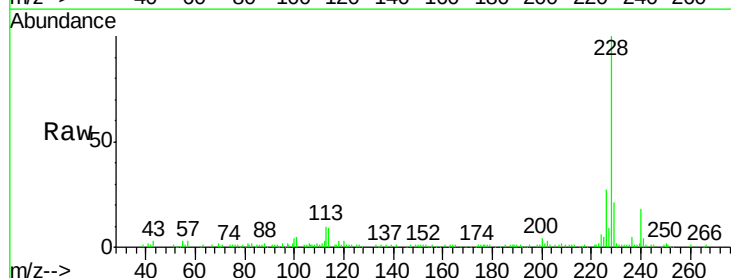
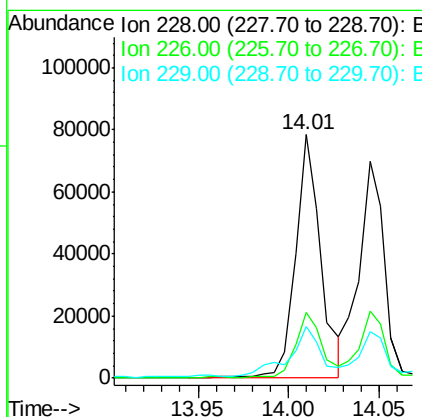
Manual Integrations  
 APPROVED

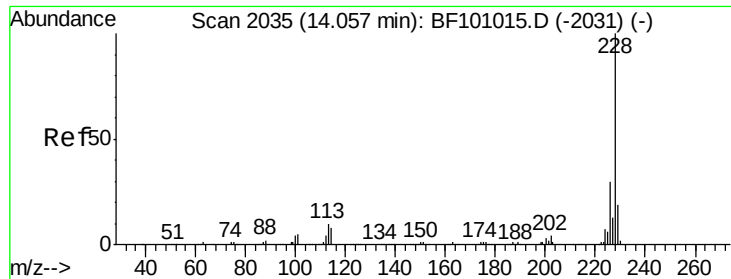
Sohil  
 12/7/2017 11:36:06 AM



#80  
 Benzo(a)anthracene  
 Concen: 11.937 ng  
 RT: 14.01 min Scan# 2027  
 Delta R.T. 0.00 min  
 Lab File: BF101181.D  
 Acq: 6 Dec 2017 21:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.2  | 22.6  | 33.8  |
| 229     | 21.0  | 15.8  | 23.6  |





#82

Chrysene

Concen: 11.392 ng

RT: 14.04 min Scan# 2033

Delta R.T. -0.01 min

Lab File: BF101181.D

Acq: 6 Dec 2017 21:19

Instrument :

BNA\_F

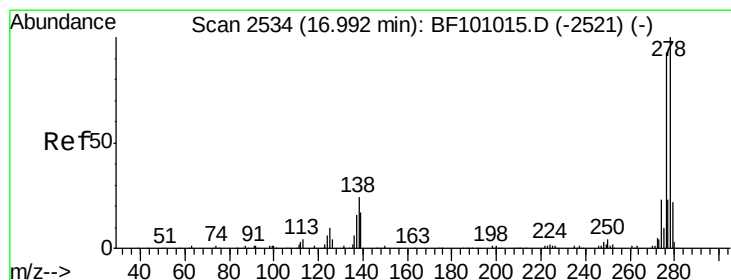
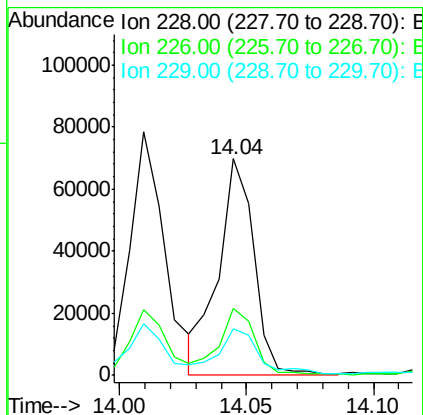
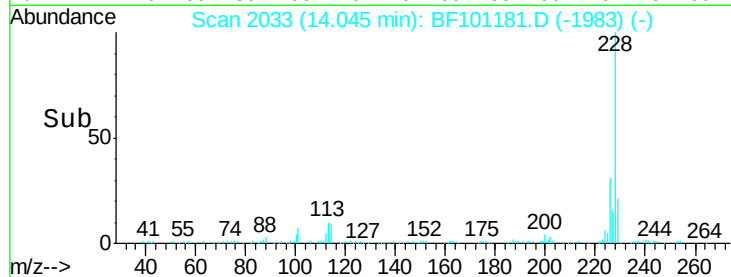
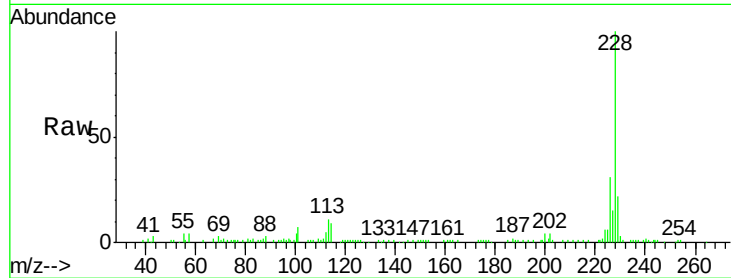
ClientSampled :

SB-11(0-2)-20171129

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 68268 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 30.9  | 25.0  | 37.6  |
| 229       | 21.8  | 16.2  | 24.4  |

Manual Integrations  
APPROVED

Sohil  
12/7/2017 11:36:06 AM



#85

Indeno(1,2,3-cd)pyrene

Concen: 5.786 ng

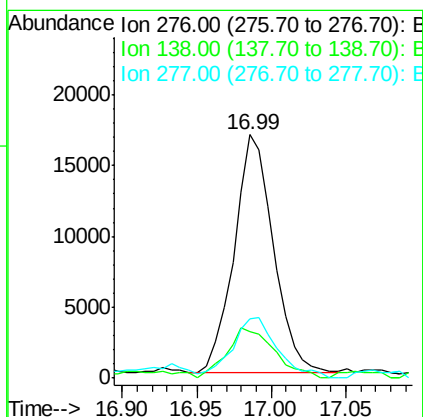
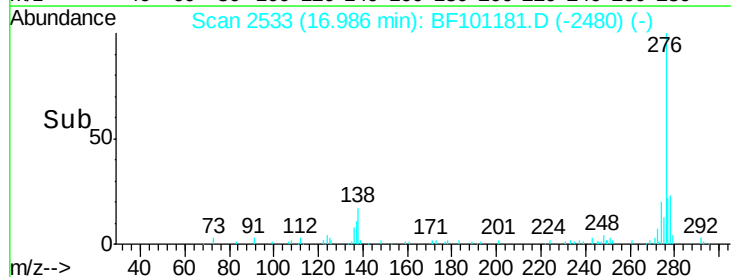
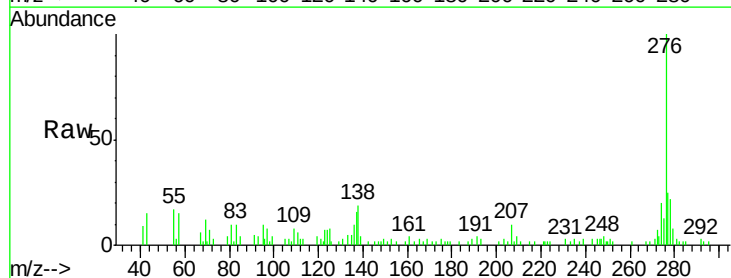
RT: 16.99 min Scan# 2533

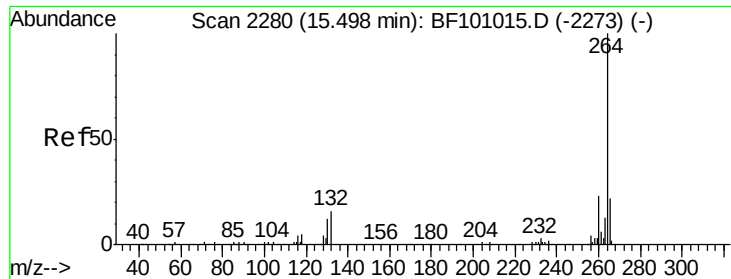
Delta R.T. 0.01 min

Lab File: BF101181.D

Acq: 6 Dec 2017 21:19

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 30825 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 25.2  | 25.0  | 37.6  |
| 277       | 29.2  | 20.1  | 30.1  |





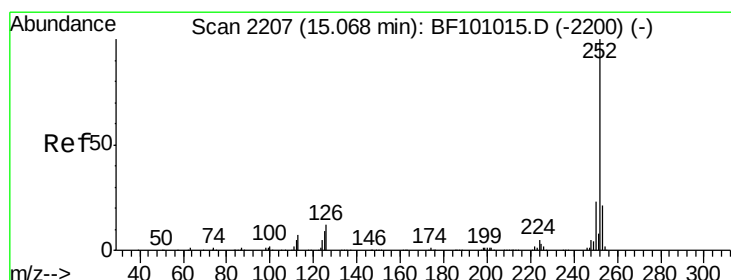
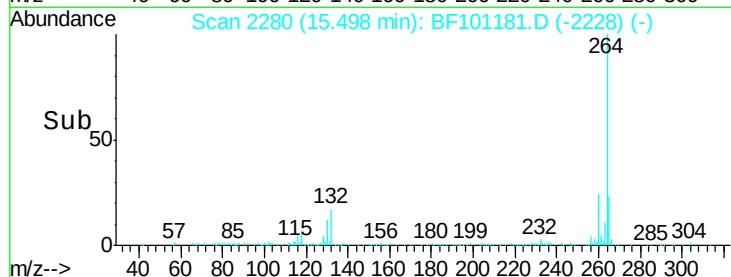
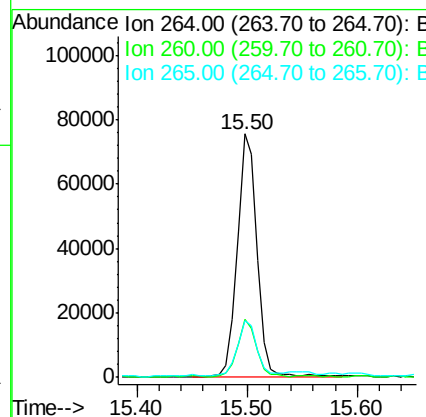
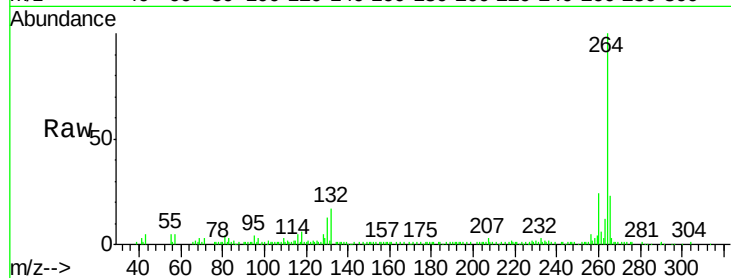
#86  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.50 min Scan# 2280  
Delta R.T. 0.01 min  
Lab File: BF101181.D  
Acq: 6 Dec 2017 21:19

Instrument :  
BNA\_F  
ClientSampleId :  
SB-11(0-2)-20171129

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.8  | 19.2  | 28.8  |
| 265     | 23.0  | 17.5  | 26.3  |

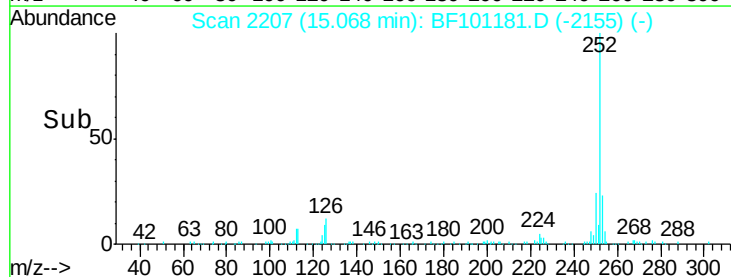
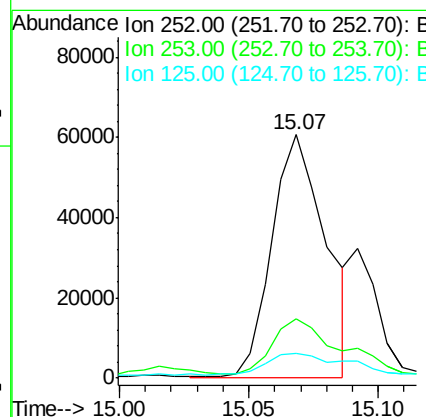
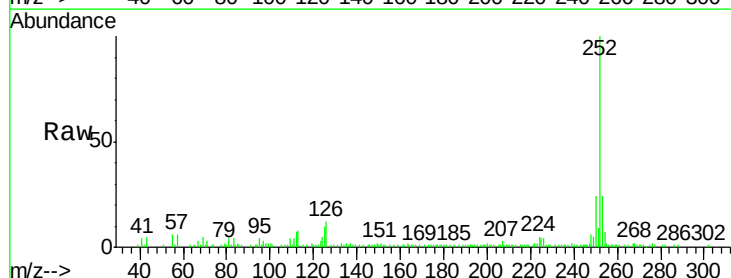
Manual Integrations  
APPROVED

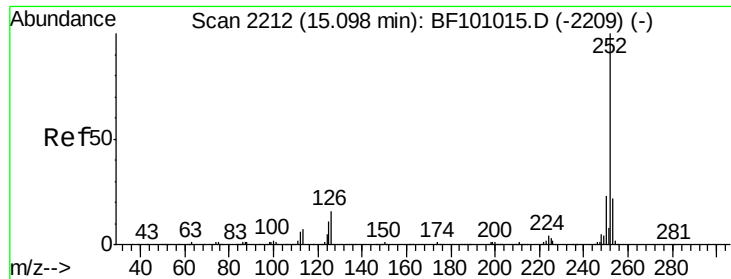
Sohil  
12/7/2017 11:36:06 AM



#87  
Benzo(b)fluoranthene  
Concen: 15.374 ng m  
RT: 15.07 min Scan# 2207  
Delta R.T. 0.01 min  
Lab File: BF101181.D  
Acq: 6 Dec 2017 21:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.3  | 17.0  | 25.6  |
| 125     | 10.3  | 9.0   | 13.6  |





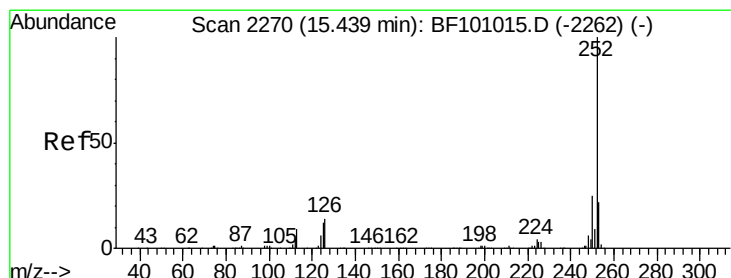
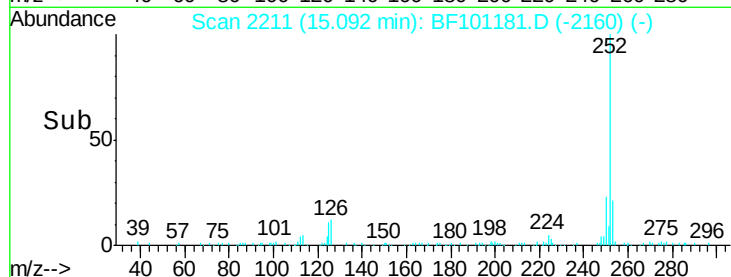
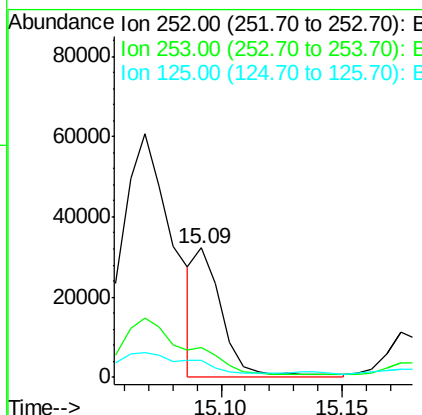
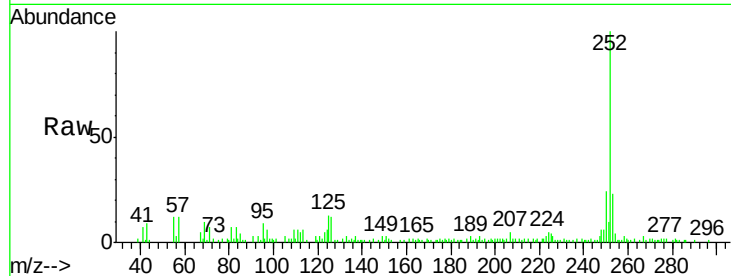
#88  
Benzo(k)fluoranthene  
Concen: 4.581 ng m  
RT: 15.09 min Scan# 2211  
Delta R.T. 0.00 min  
Lab File: BF101181.D  
Acq: 6 Dec 2017 21:19

Instrument :  
BNA\_F  
ClientSampleId :  
SB-11(0-2)-20171129

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.8  | 17.9  | 26.9  |
| 125     | 13.3  | 10.2  | 15.2  |

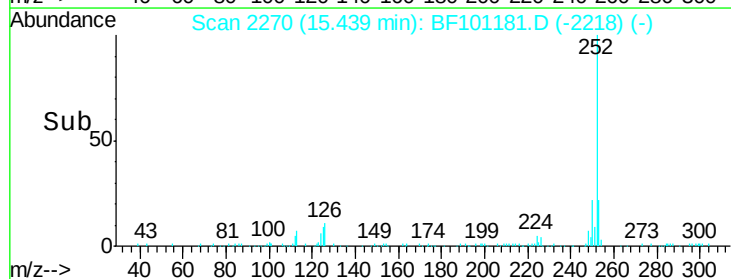
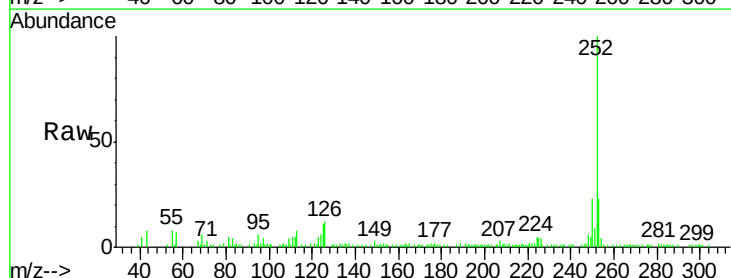
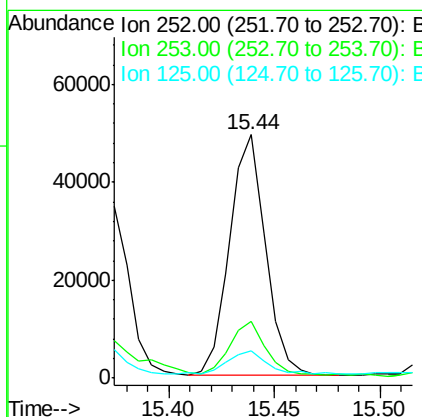
Manual Integrations  
APPROVED

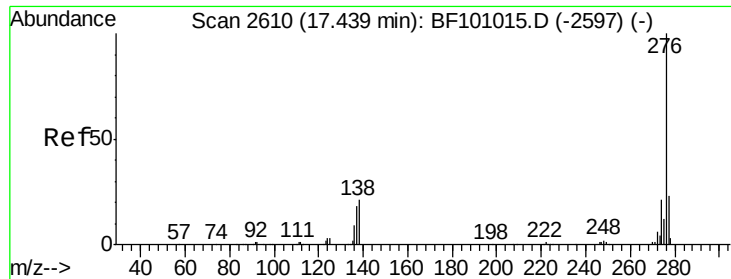
Sohil  
12/7/2017 11:36:06 AM



#89  
Benzo(a)pyrene  
Concen: 11.164 ng  
RT: 15.44 min Scan# 2270  
Delta R.T. 0.01 min  
Lab File: BF101181.D  
Acq: 6 Dec 2017 21:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.4  | 17.1  | 25.7  |
| 125     | 11.2  | 9.8   | 14.6  |





#91  
 Benzo(a,h,i)perylene  
 Concen: 7.130 ng  
 RT: 17.44 min Scan# 2611  
 Delta R.T. 0.02 min  
 Lab File: BF101181.D  
 Acq: 6 Dec 2017 21:19

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-11(0-2)-20171129

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.0  | 17.9  | 26.9  |
| 138     | 19.7  | 21.8  | 32.8  |

Manual Integrations  
 APPROVED

Sohil  
 12/7/2017 11:36:06 AM

