

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF081718\  
 Data File : BF108260.D  
 Acq On : 17 Aug 2018 23:34  
 Operator : JU/SJ  
 Sample : J4501-02  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RA-081318-FL-017

Manual Integrations  
 APPROVED

Sohil  
 8/20/2018 12:48:36 PM

Quant Time: Aug 18 01:17:00 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF080818.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Aug 08 12:24:24 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.01  | 152  | 165674   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.30  | 136  | 610172   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10        | 10.06 | 164  | 283407   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.55 | 188  | 444171   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12            | 14.21 | 240  | 405304   | 20.00  | ng    | -0.01    |
| 86) Perylene-d12            | 15.77 | 264  | 287875   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.65  | 112  | 980232   | 107.12 | ng    | 0.02     |
| 7) Phenol-d6                | 6.64  | 99   | 1328633  | 109.26 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.58  | 82   | 870416   | 79.60  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.85 | 330  | 291954   | 103.28 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.37  | 172  | 1432696  | 81.16  | ng    | 0.00     |
| 78) Terphenyl-d14           | 13.14 | 244  | 1161745  | 72.88  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 49) Dimethylphthalate       | 9.76  | 163  | 99490    | 5.040  | ng    | 99       |
| 70) Phenanthrene            | 11.58 | 178  | 365067   | 17.426 | ng    | 99       |
| 71) Anthracene              | 11.63 | 178  | 83824    | 3.904  | ng    | 98       |
| 74) Fluoranthene            | 12.78 | 202  | 429329   | 18.777 | ng    | 95       |
| 77) Pyrene                  | 13.01 | 202  | 369444   | 14.398 | ng    | 99       |
| 80) Benzo(a)anthracene      | 14.19 | 228  | 184455   | 7.930  | ng    | 99       |
| 82) Chrysene                | 14.24 | 228  | 161207   | 7.560  | ng    | 96       |
| 85) Indeno(1,2,3-cd)pyrene  | 17.38 | 276  | 50317    | 2.723  | ng    | # 87     |
| 87) Benzo(b)fluoranthene    | 15.30 | 252  | 166820m  | 9.698  | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.32 | 252  | 57004m   | 3.605  | ng    |          |
| 89) Benzo(a)pyrene          | 15.70 | 252  | 106884   | 6.939  | ng    | 97       |
| 91) Benzo(a,h,i)perylene    | 17.88 | 276  | 52152    | 4.156  | ng    | # 89     |

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

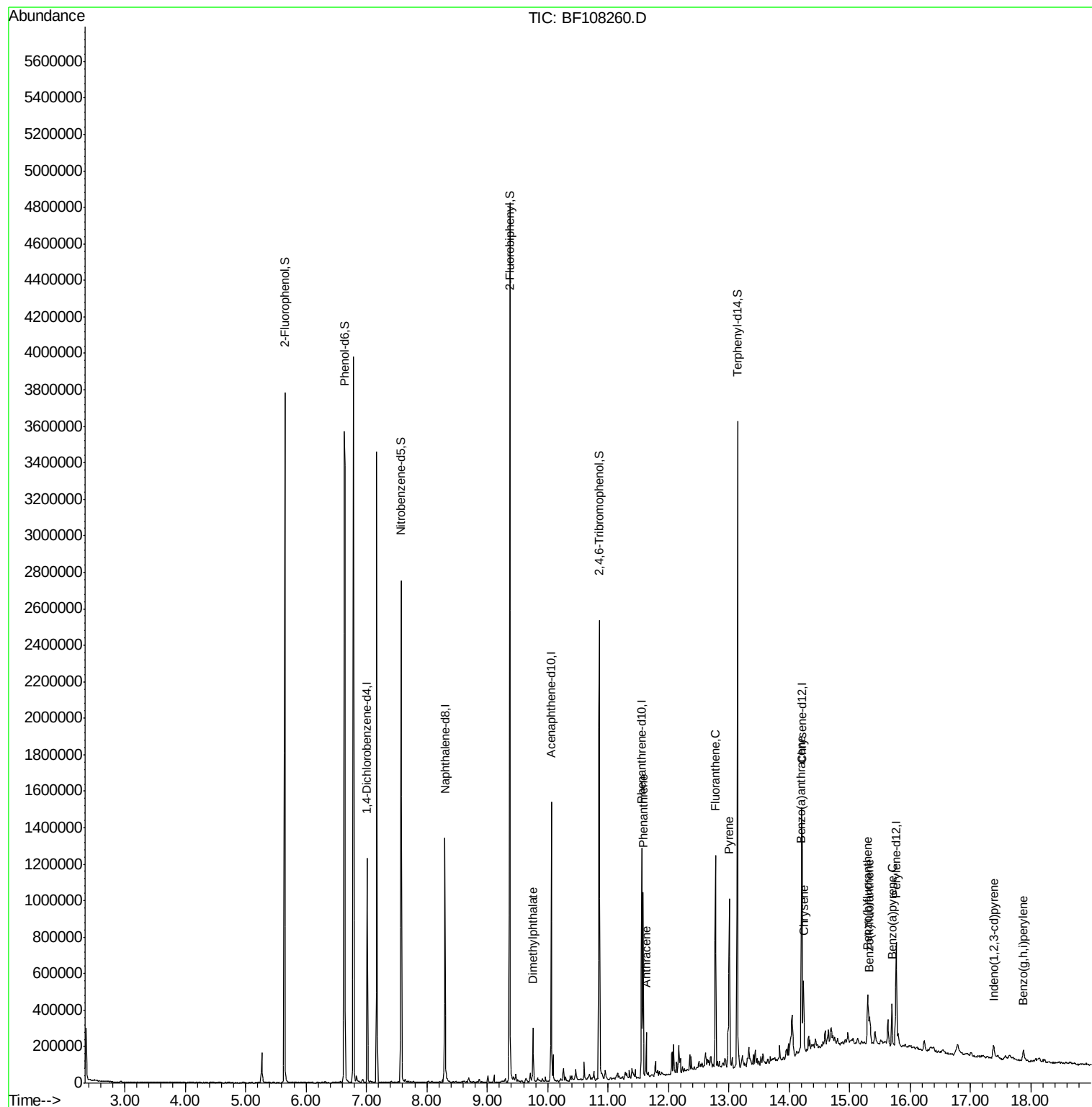
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF081718\  
Data File : BF108260.D  
Acq On : 17 Aug 2018 23:34  
Operator : JU/SJ  
Sample : J4501-02  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

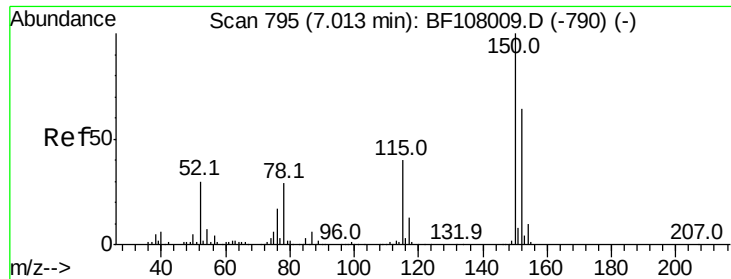
Instrument :  
BNA\_F  
ClientSampleId :  
RA-081318-FL-017

Manual Integrations  
APPROVED

Sohil  
8/20/2018 12:48:36 PM

Quant Time: Aug 18 01:17:00 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF080818.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Aug 08 12:24:24 2018  
Response via : Initial Calibration





#1

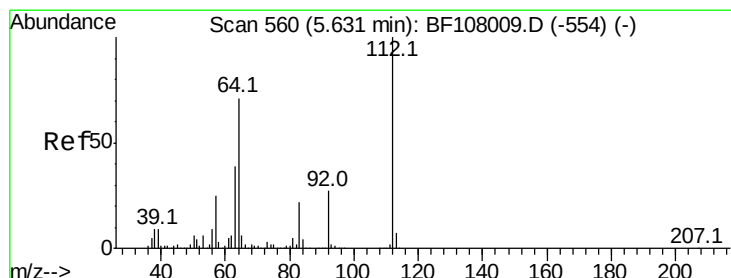
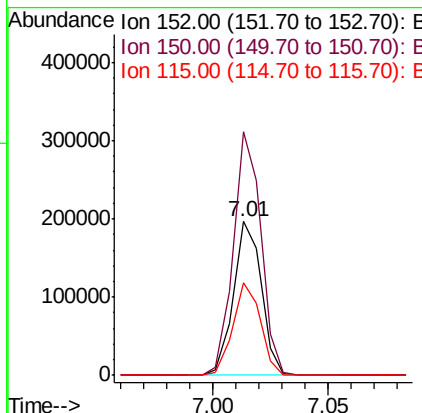
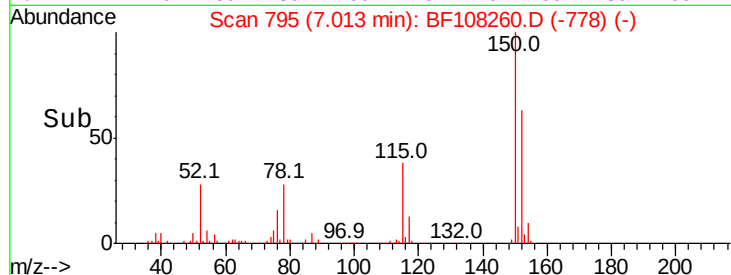
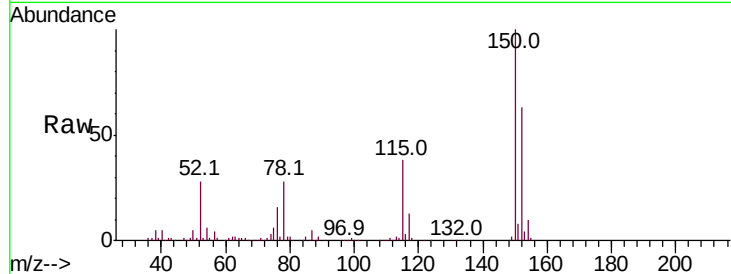
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.01 min Scan# 795  
Delta R.T. 0.00 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

Instrument :  
BNA\_F  
ClientSampleId :  
RA-081318-FL-017

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 158.7 | 124.6 | 186.8 |
| 115     | 60.6  | 50.1  | 75.1  |

Manual Integrations  
APPROVED

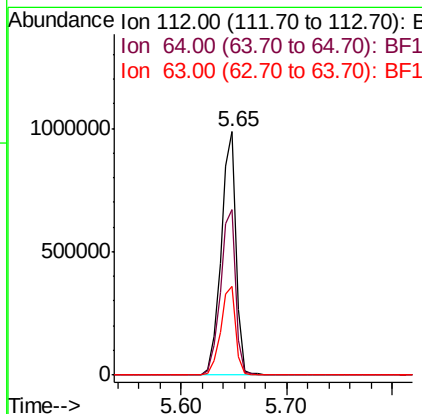
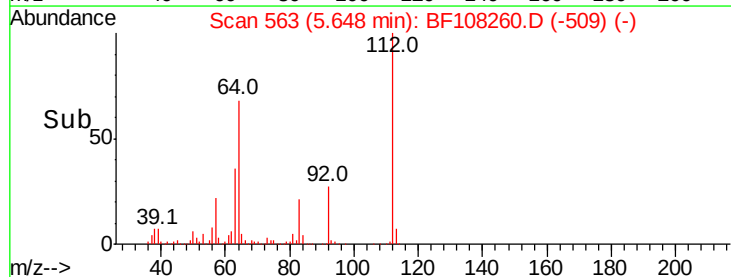
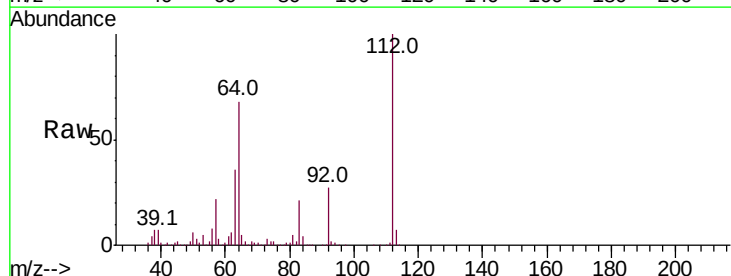
Sohil  
8/20/2018 12:48:36 PM

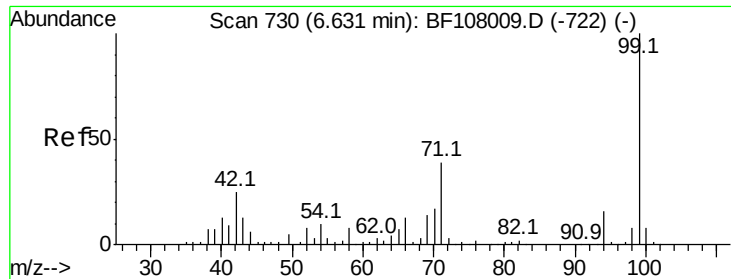


#5

2-Fluorophenol  
Concen: 107.118 ng  
RT: 5.65 min Scan# 563  
Delta R.T. 0.02 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 67.9  | 47.9  | 71.9  |
| 63      | 36.2  | 23.7  | 35.5# |





#7

Phenol-d6

Concen: 109.259 ng

RT: 6.64 min Scan# 731

Delta R.T. 0.01 min

Lab File: BF108260.D

Acq: 17 Aug 2018 23:34

Instrument :

BNA\_F

ClientSampleId :

RA-081318-FL-017

Tot Ion: 99 Resp: 1328633

Ion Ratio Lower Upper

99 100

42 23.5 14.5 21.7#

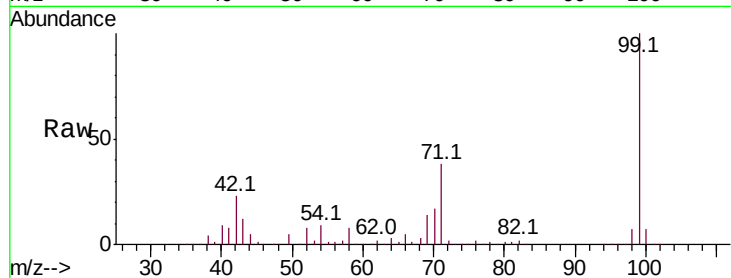
71 37.5 25.4 38.0

Manual Integrations

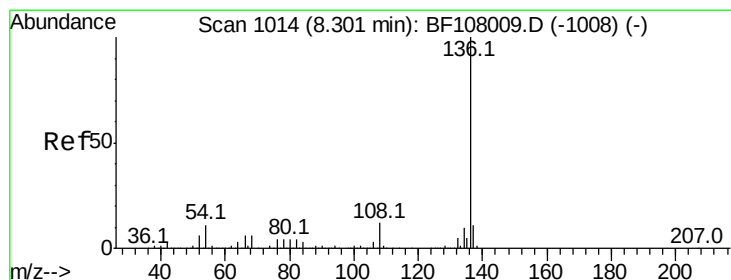
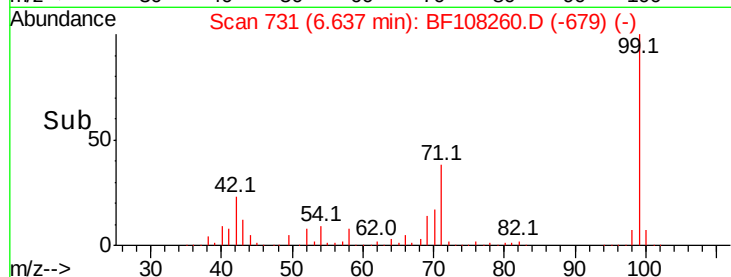
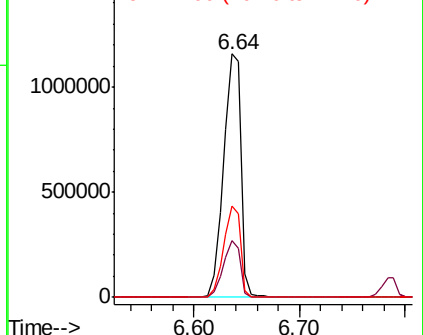
APPROVED

Sohil

8/20/2018 12:48:36 PM



Abundance Ion 99.00 (98.70 to 99.70): BF1  
Ion 42.00 (41.70 to 42.70): BF1  
Ion 71.00 (70.70 to 71.70): BF1



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.30 min Scan# 1014

Delta R.T. 0.00 min

Lab File: BF108260.D

Acq: 17 Aug 2018 23:34

Tgt Ion: 136 Resp: 610172

Ion Ratio Lower Upper

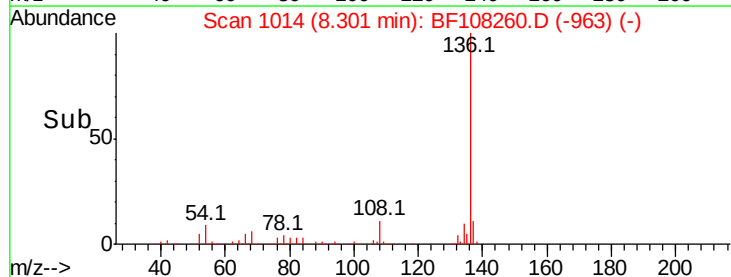
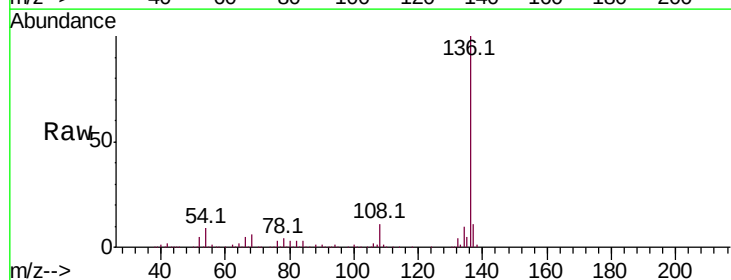
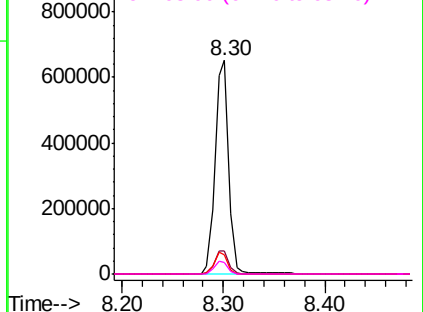
136 100

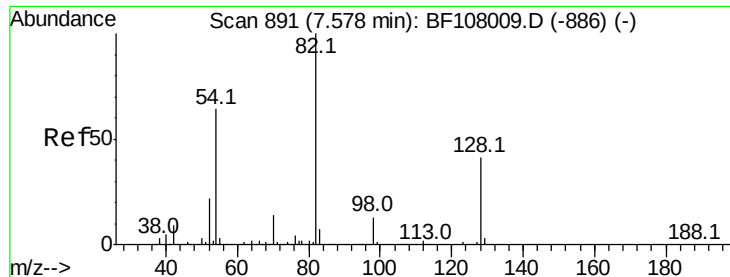
137 10.7 8.9 13.3

54 9.1 6.6 9.8

68 5.5 5.0 7.4

Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF1  
Ion 68.00 (67.70 to 68.70): BF1





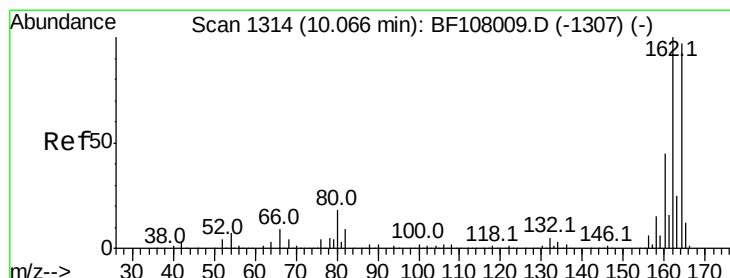
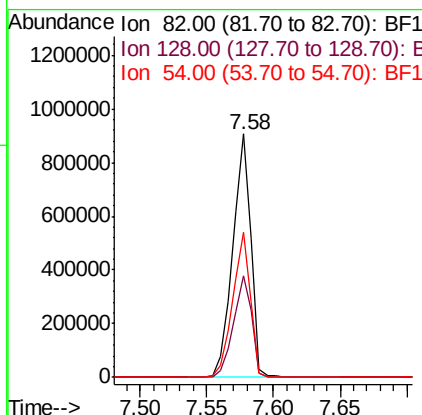
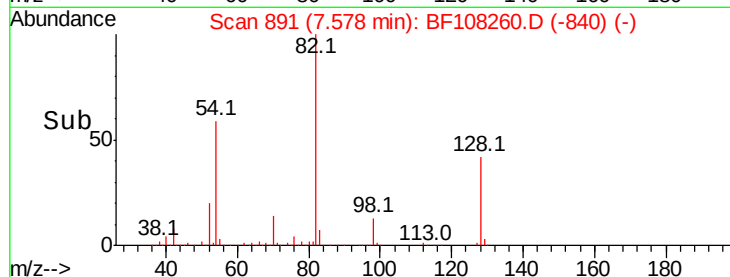
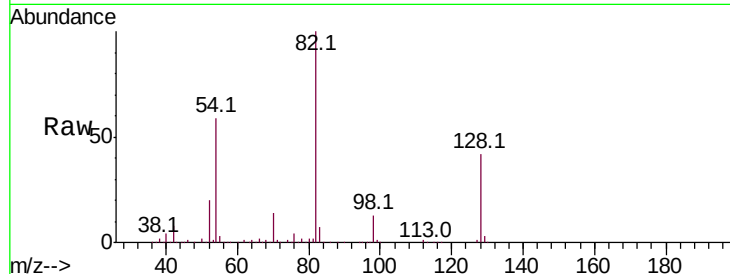
#23  
 Nitrobenzene-d5  
 Concen: 79.601 ng  
 RT: 7.58 min Scan# 891  
 Delta R.T. 0.00 min  
 Lab File: BF108260.D  
 Acq: 17 Aug 2018 23:34

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RA-081318-FL-017

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 41.7  | 36.1  | 54.1  |
| 54      | 59.3  | 41.4  | 62.2  |

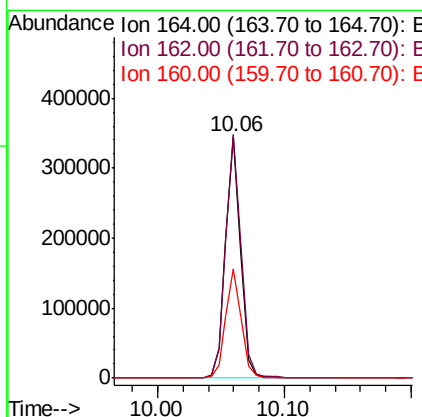
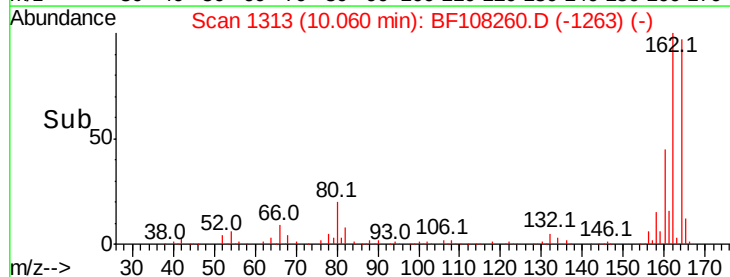
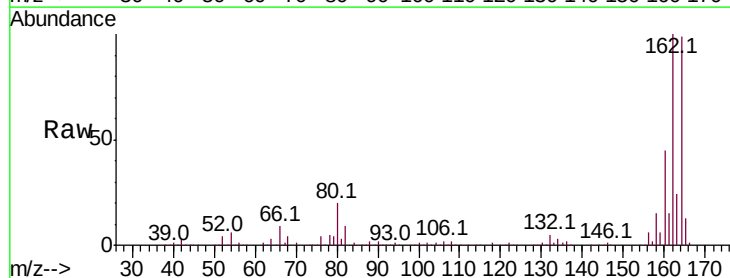
Manual Integrations  
 APPROVED

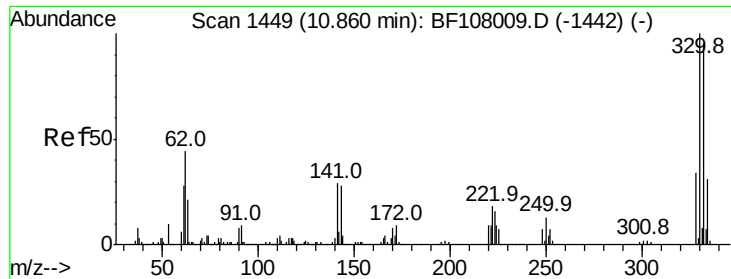
Sohil  
 8/20/2018 12:48:36 PM



#38  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 10.06 min Scan# 1313  
 Delta R.T. -0.01 min  
 Lab File: BF108260.D  
 Acq: 17 Aug 2018 23:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 101.0 | 86.1  | 129.1 |
| 160     | 45.1  | 38.3  | 57.5  |





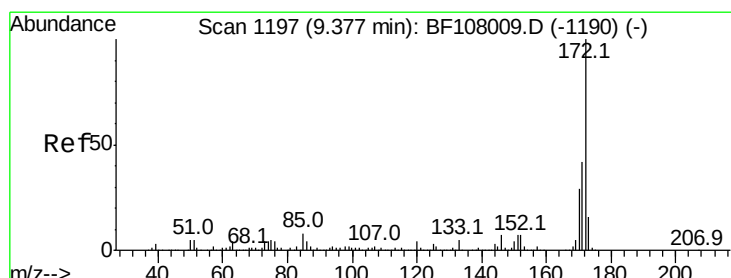
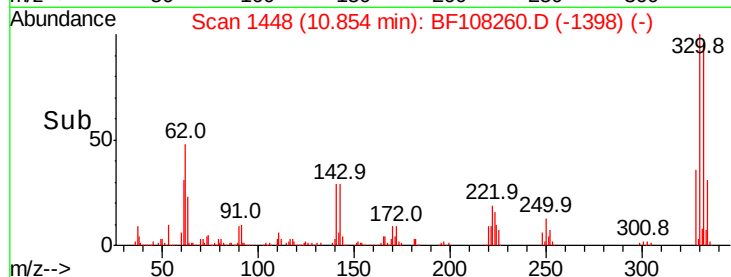
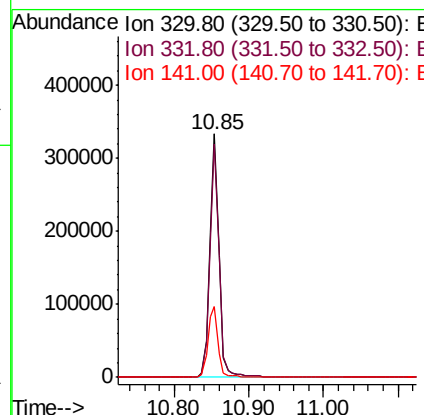
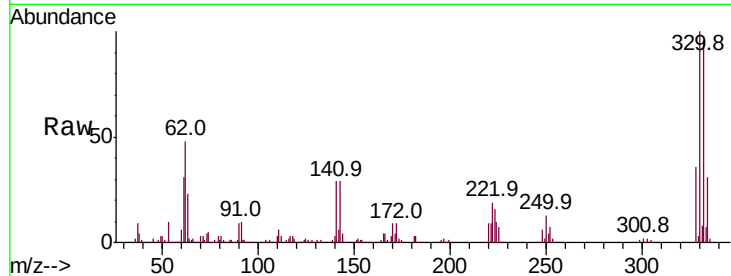
#41  
 2,4,6-Tribromophenol  
 Concen: 103.277 ng  
 RT: 10.85 min Scan# 1448  
 Delta R.T. -0.01 min  
 Lab File: BF108260.D  
 Acq: 17 Aug 2018 23:34

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RA-081318-FL-017

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 291954 |       |       |
| 332     | 95.7  | 77.0   | 115.6 |       |
| 141     | 32.1  | 29.9   | 44.9  |       |

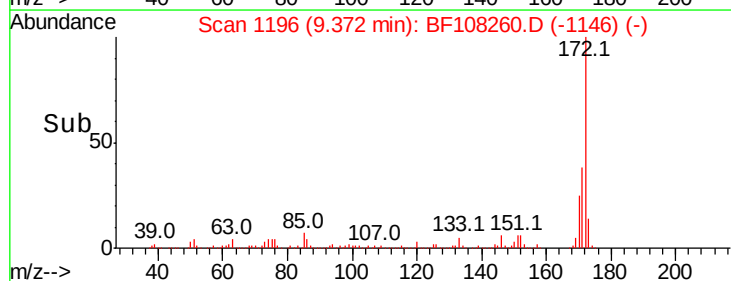
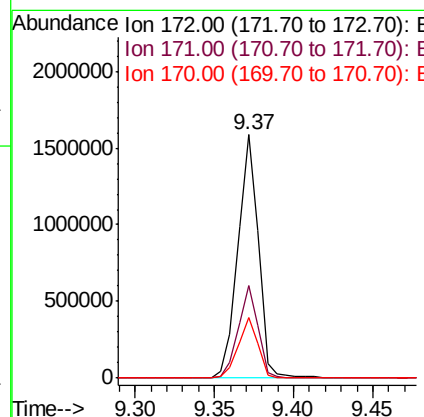
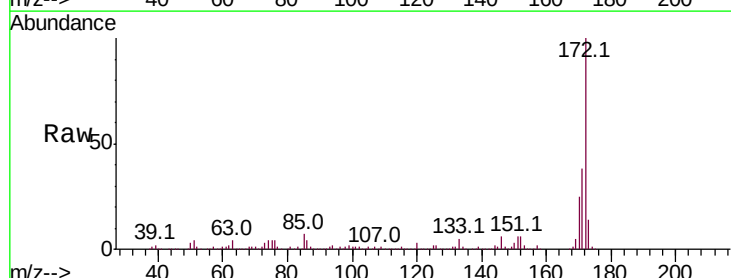
Manual Integrations  
 APPROVED

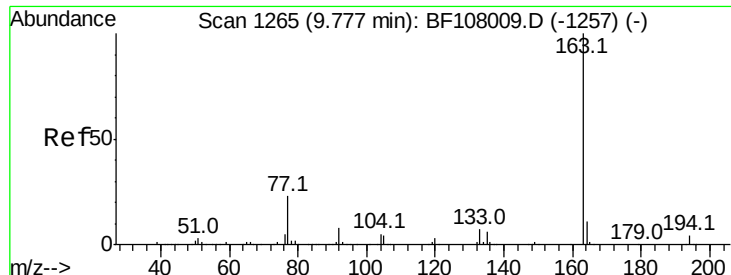
Sohil  
 8/20/2018 12:48:36 PM



#44  
 2-Fluorobiphenyl  
 Concen: 81.161 ng  
 RT: 9.37 min Scan# 1196  
 Delta R.T. -0.01 min  
 Lab File: BF108260.D  
 Acq: 17 Aug 2018 23:34

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 172     | 100   | 1432696 |       |       |
| 171     | 37.9  | 29.7    | 44.5  |       |
| 170     | 24.9  | 19.6    | 29.4  |       |





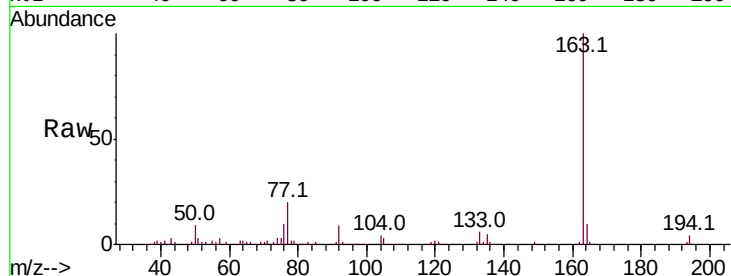
#49  
Dimethylphthalate  
Concen: 5.040 ng  
RT: 9.76 min Scan# 1262  
Delta R.T. -0.02 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

Instrument :  
BNA\_F  
ClientSampleId :  
RA-081318-FL-017

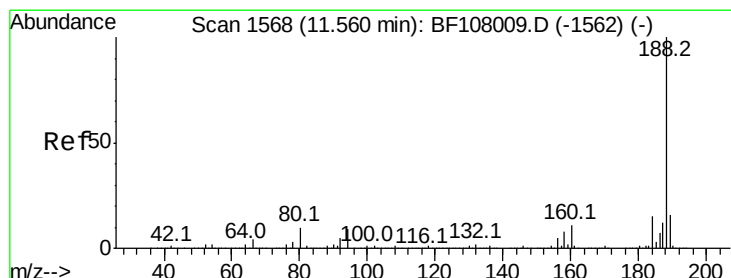
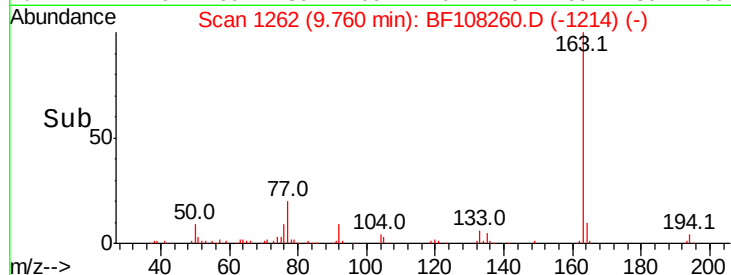
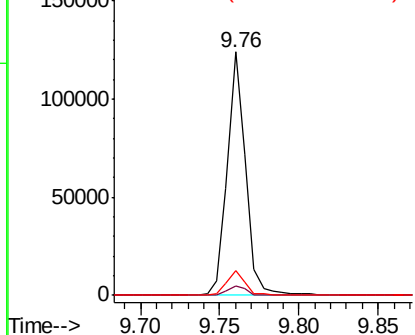
| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 163     | 100   |      |       |       |
| 194     | 3.9   | 2.7  | 4.1   |       |
| 164     | 10.3  | 8.2  | 12.2  |       |

Manual Integrations  
APPROVED

Sohil  
8/20/2018 12:48:36 PM



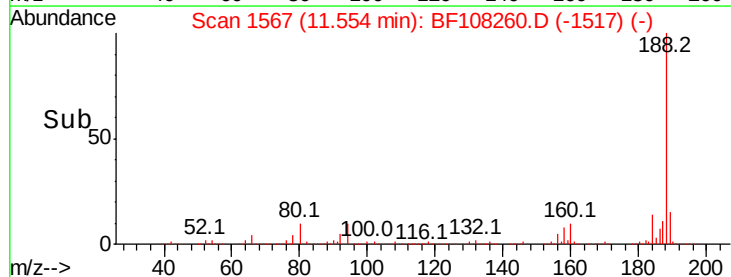
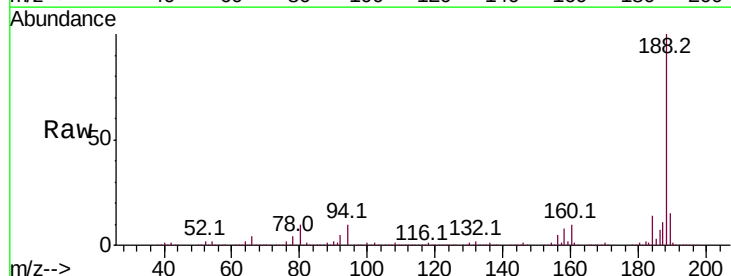
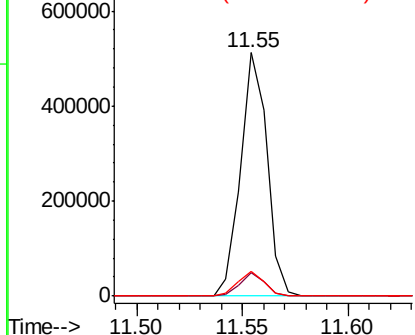
Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

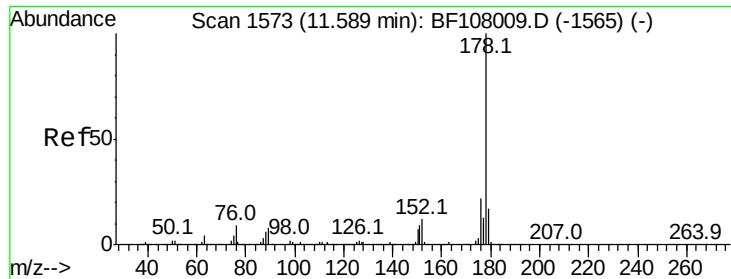


#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.55 min Scan# 1567  
Delta R.T. -0.01 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 188     | 100   |      |       |       |
| 94      | 9.7   | 8.5  | 12.7  |       |
| 80      | 10.1  | 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





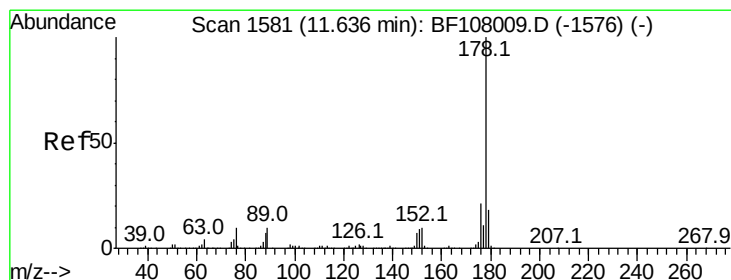
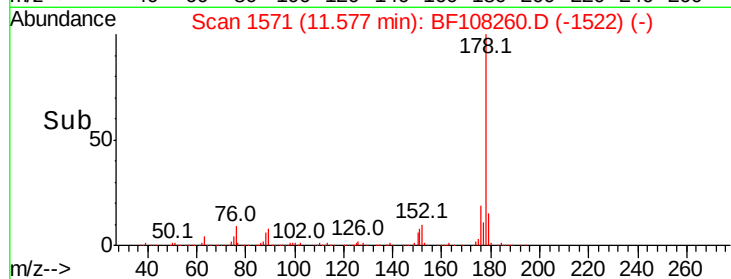
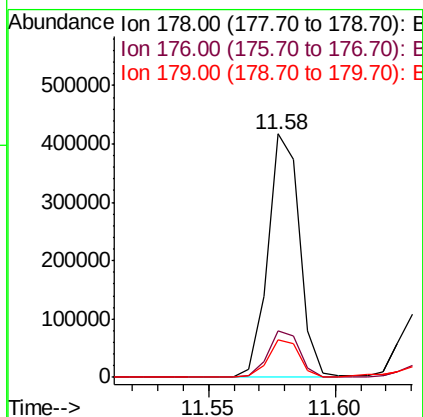
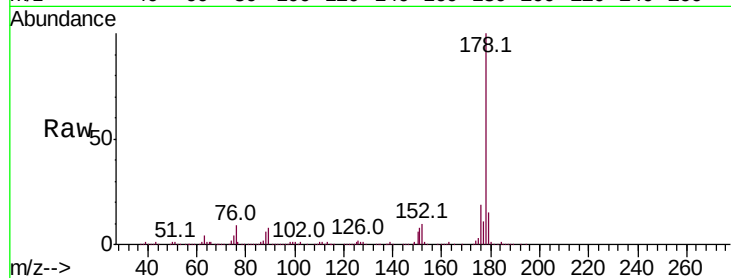
#70  
Phenanthrene  
Concen: 17.426 ng  
RT: 11.58 min Scan# 1571  
Delta R.T. -0.01 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

Instrument :  
BNA\_F  
ClientSampleId :  
RA-081318-FL-017

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.4  | 15.8  | 23.8  |
| 179     | 15.4  | 13.0  | 19.6  |

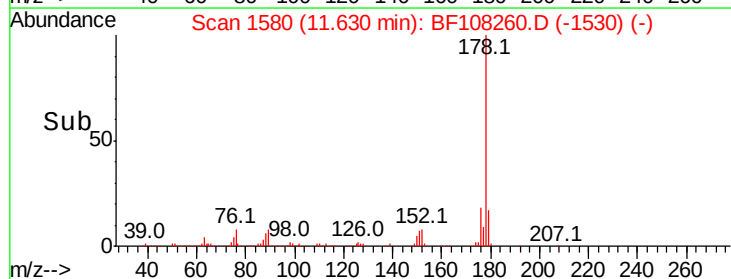
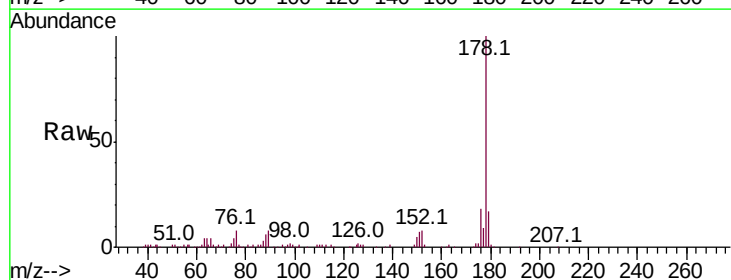
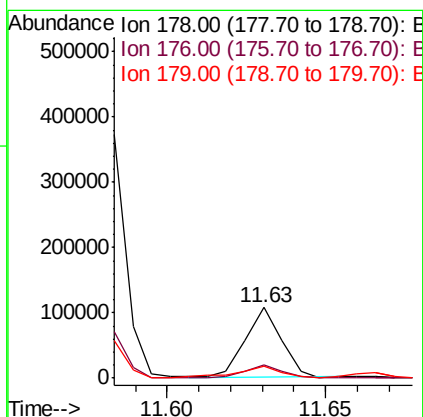
Manual Integrations  
APPROVED

Sohil  
8/20/2018 12:48:36 PM

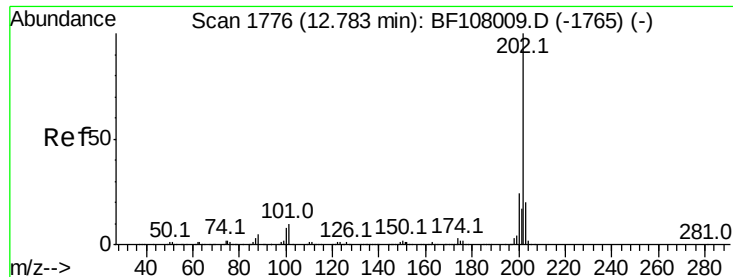


#71  
Anthracene  
Concen: 3.904 ng  
RT: 11.63 min Scan# 1580  
Delta R.T. -0.01 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.2  | 15.4  | 23.2  |
| 179     | 16.5  | 12.6  | 19.0  |







#74

Fluoranthene

Concen: 18.777 ng

RT: 12.78 min Scan# 1775

Delta R.T. -0.01 min

Lab File: BF108260.D

Acq: 17 Aug 2018 23:34

Instrument :

BNA\_F

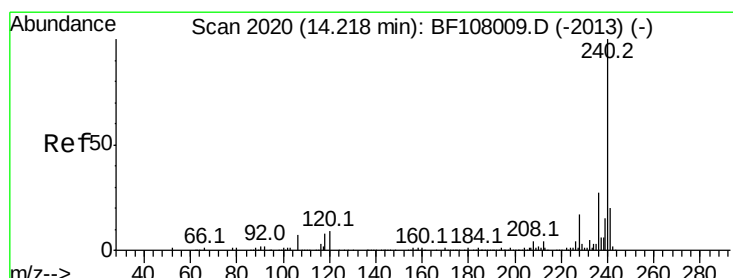
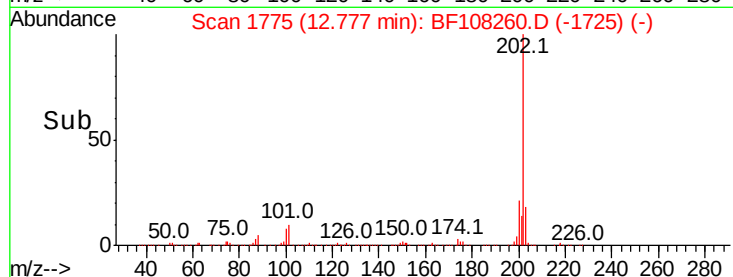
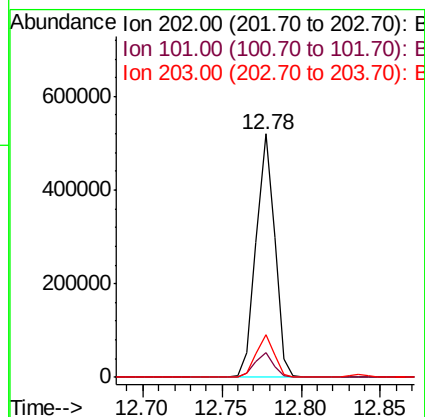
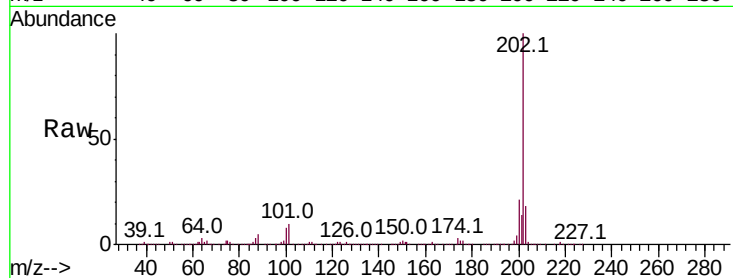
ClientSampleId :

RA-081318-FL-017

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 10.3  | 0.0        | 34.1  |
| 203     | 17.6  | 0.0        | 38.1  |

Manual Integrations  
APPROVED

Sohil  
8/20/2018 12:48:36 PM



#75

Chrysene-d12

Concen: 20.000 ng

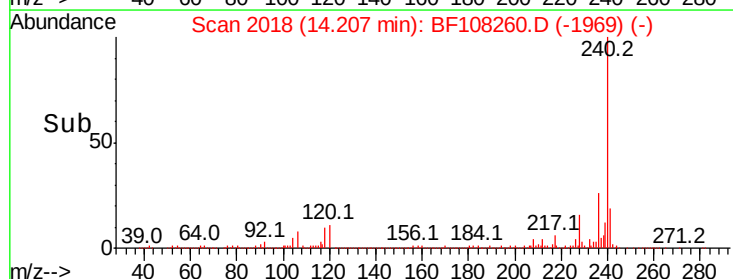
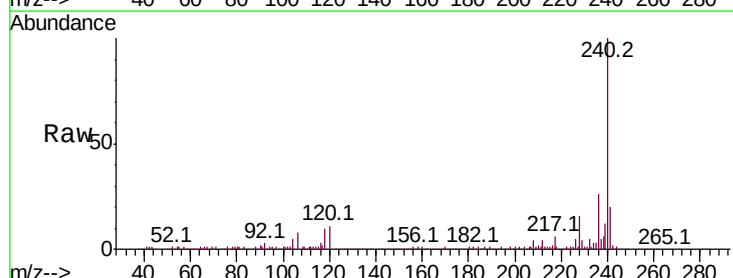
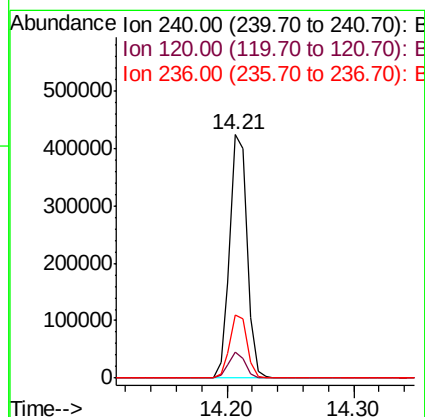
RT: 14.21 min Scan# 2018

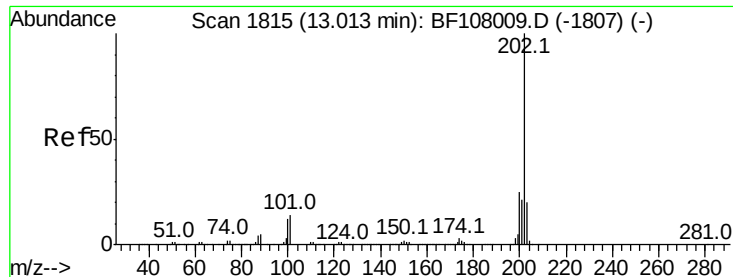
Delta R.T. -0.01 min

Lab File: BF108260.D

Acq: 17 Aug 2018 23:34

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 240     | 100   |            |       |
| 120     | 10.8  | 9.5        | 14.3  |
| 236     | 25.9  | 20.7       | 31.1  |





#77

Pvrene

Concen: 14.398 ng

RT: 13.01 min Scan# 1814

Delta R.T. -0.01 min

Lab File: BF108260.D

Acq: 17 Aug 2018 23:34

Instrument :

BNA\_F

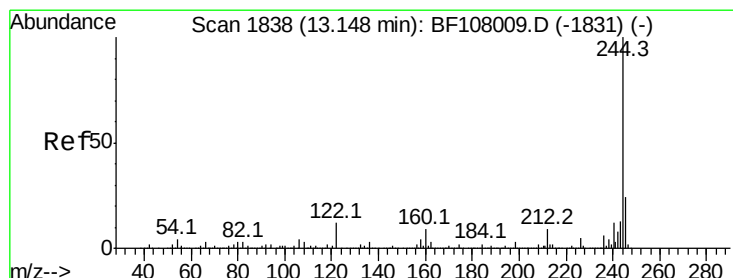
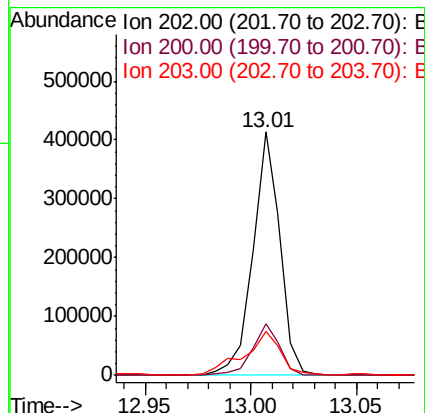
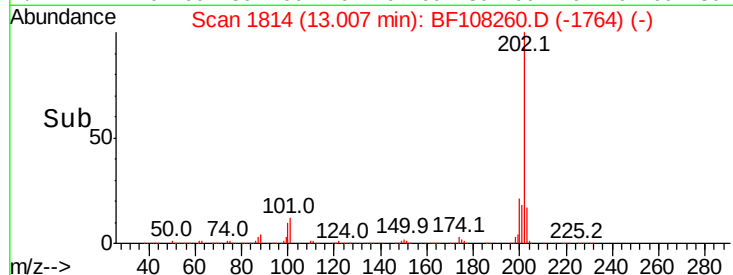
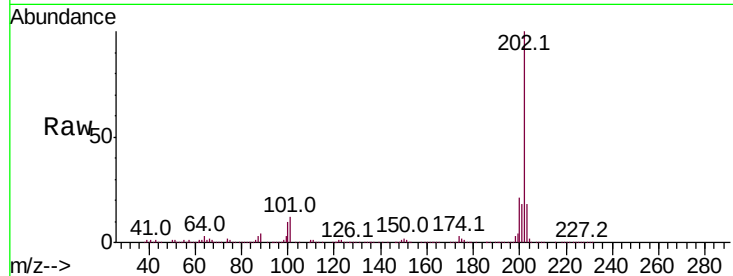
ClientSampleId :

RA-081318-FL-017

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 202  | Resp: | 369444 |
| Ion Ratio |      | Lower | Upper  |
| 202       | 100  |       |        |
| 200       | 21.0 | 17.4  | 26.2   |
| 203       | 17.8 | 14.3  | 21.5   |

Manual Integrations  
APPROVED

Sohil  
8/20/2018 12:48:36 PM



#78

Terphenyl-d14

Concen: 72.879 ng

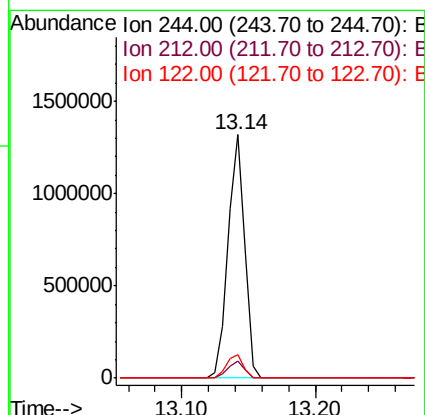
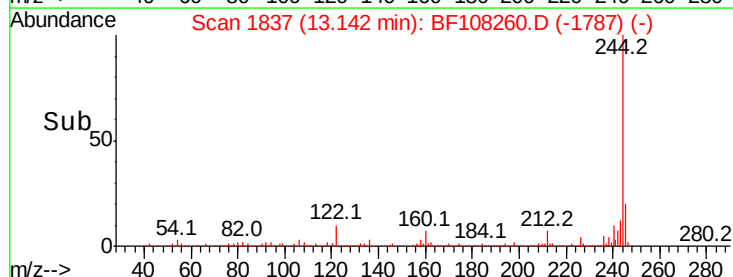
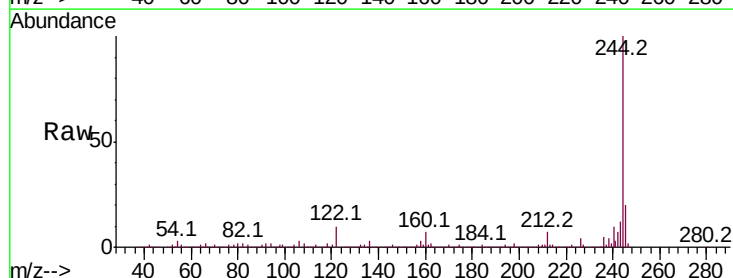
RT: 13.14 min Scan# 1837

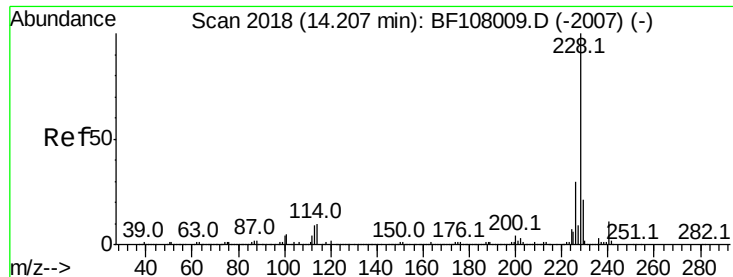
Delta R.T. -0.01 min

Lab File: BF108260.D

Acq: 17 Aug 2018 23:34

|           |     |       |         |
|-----------|-----|-------|---------|
| Tgt Ion:  | 244 | Resp: | 1161745 |
| Ion Ratio |     | Lower | Upper   |
| 244       | 100 |       |         |
| 212       | 7.2 | 5.4   | 8.0     |
| 122       | 9.7 | 11.0  | 16.4#   |





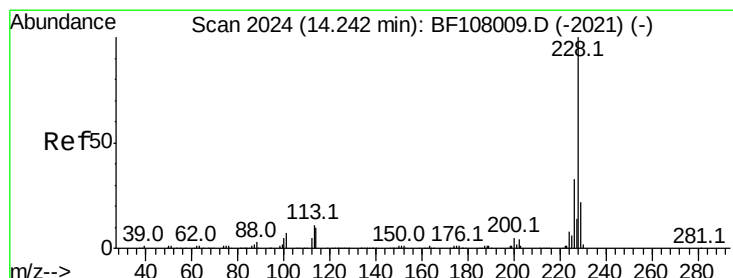
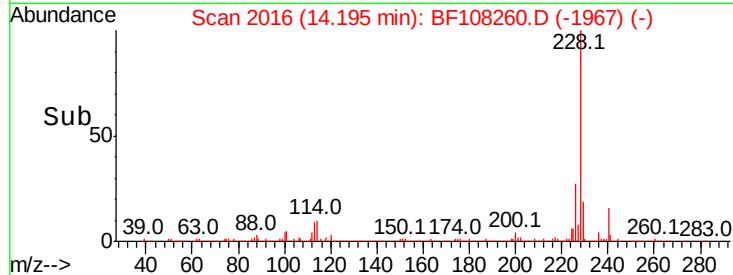
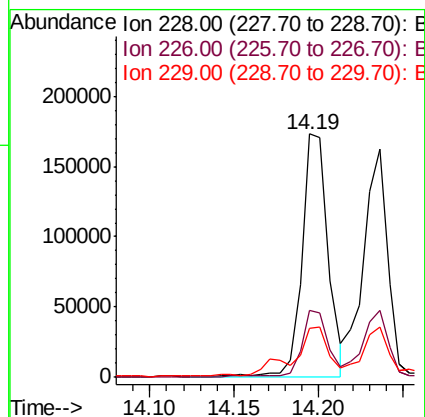
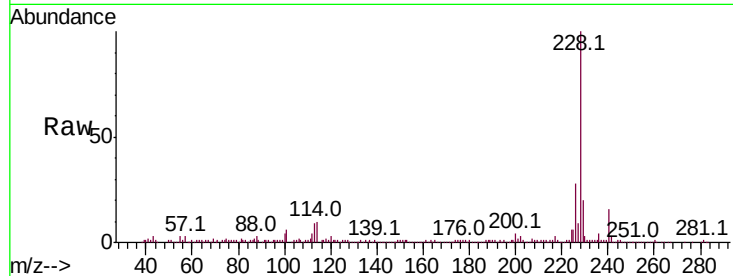
#80  
Benzo(a)anthracene  
Concen: 7.930 ng  
RT: 14.19 min Scan# 2016  
Delta R.T. -0.01 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

Instrument :  
BNA\_F  
ClientSampleId :  
RA-081318-FL-017

|             |       |        |
|-------------|-------|--------|
| Tot Ion:228 | Resp: | 184455 |
| Ion Ratio   | Lower | Upper  |
| 228 100     |       |        |
| 226 27.6    | 22.6  | 33.8   |
| 229 20.1    | 15.8  | 23.6   |

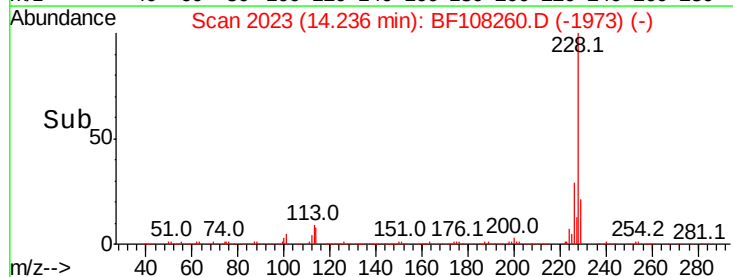
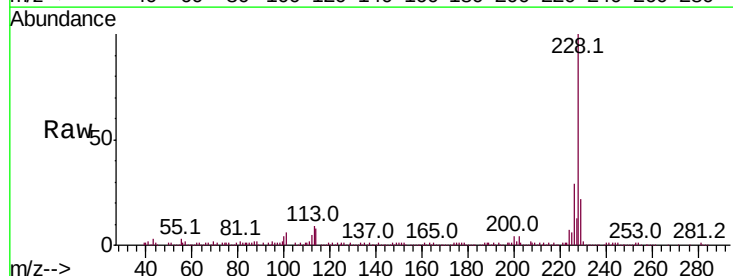
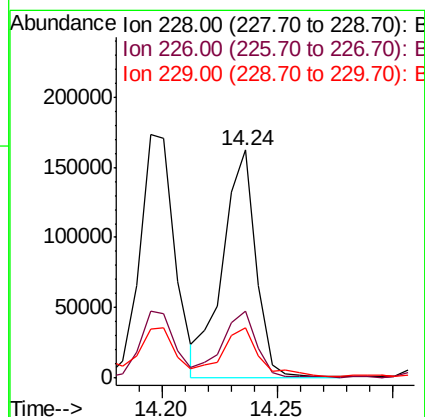
Manual Integrations  
APPROVED

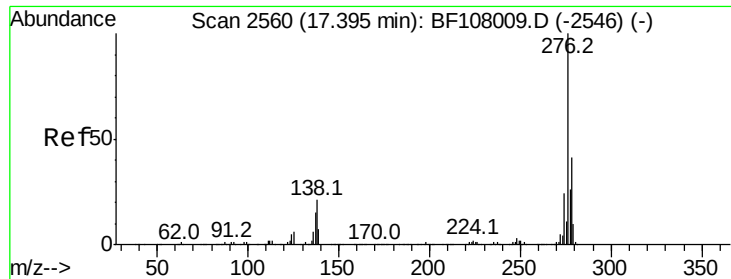
Sohil  
8/20/2018 12:48:36 PM



#82  
Chrysene  
Concen: 7.560 ng  
RT: 14.24 min Scan# 2023  
Delta R.T. -0.01 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

|             |       |        |
|-------------|-------|--------|
| Tgt Ion:228 | Resp: | 161207 |
| Ion Ratio   | Lower | Upper  |
| 228 100     |       |        |
| 226 29.5    | 25.0  | 37.6   |
| 229 22.1    | 16.2  | 24.4   |





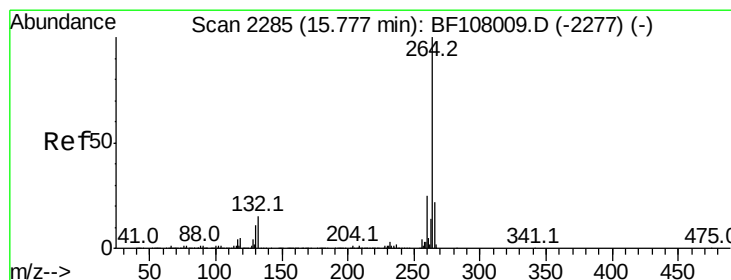
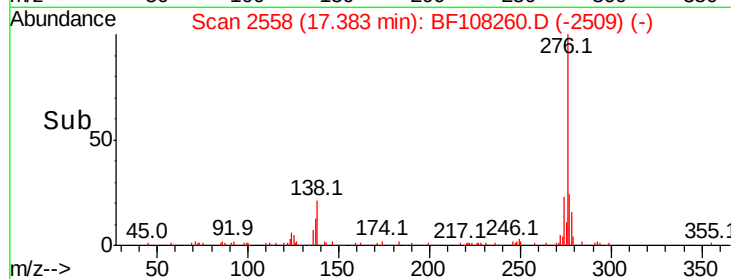
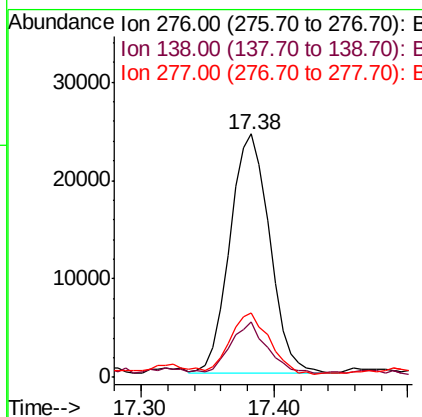
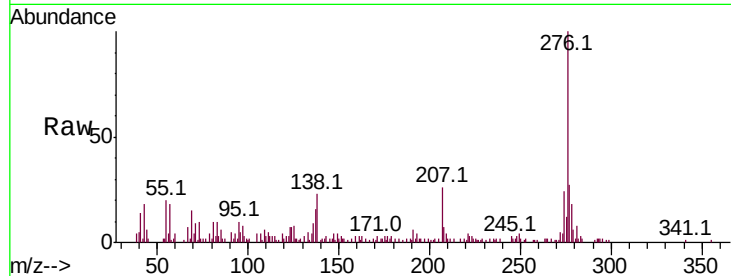
#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 2.723 ng  
 RT: 17.38 min Scan# 2558  
 Delta R.T. -0.01 min  
 Lab File: BF108260.D  
 Acq: 17 Aug 2018 23:34

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RA-081318-FL-017

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 19.0  | 25.0  | 37.6# |
| 277     | 24.8  | 20.1  | 30.1  |

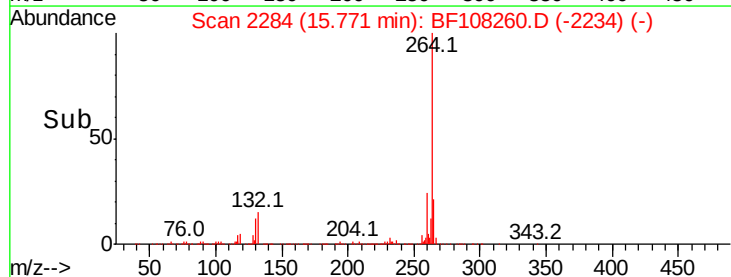
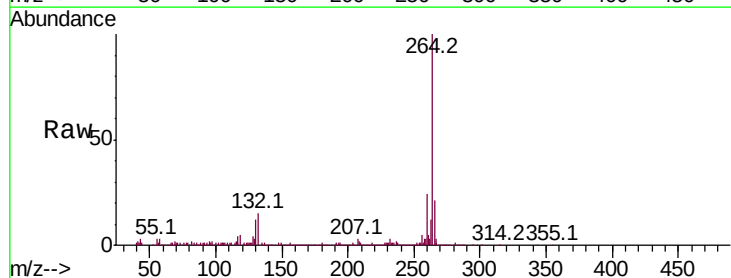
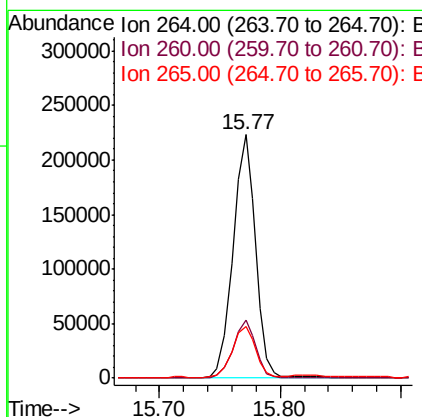
Manual Integrations  
 APPROVED

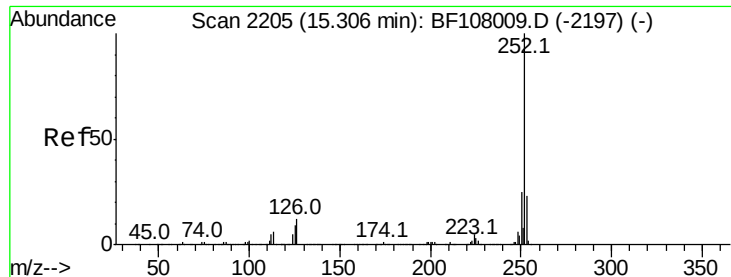
Sohil  
 8/20/2018 12:48:36 PM



#86  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 15.77 min Scan# 2284  
 Delta R.T. -0.01 min  
 Lab File: BF108260.D  
 Acq: 17 Aug 2018 23:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.8  | 19.2  | 28.8  |
| 265     | 21.4  | 17.5  | 26.3  |





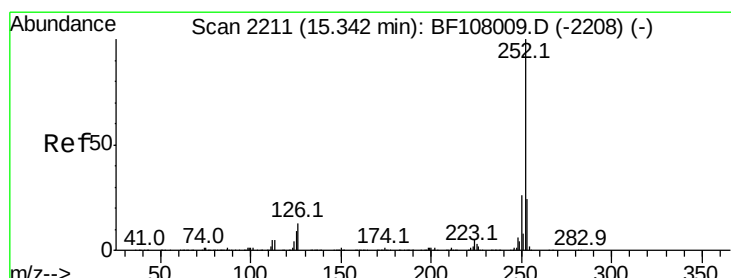
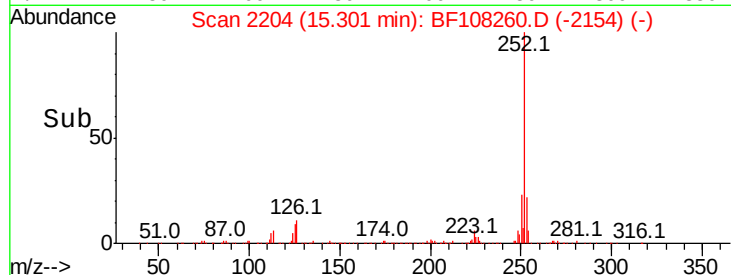
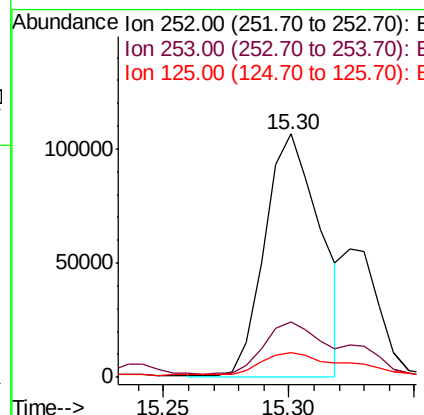
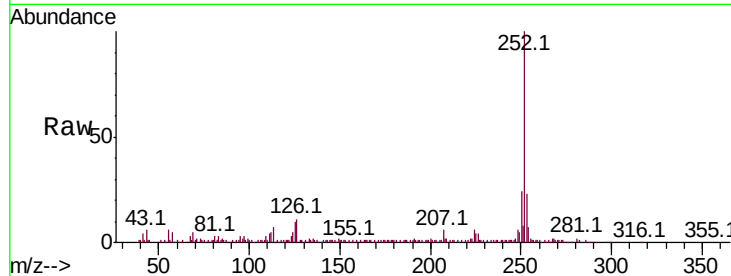
#87  
Benzo(b)fluoranthene  
Concen: 9.698 ng m  
RT: 15.30 min Scan# 2204  
Delta R.T. -0.01 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

Instrument :  
BNA\_F  
ClientSampleId :  
RA-081318-FL-017

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.8  | 17.0  | 25.6  |
| 125     | 10.1  | 9.0   | 13.6  |

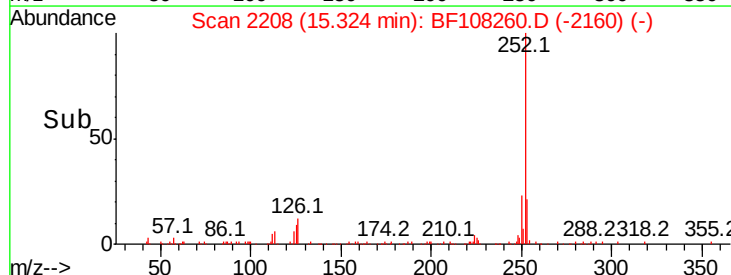
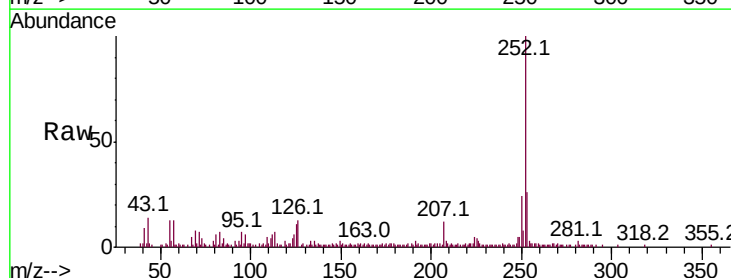
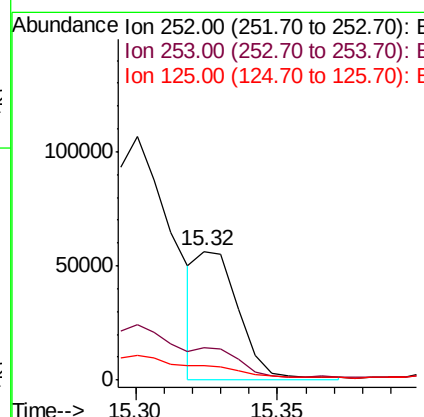
Manual Integrations  
APPROVED

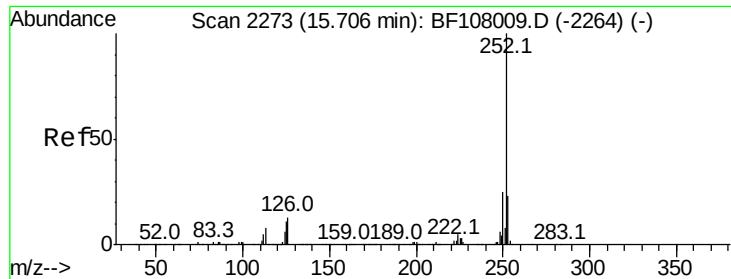
Sohil  
8/20/2018 12:48:36 PM



#88  
Benzo(k)fluoranthene  
Concen: 3.605 ng m  
RT: 15.32 min Scan# 2208  
Delta R.T. -0.02 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.5  | 17.9  | 26.9  |
| 125     | 10.8  | 10.2  | 15.2  |





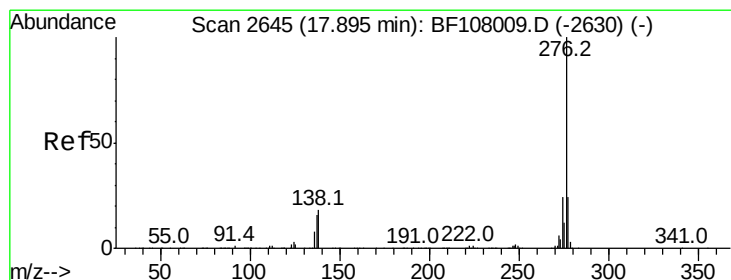
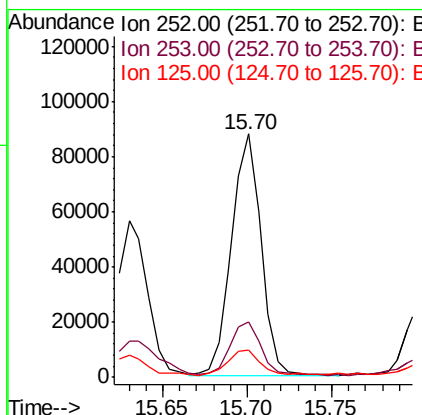
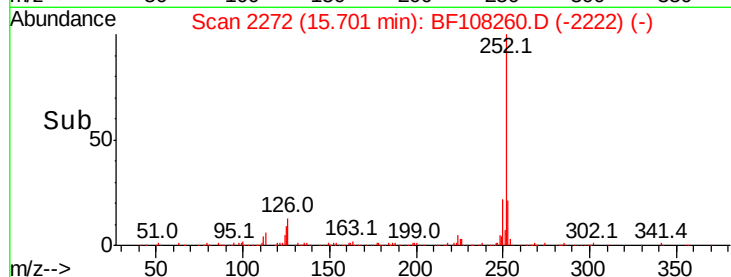
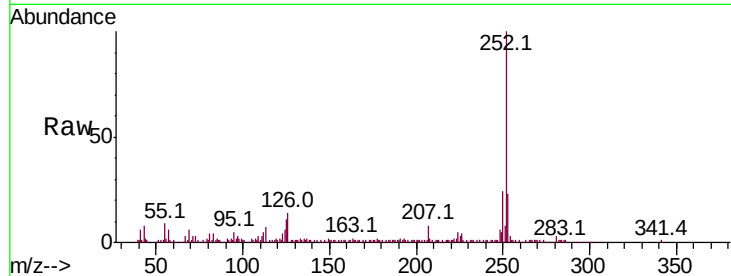
#89  
Benzo(a)pyrene  
Concen: 6.939 ng  
RT: 15.70 min Scan# 2272  
Delta R.T. -0.01 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

Instrument :  
BNA\_F  
ClientSampleId :  
RA-081318-FL-017

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 106884 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.6  | 17.1  | 25.7   |
| 125       | 11.0  | 9.8   | 14.6   |

Manual Integrations  
APPROVED

Sohil  
8/20/2018 12:48:36 PM



#91  
Benzo(g,h,i)perylene  
Concen: 4.156 ng  
RT: 17.88 min Scan# 2642  
Delta R.T. -0.02 min  
Lab File: BF108260.D  
Acq: 17 Aug 2018 23:34

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 52152 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 277       | 22.2  | 17.9  | 26.9  |
| 138       | 16.7  | 21.8  | 32.8# |

