

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM081415\  
 Data File : BM002417.D  
 Acq On : 15 Aug 2015 10:20  
 Operator : UM/IZ  
 Sample : G3219-06  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9D99

Manual Integrations  
 APPROVED

MMDadoda  
 8/17/2015 2:45:08 PM

Quant Time: Aug 17 04:27:23 2015  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM081415MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Aug 17 02:54:04 2015  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 8.87  | 152  | 119646   | 20.00 | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 11.74 | 136  | 586717   | 20.00 | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 15.44 | 164  | 341203   | 20.00 | ng/ul  | 0.00     |
| 12) Phenanthrene-d10        | 18.15 | 188  | 725909   | 20.00 | ng/ul  | 0.00     |
| 17) Chrysene-d12            | 22.23 | 240  | 650845   | 20.00 | ng/ul  | 0.00     |
| 22) Perylene-d12            | 24.89 | 264  | 528338   | 20.00 | ng/ul  | 0.01     |
| System Monitoring Compounds |       |      |          |       |        |          |
| 7) Acenaphthylene-d8        | 15.15 | 160  | 716865   | 20.55 | ng/ul  | 0.00     |
| 10) Fluorene-d10            | 16.42 | 176  | 473545   | 19.33 | ng/ul  | 0.00     |
| 14) Anthracene-d10          | 18.25 | 188  | 695703   | 19.87 | ng/ul  | 0.00     |
| 18) Pyrene-d10              | 20.47 | 212  | 678302   | 23.51 | ng/ul  | 0.00     |
| 25) Benzo(a)pyrene-d12      | 24.72 | 264  | 481024   | 17.33 | ng/ul  | 0.01     |
| Target Compounds            |       |      |          |       |        |          |
|                             |       |      |          |       |        | Qvalue   |
| 3) Naphthalene              | 11.79 | 128  | 159559   | 5.33  | ng/ul  | 99       |
| 4) 2-Methylnaphthalene      | 13.33 | 142  | 41092    | 1.83  | ng/ul  | 99       |
| 5) 1-Methylnaphthalene      | 13.55 | 142  | 29032    | 1.31  | ng/ul  | 99       |
| 9) Acenaphthene             | 15.51 | 153  | 82475    | 3.43  | ng/ul  | 98       |
| 11) Fluorene                | 16.47 | 166  | 90609    | 3.29  | ng/ul  | 99       |
| 13) Phenanthrene            | 18.20 | 178  | 1102077  | 26.29 | ng/ul  | 100      |
| 15) Anthracene              | 18.29 | 178  | 253028   | 5.96  | ng/ul  | 100      |
| 16) Fluoranthene            | 20.14 | 202  | 1648874  | 34.74 | ng/ul  | 98       |
| 19) Pyrene                  | 20.50 | 202  | 1393828  | 36.56 | ng/ul  | 99       |
| 20) Benzo(a)anthracene      | 22.21 | 228  | 1043222  | 26.80 | ng/ul  | 98       |
| 21) Chrysene                | 22.27 | 228  | 1206237  | 33.14 | ng/ul  | 98       |
| 23) Benzo(b)fluoranthene    | 24.07 | 252  | 2085004  | 65.28 | ng/ul  | 99       |
| 24) Benzo(k)fluoranthene    | 24.11 | 252  | 582830m  | 19.26 | ng/ul  |          |
| 26) Benzo(a)pyrene          | 24.78 | 252  | 1149243  | 37.67 | ng/ul  | 99       |
| 27) Indeno(1,2,3-cd)pyrene  | 27.71 | 276  | 986622   | 28.12 | ng/ul  | 94       |
| 28) Dibenzo(a,h)anthracene  | 27.71 | 278  | 318772   | 10.87 | ng/ul# | 78       |
| 29) Benzo(g,h,i)perylene    | 28.59 | 276  | 887974   | 30.40 | ng/ul  | 99       |

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

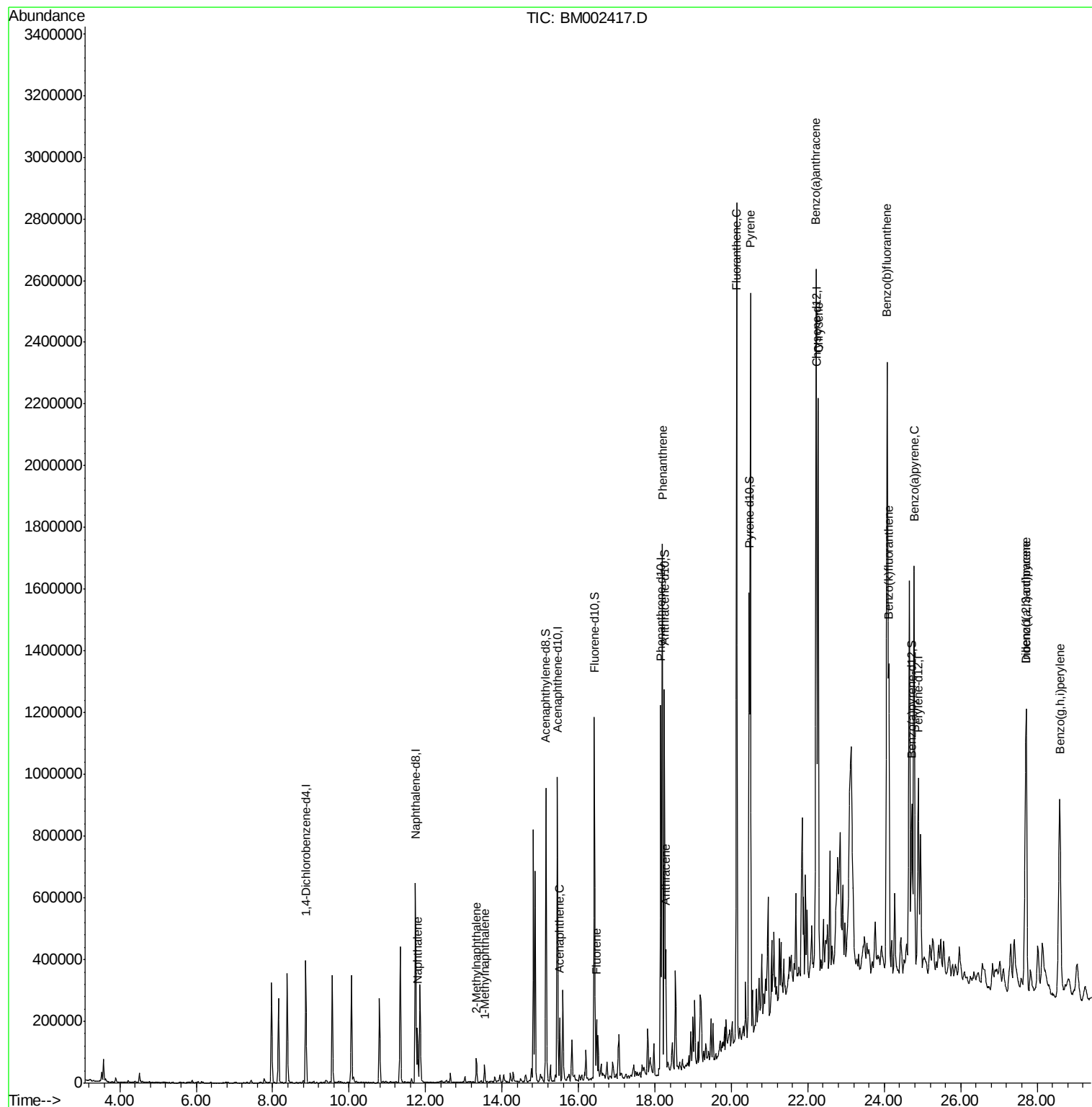
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM081415\  
Data File : BM002417.D  
Acq On : 15 Aug 2015 10:20  
Operator : UM/IZ  
Sample : G3219-06  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

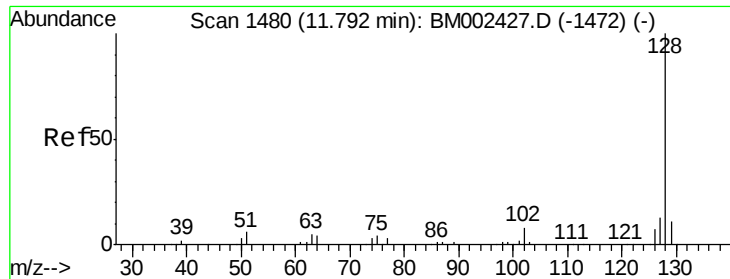
Instrument :  
BNA\_M  
ClientSampleId :  
D9D99

Manual Integrations  
APPROVED

MMDadoda  
8/17/2015 2:45:08 PM

Quant Time: Aug 17 04:27:23 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM081415MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon Aug 17 02:54:04 2015  
Response via : Initial Calibration





#3

Naphthalene

Concen: 5.33 ng/ul

RT: 11.79 min Scan# 1479

Delta R.T. 0.00 min

Lab File: BM002417.D

Acq: 15 Aug 2015 10:20

Instrument :

BNA\_M

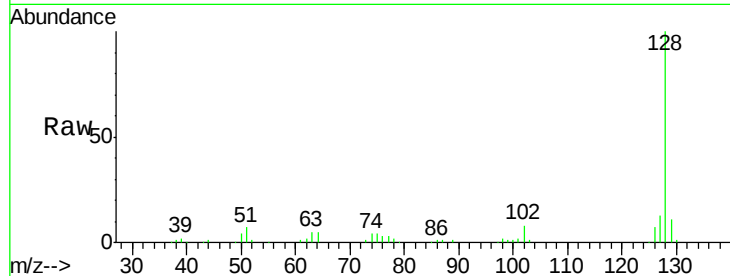
ClientSampleId :

D9D99

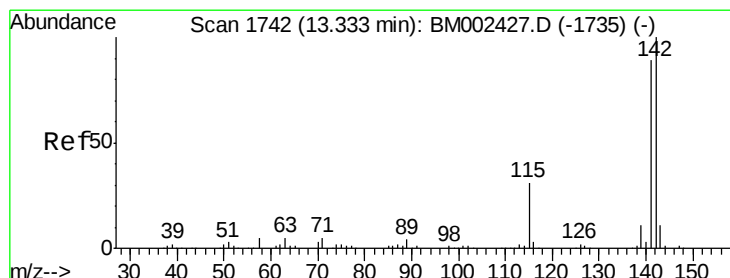
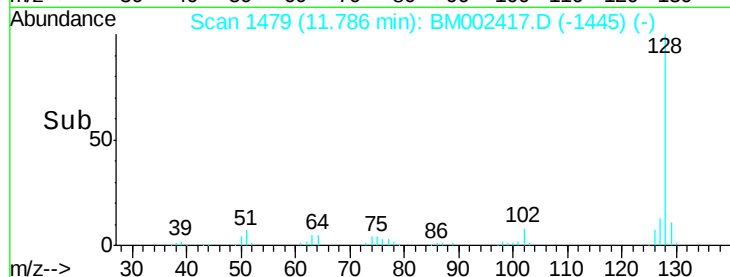
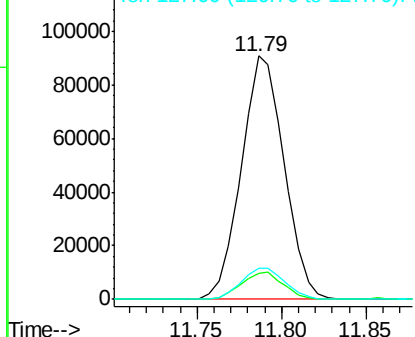
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 128   | Resp: | 159559 |
| Ion Ratio | Lower | Upper |        |
| 128       | 100   |       |        |
| 129       | 10.9  | 8.6   | 12.8   |
| 127       | 12.7  | 10.4  | 15.6   |

Manual Integrations  
APPROVED

MMDadoda  
8/17/2015 2:45:08 PM



Abundance Ion 128.00 (127.70 to 128.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 127.00 (126.70 to 127.70): E



#4

2-Methylnaphthalene

Concen: 1.83 ng/ul

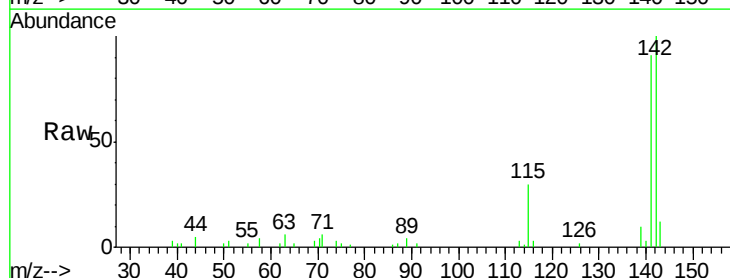
RT: 13.33 min Scan# 1741

Delta R.T. 0.00 min

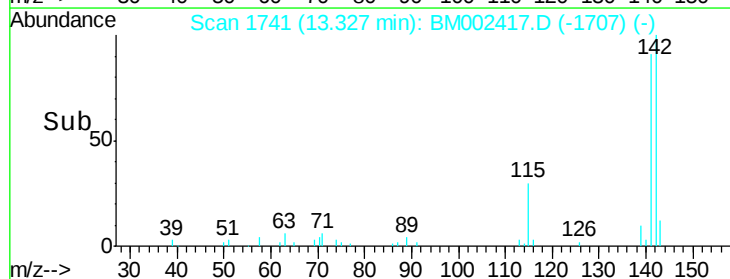
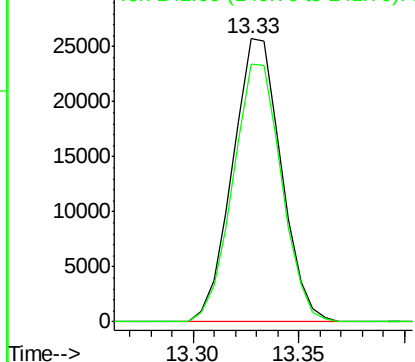
Lab File: BM002417.D

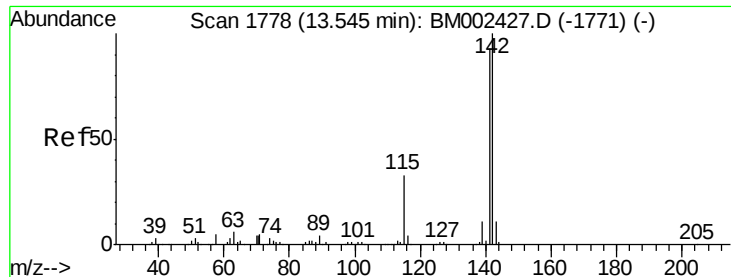
Acq: 15 Aug 2015 10:20

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 142   | Resp: | 41092 |
| Ion Ratio | Lower | Upper |       |
| 142       | 100   |       |       |
| 141       | 90.8  | 72.2  | 108.2 |



Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E





#5

1-Methylnaphthalene

Concen: 1.31 ng/ul

RT: 13.55 min Scan# 1778

Delta R.T. 0.00 min

Lab File: BM002417.D

Acq: 15 Aug 2015 10:20

Instrument :

BNA\_M

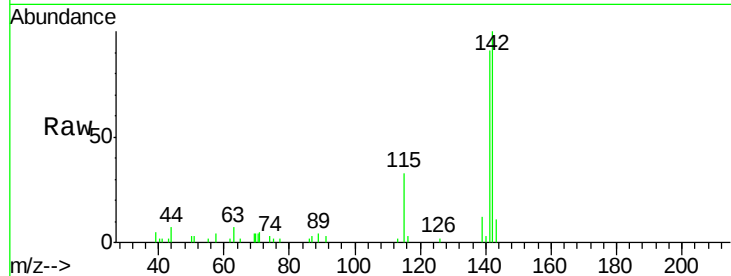
ClientSampleId :

D9D99

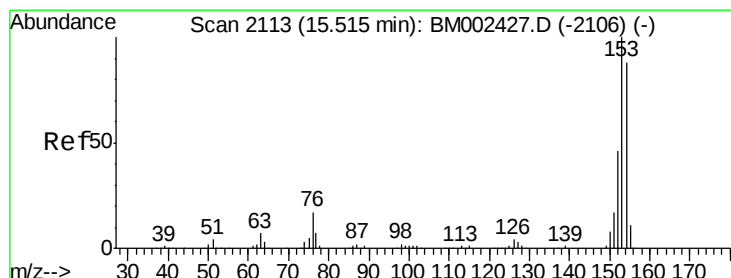
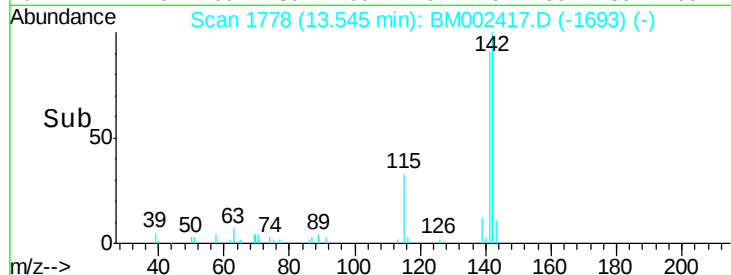
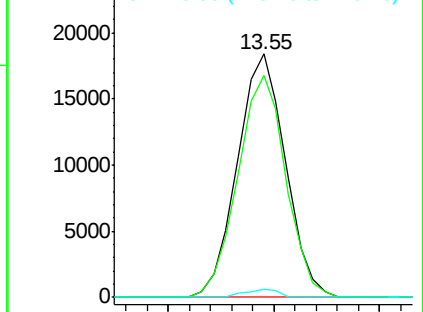
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 142   | Resp: | 29032 |
| Ion Ratio | Lower | Upper |       |
| 142       | 100   |       |       |
| 141       | 91.3  | 73.9  | 110.9 |
| 116       | 3.3   | 3.0   | 4.4   |

Manual Integrations  
APPROVED

MMDadoda  
8/17/2015 2:45:08 PM



Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E  
Ion 116.00 (115.70 to 116.70): E



#9

Acenaphthene

Concen: 3.43 ng/ul

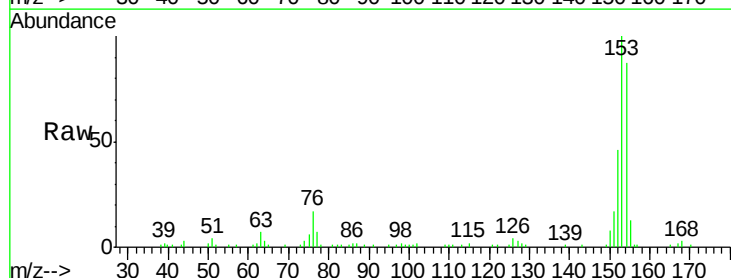
RT: 15.51 min Scan# 2112

Delta R.T. 0.00 min

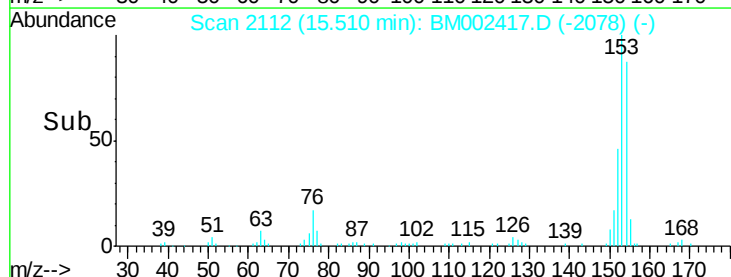
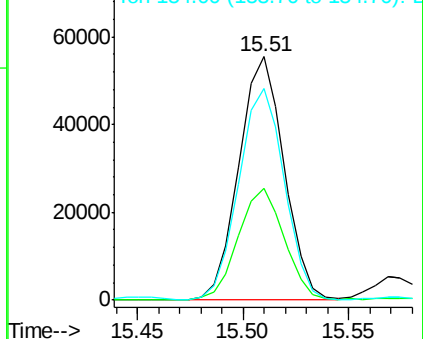
Lab File: BM002417.D

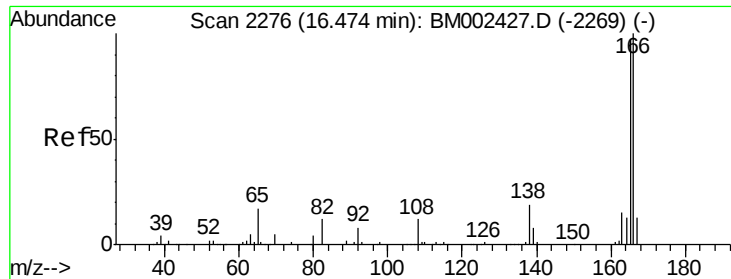
Acq: 15 Aug 2015 10:20

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 82475 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 46.1  | 36.9  | 55.3  |
| 154       | 86.7  | 71.3  | 106.9 |



Abundance Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E  
Ion 154.00 (153.70 to 154.70): E





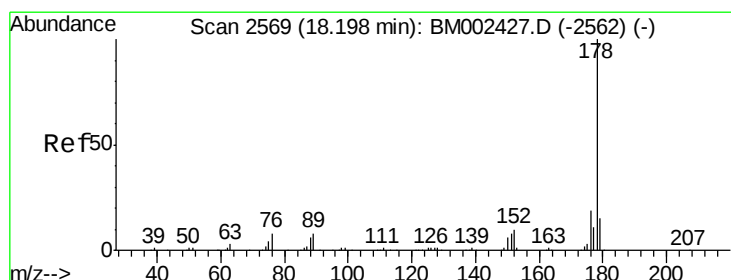
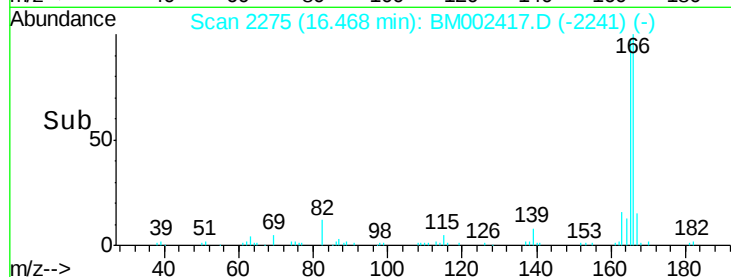
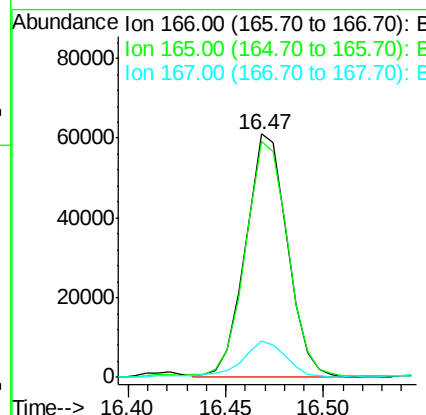
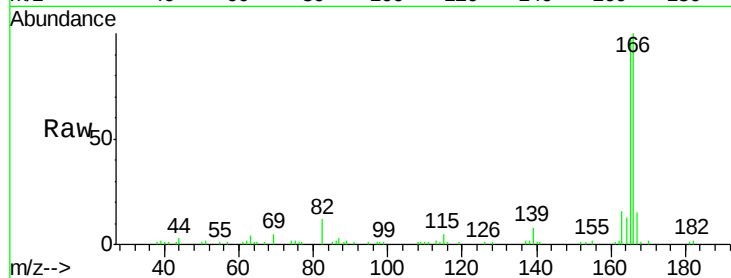
#11  
 Fluorene  
 Concen: 3.29 ng/ul  
 RT: 16.47 min Scan# 2275  
 Delta R.T. 0.00 min  
 Lab File: BM002417.D  
 Acq: 15 Aug 2015 10:20

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9D99

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 166     | 100   | 90609 |       |       |
| 165     | 97.1  |       | 77.6  | 116.4 |
| 167     | 14.7  |       | 10.7  | 16.1  |

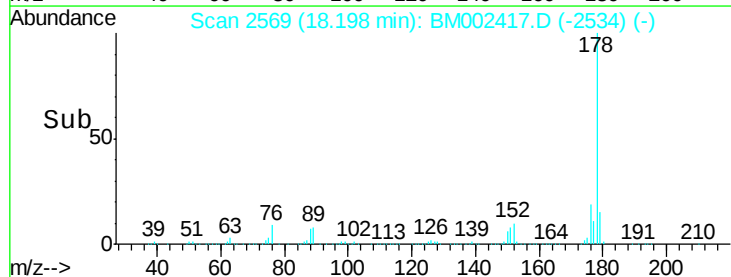
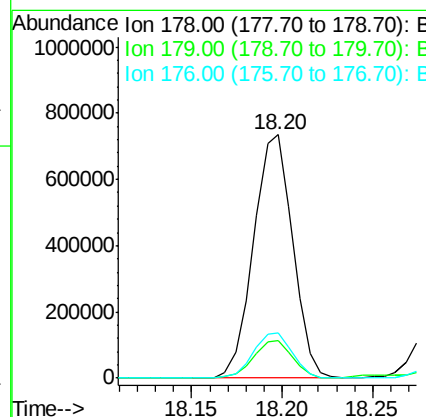
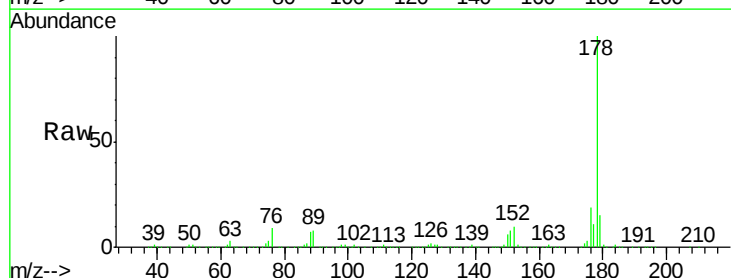
Manual Integrations  
 APPROVED

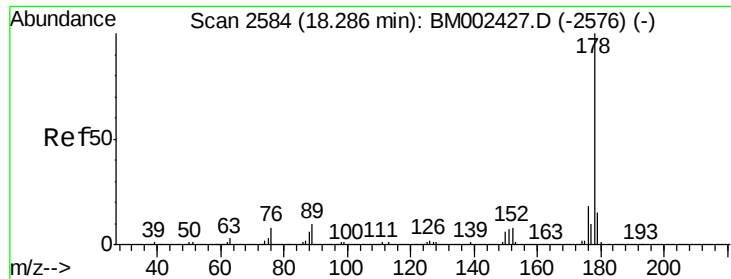
MMDadoda  
 8/17/2015 2:45:08 PM



#13  
 Phenanthrene  
 Concen: 26.29 ng/ul  
 RT: 18.20 min Scan# 2569  
 Delta R.T. 0.01 min  
 Lab File: BM002417.D  
 Acq: 15 Aug 2015 10:20

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 178     | 100   | 1102077 |       |       |
| 179     | 15.3  |         | 12.4  | 18.6  |
| 176     | 18.8  |         | 15.1  | 22.7  |





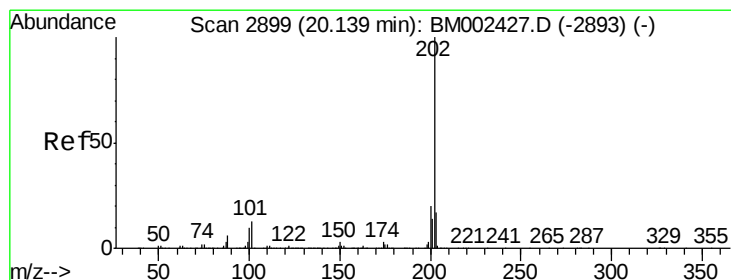
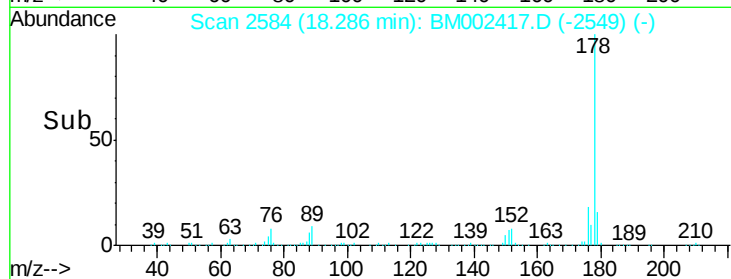
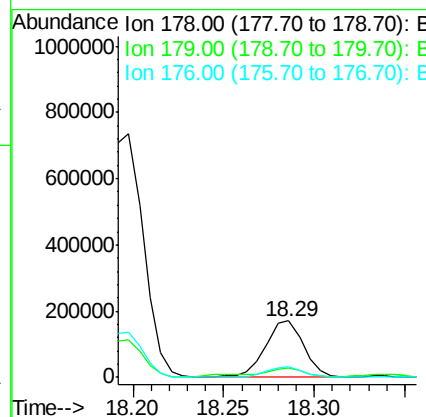
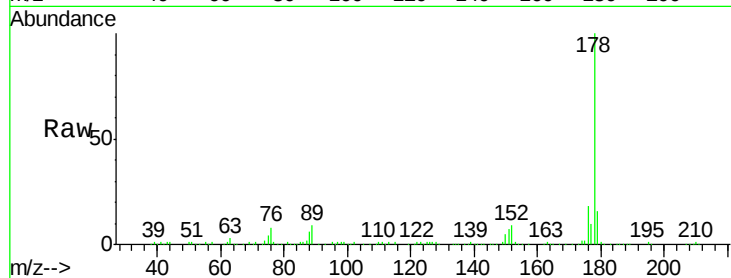
#15  
 Anthracene  
 Concen: 5.96 ng/ul  
 RT: 18.29 min Scan# 2584  
 Delta R.T. 0.01 min  
 Lab File: BM002417.D  
 Acq: 15 Aug 2015 10:20

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9D99

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.5  | 12.6  | 18.8  |
| 176     | 18.0  | 14.5  | 21.7  |

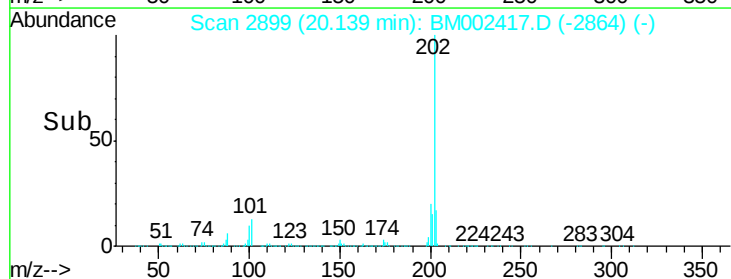
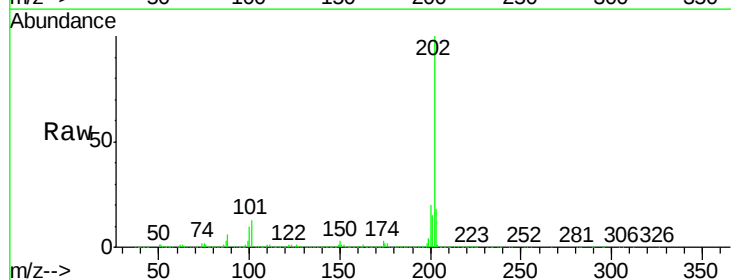
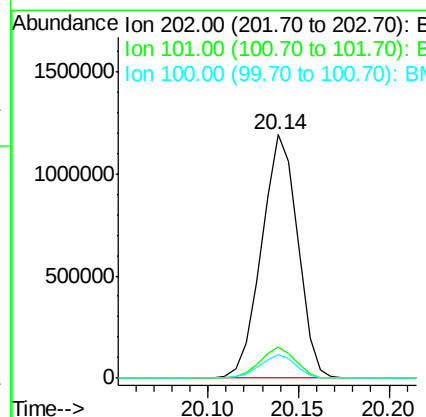
Manual Integrations  
 APPROVED

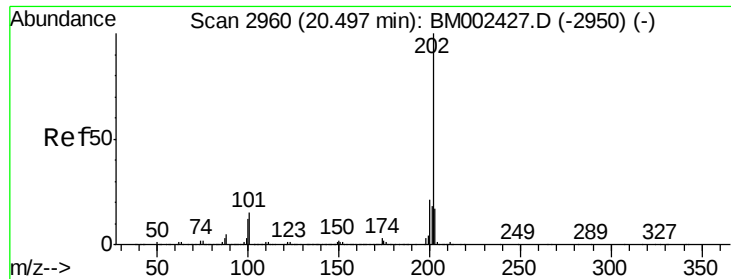
MMDadoda  
 8/17/2015 2:45:08 PM



#16  
 Fluoranthene  
 Concen: 34.74 ng/ul  
 RT: 20.14 min Scan# 2899  
 Delta R.T. 0.01 min  
 Lab File: BM002417.D  
 Acq: 15 Aug 2015 10:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 13.0  | 9.7   | 14.5  |
| 100     | 9.7   | 7.4   | 11.2  |





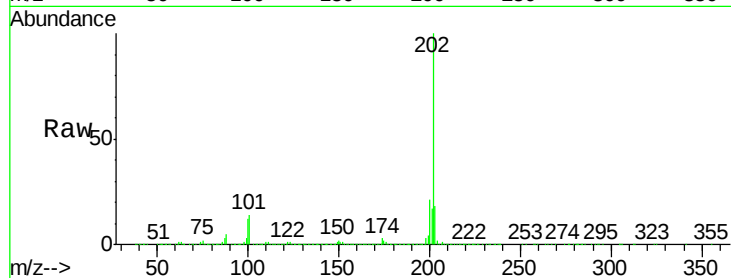
#19  
 Pyrene  
 Concen: 36.56 ng/ul  
 RT: 20.50 min Scan# 2960  
 Delta R.T. 0.01 min  
 Lab File: BM002417.D  
 Acq: 15 Aug 2015 10:20

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9D99

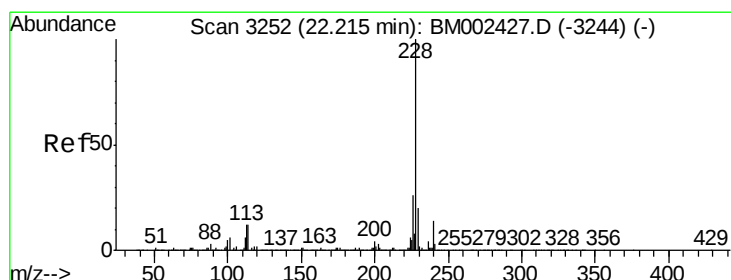
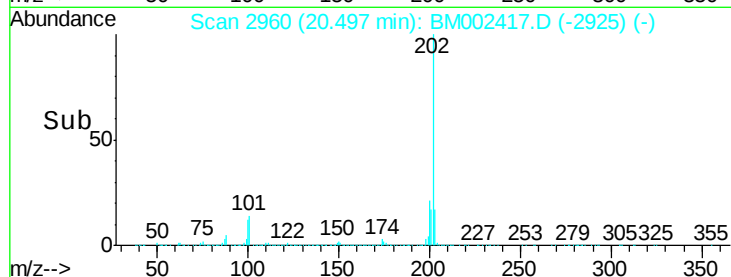
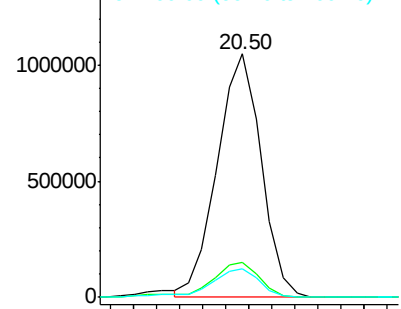
|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 202   | Resp: | 1393828 |
| Ion      | Ratio | Lower | Upper   |
| 202      | 100   |       |         |
| 101      | 14.5  | 12.0  | 18.0    |
| 100      | 11.7  | 9.7   | 14.5    |

Manual Integrations  
 APPROVED

MMDadoda  
 8/17/2015 2:45:08 PM



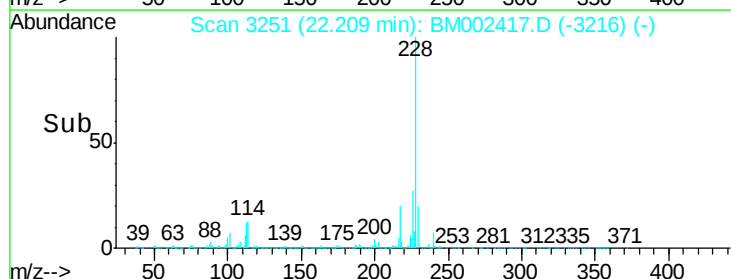
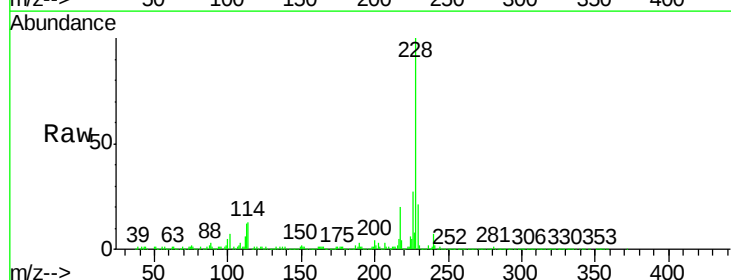
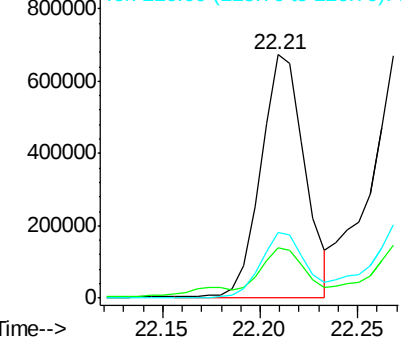
Abundance Ion 202.00 (201.70 to 202.70): E  
 Ion 101.00 (100.70 to 101.70): E  
 Ion 100.00 (99.70 to 100.70): B

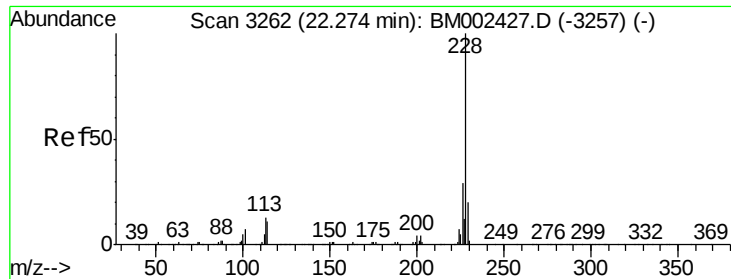


#20  
 Benzo(a)anthracene  
 Concen: 26.80 ng/ul  
 RT: 22.21 min Scan# 3251  
 Delta R.T. 0.01 min  
 Lab File: BM002417.D  
 Acq: 15 Aug 2015 10:20

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 228   | Resp: | 1043222 |
| Ion      | Ratio | Lower | Upper   |
| 228      | 100   |       |         |
| 229      | 20.8  | 15.8  | 23.6    |
| 226      | 27.0  | 21.1  | 31.7    |

Abundance Ion 228.00 (227.70 to 228.70): E  
 Ion 229.00 (228.70 to 229.70): E  
 Ion 226.00 (225.70 to 226.70): E





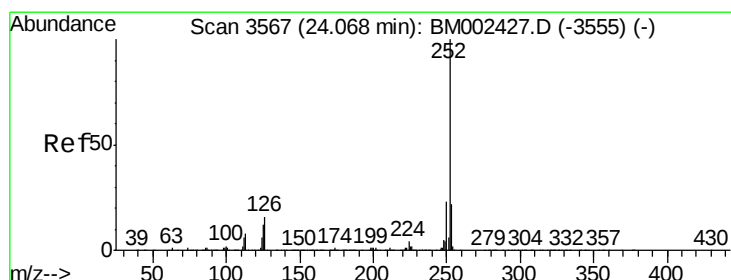
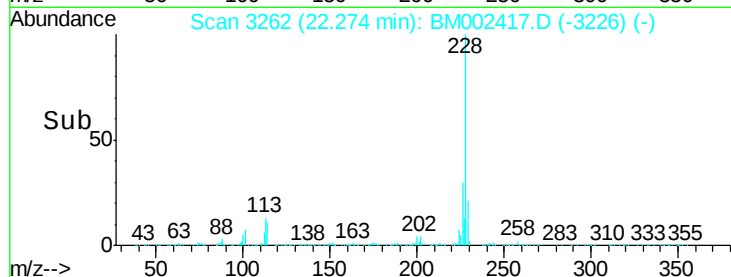
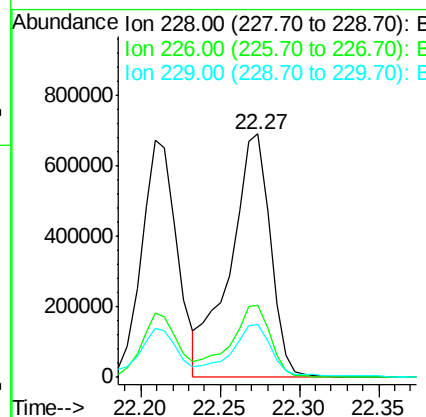
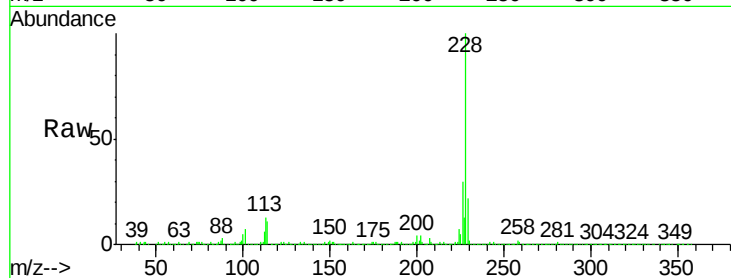
#21  
Chrysene  
Concen: 33.14 ng/ul  
RT: 22.27 min Scan# 3262  
Delta R.T. 0.01 min  
Lab File: BM002417.D  
Acq: 15 Aug 2015 10:20

Instrument :  
BNA\_M  
ClientSampleId :  
D9D99

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.7  | 23.4  | 35.2  |
| 229     | 21.5  | 15.7  | 23.5  |

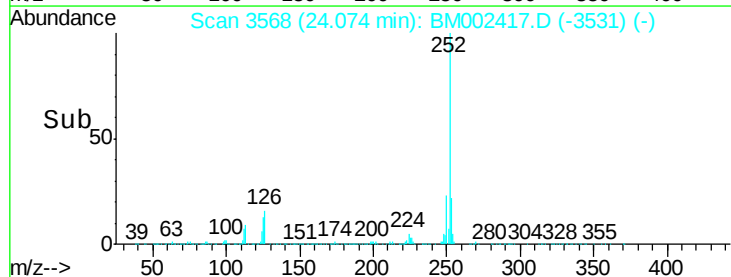
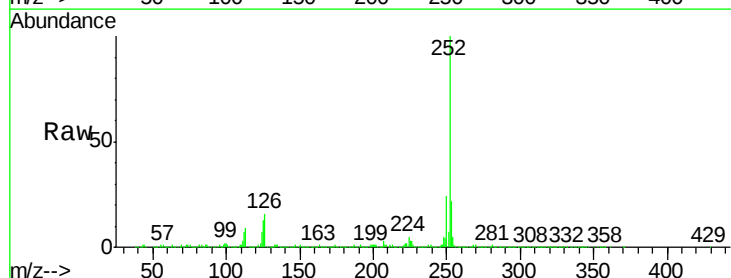
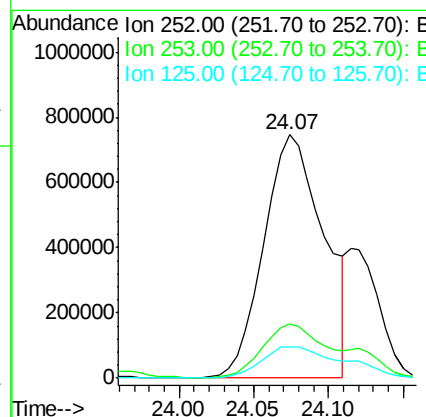
Manual Integrations  
APPROVED

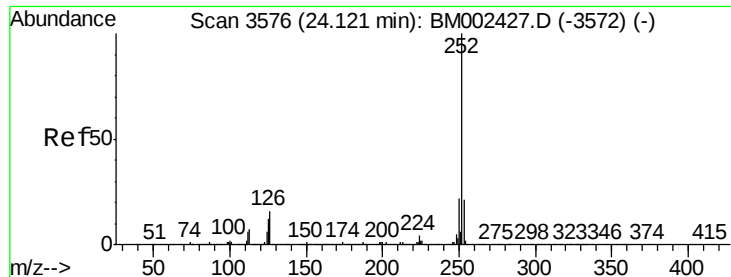
MMDadoda  
8/17/2015 2:45:08 PM



#23  
Benzo(b)fluoranthene  
Concen: 65.28 ng/ul  
RT: 24.07 min Scan# 3568  
Delta R.T. 0.02 min  
Lab File: BM002417.D  
Acq: 15 Aug 2015 10:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.3  | 17.4  | 26.0  |
| 125     | 13.0  | 10.0  | 15.0  |





#24

Benzo(k)fluoranthene

Concen: 19.26 ng/ul m

RT: 24.11 min Scan# 3575

Delta R.T. 0.01 min

Lab File: BM002417.D

Acq: 15 Aug 2015 10:20

Instrument :

BNA\_M

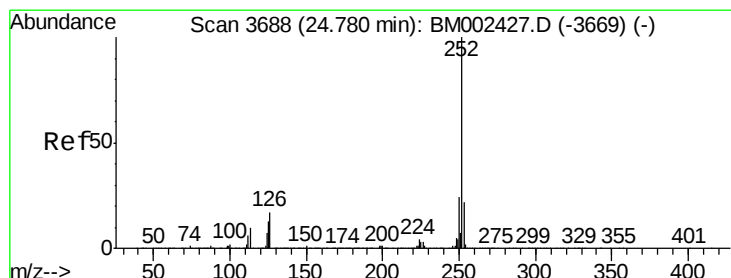
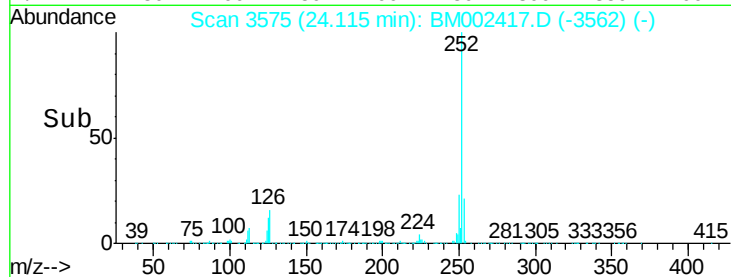
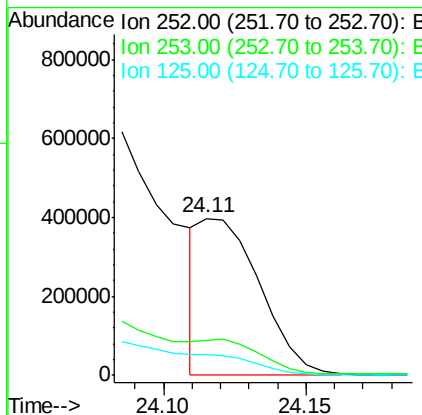
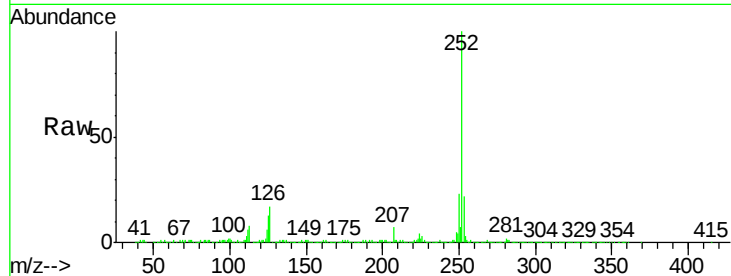
ClientSampleId :

D9D99

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 582830 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.4  | 17.8  | 26.6   |
| 125       | 13.3  | 9.8   | 14.8   |

Manual Integrations  
APPROVED

MMDadoda  
8/17/2015 2:45:08 PM



#26

Benzo(a)pyrene

Concen: 37.67 ng/ul

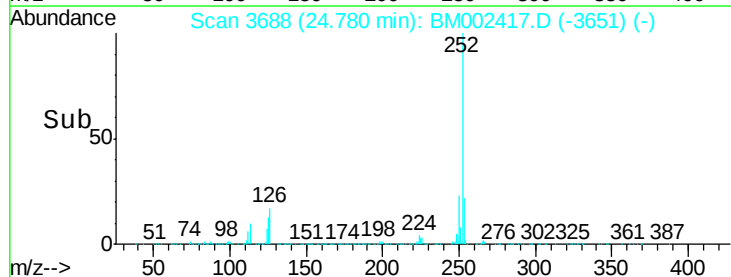
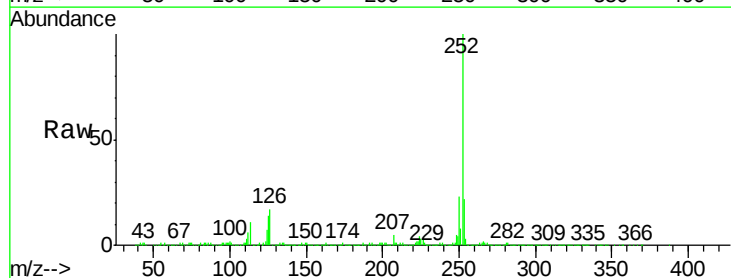
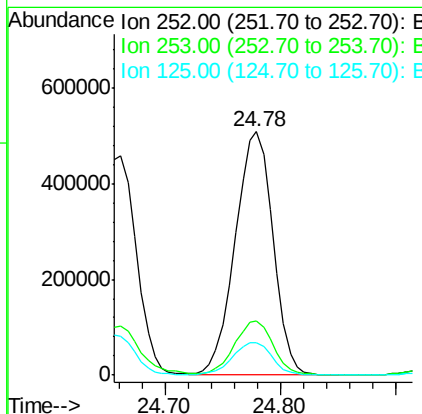
RT: 24.78 min Scan# 3688

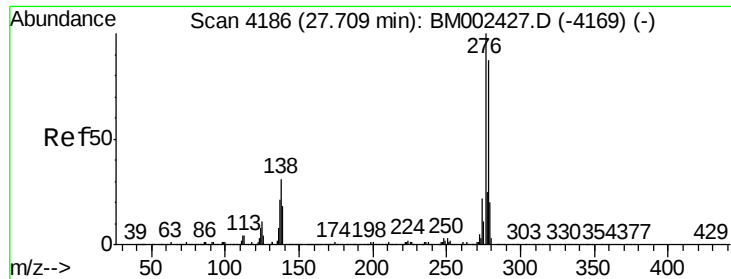
Delta R.T. 0.02 min

Lab File: BM002417.D

Acq: 15 Aug 2015 10:20

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 252   | Resp: | 1149243 |
| Ion Ratio | Lower | Upper |         |
| 252       | 100   |       |         |
| 253       | 22.4  | 17.6  | 26.4    |
| 125       | 13.5  | 10.7  | 16.1    |





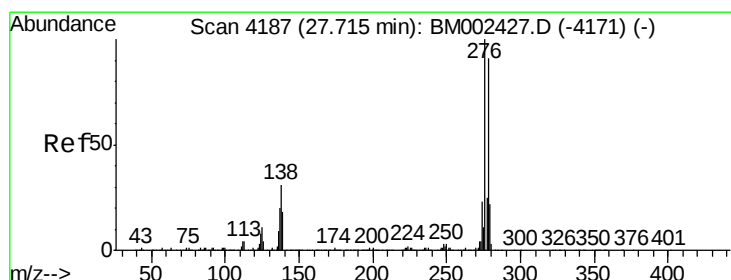
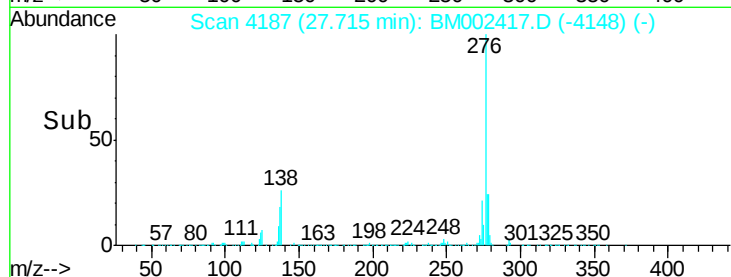
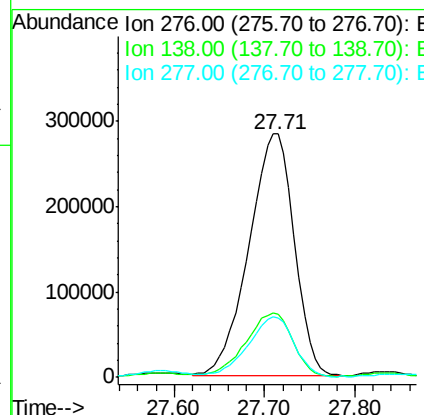
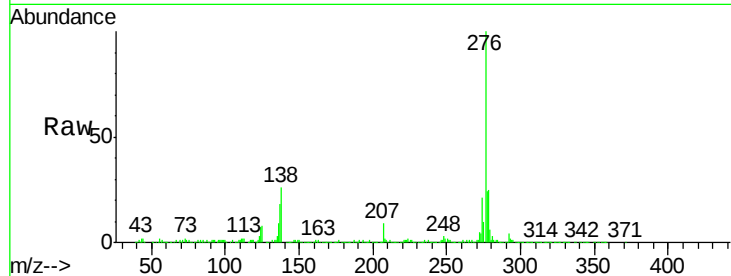
#27  
 Indeno(1,2,3-cd)pyrene  
 Concen: 28.12 ng/ul  
 RT: 27.71 min Scan# 4187  
 Delta R.T. 0.03 min  
 Lab File: BM002417.D  
 Acq: 15 Aug 2015 10:20

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9D99

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 276     | 100   |            |            |
| 138     | 26.1  | 25.3       | 37.9       |
| 277     | 24.2  | 20.2       | 30.2       |

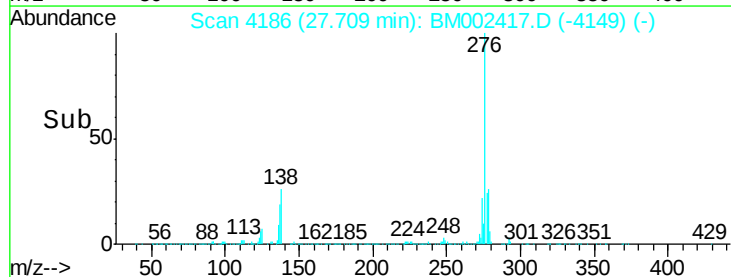
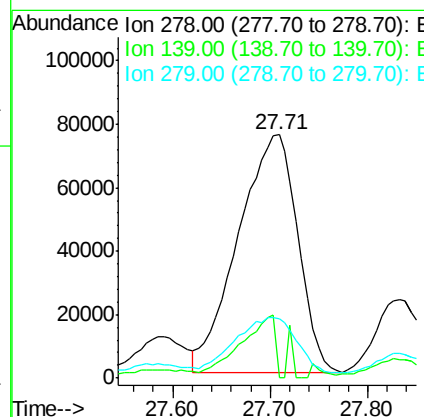
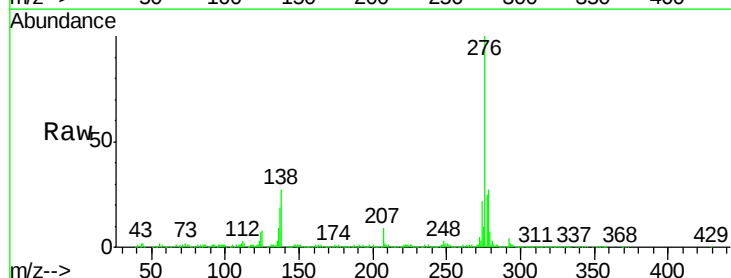
Manual Integrations  
 APPROVED

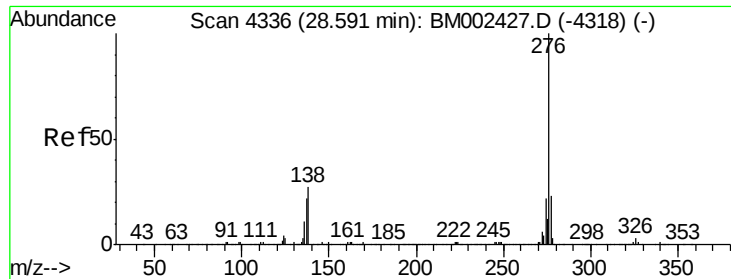
MMDadoda  
 8/17/2015 2:45:08 PM



#28  
 Dibenzo(a,h)anthracene  
 Concen: 10.87 ng/ul  
 RT: 27.71 min Scan# 4186  
 Delta R.T. 0.02 min  
 Lab File: BM002417.D  
 Acq: 15 Aug 2015 10:20

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 278     | 100   |            |            |
| 139     | 0.0   | 16.5       | 24.7#      |
| 279     | 24.6  | 18.8       | 28.2       |





#29

Benzo(g,h,i)perylene

Concen: 30.40 ng/ul

RT: 28.59 min Scan# 4336

Delta R.T. 0.03 min

Lab File: BM002417.D

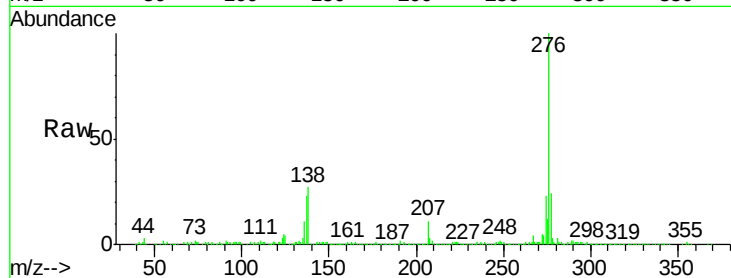
Acq: 15 Aug 2015 10:20

Instrument :

BNA\_M

ClientSampleId :

D9D99



|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 276  | Resp: | 887974 |
| Ion Ratio |      | Lower | Upper  |
| 276       | 100  |       |        |
| 138       | 27.5 | 21.0  | 31.6   |
| 277       | 23.9 | 19.2  | 28.8   |

Manual Integrations  
APPROVED

MMDadoda  
8/17/2015 2:45:08 PM

