

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120518\  
 Data File : BM017910.D  
 Acq On : 04 Dec 2018 19:47  
 Operator : JU/SJ  
 Sample : J5761-03 2X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 AU-05-112918

Manual Integrations  
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 12/5/2018 4:49:59 PM

Quant Time: Dec 05 00:44:22 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM111218.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Nov 12 18:37:25 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.58  | 152  | 277780   | 20.00  | ng    | -0.04    |
| 21) Naphthalene-d8          | 10.35 | 136  | 1072322  | 20.00  | ng    | -0.04    |
| 39) Acenaphthene-d10        | 14.23 | 164  | 520919   | 20.00  | ng    | -0.04    |
| 64) Phenanthrene-d10        | 16.99 | 188  | 941250   | 20.00  | ng    | -0.03    |
| 76) Chrysene-d12            | 21.19 | 240  | 903998   | 20.00  | ng    | -0.02    |
| 87) Perylene-d12            | 23.38 | 264  | 993193   | 20.00  | ng    | -0.03    |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.21  | 112  | 692948   | 42.10  | ng    | -0.03    |
| 7) Phenol-d6                | 6.77  | 99   | 897712   | 39.05  | ng    | -0.04    |
| 23) Nitrobenzene-d5         | 8.73  | 82   | 525891   | 25.32  | ng    | -0.04    |
| 42) 2,4,6-Tribromophenol    | 15.73 | 330  | 258060   | 34.48  | ng    | -0.03    |
| 45) 2-Fluorobiphenyl        | 12.84 | 172  | 1038154  | 25.85  | ng    | -0.04    |
| 79) Terphenyl-d14           | 19.63 | 244  | 988656   | 24.79  | ng    | -0.02    |
| Target Compounds            |       |      |          |        |       |          |
| 10) Phenol                  | 6.80  | 94   | 67844    | 2.812  | ng    | 93       |
| 71) Phenanthrene            | 17.03 | 178  | 1381585  | 27.050 | ng    | 99       |
| 72) Anthracene              | 17.12 | 178  | 189155   | 3.806  | ng    | 99       |
| 73) Carbazole               | 17.40 | 167  | 109200   | 2.174  | ng    | 98       |
| 75) Fluoranthene            | 19.06 | 202  | 2452896  | 42.446 | ng    | 99       |
| 78) Pyrene                  | 19.42 | 202  | 1936722  | 34.722 | ng    | 99       |
| 81) Benzo(a)anthracene      | 21.17 | 228  | 862922   | 16.569 | ng    | 99       |
| 83) Chrysene                | 21.23 | 228  | 951707   | 18.814 | ng    | 98       |
| 86) Indeno(1,2,3-cd)pyrene  | 25.55 | 276  | 769304   | 19.032 | ng    | 96       |
| 88) Benzo(b)fluoranthene    | 22.73 | 252  | 1407885  | 24.205 | ng    | 98       |
| 89) Benzo(k)fluoranthene    | 22.77 | 252  | 473969m  | 8.062  | ng    |          |
| 90) Benzo(a)pyrene          | 23.28 | 252  | 970944   | 18.308 | ng    | 98       |
| 91) Dibenzo(a,h)anthracene  | 25.55 | 278  | 166260   | 3.729  | ng    | # 84     |
| 92) Benzo(g,h,i)perylene    | 26.21 | 276  | 751269   | 17.918 | ng    | 100      |

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

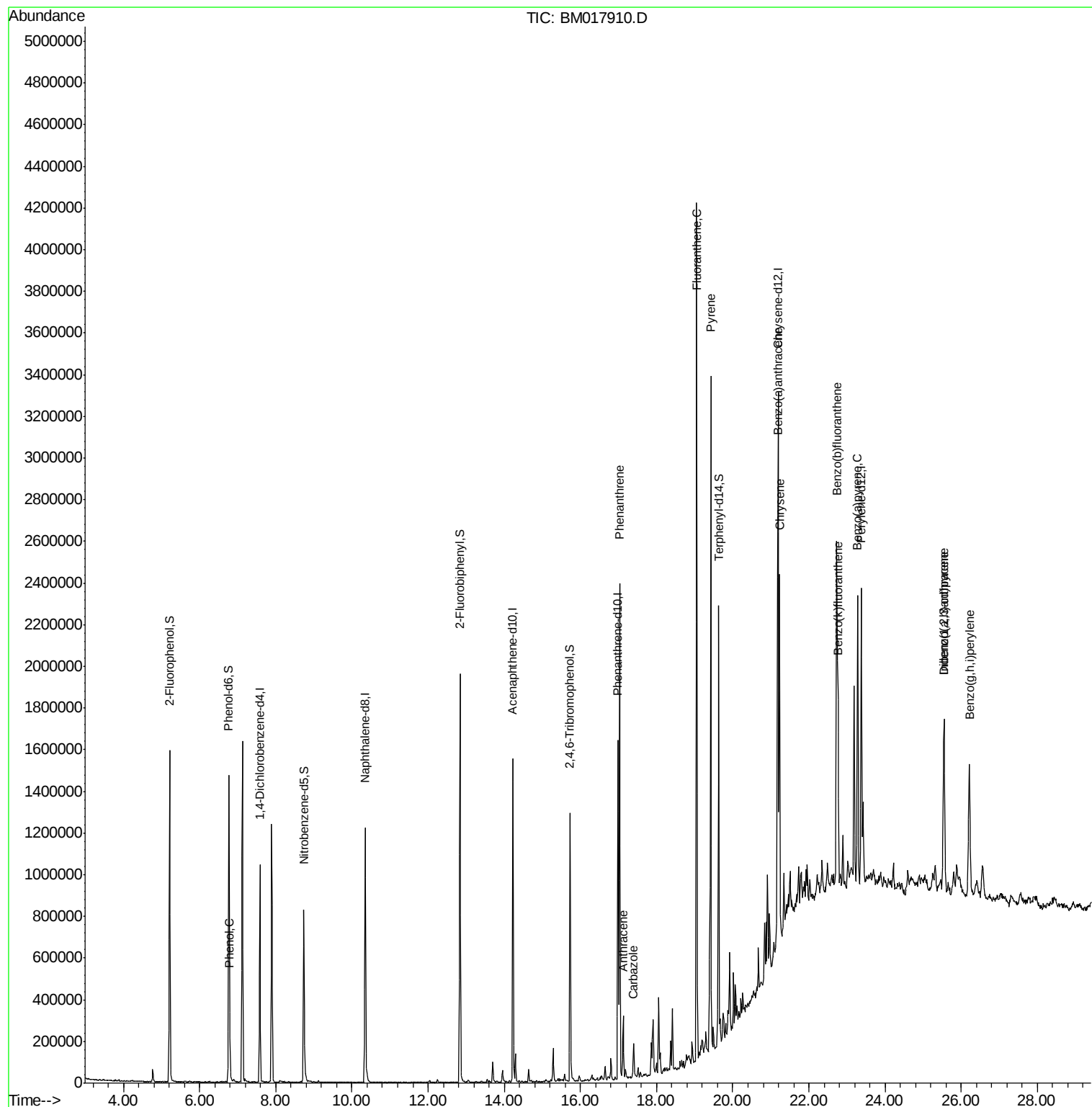
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120518\  
Data File : BM017910.D  
Acq On : 04 Dec 2018 19:47  
Operator : JU/SJ  
Sample : J5761-03 2X  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

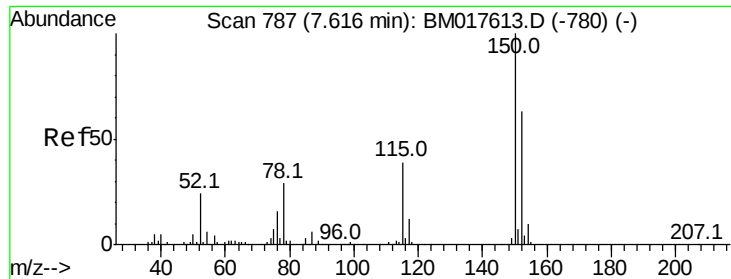
Instrument :  
BNA\_M  
ClientSampleId :  
AU-05-112918

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Quant Time: Dec 05 00:44:22 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM111218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Nov 12 18:37:25 2018  
Response via : Initial Calibration





#1

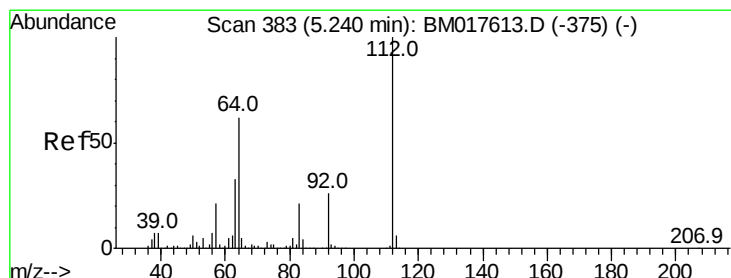
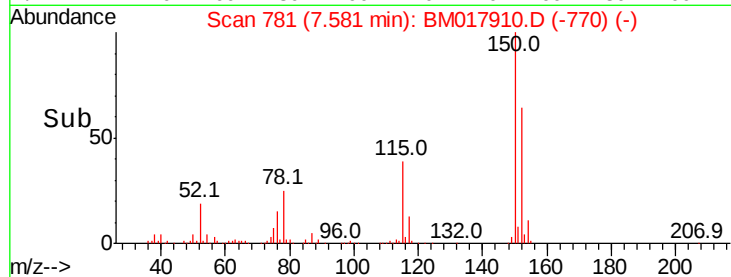
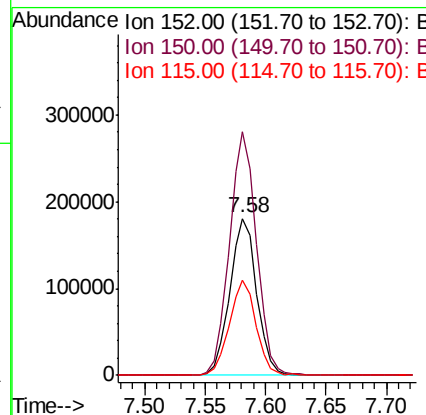
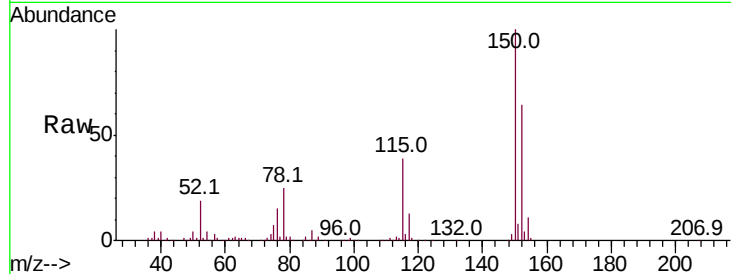
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.58 min Scan# 781  
Delta R.T. -0.04 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

Instrument :  
BNA\_M  
ClientSampleId :  
AU-05-112918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 155.3 | 126.4 | 189.6 |
| 115     | 60.5  | 49.4  | 74.0  |

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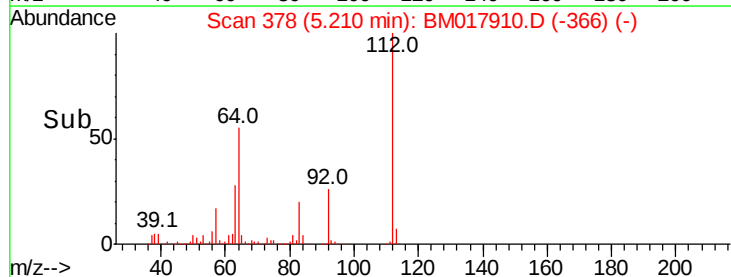
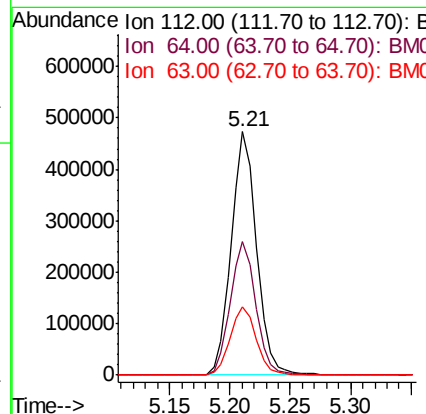
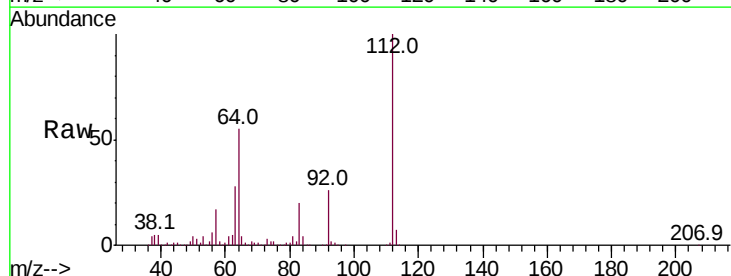
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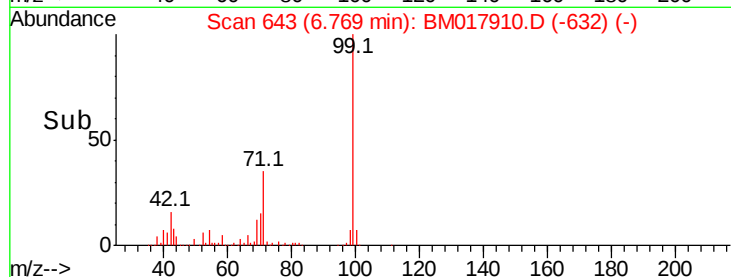
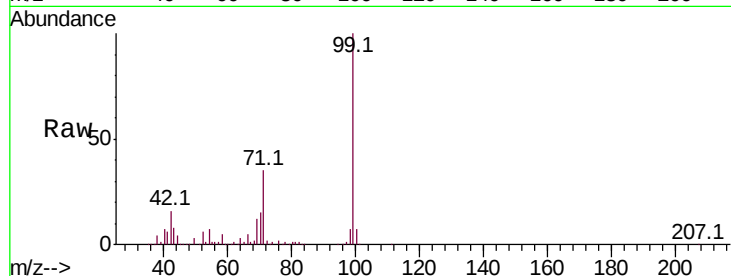
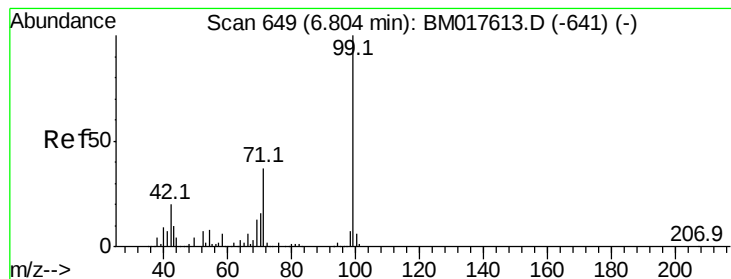


#5

2-Fluorophenol  
Concen: 42.100 ng  
RT: 5.21 min Scan# 378  
Delta R.T. -0.03 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 54.6  | 49.3  | 73.9  |
| 63      | 28.1  | 26.2  | 39.4  |





#7

Phenol-d6

Concen: 39.051 ng

RT: 6.77 min Scan# 643

Delta R.T. -0.04 min

Lab File: BM017910.D

Acq: 04 Dec 2018 19:47

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 99      | 100   | 897712 |       |       |
| 42      | 16.2  |        | 16.3  | 24.5# |
| 71      | 35.0  |        | 29.8  | 44.8  |

Instrument :

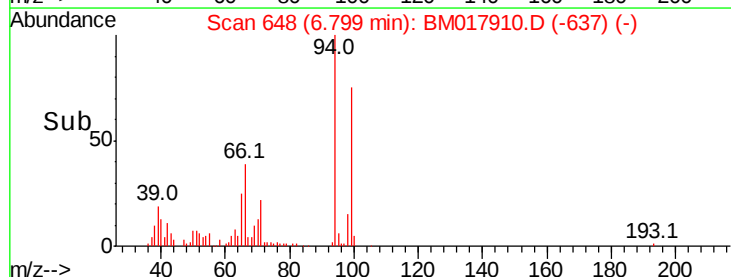
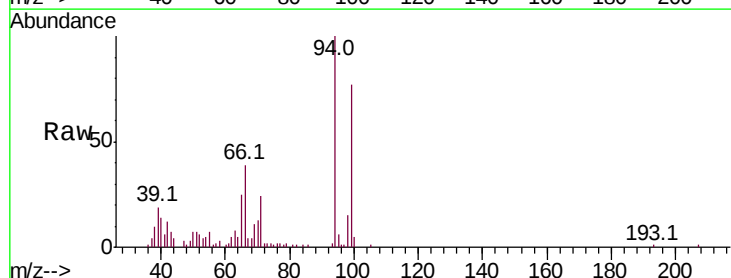
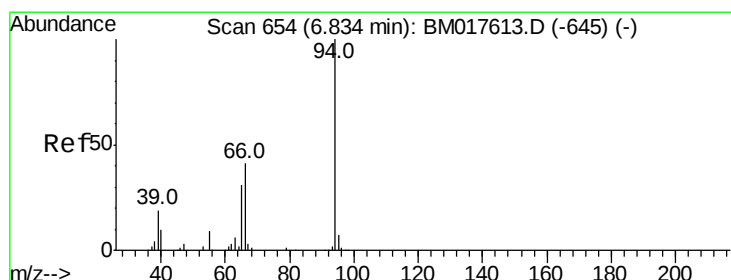
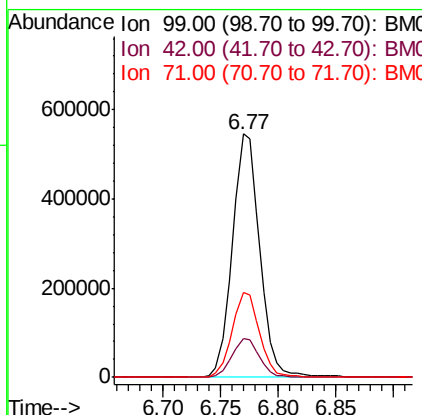
BNA\_M

ClientSampleId :

AU-05-112918

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#10

Phenol

Concen: 2.812 ng

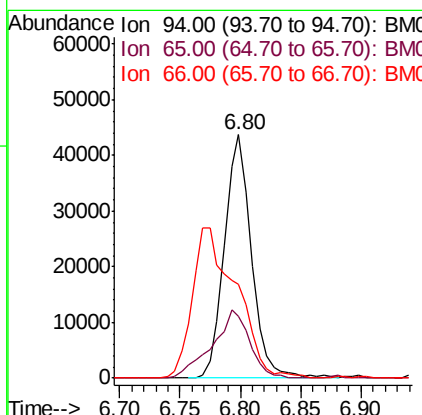
RT: 6.80 min Scan# 648

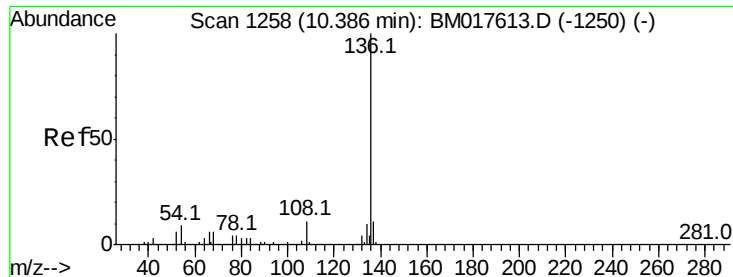
Delta R.T. -0.04 min

Lab File: BM017910.D

Acq: 04 Dec 2018 19:47

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 94      | 100   | 67844 |       |       |
| 65      | 25.4  |       | 11.4  | 51.4  |
| 66      | 38.6  |       | 21.4  | 61.4  |





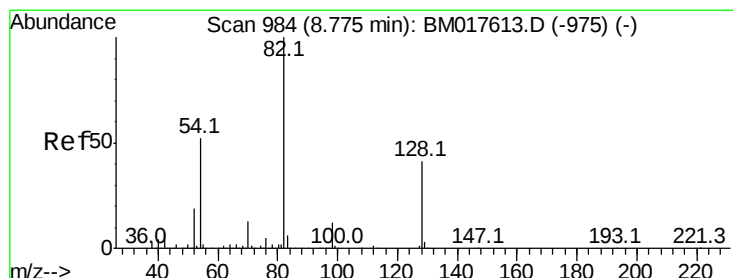
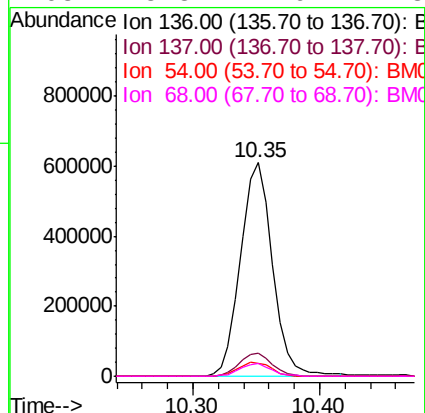
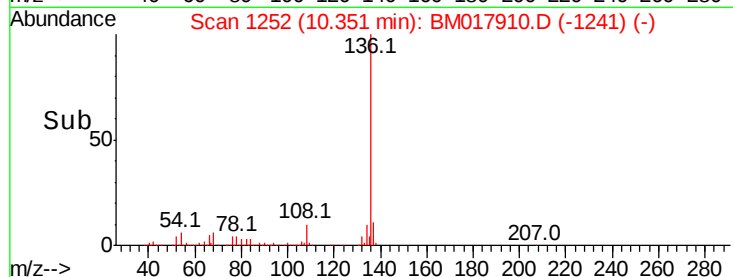
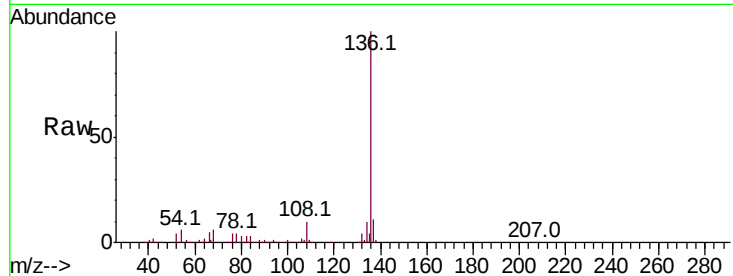
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.35 min Scan# 1252  
Delta R.T. -0.04 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

Instrument :  
BNA\_M  
ClientSampleId :  
AU-05-112918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 136     | 100   |       |       |
| 137     | 10.9  | 8.6   | 12.8  |
| 54      | 6.2   | 7.0   | 10.6  |
| 68      | 5.8   | 4.9   | 7.3   |

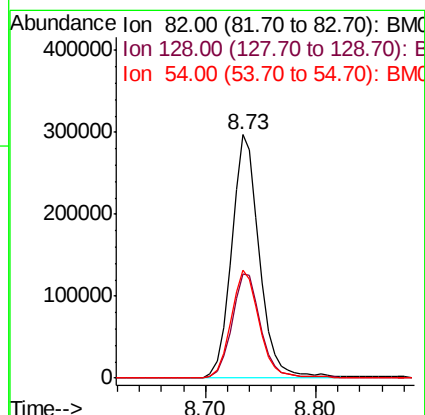
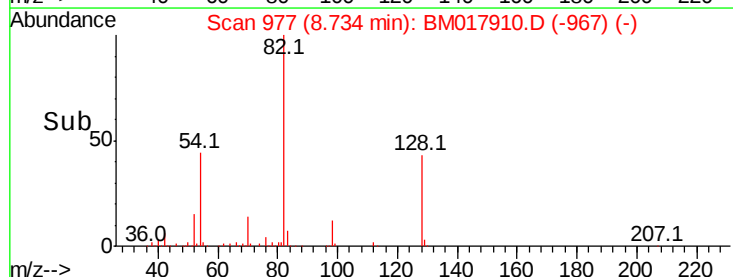
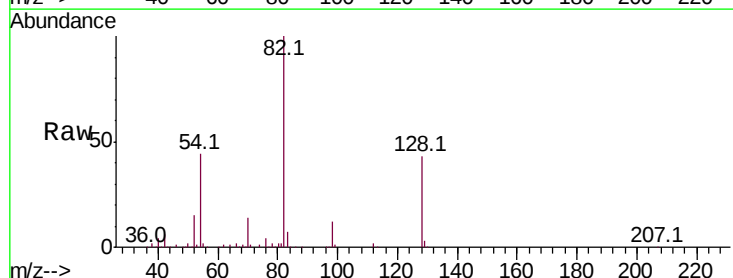
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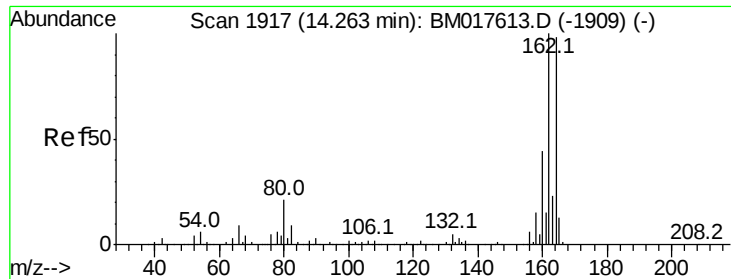
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#23  
Nitrobenzene-d5  
Concen: 25.318 ng  
RT: 8.73 min Scan# 977  
Delta R.T. -0.04 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 42.9  | 33.0  | 49.4  |
| 54      | 44.1  | 41.4  | 62.2  |





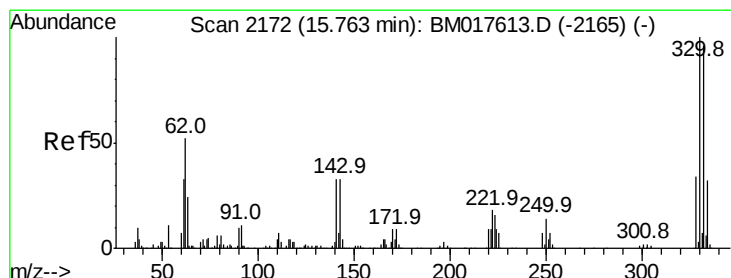
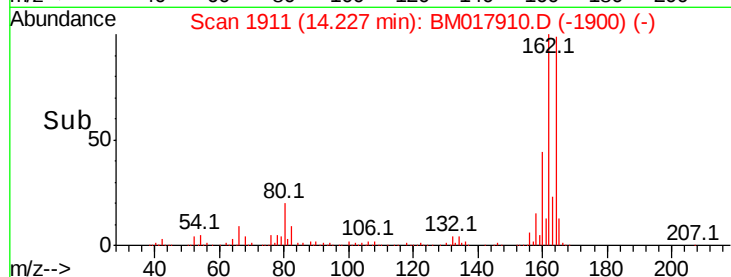
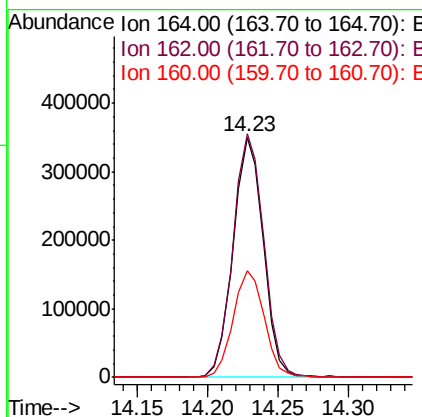
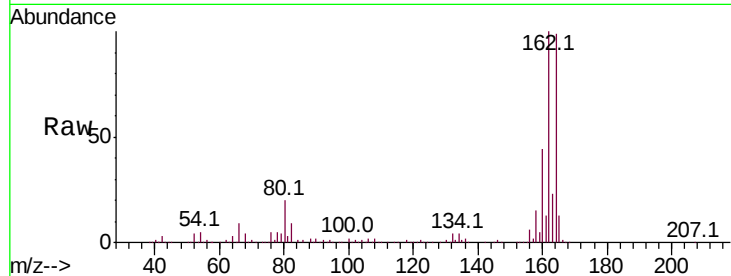
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.23 min Scan# 1911  
Delta R.T. -0.04 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

Instrument :  
BNA\_M  
ClientSampleId :  
AU-05-112918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 101.4 | 81.4  | 122.0 |
| 160     | 44.6  | 35.6  | 53.4  |

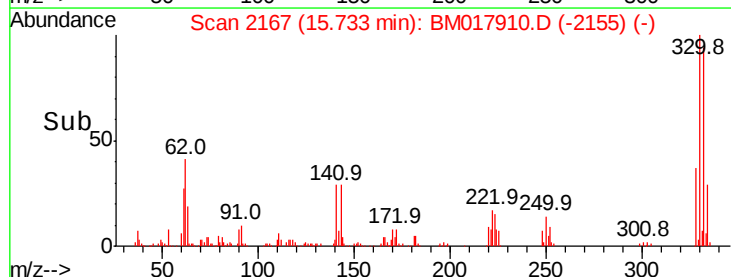
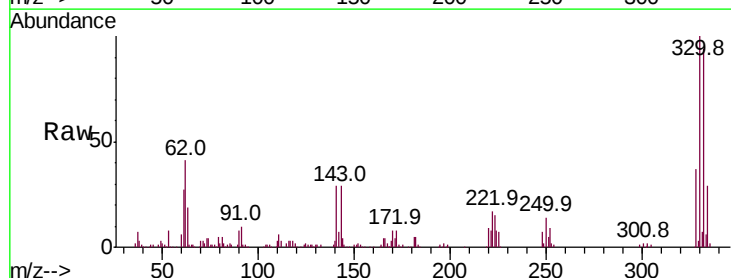
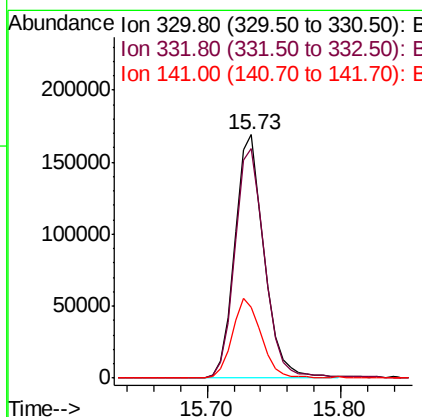
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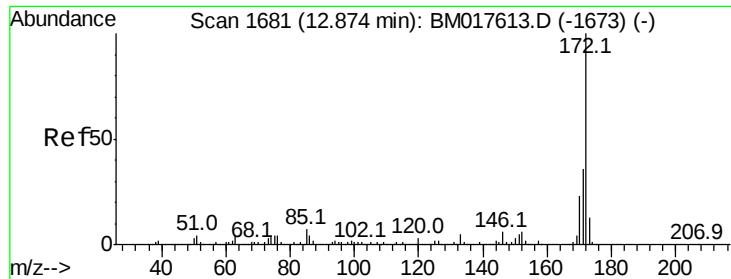
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#42  
2,4,6-Tribromophenol  
Concen: 34.478 ng  
RT: 15.73 min Scan# 2167  
Delta R.T. -0.03 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 95.8  | 77.9  | 116.9 |
| 141     | 32.5  | 27.5  | 41.3  |





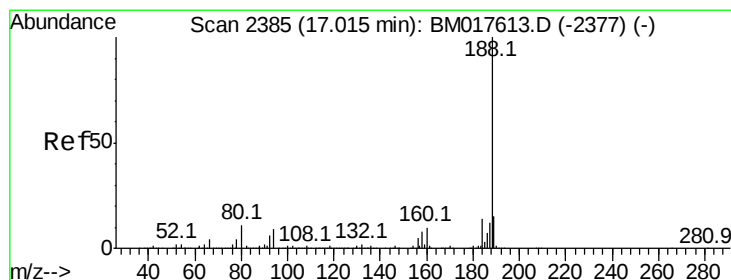
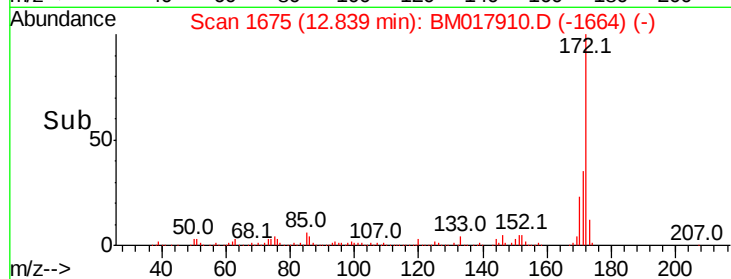
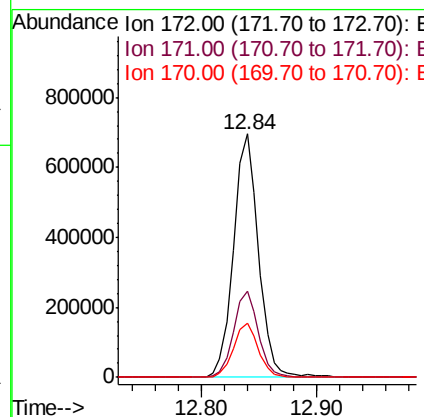
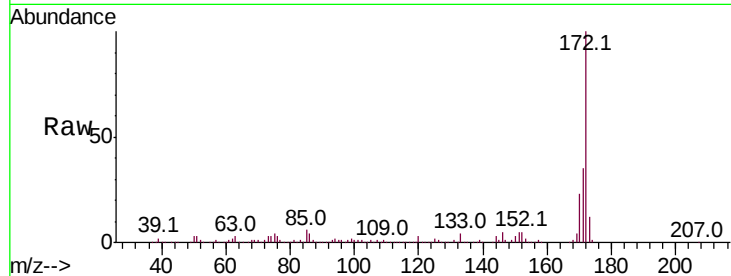
#45  
2-Fluorobiphenyl  
Concen: 25.855 ng  
RT: 12.84 min Scan# 1675  
Delta R.T. -0.04 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

Instrument :  
BNA\_M  
ClientSampleId :  
AU-05-112918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.2  | 28.7  | 43.1  |
| 170     | 22.5  | 18.3  | 27.5  |

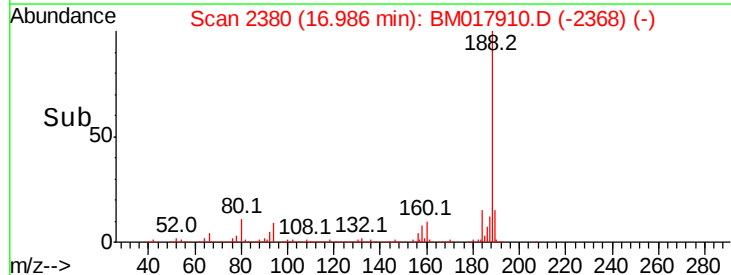
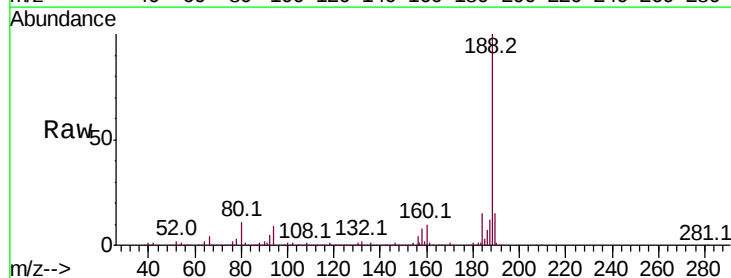
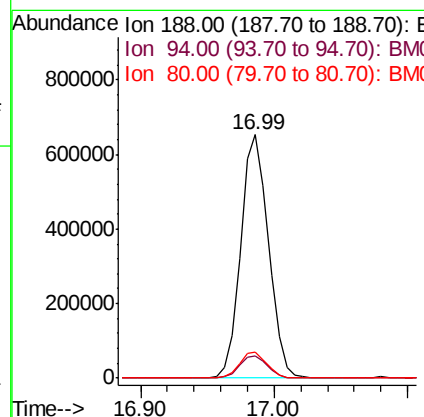
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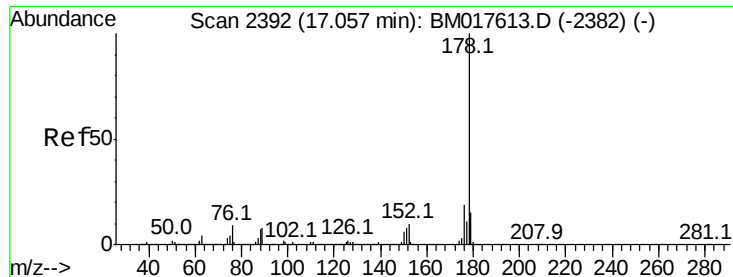
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#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 16.99 min Scan# 2380  
Delta R.T. -0.03 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 9.3   | 7.5   | 11.3  |
| 80      | 10.6  | 8.6   | 13.0  |





#71

Phenanthrene

Concen: 27.050 ng

RT: 17.03 min Scan# 2387

Delta R.T. -0.03 min

Lab File: BM017910.D

Acq: 04 Dec 2018 19:47

Instrument :

BNA\_M

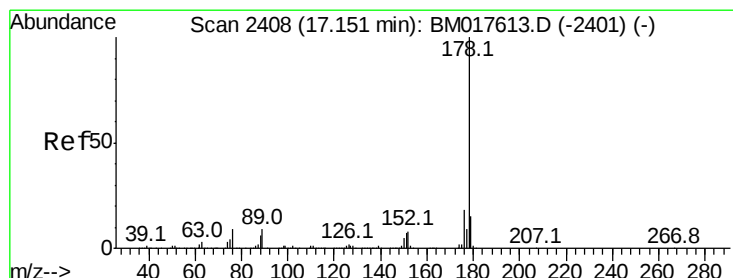
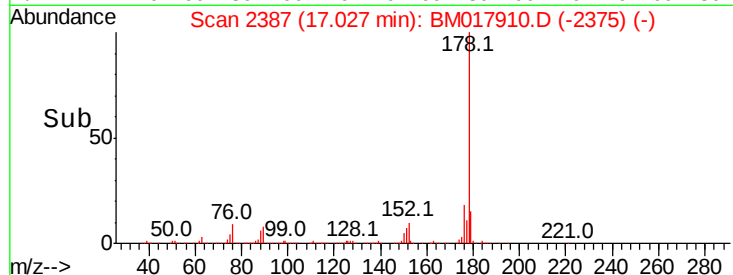
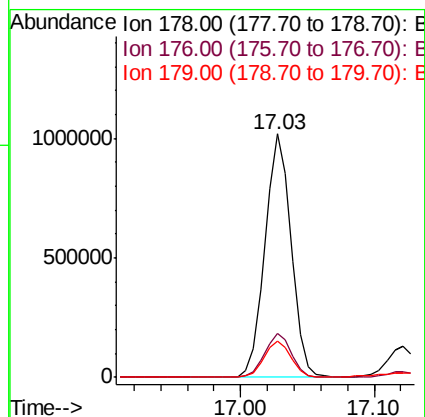
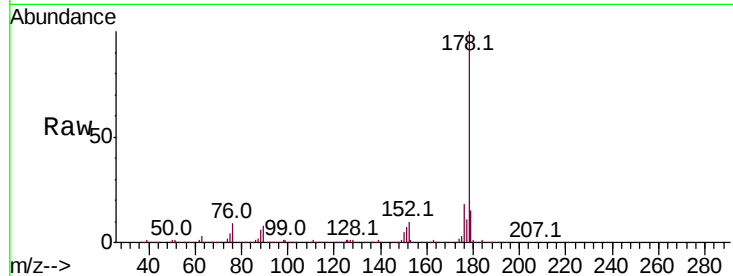
ClientSampled :

AU-05-112918

|             |               |       |      |
|-------------|---------------|-------|------|
| Tot Ion:178 | Resp: 1381585 |       |      |
| Ion Ratio   | Lower         | Upper |      |
| 178         | 100           |       |      |
| 176         | 18.2          | 15.0  | 22.4 |
| 179         | 15.2          | 12.4  | 18.6 |

Manual Integrations  
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#72

Anthracene

Concen: 3.806 ng

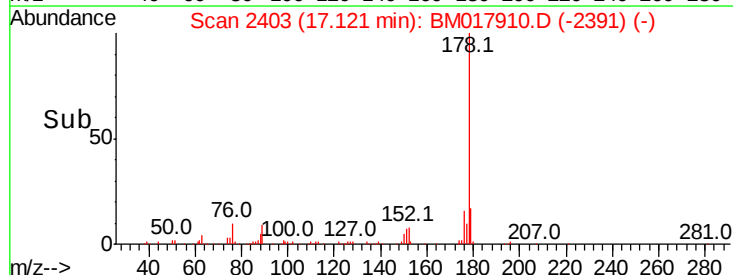
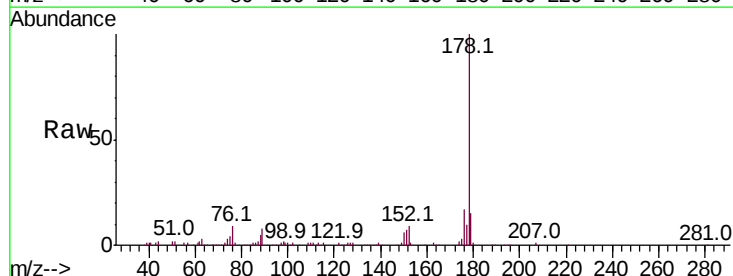
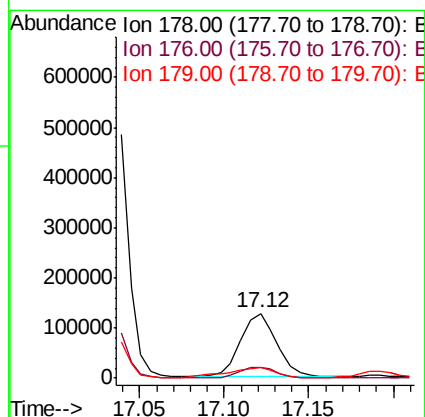
RT: 17.12 min Scan# 2403

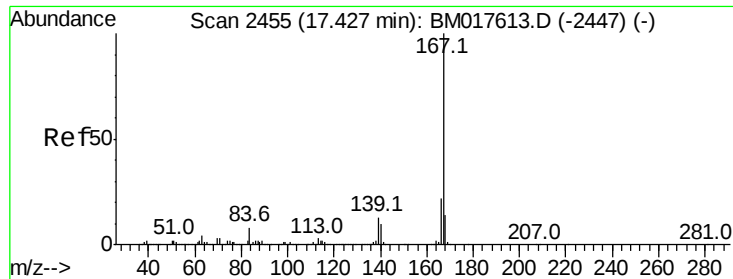
Delta R.T. -0.03 min

Lab File: BM017910.D

Acq: 04 Dec 2018 19:47

|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion:178 | Resp: | 189155 |
| Ion | Ratio   | Lower | Upper  |
| 178 | 100     |       |        |
| 176 | 17.2    | 14.5  | 21.7   |
| 179 | 15.4    | 12.3  | 18.5   |





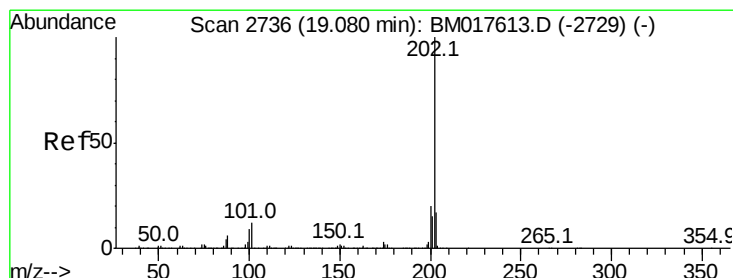
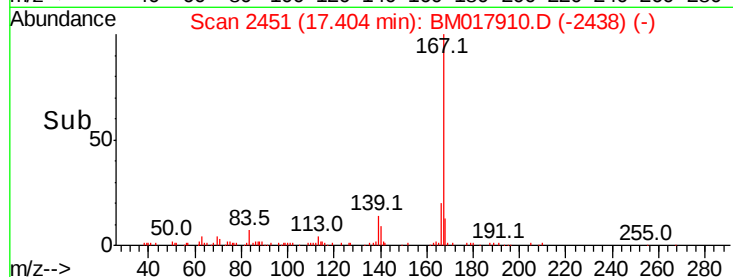
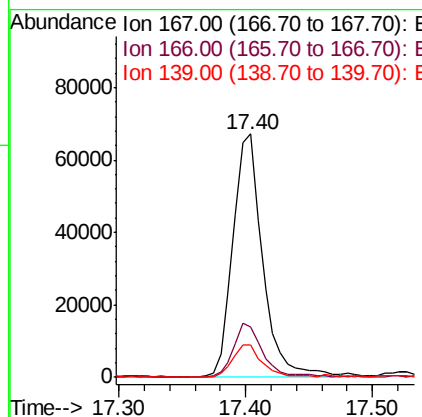
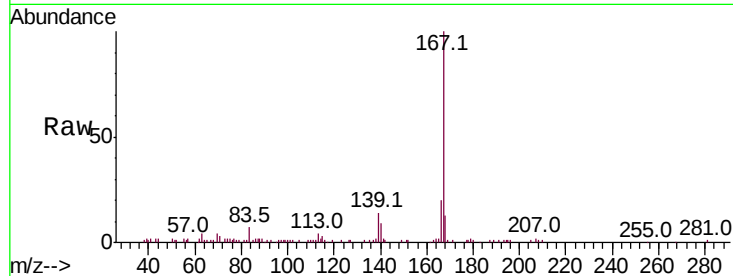
#73  
 Carbazole  
 Concen: 2.174 ng  
 RT: 17.40 min Scan# 2451  
 Delta R.T. -0.02 min  
 Lab File: BM017910.D  
 Acq: 04 Dec 2018 19:47

Instrument :  
 BNA\_M  
 ClientSampleId :  
 AU-05-112918

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 167     | 100   | 109200 |       |       |
| 166     | 20.4  | 17.2   | 25.8  |       |
| 139     | 13.5  | 10.2   | 15.4  |       |

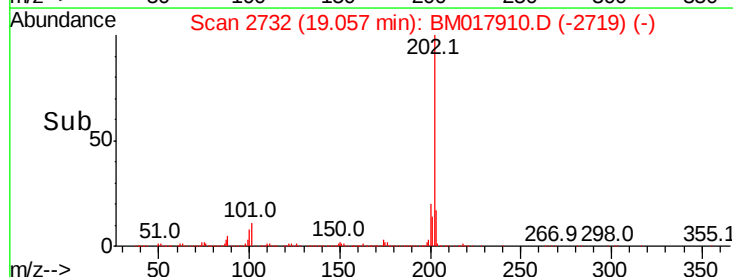
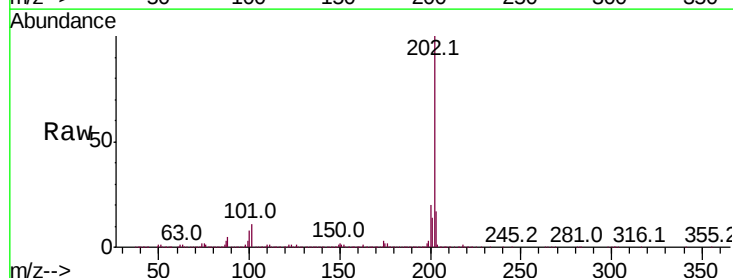
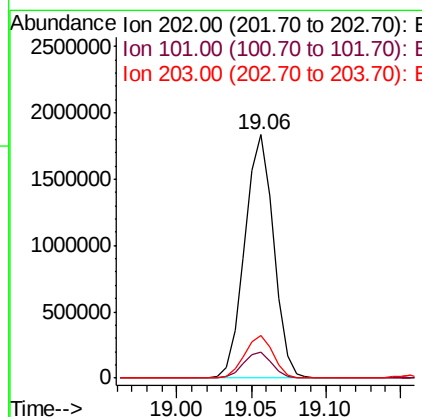
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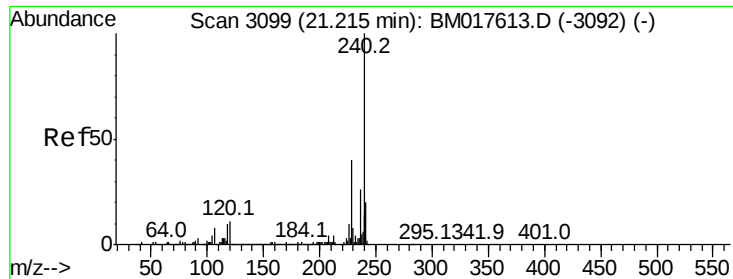
mohammad  
 12/5/2018 4:49:59 PM



#75  
 Fluoranthene  
 Concen: 42.446 ng  
 RT: 19.06 min Scan# 2732  
 Delta R.T. -0.02 min  
 Lab File: BM017910.D  
 Acq: 04 Dec 2018 19:47

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 202     | 100   | 2452896 |       |       |
| 101     | 10.6  | 0.0     | 31.5  |       |
| 203     | 17.4  | 0.0     | 37.2  |       |





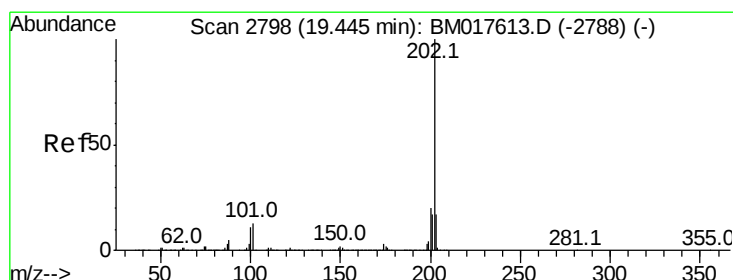
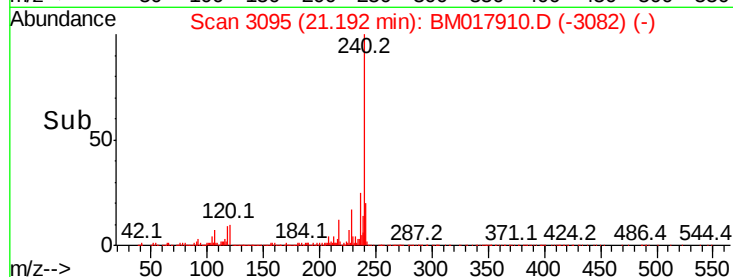
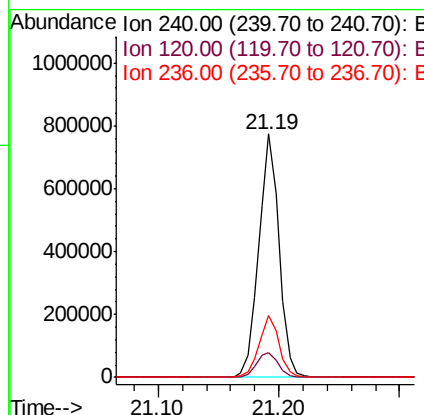
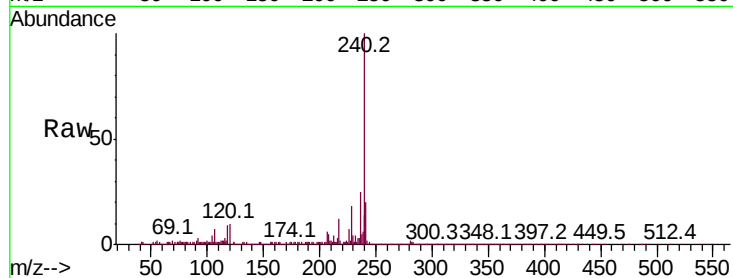
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.19 min Scan# 3095  
Delta R.T. -0.02 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

Instrument :  
BNA\_M  
ClientSampled :  
AU-05-112918

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 240     | 100   |            |       |
| 120     | 9.9   | 8.5        | 12.7  |
| 236     | 25.2  | 20.4       | 30.6  |

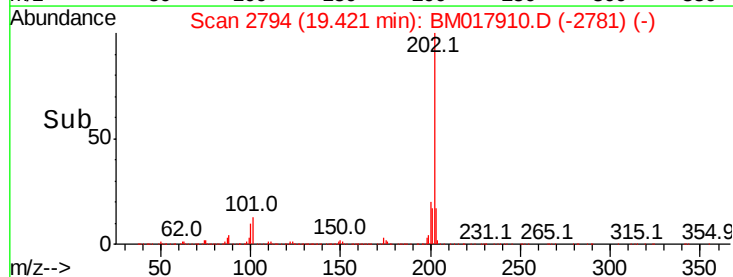
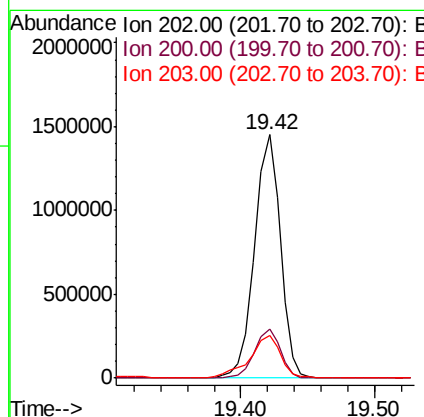
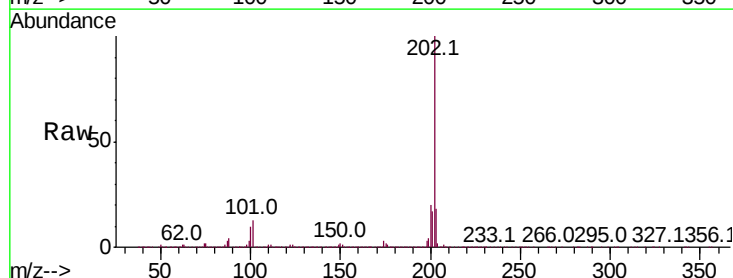
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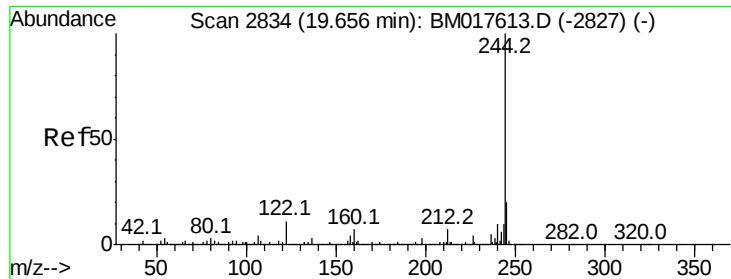
mohammad  
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#78  
Pyrene  
Concen: 34.722 ng  
RT: 19.42 min Scan# 2794  
Delta R.T. -0.02 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 200     | 20.3  | 16.4       | 24.6  |
| 203     | 17.7  | 13.8       | 20.8  |





#79

Terphenyl-d14

Concen: 24.787 ng

RT: 19.63 min Scan# 2830

Delta R.T. -0.02 min

Lab File: BM017910.D

Acq: 04 Dec 2018 19:47

Instrument :

BNA\_M

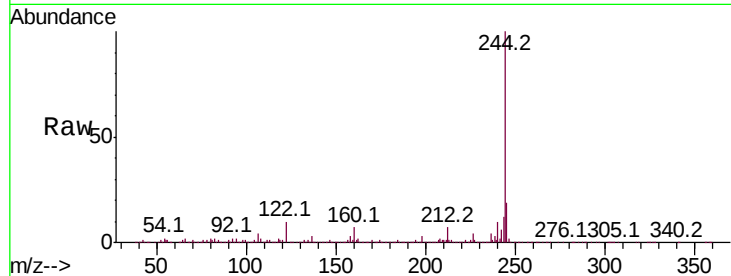
ClientSampleId :

AU-05-112918

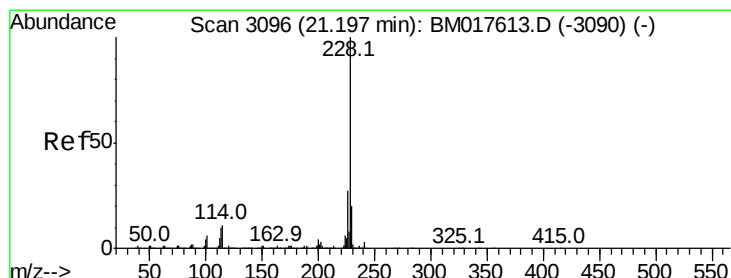
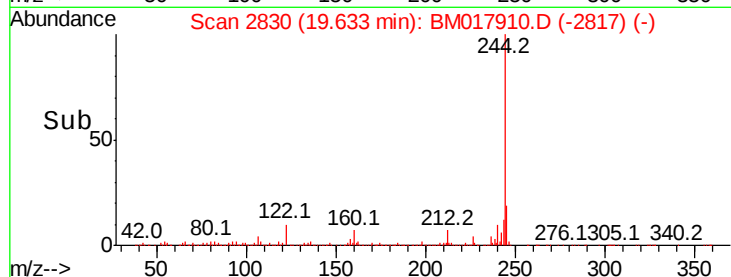
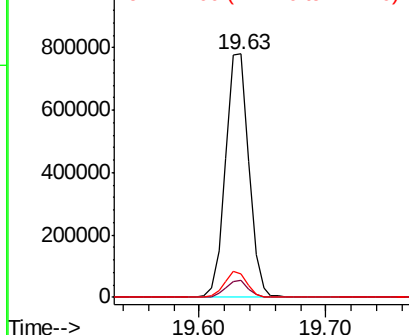
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 244   | Resp: | 988656 |
| Ion Ratio | Lower | Upper |        |
| 244       | 100   |       |        |
| 212       | 6.8   | 5.8   | 8.6    |
| 122       | 9.8   | 9.0   | 13.6   |

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Abundance Ion 244.00 (243.70 to 244.70): E  
Ion 212.00 (211.70 to 212.70): E  
Ion 122.00 (121.70 to 122.70): E



#81

Benzo(a)anthracene

Concen: 16.569 ng

RT: 21.17 min Scan# 3092

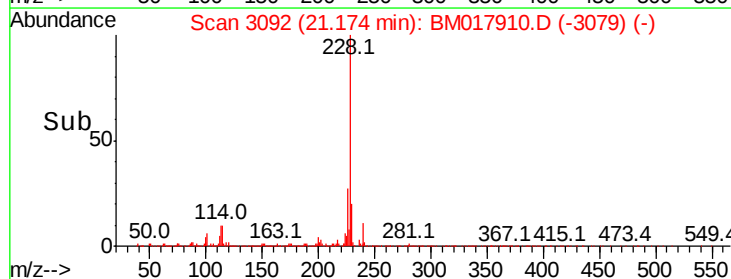
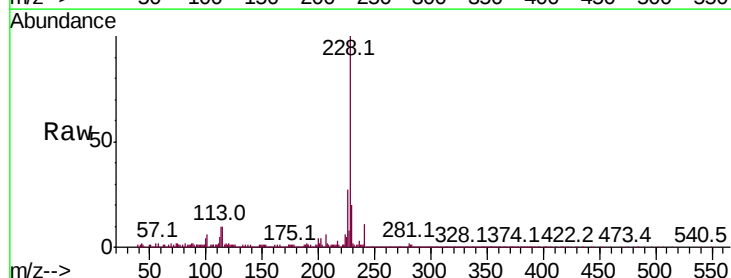
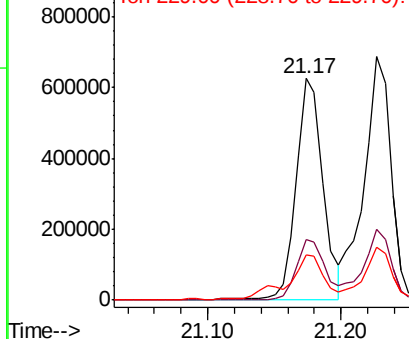
Delta R.T. -0.02 min

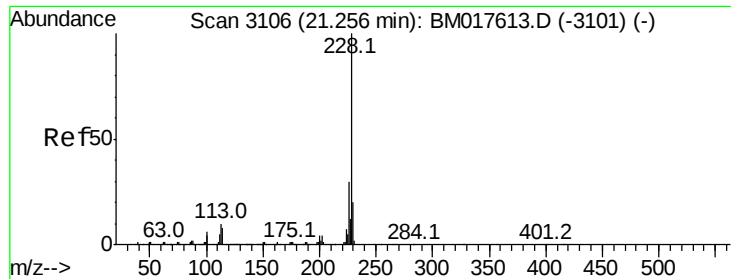
Lab File: BM017910.D

Acq: 04 Dec 2018 19:47

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 228   | Resp: | 862922 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 27.5  | 21.3  | 31.9   |
| 229       | 20.3  | 16.0  | 24.0   |

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





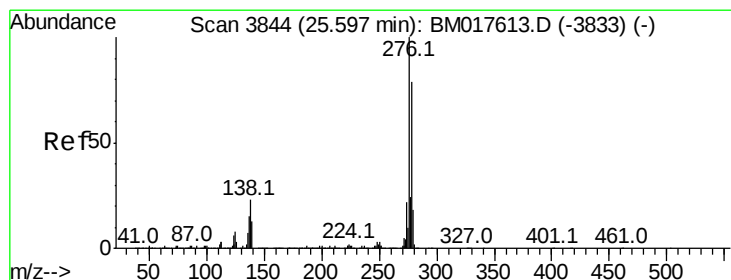
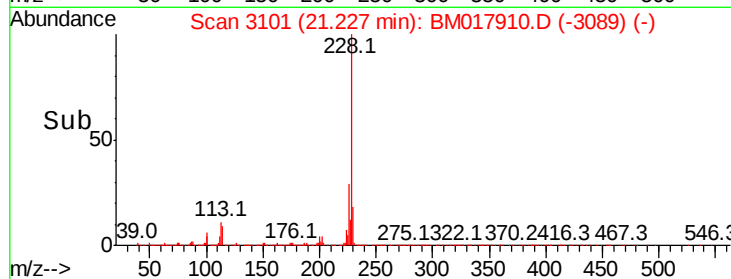
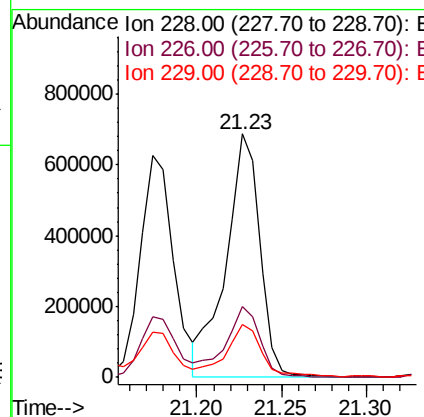
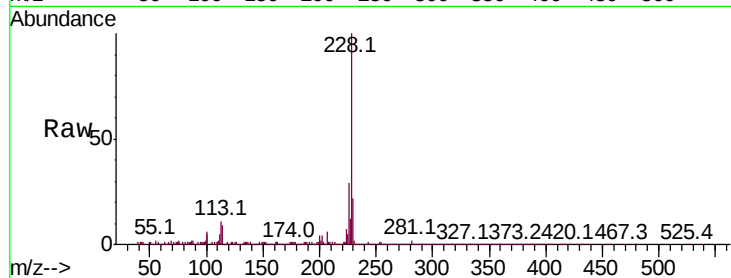
#83  
Chrysene  
Concen: 18.814 ng  
RT: 21.23 min Scan# 3101  
Delta R.T. -0.03 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

Instrument :  
BNA\_M  
ClientSampleId :  
AU-05-112918

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.0  | 23.6  | 35.4  |
| 229     | 21.8  | 15.8  | 23.6  |

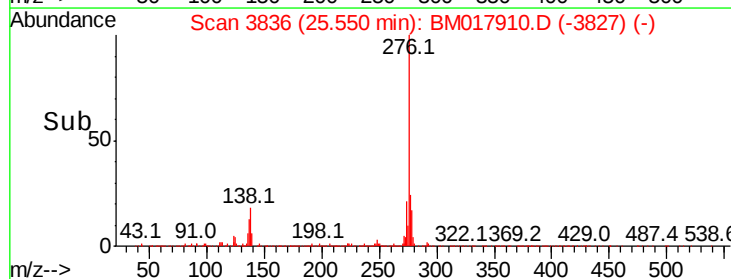
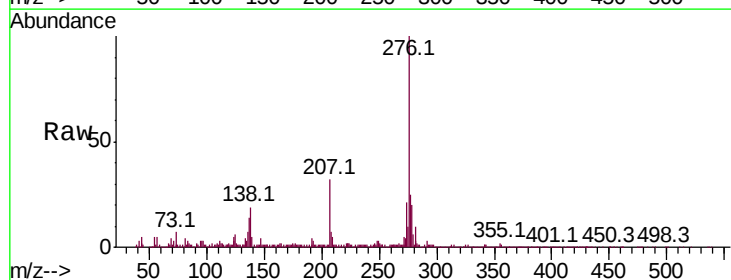
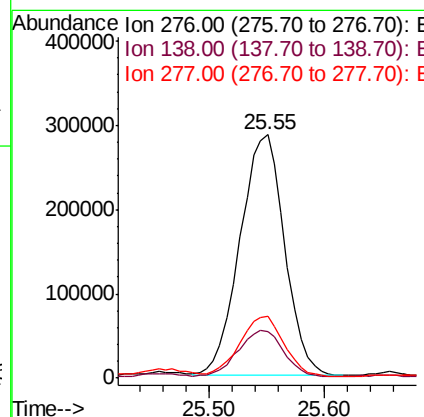
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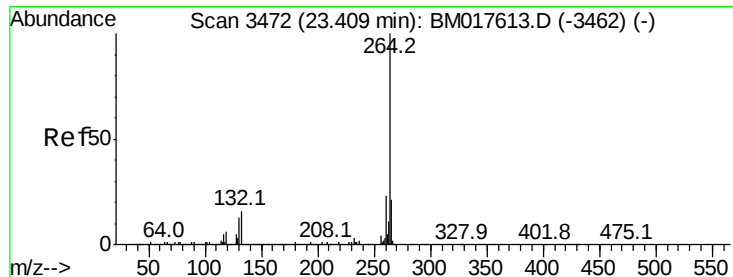
mohammad  
12/5/2018 4:49:59 PM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 19.032 ng  
RT: 25.55 min Scan# 3836  
Delta R.T. -0.05 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 19.7  | 19.1  | 28.7  |
| 277     | 25.3  | 20.0  | 30.0  |





#87

Pervlene-d12

Concen: 20.000 ng

RT: 23.38 min Scan# 3467

Delta R.T. -0.03 min

Lab File: BM017910.D

Acq: 04 Dec 2018 19:47

Instrument :

BNA\_M

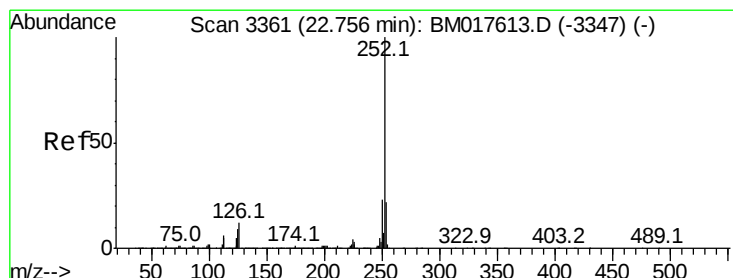
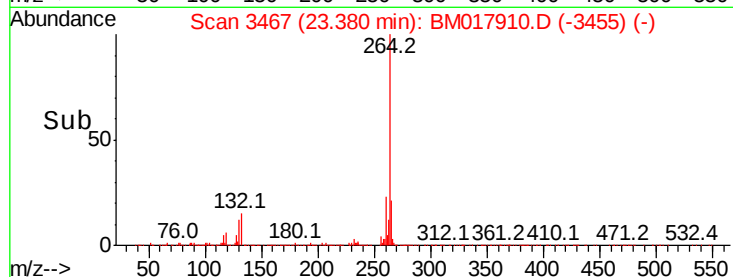
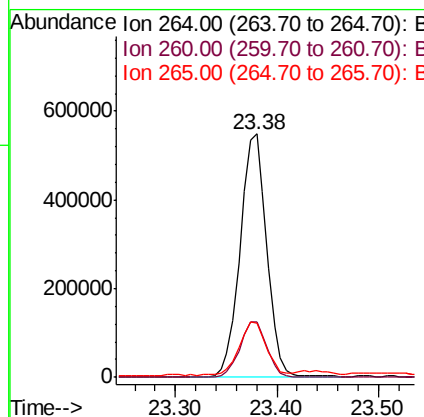
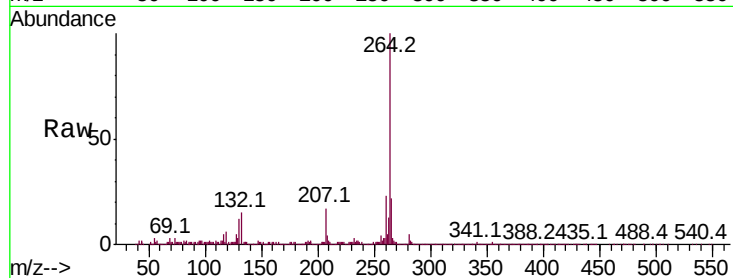
ClientSampleId :

AU-05-112918

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 264   | Resp: | 993193 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 22.9  | 18.2  | 27.2   |
| 265       | 22.0  | 17.5  | 26.3   |

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#88

Benzo(b)fluoranthene

Concen: 24.205 ng

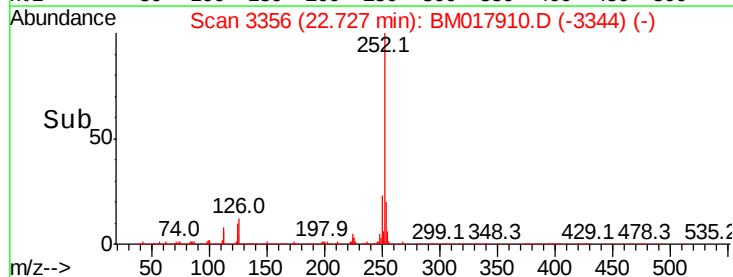
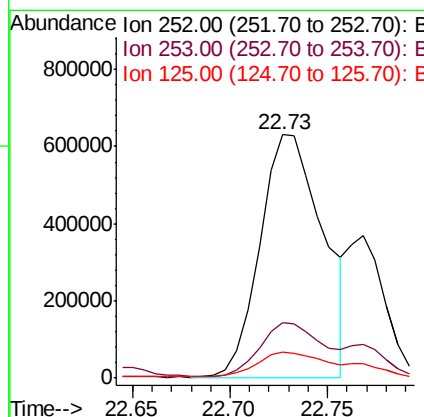
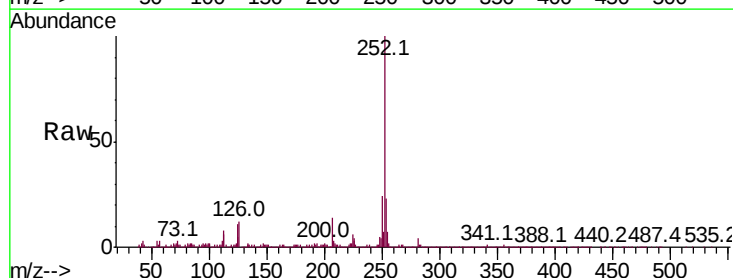
RT: 22.73 min Scan# 3356

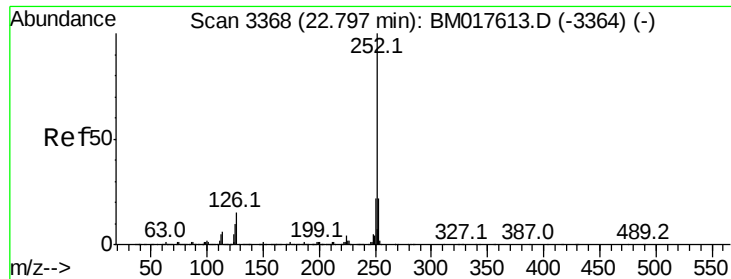
Delta R.T. -0.03 min

Lab File: BM017910.D

Acq: 04 Dec 2018 19:47

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 252   | Resp: | 1407885 |
| Ion Ratio | Lower | Upper |         |
| 252       | 100   |       |         |
| 253       | 22.5  | 17.3  | 25.9    |
| 125       | 10.8  | 7.6   | 11.4    |





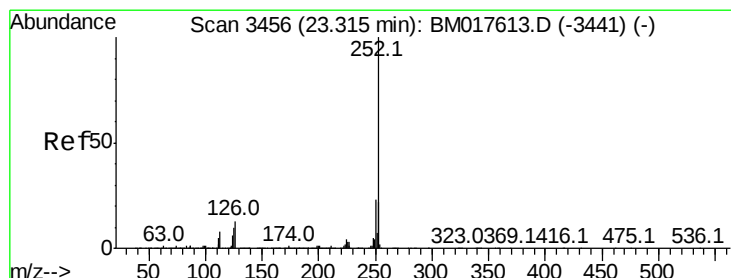
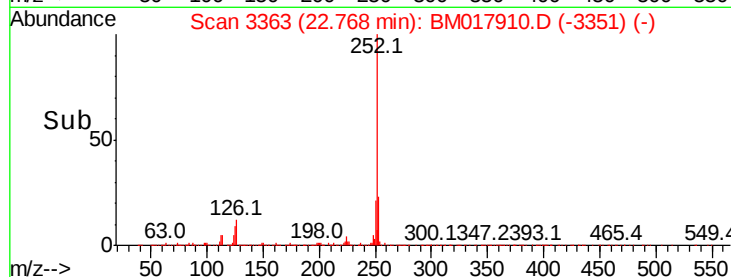
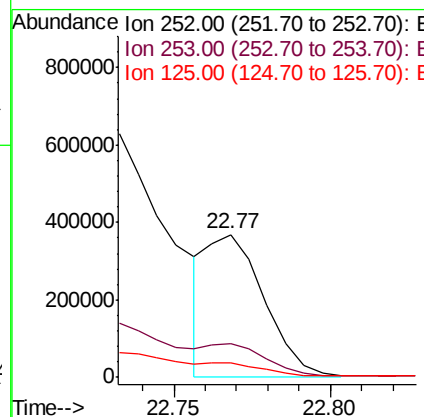
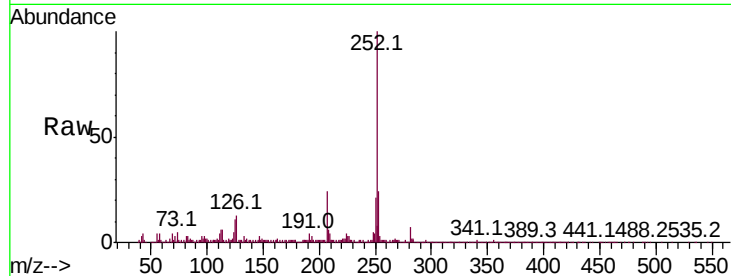
#89  
Benzo(k)fluoranthene  
Concen: 8.062 ng m  
RT: 22.77 min Scan# 3363  
Delta R.T. -0.03 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

Instrument :  
BNA\_M  
ClientSampleId :  
AU-05-112918

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 473969 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.7  | 17.7  | 26.5   |
| 125       | 10.5  | 7.9   | 11.9   |

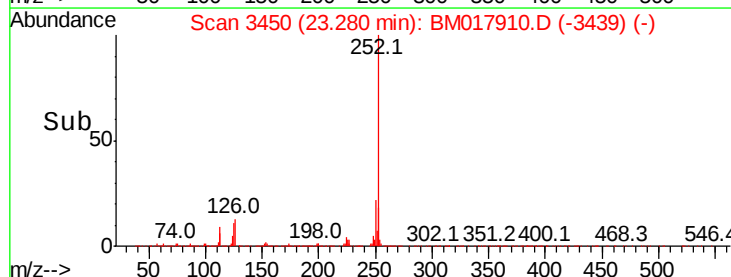
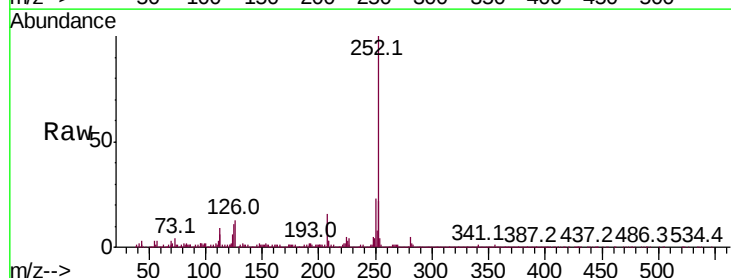
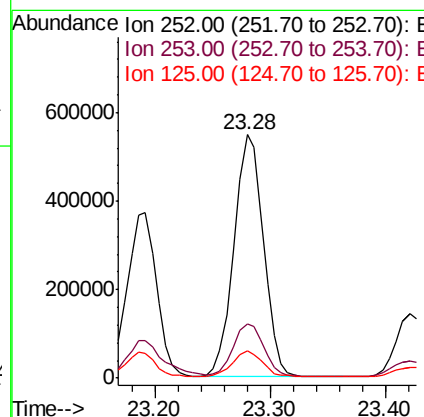
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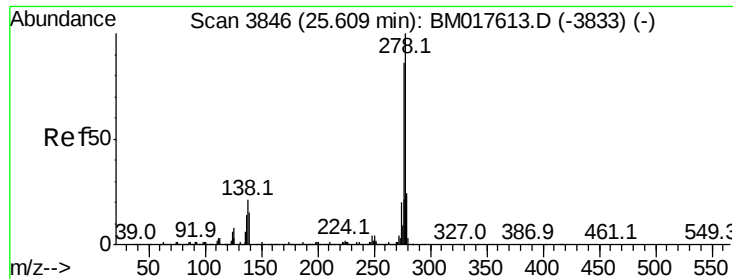
mohammad  
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#90  
Benzo(a)pyrene  
Concen: 18.308 ng  
RT: 23.28 min Scan# 3450  
Delta R.T. -0.04 min  
Lab File: BM017910.D  
Acq: 04 Dec 2018 19:47

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 970944 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.4  | 17.4  | 26.2   |
| 125       | 11.4  | 8.2   | 12.2   |





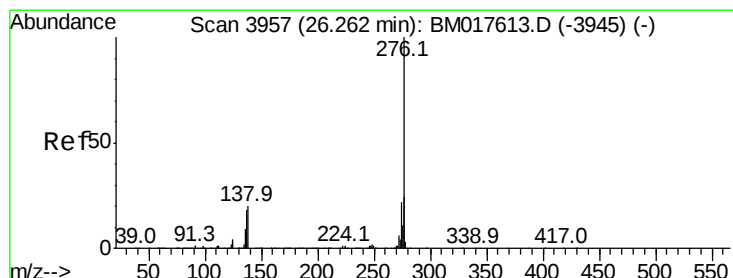
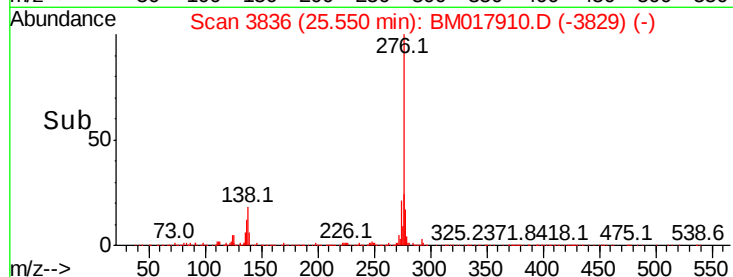
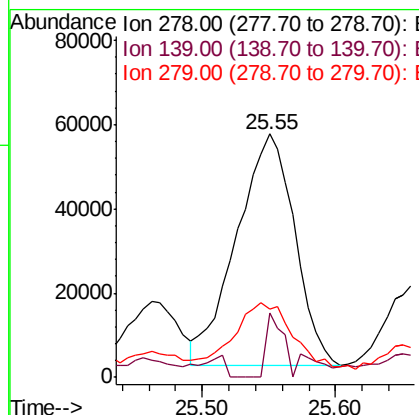
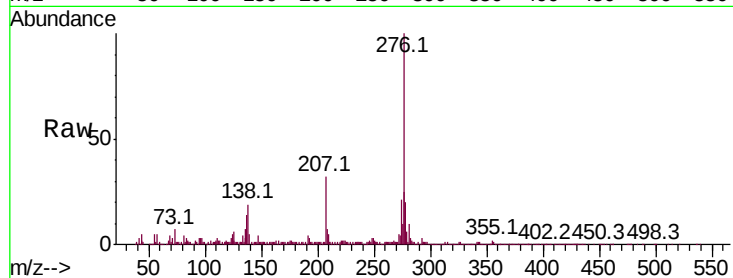
#91  
 Dibenzo(a,h)anthracene  
 Concen: 3.729 ng  
 RT: 25.55 min Scan# 3836  
 Delta R.T. -0.06 min  
 Lab File: BM017910.D  
 Acq: 04 Dec 2018 19:47

Instrument :  
 BNA\_M  
 ClientSampleId :  
 AU-05-112918

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 278   | Resp: | 166260 |
| Ion Ratio | Lower | Upper |        |
| 278       | 100   |       |        |
| 139       | 26.6  | 11.8  | 17.6#  |
| 279       | 28.1  | 19.0  | 28.6   |

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#92  
 Benzo(g,h,i)perylene  
 Concen: 17.918 ng  
 RT: 26.21 min Scan# 3948  
 Delta R.T. -0.05 min  
 Lab File: BM017910.D  
 Acq: 04 Dec 2018 19:47

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 751269 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 277       | 23.6  | 19.0  | 28.4   |
| 138       | 19.6  | 15.9  | 23.9   |

