

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120518\  
 Data File : BM017911.D  
 Acq On : 04 Dec 2018 20:23  
 Operator : JU/SJ  
 Sample : J5770-13 2X  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 OR-03-112918-A

Manual Integrations  
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 12/5/2018 4:50:02 PM

Quant Time: Dec 05 00:47:04 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  | 272346   | 20.00 | ng    | -0.04     |
| 21) Naphthalene-d8          | 10.35 | 136  | 1071147  | 20.00 | ng    | -0.04     |
| 39) Acenaphthene-d10        | 14.23 | 164  | 543004   | 20.00 | ng    | -0.04     |
| 64) Phenanthrene-d10        | 16.99 | 188  | 1012353  | 20.00 | ng    | -0.03     |
| 76) Chrysene-d12            | 21.19 | 240  | 890841   | 20.00 | ng    | -0.02     |
| 87) Perylene-d12            | 23.37 | 264  | 969819   | 20.00 | ng    | -0.04     |
| System Monitoring Compounds |       |      |          |       |       |           |
| 5) 2-Fluorophenol           | 5.21  | 112  | 784525   | 48.61 | ng    | -0.03     |
| 7) Phenol-d6                | 6.77  | 99   | 1062017  | 47.12 | ng    | -0.03     |
| 23) Nitrobenzene-d5         | 8.73  | 82   | 618549   | 29.81 | ng    | -0.04     |
| 42) 2,4,6-Tribromophenol    | 15.73 | 330  | 336460   | 43.12 | ng    | -0.03     |
| 45) 2-Fluorobiphenyl        | 12.84 | 172  | 1406501  | 33.60 | ng    | -0.04     |
| 79) Terphenyl-d14           | 19.63 | 244  | 1393725  | 35.46 | ng    | -0.02     |
| Target Compounds            |       |      |          |       |       |           |
| 50) Dimethylphthalate       | 13.70 | 163  | 93249    | 2.112 | ng    | Qvalue 98 |
| 71) Phenanthrene            | 17.03 | 178  | 249846   | 4.548 | ng    | 98        |
| 75) Fluoranthene            | 19.06 | 202  | 478039   | 7.691 | ng    | 98        |
| 78) Pyrene                  | 19.42 | 202  | 450763   | 8.201 | ng    | 99        |
| 81) Benzo(a)anthracene      | 21.17 | 228  | 273703   | 5.333 | ng    | 94        |
| 83) Chrysene                | 21.23 | 228  | 254830   | 5.112 | ng    | 97        |
| 86) Indeno(1,2,3-cd)pyrene  | 25.54 | 276  | 198498   | 4.983 | ng    | 95        |
| 88) Benzo(b)fluoranthene    | 22.73 | 252  | 385020   | 6.779 | ng    | # 93      |
| 89) Benzo(k)fluoranthene    | 22.76 | 252  | 127288m  | 2.217 | ng    |           |
| 90) Benzo(a)pyrene          | 23.28 | 252  | 275596   | 5.322 | ng    | # 94      |
| 92) Benzo(a,h,i)perylene    | 26.21 | 276  | 184603   | 4.509 | ng    | 95        |

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

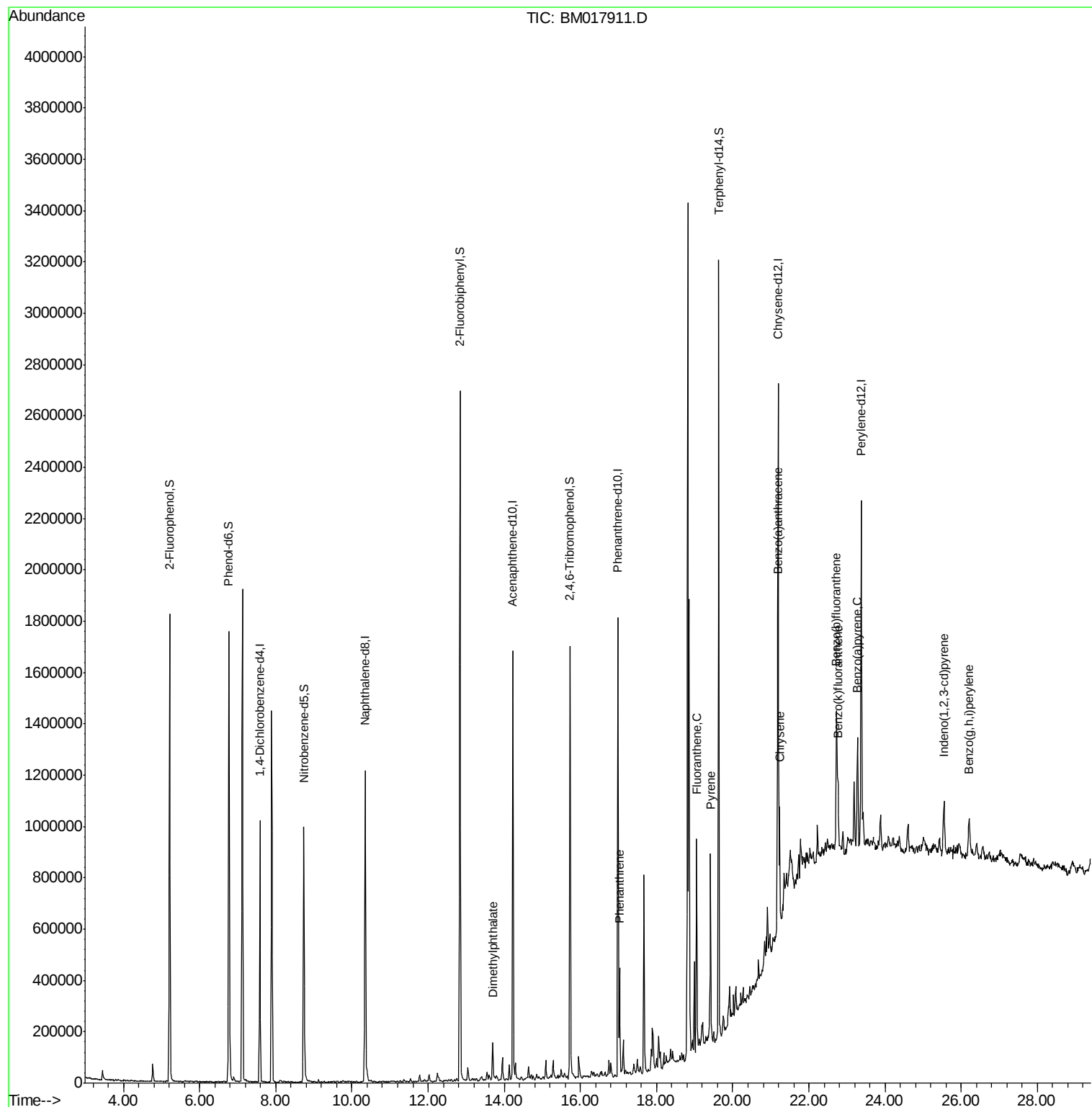
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120518\  
Data File : BM017911.D  
Acq On : 04 Dec 2018 20:23  
Operator : JU/SJ  
Sample : J5770-13 2X  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

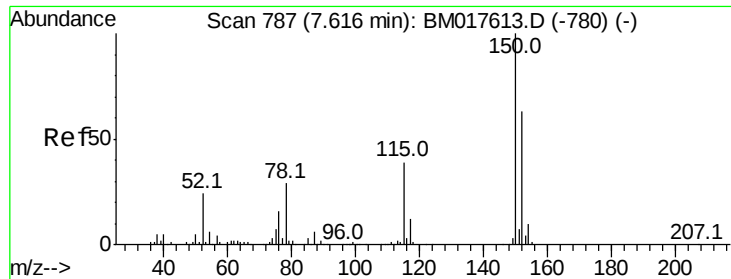
Instrument :  
BNA\_M  
ClientSampleId :  
OR-03-112918-A

Manual Integrations  
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Quant Time: Dec 05 00:47:04 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

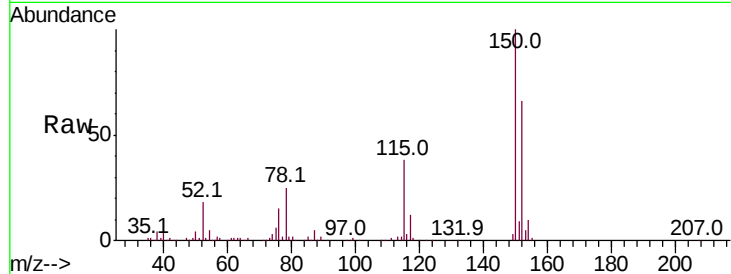
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.58 min Scan# 781  
Delta R.T. -0.04 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

Instrument :  
BNA\_M  
ClientSampleId :  
OR-03-112918-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 151.1 | 126.4 | 189.6 |
| 115     | 57.2  | 49.4  | 74.0  |

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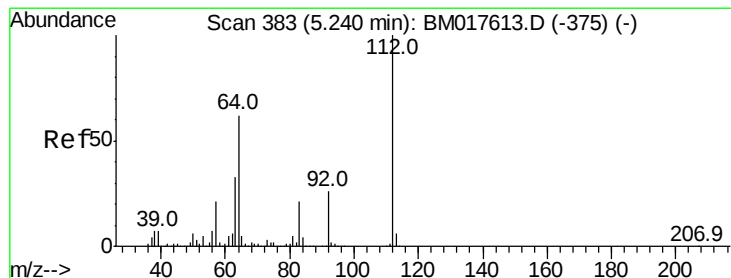
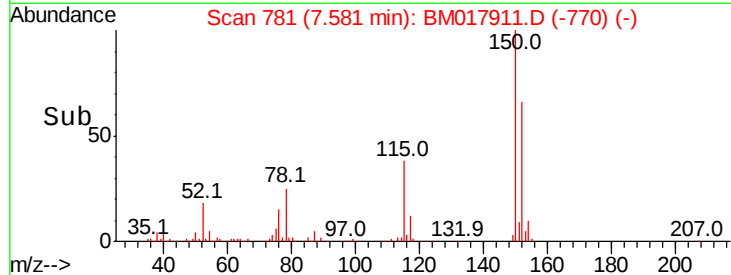
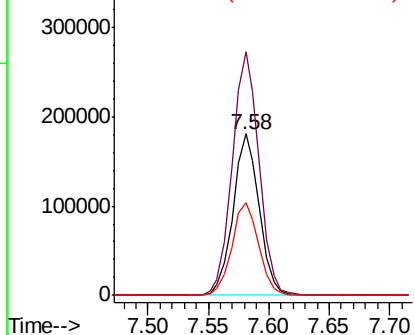


Abundance

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: 48.615 ng  
RT: 5.21 min Scan# 378  
Delta R.T. -0.03 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

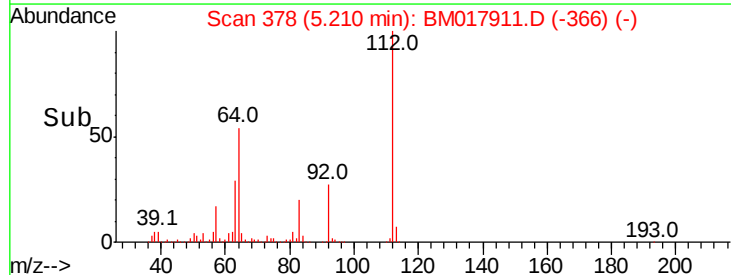
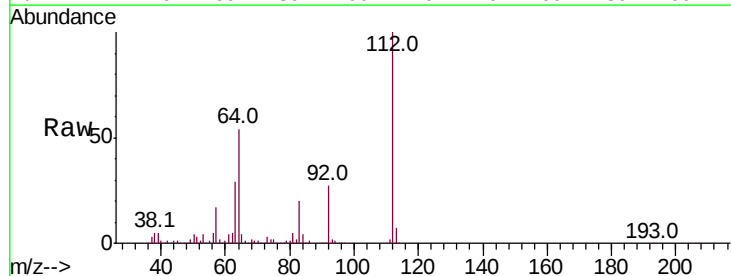
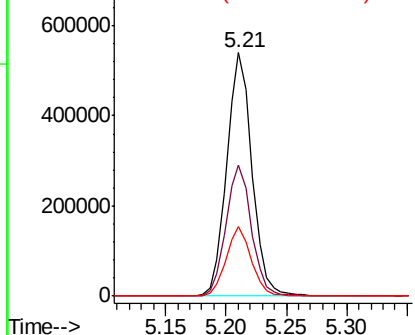
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 53.9  | 49.3  | 73.9  |
| 63      | 28.8  | 26.2  | 39.4  |

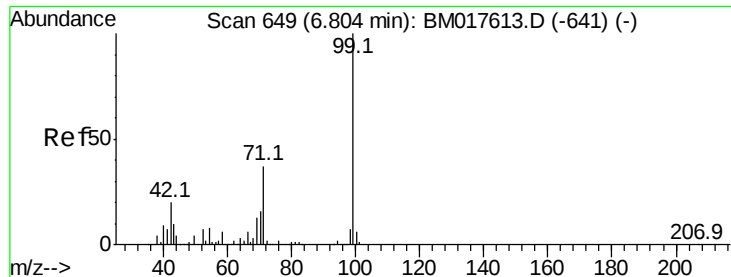
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BM0

Ion 63.00 (62.70 to 63.70): BM0





#7

Phenol-d6

Concen: 47.120 ng

RT: 6.77 min Scan# 644

Delta R.T. -0.03 min

Lab File: BM017911.D

Acq: 04 Dec 2018 20:23

Instrument :

BNA\_M

ClientSampleId :

OR-03-112918-A

Tot Ion: 99 Resp: 1062017

Ion Ratio Lower Upper

99 100

42 15.7 16.3 24.5#

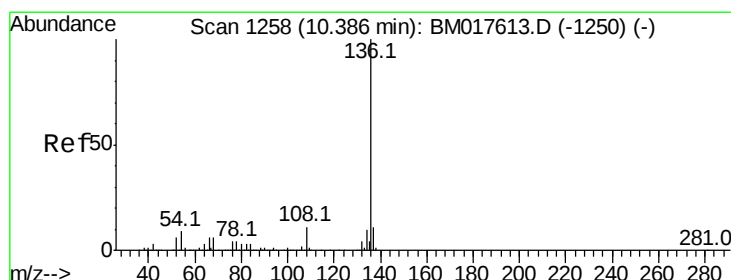
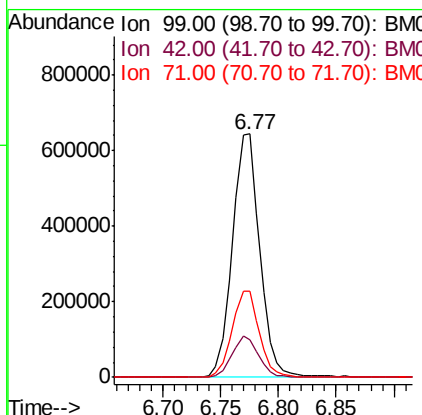
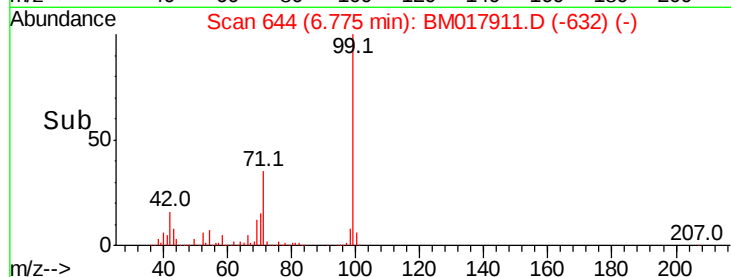
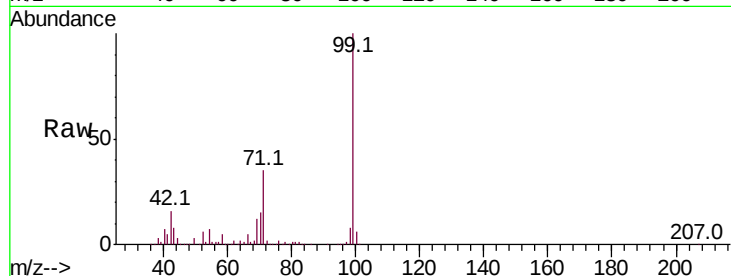
71 35.2 29.8 44.8

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#21

Naphthalene-d8

Concen: 20.000 ng

RT: 10.35 min Scan# 1252

Delta R.T. -0.04 min

Lab File: BM017911.D

Acq: 04 Dec 2018 20:23

Tgt Ion: 136 Resp: 1071147

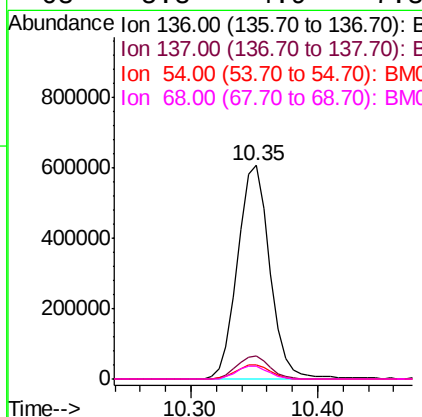
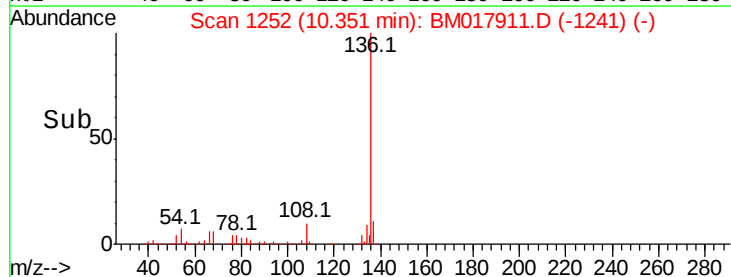
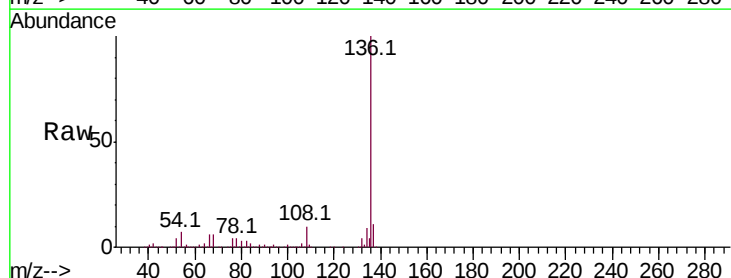
Ion Ratio Lower Upper

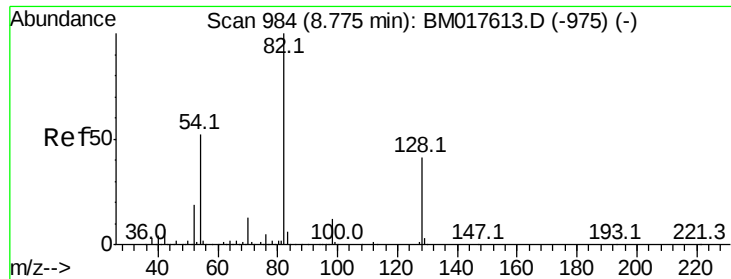
136 100

137 10.7 8.6 12.8

54 6.7 7.0 10.6#

68 5.8 4.9 7.3





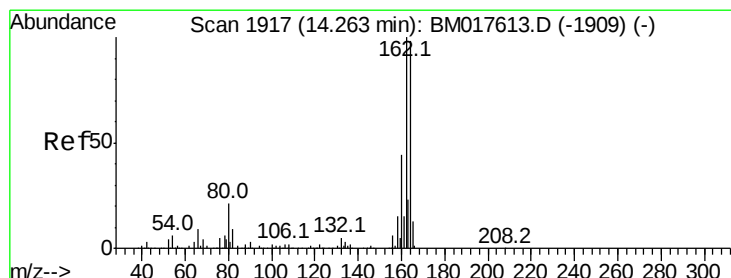
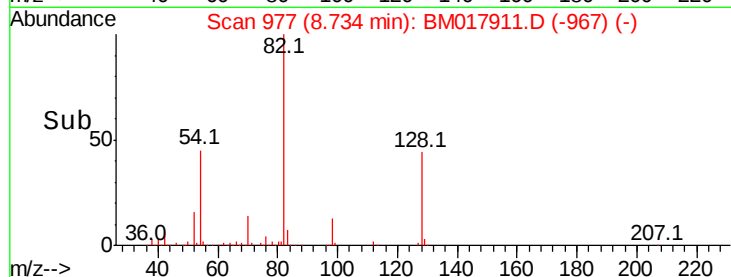
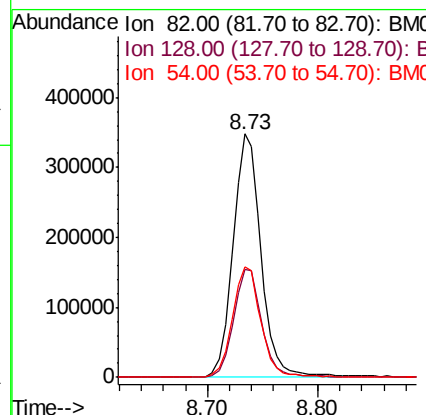
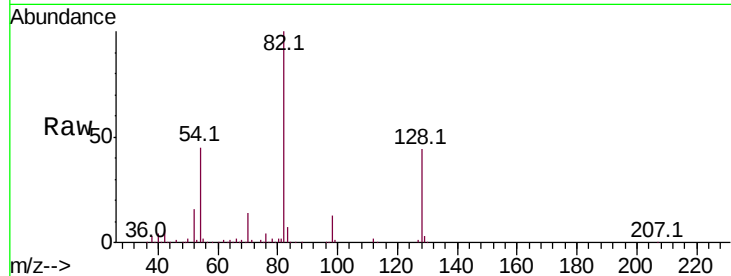
#23  
Nitrobenzene-d5  
Concen: 29.812 ng  
RT: 8.73 min Scan# 977  
Delta R.T. -0.04 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

Instrument :  
BNA\_M  
ClientSampleId :  
OR-03-112918-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 44.3  | 33.0  | 49.4  |
| 54      | 45.2  | 41.4  | 62.2  |

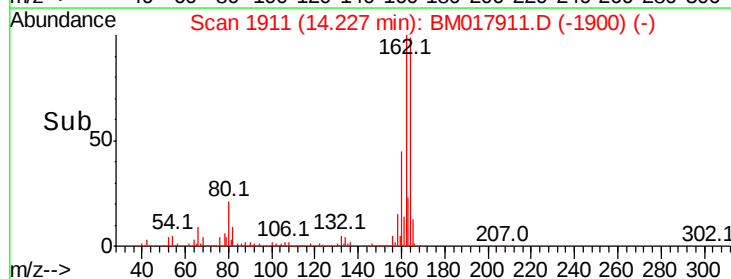
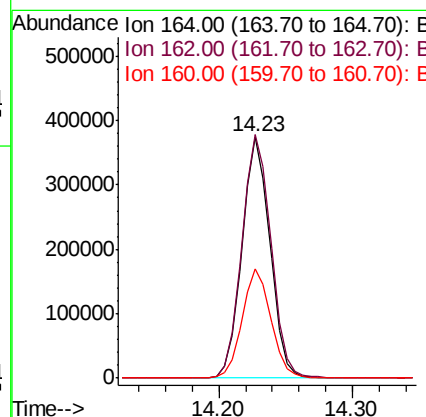
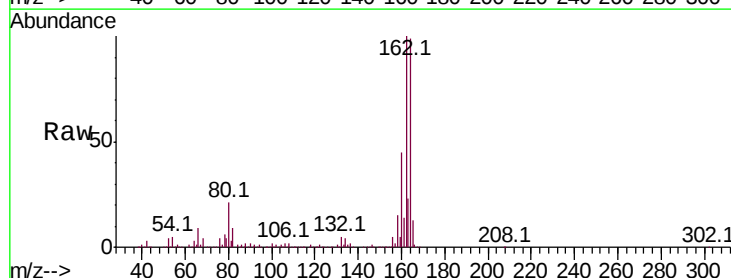
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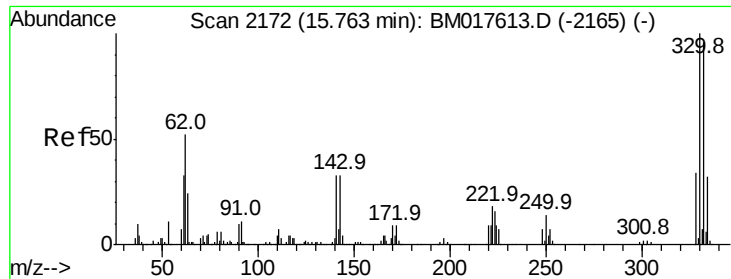
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#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.23 min Scan# 1911  
Delta R.T. -0.04 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 100.8 | 81.4  | 122.0 |
| 160     | 45.0  | 35.6  | 53.4  |





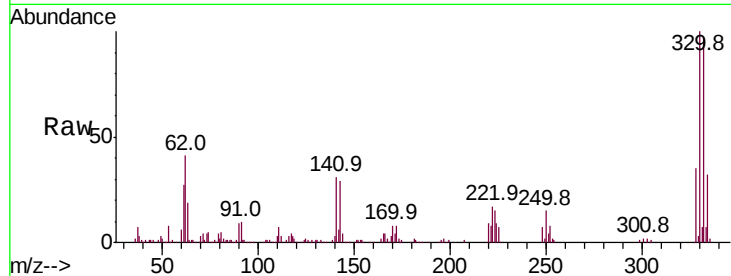
#42  
 2,4,6-Tribromophenol  
 Concen: 43.124 ng  
 RT: 15.73 min Scan# 2167  
 Delta R.T. -0.03 min  
 Lab File: BM017911.D  
 Acq: 04 Dec 2018 20:23

Instrument :  
 BNA\_M  
 ClientSampleId :  
 OR-03-112918-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 96.2  | 77.9  | 116.9 |
| 141     | 32.6  | 27.5  | 41.3  |

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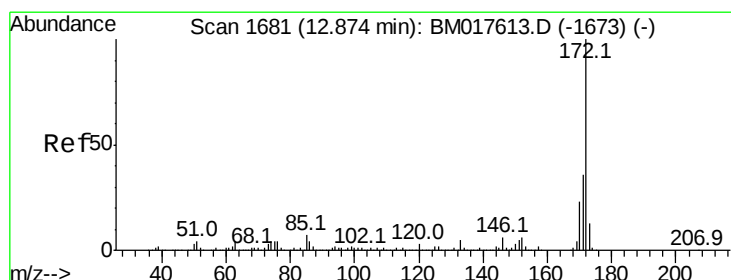
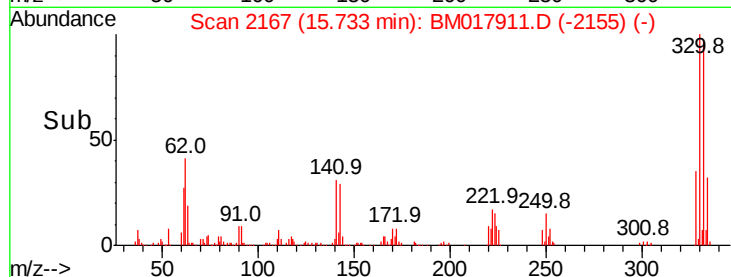
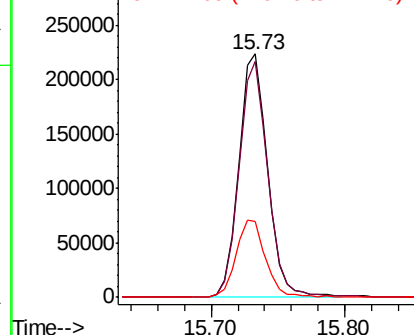


Abundance

Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#45  
 2-Fluorobiphenyl  
 Concen: 33.604 ng  
 RT: 12.84 min Scan# 1675  
 Delta R.T. -0.04 min  
 Lab File: BM017911.D  
 Acq: 04 Dec 2018 20:23

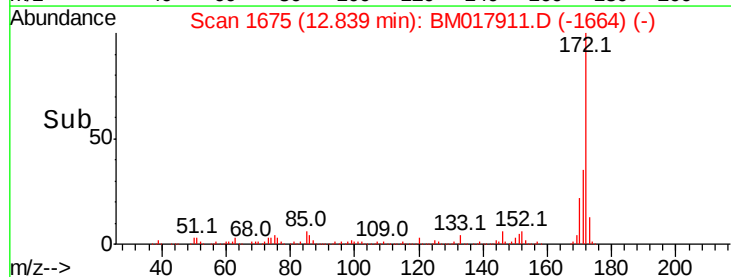
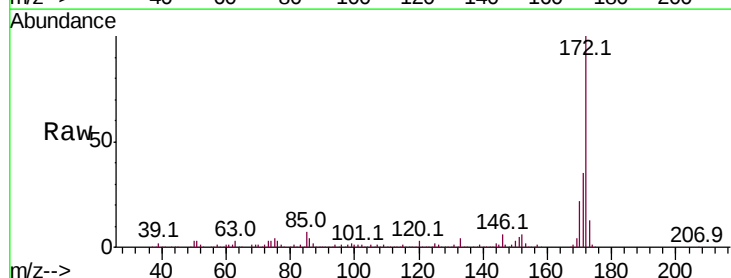
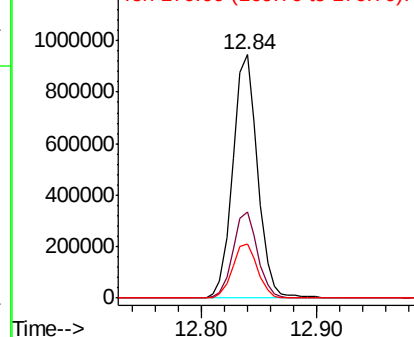
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.3  | 28.7  | 43.1  |
| 170     | 22.4  | 18.3  | 27.5  |

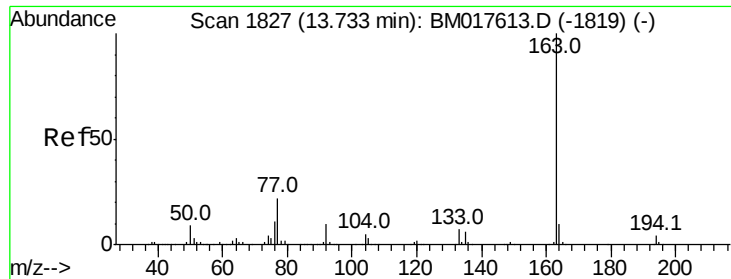
Abundance

Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





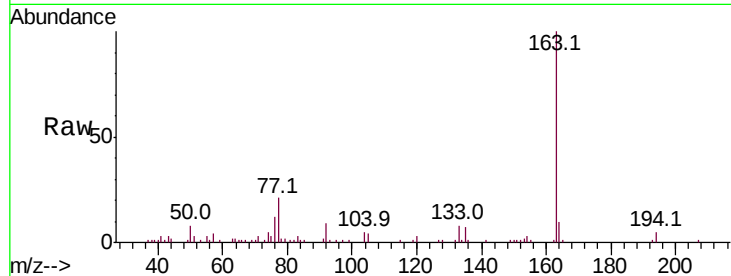
#50  
Dimethylphthalate  
Concen: 2.112 ng  
RT: 13.70 min Scan# 1821  
Delta R.T. -0.04 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

Instrument :  
BNA\_M  
ClientSampleId :  
OR-03-112918-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.6   | 3.1   | 4.7   |
| 164     | 9.7   | 8.2   | 12.4  |

Manual Integrations  
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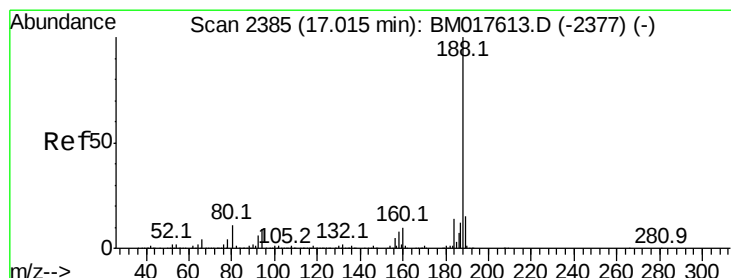
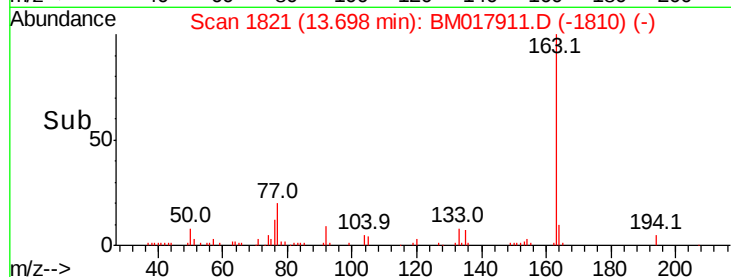
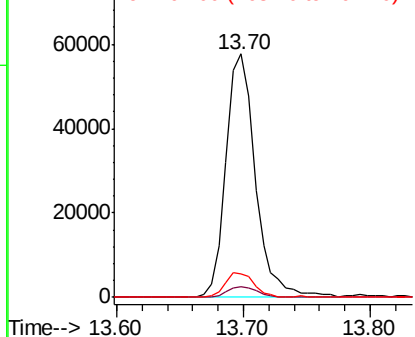


Abundance

Ion 163.00 (162.70 to 163.70): E

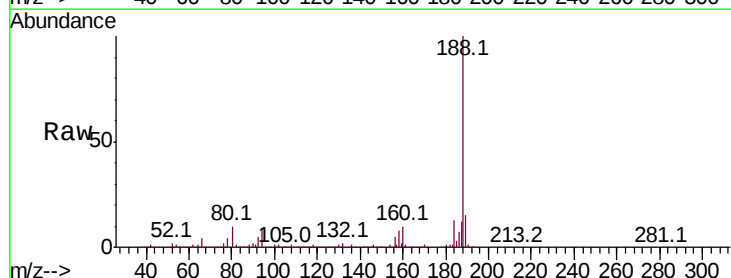
Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 16.99 min Scan# 2380  
Delta R.T. -0.03 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 8.9   | 7.5   | 11.3  |
| 80      | 10.0  | 8.6   | 13.0  |

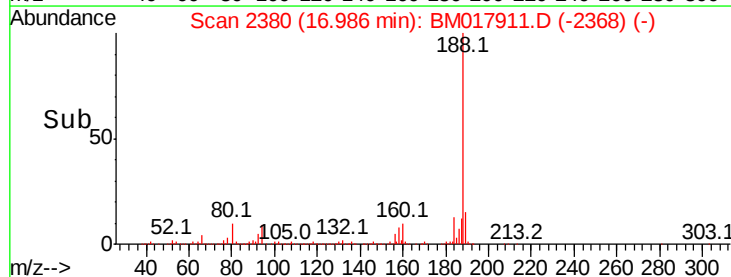
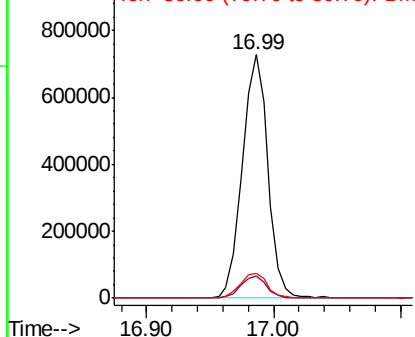


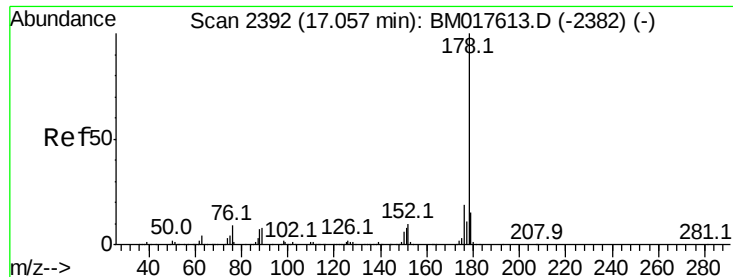
Abundance

Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BM0

Ion 80.00 (79.70 to 80.70): BM0





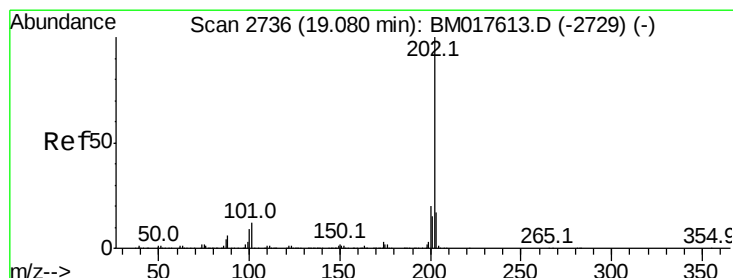
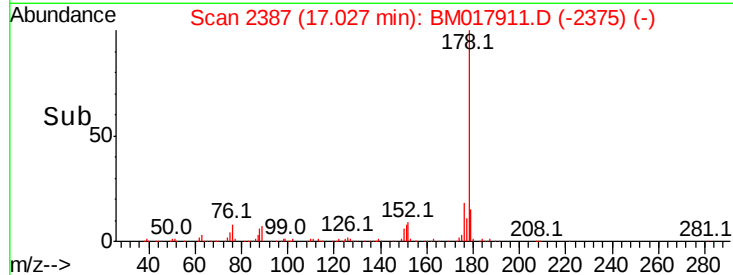
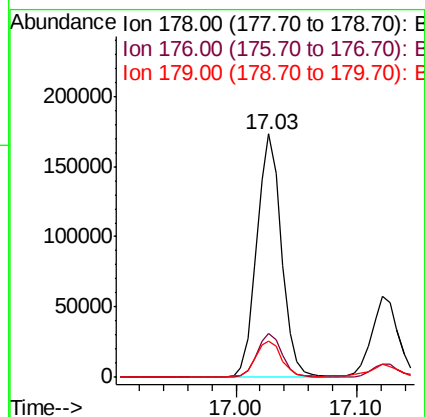
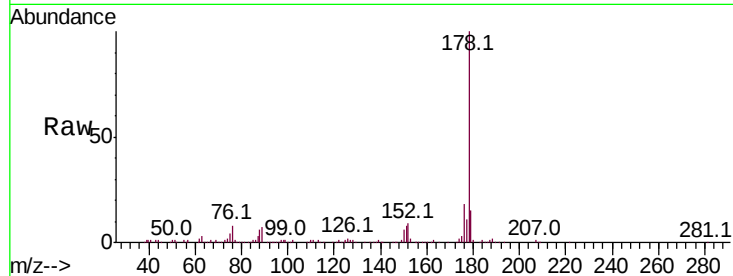
#71  
Phenanthrene  
Concen: 4.548 ng  
RT: 17.03 min Scan# 2387  
Delta R.T. -0.03 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

Instrument :  
BNA\_M  
ClientSampleId :  
OR-03-112918-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.0  | 15.0  | 22.4  |
| 179     | 14.8  | 12.4  | 18.6  |

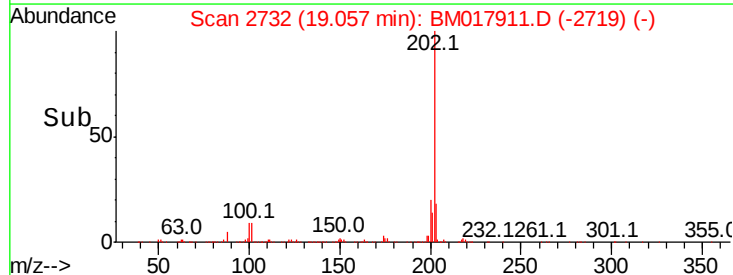
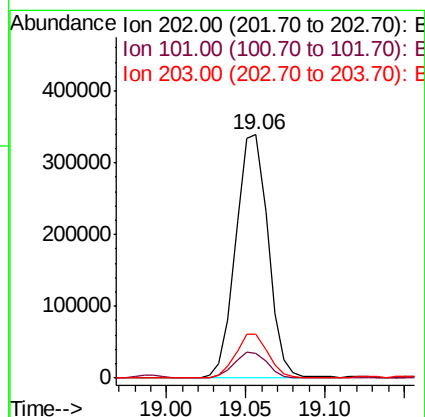
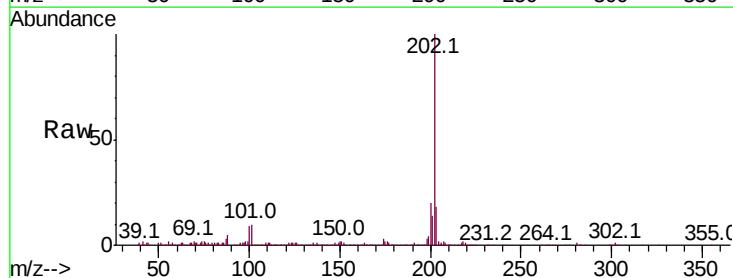
Manual Integrations  
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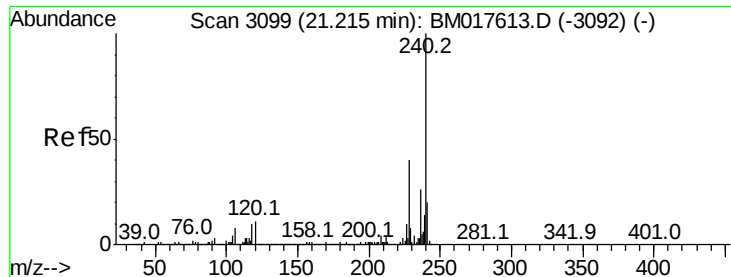
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#75  
Fluoranthene  
Concen: 7.691 ng  
RT: 19.06 min Scan# 2732  
Delta R.T. -0.02 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.1  | 0.0   | 31.5  |
| 203     | 17.8  | 0.0   | 37.2  |





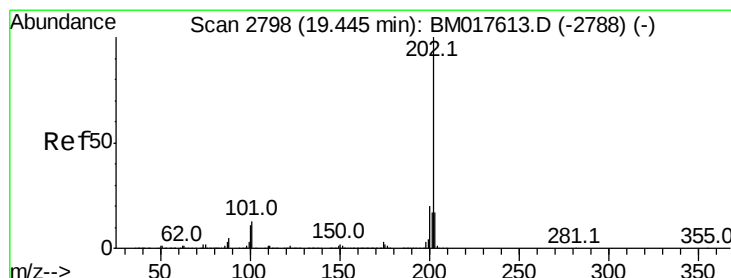
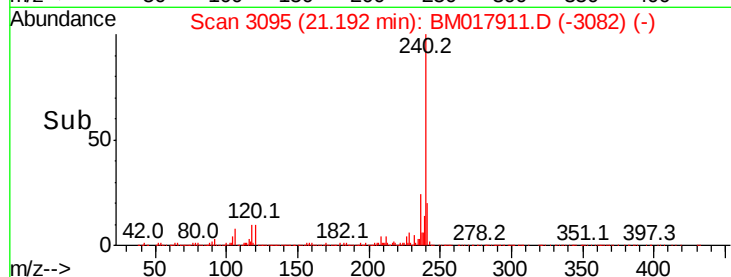
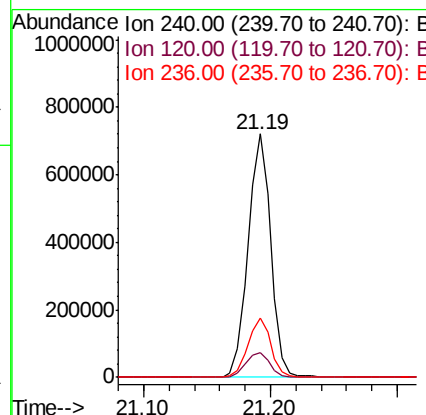
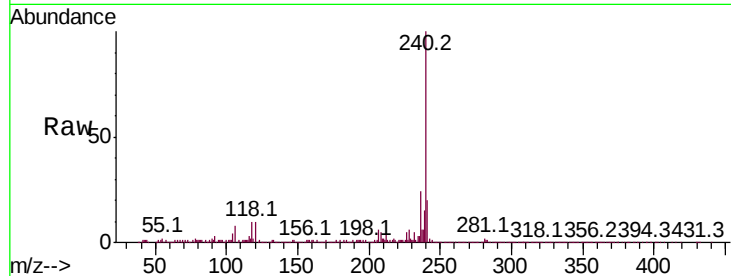
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.19 min Scan# 3095  
Delta R.T. -0.02 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

Instrument :  
BNA\_M  
ClientSampleId :  
OR-03-112918-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 10.2  | 8.5   | 12.7  |
| 236     | 24.4  | 20.4  | 30.6  |

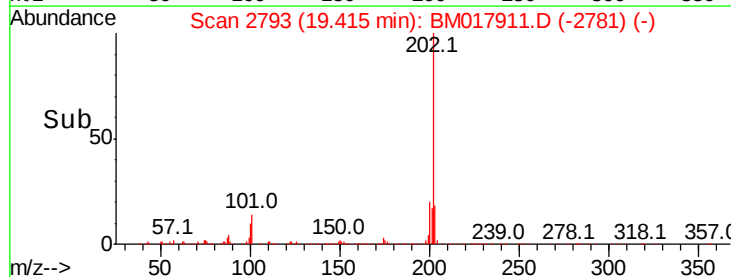
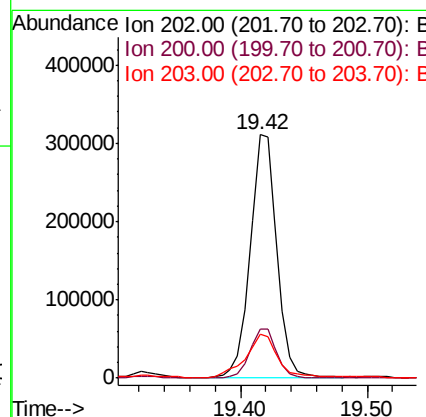
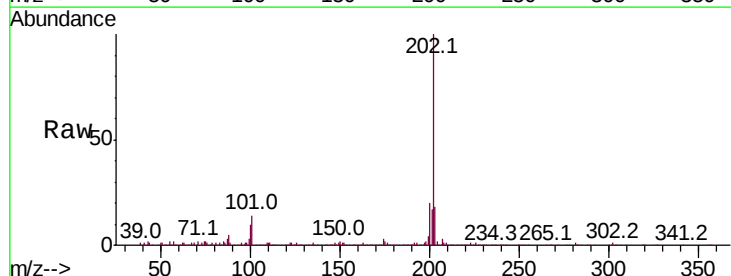
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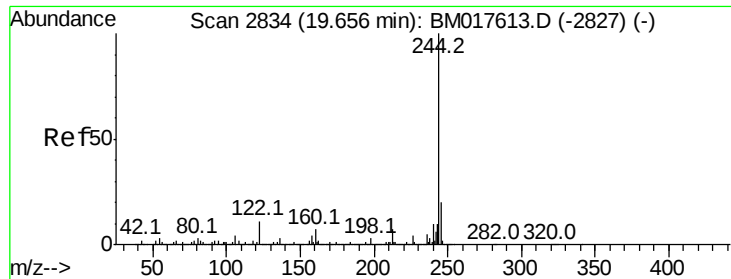
mohammad  
12/5/2018 4:50:02 PM



#78  
Pyrene  
Concen: 8.201 ng  
RT: 19.42 min Scan# 2793  
Delta R.T. -0.03 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 20.0  | 16.4  | 24.6  |
| 203     | 18.0  | 13.8  | 20.8  |





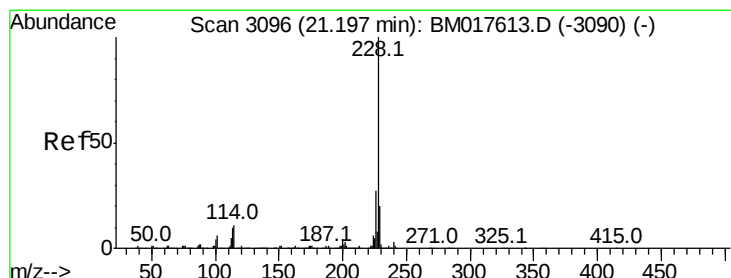
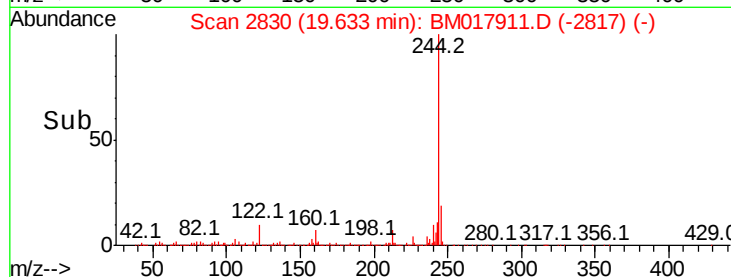
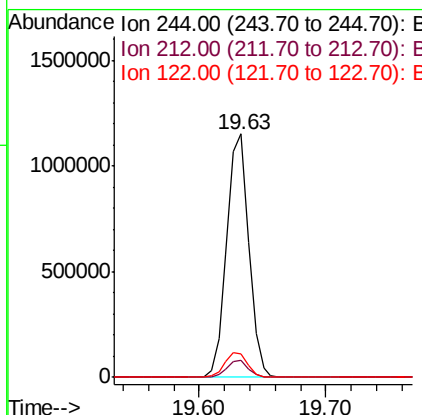
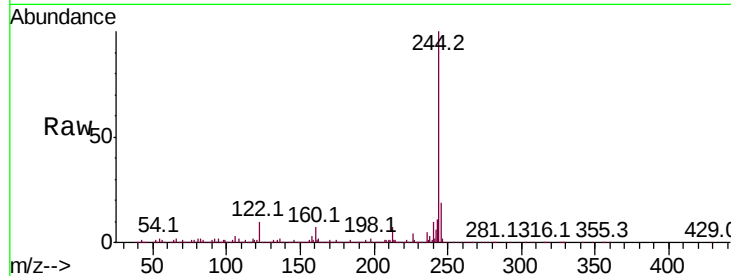
#79  
 Terphenyl-d14  
 Concen: 35.458 ng  
 RT: 19.63 min Scan# 2830  
 Delta R.T. -0.02 min  
 Lab File: BM017911.D  
 Acq: 04 Dec 2018 20:23

Instrument :  
 BNA\_M  
 ClientSampleId :  
 OR-03-112918-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.7   | 5.8   | 8.6   |
| 122     | 9.9   | 9.0   | 13.6  |

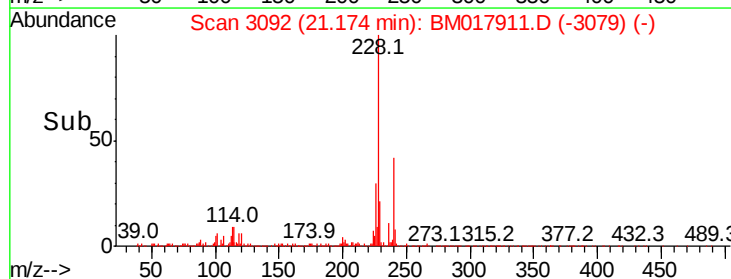
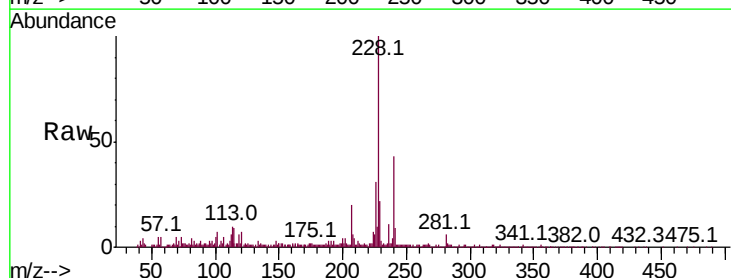
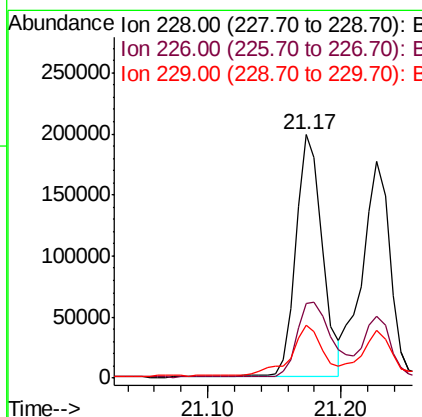
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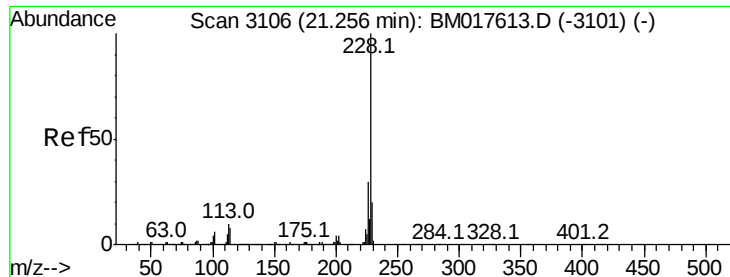
mohammad  
 12/5/2018 4:50:02 PM



#81  
 Benzo(a)anthracene  
 Concen: 5.333 ng  
 RT: 21.17 min Scan# 3092  
 Delta R.T. -0.02 min  
 Lab File: BM017911.D  
 Acq: 04 Dec 2018 20:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.8  | 21.3  | 31.9  |
| 229     | 21.6  | 16.0  | 24.0  |





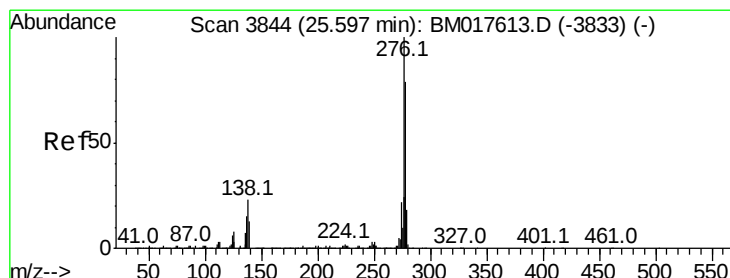
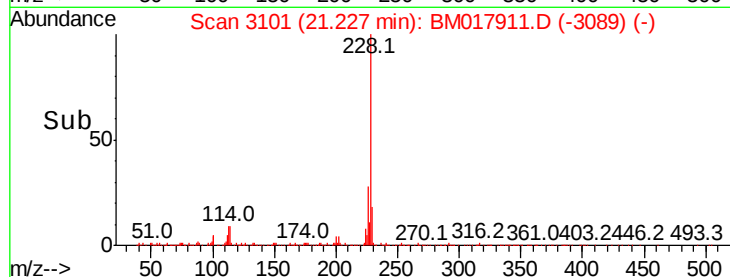
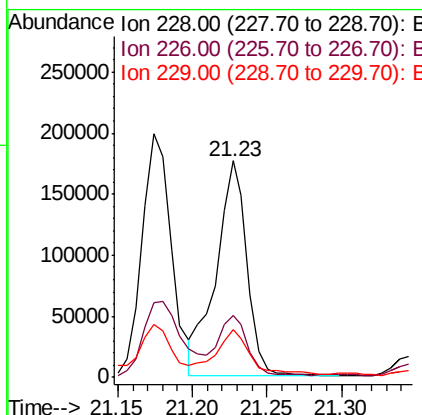
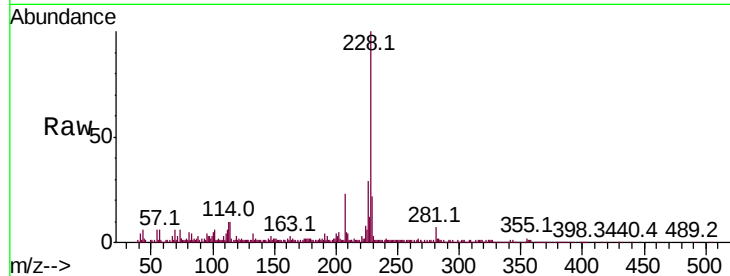
#83  
Chrysene  
Concen: 5.112 ng  
RT: 21.23 min Scan# 3101  
Delta R.T. -0.03 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

Instrument :  
BNA\_M  
ClientSampleID :  
OR-03-112918-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.8  | 23.6  | 35.4  |
| 229     | 22.0  | 15.8  | 23.6  |

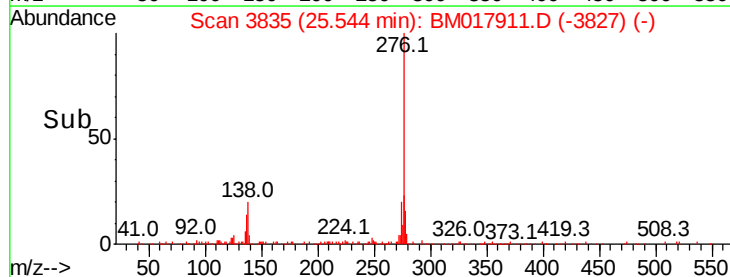
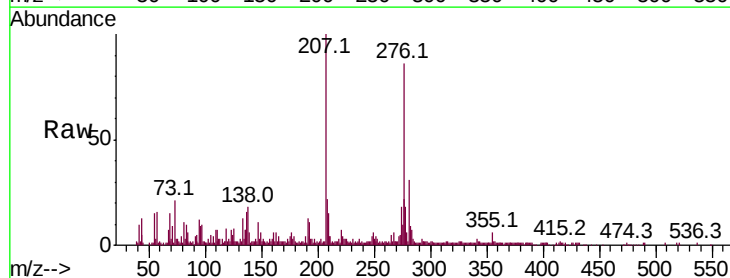
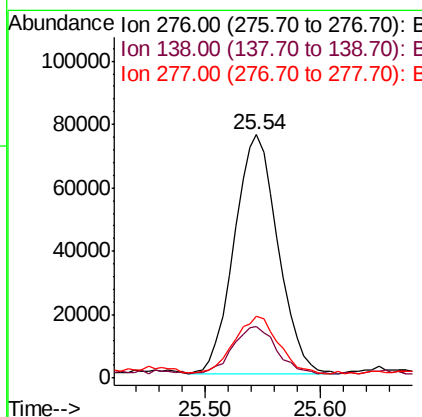
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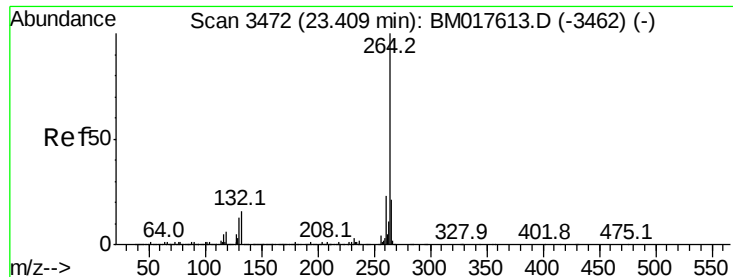
mohammad  
12/5/2018 4:50:02 PM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 4.983 ng  
RT: 25.54 min Scan# 3835  
Delta R.T. -0.05 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 20.1  | 19.1  | 28.7  |
| 277     | 24.0  | 20.0  | 30.0  |





#87

Pervlene-d12

Concen: 20.000 ng

RT: 23.37 min Scan# 3466

Delta R.T. -0.04 min

Lab File: BM017911.D

Acq: 04 Dec 2018 20:23

Instrument :

BNA\_M

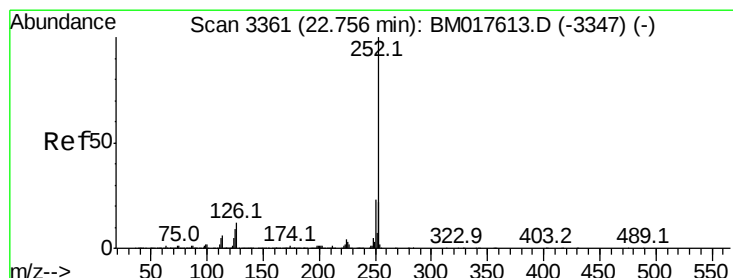
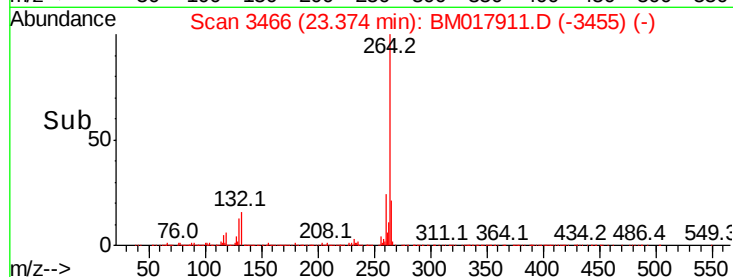
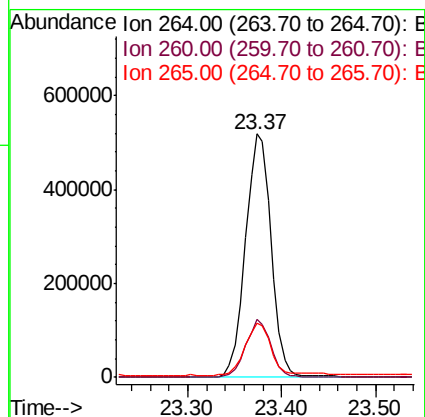
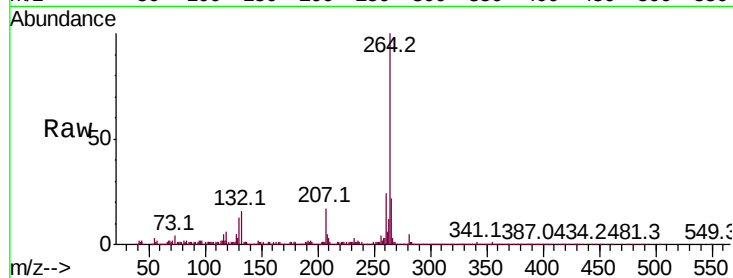
ClientSampleId :

OR-03-112918-A

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 264   | Resp: | 969819 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 24.0  | 18.2  | 27.2   |
| 265       | 22.2  | 17.5  | 26.3   |

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#88

Benzo(b)fluoranthene

Concen: 6.779 ng

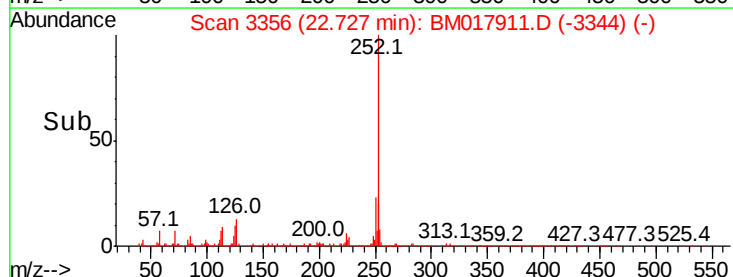
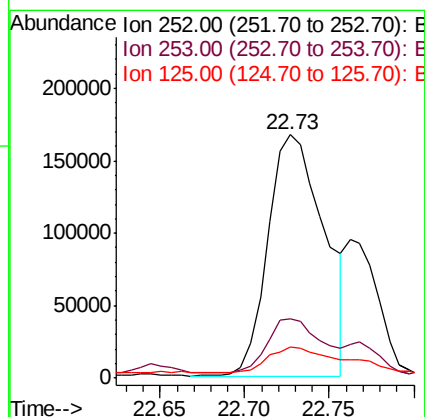
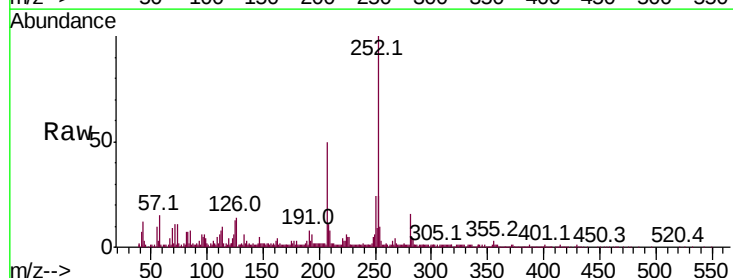
RT: 22.73 min Scan# 3356

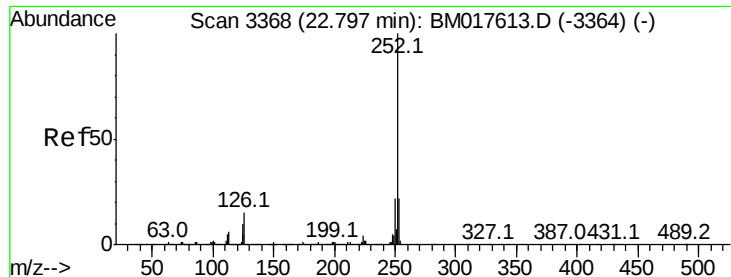
Delta R.T. -0.03 min

Lab File: BM017911.D

Acq: 04 Dec 2018 20:23

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 385020 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 24.4  | 17.3  | 25.9   |
| 125       | 12.7  | 7.6   | 11.4#  |





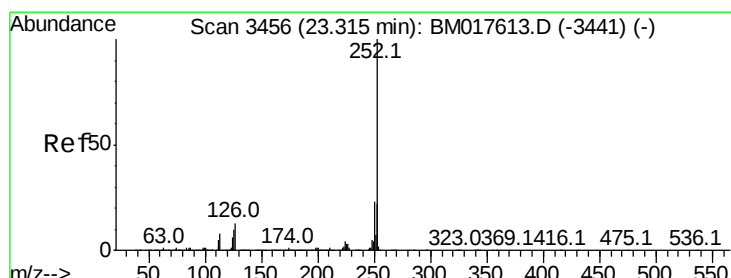
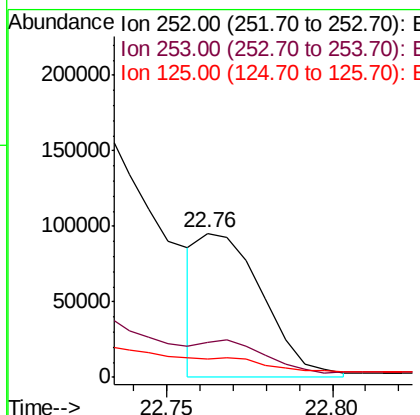
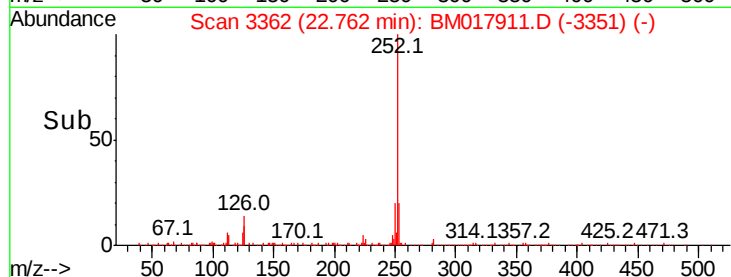
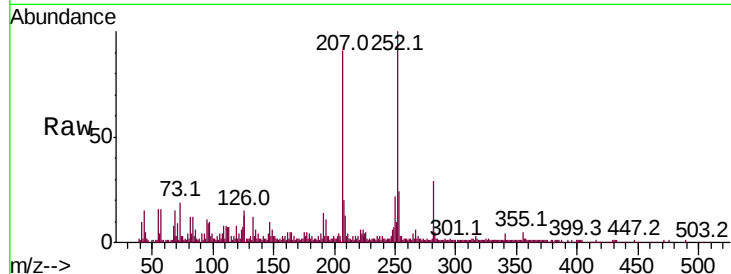
#89  
Benzo(k)fluoranthene  
Concen: 2.217 ng m  
RT: 22.76 min Scan# 3362  
Delta R.T. -0.04 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

Instrument :  
BNA\_M  
ClientSampleId :  
OR-03-112918-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.9  | 17.7  | 26.5  |
| 125     | 13.1  | 7.9   | 11.9  |

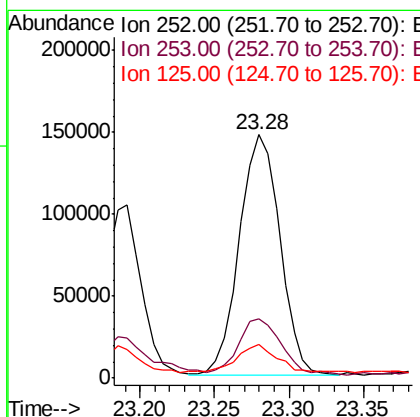
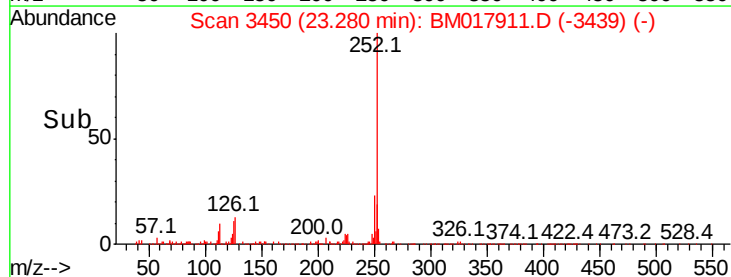
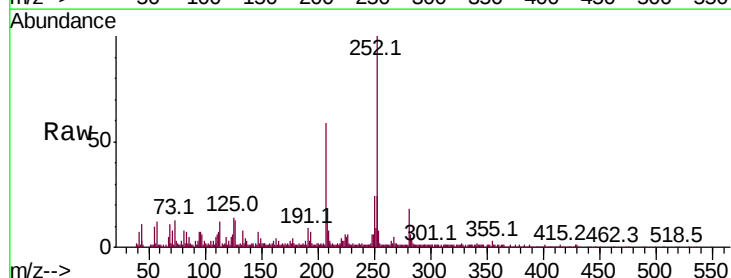
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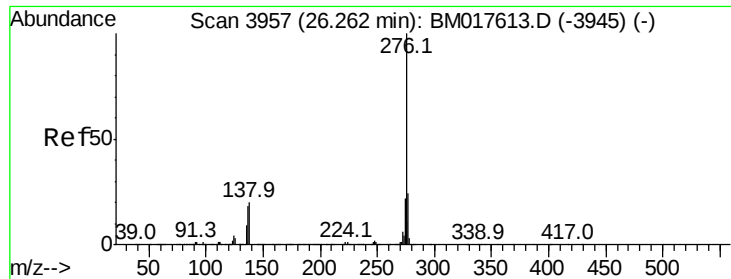
mohammad  
12/5/2018 4:50:02 PM



#90  
Benzo(a)pyrene  
Concen: 5.322 ng  
RT: 23.28 min Scan# 3450  
Delta R.T. -0.04 min  
Lab File: BM017911.D  
Acq: 04 Dec 2018 20:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.1  | 17.4  | 26.2  |
| 125     | 13.8  | 8.2   | 12.2  |





#92  
 Benzo(a,h,i)perylene  
 Concen: 4.509 ng  
 RT: 26.21 min Scan# 3948  
 Delta R.T. -0.05 min  
 Lab File: BM017911.D  
 Acq: 04 Dec 2018 20:23

Instrument :  
 BNA\_M  
 ClientSampleId :  
 OR-03-112918-A

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 184603 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 277       | 27.6  | 19.0  | 28.4   |
| 138       | 20.7  | 15.9  | 23.9   |

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