

Data Path : Z:\HPCHEM1\BNA M\DATA\BM052217\  
 Data File : BM010128.D  
 Acq On : 23 May 2017 06:35  
 Operator : SJ/MA  
 Sample : I3222-16  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 EX-24

Quant Time: May 23 08:12:15 2017  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\8270-BM051917.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat May 20 04:25:49 2017  
 Response via : Initial Calibration

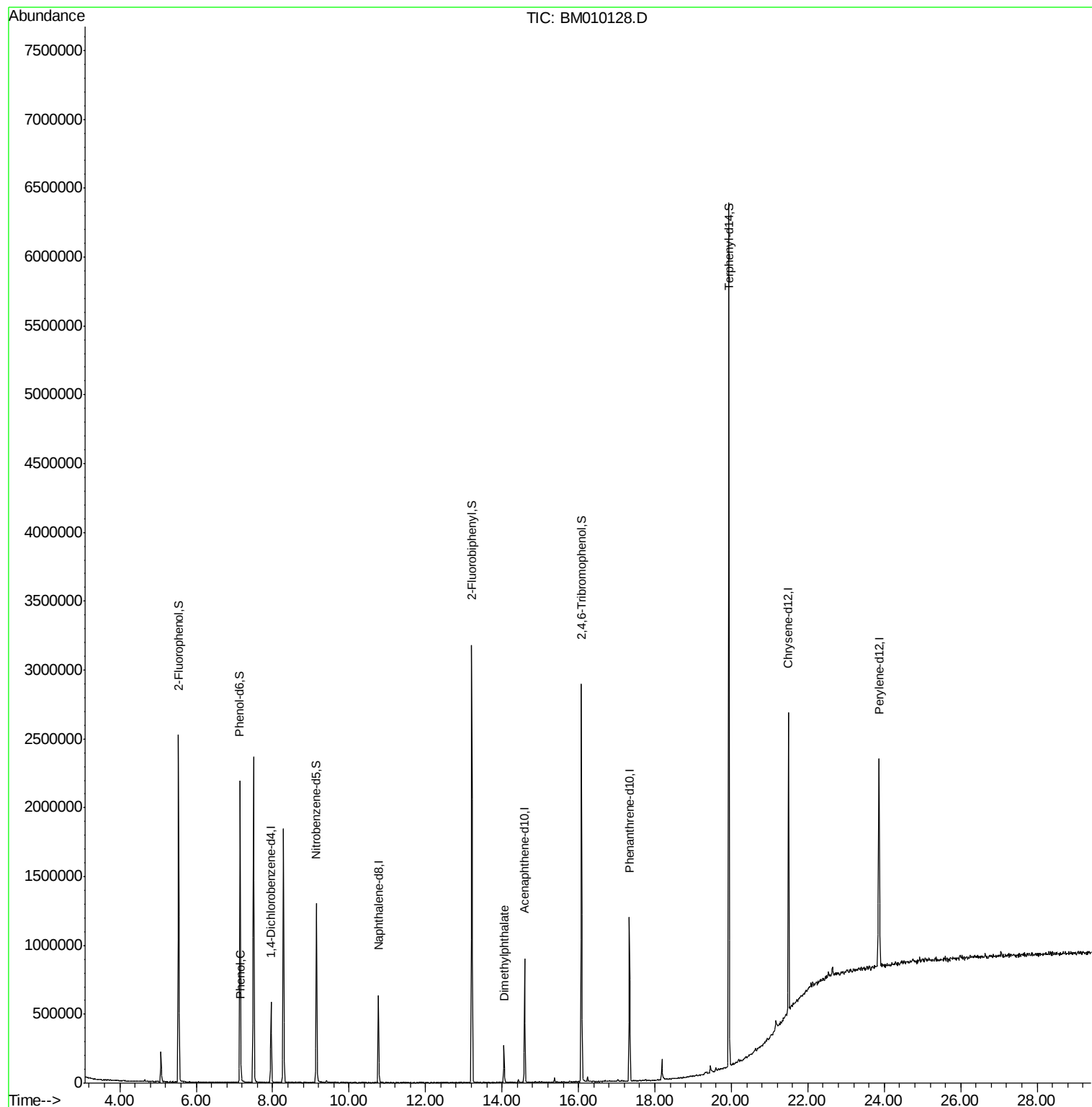
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min)  |
|-----------------------------|-------|------|----------|--------|-------|-----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.96  | 152  | 143054   | 20.00  | ng    | -0.02     |
| 21) Naphthalene-d8          | 10.77 | 136  | 475412   | 20.00  | ng    | -0.02     |
| 38) Acenaphthene-d10        | 14.59 | 164  | 284127   | 20.00  | ng    | -0.02     |
| 63) Phenanthrene-d10        | 17.33 | 188  | 713634   | 20.00  | ng    | -0.02     |
| 75) Chrysene-d12            | 21.49 | 240  | 1079604  | 20.00  | ng    | -0.02     |
| 86) Perylene-d12            | 23.86 | 264  | 1243167  | 20.00  | ng    | -0.03     |
| System Monitoring Compounds |       |      |          |        |       |           |
| 5) 2-Fluorophenol           | 5.54  | 112  | 913325   | 115.29 | ng    | -0.02     |
| 7) Phenol-d6                | 7.15  | 99   | 1114533  | 109.34 | ng    | -0.02     |
| 23) Nitrobenzene-d5         | 9.15  | 82   | 714212   | 81.05  | ng    | -0.02     |
| 41) 2,4,6-Tribromophenol    | 16.08 | 330  | 485015   | 112.39 | ng    | -0.02     |
| 44) 2-Fluorobiphenyl        | 13.22 | 172  | 1605660  | 72.65  | ng    | -0.02     |
| 78) Terphenyl-d14           | 19.93 | 244  | 2586153  | 54.47  | ng    | -0.02     |
| Target Compounds            |       |      |          |        |       |           |
| 10) Phenol                  | 7.17  | 94   | 21683    | 2.02   | ng    | Qvalue 90 |
| 49) Dimethylphthalate       | 14.05 | 163  | 151008   | 5.96   | ng    | # 98      |

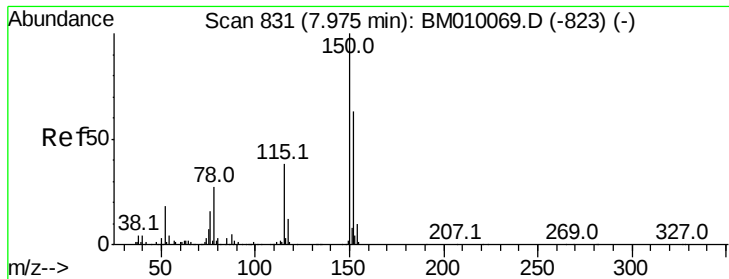
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA M\DATA\BM052217\  
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Misc :  
ALS Vial : 34 Sample Multiplier: 1

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BNA\_M  
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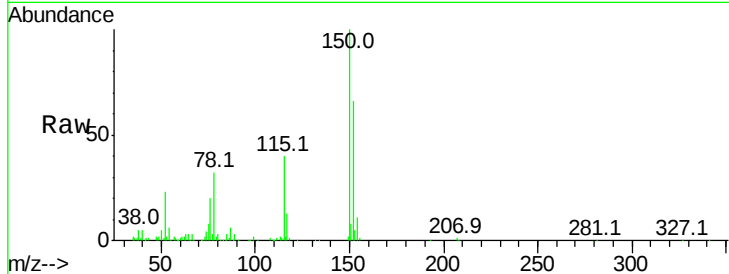


#1

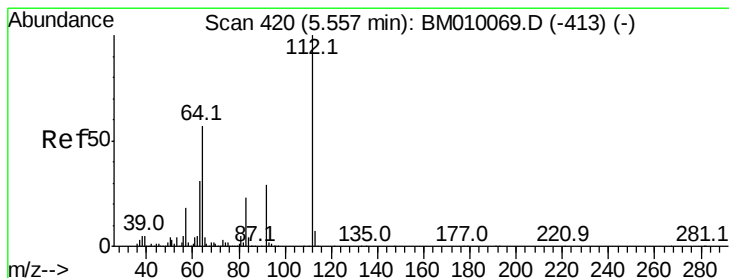
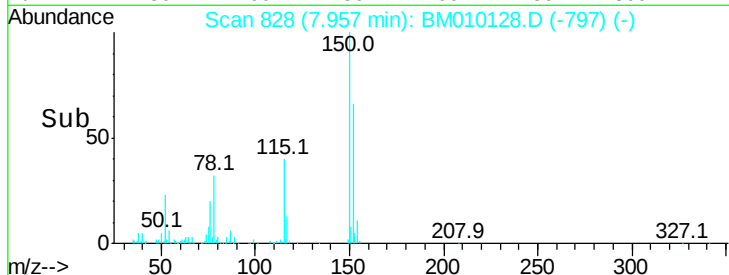
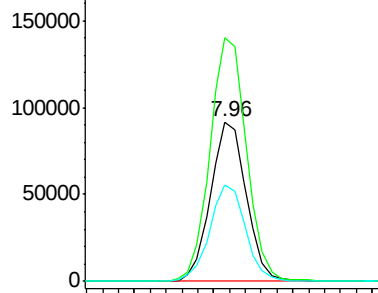
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.96 min Scan# 828  
Delta R.T. -0.02 min  
Lab File: BM010128.D  
Acq: 23 May 2017 06:35

Instrument :  
BNA\_M  
ClientSampleId :  
EX-24

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 152.4 | 119.5 | 179.3 |
| 115     | 60.7  | 43.0  | 64.4  |



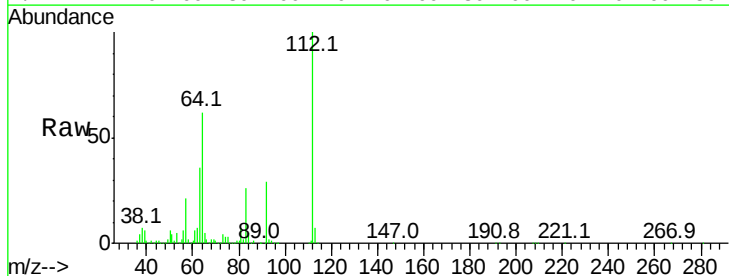
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



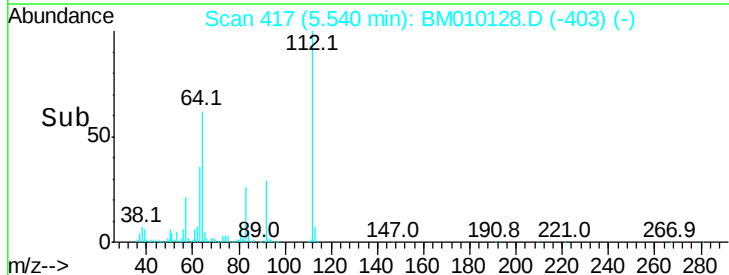
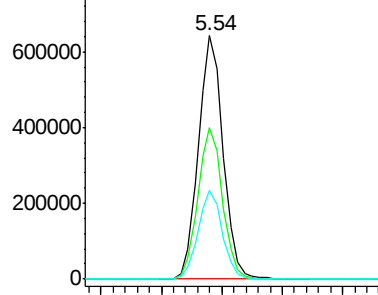
#5

2-Fluorophenol  
Concen: 115.29 ng  
RT: 5.54 min Scan# 417  
Delta R.T. -0.02 min  
Lab File: BM010128.D  
Acq: 23 May 2017 06:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 62.3  | 38.6  | 57.8# |
| 63      | 36.3  | 19.3  | 28.9# |



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: 109.34 ng

RT: 7.15 min Scan# 690

Delta R.T. -0.02 min

Lab File: BM010128.D

Acq: 23 May 2017 06:35

Instrument :

BNA\_M

ClientSampleId :

EX-24

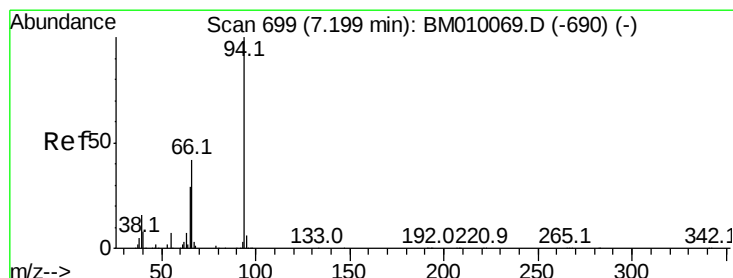
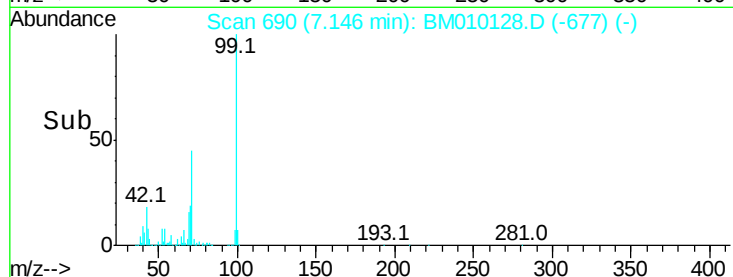
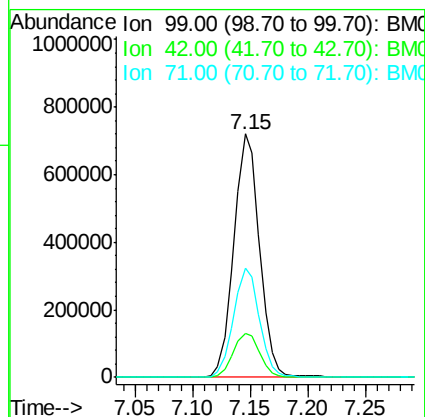
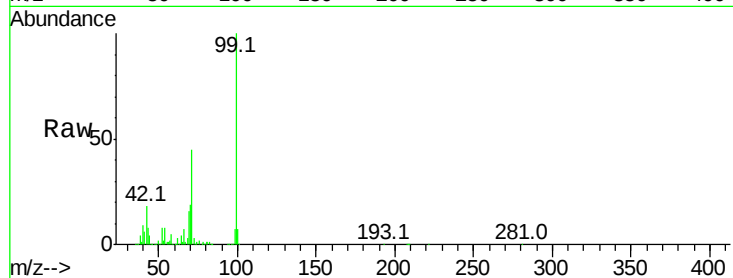
Tot Ion: 99 Resp: 1114533

Ion Ratio Lower Upper

99 100

42 18.2 11.0 16.4#

71 45.0 23.4 35.2#



#10

Phenol

Concen: 2.02 ng

RT: 7.17 min Scan# 695

Delta R.T. -0.02 min

Lab File: BM010128.D

Acq: 23 May 2017 06:35

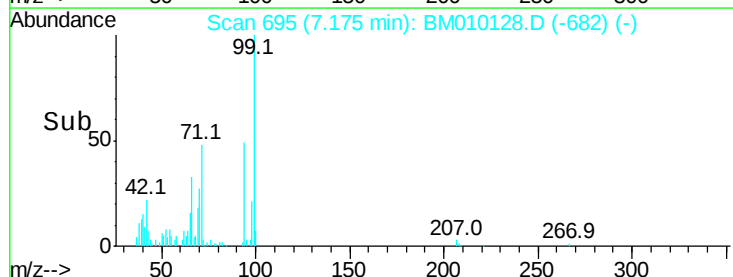
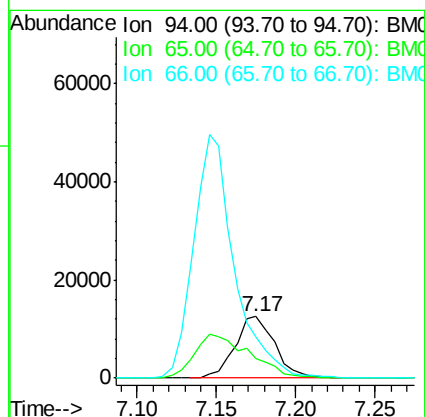
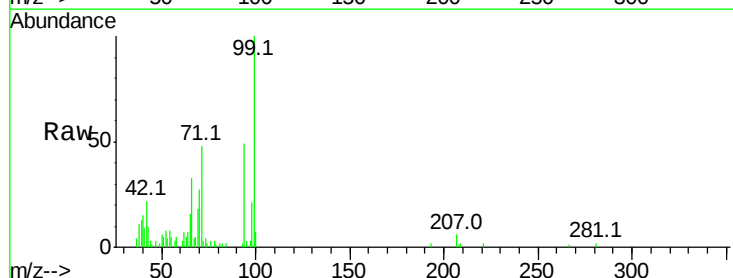
Tgt Ion: 94 Resp: 21683

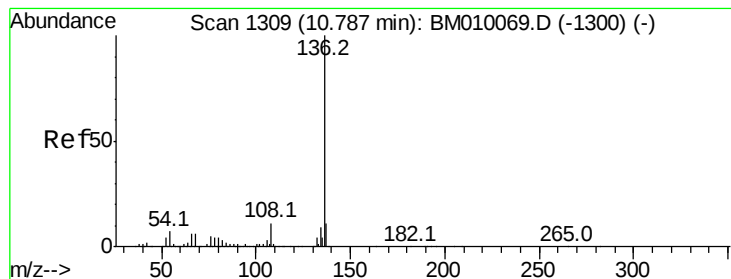
Ion Ratio Lower Upper

94 100

65 32.4 18.8 58.8

66 67.8 39.9 79.9

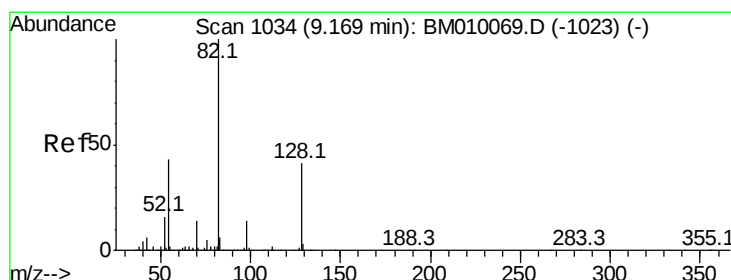
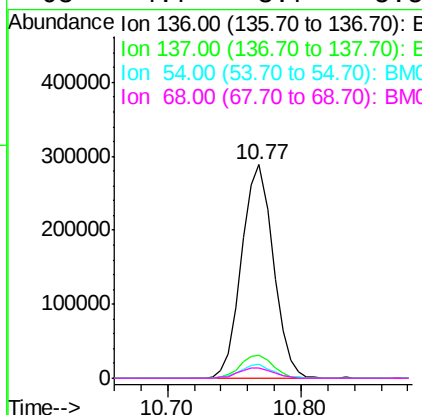
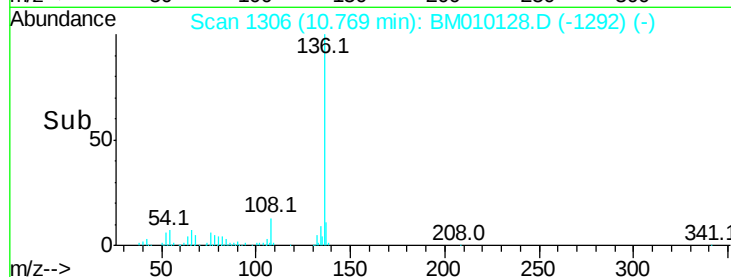
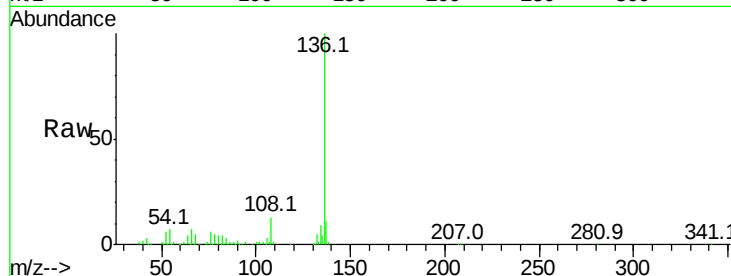




#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 10.77 min Scan# 1306  
Delta R.T. -0.02 min  
Lab File: BM010128.D  
Acq: 23 May 2017 06:35

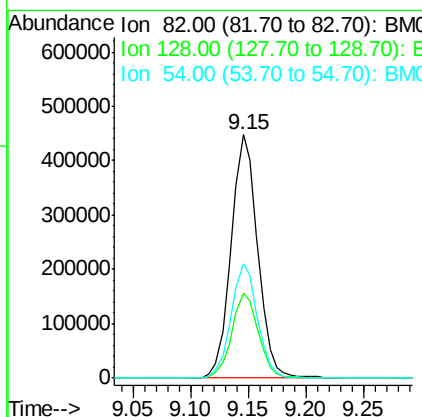
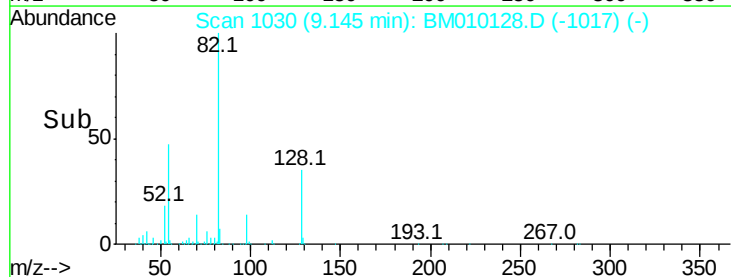
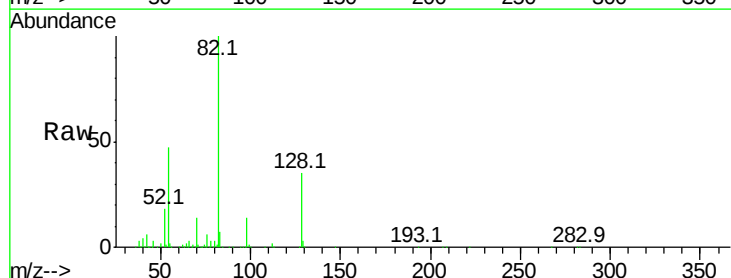
Instrument :  
BNA\_M  
ClientSampled :  
EX-24

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 136   | Resp: | 475412 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 10.8  | 8.7   | 13.1   |
| 54       | 6.9   | 4.6   | 6.8#   |
| 68       | 4.7   | 3.7   | 5.5    |



#23  
Nitrobenzene-d5  
Concen: 81.05 ng  
RT: 9.15 min Scan# 1030  
Delta R.T. -0.02 min  
Lab File: BM010128.D  
Acq: 23 May 2017 06:35

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 82    | Resp: | 714212 |
| Ion      | Ratio | Lower | Upper  |
| 82       | 100   |       |        |
| 128      | 34.8  | 32.8  | 49.2   |
| 54       | 47.0  | 40.6  | 60.8   |





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 14.59 min Scan# 1956

Delta R.T. -0.02 min

Lab File: BM010128.D

Acq: 23 May 2017 06:35

Instrument :

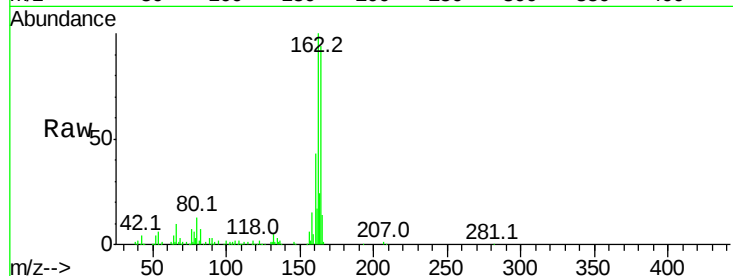
BNA\_M

ClientSampled :

EX-24

Tot Ion:164 Resp: 284127

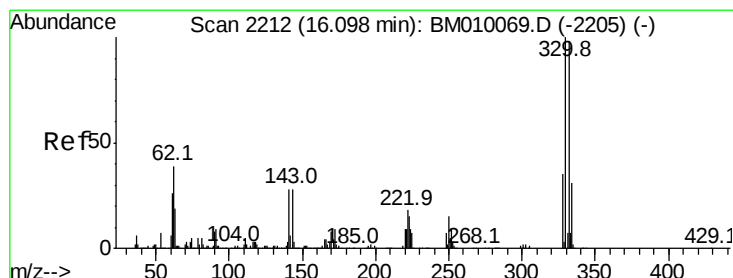
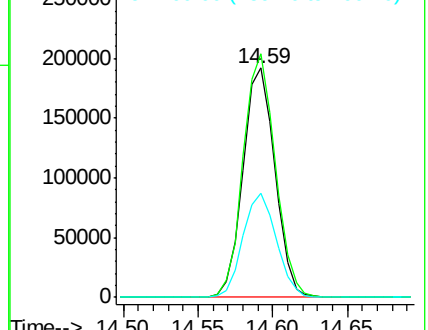
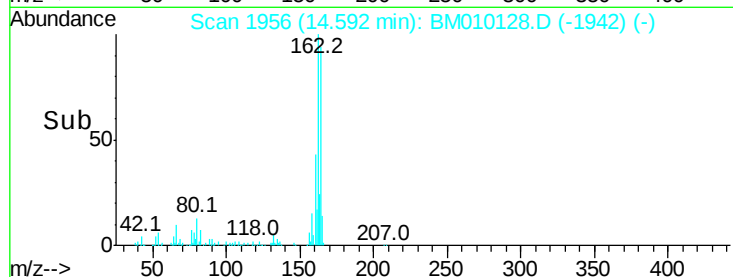
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 162 | 106.1 | 82.4  | 123.6 |
| 160 | 45.5  | 35.8  | 53.6  |



Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E



#41

2,4,6-Tribromophenol

Concen: 112.39 ng

RT: 16.08 min Scan# 2209

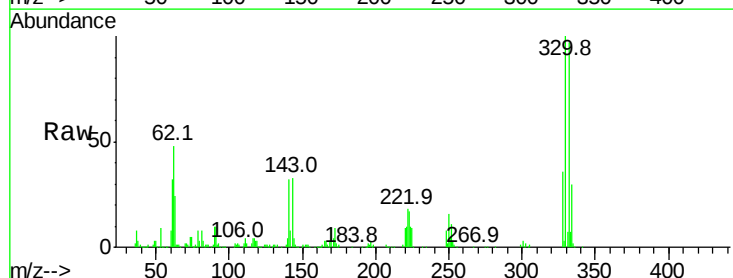
Delta R.T. -0.02 min

Lab File: BM010128.D

Acq: 23 May 2017 06:35

Tgt Ion:330 Resp: 485015

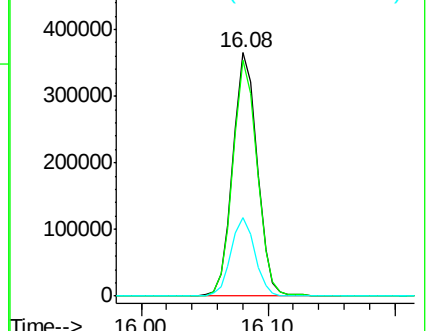
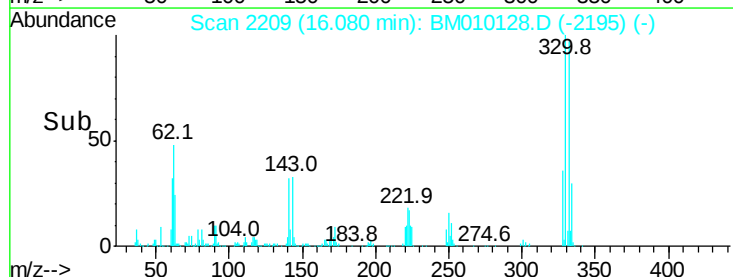
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 330 | 100   |       |       |
| 332 | 96.5  | 0.0   | 0.0#  |
| 141 | 31.9  | 0.0   | 0.0#  |



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





#44

2-Fluorobiphenyl

Concen: 72.65 ng

RT: 13.22 min Scan# 1722

Delta R.T. -0.02 min

Lab File: BM010128.D

Acq: 23 May 2017 06:35

Instrument :

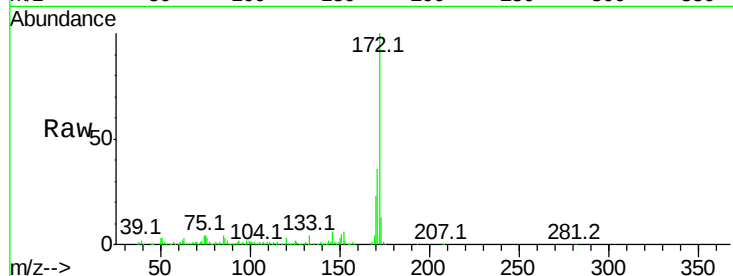
BNA\_M

ClientSampled :

EX-24

Tot Ion:172 Resp: 1605660

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 172 | 100   |       |       |
| 171 | 35.6  | 28.5  | 42.7  |
| 170 | 22.6  | 18.8  | 28.2  |

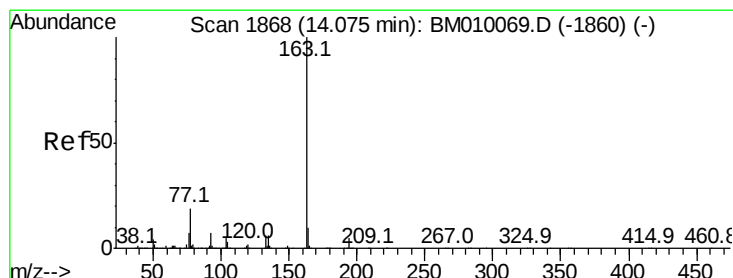
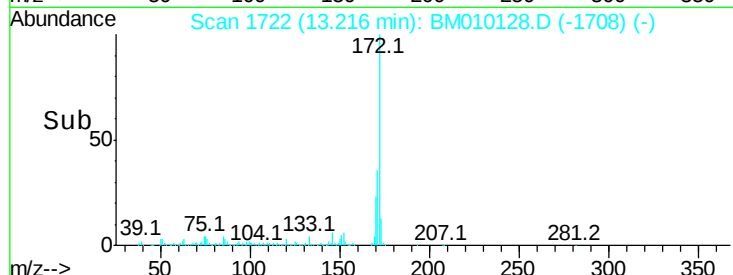
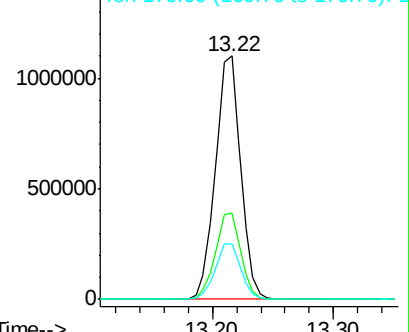


Abundance

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



#49

Dimethylphthalate

Concen: 5.96 ng

RT: 14.05 min Scan# 1864

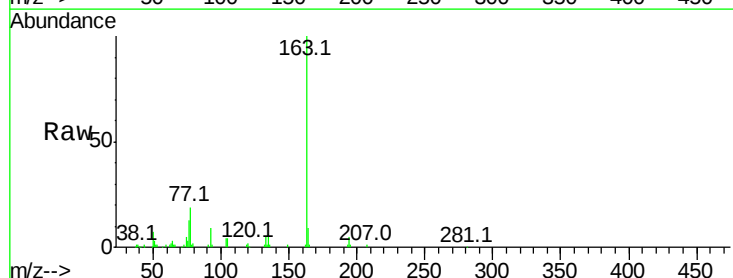
Delta R.T. -0.02 min

Lab File: BM010128.D

Acq: 23 May 2017 06:35

Tgt Ion:163 Resp: 151008

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 163 | 100   |       |       |
| 194 | 4.7   | 2.7   | 4.1#  |
| 164 | 9.5   | 8.2   | 12.2  |

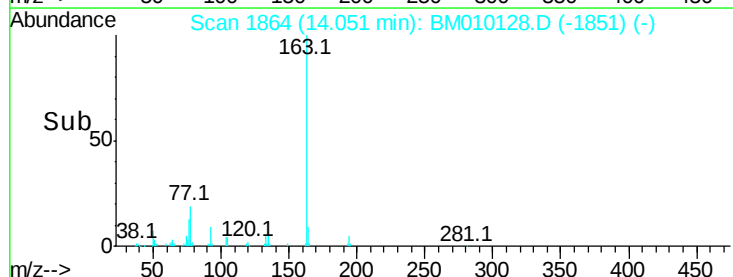
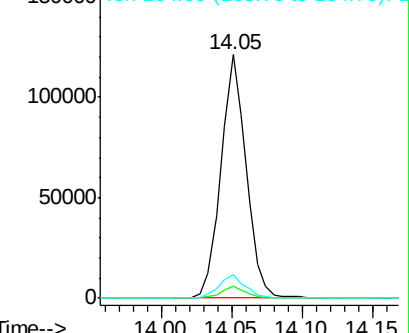


Abundance

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

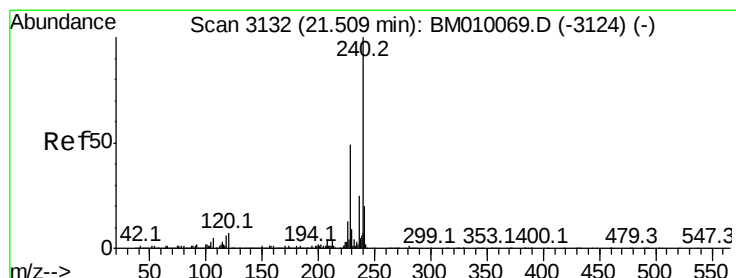
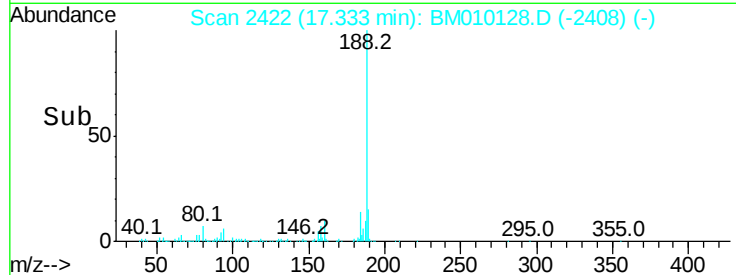
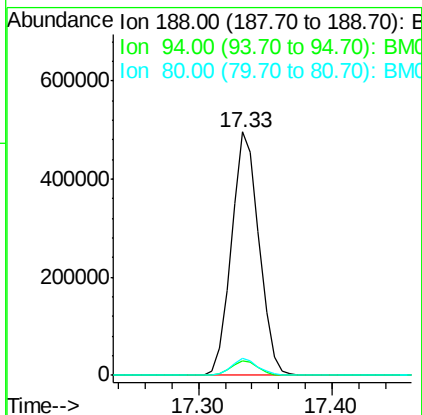
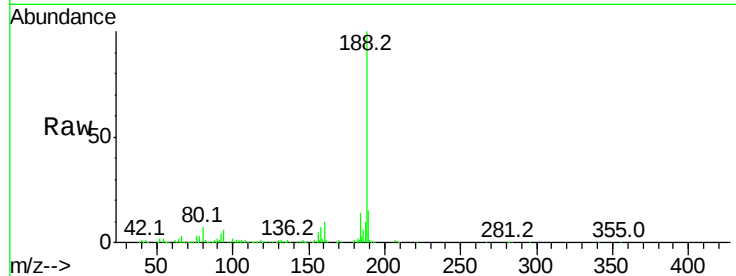




#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 17.33 min Scan# 2422  
Delta R.T. -0.02 min  
Lab File: BM010128.D  
Acq: 23 May 2017 06:35

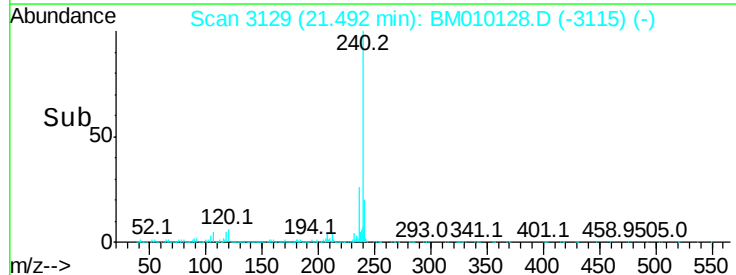
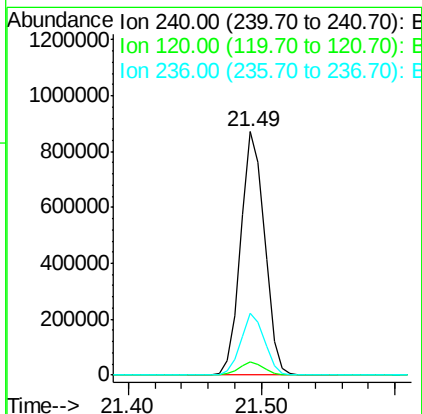
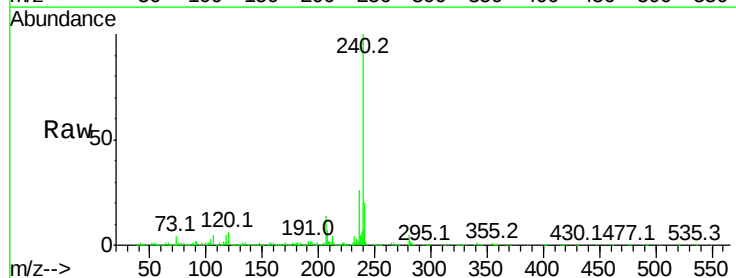
Instrument :  
BNA\_M  
ClientSampleId :  
EX-24

Tot Ion:188 Resp: 713634  
Ion Ratio Lower Upper  
188 100  
94 5.8 8.7 13.1#  
80 6.7 9.3 13.9#



#75  
Chrysene-d12  
Concen: 20.00 ng  
RT: 21.49 min Scan# 3129  
Delta R.T. -0.02 min  
Lab File: BM010128.D  
Acq: 23 May 2017 06:35

Tgt Ion:240 Resp: 1079604  
Ion Ratio Lower Upper  
240 100  
120 5.7 8.2 12.2#  
236 25.6 20.0 30.0



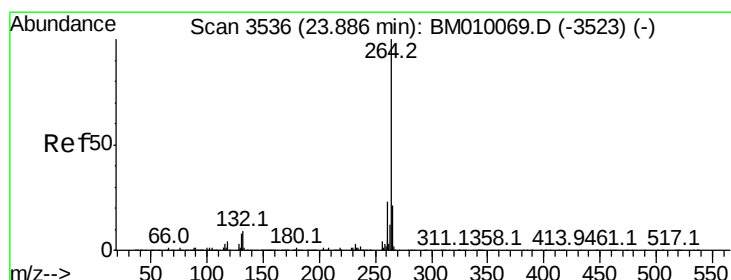
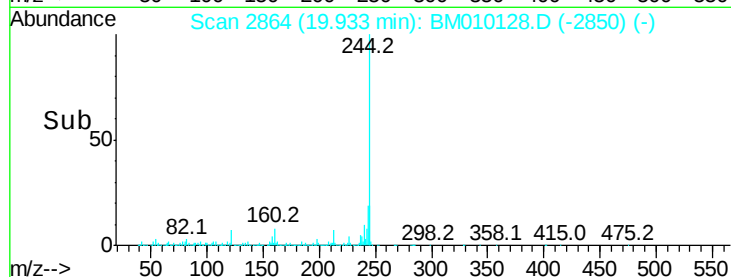
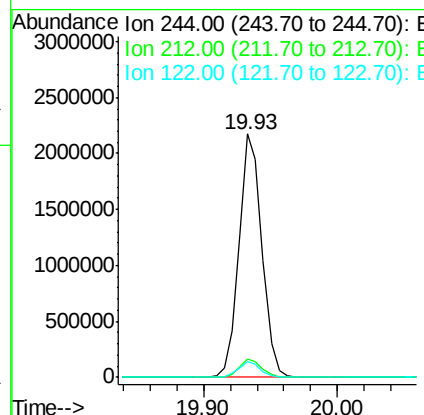
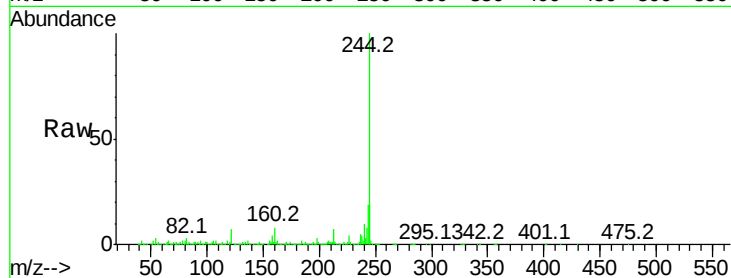


#78  
 Terphenyl-d14  
 Concen: 54.47 ng  
 RT: 19.93 min Scan# 2864  
 Delta R.T. -0.02 min  
 Lab File: BM010128.D  
 Acq: 23 May 2017 06:35

Instrument :  
 BNA\_M  
 ClientSampleId :  
 EX-24

Tot Ion:244 Resp: 2586153  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 244 | 100   |       |       |
| 212 | 7.4   | 4.9   | 7.3#  |
| 122 | 6.5   | 6.2   | 9.4   |



#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 23.86 min Scan# 3531  
 Delta R.T. -0.03 min  
 Lab File: BM010128.D  
 Acq: 23 May 2017 06:35

Tgt Ion:264 Resp: 1243167  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 22.9  | 18.6  | 27.8  |
| 265 | 22.5  | 17.3  | 25.9  |

