

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052116\  
 Data File : BM005568.D  
 Acq On : 22 May 2016 01:49  
 Operator : UM/SJ  
 Sample : H2922-03MSD 2X  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 E5NG0MSD

Manual Integrations  
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 5/23/2016 8:32:51 PM

Quant Time: May 23 12:04:14 2016  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Sun May 22 05:33:20 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.82  | 152  | 85922    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.61 | 136  | 357838   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.46 | 164  | 185296   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.20 | 188  | 320215   | 20.00 | ng/ul | 0.01     |
| 75) Chrysene-d12          | 21.40 | 240  | 297606   | 20.00 | ng/ul | 0.04     |
| 83) Perylene-d12          | 23.71 | 264  | 381407   | 20.00 | ng/ul | 0.08     |

## System Monitoring Compounds

|                                |       |     |        |      |       |      |
|--------------------------------|-------|-----|--------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.31  | 96  | 1491   | 0.76 | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.99  | 99  | 20881  | 2.96 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.16  | 67  | 24137  | 5.91 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.36  | 132 | 17054  | 2.90 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.52  | 113 | 4873   | 0.84 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.97  | 128 | 16171  | 5.91 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.69  | 143 | 7508   | 2.49 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.23 | 165 | 12393  | 2.18 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.75 | 131 | 29266  | 5.15 | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 13.86 | 166 | 100174 | 6.62 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.14 | 160 | 136736 | 7.23 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 0.00  | 143 | 0d     | 0.00 | ng/ul |      |
| 57) Fluorene-d10               | 15.45 | 176 | 92272  | 7.01 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 0.00  | 200 | 0d     | 0.00 | ng/ul |      |
| 70) Anthracene-d10             | 17.30 | 188 | 110587 | 7.25 | ng/ul | 0.01 |
| 76) Pyrene-d10                 | 19.61 | 212 | 115815 | 8.59 | ng/ul | 0.03 |
| 87) Benzo(a)pyrene-d12         | 23.56 | 264 | 101143 | 5.68 | ng/ul | 0.06 |

## Target Compounds

|                                |       |     |        |       |        | Qvalue |
|--------------------------------|-------|-----|--------|-------|--------|--------|
| 6) Phenol                      | 7.01  | 94  | 18821  | 2.59  | ng/ul  | 97     |
| 10) 2-Chlorophenol             | 7.39  | 128 | 15701  | 2.66  | ng/ul  | 99     |
| 15) N-Nitroso-di-n-propylamine | 8.62  | 70  | 25410  | 5.54  | ng/ul  | 93     |
| 28) Naphthalene                | 10.66 | 128 | 23838  | 1.33  | ng/ul  | 97     |
| 33) 4-Chloro-3-methylphenol    | 11.89 | 107 | 9794   | 1.60  | ng/ul  | 91     |
| 34) 2-Methylnaphthalene        | 12.27 | 142 | 50680  | 3.85  | ng/ul  | 98     |
| 40) 1,1'-Biphenyl              | 13.29 | 154 | 54332  | 3.49  | ng/ul  | 97     |
| 44) Dimethylphthalate          | 13.91 | 163 | 22003  | 1.47  | ng/ul# | 89     |
| 49) Acenaphthene               | 14.52 | 153 | 117923 | 9.31  | ng/ul  | 97     |
| 58) Fluorene                   | 15.50 | 166 | 52322m | 3.61  | ng/ul  |        |
| 69) Phenanthrene               | 17.25 | 178 | 543898 | 30.39 | ng/ul# | 92     |
| 74) Fluoranthene               | 19.27 | 202 | 308395 | 15.31 | ng/ul# | 93     |
| 77) Pyrene                     | 19.64 | 202 | 432988 | 25.31 | ng/ul  | 98     |
| 82) Chrysene                   | 21.43 | 228 | 144710 | 8.70  | ng/ul# | 48     |

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

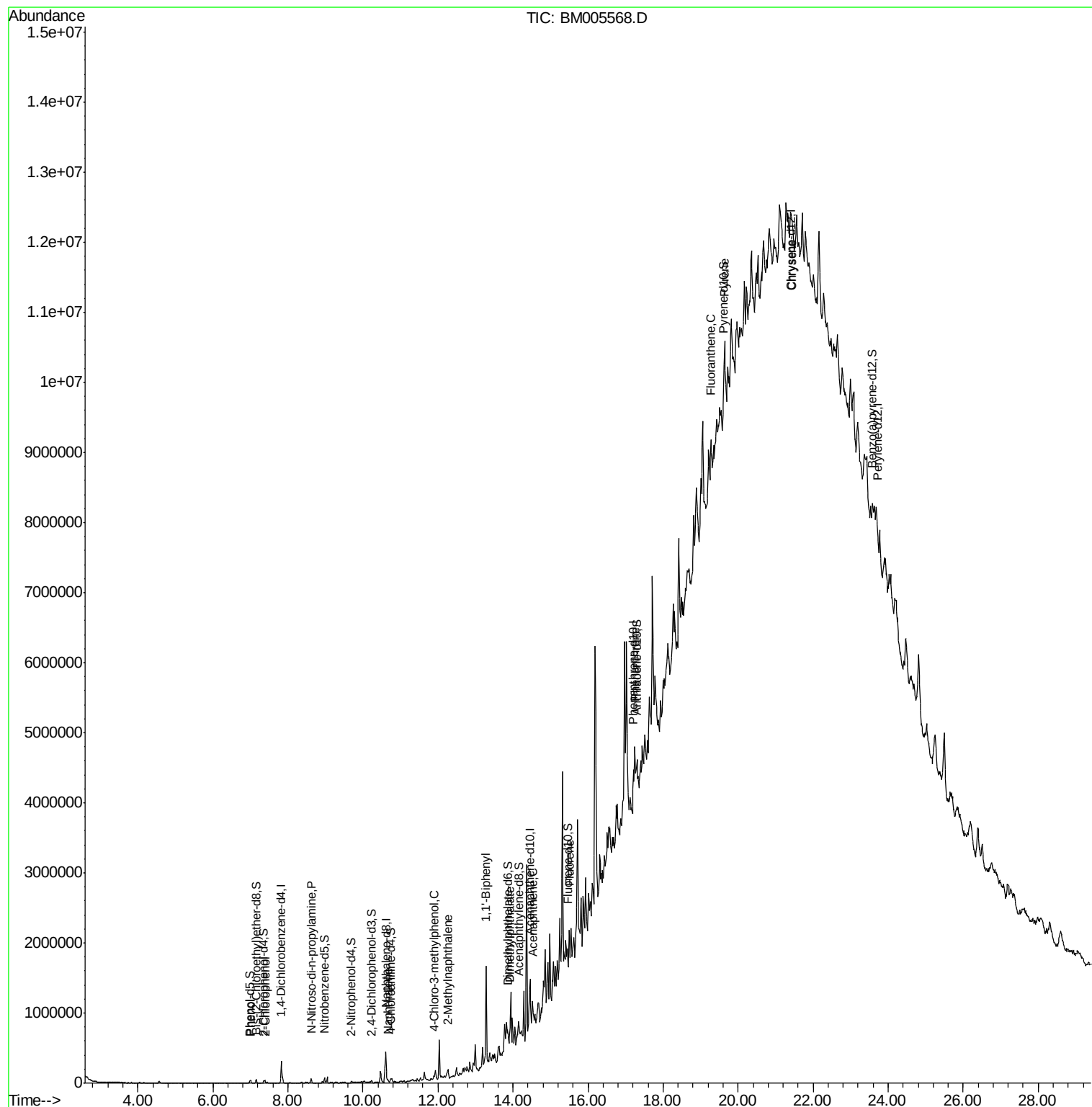
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052116\  
Data File : BM005568.D  
Acq On : 22 May 2016 01:49  
Operator : UM/SJ  
Sample : H2922-03MSD 2X  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

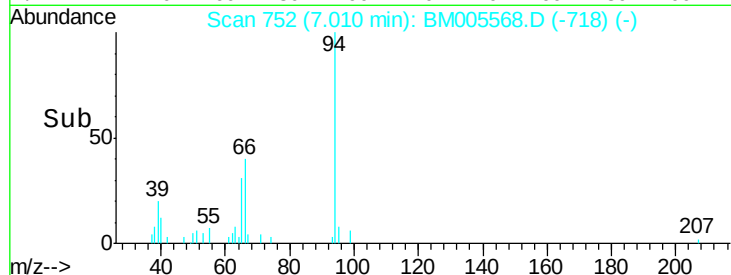
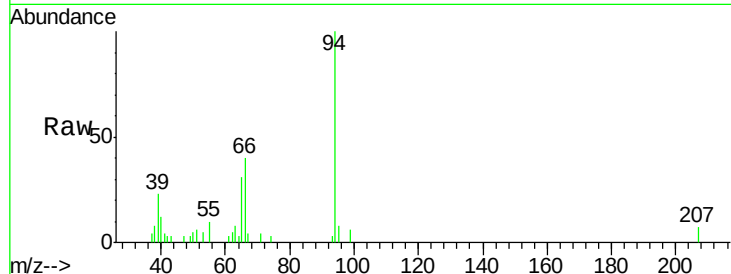
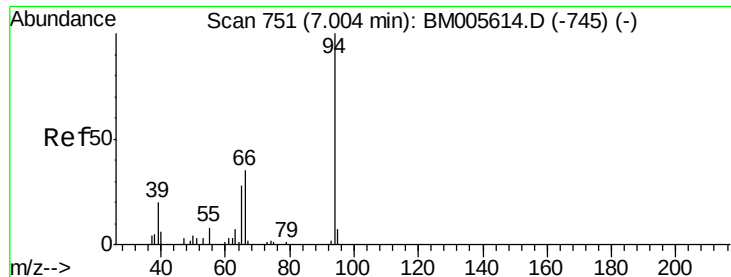
Instrument :  
BNA\_M  
ClientSampleId :  
E5NG0MSD

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Quant Time: May 23 12:04:14 2016  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Sun May 22 05:33:20 2016  
Response via : Initial Calibration





#6

Phenol

Concen: 2.59 ng/ul

RT: 7.01 min Scan# 752

Delta R.T. -0.00 min

Lab File: BM005568.D

Acq: 22 May 2016 01:49

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 94    | Resp: | 18821 |
| Ion Ratio | Lower | Upper |       |
| 94        | 100   |       |       |
| 65        | 30.6  | 24.2  | 36.2  |
| 66        | 39.8  | 33.9  | 50.9  |

Instrument :

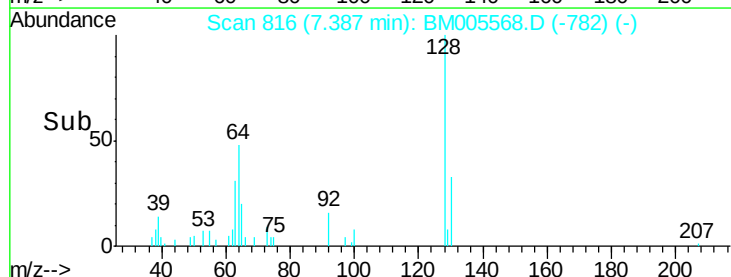
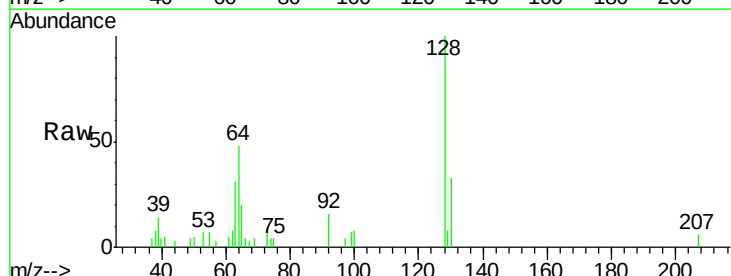
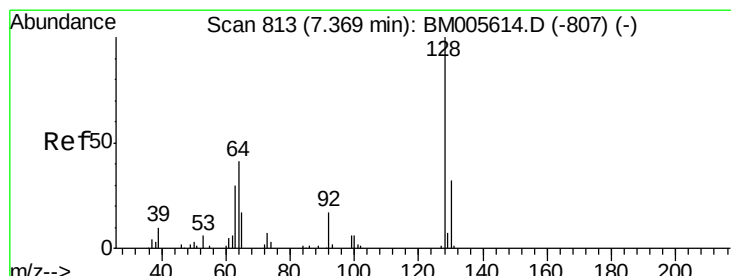
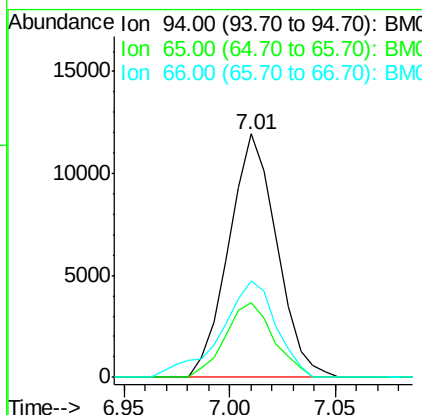
BNA\_M

ClientSampleId :

E5NG0MSD

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#10

2-Chlorophenol

Concen: 2.66 ng/ul

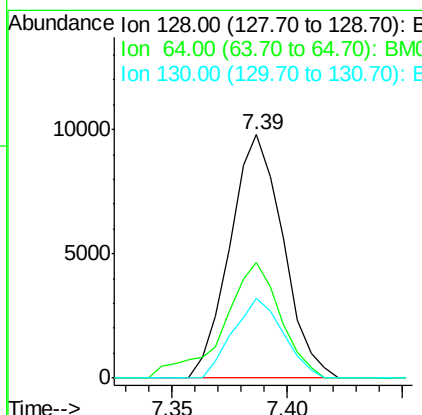
RT: 7.39 min Scan# 816

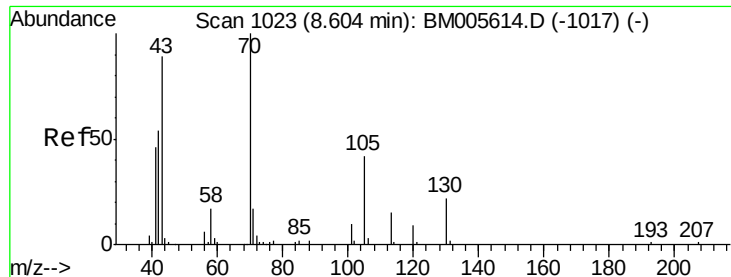
Delta R.T. -0.00 min

Lab File: BM005568.D

Acq: 22 May 2016 01:49

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 128   | Resp: | 15701 |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 64        | 47.6  | 37.3  | 55.9  |
| 130       | 33.0  | 26.6  | 40.0  |





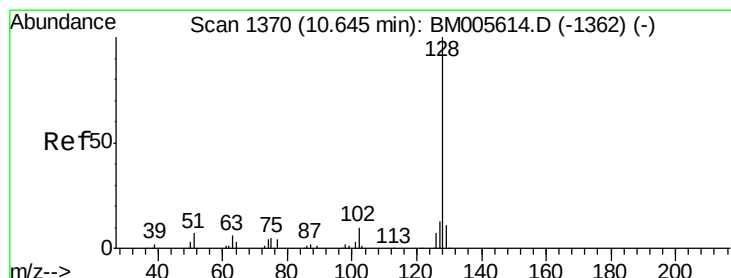
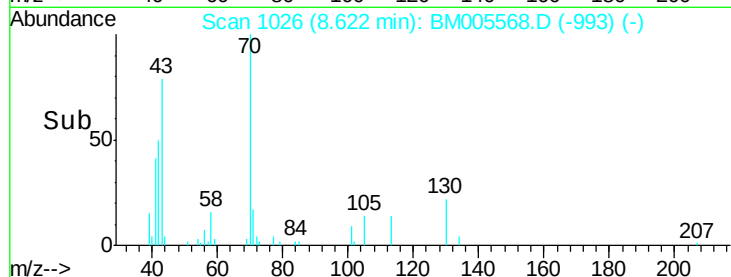
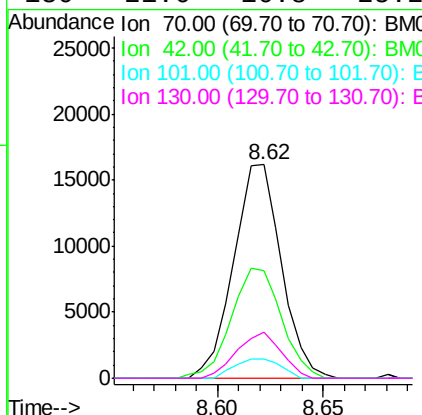
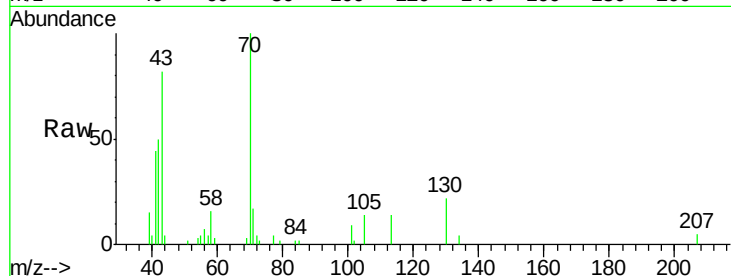
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N-Nitroso-di-n-propylamine  
Concen: 5.54 ng/ul  
RT: 8.62 min Scan# 1026  
Delta R.T. -0.01 min  
Lab File: BM005568.D  
Acq: 22 May 2016 01:49

Instrument :  
BNA\_M  
ClientSampleId :  
E5NG0MSD

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 70      | 100   |       |       |
| 42      | 50.3  | 46.1  | 69.1  |
| 101     | 9.3   | 8.0   | 12.0  |
| 130     | 21.6  | 16.8  | 25.2  |

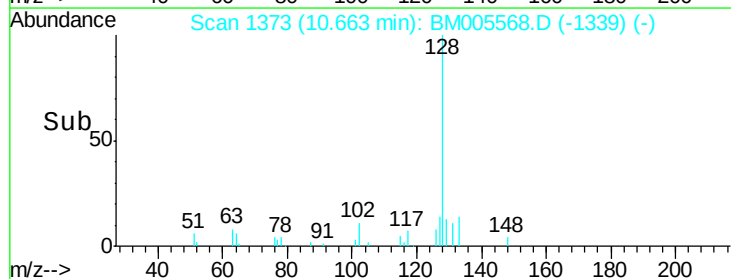
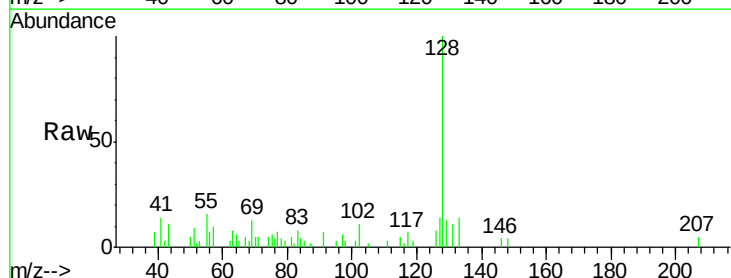
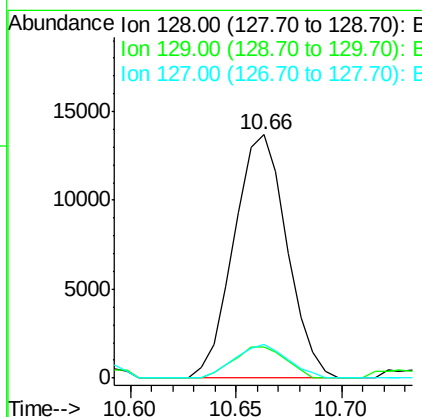
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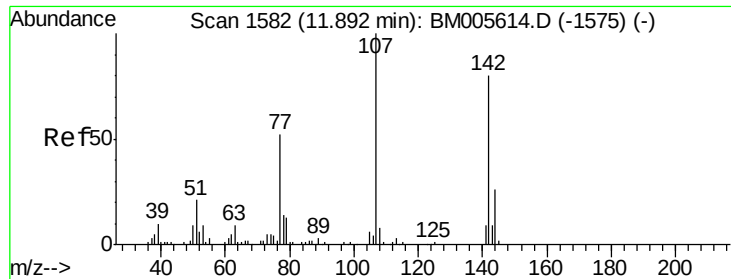
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#28  
Naphthalene  
Concen: 1.33 ng/ul  
RT: 10.66 min Scan# 1373  
Delta R.T. -0.00 min  
Lab File: BM005568.D  
Acq: 22 May 2016 01:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 12.6  | 8.6   | 13.0  |
| 127     | 13.9  | 10.6  | 15.8  |





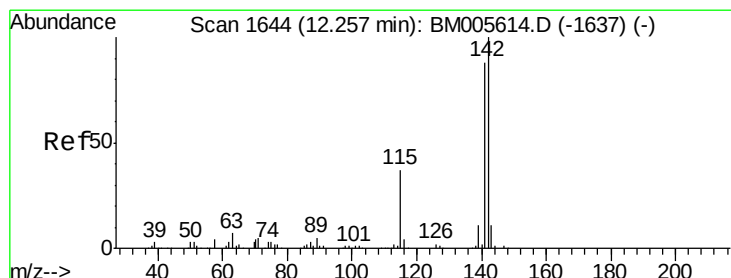
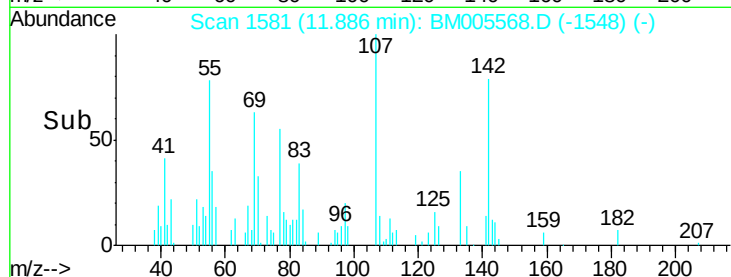
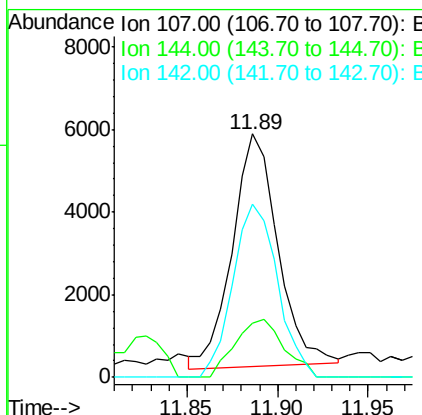
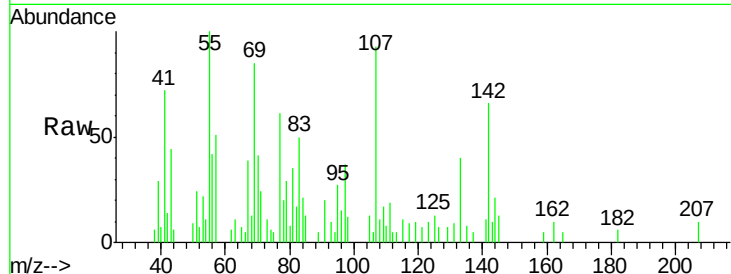
#33  
 4-Chloro-3-methylphenol  
 Concen: 1.60 ng/ul  
 RT: 11.89 min Scan# 1581  
 Delta R.T. -0.01 min  
 Lab File: BM005568.D  
 Acq: 22 May 2016 01:49

Instrument :  
 BNA\_M  
 ClientSampleId :  
 E5NG0MSD

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 107     | 100   | 9794 |       |       |
| 144     | 22.2  | 20.6 | 31.0  |       |
| 142     | 70.9  | 63.5 | 95.3  |       |

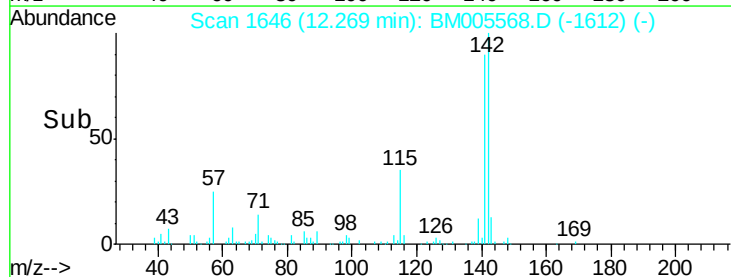
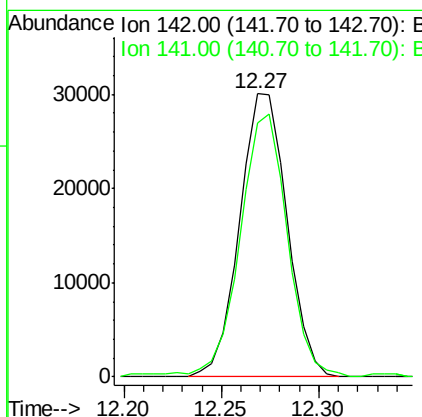
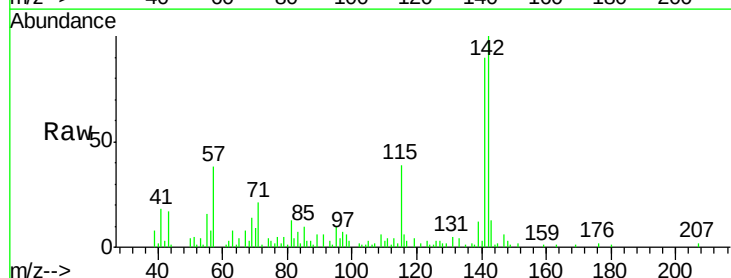
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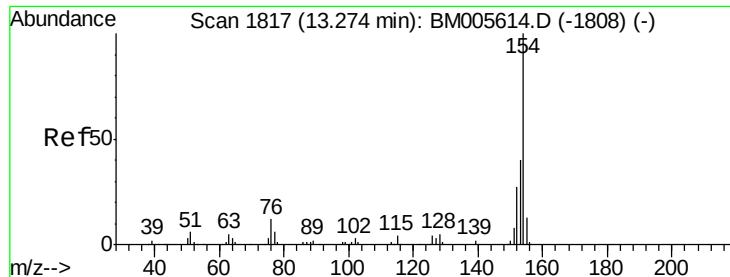
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#34  
 2-Methylnaphthalene  
 Concen: 3.85 ng/ul  
 RT: 12.27 min Scan# 1646  
 Delta R.T. -0.00 min  
 Lab File: BM005568.D  
 Acq: 22 May 2016 01:49

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 142     | 100   | 50680 |       |       |
| 141     | 89.8  | 70.6  | 106.0 |       |





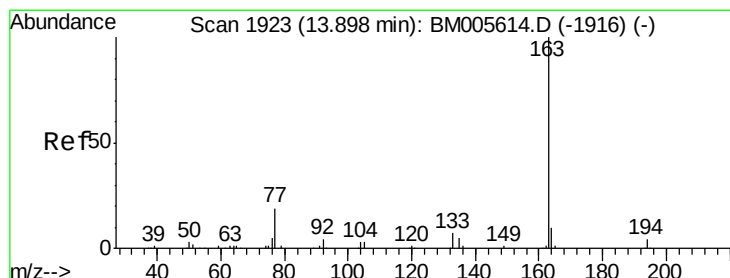
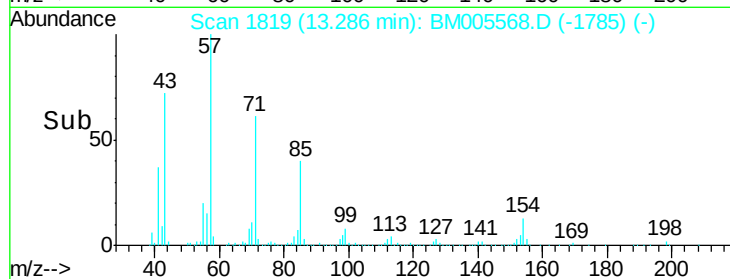
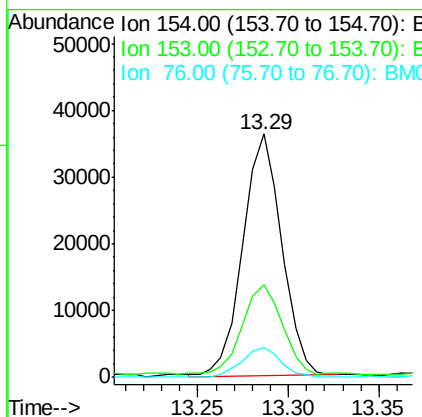
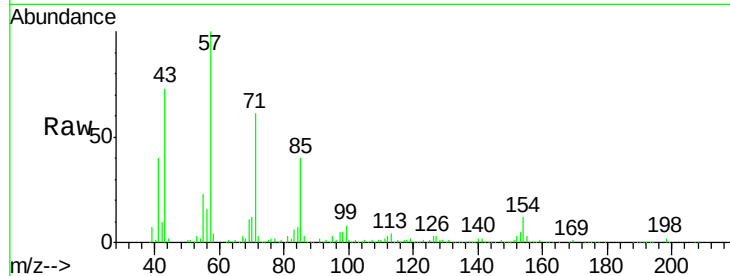
#40  
1,1'-Biphenyl  
Concen: 3.49 ng/ul  
RT: 13.29 min Scan# 1819  
Delta R.T. -0.00 min  
Lab File: BM005568.D  
Acq: 22 May 2016 01:49

Instrument :  
BNA\_M  
ClientSampleId :  
E5NG0MSD

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 154   | Resp: | 54332 |
| Ion Ratio | Lower | Upper |       |
| 154       | 100   |       |       |
| 153       | 37.8  | 31.7  | 47.5  |
| 76        | 12.1  | 10.1  | 15.1  |

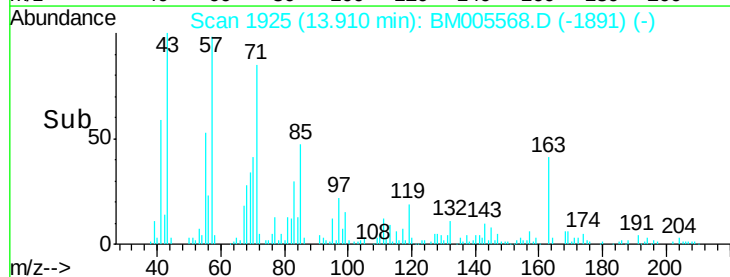
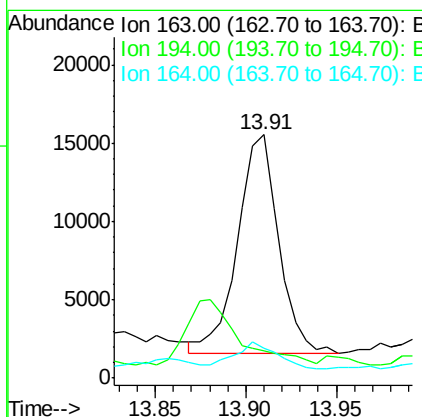
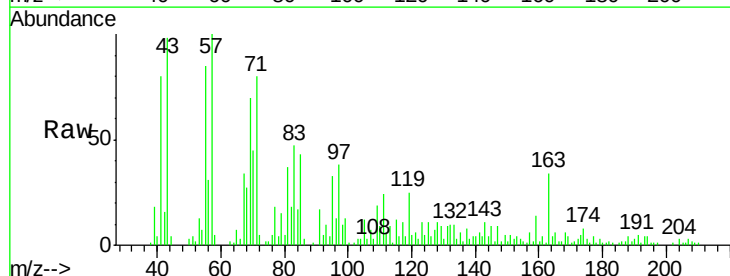
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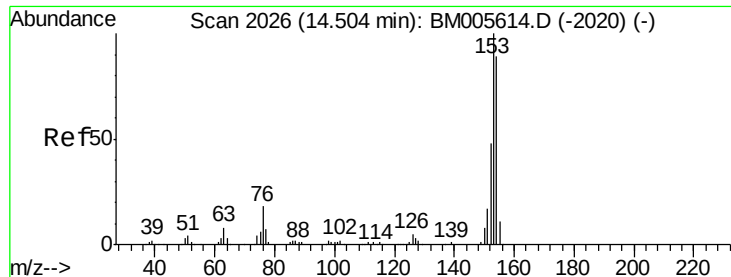
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#44  
Dimethylphthalate  
Concen: 1.47 ng/ul  
RT: 13.91 min Scan# 1925  
Delta R.T. -0.00 min  
Lab File: BM005568.D  
Acq: 22 May 2016 01:49

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 163   | Resp: | 22003 |
| Ion Ratio | Lower | Upper |       |
| 163       | 100   |       |       |
| 194       | 11.3  | 3.4   | 5.0#  |
| 164       | 12.2  | 8.0   | 12.0# |





#49

Acenaphthene

Concen: 9.31 ng/ul

RT: 14.52 min Scan# 2028

Delta R.T. -0.00 min

Lab File: BM005568.D

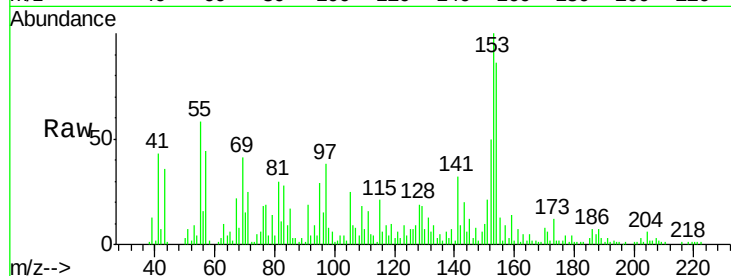
Acq: 22 May 2016 01:49

Instrument :

BNA\_M

ClientSampleId :

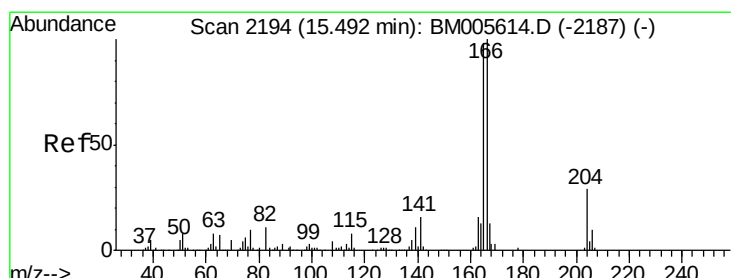
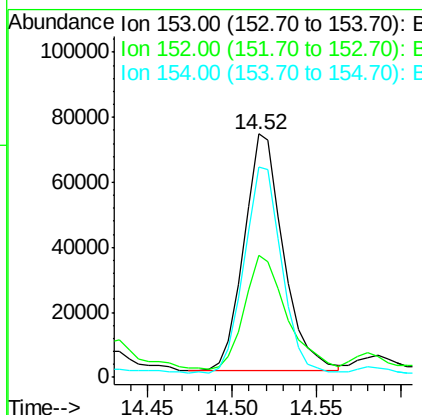
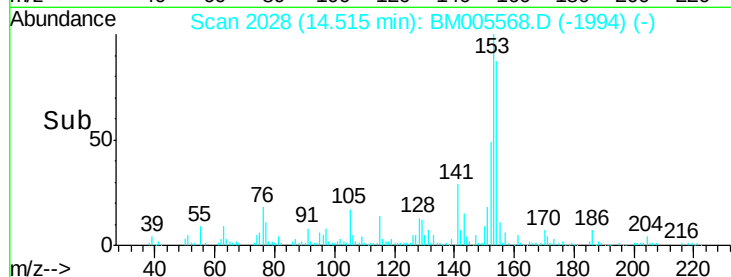
E5NG0MSD



|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 153   | Resp: | 117923 |
| Ion Ratio | Lower | Upper |        |
| 153       | 100   |       |        |
| 152       | 50.3  | 37.8  | 56.6   |
| 154       | 86.5  | 71.1  | 106.7  |

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#58

Fluorene

Concen: 3.61 ng/ul m

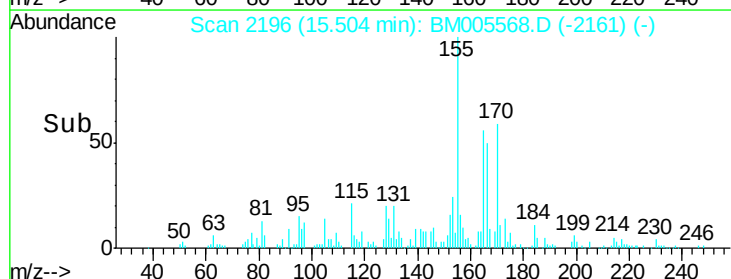
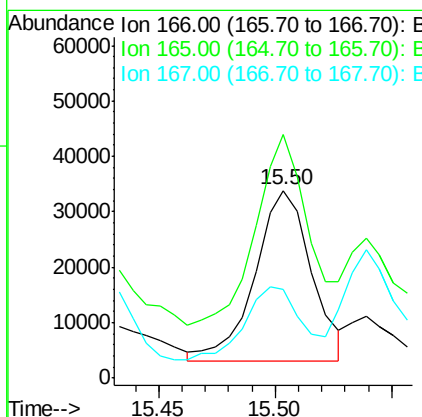
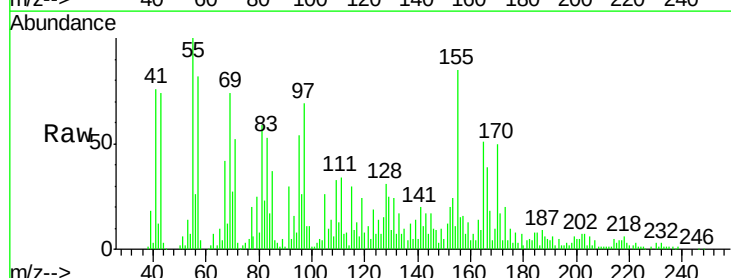
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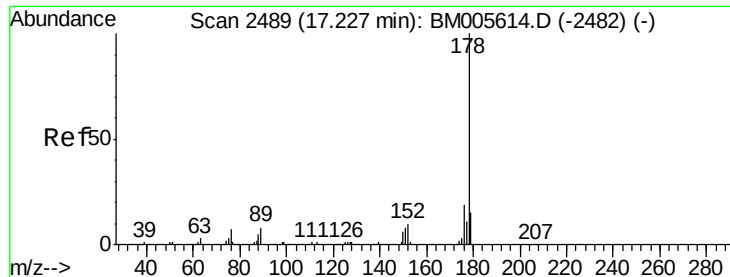
Delta R.T. 0.01 min

Lab File: BM005568.D

Acq: 22 May 2016 01:49

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 166   | Resp: | 52322  |
| Ion Ratio | Lower | Upper |        |
| 166       | 100   |       |        |
| 165       | 129.6 | 78.0  | 117.0# |
| 167       | 47.1  | 10.5  | 15.7#  |





#69

Phenanthrene

Concen: 30.39 ng/ul

RT: 17.25 min Scan# 2493

Delta R.T. 0.02 min

Lab File: BM005568.D

Acq: 22 May 2016 01:49

Instrument :

BNA\_M

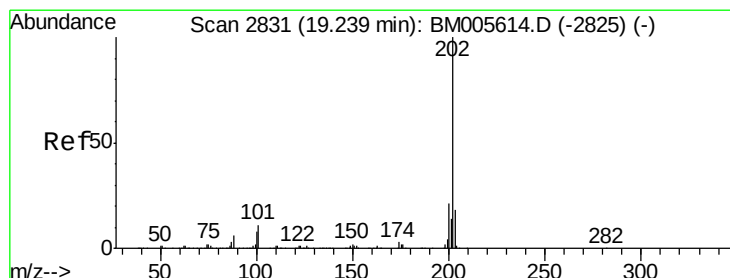
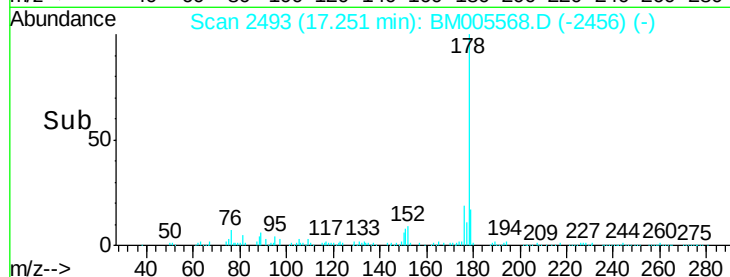
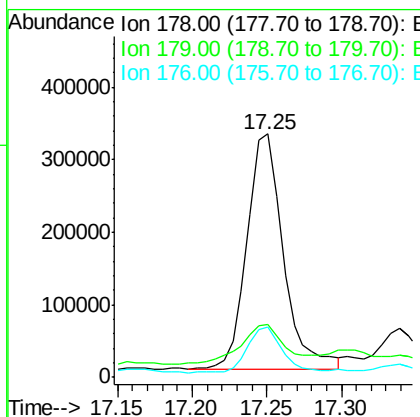
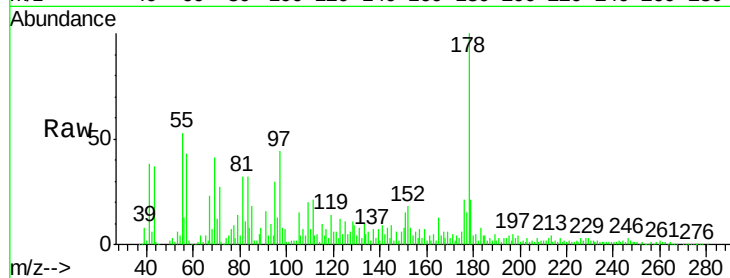
ClientSampleId :

E5NG0MSD

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 543898 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 179       | 21.5  | 12.2  | 18.2#  |
| 176       | 20.5  | 15.8  | 23.6   |

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#74

Fluoranthene

Concen: 15.31 ng/ul

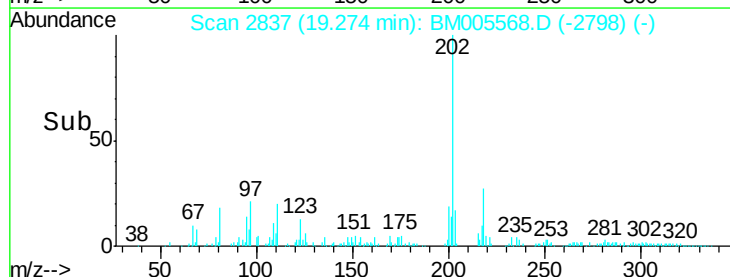
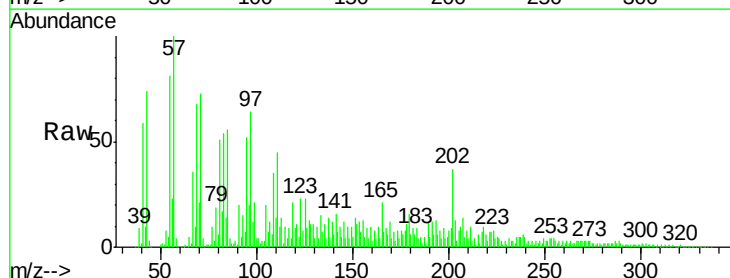
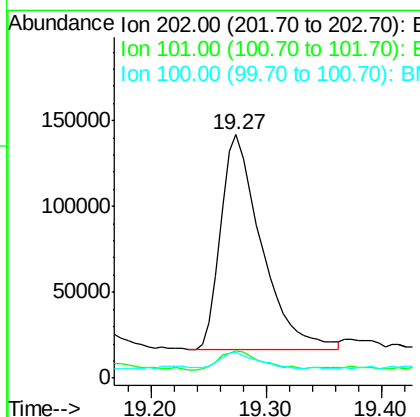
RT: 19.27 min Scan# 2837

Delta R.T. 0.03 min

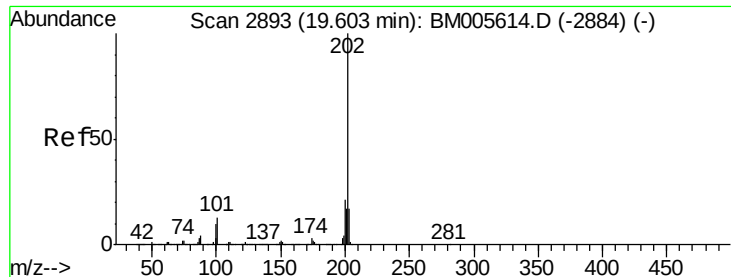
Lab File: BM005568.D

Acq: 22 May 2016 01:49

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 308395 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 11.4  | 7.9   | 11.9   |
| 100       | 10.5  | 5.6   | 8.4#   |







#77

Pyrene

Concen: 25.31 ng/ul

RT: 19.64 min Scan# 2899

Delta R.T. 0.03 min

Lab File: BM005568.D

Acq: 22 May 2016 01:49

Instrument :

BNA\_M

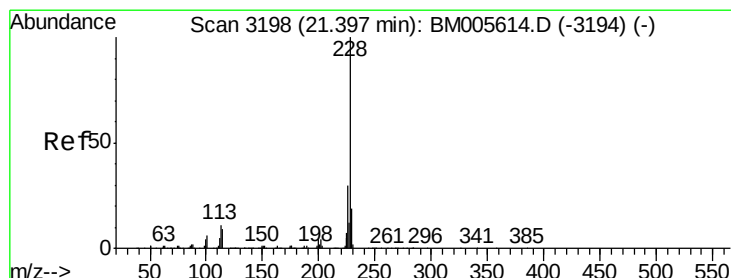
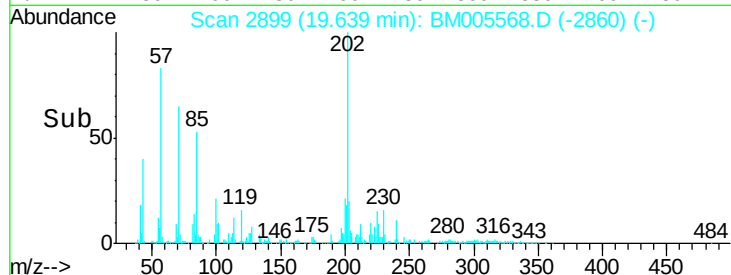
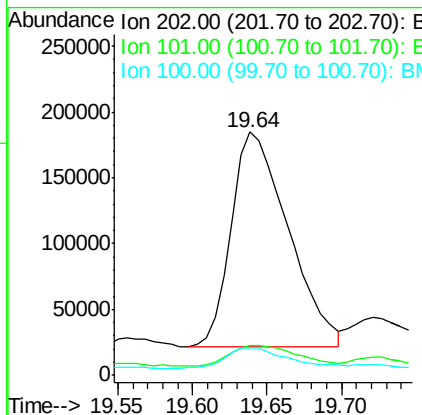
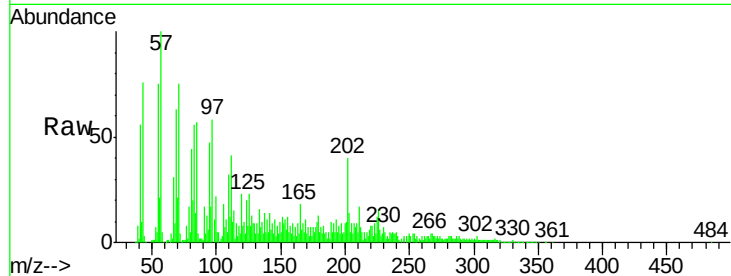
ClientSampleId :

E5NG0MSD

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 202  | Resp: | 432988 |
| Ion Ratio |      | Lower | Upper  |
| 202       | 100  |       |        |
| 101       | 12.1 | 9.6   | 14.4   |
| 100       | 11.4 | 7.8   | 11.6   |

Manual Integrations  
APPROVED

umangi  
5/23/2016 8:32:51 PM



#82

Chrysene

Concen: 8.70 ng/ul

RT: 21.43 min Scan# 3204

Delta R.T. 0.03 min

Lab File: BM005568.D

Acq: 22 May 2016 01:49

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 228  | Resp: | 144710 |
| Ion Ratio |      | Lower | Upper  |
| 228       | 100  |       |        |
| 226       | 44.0 | 23.7  | 35.5#  |
| 229       | 60.4 | 15.5  | 23.3#  |

