

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052316\  
 Data File : BM005615.D  
 Acq On : 23 May 2016 18:15  
 Operator : UM/SJ  
 Sample : H2853-25  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9WR2

Quant Time: May 24 06:55:38 2016  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue May 24 06:55:29 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.80  | 152  | 98238    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.59 | 136  | 434672   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.44 | 164  | 244515   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.19 | 188  | 554854   | 20.00 | ng/ul | 0.00     |
| 75) Chrysene-d12          | 21.36 | 240  | 584808   | 20.00 | ng/ul | 0.00     |
| 83) Perylene-d12          | 23.64 | 264  | 577065   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |         |       |       |      |
|--------------------------------|-------|-----|---------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.27  | 96  | 11946   | 5.33  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.98  | 99  | 288371  | 35.81 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.13  | 67  | 163880  | 35.12 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.34  | 132 | 231545  | 34.47 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.52  | 113 | 225017  | 34.10 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.96  | 128 | 114044  | 34.32 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.68  | 143 | 130748  | 35.74 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.22 | 165 | 232602  | 33.76 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.73 | 131 | 22936   | 3.32  | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 13.85 | 166 | 718592  | 36.00 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.13 | 160 | 871071  | 34.91 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.67 | 143 | 134934  | 35.74 | ng/ul | 0.01 |
| 57) Fluorene-d10               | 15.43 | 176 | 610557  | 35.16 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.56 | 200 | 105416  | 33.03 | ng/ul | 0.00 |
| 70) Anthracene-d10             | 17.28 | 188 | 947454  | 35.85 | ng/ul | 0.00 |
| 76) Pyrene-d10                 | 19.57 | 212 | 1069986 | 40.40 | ng/ul | 0.00 |
| 87) Benzo(a)pyrene-d12         | 23.50 | 264 | 976107  | 36.22 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |         |       |        | Qvalue |
|----------------------------|-------|-----|---------|-------|--------|--------|
| 6) Phenol                  | 7.01  | 94  | 274287  | 33.07 | ng/ul  | 94     |
| 11) 2-Methylphenol         | 8.25  | 108 | 247842  | 39.42 | ng/ul  | 94     |
| 44) Dimethylphthalate      | 13.89 | 163 | 29362   | 1.49  | ng/ul  | 99     |
| 45) 2,6-Dinitrotoluene     | 13.85 | 165 | 4197    | 1.05  | ng/ul# | 30     |
| 47) Acenaphthylene         | 14.16 | 152 | 520655  | 20.54 | ng/ul  | 100    |
| 49) Acenaphthene           | 14.50 | 153 | 351756  | 21.04 | ng/ul  | 99     |
| 53) Dibenzofuran           | 14.84 | 168 | 603437  | 25.28 | ng/ul  | 100    |
| 56) Diethylphthalate       | 15.26 | 149 | 695116  | 34.56 | ng/ul  | 99     |
| 58) Fluorene               | 15.49 | 166 | 403276  | 21.11 | ng/ul  | 99     |
| 64) N-Nitrosodiphenylamine | 15.70 | 169 | 709500  | 42.14 | ng/ul  | 100    |
| 67) Atrazine               | 16.65 | 200 | 205335  | 32.59 | ng/ul  | 99     |
| 68) Pentachlorophenol      | 16.84 | 266 | 233883  | 55.33 | ng/ul  | 99     |
| 69) Phenanthrene           | 17.32 | 178 | 437181  | 14.10 | ng/ul  | 98     |
| 71) Anthracene             | 17.32 | 178 | 437181  | 13.83 | ng/ul  | 100    |
| 73) Di-n-butylphthalate    | 18.14 | 149 | 949717  | 28.53 | ng/ul  | 99     |
| 78) Butylbenzylphthalate   | 20.50 | 149 | 571953  | 40.37 | ng/ul  | 99     |
| 84) Di-n-octyl phthalate   | 22.16 | 149 | 1202557 | 36.33 | ng/ul  | 100    |
| 85) Benzo(b)fluoranthene   | 22.96 | 252 | 1239692 | 36.42 | ng/ul  | 98     |
| 86) Benzo(k)fluoranthene   | 23.00 | 252 | 1121536 | 34.81 | ng/ul  | 100    |
| 88) Benzo(a)pyrene         | 23.54 | 252 | 990201  | 29.99 | ng/ul  | 99     |
| 89) Indeno(1,2,3-cd)pyrene | 25.96 | 276 | 1391127 | 35.47 | ng/ul  | 99     |
| 90) Dibenzo(a,h)anthracene | 25.97 | 278 | 716244  | 21.93 | ng/ul  | 97     |
| 91) Benzo(g,h,i)perylene   | 26.67 | 276 | 1198703 | 36.36 | ng/ul  | 98     |

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ALS Vial : 3 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
D9WR2

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Quant Title : SVOA CALIBRATION  
QLast Update : Tue May 24 06:55:29 2016  
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
|--------------------|------|------|----------|------|-------|----------|

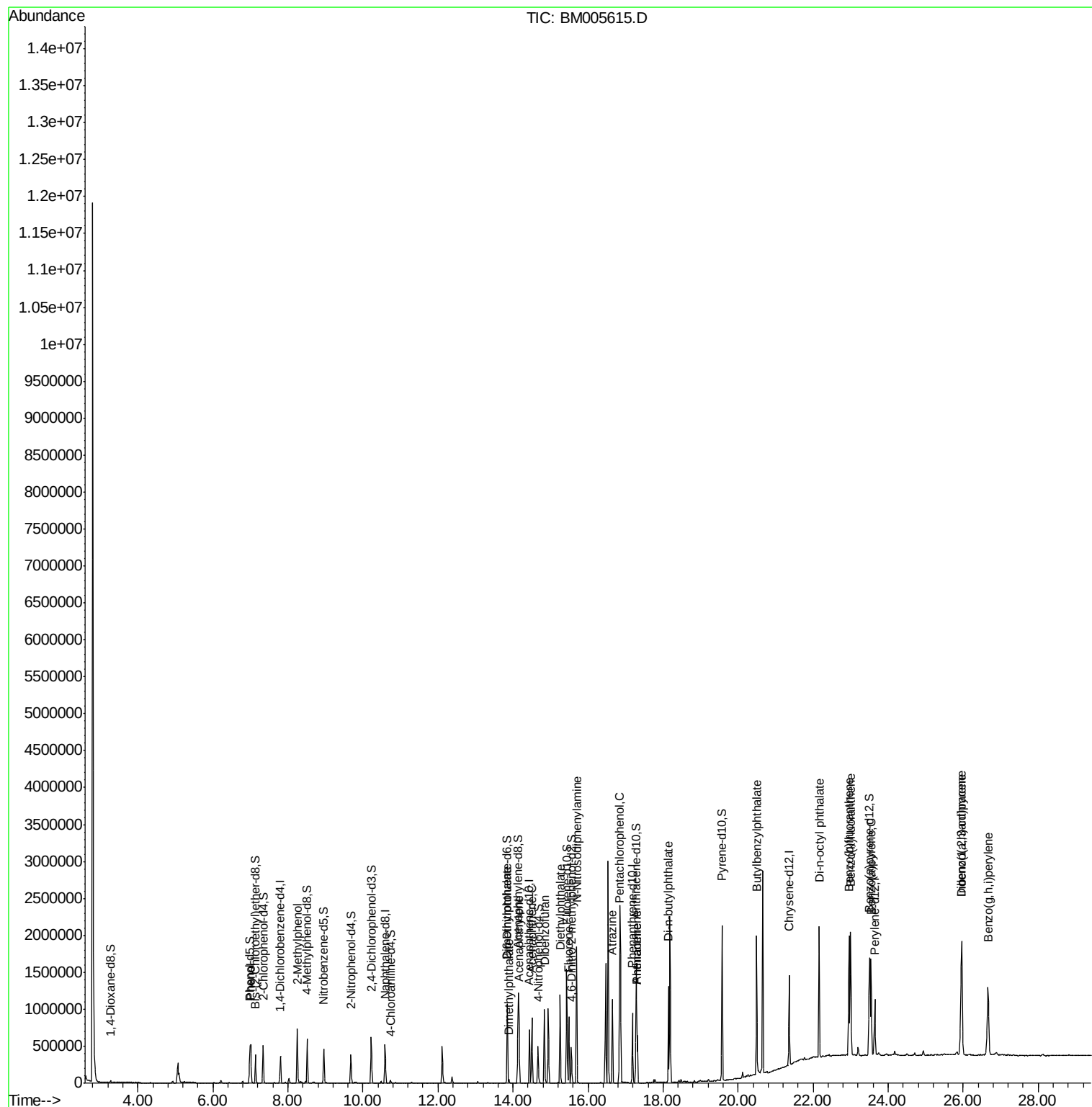
|       |  |  |  |  |  |  |
|-------|--|--|--|--|--|--|
| ----- |  |  |  |  |  |  |
| ----- |  |  |  |  |  |  |

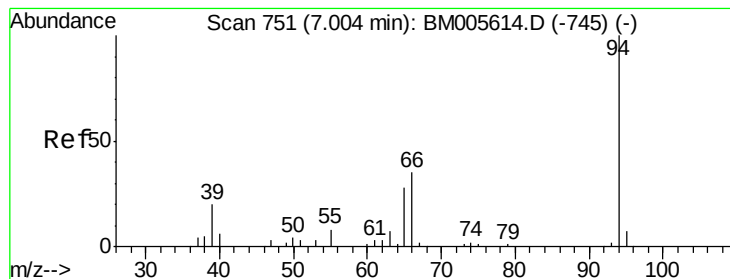
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#6

Phenol

Concen: 33.07 ng/ul

RT: 7.01 min Scan# 752

Delta R.T. 0.01 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

Instrument :

BNA\_M

ClientSampleId :

D9WR2

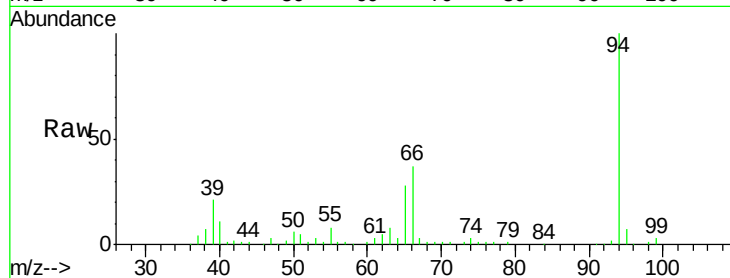
Tgt Ion: 94 Resp: 274287

Ion Ratio Lower Upper

94 100

65 28.3 24.2 36.2

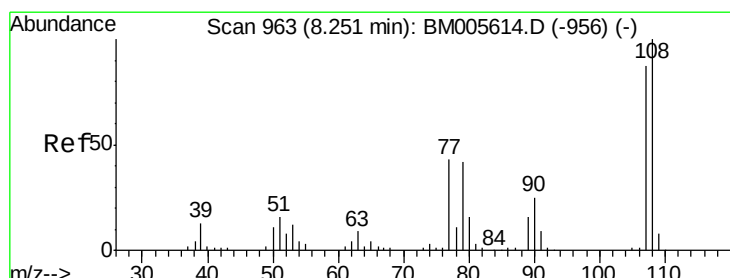
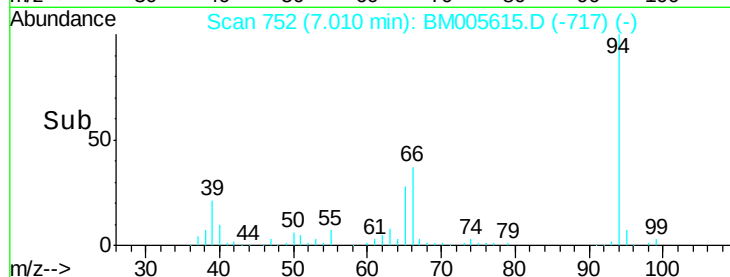
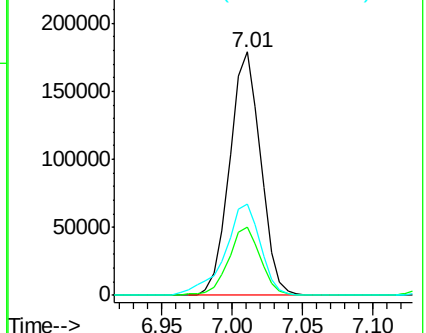
66 37.4 33.9 50.9



Abundance Ion 94.00 (93.70 to 94.70): BM005614.D (-745) (-)

Ion 65.00 (64.70 to 65.70): BM005614.D (-745) (-)

Ion 66.00 (65.70 to 66.70): BM005614.D (-745) (-)



#11

2-Methylphenol

Concen: 39.42 ng/ul

RT: 8.25 min Scan# 963

Delta R.T. 0.00 min

Lab File: BM005615.D

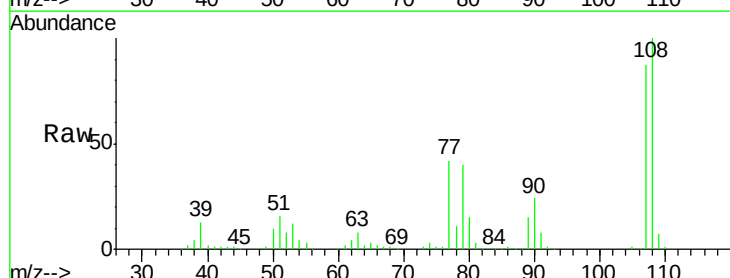
Acq: 23 May 2016 18:15

Tgt Ion: 108 Resp: 247842

Ion Ratio Lower Upper

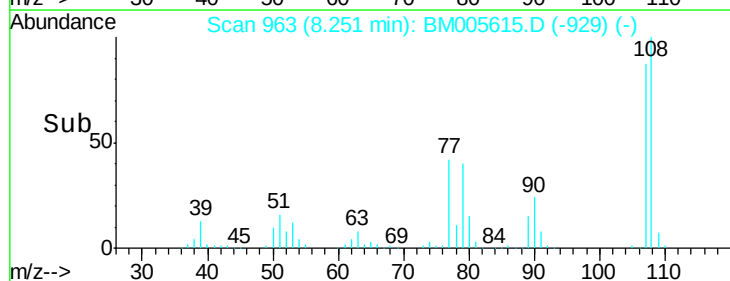
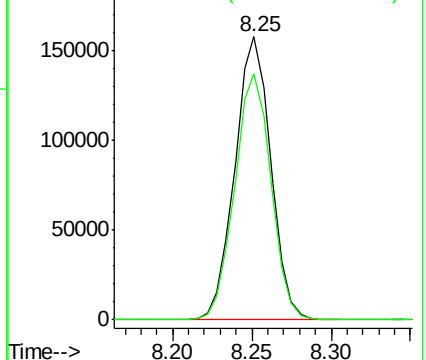
108 100

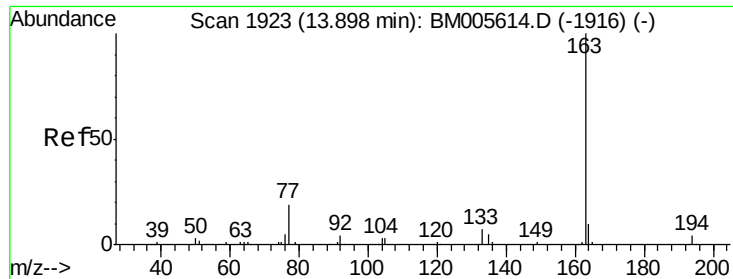
107 86.9 74.0 111.0



Abundance Ion 108.00 (107.70 to 108.70): BM005614.D (-956) (-)

Ion 107.00 (106.70 to 107.70): BM005614.D (-956) (-)

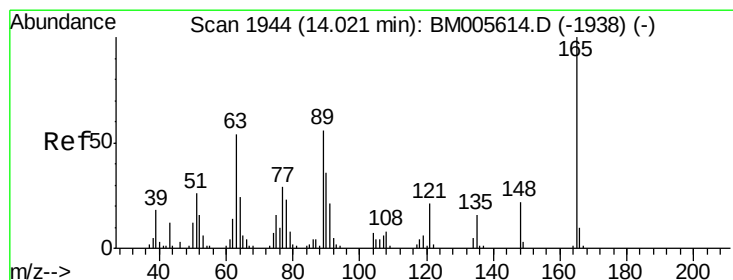
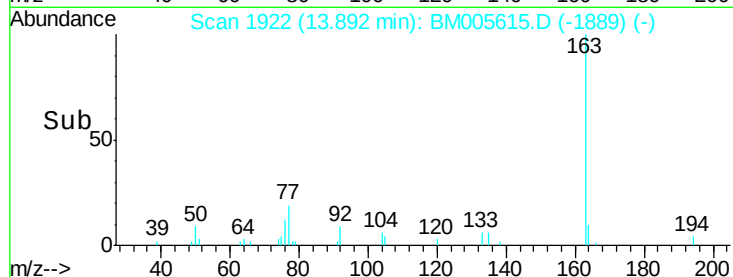
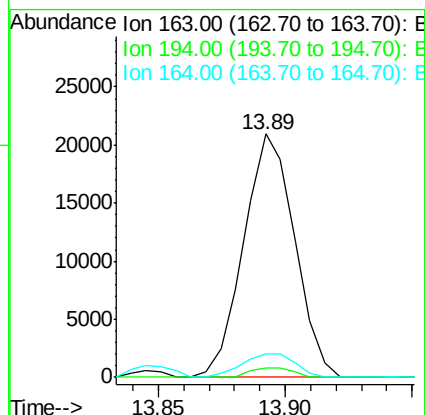
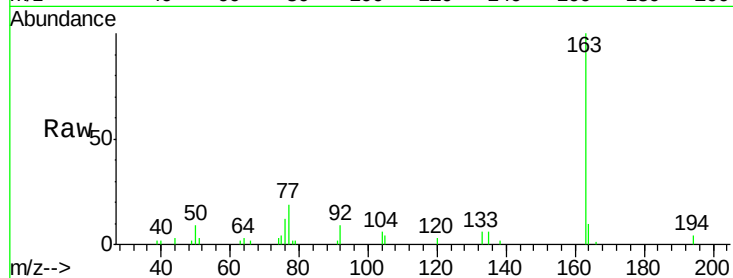




#44  
Dimethylphthalate  
Concen: 1.49 ng/ul  
RT: 13.89 min Scan# 1922  
Delta R.T. -0.01 min  
Lab File: BM005615.D  
Acq: 23 May 2016 18:15

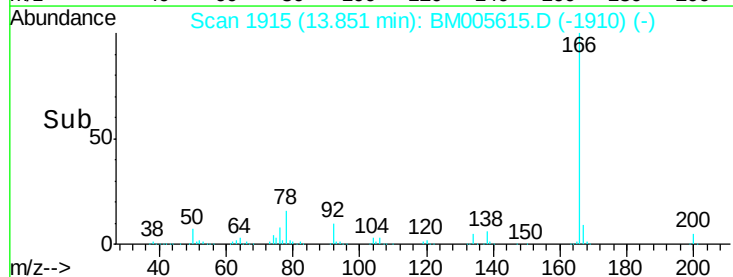
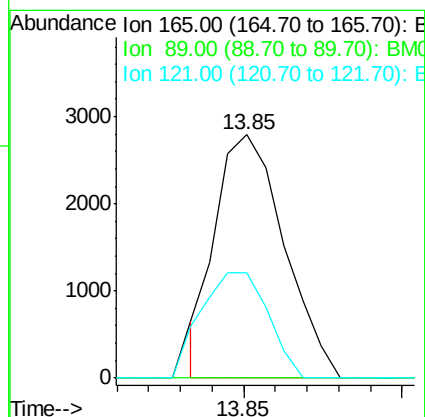
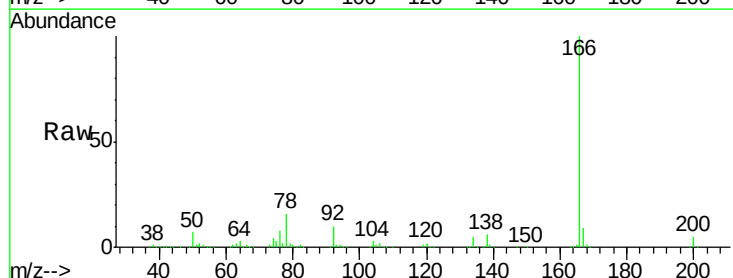
Instrument :  
BNA\_M  
ClientSampleId :  
D9WR2

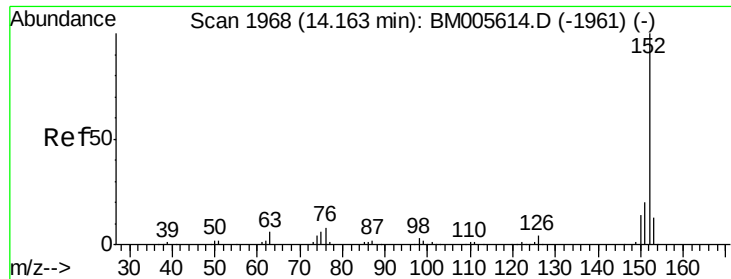
Tgt Ion:163 Resp: 29362  
Ion Ratio Lower Upper  
163 100  
194 3.7 3.4 5.0  
164 9.6 8.0 12.0



#45  
2,6-Dinitrotoluene  
Concen: 1.05 ng/ul  
RT: 13.85 min Scan# 1915  
Delta R.T. -0.17 min  
Lab File: BM005615.D  
Acq: 23 May 2016 18:15

Tgt Ion:165 Resp: 4197  
Ion Ratio Lower Upper  
165 100  
89 0.0 48.2 72.2#  
121 43.2 17.4 26.0#





#47

Acenaphthylene

Concen: 20.54 ng/ul

RT: 14.16 min Scan# 1968

Delta R.T. 0.00 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

Instrument :

BNA\_M

ClientSampleId :

D9WR2

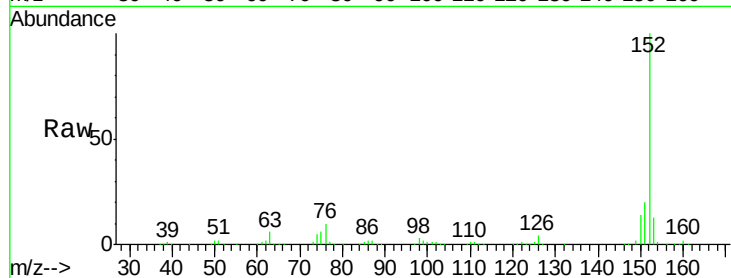
Tgt Ion:152 Resp: 520655

Ion Ratio Lower Upper

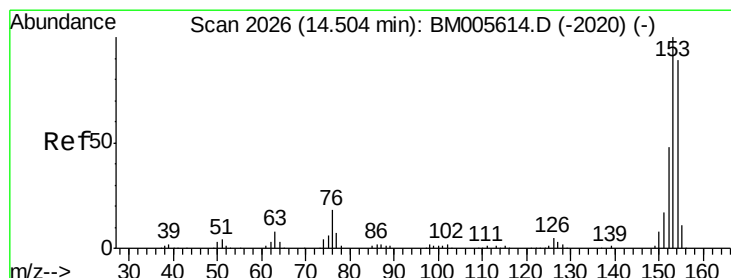
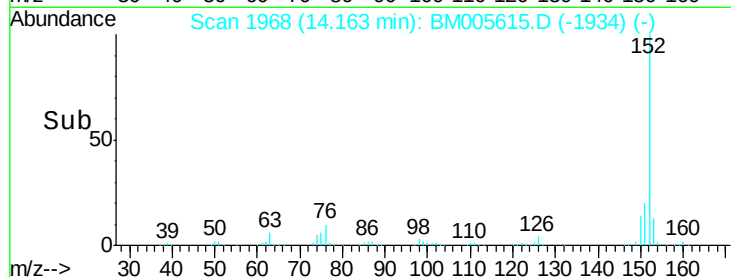
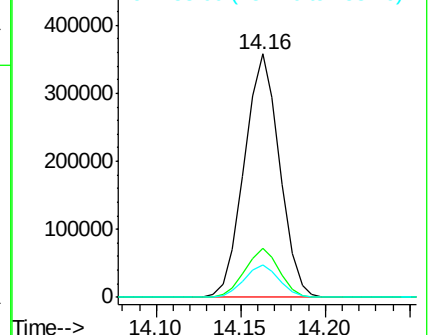
152 100

151 19.9 15.7 23.5

153 13.1 10.5 15.7



Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 151.00 (150.70 to 151.70): E  
Ion 153.00 (152.70 to 153.70): E



#49

Acenaphthene

Concen: 21.04 ng/ul

RT: 14.50 min Scan# 2026

Delta R.T. 0.00 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

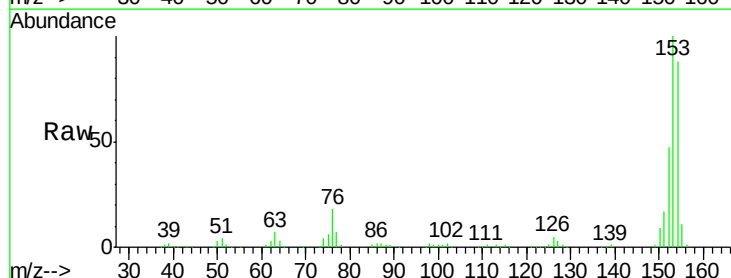
Tgt Ion:153 Resp: 351756

Ion Ratio Lower Upper

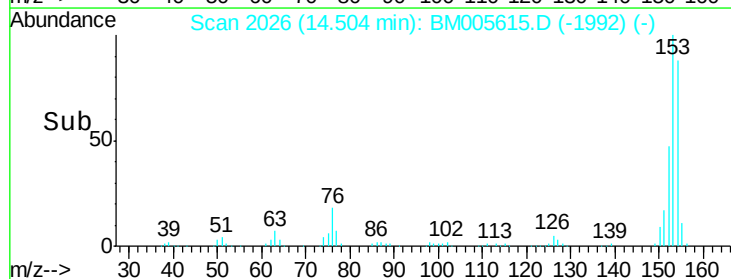
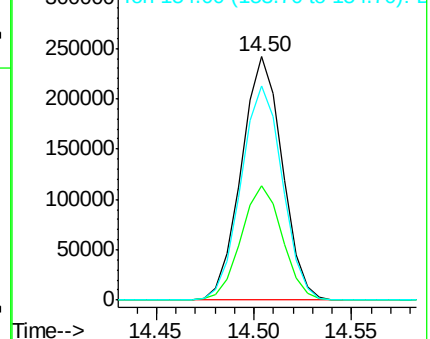
153 100

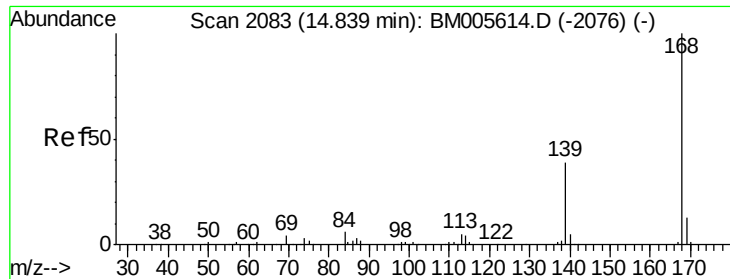
152 47.2 37.8 56.6

154 88.0 71.1 106.7



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





#53

Dibenzenofuran

Concen: 25.28 ng/ul

RT: 14.84 min Scan# 2083

Delta R.T. 0.00 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

Instrument :

BNA\_M

ClientSampleId :

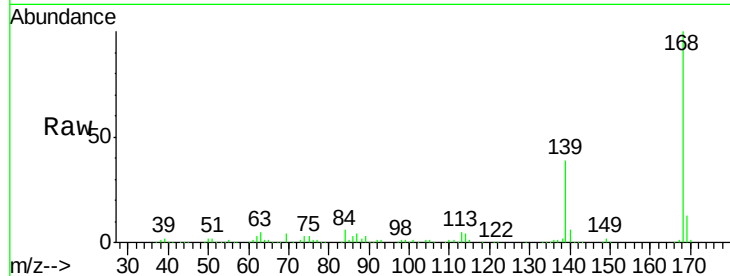
D9WR2

Tgt Ion:168 Resp: 603437

Ion Ratio Lower Upper

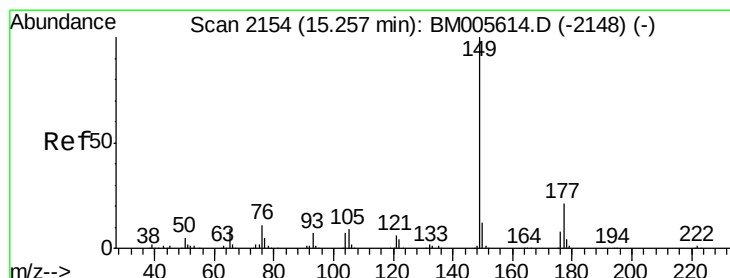
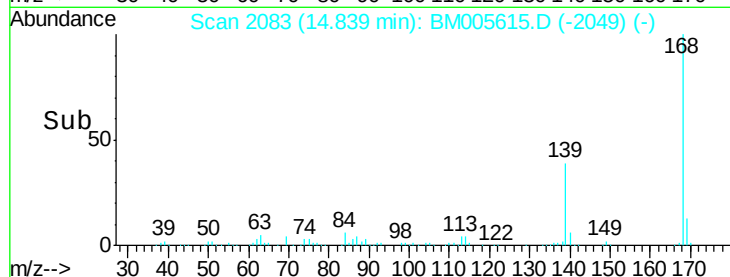
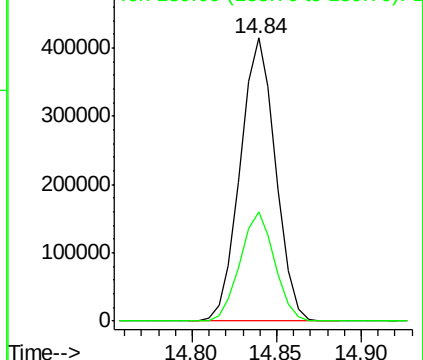
168 100

139 38.6 30.6 46.0



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E



#56

Diethylphthalate

Concen: 34.56 ng/ul

RT: 15.26 min Scan# 2155

Delta R.T. 0.01 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

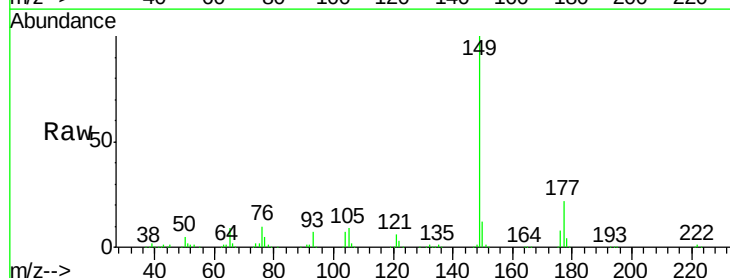
Tgt Ion:149 Resp: 695116

Ion Ratio Lower Upper

149 100

177 21.6 17.8 26.8

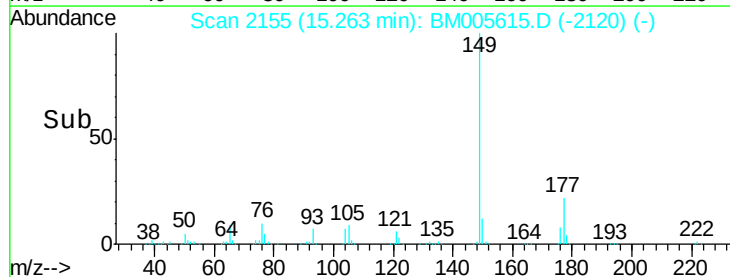
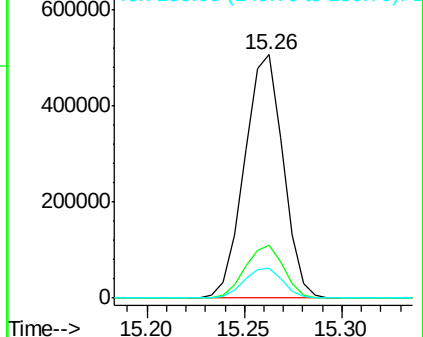
150 12.3 10.2 15.2

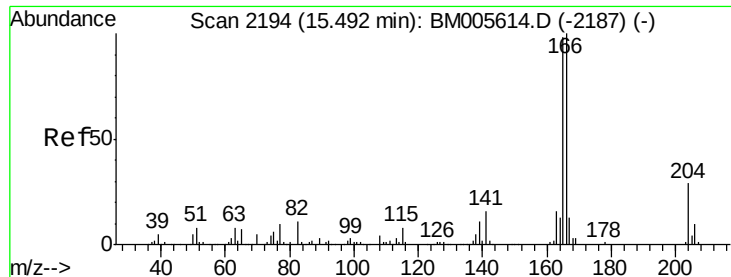


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 177.00 (176.70 to 177.70): E

Ion 150.00 (149.70 to 150.70): E





#58

Fluorene

Concen: 21.11 ng/ul

RT: 15.49 min Scan# 2193

Delta R.T. -0.01 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

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BNA\_M

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D9WR2

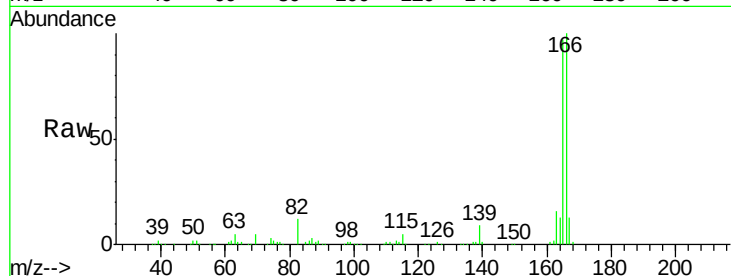
Tgt Ion:166 Resp: 403276

Ion Ratio Lower Upper

166 100

165 96.9 78.0 117.0

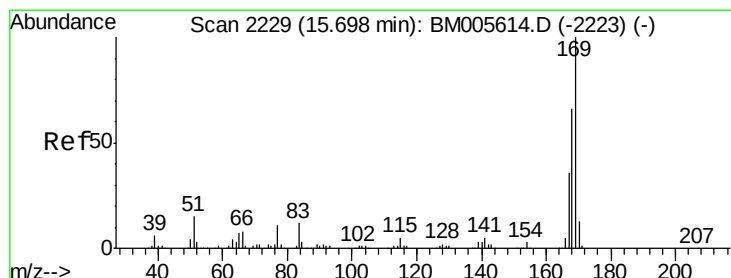
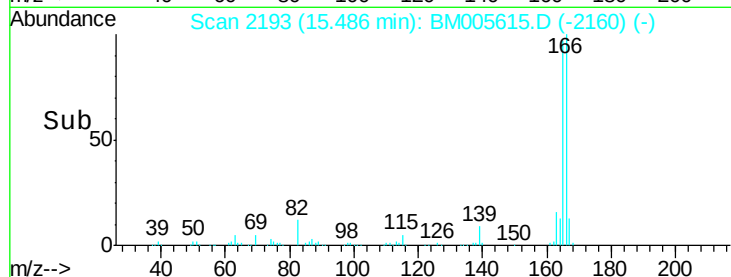
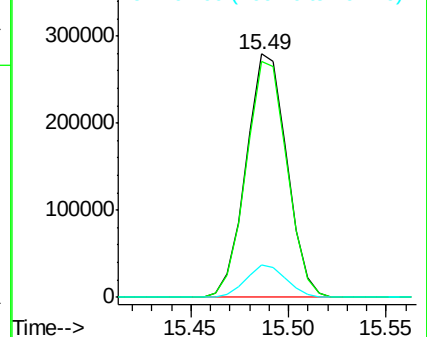
167 13.1 10.5 15.7



Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E



#64

N-Nitrosodiphenylamine

Concen: 42.14 ng/ul

RT: 15.70 min Scan# 2229

Delta R.T. 0.00 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

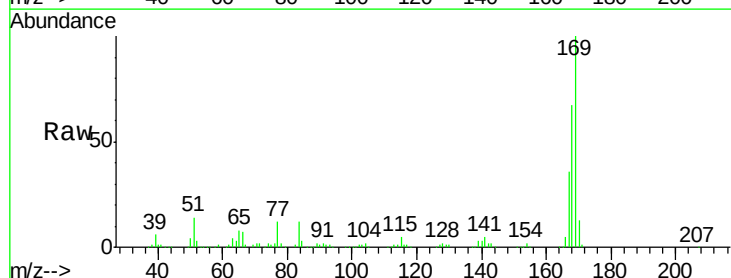
Tgt Ion:169 Resp: 709500

Ion Ratio Lower Upper

169 100

168 66.7 53.2 79.8

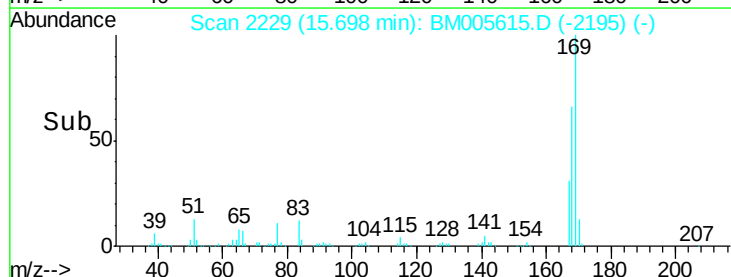
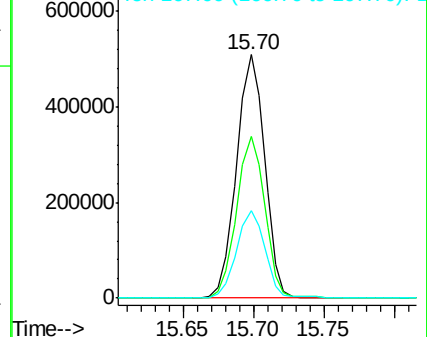
167 35.8 28.9 43.3



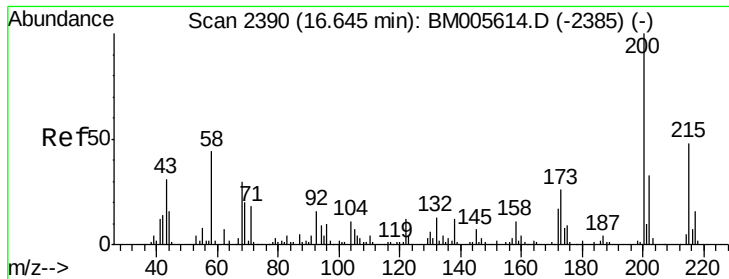
Abundance Ion 169.00 (168.70 to 169.70): E

Ion 168.00 (167.70 to 168.70): E

Ion 167.00 (166.70 to 167.70): E



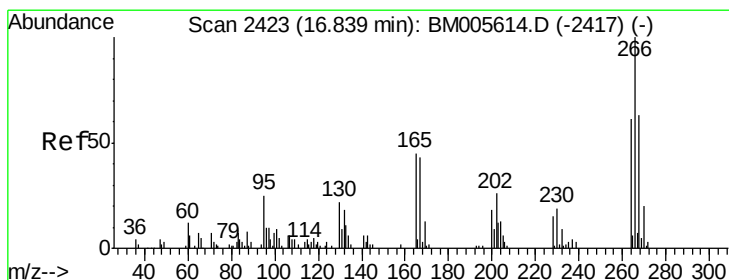
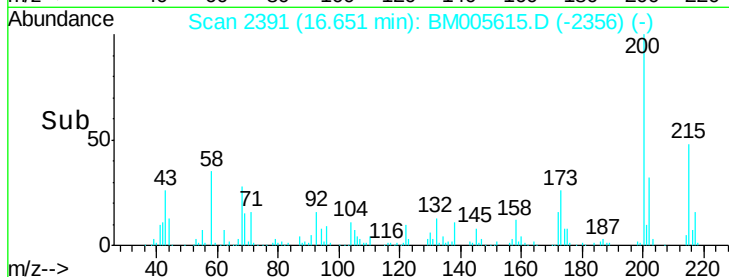
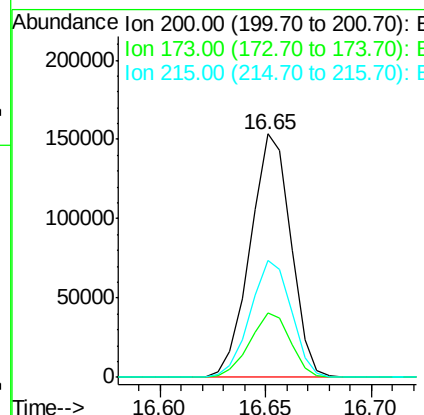
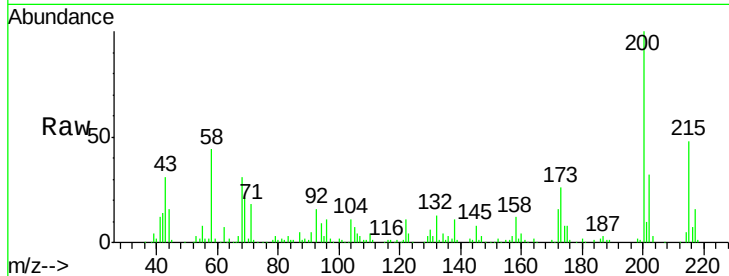




#67  
 Atrazine  
 Concen: 32.59 ng/ul  
 RT: 16.65 min Scan# 2391  
 Delta R.T. 0.01 min  
 Lab File: BM005615.D  
 Acq: 23 May 2016 18:15

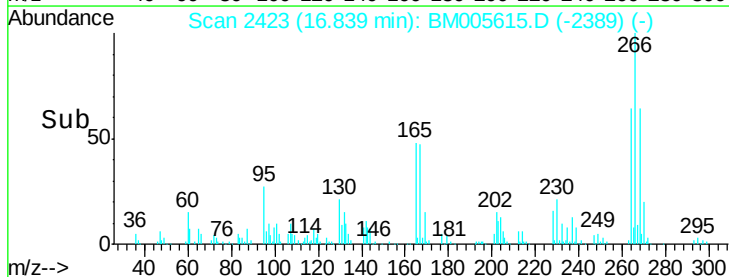
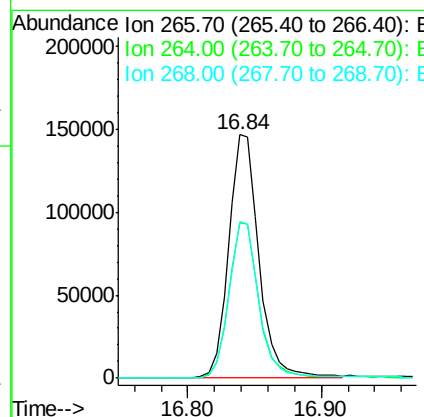
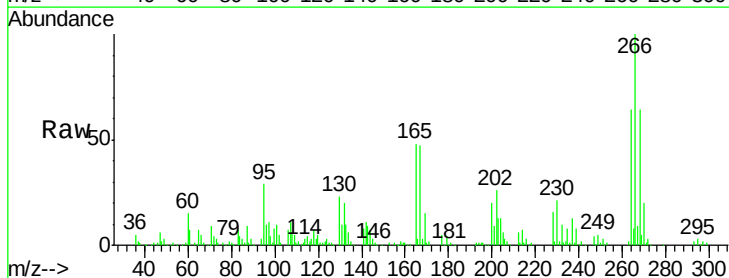
Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9WR2

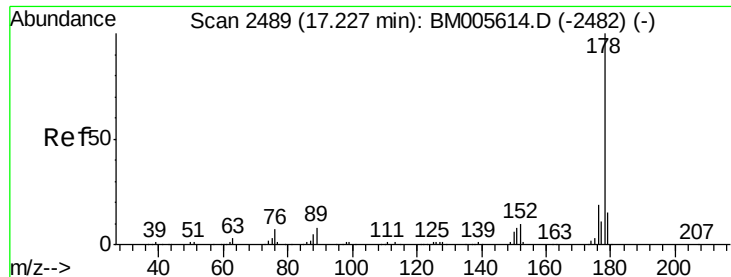
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 200     | 100   |       |       |
| 173     | 26.4  | 20.4  | 30.6  |
| 215     | 48.2  | 38.3  | 57.5  |



#68  
 Pentachlorophenol  
 Concen: 55.33 ng/ul  
 RT: 16.84 min Scan# 2423  
 Delta R.T. 0.00 min  
 Lab File: BM005615.D  
 Acq: 23 May 2016 18:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 266     | 100   |       |       |
| 264     | 63.5  | 50.9  | 76.3  |
| 268     | 64.1  | 52.8  | 79.2  |





#69

Phenanthrene

Concen: 14.10 ng/ul

RT: 17.32 min Scan# 2504

Delta R.T. 0.09 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

Instrument :

BNA\_M

ClientSampleId :

D9WR2

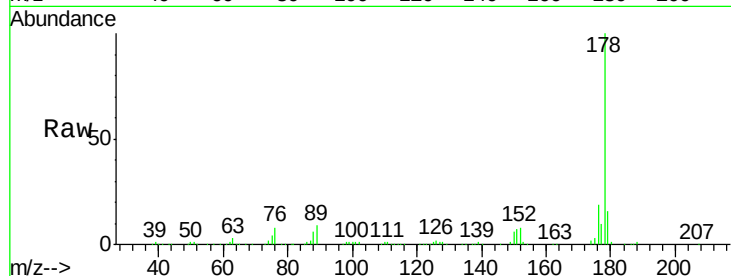
Tgt Ion:178 Resp: 437181

Ion Ratio Lower Upper

178 100

179 15.7 12.2 18.2

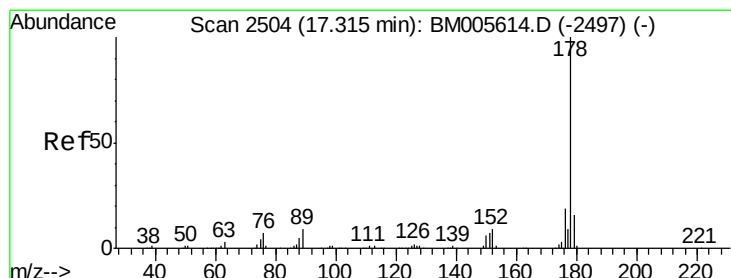
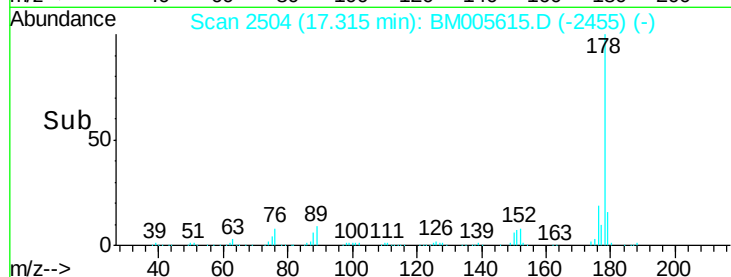
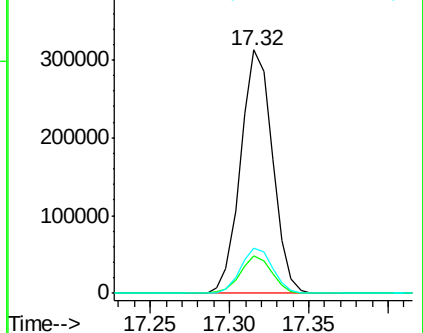
176 18.8 15.8 23.6



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#71

Anthracene

Concen: 13.83 ng/ul

RT: 17.32 min Scan# 2504

Delta R.T. 0.00 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

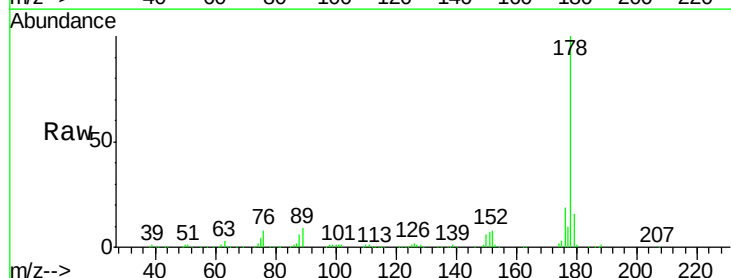
Tgt Ion:178 Resp: 437181

Ion Ratio Lower Upper

178 100

179 15.7 12.6 18.8

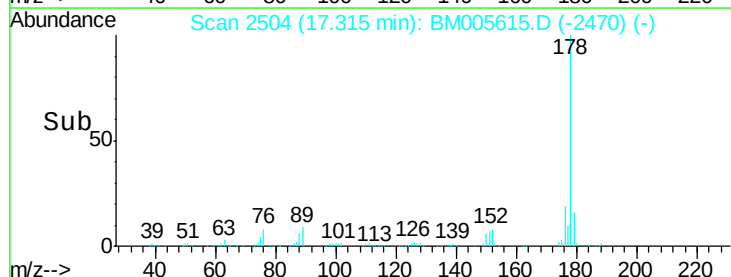
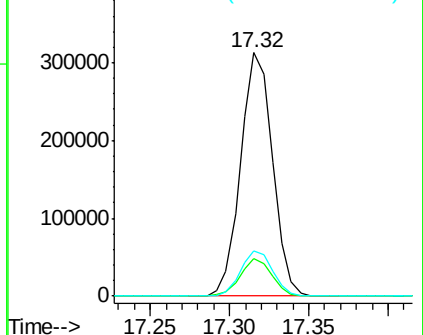
176 18.8 15.0 22.4

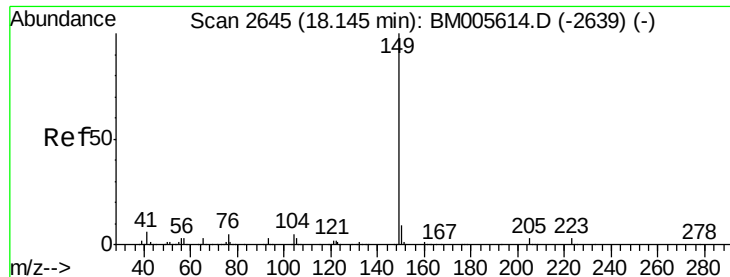


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E





#73

Di-n-butylphthalate

Concen: 28.53 ng/ul

RT: 18.14 min Scan# 2645

Delta R.T. 0.00 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

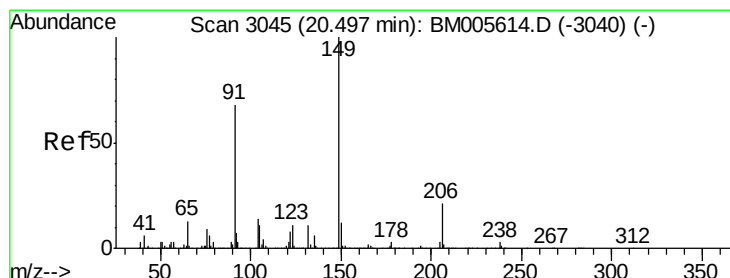
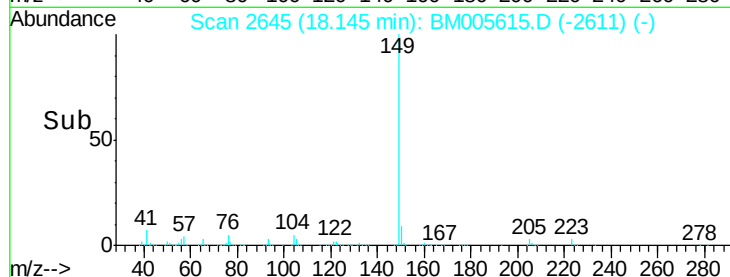
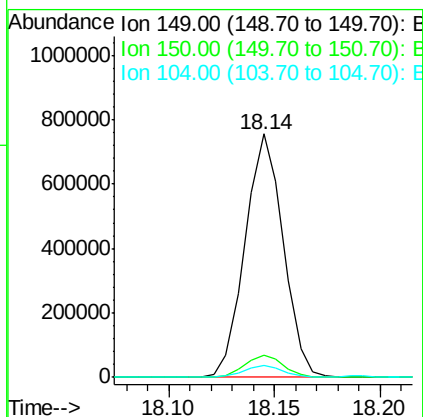
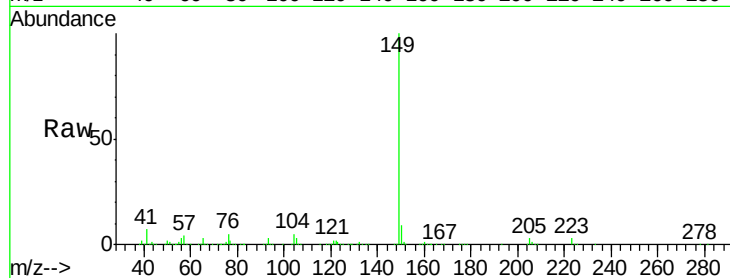
Instrument :

BNA\_M

ClientSampleId :

D9WR2

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 149   | Resp: | 949717 |
| Ion      | Ratio | Lower | Upper  |
| 149      | 100   |       |        |
| 150      | 9.4   | 7.4   | 11.0   |
| 104      | 5.1   | 4.4   | 6.6    |



#78

Butylbenzylphthalate

Concen: 40.37 ng/ul

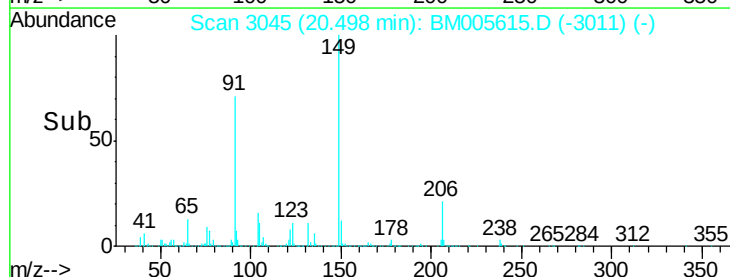
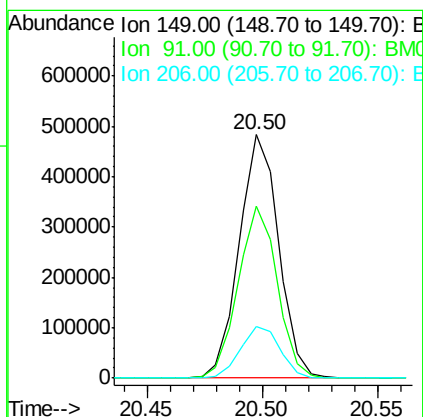
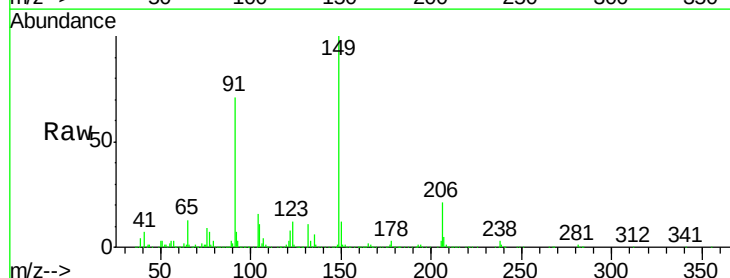
RT: 20.50 min Scan# 3045

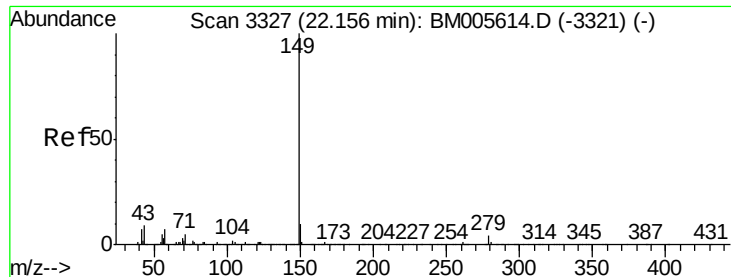
Delta R.T. 0.00 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 149   | Resp: | 571953 |
| Ion      | Ratio | Lower | Upper  |
| 149      | 100   |       |        |
| 91       | 70.8  | 56.5  | 84.7   |
| 206      | 21.1  | 18.3  | 27.5   |





#84

Di-n-octyl phthalate

Concen: 36.33 ng/ul

RT: 22.16 min Scan# 3328

Delta R.T. 0.01 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

Instrument :

BNA\_M

ClientSampleId :

D9WR2

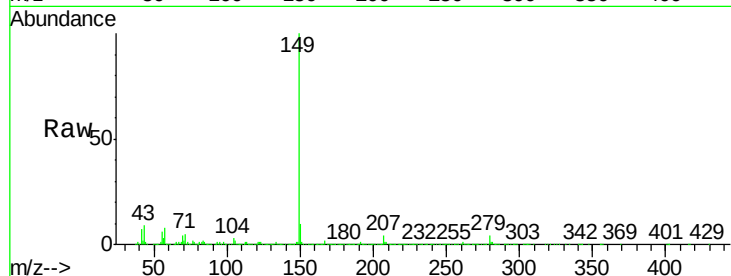
Tgt Ion:149 Resp: 1202557

Ion Ratio Lower Upper

149 100

167 1.7 1.3 1.9

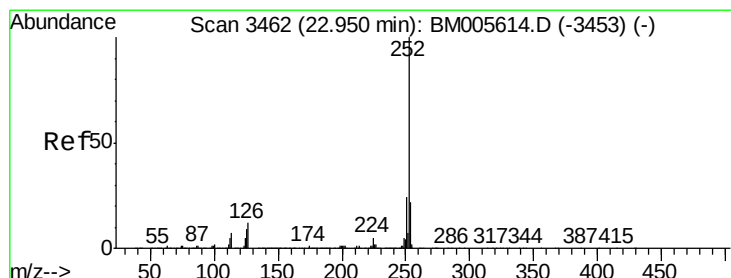
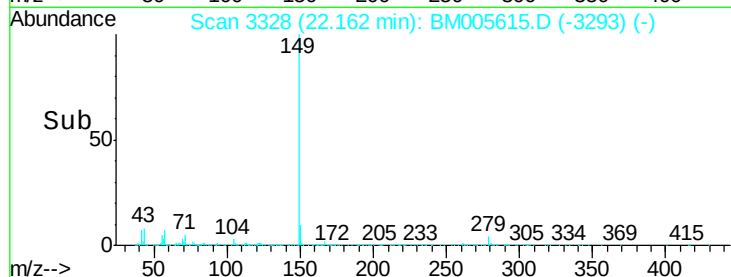
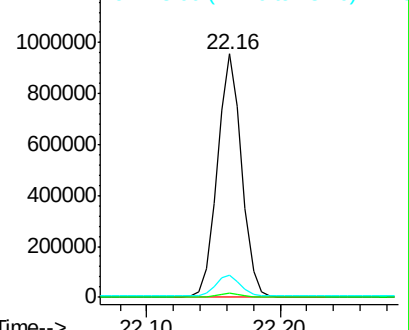
43 9.2 7.4 11.0



Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 43.00 (42.70 to 43.70): BM



#85

Benzo(b)fluoranthene

Concen: 36.42 ng/ul

RT: 22.96 min Scan# 3463

Delta R.T. 0.01 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

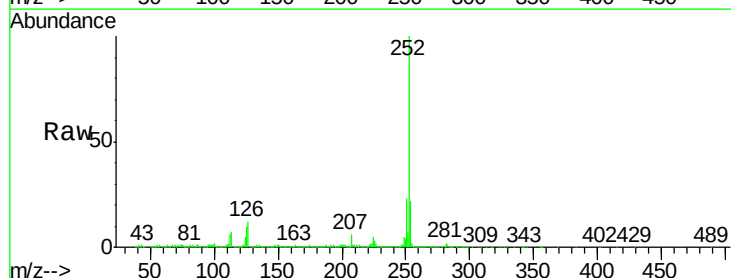
Tgt Ion:252 Resp: 1239692

Ion Ratio Lower Upper

252 100

253 22.2 17.3 25.9

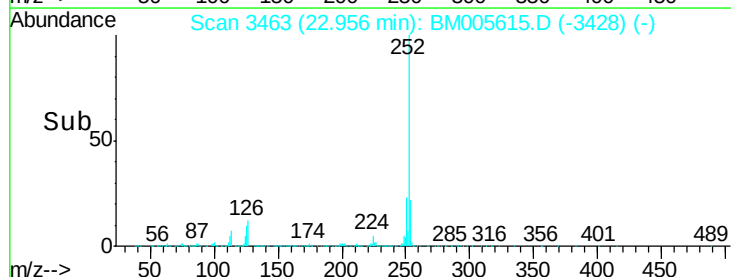
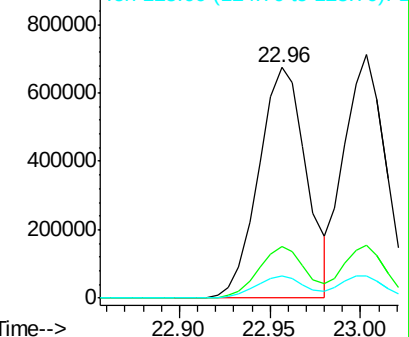
125 9.8 7.0 10.4

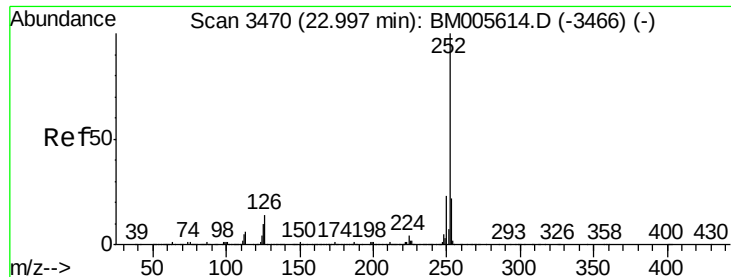


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

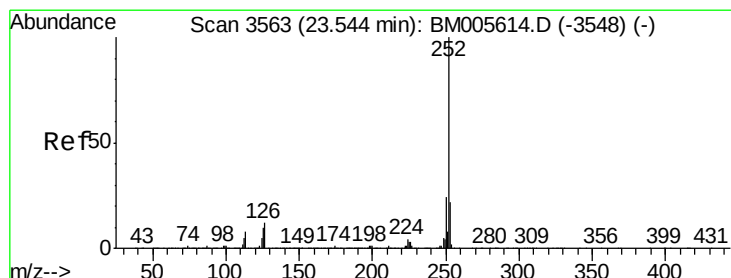
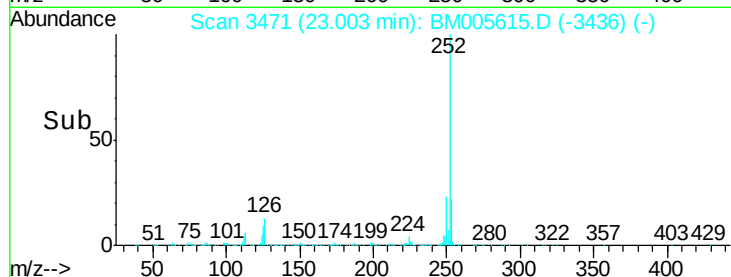
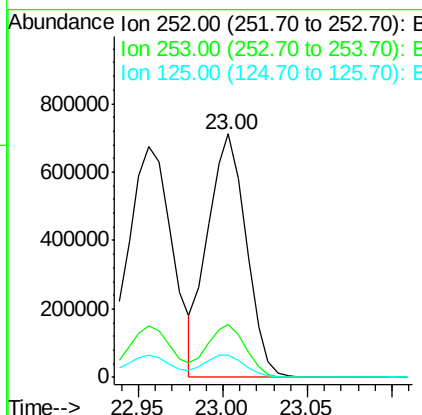
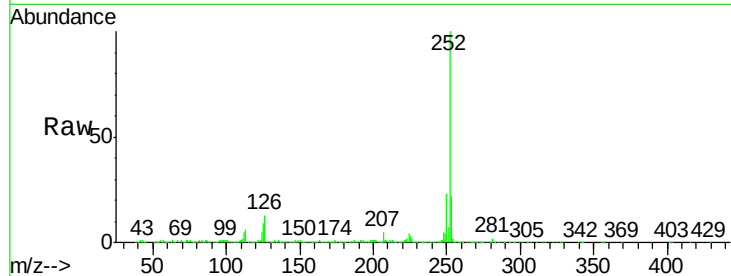




#86  
Benzo(k)fluoranthene  
Concen: 34.81 ng/ul  
RT: 23.00 min Scan# 3471  
Delta R.T. 0.01 min  
Lab File: BM005615.D  
Acq: 23 May 2016 18:15

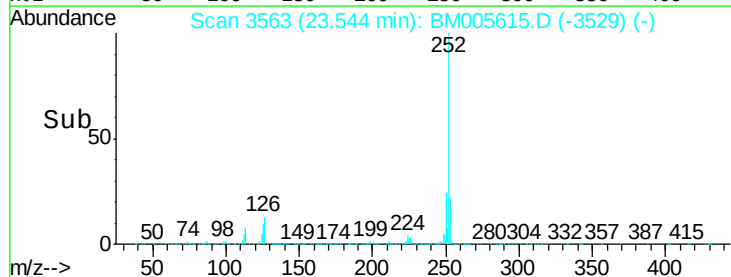
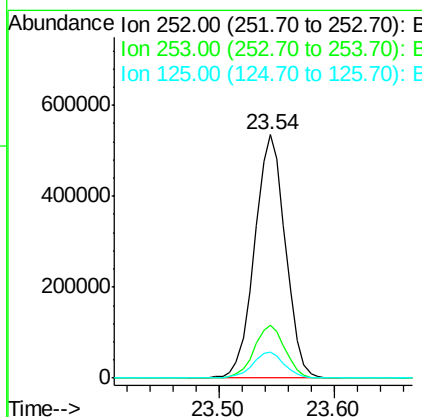
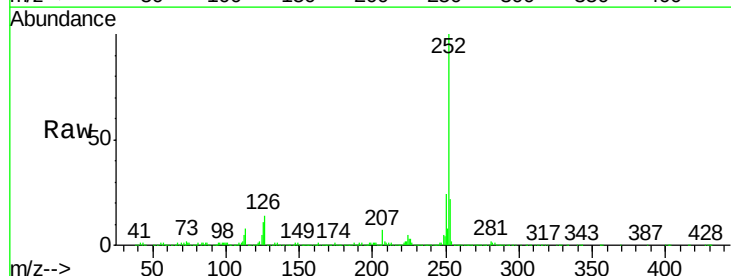
Instrument :  
BNA\_M  
ClientSampled :  
D9WR2

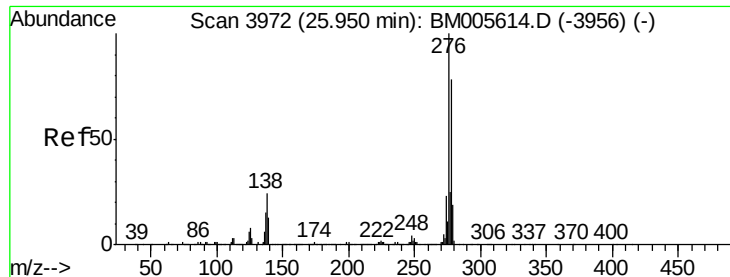
Tgt Ion:252 Resp: 1121536  
Ion Ratio Lower Upper  
252 100  
253 21.8 17.5 26.3  
125 9.2 7.0 10.6



#88  
Benzo(a)pyrene  
Concen: 29.99 ng/ul  
RT: 23.54 min Scan# 3563  
Delta R.T. 0.00 min  
Lab File: BM005615.D  
Acq: 23 May 2016 18:15

Tgt Ion:252 Resp: 990201  
Ion Ratio Lower Upper  
252 100  
253 21.9 17.6 26.4  
125 10.6 7.6 11.4





#89

Indeno(1,2,3-cd)pyrene

Concen: 35.47 ng/ul

RT: 25.96 min Scan# 3973

Delta R.T. 0.01 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

Instrument :

BNA\_M

ClientSampleId :

D9WR2

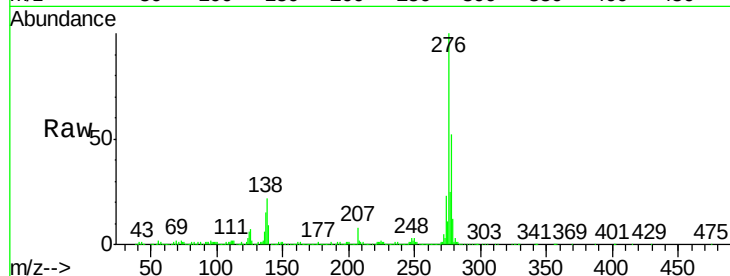
Tgt Ion:276 Resp: 1391127

Ion Ratio Lower Upper

276 100

138 21.7 16.9 25.3

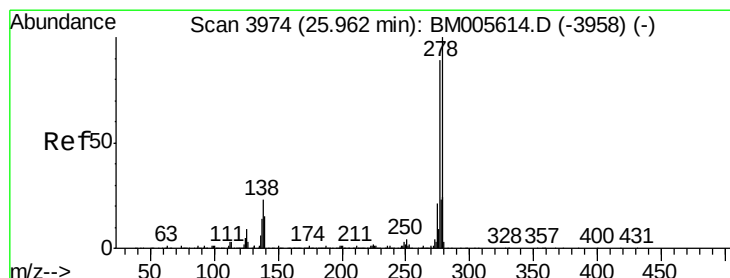
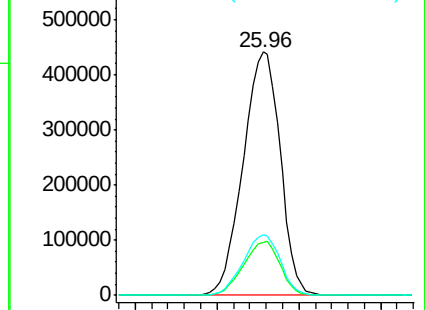
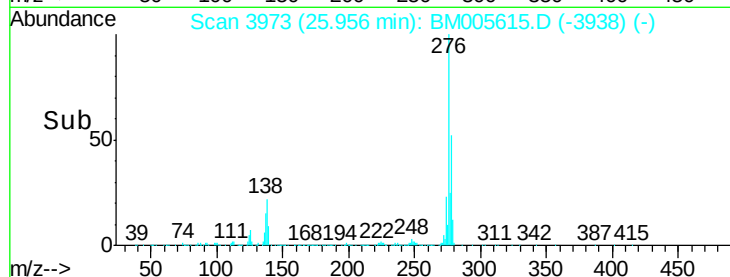
277 24.7 20.2 30.4



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#90

Dibenzo(a,h)anthracene

Concen: 21.93 ng/ul

RT: 25.97 min Scan# 3975

Delta R.T. 0.01 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

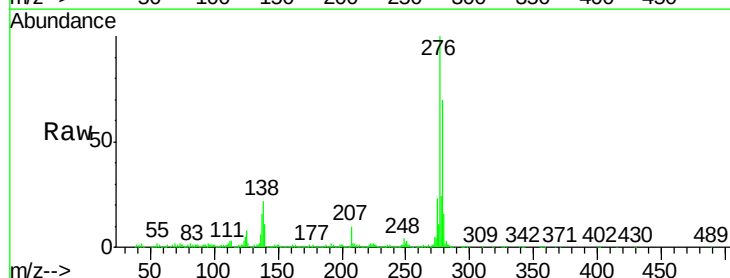
Tgt Ion:278 Resp: 716244

Ion Ratio Lower Upper

278 100

139 16.5 11.8 17.6

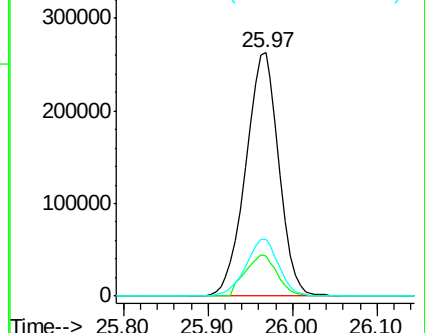
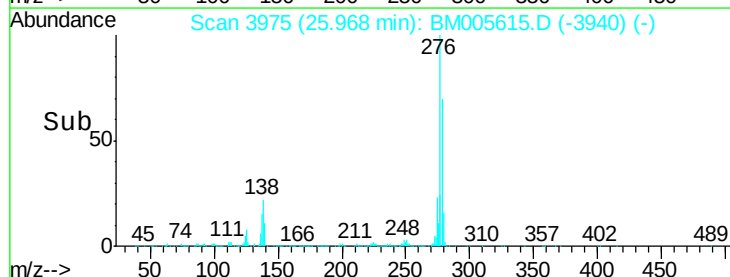
279 23.2 19.4 29.2

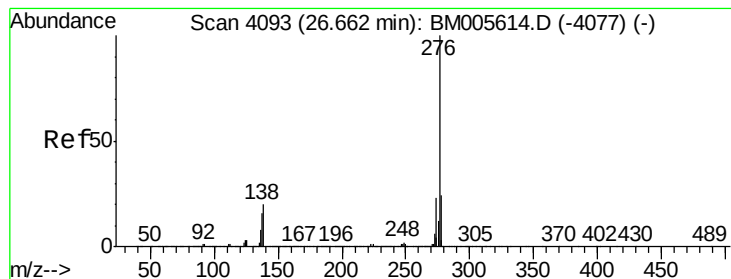


Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E





#91

Benzo(g,h,i)perylene

Concen: 36.36 ng/ul

RT: 26.67 min Scan# 4094

Delta R.T. 0.01 min

Lab File: BM005615.D

Acq: 23 May 2016 18:15

Instrument :

BNA\_M

ClientSampleId :

D9WR2

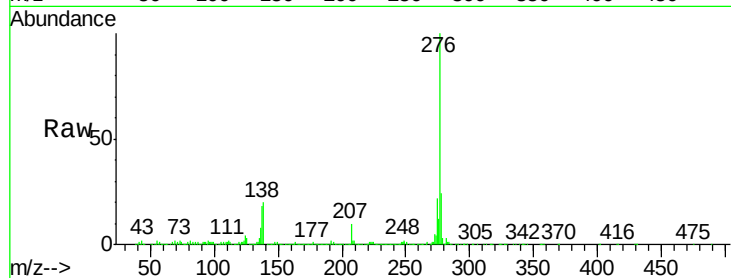
Tgt Ion:276 Resp: 1198703

Ion Ratio Lower Upper

276 100

138 20.4 15.0 22.6

277 23.7 18.6 28.0



Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

