

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052316\  
 Data File : BM005624.D  
 Acq On : 24 May 2016 00:12  
 Operator : UM/SJ  
 Sample : H3087-07  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 JHGK2

Manual Integrations  
 APPROVED

umangi  
 5/24/2016 7:41:45 PM

Quant Time: May 24 07:34:54 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  | 151018   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.59 | 136  | 708819   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.44 | 164  | 398687   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.18 | 188  | 878188   | 20.00 | ng/ul | 0.00     |
| 75) Chrysene-d12          | 21.36 | 240  | 925485   | 20.00 | ng/ul | 0.00     |
| 83) Perylene-d12          | 23.63 | 264  | 943296   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |       |
|--------------------------------|-------|-----|--------|-------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.27  | 96  | 9381   | 2.72  | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.97  | 99  | 201741 | 16.30 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.13  | 67  | 122483 | 17.07 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.33  | 132 | 167313 | 16.20 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.51  | 113 | 161573 | 15.93 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.96  | 128 | 82234  | 15.17 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.67  | 143 | 89481  | 15.00 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 10.22 | 165 | 161824 | 14.40 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 10.73 | 131 | 160985 | 14.31 | ng/ul | 0.00  |
| 43) Dimethylphthalate-d6       | 13.84 | 166 | 494305 | 15.19 | ng/ul | 0.00  |
| 46) Acenaphthylene-d8          | 14.13 | 160 | 629819 | 15.48 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.65 | 143 | 74627  | 12.12 | ng/ul | 0.00  |
| 57) Fluorene-d10               | 15.43 | 176 | 444121 | 15.68 | ng/ul | 0.00  |
| 62) 4,6-Dinitro-2-methylphenol | 15.56 | 200 | 37195  | 7.36  | ng/ul | 0.00  |
| 70) Anthracene-d10             | 17.27 | 188 | 662291 | 15.83 | ng/ul | 0.00  |
| 76) Pyrene-d10                 | 19.57 | 212 | 708910 | 16.91 | ng/ul | 0.00  |
| 87) Benzo(a)pyrene-d12         | 23.49 | 264 | 689833 | 15.66 | ng/ul | -0.01 |

## Target Compounds

|                            |       |     |         |             | Qvalue |
|----------------------------|-------|-----|---------|-------------|--------|
| 14) Acetophenone           | 8.62  | 105 | 23660   | 1.55 ng/ul  | 96     |
| 16) 4-Methylphenol         | 8.56  | 108 | 10827   | 1.03 ng/ul  | 86     |
| 44) Dimethylphthalate      | 13.89 | 163 | 276305  | 8.59 ng/ul  | 99     |
| 47) Acenaphthylene         | 14.16 | 152 | 122475  | 2.96 ng/ul  | 99     |
| 49) Acenaphthene           | 14.50 | 153 | 32408   | 1.19 ng/ul  | 98     |
| 58) Fluorene               | 15.49 | 166 | 114073  | 3.66 ng/ul  | 97     |
| 69) Phenanthrene           | 17.22 | 178 | 1435651 | 29.25 ng/ul | 99     |
| 71) Anthracene             | 17.31 | 178 | 386357  | 7.72 ng/ul  | 99     |
| 72) Carbazole              | 17.58 | 167 | 47187   | 1.09 ng/ul  | 97     |
| 74) Fluoranthene           | 19.24 | 202 | 2653792 | 48.04 ng/ul | 97     |
| 77) Pyrene                 | 19.60 | 202 | 2504119 | 47.07 ng/ul | 99     |
| 80) Benzo(a)anthracene     | 21.34 | 228 | 923596  | 16.98 ng/ul | 95     |
| 82) Chrysene               | 21.39 | 228 | 1153984 | 22.30 ng/ul | 97     |
| 85) Benzo(b)fluoranthene   | 22.95 | 252 | 1103137 | 19.83 ng/ul | 97     |
| 86) Benzo(k)fluoranthene   | 22.99 | 252 | 320374m | 6.08 ng/ul  |        |
| 88) Benzo(a)pyrene         | 23.53 | 252 | 851503  | 15.78 ng/ul | 98     |
| 89) Indeno(1,2,3-cd)pyrene | 25.93 | 276 | 463802  | 7.23 ng/ul  | 98     |
| 90) Dibenzo(a,h)anthracene | 25.93 | 278 | 109692  | 2.05 ng/ul# | 82     |
| 91) Benzo(g,h,i)perylene   | 26.64 | 276 | 416636  | 7.73 ng/ul  | 95     |

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

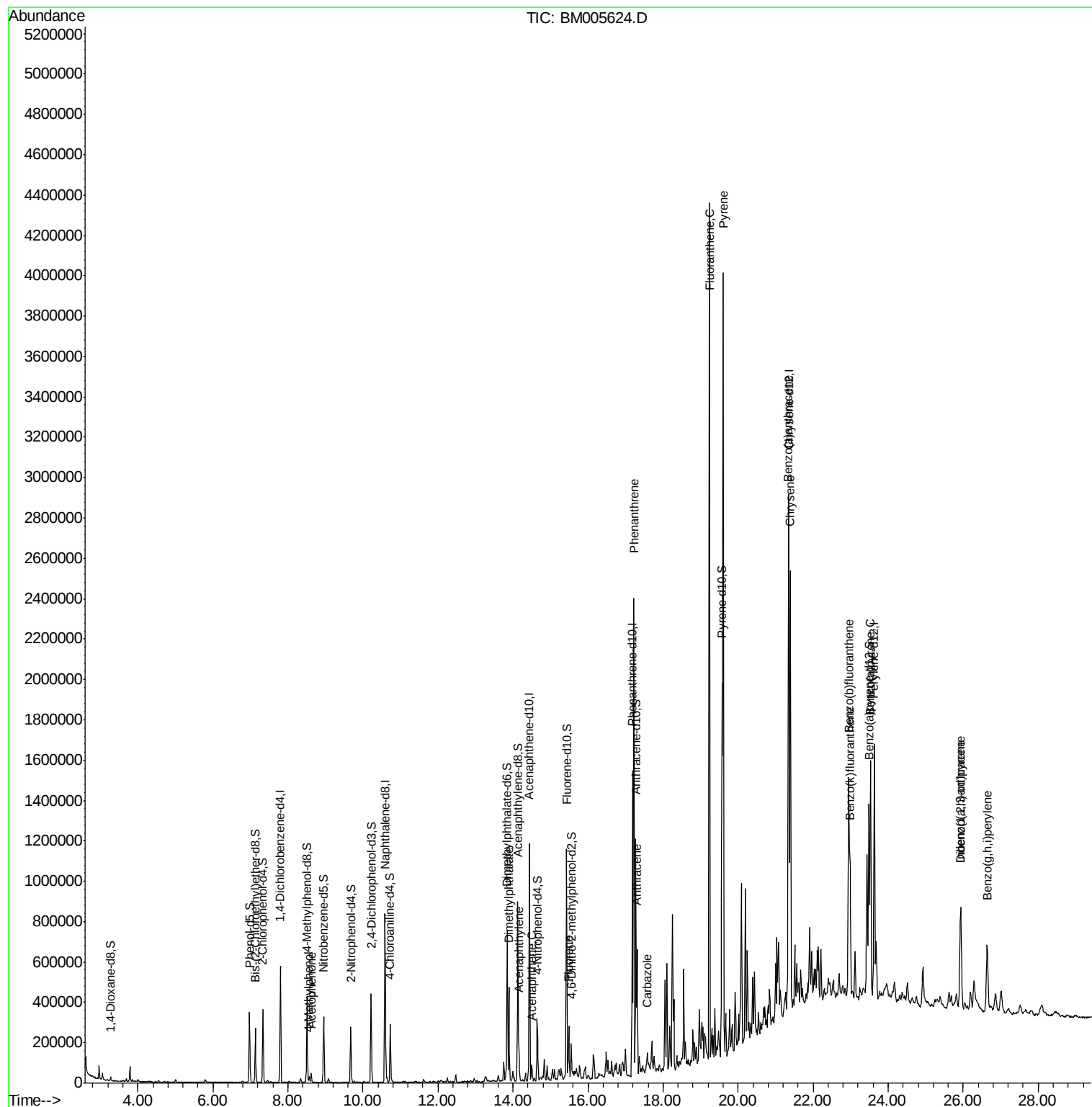
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052316\  
Data File : BM005624.D  
Acq On : 24 May 2016 00:12  
Operator : UM/SJ  
Sample : H3087-07  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

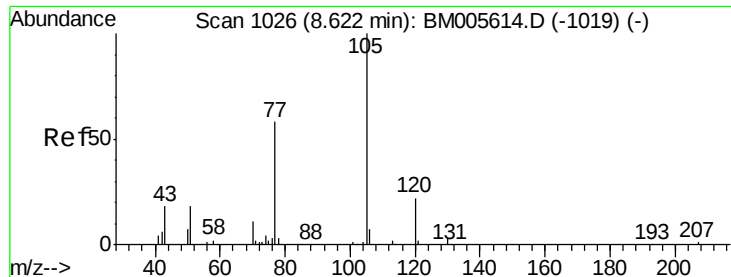
Instrument :  
BNA\_M  
ClientSampleId :  
JHKG2

Manual Integrations  
APPROVED

umangi  
5/24/2016 7:41:45 PM

Quant Time: May 24 07:34:54 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





#14

Acetophenone

Concen: 1.55 ng/ul

RT: 8.62 min Scan# 1025

Delta R.T. -0.01 min

Lab File: BM005624.D

Acq: 24 May 2016 00:12

Instrument :

BNA\_M

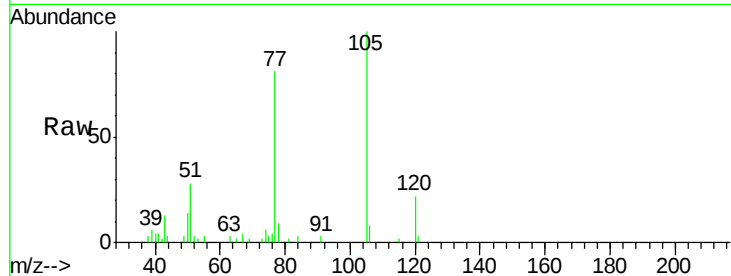
ClientSampleId :

JHKG2

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 105   | Resp: | 23660 |
| Ion Ratio | Lower | Upper |       |
| 105       | 100   |       |       |
| 77        | 80.5  | 60.8  | 91.2  |
| 51        | 28.2  | 22.2  | 33.2  |

Manual Integrations  
APPROVED

umangi  
5/24/2016 7:41:45 PM

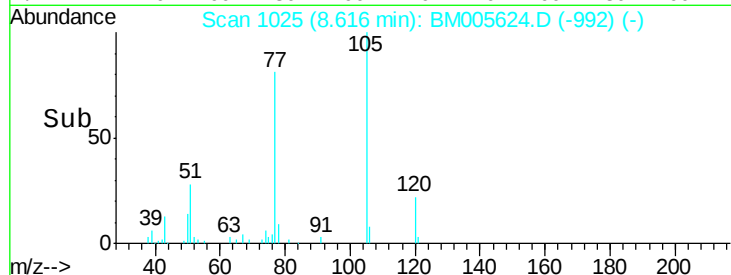


Abundance Ion 105.00 (104.70 to 105.70): E

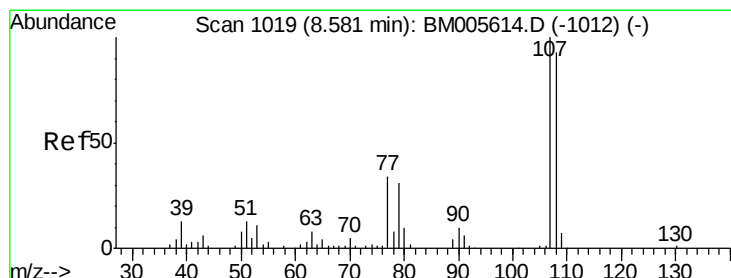
Ion 77.00 (76.70 to 77.70): BM005614.D (-1019) (-)

Ion 51.00 (50.70 to 51.70): BM005614.D (-1019) (-)

Time-->



Time-->



#16

4-Methylphenol

Concen: 1.03 ng/ul

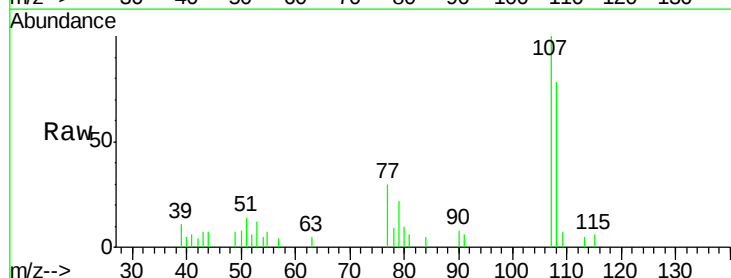
RT: 8.56 min Scan# 1016

Delta R.T. -0.02 min

Lab File: BM005624.D

Acq: 24 May 2016 00:12

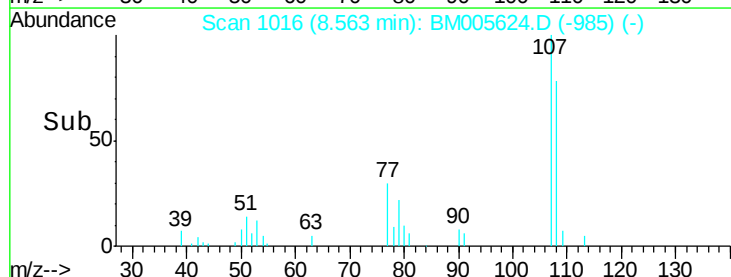
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 108   | Resp: | 10827 |
| Ion Ratio | Lower | Upper |       |
| 108       | 100   |       |       |
| 107       | 127.7 | 90.3  | 135.5 |



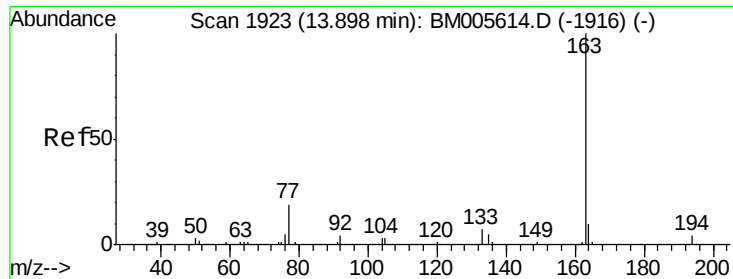
Abundance Ion 108.00 (107.70 to 108.70): E

Ion 107.00 (106.70 to 107.70): BM005614.D (-1012) (-)

Time-->



Time-->



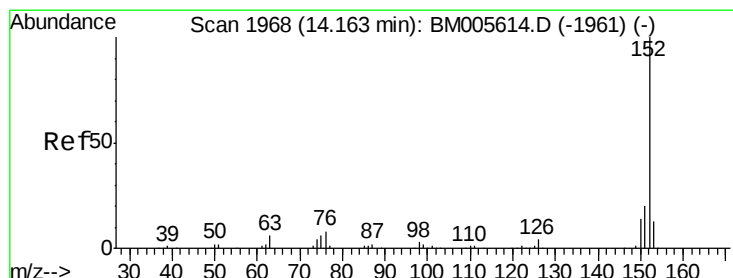
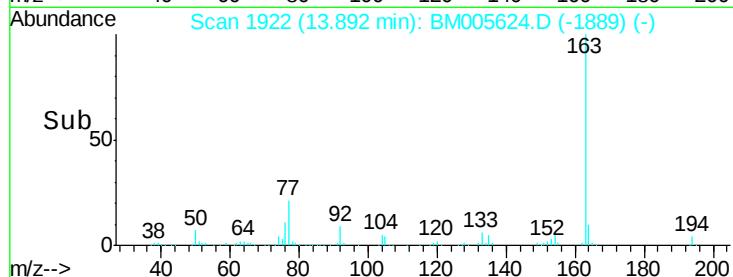
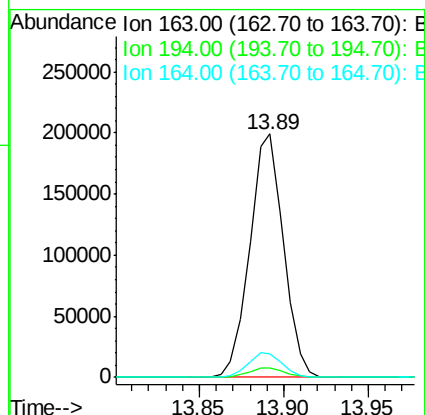
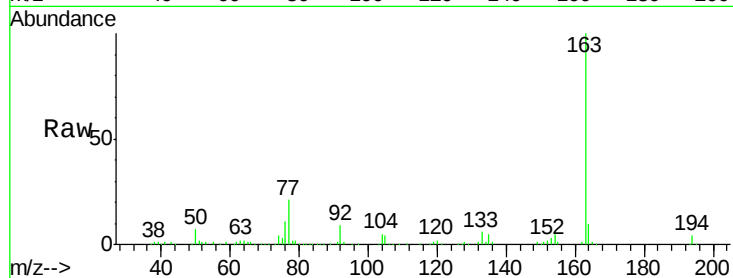
#44  
Dimethylphthalate  
Concen: 8.59 ng/ul  
RT: 13.89 min Scan# 1922  
Delta R.T. -0.01 min  
Lab File: BM005624.D  
Acq: 24 May 2016 00:12

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK2

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 163     | 100   |            |            |
| 194     | 4.1   | 3.4        | 5.0        |
| 164     | 9.8   | 8.0        | 12.0       |

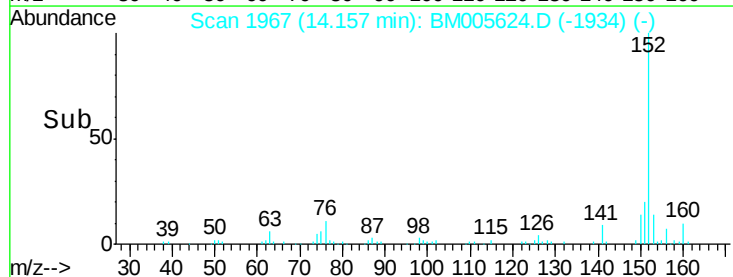
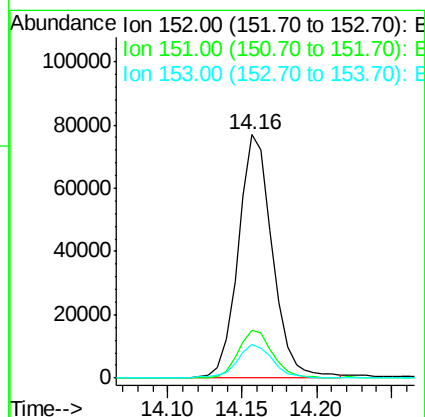
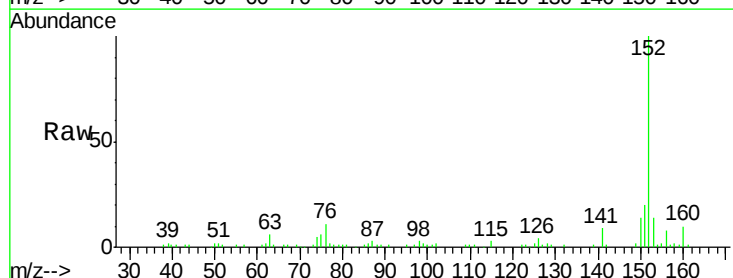
Manual Integrations  
APPROVED

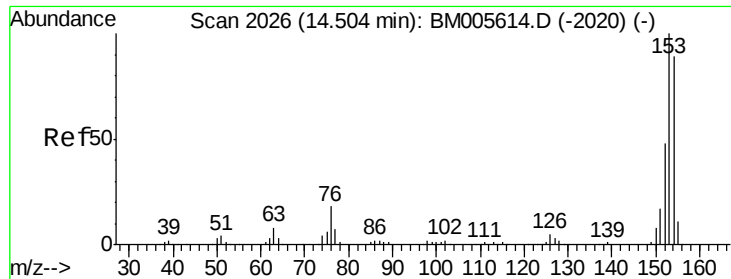
umangi  
5/24/2016 7:41:45 PM



#47  
Acenaphthylene  
Concen: 2.96 ng/ul  
RT: 14.16 min Scan# 1967  
Delta R.T. -0.01 min  
Lab File: BM005624.D  
Acq: 24 May 2016 00:12

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 152     | 100   |            |            |
| 151     | 19.8  | 15.7       | 23.5       |
| 153     | 13.9  | 10.5       | 15.7       |





#49

Acenaphthene

Concen: 1.19 ng/ul

RT: 14.50 min Scan# 2025

Delta R.T. -0.01 min

Lab File: BM005624.D

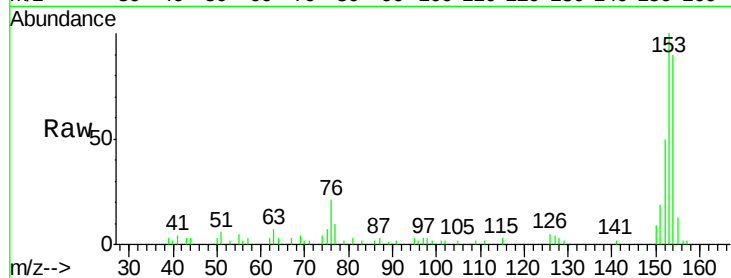
Acq: 24 May 2016 00:12

Instrument :

BNA\_M

ClientSampleId :

JHKG2



Tgt Ion:153 Resp: 32408

Ion Ratio Lower Upper

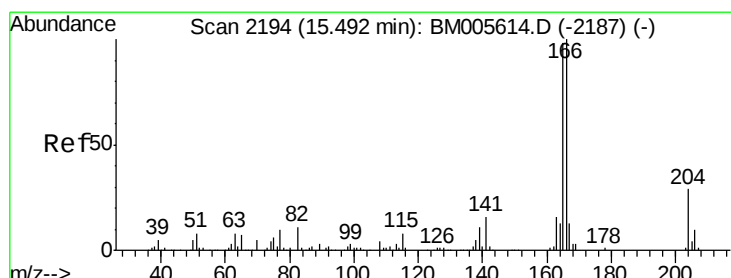
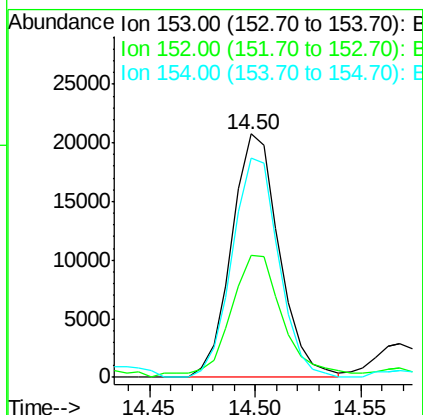
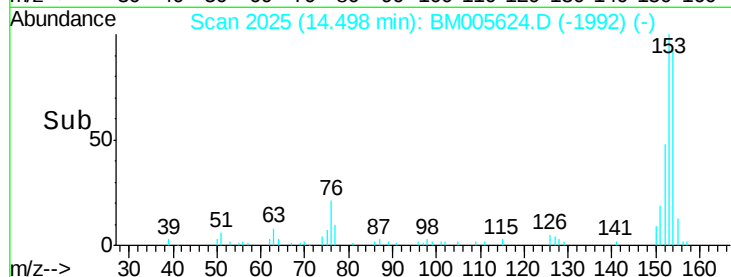
153 100

152 50.0 37.8 56.6

154 90.3 71.1 106.7

Manual Integrations  
APPROVED

umangi  
5/24/2016 7:41:45 PM



#58

Fluorene

Concen: 3.66 ng/ul

RT: 15.49 min Scan# 2193

Delta R.T. -0.01 min

Lab File: BM005624.D

Acq: 24 May 2016 00:12

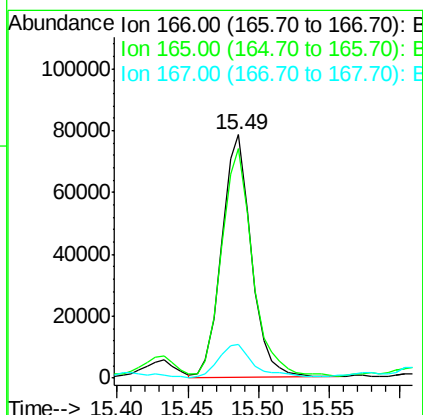
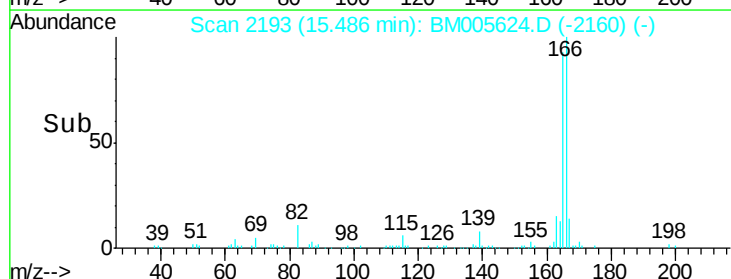
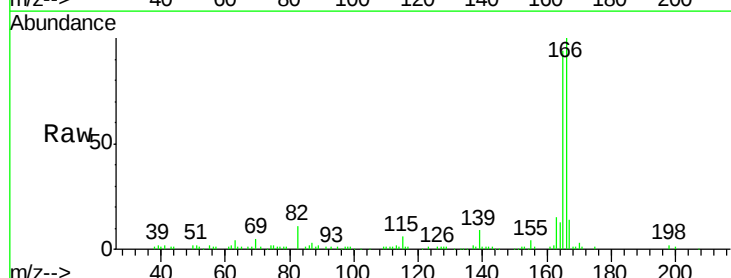
Tgt Ion:166 Resp: 114073

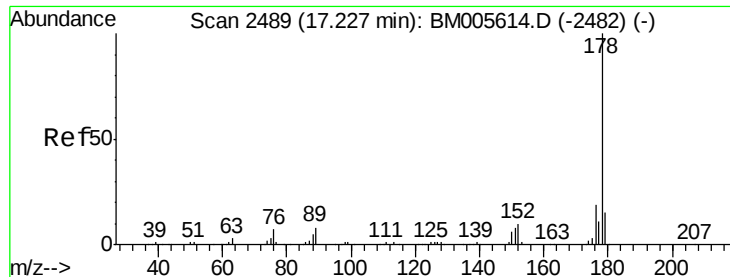
Ion Ratio Lower Upper

166 100

165 94.3 78.0 117.0

167 13.6 10.5 15.7





#69

Phenanthrene

Concen: 29.25 ng/ul

RT: 17.22 min Scan# 2488

Delta R.T. -0.01 min

Lab File: BM005624.D

Acq: 24 May 2016 00:12

Instrument :

BNA\_M

ClientSampleId :

JHGK2

Tgt Ion:178 Resp: 1435651

Ion Ratio Lower Upper

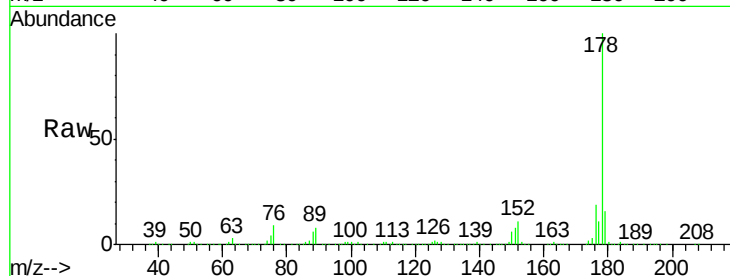
178 100

179 15.7 12.2 18.2

176 19.2 15.8 23.6

Manual Integrations  
APPROVED

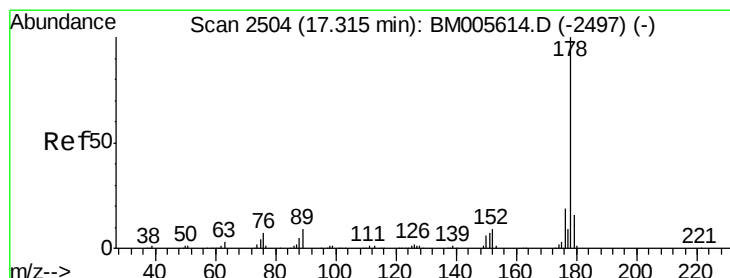
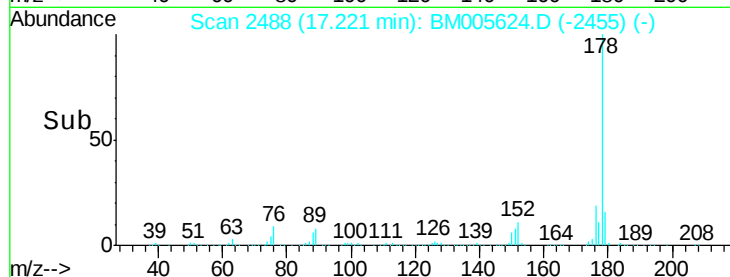
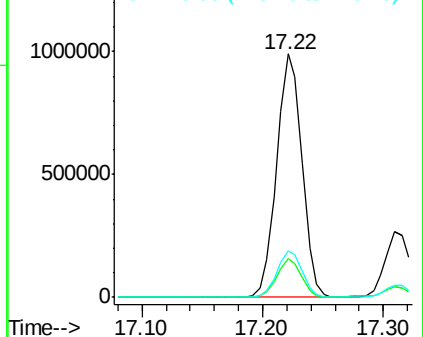
umangi  
5/24/2016 7:41:45 PM



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: 7.72 ng/ul

RT: 17.31 min Scan# 2503

Delta R.T. -0.01 min

Lab File: BM005624.D

Acq: 24 May 2016 00:12

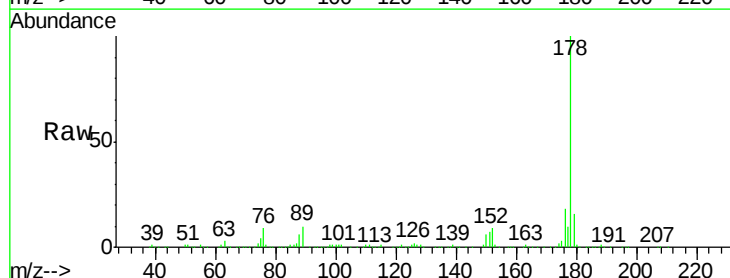
Tgt Ion:178 Resp: 386357

Ion Ratio Lower Upper

178 100

179 15.5 12.6 18.8

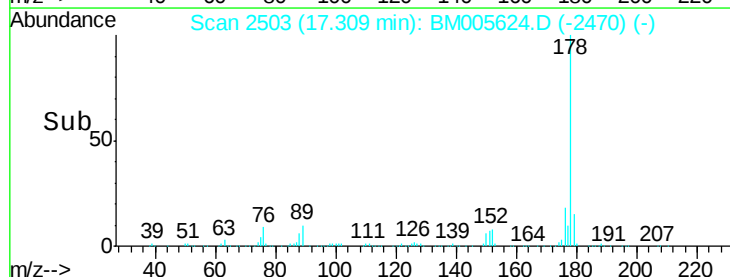
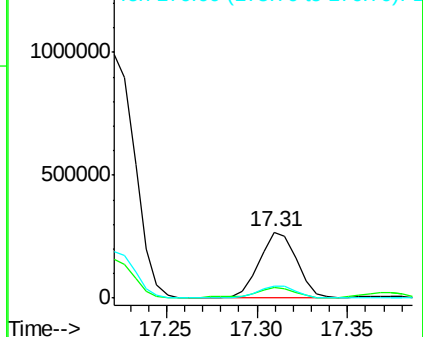
176 18.1 15.0 22.4

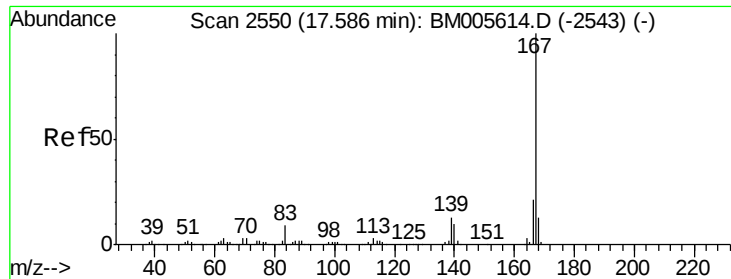


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E





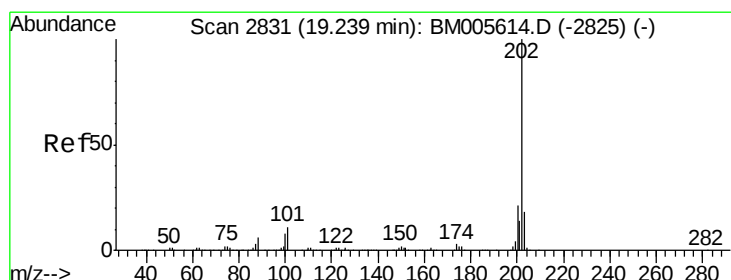
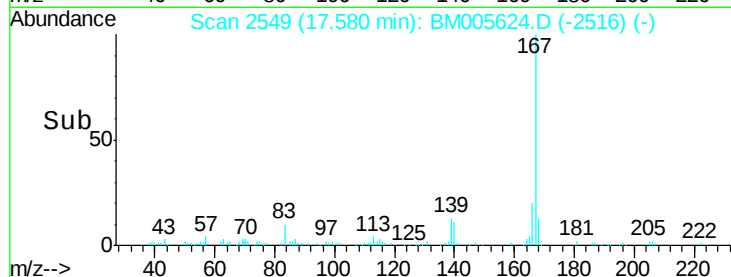
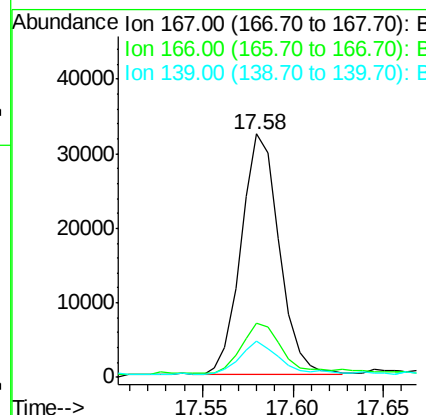
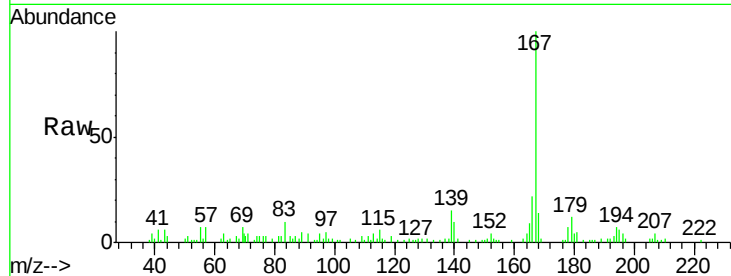
#72  
 Carbazole  
 Concen: 1.09 ng/ul  
 RT: 17.58 min Scan# 2549  
 Delta R.T. -0.01 min  
 Lab File: BM005624.D  
 Acq: 24 May 2016 00:12

Instrument :  
 BNA\_M  
 ClientSampleId :  
 JHKG2

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 167     | 100   | 47187 |       |       |
| 166     | 22.0  | 16.9  | 25.3  |       |
| 139     | 14.7  | 10.6  | 16.0  |       |

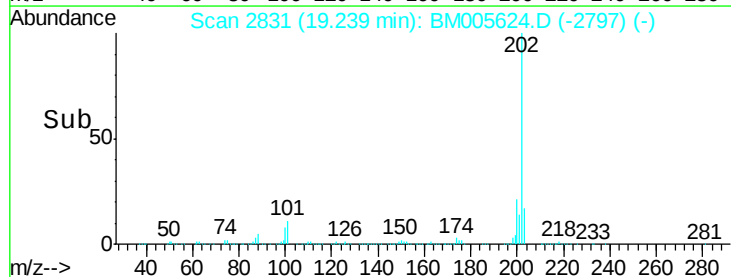
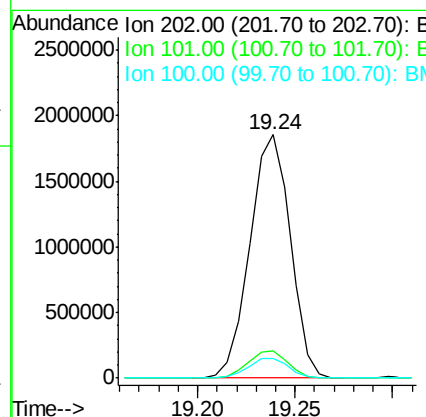
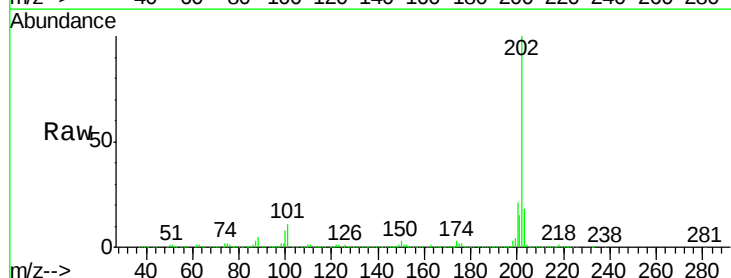
Manual Integrations  
 APPROVED

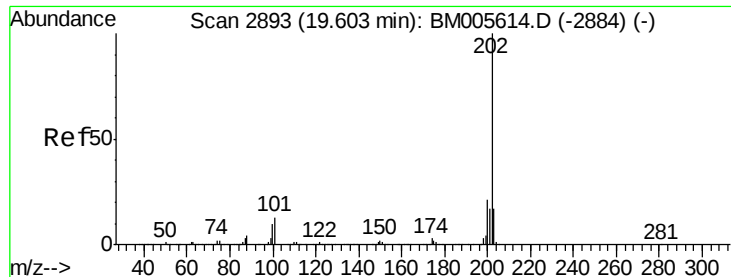
umangi  
 5/24/2016 7:41:45 PM



#74  
 Fluoranthene  
 Concen: 48.04 ng/ul  
 RT: 19.24 min Scan# 2831  
 Delta R.T. -0.00 min  
 Lab File: BM005624.D  
 Acq: 24 May 2016 00:12

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 202     | 100   | 2653792 |       |       |
| 101     | 11.0  | 7.9     | 11.9  |       |
| 100     | 8.1   | 5.6     | 8.4   |       |





#77

Pyrene

Concen: 47.07 ng/ul

RT: 19.60 min Scan# 2893

Delta R.T. -0.00 min

Lab File: BM005624.D

Acq: 24 May 2016 00:12

Instrument :

BNA\_M

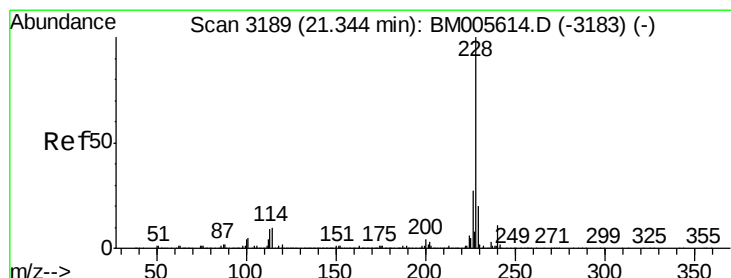
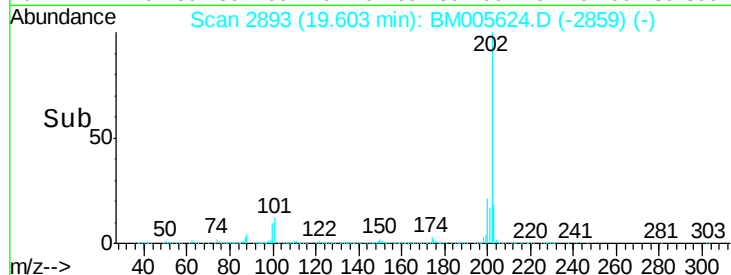
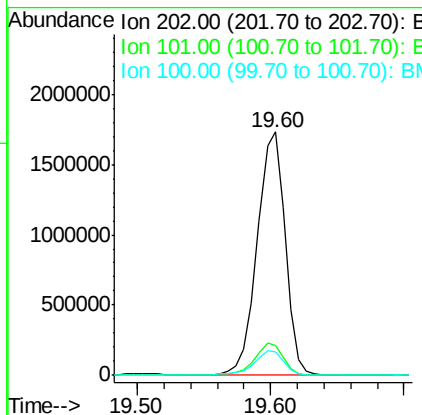
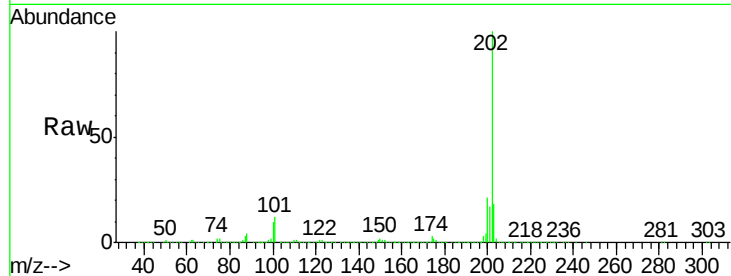
ClientSampleId :

JHGK2

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 2504119 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 12.4  | 9.6   | 14.4    |
| 100       | 9.9   | 7.8   | 11.6    |

Manual Integrations  
APPROVED

umangi  
5/24/2016 7:41:45 PM



#80

Benzo(a)anthracene

Concen: 16.98 ng/ul

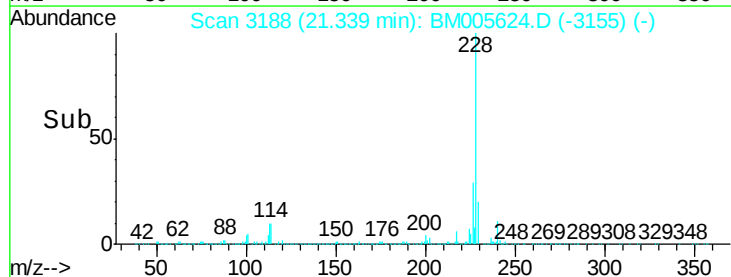
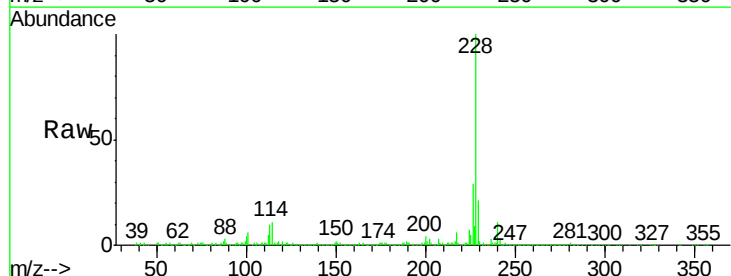
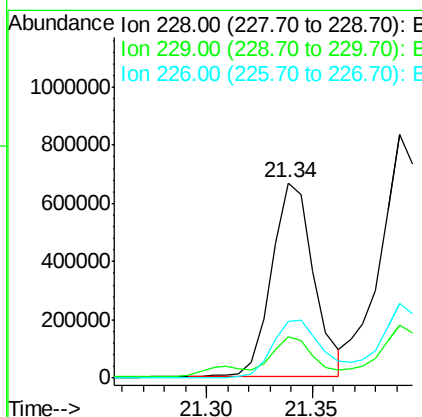
RT: 21.34 min Scan# 3188

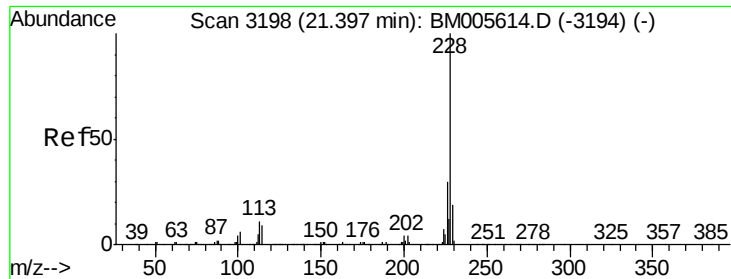
Delta R.T. -0.01 min

Lab File: BM005624.D

Acq: 24 May 2016 00:12

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 228   | Resp: | 923596 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 229       | 21.1  | 15.4  | 23.2   |
| 226       | 29.3  | 21.0  | 31.4   |





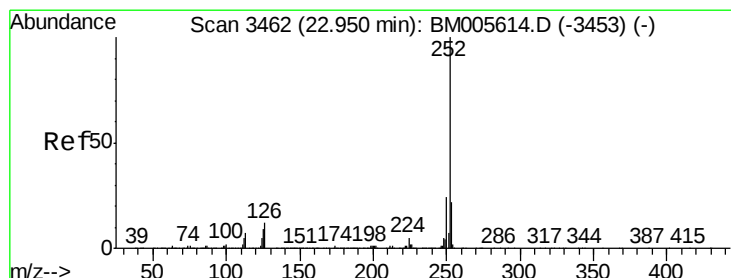
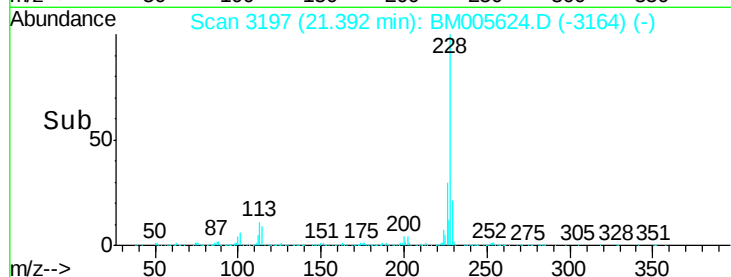
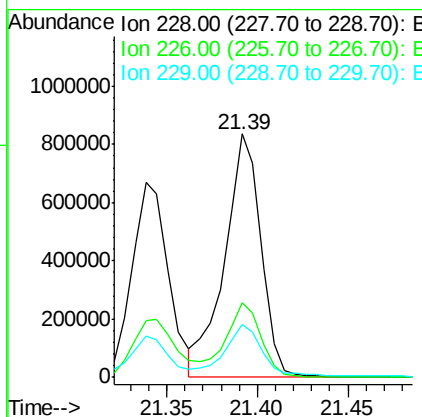
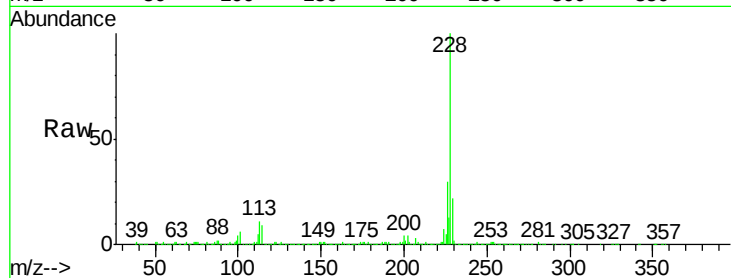
#82  
Chrysene  
Concen: 22.30 ng/ul  
RT: 21.39 min Scan# 3197  
Delta R.T. -0.01 min  
Lab File: BM005624.D  
Acq: 24 May 2016 00:12

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK2

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.4  | 23.7  | 35.5  |
| 229     | 21.6  | 15.5  | 23.3  |

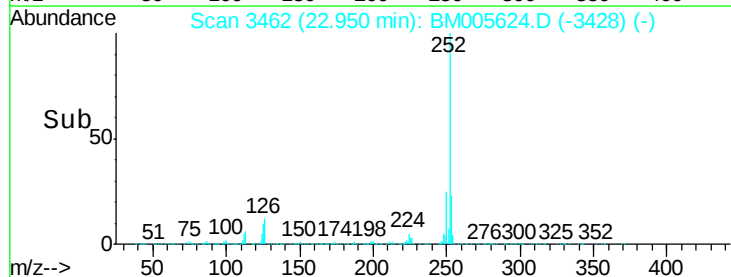
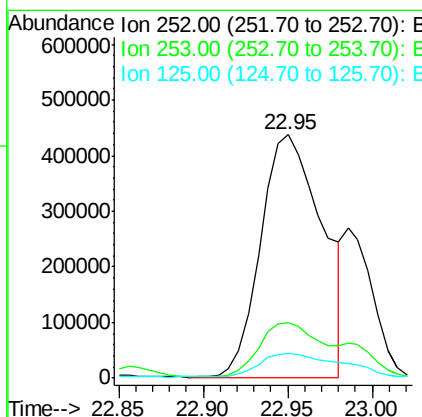
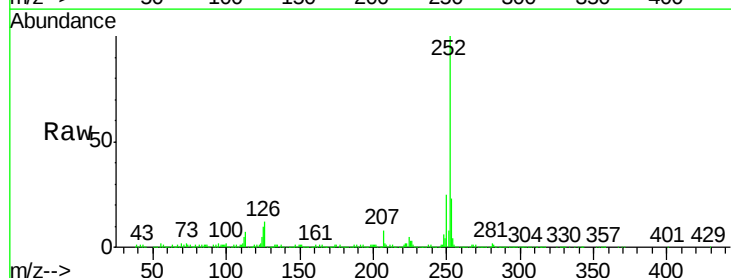
Manual Integrations  
APPROVED

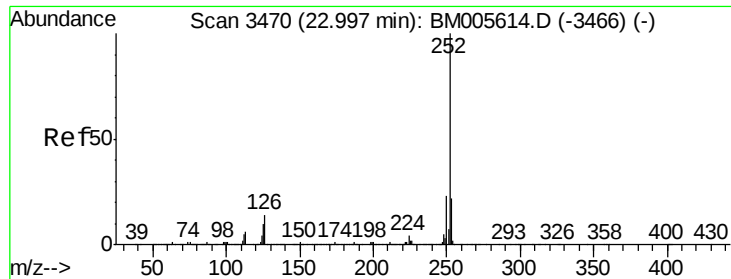
umangi  
5/24/2016 7:41:45 PM



#85  
Benzo(b)fluoranthene  
Concen: 19.83 ng/ul  
RT: 22.95 min Scan# 3462  
Delta R.T. -0.00 min  
Lab File: BM005624.D  
Acq: 24 May 2016 00:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.0  | 17.3  | 25.9  |
| 125     | 10.3  | 7.0   | 10.4  |





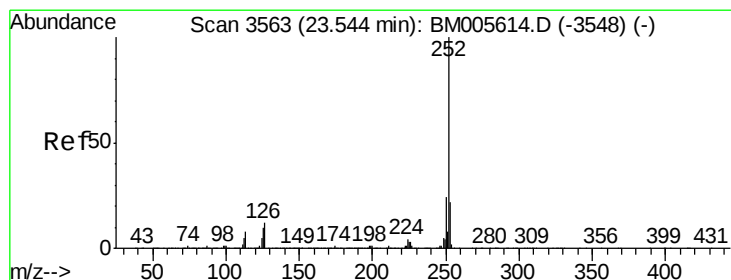
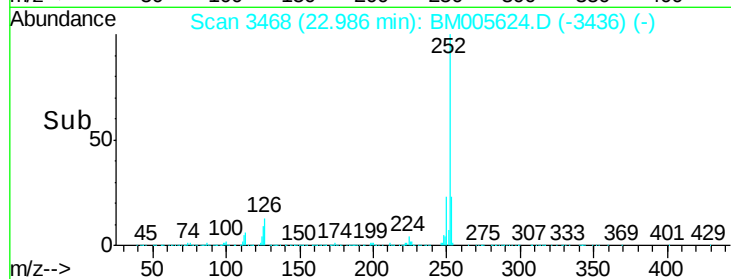
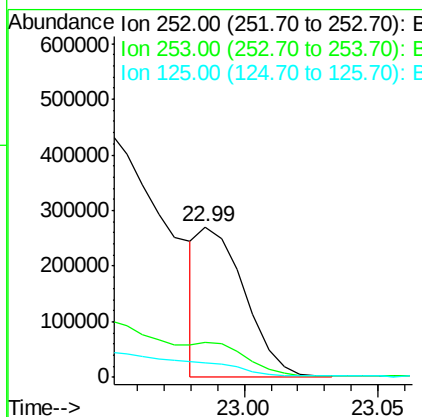
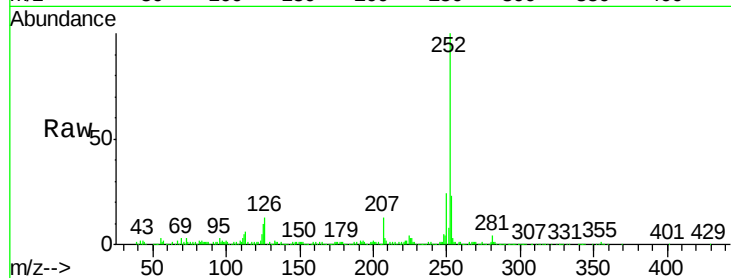
#86  
Benzo(k)fluoranthene  
Concen: 6.08 ng/ul m  
RT: 22.99 min Scan# 3468  
Delta R.T. -0.01 min  
Lab File: BM005624.D  
Acq: 24 May 2016 00:12

Instrument :  
BNA\_M  
ClientSampled :  
JHGK2

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.3  | 17.5  | 26.3  |
| 125     | 10.1  | 7.0   | 10.6  |

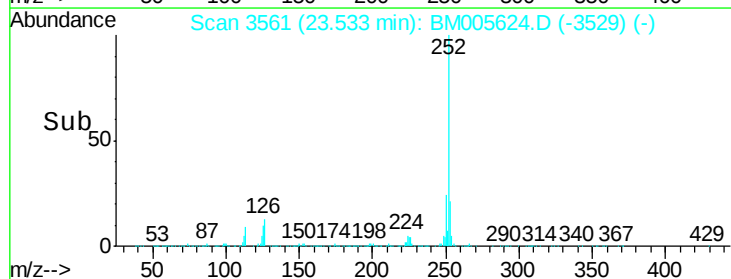
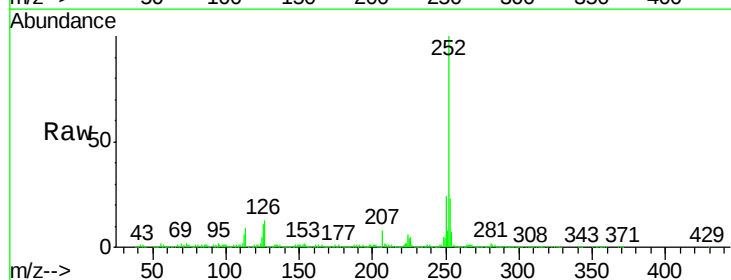
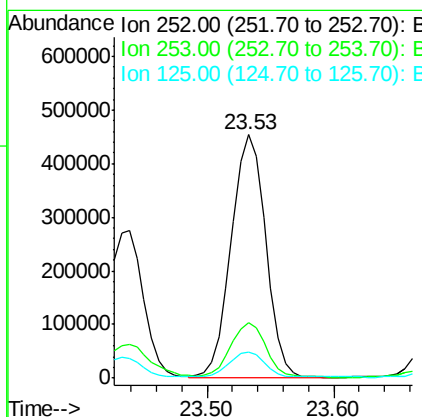
Manual Integrations  
APPROVED

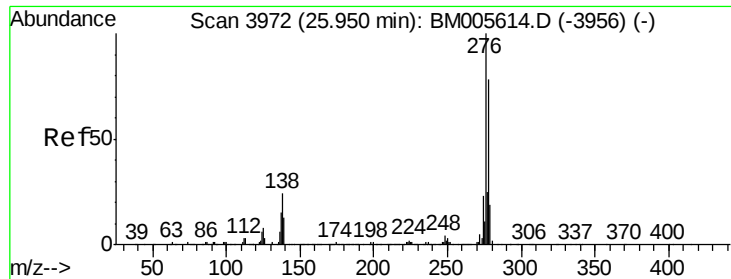
umangi  
5/24/2016 7:41:45 PM



#88  
Benzo(a)pyrene  
Concen: 15.78 ng/ul  
RT: 23.53 min Scan# 3561  
Delta R.T. -0.01 min  
Lab File: BM005624.D  
Acq: 24 May 2016 00:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.5  | 17.6  | 26.4  |
| 125     | 10.6  | 7.6   | 11.4  |





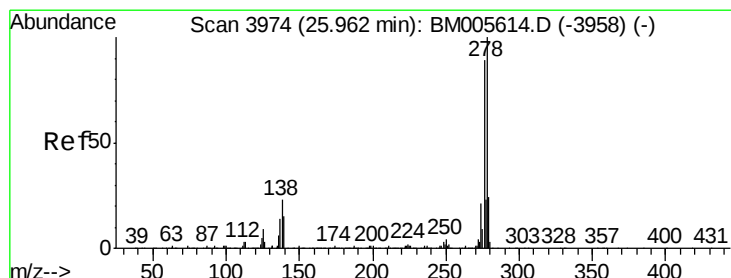
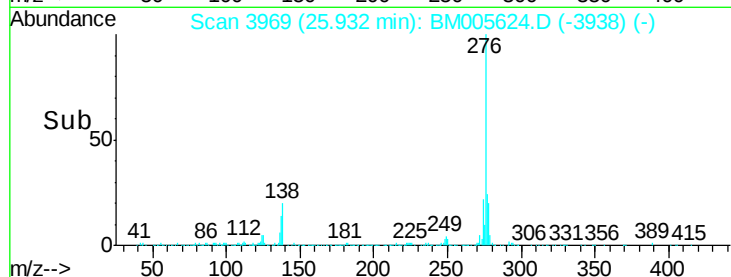
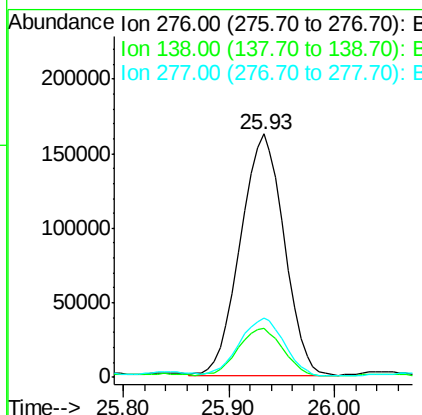
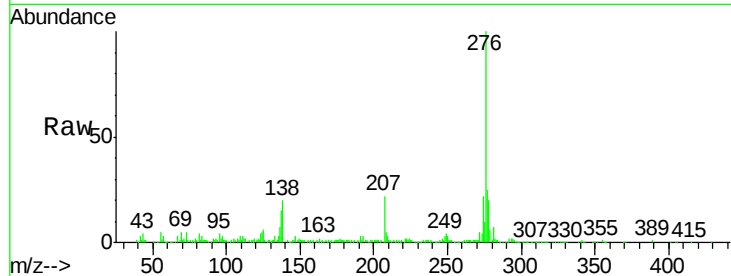
#89  
 Indeno(1,2,3-cd)pyrene  
 Concen: 7.23 ng/ul  
 RT: 25.93 min Scan# 3969  
 Delta R.T. -0.02 min  
 Lab File: BM005624.D  
 Acq: 24 May 2016 00:12

Instrument :  
 BNA\_M  
 ClientSampleId :  
 JHKG2

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 20.2  | 16.9  | 25.3  |
| 277     | 24.6  | 20.2  | 30.4  |

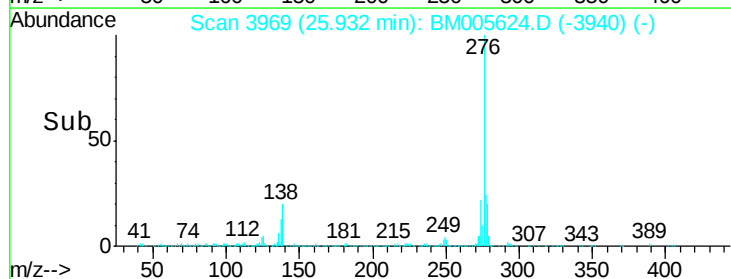
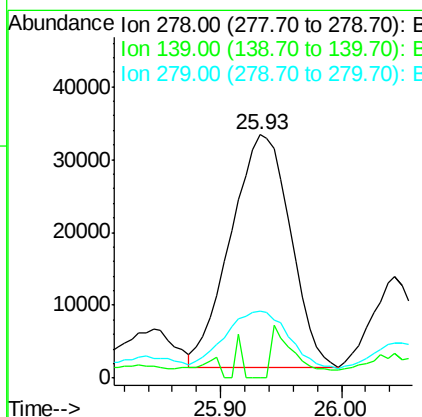
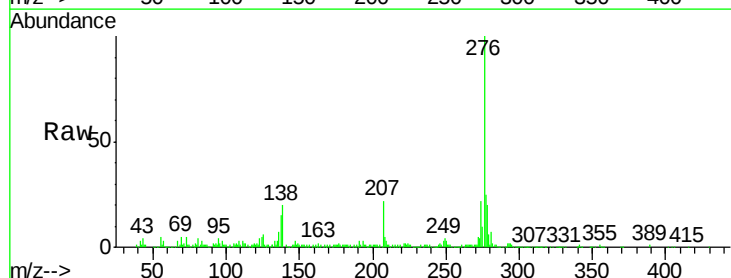
Manual Integrations  
 APPROVED

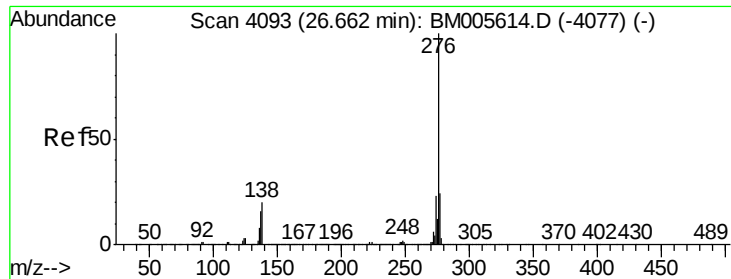
umangi  
 5/24/2016 7:41:45 PM



#90  
 Dibenzo(a,h)anthracene  
 Concen: 2.05 ng/ul  
 RT: 25.93 min Scan# 3969  
 Delta R.T. -0.03 min  
 Lab File: BM005624.D  
 Acq: 24 May 2016 00:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 11.8  | 17.6# |
| 279     | 27.7  | 19.4  | 29.2  |





#91  
 Benzo(g,h,i)perylene  
 Concen: 7.73 ng/ul  
 RT: 26.64 min Scan# 4089  
 Delta R.T. -0.02 min  
 Lab File: BM005624.D  
 Acq: 24 May 2016 00:12

Instrument :  
 BNA\_M  
 ClientSampleId :  
 JHKG2

|     |       |       |       |        |
|-----|-------|-------|-------|--------|
| Tgt | Ion   | 276   | Resp: | 416636 |
| Ion | Ratio | Lower | Upper |        |
| 276 | 100   |       |       |        |
| 138 | 22.0  | 15.0  | 22.6  |        |
| 277 | 24.5  | 18.6  | 28.0  |        |

Manual Integrations  
 APPROVED

umangi  
 5/24/2016 7:41:45 PM

