

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM081316\  
 Data File : BM007101.D  
 Acq On : 14 Aug 2016 11:01  
 Operator : UM/SJ  
 Sample : H4387-17  
 Misc :  
 ALS Vial : 66 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 P003-SS004-1218-01

Manual Integrations  
 APPROVED

sohil  
 8/15/2016 6:55:14 PM

Quant Time: Aug 15 14:28:16 2016  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM081116.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Aug 15 10:34:14 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.81  | 152  | 295664   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.60 | 136  | 1194466  | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.44 | 164  | 688022   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.18 | 188  | 1631909  | 20.00 | ng/ul | 0.00     |
| 75) Chrysene-d12          | 21.36 | 240  | 2051628  | 20.00 | ng/ul | 0.00     |
| 83) Perylene-d12          | 23.64 | 264  | 2224888  | 20.00 | ng/ul | -0.01    |

## System Monitoring Compounds

|                                |       |     |         |       |       |       |
|--------------------------------|-------|-----|---------|-------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.32  | 96  | 34013   | 5.03  | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.97  | 99  | 691115  | 28.85 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.15  | 67  | 403479  | 29.39 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.35  | 132 | 561416  | 29.43 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.50  | 113 | 507443  | 25.75 | ng/ul | -0.01 |
| 19) Nitrobenzene-d5            | 8.96  | 128 | 271161  | 31.26 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.68  | 143 | 307826  | 33.21 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 10.21 | 165 | 575119  | 29.62 | ng/ul | -0.01 |
| 29) 4-Chloroaniline-d4         | 10.73 | 131 | 639234  | 27.67 | ng/ul | 0.00  |
| 43) Dimethylphthalate-d6       | 13.85 | 166 | 1744154 | 30.68 | ng/ul | 0.00  |
| 46) Acenaphthylene-d8          | 14.13 | 160 | 2158752 | 31.61 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.63 | 143 | 277697  | 27.25 | ng/ul | 0.00  |
| 57) Fluorene-d10               | 15.43 | 176 | 1548490 | 31.16 | ng/ul | 0.00  |
| 62) 4,6-Dinitro-2-methylphenol | 15.55 | 200 | 232244  | 25.75 | ng/ul | 0.00  |
| 70) Anthracene-d10             | 17.28 | 188 | 2368123 | 31.32 | ng/ul | 0.00  |
| 76) Pyrene-d10                 | 19.57 | 212 | 2887525 | 33.34 | ng/ul | 0.00  |
| 87) Benzo(a)pyrene-d12         | 23.49 | 264 | 3328612 | 32.71 | ng/ul | -0.01 |

## Target Compounds

|                            |       |     |         |             | Qvalue |
|----------------------------|-------|-----|---------|-------------|--------|
| 6) Phenol                  | 7.00  | 94  | 53773   | 2.13 ng/ul  | 95     |
| 44) Dimethylphthalate      | 13.90 | 163 | 1403399 | 24.70 ng/ul | 100    |
| 47) Acenaphthylene         | 14.16 | 152 | 113000  | 1.61 ng/ul  | 97     |
| 69) Phenanthrene           | 17.22 | 178 | 413535  | 4.71 ng/ul  | 98     |
| 71) Anthracene             | 17.32 | 178 | 96753   | 1.07 ng/ul  | 98     |
| 74) Fluoranthene           | 19.24 | 202 | 663903  | 6.24 ng/ul  | 99     |
| 77) Pyrene                 | 19.60 | 202 | 928589  | 8.19 ng/ul  | 99     |
| 80) Benzo(a)anthracene     | 21.34 | 228 | 468001  | 3.86 ng/ul  | 93     |
| 82) Chrysene               | 21.40 | 228 | 509175  | 4.60 ng/ul  | 95     |
| 85) Benzo(b)fluoranthene   | 22.95 | 252 | 572385  | 4.27 ng/ul  | 98     |
| 86) Benzo(k)fluoranthene   | 22.99 | 252 | 155664m | 1.24 ng/ul  |        |
| 88) Benzo(a)pyrene         | 23.54 | 252 | 455263  | 3.58 ng/ul  | 98     |
| 89) Indeno(1,2,3-cd)pyrene | 25.93 | 276 | 300274  | 1.93 ng/ul  | 99     |
| 91) Benzo(g,h,i)perylene   | 26.63 | 276 | 289378  | 2.20 ng/ul  | 98     |

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

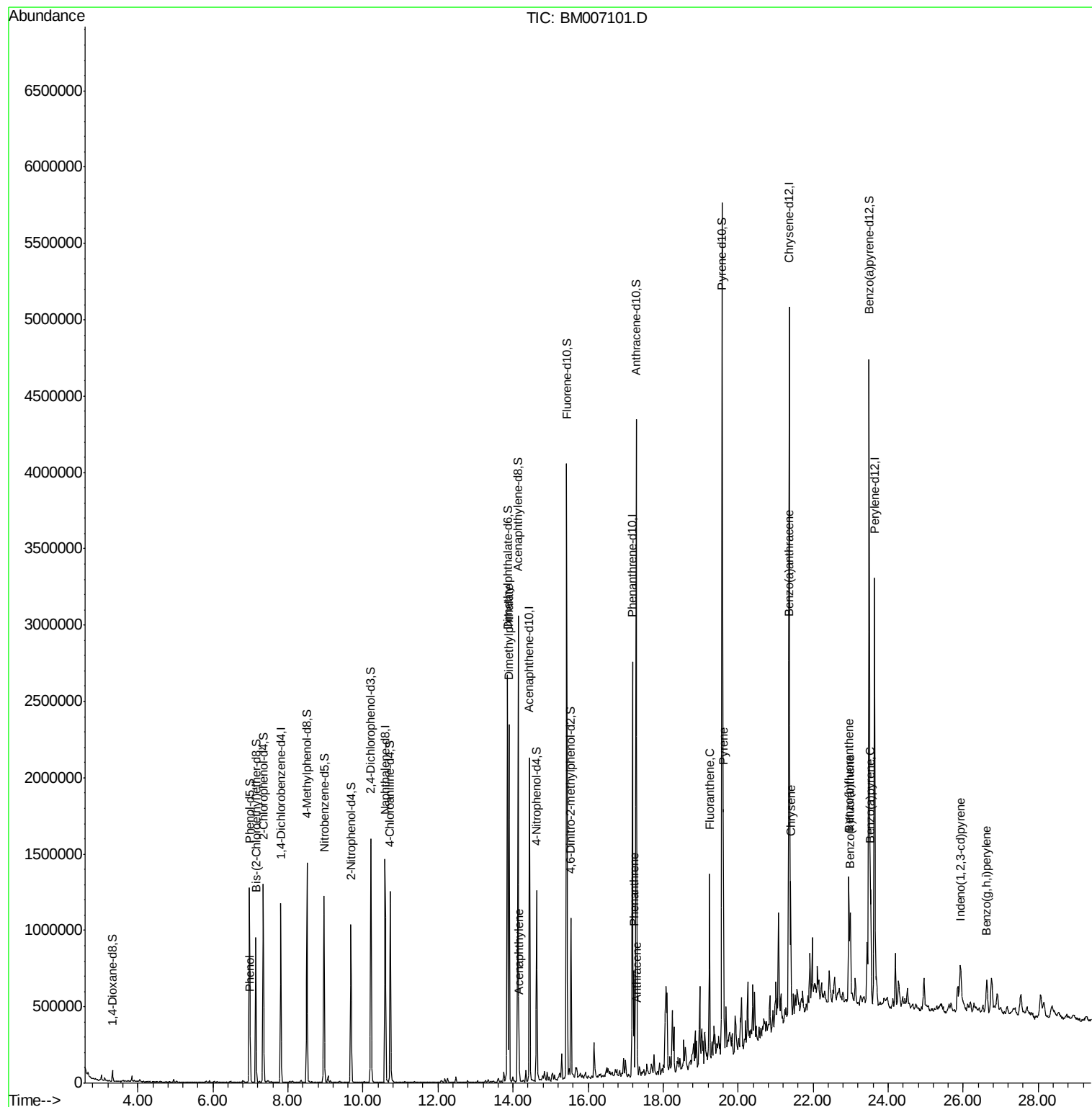
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM081316\  
Data File : BM007101.D  
Acq On : 14 Aug 2016 11:01  
Operator : UM/SJ  
Sample : H4387-17  
Misc :  
ALS Vial : 66 Sample Multiplier: 1

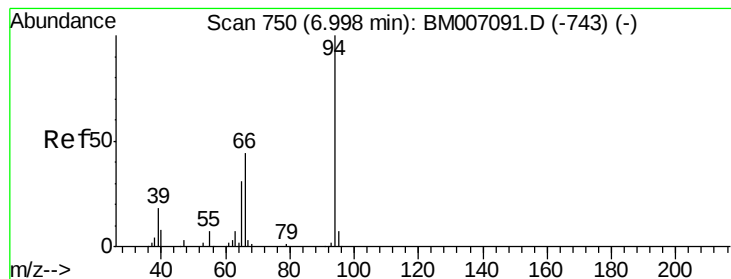
Instrument :  
BNA\_M  
ClientSampleId :  
P003-SS004-1218-01

Manual Integrations  
APPROVED

sohil  
8/15/2016 6:55:14 PM

Quant Time: Aug 15 14:28:16 2016  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM081116.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon Aug 15 10:34:14 2016  
Response via : Initial Calibration





#6

Phenol

Concen: 2.13 ng/ul

RT: 7.00 min Scan# 750

Delta R.T. -0.01 min

Lab File: BM007101.D

Acq: 14 Aug 2016 11:01

Instrument :

BNA\_M

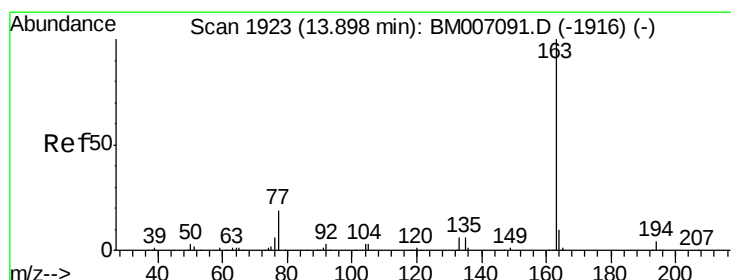
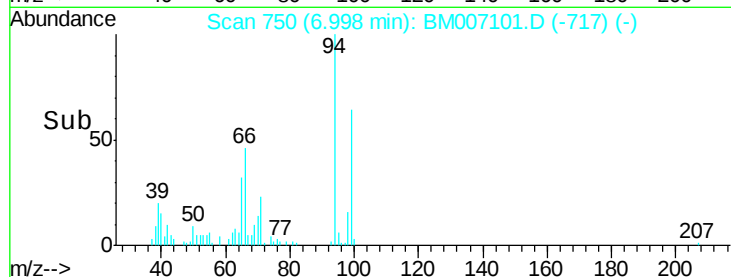
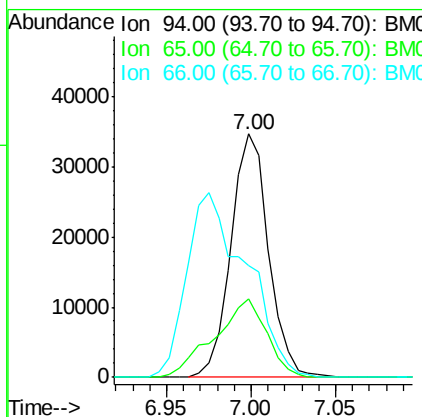
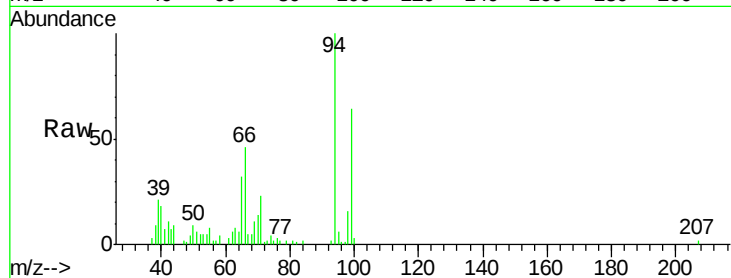
ClientSampleId :

P003-SS004-1218-01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 94    | Resp: | 53773 |
| Ion Ratio | Lower | Upper |       |
| 94        | 100   |       |       |
| 65        | 32.0  | 23.9  | 35.9  |
| 66        | 45.9  | 33.5  | 50.3  |

Manual Integrations  
APPROVED

sohil  
8/15/2016 6:55:14 PM



#44

Dimethylphthalate

Concen: 24.70 ng/ul

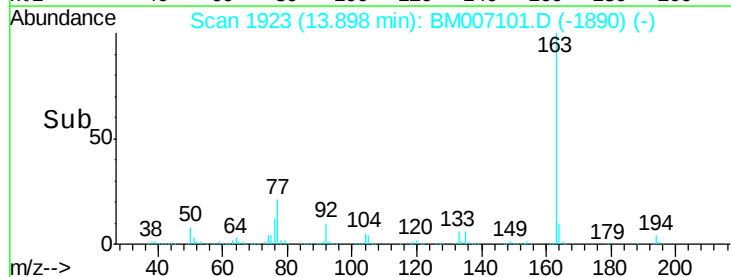
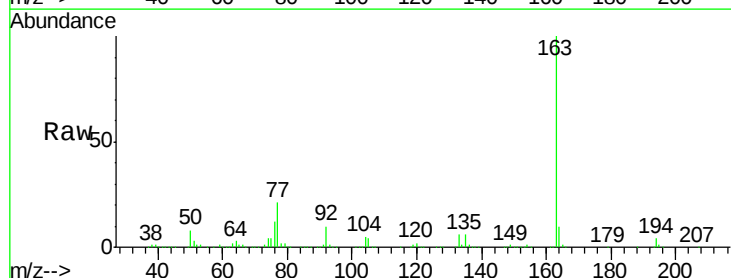
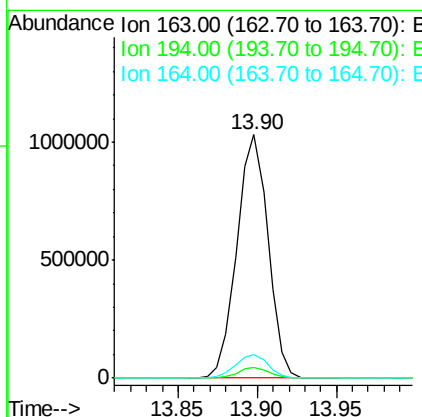
RT: 13.90 min Scan# 1923

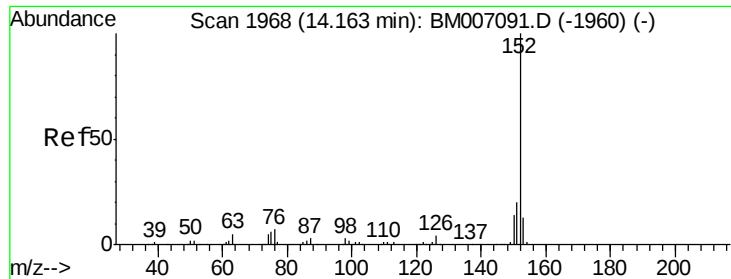
Delta R.T. -0.01 min

Lab File: BM007101.D

Acq: 14 Aug 2016 11:01

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 163   | Resp: | 1403399 |
| Ion Ratio | Lower | Upper |         |
| 163       | 100   |       |         |
| 194       | 4.2   | 3.4   | 5.2     |
| 164       | 9.9   | 7.8   | 11.8    |





#47

Acenaphthylene

Concen: 1.61 ng/ul

RT: 14.16 min Scan# 1968

Delta R.T. -0.01 min

Lab File: BM007101.D

Acq: 14 Aug 2016 11:01

Instrument :

BNA\_M

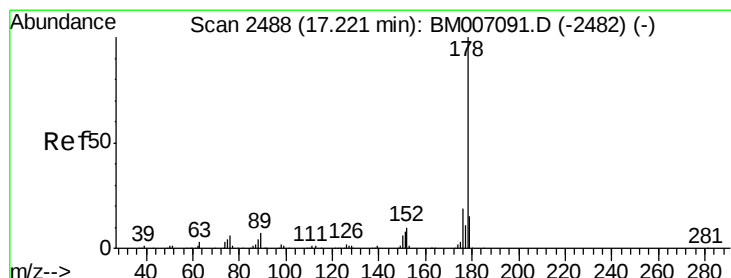
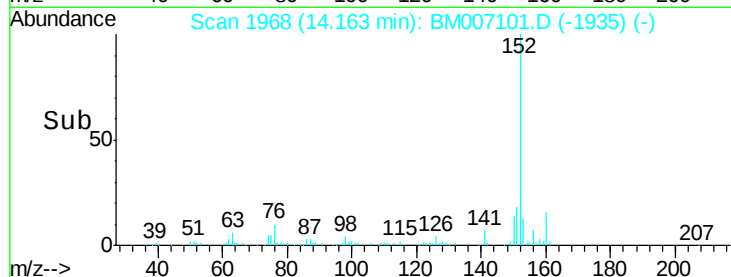
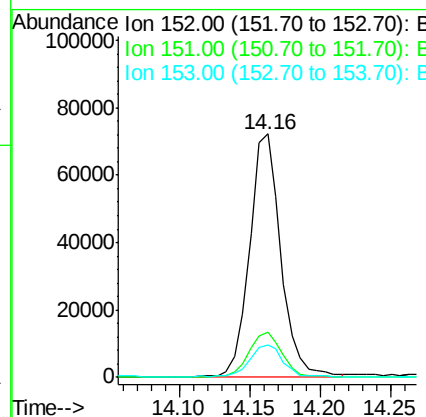
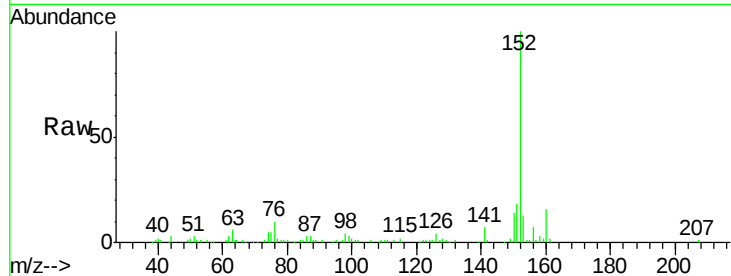
ClientSampleId :

P003-SS004-1218-01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 18.5  | 16.0  | 24.0  |
| 153     | 13.2  | 11.0  | 16.6  |

Manual Integrations  
APPROVED

sohil  
8/15/2016 6:55:14 PM



#69

Phenanthrene

Concen: 4.71 ng/ul

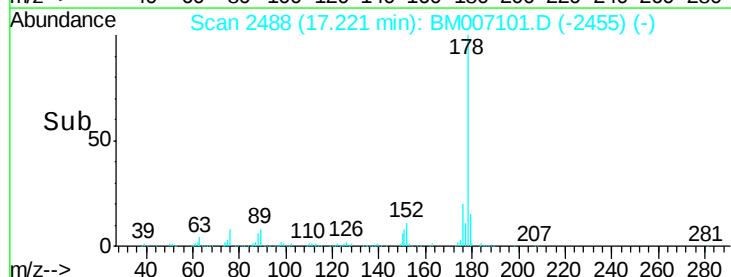
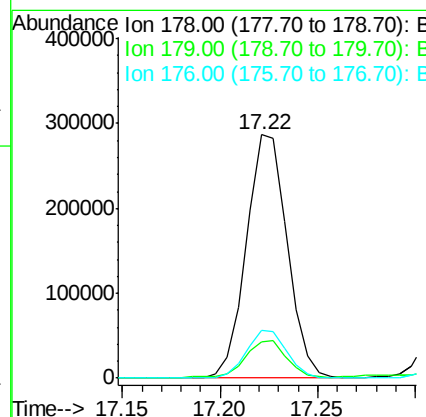
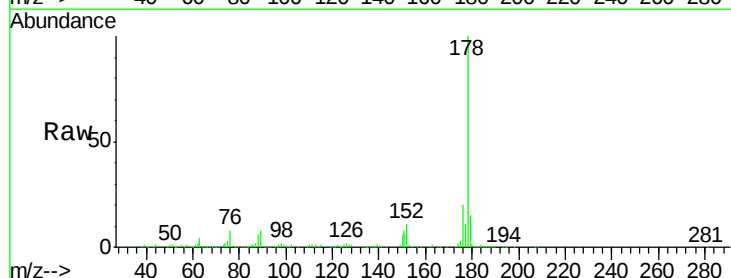
RT: 17.22 min Scan# 2488

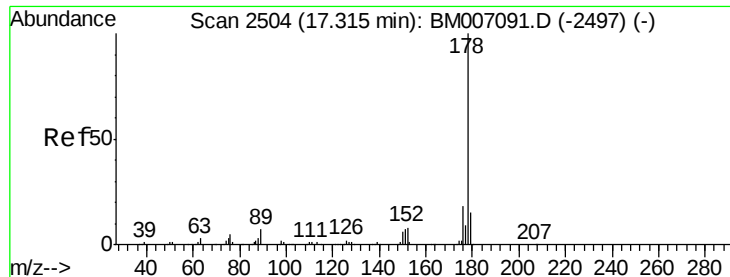
Delta R.T. -0.01 min

Lab File: BM007101.D

Acq: 14 Aug 2016 11:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 14.7  | 12.2  | 18.2  |
| 176     | 19.8  | 15.1  | 22.7  |





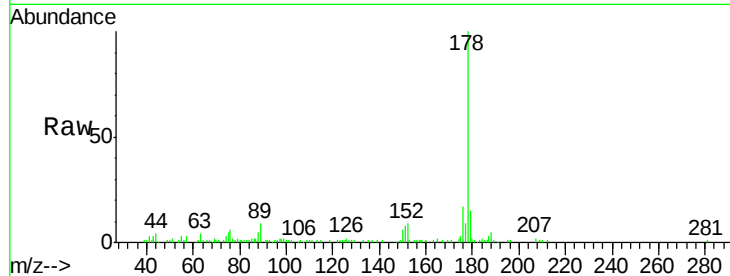
#71  
 Anthracene  
 Concen: 1.07 ng/ul  
 RT: 17.32 min Scan# 2504  
 Delta R.T. -0.01 min  
 Lab File: BM007101.D  
 Acq: 14 Aug 2016 11:01

Instrument :  
 BNA\_M  
 ClientSampleId :  
 P003-SS004-1218-01

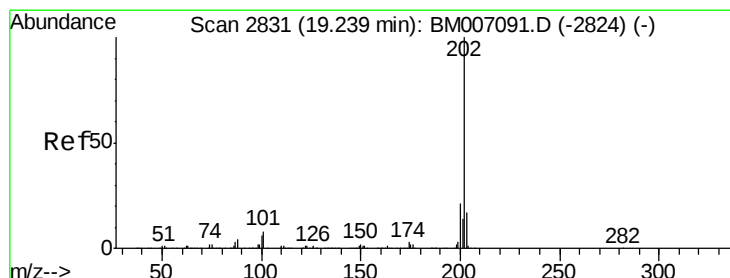
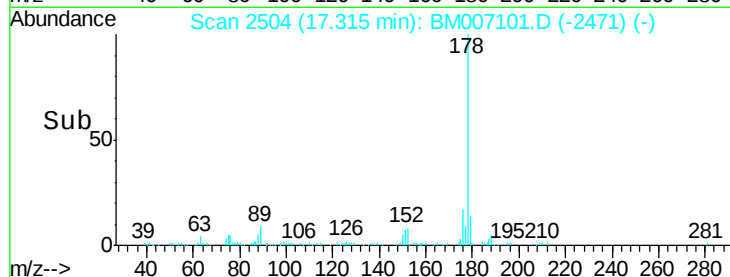
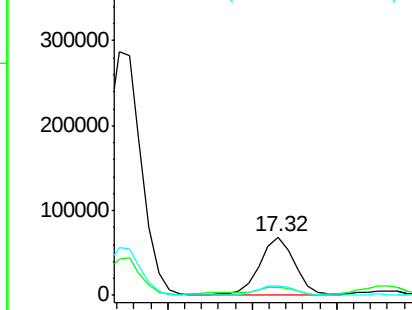
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 96753 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 179       | 14.7  | 12.1  | 18.1  |
| 176       | 17.1  | 14.5  | 21.7  |

Manual Integrations  
 APPROVED

sohil  
 8/15/2016 6:55:14 PM



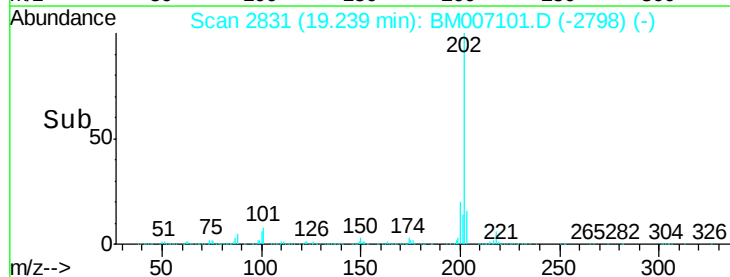
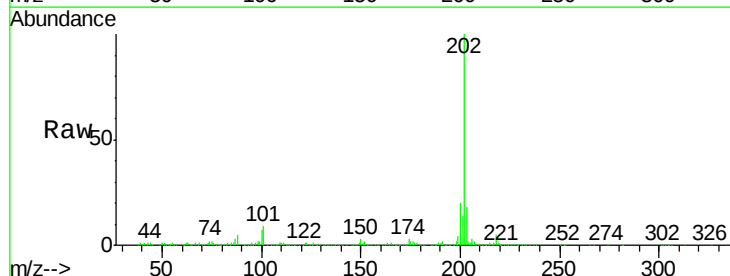
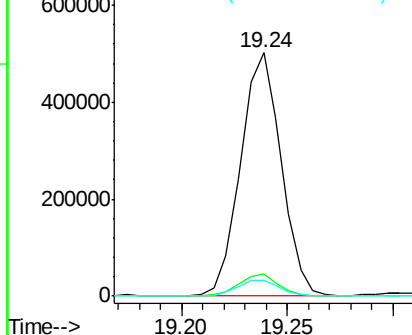
Abundance Ion 178.00 (177.70 to 178.70): E  
 Ion 179.00 (178.70 to 179.70): E  
 Ion 176.00 (175.70 to 176.70): E

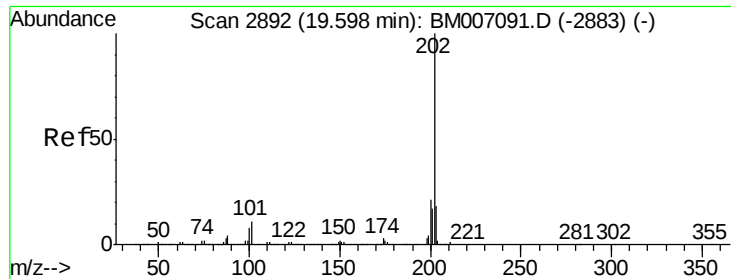


#74  
 Fluoranthene  
 Concen: 6.24 ng/ul  
 RT: 19.24 min Scan# 2831  
 Delta R.T. -0.01 min  
 Lab File: BM007101.D  
 Acq: 14 Aug 2016 11:01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 663903 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 9.0   | 6.9   | 10.3   |
| 100       | 6.7   | 5.4   | 8.0    |

Abundance Ion 202.00 (201.70 to 202.70): E  
 Ion 101.00 (100.70 to 101.70): E  
 Ion 100.00 (99.70 to 100.70): B





#77

Pyrene

Concen: 8.19 ng/ul

RT: 19.60 min Scan# 2893

Delta R.T. -0.01 min

Lab File: BM007101.D

Acq: 14 Aug 2016 11:01

Instrument :

BNA\_M

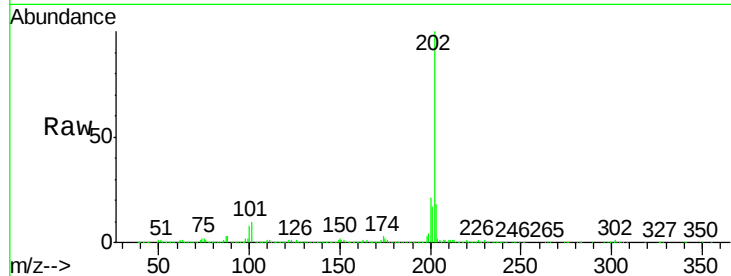
ClientSampleId :

P003-SS004-1218-01

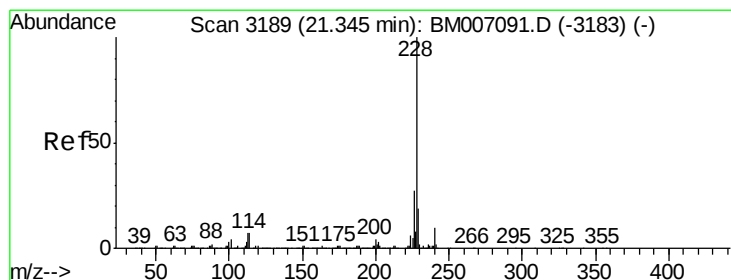
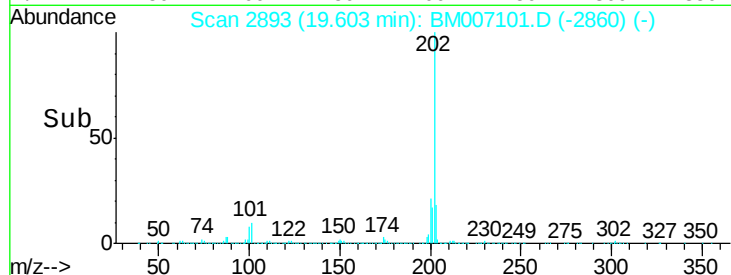
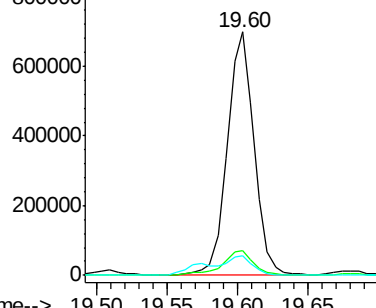
| Tgt | Ion  | Ratio | Resp   | Lower | Upper |
|-----|------|-------|--------|-------|-------|
| 202 | 100  |       | 928589 |       |       |
| 101 | 10.0 |       | 8.4    | 12.6  |       |
| 100 | 8.3  |       | 6.9    | 10.3  |       |

Manual Integrations  
APPROVED

sohil  
8/15/2016 6:55:14 PM



Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 100.00 (99.70 to 100.70): B



#80

Benzo(a)anthracene

Concen: 3.86 ng/ul

RT: 21.34 min Scan# 3189

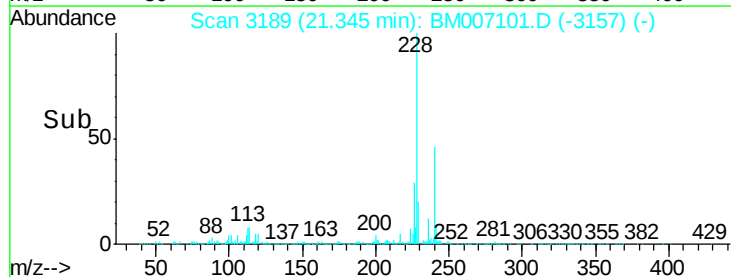
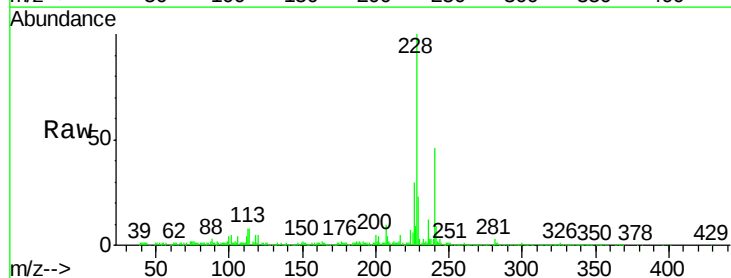
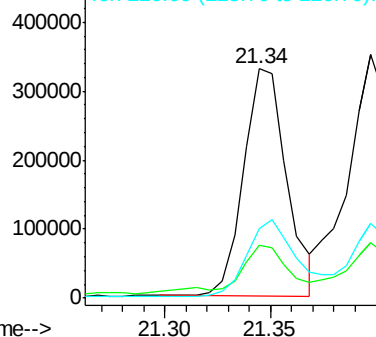
Delta R.T. -0.01 min

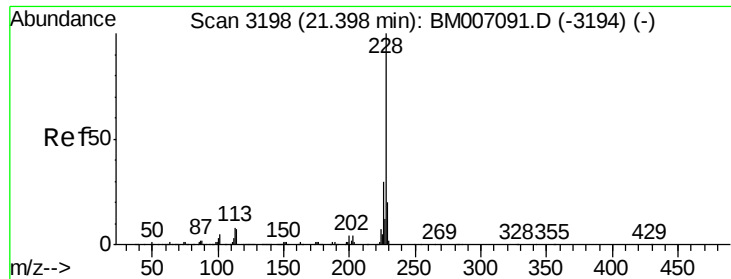
Lab File: BM007101.D

Acq: 14 Aug 2016 11:01

| Tgt | Ion  | Ratio | Resp   | Lower | Upper |
|-----|------|-------|--------|-------|-------|
| 228 | 100  |       | 468001 |       |       |
| 229 | 23.2 |       | 15.6   | 23.4  |       |
| 226 | 30.3 |       | 21.8   | 32.8  |       |

Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 229.00 (228.70 to 229.70): E  
Ion 226.00 (225.70 to 226.70): E





#82

Chrysene

Concen: 4.60 ng/ul

RT: 21.40 min Scan# 3198

Delta R.T. -0.01 min

Lab File: BM007101.D

Acq: 14 Aug 2016 11:01

Instrument :

BNA\_M

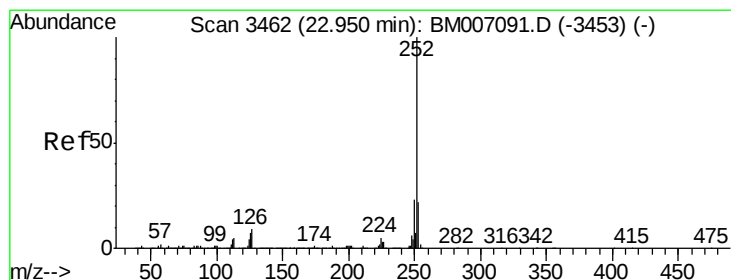
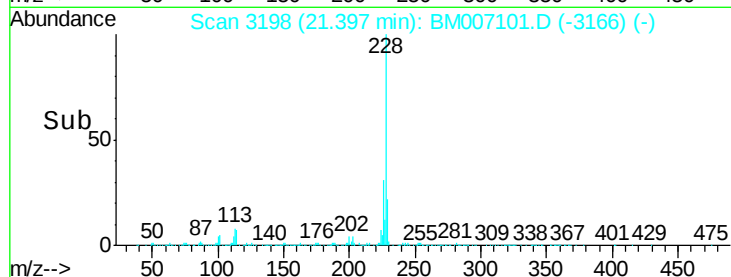
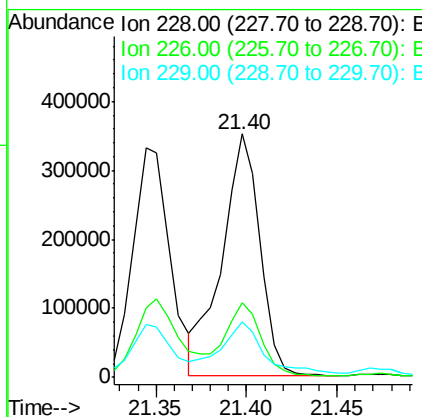
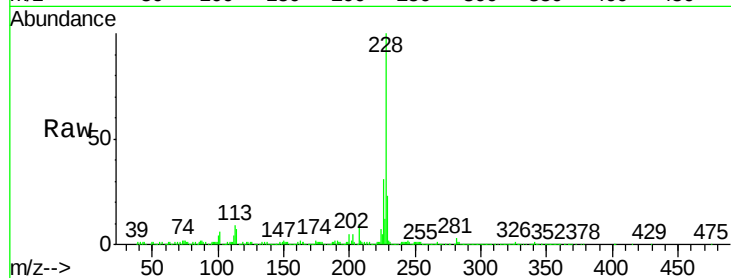
ClientSampleId :

P003-SS004-1218-01

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 228  | Resp: | 509175 |
| Ion Ratio |      | Lower | Upper  |
| 228       | 100  |       |        |
| 226       | 30.8 | 23.4  | 35.2   |
| 229       | 22.6 | 15.5  | 23.3   |

Manual Integrations  
APPROVED

sohil  
8/15/2016 6:55:14 PM



#85

Benzo(b)fluoranthene

Concen: 4.27 ng/ul

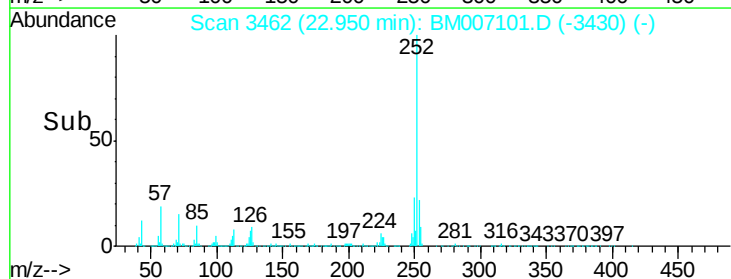
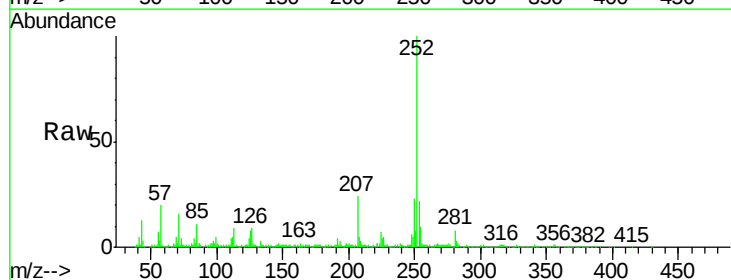
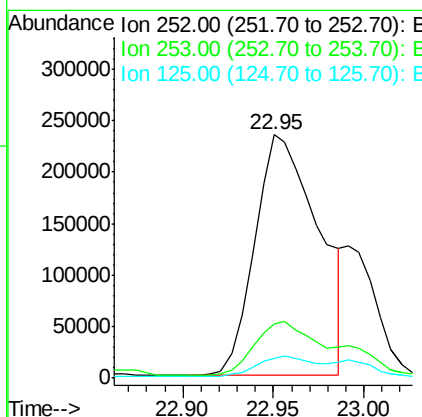
RT: 22.95 min Scan# 3462

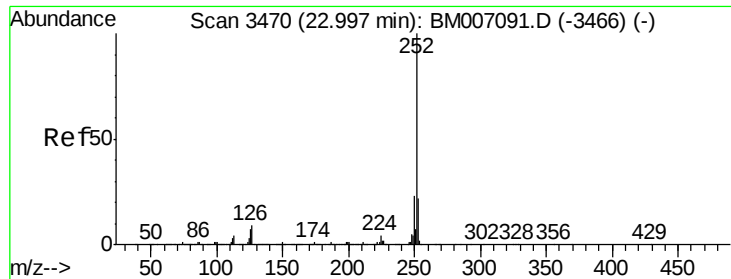
Delta R.T. -0.01 min

Lab File: BM007101.D

Acq: 14 Aug 2016 11:01

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 252  | Resp: | 572385 |
| Ion Ratio |      | Lower | Upper  |
| 252       | 100  |       |        |
| 253       | 22.4 | 17.1  | 25.7   |
| 125       | 8.0  | 5.8   | 8.8    |





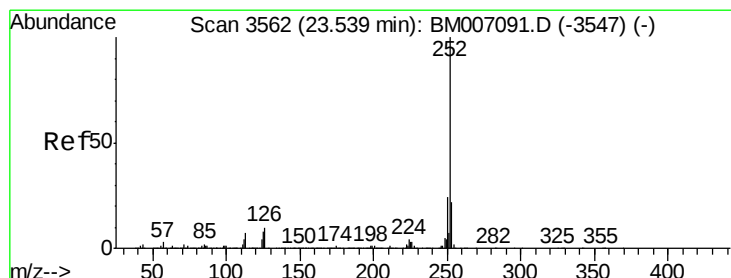
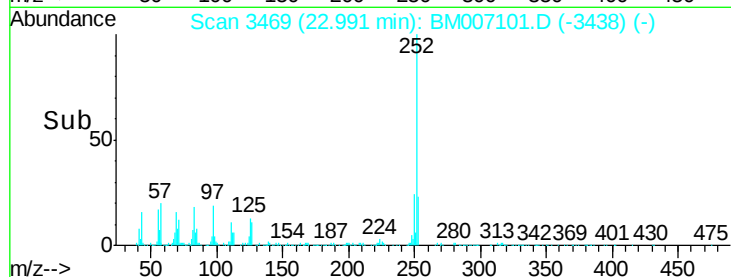
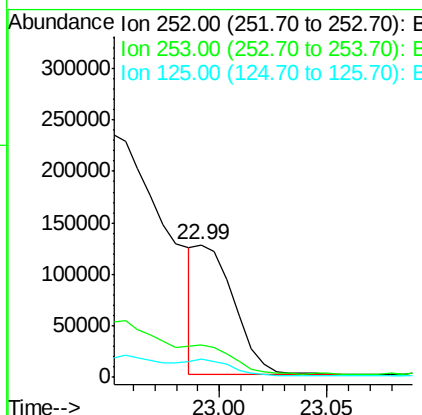
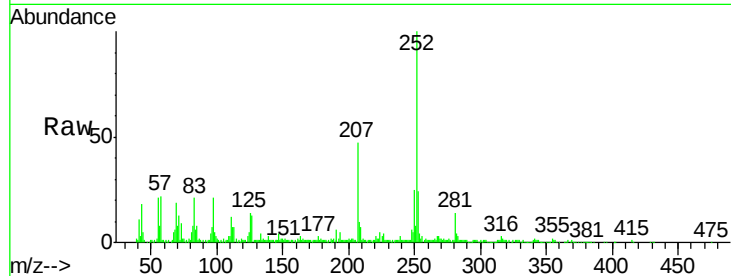
#86  
Benzo(k)fluoranthene  
Concen: 1.24 ng/ul m  
RT: 22.99 min Scan# 3469  
Delta R.T. -0.02 min  
Lab File: BM007101.D  
Acq: 14 Aug 2016 11:01

Instrument :  
BNA\_M  
ClientSampleId :  
P003-SS004-1218-01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.4  | 17.6  | 26.4  |
| 125     | 13.9  | 5.7   | 8.5#  |

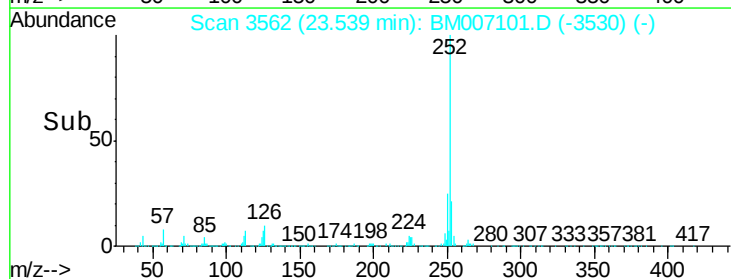
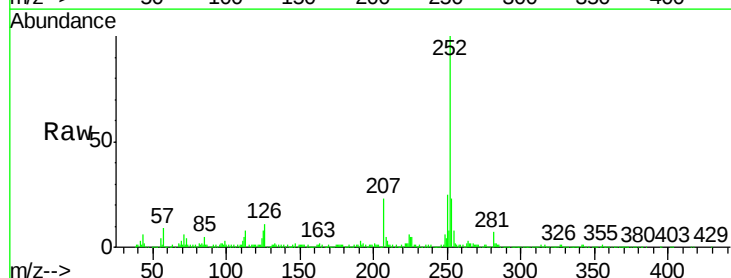
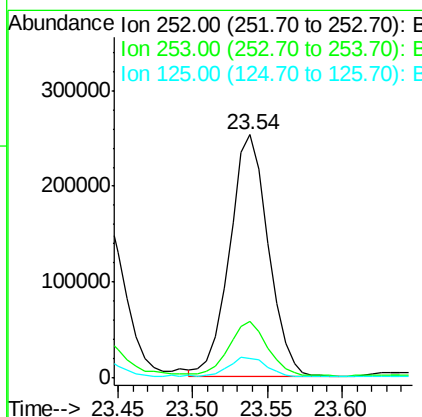
Manual Integrations  
APPROVED

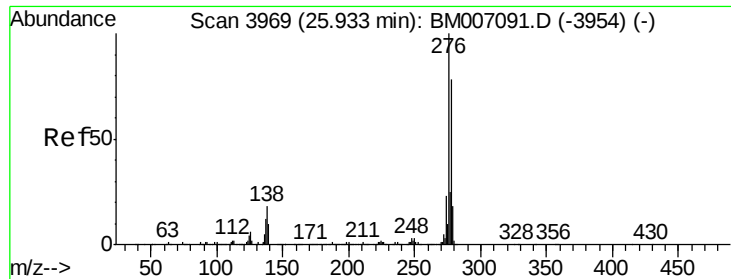
sohil  
8/15/2016 6:55:14 PM



#88  
Benzo(a)pyrene  
Concen: 3.58 ng/ul  
RT: 23.54 min Scan# 3562  
Delta R.T. -0.01 min  
Lab File: BM007101.D  
Acq: 14 Aug 2016 11:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.1  | 17.7  | 26.5  |
| 125     | 7.9   | 6.6   | 9.8   |





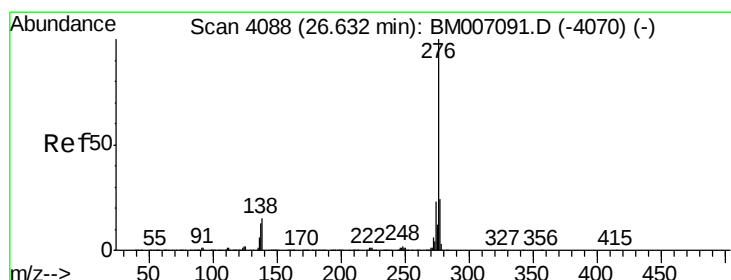
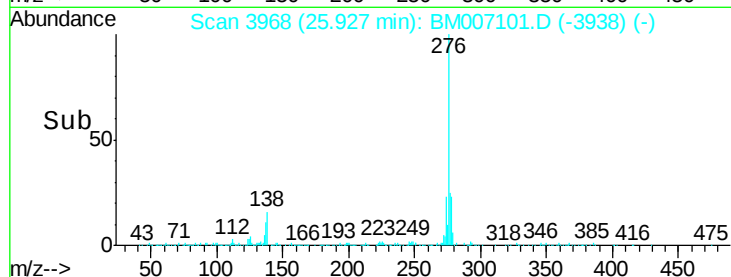
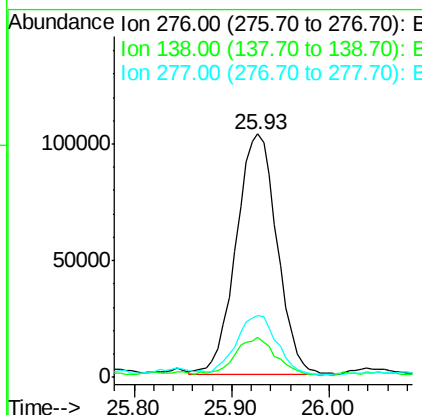
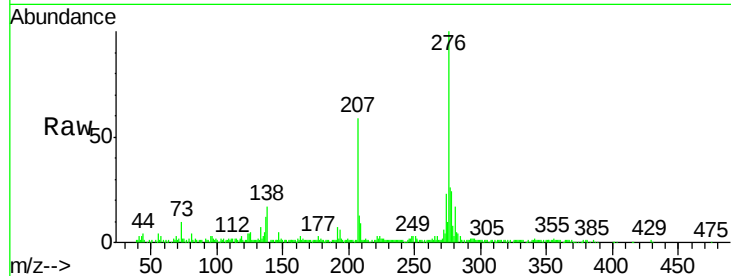
#89  
 Indeno(1,2,3-cd)pyrene  
 Concen: 1.93 ng/ul  
 RT: 25.93 min Scan# 3968  
 Delta R.T. -0.02 min  
 Lab File: BM007101.D  
 Acq: 14 Aug 2016 11:01

Instrument :  
 BNA\_M  
 ClientSampleId :  
 P003-SS004-1218-01

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 276     | 100   |            |            |
| 138     | 16.6  | 13.9       | 20.9       |
| 277     | 25.7  | 20.1       | 30.1       |

Manual Integrations  
 APPROVED

sohil  
 8/15/2016 6:55:14 PM



#91  
 Benzo(g,h,i)perylene  
 Concen: 2.20 ng/ul  
 RT: 26.63 min Scan# 4088  
 Delta R.T. -0.02 min  
 Lab File: BM007101.D  
 Acq: 14 Aug 2016 11:01

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 276     | 100   |            |            |
| 138     | 17.1  | 13.5       | 20.3       |
| 277     | 26.0  | 19.3       | 28.9       |

