

Data Path : Z:\HPCHEM1\BNA M\DATA\BM060716\  
 Data File : BM005694.D  
 Acq On : 07 Jun 2016 16:09  
 Operator : UM/SJ  
 Sample : H3412-02  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9XS3

Manual Integrations  
 APPROVED

sohil  
 6/8/2016 7:16:04 PM

Quant Time: Jun 08 01:38:56 2016  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM060216.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Jun 08 01:24:32 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.76  | 152  | 140349   | 20.00 | ng/ul | 0.00     |
| 7) Naphthalene-d8         | 10.55 | 136  | 755301   | 20.00 | ng/ul | 0.00     |
| 15) Acenaphthene-d10      | 14.40 | 164  | 459272   | 20.00 | ng/ul | 0.00     |
| 23) Phenanthrene-d10      | 17.14 | 188  | 1011258  | 20.00 | ng/ul | 0.00     |
| 29) Chrysene-d12          | 21.33 | 240  | 895055   | 20.00 | ng/ul | 0.00     |
| 34) Perylene-d12          | 23.59 | 264  | 769692   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 2) 1,4-Dioxane-d8              | 3.20  | 96  | 2489   | 0.75  | ng/uL | 0.00 |
| 3) Phenol-d5                   | 6.93  | 99  | 113409 | 9.19  | ng/ul | 0.00 |
| 4) Bis-(2-Chloroethyl)ether-d  | 7.09  | 67  | 74915  | 9.98  | ng/ul | 0.00 |
| 5) 2-Chlorophenol-d4           | 7.29  | 132 | 97609  | 9.59  | ng/ul | 0.00 |
| 6) 4-Methylphenol-d8           | 8.47  | 113 | 54878  | 5.62  | ng/ul | 0.00 |
| 8) Nitrobenzene-d5             | 8.92  | 128 | 51943  | 8.96  | ng/ul | 0.00 |
| 9) 2-Nitrophenol-d4            | 9.63  | 143 | 57029  | 9.19  | ng/ul | 0.00 |
| 10) 2,4-Dichlorophenol-d3      | 10.17 | 165 | 99380  | 9.01  | ng/ul | 0.00 |
| 12) 4-Chloroaniline-d4         | 10.69 | 131 | 58851  | 4.49  | ng/ul | 0.00 |
| 16) Dimethylphthalate-d6       | 13.80 | 166 | 324989 | 9.20  | ng/ul | 0.00 |
| 17) Acenaphthylene-d8          | 14.09 | 160 | 420305 | 9.15  | ng/ul | 0.00 |
| 20) 4-Nitrophenol-d4           | 14.63 | 143 | 33626  | 6.65  | ng/ul | 0.00 |
| 21) Fluorene-d10               | 15.39 | 176 | 294591 | 9.71  | ng/ul | 0.00 |
| 24) 4,6-Dinitro-2-methylphenol | 15.53 | 200 | 25681  | 5.39  | ng/ul | 0.00 |
| 26) Anthracene-d10             | 17.24 | 188 | 432254 | 9.00  | ng/ul | 0.00 |
| 30) Pyrene-d10                 | 19.54 | 212 | 458488 | 10.19 | ng/ul | 0.00 |
| 37) Benzo(a)pyrene-d12         | 23.44 | 264 | 293184 | 8.28  | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |         |       |        | Ovalue |
|----------------------------|-------|-----|---------|-------|--------|--------|
| 25) Phenanthrene           | 17.19 | 178 | 208207  | 3.73  | ng/ul  | 97     |
| 28) Fluoranthene           | 19.20 | 202 | 462749  | 8.11  | ng/ul  | 99     |
| 31) Pyrene                 | 19.57 | 202 | 514711  | 9.11  | ng/ul  | 97     |
| 32) Benzo(a)anthracene     | 21.31 | 228 | 290694  | 5.54  | ng/ul  | 96     |
| 33) Chrysene               | 21.36 | 228 | 324504  | 6.54  | ng/ul  | 96     |
| 35) Benzo(b)fluoranthene   | 22.91 | 252 | 704459  | 15.18 | ng/ul  | 98     |
| 36) Benzo(k)fluoranthene   | 22.95 | 252 | 181501m | 4.17  | ng/ul  |        |
| 38) Benzo(a)pyrene         | 23.49 | 252 | 346712  | 7.76  | ng/ul  | 96     |
| 39) Indeno(1,2,3-cd)pyrene | 25.88 | 276 | 249460  | 4.72  | ng/ul  | 96     |
| 40) Dibenzo(a,h)anthracene | 25.88 | 278 | 79267m  | 1.79  | ng/ul  |        |
| 41) Benzo(g,h,i)perylene   | 26.59 | 276 | 236118  | 5.32  | ng/ul# | 93     |

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

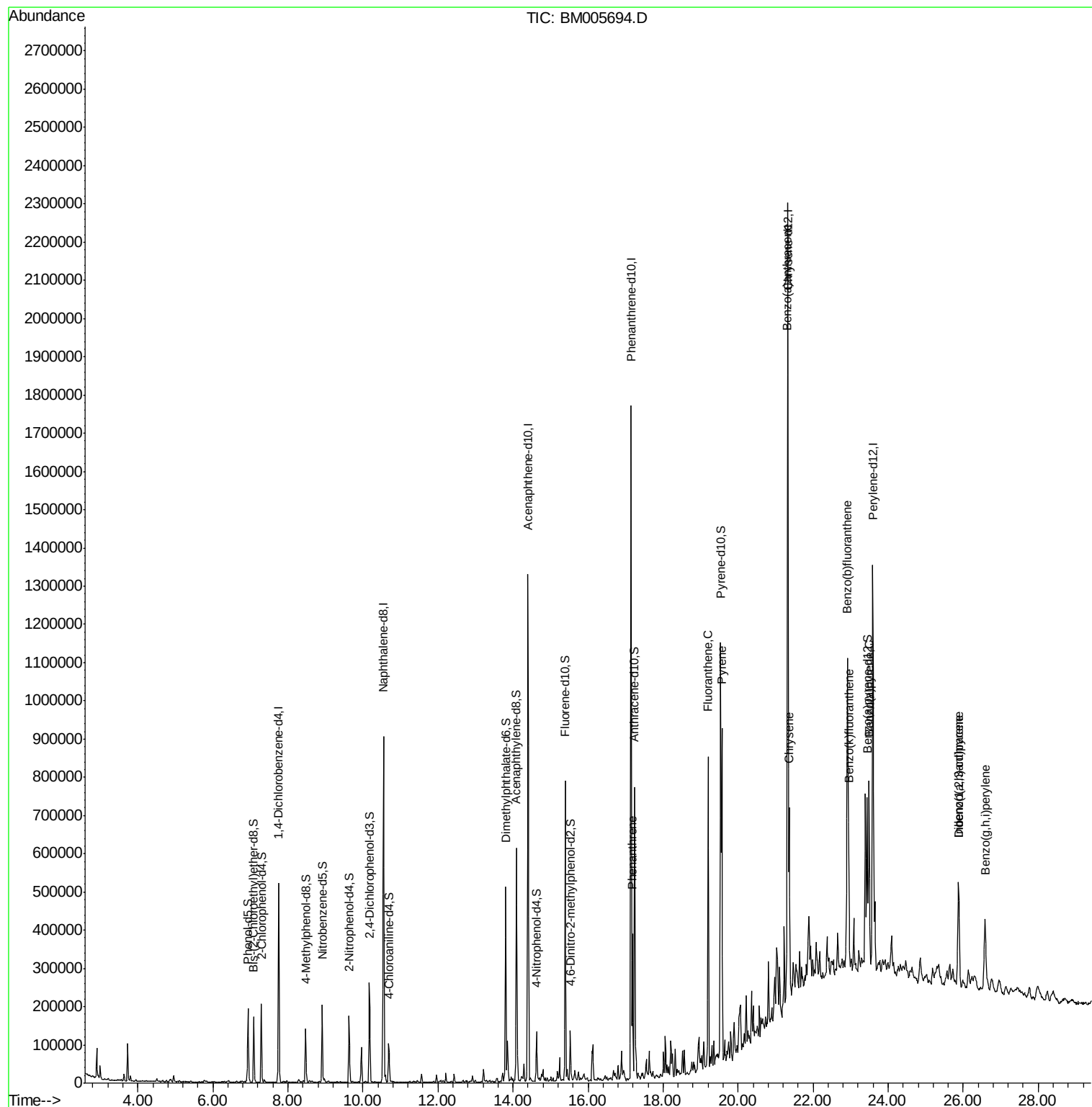
Data Path : Z:\HPCHEM1\BNA M\DATA\BM060716\  
Data File : BM005694.D  
Acq On : 07 Jun 2016 16:09  
Operator : UM/SJ  
Sample : H3412-02  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

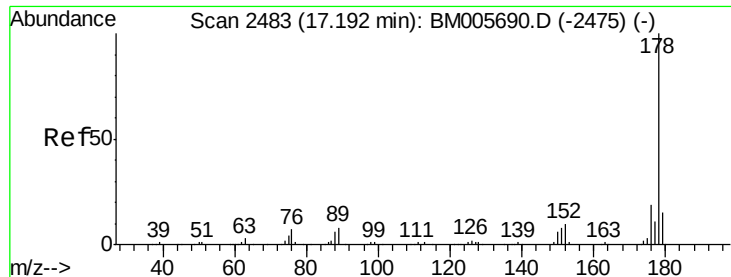
Instrument :  
BNA\_M  
ClientSampleId :  
D9XS3

Manual Integrations  
APPROVED

sohil  
6/8/2016 7:16:04 PM

Quant Time: Jun 08 01:38:56 2016  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM060216.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed Jun 08 01:24:32 2016  
Response via : Initial Calibration





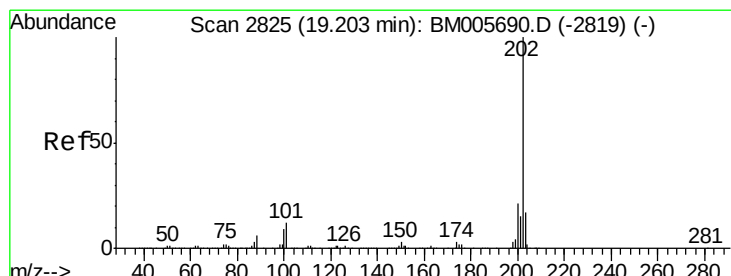
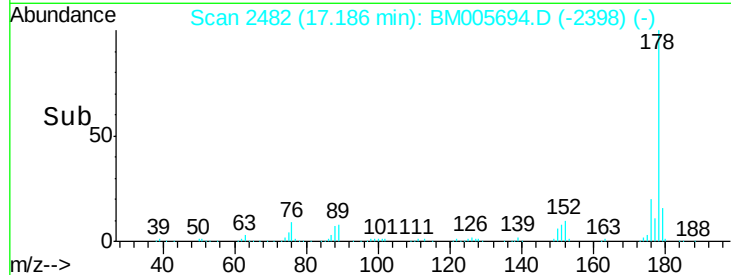
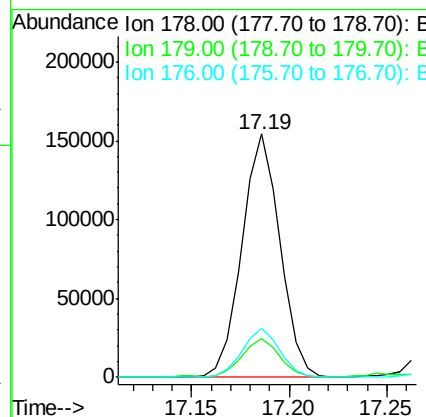
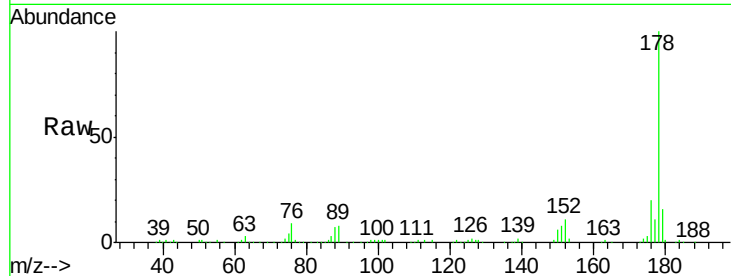
#25  
Phenanthrene  
Concen: 3.73 ng/ul  
RT: 17.19 min Scan# 2482  
Delta R.T. -0.01 min  
Lab File: BM005694.D  
Acq: 07 Jun 2016 16:09

Instrument :  
BNA\_M  
ClientSampleId :  
D9XS3

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.8  | 11.8  | 17.8  |
| 176     | 20.0  | 14.8  | 22.2  |

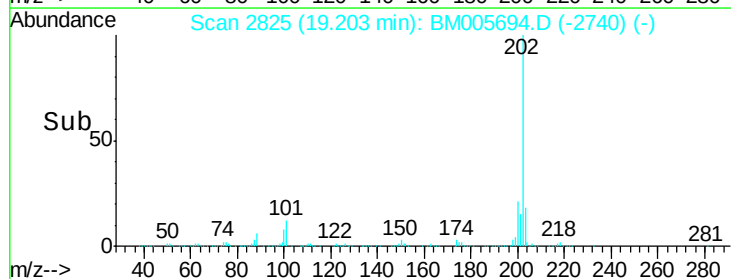
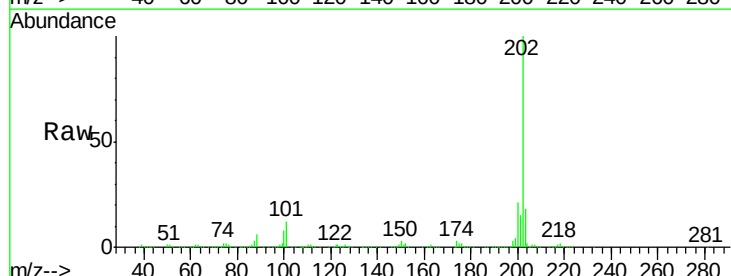
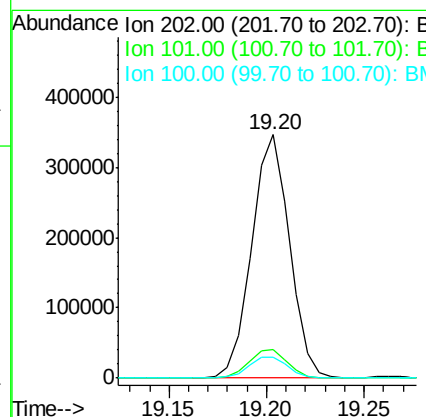
Manual Integrations  
APPROVED

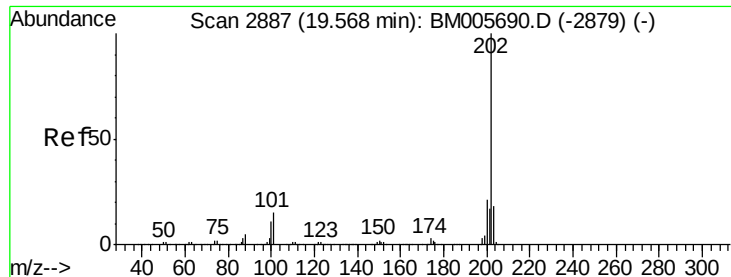
sohil  
6/8/2016 7:16:04 PM



#28  
Fluoranthene  
Concen: 8.11 ng/ul  
RT: 19.20 min Scan# 2825  
Delta R.T. 0.00 min  
Lab File: BM005694.D  
Acq: 07 Jun 2016 16:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.7  | 8.9   | 13.3  |
| 100     | 8.4   | 7.0   | 10.4  |





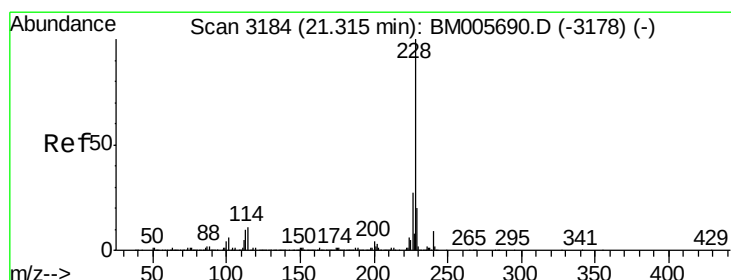
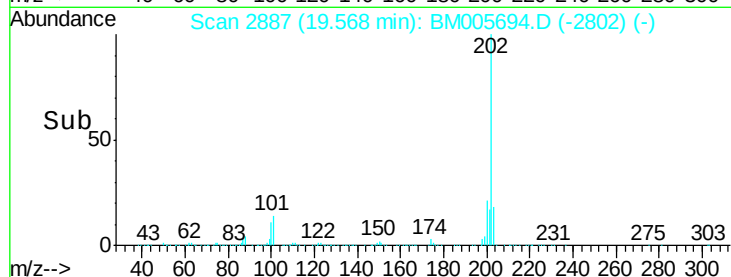
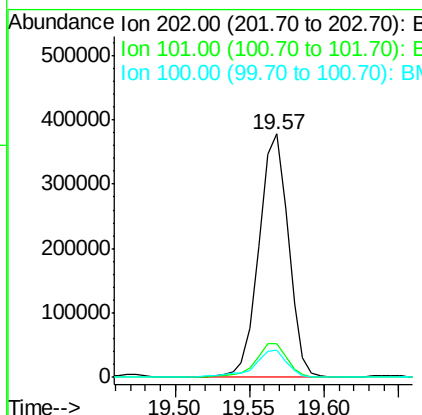
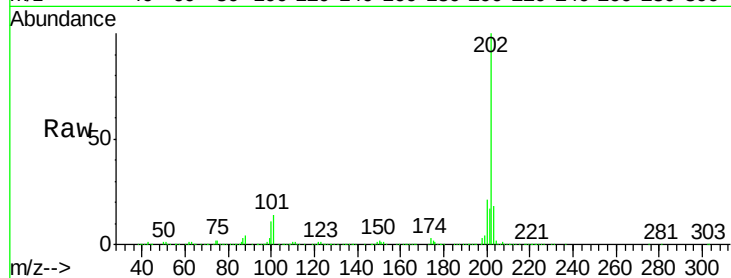
#31  
Pvrene  
Concen: 9.11 ng/ul  
RT: 19.57 min Scan# 2887  
Delta R.T. 0.00 min  
Lab File: BM005694.D  
Acq: 07 Jun 2016 16:09

Instrument :  
BNA\_M  
ClientSampleId :  
D9XS3

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 13.7  | 9.8        | 14.8  |
| 100     | 11.0  | 9.3        | 13.9  |

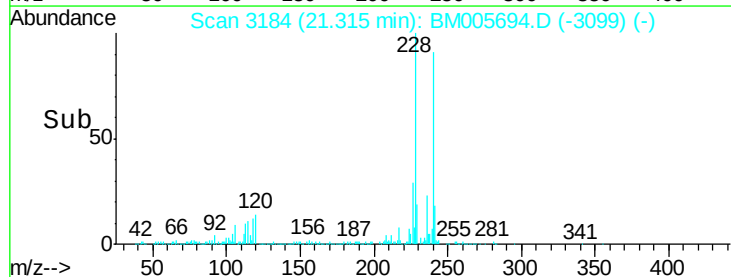
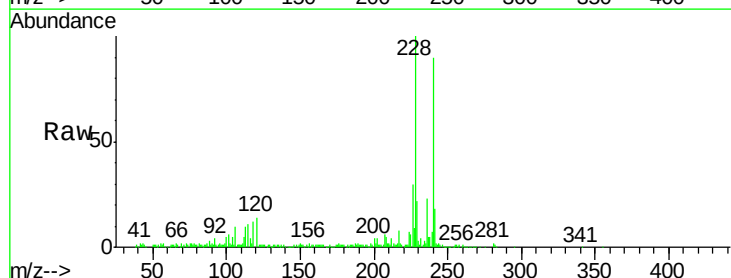
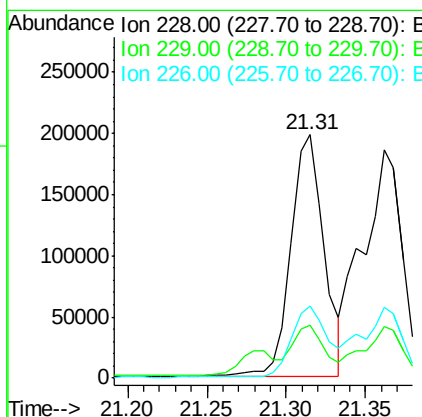
Manual Integrations  
APPROVED

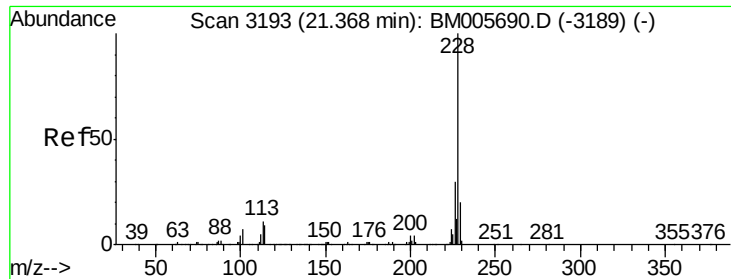
sohil  
6/8/2016 7:16:04 PM



#32  
Benzo(a)anthracene  
Concen: 5.54 ng/ul  
RT: 21.31 min Scan# 3184  
Delta R.T. 0.00 min  
Lab File: BM005694.D  
Acq: 07 Jun 2016 16:09

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 228     | 100   |            |       |
| 229     | 21.6  | 16.6       | 25.0  |
| 226     | 29.5  | 21.0       | 31.4  |





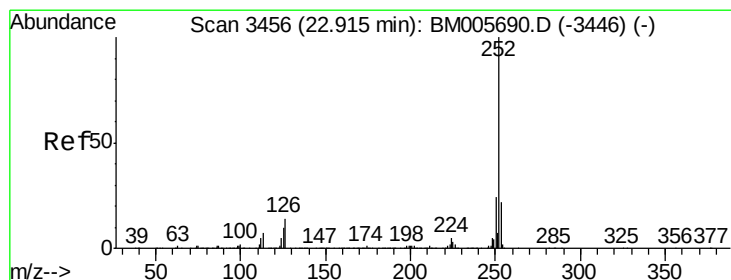
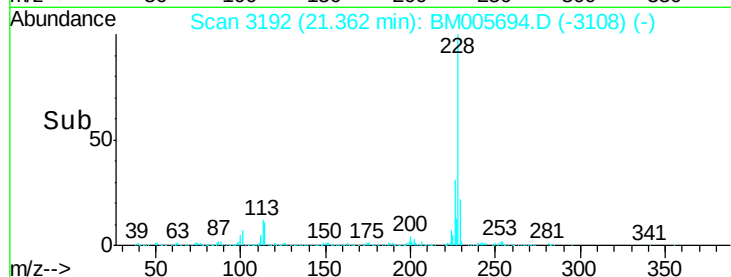
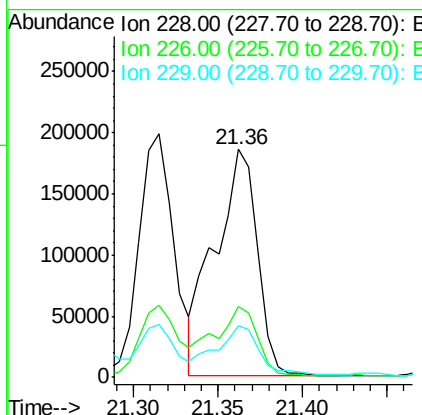
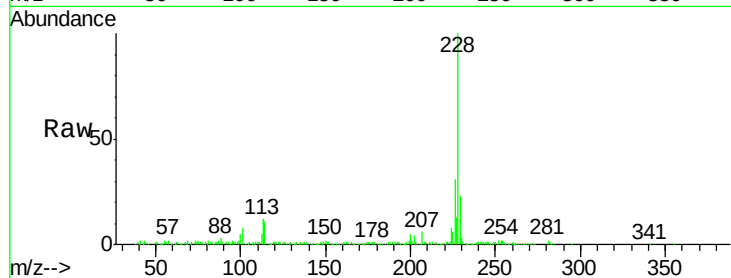
#33  
Chrysene  
Concen: 6.54 ng/ul  
RT: 21.36 min Scan# 3192  
Delta R.T. -0.01 min  
Lab File: BM005694.D  
Acq: 07 Jun 2016 16:09

Instrument :  
BNA\_M  
ClientSampled :  
D9XS3

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.2  | 23.4  | 35.2  |
| 229     | 22.6  | 16.2  | 24.2  |

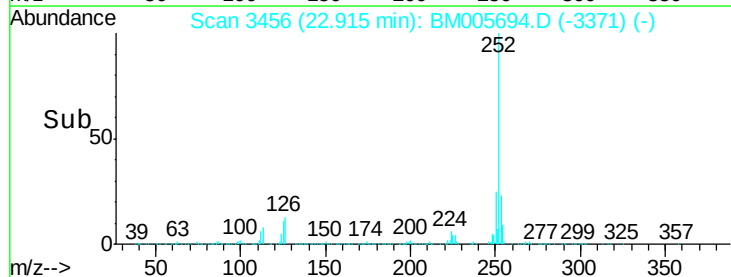
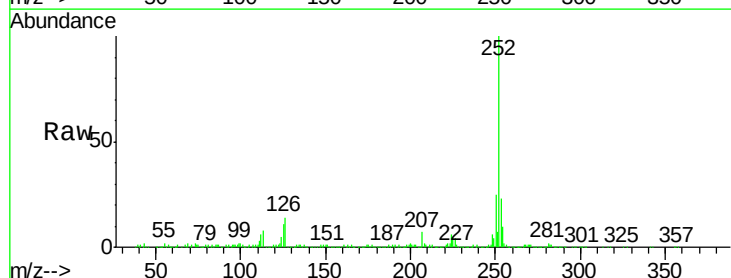
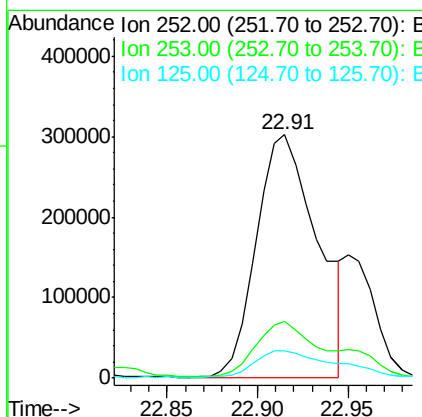
Manual Integrations  
APPROVED

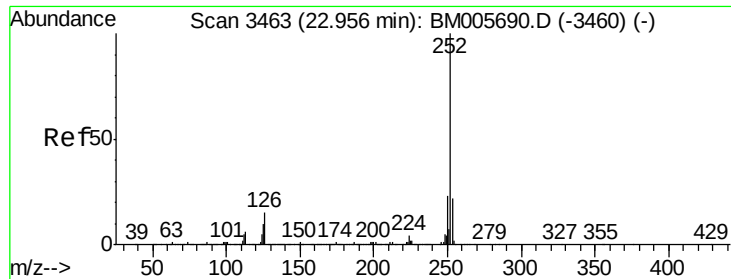
sohil  
6/8/2016 7:16:04 PM



#35  
Benzo(b)fluoranthene  
Concen: 15.18 ng/ul  
RT: 22.91 min Scan# 3456  
Delta R.T. 0.00 min  
Lab File: BM005694.D  
Acq: 07 Jun 2016 16:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.2  | 18.1  | 27.1  |
| 125     | 11.1  | 7.6   | 11.4  |





#36

Benzo(k)fluoranthene

Concen: 4.17 ng/ul m

RT: 22.95 min Scan# 3462

Delta R.T. -0.01 min

Lab File: BM005694.D

Acq: 07 Jun 2016 16:09

Instrument :

BNA\_M

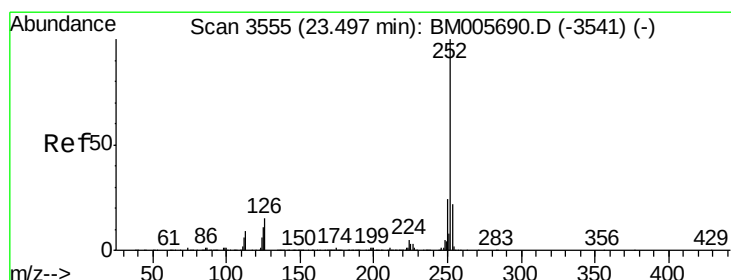
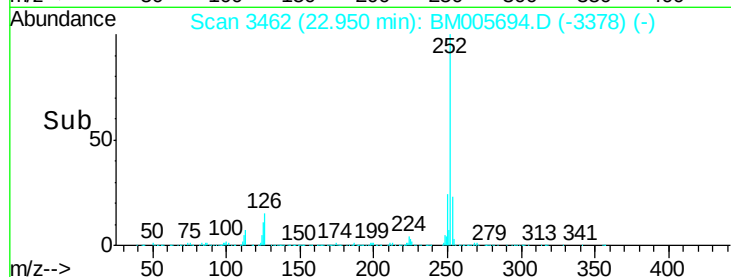
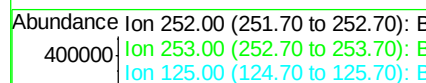
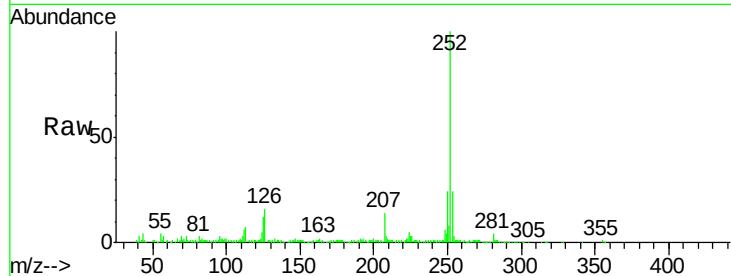
ClientSampleId :

D9XS3

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 181501 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.7  | 17.8  | 26.8   |
| 125       | 11.6  | 7.7   | 11.5#  |

Manual Integrations  
APPROVED

sohil  
6/8/2016 7:16:04 PM



#38

Benzo(a)pyrene

Concen: 7.76 ng/ul

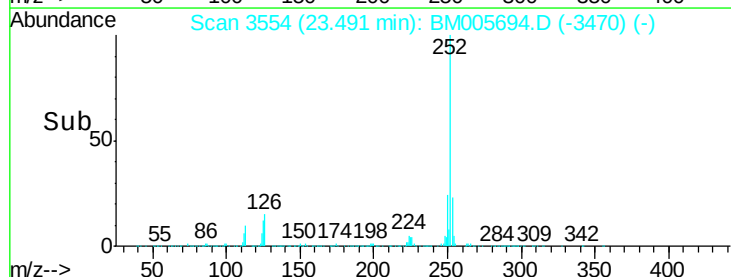
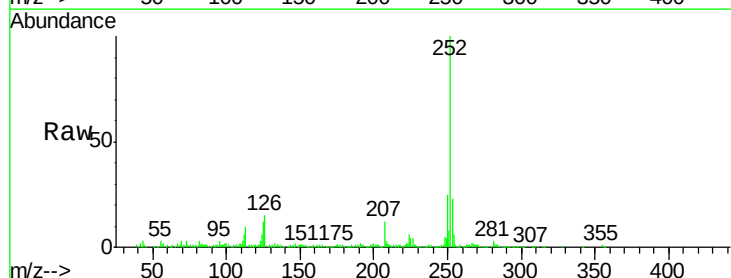
RT: 23.49 min Scan# 3554

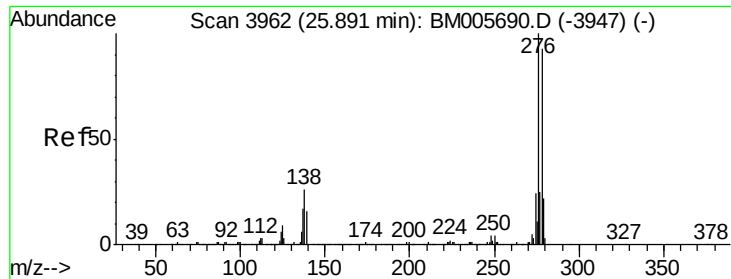
Delta R.T. -0.01 min

Lab File: BM005694.D

Acq: 07 Jun 2016 16:09

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 346712 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.3  | 17.4  | 26.0   |
| 125       | 12.2  | 8.2   | 12.2   |





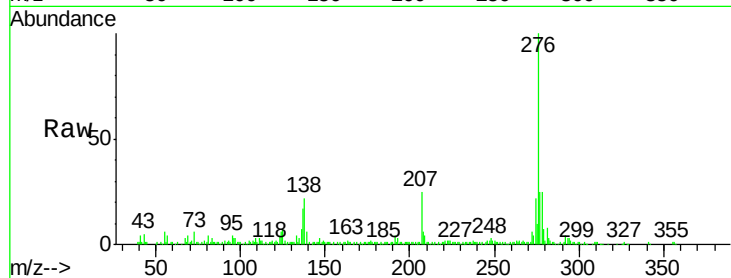
#39  
 Indeno(1,2,3-cd)pyrene  
 Concen: 4.72 ng/ul  
 RT: 25.88 min Scan# 3960  
 Delta R.T. -0.01 min  
 Lab File: BM005694.D  
 Acq: 07 Jun 2016 16:09

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9XS3

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 22.2  | 15.8  | 23.6  |
| 277     | 25.0  | 19.0  | 28.6  |

Manual Integrations  
 APPROVED

sohil  
 6/8/2016 7:16:04 PM

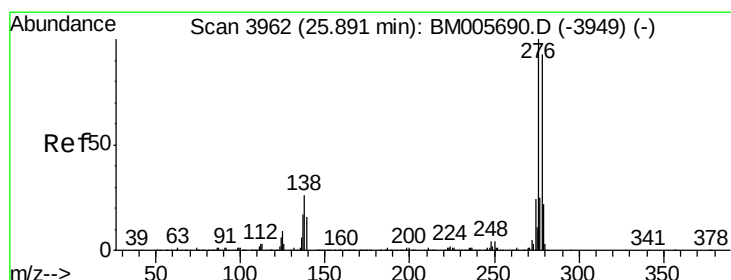
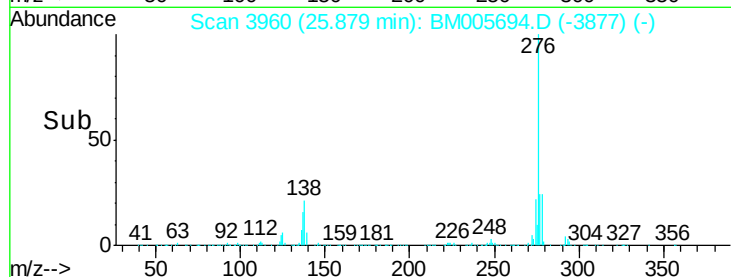
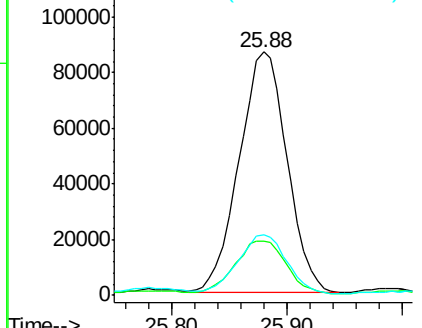


Abundance

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



#40  
 Dibenzo(a,h)anthracene  
 Concen: 1.79 ng/ul m  
 RT: 25.88 min Scan# 3960  
 Delta R.T. -0.01 min  
 Lab File: BM005694.D  
 Acq: 07 Jun 2016 16:09

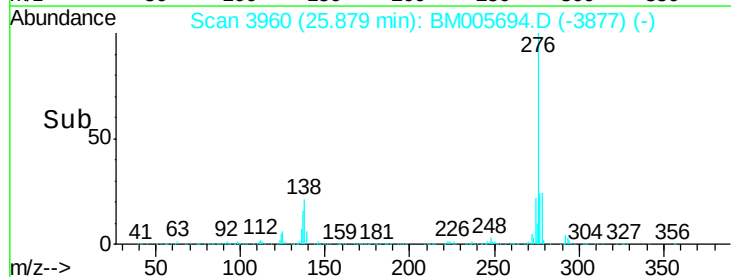
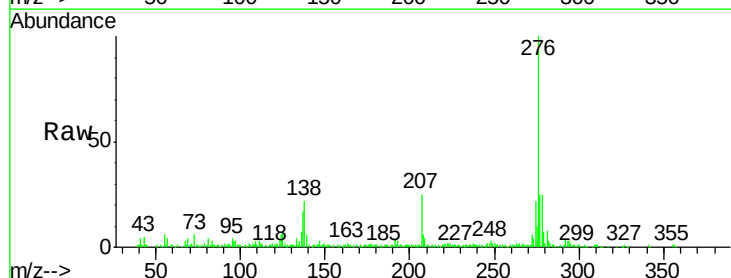
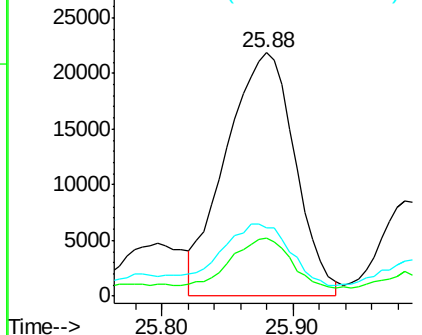
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 24.1  | 12.1  | 18.1# |
| 279     | 28.0  | 19.8  | 29.8  |

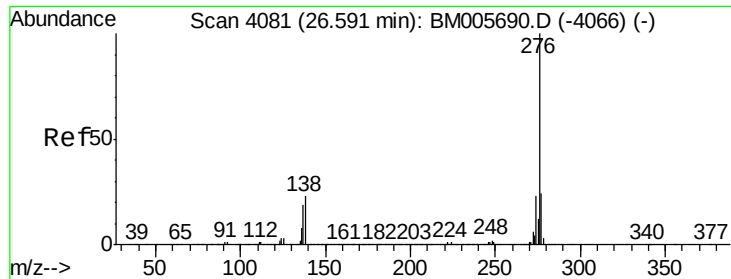
Abundance

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





#41  
 Benzo(a,h,i)perylene  
 Concen: 5.32 ng/ul  
 RT: 26.59 min Scan# 4080  
 Delta R.T. -0.01 min  
 Lab File: BM005694.D  
 Acq: 07 Jun 2016 16:09

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9XS3

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 23.7  | 13.9  | 20.9# |
| 277     | 24.1  | 19.8  | 29.6  |

Manual Integrations  
 APPROVED

sohil  
 6/8/2016 7:16:04 PM

