

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN042519\  
 Data File : BN005306.D  
 Acq On : 26 Apr 2019 06:28  
 Operator : JU/SJ  
 Sample : K2481-03 10X  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :

Quant Time: Apr 26 07:30:11 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Apr 25 03:19:34 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.59  | 152  | 512226   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.35 | 136  | 2192574  | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.23 | 164  | 1284416  | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.98 | 188  | 2940603  | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.22 | 240  | 2766292  | 20.00 | ng/ul | -0.01    |
| 85) Perylene-d12          | 23.42 | 264  | 2644365  | 20.00 | ng/ul | -0.02    |

## System Monitoring Compounds

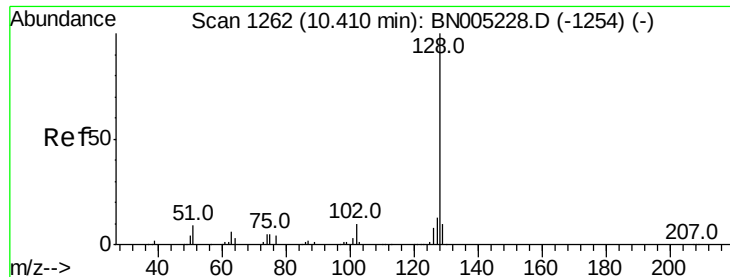
|                                |       |     |        |      |       |       |
|--------------------------------|-------|-----|--------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.22  | 96  | 3826   | 0.36 | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.77  | 99  | 79568  | 1.98 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.94  | 67  | 49993  | 1.99 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.13  | 132 | 63339  | 2.06 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.29  | 113 | 64034  | 2.04 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.73  | 128 | 33715  | 2.50 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.45  | 143 | 35434  | 2.59 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 9.98  | 165 | 65613  | 2.09 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 10.49 | 131 | 58286  | 1.80 | ng/ul | 0.00  |
| 43) Dimethylphthalate-d6       | 13.64 | 166 | 221234 | 2.37 | ng/ul | -0.01 |
| 46) Acenaphthylene-d8          | 13.92 | 160 | 263657 | 2.30 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.44 | 143 | 25846  | 1.76 | ng/ul | 0.00  |
| 57) Fluorene-d10               | 15.22 | 176 | 195482 | 2.50 | ng/ul | 0.00  |
| 62) 4,6-Dinitro-2-methylphenol | 15.35 | 200 | 16198  | 1.22 | ng/ul | 0.00  |
| 70) Anthracene-d10             | 17.08 | 188 | 294007 | 2.39 | ng/ul | 0.00  |
| 78) Pyrene-d10                 | 19.39 | 212 | 322386 | 2.28 | ng/ul | 0.00  |
| 89) Benzo(a)pyrene-d12         | 23.28 | 264 | 262522 | 2.27 | ng/ul | -0.02 |

## Target Compounds

|                            |       |     |         |        | Ovalue    |
|----------------------------|-------|-----|---------|--------|-----------|
| 28) Naphthalene            | 10.40 | 128 | 115046  | 1.129  | ng/ul 98  |
| 34) 2-Methylnaphthalene    | 12.02 | 142 | 465709  | 6.240  | ng/ul 99  |
| 47) Acenaphthylene         | 13.95 | 152 | 1963686 | 17.449 | ng/ul 98  |
| 49) Acenaphthene           | 14.29 | 153 | 209679  | 2.729  | ng/ul 98  |
| 58) Fluorene               | 15.28 | 166 | 1062645 | 12.311 | ng/ul 97  |
| 69) Phenanthrene           | 17.03 | 178 | 5702972 | 39.822 | ng/ul 100 |
| 71) Anthracene             | 17.12 | 178 | 762049  | 5.223  | ng/ul 100 |
| 76) Fluoranthene           | 19.06 | 202 | 3758303 | 23.660 | ng/ul 99  |
| 79) Pyrene                 | 19.43 | 202 | 6899167 | 38.735 | ng/ul 98  |
| 82) Benzo(a)anthracene     | 21.26 | 228 | 2525201 | 14.674 | ng/ul 95  |
| 84) Chrysene               | 21.26 | 228 | 2525921 | 15.815 | ng/ul 98  |
| 87) Benzo(b)fluoranthene   | 22.77 | 252 | 1741210 | 11.714 | ng/ul 99  |
| 88) Benzo(k)fluoranthene   | 22.77 | 252 | 1741210 | 12.265 | ng/ul 98  |
| 90) Benzo(a)pyrene         | 23.33 | 252 | 1073834 | 7.686  | ng/ul 99  |
| 91) Indeno(1,2,3-cd)pyrene | 25.59 | 276 | 645446  | 4.178  | ng/ul 97  |
| 92) Dibenzo(a,h)anthracene | 25.60 | 278 | 213533  | 1.629  | ng/ul 97  |
| 93) Benzo(g,h,i)perylene   | 26.26 | 276 | 521897  | 4.086  | ng/ul 97  |

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

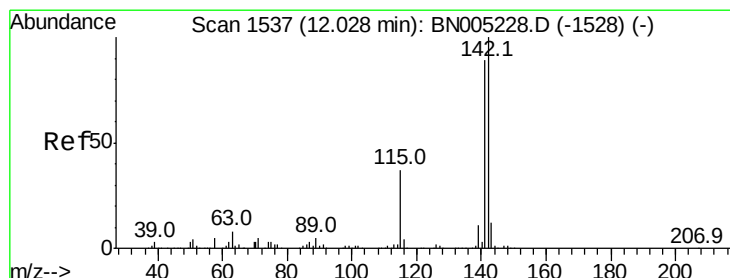
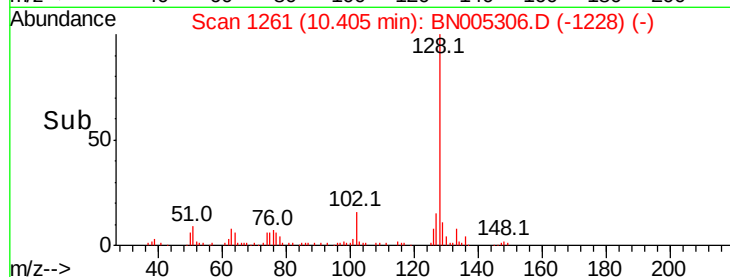
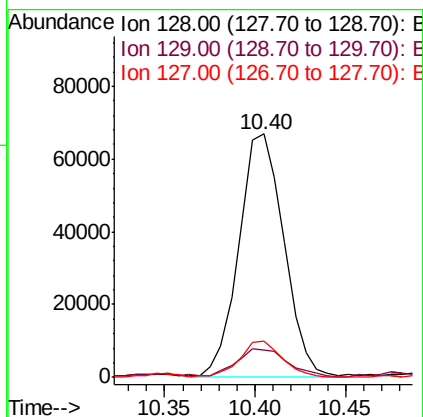
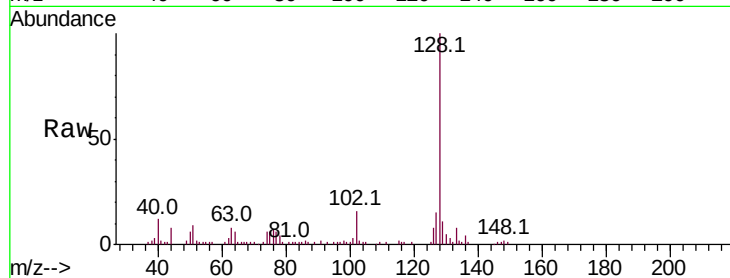




#28  
Naphthalene  
Concen: 1.129 ng/ul  
RT: 10.40 min Scan# 1261  
Delta R.T. -0.01 min  
Lab File: BN005306.D  
Acq: 26 Apr 2019 06:28

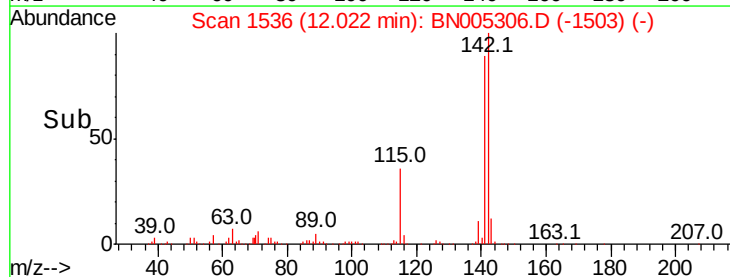
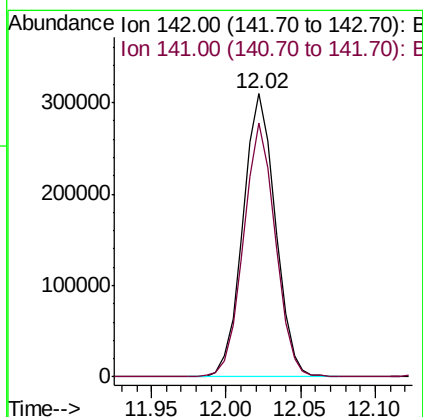
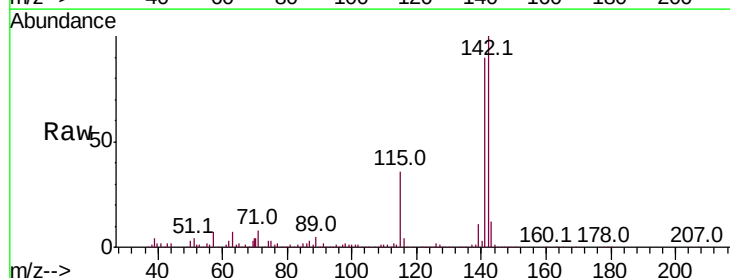
Instrument :  
BNA\_N  
ClientSampled :

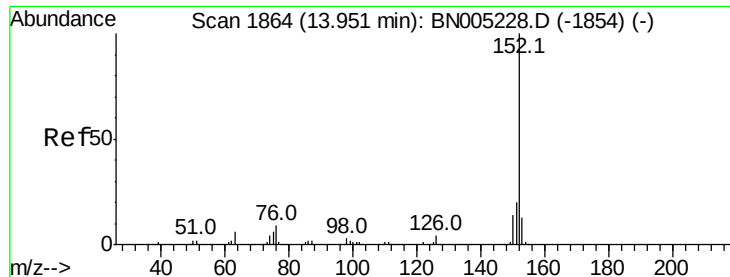
Tot Ion:128 Resp: 115046  
Ion Ratio Lower Upper  
128 100  
129 11.5 9.2 13.8  
127 14.9 10.7 16.1



#34  
2-Methylnaphthalene  
Concen: 6.240 ng/ul  
RT: 12.02 min Scan# 1536  
Delta R.T. -0.01 min  
Lab File: BN005306.D  
Acq: 26 Apr 2019 06:28

Tgt Ion:142 Resp: 465709  
Ion Ratio Lower Upper  
142 100  
141 89.5 72.0 108.0





#47

Acenaphthylene

Concen: 17.449 ng/ul

RT: 13.95 min Scan# 1863

Delta R.T. -0.01 min

Lab File: BN005306.D

Acq: 26 Apr 2019 06:28

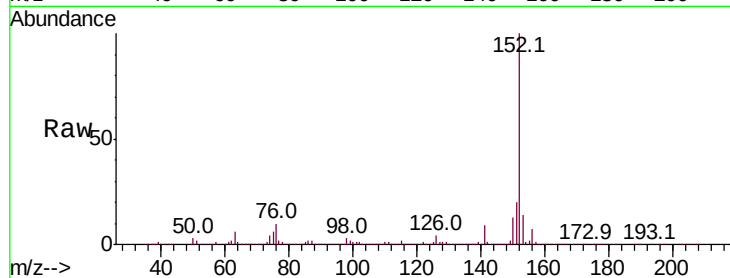
Instrument :

BNA\_N

ClientSampleId :

Tot Ion:152 Resp: 1963686

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 152 | 100   |       |       |
| 151 | 20.2  | 15.8  | 23.8  |
| 153 | 13.9  | 9.8   | 14.8  |

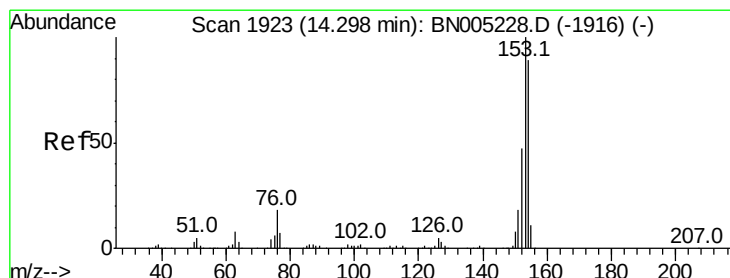
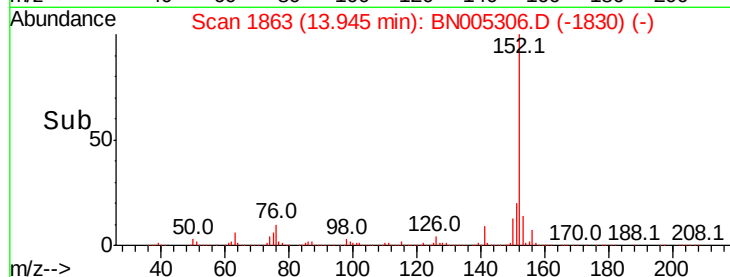
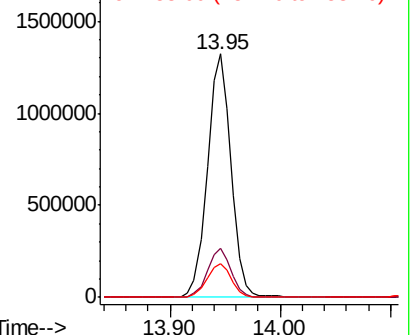


Abundance

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: 2.729 ng/ul

RT: 14.29 min Scan# 1922

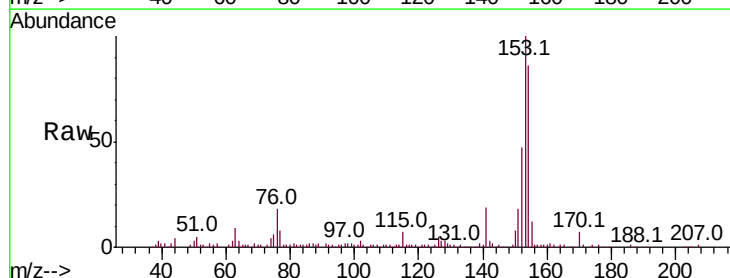
Delta R.T. -0.01 min

Lab File: BN005306.D

Acq: 26 Apr 2019 06:28

Tgt Ion:153 Resp: 209679

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 153 | 100   |       |       |
| 152 | 46.9  | 37.4  | 56.0  |
| 154 | 86.0  | 71.2  | 106.8 |

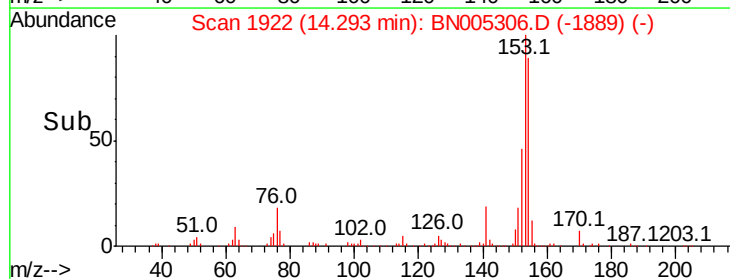
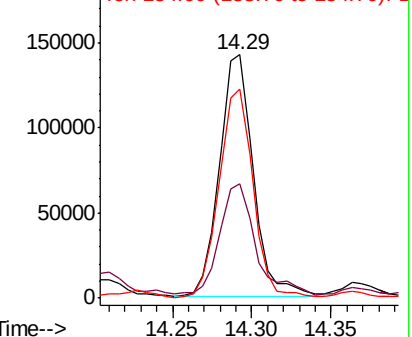


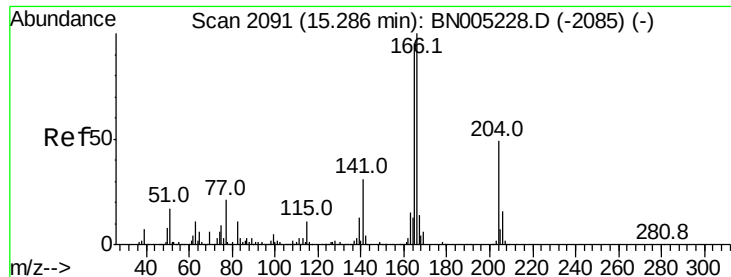
Abundance

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

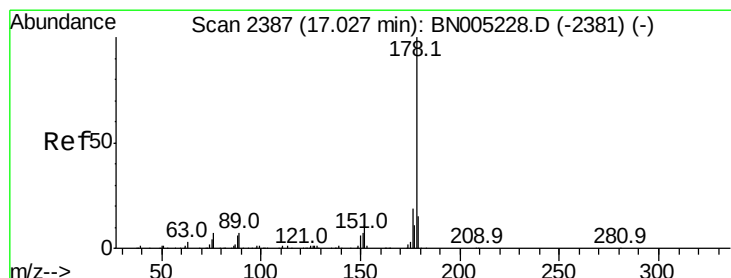
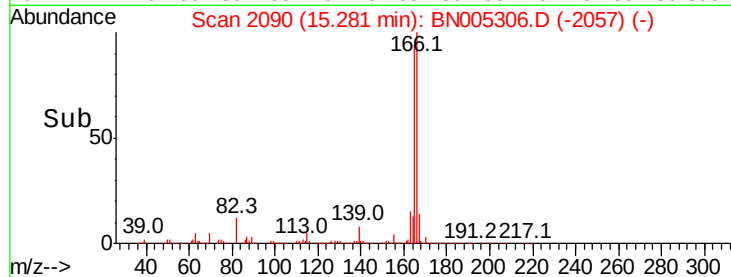
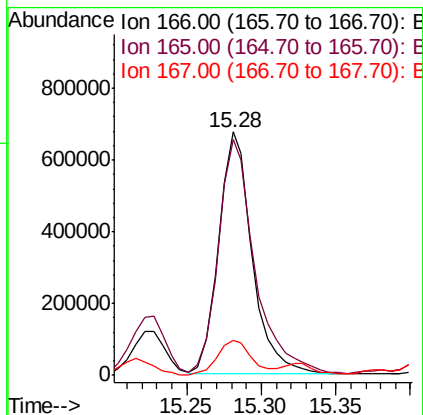
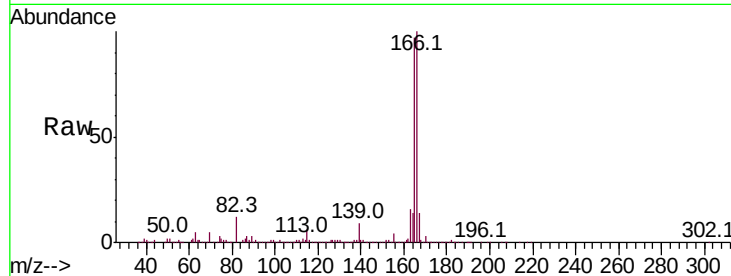




#58  
 Fluorene  
 Concen: 12.311 ng/ul  
 RT: 15.28 min Scan# 2090  
 Delta R.T. -0.01 min  
 Lab File: BN005306.D  
 Acq: 26 Apr 2019 06:28

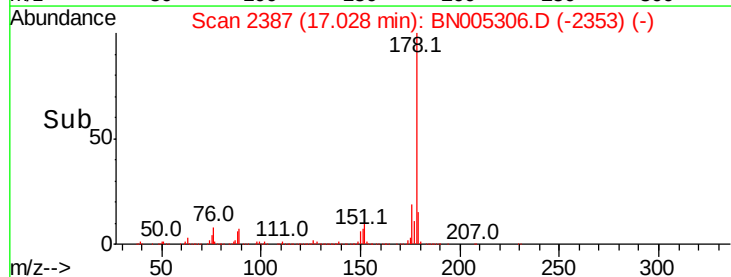
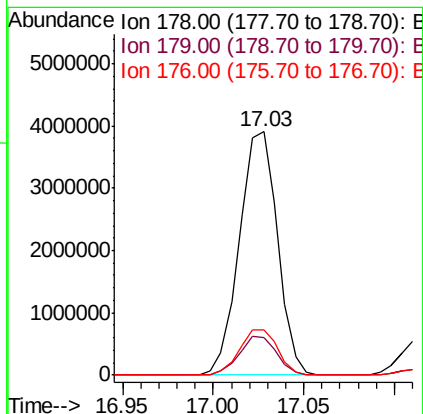
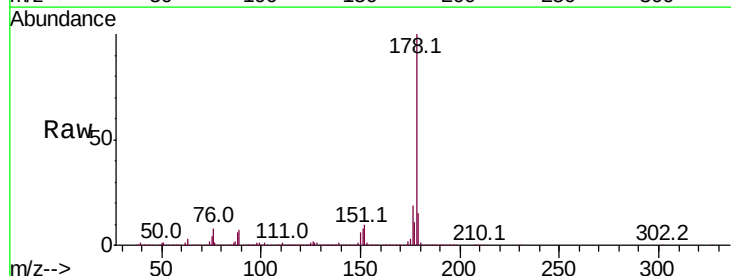
Instrument :  
 BNA\_N  
 ClientSampleId :

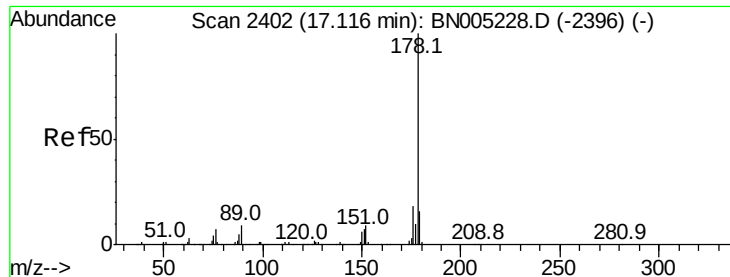
Tot Ion:166 Resp: 1062645  
 Ion Ratio Lower Upper  
 166 100  
 165 96.9 80.0 120.0  
 167 14.2 10.7 16.1



#69  
 Phenanthrene  
 Concen: 39.822 ng/ul  
 RT: 17.03 min Scan# 2387  
 Delta R.T. 0.00 min  
 Lab File: BN005306.D  
 Acq: 26 Apr 2019 06:28

Tgt Ion:178 Resp: 5702972  
 Ion Ratio Lower Upper  
 178 100  
 179 15.2 12.2 18.4  
 176 18.8 15.1 22.7

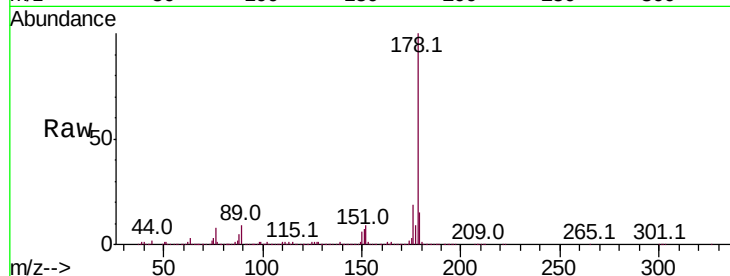




#71  
 Anthracene  
 Concen: 5.223 ng/ul  
 RT: 17.12 min Scan# 2402  
 Delta R.T. 0.00 min  
 Lab File: BN005306.D  
 Acq: 26 Apr 2019 06:28

Instrument :  
 BNA\_N  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.4  | 12.3  | 18.5  |
| 176     | 18.6  | 15.1  | 22.7  |

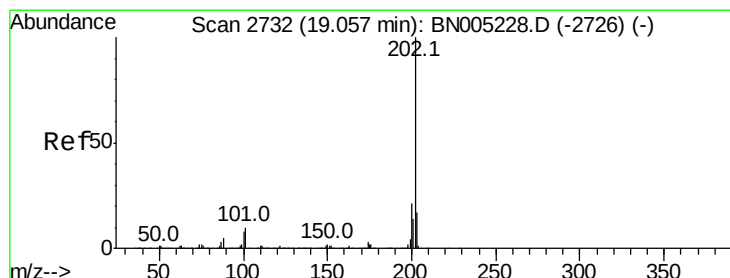
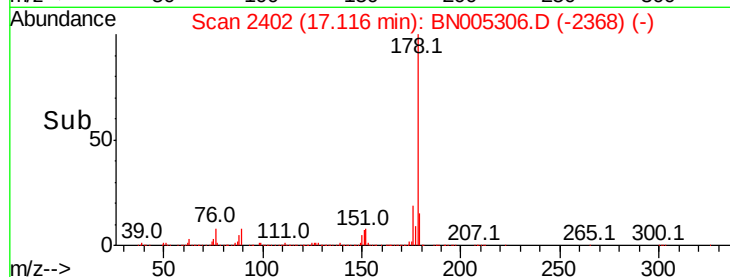
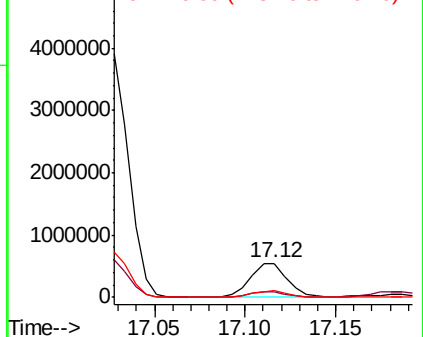


Abundance

Ion 178.00 (177.70 to 178.70): E

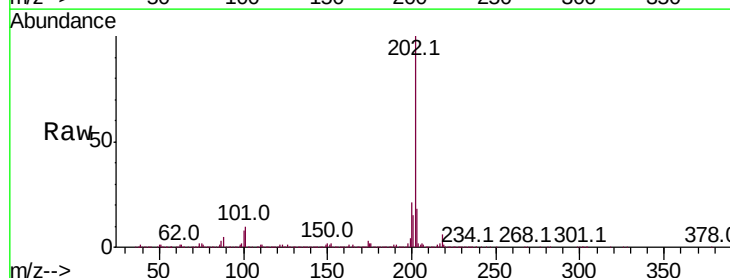
Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#76  
 Fluoranthene  
 Concen: 23.660 ng/ul  
 RT: 19.06 min Scan# 2732  
 Delta R.T. -0.01 min  
 Lab File: BN005306.D  
 Acq: 26 Apr 2019 06:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.3  | 8.6   | 12.8  |
| 100     | 7.6   | 6.3   | 9.5   |

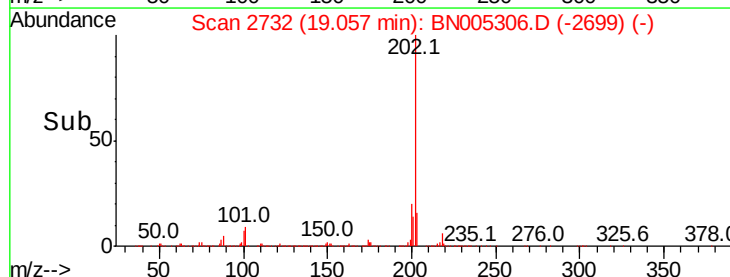
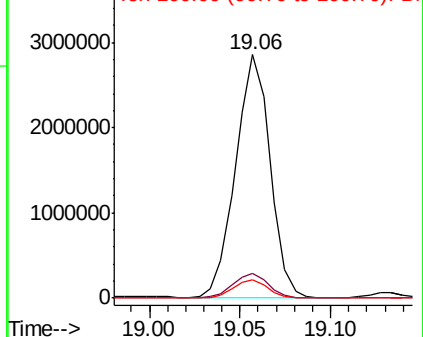


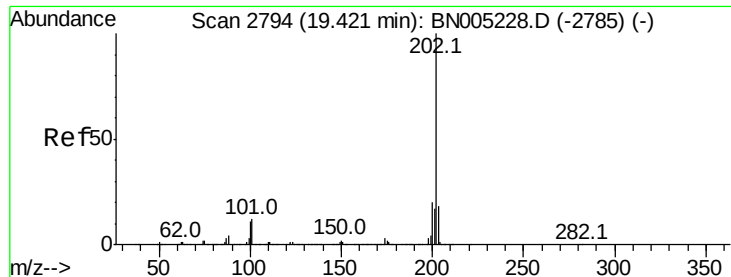
Abundance

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): E





#79

Pvrene

Concen: 38.735 ng/ul

RT: 19.43 min Scan# 2795

Delta R.T. 0.00 min

Lab File: BN005306.D

Acq: 26 Apr 2019 06:28

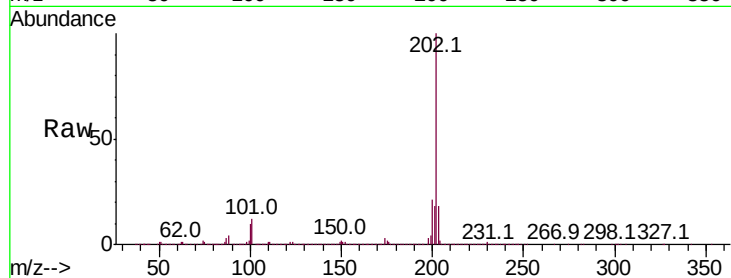
Instrument :

BNA\_N

ClientSampleId :

Tot Ion:202 Resp: 6899167

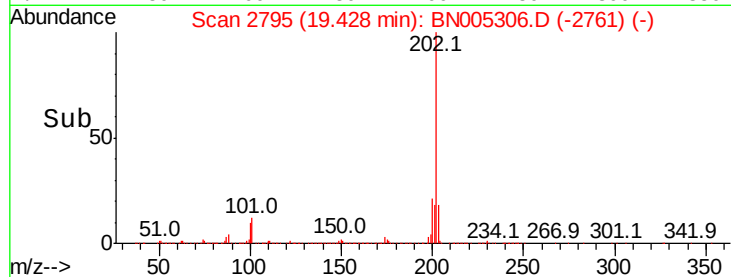
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 202 | 100   |       |       |
| 101 | 12.0  | 10.3  | 15.5  |
| 100 | 9.7   | 7.9   | 11.9  |



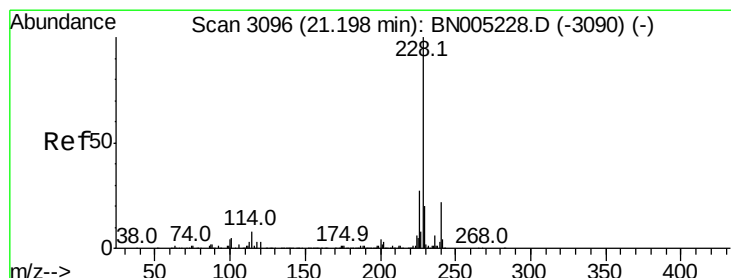
Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): E



Time-->



#82

Benzo(a)anthracene

Concen: 14.674 ng/ul

RT: 21.26 min Scan# 3106

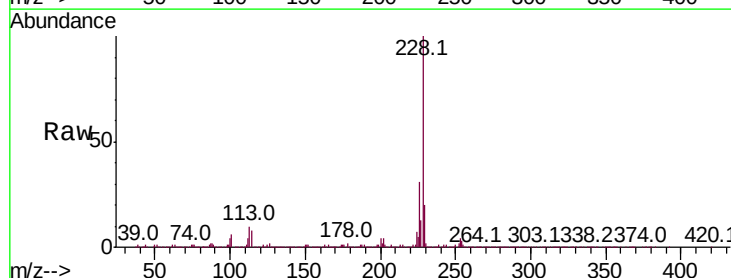
Delta R.T. 0.05 min

Lab File: BN005306.D

Acq: 26 Apr 2019 06:28

Tgt Ion:228 Resp: 2525201

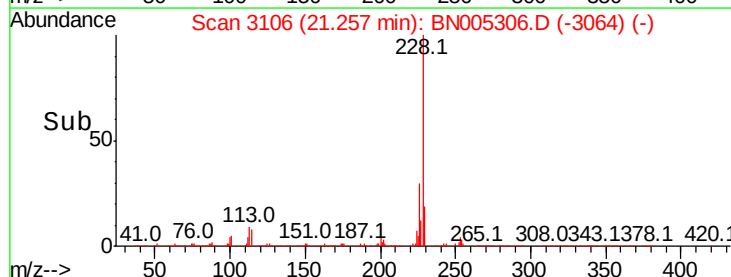
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 229 | 20.3  | 15.8  | 23.6  |
| 226 | 30.6  | 21.4  | 32.2  |



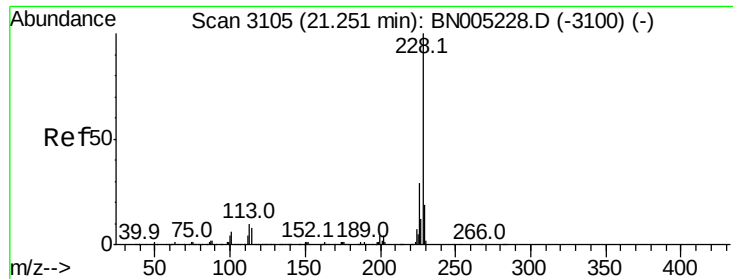
Abundance Ion 228.00 (227.70 to 228.70): E

Ion 229.00 (228.70 to 229.70): E

Ion 226.00 (225.70 to 226.70): E



Time-->



#84

Chrysene

Concen: 15.815 ng/ul

RT: 21.26 min Scan# 3106

Delta R.T. -0.01 min

Lab File: BN005306.D

Acq: 26 Apr 2019 06:28

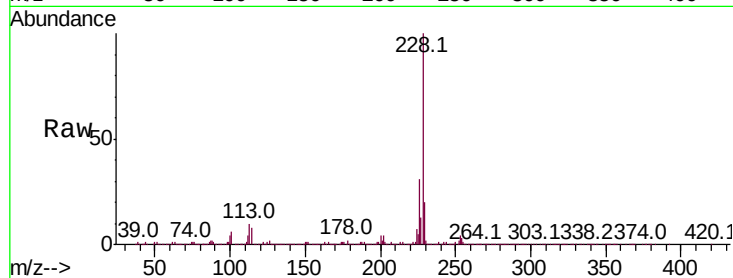
Instrument :

BNA\_N

ClientSampleId :

Tot Ion:228 Resp: 2525921

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 30.6  | 24.0  | 36.0  |
| 229 | 20.3  | 15.4  | 23.0  |

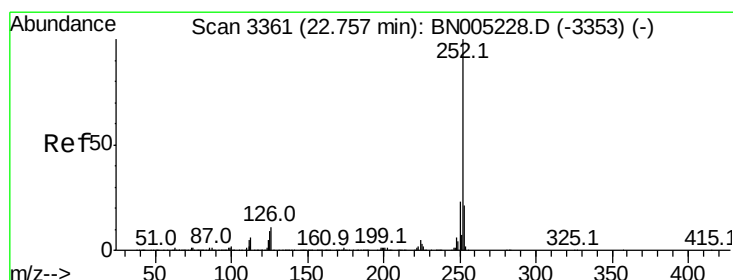
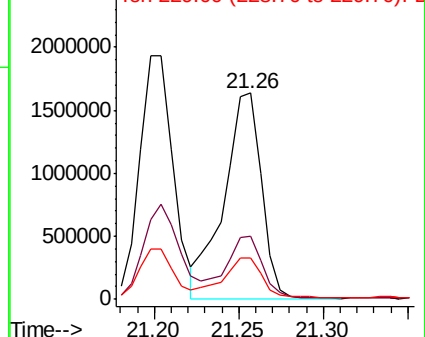
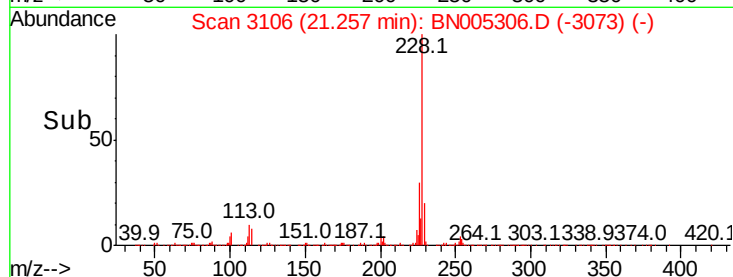


Abundance

Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#87

Benzo(b)fluoranthene

Concen: 11.714 ng/ul

RT: 22.77 min Scan# 3364

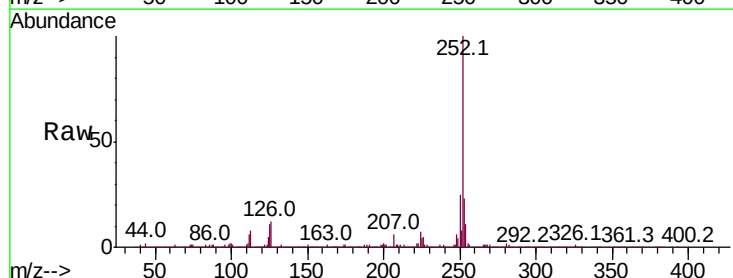
Delta R.T. -0.01 min

Lab File: BN005306.D

Acq: 26 Apr 2019 06:28

Tgt Ion:252 Resp: 1741210

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 22.6  | 17.7  | 26.5  |
| 125 | 10.7  | 8.4   | 12.6  |

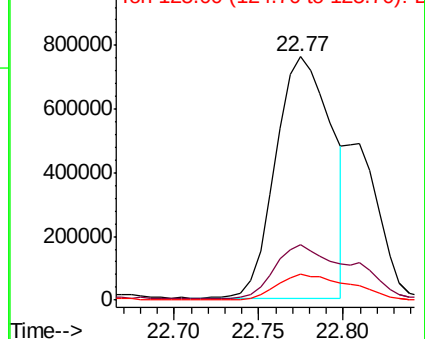
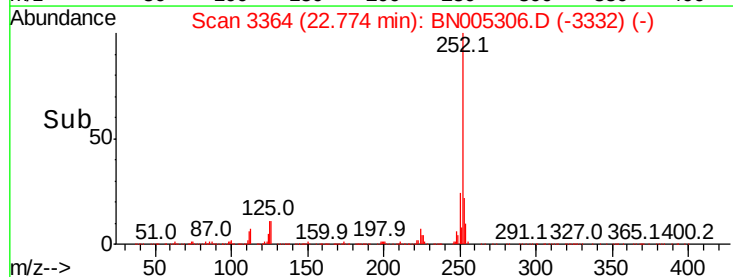


Abundance

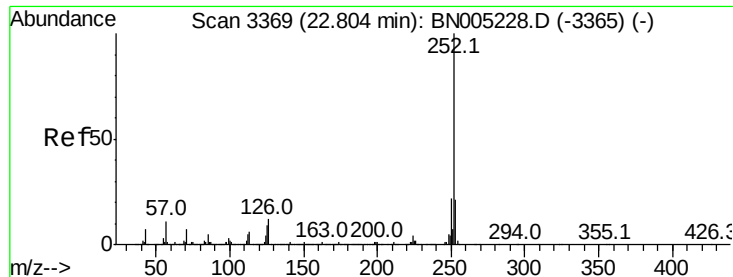
Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E







#88

Benzo(k)fluoranthene

Concen: 12.265 ng/ul

RT: 22.77 min Scan# 3364

Delta R.T. -0.05 min

Lab File: BN005306.D

Acq: 26 Apr 2019 06:28

Instrument :

BNA\_N

ClientSampled :

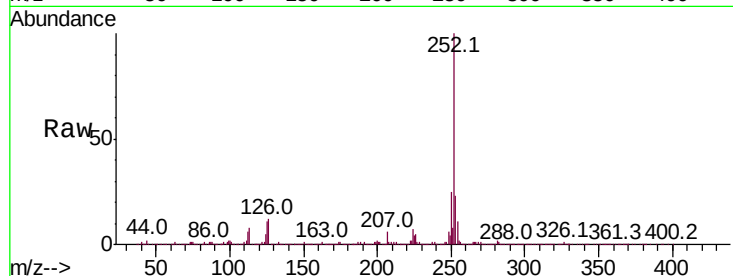
Tot Ion:252 Resp: 1741210

Ion Ratio Lower Upper

252 100

253 22.6 17.4 26.0

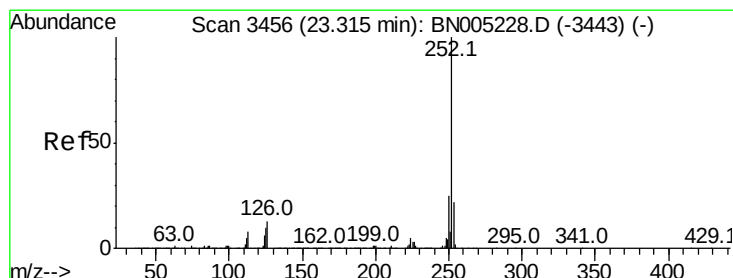
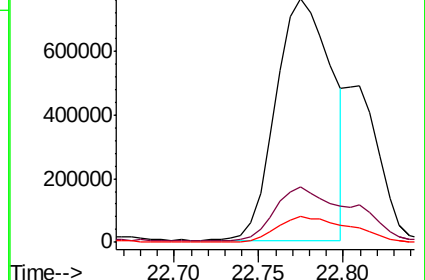
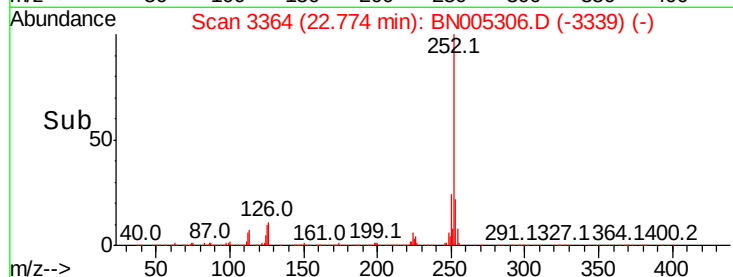
125 10.7 7.5 11.3



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



#90

Benzo(a)pyrene

Concen: 7.686 ng/ul

RT: 23.33 min Scan# 3458

Delta R.T. -0.02 min

Lab File: BN005306.D

Acq: 26 Apr 2019 06:28

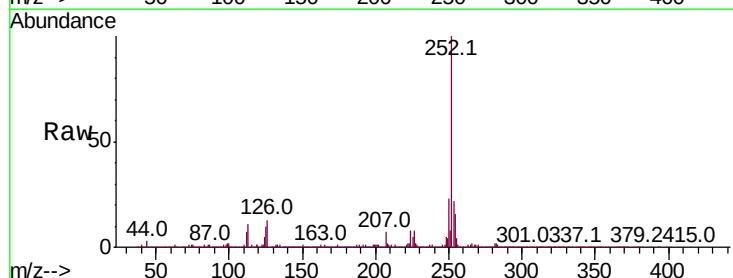
Tgt Ion:252 Resp: 1073834

Ion Ratio Lower Upper

252 100

253 21.9 17.3 25.9

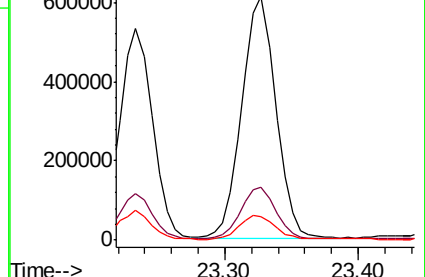
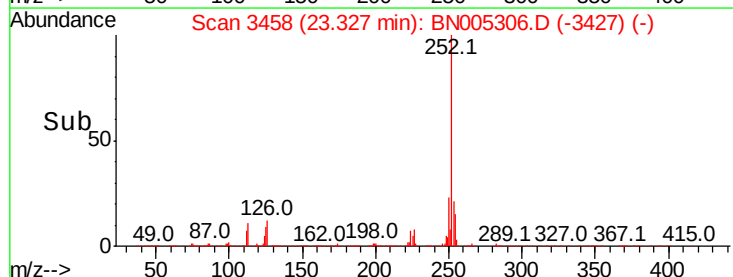
125 9.9 8.6 13.0

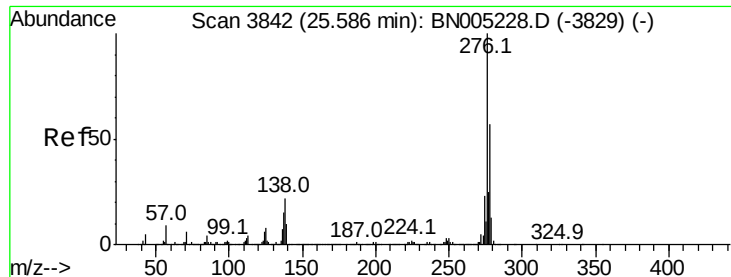


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



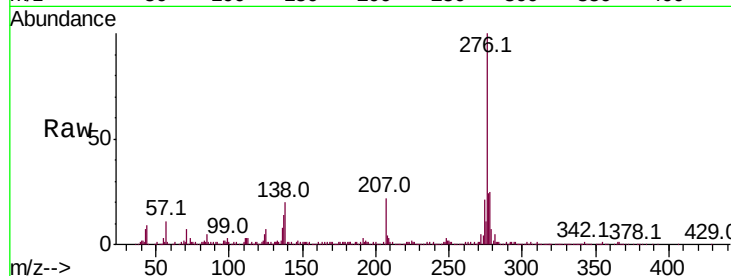


#91

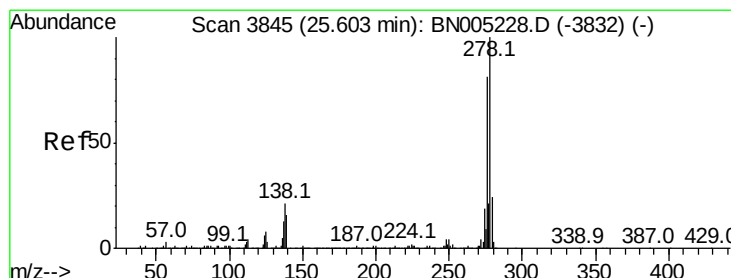
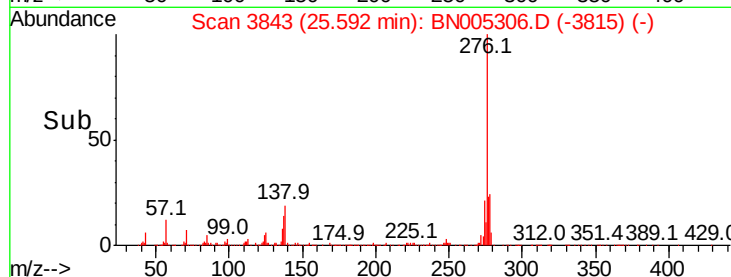
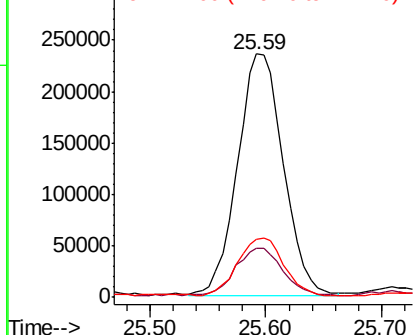
Indeno(1,2,3-cd)pyrene  
Concen: 4.178 ng/ul  
RT: 25.59 min Scan# 3843  
Delta R.T. -0.03 min  
Lab File: BN005306.D  
Acq: 26 Apr 2019 06:28

Instrument :  
BNA\_N  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 20.0  | 17.9  | 26.9  |
| 277     | 23.7  | 19.7  | 29.5  |



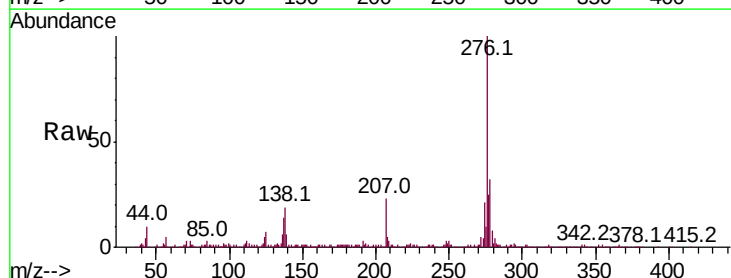
Abundance Ion 276.00 (275.70 to 276.70): E  
Ion 138.00 (137.70 to 138.70): E  
Ion 277.00 (276.70 to 277.70): E



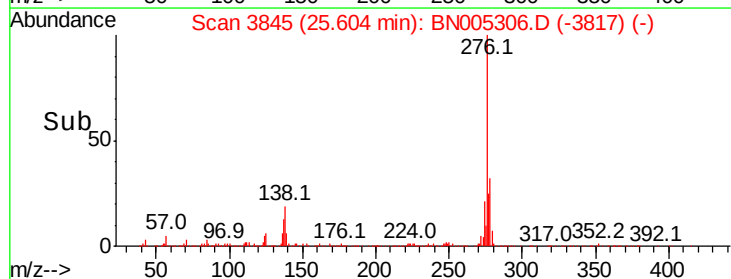
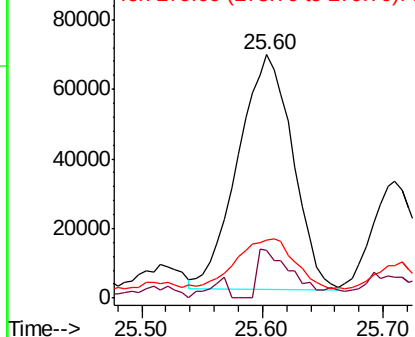
#92

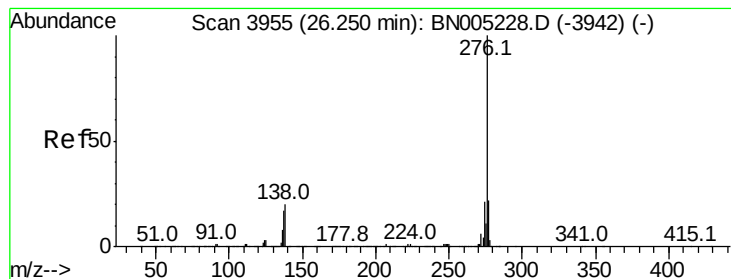
Dibenzo(a,h)anthracene  
Concen: 1.629 ng/ul  
RT: 25.60 min Scan# 3845  
Delta R.T. -0.03 min  
Lab File: BN005306.D  
Acq: 26 Apr 2019 06:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 19.5  | 13.1  | 19.7  |
| 279     | 24.0  | 19.4  | 29.0  |



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





#93

Benzo(a,h,i)perylene

Concen: 4.086 ng/ul

RT: 26.26 min Scan# 3956

Delta R.T. -0.03 min

Lab File: BN005306.D

Acq: 26 Apr 2019 06:28

Instrument :

BNA\_N

ClientSampleId :

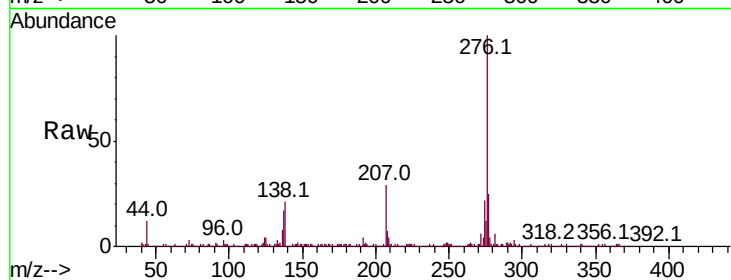
Tot Ion:276 Resp: 521897

Ion Ratio Lower Upper

276 100

138 20.8 16.7 25.1

277 25.0 18.2 27.2



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

