

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN042219\  
 Data File : BN005196.D  
 Acq On : 23 Apr 2019 04:29  
 Operator : JU/SJ  
 Sample : K2402-05  
 Misc :  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAHH7

Manual Integrations  
 APPROVED

Sohil  
 4/23/2019 4:19:52 PM

Quant Time: Apr 23 05:09:36 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Apr 23 03:50:45 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.60  | 152  | 484710   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.37 | 136  | 2569685  | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.23 | 164  | 1606496  | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.99 | 188  | 3250407  | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.22 | 240  | 2560408  | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 23.42 | 264  | 2932289  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |         |       |       |      |
|--------------------------------|-------|-----|---------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.22  | 96  | 103284  | 10.29 | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.77  | 99  | 1218250 | 32.00 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.95  | 67  | 784268  | 33.02 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.13  | 132 | 981495  | 33.69 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.29  | 113 | 864250  | 29.04 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.74  | 128 | 493808  | 31.22 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.45  | 143 | 535054  | 33.37 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 9.99  | 165 | 961539  | 26.16 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.50 | 131 | 1043951 | 27.54 | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 13.65 | 166 | 2952011 | 25.31 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 13.93 | 160 | 3570214 | 24.93 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.43 | 143 | 391468  | 21.26 | ng/ul | 0.00 |
| 57) Fluorene-d10               | 15.23 | 176 | 2367927 | 24.19 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.36 | 200 | 278319  | 19.04 | ng/ul | 0.01 |
| 70) Anthracene-d10             | 17.09 | 188 | 3363082 | 24.68 | ng/ul | 0.00 |
| 78) Pyrene-d10                 | 19.40 | 212 | 3462495 | 26.44 | ng/ul | 0.00 |
| 89) Benzo(a)pyrene-d12         | 23.28 | 264 | 3261175 | 25.45 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |           |         | Ovalue    |
|----------------------------|-------|-----|-----------|---------|-----------|
| 28) Naphthalene            | 10.42 | 128 | 33913296m | 283.887 | ng/ul     |
| 34) 2-Methylnaphthalene    | 12.05 | 142 | 20029221  | 228.983 | ng/ul 89  |
| 40) 1,1'-Biphenyl          | 13.06 | 154 | 5258508   | 43.931  | ng/ul 100 |
| 44) Dimethylphthalate      | 13.70 | 163 | 867939    | 7.469   | ng/ul 100 |
| 47) Acenaphthylene         | 13.96 | 152 | 9268064   | 65.842  | ng/ul# 96 |
| 49) Acenaphthene           | 14.30 | 153 | 1657935   | 17.253  | ng/ul 98  |
| 53) Dibenzofuran           | 14.63 | 168 | 1742018   | 12.591  | ng/ul 95  |
| 58) Fluorene               | 15.30 | 166 | 9873607   | 91.455  | ng/ul 97  |
| 69) Phenanthrene           | 17.03 | 178 | 23860340m | 150.729 | ng/ul     |
| 71) Anthracene             | 17.13 | 178 | 11209153  | 69.510  | ng/ul 97  |
| 74) Carbazole              | 17.39 | 167 | 398636    | 2.878   | ng/ul 97  |
| 76) Fluoranthene           | 19.06 | 202 | 15092323m | 85.955  | ng/ul     |
| 79) Pyrene                 | 19.43 | 202 | 17886755m | 108.499 | ng/ul     |
| 82) Benzo(a)anthracene     | 21.20 | 228 | 8633913m  | 54.205  | ng/ul     |
| 84) Chrysene               | 21.26 | 228 | 7612004   | 51.492  | ng/ul 97  |
| 87) Benzo(b)fluoranthene   | 22.77 | 252 | 5644447   | 34.244  | ng/ul 99  |
| 88) Benzo(k)fluoranthene   | 22.80 | 252 | 2189170m  | 13.906  | ng/ul     |
| 90) Benzo(a)pyrene         | 23.33 | 252 | 6639864   | 42.856  | ng/ul 98  |
| 91) Indeno(1,2,3-cd)pyrene | 25.59 | 276 | 2687588   | 15.690  | ng/ul 98  |
| 92) Dibenzo(a,h)anthracene | 25.60 | 278 | 835048m   | 5.744   | ng/ul     |
| 93) Benzo(a,h,i)perylene   | 26.25 | 276 | 2285843   | 16.139  | ng/ul 98  |

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Sample : K2402-05  
Misc :  
ALS Vial : 32 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
GAHH7

Manual Integrations  
APPROVED

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Quant Time: Apr 23 05:09:36 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Tue Apr 23 03:50:45 2019  
Response via : Initial Calibration

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

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

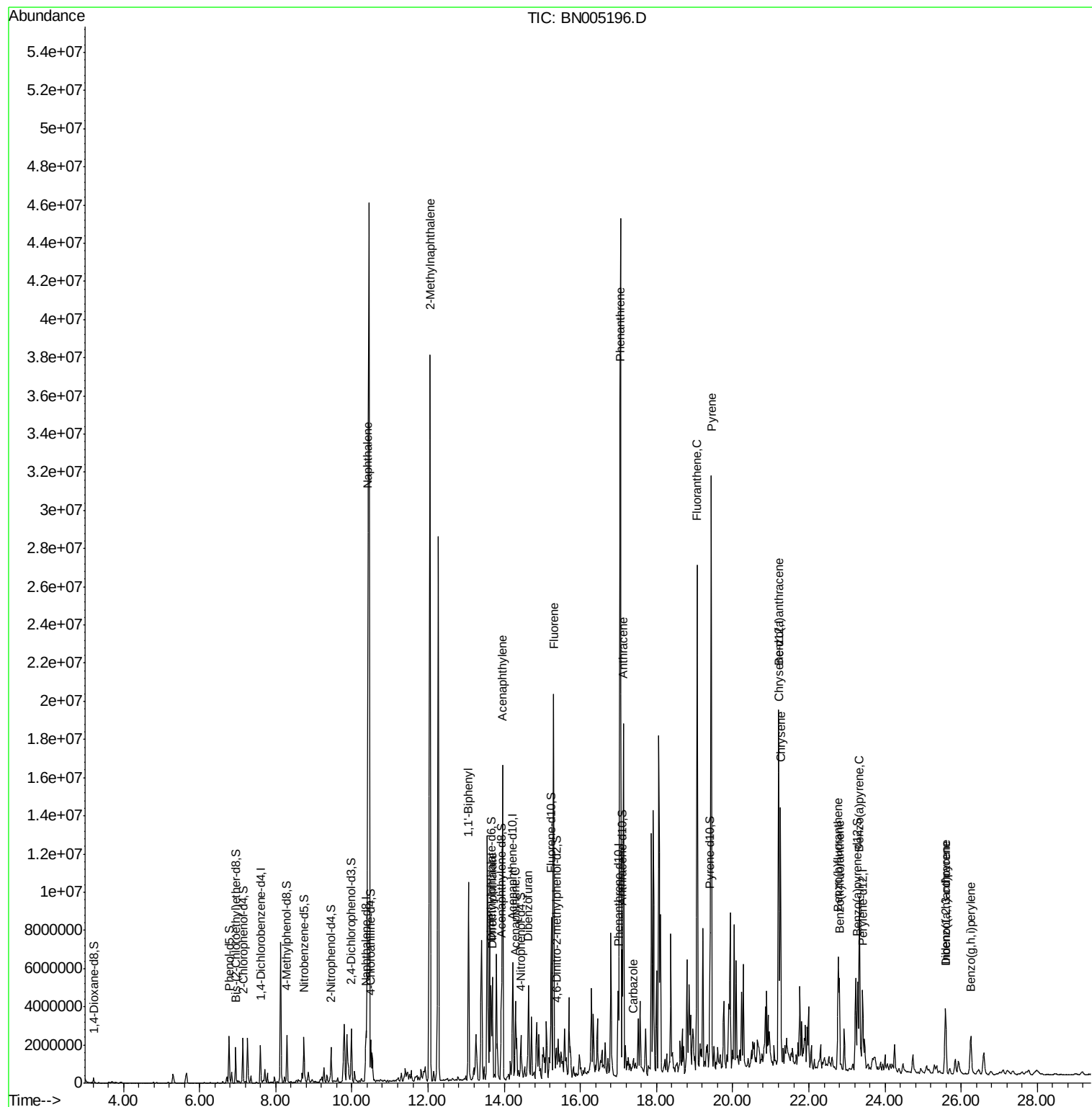
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN042219\  
Data File : BN005196.D  
Acq On : 23 Apr 2019 04:29  
Operator : JU/SJ  
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Misc :  
ALS Vial : 32 Sample Multiplier: 1

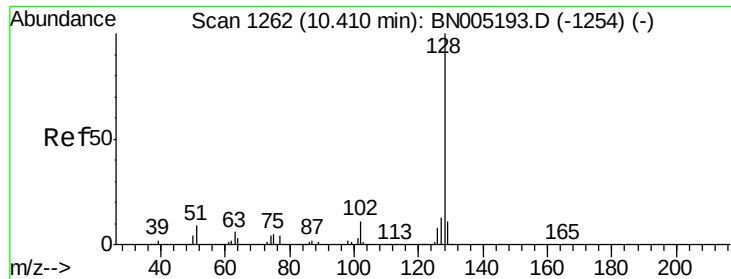
Instrument :  
BNA\_N  
ClientSampled :  
GAHH7

Manual Integrations  
APPROVED

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4/23/2019 4:19:52 PM

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Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
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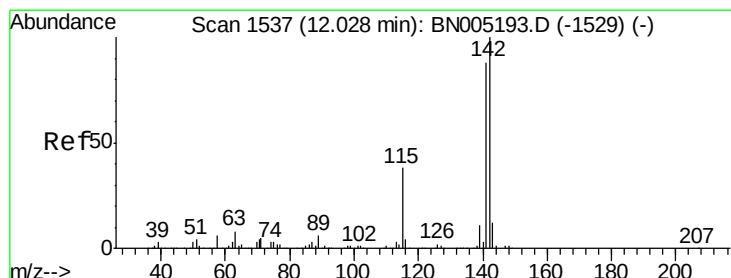
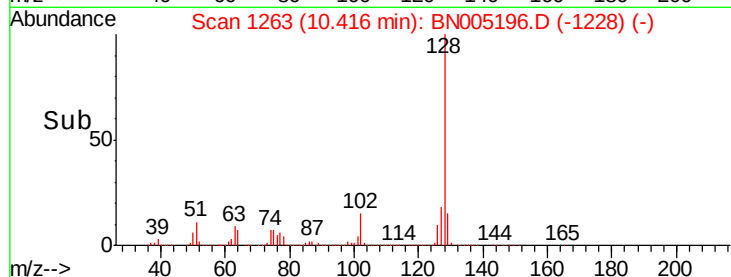
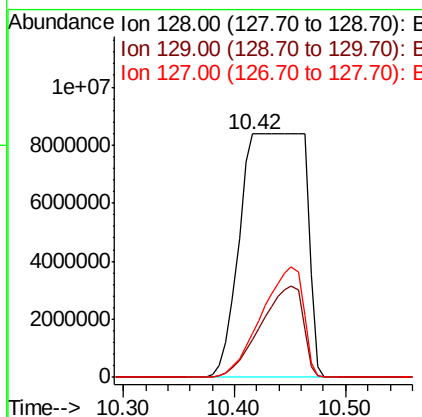
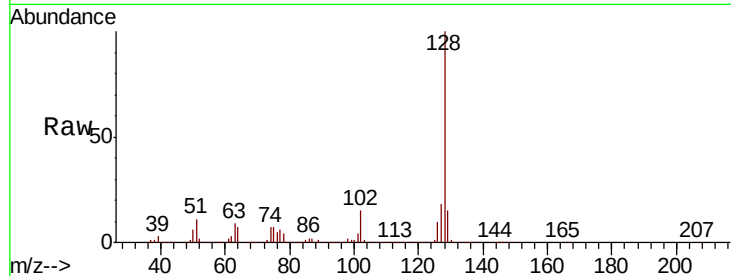
#28  
Naphthalene  
Concen: 283.887 ng/ul m  
RT: 10.42 min Scan# 1263  
Delta R.T. 0.01 min  
Lab File: BN005196.D  
Acq: 23 Apr 2019 04:29

Instrument :  
BNA\_N  
ClientSampled :  
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Tot Ion:128 Resp:33913296  
Ion Ratio Lower Upper  
128 100  
129 15.4 9.2 13.8#  
127 17.8 10.7 16.1#

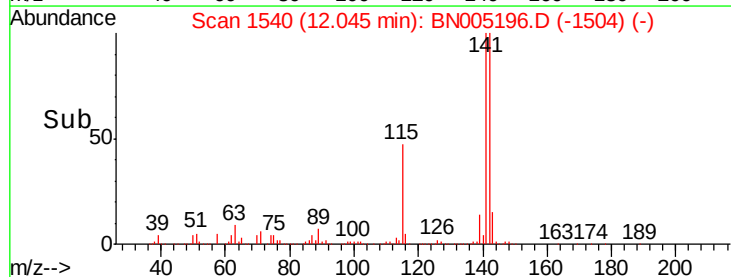
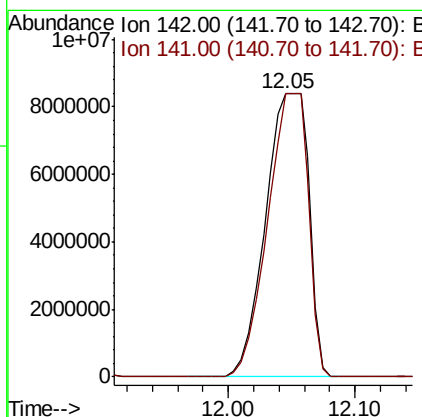
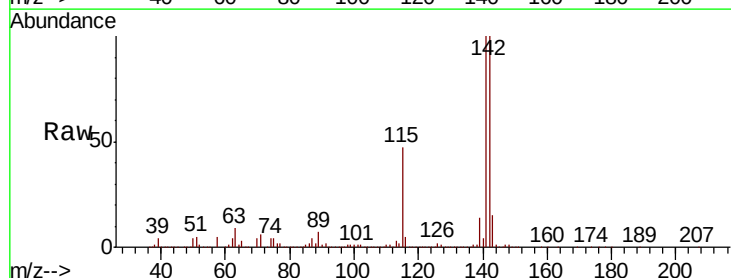
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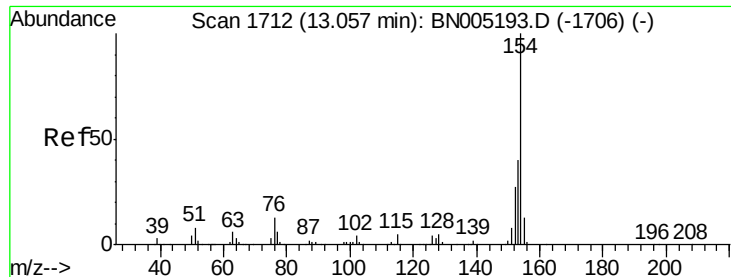
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#34  
2-Methylnaphthalene  
Concen: 228.983 ng/ul  
RT: 12.05 min Scan# 1540  
Delta R.T. 0.01 min  
Lab File: BN005196.D  
Acq: 23 Apr 2019 04:29

Tgt Ion:142 Resp:20029221  
Ion Ratio Lower Upper  
142 100  
141 100.0 72.0 108.0





#40

1,1'-Biphenyl

Concen: 43.931 ng/ul

RT: 13.06 min Scan# 1713

Delta R.T. -0.00 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

Instrument :

BNA\_N

ClientSampleId :

GAHH7

Tot Ion:154 Resp: 5258508

Ion Ratio Lower Upper

154 100

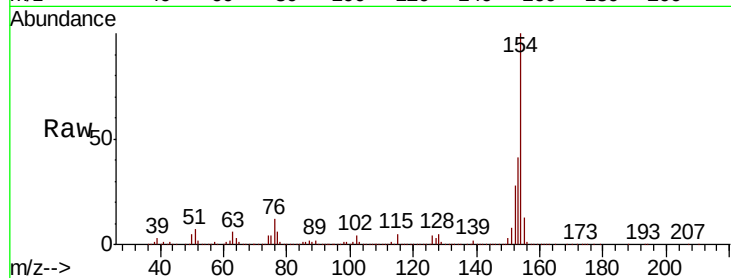
153 40.7 32.6 49.0

76 12.5 10.4 15.6

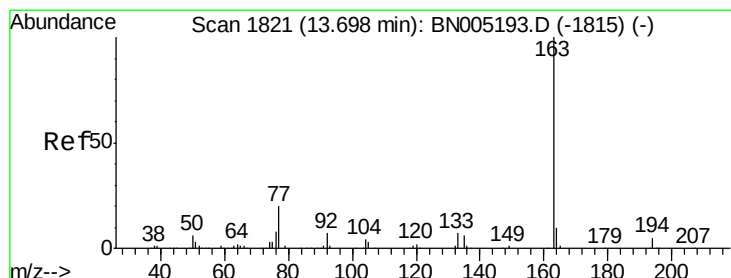
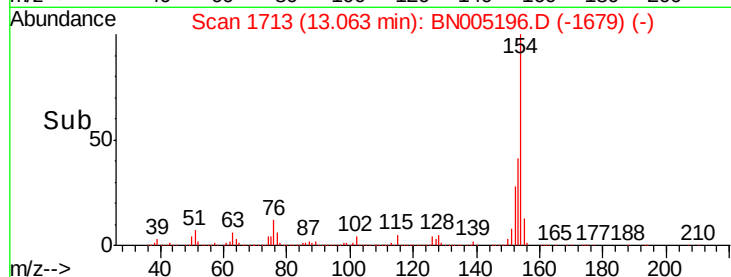
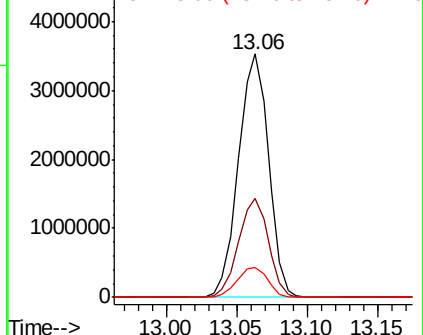
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Abundance Ion 154.00 (153.70 to 154.70): E  
Ion 153.00 (152.70 to 153.70): E  
Ion 76.00 (75.70 to 76.70): BNC



#44

Dimethylphthalate

Concen: 7.469 ng/ul

RT: 13.70 min Scan# 1821

Delta R.T. -0.01 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

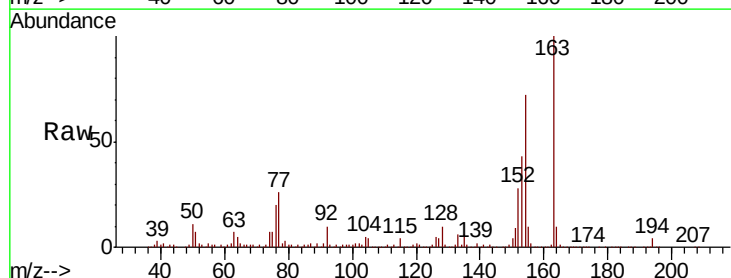
Tgt Ion:163 Resp: 867939

Ion Ratio Lower Upper

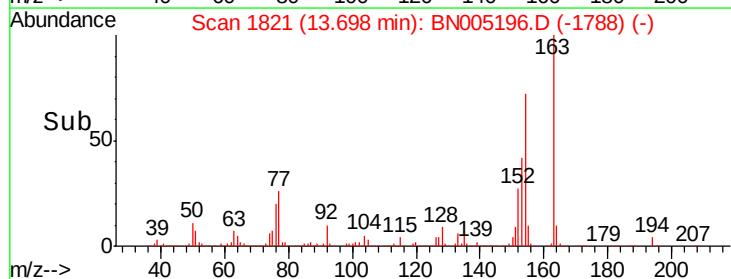
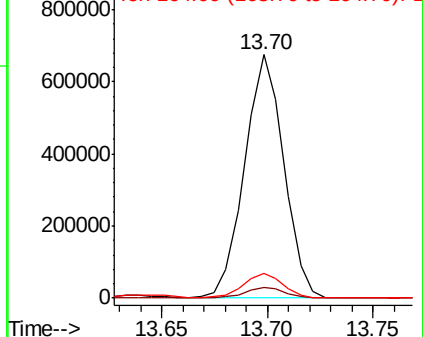
163 100

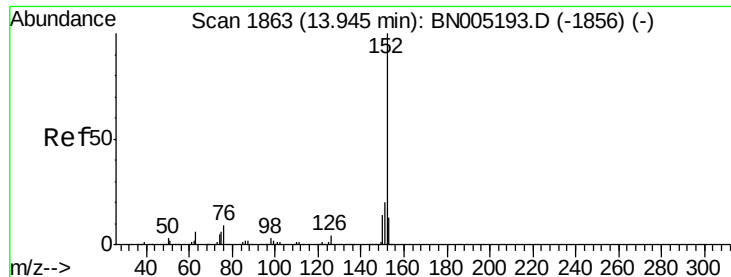
194 4.1 3.4 5.0

164 10.3 8.1 12.1



Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E





#47

Acenaphthylene

Concen: 65.842 ng/ul

RT: 13.96 min Scan# 1865

Delta R.T. 0.01 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

Instrument :

BNA\_N

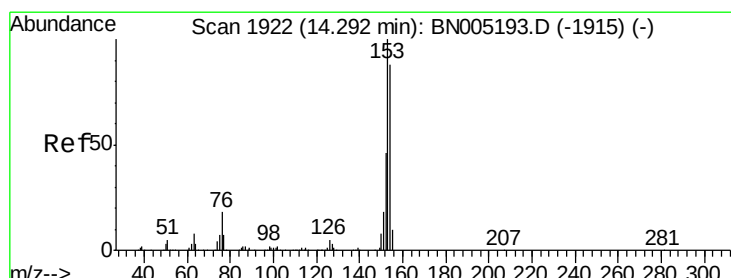
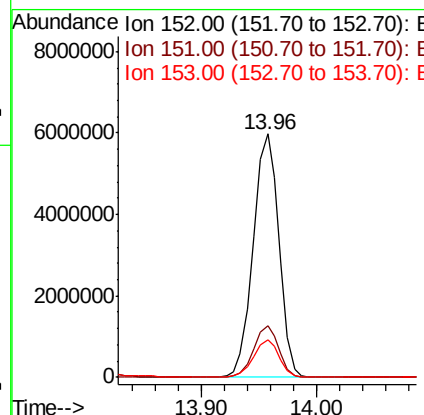
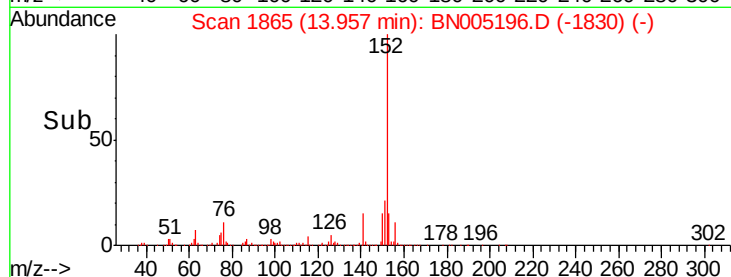
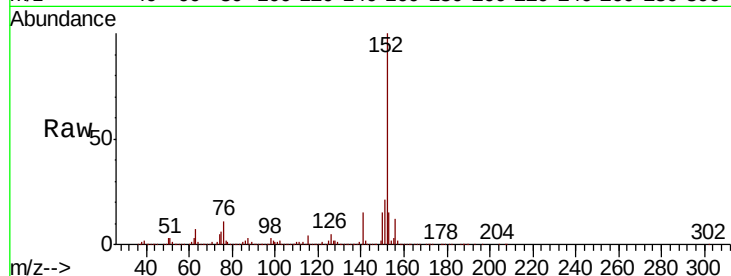
ClientSampleId :

GAHH7

|           |       |       |         |
|-----------|-------|-------|---------|
| Tot Ion:  | 152   | Resp: | 9268064 |
| Ion Ratio | Lower | Upper |         |
| 152       | 100   |       |         |
| 151       | 21.0  | 15.8  | 23.8    |
| 153       | 15.2  | 9.8   | 14.8#   |

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#49

Acenaphthene

Concen: 17.253 ng/ul

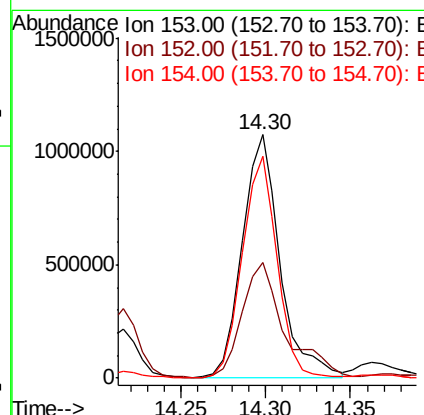
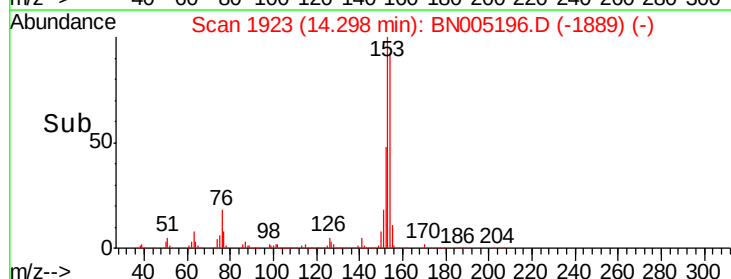
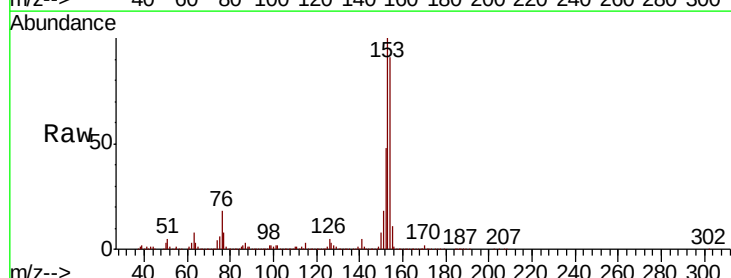
RT: 14.30 min Scan# 1923

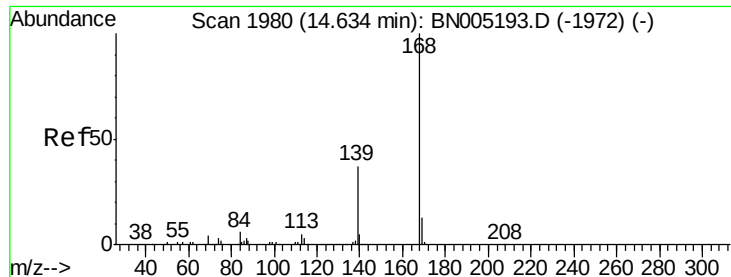
Delta R.T. -0.00 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 153   | Resp: | 1657935 |
| Ion Ratio | Lower | Upper |         |
| 153       | 100   |       |         |
| 152       | 47.7  | 37.4  | 56.0    |
| 154       | 91.0  | 71.2  | 106.8   |





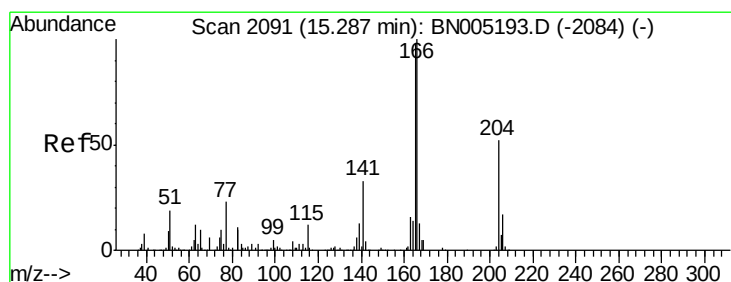
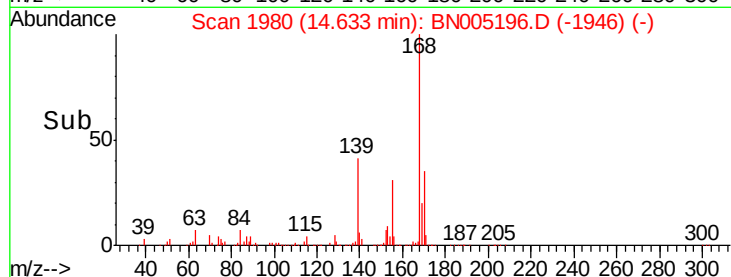
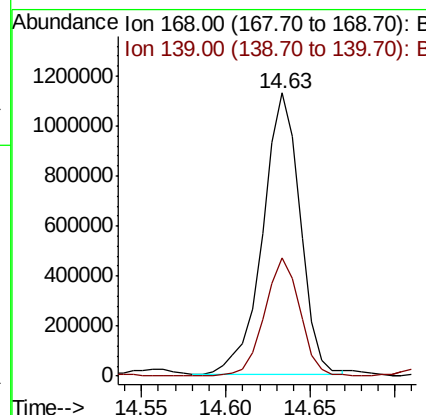
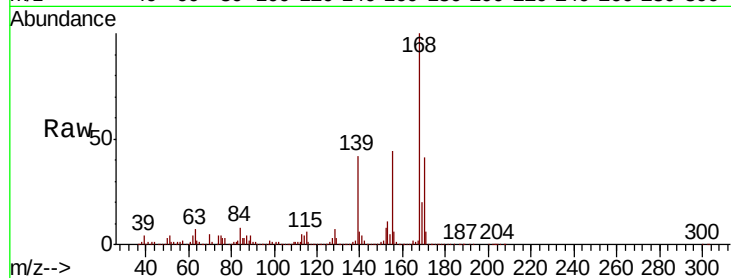
#53  
Dibenzenofuran  
Concen: 12.591 ng/ul  
RT: 14.63 min Scan# 1980  
Delta R.T. -0.00 min  
Lab File: BN005196.D  
Acq: 23 Apr 2019 04:29

Instrument :  
BNA\_N  
ClientSampleId :  
GAHH7

Tot Ion:168 Resp: 1742018  
Ion Ratio Lower Upper  
168 100  
139 41.6 30.9 46.3

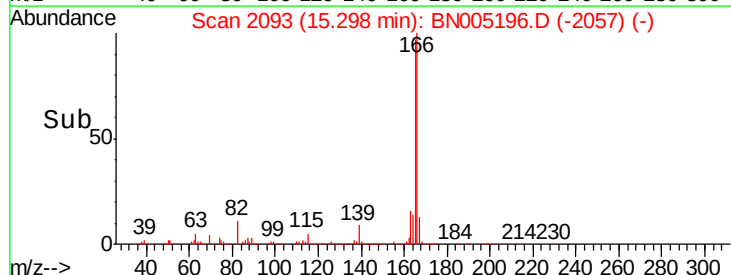
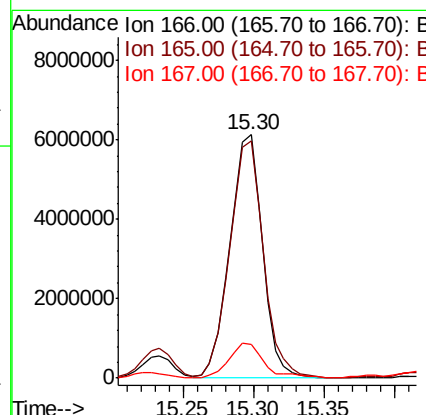
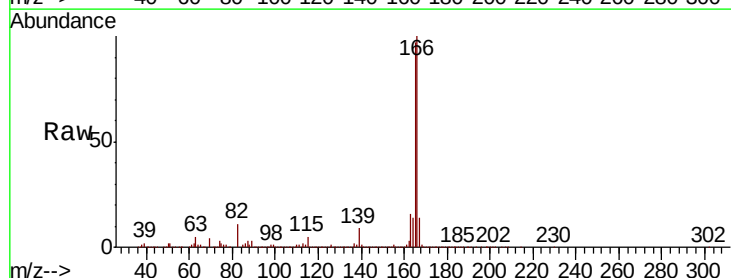
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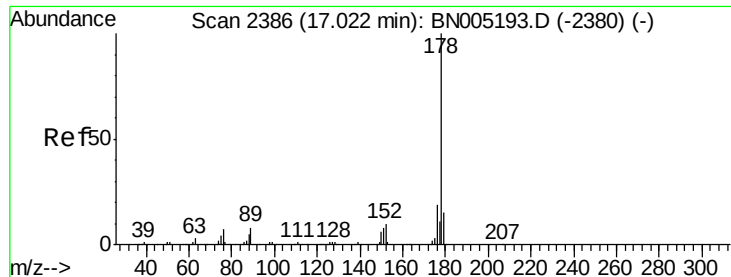
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#58  
Fluorene  
Concen: 91.455 ng/ul  
RT: 15.30 min Scan# 2093  
Delta R.T. 0.01 min  
Lab File: BN005196.D  
Acq: 23 Apr 2019 04:29

Tgt Ion:166 Resp: 9873607  
Ion Ratio Lower Upper  
166 100  
165 97.3 80.0 120.0  
167 13.8 10.7 16.1





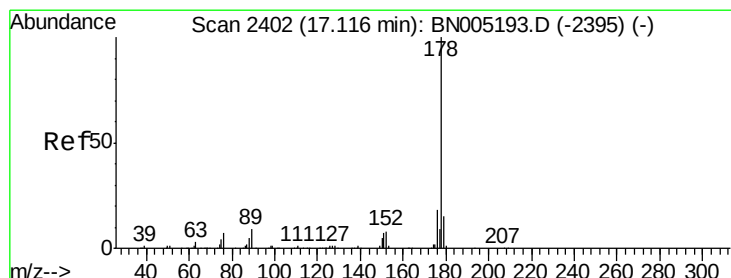
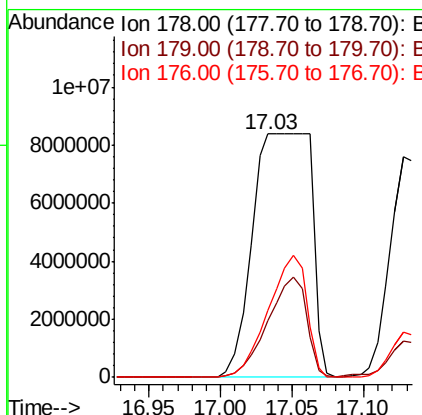
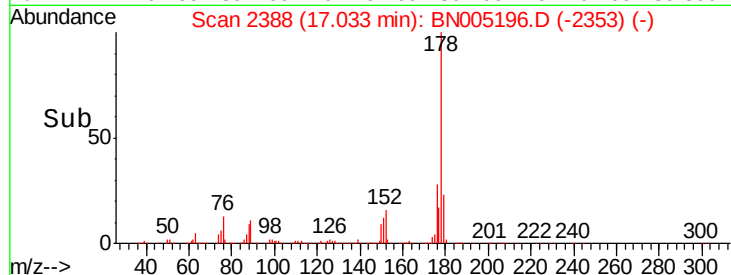
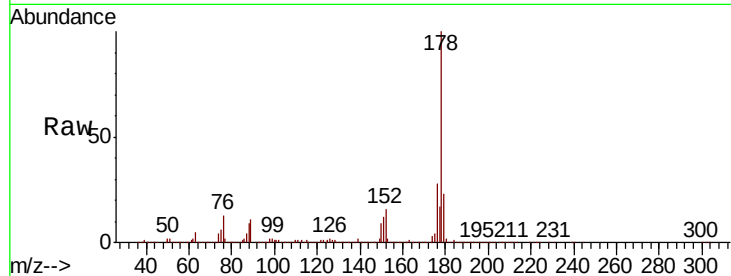
#69  
Phenanthrene  
Concen: 150.729 ng/ul m  
RT: 17.03 min Scan# 2388  
Delta R.T. 0.01 min  
Lab File: BN005196.D  
Acq: 23 Apr 2019 04:29

Instrument :  
BNA\_N  
ClientSampled :  
GAHH7

Tot Ion:178 Resp:23860340  
Ion Ratio Lower Upper  
178 100  
179 23.2 12.2 18.4#  
176 27.7 15.1 22.7#

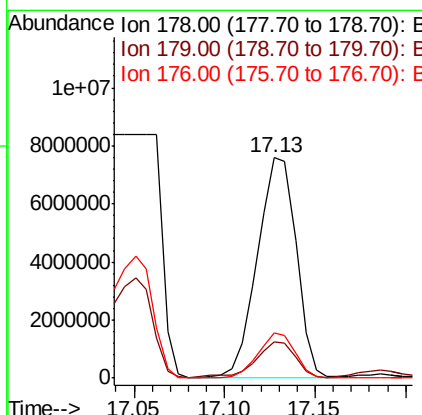
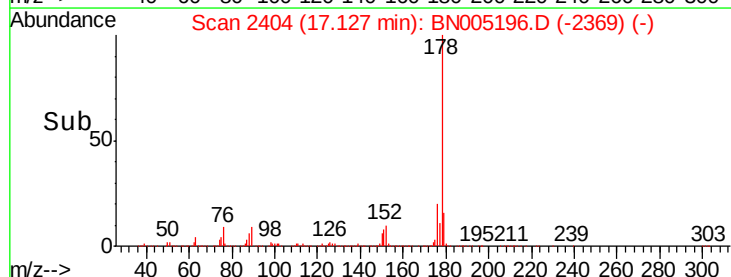
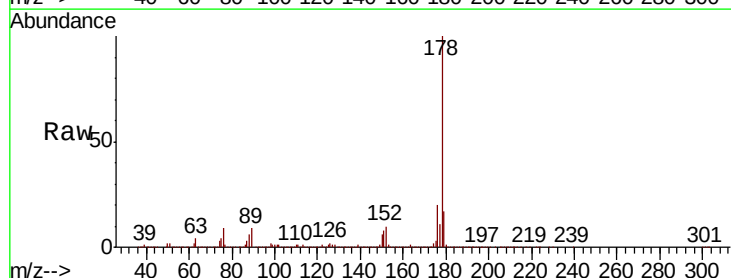
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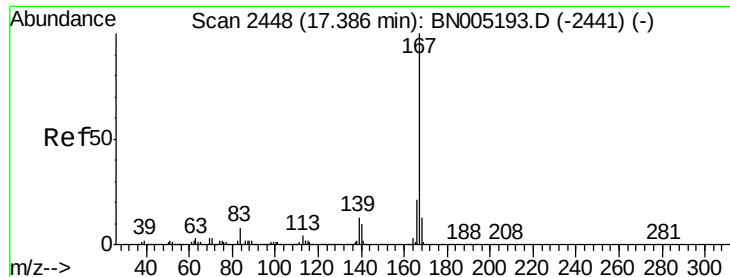


#71  
Anthracene  
Concen: 69.510 ng/ul  
RT: 17.13 min Scan# 2404  
Delta R.T. 0.01 min  
Lab File: BN005196.D  
Acq: 23 Apr 2019 04:29

Tgt Ion:178 Resp:11209153  
Ion Ratio Lower Upper  
178 100  
179 16.6 12.3 18.5  
176 20.3 15.1 22.7







#74

Carbazole

Concen: 2.878 ng/ul

RT: 17.39 min Scan# 2448

Delta R.T. -0.01 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

Instrument :

BNA\_N

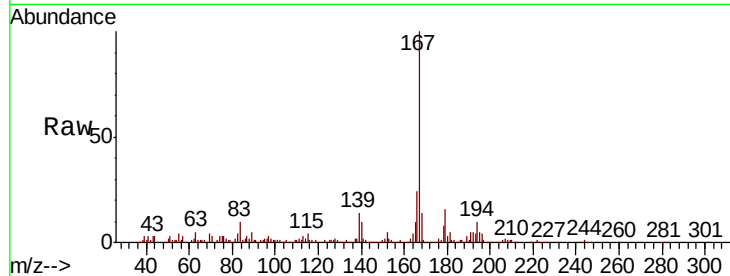
ClientSampled :

GAHH7

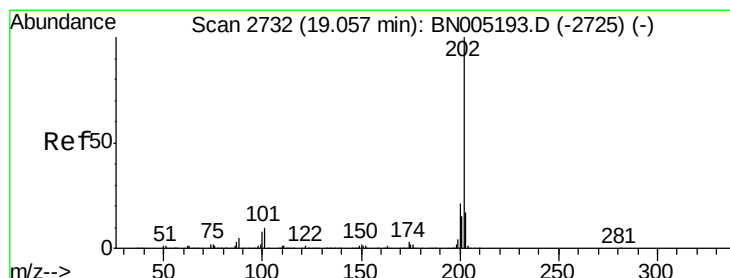
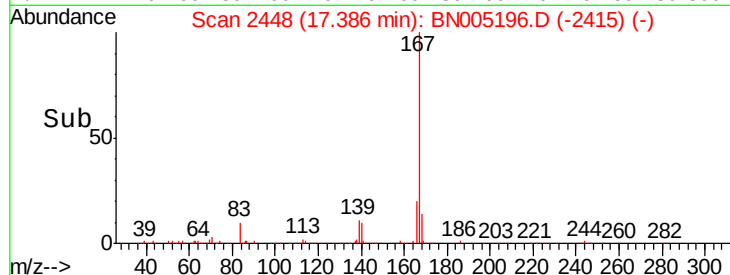
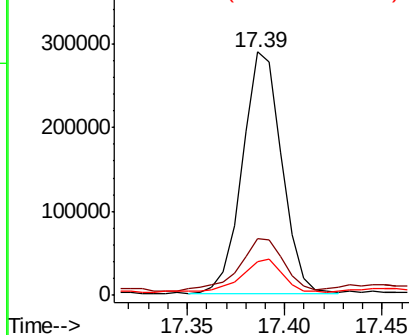
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 167   | Resp: | 398636 |
| Ion Ratio | Lower | Upper |        |
| 167       | 100   |       |        |
| 166       | 23.5  | 17.2  | 25.8   |
| 139       | 13.8  | 10.6  | 16.0   |

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Abundance Ion 167.00 (166.70 to 167.70): E  
Ion 166.00 (165.70 to 166.70): E  
Ion 139.00 (138.70 to 139.70): E



#76

Fluoranthene

Concen: 85.955 ng/ul m

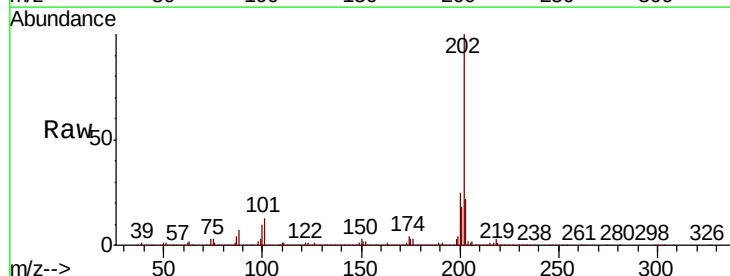
RT: 19.06 min Scan# 2733

Delta R.T. 0.01 min

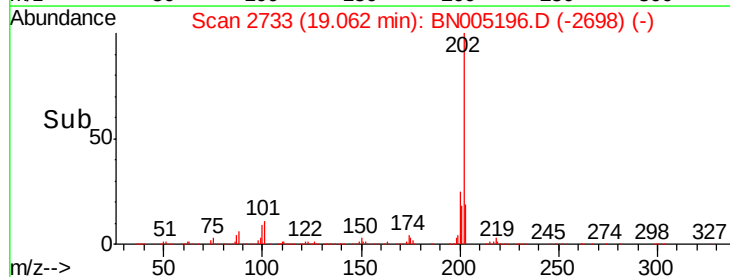
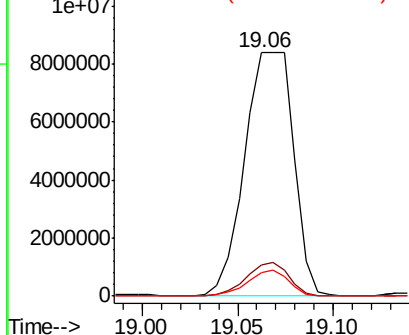
Lab File: BN005196.D

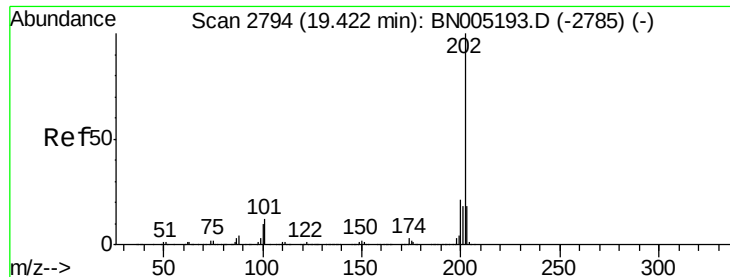
Acq: 23 Apr 2019 04:29

|           |       |       |          |
|-----------|-------|-------|----------|
| Tgt Ion:  | 202   | Resp: | 15092323 |
| Ion Ratio | Lower | Upper |          |
| 202       | 100   |       |          |
| 101       | 12.6  | 8.6   | 12.8     |
| 100       | 9.5   | 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): B





#79

Pvrene

Concen: 108.499 ng/ul m

RT: 19.43 min Scan# 2796

Delta R.T. 0.01 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

Instrument :

BNA\_N

ClientSampled :

GAHH7

Tot Ion:202 Resp:17886755

Ion Ratio Lower Upper

202 100

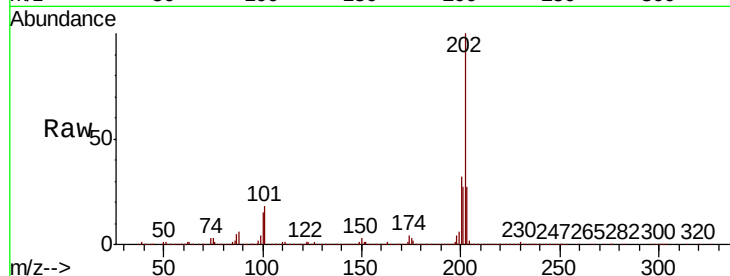
101 18.2 10.3 15.5#

100 15.0 7.9 11.9#

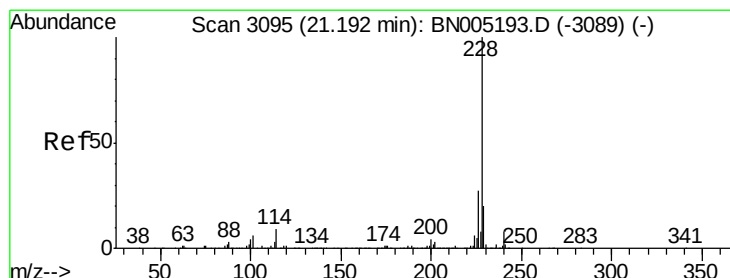
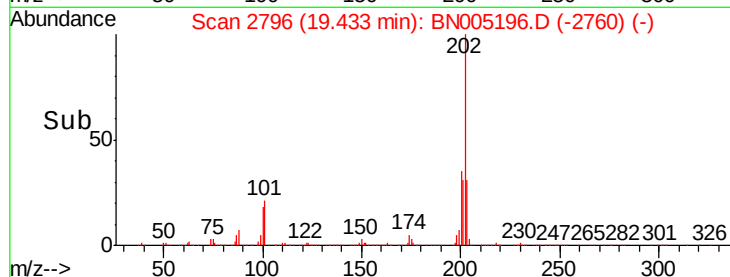
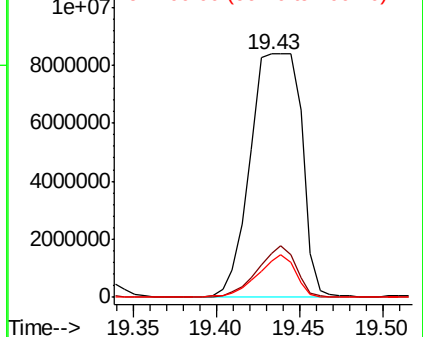
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Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 100.00 (99.70 to 100.70): B



#82

Benzo(a)anthracene

Concen: 54.205 ng/ul m

RT: 21.20 min Scan# 3097

Delta R.T. 0.01 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

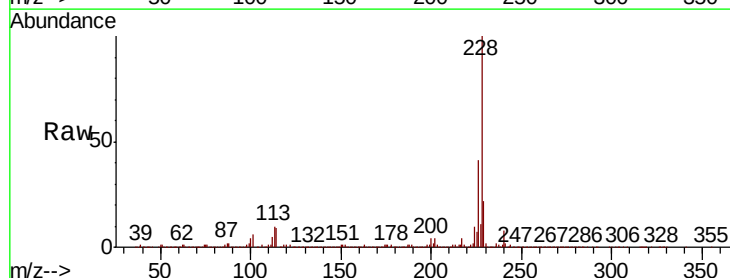
Tgt Ion:228 Resp: 8633913

Ion Ratio Lower Upper

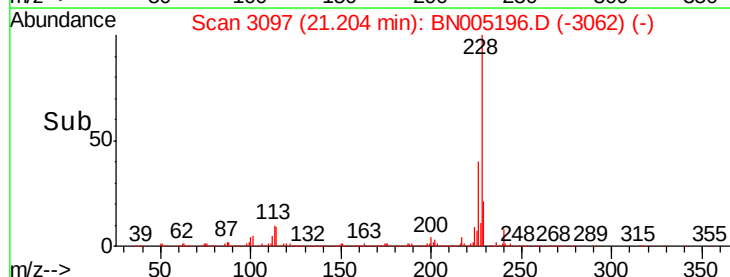
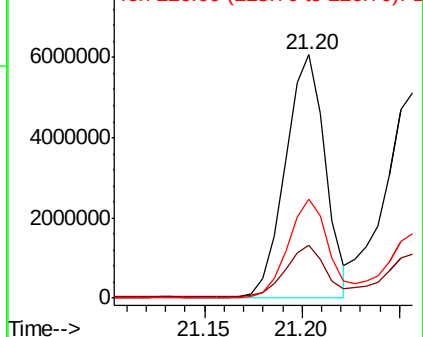
228 100

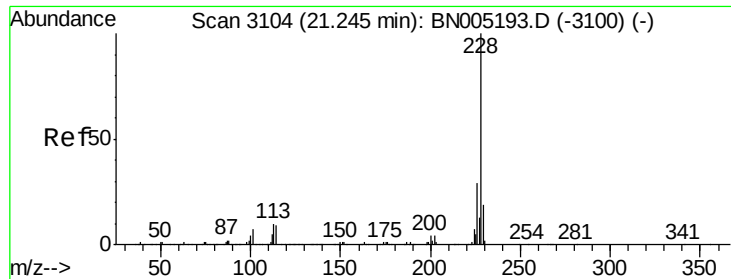
229 21.6 15.8 23.6

226 40.8 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





#84

Chrysene

Concen: 51.492 ng/ul

RT: 21.26 min Scan# 3106

Delta R.T. 0.01 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

Instrument :

BNA\_N

ClientSampled :

GAHH7

Tot Ion:228 Resp: 7612004

Ion Ratio Lower Upper

228 100

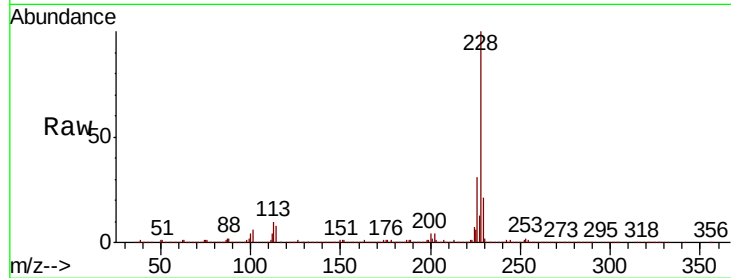
226 31.3 24.0 36.0

229 21.4 15.4 23.0

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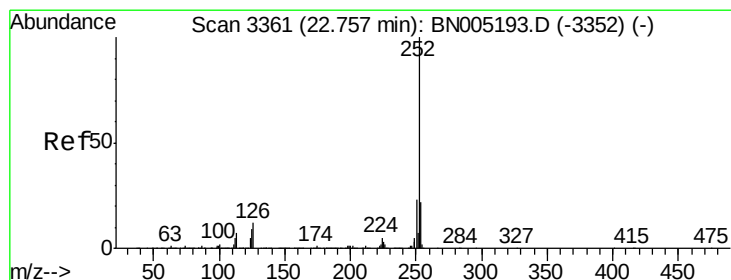
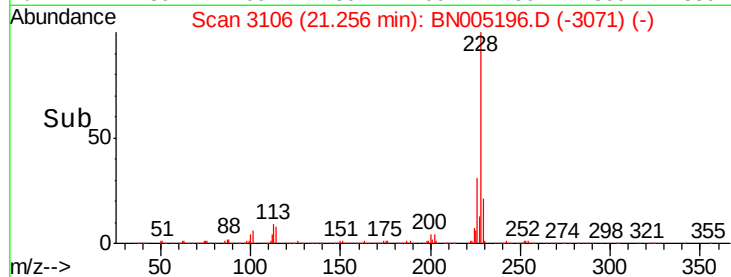
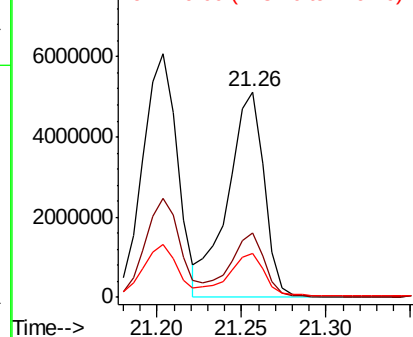


Abundance

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: 34.244 ng/ul

RT: 22.77 min Scan# 3363

Delta R.T. -0.00 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

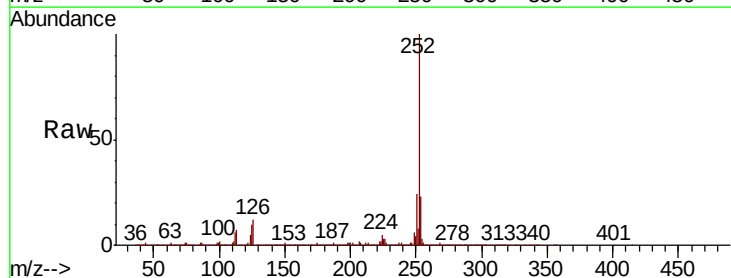
Tgt Ion:252 Resp: 5644447

Ion Ratio Lower Upper

252 100

253 22.6 17.7 26.5

125 9.9 8.4 12.6

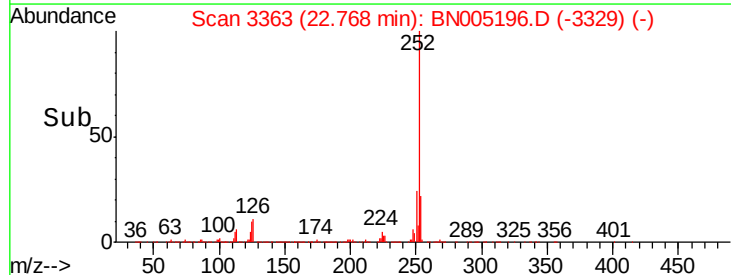
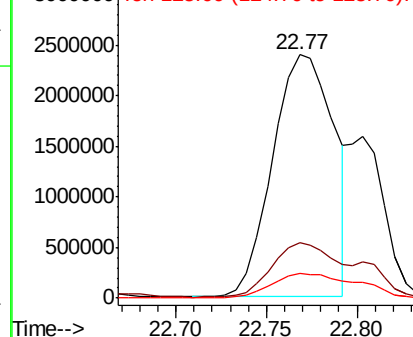


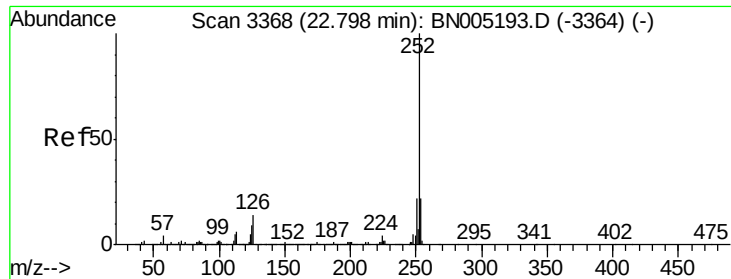
Abundance

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





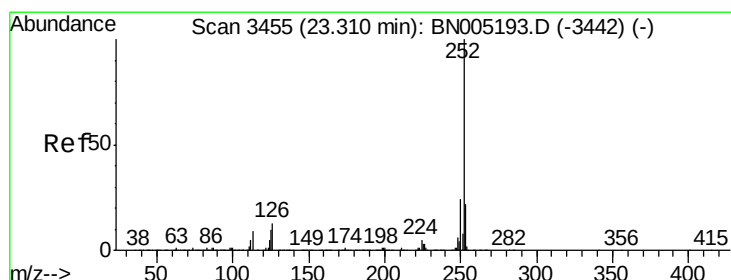
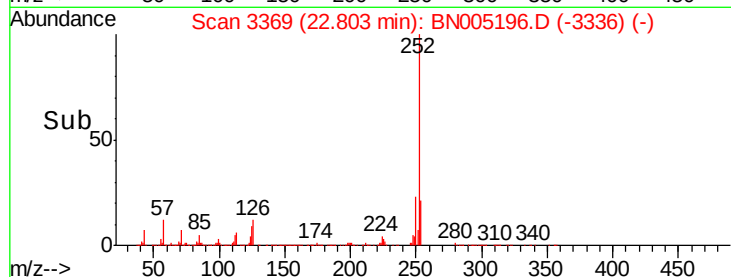
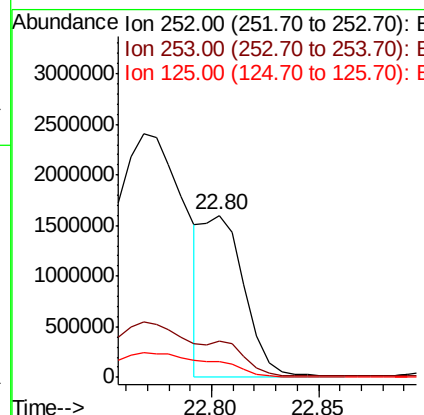
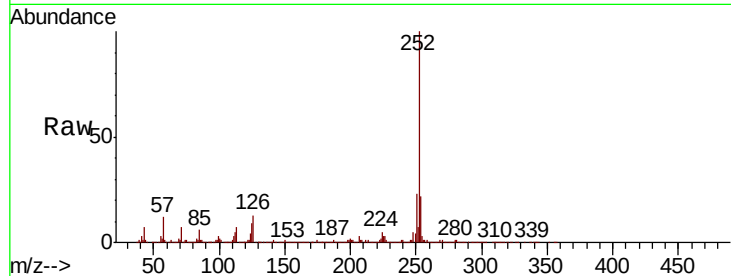
#88  
Benzo(k)fluoranthene  
Concen: 13.906 ng/ul m  
RT: 22.80 min Scan# 3369  
Delta R.T. -0.01 min  
Lab File: BN005196.D  
Acq: 23 Apr 2019 04:29

Instrument :  
BNA\_N  
ClientSampleId :  
GAHH7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.3  | 17.4  | 26.0  |
| 125     | 9.5   | 7.5   | 11.3  |

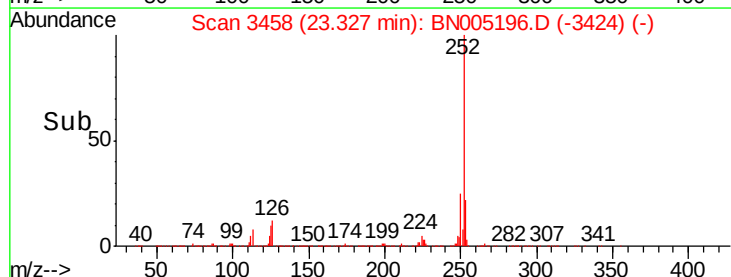
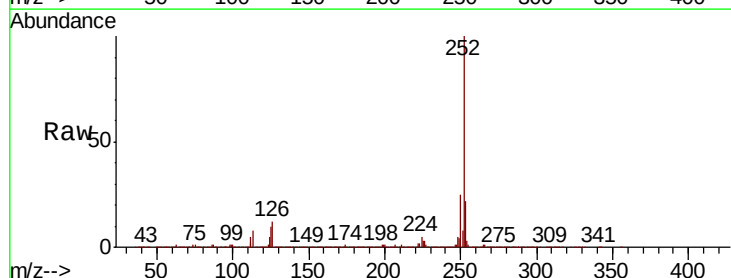
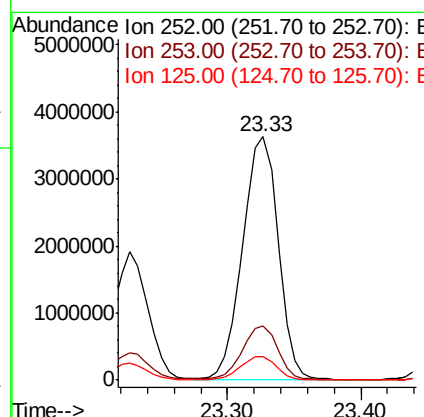
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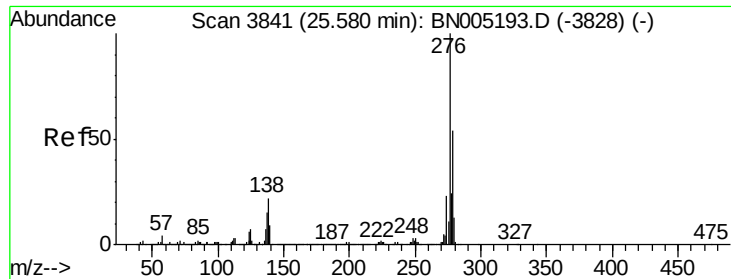
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#90  
Benzo(a)pyrene  
Concen: 42.856 ng/ul  
RT: 23.33 min Scan# 3458  
Delta R.T. -0.00 min  
Lab File: BN005196.D  
Acq: 23 Apr 2019 04:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.2  | 17.3  | 25.9  |
| 125     | 9.7   | 8.6   | 13.0  |





#91

Indeno(1,2,3-cd)pyrene

Concen: 15.690 ng/ul

RT: 25.59 min Scan# 3842

Delta R.T. -0.02 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

Instrument :

BNA\_N

ClientSampled :

GAHH7

Tot Ion:276 Resp: 2687588

Ion Ratio Lower Upper

276 100

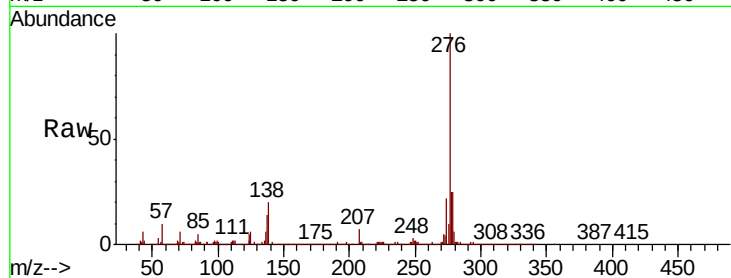
138 20.3 17.9 26.9

277 24.5 19.7 29.5

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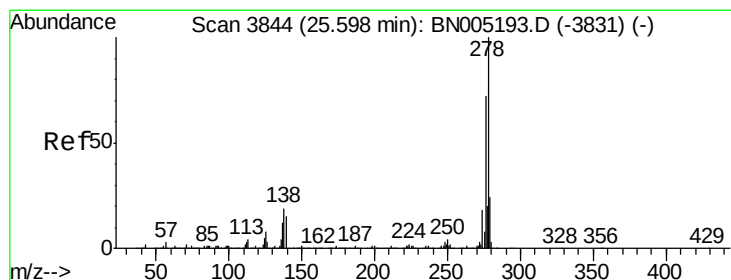
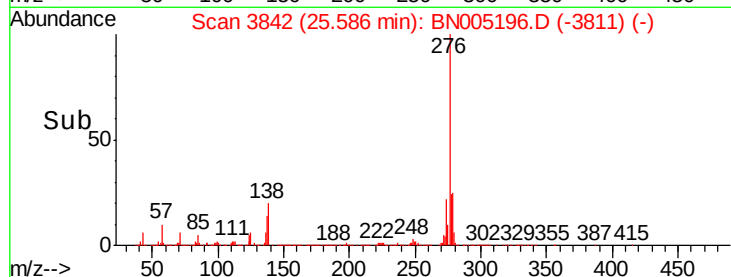
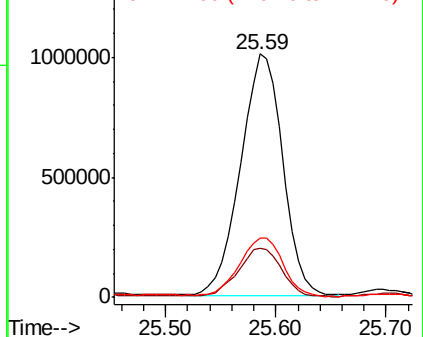
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Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#92

Dibenzo(a,h)anthracene

Concen: 5.744 ng/ul m

RT: 25.60 min Scan# 3844

Delta R.T. -0.02 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

Tgt Ion:278 Resp: 835048

Ion Ratio Lower Upper

278 100

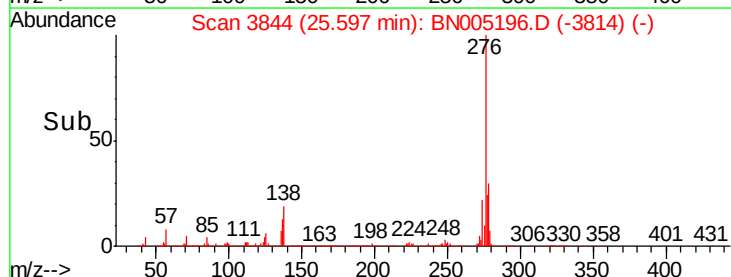
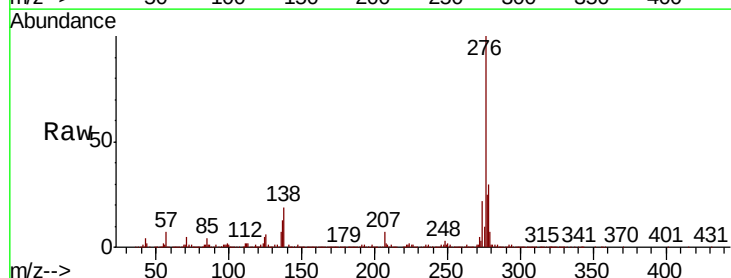
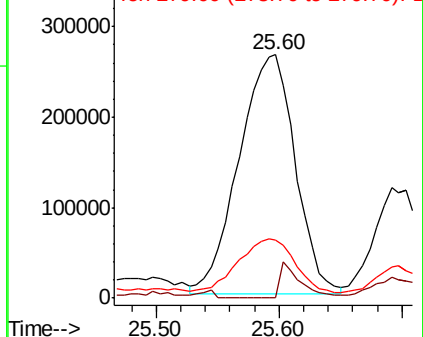
139 0.0 13.1 19.7#

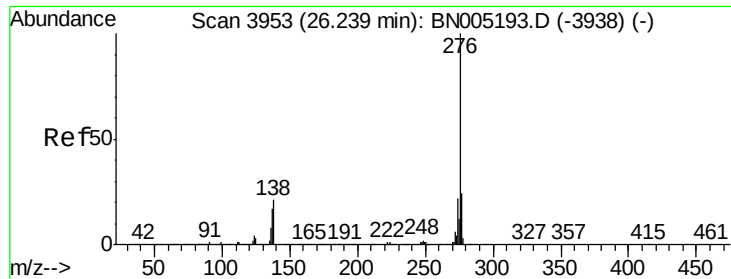
279 23.7 19.4 29.0

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: 16.139 ng/ul

RT: 26.25 min Scan# 3955

Delta R.T. -0.01 min

Lab File: BN005196.D

Acq: 23 Apr 2019 04:29

Instrument :

BNA\_N

ClientSampleId :

GAHH7

Tot Ion: 276 Resp: 2285843

Ion Ratio Lower Upper

276 100

138 21.0 16.7 25.1

277 24.3 18.2 27.2

Manual Integrations

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