

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN050219\  
 Data File : BN005441.D  
 Acq On : 03 May 2019 06:31  
 Operator : JU/SJ  
 Sample : K2603-17 10X  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleID :  
 GAJ69

Manual Integrations  
 APPROVED

Sohil  
 5/3/2019 10:54:23 PM

Quant Time: May 06 06:57:58 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri May 03 03:02:31 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.59  | 152  | 366407   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.36 | 136  | 1528972  | 20.00 | ng/ul | 0.01     |
| 35) Acenaphthene-d10      | 14.23 | 164  | 1004055  | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.99 | 188  | 2186017  | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.22 | 240  | 1790489  | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 23.42 | 264  | 1689157  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |      |       |      |
|--------------------------------|-------|-----|--------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.21  | 96  | 1900   | 0.25 | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.78  | 99  | 49034  | 1.70 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.94  | 67  | 33002  | 1.84 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.13  | 132 | 42143  | 1.91 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.29  | 113 | 41269  | 1.83 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.73  | 128 | 31186  | 3.31 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.45  | 143 | 23349  | 2.45 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 9.99  | 165 | 45488  | 2.08 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 0.00  | 131 | 0d     | 0.00 | ng/ul |      |
| 43) Dimethylphthalate-d6       | 13.65 | 166 | 164493 | 2.26 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 13.92 | 160 | 185953 | 2.08 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.46 | 143 | 25395  | 2.21 | ng/ul | 0.02 |
| 57) Fluorene-d10               | 15.23 | 176 | 138147 | 2.26 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.39 | 200 | 8838   | 0.90 | ng/ul | 0.03 |
| 70) Anthracene-d10             | 17.09 | 188 | 206513 | 2.25 | ng/ul | 0.00 |
| 78) Pyrene-d10                 | 19.40 | 212 | 221094 | 2.41 | ng/ul | 0.00 |
| 89) Benzo(a)pyrene-d12         | 23.28 | 264 | 162767 | 2.20 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |           |         | Ovalue    |
|----------------------------|-------|-----|-----------|---------|-----------|
| 28) Naphthalene            | 10.42 | 128 | 29675359m | 417.496 | ng/ul     |
| 34) 2-Methylnaphthalene    | 12.05 | 142 | 21080822  | 405.049 | ng/ul 94  |
| 40) 1,1'-Biphenyl          | 13.06 | 154 | 2923708   | 39.081  | ng/ul 98  |
| 47) Acenaphthylene         | 13.96 | 152 | 11821805  | 134.376 | ng/ul# 95 |
| 49) Acenaphthene           | 14.29 | 153 | 1291026   | 21.496  | ng/ul 98  |
| 53) Dibenzofuran           | 14.63 | 168 | 2327247   | 26.913  | ng/ul 99  |
| 58) Fluorene               | 15.29 | 166 | 7385530   | 109.455 | ng/ul 98  |
| 69) Phenanthrene           | 17.03 | 178 | 21095633m | 198.151 | ng/ul     |
| 71) Anthracene             | 17.13 | 178 | 7144398   | 65.876  | ng/ul 99  |
| 74) Carbazole              | 17.39 | 167 | 726078    | 7.794   | ng/ul 95  |
| 76) Fluoranthene           | 19.07 | 202 | 9983808   | 84.546  | ng/ul 96  |
| 79) Pyrene                 | 19.43 | 202 | 12546761  | 108.834 | ng/ul 97  |
| 82) Benzo(a)anthracene     | 21.20 | 228 | 4319853m  | 38.782  | ng/ul     |
| 84) Chrysene               | 21.25 | 228 | 3558972   | 34.427  | ng/ul 97  |
| 87) Benzo(b)fluoranthene   | 22.77 | 252 | 2240864   | 23.600  | ng/ul 98  |
| 88) Benzo(k)fluoranthene   | 22.80 | 252 | 869660m   | 9.590   | ng/ul     |
| 90) Benzo(a)pyrene         | 23.32 | 252 | 2511764m  | 28.143  | ng/ul     |
| 91) Indeno(1,2,3-cd)pyrene | 25.60 | 276 | 904833    | 9.170   | ng/ul# 94 |
| 92) Dibenzo(a,h)anthracene | 25.60 | 278 | 277269    | 3.311   | ng/ul 95  |
| 93) Benzo(g,h,i)perylene   | 26.26 | 276 | 876912    | 10.748  | ng/ul# 94 |

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

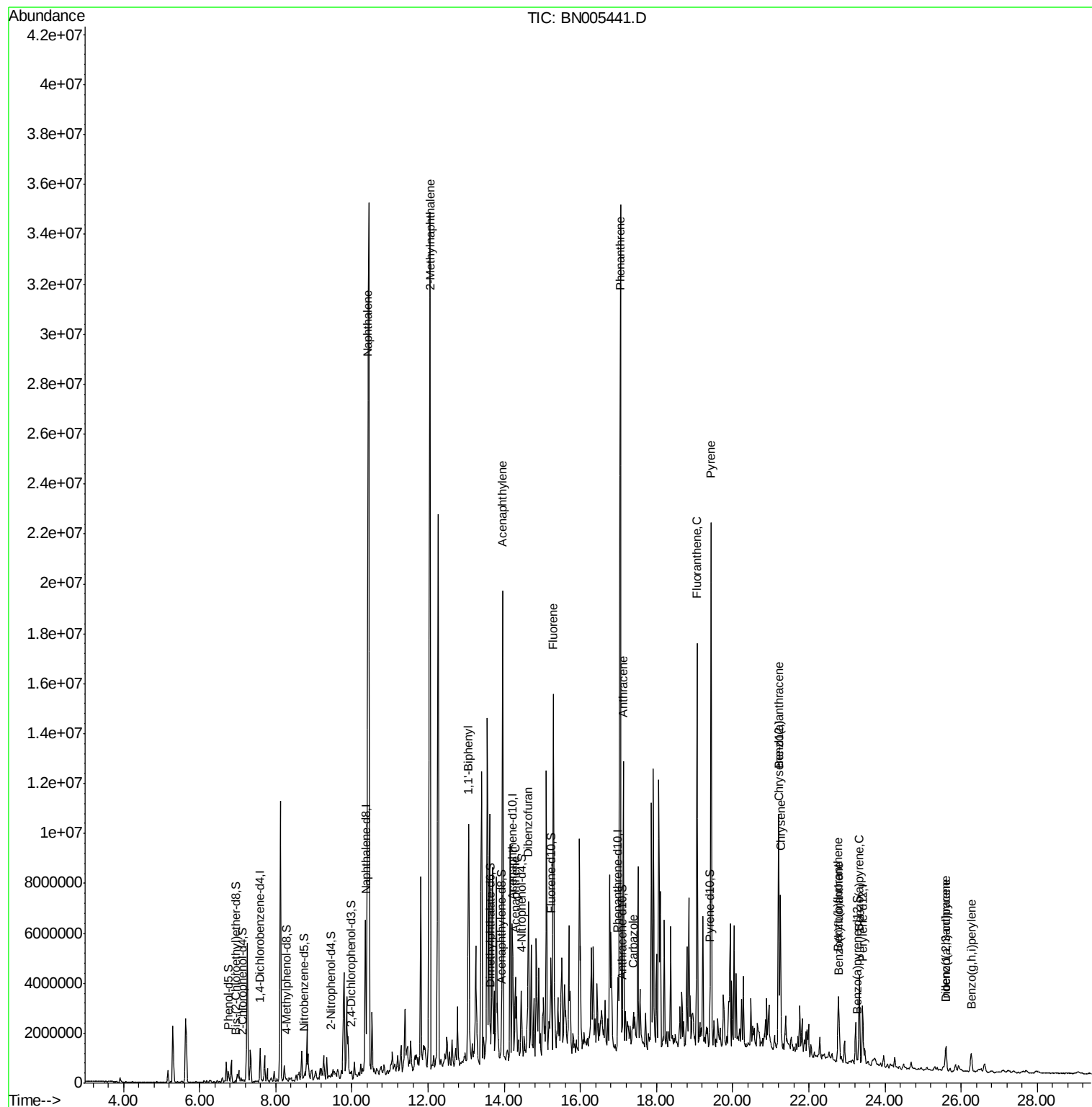
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN050219\  
Data File : BN005441.D  
Acq On : 03 May 2019 06:31  
Operator : JU/SJ  
Sample : K2603-17 10X  
Misc :  
ALS Vial : 26 Sample Multiplier: 1

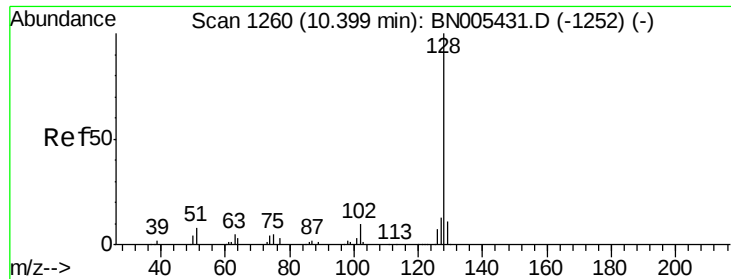
Instrument :  
BNA\_N  
ClientSampleId :  
GAJ69

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5/3/2019 10:54:23 PM

Quant Time: May 06 06:57:58 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri May 03 03:02:31 2019  
Response via : Initial Calibration





#28

Naphthalene

Concen: 417.496 ng/ul m

RT: 10.42 min Scan# 1263

Delta R.T. 0.02 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

Instrument :

BNA\_N

ClientSampled :

GAJ69

Tot Ion:128 Resp:29675359

Ion Ratio Lower Upper

128 100

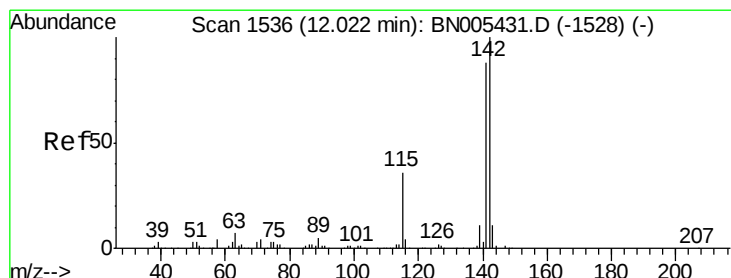
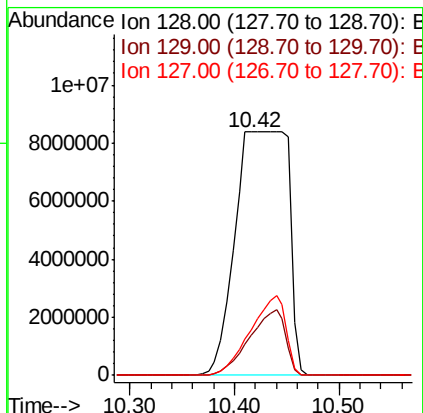
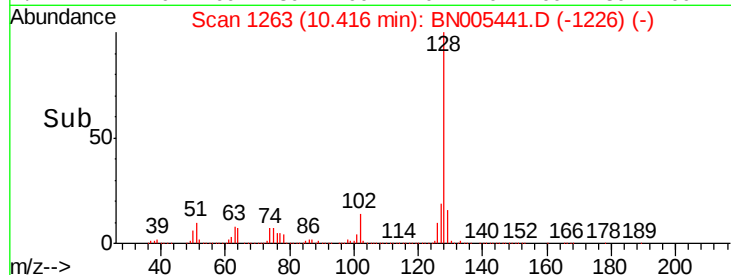
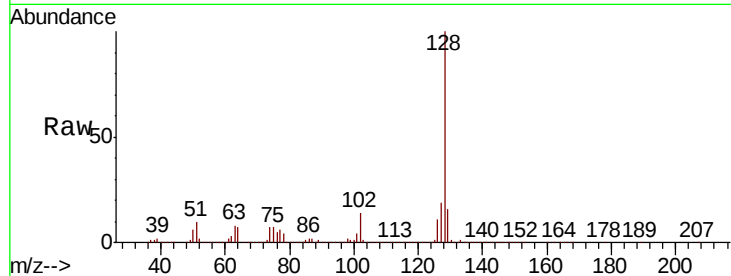
129 16.4 9.2 13.8#

127 18.8 10.7 16.1#

Manual Integrations  
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#34

2-Methylnaphthalene

Concen: 405.049 ng/ul

RT: 12.05 min Scan# 1540

Delta R.T. 0.02 min

Lab File: BN005441.D

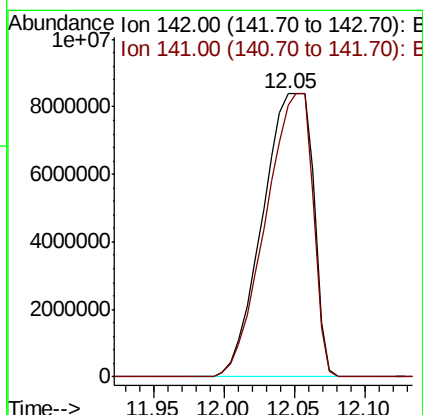
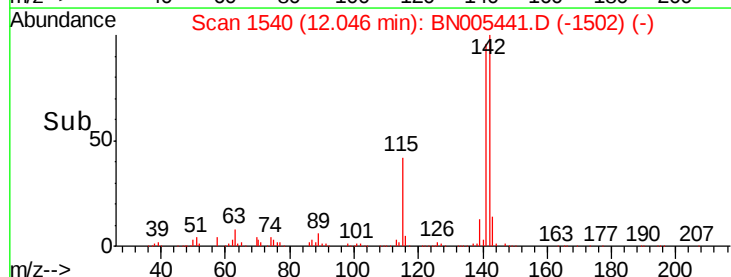
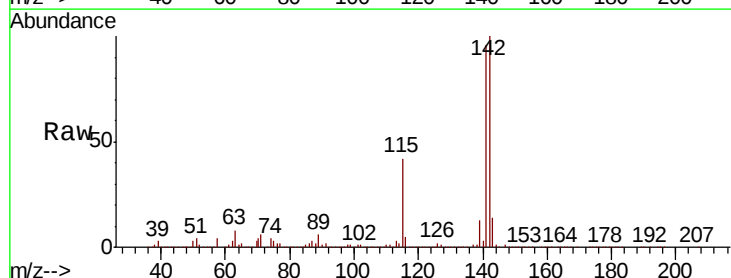
Acq: 03 May 2019 06:31

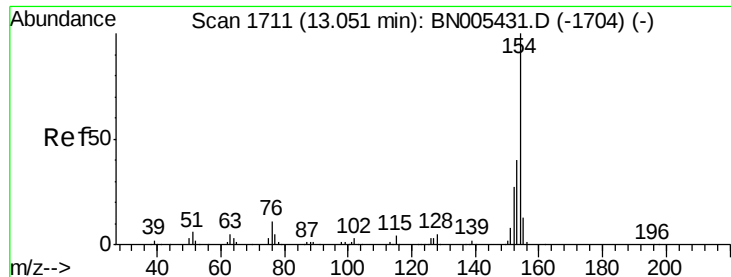
Tgt Ion:142 Resp:21080822

Ion Ratio Lower Upper

142 100

141 95.9 72.0 108.0





#40

1,1'-Biphenyl

Concen: 39.081 ng/ul

RT: 13.06 min Scan# 1712

Delta R.T. 0.01 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

Instrument :

BNA\_N

ClientSampleId :

GAJ69

Tot Ion:154 Resp: 2923708

Ion Ratio Lower Upper

154 100

153 40.5 32.6 49.0

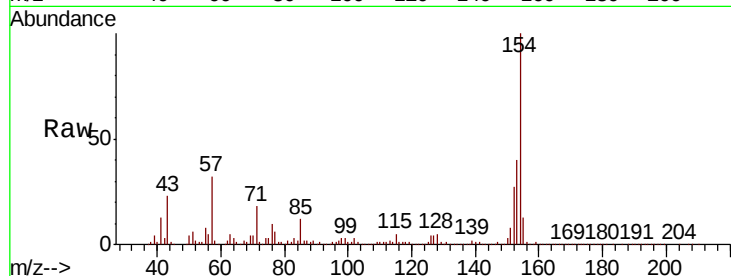
76 10.5 10.4 15.6

Manual Integrations

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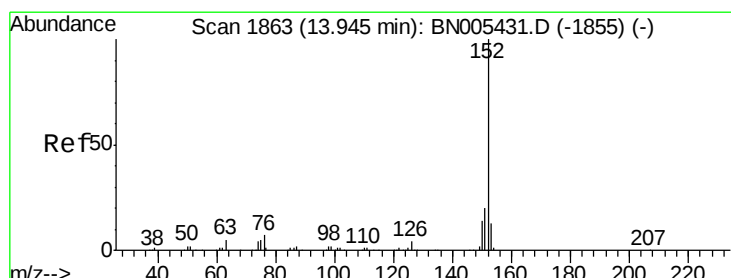
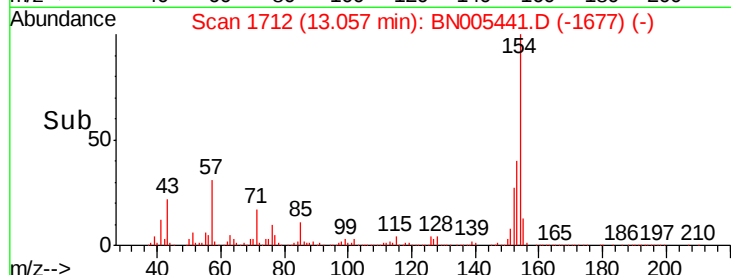
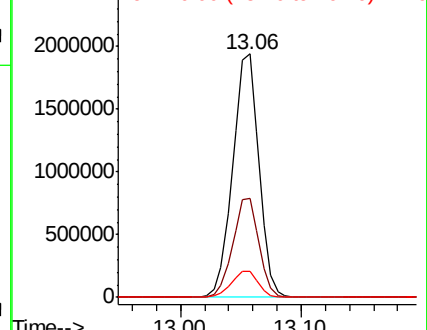


Abundance

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



#47

Acenaphthylene

Concen: 134.376 ng/ul

RT: 13.96 min Scan# 1865

Delta R.T. 0.01 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

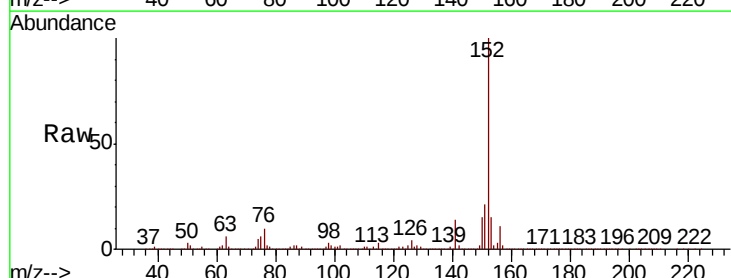
Tgt Ion:152 Resp:11821805

Ion Ratio Lower Upper

152 100

151 21.5 15.8 23.8

153 15.4 9.8 14.8#

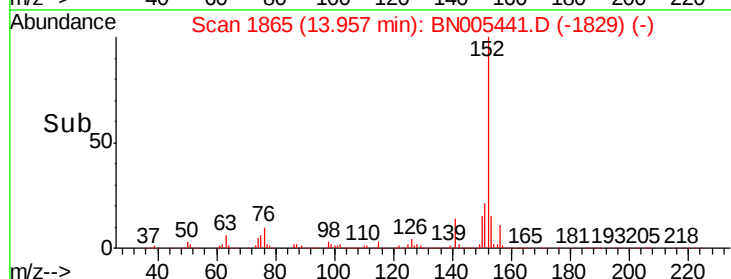
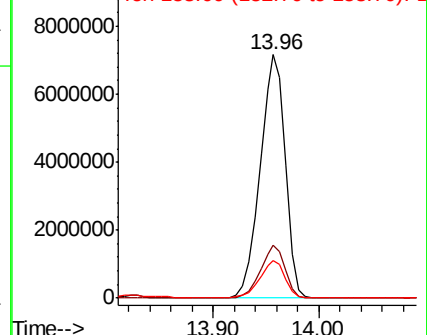


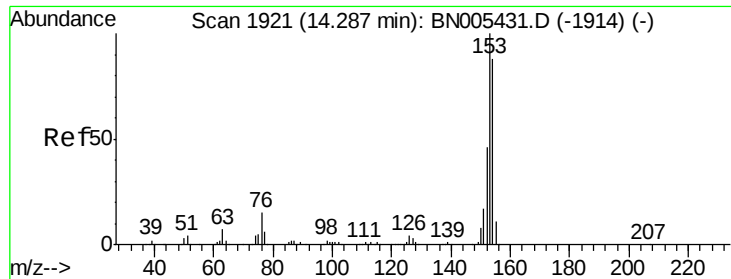
Abundance

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: 21.496 ng/ul

RT: 14.29 min Scan# 1922

Delta R.T. -0.00 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

Instrument :

BNA\_N

ClientSampleId :

GAJ69

Tot Ion:153 Resp: 1291026

Ion Ratio Lower Upper

153 100

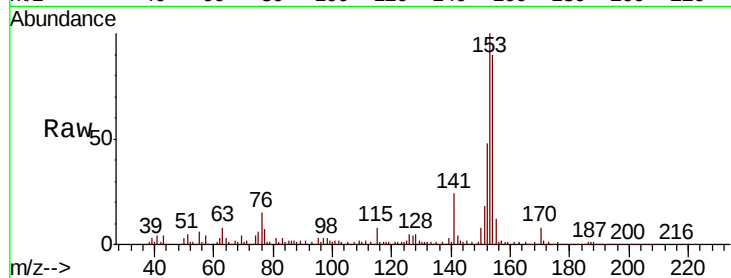
152 48.3 37.4 56.0

154 90.4 71.2 106.8

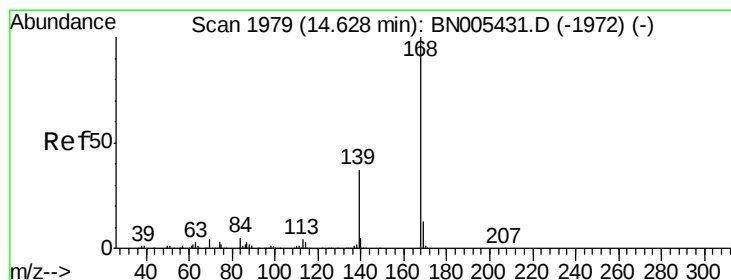
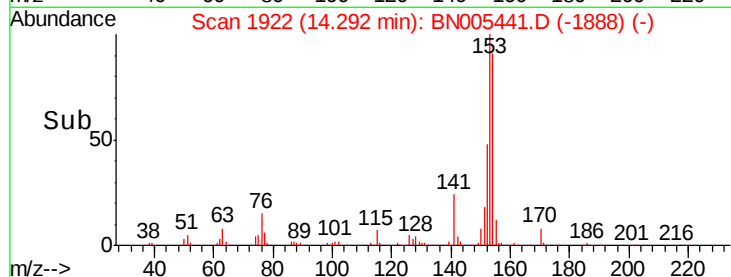
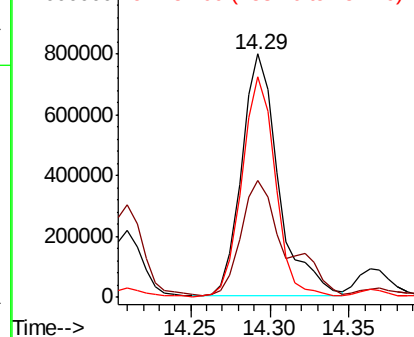
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Abundance Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E  
Ion 154.00 (153.70 to 154.70): E



#53

Dibenzofuran

Concen: 26.913 ng/ul

RT: 14.63 min Scan# 1979

Delta R.T. -0.00 min

Lab File: BN005441.D

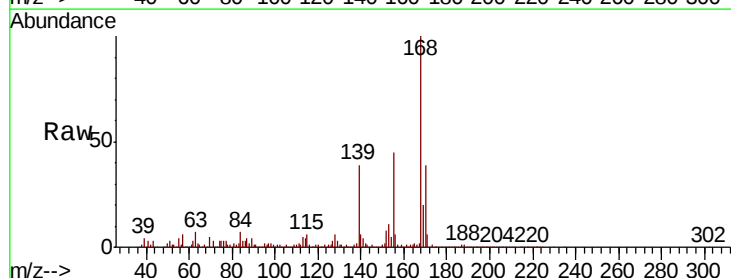
Acq: 03 May 2019 06:31

Tgt Ion:168 Resp: 2327247

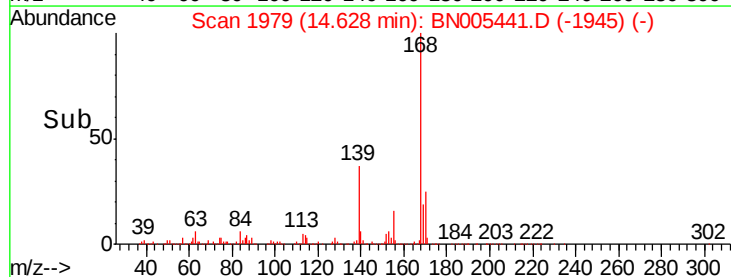
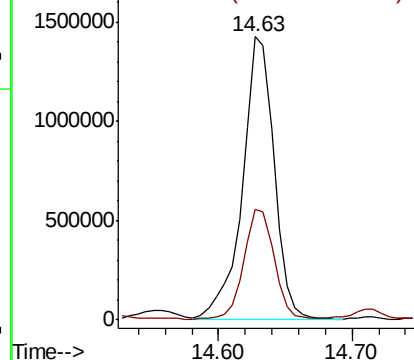
Ion Ratio Lower Upper

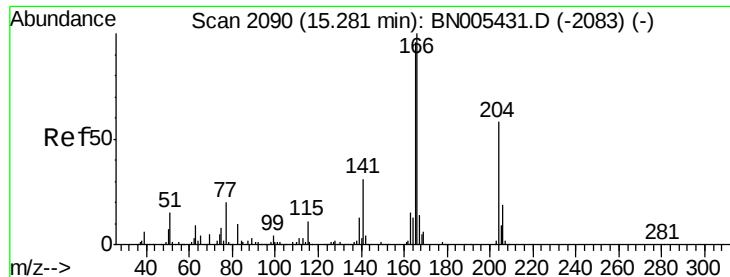
168 100

139 39.0 30.9 46.3



Abundance Ion 168.00 (167.70 to 168.70): E  
Ion 139.00 (138.70 to 139.70): E





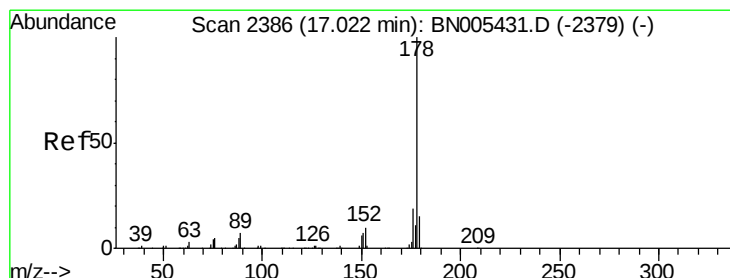
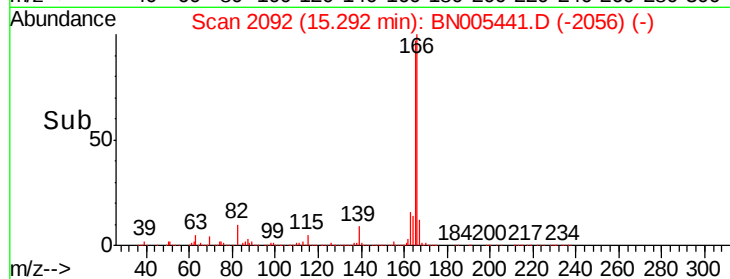
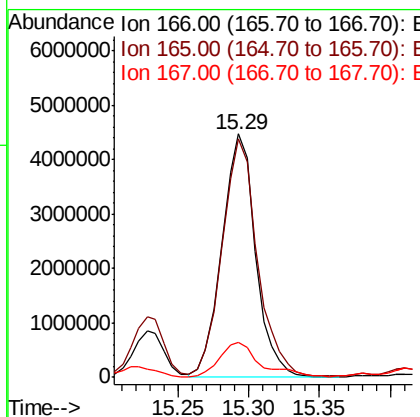
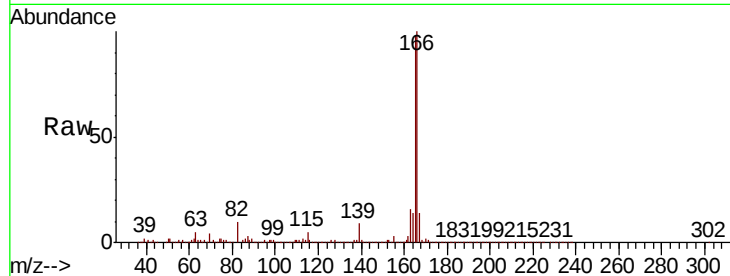
#58  
**Fluorene**  
 Concen: 109.455 ng/ul  
 RT: 15.29 min Scan# 2092  
 Delta R.T. 0.01 min  
 Lab File: BN005441.D  
 Acq: 03 May 2019 06:31

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAJ69

Tot Ion:166 Resp: 7385530  
 Ion Ratio Lower Upper  
 166 100  
 165 98.1 80.0 120.0  
 167 14.5 10.7 16.1

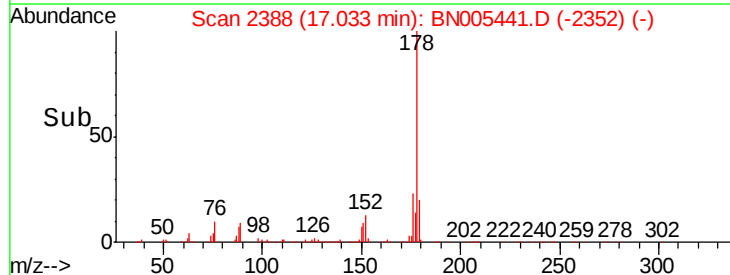
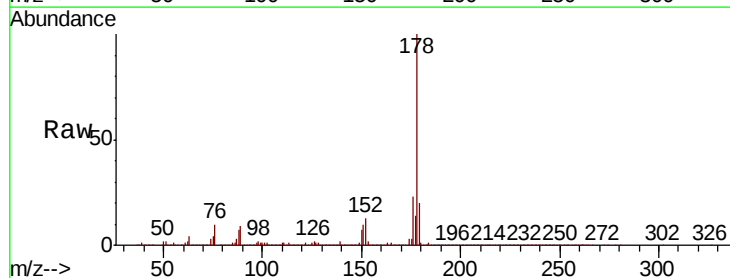
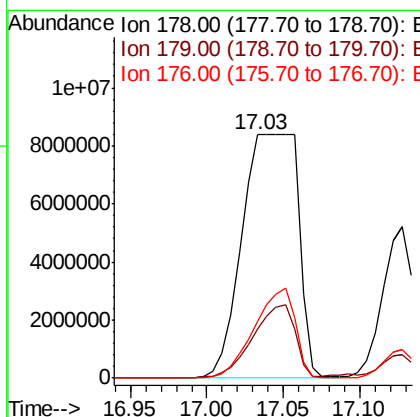
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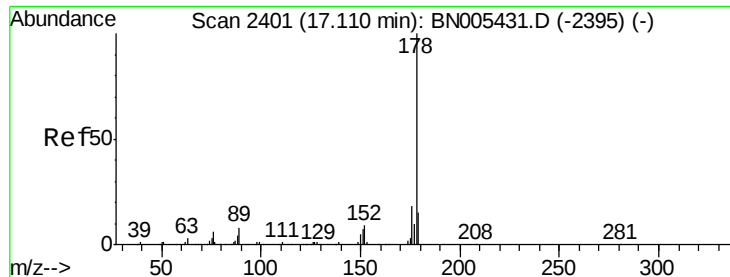
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#69  
**Phenanthrene**  
 Concen: 198.151 ng/ul m  
 RT: 17.03 min Scan# 2388  
 Delta R.T. 0.01 min  
 Lab File: BN005441.D  
 Acq: 03 May 2019 06:31

Tgt Ion:178 Resp:21095633  
 Ion Ratio Lower Upper  
 178 100  
 179 20.2 12.2 18.4#  
 176 23.2 15.1 22.7#





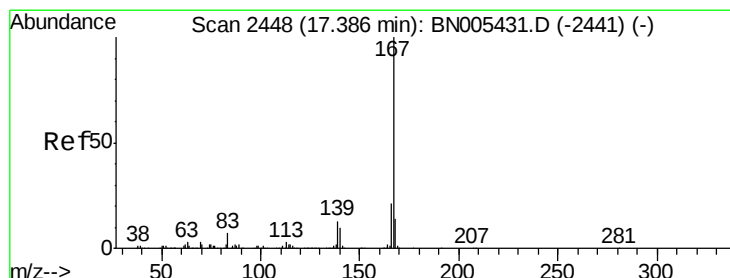
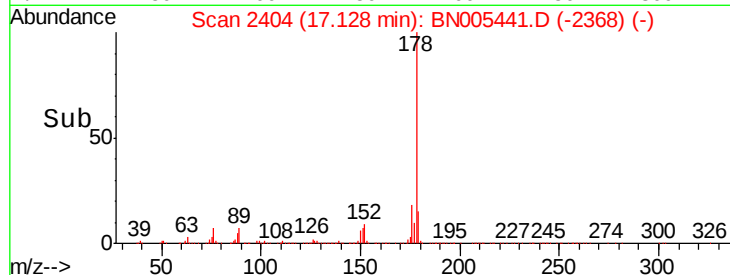
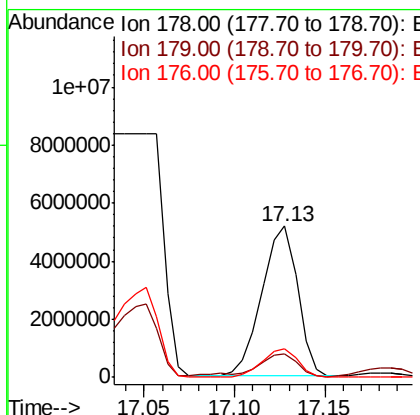
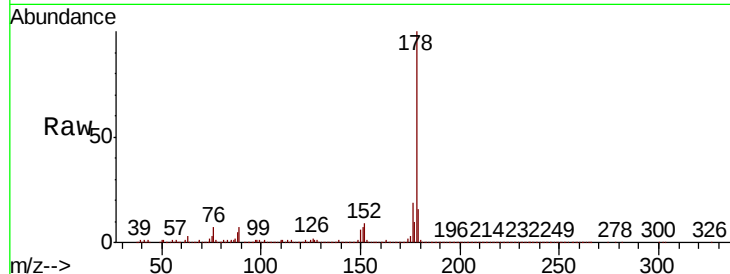
#71  
 Anthracene  
 Concen: 65.876 ng/ul  
 RT: 17.13 min Scan# 2404  
 Delta R.T. 0.01 min  
 Lab File: BN005441.D  
 Acq: 03 May 2019 06:31

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAJ69

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.9  | 12.3  | 18.5  |
| 176     | 18.5  | 15.1  | 22.7  |

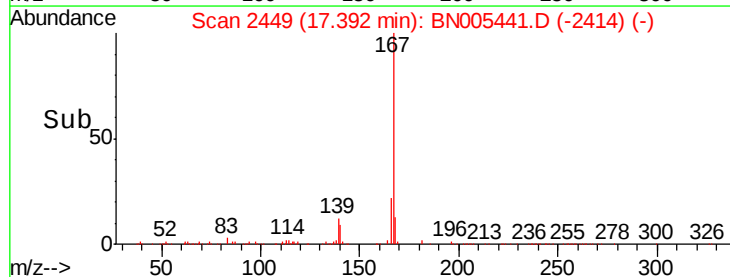
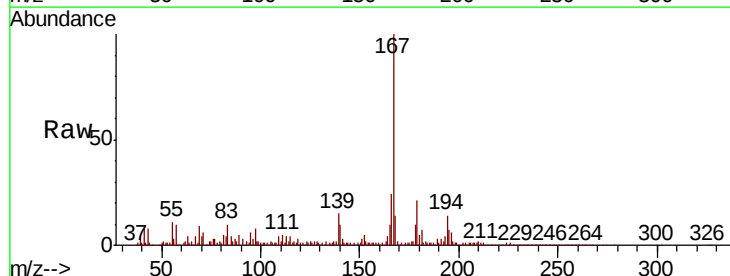
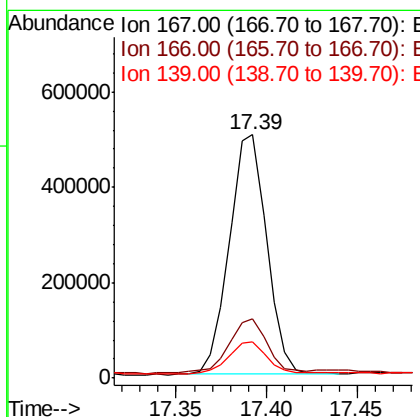
Manual Integrations  
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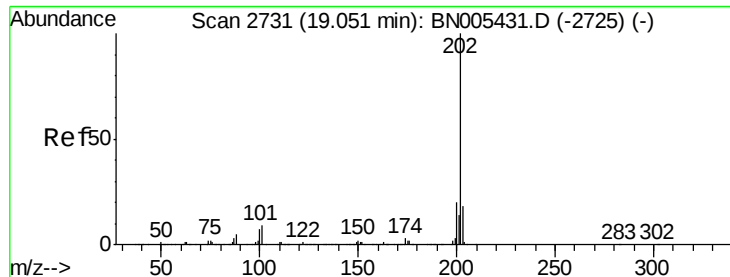
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#74  
 Carbazole  
 Concen: 7.794 ng/ul  
 RT: 17.39 min Scan# 2449  
 Delta R.T. 0.01 min  
 Lab File: BN005441.D  
 Acq: 03 May 2019 06:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 24.2  | 17.2  | 25.8  |
| 139     | 14.8  | 10.6  | 16.0  |





#76

Fluoranthene

Concen: 84.546 ng/ul

RT: 19.07 min Scan# 2734

Delta R.T. 0.01 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

Instrument :

BNA\_N

ClientSampleId :

GAJ69

Tot Ion:202 Resp: 9983808

Ion Ratio Lower Upper

202 100

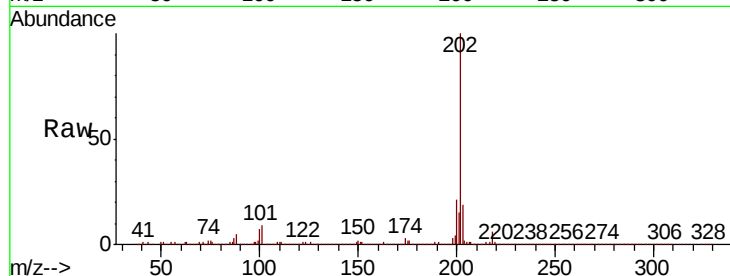
101 8.8 8.6 12.8

100 6.8 6.3 9.5

Manual Integrations  
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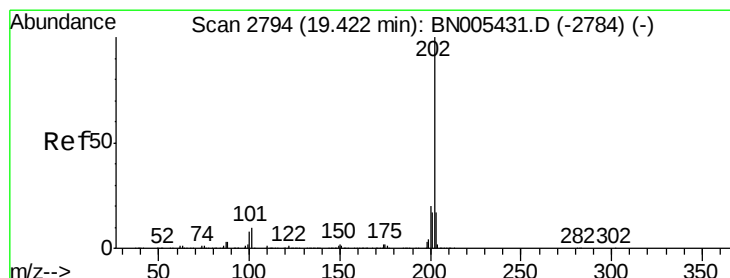
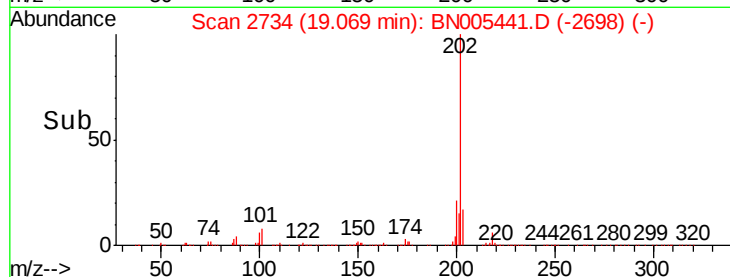
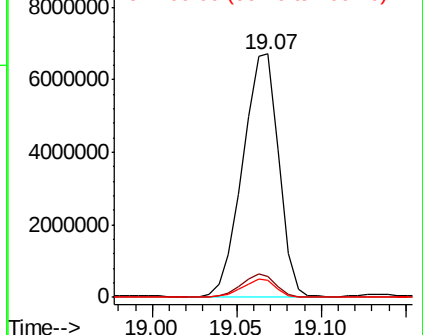
5/3/2019 10:54:23 PM



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



#79

Pyrene

Concen: 108.834 ng/ul

RT: 19.43 min Scan# 2796

Delta R.T. 0.01 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

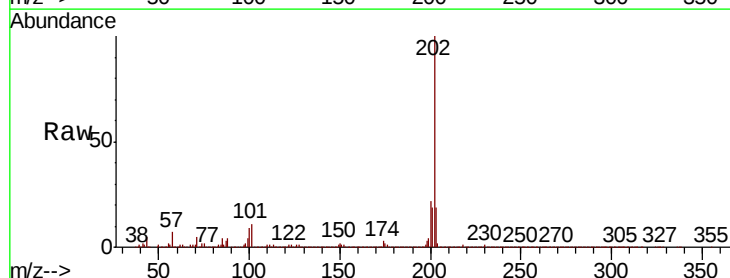
Tgt Ion:202 Resp:12546761

Ion Ratio Lower Upper

202 100

101 11.3 10.3 15.5

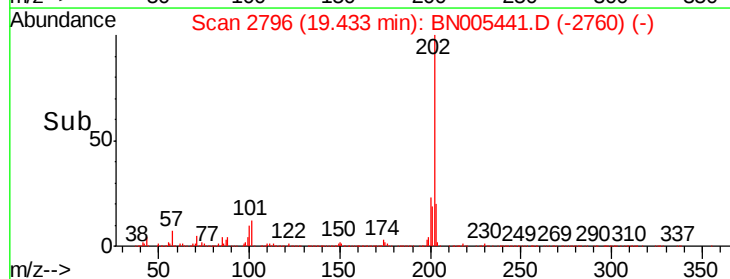
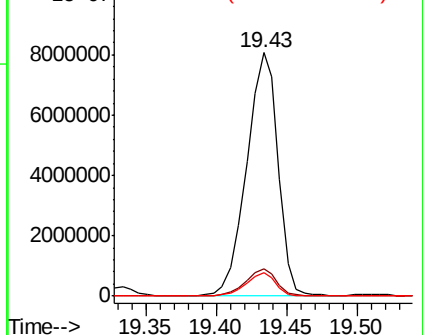
100 9.5 7.9 11.9

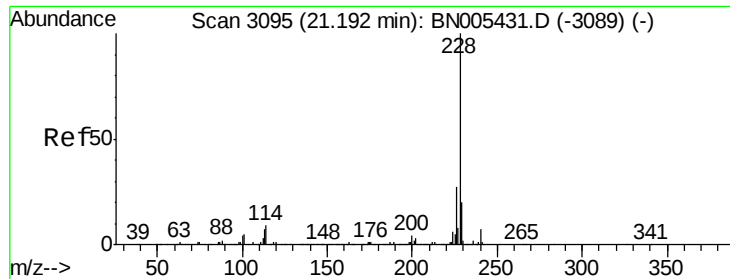


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B





#82

Benzo(a)anthracene

Concen: 38.782 ng/ul m

RT: 21.20 min Scan# 3096

Delta R.T. -0.00 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

Instrument :

BNA\_N

ClientSampleId :

GAJ69

Tot Ion:228 Resp: 4319853

Ion Ratio Lower Upper

228 100

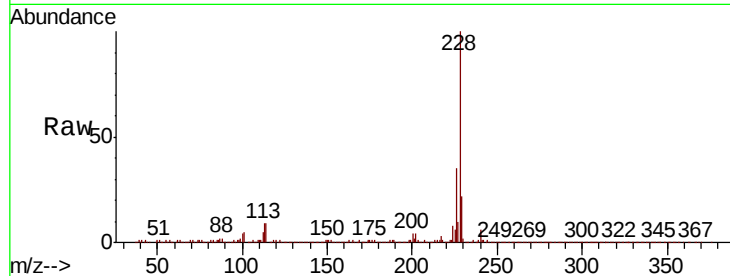
229 21.5 15.8 23.6

226 35.0 21.4 32.2#

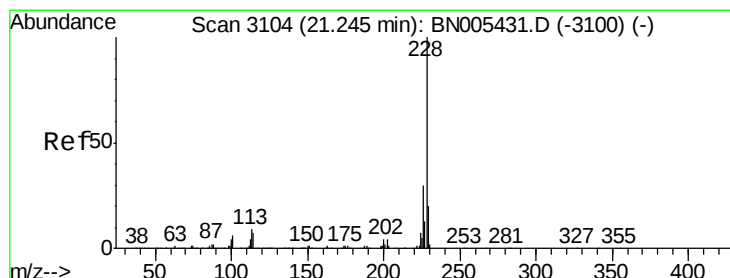
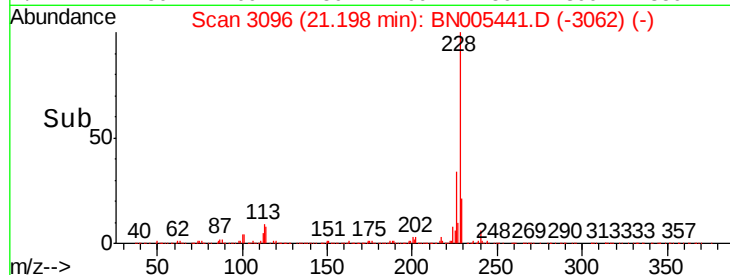
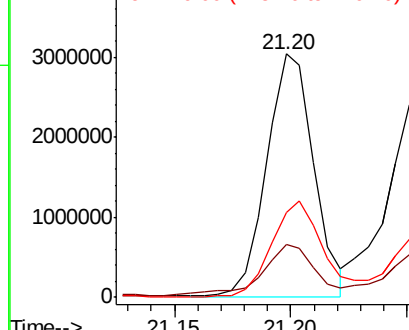
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Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 229.00 (228.70 to 229.70): E  
Ion 226.00 (225.70 to 226.70): E



#84

Chrysene

Concen: 34.427 ng/ul

RT: 21.25 min Scan# 3105

Delta R.T. -0.00 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

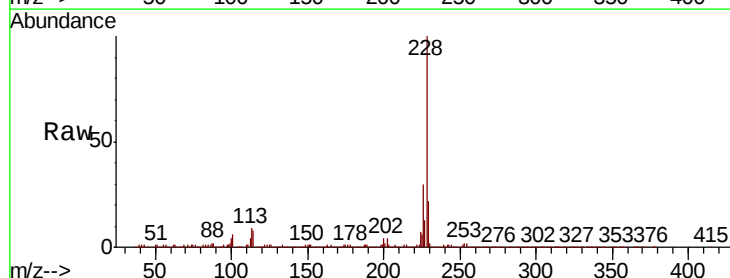
Tgt Ion:228 Resp: 3558972

Ion Ratio Lower Upper

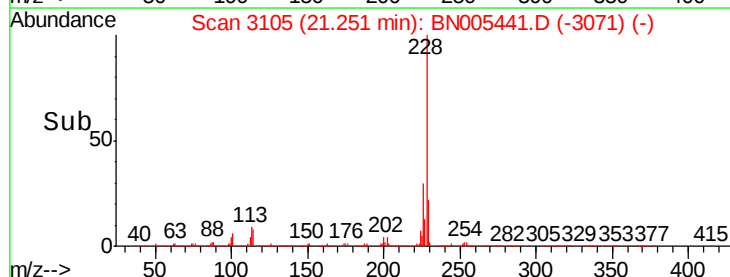
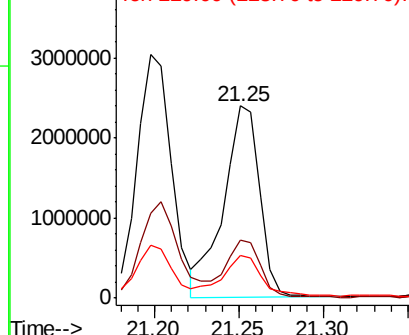
228 100

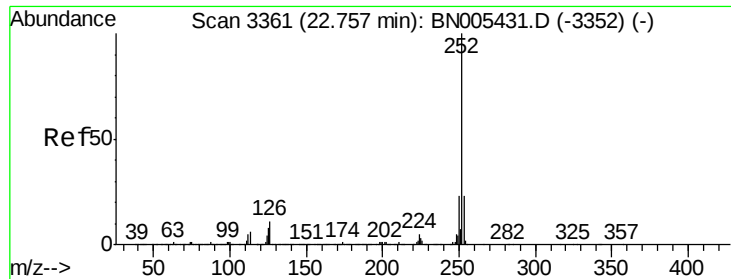
226 30.3 24.0 36.0

229 22.3 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: 23.600 ng/ul

RT: 22.77 min Scan# 3363

Delta R.T. 0.01 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

Instrument :

BNA\_N

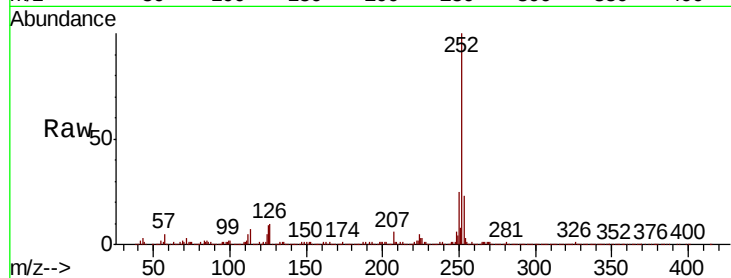
ClientSampled :

GAJ69

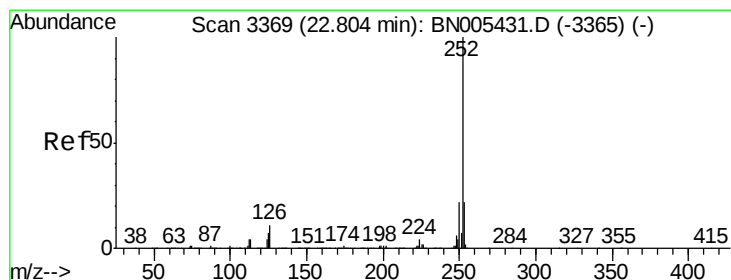
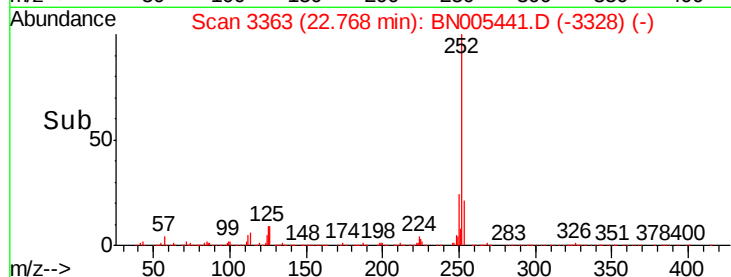
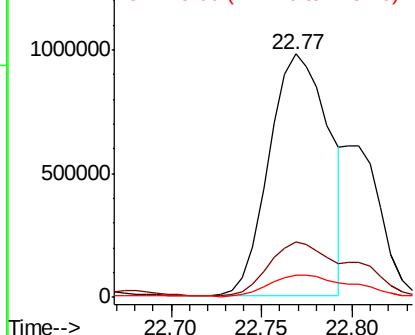
|           |       |       |         |
|-----------|-------|-------|---------|
| Tot Ion:  | 252   | Resp: | 2240864 |
| Ion Ratio | Lower | Upper |         |
| 252       | 100   |       |         |
| 253       | 22.6  | 17.7  | 26.5    |
| 125       | 9.1   | 8.4   | 12.6    |

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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: 9.590 ng/ul m

RT: 22.80 min Scan# 3368

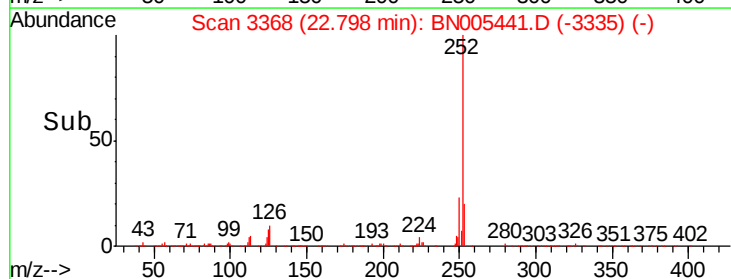
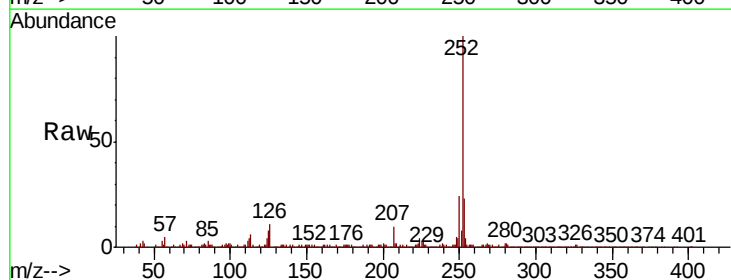
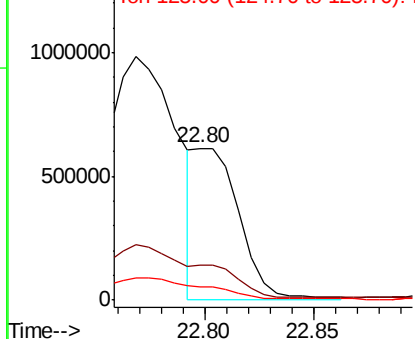
Delta R.T. -0.01 min

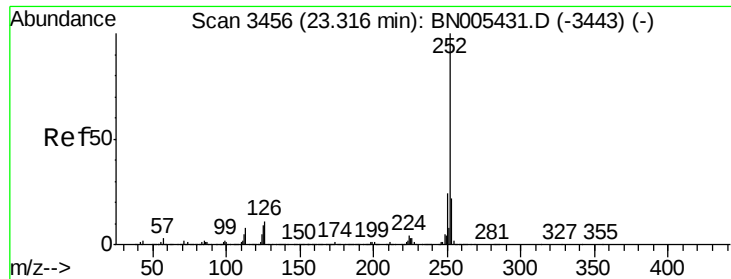
Lab File: BN005441.D

Acq: 03 May 2019 06:31

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 869660 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.1  | 17.4  | 26.0   |
| 125       | 8.5   | 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





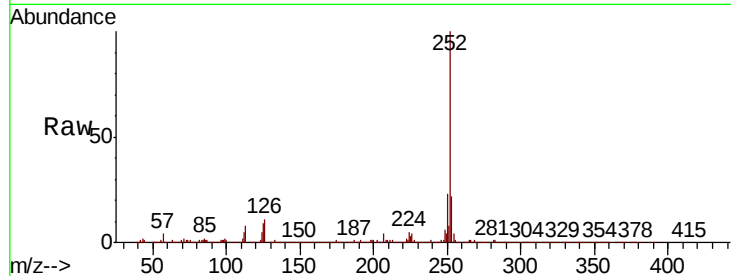
#90  
Benzo(a)pyrene  
Concen: 28.143 ng/ul m  
RT: 23.32 min Scan# 3457  
Delta R.T. -0.00 min  
Lab File: BN005441.D  
Acq: 03 May 2019 06:31

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ69

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

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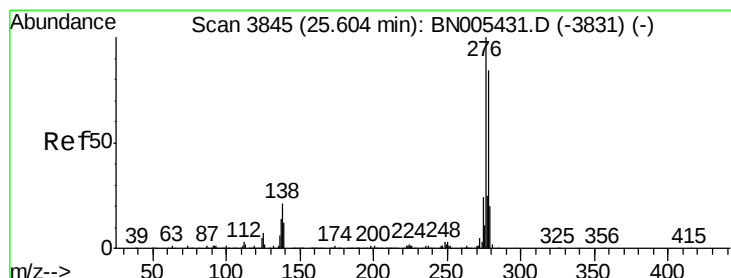
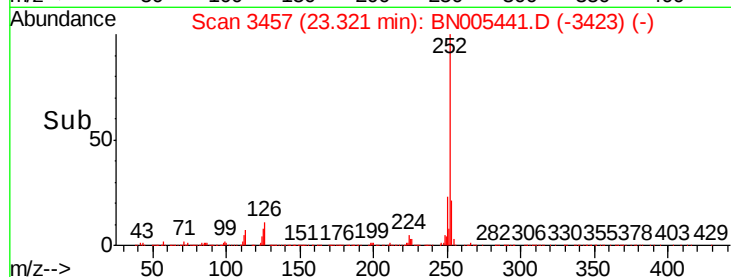
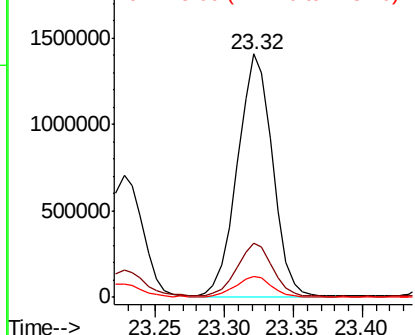


Abundance

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: 9.170 ng/ul  
RT: 25.60 min Scan# 3844  
Delta R.T. -0.01 min  
Lab File: BN005441.D  
Acq: 03 May 2019 06:31

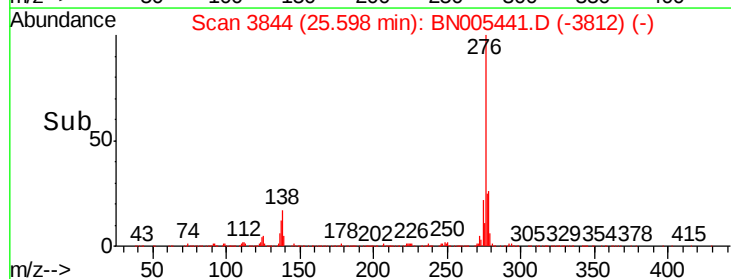
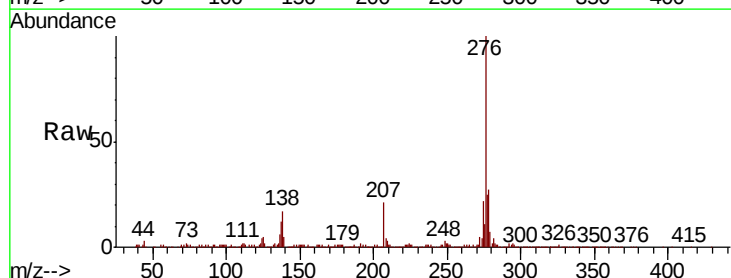
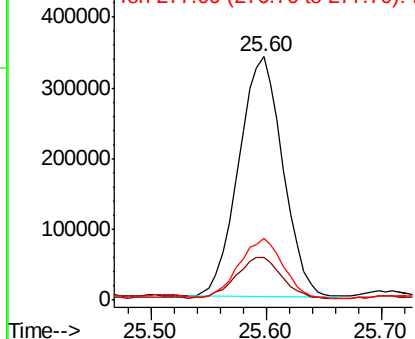
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 17.3  | 17.9  | 26.9  |
| 277     | 25.2  | 19.7  | 29.5  |

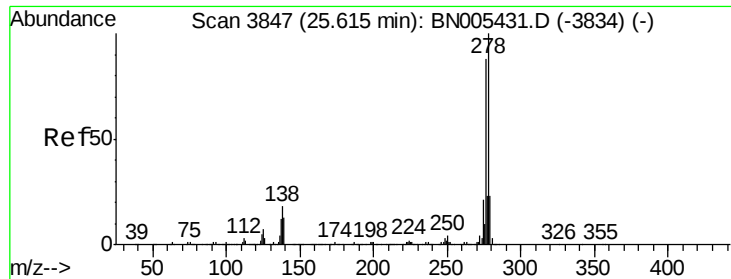
Abundance

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: 3.311 ng/ul

RT: 25.60 min Scan# 3844

Delta R.T. -0.02 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

Instrument :

BNA\_N

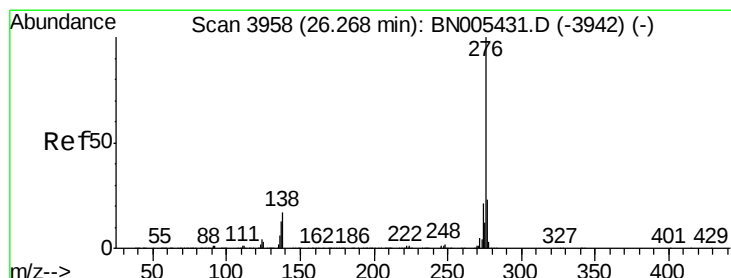
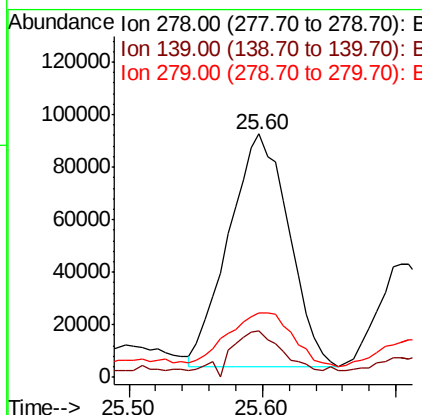
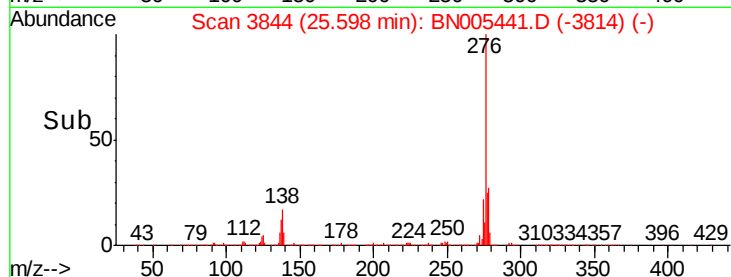
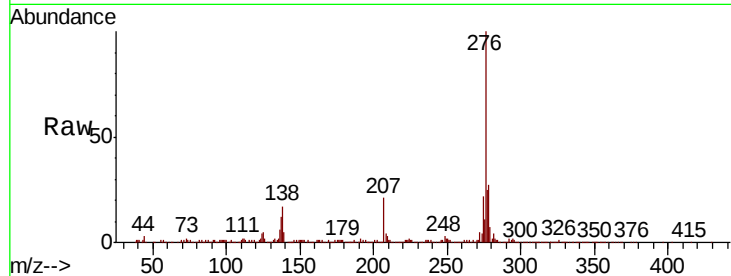
ClientSampleId :

GAJ69

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 278   | Resp: | 277269 |
| Ion Ratio | Lower | Upper |        |
| 278       | 100   |       |        |
| 139       | 19.2  | 13.1  | 19.7   |
| 279       | 26.5  | 19.4  | 29.0   |

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#93

Benzo(g,h,i)perylene

Concen: 10.748 ng/ul

RT: 26.26 min Scan# 3957

Delta R.T. -0.02 min

Lab File: BN005441.D

Acq: 03 May 2019 06:31

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 876912 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 16.3  | 16.7  | 25.1#  |
| 277       | 23.6  | 18.2  | 27.2   |

