

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN042419\  
 Data File : BN005273.D  
 Acq On : 25 Apr 2019 05:08  
 Operator : JU/SJ  
 Sample : K2455-03 5X  
 Misc :  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAHQ5

Manual Integrations  
 APPROVED

Sohil  
 4/25/2019 5:35:18 PM

Quant Time: Apr 25 07:07:02 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  | 444402   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.36 | 136  | 2025290  | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.23 | 164  | 1265548  | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.99 | 188  | 2877521  | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.22 | 240  | 2273060  | 20.00 | ng/ul | -0.01    |
| 85) Perylene-d12          | 23.41 | 264  | 2180662  | 20.00 | ng/ul | -0.03    |

## System Monitoring Compounds

|                                |       |     |        |      |       |       |
|--------------------------------|-------|-----|--------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.22  | 96  | 7723   | 0.84 | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.78  | 99  | 169934 | 4.87 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.94  | 67  | 101664 | 4.67 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.13  | 132 | 134097 | 5.02 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.29  | 113 | 143253 | 5.25 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.73  | 128 | 70416  | 5.65 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.45  | 143 | 68429  | 5.41 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 9.98  | 165 | 148203 | 5.12 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 10.49 | 131 | 92489  | 3.10 | ng/ul | 0.00  |
| 43) Dimethylphthalate-d6       | 13.65 | 166 | 488848 | 5.32 | ng/ul | 0.00  |
| 46) Acenaphthylene-d8          | 13.92 | 160 | 589998 | 5.23 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.43 | 143 | 67169  | 4.63 | ng/ul | 0.00  |
| 57) Fluorene-d10               | 15.23 | 176 | 430759 | 5.59 | ng/ul | 0.00  |
| 62) 4,6-Dinitro-2-methylphenol | 15.36 | 200 | 30122  | 2.33 | ng/ul | 0.00  |
| 70) Anthracene-d10             | 17.08 | 188 | 661439 | 5.48 | ng/ul | 0.00  |
| 78) Pyrene-d10                 | 19.40 | 212 | 697762 | 6.00 | ng/ul | 0.00  |
| 89) Benzo(a)pyrene-d12         | 23.27 | 264 | 495116 | 5.20 | ng/ul | -0.03 |

## Target Compounds

|                            |       |     |           |         | Ovalue |    |
|----------------------------|-------|-----|-----------|---------|--------|----|
| 28) Naphthalene            | 10.41 | 128 | 6811477   | 72.345  | ng/ul  | 99 |
| 34) 2-Methylnaphthalene    | 12.03 | 142 | 10329193  | 149.830 | ng/ul  | 98 |
| 40) 1,1'-Biphenyl          | 13.06 | 154 | 943693    | 10.008  | ng/ul  | 98 |
| 44) Dimethylphthalate      | 13.69 | 163 | 145233    | 1.587   | ng/ul  | 99 |
| 47) Acenaphthylene         | 13.95 | 152 | 3673421   | 33.127  | ng/ul  | 98 |
| 49) Acenaphthene           | 14.29 | 153 | 456476    | 6.030   | ng/ul  | 99 |
| 53) Dibenzofuran           | 14.63 | 168 | 368438    | 3.380   | ng/ul  | 92 |
| 58) Fluorene               | 15.29 | 166 | 2534516   | 29.801  | ng/ul  | 97 |
| 69) Phenanthrene           | 17.03 | 178 | 13903083m | 99.209  | ng/ul  |    |
| 71) Anthracene             | 17.12 | 178 | 1704121   | 11.937  | ng/ul  | 99 |
| 76) Fluoranthene           | 19.06 | 202 | 7612172   | 48.971  | ng/ul  | 98 |
| 79) Pyrene                 | 19.43 | 202 | 13293713  | 90.832  | ng/ul  | 98 |
| 82) Benzo(a)anthracene     | 21.20 | 228 | 3951765m  | 27.946  | ng/ul  |    |
| 84) Chrysene               | 21.25 | 228 | 3798446   | 28.943  | ng/ul  | 98 |
| 87) Benzo(b)fluoranthene   | 22.76 | 252 | 2785423   | 22.723  | ng/ul  | 98 |
| 88) Benzo(k)fluoranthene   | 22.80 | 252 | 904720m   | 7.728   | ng/ul  |    |
| 90) Benzo(a)pyrene         | 23.32 | 252 | 1236795   | 10.734  | ng/ul  | 98 |
| 91) Indeno(1,2,3-cd)pyrene | 25.59 | 276 | 1112296   | 8.731   | ng/ul  | 97 |
| 92) Dibenzo(a,h)anthracene | 25.60 | 278 | 351395    | 3.250   | ng/ul  | 95 |
| 93) Benzo(g,h,i)perylene   | 26.24 | 276 | 805885    | 7.651   | ng/ul  | 98 |

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

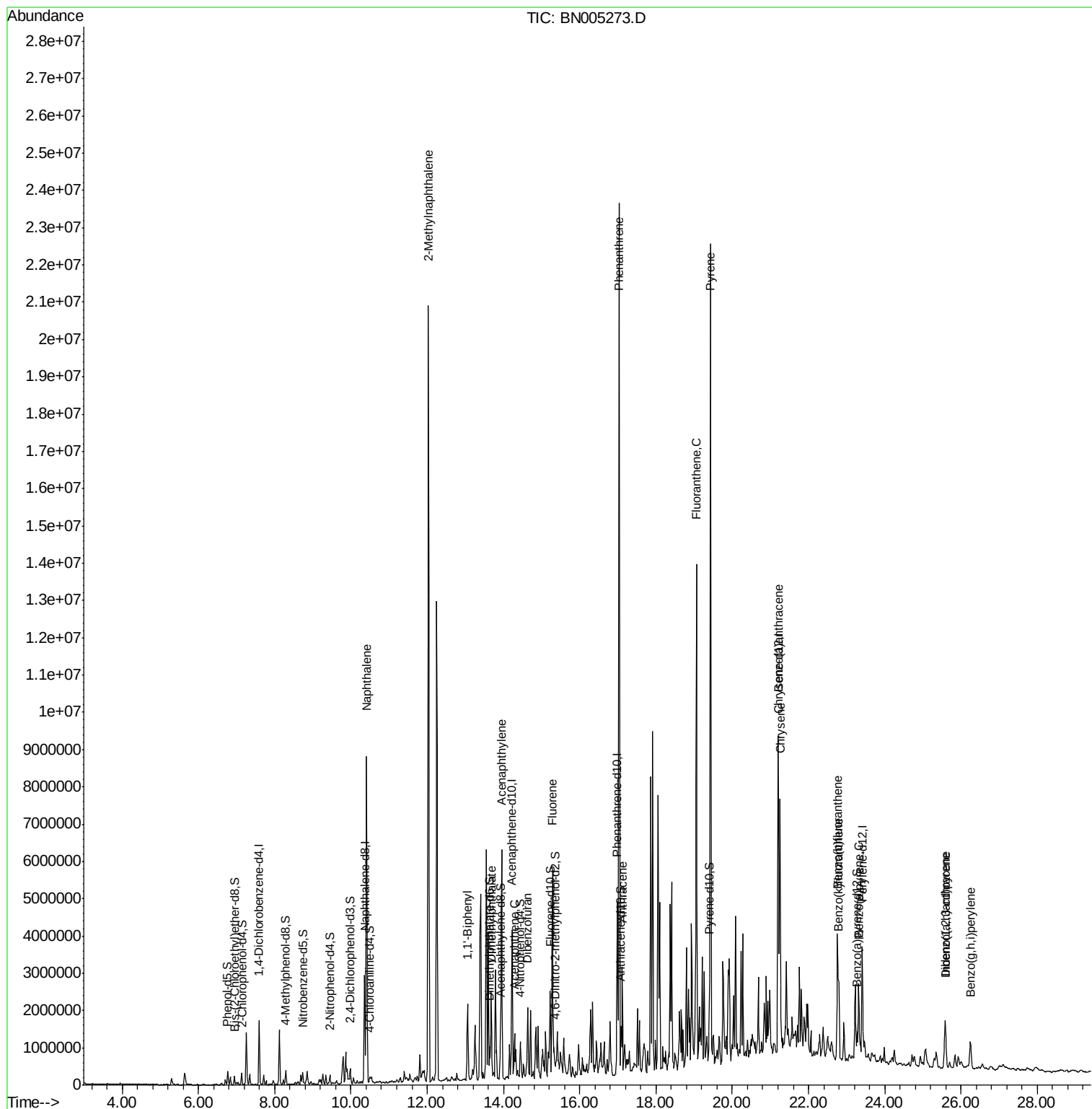
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN042419\  
Data File : BN005273.D  
Acq On : 25 Apr 2019 05:08  
Operator : JU/SJ  
Sample : K2455-03 5X  
Misc :  
ALS Vial : 29 Sample Multiplier: 1

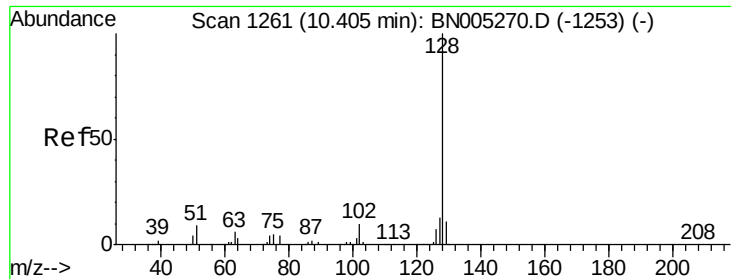
Instrument :  
BNA\_N  
ClientSampleId :  
GAHQ5

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Quant Time: Apr 25 07:07:02 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





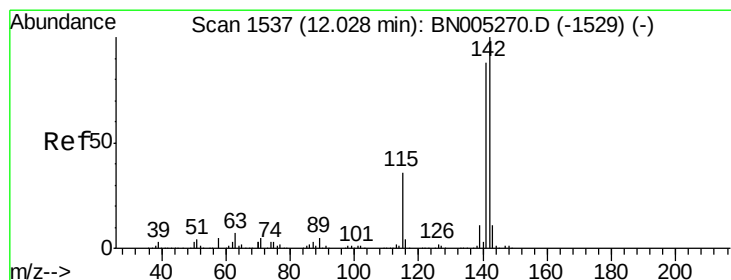
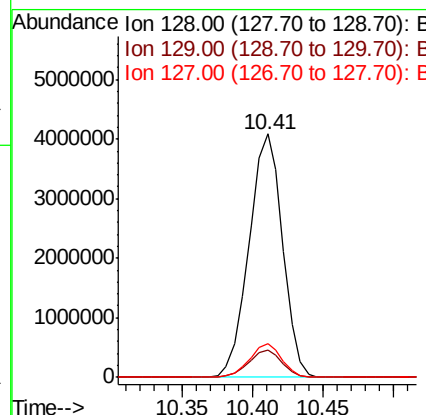
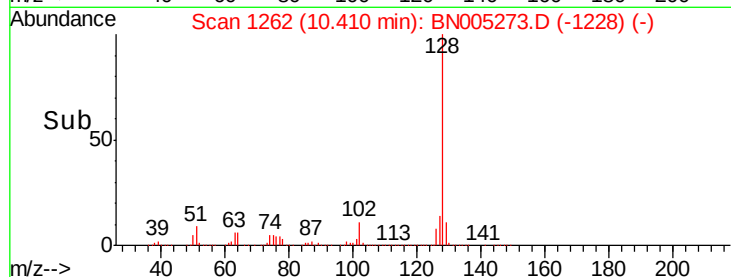
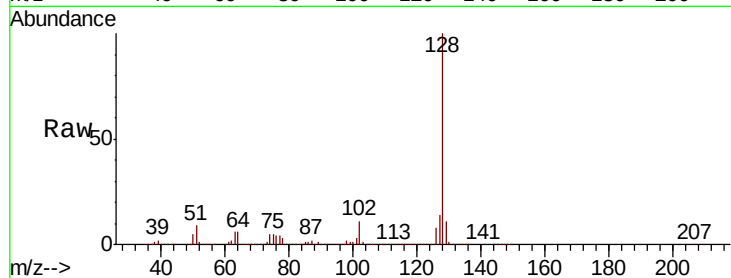
#28  
Naphthalene  
Concen: 72.345 ng/ul  
RT: 10.41 min Scan# 1262  
Delta R.T. 0.00 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

Instrument :  
BNA\_N  
ClientSampled :  
GAHQ5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.0  | 9.2   | 13.8  |
| 127     | 13.7  | 10.7  | 16.1  |

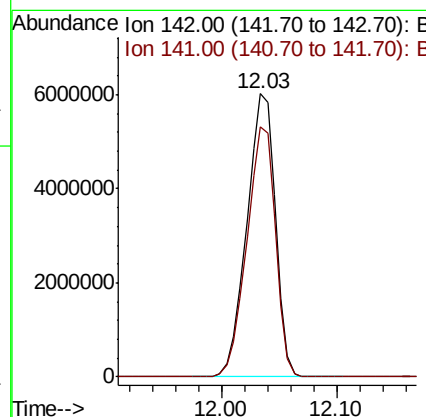
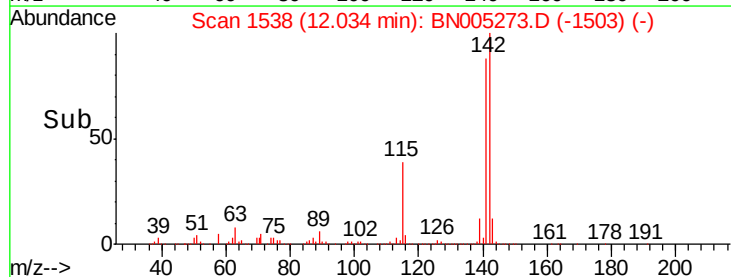
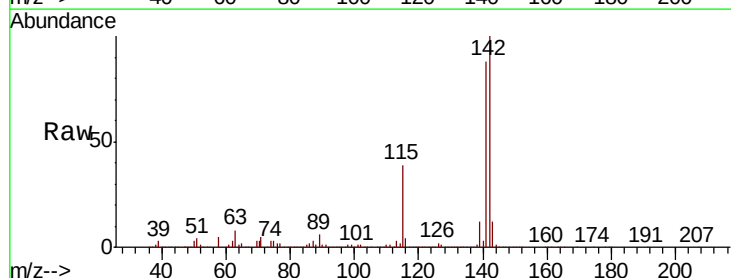
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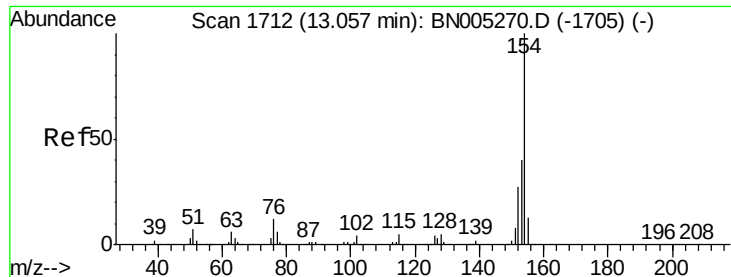
Sohil  
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#34  
2-Methylnaphthalene  
Concen: 149.830 ng/ul  
RT: 12.03 min Scan# 1538  
Delta R.T. 0.01 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 88.2  | 72.0  | 108.0 |





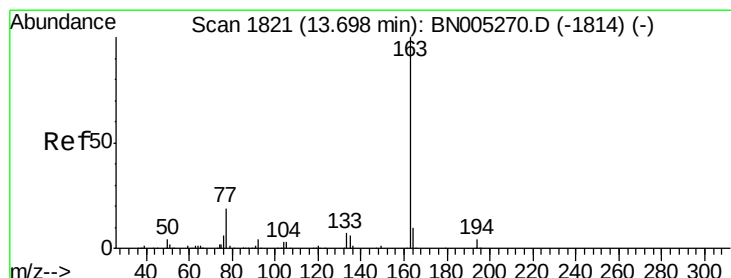
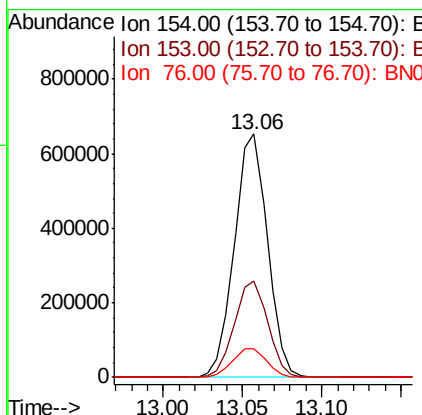
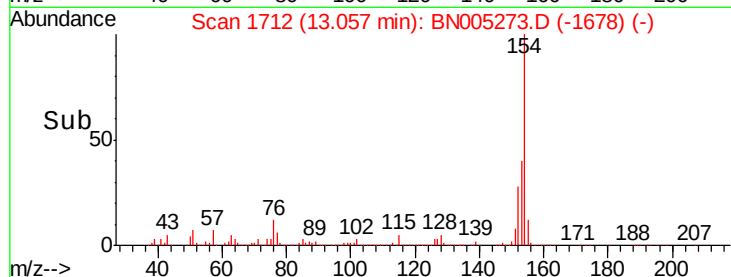
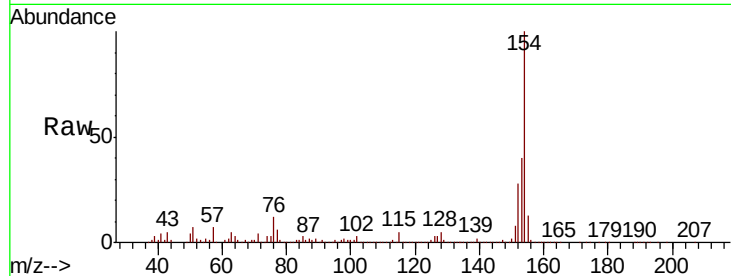
#40  
1,1'-Biphenyl  
Concen: 10.008 ng/ul  
RT: 13.06 min Scan# 1712  
Delta R.T. 0.00 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

Instrument :  
BNA\_N  
ClientSampleId :  
GAHQ5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 154   | Resp: | 943693 |
| Ion Ratio | Lower | Upper |        |
| 154       | 100   |       |        |
| 153       | 39.6  | 32.6  | 49.0   |
| 76        | 11.9  | 10.4  | 15.6   |

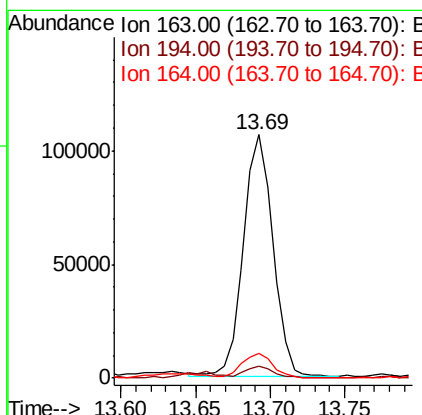
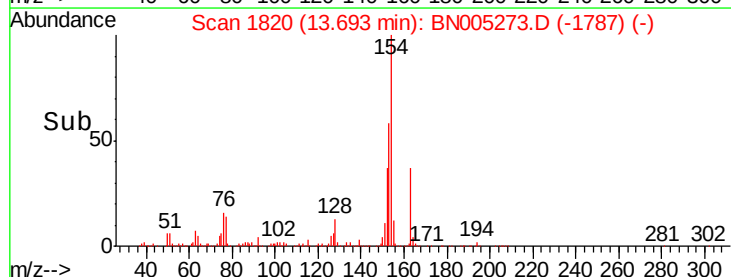
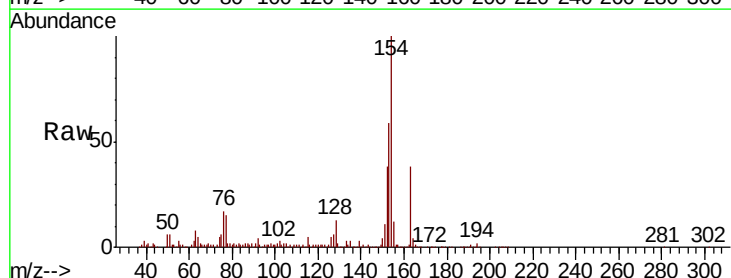
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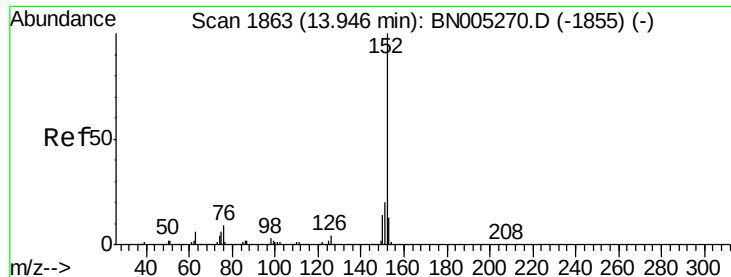
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#44  
Dimethylphthalate  
Concen: 1.587 ng/ul  
RT: 13.69 min Scan# 1820  
Delta R.T. -0.01 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 163   | Resp: | 145233 |
| Ion Ratio | Lower | Upper |        |
| 163       | 100   |       |        |
| 194       | 4.8   | 3.4   | 5.0    |
| 164       | 10.2  | 8.1   | 12.1   |





#47

Acenaphthylene

Concen: 33.127 ng/ul

RT: 13.95 min Scan# 1863

Delta R.T. -0.01 min

Lab File: BN005273.D

Acq: 25 Apr 2019 05:08

Instrument :

BNA\_N

ClientSampleId :

GAHQ5

Tot Ion:152 Resp: 3673421

Ion Ratio Lower Upper

152 100

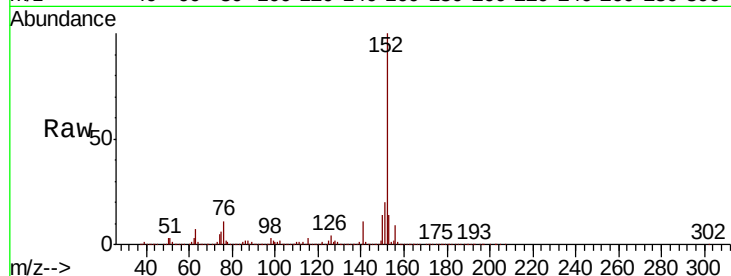
151 20.2 15.8 23.8

153 14.1 9.8 14.8

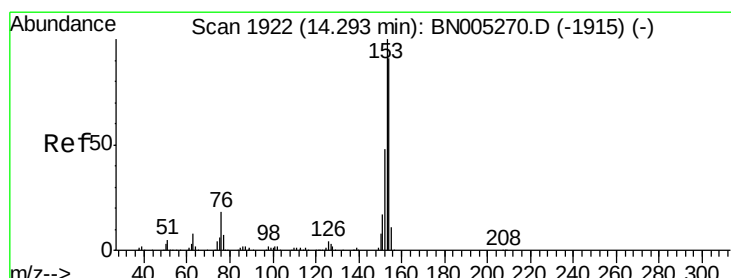
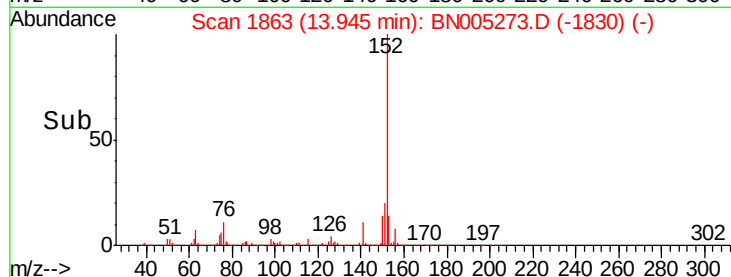
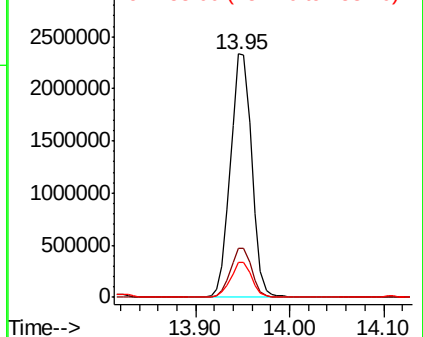
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Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 151.00 (150.70 to 151.70): E  
Ion 153.00 (152.70 to 153.70): E



#49

Acenaphthene

Concen: 6.030 ng/ul

RT: 14.29 min Scan# 1922

Delta R.T. -0.01 min

Lab File: BN005273.D

Acq: 25 Apr 2019 05:08

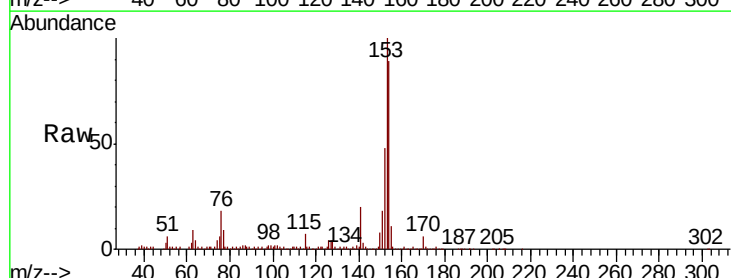
Tgt Ion:153 Resp: 456476

Ion Ratio Lower Upper

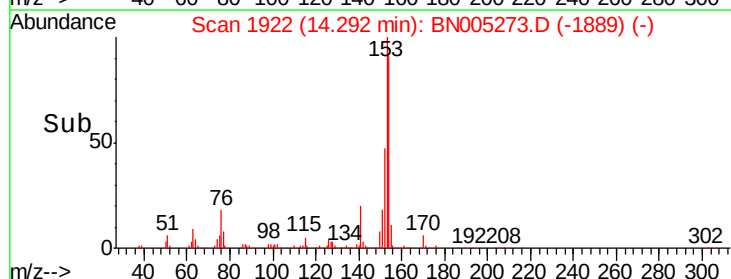
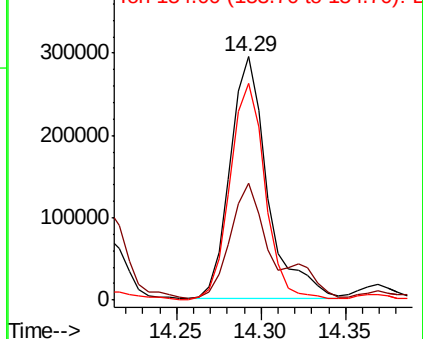
153 100

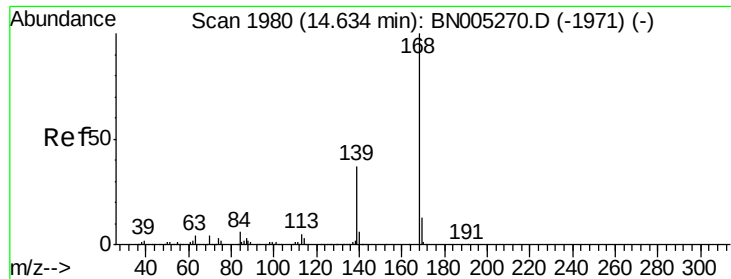
152 47.9 37.4 56.0

154 89.2 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





#53

Dibenzofuran

Concen: 3.380 ng/ul

RT: 14.63 min Scan# 1979

Delta R.T. -0.01 min

Lab File: BN005273.D

Acq: 25 Apr 2019 05:08

Instrument :

BNA\_N

ClientSampled :

GAHQ5

Tot Ion:168 Resp: 368438

Ion Ratio Lower Upper

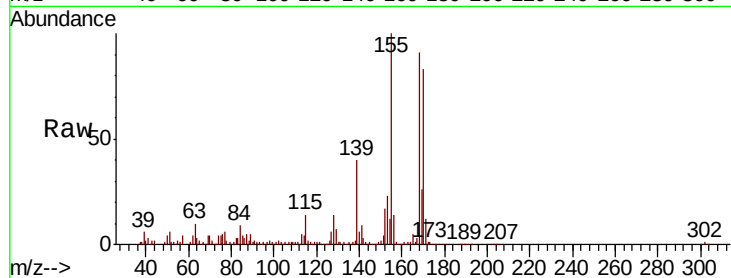
168 100

139 43.4 30.9 46.3

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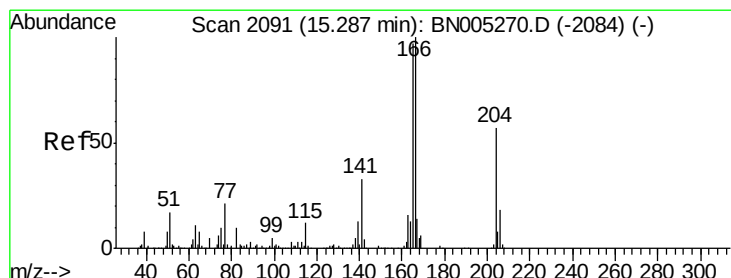
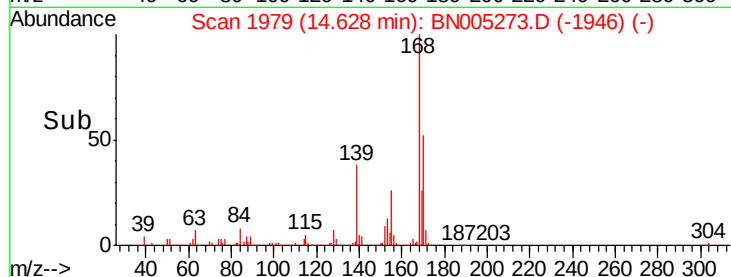
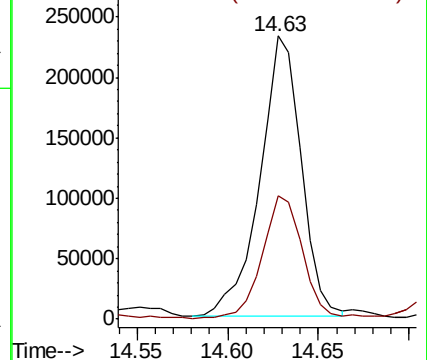
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Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E



#58

Fluorene

Concen: 29.801 ng/ul

RT: 15.29 min Scan# 2091

Delta R.T. 0.00 min

Lab File: BN005273.D

Acq: 25 Apr 2019 05:08

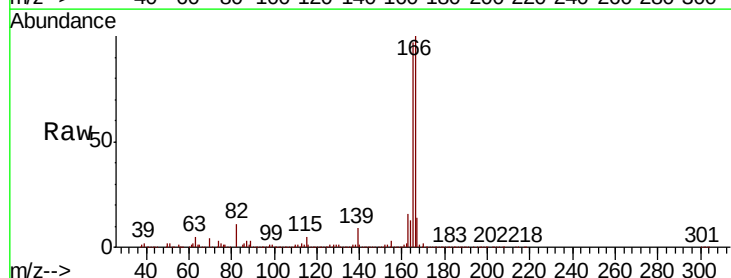
Tgt Ion:166 Resp: 2534516

Ion Ratio Lower Upper

166 100

165 96.8 80.0 120.0

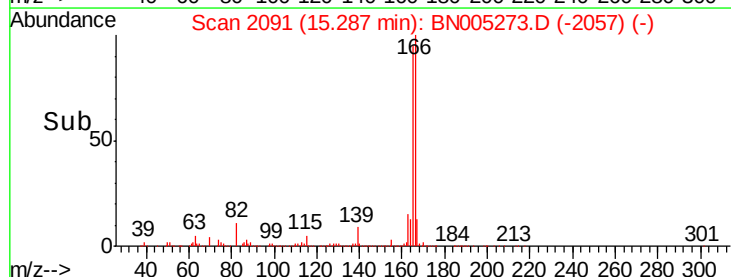
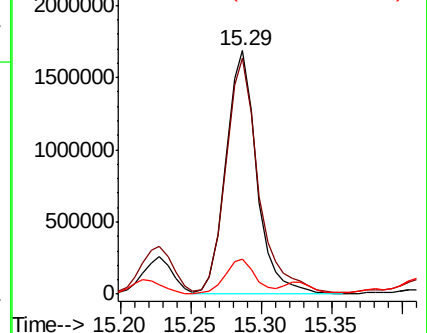
167 14.2 10.7 16.1

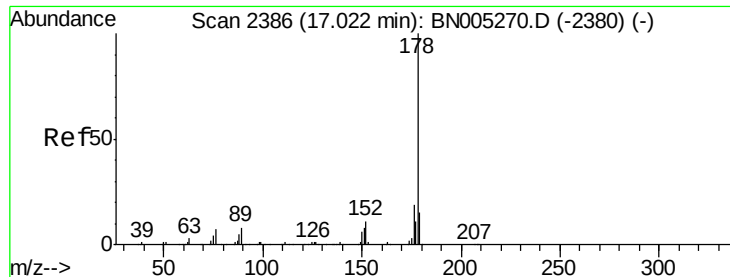


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





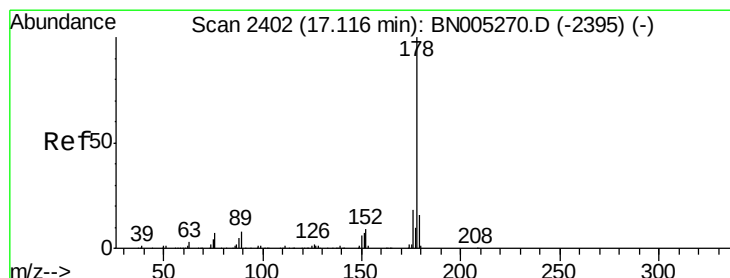
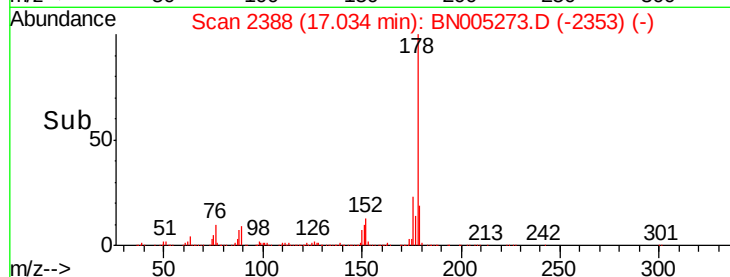
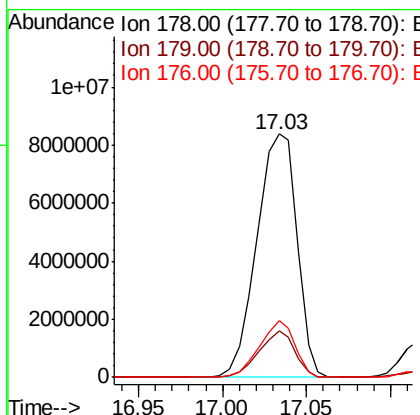
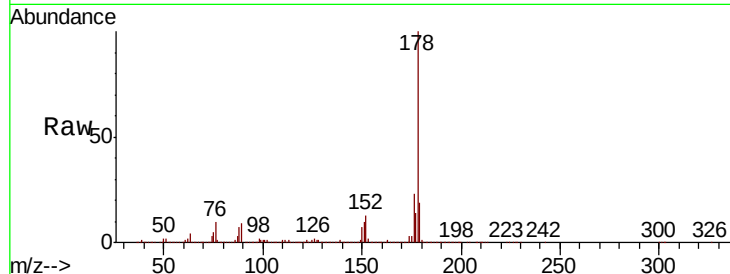
#69  
Phenanthrene  
Concen: 99.209 ng/ul m  
RT: 17.03 min Scan# 2388  
Delta R.T. 0.01 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

Instrument :  
BNA\_N  
ClientSampled :  
GAHQ5

Tot Ion:178 Resp:13903083  
Ion Ratio Lower Upper  
178 100  
179 19.1 12.2 18.4#  
176 23.2 15.1 22.7#

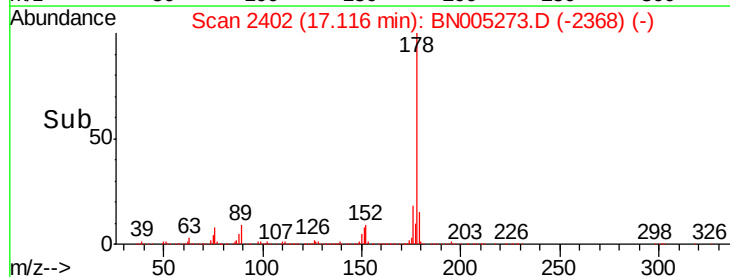
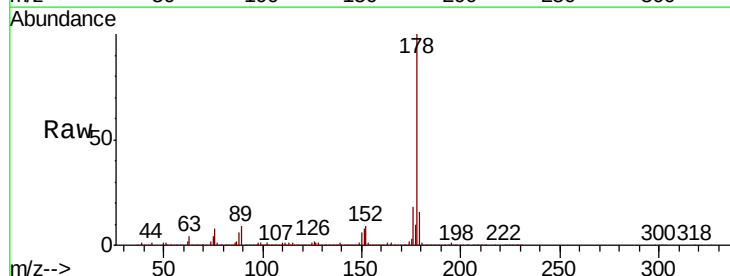
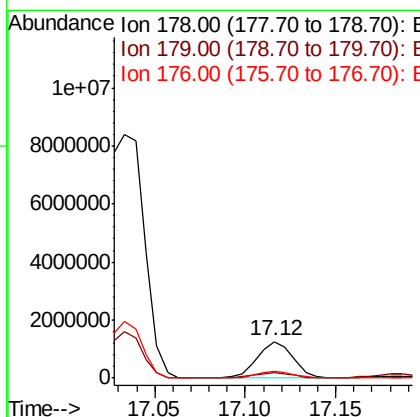
Manual Integrations  
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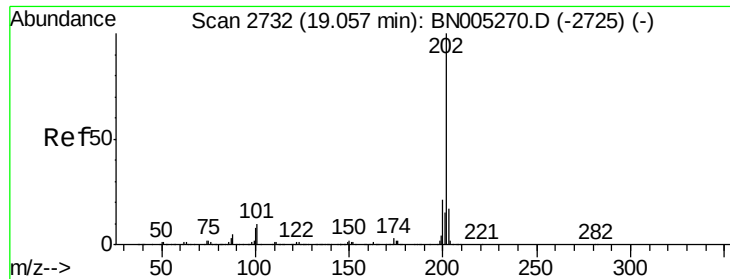
Sohil  
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#71  
Anthracene  
Concen: 11.937 ng/ul  
RT: 17.12 min Scan# 2402  
Delta R.T. 0.00 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

Tgt Ion:178 Resp: 1704121  
Ion Ratio Lower Upper  
178 100  
179 15.7 12.3 18.5  
176 18.5 15.1 22.7





#76

Fluoranthene

Concen: 48.971 ng/ul

RT: 19.06 min Scan# 2733

Delta R.T. 0.00 min

Lab File: BN005273.D

Acq: 25 Apr 2019 05:08

Instrument :

BNA\_N

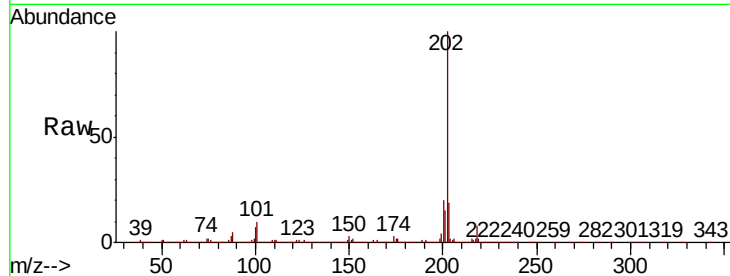
ClientSampleId :

GAHQ5

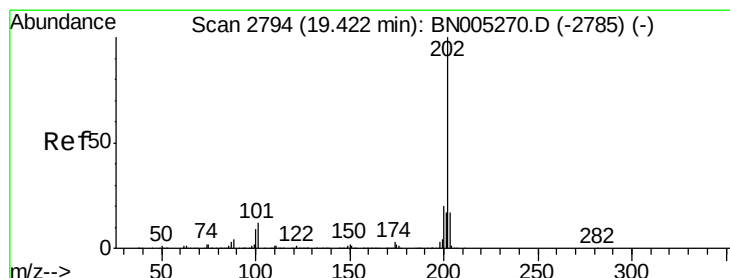
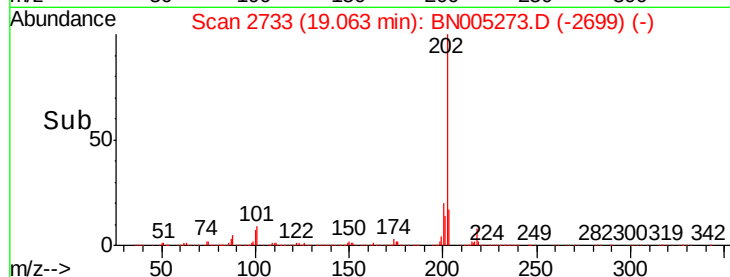
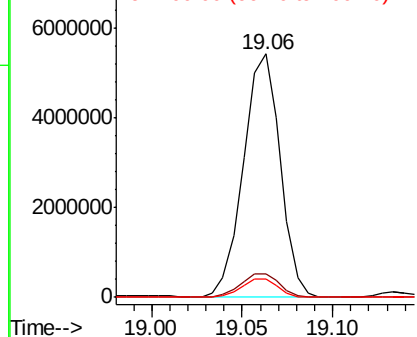
|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 202   | Resp: | 7612172 |
| Ion      | Ratio | Lower | Upper   |
| 202      | 100   |       |         |
| 101      | 9.9   | 8.6   | 12.8    |
| 100      | 7.3   | 6.3   | 9.5     |

Manual Integrations  
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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



#79

Pyrene

Concen: 90.832 ng/ul

RT: 19.43 min Scan# 2796

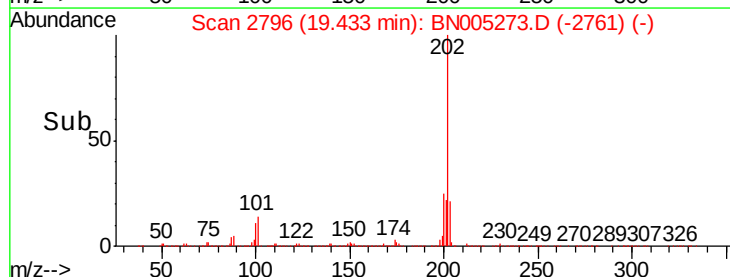
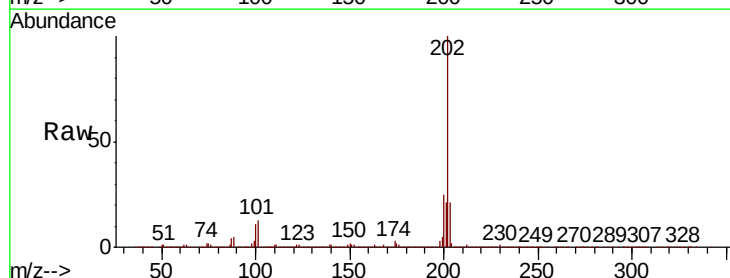
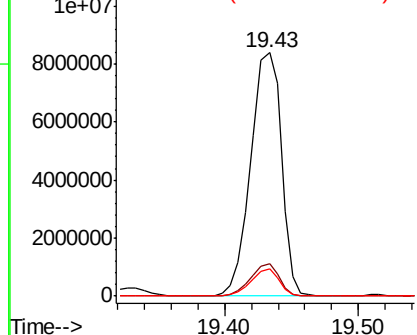
Delta R.T. 0.01 min

Lab File: BN005273.D

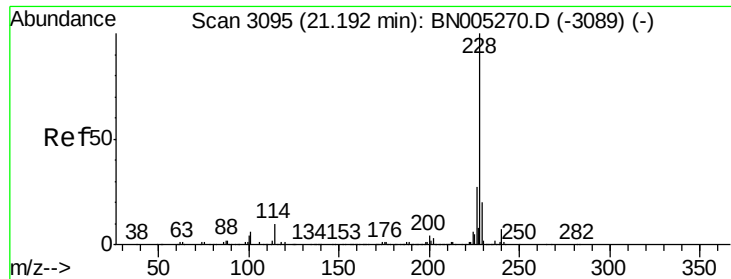
Acq: 25 Apr 2019 05:08

|          |       |       |          |
|----------|-------|-------|----------|
| Tgt Ion: | 202   | Resp: | 13293713 |
| Ion      | Ratio | Lower | Upper    |
| 202      | 100   |       |          |
| 101      | 13.4  | 10.3  | 15.5     |
| 100      | 11.1  | 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







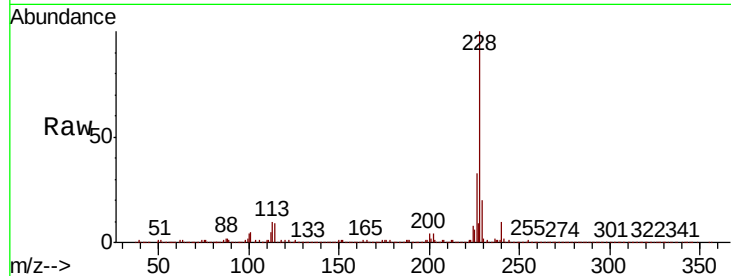
#82  
Benzo(a)anthracene  
Concen: 27.946 ng/ul m  
RT: 21.20 min Scan# 3096  
Delta R.T. -0.01 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

Instrument :  
BNA\_N  
ClientSampleId :  
GAHQ5

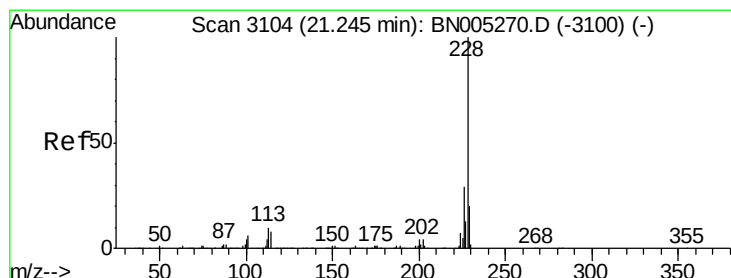
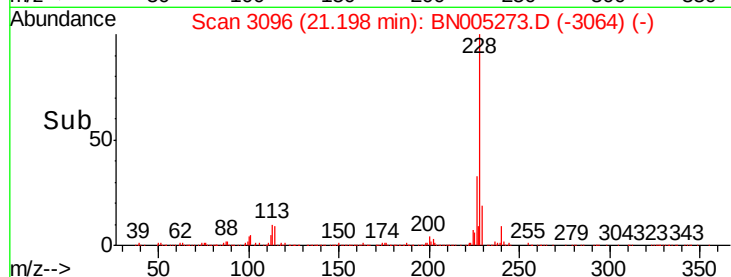
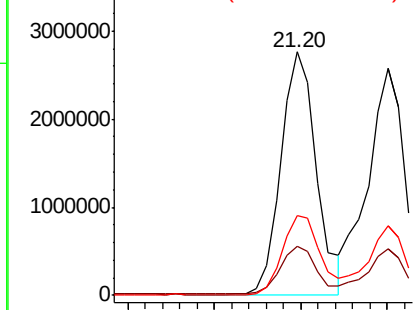
Tot Ion:228 Resp: 3951765  
Ion Ratio Lower Upper  
228 100  
229 20.4 15.8 23.6  
226 33.0 21.4 32.2#

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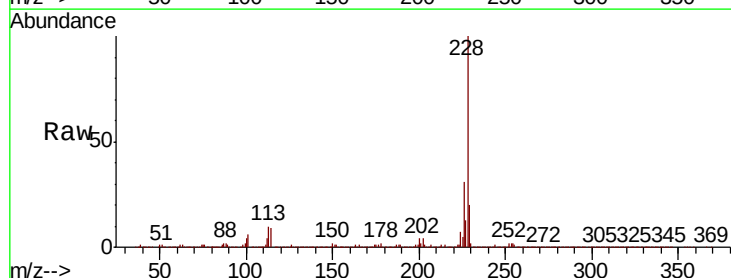


Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 229.00 (228.70 to 229.70): E  
Ion 226.00 (225.70 to 226.70): E

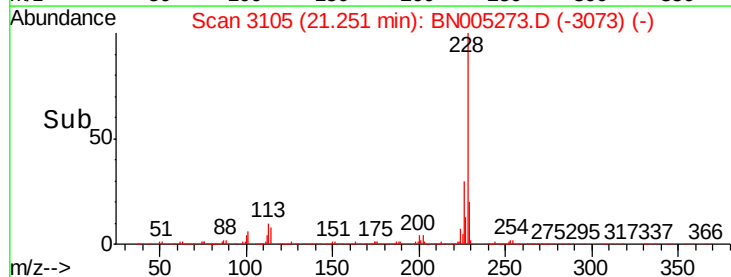
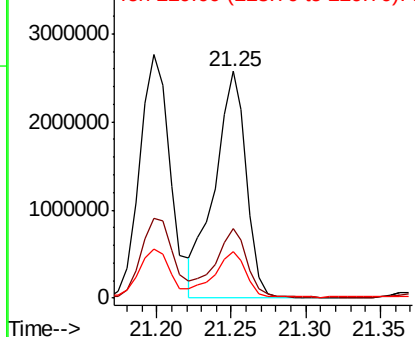


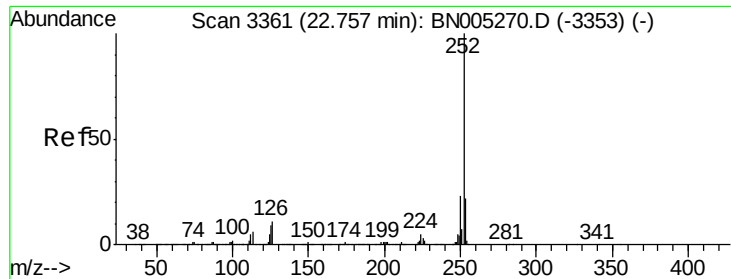
#84  
Chrysene  
Concen: 28.943 ng/ul  
RT: 21.25 min Scan# 3105  
Delta R.T. -0.01 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

Tgt Ion:228 Resp: 3798446  
Ion Ratio Lower Upper  
228 100  
226 30.6 24.0 36.0  
229 20.5 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: 22.723 ng/ul

RT: 22.76 min Scan# 3362

Delta R.T. -0.02 min

Lab File: BN005273.D

Acq: 25 Apr 2019 05:08

Instrument :

BNA\_N

ClientSampleId :

GAHQ5

Tot Ion:252 Resp: 2785423

Ion Ratio Lower Upper

252 100

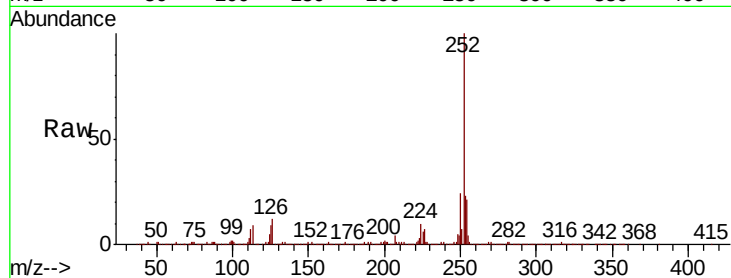
253 22.9 17.7 26.5

125 9.5 8.4 12.6

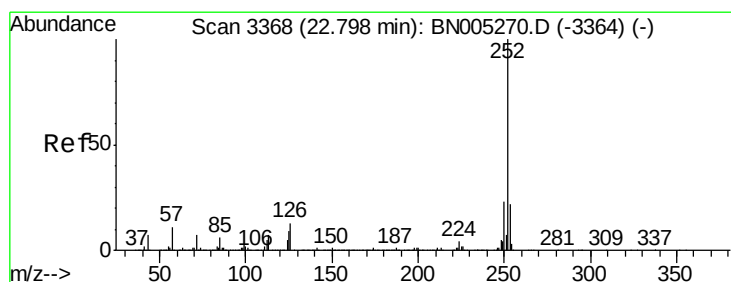
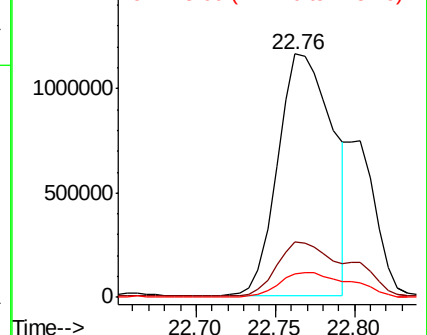
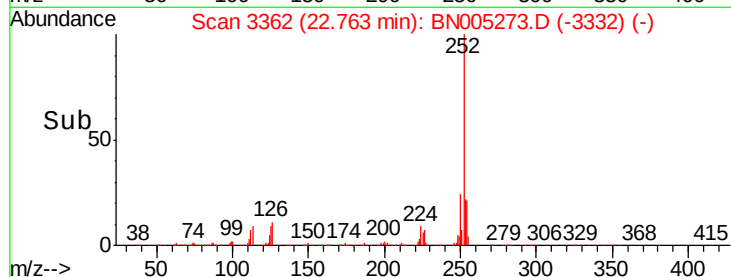
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Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



#88

Benzo(k)fluoranthene

Concen: 7.728 ng/ul m

RT: 22.80 min Scan# 3369

Delta R.T. -0.02 min

Lab File: BN005273.D

Acq: 25 Apr 2019 05:08

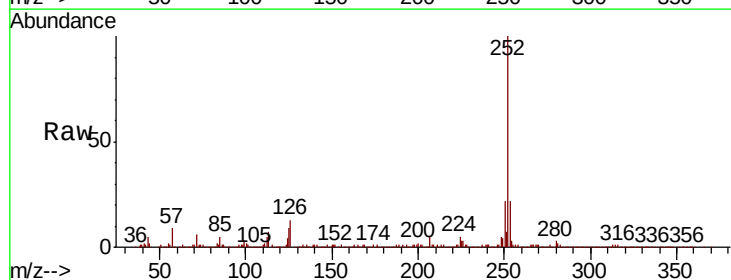
Tgt Ion:252 Resp: 904720

Ion Ratio Lower Upper

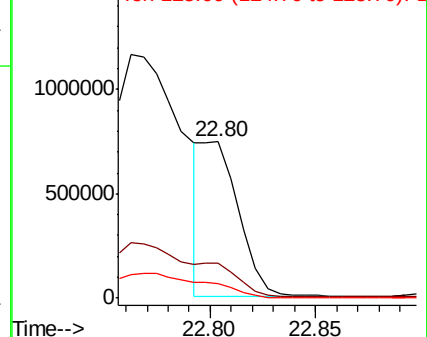
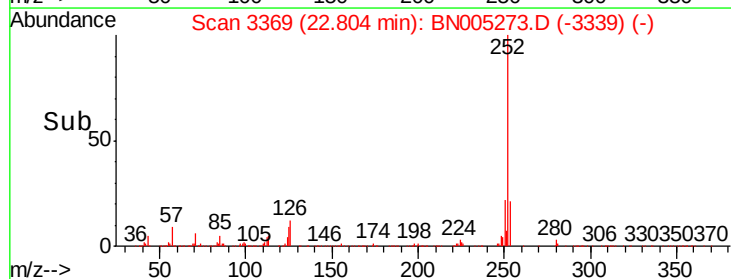
252 100

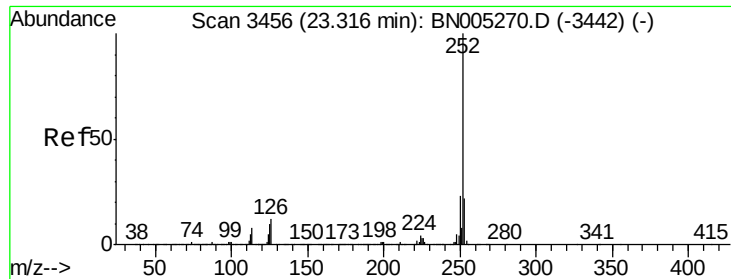
253 22.1 17.4 26.0

125 9.1 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





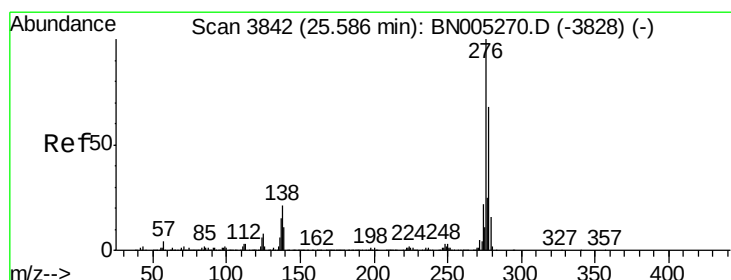
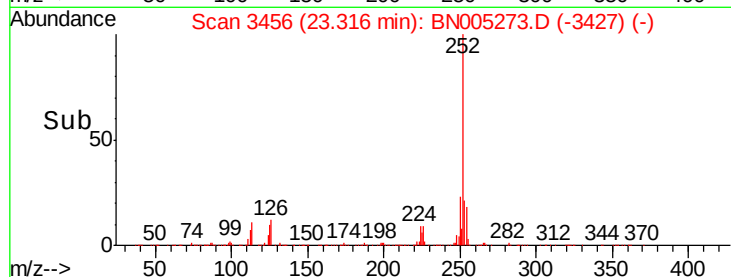
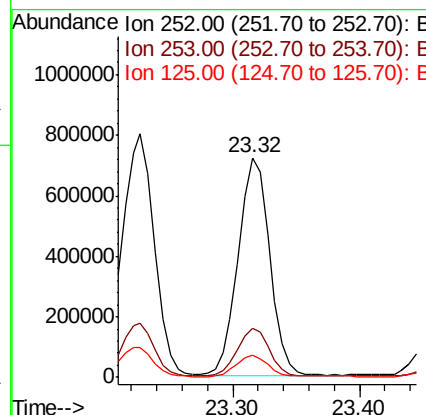
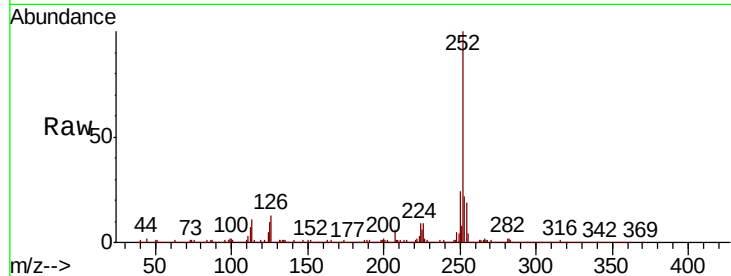
#90  
Benzo(a)pyrene  
Concen: 10.734 ng/ul  
RT: 23.32 min Scan# 3456  
Delta R.T. -0.03 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

Instrument :  
BNA\_N  
ClientSampleId :  
GAHQ5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.3  | 17.3  | 25.9  |
| 125     | 10.0  | 8.6   | 13.0  |

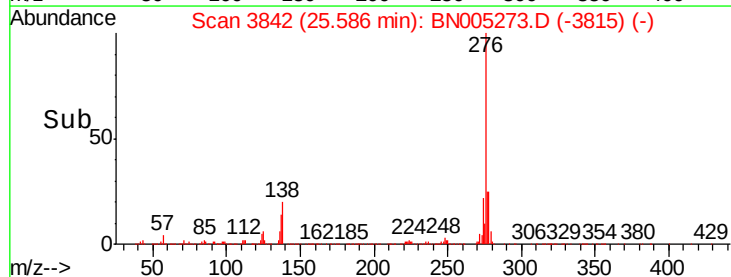
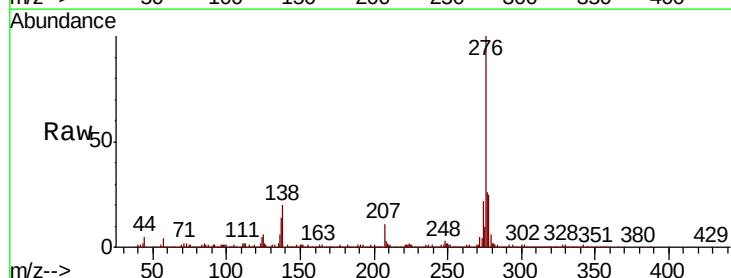
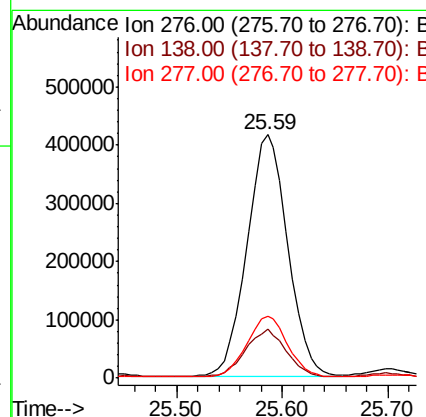
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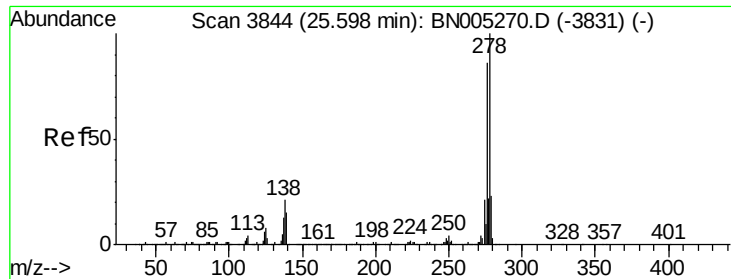
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#91  
Indeno(1,2,3-cd)pyrene  
Concen: 8.731 ng/ul  
RT: 25.59 min Scan# 3842  
Delta R.T. -0.04 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 20.3  | 17.9  | 26.9  |
| 277     | 25.5  | 19.7  | 29.5  |





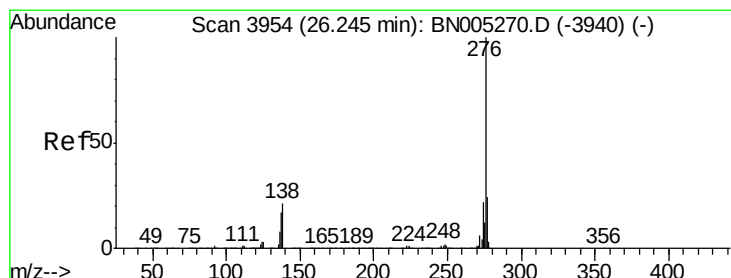
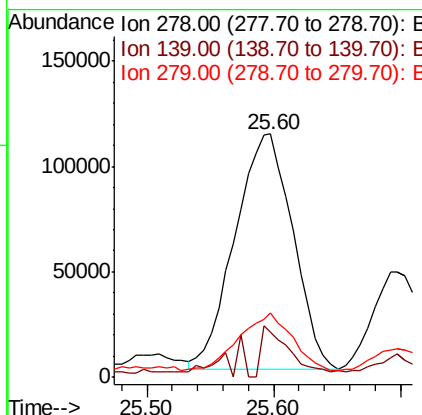
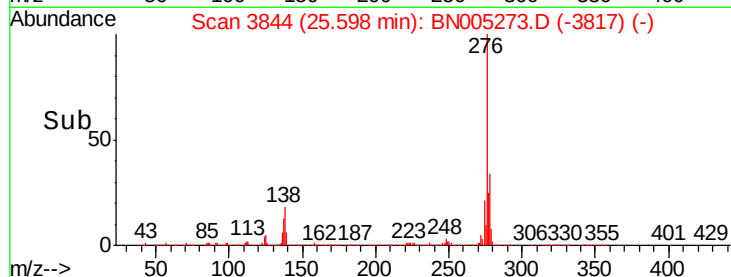
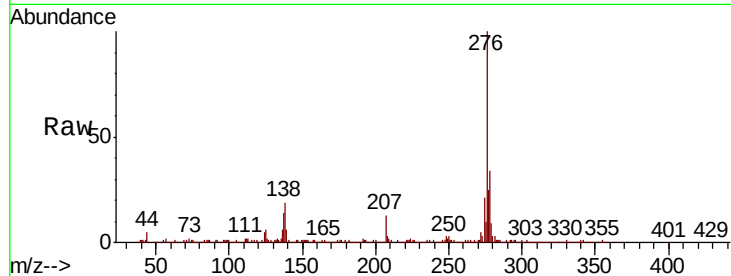
#92  
Dibenzo(a,h)anthracene  
Concen: 3.250 ng/ul  
RT: 25.60 min Scan# 3844  
Delta R.T. -0.04 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

Instrument :  
BNA\_N  
ClientSampleId :  
GAHQ5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 278   | Resp: | 351395 |
| Ion Ratio | Lower | Upper |        |
| 278       | 100   |       |        |
| 139       | 18.7  | 13.1  | 19.7   |
| 279       | 26.2  | 19.4  | 29.0   |

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#93  
Benzo(g,h,i)perylene  
Concen: 7.651 ng/ul  
RT: 26.24 min Scan# 3954  
Delta R.T. -0.05 min  
Lab File: BN005273.D  
Acq: 25 Apr 2019 05:08

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 805885 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 19.6  | 16.7  | 25.1   |
| 277       | 23.3  | 18.2  | 27.2   |

