

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN042419\  
 Data File : BN005276.D  
 Acq On : 25 Apr 2019 06:52  
 Operator : JU/SJ  
 Sample : K2455-20 5X  
 Misc :  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAHS0

Manual Integrations  
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Sohil  
 4/25/2019 5:35:29 PM

Quant Time: Apr 25 07:33:02 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  | 526387   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.36 | 136  | 2299553  | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.23 | 164  | 1347969  | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.98 | 188  | 2884126  | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.21 | 240  | 2010627  | 20.00 | ng/ul | -0.02    |
| 85) Perylene-d12          | 23.41 | 264  | 2079722  | 20.00 | ng/ul | -0.03    |

## System Monitoring Compounds

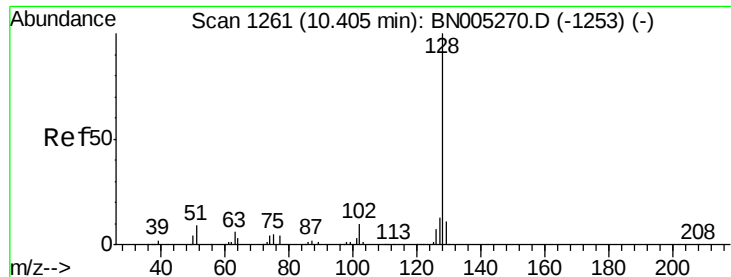
|                                |       |     |        |      |       |       |
|--------------------------------|-------|-----|--------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.22  | 96  | 8231   | 0.75 | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.78  | 99  | 184070 | 4.45 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.94  | 67  | 111868 | 4.34 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.13  | 132 | 149429 | 4.72 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.29  | 113 | 158656 | 4.91 | ng/ul | -0.01 |
| 19) Nitrobenzene-d5            | 8.73  | 128 | 72518  | 5.12 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.45  | 143 | 76864  | 5.36 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 9.98  | 165 | 160864 | 4.89 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 10.49 | 131 | 110891 | 3.27 | ng/ul | 0.00  |
| 43) Dimethylphthalate-d6       | 13.65 | 166 | 514349 | 5.26 | ng/ul | 0.00  |
| 46) Acenaphthylene-d8          | 13.92 | 160 | 610061 | 5.08 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.43 | 143 | 61399  | 3.97 | ng/ul | 0.00  |
| 57) Fluorene-d10               | 15.23 | 176 | 439471 | 5.35 | ng/ul | 0.00  |
| 62) 4,6-Dinitro-2-methylphenol | 15.35 | 200 | 33115  | 2.55 | ng/ul | 0.00  |
| 70) Anthracene-d10             | 17.08 | 188 | 648230 | 5.36 | ng/ul | 0.00  |
| 78) Pyrene-d10                 | 19.39 | 212 | 624735 | 6.07 | ng/ul | 0.00  |
| 89) Benzo(a)pyrene-d12         | 23.27 | 264 | 447976 | 4.93 | ng/ul | -0.03 |

## Target Compounds

|                            |       |     |          |        | Ovalue    |
|----------------------------|-------|-----|----------|--------|-----------|
| 28) Naphthalene            | 10.40 | 128 | 398999   | 3.732  | ng/ul 99  |
| 34) 2-Methylnaphthalene    | 12.03 | 142 | 1141531  | 14.584 | ng/ul 98  |
| 40) 1,1'-Biphenyl          | 13.06 | 154 | 224705   | 2.237  | ng/ul 100 |
| 47) Acenaphthylene         | 13.95 | 152 | 1700751  | 14.400 | ng/ul 98  |
| 49) Acenaphthene           | 14.29 | 153 | 132908   | 1.648  | ng/ul 96  |
| 53) Dibenzofuran           | 14.63 | 168 | 118353   | 1.019  | ng/ul 90  |
| 58) Fluorene               | 15.28 | 166 | 660184   | 7.288  | ng/ul 98  |
| 69) Phenanthrene           | 17.03 | 178 | 3299810  | 23.493 | ng/ul 100 |
| 71) Anthracene             | 17.12 | 178 | 929385   | 6.495  | ng/ul 99  |
| 76) Fluoranthene           | 19.06 | 202 | 1936143  | 12.427 | ng/ul 98  |
| 79) Pyrene                 | 19.43 | 202 | 8923091  | 68.927 | ng/ul 97  |
| 82) Benzo(a)anthracene     | 21.19 | 228 | 1233272m | 9.860  | ng/ul     |
| 84) Chrysene               | 21.25 | 228 | 897369   | 7.730  | ng/ul 97  |
| 87) Benzo(b)fluoranthene   | 22.76 | 252 | 2145956m | 18.356 | ng/ul     |
| 88) Benzo(k)fluoranthene   | 22.79 | 252 | 673319m  | 6.030  | ng/ul     |
| 90) Benzo(a)pyrene         | 23.31 | 252 | 1584723  | 14.421 | ng/ul 99  |
| 91) Indeno(1,2,3-cd)pyrene | 25.58 | 276 | 923103   | 7.598  | ng/ul 95  |
| 92) Dibenzo(a,h)anthracene | 25.59 | 278 | 315708   | 3.062  | ng/ul 94  |
| 93) Benzo(g,h,i)perylene   | 26.24 | 276 | 647423   | 6.445  | ng/ul 99  |

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





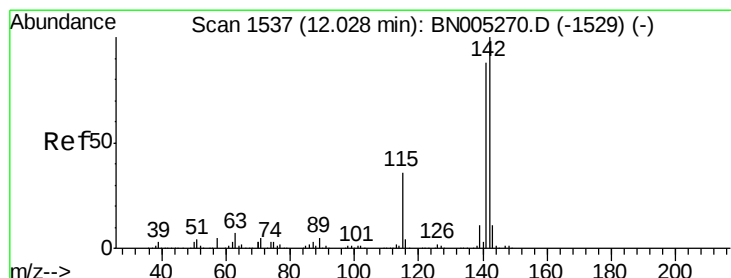
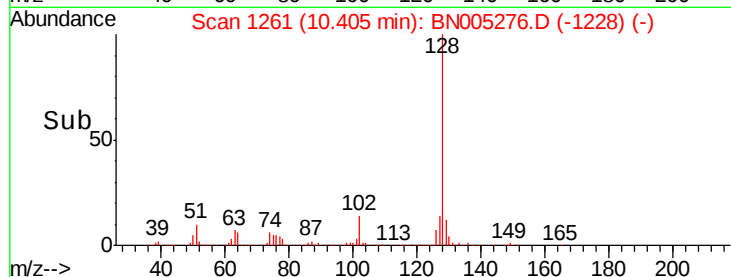
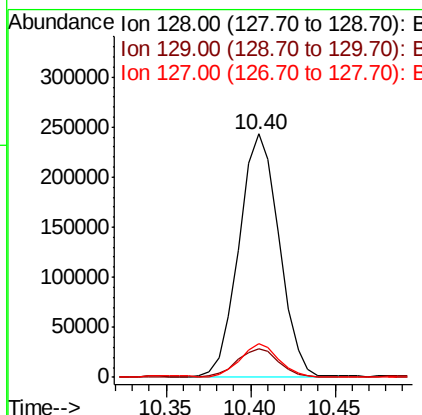
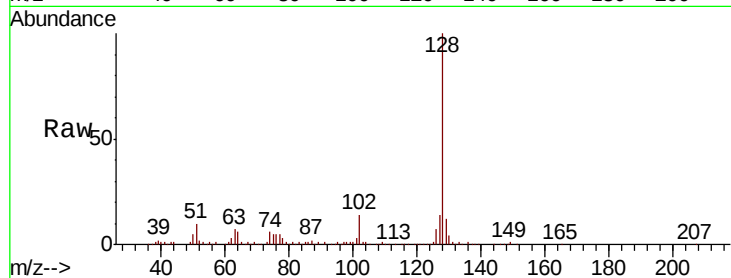
#28  
Naphthalene  
Concen: 3.732 ng/ul  
RT: 10.40 min Scan# 1261  
Delta R.T. -0.01 min  
Lab File: BN005276.D  
Acq: 25 Apr 2019 06:52

Instrument :  
BNA\_N  
ClientSampleId :  
GAHS0

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.7  | 9.2   | 13.8  |
| 127     | 13.9  | 10.7  | 16.1  |

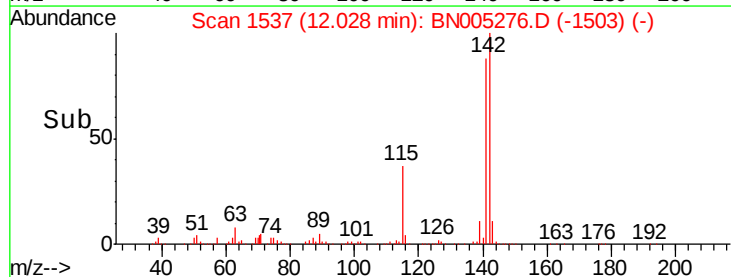
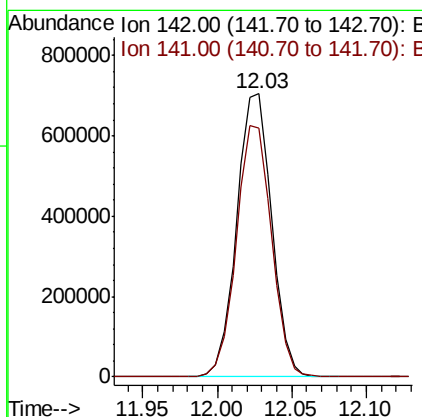
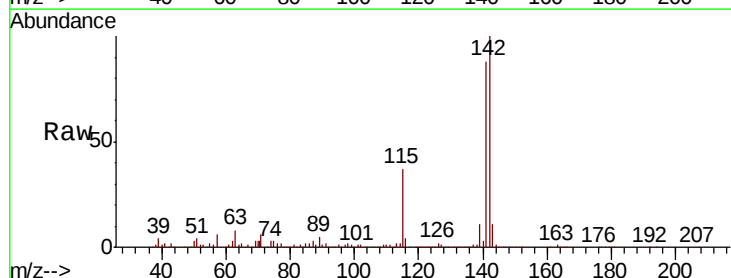
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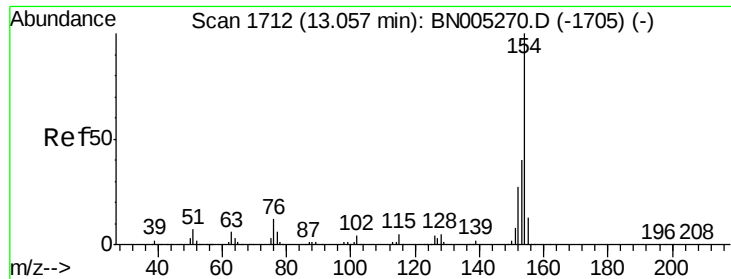
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#34  
2-Methylnaphthalene  
Concen: 14.584 ng/ul  
RT: 12.03 min Scan# 1537  
Delta R.T. 0.00 min  
Lab File: BN005276.D  
Acq: 25 Apr 2019 06:52

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 87.9  | 72.0  | 108.0 |





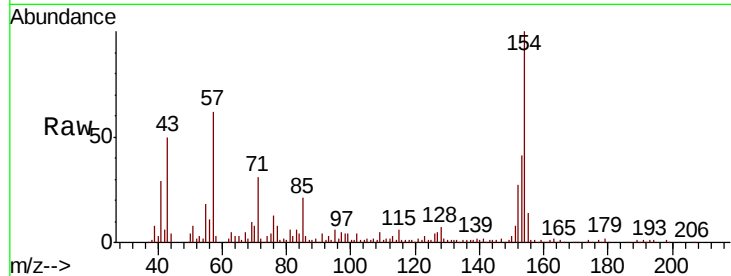
#40  
 1,1'-Biphenyl  
 Concen: 2.237 ng/ul  
 RT: 13.06 min Scan# 1712  
 Delta R.T. 0.00 min  
 Lab File: BN005276.D  
 Acq: 25 Apr 2019 06:52

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAHS0

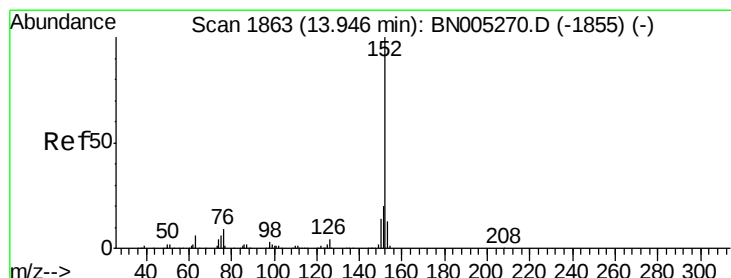
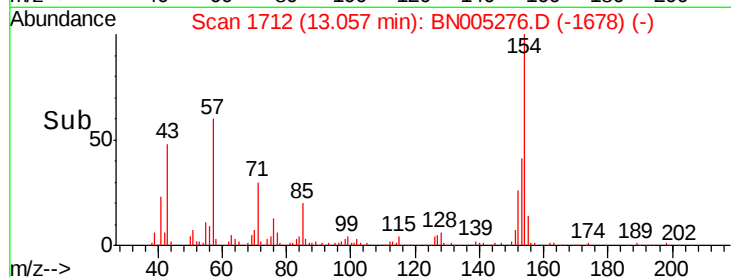
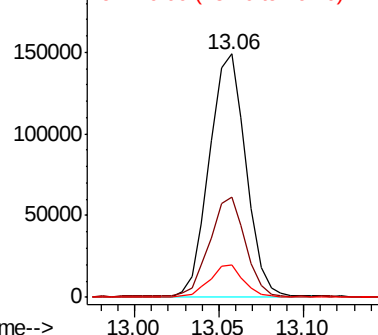
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 154   | Resp: | 224705 |
| Ion Ratio | Lower | Upper |        |
| 154       | 100   |       |        |
| 153       | 41.1  | 32.6  | 49.0   |
| 76        | 13.1  | 10.4  | 15.6   |

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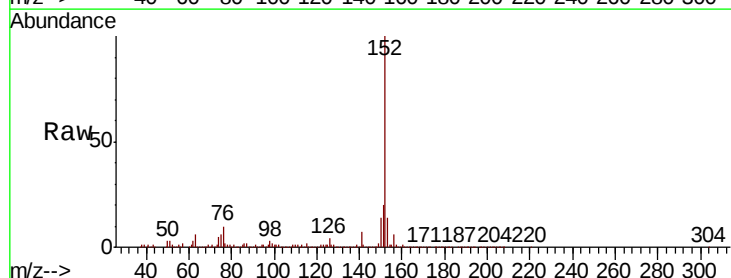


Abundance Ion 154.00 (153.70 to 154.70): E  
 Ion 153.00 (152.70 to 153.70): E  
 Ion 76.00 (75.70 to 76.70): BNC

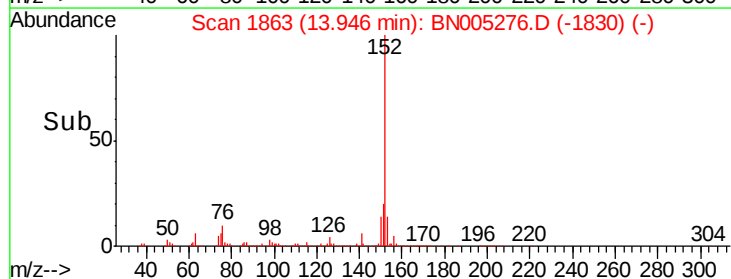
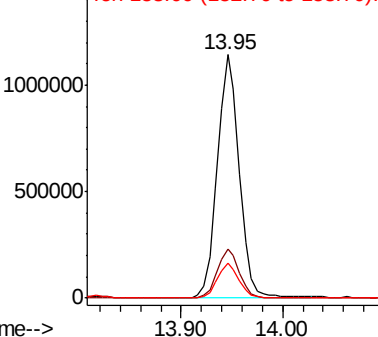


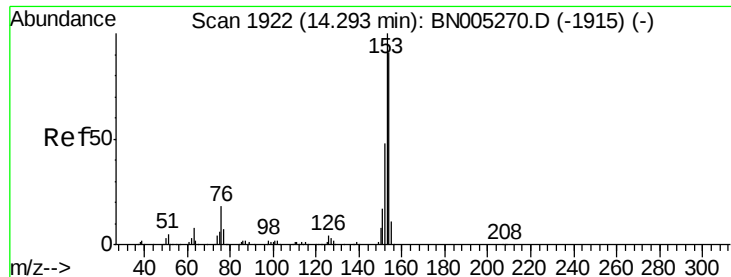
#47  
 Acenaphthylene  
 Concen: 14.400 ng/ul  
 RT: 13.95 min Scan# 1863  
 Delta R.T. -0.01 min  
 Lab File: BN005276.D  
 Acq: 25 Apr 2019 06:52

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 152   | Resp: | 1700751 |
| Ion Ratio | Lower | Upper |         |
| 152       | 100   |       |         |
| 151       | 20.0  | 15.8  | 23.8    |
| 153       | 14.2  | 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: 1.648 ng/ul

RT: 14.29 min Scan# 1922

Delta R.T. -0.01 min

Lab File: BN005276.D

Acq: 25 Apr 2019 06:52

Instrument :

BNA\_N

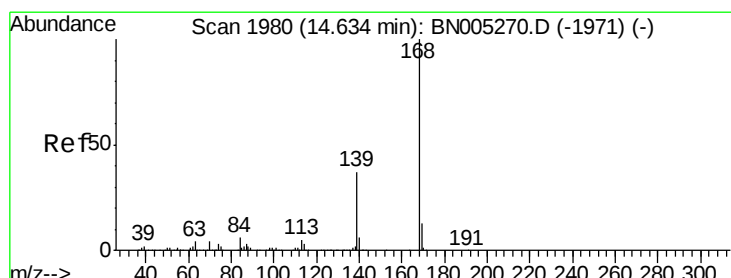
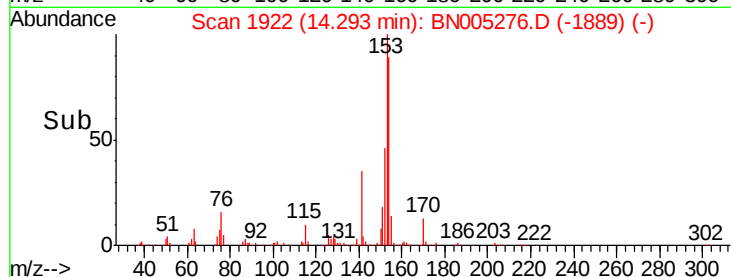
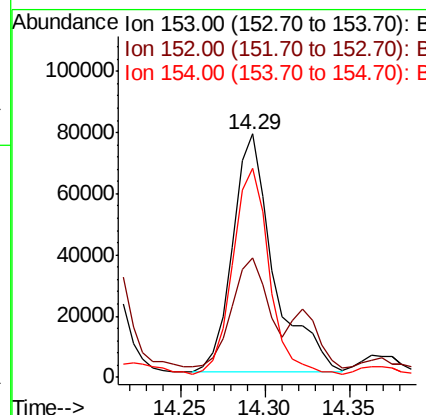
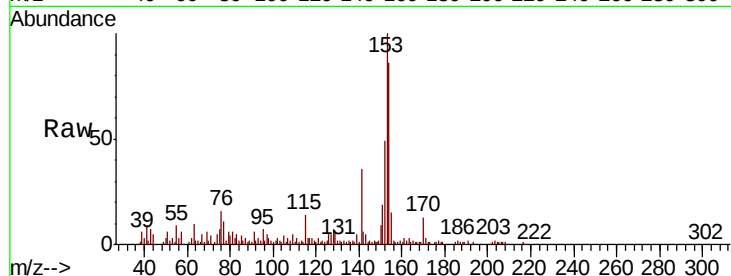
ClientSampled :

GAHS0

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 153   | Resp: | 132908 |
| Ion Ratio | Lower | Upper |        |
| 153       | 100   |       |        |
| 152       | 49.1  | 37.4  | 56.0   |
| 154       | 85.8  | 71.2  | 106.8  |

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#53

Dibenzofuran

Concen: 1.019 ng/ul

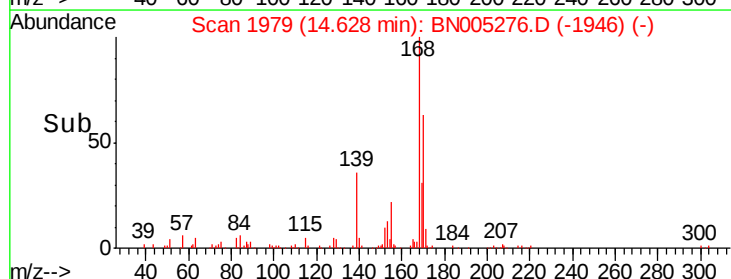
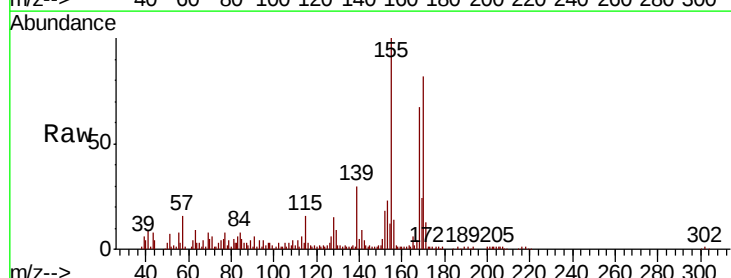
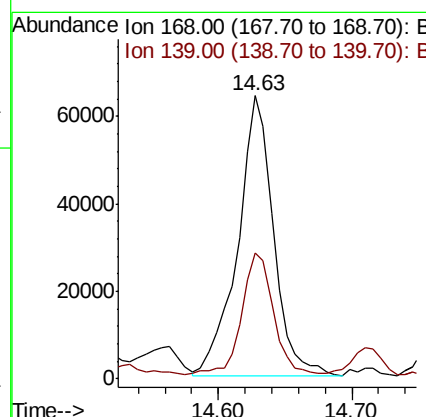
RT: 14.63 min Scan# 1979

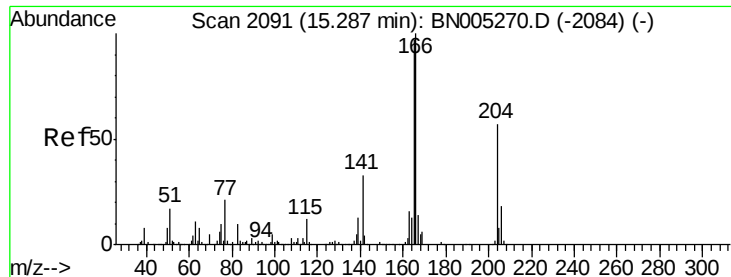
Delta R.T. -0.01 min

Lab File: BN005276.D

Acq: 25 Apr 2019 06:52

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 168   | Resp: | 118353 |
| Ion Ratio | Lower | Upper |        |
| 168       | 100   |       |        |
| 139       | 44.4  | 30.9  | 46.3   |





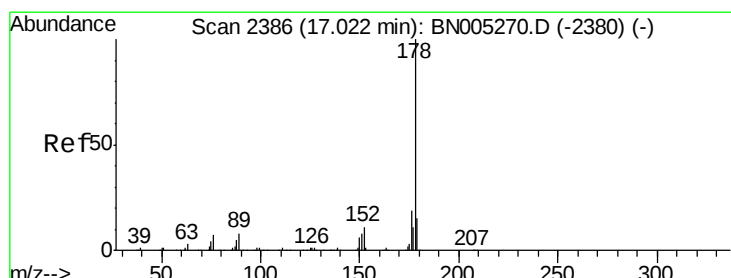
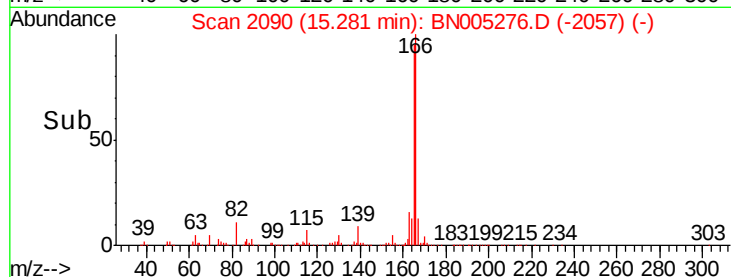
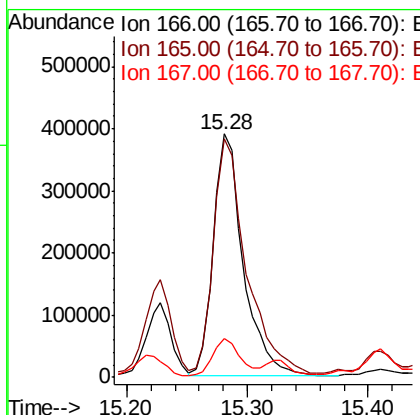
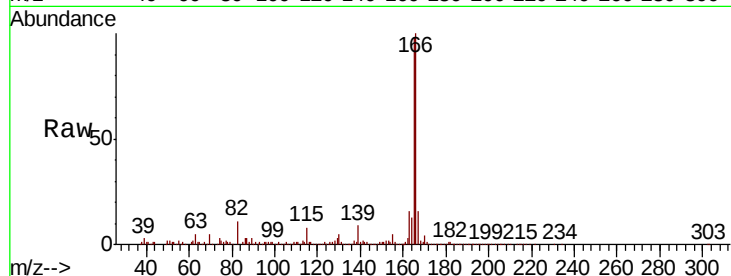
#58  
**Fluorene**  
 Concen: 7.288 ng/ul  
 RT: 15.28 min Scan# 2090  
 Delta R.T. -0.01 min  
 Lab File: BN005276.D  
 Acq: 25 Apr 2019 06:52

Instrument :  
 BNA\_N  
 ClientSampled :  
 GAHS0

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 98.1  | 80.0  | 120.0 |
| 167     | 15.8  | 10.7  | 16.1  |

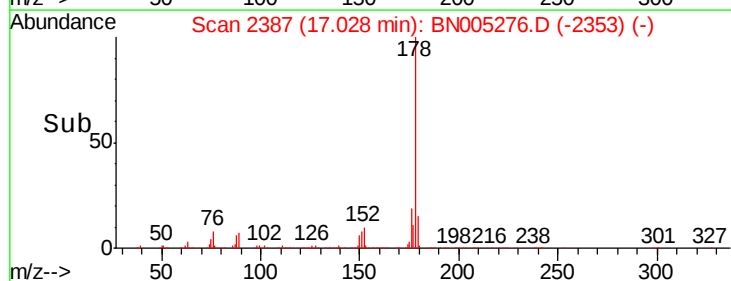
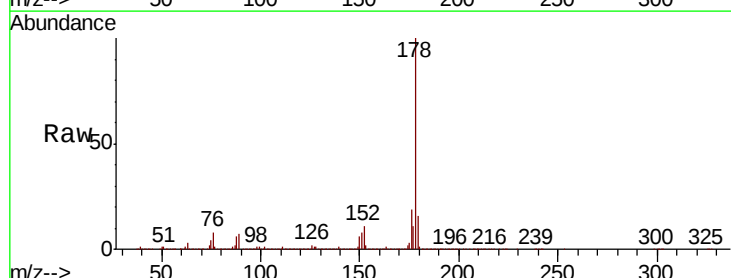
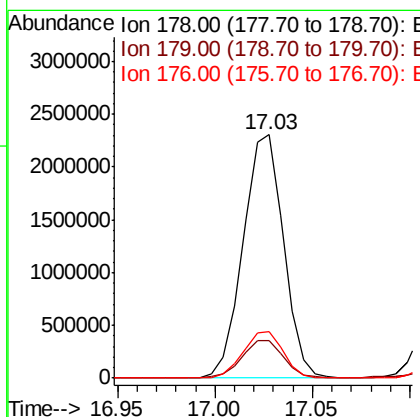
Manual Integrations  
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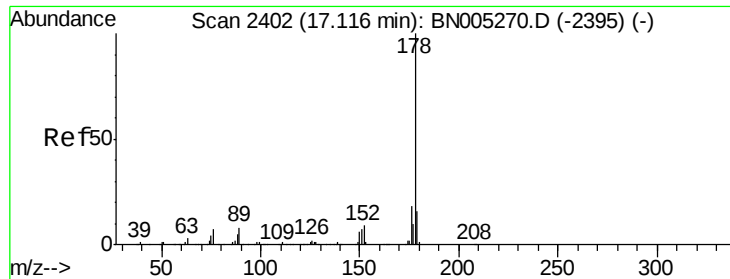
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#69  
**Phenanthrene**  
 Concen: 23.493 ng/ul  
 RT: 17.03 min Scan# 2387  
 Delta R.T. 0.00 min  
 Lab File: BN005276.D  
 Acq: 25 Apr 2019 06:52

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.5  | 12.2  | 18.4  |
| 176     | 18.9  | 15.1  | 22.7  |





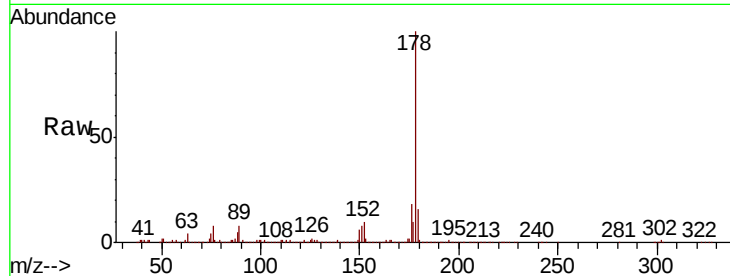
#71  
 Anthracene  
 Concen: 6.495 ng/ul  
 RT: 17.12 min Scan# 2402  
 Delta R.T. 0.00 min  
 Lab File: BN005276.D  
 Acq: 25 Apr 2019 06:52

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAHS0

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.8  | 12.3  | 18.5  |
| 176     | 18.3  | 15.1  | 22.7  |

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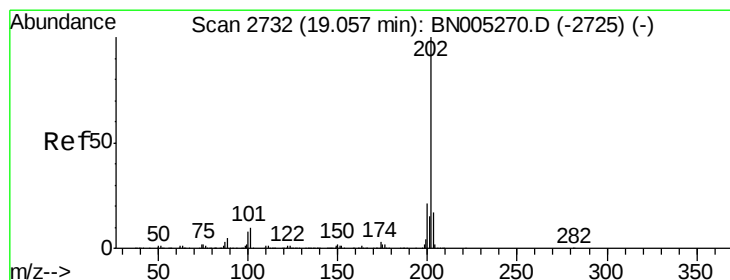
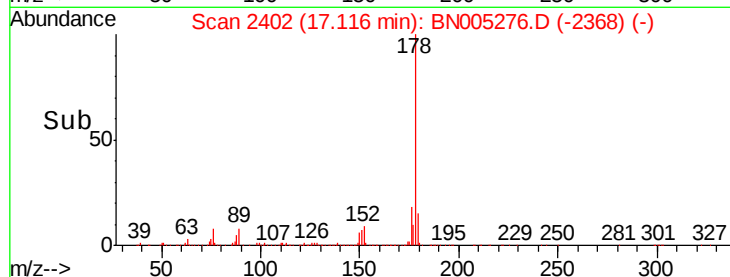
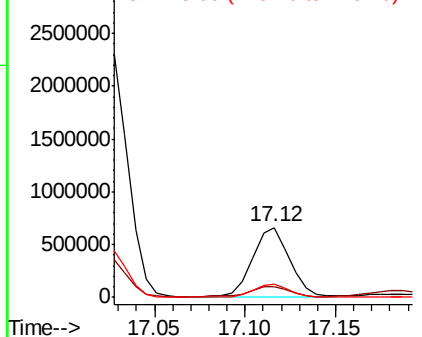


Abundance

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: 12.427 ng/ul  
 RT: 19.06 min Scan# 2732  
 Delta R.T. -0.01 min  
 Lab File: BN005276.D  
 Acq: 25 Apr 2019 06:52

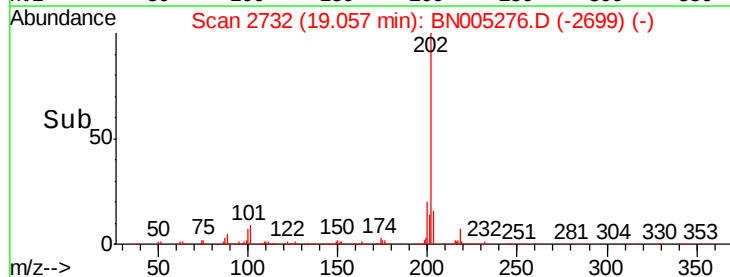
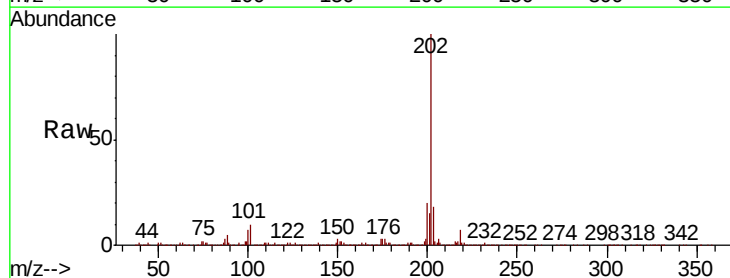
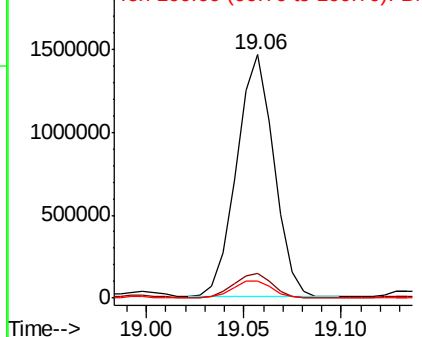
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.1  | 8.6   | 12.8  |
| 100     | 7.2   | 6.3   | 9.5   |

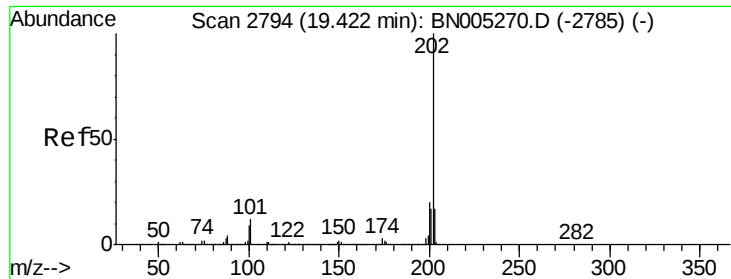
Abundance

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: 68.927 ng/ul

RT: 19.43 min Scan# 2795

Delta R.T. 0.00 min

Lab File: BN005276.D

Acq: 25 Apr 2019 06:52

Instrument :

BNA\_N

ClientSampleId :

GAHS0

Tot Ion:202 Resp: 8923091

Ion Ratio Lower Upper

202 100

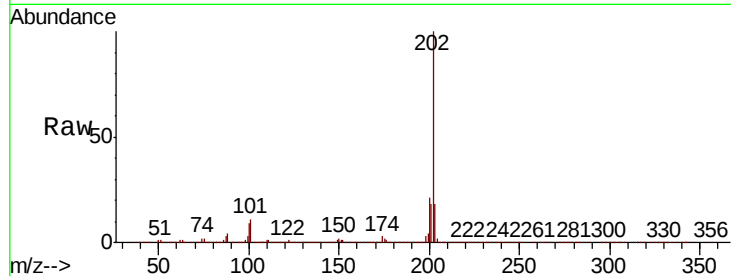
101 11.4 10.3 15.5

100 9.4 7.9 11.9

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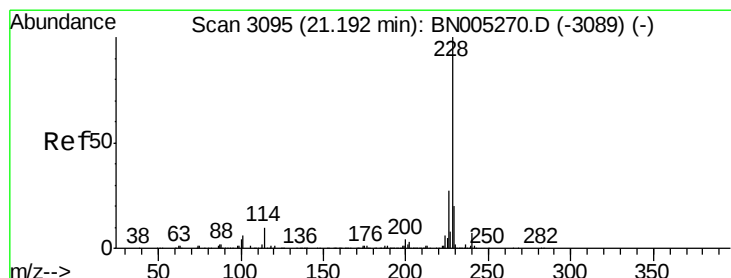
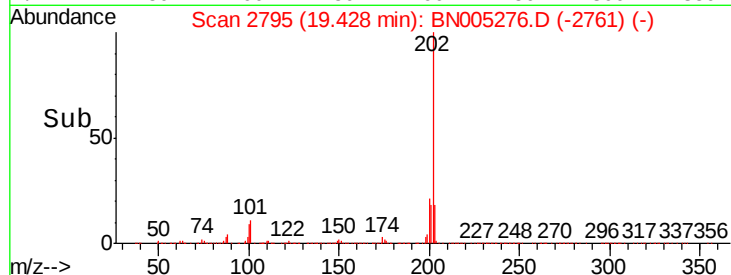
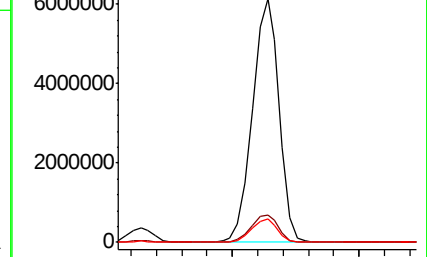
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Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): E



#82

Benzo(a)anthracene

Concen: 9.860 ng/ul m

RT: 21.19 min Scan# 3095

Delta R.T. -0.02 min

Lab File: BN005276.D

Acq: 25 Apr 2019 06:52

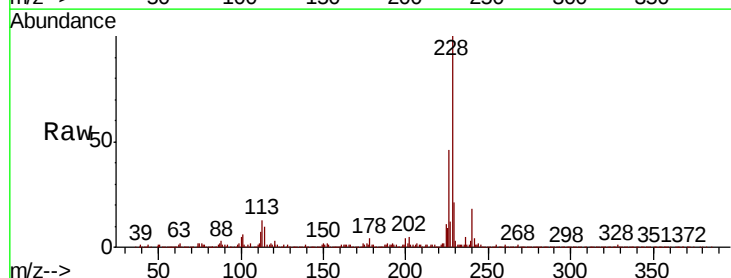
Tgt Ion:228 Resp: 1233272

Ion Ratio Lower Upper

228 100

229 21.0 15.8 23.6

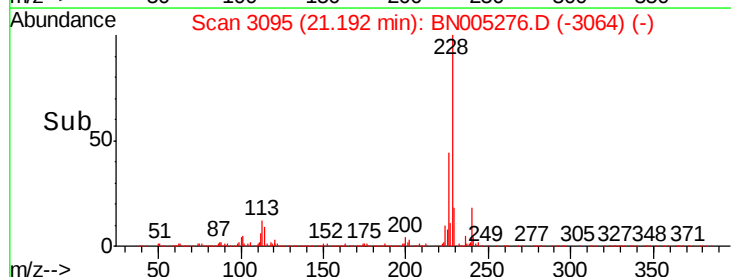
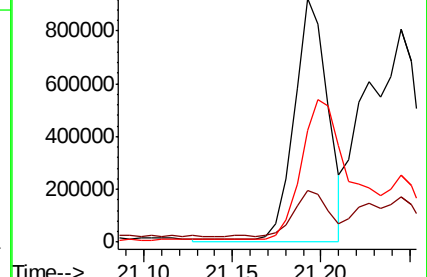
226 45.7 21.4 32.2#

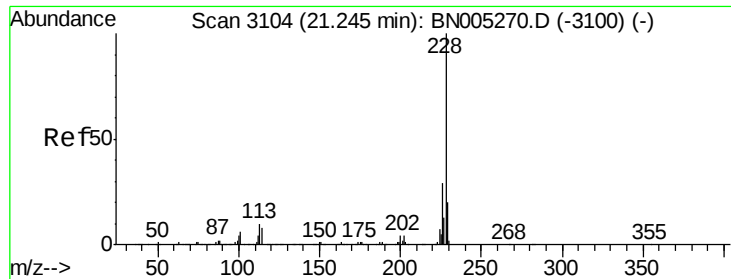


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 229.00 (228.70 to 229.70): E

Ion 226.00 (225.70 to 226.70): E





#84

Chrysene

Concen: 7.730 ng/ul

RT: 21.25 min Scan# 3104

Delta R.T. -0.02 min

Lab File: BN005276.D

Acq: 25 Apr 2019 06:52

Instrument :

BNA\_N

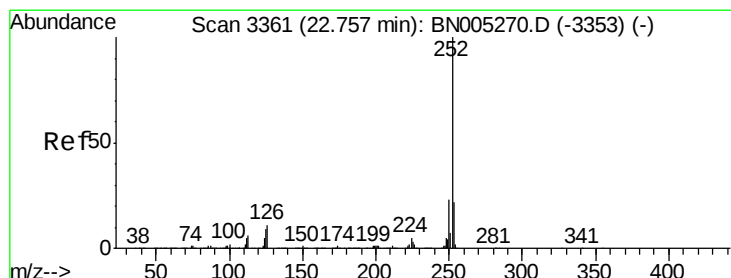
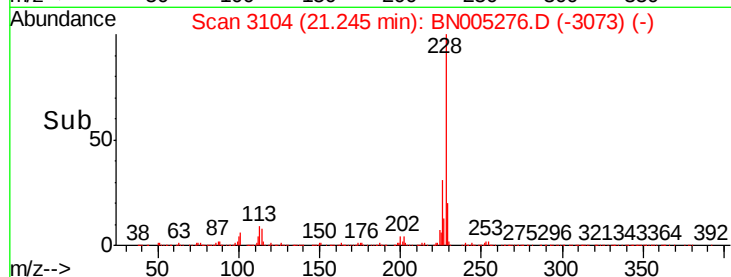
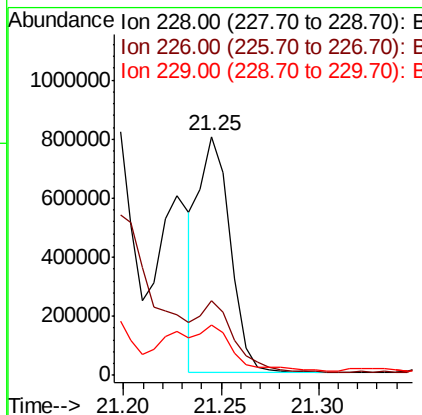
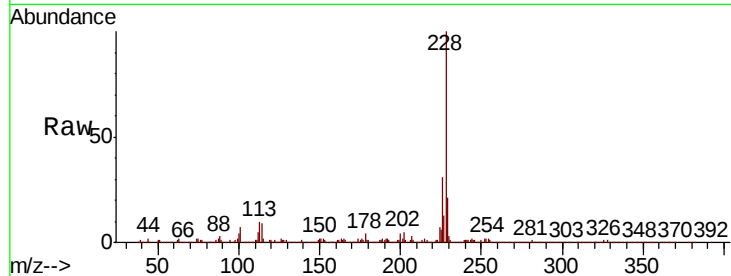
ClientSampled :

GAHS0

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 897369 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 31.3  | 24.0  | 36.0   |
| 229       | 21.2  | 15.4  | 23.0   |

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#87

Benzo(b)fluoranthene

Concen: 18.356 ng/ul m

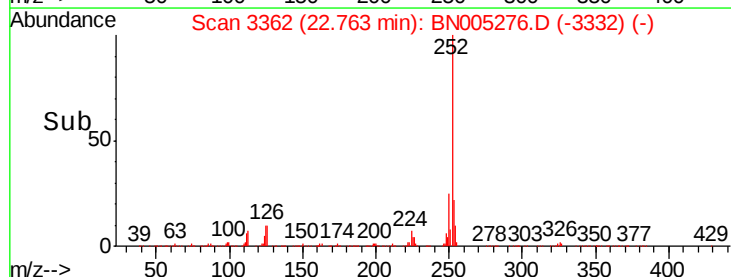
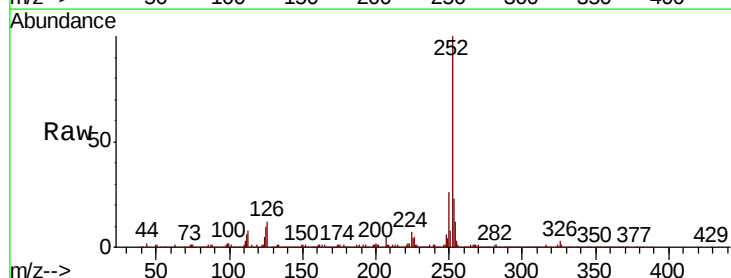
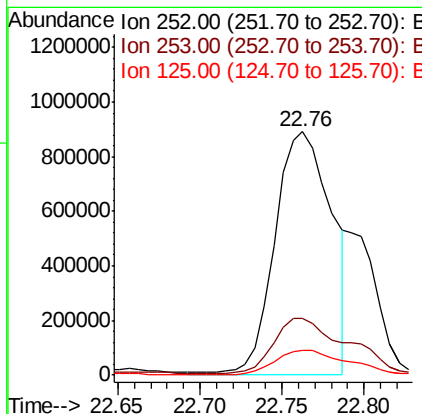
RT: 22.76 min Scan# 3362

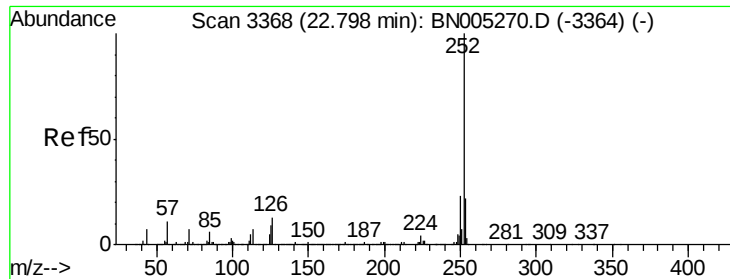
Delta R.T. -0.02 min

Lab File: BN005276.D

Acq: 25 Apr 2019 06:52

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 252   | Resp: | 2145956 |
| Ion Ratio | Lower | Upper |         |
| 252       | 100   |       |         |
| 253       | 23.3  | 17.7  | 26.5    |
| 125       | 10.2  | 8.4   | 12.6    |





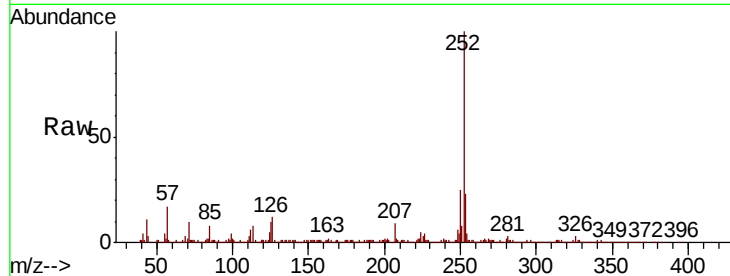
#88  
Benzo(k)fluoranthene  
Concen: 6.030 ng/ul m  
RT: 22.79 min Scan# 3366  
Delta R.T. -0.04 min  
Lab File: BN005276.D  
Acq: 25 Apr 2019 06:52

Instrument :  
BNA\_N  
ClientSampled :  
GAHS0

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.8  | 17.4  | 26.0  |
| 125     | 10.0  | 7.5   | 11.3  |

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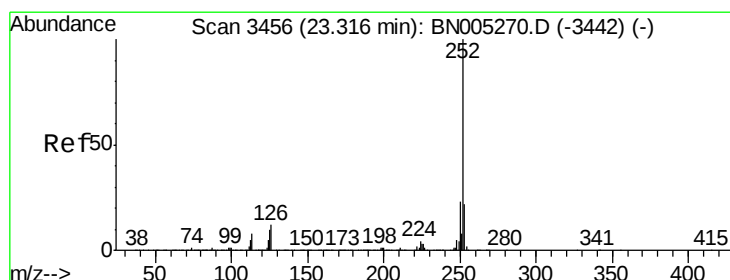
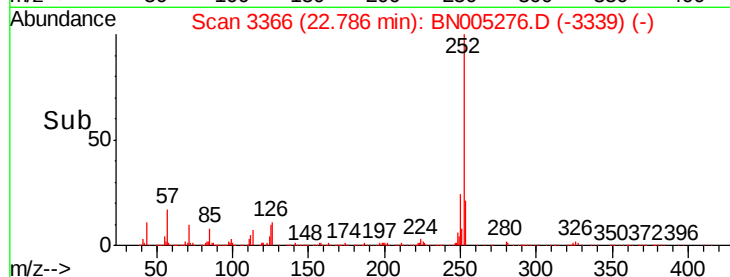
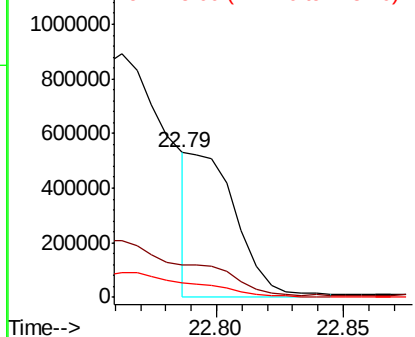


Abundance

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



#90  
Benzo(a)pyrene  
Concen: 14.421 ng/ul  
RT: 23.31 min Scan# 3455  
Delta R.T. -0.03 min  
Lab File: BN005276.D  
Acq: 25 Apr 2019 06:52

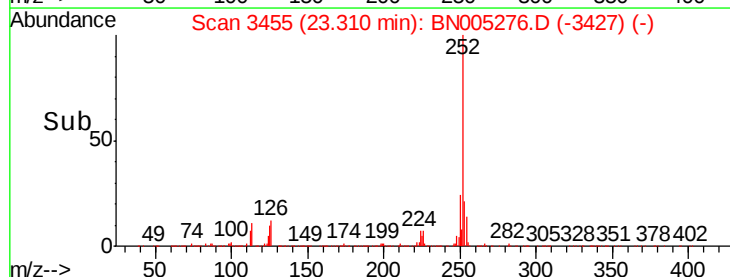
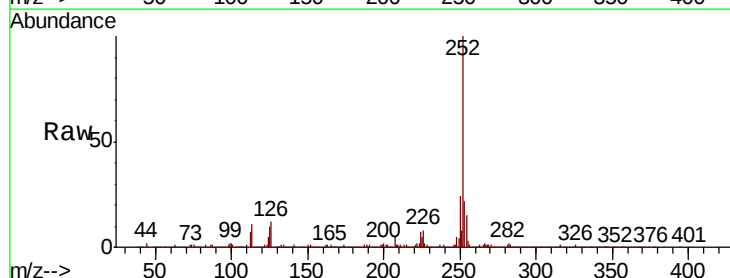
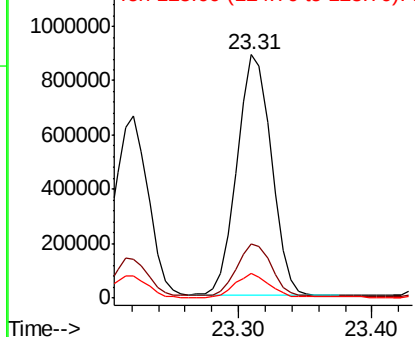
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.4  | 17.3  | 25.9  |
| 125     | 10.3  | 8.6   | 13.0  |

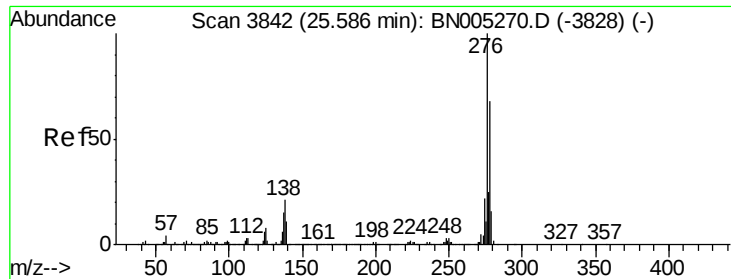
Abundance

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





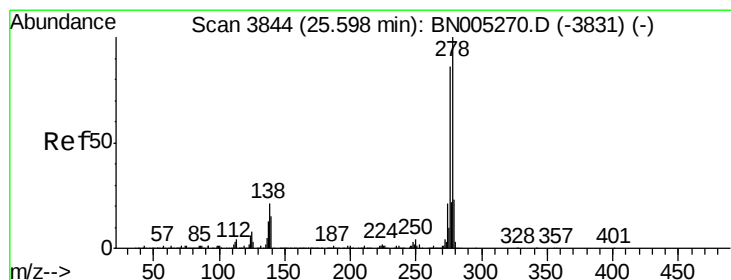
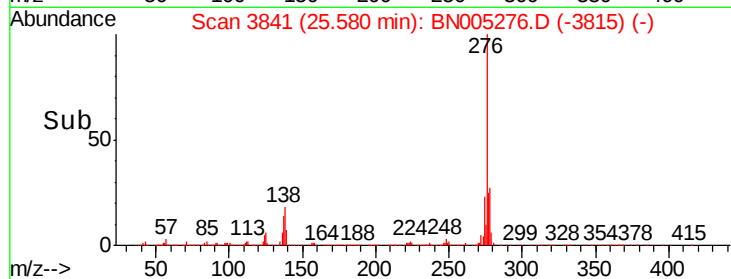
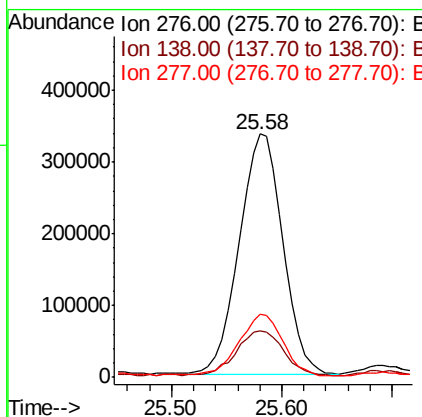
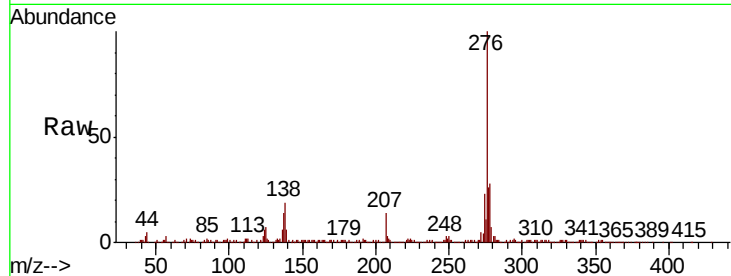
#91  
 Indeno(1,2,3-cd)pyrene  
 Concen: 7.598 ng/ul  
 RT: 25.58 min Scan# 3841  
 Delta R.T. -0.05 min  
 Lab File: BN005276.D  
 Acq: 25 Apr 2019 06:52

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAHS0

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 19.1  | 17.9  | 26.9  |
| 277     | 25.9  | 19.7  | 29.5  |

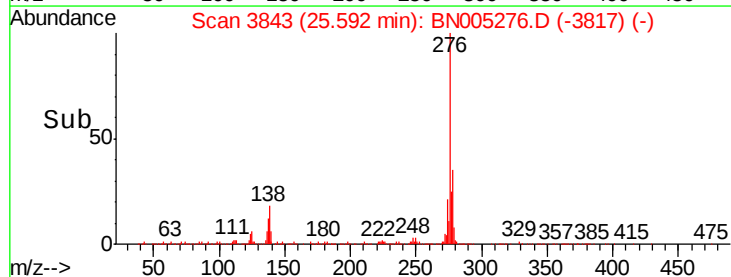
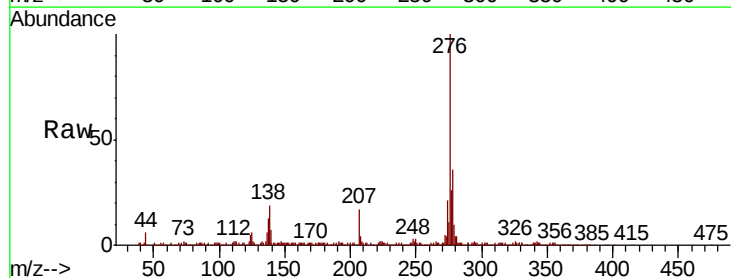
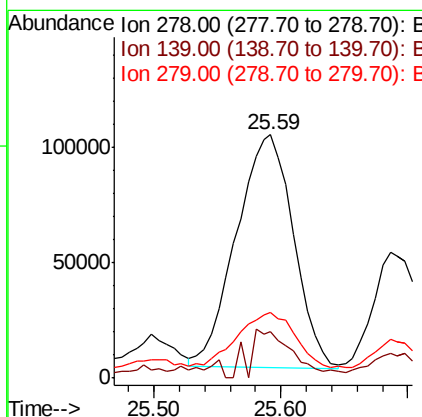
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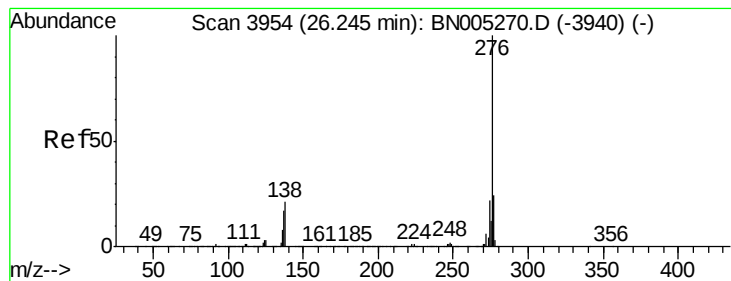
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#92  
 Dibenzo(a,h)anthracene  
 Concen: 3.062 ng/ul  
 RT: 25.59 min Scan# 3843  
 Delta R.T. -0.05 min  
 Lab File: BN005276.D  
 Acq: 25 Apr 2019 06:52

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 19.2  | 13.1  | 19.7  |
| 279     | 26.8  | 19.4  | 29.0  |





#93

Benzo(a,h,i)perylene

Concen: 6.445 ng/ul

RT: 26.24 min Scan# 3954

Delta R.T. -0.05 min

Lab File: BN005276.D

Acq: 25 Apr 2019 06:52

Instrument :

BNA\_N

ClientSampleId :

GAHS0

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 647423 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 20.9  | 16.7  | 25.1   |
| 277       | 23.5  | 18.2  | 27.2   |

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