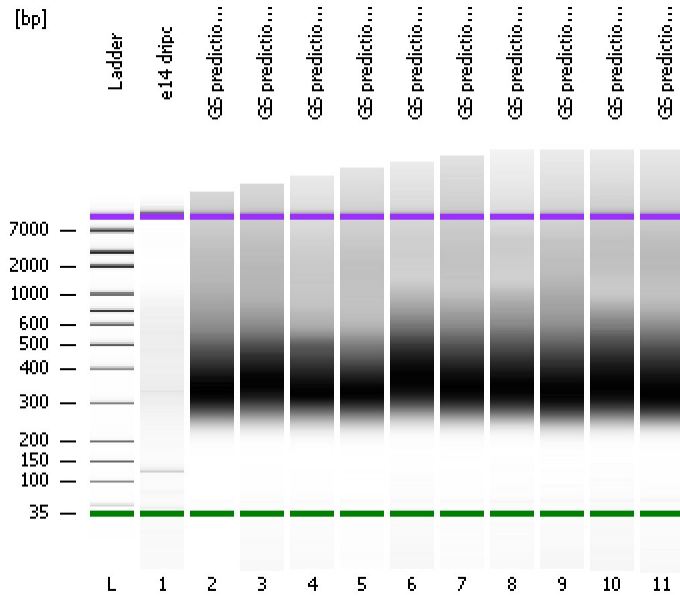


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

Created: 8/19/2014 3:55:40 PM  
Modified: 8/19/2014 4:36:10 PM

### Electrophoresis File Run Summary



#### Instrument Information:

Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy  
Assay Class: High Sensitivity DNA Assay  
Version: 1.03  
Assay Comments: Copyright © 2003-2010 Agilent Technologies

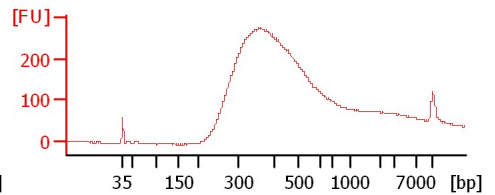
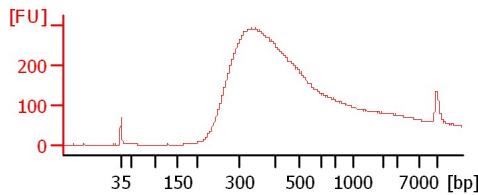
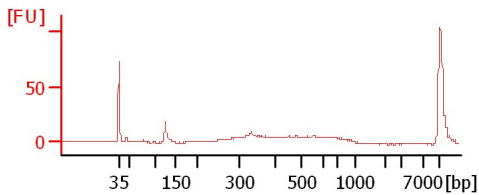
#### Chip Information:

Chip Lot #:   
Reagent Kit Lot #:   
Chip Comments:

e14 dripc

GS prediction E2

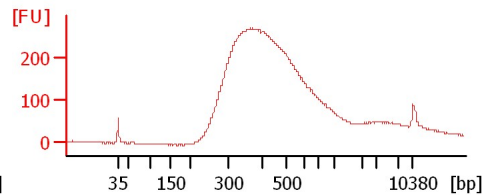
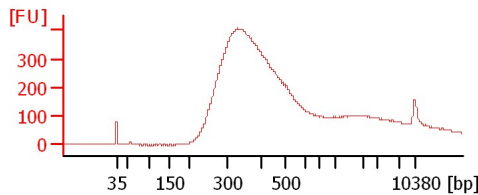
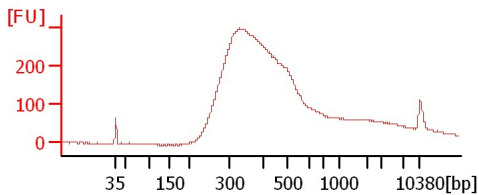
GS prediction F2



GS prediction G2

GS prediction H2

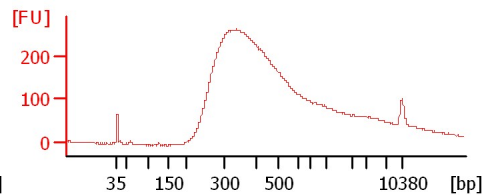
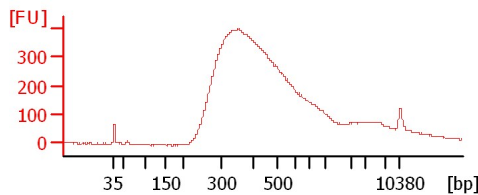
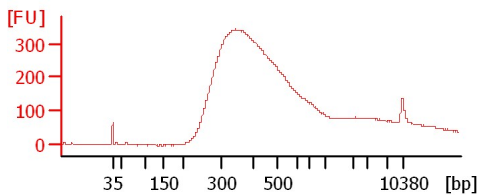
GS prediction A3



GS prediction B3

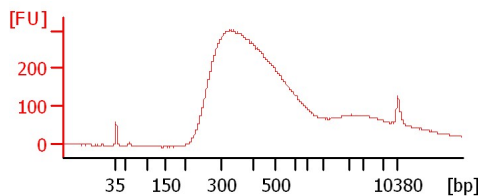
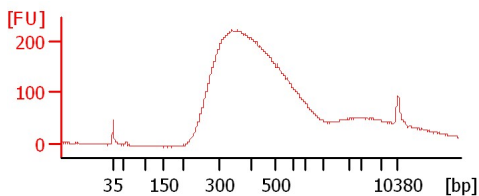
GS prediction C3

GS prediction D3



GS prediction E3

GS prediction F3



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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 Modified: 8/19/2014 4:36:10 PM

**Electrophoresis File Run Summary (Chip Summary)**

| Sample Name      | Sample Comment | Rest. Digest             | Status | Observation | Result Label | Result Color |
|------------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| e14 dripc        |                | <input type="checkbox"/> | ✓      |             |              |              |
| GS prediction E2 |                | <input type="checkbox"/> | ✓      |             |              |              |
| GS prediction F2 |                | <input type="checkbox"/> | ✓      |             |              |              |
| GS prediction G2 |                | <input type="checkbox"/> | ✓      |             |              |              |
| GS prediction H2 |                | <input type="checkbox"/> | ✓      |             |              |              |
| GS prediction A3 |                | <input type="checkbox"/> | ✓      |             |              |              |
| GS prediction B3 |                | <input type="checkbox"/> | ✓      |             |              |              |
| GS prediction C3 |                | <input type="checkbox"/> | ✓      |             |              |              |
| GS prediction D3 |                | <input type="checkbox"/> | ✓      |             |              |              |
| GS prediction E3 |                | <input type="checkbox"/> | ✓      |             |              |              |
| GS prediction F3 |                | <input type="checkbox"/> | ✓      |             |              |              |
| Ladder           |                | <input type="checkbox"/> | ✓      |             |              |              |

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

Created: 8/19/2014 3:55:40 PM  
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**Electrophoresis Assay Details**

**General Analysis Settings**

Number of Available Sample and Ladder Wells (Max.) : 12  
Minimum Visible Range [s] : 32  
Maximum Visible Range [s] : 138  
Start Analysis Time Range [s] : 33  
End Analysis Time Range [s] : 137.5  
Ladder Concentration [pg/μl] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/μl] : 125  
Upper Marker Concentration [pg/μl] : 75  
Used Upper Marker for Quantitation  
Standard Curve Fit is Point to Point  
Show Data Aligned to Lower and Upper Marker

**Integrator Settings**

Integration Start Time [s] : 33.05  
Integration End Time [s] : 137  
Slope Threshold : 0.8  
Height Threshold [FU] : 5  
Area Threshold : 0.1  
Width Threshold [s] : 0.6  
Baseline Plateau [s] : 0.5

**Filter Settings**

Filter Width [s] : 0.5  
Polynomial Order : 4

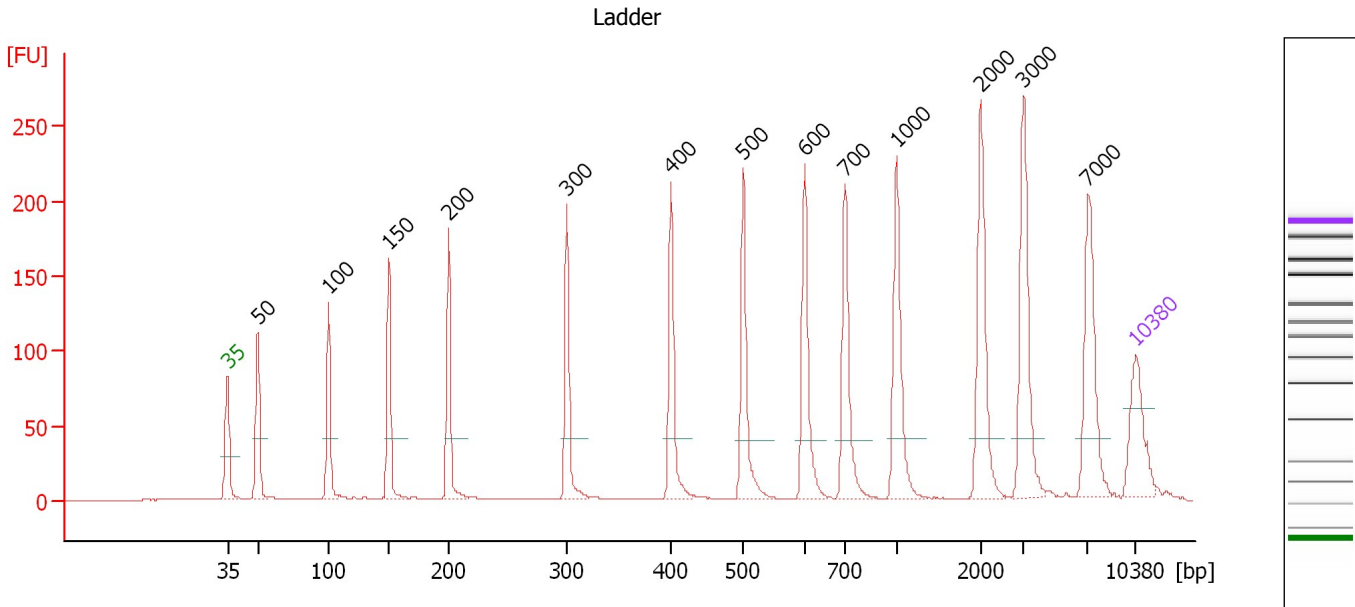
**Ladder**

| Ladder Peak | Size  | Area |
|-------------|-------|------|
| 1           | 35    | 160  |
| 2           | 50    | 210  |
| 3           | 100   | 208  |
| 4           | 150   | 221  |
| 5           | 200   | 242  |
| 6           | 300   | 270  |
| 7           | 400   | 305  |
| 8           | 500   | 306  |
| 9           | 600   | 336  |
| 10          | 700   | 321  |
| 11          | 1000  | 366  |
| 12          | 2000  | 413  |
| 13          | 3000  | 411  |
| 14          | 7000  | 400  |
| 15          | 10380 | 214  |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

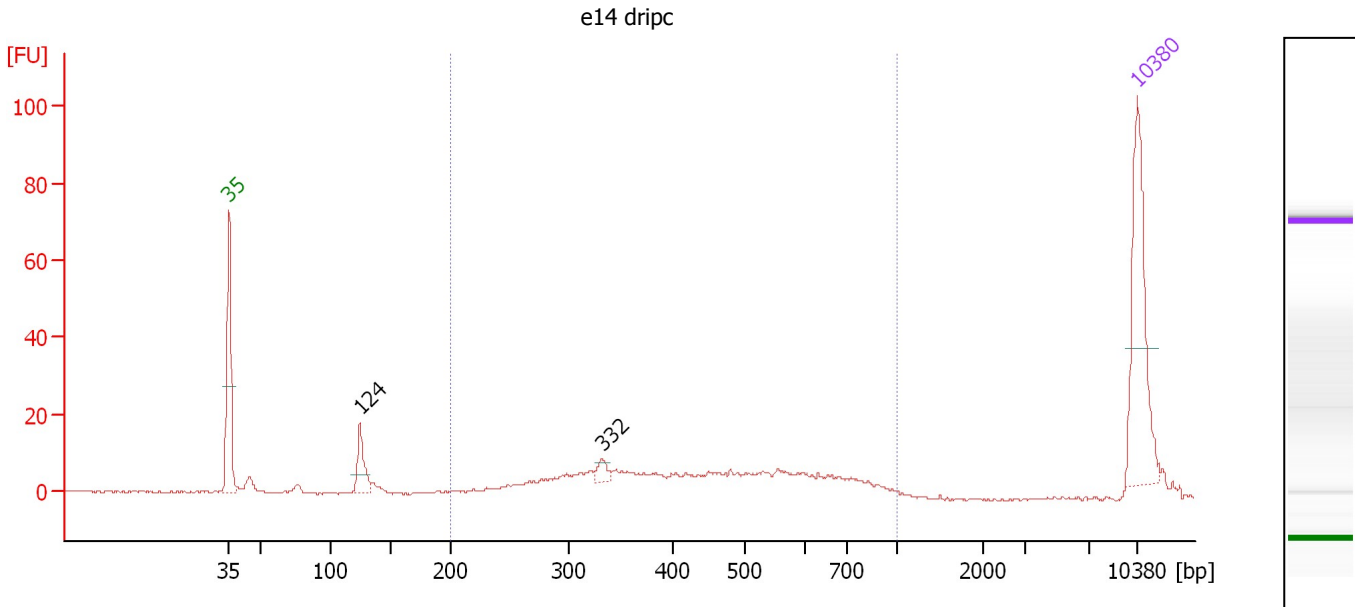
**Peak table for Ladder**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 50        | 150.00        | 4,545.5           | Ladder Peak  |
| 3    | 100       | 150.00        | 2,272.7           | Ladder Peak  |
| 4    | 150       | 150.00        | 1,515.2           | Ladder Peak  |
| 5    | 200       | 150.00        | 1,136.4           | Ladder Peak  |
| 6    | 300       | 150.00        | 757.6             | Ladder Peak  |
| 7    | 400       | 150.00        | 568.2             | Ladder Peak  |
| 8    | 500       | 150.00        | 454.5             | Ladder Peak  |
| 9    | 600       | 150.00        | 378.8             | Ladder Peak  |
| 10   | 700       | 150.00        | 324.7             | Ladder Peak  |
| 11   | 1,000     | 150.00        | 227.3             | Ladder Peak  |
| 12   | 2,000     | 150.00        | 113.6             | Ladder Peak  |
| 13   | 3,000     | 150.00        | 75.8              | Ladder Peak  |
| 14   | 7,000     | 150.00        | 32.5              | Ladder Peak  |
| 15   | 10,380    | 75.00         | 10.9              | Upper Marker |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : e14 dripc**

Number of peaks found: 2                      Corr. Area 1: 189.7  
 Noise: 0.2

**Peak table for sample 1 : e14 dripc**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 124       | 31.18         | 379.8             |              |
| 3    | 332       | 7.86          | 35.9              |              |
| 4    | 10,380    | 75.00         | 10.9              | Upper Marker |

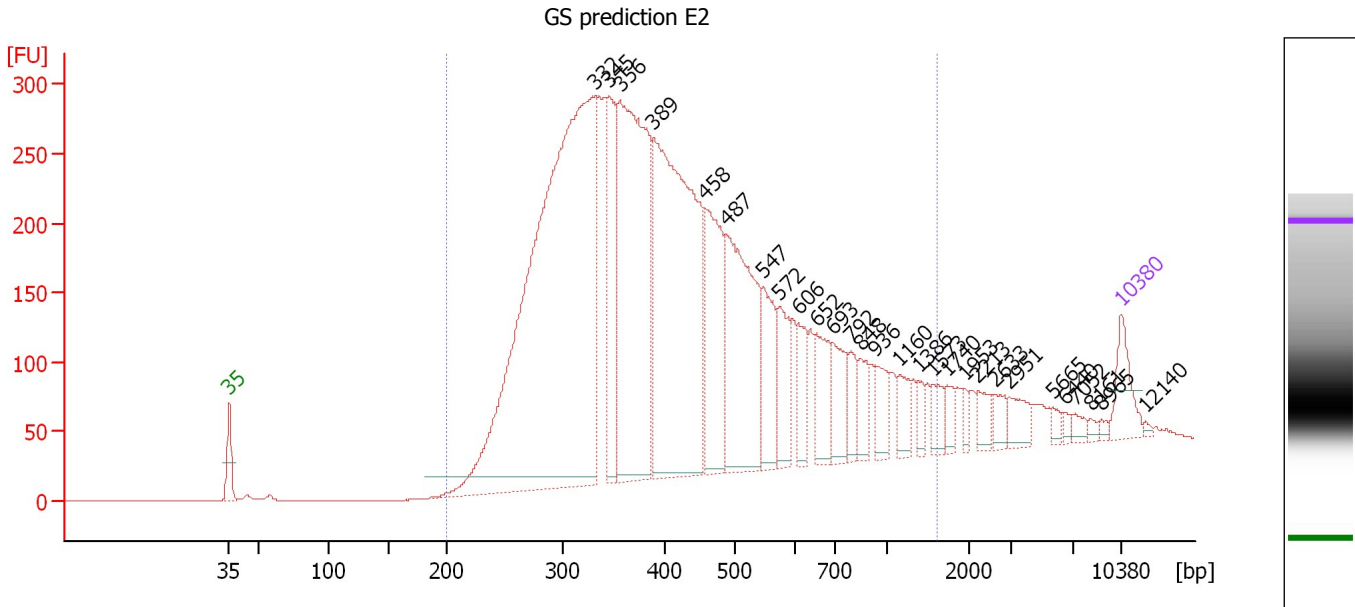
**Region table for sample 1 : e14 dripc**

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|-------------------|------------|-----------------------------|
| 200       | 1,000   | 461               | 752.8             | 195.95        | 189.7             | 82         | 33.9                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : GS prediction E2**

Number of peaks found: 28                      Corr. Area 1: 7,132.4  
 Noise: 0.2

**Peak table for sample 2 : GS prediction E2**


| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 332       | 2,597.78      | 11,868.1          |              |
| 3    | 345       | 342.51        | 1,503.2           |              |
| 4    | 356       | 1,066.45      | 4,536.4           |              |
| 5    | 389       | 1,254.50      | 4,885.0           |              |
| 6    | 458       | 362.55        | 1,198.9           |              |
| 7    | 487       | 565.56        | 1,760.0           |              |
| 8    | 547       | 172.22        | 477.4             |              |
| 9    | 572       | 149.52        | 395.9             |              |
| 10   | 606       | 87.44         | 218.5             |              |
| 11   | 652       | 134.02        | 311.5             |              |
| 12   | 693       | 118.77        | 259.5             |              |
| 13   | 792       | 64.45         | 123.4             |              |
| 14   | 848       | 64.30         | 114.8             |              |
| 15   | 936       | 74.11         | 119.9             |              |
| 16   | 1,160     | 56.62         | 74.0              |              |
| 17   | 1,386     | 28.77         | 31.5              |              |
| 18   | 1,573     | 43.37         | 41.8              |              |
| 19   | 1,740     | 32.52         | 28.3              |              |
| 20   | 1,953     | 19.08         | 14.8              |              |
| 21   | 2,213     | 34.57         | 23.7              |              |
| 22   | 2,633     | 35.57         | 20.5              |              |
| 23   | 2,951     | 47.95         | 24.6              |              |
| 24   | 5,665     | 16.18         | 4.3               |              |
| 25   | 6,440     | 10.55         | 2.5               |              |
| 26   | 7,052     | 17.17         | 3.7               |              |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad


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### Electropherogram Summary Continued ...

#### ... Peak table for sample 2 : GS prediction E2

| Peak | Size [bp]  | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|--|---------------|-------------------|--------------|
| 27   | 8,161  | 8.99          | 1.7               |              |
| 28   | 8,965  | 8.02          | 1.4               |              |
| 29   |  10,380 | 75.00         | 10.9              | Upper Marker |
| 30   | 12,140   | 0.00          | 0.0               |              |

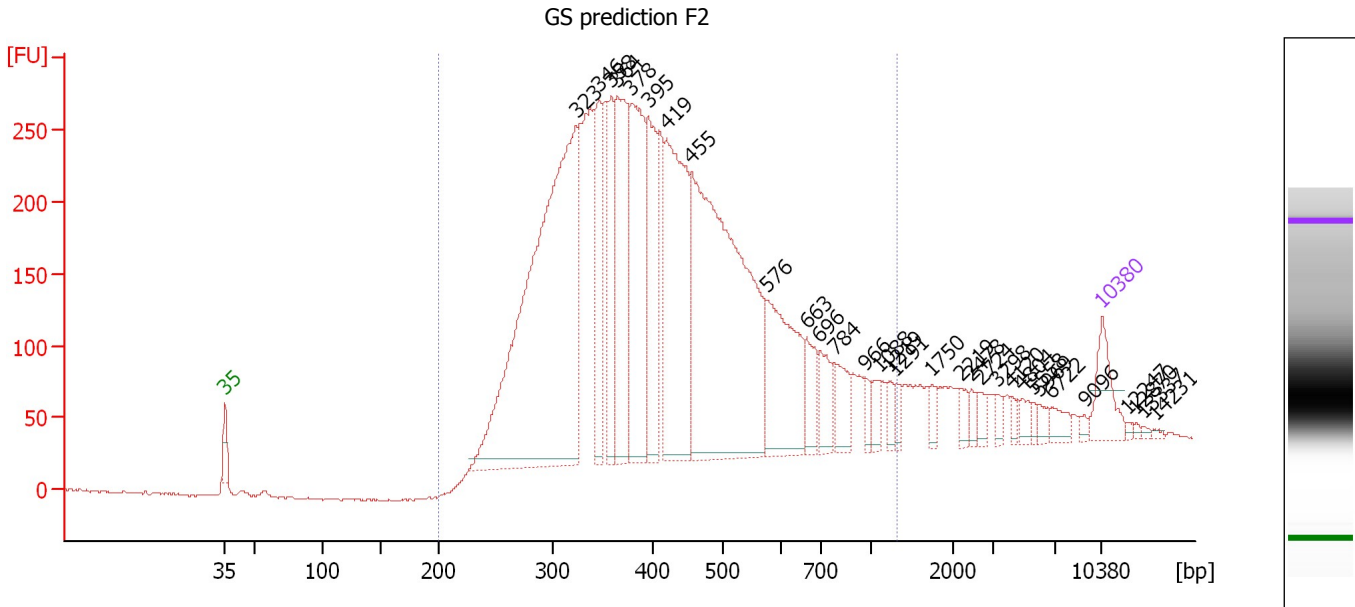
#### Region table for sample 2 : GS prediction E2

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. for Area   | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|---|------------|-----------------------------|
| 200       | 1,623   | 459               | 30,032.3          | 7,515.62      |  7,132.4 | 94         | 49.2                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : GS prediction F2**

Number of peaks found: 31                      Corr. Area 1: 6,496.5  
 Noise: 0.7

**Peak table for sample 3 : GS prediction F2**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 323       | 1,586.25      | 7,431.6           |              |
| 3    | 346       | 250.39        | 1,097.4           |              |
| 4    | 358       | 199.83        | 845.9             |              |
| 5    | 364       | 407.58        | 1,695.1           |              |
| 6    | 378       | 455.11        | 1,826.2           |              |
| 7    | 395       | 287.03        | 1,100.7           |              |
| 8    | 419       | 563.68        | 2,038.1           |              |
| 9    | 455       | 1,165.96      | 3,881.8           |              |
| 10   | 576       | 312.56        | 822.0             |              |
| 11   | 663       | 84.13         | 192.2             |              |
| 12   | 696       | 78.29         | 170.4             |              |
| 13   | 784       | 77.19         | 149.2             |              |
| 14   | 966       | 24.87         | 39.0              |              |
| 15   | 1,088     | 34.25         | 47.7              |              |
| 16   | 1,219     | 22.10         | 27.5              |              |
| 17   | 1,291     | 22.71         | 26.6              |              |
| 18   | 1,750     | 20.99         | 18.2              |              |
| 19   | 2,219     | 22.13         | 15.1              |              |
| 20   | 2,478     | 16.41         | 10.0              |              |
| 21   | 2,724     | 24.59         | 13.7              |              |
| 22   | 3,298     | 16.65         | 7.6               |              |
| 23   | 4,120     | 13.69         | 5.0               |              |
| 24   | 4,804     | 19.02         | 6.0               |              |
| 25   | 5,558     | 10.90         | 3.0               |              |
| 26   | 5,969     | 14.58         | 3.7               |              |




Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad


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### Electropherogram Summary Continued ...

#### ... Peak table for sample 3 : GS prediction F2

| Peak | Size [bp]  | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|--|---------------|-------------------|--------------|
| 27   | 6,722  | 28.84         | 6.5               |              |
| 28   | 9,096  | 9.15          | 1.5               |              |
| 29   |  10,380 | 75.00         | 10.9              | Upper Marker |
| 30   | 12,247   | 0.00          | 0.0               |              |
| 31   | 12,870   | 0.00          | 0.0               |              |
| 32   | 13,337   | 0.00          | 0.0               |              |
| 33   | 14,231   | 0.00          | 0.0               |              |

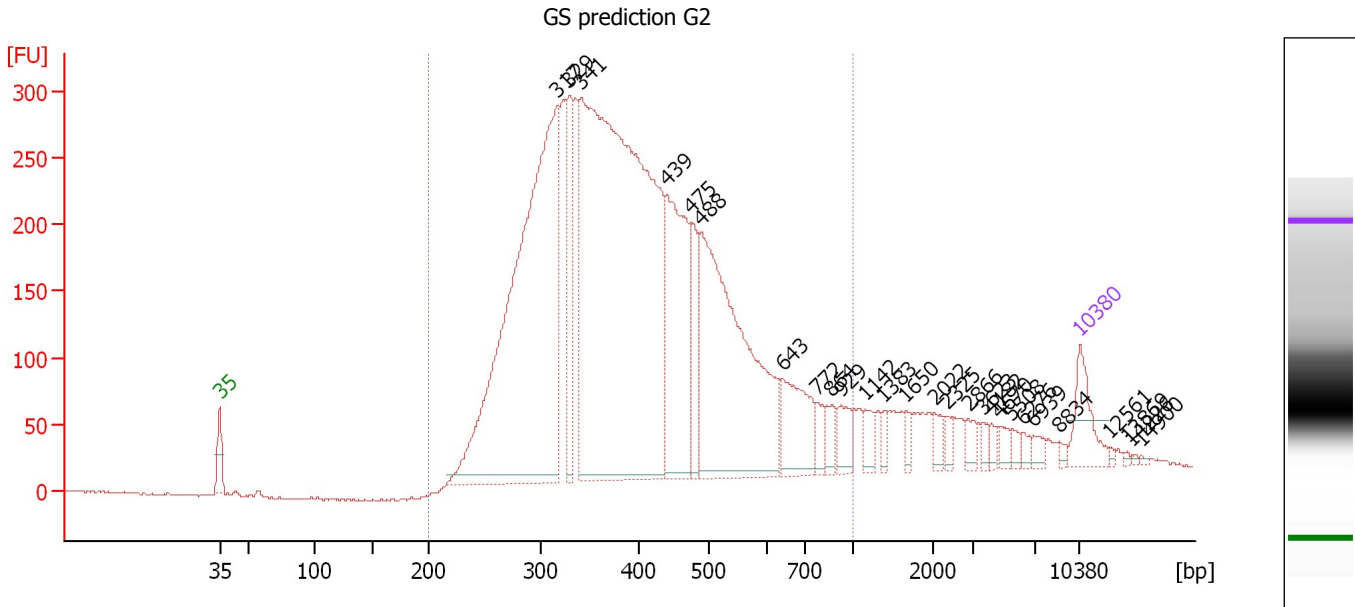
#### Region table for sample 3 : GS prediction F2

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area   | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|---|------------|-----------------------------|
| 200       | 1,319   | 445               | 25,385.8          | 6,459.46      |  6,496.5 | 92         | 38.7                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : GS prediction G2**

Number of peaks found: 27                      Corr. Area 1: 6,913.1  
 Noise: 0.9

**Peak table for sample 4 : GS prediction G2**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 317       | 1,648.69      | 7,890.3           |              |
| 3    | 329       | 220.65        | 1,017.7           |              |
| 4    | 341       | 2,324.32      | 10,328.9          |              |
| 5    | 439       | 470.37        | 1,623.2           |              |
| 6    | 475       | 151.29        | 482.5             |              |
| 7    | 488       | 835.57        | 2,592.6           |              |
| 8    | 643       | 168.71        | 397.4             |              |
| 9    | 772       | 38.61         | 75.7              |              |
| 10   | 864       | 35.62         | 62.5              |              |
| 11   | 929       | 55.84         | 91.1              |              |
| 12   | 1,142     | 32.33         | 42.9              |              |
| 13   | 1,383     | 18.82         | 20.6              |              |
| 14   | 1,650     | 17.51         | 16.1              |              |
| 15   | 2,022     | 23.55         | 17.7              |              |
| 16   | 2,325     | 18.00         | 11.7              |              |
| 17   | 2,866     | 20.24         | 10.7              |              |
| 18   | 3,623     | 13.31         | 5.6               |              |
| 19   | 4,182     | 11.69         | 4.2               |              |
| 20   | 4,670     | 19.35         | 6.3               |              |
| 21   | 5,508     | 12.91         | 3.6               |              |
| 22   | 6,276     | 13.59         | 3.3               |              |
| 23   | 6,939     | 16.67         | 3.6               |              |
| 24   | 8,834     | 7.69          | 1.3               |              |
| 25   | 10,380    | 75.00         | 10.9              | Upper Marker |
| 26   | 12,561    | 0.00          | 0.0               |              |

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad


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**Electropherogram Summary Continued ...**

**... Peak table for sample 4 : GS prediction G2**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 27   | 13,869    | 0.00          | 0.0               |              |
| 28   | 14,226    | 0.00          | 0.0               |              |
| 29   | 14,900    | 0.00          | 0.0               |              |

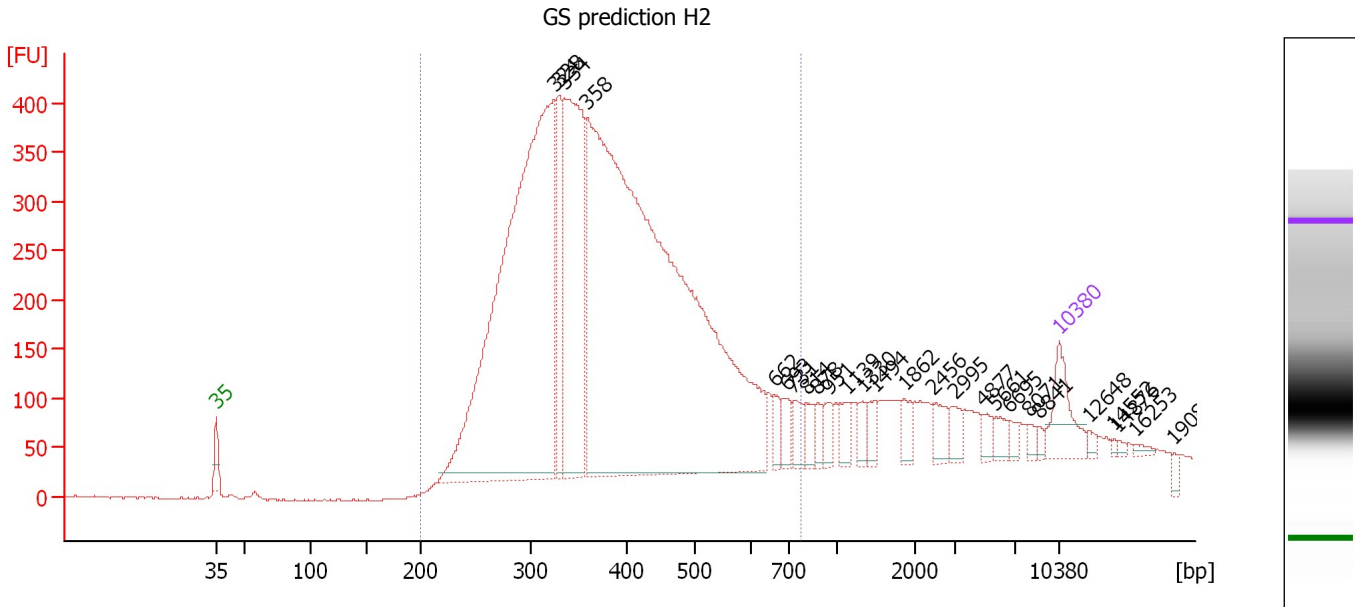
**Region table for sample 4 : GS prediction G2**

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area   | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|---|------------|-----------------------------|
| 200       | 1,000   | 415               | 25,365.5          | 6,203.14      |  6,913.1 | 91         | 32.2                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : GS prediction H2**

Number of peaks found: 26                      Corr. Area 1: 8,622.7  
 Noise: 1.0

**Peak table for sample 5 : GS prediction H2**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 324       | 1,752.01      | 8,193.6           |              |
| 3    | 328       | 202.70        | 935.2             |              |
| 4    | 334       | 633.68        | 2,875.2           |              |
| 5    | 358       | 2,693.55      | 11,391.3          |              |
| 6    | 662       | 28.64         | 65.5              |              |
| 7    | 693       | 37.40         | 81.7              |              |
| 8    | 731       | 40.51         | 84.0              |              |
| 9    | 814       | 32.21         | 59.9              |              |
| 10   | 878       | 24.24         | 41.8              |              |
| 11   | 951       | 29.60         | 47.2              |              |
| 12   | 1,139     | 32.38         | 43.1              |              |
| 13   | 1,330     | 28.37         | 32.3              |              |
| 14   | 1,494     | 22.17         | 22.5              |              |
| 15   | 1,862     | 29.48         | 24.0              |              |
| 16   | 2,456     | 33.62         | 20.7              |              |
| 17   | 2,995     | 28.27         | 14.3              |              |
| 18   | 4,877     | 21.07         | 6.5               |              |
| 19   | 5,661     | 21.66         | 5.8               |              |
| 20   | 6,695     | 14.49         | 3.3               |              |
| 21   | 8,071     | 12.00         | 2.3               |              |
| 22   | 8,841     | 8.39          | 1.4               |              |
| 23   | 10,380    | 75.00         | 10.9              | Upper Marker |
| 24   | 12,648    | 0.00          | 0.0               |              |
| 25   | 14,552    | 0.00          | 0.0               |              |
| 26   | 14,876    | 0.00          | 0.0               |              |

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

Created: 8/19/2014 3:55:40 PM  
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**Electropherogram Summary Continued ...****... Peak table for sample 5 : GS prediction H2**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 27   | 16,253    | 0.00          | 0.0               |              |
| 28   | 19,088    | 0.00          | 0.0               |              |

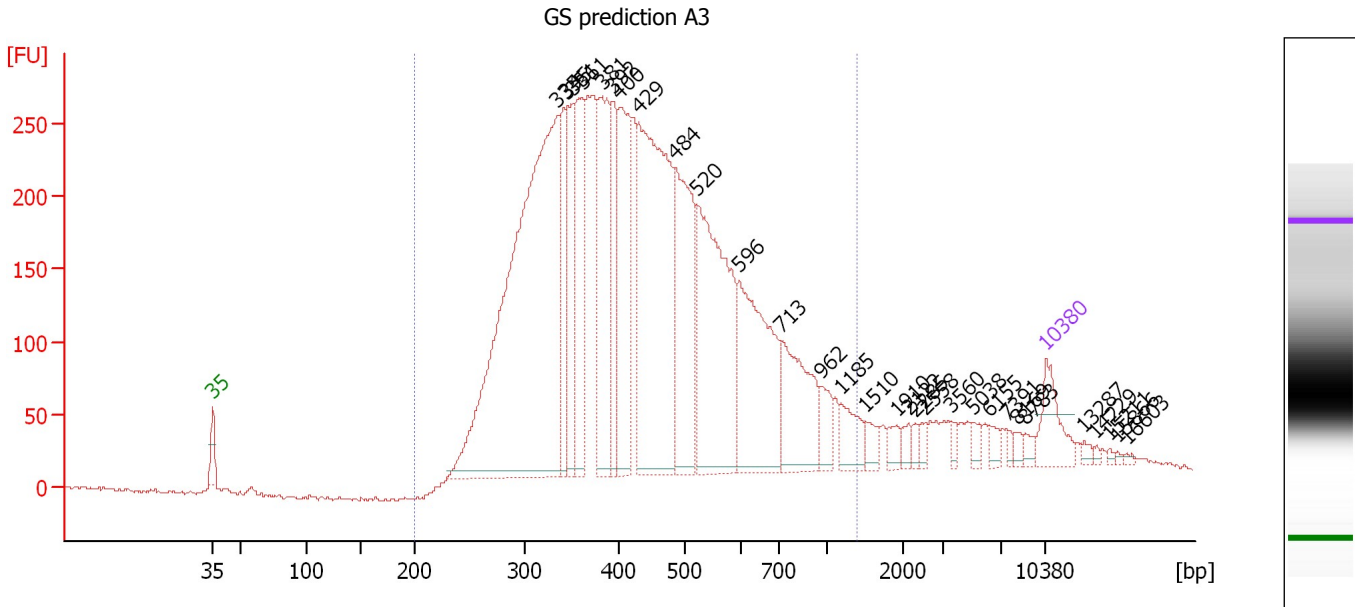
**Region table for sample 5 : GS prediction H2**

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area   | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|---|------------|-----------------------------|
| 200       | 777     | 391               | 22,451.1          | 5,292.88      |  8,622.7 | 87         | 26.8                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : GS prediction A3**

Number of peaks found: 30                      Corr. Area 1: 6,999.0  
 Noise: 1.3

**Peak table for sample 6 : GS prediction A3**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 335       | 1,705.14      | 7,710.7           |              |
| 3    | 345       | 239.22        | 1,050.2           |              |
| 4    | 351       | 207.03        | 893.0             |              |
| 5    | 361       | 299.36        | 1,255.3           |              |
| 6    | 381       | 391.12        | 1,553.5           |              |
| 7    | 392       | 188.23        | 727.4             |              |
| 8    | 400       | 349.02        | 1,322.3           |              |
| 9    | 429       | 853.49        | 3,014.7           |              |
| 10   | 484       | 417.01        | 1,305.8           |              |
| 11   | 520       | 603.61        | 1,759.0           |              |
| 12   | 596       | 401.22        | 1,020.4           |              |
| 13   | 713       | 245.35        | 521.5             |              |
| 14   | 962       | 51.44         | 81.0              |              |
| 15   | 1,185     | 66.79         | 85.4              |              |
| 16   | 1,510     | 29.23         | 29.3              |              |
| 17   | 1,910     | 24.44         | 19.4              |              |
| 18   | 2,122     | 17.69         | 12.6              |              |
| 19   | 2,285     | 13.47         | 8.9               |              |
| 20   | 2,558     | 15.48         | 9.2               |              |
| 21   | 3,560     | 13.47         | 5.7               |              |
| 22   | 5,038     | 17.29         | 5.2               |              |
| 23   | 6,155     | 17.45         | 4.3               |              |
| 24   | 7,391     | 9.52          | 2.0               |              |
| 25   | 8,169     | 12.05         | 2.2               |              |
| 26   | 8,783     | 14.04         | 2.4               |              |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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### Electropherogram Summary Continued ...

#### ... Peak table for sample 6 : GS prediction A3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 27   | 10,380    | 75.00         | 10.9              | Upper Marker |
| 28   | 13,287    | 0.00          | 0.0               |              |
| 29   | 14,229    | 0.00          | 0.0               |              |
| 30   | 15,211    | 0.00          | 0.0               |              |
| 31   | 15,866    | 0.00          | 0.0               |              |
| 32   | 16,603    | 0.00          | 0.0               |              |

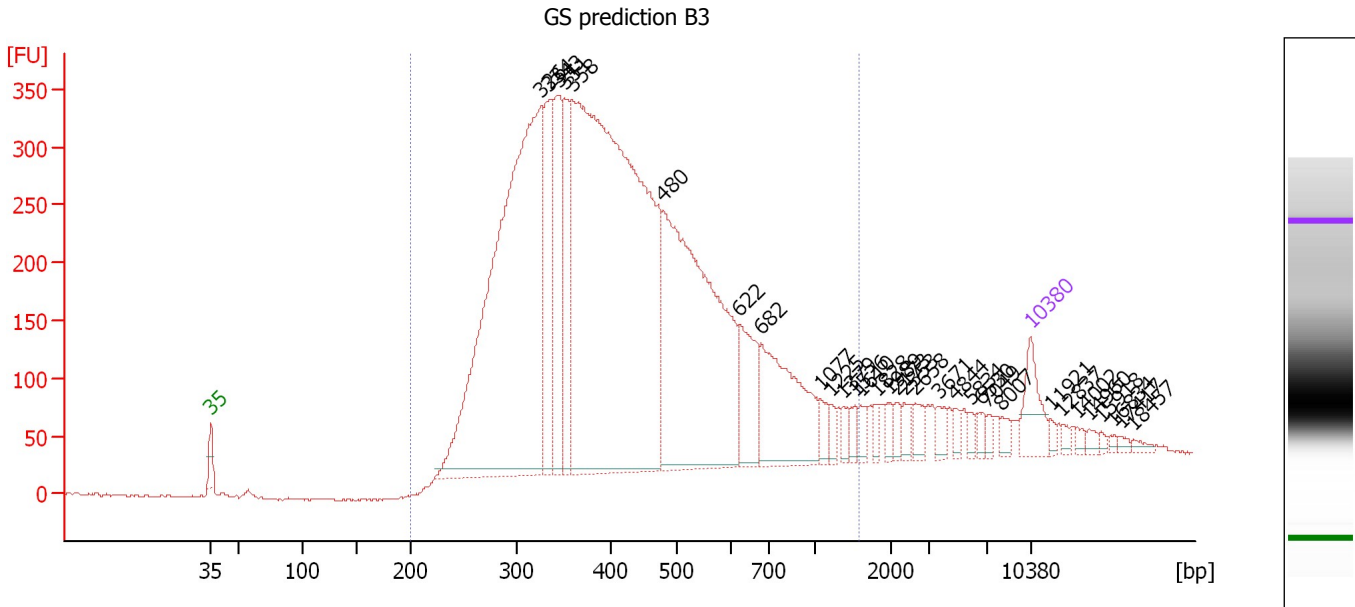
#### Region table for sample 6 : GS prediction A3

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|-------------------|------------|-----------------------------|
| 200       | 1,401   | 462               | 25,448.4          | 6,701.17      | 6,999.0           | 93         | 39.1                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : GS prediction B3**

Number of peaks found: 32                      Corr. Area 1: 8,461.6  
 Noise: 1.1

**Peak table for sample 7 : GS prediction B3**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 326       | 1,828.04      | 8,500.7           |              |
| 3    | 334       | 310.15        | 1,405.5           |              |
| 4    | 343       | 306.96        | 1,354.2           |              |
| 5    | 351       | 249.60        | 1,077.9           |              |
| 6    | 358       | 2,405.15      | 10,172.5          |              |
| 7    | 480       | 1,080.81      | 3,410.9           |              |
| 8    | 622       | 163.59        | 398.5             |              |
| 9    | 682       | 328.74        | 730.6             |              |
| 10   | 1,077     | 27.99         | 39.4              |              |
| 11   | 1,225     | 19.48         | 24.1              |              |
| 12   | 1,379     | 19.63         | 21.6              |              |
| 13   | 1,526     | 24.51         | 24.3              |              |
| 14   | 1,610     | 22.95         | 21.6              |              |
| 15   | 1,828     | 17.18         | 14.2              |              |
| 16   | 1,989     | 19.45         | 14.8              |              |
| 17   | 2,173     | 20.61         | 14.4              |              |
| 18   | 2,353     | 20.24         | 13.0              |              |
| 19   | 2,658     | 28.28         | 16.1              |              |
| 20   | 3,671     | 25.04         | 10.3              |              |
| 21   | 4,844     | 16.17         | 5.1               |              |
| 22   | 5,834     | 14.69         | 3.8               |              |
| 23   | 6,530     | 17.12         | 4.0               |              |
| 24   | 7,049     | 13.65         | 2.9               |              |
| 25   | 8,007     | 17.52         | 3.3               |              |
| 26   | 10,380    | 75.00         | 10.9              | Upper Marker |



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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### Electropherogram Summary Continued ...

#### ... Peak table for sample 7 : GS prediction B3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 27   | 11,921    | 0.00          | 0.0               |              |
| 28   | 12,837    | 0.00          | 0.0               |              |
| 29   | 14,002    | 0.00          | 0.0               |              |
| 30   | 14,960    | 0.00          | 0.0               |              |
| 31   | 15,918    | 0.00          | 0.0               |              |
| 32   | 16,834    | 0.00          | 0.0               |              |
| 33   | 17,417    | 0.00          | 0.0               |              |
| 34   | 18,457    | 0.00          | 0.0               |              |

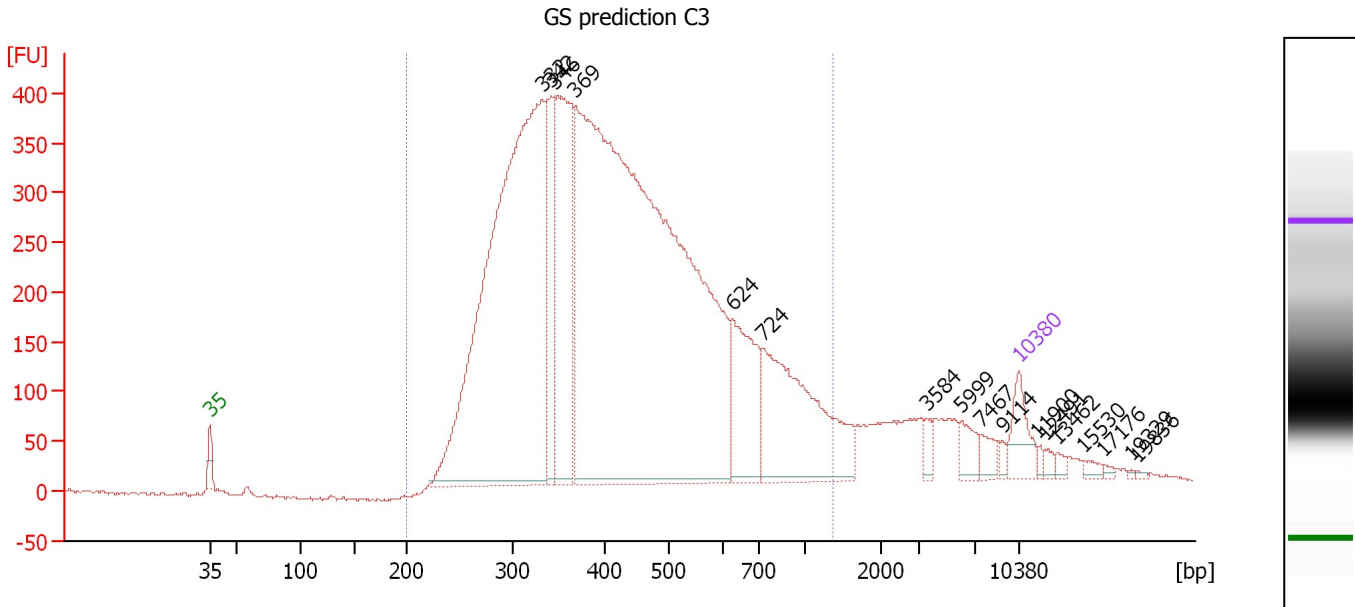
#### Region table for sample 7 : GS prediction B3

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|-------------------|------------|-----------------------------|
| 200       | 1,576   | 454               | 26,348.7          | 6,680.69      | 8,461.6           | 92         | 44.6                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : GS prediction C3**

Number of peaks found: 17                      Corr. Area 1: 10,415.8  
 Noise: 1.6

**Peak table for sample 8 : GS prediction C3**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 332       | 2,270.98      | 10,350.4          |              |
| 3    | 342       | 298.11        | 1,319.8           |              |
| 4    | 346       | 661.79        | 2,895.7           |              |
| 5    | 369       | 3,665.12      | 15,059.4          |              |
| 6    | 624       | 290.90        | 706.1             |              |
| 7    | 724       | 533.49        | 1,117.2           |              |
| 8    | 3,584     | 22.61         | 9.6               |              |
| 9    | 5,999     | 44.12         | 11.1              |              |
| 10   | 7,467     | 33.86         | 6.9               |              |
| 11   | 9,114     | 10.35         | 1.7               |              |
| 12   | 10,380    | 75.00         | 10.9              | Upper Marker |
| 13   | 11,900    | 0.00          | 0.0               |              |
| 14   | 12,491    | 0.00          | 0.0               |              |
| 15   | 13,462    | 0.00          | 0.0               |              |
| 16   | 15,530    | 0.00          | 0.0               |              |
| 17   | 17,176    | 0.00          | 0.0               |              |
| 18   | 19,329    | 0.00          | 0.0               |              |
| 19   | 19,836    | 0.00          | 0.0               |              |

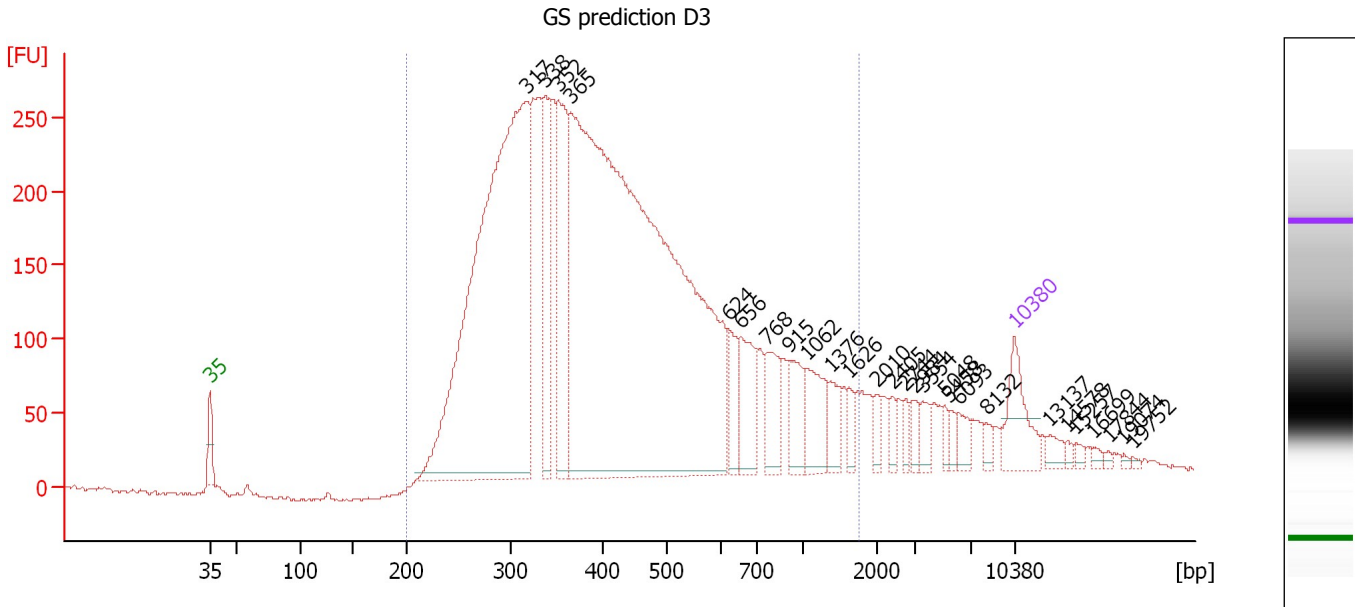
**Region table for sample 8 : GS prediction C3**

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|-------------------|------------|-----------------------------|
| 200       | 1,358   | 453               | 29,321.6          | 7,467.96      | 10,415.8          | 91         | 40.7                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : GS prediction D3**

Number of peaks found: 27                      Corr. Area 1: 7,174.2  
 Noise: 1.1

**Peak table for sample 9 : GS prediction D3**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 317       | 1,572.27      | 7,521.2           |              |
| 3    | 338       | 226.02        | 1,014.4           |              |
| 4    | 352       | 313.98        | 1,351.3           |              |
| 5    | 365       | 2,502.88      | 10,395.4          |              |
| 6    | 624       | 61.68         | 149.9             |              |
| 7    | 656       | 113.38        | 261.8             |              |
| 8    | 768       | 90.42         | 178.3             |              |
| 9    | 915       | 69.31         | 114.8             |              |
| 10   | 1,062     | 87.06         | 124.3             |              |
| 11   | 1,376     | 42.78         | 47.1              |              |
| 12   | 1,626     | 21.29         | 19.8              |              |
| 13   | 2,010     | 21.02         | 15.8              |              |
| 14   | 2,405     | 17.55         | 11.1              |              |
| 15   | 2,744     | 15.64         | 8.6               |              |
| 16   | 2,984     | 21.06         | 10.7              |              |
| 17   | 3,554     | 23.88         | 10.2              |              |
| 18   | 5,048     | 13.65         | 4.1               |              |
| 19   | 5,458     | 12.74         | 3.5               |              |
| 20   | 6,093     | 24.30         | 6.0               |              |
| 21   | 8,132     | 13.09         | 2.4               |              |
| 22   | 10,380    | 75.00         | 10.9              | Upper Marker |
| 23   | 13,137    | 0.00          | 0.0               |              |
| 24   | 14,578    | 0.00          | 0.0               |              |
| 25   | 15,257    | 0.00          | 0.0               |              |
| 26   | 16,699    | 0.00          | 0.0               |              |


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...****... Peak table for sample 9 : GS prediction D3**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 27   | 17,844    | 0.00          | 0.0               |              |
| 28   | 19,074    | 0.00          | 0.0               |              |
| 29   | 19,752    | 0.00          | 0.0               |              |

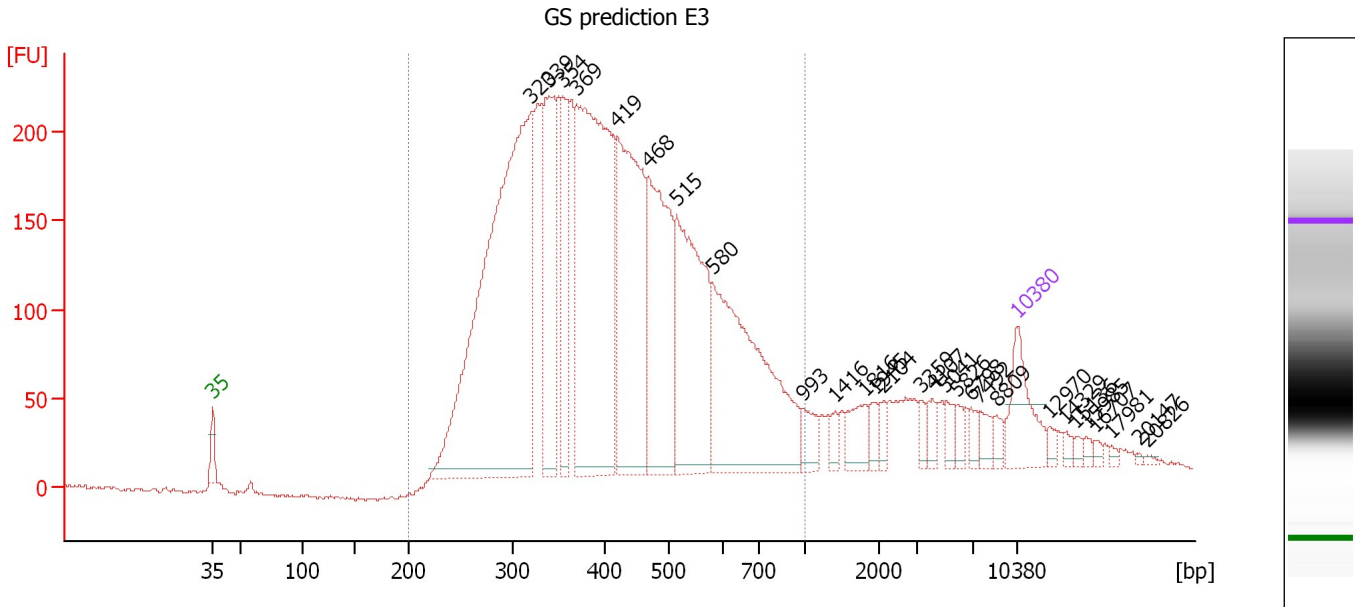
**Region table for sample 9 : GS prediction D3**

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area   | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|---|------------|-----------------------------|
| 200       | 1,749   | 479               | 21,854.6          | 5,479.25      |  7,174.2 | 91         | 55.3                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : GS prediction E3**

Number of peaks found: 28                      Corr. Area 1: 5,658.0  
 Noise: 1.1

**Peak table for sample 10 : GS prediction E3**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 320       | 1,170.70      | 5,541.6           |              |
| 3    | 339       | 304.05        | 1,358.0           |              |
| 4    | 354       | 152.23        | 651.0             |              |
| 5    | 369       | 742.82        | 3,047.0           |              |
| 6    | 419       | 456.03        | 1,647.4           |              |
| 7    | 468       | 356.85        | 1,155.3           |              |
| 8    | 515       | 370.34        | 1,090.5           |              |
| 9    | 580       | 452.99        | 1,182.5           |              |
| 10   | 993       | 33.47         | 51.1              |              |
| 11   | 1,416     | 16.82         | 18.0              |              |
| 12   | 1,816     | 40.84         | 34.1              |              |
| 13   | 1,945     | 16.82         | 13.1              |              |
| 14   | 2,104     | 14.92         | 10.7              |              |
| 15   | 3,359     | 13.55         | 6.1               |              |
| 16   | 4,107     | 18.33         | 6.8               |              |
| 17   | 5,041     | 18.44         | 5.5               |              |
| 18   | 5,826     | 15.81         | 4.1               |              |
| 19   | 6,798     | 14.67         | 3.3               |              |
| 20   | 7,492     | 19.98         | 4.0               |              |
| 21   | 8,809     | 13.25         | 2.3               |              |
| 22   | 10,380    | 75.00         | 10.9              | Upper Marker |
| 23   | 12,970    | 0.00          | 0.0               |              |
| 24   | 14,329    | 0.00          | 0.0               |              |
| 25   | 15,136    | 0.00          | 0.0               |              |
| 26   | 15,985    | 0.00          | 0.0               |              |

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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Modified: 8/19/2014 4:36:10 PM

**Electropherogram Summary Continued ...****... Peak table for sample 10 : GS prediction E3**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 27   | 16,707    | 0.00          | 0.0               |              |
| 28   | 17,981    | 0.00          | 0.0               |              |
| 29   | 20,147    | 0.00          | 0.0               |              |
| 30   | 20,826    | 0.00          | 0.0               |              |

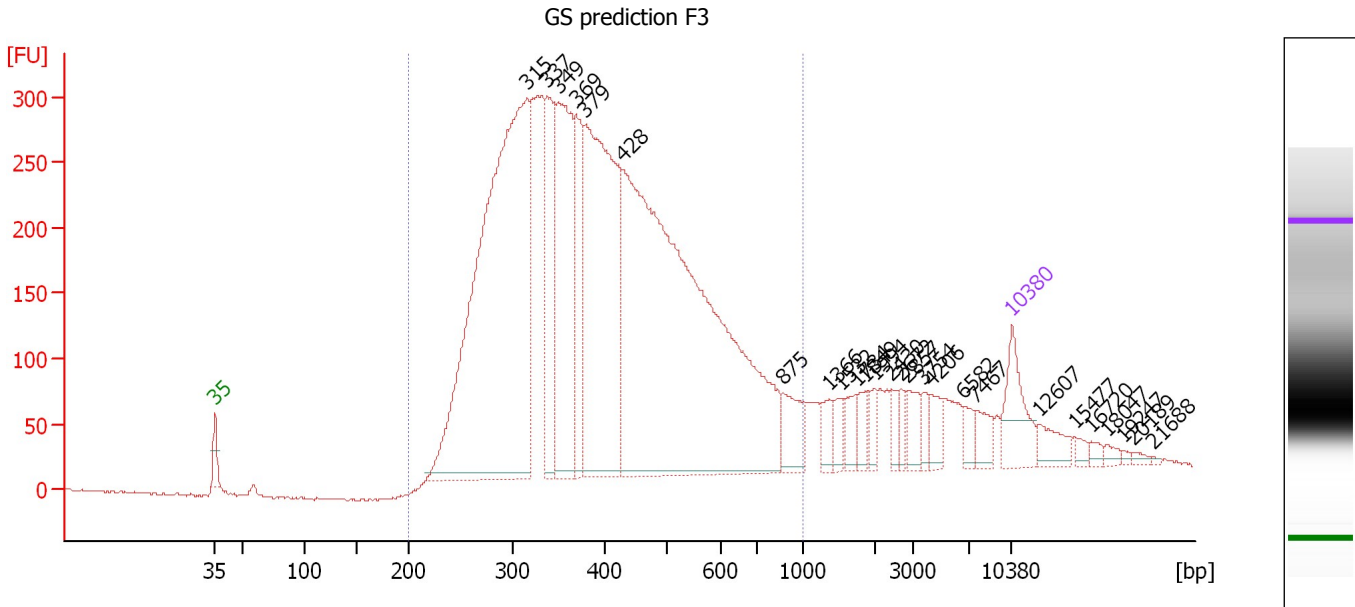
**Region table for sample 10 : GS prediction E3**

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. for Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|-------------------|------------|-----------------------------|
| 200       | 1,000   | 428               | 17,851.9          | 4,464.92      | 5,658.0           | 89         | 32.4                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : GS prediction F3**

Number of peaks found: 26                      Corr. Area 1: 7,551.0  
 Noise: 0.8

**Peak table for sample 11 : GS prediction F3**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1    | 35        | 125.00        | 5,411.3           | Lower Marker |
| 2    | 315       | 1,414.55      | 6,805.8           |              |
| 3    | 337       | 225.80        | 1,014.8           |              |
| 4    | 349       | 440.76        | 1,911.2           |              |
| 5    | 369       | 187.22        | 768.1             |              |
| 6    | 379       | 705.52        | 2,818.6           |              |
| 7    | 428       | 1,575.39      | 5,572.7           |              |
| 8    | 875       | 70.41         | 121.9             |              |
| 9    | 1,366     | 32.47         | 36.0              |              |
| 10   | 1,532     | 24.41         | 24.1              |              |
| 11   | 1,734     | 31.95         | 27.9              |              |
| 12   | 1,849     | 23.59         | 19.3              |              |
| 13   | 1,994     | 21.06         | 16.0              |              |
| 14   | 2,430     | 19.34         | 12.1              |              |
| 15   | 2,672     | 16.59         | 9.4               |              |
| 16   | 2,857     | 30.81         | 16.3              |              |
| 17   | 3,754     | 16.83         | 6.8               |              |
| 18   | 4,206     | 30.93         | 11.1              |              |
| 19   | 6,582     | 19.71         | 4.5               |              |
| 20   | 7,467     | 28.52         | 5.8               |              |
| 21   | 10,380    | 75.00         | 10.9              | Upper Marker |
| 22   | 12,607    | 0.00          | 0.0               |              |
| 23   | 15,477    | 0.00          | 0.0               |              |
| 24   | 16,720    | 0.00          | 0.0               |              |
| 25   | 18,047    | 0.00          | 0.0               |              |
| 26   | 19,247    | 0.00          | 0.0               |              |

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

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**Electropherogram Summary Continued ...****... Peak table for sample 11 : GS prediction F3**

| Peak | Size [bp] | Conc. [pg/ $\mu$ l] | Molarity [pmol/l] | Observations |
|------|-----------|---------------------|-------------------|--------------|
| 27   | 20,189    | 0.00                | 0.0               |              |
| 28   | 21,688    | 0.00                | 0.0               |              |

**Region table for sample 11 : GS prediction F3**

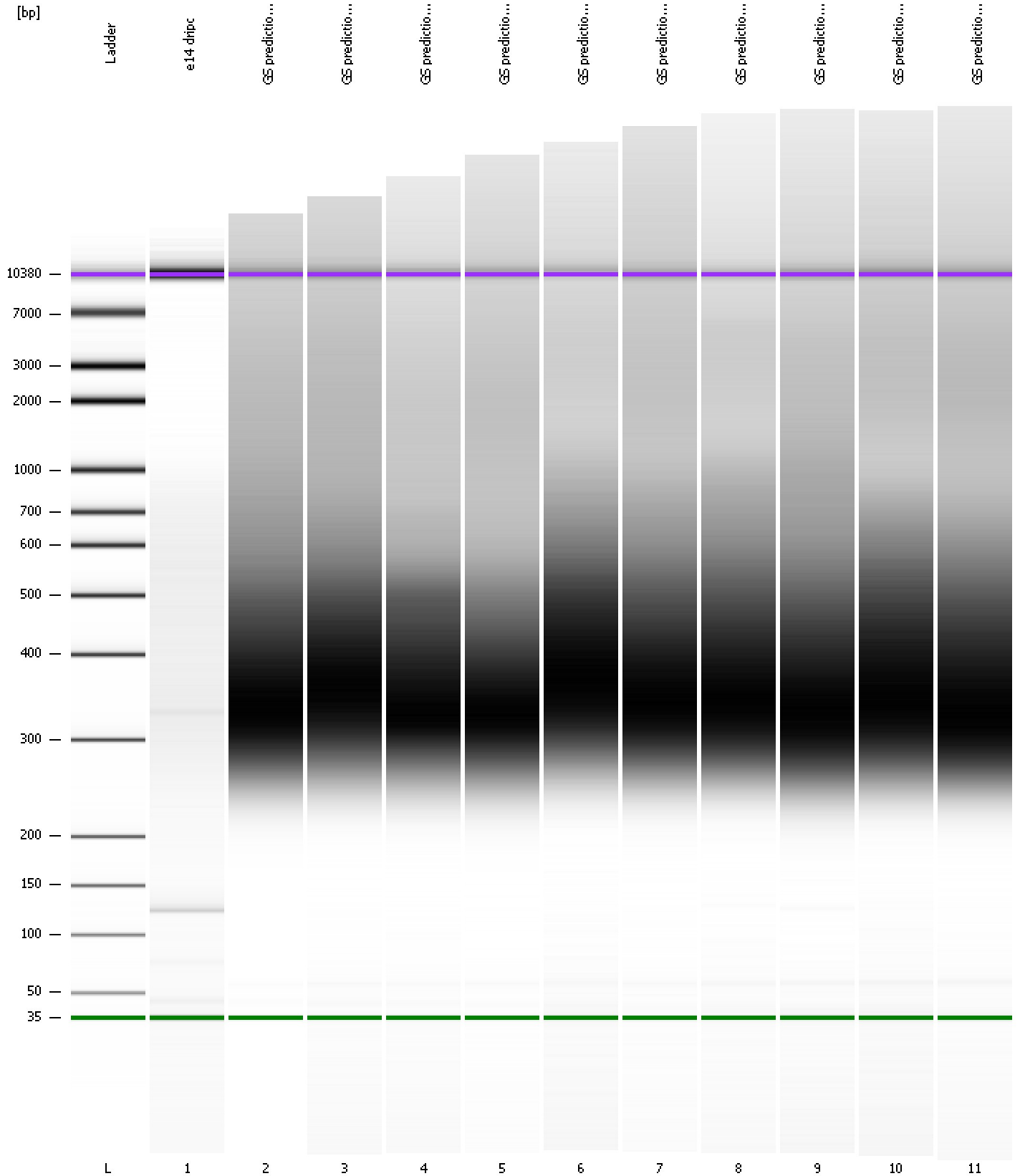
| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/ $\mu$ l] | Co Corr. lor Area   | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------------|---|------------|-----------------------------|
| 200       | 1,000   | 418               | 20,177.7          | 4,908.29            |  7,551.0 | 87         | 33.3                        |



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

Created: 8/19/2014 3:55:40 PM  
Modified: 8/19/2014 4:36:10 PM

**Gel Image**

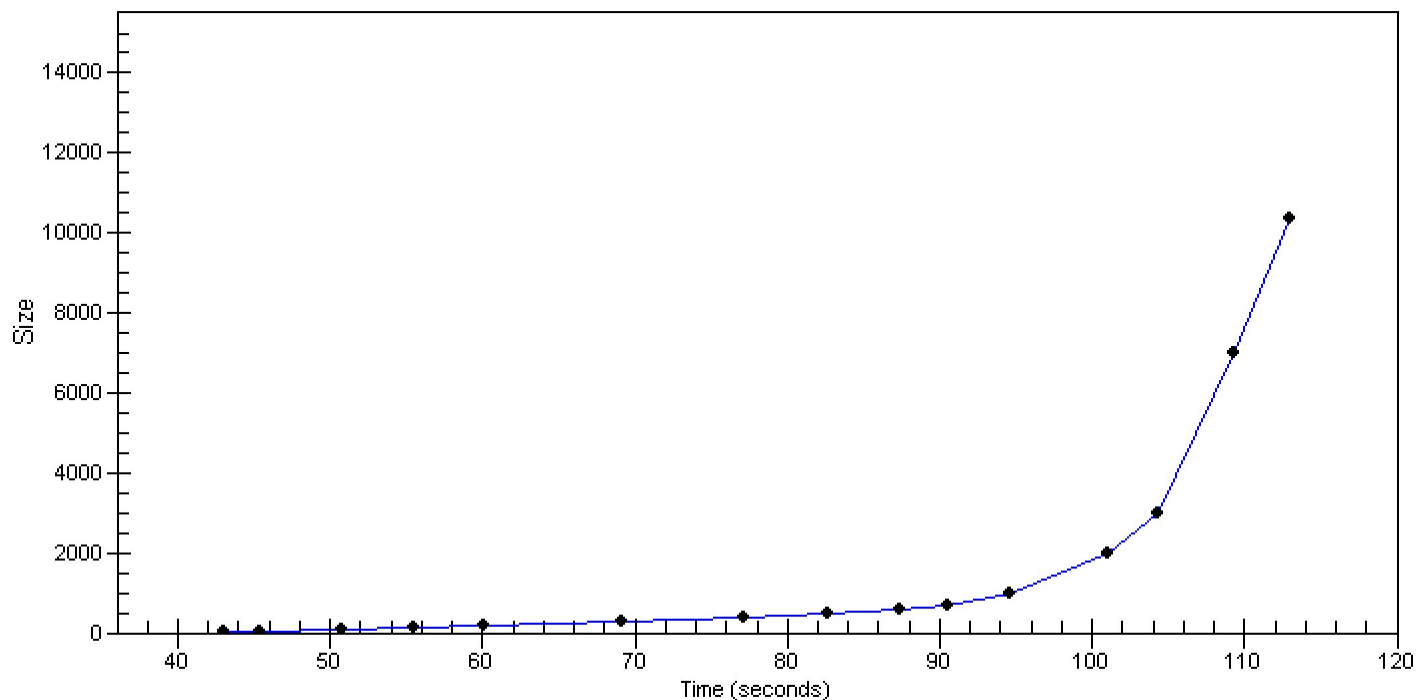


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad

Created: 8/19/2014 3:55:40 PM  
Modified: 8/19/2014 4:36:10 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay Created: 8/19/2014 3:55:40 PM  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19\_002.xad Modified: 8/19/2014 4:36:10 PM

**Run Logbook**

| Description  | Number | Source     | Category | Sub Category | Time                 | Time Zone                           | User     | Host     |
|--|--------|------------|----------|--------------|----------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 12)   |        | Instrument | Run      |              | 8/19/2014 4:36:07 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-08-19\2014-08-19_002.xad) |        | Instrument | Run      |              | 8/19/2014 3:55:46 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B  |        | Instrument | Run      |              | 8/19/2014 3:55:46 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name :   |        | Instrument | Run      |              | 8/19/2014 3:55:46 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies  |        | Instrument | Run      |              | 8/19/2014 3:55:46 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086   |        | Instrument | Run      |              | 8/19/2014 3:55:46 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069  |        | Instrument | Run      |              | 8/19/2014 3:55:46 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode  |        | Instrument | Run      |              | 8/19/2014 3:55:46 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |