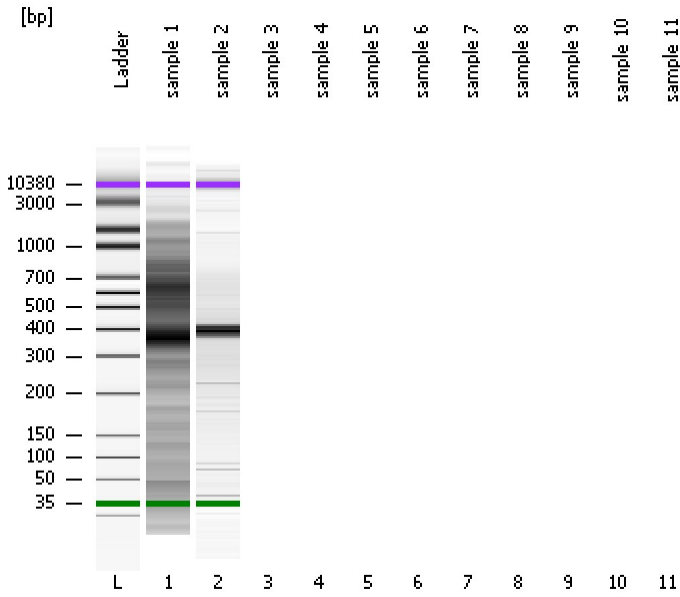


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-21\2013-11-21_001.xad

Created: 11/21/2013 12:26:20 PM
Modified: 11/21/2013 12:44:14 PM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

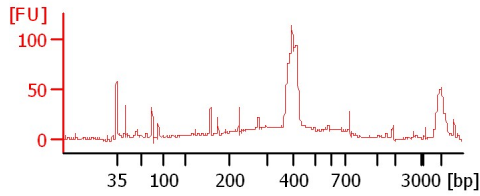
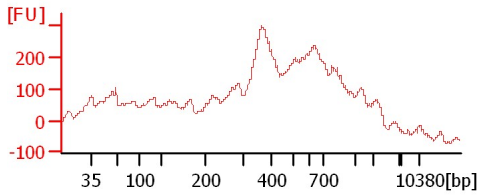
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

Chip Information:

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

sample 1

sample 2



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-21\2013-11-21_001.xad

Created: 11/21/2013 12:26:20 PM
Modified: 11/21/2013 12:44:14 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|-------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| sample 1 | | <input type="checkbox"/> | ✓ | | | |
| sample 2 | | <input type="checkbox"/> | ✓ | | | |
| sample 3 | | <input type="checkbox"/> | | | | |
| sample 4 | | <input type="checkbox"/> | | | | |
| sample 5 | | <input type="checkbox"/> | | | | |
| sample 6 | | <input type="checkbox"/> | | | | |
| sample 7 | | <input type="checkbox"/> | | | | |
| sample 8 | | <input type="checkbox"/> | | | | |
| sample 9 | | <input type="checkbox"/> | | | | |
| sample 10 | | <input type="checkbox"/> | | | | |
| sample 11 | | <input type="checkbox"/> | | | | |
| Ladder | | <input type="checkbox"/> | ✓ | | | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-21\2013-11-21_001.xad

Created: 11/21/2013 12:26:20 PM
Modified: 11/21/2013 12:44:14 PM

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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

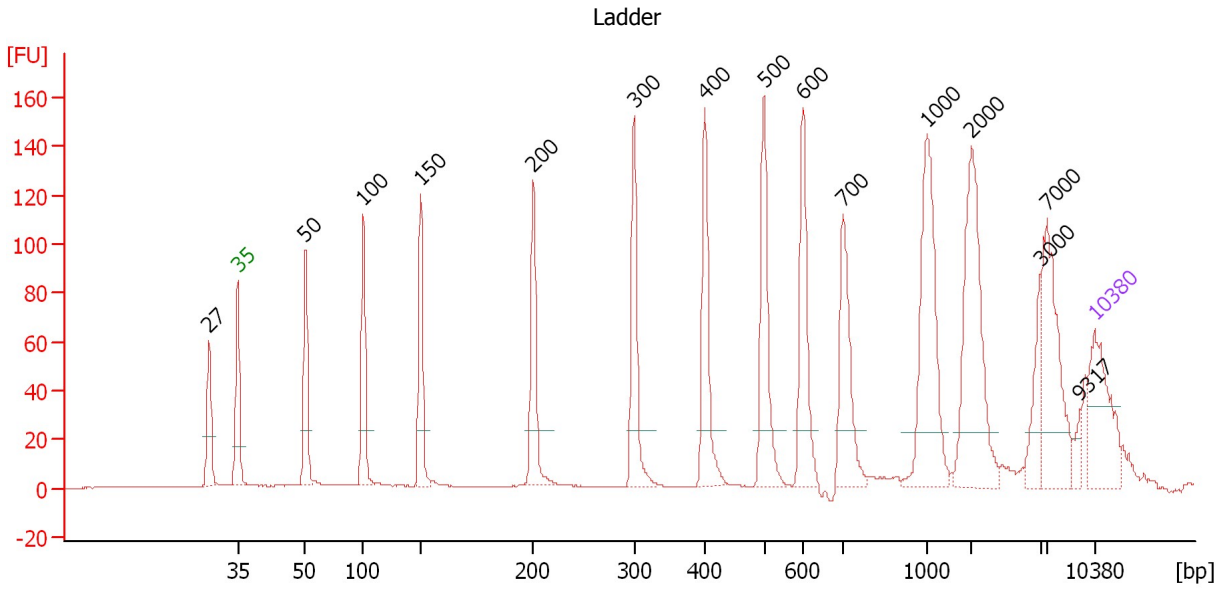
Ladder

| 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:\...ents and Settings\Bioanalyzer\2013-11-21\2013-11-21_001.xad

Created: 11/21/2013 12:26:20 PM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

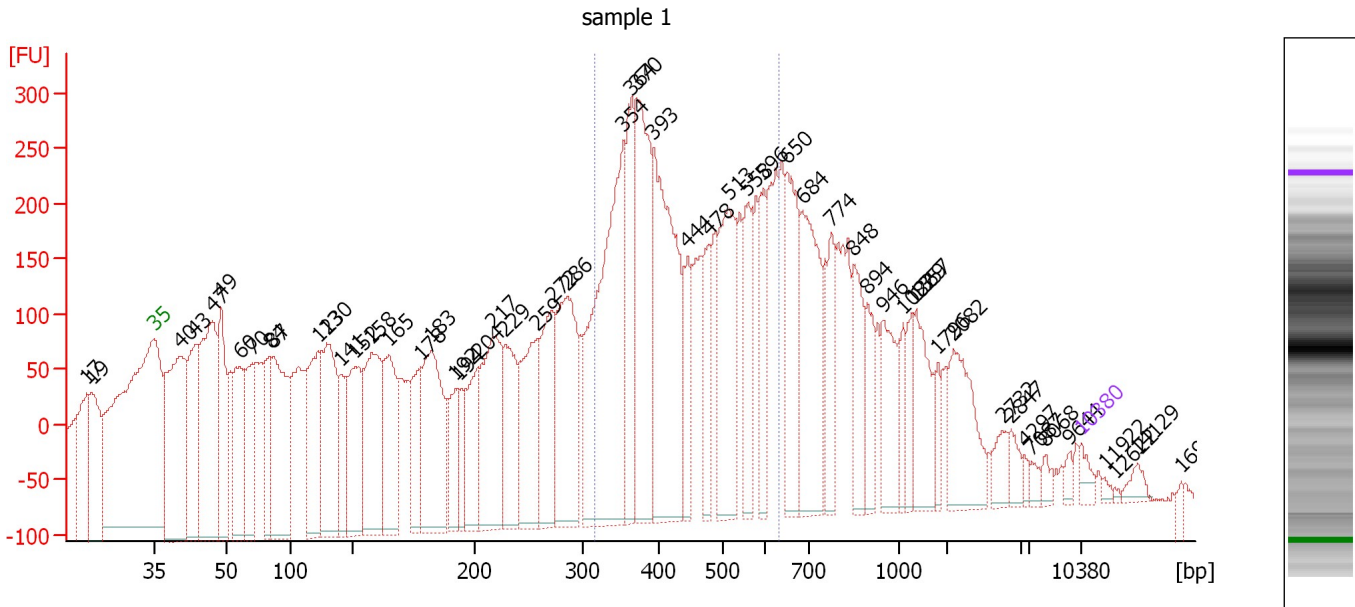
Peak table for Ladder

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------|-------------------|--------------|
| 1 | 40.65 | 27 | 0.00 | 0.0 | |
| 2 | 43.00 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 3 | 48.53 | 50 | 150.00 | 4,545.5 | Ladder Peak |
| 4 | 53.28 | 100 | 150.00 | 2,272.7 | Ladder Peak |
| 5 | 57.94 | 150 | 150.00 | 1,515.2 | Ladder Peak |
| 6 | 67.18 | 200 | 150.00 | 1,136.4 | Ladder Peak |
| 7 | 75.36 | 300 | 150.00 | 757.6 | Ladder Peak |
| 8 | 81.16 | 400 | 150.00 | 568.2 | Ladder Peak |
| 9 | 85.99 | 500 | 150.00 | 454.5 | Ladder Peak |
| 10 | 89.17 | 600 | 150.00 | 378.8 | Ladder Peak |
| 11 | 92.48 | 700 | 150.00 | 324.7 | Ladder Peak |
| 12 | 99.28 | 1,000 | 150.00 | 227.3 | Ladder Peak |
| 13 | 102.94 | 2,000 | 150.00 | 113.6 | Ladder Peak |
| 14 | 108.56 | 3,000 | 150.00 | 75.8 | Ladder Peak |
| 15 | 109.12 | 7,000 | 150.00 | 32.5 | Ladder Peak |
| 16 | 111.78 | 9,317 | 0.00 | 0.0 | |
| 17 | 113.00 | 10,380 | 75.00 | 10.9 | Upper Marker |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-21\2013-11-21_001.xad

Created: 11/21/2013 12:26:20 PM
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Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 56 Corr. Area 1: 4,372.7
 Noise: 4.4

Peak table for sample 1 : sample 1

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------|-------------------|--------------|
| 1 | 37.94 | 17 | 0.00 | 0.0 | |
| 2 | 38.30 | 19 | 0.00 | 0.0 | |
| 3 | 43.00 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 4 | 44.97 | 40 | 2,647.14 | 99,427.9 | |
| 5 | 46.13 | 43 | 1,323.48 | 46,099.6 | |
| 6 | 47.46 | 47 | 2,317.13 | 74,548.5 | |
| 7 | 48.10 | 49 | 1,155.90 | 35,860.9 | |
| 8 | 49.51 | 60 | 1,139.07 | 28,623.1 | |
| 9 | 50.43 | 70 | 882.30 | 19,089.6 | |
| 10 | 51.76 | 84 | 639.89 | 11,542.9 | |
| 11 | 52.00 | 87 | 1,669.83 | 29,238.2 | |
| 12 | 55.42 | 123 | 1,175.18 | 14,485.3 | |
| 13 | 56.06 | 130 | 1,478.82 | 17,259.6 | |
| 14 | 57.14 | 141 | 553.81 | 5,931.8 | |
| 15 | 58.23 | 152 | 994.32 | 9,940.1 | |
| 16 | 59.44 | 158 | 1,354.84 | 12,984.9 | |
| 17 | 60.72 | 165 | 1,117.53 | 10,258.6 | |
| 18 | 63.13 | 178 | 610.10 | 5,190.1 | |
| 19 | 63.98 | 183 | 1,518.46 | 12,594.4 | |
| 20 | 65.78 | 192 | 443.33 | 3,490.0 | |
| 21 | 66.03 | 194 | 326.36 | 2,551.9 | |
| 22 | 67.47 | 204 | 669.02 | 4,978.2 | |
| 23 | 68.60 | 217 | 1,362.78 | 9,499.5 | |
| 24 | 69.52 | 229 | 789.28 | 5,230.3 | |
| 25 | 71.97 | 259 | 971.76 | 5,694.1 | |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-21\2013-11-21_001.xad


Created: 11/21/2013 12:26:20 PM
 Modified: 11/21/2013 12:44:14 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : sample 1

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------|-------------------|--------------|
| 26 | 73.06 | 272 | 913.74 | 5,093.2 | |
| 27 | 74.18 | 286 | 1,355.12 | 7,190.0 | |
| 28 | 78.48 | 354 | 2,526.32 | 10,818.6 | |
| 29 | 79.04 | 364 | 962.70 | 4,012.5 | |
| 30 | 79.41 | 370 | 1,486.55 | 6,091.3 | |
| 31 | 80.73 | 393 | 1,996.17 | 7,702.7 | |
| 32 | 83.30 | 444 | 407.12 | 1,388.1 | |
| 33 | 84.95 | 478 | 448.16 | 1,419.2 | |
| 34 | 86.40 | 513 | 1,083.05 | 3,200.4 | |
| 35 | 87.85 | 558 | 552.49 | 1,499.5 | |
| 36 | 89.05 | 596 | 405.53 | 1,030.7 | |
| 37 | 90.82 | 650 | 789.78 | 1,841.8 | |
| 38 | 91.94 | 684 | 1,085.96 | 2,406.6 | |
| 39 | 94.15 | 774 | 410.17 | 803.2 | |
| 40 | 95.84 | 848 | 463.88 | 828.6 | |
| 41 | 96.89 | 894 | 294.34 | 498.6 | |
| 42 | 98.05 | 946 | 458.09 | 733.8 | |
| 43 | 99.58 | 1,082 | 178.51 | 250.0 | |
| 44 | 100.26 | 1,269 | 200.06 | 238.9 | |
| 45 | 100.58 | 1,357 | 446.75 | 499.0 | |
| 46 | 102.19 | 1,796 | 115.68 | 97.6 | |
| 47 | 103.40 | 2,082 | 543.35 | 395.5 | |
| 48 | 107.05 | 2,732 | 139.47 | 77.3 | |
| 49 | 107.70 | 2,847 | 99.67 | 53.0 | |
| 50 | 108.74 | 4,297 | 39.98 | 14.1 | |
| 51 | 109.22 | 7,087 | 49.39 | 10.6 | |
| 52 | 110.35 | 8,068 | 59.36 | 11.1 | |
| 53 | 112.16 | 9,644 | 43.91 | 6.9 | |
| 54 | 113.00 | 10,380 | 75.00 | 10.9 | Upper Marker |
| 55 | 114.77 | 11,922 | 0.00 | 0.0 | |
| 56 | 115.57 | 12,622 | 0.00 | 0.0 | |
| 57 | 117.30 | 14,129 | 0.00 | 0.0 | |
| 58 | 120.55 | 16,966 | 0.00 | 0.0 | |

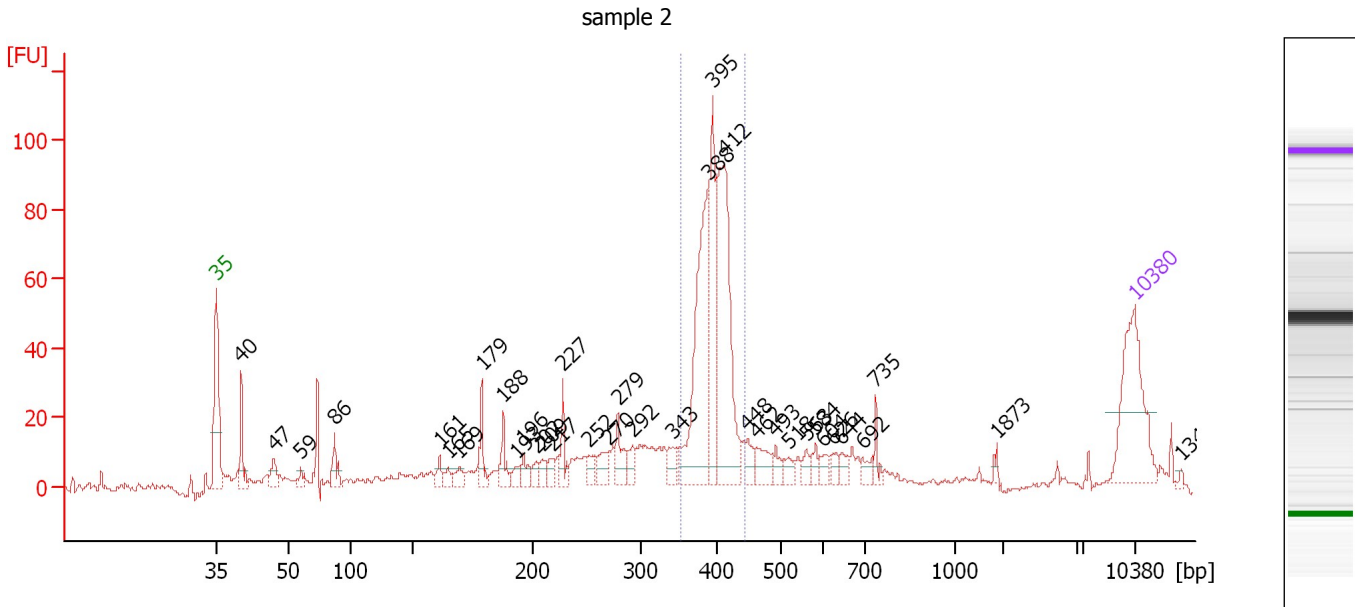
Region table for sample 1 : sample 1

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Corr. Area | % of Total | Size distribution in CV [%] | Color |
|-----------|---------|-------------------|-------------------|---------------|------------|------------|-----------------------------|---|
| 317 | 629 | 451 | 32,698.2 | 9,231.83 | 4,372.7 | 35 | 20.0 |  |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-21\2013-11-21_001.xad

Created: 11/21/2013 12:26:20 PM
 Modified: 11/21/2013 12:44:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 36 Corr. Area 1: 351.1
 Noise: 0.8

Peak table for sample 2 : sample 2


| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------|-------------------|--------------|
| 1 | 43.00 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 44.91 | 40 | 38.39 | 1,447.7 | |
| 3 | 47.39 | 47 | 17.09 | 552.0 | |
| 4 | 49.42 | 59 | 7.82 | 199.7 | |
| 5 | 51.98 | 86 | 21.51 | 377.4 | |
| 6 | 60.03 | 161 | 10.56 | 99.2 | |
| 7 | 60.68 | 165 | 8.59 | 78.9 | |
| 8 | 61.54 | 169 | 12.24 | 109.5 | |
| 9 | 63.24 | 179 | 24.25 | 205.6 | |
| 10 | 64.87 | 188 | 18.83 | 152.1 | |
| 11 | 65.85 | 193 | 9.68 | 76.0 | |
| 12 | 66.41 | 196 | 13.61 | 105.3 | |
| 13 | 67.35 | 202 | 9.28 | 69.5 | |
| 14 | 67.88 | 209 | 9.54 | 69.3 | |
| 15 | 68.57 | 217 | 9.95 | 69.5 | |
| 16 | 69.42 | 227 | 21.44 | 142.8 | |
| 17 | 71.41 | 252 | 10.95 | 65.9 | |
| 18 | 72.88 | 270 | 20.32 | 114.2 | |
| 19 | 73.61 | 279 | 24.69 | 134.3 | |
| 20 | 74.71 | 292 | 12.32 | 63.9 | |
| 21 | 77.84 | 343 | 13.73 | 60.7 | |
| 22 | 80.48 | 388 | 166.14 | 648.3 | |
| 23 | 80.85 | 395 | 90.60 | 347.9 | |
| 24 | 81.74 | 412 | 179.07 | 658.5 | |
| 25 | 83.49 | 448 | 12.87 | 43.5 | |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-21\2013-11-21_001.xad


Created: 11/21/2013 12:26:20 PM
 Modified: 11/21/2013 12:44:14 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : sample 2

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|--|-----------|---------------|-------------------|--------------|
| 26 | 84.18 | 462 | 20.92 | 68.5 | |
| 27 | 85.64 | 493 | 9.71 | 29.9 | |
| 28 | 86.58 | 518 | 9.32 | 27.2 | |
| 29 | 88.00 | 563 | 8.70 | 23.4 | |
| 30 | 88.65 | 584 | 8.24 | 21.4 | |
| 31 | 89.30 | 604 | 8.70 | 21.8 | |
| 32 | 90.03 | 626 | 7.65 | 18.5 | |
| 33 | 90.64 | 644 | 7.98 | 18.8 | |
| 34 | 92.23 | 692 | 8.17 | 17.9 | |
| 35 | 93.28 | 735 | 9.66 | 19.9 | |
| 36 | 102.47 | 1,873 | 3.24 | 2.6 | |
| 37 |  113.00 | 10,380 | 75.00 | 10.9 | Upper Marker |
| 38 | 116.54 | 13,463 | 0.00 | 0.0 | |

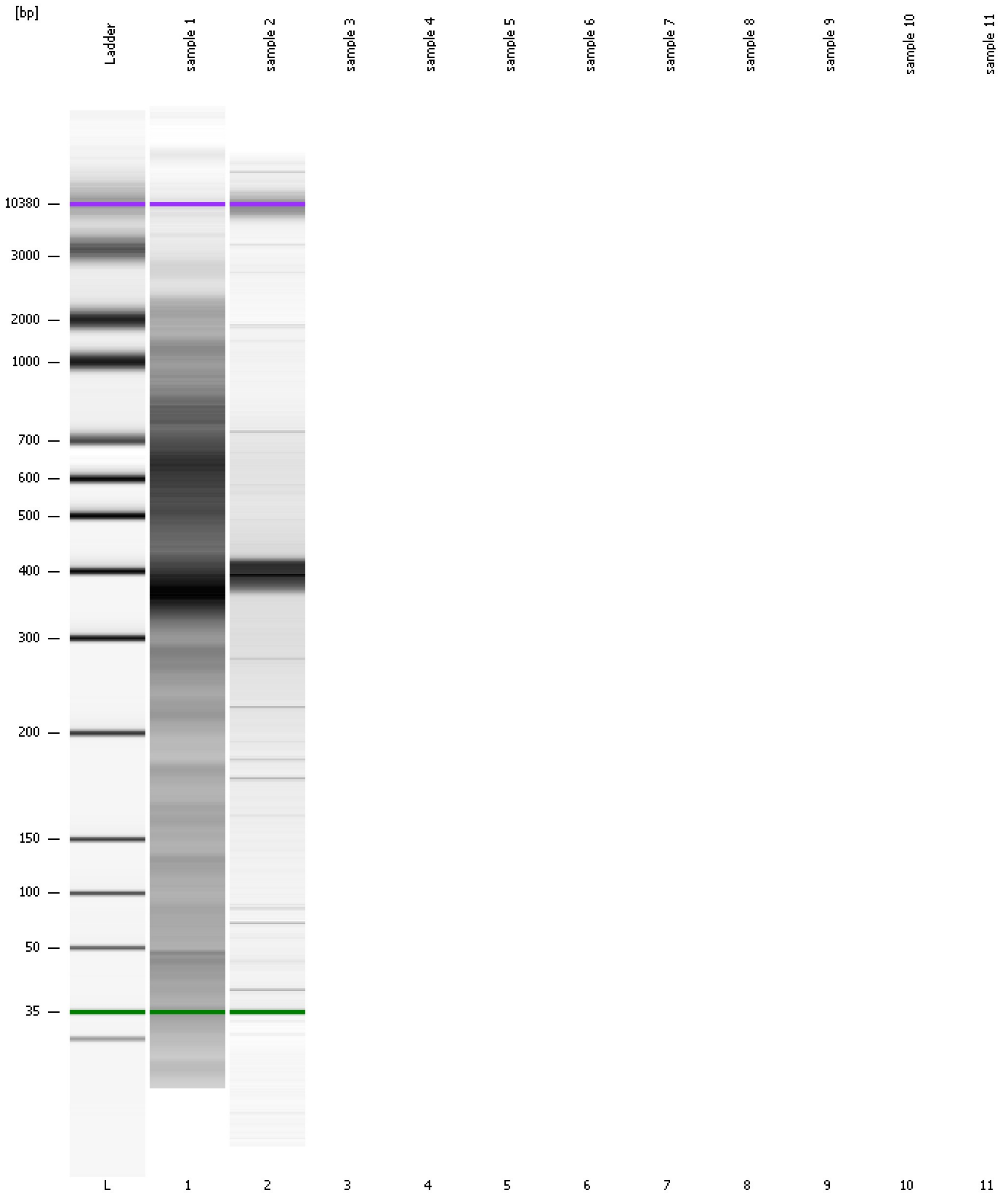
Region table for sample 2 : sample 2

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Corr. Area | % of Total | Size distribution in CV [%] | Color |
|-----------|---------|-------------------|-------------------|---------------|------------|------------|-----------------------------|---|
| 353 | 444 | 397 | 1,700.8 | 444.27 | 351.1 | 42 | 4.6 |  |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-21\2013-11-21_001.xad

Created: 11/21/2013 12:26:20 PM
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Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-21\2013-11-21_001.xad

Created: 11/21/2013 12:26:20 PM
Modified: 11/21/2013 12:44:14 PM

Invalid Samples

- Sample 3 has not been run, no results available.
- Sample 4 has not been run, no results available.
- Sample 5 has not been run, no results available.
- Sample 6 has not been run, no results available.
- Sample 7 has not been run, no results available.
- Sample 8 has not been run, no results available.
- Sample 9 has not been run, no results available.
- Sample 10 has not been run, no results available.
- Sample 11 has not been run, no results available.