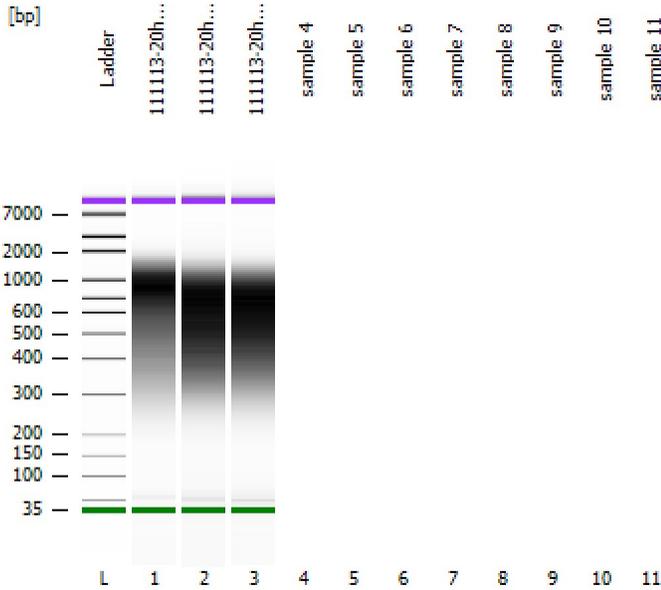


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
Modified: 2/14/2014 3:49:35 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13804984 Firmware: C.01.069
Serial#: DE13804984 Type: G2939A

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 #:

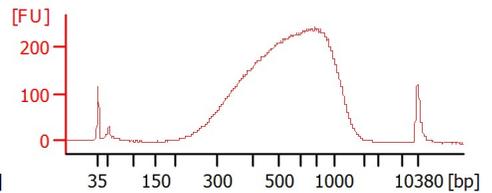
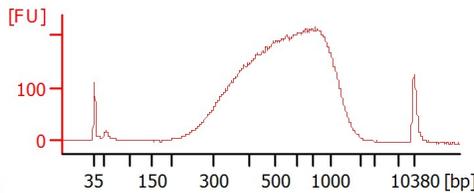
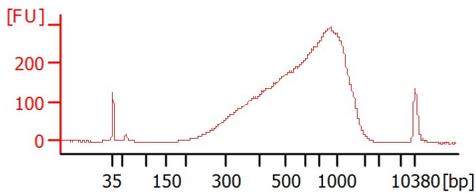
Reagent Kit Lot #:

Chip Comments:

111113-20half-roots-0.03ng-SMARTer2lib

111113-20half-roots-0.3ng-SMARTer2lib

111113-20half-roots-3ng-SMARTer2lib



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
 Modified: 2/14/2014 3:49:35 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|--|----------------|--------------------------|--------|-------------|--------------|--------------|
| 111113-20half-roots-0.03ng-SMARTer2lib | | <input type="checkbox"/> | ✓ | | | |
| 111113-20half-roots-0.3ng-SMARTer2lib | | <input type="checkbox"/> | ✓ | | | |
| 111113-20half-roots-3ng-SMARTer2li | | <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:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
Modified: 2/14/2014 3:49:35 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/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

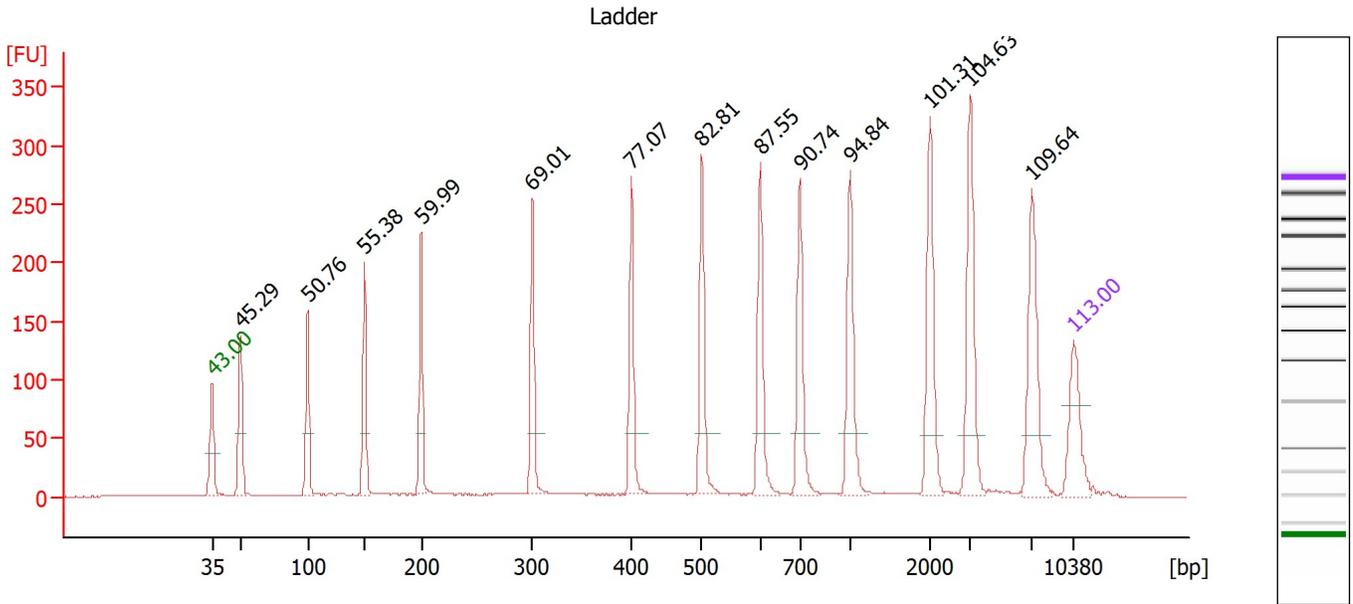
Ladder

| 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:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
 Modified: 2/14/2014 3:49:35 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

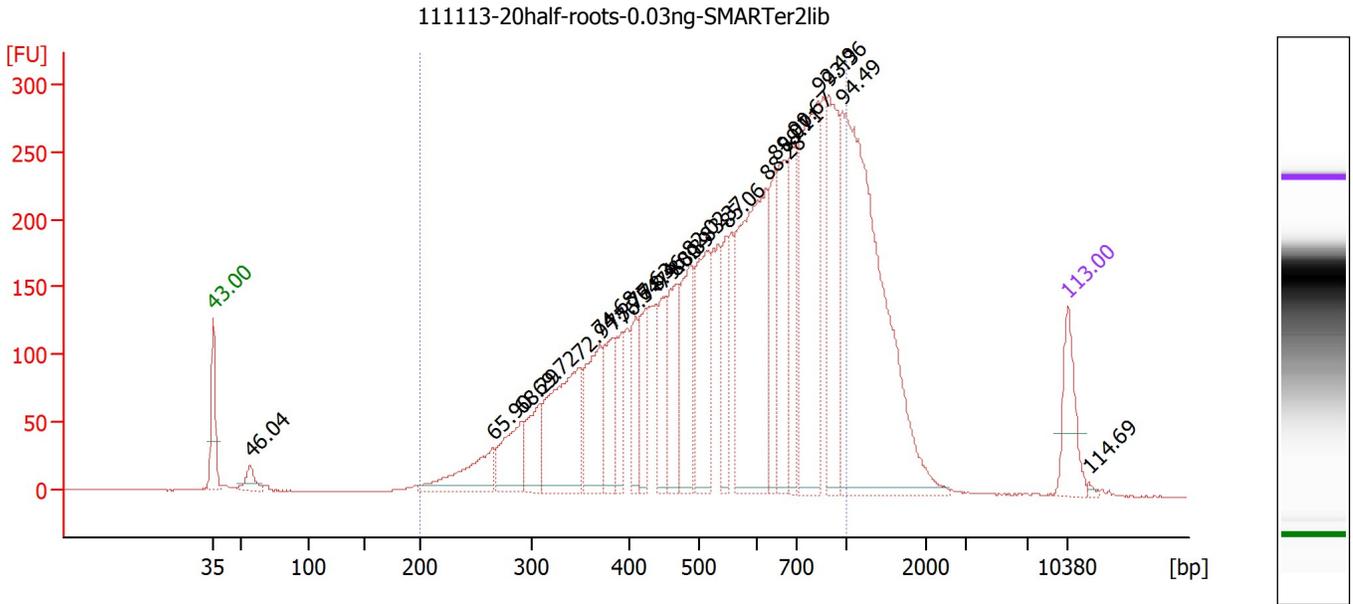
Peak table for Ladder

| 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:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
 Modified: 2/14/2014 3:49:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 111113-20half-roots-0.03ng-SMARTer2lib

Number of peaks found: 23 Corr. Area 1: 5,756.9
 Noise: 0.3

Peak table for sample 1 : 111113-20half-roots-0.03ng-SMARTer2lib

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 57 | 41.01 | 1,092.1 | |
| 3 | 266 | 131.58 | 750.9 | |
| 4 | 292 | 122.38 | 635.0 | |
| 5 | 309 | 102.38 | 502.2 | |
| 6 | 349 | 297.00 | 1,290.4 | |
| 7 | 370 | 175.69 | 718.9 | |
| 8 | 384 | 114.78 | 453.2 | |
| 9 | 393 | 86.45 | 332.9 | |
| 10 | 410 | 81.10 | 299.9 | |
| 11 | 424 | 96.10 | 343.3 | |
| 12 | 448 | 106.93 | 362.0 | |
| 13 | 467 | 148.37 | 481.9 | |
| 14 | 486 | 176.80 | 550.9 | |
| 15 | 512 | 204.26 | 604.8 | |
| 16 | 547 | 90.14 | 249.5 | |
| 17 | 623 | 458.21 | 1,115.0 | |
| 18 | 646 | 136.11 | 319.3 | |
| 19 | 668 | 168.47 | 382.4 | |
| 20 | 698 | 149.32 | 324.4 | |
| 21 | 828 | 372.17 | 681.2 | |
| 22 | 891 | 230.68 | 392.1 | |
| 23 | 974 | 756.00 | 1,175.8 | |
| 24 | 10,380 | 75.00 | 10.9 | Upper Marker |
| 25 | 12,083 | 0.00 | 0.0 | |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
Modified: 2/14/2014 3:49:35 PM

Electropherogram Summary Continued ...

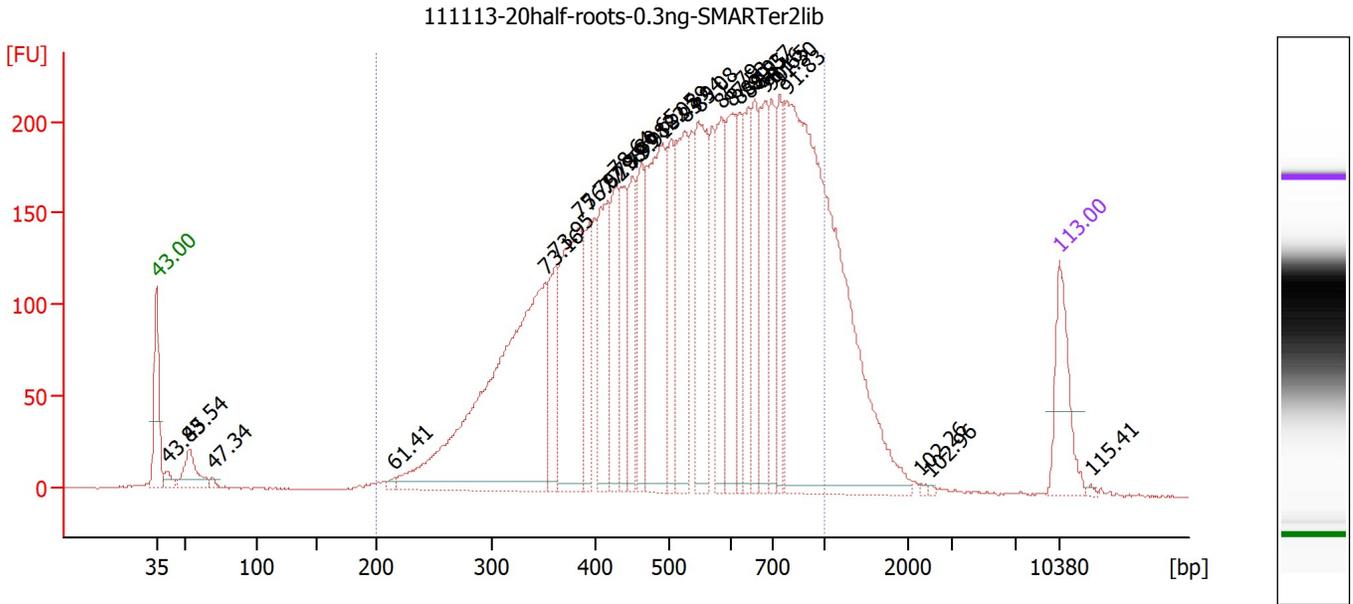
... Region table for sample 1 : 111113-20half-roots-0.03ng-SMARTer2lib

| From [bp] | To [bp] | Corr. Area | % of Total | Average Size [bp] | Size distribution in CV [%] | Conc. [pg/ μ l] | Molarity [pmol/l] | Color |
|-----------|---------|------------|------------|-------------------|-----------------------------|---------------------|-------------------|-------|
| 200 | 1,000 | 5,756.9 | 83 | 579 | 33.4 | 4,112.09 | 12,852.0 | ■ |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
 Modified: 2/14/2014 3:49:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 111113-20half-roots-0.3ng-SMARTer2lib

Number of peaks found: 29 Corr. Area 1: 5,712.0
 Noise: 0.4

Peak table for sample 2 : 111113-20half-roots-0.3ng-SMARTer2lib

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 40 | 16.31 | 610.9 | |
| 3 | 52 | 62.17 | 1,799.8 | |
| 4 | 69 | 7.71 | 169.8 | |
| 5 | 216 | 6.66 | 46.8 | |
| 6 | 351 | 674.64 | 2,908.5 | |
| 7 | 361 | 98.33 | 412.4 | |
| 8 | 384 | 280.91 | 1,108.3 | |
| 9 | 394 | 98.08 | 376.8 | |
| 10 | 416 | 143.20 | 521.8 | |
| 11 | 427 | 135.25 | 479.6 | |
| 12 | 433 | 100.77 | 352.3 | |
| 13 | 449 | 108.93 | 367.3 | |
| 14 | 462 | 111.71 | 366.1 | |
| 15 | 487 | 289.51 | 901.0 | |
| 16 | 502 | 117.17 | 353.9 | |
| 17 | 524 | 184.52 | 533.7 | |
| 18 | 548 | 205.21 | 567.5 | |
| 19 | 584 | 138.95 | 360.6 | |
| 20 | 600 | 138.39 | 349.7 | |
| 21 | 620 | 95.36 | 233.0 | |
| 22 | 641 | 103.84 | 245.6 | |
| 23 | 657 | 97.86 | 225.7 | |
| 24 | 682 | 121.06 | 269.0 | |
| 25 | 697 | 106.15 | 230.8 | |
| 26 | 741 | 96.87 | 198.1 | |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
 Modified: 2/14/2014 3:49:35 PM

Electropherogram Summary Continued ...**... Peak table for sample 2 : 111113-20half-roots-0.3ng-SMARTer2lib**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 27 | 779 | 844.93 | 1,642.6 | |
| 28 | 2,286 | 2.20 | 1.5 | |
| 29 | 2,497 | 1.48 | 0.9 | |
| 30 | 10,380 | 75.00 | 10.9 | Upper Marker |
| 31 | 12,802 | 0.00 | 0.0 | |

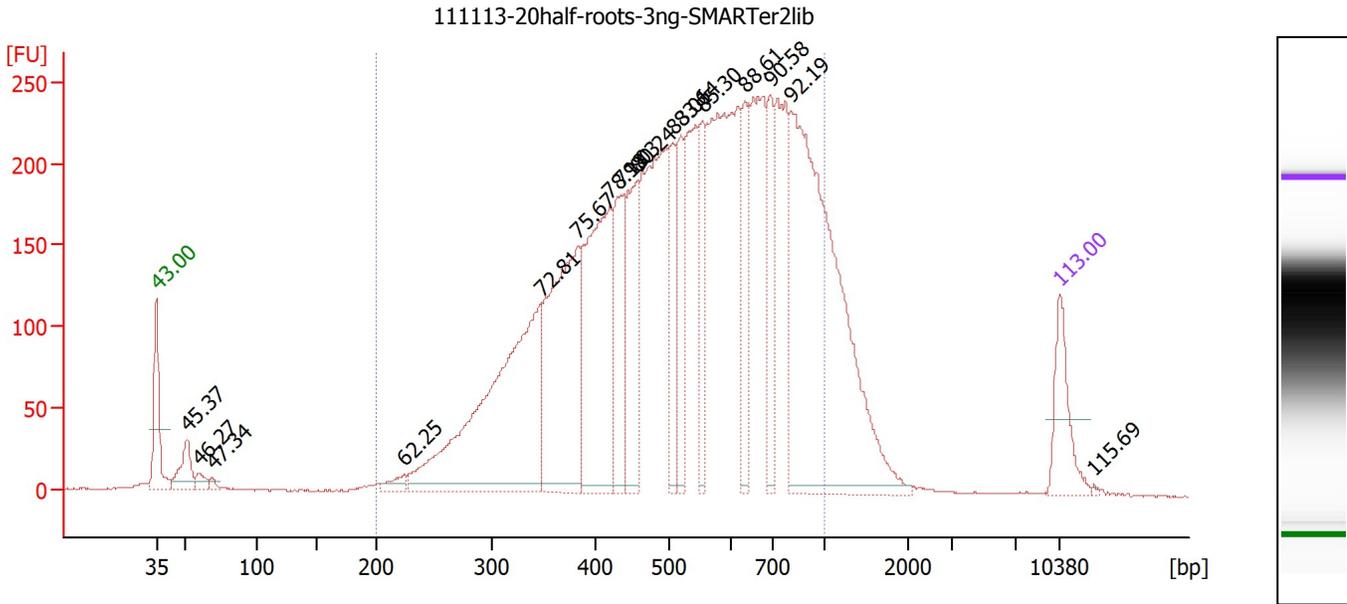
Region table for sample 2 : 111113-20half-roots-0.3ng-SMARTer2lib

| From [bp] | To [bp] | Corr. Area | % of Total | Average Size [bp] | Size distribution in CV [%] | Conc. [pg/μl] | Molarity [pmol/l] | Color |
|-----------|---------|------------|------------|-------------------|-----------------------------|---------------|-------------------|---|
| 200 | 1,000 | 5,712.0 | 90 | 545 | 33.0 | 4,239.97 | 13,800.4 |  |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
 Modified: 2/14/2014 3:49:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 111113-20half-roots-3ng-SMARTer2lib

Number of peaks found: 16 Corr. Area 1: 6,225.9
 Noise: 0.6

Peak table for sample 3 : 111113-20half-roots-3ng-SMARTer2lib

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 51 | 72.42 | 2,160.6 | |
| 3 | 59 | 20.67 | 531.2 | |
| 4 | 69 | 9.94 | 219.1 | |
| 5 | 225 | 21.62 | 145.6 | |
| 6 | 347 | 637.15 | 2,781.1 | |
| 7 | 383 | 421.50 | 1,669.0 | |
| 8 | 419 | 407.26 | 1,471.7 | |
| 9 | 434 | 166.88 | 582.4 | |
| 10 | 455 | 194.48 | 647.4 | |
| 11 | 504 | 115.45 | 346.9 | |
| 12 | 518 | 123.91 | 362.8 | |
| 13 | 552 | 113.93 | 312.5 | |
| 14 | 633 | 120.65 | 288.8 | |
| 15 | 695 | 122.79 | 267.8 | |
| 16 | 806 | 780.27 | 1,467.4 | |
| 17 | 10,380 | 75.00 | 10.9 | Upper Marker |
| 18 | 13,078 | 0.00 | 0.0 | |

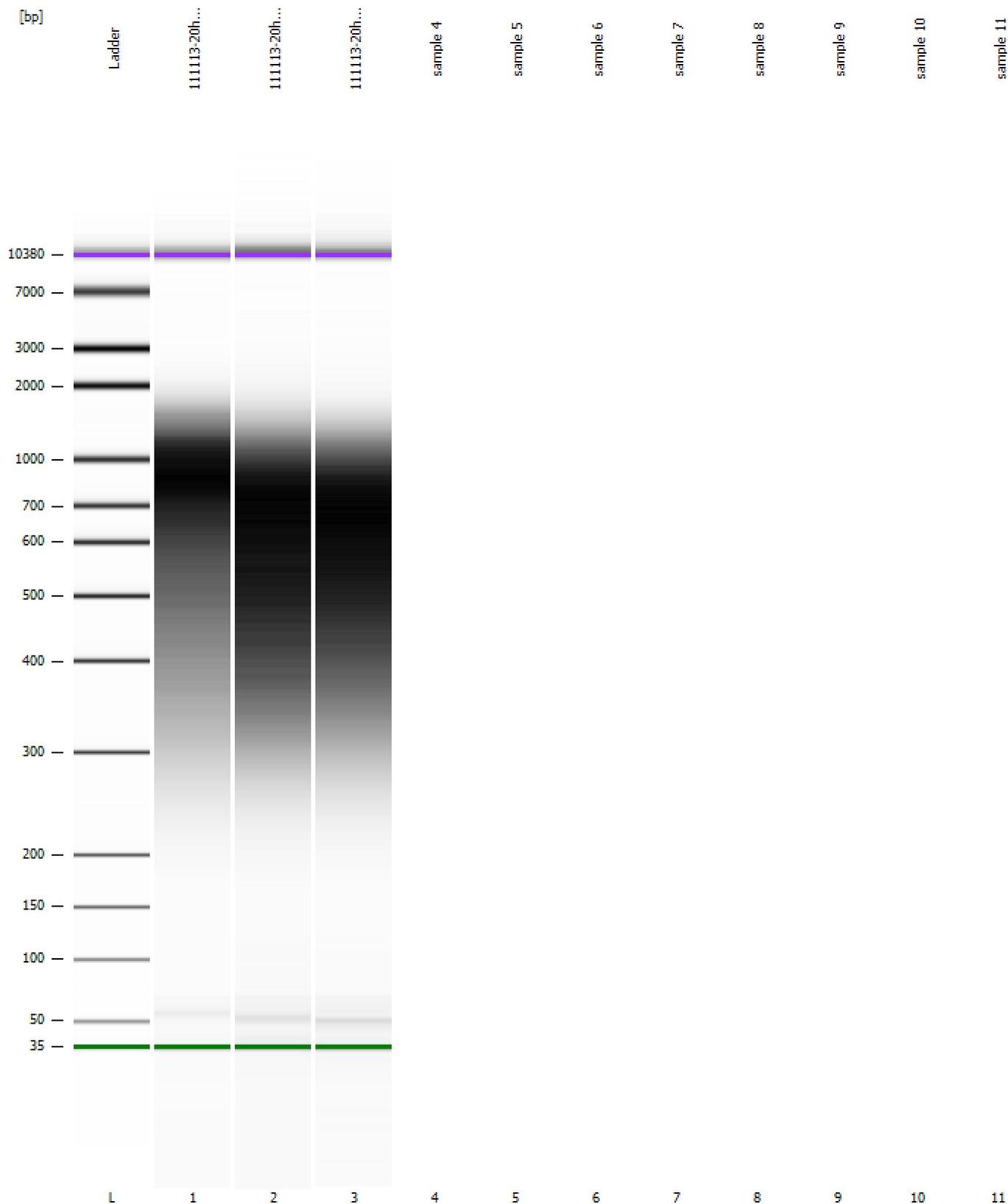
Region table for sample 3 : 111113-20half-roots-3ng-SMARTer2lib

| From [bp] | To [bp] | Corr. Area | % of Total | Average Size [bp] | Size distribution in CV [%] | Conc. [pg/μl] | Molarity [pmol/l] | Color |
|-----------|---------|------------|------------|-------------------|-----------------------------|---------------|-------------------|-------|
| 200 | 1,000 | 6,225.9 | 90 | 547 | 32.4 | 4,632.91 | 14,975.8 | Blue |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
Modified: 2/14/2014 3:49:35 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad

Created: 2/14/2014 3:31:05 PM
Modified: 2/14/2014 3:49:35 PM

Invalid Samples

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.

Assay Class: High Sensitivity DNA Assay Created: 2/14/2014 3:31:05 PM
 Data Path: C:\...gh Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad Modified: 2/14/2014 3:49:35 PM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|---|--------|------------|----------|--------------|----------------------|-------------------------------------|------|------|
| Run ended on port 1 (Number of wells acquired: 4) | | Instrument | Run | | 2/14/2014 3:49:32 PM | (GMT --05:00) Eastern Standard Time | gw57 | WIN |
| Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-02-14\2100 expert_High Sensitivity DNA Assay_DE13804984_2014-02-14_15-31-06.xad) | | Instrument | Run | | 2/14/2014 3:31:11 PM | (GMT --05:00) Eastern Standard Time | gw57 | WIN |
| Product Number : G2939A | | Instrument | Run | | 2/14/2014 3:31:11 PM | (GMT --05:00) Eastern Standard Time | gw57 | WIN |
| Name : | | Instrument | Run | | 2/14/2014 3:31:11 PM | (GMT --05:00) Eastern Standard Time | gw57 | WIN |
| Vendor : Agilent Technologies | | Instrument | Run | | 2/14/2014 3:31:11 PM | (GMT --05:00) Eastern Standard Time | gw57 | WIN |
| Serial# : DE13804984 | | Instrument | Run | | 2/14/2014 3:31:11 PM | (GMT --05:00) Eastern Standard Time | gw57 | WIN |
| Firmware : C.01.069 | | Instrument | Run | | 2/14/2014 3:31:11 PM | (GMT --05:00) Eastern Standard Time | gw57 | WIN |
| Cartridge : Electrode | | Instrument | Run | | 2/14/2014 3:31:11 PM | (GMT --05:00) Eastern Standard Time | gw57 | WIN |