

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31_001.xad

Created: 7/31/2014 10:13:10 AM
Modified: 7/31/2014 10:35:29 AM

Electrophoresis File Run Summary

Instrument Information:

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

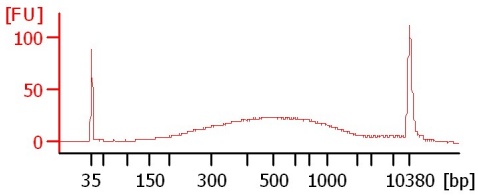
Assay Information:

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

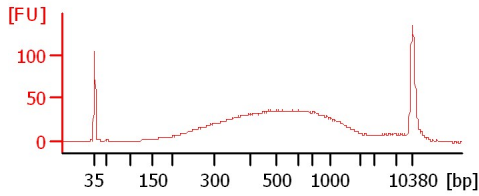
Chip Information:

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

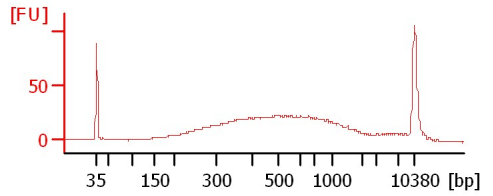
9



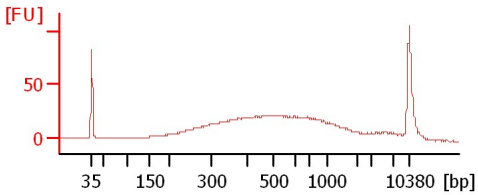
18



26



29



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Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|-------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| 9 | | <input type="checkbox"/> | ✓ | | | |
| 18 | | <input type="checkbox"/> | ✓ | | | |
| 26 | | <input type="checkbox"/> | ✓ | | | |
| 29 | | <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 :

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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

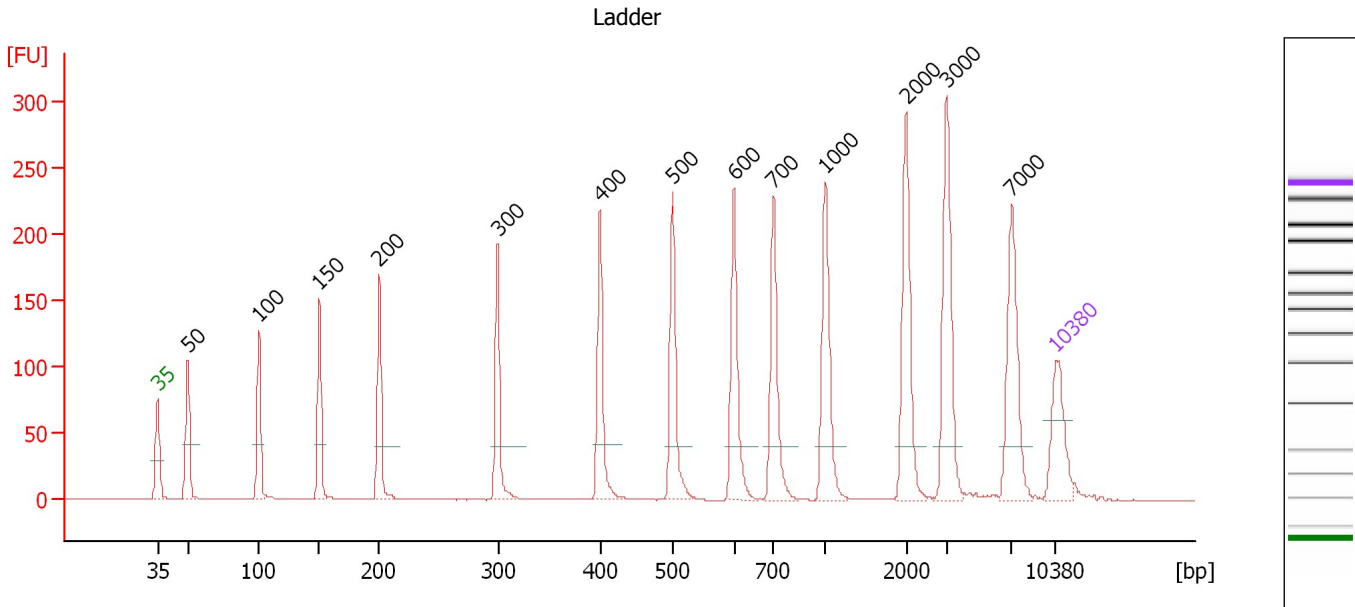
Ladder

| 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 |

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Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

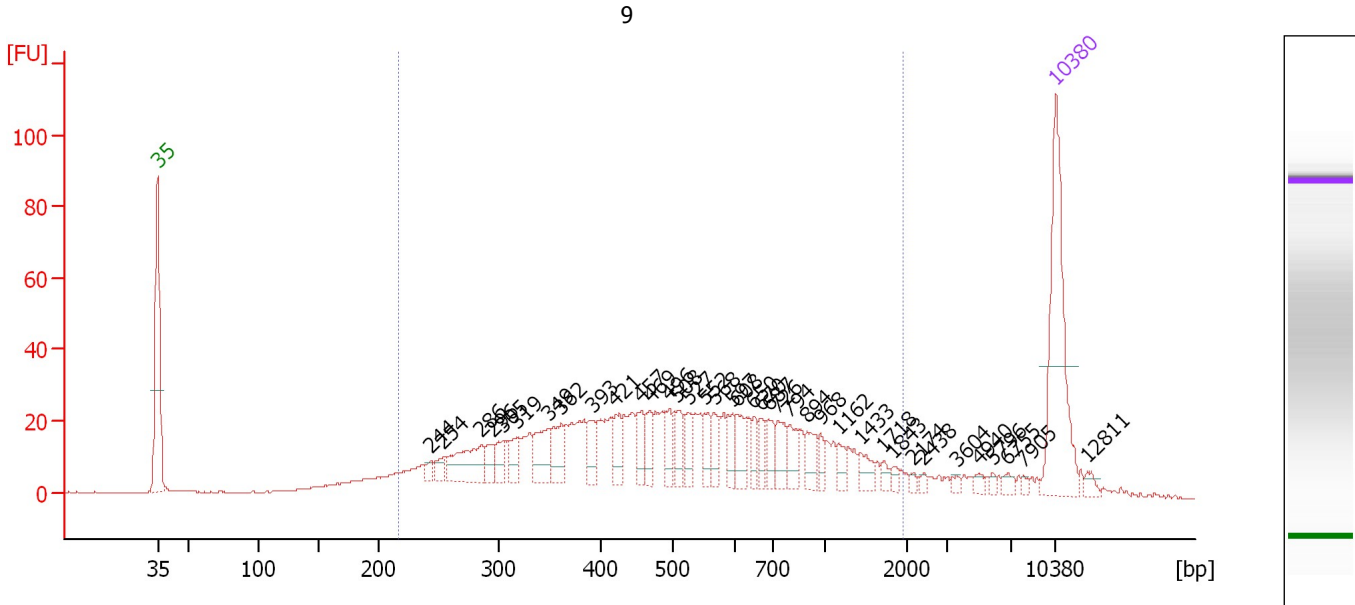
Peak table for Ladder

| 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 |

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Electropherogram Summary Continued ...



Overall Results for sample 1 : 9

Number of peaks found: 38 Corr. Area 1: 868.6
 Noise: 0.1

Peak table for sample 1 : 9

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 244 | 5.64 | 35.1 | |
| 3 | 254 | 9.06 | 54.0 | |
| 4 | 286 | 38.50 | 203.7 | |
| 5 | 296 | 11.69 | 59.8 | |
| 6 | 305 | 13.17 | 65.4 | |
| 7 | 319 | 14.58 | 69.3 | |
| 8 | 349 | 25.41 | 110.4 | |
| 9 | 362 | 21.68 | 90.7 | |
| 10 | 393 | 15.09 | 58.2 | |
| 11 | 421 | 15.99 | 57.5 | |
| 12 | 457 | 17.23 | 57.1 | |
| 13 | 469 | 13.24 | 42.8 | |
| 14 | 496 | 14.29 | 43.7 | |
| 15 | 508 | 16.94 | 50.5 | |
| 16 | 527 | 13.28 | 38.2 | |
| 17 | 552 | 12.73 | 35.0 | |
| 18 | 568 | 12.41 | 33.1 | |
| 19 | 597 | 12.76 | 32.4 | |
| 20 | 608 | 15.09 | 37.6 | |
| 21 | 650 | 10.61 | 24.7 | |
| 22 | 670 | 10.52 | 23.8 | |
| 23 | 687 | 11.84 | 26.1 | |
| 24 | 726 | 15.95 | 33.3 | |
| 25 | 794 | 13.63 | 26.0 | |
| 26 | 894 | 13.42 | 22.7 | |

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Electropherogram Summary Continued ...

... Peak table for sample 1 : 9

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 27 | 968 | 6.82 | 10.7 | |
| 28 | 1,162 | 7.25 | 9.5 | |
| 29 | 1,433 | 9.19 | 9.7 | |
| 30 | 1,718 | 3.97 | 3.5 | |
| 31 | 1,843 | 3.19 | 2.6 | |
| 32 | 2,174 | 2.06 | 1.4 | |
| 33 | 2,438 | 1.94 | 1.2 | |
| 34 | 3,604 | 2.20 | 0.9 | |
| 35 | 4,940 | 2.76 | 0.8 | |
| 36 | 5,796 | 2.09 | 0.5 | |
| 37 | 6,755 | 3.45 | 0.8 | |
| 38 | 7,905 | 1.89 | 0.4 | |
| 39 | 10,380 | 75.00 | 10.9 | Upper Marker |
| 40 | 12,811 | 0.00 | 0.0 | |

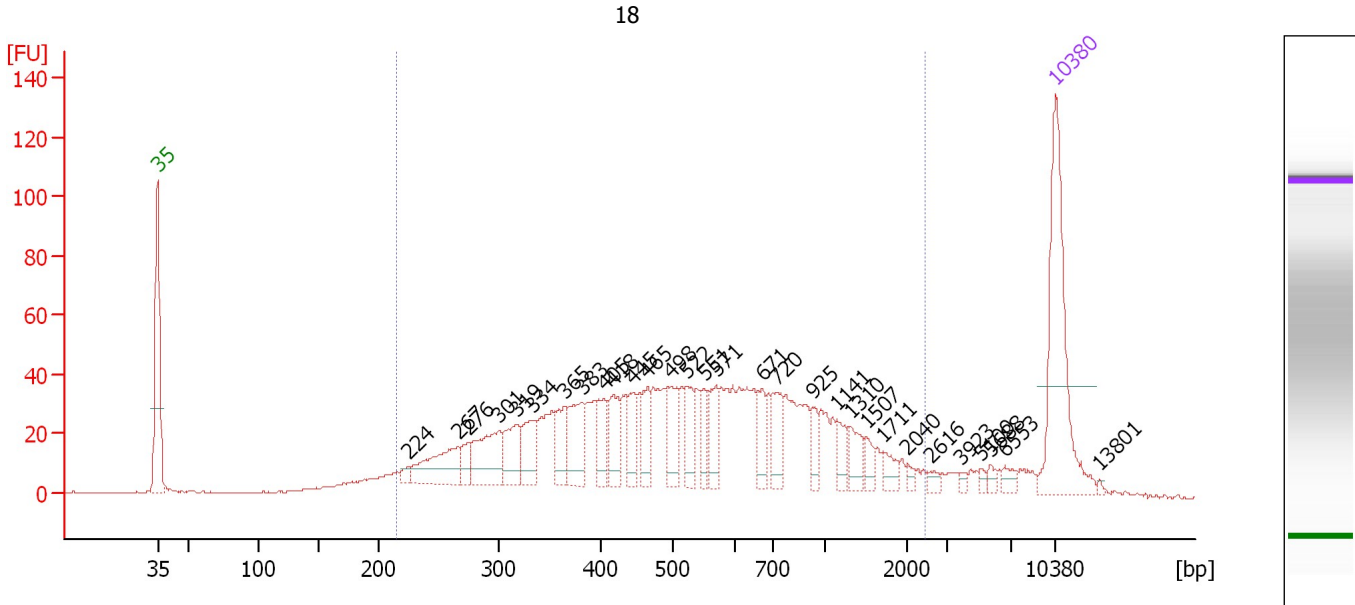
Region table for sample 1 : 9

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|-------------------|------------|-----------------------------|
| 216 | 1,953 | 585 | 2,711.6 | 763.80 | 868.6 | 87 | 57.8 |

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Electropherogram Summary Continued ...



Overall Results for sample 2 : 18

Number of peaks found: 30 Corr. Area 1: 1,358.3
 Noise: 0.3

Peak table for sample 2 : 18

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 224 | 5.09 | 34.4 | |
| 3 | 267 | 40.30 | 228.7 | |
| 4 | 276 | 11.39 | 62.6 | |
| 5 | 301 | 41.78 | 210.6 | |
| 6 | 319 | 27.00 | 128.1 | |
| 7 | 334 | 23.45 | 106.4 | |
| 8 | 365 | 21.12 | 87.7 | |
| 9 | 383 | 32.31 | 128.0 | |
| 10 | 405 | 19.87 | 74.3 | |
| 11 | 418 | 24.67 | 89.5 | |
| 12 | 445 | 19.50 | 66.4 | |
| 13 | 465 | 19.92 | 64.8 | |
| 14 | 498 | 24.85 | 75.7 | |
| 15 | 522 | 19.44 | 56.4 | |
| 16 | 551 | 13.96 | 38.3 | |
| 17 | 571 | 17.96 | 47.7 | |
| 18 | 671 | 16.00 | 36.1 | |
| 19 | 720 | 20.36 | 42.9 | |
| 20 | 925 | 10.21 | 16.7 | |
| 21 | 1,141 | 10.54 | 14.0 | |
| 22 | 1,310 | 12.92 | 14.9 | |
| 23 | 1,507 | 6.99 | 7.0 | |
| 24 | 1,711 | 7.82 | 6.9 | |
| 25 | 2,040 | 2.79 | 2.1 | |
| 26 | 2,616 | 3.05 | 1.8 | |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31_001.xad

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Electropherogram Summary Continued ...

... Peak table for sample 2 : 18

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 27 | 3,923 | 1.91 | 0.7 | |
| 28 | 5,100 | 2.35 | 0.7 | |
| 29 | 5,688 | 3.19 | 0.8 | |
| 30 | 6,553 | 4.61 | 1.1 | |
| 31 | 10,380 | 75.00 | 10.9 | Upper Marker |
| 32 | 13,801 | 0.00 | 0.0 | |

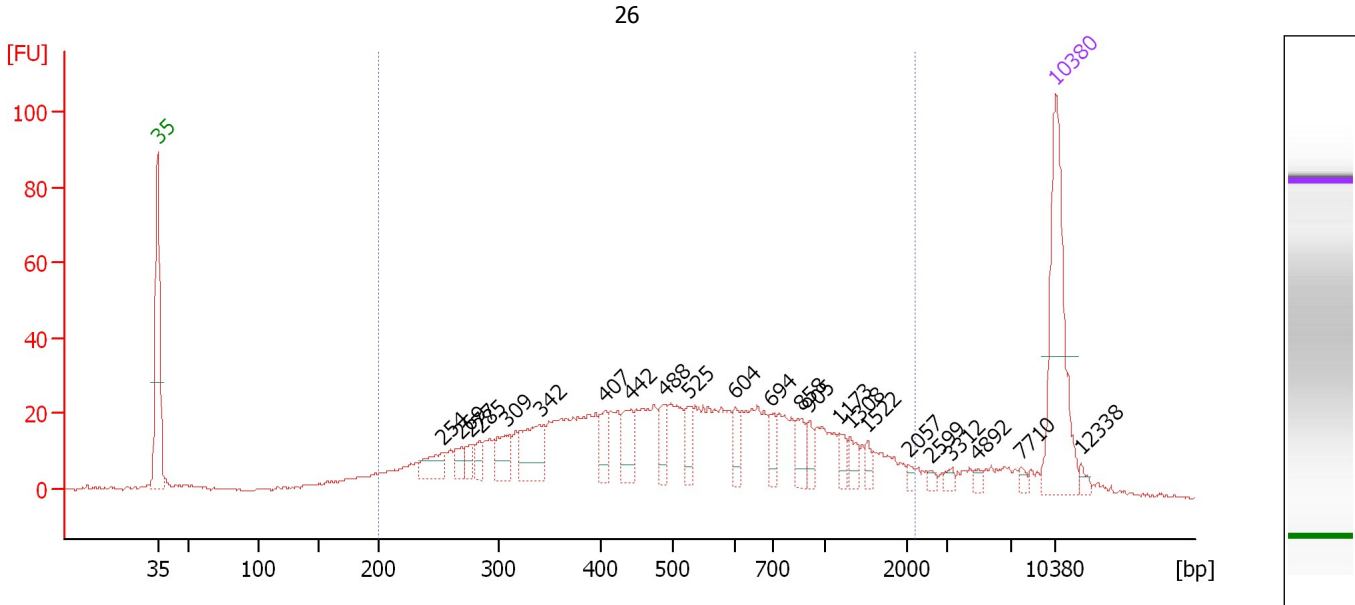
Region table for sample 2 : 18

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|---|------------|-----------------------------|
| 215 | 2,448 | 627 | 2,936.2 | 854.75 |  1,358.3 | 90 | 62.8 |

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Electropherogram Summary Continued ...



Overall Results for sample 3 : 26

Number of peaks found: 23 Corr. Area 1: 896.5
 Noise: 0.3

Peak table for sample 3 : 26


| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 254 | 19.34 | 115.3 | |
| 3 | 269 | 10.46 | 58.8 | |
| 4 | 277 | 8.73 | 47.8 | |
| 5 | 285 | 9.49 | 50.5 | |
| 6 | 309 | 20.05 | 98.1 | |
| 7 | 342 | 38.74 | 171.6 | |
| 8 | 407 | 15.52 | 57.8 | |
| 9 | 442 | 21.45 | 73.5 | |
| 10 | 488 | 14.29 | 44.4 | |
| 11 | 525 | 12.52 | 36.1 | |
| 12 | 604 | 11.00 | 27.6 | |
| 13 | 694 | 11.34 | 24.8 | |
| 14 | 858 | 12.32 | 21.7 | |
| 15 | 905 | 8.85 | 14.8 | |
| 16 | 1,173 | 7.70 | 10.0 | |
| 17 | 1,308 | 8.29 | 9.6 | |
| 18 | 1,522 | 5.43 | 5.4 | |
| 19 | 2,057 | 2.96 | 2.2 | |
| 20 | 2,599 | 2.72 | 1.6 | |
| 21 | 3,312 | 3.26 | 1.5 | |
| 22 | 4,892 | 2.51 | 0.8 | |
| 23 | 7,710 | 2.89 | 0.6 | |
| 24 | 10,380 | 75.00 | 10.9 | Upper Marker |
| 25 | 12,338 | 0.00 | 0.0 | |

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Electropherogram Summary Continued ...

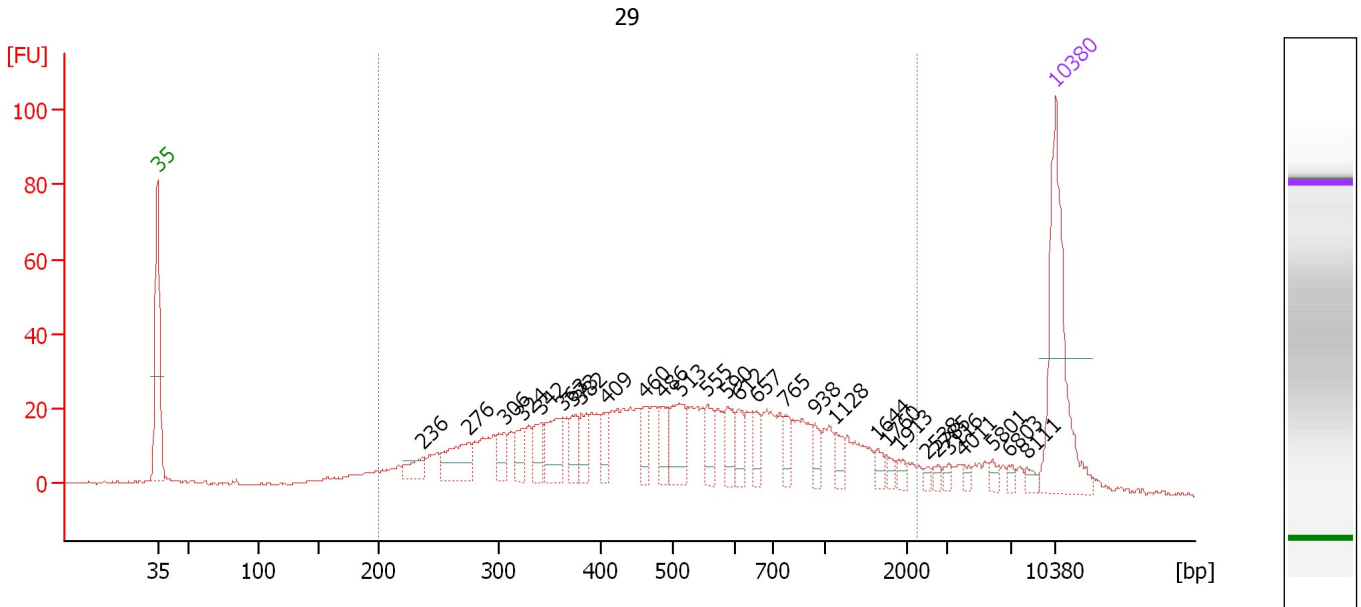
... Region table for sample 3 : 26

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|---|------------|-----------------------------|
| 200 | 2,229 | 612 | 2,774.1 | 778.25 |  896.5 | 87 | 62.9 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 4 : 29

Number of peaks found: 29 Corr. Area 1: 730.9
 Noise: 0.4

Peak table for sample 4 : 29

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 236 | 13.97 | 89.6 | |
| 3 | 276 | 32.29 | 177.4 | |
| 4 | 306 | 14.64 | 72.5 | |
| 5 | 324 | 13.52 | 63.2 | |
| 6 | 342 | 15.36 | 67.9 | |
| 7 | 363 | 28.85 | 120.6 | |
| 8 | 373 | 15.69 | 63.8 | |
| 9 | 382 | 15.60 | 61.9 | |
| 10 | 409 | 13.46 | 49.8 | |
| 11 | 460 | 13.21 | 43.5 | |
| 12 | 486 | 17.98 | 56.1 | |
| 13 | 513 | 27.84 | 82.3 | |
| 14 | 555 | 15.46 | 42.2 | |
| 15 | 590 | 15.35 | 39.4 | |
| 16 | 612 | 12.42 | 30.7 | |
| 17 | 657 | 11.41 | 26.3 | |
| 18 | 765 | 9.75 | 19.3 | |
| 19 | 938 | 8.22 | 13.3 | |
| 20 | 1,128 | 8.73 | 11.7 | |
| 21 | 1,644 | 5.25 | 4.8 | |
| 22 | 1,760 | 4.05 | 3.5 | |
| 23 | 1,913 | 4.06 | 3.2 | |
| 24 | 2,538 | 2.42 | 1.4 | |
| 25 | 2,785 | 2.70 | 1.5 | |
| 26 | 3,116 | 2.97 | 1.4 | |

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Created: 7/31/2014 10:13:10 AM
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Electropherogram Summary Continued ...

... Peak table for sample 4 : 29

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|-----------|---------------|-------------------|--------------|
| 27 | 4,011 | 2.81 | 1.1 | |
| 28 | 5,801 | 3.72 | 1.0 | |
| 29 | 6,803 | 2.96 | 0.7 | |
| 30 | 8,111 | 3.61 | 0.7 | |
| 31 | 10,380 | 75.00 | 10.9 | Upper Marker |

Region table for sample 4 : 29

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|---|------------|-----------------------------|
| 200 | 2,293 | 589 | 2,181.1 | 612.57 |  730.9 | 94 | 60.1 |

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Created: 7/31/2014 10:13:10 AM
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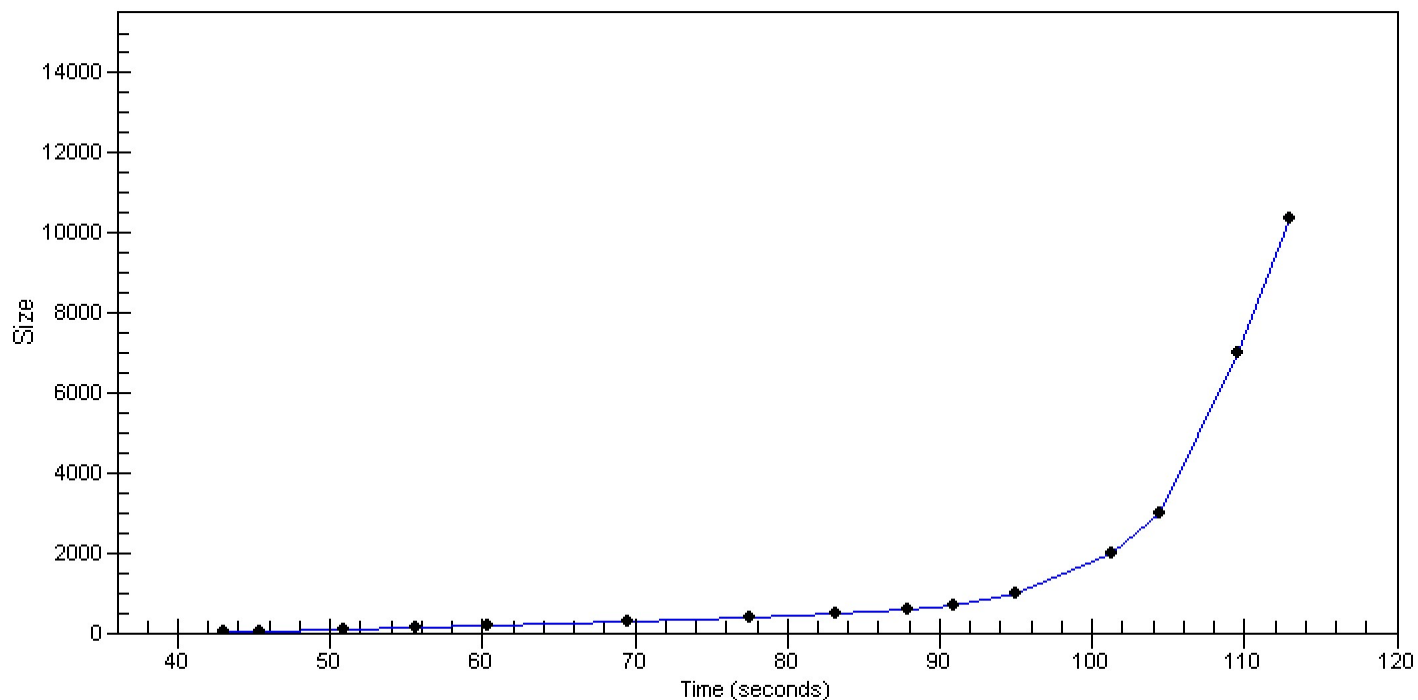
Gel Image

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31_001.xad

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Curves

Standard Curve



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Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31_001.xad

Created: 7/31/2014 10:13:10 AM
Modified: 7/31/2014 10:35:29 AM

Invalid Samples

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
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31_001.xad

Created: 7/31/2014 10:13:10 AM
 Modified: 7/31/2014 10:35:29 AM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|--|--------|------------|----------|--------------|-----------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 5) | | Instrument | Run | | 7/31/2014 10:34:30 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31_001.xad) | | Instrument | Run | | 7/31/2014 10:13:15 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 7/31/2014 10:13:15 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 7/31/2014 10:13:15 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 7/31/2014 10:13:15 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 7/31/2014 10:13:15 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 7/31/2014 10:13:15 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 7/31/2014 10:13:15 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |