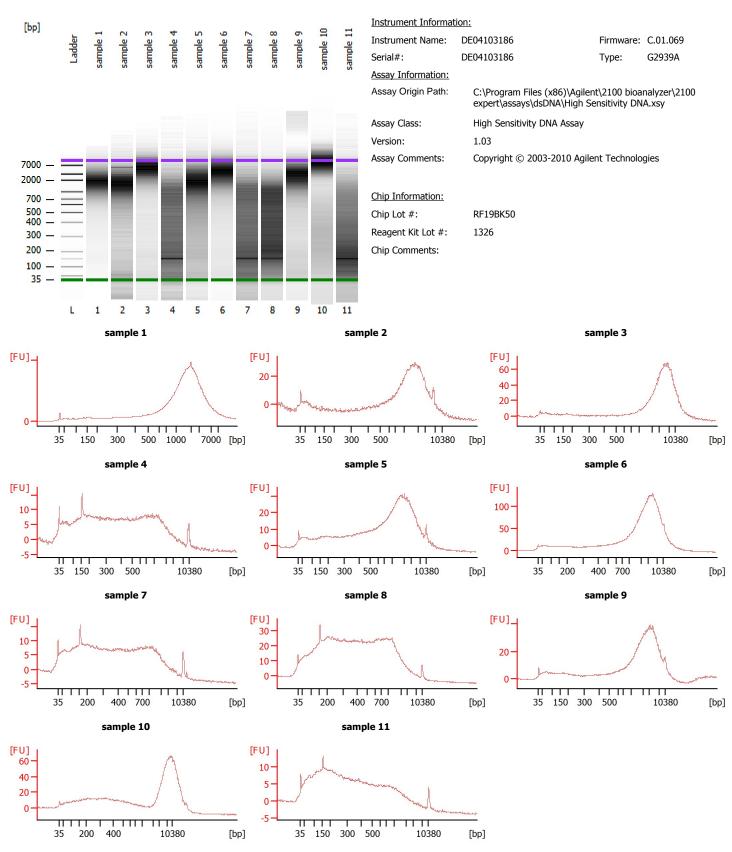
Assay Class: High Sensitivity DNA Assay Created: 1/17/2014 2:18:46 PM Data Path: C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad Created: 1/17/2014 3:00:07 PM

Electrophoresis File Run Summary



Page 2 of 11

High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad 1/17/2014 2:18:46 PM 1/17/2014 3:00:07 PM Assay Class: Created: Modified: Data Path: **Electrophoresis File Run Summary (Chip Summary) Sample Name Sample Comment** Rest. Digest Status Observation **Result Label** Res ult Col or sample 1 sample 2 sample 3 sample 4 sample 5 sample 6 sample 7 sample 8 sample 9 sample 10 sample 11

Reagent Kit Lot #

1326

Chip Comments:

Ladder

Chip Lot #

RF19BK50

Assay Class: High Sensitivity DNA Assay

1/17/2014 2:18:46 PM 1/17/2014 3:00:07 PM Created: C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad Modified: Data Path:

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 |

Printed:

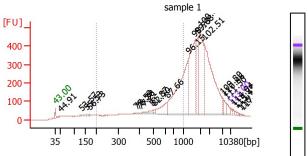
1/17/2014 3:04:18 PM

Observation

Assay Class: High Sensitivity DNA Assay Created: 1/17/2014 2:18:46 PM Data Path: C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad Modified: 1/17/2014 3:00:07 PM

Peak

Electropherogram Summary



Overall Results for sample 1: sample 1

Number of peaks found: 23

 Noise:
 0.3

 Corr. Area 1:
 2,330.9

 Region table for sample 1:
 sample 1

| From To | Corr. % of Average | Size | Conc. Molarit | Co | Cop | Cop

| = | 1 | 35 | 125.00 | 5,411.3 | Lower Marker |
|--------------------|----|--------|----------|---------|--------------|
| , a | 2 | 48 | 170.35 | 5,396.8 | |
| (A) (A) | 3 | 134 | 77.73 | 879.2 | |
| | 4 | 156 | 136.93 | 1,333.2 | |
| | 5 | 169 | 53.29 | 477.5 | |
| | 6 | 388 | 23.33 | 91.0 | |
| 102005 | 7 | 398 | 22.96 | 87.4 | |
| 10380[bp] | 8 | 412 | 26.06 | 95.9 | |
| . <u>1</u> | 9 | 493 | 369.07 | 1,134.7 | |
| <u></u> | 10 | 509 | 73.58 | 219.0 | |
| | 11 | 624 | 936.02 | 2,274.2 | |
| | 12 | 1,277 | 4,958.61 | 5,884.3 | |
| | 13 | 1,655 | 3,087.51 | 2,825.9 | |
| | 14 | 1,796 | 768.31 | 648.2 | |
| Conc. Molarit Co | 15 | 1,973 | 3,064.27 | 2,353.2 | |
| n [pg/μl y lo | 16 | 2,405 | 4,950.59 | 3,119.0 | |
|] [pmol/l <u>r</u> | 17 | 7,009 | 172.19 | 37.2 | |
| 8,855.74 27,379.9 | 18 | 7,709 | 211.46 | 41.6 | |
| | 19 | 8,804 | 219.72 | 37.8 | |
| | 20 | 10,380 | 75.00 | 10.9 | Upper Marker |
| | | | | | |
| | 21 | 11,475 | 0.00 | 0.0 | |
| | 22 | 12,263 | 0.00 | 0.0 | |
| | 23 | 12,919 | 0.00 | 0.0 | |
| | 24 | 14,408 | 0.00 | 0.0 | |
| | 25 | 15,459 | 0.00 | 0.0 | |
| | | | | | |

Peak table for sample 1:

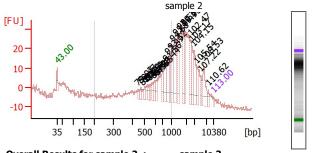
Size [bp] Conc.

[pg/µl]

sample 1

Molarity

[pmol/l]



Overall Results for sample 2: sample 2

Number of peaks found: 26

Noise: 1.1
Corr. Area 1: 216.5 **Region table for sample 2:** san

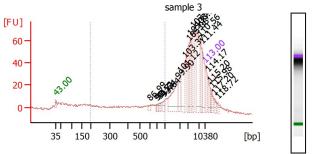
| Region table for sample 2 : sample 2 | Sam

| Peak table for sample 2 : <u>sample 2</u> | | | | | | | | |
|---|---------|---------------------|-------------------|---------------|--|--|--|--|
| Peak | Size [b | p] Conc. [pg/µl] | Molarity [pmol/l] | Observation s | | | | |
| 1 • | 35 | 125.00 | 5,411.3 | Lower Marker | | | | |
| 2 | 443 | 198.28 | 677.7 | | | | | |
| 3 | 468 | 261.39 | 845.5 | | | | | |
| 4 | 480 | 181.09 | 571.9 | | | | | |
| 5 | 500 | 239.74 | 726.4 | | | | | |
| 6 | 514 | 206.76 | 609.3 | | | | | |
| 7 | 528 | 255.66 | 733.2 | | | | | |
| 8 | 547 | 201.85 | 558.6 | | | | | |
| 9 | 580 | 317.04 | 828.6 | | | | | |
| 10 | 592 | 284.77 | 729.1 | | | | | |
| 11 | 620 | 296.55 | 724.2 | | | | | |
| 12 | 727 | 590.91 | 1,232.2 | | | | | |
| 13 | 807 | 727.26 | 1,365.9 | | | | | |
| 14 | 874 | 949.84 | 1,647.5 | | | | | |
| 15 | 947 | 511.13 | 817.8 | | | | | |
| 16 | 1,062 | 1,128.60 | 1,609.5 | | | | | |
| 17 | 1,254 | 1,356.60 | 1,639.2 | | | | | |
| 18 | 1,480 | 972.37 | 995.7 | | | | | |
| 19 | 1,774 | 664.32 | 567.5 | | | | | |
| 20 | 1,835 | 860.35 | 710.3 | | | | | |
| 21 | 2,392 | 755.38 | 478.4 | | | | | |
| 22 | 2,589 | 559.75 | 327.6 | | | | | |
| 23 | 2,864 | 1,057.22 | 559.2 | | | | | |
| 24 | 3,710 | 402.39 | 164.3 | | | | | |
| 25 | 5,011 | 333.63 | 100.9 | | | | | |

Assay Class: High Sensitivity DNA Assay Created: 1/17/2014 2:18:46 PM Data Path: C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad Modified: 1/17/2014 3:00:07 PM

Electropherogram Summary Continued ...

| Peak | Size [bp] Conc. | | Molarity | Observation | |
|------|-----------------|---------|----------|--------------|--|
| | | [pg/µl] | [pmol/l] | s | |
| 26 | 6,022 | 915.62 | 230.4 | | |
| 27 | 7,879 | 137.63 | 26.5 | | |
| 28 | 10,380 | 75.00 | 10.9 | Upper Marker | |



Overall Results for sample 3: sample 3

 Number of peaks found:
 19

 Noise:
 0.6

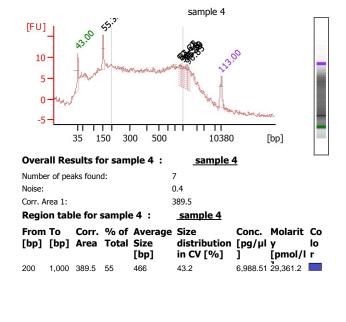
 Corr. Area 1:
 152.2

Region table for sample 3: sample 3

From To Corr % of Average Size

| From To | Corr. | % of | Average | Size | Corc. | Molarit | Co | Copy | y | lo | | Copy | y | lo | Copy | lo | Copy

| Peak ta | ble for sa | mple 3 : | sample 3 | | | |
|---------|------------|---------------------|----------------------|---------------|--|--|
| Peak | Size [bp | o] Conc. [pg/μl] | Molarity [pmol/l] | Observation s | | |
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | | |
| | | | | | | |
| 2 | 603 | 15.62 | 39.3 | | | |
| 3 | 704 | 13.90 | 29.9 | | | |
| 4 | 746 | 12.18 | 24.8 | | | |
| 5 | 812 | 17.99 | 33.6 | | | |
| 6 | 956 | 27.47 | 43.5 | | | |
| 7 | 1,828 | 187.18 | 155.2 | | | |
| 8 | 2,013 | 74.82 | 56.3 | | | |
| 9 | 2,646 | 175.21 | 100.3 | | | |
| 10 | 3,352 | 114.46 | 51.7 | | | |
| 11 | 3,882 | 91.63 | 35.8 | | | |
| 12 | 5,095 | 155.34 | 46.2 | | | |
| 13 | 6,345 | 234.28 | 55.9 | | | |
| 14 | 7,809 | 111.99 | 21.7 | | | |
| 15 | 8,734 | 144.40 | 25.0 | | | |
| 16 | 10,380 | 75.00 | 10.9 | Upper Marker | | |
| | | | | | | |
| 17 | 11,614 | 0.00 | 0.0 | | | |
| 18 | 12,694 | 0.00 | 0.0 | | | |
| 19 | 13,517 | 0.00 | 0.0 | | | |
| 20 | 14,803 | 0.00 | 0.0 | | | |
| 21 | 16,397 | 0.00 | 0.0 | | | |
| | | | | | | |

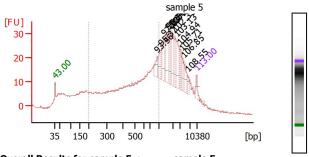


Conc. Molarit Co

Assay Class: High Sensitivity DNA Assay Created: 1/17/2014 2:18:46 PM Data Path: C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad Modified: 1/17/2014 3:00:07 PM

Electropherogram Summary Continued ...

| Peak tal | ole for sar | nple 4 : | sample 4 | |
|----------|-------------|--------------------|-------------------|---------------|
| Peak | Size [bp] |] Conc. [pg/µl] | Molarity [pmol/l] | Observation s |
| 1 • | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 153 | 236.26 | 2,333.4 | |
| 3 | 883 | 58.13 | 99.8 | |
| 4 | 930 | 73.03 | 119.0 | |
| 5 | 1,014 | 62.94 | 94.1 | |
| 6 | 1,193 | 81.91 | 104.0 | |
| 7 | 1,313 | 51.32 | 59.2 | |
| 8 | 1,380 | 57.05 | 62.6 | |
| 9 | 10,380 | 75.00 | 10.9 | Upper Marker |



Overall Results for sample 5 : <u>sample 5</u>

 Number of peaks found:
 12

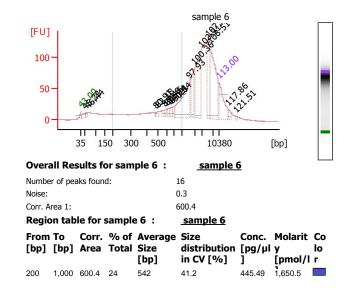
 Noise:
 0.3

 Corr. Area 1:
 442.0

Region table for sample 5 : $\underline{\text{sample 5}}$ From To Corr. % of Average Size

[bp] [bp] Area Total Size | distribution [pg/μl y lo in CV [%]] | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 4 | 8 | 5 | 5 | 5 | 3 | 2 | 3 | 4 | ■

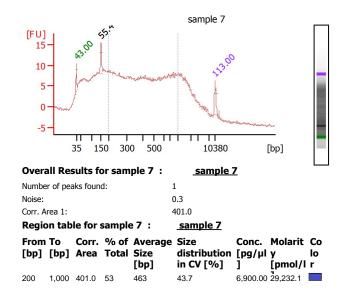
| Peak ta | ble for sa | mple 5 : | sample 5 | |
|---------|------------|--------------------|----------------------|---------------|
| Peak | Size [bp |] Conc. [pg/µl] | Molarity [pmol/l] | Observation s |
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 950 | 129.55 | 206.6 | |
| 3 | 1,163 | 178.78 | 232.9 | |
| 4 | 1,414 | 257.46 | 276.0 | |
| 5 | 1,702 | 343.38 | 305.7 | |
| 6 | 1,778 | 198.73 | 169.4 | |
| 7 | 1,975 | 285.46 | 219.0 | |
| 8 | 2,359 | 147.29 | 94.6 | |
| 9 | 2,577 | 206.20 | 121.2 | |
| 10 | 3,239 | 98.62 | 46.1 | |
| 11 | 3,840 | 120.07 | 47.4 | |
| 12 | 4,721 | 148.50 | 47.7 | |
| 13 | 6,044 | 67.07 | 16.8 | |
| 14 | 10,380 | 75.00 | 10.9 | Upper Marker |

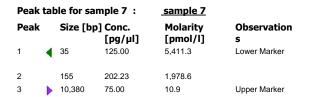


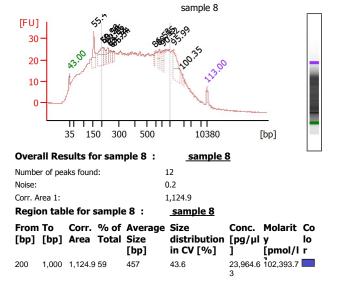
Assay Class: High Sensitivity DNA Assay Created: 1/17/2014 2:18:46 PM Data Path: C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad Modified: 1/17/2014 3:00:07 PM

Electropherogram Summary Continued ...

| Peak ta | ble for sa | mple 6 : | sample 6 | |
|---------|------------|--------------------|----------------------|---------------|
| Peak | Size [bp |] Conc. [pg/μl] | Molarity [pmol/l] | Observation s |
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 0 | 50 | 07.44 | 000.7 | |
| 2 | 50 | 27.44 | 833.7 | |
| 3 | 61 | 17.56 | 433.5 | |
| 4 | 476 | 3.88 | 12.3 | |
| 5 | 498 | 7.48 | 22.8 | |
| 6 | 567 | 11.36 | 30.3 | |
| 7 | 590 | 7.03 | 18.0 | |
| 8 | 633 | 9.24 | 22.1 | |
| 9 | 673 | 15.25 | 34.4 | |
| 10 | 740 | 14.63 | 29.9 | |
| 11 | 1,539 | 140.39 | 138.2 | |
| 12 | 1,896 | 60.43 | 48.3 | |
| 13 | 2,797 | 165.95 | 89.9 | |
| 14 | 5,105 | 76.31 | 22.6 | |
| 15 | 6,007 | 198.85 | 50.2 | |
| 16 | 10,380 | 75.00 | 10.9 | Upper Marker |
| | | | | |
| 17 | 15,497 | 0.00 | 0.0 | |
| 18 | 19,335 | 0.00 | 0.0 | |
| | | | | |



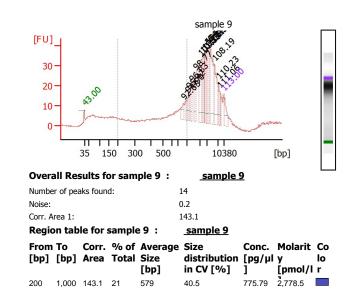




Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad Modified: 1/17/2014 3:00:07 PM

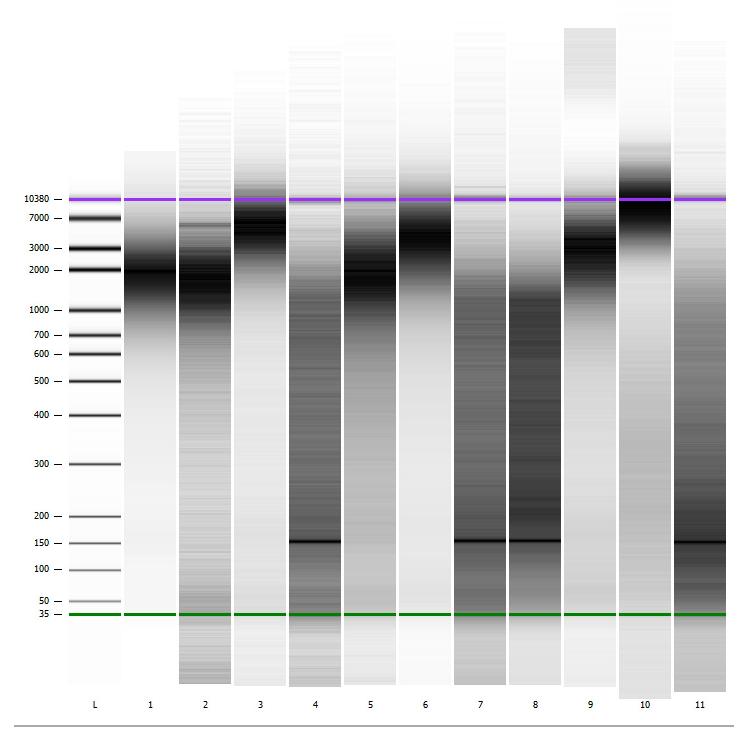
Electropherogram Summary Continued ...

| Peak tal | ble for saı | mple 8 : | sample 8 | |
|----------|-------------|--------------------|----------------------|---------------|
| Peak | Size [bp |] Conc. [pg/µl] | Molarity [pmol/l] | Observation s |
| 1 4 | 35 | 125.00 | 5,411.3 | Lower Marker |
| | | | | |
| 2 | 155 | 809.37 | 7,931.2 | |
| 3 | 205 | 873.86 | 6,455.1 | |
| 4 | 212 | 332.47 | 2,379.4 | |
| 5 | 235 | 368.65 | 2,381.8 | |
| 6 | 245 | 178.04 | 1,099.7 | |
| 7 | 259 | 129.17 | 755.3 | |
| 8 | 268 | 117.13 | 661.9 | |
| 9 | 592 | 108.55 | 277.9 | |
| 10 | 652 | 152.71 | 354.9 | |
| 11 | 732 | 244.86 | 506.9 | |
| 12 | 1,254 | 610.32 | 737.3 | |
| 13 | 1,894 | 67.81 | 54.3 | |
| 14 | 10,380 | 75.00 | 10.9 | Upper Marker |



| Peak tal | ole for sai | mple 9 : | sample 9 | |
|----------|-------------|--------------------|----------------------|---------------|
| Peak | Size [bp |] Conc. [pg/µl] | Molarity [pmol/l] | Observation s |
| 1 4 | 35 | 125.00 | 5,411.3 | Lower Marker |
| | | | | |
| 2 | 885 | 56.57 | 96.9 | |
| 3 | 1,094 | 67.39 | 93.3 | |
| 4 | 1,171 | 40.98 | 53.0 | |
| 5 | 1,378 | 76.68 | 84.3 | |
| 6 | 1,662 | 114.48 | 104.4 | |
| 7 | 2,073 | 153.32 | 112.1 | |
| 8 | 2,368 | 91.21 | 58.4 | |
| 9 | 2,633 | 106.74 | 61.4 | |
| 10 | 2,883 | 126.50 | 66.5 | |
| 11 | 3,042 | 120.88 | 60.2 | |
| 12 | 4,299 | 255.82 | 90.2 | |
| 13 | 5,759 | 175.02 | 46.0 | |
| 14 | 7,463 | 55.01 | 11.2 | |
| 15 | 8,344 | 36.72 | 6.7 | |
| 16 | 10,380 | 75.00 | 10.9 | Upper Marker |

| Assay Class: Data Path: Gel Image | 2 (3 2 2 2 2) | | | | | | | | | Created: lodified: | | 2:18:46 PM 3:00:07 PM |
|--|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------------------|----------|--------------------------|
| [bp] | Ladder | ample 1 | ample 2 | ample 3 | ample 4 | ample 5 | ample 6 | ample 7 | ample 8 | ample 9 | ample 10 | ample 11 |

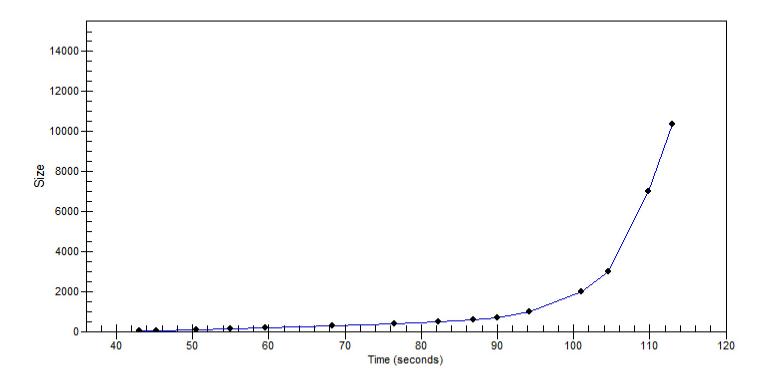


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad

Created: 1/17/2014 2:18:46 PM Modified: 1/17/2014 3:00:07 PM

Curves

Standard Curve



Printed:

1/17/2014 3:04:18 PM

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad C:\...gh Sensitivity DNA Assay_DE04103186_2014-01-17_14-18-46.xad Modified: 1/17/2014 2:18:46 PM Modified: 1/17/2014 3:00:07 PM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|--|--------|------------|----------|--------------|-------------------------|--|--------|----------------|
| Run ended on port 4 (Number of wells acquired: 12) | | Instrument | Run | | 1/17/2014 3:00:05 PM | (GMT05:00) Eastern Standard Time | Divino | Bioanalyzer-HP |
| Run started on port 4 (File: C:\Program Files (x86)\Agilent\2: 00 bioanalyzer\210 0 expert\Data\20: 4-01-17\2100 expert High |) | Instrument | Run | | 1/17/2014 2:18:51 PM | (GMT05:00) Eastern Standard Time | Divino | Bioanalyzer-HP |
| Sensitivity DNA Assay_DE04103 186_2014-01-1 _14-18-46.xad) | 3 7 | | | | | | | |
| Product Number: G2939A | r | Instrument | Run | | 1/17/2014 2:18:51 PM | (GMT05:00) Eastern Standard Time | Divino | Bioanalyzer-HP |
| Name : | | Instrument | Run | | 1/17/2014 2:18:51 PM | (GMT05:00) Eastern Standard Time | Divino | Bioanalyzer-HP |
| Vendor : Agilent Technologies | t | Instrument | Run | | 1/17/2014 2:18:51 PM | (GMT05:00) Eastern Standard Time | Divino | Bioanalyzer-HP |
| Serial# : DE04103186 | | Instrument | Run | | 1/17/2014 2:18:51 PM | (GMT05:00) Eastern Standard Time | Divino | Bioanalyzer-HP |
| Firmware : C.01.069 | | Instrument | Run | | 1/17/2014 2:18:51 PM | (GMT05:00) Eastern Standard Time | Divino | Bioanalyzer-HP |
| Cartridge : Electrode | | Instrument | Run | | 1/17/2014 2:18:51 PM | (GMT05:00) Eastern Standard Time | Divino | Bioanalyzer-HP |