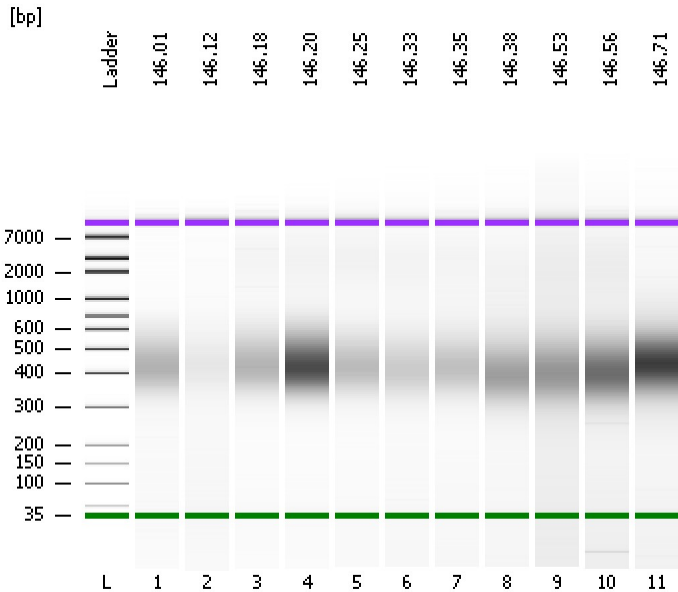


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
Modified: 9/4/2014 3:15:02 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

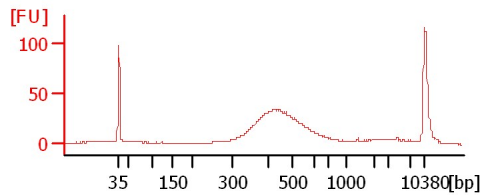
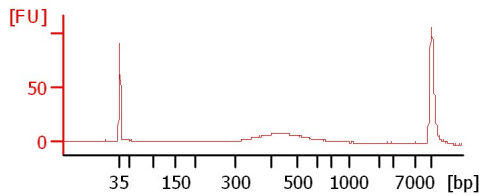
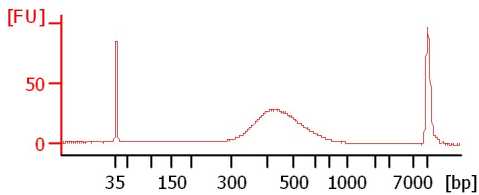
Chip Information:

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

**146.01**

**146.12**

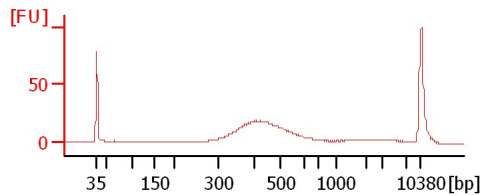
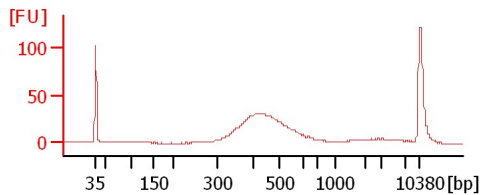
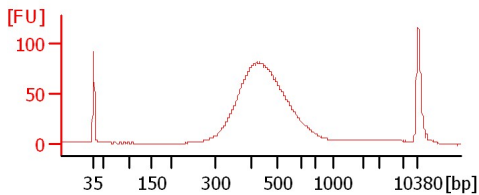
**146.18**



**146.20**

**146.25**

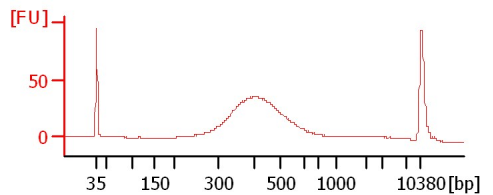
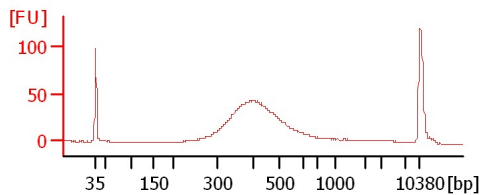
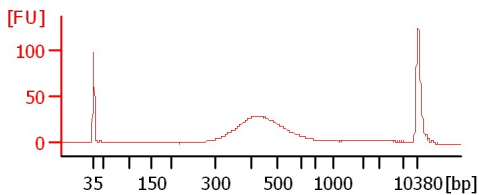
**146.33**



**146.35**

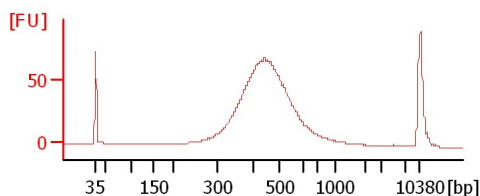
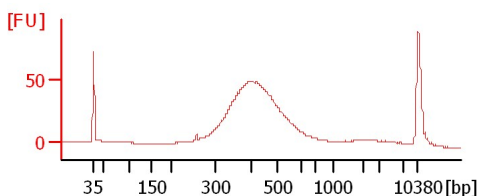
**146.38**

**146.53**



**146.56**

**146.71**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
146.01		<input type="checkbox"/>	✓			
146.12		<input type="checkbox"/>	✓			
146.18		<input type="checkbox"/>	✓			
146.20		<input type="checkbox"/>	✓			
146.25		<input type="checkbox"/>	✓			
146.33		<input type="checkbox"/>	✓			
146.35		<input type="checkbox"/>	✓			
146.38		<input type="checkbox"/>	✓			
146.53		<input type="checkbox"/>	✓			
146.56		<input type="checkbox"/>	✓			
146.71		<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\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
Modified: 9/4/2014 3:15:02 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

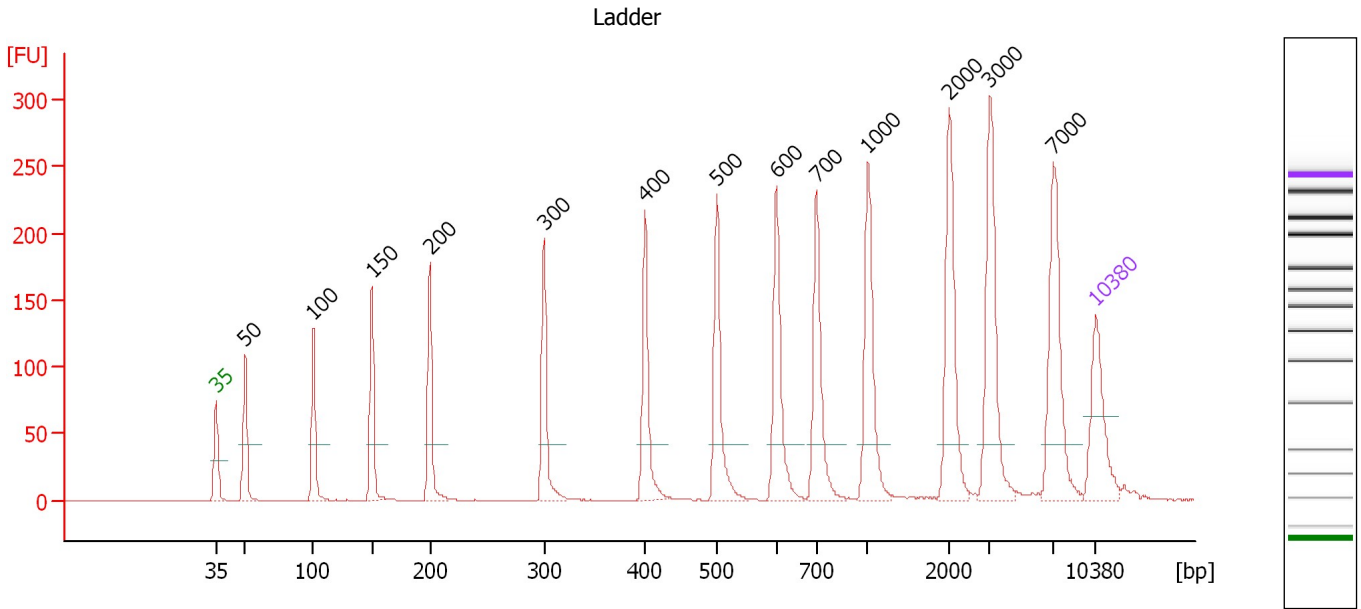
**Ladder**

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:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

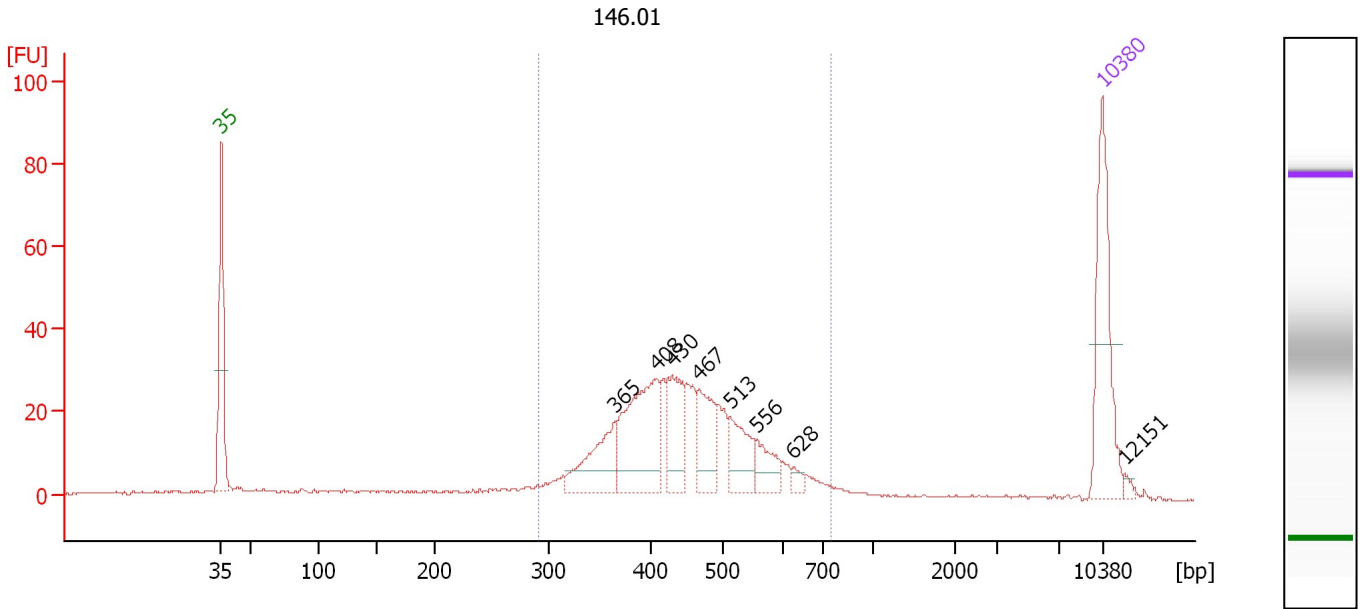
**Peak table for Ladder**

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:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 146.01**

Number of peaks found: 8                      Corr. Area 1: 465.5  
 Noise: 0.3

**Peak table for sample 1 : 146.01**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	365	59.53	247.4	
3	408	109.64	407.4	
4	430	56.08	197.6	
5	467	48.73	158.1	
6	513	39.20	115.8	
7	556	24.55	66.9	
8	628	5.83	14.0	
9	10,380	75.00	10.9	Upper Marker
10	12,151	0.00	0.0	

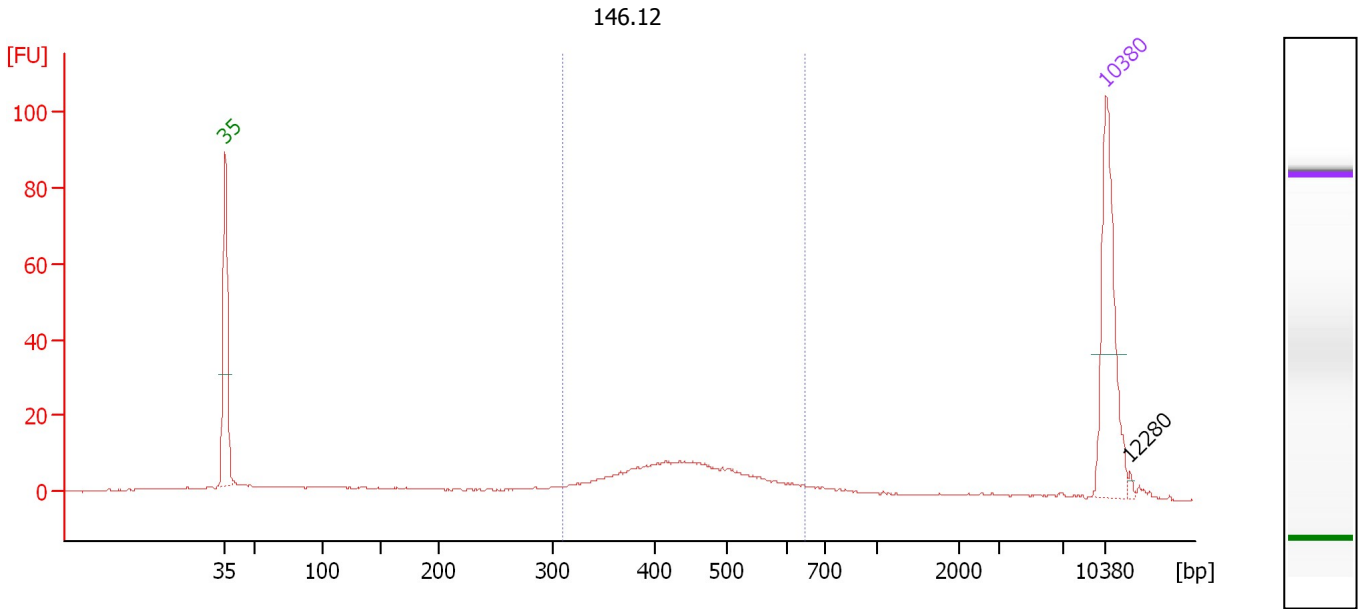
**Region table for sample 1 : 146.01**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
290	756	465.5	87	451	18.8	476.45	1,673.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 146.12**

Number of peaks found: 1                      Corr. Area 1: 154.0  
 Noise: 0.1

**Peak table for sample 2 : 146.12**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,280	0.00	0.0	

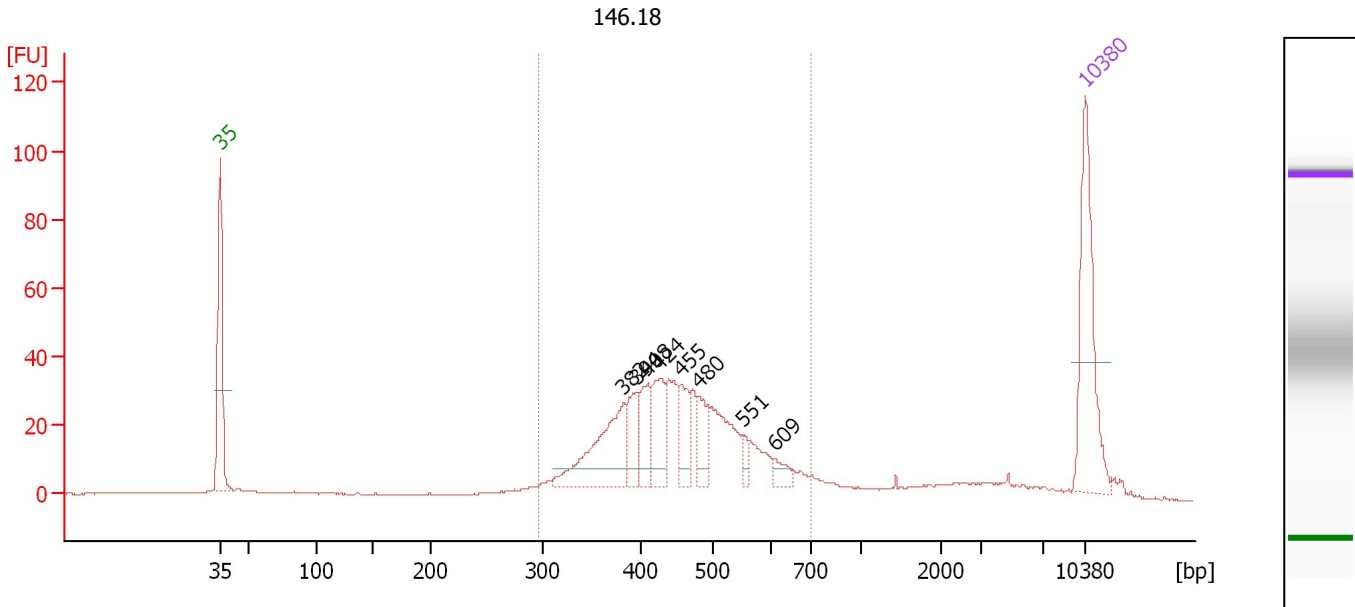
**Region table for sample 2 : 146.12**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
310	647	154.0	52	449	17.7	142.93	502.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 146.18**

Number of peaks found: 8                      Corr. Area 1: 555.8  
 Noise: 0.1

**Peak table for sample 3 : 146.18**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	382	82.44	327.1	
3	394	30.65	117.8	
4	408	30.18	112.2	
5	424	40.62	145.1	
6	455	28.71	95.6	
7	480	23.48	74.1	
8	551	7.97	21.9	
9	609	9.04	22.5	
10	10,380	75.00	10.9	Upper Marker

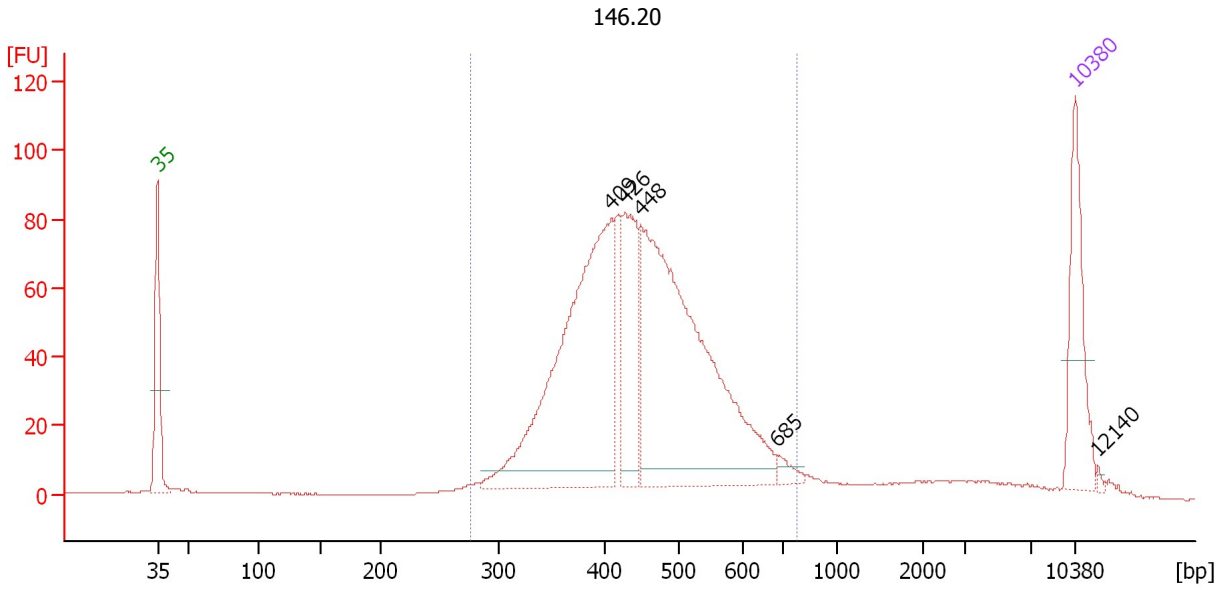
**Region table for sample 3 : 146.18**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
297	705	555.8	80	456	18.6	478.51	1,663.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 146.20**

Number of peaks found: 5                      Corr. Area 1: 1,318.4  
 Noise: 0.1

**Peak table for sample 4 : 146.20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	409	437.22	1,618.2	
3	426	129.79	461.2	
4	448	496.41	1,679.0	
5	685	11.84	26.2	
6	10,380	75.00	10.9	Upper Marker
7	12,140	0.00	0.0	

**Region table for sample 4 : 146.20**

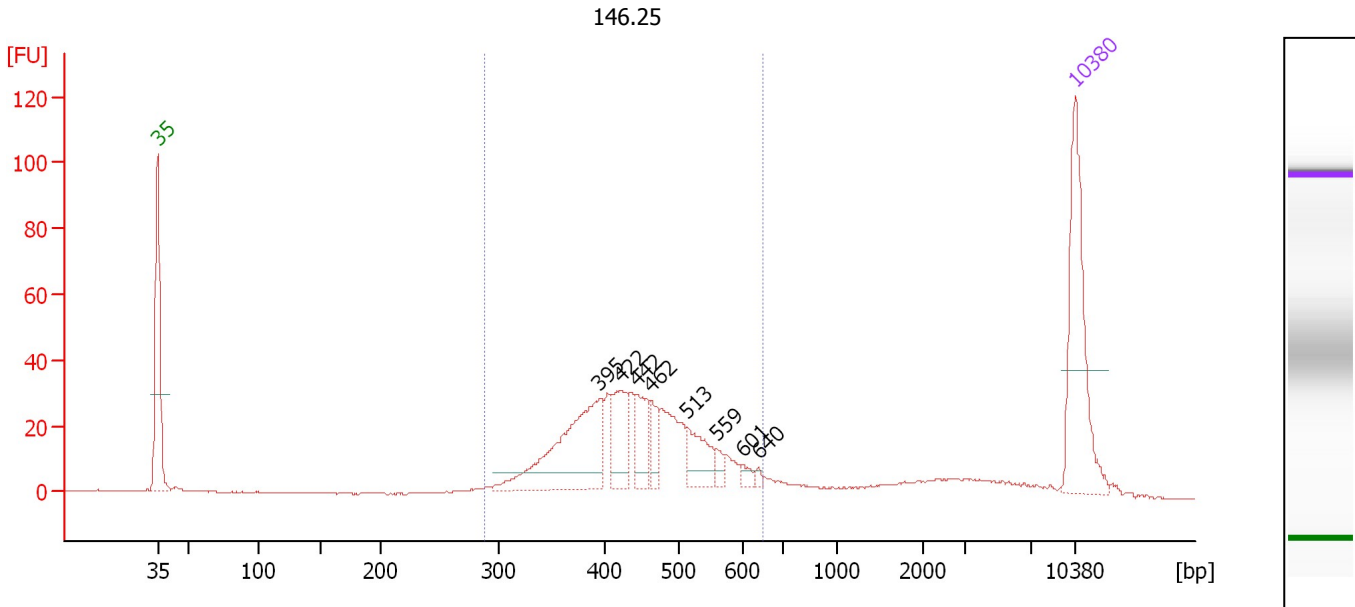
From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
276	775	1,318.4	89	452	19.2	1,224.82	4,303.9	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 146.25**

Number of peaks found: 8                      Corr. Area 1: 494.3  
 Noise: 0.1

**Peak table for sample 5 : 146.25**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	395	111.97	430.0	
3	422	38.48	138.1	
4	442	29.55	101.3	
5	462	17.71	58.0	
6	513	29.54	87.3	
7	559	5.87	15.9	
8	601	4.72	11.9	
9	640	2.48	5.9	
10	10,380	75.00	10.9	Upper Marker

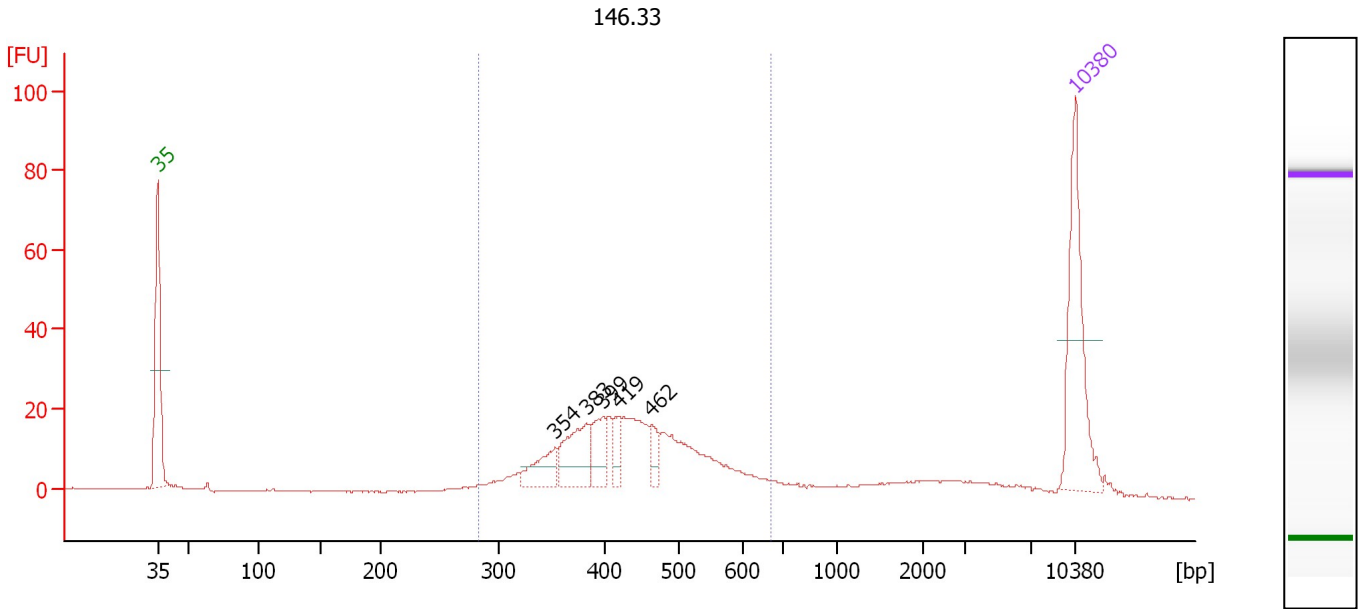
**Region table for sample 5 : 146.25**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
287	651	494.3	77	444	17.4	380.99	1,351.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 146.33**

Number of peaks found: 5                      Corr. Area 1: 318.6  
 Noise: 0.2

**Peak table for sample 6 : 146.33**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	354	29.29	125.5	
3	383	47.39	187.7	
4	399	26.35	100.1	
5	419	15.07	54.5	
6	462	13.01	42.7	
7	10,380	75.00	10.9	Upper Marker

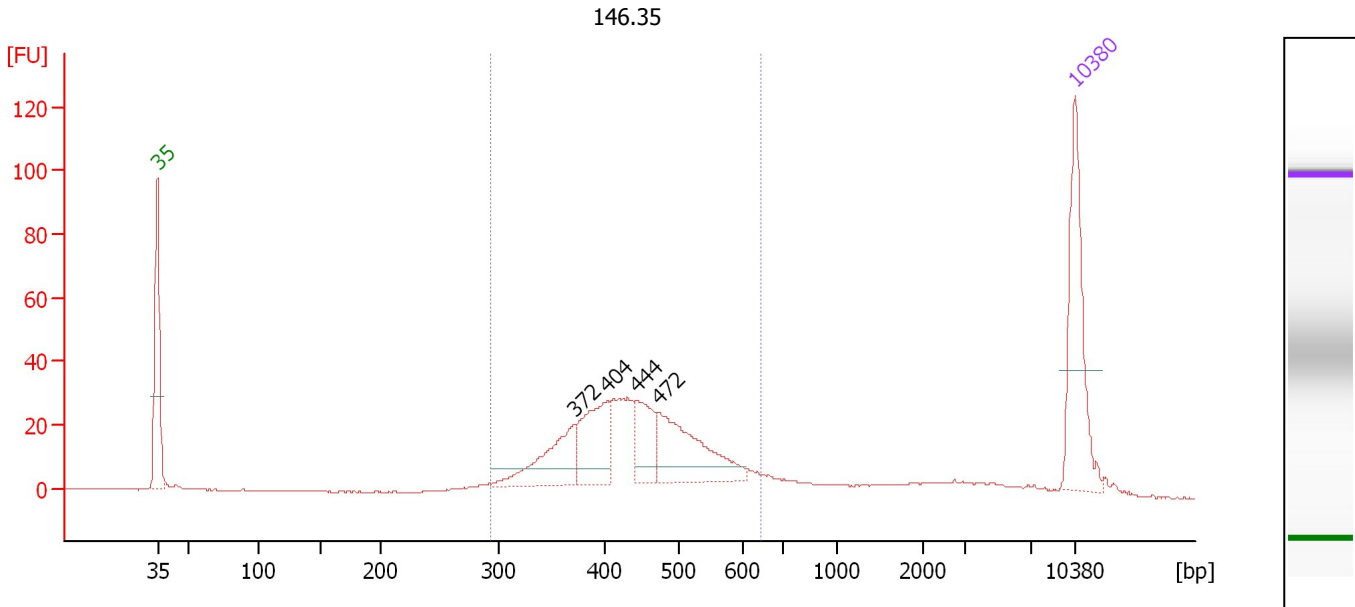
**Region table for sample 6 : 146.33**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
283	669	318.6	79	439	18.4	331.01	1,193.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 146.35**

Number of peaks found: 4                      Corr. Area 1: 468.4  
 Noise: 0.2

**Peak table for sample 7 : 146.35**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	372	62.05	252.7	
3	404	64.13	240.6	
4	444	41.57	142.0	
5	472	85.89	275.7	
6	10,380	75.00	10.9	Upper Marker

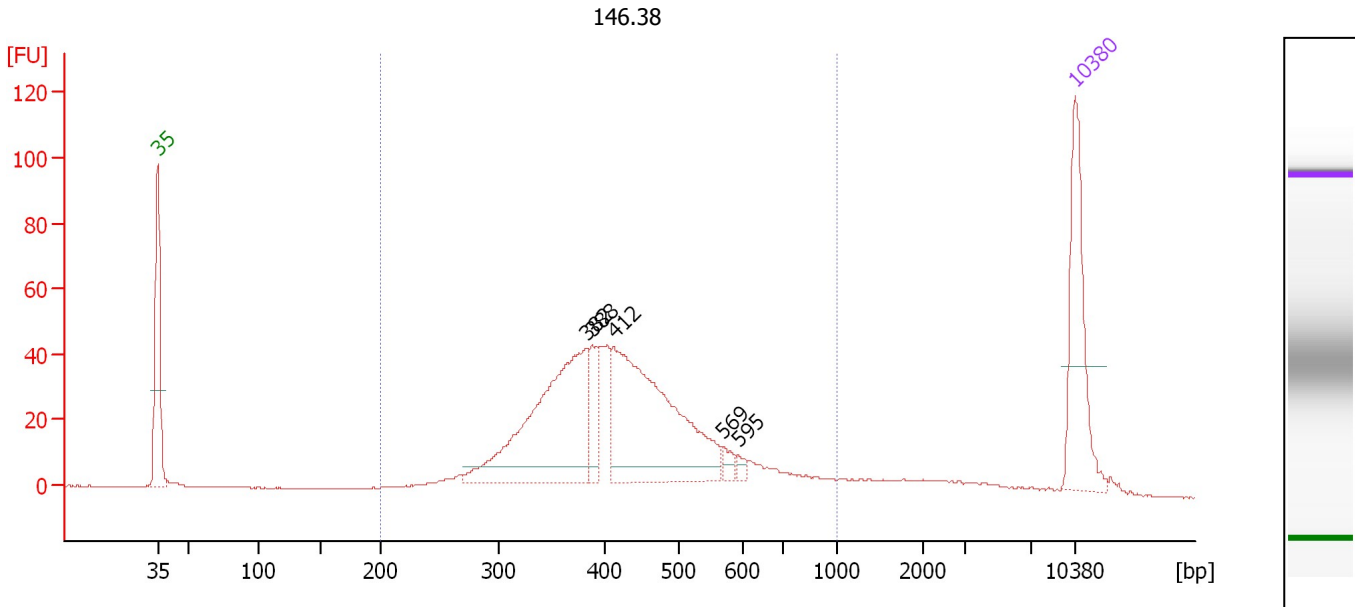
**Region table for sample 7 : 146.35**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
293	648	468.4	78	442	17.4	386.95	1,378.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 146.38**

Number of peaks found: 5                      Corr. Area 1: 815.5  
 Noise: 0.1

**Peak table for sample 8 : 146.38**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	382	216.84	859.0	
3	388	34.32	133.9	
4	412	228.49	839.7	
5	569	8.13	21.6	
6	595	5.59	14.2	
7	10,380	75.00	10.9	Upper Marker

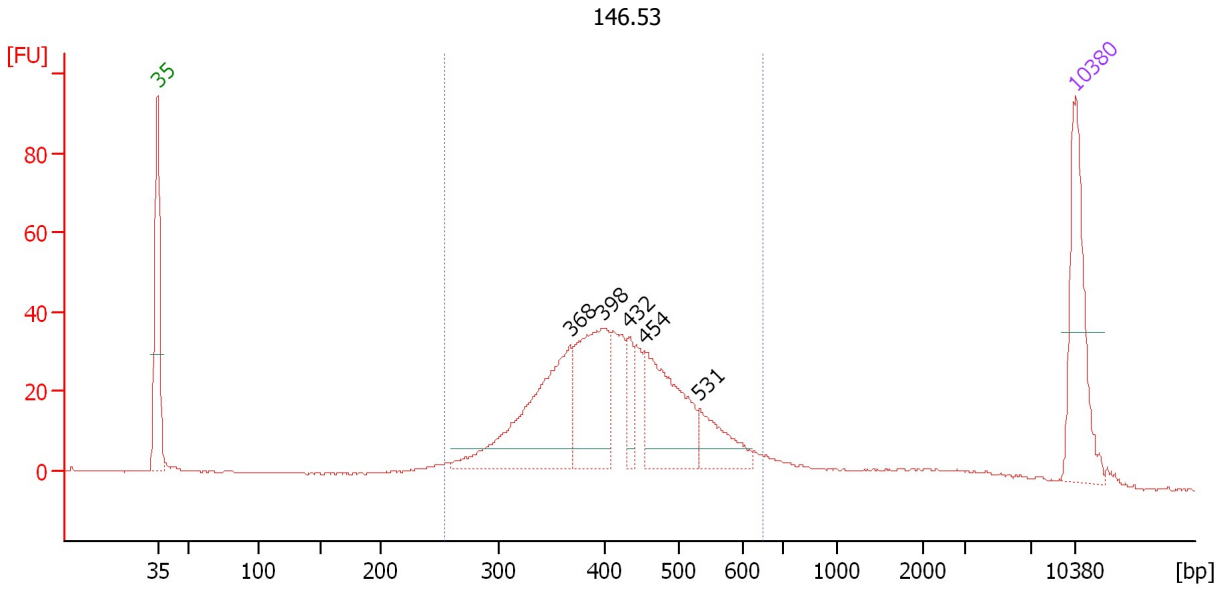
**Region table for sample 8 : 146.38**

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	815.5	89	437	27.4	679.48	2,563.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 146.53**

Number of peaks found: 5                      Corr. Area 1: 694.7  
 Noise: 0.1

**Peak table for sample 9 : 146.53**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	368	168.53	694.5	
3	398	119.81	456.6	
4	432	26.41	92.6	
5	454	109.18	364.1	
6	531	43.04	122.7	
7	10,380	75.00	10.9	Upper Marker

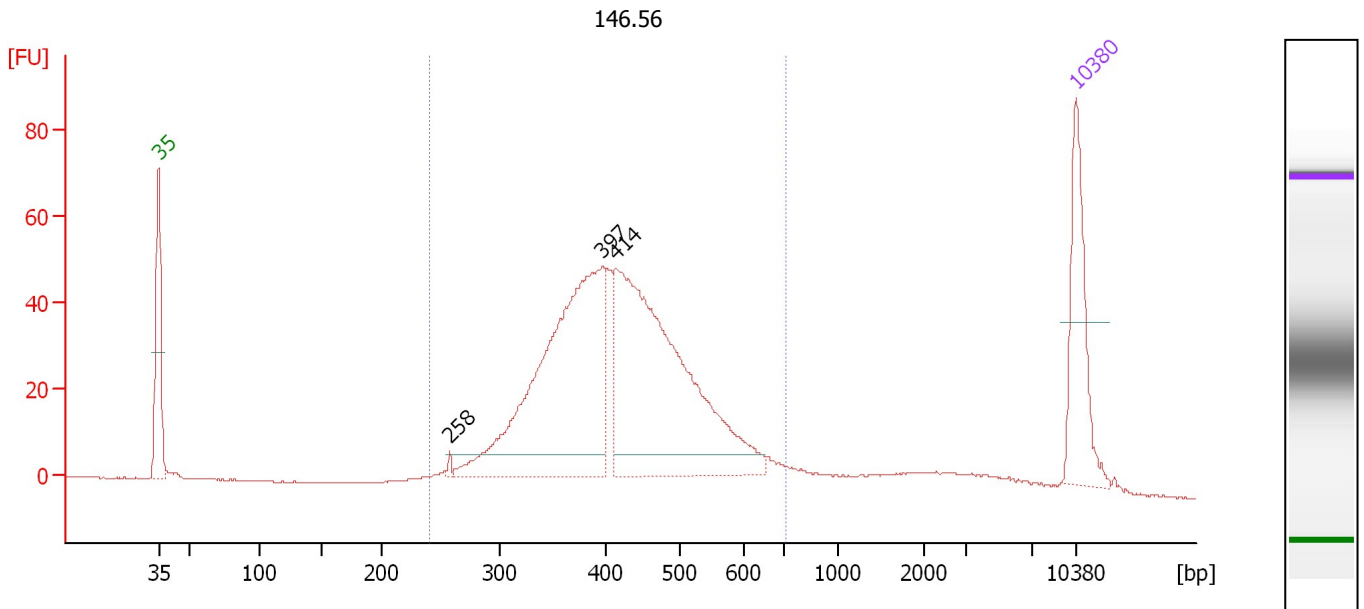
**Region table for sample 9 : 146.53**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
254	653	694.7	77	422	19.9	687.52	2,610.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 146.56**

Number of peaks found: 3                      Corr. Area 1: 861.2  
 Noise: 0.1

**Peak table for sample 10 : 146.56**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	258	3.11	18.3	
3	397	375.89	1,435.0	
4	414	400.54	1,466.3	
5	10,380	75.00	10.9	Upper Marker

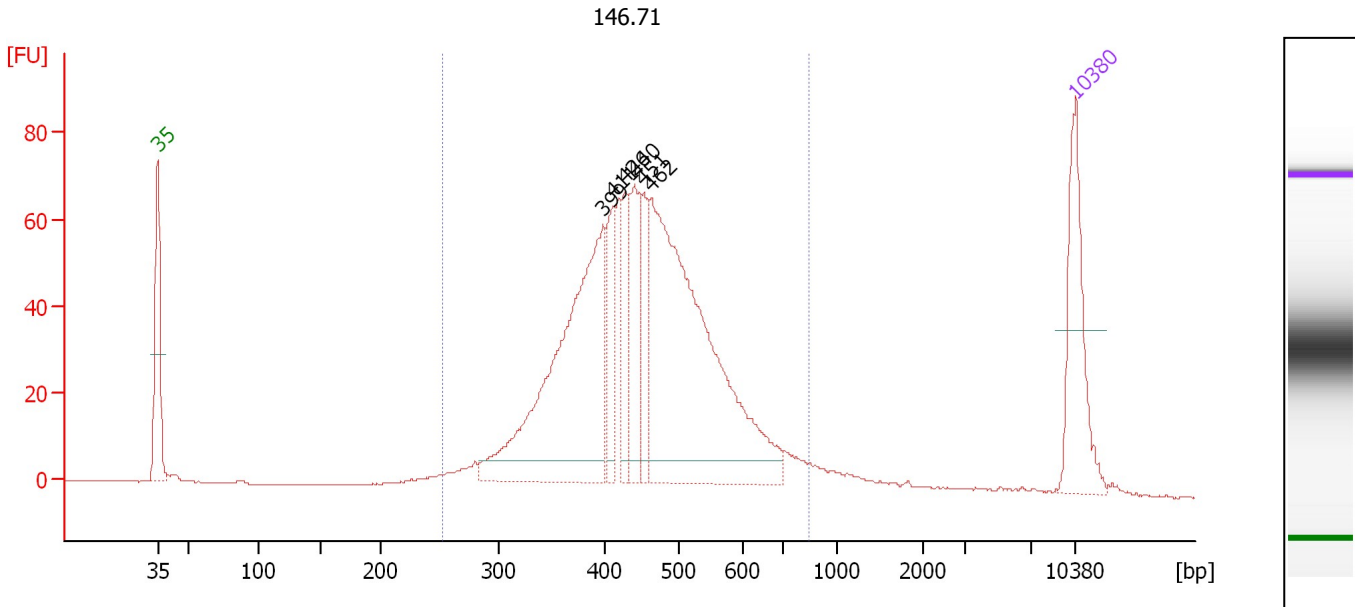
**Region table for sample 10 : 146.56**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
240	706	861.2	87	426	20.2	943.46	3,548.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
 Modified: 9/4/2014 3:15:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 146.71**

Number of peaks found: 6                      Corr. Area 1: 1,083.4  
 Noise: 0.1

**Peak table for sample 11 : 146.71**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	399	325.83	1,238.6	
3	411	54.05	199.5	
4	426	53.05	188.5	
5	440	69.72	240.2	
6	451	51.98	174.8	
7	462	420.26	1,379.6	
8	10,380	75.00	10.9	Upper Marker

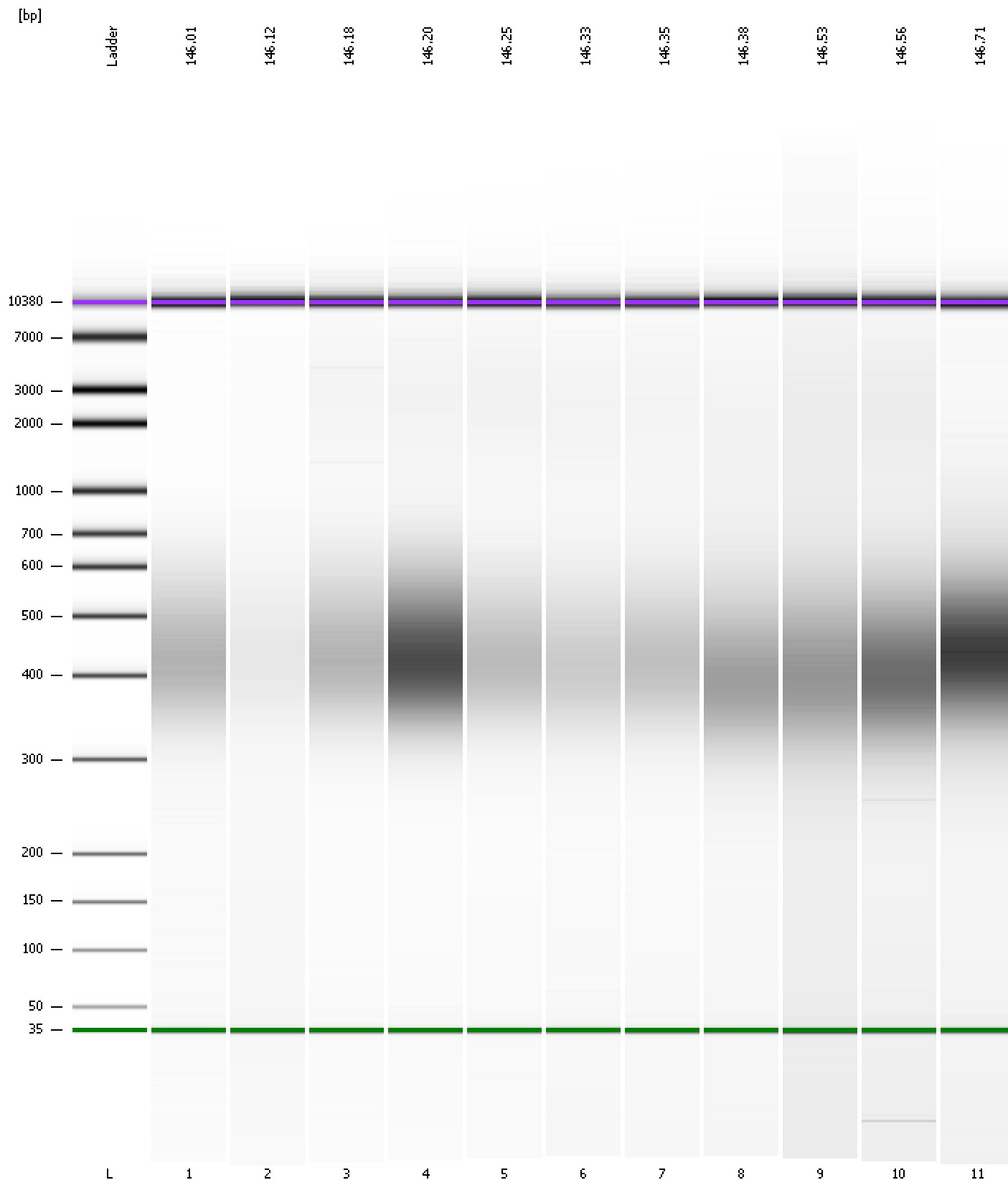
**Region table for sample 11 : 146.71**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
252	849	1,083.4	94	454	20.8	1,103.33	3,890.9	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad

Created: 9/4/2014 2:33:07 PM  
Modified: 9/4/2014 3:15:02 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay Created: 9/4/2014 2:33:07 PM  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-04\2014-09-04\_006.xad Modified: 9/4/2014 3:15:02 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		9/4/2014 3:13:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-09-04\2014-09-04_006.xad)		Instrument	Run		9/4/2014 2:33:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/4/2014 2:33:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/4/2014 2:33:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/4/2014 2:33:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/4/2014 2:33:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/4/2014 2:33:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/4/2014 2:33:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1