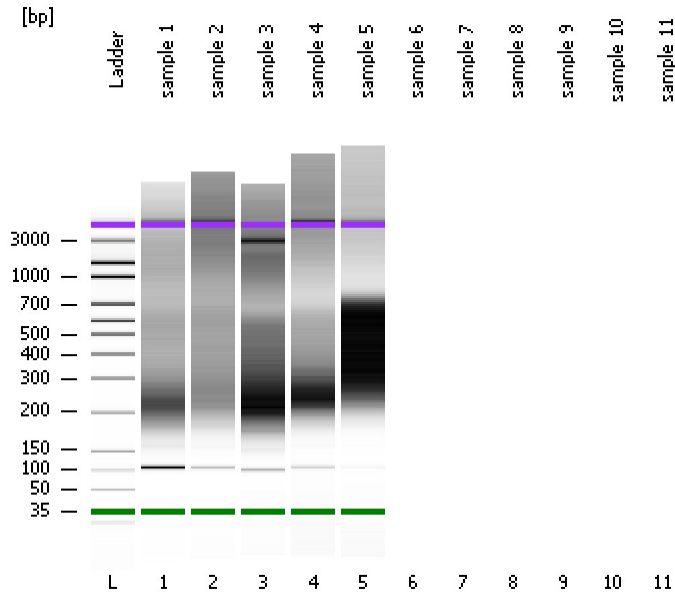


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
Modified: 5/15/2012 10:50:24 AM

### Electrophoresis File Run Summary



#### Instrument Information:

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

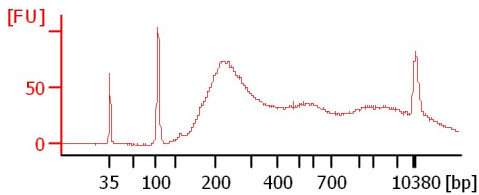
#### Assay Information:

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

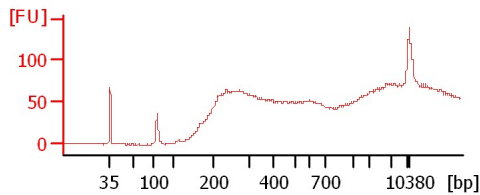
#### Chip Information:

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

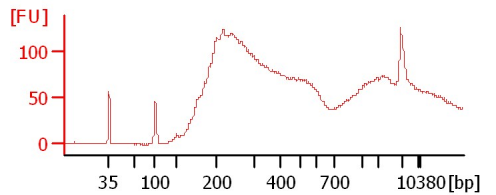
sample 1



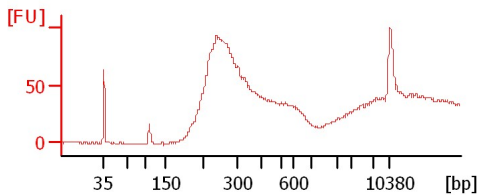
sample 2



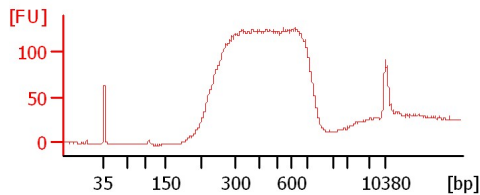
sample 3



sample 4



sample 5



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
Modified: 5/15/2012 10:50:24 AM

**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\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
Modified: 5/15/2012 10:50:24 AM

**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

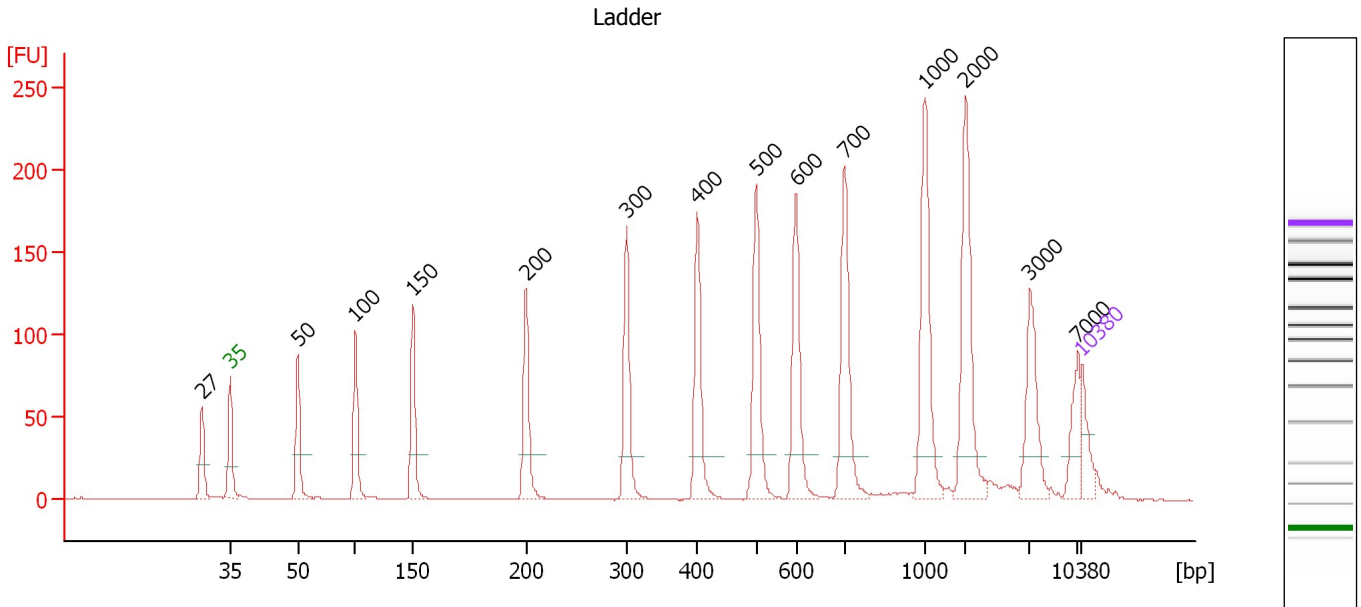
**Ladder**

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\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
 Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

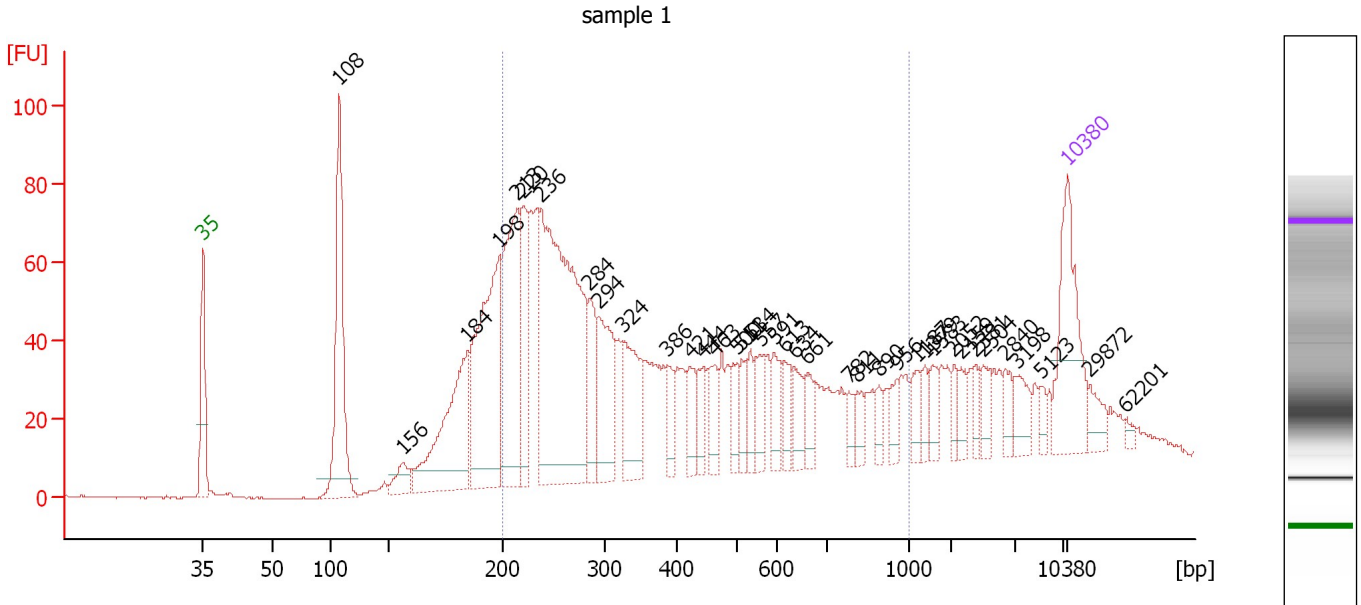
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	27	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	50	150.00	4,545.5	Ladder Peak
4	100	150.00	2,272.7	Ladder Peak
5	150	150.00	1,515.2	Ladder Peak
6	200	150.00	1,136.4	Ladder Peak
7	300	150.00	757.6	Ladder Peak
8	400	150.00	568.2	Ladder Peak
9	500	150.00	454.5	Ladder Peak
10	600	150.00	378.8	Ladder Peak
11	700	150.00	324.7	Ladder Peak
12	1,000	150.00	227.3	Ladder Peak
13	2,000	150.00	113.6	Ladder Peak
14	3,000	150.00	75.8	Ladder Peak
15	7,000	150.00	32.5	Ladder Peak
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
 Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 1**

Number of peaks found: 38      Corr. Area 1: 1,474.3  
 Noise: 0.3

**Peak table for sample 1 : sample 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	108	197.03	2,766.9	
3	156	25.08	242.9	
4	184	175.85	1,445.8	
5	198	229.91	1,757.4	
6	213	187.42	1,331.6	
7	220	91.36	630.5	
8	236	407.98	2,616.0	
9	284	53.32	284.0	
10	294	93.77	483.4	
11	324	83.78	391.8	
12	386	23.62	92.7	
13	421	27.99	100.8	
14	444	21.76	74.2	
15	463	27.56	90.2	
16	500	21.55	65.3	
17	511	18.76	55.6	
18	534	20.35	57.8	
19	557	25.36	69.0	
20	591	26.26	67.3	
21	613	18.33	45.3	
22	634	22.29	53.3	
23	661	20.14	46.2	
24	782	11.81	22.9	
25	811	13.94	26.0	
26	890	11.52	19.6	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad


Created: 5/15/2012 10:26:10 AM  
 Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary Continued ...**

**... Peak table for sample 1 : sample 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	956	12.44	19.7	
28	1,187	17.89	22.8	
29	1,379	10.58	11.6	
30	1,583	14.48	13.9	
31	2,052	9.59	7.1	
32	2,159	12.11	8.5	
33	2,381	10.14	6.5	
34	2,504	12.71	7.7	
35	2,840	12.27	6.5	
36	3,198	19.48	9.2	
37	5,123	7.61	2.3	
38	10,380	75.00	10.9	Upper Marker
39	29,872	0.00	0.0	
40	62,201	0.00	0.0	

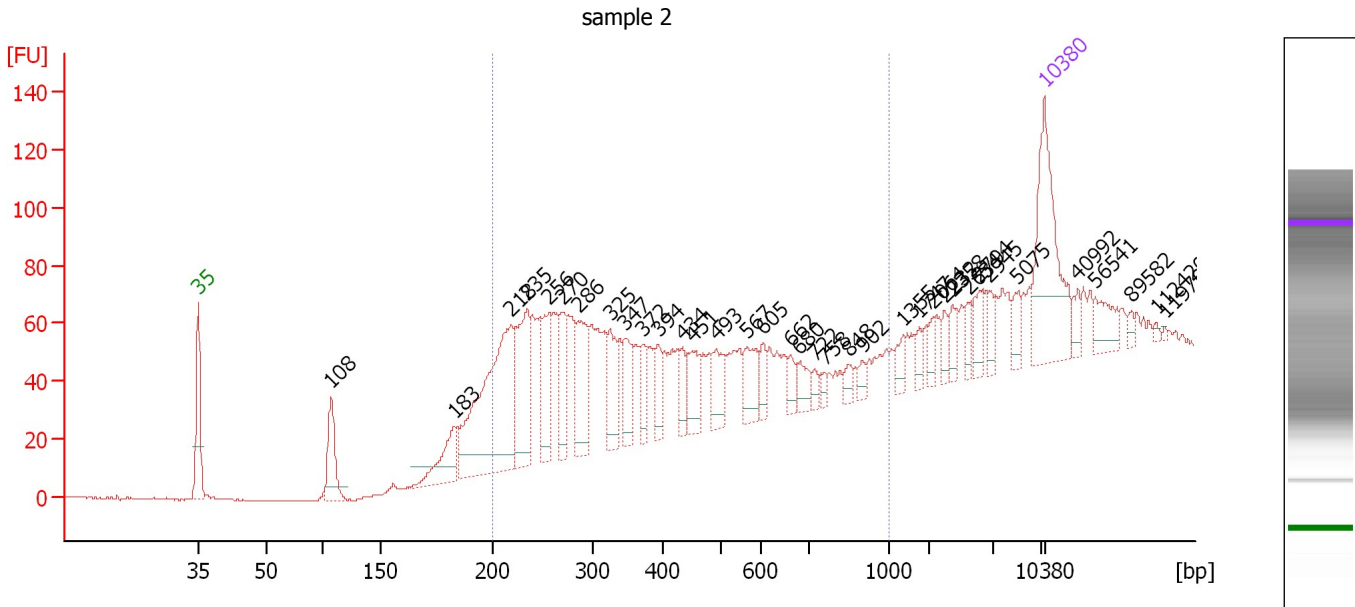
**Region table for sample 1 : sample 1**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	7,531.6	418	1,571.47	1,000	1,474.3	66	50.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
 Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 2**

Number of peaks found: 36                      Corr. Area 1: 962.8  
 Noise: 0.3

**Peak table for sample 2 : sample 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	108	48.42	681.3	
3	183	44.40	367.0	
4	218	199.10	1,380.9	
5	235	85.01	548.0	
6	256	51.23	302.7	
7	270	44.01	246.6	
8	286	56.72	300.0	
9	325	35.85	166.9	
10	347	30.24	132.2	
11	372	19.70	80.3	
12	394	20.41	78.6	
13	434	14.69	51.3	
14	451	26.70	89.7	
15	493	24.25	74.5	
16	567	26.28	70.2	
17	605	11.34	28.4	
18	662	10.43	23.9	
19	680	13.70	30.5	
20	722	7.00	14.7	
21	758	5.15	10.3	
22	848	6.48	11.6	
23	902	5.72	9.6	
24	1,355	8.74	9.8	
25	1,747	7.07	6.1	
26	2,064	7.78	5.7	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad


Created: 5/15/2012 10:26:10 AM  
 Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary Continued ...**

**... Peak table for sample 2 : sample 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,232	8.03	5.4	
28	2,358	10.09	6.5	
29	2,634	7.49	4.3	
30	2,794	11.81	6.4	
31	2,945	8.60	4.4	
32	5,075	10.03	3.0	
33	10,380	75.00	10.9	Upper Marker
34	40,992	0.00	0.0	
35	56,541	0.00	0.0	
36	89,582	0.00	0.0	
37	112,420	0.00	0.0	
38	119,708	0.00	0.0	

**Region table for sample 2 : sample 2**

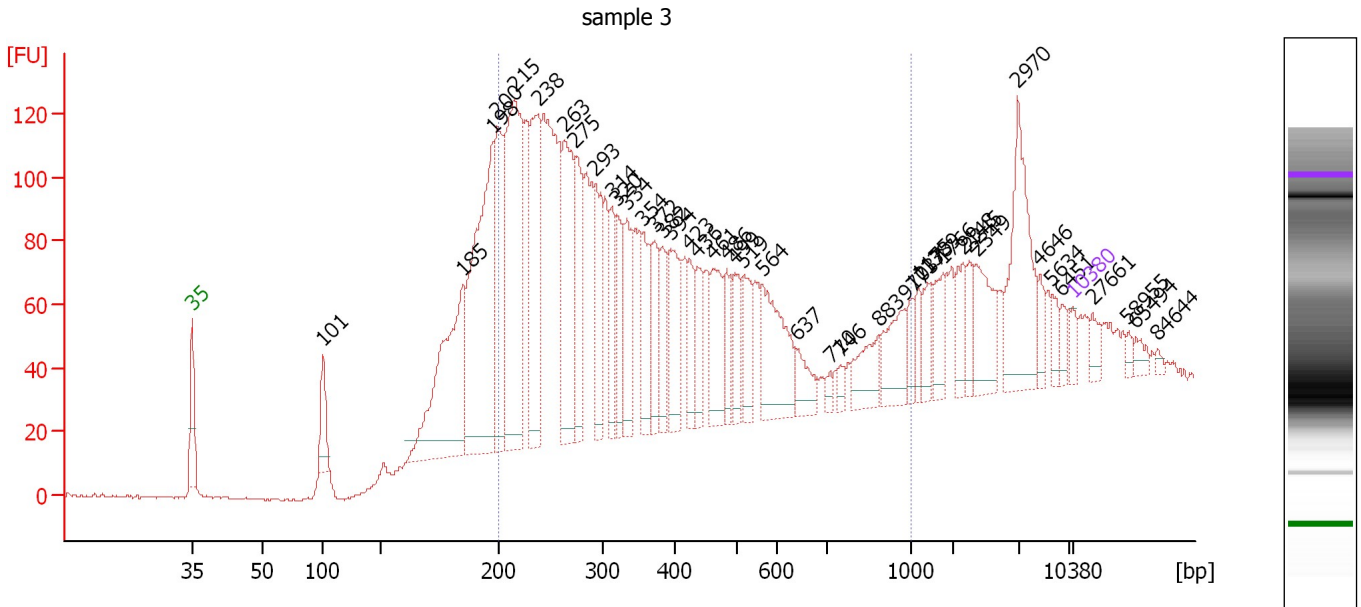
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	3,497.7	392	729.41	1,000	962.8	70	45.7	



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
 Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 3**

Number of peaks found: 43                      Corr. Area 1: 2,470.5  
 Noise: 0.5

**Peak table for sample 3 : sample 3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	101	360.42	5,411.1	
3	185	1,817.47	14,903.8	
4	198	2,393.44	18,336.4	
5	200	1,065.88	8,091.1	
6	215	2,212.49	15,588.9	
7	238	1,225.66	7,796.4	
8	263	1,175.49	6,761.6	
9	275	732.44	4,039.5	
10	293	663.36	3,427.5	
11	314	421.85	2,037.3	
12	320	428.51	2,027.2	
13	334	518.88	2,353.2	
14	354	461.62	1,973.2	
15	372	382.99	1,560.3	
16	382	340.10	1,348.6	
17	394	537.94	2,066.3	
18	423	254.24	910.3	
19	436	316.51	1,098.9	
20	461	479.38	1,575.5	
21	486	221.56	691.2	
22	499	250.12	759.7	
23	519	314.38	918.0	
24	564	699.27	1,878.4	
25	637	203.91	484.8	
26	710	51.09	109.1	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad


Created: 5/15/2012 10:26:10 AM  
 Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary Continued ...**

**... Peak table for sample 3 : sample 3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	746	59.68	121.2	
28	883	281.97	484.0	
29	977	335.54	520.4	
30	1,037	121.56	177.6	
31	1,175	110.86	142.9	
32	1,389	147.63	161.1	
33	1,766	189.38	162.5	
34	2,148	177.09	124.9	
35	2,245	117.24	79.1	
36	2,349	346.47	223.4	
37	2,970	731.61	373.2	
38	4,646	102.25	33.3	
39	5,634	89.22	24.0	
40	6,451	66.12	15.5	
41	10,380	75.00	10.9	Upper Marker
42	27,661	0.00	0.0	
43	58,955	0.00	0.0	
44	65,494	0.00	0.0	
45	84,644	0.00	0.0	

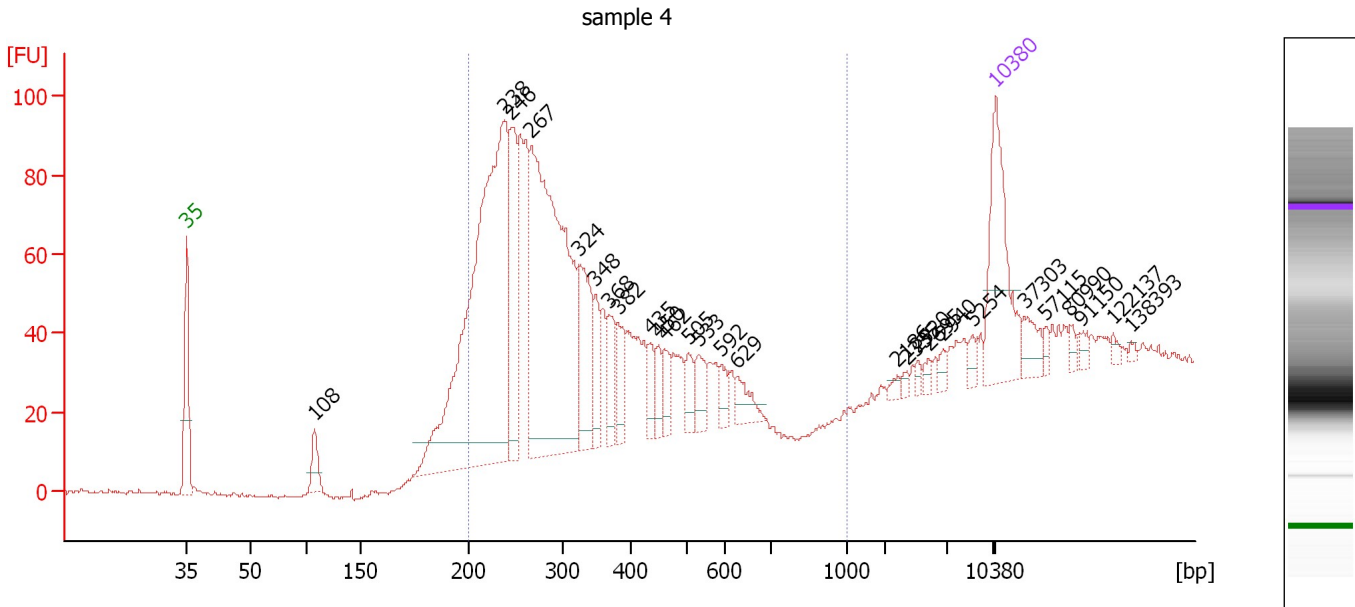
**Region table for sample 3 : sample 3**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	90,353.5	388	18,447.67	1,000	2,470.5	67	48.1	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
 Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 4**

Number of peaks found: 27      Corr. Area 1: 1,256.6  
 Noise: 0.4

**Peak table for sample 4 : sample 4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	108	25.76	361.0	
3	238	538.96	3,426.7	
4	246	108.16	667.3	
5	267	413.31	2,346.8	
6	324	79.20	370.9	
7	348	31.98	139.2	
8	368	32.29	133.0	
9	382	29.03	115.1	
10	435	19.15	66.7	
11	450	15.67	52.7	
12	462	19.39	63.6	
13	505	16.71	50.1	
14	533	21.62	61.4	
15	592	10.84	27.7	
16	629	17.66	42.5	
17	2,186	3.93	2.7	
18	2,335	3.15	2.0	
19	2,520	3.31	2.0	
20	2,695	4.31	2.4	
21	2,940	4.86	2.5	
22	5,254	6.70	1.9	
23	10,380	75.00	10.9	Upper Marker
24	37,303	0.00	0.0	
25	57,115	0.00	0.0	
26	80,990	0.00	0.0	


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary Continued ...****... Peak table for sample 4 : sample 4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	91,150	0.00	0.0	
28	122,137	0.00	0.0	
29	138,393	0.00	0.0	

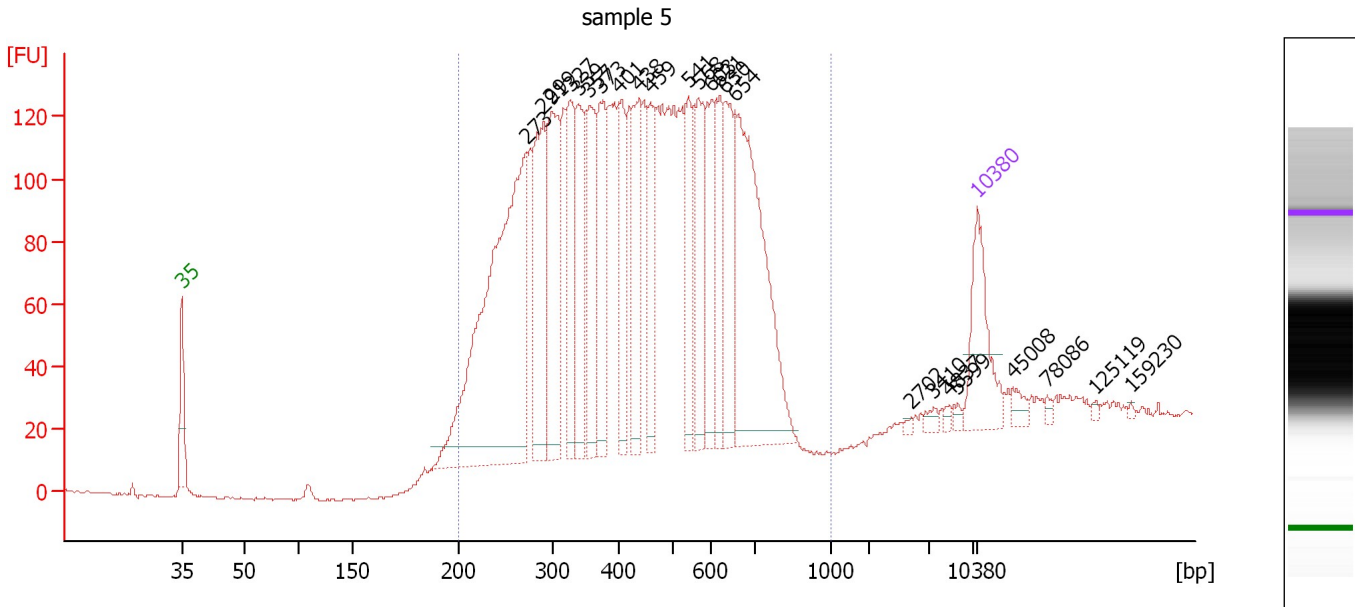
**Region table for sample 4 : sample 4**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	7,163.7	315	1,345.77	1,000	1,256.6	83	32.2	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
 Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 5**

Number of peaks found: 24                      Corr. Area 1: 3,401.4  
 Noise: 0.5

**Peak table for sample 5 : sample 5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	273	652.90	3,629.1	
3	291	194.57	1,013.7	
4	299	200.31	1,013.9	
5	327	132.84	615.1	
6	339	135.69	605.9	
7	357	144.73	614.2	
8	373	134.49	546.1	
9	401	107.08	405.0	
10	438	117.93	408.4	
11	459	83.32	275.0	
12	541	76.75	214.9	
13	568	107.74	287.3	
14	603	103.45	259.8	
15	621	76.72	187.2	
16	630	112.69	270.9	
17	654	339.52	786.8	
18	2,702	2.67	1.5	
19	3,410	6.78	3.0	
20	4,837	4.11	1.3	
21	5,599	4.82	1.3	
22	10,380	75.00	10.9	Upper Marker
23	45,008	0.00	0.0	
24	78,086	0.00	0.0	
25	125,119	0.00	0.0	
26	159,230	0.00	0.0	


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
Modified: 5/15/2012 10:50:24 AM

**Electropherogram Summary Continued ...**

... Region table for sample 5 :

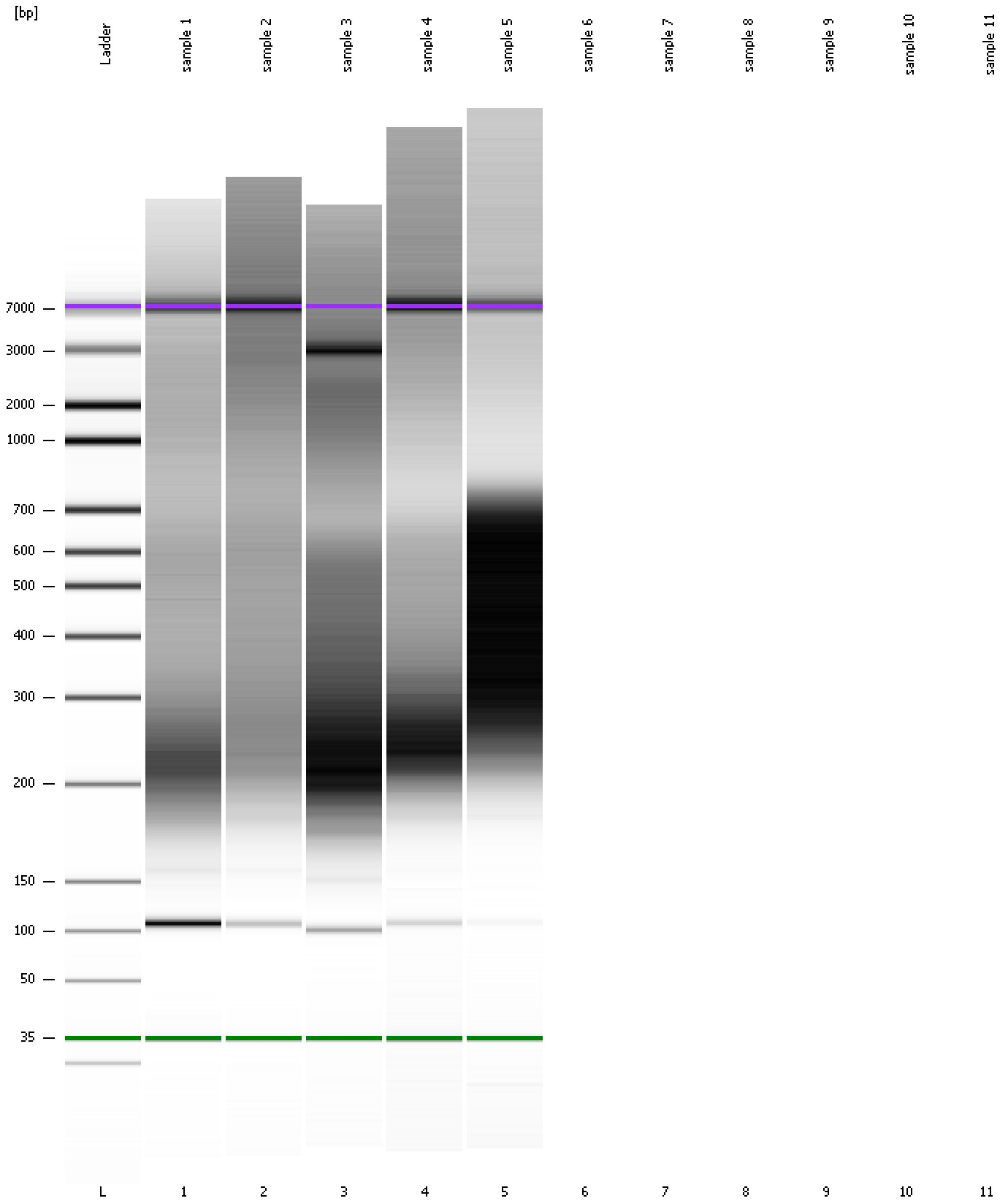
sample 5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	14,409.0	443	3,545.83	1,000	3,401.4	97	34.3	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
Modified: 5/15/2012 10:50:24 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
Modified: 5/15/2012 10:50:24 AM

**Invalid Samples**

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:\...ents and Settings\Bioanalyzer\2012-05-15\2012-05-15\_001.xad

Created: 5/15/2012 10:26:10 AM  
 Modified: 5/15/2012 10:50:24 AM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 6)		Instrument	Run		5/15/2012 10:50:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-15\2012-05-15_001.xad)		Instrument	Run		5/15/2012 10:26:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/15/2012 10:26:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/15/2012 10:26:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/15/2012 10:26:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/15/2012 10:26:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/15/2012 10:26:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/15/2012 10:26:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1