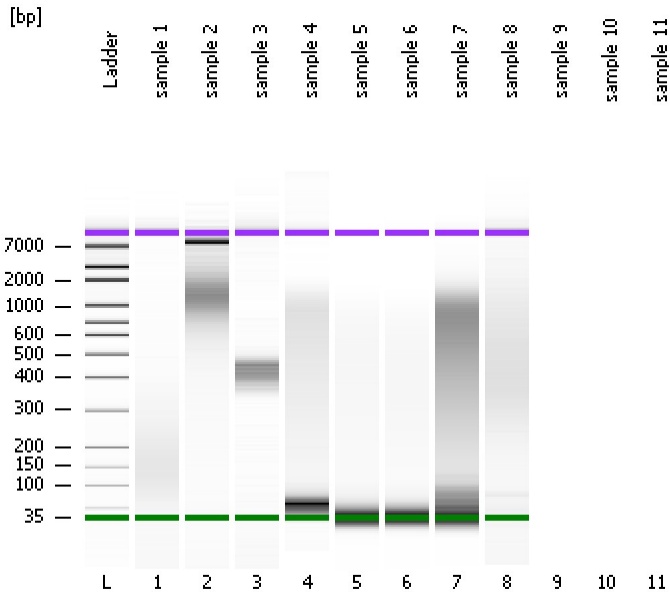


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
Modified: 9/23/2013 3:09:26 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

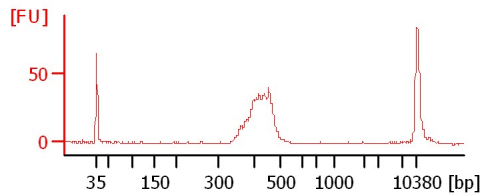
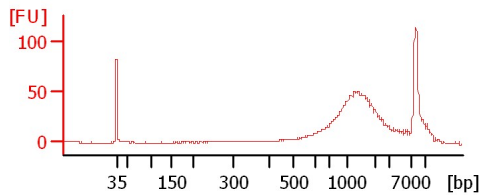
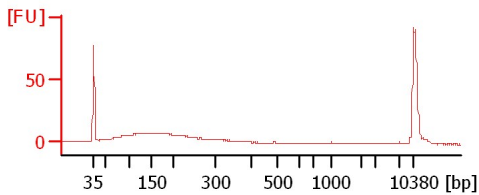
Chip Information:

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

sample 1

sample 2

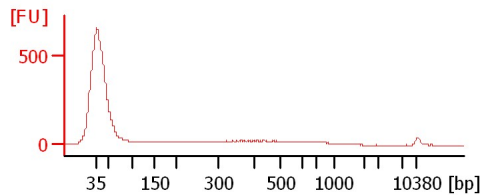
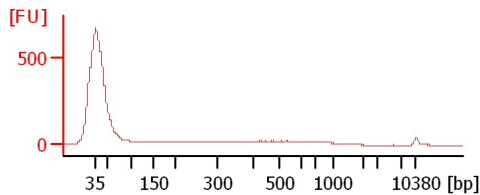
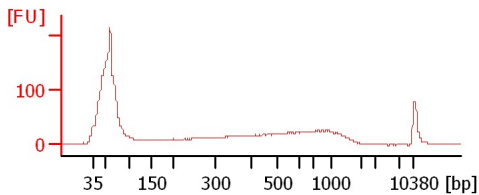
sample 3



sample 4

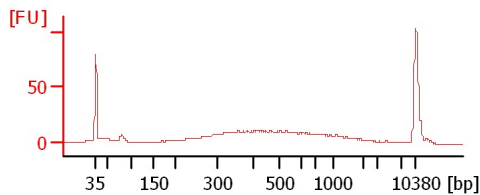
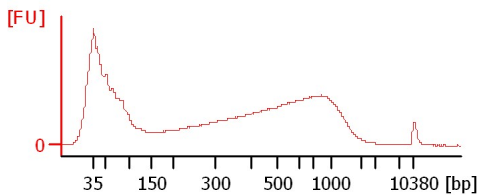
sample 5

sample 6



sample 7

sample 8



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
Modified: 9/23/2013 3:09:26 PM

**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\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
Modified: 9/23/2013 3:09:26 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

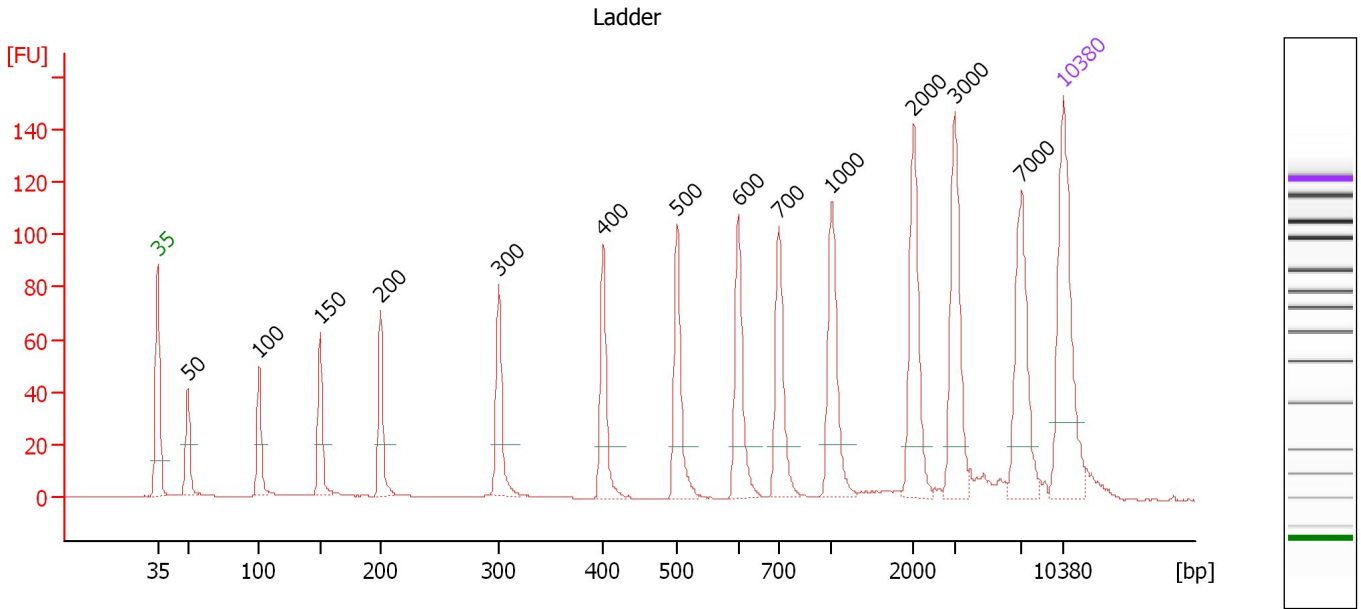
**Ladder**

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\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
 Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

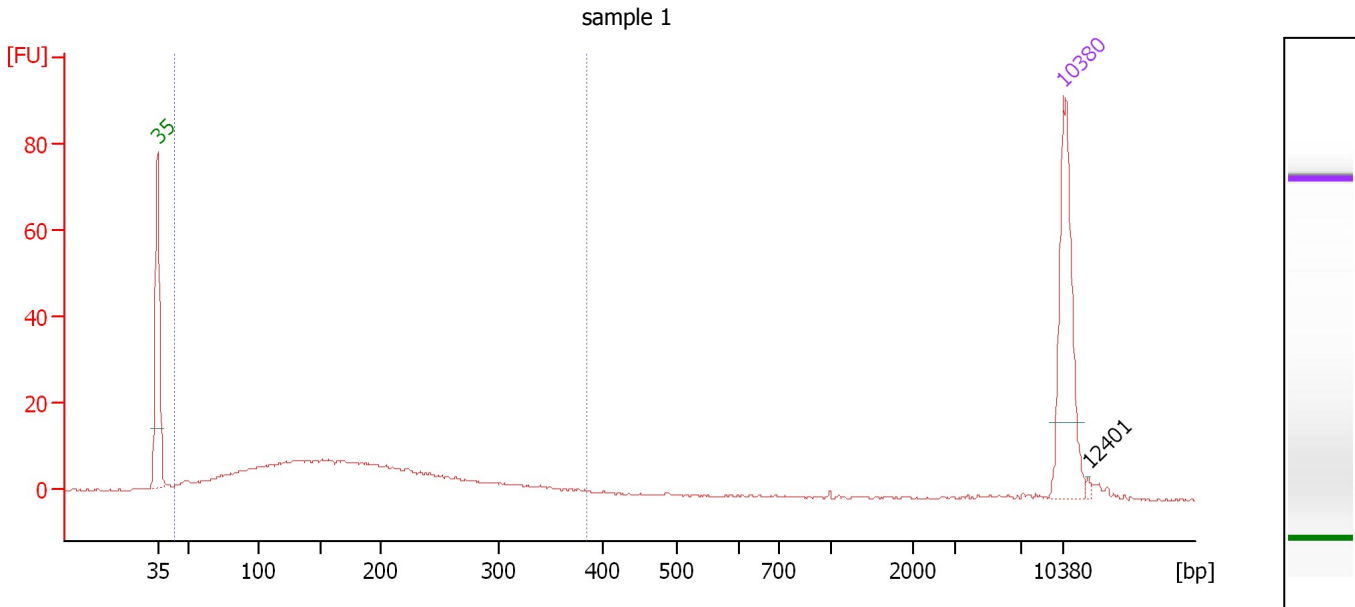
**Peak table for Ladder**

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\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
 Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 1                      Corr. Area 1: 252.9  
 Noise: 0.2

**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	10,380	75.00	10.9	Upper Marker
3	12,401	0.00	0.0	

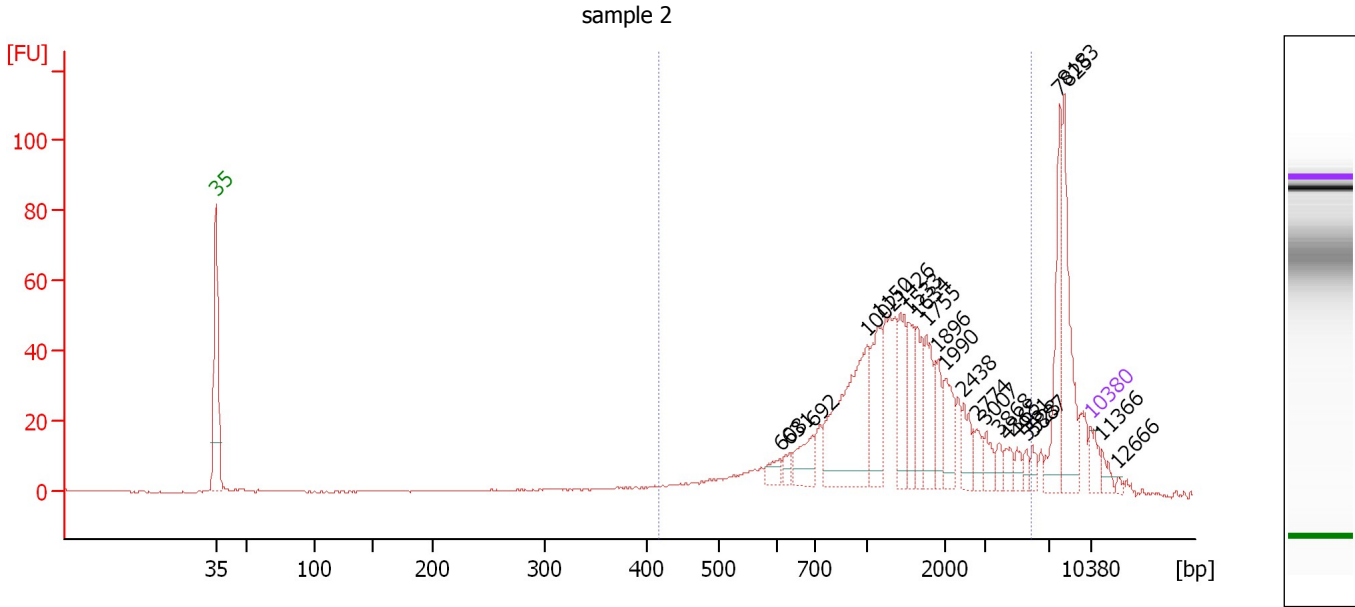
**Region table for sample 1 : sample 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
43	384	180	4,154.8	366.76	252.9	90	43.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
 Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 23                      Corr. Area 1: 663.0  
 Noise: 0.1

**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	608	68.74	171.4	
3	631	50.71	121.7	
4	692	165.85	363.0	
5	1,002	736.05	1,113.0	
6	1,150	296.89	391.2	
7	1,426	234.98	249.7	
8	1,533	160.93	159.0	
9	1,634	183.98	170.6	
10	1,755	205.48	177.4	
11	1,896	137.49	109.9	
12	1,990	172.04	131.0	
13	2,438	105.43	65.5	
14	2,774	70.55	38.5	
15	3,007	74.94	37.8	
16	3,868	43.41	17.0	
17	4,365	51.85	18.0	
18	4,961	39.97	12.2	
19	5,523	32.67	9.0	
20	5,887	39.77	10.2	
21	7,825	333.96	64.7	
22	8,183	432.87	80.1	
23	10,380	75.00	10.9	Upper Marker
24	11,366	0.00	0.0	
25	12,666	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary Continued ...**

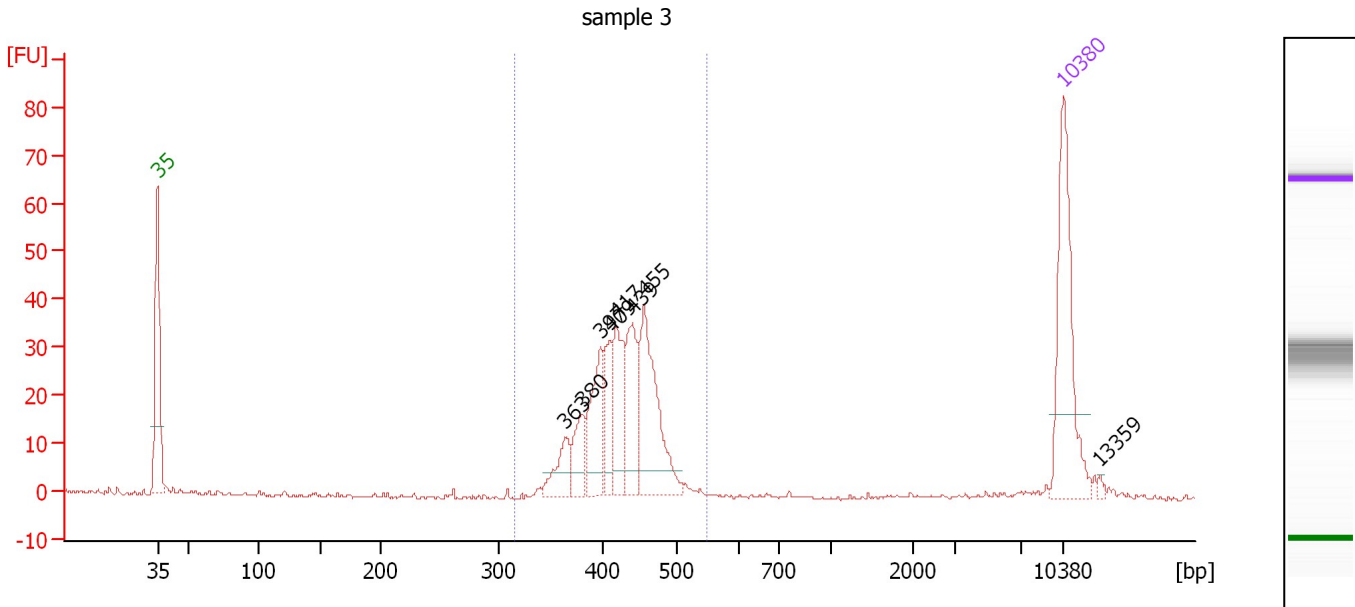
... Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
418	5,828	1,577	5,702.5	4,116.32	663.0	74	64.0	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
 Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 8                      Corr. Area 1: 278.8  
 Noise: 0.3

**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	363	25.49	106.3	
3	380	26.36	105.1	
4	397	50.19	191.4	
5	409	30.28	112.2	
6	417	47.16	171.1	
7	439	51.77	178.5	
8	455	89.12	296.6	
9	10,380	75.00	10.9	Upper Marker
10	13,359	0.00	0.0	

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

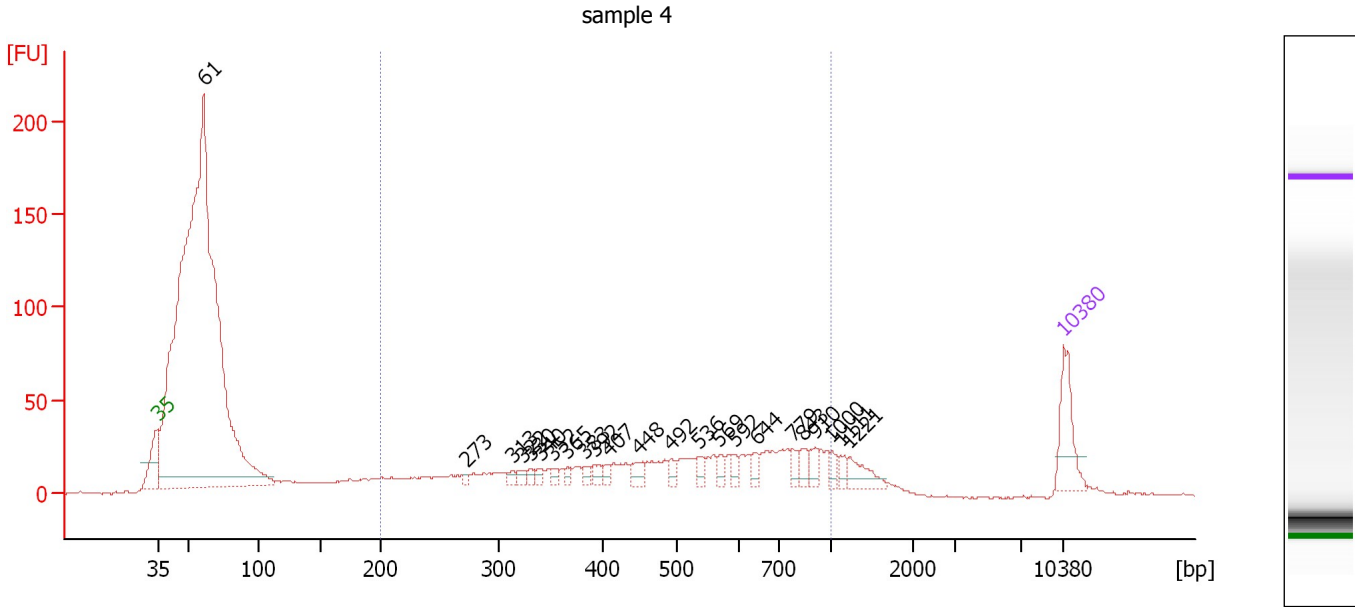
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
316	549	424	1,164.7	323.45	278.8	96	8.5	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
 Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 23                      Corr. Area 1: 739.1  
 Noise: 0.5

**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	61	3,093.89	76,800.5	
3	273	7.34	40.8	
4	313	11.85	57.4	
5	322	13.04	61.3	
6	330	11.19	51.4	
7	340	12.73	56.8	
8	352	13.08	56.3	
9	365	10.81	44.9	
10	383	12.78	50.5	
11	392	17.34	67.1	
12	407	13.76	51.2	
13	448	23.57	79.8	
14	492	15.13	46.6	
15	536	18.02	51.0	
16	569	15.78	42.0	
17	592	14.74	37.7	
18	644	15.46	36.4	
19	779	18.82	36.6	
20	843	22.24	40.0	
21	910	20.49	34.1	
22	1,000	15.26	23.1	
23	1,111	14.49	19.8	
24	1,221	36.38	45.1	
25	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary Continued ...**

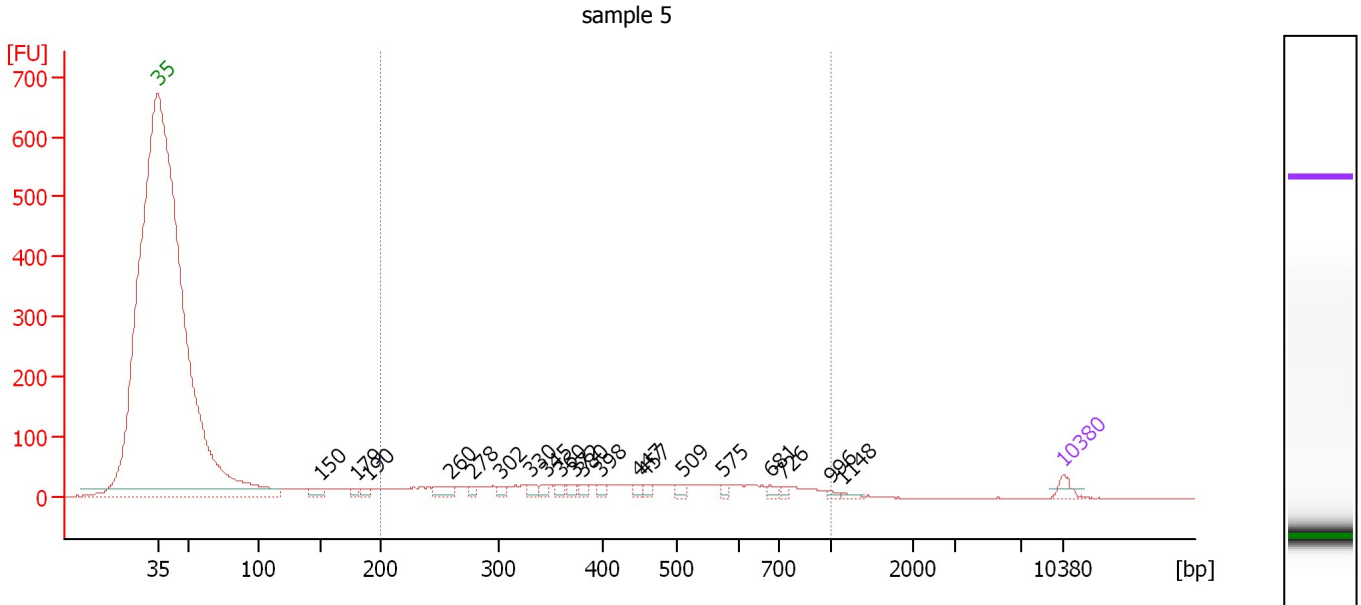
... Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	513	3,747.8	992.01	739.1	28	39.4	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
 Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 20      Corr. Area 1: 871.4  
 Noise: 0.2

**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	150	105.32	1,061.2	
3	179	49.25	416.2	
4	190	55.74	443.5	
5	260	131.64	767.9	
6	278	52.75	287.6	
7	302	52.70	264.4	
8	330	66.16	304.1	
9	345	61.05	268.2	
10	360	63.52	267.2	
11	372	58.72	239.2	
12	380	62.16	248.1	
13	398	50.84	193.7	
14	447	53.07	179.8	
15	457	46.29	153.4	
16	509	60.95	181.4	
17	575	39.82	104.8	
18	681	47.52	105.8	
19	726	35.02	73.1	
20	996	24.48	37.2	
21	1,148	23.13	30.5	
22	10,380	75.00	10.9	Upper Marker

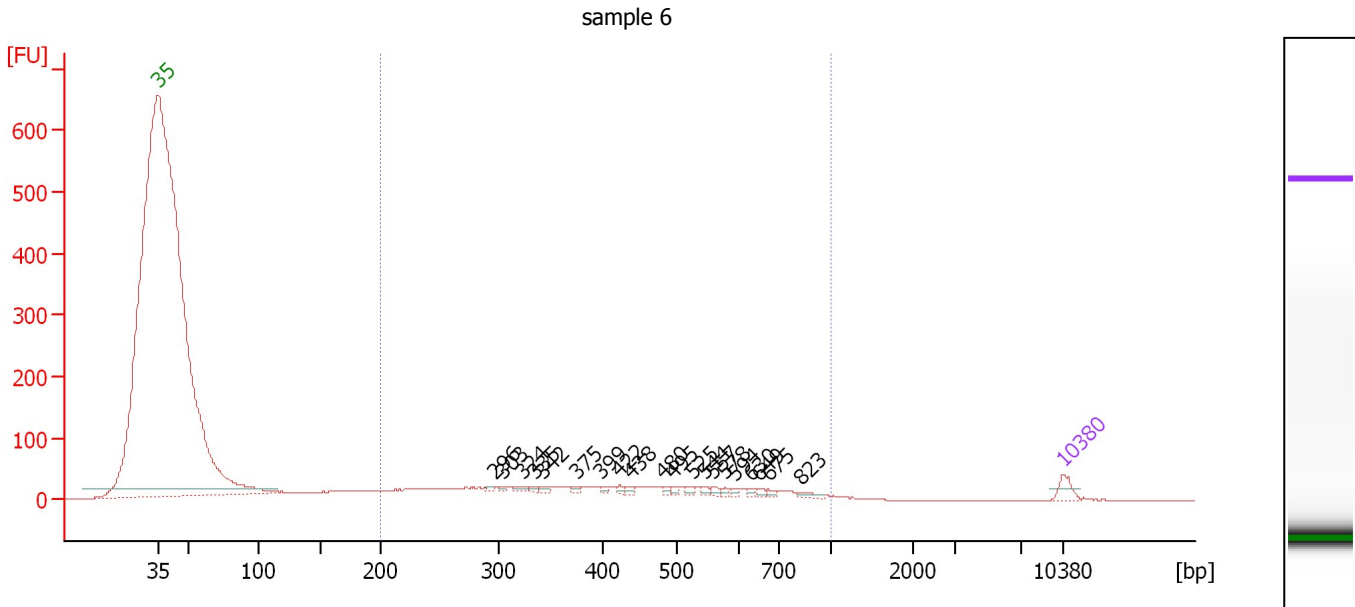
**Region table for sample 5 : sample 5**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	451	9,752.0	2,339.17	871.4	80	39.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
 Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 6**

Number of peaks found: 20      Corr. Area 1: 888.4  
 Noise: 0.1

**Peak table for sample 6 : sample 6**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	296	19.02	97.5	
3	303	15.93	79.5	
4	324	31.82	148.9	
5	335	22.72	102.8	
6	342	29.04	128.6	
7	375	24.82	100.2	
8	399	24.38	92.7	
9	422	23.12	83.0	
10	438	32.75	113.3	
11	480	26.43	83.4	
12	495	23.89	73.1	
13	525	25.38	73.2	
14	544	26.82	74.8	
15	557	27.55	75.0	
16	578	21.30	55.8	
17	594	20.94	53.4	
18	630	19.90	47.9	
19	649	23.74	55.4	
20	675	23.14	51.9	
21	823	39.44	72.6	
22	10,380	75.00	10.9	Upper Marker

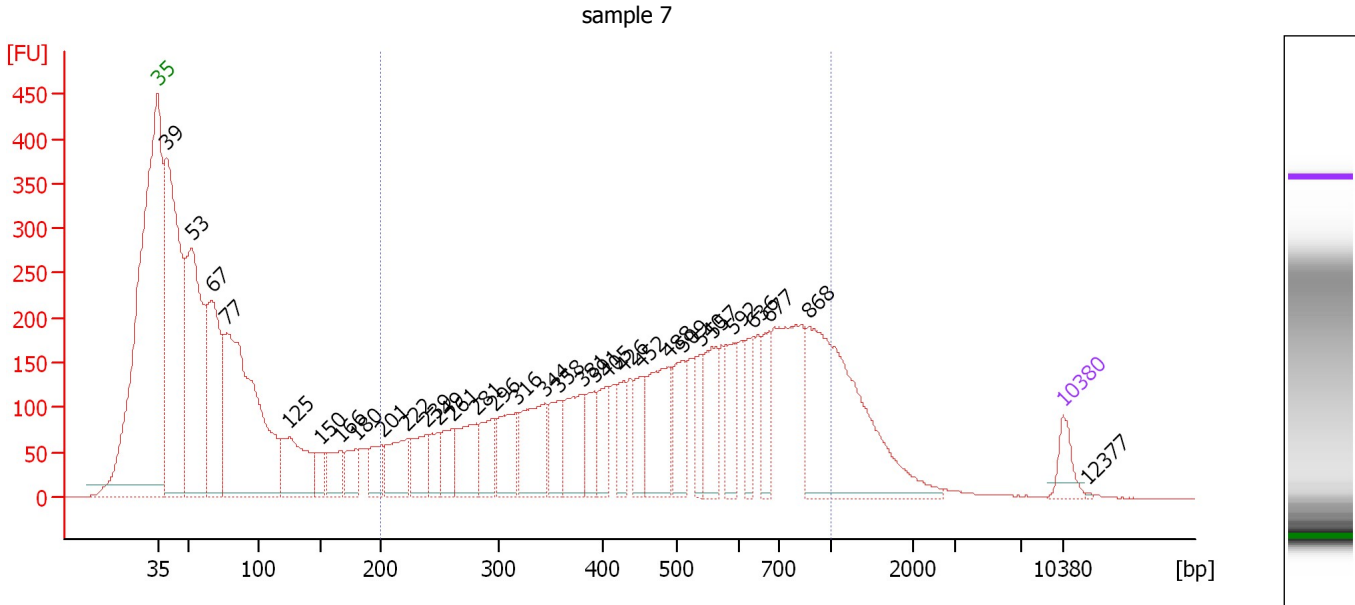
**Region table for sample 6 : sample 6**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	434	9,676.1	2,264.90	888.4	80	39.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
 Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 7**

Number of peaks found: 32                      Corr. Area 1: 5,507.2  
 Noise: 0.1

**Peak table for sample 7 : sample 7**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	1,993.28	76,687.9	
3	53	1,378.46	39,640.3	
4	67	895.81	20,305.3	
5	77	1,807.24	35,553.1	
6	125	429.86	5,217.5	
7	150	103.87	1,051.8	
8	166	167.05	1,521.7	
9	180	141.41	1,191.0	
10	201	154.64	1,167.0	
11	222	248.45	1,694.5	
12	239	199.59	1,264.0	
13	249	131.01	795.9	
14	261	154.33	895.4	
15	281	269.62	1,454.2	
16	296	191.46	980.4	
17	316	248.58	1,190.0	
18	344	354.27	1,561.9	
19	358	175.07	741.8	
20	381	270.41	1,076.7	
21	391	145.59	563.6	
22	405	172.75	646.4	
23	426	145.22	516.2	
24	452	157.60	528.6	
25	488	358.88	1,113.6	
26	509	215.10	640.9	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad


Created: 9/23/2013 2:33:34 PM  
 Modified: 9/23/2013 3:09:26 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	540	141.50	397.4	
28	557	238.90	649.7	
29	592	169.45	433.5	
30	636	145.31	346.4	
31	677	151.36	338.9	
32	868	987.13	1,722.3	
33	10,380	75.00	10.9	Upper Marker
34	12,377	0.00	0.0	

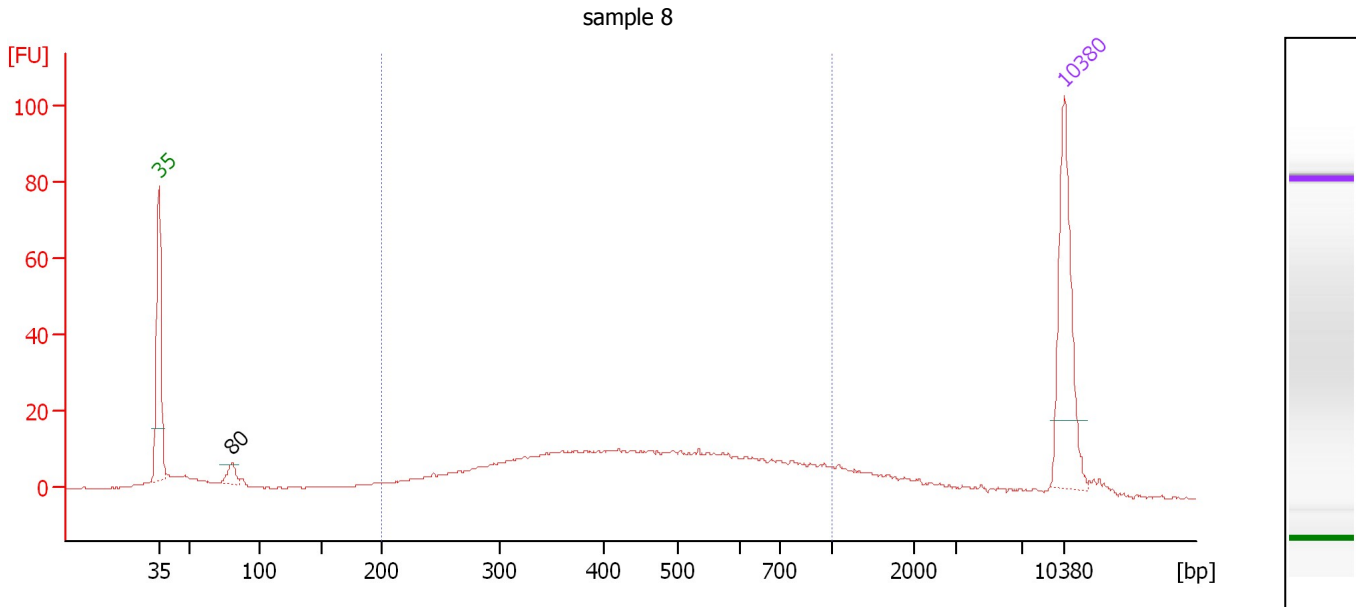
#### Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	514	22,392.4	6,004.92	5,507.2	51	38.9	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
 Modified: 9/23/2013 3:09:26 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 8**

Number of peaks found: 1                      Corr. Area 1: 380.2  
 Noise: 0.2

**Peak table for sample 8 : sample 8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	13.58	256.0	
3	10,380	75.00	10.9	Upper Marker

**Region table for sample 8 : sample 8**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	477	1,533.1	400.74	380.2	73	37.2	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-23\2013-09-23\_001.xad

Created: 9/23/2013 2:33:34 PM  
Modified: 9/23/2013 3:09:26 PM

**Gel Image**

