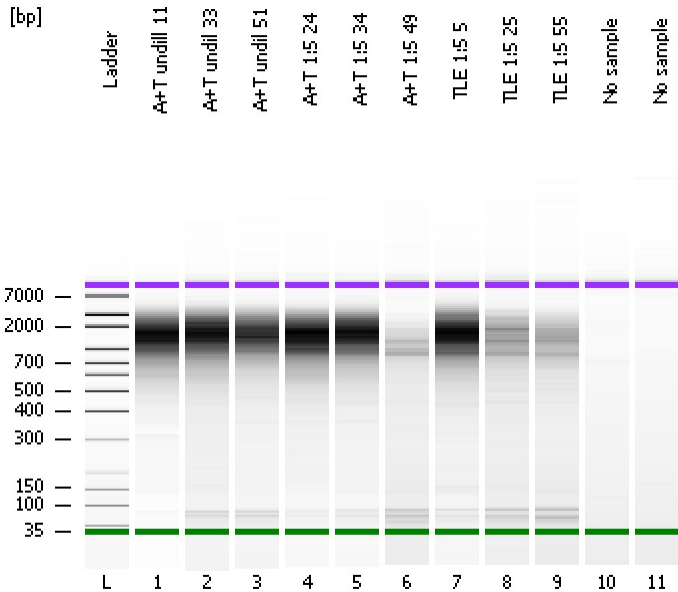


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
Modified: 5/26/2015 11:33:45 AM

**Electrophoresis File Run Summary**



Instrument Information:

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

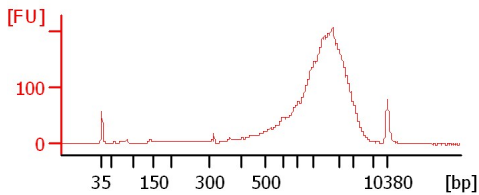
Assay Information:

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

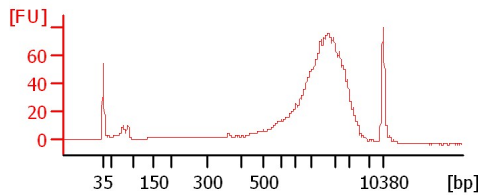
Chip Information:

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

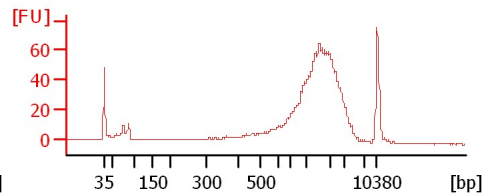
**A+T undill 11**



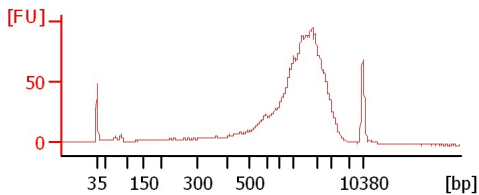
**A+T undill 33**



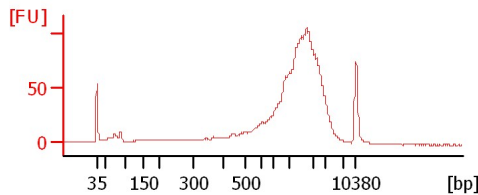
**A+T undill 51**



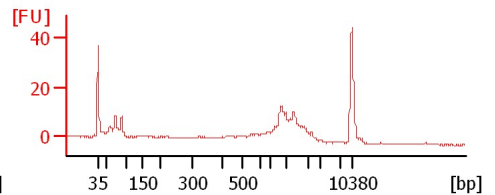
**A+T 1:5 24**



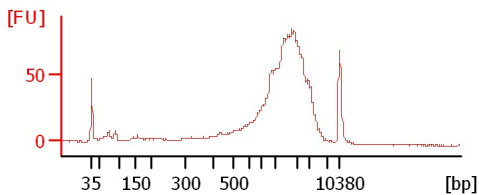
**A+T 1:5 34**



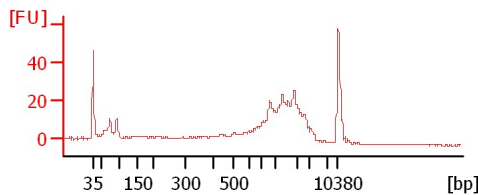
**A+T 1:5 49**



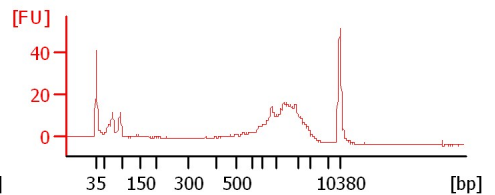
**TLE 1:5 5**



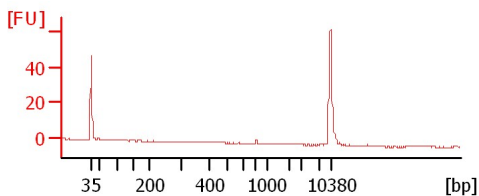
**TLE 1:5 25**



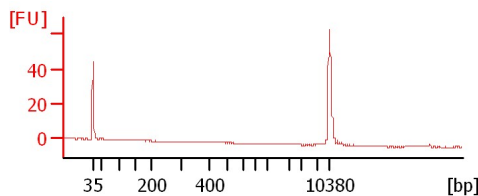
**TLE 1:5 55**



**No sample**



**No sample**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
Modified: 5/26/2015 11:33:45 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
A+T undill 11		<input type="checkbox"/>	✓			
A+T undil 33		<input type="checkbox"/>	✓			
A+T undil 51		<input type="checkbox"/>	✓			
A+T 1:5 24		<input type="checkbox"/>	✓			
A+T 1:5 34		<input type="checkbox"/>	✓			
A+T 1:5 49		<input type="checkbox"/>	✓			
TLE 1:5 5		<input type="checkbox"/>	✓			
TLE 1:5 25		<input type="checkbox"/>	✓			
TLE 1:5 55		<input type="checkbox"/>	✓			
No sample		<input type="checkbox"/>	✓			
No sample		<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\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
Modified: 5/26/2015 11:33:45 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

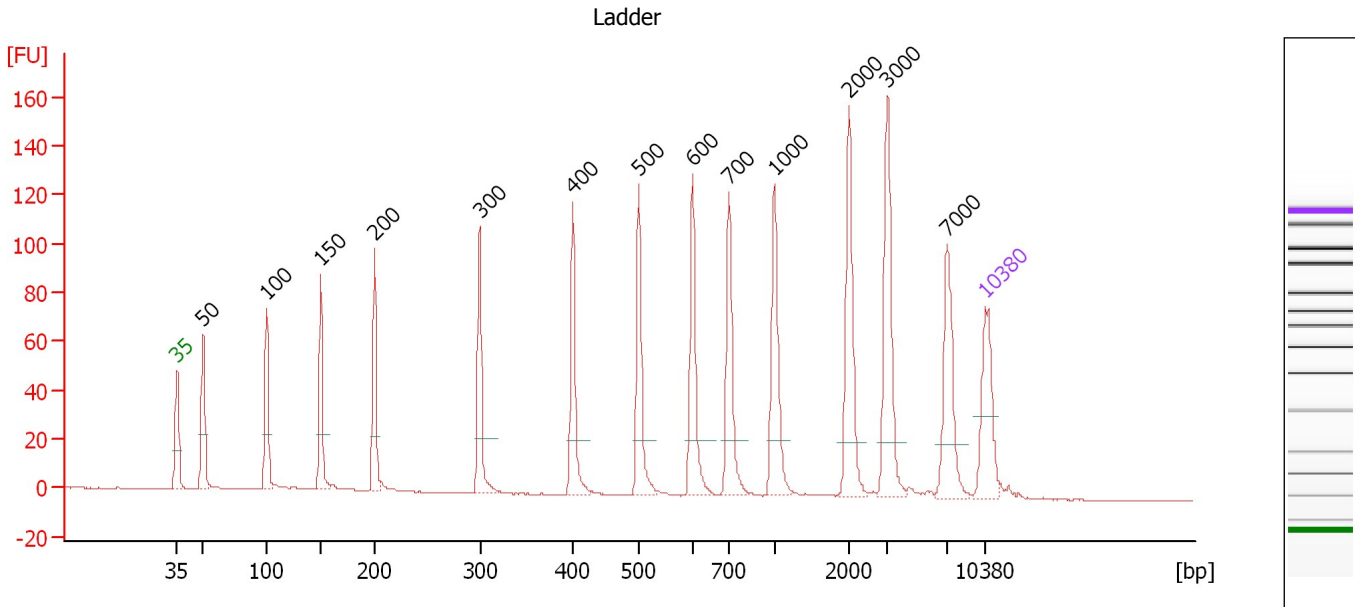
**Ladder**

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\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

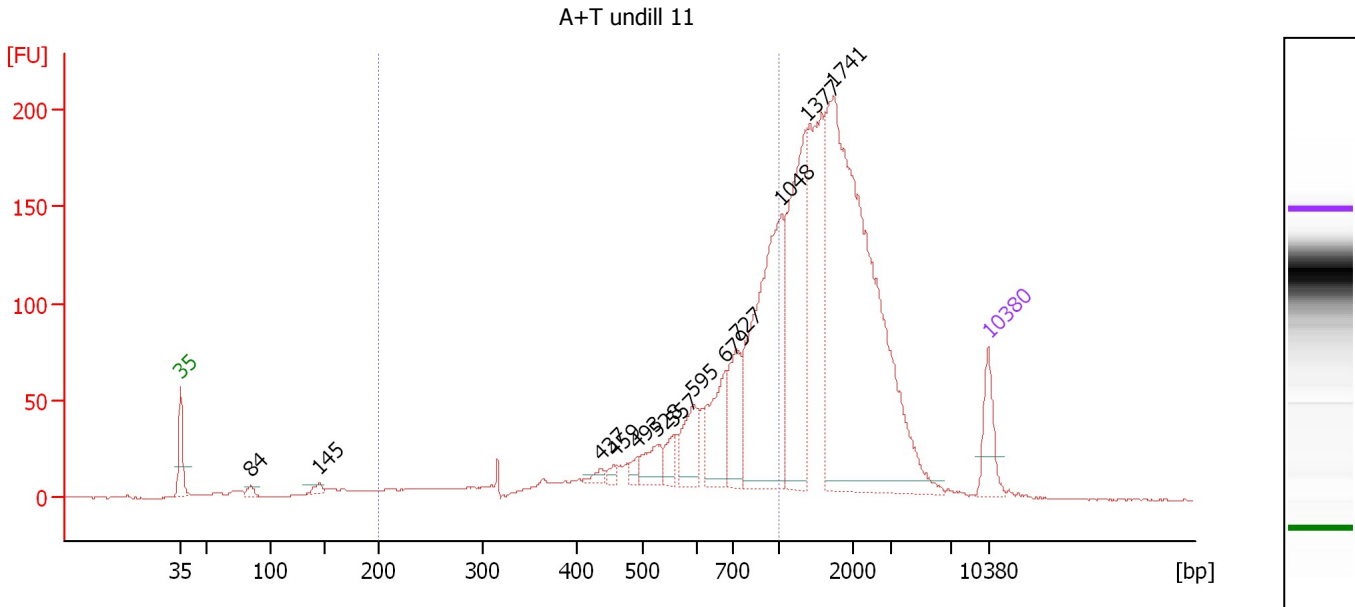
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.26
3	100	150.00	2,272.7	Ladder Peak	50.76
4	150	150.00	1,515.2	Ladder Peak	55.47
5	200	150.00	1,136.4	Ladder Peak	60.13
6	300	150.00	757.6	Ladder Peak	69.23
7	400	150.00	568.2	Ladder Peak	77.31
8	500	150.00	454.5	Ladder Peak	82.99
9	600	150.00	378.8	Ladder Peak	87.65
10	700	150.00	324.7	Ladder Peak	90.84
11	1,000	150.00	227.3	Ladder Peak	94.76
12	2,000	150.00	113.6	Ladder Peak	101.23
13	3,000	150.00	75.8	Ladder Peak	104.55
14	7,000	150.00	32.5	Ladder Peak	109.68
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : A+T undill 11**

Number of peaks found: 13                      Corr. Area 1: 1,083.4  
 Noise: 0.2

**Peak table for sample 1 : A+T undill 11**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	84	19.35	347.1		49.05
3	145	21.65	226.0		55.01
4	437	18.54	64.3		79.41
5	459	15.36	50.7		80.66
6	493	20.77	63.8		82.60
7	528	65.71	188.4		84.31
8	557	36.08	98.1		85.65
9	595	109.71	279.5		87.40
10	679	156.20	348.4		90.17
11	727	142.09	296.1		91.19
12	1,048	553.87	800.6		95.07
13	1,377	409.52	450.6		97.20
14	1,741	1,163.43	1,012.2		99.55
15	10,380	75.00	10.9	Upper Marker	113.00

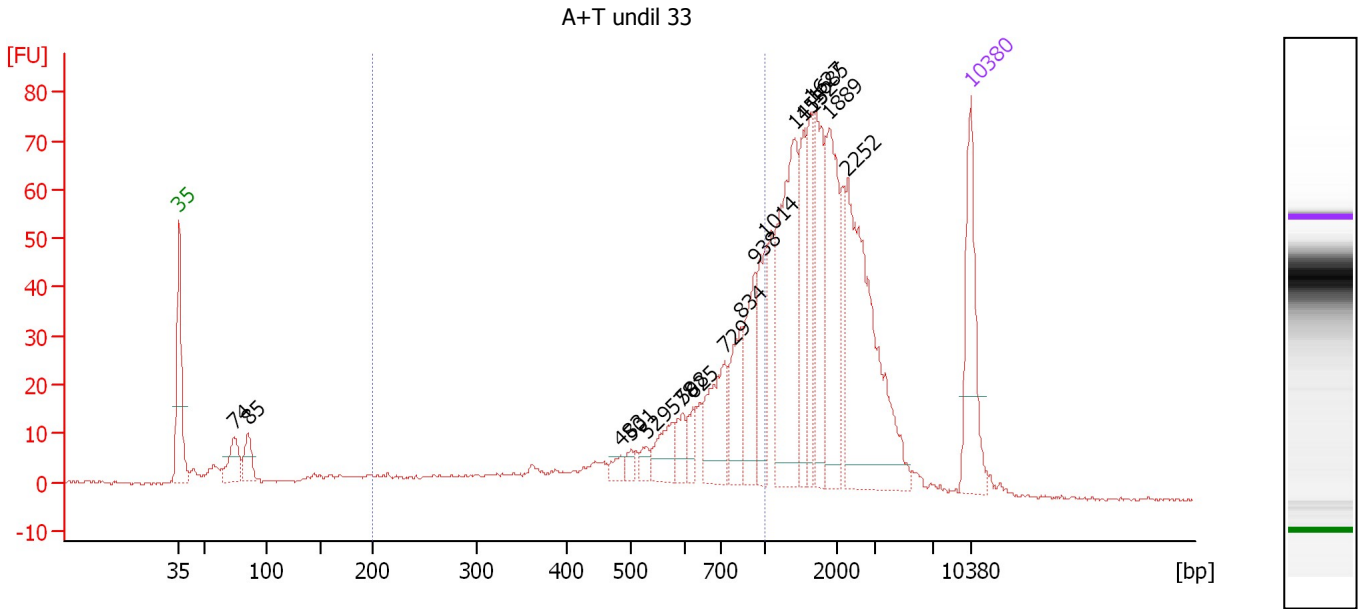
**Region table for sample 1 : A+T undill 11**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	674	1,000	1,083.4	4,293.2	36	30.3	1,564.18	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : A+T undil 33**

Number of peaks found: 18                      Corr. Area 1: 395.7  
 Noise: 0.3

**Peak table for sample 2 : A+T undil 33**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	74	46.07	948.6		47.86
3	85	34.45	612.8		49.13
4	483	11.08	34.7		82.03
5	501	8.39	25.4		83.02
6	529	11.01	31.5		84.34
7	578	34.64	90.9		86.60
8	598	19.65	49.8		87.55
9	625	17.94	43.5		88.44
10	729	71.08	147.6		91.22
11	834	55.59	101.0		92.59
12	938	62.35	100.7		93.96
13	1,014	58.55	87.5		94.85
14	1,415	165.26	176.9		97.44
15	1,532	56.38	55.8		98.20
16	1,627	54.12	50.4		98.81
17	1,685	85.55	76.9		99.19
18	1,889	101.98	81.8		100.51
19	2,252	199.95	134.5		102.06
20	10,380	75.00	10.9	Upper Marker	113.00

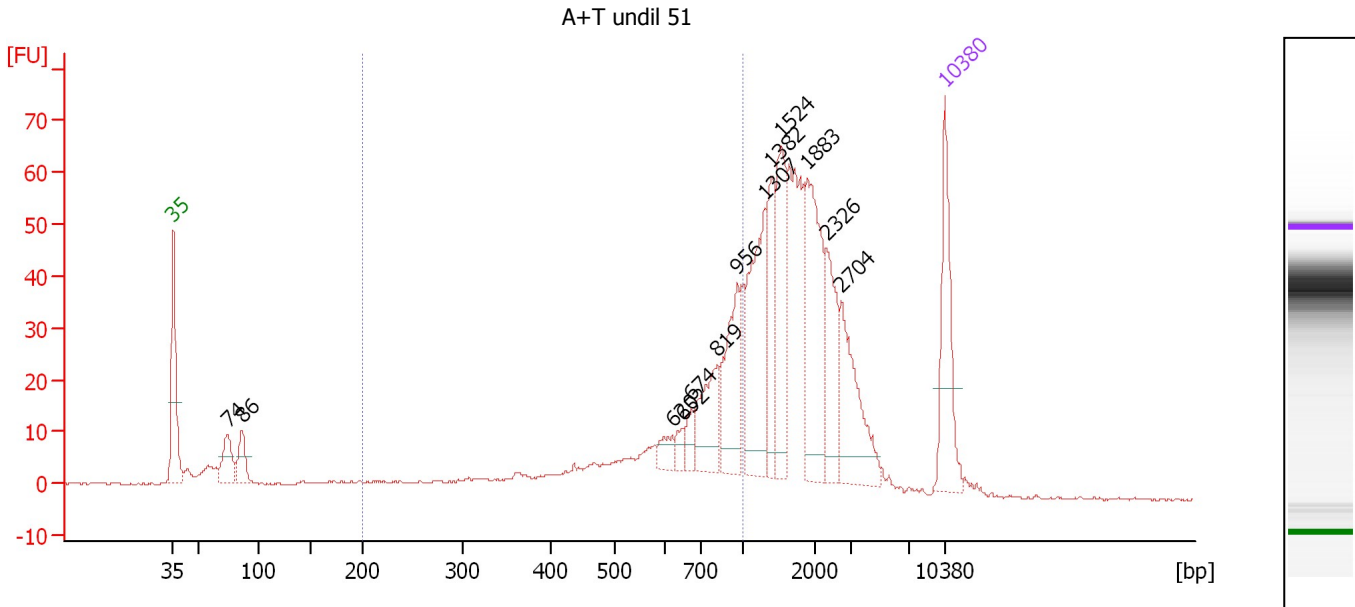
**Region table for sample 2 : A+T undil 33**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	659	1,000	395.7	1,597.7	33	32.3	553.26	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : A+T undil 51**

Number of peaks found: 13                      Corr. Area 1: 284.5  
 Noise: 0.2

**Peak table for sample 3 : A+T undil 51**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	74	48.27	984.1		47.93
3	86	37.64	661.7		49.24
4	620	15.85	38.7		88.28
5	652	12.09	28.1		89.30
6	674	17.30	38.9		90.02
7	819	61.88	114.5		92.39
8	956	78.17	123.9		94.18
9	1,307	120.45	139.6		96.75
10	1,382	59.64	65.4		97.23
11	1,524	86.97	86.5		98.15
12	1,883	124.90	100.5		100.47
13	2,326	63.61	41.4		102.31
14	2,704	81.46	45.6		103.57
15	10,380	75.00	10.9	Upper Marker	113.00

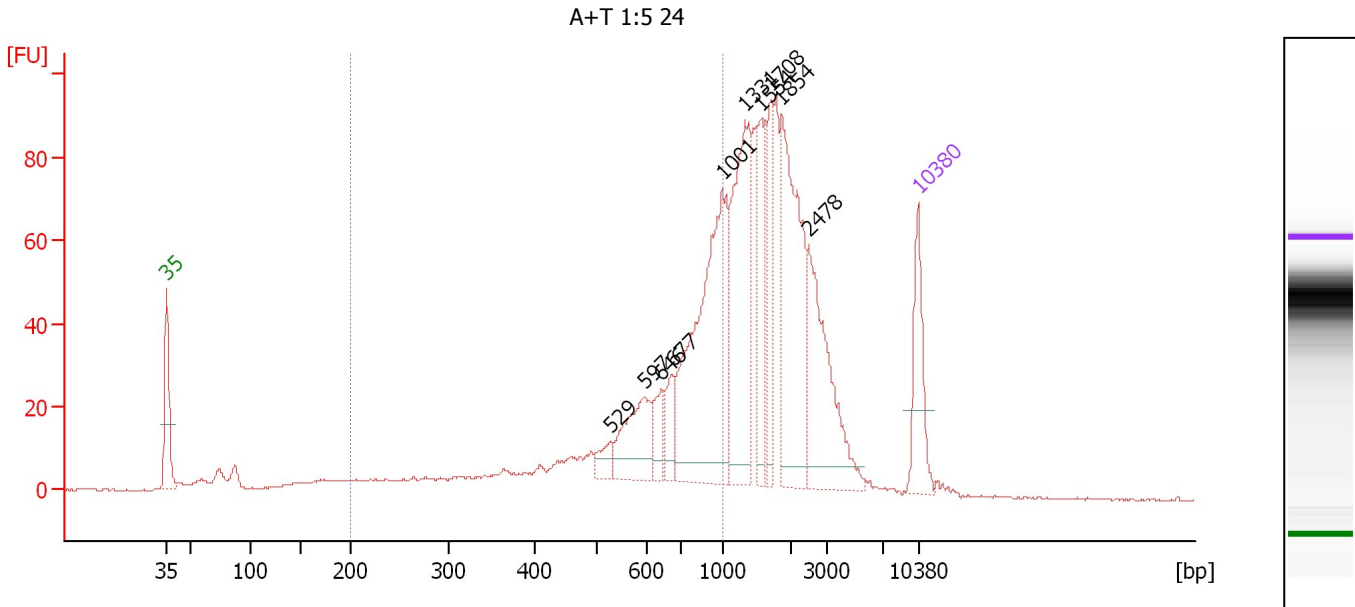
**Region table for sample 3 : A+T undil 51**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	677	1,000	284.5	1,219.9	31	31.2	442.67	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : A+T 1:5 24**

Number of peaks found: 10                      Corr. Area 1: 545.9  
 Noise: 0.2

**Peak table for sample 4 : A+T 1:5 24**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	529	24.73	70.8		84.33
3	597	102.80	260.9		87.51
4	646	39.76	93.3		89.10
5	677	37.97	85.0		90.10
6	1,001	371.14	561.8		94.77
7	1,331	241.45	274.8		96.90
8	1,554	104.10	101.5		98.34
9	1,708	86.26	76.5		99.34
10	1,854	242.71	198.4		100.28
11	2,478	174.08	106.4		102.82
12	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : A+T 1:5 24**

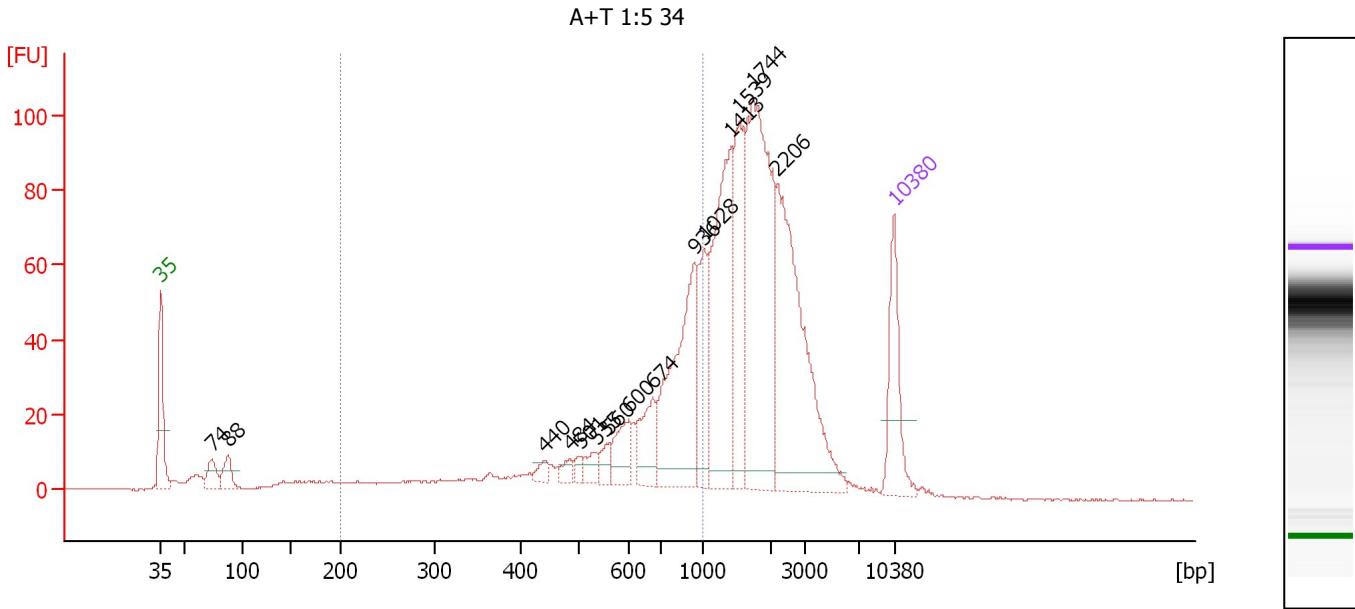
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	658	1,000	545.9	2,643.1	37	32.6	913.39	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : A+T 1:5 34**

Number of peaks found: 15                      Corr. Area 1: 483.1  
 Noise: 0.2

**Peak table for sample 5 : A+T 1:5 34**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	74	35.41	726.5		47.88
3	88	36.66	629.8		49.46
4	440	11.68	40.2		79.58
5	484	13.56	42.5		82.07
6	501	9.01	27.2		83.04
7	535	18.15	51.4		84.61
8	560	16.25	44.0		85.78
9	600	43.75	110.4		87.67
10	674	59.32	133.4		90.01
11	936	207.35	335.7		93.92
12	1,028	77.00	113.5		94.94
13	1,413	217.40	233.1		97.43
14	1,539	130.51	128.5		98.25
15	1,744	314.73	273.5		99.57
16	2,206	266.72	183.2		101.91
17	10,380	75.00	10.9	Upper Marker	113.00

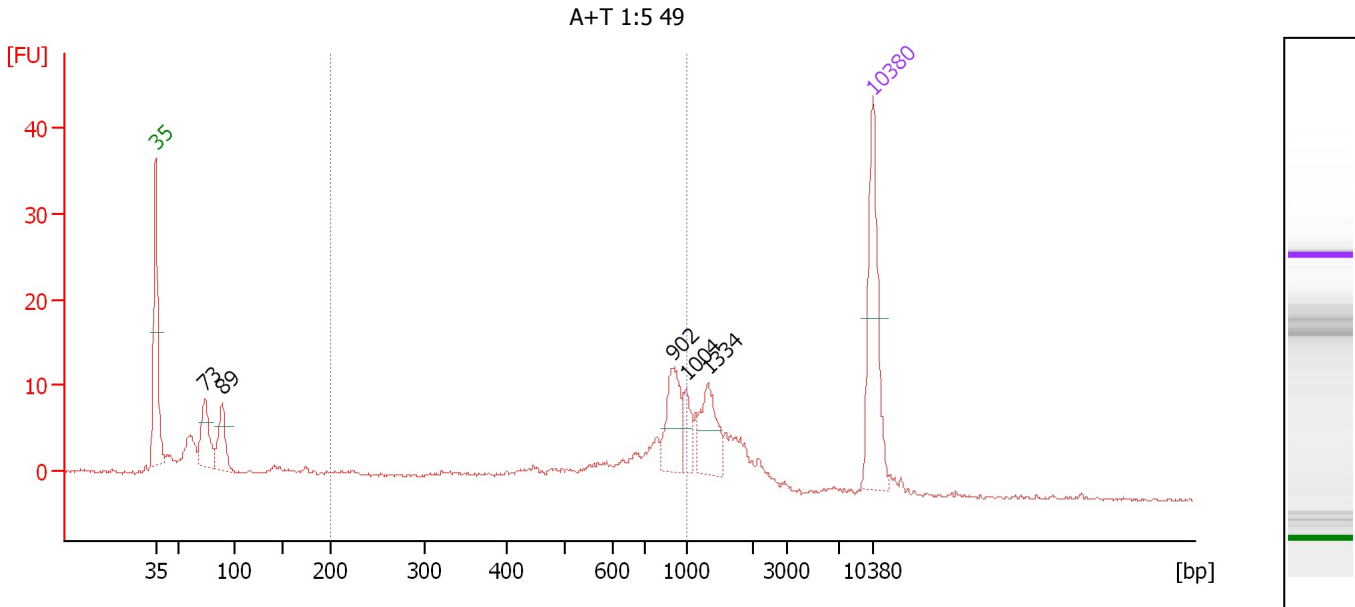
**Region table for sample 5 : A+T 1:5 34**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	665	1,000	483.1	1,904.5	33	32.2	667.94	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : A+T 1:5 49**

Number of peaks found: 5                      Corr. Area 1: 89.2  
 Noise: 0.2

**Peak table for sample 6 : A+T 1:5 49**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	73	54.02	1,121.6		47.79
3	89	43.07	736.5		49.51
4	902	43.15	72.4		93.48
5	1,004	17.03	25.7		94.78
6	1,334	37.60	42.7		96.92
7	10,380	75.00	10.9	Upper Marker	113.00

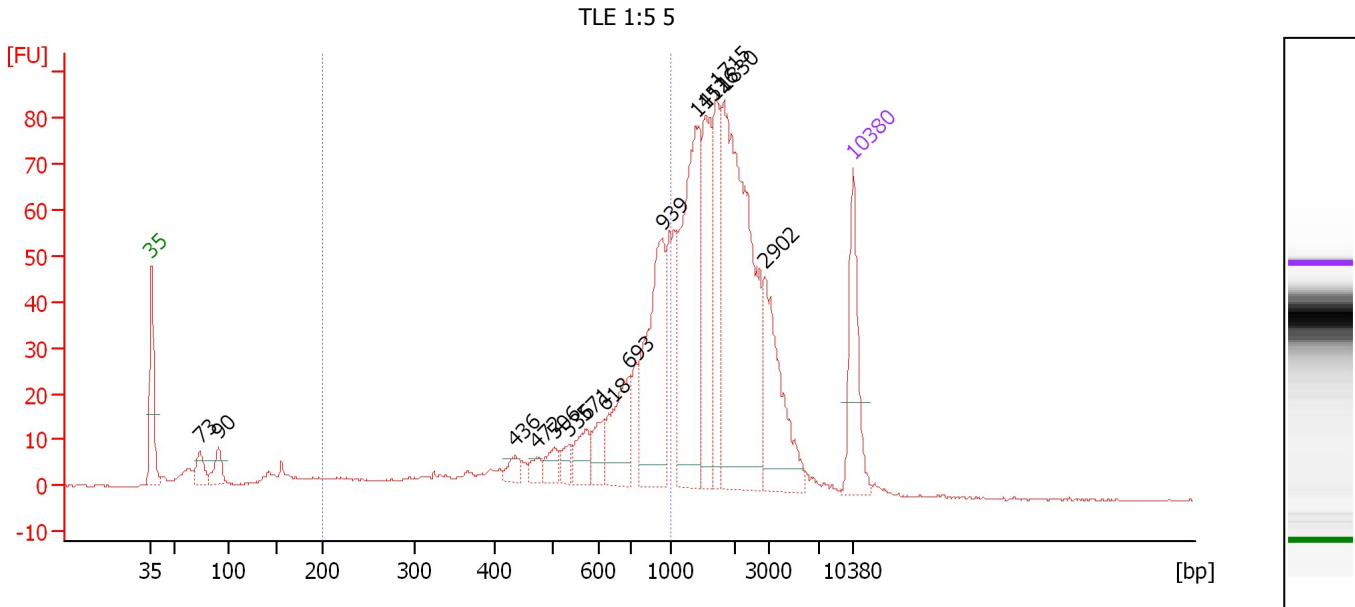
**Region table for sample 6 : A+T 1:5 49**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	658	1,000	89.2	611.2	41	35.3	202.53	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : TLE 1:5 5**

Number of peaks found: 15                      Corr. Area 1: 418.1  
 Noise: 0.2

**Peak table for sample 7 : TLE 1:5 5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	73	32.63	673.1		47.84
3	90	32.96	552.5		49.70
4	436	14.46	50.3		79.33
5	472	13.43	43.1		81.40
6	506	19.06	57.1		83.27
7	536	14.66	41.5		84.65
8	571	33.01	87.6		86.30
9	618	30.44	74.7		88.21
10	693	80.38	175.8		90.61
11	939	166.77	269.2		93.96
12	1,411	209.72	225.3		97.41
13	1,526	108.94	108.2		98.16
14	1,715	87.53	77.3		99.38
15	1,830	328.82	272.2		100.13
16	2,902	110.92	57.9		104.22
17	10,380	75.00	10.9	Upper Marker	113.00

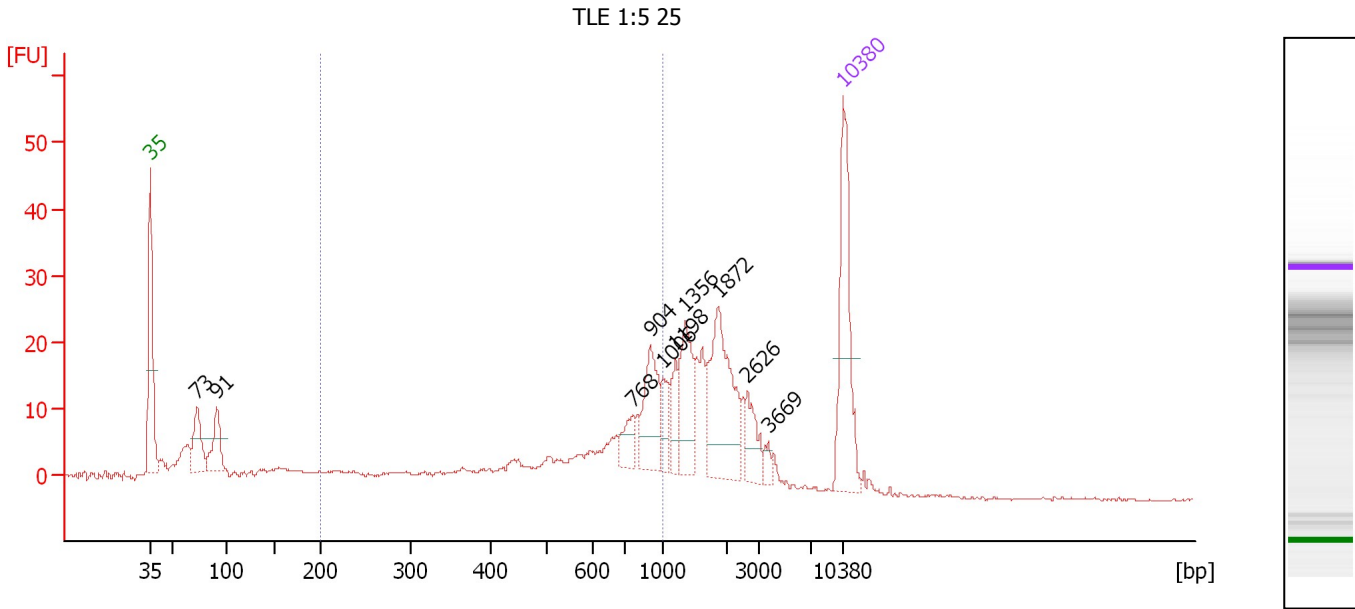
**Region table for sample 7 : TLE 1:5 5**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	669	1,000	418.1	1,814.8	33	32.0	640.90	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : TLE 1:5 25**

Number of peaks found: 10                      Corr. Area 1: 165.3  
 Noise: 0.2

**Peak table for sample 8 : TLE 1:5 25**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	73	46.31	967.4		47.74
3	91	42.48	710.0		49.73
4	768	17.13	33.8		91.73
5	904	48.44	81.2		93.51
6	1,006	17.02	25.6		94.80
7	1,198	18.28	23.1		96.04
8	1,356	45.82	51.2		97.06
9	1,872	84.07	68.0		100.40
10	2,626	22.19	12.8		103.31
11	3,669	6.12	2.5		105.41
12	10,380	75.00	10.9	Upper Marker	113.00

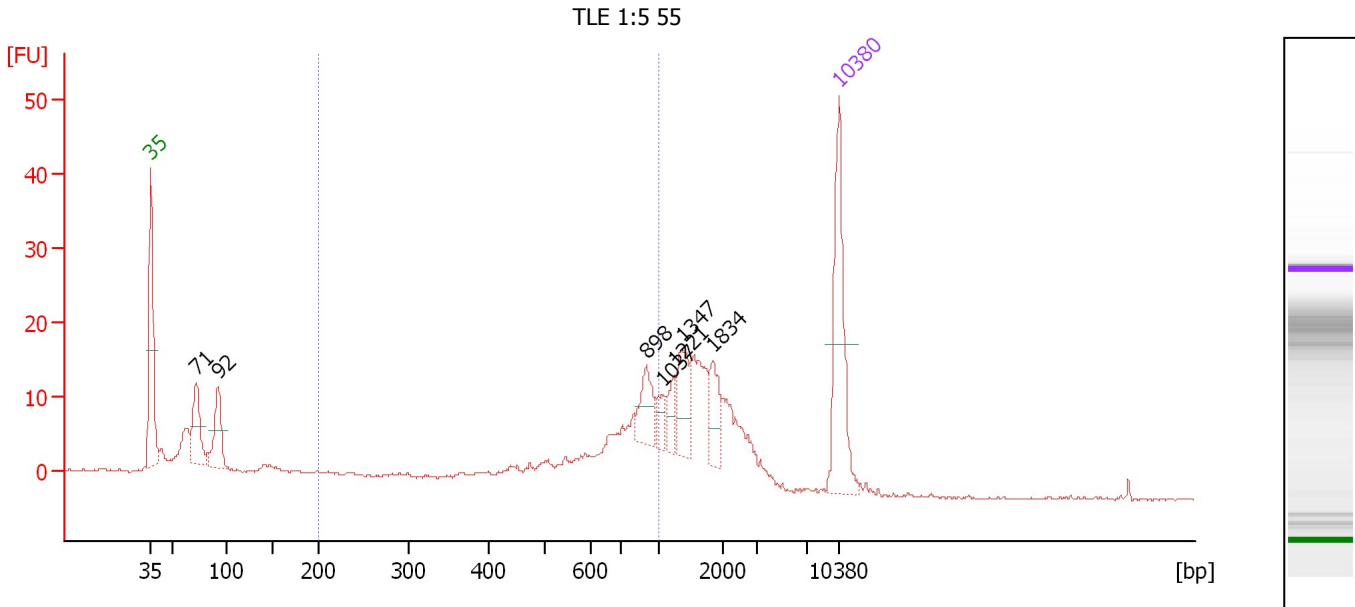
**Region table for sample 8 : TLE 1:5 25**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	631	1,000	165.3	881.1	37	35.8	281.66	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : TLE 1:5 55**

Number of peaks found: 7                      Corr. Area 1: 107.1  
 Noise: 0.2

**Peak table for sample 9 : TLE 1:5 55**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	71	58.58	1,244.0		47.61
3	92	51.58	853.4		49.83
4	898	28.24	47.7		93.43
5	1,037	10.82	15.8		95.00
6	1,221	14.04	17.4		96.19
7	1,347	30.92	34.8		97.00
8	1,834	24.38	20.1		100.15
9	10,380	75.00	10.9	Upper Marker	113.00

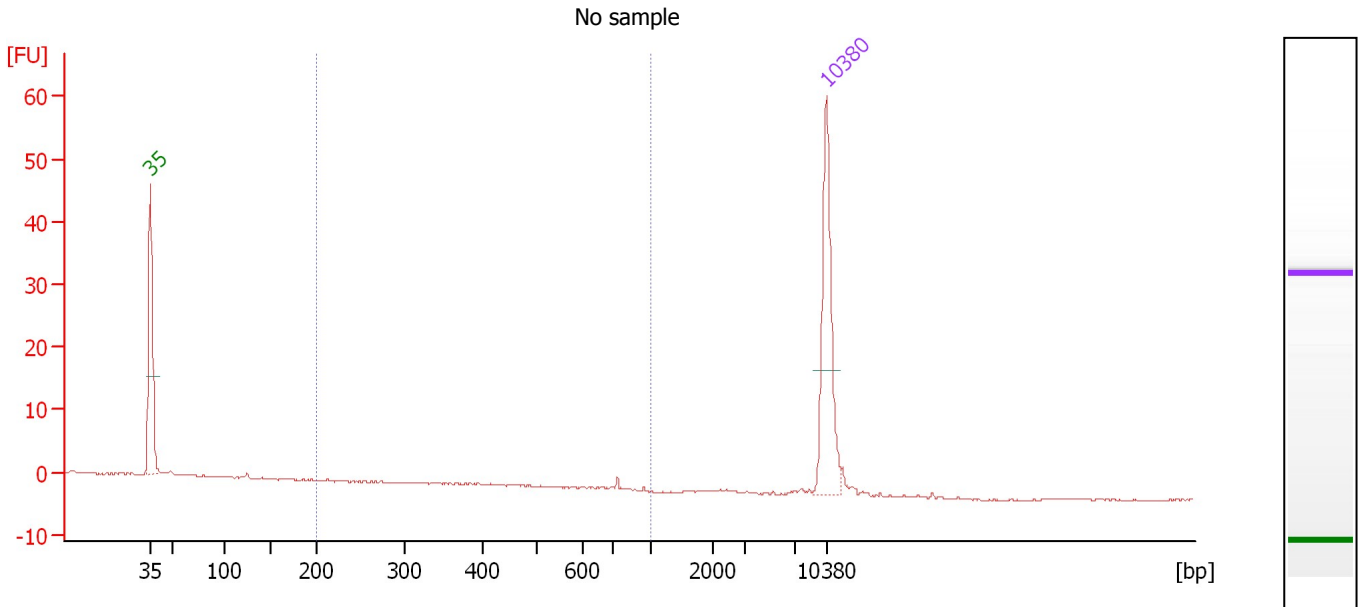
**Region table for sample 9 : TLE 1:5 55**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	681	1,000	107.1	558.3	33	30.1	205.09	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : No sample**

Number of peaks found: 0                      Corr. Area 1: 0.2  
 Noise: 0.1

**Peak table for sample 10 : No sample**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

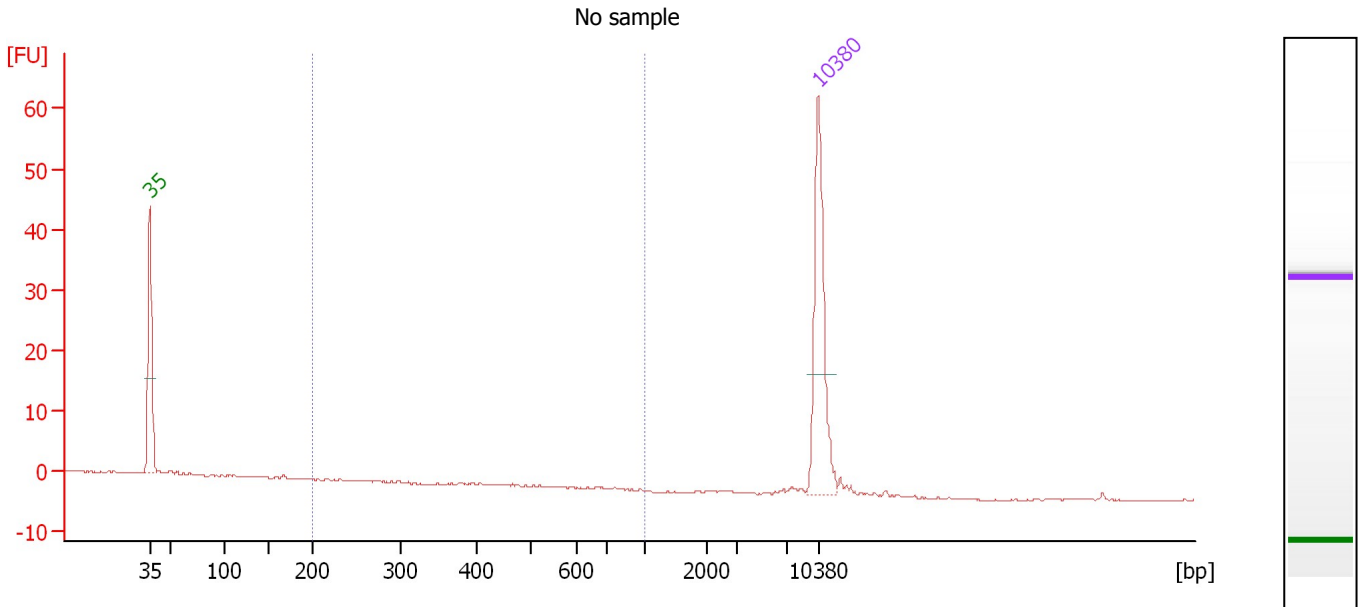
**Region table for sample 10 : No sample**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	738	1,000	0.2	0.8	8	0.6	0.37	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
 Modified: 5/26/2015 11:33:45 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : No sample**

Number of peaks found: 0                      Corr. Area 1: 0.0  
 Noise: 0.1

**Peak table for sample 11 : No sample**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : No sample**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	0	1,000	0.0	0.0	0	0.0	0.00	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-26\2015-05-26\_001.xad

Created: 5/26/2015 10:53:08 AM  
Modified: 5/26/2015 11:33:45 AM

**Gel Image**

