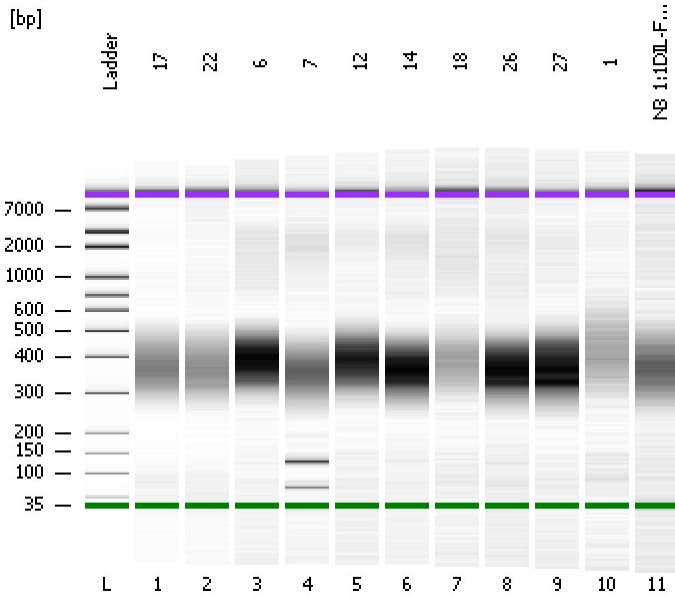


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
Modified: 2/19/2014 12:40:02 PM

**Electrophoresis File Run Summary**



Instrument Information:

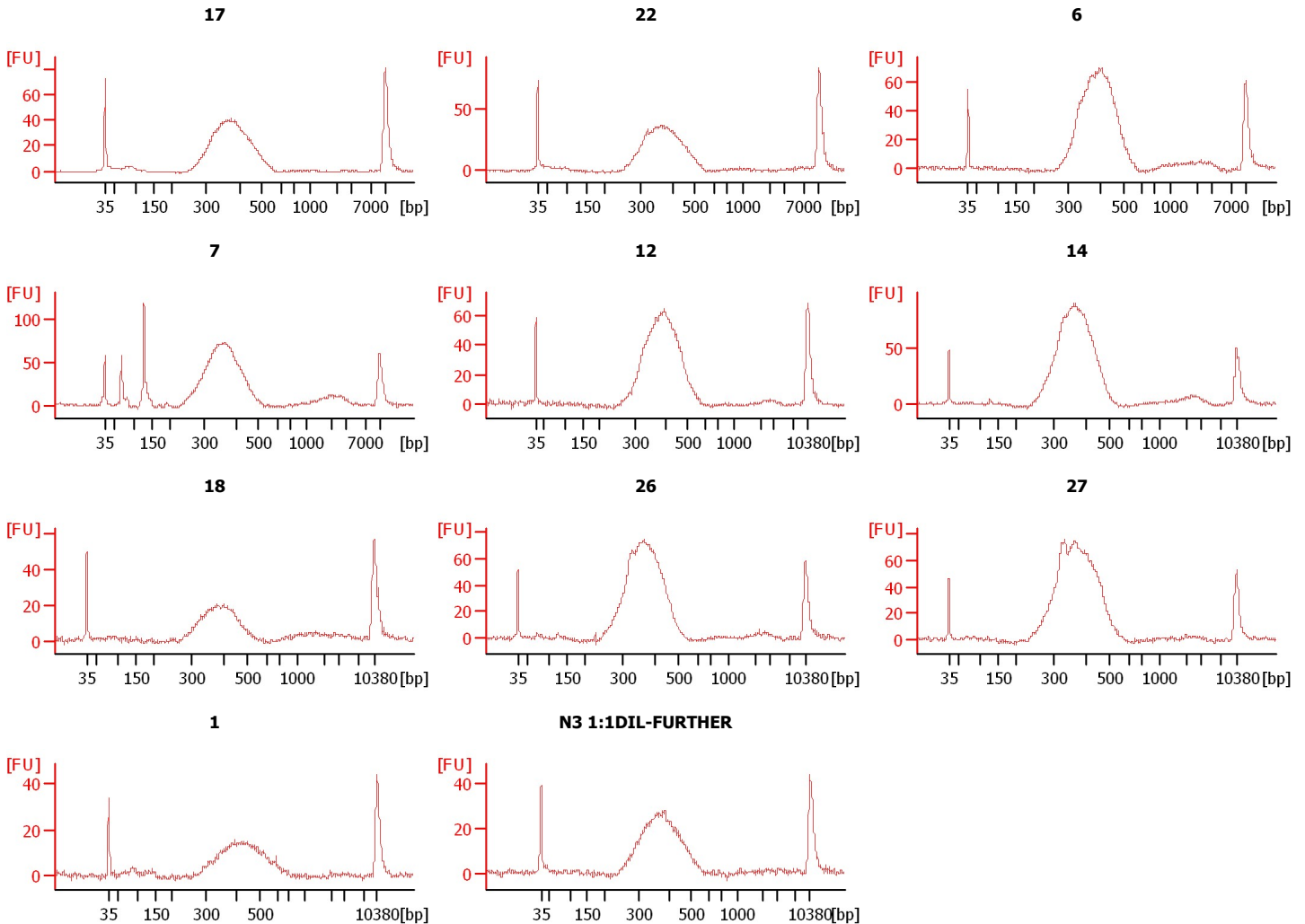
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
 Modified: 2/19/2014 12:40:02 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
17		<input type="checkbox"/>	✓			
22		<input type="checkbox"/>	✓			
6		<input type="checkbox"/>	✓			
7		<input type="checkbox"/>	✓			
12		<input type="checkbox"/>	✓			
14		<input type="checkbox"/>	✓			
18		<input type="checkbox"/>	✓			
26		<input type="checkbox"/>	✓			
27		<input type="checkbox"/>	✓			
1		<input type="checkbox"/>	✓			
N3 1:1DIL-FURTHER		<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\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
Modified: 2/19/2014 12:40:02 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

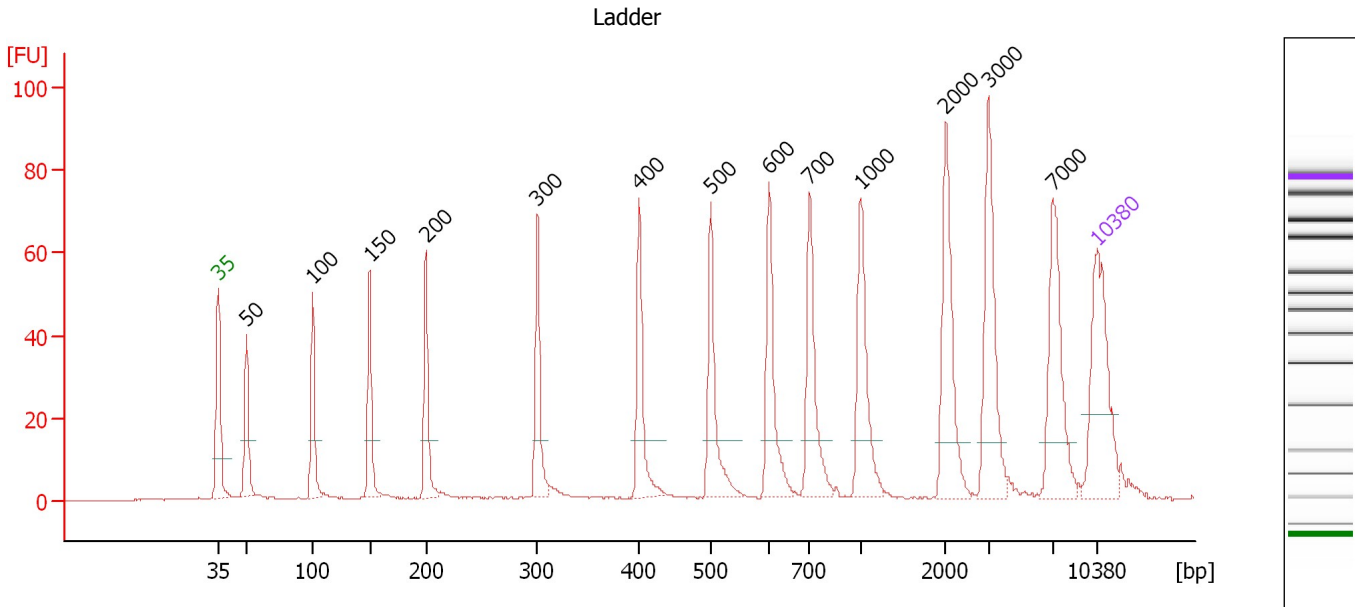
**Ladder**

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\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

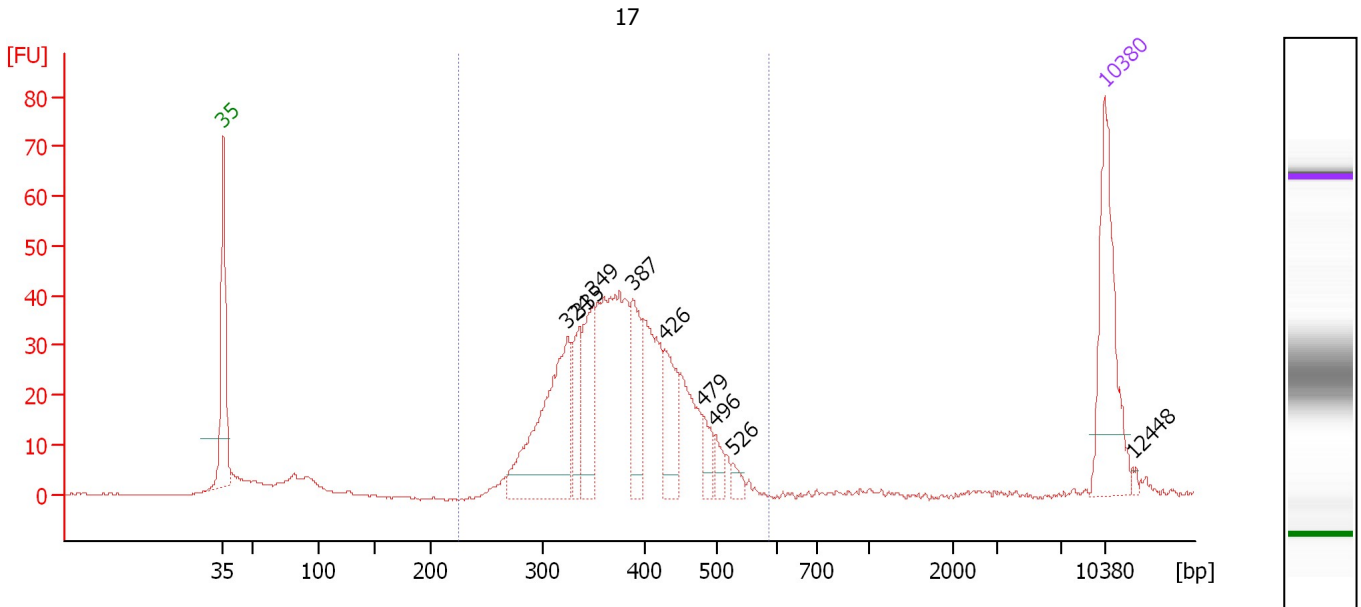
**Peak table for Ladder**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.25	50	150.00	4,545.5	Ladder Peak
3	50.52	100	150.00	2,272.7	Ladder Peak
4	55.07	150	150.00	1,515.2	Ladder Peak
5	59.53	200	150.00	1,136.4	Ladder Peak
6	68.42	300	150.00	757.6	Ladder Peak
7	76.53	400	150.00	568.2	Ladder Peak
8	82.23	500	150.00	454.5	Ladder Peak
9	86.90	600	150.00	378.8	Ladder Peak
10	90.13	700	150.00	324.7	Ladder Peak
11	94.21	1,000	150.00	227.3	Ladder Peak
12	100.97	2,000	150.00	113.6	Ladder Peak
13	104.37	3,000	150.00	75.8	Ladder Peak
14	109.47	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 17**

Number of peaks found: 9                      Corr. Area 1: 636.7  
 Noise: 0.1

**Peak table for sample 1 : 17**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	70.34	324	156.81	734.0	
3	71.23	335	42.22	191.2	
4	72.37	349	62.93	273.4	
5	75.50	387	55.10	215.6	
6	78.00	426	49.22	175.2	
7	81.05	479	18.67	59.0	
8	82.02	496	11.60	35.4	
9	83.46	526	8.04	23.2	
10	113.00	10,380	75.00	10.9	Upper Marker
11	115.16	12,448	0.00	0.0	

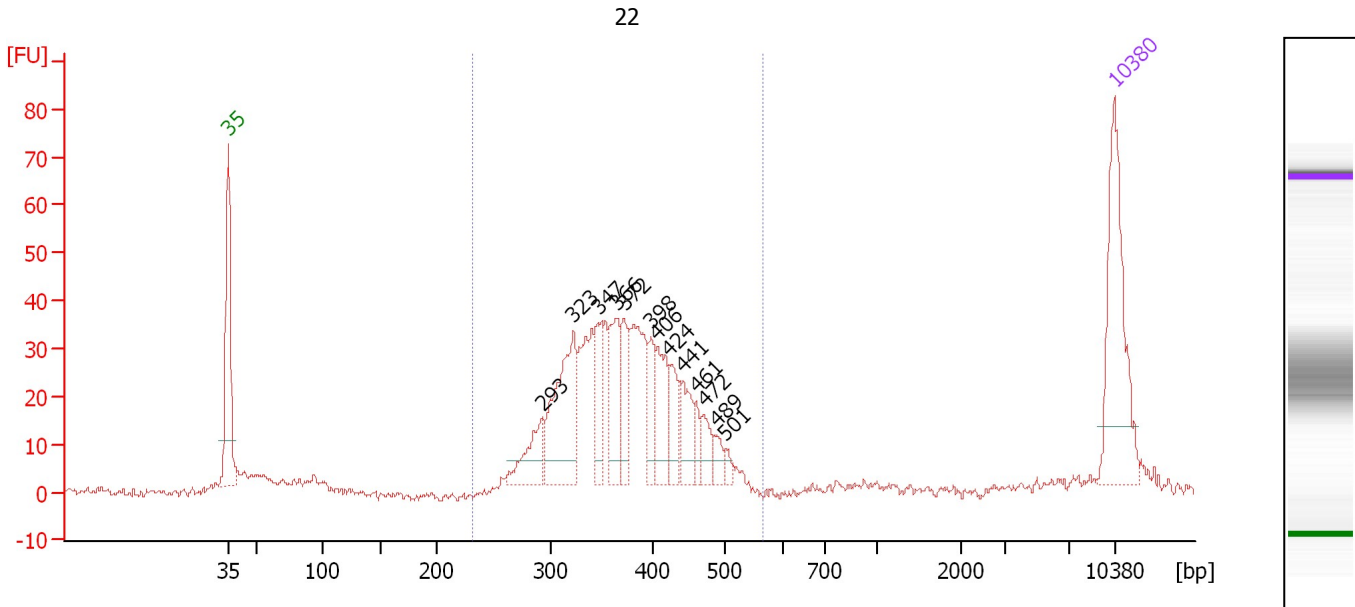
**Region table for sample 1 : 17**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
223	587	380	2,877.1	700.12	636.7	92	15.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 22**

Number of peaks found: 13                      Corr. Area 1: 567.2  
 Noise: 0.9

**Peak table for sample 2 : 22**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	67.81	293	36.36	187.9	
3	70.29	323	97.26	456.1	
4	72.23	347	30.60	133.6	
5	73.75	366	46.60	193.1	
6	74.29	372	27.15	110.5	
7	76.40	398	24.25	92.2	
8	76.86	406	38.73	144.6	
9	77.87	424	26.82	95.9	
10	78.88	441	28.58	98.1	
11	79.98	461	11.39	37.5	
12	80.65	472	16.12	51.7	
13	81.58	489	9.61	29.8	
14	82.25	501	5.38	16.3	
15	113.00	10,380	75.00	10.9	Upper Marker

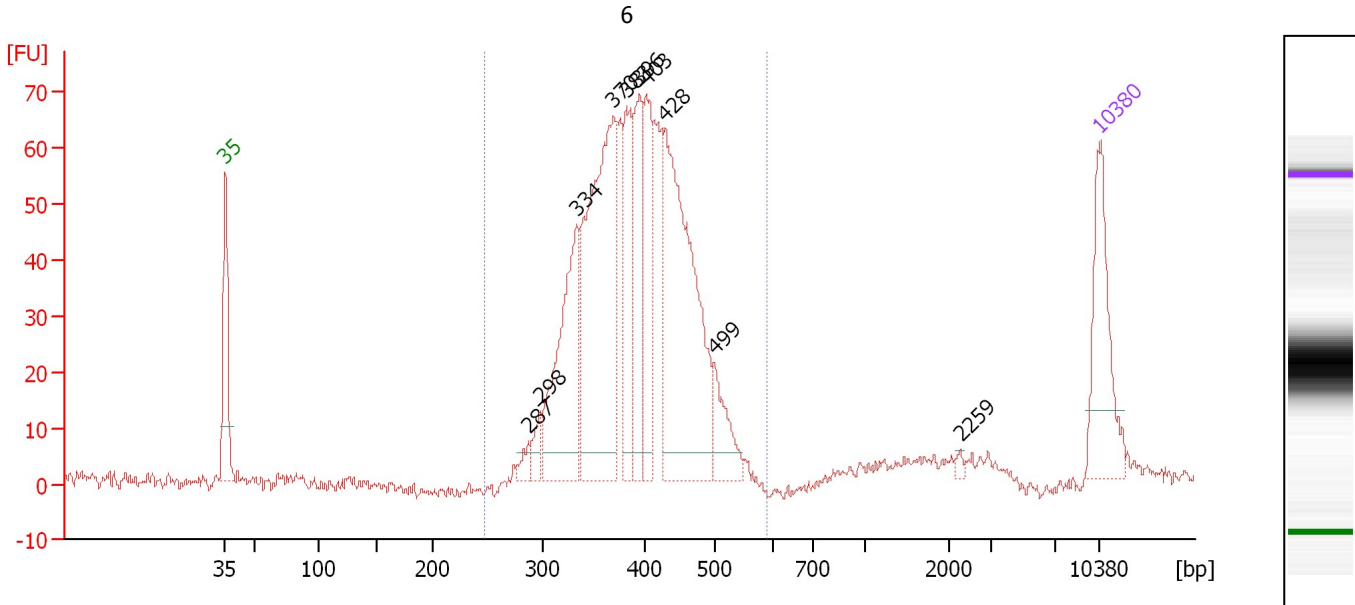
**Region table for sample 2 : 22**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
232	564	375	2,504.0	602.28	567.2	92	15.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 6**

Number of peaks found: 10                      Corr. Area 1: 969.6  
 Noise: 1.4

**Peak table for sample 3 : 6**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	67.26	287	12.51	66.1	
3	68.24	298	17.81	90.6	
4	71.15	334	171.25	777.7	
5	74.09	370	316.08	1,294.6	
6	75.12	383	98.54	390.3	
7	76.18	396	93.42	357.7	
8	76.70	403	91.75	345.1	
9	78.15	428	297.80	1,053.3	
10	82.16	499	46.55	141.4	
11	101.85	2,259	3.30	2.2	
12	113.00	10,380	75.00	10.9	Upper Marker

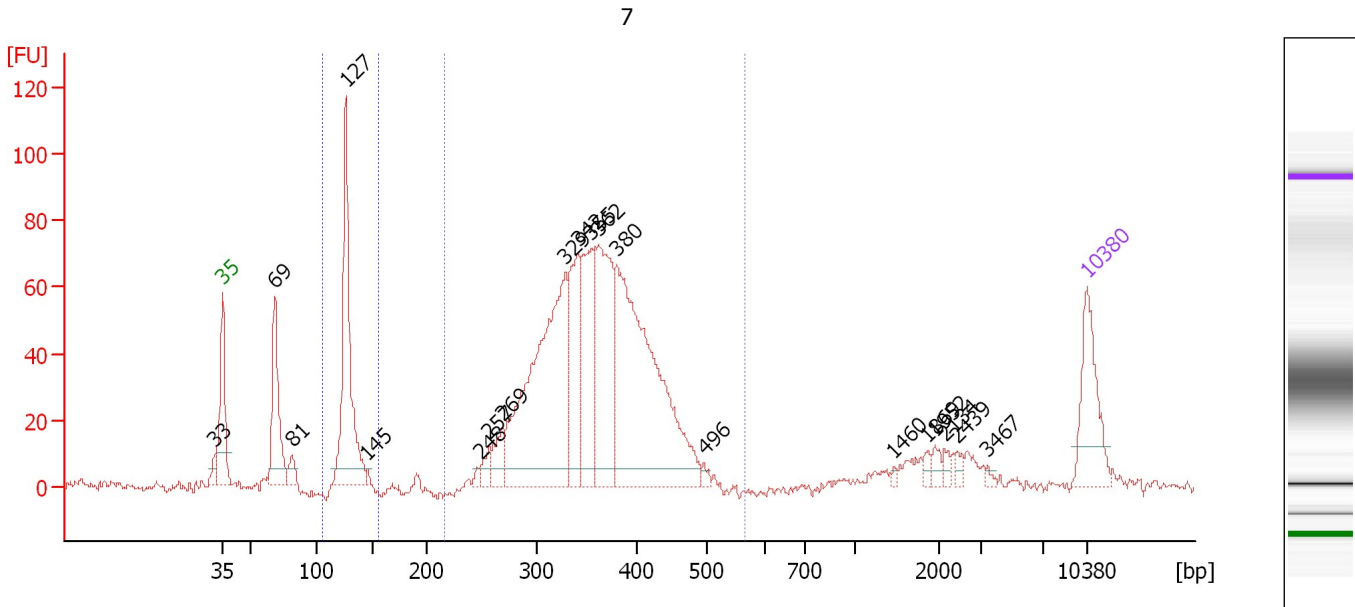
**Region table for sample 3 : 6**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
248	587	395	5,165.9	1,317.01	969.6	92	13.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 7**

Number of peaks found: 20                      Corr. Area 1: 1,018.4  
 Noise: 1.3    Corr. Area 2: 151.8

**Peak table for sample 4 : 7**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	42.40	33	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	47.23	69	148.60	3,273.5	
4	48.57	81	21.68	403.1	
5	52.98	127	295.97	3,531.9	
6	54.66	145	5.55	57.8	
7	63.81	248	7.06	43.1	
8	64.59	257	18.38	108.4	
9	65.63	269	39.21	221.2	
10	70.77	329	437.32	2,014.2	
11	71.80	342	138.40	613.6	
12	72.88	355	152.78	652.0	
13	73.44	362	208.91	874.5	
14	74.91	380	472.55	1,884.0	
15	81.99	496	6.59	20.1	
16	97.32	1,460	3.13	3.2	
17	100.09	1,869	7.17	5.8	
18	100.65	1,952	9.41	7.3	
19	101.43	2,134	7.70	5.5	
20	102.46	2,439	7.20	4.5	
21	104.97	3,467	3.66	1.6	
22	113.00	10,380	75.00	10.9	Upper Marker



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**

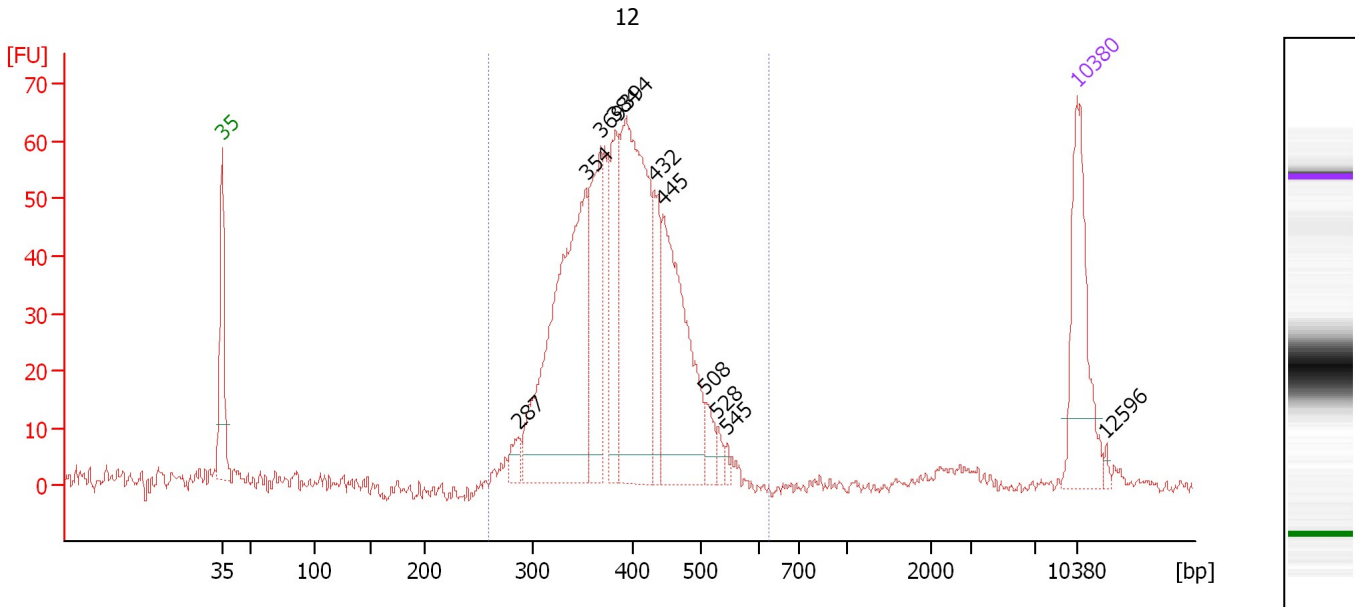
... Region table for sample 4 : Z

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
106	155	129	3,408.4	289.56	151.8	11	4.1
217	564	359	6,317.7	1,457.72	1,018.4	77	14.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 12**

Number of peaks found: 11                      Corr. Area 1: 891.0  
 Noise: 0.7

**Peak table for sample 5 : 12**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	67.22	287	15.15	80.1	
3	72.76	354	292.22	1,252.3	
4	73.99	369	116.74	479.9	
5	75.21	384	89.55	353.7	
6	76.04	394	255.75	983.8	
7	78.35	432	49.62	174.1	
8	79.09	445	167.41	570.1	
9	82.58	508	16.25	48.5	
10	83.54	528	7.19	20.6	
11	84.33	545	4.48	12.5	
12	113.00	10,380	75.00	10.9	Upper Marker
13	115.31	12,596	0.00	0.0	

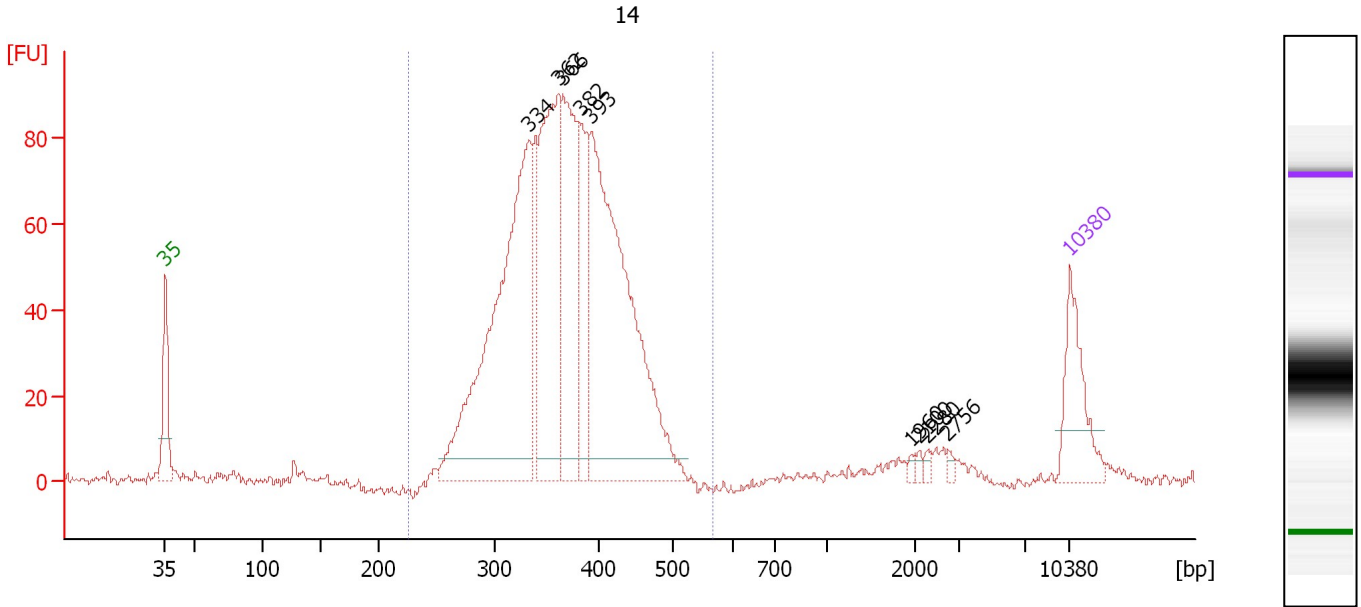
**Region table for sample 5 : 12**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
259	626	393	4,274.2	1,081.06	891.0	93	14.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 14**

Number of peaks found: 9                      Corr. Area 1: 1,248.4  
 Noise: 1.2

**Peak table for sample 6 : 14**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	71.15	334	609.25	2,766.6	
3	73.43	362	334.53	1,401.3	
4	73.78	366	245.53	1,016.4	
5	75.09	382	126.54	501.6	
6	75.96	393	574.07	2,213.3	
7	100.70	1,960	4.12	3.2	
8	101.31	2,100	4.08	2.9	
9	101.92	2,280	4.74	3.2	
10	103.54	2,756	4.35	2.4	
11	113.00	10,380	75.00	10.9	Upper Marker

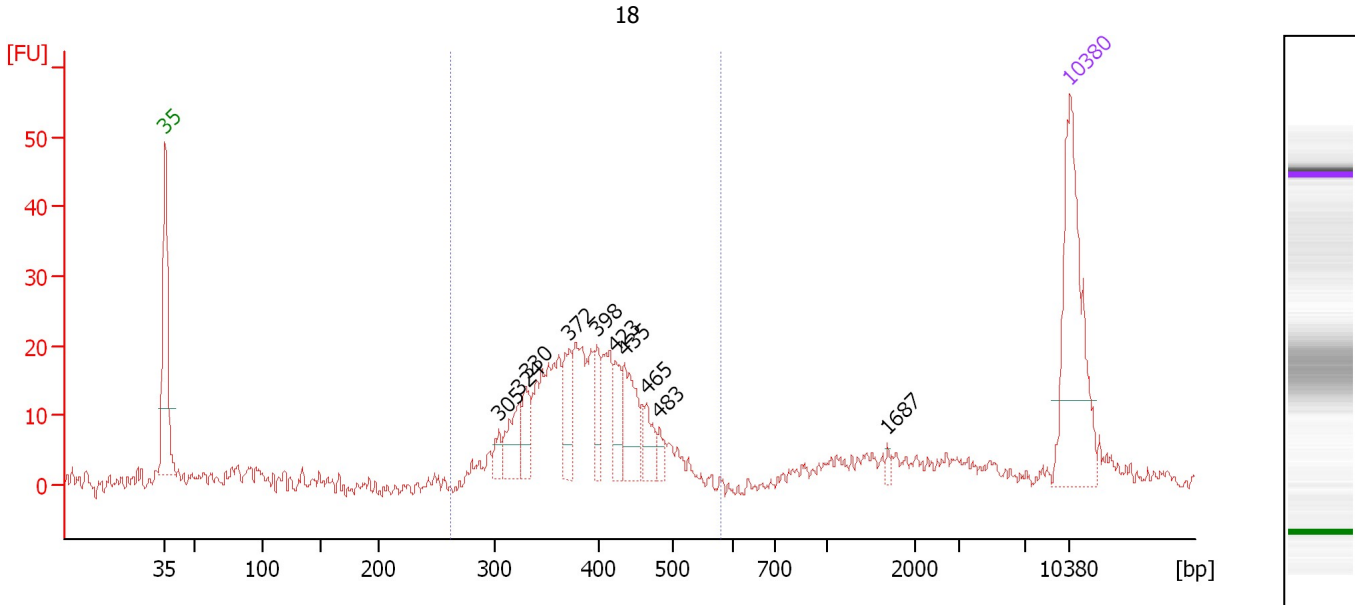
**Region table for sample 6 : 14**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
225	566	368	8,248.6	1,956.72	1,248.4	97	13.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 18**

Number of peaks found: 10                      Corr. Area 1: 249.3  
 Noise: 1.3

**Peak table for sample 7 : 18**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	68.81	305	9.46	47.0	
3	70.40	324	25.60	119.5	
4	70.89	330	18.41	84.4	
5	74.28	372	26.20	106.6	
6	76.39	398	18.42	70.1	
7	77.85	423	18.67	66.9	
8	78.51	435	33.70	117.5	
9	80.22	465	15.15	49.4	
10	81.24	483	6.69	21.0	
11	98.86	1,687	2.50	2.2	
12	113.00	10,380	75.00	10.9	Upper Marker

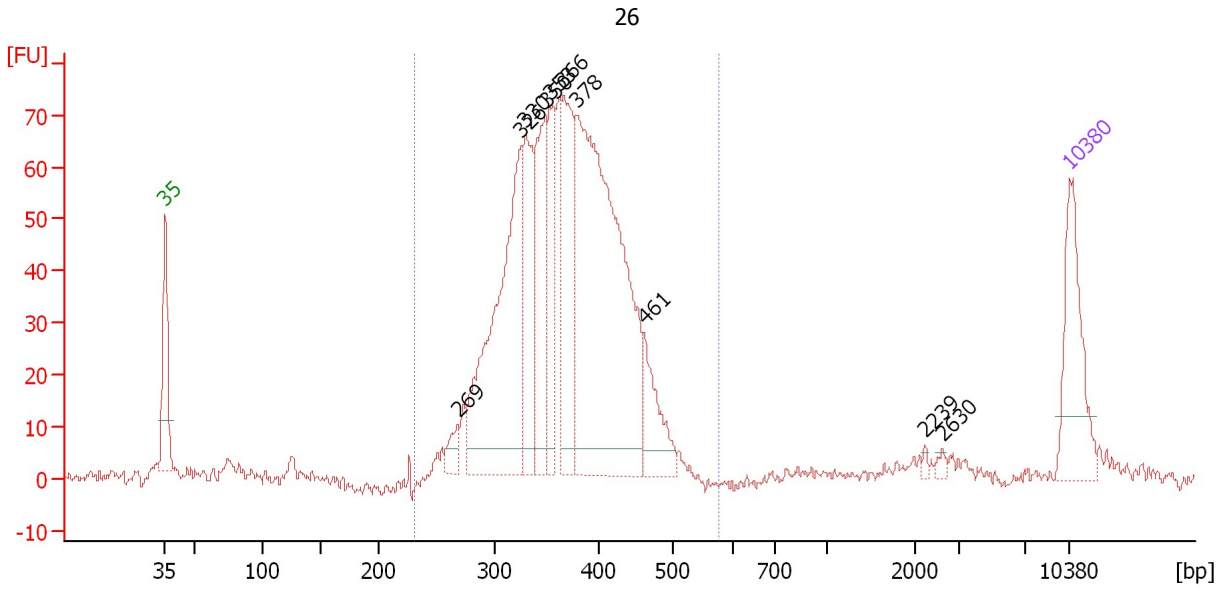
**Region table for sample 7 : 18**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
262	580	390	1,325.9	334.19	249.3	85	13.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 26**

Number of peaks found: 10                      Corr. Area 1: 1,054.7  
 Noise: 1.2

**Peak table for sample 8 : 26**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	65.65	269	19.72	111.1	
3	70.53	326	306.25	1,423.2	
4	70.84	330	118.59	544.7	
5	72.44	350	128.81	558.4	
6	72.75	353	86.50	370.9	
7	73.81	366	151.46	626.2	
8	74.79	378	502.41	2,011.3	
9	80.02	461	63.47	208.5	
10	101.78	2,239	2.86	1.9	
11	103.11	2,630	3.85	2.2	
12	113.00	10,380	75.00	10.9	Upper Marker

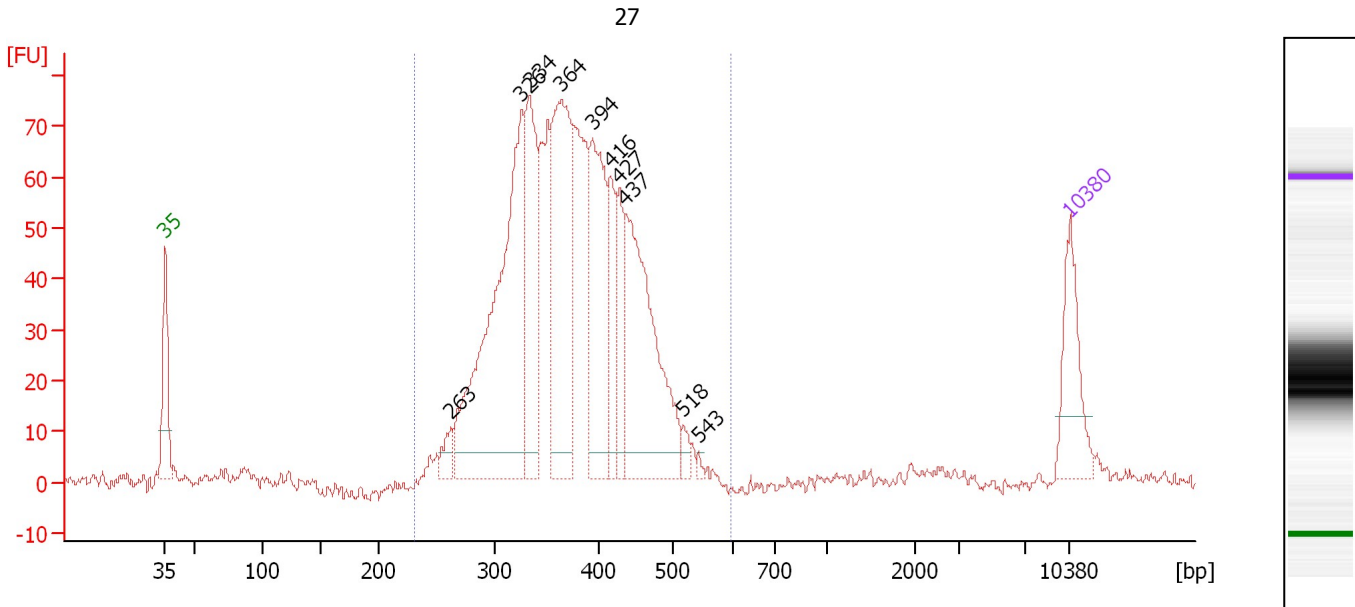
**Region table for sample 8 : 26**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
230	576	369	6,299.9	1,495.14	1,054.7	93	14.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

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 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 27**

Number of peaks found: 10                      Corr. Area 1: 1,197.5  
 Noise: 1.5

**Peak table for sample 9 : 27**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	65.11	263	26.43	152.4	
3	70.54	326	510.27	2,370.3	
4	71.20	334	202.46	917.5	
5	73.63	364	299.66	1,246.5	
6	76.06	394	207.28	796.8	
7	77.47	416	84.19	306.3	
8	78.09	427	68.59	243.2	
9	78.62	437	293.11	1,017.2	
10	83.08	518	12.81	37.5	
11	84.22	543	3.88	10.8	
12	113.00	10,380	75.00	10.9	Upper Marker

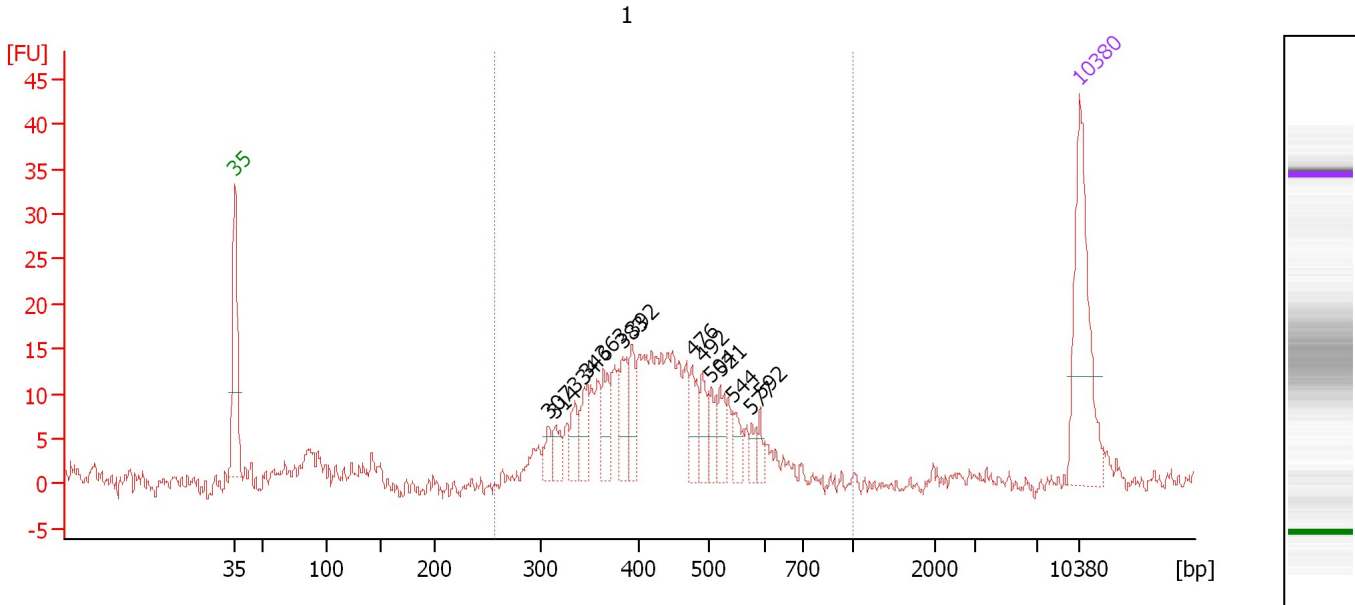
**Region table for sample 9 : 27**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
231	598	375	8,824.0	2,114.13	1,197.5	97	15.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

Created: 2/19/2014 11:37:54 AM  
 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 1**

Number of peaks found: 14                      Corr. Area 1: 228.5  
 Noise: 1.1

**Peak table for sample 10 : 1**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	68.98	307	12.70	62.7	
3	69.56	314	14.43	69.6	
4	71.19	334	17.03	77.2	
5	72.12	346	24.60	107.8	
6	73.54	363	25.26	105.4	
7	75.13	383	29.64	117.4	
8	75.92	392	22.16	85.6	
9	80.87	476	24.75	78.7	
10	81.76	492	19.36	59.7	
11	82.42	504	14.99	45.1	
12	83.21	521	17.32	50.4	
13	84.28	544	13.77	38.4	
14	85.82	577	7.65	20.1	
15	86.53	592	7.48	19.1	
16	113.00	10,380	75.00	10.9	Upper Marker

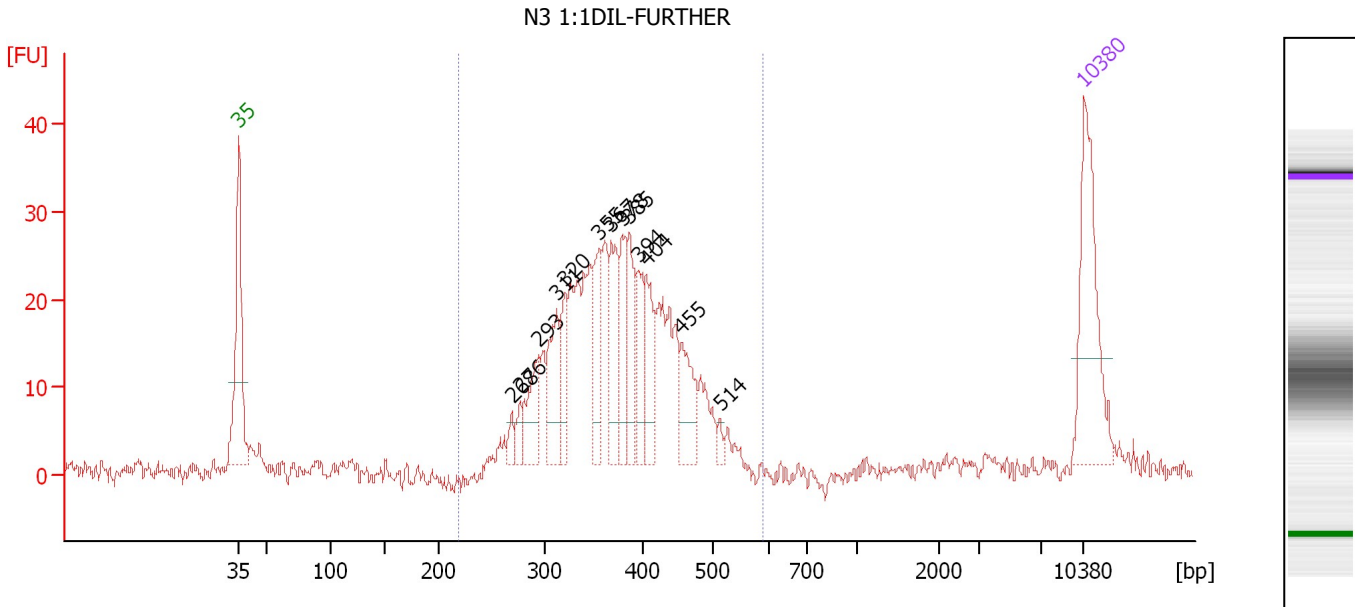
**Region table for sample 10 : 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
256	1,000	433	1,733.4	473.87	228.5	95	18.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

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 Modified: 2/19/2014 12:40:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : N3 1:1DIL-FURTHER**

Number of peaks found: 13                      Corr. Area 1: 419.7  
 Noise: 0.8

**Peak table for sample 11 : N3 1:1DIL-FURTHER**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	65.61	268	10.63	60.0	
3	66.27	276	11.42	62.7	
4	67.82	293	41.82	216.1	
5	69.32	311	52.15	253.9	
6	70.03	320	31.01	146.9	
7	72.90	355	42.65	181.9	
8	73.83	367	53.97	223.0	
9	74.75	378	40.13	160.8	
10	75.28	385	46.11	181.7	
11	76.08	394	35.63	136.9	
12	76.74	404	38.27	143.7	
13	79.66	455	40.82	136.0	
14	82.88	514	5.85	17.3	
15	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : N3 1:1DIL-FURTHER**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
218	589	376	3,402.3	814.96	419.7	92	16.5



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-19\2014-02-19\_003.xad

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**Gel Image**

