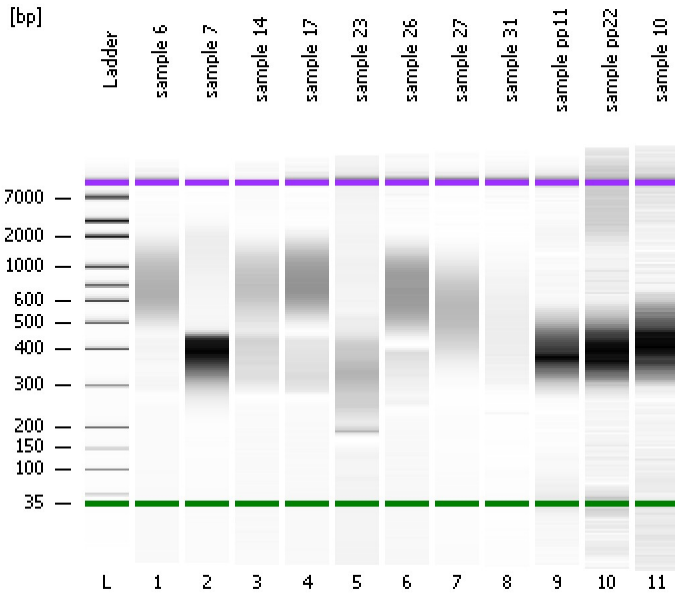


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

Created: 2/13/2014 2:33:09 PM  
Modified: 2/13/2014 4:42:45 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

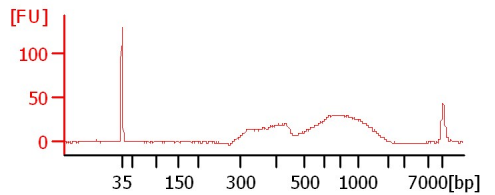
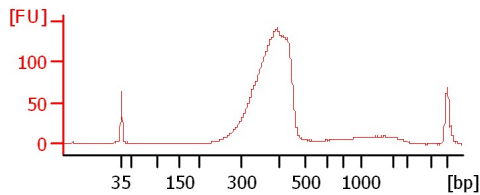
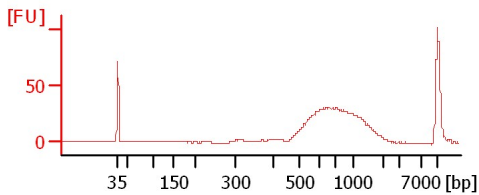
#### Chip Information:

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

sample 6

sample 7

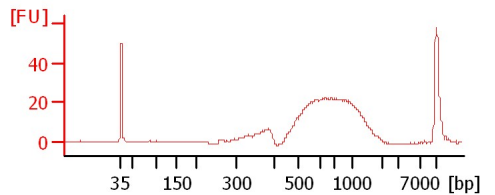
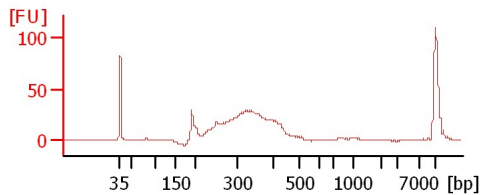
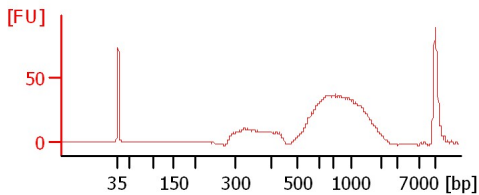
sample 14



sample 17

sample 23

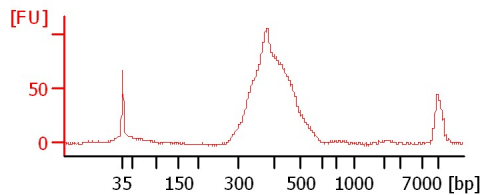
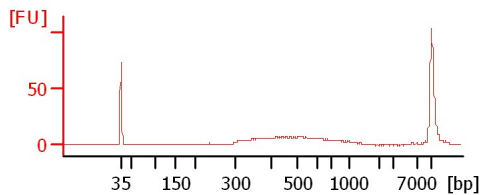
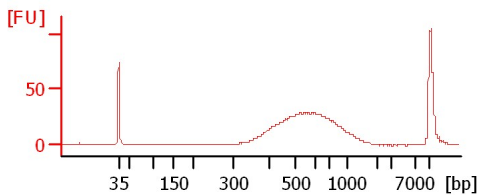
sample 26



sample 27

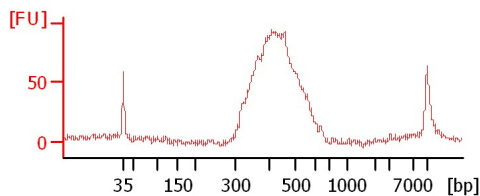
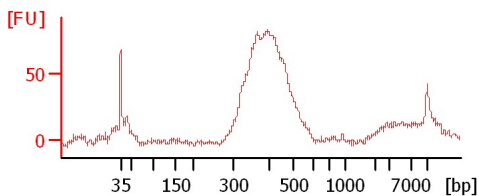
sample 31

sample pp11



sample pp22

sample 10



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

Created: 2/13/2014 2:33:09 PM  
 Modified: 2/13/2014 4:42:45 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 6		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>	✓			
sample 14		<input type="checkbox"/>	✓			
sample 17		<input type="checkbox"/>	✓			
sample 23		<input type="checkbox"/>	✓			
sample 26		<input type="checkbox"/>	✓			
sample 27		<input type="checkbox"/>	✓			
sample 31		<input type="checkbox"/>	✓			
sample pp11		<input type="checkbox"/>	✓			
sample pp22		<input type="checkbox"/>	✓			
sample 10		<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\2014-02-13\2014-02-13\_003.xad

Created: 2/13/2014 2:33:09 PM  
 Modified: 2/13/2014 4:42:45 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

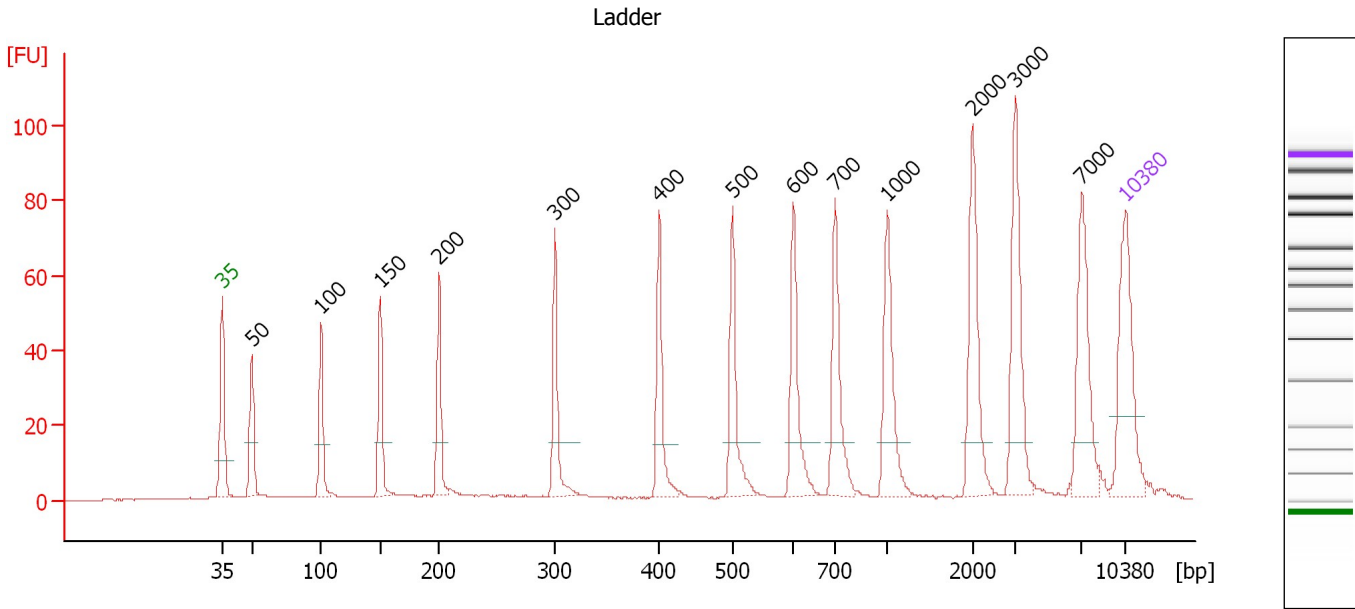
**Ladder**

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\2014-02-13\2014-02-13\_003.xad

Created: 2/13/2014 2:33:09 PM  
 Modified: 2/13/2014 4:42:45 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

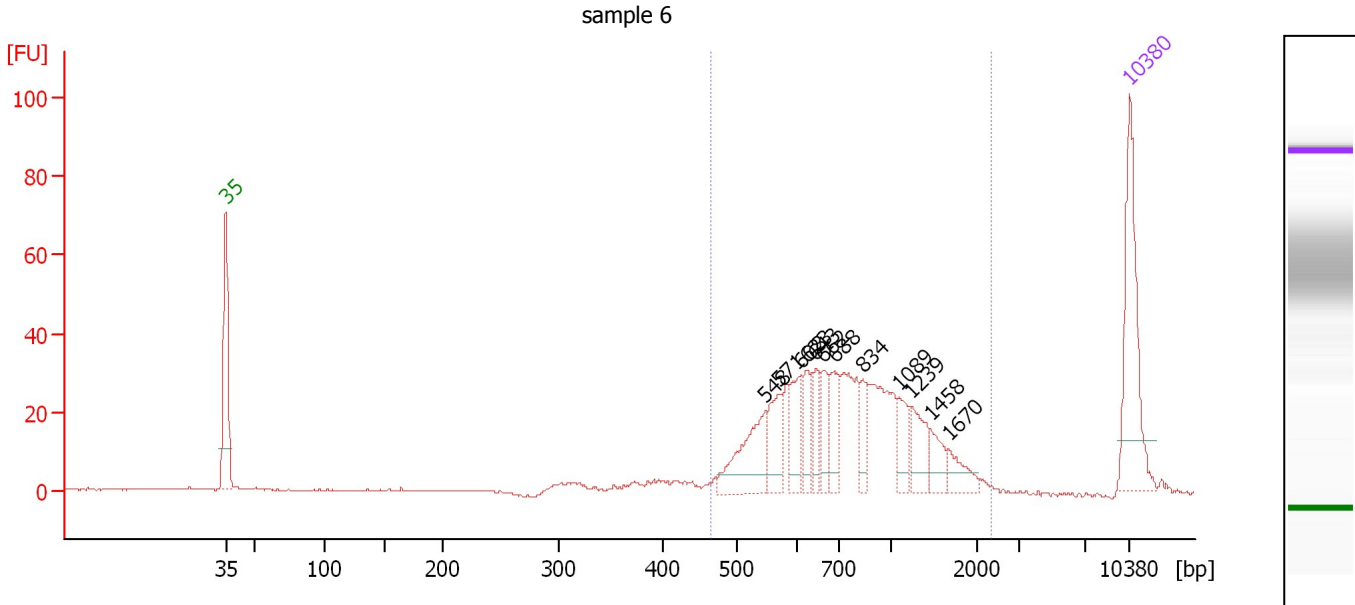
**Peak table for Ladder**

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	45.27	50	150.00	4,545.5	Ladder Peak
3	50.69	100	150.00	2,272.7	Ladder Peak
4	55.28	150	150.00	1,515.2	Ladder Peak
5	59.83	200	150.00	1,136.4	Ladder Peak
6	68.80	300	150.00	757.6	Ladder Peak
7	76.86	400	150.00	568.2	Ladder Peak
8	82.57	500	150.00	454.5	Ladder Peak
9	87.28	600	150.00	378.8	Ladder Peak
10	90.55	700	150.00	324.7	Ladder Peak
11	94.56	1,000	150.00	227.3	Ladder Peak
12	101.17	2,000	150.00	113.6	Ladder Peak
13	104.52	3,000	150.00	75.8	Ladder Peak
14	109.65	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\2014-02-13\2014-02-13\_003.xad

Created: 2/13/2014 2:33:09 PM  
 Modified: 2/13/2014 4:42:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 6**

Number of peaks found: 12                      Corr. Area 1: 473.5  
 Noise: 0.1

**Peak table for sample 1 : sample 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	84.82	548	63.11	174.6	
3	85.89	571	33.64	89.3	
4	87.55	608	31.78	79.2	
5	88.04	623	21.55	52.4	
6	88.70	643	23.54	55.4	
7	89.32	662	21.73	49.7	
8	90.15	688	29.18	64.3	
9	92.34	834	17.15	31.2	
10	95.15	1,089	23.15	32.2	
11	96.14	1,239	27.30	33.4	
12	97.59	1,458	16.36	17.0	
13	98.99	1,670	16.14	14.6	
14	113.00	10,380	75.00	10.9	Upper Marker

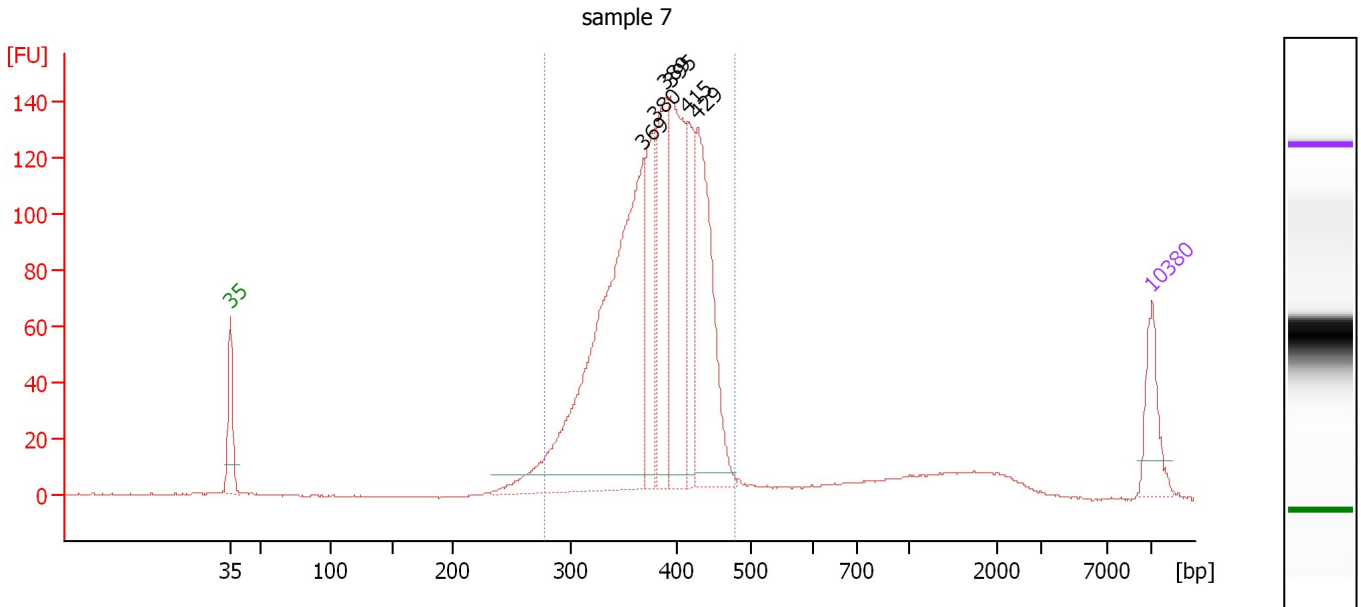
**Region table for sample 1 : sample 6**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
465	2,312	852	973.4	469.94	473.5	94	41.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

Created: 2/13/2014 2:33:09 PM  
 Modified: 2/13/2014 4:42:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 7**

Number of peaks found: 6                      Corr. Area 1: 1,660.9  
 Noise: 0.2

**Peak table for sample 2 : sample 7**

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	74.38	369	1,064.25	4,368.0	
3	75.23	380	223.64	892.4	
4	76.00	389	262.82	1,023.0	
5	76.44	395	398.68	1,530.1	
6	77.70	415	197.25	720.8	
7	78.51	429	393.66	1,391.0	
8	113.00	10,380	75.00	10.9	Upper Marker

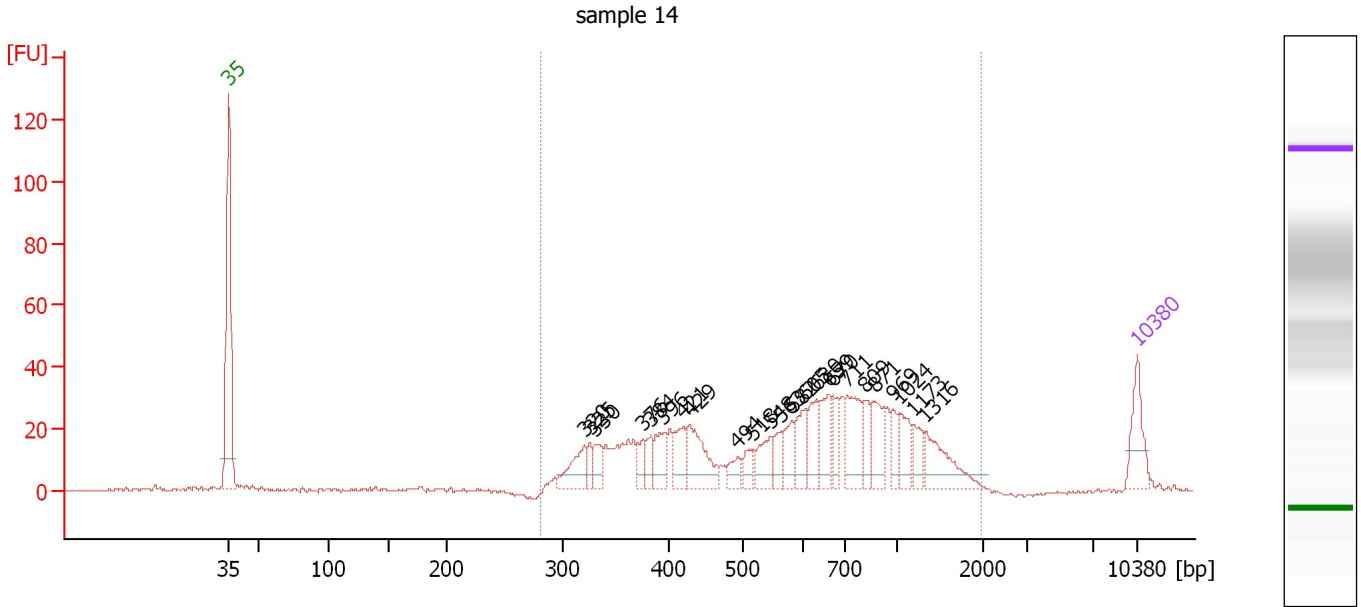
**Region table for sample 2 : sample 7**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
279	478	381	10,705.9	2,653.82	1,660.9	89	11.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

Created: 2/13/2014 2:33:09 PM  
 Modified: 2/13/2014 4:42:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 14**

Number of peaks found: 24                      Corr. Area 1: 709.6  
 Noise: 0.3


**Peak table for sample 3 : sample 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	70.40	320	93.40	442.5	
3	70.85	325	36.14	168.2	
4	71.22	330	49.59	227.7	
5	74.92	376	40.03	161.4	
6	75.54	384	44.94	177.5	
7	76.52	396	70.60	270.3	
8	78.04	421	74.89	269.8	
9	78.53	429	136.83	482.9	
10	82.23	494	39.45	121.0	
11	83.42	518	39.23	114.7	
12	84.82	548	66.22	183.2	
13	85.56	563	39.95	107.4	
14	86.42	582	61.16	159.3	
15	87.45	605	76.85	192.4	
16	88.27	630	76.49	183.9	
17	89.21	659	81.31	186.9	
18	89.58	670	50.65	114.5	
19	90.69	711	123.24	262.7	
20	92.01	809	52.71	98.7	
21	92.83	871	78.41	136.5	
22	94.14	969	39.37	61.6	
23	94.72	1,024	63.58	94.1	
24	95.71	1,173	47.01	60.7	
25	96.65	1,316	104.43	120.2	


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

Created: 2/13/2014 2:33:09 PM  
Modified: 2/13/2014 4:42:45 PM

**Electropherogram Summary Continued ...****... Peak table for sample 3 : sample 14**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
26	 113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 3 : sample 14**

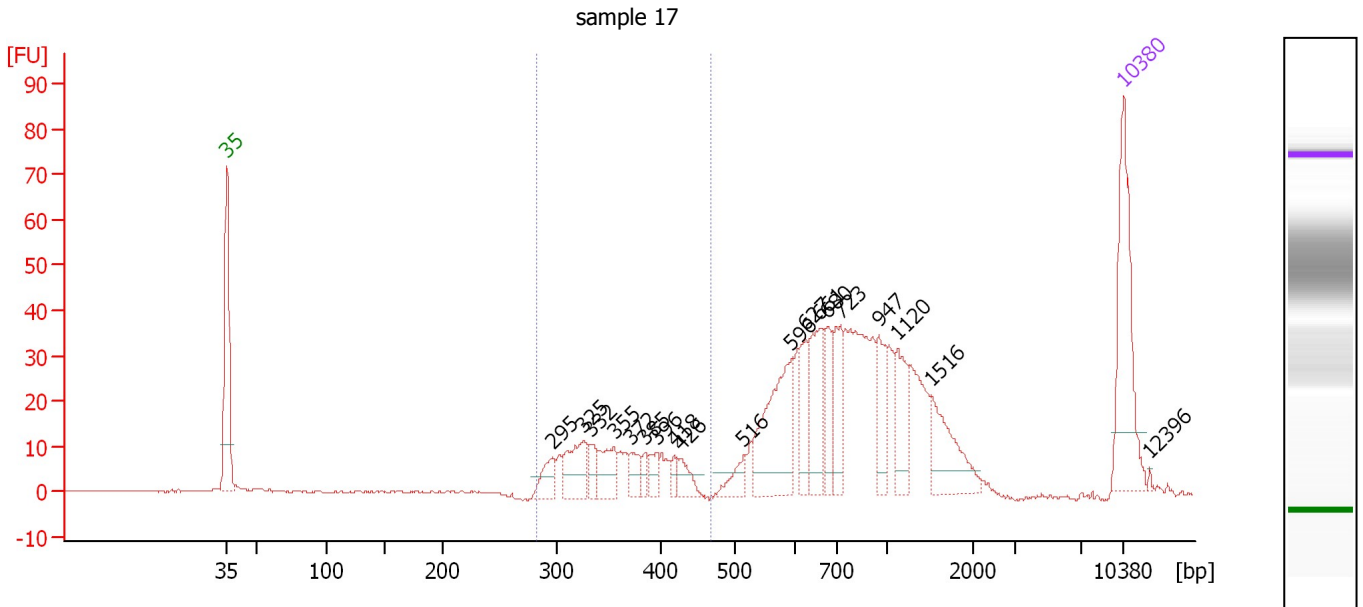
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
281	1,979	685	5,667.3	1,966.71	709.6	95	48.8	



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

Created: 2/13/2014 2:33:09 PM  
 Modified: 2/13/2014 4:42:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 17**

Number of peaks found: 19                      Corr. Area 1: 144.9  
 Noise: 0.2

**Peak table for sample 4 : sample 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	68.39	295	21.59	110.8	
3	70.84	325	42.43	197.6	
4	71.34	332	14.42	65.9	
5	73.21	355	28.78	122.9	
6	74.59	372	15.77	64.3	
7	75.63	385	8.54	33.6	
8	76.50	396	12.16	46.6	
9	77.88	418	7.89	28.6	
10	78.37	426	15.36	54.6	
11	83.33	516	15.70	46.1	
12	87.07	596	90.87	231.2	
13	88.15	627	28.80	69.6	
14	89.28	661	49.99	114.6	
15	89.90	680	27.53	61.3	
16	90.86	723	38.76	81.2	
17	93.86	947	29.63	47.4	
18	95.35	1,120	33.24	45.0	
19	97.98	1,516	45.31	45.3	
20	113.00	10,380	75.00	10.9	Upper Marker
21	115.00	12,396	0.00	0.0	

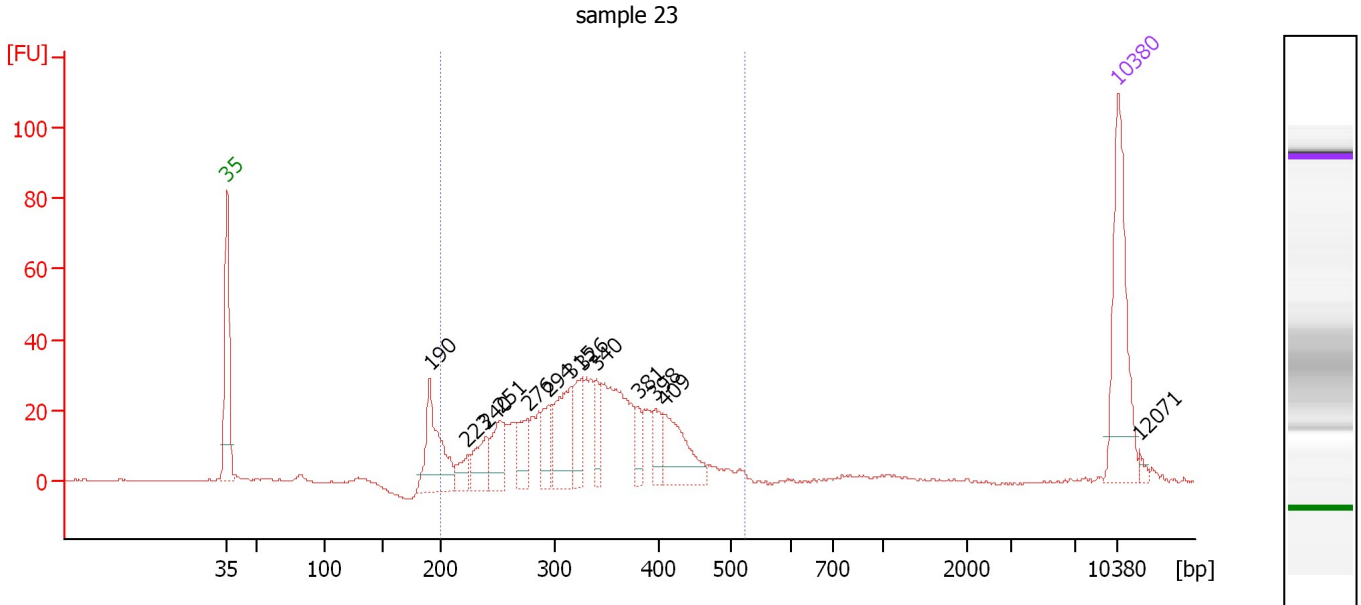
**Region table for sample 4 : sample 17**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
282	468	356	783.3	181.36	144.9	21	11.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 23**

Number of peaks found: 13                      Corr. Area 1: 559.4  
 Noise: 0.2

**Peak table for sample 5 : sample 23**

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	58.92	190	81.97	653.7	
3	61.89	223	19.42	131.9	
4	63.40	240	34.04	215.1	
5	64.45	251	37.58	226.4	
6	66.63	276	31.81	174.8	
7	68.26	294	25.52	131.5	
8	70.02	315	65.39	314.4	
9	70.90	326	34.77	161.6	
10	72.03	340	24.65	109.8	
11	75.30	381	15.25	60.7	
12	76.68	398	20.41	77.7	
13	77.35	409	53.27	197.6	
14	113.00	10,380	75.00	10.9	Upper Marker
15	114.68	12,071	0.00	0.0	

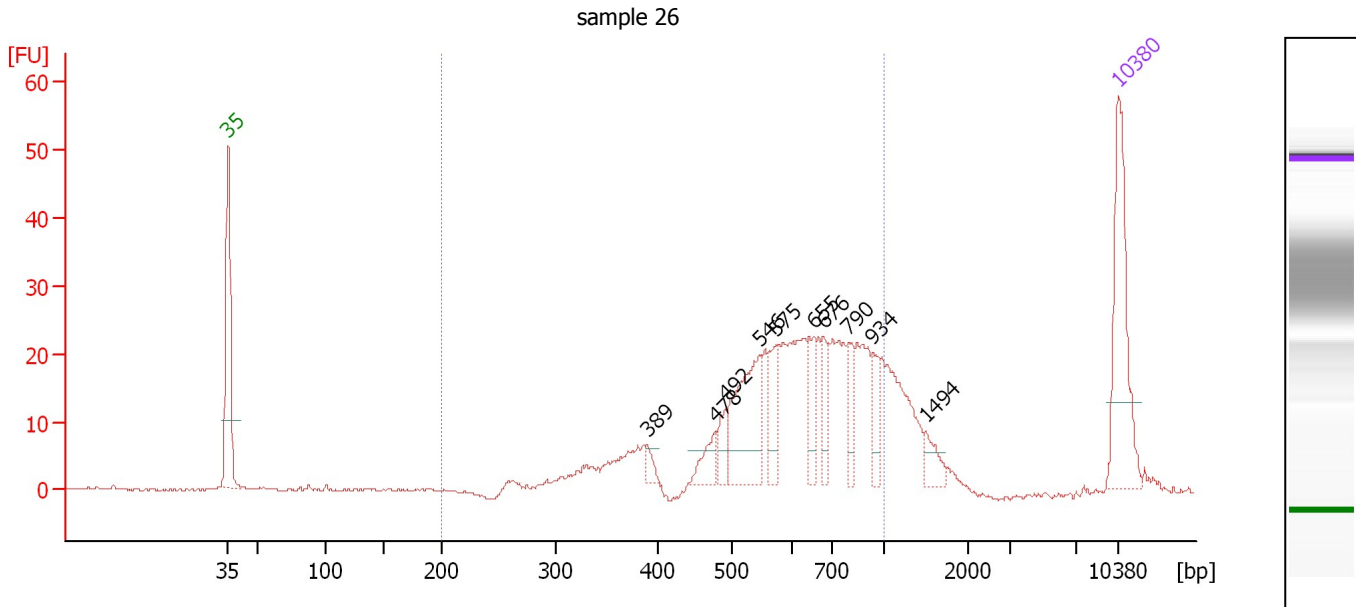
**Region table for sample 5 : sample 23**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	524	334	2,630.0	548.79	559.4	89	19.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 26**

Number of peaks found: 10                      Corr. Area 1: 357.3  
 Noise: 0.2

**Peak table for sample 6 : sample 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	75.99	389	8.86	34.5	
3	81.31	478	19.03	60.3	
4	82.11	492	17.26	53.2	
5	84.75	546	85.09	236.0	
6	86.09	575	31.29	82.5	
7	89.07	655	30.74	71.2	
8	89.78	676	23.69	53.1	
9	91.75	790	20.39	39.1	
10	93.68	934	18.65	30.3	
11	97.83	1,494	14.22	14.4	
12	113.00	10,380	75.00	10.9	Upper Marker

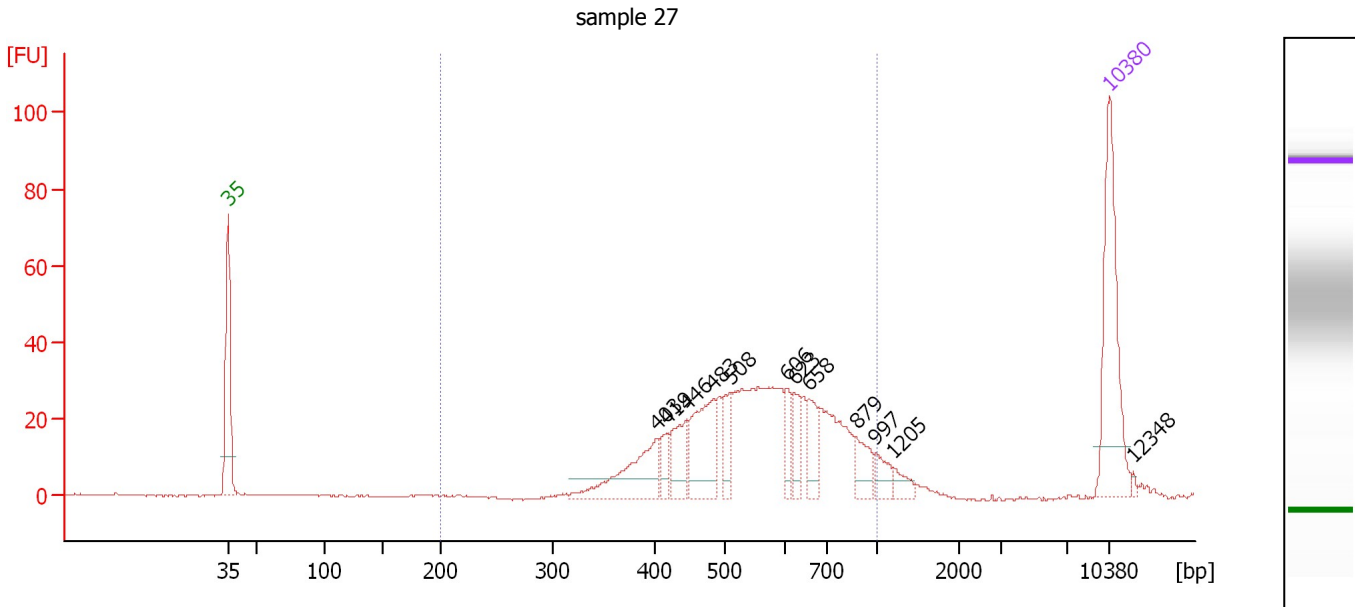
**Region table for sample 6 : sample 26**

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	631	1,574.0	587.20	357.3	85	26.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 27**

Number of peaks found: 12      Corr. Area 1: 526.3  
 Noise: 0.1

**Peak table for sample 7 : sample 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	77.05	403	61.00	229.2	
3	77.94	419	15.19	55.0	
4	79.46	446	31.82	108.2	
5	81.58	483	60.54	190.0	
6	82.94	508	21.66	64.6	
7	87.48	606	17.15	42.9	
8	88.03	623	18.92	46.0	
9	89.17	658	24.15	55.6	
10	92.95	879	20.11	34.7	
11	94.51	997	12.83	19.5	
12	95.91	1,205	8.90	11.2	
13	113.00	10,380	75.00	10.9	Upper Marker
14	114.95	12,348	0.00	0.0	

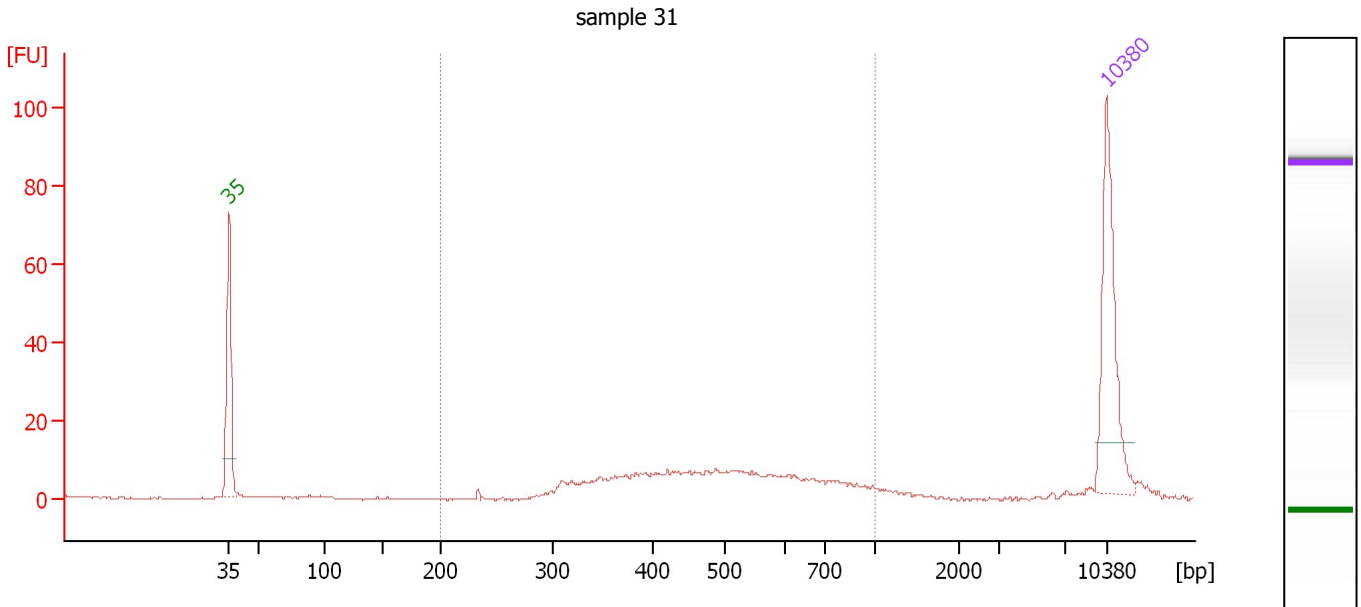
**Region table for sample 7 : sample 27**

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	572	1,372.2	479.86	526.3	94	24.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 31**

Number of peaks found: 0                      Corr. Area 1: 179.7  
 Noise: 0.2

**Peak table for sample 8 : sample 31**

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	113.00	10,380	75.00	10.9	Upper Marker

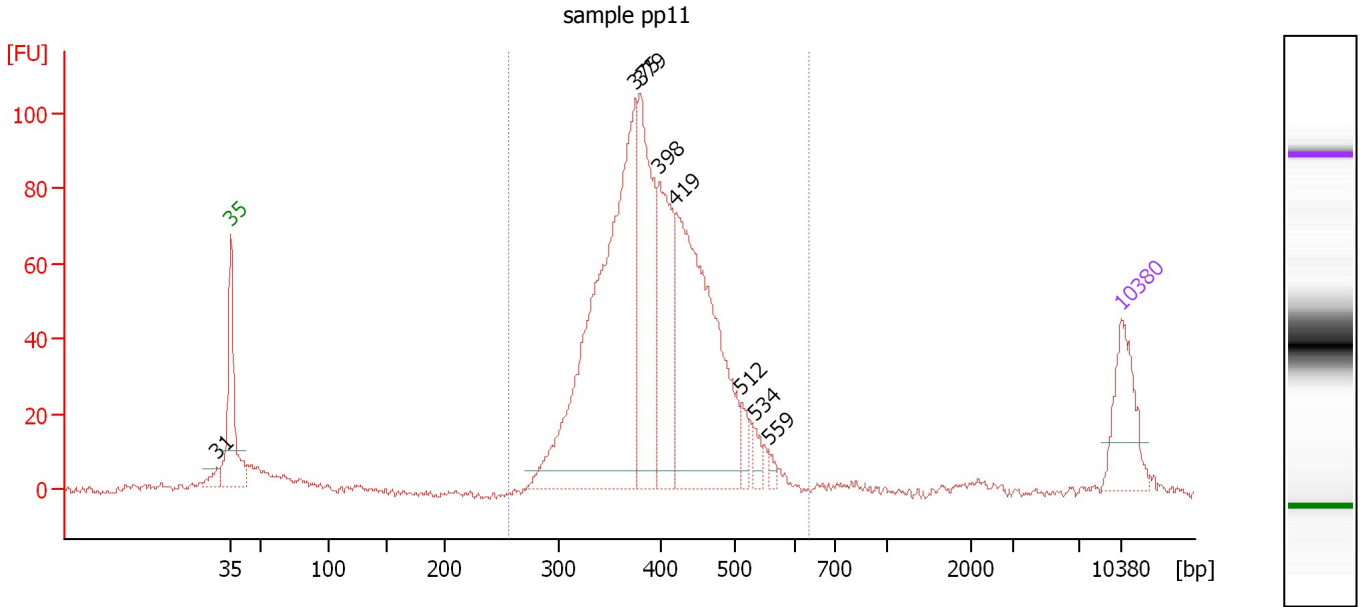
**Region table for sample 8 : sample 31**

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	507	617.4	184.32	179.7	88	30.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample pp11**

Number of peaks found: 8                      Corr. Area 1: 1,287.9  
 Noise: 0.8

**Peak table for sample 9 : sample pp11**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	41.91	31	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	74.81	375	707.34	2,861.1	
4	75.19	379	268.86	1,074.1	
5	76.70	398	201.16	765.8	
6	77.96	419	481.81	1,741.5	
7	83.16	512	26.98	79.8	
8	84.16	534	16.53	46.9	
9	85.34	559	8.71	23.6	
10	113.00	10,380	75.00	10.9	Upper Marker

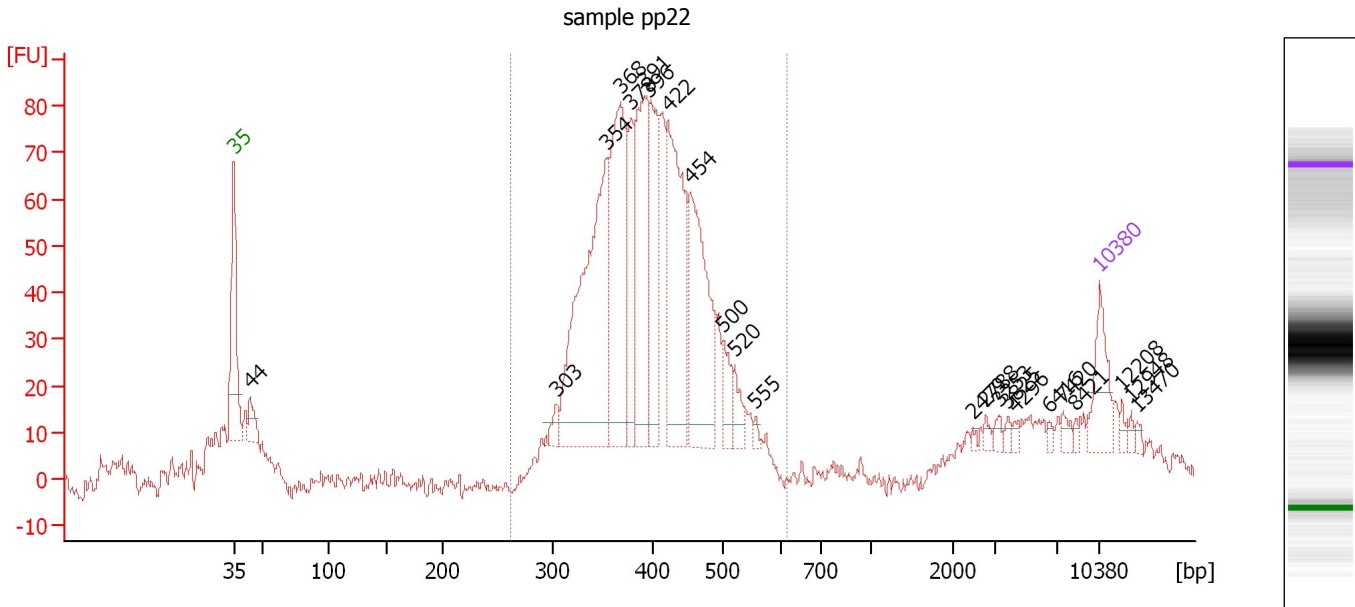
**Region table for sample 9 : sample pp11**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
256	635	400	7,064.7	1,815.57	1,287.9	90	15.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

Created: 2/13/2014 2:33:09 PM  
 Modified: 2/13/2014 4:42:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sample pp22**

Number of peaks found: 23                      Corr. Area 1: 1,187.4  
 Noise: 1.8

**Peak table for sample 10 : sample pp22**

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	44.29	44	54.09	1,882.5	
3	69.05	303	26.08	130.4	
4	73.19	354	609.51	2,605.4	
5	74.27	368	416.75	1,716.7	
6	75.09	378	163.74	656.4	
7	76.17	391	299.67	1,160.1	
8	76.56	396	224.09	857.0	
9	78.11	422	399.69	1,435.7	
10	79.96	454	337.76	1,126.4	
11	82.55	500	54.13	164.1	
12	83.50	520	48.14	140.3	
13	85.18	555	9.41	25.7	
14	102.78	2,479	4.67	2.9	
15	103.81	2,788	8.88	4.8	
16	104.85	3,253	10.50	4.9	
17	105.58	3,825	8.21	3.3	
18	106.19	4,296	8.12	2.9	
19	108.90	6,416	6.72	1.6	
20	110.07	7,420	14.10	2.9	
21	111.06	8,421	7.03	1.3	
22	113.00	10,380	75.00	10.9	Upper Marker
23	114.81	12,208	0.00	0.0	
24	115.54	12,948	0.00	0.0	
25	116.06	13,470	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

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Modified: 2/13/2014 4:42:45 PM

**Electropherogram Summary Continued ...**

... Region table for sample 10 : sample pp22

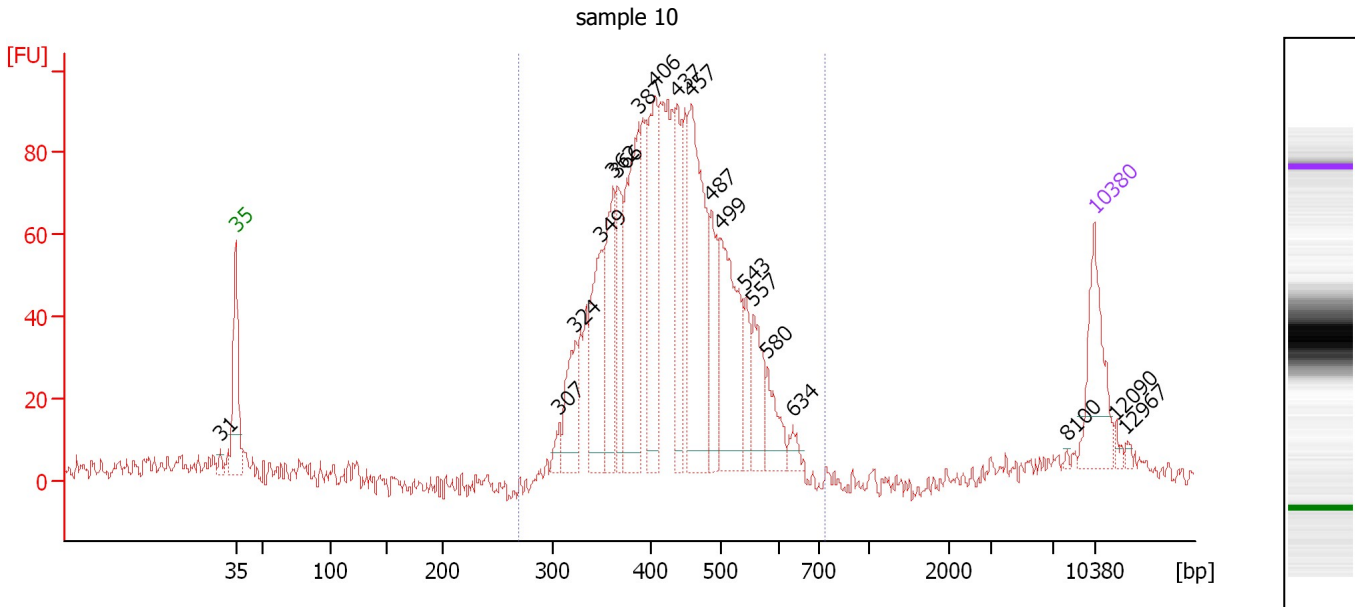
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
262	611	403	13,194.1	3,414.48	1,187.4	74	15.0	■



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : sample 10**

Number of peaks found: 19      Corr. Area 1: 1,443.7  
 Noise: 3.5

**Peak table for sample 11 : sample 10**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	41.74	31	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	69.37	307	15.58	76.8	
4	70.72	324	76.71	358.9	
5	72.76	349	131.07	568.8	
6	73.76	362	125.21	524.7	
7	74.11	366	79.65	329.9	
8	75.85	387	220.35	861.7	
9	77.20	406	153.43	572.8	
10	78.98	437	91.42	316.9	
11	80.11	457	241.53	801.0	
12	81.80	487	78.43	244.2	
13	82.50	499	173.12	525.9	
14	84.58	543	38.93	108.7	
15	85.23	557	60.74	165.4	
16	86.32	580	42.89	112.1	
17	88.41	634	14.05	33.5	
18	110.74	8,100	1.70	0.3	
19	113.00	10,380	75.00	10.9	Upper Marker
20	114.69	12,090	0.00	0.0	
21	115.56	12,967	0.00	0.0	

**Region table for sample 11 : sample 10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
269	735	433	7,637.1	2,102.40	1,443.7	86	17.1	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-13\2014-02-13\_003.xad

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Modified: 2/13/2014 4:42:45 PM

**Gel Image**

