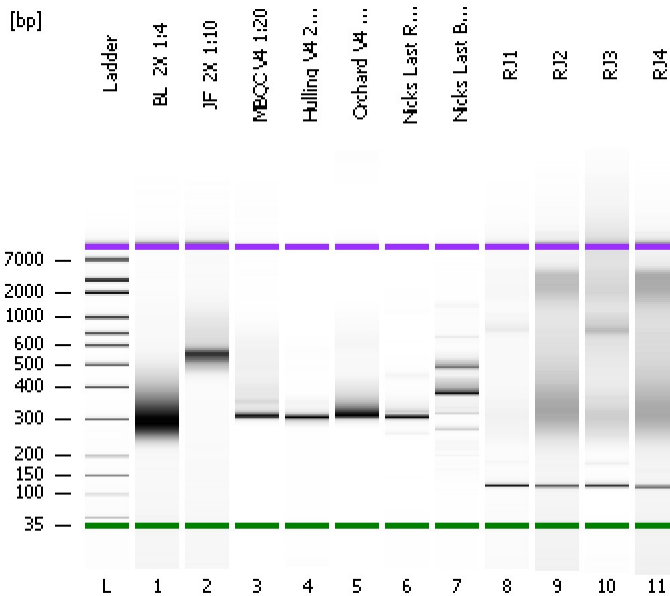


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
Modified: 5/2/2014 2:06:10 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

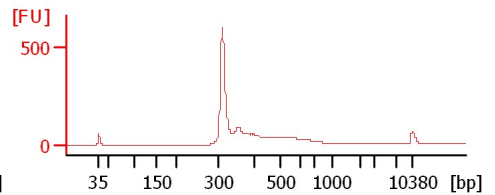
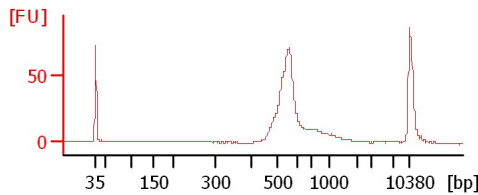
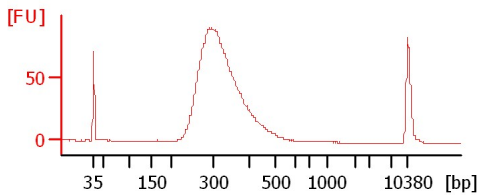
Chip Information:

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

**BL\_2X 1:4**

**JF\_2X 1:10**

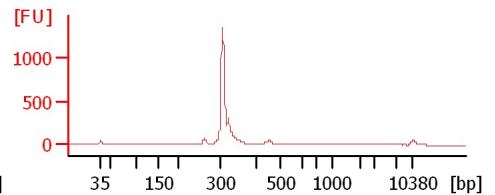
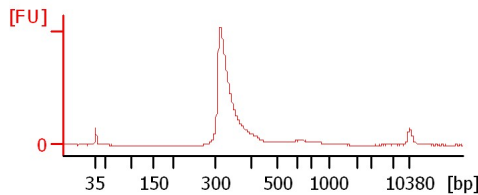
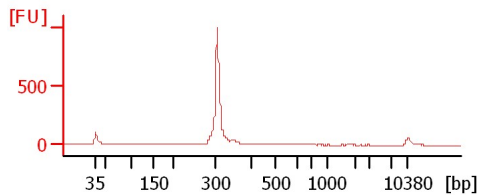
**MBQC V4 1:20**



**Hulling V4 2013 1:4**

**Orchard V4 9/10 1:10**

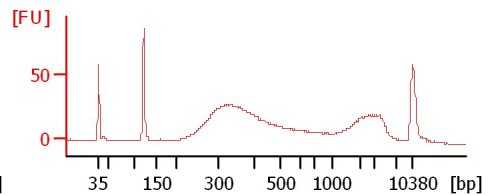
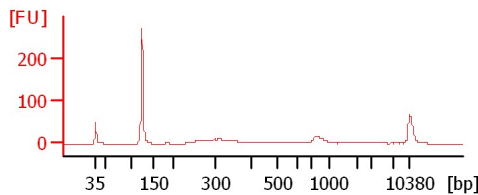
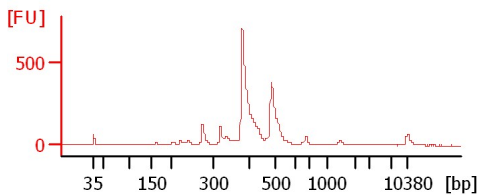
**Nicks Last Run 1:20**



**Nicks Last BITS Run 1:20**

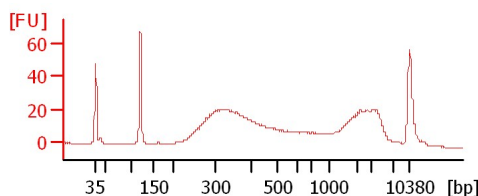
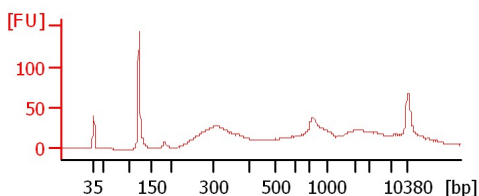
**RJ1**

**RJ2**



**RJ3**

**RJ4**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
BL_2X 1:4		<input type="checkbox"/>	✓			
JF_2X 1:10		<input type="checkbox"/>	✓			
MBQC V4 1:20		<input type="checkbox"/>	✓			
Hulling V4 2013 1:4		<input type="checkbox"/>	✓			
Orchard V4 9/10 1:10		<input type="checkbox"/>	✓			
Nicks Last Run 1:20		<input type="checkbox"/>	✓			
Nicks Last BITS Run 1:20		<input type="checkbox"/>	✓			
RJ1		<input type="checkbox"/>	✓			
RJ2		<input type="checkbox"/>	✓			
RJ3		<input type="checkbox"/>	✓			
RJ4		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
Modified: 5/2/2014 2:06:10 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

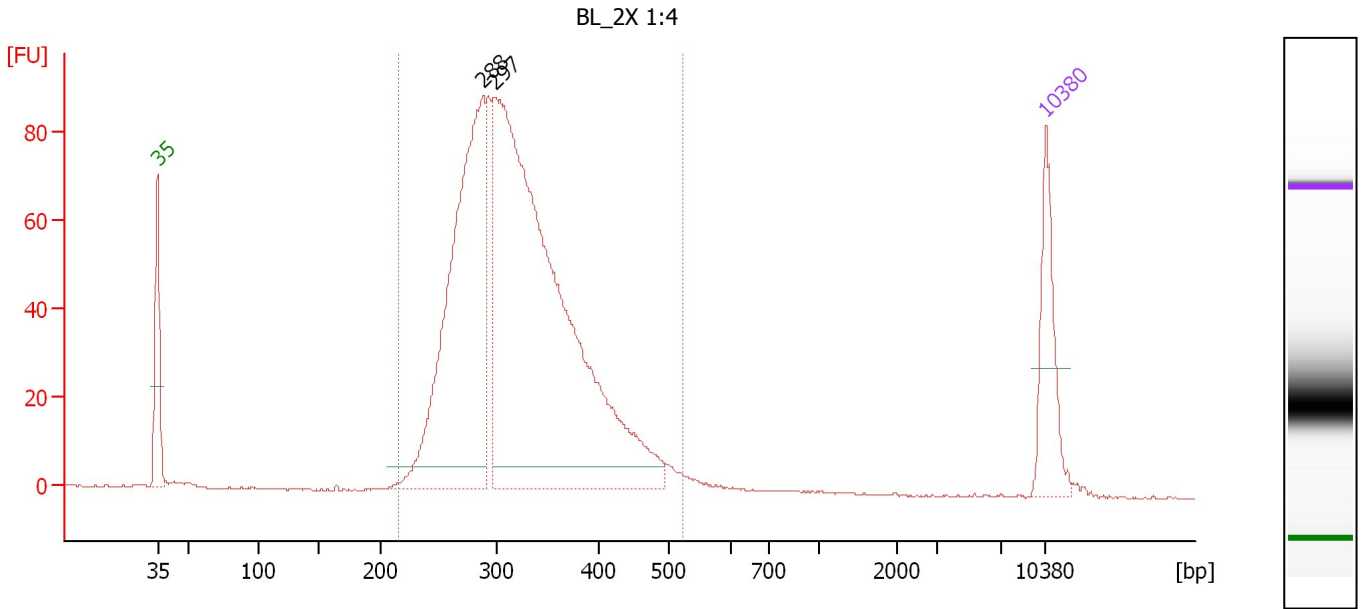
**Ladder**

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:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary**



**Overall Results for sample 1 : BL\_2X 1:4**

Number of peaks found: 2                      Corr. Area 1: 1,284.1  
 Noise: 0.1

**Peak table for sample 1 : BL\_2X 1:4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	288	580.43	3,052.7	
3	297	1,087.21	5,542.0	
4	10,380	75.00	10.9	Upper Marker

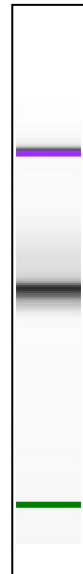
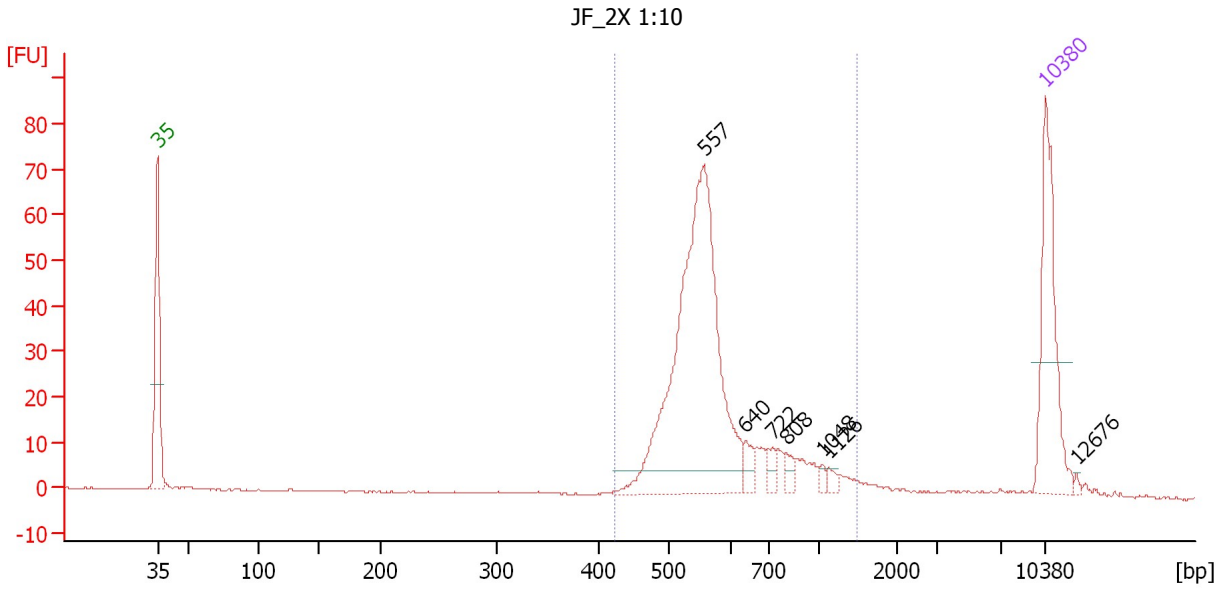
**Region table for sample 1 : BL\_2X 1:4**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
215	522	323	8,222.1	1,690.89	1,284.1	98	17.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : JF\_2X 1:10**

Number of peaks found: 7      Corr. Area 1: 399.4  
 Noise: 0.2

**Peak table for sample 2 : JF\_2X 1:10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	557	336.05	914.7	
3	640	10.00	23.7	
4	722	8.05	16.9	
5	808	6.41	12.0	
6	1,048	3.39	4.9	
7	1,126	4.14	5.6	
8	10,380	75.00	10.9	Upper Marker
9	12,676	0.00	0.0	

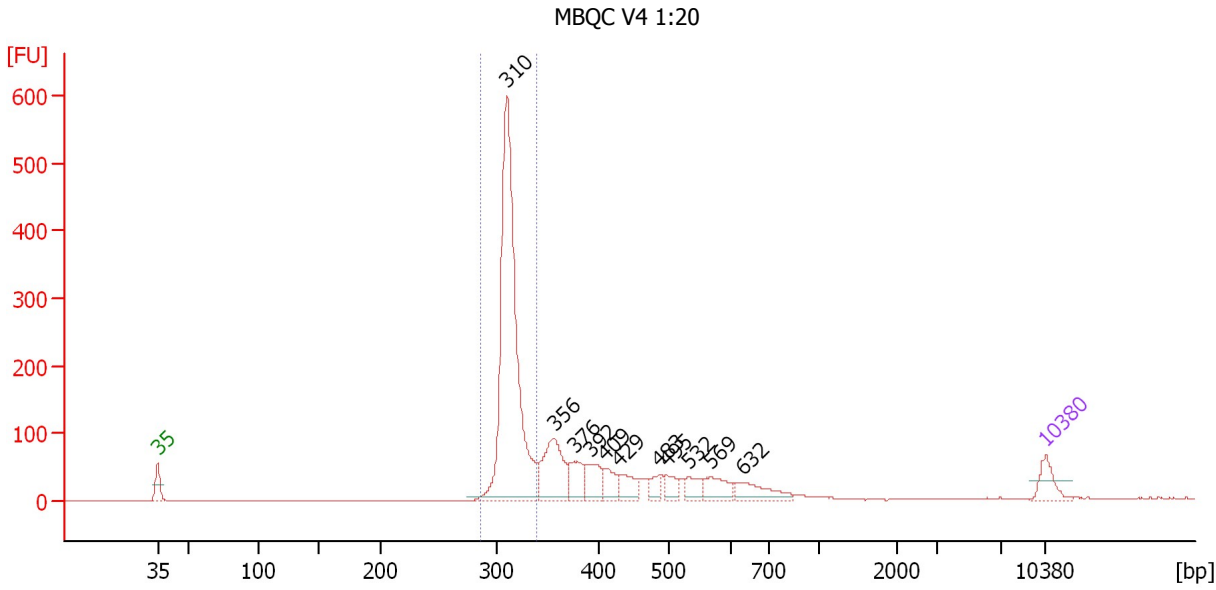
**Region table for sample 2 : JF\_2X 1:10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
422	1,487	608	1,098.1	416.53	399.4	94	27.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : MBQC V4 1:20**

Number of peaks found: 11      Corr. Area 1: 1,191.0  
 Noise: 0.2

**Peak table for sample 3 : MBQC V4 1:20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	310	1,791.76	8,764.6	
3	356	331.75	1,412.5	
4	376	139.34	562.0	
5	392	130.17	502.6	
6	409	91.67	339.7	
7	429	99.43	350.8	
8	483	53.40	167.4	
9	495	58.21	178.0	
10	532	72.28	206.0	
11	569	108.51	288.9	
12	632	126.68	303.6	
13	10,380	75.00	10.9	Upper Marker

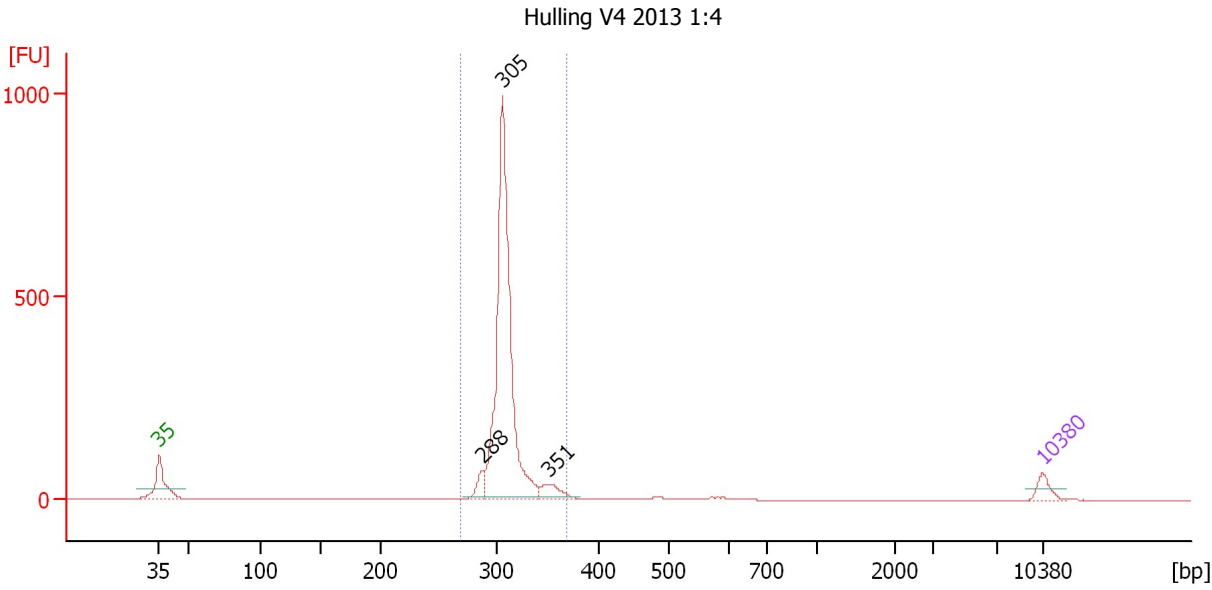
**Region table for sample 3 : MBQC V4 1:20**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
285	339	313	8,530.2	1,760.42	1,191.0	52	2.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Hulling V4 2013 1:4**

Number of peaks found: 3                      Corr. Area 1: 1,894.3  
 Noise: 0.2

**Peak table for sample 4 : Hulling V4 2013 1:4**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	288	110.19	578.7	
3	305	2,806.81	13,922.9	
4	351	135.50	584.2	
5	10,380	75.00	10.9	Upper Marker

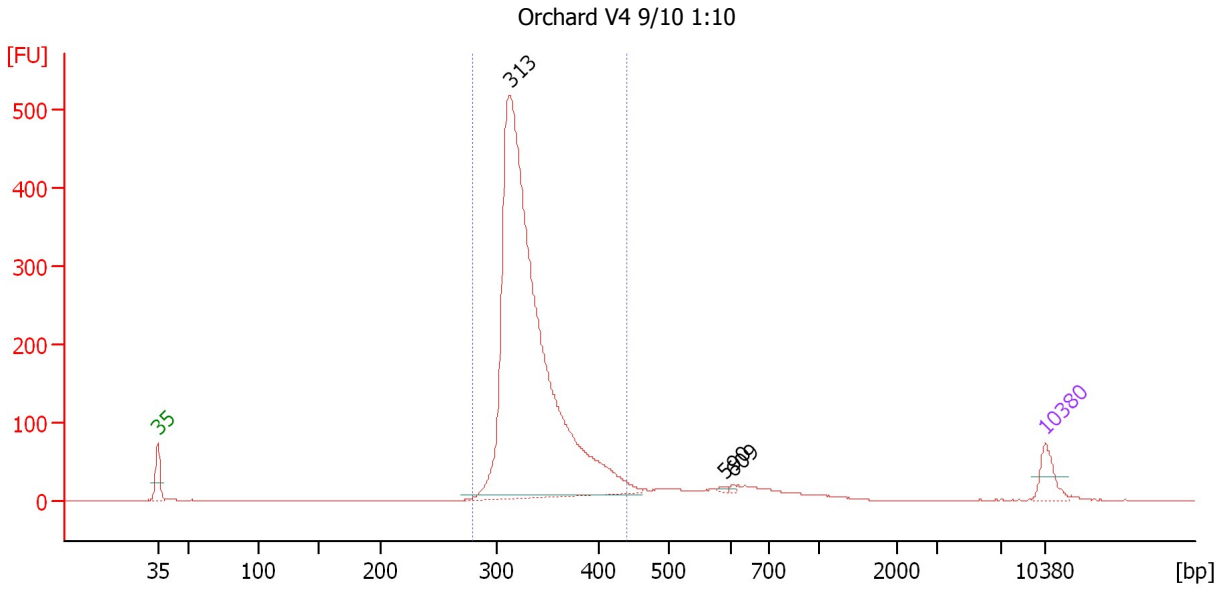
**Region table for sample 4 : Hulling V4 2013 1:4**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
269	370	310	14,949.8	3,051.49	1,894.3	97	4.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Orchard V4 9/10 1:10**

Number of peaks found: 3                      Corr. Area 1: 2,532.9  
 Noise: 0.1

**Peak table for sample 5 : Orchard V4 9/10 1:10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	313	3,716.88	18,017.3	
3	590	7.49	19.2	
4	609	8.41	20.9	
5	10,380	75.00	10.9	Upper Marker

**Region table for sample 5 : Orchard V4 9/10 1:10**

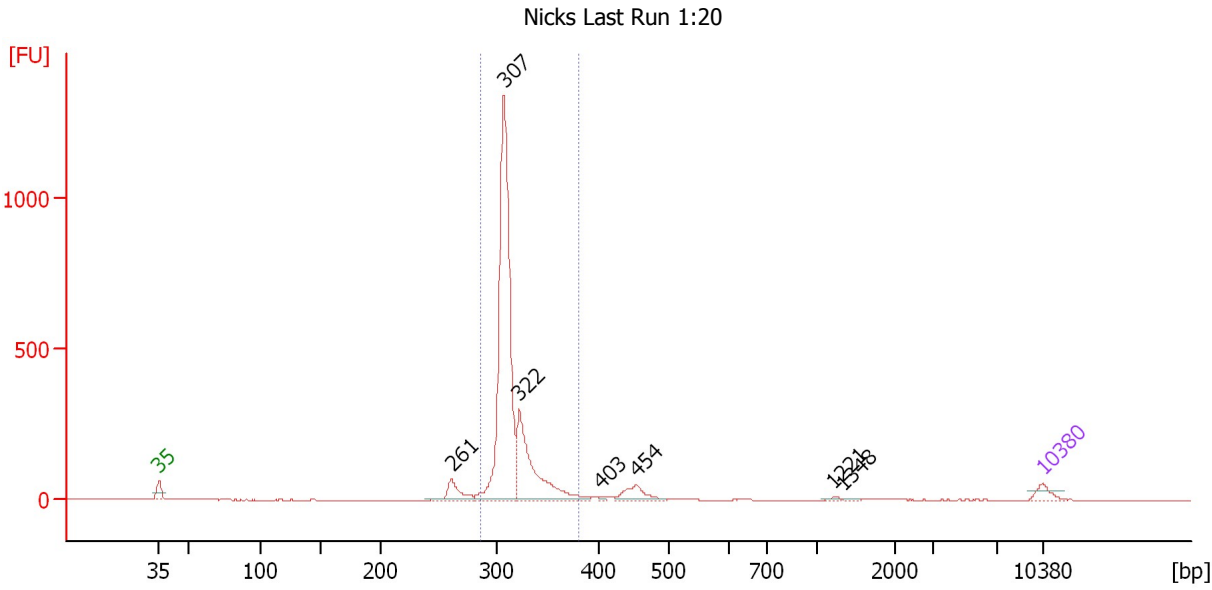
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
279	439	335	16,325.8	3,590.21	2,532.9	92	8.6	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Nicks Last Run 1:20**

Number of peaks found: 7      Corr. Area 1: 2,502.9  
 Noise: 0.3

**Peak table for sample 6 : Nicks Last Run 1:20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	236.39	1,371.0	
3	307	3,637.69	17,942.7	
4	322	1,204.99	5,672.5	
5	403	12.77	48.0	
6	454	198.43	661.6	
7	1,221	11.91	14.8	
8	1,348	7.82	8.8	
9	10,380	75.00	10.9	Upper Marker

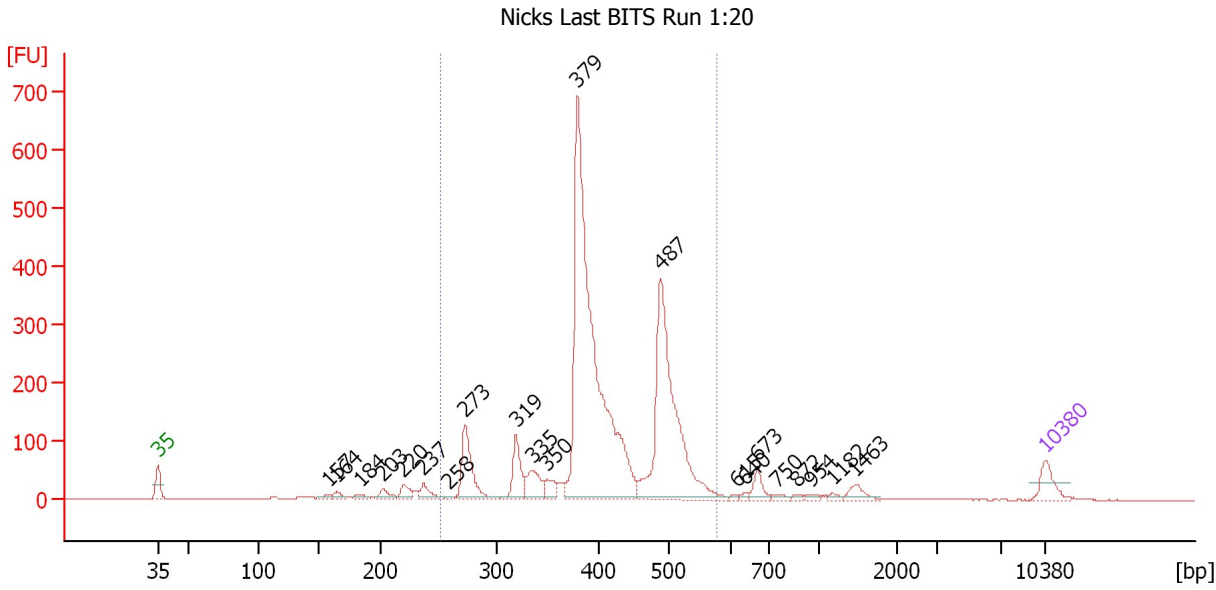
**Region table for sample 6 : Nicks Last Run 1:20**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
286	381	314	22,916.3	4,752.70	2,502.9	87	4.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Nicks Last BITS Run 1:20**

Number of peaks found: 21                      Corr. Area 1: 2,855.8  
 Noise: 0.2

**Peak table for sample 7 : Nicks Last BITS Run 1:20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	157	24.41	235.7	
3	164	37.62	347.2	
4	184	31.11	256.4	
5	203	53.67	401.5	
6	220	62.29	428.7	
7	237	71.50	456.7	
8	258	11.05	64.9	
9	273	301.55	1,673.8	
10	319	189.62	901.4	
11	335	130.86	592.3	
12	350	72.31	313.4	
13	379	2,356.24	9,416.0	
14	487	1,153.10	3,584.1	
15	615	9.51	23.4	
16	640	12.10	28.7	
17	673	66.80	150.5	
18	750	16.93	34.2	
19	872	10.66	18.5	
20	954	12.80	20.3	
21	1,182	12.79	16.4	
22	1,463	43.07	44.6	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**

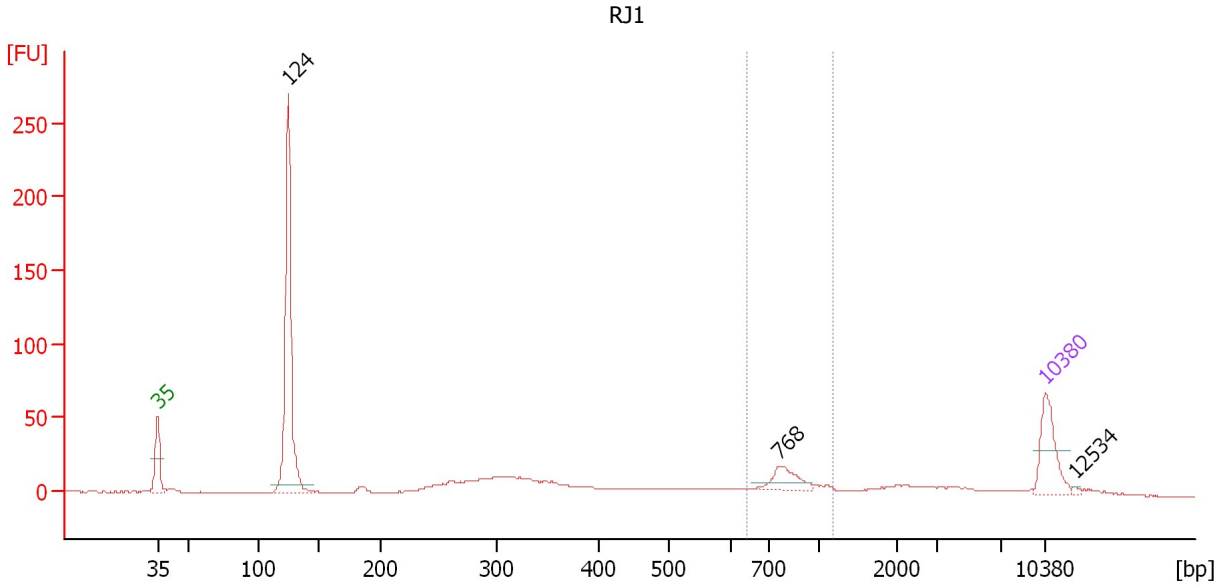
... Region table for sample 7 : Nicks Last BITS Run 1:20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
252	577	414	15,784.3	4,151.10	2,855.8	88	16.2	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : RJ1**

Number of peaks found: 3                      Corr. Area 1: 75.8  
 Noise: 0.2

**Peak table for sample 8 : RJ1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	124	486.14	5,927.4	
3	768	47.54	93.8	
4	10,380	75.00	10.9	Upper Marker
5	12,534	0.00	0.0	

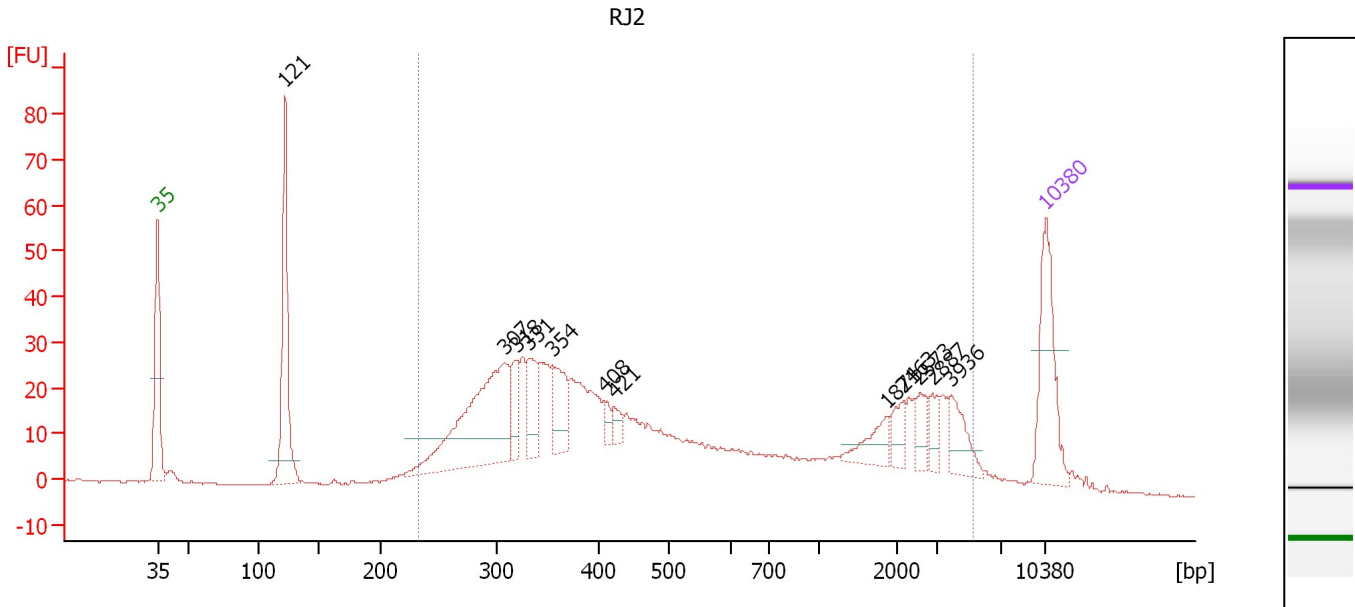
**Region table for sample 8 : RJ1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
645	1,174	836	161.8	87.56	75.8	11	14.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : RJ2**

Number of peaks found: 12                      Corr. Area 1: 823.9  
 Noise: 0.2

**Peak table for sample 9 : RJ2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	121	186.47	2,326.2	
3	307	228.25	1,125.2	
4	318	36.98	176.0	
5	331	45.84	209.9	
6	354	52.74	225.5	
7	408	11.73	43.5	
8	421	12.97	46.6	
9	1,874	25.35	20.5	
10	2,163	16.92	11.8	
11	2,573	17.74	10.4	
12	2,887	16.05	8.4	
13	3,936	31.14	12.0	
14	10,380	75.00	10.9	Upper Marker

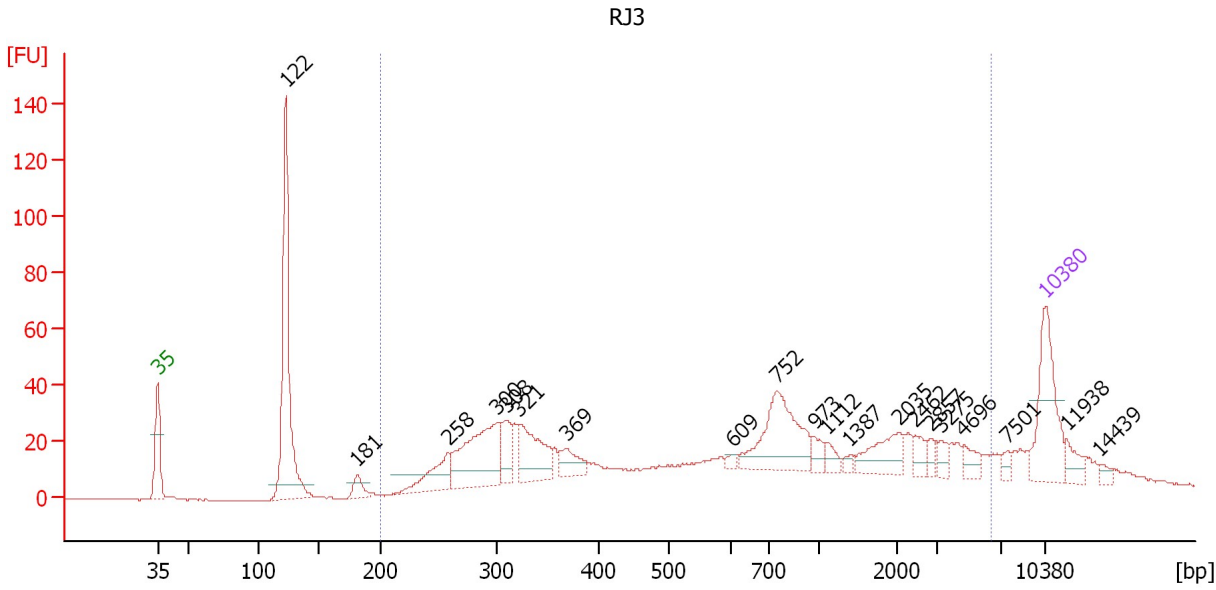
**Region table for sample 9 : RJ2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
232	5,319	1,030	4,602.0	1,296.48	823.9	86	100.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : RJ3**

Number of peaks found: 20                      Corr. Area 1: 938.9  
 Noise: 0.2

**Peak table for sample 10 : RJ3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	122	289.71	3,598.5	
3	181	18.68	155.9	
4	258	57.48	337.8	
5	300	137.77	695.0	
6	308	41.19	202.3	
7	321	78.65	370.7	
8	369	28.88	118.7	
9	609	5.87	14.6	
10	752	114.17	230.0	
11	973	13.11	20.4	
12	1,112	11.72	16.0	
13	1,387	5.54	6.0	
14	2,035	37.51	27.9	
15	2,462	12.50	7.7	
16	2,857	7.68	4.1	
17	3,275	10.64	4.9	
18	4,696	13.54	4.4	
19	7,501	6.85	1.4	
20	10,380	75.00	10.9	Upper Marker
21	11,938	0.00	0.0	
22	14,439	0.00	0.0	

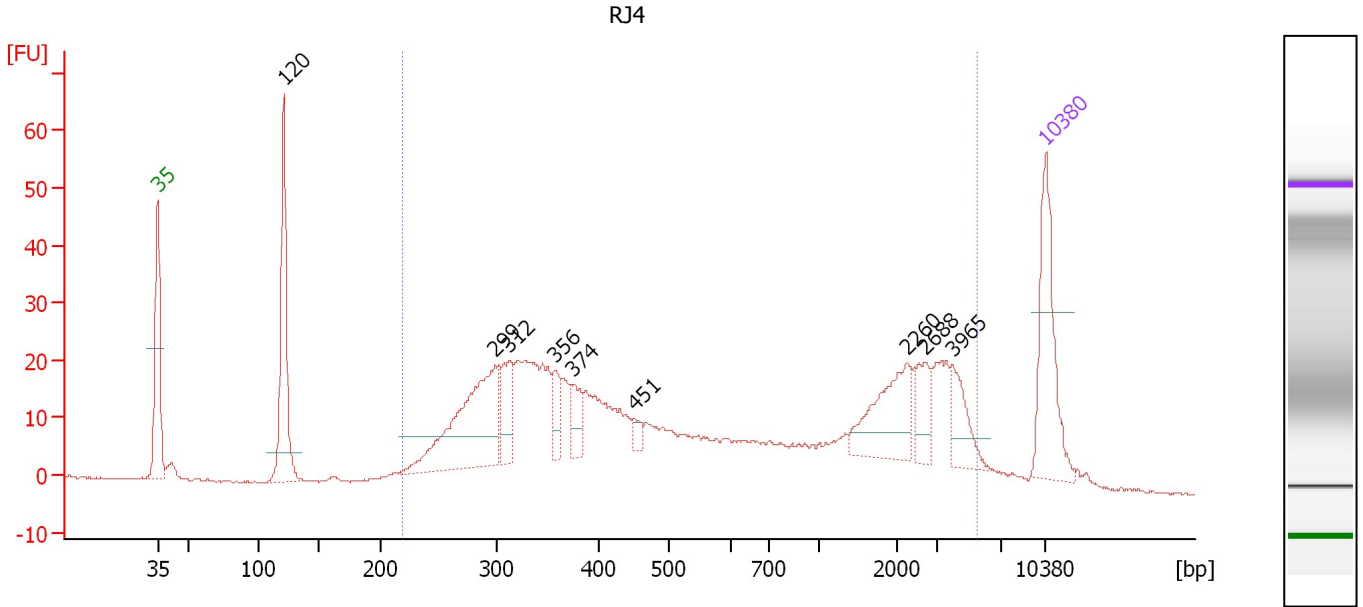
**Region table for sample 10 : RJ3**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	6,386	1,179	3,753.6	1,147.91	938.9	75	100.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
 Modified: 5/2/2014 2:06:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : RJ4**

Number of peaks found: 9                      Corr. Area 1: 711.0  
 Noise: 0.2

**Peak table for sample 11 : RJ4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	120	159.64	2,011.3	
3	299	172.97	877.6	
4	312	43.07	209.1	
5	356	26.17	111.3	
6	374	24.31	98.5	
7	451	9.54	32.0	
8	2,260	63.20	42.4	
9	2,688	26.14	14.7	
10	3,965	31.31	12.0	
11	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : RJ4**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
220	5,582	1,166	3,881.8	1,141.74	711.0	88	100.0	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-05-02\2014-05-02\_005.xad

Created: 5/2/2014 1:14:46 PM  
Modified: 5/2/2014 2:06:10 PM

**Gel Image**

