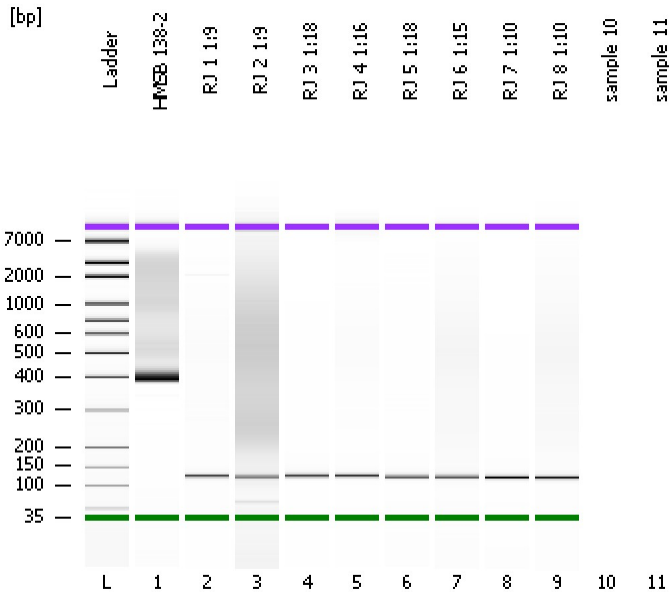


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
Modified: 2/5/2014 5:42:06 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

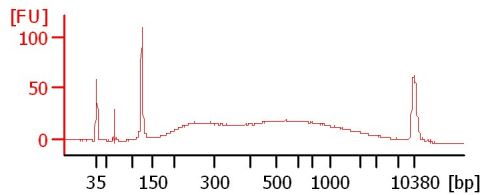
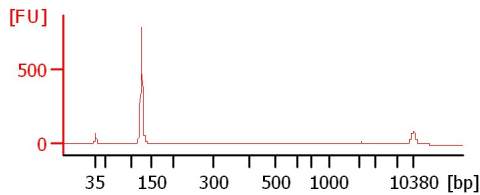
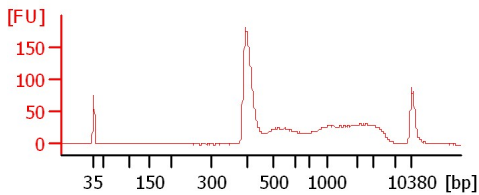
Chip Information:

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

**HMSB 138-2**

**RJ 1 1:9**

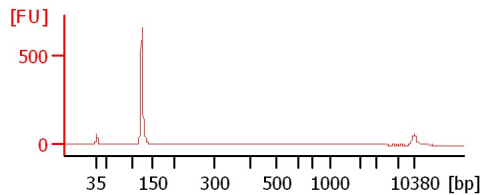
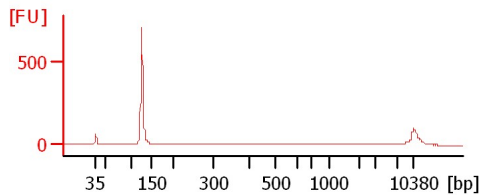
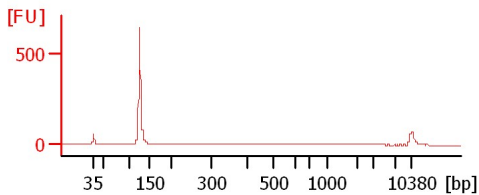
**RJ 2 1:9**



**RJ 3 1:18**

**RJ 4 1:16**

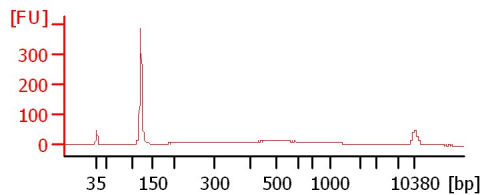
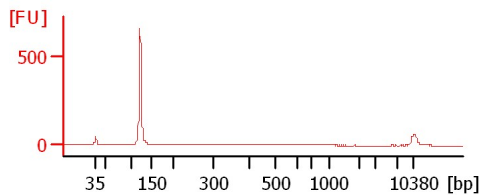
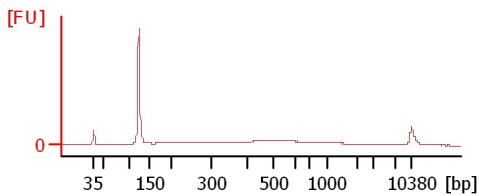
**RJ 5 1:18**



**RJ 6 1:15**

**RJ 7 1:10**

**RJ 8 1:10**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
Modified: 2/5/2014 5:42:06 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HMSB 138-2		<input type="checkbox"/>	✓			
RJ 1 1:9		<input type="checkbox"/>	✓			
RJ 2 1:9		<input type="checkbox"/>	✓			
RJ 3 1:18		<input type="checkbox"/>	✓			
RJ 4 1:16		<input type="checkbox"/>	✓			
RJ 5 1:18		<input type="checkbox"/>	✓			
RJ 6 1:15		<input type="checkbox"/>	✓			
RJ 7 1:10		<input type="checkbox"/>	✓			
RJ 8 1:10		<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\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 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

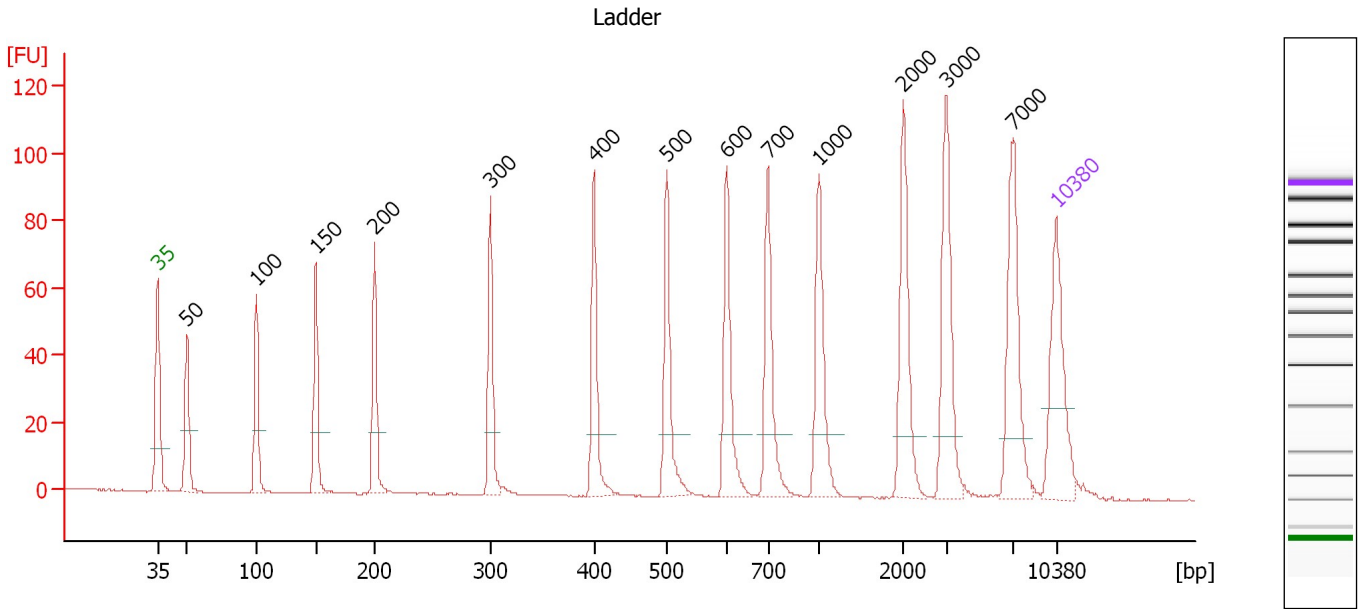
**Ladder**

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\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

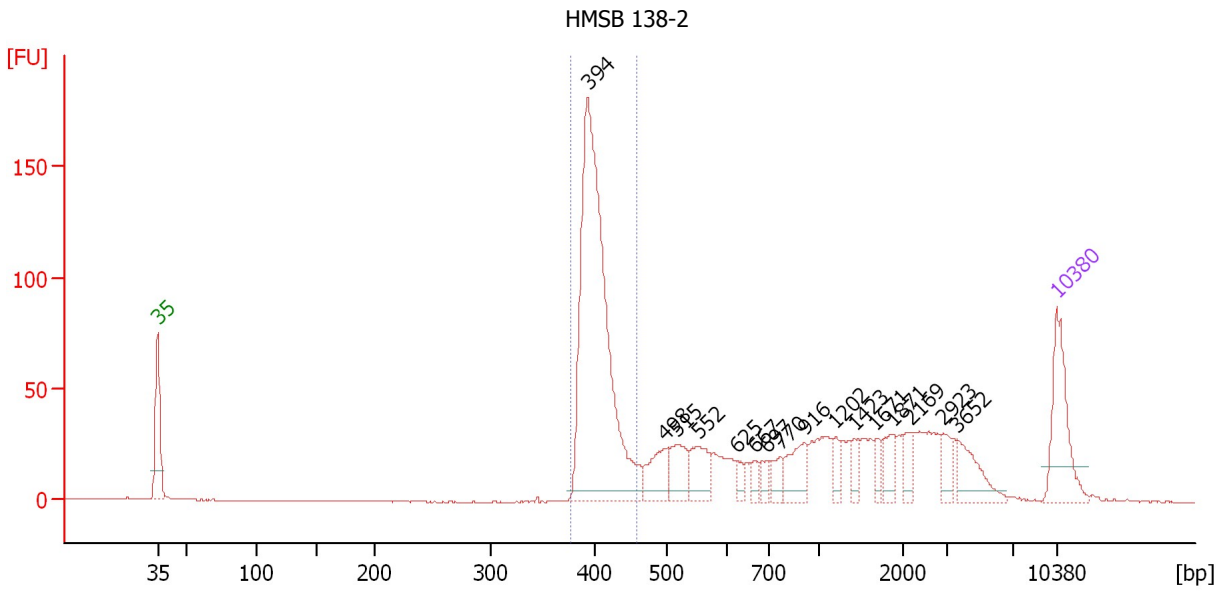
**Peak table for Ladder**

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	45.29	50	150.00	4,545.5	Ladder Peak
3	50.71	100	150.00	2,272.7	Ladder Peak
4	55.34	150	150.00	1,515.2	Ladder Peak
5	59.93	200	150.00	1,136.4	Ladder Peak
6	68.92	300	150.00	757.6	Ladder Peak
7	76.99	400	150.00	568.2	Ladder Peak
8	82.67	500	150.00	454.5	Ladder Peak
9	87.35	600	150.00	378.8	Ladder Peak
10	90.56	700	150.00	324.7	Ladder Peak
11	94.49	1,000	150.00	227.3	Ladder Peak
12	101.10	2,000	150.00	113.6	Ladder Peak
13	104.45	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\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : HMSB 138-2**

Number of peaks found: 16      Corr. Area 1: 542.6  
 Noise: 0.1

**Peak table for sample 1 : HMSB 138-2**

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	76.52	394	573.29	2,203.6	
3	82.54	498	51.38	156.4	
4	83.38	515	48.80	143.5	
5	85.11	552	45.99	126.2	
6	88.16	625	11.27	27.3	
7	89.49	667	13.16	29.9	
8	90.46	697	14.25	31.0	
9	91.48	770	19.92	39.2	
10	93.39	916	43.32	71.7	
11	95.82	1,202	16.86	21.3	
12	97.28	1,423	13.82	14.7	
13	98.92	1,671	13.34	12.1	
14	100.25	1,871	24.68	20.0	
15	101.67	2,169	18.90	13.2	
16	104.19	2,923	19.91	10.3	
17	105.30	3,652	42.31	17.6	
18	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 1 : HMSB 138-2**

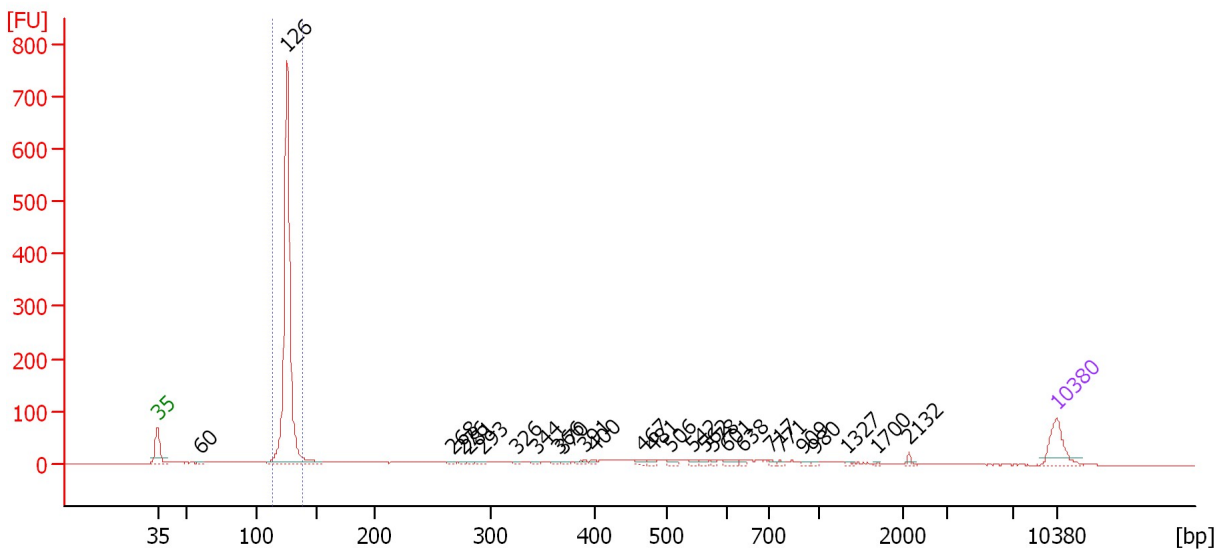
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
378	459	405	2,075.9	554.28	542.6	42	4.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

**Electropherogram Summary Continued ...**

RJ 1 1:9



**Overall Results for sample 2 : RJ 1 1:9**

Number of peaks found: 27      Corr. Area 1: 797.1  
 Noise: 0.6

**Peak table for sample 2 : RJ 1 1:9**

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	46.35	60	10.16	257.6	
3	53.09	126	1,235.65	14,892.5	
4	66.01	268	8.10	45.8	
5	66.76	276	6.38	35.1	
6	67.24	281	5.79	31.2	
7	68.30	293	9.47	48.9	
8	71.04	326	6.30	29.3	
9	72.49	344	8.07	35.5	
10	74.25	366	7.76	32.1	
11	74.61	370	6.92	28.3	
12	76.24	391	10.22	39.6	
13	76.99	400	7.70	29.2	
14	80.82	467	11.54	37.4	
15	81.57	481	8.65	27.3	
16	82.94	506	11.89	35.6	
17	84.66	542	9.88	27.6	
18	85.58	562	8.44	22.7	
19	86.33	578	6.70	17.6	
20	87.39	601	14.50	36.5	
21	88.58	638	5.84	13.9	
22	90.78	717	5.31	11.2	
23	91.49	771	4.88	9.6	
24	93.30	909	5.73	9.5	
25	94.22	980	3.58	5.5	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad


Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 2 : RJ 1 1:9

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
26	96.65	1,327	3.75	4.3	
27	99.11	1,700	2.69	2.4	
28	101.54	2,132	5.96	4.2	
29	113.00	10,380	75.00	10.9	Upper Marker

#### Region table for sample 2 : RJ 1 1:9

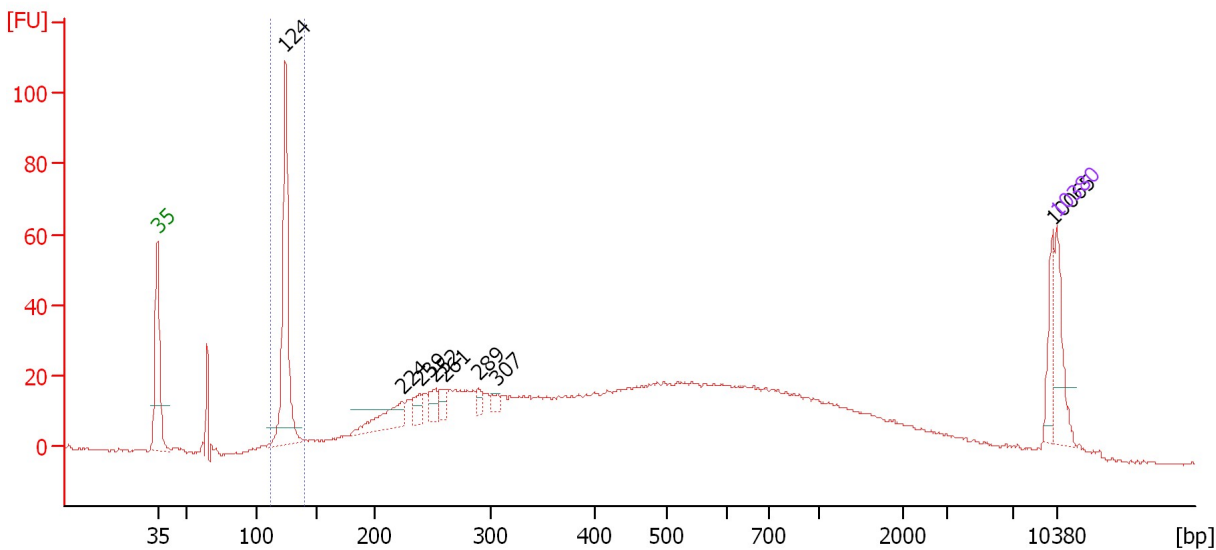
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
113	139	126	14,349.3	1,192.00	797.1	62	2.6	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

**Electropherogram Summary Continued ...**

RJ 2 1:9



**Overall Results for sample 3 : RJ 2 1:9**

Number of peaks found: 8                      Corr. Area 1: 119.9  
 Noise: 0.2

**Peak table for sample 3 : RJ 2 1:9**

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	52.96	124	409.69	4,994.6	
3	62.07	224	84.31	570.6	
4	63.41	239	34.81	220.9	
5	64.62	252	36.21	217.5	
6	65.43	261	24.21	140.5	
7	67.97	289	17.30	90.6	
8	69.45	307	14.79	73.1	
9	112.69	10,065	51.40	7.7	
10	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 3 : RJ 2 1:9**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
112	140	125	5,396.7	444.06	119.9	10	3.2	Blue

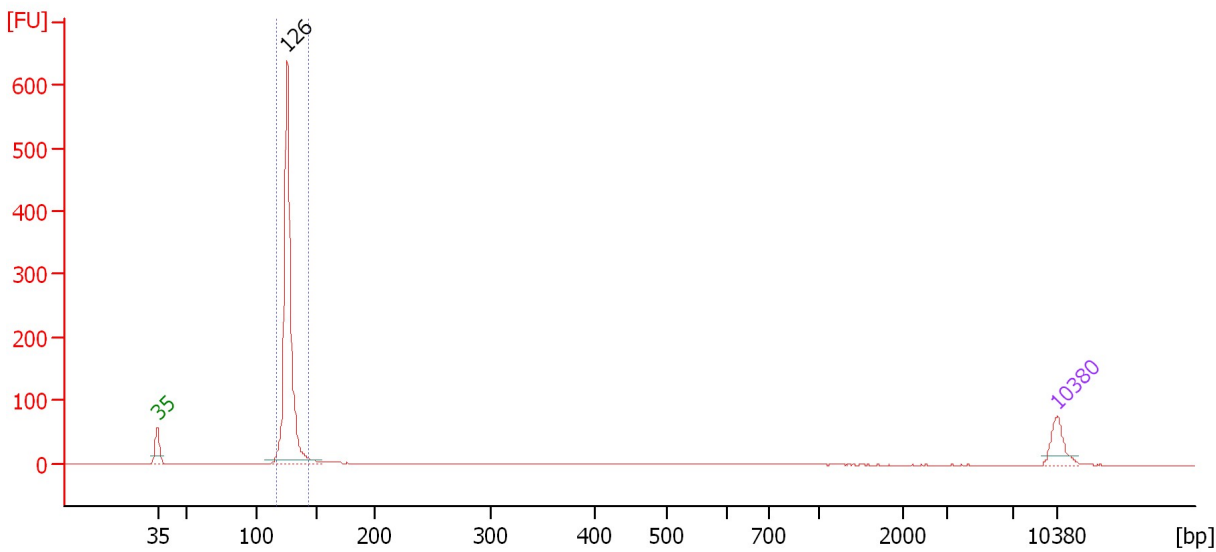


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

**Electropherogram Summary Continued ...**

RJ 3 1:18



**Overall Results for sample 4 : RJ 3 1:18**

Number of peaks found: 1                      Corr. Area 1: 717.5  
 Noise: 0.2

**Peak table for sample 4 : RJ 3 1:18**

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	53.08	126	1,327.52	16,022.6	
3	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : RJ 3 1:18**

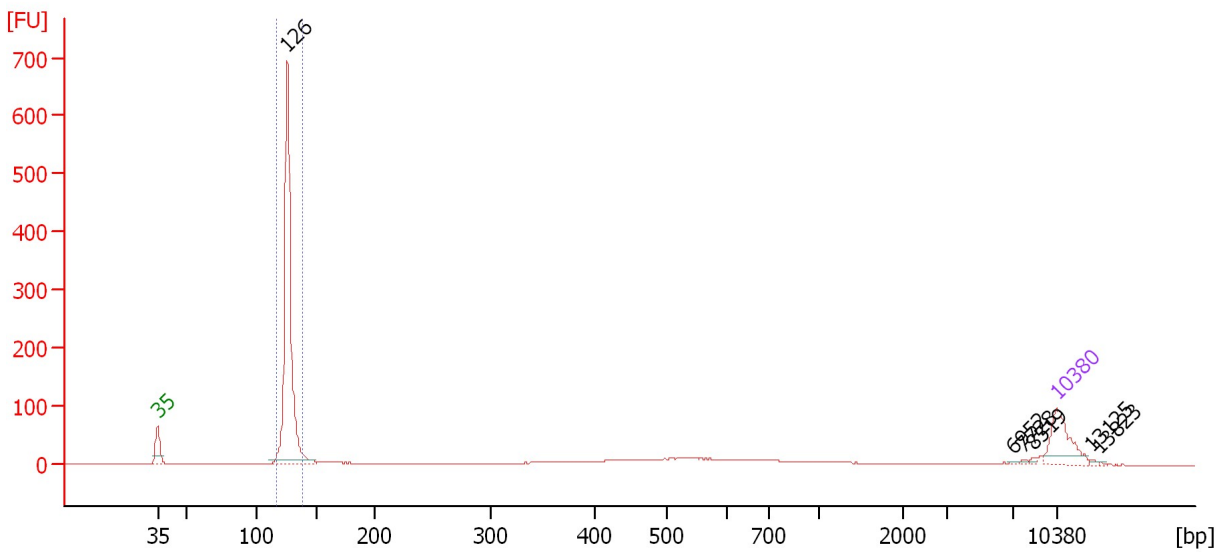
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
116	143	127	15,534.8	1,298.01	717.5	89	3.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

**Electropherogram Summary Continued ...**

RJ 4 1:16



**Overall Results for sample 5 : RJ 4 1:16**

Number of peaks found: 6                      Corr. Area 1: 731.5  
 Noise: 0.2

**Peak table for sample 5 : RJ 4 1:16**

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	53.10	126	741.36	8,931.7	
3	109.59	6,952	1.91	0.4	
4	110.37	7,728	2.55	0.5	
5	111.16	8,519	2.99	0.5	
6	113.00	10,380	75.00	10.9	Upper Marker
7	115.72	13,125	0.00	0.0	
8	116.41	13,823	0.00	0.0	

**Region table for sample 5 : RJ 4 1:16**

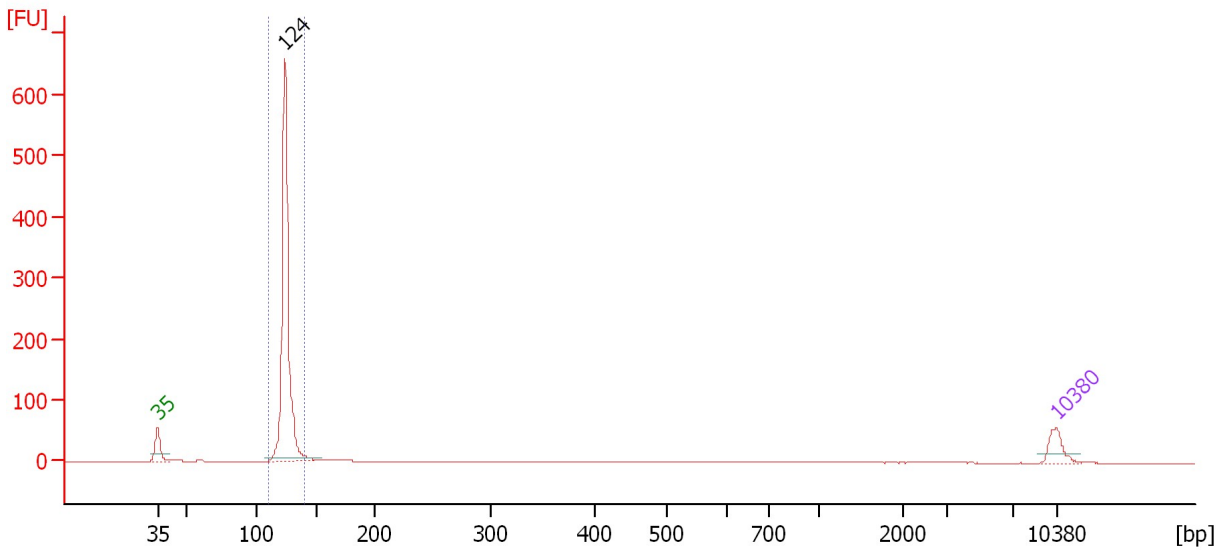
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
116	138	127	8,617.1	719.75	731.5	65	2.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

**Electropherogram Summary Continued ...**

RJ 5 1:18



**Overall Results for sample 6 : RJ 5 1:18**

Number of peaks found: 1                      Corr. Area 1: 718.2  
 Noise: 0.2

**Peak table for sample 6 : RJ 5 1:18**

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	52.95	124	1,639.63	20,015.2	
3	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 6 : RJ 5 1:18**

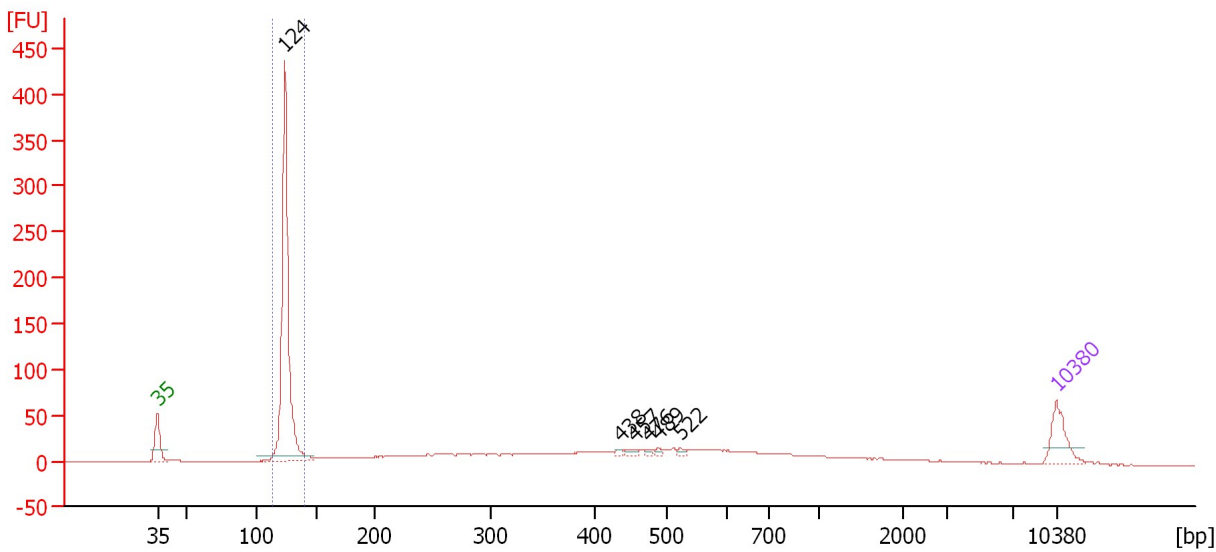
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
110	140	125	19,818.6	1,630.26	718.2	86	2.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

**Electropherogram Summary Continued ...**

RJ 6 1:15



**Overall Results for sample 7 : RJ 6 1:15**

Number of peaks found: 6                      Corr. Area 1: 471.0  
 Noise: 0.1

**Peak table for sample 7 : RJ 6 1:15**

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	52.91	124	939.98	11,509.5	
3	79.14	438	6.25	21.6	
4	80.23	457	11.12	36.9	
5	81.32	476	7.63	24.3	
6	82.03	489	8.54	26.5	
7	83.69	522	9.03	26.2	
8	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 7 : RJ 6 1:15**

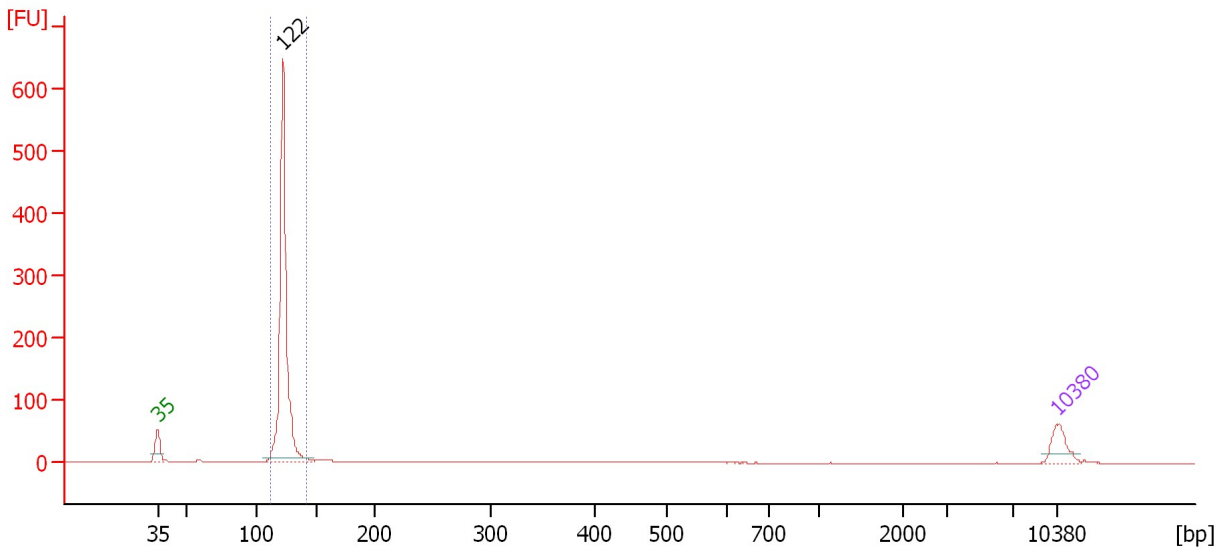
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
114	140	125	11,490.4	944.97	471.0	42	3.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

**Electropherogram Summary Continued ...**

RJ 7 1:10



**Overall Results for sample 8 : RJ 7 1:10**

Number of peaks found: 1                      Corr. Area 1: 700.4  
 Noise: 0.1

**Peak table for sample 8 : RJ 7 1:10**

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	52.77	122	1,387.17	17,191.8	
3	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 8 : RJ 7 1:10**

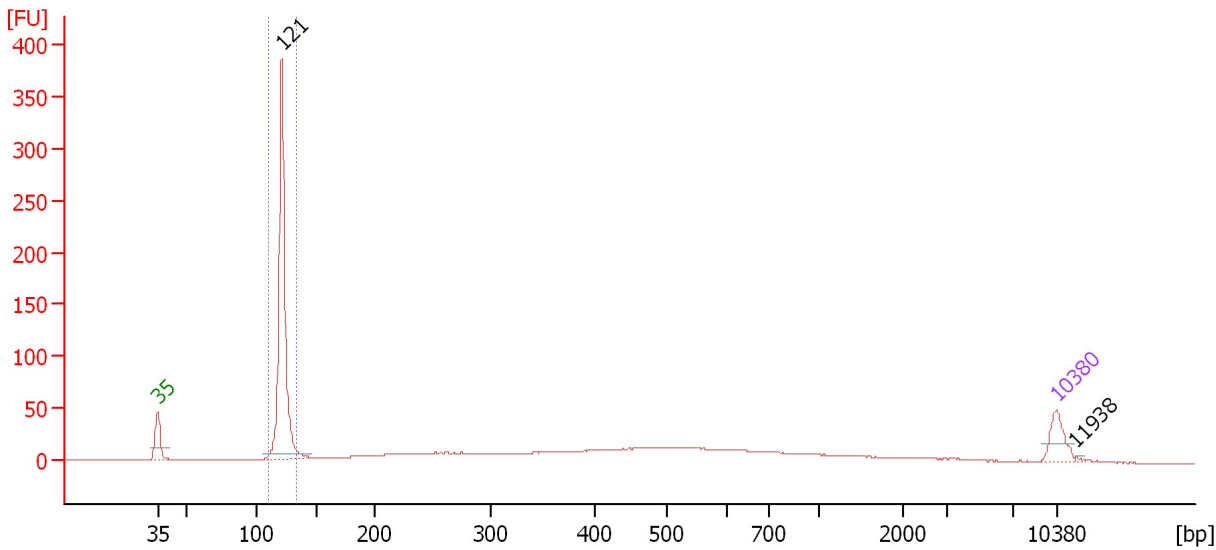
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
111	141	123	16,931.0	1,373.71	700.4	96	3.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
 Modified: 2/5/2014 5:42:06 PM

**Electropherogram Summary Continued ...**

RJ 8 1:10



**Overall Results for sample 9 : RJ 8 1:10**

Number of peaks found: 2                      Corr. Area 1: 405.9  
 Noise: 0.1

**Peak table for sample 9 : RJ 8 1:10**

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	52.70	121	1,118.52	13,957.8	
3	113.00	10,380	75.00	10.9	Upper Marker
4	114.54	11,938	0.00	0.0	

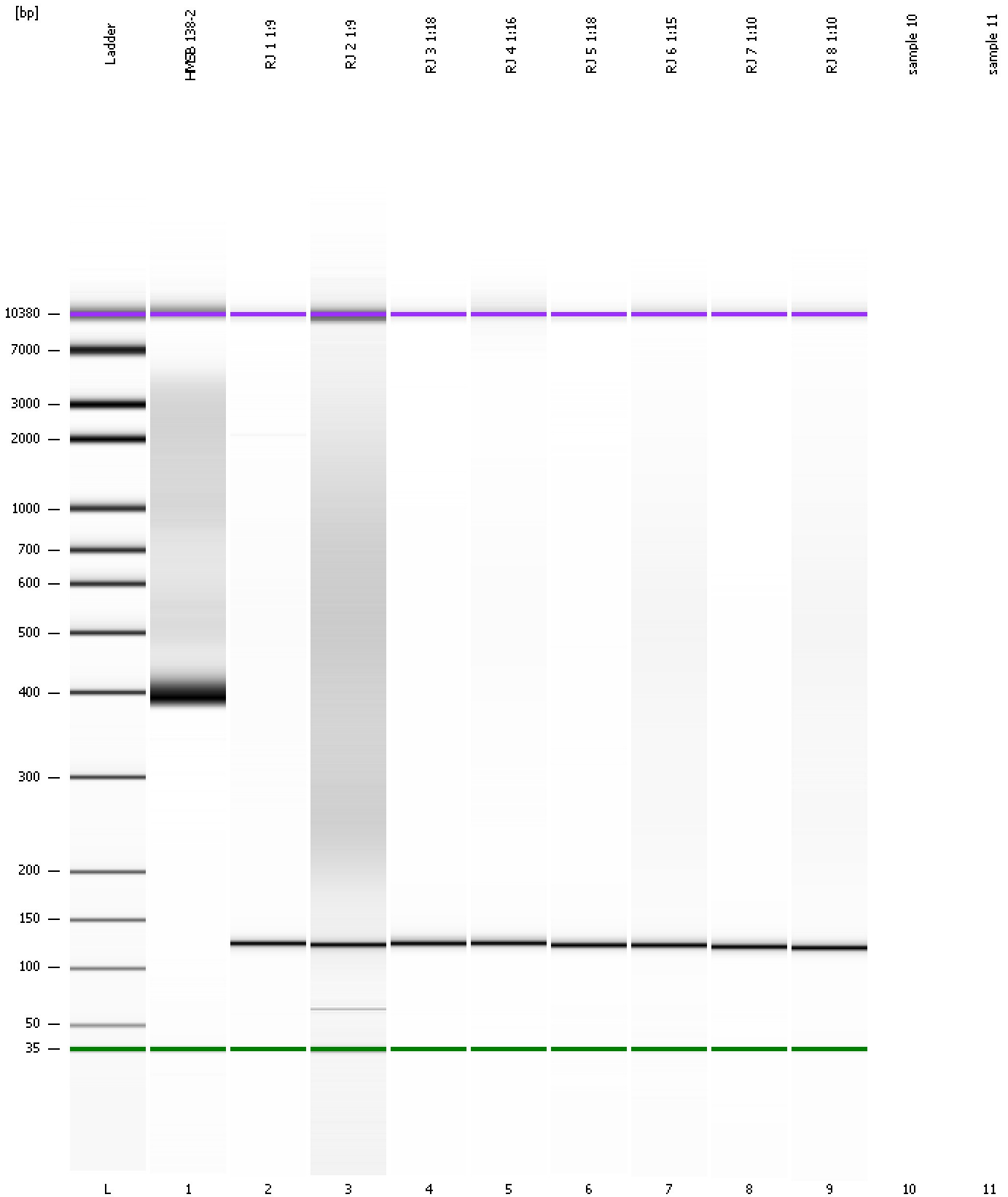
**Region table for sample 9 : RJ 8 1:10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
110	134	122	13,923.5	1,117.86	405.9	41	2.8	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
Modified: 2/5/2014 5:42:06 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-05\2014-02-05\_005.xad

Created: 2/5/2014 4:59:58 PM  
Modified: 2/5/2014 5:42:06 PM

**Invalid Samples**

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.