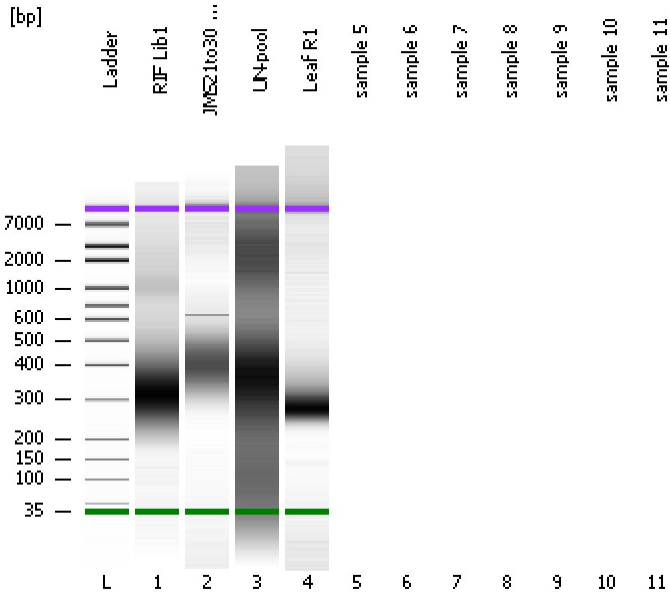


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
Modified: 8/13/2014 3:07:17 PM

**Electrophoresis File Run Summary**



Instrument Information:

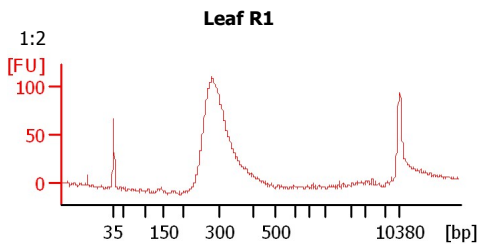
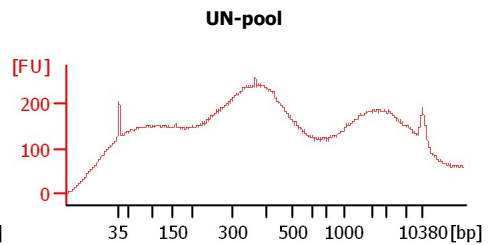
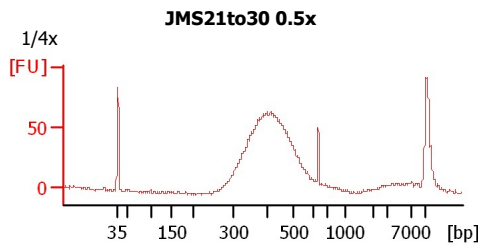
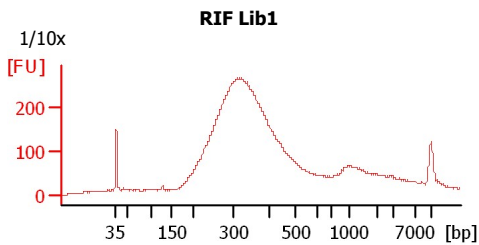
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
Modified: 8/13/2014 3:07:17 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
RIF Lib1	1/10x	<input type="checkbox"/>	✓			
JMS21to30 0.5x	1/4x	<input type="checkbox"/>	✓			
UN-pool		<input type="checkbox"/>	✓			
Leaf R1	1:2	<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>				
sample 6		<input type="checkbox"/>				
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<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:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
Modified: 8/13/2014 3:07:17 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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ l] : 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

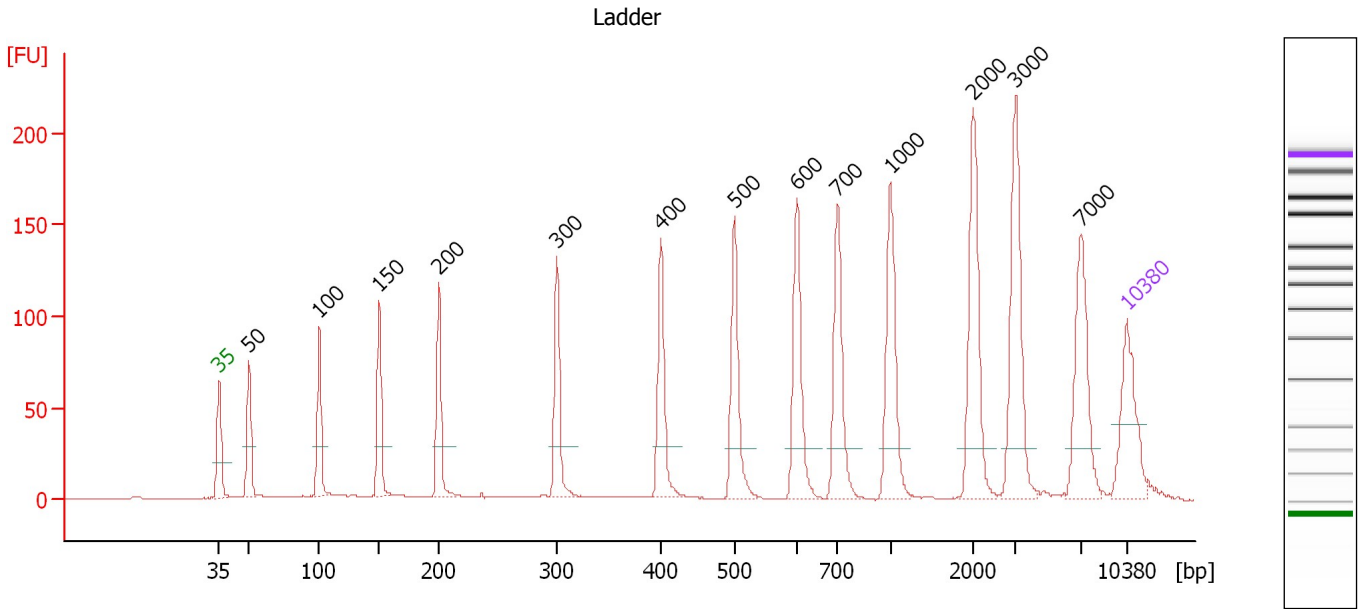
### Ladder

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\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

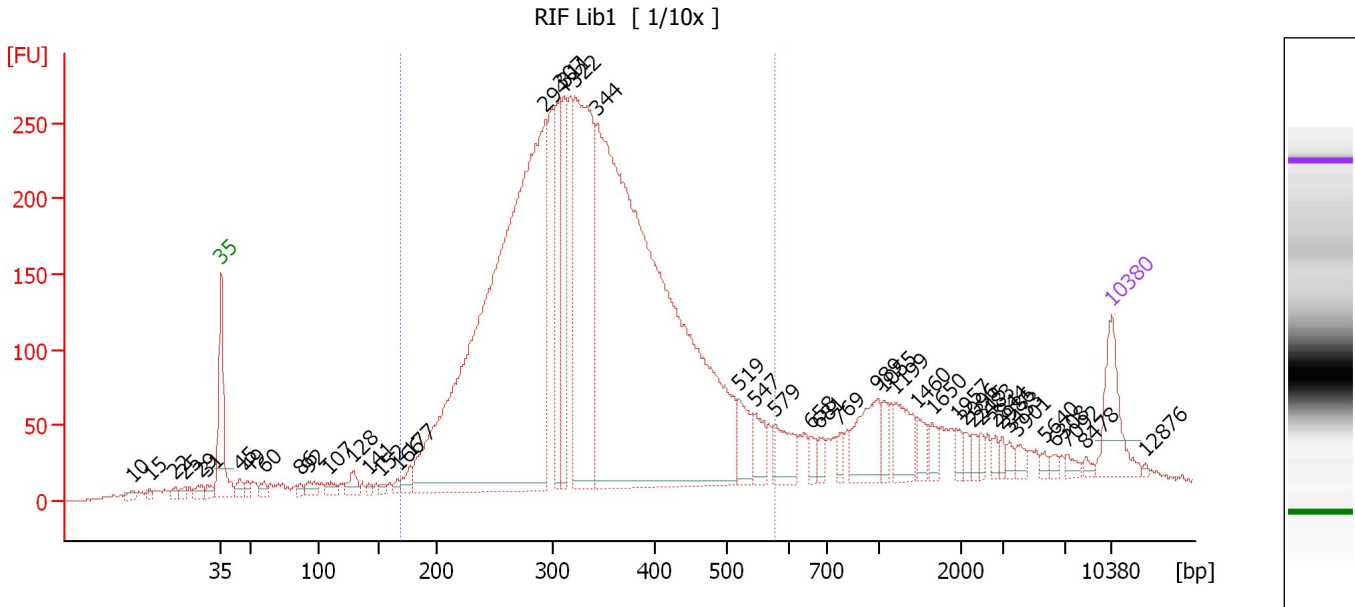
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : RIF Lib1**

Number of peaks found: 46                      Corr. Area 1: 5,923.1  
 Noise: 0.8

**Peak table for sample 1 : RIF Lib1**


Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	11	0.00	0.0	
2	15	0.00	0.0	
3	22	0.00	0.0	
4	25	0.00	0.0	
5	29	0.00	0.0	
6	31	0.00	0.0	
7	35	125.00	5,411.3	Lower Marker
8	45	21.50	731.0	
9	49	15.48	479.4	
10	60	17.09	431.1	
11	86	11.46	202.1	
12	92	24.62	406.6	
13	107	17.70	250.4	
14	128	28.89	342.5	
15	141	7.48	80.2	
16	152	7.91	79.0	
17	166	9.45	86.0	
18	177	23.57	201.2	
19	294	1,832.84	9,455.3	
20	307	191.04	943.0	
21	311	191.33	931.7	
22	322	574.40	2,701.8	
23	344	1,923.91	8,472.0	
24	519	68.56	200.2	
25	547	41.27	114.3	
26	579	60.05	157.1	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad


Created: 8/13/2014 2:36:16 PM  
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**Electropherogram Summary Continued ...**

**... Peak table for sample 1 : RIF Lib1**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	658	17.90	41.2	
28	681	15.35	34.2	
29	769	14.88	29.3	
30	989	84.91	130.1	
31	1,055	24.35	35.0	
32	1,199	59.69	75.5	
33	1,460	20.45	21.2	
34	1,650	17.86	16.4	
35	1,957	12.82	9.9	
36	2,096	10.16	7.3	
37	2,315	10.60	6.9	
38	2,483	9.76	6.0	
39	2,844	10.12	5.4	
40	2,986	8.16	4.1	
41	3,433	9.09	4.0	
42	3,901	12.34	4.8	
43	5,640	6.72	1.8	
44	6,308	6.91	1.7	
45	7,092	9.29	2.0	
46	8,478	5.82	1.0	
47	 10,380	75.00	10.9	Upper Marker
48	12,876	0.00	0.0	

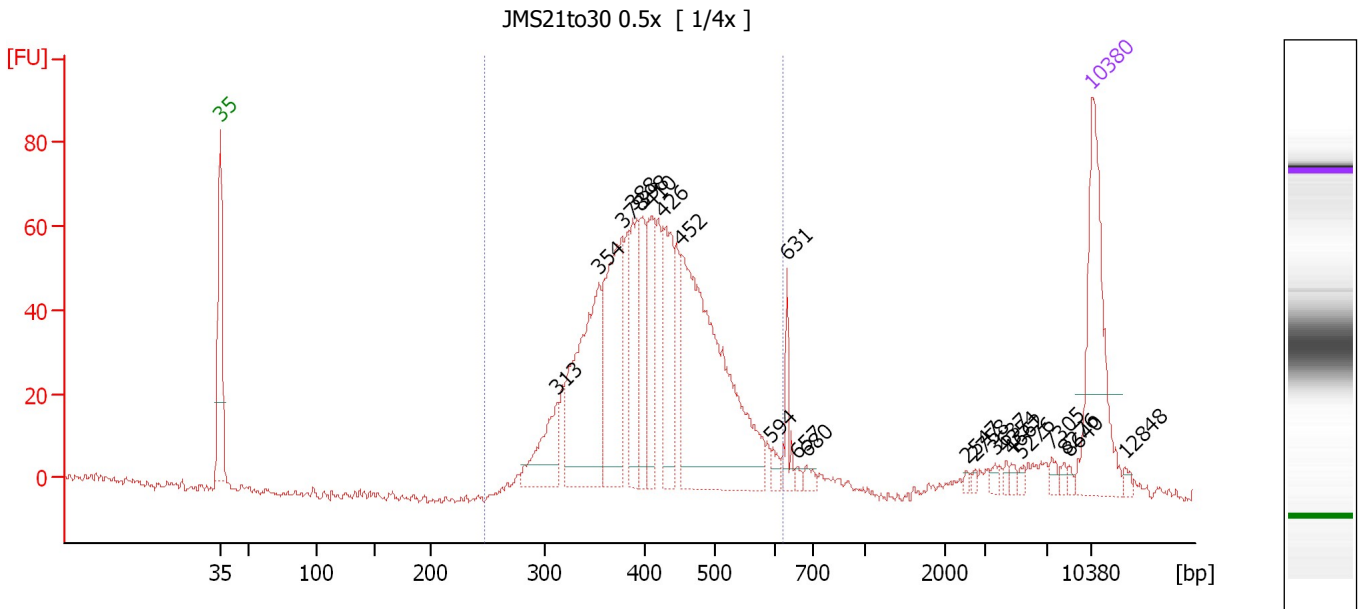
**Region table for sample 1 : RIF Lib1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
169	580	338	25,582.3	5,260.53	 5,923.1	82	24.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

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 Modified: 8/13/2014 3:07:17 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : JMS21to30 0.5x**

Number of peaks found: 22                      Corr. Area 1: 1,031.4  
 Noise: 0.9

**Peak table for sample 2 : JMS21to30 0.5x**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	313	46.88	226.9	
3	354	137.81	589.6	
4	378	114.73	460.3	
5	388	56.87	221.9	
6	398	40.99	156.1	
7	410	52.91	195.6	
8	426	69.76	247.8	
9	452	238.97	800.8	
10	594	5.88	15.0	
11	631	14.02	33.7	
12	657	2.86	6.6	
13	680	4.85	10.8	
14	2,547	1.55	0.9	
15	2,758	1.75	1.0	
16	3,637	2.99	1.2	
17	4,354	2.35	0.8	
18	4,662	2.61	0.8	
19	5,276	2.06	0.6	
20	7,305	3.47	0.7	
21	8,276	2.87	0.5	
22	8,640	1.95	0.3	
23	10,380	75.00	10.9	Upper Marker
24	12,848	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
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**Electropherogram Summary Continued ...**

... Region table for sample 2 : JMS21to30 0.5x

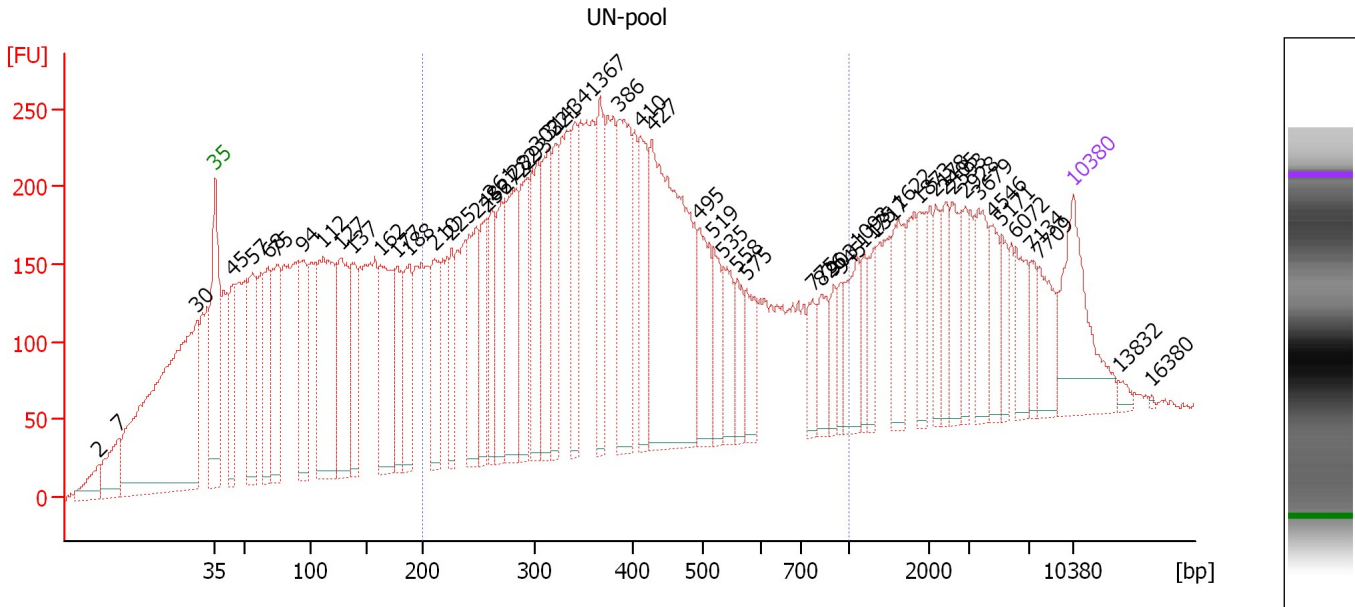
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
247	622	418	3,341.7	889.36	 1,031.4	90	16.8



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
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Electropherogram Summary Continued ...



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
 Modified: 8/13/2014 3:07:17 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 3 : UN-pool**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	341	73.93	328.5	
28	367	76.92	318.0	
29	386	136.67	536.4	
30	410	79.76	294.6	
31	427	301.62	1,070.2	
32	495	67.12	205.3	
33	519	41.44	121.0	
34	535	42.92	121.5	
35	558	31.14	84.6	
36	575	39.17	103.2	
37	775	23.93	46.8	
38	826	33.33	61.1	
39	903	18.80	31.5	
40	945	17.72	28.4	
41	1,093	43.10	59.7	
42	1,175	20.76	26.8	
43	1,317	22.12	25.4	
44	1,622	42.60	39.8	
45	1,873	27.13	21.9	
46	2,178	23.52	16.4	
47	2,405	23.65	14.9	
48	2,593	32.29	18.9	
49	2,928	22.71	11.8	
50	3,679	39.12	16.1	
51	4,546	26.73	8.9	
52	5,171	20.00	5.9	
53	6,072	30.26	7.5	
54	7,134	15.95	3.4	
55	7,709	33.42	6.6	
56	10,380	75.00	10.9	Upper Marker
57	13,832	0.00	0.0	
58	16,380	0.00	0.0	

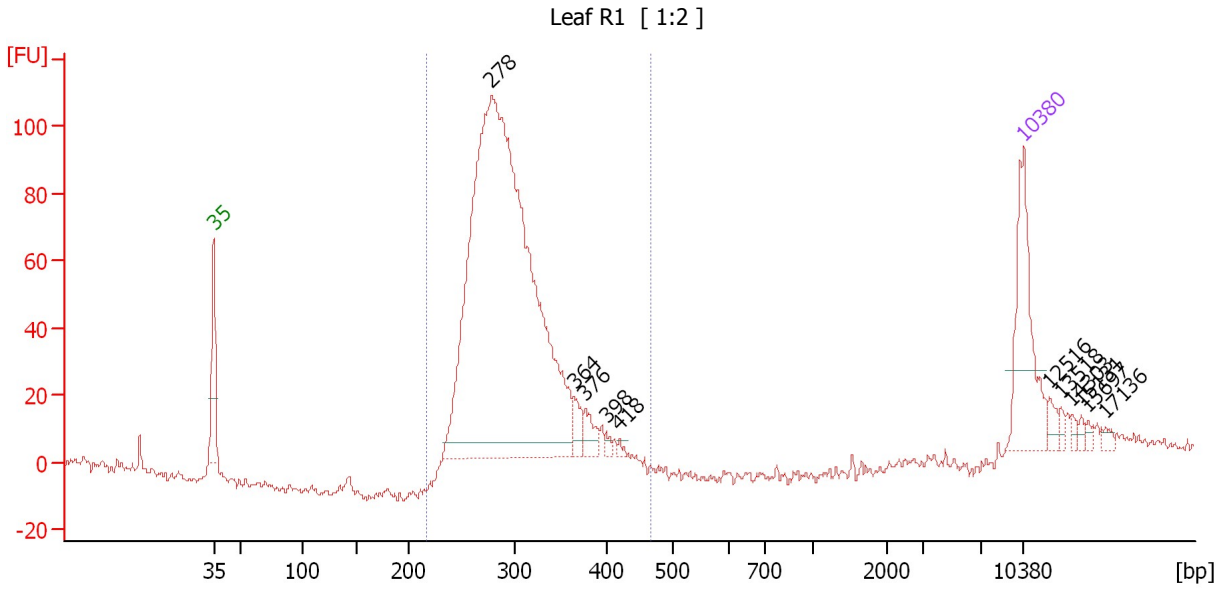
**Region table for sample 3 : UN-pool**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	412	11,690.8	2,636.21	7,203.6	47	40.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
 Modified: 8/13/2014 3:07:17 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Leaf R1**

Number of peaks found: 11                      Corr. Area 1: 980.8  
 Noise: 1.5

**Peak table for sample 4 : Leaf R1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	278	1,004.13	5,478.6	
3	364	16.34	68.0	
4	376	17.83	71.9	
5	398	4.02	15.3	
6	418	2.85	10.3	
7	10,380	75.00	10.9	Upper Marker
8	12,516	0.00	0.0	
9	13,518	0.00	0.0	
10	14,303	0.00	0.0	
11	15,131	0.00	0.0	
12	15,697	0.00	0.0	
13	17,136	0.00	0.0	

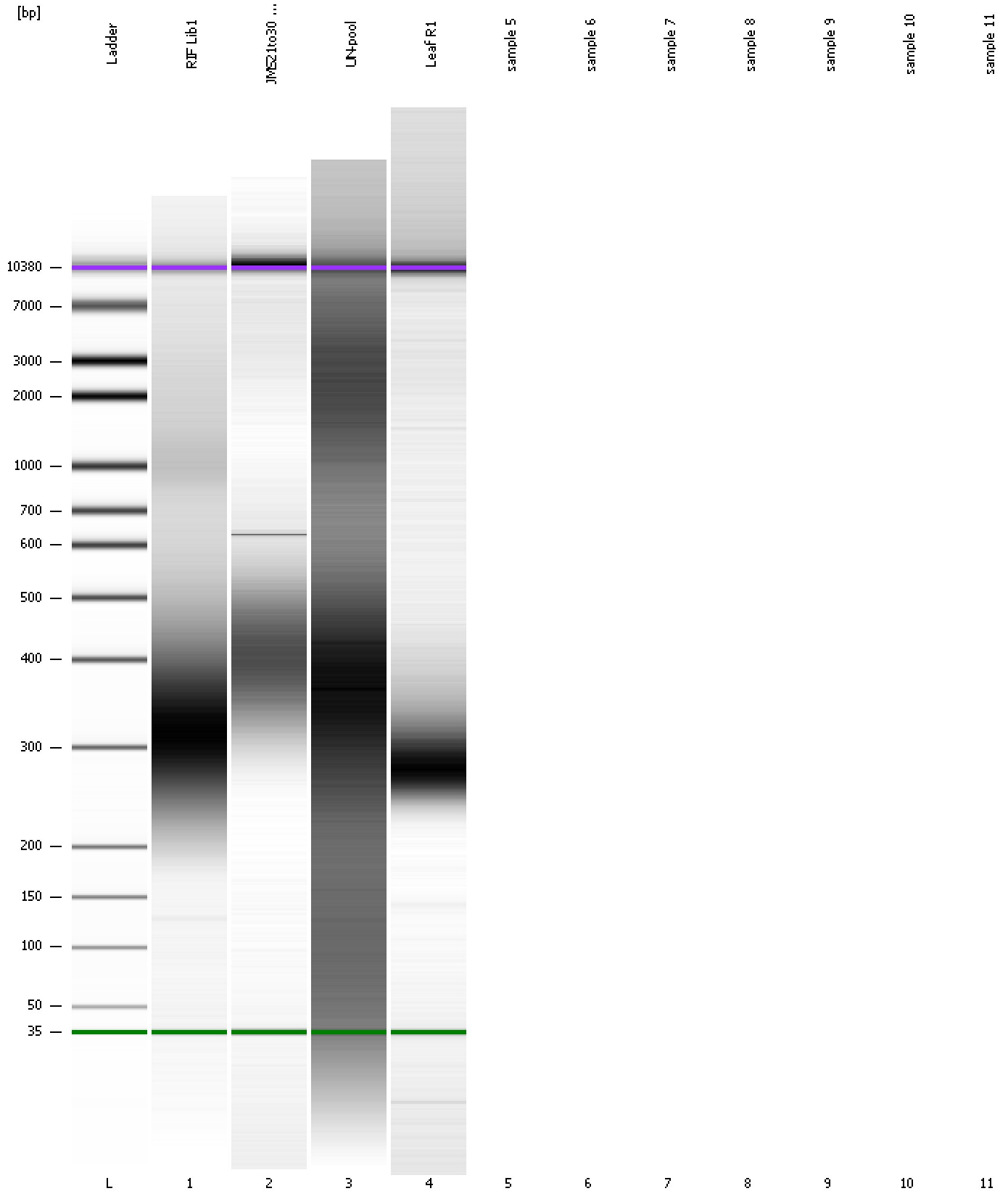
**Region table for sample 4 : Leaf R1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
216	465	295	5,079.6	975.82	980.8	96	11.2

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
Modified: 8/13/2014 3:07:17 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
Modified: 8/13/2014 3:07:17 PM

**Invalid Samples**

- Sample 5 has not been run, no results available.
- Sample 6 has not been run, no results available.
- Sample 7 has not been run, no results available.
- Sample 8 has not been run, no results available.
- Sample 9 has not been run, no results available.
- Sample 10 has not been run, no results available.
- Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13\_002.xad

Created: 8/13/2014 2:36:16 PM  
 Modified: 8/13/2014 3:07:17 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 5)		Instrument	Run		8/13/2014 2:57:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-08-13\2014-08-13_002.xad)		Instrument	Run		8/13/2014 2:36:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/13/2014 2:36:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/13/2014 2:36:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/13/2014 2:36:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/13/2014 2:36:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/13/2014 2:36:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/13/2014 2:36:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1