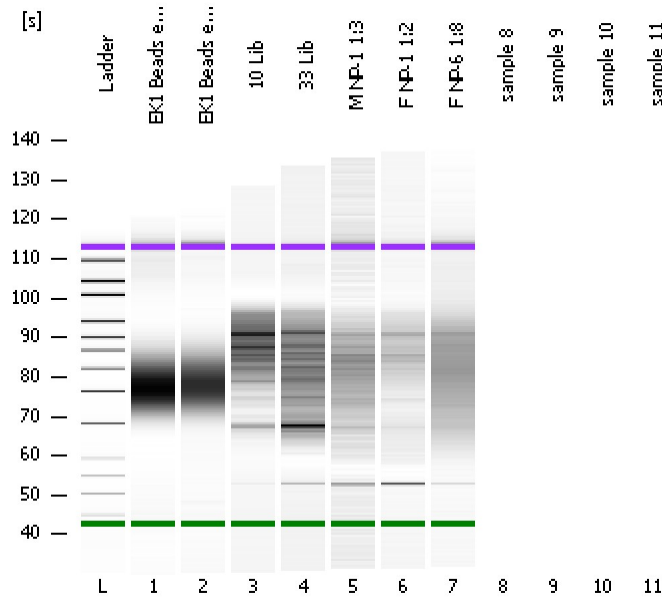


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
Modified: 5/7/2012 12:14:48 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

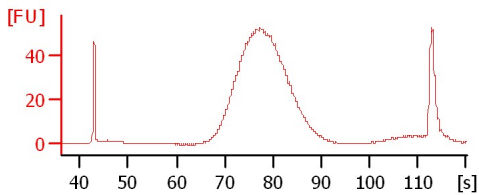
Assay Information:

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

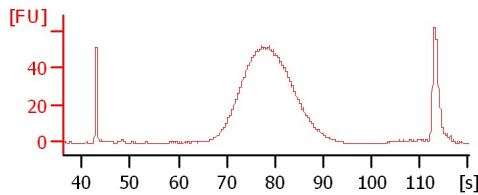
Chip Information:

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

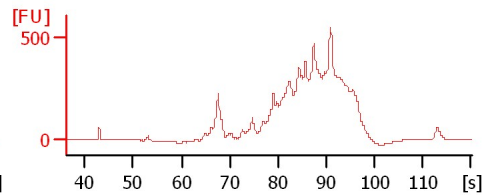
**EK1 Beads experiment #2 Lib 1:25**



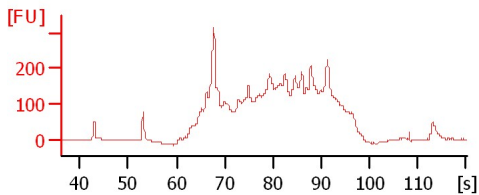
**EK1 Beads experiment #4 Lib 1:4**



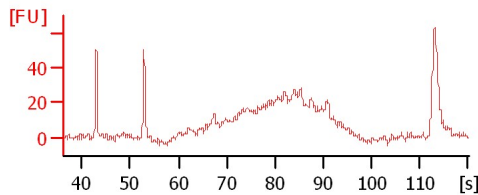
**10 Lib**



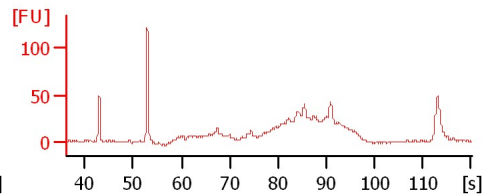
**33 Lib**



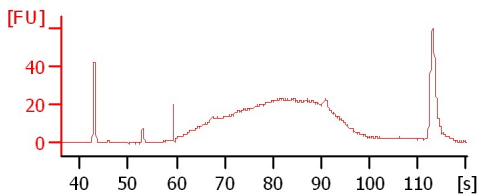
**M NP-1 1:3**



**F NP-1 1:2**



**F NP-6 1:8**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
EK1 Beads experiment #2 Lib 1:25		<input type="checkbox"/>	✓			
EK1 Beads experiment #4 Lib 1:4		<input type="checkbox"/>	✓			
10 Lib		<input type="checkbox"/>	✓			
33 Lib		<input type="checkbox"/>	✓			
M NP-1 1:3		<input type="checkbox"/>	✓			
F NP-1 1:2		<input type="checkbox"/>	✓			
F NP-6 1:8		<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:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
Modified: 5/7/2012 12:14:48 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

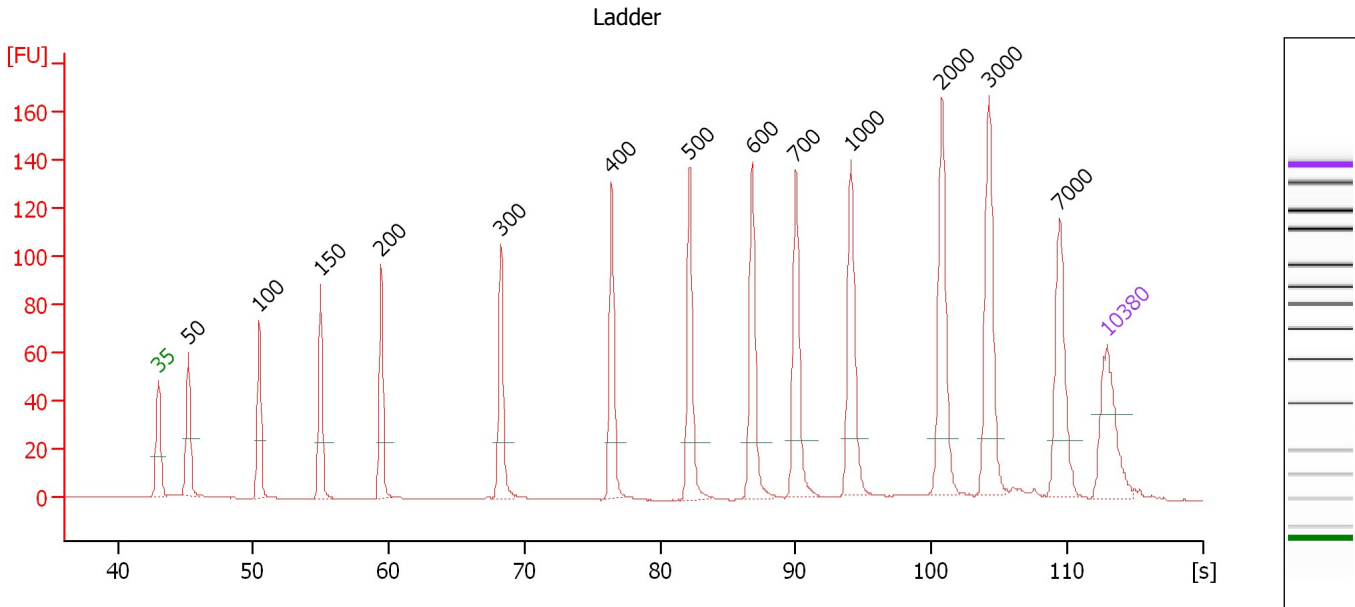
**Ladder**

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\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

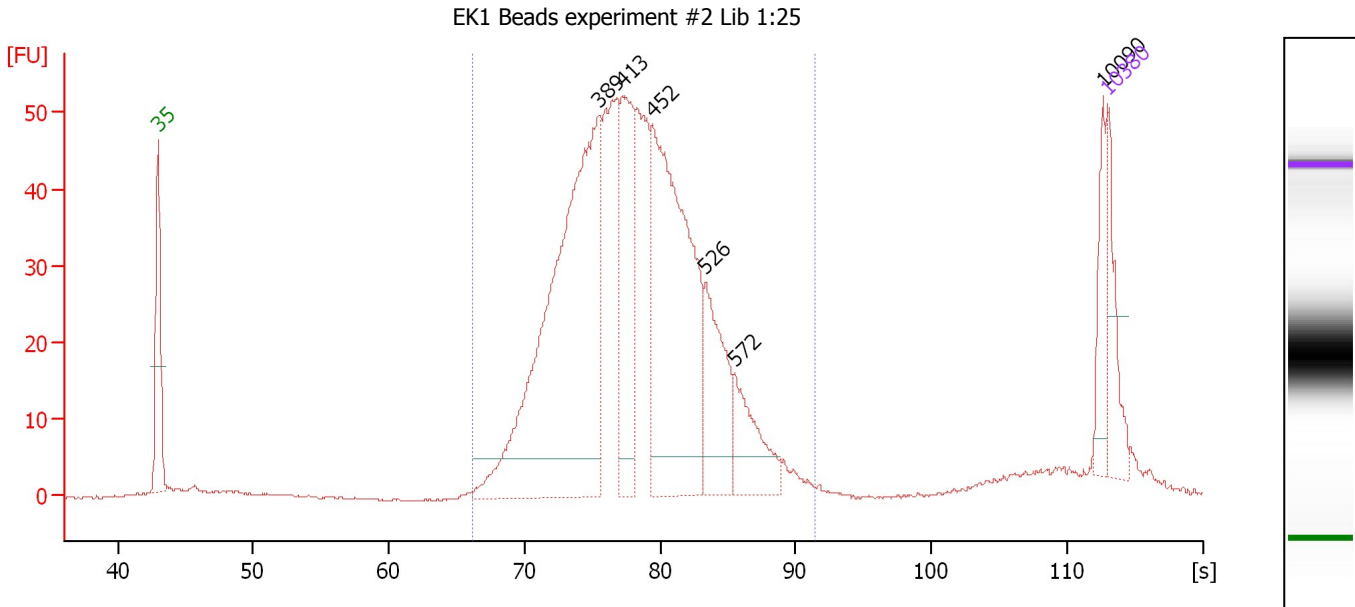
**Peak table for Ladder**

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:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : EK1 Beads experiment #2 Lib 1:25**

Number of peaks found: 6                      Corr. Area 1: 840.1  
 Noise: 0.1

**Peak table for sample 1 : EK1 Beads experiment #2 Lib 1:25**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	389	904.39	3,524.1	
3	413	240.64	882.3	
4	452	613.93	2,057.6	
5	526	178.12	513.2	
6	572	112.23	297.2	
7	10,090	62.03	9.3	
8	10,380	75.00	10.9	Upper Marker

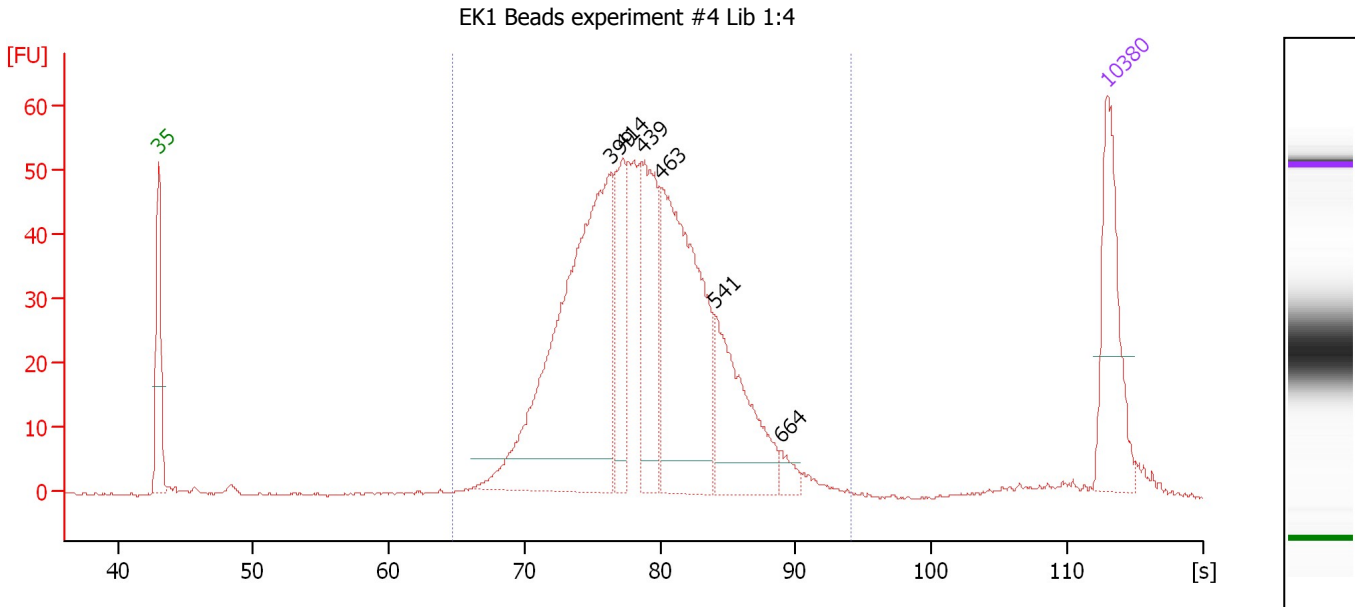
**Region table for sample 1 : EK1 Beads experiment #2 Lib 1:25**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
66.12	9,562.5	436	2,642.51	91.42	840.1	92	18.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : EK1 Beads experiment #4 Lib 1:4**

Number of peaks found: 6                      Corr. Area 1: 868.9  
 Noise: 0.2

**Peak table for sample 2 : EK1 Beads experiment #4 Lib 1:4**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	399	393.33	1,492.3	
3	414	78.80	288.6	
4	439	113.72	392.5	
5	463	262.07	858.2	
6	541	117.08	327.7	
7	664	12.19	27.8	
8	10,380	75.00	10.9	Upper Marker

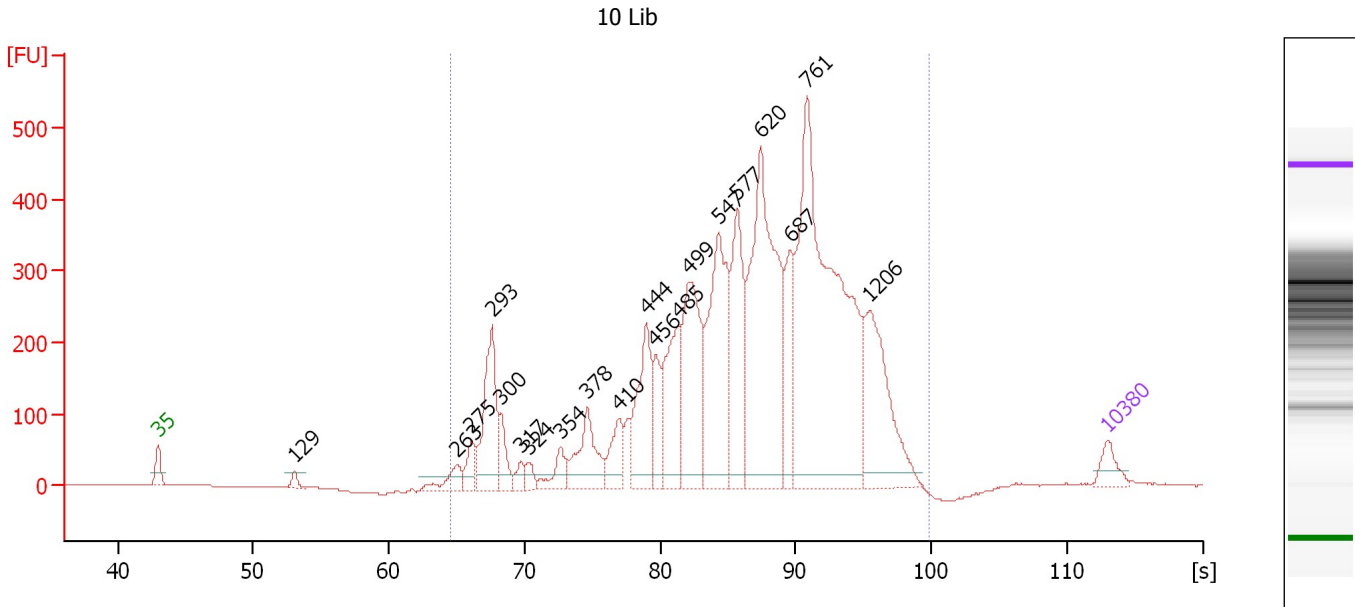
**Region table for sample 2 : EK1 Beads experiment #4 Lib 1:4**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
64.72	4,101.7	449	1,157.95	94.08	868.9	96	20.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 3 : 10 Lib**

Height Threshold [FU] : 20

**Overall Results for sample 3 : 10 Lib**

Number of peaks found: 20                      Corr. Area 1: 7,339.2  
 Noise: 0.2

**Peak table for sample 3 : 10 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	129	40.19	472.0	
3	263	118.88	684.1	
4	275	120.55	664.7	
5	293	551.55	2,856.8	
6	300	140.43	709.7	
7	317	61.17	292.0	
8	324	60.00	280.4	
9	354	119.83	513.4	
10	378	332.86	1,334.3	
11	410	186.40	689.3	
12	444	481.49	1,641.7	
13	456	200.26	664.8	
14	485	478.97	1,495.0	
15	499	743.47	2,257.0	
16	547	879.39	2,436.2	
17	577	583.69	1,532.9	
18	620	1,467.60	3,587.1	
19	687	347.26	765.9	
20	761	2,365.34	4,708.8	
21	1,206	637.94	801.2	
22	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary Continued ...**

... Region table for sample 3 : 10 Lib

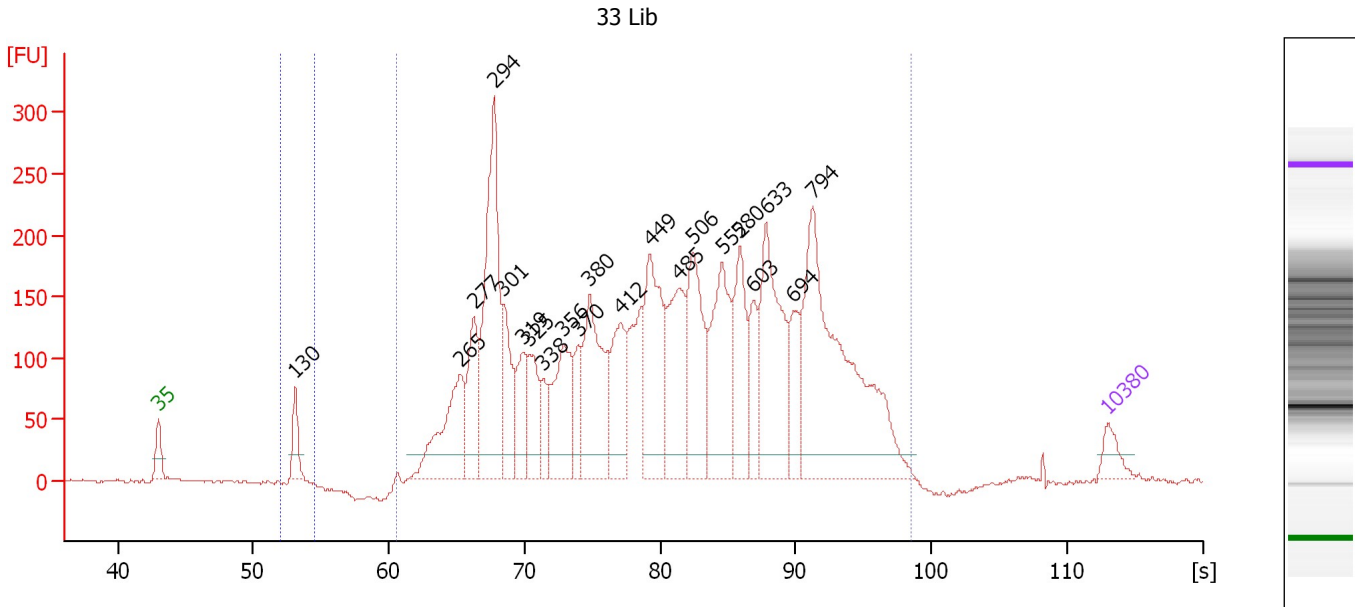
From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/ $\mu$ l]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Color
64.57	25,952.2	681	9,482.03	99.82	7,339.2	99	40.0



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 4 : 33 Lib**

Height Threshold [FU] : 20

**Overall Results for sample 4 : 33 Lib**

Number of peaks found: 21      Corr. Area 1: 5,395.5  
 Noise: 1.5      Corr. Area 2: 62.1


**Peak table for sample 4 : 33 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	130	170.52	1,994.7	
3	265	581.72	3,322.0	
4	277	400.93	2,190.2	
5	294	1,101.35	5,669.8	
6	301	369.31	1,859.3	
7	319	248.10	1,177.1	
8	325	265.37	1,236.0	
9	338	148.57	666.5	
10	356	488.12	2,076.6	
11	370	183.69	752.6	
12	380	643.36	2,566.0	
13	412	395.06	1,453.3	
14	449	666.86	2,250.4	
15	485	534.37	1,668.5	
16	506	585.45	1,753.8	
17	552	601.71	1,651.9	
18	580	391.83	1,023.2	
19	603	208.04	522.6	
20	633	734.64	1,758.3	
21	694	228.37	498.3	
22	794	1,526.23	2,912.8	



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary Continued ...****... Peak table for sample 4 : 33 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
23	 10,380	75.00	10.9	Upper Marker

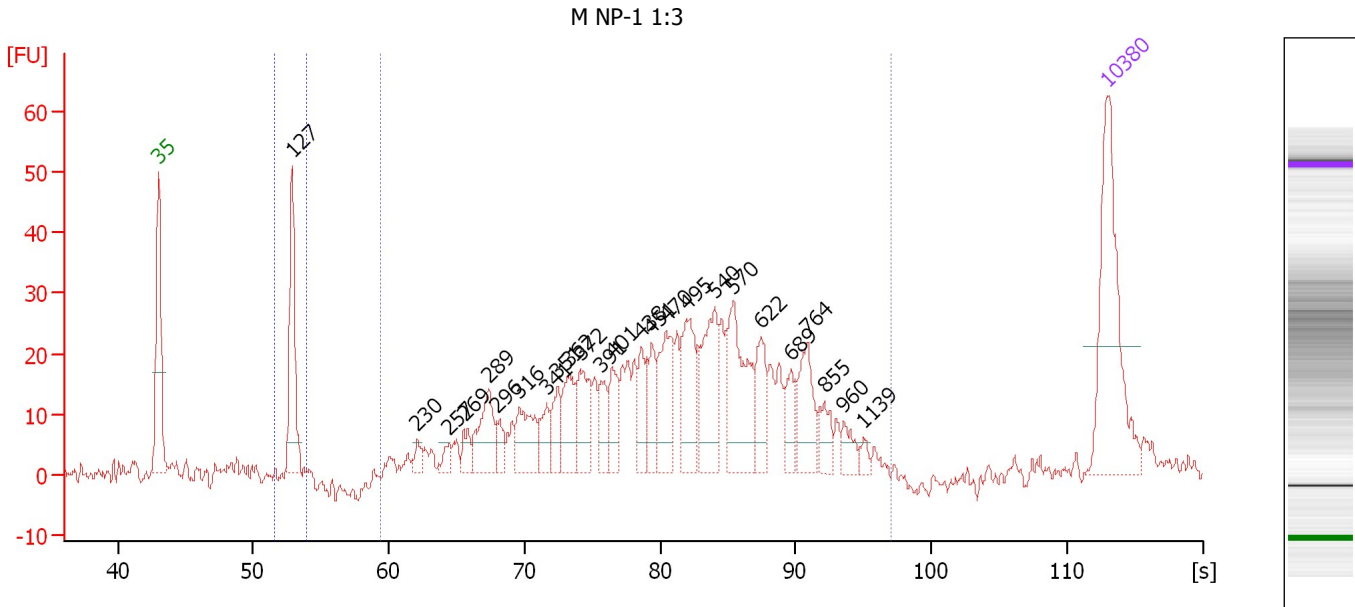
**Region table for sample 4 : 33 Lib**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
52.08	2,001.0	130	171.48	54.58	62.1	1	1.6	
60.59	37,655.1	543	10,573.58	98.50	5,395.5	99	46.3	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : M NP-1 1:3**

Number of peaks found: 25      Corr. Area 1: 586.5  
 Noise: 1.8      Corr. Area 2: 45.3

**Peak table for sample 5 : M NP-1 1:3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	77.10	921.8	
3	230	7.15	47.1	
4	257	6.91	40.8	
5	269	10.77	60.7	
6	289	35.46	185.7	
7	296	11.05	56.6	
8	316	32.15	154.1	
9	341	17.55	77.9	
10	351	17.90	77.3	
11	362	29.20	122.3	
12	372	31.45	128.3	
13	391	16.93	65.6	
14	401	20.80	78.7	
15	438	22.61	78.2	
16	451	21.42	72.0	
17	470	41.12	132.6	
18	495	45.65	139.6	
19	540	52.06	146.0	
20	570	60.46	160.8	
21	622	24.82	60.4	
22	689	17.31	38.1	
23	764	32.73	64.9	
24	855	12.36	21.9	
25	960	9.68	15.3	
26	1,139	3.99	5.3	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad



Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 5 : M NP-1 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	10,380	75.00	10.9	Upper Marker

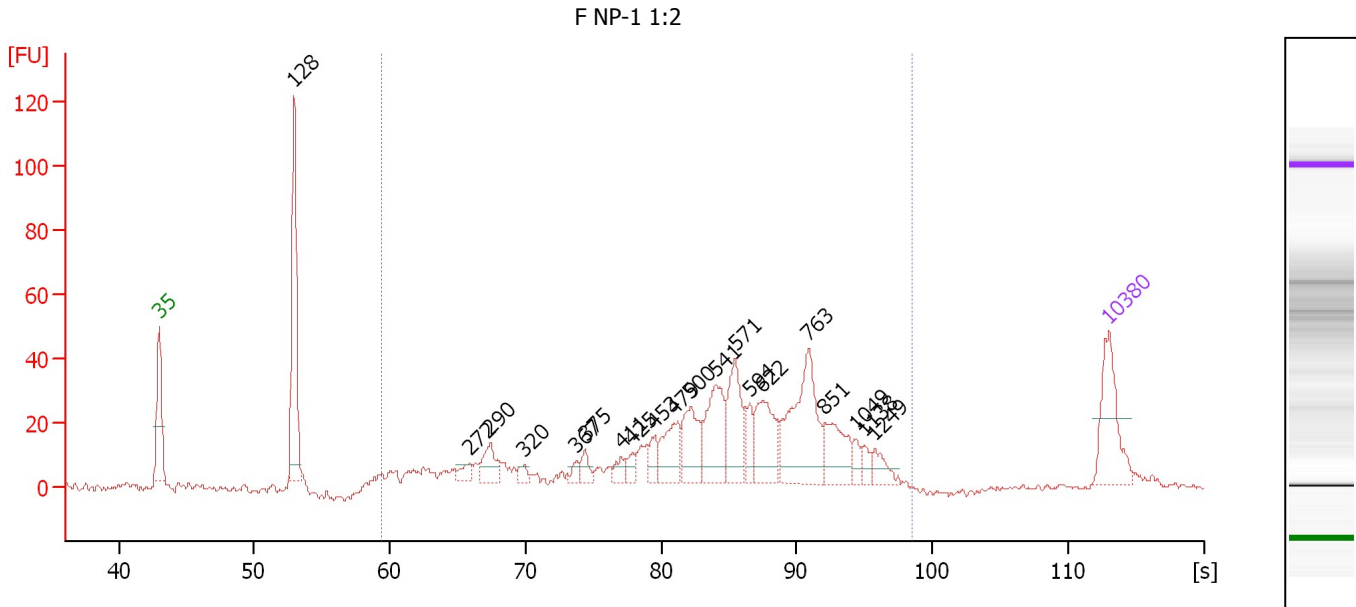
#### Region table for sample 5 : M NP-1 1:3

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
51.57	964.2	127	80.94	53.91	45.3	7	2.2	
59.47	2,604.9	508	740.41	97.01	586.5	86	35.2	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : F NP-1 1:2**

Number of peaks found: 20      Corr. Area 1: 608.7  
 Noise: 0.7

**Peak table for sample 6 : F NP-1 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	244.48	2,900.0	
3	272	16.31	90.7	
4	290	39.86	208.3	
5	320	11.00	52.0	
6	367	11.00	45.4	
7	375	17.36	70.1	
8	411	14.74	54.4	
9	425	14.97	53.3	
10	453	24.51	82.0	
11	479	59.79	189.1	
12	500	72.66	220.2	
13	541	97.34	272.7	
14	571	83.74	222.2	
15	594	29.64	75.6	
16	622	83.10	202.5	
17	763	157.05	311.9	
18	851	63.78	113.5	
19	1,049	13.70	19.8	
20	1,138	11.37	15.1	
21	1,249	20.52	24.9	
22	10,380	75.00	10.9	Upper Marker

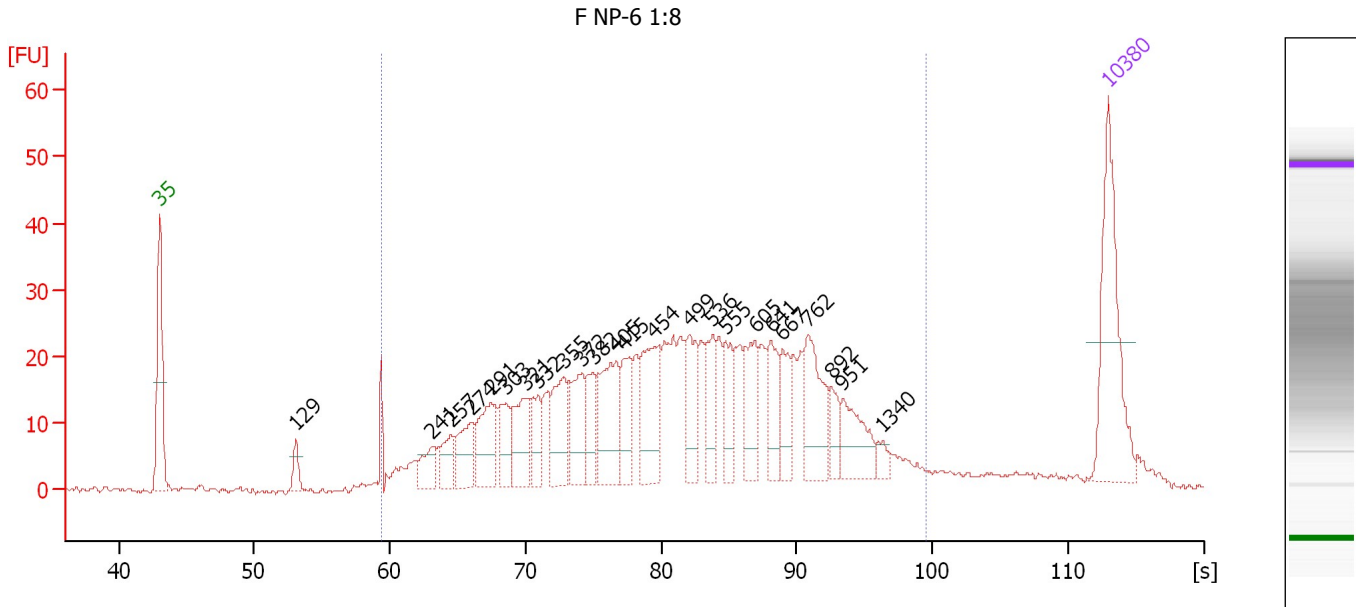
**Region table for sample 6 : F NP-1 1:2**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.47	3,543.2	604	1,109.43	98.51	608.7	84	40.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : F NP-6 1:8**

Number of peaks found: 24      Corr. Area 1: 759.1  
 Noise: 0.4

**Peak table for sample 7 : F NP-6 1:8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	129	13.73	160.7	
3	241	20.34	127.9	
4	257	22.12	130.2	
5	274	33.70	186.5	
6	291	49.27	256.8	
7	303	27.30	136.3	
8	321	41.36	195.5	
9	332	25.73	117.3	
10	355	47.75	203.8	
11	372	39.53	161.2	
12	382	23.54	93.4	
13	405	58.63	219.4	
14	415	30.92	112.8	
15	454	58.43	195.1	
16	499	41.39	125.7	
17	536	31.37	88.7	
18	555	25.59	69.8	
19	605	35.90	89.8	
20	641	30.15	71.3	
21	667	27.15	61.6	
22	762	51.63	102.6	
23	892	15.68	26.6	
24	951	33.74	53.8	
25	1,340	7.20	8.1	
26	10,380	75.00	10.9	Upper Marker


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
Modified: 5/7/2012 12:14:48 PM

**Electropherogram Summary Continued ...**

... Region table for sample 7 :

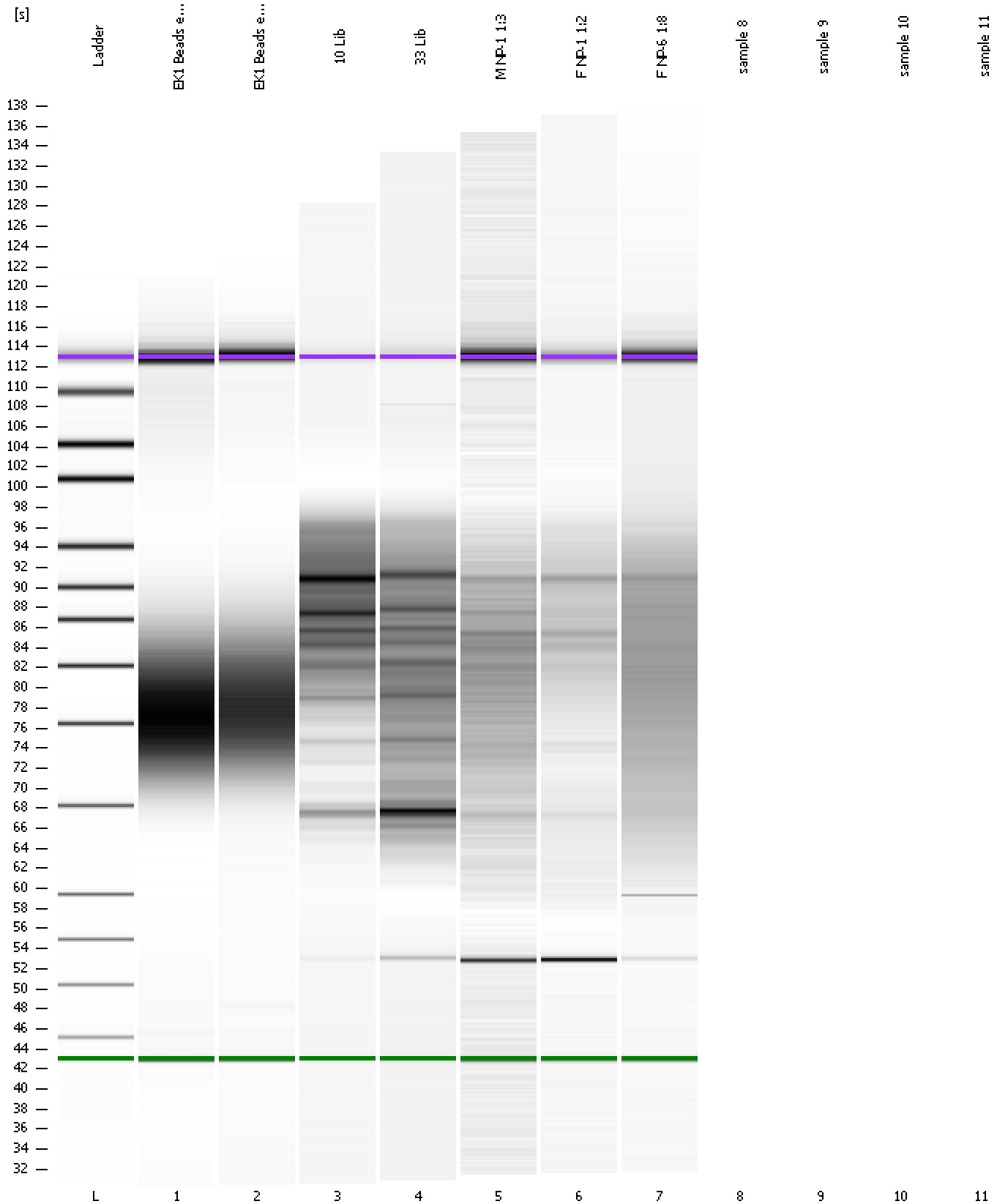
**F NP-6 1:8**

<b>From [s]</b>	<b>Molarity [pmol/l]</b>	<b>Average Size [bp]</b>	<b>Conc. [pg/μl]</b>	<b>To [s]</b>	<b>Corr. Area</b>	<b>% of Total</b>	<b>Size distribution in CV [%]</b>	<b>Co lor</b>
59.47	4,287.5	553	1,211.24	99.61	759.1	90	49.5	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
Modified: 5/7/2012 12:14:48 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
Modified: 5/7/2012 12:14:48 PM

**Invalid Samples**

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:\...ents and Settings\Bioanalyzer\2012-05-07\2012-05-07\_002.xad

Created: 5/7/2012 11:41:25 AM  
 Modified: 5/7/2012 12:14:48 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		5/7/2012 12:11:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-07\2012-05-07_002.xad)		Instrument	Run		5/7/2012 11:41:30 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/7/2012 11:41:30 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/7/2012 11:41:30 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/7/2012 11:41:30 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/7/2012 11:41:30 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/7/2012 11:41:30 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/7/2012 11:41:30 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1