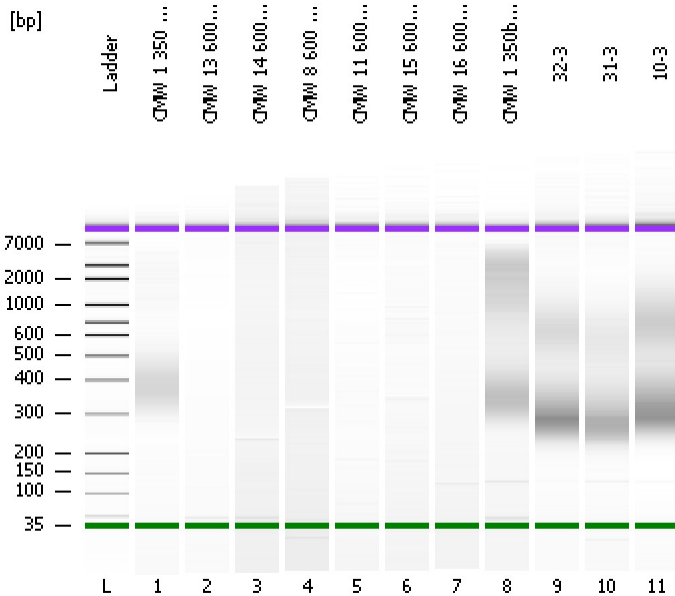


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
Modified: 5/30/2012 9:34:04 AM

Electrophoresis File Run Summary



Instrument Information:

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

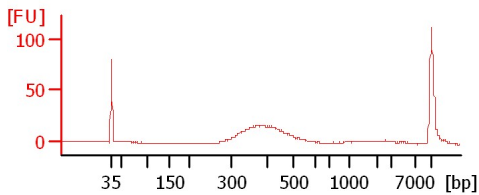
Assay Information:

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

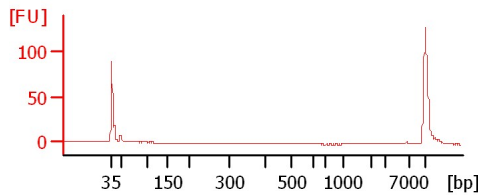
Chip Information:

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

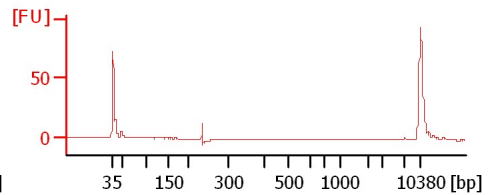
CMW 1 350 bp Lib re-do 5/17(adp purif'd)



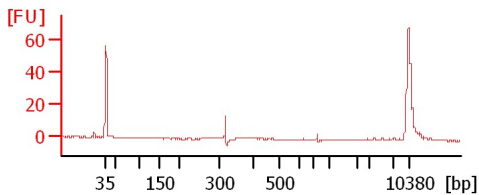
CMW 13 600 bp Lib re-do 5/29



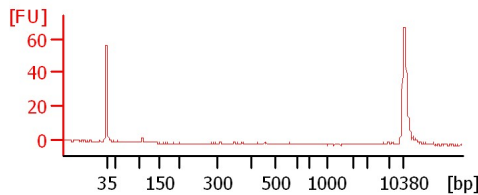
CMW 14 600 bp re-do Lib 5/29



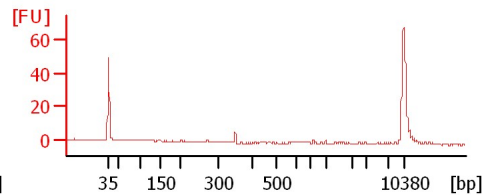
CMW 8 600 bp Lib (Pippin)



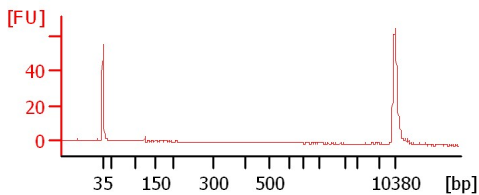
CMW 11 600 bp Lib (Pippin)



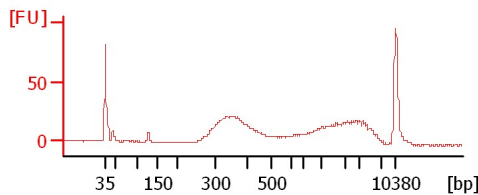
CMW 15 600bp (Pippin)



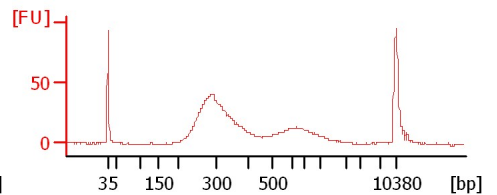
CMW 16 600bp (Pippin)



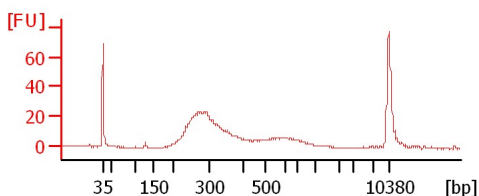
CMW 1 350bp Lib 4/24/12



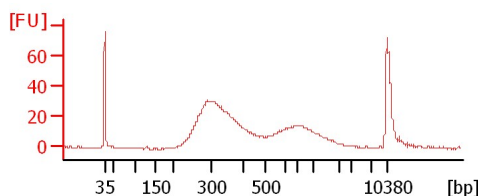
32-3



31-3



10-3



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
Modified: 5/30/2012 9:34:04 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CMW 1 350 bp Lib re-do 5/17(adp purif'd)		<input type="checkbox"/>	✓			
CMW 13 600 bp Lib re-do 5/29		<input type="checkbox"/>	✓			
CMW 14 600 bp re-do Lib 5/29		<input type="checkbox"/>	✓			
CMW 8 600 bp Lib (Pippin)		<input type="checkbox"/>	✓			
CMW 11 600 bp Lib (Pippin)		<input type="checkbox"/>	✓			
CMW 15 600bp (Pippin)		<input type="checkbox"/>	✓			
CMW 16 600bp (Pippin)		<input type="checkbox"/>	✓			
CMW 1 350bp Lib 4/24/12		<input type="checkbox"/>	✓			
32-3		<input type="checkbox"/>	✓			
31-3		<input type="checkbox"/>	✓			
10-3		<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\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
Modified: 5/30/2012 9:34:04 AM

**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

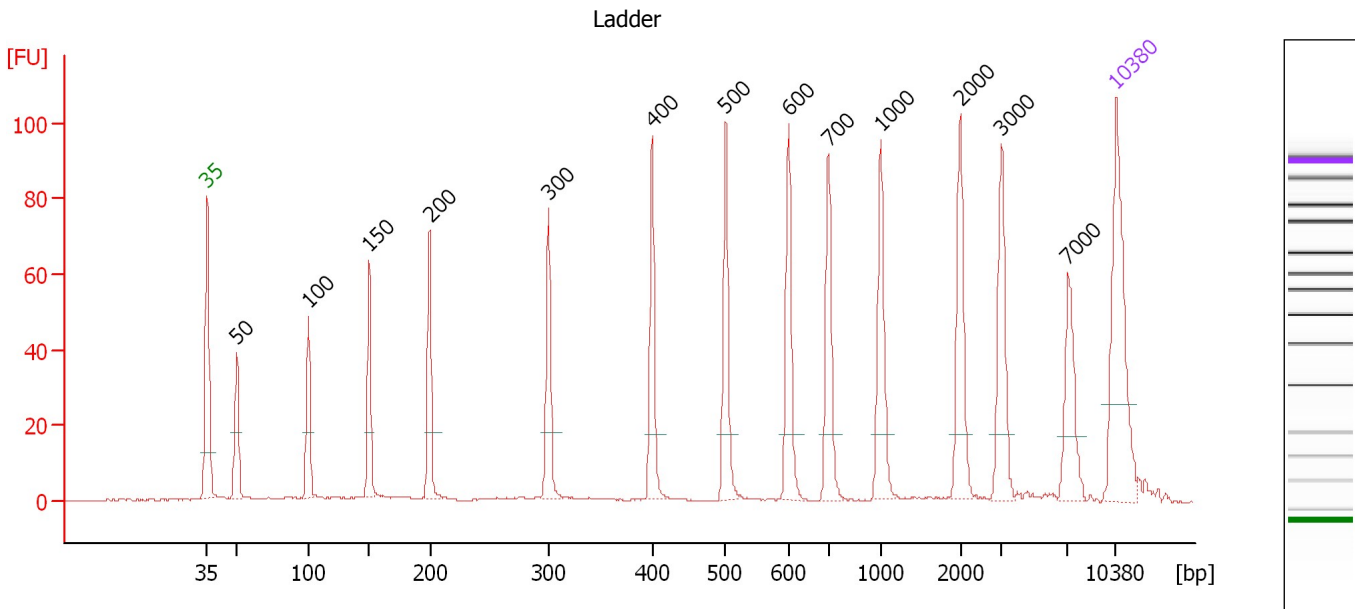
**Ladder**

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\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

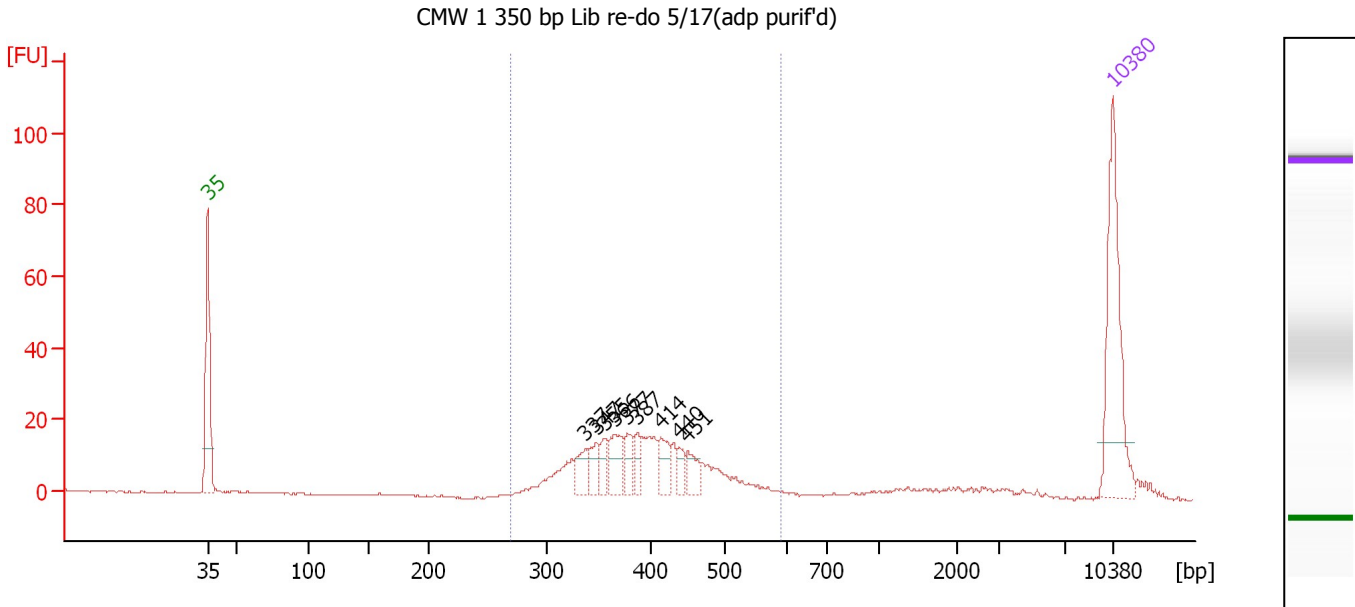
**Peak table for Ladder**

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\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 1 : CMW 1 350 bp Lib re-do 5/17(adp purif'd)**

Height Threshold [FU] : 10

**Overall Results for sample 1 : CMW 1 350 bp Lib re-do 5/17(adp purif'd)**

Number of peaks found: 9                      Corr. Area 1: 270.9  
 Noise: 0.2

**Peak table for sample 1 : CMW 1 350 bp Lib re-do 5/17(adp purif'd)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	337	18.23	82.1	
3	347	17.62	76.8	
4	355	13.92	59.4	
5	366	24.14	100.1	
6	377	16.29	65.4	
7	387	12.31	48.2	
8	414	18.64	68.2	
9	440	10.60	36.5	
10	451	15.34	51.6	
11	10,380	75.00	10.9	Upper Marker

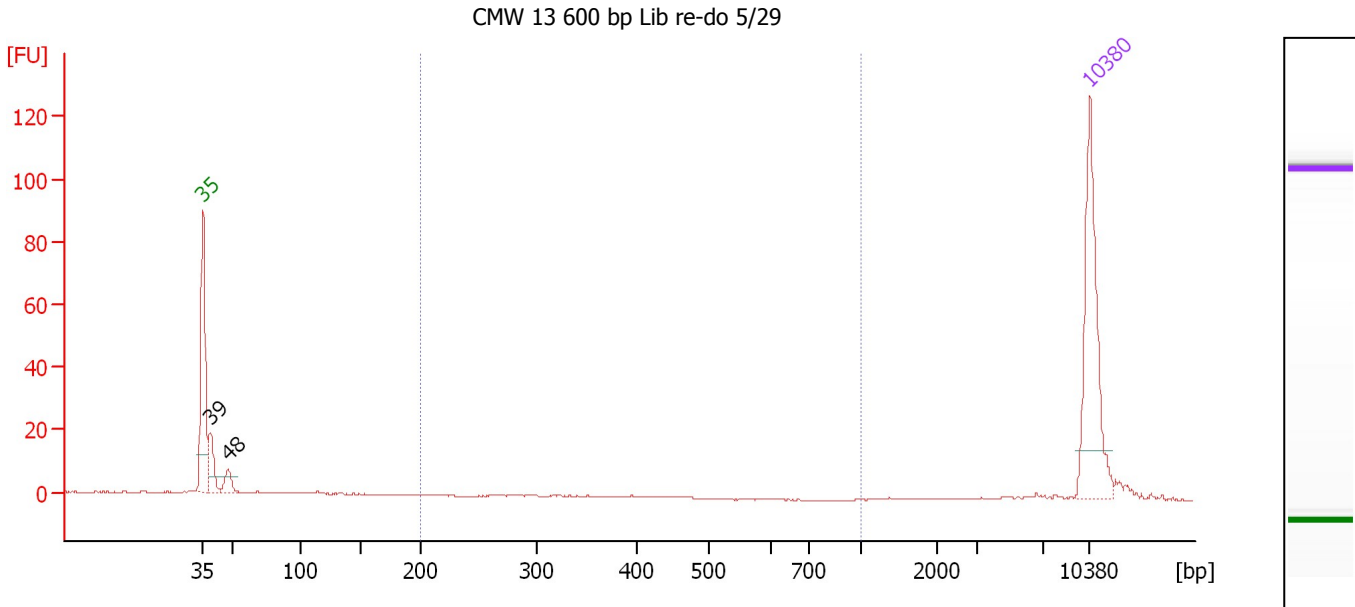
**Region table for sample 1 : CMW 1 350 bp Lib re-do 5/17(adp purif'd)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
269	590	399	1,050.2	268.06	270.9	85	15.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : CMW 13 600 bp Lib re-do 5/29**

Number of peaks found: 2                      Corr. Area 1: 0.9  
 Noise: 0.1

**Peak table for sample 2 : CMW 13 600 bp Lib re-do 5/29**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	29.53	1,149.7	
3	48	14.37	452.4	
4	10,380	75.00	10.9	Upper Marker

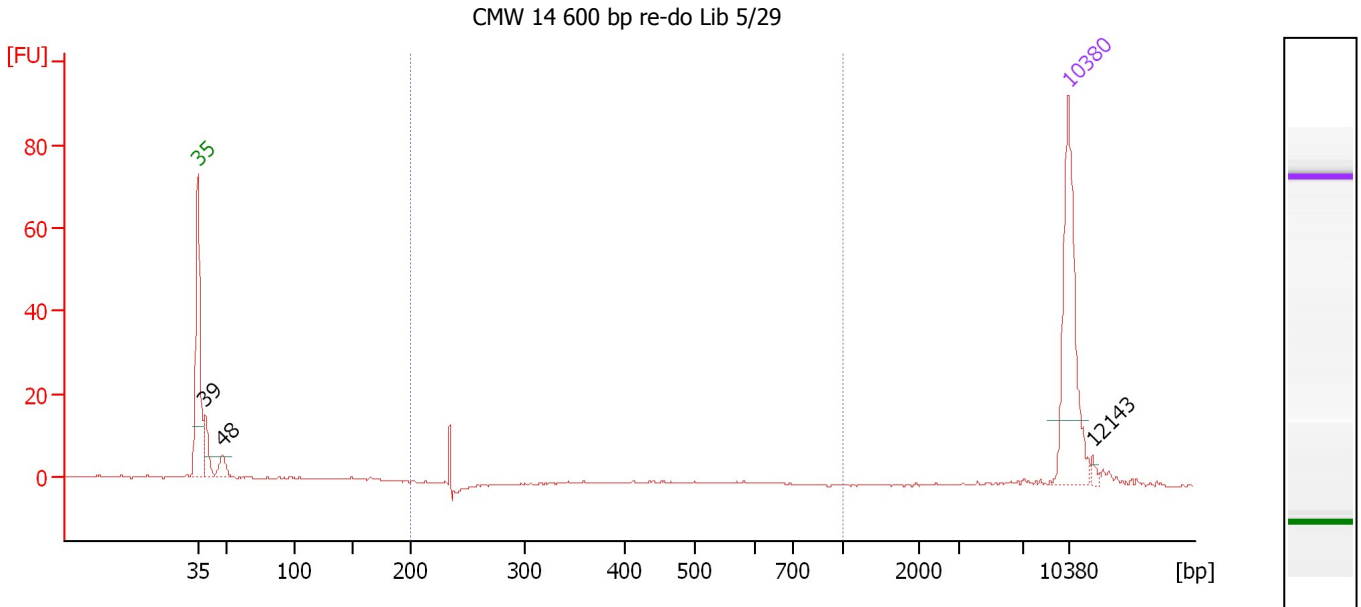
**Region table for sample 2 : CMW 13 600 bp Lib re-do 5/29**

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	321	4.2	0.87	0.9	1	16.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : CMW 14 600 bp re-do Lib 5/29**

Number of peaks found: 3                      Corr. Area 1: 3.7  
 Noise: 0.2

**Peak table for sample 3 : CMW 14 600 bp re-do Lib 5/29**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	29.22	1,135.5	
3	48	14.61	460.3	
4	10,380	75.00	10.9	Upper Marker
5	12,143	0.00	0.0	

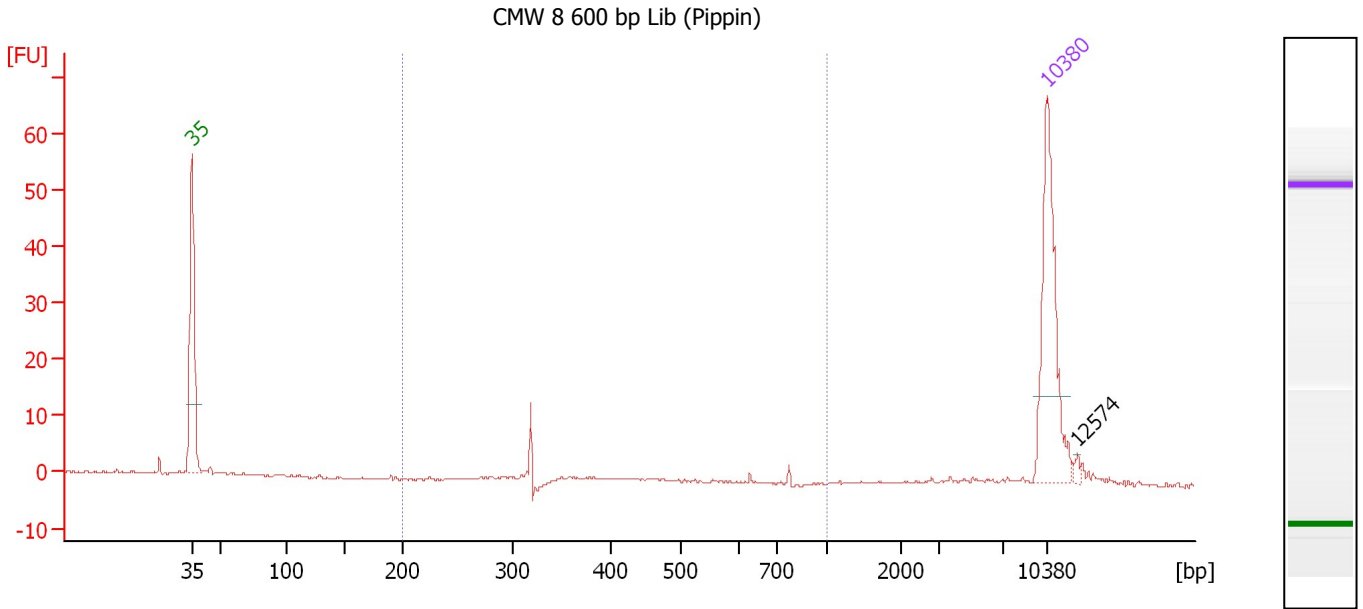
**Region table for sample 3 : CMW 14 600 bp re-do Lib 5/29**

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	244	32.0	4.99	3.7	7	22.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : CMW 8 600 bp Lib (Pippin)**

Number of peaks found: 1                      Corr. Area 1: 5.1  
 Noise: 0.1

**Peak table for sample 4 : CMW 8 600 bp Lib (Pippin)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,574	0.00	0.0	

**Region table for sample 4 : CMW 8 600 bp Lib (Pippin)**

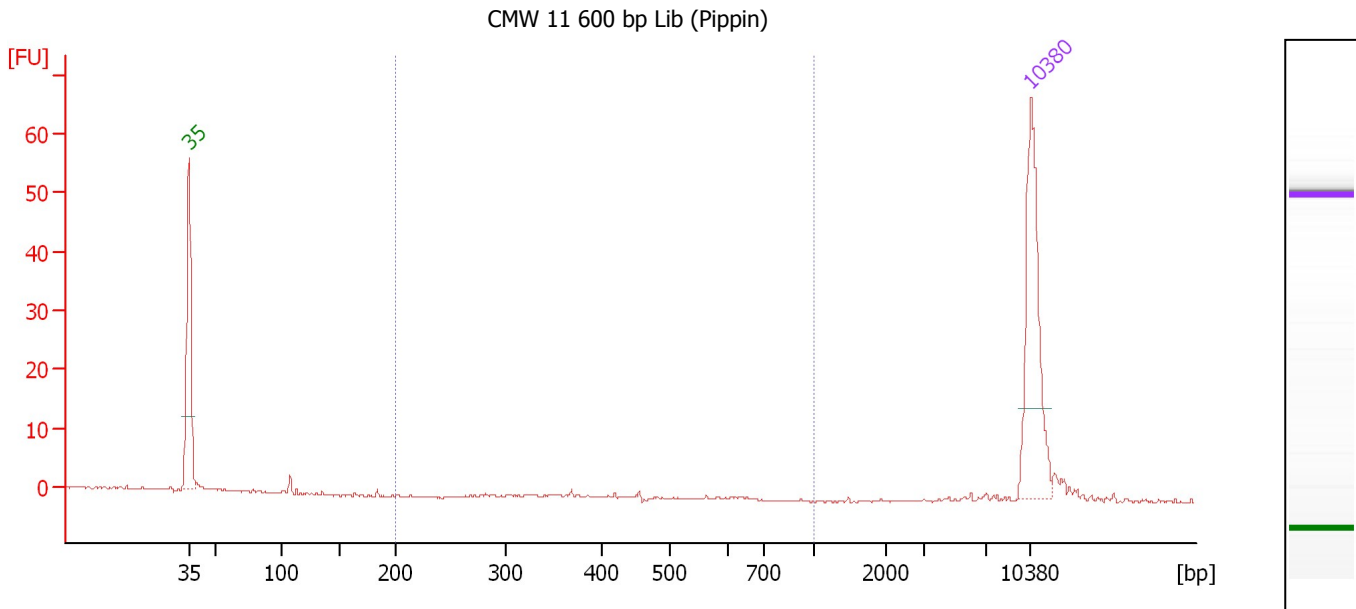
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	404	32.1	7.41	5.1	25	40.6	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : CMW 11 600 bp Lib (Pippin)**

Number of peaks found: 0                      Corr. Area 1: 0.5  
 Noise: 0.1

**Peak table for sample 5 : CMW 11 600 bp Lib (Pippin)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

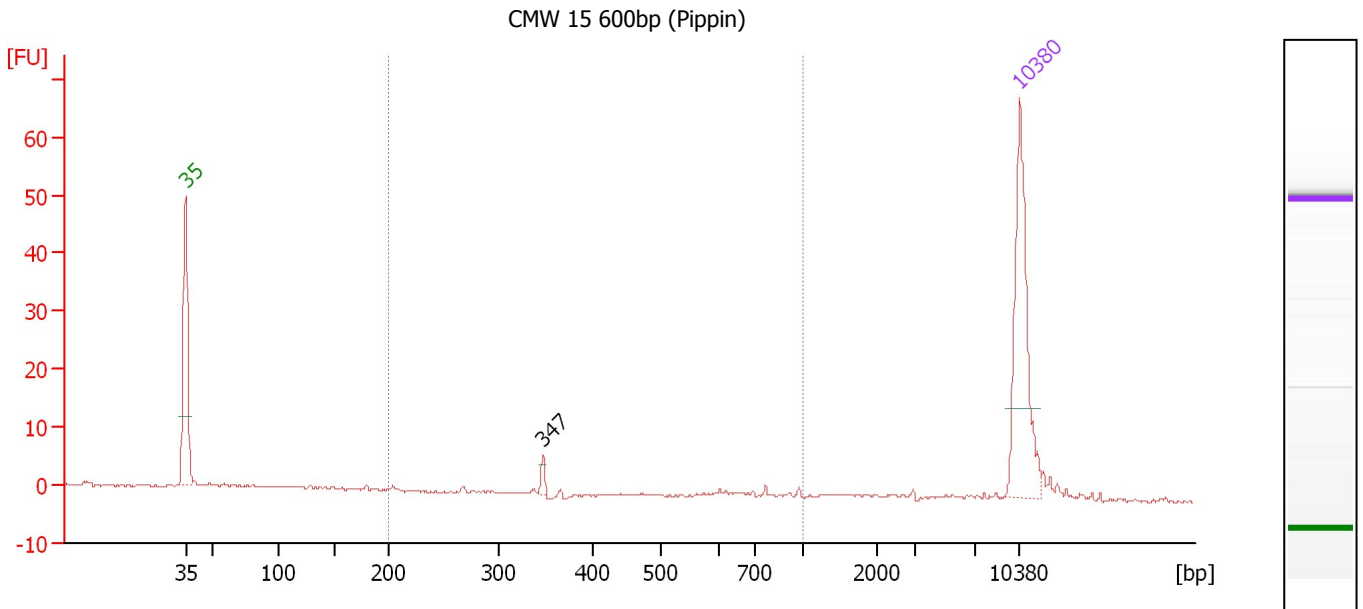
**Region table for sample 5 : CMW 11 600 bp Lib (Pippin)**

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	442	2.3	0.65	0.5	3	17.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : CMW 15 600bp (Pippin)**

Number of peaks found: 1                      Corr. Area 1: 9.9  
 Noise: 0.2

**Peak table for sample 6 : CMW 15 600bp (Pippin)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	347	5.01	21.9	
3	10,380	75.00	10.9	Upper Marker

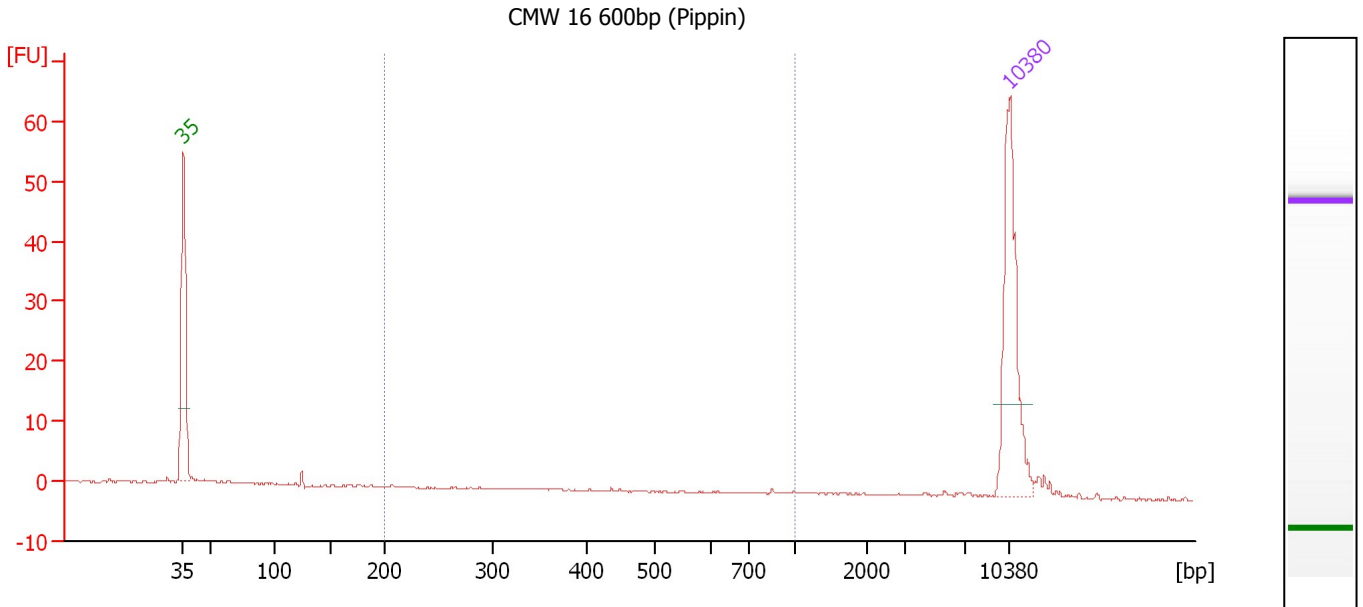
**Region table for sample 6 : CMW 15 600bp (Pippin)**

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	542	54.1	14.51	9.9	22	41.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : CMW 16 600bp (Pippin)**

Number of peaks found: 0                      Corr. Area 1: 2.4  
 Noise: 0.1

**Peak table for sample 7 : CMW 16 600bp (Pippin)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

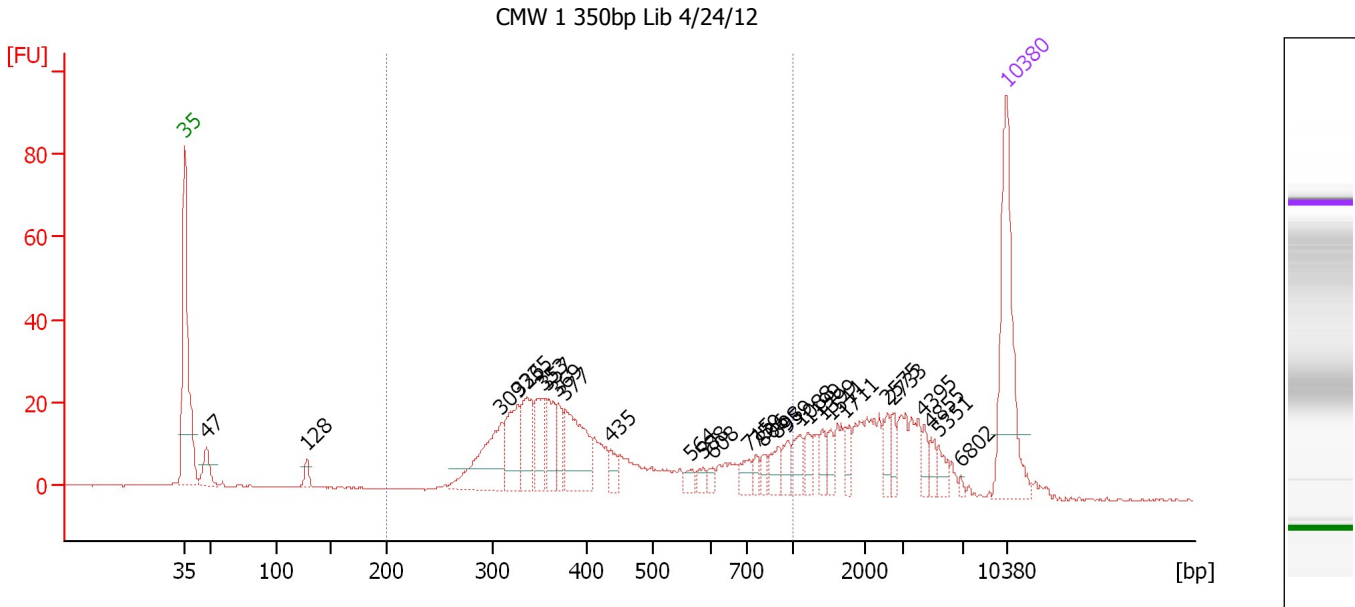
**Region table for sample 7 : CMW 16 600bp (Pippin)**

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	603	11.3	3.36	2.4	10	38.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : CMW 1 350bp Lib 4/24/12**

Number of peaks found: 29                      Corr. Area 1: 431.9  
 Noise: 0.1

**Peak table for sample 8 : CMW 1 350bp Lib 4/24/12**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	23.03	736.6	
3	128	8.16	96.6	
4	309	66.38	325.8	
5	326	43.01	199.7	
6	335	40.51	183.0	
7	353	31.73	136.4	
8	357	27.55	116.9	
9	369	18.42	75.7	
10	377	58.98	237.0	
11	435	9.42	32.8	
12	564	6.38	17.2	
13	588	5.68	14.6	
14	608	4.90	12.2	
15	715	10.35	21.9	
16	759	5.75	11.5	
17	806	6.33	11.9	
18	898	11.45	19.3	
19	959	9.67	15.3	
20	1,088	13.30	18.5	
21	1,199	8.48	10.7	
22	1,399	7.90	8.6	
23	1,511	8.30	8.3	
24	1,711	8.61	7.6	
25	2,575	10.05	5.9	
26	2,733	8.67	4.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad


Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 8 : CMW 1 350bp Lib 4/24/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	4,395	6.93	2.4	
28	4,855	7.22	2.3	
29	5,351	7.26	2.1	
30	6,802	1.66	0.4	
31	10,380	75.00	10.9	Upper Marker

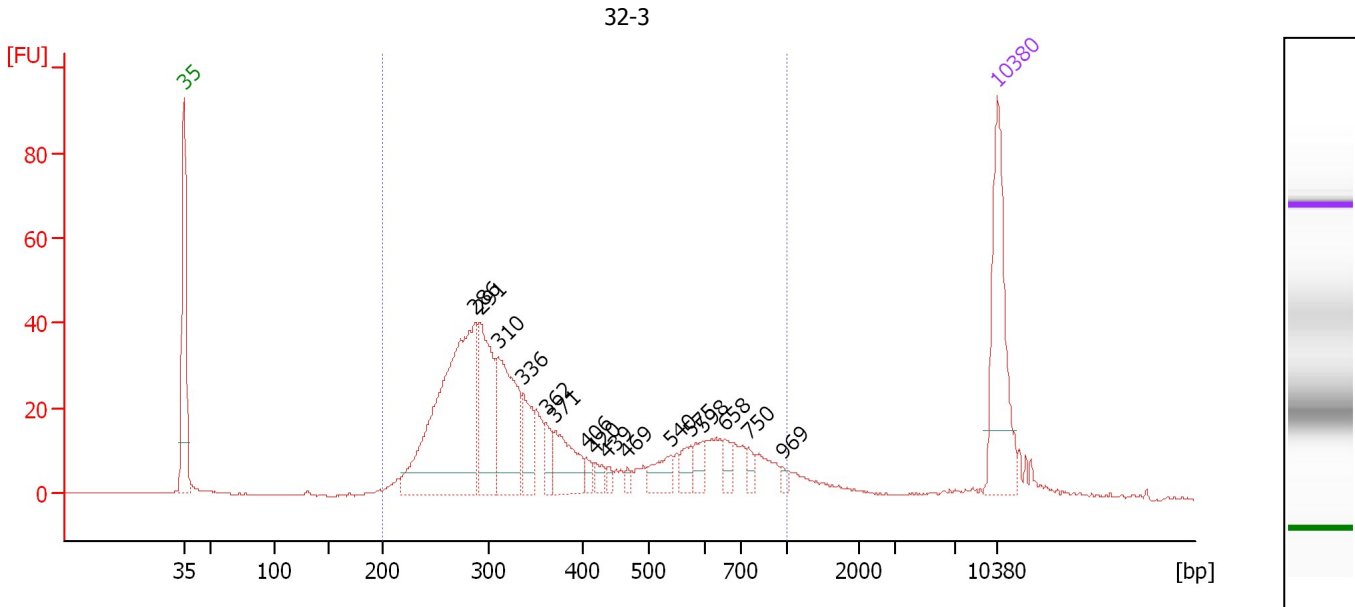
#### Region table for sample 8 : CMW 1 350bp Lib 4/24/12

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	460	1,779.9	461.20	431.9	62	39.7	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 32-3**

Number of peaks found: 16                      Corr. Area 1: 740.6  
 Noise: 0.2

**Peak table for sample 9 : 32-3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	286	259.71	1,373.9	
3	291	86.46	450.3	
4	310	101.42	496.2	
5	336	36.02	162.3	
6	362	15.49	64.9	
7	371	43.01	175.8	
8	406	7.08	26.4	
9	420	8.23	29.7	
10	439	4.76	16.4	
11	469	4.04	13.0	
12	540	18.85	52.9	
13	575	12.51	33.0	
14	598	12.34	31.3	
15	658	9.98	23.0	
16	750	6.91	14.0	
17	969	3.38	5.3	
18	10,380	75.00	10.9	Upper Marker

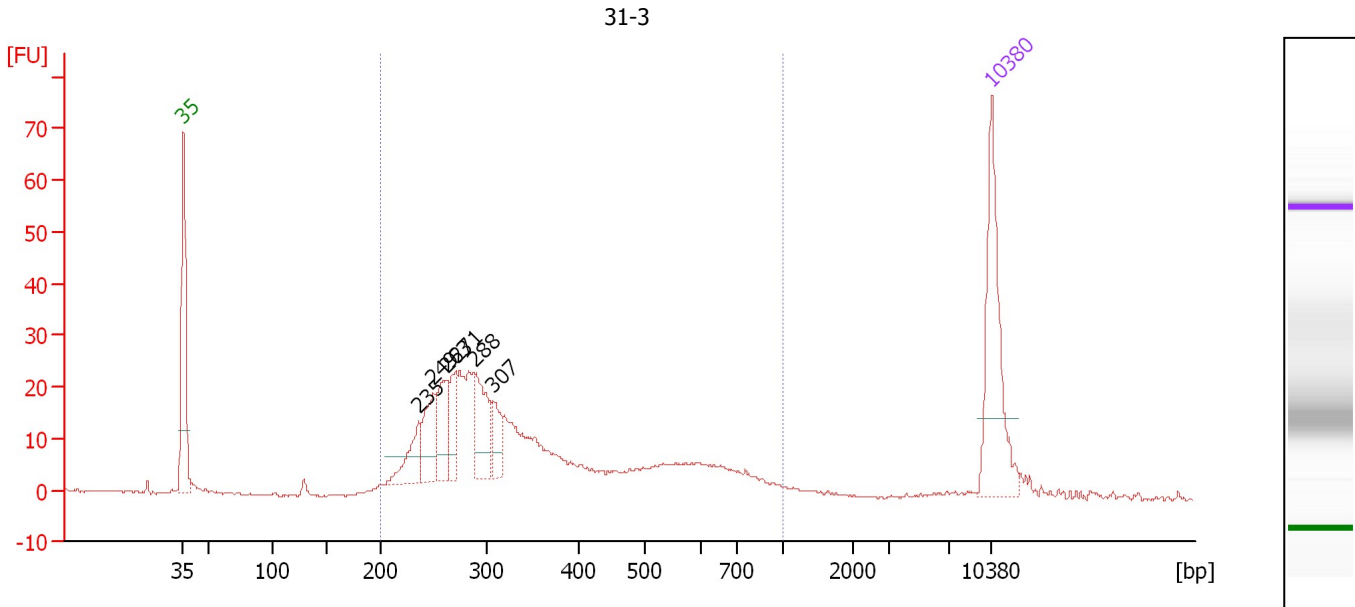
**Region table for sample 9 : 32-3**

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	398	3,538.5	773.12	740.6	93	42.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 31-3**

Number of peaks found: 6                      Corr. Area 1: 459.6  
 Noise: 0.2

**Peak table for sample 10 : 31-3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	235	36.32	233.9	
3	249	45.76	278.0	
4	263	46.34	267.5	
5	271	28.66	160.5	
6	288	52.86	277.9	
7	307	23.41	115.4	
8	10,380	75.00	10.9	Upper Marker

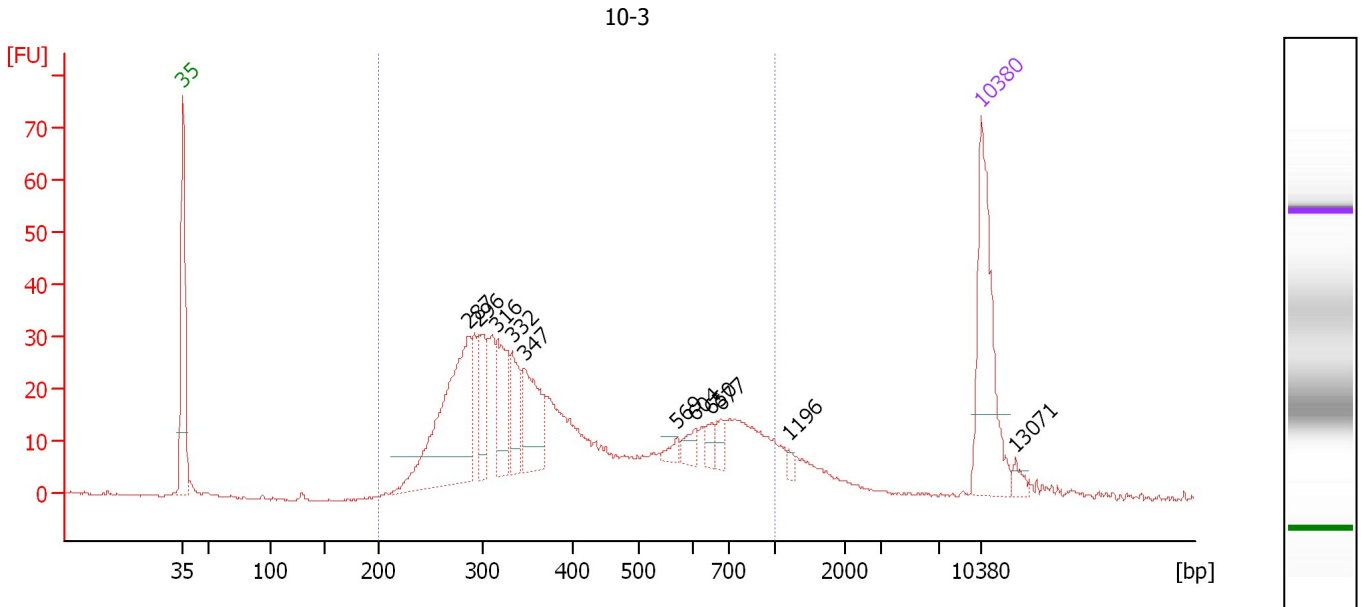
**Region table for sample 10 : 31-3**

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	374	2,860.2	597.46	459.6	93	41.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 10-3**

Number of peaks found: 11                      Corr. Area 1: 686.2  
 Noise: 0.2

**Peak table for sample 11 : 10-3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	287	164.03	866.2	
3	296	41.27	211.2	
4	316	51.77	248.2	
5	332	35.00	159.8	
6	347	53.58	234.2	
7	569	6.32	16.8	
8	604	10.62	26.6	
9	650	8.24	19.2	
10	677	8.66	19.4	
11	1,196	3.43	4.3	
12	10,380	75.00	10.9	Upper Marker
13	13,071	0.00	0.0	

**Region table for sample 11 : 10-3**

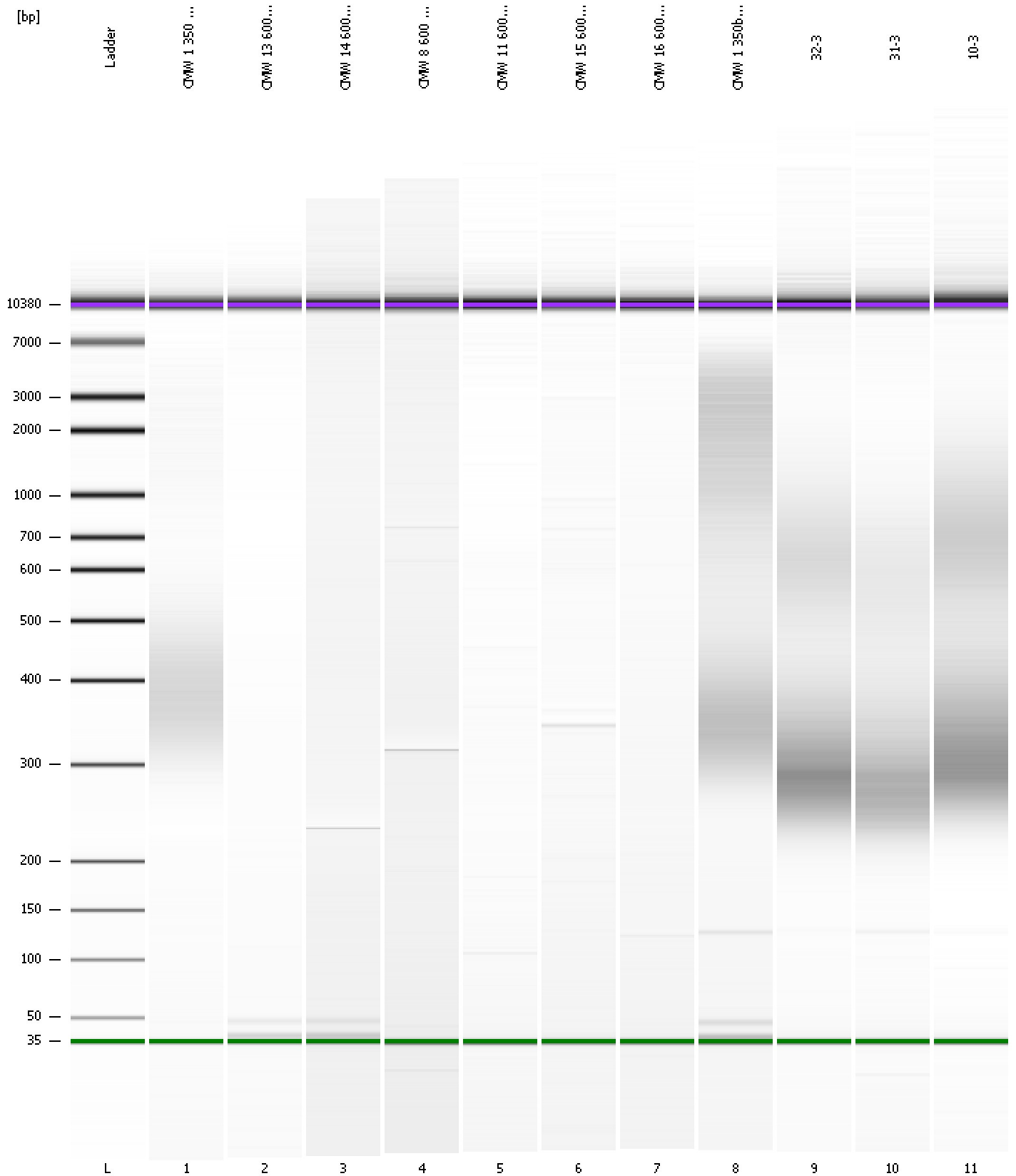
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	435	3,369.5	796.92	686.2	90	42.1	Blue



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
Modified: 5/30/2012 9:34:04 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-30\2012-05-30\_001.xad

Created: 5/30/2012 8:52:44 AM  
 Modified: 5/30/2012 9:34:04 AM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		5/30/2012 9:34:01 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-30\2012-05-30_001.xad)		Instrument	Run		5/30/2012 8:52:49 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/30/2012 8:52:49 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/30/2012 8:52:49 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/30/2012 8:52:49 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/30/2012 8:52:49 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/30/2012 8:52:49 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/30/2012 8:52:49 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1