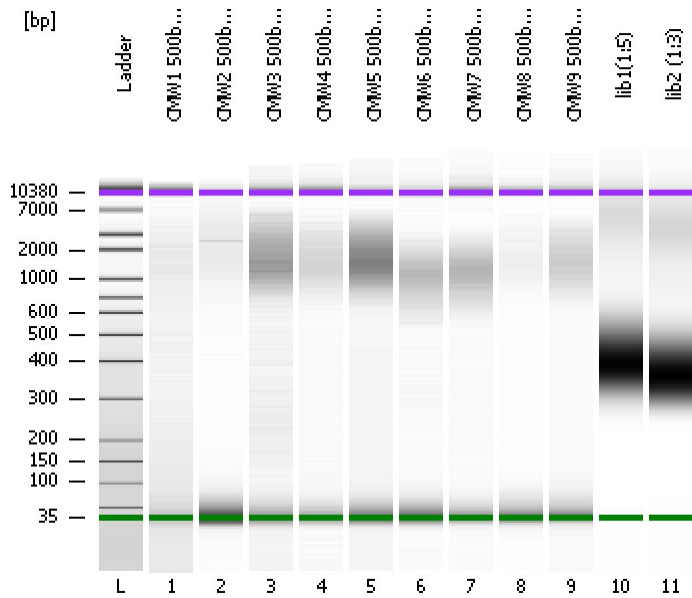


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
Modified: 4/9/2012 9:54:48 AM

**Electrophoresis File Run Summary**



Instrument Information:

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

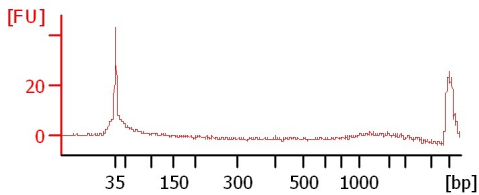
Assay Information:

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

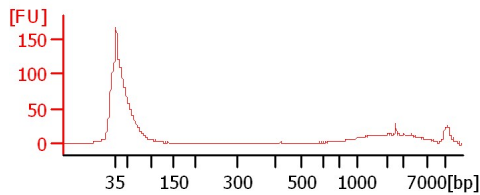
Chip Information:

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

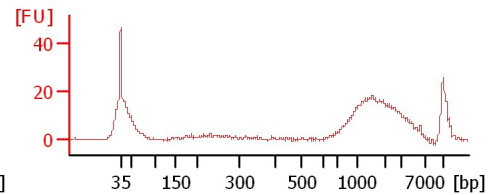
**CMW1 500bp soni 1:20**



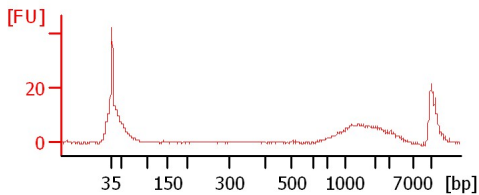
**CMW2 500bp soni 1:20**



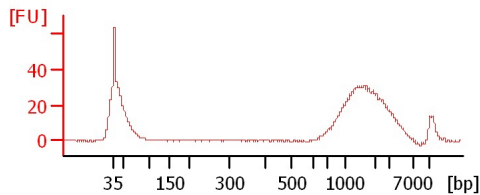
**CMW3 500bp soni 1:20**



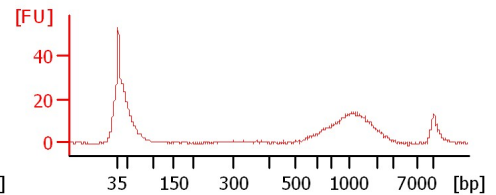
**CMW4 500bp soni 1:20**



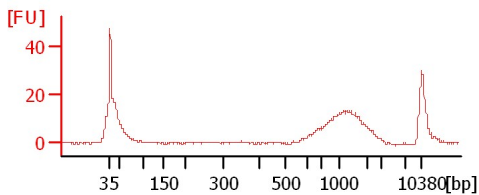
**CMW5 500bp soni 1:20**



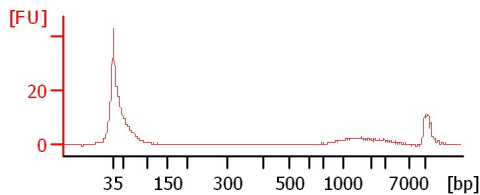
**CMW6 500bp soni 1:20**



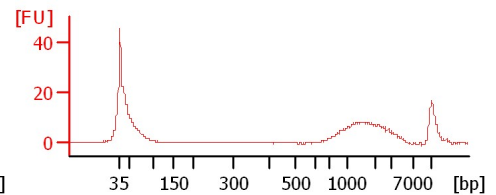
**CMW7 500bp soni 1:20**



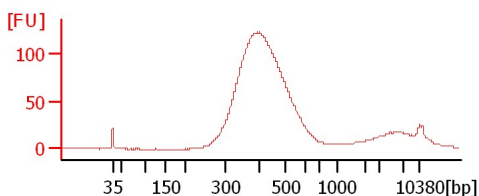
**CMW8 500bp soni 1:20**



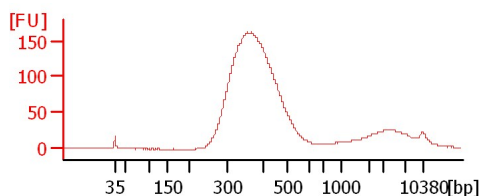
**CMW9 500bp soni 1:20**



**lib1(1:5)**



**lib2(1:3)**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CMW1 500bp soni 1:20		<input type="checkbox"/>	✓			
CMW2 500bp soni 1:20		<input type="checkbox"/>	✓			
CMW3 500bp soni 1:20		<input type="checkbox"/>	✓			
CMW4 500bp soni 1:20		<input type="checkbox"/>	✓			
CMW5 500bp soni 1:20		<input type="checkbox"/>	✓			
CMW6 500bp soni 1:20		<input type="checkbox"/>	✓			
CMW7 500bp soni 1:20		<input type="checkbox"/>	✓			
CMW8 500bp soni 1:20		<input type="checkbox"/>	✓			
CMW9 500bp soni 1:20		<input type="checkbox"/>	✓			
lib1(1:5)		<input type="checkbox"/>	✓			
lib2 (1:3)		<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\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
Modified: 4/9/2012 9:54:48 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

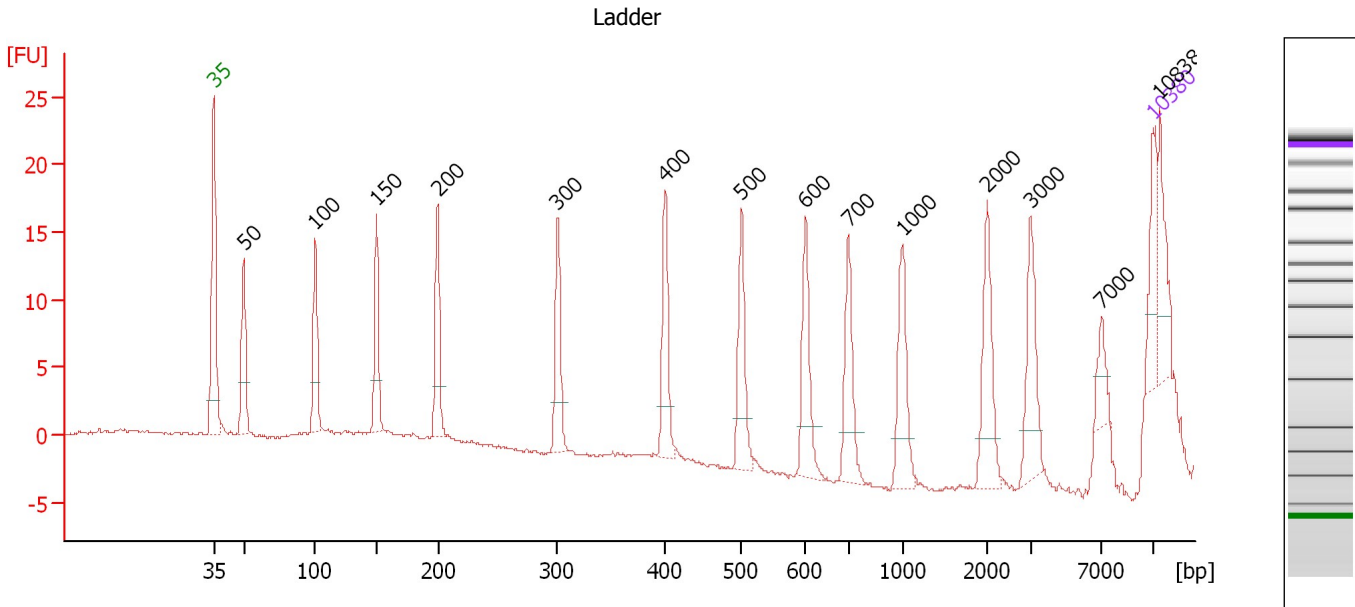
**Ladder**

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\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

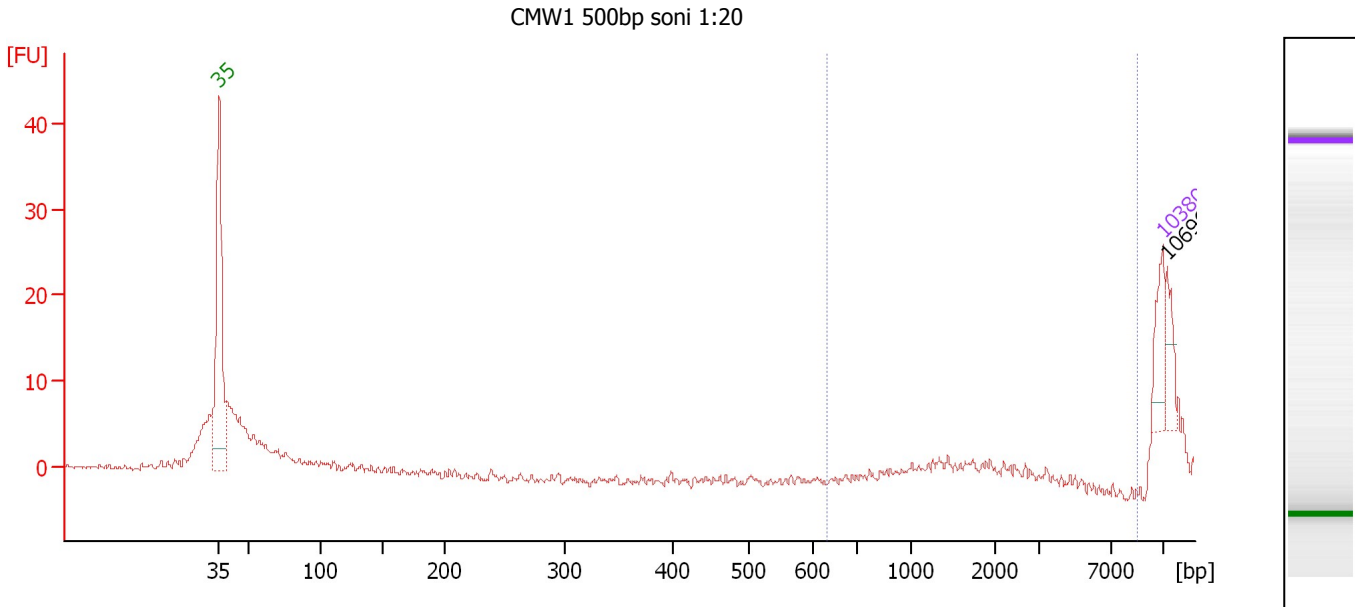
**Peak table for Ladder**

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
16	10,838	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 1 : CMW1 500bp soni 1:20**

Height Threshold [FU] : 10

**Overall Results for sample 1 : CMW1 500bp soni 1:20**

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

**Peak table for sample 1 : CMW1 500bp soni 1:20**

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	10,696	0.00	0.0	

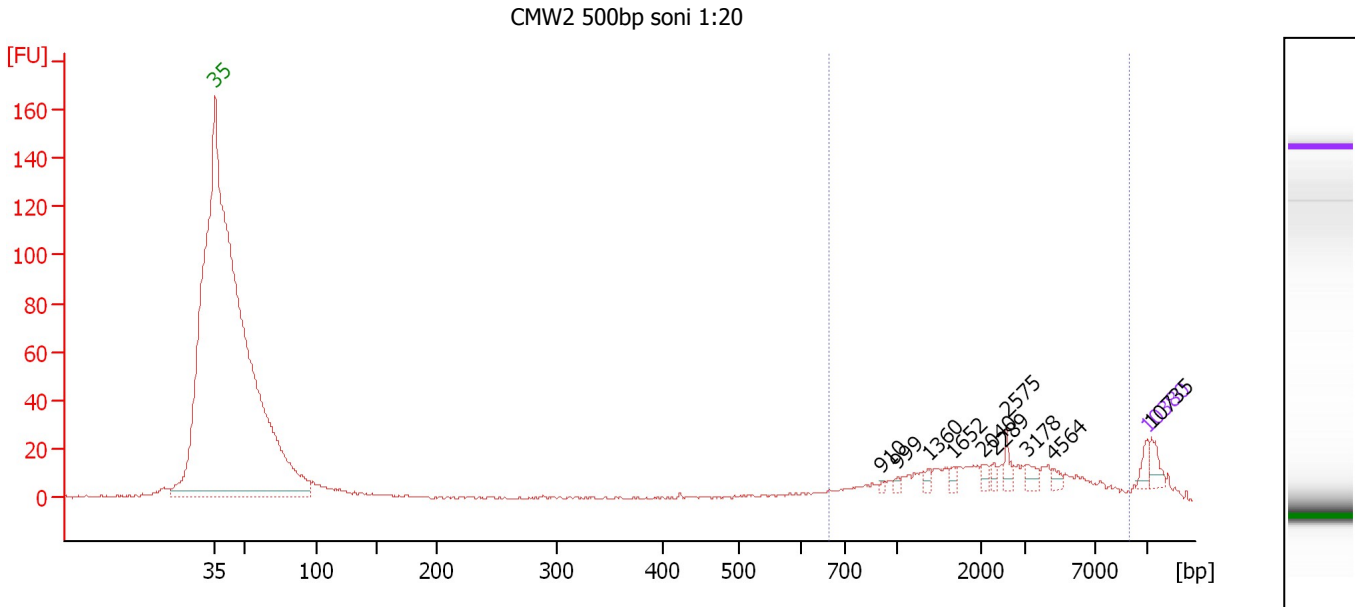
**Region table for sample 1 : CMW1 500bp soni 1:20**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
630	1.1	1,533	1.13	8,758	0.2	0	16.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : CMW2 500bp soni 1:20**

Number of peaks found: 10                      Corr. Area 1: 214.8  
 Noise: 0.4

**Peak table for sample 2 : CMW2 500bp soni 1:20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	910	20.94	34.9	
3	999	30.53	46.3	
4	1,360	40.06	44.6	
5	1,652	39.17	35.9	
6	2,040	51.25	38.1	
7	2,289	41.54	27.5	
8	2,575	80.82	47.5	
9	3,178	63.98	30.5	
10	4,564	40.40	13.4	
11	10,380	75.00	10.9	Upper Marker
12	10,735	0.00	0.0	

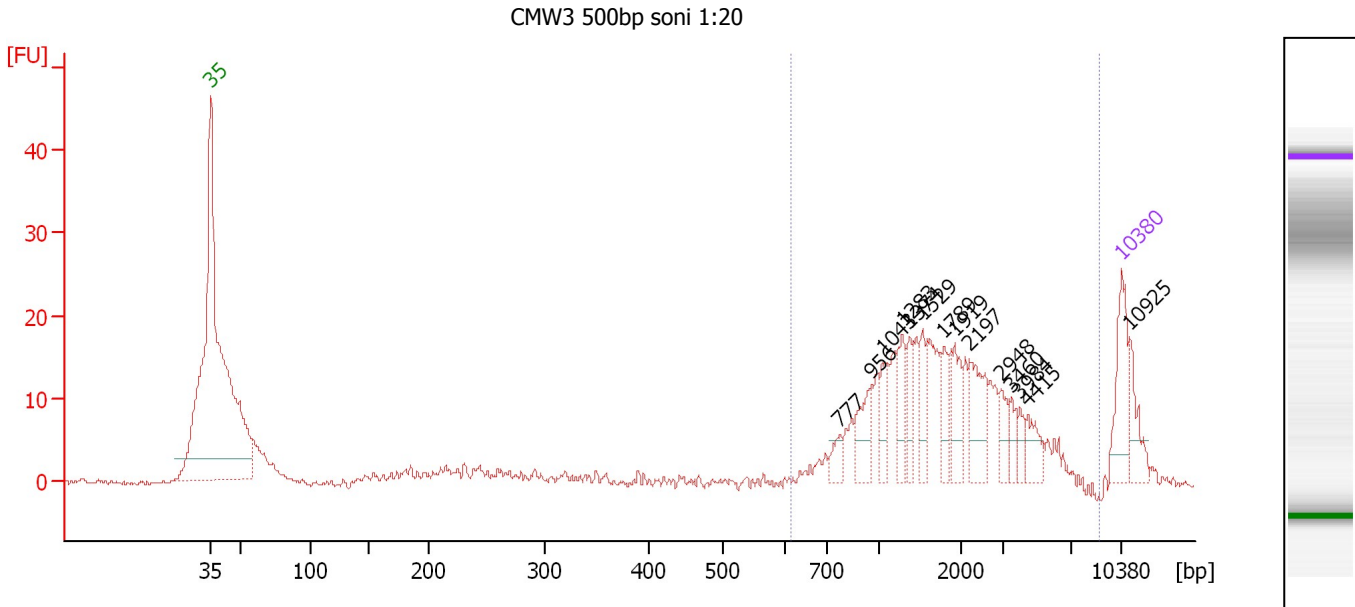
**Region table for sample 2 : CMW2 500bp soni 1:20**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
664	1,255.1	2,814	1,496.10	9,196	214.8	70	68.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : CMW3 500bp soni 1:20**

Number of peaks found: 14                      Corr. Area 1: 232.6  
 Noise: 0.3

**Peak table for sample 3 : CMW3 500bp soni 1:20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	777	25.17	49.1	
3	956	57.41	91.0	
4	1,043	37.90	55.1	
5	1,283	51.29	60.6	
6	1,374	36.98	40.8	
7	1,529	37.22	36.9	
8	1,789	37.00	31.3	
9	1,919	48.38	38.2	
10	2,197	72.17	49.8	
11	2,948	25.94	13.3	
12	3,460	19.12	8.4	
13	3,984	16.69	6.3	
14	4,415	32.43	11.1	
15	10,380	75.00	10.9	Upper Marker
16	10,925	0.00	0.0	

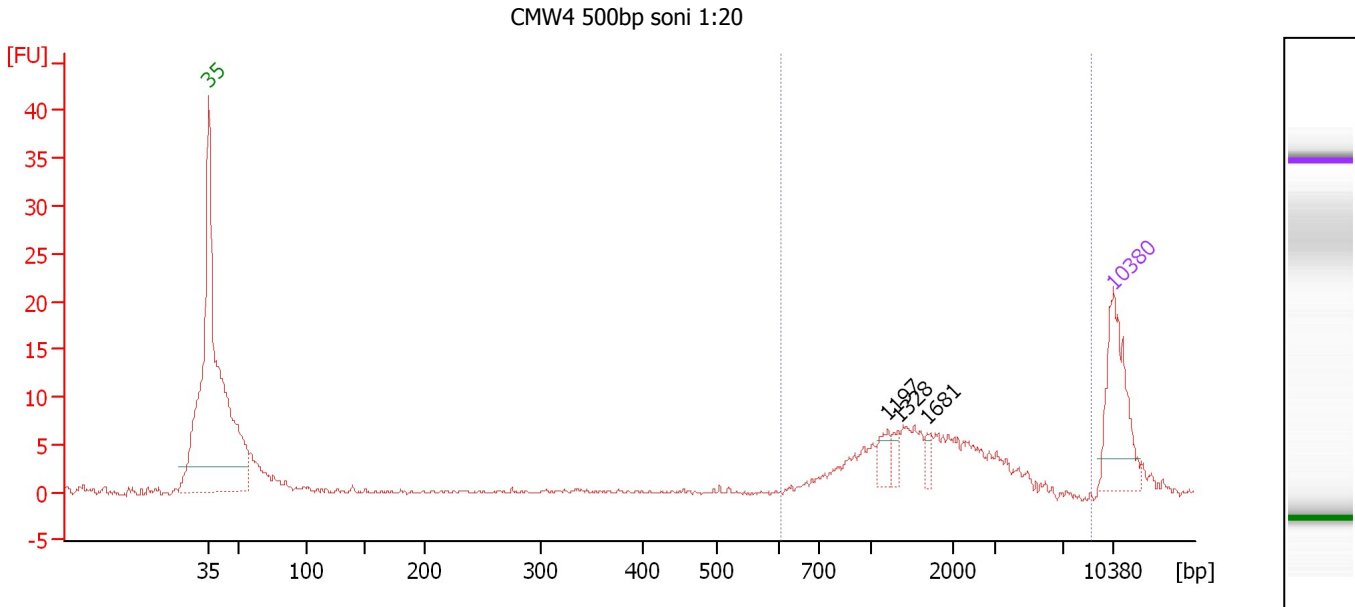
**Region table for sample 3 : CMW3 500bp soni 1:20**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
617	865.2	2,076	863.18	8,870	232.6	75	62.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : CMW4 500bp soni 1:20**

Number of peaks found: 3                      Corr. Area 1: 82.4  
 Noise: 0.2

**Peak table for sample 4 : CMW4 500bp soni 1:20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,197	17.63	22.3	
3	1,328	9.43	10.8	
4	1,681	8.69	7.8	
5	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : CMW4 500bp soni 1:20**

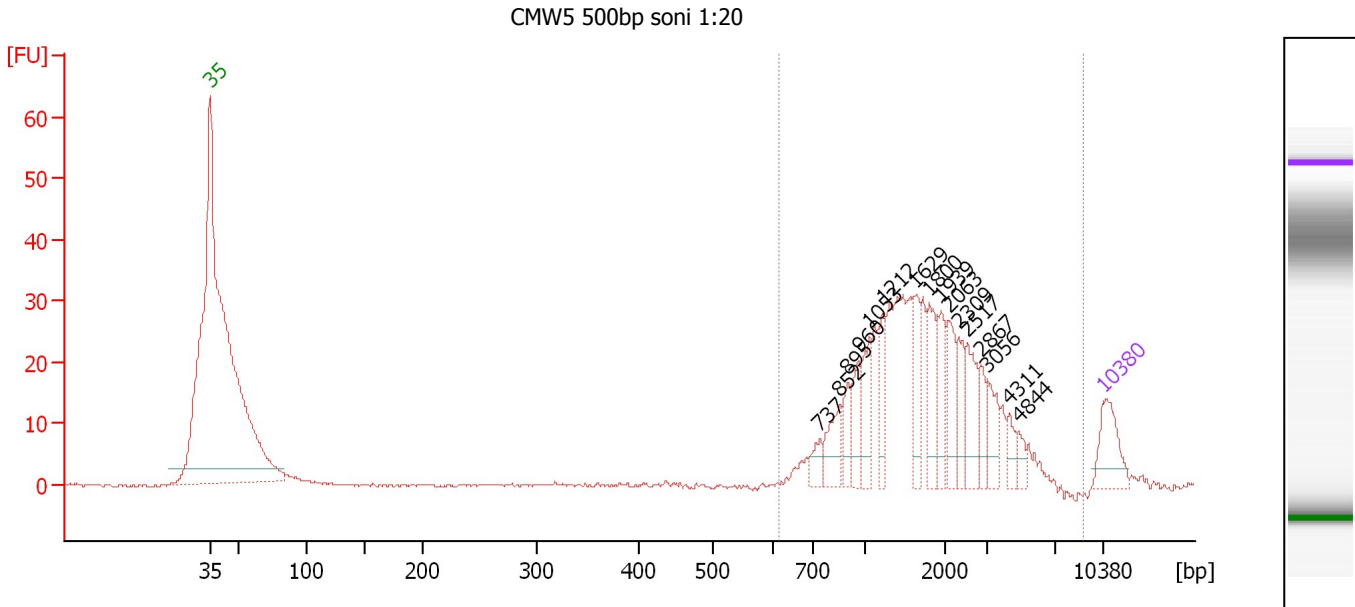
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
608	225.2	1,856	211.81	8,939	82.4	73	55.2	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : CMW5 500bp soni 1:20**

Number of peaks found: 16                      Corr. Area 1: 367.9  
 Noise: 0.2

**Peak table for sample 5 : CMW5 500bp soni 1:20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	737	33.63	69.1	
3	852	73.63	131.0	
4	895	48.19	81.6	
5	960	66.28	104.6	
6	1,053	75.66	108.8	
7	1,212	60.62	75.8	
8	1,629	63.65	59.2	
9	1,800	79.18	66.6	
10	1,939	70.75	55.3	
11	2,063	69.05	50.7	
12	2,309	55.24	36.2	
13	2,517	81.25	48.9	
14	2,867	37.95	20.1	
15	3,056	51.39	25.5	
16	4,311	27.32	9.6	
17	4,844	20.87	6.5	
18	10,380	75.00	10.9	Upper Marker

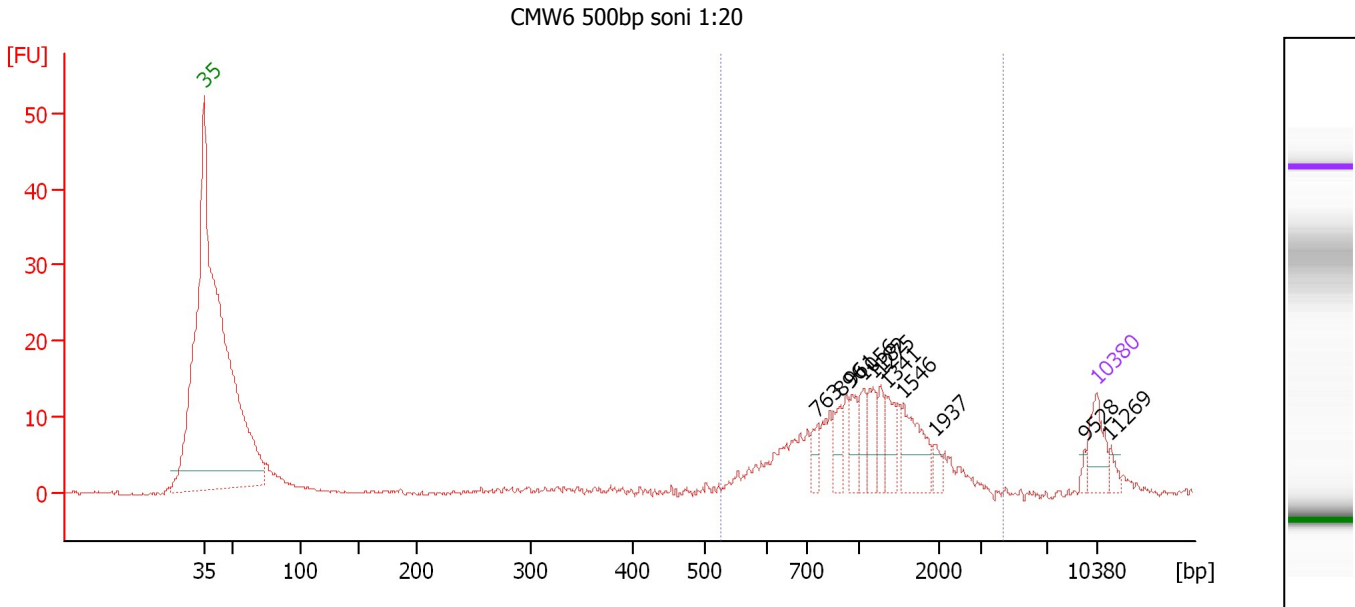
**Region table for sample 5 : CMW5 500bp soni 1:20**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
614	1,355.5	1,918	1,328.12	9,004	367.9	99	55.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : CMW6 500bp soni 1:20**

Number of peaks found: 11                      Corr. Area 1: 165.2  
 Noise: 0.2

**Peak table for sample 6 : CMW6 500bp soni 1:20**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	763	48.65	96.6	
3	896	51.82	87.6	
4	961	60.77	95.8	
5	1,056	58.25	83.5	
6	1,182	68.44	87.7	
7	1,275	49.08	58.3	
8	1,341	66.01	74.6	
9	1,546	125.18	122.7	
10	1,937	21.27	16.6	
11	9,528	10.64	1.7	
12	10,380	75.00	10.9	Upper Marker
13	11,269	0.00	0.0	

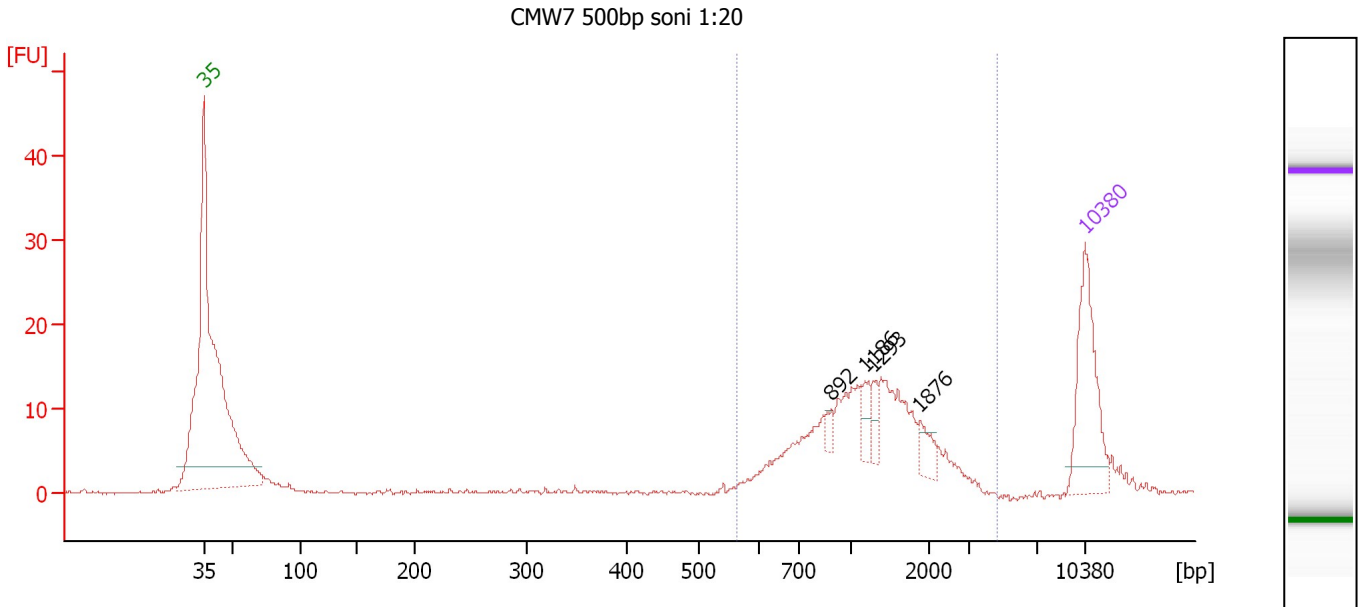
**Region table for sample 6 : CMW6 500bp soni 1:20**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
525	1,527.0	1,193	988.92	4,302	165.2	84	43.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : CMW7 500bp soni 1:20**

Number of peaks found: 4                      Corr. Area 1: 150.2  
 Noise: 0.2

**Peak table for sample 7 : CMW7 500bp soni 1:20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	892	7.01	11.9	
3	1,186	14.21	18.2	
4	1,293	11.16	13.1	
5	1,876	15.48	12.5	
6	10,380	75.00	10.9	Upper Marker

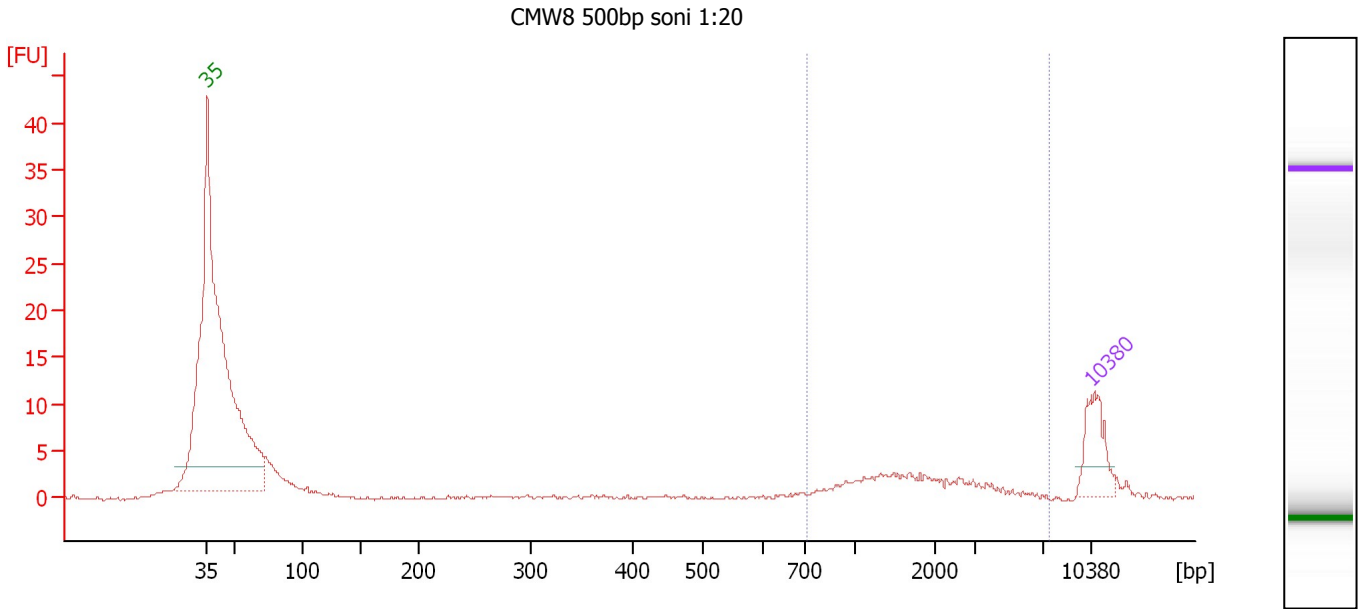
**Region table for sample 7 : CMW7 500bp soni 1:20**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
563	414.3	1,303	296.27	4,614	150.2	90	41.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : CMW8 500bp soni 1:20**

Number of peaks found: 0                      Corr. Area 1: 27.2  
 Noise: 0.2

**Peak table for sample 8 : CMW8 500bp soni 1:20**

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

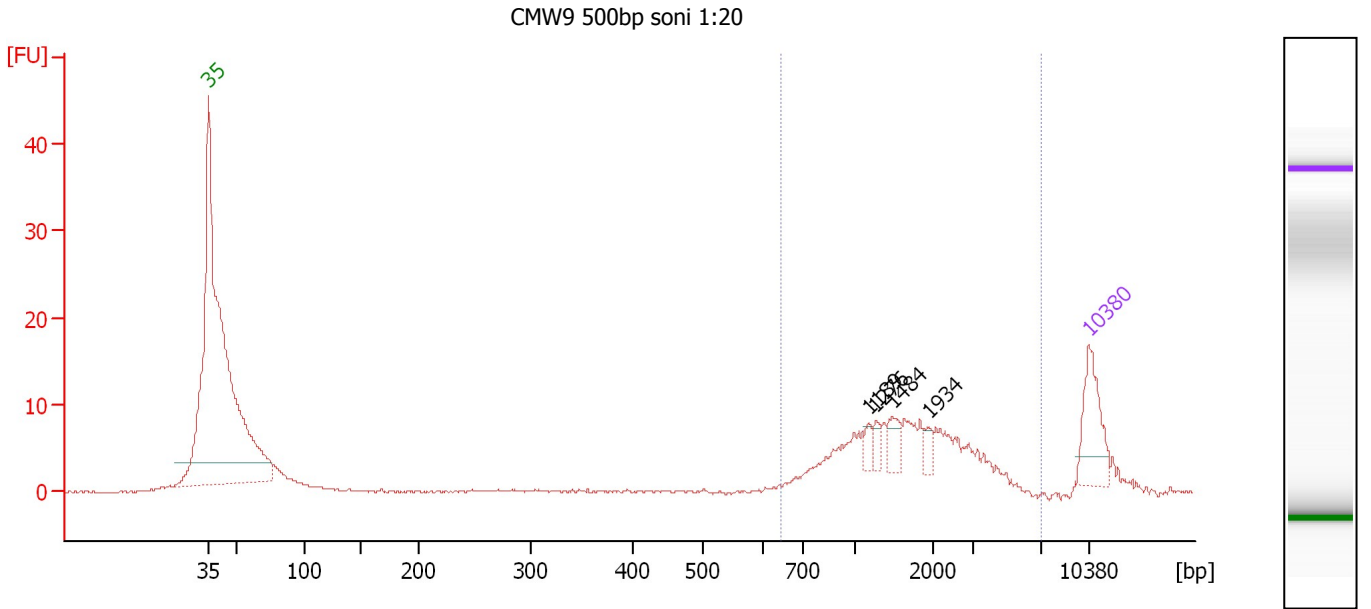
**Region table for sample 8 : CMW8 500bp soni 1:20**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
716	115.9	2,032	120.30	7,391	27.2	58	57.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : CMW9 500bp soni 1:20**

Number of peaks found: 4                      Corr. Area 1: 101.7  
 Noise: 0.1

**Peak table for sample 9 : CMW9 500bp soni 1:20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,189	15.51	19.8	
3	1,276	14.29	17.0	
4	1,484	26.96	27.5	
5	1,934	13.72	10.7	
6	10,380	75.00	10.9	Upper Marker

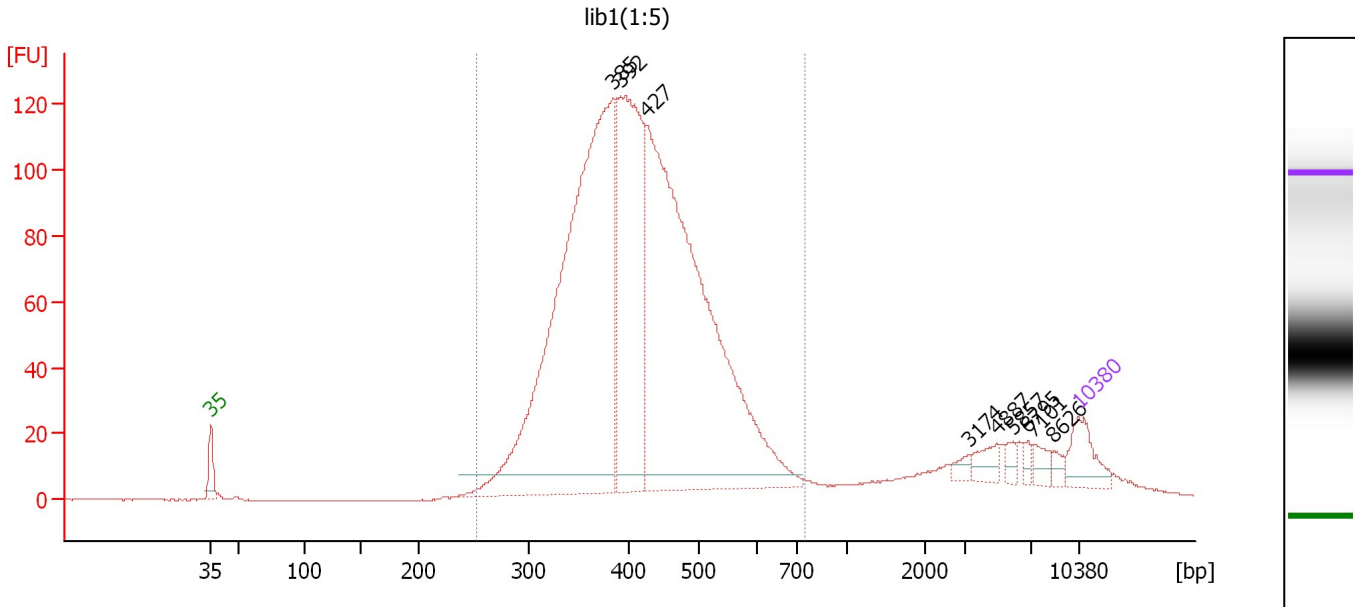
**Region table for sample 9 : CMW9 500bp soni 1:20**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
646	399.4	1,816	374.79	6,972	101.7	79	52.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : lib1(1:5)**

Number of peaks found: 9                      Corr. Area 1: 2,089.9  
 Noise: 0.1

**Peak table for sample 10 : lib1(1:5)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	385	1,985.15	7,813.8	
3	392	848.81	3,277.2	
4	427	1,882.67	6,677.5	
5	3,174	18.36	8.8	
6	4,887	37.99	11.8	
7	5,857	18.85	4.9	
8	6,795	15.54	3.5	
9	7,101	29.42	6.3	
10	8,626	16.41	2.9	
11	10,380	75.00	10.9	Upper Marker

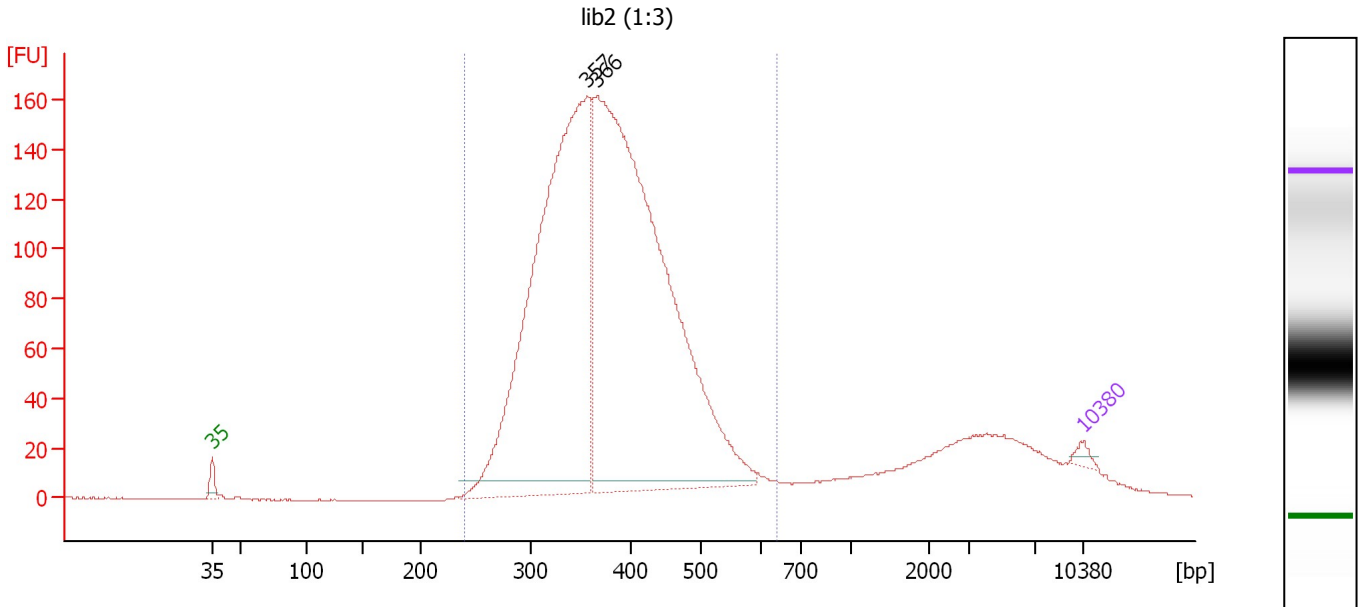
**Region table for sample 10 : lib1(1:5)**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
253	18,702.2	421	4,955.94	748	2,089.9	91	19.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
 Modified: 4/9/2012 9:54:48 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : lib2 (1:3)**

Number of peaks found: 2                      Corr. Area 1: 2,742.8  
 Noise: 0.2

**Peak table for sample 11 : lib2 (1:3)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	357	11,556.25	49,082.0	
3	366	14,317.83	59,215.0	
4	10,380	75.00	10.9	Upper Marker

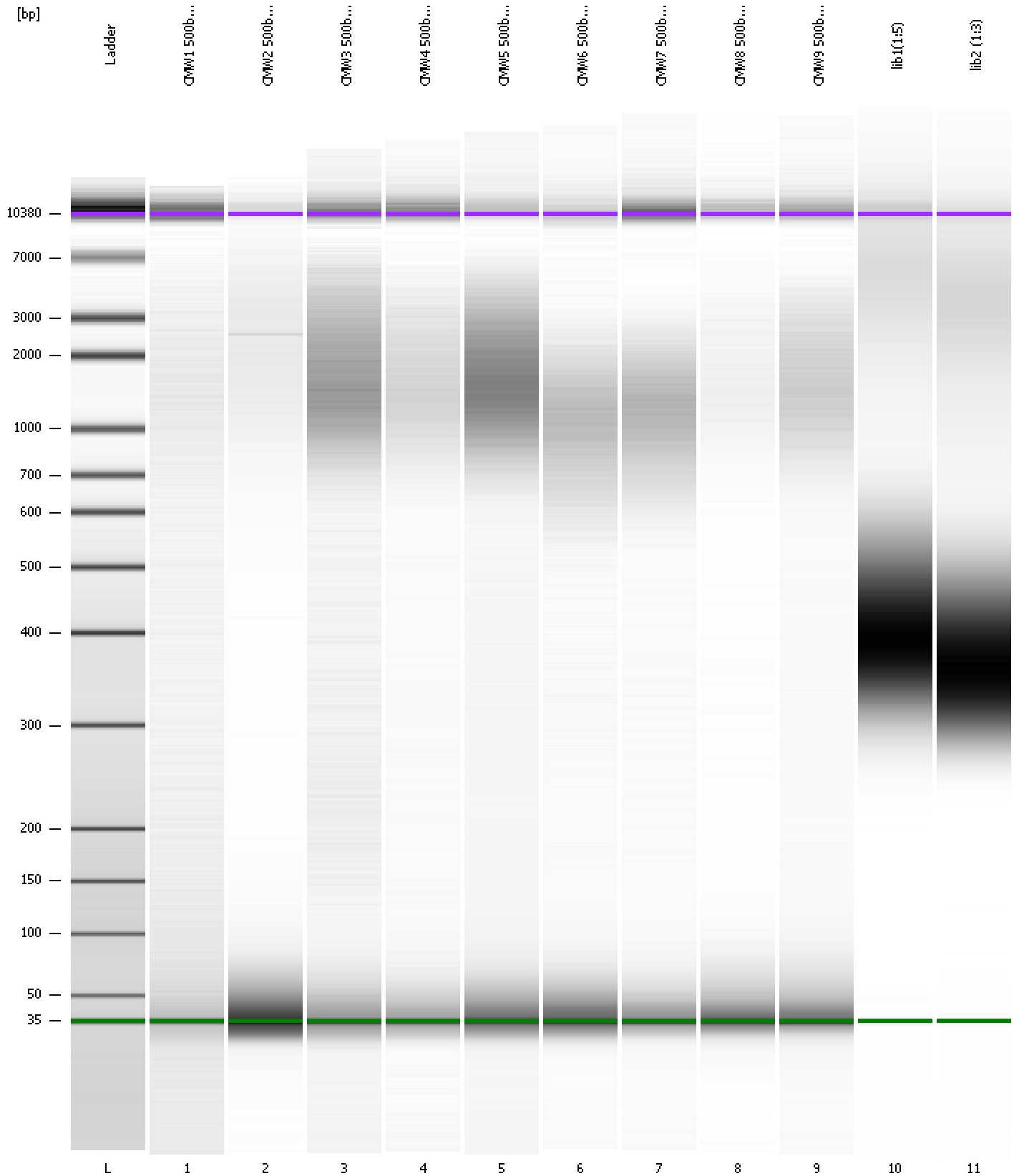
**Region table for sample 11 : lib2 (1:3)**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
240	110,100.6	382	26,685.56	643	2,742.8	89	17.6	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad

Created: 4/9/2012 9:12:59 AM  
Modified: 4/9/2012 9:54:48 AM

**Gel Image**





Assay Class: High Sensitivity DNA Assay Created: 4/9/2012 9:12:59 AM  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-09\2012-04-09\_001.xad Modified: 4/9/2012 9:54:48 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		4/9/2012 9:54:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-04-09\2012-04-09_001.xad)		Instrument	Run		4/9/2012 9:13:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/9/2012 9:13:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/9/2012 9:13:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/9/2012 9:13:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/9/2012 9:13:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/9/2012 9:13:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/9/2012 9:13:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1