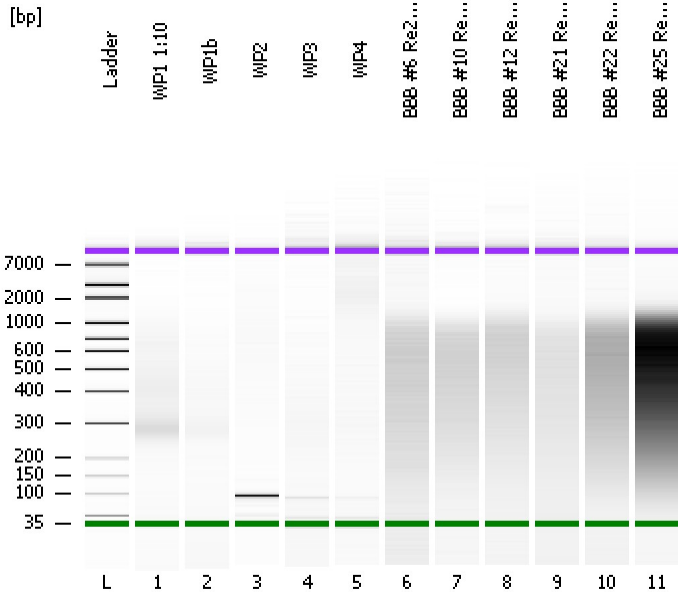


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
Modified: 6/5/2012 2:42:24 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

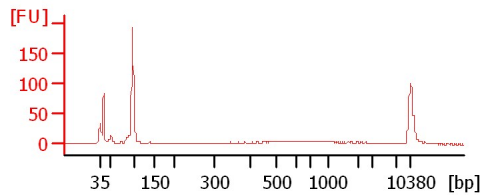
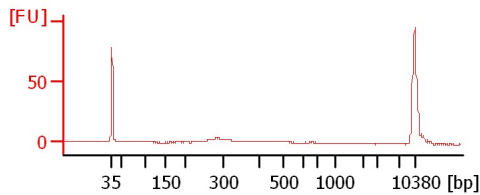
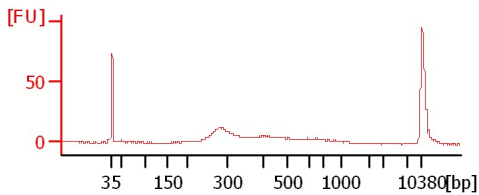
Chip Information:

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

WP1 1:10

WP1b

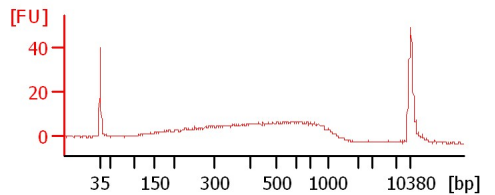
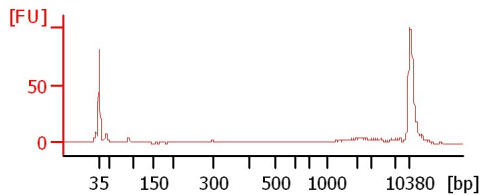
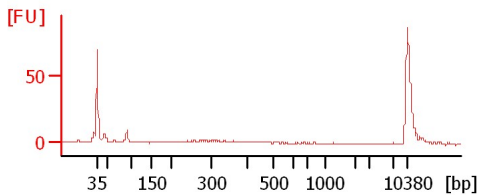
WP2



WP3

WP4

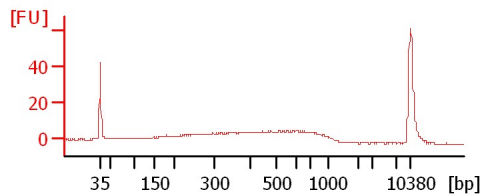
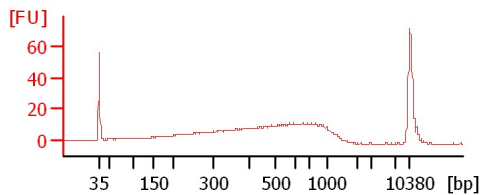
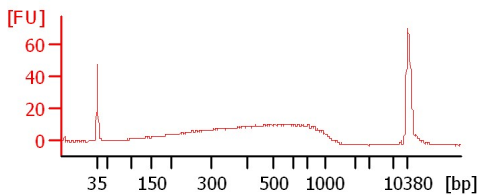
BBB #6 Re2cycl. 6/4/12



BBB #10 Re2cycl. 6/4/12

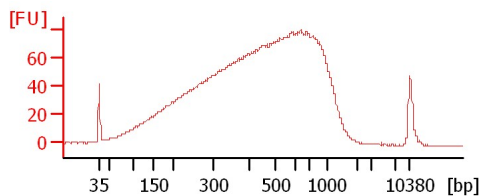
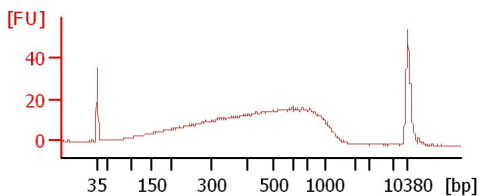
BBB #12 Re2cycl. 6/4/12

BBB #21 Re2cycl. 6/4/12



BBB #22 Re2cycl. 6/4/12

BBB #25 Re3cycl. 6/4/12



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WP1 1:10		<input type="checkbox"/>	✓			
WP1b		<input type="checkbox"/>	✓			
WP2		<input type="checkbox"/>	✓			
WP3		<input type="checkbox"/>	✓			
WP4		<input type="checkbox"/>	✓			
BBB #6 Re2cycl. 6/4/12		<input type="checkbox"/>	✓			
BBB #10 Re2cycl. 6/4/12		<input type="checkbox"/>	✓			
BBB #12 Re2cycl. 6/4/12		<input type="checkbox"/>	✓			
BBB #21 Re2cycl. 6/4/12		<input type="checkbox"/>	✓			
BBB #22 Re2cycl. 6/4/12		<input type="checkbox"/>	✓			
BBB #25 Re3cycl. 6/4/12		<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\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 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

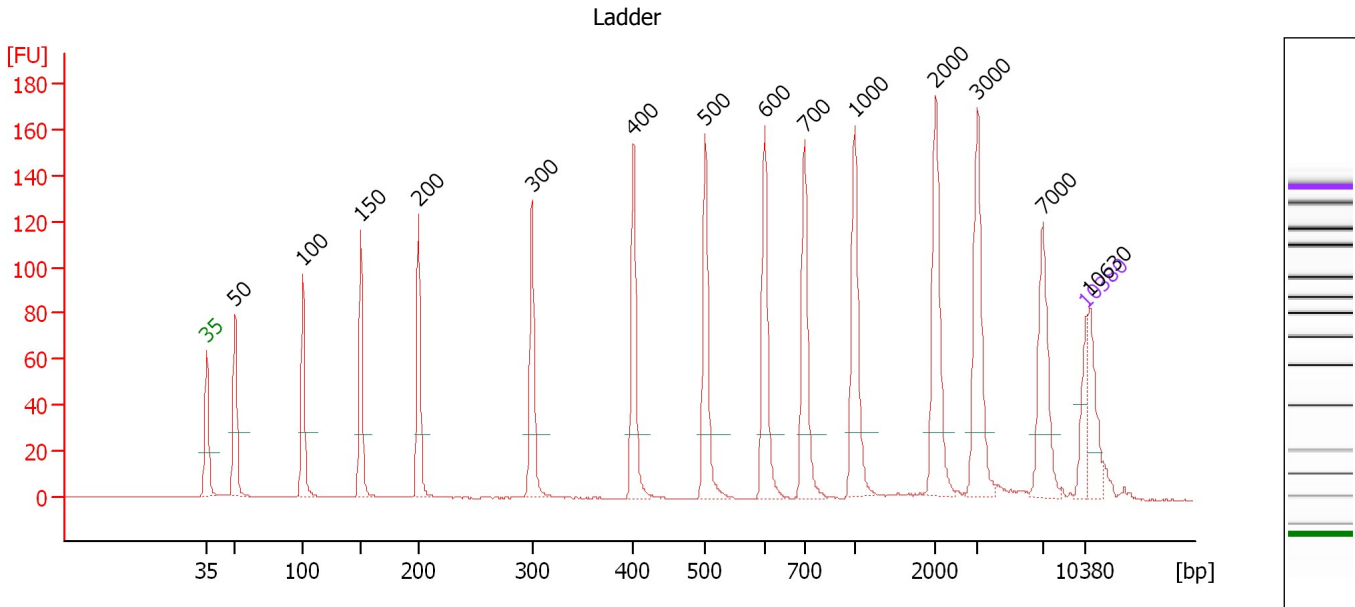
Ladder

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\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

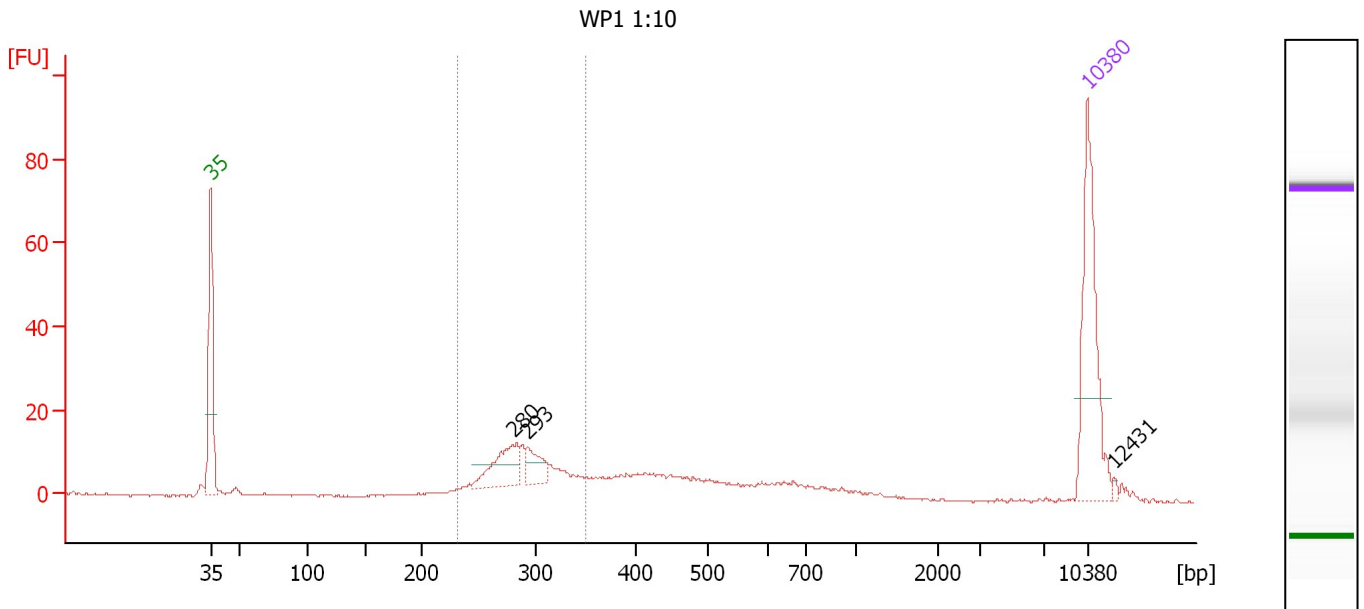
Peak table for Ladder

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
16	10,630	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : WP1 1:10

Number of peaks found: 3 Corr. Area 1: 120.1
 Noise: 0.2

Peak table for sample 1 : WP1 1:10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	280	43.31	234.2	
3	293	21.26	109.8	
4	10,380	75.00	10.9	Upper Marker
5	12,431	0.00	0.0	

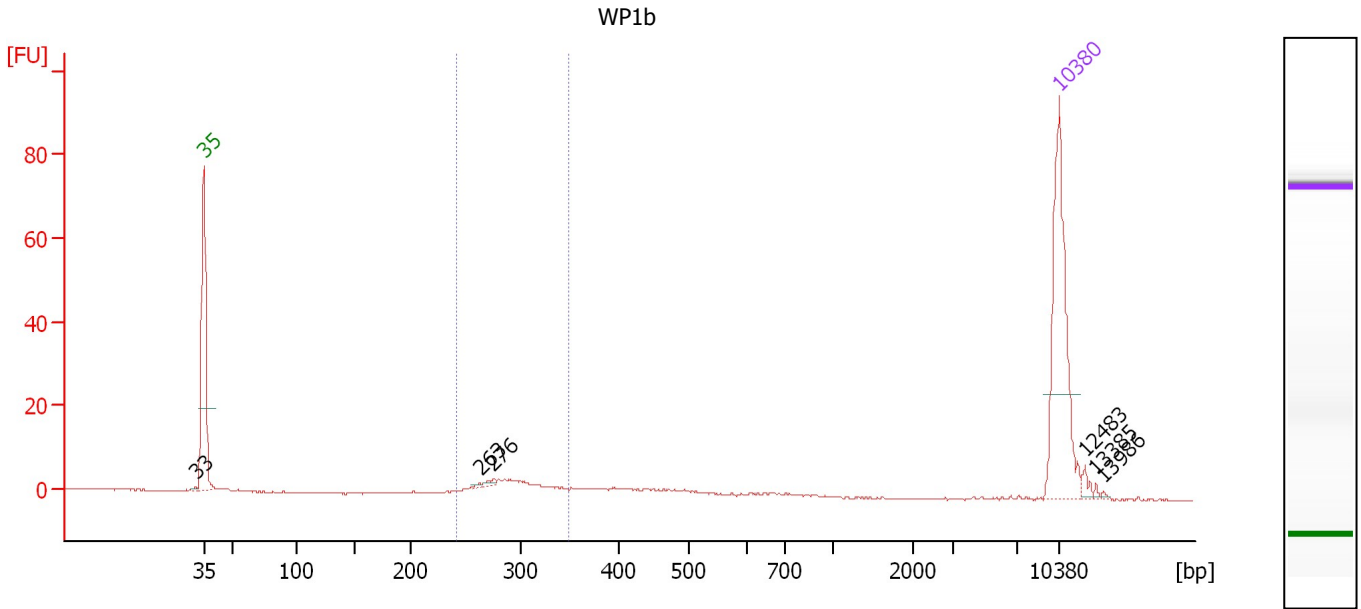
Region table for sample 1 : WP1 1:10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
231	351	291	729.2	138.83	120.1	47	9.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : WP1b

Height Threshold [FU] : 0.5

Overall Results for sample 2 : WP1b

Number of peaks found: 6 Corr. Area 1: 30.3
 Noise: 0.1

Peak table for sample 2 : WP1b

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	263	1.29	7.4	
4	276	2.18	12.0	
5	10,380	75.00	10.9	Upper Marker
6	12,483	0.00	0.0	
7	13,385	0.00	0.0	
8	13,986	0.00	0.0	

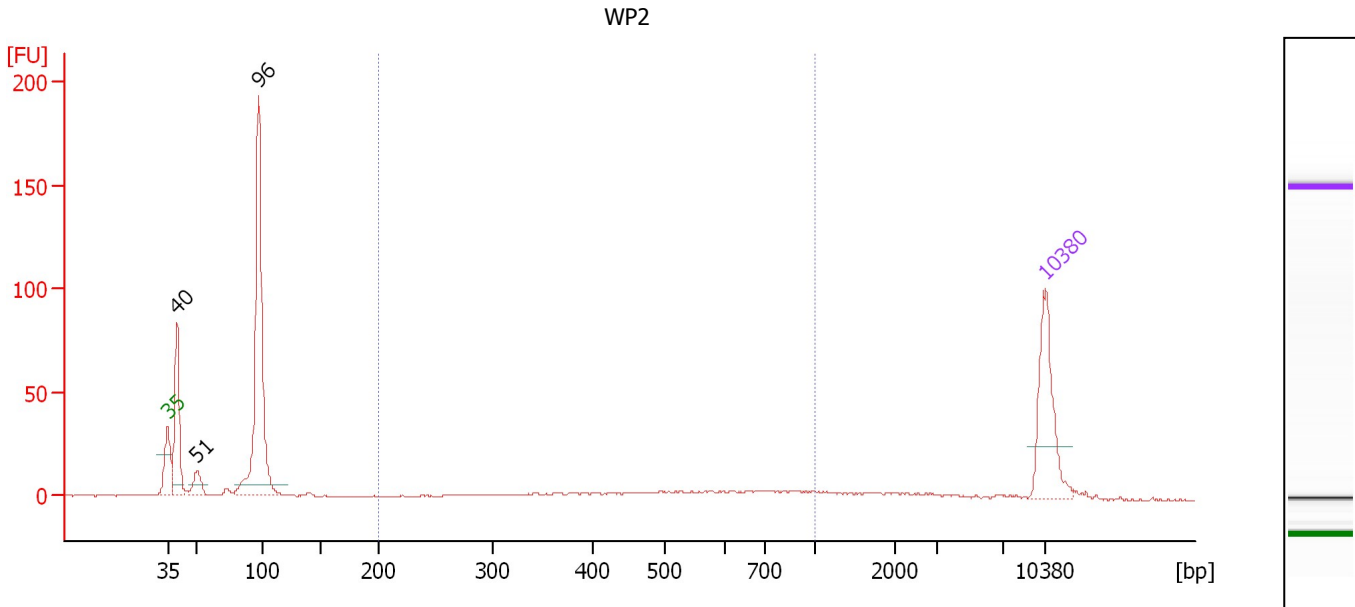
Region table for sample 2 : WP1b

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
242	348	293	181.8	34.86	30.3	47	8.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : WP2

Number of peaks found: 3 Corr. Area 1: 99.6
 Noise: 0.2

Peak table for sample 3 : WP2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	122.96	4,656.6	
3	51	27.08	806.7	
4	96	345.08	5,426.5	
5	10,380	75.00	10.9	Upper Marker

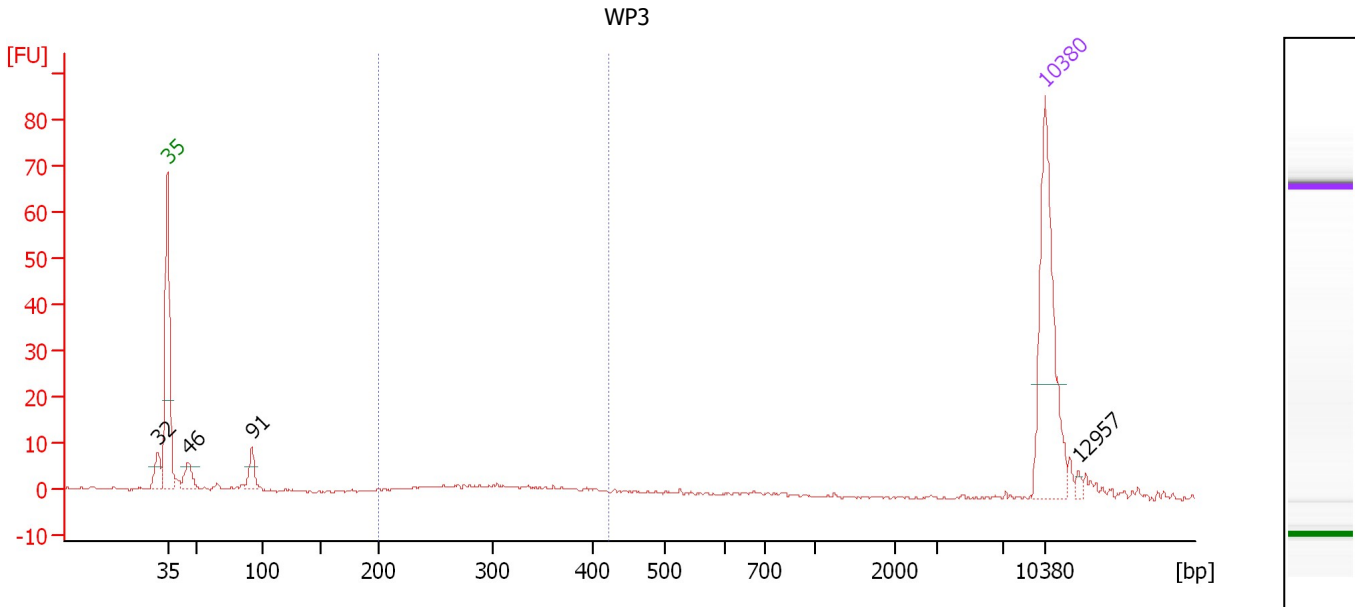
Region table for sample 3 : WP2

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	538	302.1	88.00	99.6	18	35.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : WP3

Number of peaks found: 4 Corr. Area 1: 28.5
 Noise: 0.3

Peak table for sample 4 : WP3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	46	16.39	543.0	
4	91	15.31	253.7	
5	10,380	75.00	10.9	Upper Marker
6	12,957	0.00	0.0	

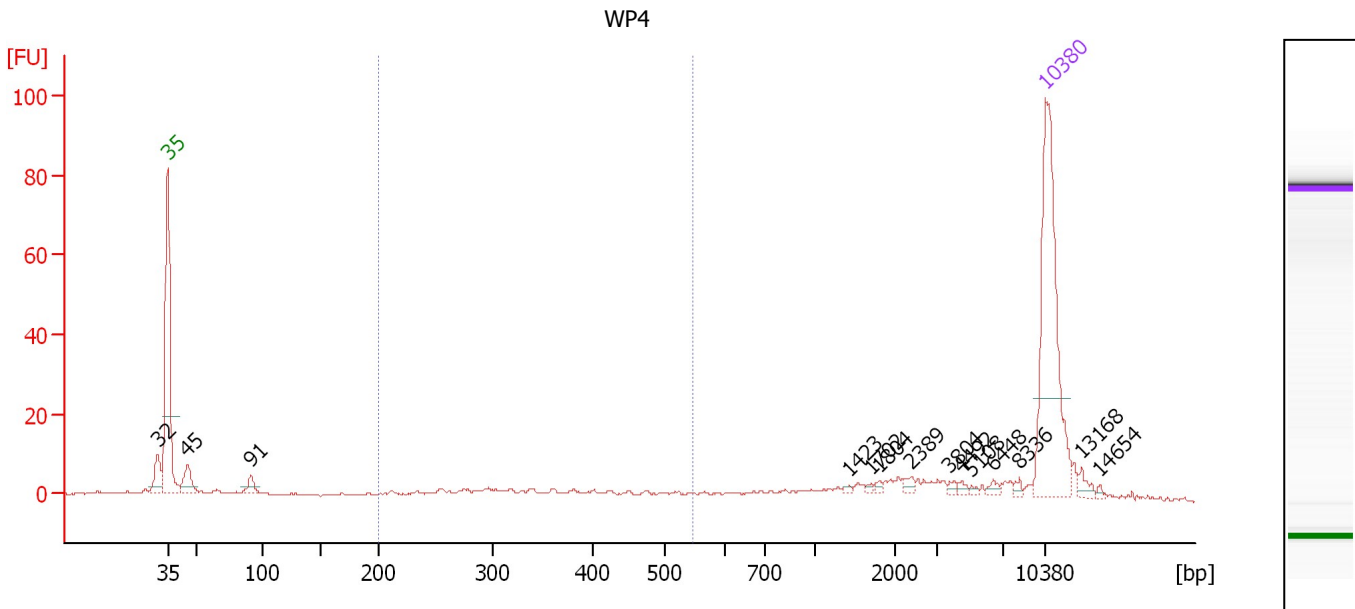
Region table for sample 4 : WP3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	422	308	176.1	34.41	28.5	31	17.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : WP4

Height Threshold [FU] : 1.5

Overall Results for sample 5 : WP4

Number of peaks found: 14 Corr. Area 1: 42.7
 Noise: 0.3

Peak table for sample 5 : WP4

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	45	14.96	499.4	
4	91	5.91	98.5	
5	1,423	0.74	0.8	
6	1,702	0.83	0.7	
7	1,804	1.13	1.0	
8	2,389	2.38	1.5	
9	3,804	1.39	0.6	
10	4,492	1.41	0.5	
11	5,108	0.89	0.3	
12	6,448	2.06	0.5	
13	8,336	1.48	0.3	
14	10,380	75.00	10.9	Upper Marker
15	13,168	0.00	0.0	
16	14,654	0.00	0.0	

Region table for sample 5 : WP4

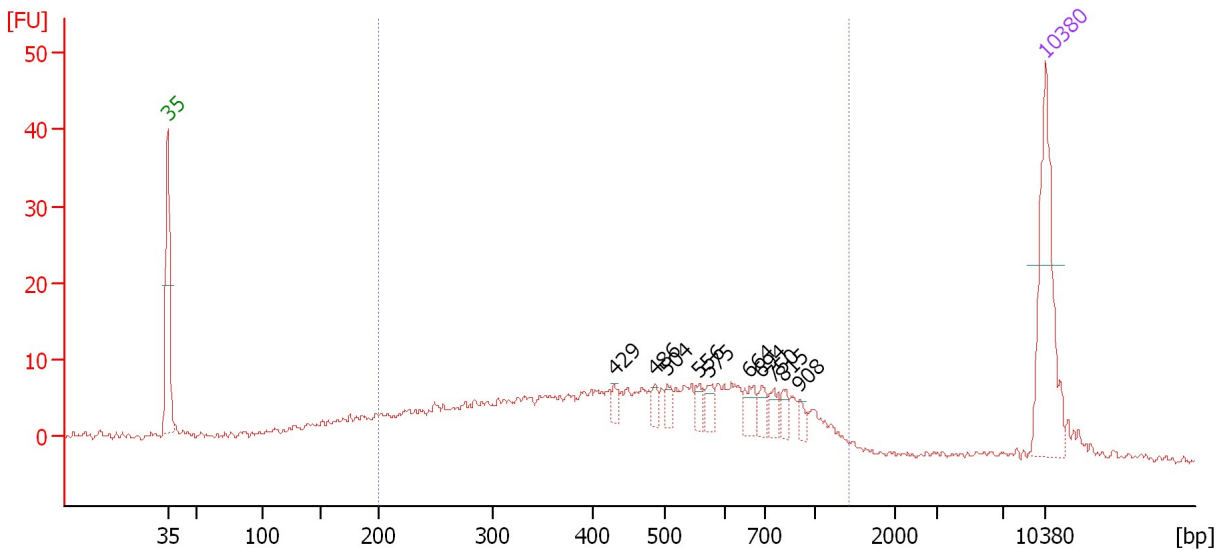
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	547	356	180.8	38.71	42.7	22	25.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...

BBB #6 Re2cycl. 6/4/12



Overall Results for sample 6 : BBB #6 Re2cycl. 6/4/12

Number of peaks found: 10 Corr. Area 1: 319.1
 Noise: 0.5

Peak table for sample 6 : BBB #6 Re2cycl. 6/4/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	429	6.84	24.2	
3	486	7.44	23.2	
4	504	7.63	22.9	
5	556	8.28	22.6	
6	575	9.98	26.3	
7	664	13.85	31.6	
8	694	9.41	20.5	
9	750	10.50	21.2	
10	815	7.58	14.1	
11	908	5.50	9.2	
12	10,380	75.00	10.9	Upper Marker

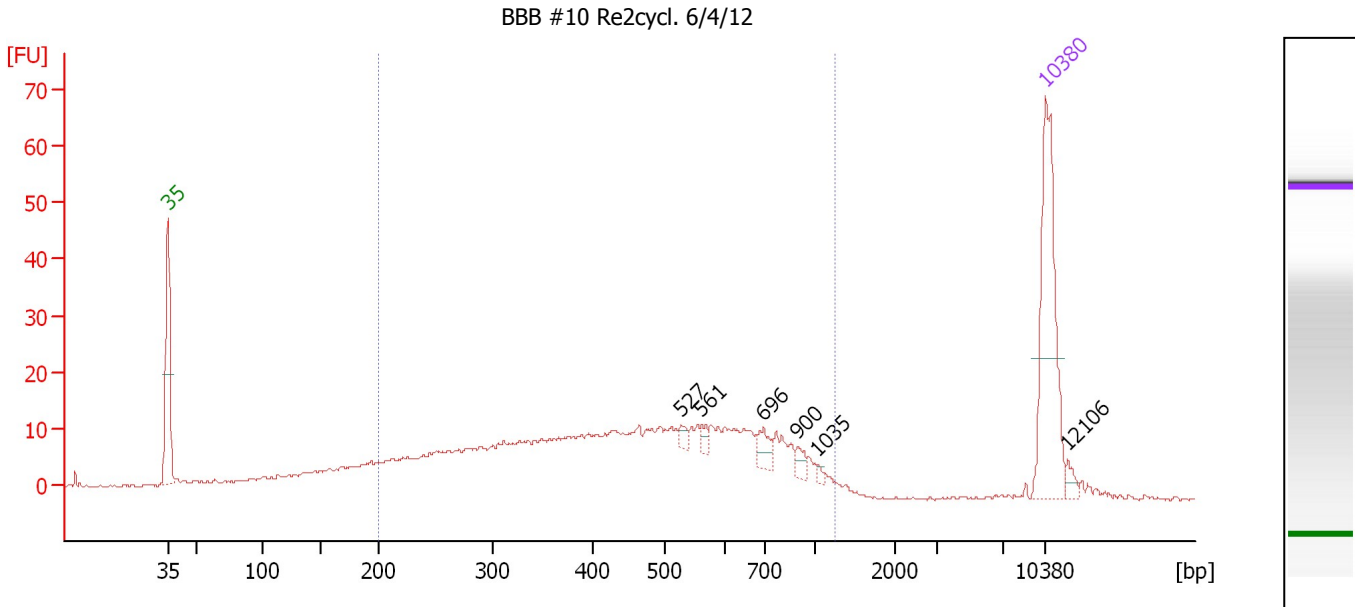
Region table for sample 6 : BBB #6 Re2cycl. 6/4/12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,437	506	2,400.7	617.87	319.1	79	45.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : BBB #10 Re2cycl. 6/4/12

Height Threshold [FU] : 3

Overall Results for sample 7 : BBB #10 Re2cycl. 6/4/12

Number of peaks found: 6 Corr. Area 1: 415.5
 Noise: 0.1

Peak table for sample 7 : BBB #10 Re2cycl. 6/4/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	527	4.57	13.1	
3	561	4.72	12.7	
4	696	10.19	22.2	
5	900	5.43	9.1	
6	1,035	1.94	2.8	
7	10,380	75.00	10.9	Upper Marker
8	12,106	0.00	0.0	

Region table for sample 7 : BBB #10 Re2cycl. 6/4/12

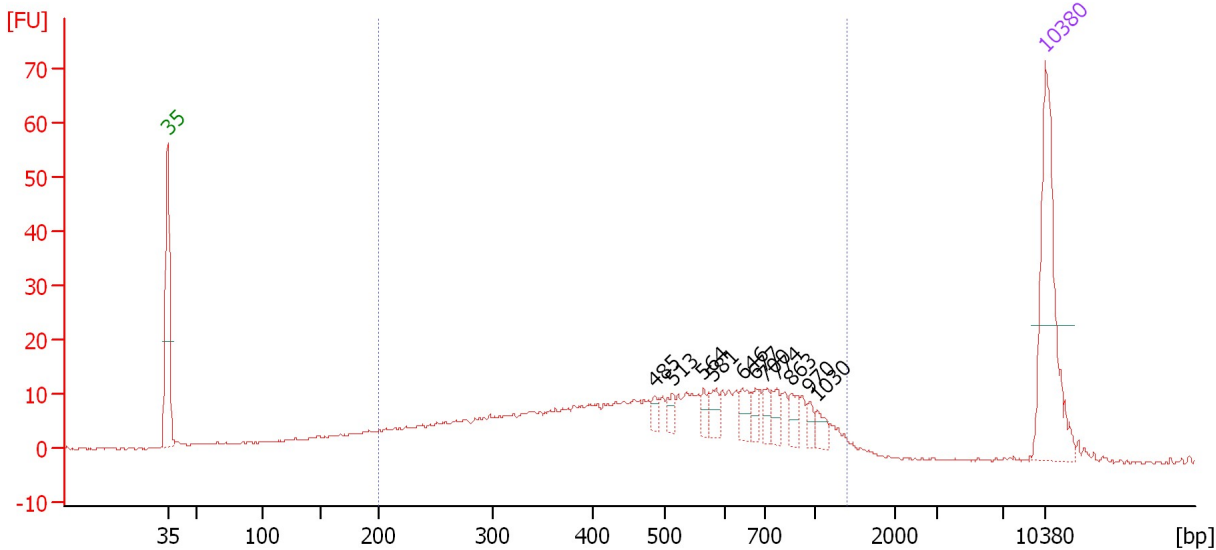
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,252	486	2,135.0	543.90	415.5	84	41.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...

BBB #12 Re2cycl. 6/4/12



Overall Results for sample 8 : BBB #12 Re2cycl. 6/4/12

Number of peaks found: 11 Corr. Area 1: 415.8
 Noise: 0.2

Peak table for sample 8 : BBB #12 Re2cycl. 6/4/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	485	5.99	18.7	
3	513	6.89	20.4	
4	564	7.17	19.3	
5	581	10.21	26.6	
6	646	10.80	25.3	
7	677	8.13	18.2	
8	700	8.31	18.0	
9	774	10.41	20.4	
10	863	9.42	16.5	
11	970	5.61	8.8	
12	1,030	7.49	11.0	
13	10,380	75.00	10.9	Upper Marker

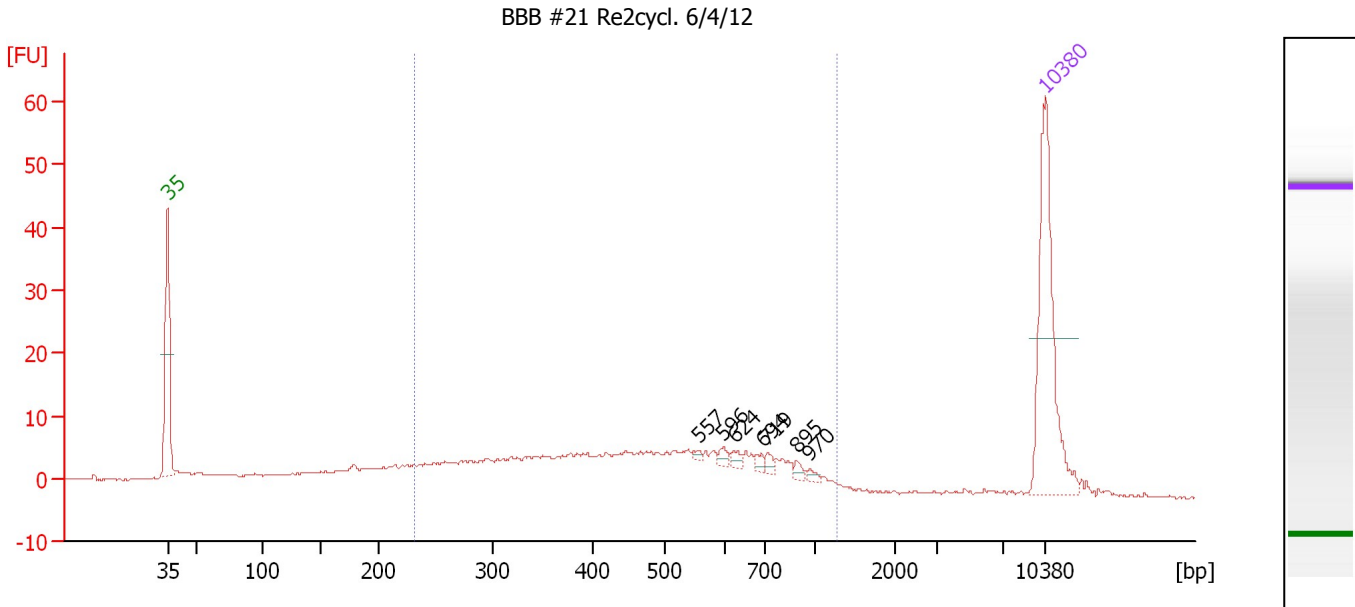
Region table for sample 8 : BBB #12 Re2cycl. 6/4/12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,396	534	1,954.4	526.50	415.8	83	44.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : BBB #21 Re2cycl. 6/4/12

Height Threshold [FU] : 1

Overall Results for sample 9 : BBB #21 Re2cycl. 6/4/12

Number of peaks found: 7 Corr. Area 1: 208.0
 Noise: 0.1

Peak table for sample 9 : BBB #21 Re2cycl. 6/4/12

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	557	1.72	4.7	
3	596	3.07	7.8	
4	624	3.29	8.0	
5	694	3.00	6.6	
6	719	3.47	7.3	
7	895	2.53	4.3	
8	970	2.11	3.3	
9	10,380	75.00	10.9	Upper Marker

Region table for sample 9 : BBB #21 Re2cycl. 6/4/12

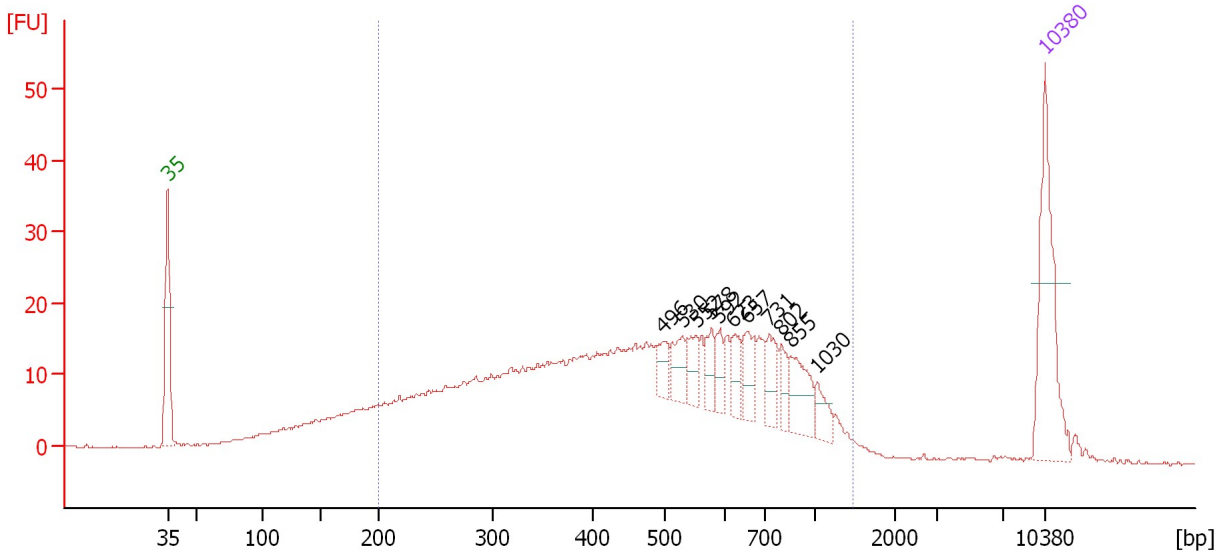
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
232	1,269	500	1,144.7	308.22	208.0	73	39.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...

BBB #22 Re2cycl. 6/4/12



Overall Results for sample 10 : BBB #22 Re2cycl. 6/4/12

Number of peaks found: 11 Corr. Area 1: 608.2
 Noise: 0.1

Peak table for sample 10 : BBB #22 Re2cycl. 6/4/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	496	18.45	56.3	
3	530	22.53	64.4	
4	552	16.63	45.6	
5	578	17.68	46.4	
6	592	13.75	35.2	
7	623	18.29	44.5	
8	657	24.07	55.5	
9	731	21.94	45.5	
10	802	12.96	24.5	
11	855	32.72	58.0	
12	1,030	14.40	21.2	
13	10,380	75.00	10.9	Upper Marker

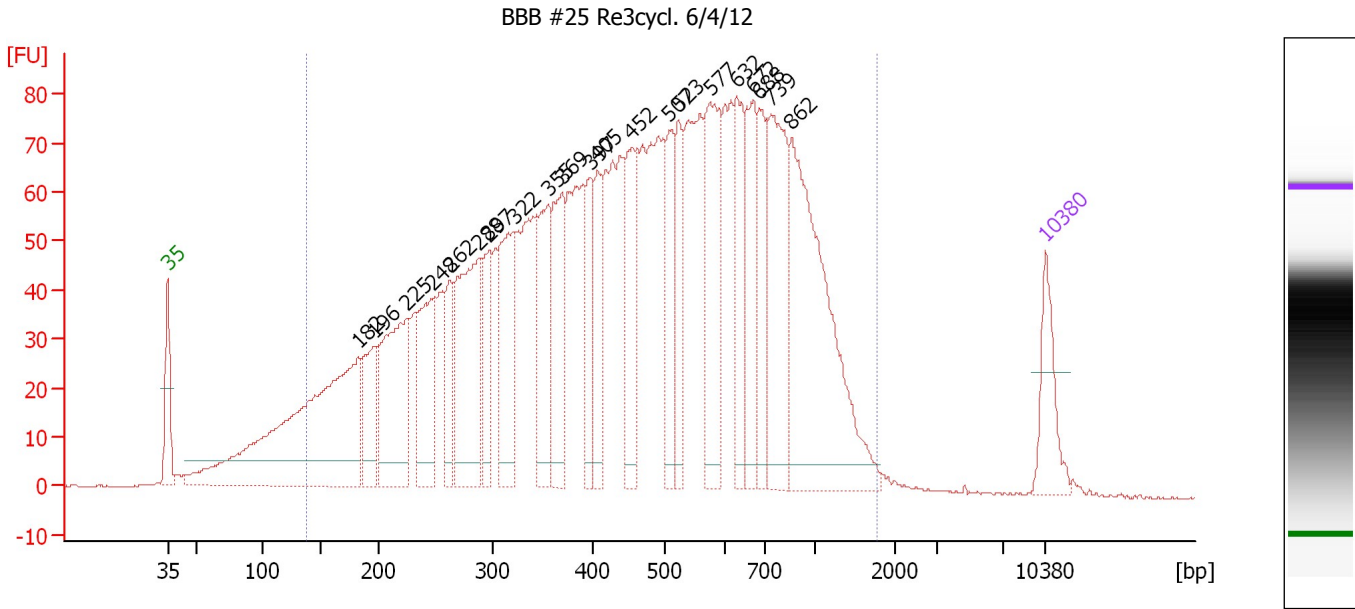
Region table for sample 10 : BBB #22 Re2cycl. 6/4/12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,485	514	4,297.0	1,124.42	608.2	85	45.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : BBB #25 Re3cycl. 6/4/12

Number of peaks found: 21 Corr. Area 1: 3,047.3
 Noise: 0.1

Peak table for sample 11 : BBB #25 Re3cycl. 6/4/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	182	738.06	6,137.1	
3	196	139.56	1,078.3	
4	225	304.25	2,051.0	
5	248	185.29	1,132.8	
6	262	95.55	551.6	
7	288	318.51	1,676.8	
8	297	109.08	555.7	
9	322	212.16	999.3	
10	355	177.71	758.2	
11	369	178.90	734.5	
12	397	114.15	435.2	
13	405	106.89	399.6	
14	452	179.40	600.9	
15	507	120.27	359.5	
16	523	119.56	346.3	
17	577	231.94	608.9	
18	632	138.35	331.8	
19	672	154.01	347.4	
20	688	111.83	246.4	
21	739	250.01	512.4	
22	862	472.49	830.7	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
Modified: 6/5/2012 2:42:24 PM

Electropherogram Summary Continued ...

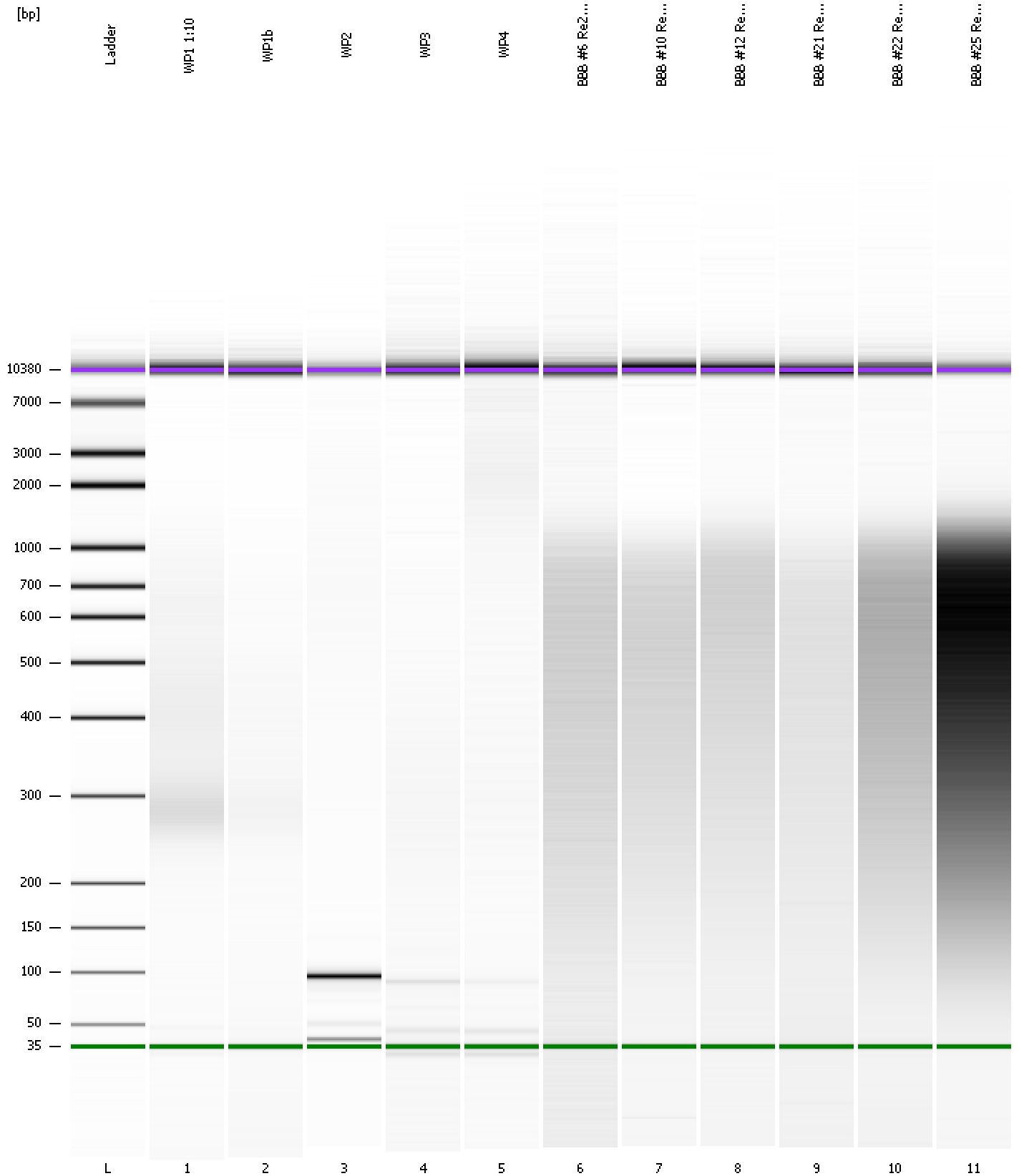
... Region table for sample 11 : **BBB #25 Re3cycl. 6/4/12**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
136	1,781	511	26,560.0	6,186.69	3,047.3	94	52.1	■

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
Modified: 6/5/2012 2:42:24 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad

Created: 6/5/2012 1:51:51 PM
 Modified: 6/5/2012 2:42:24 PM

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		6/5/2012 2:33:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-05\2012-06-05_003.xad)		Instrument	Run		6/5/2012 1:51:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/5/2012 1:51:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/5/2012 1:51:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/5/2012 1:51:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/5/2012 1:51:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/5/2012 1:51:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/5/2012 1:51:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1