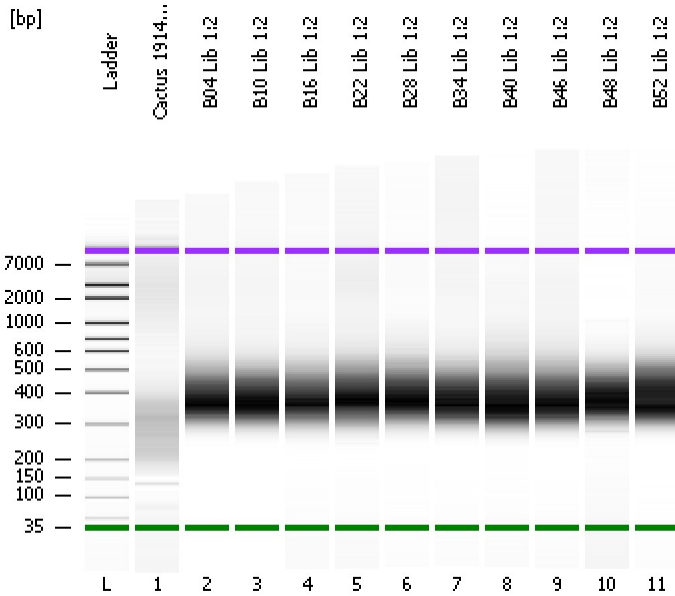


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
Modified: 7/17/2012 3:47:41 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

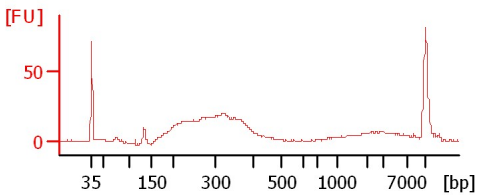
Assay Information:

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

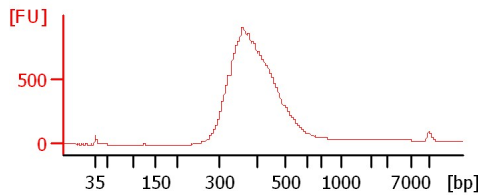
Chip Information:

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

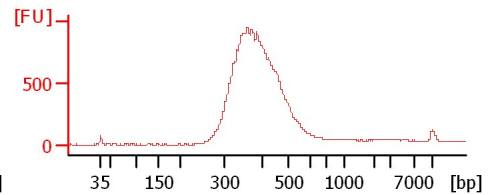
**Cactus 1914D Lib**



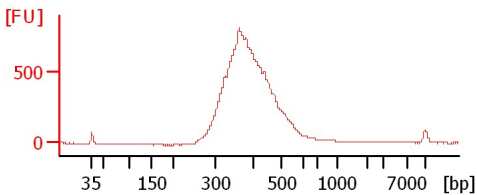
**B04 Lib 1:2**



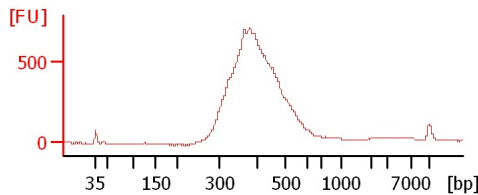
**B10 Lib 1:2**



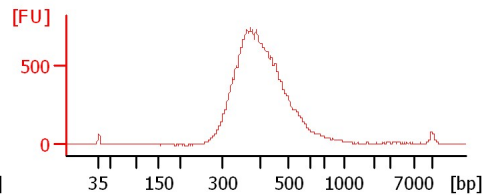
**B16 Lib 1:2**



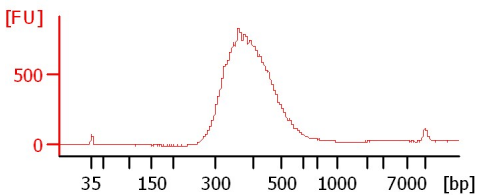
**B22 Lib 1:2**



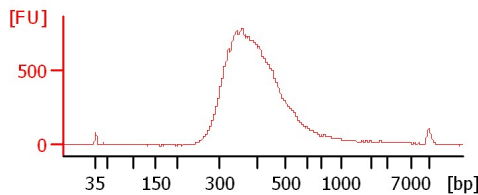
**B28 Lib 1:2**



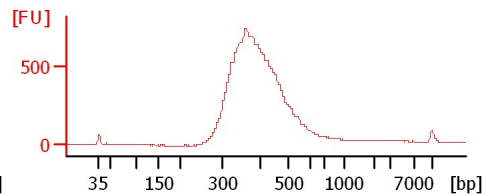
**B34 Lib 1:2**



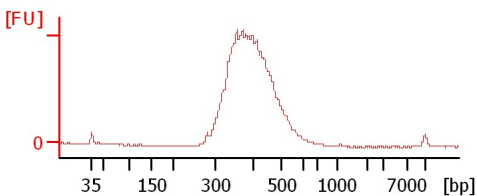
**B40 Lib 1:2**



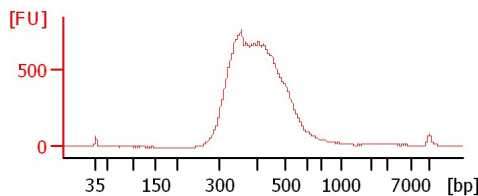
**B46 Lib 1:2**



**B48 Lib 1:2**



**B52 Lib 1:2**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Cactus 1914D Lib		<input type="checkbox"/>	✓			
B04 Lib 1:2		<input type="checkbox"/>	✓			
B10 Lib 1:2		<input type="checkbox"/>	✓			
B16 Lib 1:2		<input type="checkbox"/>	✓			
B22 Lib 1:2		<input type="checkbox"/>	✓			
B28 Lib 1:2		<input type="checkbox"/>	✓			
B34 Lib 1:2		<input type="checkbox"/>	✓			
B40 Lib 1:2		<input type="checkbox"/>	✓			
B46 Lib 1:2		<input type="checkbox"/>	✓			
B48 Lib 1:2		<input type="checkbox"/>	✓			
B52 Lib 1:2		<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\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 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

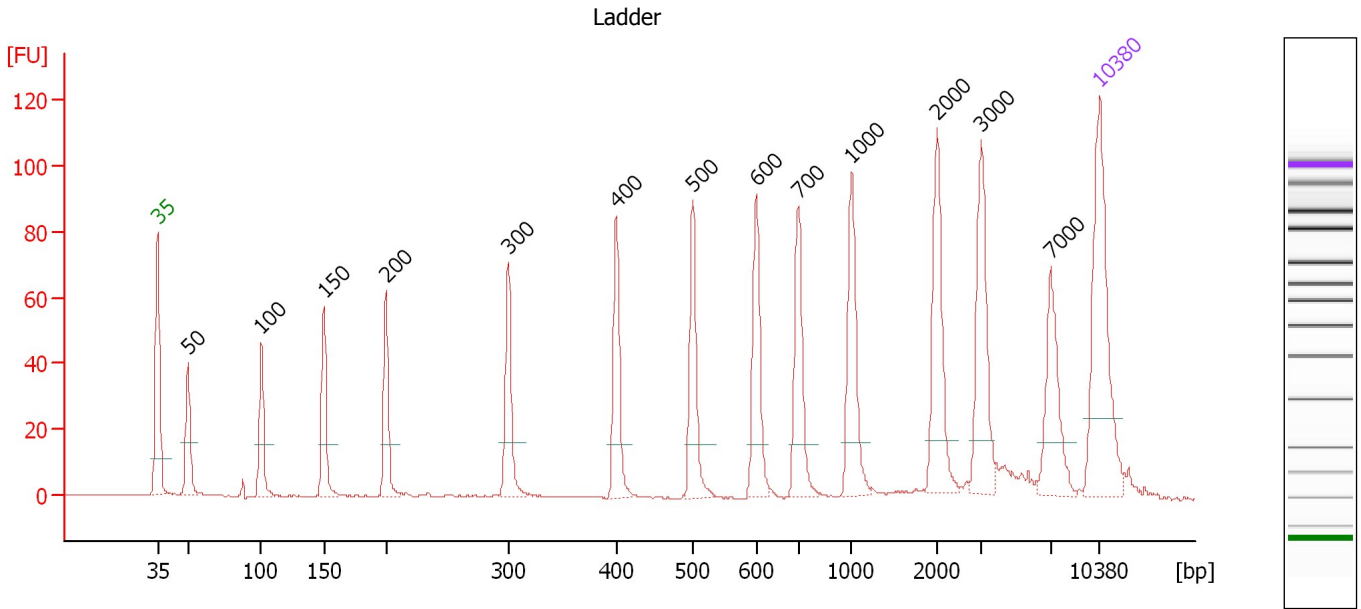
**Ladder**

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\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

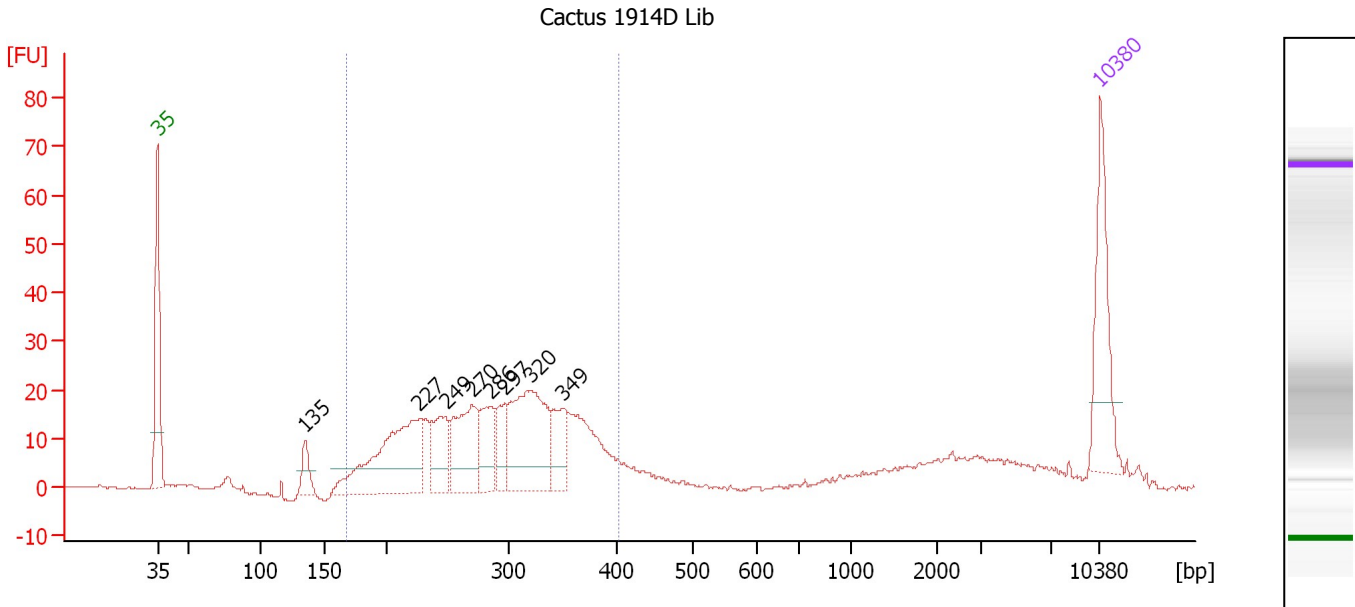
**Peak table for Ladder**

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\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Cactus 1914D Lib**

Number of peaks found: 8                      Corr. Area 1: 401.7  
 Noise: 0.2

**Peak table for sample 1 : Cactus 1914D Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	135	28.88	323.8	
3	227	185.48	1,235.5	
4	249	59.41	361.8	
5	270	98.53	552.6	
6	286	49.17	260.8	
7	297	36.81	187.9	
8	320	149.37	707.0	
9	349	42.18	182.9	
10	10,380	75.00	10.9	Upper Marker

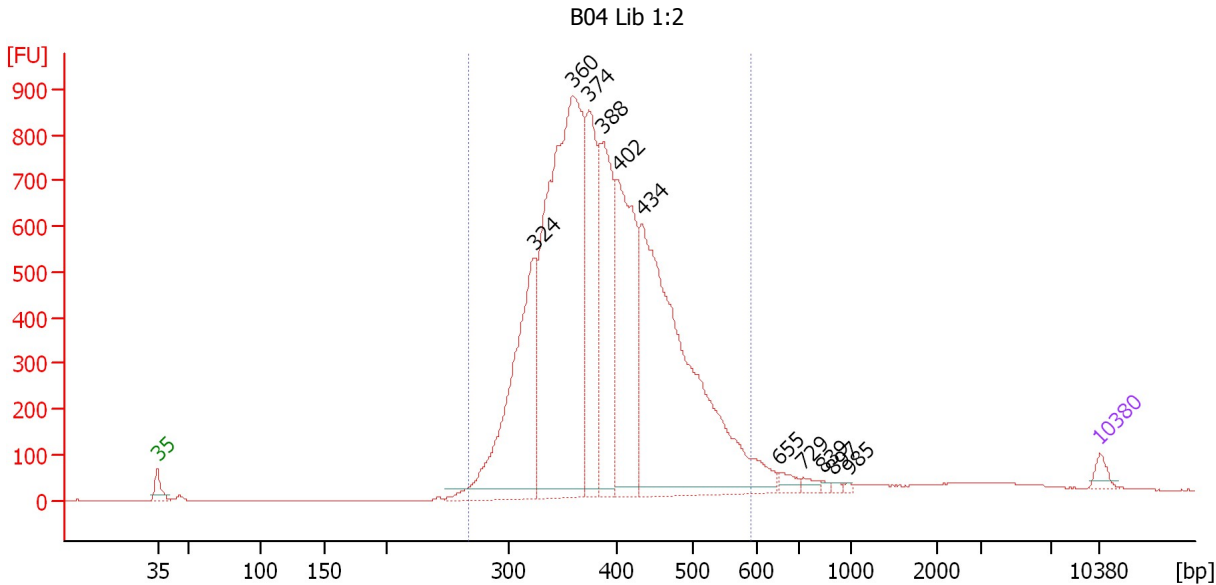
**Region table for sample 1 : Cactus 1914D Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
169	403	290	3,835.0	694.79	401.7	78	19.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 2 : B04 Lib 1:2**

Height Threshold [FU] : 20

**Overall Results for sample 2 : B04 Lib 1:2**

Number of peaks found: 11                      Corr. Area 1: 12,601.3  
 Noise: 0.4

**Peak table for sample 2 : B04 Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	324	2,939.68	13,757.8	
3	360	6,168.64	25,978.6	
4	374	1,795.84	7,267.4	
5	388	2,018.79	7,885.1	
6	402	2,366.66	8,919.8	
7	434	5,258.39	18,368.8	
8	655	112.36	259.9	
9	729	69.36	144.1	
10	839	27.65	50.0	
11	897	24.67	41.7	
12	985	21.67	33.3	
13	10,380	75.00	10.9	Upper Marker

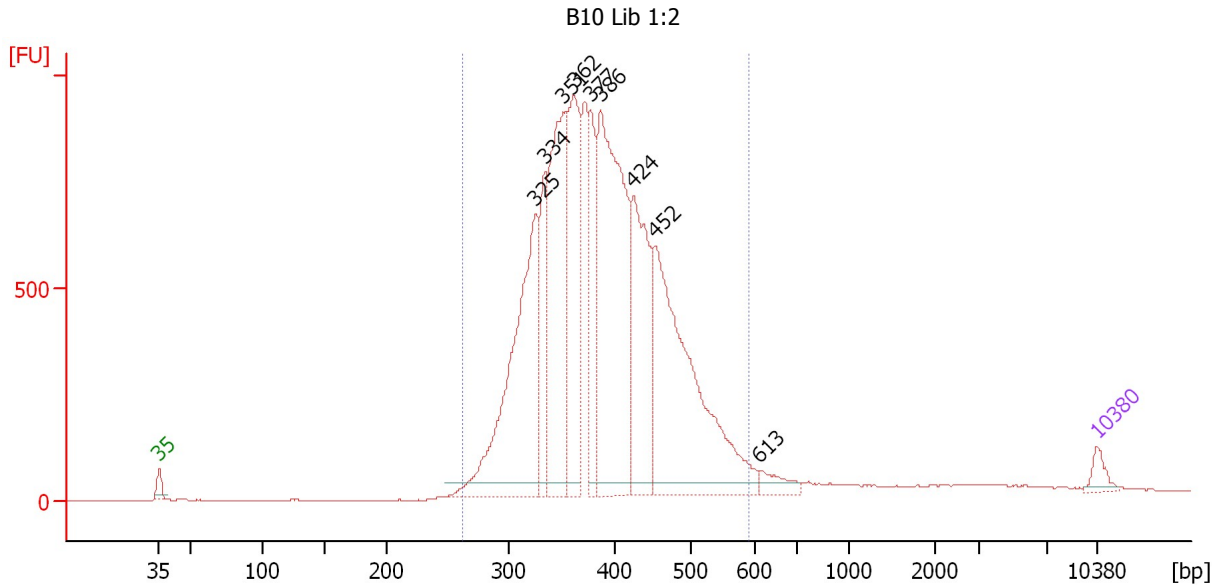
**Region table for sample 2 : B04 Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
267	593	395	79,507.7	20,080.70	12,601.3	94	16.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 3 : B10 Lib 1:2**

Height Threshold [FU] : 30

**Overall Results for sample 3 : B10 Lib 1:2**

Number of peaks found: 9                      Corr. Area 1: 14,058.6  
 Noise: 1.5

**Peak table for sample 3 : B10 Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	325	2,297.69	10,703.9	
3	334	688.48	3,118.7	
4	351	1,663.66	7,176.9	
5	362	1,399.37	5,863.3	
6	377	701.47	2,817.6	
7	386	2,635.15	10,331.8	
8	424	1,283.56	4,586.6	
9	452	2,437.05	8,160.4	
10	613	129.78	320.6	
11	10,380	75.00	10.9	Upper Marker

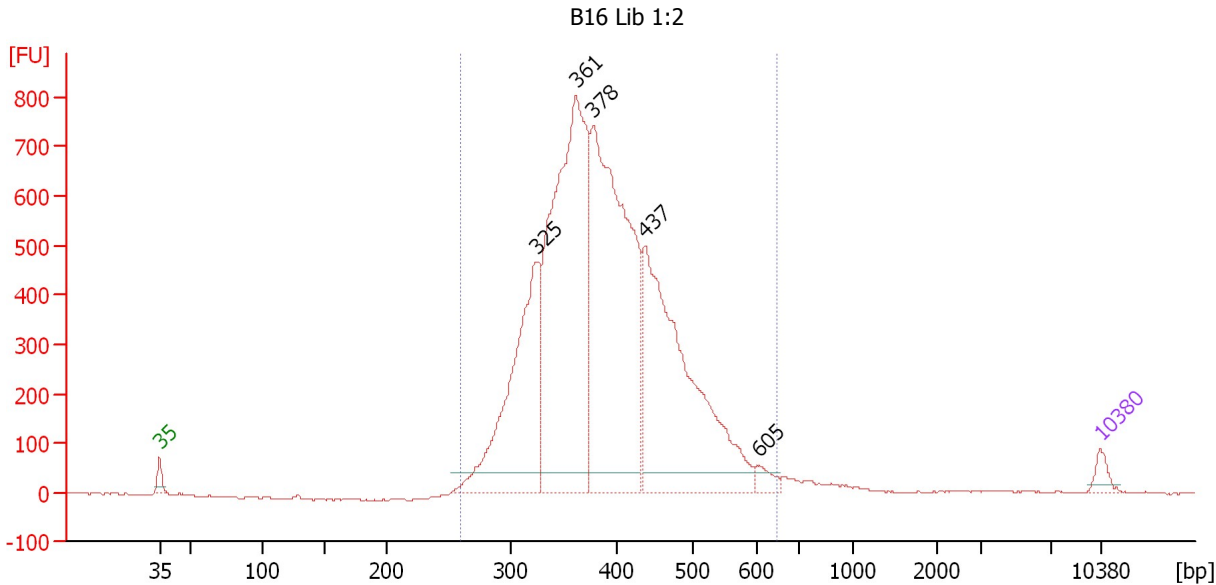
**Region table for sample 3 : B10 Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
263	590	392	54,496.6	13,661.55	14,058.6	96	16.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 4 : B16 Lib 1:2**

Height Threshold [FU] : 40

**Overall Results for sample 4 : B16 Lib 1:2**

Number of peaks found: 5                      Corr. Area 1: 10,916.3  
 Noise: 1.6

**Peak table for sample 4 : B16 Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	325	2,398.76	11,182.2	
3	361	4,468.60	18,734.4	
4	378	4,219.50	16,921.0	
5	437	3,257.46	11,306.0	
6	605	108.96	272.9	
7	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : B16 Lib 1:2**

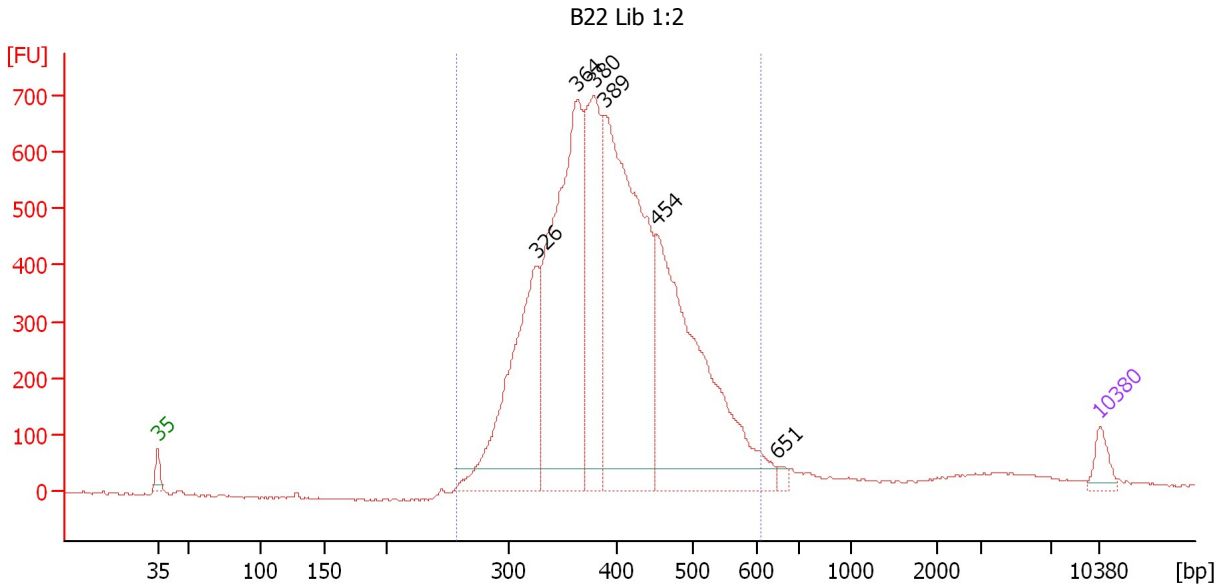
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
261	646	395	57,003.4	14,329.56	10,916.3	99	17.1	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 5 : B22 Lib 1:2**

Height Threshold [FU] : 40

**Overall Results for sample 5 : B22 Lib 1:2**

Number of peaks found: 6                      Corr. Area 1: 10,355.6  
 Noise: 2.2

**Peak table for sample 5 : B22 Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	326	1,441.66	6,695.5	
3	364	2,194.39	9,135.1	
4	380	1,096.27	4,376.5	
5	389	2,549.33	9,926.9	
6	454	2,057.50	6,869.1	
7	651	34.64	80.6	
8	10,380	75.00	10.9	Upper Marker

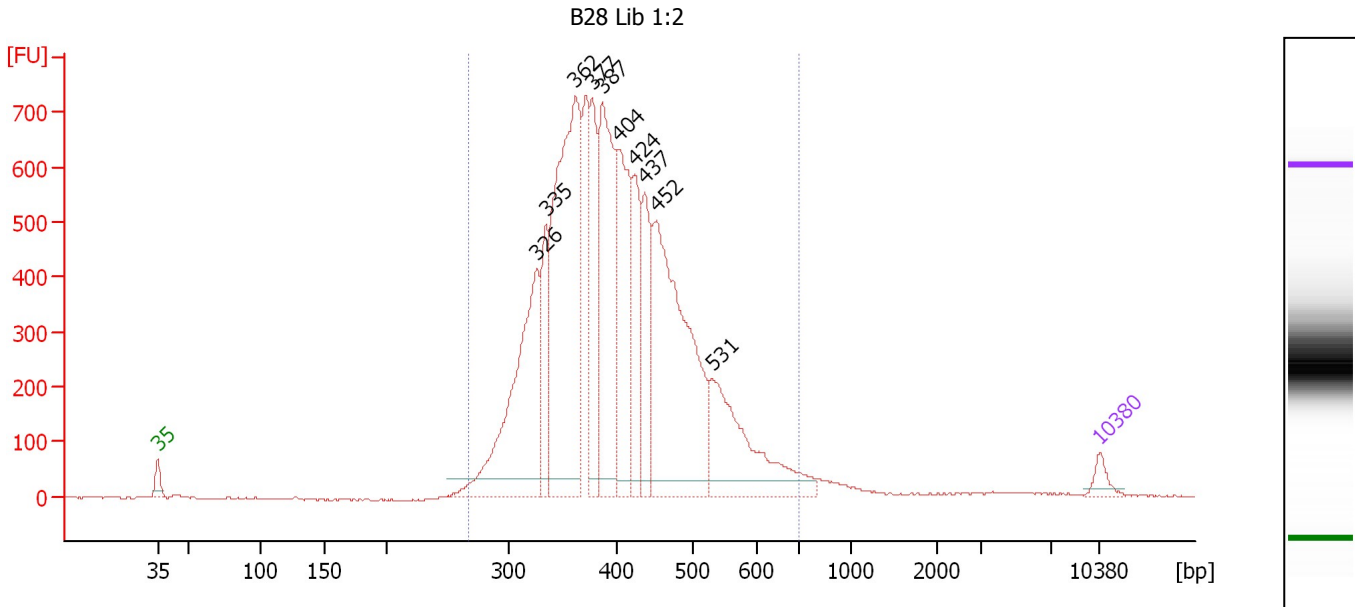
**Region table for sample 5 : B22 Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
258	611	402	35,842.2	9,163.05	10,355.6	94	17.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 6 : B28 Lib 1:2**

Height Threshold [FU] : 30

**Overall Results for sample 6 : B28 Lib 1:2**

Number of peaks found: 10      Corr. Area 1: 11,082.0  
 Noise: 1.6

**Peak table for sample 6 : B28 Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	326	1,925.59	8,949.0	
3	335	631.78	2,856.7	
4	362	2,908.92	12,165.5	
5	377	804.04	3,227.9	
6	387	1,682.03	6,584.0	
7	404	1,169.04	4,385.0	
8	424	701.74	2,505.4	
9	437	645.48	2,237.2	
10	452	2,519.04	8,434.9	
11	531	1,187.98	3,388.6	
12	10,380	75.00	10.9	Upper Marker

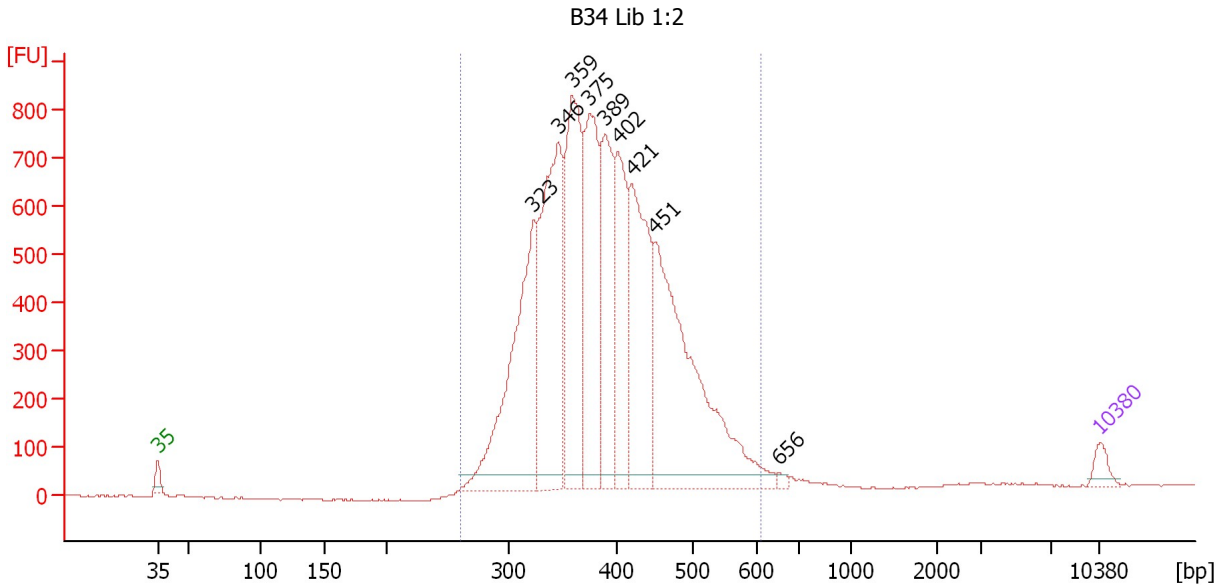
**Region table for sample 6 : B28 Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
268	709	409	57,248.5	14,834.75	11,082.0	98	18.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 7 : B34 Lib 1:2**

Height Threshold [FU] : 30

**Overall Results for sample 7 : B34 Lib 1:2**

Number of peaks found: 9                      Corr. Area 1: 12,096.5  
 Noise: 1.8

**Peak table for sample 7 : B34 Lib 1:2**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	323	2,078.60	9,747.2	
3	346	2,111.58	9,253.3	
4	359	1,829.02	7,714.6	
5	375	1,440.82	5,819.4	
6	389	1,165.96	4,538.9	
7	402	1,058.21	3,987.9	
8	421	1,509.32	5,431.5	
9	451	2,592.78	8,706.3	
10	656	32.29	74.6	
11	10,380	75.00	10.9	Upper Marker

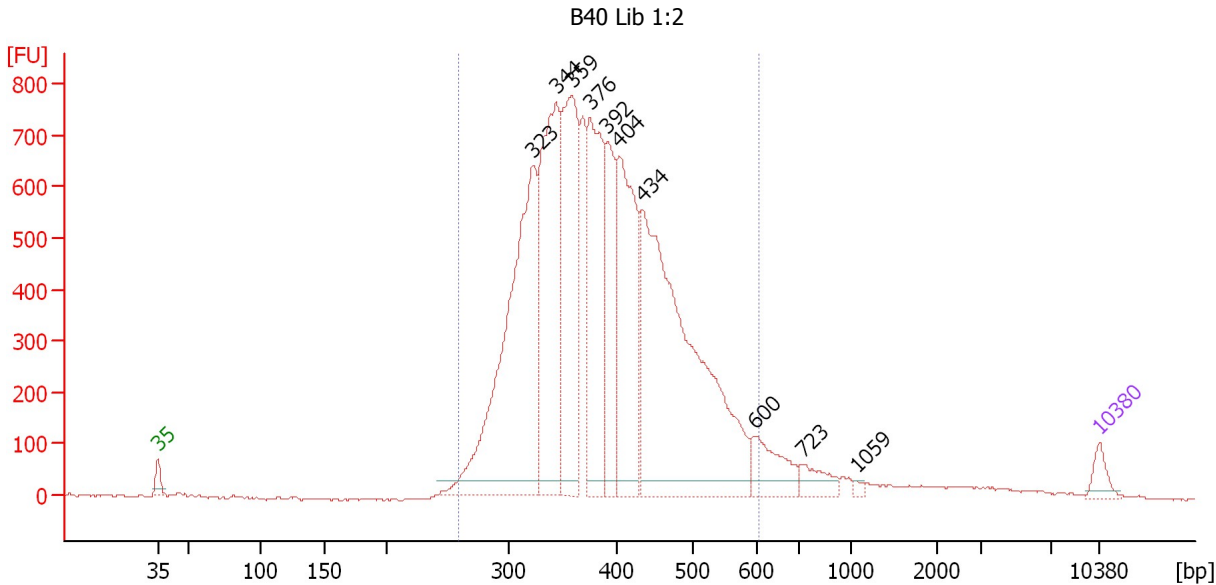
**Region table for sample 7 : B34 Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
261	613	395	55,238.1	13,915.15	12,096.5	96	16.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 8 : B40 Lib 1:2**

Height Threshold [FU] : 30

**Overall Results for sample 8 : B40 Lib 1:2**

Number of peaks found: 10                      Corr. Area 1: 12,993.0  
 Noise: 1.9

**Peak table for sample 8 : B40 Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	323	2,688.62	12,603.2	
3	344	1,746.44	7,688.8	
4	359	1,468.94	6,200.9	
5	376	1,276.88	5,151.6	
6	392	737.09	2,852.2	
7	404	1,384.73	5,197.0	
8	434	3,129.81	10,924.8	
9	600	316.33	799.1	
10	723	149.71	314.0	
11	1,059	22.29	31.9	
12	10,380	75.00	10.9	Upper Marker

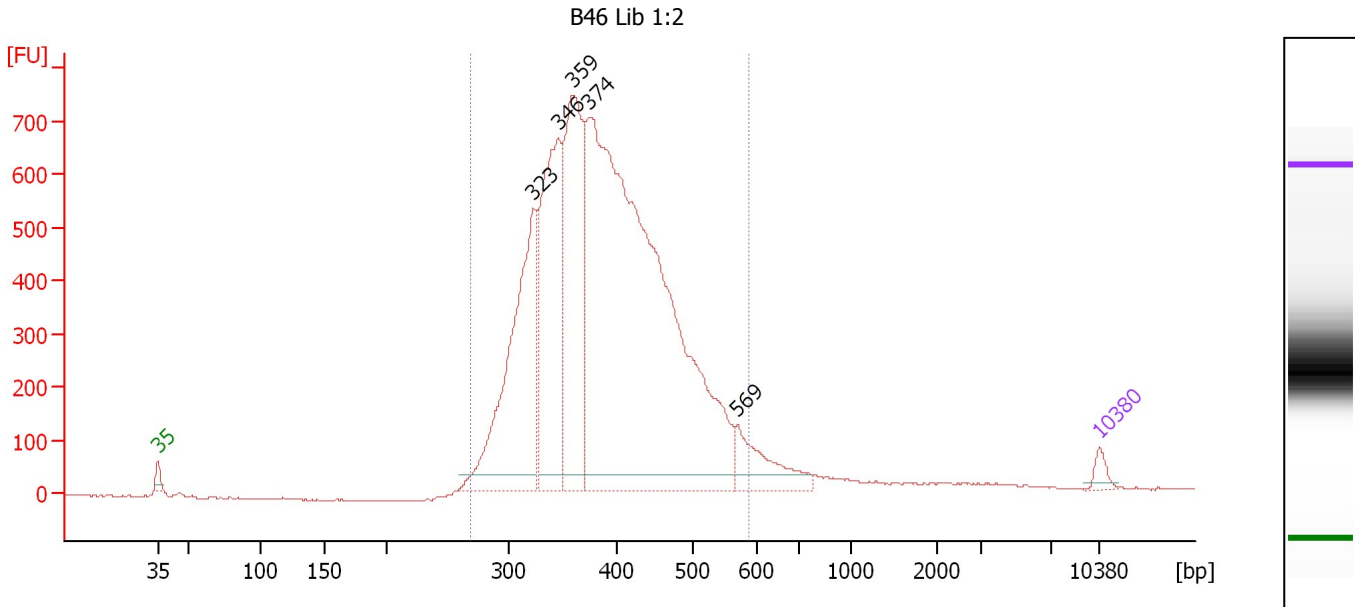
**Region table for sample 8 : B40 Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
259	607	393	52,420.5	13,039.93	12,993.0	94	18.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 9 : B46 Lib 1:2**

Height Threshold [FU] : 30

**Overall Results for sample 9 : B46 Lib 1:2**

Number of peaks found: 5                      Corr. Area 1: 11,047.9  
 Noise: 1.9

**Peak table for sample 9 : B46 Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	323	2,754.02	12,930.0	
3	346	2,459.97	10,781.5	
4	359	2,452.37	10,339.4	
5	374	9,281.02	37,570.8	
6	569	569.86	1,516.6	
7	10,380	75.00	10.9	Upper Marker

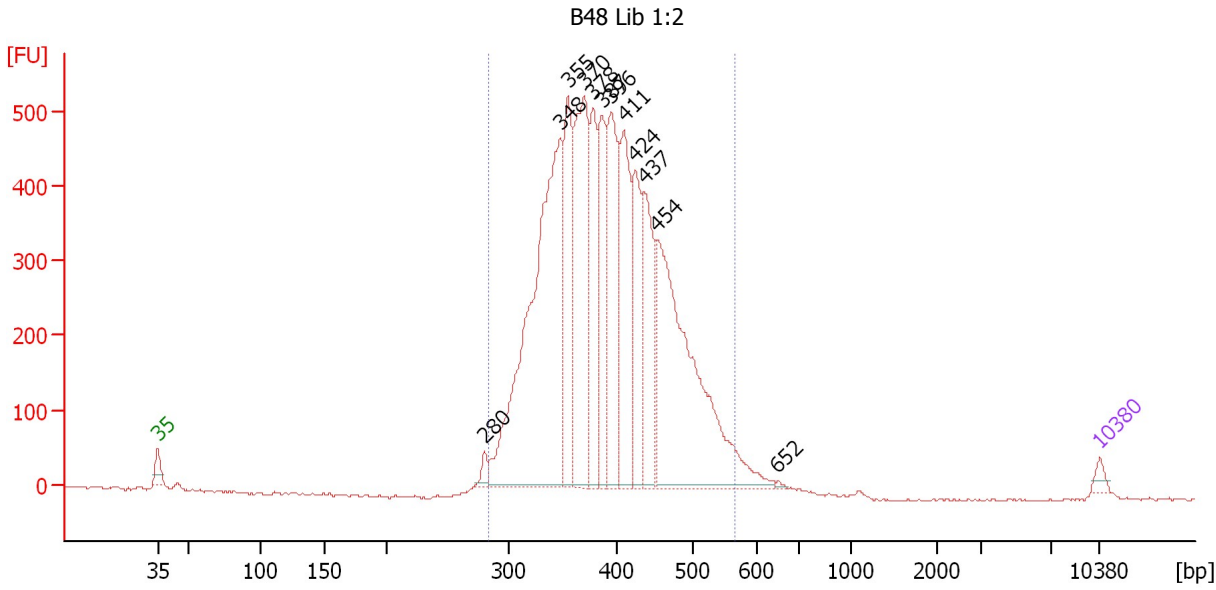
**Region table for sample 9 : B46 Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
269	590	394	66,738.1	16,747.42	11,047.9	94	17.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : B48 Lib 1:2**

Number of peaks found: 12      Corr. Area 1: 7,370.6  
 Noise: 1.7

**Peak table for sample 10 : B48 Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	280	142.50	770.2	
3	348	6,149.88	26,788.6	
4	355	1,853.54	7,904.4	
5	370	2,740.65	11,216.4	
6	378	1,430.73	5,730.3	
7	387	1,393.32	5,455.0	
8	396	1,871.77	7,167.0	
9	411	1,812.26	6,687.5	
10	424	1,285.30	4,595.9	
11	437	1,522.95	5,281.8	
12	454	4,507.14	15,057.8	
13	652	22.42	52.1	
14	10,380	75.00	10.9	Upper Marker

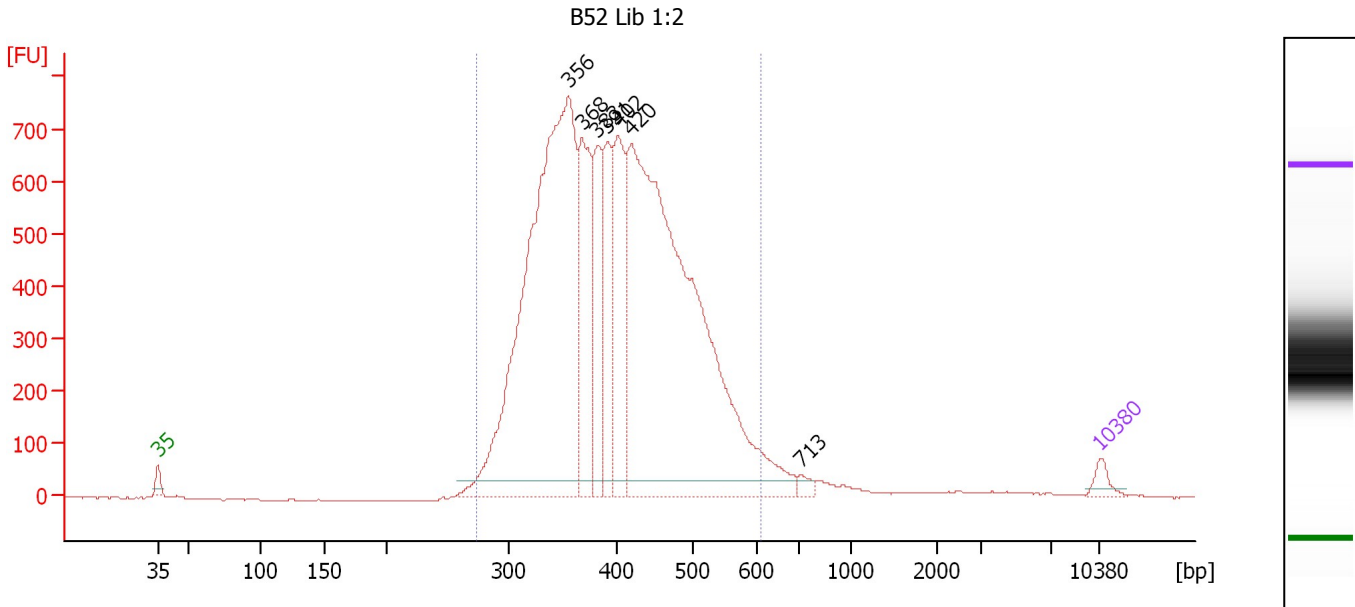
**Region table for sample 10 : B48 Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
284	566	396	96,715.0	24,667.65	7,370.6	98	14.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
 Modified: 7/17/2012 3:47:41 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 11 : B52 Lib 1:2**

Height Threshold [FU] : 30

**Overall Results for sample 11 : B52 Lib 1:2**

Number of peaks found: 7                      Corr. Area 1: 12,397.3  
 Noise: 0.9

**Peak table for sample 11 : B52 Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	356	6,050.72	25,773.0	
3	368	1,345.77	5,536.9	
4	383	826.56	3,272.5	
5	391	876.94	3,394.0	
6	402	1,151.53	4,338.6	
7	420	6,703.60	24,193.4	
8	713	58.33	124.0	
9	10,380	75.00	10.9	Upper Marker

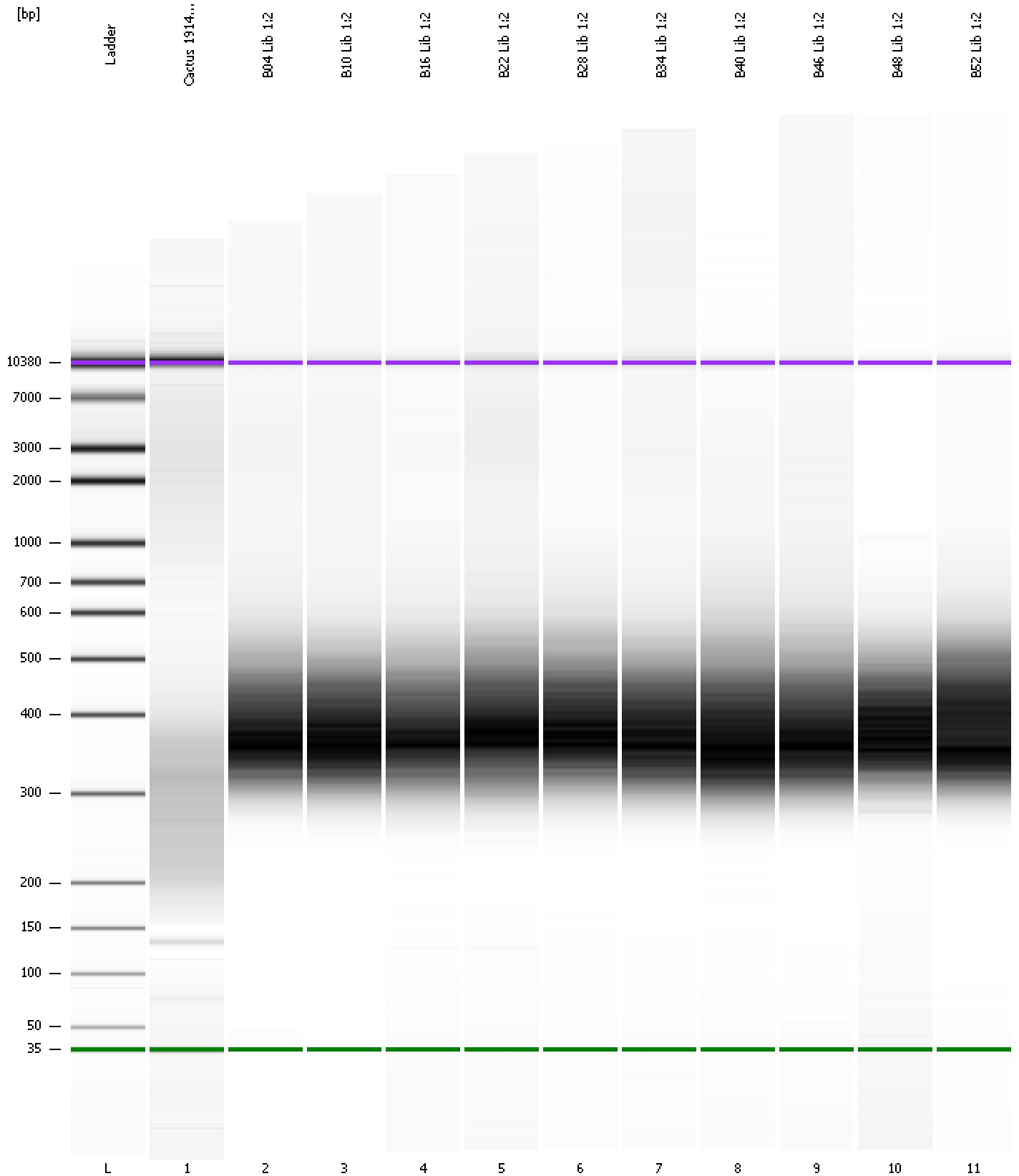
**Region table for sample 11 : B52 Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
274	610	406	64,641.2	16,658.38	12,397.3	96	17.5	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
Modified: 7/17/2012 3:47:41 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-17\2012-07-17\_003.xad

Created: 7/17/2012 3:00:04 PM  
Modified: 7/17/2012 3:47:41 PM

**Curves**

**Standard Curve**

