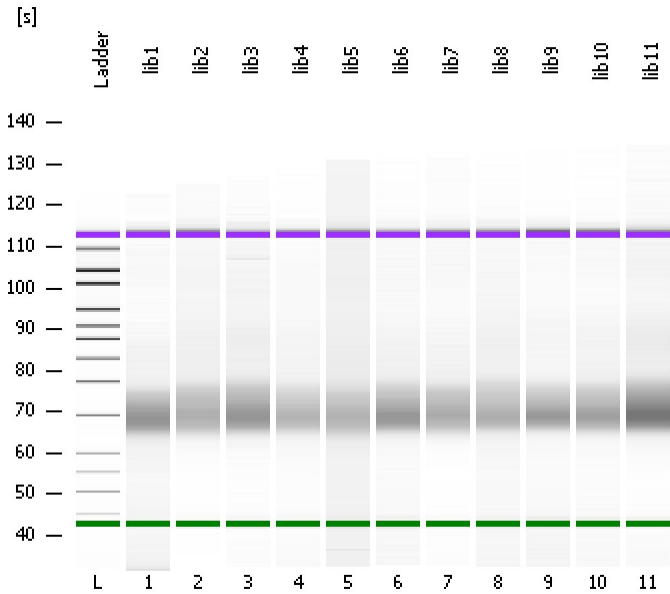


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
Modified: 5/8/2012 11:55:03 AM

**Electrophoresis File Run Summary**



Instrument Information:

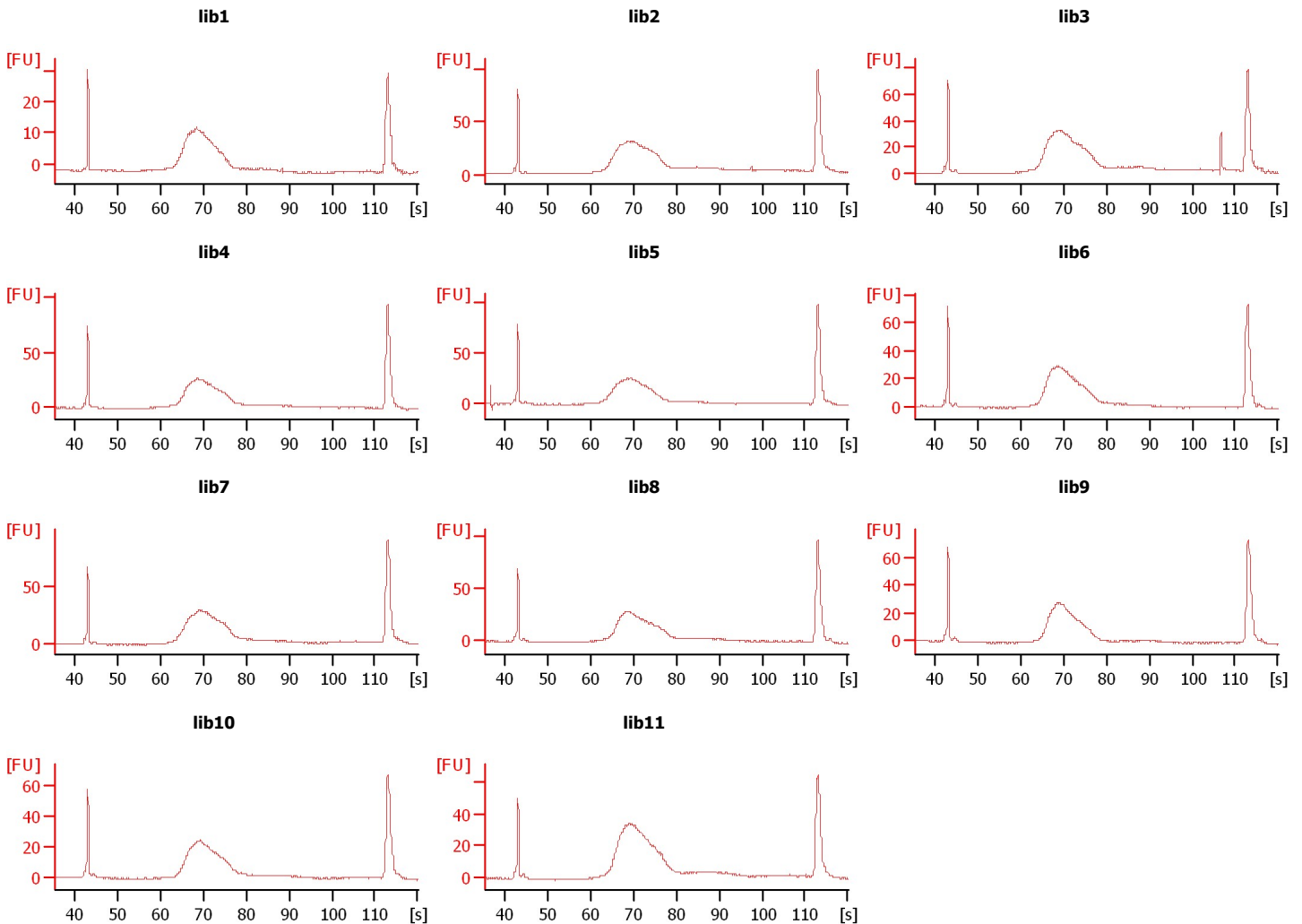
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
lib1		<input type="checkbox"/>	✓			
lib2		<input type="checkbox"/>	✓			
lib3		<input type="checkbox"/>	✓			
lib4		<input type="checkbox"/>	✓			
lib5		<input type="checkbox"/>	✓			
lib6		<input type="checkbox"/>	✓			
lib7		<input type="checkbox"/>	✓			
lib8		<input type="checkbox"/>	✓			
lib9		<input type="checkbox"/>	✓			
lib10		<input type="checkbox"/>	✓			
lib11		<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\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
Modified: 5/8/2012 11:55:03 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

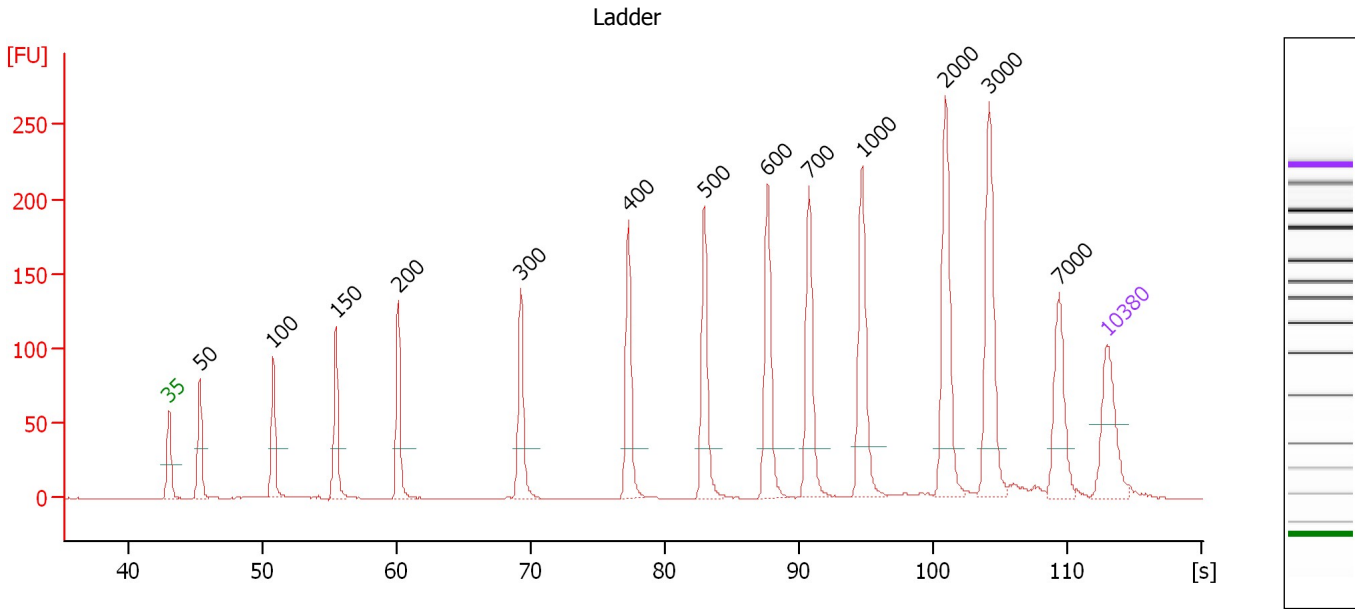
**Ladder**

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\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

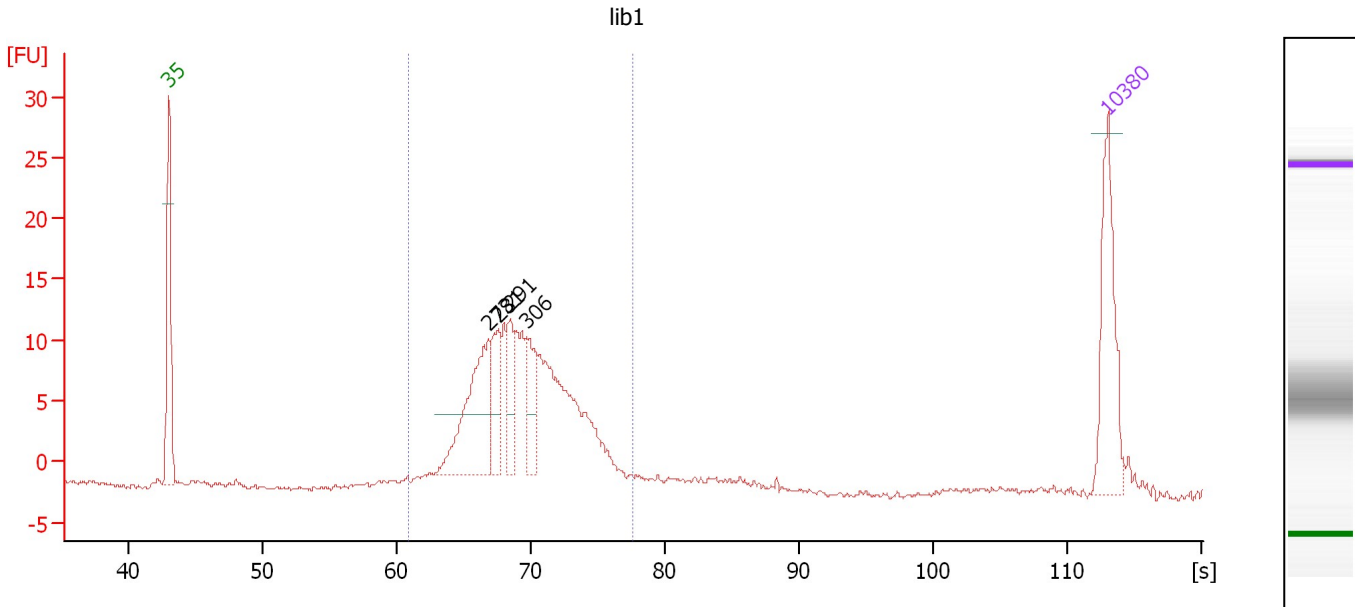
**Peak table for Ladder**

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\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : lib1**

Number of peaks found: 4                      Corr. Area 1: 155.9  
 Noise: 0.2

**Peak table for sample 1 : lib1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	273	137.36	761.3	
3	281	48.68	262.2	
4	291	41.23	214.6	
5	306	49.72	246.3	
6	10,380	75.00	10.9	Upper Marker

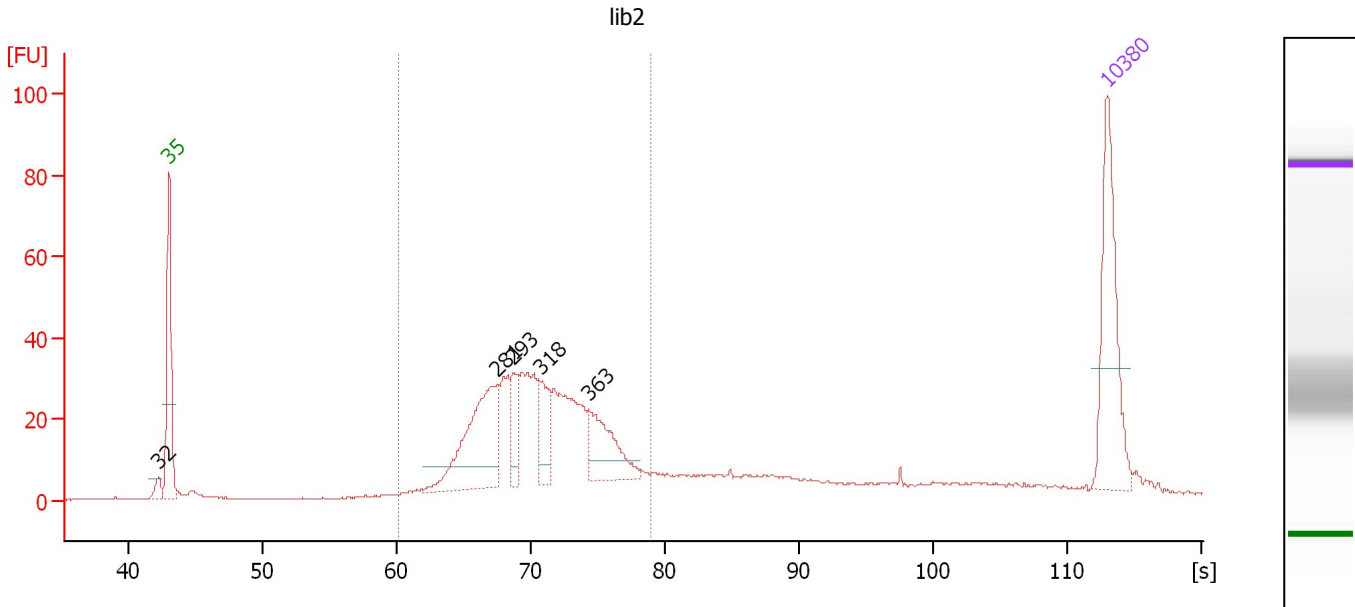
**Region table for sample 1 : lib1**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.86	2,952.4	304	583.34	77.53	155.9	98	11.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : lib2**

Number of peaks found: 5                      Corr. Area 1: 486.1  
 Noise: 0.3

**Peak table for sample 2 : lib2**

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	281	125.87	678.7	
4	293	33.38	172.4	
5	318	32.87	156.6	
6	363	54.85	228.8	
7	10,380	75.00	10.9	Upper Marker

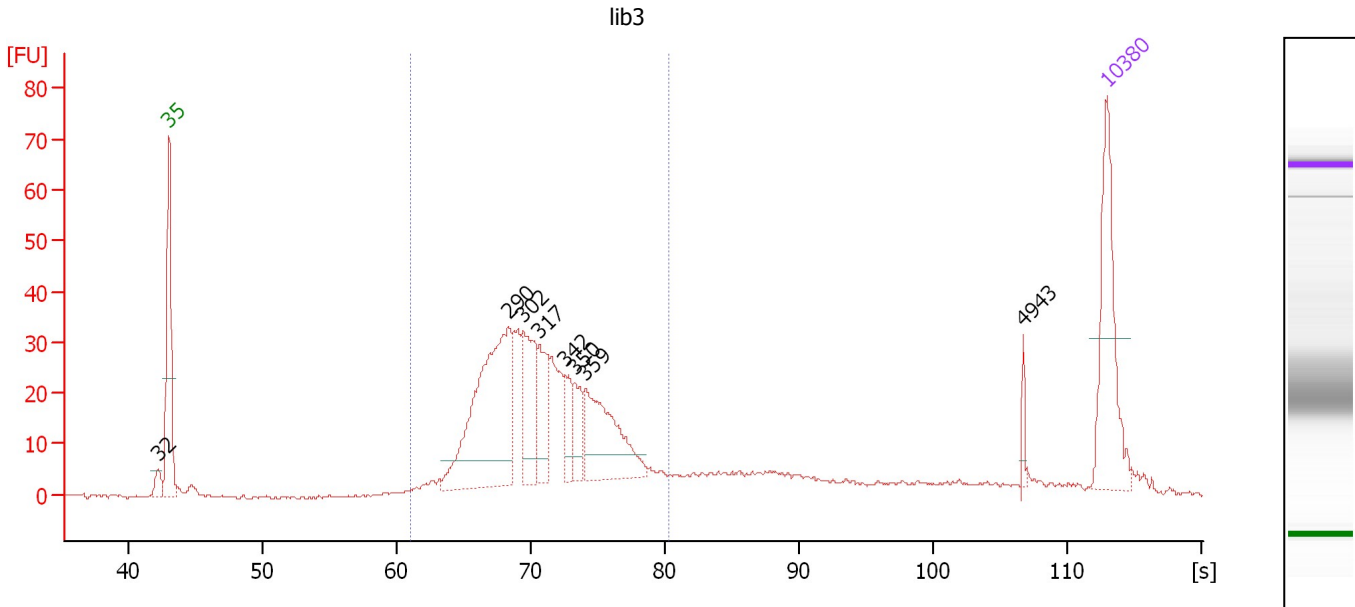
**Region table for sample 2 : lib2**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.10	2,602.7	316	528.91	78.88	486.1	75	14.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : lib3**

Number of peaks found: 8                      Corr. Area 1: 494.2  
 Noise: 0.3

**Peak table for sample 3 : lib3**

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	290	218.25	1,139.1	
4	302	71.75	359.6	
5	317	45.42	217.3	
6	342	23.95	106.2	
7	350	29.83	129.1	
8	359	95.74	403.6	
9	4,943	6.15	1.9	
10	10,380	75.00	10.9	Upper Marker

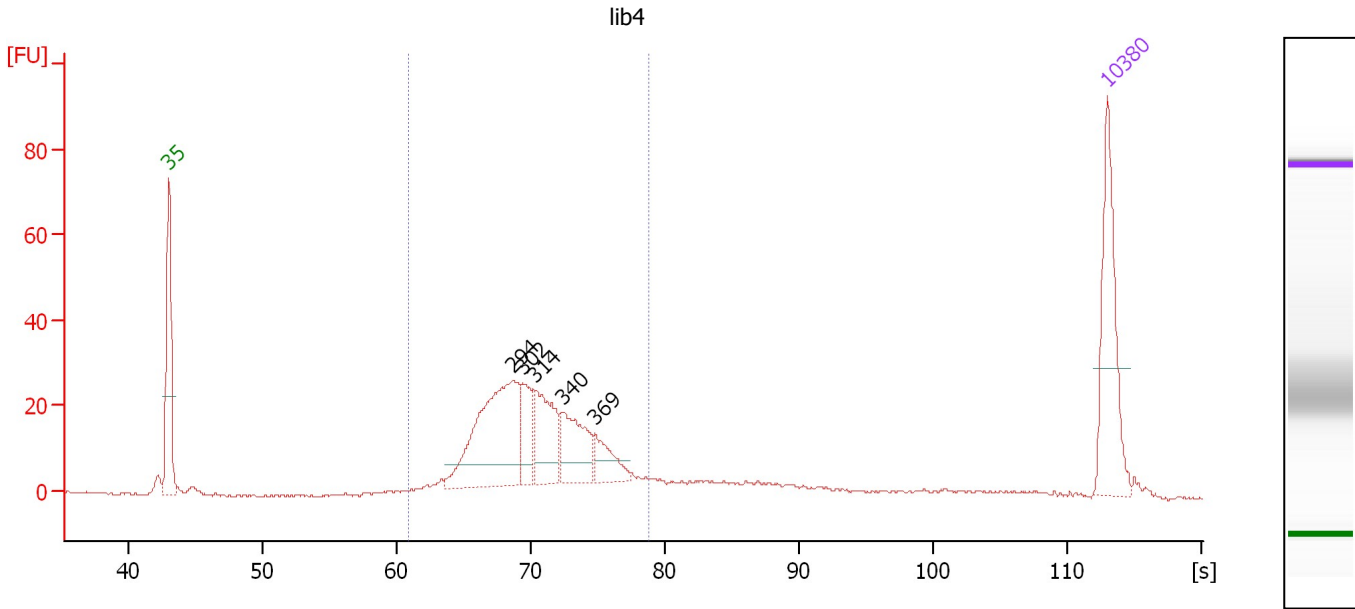
**Region table for sample 3 : lib3**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.08	3,466.4	320	712.73	80.32	494.2	75	14.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : lib4**

Number of peaks found: 5                      Corr. Area 1: 366.0  
 Noise: 0.3

**Peak table for sample 4 : lib4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	294	175.25	903.3	
3	302	38.81	195.0	
4	314	69.78	337.2	
5	340	59.76	266.6	
6	369	27.67	113.6	
7	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : lib4**

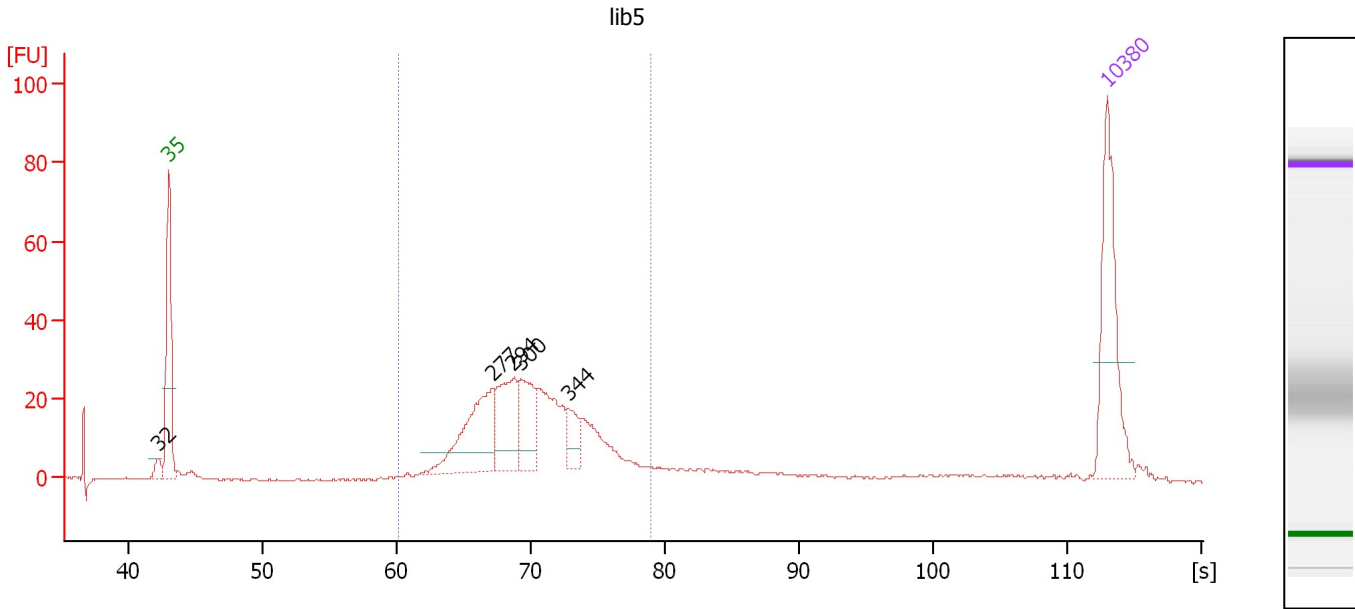
From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.91	2,260.7	315	458.94	78.84	366.0	81	13.6	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : lib5**

Number of peaks found: 5                      Corr. Area 1: 367.3  
 Noise: 0.4

**Peak table for sample 5 : lib5**

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	277	95.75	522.8	
4	294	67.22	346.2	
5	300	51.81	261.4	
6	344	21.49	94.7	
7	10,380	75.00	10.9	Upper Marker

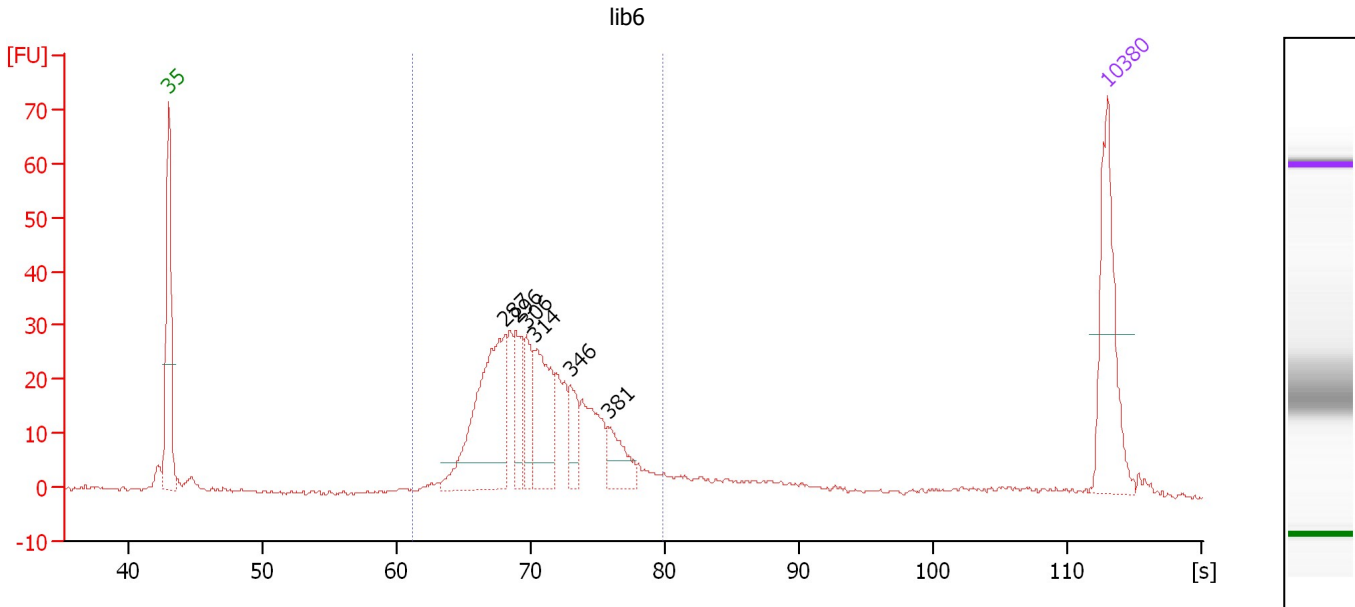
**Region table for sample 5 : lib5**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.10	2,072.7	311	414.85	79.01	367.3	82	14.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : lib6**

Number of peaks found: 6                      Corr. Area 1: 396.4  
 Noise: 0.3

**Peak table for sample 6 : lib6**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	287	171.26	903.3	
3	296	44.96	230.2	
4	306	38.79	192.2	
5	314	81.03	391.1	
6	346	28.13	123.3	
7	381	31.54	125.4	
8	10,380	75.00	10.9	Upper Marker

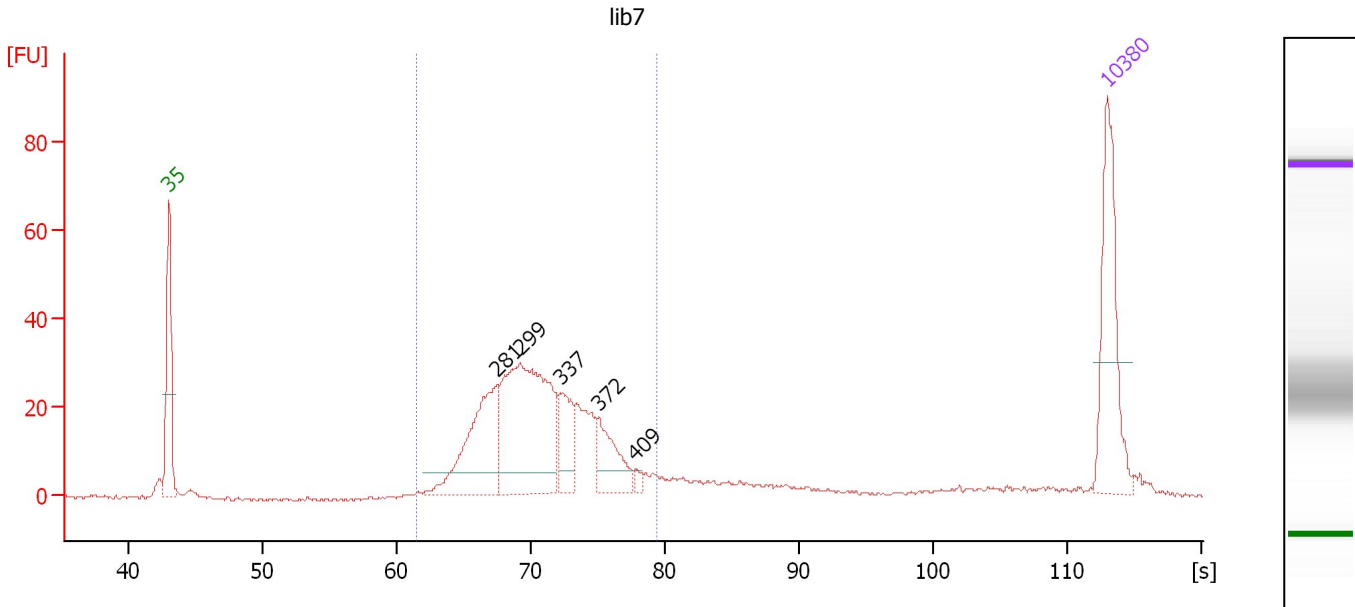
**Region table for sample 6 : lib6**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.13	2,777.2	318	569.83	79.84	396.4	84	13.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : lib7**

Number of peaks found: 5                      Corr. Area 1: 427.8  
 Noise: 0.5

**Peak table for sample 7 : lib7**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	281	118.55	639.8	
3	299	206.05	1,043.1	
4	337	41.86	188.4	
5	372	44.37	180.8	
6	409	4.89	18.1	
7	10,380	75.00	10.9	Upper Marker

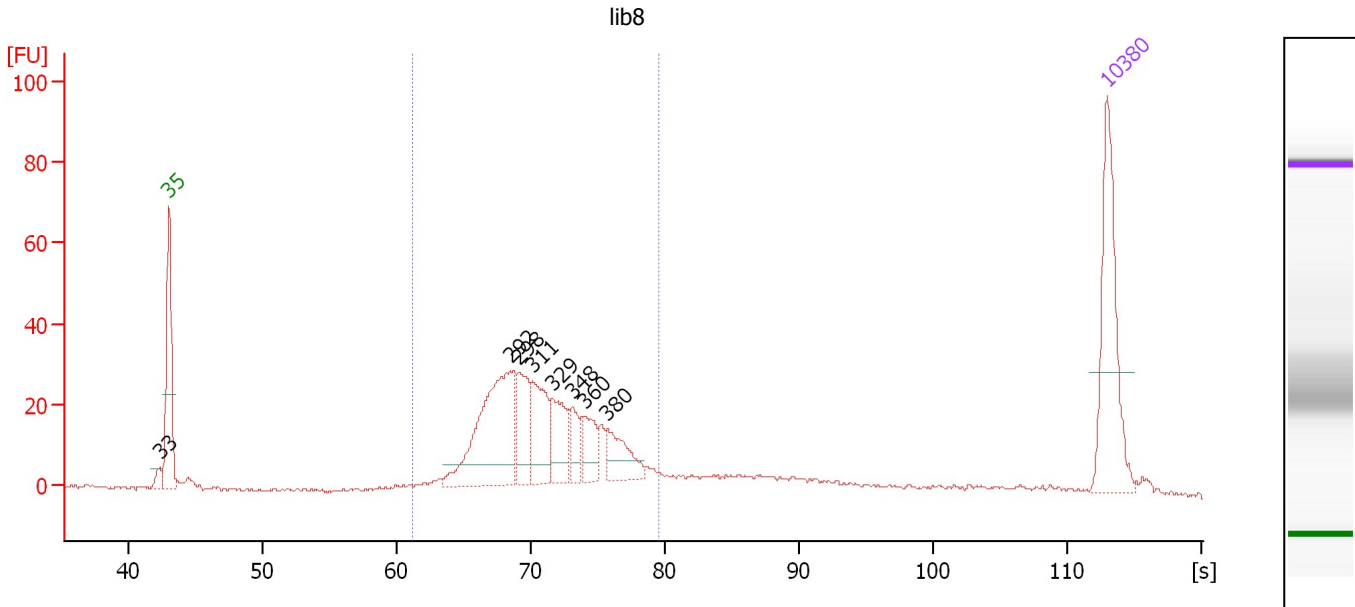
**Region table for sample 7 : lib7**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.41	2,434.4	319	499.75	79.41	427.8	79	14.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : lib8**

Number of peaks found: 8                      Corr. Area 1: 415.8  
 Noise: 0.5

**Peak table for sample 8 : lib8**

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	292	144.04	747.5	
4	298	44.63	226.8	
5	311	53.94	262.9	
6	329	43.22	199.0	
7	348	19.63	85.3	
8	360	27.21	114.5	
9	380	33.60	133.9	
10	10,380	75.00	10.9	Upper Marker

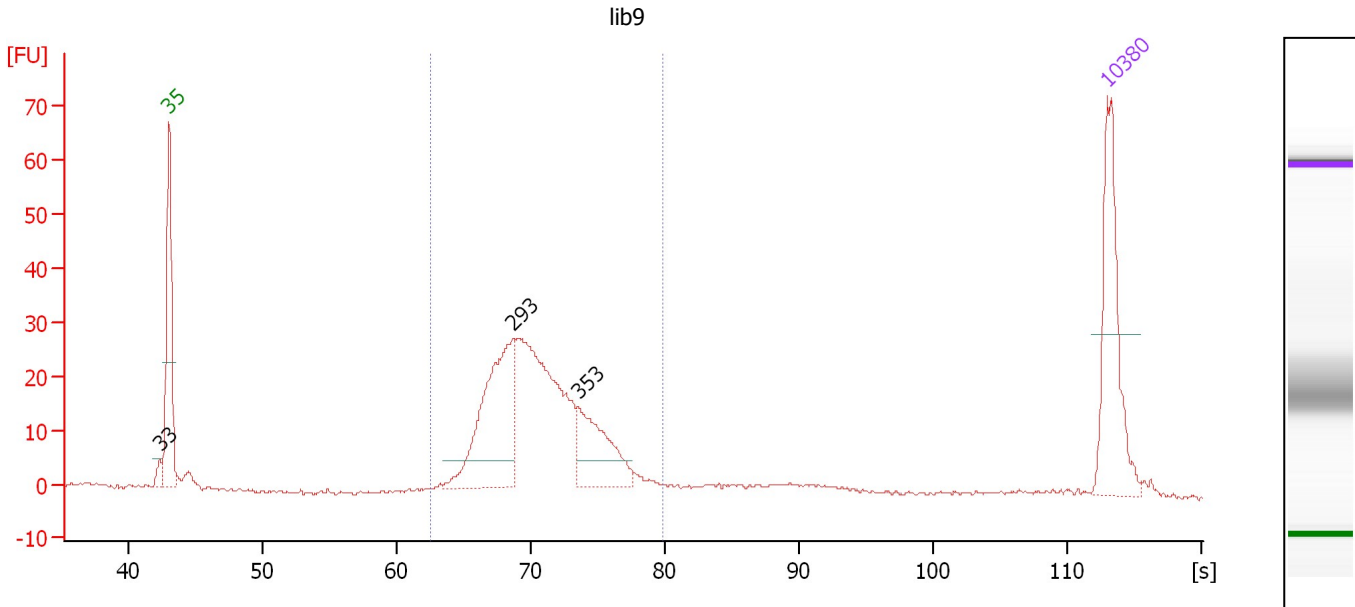
**Region table for sample 8 : lib8**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.24	2,182.9	322	451.83	79.49	415.8	76	14.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : lib9**

Number of peaks found: 3                      Corr. Area 1: 330.8  
 Noise: 0.4

**Peak table for sample 9 : lib9**

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	293	152.30	786.3	
4	353	67.58	289.7	
5	10,380	75.00	10.9	Upper Marker

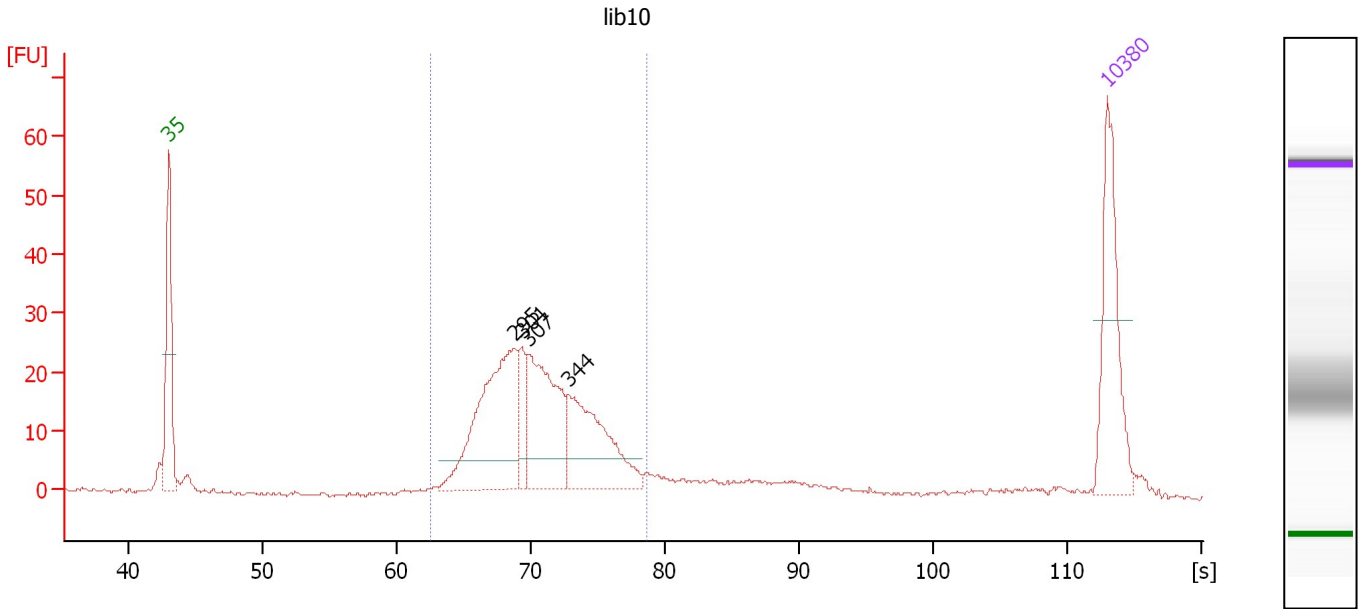
**Region table for sample 9 : lib9**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
62.55	2,170.3	318	447.41	79.82	330.8	87	12.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : lib10**

Number of peaks found: 4                      Corr. Area 1: 313.6  
 Noise: 0.3

**Peak table for sample 10 : lib10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	295	180.67	926.6	
3	301	33.59	168.9	
4	307	126.02	622.6	
5	344	111.50	490.9	
6	10,380	75.00	10.9	Upper Marker

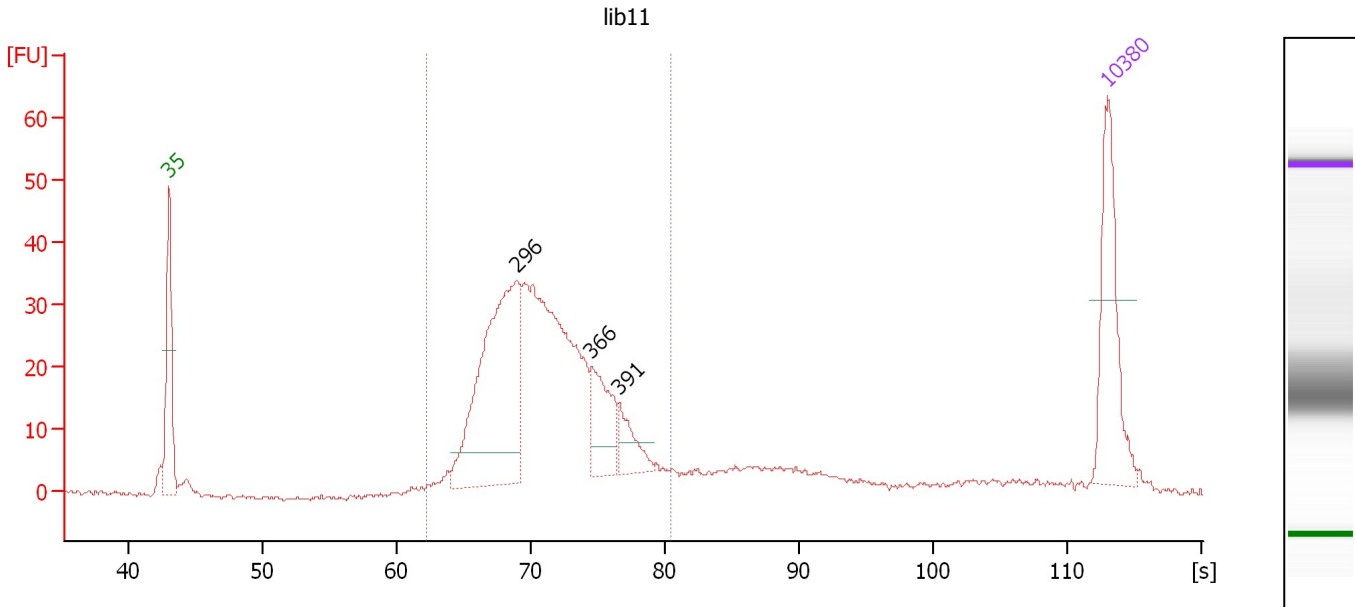
**Region table for sample 10 : lib10**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
62.46	2,324.6	317	476.80	78.57	313.6	82	12.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : lib11**

Number of peaks found: 3                      Corr. Area 1: 465.6  
 Noise: 0.4

**Peak table for sample 11 : lib11**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	296	260.71	1,334.1	
3	366	60.17	249.4	
4	391	29.55	114.4	
5	10,380	75.00	10.9	Upper Marker

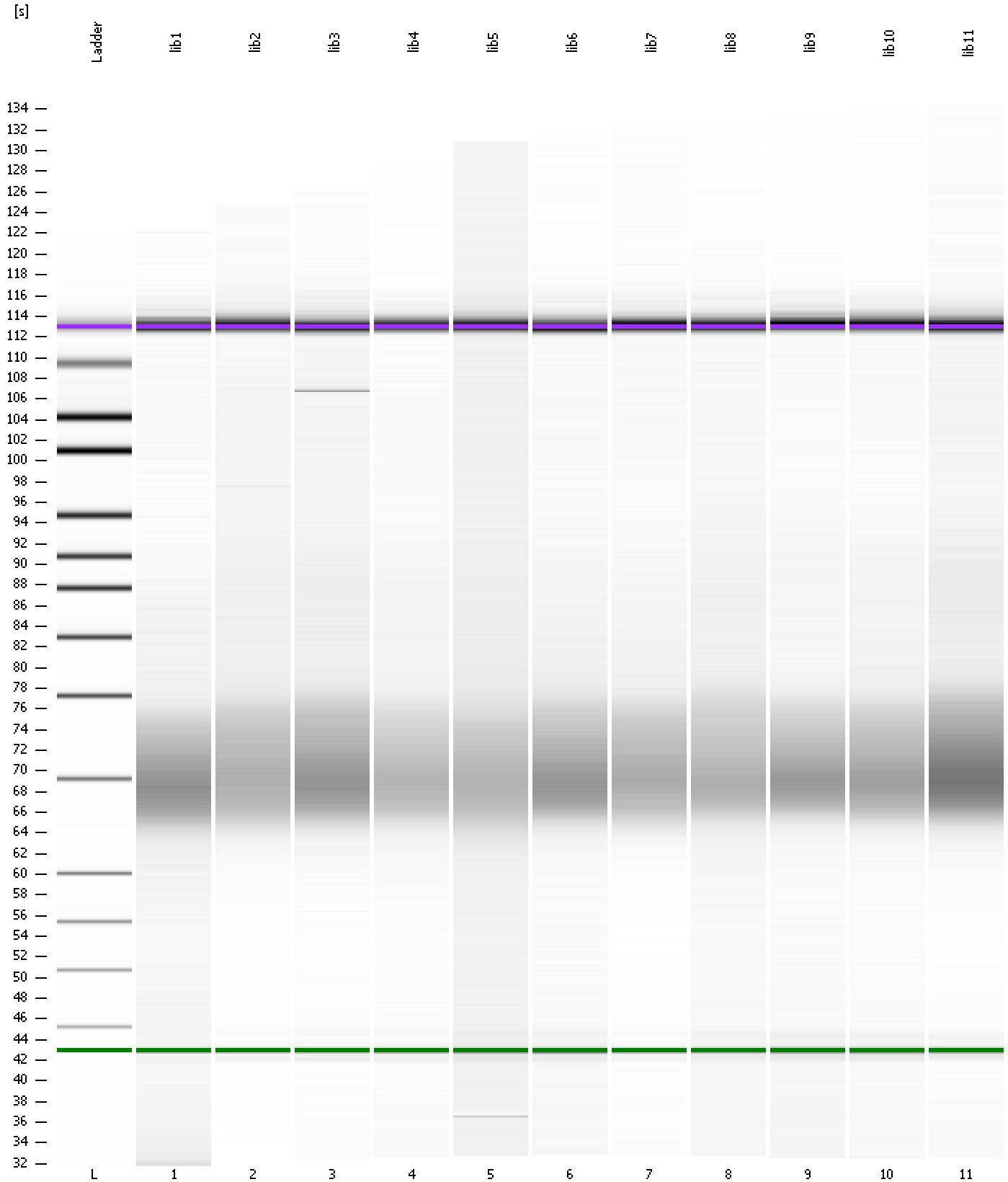
**Region table for sample 11 : lib11**

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
62.21	3,475.0	324	724.35	80.43	465.6	83	14.0	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
Modified: 5/8/2012 11:55:03 AM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08\_002.xad

Created: 5/8/2012 11:12:50 AM  
 Modified: 5/8/2012 11:55:03 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		5/8/2012 11:54:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-08\2012-05-08_002.xad)		Instrument	Run		5/8/2012 11:12:55 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/8/2012 11:12:55 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/8/2012 11:12:55 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/8/2012 11:12:55 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/8/2012 11:12:55 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/8/2012 11:12:55 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/8/2012 11:12:55 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1