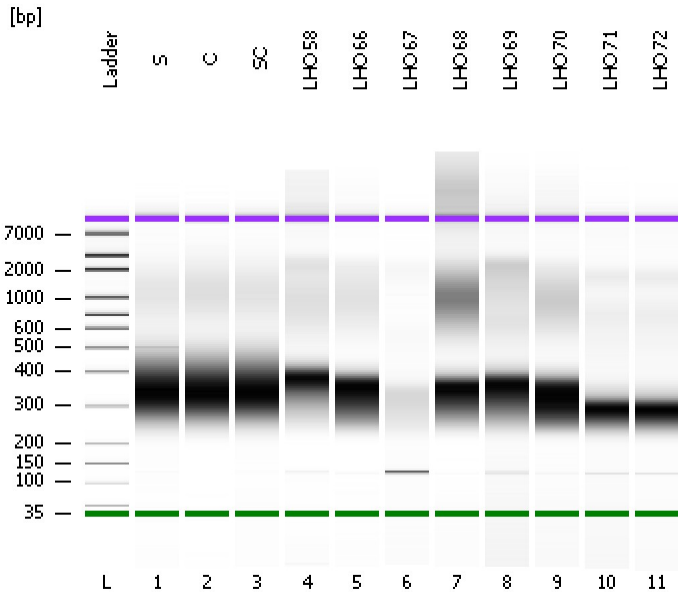


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

Created: 10/22/2013 10:21:49 AM  
Modified: 10/22/2013 11:06:42 AM

### Electrophoresis File Run Summary



#### Instrument Information:

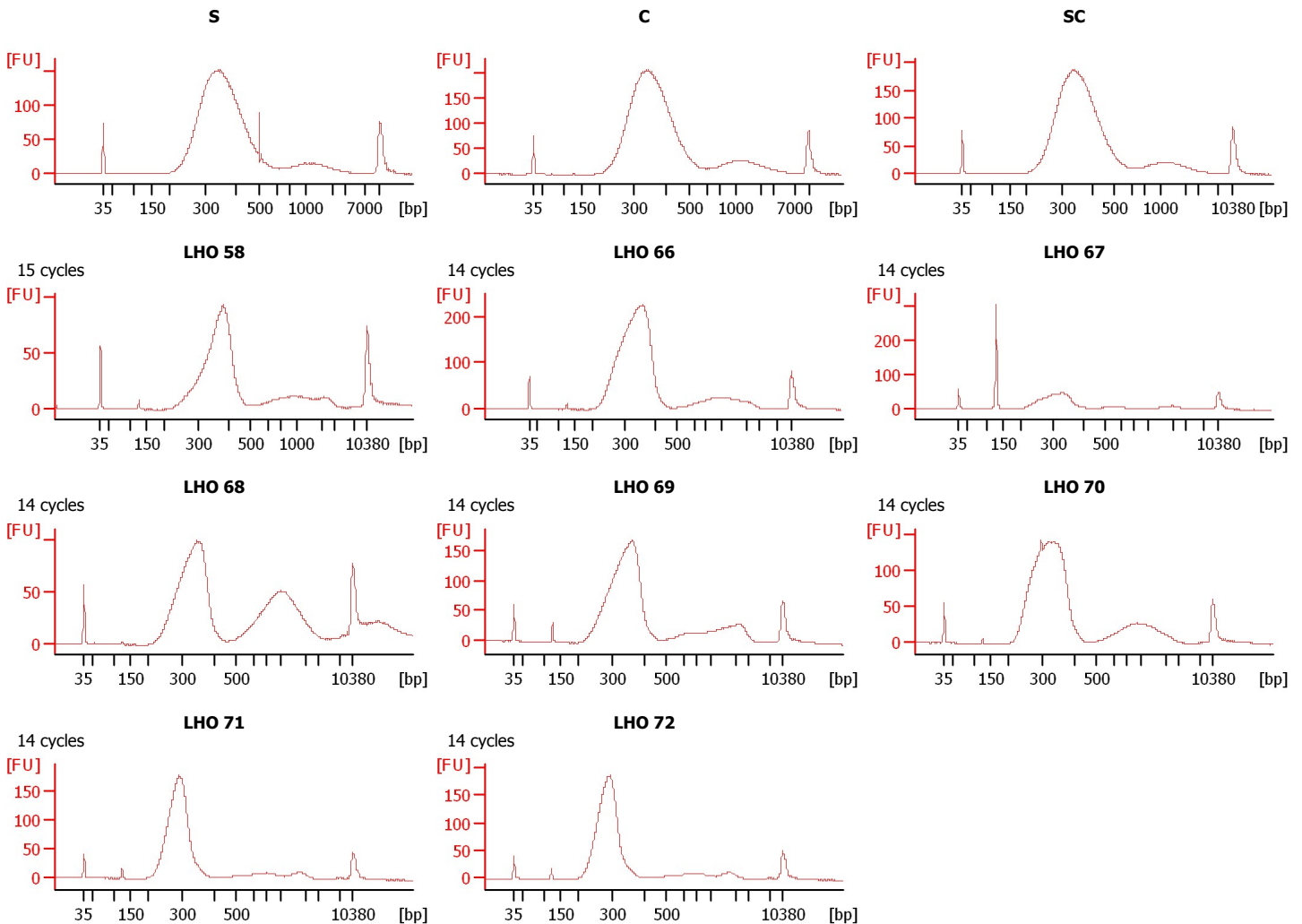
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### 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\2013-10-22\2013-10-22\_001.xad

Created: 10/22/2013 10:21:49 AM  
 Modified: 10/22/2013 11:06:42 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
S		<input type="checkbox"/>	✓			
C		<input type="checkbox"/>	✓			
SC		<input type="checkbox"/>	✓			
LHO 58	15 cycles	<input type="checkbox"/>	✓			
LHO 66	14 cycles	<input type="checkbox"/>	✓			
LHO 67	14 cycles	<input type="checkbox"/>	✓			
LHO 68	14 cycles	<input type="checkbox"/>	✓			
LHO 69	14 cycles	<input type="checkbox"/>	✓			
LHO 70	14 cycles	<input type="checkbox"/>	✓			
LHO 71	14 cycles	<input type="checkbox"/>	✓			
LHO 72	14 cycles	<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\2013-10-22\2013-10-22\_001.xad

Created: 10/22/2013 10:21:49 AM  
Modified: 10/22/2013 11:06:42 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

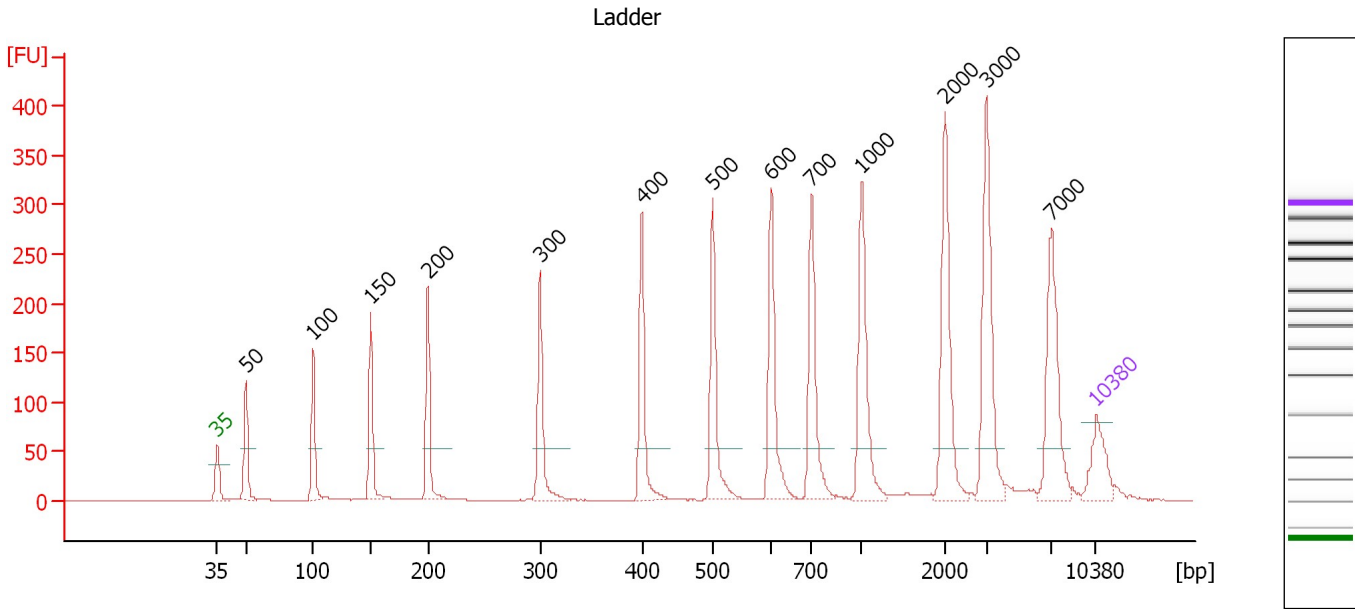
**Ladder**

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\2013-10-22\2013-10-22\_001.xad

Created: 10/22/2013 10:21:49 AM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

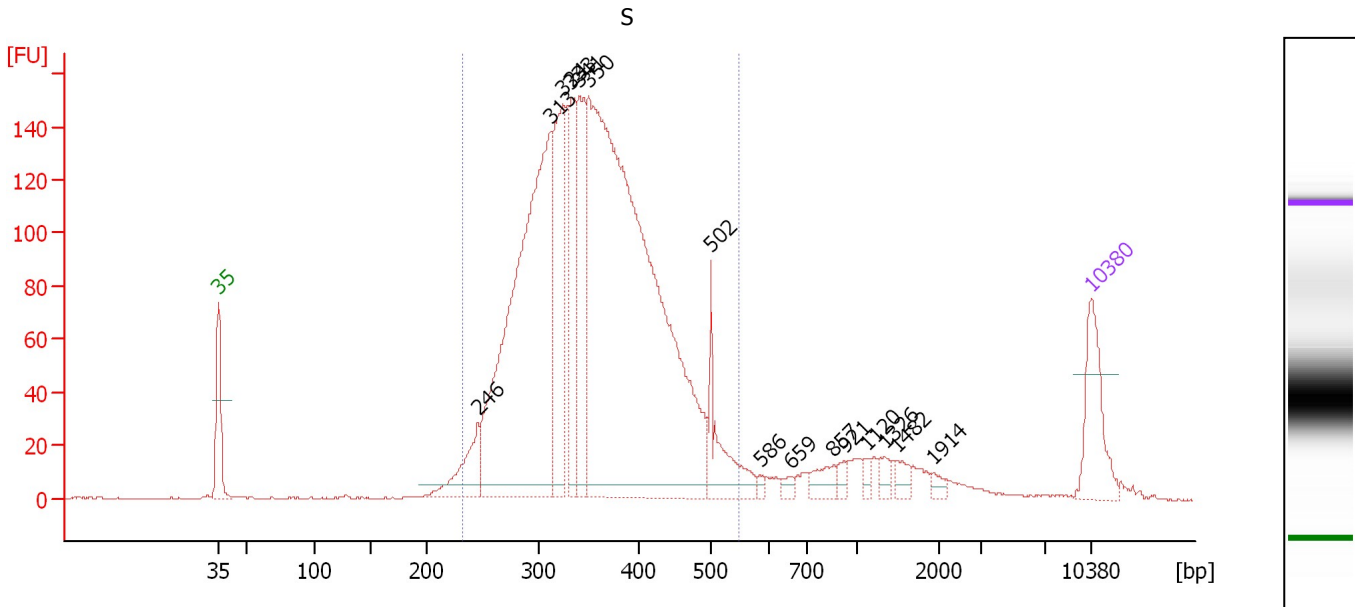
**Peak table for Ladder**

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\2013-10-22\2013-10-22\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : S**

Number of peaks found: 15                      Corr. Area 1: 2,705.1  
 Noise: 0.2

**Peak table for sample 1 : S**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	246	87.20	537.8	
3	313	819.16	3,971.1	
4	324	253.26	1,183.8	
5	333	154.81	705.3	
6	341	193.14	859.4	
7	350	1,386.83	6,003.3	
8	502	94.27	284.5	
9	586	5.70	14.7	
10	659	9.35	21.5	
11	857	25.14	44.5	
12	921	9.51	15.6	
13	1,120	8.28	11.2	
14	1,326	13.57	15.5	
15	1,482	14.33	14.7	
16	1,914	8.89	7.0	
17	10,380	75.00	10.9	Upper Marker

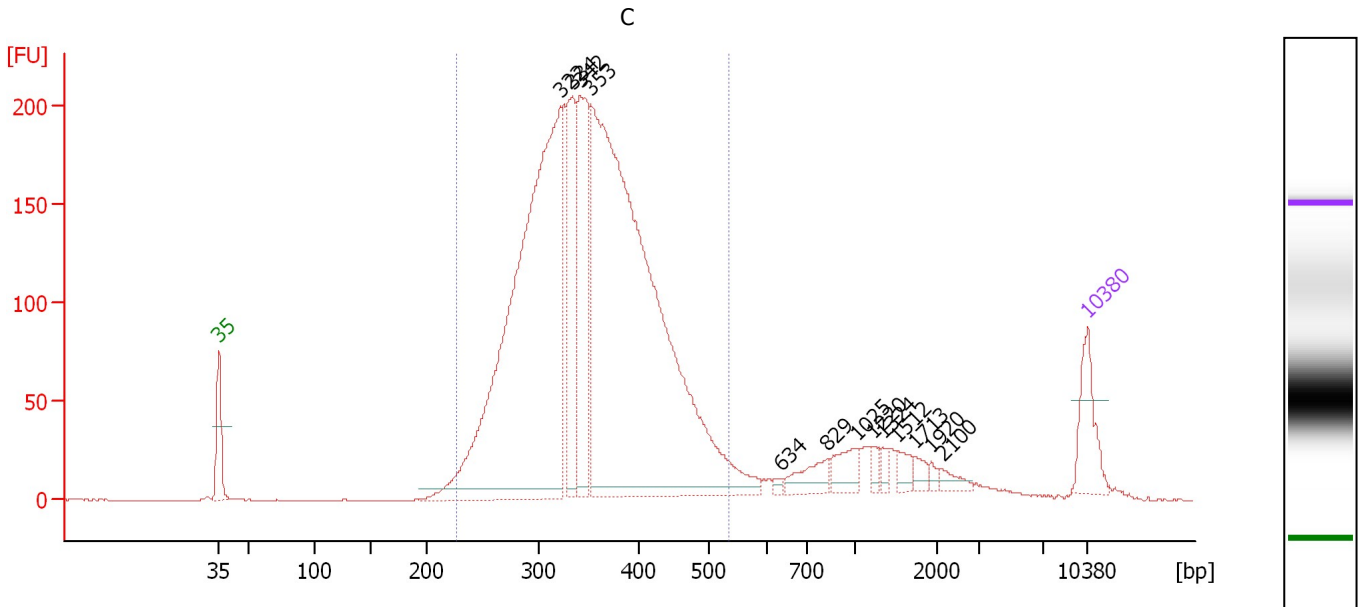
**Region table for sample 1 : S**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
233	549	356	13,023.7	2,935.95	2,705.1	90	17.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

Created: 10/22/2013 10:21:49 AM  
 Modified: 10/22/2013 11:06:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : C**

Number of peaks found: 13                      Corr. Area 1: 3,568.4  
 Noise: 0.2

**Peak table for sample 2 : C**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	322	1,502.54	7,065.0	
3	334	257.20	1,165.3	
4	342	323.19	1,432.5	
5	353	1,842.34	7,908.8	
6	634	8.05	19.3	
7	829	48.84	89.3	
8	1,025	46.88	69.3	
9	1,220	15.32	19.0	
10	1,324	13.60	15.6	
11	1,512	23.05	23.1	
12	1,713	15.36	13.6	
13	1,920	8.42	6.6	
14	2,100	15.84	11.4	
15	10,380	75.00	10.9	Upper Marker

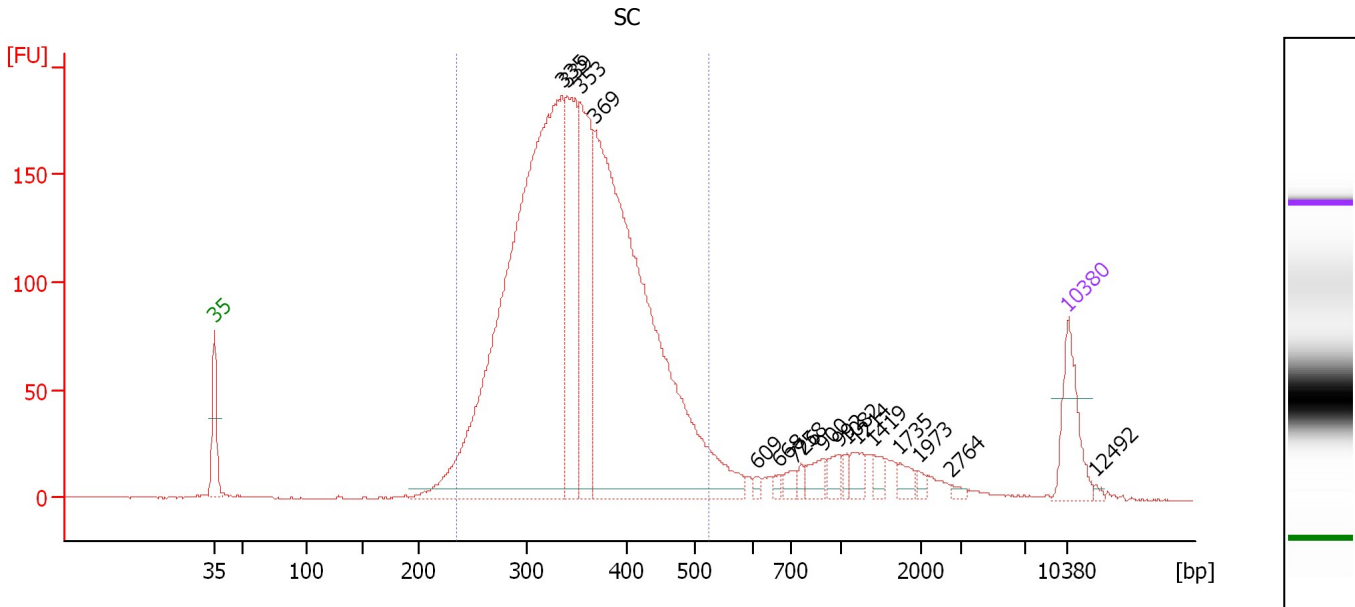
**Region table for sample 2 : C**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
227	535	353	17,878.9	4,002.39	3,568.4	88	17.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

Created: 10/22/2013 10:21:49 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : SC**

Number of peaks found: 17                      Corr. Area 1: 3,237.7  
 Noise: 0.3

**Peak table for sample 3 : SC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	335	1,487.23	6,723.1	
3	339	312.09	1,392.9	
4	353	312.89	1,341.1	
5	369	1,253.68	5,153.6	
6	609	7.64	19.0	
7	668	8.45	19.2	
8	726	16.29	34.0	
9	758	8.57	17.1	
10	900	26.80	45.1	
11	992	21.27	32.5	
12	1,082	10.05	14.1	
13	1,214	23.20	28.9	
14	1,419	15.21	16.2	
15	1,735	17.07	14.9	
16	1,973	7.39	5.7	
17	2,764	5.29	2.9	
18	10,380	75.00	10.9	Upper Marker
19	12,492	0.00	0.0	

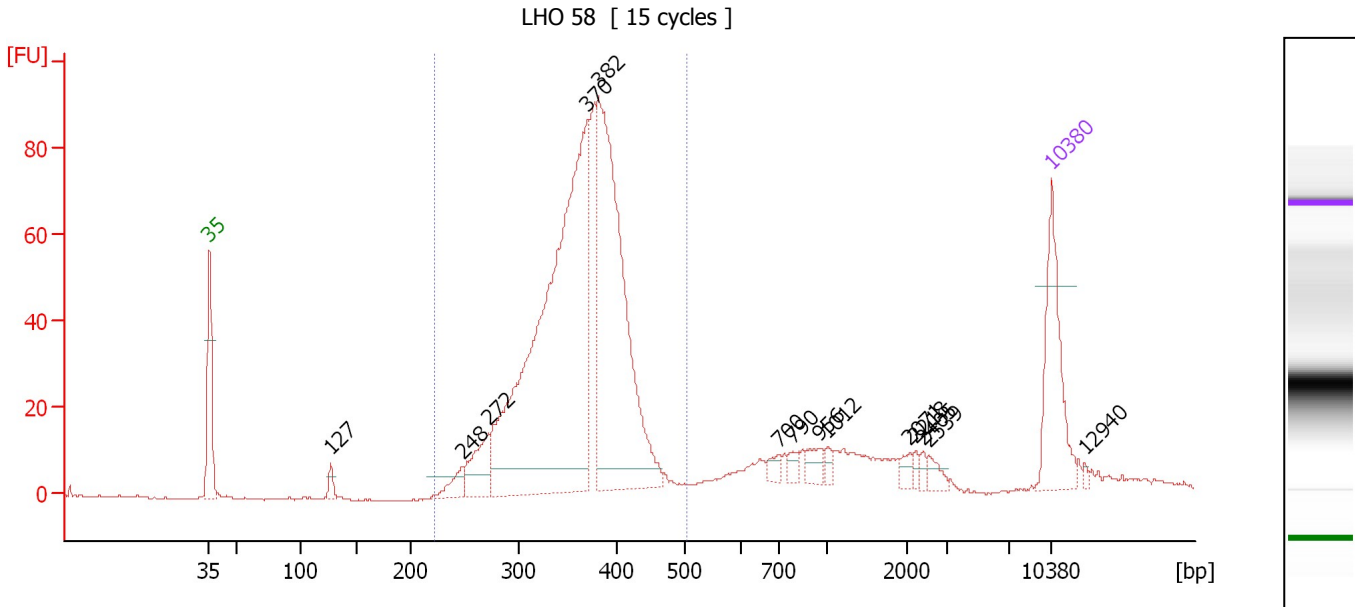
**Region table for sample 3 : SC**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
236	523	353	14,687.5	3,300.01	3,237.7	88	16.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : LHO 58**

Number of peaks found: 14                      Corr. Area 1: 955.4  
 Noise: 0.2

**Peak table for sample 4 : LHO 58**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	11.08	132.5	
3	248	21.31	130.3	
4	272	50.92	283.4	
5	370	642.60	2,632.3	
6	382	401.23	1,591.9	
7	700	9.25	20.0	
8	790	8.23	15.8	
9	956	13.74	21.8	
10	1,012	5.73	8.6	
11	2,071	7.21	5.3	
12	2,218	4.45	3.0	
13	2,405	4.64	2.9	
14	2,539	8.65	5.2	
15	10,380	75.00	10.9	Upper Marker
16	12,940	0.00	0.0	

**Region table for sample 4 : LHO 58**

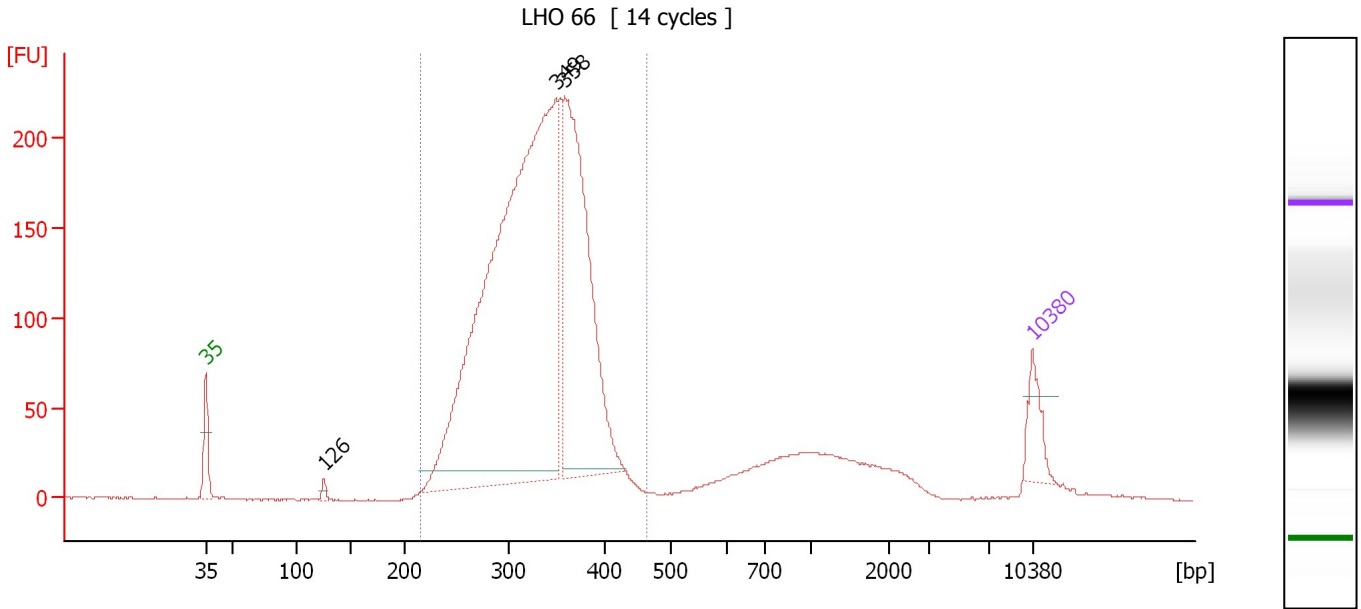
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
221	506	360	5,272.3	1,227.93	955.4	85	12.2	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

Created: 10/22/2013 10:21:49 AM  
 Modified: 10/22/2013 11:06:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : LHO 66**

Number of peaks found: 3                      Corr. Area 1: 3,100.3  
 Noise: 0.4

**Peak table for sample 5 : LHO 66**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	126	16.20	194.9	
3	349	2,588.68	11,239.4	
4	358	1,036.99	4,383.5	
5	10,380	75.00	10.9	Upper Marker

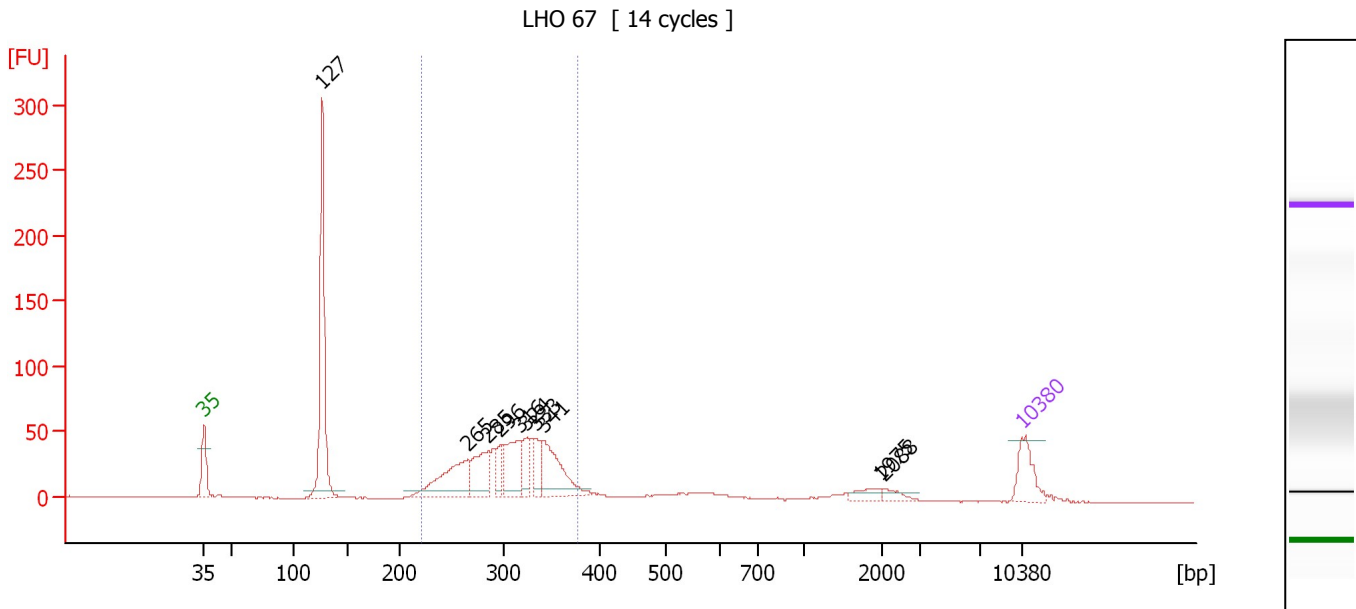
**Region table for sample 5 : LHO 66**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
215	464	328	20,540.4	4,350.01	3,100.3	87	13.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : LHO 67**

Number of peaks found: 10                      Corr. Area 1: 623.7  
 Noise: 0.3

**Peak table for sample 6 : LHO 67**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	604.34	7,205.3	
3	265	222.51	1,271.6	
4	285	146.98	782.6	
5	296	59.92	306.4	
6	316	160.57	769.4	
7	324	79.61	372.8	
8	333	66.86	304.6	
9	341	194.41	863.9	
10	1,975	25.13	19.3	
11	2,088	18.06	13.1	
12	10,380	75.00	10.9	Upper Marker

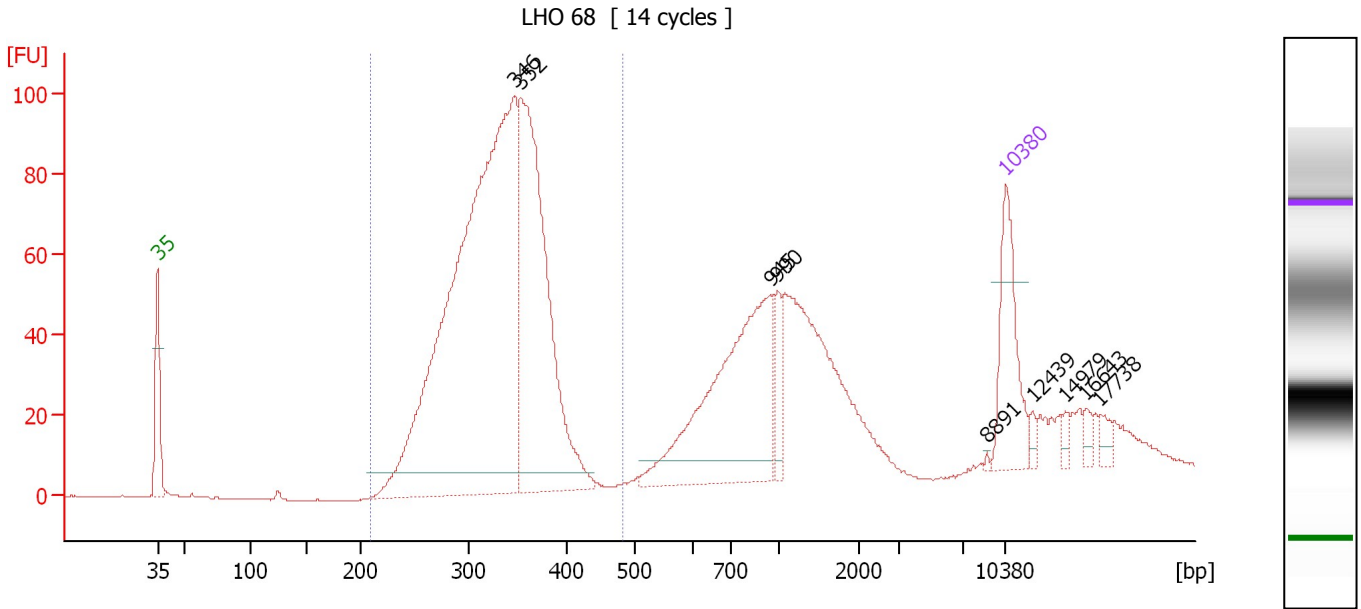
**Region table for sample 6 : LHO 67**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
220	378	304	5,509.5	1,083.52	623.7	58	12.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : LHO 68**

Number of peaks found: 9                      Corr. Area 1: 1,132.5  
 Noise: 0.1

**Peak table for sample 7 : LHO 68**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	346	935.50	4,093.4	
3	352	434.58	1,870.8	
4	945	262.09	420.1	
5	990	29.68	45.4	
6	8,891	1.38	0.2	
7	10,380	75.00	10.9	Upper Marker
8	12,439	0.00	0.0	
9	14,979	0.00	0.0	
10	16,643	0.00	0.0	
11	17,738	0.00	0.0	

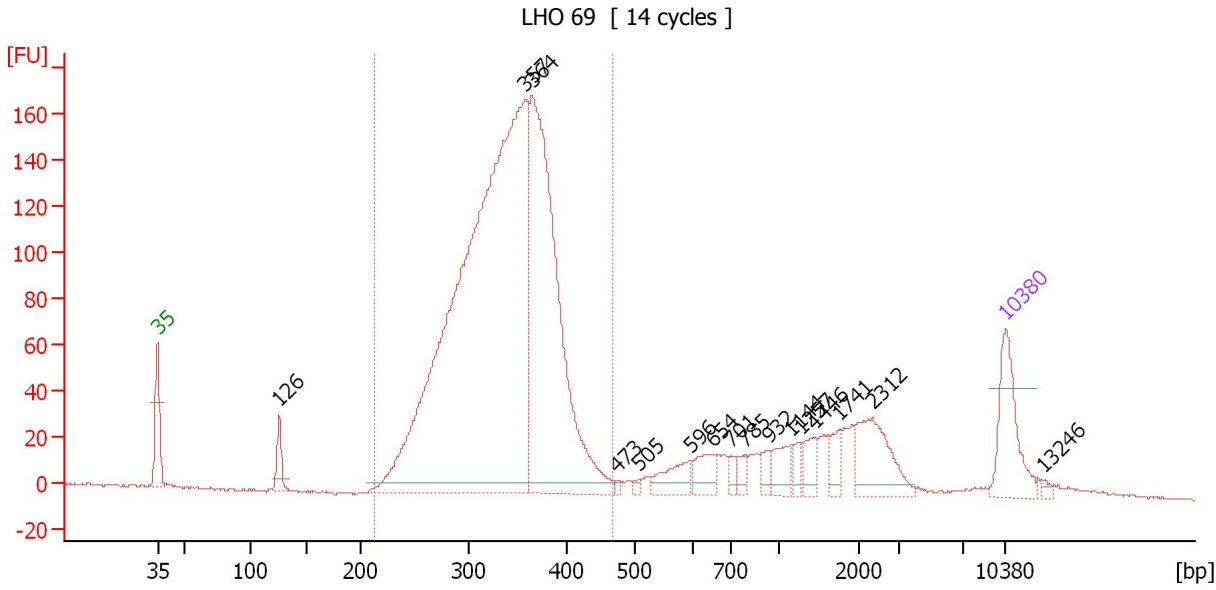
**Region table for sample 7 : LHO 68**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
210	481	328	6,343.3	1,350.23	1,132.5	64	11.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

Created: 10/22/2013 10:21:49 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : LHO 69**

Number of peaks found: 16                      Corr. Area 1: 2,152.4  
 Noise: 0.5

**Peak table for sample 8 : LHO 69**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	126	36.82	441.9	
3	357	1,504.12	6,378.4	
4	364	656.20	2,730.1	
5	473	4.22	13.5	
6	505	4.81	14.4	
7	596	38.85	98.8	
8	654	34.02	78.8	
9	701	10.63	23.0	
10	785	12.51	24.2	
11	932	16.06	26.1	
12	1,144	28.78	38.1	
13	1,257	12.35	14.9	
14	1,446	24.68	25.9	
15	1,741	21.27	18.5	
16	2,312	79.94	52.4	
17	10,380	75.00	10.9	Upper Marker
18	13,246	0.00	0.0	

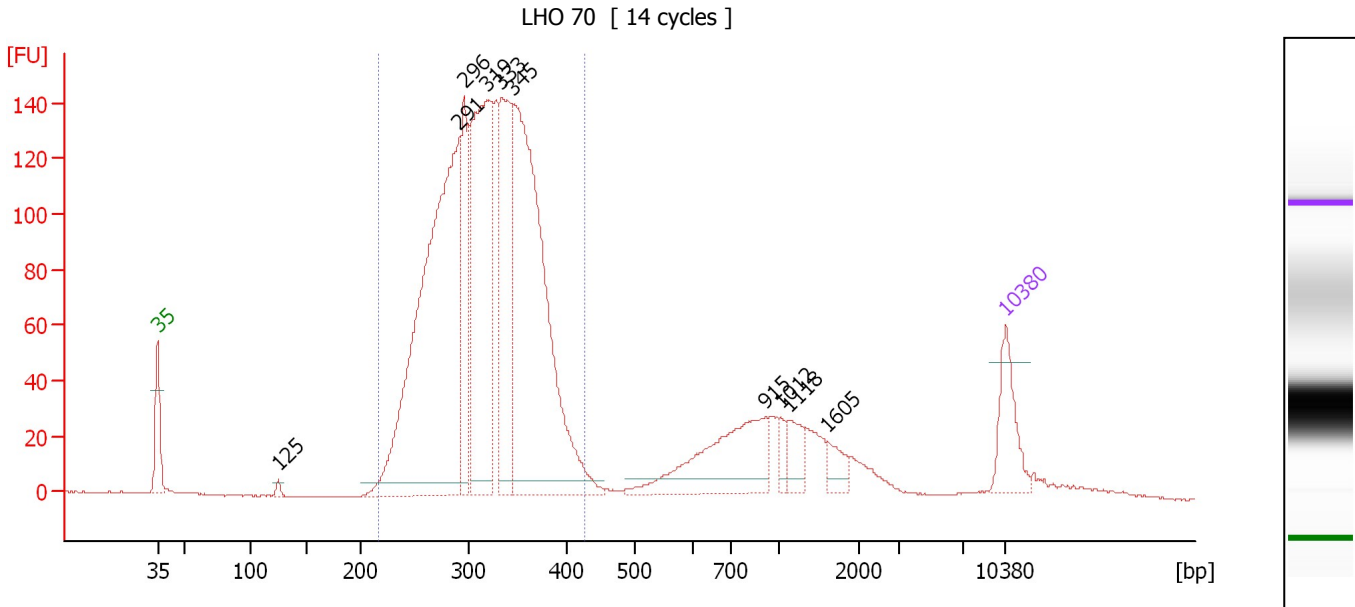
**Region table for sample 8 : LHO 69**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
213	467	335	10,464.7	2,265.41	2,152.4	80	13.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : LHO 70**

Number of peaks found: 10                      Corr. Area 1: 2,154.1  
 Noise: 0.3

**Peak table for sample 9 : LHO 70**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	125	9.11	110.2	
3	291	1,061.91	5,523.1	
4	296	200.84	1,029.8	
5	319	561.60	2,670.0	
6	333	330.83	1,504.8	
7	345	888.19	3,898.3	
8	915	214.51	355.4	
9	1,012	21.15	31.7	
10	1,118	44.24	60.0	
11	1,605	30.59	28.9	
12	10,380	75.00	10.9	Upper Marker

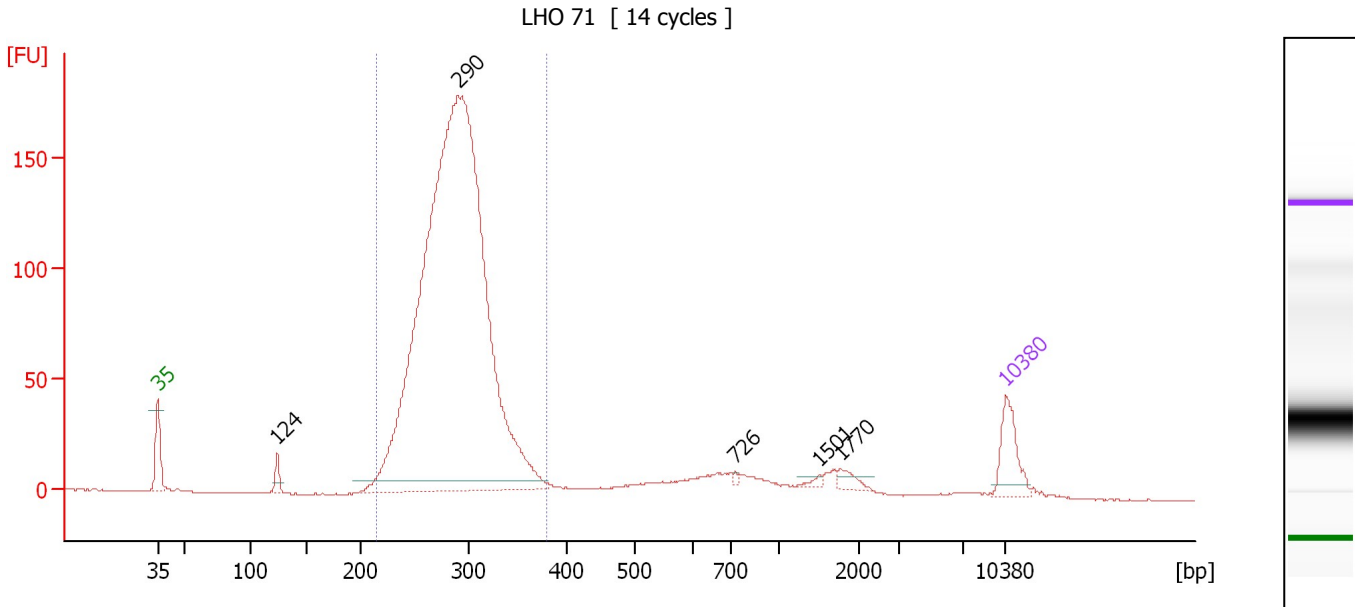
**Region table for sample 9 : LHO 70**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
217	424	317	15,786.2	3,225.01	2,154.1	82	13.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : LHO 71**

Number of peaks found: 5                      Corr. Area 1: 1,630.2  
 Noise: 0.2

**Peak table for sample 10 : LHO 71**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	124	35.82	436.8	
3	290	3,188.84	16,650.2	
4	726	5.44	11.4	
5	1,501	7.62	7.7	
6	1,770	19.80	16.9	
7	10,380	75.00	10.9	Upper Marker

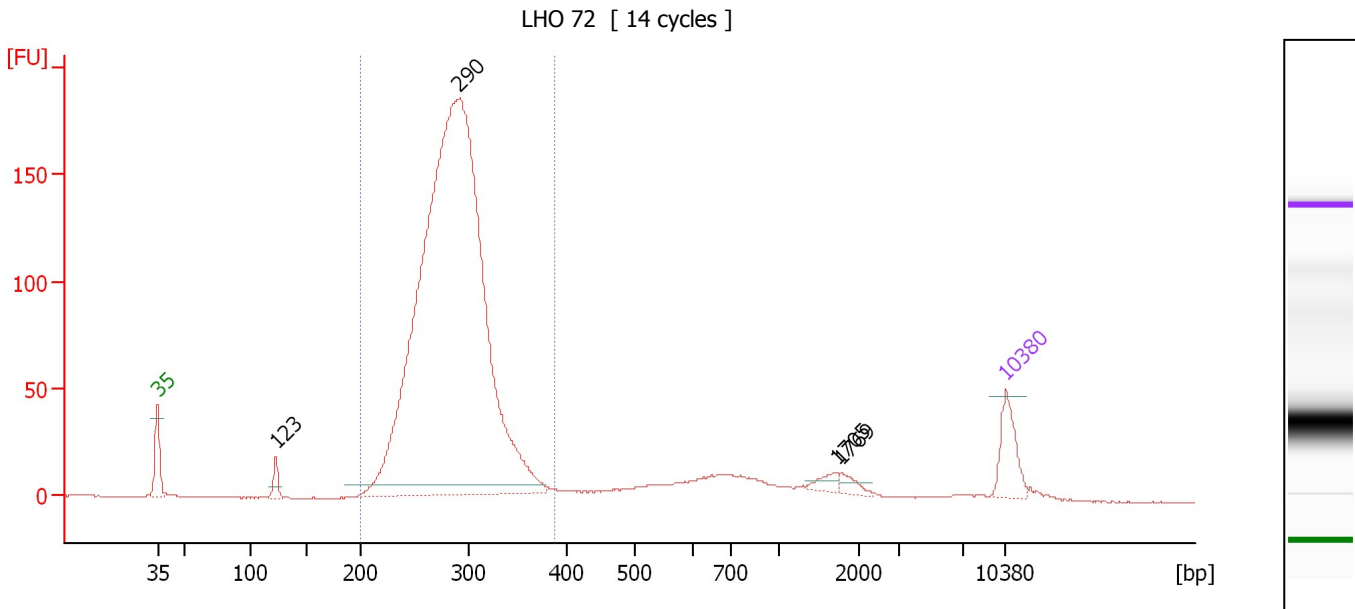
**Region table for sample 10 : LHO 71**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
214	379	287	17,258.6	3,240.10	1,630.2	87	10.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

Created: 10/22/2013 10:21:49 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : LHO 72**

Number of peaks found: 4                      Corr. Area 1: 1,715.0  
 Noise: 0.1

**Peak table for sample 11 : LHO 72**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	123	37.19	458.1	
3	290	3,199.19	16,737.9	
4	1,705	20.91	18.6	
5	1,769	19.31	16.5	
6	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : LHO 72**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	386	285	17,751.7	3,309.78	1,715.0	87	10.5	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22\_001.xad

Created: 10/22/2013 10:21:49 AM  
Modified: 10/22/2013 11:06:42 AM

**Gel Image**

