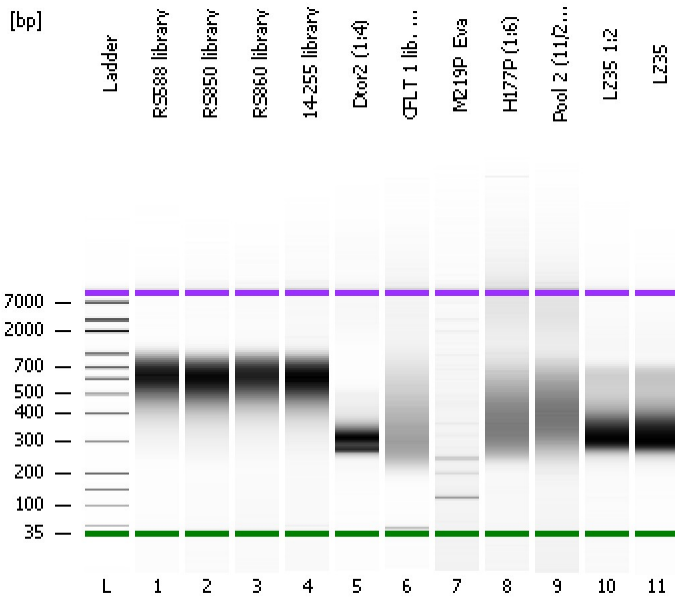


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
Modified: 11/2/2015 2:59:24 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

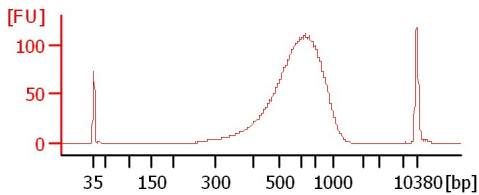
Assay Information:

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

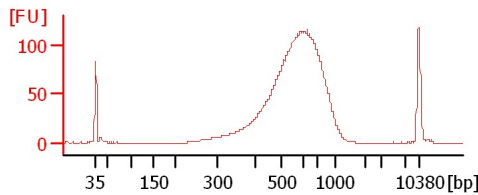
Chip Information:

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

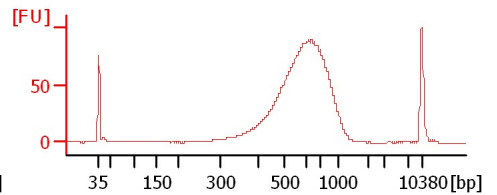
**RS588 library**



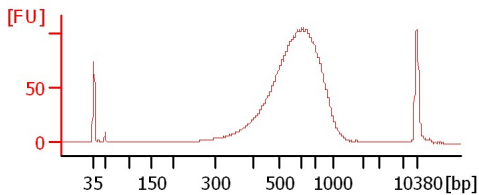
**RS850 library**



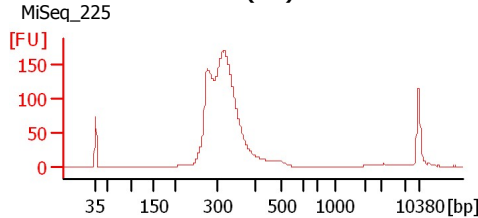
**RS860 library**



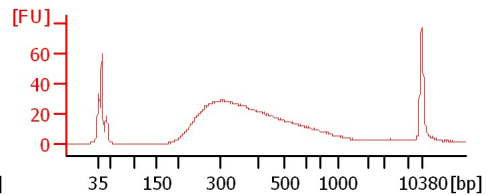
**14-255 library**



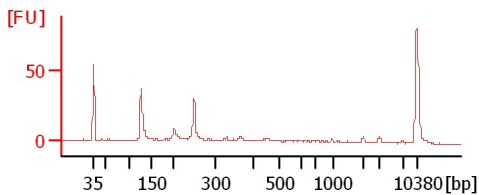
**Dtor2 (1:4)**



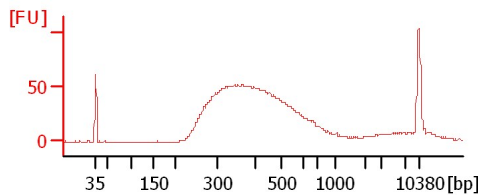
**CFLT 1 lib. with extra PCR**



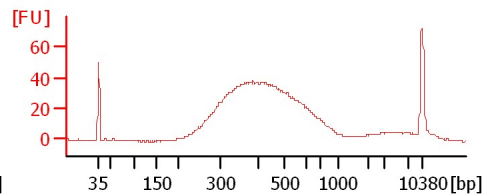
**M219P\_Eva**



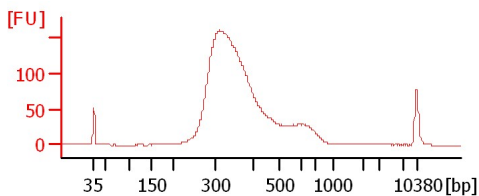
**H177P (1:6)**



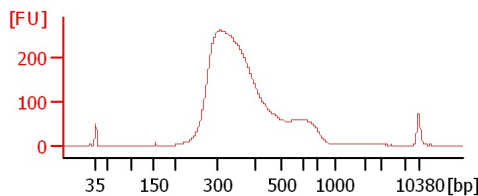
**Pool 2 (11/2/15 submission)**



**LZ35 1:2**



**LZ35**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
Modified: 11/2/2015 2:59:24 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
RS588 library		<input type="checkbox"/>	✓			
RS850 library		<input type="checkbox"/>	✓			
RS860 library		<input type="checkbox"/>	✓			
14-255 library		<input type="checkbox"/>	✓			
Dtor2 (1:4)	MiSeq_225	<input type="checkbox"/>	✓			
CFLT 1 lib. with extra PCR		<input type="checkbox"/>	✓			
M219P_Eva		<input type="checkbox"/>	✓			
H177P (1:6)		<input type="checkbox"/>	✓			
Pool 2 (11/2/15 submission)		<input type="checkbox"/>	✓			
LZ35 1:2		<input type="checkbox"/>	✓			
LZ35		<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\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
Modified: 11/2/2015 2:59:24 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

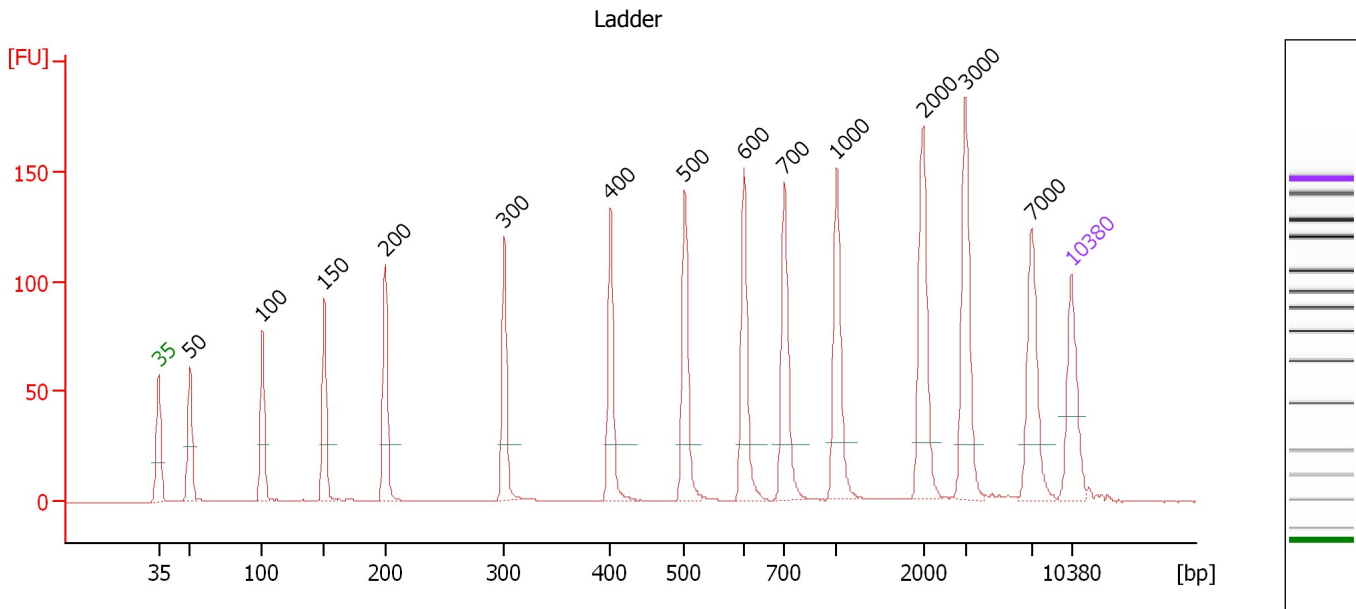
**Ladder**

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\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

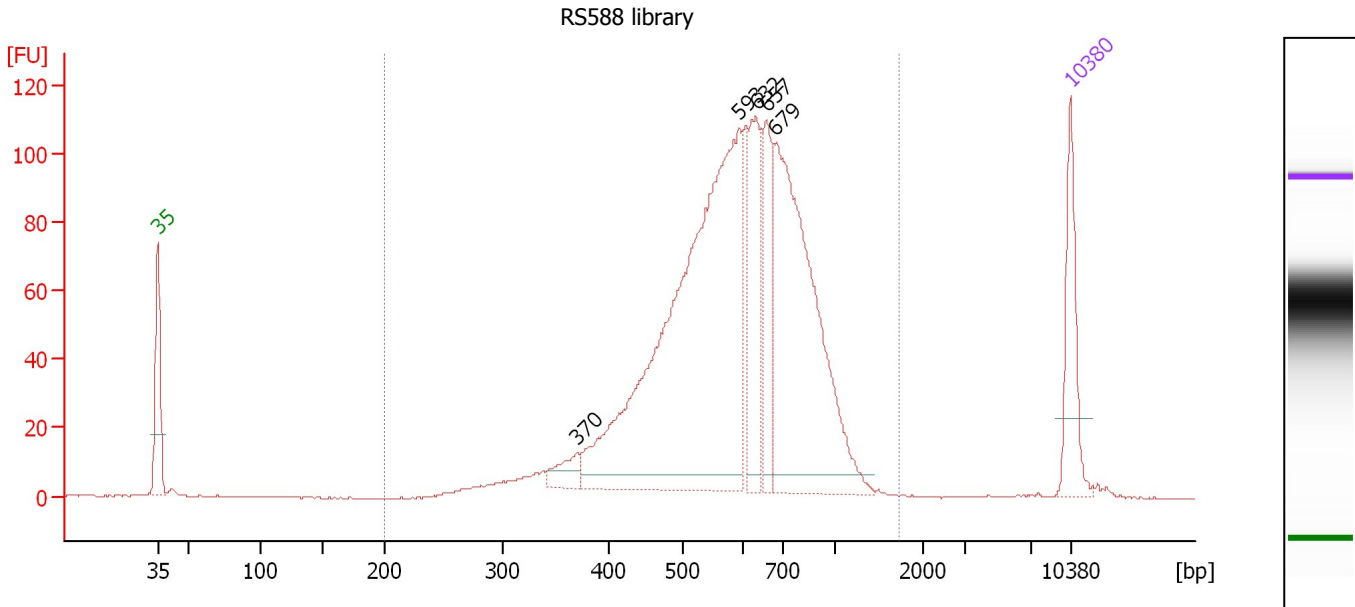
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.40
3	100	150.00	2,272.7	Ladder Peak	50.93
4	150	150.00	1,515.2	Ladder Peak	55.68
5	200	150.00	1,136.4	Ladder Peak	60.38
6	300	150.00	757.6	Ladder Peak	69.52
7	400	150.00	568.2	Ladder Peak	77.66
8	500	150.00	454.5	Ladder Peak	83.35
9	600	150.00	378.8	Ladder Peak	87.89
10	700	150.00	324.7	Ladder Peak	91.02
11	1,000	150.00	227.3	Ladder Peak	94.99
12	2,000	150.00	113.6	Ladder Peak	101.62
13	3,000	150.00	75.8	Ladder Peak	104.86
14	7,000	150.00	32.5	Ladder Peak	109.92
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : RS588 library**

Number of peaks found: 5                      Corr. Area 1: 1,550.1  
 Noise: 0.1

**Peak table for sample 1 : RS588 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	370	30.32	124.3		75.19
3	593	767.31	1,959.8		87.58
4	632	143.15	343.2		88.90
5	657	107.49	247.8		89.68
6	679	450.35	1,004.9		90.37
7	10,380	75.00	10.9	Upper Marker	113.00

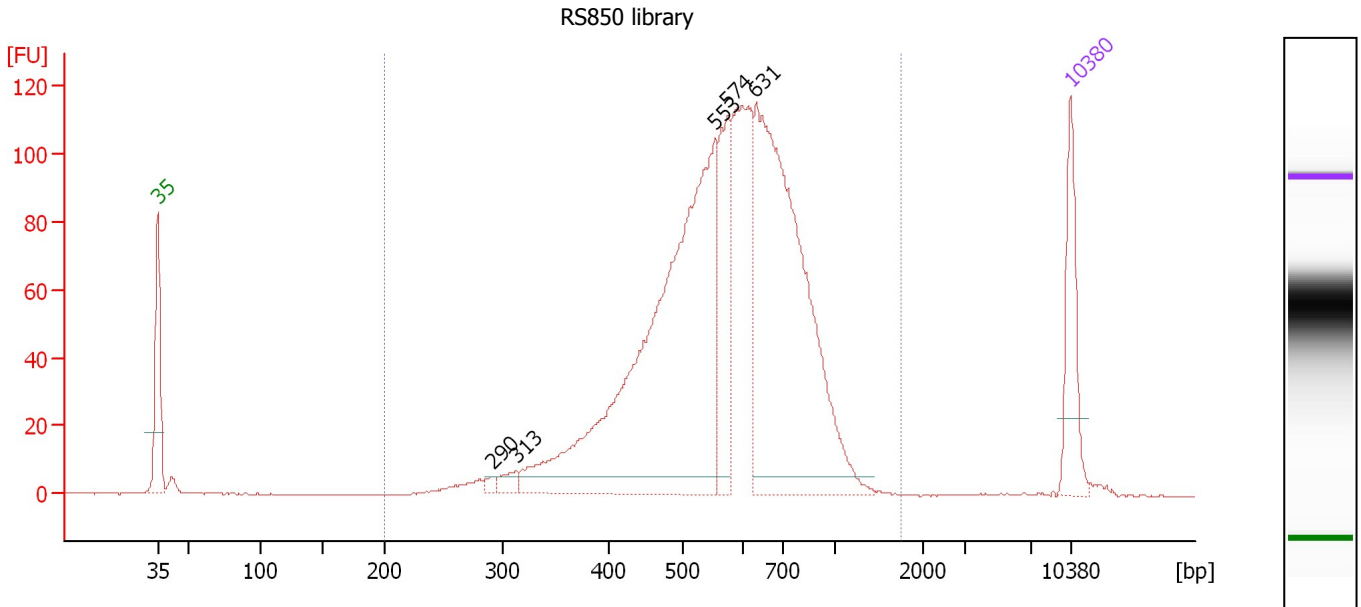
**Region table for sample 1 : RS588 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,733	617	1,550.1	4,752.4	1,749.38	98	28.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : RS850 library**

Number of peaks found: 5                      Corr. Area 1: 1,676.5  
 Noise: 0.1

**Peak table for sample 2 : RS850 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	290	8.06	42.1		68.65
3	313	16.27	78.9		70.54
4	553	742.05	2,031.5		85.78
5	574	134.88	355.9		86.72
6	631	578.83	1,388.8		88.88
7	10,380	75.00	10.9	Upper Marker	113.00

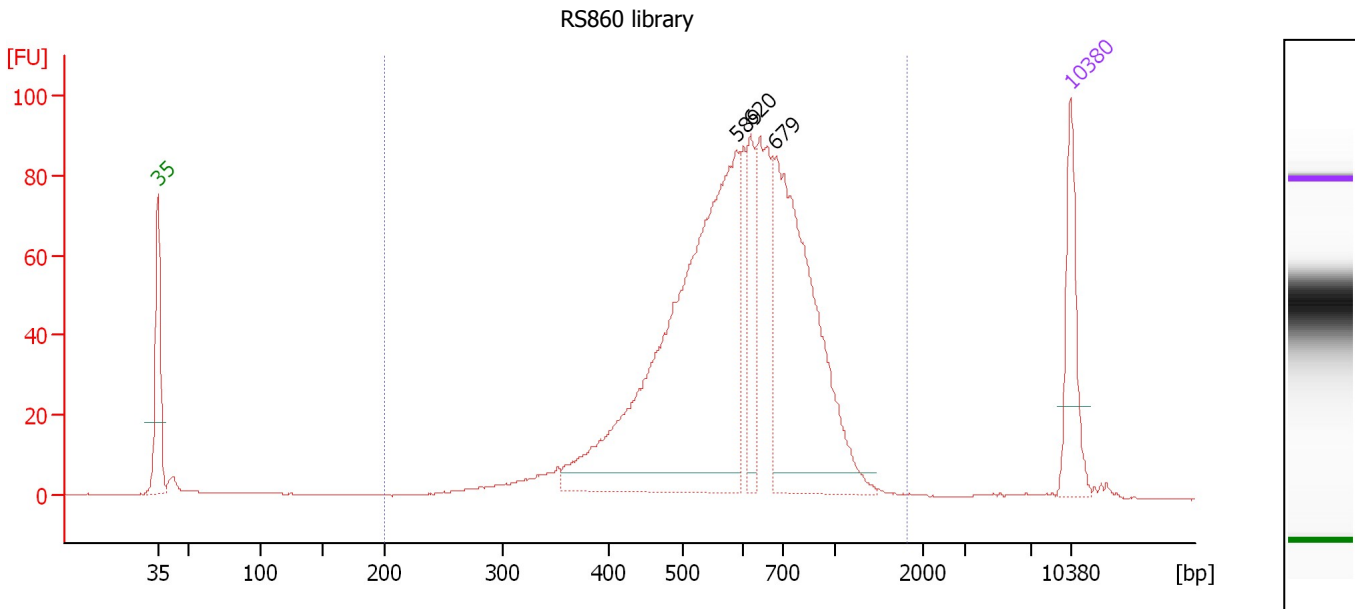
**Region table for sample 2 : RS850 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,745	594	1,676.5	5,116.6	1,814.24	98	27.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : RS860 library**

Number of peaks found: 3                      Corr. Area 1: 1,255.5  
 Noise: 0.2

**Peak table for sample 3 : RS860 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	589	688.11	1,769.6		87.40
3	620	85.88	209.9		88.52
4	679	414.39	924.3		90.37
5	10,380	75.00	10.9	Upper Marker	113.00

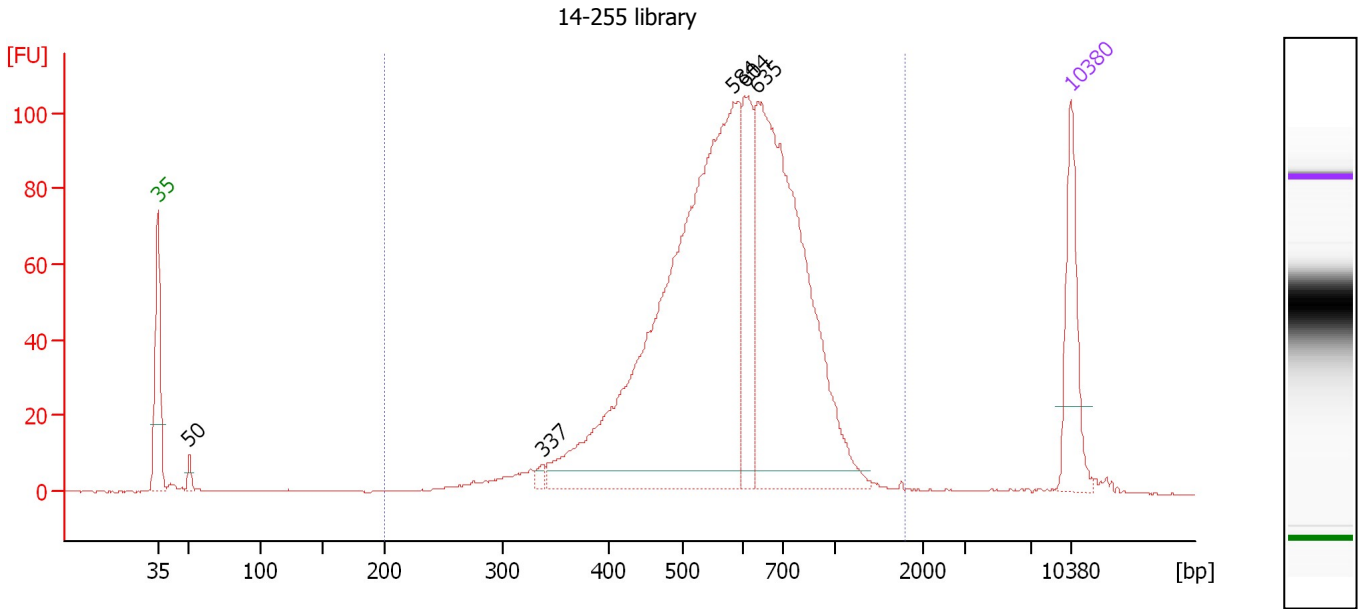
**Region table for sample 3 : RS860 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,817	622	1,255.5	4,182.7	1,550.12	97	28.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 14-255 library**

Number of peaks found: 5                      Corr. Area 1: 1,506.1  
 Noise: 0.1

**Peak table for sample 4 : 14-255 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	11.13	335.8		45.43
3	337	7.09	31.8		72.55
4	584	819.33	2,125.5		87.17
5	604	131.31	329.2		88.03
6	635	546.95	1,304.2		89.00
7	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : 14-255 library**

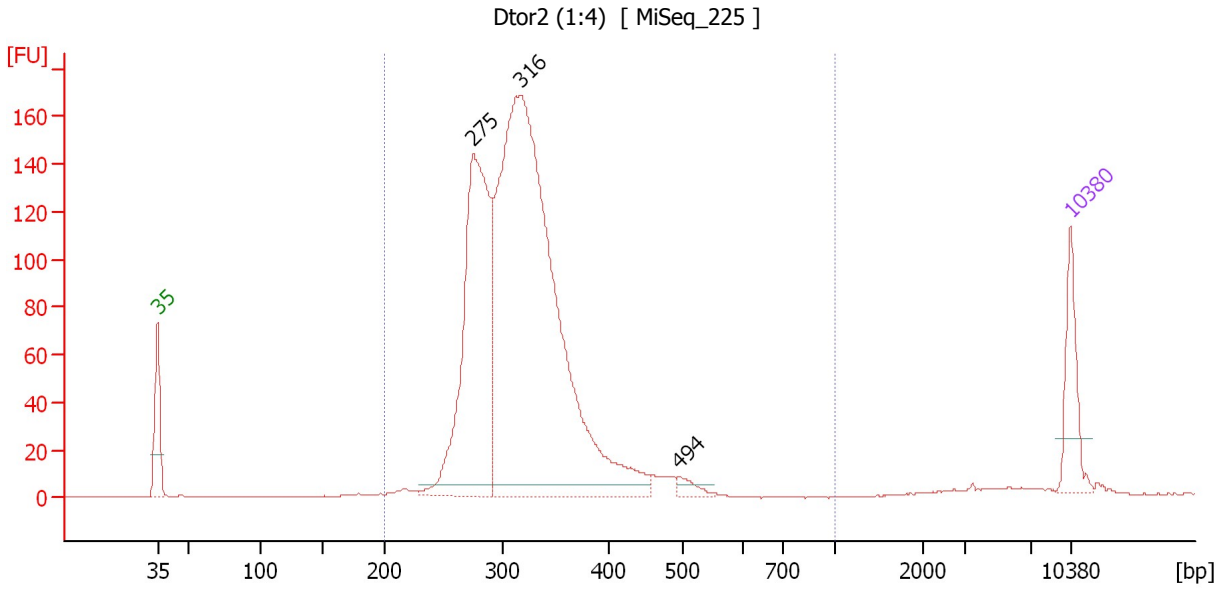
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,793	606	1,506.1	4,701.0	1,695.13	96	29.4



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Dtor2 (1:4)**

Number of peaks found: 3                      Corr. Area 1: 1,736.7  
 Noise: 0.1

**Peak table for sample 5 : Dtor2 (1:4)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	275	667.94	3,684.0		67.21
3	316	1,542.54	7,397.9		70.81
4	494	20.65	63.4		83.00
5	10,380	75.00	10.9	Upper Marker	113.00

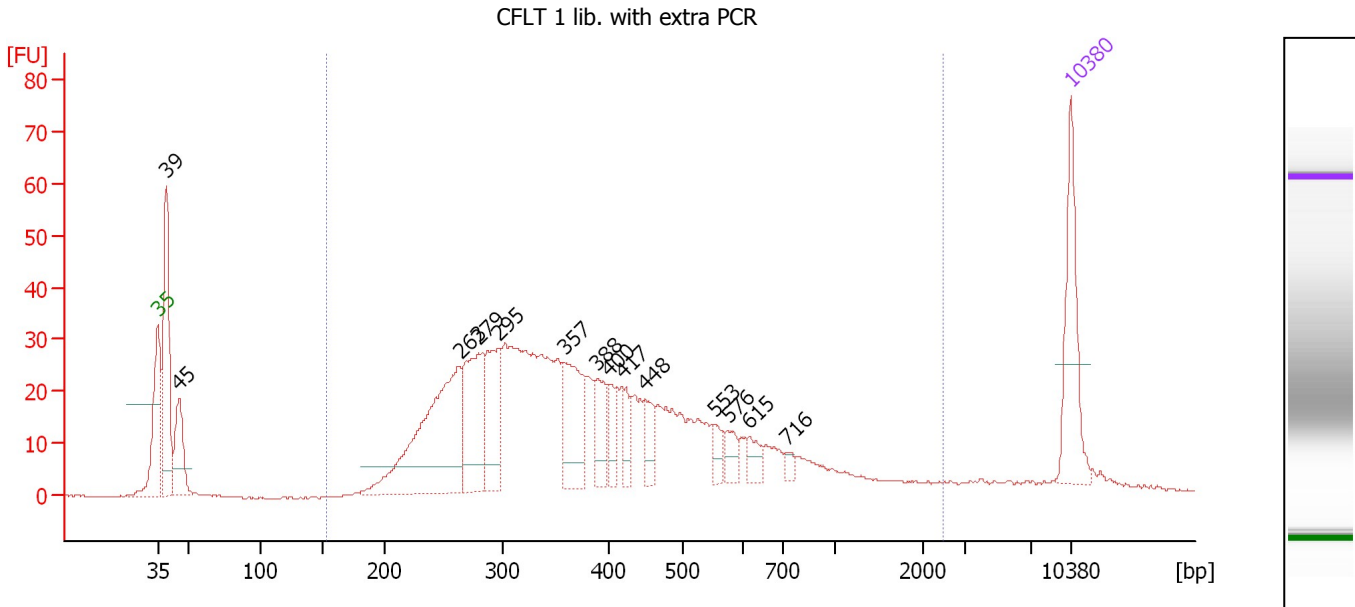
**Region table for sample 5 : Dtor2 (1:4)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	322	1,736.7	10,932.3	2,259.01	94	17.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : CFLT 1 lib. with extra PCR**

Number of peaks found: 14                      Corr. Area 1: 843.8  
 Noise: 0.2

**Peak table for sample 6 : CFLT 1 lib. with extra PCR**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	39	174.85	6,781.1		43.65
3	45	74.39	2,495.4		44.63
4	263	254.24	1,462.7		66.17
5	279	123.90	671.9		67.64
6	295	97.27	498.9		69.10
7	357	93.29	396.1		74.15
8	388	47.12	183.9		76.70
9	400	29.90	113.4		77.62
10	417	27.81	100.9		78.65
11	448	25.79	87.2		80.39
12	553	17.65	48.4		85.76
13	576	19.88	52.3		86.79
14	615	16.67	41.1		88.36
15	716	8.16	17.3		91.24
16	10,380	75.00	10.9	Upper Marker	113.00

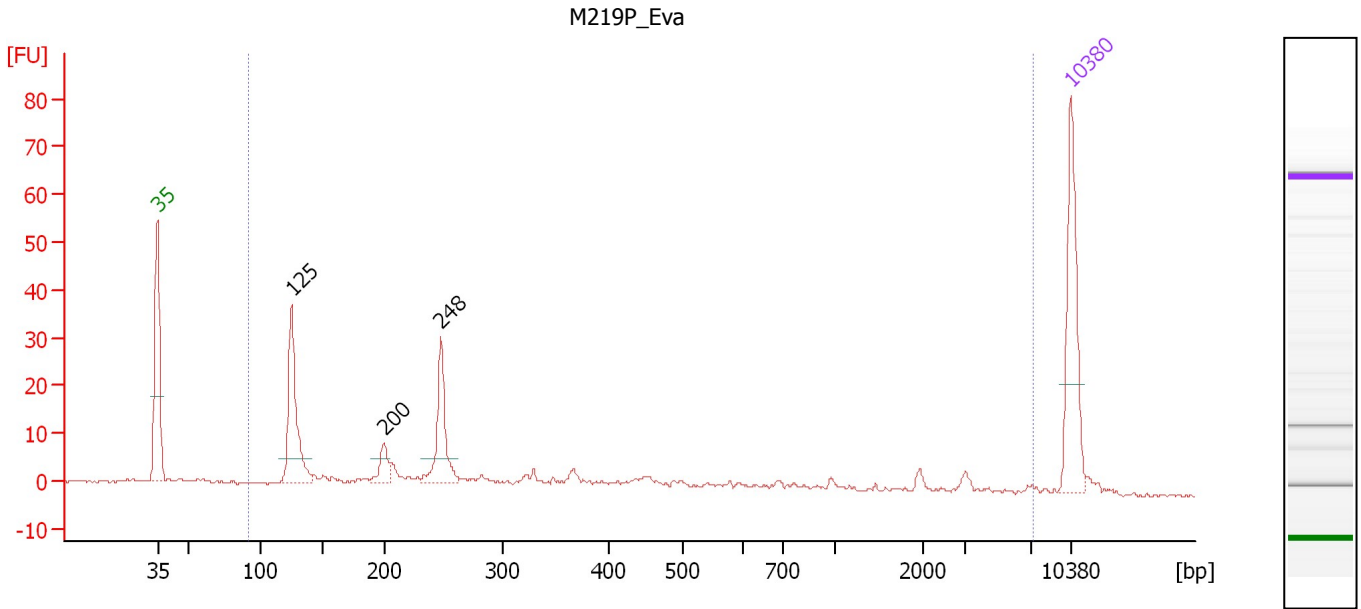
**Region table for sample 6 : CFLT 1 lib. with extra PCR**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
153	2,479	454	843.8	6,773.5	1,547.23	84	66.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : M219P\_Eva**

Number of peaks found: 3                      Corr. Area 1: 161.6  
 Noise: 0.2

**Peak table for sample 7 : M219P\_Eva**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	125	114.86	1,396.6		53.27
3	200	21.20	160.4		60.40
4	248	65.26	399.5		64.72
5	10,380	75.00	10.9	Upper Marker	113.00

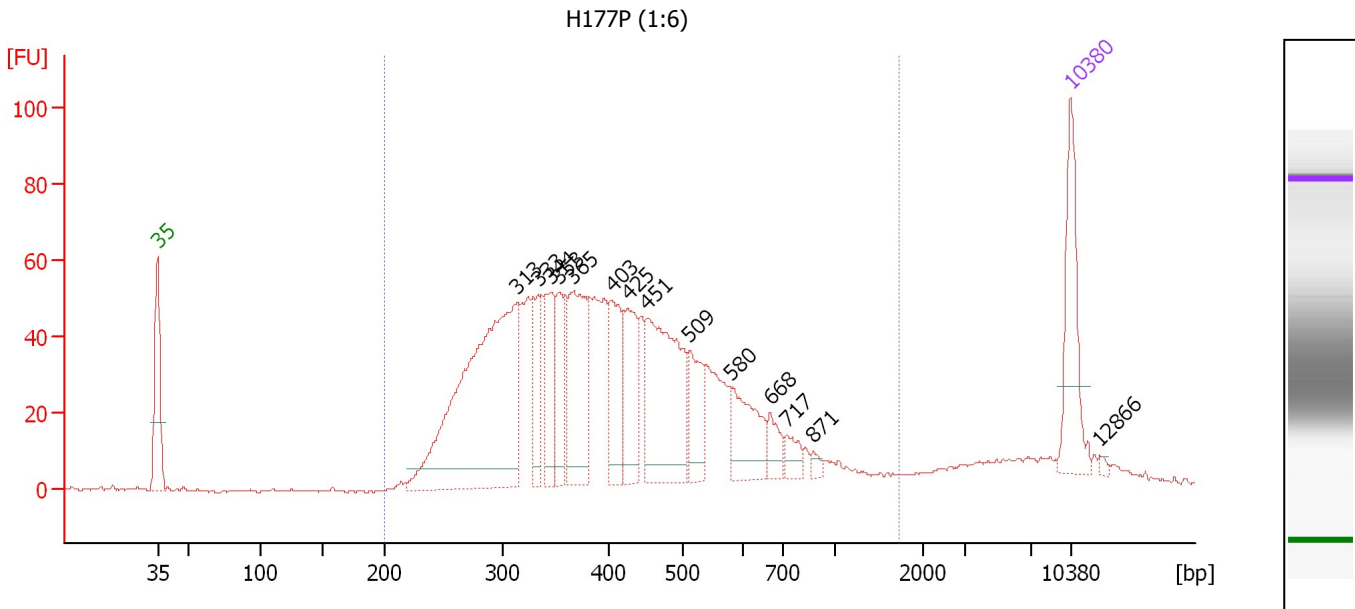
**Region table for sample 7 : M219P\_Eva**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
91	7,193	563	161.6	2,603.8	341.40	93	100.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : H177P (1:6)**

Number of peaks found: 14                      Corr. Area 1: 1,409.6  
 Noise: 0.4

**Peak table for sample 8 : H177P (1:6)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	313	441.15	2,135.1		70.58
3	333	66.04	300.9		72.17
4	344	70.10	308.4		73.13
5	353	63.65	273.4		73.81
6	365	146.28	606.9		74.83
7	403	82.29	309.4		77.83
8	425	77.55	276.5		79.08
9	451	183.95	618.3		80.55
10	509	57.06	169.7		83.78
11	580	70.46	183.9		87.00
12	668	22.34	50.7		90.01
13	717	17.69	37.4		91.25
14	871	5.74	10.0		93.29
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,866	0.00	0.0		115.27

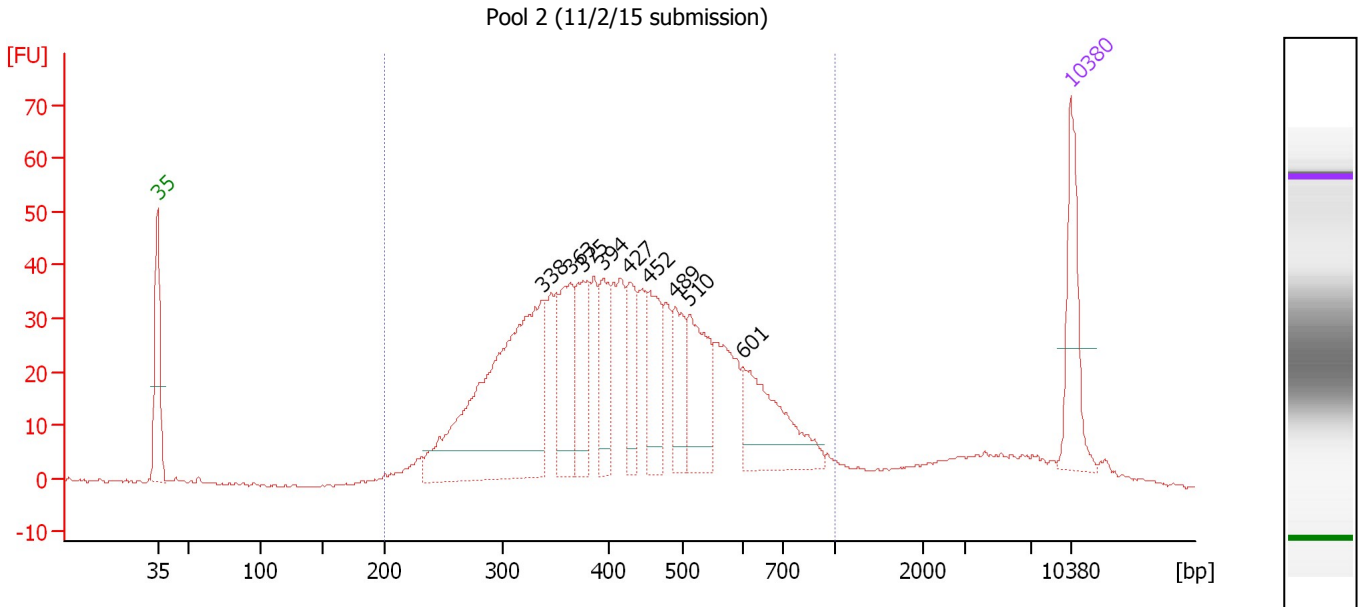
**Region table for sample 8 : H177P (1:6)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,744	447	1,409.6	7,425.8	1,849.32	89	45.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : Pool 2 (11/2/15 submission)**

Number of peaks found: 9                      Corr. Area 1: 984.6  
 Noise: 0.2

**Peak table for sample 9 : Pool 2 (11/2/15 submission)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	338	452.94	2,031.9		72.59
3	363	116.45	486.0		74.65
4	375	92.01	371.8		75.62
5	394	65.13	250.5		77.17
6	427	65.78	233.6		79.17
7	452	85.03	285.2		80.60
8	489	67.76	210.0		82.72
9	510	108.68	322.8		83.81
10	601	123.12	310.3		87.93
11	10,380	75.00	10.9	Upper Marker	113.00

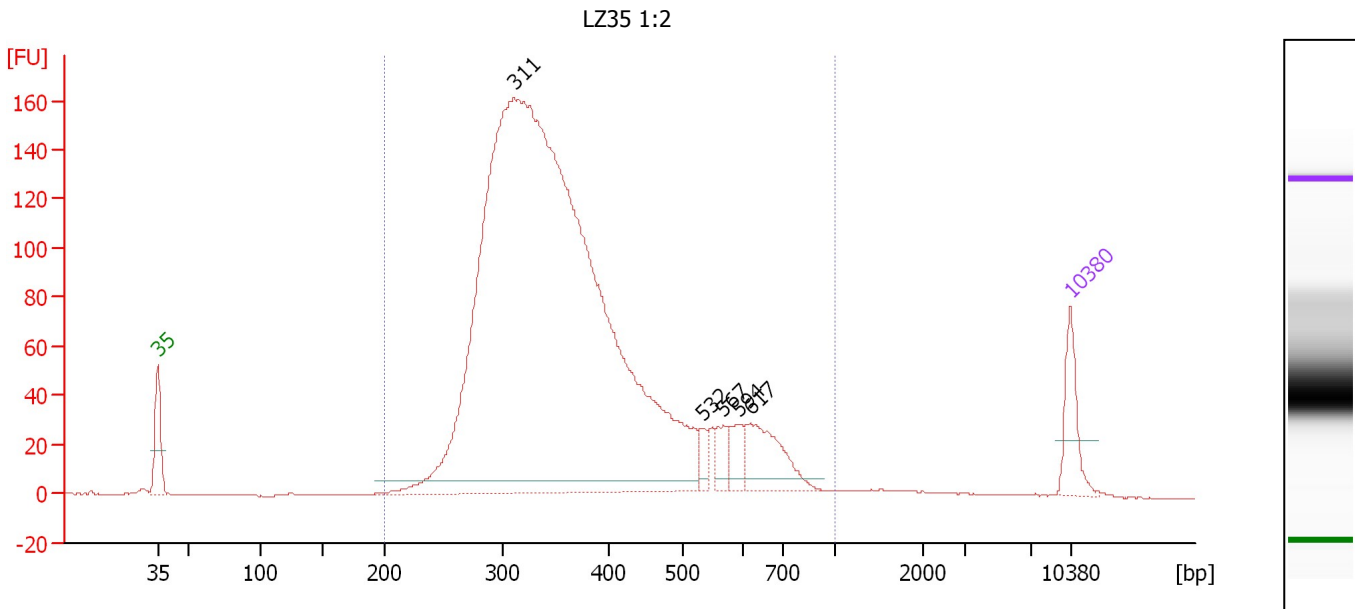
**Region table for sample 9 : Pool 2 (11/2/15 submission)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	441	984.6	7,161.7	1,841.23	89	31.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : LZ35 1:2**

Number of peaks found: 5                      Corr. Area 1: 2,452.5  
 Noise: 0.1

**Peak table for sample 10 : LZ35 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	311	3,876.56	18,895.0		70.40
3	532	31.71	90.3		84.79
4	567	45.39	121.2		86.40
5	594	44.81	114.3		87.61
6	617	134.38	330.1		88.42
7	10,380	75.00	10.9	Upper Marker	113.00

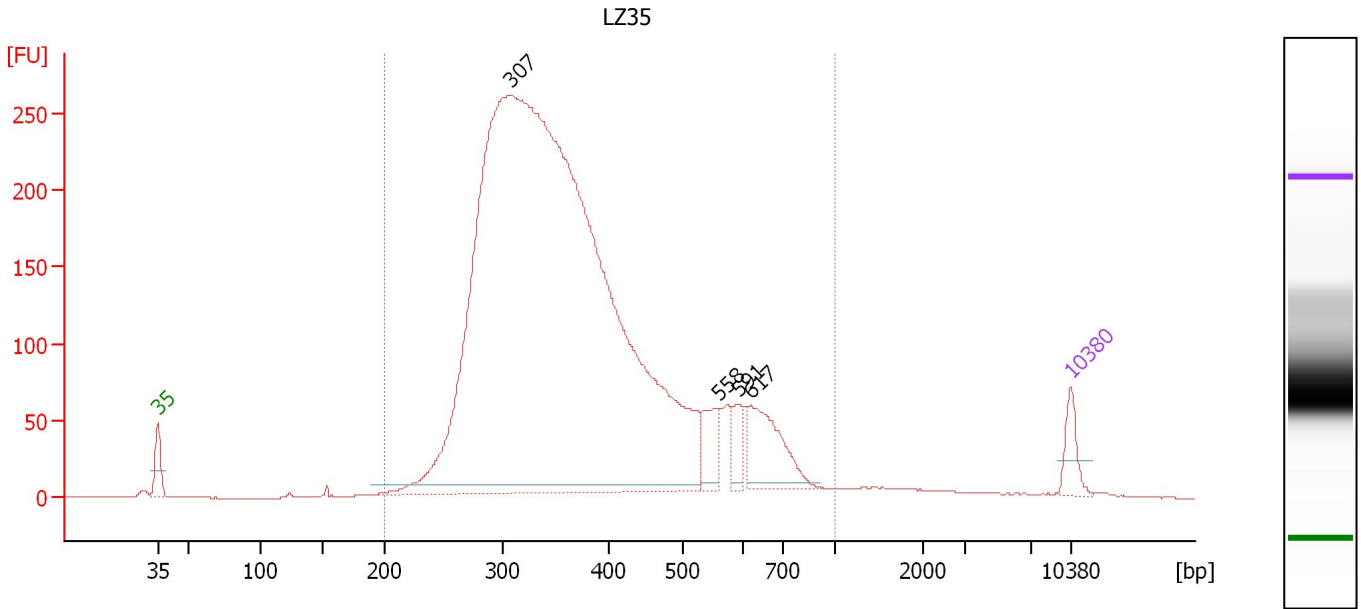
**Region table for sample 10 : LZ35 1:2**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	378	2,452.5	17,629.3	4,048.71	98	28.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : LZ35**

Number of peaks found: 4                      Corr. Area 1: 4,428.6  
 Noise: 0.1

**Peak table for sample 11 : LZ35**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	307	8,050.62	39,759.6		70.07
3	558	140.12	380.4		85.99
4	591	84.00	215.2		87.50
5	617	292.25	717.5		88.43
6	10,380	75.00	10.9	Upper Marker	113.00

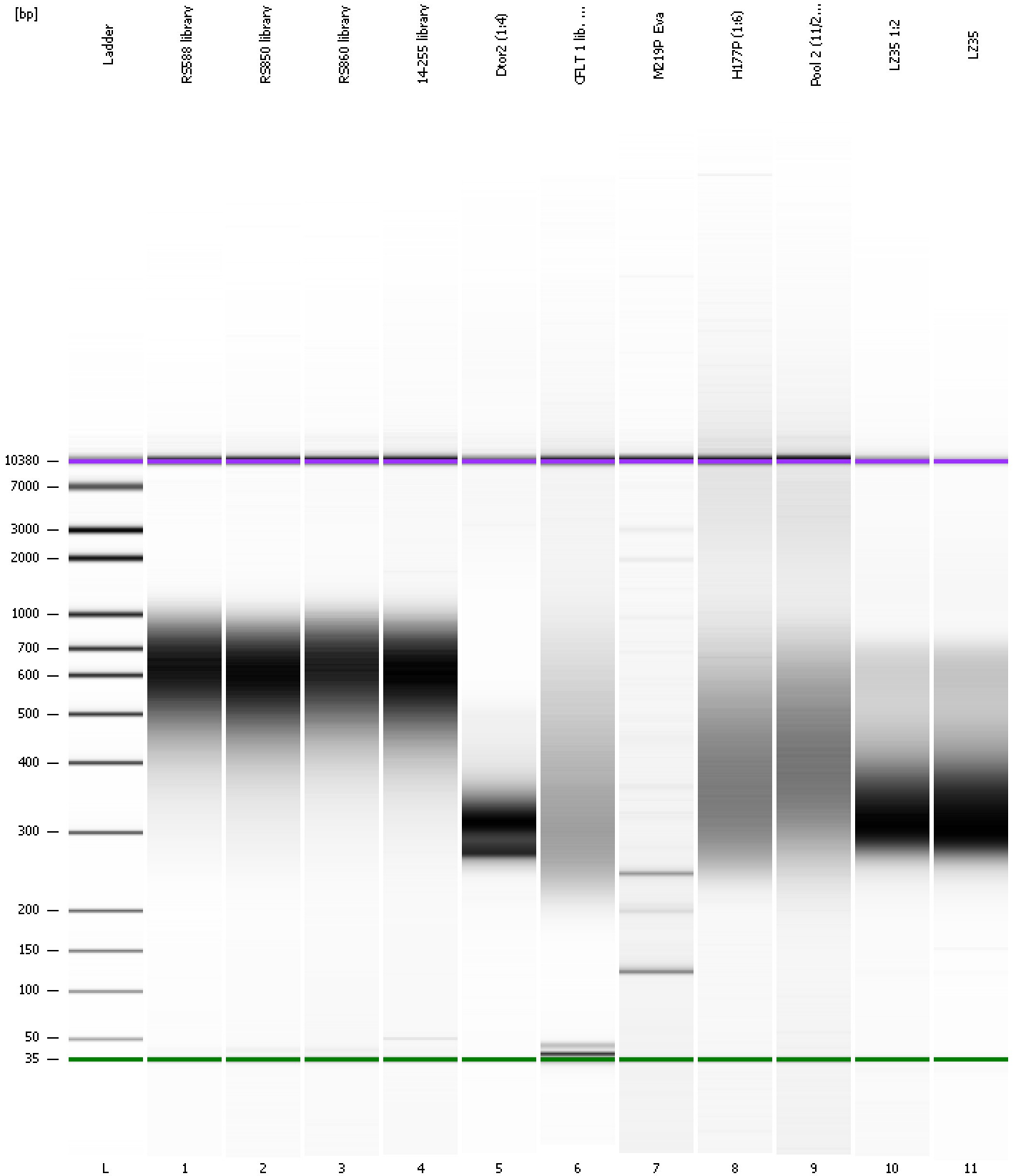
**Region table for sample 11 : LZ35**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	382	4,428.6	36,629.4	8,437.18	97	29.5

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
Modified: 11/2/2015 2:59:24 PM

**Gel Image**



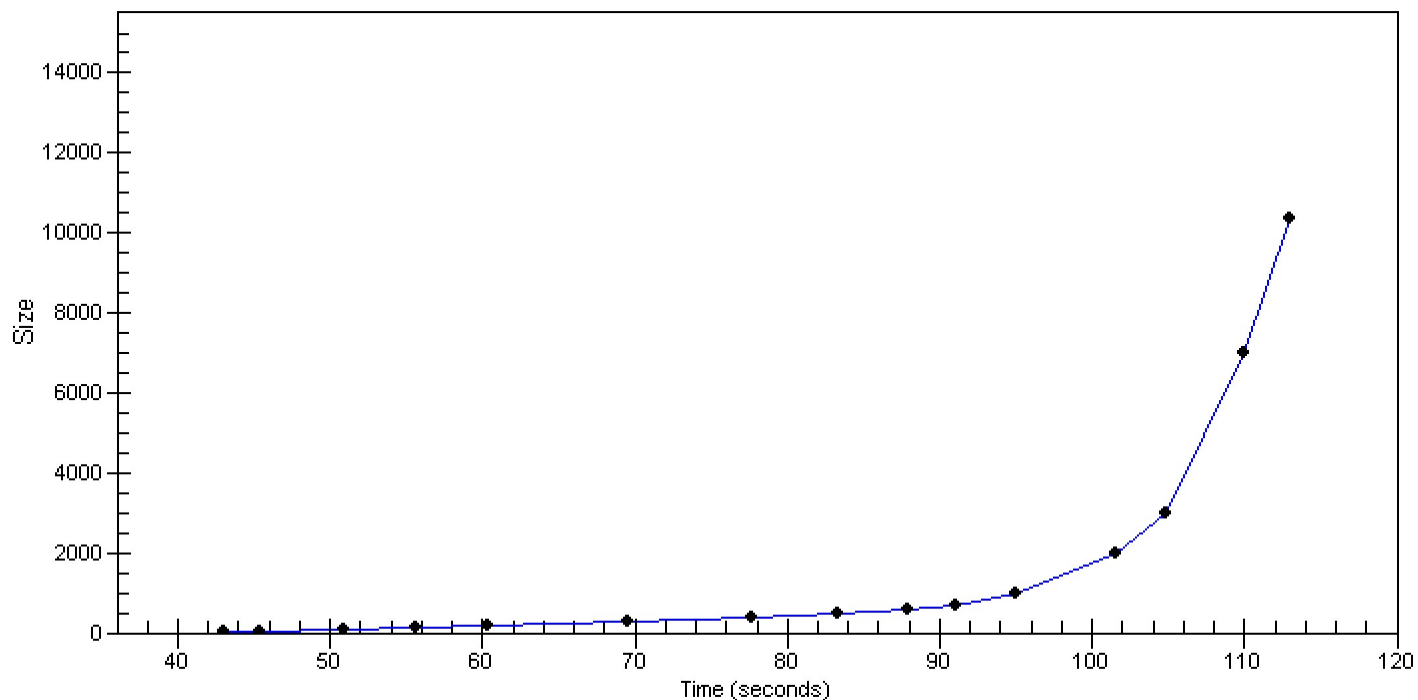


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
Modified: 11/2/2015 2:59:24 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-02\2015-11-02\_001.xad

Created: 11/2/2015 2:18:04 PM  
 Modified: 11/2/2015 2:59:24 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		11/2/2015 12:59:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-11-02\2015-11-02_001.xad)		Instrument	Run		11/2/2015 12:18:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/2/2015 12:18:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/2/2015 12:18:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/2/2015 12:18:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/2/2015 12:18:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/2/2015 12:18:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/2/2015 12:18:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1