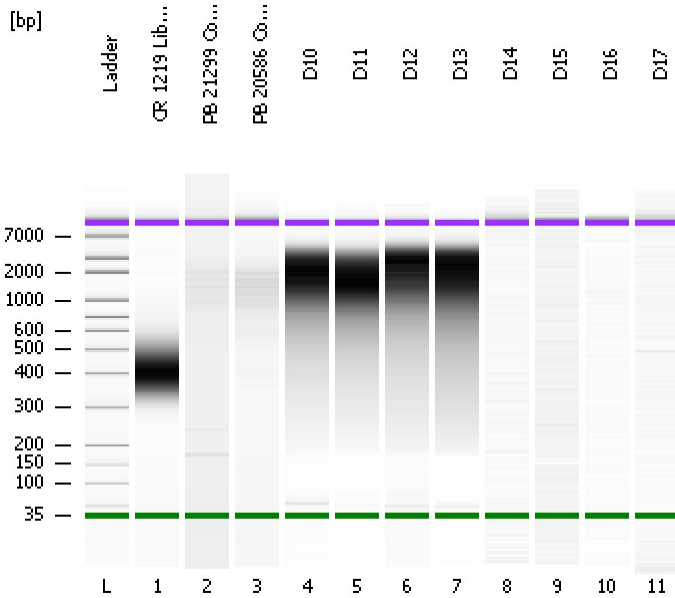


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
Modified: 10/23/2013 2:09:31 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

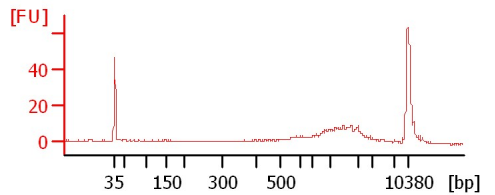
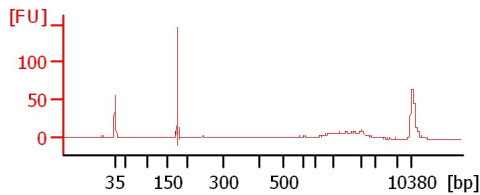
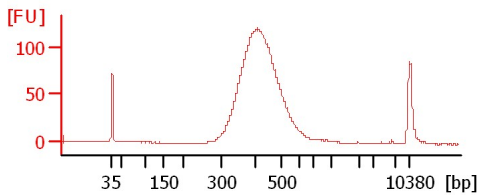
Chip Information:

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

**CR 1219 Lib-350bp 1:16**

**PB 21299 Concentrated Soni**

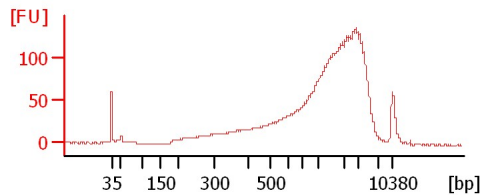
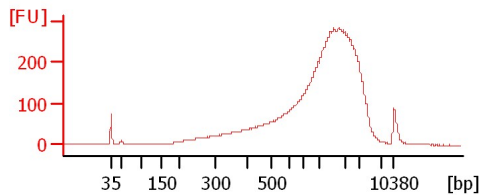
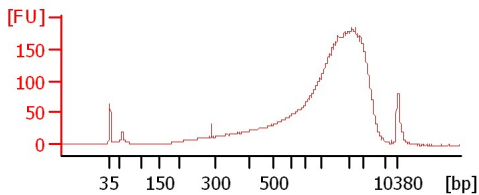
**PB 20586 Concentrated Soni**



**D10**

**D11**

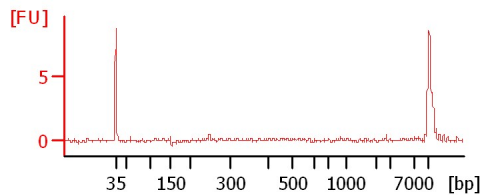
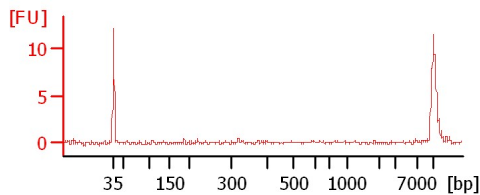
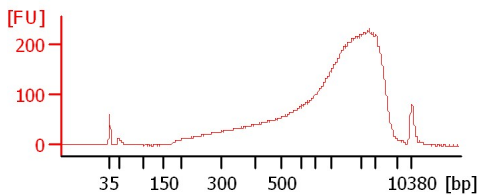
**D12**



**D13**

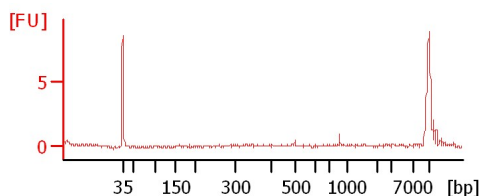
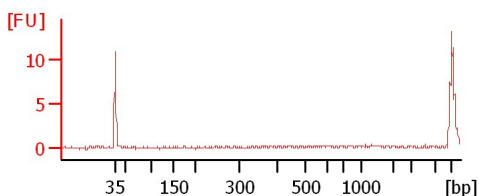
**D14**

**D15**



**D16**

**D17**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
Modified: 10/23/2013 2:09:31 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CR 1219 Lib-350bp 1:16		<input type="checkbox"/>	✓			
PB 21299 Concentrated Soni		<input type="checkbox"/>	✓			
PB 20586 Concentrated Soni		<input type="checkbox"/>	✓			
D10		<input type="checkbox"/>	✓			
D11		<input type="checkbox"/>	✓			
D12		<input type="checkbox"/>	✓			
D13		<input type="checkbox"/>	✓			
D14		<input type="checkbox"/>	✓			
D15		<input type="checkbox"/>	✓			
D16		<input type="checkbox"/>	✓			
D17		<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\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
Modified: 10/23/2013 2:09:31 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

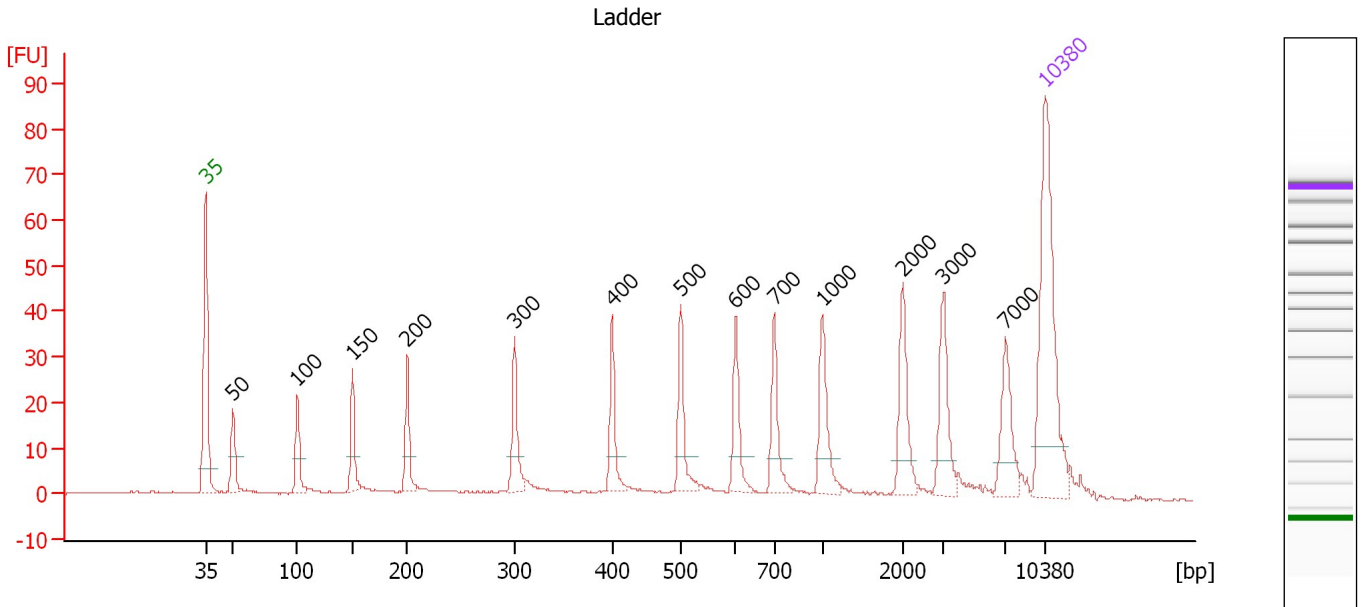
**Ladder**

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\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

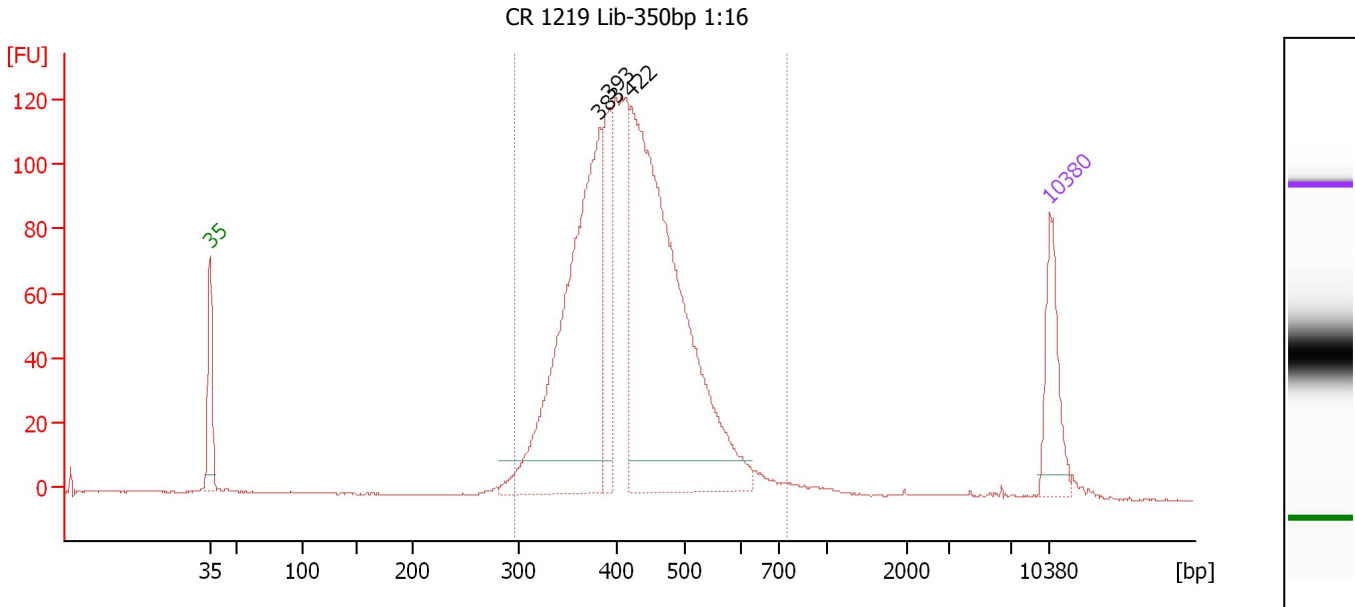
**Peak table for Ladder**

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\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 1 : CR 1219 Lib-350bp 1:16**

Height Threshold [FU] : 10

**Overall Results for sample 1 : CR 1219 Lib-350bp 1:16**

Number of peaks found: 3                      Corr. Area 1: 1,673.4  
 Noise: 0.2

**Peak table for sample 1 : CR 1219 Lib-350bp 1:16**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	383	616.57	2,440.4	
3	393	140.43	541.9	
4	422	821.70	2,949.6	
5	10,380	75.00	10.9	Upper Marker

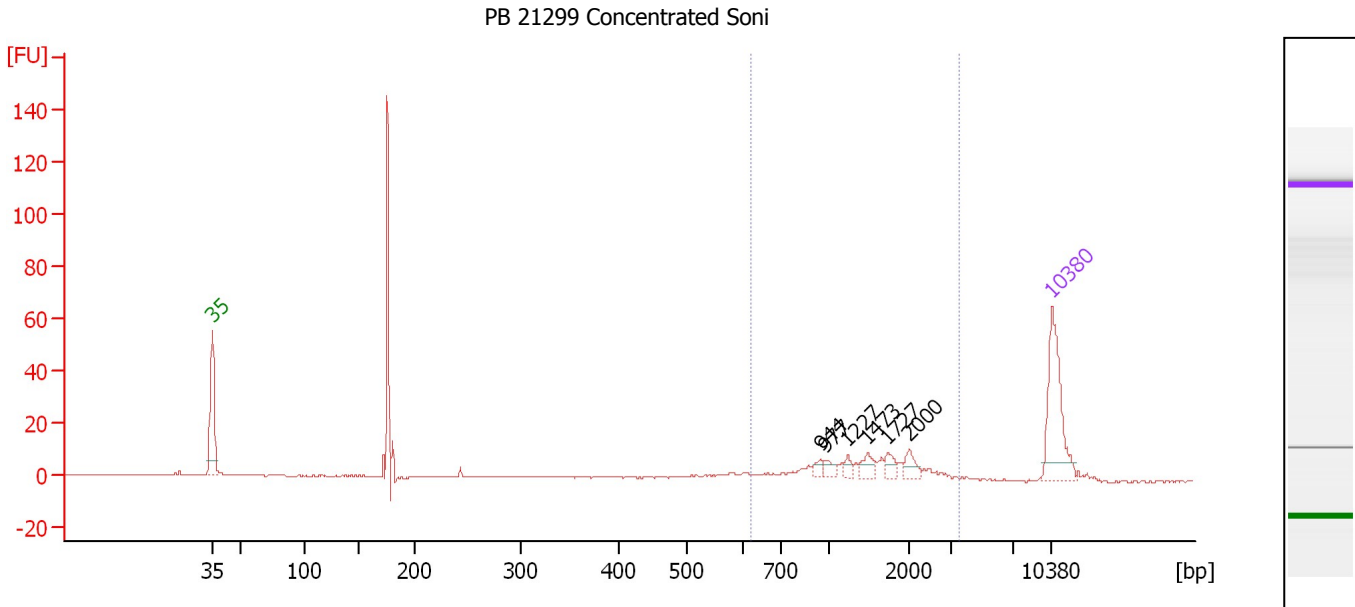
**Region table for sample 1 : CR 1219 Lib-350bp 1:16**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
297	755	426	6,830.3	1,862.46	1,673.4	97	16.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : PB 21299 Concentrated Soni**

Number of peaks found: 6                      Corr. Area 1: 94.9  
 Noise: 0.2

**Peak table for sample 2 : PB 21299 Concentrated Soni**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	944	7.18	11.5	
3	977	8.57	13.3	
4	1,227	6.32	7.8	
5	1,473	12.40	12.8	
6	1,727	9.56	8.4	
7	2,000	12.43	9.4	
8	10,380	75.00	10.9	Upper Marker

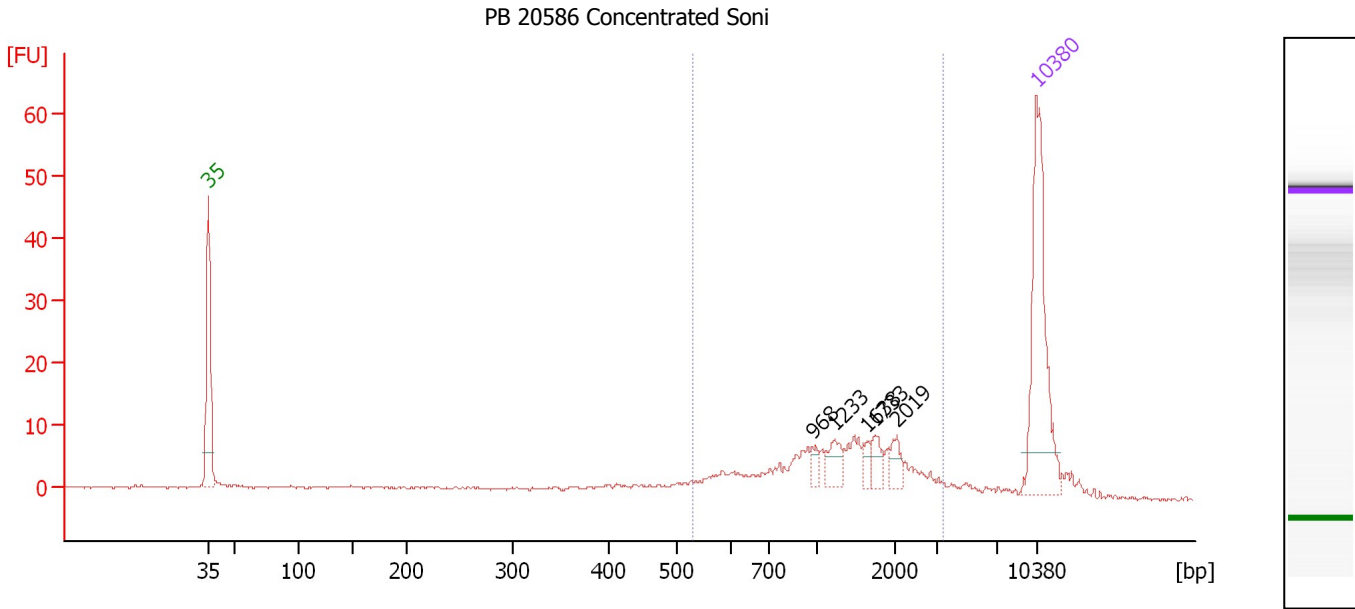
**Region table for sample 2 : PB 21299 Concentrated Soni**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
619	3,493	1,493	131.8	109.59	94.9	46	38.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : PB 20586 Concentrated Soni**

Number of peaks found: 5                      Corr. Area 1: 121.7  
 Noise: 0.2

**Peak table for sample 3 : PB 20586 Concentrated Soni**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	968	5.69	8.9	
3	1,233	11.98	14.7	
4	1,638	5.10	4.7	
5	1,733	9.05	7.9	
6	2,019	8.38	6.3	
7	10,380	75.00	10.9	Upper Marker

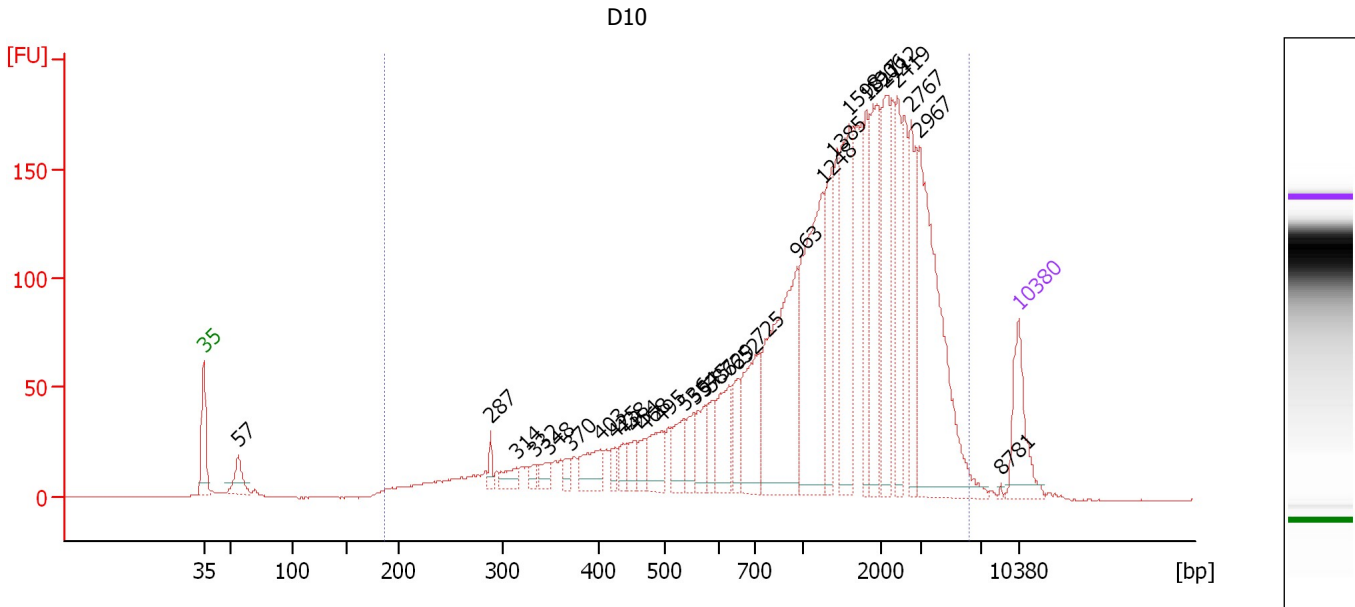
**Region table for sample 3 : PB 20586 Concentrated Soni**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
529	3,455	1,374	203.9	142.43	121.7	68	46.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : D10**

Number of peaks found: 30                      Corr. Area 1: 3,278.4  
 Noise: 0.2

**Peak table for sample 4 : D10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	57	54.22	1,452.2	
3	287	17.14	90.4	
4	314	27.57	133.1	
5	332	12.72	58.0	
6	348	20.09	87.6	
7	370	16.40	67.2	
8	403	58.11	218.4	
9	425	18.94	67.5	
10	438	21.74	75.2	
11	454	27.82	92.8	
12	468	25.53	82.6	
13	495	61.18	187.4	
14	536	53.34	150.7	
15	554	38.27	104.6	
16	575	49.45	130.2	
17	587	33.88	87.4	
18	629	81.47	196.2	
19	652	44.10	102.5	
20	725	123.58	258.1	
21	963	287.24	452.0	
22	1,248	273.37	332.0	
23	1,385	97.53	106.7	
24	1,598	176.09	167.0	
25	1,817	99.98	83.4	
26	1,906	136.87	108.8	



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 4 : D10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,112	129.77	93.1	
28	2,419	91.20	57.1	
29	2,767	108.34	59.3	
30	2,967	308.00	157.3	
31	8,781	1.62	0.3	
32	10,380	75.00	10.9	Upper Marker

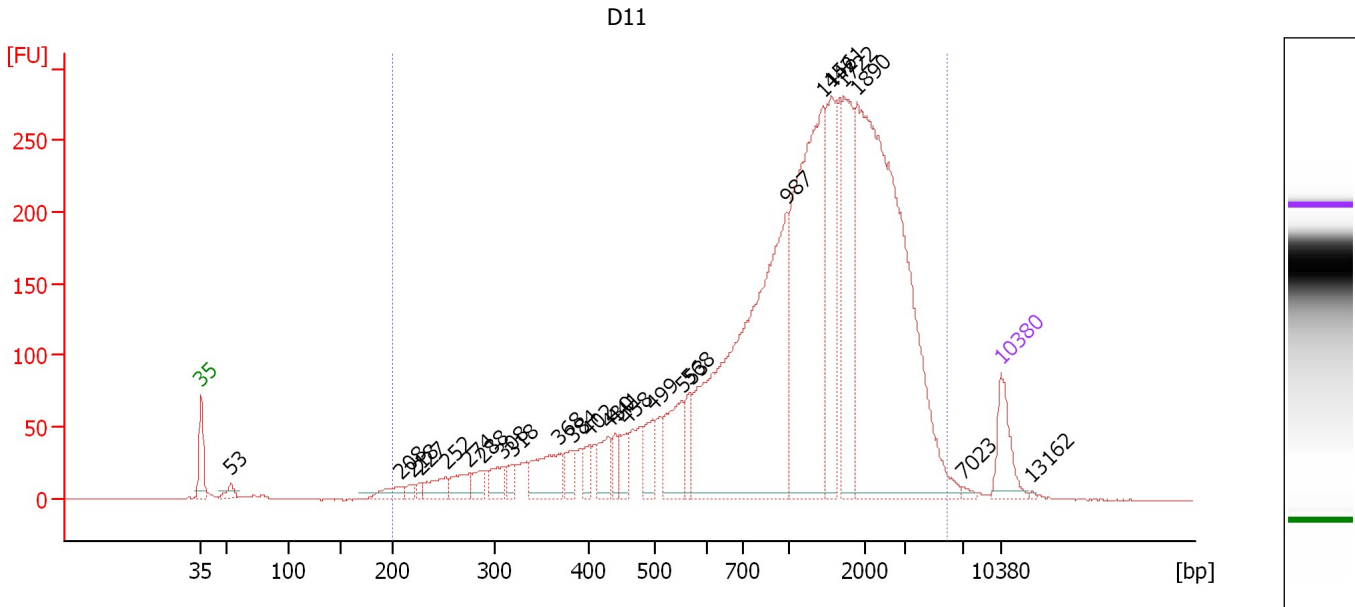
**Region table for sample 4 : D10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
187	6,202	1,662	6,100.7	3,259.34	3,278.4	98	67.6	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : D11**

Number of peaks found: 25                      Corr. Area 1: 5,181.6  
 Noise: 0.3

**Peak table for sample 5 : D11**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	26.04	741.3	
3	208	46.47	338.8	
4	218	18.95	131.5	
5	227	14.49	96.9	
6	252	59.19	356.3	
7	274	58.15	322.0	
8	288	43.83	230.4	
9	308	52.14	256.2	
10	318	27.65	131.7	
11	368	128.93	530.8	
12	384	48.88	193.1	
13	402	37.69	142.1	
14	430	71.53	251.8	
15	441	35.59	122.3	
16	458	49.84	164.8	
17	499	75.55	229.5	
18	553	141.88	388.4	
19	568	49.81	132.9	
20	987	967.02	1,485.1	
21	1,442	659.81	693.3	
22	1,561	235.77	228.9	
23	1,722	259.62	228.4	
24	1,890	1,100.04	881.9	
25	7,023	7.08	1.5	
26	10,380	75.00	10.9	Upper Marker


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...****... Peak table for sample 5 : D11**

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
27	13,162	0.00	0.0	

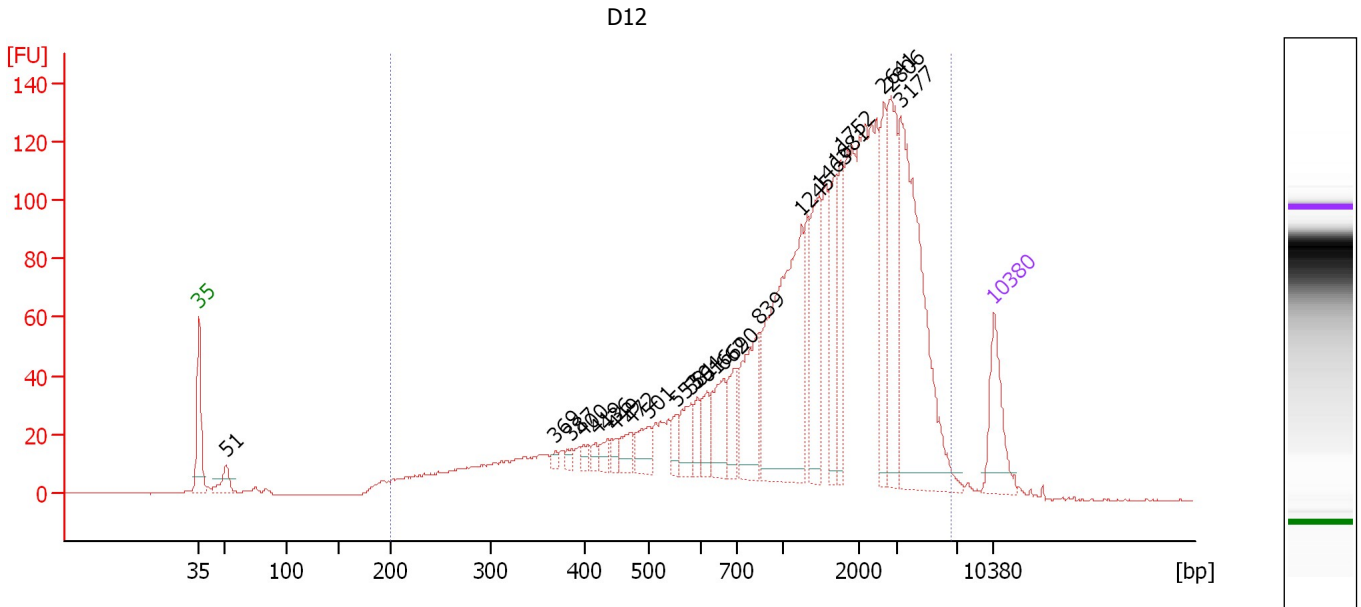
**Region table for sample 5 : D11**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	5,877	1,494	8,893.6	4,572.07	5,181.6	98	66.6	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : D12**

Number of peaks found: 23                      Corr. Area 1: 2,396.2  
 Noise: 0.2


**Peak table for sample 6 : D12**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	51	41.50	1,238.8	
3	369	7.30	29.9	
4	387	9.34	36.6	
5	400	12.76	48.4	
6	419	13.62	49.3	
7	436	18.05	62.8	
8	449	15.76	53.2	
9	472	30.12	96.7	
10	501	42.97	130.1	
11	553	25.04	68.6	
12	581	43.64	113.9	
13	594	26.16	66.7	
14	616	36.32	89.3	
15	662	75.30	172.4	
16	690	53.07	116.6	
17	839	122.79	221.8	
18	1,245	336.27	409.3	
19	1,463	118.79	123.0	
20	1,681	88.64	79.9	
21	1,752	79.51	68.8	
22	2,641	87.44	50.2	
23	2,806	149.06	80.5	
24	3,177	345.62	164.8	
25	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
Modified: 10/23/2013 2:09:31 PM

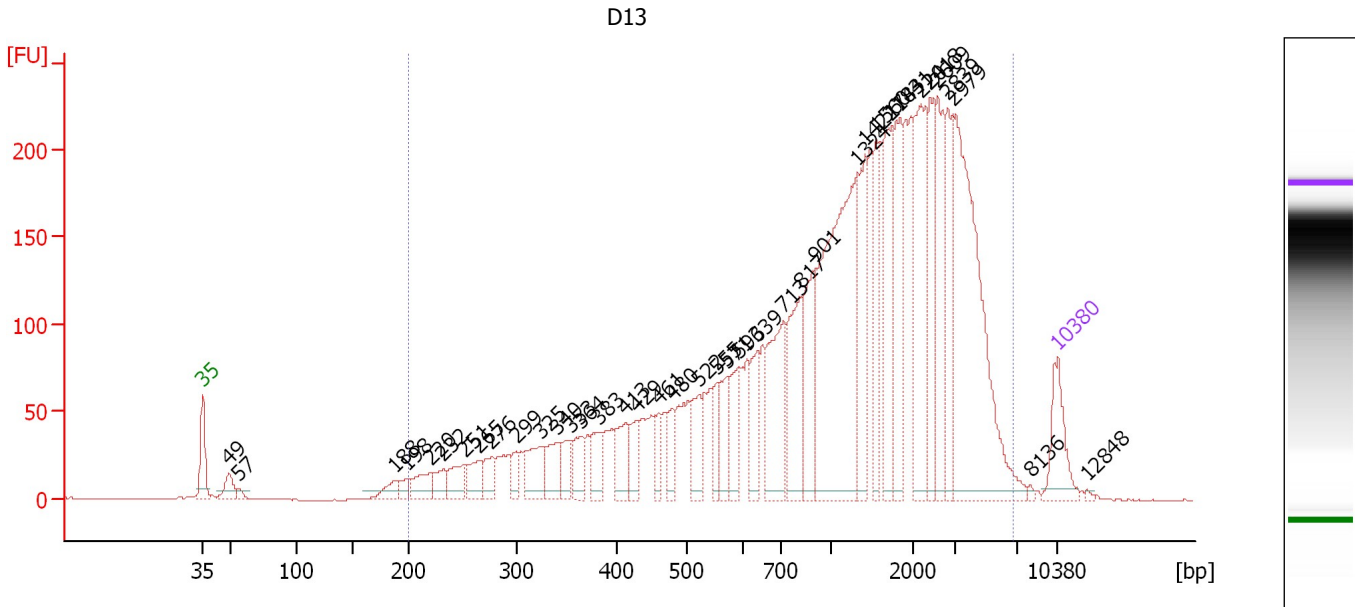
**Electropherogram Summary Continued ...****... Region table for sample 6 : D12**

<b>From [bp]</b>	<b>To [bp]</b>	<b>Average Size [bp]</b>	<b>Molarity [pmol/l]</b>	<b>Conc. [pg/<math>\mu</math>l]</b>	<b>Corr. Area</b>	<b>% of Total</b>	<b>Size distribution in CV [%]</b>	<b>Co lor</b>
200	6,628	1,790	5,979.4	3,149.36	2,396.2	97	71.7	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : D13**

Number of peaks found: 39                      Corr. Area 1: 4,971.6  
 Noise: 0.2

**Peak table for sample 7 : D13**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	47.83	1,483.0	
3	57	11.59	310.7	
4	188	36.23	292.4	
5	198	22.59	172.7	
6	220	60.16	414.0	
7	232	42.88	279.6	
8	251	60.99	367.5	
9	265	59.26	339.3	
10	276	44.11	241.8	
11	299	31.96	162.0	
12	325	88.94	415.2	
13	340	71.14	316.9	
14	353	45.13	193.7	
15	364	56.81	236.3	
16	383	55.74	220.8	
17	413	78.26	287.4	
18	429	46.50	164.4	
19	461	43.92	144.5	
20	480	48.52	153.3	
21	522	77.08	223.7	
22	555	52.90	144.6	
23	571	65.41	173.7	
24	593	78.99	201.9	
25	639	79.54	188.7	
26	713	191.97	407.9	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 7 : D13**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	817	164.69	305.5	
28	901	143.88	242.0	
29	1,324	531.74	608.6	
30	1,422	142.86	152.2	
31	1,560	107.01	104.0	
32	1,743	156.53	136.1	
33	1,841	165.78	136.4	
34	2,201	215.17	148.1	
35	2,418	125.52	78.7	
36	2,609	147.85	85.9	
37	2,839	112.55	60.1	
38	2,979	484.03	246.2	
39	8,136	3.52	0.7	
40	▶ 10,380	75.00	10.9	Upper Marker
41	12,848	0.00	0.0	

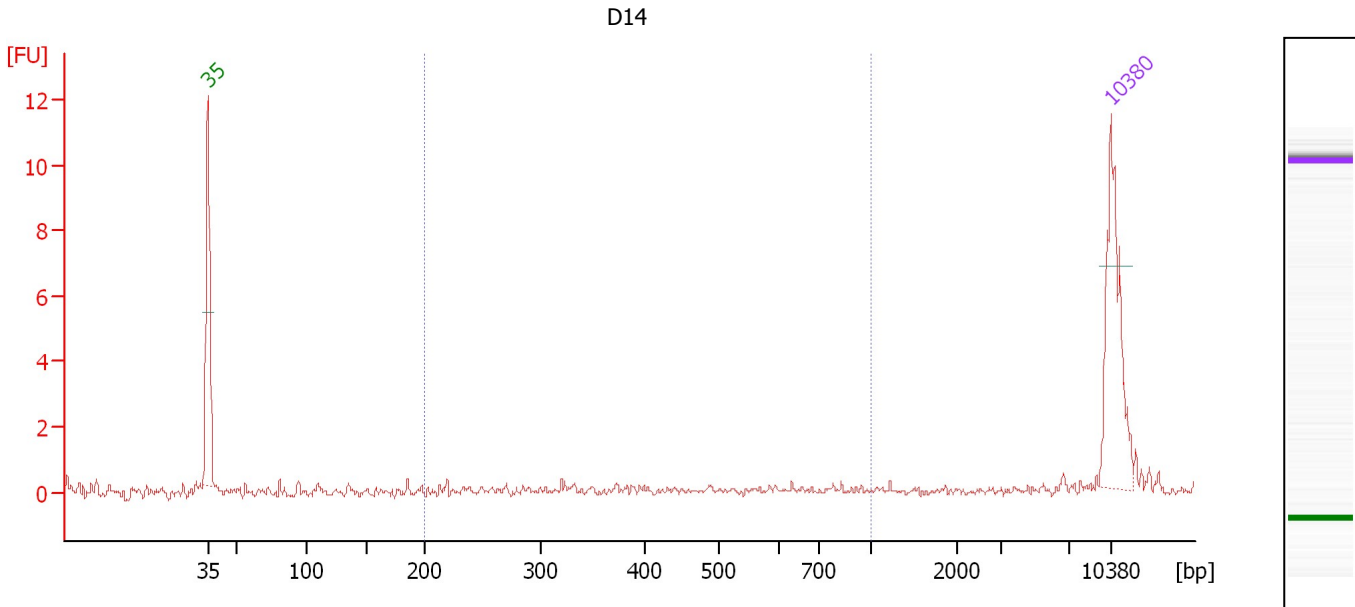
**Region table for sample 7 : D13**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	6,700	1,636	10,161.2	4,828.20	4,971.6	98	75.6	<span style="background-color: blue; color: blue;">■</span>

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : D14**

Number of peaks found: 0                      Corr. Area 1: 4.1  
 Noise: 0.1

**Peak table for sample 8 : D14**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

**Region table for sample 8 : D14**

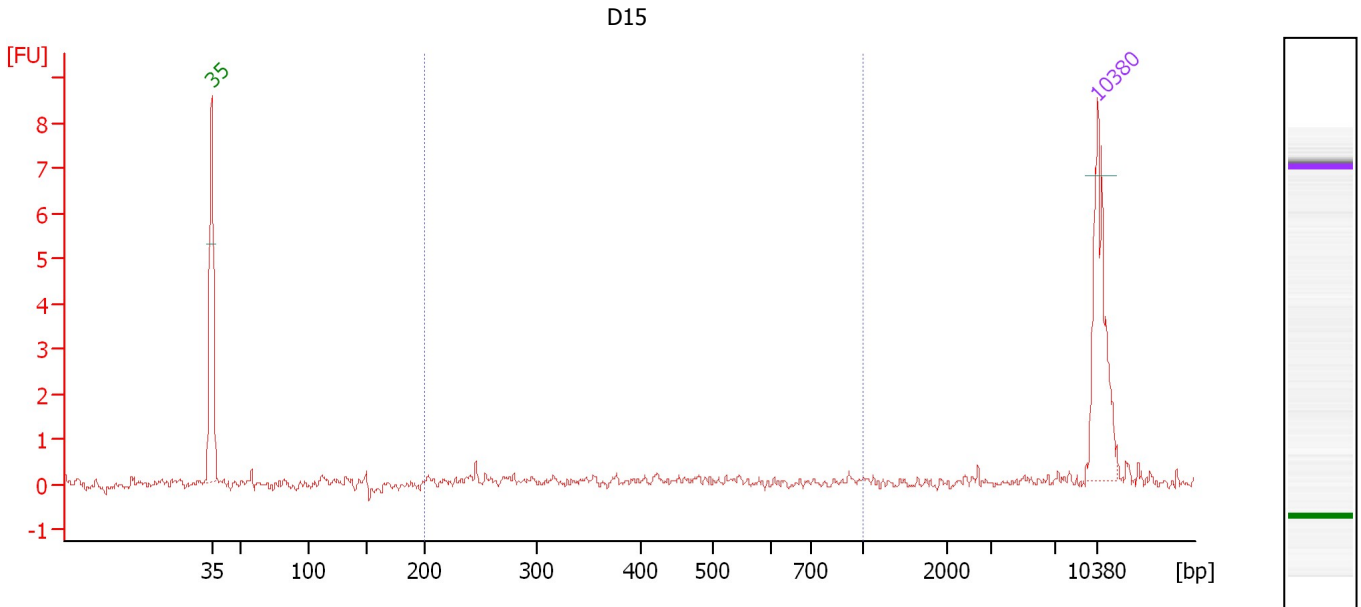
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	462	157.0	37.41	4.1	38	42.9	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : D15**

Number of peaks found: 0                      Corr. Area 1: 3.6  
 Noise: 0.1

**Peak table for sample 9 : D15**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

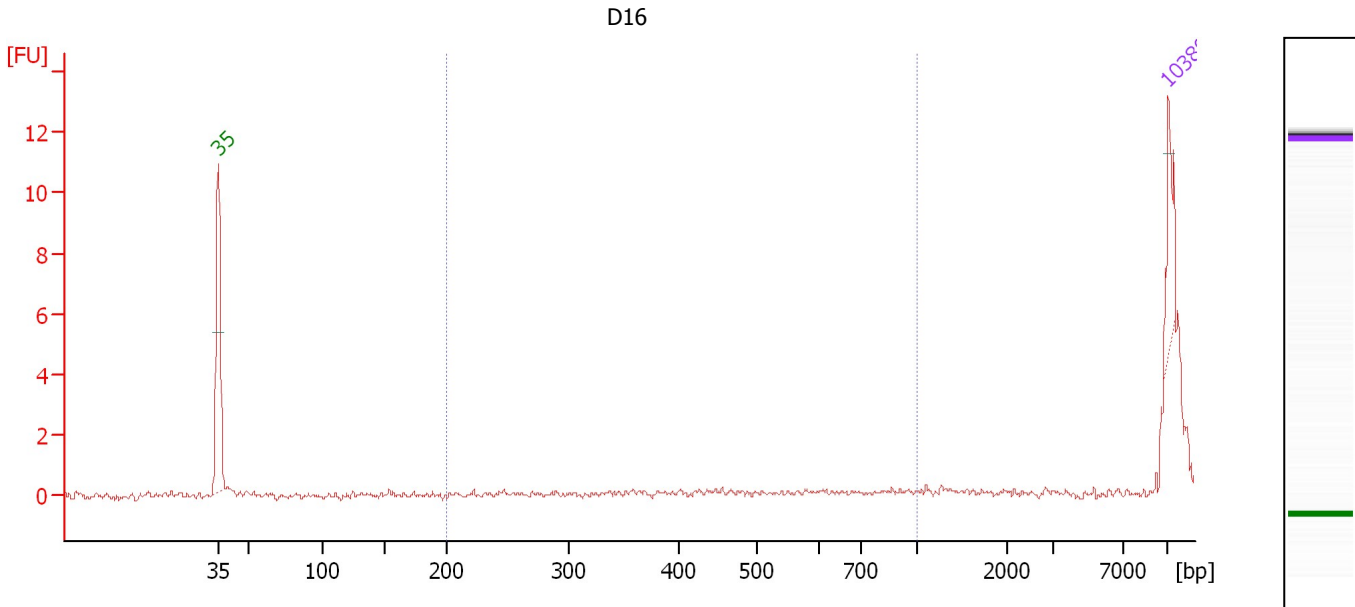
**Region table for sample 9 : D15**

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	427	231.8	51.56	3.6	49	44.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : D16**

Number of peaks found: 0                      Corr. Area 1: 0.0  
 Noise: 0.1

**Peak table for sample 10 : D16**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

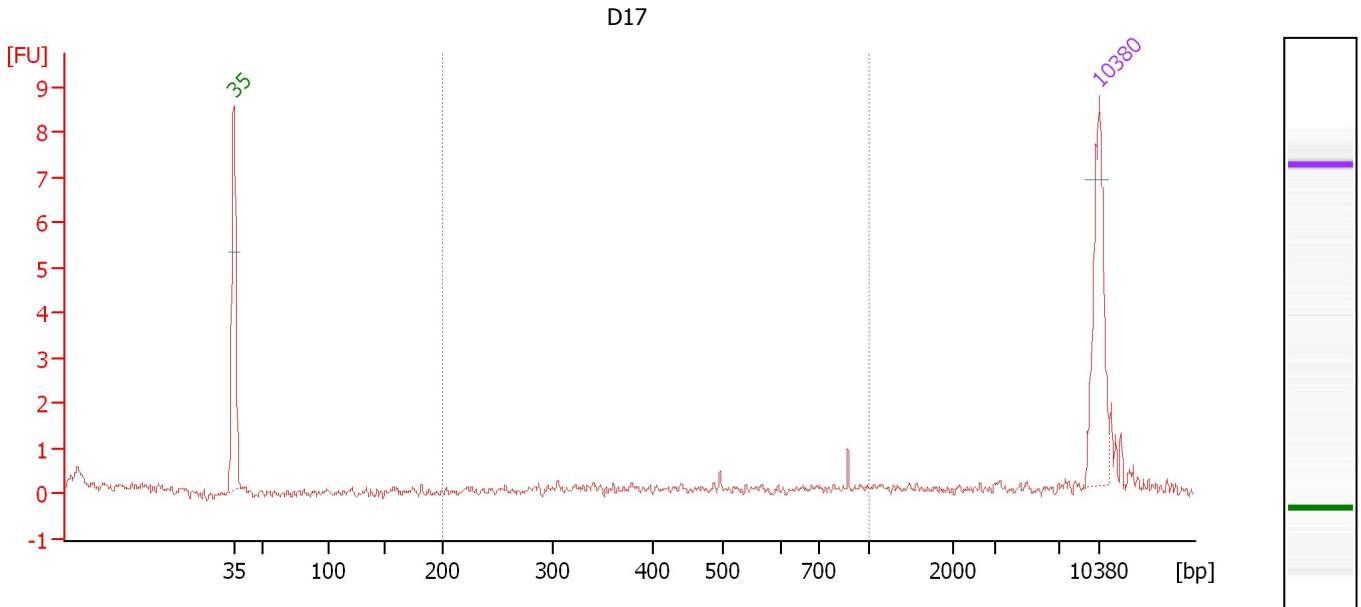
**Region table for sample 10 : D16**

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	0	0.0	0.00	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
 Modified: 10/23/2013 2:09:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : D17**

Number of peaks found: 0                      Corr. Area 1: 0.3  
 Noise: 0.1

**Peak table for sample 11 : D17**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : D17**

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	764	8.0	3.66	0.3	10	22.8	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-23\2013-10-23\_005.xad

Created: 10/23/2013 1:24:55 PM  
Modified: 10/23/2013 2:09:31 PM

**Gel Image**

