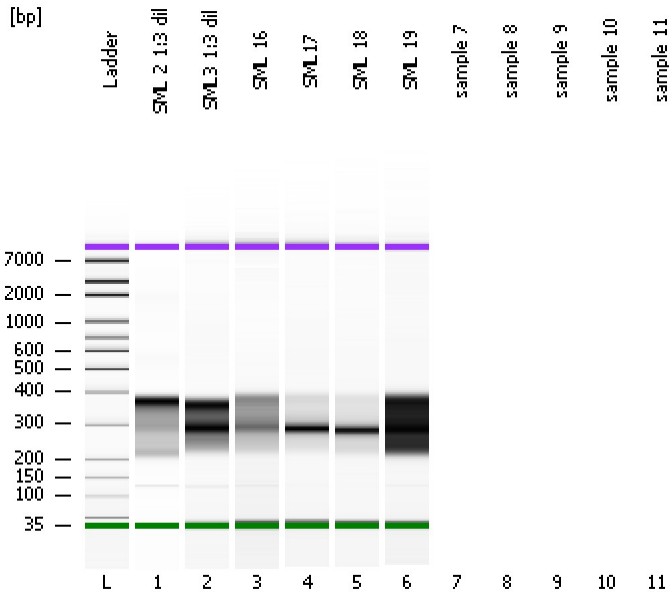


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
Modified: 4/9/2015 1:08:26 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

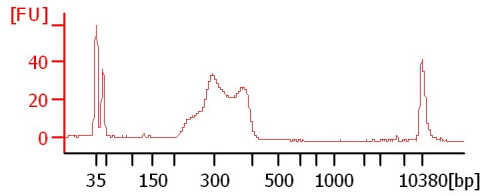
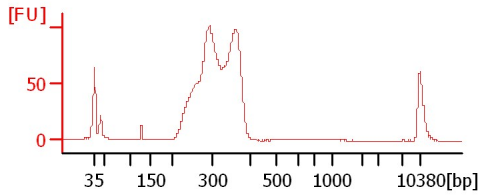
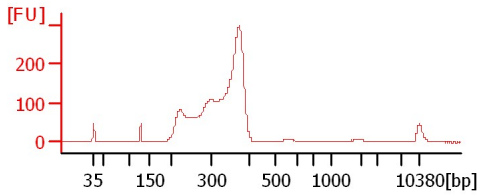
Chip Information:

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

**SML 2 1:3 dil**

**SML 3 1:3 dil**

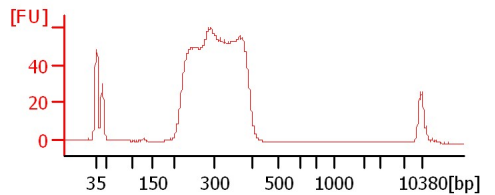
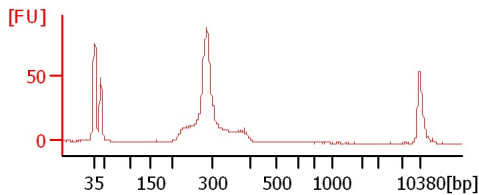
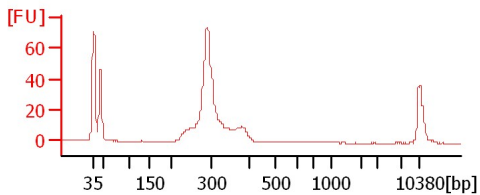
**SML 16**



**SML 17**

**SML 18**

**SML 19**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
 Modified: 4/9/2015 1:08:26 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
SML 2 1:3 dil		<input type="checkbox"/>	✓			
SML3 1:3 dil		<input type="checkbox"/>	✓			
SML 16		<input type="checkbox"/>	✓			
SML17		<input type="checkbox"/>	✓			
SML 18		<input type="checkbox"/>	✓			
SML 19		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
Modified: 4/9/2015 1:08:26 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

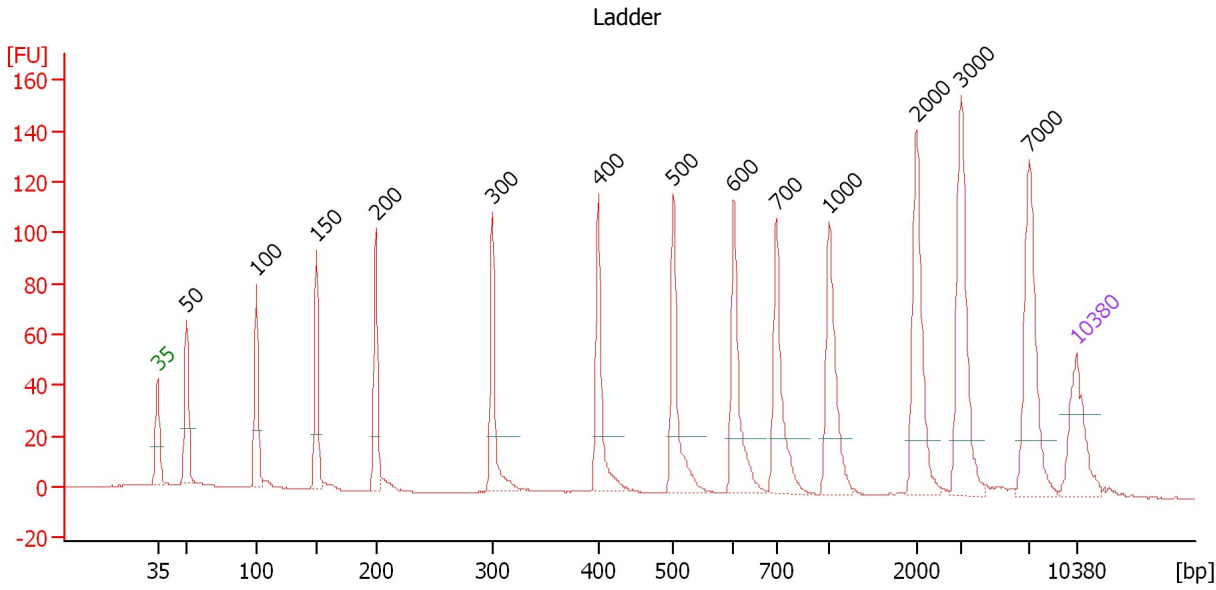
**Ladder**

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:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
 Modified: 4/9/2015 1:08:26 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

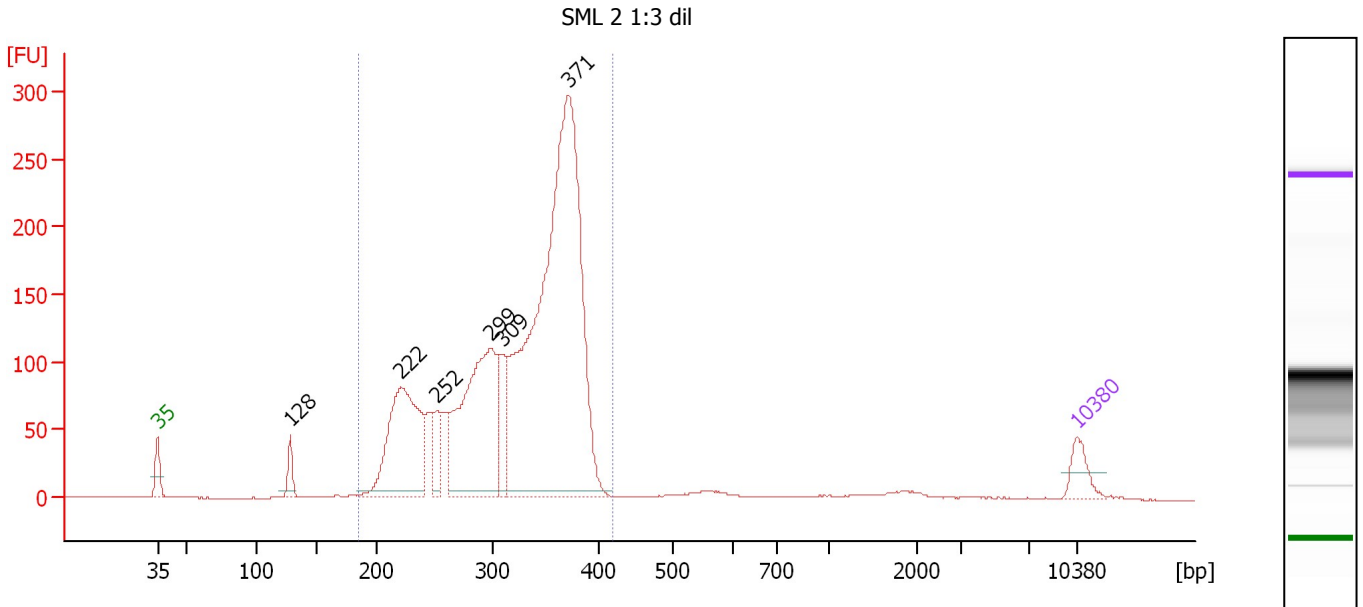
**Peak table for Ladder**

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	45.21
3	100	150.00	2,272.7	Ladder Peak	50.52
4	150	150.00	1,515.2	Ladder Peak	55.11
5	200	150.00	1,136.4	Ladder Peak	59.61
6	300	150.00	757.6	Ladder Peak	68.52
7	400	150.00	568.2	Ladder Peak	76.58
8	500	150.00	454.5	Ladder Peak	82.30
9	600	150.00	378.8	Ladder Peak	86.89
10	700	150.00	324.7	Ladder Peak	90.13
11	1,000	150.00	227.3	Ladder Peak	94.14
12	2,000	150.00	113.6	Ladder Peak	100.80
13	3,000	150.00	75.8	Ladder Peak	104.22
14	7,000	150.00	32.5	Ladder Peak	109.40
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
 Modified: 4/9/2015 1:08:26 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : SML 2 1:3 dil**

Number of peaks found: 6                      Corr. Area 1: 2,835.2  
 Noise: 0.2

**Peak table for sample 1 : SML 2 1:3 dil**

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	128	86.78	1,026.0		53.10
3	222	839.79	5,730.3		61.58
4	252	135.35	813.7		64.25
5	299	972.04	4,928.9		68.42
6	309	208.55	1,023.3		69.23
7	371	2,819.55	11,508.4		74.26
8	10,380	75.00	10.9	Upper Marker	113.00

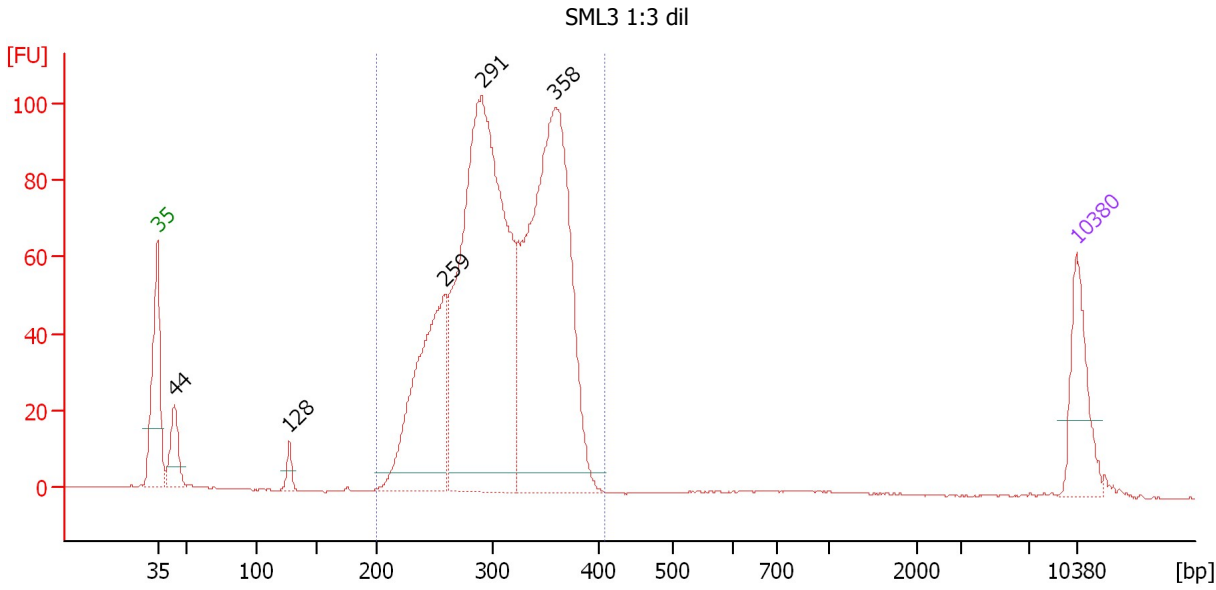
**Region table for sample 1 : SML 2 1:3 dil**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
185	321	420	2,835.2	26,625.6	95	16.7	5,400.61	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
 Modified: 4/9/2015 1:08:26 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : SML3 1:3 dil**

Number of peaks found: 5                      Corr. Area 1: 1,403.2  
 Noise: 0.1

**Peak table for sample 2 : SML3 1:3 dil**

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	44	73.03	2,527.6		44.29
3	128	20.01	237.7		53.05
4	259	344.29	2,012.4		64.89
5	291	922.04	4,804.8		67.70
6	358	749.63	3,169.0		73.23
7	10,380	75.00	10.9	Upper Marker	113.00

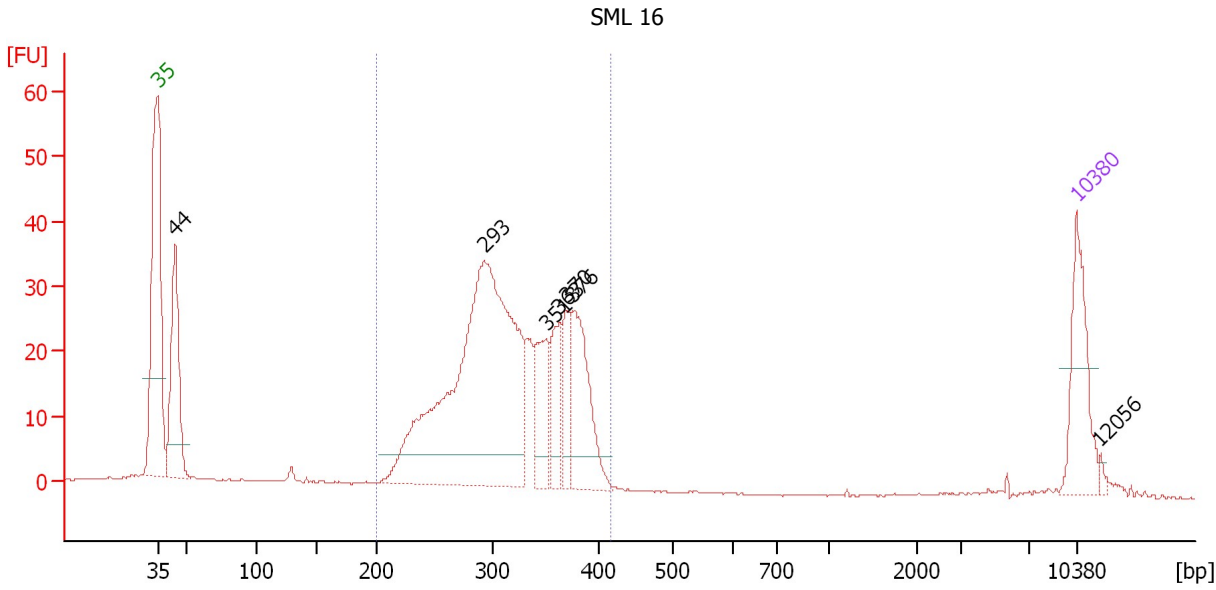
**Region table for sample 2 : SML3 1:3 dil**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	310	407	1,403.2	10,271.9	93	13.9	2,049.86	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
 Modified: 4/9/2015 1:08:26 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : SML 16**

Number of peaks found: 7                      Corr. Area 1: 482.0  
 Noise: 0.2

**Peak table for sample 3 : SML 16**

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	44	184.93	6,376.1		44.32
3	293	677.22	3,502.1		67.90
4	351	78.56	339.6		72.60
5	363	65.92	275.3		73.58
6	370	48.51	198.8		74.15
7	376	129.37	521.8		74.62
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,056	0.00	0.0		114.79

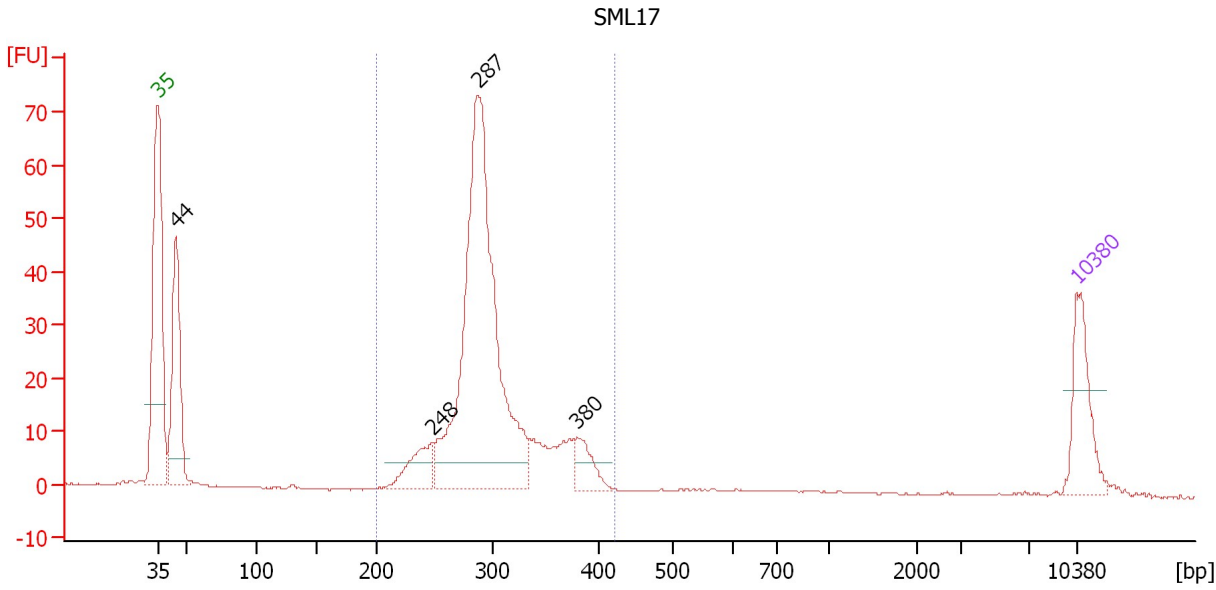
**Region table for sample 3 : SML 16**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	316	416	482.0	5,377.8	82	14.7	1,092.66	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
 Modified: 4/9/2015 1:08:26 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : SML17**

Number of peaks found: 4                      Corr. Area 1: 411.9  
 Noise: 0.2

**Peak table for sample 4 : SML17**

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	44	246.01	8,378.6		44.40
3	248	69.37	423.1		63.93
4	287	757.68	3,995.9		67.39
5	380	46.99	187.2		74.99
6	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : SML17**

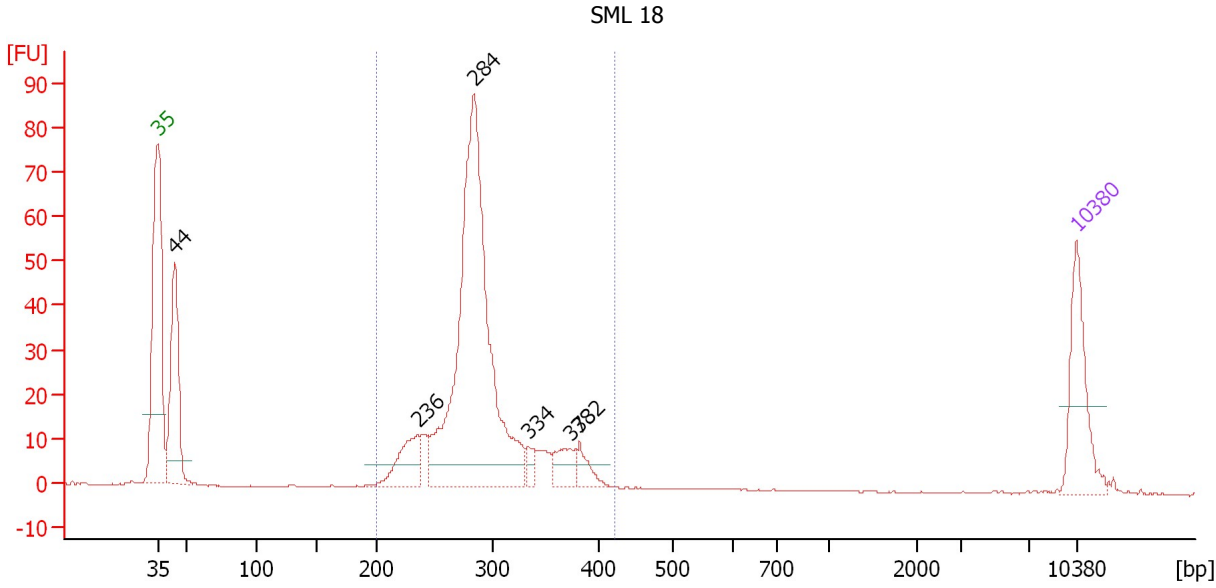
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	300	422	411.9	5,019.1	79	12.5	978.78	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
 Modified: 4/9/2015 1:08:26 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : SML 18**

Number of peaks found: 6                      Corr. Area 1: 467.6  
 Noise: 0.1

**Peak table for sample 5 : SML 18**

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	44	193.48	6,713.4		44.27
3	236	65.97	422.9		62.85
4	284	623.80	3,325.4		67.12
5	334	13.27	60.2		71.28
6	373	33.04	134.1		74.42
7	382	23.15	91.7		75.16
8	10,380	75.00	10.9	Upper Marker	113.00

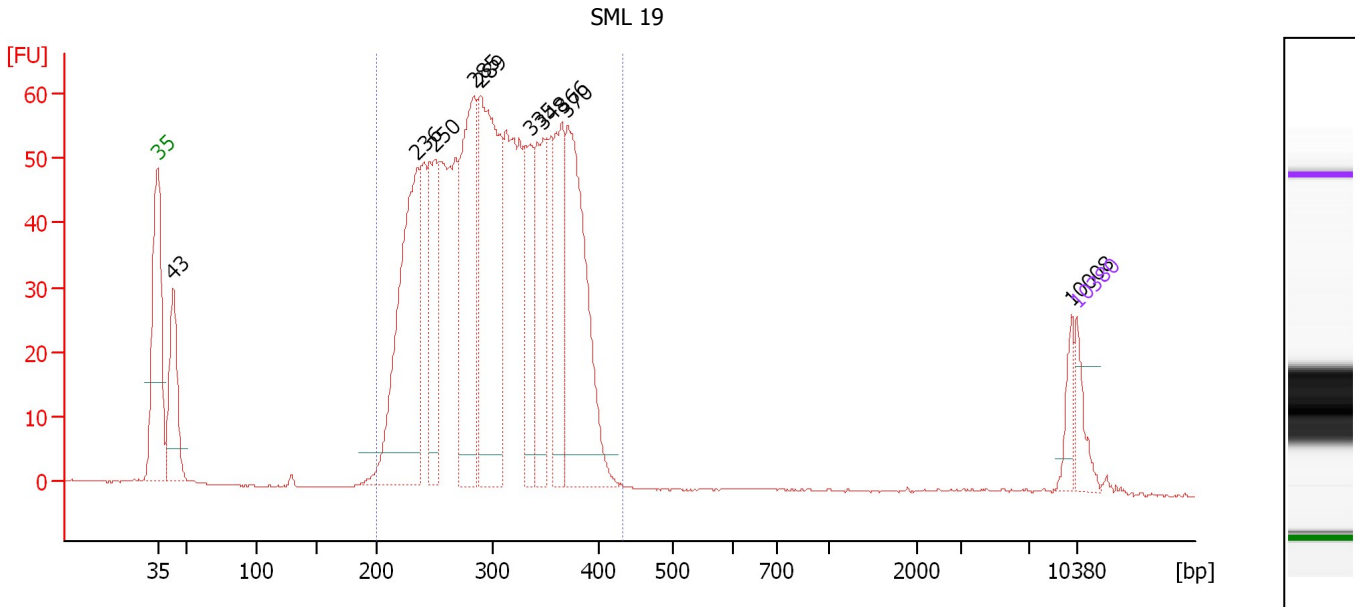
**Region table for sample 5 : SML 18**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	291	421	467.6	4,410.6	81	13.2	834.20	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
 Modified: 4/9/2015 1:08:26 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : SML 19**

Number of peaks found: 10      Corr. Area 1: 1,185.4  
 Noise: 0.1

**Peak table for sample 6 : SML 19**

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	43	412.31	14,495.6		44.19
3	236	1,017.77	6,542.0		62.79
4	250	369.73	2,239.1		64.08
5	285	764.70	4,069.7		67.16
6	289	1,012.01	5,302.9		67.56
7	335	338.43	1,528.8		71.38
8	348	398.38	1,735.9		72.37
9	366	415.63	1,722.6		73.81
10	370	827.09	3,382.4		74.20
11	10,008	64.70	9.8		112.60
12	10,380	75.00	10.9	Upper Marker	113.00

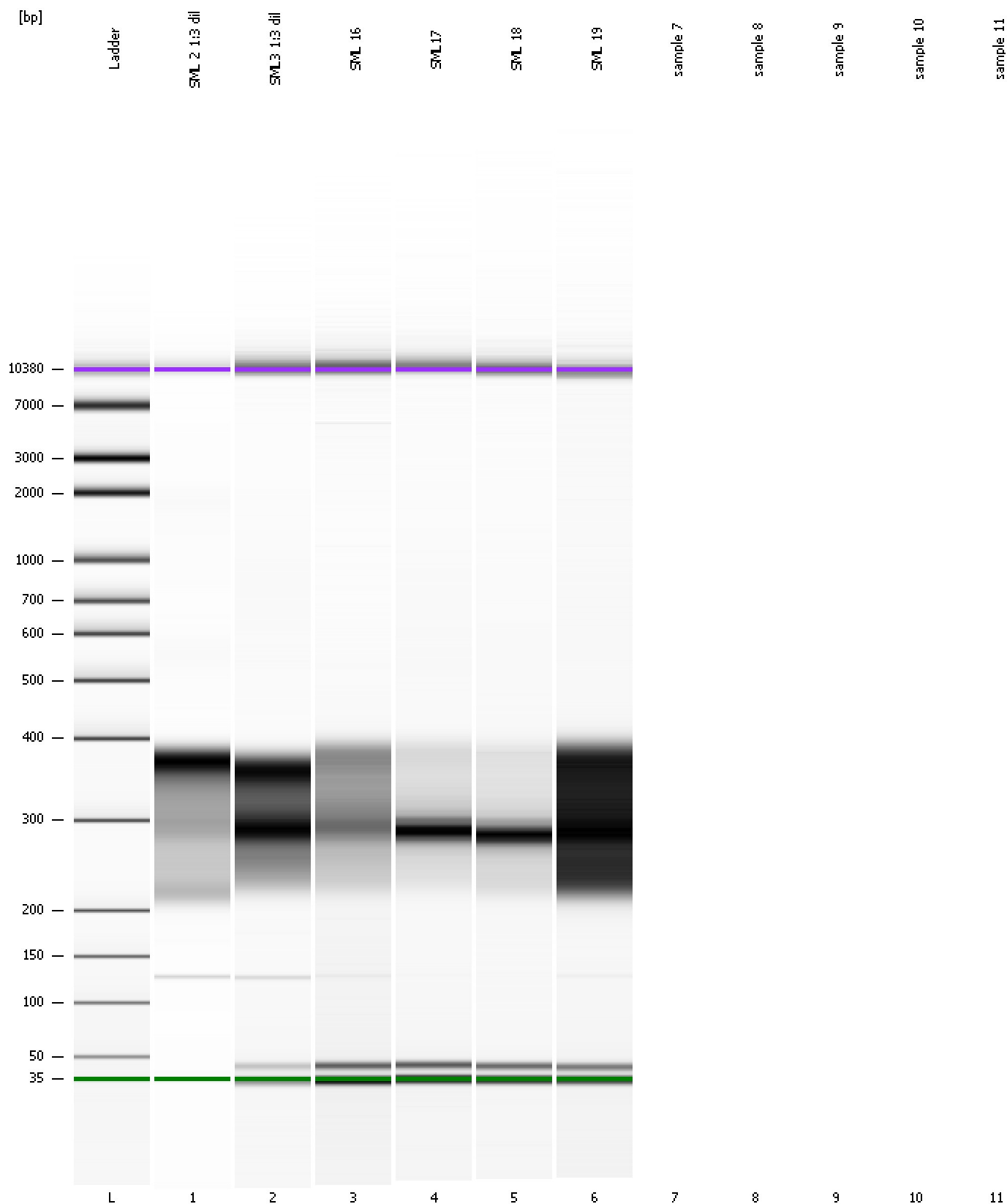
**Region table for sample 6 : SML 19**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	304	433	1,185.4	38,280.0	93	16.8	7,414.00	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
Modified: 4/9/2015 1:08:26 PM

**Gel Image**

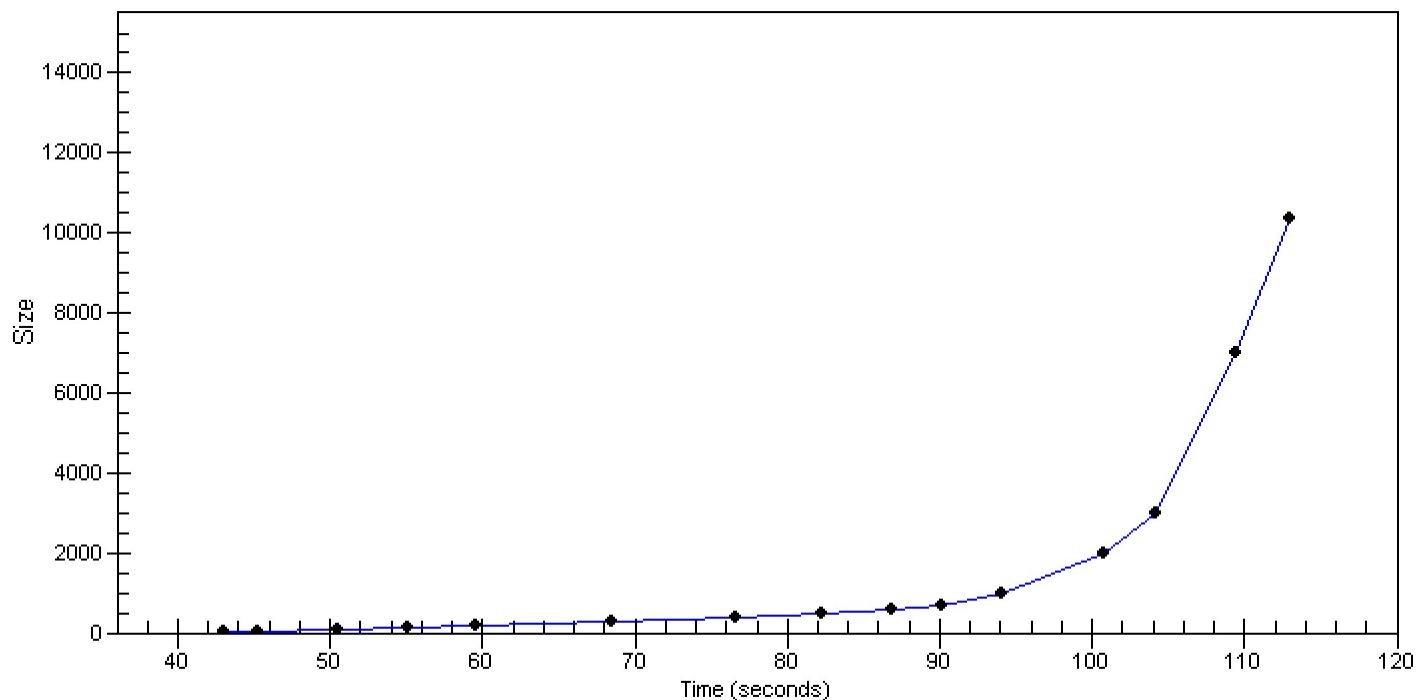


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
Modified: 4/9/2015 1:08:26 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
Modified: 4/9/2015 1:08:26 PM

**Invalid Samples**

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...s and Settings\Bioanalyzer\2015-04-09\2015-04-09\_002\_SM.xad

Created: 4/9/2015 12:34:44 PM  
 Modified: 4/9/2015 1:08:26 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 7)		Instrument	Run		4/9/2015 1:01:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-09\2015-04-09_002.xad)		Instrument	Run		4/9/2015 12:34:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/9/2015 12:34:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/9/2015 12:34:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/9/2015 12:34:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/9/2015 12:34:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/9/2015 12:34:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/9/2015 12:34:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1