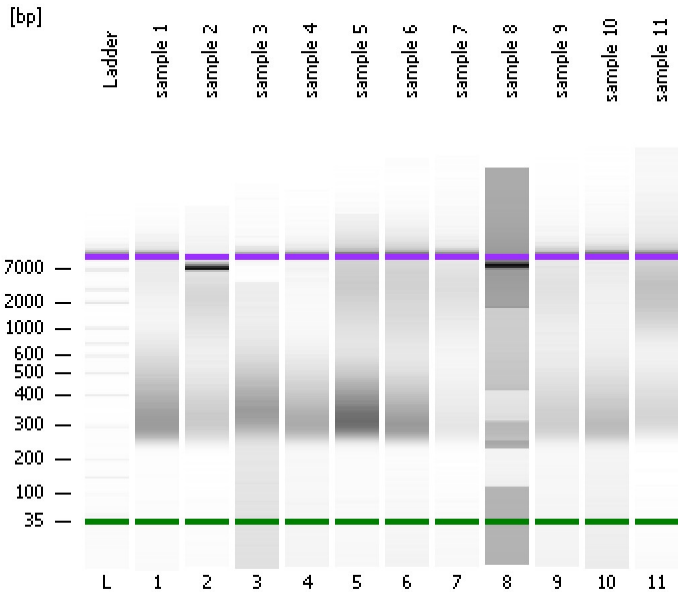


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
Modified: 4/2/2012 3:03:34 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

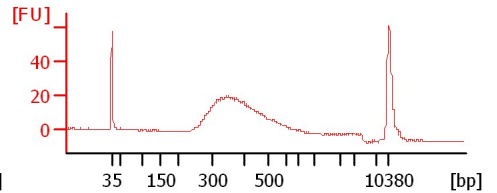
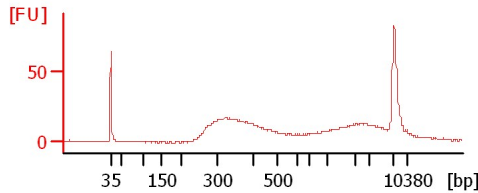
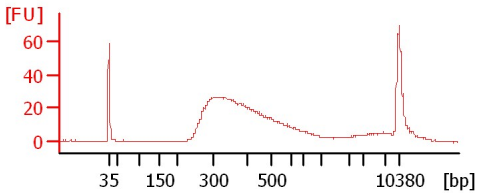
Chip Information:

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

sample 1

sample 2

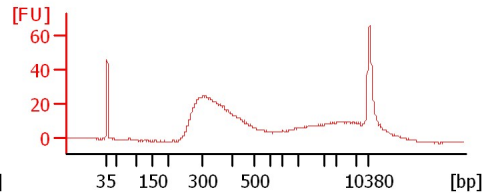
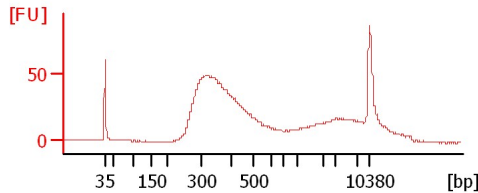
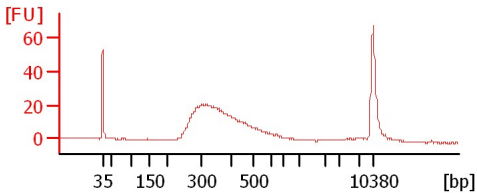
sample 3



sample 4

sample 5

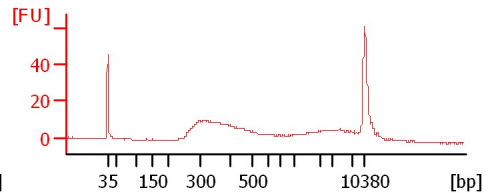
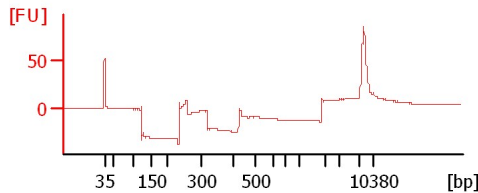
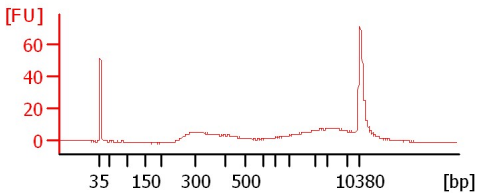
sample 6



sample 7

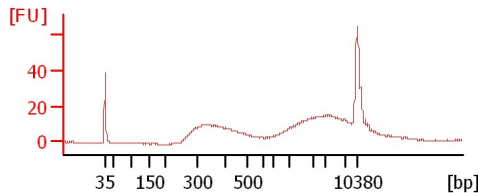
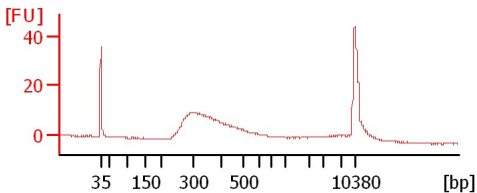
sample 8

sample 9



sample 10

sample 11



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
Modified: 4/2/2012 3:03:34 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<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:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
Modified: 4/2/2012 3:03:34 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

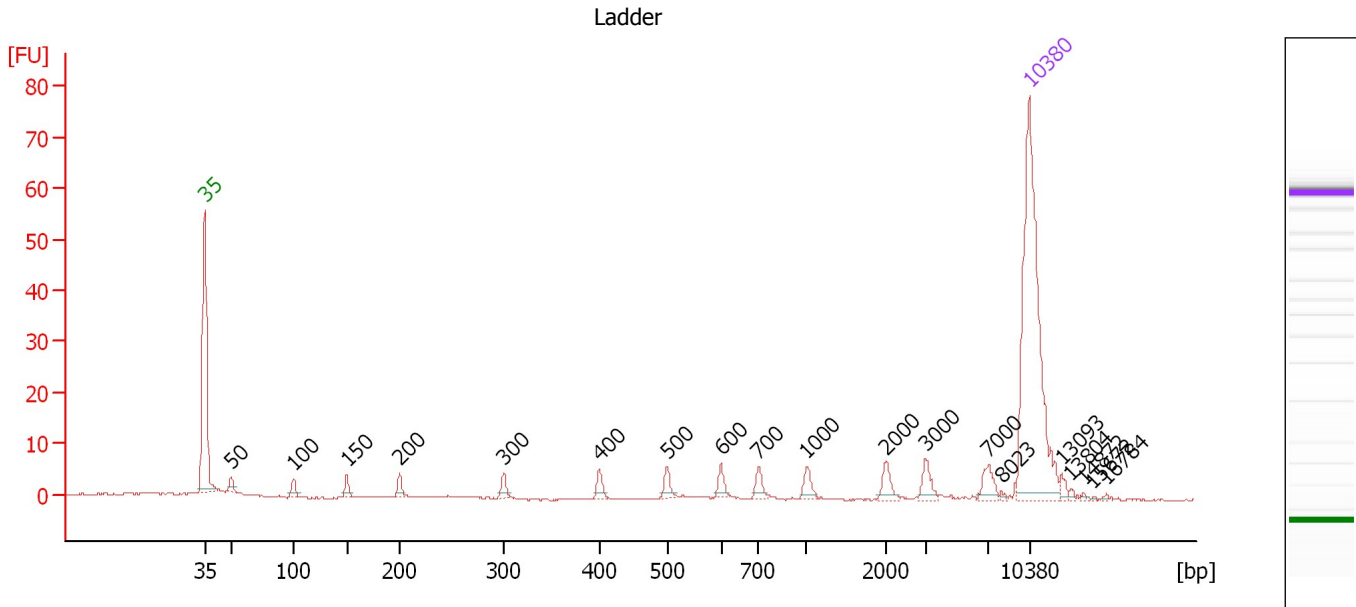
Ladder

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\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

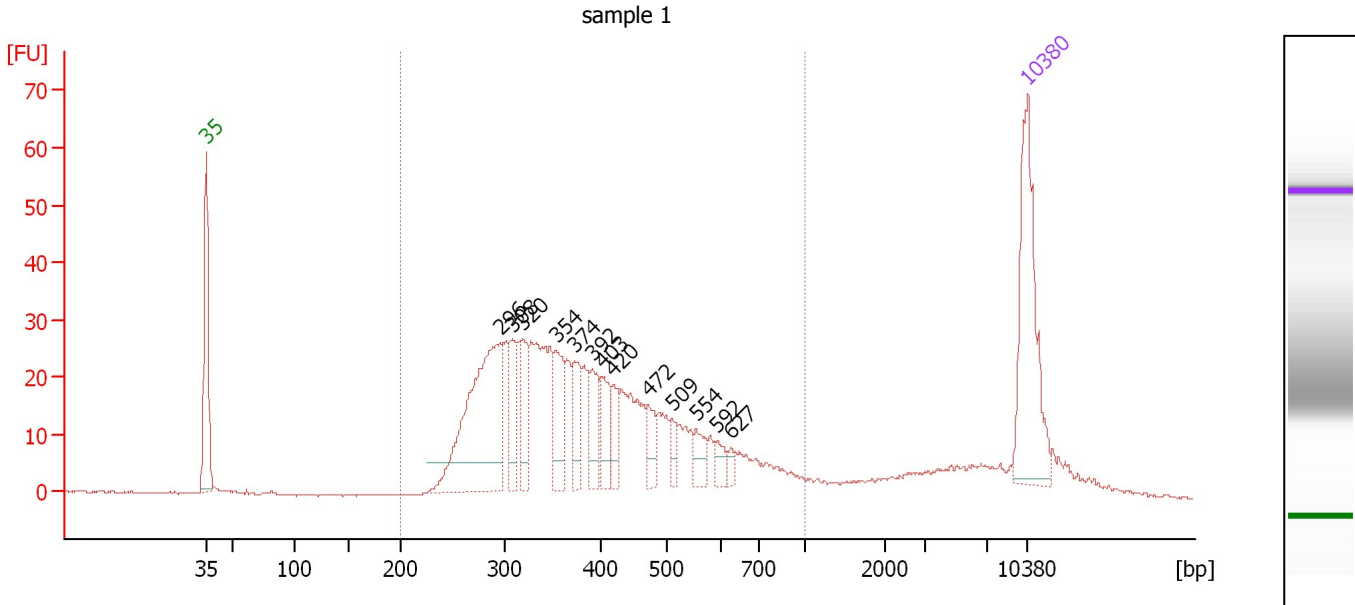
Peak table for Ladder

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	8,023	0.00	0.0	
16	10,380	75.00	10.9	Upper Marker
17	13,093	0.00	0.0	
18	13,804	0.00	0.0	
19	14,872	0.00	0.0	
20	15,672	0.00	0.0	
21	16,784	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 13 Corr. Area 1: 658.6
 Noise: 0.2

Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	296	170.88	873.2	
3	308	29.50	144.9	
4	320	35.05	166.2	
5	354	40.01	171.1	
6	374	29.27	118.7	
7	392	27.28	105.4	
8	403	24.79	93.2	
9	420	15.81	57.0	
10	472	14.21	45.6	
11	509	9.42	28.0	
12	554	13.90	38.0	
13	592	9.53	24.4	
14	627	4.42	10.7	
15	10,380	75.00	10.9	Upper Marker

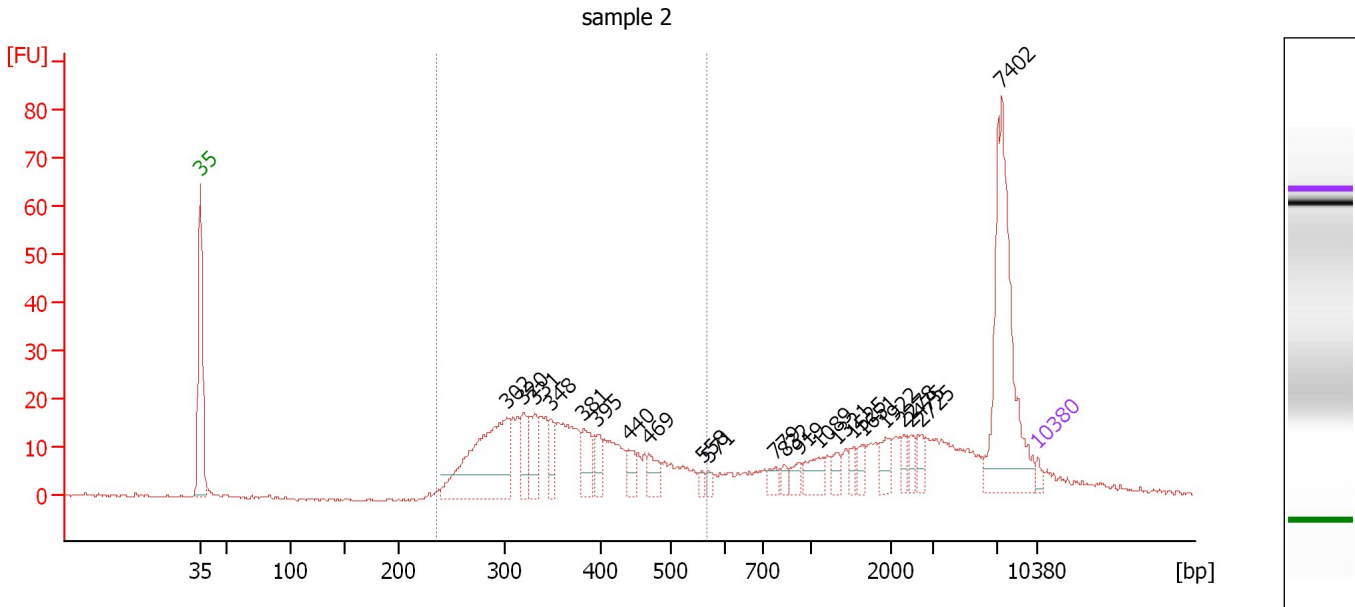
Region table for sample 1 : sample 1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	3,309.9	407	791.88	1,000	658.6	88	32.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 22 Corr. Area 1: 329.6
 Noise: 0.3

Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	302	3,057.64	15,322.5	
3	320	592.61	2,807.2	
4	331	638.54	2,919.9	
5	348	417.48	1,818.9	
6	381	604.99	2,405.1	
7	395	411.40	1,576.6	
8	440	297.19	1,023.5	
9	469	354.30	1,145.5	
10	558	97.44	264.6	
11	571	102.23	271.4	
12	779	161.90	314.8	
13	832	115.77	210.7	
14	919	187.23	308.8	
15	1,089	349.02	485.5	
16	1,321	168.86	193.7	
17	1,525	132.94	132.1	
18	1,651	167.81	154.0	
19	1,922	245.97	193.9	
20	2,278	152.52	101.4	
21	2,475	151.90	93.0	
22	2,725	184.00	102.3	
23	7,402	2,692.31	551.1	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...

... Region table for sample 2 :

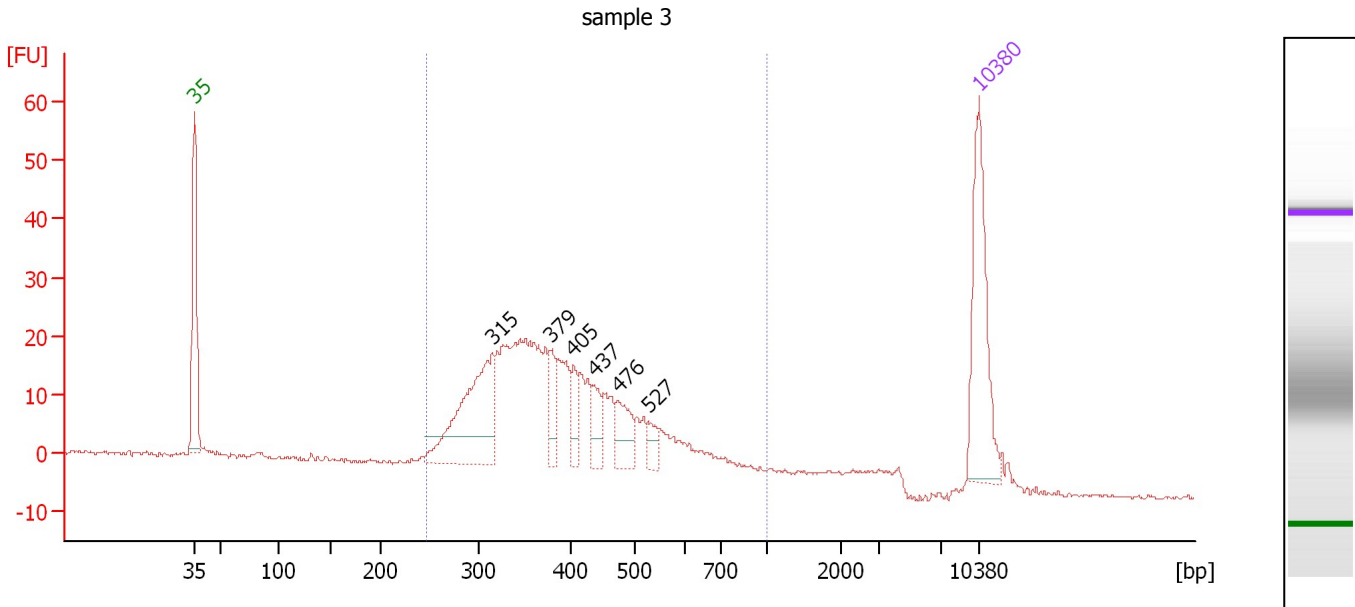
sample 2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
236	45,136.8	366	10,318.96	568	329.6	50	20.3	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 6 Corr. Area 1: 460.9
 Noise: 0.3

Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	315	131.67	633.5	
3	379	21.95	87.8	
4	405	17.86	66.8	
5	437	20.54	71.2	
6	476	28.21	89.8	
7	527	11.17	32.1	
8	10,380	75.00	10.9	Upper Marker

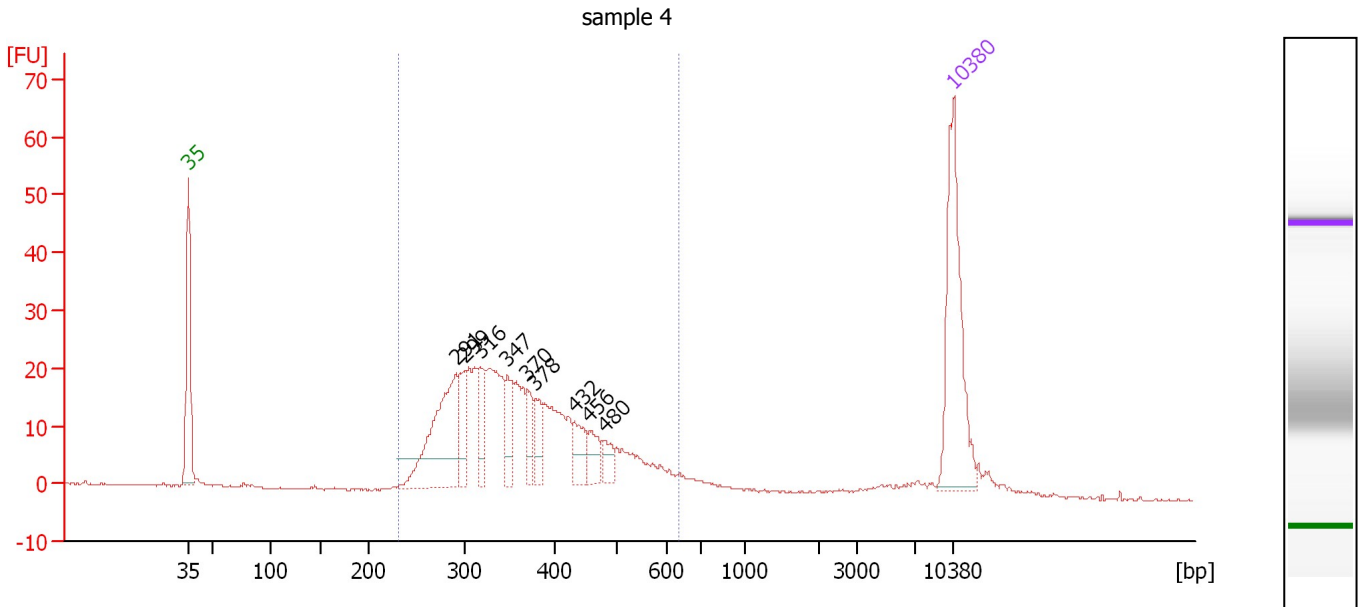
Region table for sample 3 : sample 3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	2,534.2	409	626.57	1,000	460.9	89	28.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 9 Corr. Area 1: 419.2
 Noise: 0.2

Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	291	104.12	542.9	
3	299	25.01	126.8	
4	316	24.67	118.2	
5	347	25.45	111.0	
6	370	16.91	69.3	
7	378	18.90	75.6	
8	432	20.15	70.6	
9	456	16.03	53.2	
10	480	11.46	36.2	
11	10,380	75.00	10.9	Upper Marker

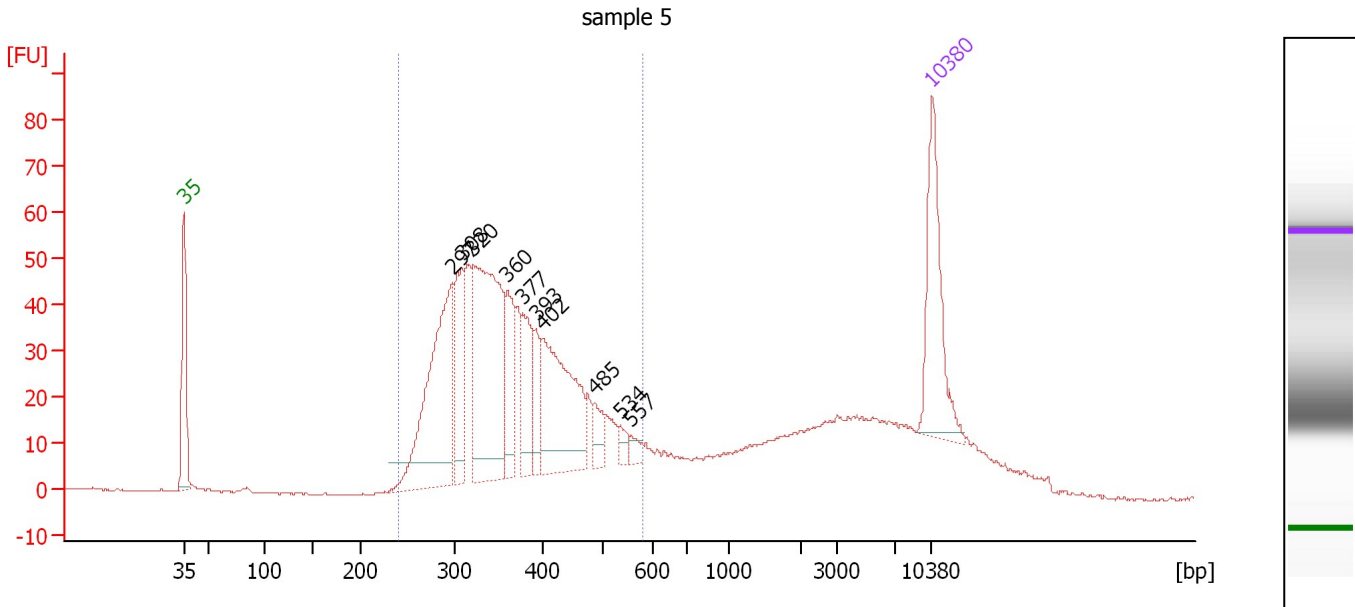
Region table for sample 4 : sample 4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
231	2,320.1	371	532.37	634	419.2	91	22.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 10 Corr. Area 1: 913.7
 Noise: 0.2

Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	297	211.01	1,075.4	
3	308	73.59	361.9	
4	320	240.16	1,135.9	
5	360	58.77	247.2	
6	377	59.06	237.2	
7	393	29.43	113.6	
8	402	141.54	533.8	
9	485	19.90	62.2	
10	534	9.05	25.7	
11	557	7.58	20.6	
12	10,380	75.00	10.9	Upper Marker

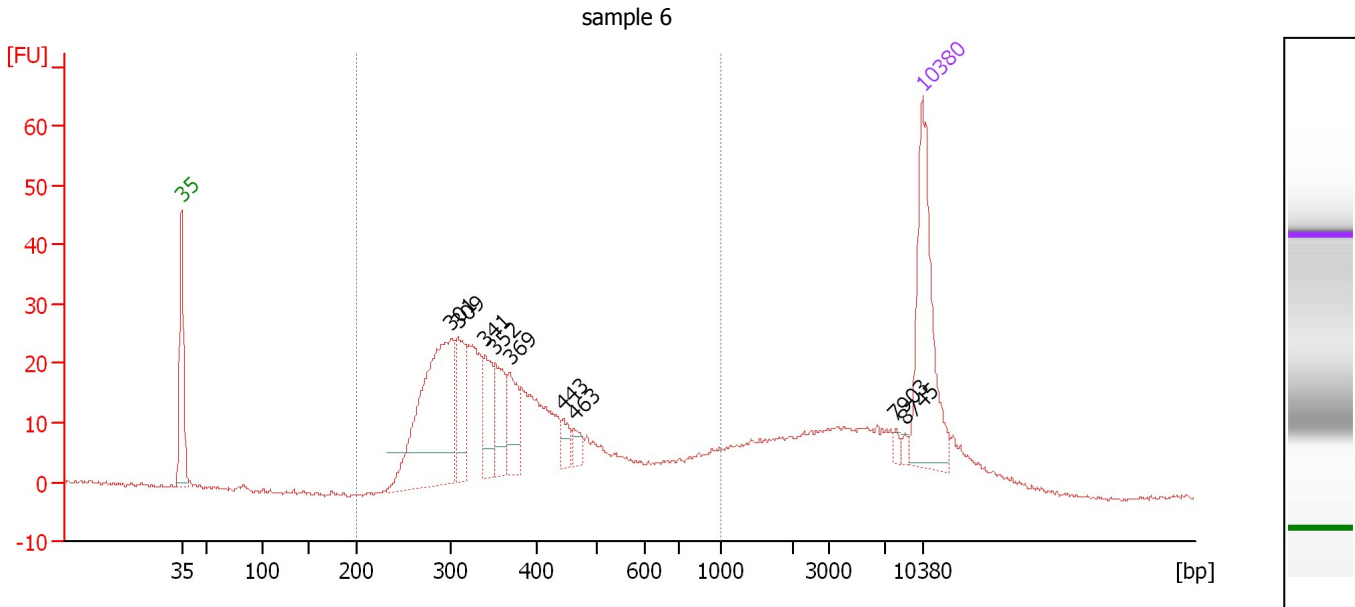
Region table for sample 5 : sample 5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
241	4,687.3	370	1,084.52	582	913.7	72	20.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 9 Corr. Area 1: 497.3
 Noise: 0.5

Peak table for sample 6 : sample 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	301	175.43	881.8	
3	309	42.88	209.9	
4	341	36.70	163.1	
5	352	35.50	152.7	
6	369	31.50	129.2	
7	443	10.39	35.5	
8	463	9.16	30.0	
9	7,903	2.78	0.5	
10	8,745	2.44	0.4	
11	10,380	75.00	10.9	Upper Marker

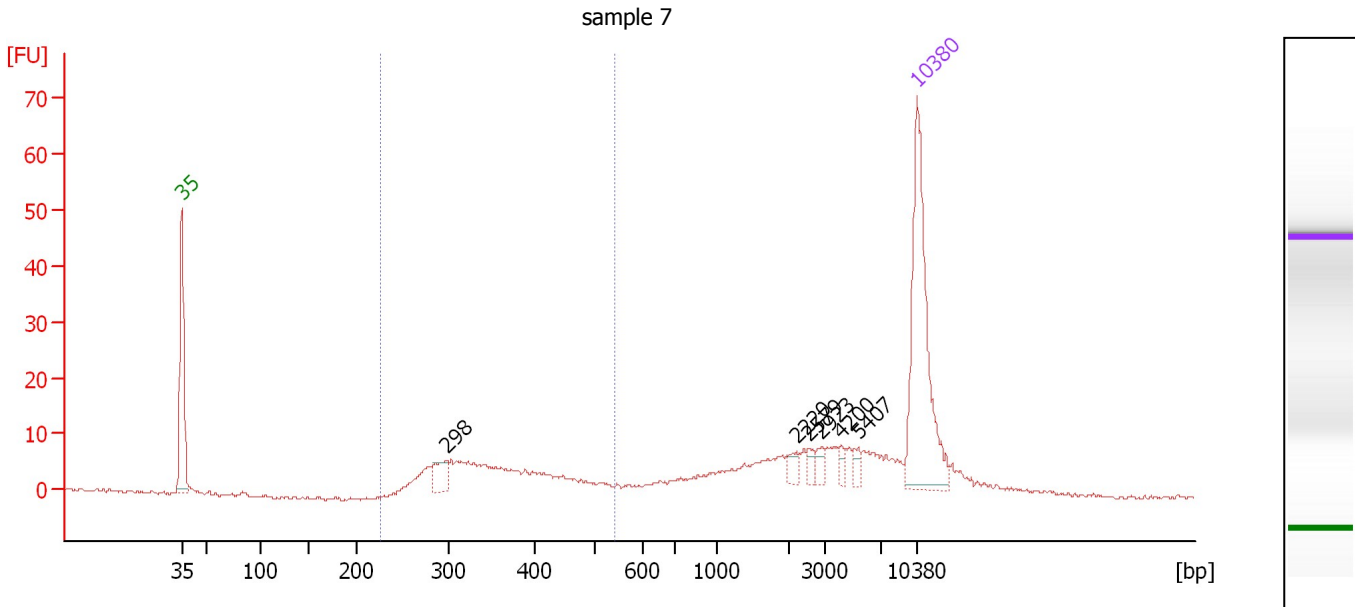
Region table for sample 6 : sample 6

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,632.0	406	618.45	1,000	497.3	72	37.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 6 Corr. Area 1: 99.7
 Noise: 0.2

Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	298	15.11	76.8	
3	2,220	5.29	3.6	
4	2,579	3.70	2.2	
5	2,923	4.56	2.4	
6	4,200	3.43	1.2	
7	5,407	4.06	1.1	
8	10,380	75.00	10.9	Upper Marker

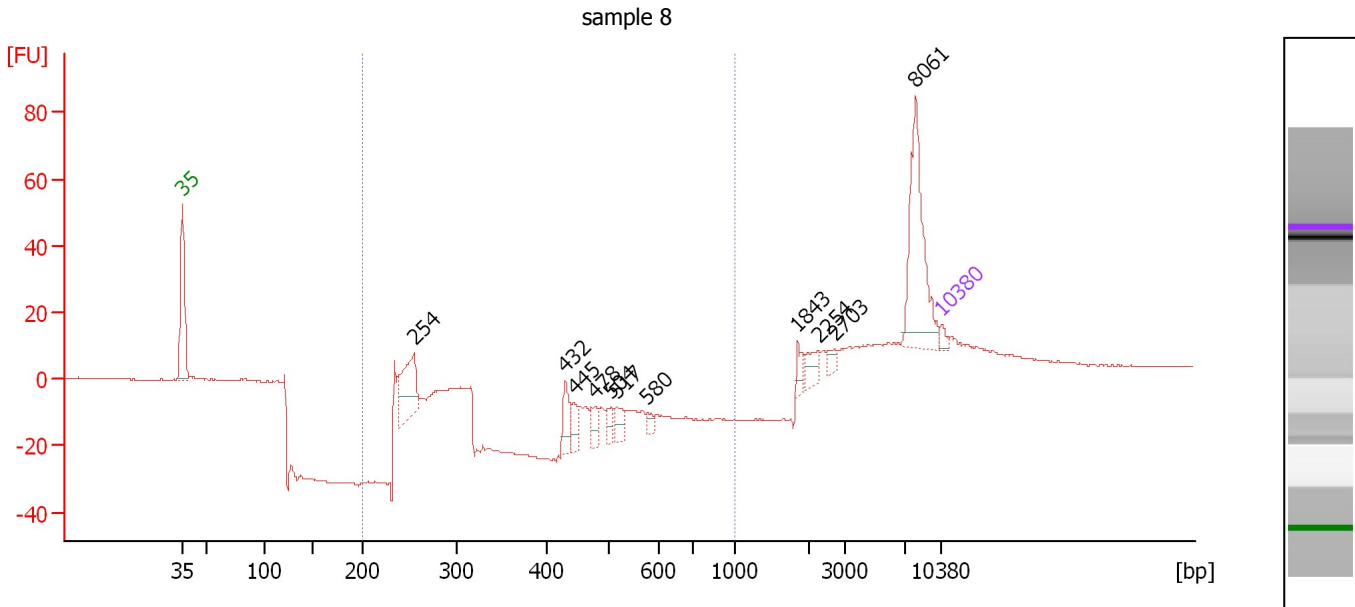
Region table for sample 7 : sample 7

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
226	511.6	361	116.00	541	99.7	38	19.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 11 Corr. Area 1: 7.9
 Noise: 0.2

Peak table for sample 8 : sample 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	254	1,226.49	7,313.4	
3	432	444.15	1,559.3	
4	445	266.48	906.8	
5	478	251.29	796.9	
6	504	203.59	611.6	
7	517	262.86	770.0	
8	580	105.62	276.1	
9	1,843	163.20	134.1	
10	2,254	229.24	154.1	
11	2,703	113.49	63.6	
12	8,061	1,650.33	310.2	
13	10,380	75.00	10.9	Upper Marker

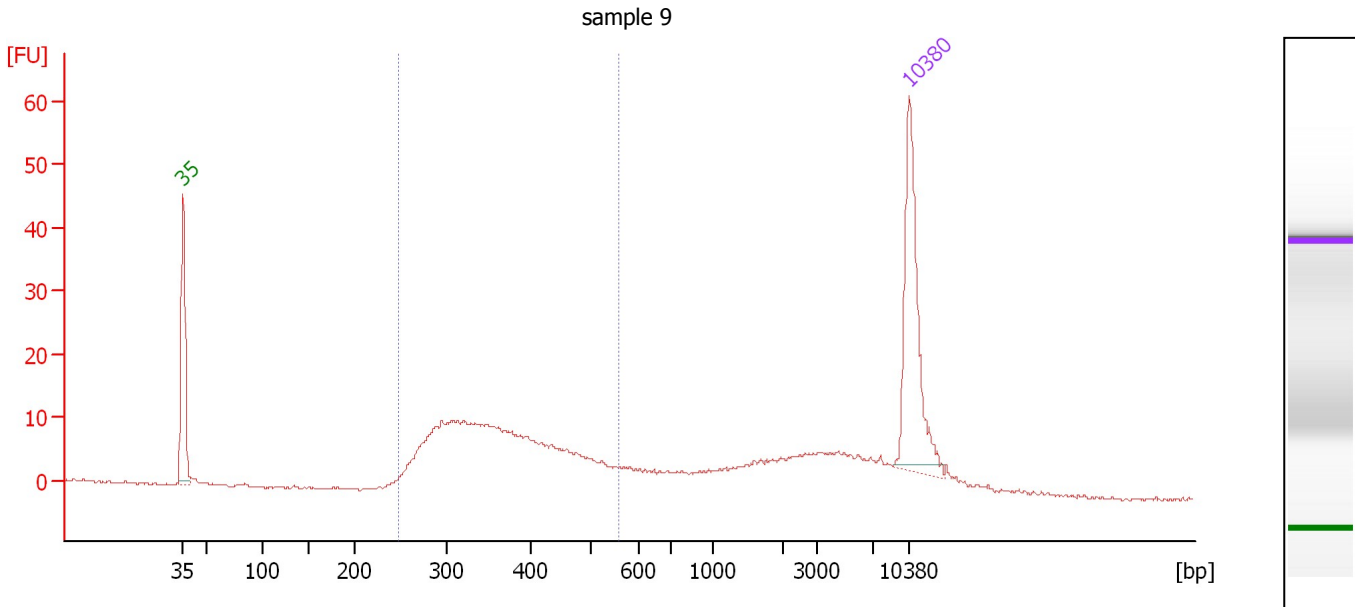
Region table for sample 8 : sample 8

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,325.9	249	217.95	1,000	7.9	3	2.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 0 Corr. Area 1: 201.3
 Noise: 0.2

Peak table for sample 9 : sample 9

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

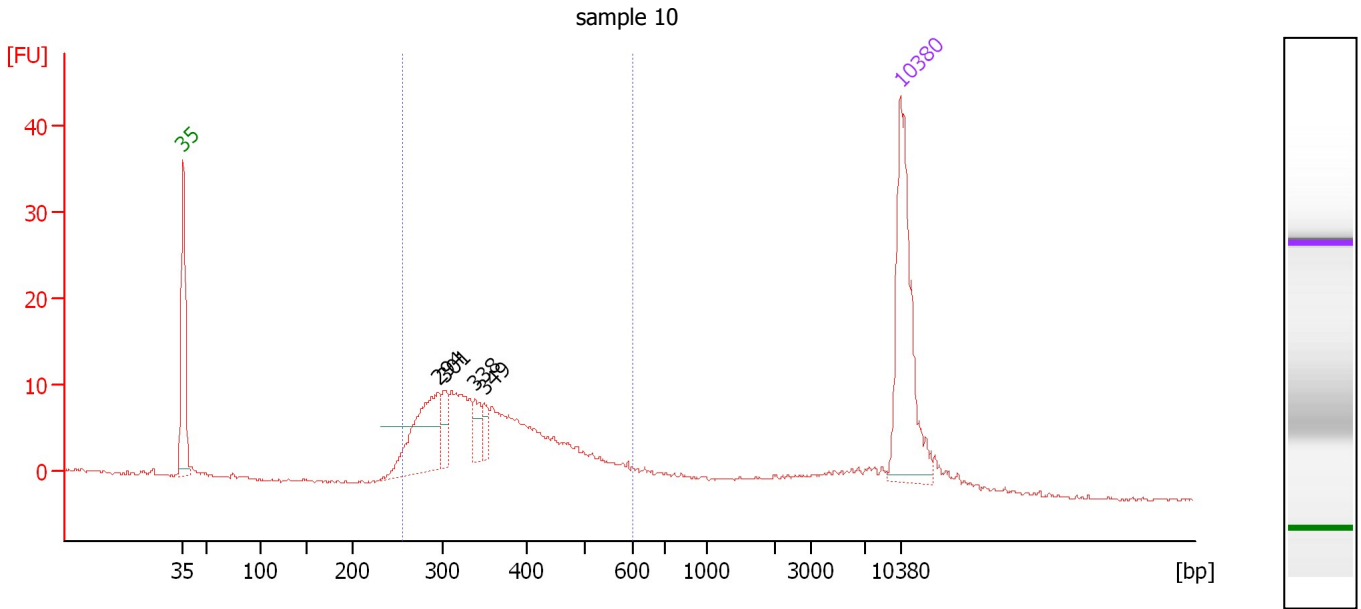
Region table for sample 9 : sample 9

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
248	1,291.1	370	298.96	558	201.3	61	20.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 4 Corr. Area 1: 188.5
 Noise: 0.2

Peak table for sample 10 : sample 10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	294	72.35	373.3	
3	301	16.37	82.3	
4	338	14.06	63.0	
5	349	9.56	41.4	
6	10,380	75.00	10.9	Upper Marker

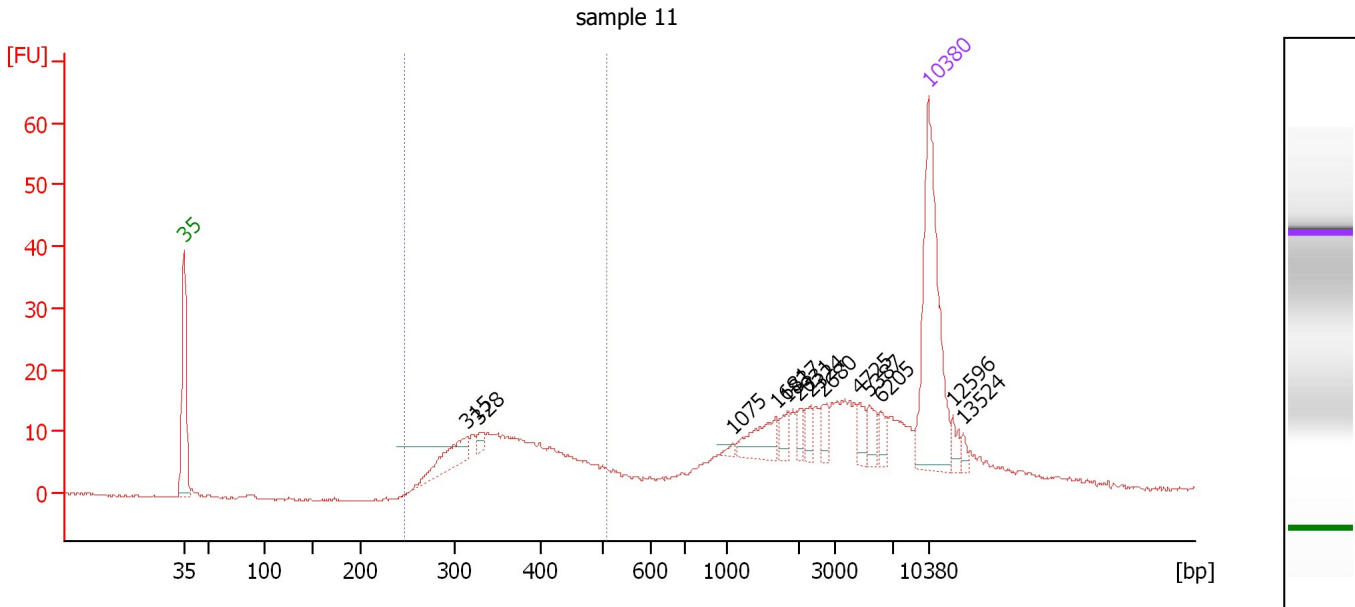
Region table for sample 10 : sample 10

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
254	1,403.8	369	321.55	601	188.5	79	21.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : sample 11

Height Threshold [FU] : 2

Overall Results for sample 11 : sample 11

Number of peaks found: 13 Corr. Area 1: 160.2
 Noise: 0.1

Peak table for sample 11 : sample 11

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	315	24.61	118.2	
3	328	4.38	20.2	
4	1,075	1.92	2.7	
5	1,681	16.59	15.0	
6	1,837	6.44	5.3	
7	2,031	5.50	4.1	
8	2,324	5.33	3.5	
9	2,680	6.50	3.7	
10	4,725	6.55	2.1	
11	5,387	8.38	2.4	
12	6,205	5.76	1.4	
13	10,380	75.00	10.9	Upper Marker
14	12,596	0.00	0.0	
15	13,524	0.00	0.0	

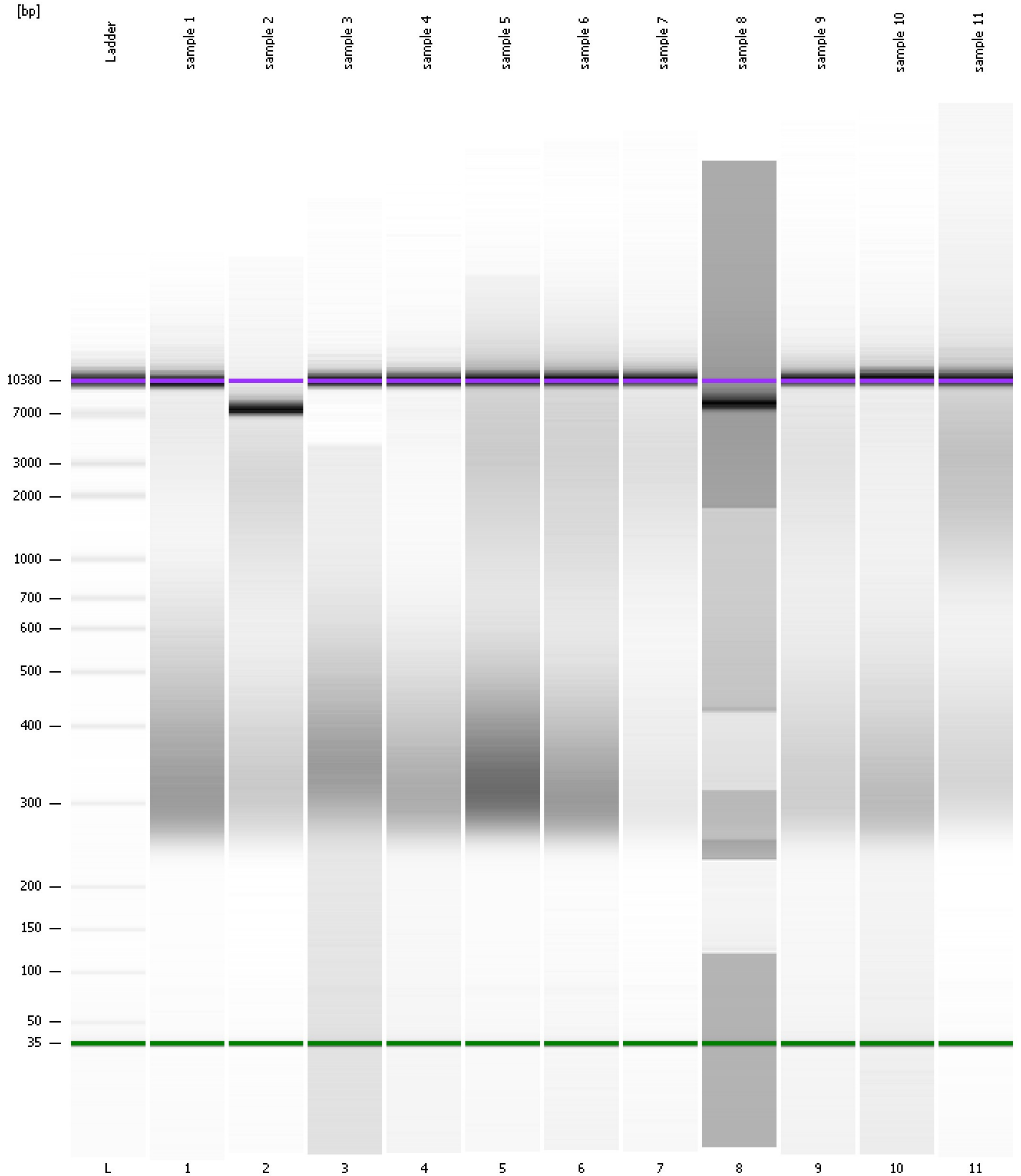
Region table for sample 11 : sample 11

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	909.0	368	212.91	511	160.2	37	16.5	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
Modified: 4/2/2012 3:03:34 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad

Created: 4/2/2012 2:19:23 PM
 Modified: 4/2/2012 3:03:34 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		4/2/2012 3:00:40 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-04-02\2012-04-02_005.xad)		Instrument	Run		4/2/2012 2:19:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/2/2012 2:19:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/2/2012 2:19:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/2/2012 2:19:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/2/2012 2:19:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/2/2012 2:19:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/2/2012 2:19:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1