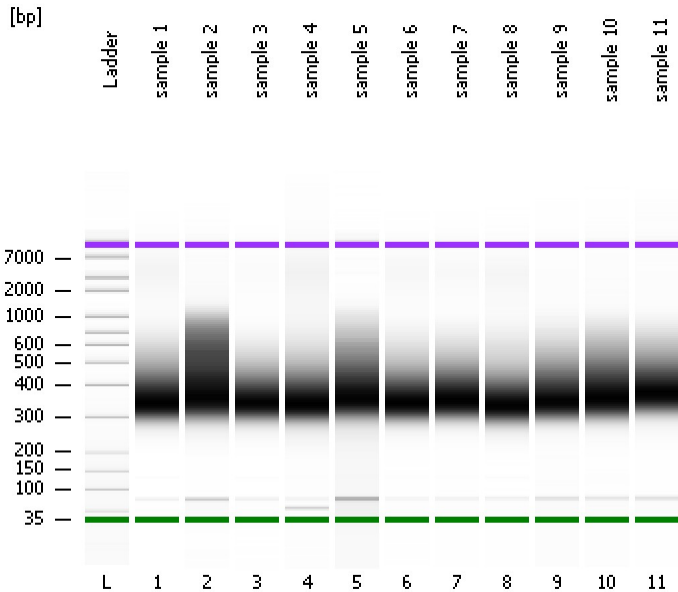


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
Modified: 7/16/2013 5:11:48 PM

Electrophoresis File Run Summary



Instrument Information:

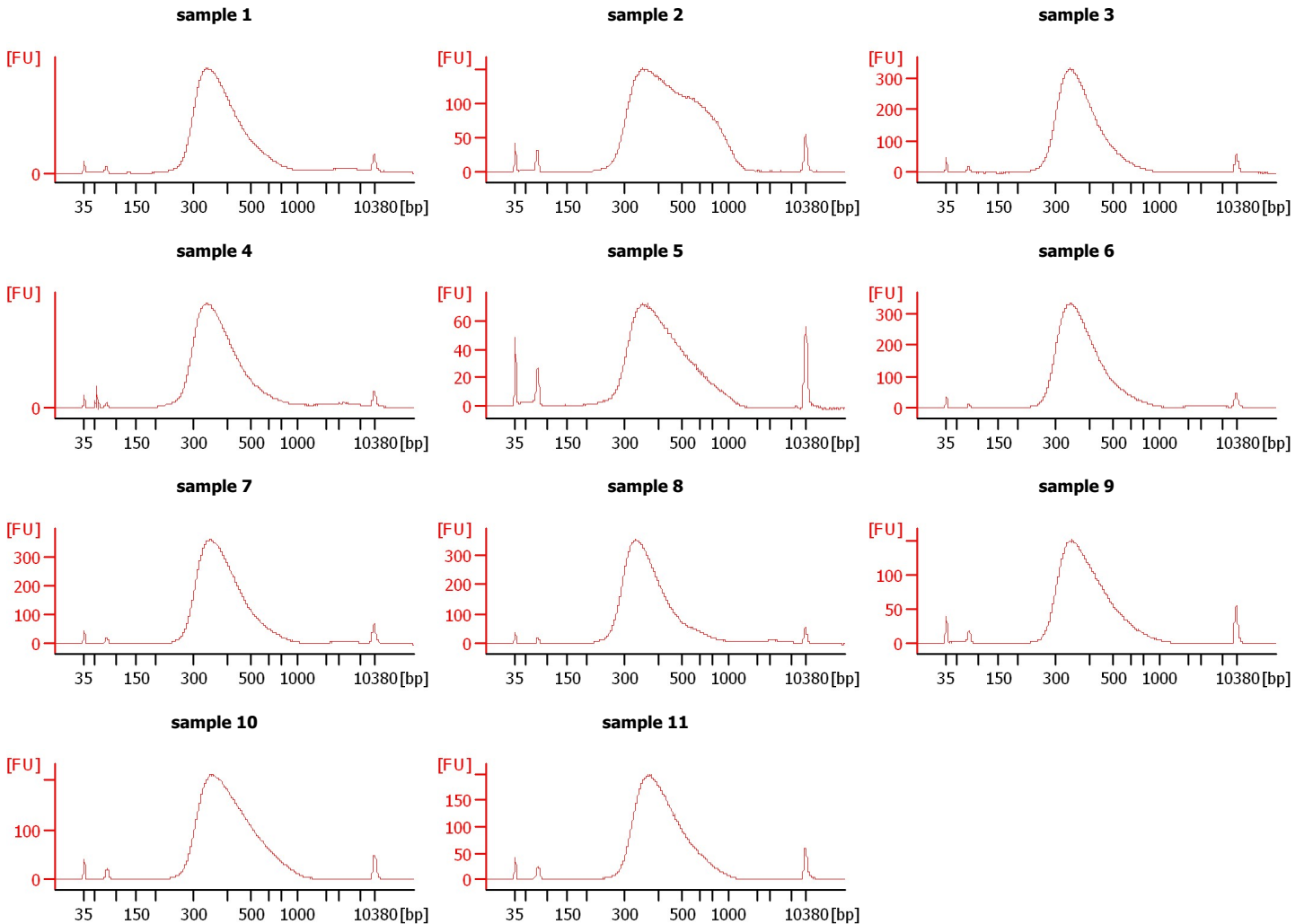
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
Modified: 7/16/2013 5:11:48 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\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
Modified: 7/16/2013 5:11:48 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

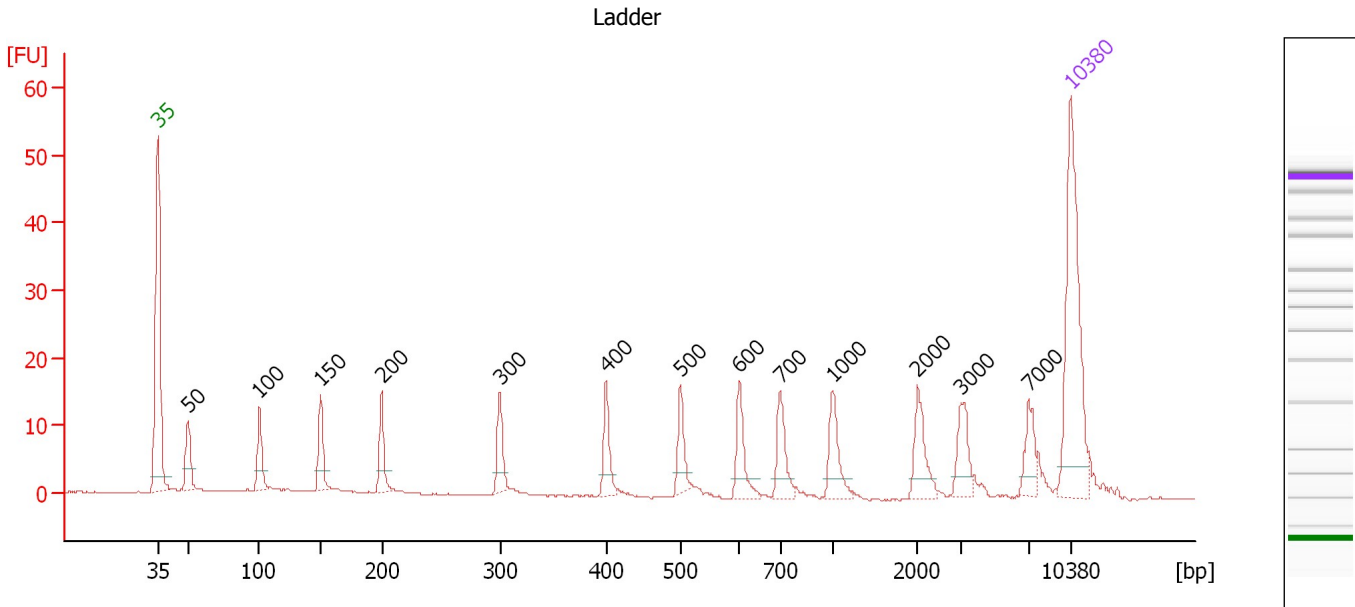
Ladder

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\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

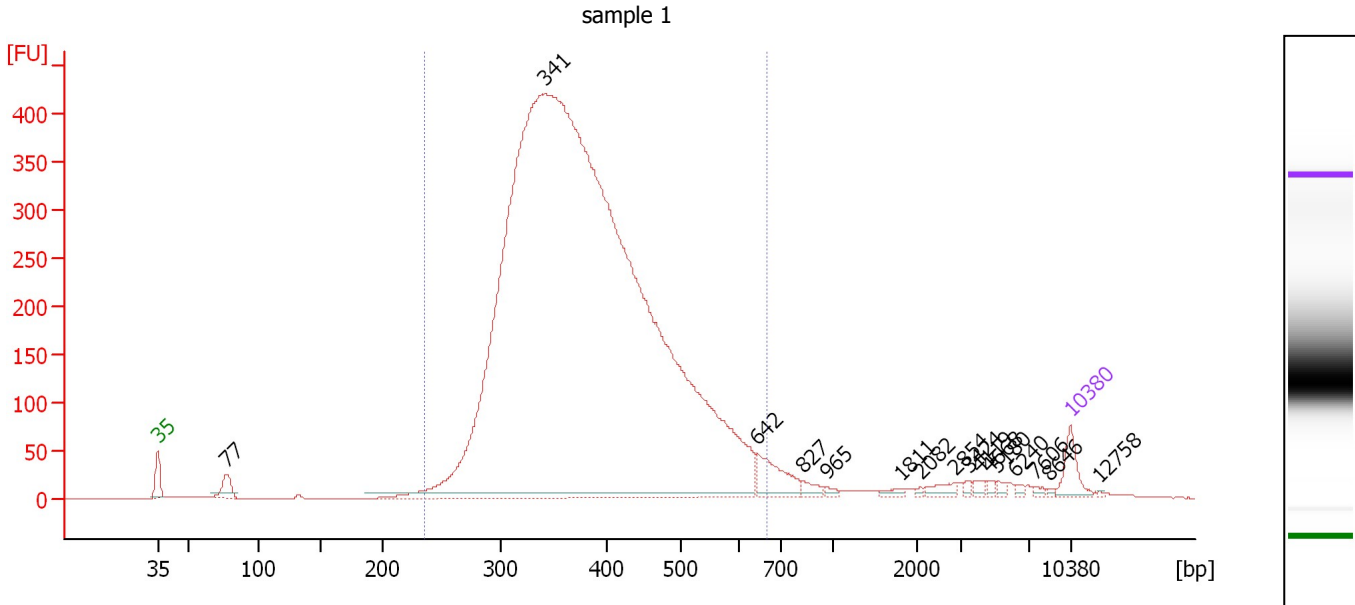
Peak table for Ladder

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\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 16 Corr. Area 1: 6,930.1
 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	77	91.09	1,792.6	
3	341	11,325.73	50,291.9	
4	642	162.94	384.6	
5	827	34.74	63.7	
6	965	12.64	19.8	
7	1,811	17.07	14.3	
8	2,082	7.27	5.3	
9	2,854	32.55	17.3	
10	3,424	10.25	4.5	
11	4,119	15.46	5.7	
12	4,668	10.36	3.4	
13	5,180	12.66	3.7	
14	6,240	10.25	2.5	
15	7,606	9.17	1.8	
16	8,646	5.27	0.9	
17	10,380	75.00	10.9	Upper Marker
18	12,758	0.00	0.0	

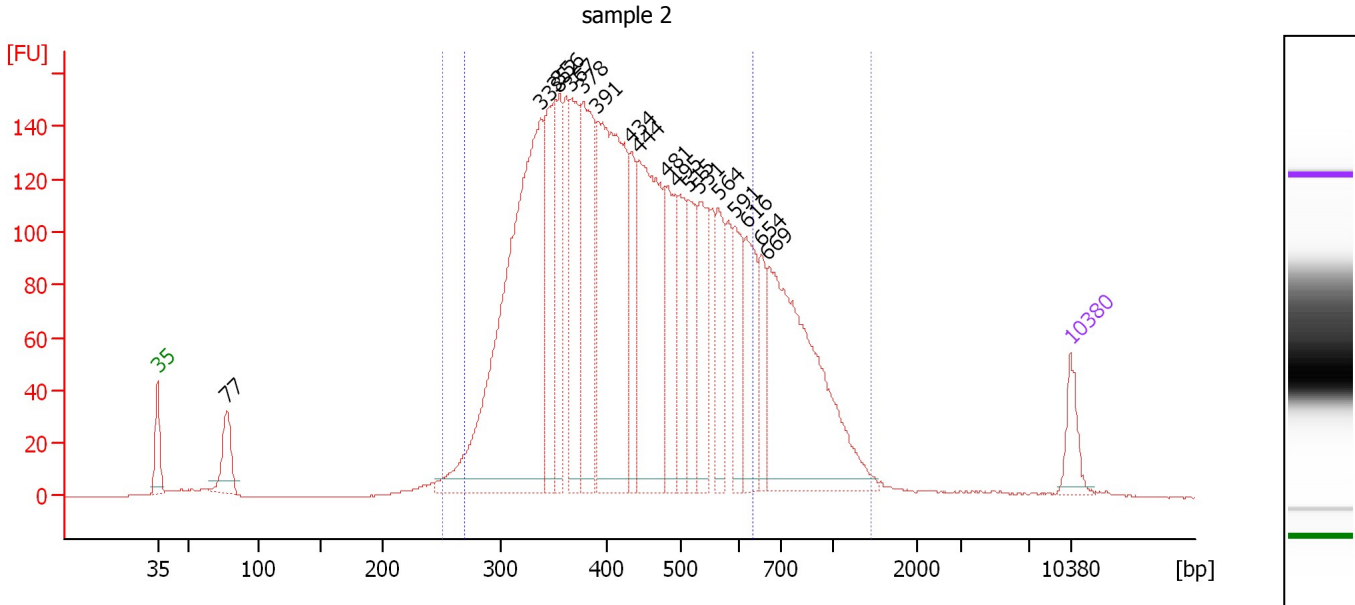
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
236	665	389	43,906.9	10,720.28	6,930.1	94	20.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 18 Corr. Area 1: 3,808.6
 Noise: 0.2 Corr. Area 2: 3,236.9

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	77	180.85	3,560.2	
3	338	1,706.21	7,639.7	
4	352	433.47	1,868.0	
5	356	300.86	1,281.9	
6	367	380.64	1,571.1	
7	378	555.18	2,225.4	
8	391	1,029.88	3,988.9	
9	434	226.57	791.0	
10	444	736.03	2,512.9	
11	481	301.34	948.6	
12	495	218.81	669.5	
13	515	209.66	617.2	
14	531	269.71	769.2	
15	564	198.96	535.0	
16	591	190.86	489.7	
17	616	251.24	617.7	
18	654	128.79	298.5	
19	669	917.14	2,078.2	
20	10,380	75.00	10.9	Upper Marker

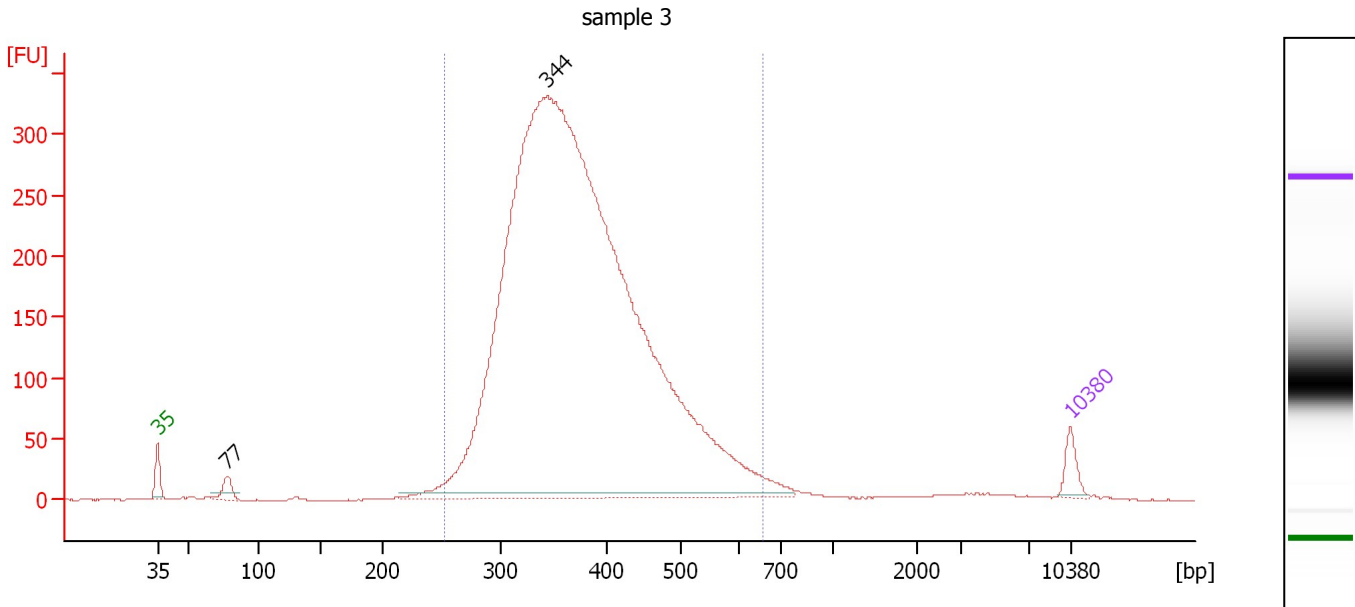
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
251	1,453	489	31,436.7	8,822.94	3,808.6	96	37.0	Blue
270	632	427	28,800.7	7,617.99	3,236.9	82	21.4	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 2 Corr. Area 1: 4,962.3
 Noise: 0.2

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	77	100.35	1,964.5	
3	344	11,171.06	49,229.5	
4	10,380	75.00	10.9	Upper Marker

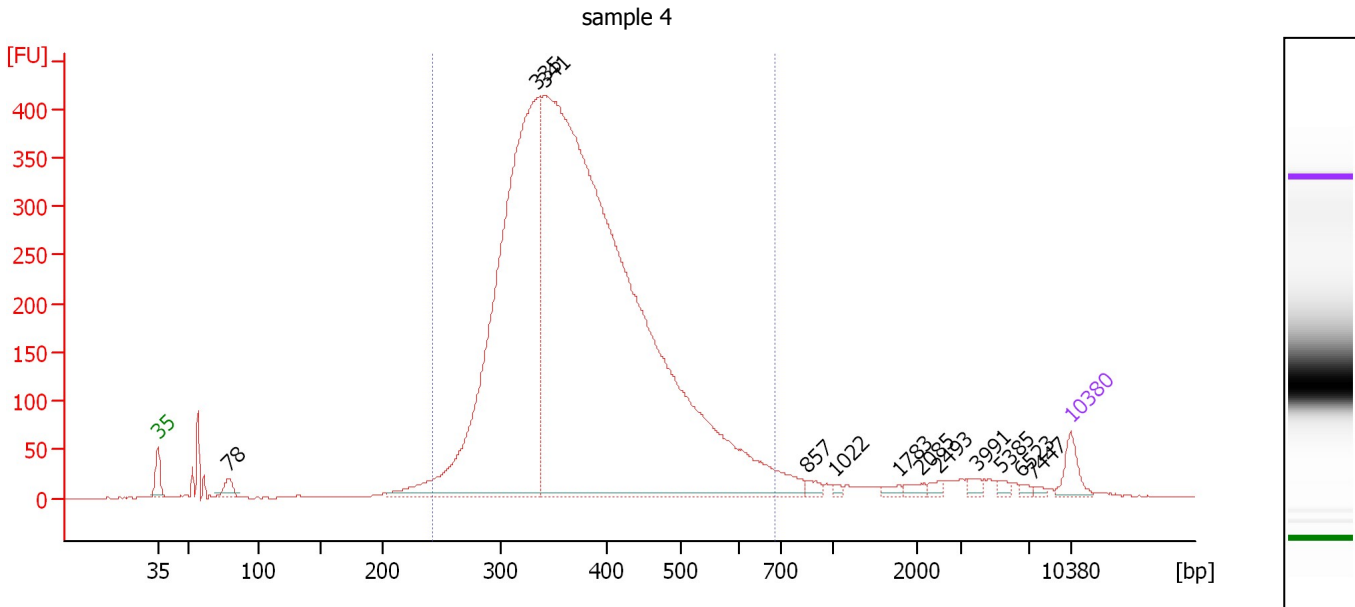
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
253	658	381	43,933.2	10,602.55	4,962.3	96	18.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 12 Corr. Area 1: 6,639.1
 Noise: 0.3

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	78	71.08	1,372.7	
3	335	3,578.14	16,188.9	
4	341	7,580.83	33,656.0	
5	857	31.70	56.0	
6	1,022	14.43	21.4	
7	1,783	21.46	18.2	
8	2,085	24.30	17.7	
9	2,493	19.30	11.7	
10	3,991	22.85	8.7	
11	5,385	17.54	4.9	
12	6,523	12.78	3.0	
13	7,447	10.96	2.2	
14	10,380	75.00	10.9	Upper Marker

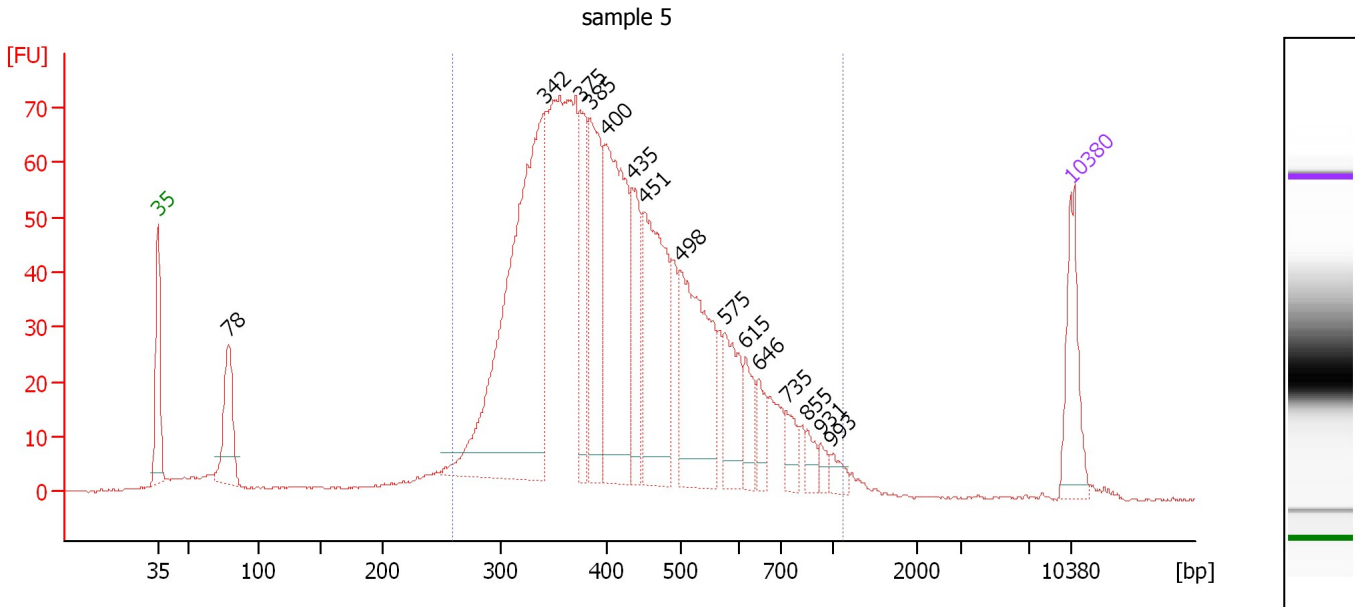
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
243	687	383	43,114.3	10,380.42	6,639.1	92	20.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 15 Corr. Area 1: 1,445.7
 Noise: 0.1

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	78	126.45	2,445.1	
3	342	648.28	2,869.5	
4	375	114.90	463.8	
5	385	173.70	683.9	
6	400	311.98	1,183.0	
7	435	101.57	354.0	
8	451	241.70	812.7	
9	498	236.14	717.8	
10	575	83.05	218.8	
11	615	43.58	107.4	
12	646	30.23	70.9	
13	735	26.63	54.9	
14	855	18.16	32.2	
15	931	12.02	19.6	
16	993	15.39	23.5	
17	10,380	75.00	10.9	Upper Marker

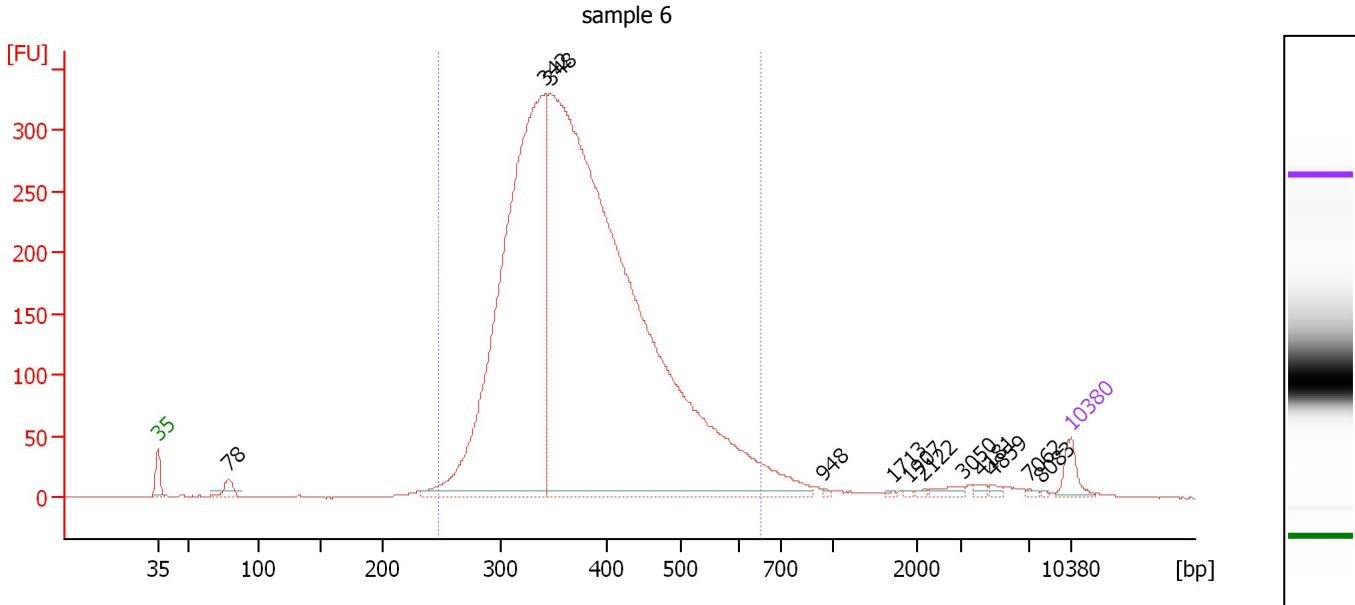
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
259	1,131	440	11,219.9	2,967.62	1,445.7	91	30.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 12 Corr. Area 1: 5,052.7
 Noise: 0.1

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	78	78.05	1,507.2	
3	342	4,047.46	17,921.9	
4	348	7,890.02	34,396.3	
5	948	8.77	14.0	
6	1,713	5.87	5.2	
7	1,907	6.11	4.9	
8	2,122	8.51	6.1	
9	3,050	33.43	16.6	
10	4,181	15.82	5.7	
11	4,859	14.26	4.4	
12	7,062	9.00	1.9	
13	8,083	4.82	0.9	
14	10,380	75.00	10.9	Upper Marker

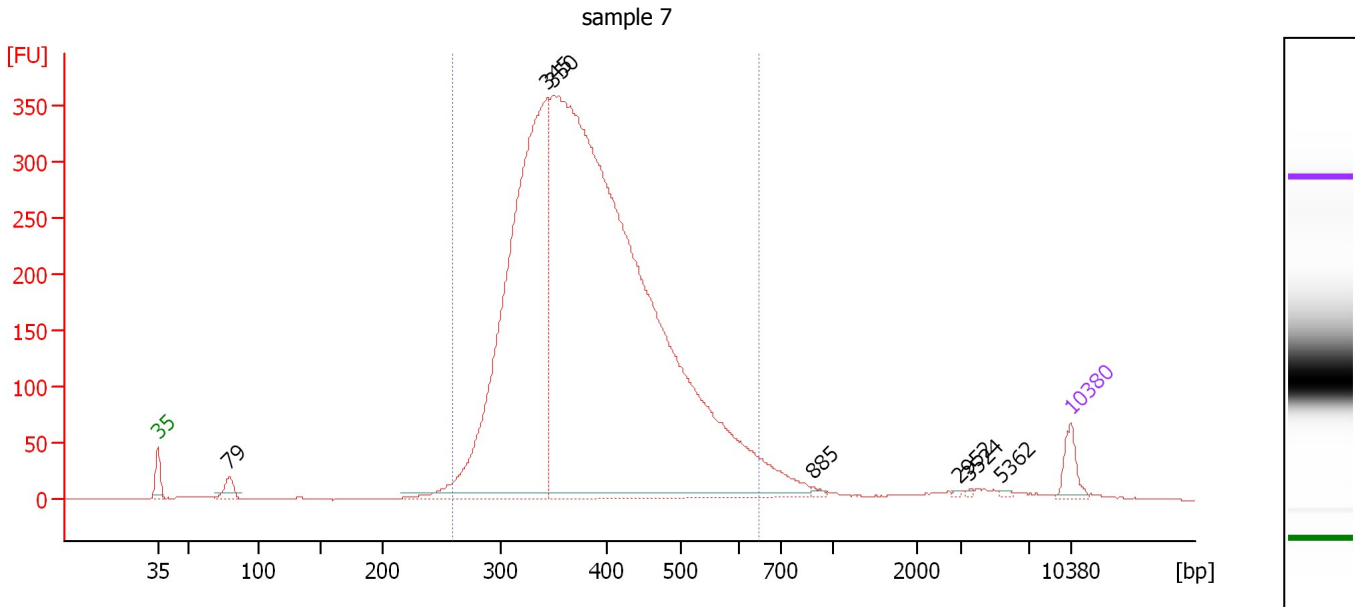
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
249	650	384	46,227.7	11,199.12	5,052.7	94	19.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 7 Corr. Area 1: 5,663.6
 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	79	81.31	1,563.8	
3	345	3,351.14	14,725.5	
4	350	7,506.40	32,526.9	
5	885	12.00	20.5	
6	2,952	4.38	2.2	
7	3,524	4.66	2.0	
8	5,362	7.63	2.2	
9	10,380	75.00	10.9	Upper Marker

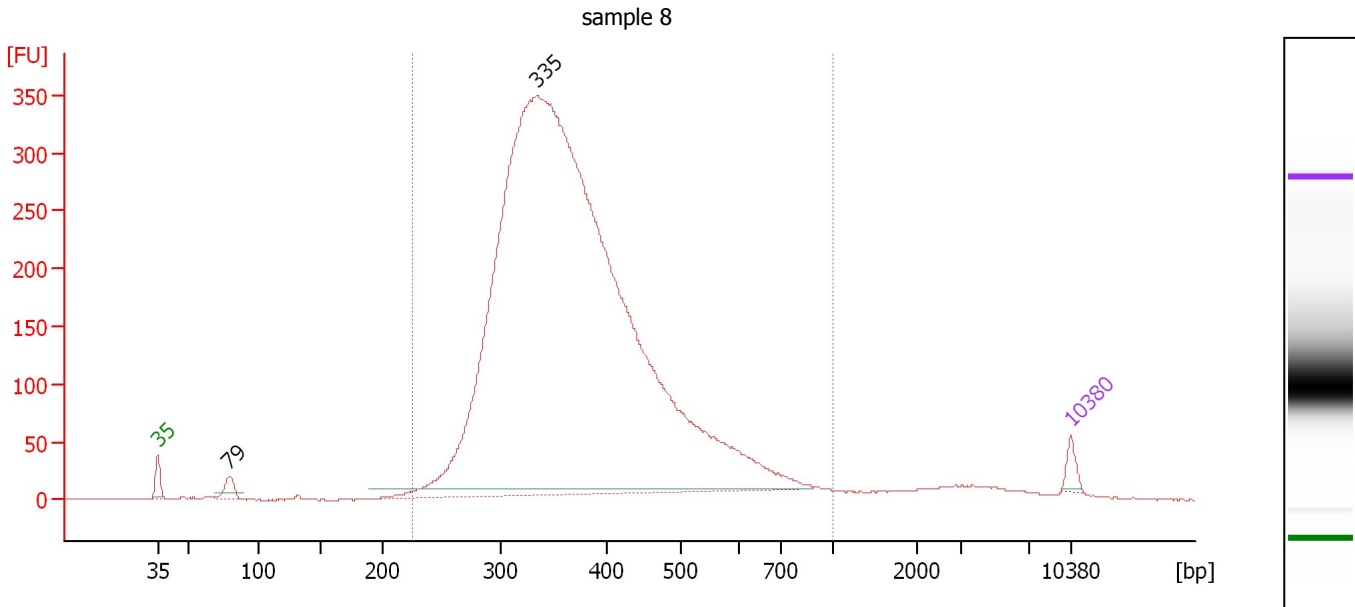
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
260	647	392	40,908.4	10,142.58	5,663.6	94	19.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 2 Corr. Area 1: 5,423.0
 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	79	157.47	3,025.4	
3	335	18,129.46	82,084.8	
4	10,380	75.00	10.9	Upper Marker

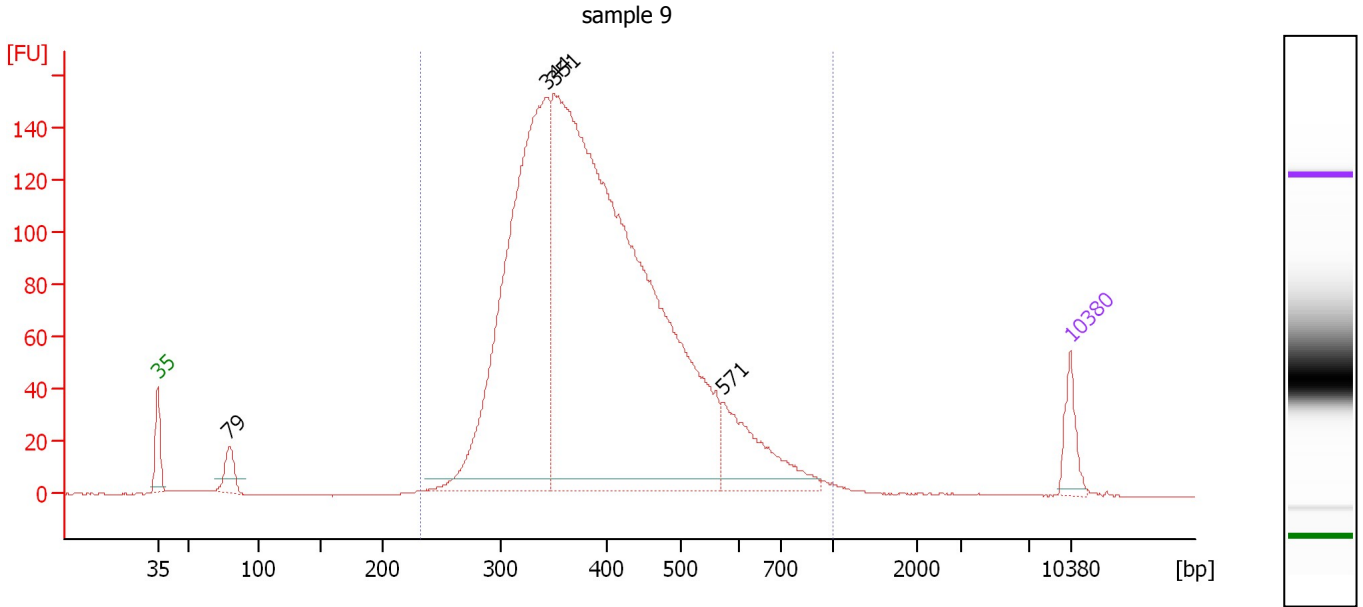
Region table for sample 8 : sample 8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
225	1,000	384	74,931.1	17,817.80	5,423.0	96	25.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 4 Corr. Area 1: 2,566.0
 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	79	106.49	2,051.4	
3	344	2,009.65	8,856.0	
4	351	4,067.85	17,579.7	
5	571	320.38	850.2	
6	10,380	75.00	10.9	Upper Marker

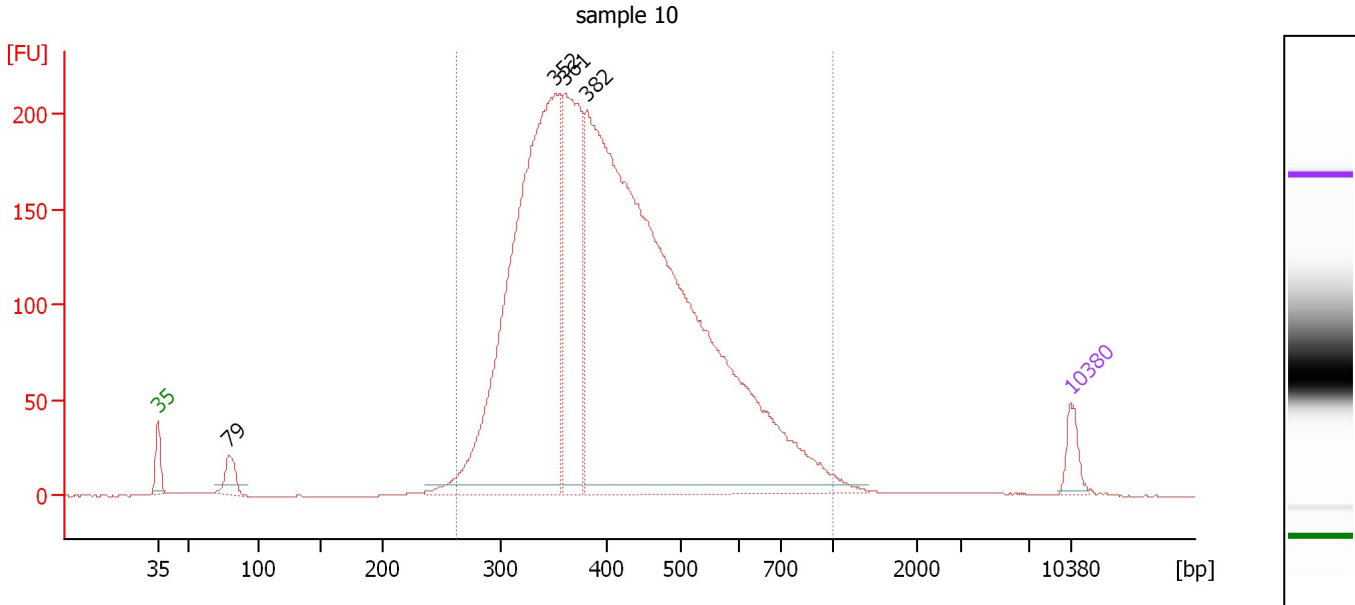
Region table for sample 9 : sample 9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
233	1,000	407	25,087.2	6,310.35	2,566.0	97	25.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 4 Corr. Area 1: 3,907.6
 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	79	134.98	2,587.1	
3	352	3,184.09	13,693.1	
4	361	1,081.12	4,537.4	
5	382	5,652.38	22,448.7	
6	10,380	75.00	10.9	Upper Marker

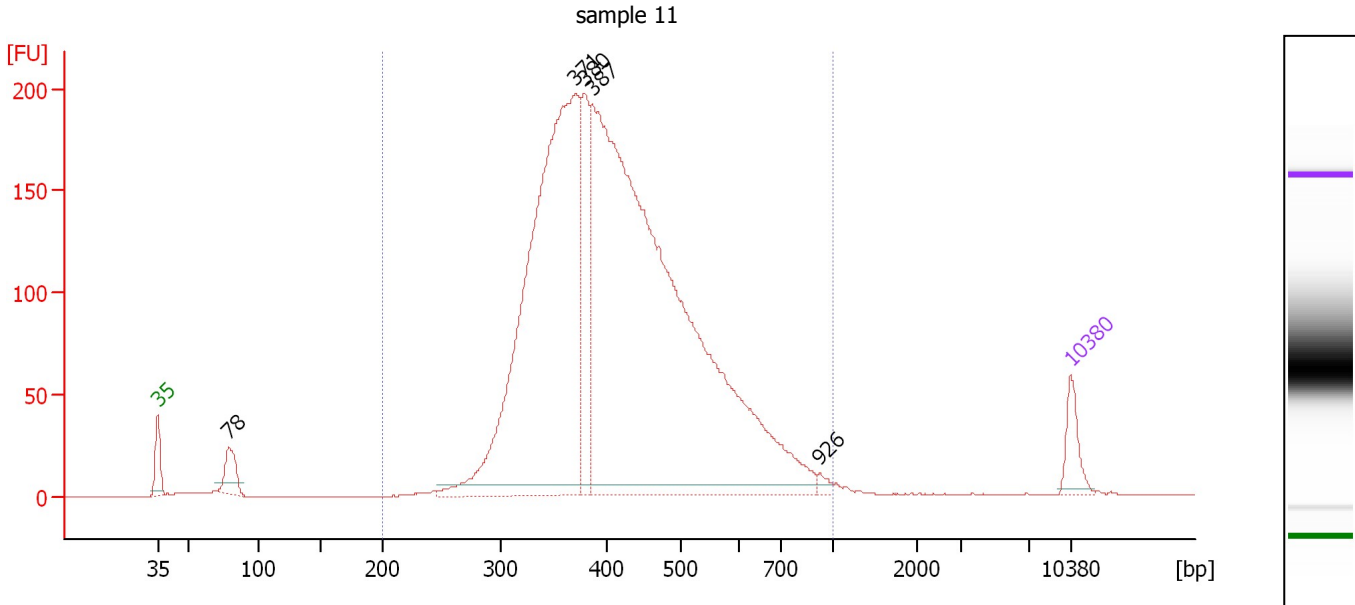
Region table for sample 10 : sample 10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
264	1,000	428	36,954.0	9,668.74	3,907.6	96	26.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 5 Corr. Area 1: 3,256.9
 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	78	128.91	2,492.0	
3	371	2,432.65	9,932.9	
4	380	364.10	1,452.5	
5	387	3,790.20	14,851.5	
6	926	16.86	27.6	
7	10,380	75.00	10.9	Upper Marker

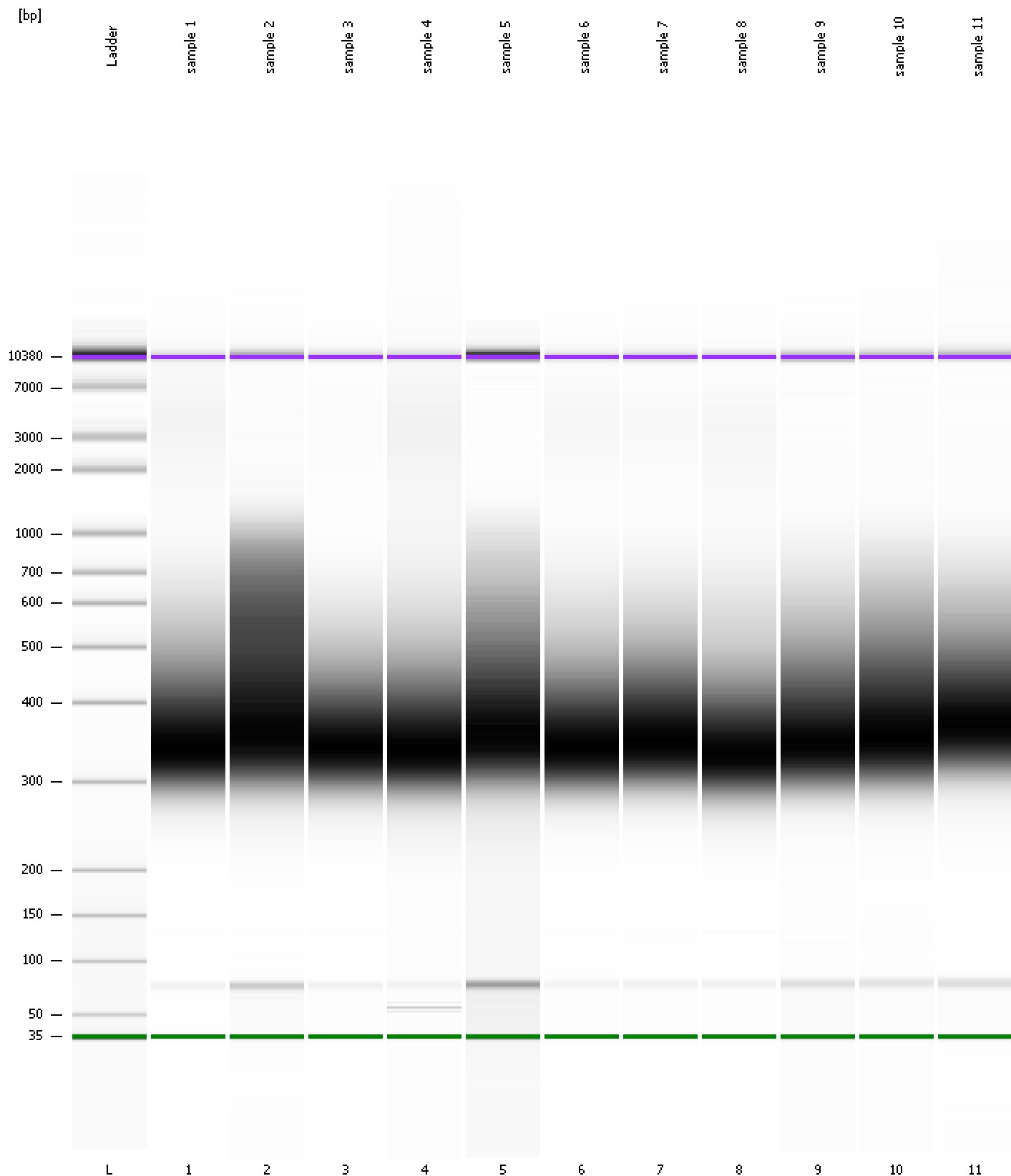
Region table for sample 11 : sample 11

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	430	24,758.1	6,580.66	3,256.9	96	24.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
Modified: 7/16/2013 5:11:48 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad

Created: 7/16/2013 4:31:13 PM
 Modified: 7/16/2013 5:11:48 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		7/16/2013 5:11:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-16\2013-07-16_003.xad)		Instrument	Run		7/16/2013 4:31:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/16/2013 4:31:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/16/2013 4:31:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/16/2013 4:31:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/16/2013 4:31:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/16/2013 4:31:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/16/2013 4:31:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1