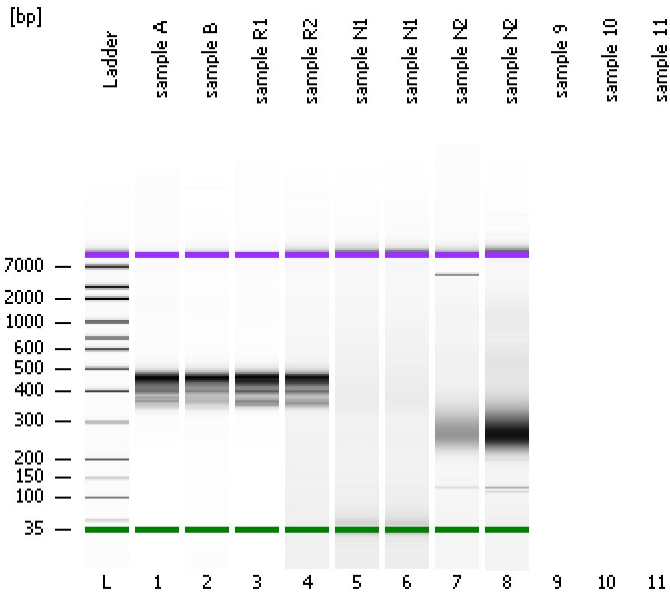


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
Modified: 8/8/2013 1:46:17 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

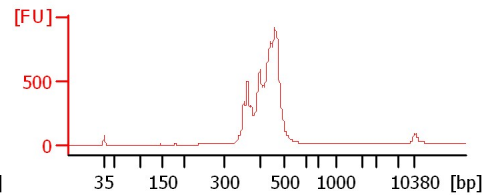
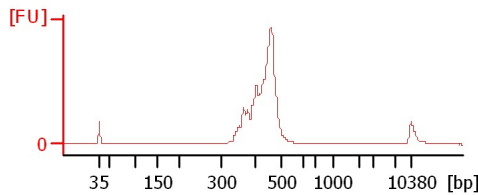
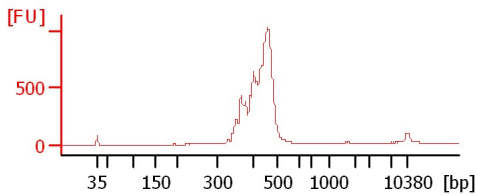
Chip Information:

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

sample A

sample B

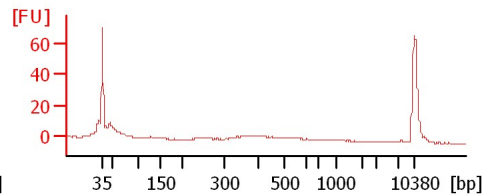
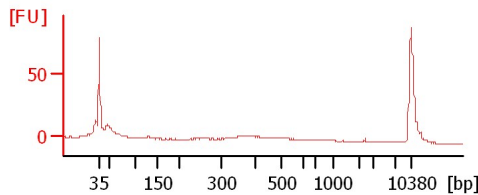
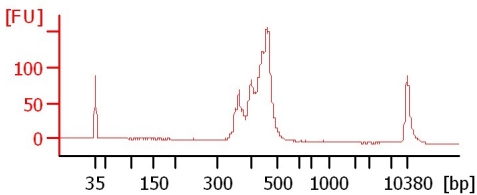
sample R1



sample R2

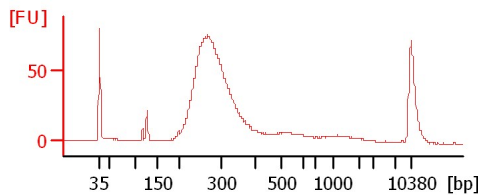
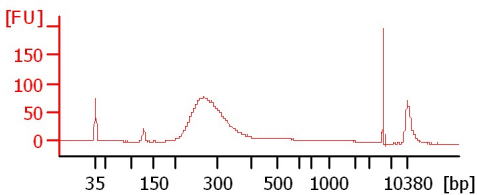
sample N1

sample N1



sample N2

sample N2



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
Modified: 8/8/2013 1:46:17 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample A		<input type="checkbox"/>	✓			
sample B		<input type="checkbox"/>	✓			
sample R1		<input type="checkbox"/>	✓			
sample R2		<input type="checkbox"/>	✓			
sample N1		<input type="checkbox"/>	✓			
sample N1		<input type="checkbox"/>	✓			
sample N2		<input type="checkbox"/>	✓			
sample N2		<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\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
Modified: 8/8/2013 1:46:17 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

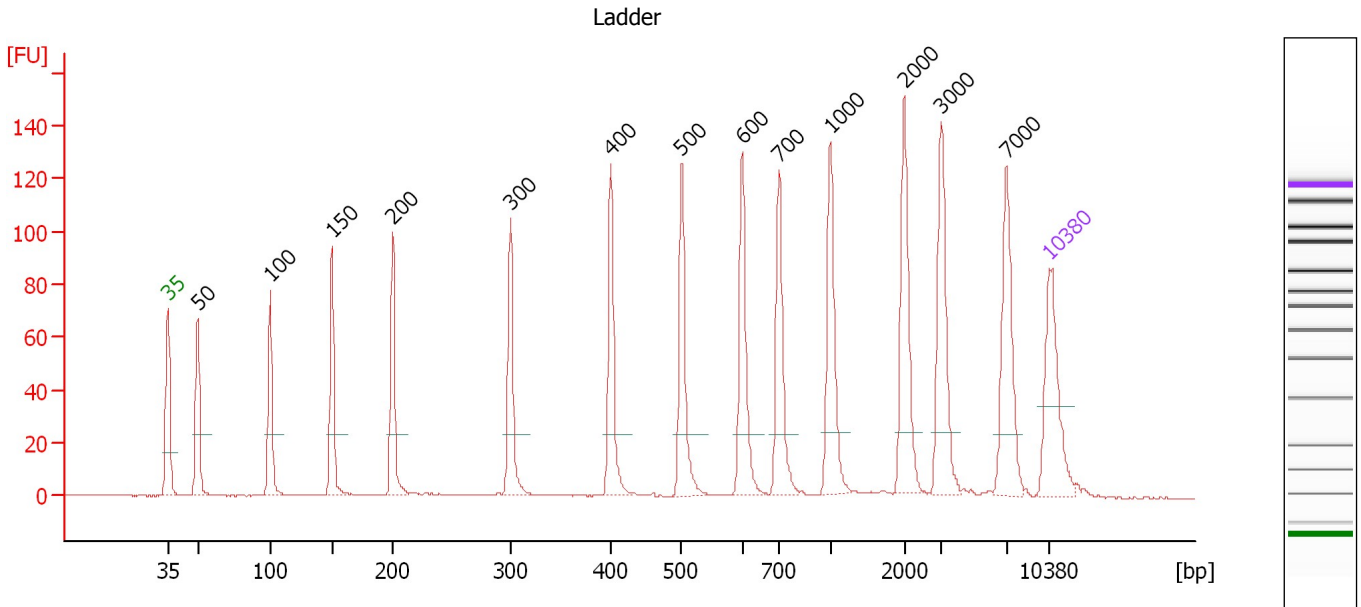
Ladder

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\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
 Modified: 8/8/2013 1:46:17 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

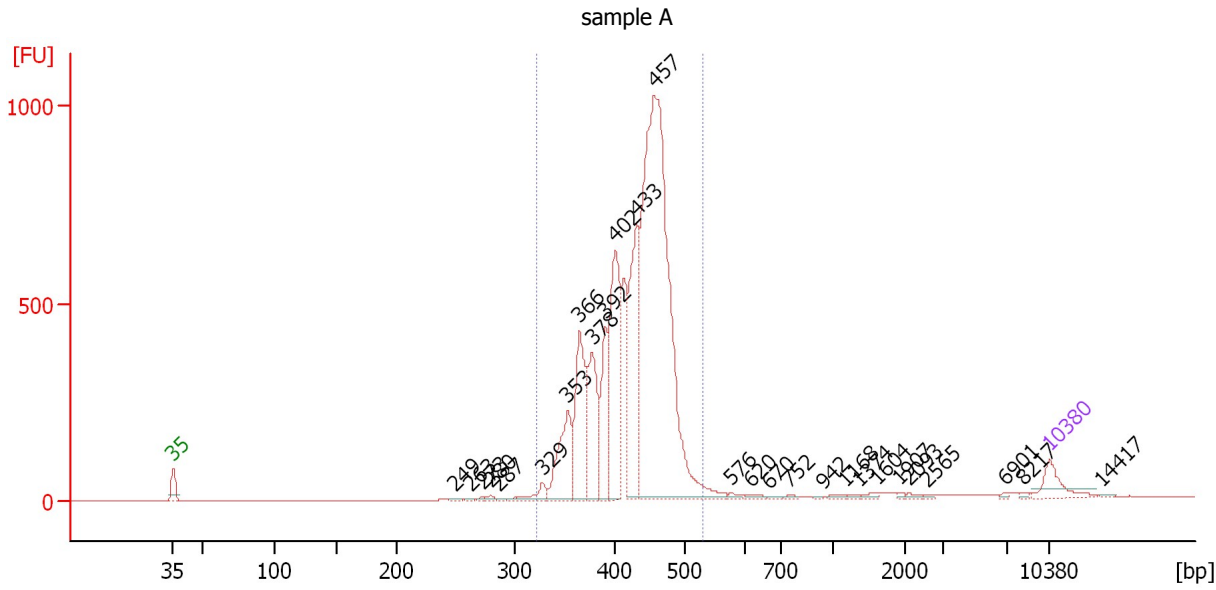
Peak table for Ladder

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	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
 Modified: 8/8/2013 1:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample A

Number of peaks found: 27 Corr. Area 1: 6,754.2
 Noise: 0.2

Peak table for sample 1 : sample A

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	249	6.22	37.8	
3	263	5.62	32.4	
4	273	5.39	29.9	
5	280	10.27	55.6	
6	287	5.14	27.1	
7	329	51.58	237.8	
8	353	284.42	1,219.1	
9	366	400.58	1,660.3	
10	378	333.52	1,335.9	
11	392	242.66	939.0	
12	402	558.68	2,107.0	
13	433	533.61	1,869.2	
14	457	2,341.14	7,755.8	
15	576	11.73	30.8	
16	620	13.15	32.1	
17	670	6.36	14.4	
18	752	8.08	16.3	
19	942	4.19	6.7	
20	1,168	8.88	11.5	
21	1,374	6.84	7.5	
22	1,604	9.96	9.4	
23	1,907	4.30	3.4	
24	2,093	7.94	5.8	
25	2,565	4.32	2.6	
26	6,901	4.79	1.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
Modified: 8/8/2013 1:46:17 PM

Electropherogram Summary Continued ...**... Peak table for sample 1 : sample A**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	8,217	5.20	1.0	
28	10,380	75.00	10.9	Upper Marker
29	14,417	0.00	0.0	

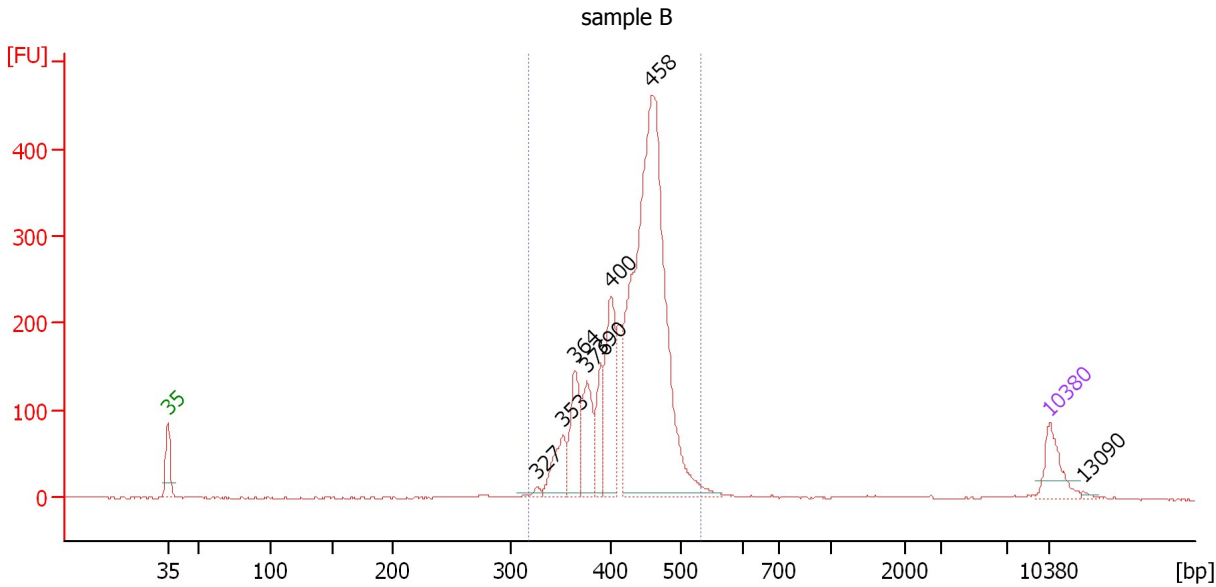
Region table for sample 1 : sample A

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
322	530	427	17,694.5	4,935.20	6,754.2	95	9.7	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
 Modified: 8/8/2013 1:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample B

Number of peaks found: 8 Corr. Area 1: 2,696.1
 Noise: 0.5

Peak table for sample 2 : sample B

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	327	15.24	70.6	
3	353	118.43	509.0	
4	364	177.46	738.4	
5	376	157.78	635.3	
6	390	121.85	473.0	
7	400	266.25	1,008.4	
8	458	1,577.94	5,222.7	
9	10,380	75.00	10.9	Upper Marker
10	13,090	0.00	0.0	

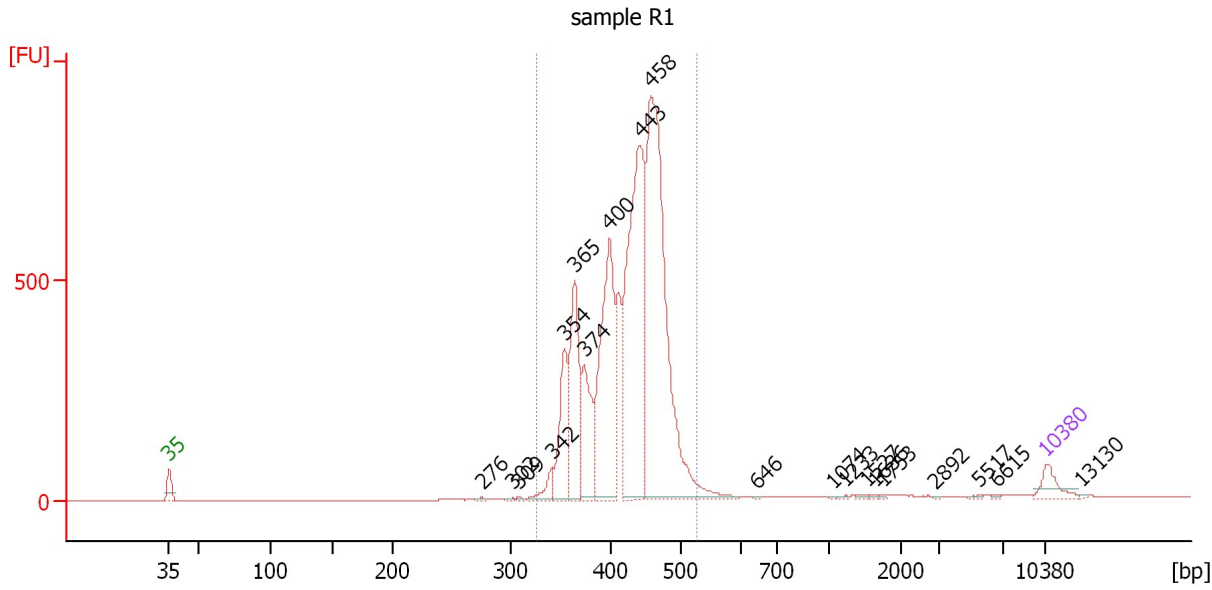
Region table for sample 2 : sample B

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
318	532	429	9,177.3	2,572.86	2,696.1	94	9.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
 Modified: 8/8/2013 1:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample R1

Number of peaks found: 20 Corr. Area 1: 6,286.2
 Noise: 0.4

Peak table for sample 3 : sample R1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	276	8.24	45.3	
3	302	6.37	31.9	
4	309	6.94	34.1	
5	342	89.24	395.7	
6	354	407.81	1,745.2	
7	365	614.46	2,553.8	
8	374	403.38	1,635.0	
9	400	1,042.84	3,952.5	
10	443	1,690.97	5,789.9	
11	458	2,283.19	7,549.2	
12	646	4.24	9.9	
13	1,074	3.35	4.7	
14	1,233	5.32	6.5	
15	1,527	6.81	6.8	
16	1,636	4.78	4.4	
17	1,753	4.82	4.2	
18	2,892	2.44	1.3	
19	5,517	5.17	1.4	
20	6,615	4.85	1.1	
21	10,380	75.00	10.9	Upper Marker
22	13,130	0.00	0.0	

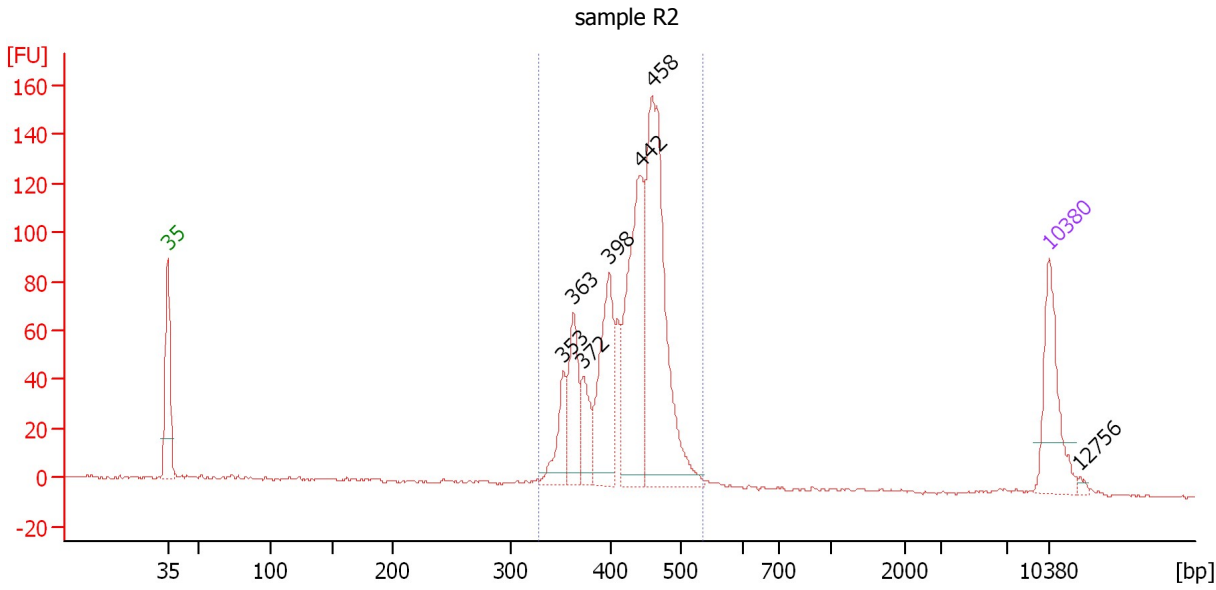
Region table for sample 3 : sample R1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
326	528	426	24,321.6	6,756.99	6,286.2	95	9.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
 Modified: 8/8/2013 1:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample R2

Number of peaks found: 7 Corr. Area 1: 984.5
 Noise: 0.4

Peak table for sample 4 : sample R2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	353	54.32	233.3	
3	363	84.38	352.5	
4	372	47.45	193.2	
5	398	138.71	527.7	
6	442	225.02	772.1	
7	458	332.01	1,097.7	
8	10,380	75.00	10.9	Upper Marker
9	12,756	0.00	0.0	

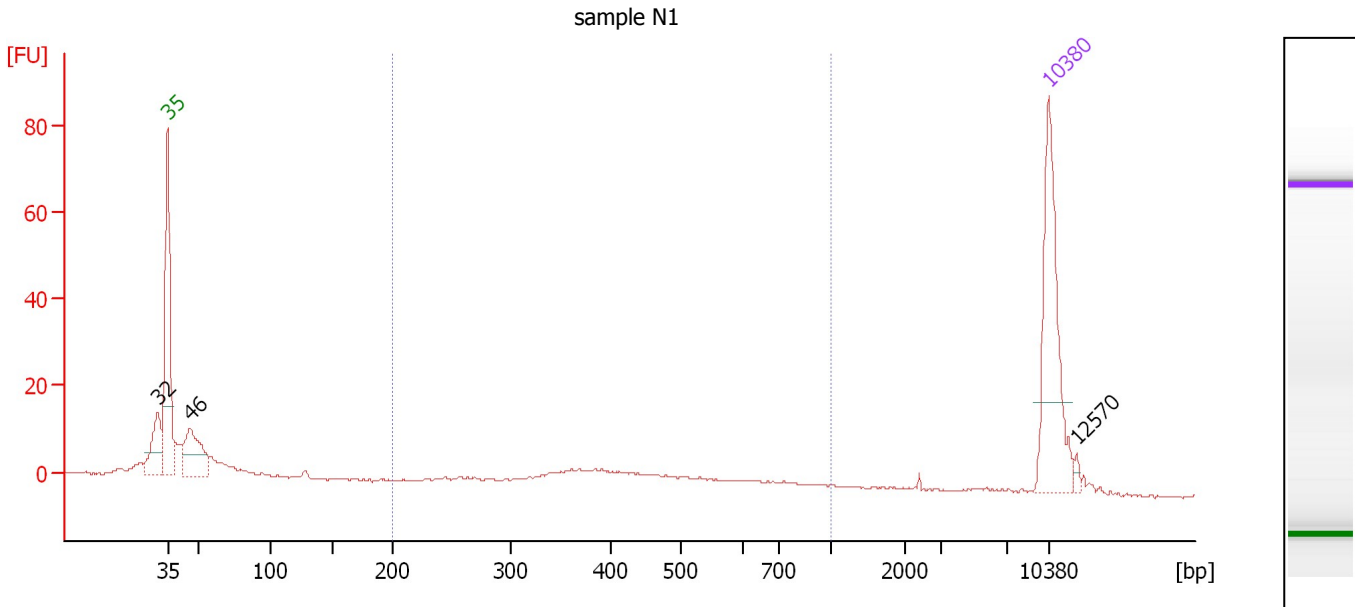
Region table for sample 4 : sample R2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
328	535	427	3,368.3	938.06	984.5	91	9.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
 Modified: 8/8/2013 1:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample N1

Number of peaks found: 3 Corr. Area 1: 65.9
 Noise: 0.2

Peak table for sample 5 : sample N1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	46	59.87	1,959.6	
4	10,380	75.00	10.9	Upper Marker
5	12,570	0.00	0.0	

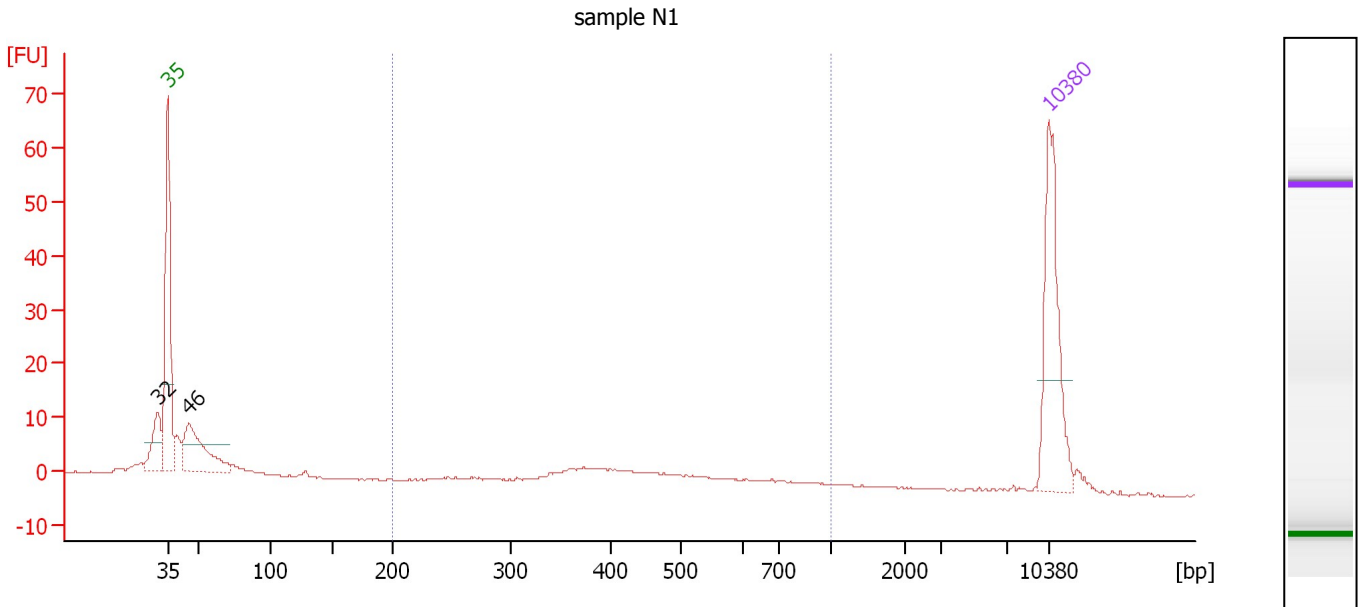
Region table for sample 5 : sample N1

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	467	252.5	68.57	65.9	34	32.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
 Modified: 8/8/2013 1:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample N1

Number of peaks found: 2 Corr. Area 1: 52.6
 Noise: 0.1

Peak table for sample 6 : sample N1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	46	79.30	2,626.4	
4	10,380	75.00	10.9	Upper Marker

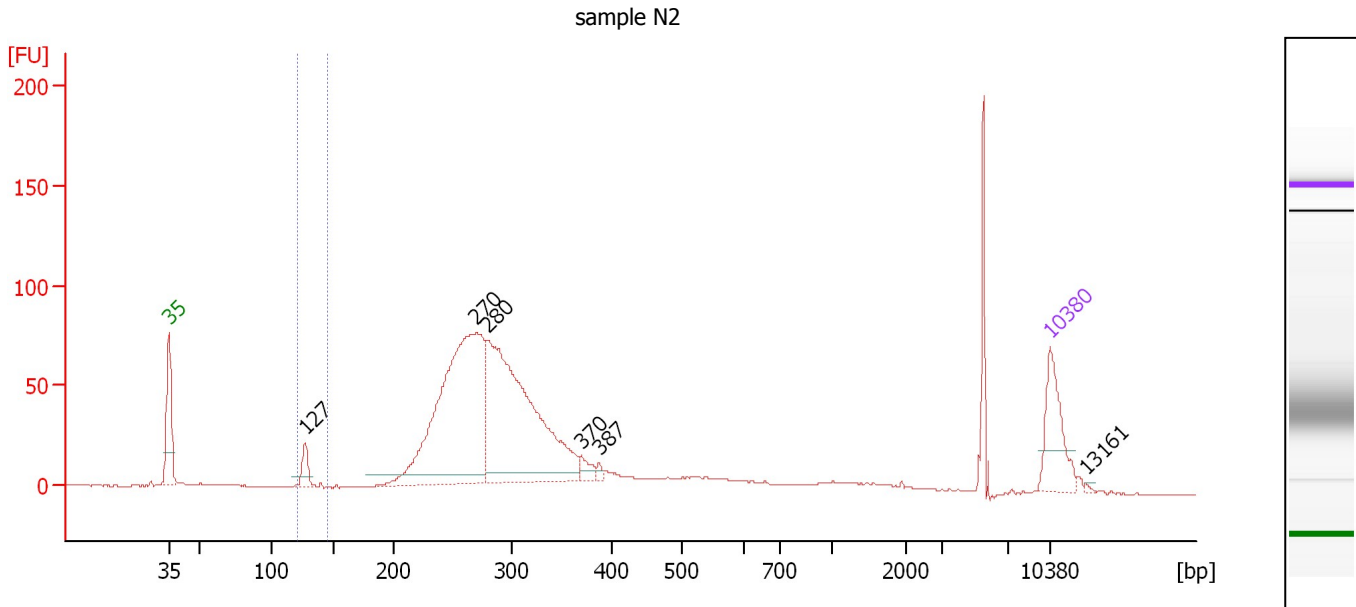
Region table for sample 6 : sample N1

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	481	254.9	71.96	52.6	34	31.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
 Modified: 8/8/2013 1:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample N2

Number of peaks found: 6 Corr. Area 1: 25.0
 Noise: 0.2

Peak table for sample 7 : sample N2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	36.63	435.9	
3	270	625.91	3,513.6	
4	280	590.51	3,199.3	
5	370	19.15	78.5	
6	387	6.72	26.3	
7	10,380	75.00	10.9	Upper Marker
8	13,161	0.00	0.0	

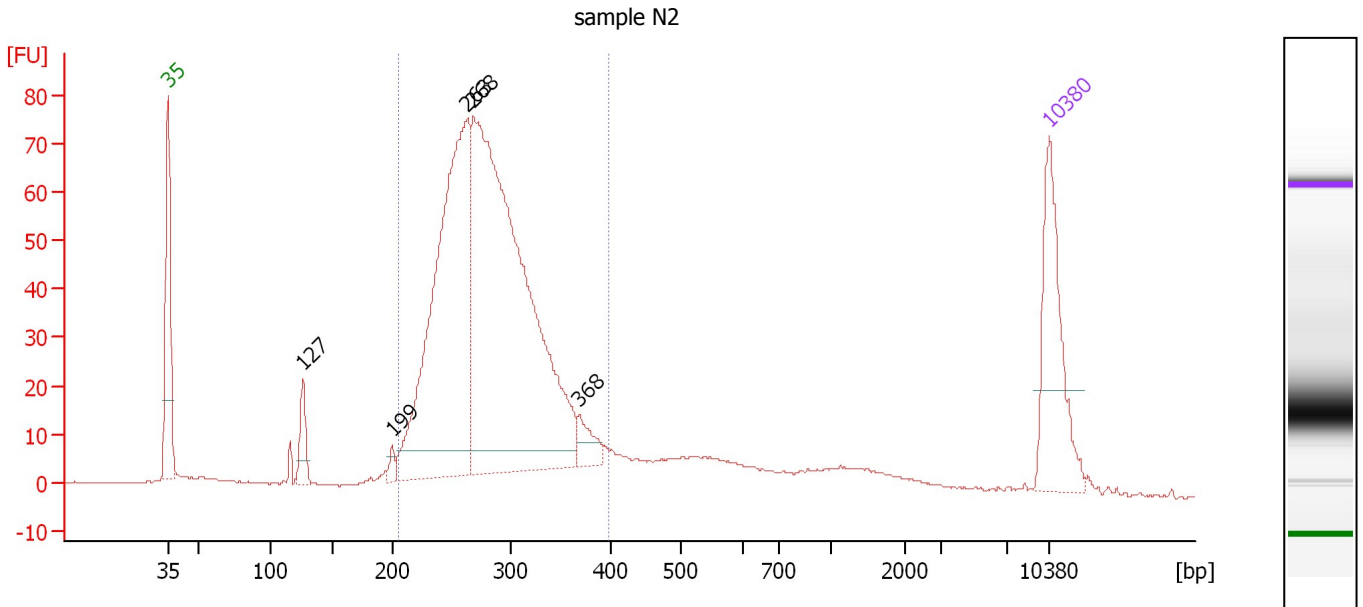
Region table for sample 7 : sample N2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
121	145	128	479.9	40.61	25.0	2	3.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
 Modified: 8/8/2013 1:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample N2

Number of peaks found: 5 Corr. Area 1: 974.8
 Noise: 0.1

Peak table for sample 8 : sample N2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	28.91	345.7	
3	199	7.39	56.2	
4	263	412.38	2,373.6	
5	268	608.84	3,440.4	
6	368	20.43	84.1	
7	10,380	75.00	10.9	Upper Marker

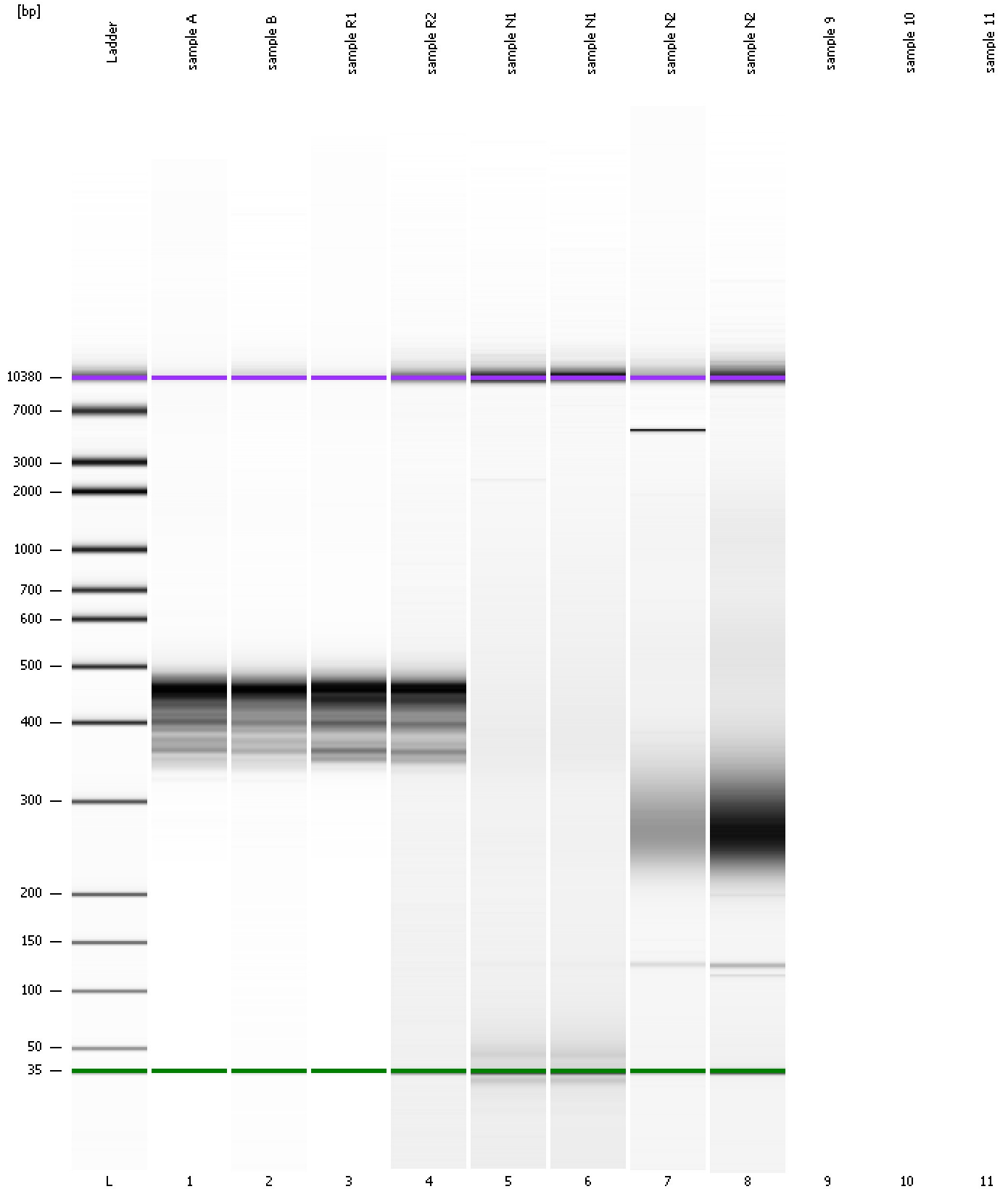
Region table for sample 8 : sample N2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
204	398	284	6,029.7	1,107.07	974.8	80	14.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
Modified: 8/8/2013 1:46:17 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad

Created: 8/8/2013 1:09:47 PM
Modified: 8/8/2013 1:46:17 PM

Invalid Samples

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 Created: 8/8/2013 1:09:47 PM
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad Modified: 8/8/2013 1:46:17 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		8/8/2013 1:42:31 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-08\2013-08-08_004.xad)		Instrument	Run		8/8/2013 1:09:54 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/8/2013 1:09:54 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/8/2013 1:09:54 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/8/2013 1:09:54 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/8/2013 1:09:54 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/8/2013 1:09:54 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/8/2013 1:09:54 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1