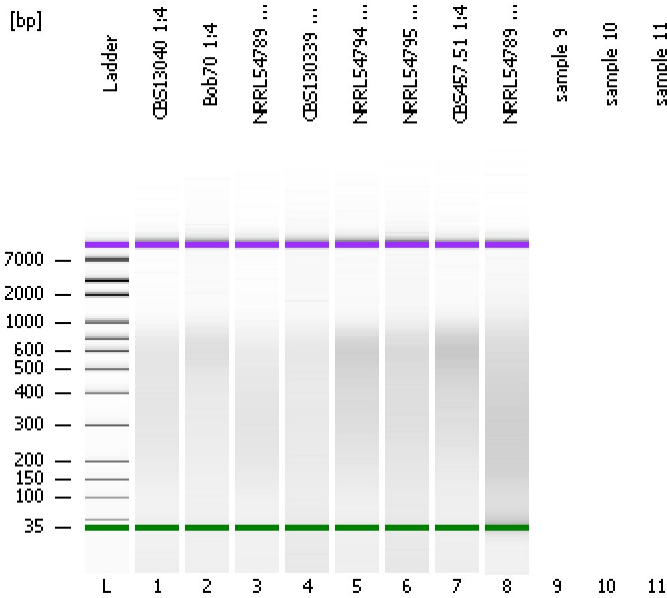


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
Modified: 4/27/2015 12:38:10 PM

Electrophoresis File Run Summary



Instrument Information:

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

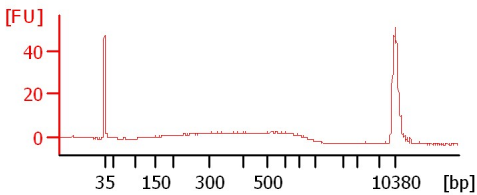
Assay Information:

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

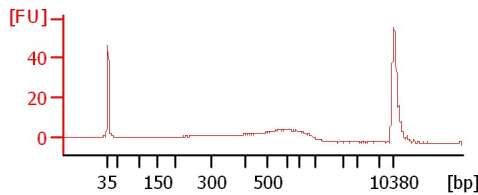
Chip Information:

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

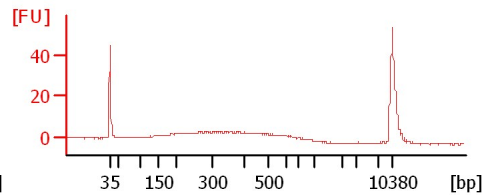
CBS13040 1:4



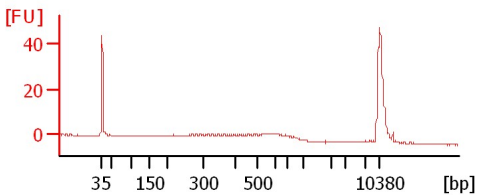
Bob70 1:4



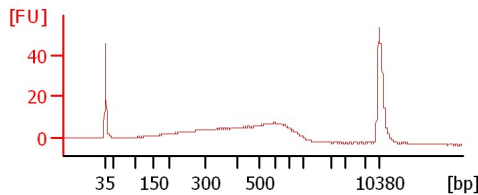
NRRL54789 1:4



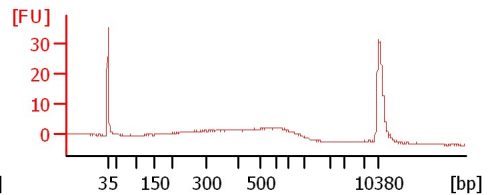
CBS130339 1:4



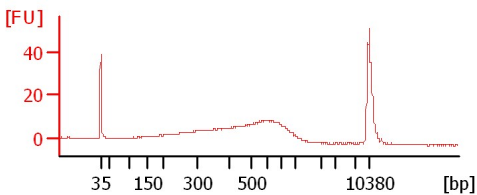
NRRL54794 1:4



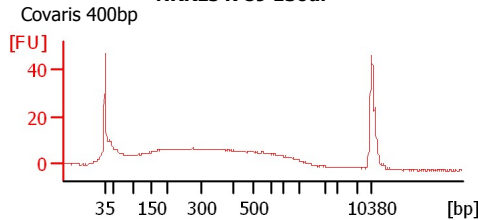
NRRL54795 1:4



CBS457.51 1:4



NRRL54789 130ul



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
Modified: 4/27/2015 12:38:10 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CBS13040 1:4		<input type="checkbox"/>	✓			
Bob70 1:4		<input type="checkbox"/>	✓			
NRRL54789 1:4		<input type="checkbox"/>	✓			
CBS130339 1:4		<input type="checkbox"/>	✓			
NRRL54794 1:4		<input type="checkbox"/>	✓			
NRRL54795 1:4		<input type="checkbox"/>	✓			
CBS457.51 1:4		<input type="checkbox"/>	✓			
NRRL54789 130ul sample 9	Covaris 400bp	<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\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
Modified: 4/27/2015 12:38:10 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

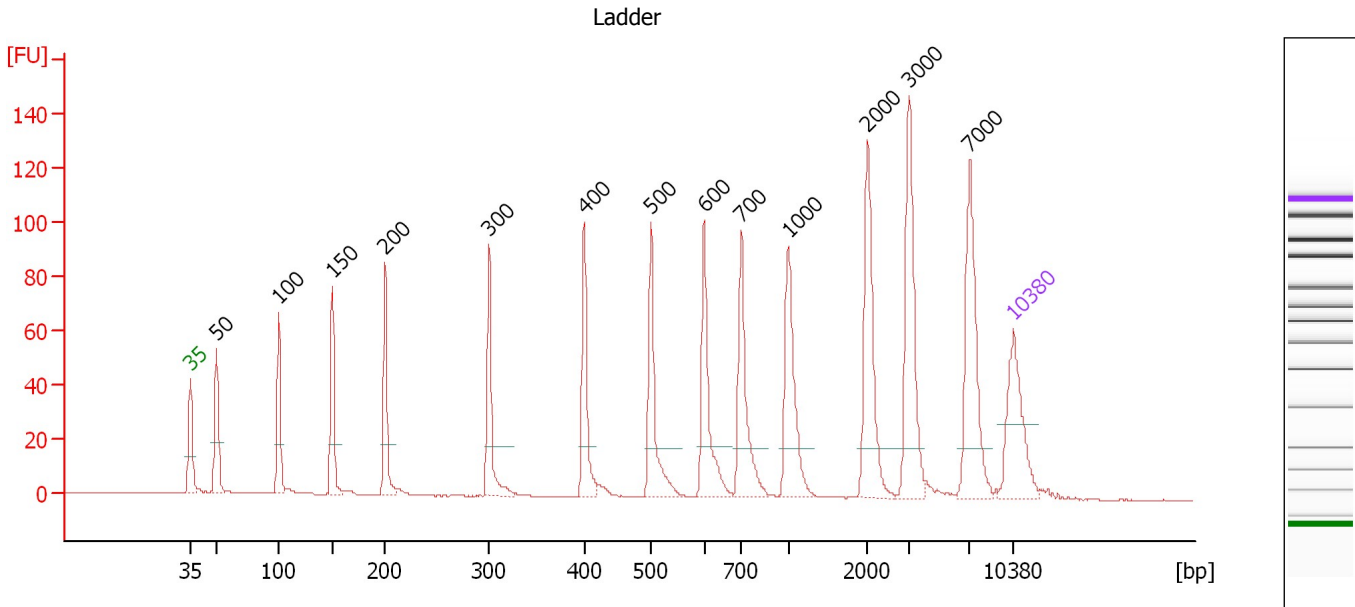
Ladder

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\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
 Modified: 4/27/2015 12:38:10 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

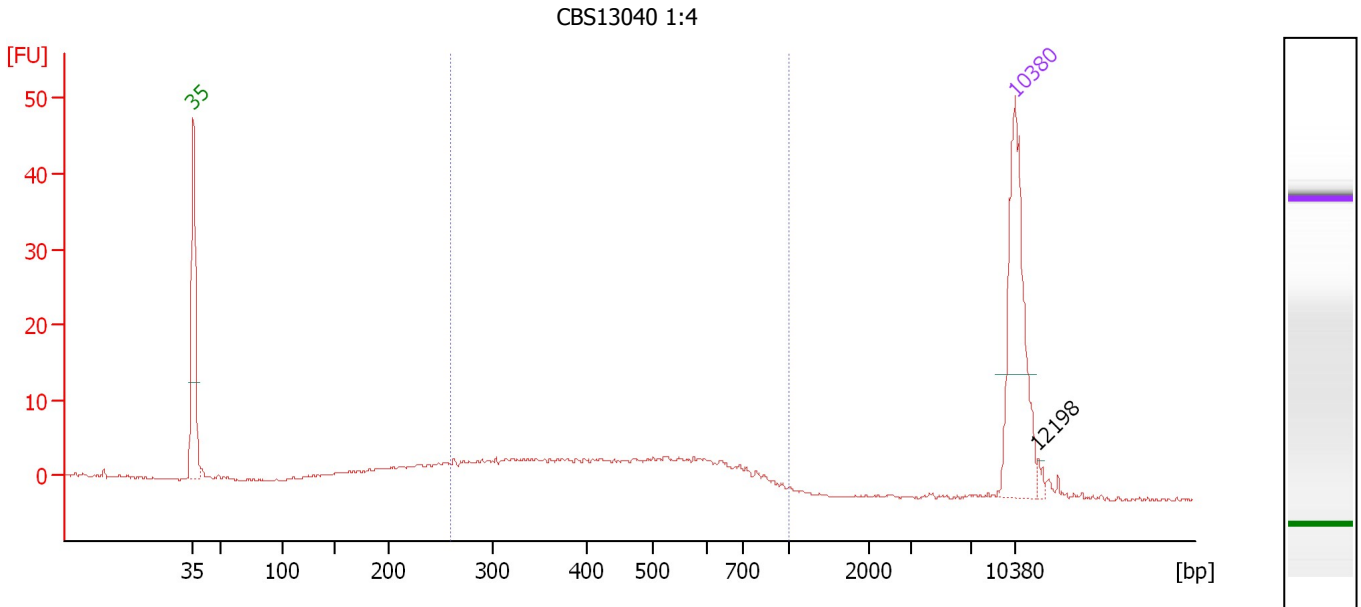
Peak table for Ladder

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	45.22
3	100	150.00	2,272.7	Ladder Peak	50.53
4	150	150.00	1,515.2	Ladder Peak	55.10
5	200	150.00	1,136.4	Ladder Peak	59.59
6	300	150.00	757.6	Ladder Peak	68.43
7	400	150.00	568.2	Ladder Peak	76.50
8	500	150.00	454.5	Ladder Peak	82.17
9	600	150.00	378.8	Ladder Peak	86.70
10	700	150.00	324.7	Ladder Peak	89.88
11	1,000	150.00	227.3	Ladder Peak	93.82
12	2,000	150.00	113.6	Ladder Peak	100.62
13	3,000	150.00	75.8	Ladder Peak	104.11
14	7,000	150.00	32.5	Ladder Peak	109.28
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
 Modified: 4/27/2015 12:38:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : CBS13040 1:4

Number of peaks found: 1 Corr. Area 1: 118.6
 Noise: 0.1

Peak table for sample 1 : CBS13040 1:4

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	10,380	75.00	10.9	Upper Marker	113.00
3	12,198	0.00	0.0		115.00

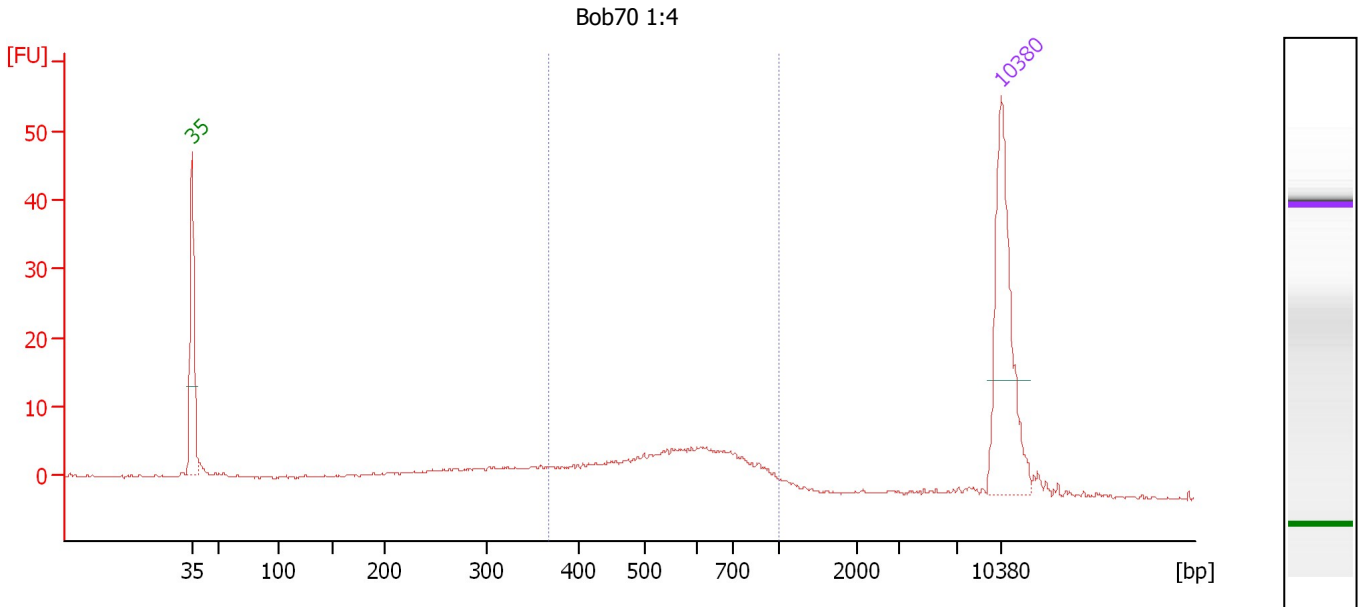
Region table for sample 1 : CBS13040 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
260	468	1,000	118.6	649.8	75	31.6	175.13	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
 Modified: 4/27/2015 12:38:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Bob70 1:4

Number of peaks found: 0 Corr. Area 1: 95.8
 Noise: 0.2

Peak table for sample 2 : Bob70 1:4

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	10,380	75.00	10.9	Upper Marker	113.00

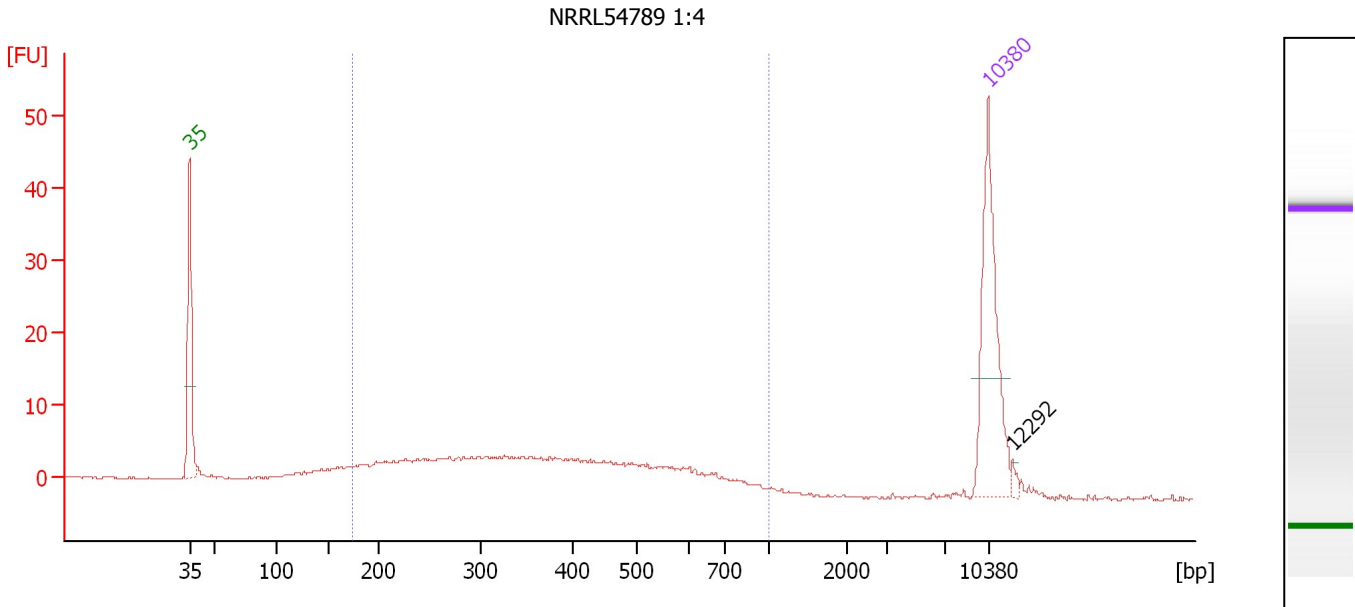
Region table for sample 2 : Bob70 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
367	579	1,000	95.8	336.5	59	24.5	119.27	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
 Modified: 4/27/2015 12:38:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : NRRL54789 1:4

Number of peaks found: 1 Corr. Area 1: 155.4
 Noise: 0.2

Peak table for sample 3 : NRRL54789 1:4

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	10,380	75.00	10.9	Upper Marker	113.00
3	12,292	0.00	0.0		115.10

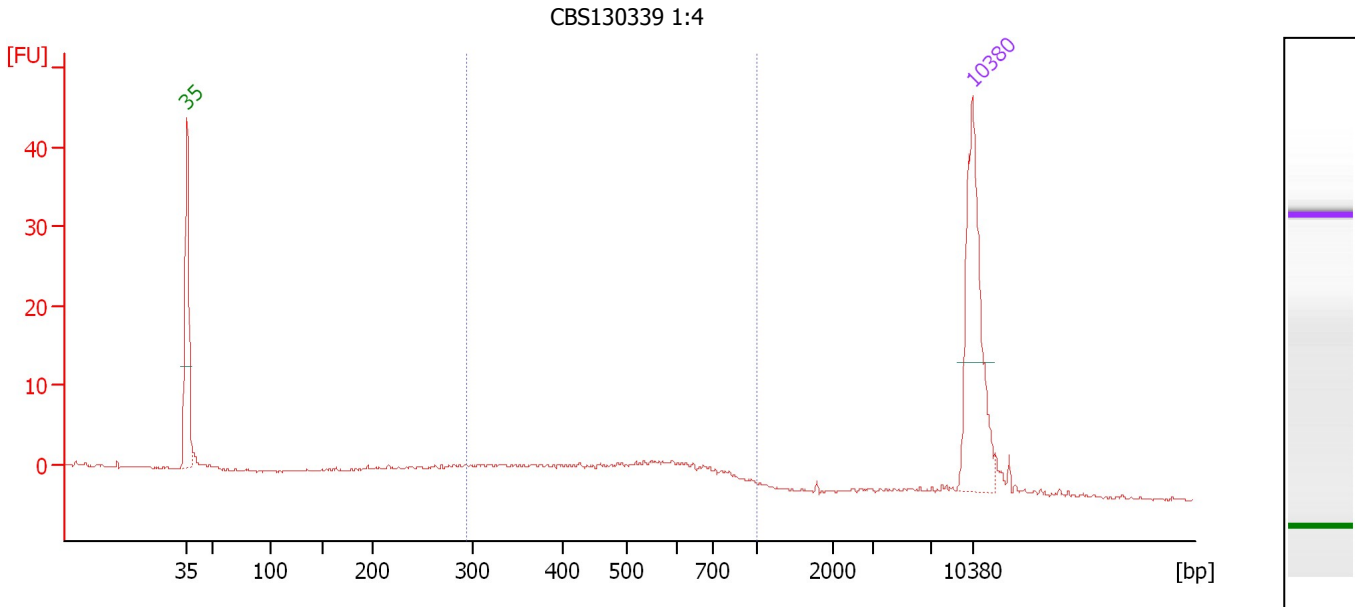
Region table for sample 3 : NRRL54789 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
174	392	1,000	155.4	1,224.6	84	38.7	257.47	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
 Modified: 4/27/2015 12:38:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : CBS130339 1:4

Number of peaks found: 0 Corr. Area 1: 62.3
 Noise: 0.2

Peak table for sample 4 : CBS130339 1:4

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	10,380	75.00	10.9	Upper Marker	113.00

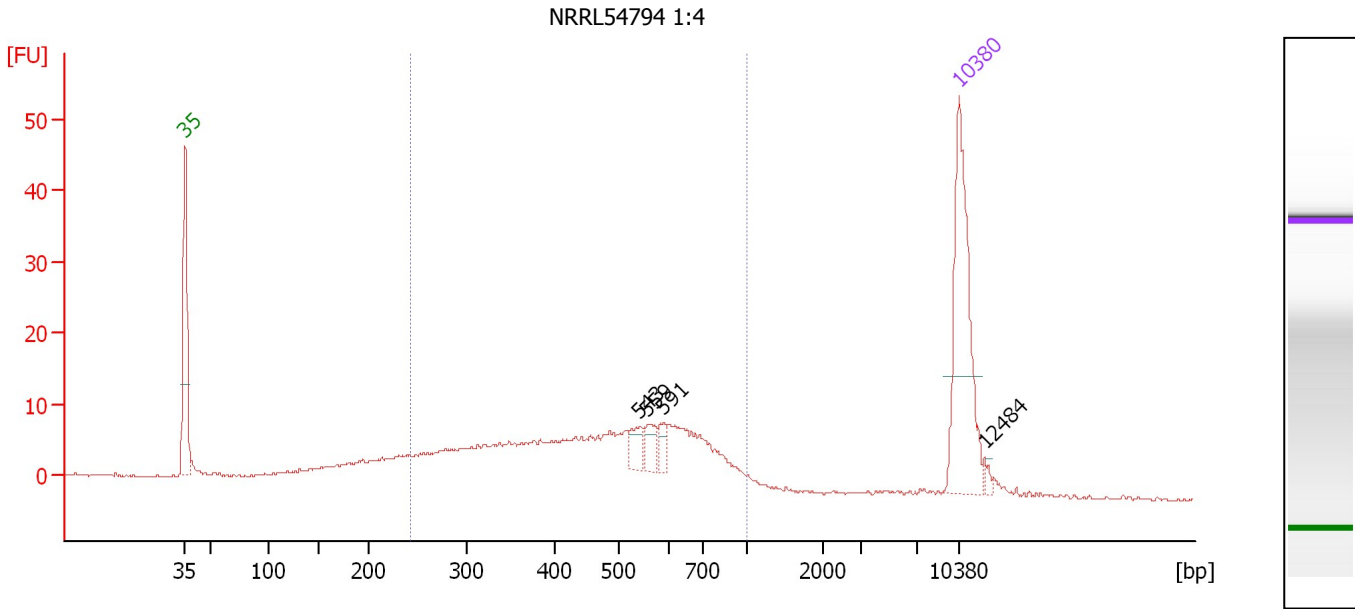
Region table for sample 4 : CBS130339 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
293	510	1,000	62.3	331.7	67	29.3	99.66	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
 Modified: 4/27/2015 12:38:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NRRL54794 1:4

Number of peaks found: 4 Corr. Area 1: 241.8
 Noise: 0.2

Peak table for sample 5 : NRRL54794 1:4

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	543	10.88	30.3		84.12
3	559	11.32	30.7		84.85
4	591	7.64	19.6		86.29
5	10,380	75.00	10.9	Upper Marker	113.00
6	12,484	0.00	0.0		115.31

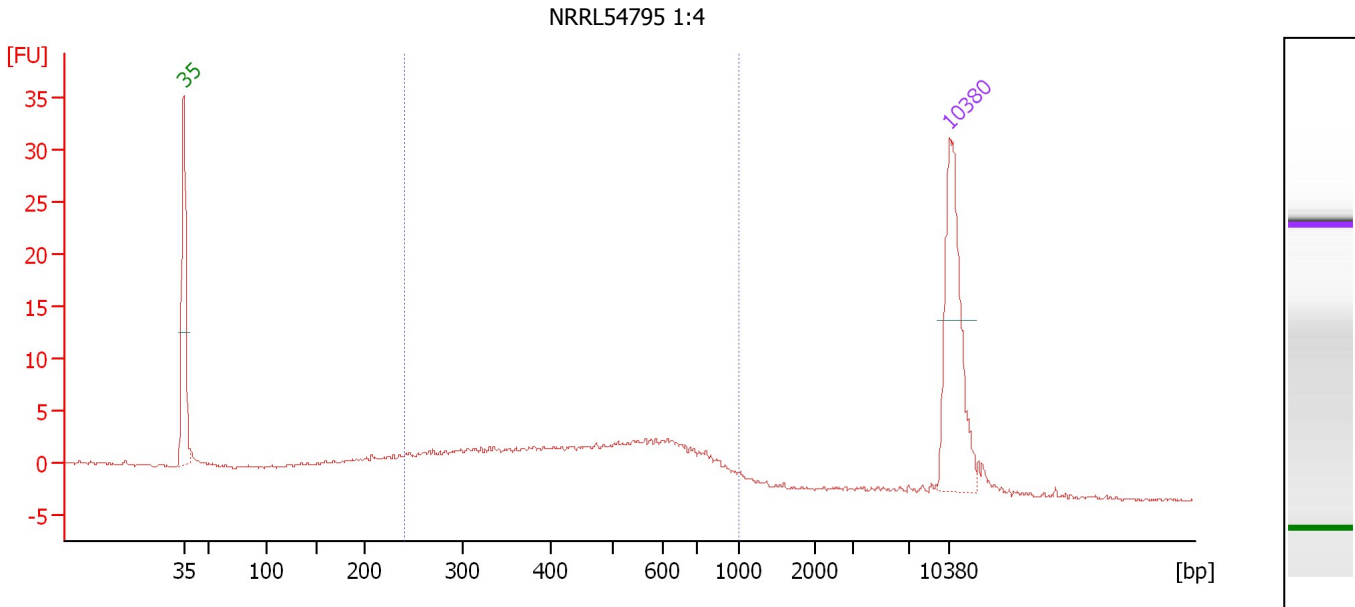
Region table for sample 5 : NRRL54794 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
244	487	1,000	241.8	1,226.7	77	33.1	336.28	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
 Modified: 4/27/2015 12:38:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NRRL54795 1:4

Number of peaks found: 0 Corr. Area 1: 117.2
 Noise: 0.2

Peak table for sample 6 : NRRL54795 1:4

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	10,380	75.00	10.9	Upper Marker	113.00

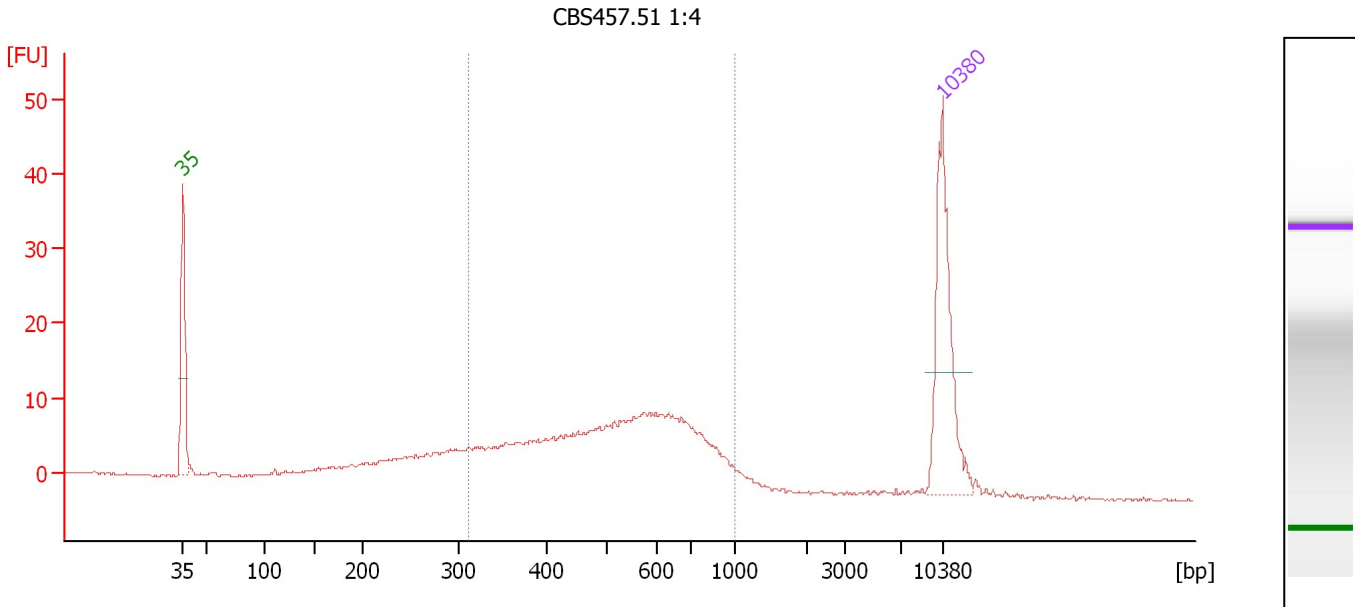
Region table for sample 6 : NRRL54795 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
241	485	1,000	117.2	899.2	73	34.2	243.44	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
 Modified: 4/27/2015 12:38:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : CBS457.51 1:4

Number of peaks found: 0 Corr. Area 1: 204.4
 Noise: 0.1

Peak table for sample 7 : CBS457.51 1:4

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	10,380	75.00	10.9	Upper Marker	113.00

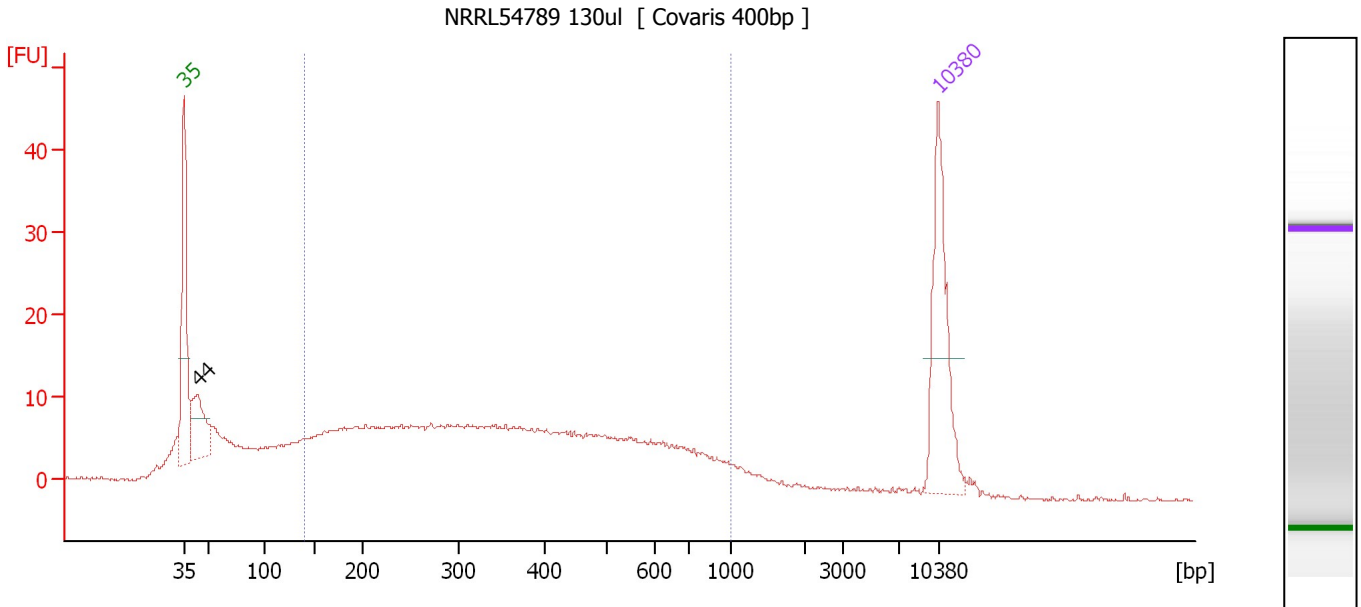
Region table for sample 7 : CBS457.51 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
312	539	1,000	204.4	957.4	72	28.4	306.35	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
 Modified: 4/27/2015 12:38:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : NRRL54789 130ul

Number of peaks found: 1 Corr. Area 1: 356.5
 Noise: 0.2

Peak table for sample 8 : NRRL54789 130ul

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	68.12	2,362.8		44.29
3	10,380	75.00	10.9	Upper Marker	113.00

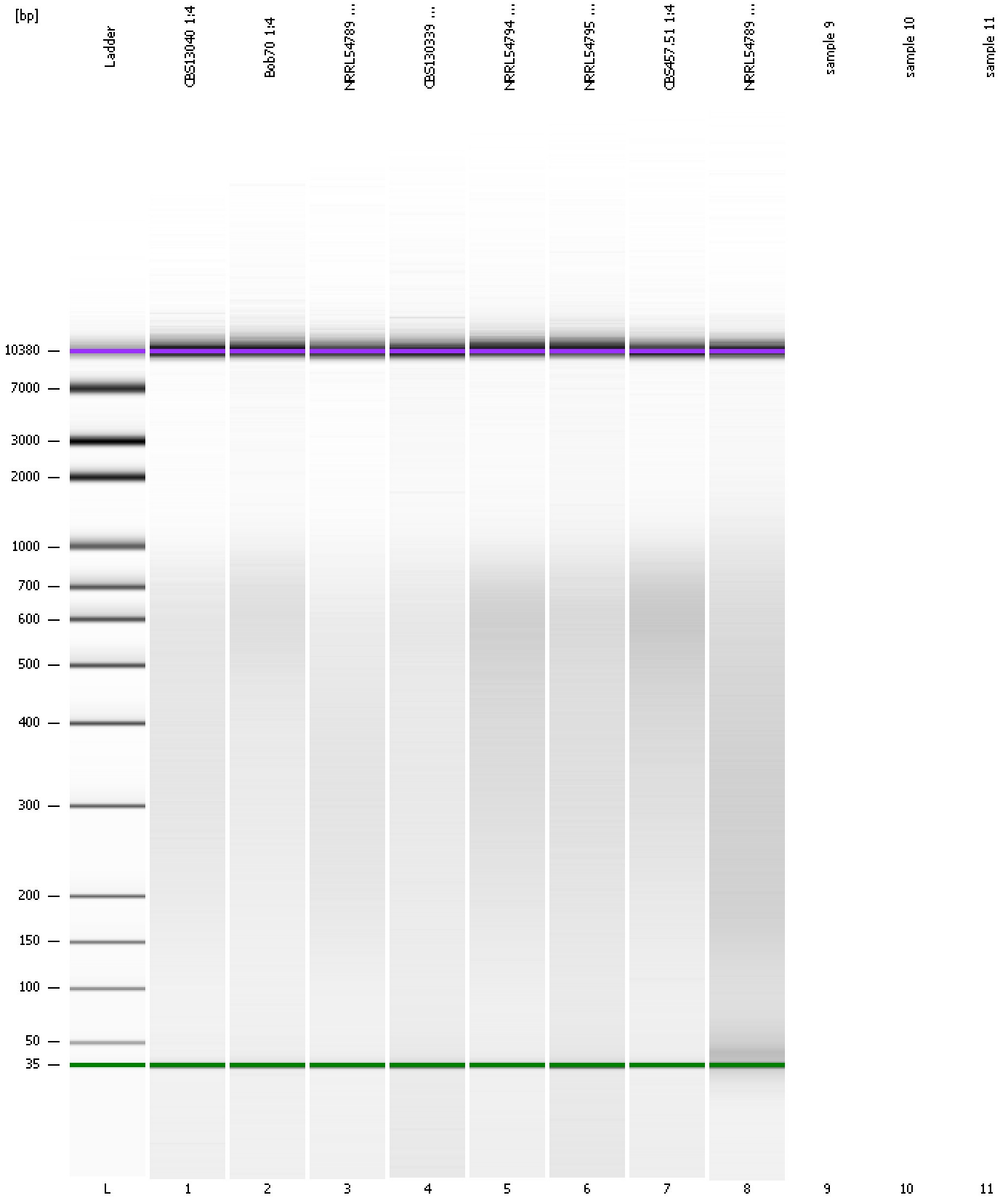
Region table for sample 8 : NRRL54789 130ul

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
139	388	1,000	356.5	3,607.2	69	47.2	673.04	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
Modified: 4/27/2015 12:38:10 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
Modified: 4/27/2015 12:38:10 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
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad

Created: 4/27/2015 11:57:34 AM
 Modified: 4/27/2015 12:38:10 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		4/27/2015 12:30:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-27\2015-04-27_004.xad)		Instrument	Run		4/27/2015 11:57:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/27/2015 11:57:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/27/2015 11:57:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/27/2015 11:57:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/27/2015 11:57:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/27/2015 11:57:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/27/2015 11:57:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1