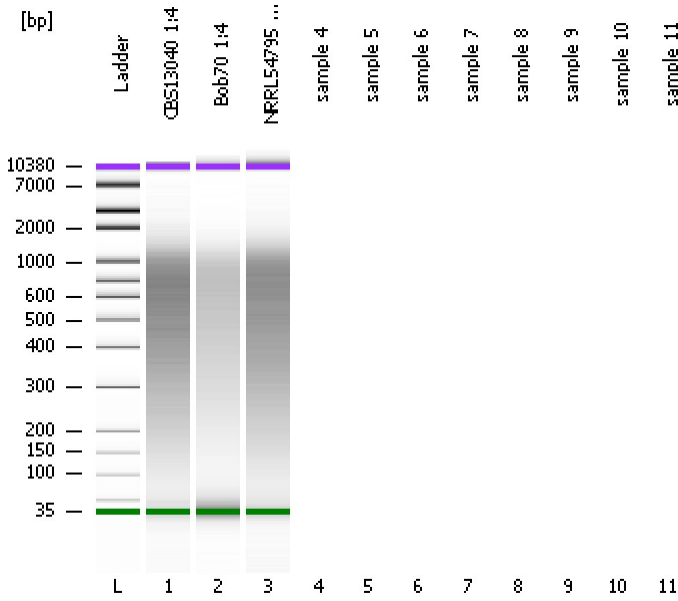


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
Modified: 4/23/2015 8:46:16 AM

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

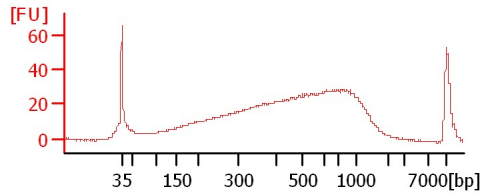
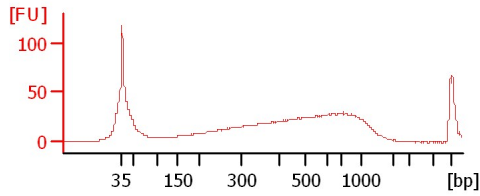
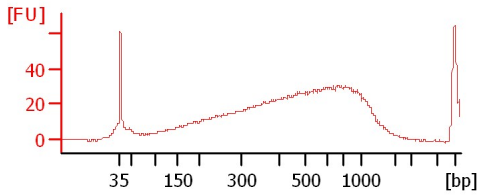
Chip Information:

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

CBS13040 1:4

Bob70 1:4

NRRL54795 1:4



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
Modified: 4/23/2015 8:46:16 AM

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"/>	✓			
NRRL54795 1:4		<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\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
Modified: 4/23/2015 8:46:16 AM

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

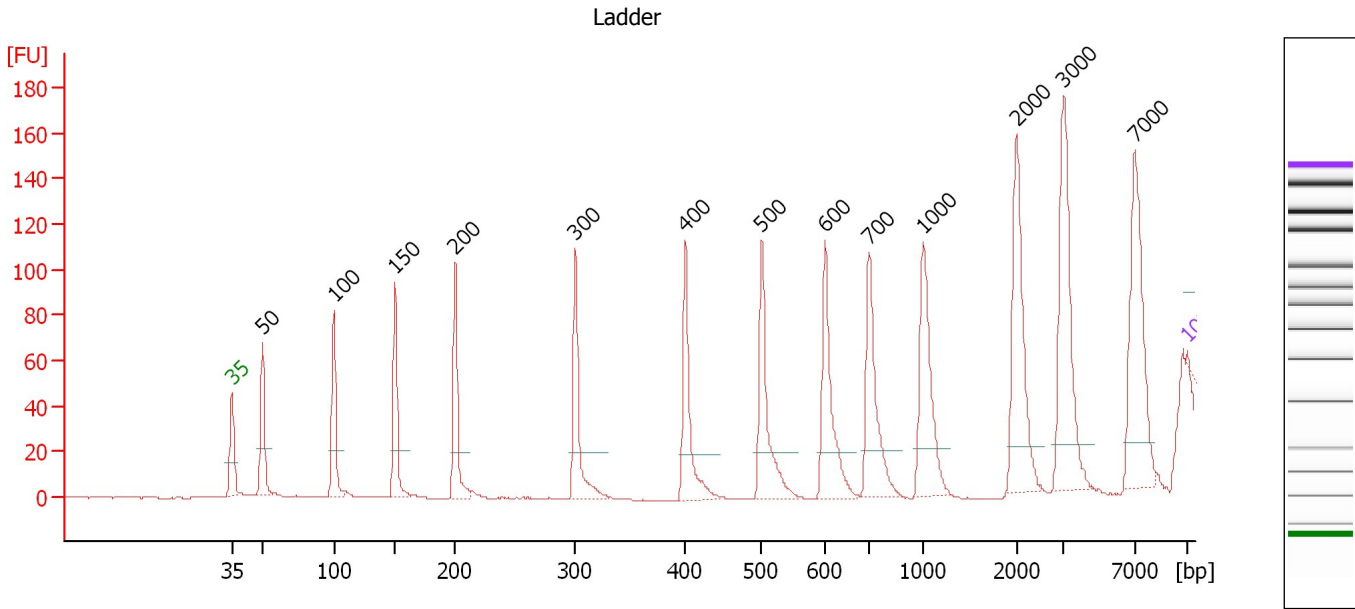
Ladder

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\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
 Modified: 4/23/2015 8:46:16 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

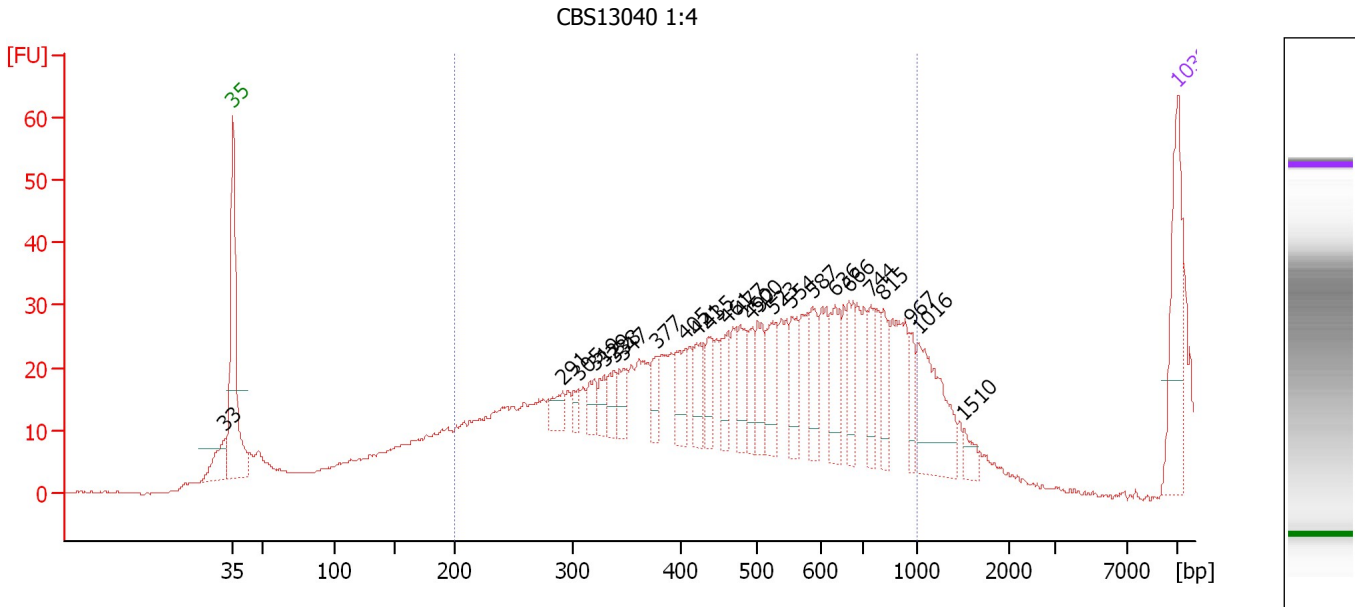
Peak table for Ladder

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	45.27
3	100	150.00	2,272.7	Ladder Peak	50.50
4	150	150.00	1,515.2	Ladder Peak	54.96
5	200	150.00	1,136.4	Ladder Peak	59.38
6	300	150.00	757.6	Ladder Peak	68.17
7	400	150.00	568.2	Ladder Peak	76.26
8	500	150.00	454.5	Ladder Peak	81.85
9	600	150.00	378.8	Ladder Peak	86.50
10	700	150.00	324.7	Ladder Peak	89.71
11	1,000	150.00	227.3	Ladder Peak	93.69
12	2,000	150.00	113.6	Ladder Peak	100.49
13	3,000	150.00	75.8	Ladder Peak	103.97
14	7,000	150.00	32.5	Ladder Peak	109.21
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
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Electropherogram Summary Continued ...



Overall Results for sample 1 : CBS13040 1:4

Number of peaks found: 25 Corr. Area 1: 437.2
 Noise: 0.2


Peak table for sample 1 : CBS13040 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.41
2	35	125.00	5,411.3	Lower Marker	43.00
3	291	24.63	128.1		67.41
4	305	13.45	66.8		68.56
5	319	24.16	114.6		69.74
6	329	20.63	95.1		70.49
7	338	25.59	114.7		71.24
8	347	26.94	117.7		71.96
9	377	21.24	85.4		74.41
10	405	39.47	147.7		76.54
11	421	35.19	126.8		77.41
12	435	31.11	108.4		78.20
13	461	34.20	112.5		79.66
14	477	40.62	129.0		80.57
15	492	29.59	91.1		81.40
16	500	43.43	131.5		81.87
17	523	49.44	143.1		82.94
18	554	37.20	101.7		84.36
19	587	40.08	103.4		85.90
20	636	46.85	111.7		87.64
21	666	40.13	91.2		88.63
22	744	29.66	60.4		90.29
23	815	33.53	62.3		91.23
24	967	21.98	34.5		93.25
25	1,016	90.64	135.2		93.80


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
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Electropherogram Summary Continued ...**... Peak table for sample 1 : CBS13040 1:4**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,510	12.92	13.0		97.16
27	 10,380	75.00	10.9	Upper Marker	113.00

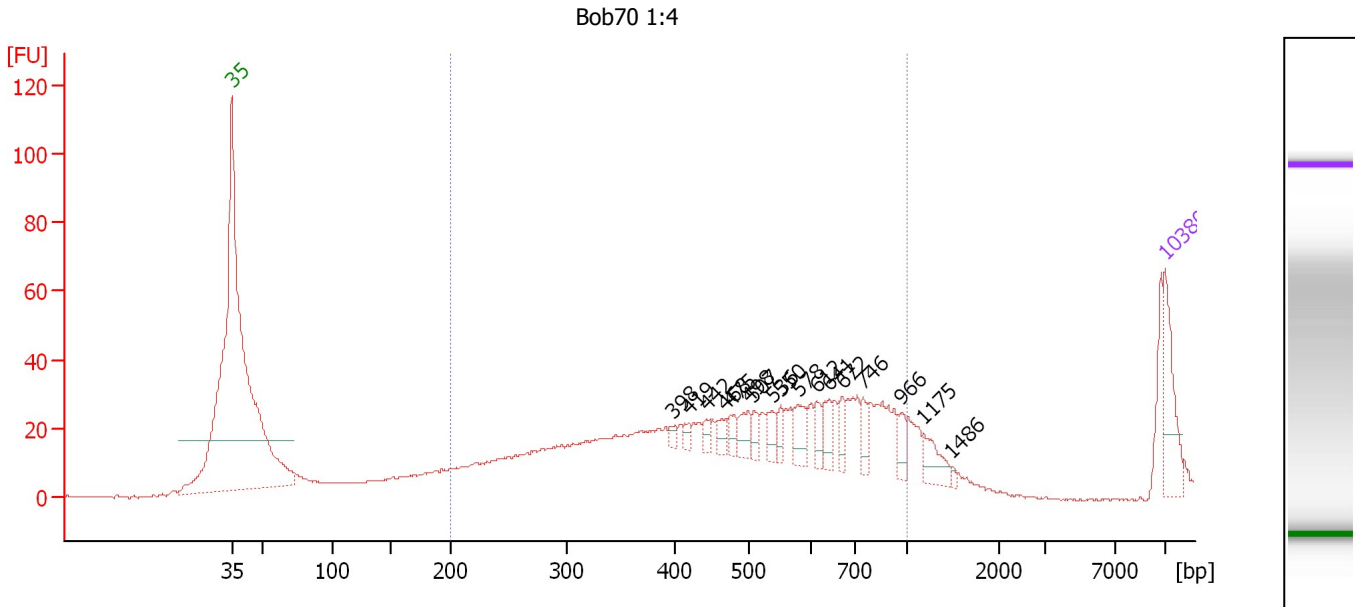
Region table for sample 1 : CBS13040 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Color
200	505	1,000	437.2	3,348.3	90	35.7	914.79	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
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Electropherogram Summary Continued ...



Overall Results for sample 2 : Bob70 1:4

Number of peaks found: 17 Corr. Area 1: 707.0
 Noise: 0.3

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	398	10.90	41.5		76.08
3	419	12.29	44.4		77.32
4	442	14.66	50.3		78.60
5	468	21.60	70.0		80.04
6	475	20.90	66.7		80.44
7	498	33.11	100.7		81.76
8	507	18.08	54.1		82.16
9	536	27.98	79.1		83.52
10	550	19.36	53.4		84.16
11	578	40.88	107.1		85.48
12	612	25.23	62.5		86.88
13	641	35.04	82.9		87.80
14	672	26.17	59.0		88.80
15	746	28.14	57.1		90.32
16	966	25.90	40.6		93.24
17	1,175	39.00	50.3		94.88
18	1,486	5.12	5.2		97.00
19	10,380	75.00	10.9	Upper Marker	113.00

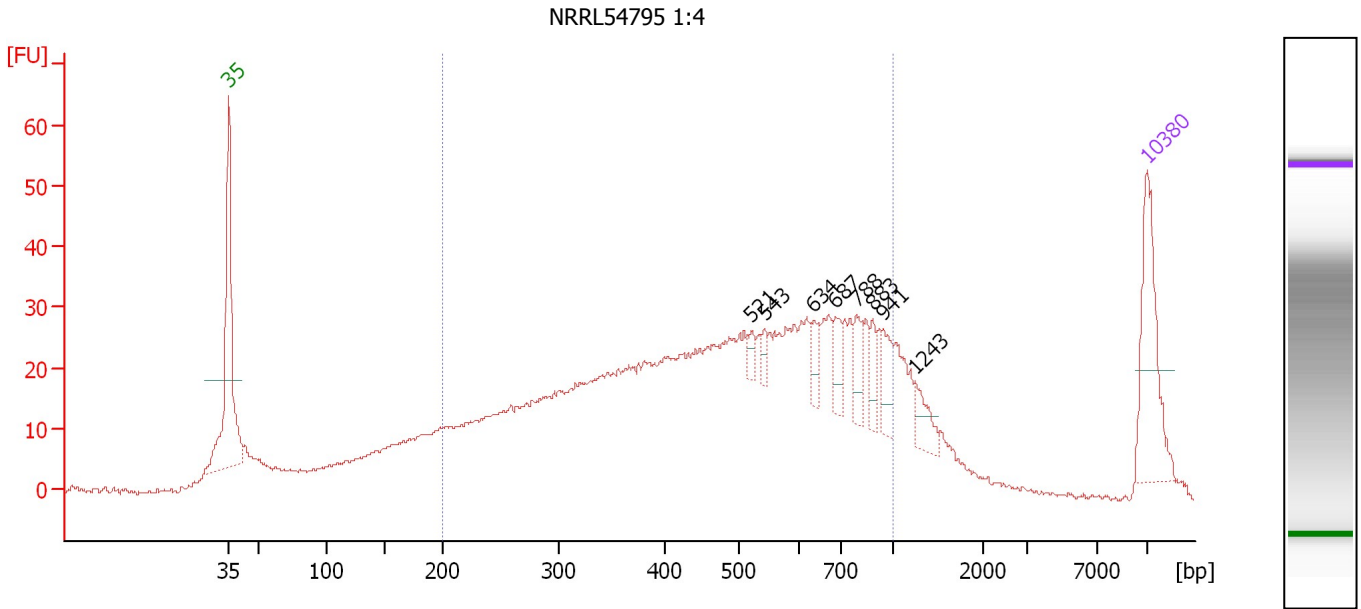
Region table for sample 2 : Bob70 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	508	1,000	707.0	5,290.5	85	37.5	1,427.73	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
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Electropherogram Summary Continued ...



Overall Results for sample 3 : NRRL54795 1:4

Number of peaks found: 8 Corr. Area 1: 969.5
 Noise: 0.3

Peak table for sample 3 : 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	521	9.55	27.8		82.82
3	543	9.27	25.9		83.84
4	634	16.78	40.1		87.58
5	687	21.78	48.0		89.29
6	788	22.57	43.4		90.87
7	883	15.44	26.5		92.13
8	941	25.20	40.6		92.91
9	1,243	21.08	25.7		95.35
10	10,380	75.00	10.9	Upper Marker	113.00

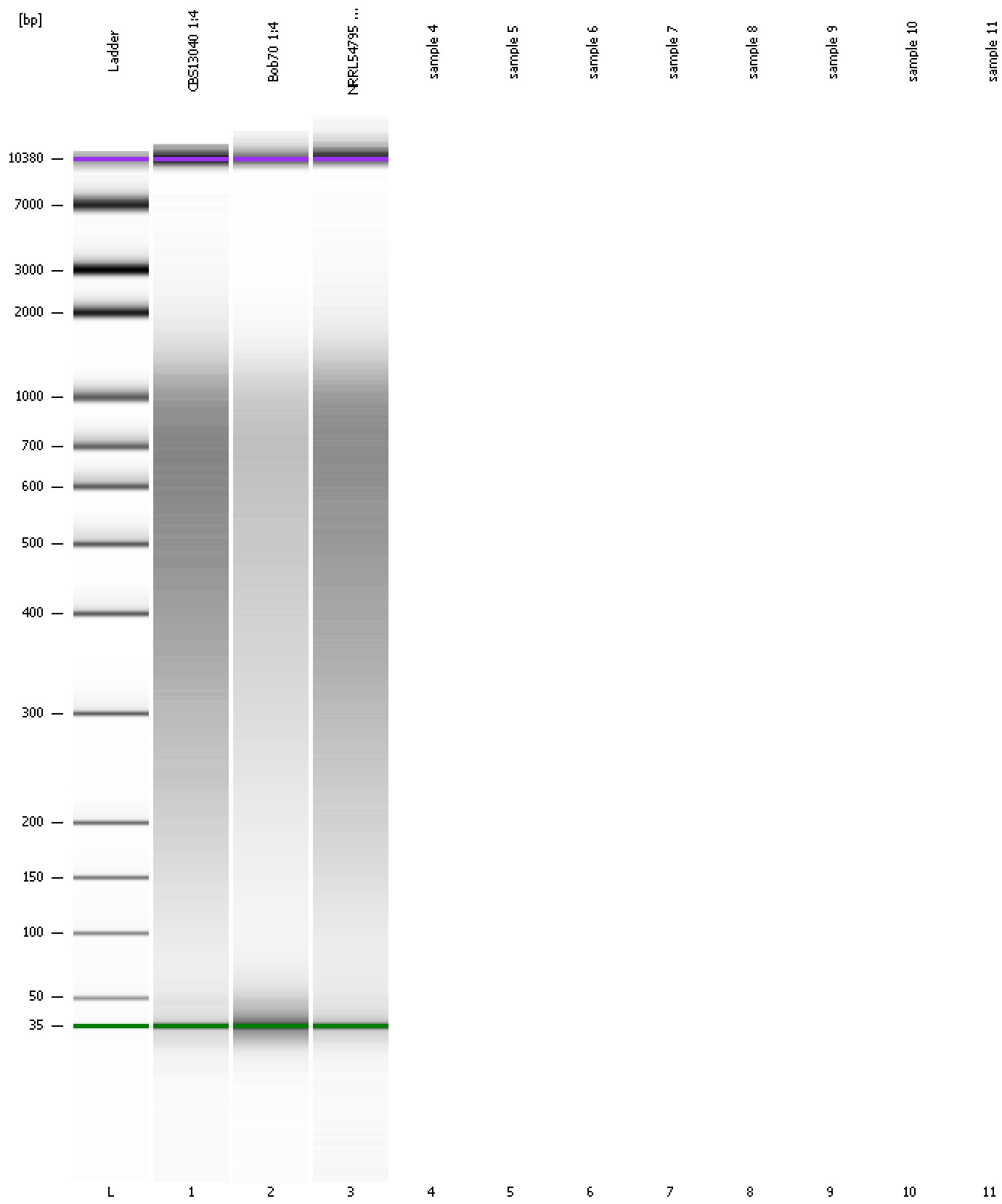
Region table for sample 3 : NRRL54795 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	500	1,000	969.5	6,394.5	78	38.9	1,677.40	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
Modified: 4/23/2015 8:46:16 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
Modified: 4/23/2015 8:46:16 AM

Invalid Samples

- Sample 4 has not been run, no results available.
- Sample 5 has not been run, no results available.
- Sample 6 has not been run, no results available.
- 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:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_001.xad

Created: 4/23/2015 8:22:19 AM
 Modified: 4/23/2015 8:46:16 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 4)		Instrument	Run		4/23/2015 8:40:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-23\2015-04-23_001.xad)		Instrument	Run		4/23/2015 8:22:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/23/2015 8:22:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/23/2015 8:22:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/23/2015 8:22:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/23/2015 8:22:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/23/2015 8:22:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/23/2015 8:22:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1