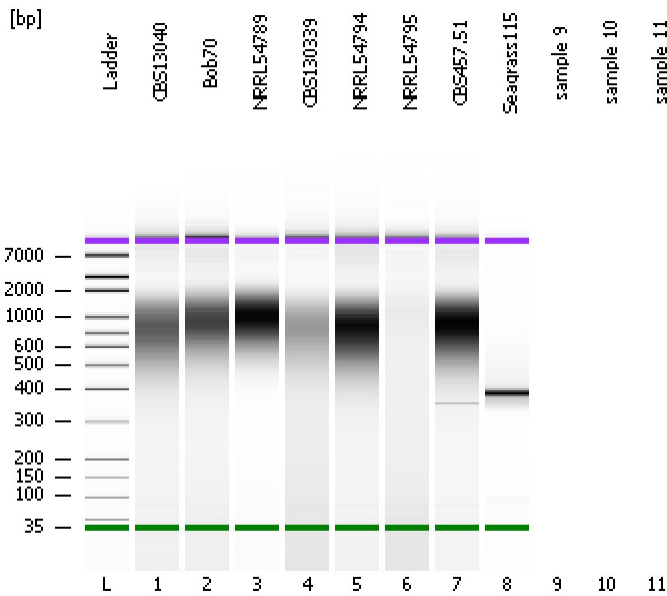


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
Modified: 4/29/2015 9:00:54 AM

Electrophoresis File Run Summary



Instrument Information:

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

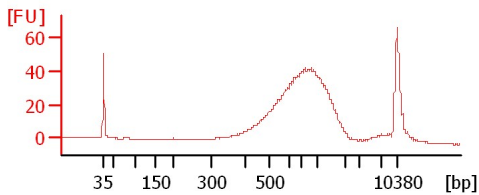
Assay Information:

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

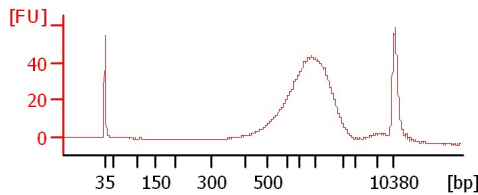
Chip Information:

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

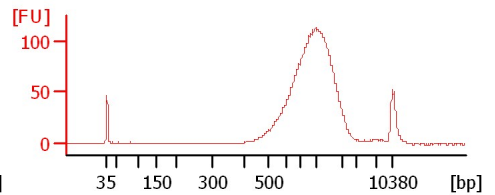
CBS13040



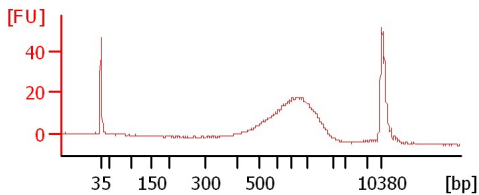
Bob70



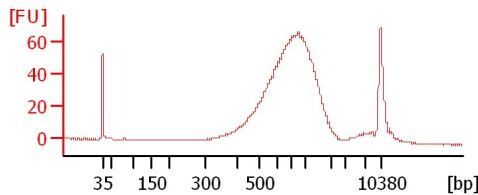
NRRL54789



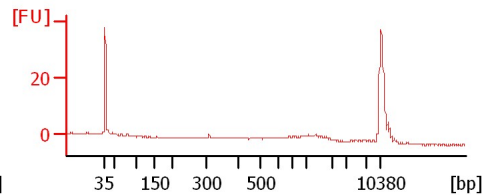
CBS130339



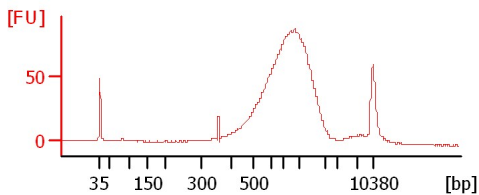
NRRL54794



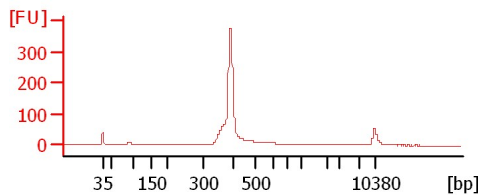
NRRL54795



CBS457.51



Seagrass115



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
Modified: 4/29/2015 9:00:54 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CBS13040		<input type="checkbox"/>	✓			
Bob70		<input type="checkbox"/>	✓			
NRRL54789		<input type="checkbox"/>	✓			
CBS130339		<input type="checkbox"/>	✓			
NRRL54794		<input type="checkbox"/>	✓			
NRRL54795		<input type="checkbox"/>	✓			
CBS457.51		<input type="checkbox"/>	✓			
Seagrass115		<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\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
Modified: 4/29/2015 9:00:54 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

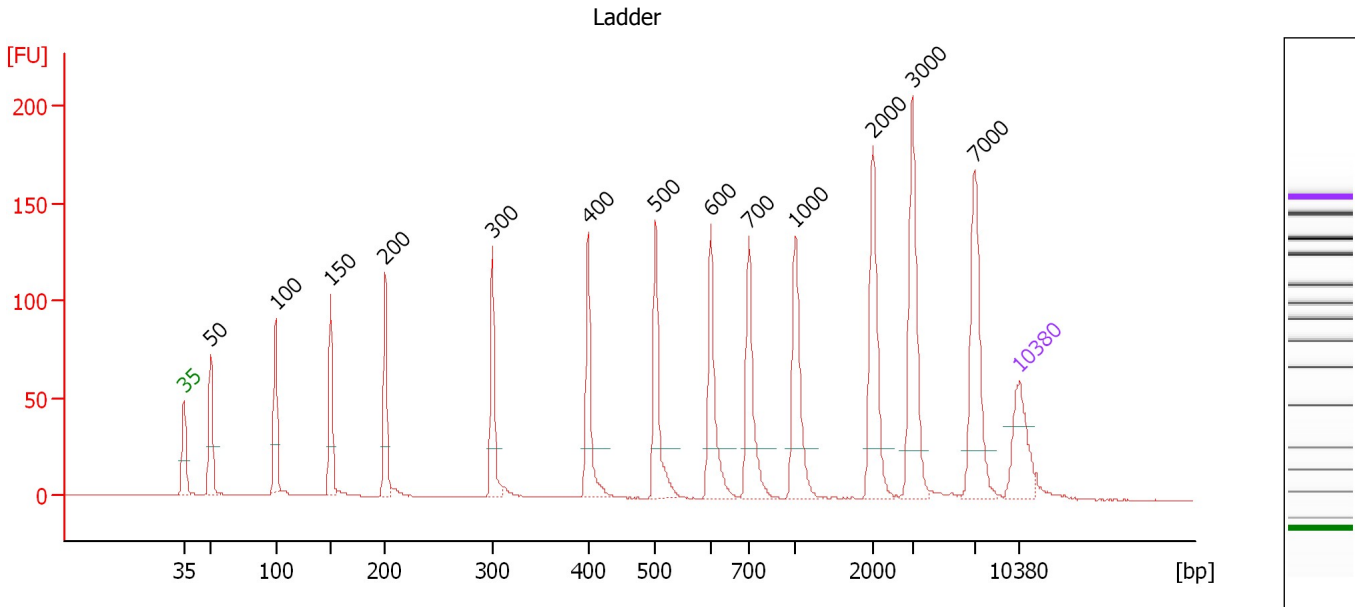
Ladder

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\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
 Modified: 4/29/2015 9:00:54 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

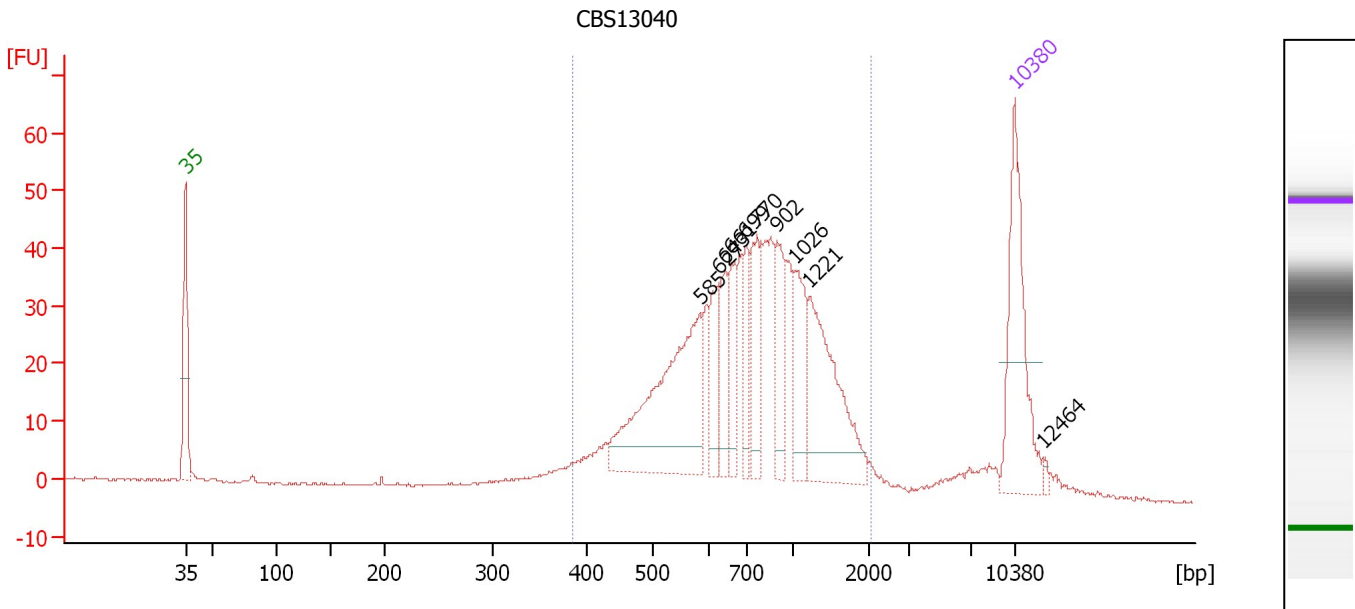
Peak table for Ladder

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	45.23
3	100	150.00	2,272.7	Ladder Peak	50.68
4	150	150.00	1,515.2	Ladder Peak	55.32
5	200	150.00	1,136.4	Ladder Peak	59.88
6	300	150.00	757.6	Ladder Peak	68.85
7	400	150.00	568.2	Ladder Peak	76.84
8	500	150.00	454.5	Ladder Peak	82.51
9	600	150.00	378.8	Ladder Peak	87.11
10	700	150.00	324.7	Ladder Peak	90.32
11	1,000	150.00	227.3	Ladder Peak	94.21
12	2,000	150.00	113.6	Ladder Peak	100.68
13	3,000	150.00	75.8	Ladder Peak	103.98
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\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
 Modified: 4/29/2015 9:00:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : CBS13040

Number of peaks found: 10 Corr. Area 1: 723.8
 Noise: 0.2

Peak table for sample 1 : CBS13040

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	585	160.69	416.3		86.41
3	627	34.91	84.3		87.99
4	643	32.06	75.6		88.48
5	661	31.78	72.9		89.07
6	699	32.07	69.5		90.28
7	770	43.04	84.7		91.23
8	902	43.27	72.7		92.94
9	1,026	42.13	62.2		94.38
10	1,221	95.66	118.7		95.63
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,464	0.00	0.0		115.34

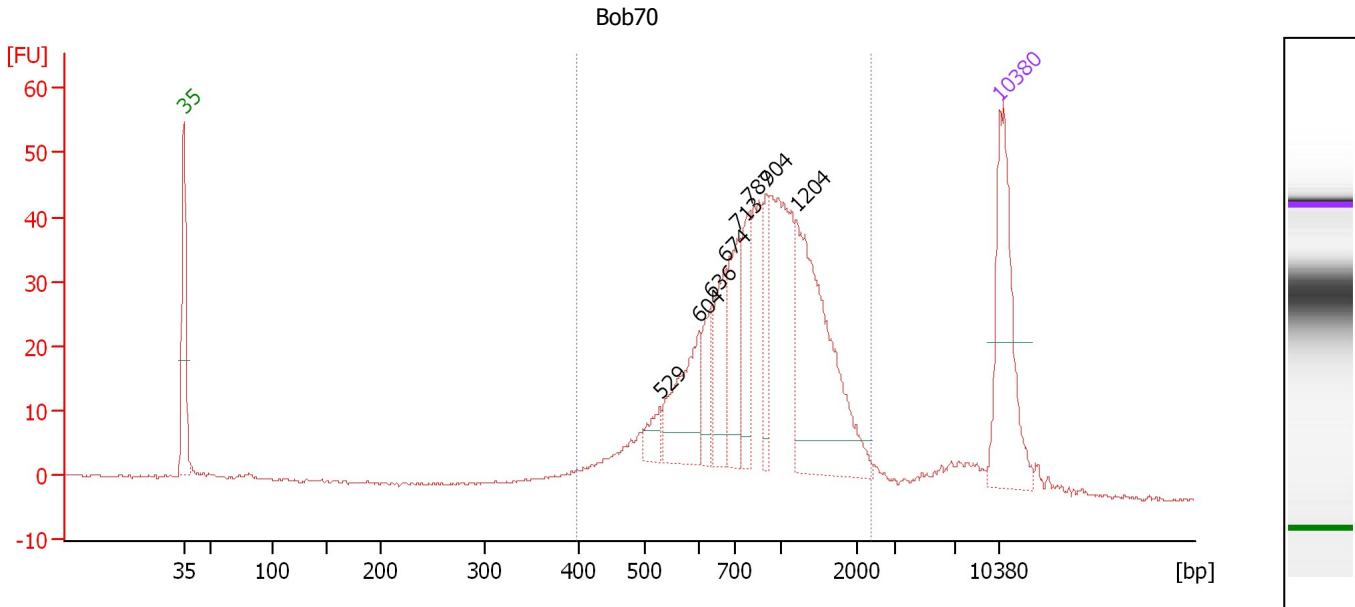
Region table for sample 1 : CBS13040

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
386	841	2,037	723.8	1,654.9	90	42.2	764.60	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
 Modified: 4/29/2015 9:00:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Bob70

Number of peaks found: 8 Corr. Area 1: 644.5
 Noise: 0.2

Peak table for sample 2 : Bob70

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	529	14.30	40.9		83.86
3	604	61.42	154.0		87.24
4	636	26.06	62.1		88.25
5	674	41.89	94.2		89.48
6	713	49.87	106.0		90.49
7	787	45.79	88.1		91.45
8	904	29.37	49.2		92.96
9	1,204	141.61	178.3		95.52
10	10,380	75.00	10.9	Upper Marker	113.00

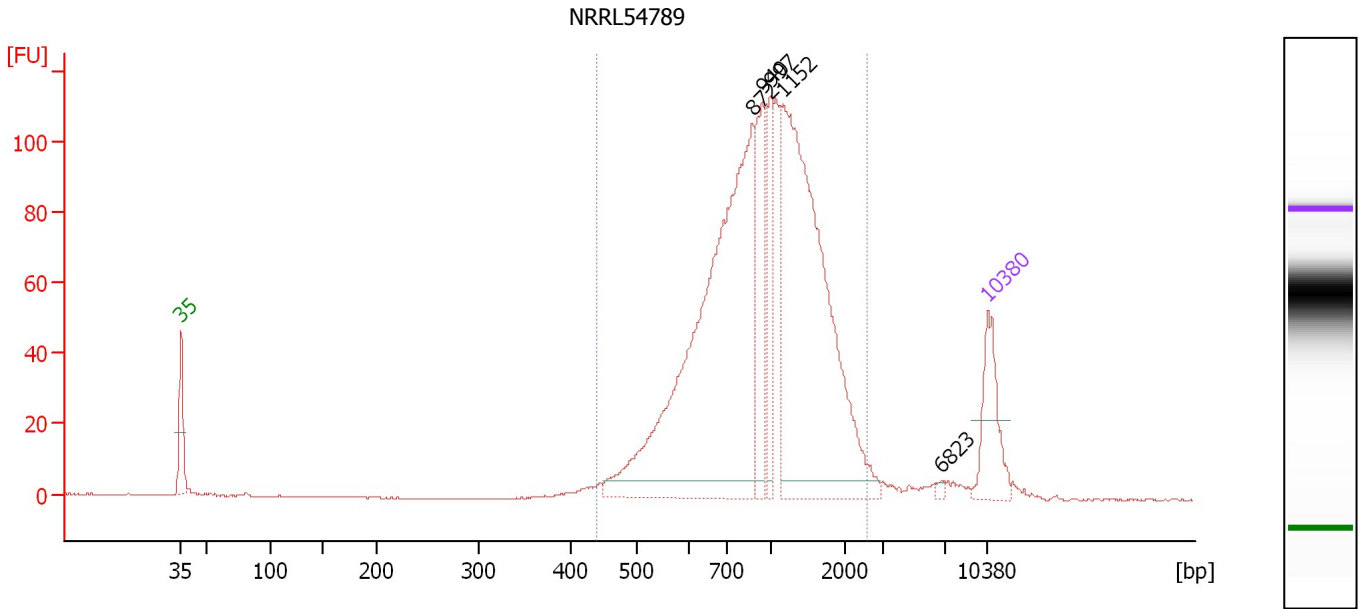
Region table for sample 2 : Bob70

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
399	969	2,376	644.5	1,295.6	91	42.1	682.34	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
 Modified: 4/29/2015 9:00:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : NRRL54789

Number of peaks found: 5 Corr. Area 1: 1,444.0
 Noise: 0.2

Peak table for sample 3 : NRRL54789

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	872	802.06	1,393.3		92.55
3	940	138.37	223.0		93.43
4	997	89.77	136.4		94.17
5	1,152	615.83	810.1		95.19
6	6,823	4.25	0.9		108.97
7	10,380	75.00	10.9	Upper Marker	113.00

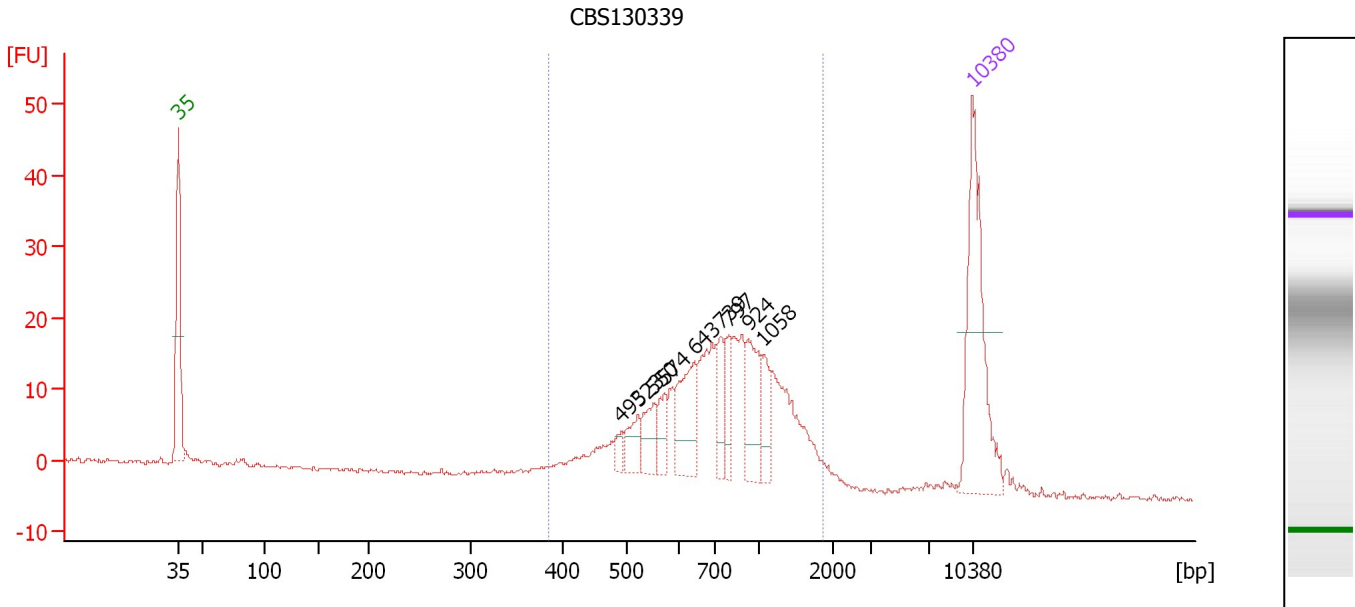
Region table for sample 3 : NRRL54789

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
439	1,059	2,531	1,444.0	3,082.1	96	40.6	1,792.83	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
 Modified: 4/29/2015 9:00:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : CBS130339

Number of peaks found: 9 Corr. Area 1: 309.4
 Noise: 0.3

Peak table for sample 4 : CBS130339

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	493	6.99	21.5		82.09
3	523	15.86	46.0		83.54
4	550	20.06	55.2		84.81
5	574	13.91	36.7		85.89
6	643	41.80	98.6		88.48
7	739	19.90	40.8		90.83
8	797	17.07	32.4		91.58
9	924	33.35	54.7		93.22
10	1,058	15.79	22.6		94.58
11	10,380	75.00	10.9	Upper Marker	113.00

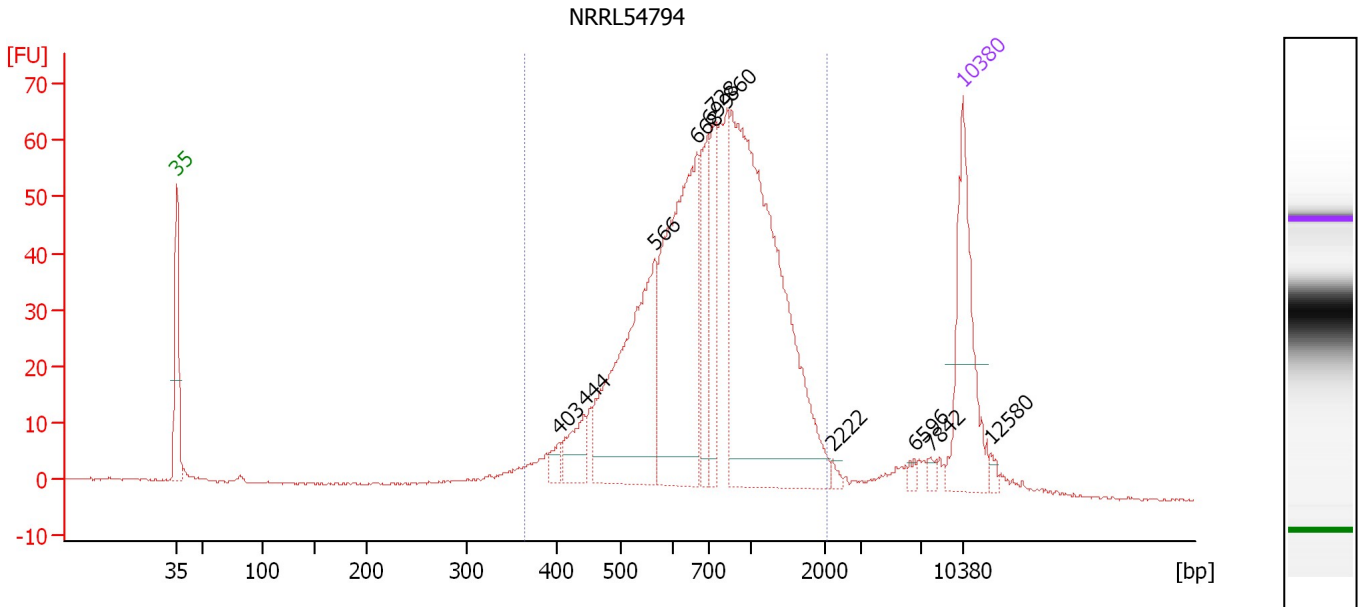
Region table for sample 4 : CBS130339

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
385	835	1,882	309.4	815.0	90	39.5	380.55	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
 Modified: 4/29/2015 9:00:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NRRL54794

Number of peaks found: 11 Corr. Area 1: 1,048.2
 Noise: 0.2

Peak table for sample 5 : NRRL54794

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	403	9.81	36.9		77.00
3	444	29.24	99.8		79.33
4	566	182.40	488.1		85.55
5	668	215.46	488.5		89.30
6	699	53.77	116.5		90.30
7	728	45.19	94.1		90.68
8	860	358.39	631.6		92.39
9	2,222	2.99	2.0		101.41
10	6,596	3.21	0.7		108.68
11	7,842	3.81	0.7		110.15
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,580	0.00	0.0		115.47

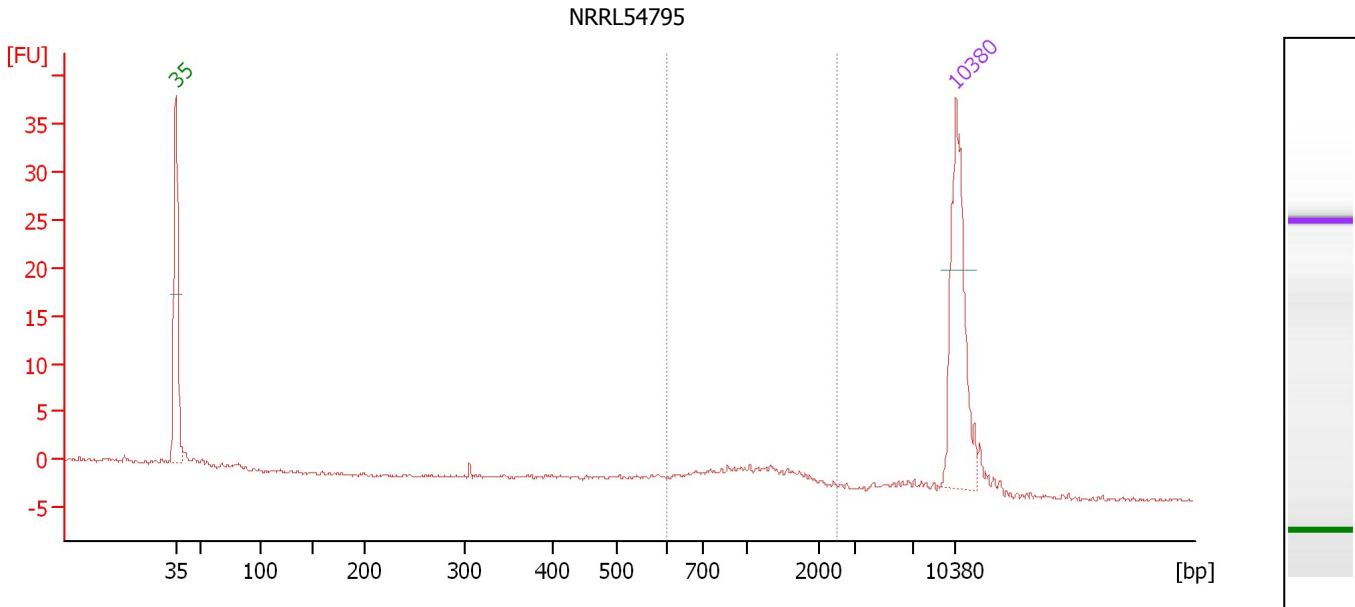
Region table for sample 5 : NRRL54794

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
364	836	2,061	1,048.2	2,221.3	92	41.8	1,022.65	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
 Modified: 4/29/2015 9:00:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NRRL54795

Number of peaks found: 0 Corr. Area 1: 18.9
 Noise: 0.2

Peak table for sample 6 : NRRL54795

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

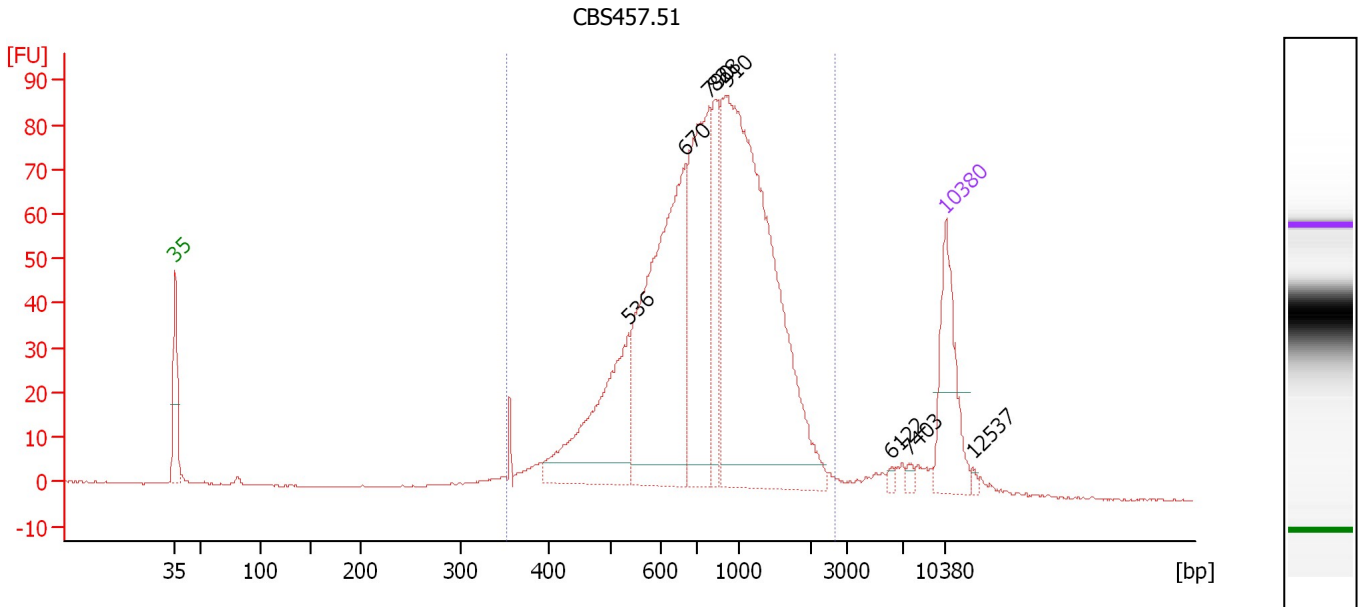
Region table for sample 6 : NRRL54795

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
599	1,182	2,519	18.9	47.9	53	36.4	32.31	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
 Modified: 4/29/2015 9:00:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : CBS457.51

Number of peaks found: 8 Corr. Area 1: 1,337.0
 Noise: 0.2

Peak table for sample 7 : CBS457.51

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	536	177.61	501.8		84.18
3	670	346.75	784.1		89.36
4	790	226.23	433.7		91.49
5	828	69.76	127.7		91.98
6	910	546.57	909.9		93.04
7	6,122	3.62	0.9		108.06
8	7,403	3.99	0.8		109.66
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,537	0.00	0.0		115.42

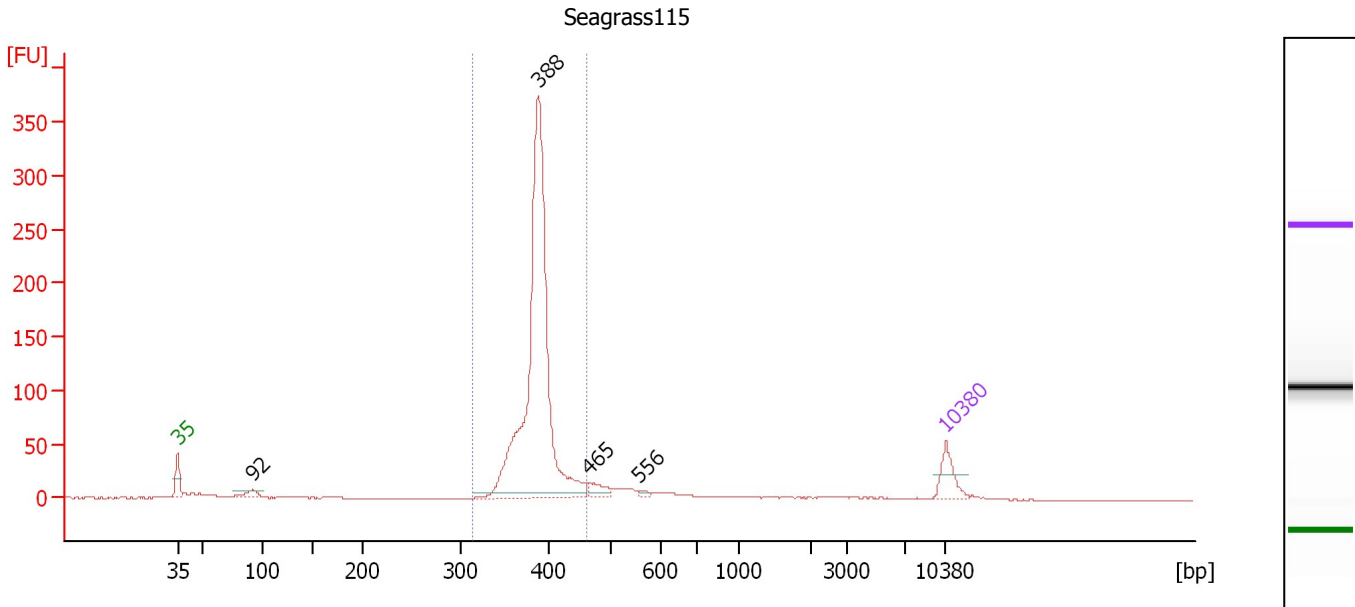
Region table for sample 7 : CBS457.51

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
354	898	2,697	1,337.0	2,951.7	95	44.2	1,427.82	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
 Modified: 4/29/2015 9:00:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Seagrass115

Number of peaks found: 4 Corr. Area 1: 992.5
 Noise: 0.2

Peak table for sample 8 : Seagrass115

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	92	47.13	772.9		49.85
3	388	1,710.05	6,676.4		75.89
4	465	48.61	158.2		80.55
5	556	11.61	31.6		85.07
6	10,380	75.00	10.9	Upper Marker	113.00

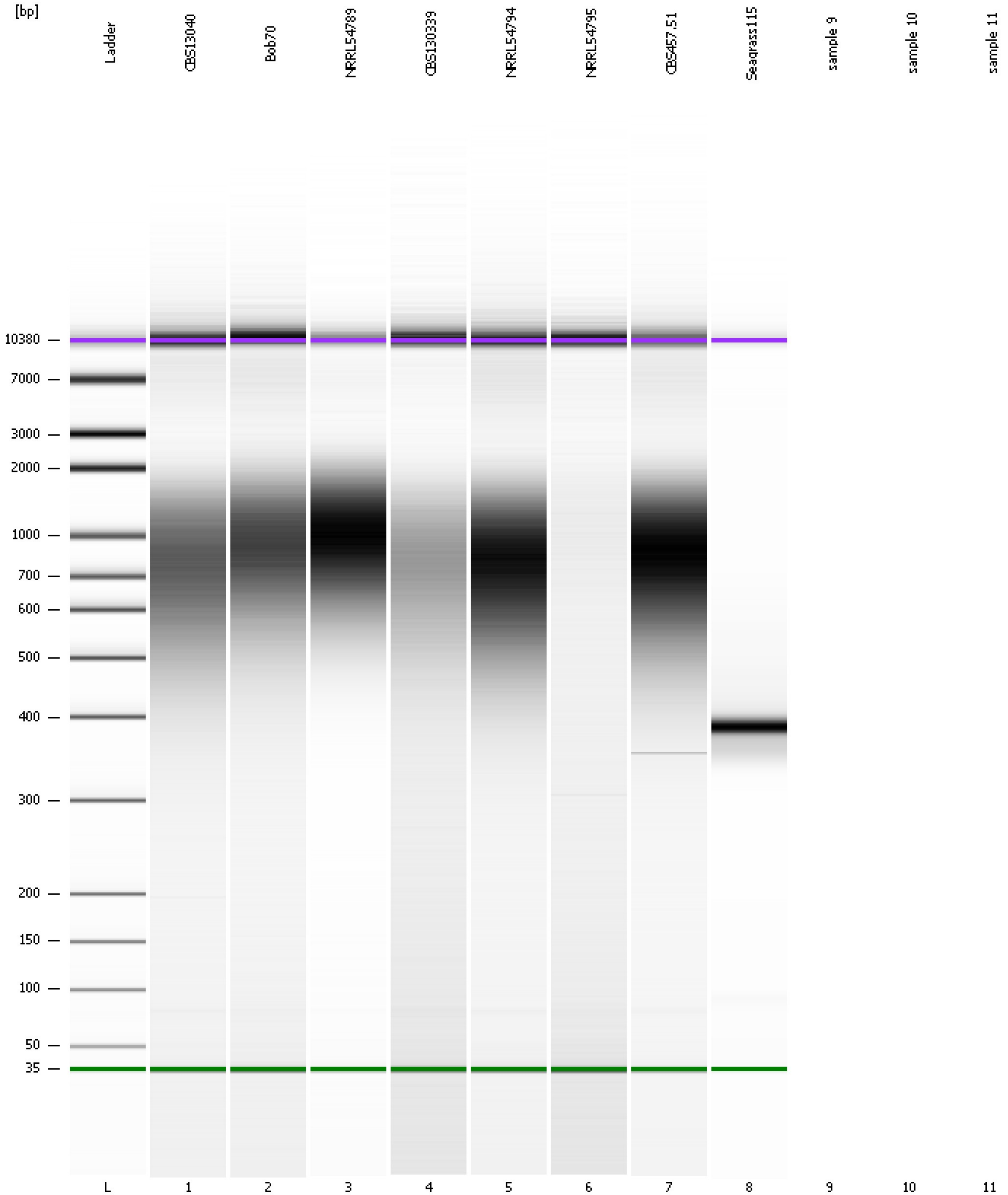
Region table for sample 8 : Seagrass115

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
314	387	459	992.5	6,838.4	80	5.0	1,742.56	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
Modified: 4/29/2015 9:00:54 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
Modified: 4/29/2015 9:00:54 AM

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\2015-04-29\2015-04-29_001.xad

Created: 4/29/2015 8:26:31 AM
 Modified: 4/29/2015 9:00:54 AM

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		4/29/2015 8:59:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-29\2015-04-29_001.xad)		Instrument	Run		4/29/2015 8:26:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/29/2015 8:26:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/29/2015 8:26:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/29/2015 8:26:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/29/2015 8:26:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/29/2015 8:26:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/29/2015 8:26:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1