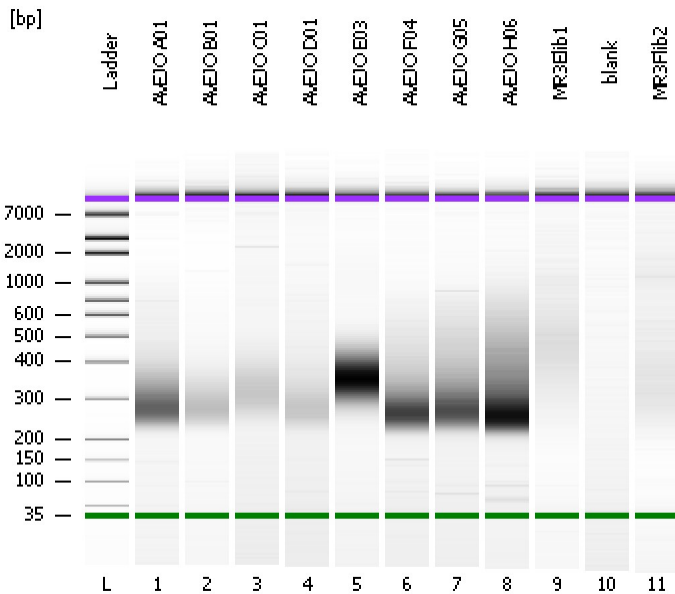


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
Modified: 1/12/2015 11:16:41 AM

Electrophoresis File Run Summary



Instrument Information:

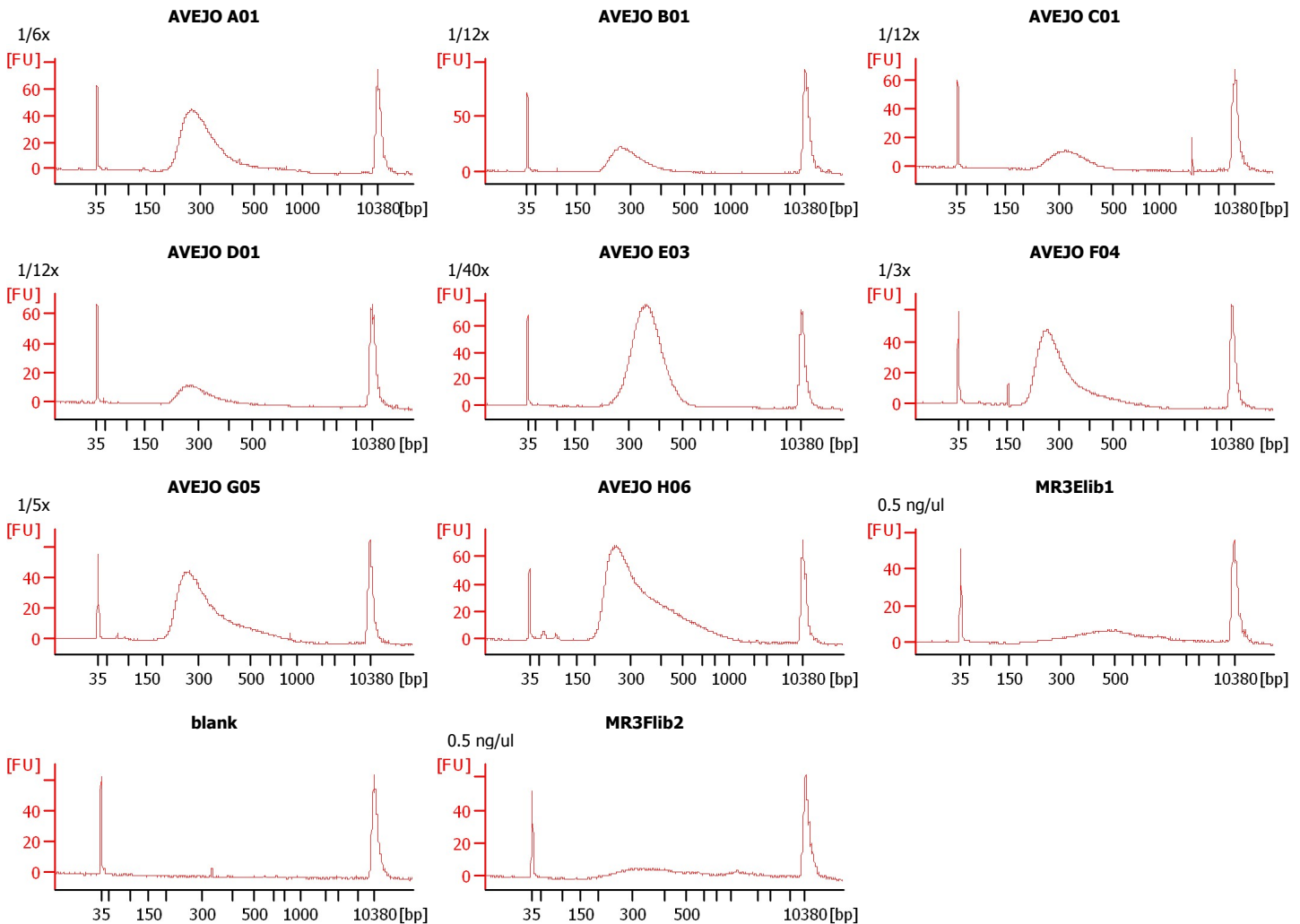
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
AVEJO A01	1/6x	<input type="checkbox"/>	✓			
AVEJO B01	1/12x	<input type="checkbox"/>	✓			
AVEJO C01	1/12x	<input type="checkbox"/>	✓			
AVEJO D01	1/12x	<input type="checkbox"/>	✓			
AVEJO E03	1/40x	<input type="checkbox"/>	✓			
AVEJO F04	1/3x	<input type="checkbox"/>	✓			
AVEJO G05	1/5x	<input type="checkbox"/>	✓			
AVEJO H06		<input type="checkbox"/>	✓			
MR3Elib1	0.5 ng/ul	<input type="checkbox"/>	✓			
blank		<input type="checkbox"/>	✓			
MR3Flib2	0.5 ng/ul	<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\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
Modified: 1/12/2015 11:16:41 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

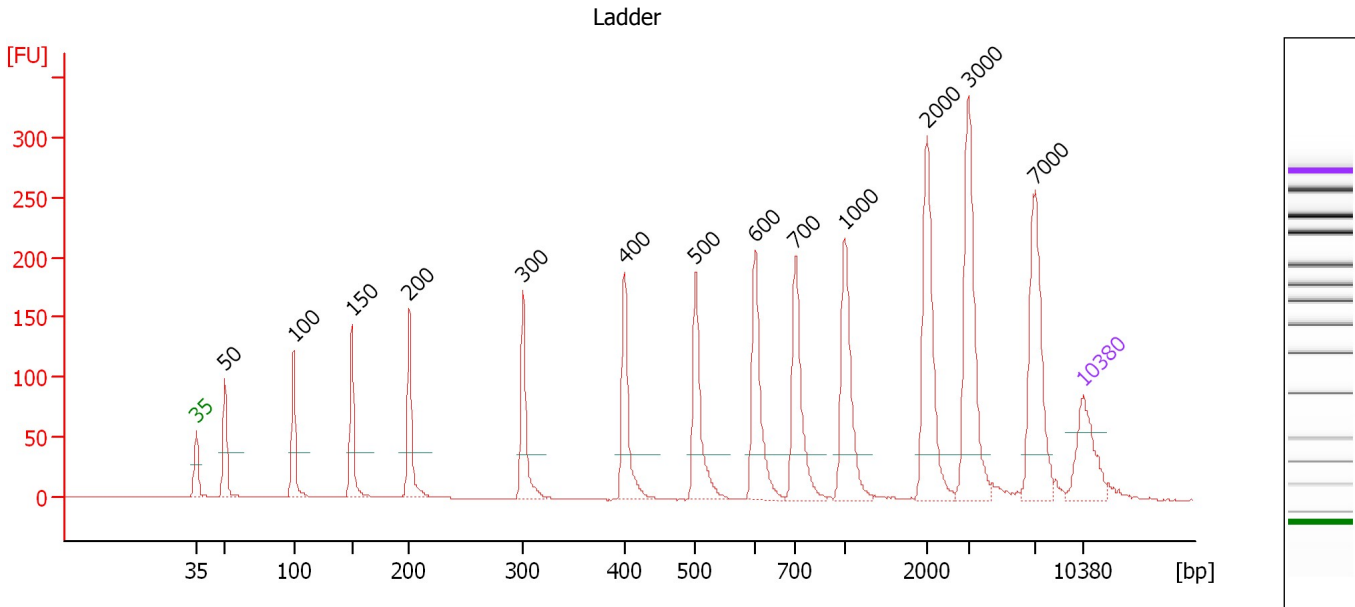
Ladder

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\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

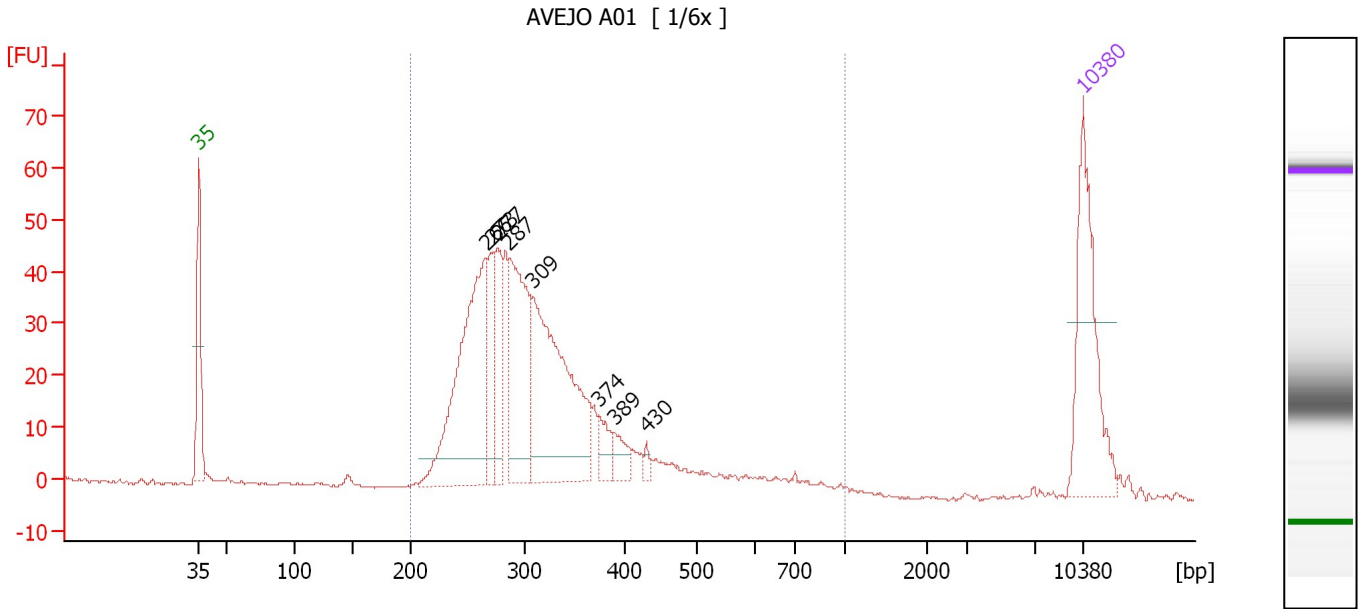
Peak table for Ladder

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	50.66
4	150	150.00	1,515.2	Ladder Peak	55.25
5	200	150.00	1,136.4	Ladder Peak	59.79
6	300	150.00	757.6	Ladder Peak	68.76
7	400	150.00	568.2	Ladder Peak	76.80
8	500	150.00	454.5	Ladder Peak	82.40
9	600	150.00	378.8	Ladder Peak	87.11
10	700	150.00	324.7	Ladder Peak	90.27
11	1,000	150.00	227.3	Ladder Peak	94.14
12	2,000	150.00	113.6	Ladder Peak	100.67
13	3,000	150.00	75.8	Ladder Peak	103.91
14	7,000	150.00	32.5	Ladder Peak	109.17
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : AVEJO A01

Number of peaks found: 8 Corr. Area 1: 746.9
 Noise: 0.2

Peak table for sample 1 : AVEJO A01

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	266	199.77	1,135.8		65.76
3	273	44.64	247.7		66.35
4	277	55.18	302.0		66.69
5	287	122.70	647.3		67.61
6	309	195.62	959.7		69.47
7	374	17.86	72.4		74.71
8	389	16.31	63.6		75.89
9	430	4.23	14.9		78.46
10	10,380	75.00	10.9	Upper Marker	113.00

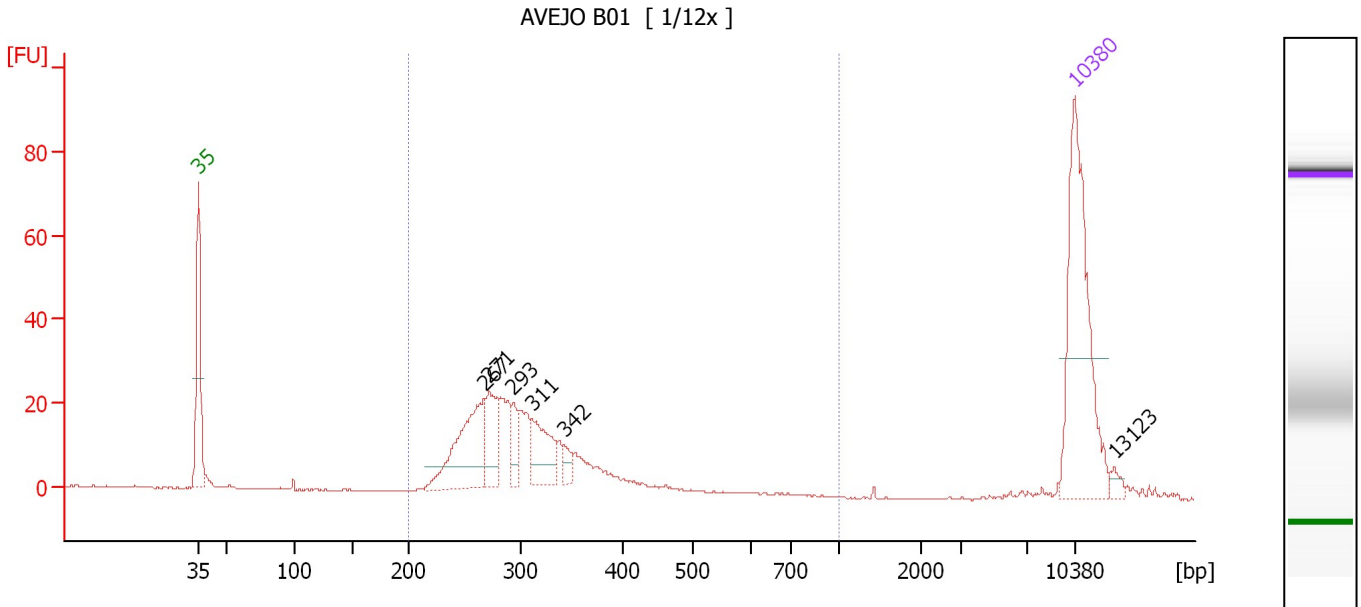
Region table for sample 1 : AVEJO A01

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	330	1,000	746.9	97	31.2	801.03	4,001.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : AVEJO B01

Number of peaks found: 6 Corr. Area 1: 342.5
 Noise: 0.2

Peak table for sample 2 : AVEJO B01

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	267	64.72	366.9		65.82
3	271	26.79	149.8		66.16
4	293	13.46	69.7		68.12
5	311	30.41	148.1		69.65
6	342	5.98	26.5		72.17
7	10,380	75.00	10.9	Upper Marker	113.00
8	13,123	0.00	0.0		116.11

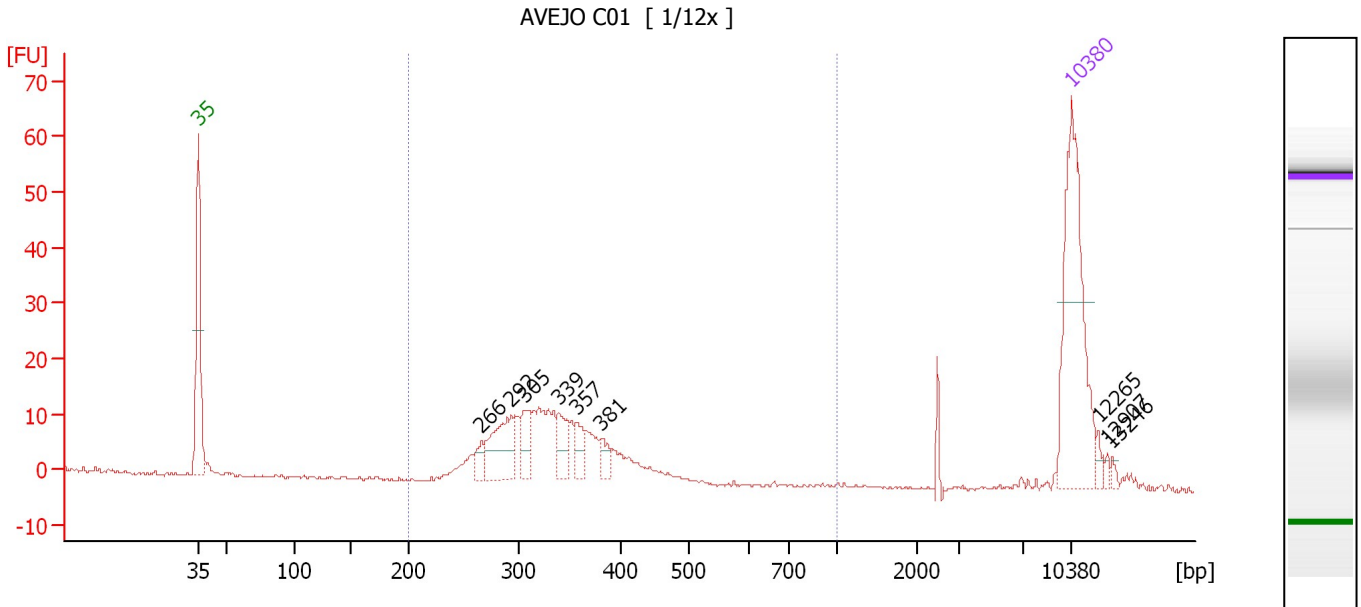
Region table for sample 2 : AVEJO B01

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	311	1,000	342.5	90	22.2	252.97	1,293.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : AVEJO C01

Number of peaks found: 9 Corr. Area 1: 187.3
 Noise: 0.2

Peak table for sample 3 : AVEJO C01

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	266	8.82	50.3		65.69
3	292	37.48	194.2		68.09
4	305	18.36	91.2		69.15
5	339	17.40	77.8		71.89
6	357	10.22	43.4		73.34
7	381	7.49	29.8		75.26
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,265	0.00	0.0		115.14
10	12,907	0.00	0.0		115.86
11	13,246	0.00	0.0		116.25

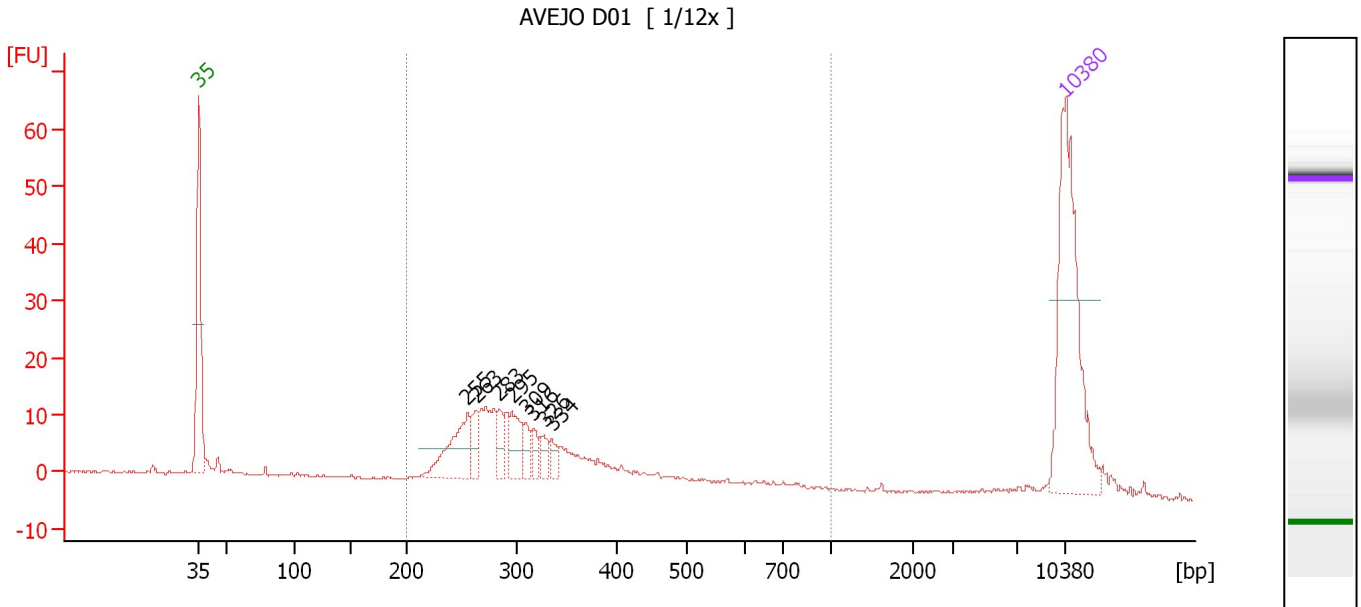
Region table for sample 3 : AVEJO C01

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	332	1,000	187.3	89	14.6	196.87	922.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : AVEJO D01

Number of peaks found: 8 Corr. Area 1: 222.5
 Noise: 0.2

Peak table for sample 4 : AVEJO D01

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	255	38.86	231.0		64.71
3	263	11.43	65.9		65.40
4	283	11.10	59.4		67.25
5	295	18.67	96.0		68.29
6	309	8.15	40.0		69.45
7	316	7.05	33.8		70.05
8	326	6.98	32.4		70.87
9	334	5.99	27.2		71.52
10	10,380	75.00	10.9	Upper Marker	113.00

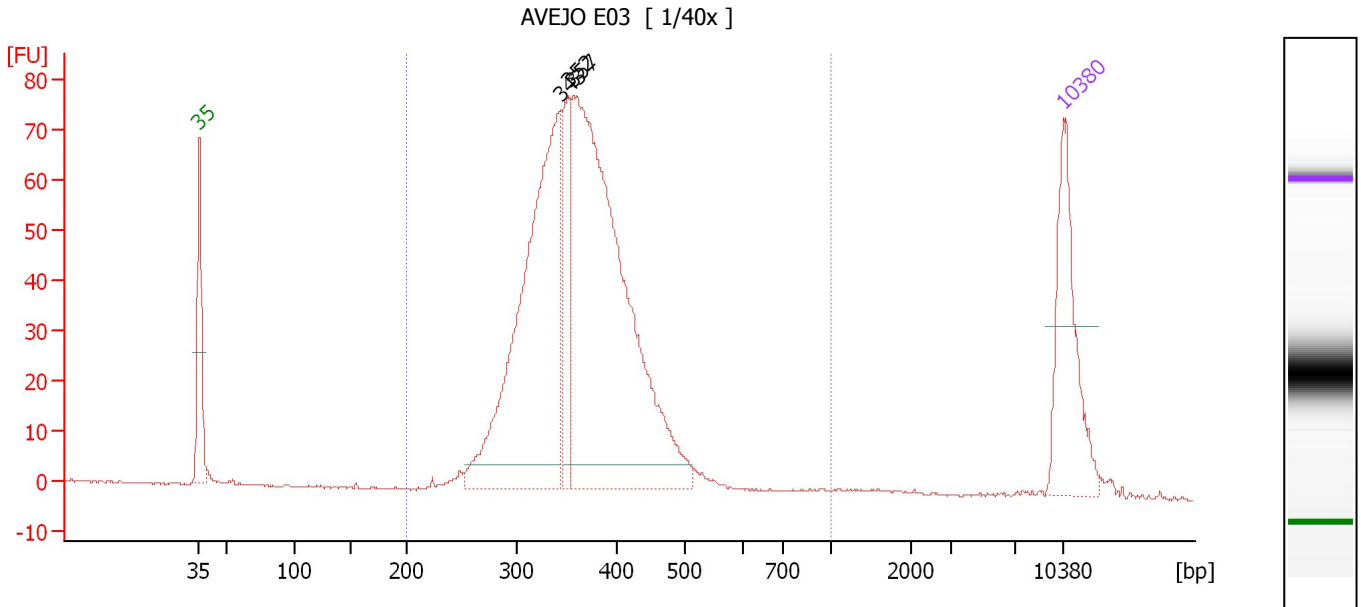
Region table for sample 4 : AVEJO D01

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	337	1,000	222.5	83	33.4	227.53	1,129.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : AVEJO E03

Number of peaks found: 3 Corr. Area 1: 1,059.7
 Noise: 0.2

Peak table for sample 5 : AVEJO E03

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	343	374.09	1,650.3		72.25
3	352	81.29	349.9		72.94
4	357	507.85	2,156.1		73.33
5	10,380	75.00	10.9	Upper Marker	113.00

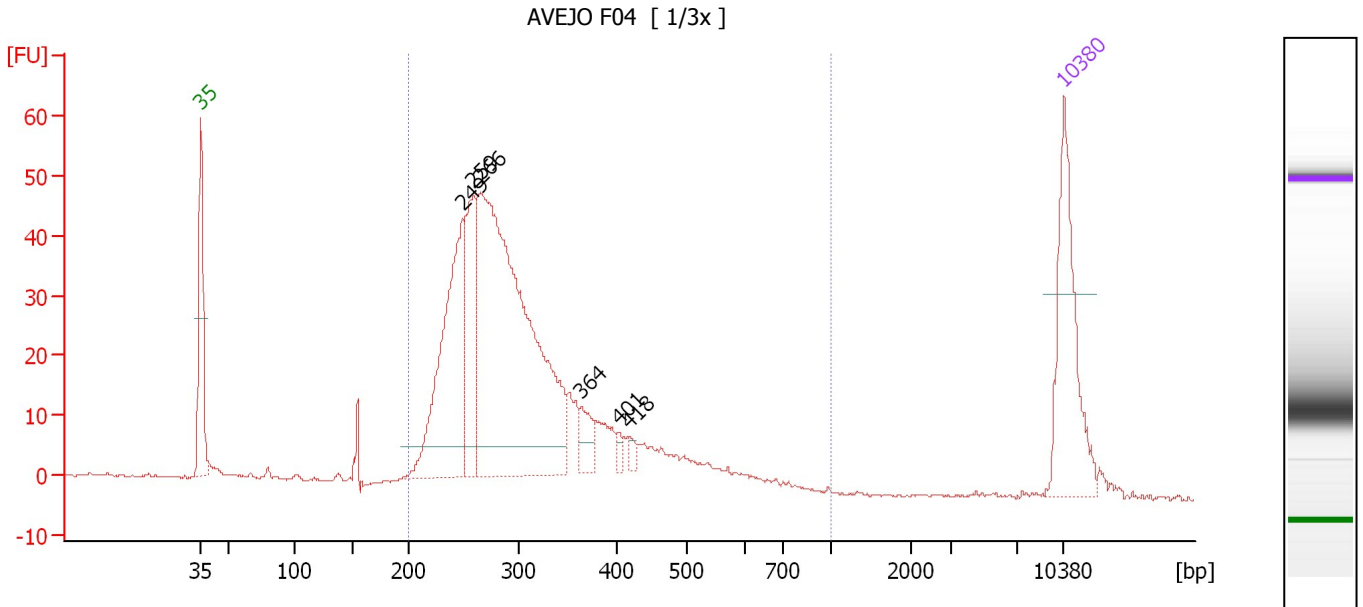
Region table for sample 5 : AVEJO E03

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	366	1,000	1,059.7	98	17.1	983.31	4,188.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : AVEJO F04

Number of peaks found: 6 Corr. Area 1: 740.6
 Noise: 0.2

Peak table for sample 6 : AVEJO F04

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	249	193.76	1,178.5		64.20
3	259	92.46	540.3		65.11
4	266	458.87	2,613.7		65.71
5	364	21.01	87.5		73.89
6	401	5.28	20.0		76.83
7	418	6.04	21.9		77.78
8	10,380	75.00	10.9	Upper Marker	113.00

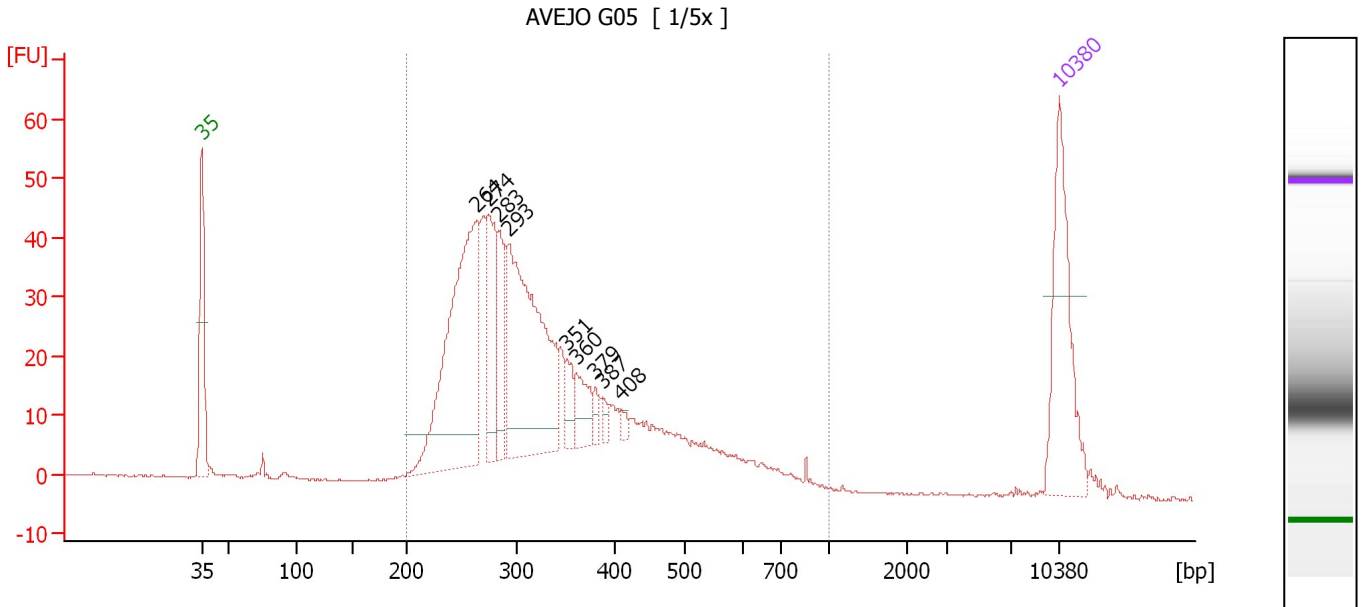
Region table for sample 6 : AVEJO F04

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	314	1,000	740.6	95	27.4	916.38	4,763.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : AVEJO G05

Number of peaks found: 9 Corr. Area 1: 829.2
 Noise: 0.2

Peak table for sample 7 : AVEJO G05

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	264	248.49	1,426.9		65.52
3	274	73.28	405.8		66.39
4	283	50.02	268.0		67.22
5	293	220.08	1,139.9		68.09
6	351	18.01	77.8		72.84
7	360	26.33	110.7		73.62
8	379	8.11	32.4		75.10
9	387	6.83	26.7		75.76
10	408	5.30	19.7		77.24
11	10,380	75.00	10.9	Upper Marker	113.00

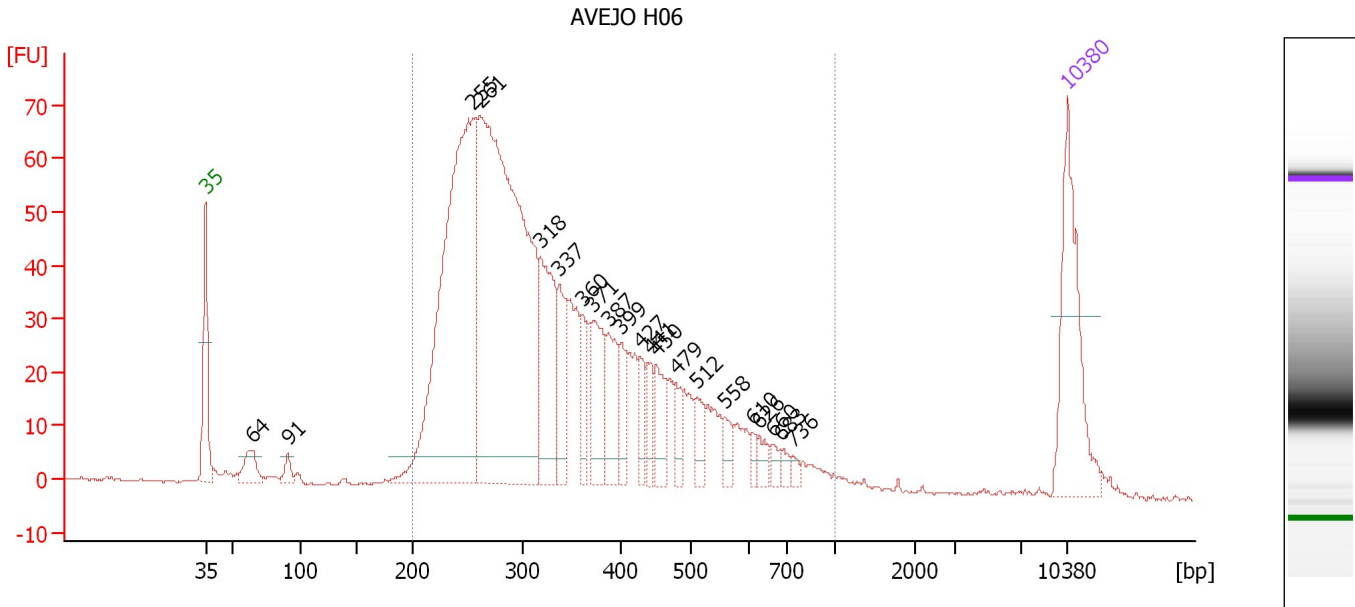
Region table for sample 7 : AVEJO G05

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	342	1,000	829.2	97	32.9	1,027.40	5,061.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : AVEJO H06

Number of peaks found: 21 Corr. Area 1: 1,442.6
 Noise: 0.2

Peak table for sample 8 : AVEJO H06


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	64	24.45	577.3		46.77
3	91	10.15	169.2		49.67
4	255	414.20	2,459.0		64.75
5	261	553.47	3,212.9		65.26
6	318	98.23	468.1		70.20
7	337	44.75	201.3		71.72
8	360	26.65	112.2		73.58
9	371	55.15	225.4		74.45
10	387	40.55	158.8		75.75
11	399	26.34	100.0		76.74
12	427	19.28	68.4		78.30
13	441	17.02	58.5		79.08
14	450	29.04	97.7		79.60
15	479	15.76	49.9		81.21
16	512	18.12	53.6		82.98
17	558	11.89	32.3		85.15
18	610	6.14	15.3		87.44
19	626	9.37	22.7		87.92
20	660	5.75	13.2		89.00
21	683	5.97	13.2		89.74
22	736	4.31	8.9		90.74
23	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...

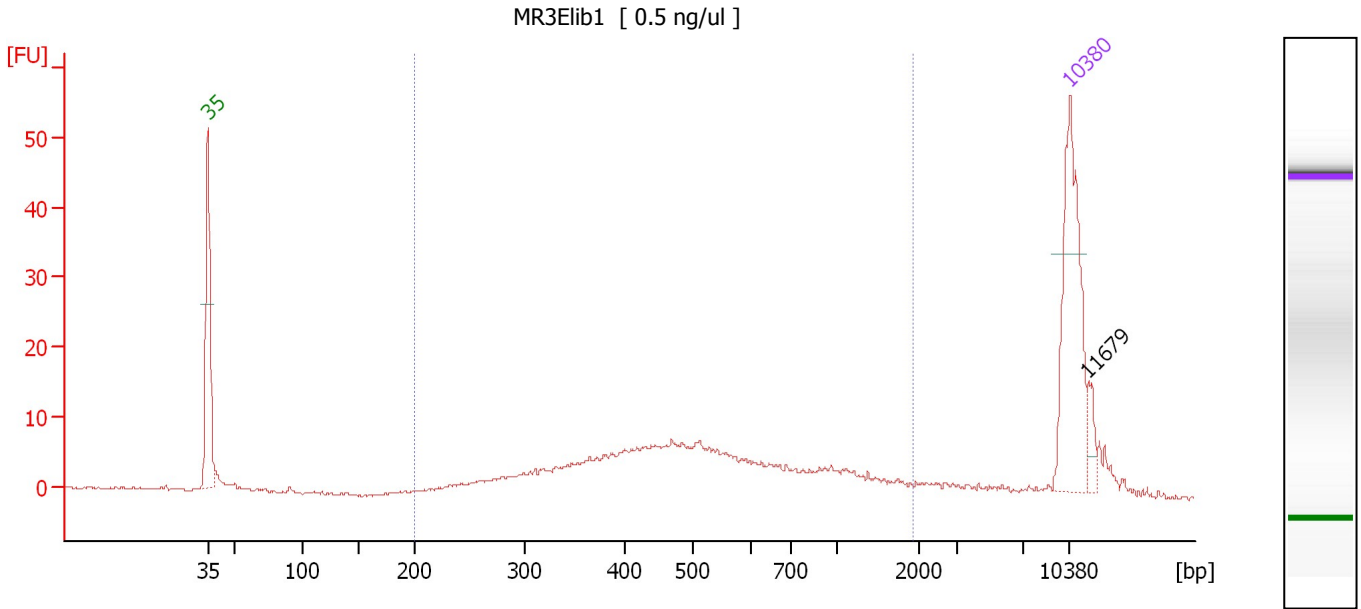
... Region table for sample 8 : AVEJO H06

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
200	350	1,000	1,442.6	96	35.5	1,602.54	7,894.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : MR3Elib1

Number of peaks found: 1 Corr. Area 1: 194.2
 Noise: 0.2

Peak table for sample 9 : MR3Elib1

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	11,679	0.00	0.0		114.47

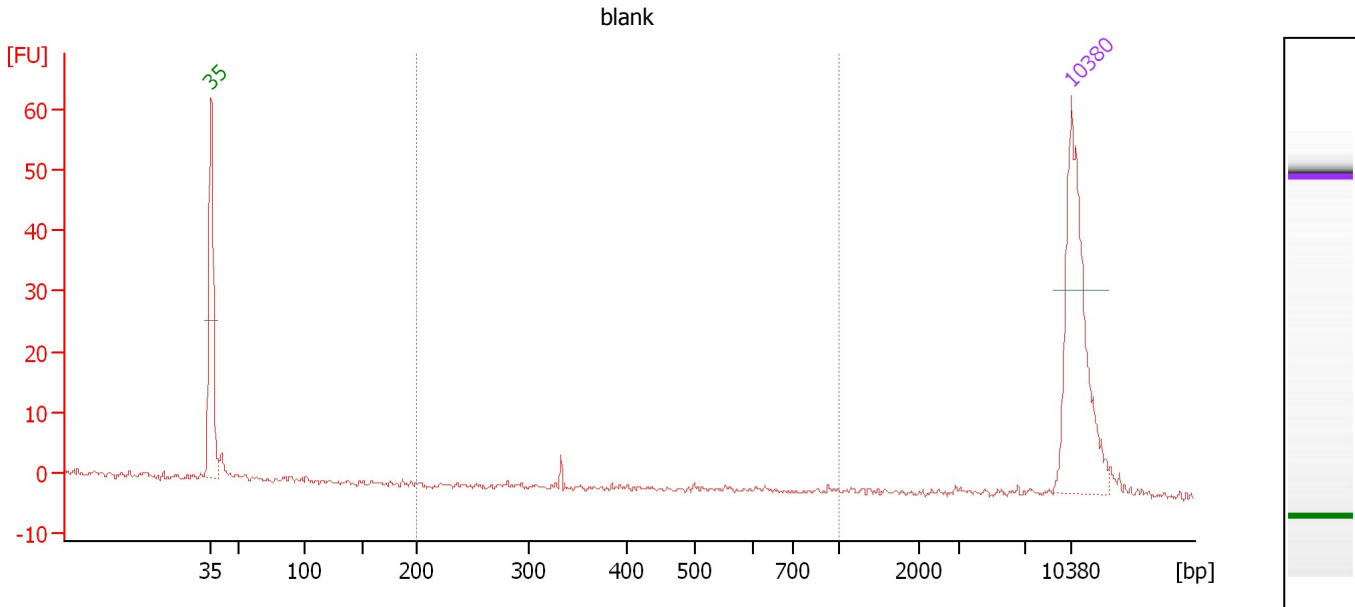
Region table for sample 9 : MR3Elib1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	582	1,932	194.2	82	55.7	252.01	857.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : blank

Number of peaks found: 0 Corr. Area 1: 1.1
 Noise: 0.4

Peak table for sample 10 : blank

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

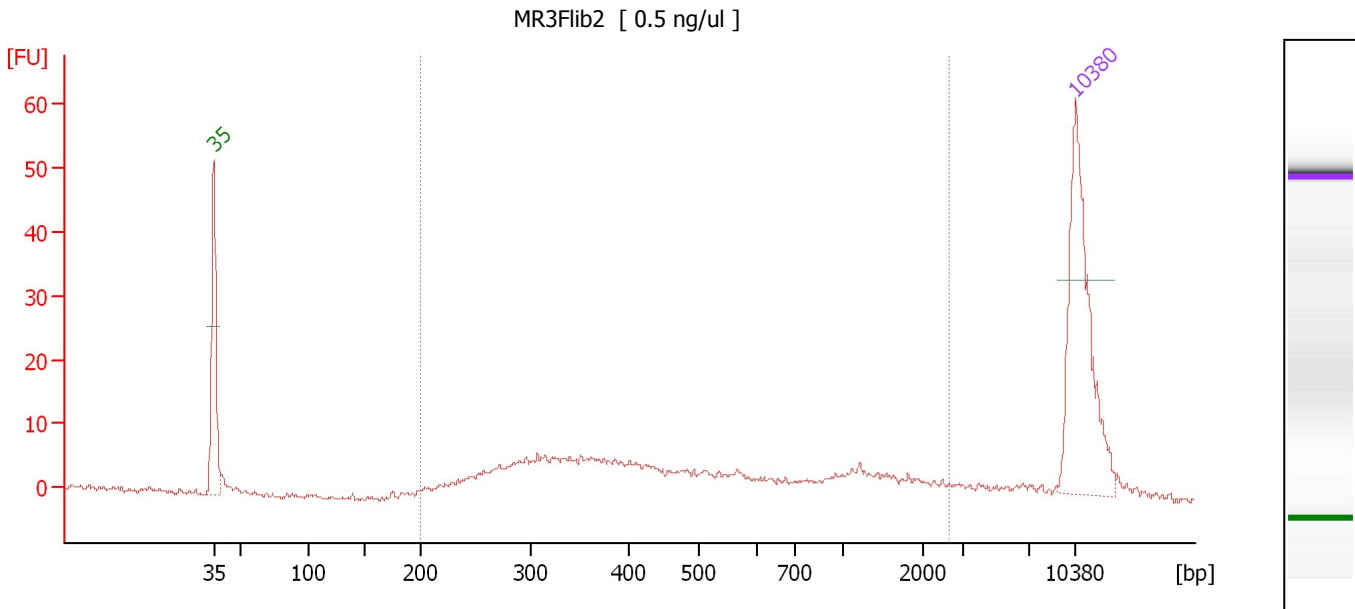
Region table for sample 10 : blank

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	372	1,000	1.1	11	37.7	1.21	5.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : MR3Flib2

Number of peaks found: 0 Corr. Area 1: 189.2
 Noise: 0.4

Peak table for sample 11 : MR3Flib2

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

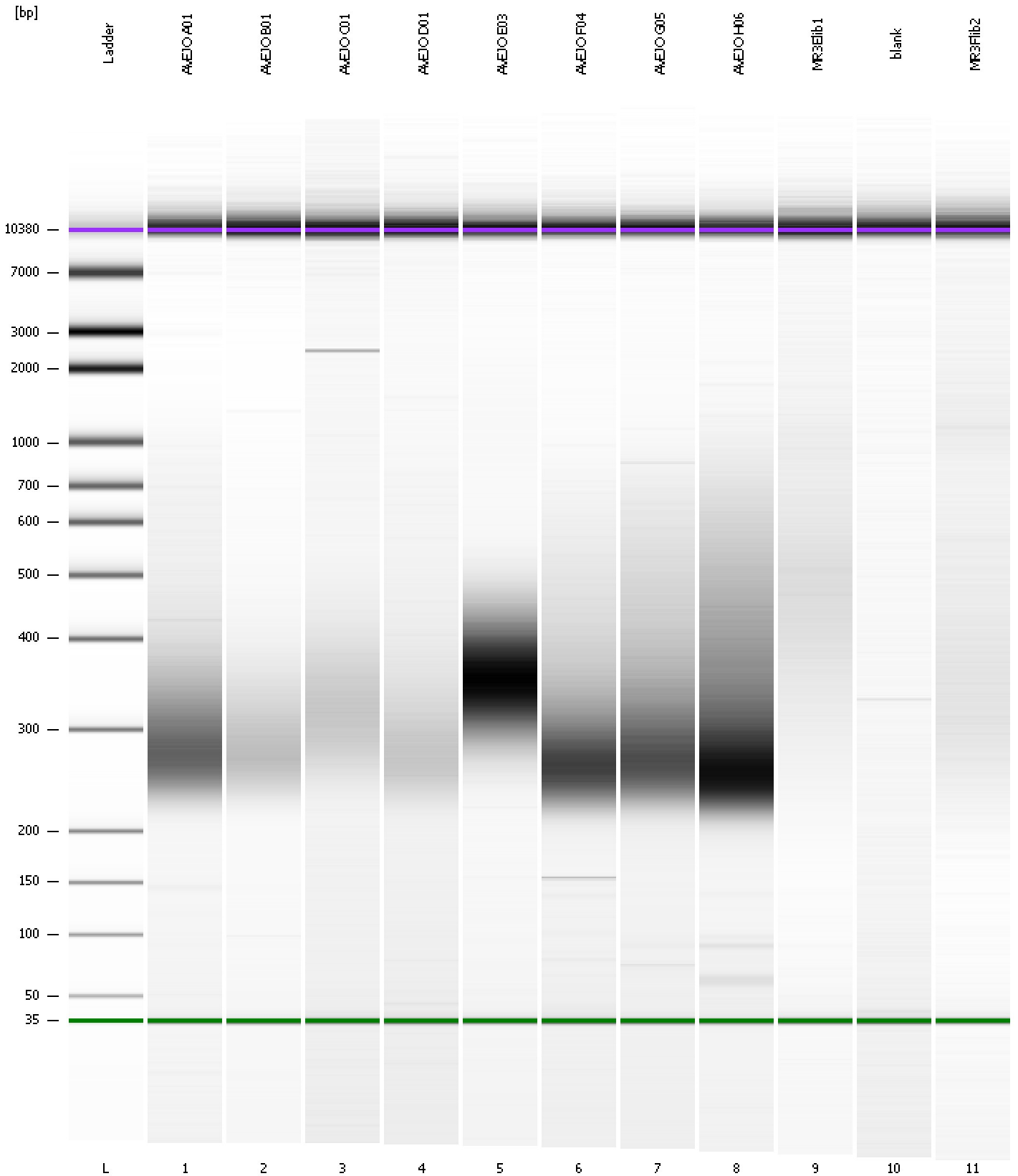
Region table for sample 11 : MR3Flib2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	649	2,649	189.2	89	78.3	192.78	724.5	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
Modified: 1/12/2015 11:16:41 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad

Created: 1/12/2015 10:23:08 AM
 Modified: 1/12/2015 11:16:41 AM

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		1/12/2015 11:04:25 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-01-12\2015-01-12_002.xad)		Instrument	Run		1/12/2015 10:23:14 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/12/2015 10:23:14 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/12/2015 10:23:14 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/12/2015 10:23:14 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/12/2015 10:23:14 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/12/2015 10:23:14 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/12/2015 10:23:14 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1