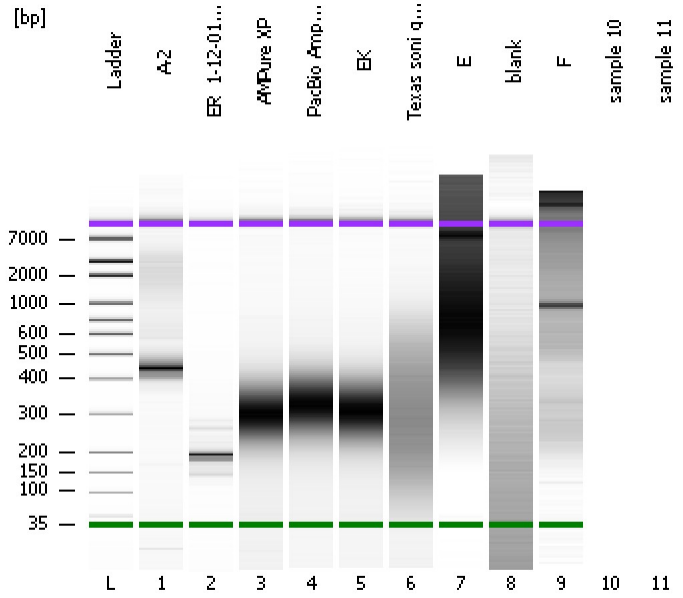
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 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

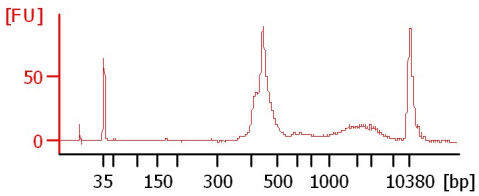
Chip Information:

Chip Lot #:

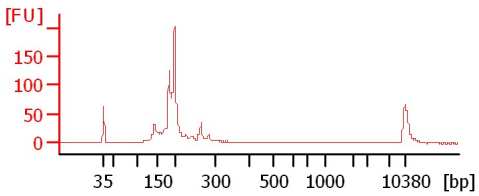
Reagent Kit Lot #:

Chip Comments:

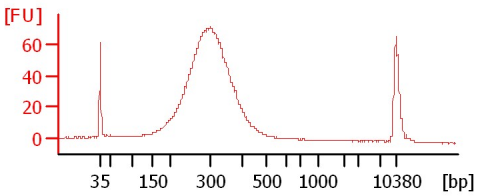
A-2



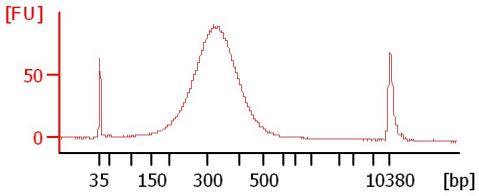
ER_1-12-010915



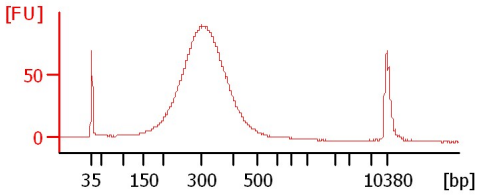
AMPure XP



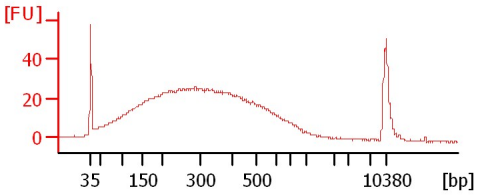
PacBio Ampure PB



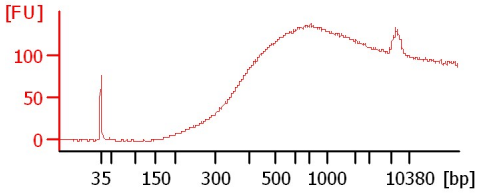
E&K



Texas soni gDNA



E



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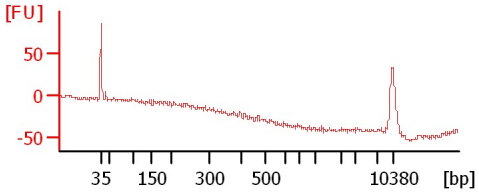

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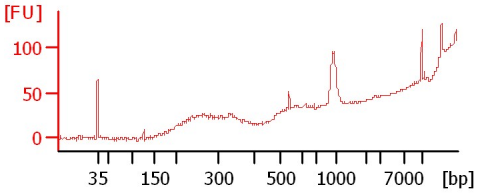


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
A-2		☐	✓			
ER_1-12-010915		☐	✓			
AMPure XP		☐	✓			
PacBio Ampure PB		☐	✓			
E&K		☐	✓			
Texas soni gDNA		☐	✓			
E		☐	✓			
blank		☐	✓			
F		☐	✓			
sample 10		☐				
sample 11		☐				
Ladder		☐	✓			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 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

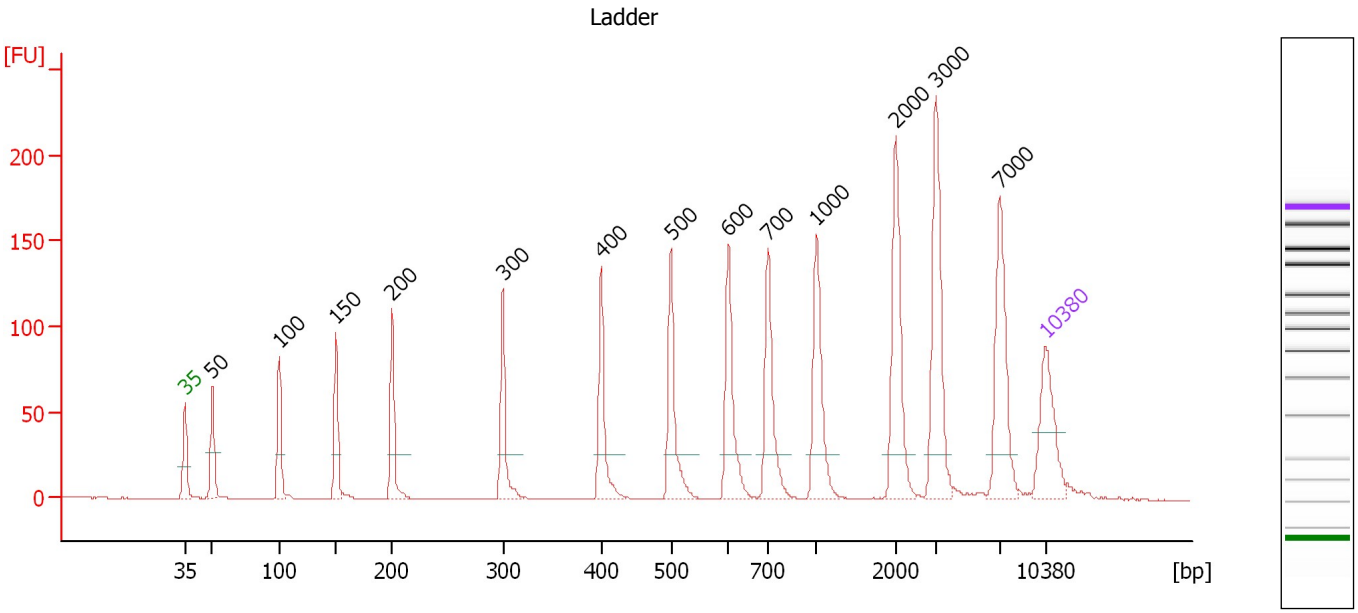
Ladder

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\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

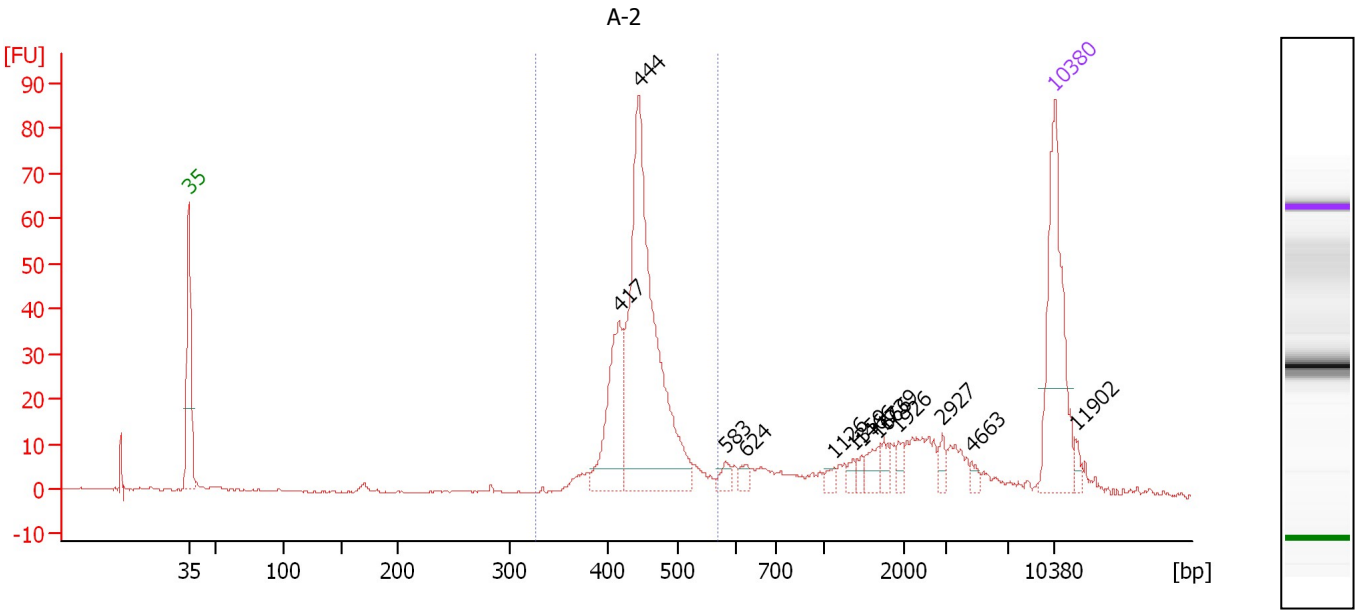
Peak table for Ladder

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	45.21
3		100	150.00	2,272.7	Ladder Peak	50.68
4		150	150.00	1,515.2	Ladder Peak	55.28
5		200	150.00	1,136.4	Ladder Peak	59.84
6		300	150.00	757.6	Ladder Peak	68.86
7		400	150.00	568.2	Ladder Peak	76.85
8		500	150.00	454.5	Ladder Peak	82.54
9		600	150.00	378.8	Ladder Peak	87.22
10		700	150.00	324.7	Ladder Peak	90.43
11		1,000	150.00	227.3	Ladder Peak	94.38
12		2,000	150.00	113.6	Ladder Peak	100.85
13		3,000	150.00	75.8	Ladder Peak	104.15
14		7,000	150.00	32.5	Ladder Peak	109.27
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : A-2

Number of peaks found:	13	Corr. Area 1:	363.4
Noise:	0.2		

Peak table for sample 1 : A-2

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	417	70.16	254.8		77.83
3	444	254.16	866.4		79.38
4	583	7.02	18.3		86.41
5	624	5.63	13.7		88.00
6	1,126	4.23	5.7		95.20
7	1,359	4.09	4.6		96.71
8	1,466	3.46	3.6		97.40
9	1,666	9.43	8.6		98.69
10	1,739	6.12	5.3		99.16
11	1,926	5.59	4.4		100.37
12	2,927	6.02	3.1		103.91
13	4,663	3.49	1.1		106.28
14	10,380	75.00	10.9	Upper Marker	113.00
15	11,902	0.00	0.0		114.68

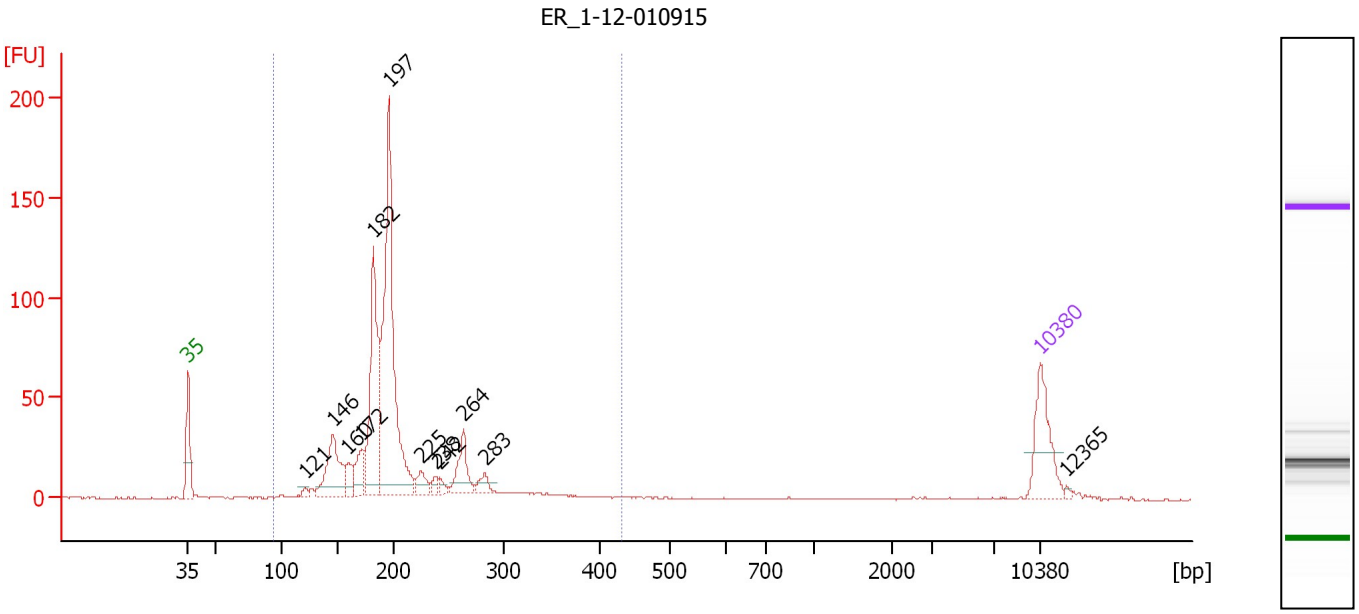
Region table for sample 1 : A-2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
328	447	568	363.4	62	7.9	348.28	1,186.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : ER_1-12-010915

Number of peaks found:	12	Corr. Area 1:	804.4
Noise:	0.3		

Peak table for sample 2 : ER_1-12-010915

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	121	9.25	116.0		52.60
3	146	130.87	1,361.6		54.88
4	160	33.11	314.4		56.15
5	172	53.14	469.3		57.25
6	182	261.44	2,174.9		58.21
7	197	506.27	3,902.5		59.52
8	225	25.96	174.7		62.11
9	238	11.70	74.4		63.29
10	242	10.97	68.6		63.64
11	264	62.19	356.9		65.62
12	283	19.52	104.4		67.37
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,365	0.00	0.0		115.19

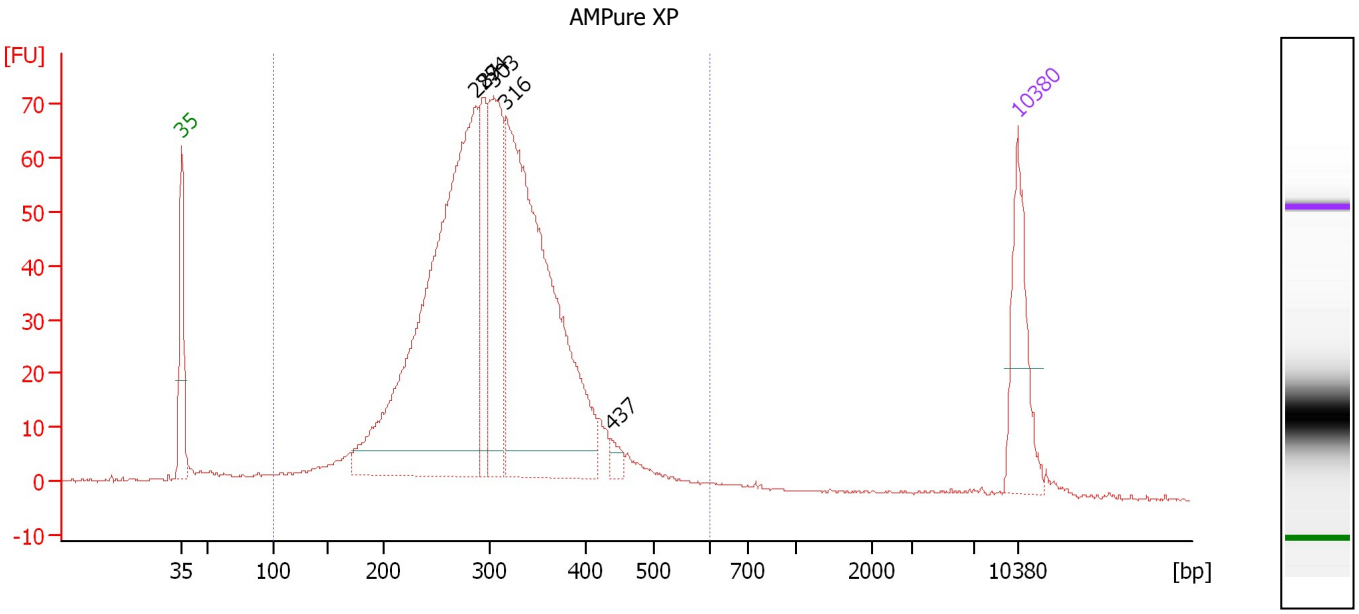
Region table for sample 2 : ER_1-12-010915

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
94	202	431	804.4	97	21.9	1,246.62	9,853.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : AMPure XP

Number of peaks found:	5	Corr. Area 1:	1,379.5
Noise:	0.2		

Peak table for sample 3 : AMPure XP

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		287	735.72	3,887.0		67.67
3		294	107.47	554.4		68.30
4		303	196.04	980.5		69.10
5		316	595.55	2,852.4		70.17
6		437	12.11	42.0		78.96
7	▶	10,380	75.00	10.9	Upper Marker	113.00

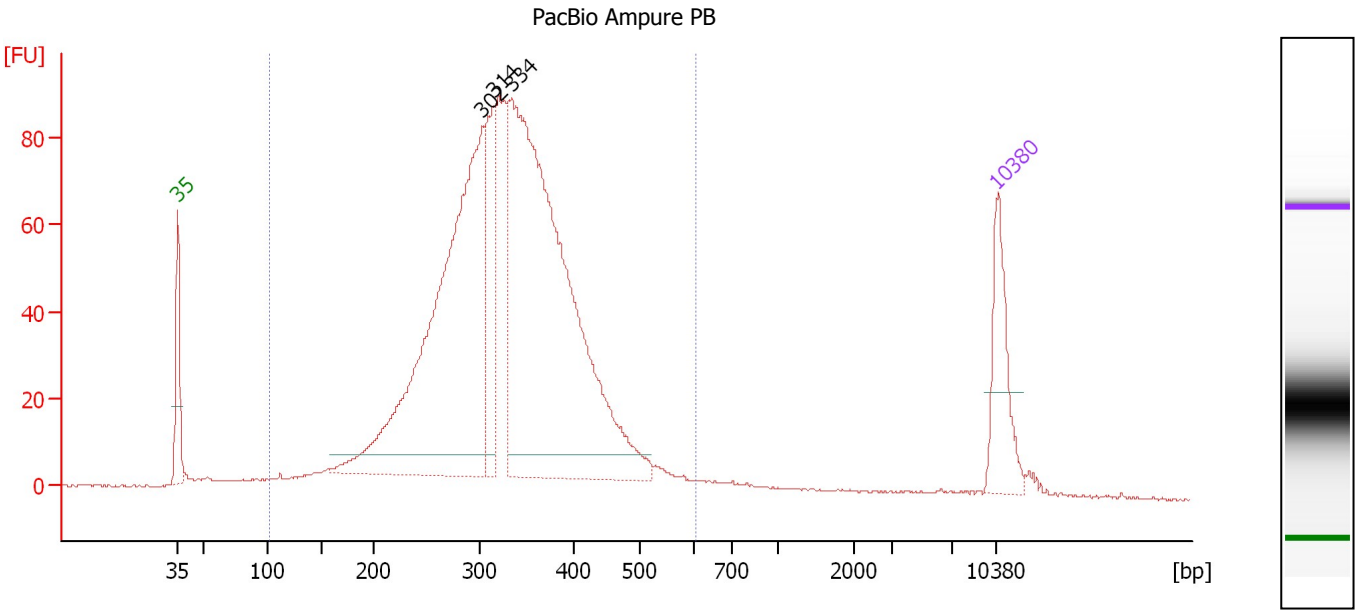
Region table for sample 3 : AMPure XP

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
101	303	599	1,379.5	96	22.2	1,896.15	10,255.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : PacBio Ampure PB

Number of peaks found:	3	Corr. Area 1:	1,754.8
Noise:	0.2		

Peak table for sample 4 : PacBio Ampure PB

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		302	771.62	3,868.9		69.04
3		314	158.63	766.4		69.95
4		334	944.70	4,290.7		71.55
5	▶	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 4 : PacBio Ampure PB

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
102	328	604	1,754.8	96	22.3	2,302.60	11,602.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

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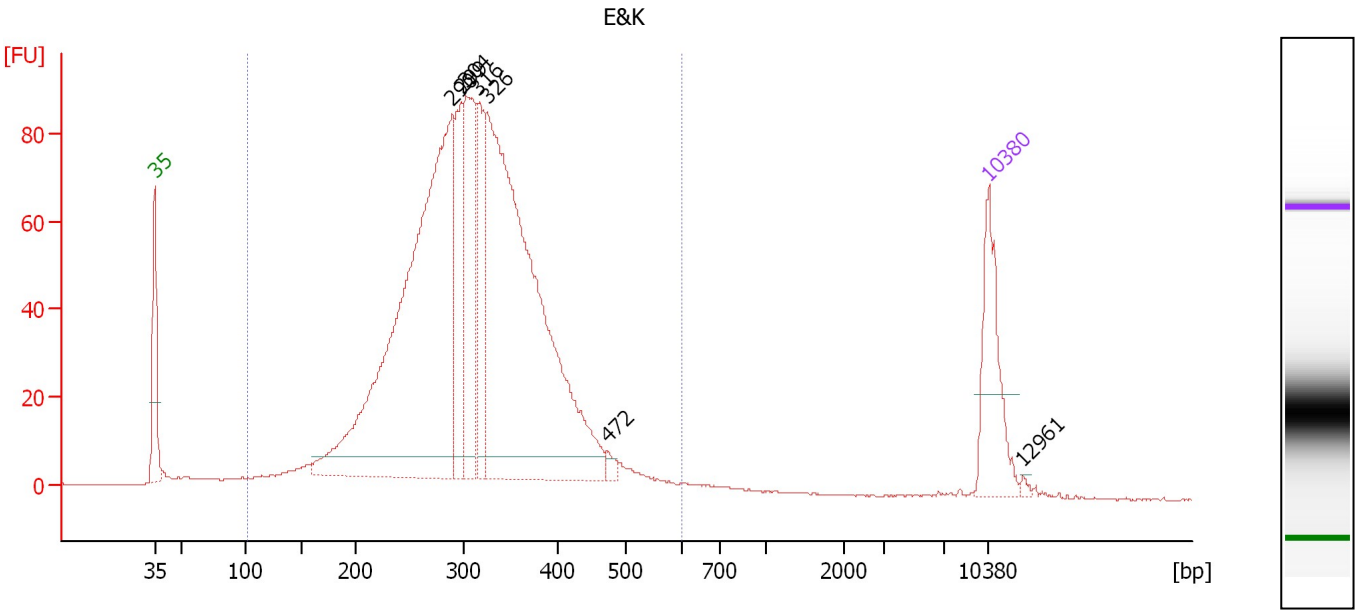

Overall Results for sample 5 : E&K

Number of peaks found:	7	Corr. Area 1:	1,753.6
Noise:	0.1		

Peak table for sample 5 : E&K

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	290	757.66	3,952.3		68.00
3	299	122.19	618.9		68.78
4	304	160.57	801.3		69.15
5	316	97.23	466.6		70.12
6	326	710.88	3,303.5		70.94
7	472	8.07	25.9		80.96
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,961	0.00	0.0		115.85

Region table for sample 5 : E&K

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
102	312	599	1,753.6	97	22.5	2,115.41	11,186.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

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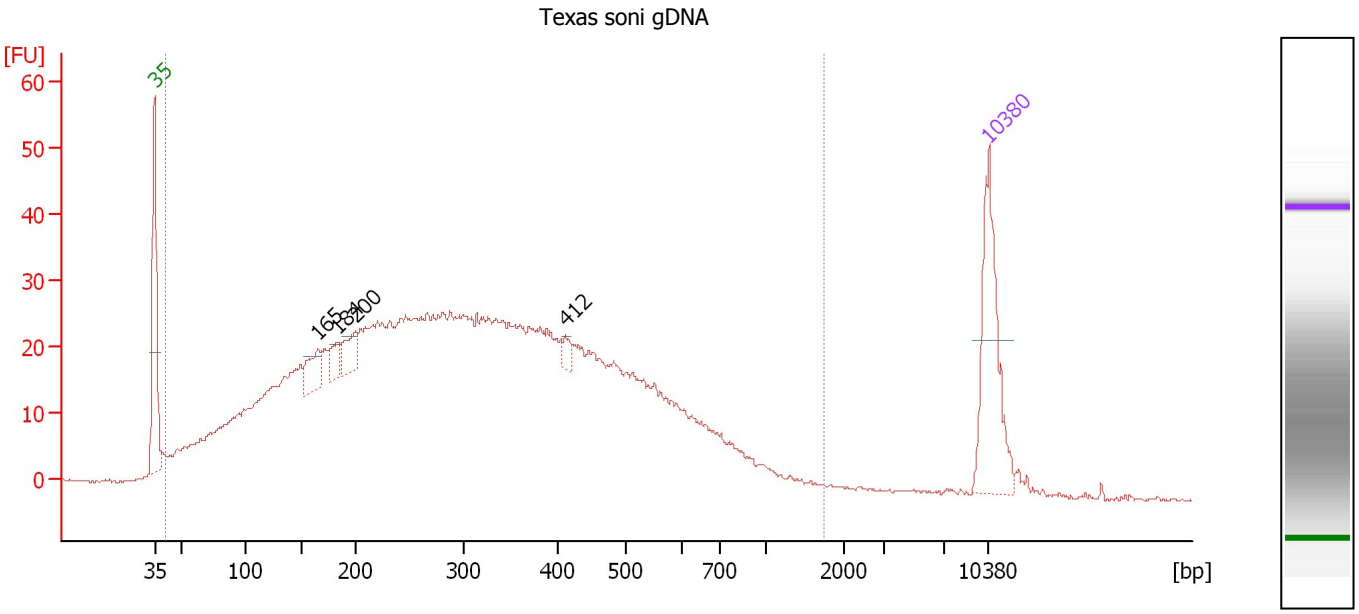
Modified: 1/9/2015 1:06:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Texas soni gDNA

Number of peaks found:	4	Corr. Area 1:	1,397.3
Noise:	0.2		

Peak table for sample 6 : Texas soni gDNA

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	165	29.63	271.4		56.69
3	184	16.52	136.3		58.35
4	200	23.77	179.8		59.87
5	412	7.49	27.6		77.52
6	10,380	75.00	10.9	Upper Marker	113.00

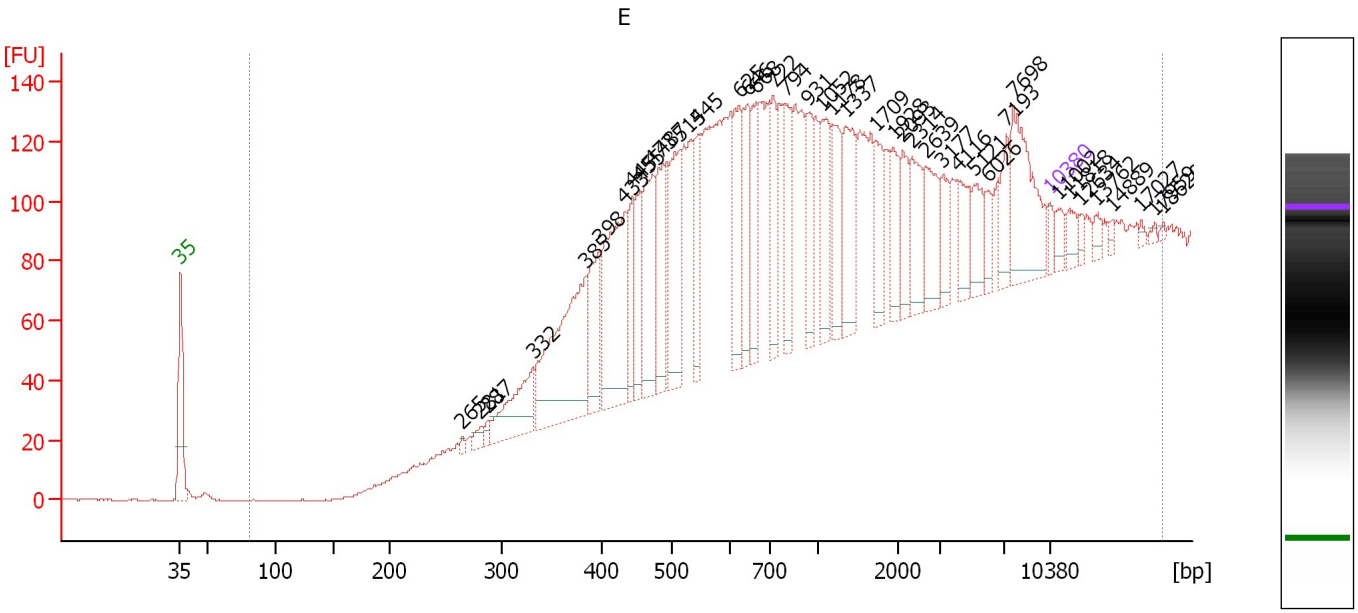
Region table for sample 6 : Texas soni gDNA

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
41	338	1,746	1,397.3	98	59.0	2,495.79	19,218.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : E

Number of peaks found:	41	Corr. Area 1:	2,608.1
Noise:	0.2		

Peak table for sample 7 : E

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	265	43.71	250.0		65.70
3	281	95.87	516.7		67.16
4	287	72.15	380.5		67.72
5	332	726.63	3,317.2		71.41
6	385	1,861.92	7,335.6		75.62
7	398	662.81	2,523.2		76.69
8	433	1,503.66	5,256.3		78.75
9	445	451.31	1,537.4		79.39
10	455	535.43	1,781.7		80.00
11	473	883.51	2,827.4		81.03
12	487	681.66	2,120.6		81.80
13	514	876.60	2,586.1		83.17
14	545	536.04	1,491.0		84.63
15	625	671.65	1,628.5		88.02
16	646	597.11	1,399.9		88.71
17	668	560.40	1,271.7		89.39
18	722	511.84	1,073.9		90.73
19	794	474.19	905.0		91.67
20	931	470.77	766.3		93.47
21	1,052	557.95	803.8		94.72
22	1,178	496.75	639.0		95.53
23	1,337	605.30	685.9		96.56
24	1,709	345.71	306.5		98.97
25	1,928	291.96	229.5		100.38

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Electropherogram Summary Continued ...

... Peak table for sample 7 : E

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,093	291.49	211.0		101.15
27	2,314	392.82	257.2		101.88
28	2,639	434.37	249.4		102.96
29	3,177	222.92	106.3		104.37
30	4,116	291.53	107.3		105.58
31	5,121	259.53	76.8		106.86
32	6,026	135.74	34.1		108.02
33	7,193	248.17	52.3		109.48
34	7,698	787.92	155.1		110.04
35	10,380	75.00	10.9	Upper Marker	113.00
36	11,002	0.00	0.0		113.69
37	11,818	0.00	0.0		114.59
38	12,634	0.00	0.0		115.49
39	13,762	0.00	0.0		116.73
40	14,889	0.00	0.0		117.98
41	17,027	0.00	0.0		120.34
42	17,959	0.00	0.0		121.37
43	18,620	0.00	0.0		122.10

Region table for sample 7 : E

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
81	2,204	18,503	2,608.1	100	100.0	20,620.35	44,308.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

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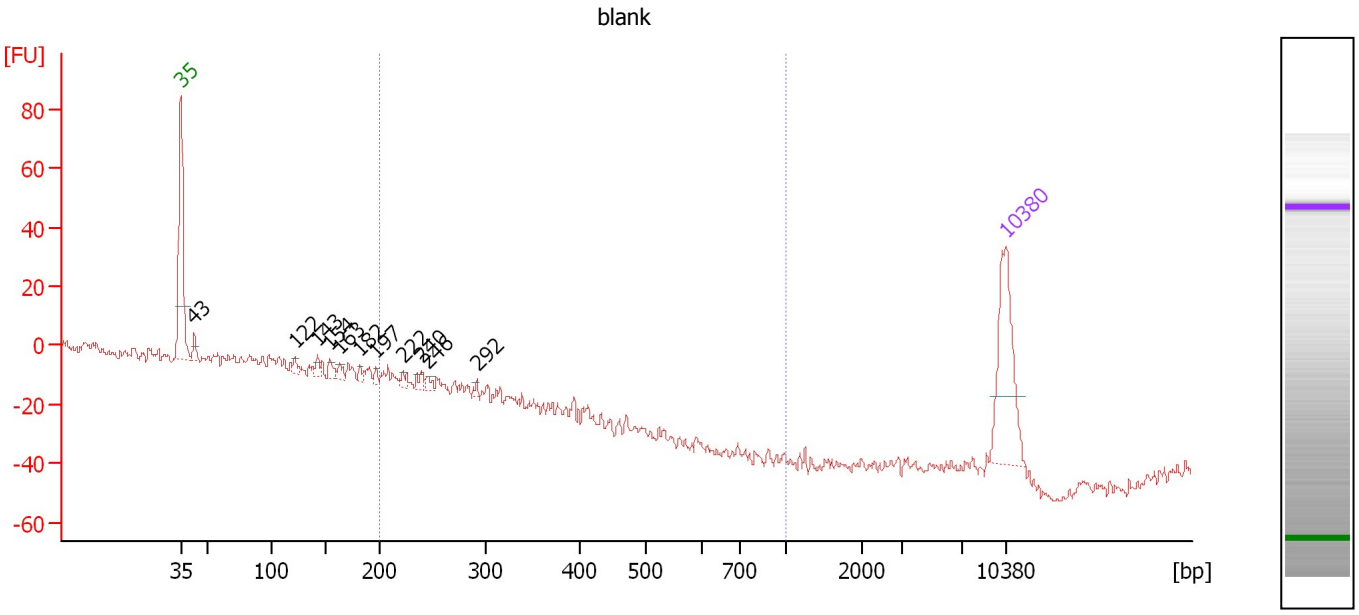
Modified: 1/9/2015 1:06:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : blank

Number of peaks found:	11	Corr. Area 1:	26.6
Noise:	2.2		

Peak table for sample 8 : 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	43	11.89	422.2		44.13
3	122	6.11	76.0		52.68
4	143	7.86	83.3		54.63
5	154	8.89	87.6		55.62
6	163	7.72	71.7		56.48
7	182	5.34	44.5		58.16
8	197	4.92	37.8		59.56
9	222	5.52	37.7		61.82
10	240	7.80	49.3		63.41
11	246	5.80	35.8		63.95
12	292	3.42	17.8		68.11
13	10,380	75.00	10.9	Upper Marker	113.00

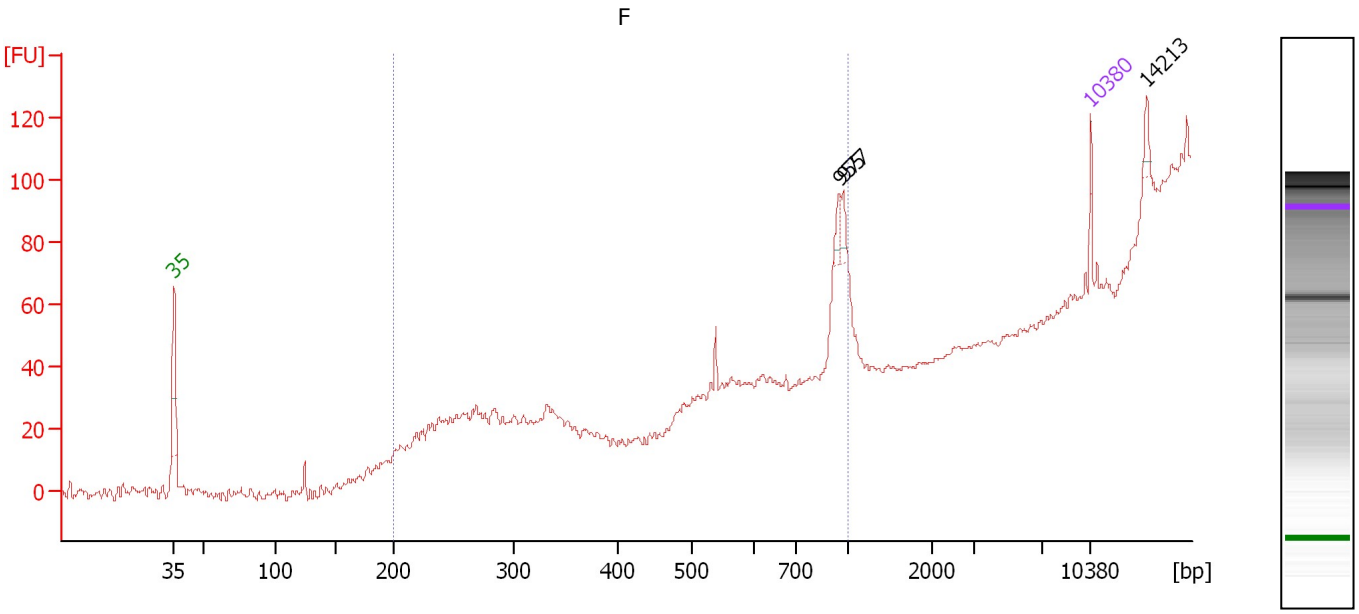
Region table for sample 8 : blank

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	245	1,000	26.6	17	13.8	34.44	215.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : F

Width Threshold [s] : 0.1

Overall Results for sample 9 : F

Number of peaks found: 3
Noise: 1.3
Corr. Area 1: 18.4

Peak table for sample 9 : F

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	955	510.29	809.6		93.79
3	977	441.72	685.3		94.08
4	10,380	75.00	10.9	Upper Marker	113.00
5	14,213	0.00	0.0		117.23

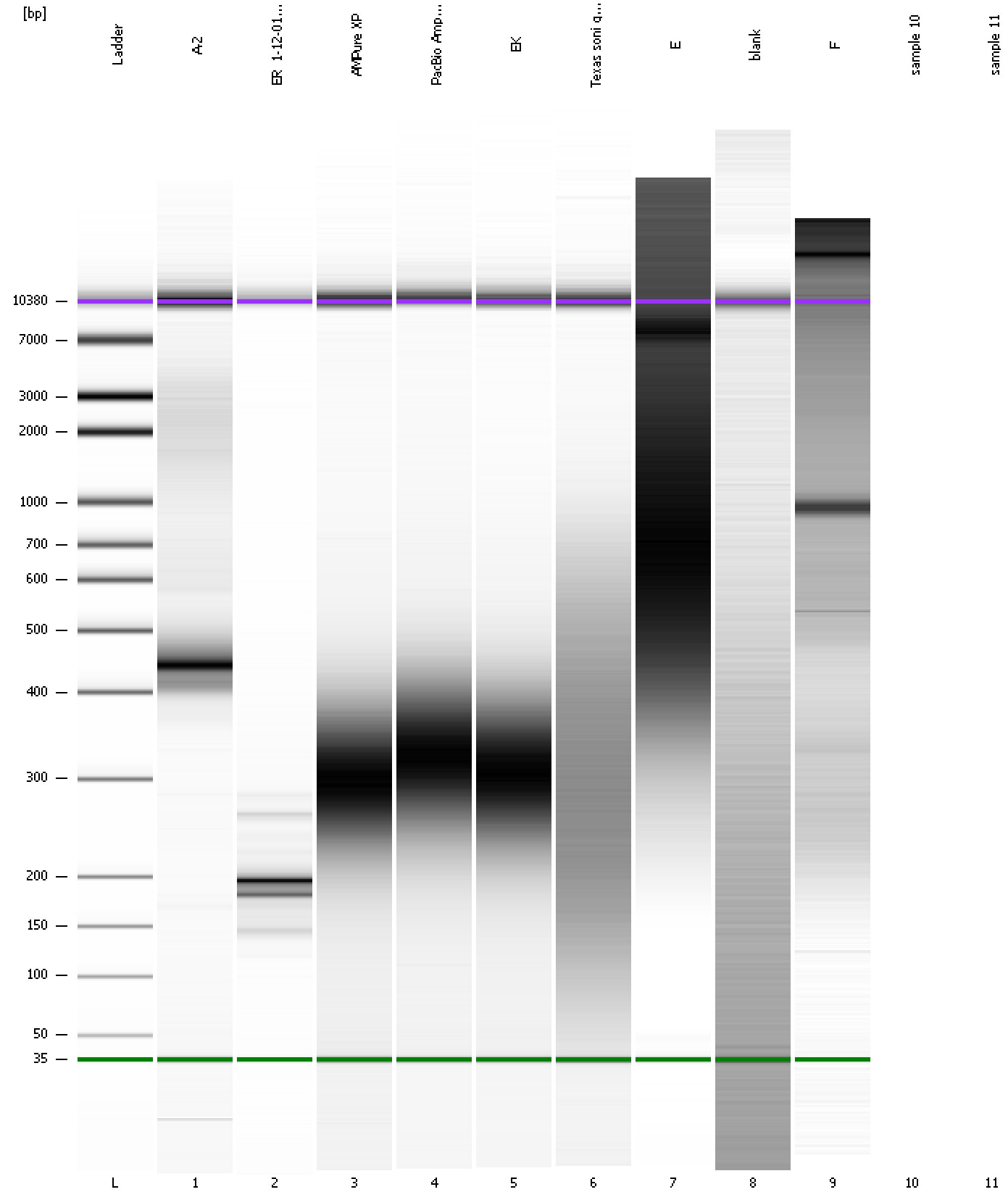
Region table for sample 9 : F

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	962	1,000	18.4	69	1.9	832.36	1,310.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Invalid Samples

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\2015-01-09\2015-01-09_003.xad

Created: 1/9/2015 12:26:39 PM
Modified: 1/9/2015 1:06:17 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		1/9/2015 1:02:15 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-01-09\2015-01-09_003.xad)		Instrument	Run		1/9/2015 12:26:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/9/2015 12:26:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/9/2015 12:26:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/9/2015 12:26:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/9/2015 12:26:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/9/2015 12:26:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/9/2015 12:26:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1