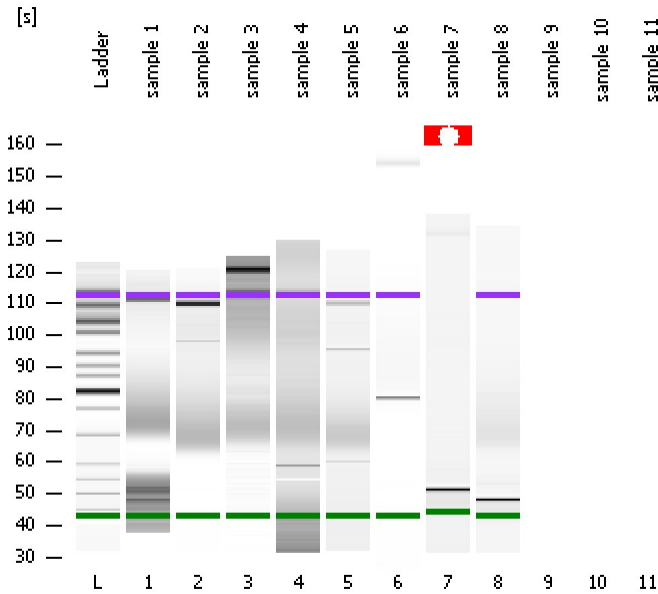


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
Modified: 4/11/2012 10:54:33 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

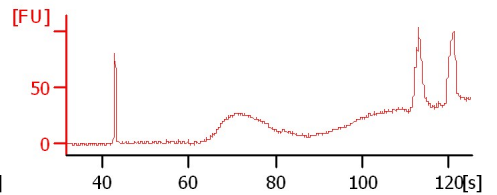
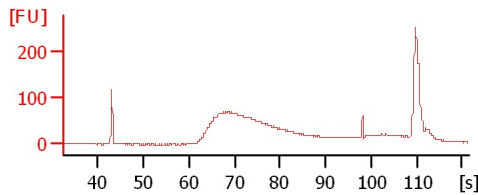
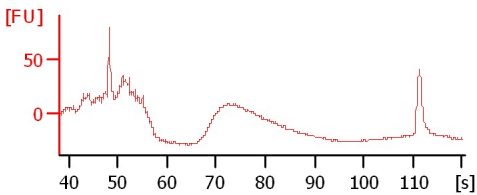
Chip Information:

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

sample 1

sample 2

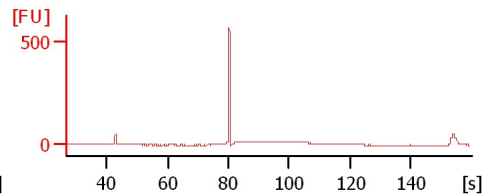
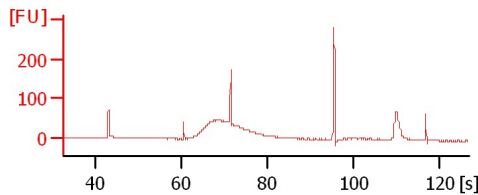
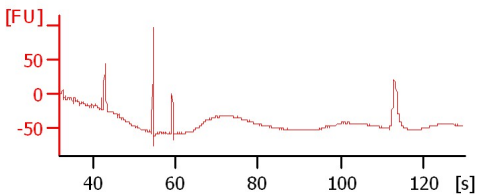
sample 3



sample 4

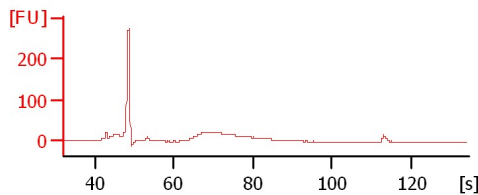
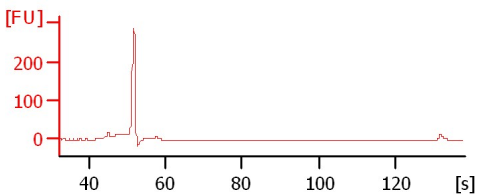
sample 5

sample 6



sample 7

sample 8



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<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\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 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

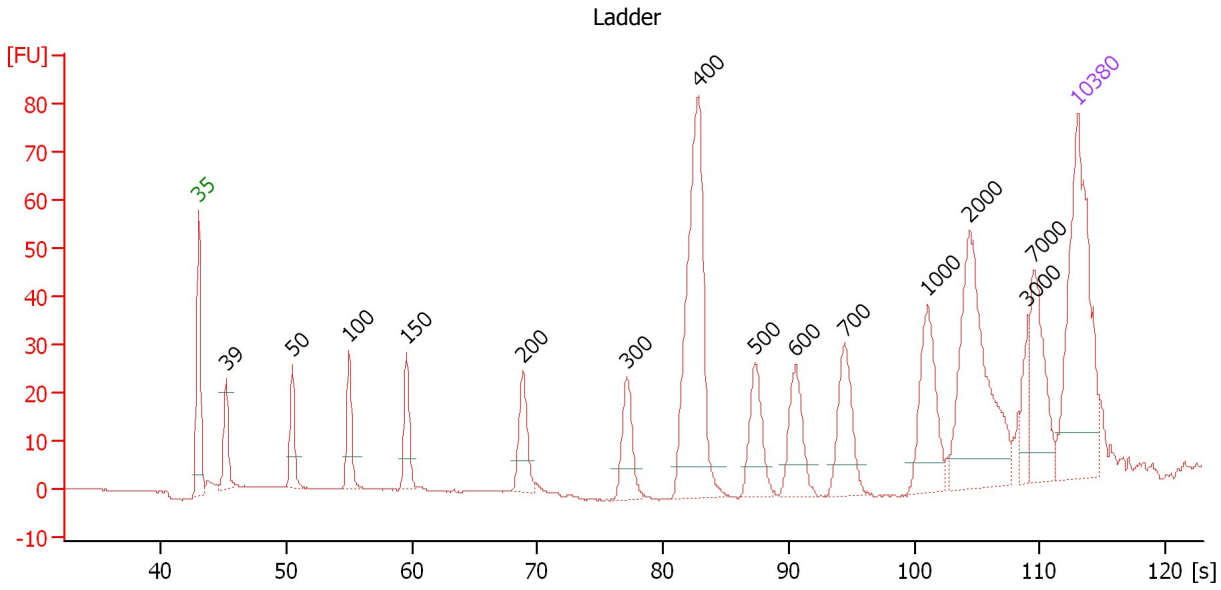
Ladder

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\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

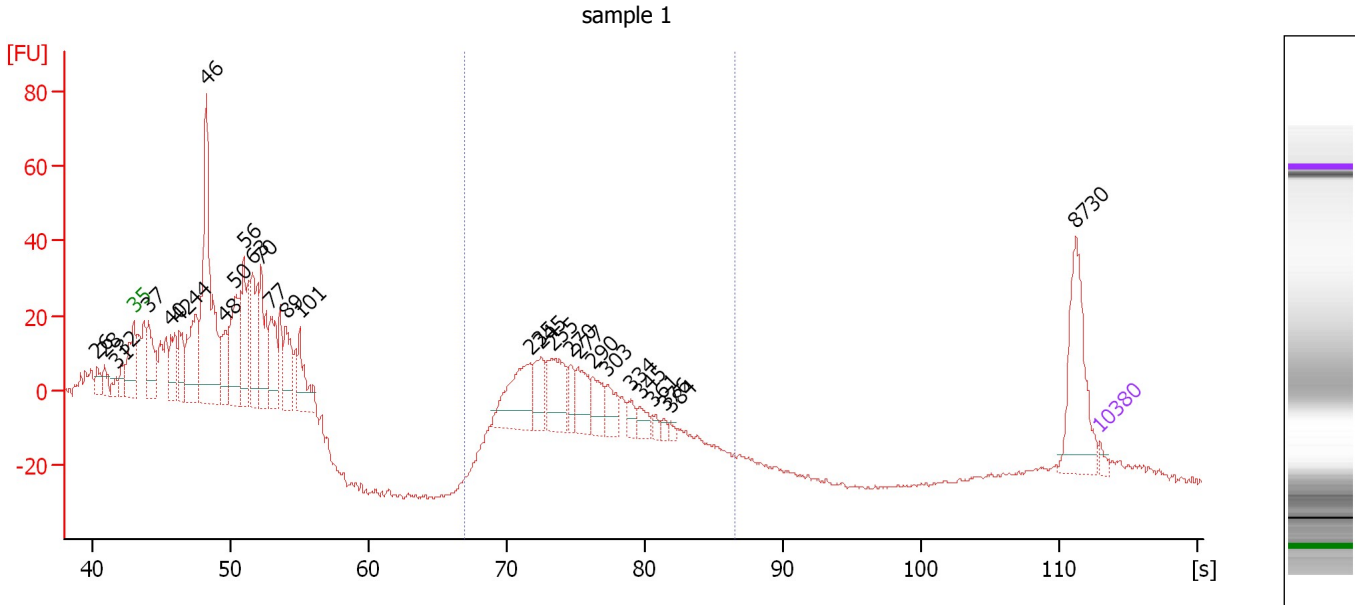
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	0.00	0.0	
3	50	150.00	4,545.5	Ladder Peak
4	100	150.00	2,272.7	Ladder Peak
5	150	150.00	1,515.2	Ladder Peak
6	200	150.00	1,136.4	Ladder Peak
7	300	150.00	757.6	Ladder Peak
8	400	150.00	568.2	Ladder Peak
9	500	150.00	454.5	Ladder Peak
10	600	150.00	378.8	Ladder Peak
11	700	150.00	324.7	Ladder Peak
12	1,000	150.00	227.3	Ladder Peak
13	2,000	150.00	113.6	Ladder Peak
14	3,000	150.00	75.8	Ladder Peak
15	7,000	150.00	32.5	Ladder Peak
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 30 Corr. Area 1: 245.2
 Noise: 0.5

Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	26	0.00	0.0	
2	28	0.00	0.0	
3	31	0.00	0.0	
4	32	0.00	0.0	
5	35	125.00	5,411.3	Lower Marker
6	37	1,276.03	52,087.5	
7	40	967.52	36,274.3	
8	42	888.71	32,315.7	
9	44	1,798.10	61,888.2	
10	46	5,128.55	170,443.9	
11	48	935.11	29,360.1	
12	50	1,919.67	58,375.1	
13	56	1,492.43	40,440.8	
14	63	1,565.03	37,769.3	
15	70	1,681.49	36,578.6	
16	77	1,112.80	21,790.4	
17	89	1,009.69	17,113.3	
18	101	1,072.26	16,157.7	
19	235	1,585.54	10,230.7	
20	245	686.37	4,250.5	
21	255	1,158.34	6,870.4	
22	270	357.84	2,004.7	
23	277	731.75	4,008.9	
24	290	532.89	2,782.6	
25	303	475.40	2,373.8	
26	334	200.69	911.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad


Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary Continued ...

... Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	345	255.53	1,121.6	
28	361	117.85	494.7	
29	376	93.24	375.8	
30	384	74.77	294.9	
31	8,730	1,327.55	230.4	
32	10,380	75.00	10.9	Upper Marker

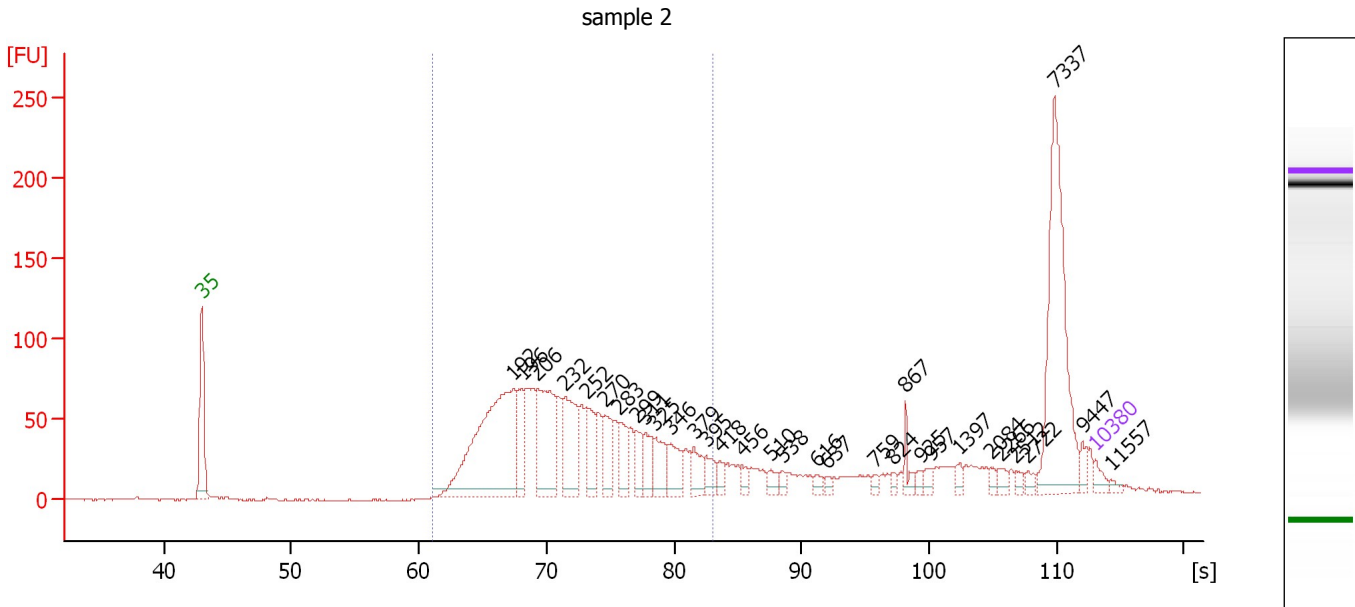
Region table for sample 1 : sample 1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
190	34,051.6	276	6,051.17	482	245.2	22	16.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 32 Corr. Area 1: 1,434.0
 Noise: 0.8

Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	192	3,275.39	25,796.3	
3	196	552.81	4,263.4	
4	206	1,379.48	10,156.7	
5	232	951.15	6,220.7	
6	252	521.12	3,133.7	
7	270	481.66	2,705.7	
8	283	404.46	2,166.1	
9	299	293.07	1,484.4	
10	311	304.22	1,484.0	
11	325	370.06	1,723.1	
12	346	356.39	1,560.1	
13	379	246.87	987.7	
14	395	209.80	804.8	
15	418	108.33	392.7	
16	456	83.13	276.0	
17	510	119.11	354.0	
18	538	63.14	177.7	
19	616	65.70	161.7	
20	637	51.93	123.5	
21	759	51.02	101.9	
22	824	49.11	90.3	
23	867	140.18	244.9	
24	925	50.91	83.4	
25	957	75.19	119.0	
26	1,397	72.00	78.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad


Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary Continued ...

... Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,084	48.24	35.1	
28	2,266	73.10	48.9	
29	2,512	46.28	27.9	
30	2,722	54.47	30.3	
31	7,337	1,792.13	370.1	
32	9,447	75.20	12.1	
33	10,380	75.00	10.9	Upper Marker
34	11,557	0.00	0.0	

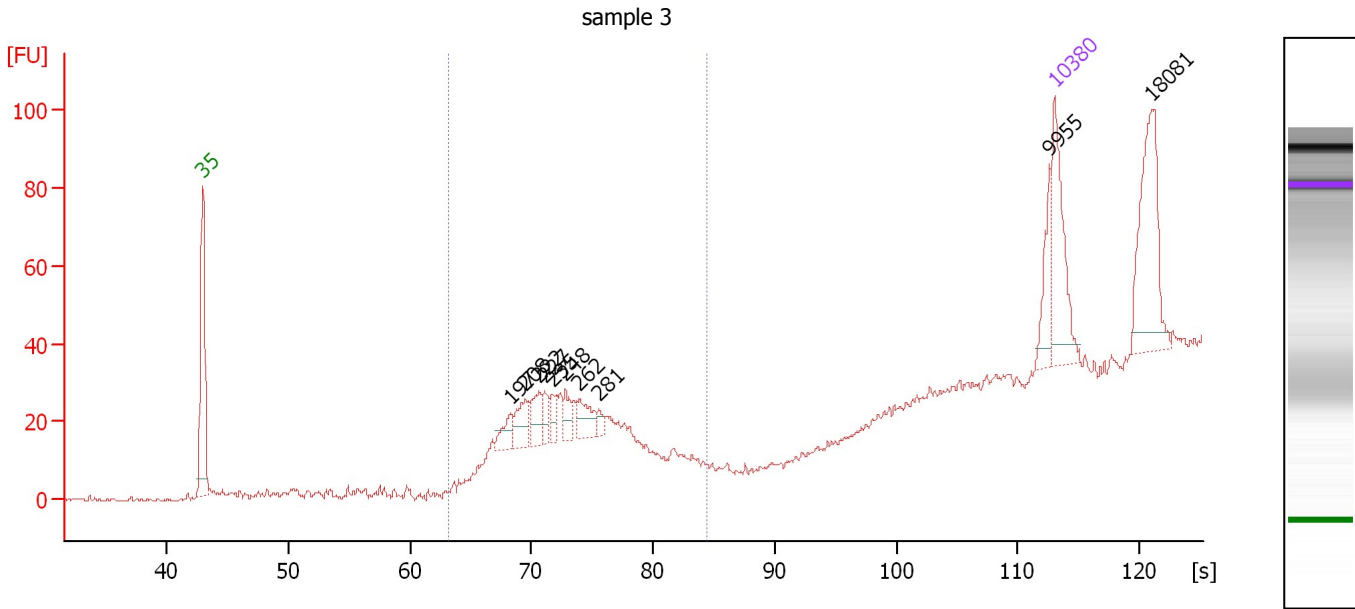
Region table for sample 2 : sample 2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
159	79,783.4	246	12,021.51	407	1,434.0	64	24.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 10 Corr. Area 1: 87.7
 Noise: 0.5

Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	197	26.20	201.4	
3	208	41.60	303.2	
4	222	35.85	245.0	
5	227	21.15	141.2	
6	235	21.47	138.4	
7	248	24.23	148.2	
8	262	33.34	193.1	
9	281	10.83	58.5	
10	9,955	36.35	5.5	
11	10,380	75.00	10.9	Upper Marker
12	18,081	0.00	0.0	

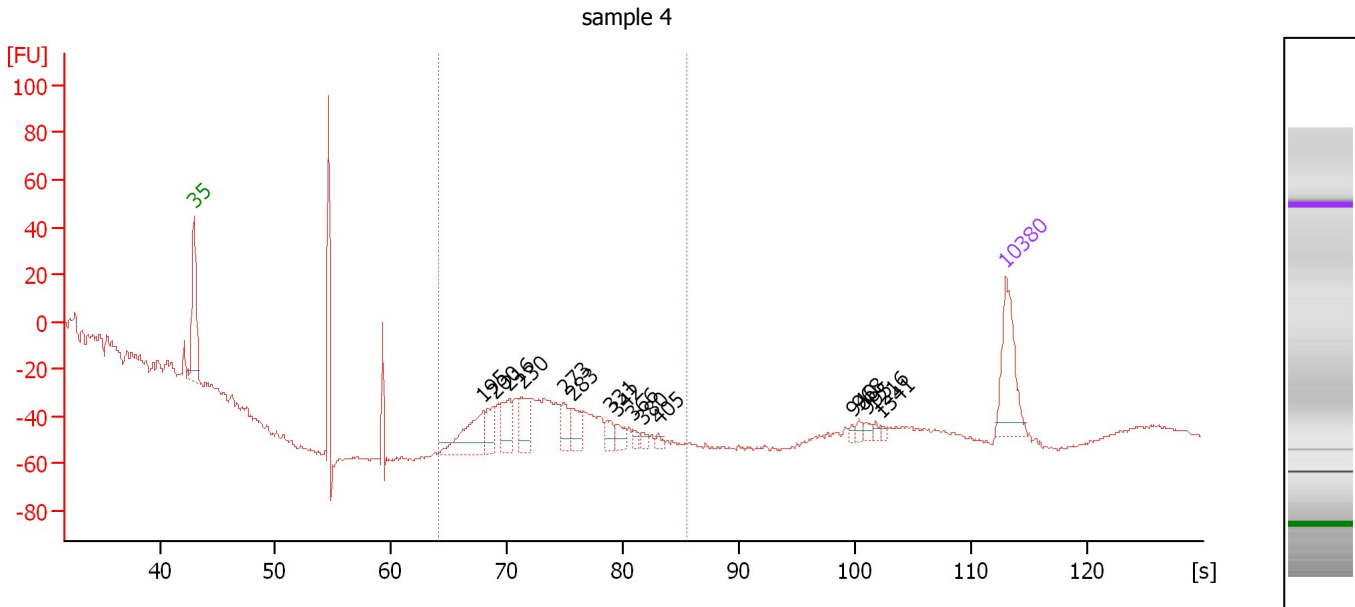
Region table for sample 3 : sample 3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
169	1,120.1	233	171.50	436	87.7	43	10.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 16 Corr. Area 1: 0.0
 Noise: 0.8

Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	195	100.18	777.9	
3	200	41.46	313.7	
4	216	50.82	355.7	
5	230	54.37	358.4	
6	273	35.30	195.6	
7	283	39.36	210.8	
8	331	20.17	92.2	
9	342	19.07	84.5	
10	366	8.07	33.5	
11	380	9.42	37.5	
12	405	5.92	22.1	
13	940	4.76	7.7	
14	968	6.21	9.7	
15	995	7.28	11.1	
16	1,216	4.75	5.9	
17	1,341	3.88	4.4	
18	10,380	75.00	10.9	Upper Marker

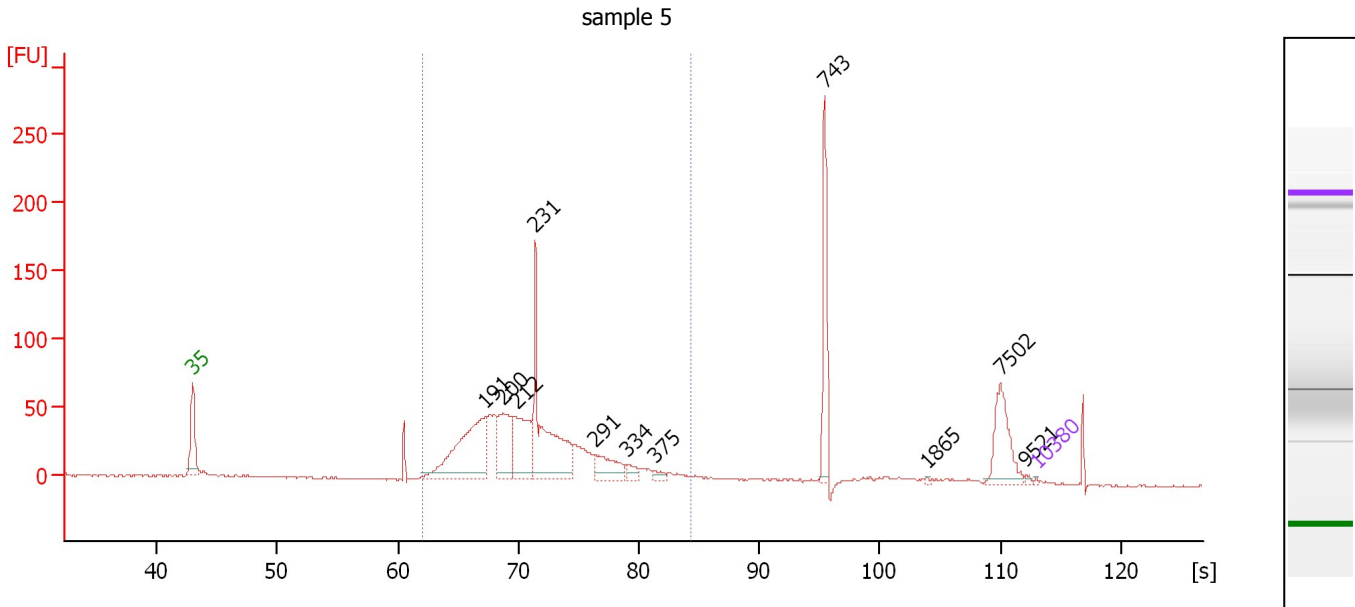
Region table for sample 4 : sample 4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
175	0.0	0	0.00	461	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 11 Corr. Area 1: 830.8
 Noise: 0.6

Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	191	12,083.90	95,637.4	
3	200	5,761.58	43,682.3	
4	212	6,507.43	46,506.9	
5	231	12,289.55	80,489.1	
6	291	2,909.77	15,152.3	
7	334	748.14	3,395.6	
8	375	486.87	1,969.4	
9	743	5,499.54	11,209.3	
10	1,865	82.93	67.4	
11	7,502	3,604.79	728.0	
12	9,521	138.51	22.0	
13	10,380	75.00	10.9	Upper Marker

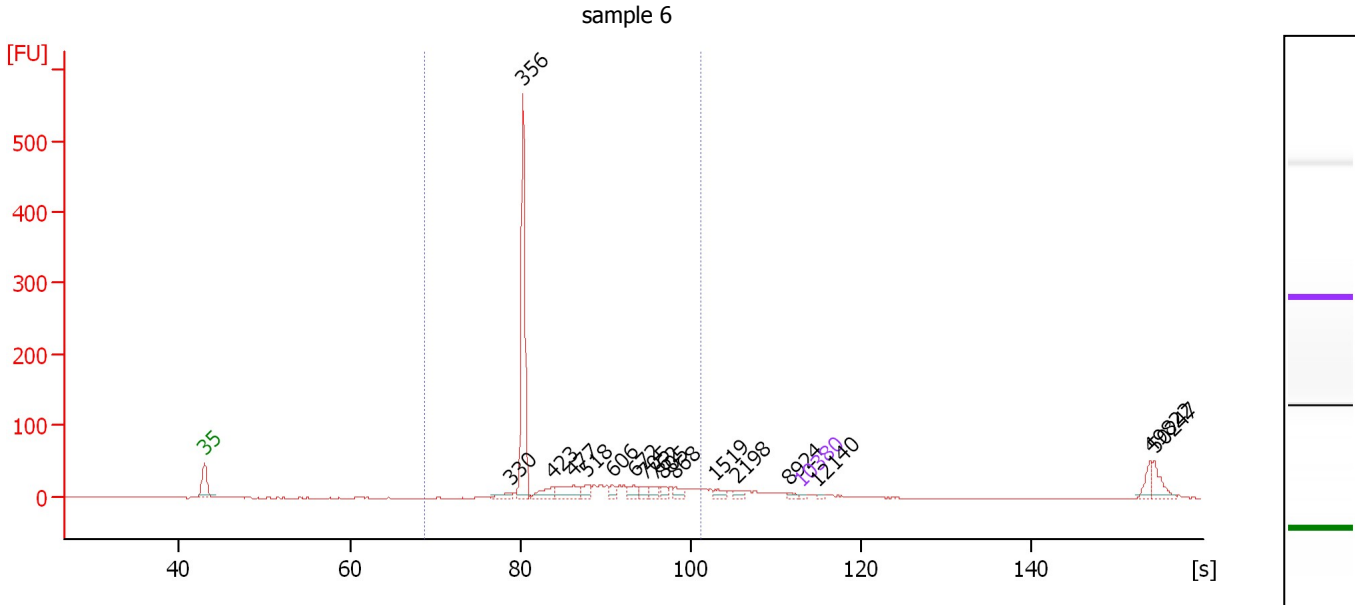
Region table for sample 5 : sample 5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
163	339,679.8	235	49,838.42	433	830.8	71	22.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 17 Corr. Area 1: 608.7
 Noise: 0.4

Peak table for sample 6 : sample 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	330	380.69	1,748.9	
3	356	8,512.48	36,192.1	
4	423	718.01	2,570.4	
5	477	1,235.49	3,928.4	
6	518	485.50	1,420.3	
7	606	311.96	780.1	
8	672	447.60	1,008.9	
9	705	405.62	871.5	
10	762	382.52	760.4	
11	805	301.80	568.1	
12	868	365.31	638.0	
13	1,519	298.30	297.5	
14	2,198	230.35	158.8	
15	8,924	150.51	25.6	
16	10,380	75.00	10.9	Upper Marker
17	12,140	0.00	0.0	
18	49,822	0.00	0.0	
19	50,247	0.00	0.0	

Region table for sample 6 : sample 6

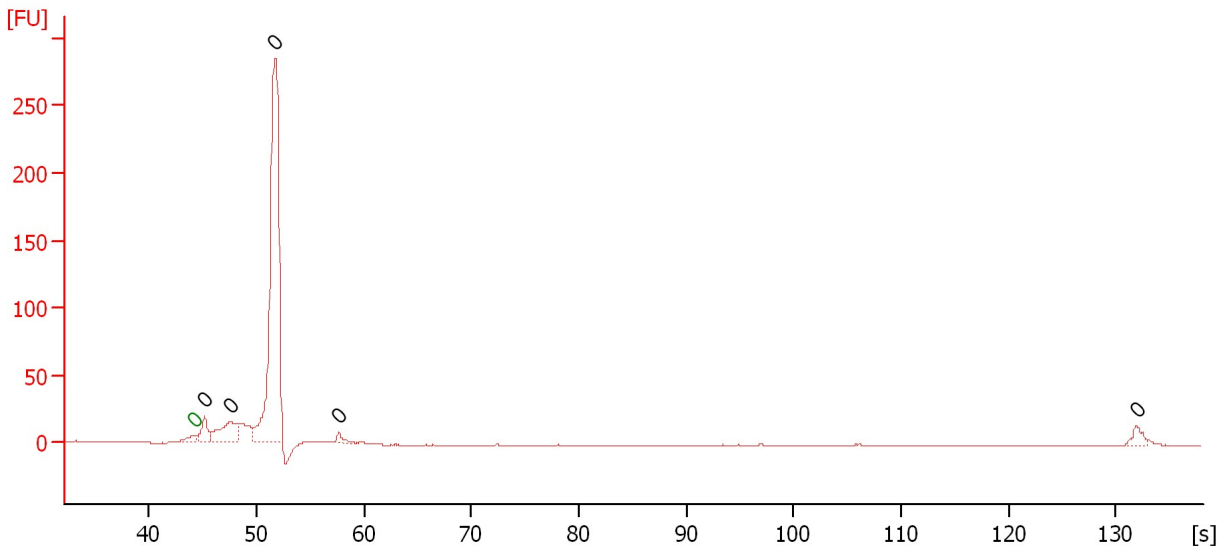
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	53,208.0	485	14,846.96	1,000	608.7	79	37.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary Continued ...

sample 7



Overall Results for sample 7 : sample 7

Number of peaks found: 5 Noise: 0.2

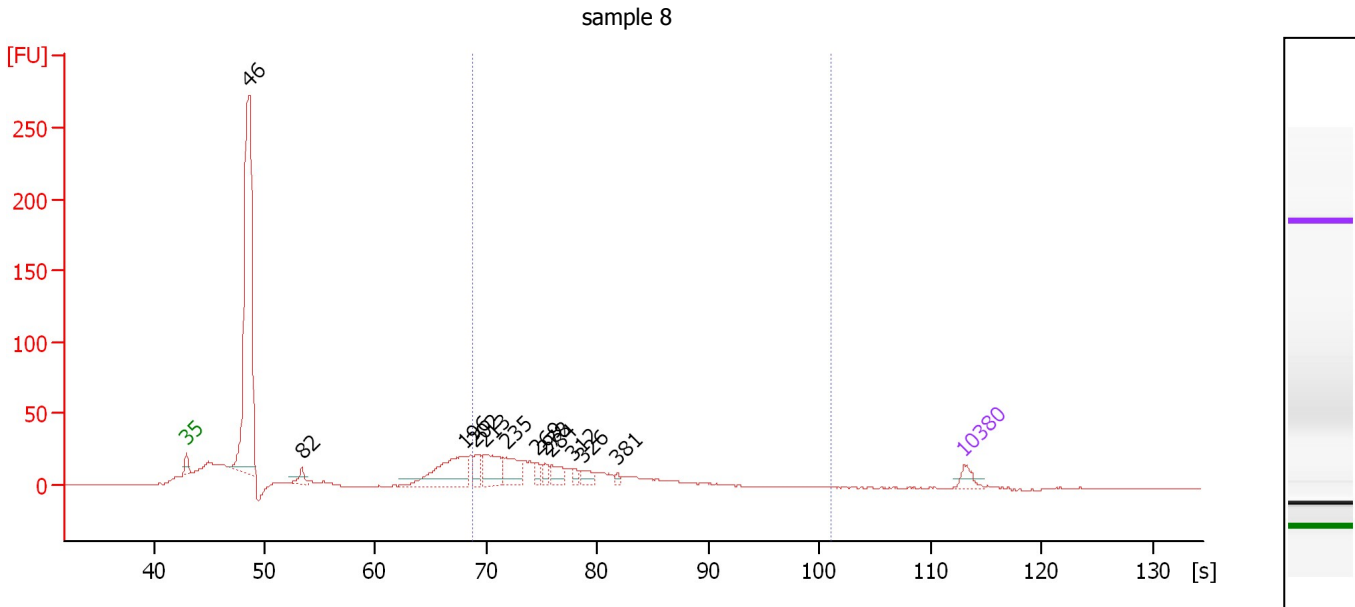
Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	Lower Marker
2	0	0.00	0.0	
3	0	0.00	0.0	
4	0	0.00	0.0	
5	0	0.00	0.0	
6	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 12 Corr. Area 1: 333.1
 Noise: 0.1

Peak table for sample 8 : sample 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	4,195.46	137,256.0	
3	82	117.23	2,162.9	
4	196	778.65	6,031.7	
5	202	176.70	1,326.7	
6	213	425.13	3,025.7	
7	235	324.36	2,090.9	
8	269	95.06	535.7	
9	278	96.07	524.3	
10	284	163.76	873.6	
11	312	62.85	305.6	
12	326	116.71	542.4	
13	381	35.65	141.7	
14	10,380	75.00	10.9	Upper Marker

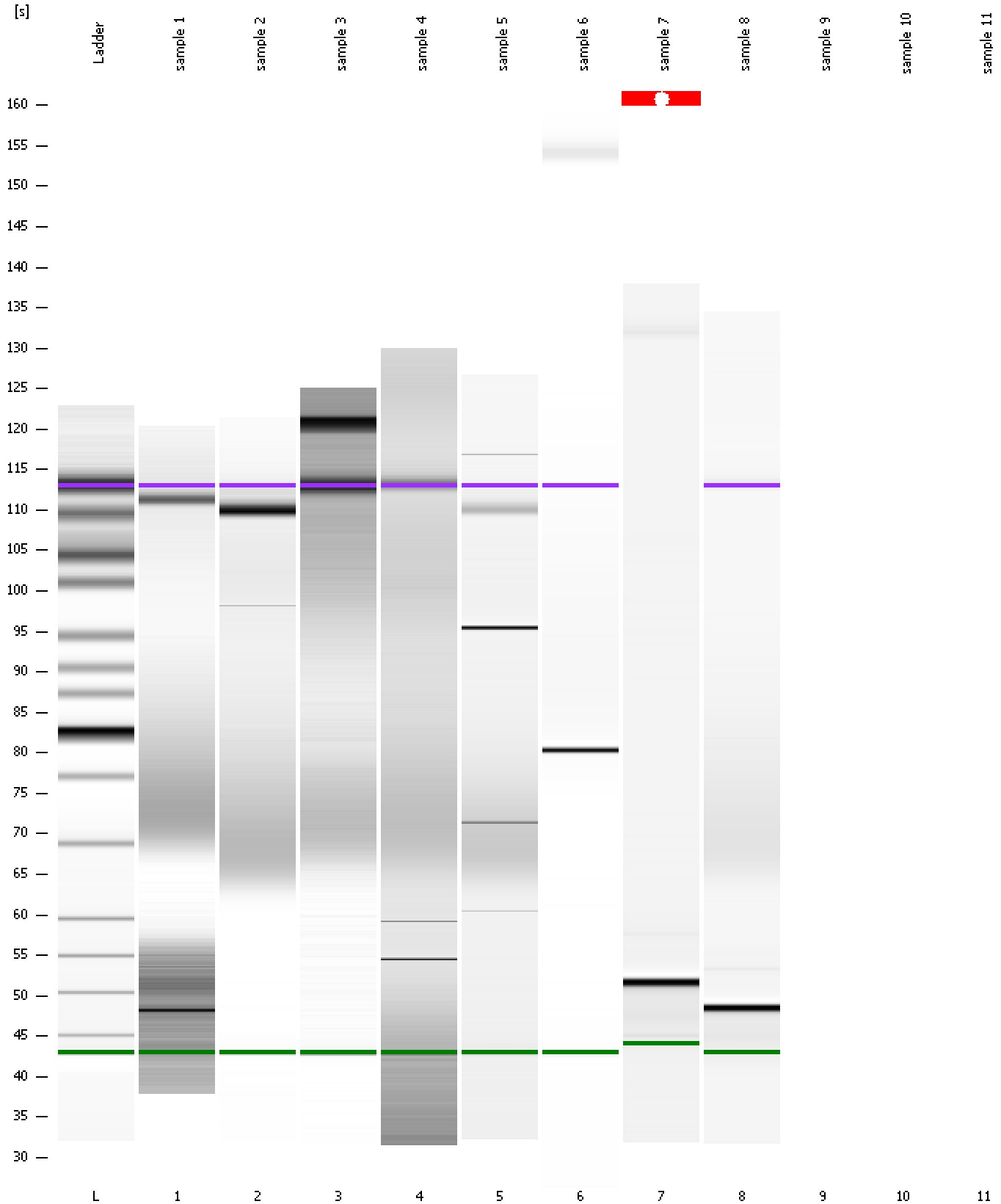
Region table for sample 8 : sample 8

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	12,731.8	310	2,340.48	1,000	333.1	29	34.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
Modified: 4/11/2012 10:54:33 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
Modified: 4/11/2012 10:54:33 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\2012-04-11\2012-04-11_002.xad

Created: 4/11/2012 10:21:47 AM
 Modified: 4/11/2012 10:54:33 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		4/11/2012 10:54:30 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-04-11\2012-04-11_002.xad)		Instrument	Run		4/11/2012 10:21:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/11/2012 10:21:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/11/2012 10:21:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/11/2012 10:21:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/11/2012 10:21:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/11/2012 10:21:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/11/2012 10:21:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1