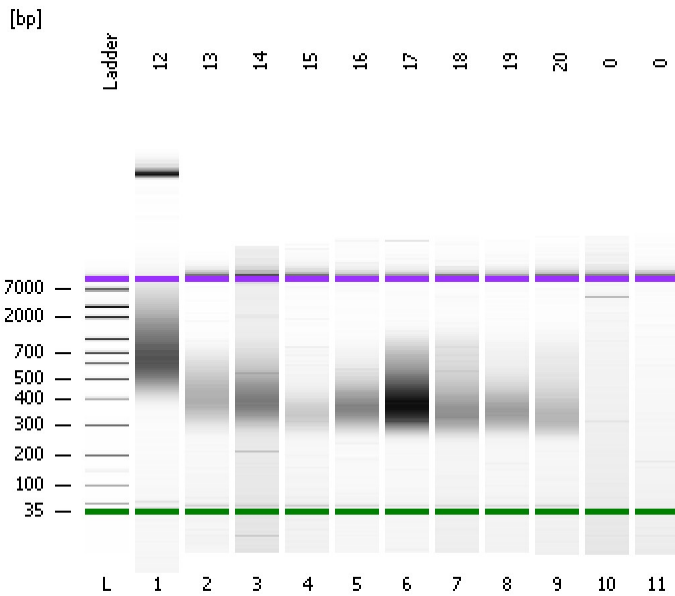


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
Modified: 2/22/2012 12:44:12 PM

Electrophoresis File Run Summary



Instrument Information:

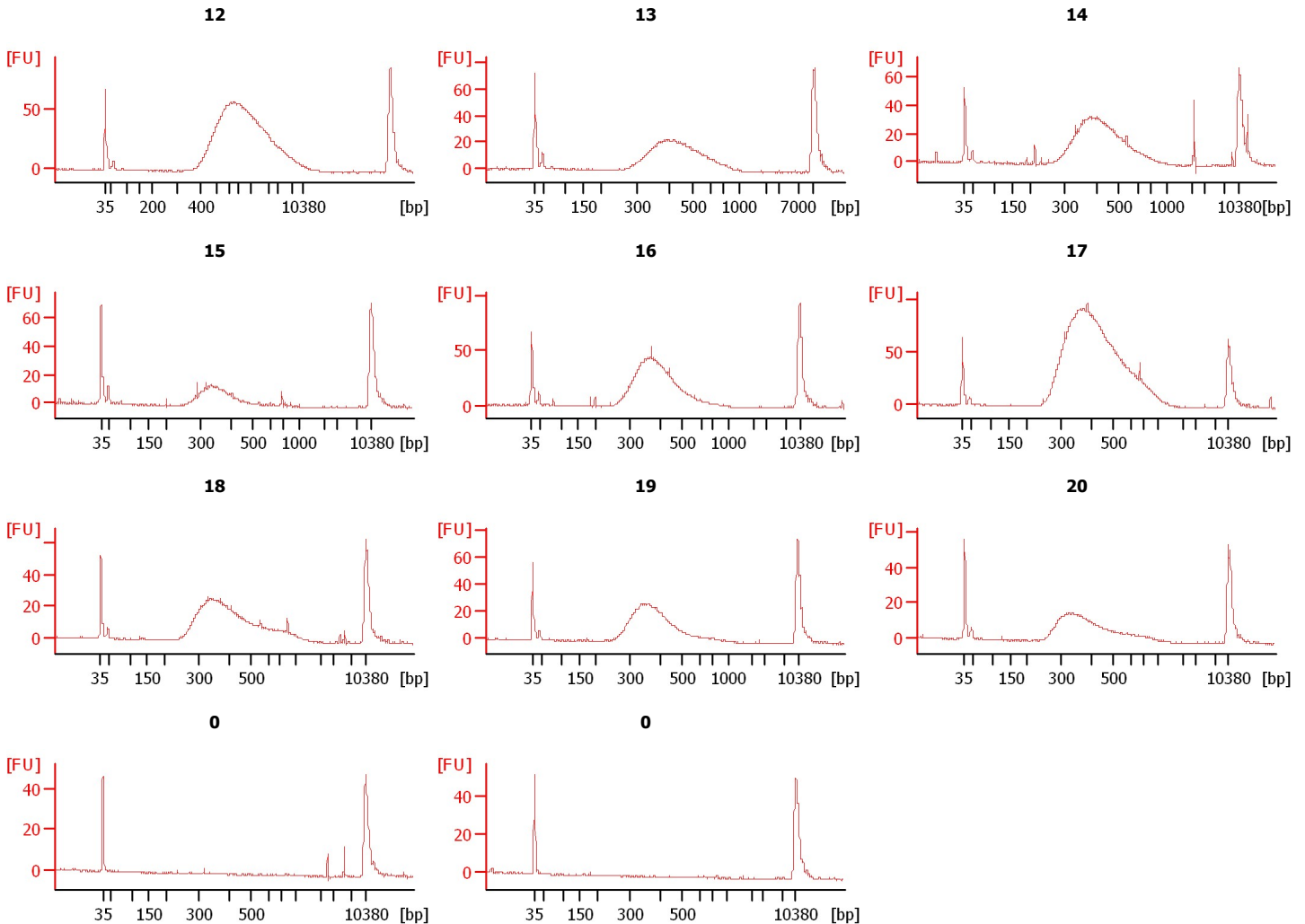
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
12		<input type="checkbox"/>	✓			
13		<input type="checkbox"/>	✓			
14		<input type="checkbox"/>	✓			
15		<input type="checkbox"/>	✓			
16		<input type="checkbox"/>	✓			
17		<input type="checkbox"/>	✓			
18		<input type="checkbox"/>	✓			
19		<input type="checkbox"/>	✓			
20		<input type="checkbox"/>	✓			
0		<input type="checkbox"/>	✓			
0		<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\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
Modified: 2/22/2012 12:44:12 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

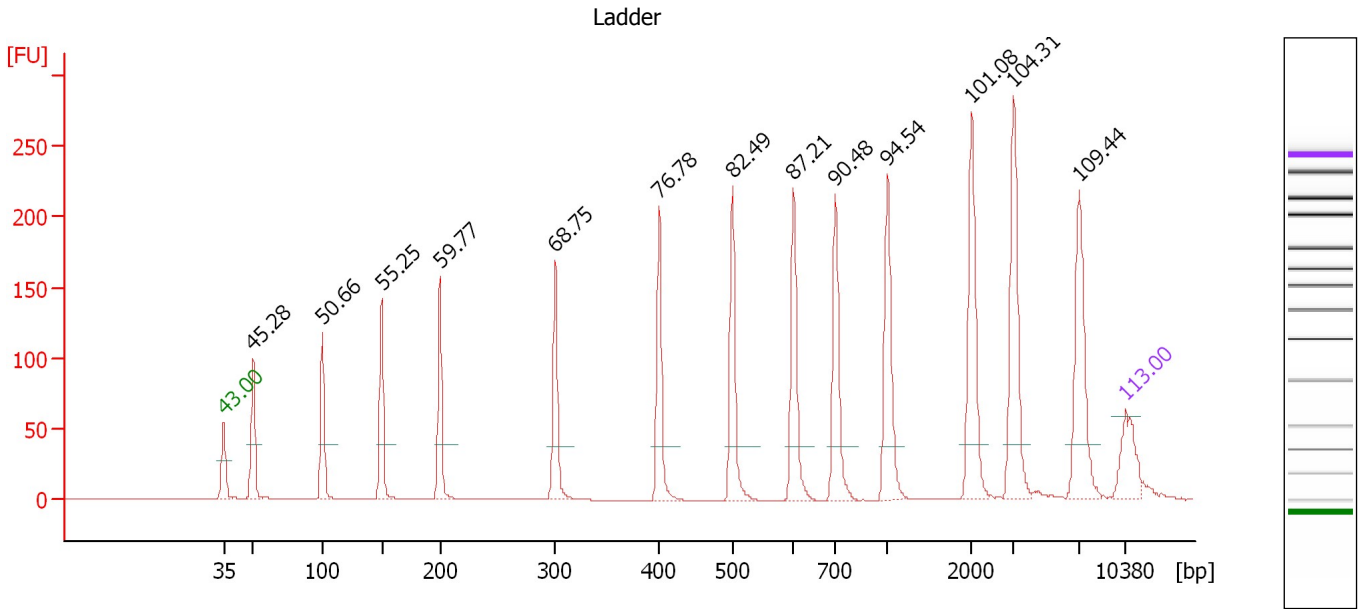
Ladder

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\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

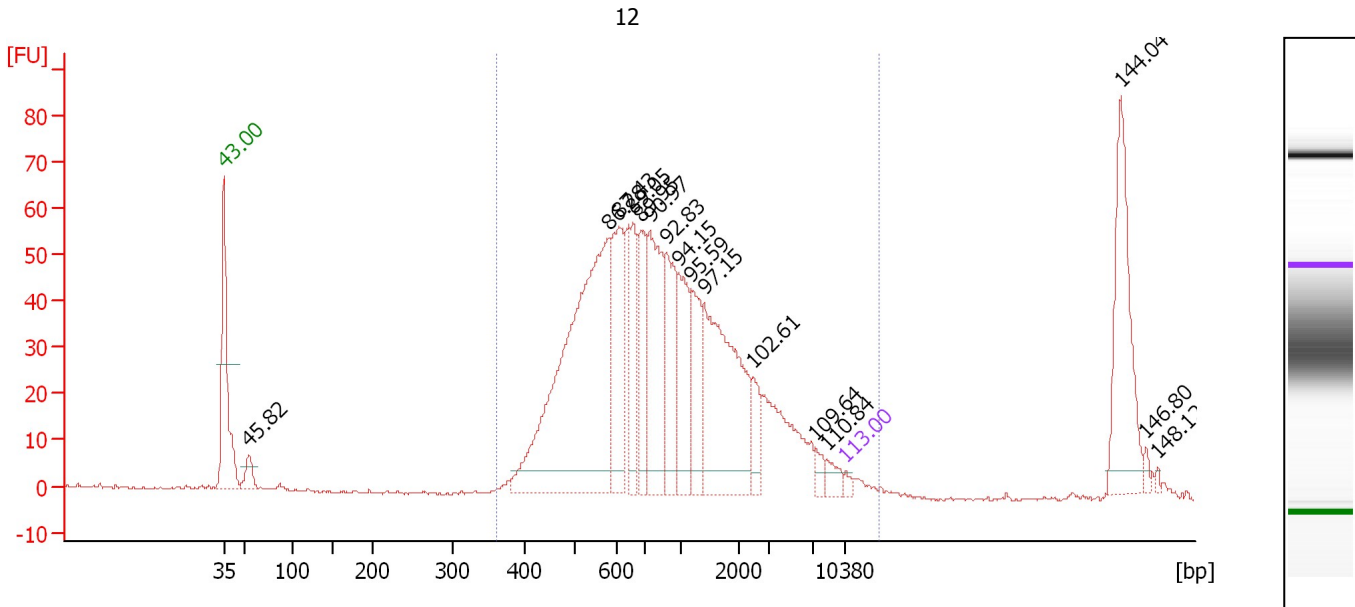
Peak table for Ladder

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

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 12

Number of peaks found: 16 Corr. Area 1: 1,098.6
 Noise: 0.3

Peak table for sample 1 : 12

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	55	470.24	12,939.7	
3	580	8,605.58	22,465.8	
4	607	2,096.85	5,237.7	
5	656	1,334.90	3,082.6	
6	684	1,404.86	3,113.4	
7	736	2,722.27	5,604.2	
8	874	1,629.18	2,825.6	
9	971	1,484.04	2,315.0	
10	1,161	1,210.63	1,580.0	
11	1,400	3,674.23	3,977.7	
12	2,476	496.75	304.0	
13	7,188	181.72	38.3	
14	8,328	216.28	39.3	
15	10,380	75.00	10.9	Upper Marker
16	39,848	0.00	0.0	
17	42,470	0.00	0.0	
18	43,724	0.00	0.0	

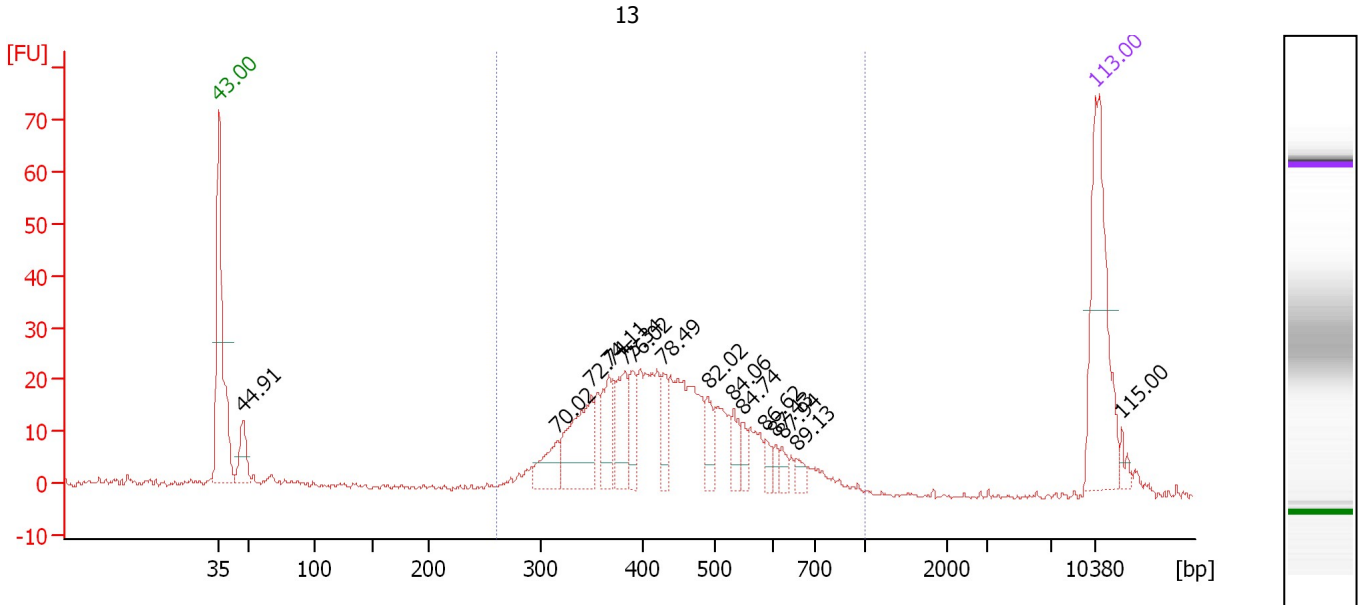
Region table for sample 1 : 12

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
362	55,848.4	1,390	27,638.19	13,874	1,098.6	90	100.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 13

Number of peaks found: 15 Corr. Area 1: 460.5
 Noise: 0.5

Peak table for sample 2 : 13

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	28.54	908.3	
3	316	24.92	119.5	
4	350	60.11	260.4	
5	367	28.74	118.8	
6	382	31.47	124.8	
7	391	22.31	86.5	
8	430	17.04	60.1	
9	492	17.32	53.4	
10	533	14.29	40.6	
11	548	8.55	23.6	
12	587	6.98	18.0	
13	607	5.43	13.6	
14	622	6.29	15.3	
15	659	6.37	14.7	
16	10,380	75.00	10.9	Upper Marker
17	12,279	0.00	0.0	

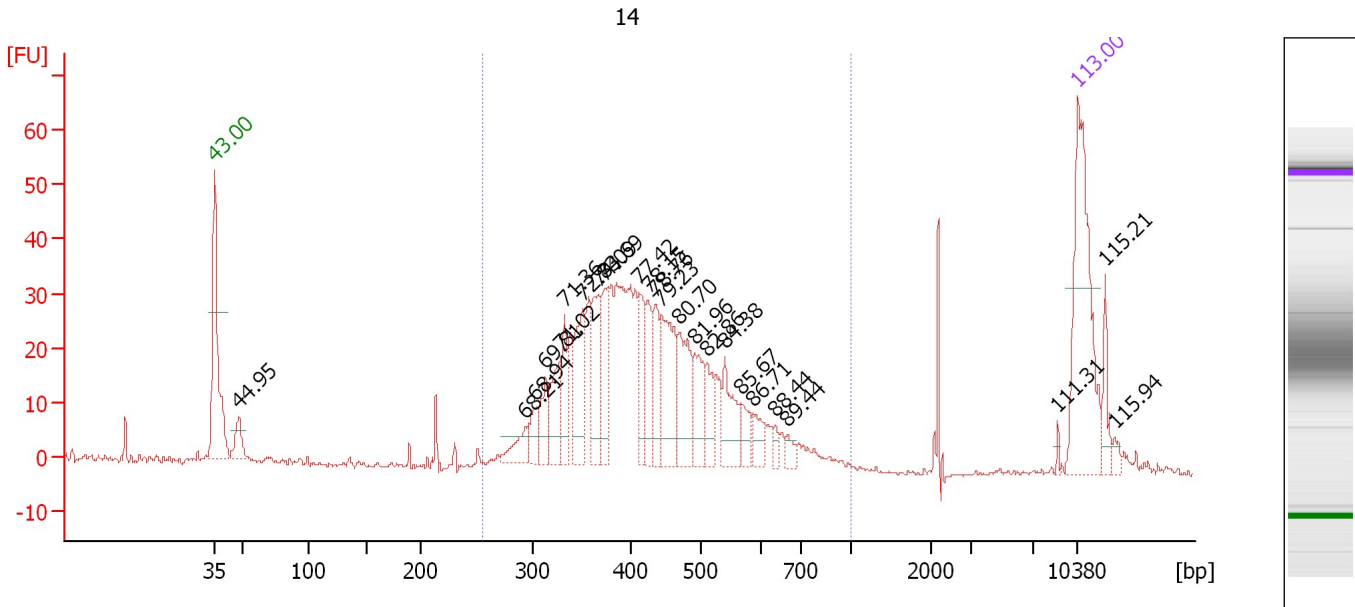
Region table for sample 2 : 13

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
260	1,770.2	447	487.21	1,000	460.5	85	23.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 14

Number of peaks found: 24 Corr. Area 1: 616.4
 Noise: 0.4


Peak table for sample 3 : 14

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	19.45	616.2	
3	294	16.21	83.5	
4	302	13.90	69.6	
5	313	20.78	100.5	
6	328	29.22	134.9	
7	333	24.65	112.3	
8	351	42.84	185.0	
9	366	37.65	155.7	
10	374	29.49	119.5	
11	411	26.57	97.9	
12	424	25.06	89.5	
13	435	24.07	83.9	
14	443	55.14	188.6	
15	469	39.84	128.8	
16	491	28.33	87.5	
17	508	18.24	54.4	
18	540	27.48	77.1	
19	567	13.13	35.1	
20	589	11.08	28.5	
21	638	4.98	11.8	
22	668	5.52	12.5	
23	8,779	1.60	0.3	
24	10,380	75.00	10.9	Upper Marker
25	12,474	0.00	0.0	
26	13,171	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
Modified: 2/22/2012 12:44:12 PM

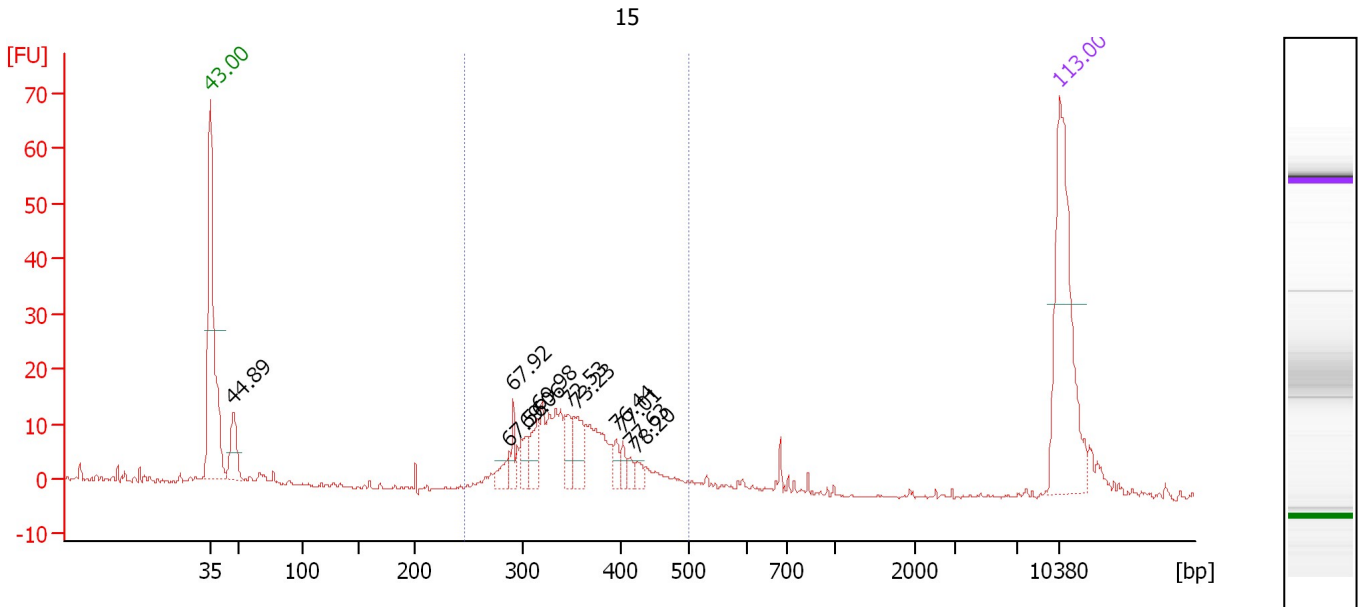
Electropherogram Summary Continued ...**... Region table for sample 3 : 14**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
256	2,645.1	433	709.58	1,000	616.4	90	23.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 15

Number of peaks found: 11 Corr. Area 1: 181.8
 Noise: 0.2

Peak table for sample 4 : 15

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	28.26	902.5	
3	287	10.34	54.6	
4	291	9.99	52.1	
5	304	11.53	57.5	
6	315	15.05	72.3	
7	347	13.11	57.2	
8	356	21.82	92.9	
9	396	6.57	25.2	
10	404	5.98	22.4	
11	415	4.31	15.7	
12	425	4.75	17.0	
13	10,380	75.00	10.9	Upper Marker

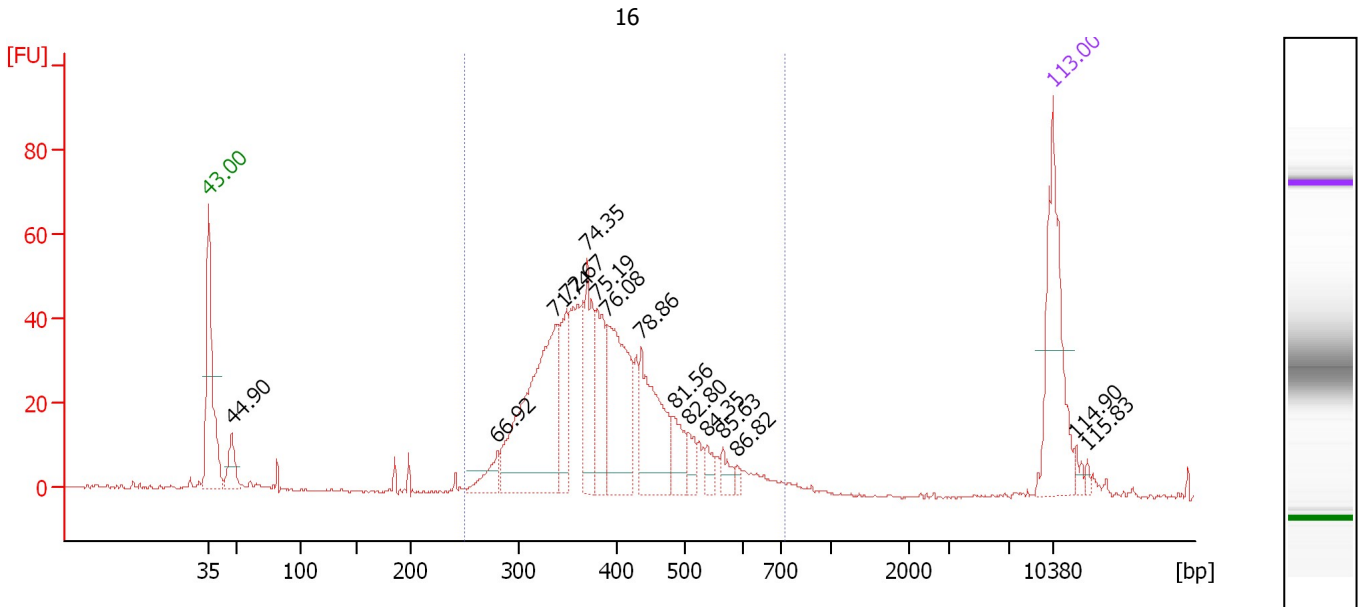
Region table for sample 4 : 15

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	898.1	354	205.09	498	181.8	72	13.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 16

Number of peaks found: 15 Corr. Area 1: 617.6
 Noise: 0.3

Peak table for sample 5 : 16

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	28.52	909.2	
3	280	20.69	112.1	
4	337	187.61	842.8	
5	349	51.43	223.4	
6	370	60.80	249.1	
7	380	50.73	202.1	
8	391	106.66	413.1	
9	436	83.48	289.8	
10	484	25.05	78.5	
11	506	13.04	39.0	
12	539	10.40	29.2	
13	566	10.47	28.0	
14	592	3.99	10.2	
15	10,380	75.00	10.9	Upper Marker
16	12,185	0.00	0.0	
17	13,067	0.00	0.0	

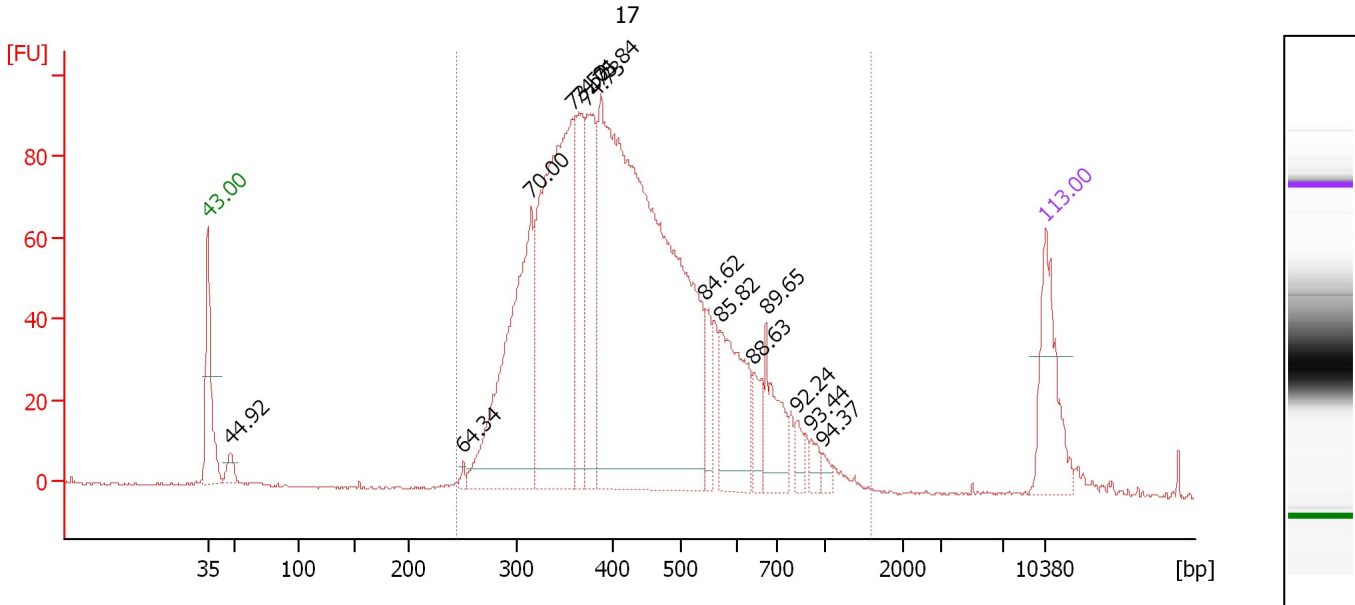
Region table for sample 5 : 16

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
250	2,521.0	386	621.83	726	617.6	96	16.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 17

Number of peaks found: 14 Corr. Area 1: 2,040.2
 Noise: 0.3

Peak table for sample 6 : 17

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	20.97	667.2	
3	251	5.28	31.9	
4	316	338.32	1,624.2	
5	359	466.99	1,968.5	
6	366	109.92	455.6	
7	374	147.24	595.8	
8	388	993.51	3,876.7	
9	545	33.69	93.7	
10	571	122.89	326.4	
11	643	30.99	73.0	
12	675	64.32	144.4	
13	830	14.10	25.7	
14	919	12.39	20.4	
15	988	7.78	11.9	
16	10,380	75.00	10.9	Upper Marker

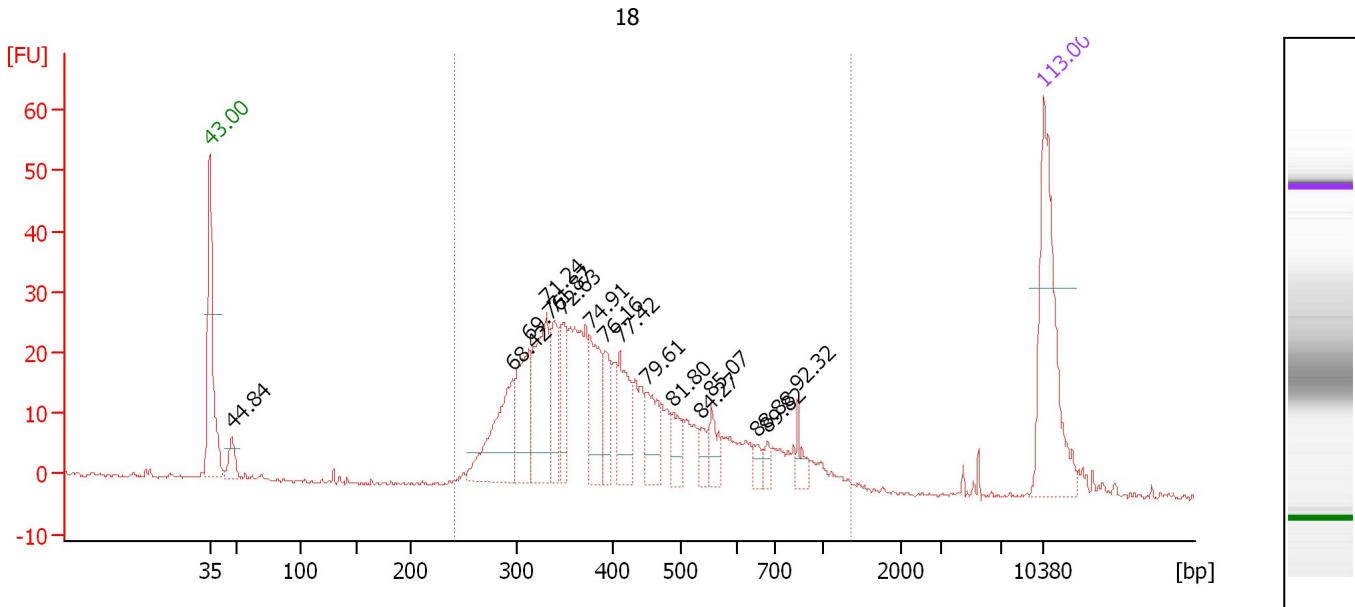
Region table for sample 6 : 17

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
244	9,009.8	447	2,389.93	1,599	2,040.2	98	33.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 18

Number of peaks found: 16 Corr. Area 1: 560.7
 Noise: 0.4

Peak table for sample 7 : 18

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	17.56	564.9	
3	296	71.88	367.5	
4	313	53.44	259.0	
5	331	71.95	329.3	
6	339	34.78	155.5	
7	348	31.91	138.8	
8	377	41.71	167.7	
9	392	25.12	97.0	
10	411	39.26	144.6	
11	450	27.07	91.2	
12	488	17.75	55.1	
13	538	10.18	28.7	
14	555	15.86	43.3	
15	651	6.36	14.8	
16	680	6.10	13.6	
17	836	10.68	19.4	
18	10,380	75.00	10.9	Upper Marker

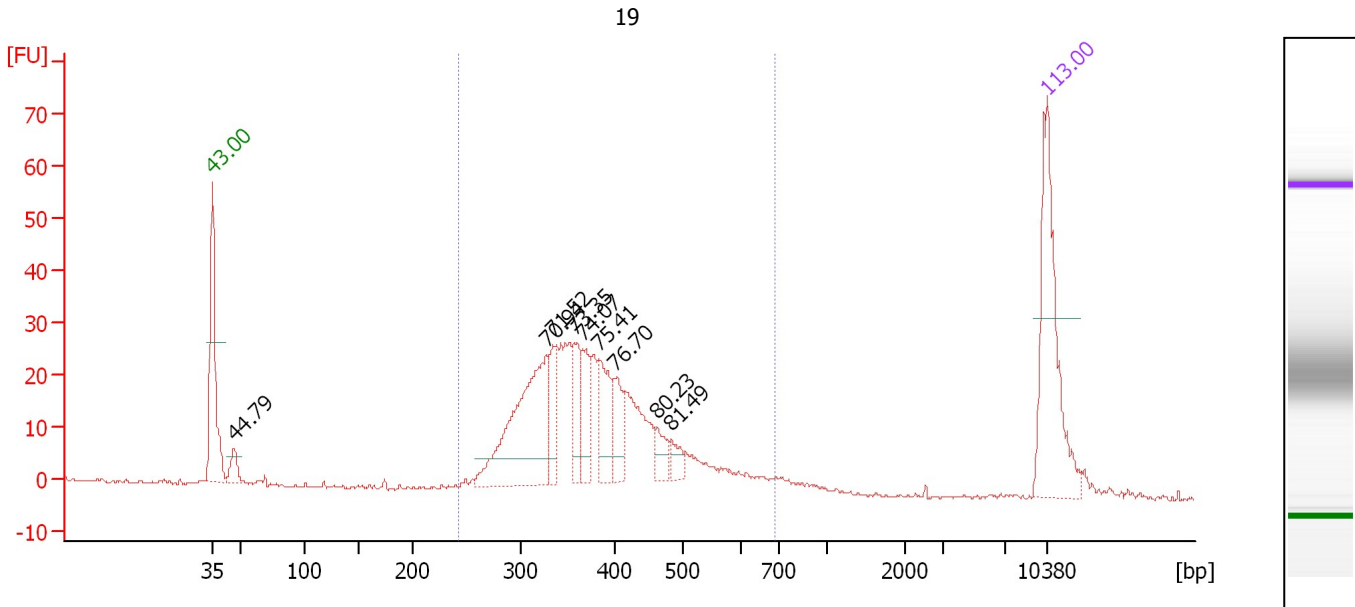
Region table for sample 7 : 18

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
242	2,732.1	440	698.21	1,343	560.7	96	36.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 19

Number of peaks found: 9 Corr. Area 1: 462.9
 Noise: 0.3

Peak table for sample 8 : 19

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	15.18	491.5	
3	327	130.35	603.5	
4	334	30.05	136.1	
5	357	27.05	114.7	
6	366	26.89	111.3	
7	383	36.33	143.8	
8	399	26.93	102.2	
9	461	12.91	42.5	
10	482	9.18	28.8	
11	10,380	75.00	10.9	Upper Marker

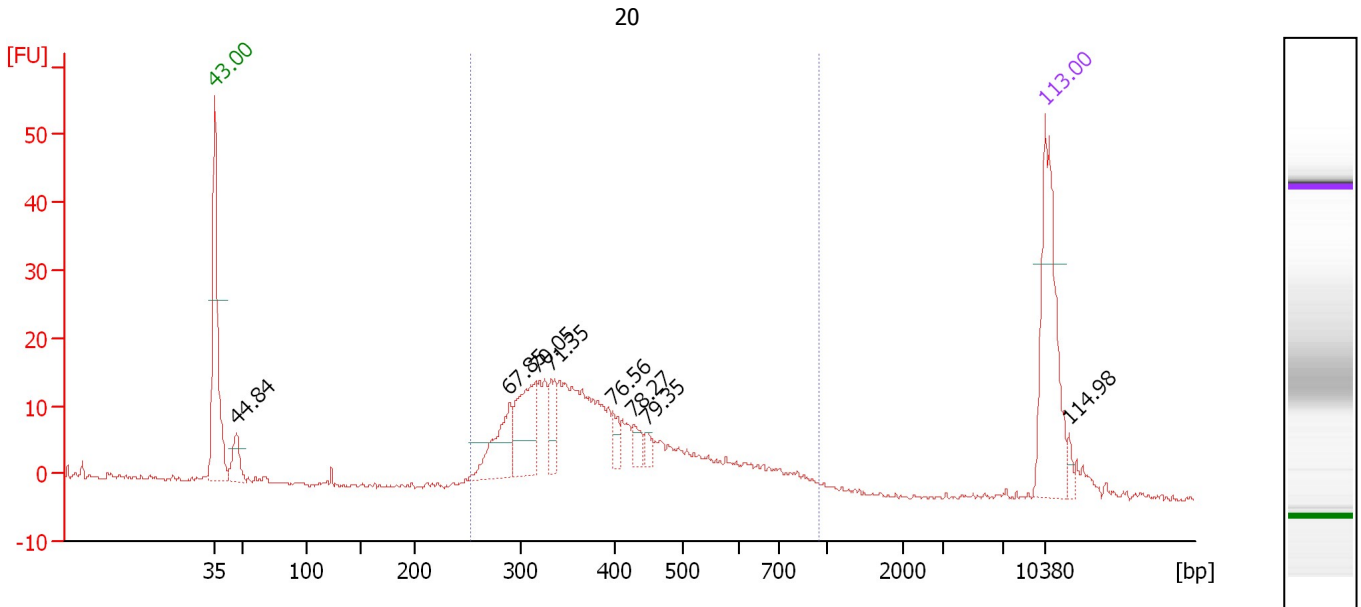
Region table for sample 8 : 19

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
244	2,081.6	386	504.14	691	462.9	94	20.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 20

Number of peaks found: 8 Corr. Area 1: 298.5
 Noise: 0.3

Peak table for sample 9 : 20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	26.49	851.5	
3	290	48.70	254.5	
4	316	59.98	287.4	
5	332	21.13	96.3	
6	397	9.59	36.6	
7	426	9.74	34.6	
8	445	6.68	22.7	
9	10,380	75.00	10.9	Upper Marker
10	12,257	0.00	0.0	

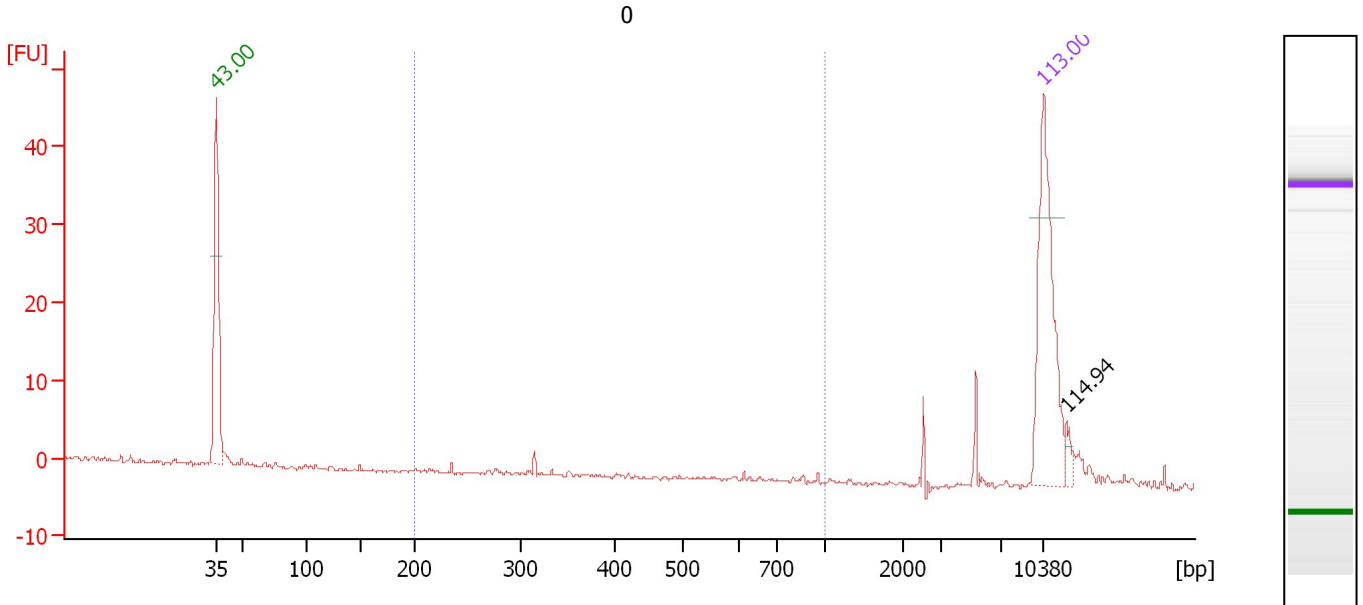
Region table for sample 9 : 20

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
253	1,909.6	407	465.96	957	298.5	92	30.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 0

Number of peaks found: 1 Corr. Area 1: 0.8
 Noise: 0.2

Peak table for sample 10 : 0

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,223	0.00	0.0	

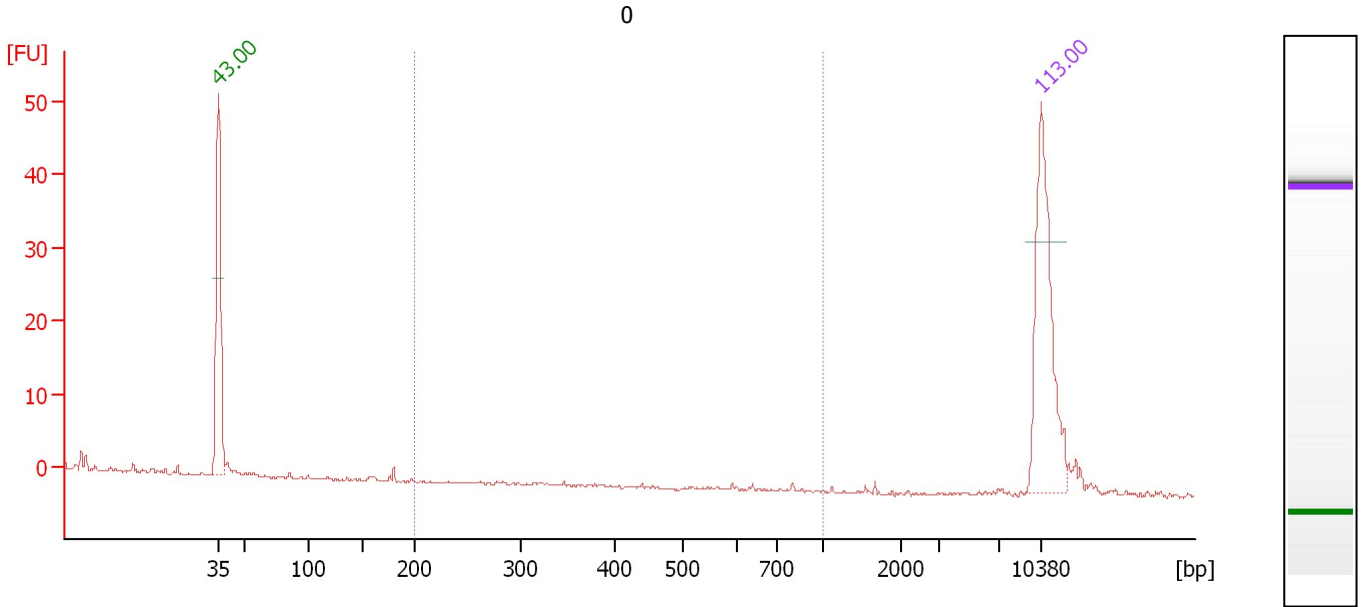
Region table for sample 10 : 0

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	6.6	432	1.43	1,000	0.8	4	55.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 0

Number of peaks found: 0 Corr. Area 1: 0.0
 Noise: 0.2

Peak table for sample 11 : 0

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

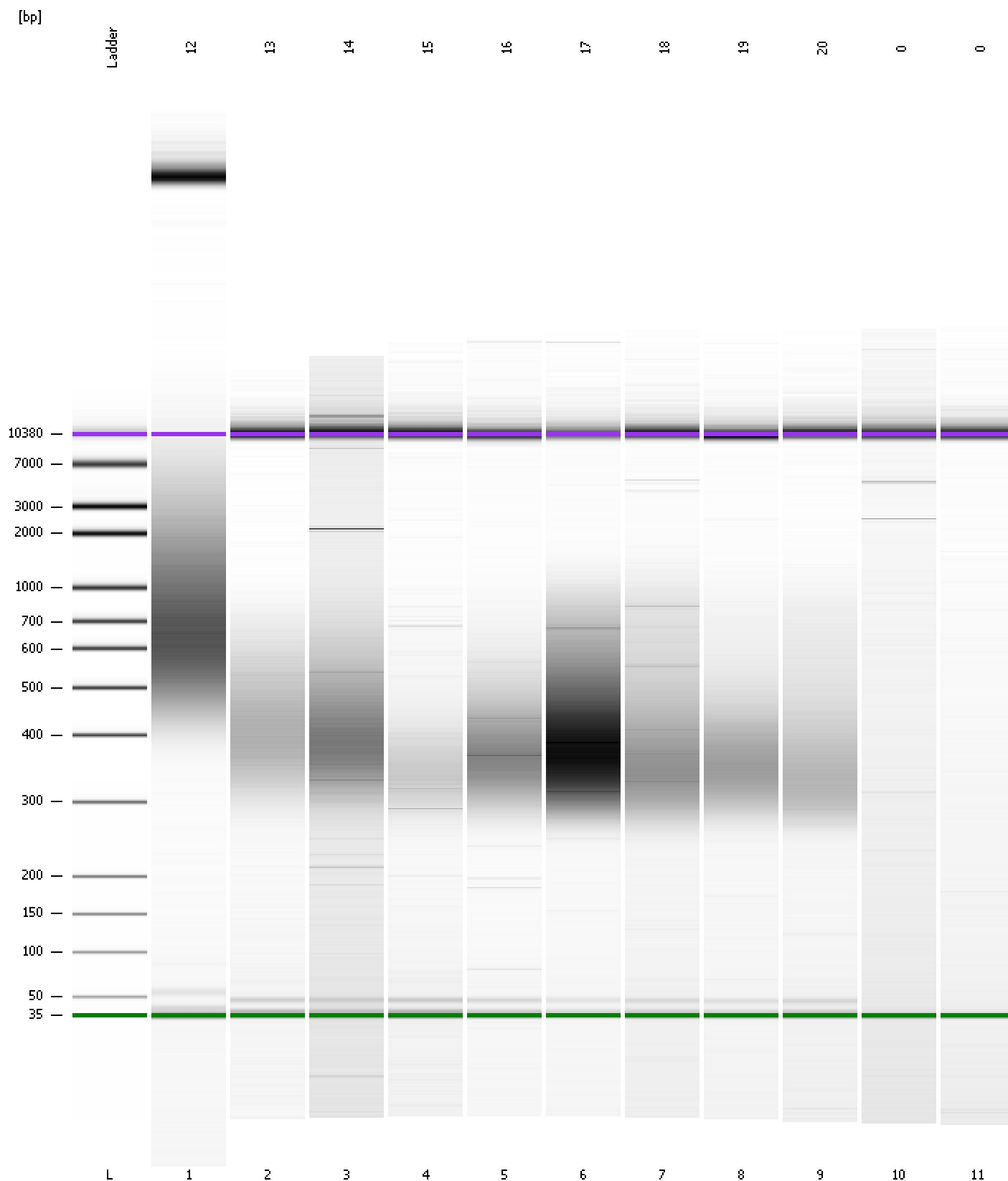
Region table for sample 11 : 0

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	0.1	791	0.04	1,000	0.0	0	5.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
Modified: 2/22/2012 12:44:12 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad

Created: 2/22/2012 12:02:47 PM
 Modified: 2/22/2012 12:44:12 PM

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		2/22/2012 12:44:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-02-22\2012-02-22_004.xad)		Instrument	Run		2/22/2012 12:02:54 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/22/2012 12:02:54 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/22/2012 12:02:54 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/22/2012 12:02:54 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/22/2012 12:02:54 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/22/2012 12:02:54 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/22/2012 12:02:54 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1