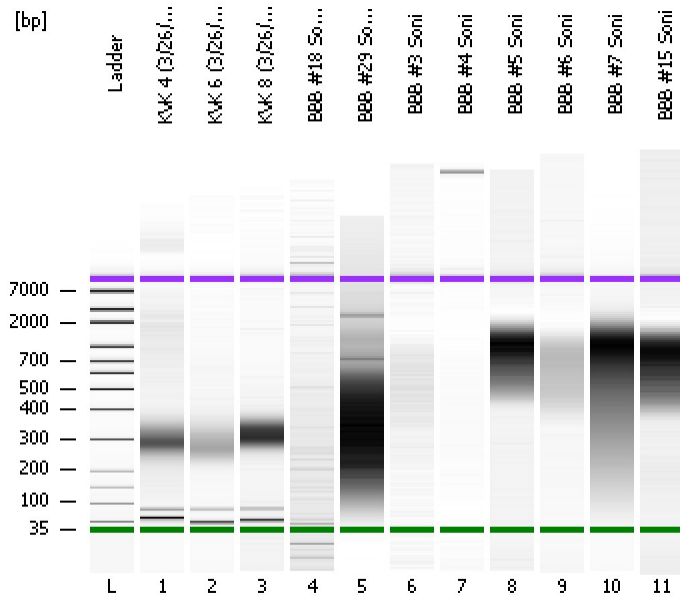


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
Modified: 3/29/2012 11:32:03 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

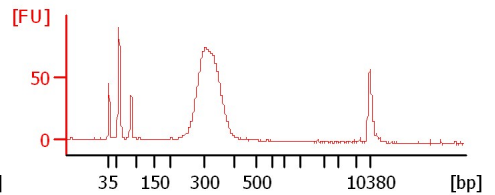
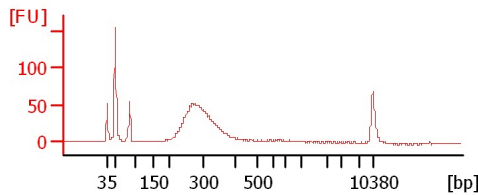
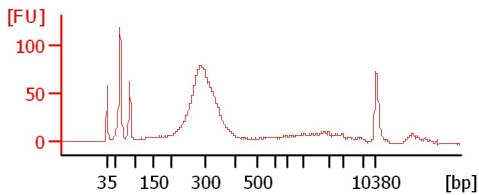
Chip Information:

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

KVK 4 (3/26/12)

KVK 6 (3/26/12)

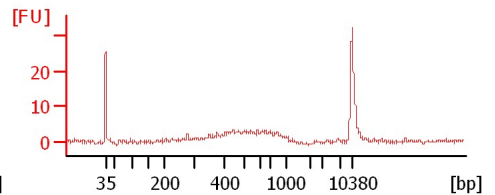
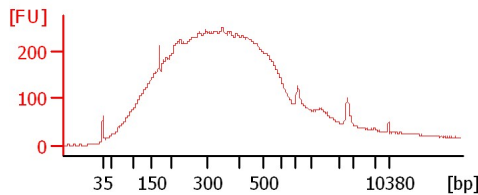
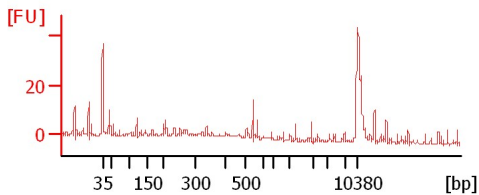
KVK 8 (3/26/12)



BBB #18 Soni (3/28/12)

BBB #29 Soni (3/28/12)

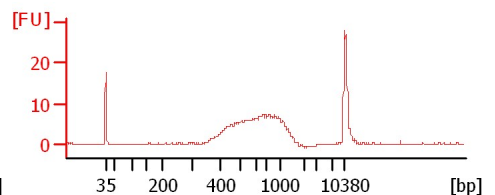
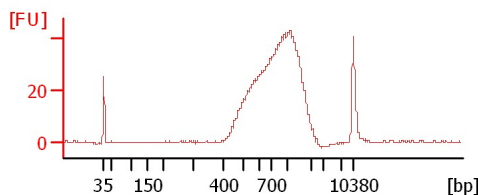
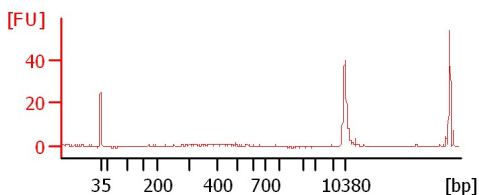
BBB #3 Soni



BBB #4 Soni

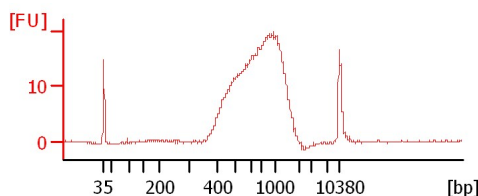
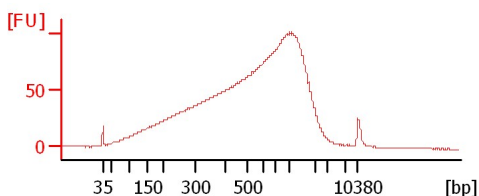
BBB #5 Soni

BBB #6 Soni



BBB #7 Soni

BBB #15 Soni



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
Modified: 3/29/2012 11:32:03 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
KVK 4 (3/26/12)		<input type="checkbox"/>	✓			
KVK 6 (3/26/12)		<input type="checkbox"/>	✓			
KVK 8 (3/26/12)		<input type="checkbox"/>	✓			
BBB #18 Soni (3/28/12)		<input type="checkbox"/>	✓			
BBB #29 Soni (3/28/12)		<input type="checkbox"/>	✓			
BBB #3 Soni		<input type="checkbox"/>	✓			
BBB #4 Soni		<input type="checkbox"/>	✓			
BBB #5 Soni		<input type="checkbox"/>	✓			
BBB #6 Soni		<input type="checkbox"/>	✓			
BBB #7 Soni		<input type="checkbox"/>	✓			
BBB #15 Soni		<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\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
Modified: 3/29/2012 11:32:03 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

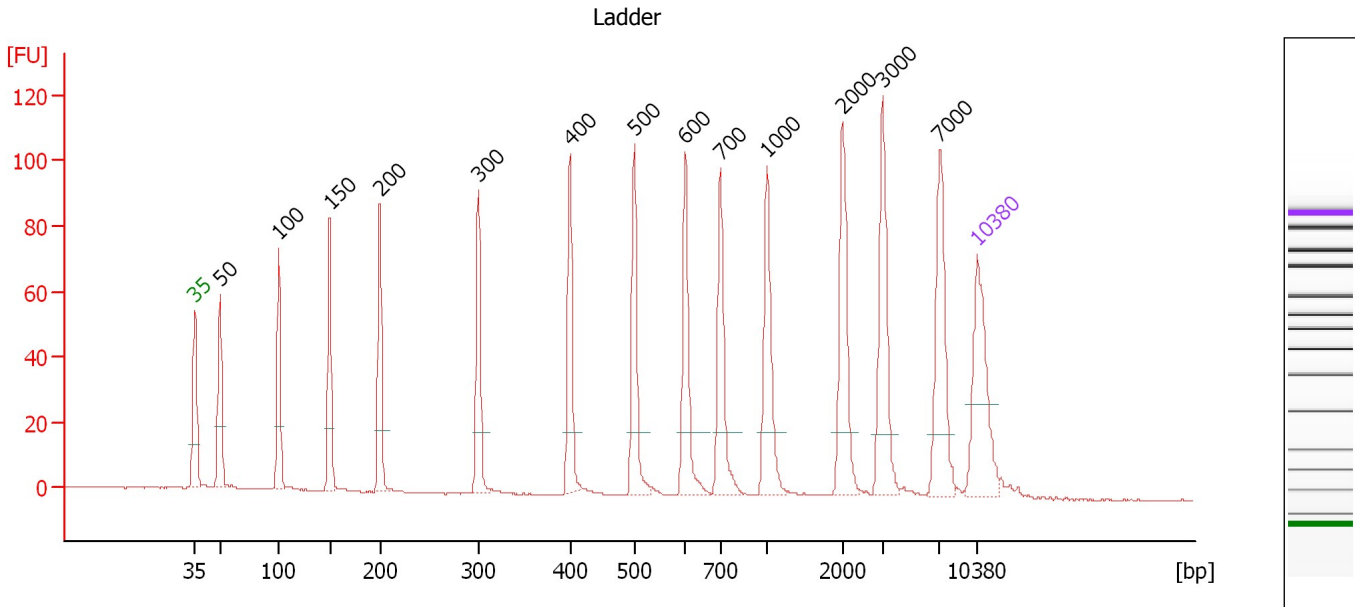
Ladder

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\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

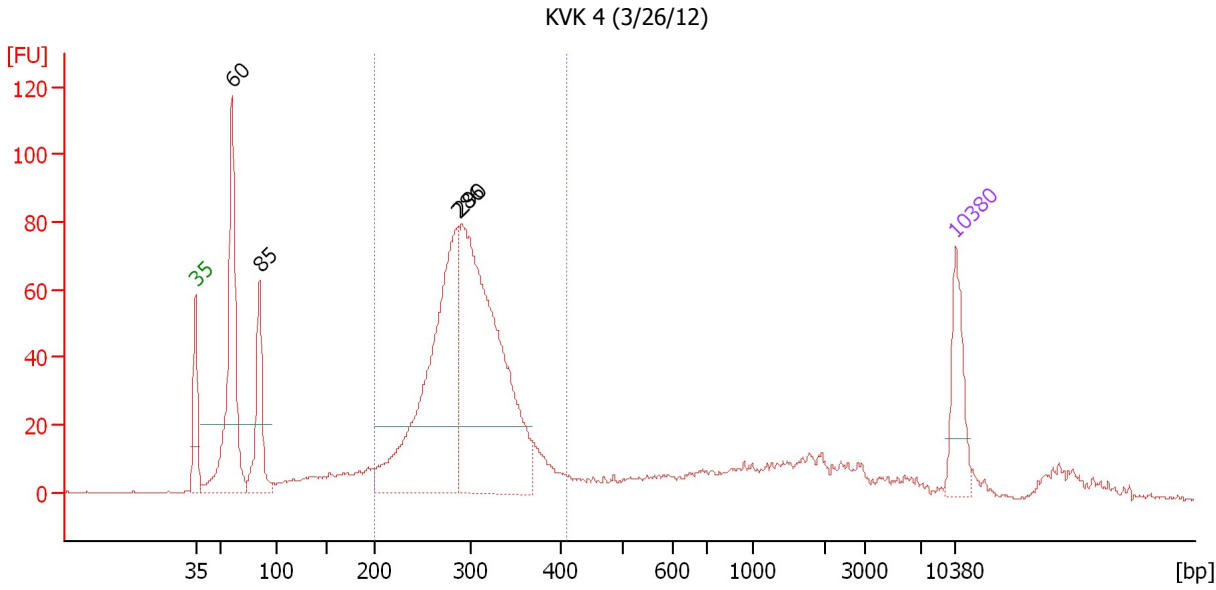
Peak table for Ladder

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\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : KVK 4 (3/26/12)

Height Threshold [FU] : 20

Overall Results for sample 1 : KVK 4 (3/26/12)

Number of peaks found: 4 Corr. Area 1: 904.7
 Noise: 0.2

Peak table for sample 1 : KVK 4 (3/26/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	60	406.04	10,183.4	
3	85	166.07	2,970.4	
4	286	564.54	2,992.5	
5	290	734.63	3,841.8	
6	10,380	75.00	10.9	Upper Marker

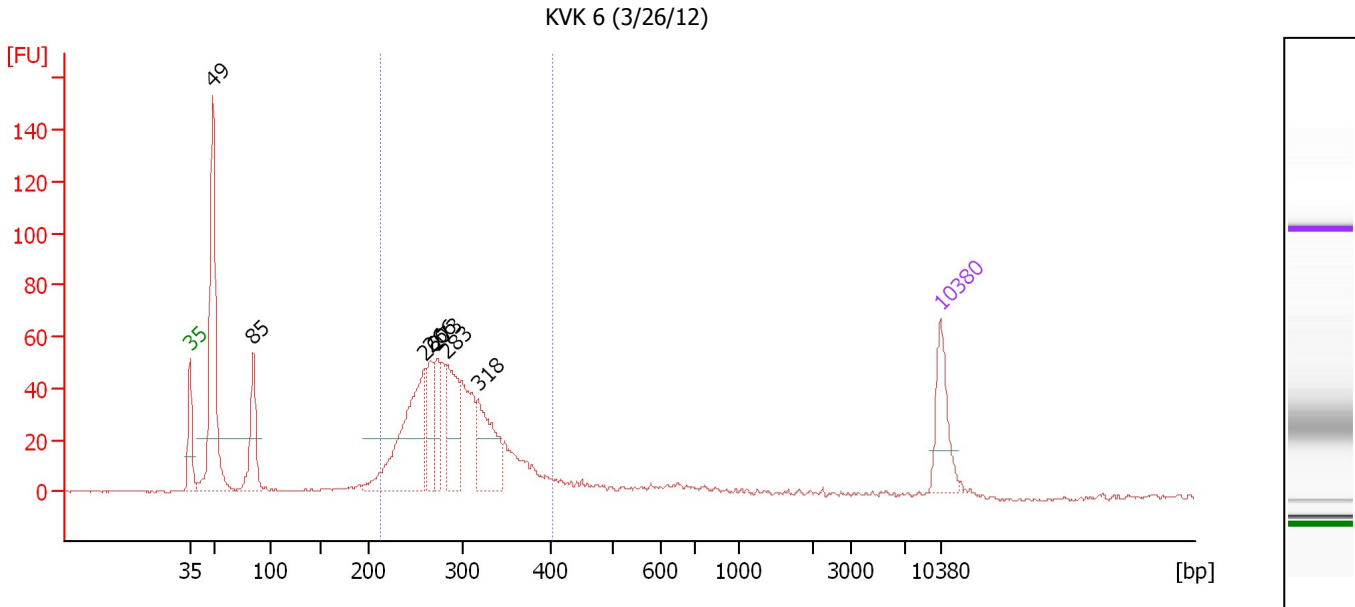
Region table for sample 1 : KVK 4 (3/26/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	7,086.0	297	1,362.99	411	904.7	57	13.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : KVK 6 (3/26/12)

Height Threshold [FU] : 20

Overall Results for sample 2 : KVK 6 (3/26/12)

Number of peaks found: 7 Corr. Area 1: 658.9
 Noise: 0.2

Peak table for sample 2 : KVK 6 (3/26/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	468.06	14,483.0	
3	85	142.50	2,554.5	
4	260	298.63	1,742.4	
5	266	88.08	500.9	
6	273	81.61	452.6	
7	283	144.94	775.1	
8	318	152.85	728.5	
9	10,380	75.00	10.9	Upper Marker

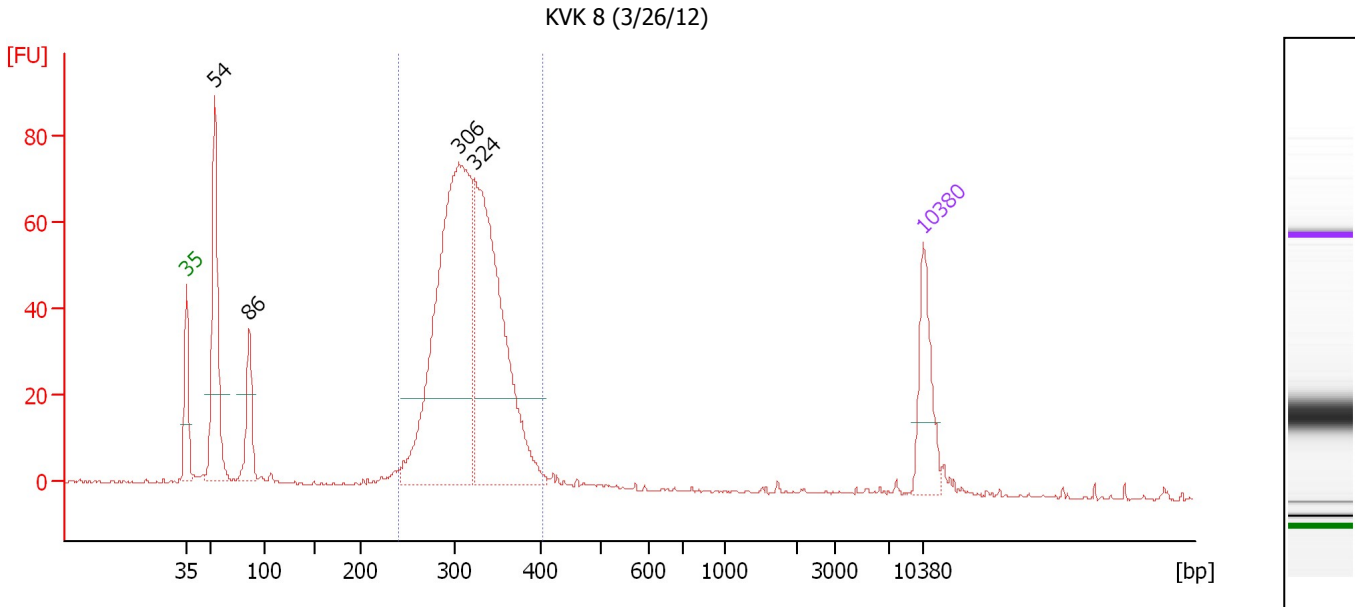
Region table for sample 2 : KVK 6 (3/26/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
213	5,761.6	292	1,085.11	404	658.9	63	14.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : KVK 8 (3/26/12)

Height Threshold [FU] : 20

Overall Results for sample 3 : KVK 8 (3/26/12)

Number of peaks found: 4 Corr. Area 1: 747.6
 Noise: 0.3

Peak table for sample 3 : KVK 8 (3/26/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	54	283.31	7,921.0	
3	86	97.29	1,723.5	
4	306	725.74	3,594.9	
5	324	536.08	2,507.9	
6	10,380	75.00	10.9	Upper Marker

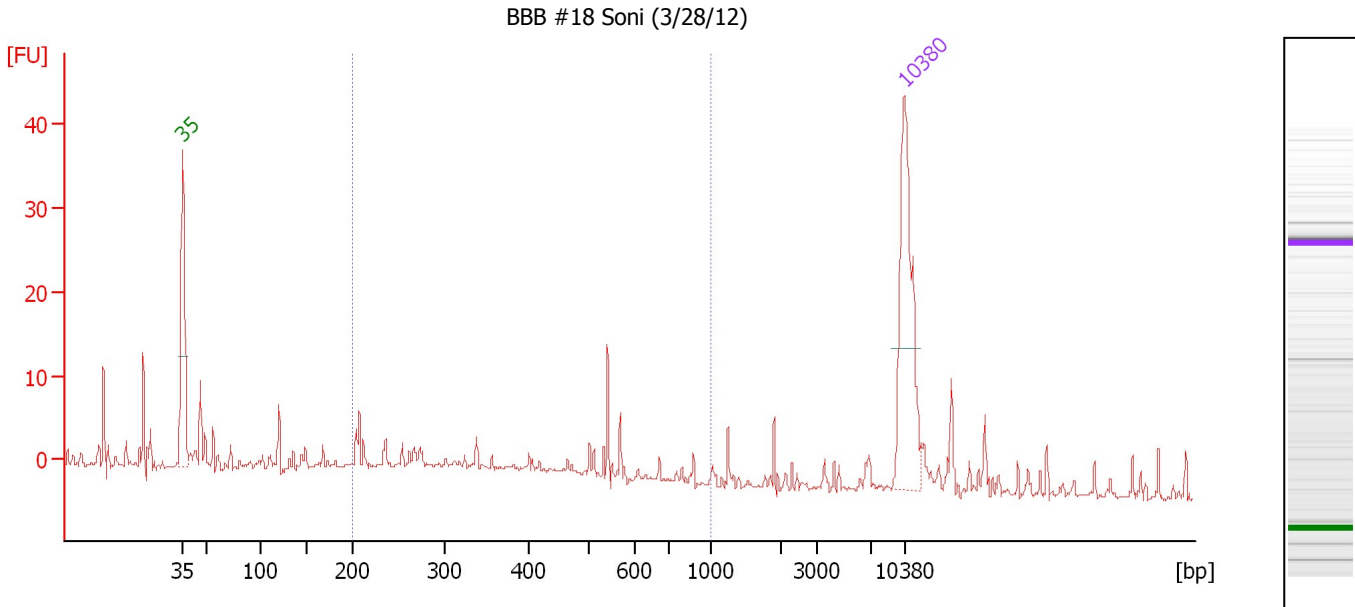
Region table for sample 3 : KVK 8 (3/26/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
241	6,209.0	318	1,290.77	406	747.6	75	9.8	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : BBB #18 Soni (3/28/12)

Height Threshold [FU] : 20

Overall Results for sample 4 : BBB #18 Soni (3/28/12)

Number of peaks found: 0 Corr. Area 1: 45.8
Noise: 0.4

Peak table for sample 4 : BBB #18 Soni (3/28/12)

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

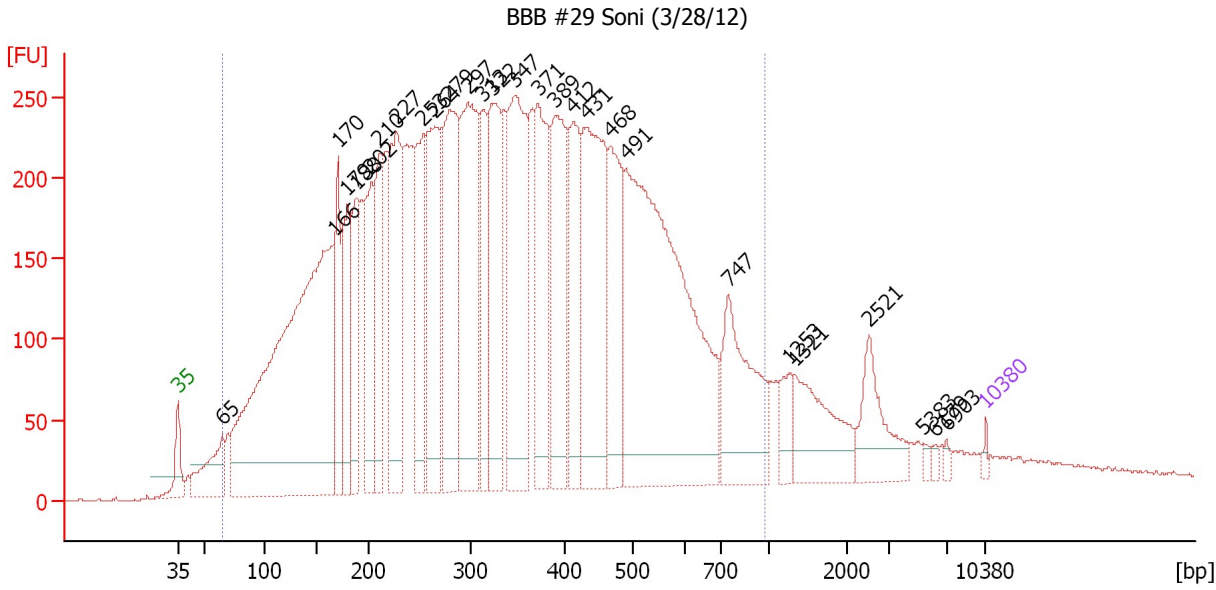
Region table for sample 4 : BBB #18 Soni (3/28/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	441.1	396	93.96	1,000	45.8	40	38.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : BBB #29 Soni (3/28/12)

Height Threshold [FU] : 20

Overall Results for sample 5 : BBB #29 Soni (3/28/12)

Number of peaks found: 28 Corr. Area 1: 12,131.1
 Noise: 0.4

Peak table for sample 5 : BBB #29 Soni (3/28/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	65	1,906.59	44,344.7	
3	166	18,458.03	168,757.4	
4	170	2,298.73	20,445.2	
5	179	2,653.33	22,446.2	
6	188	2,365.92	19,082.5	
7	202	2,990.96	22,400.9	
8	210	2,507.70	18,080.3	
9	227	4,773.92	31,880.4	
10	253	3,203.04	19,179.2	
11	264	4,658.60	26,734.3	
12	279	5,286.61	28,743.8	
13	297	5,761.99	29,397.3	
14	313	2,229.35	10,786.9	
15	322	3,970.34	18,671.0	
16	347	5,414.08	23,672.6	
17	371	3,698.41	15,109.9	
18	389	3,617.39	14,090.9	
19	412	2,515.13	9,258.5	
20	431	5,478.15	19,267.4	
21	468	3,001.56	9,726.3	
22	491	12,306.87	37,994.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...

... Peak table for sample 5 : BBB #29 Soni (3/28/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
23	747	2,957.62	6,000.1	
24	1,253	565.13	683.3	
25	1,321	1,841.10	2,111.4	
26	2,521	1,233.79	741.5	
27	5,383	95.31	26.8	
28	6,179	87.18	21.4	
29	6,903	75.79	16.6	
30	▶ 10,380	75.00	10.9	Upper Marker

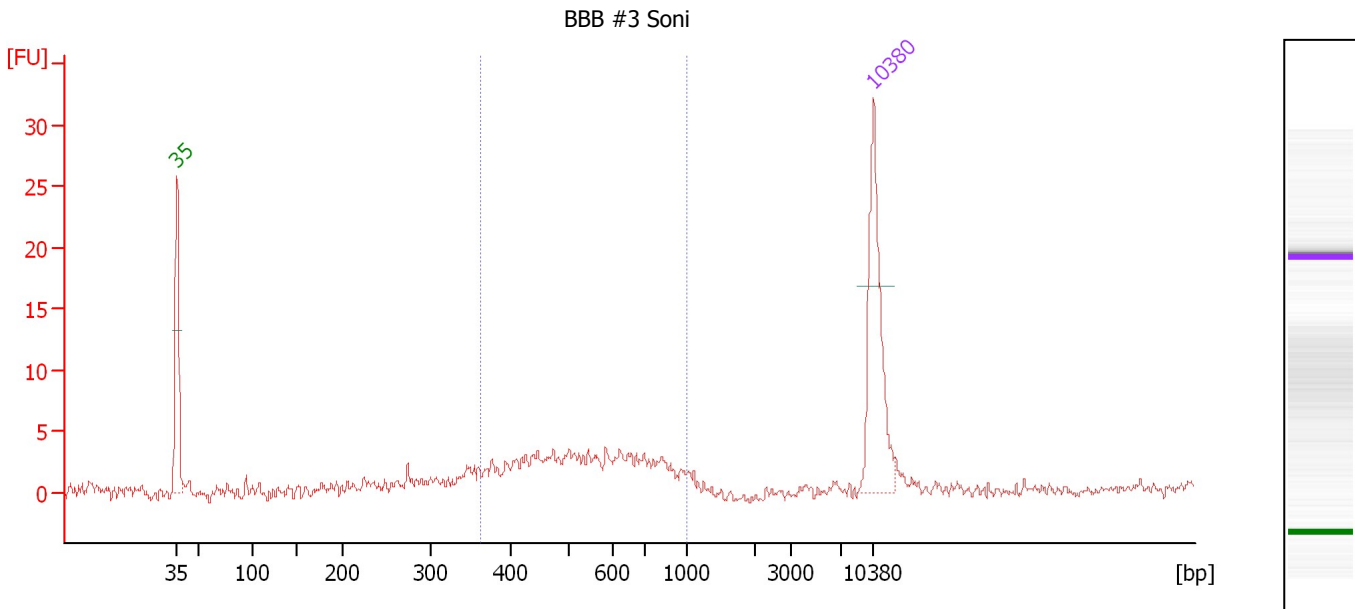
Region table for sample 5 : BBB #29 Soni (3/28/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
66	727,852.9	353	112,881.04	972	12,131.1	92	47.9	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : BBB #3 Soni

Number of peaks found: 0 Corr. Area 1: 47.9
 Noise: 0.5

Peak table for sample 6 : BBB #3 Soni

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

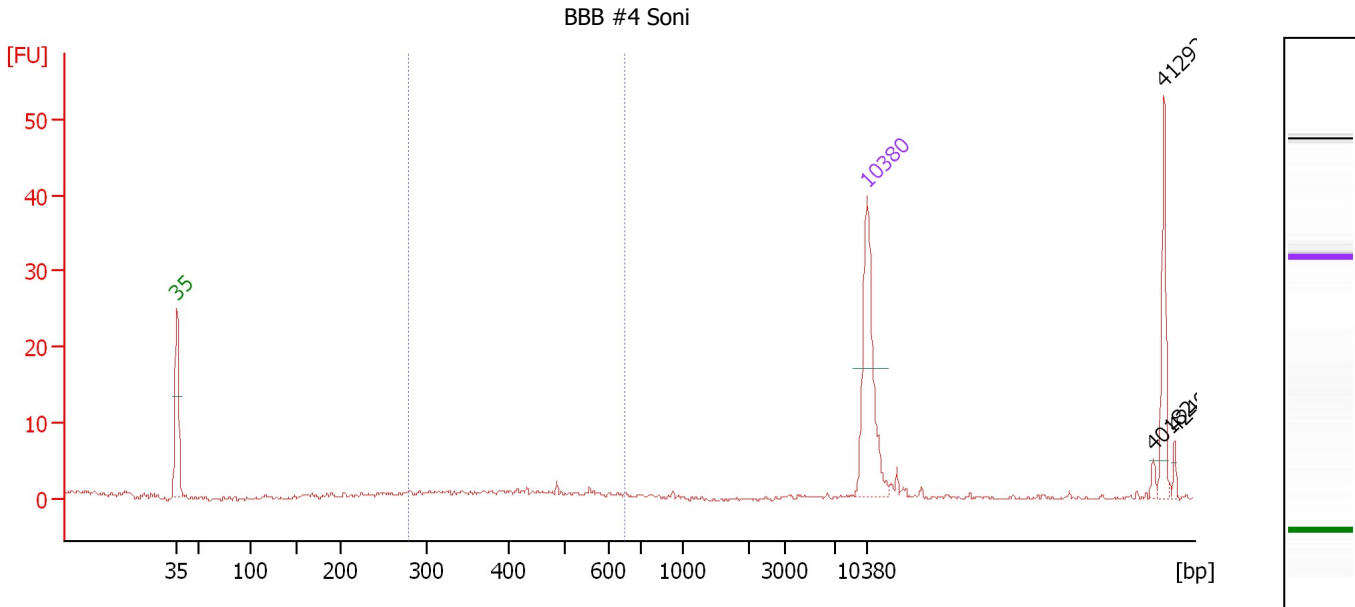
Region table for sample 6 : BBB #3 Soni

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
361	377.2	561	128.94	1,000	47.9	78	26.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : BBB #4 Soni

Number of peaks found: 3 Corr. Area 1: 6.9
 Noise: 0.2

Peak table for sample 7 : BBB #4 Soni

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	40,182	0.00	0.0	
4	41,292	0.00	0.0	
5	42,402	0.00	0.0	

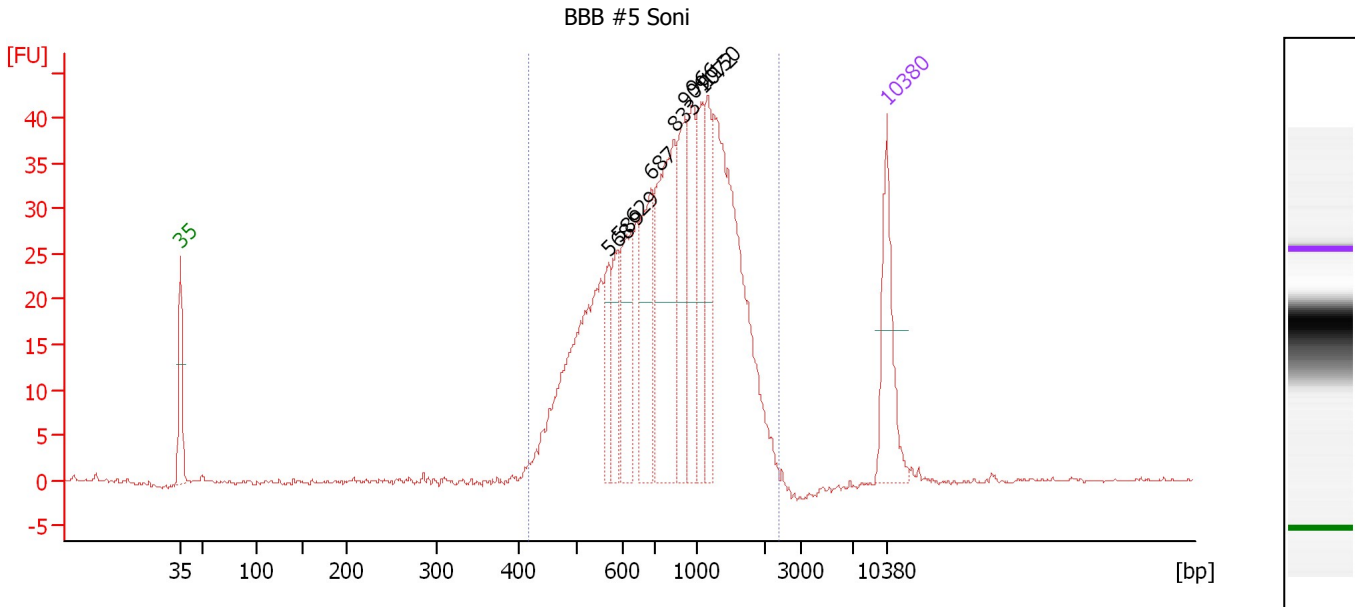
Region table for sample 7 : BBB #4 Soni

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
278	69.2	423	18.21	651	6.9	21	20.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : BBB #5 Soni

Height Threshold [FU] : 20

Overall Results for sample 8 : BBB #5 Soni

Number of peaks found: 9 Corr. Area 1: 618.8
 Noise: 0.2

Peak table for sample 8 : BBB #5 Soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	568	45.73	122.0	
3	589	47.32	121.8	
4	629	92.55	223.0	
5	687	110.77	244.5	
6	833	187.08	340.3	
7	909	100.25	167.1	
8	966	81.27	127.4	
9	1,072	69.61	98.4	
10	1,150	68.59	90.4	
11	10,380	75.00	10.9	Upper Marker

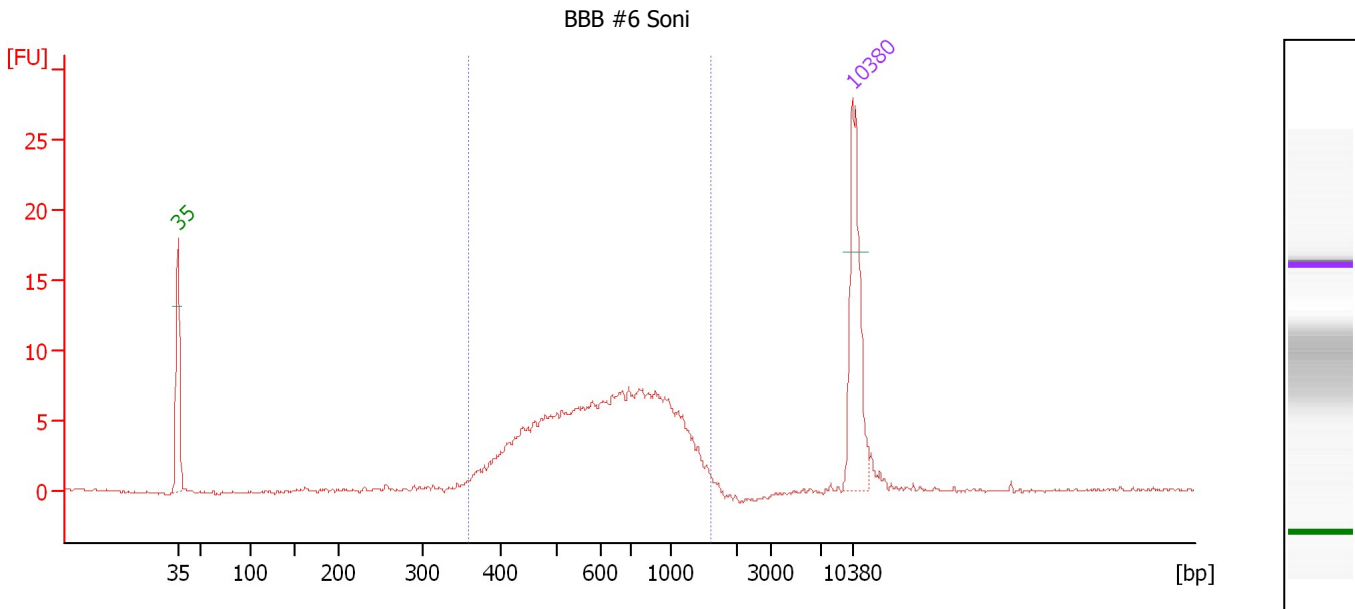
Region table for sample 8 : BBB #5 Soni

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
416	2,877.7	934	1,455.55	2,380	618.8	100	42.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : BBB #6 Soni

Number of peaks found: 0 Corr. Area 1: 130.3
 Noise: 0.1

Peak table for sample 9 : BBB #6 Soni

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

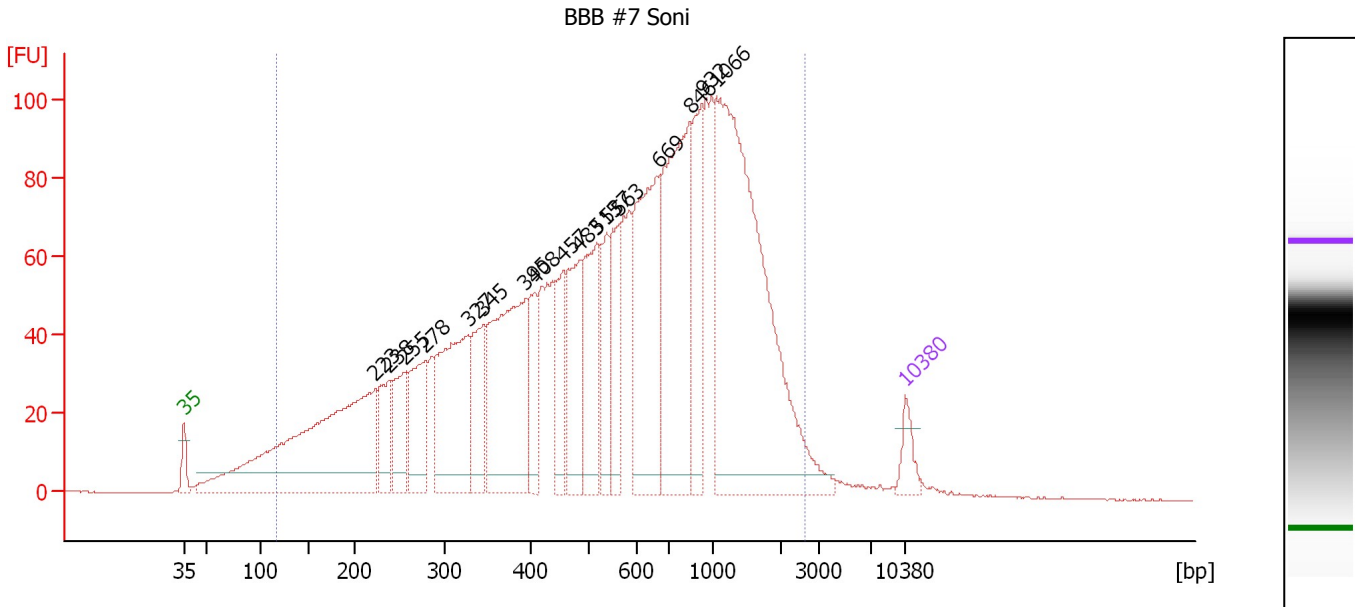
Region table for sample 9 : BBB #6 Soni

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
357	1,140.1	692	449.15	1,586	130.3	97	37.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : BBB #7 Soni

Number of peaks found: 17 Corr. Area 1: 3,140.1
 Noise: 0.1

Peak table for sample 10 : BBB #7 Soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	223	1,823.72	12,408.2	
3	238	254.90	1,623.3	
4	255	307.76	1,825.1	
5	278	408.42	2,228.0	
6	327	796.45	3,694.6	
7	345	322.74	1,417.4	
8	395	961.05	3,686.0	
9	408	238.32	884.5	
10	457	265.48	881.0	
11	483	416.48	1,307.7	
12	515	484.66	1,424.8	
13	537	269.74	760.9	
14	563	284.36	764.8	
15	669	833.09	1,886.0	
16	846	976.03	1,748.6	
17	932	396.69	645.1	
18	1,066	1,924.93	2,734.9	
19	10,380	75.00	10.9	Upper Marker

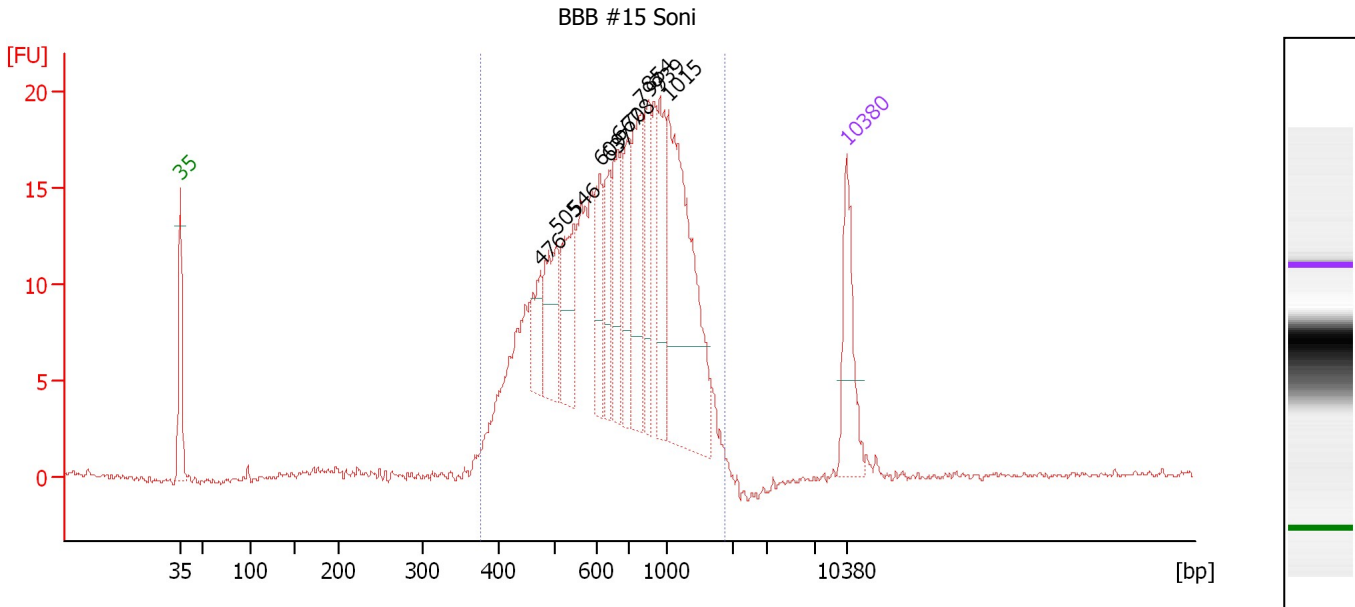
Region table for sample 10 : BBB #7 Soni

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
116	47,645.6	726	12,376.83	2,655	3,140.1	95	66.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : BBB #15 Soni

Number of peaks found: 11 Corr. Area 1: 319.9
 Noise: 0.1

Peak table for sample 11 : BBB #15 Soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	476	50.15	159.7	
3	505	85.98	258.0	
4	546	92.85	257.8	
5	609	69.22	172.3	
6	637	55.75	132.6	
7	667	74.69	169.8	
8	708	65.29	139.7	
9	797	108.09	205.5	
10	854	69.05	122.6	
11	939	86.42	139.5	
12	1,015	273.97	408.9	
13	10,380	75.00	10.9	Upper Marker

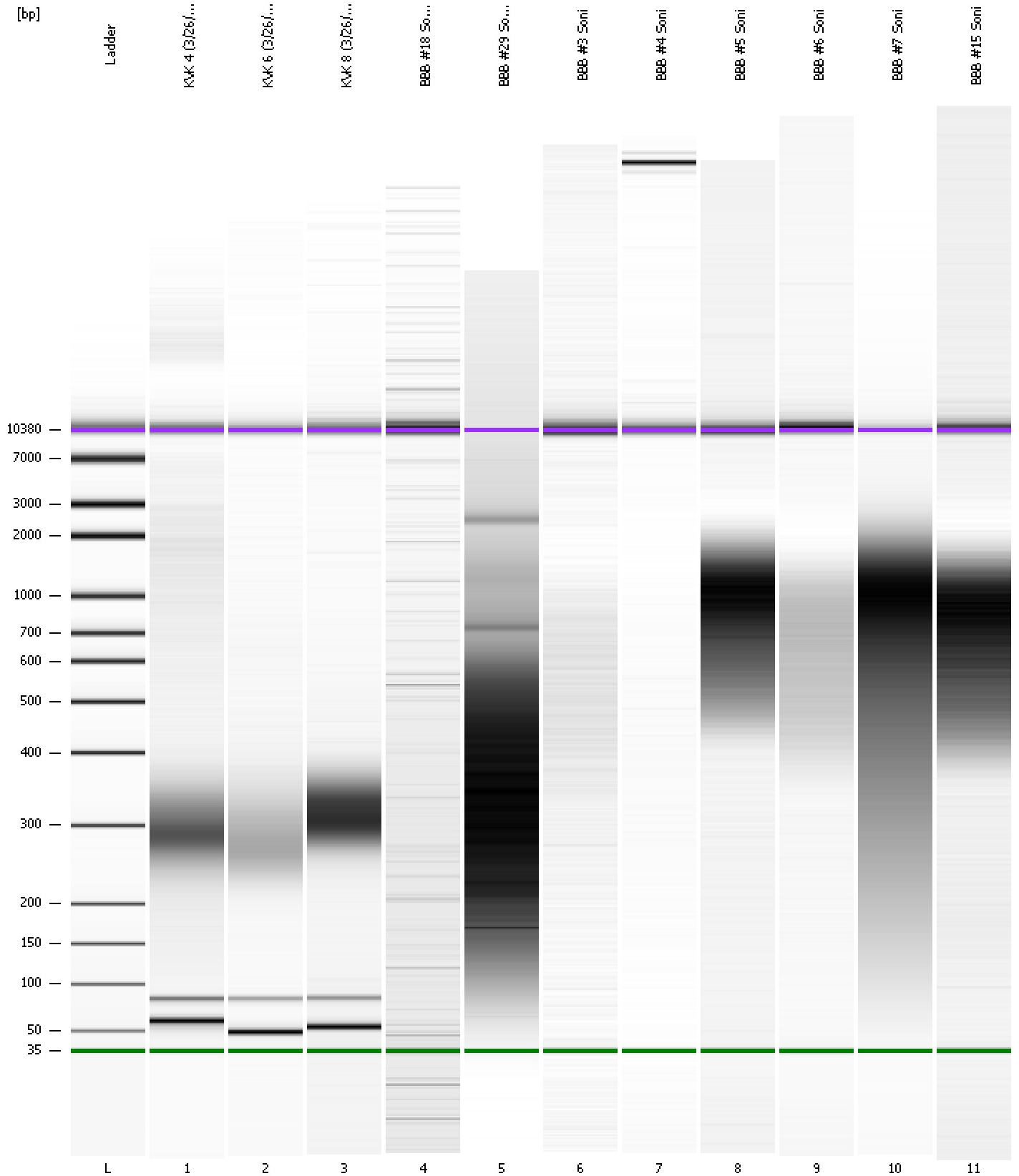
Region table for sample 11 : BBB #15 Soni

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
375	4,153.9	778	1,792.34	1,873	319.9	99	40.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
Modified: 3/29/2012 11:32:03 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad

Created: 3/29/2012 10:47:31 AM
 Modified: 3/29/2012 11:32:03 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		3/29/2012 11:28:50 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-29\2012-03-29_002.xad)		Instrument	Run		3/29/2012 10:47:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/29/2012 10:47:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/29/2012 10:47:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/29/2012 10:47:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/29/2012 10:47:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/29/2012 10:47:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/29/2012 10:47:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1