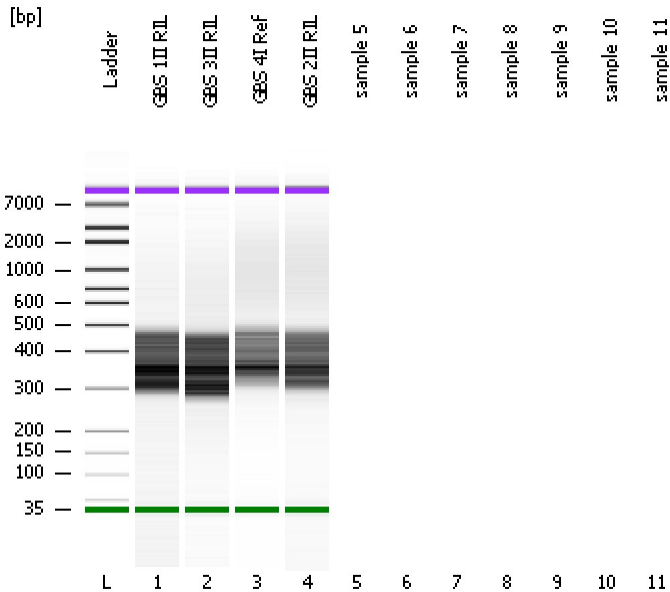


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
Modified: 6/21/2013 12:19:38 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

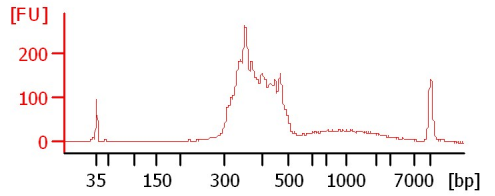
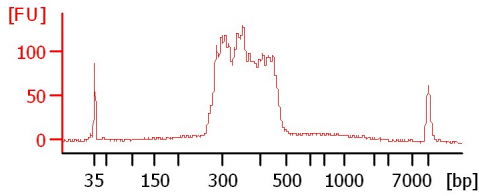
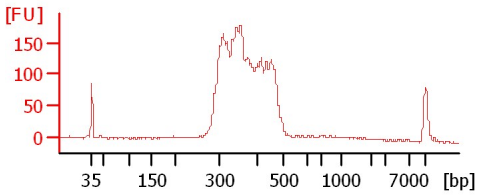
Chip Information:

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

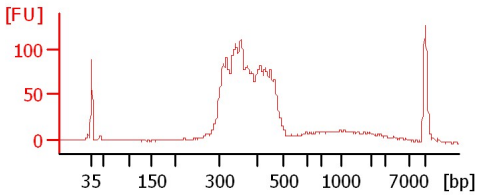
**GBS 1II RIL**

**GBS 3II RIL**

**GBS 4I Ref**



**GBS 2II RIL**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
Modified: 6/21/2013 12:19:38 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
GBS 1II RIL		<input type="checkbox"/>	✓			
GBS 3II RIL		<input type="checkbox"/>	✓			
GBS 4I Ref		<input type="checkbox"/>	✓			
GBS 2II RIL		<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\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
Modified: 6/21/2013 12:19:38 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

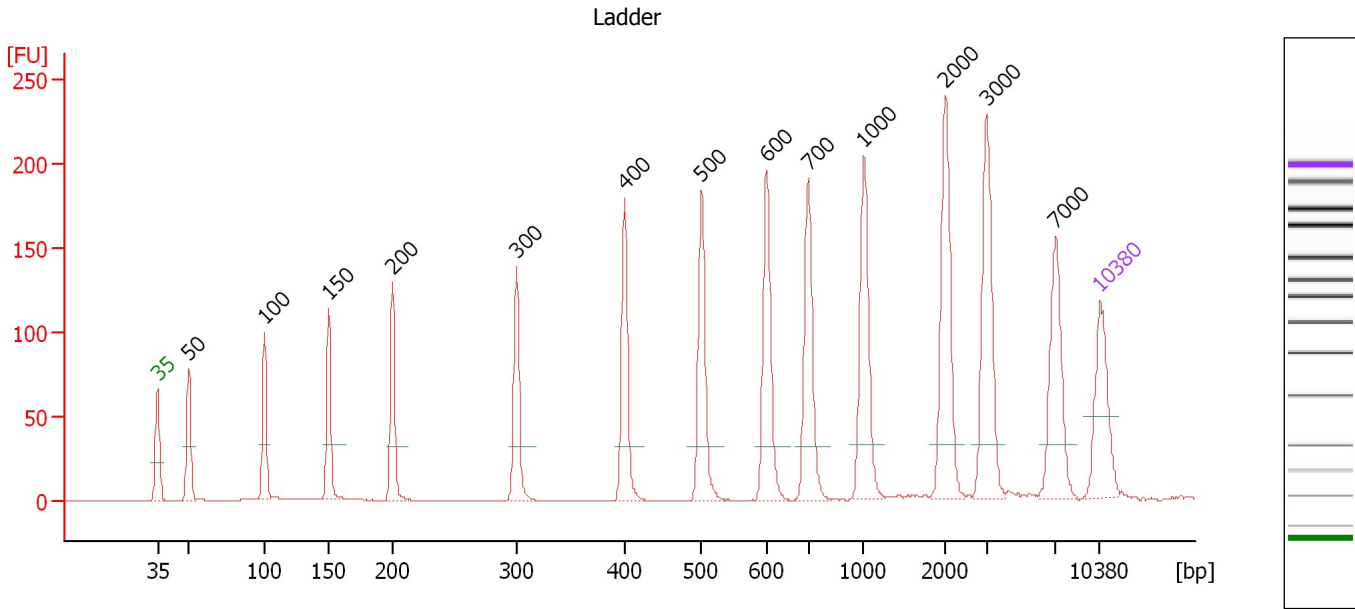
**Ladder**

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\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
 Modified: 6/21/2013 12:19:38 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

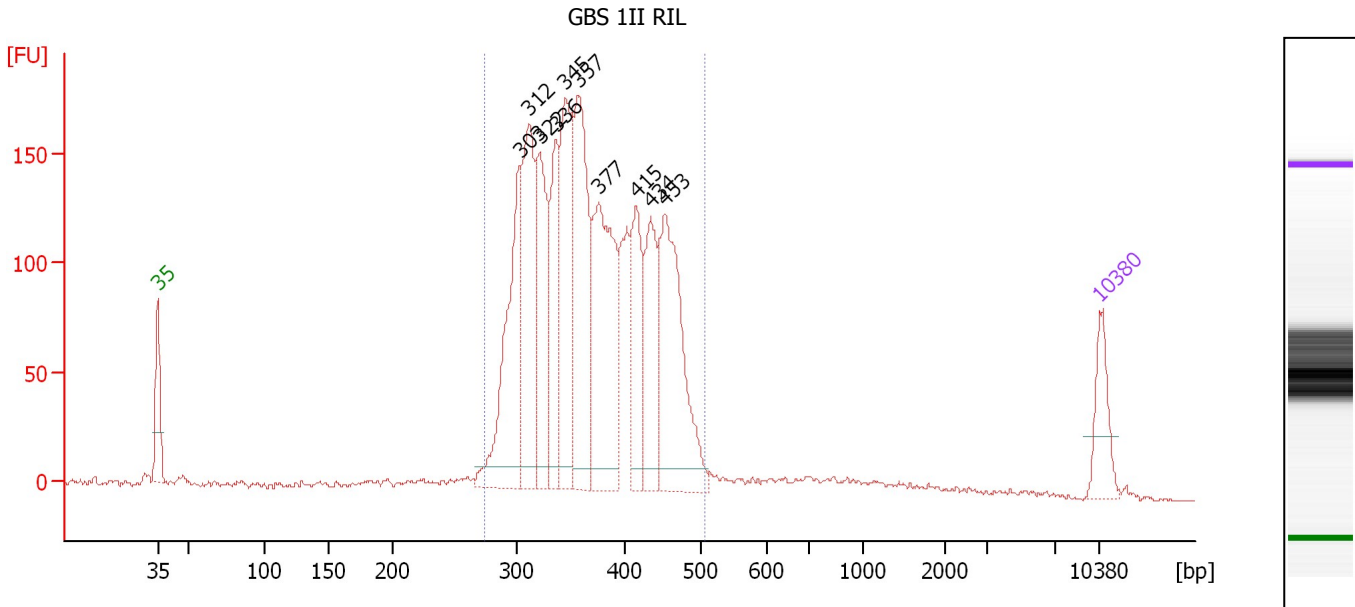
**Peak table for Ladder**

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\2013-06-21\2013-06-21\_003.xad

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**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 1 : GBS 1II RIL**

Height Threshold [FU] : 10

**Overall Results for sample 1 : GBS 1II RIL**

Number of peaks found: 10                      Corr. Area 1: 2,627.0  
 Noise: 0.4

**Peak table for sample 1 : GBS 1II RIL**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	303	388.55	1,941.6	
3	312	355.61	1,728.9	
4	322	282.65	1,331.3	
5	336	208.19	937.5	
6	345	332.34	1,460.0	
7	357	387.56	1,644.8	
8	377	434.41	1,748.0	
9	415	194.21	708.8	
10	434	201.62	704.5	
11	453	423.36	1,416.6	
12	10,380	75.00	10.9	Upper Marker

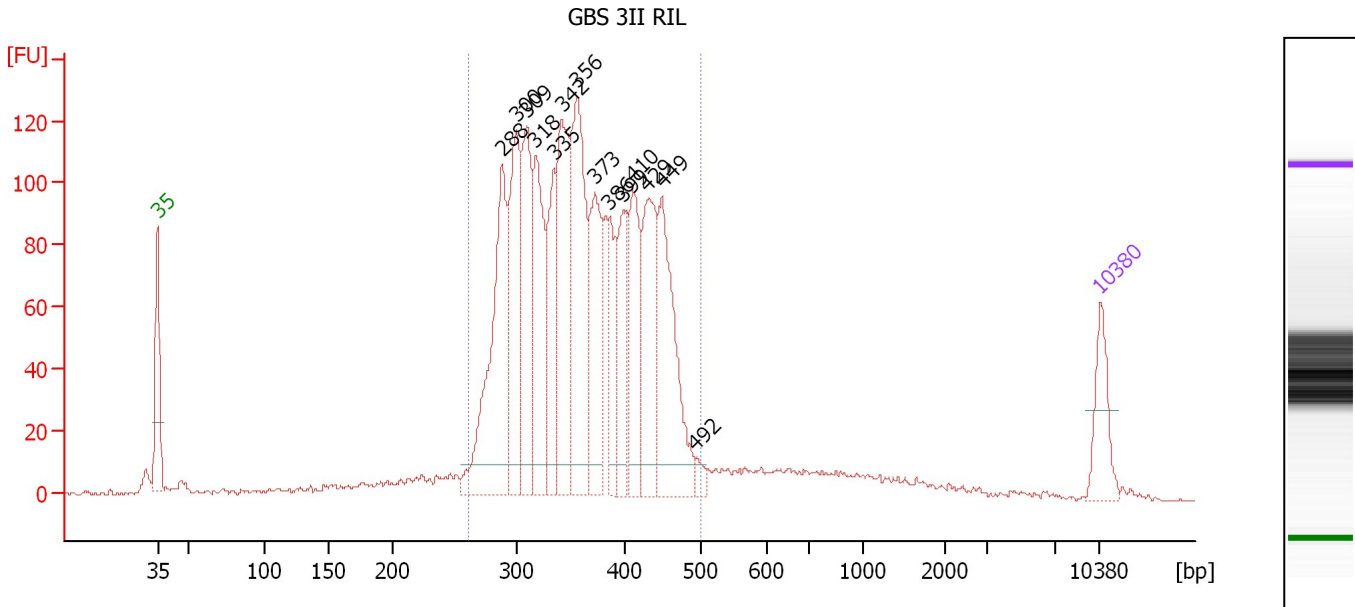
**Region table for sample 1 : GBS 1II RIL**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
275	506	372	14,228.8	3,402.08	2,627.0	91	14.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
 Modified: 6/21/2013 12:19:38 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 2 : GBS 3II RIL**

Height Threshold [FU] : 10

**Overall Results for sample 2 : GBS 3II RIL**

Number of peaks found: 14                      Corr. Area 1: 2,023.5  
 Noise: 0.5

**Peak table for sample 2 : GBS 3II RIL**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	288	444.20	2,333.7	
3	300	300.62	1,519.0	
4	309	279.71	1,370.0	
5	318	274.41	1,308.4	
6	335	183.08	828.9	
7	342	303.60	1,344.9	
8	356	394.33	1,677.1	
9	373	227.32	924.4	
10	386	118.99	466.7	
11	399	153.56	583.2	
12	410	193.86	715.8	
13	429	241.86	854.6	
14	449	320.88	1,083.4	
15	492	19.84	61.1	
16	10,380	75.00	10.9	Upper Marker

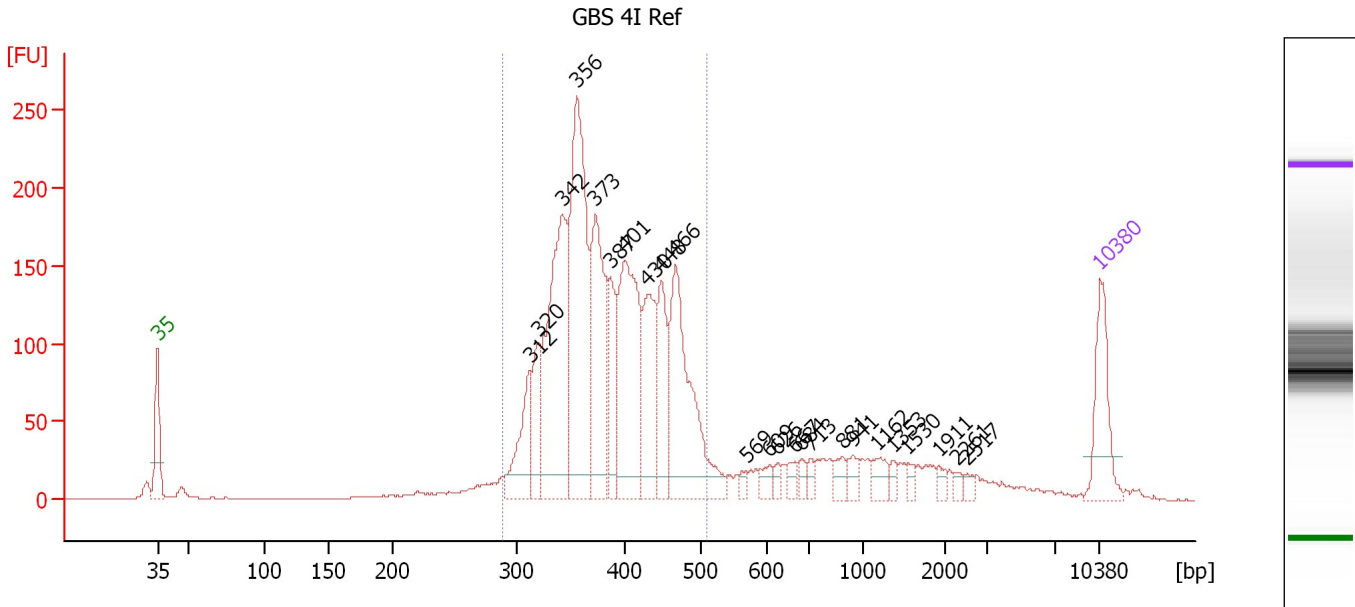
**Region table for sample 2 : GBS 3II RIL**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
261	498	362	15,376.3	3,564.36	2,023.5	87	15.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
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**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 3 : GBS 4I Ref**

Height Threshold [FU] : 15

**Overall Results for sample 3 : GBS 4I Ref**

Number of peaks found: 24                      Corr. Area 1: 2,580.2  
 Noise: 0.2

**Peak table for sample 3 : GBS 4I Ref**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	312	94.55	458.6	
3	320	79.77	377.3	
4	342	338.31	1,497.6	
5	356	365.63	1,557.8	
6	373	223.63	907.8	
7	387	82.79	324.0	
8	401	253.82	958.0	
9	430	136.55	481.3	
10	448	103.63	350.6	
11	466	259.91	845.5	
12	569	8.46	22.5	
13	609	16.40	40.8	
14	626	10.48	25.3	
15	667	14.41	32.7	
16	684	12.50	27.7	
17	713	10.83	23.0	
18	881	18.10	31.1	
19	941	17.20	27.7	
20	1,162	21.86	28.5	
21	1,353	8.99	10.1	
22	1,530	9.95	9.9	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-21\2013-06-21\_003.xad


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### Electropherogram Summary Continued ...

#### ... Peak table for sample 3 : GBS 4I Ref

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
23	1,911	8.71	6.9	
24	2,261	6.80	4.6	
25	2,517	6.84	4.1	
26	10,380	75.00	10.9	Upper Marker

#### Region table for sample 3 : GBS 4I Ref

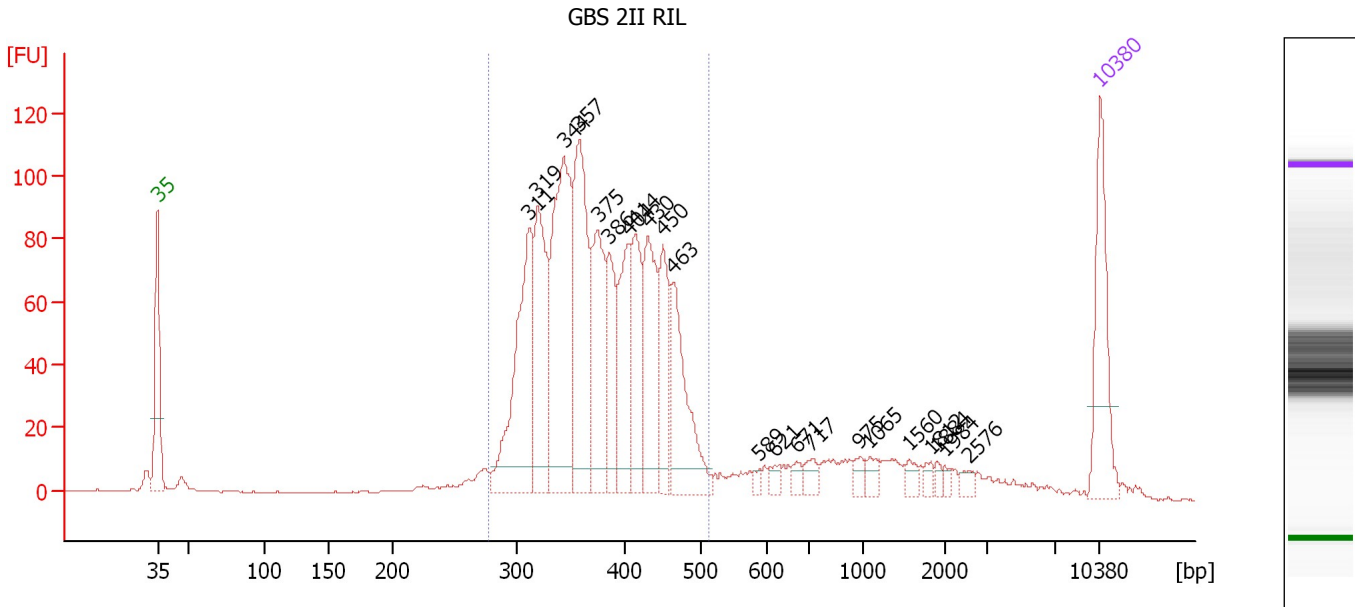
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
290	509	388	7,708.5	1,935.19	2,580.2	79	13.2	



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
 Modified: 6/21/2013 12:19:38 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 4 : GBS 2II RIL**

Height Threshold [FU] : 8

**Overall Results for sample 4 : GBS 2II RIL**

Number of peaks found: 22                      Corr. Area 1: 1,473.4  
 Noise: 0.2

**Peak table for sample 4 : GBS 2II RIL**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	311	198.28	965.1	
3	319	150.34	713.1	
4	344	237.69	1,047.2	
5	357	193.81	821.4	
6	375	117.26	473.3	
7	386	75.12	295.0	
8	404	98.41	368.7	
9	414	91.49	334.6	
10	430	108.27	381.2	
11	450	74.32	250.2	
12	463	117.07	383.1	
13	589	4.53	11.7	
14	621	8.92	21.8	
15	671	8.06	18.2	
16	717	12.76	27.0	
17	975	9.86	15.3	
18	1,065	10.48	14.9	
19	1,560	8.51	8.3	
20	1,812	6.67	5.6	
21	1,884	4.29	3.5	
22	1,984	4.83	3.7	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
Modified: 6/21/2013 12:19:38 PM

**Electropherogram Summary Continued ...****... Peak table for sample 4 : GBS 2II RIL**

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
23	2,576	6.64	3.9	
24	▶ 10,380	75.00	10.9	Upper Marker

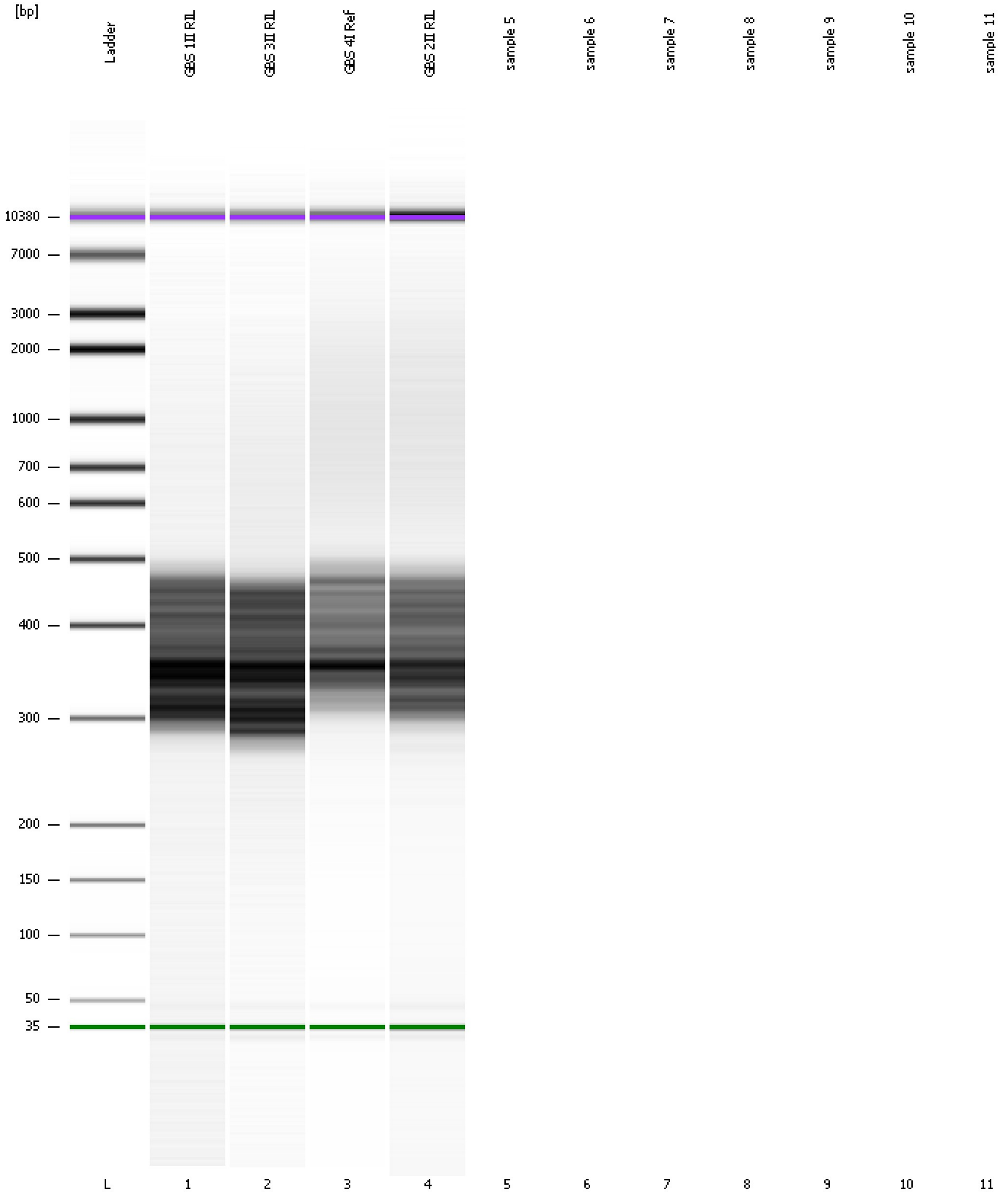
**Region table for sample 4 : GBS 2II RIL**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
277	510	378	6,075.7	1,481.95	1,473.4	83	14.0	■

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
Modified: 6/21/2013 12:19:38 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
Modified: 6/21/2013 12:19:38 PM

**Invalid Samples**

- Sample 5 has not been run, no results available.
- Sample 6 has not been run, no results available.
- Sample 7 has not been run, no results available.
- Sample 8 has not been run, no results available.
- 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\2013-06-21\2013-06-21\_003.xad

Created: 6/21/2013 11:53:55 AM  
 Modified: 6/21/2013 12:19:38 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 5)		Instrument	Run		6/21/2013 12:15:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-21\2013-06-21_003.xad)		Instrument	Run		6/21/2013 11:54:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/21/2013 11:54:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/21/2013 11:54:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/21/2013 11:54:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/21/2013 11:54:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/21/2013 11:54:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/21/2013 11:54:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1