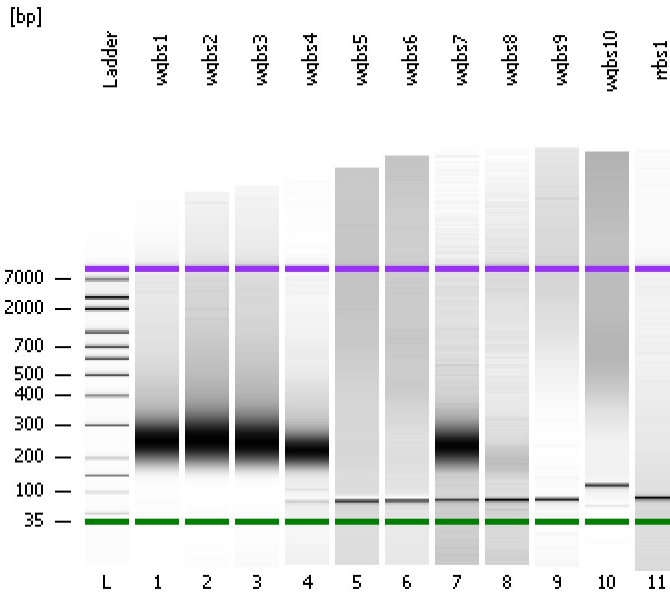


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
Modified: 2/4/2016 2:44:21 PM

Electrophoresis File Run Summary



Instrument Information:

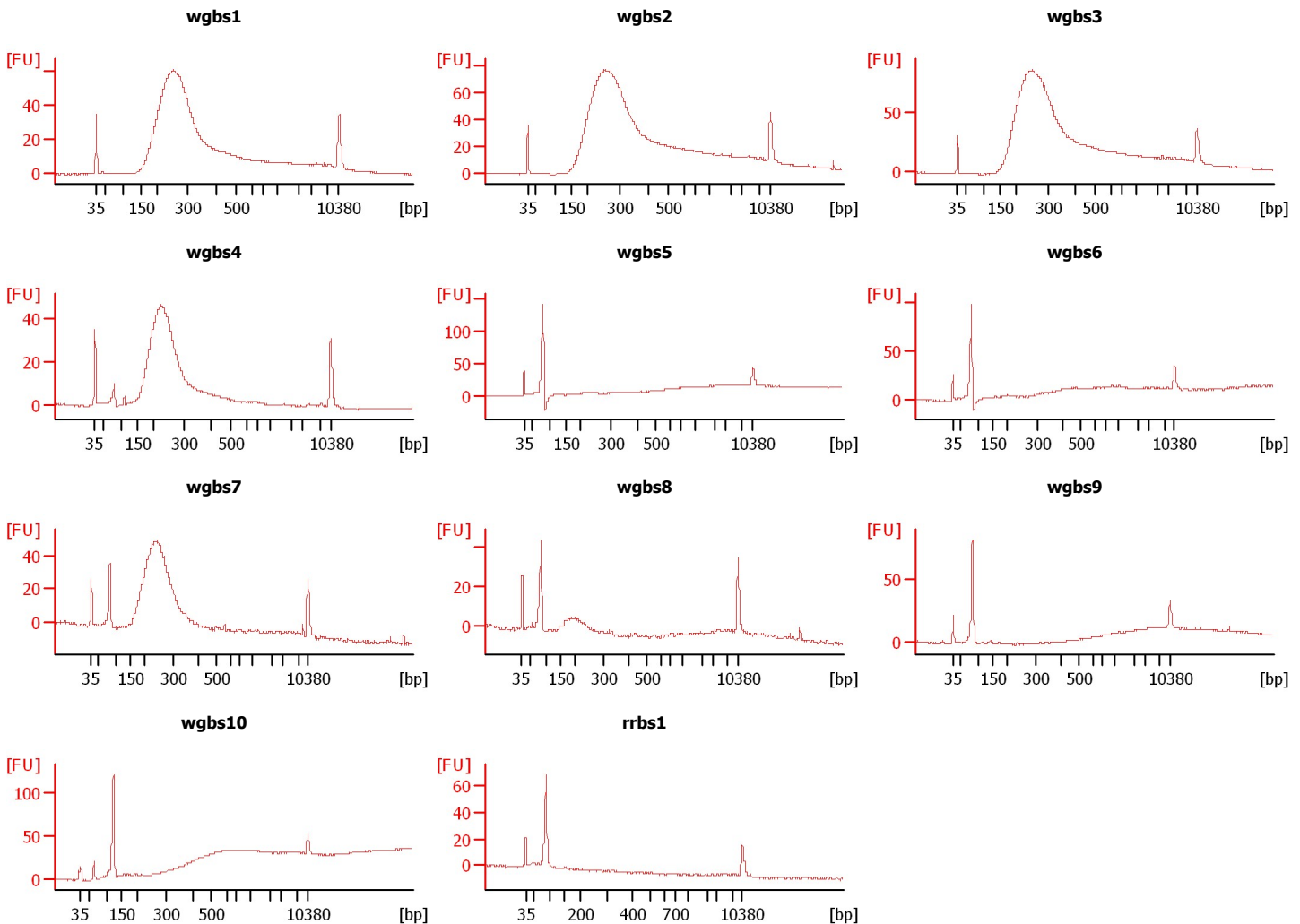
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
wgbs1		<input type="checkbox"/>	✓			
wgbs2		<input type="checkbox"/>	✓			
wgbs3		<input type="checkbox"/>	✓			
wgbs4		<input type="checkbox"/>	✓			
wgbs5		<input type="checkbox"/>	✓			
wgbs6		<input type="checkbox"/>	✓			
wgbs7		<input type="checkbox"/>	✓			
wgbs8		<input type="checkbox"/>	✓			
wgbs9		<input type="checkbox"/>	✓			
wgbs10		<input type="checkbox"/>	✓			
rrbs1		<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\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
Modified: 2/4/2016 2:44:21 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

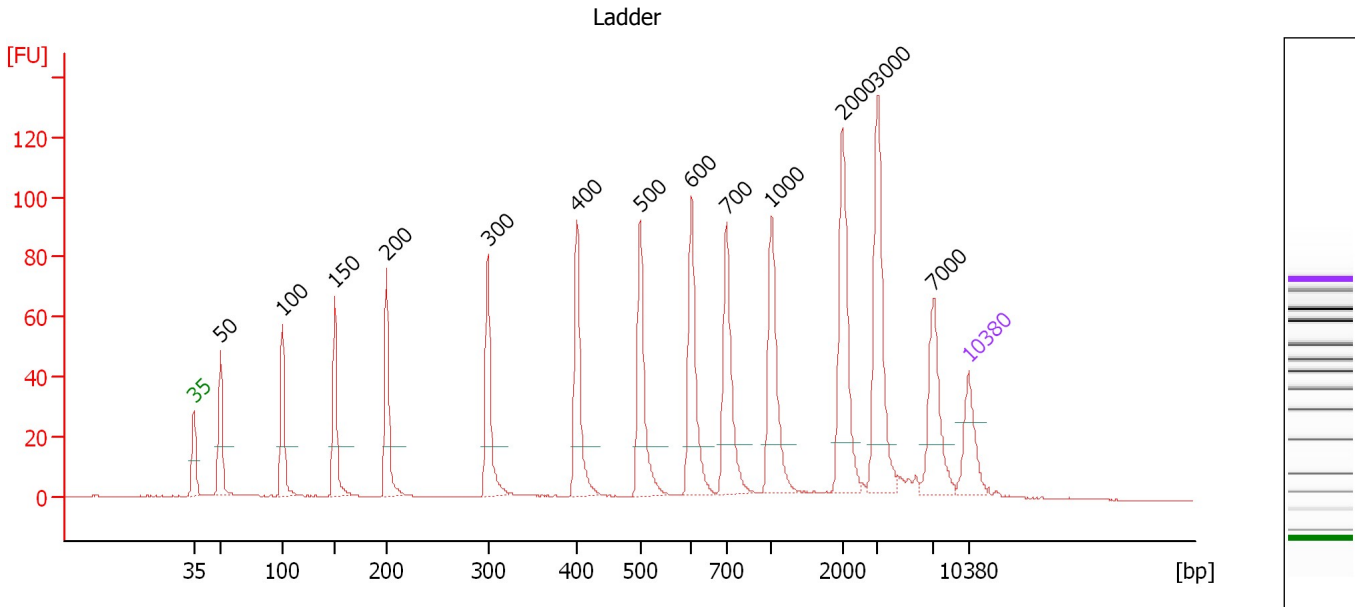
Ladder

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\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

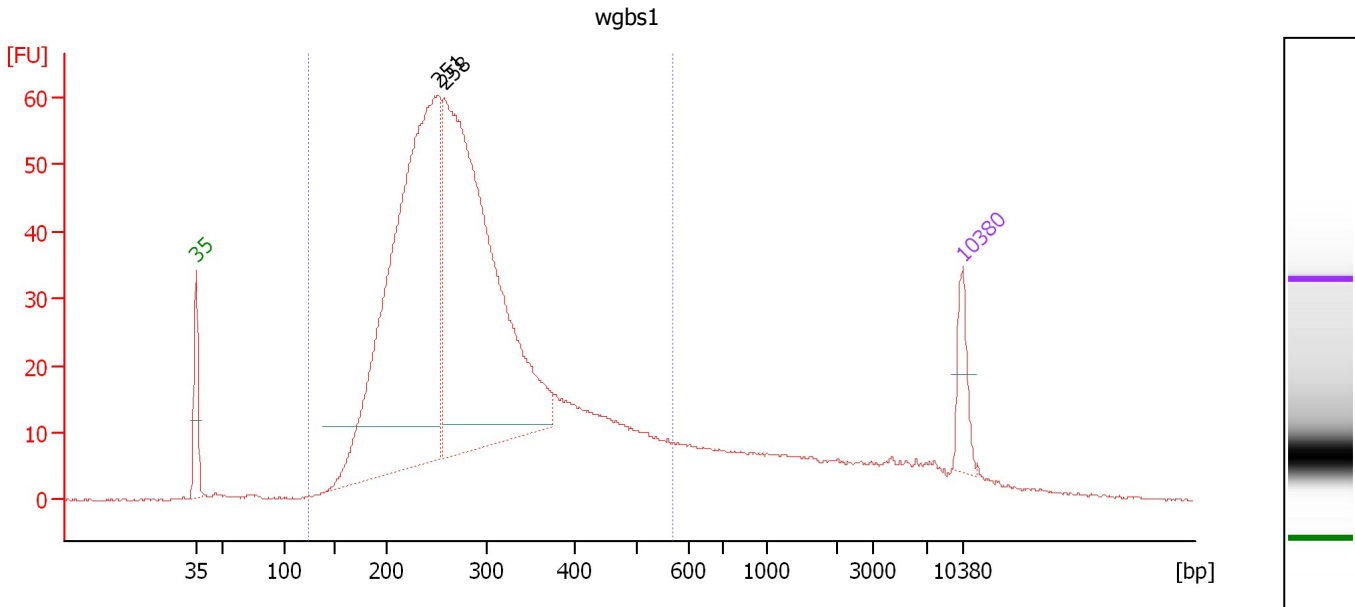
Peak table for Ladder

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	45.41
3	100	150.00	2,272.7	Ladder Peak	51.00
4	150	150.00	1,515.2	Ladder Peak	55.72
5	200	150.00	1,136.4	Ladder Peak	60.39
6	300	150.00	757.6	Ladder Peak	69.55
7	400	150.00	568.2	Ladder Peak	77.59
8	500	150.00	454.5	Ladder Peak	83.32
9	600	150.00	378.8	Ladder Peak	87.95
10	700	150.00	324.7	Ladder Peak	91.13
11	1,000	150.00	227.3	Ladder Peak	95.17
12	2,000	150.00	113.6	Ladder Peak	101.58
13	3,000	150.00	75.8	Ladder Peak	104.76
14	7,000	150.00	32.5	Ladder Peak	109.82
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : wgbs1

Number of peaks found: 2 Corr. Area 1: 1,211.5
 Noise: 0.1

Peak table for sample 1 : wgbs1

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	251	2,025.03	12,220.3		65.07
3	258	1,925.49	11,308.0		65.70
4	10,380	75.00	10.9	Upper Marker	113.00

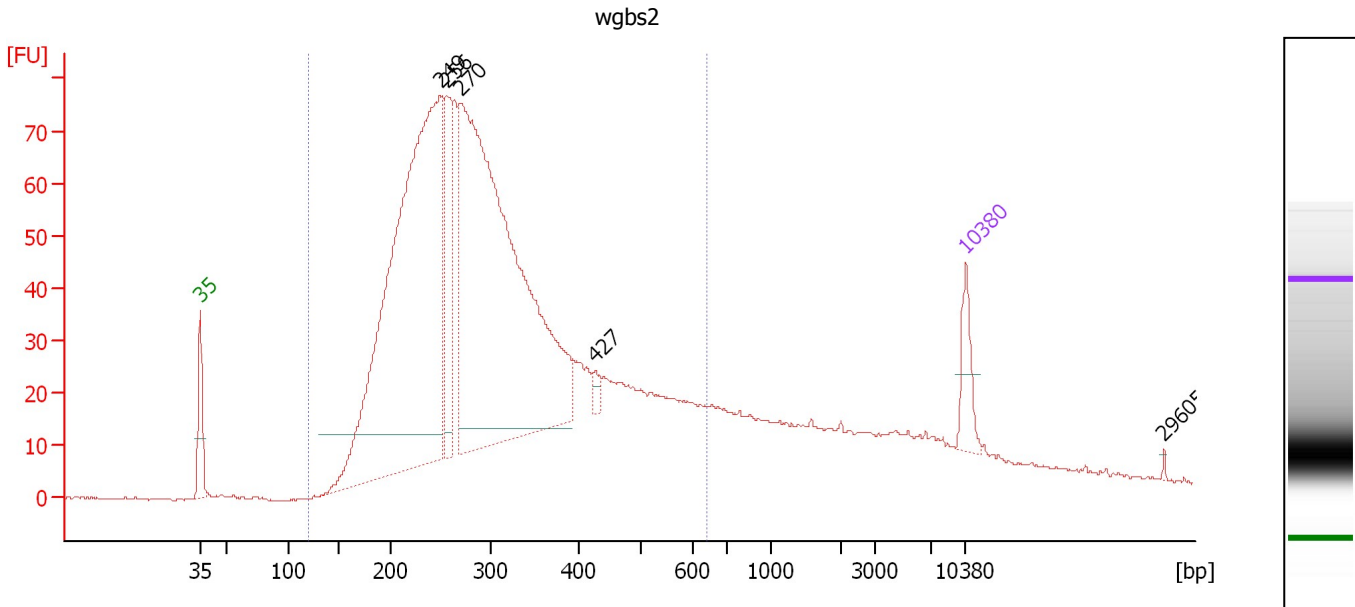
Region table for sample 1 : wgbs1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
123	570	292	1,211.5	31,373.0	5,453.37	86	29.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : wgbs2

Number of peaks found: 5 Corr. Area 1: 1,789.8
 Noise: 0.2

Peak table for sample 2 : wgbs2

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	249	2,316.68	14,090.5		64.89
3	256	287.83	1,706.8		65.47
4	270	2,308.74	12,961.5		66.79
5	427	22.32	79.3		79.12
6	10,380	75.00	10.9	Upper Marker	113.00
7	29,605	0.00	0.0		131.08

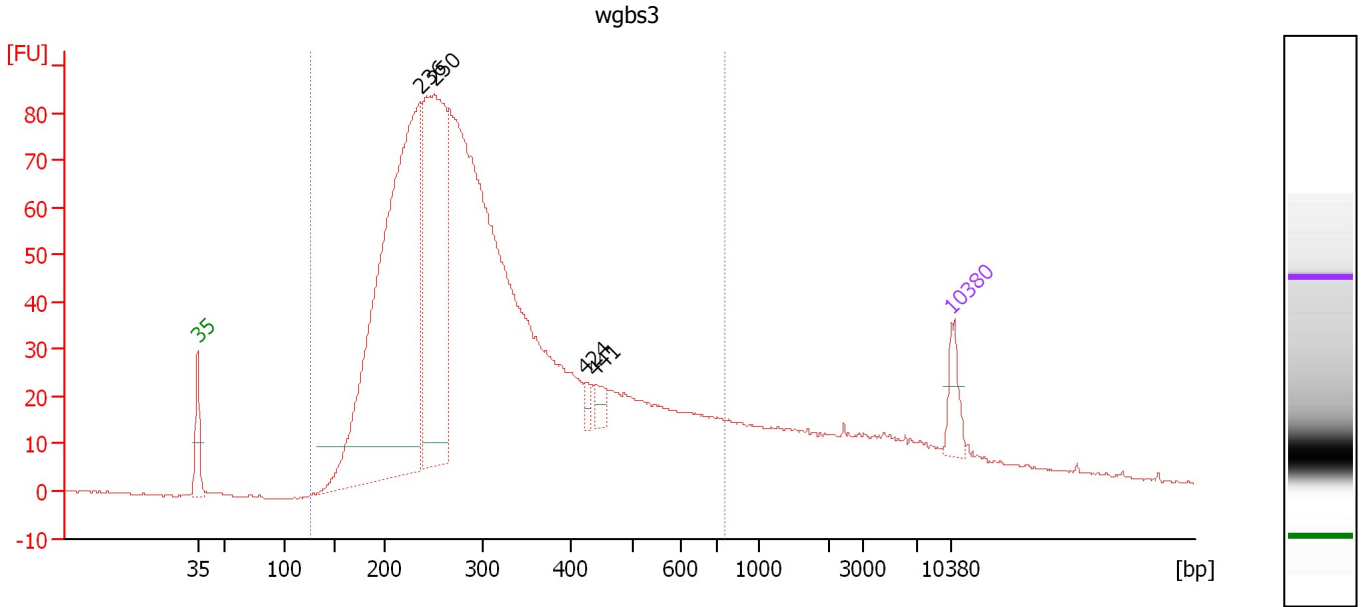
Region table for sample 2 : wgbs2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
119	645	314	1,789.8	38,726.5	7,007.31	86	33.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : wgbs3

Number of peaks found: 4 Corr. Area 1: 1,938.3
 Noise: 0.2

Peak table for sample 3 : wgbs3

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	236	2,509.46	16,143.4		63.64
3	250	1,282.87	7,787.8		64.93
4	424	31.86	113.7		78.99
5	441	52.21	179.5		79.93
6	10,380	75.00	10.9	Upper Marker	113.00

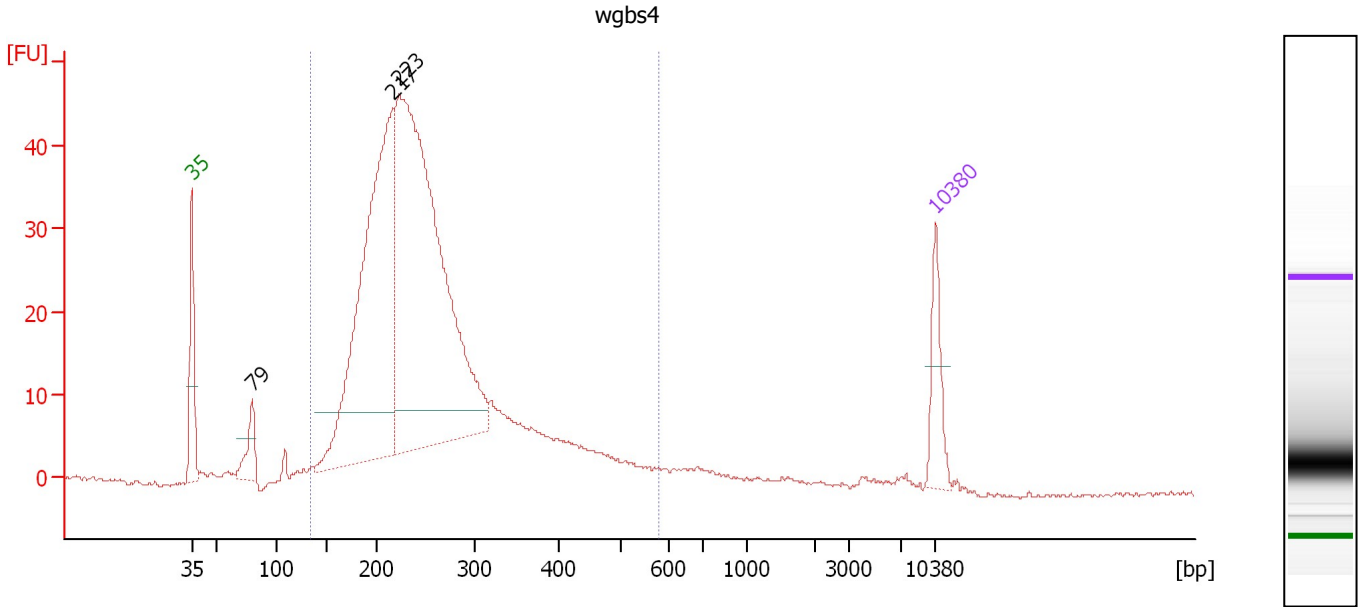
Region table for sample 3 : wgbs3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
126	762	318	1,938.3	48,572.7	8,710.57	88	38.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : wgbs4

Number of peaks found: 3 Corr. Area 1: 739.2
 Noise: 0.3

Peak table for sample 4 : wgbs4

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	79	87.77	1,679.6		48.67
3	217	1,060.88	7,418.6		61.92
4	223	1,523.08	10,362.3		62.47
5	10,380	75.00	10.9	Upper Marker	113.00

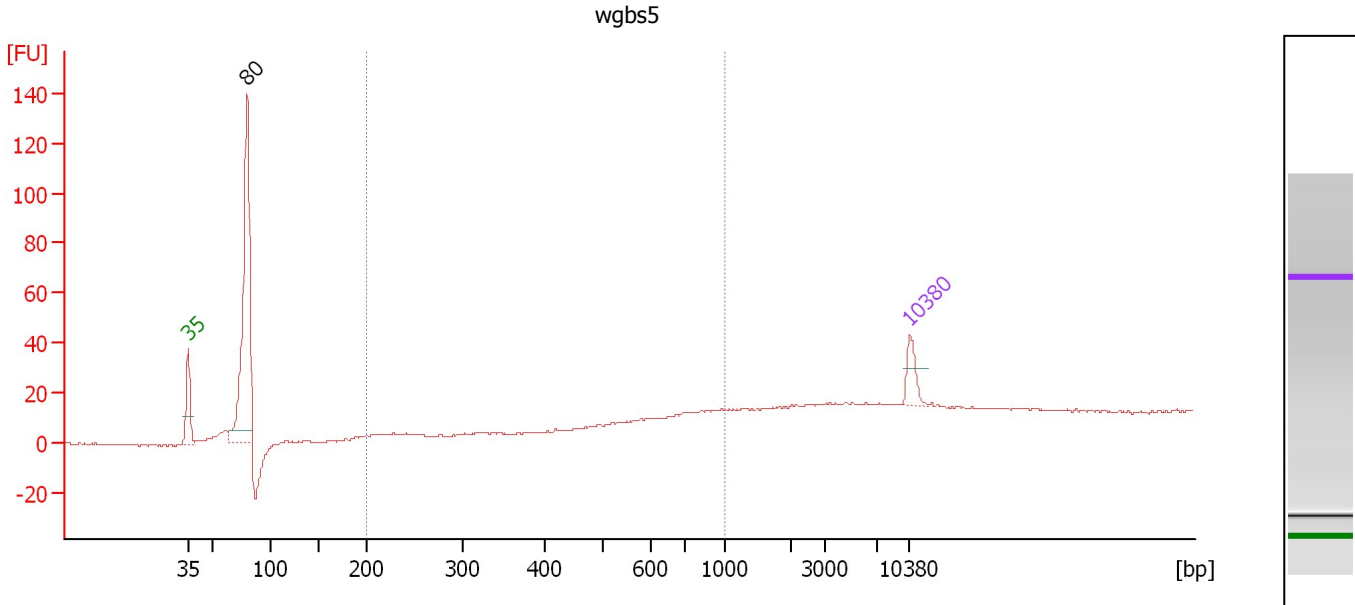
Region table for sample 4 : wgbs4

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
133	577	259	739.2	21,777.8	3,397.68	93	29.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : wgbs5

Number of peaks found: 1 Corr. Area 1: 53.1
 Noise: 0.3

Peak table for sample 5 : wgbs5

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	80	1,347.96	25,584.1		48.74
3	10,380	75.00	10.9	Upper Marker	113.00

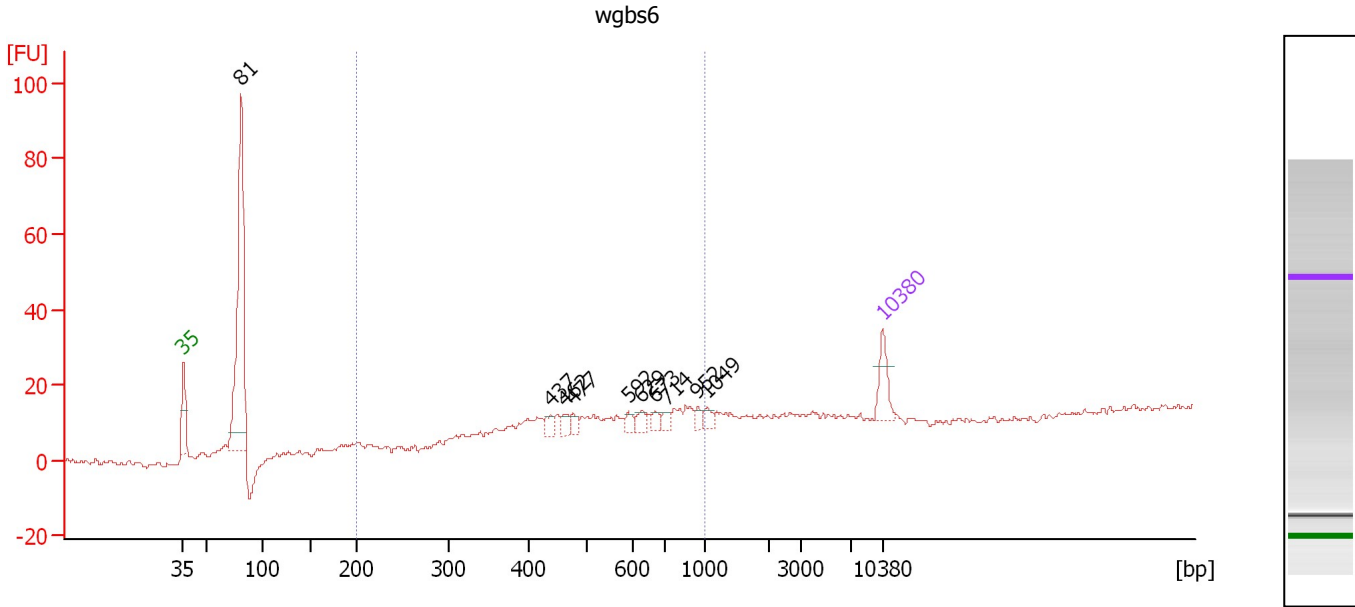
Region table for sample 5 : wgbs5

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	707	53.1	514.8	216.95	13	22.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : wgbs6

Number of peaks found: 10 Corr. Area 1: 124.5
 Noise: 0.8

Peak table for sample 6 : wgbs6

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	81	984.77	18,530.5		48.82
3	437	32.85	113.8		79.74
4	462	32.60	107.0		81.12
5	477	28.12	89.2		82.03
6	592	24.69	63.2		87.58
7	629	30.72	74.0		88.87
8	673	24.55	55.3		90.25
9	714	22.82	48.4		91.32
10	952	17.93	28.5		94.53
11	1,049	24.36	35.2		95.49
12	10,380	75.00	10.9	Upper Marker	113.00

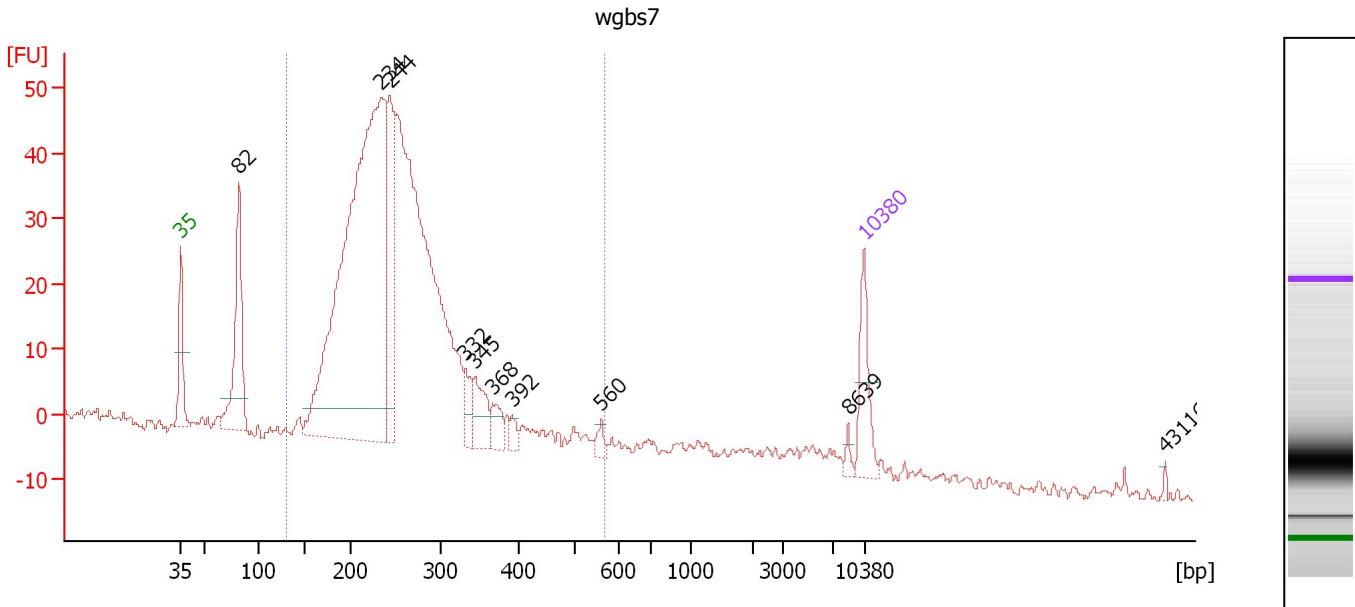
Region table for sample 6 : wgbs6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	561	124.5	1,956.1	635.53	41	31.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : wgbs7

Number of peaks found: 10 Corr. Area 1: 803.5
 Noise: 0.9

Peak table for sample 7 : wgbs7

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	82	297.11	5,510.1		48.95
3	234	1,540.57	9,988.2		63.48
4	244	273.39	1,698.8		64.40
5	332	44.75	203.9		72.16
6	345	77.47	340.6		73.14
7	368	41.02	169.0		75.00
8	392	18.36	71.1		76.91
9	560	16.74	45.3		86.08
10	8,639	9.63	1.7		111.36
11	10,380	75.00	10.9	Upper Marker	113.00
12	43,116	0.00	0.0		143.80

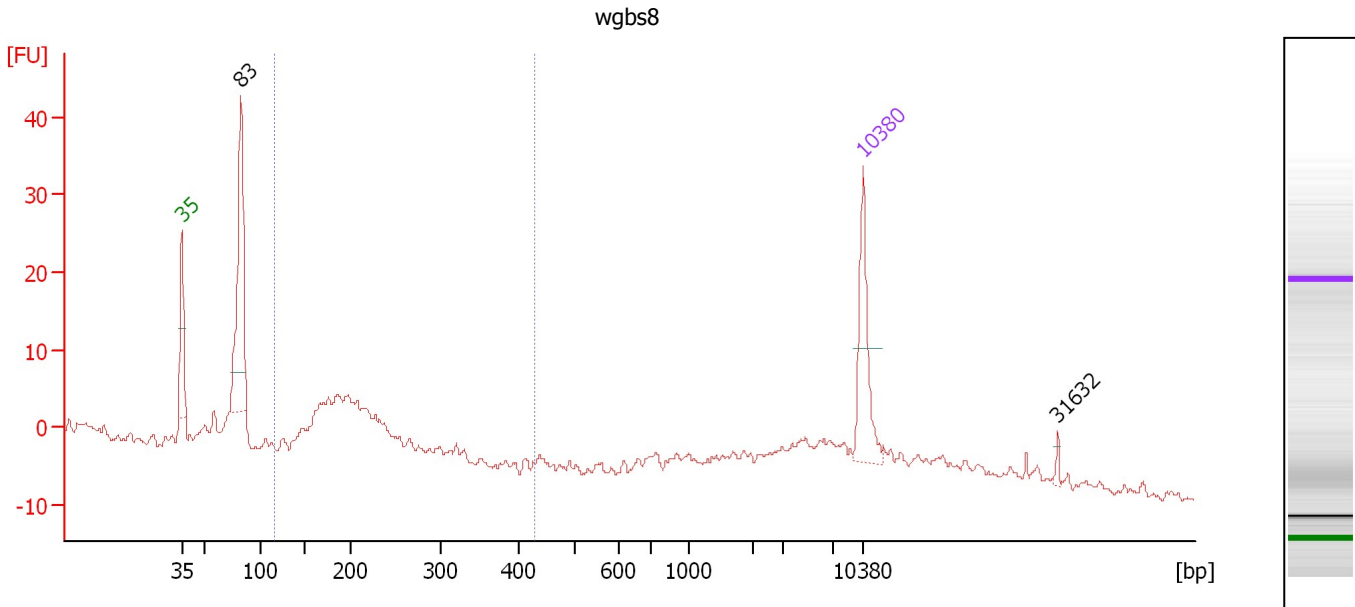
Region table for sample 7 : wgbs7

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
130	565	259	803.5	20,530.3	3,289.86	87	25.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : wqbs8

Number of peaks found: 2 Corr. Area 1: 82.2
 Noise: 0.5

Peak table for sample 8 : wqbs8

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	83	260.36	4,761.7		49.08
3	10,380	75.00	10.9	Upper Marker	113.00
4	31,632	0.00	0.0		132.99

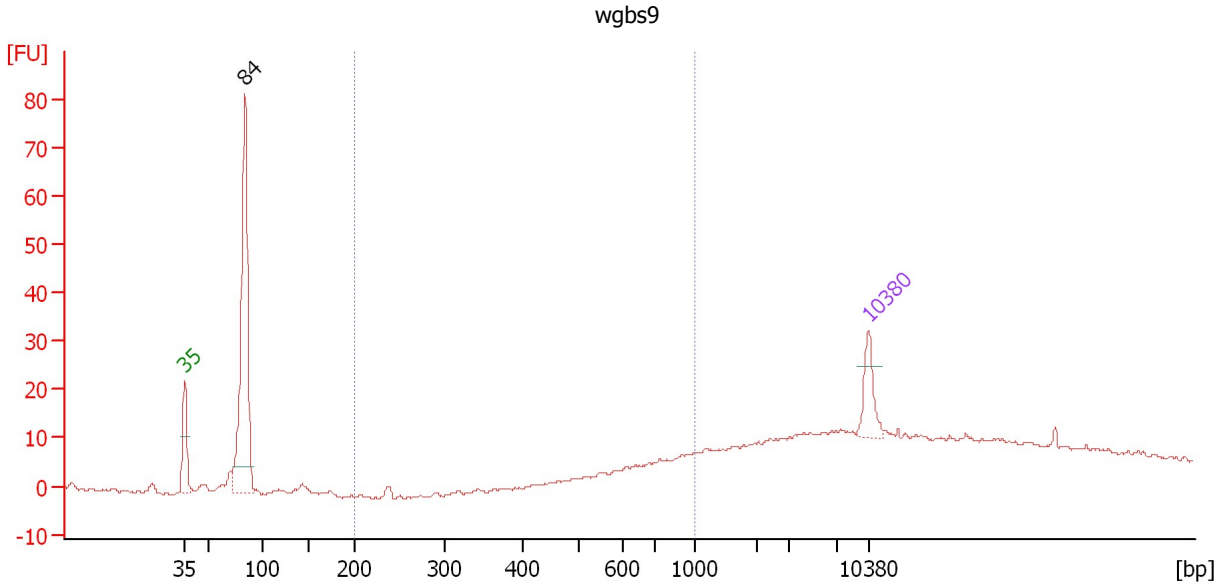
Region table for sample 8 : wqbs8

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
117	429	203	82.2	2,633.2	338.67	31	18.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : wgbs9

Number of peaks found: 1 Corr. Area 1: 15.7
 Noise: 0.3

Peak table for sample 9 : wgbs9

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	84	872.50	15,719.6		49.22
3	10,380	75.00	10.9	Upper Marker	113.00

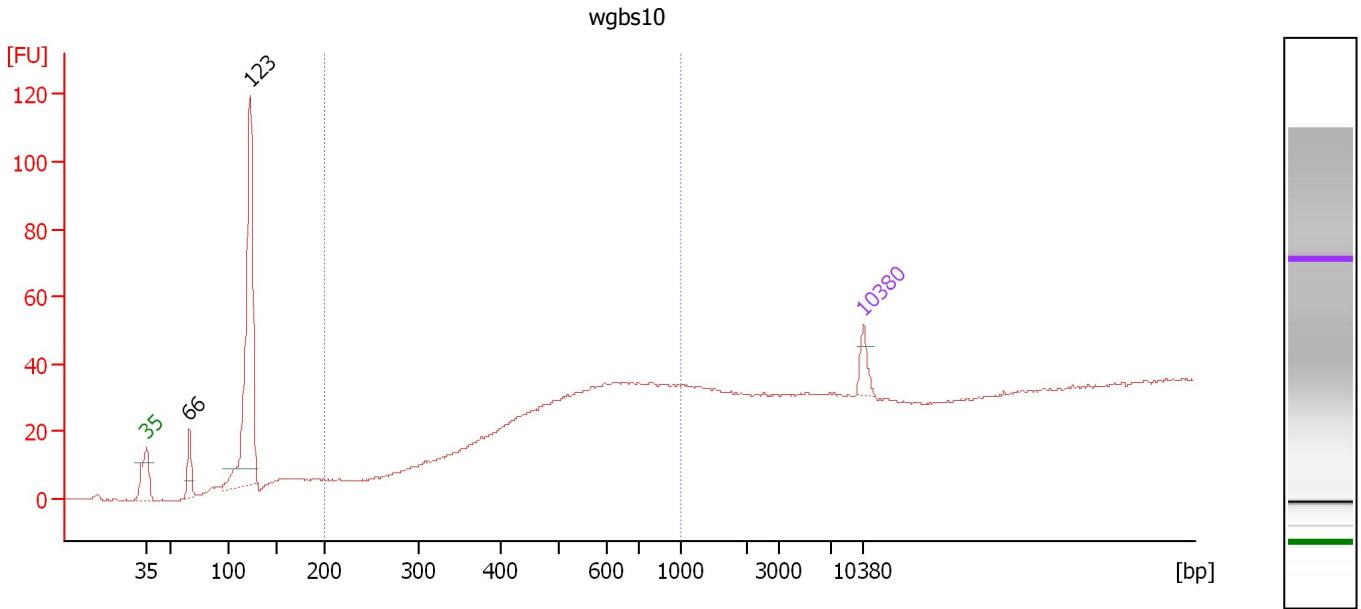
Region table for sample 9 : wgbs9

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	800	15.7	136.2	70.20	5	15.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : wgbs10

Number of peaks found: 2 Corr. Area 1: 330.6
 Noise: 0.3

Peak table for sample 10 : wgbs10

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	66	208.77	4,814.5		47.16
3	123	1,839.88	22,704.0		53.15
4	10,380	75.00	10.9	Upper Marker	113.00

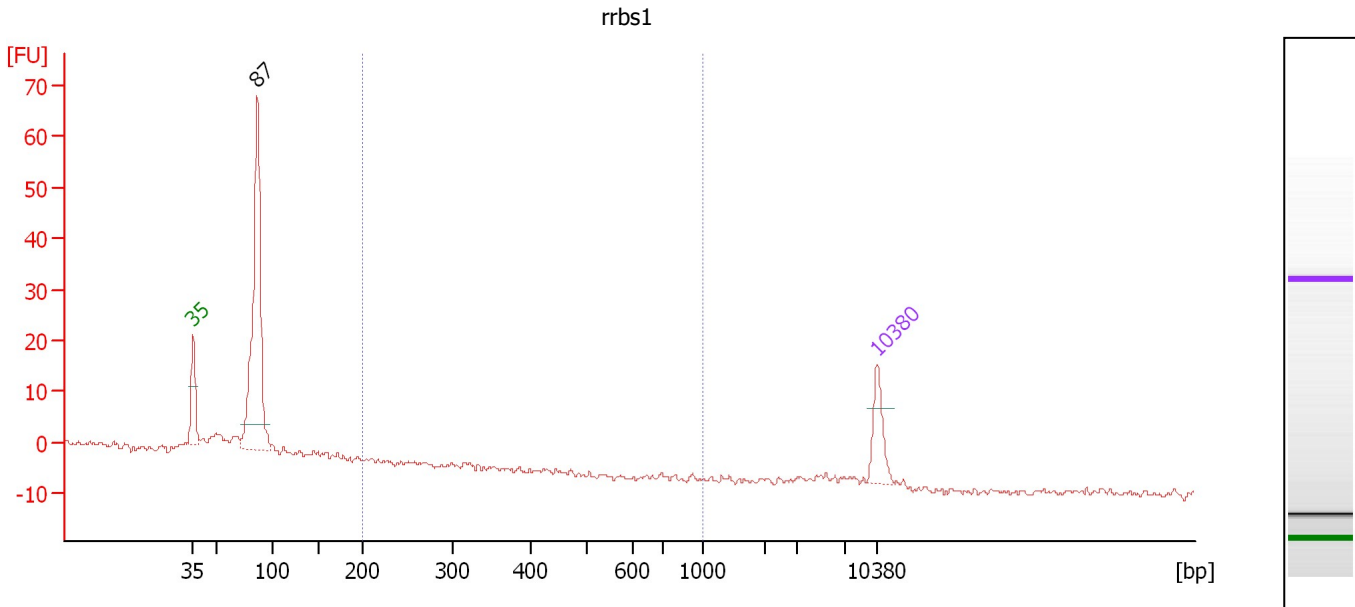
Region table for sample 10 : wgbs10

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	601	330.6	6,169.5	2,229.71	46	26.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : rrbs1

Number of peaks found: 1 Corr. Area 1: 0.0
 Noise: 0.6

Peak table for sample 11 : rrbs1

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	87	785.13	13,662.2		49.55
3	10,380	75.00	10.9	Upper Marker	113.00

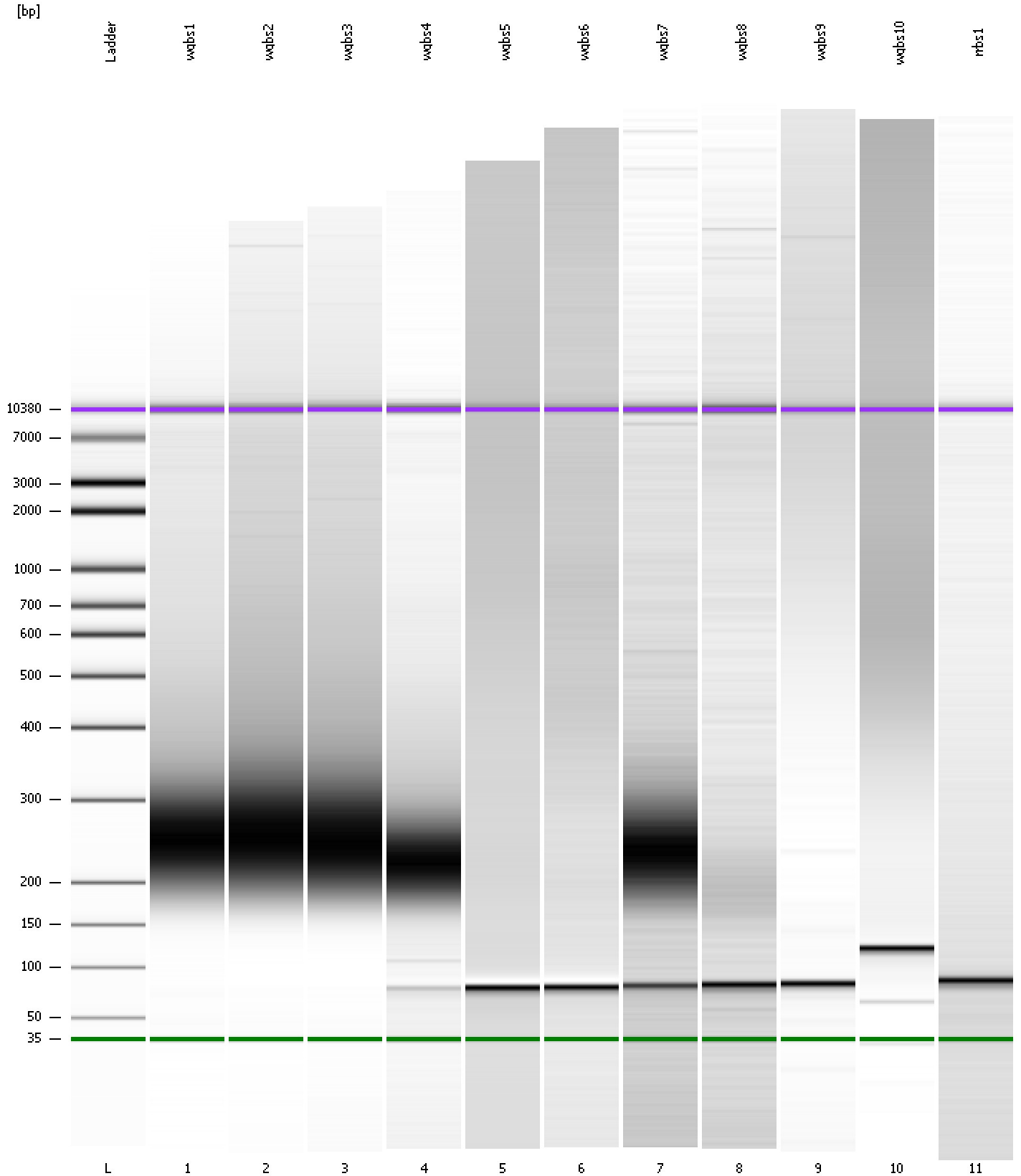
Region table for sample 11 : rrbs1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	0	0.0	0.0	0.00	0	0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
Modified: 2/4/2016 2:44:21 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad

Created: 2/4/2016 2:03:04 PM
 Modified: 2/4/2016 2:44:21 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		2/4/2016 2:44:21 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2016-02-04\2016-02-04_001.xad)		Instrument	Run		2/4/2016 2:03:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/4/2016 2:03:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/4/2016 2:03:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/4/2016 2:03:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/4/2016 2:03:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/4/2016 2:03:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/4/2016 2:03:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1