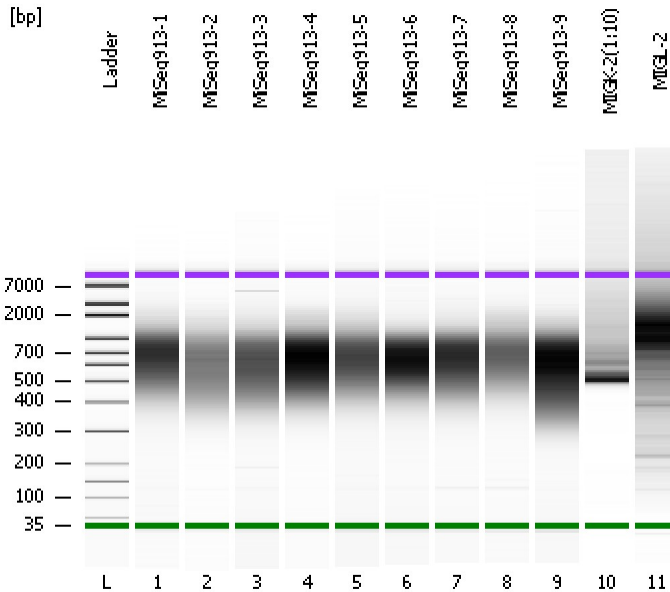


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
Modified: 11/6/2019 2:34:23 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

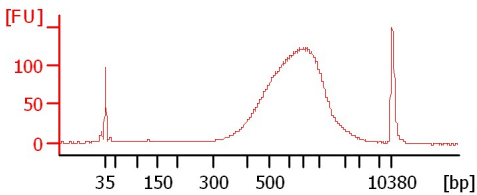
Assay Information:

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

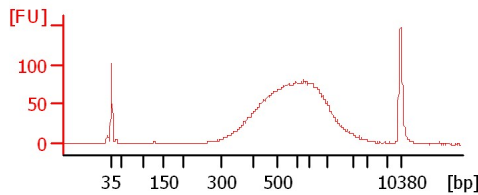
Chip Information:

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

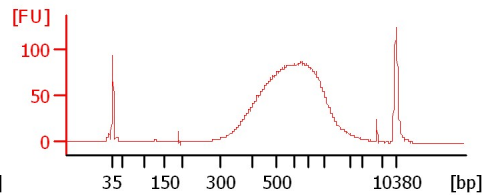
MiSeq913-1



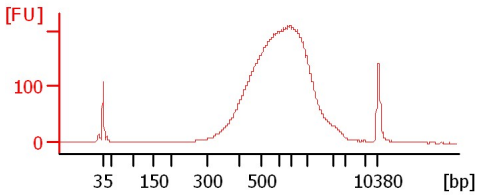
MiSeq913-2



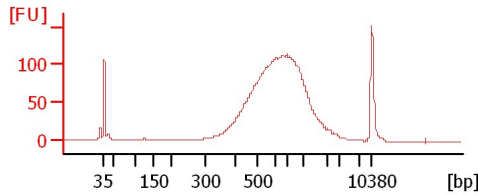
MiSeq913-3



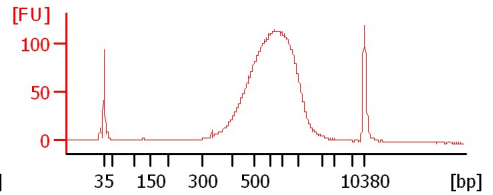
MiSeq913-4



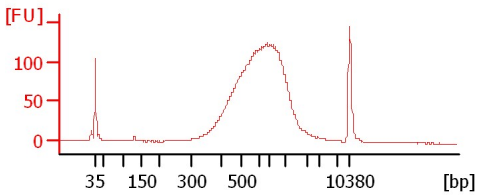
MiSeq913-5



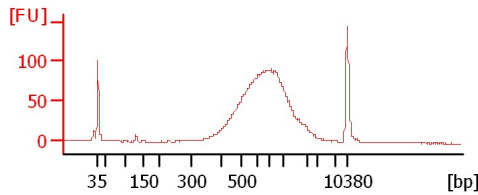
MiSeq913-6



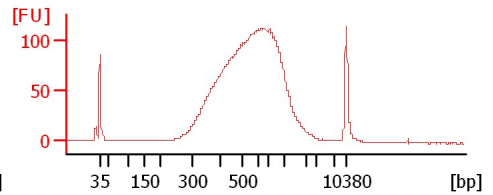
MiSeq913-7



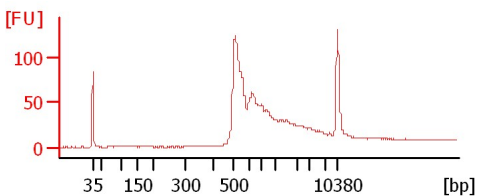
MiSeq913-8



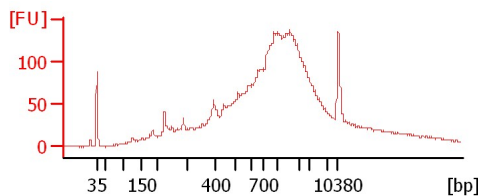
MiSeq913-9



MIGK-2(1:10)



MIGL-2



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
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MiSeq913-2		<input type="checkbox"/>	✓			
MiSeq913-3		<input type="checkbox"/>	✓			
MiSeq913-4		<input type="checkbox"/>	✓			
MiSeq913-5		<input type="checkbox"/>	✓			
MiSeq913-6		<input type="checkbox"/>	✓			
MiSeq913-7		<input type="checkbox"/>	✓			
MiSeq913-8		<input type="checkbox"/>	✓			
MiSeq913-9		<input type="checkbox"/>	✓			
MIGK-2(1:10)		<input type="checkbox"/>	✓			
MIGL-2		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
Modified: 11/6/2019 2:34:23 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

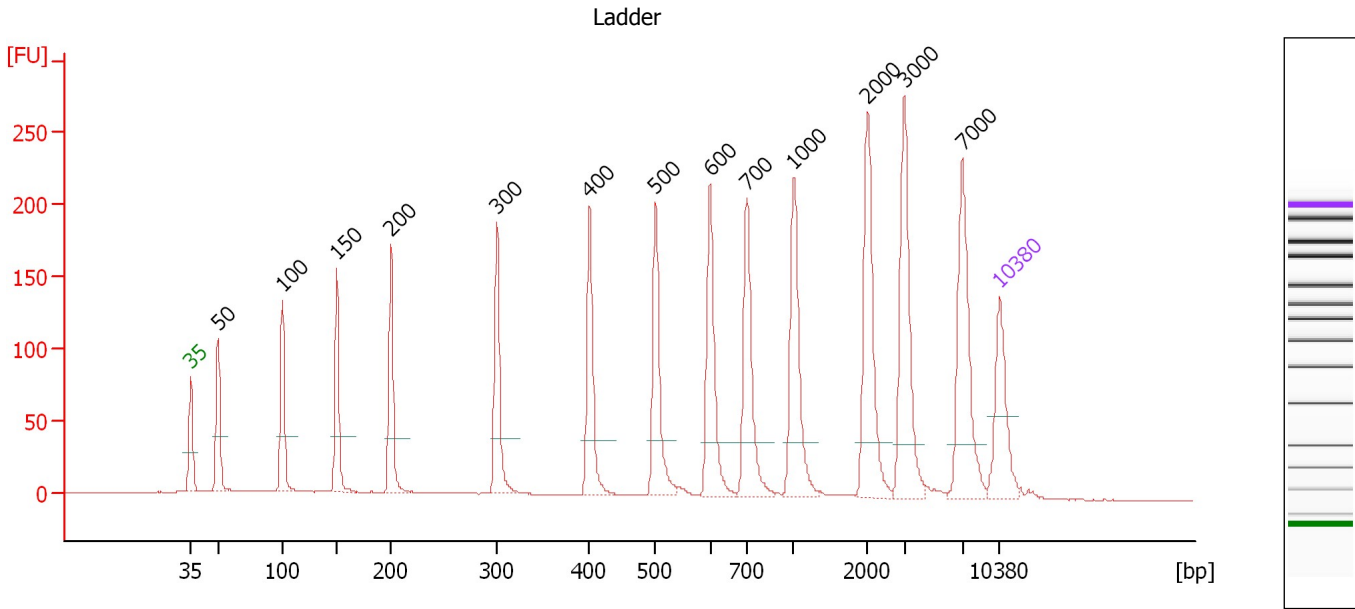
Ladder

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:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

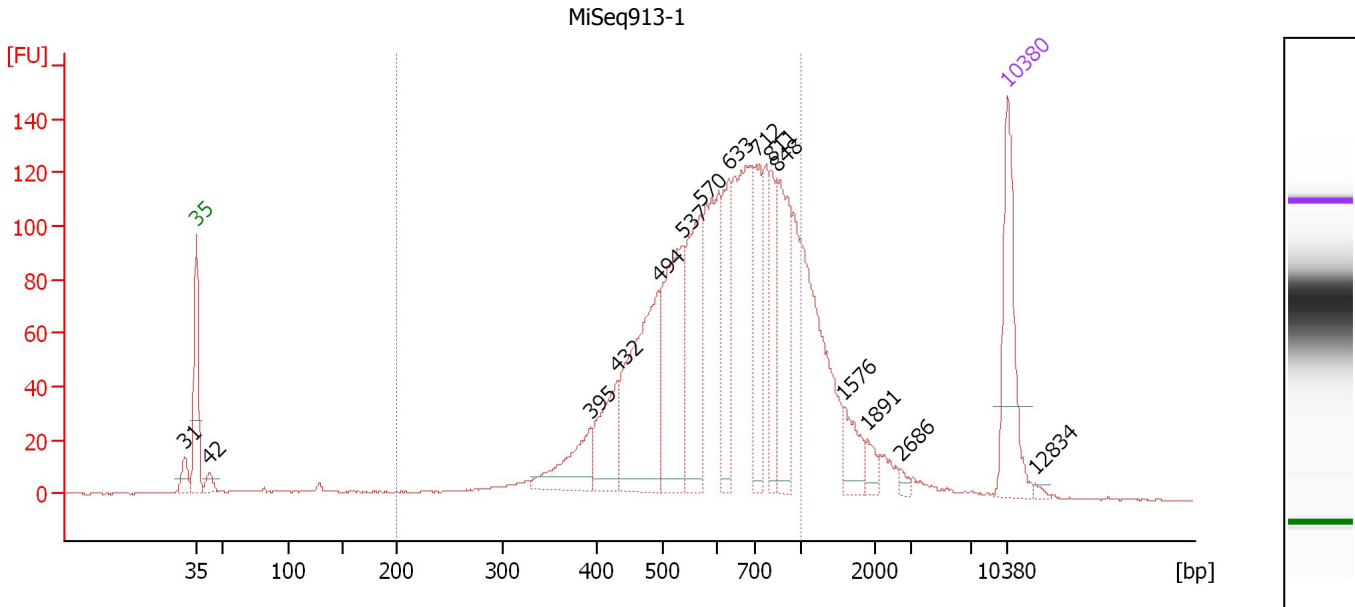
Peak table for Ladder

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	45.35
3	100	150.00	2,272.7	Ladder Peak	50.94
4	150	150.00	1,515.2	Ladder Peak	55.64
5	200	150.00	1,136.4	Ladder Peak	60.35
6	300	150.00	757.6	Ladder Peak	69.49
7	400	150.00	568.2	Ladder Peak	77.52
8	500	150.00	454.5	Ladder Peak	83.24
9	600	150.00	378.8	Ladder Peak	87.94
10	700	150.00	324.7	Ladder Peak	91.13
11	1,000	150.00	227.3	Ladder Peak	95.19
12	2,000	150.00	113.6	Ladder Peak	101.60
13	3,000	150.00	75.8	Ladder Peak	104.74
14	7,000	150.00	32.5	Ladder Peak	109.77
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : MiSeq913-1

Number of peaks found: 15 Corr. Area 1: 2,032.3
 Noise: 0.2

Peak table for sample 1 : MiSeq913-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.99
2	35	125.00	5,411.3	Lower Marker	43.00
3	42	12.88	464.1		44.10
4	395	56.78	218.0		77.08
5	432	66.87	234.7		79.33
6	494	178.94	549.2		82.88
7	537	145.46	410.2		84.99
8	570	118.16	314.4		86.51
9	633	69.97	167.5		88.99
10	712	70.06	149.1		91.29
11	811	49.34	92.2		92.63
12	848	98.10	175.3		93.13
13	1,576	26.55	25.5		98.88
14	1,891	11.05	8.9		100.90
15	2,686	4.04	2.3		103.76
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,834	0.00	0.0		115.35

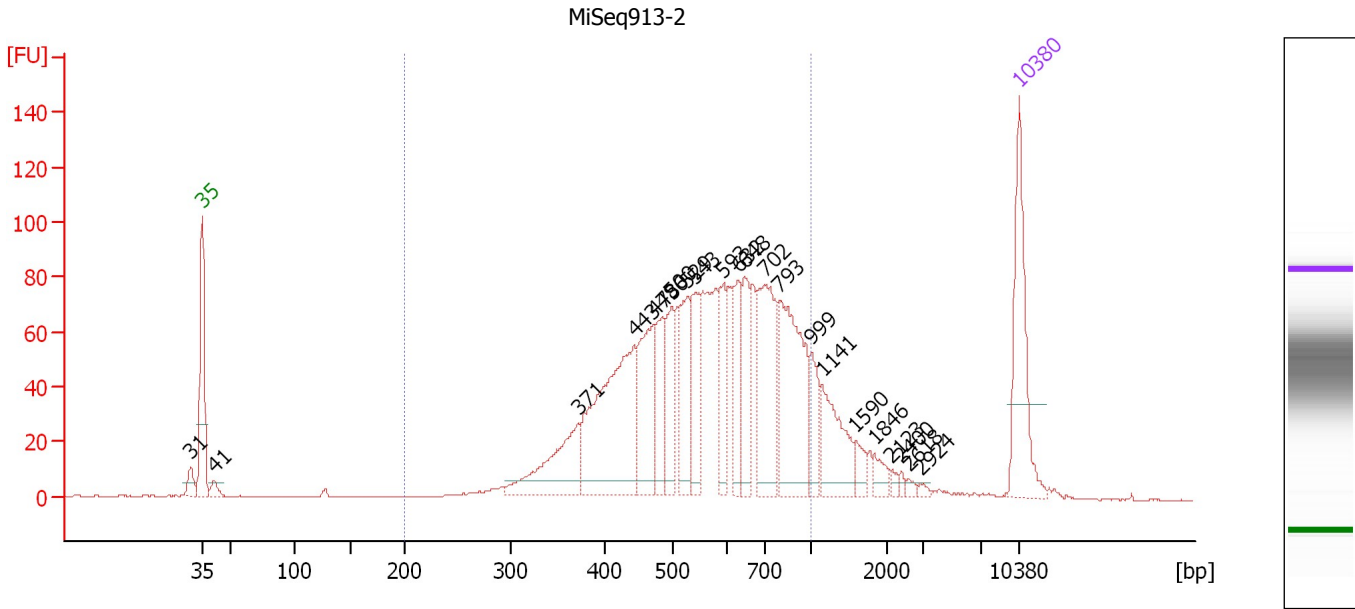
Region table for sample 1 : MiSeq913-1

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	624	1,338.41	2,032.3	3,597.6	82	26.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : MiSeq913-2

Number of peaks found: 22 Corr. Area 1: 1,632.6
 Noise: 0.2

Peak table for sample 2 : MiSeq913-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.99
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	11.05	407.3		43.96
4	371	85.84	350.8		75.17
5	443	197.78	676.7		79.96
6	473	87.84	281.3		81.70
7	486	49.95	155.7		82.43
8	500	51.86	157.3		83.21
9	529	58.40	167.4		84.58
10	543	53.28	148.6		85.27
11	593	45.56	116.5		87.60
12	632	43.09	103.3		88.97
13	648	49.38	115.5		89.47
14	702	105.94	228.6		91.16
15	793	127.00	242.5		92.39
16	999	30.08	45.6		95.18
17	1,141	56.71	75.3		96.09
18	1,590	12.16	11.6		98.97
19	1,846	10.61	8.7		100.62
20	2,123	3.50	2.5		101.99
21	2,400	2.82	1.8		102.86
22	2,618	3.01	1.7		103.54
23	2,924	2.56	1.3		104.50
24	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary Continued ...

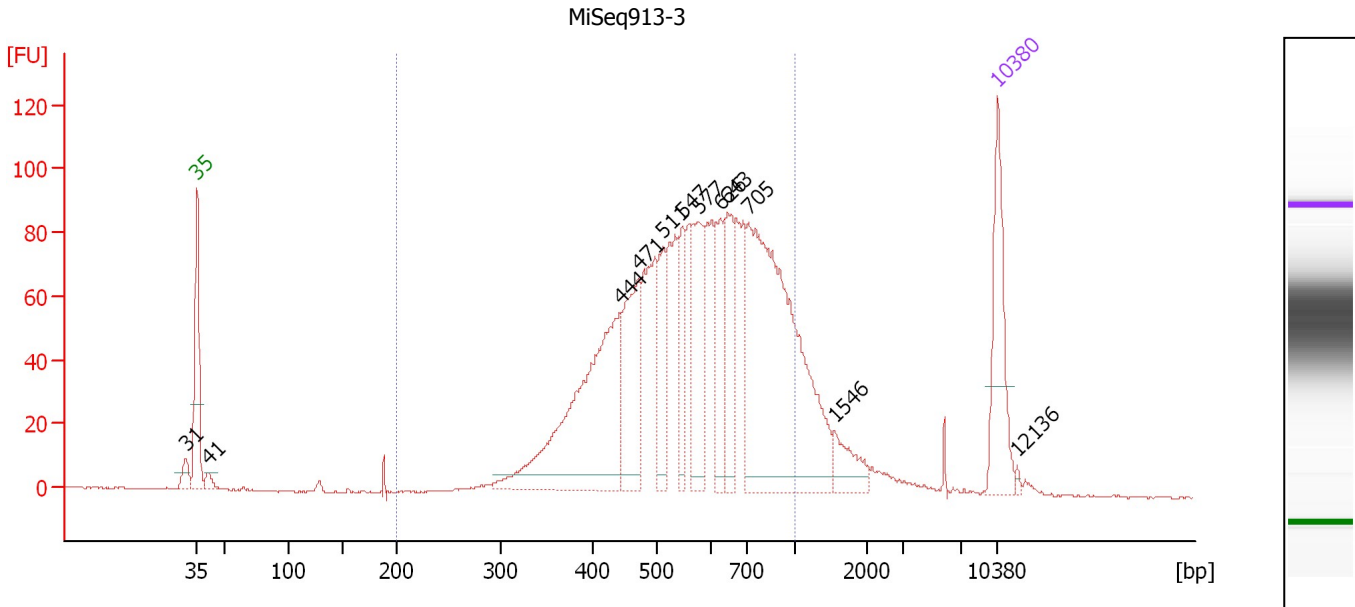
... Region table for sample 2 : MiSeq913-2

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ μ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	579	1,208.48	1,632.6	3,517.7	 87	28.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : MiSeq913-3

Number of peaks found: 12 Corr. Area 1: 1,699.0
 Noise: 0.3

Peak table for sample 3 : MiSeq913-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.97
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	12.14	446.2		43.98
4	444	300.22	1,023.8		80.05
5	471	116.39	374.3		81.59
6	511	60.54	179.7		83.73
7	547	50.64	140.2		85.46
8	577	92.08	241.9		86.85
9	626	60.09	145.5		88.77
10	643	72.79	171.4		89.32
11	705	403.59	868.0		91.19
12	1,546	31.38	30.7		98.69
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,136	0.00	0.0		114.68

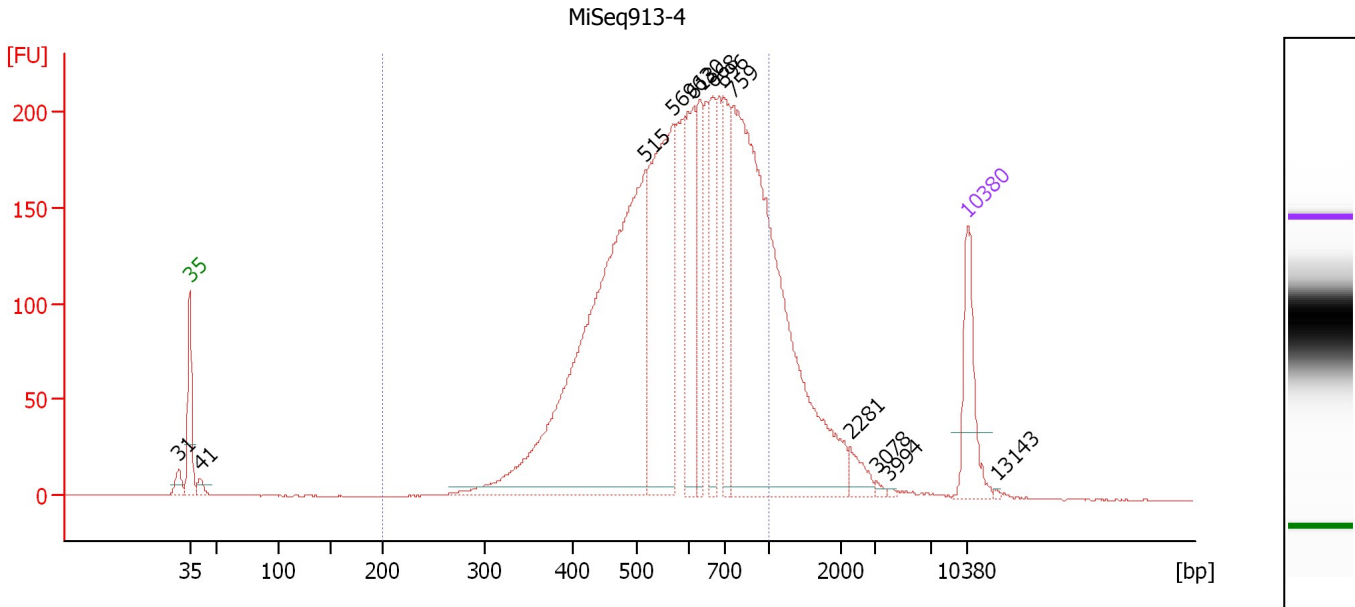
Region table for sample 3 : MiSeq913-3

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	588	1,467.78	1,699.0	4,163.3	88	27.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : MiSeq913-4

Number of peaks found: 13 Corr. Area 1: 3,739.7
 Noise: 0.3

Peak table for sample 4 : MiSeq913-4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.99
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	15.25	561.9		43.96
4	515	901.52	2,651.2		83.95
5	569	366.88	976.5		86.50
6	613	155.83	384.9		88.37
7	630	98.82	237.7		88.90
8	668	123.55	280.4		90.10
9	696	123.08	267.8		91.01
10	759	805.78	1,609.0		91.92
11	2,281	22.22	14.8		102.49
12	3,078	3.60	1.8		104.84
13	3,994	1.95	0.7		105.99
14	10,380	75.00	10.9	Upper Marker	113.00
15	13,143	0.00	0.0		115.64

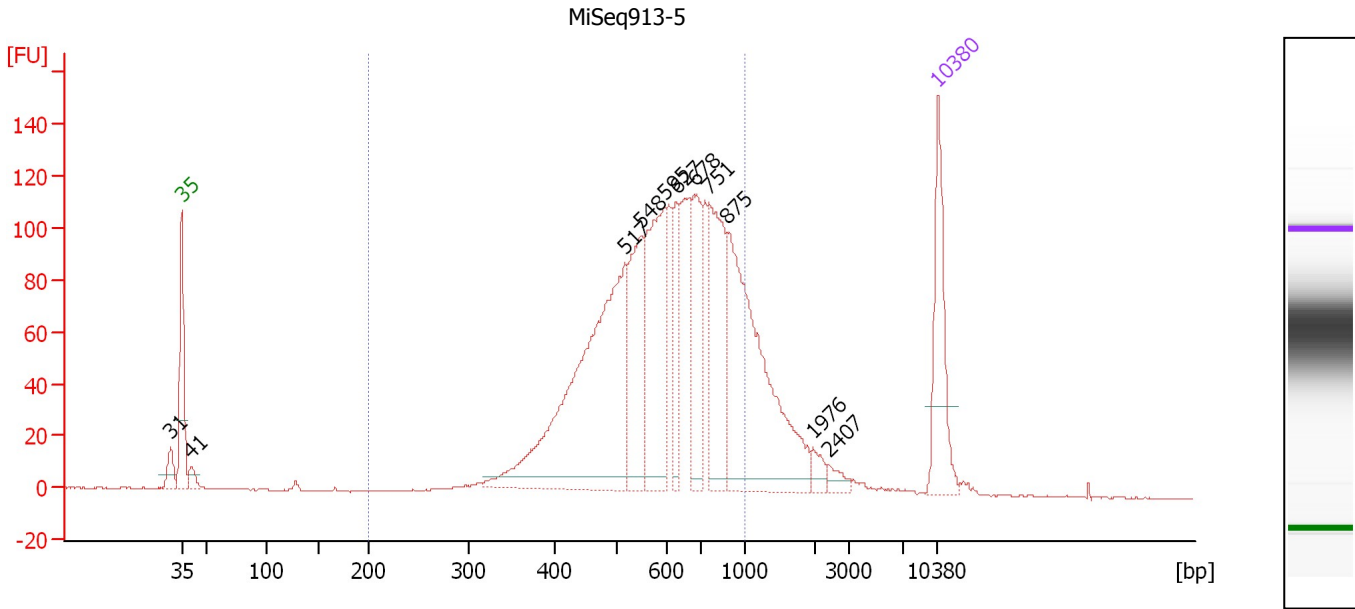
Region table for sample 4 : MiSeq913-4

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	607	2,623.92	3,739.7	7,201.2	86	26.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : MiSeq913-5

Number of peaks found: 11 Corr. Area 1: 1,882.5
 Noise: 0.2

Peak table for sample 5 : MiSeq913-5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.96
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	16.28	606.7		43.89
4	517	408.15	1,196.9		84.02
5	548	119.44	330.1		85.50
6	595	159.85	406.8		87.72
7	627	54.98	132.8		88.81
8	678	91.18	203.6		90.44
9	751	134.67	271.6		91.82
10	875	276.21	478.1		93.50
11	1,976	11.98	9.2		101.45
12	2,407	9.23	5.8		102.88
13	10,380	75.00	10.9	Upper Marker	113.00

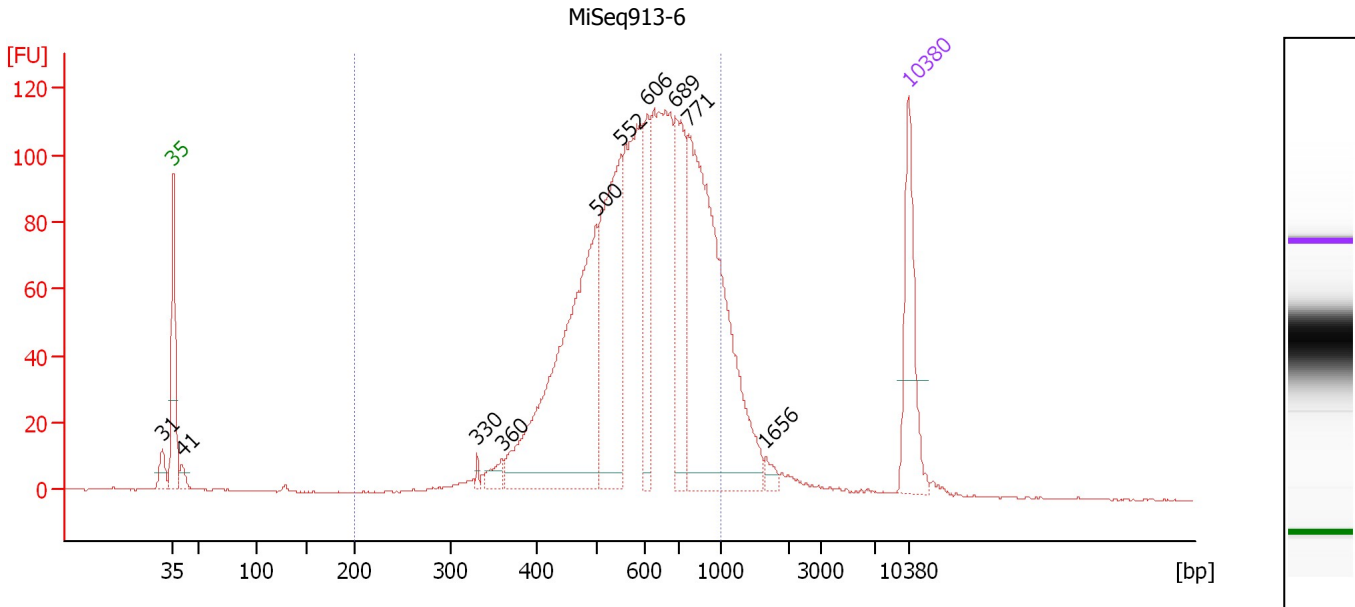
Region table for sample 5 : MiSeq913-5

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	617	1,337.59	1,882.5	3,584.4	84	25.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : MiSeq913-6

Number of peaks found: 10 Corr. Area 1: 1,824.8
 Noise: 0.2

Peak table for sample 6 : MiSeq913-6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.93
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	14.77	552.5		43.86
4	330	4.64	21.3		71.93
5	360	14.53	61.1		74.32
6	500	379.89	1,150.4		83.25
7	552	206.89	567.8		85.69
8	606	75.65	189.2		88.13
9	689	139.06	306.0		90.77
10	771	387.61	761.9		92.09
11	1,656	8.01	7.3		99.40
12	10,380	75.00	10.9	Upper Marker	113.00

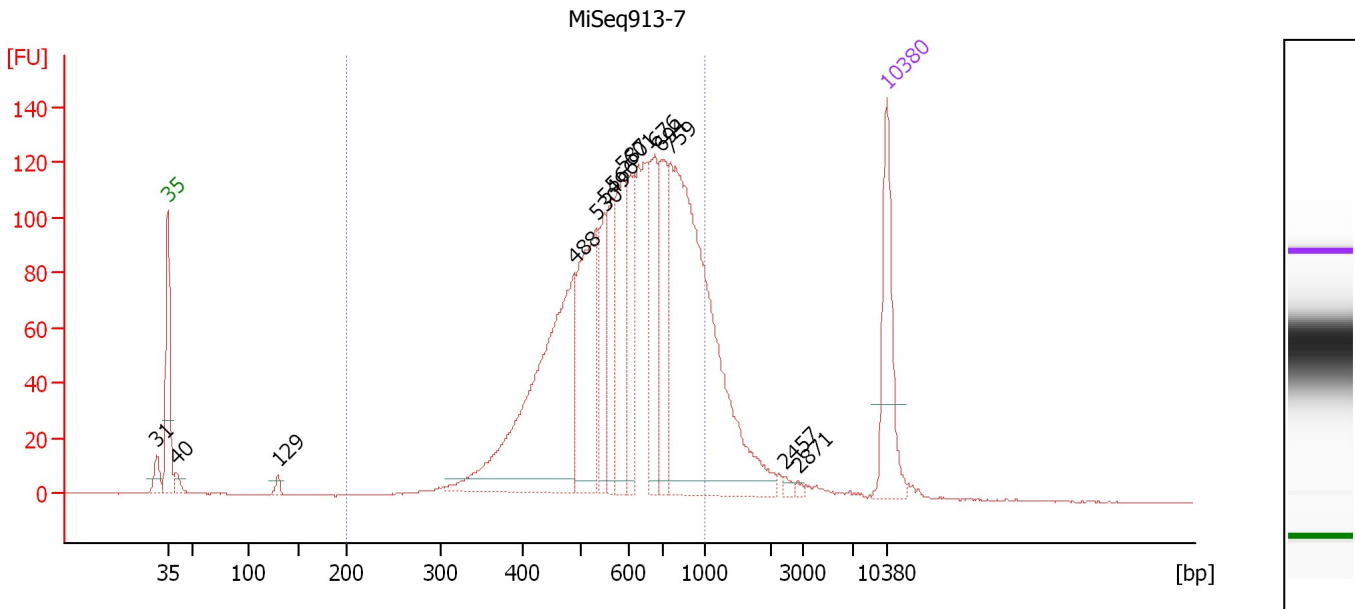
Region table for sample 6 : MiSeq913-6

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	617	1,601.60	1,824.8	4,276.1	88	24.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : MiSeq913-7

Number of peaks found: 14 Corr. Area 1: 2,027.9
 Noise: 0.2

Peak table for sample 7 : MiSeq913-7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.91
2	35	125.00	5,411.3	Lower Marker	43.00
3	40	13.14	498.2		43.78
4	129	7.44	87.2		53.69
5	488	342.22	1,062.9		82.54
6	530	161.74	462.0		84.67
7	549	60.39	166.6		85.55
8	566	62.41	167.2		86.33
9	587	105.48	272.4		87.31
10	601	69.75	175.7		87.99
11	676	93.90	210.4		90.38
12	694	83.85	183.0		90.95
13	759	445.54	888.9		91.93
14	2,457	3.54	2.2		103.04
15	2,871	2.37	1.2		104.33
16	10,380	75.00	10.9	Upper Marker	113.00

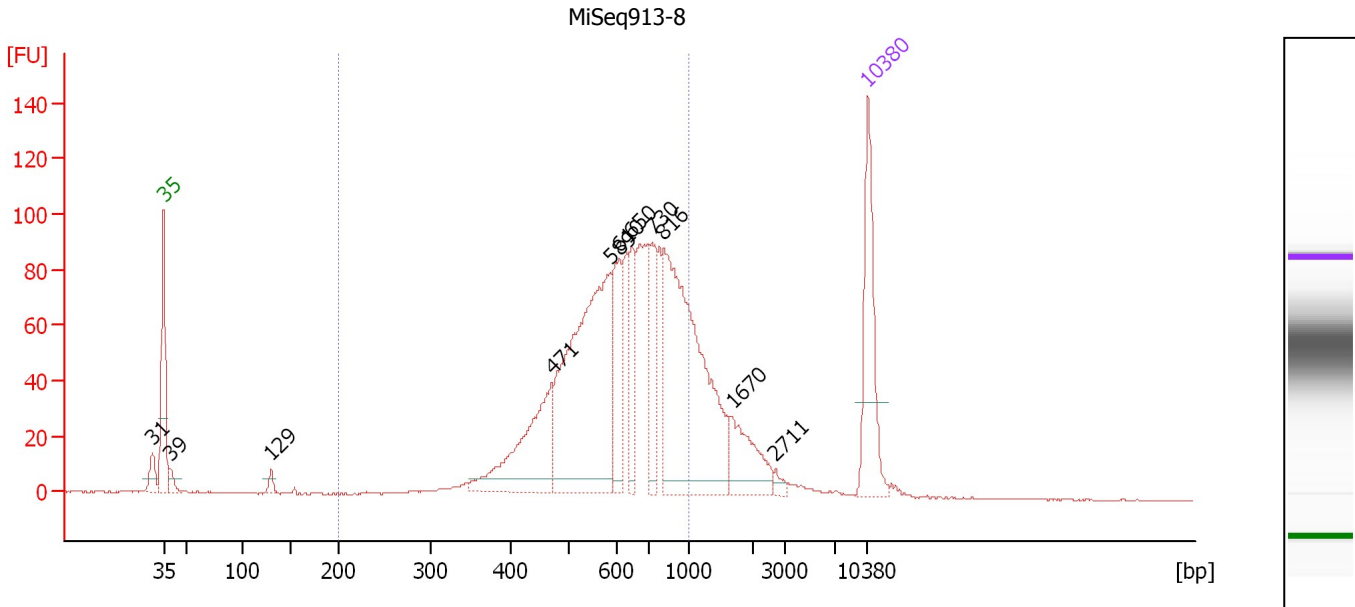
Region table for sample 7 : MiSeq913-7

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	616	1,458.81	2,027.9	3,930.8	86	25.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : MiSeq913-8

Number of peaks found: 11 Corr. Area 1: 1,331.9
 Noise: 0.2

Peak table for sample 8 : MiSeq913-8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.89
2	35	125.00	5,411.3	Lower Marker	43.00
3	39	12.78	491.6		43.69
4	129	9.04	105.9		53.70
5	471	130.77	420.7		81.58
6	589	288.39	742.4		87.41
7	610	65.55	162.9		88.25
8	650	47.76	111.4		89.53
9	730	52.03	107.9		91.54
10	816	287.43	533.4		92.70
11	1,670	48.25	43.8		99.49
12	2,711	4.99	2.8		103.83
13	10,380	75.00	10.9	Upper Marker	113.00

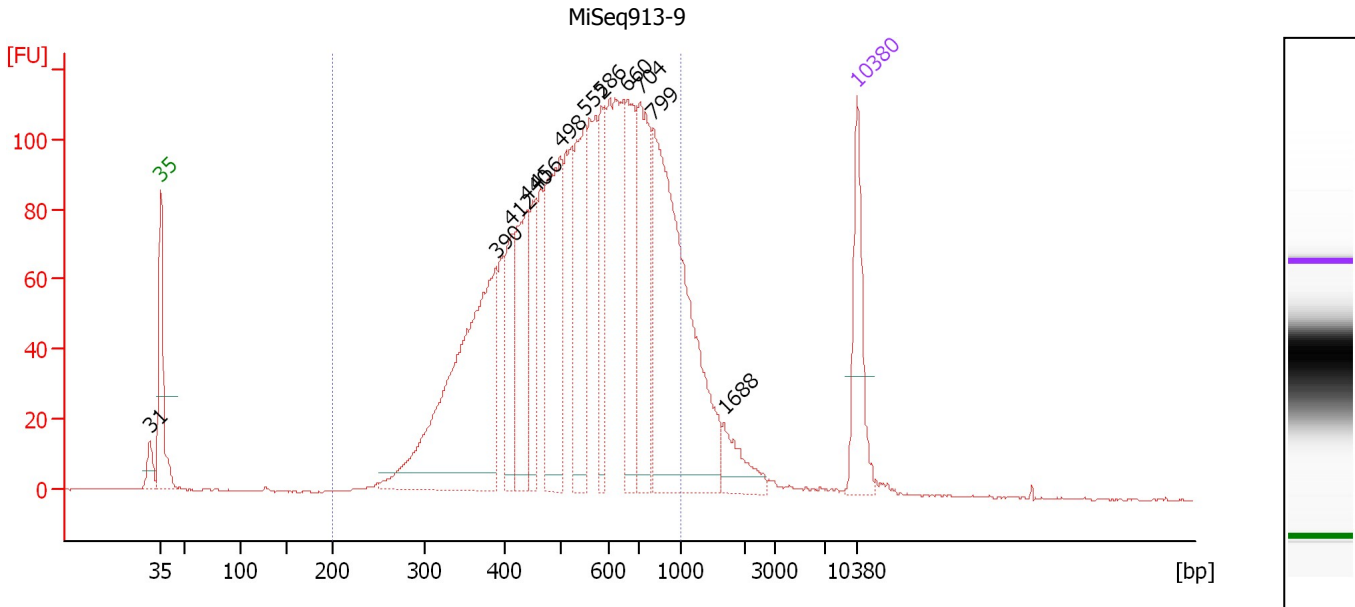
Region table for sample 8 : MiSeq913-8

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	637	966.43	1,331.9	2,501.3	79	24.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : MiSeq913-9

Number of peaks found: 12 Corr. Area 1: 2,465.7
 Noise: 0.1

Peak table for sample 9 : MiSeq913-9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.87
2	35	125.00	5,411.3	Lower Marker	43.00
3	390	424.46	1,649.0		76.71
4	412	89.96	330.7		78.21
5	440	141.69	487.6		79.82
6	456	74.69	248.0		80.73
7	498	211.92	644.3		83.15
8	552	140.95	387.2		85.66
9	586	78.31	202.6		87.27
10	660	132.88	305.2		89.85
11	704	158.64	341.3		91.19
12	799	407.30	772.1		92.47
13	1,688	37.30	33.5		99.60
14	10,380	75.00	10.9	Upper Marker	113.00

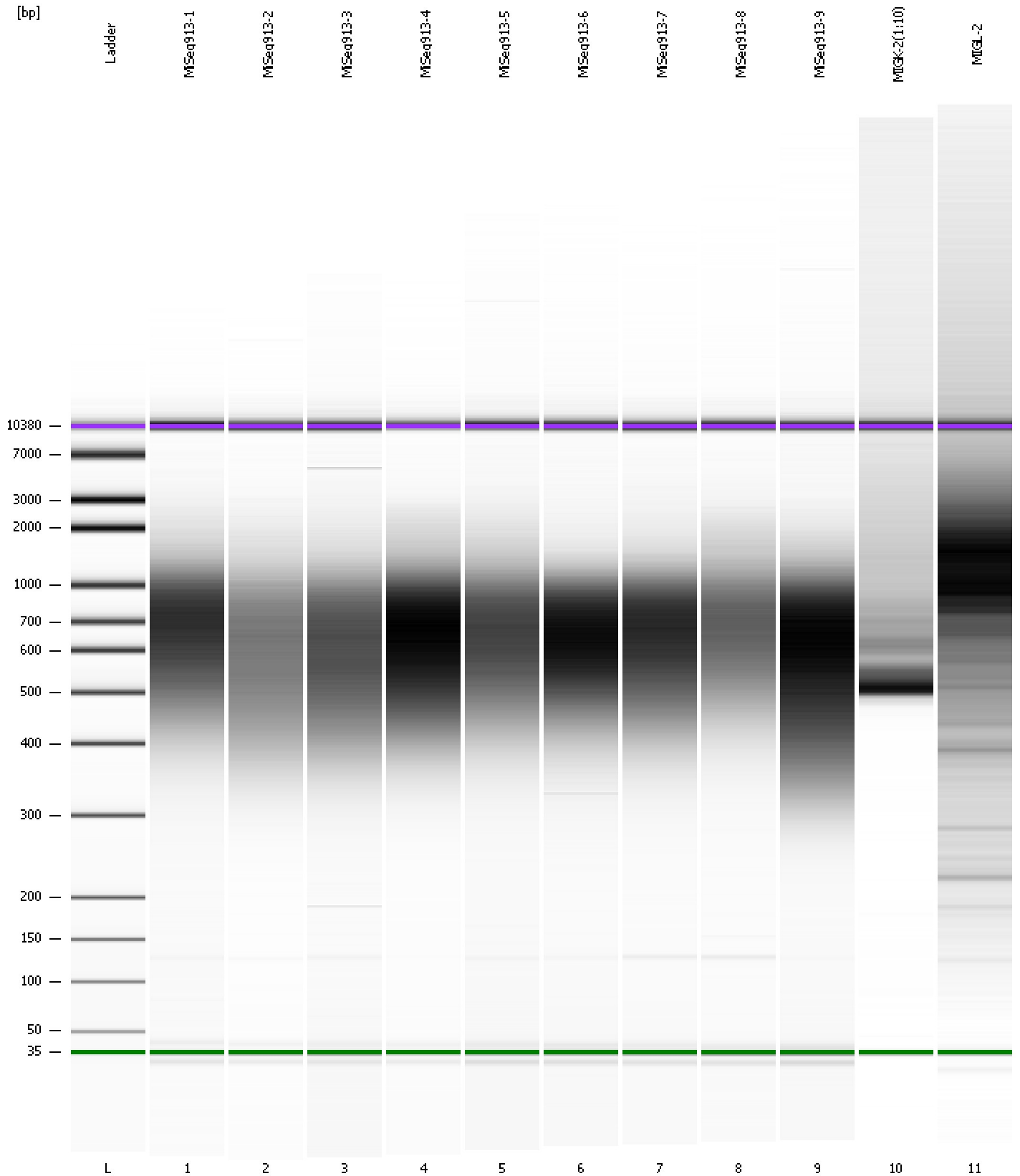
Region table for sample 9 : MiSeq913-9

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	562	2,371.75	2,465.7	7,249.6	89	30.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
Modified: 11/6/2019 2:34:23 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad

Created: 11/6/2019 1:53:04 PM
 Modified: 11/6/2019 2:34:23 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		11/6/2019 2:34:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-11-06\2019-11-06_003.xad)		Instrument	Run		11/6/2019 1:53:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		11/6/2019 1:53:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/6/2019 1:53:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/6/2019 1:53:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		11/6/2019 1:53:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/6/2019 1:53:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/6/2019 1:53:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1