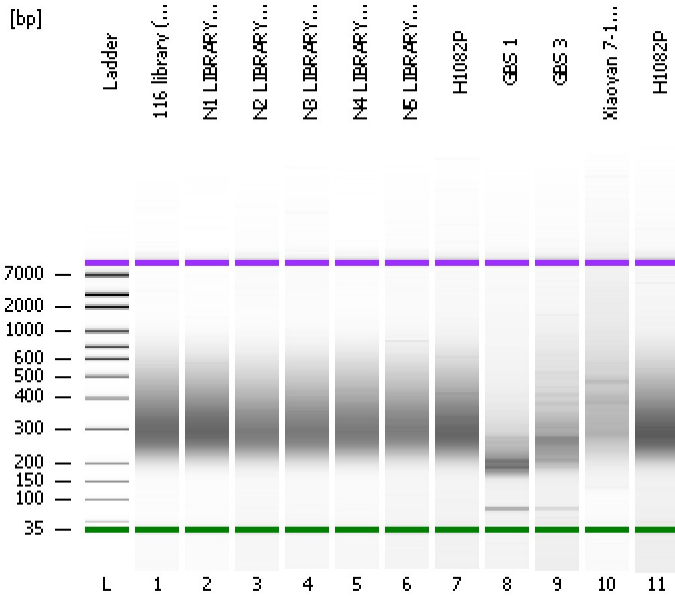


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
Modified: 7/13/2017 1:44:53 PM

Electrophoresis File Run Summary



Instrument Information:

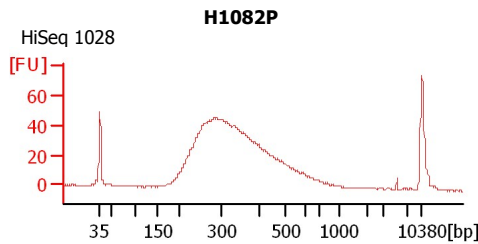
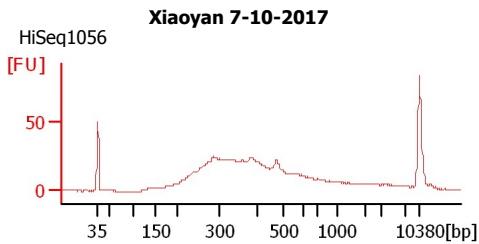
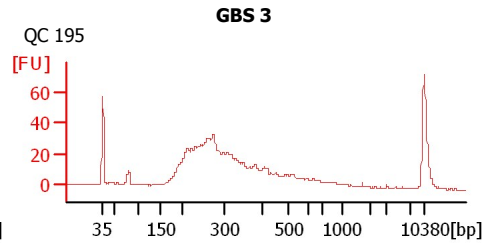
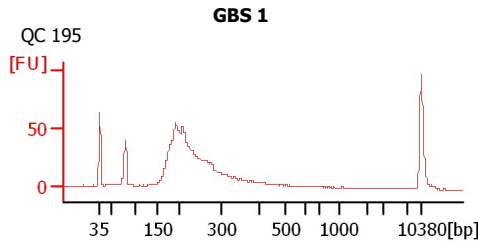
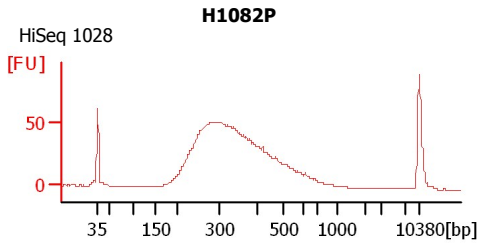
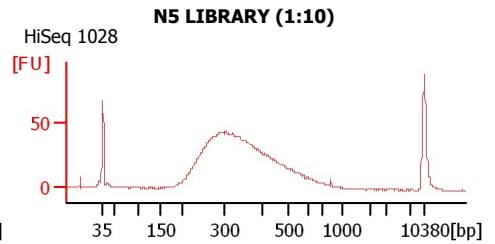
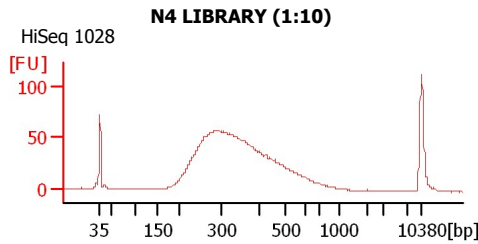
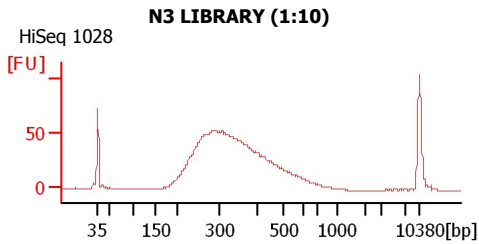
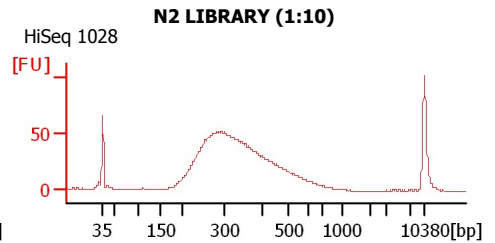
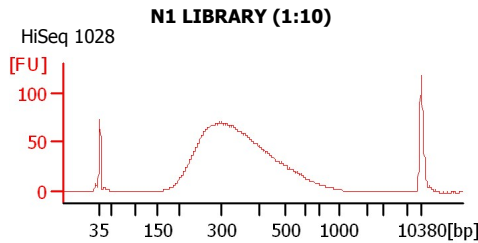
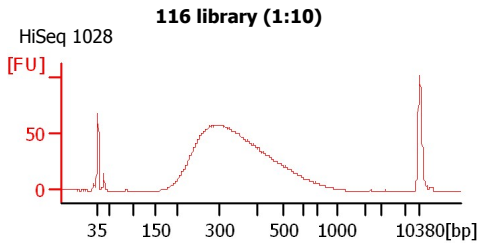
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
Modified: 7/13/2017 1:44:53 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
116 library (1:10)	HiSeq 1028	<input type="checkbox"/>	✓			
N1 LIBRARY (1:10)	HiSeq 1028	<input type="checkbox"/>	✓			
N2 LIBRARY (1:10)	HiSeq 1028	<input type="checkbox"/>	✓			
N3 LIBRARY (1:10)	HiSeq 1028	<input type="checkbox"/>	✓			
N4 LIBRARY (1:10)	HiSeq 1028	<input type="checkbox"/>	✓			
N5 LIBRARY (1:10)	HiSeq 1028	<input type="checkbox"/>	✓			
H1082P	HiSeq 1028	<input type="checkbox"/>	✓			
GBS 1	QC 195	<input type="checkbox"/>	✓			
GBS 3	QC 195	<input type="checkbox"/>	✓			
Xiaoyan 7-10-2017	HiSeq1056	<input type="checkbox"/>	✓			
H1082P	HiSeq 1028	<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\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
Modified: 7/13/2017 1:44:53 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

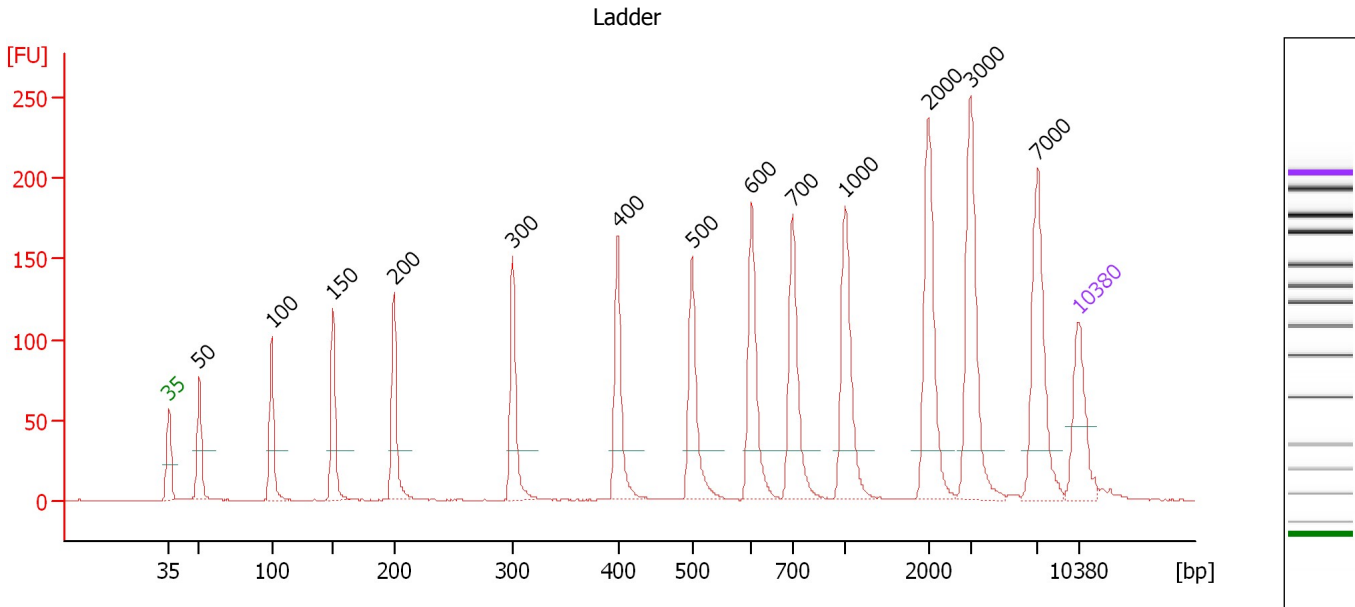
**Ladder**

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\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

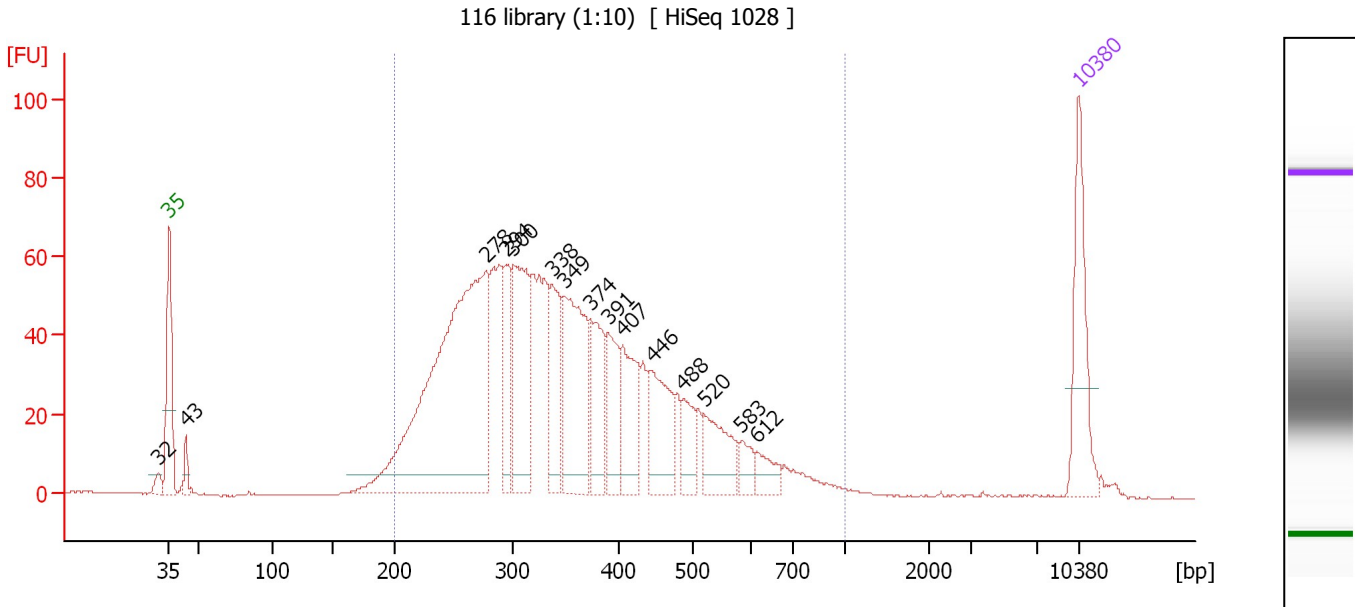
**Peak table for Ladder**

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	45.33
3	100	150.00	2,272.7	Ladder Peak	50.89
4	150	150.00	1,515.2	Ladder Peak	55.64
5	200	150.00	1,136.4	Ladder Peak	60.30
6	300	150.00	757.6	Ladder Peak	69.47
7	400	150.00	568.2	Ladder Peak	77.55
8	500	150.00	454.5	Ladder Peak	83.25
9	600	150.00	378.8	Ladder Peak	87.86
10	700	150.00	324.7	Ladder Peak	91.00
11	1,000	150.00	227.3	Ladder Peak	95.04
12	2,000	150.00	113.6	Ladder Peak	101.45
13	3,000	150.00	75.8	Ladder Peak	104.68
14	7,000	150.00	32.5	Ladder Peak	109.86
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 116 library (1:10)**

Number of peaks found: 15                      Corr. Area 1: 1,493.8  
 Noise: 0.2

**Peak table for sample 1 : 116 library (1:10)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.18
2	35	125.00	5,411.3	Lower Marker	43.00
3	43	18.53	646.6		44.31
4	278	569.30	3,107.5		67.41
5	294	71.52	368.0		68.96
6	300	155.42	784.3		69.49
7	338	84.14	377.2		72.54
8	349	158.53	688.7		73.41
9	374	84.27	341.5		75.44
10	391	65.40	253.7		76.79
11	407	77.57	288.7		77.95
12	446	83.89	285.0		80.18
13	488	36.65	113.7		82.59
14	520	60.07	174.9		84.19
15	583	18.76	48.7		87.09
16	612	21.52	53.2		88.25
17	10,380	75.00	10.9	Upper Marker	113.00

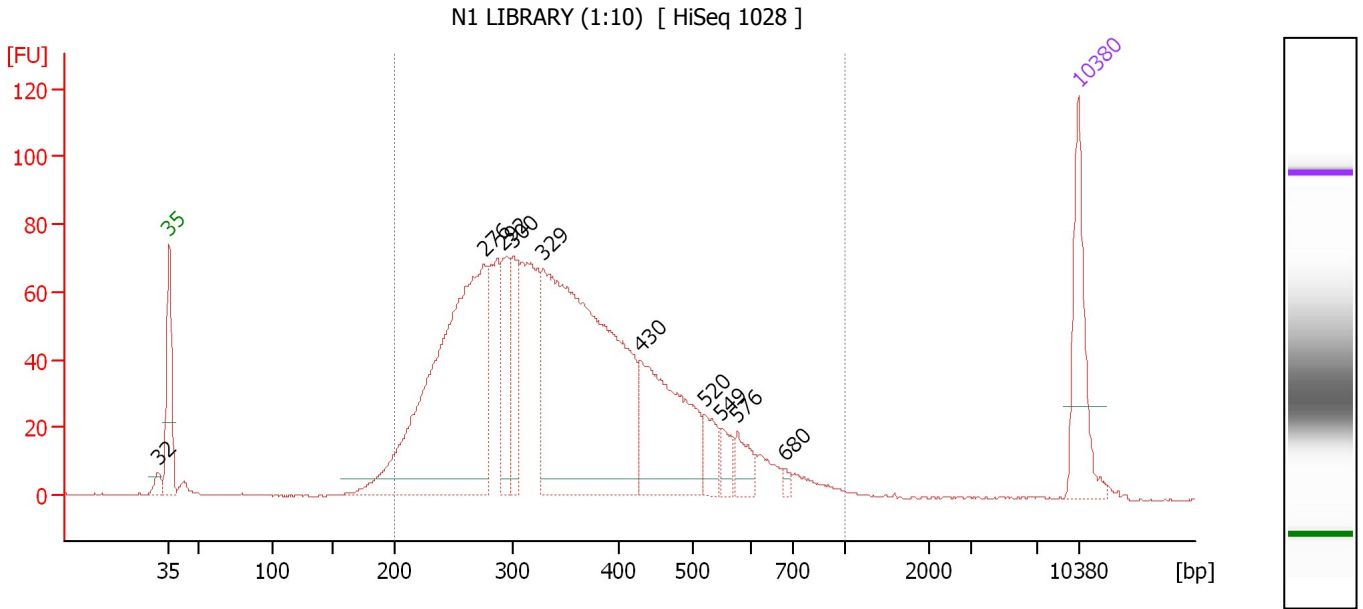
**Region table for sample 1 : 116 library (1:10)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	362	1,493.8	8,916.7	1,901.17	96	31.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : N1 LIBRARY (1:10)**

Number of peaks found: 10                      Corr. Area 1: 1,801.4  
 Noise: 0.2

**Peak table for sample 2 : N1 LIBRARY (1:10)**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.12
2	35	125.00	5,411.3	Lower Marker	43.00
3	276	571.34	3,139.8		67.24
4	292	80.94	420.5		68.70
5	300	79.01	398.9		69.48
6	329	627.66	2,890.0		71.82
7	430	201.01	708.1		79.27
8	520	33.13	96.5		84.18
9	549	21.55	59.5		85.50
10	576	27.21	71.5		86.76
11	680	4.98	11.1		90.36
12	10,380	75.00	10.9	Upper Marker	113.00

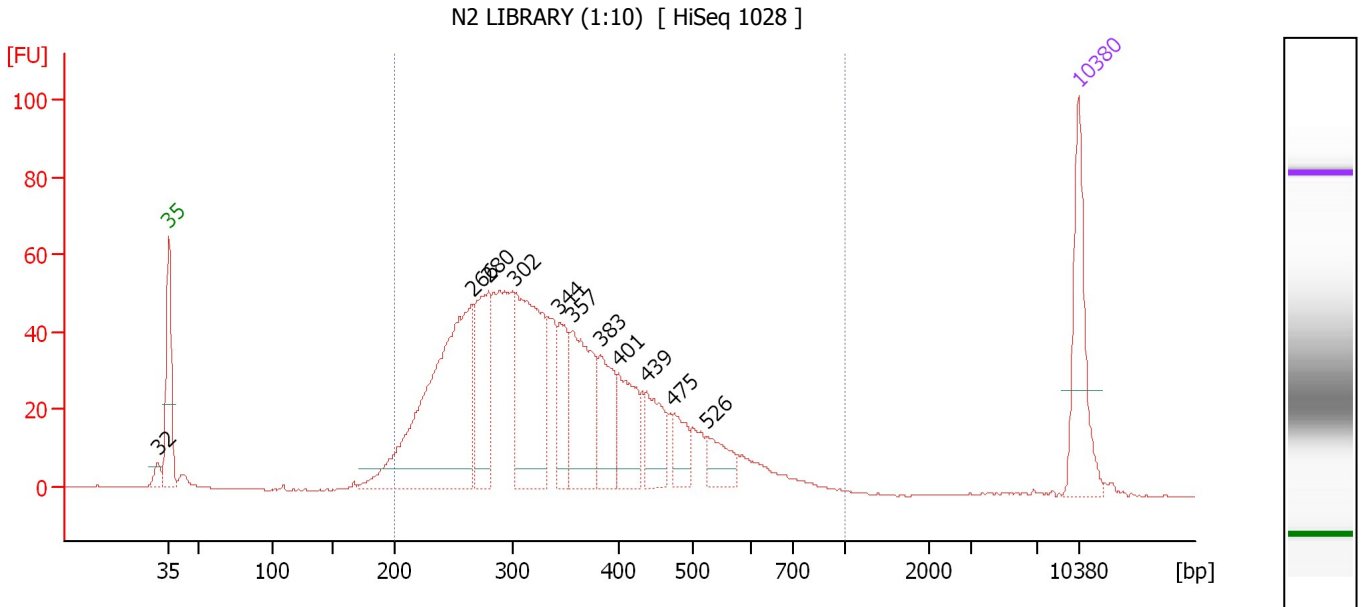
**Region table for sample 2 : N1 LIBRARY (1:10)**

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	361	1,801.4	9,226.9	1,965.88	96	31.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : N2 LIBRARY (1:10)**

Number of peaks found: 11                      Corr. Area 1: 1,260.7  
 Noise: 0.2

**Peak table for sample 3 : N2 LIBRARY (1:10)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.11
2	35	125.00	5,411.3	Lower Marker	43.00
3	266	383.71	2,185.8		66.35
4	280	128.01	692.8		67.63
5	302	224.45	1,127.5		69.60
6	344	65.18	286.8		73.05
7	357	127.66	542.6		74.03
8	383	72.31	285.8		76.20
9	401	71.82	271.7		77.58
10	439	54.05	186.4		79.80
11	475	33.17	105.8		81.82
12	526	34.45	99.3		84.43
13	10,380	75.00	10.9	Upper Marker	113.00

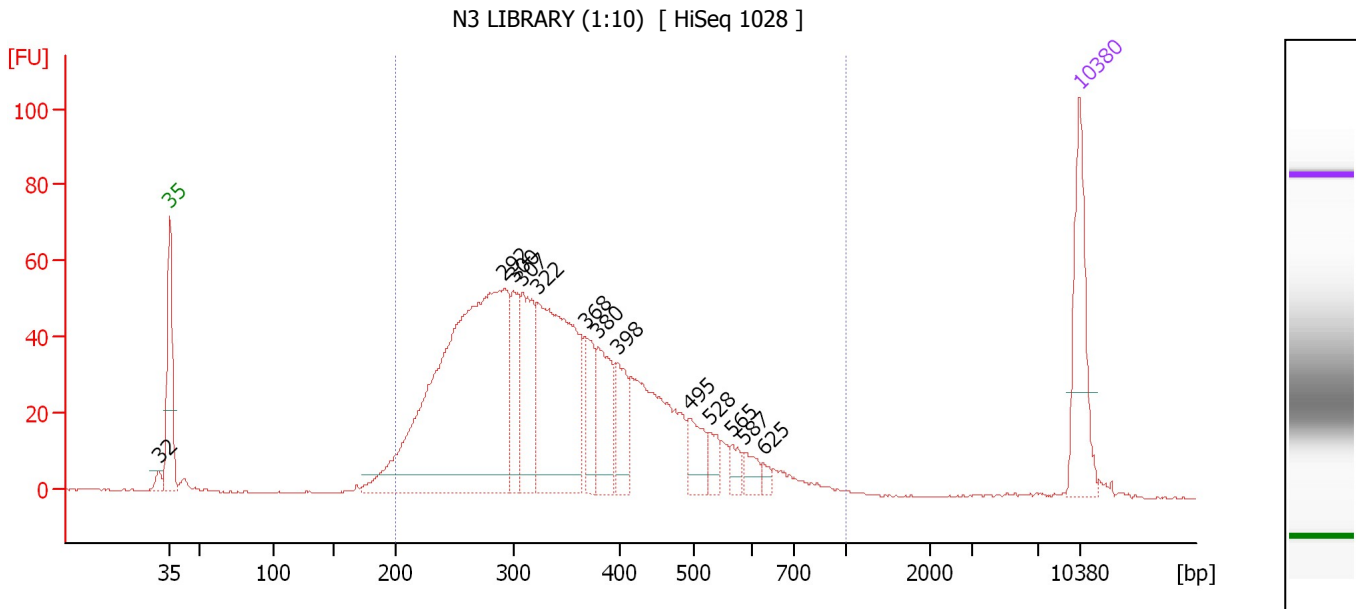
**Region table for sample 3 : N2 LIBRARY (1:10)**

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	353	1,260.7	7,410.1	1,551.81	95	31.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : N3 LIBRARY (1:10)**

Number of peaks found: 13                      Corr. Area 1: 1,337.5  
 Noise: 0.1

**Peak table for sample 4 : N3 LIBRARY (1:10)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.15
2	35	125.00	5,411.3	Lower Marker	43.00
3	292	633.76	3,286.8		68.75
4	300	61.87	312.7		69.45
5	307	109.16	538.4		70.05
6	322	280.91	1,321.6		71.25
7	368	49.18	202.2		75.00
8	380	76.62	305.8		75.90
9	398	52.19	198.6		77.40
10	495	38.70	118.5		82.95
11	528	17.81	51.1		84.55
12	565	13.93	37.4		86.25
13	587	16.27	42.0		87.25
14	625	6.04	14.6		88.65
15	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : N3 LIBRARY (1:10)**

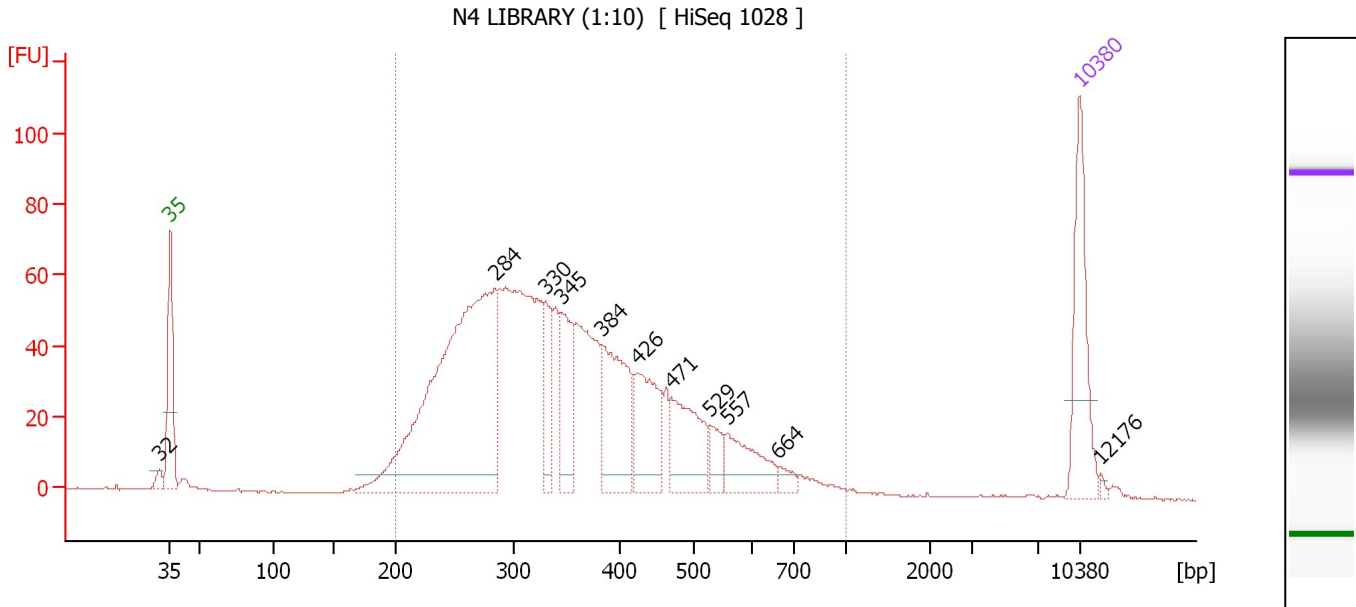
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	357	1,337.5	7,593.1	1,603.25	96	31.4



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : N4 LIBRARY (1:10)**

Number of peaks found: 11                      Corr. Area 1: 1,462.1  
 Noise: 0.2

**Peak table for sample 5 : N4 LIBRARY (1:10)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.19
2	35	125.00	5,411.3	Lower Marker	43.00
3	284	536.55	2,862.8		68.00
4	330	53.16	244.1		71.89
5	345	76.84	337.5		73.10
6	384	120.49	475.0		76.28
7	426	87.01	309.8		79.01
8	471	82.96	267.0		81.59
9	529	22.89	65.6		84.57
10	557	54.12	147.2		85.88
11	664	10.01	22.8		89.87
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,176	0.00	0.0		114.67

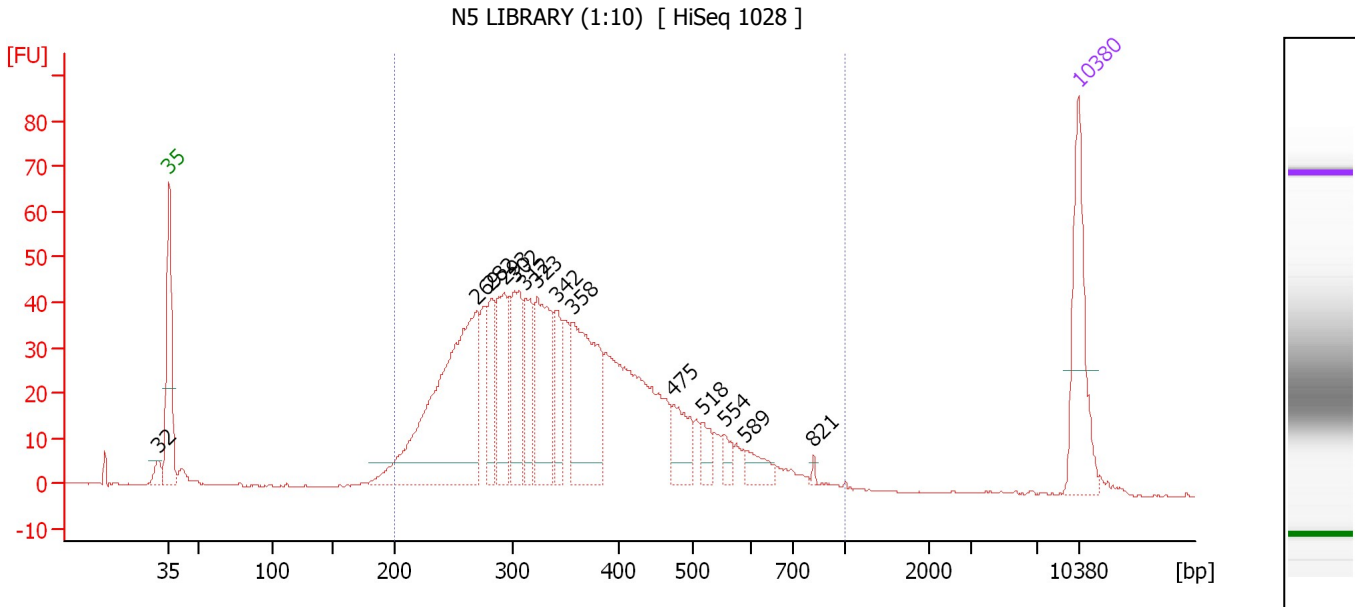
**Region table for sample 5 : N4 LIBRARY (1:10)**

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	362	1,462.1	7,486.8	1,596.66	97	31.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : N5 LIBRARY (1:10)**

Number of peaks found: 14                      Corr. Area 1: 1,055.1  
 Noise: 0.2

**Peak table for sample 6 : N5 LIBRARY (1:10)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.14
2	35	125.00	5,411.3	Lower Marker	43.00
3	269	337.16	1,895.6		66.67
4	282	59.80	321.7		67.79
5	293	96.74	500.7		68.81
6	302	91.01	456.8		69.62
7	312	60.34	293.1		70.43
8	323	109.89	515.1		71.35
9	342	48.27	213.8		72.87
10	358	151.66	642.2		74.14
11	475	44.26	141.3		81.81
12	518	18.63	54.5		84.10
13	554	12.61	34.5		85.72
14	589	19.34	49.8		87.35
15	821	2.30	4.2		92.63
16	10,380	75.00	10.9	Upper Marker	113.00

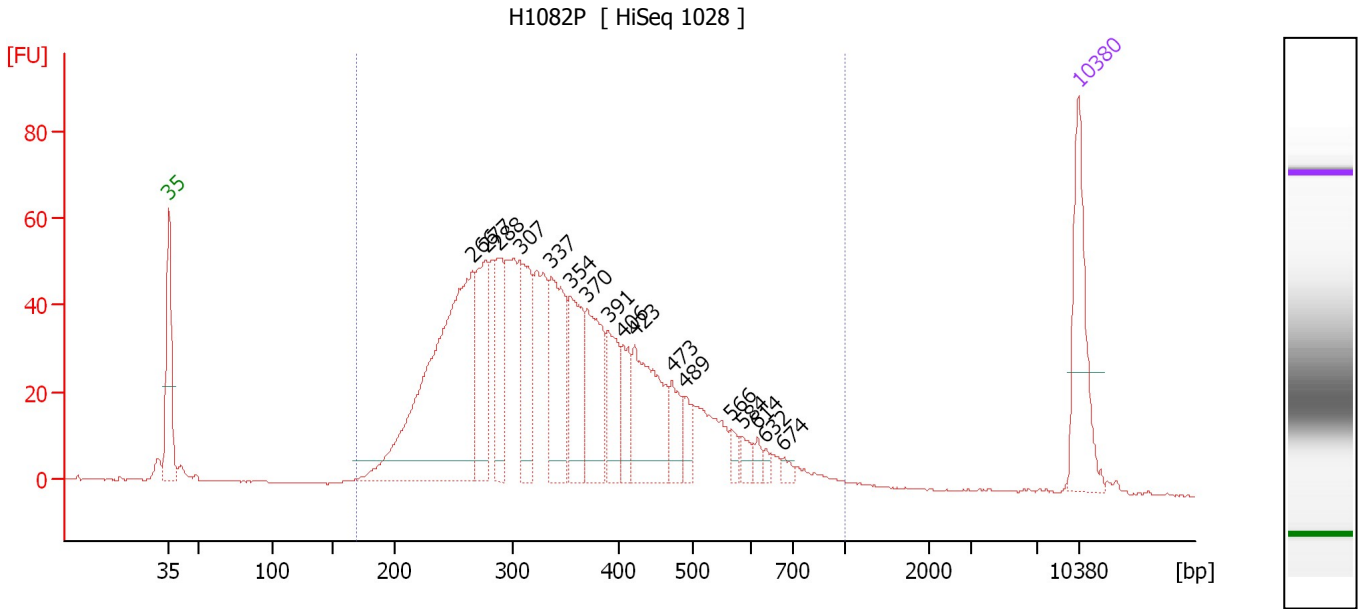
**Region table for sample 6 : N5 LIBRARY (1:10)**

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	364	1,055.1	6,935.0	1,492.64	96	31.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : H1082P**

Number of peaks found: 17                      Corr. Area 1: 1,334.7  
 Noise: 0.2

**Peak table for sample 7 : H1082P**

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	266	412.63	2,348.8		66.37
3	277	99.31	542.5		67.39
4	288	78.68	413.9		68.37
5	307	91.85	452.8		70.07
6	337	114.96	517.5		72.43
7	354	90.04	384.9		73.87
8	370	97.83	400.3		75.15
9	391	56.68	219.8		76.79
10	406	36.24	135.4		77.87
11	423	111.46	399.5		78.85
12	473	35.18	112.6		81.72
13	489	19.56	60.6		82.65
14	566	10.68	28.6		86.29
15	584	12.16	31.6		87.12
16	614	8.00	19.7		88.30
17	632	5.98	14.3		88.86
18	674	6.00	13.5		90.20
19	10,380	75.00	10.9	Upper Marker	113.00

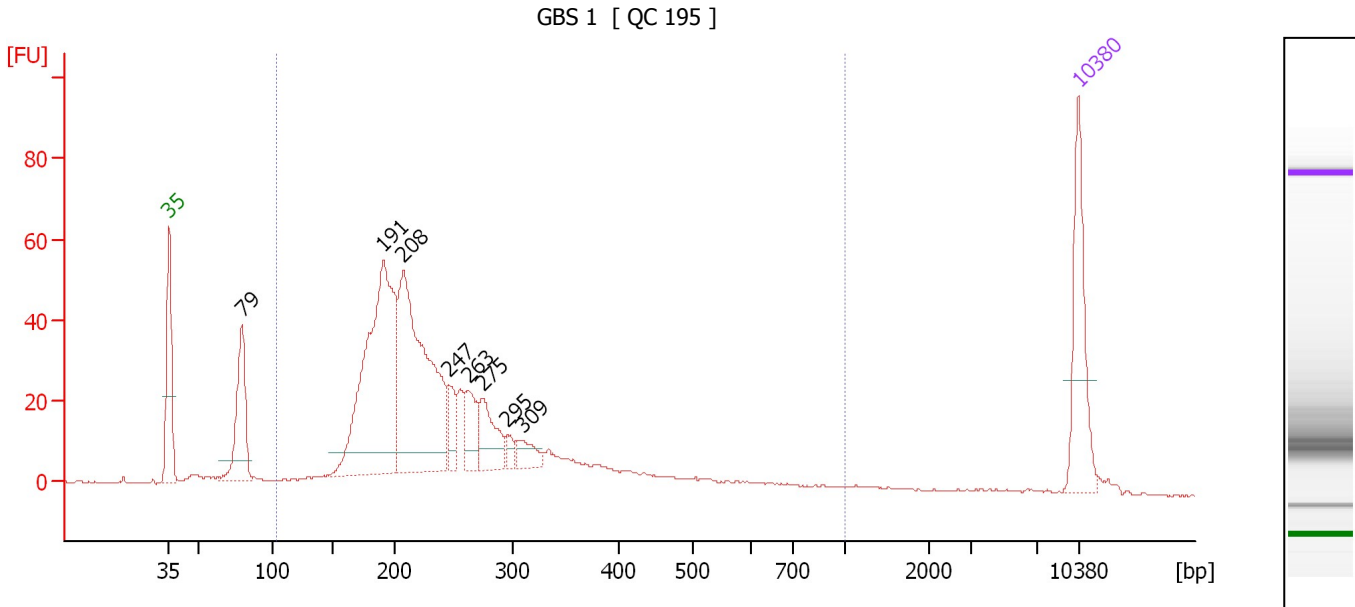
**Region table for sample 7 : H1082P**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
169	1,000	360	1,334.7	8,276.5	1,738.11	97	32.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

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 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : GBS 1**

Number of peaks found: 8                      Corr. Area 1: 776.8  
 Noise: 0.2

**Peak table for sample 8 : GBS 1**

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	117.08	2,233.6		48.60
3	191	368.47	2,918.2		59.49
4	208	324.81	2,364.5		61.04
5	247	31.92	196.1		64.57
6	263	40.68	234.4		66.07
7	275	53.91	297.2		67.16
8	295	11.46	58.8		69.03
9	309	22.82	112.0		70.17
10	10,380	75.00	10.9	Upper Marker	113.00

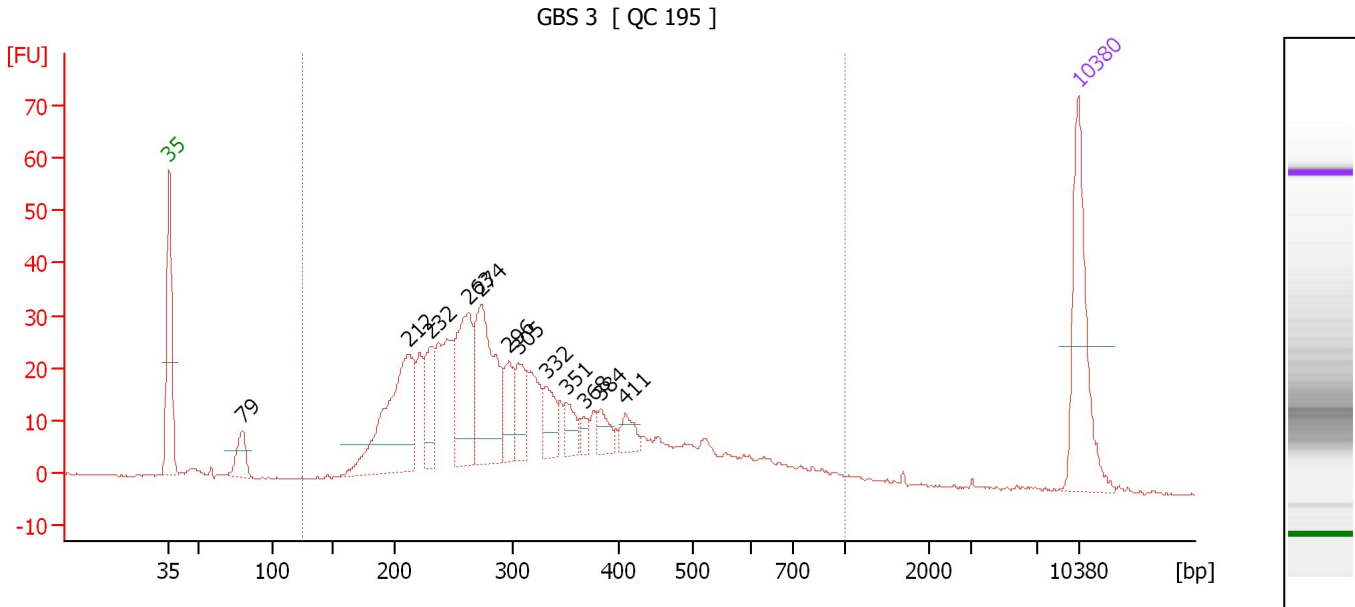
**Region table for sample 8 : GBS 1**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
104	1,000	263	776.8	7,952.0	1,188.06	87	43.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

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 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : GBS 3**

Number of peaks found: 12                      Corr. Area 1: 712.5  
 Noise: 0.2

**Peak table for sample 9 : GBS 3**

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	28.95	551.8		48.61
3	212	153.78	1,097.0		61.43
4	232	47.51	310.8		63.20
5	263	99.01	570.9		66.06
6	274	120.77	669.0		67.04
7	296	32.98	168.7		69.12
8	305	37.45	185.9		69.90
9	332	28.35	129.5		72.03
10	351	18.24	78.8		73.59
11	368	8.70	35.8		74.99
12	384	15.07	59.5		76.23
13	411	14.04	51.8		78.16
14	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 9 : GBS 3**

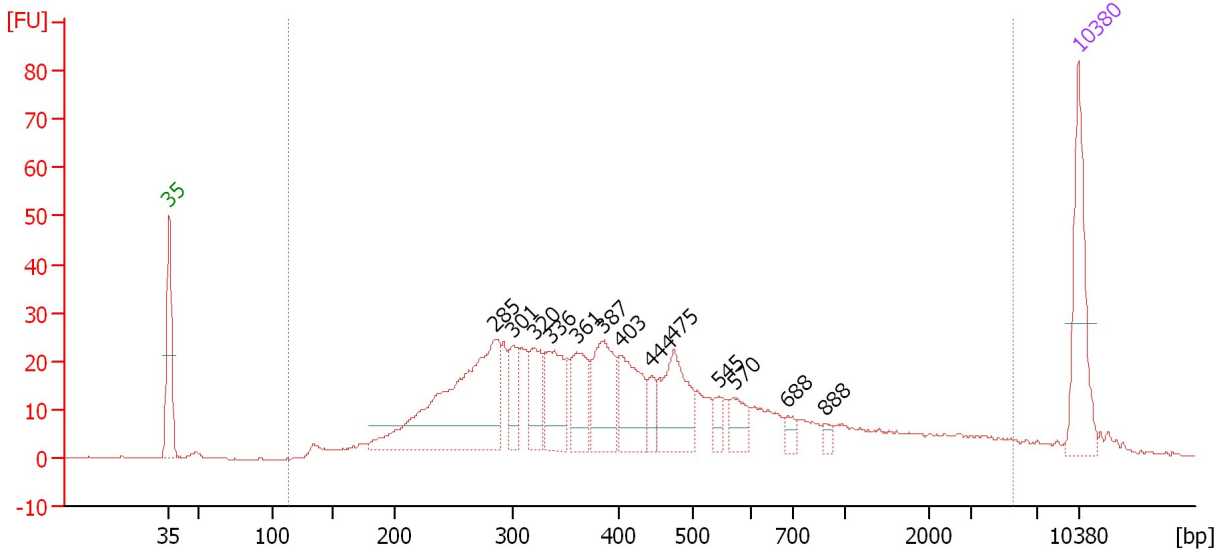
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
125	1,000	336	712.5	5,731.9	1,074.21	94	41.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

Created: 7/13/2017 1:02:27 PM  
 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**

Xiaoyan 7-10-2017 [ HiSeq1056 ]



**Overall Results for sample 10 : Xiaoyan 7-10-2017**

Number of peaks found: 13                      Corr. Area 1: 825.3  
 Noise: 0.2

**Peak table for sample 10 : Xiaoyan 7-10-2017**

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	285	266.93	1,418.3		68.11
3	301	36.85	185.7		69.52
4	320	53.72	254.4		71.08
5	336	72.57	327.1		72.39
6	361	57.14	240.1		74.37
7	387	78.75	308.7		76.46
8	403	74.04	278.5		77.71
9	444	18.82	64.2		80.06
10	475	85.81	273.6		81.84
11	545	14.48	40.2		85.33
12	570	24.16	64.2		86.48
13	688	11.54	25.4		90.61
14	888	6.77	11.6		93.53
15	10,380	75.00	10.9	Upper Marker	113.00

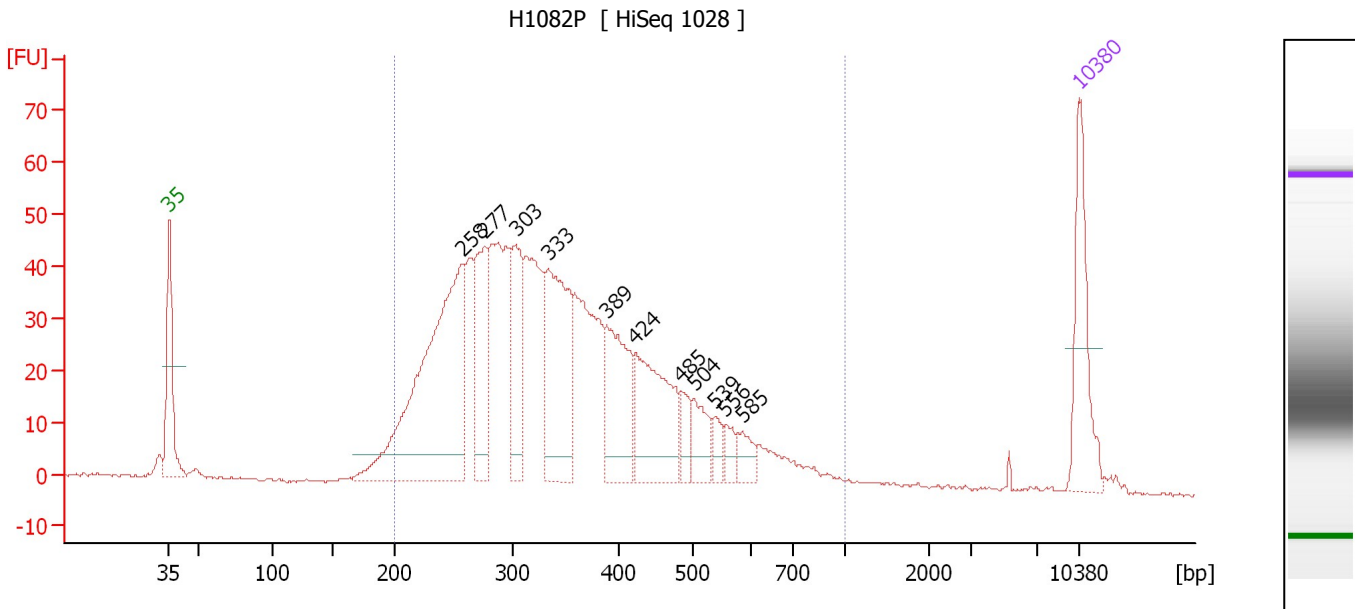
**Region table for sample 10 : Xiaoyan 7-10-2017**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
113	5,553	625	825.3	5,537.9	1,273.51	95	100.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

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 Modified: 7/13/2017 1:44:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : H1082P**

Number of peaks found: 11                      Corr. Area 1: 1,120.8  
 Noise: 0.2

**Peak table for sample 11 : H1082P**

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	258	392.51	2,303.8		65.63
3	277	110.03	602.9		67.32
4	303	98.58	493.5		69.68
5	333	185.60	843.8		72.16
6	389	116.14	452.8		76.63
7	424	133.57	477.8		78.89
8	485	23.28	72.7		82.42
9	504	37.70	113.4		83.42
10	539	16.59	46.6		85.05
11	556	15.72	42.8		85.84
12	585	20.06	52.0		87.16
13	10,380	75.00	10.9	Upper Marker	113.00

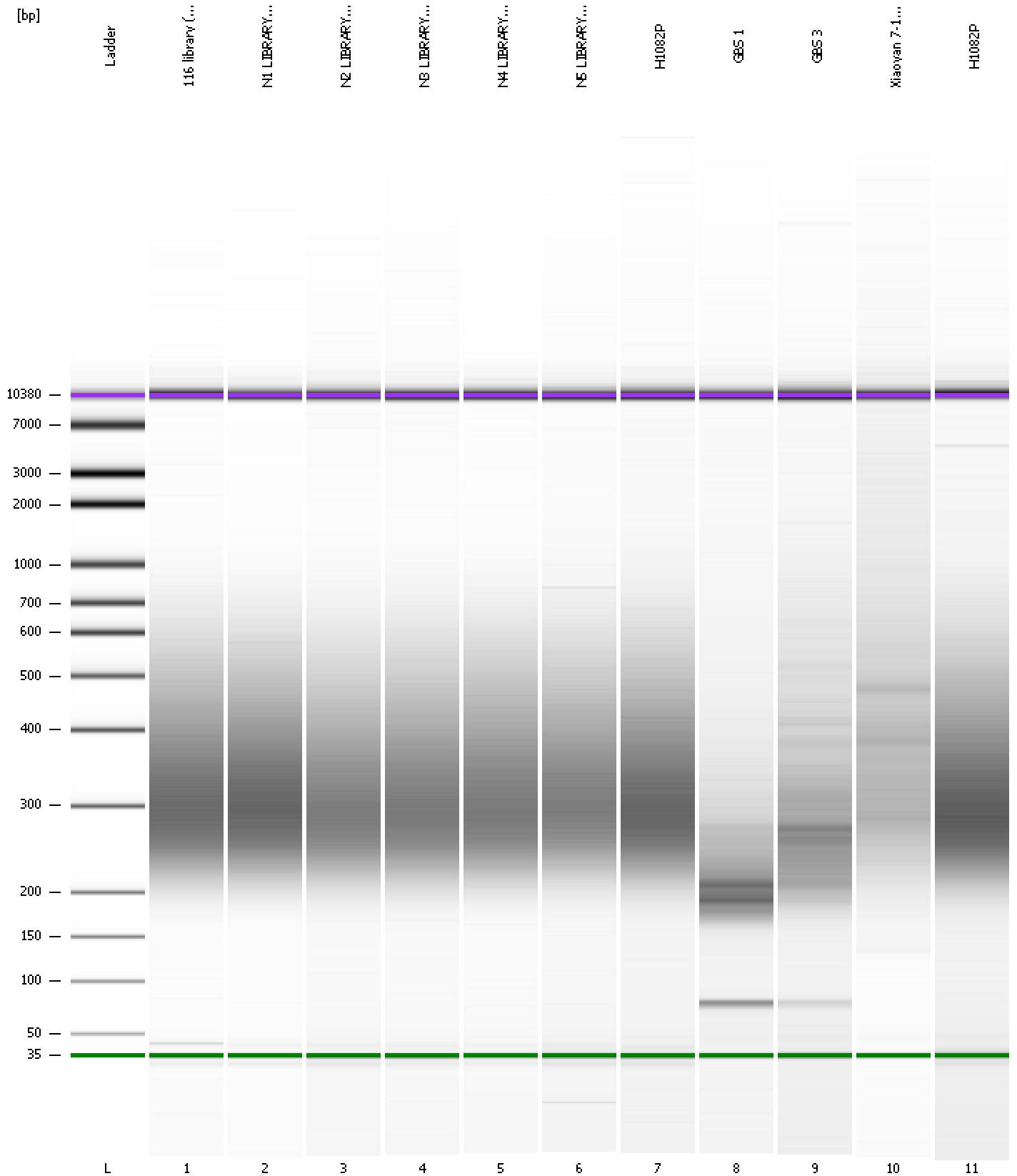
**Region table for sample 11 : H1082P**

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	359	1,120.8	8,587.4	1,808.47	96	32.8

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

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Modified: 7/13/2017 1:44:53 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-07-13\2017-07-13\_002.xad

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**Curves**

**Standard Curve**

