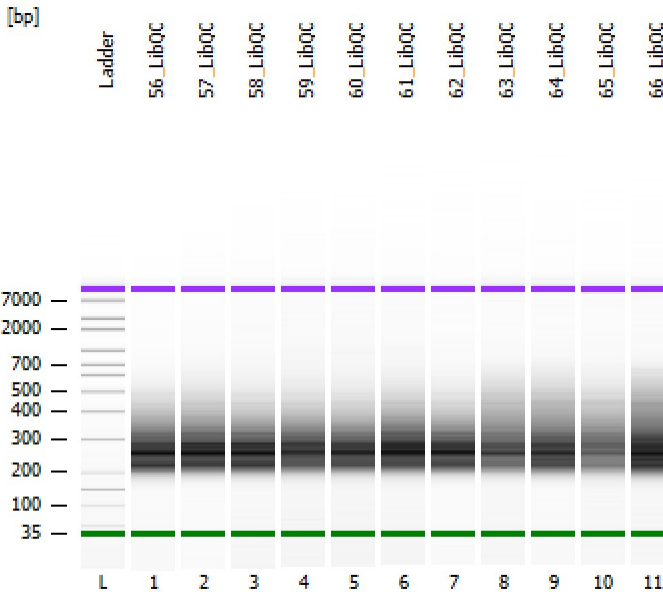


Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
Modified: 7/28/2020 11:01:11 AM

**Electrophoresis File Run Summary**



Instrument Information:

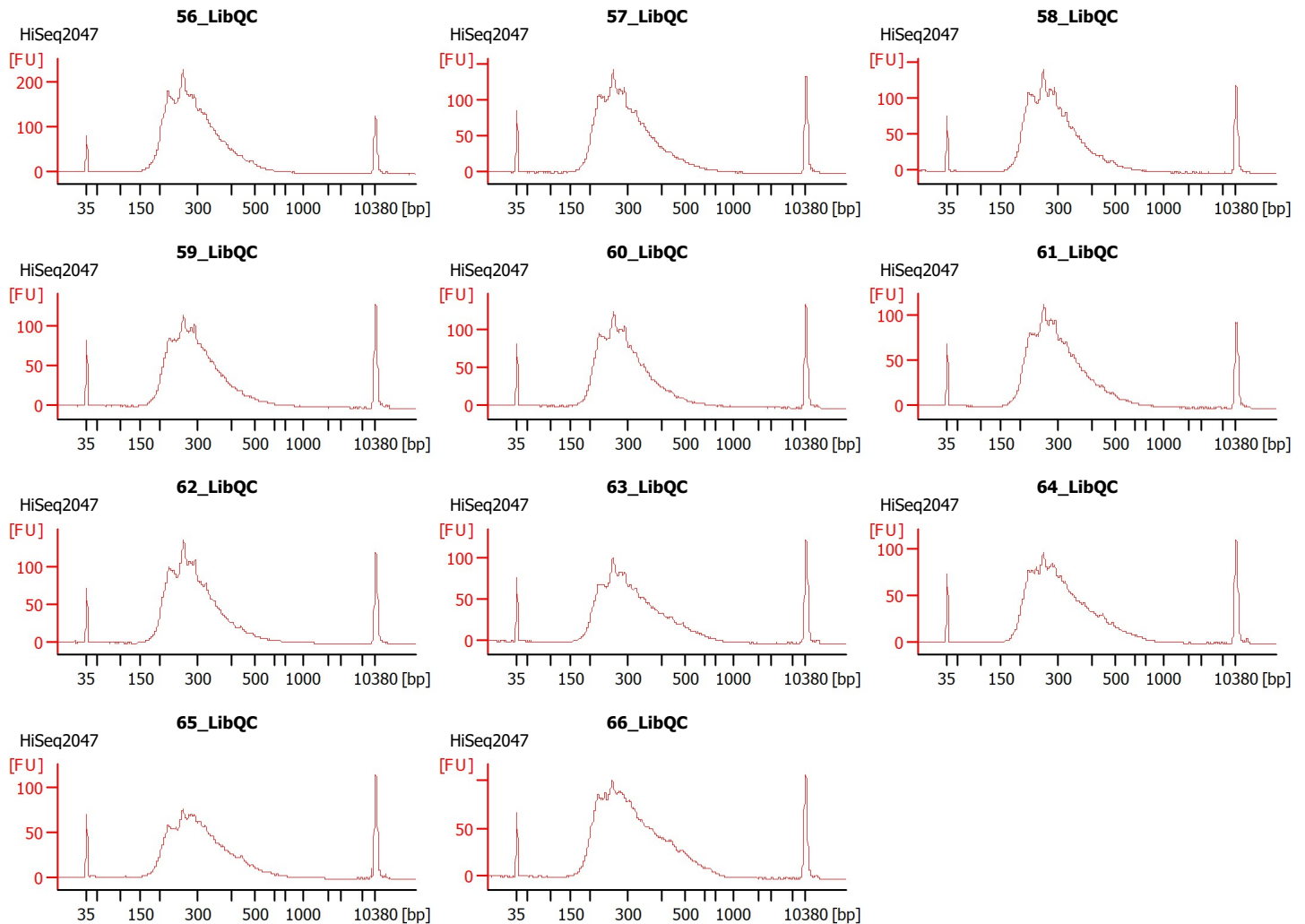
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

Assay Information:

Assay Origin Path: C:\Program Files (x86)\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: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
56_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
57_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
58_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
59_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
60_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
61_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
62_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
63_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
64_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
65_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
66_LibQC	HiSeq2047	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 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/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

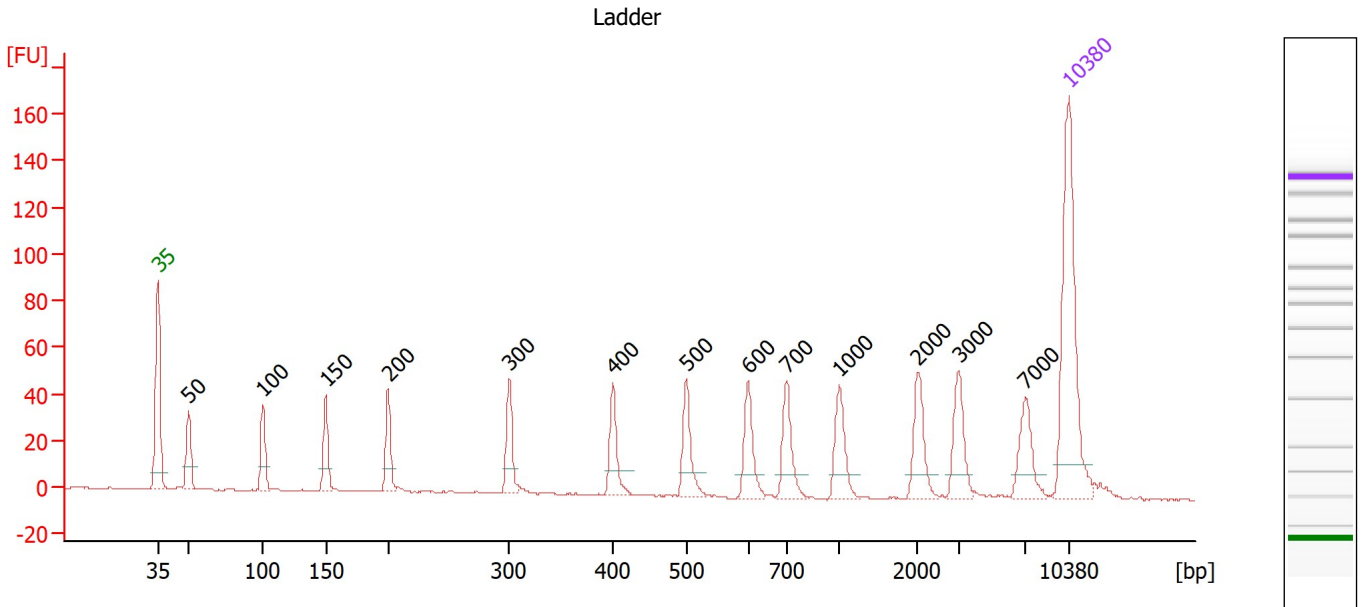
**Ladder**

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: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

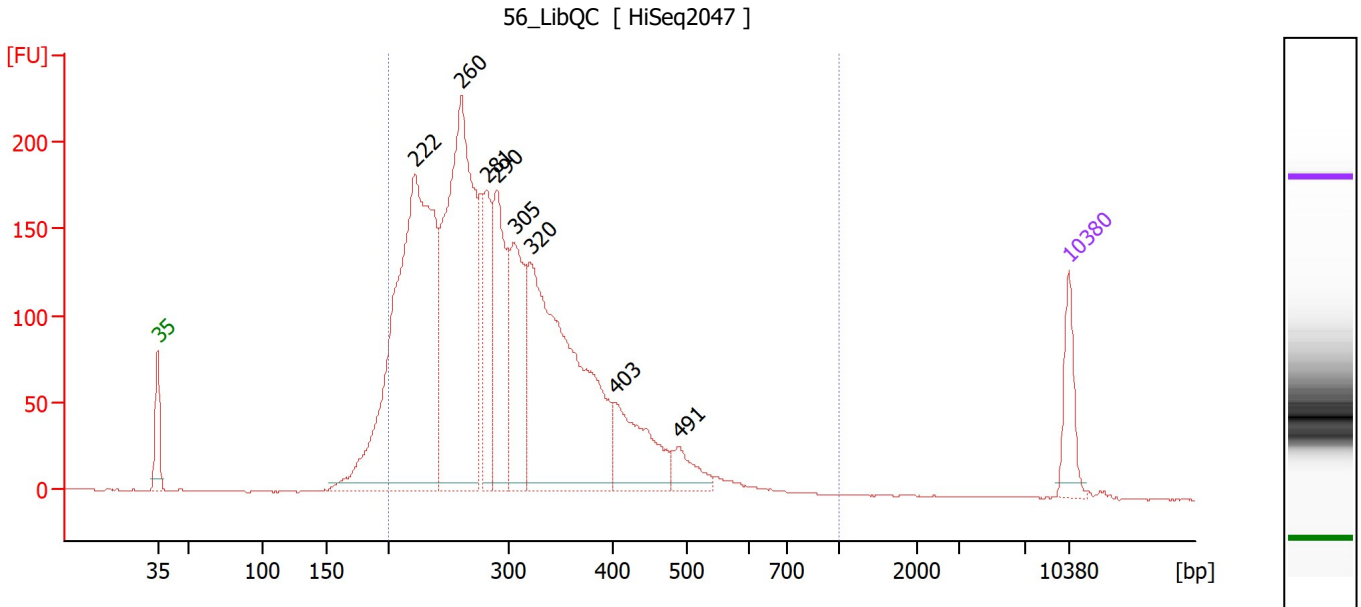
**Peak table for Ladder**

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: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 56 LibQC**

Number of peaks found: 8                      Corr. Area 1: 3,825.4  
 Noise: 0.2

**Peak table for sample 1 : 56 LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	222	1,414.57	9,657.1	
3	260	1,074.04	6,254.3	
4	281	222.63	1,199.8	
5	290	347.63	1,819.1	
6	305	303.71	1,509.1	
7	320	932.62	4,413.0	
8	403	208.63	784.3	
9	491	68.34	210.9	
10	10,380	75.00	10.9	Upper Marker

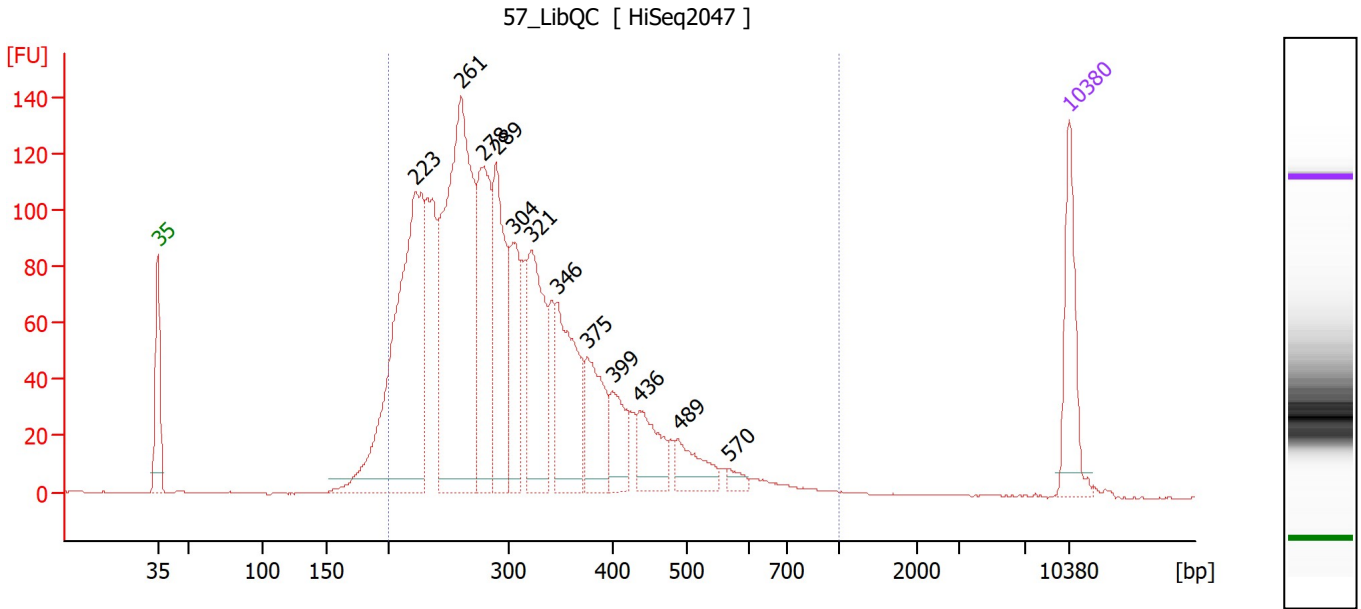
**Region table for sample 1 : 56 LibQC**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	3,825.4	95	302	26.8	4,472.89	24,088.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 57 LibQC**

Number of peaks found: 12      Corr. Area 1: 2,455.3  
 Noise: 0.4

**Peak table for sample 2 : 57 LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	223	552.04	3,756.7	
3	261	584.77	3,400.7	
4	278	221.09	1,204.3	
5	289	210.90	1,106.3	
6	304	132.99	663.3	
7	321	193.36	912.1	
8	346	171.40	751.6	
9	375	104.28	421.6	
10	399	63.91	242.7	
11	436	70.04	243.5	
12	489	50.12	155.3	
13	570	10.91	29.0	
14	10,380	75.00	10.9	Upper Marker

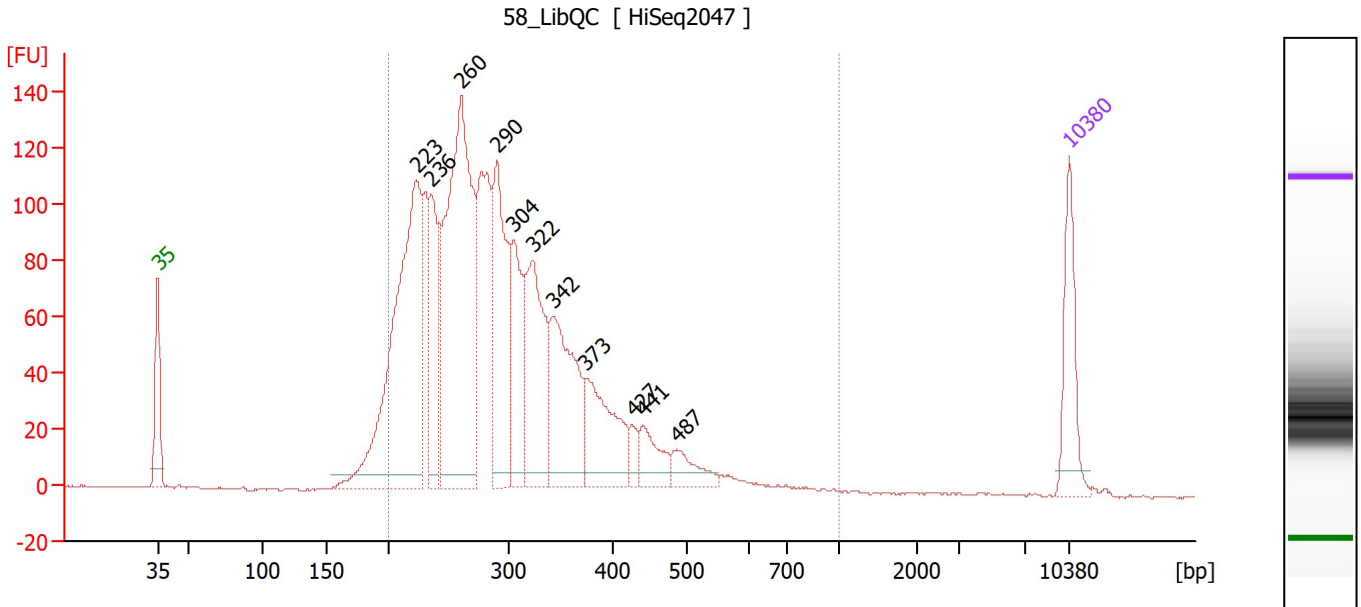
**Region table for sample 2 : 57 LibQC**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,455.3	96	312	30.1	2,642.44	13,995.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 58 LibQC**

Number of peaks found: 11      Corr. Area 1: 2,282.0  
 Noise: 0.3

**Peak table for sample 3 : 58 LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	223	578.28	3,925.0	
3	236	153.48	986.5	
4	260	598.84	3,487.3	
5	290	248.57	1,298.4	
6	304	134.03	667.5	
7	322	217.31	1,022.5	
8	342	216.02	956.2	
9	373	147.29	598.8	
10	427	20.01	71.0	
11	441	51.06	175.6	
12	487	39.07	121.7	
13	10,380	75.00	10.9	Upper Marker

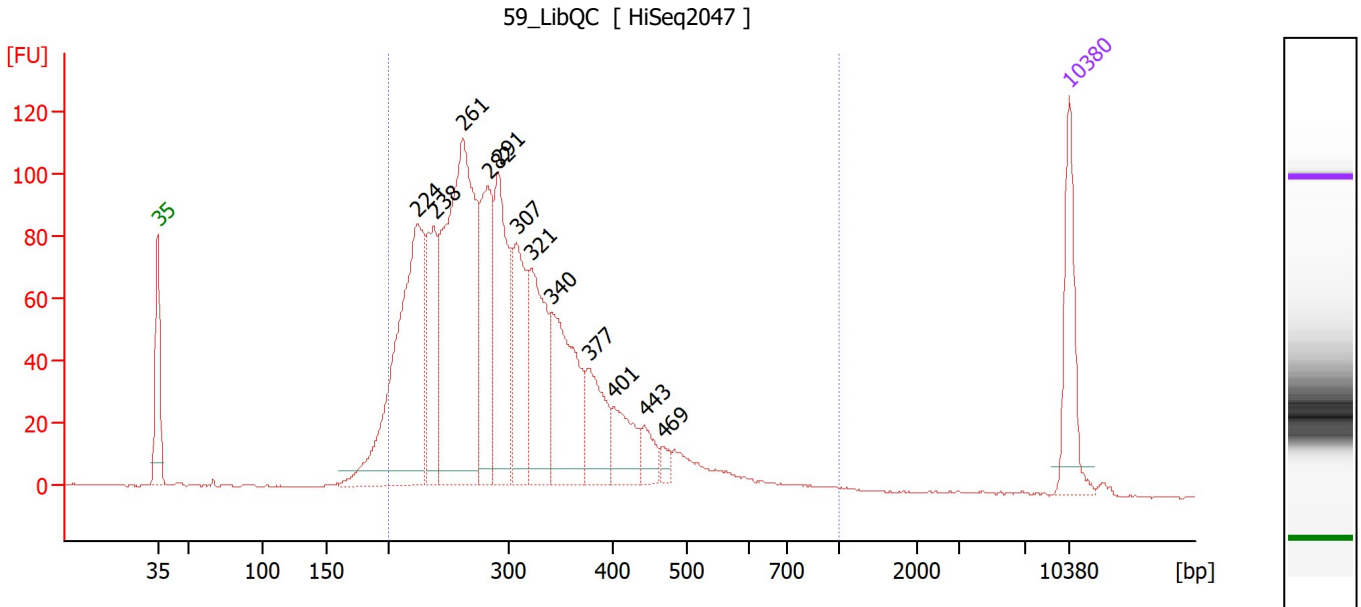
**Region table for sample 3 : 58 LibQC**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,282.0	96	302	28.3	2,747.53	14,818.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 59 LibQC**

Number of peaks found: 12      Corr. Area 1: 1,964.5  
 Noise: 0.3

**Peak table for sample 4 : 59 LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	224	437.60	2,959.0	
3	238	146.26	931.3	
4	261	530.31	3,075.2	
5	282	175.49	941.6	
6	291	206.85	1,076.0	
7	307	148.14	730.3	
8	321	163.03	769.7	
9	340	187.36	835.7	
10	377	87.42	351.7	
11	401	61.60	232.8	
12	443	27.65	94.5	
13	469	10.94	35.3	
14	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : 59 LibQC**

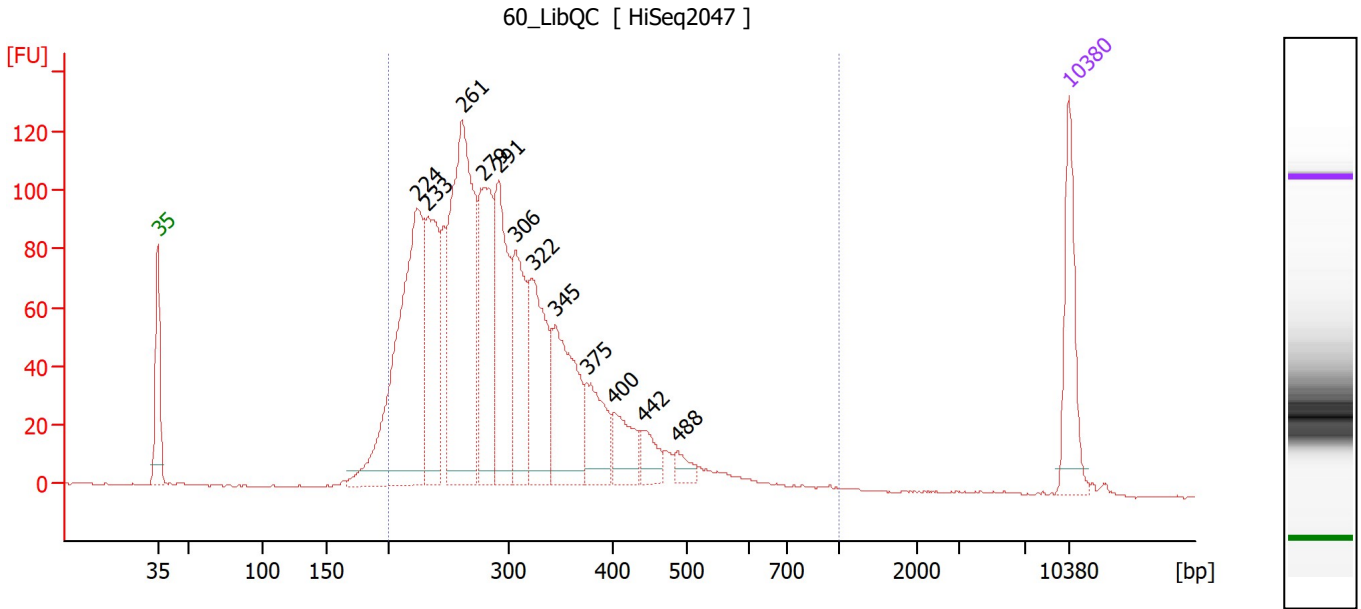
From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,964.5	96	309	29.2	2,258.81	11,982.4	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 60 LibQC**

Number of peaks found: 12      Corr. Area 1: 2,026.0  
 Noise: 0.3

**Peak table for sample 5 : 60 LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	224	433.19	2,930.4	
3	233	199.88	1,302.6	
4	261	422.52	2,453.5	
5	279	207.13	1,126.7	
6	291	194.54	1,012.7	
7	306	138.39	684.9	
8	322	164.37	773.3	
9	345	159.33	700.5	
10	375	77.80	314.2	
11	400	53.34	201.8	
12	442	32.36	110.9	
13	488	17.10	53.1	
14	10,380	75.00	10.9	Upper Marker

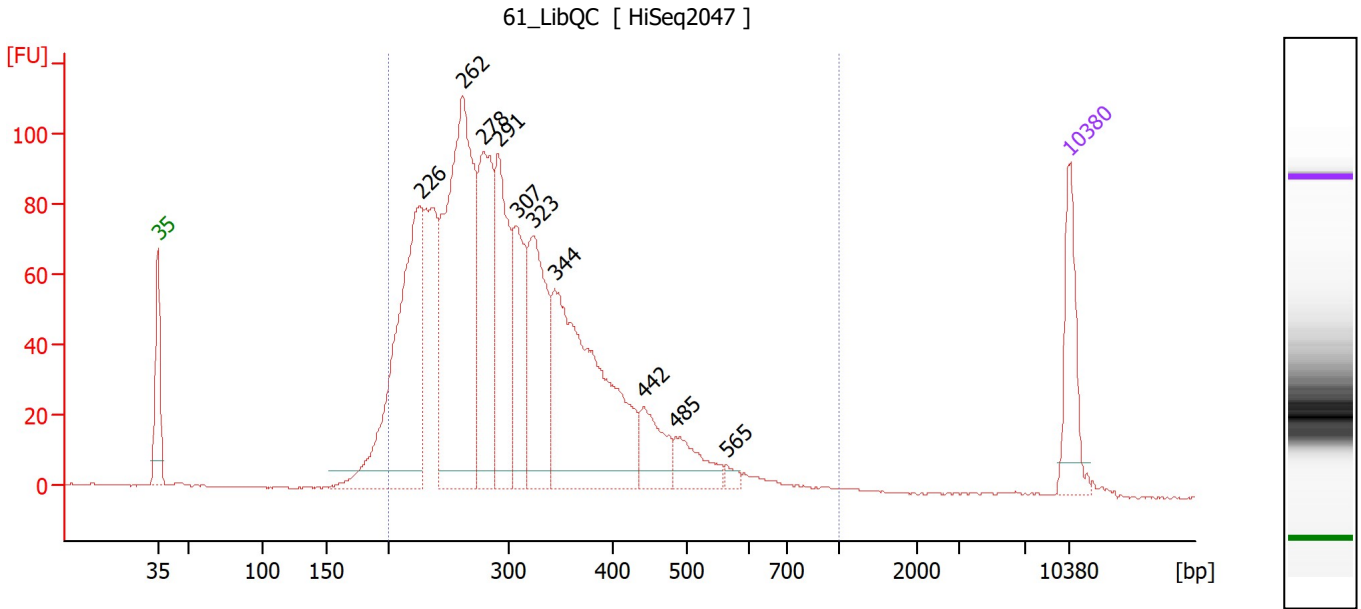
**Region table for sample 5 : 60 LibQC**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,026.0	96	305	28.5	2,209.60	11,832.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 61\_LibQC**

Number of peaks found: 10      Corr. Area 1: 1,929.3  
 Noise: 0.2

**Peak table for sample 6 : 61\_LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	226	461.87	3,095.9	
3	262	585.85	3,394.3	
4	278	251.57	1,369.2	
5	291	229.46	1,196.4	
6	307	151.13	746.7	
7	323	214.88	1,008.1	
8	344	447.67	1,971.8	
9	442	70.75	242.5	
10	485	57.02	178.0	
11	565	8.63	23.1	
12	10,380	75.00	10.9	Upper Marker

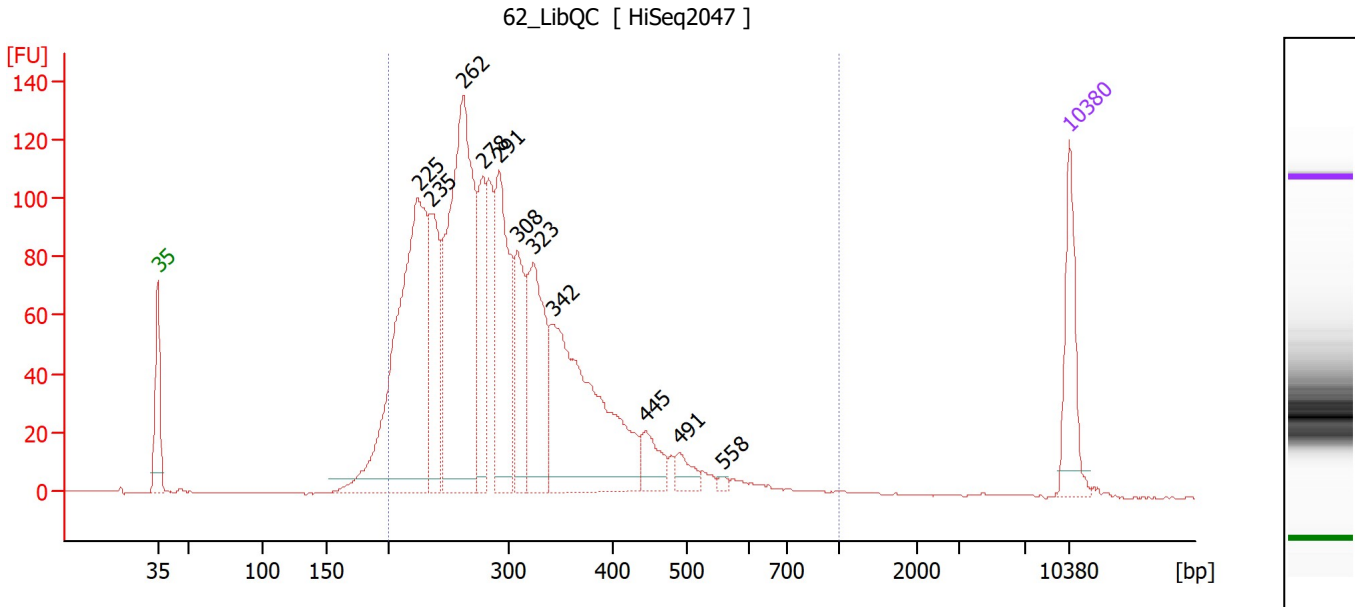
**Region table for sample 6 : 61\_LibQC**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,929.3	97	312	28.6	2,661.07	13,994.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 62\_LibQC**

Number of peaks found: 11      Corr. Area 1: 2,111.0  
 Noise: 0.2

**Peak table for sample 7 : 62\_LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	225	608.74	4,104.6	
3	235	165.51	1,068.3	
4	262	573.99	3,320.3	
5	278	138.98	757.8	
6	291	239.44	1,244.7	
7	308	125.39	616.9	
8	323	207.13	971.3	
9	342	391.32	1,731.6	
10	445	45.68	155.7	
11	491	25.68	79.3	
12	558	4.81	13.1	
13	10,380	75.00	10.9	Upper Marker

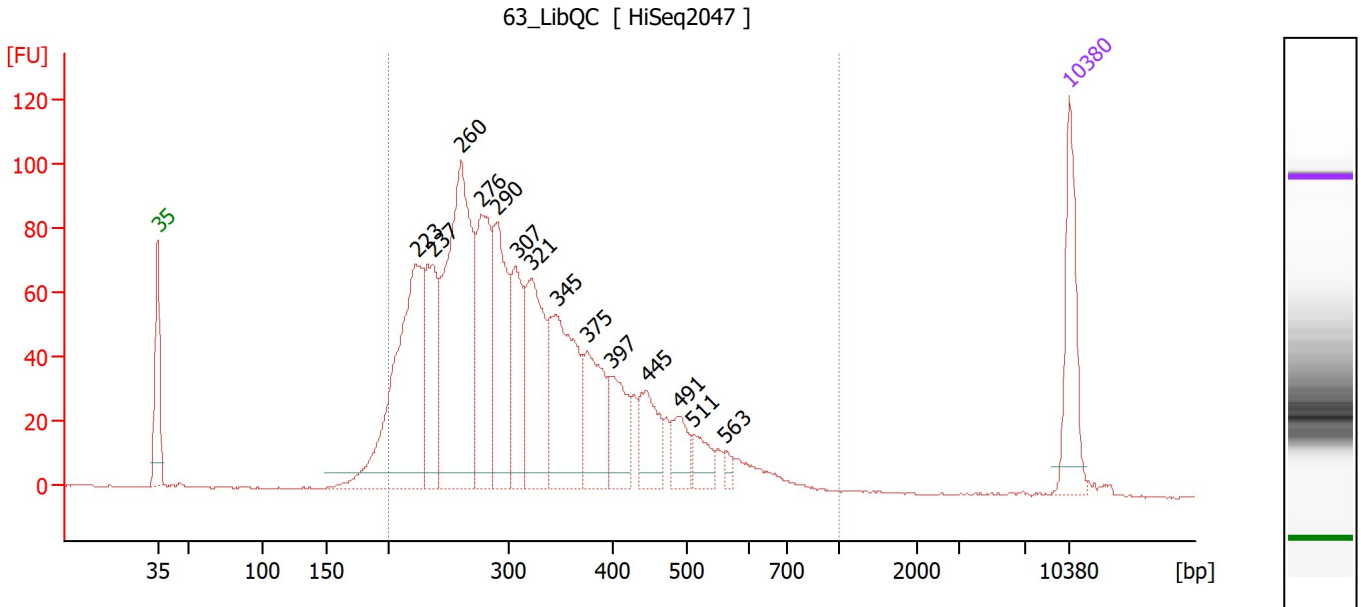
**Region table for sample 7 : 62\_LibQC**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,111.0	96	304	27.9	2,616.09	14,028.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 63 LibQC**

Number of peaks found: 14      Corr. Area 1: 1,839.7  
 Noise: 0.2

**Peak table for sample 8 : 63 LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	223	353.08	2,394.3	
3	237	150.42	963.5	
4	260	407.36	2,370.7	
5	276	181.69	995.9	
6	290	173.45	905.8	
7	307	117.32	579.9	
8	321	164.43	775.9	
9	345	185.60	814.1	
10	375	103.63	419.1	
11	397	67.92	259.3	
12	445	65.34	222.5	
13	491	36.09	111.3	
14	511	30.98	91.9	
15	563	8.57	23.1	
16	10,380	75.00	10.9	Upper Marker

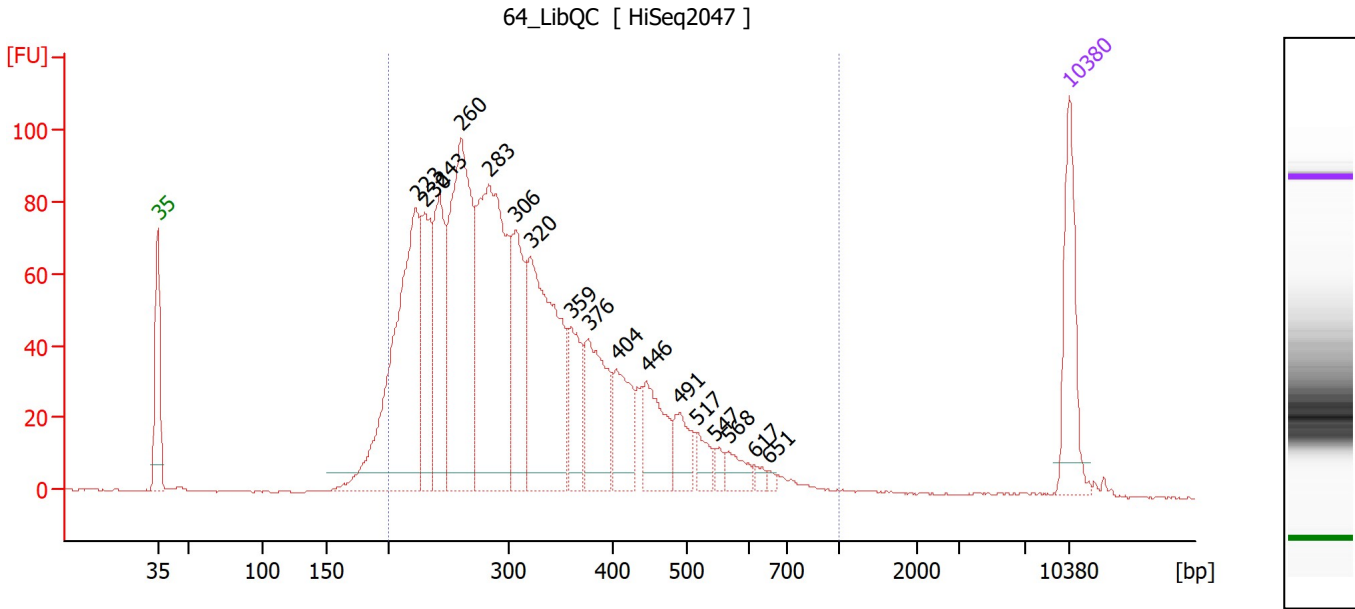
**Region table for sample 8 : 63 LibQC**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,839.7	97	327	30.7	2,097.47	10,741.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 64 LibQC**

Number of peaks found: 17      Corr. Area 1: 1,875.8  
 Noise: 0.2

**Peak table for sample 9 : 64 LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	223	391.46	2,660.9	
3	230	131.76	869.8	
4	243	165.02	1,030.1	
5	260	365.09	2,126.4	
6	283	383.64	2,054.2	
7	306	131.57	651.4	
8	320	288.13	1,364.0	
9	359	73.72	310.8	
10	376	116.53	469.4	
11	404	74.73	280.3	
12	446	76.10	258.6	
13	491	39.98	123.5	
14	517	21.41	62.7	
15	547	9.85	27.3	
16	568	21.14	56.3	
17	617	6.63	16.3	
18	651	4.31	10.0	
19	10,380	75.00	10.9	Upper Marker

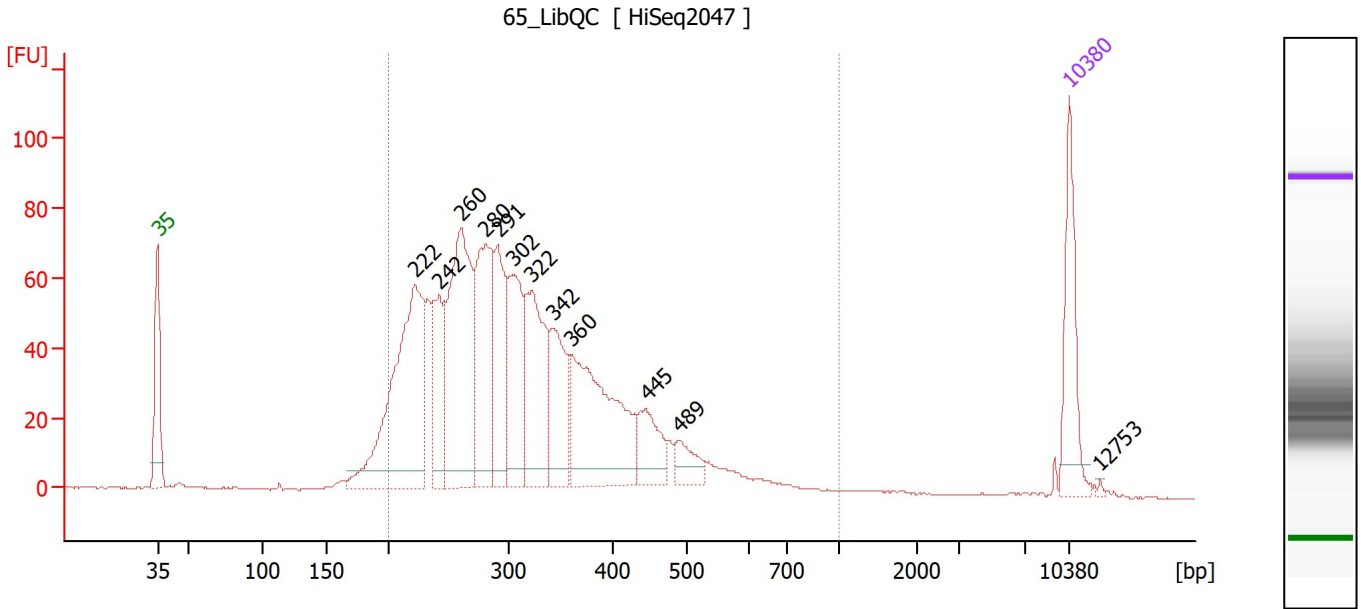
**Region table for sample 9 : 64 LibQC**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,875.8	96	324	31.5	2,310.81	11,951.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 65\_LibQC**

Number of peaks found: 12                      Corr. Area 1: 1,471.7  
 Noise: 0.2

**Peak table for sample 10 : 65\_LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	222	365.38	2,491.5	
3	242	110.49	693.0	
4	260	298.48	1,737.1	
5	280	192.96	1,043.0	
6	291	132.33	689.9	
7	302	141.69	709.8	
8	322	173.17	816.0	
9	342	104.44	462.7	
10	360	230.50	971.0	
11	445	60.59	206.2	
12	489	33.47	103.6	
13	10,380	75.00	10.9	Upper Marker
14	12,753	0.00	0.0	

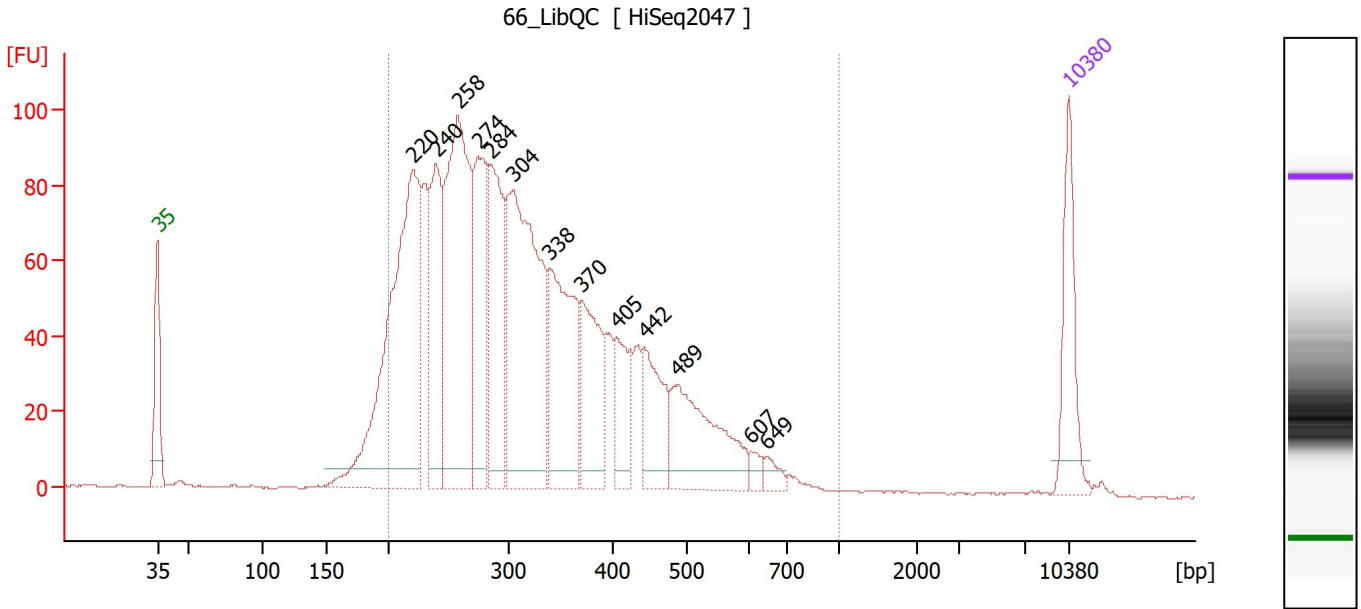
**Region table for sample 10 : 65\_LibQC**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,471.7	95	321	29.6	1,950.18	10,073.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 66 LibQC**

Number of peaks found: 13                      Corr. Area 1: 2,096.4  
 Noise: 0.2

**Peak table for sample 11 : 66 LibQC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	220	527.22	3,629.0	
3	240	187.95	1,188.9	
4	258	409.88	2,409.8	
5	274	190.85	1,055.0	
6	284	176.15	938.4	
7	304	392.22	1,956.6	
8	338	211.88	948.7	
9	370	133.11	545.8	
10	405	66.35	248.2	
11	442	93.33	319.8	
12	489	158.42	491.3	
13	607	11.49	28.7	
14	649	13.90	32.4	
15	10,380	75.00	10.9	Upper Marker

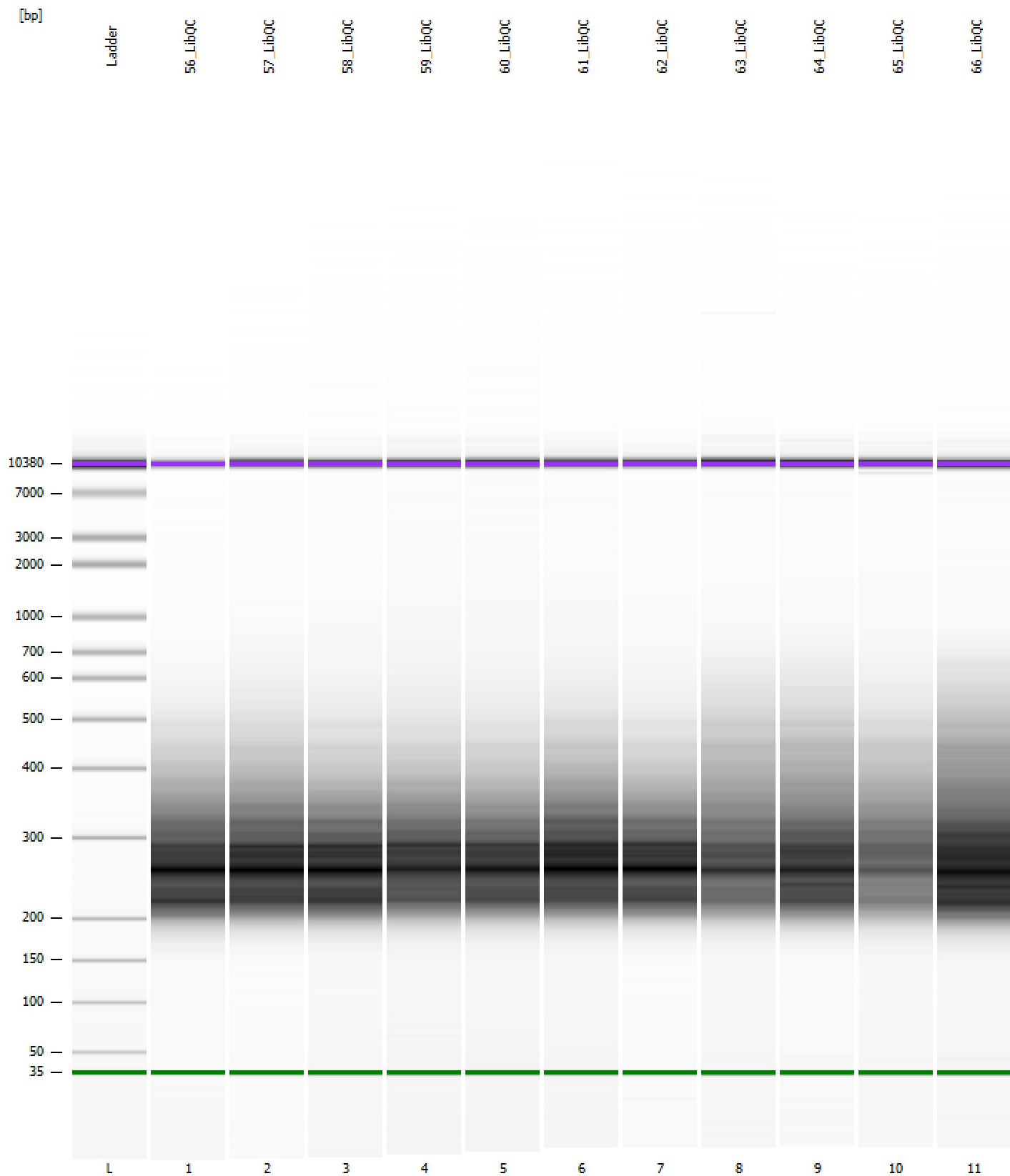
**Region table for sample 11 : 66 LibQC**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,096.4	95	329	31.8	2,721.73	13,962.8	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
Modified: 7/28/2020 11:01:11 AM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-07-28\_004.xad

Created: 7/28/2020 10:20:36 AM  
 Modified: 7/28/2020 11:01:11 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		7/28/2020 11:01:04 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-07-28\Bioanalyze r1_High Sensitivity DNA Assay_2020-07-28_004.xad)		Instrument	Run		7/28/2020 10:20:41 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		7/28/2020 10:20:41 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		7/28/2020 10:20:41 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		7/28/2020 10:20:41 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		7/28/2020 10:20:41 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		7/28/2020 10:20:41 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		7/28/2020 10:20:41 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB