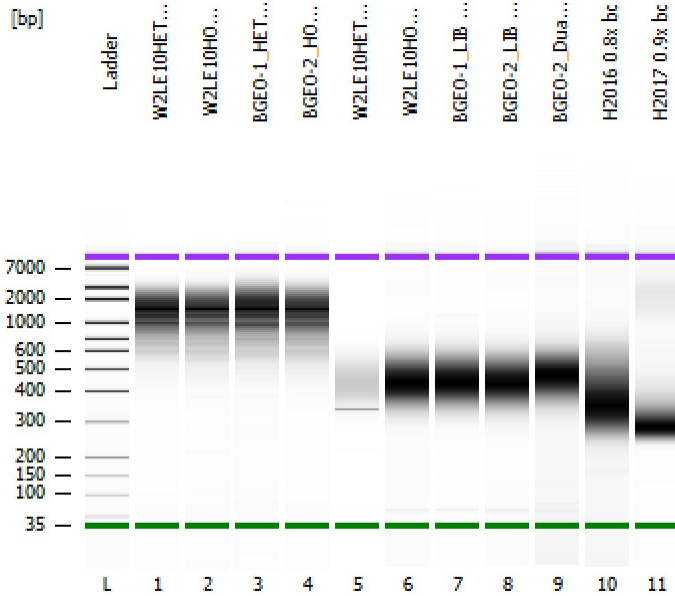


Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
Modified: 11/25/2019 1:15:00 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 (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

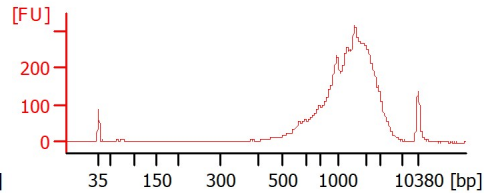
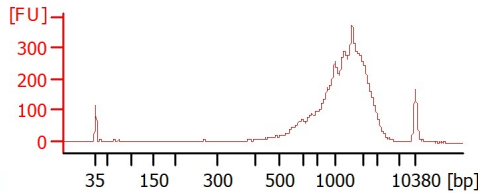
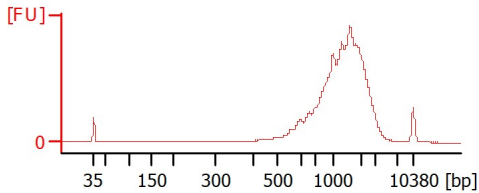
Chip Information:

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

W2LE10HET\_cDNA (1:4)

W2LE10HOM\_cDNA (1:4)

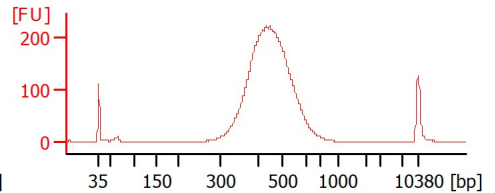
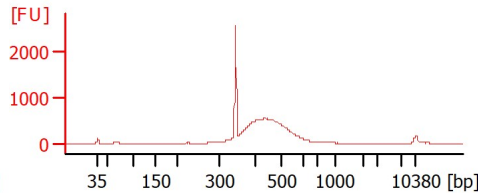
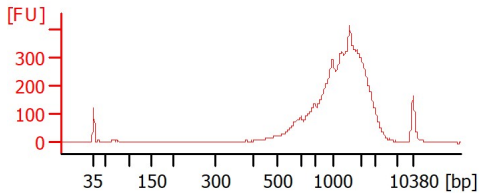
BGEO-1\_HET\_cDNA (1:4)



BGEO-2\_HOM\_cDNA (1:4)

W2LE10HET\_LIB (1:2)

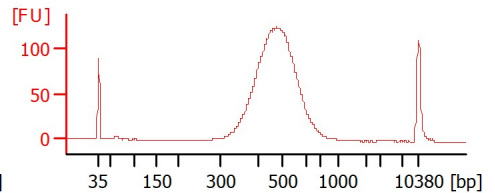
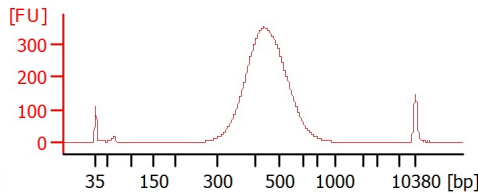
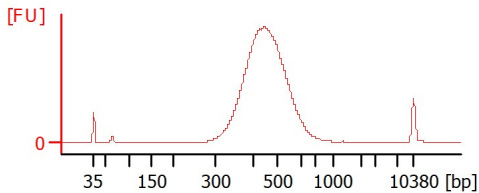
W2LE10HOM\_LIB (1:2)



BGEO-1\_LIB (1:2)

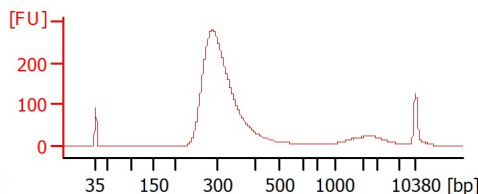
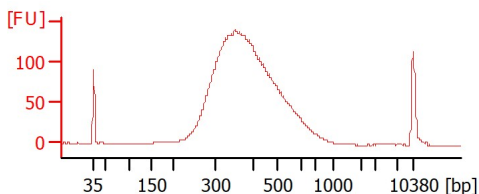
BGEO-2\_LIB (1:2)

BGEO-2\_Dual\_LIB (1:2)



H2016 0.8x bc

H2017 0.9x bc



Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
W2LE10HET_cDNA (1:4)		<input type="checkbox"/>	✓			
W2LE10HOM_cDNA (1:4)		<input type="checkbox"/>	✓			
BGEO-1_HET_cDNA (1:4)		<input type="checkbox"/>	✓			
BGEO-2_HOM_cDNA (1:4)		<input type="checkbox"/>	✓			
W2LE10HET_LIB (1:2)		<input type="checkbox"/>	✓			
W2LE10HOM_LIB (1:2)		<input type="checkbox"/>	✓			
BGEO-1_LIB (1:2)		<input type="checkbox"/>	✓			
BGEO-2_LIB (1:2)		<input type="checkbox"/>	✓			
BGEO-2_Dual_LIB (1:2)		<input type="checkbox"/>	✓			
H2016 0.8x bc		<input type="checkbox"/>	✓			
H2017 0.9x bc		<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\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 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

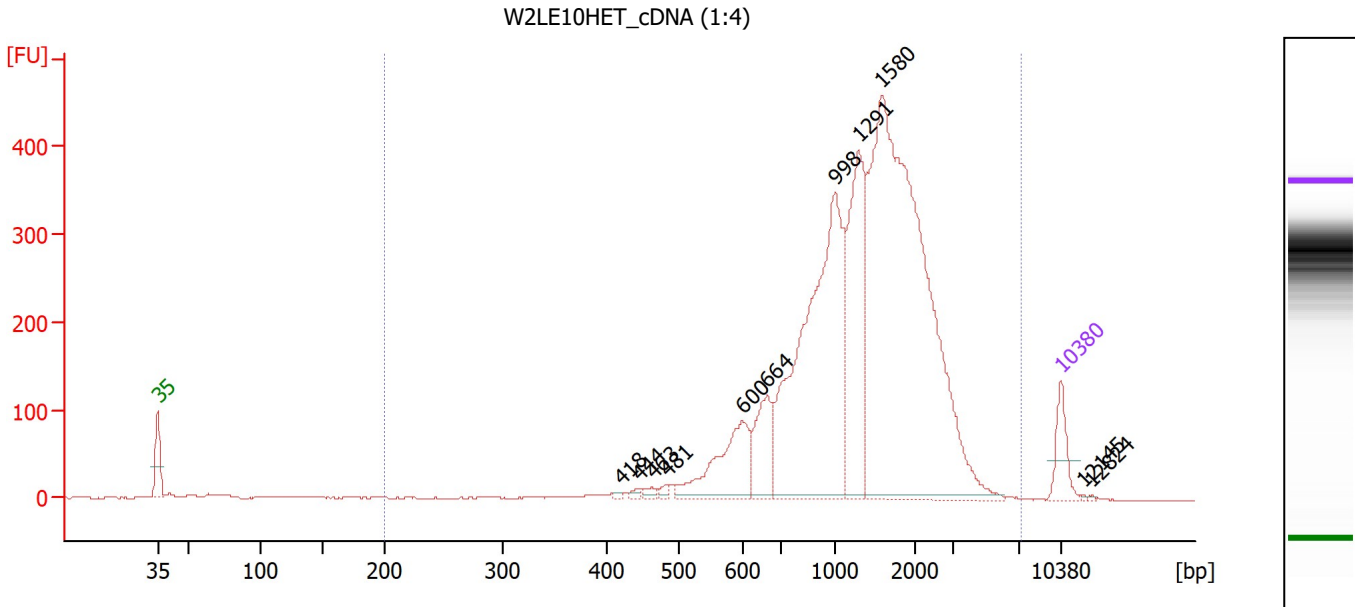
**Ladder**

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: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary**



**Overall Results for sample 1 : W2LE10HET\_cDNA (1:4)**

Number of peaks found: 11      Corr. Area 1: 4,942.5  
 Noise: 0.3

**Peak table for sample 1 : W2LE10HET\_cDNA (1:4)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	418	5.68	20.6	
3	444	10.75	36.7	
4	463	14.52	47.6	
5	481	12.50	39.3	
6	600	265.34	670.5	
7	664	171.12	390.5	
8	998	1,042.40	1,583.2	
9	1,291	440.19	516.7	
10	1,580	1,713.11	1,642.9	
11	10,380	75.00	10.9	Upper Marker
12	12,145	0.00	0.0	
13	12,824	0.00	0.0	

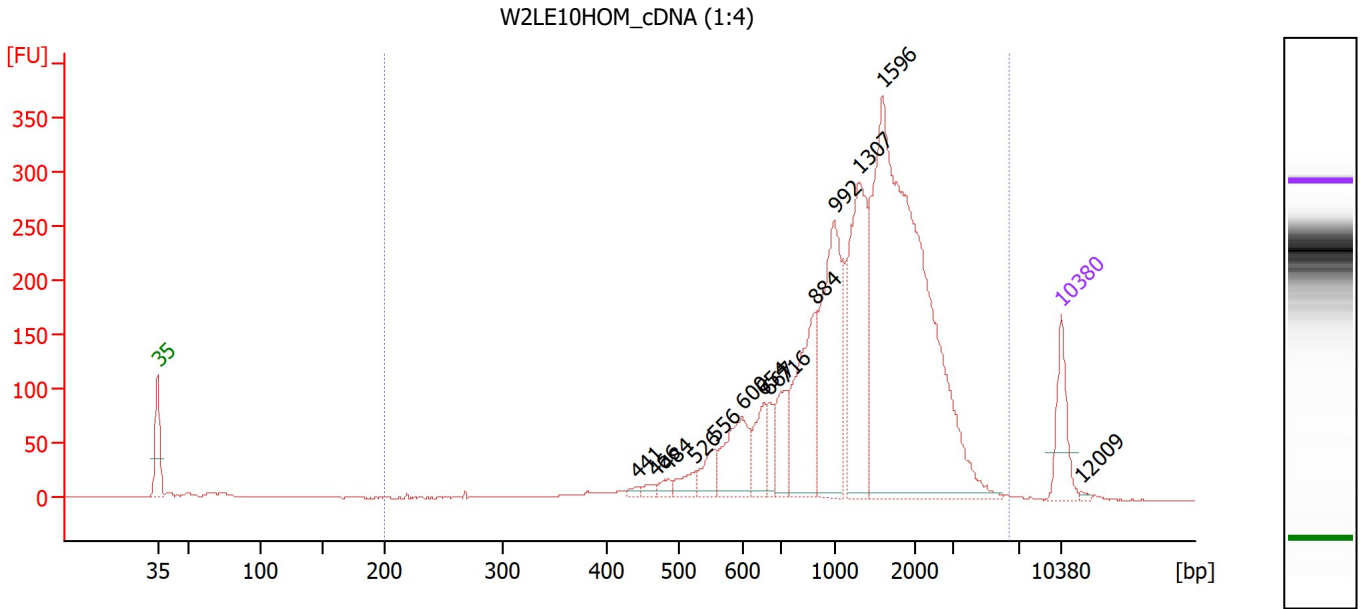
**Region table for sample 1 : W2LE10HET\_cDNA (1:4)**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	7,203	4,942.5	99	1,466	50.5	3,758.85	5,204.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : W2LE10HOM\_cDNA (1:4)**

Number of peaks found: 14                      Corr. Area 1: 3,814.6  
 Noise: 0.3

**Peak table for sample 2 : W2LE10HOM\_cDNA (1:4)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	441	7.77	26.7	
3	466	13.30	43.2	
4	484	16.52	51.7	
5	526	31.84	91.8	
6	556	47.77	130.3	
7	600	131.48	332.1	
8	654	75.28	174.3	
9	667	41.46	94.1	
10	716	86.93	183.9	
11	884	233.55	400.2	
12	992	305.46	466.5	
13	1,307	312.02	361.7	
14	1,596	1,057.56	1,004.1	
15	10,380	75.00	10.9	Upper Marker
16	12,009	0.00	0.0	

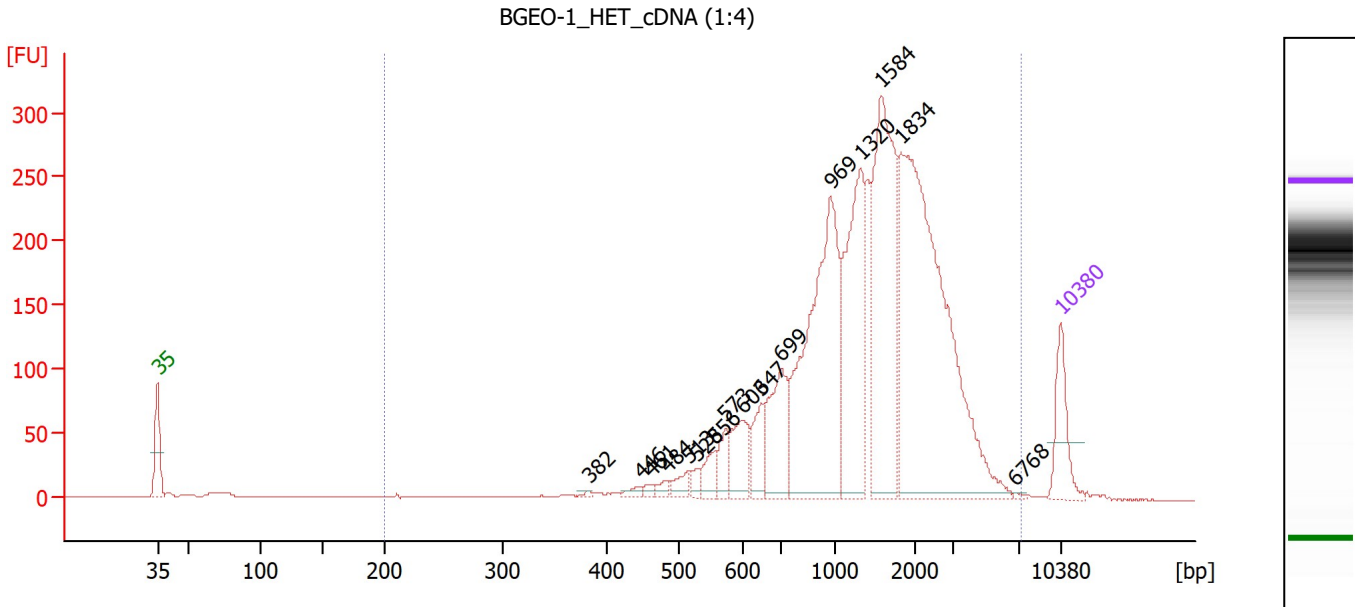
**Region table for sample 2 : W2LE10HOM\_cDNA (1:4)**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	6,469	3,814.6	98	1,458	52.1	2,461.78	3,560.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : BGEO-1 HET cDNA (1:4)**

Number of peaks found: 16                      Corr. Area 1: 3,658.5  
 Noise: 0.3

**Peak table for sample 3 : BGEO-1 HET cDNA (1:4)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	382	4.40	17.4	
3	446	11.81	40.1	
4	461	9.10	29.9	
5	484	13.72	43.0	
6	513	25.25	74.5	
7	528	14.92	42.8	
8	556	36.95	100.7	
9	573	42.75	113.0	
10	603	79.91	200.8	
11	647	63.68	149.2	
12	699	152.72	330.9	
13	969	483.16	755.2	
14	1,320	306.36	351.7	
15	1,584	403.53	385.9	
16	1,834	722.73	597.0	
17	6,768	3.16	0.7	
18	10,380	75.00	10.9	Upper Marker

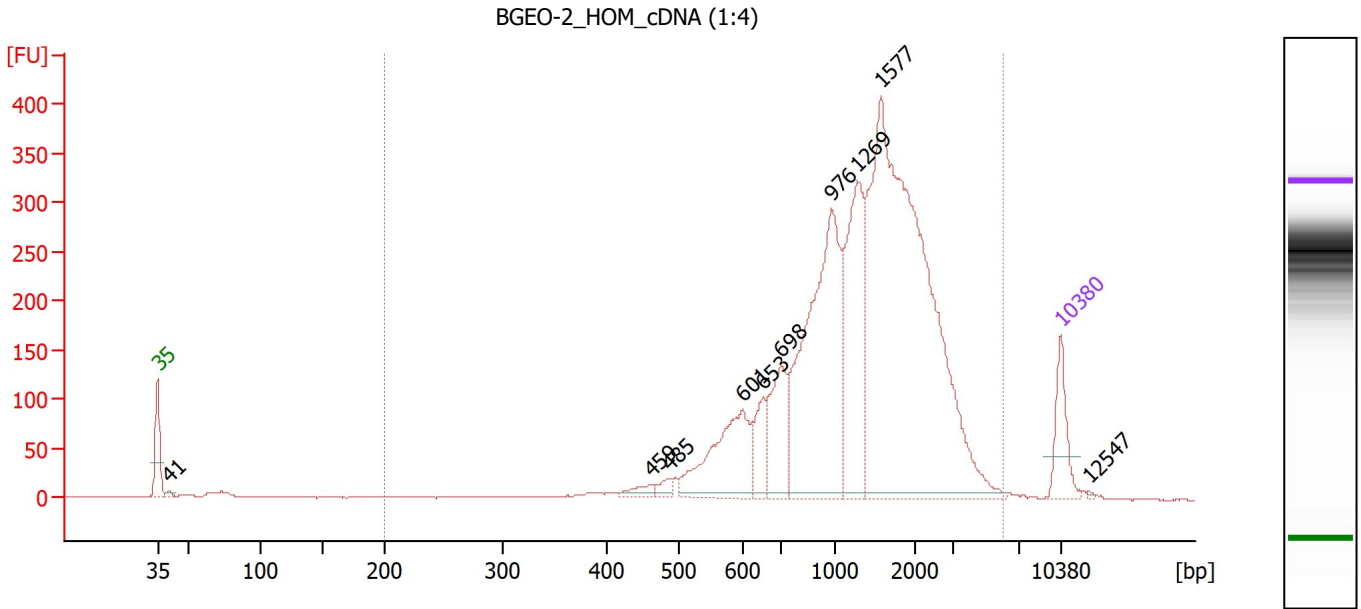
**Region table for sample 3 : BGEO-1 HET cDNA (1:4)**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	7,269	3,658.5	98	1,593	57.8	2,521.40	3,484.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : BGEO-2 HOM cDNA (1:4)**

Number of peaks found: 10                      Corr. Area 1: 4,410.9  
 Noise: 0.3

**Peak table for sample 4 : BGEO-2 HOM cDNA (1:4)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	9.68	359.3	
3	459	24.06	79.4	
4	485	20.52	64.1	
5	601	236.90	597.3	
6	653	77.75	180.3	
7	698	157.28	341.4	
8	976	577.03	895.7	
9	1,269	306.97	366.5	
10	1,577	1,203.08	1,155.7	
11	10,380	75.00	10.9	Upper Marker
12	12,547	0.00	0.0	

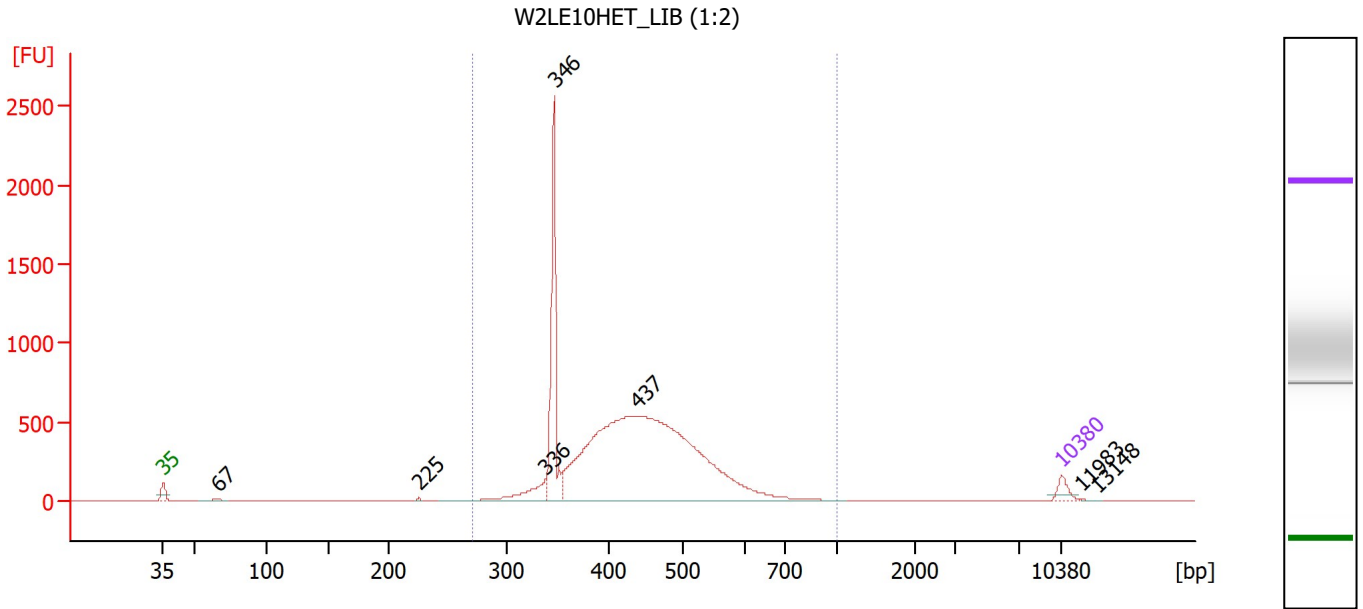
**Region table for sample 4 : BGEO-2 HOM cDNA (1:4)**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	6,101	4,410.9	99	1,473	53.5	2,637.27	3,754.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : W2LE10HET\_LIB (1:2)**

Number of peaks found: 7                      Corr. Area 1: 8,638.7  
 Noise: 0.2

**Peak table for sample 5 : W2LE10HET\_LIB (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	67	36.04	819.2	
3	225	10.55	70.9	
4	336	276.13	1,244.6	
5	346	1,130.65	4,956.7	
6	437	5,314.27	18,430.9	
7	10,380	75.00	10.9	Upper Marker
8	11,983	0.00	0.0	
9	13,148	0.00	0.0	

**Region table for sample 5 : W2LE10HET\_LIB (1:2)**

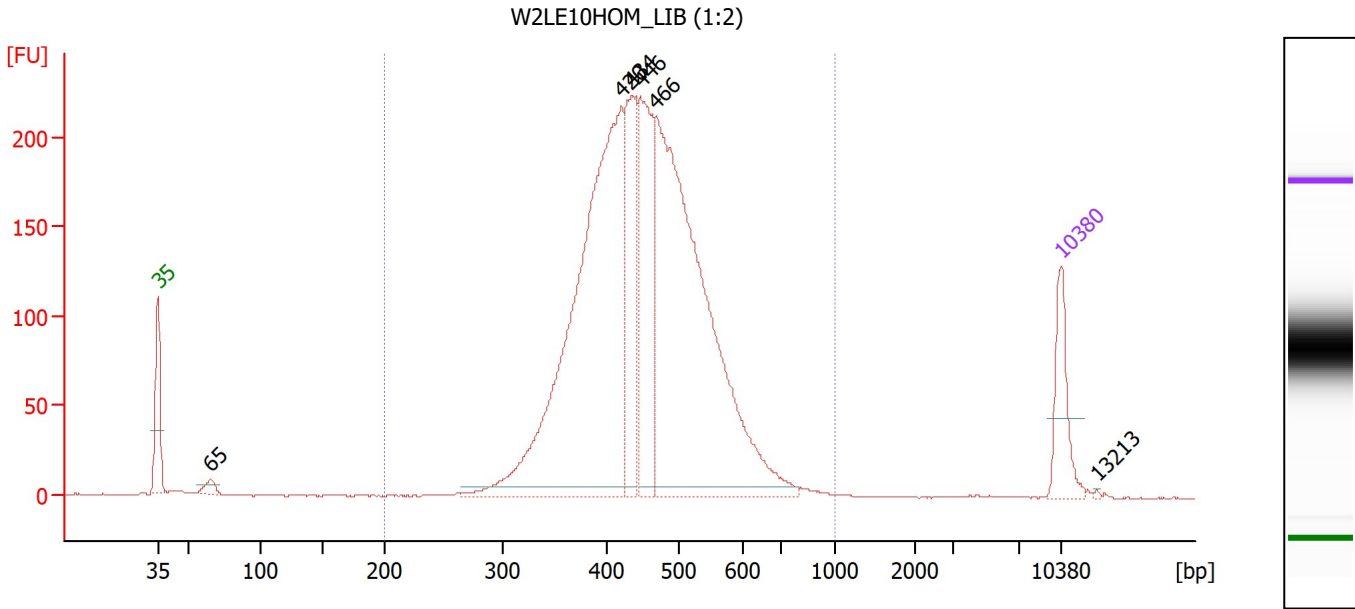
From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
272	1,000	8,638.7	98	438	18.8	6,644.41	23,956.0	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : W2LE10HOM\_LIB (1:2)**

Number of peaks found: 6                      Corr. Area 1: 3,107.3  
 Noise: 0.3

**Peak table for sample 6 : W2LE10HOM\_LIB (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	65	18.84	436.5	
3	420	1,026.59	3,706.1	
4	434	255.65	892.0	
5	446	271.61	922.3	
6	466	1,027.20	3,340.9	
7	10,380	75.00	10.9	Upper Marker
8	13,213	0.00	0.0	

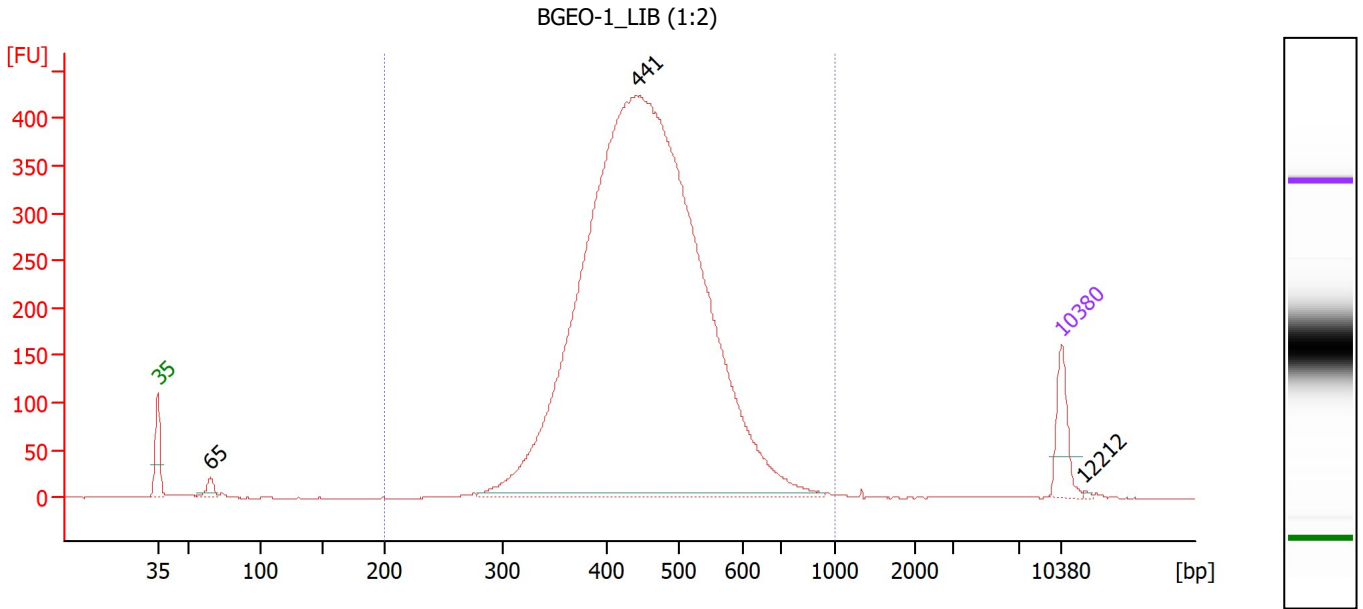
**Region table for sample 6 : W2LE10HOM\_LIB (1:2)**

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	3,107.3	97	454	17.7	2,644.28	9,157.7	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : BGEO-1\_LIB (1:2)**

Number of peaks found: 3                      Corr. Area 1: 5,858.0  
Noise: 0.3

**Peak table for sample 7 : BGEO-1\_LIB (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	65	35.88	831.2	
3	441	4,362.98	14,987.1	
4	10,380	75.00	10.9	Upper Marker
5	12,212	0.00	0.0	

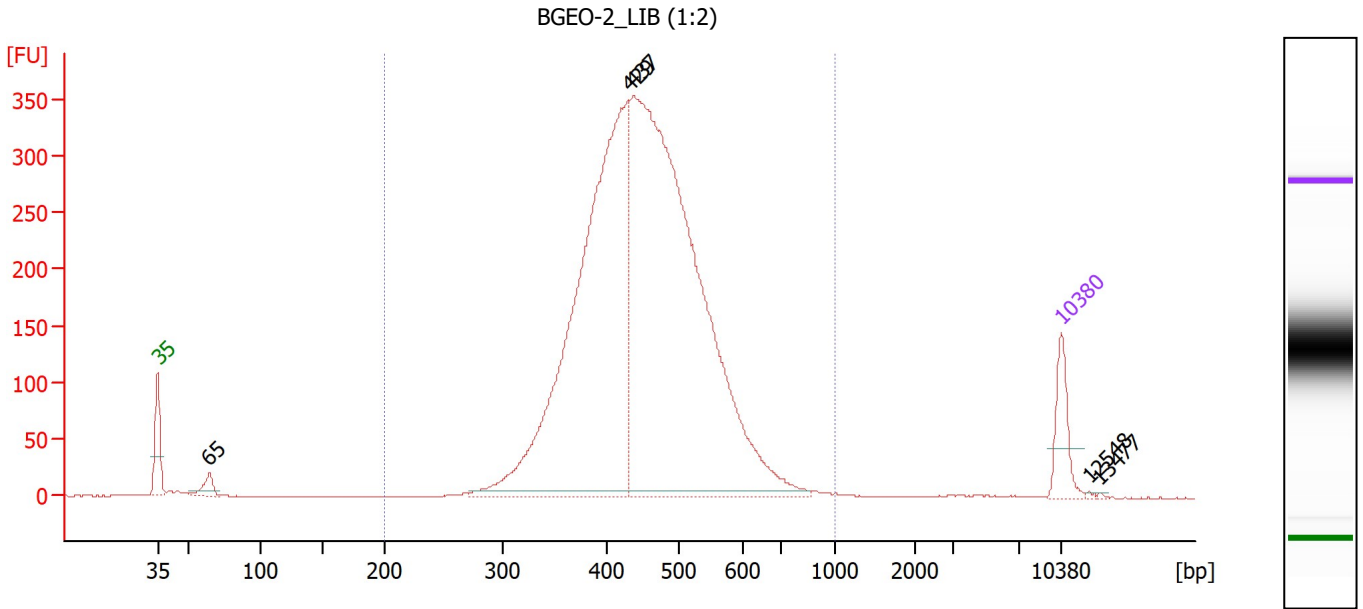
**Region table for sample 7 : BGEO-1\_LIB (1:2)**

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	5,858.0	97	458	18.0	4,408.30	15,174.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : BGEO-2\_LIB (1:2)**

Number of peaks found: 5                      Corr. Area 1: 4,781.8  
 Noise: 0.2

**Peak table for sample 8 : BGEO-2\_LIB (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	65	45.73	1,072.6	
3	429	1,646.16	5,811.4	
4	437	2,172.83	7,530.5	
5	10,380	75.00	10.9	Upper Marker
6	12,548	0.00	0.0	
7	13,477	0.00	0.0	

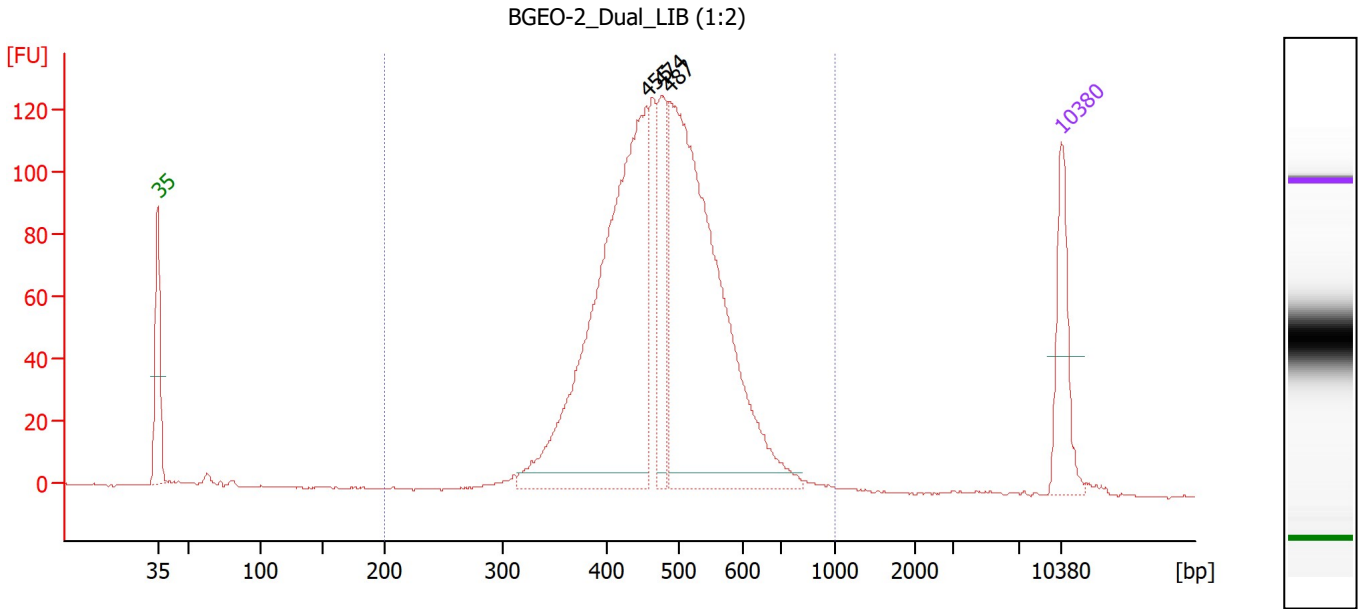
**Region table for sample 8 : BGEO-2\_LIB (1:2)**

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	4,781.8	97	454	17.9	3,868.07	13,418.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : B GEO-2\_Dual\_LIB (1:2)**

Number of peaks found: 3                      Corr. Area 1: 1,635.2  
 Noise: 0.2

**Peak table for sample 9 : B GEO-2\_Dual\_LIB (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	455	708.34	2,356.8	
3	474	128.58	410.8	
4	487	704.54	2,193.2	
5	10,380	75.00	10.9	Upper Marker

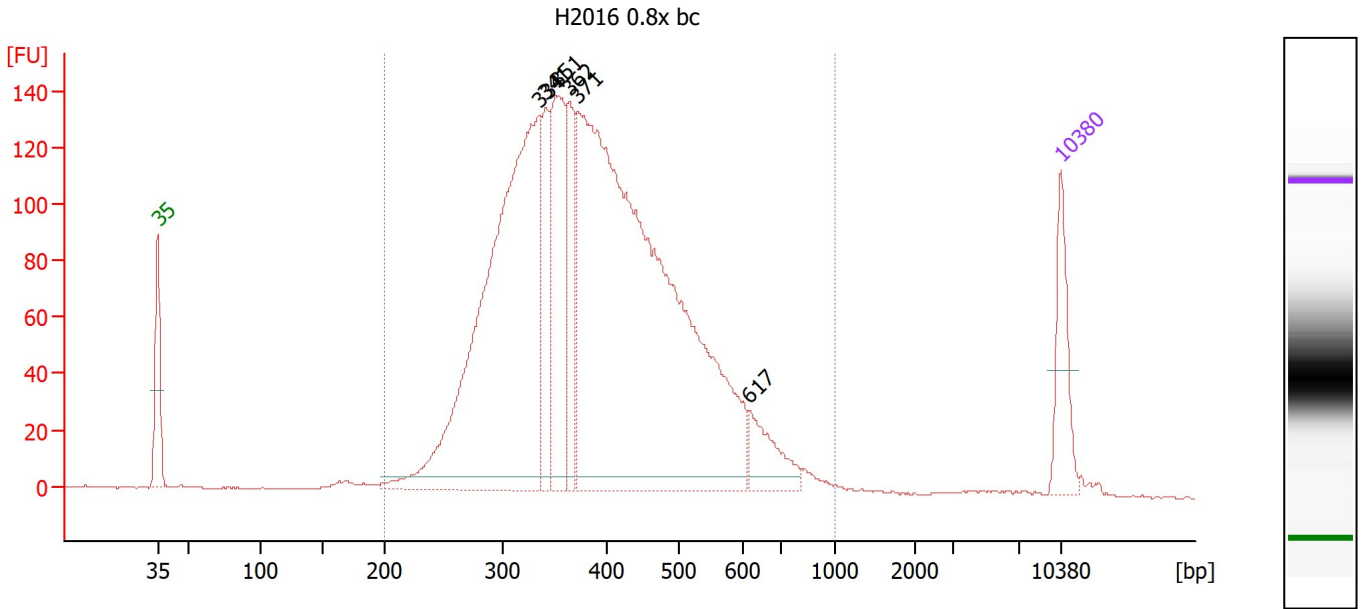
**Region table for sample 9 : B GEO-2\_Dual\_LIB (1:2)**

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	1,635.2	98	479	17.3	1,683.89	5,522.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : H2016 0.8x bc**

Number of peaks found: 6                      Corr. Area 1: 2,877.1  
 Noise: 0.3

**Peak table for sample 10 : H2016 0.8x bc**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	334	1,032.19	4,686.2	
3	341	138.81	617.2	
4	351	267.85	1,156.3	
5	362	133.77	559.1	
6	371	1,564.94	6,383.7	
7	617	77.03	189.3	
8	10,380	75.00	10.9	Upper Marker

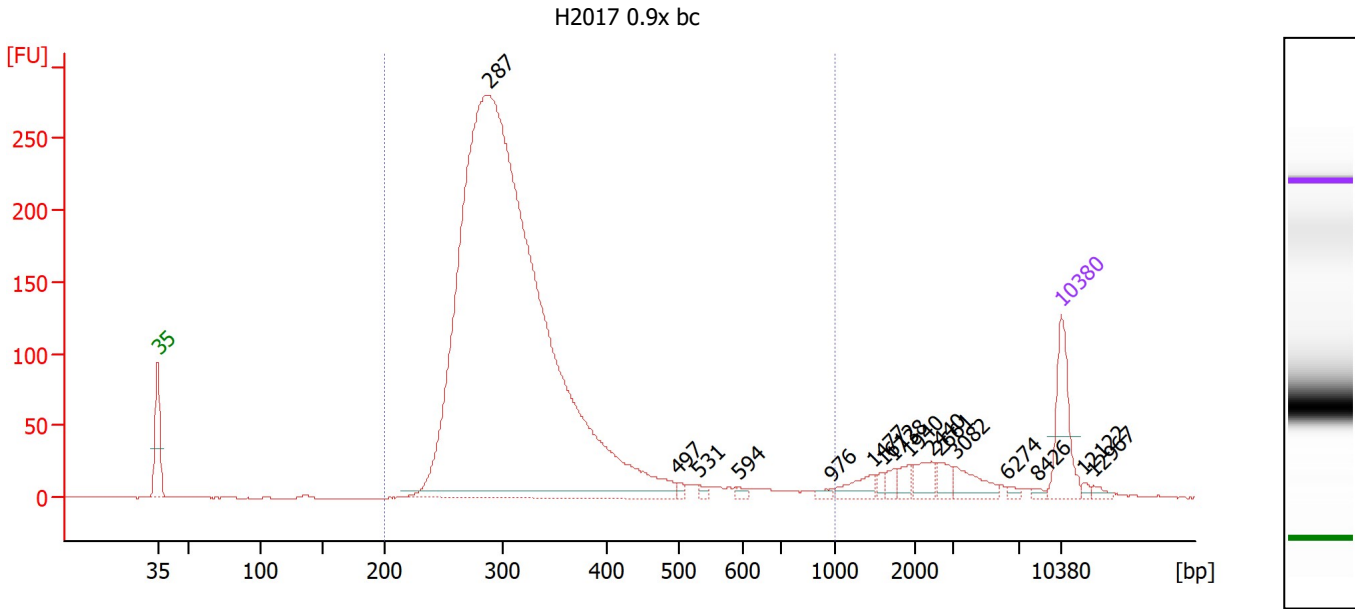
**Region table for sample 10 : H2016 0.8x bc**

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	2,877.1	98	401	26.4	3,194.57	13,128.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : H2017 0.9x bc**

Number of peaks found: 16      Corr. Area 1: 3,086.6  
 Noise: 0.4

**Peak table for sample 11 : H2017 0.9x bc**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	287	2,909.43	15,358.8	
3	497	7.01	21.4	
4	531	7.15	20.4	
5	594	6.95	17.7	
6	976	6.79	10.5	
7	1,477	25.63	26.3	
8	1,612	7.78	7.3	
9	1,738	12.40	10.8	
10	1,940	13.33	10.4	
11	2,440	26.01	16.2	
12	2,661	19.35	11.0	
13	3,082	31.93	15.7	
14	6,274	5.82	1.4	
15	8,426	4.70	0.8	
16	10,380	75.00	10.9	Upper Marker
17	12,122	0.00	0.0	
18	12,967	0.00	0.0	

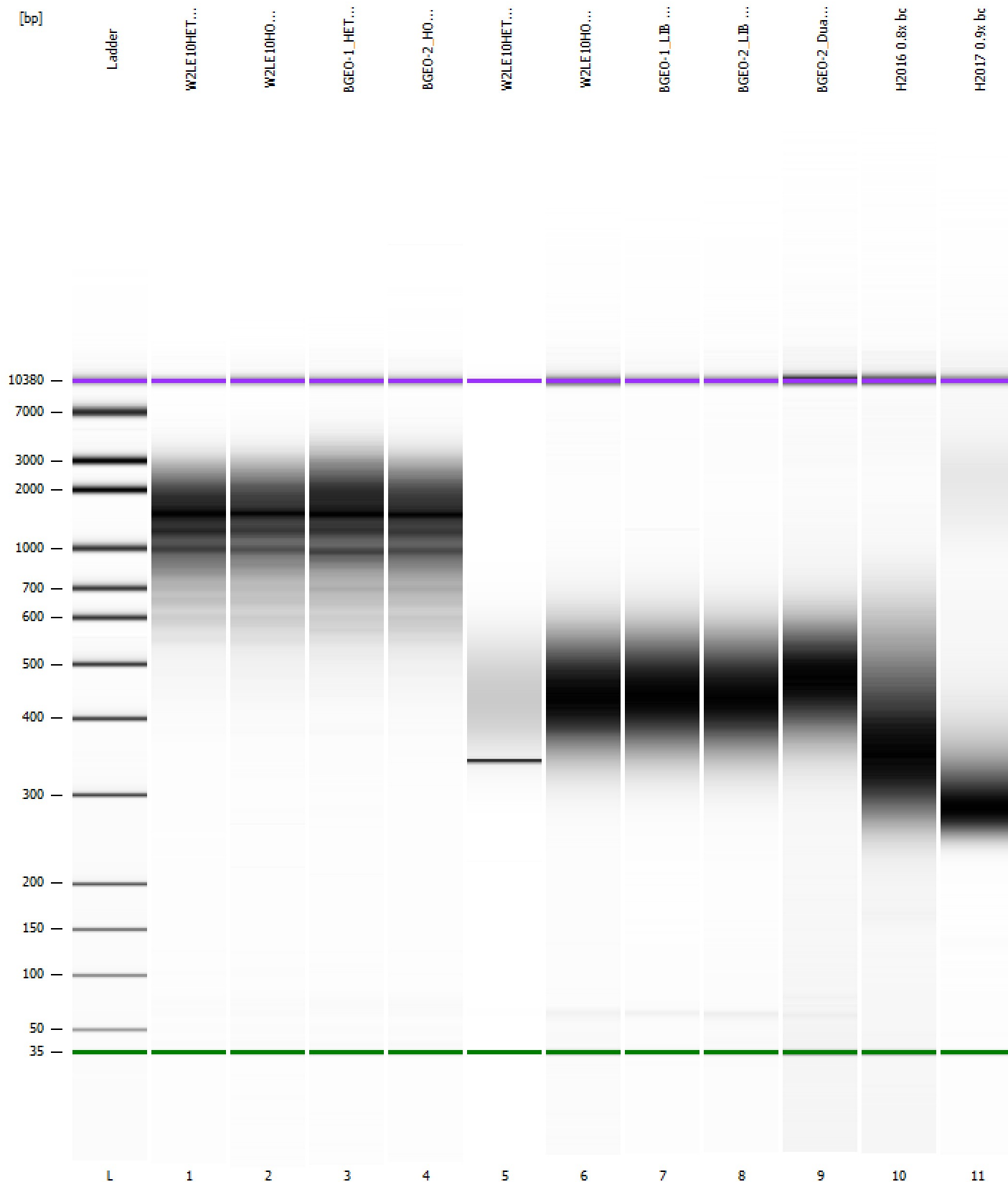
**Region table for sample 11 : H2017 0.9x bc**

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	3,086.6	91	324	26.4	2,856.08	14,080.5	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
Modified: 11/25/2019 1:15:00 PM

Gel Image

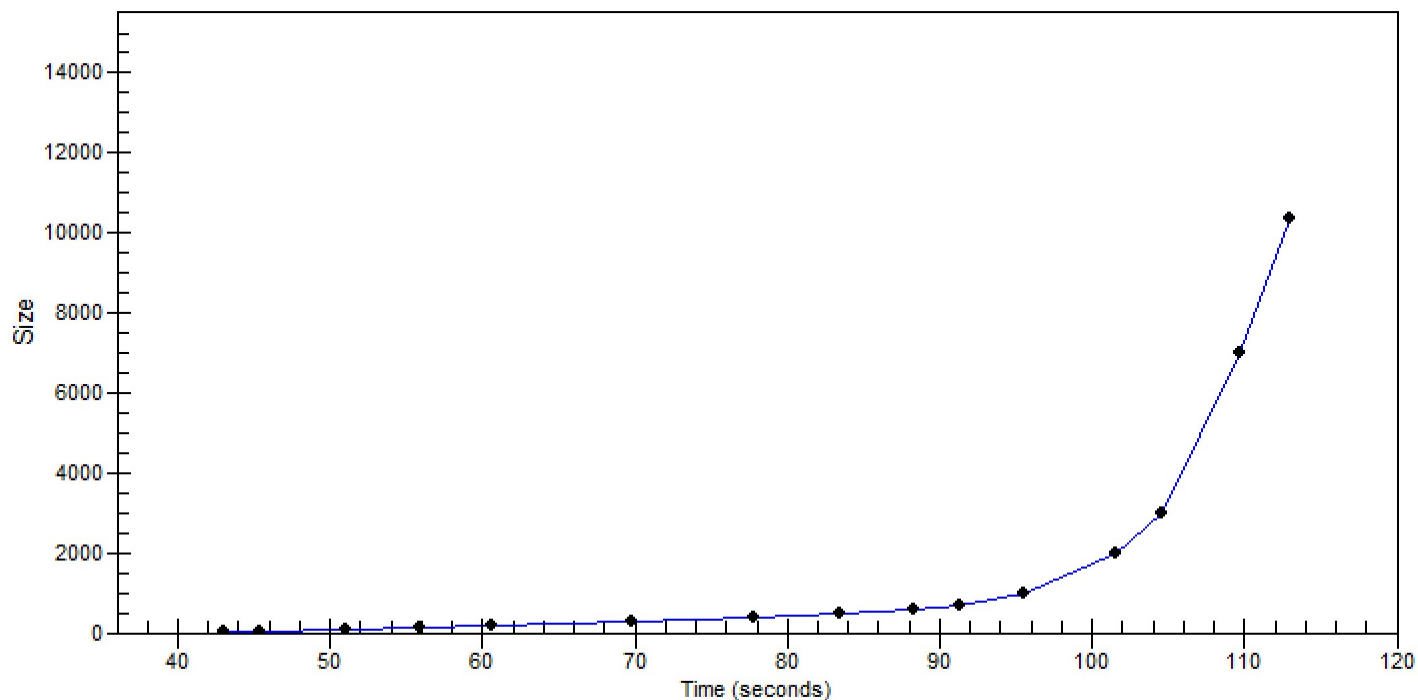


Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
Modified: 11/25/2019 1:15:00 PM

**Curves**

**Standard Curve**





Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-11-25\_001.xad

Created: 11/25/2019 12:33:35 PM  
 Modified: 11/25/2019 1:15:00 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		11/25/2019 1:14:56 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2019-11-25\Bioanalyze r1_High Sensitivity DNA Assay_2019-11-25_001.xad)		Instrument	Run		11/25/2019 12:33:41 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		11/25/2019 12:33:41 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		11/25/2019 12:33:41 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		11/25/2019 12:33:41 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		11/25/2019 12:33:41 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		11/25/2019 12:33:41 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		11/25/2019 12:33:41 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB