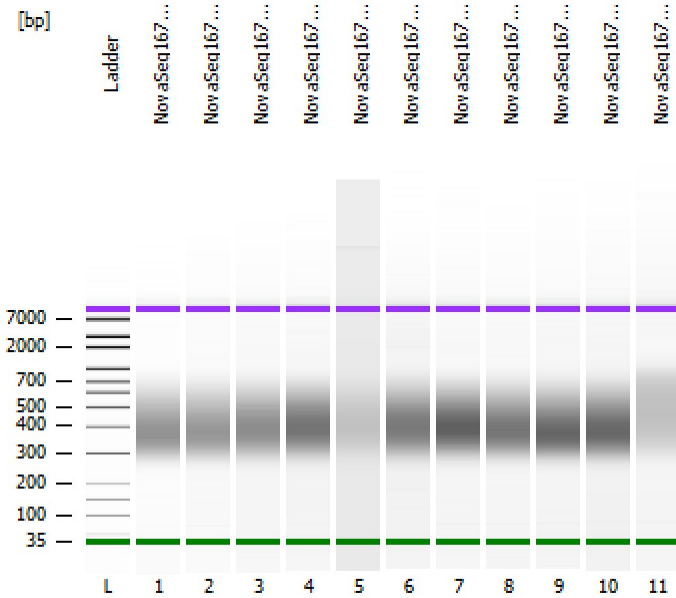


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
Modified: 5/28/2020 4:52:07 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

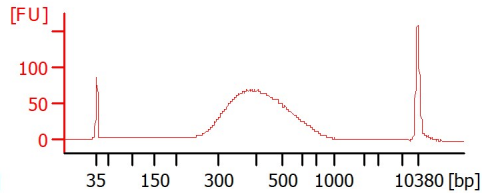
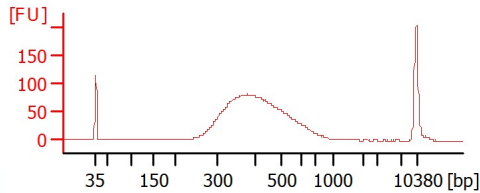
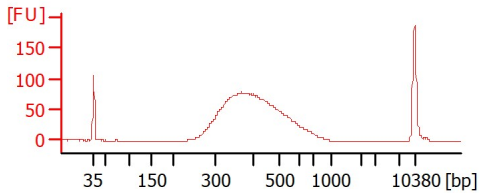
Chip Information:

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

NovaSeq167 - 1 library

NovaSeq167 - 2 library

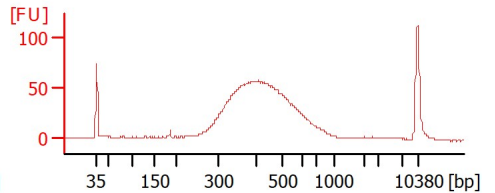
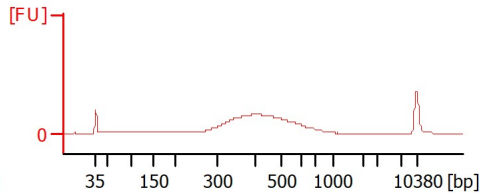
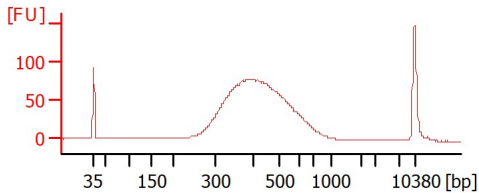
NovaSeq167 - 3 library



NovaSeq167 - 4 library

NovaSeq167 - 5 library

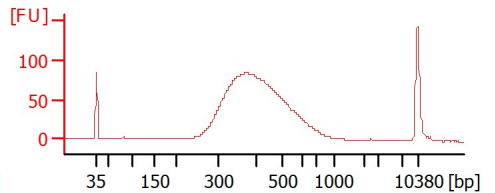
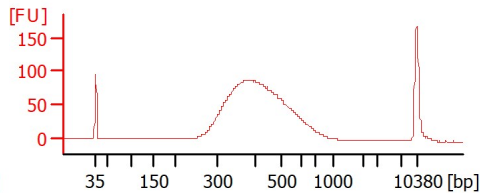
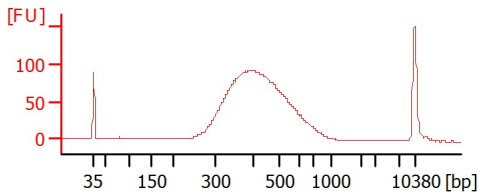
NovaSeq167 - 6 library



NovaSeq167 - 7 library

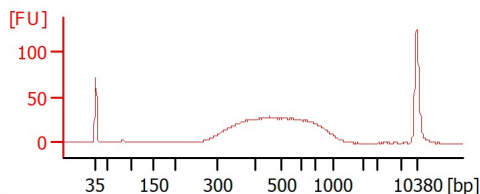
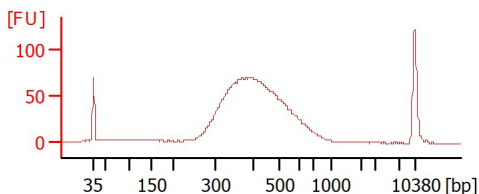
NovaSeq167 - 8 library

NovaSeq167 - 9 library



NovaSeq167 - 10 library

NovaSeq167 - 1 library_no soni_Gold



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NovaSeq167 - 1 library		<input type="checkbox"/>	✓			
NovaSeq167 - 2 library		<input type="checkbox"/>	✓			
NovaSeq167 - 3 library		<input type="checkbox"/>	✓			
NovaSeq167 - 4 library		<input type="checkbox"/>	✓			
NovaSeq167 - 5 library		<input type="checkbox"/>	✓			
NovaSeq167 - 6 library		<input type="checkbox"/>	✓			
NovaSeq167 - 7 library		<input type="checkbox"/>	✓			
NovaSeq167 - 8 library		<input type="checkbox"/>	✓			
NovaSeq167 - 9 library		<input type="checkbox"/>	✓			
NovaSeq167 - 10 library		<input type="checkbox"/>	✓			
NovaSeq167 - 1 library_no soni_Gold		<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_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 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

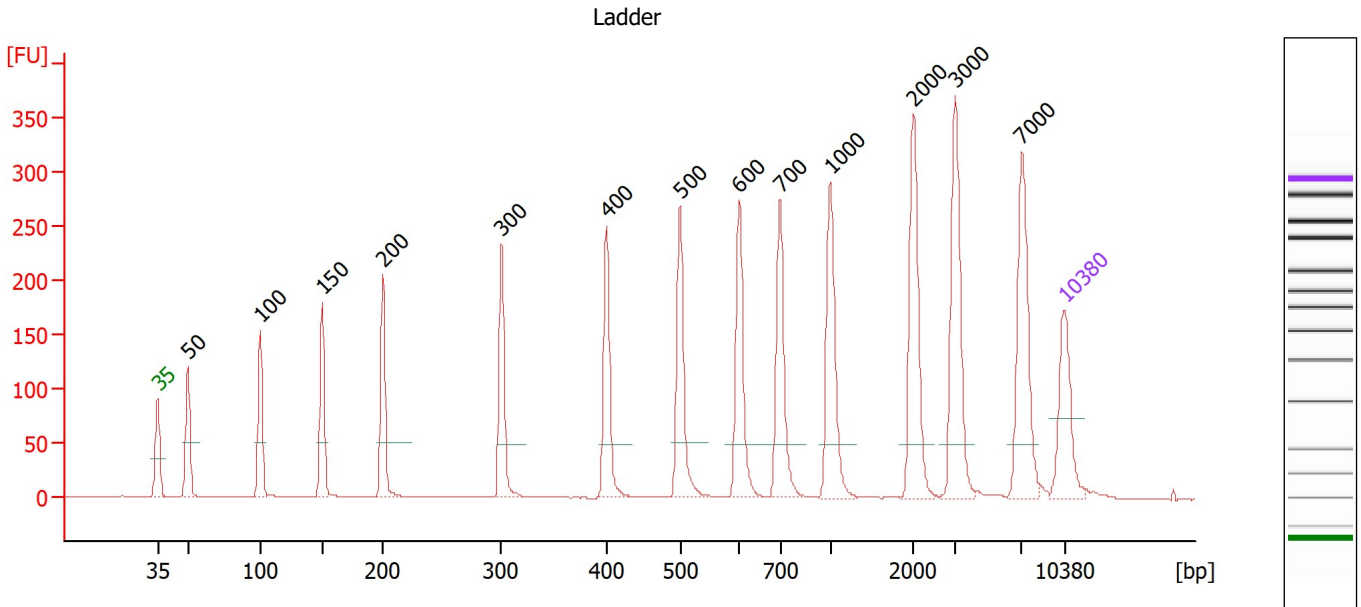
Ladder

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_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

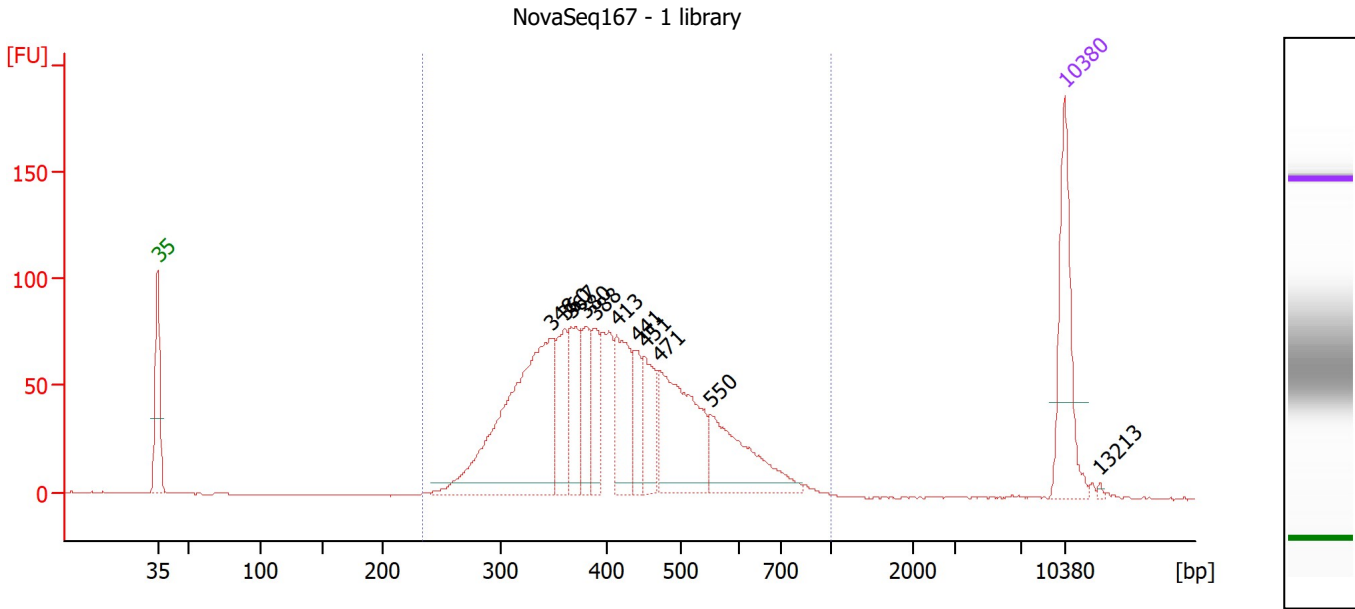
Peak table for Ladder

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_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NovaSeq167 - 1 library

Number of peaks found: 11 Corr. Area 1: 1,632.4
 Noise: 0.2

Peak table for sample 1 : NovaSeq167 - 1 library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	348	295.01	1,285.8	
3	360	68.28	287.2	
4	367	62.75	259.4	
5	380	54.00	215.4	
6	388	45.94	179.4	
7	413	84.48	309.6	
8	441	34.70	119.1	
9	451	53.36	179.1	
10	471	142.15	457.2	
11	550	96.38	265.3	
12	10,380	75.00	10.9	Upper Marker
13	13,213	0.00	0.0	

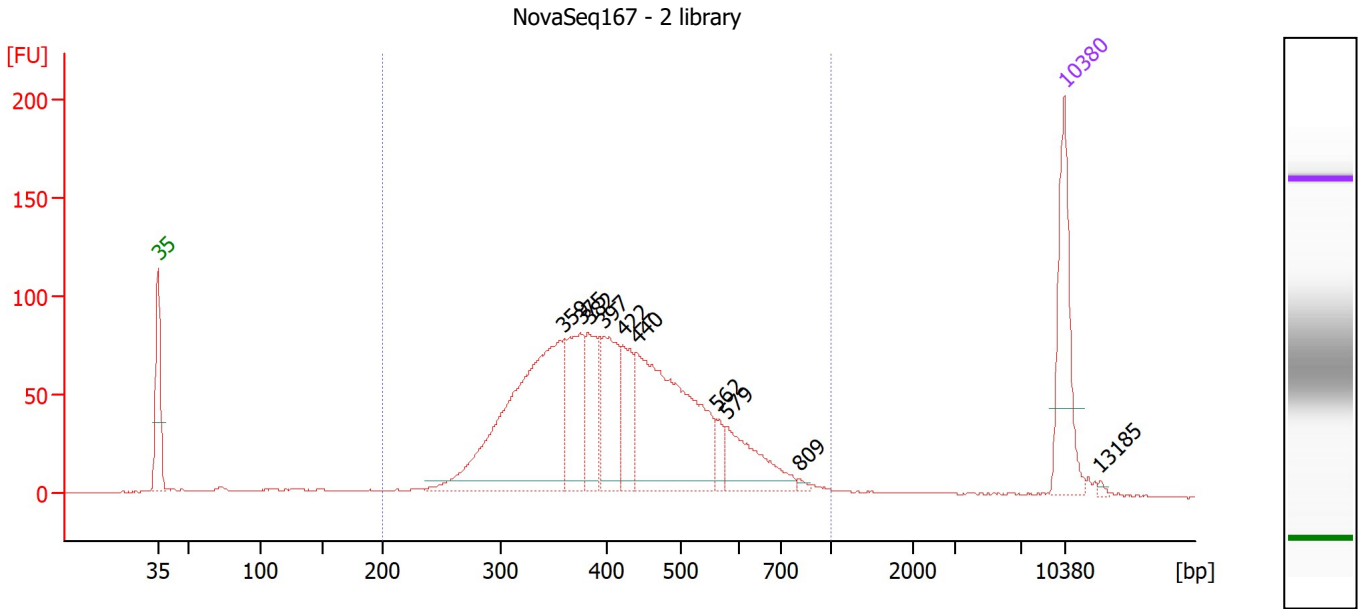
Region table for sample 1 : NovaSeq167 - 1 library

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
233	1,000	1,632.4	99	424	24.9	1,047.78	4,032.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : NovaSeq167 - 2 library

Number of peaks found: 10 Corr. Area 1: 1,763.8
 Noise: 0.2

Peak table for sample 2 : NovaSeq167 - 2 library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	359	308.07	1,301.7	
3	375	94.91	383.3	
4	382	62.64	248.4	
5	397	85.08	324.9	
6	422	54.17	194.6	
7	440	243.76	839.6	
8	562	14.78	39.8	
9	579	62.39	163.3	
10	809	2.94	5.5	
11	10,380	75.00	10.9	Upper Marker
12	13,185	0.00	0.0	

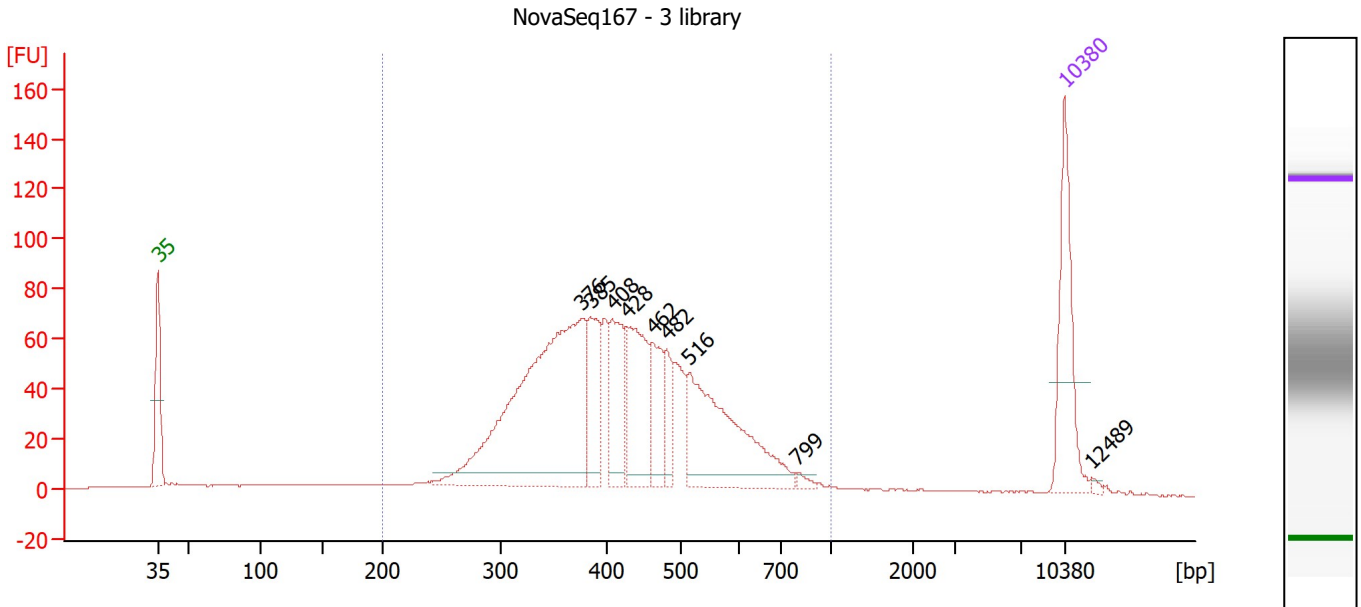
Region table for sample 2 : NovaSeq167 - 2 library

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	1,763.8	93	427	26.4	1,030.43	3,981.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : NovaSeq167 - 3 library

Number of peaks found: 9 Corr. Area 1: 1,501.9
 Noise: 0.2

Peak table for sample 3 : NovaSeq167 - 3 library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	376	391.95	1,578.9	
3	385	68.31	269.1	
4	408	74.12	275.5	
5	428	101.09	357.8	
6	462	55.55	182.0	
7	482	34.27	107.7	
8	516	174.37	512.4	
9	799	4.48	8.5	
10	10,380	75.00	10.9	Upper Marker
11	12,489	0.00	0.0	

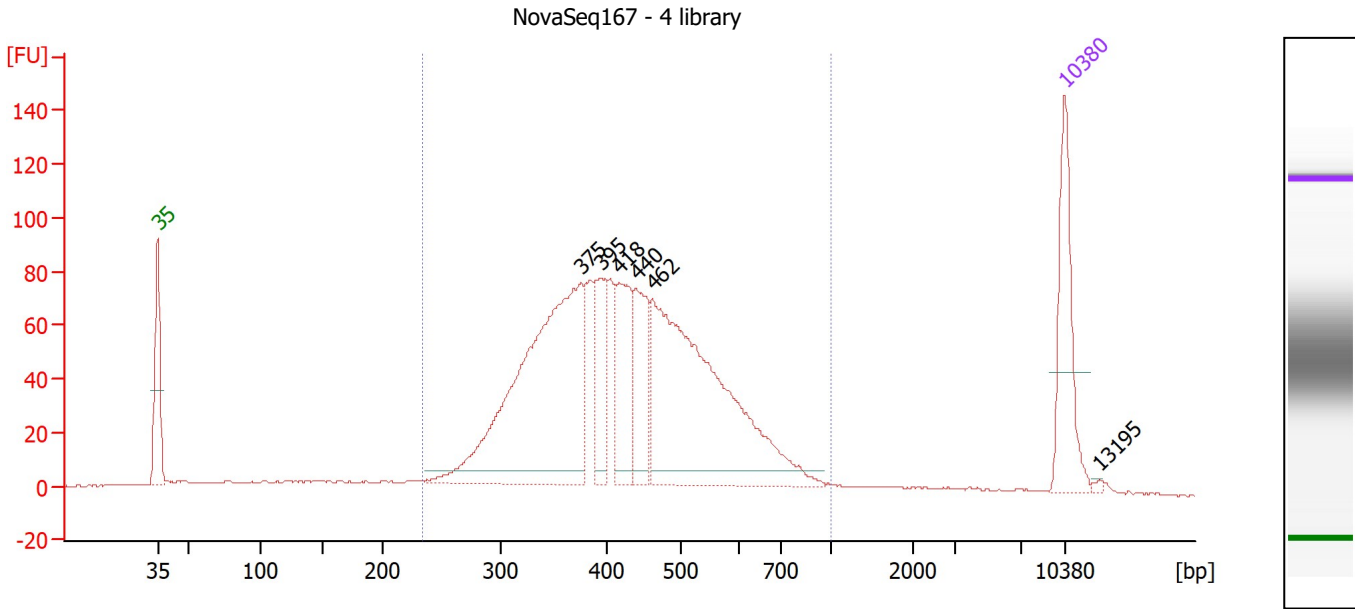
Region table for sample 3 : NovaSeq167 - 3 library

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	1,501.9	91	432	26.4	1,120.15	4,281.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : NovaSeq167 - 4 library

Number of peaks found: 6 Corr. Area 1: 1,673.3
 Noise: 0.3

Peak table for sample 4 : NovaSeq167 - 4 library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	375	407.09	1,643.9	
3	395	69.73	267.4	
4	418	91.64	332.4	
5	440	82.88	285.1	
6	462	386.07	1,265.6	
7	10,380	75.00	10.9	Upper Marker
8	13,195	0.00	0.0	

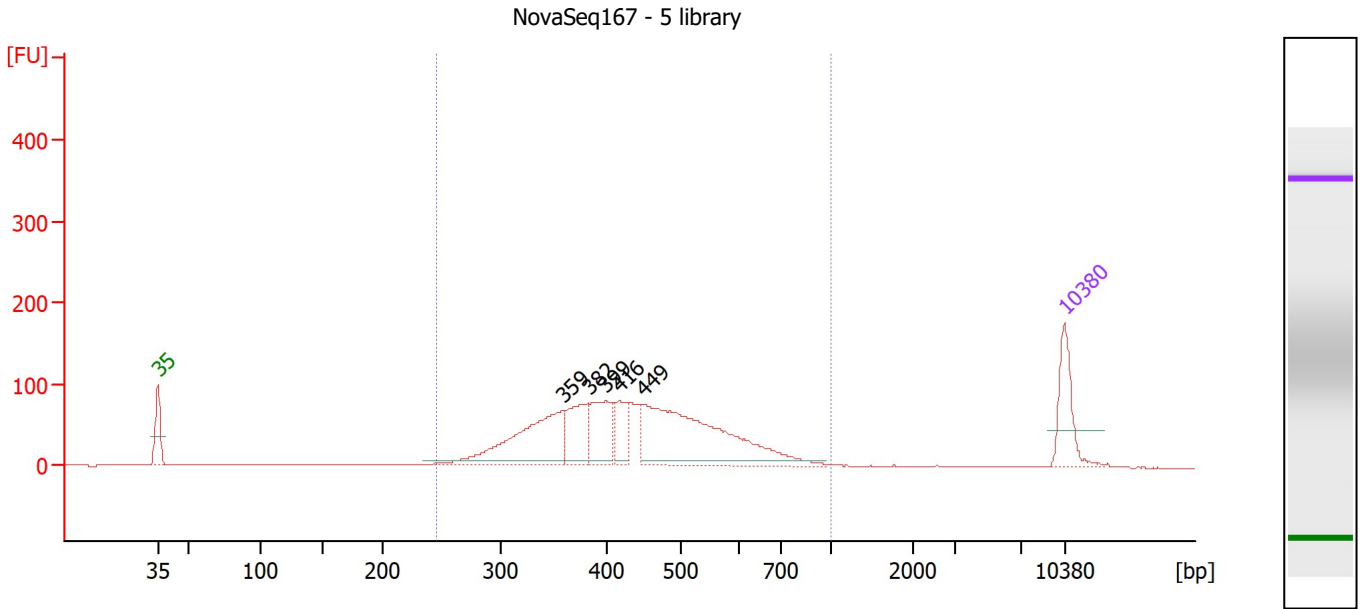
Region table for sample 4 : NovaSeq167 - 4 library

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
233	1,000	1,673.3	91	439	25.7	1,237.19	4,635.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NovaSeq167 - 5 library

Number of peaks found: 5 Corr. Area 1: 1,709.1
 Noise: 0.2

Peak table for sample 5 : NovaSeq167 - 5 library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	359	246.34	1,041.0	
3	382	104.93	415.9	
4	399	108.31	411.7	
5	416	65.04	236.6	
6	449	391.53	1,322.6	
7	10,380	75.00	10.9	Upper Marker

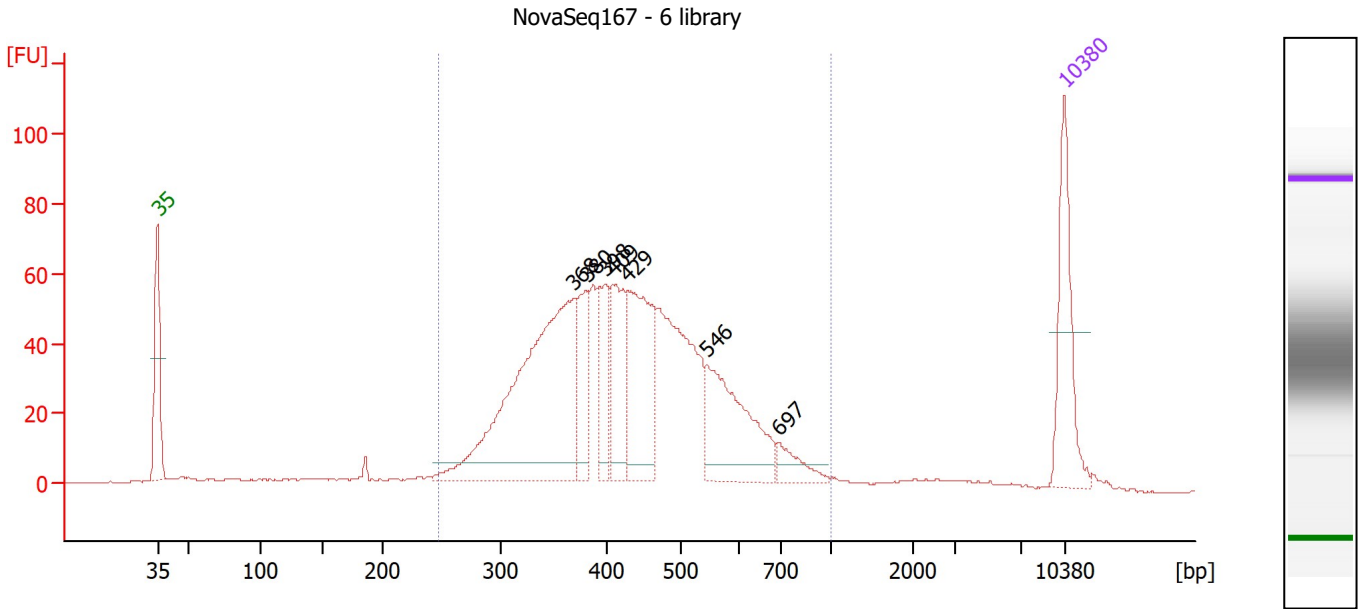
Region table for sample 5 : NovaSeq167 - 5 library

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
245	1,000	1,709.1	87	446	26.0	1,046.01	3,855.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NovaSeq167 - 6 library

Number of peaks found: 7 Corr. Area 1: 1,228.9
 Noise: 0.2

Peak table for sample 6 : NovaSeq167 - 6 library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	368	368.99	1,519.5	
3	380	59.81	238.2	
4	398	63.81	243.0	
5	409	85.92	318.4	
6	429	142.34	503.1	
7	546	131.97	366.3	
8	697	23.59	51.3	
9	10,380	75.00	10.9	Upper Marker

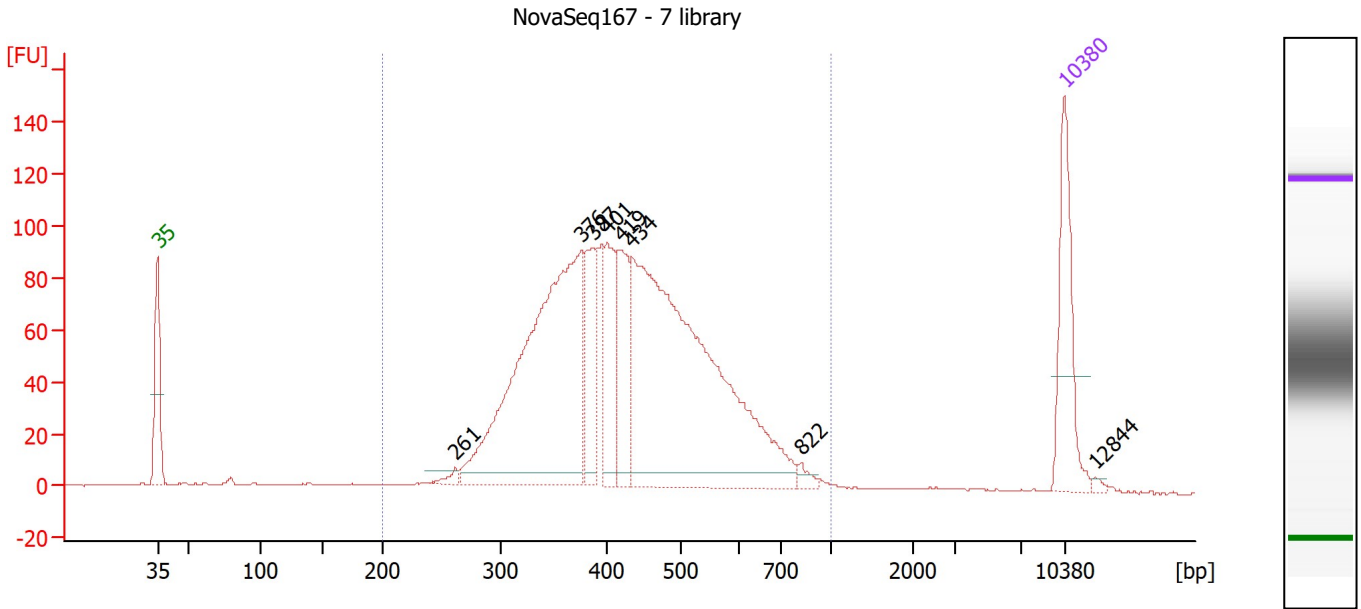
Region table for sample 6 : NovaSeq167 - 6 library

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
247	1,000	1,228.9	90	443	26.5	1,243.18	4,620.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NovaSeq167 - 7 library

Number of peaks found: 8 Corr. Area 1: 1,875.7
 Noise: 0.2

Peak table for sample 7 : NovaSeq167 - 7 library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	7.53	43.7	
3	376	454.33	1,831.5	
4	387	73.88	289.1	
5	401	86.98	328.8	
6	419	78.93	285.5	
7	434	554.12	1,934.4	
8	822	7.06	13.0	
9	10,380	75.00	10.9	Upper Marker
10	12,844	0.00	0.0	

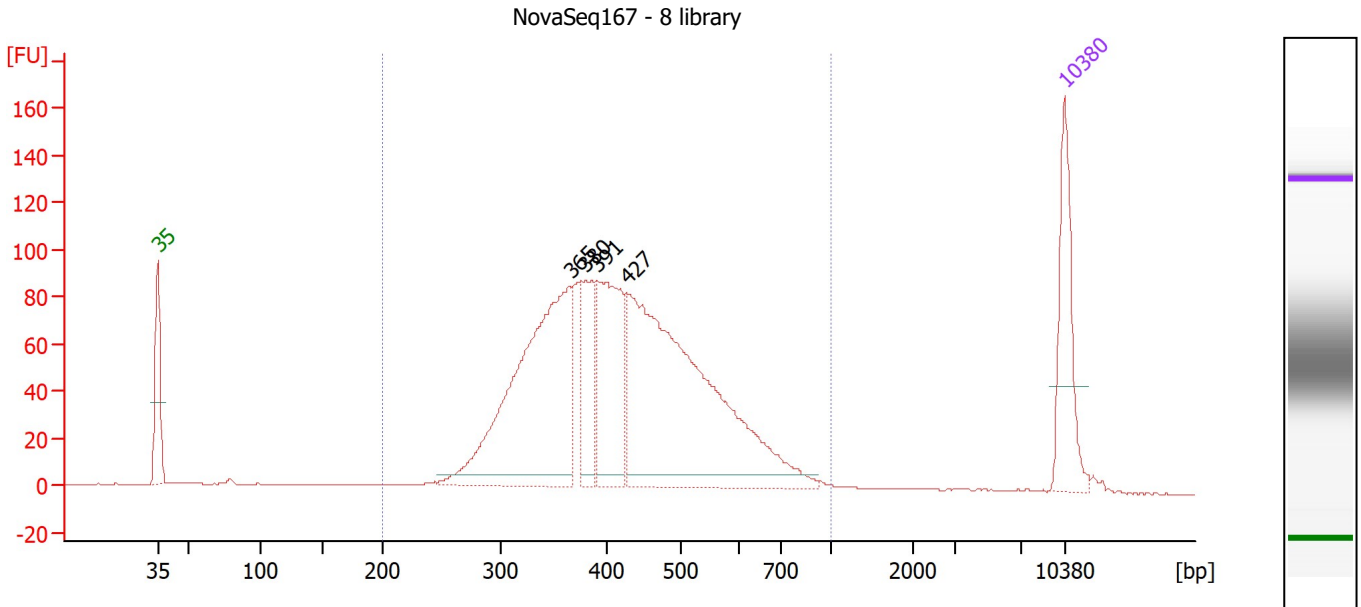
Region table for sample 7 : NovaSeq167 - 7 library

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	1,875.7	95	438	25.3	1,394.41	5,218.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : NovaSeq167 - 8 library

Number of peaks found: 4 Corr. Area 1: 1,764.1
 Noise: 0.2

Peak table for sample 8 : NovaSeq167 - 8 library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	365	374.08	1,553.3	
3	380	79.28	316.2	
4	391	163.86	635.7	
5	427	483.14	1,713.7	
6	10,380	75.00	10.9	Upper Marker

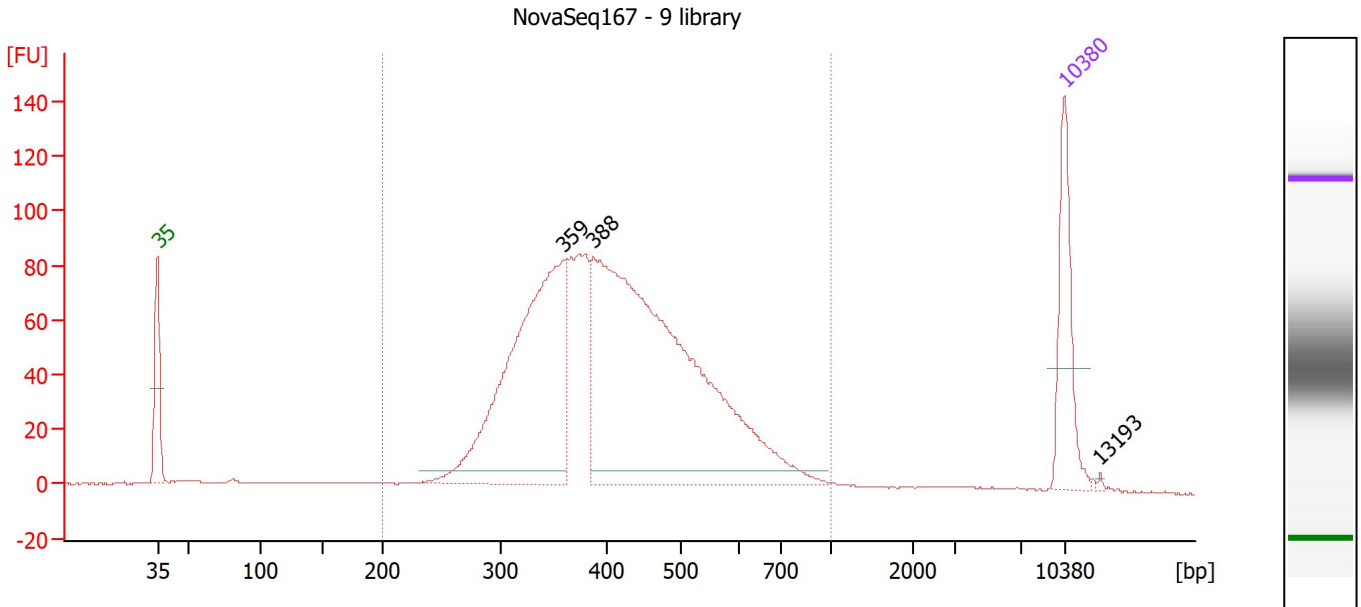
Region table for sample 8 : NovaSeq167 - 8 library

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	1,764.1	96	432	25.3	1,201.23	4,548.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : NovaSeq167 - 9 library

Number of peaks found: 3 Corr. Area 1: 1,675.9
 Noise: 0.2

Peak table for sample 9 : NovaSeq167 - 9 library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	359	424.36	1,792.3	
3	388	724.13	2,831.3	
4	10,380	75.00	10.9	Upper Marker
5	13,193	0.00	0.0	

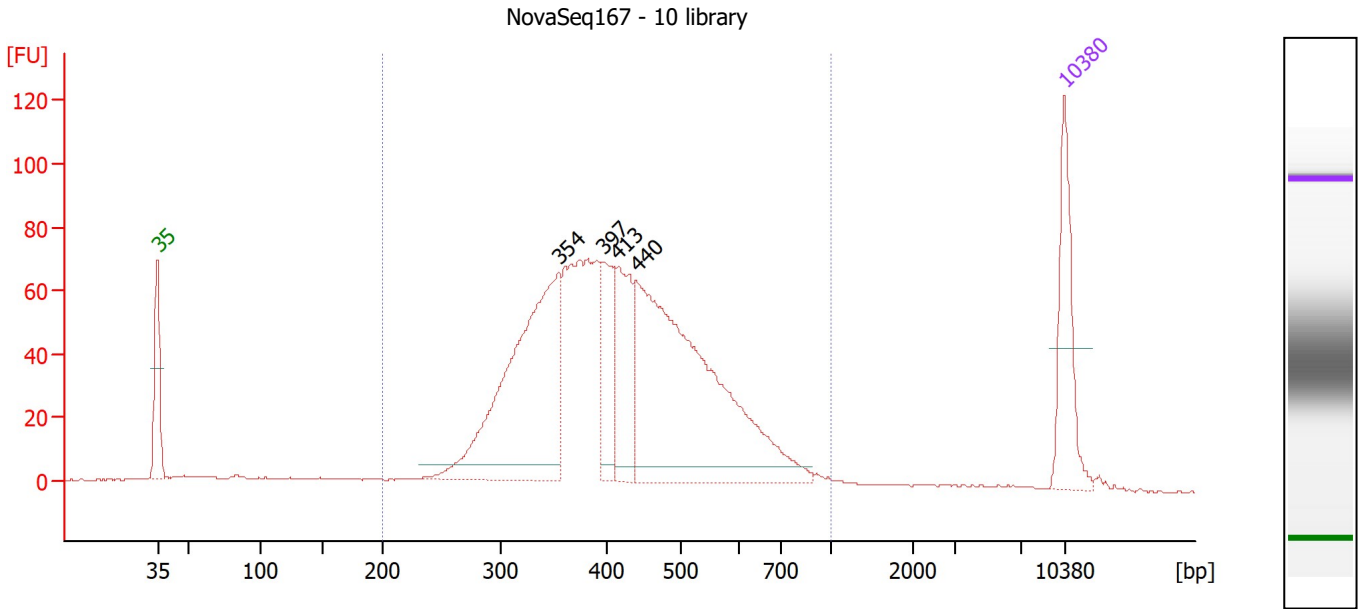
Region table for sample 9 : NovaSeq167 - 9 library

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	1,675.9	95	424	25.6	1,342.57	5,175.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NovaSeq167 - 10 library

Number of peaks found: 4 Corr. Area 1: 1,455.1
 Noise: 0.2

Peak table for sample 10 : NovaSeq167 - 10 library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	354	368.32	1,576.8	
3	397	87.81	335.3	
4	413	104.47	383.2	
5	440	479.67	1,651.5	
6	10,380	75.00	10.9	Upper Marker

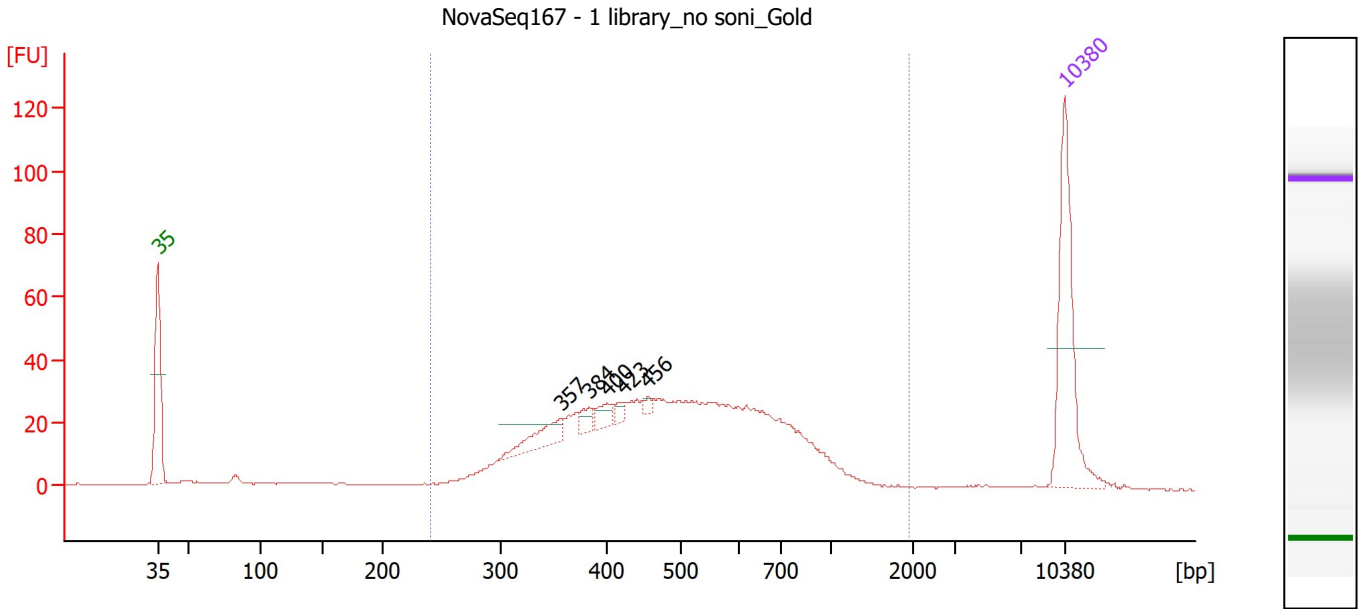
Region table for sample 10 : NovaSeq167 - 10 library

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	1,455.1	94	431	26.1	1,365.46	5,214.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : NovaSeq167 - 1 library_no soni_Gold

Number of peaks found: 5 Corr. Area 1: 764.9
 Noise: 0.2

Peak table for sample 11 : NovaSeq167 - 1 library_no soni_Gold

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	357	24.19	102.8	
3	384	9.11	35.9	
4	400	10.45	39.6	
5	423	5.04	18.0	
6	456	3.96	13.2	
7	10,380	75.00	10.9	Upper Marker

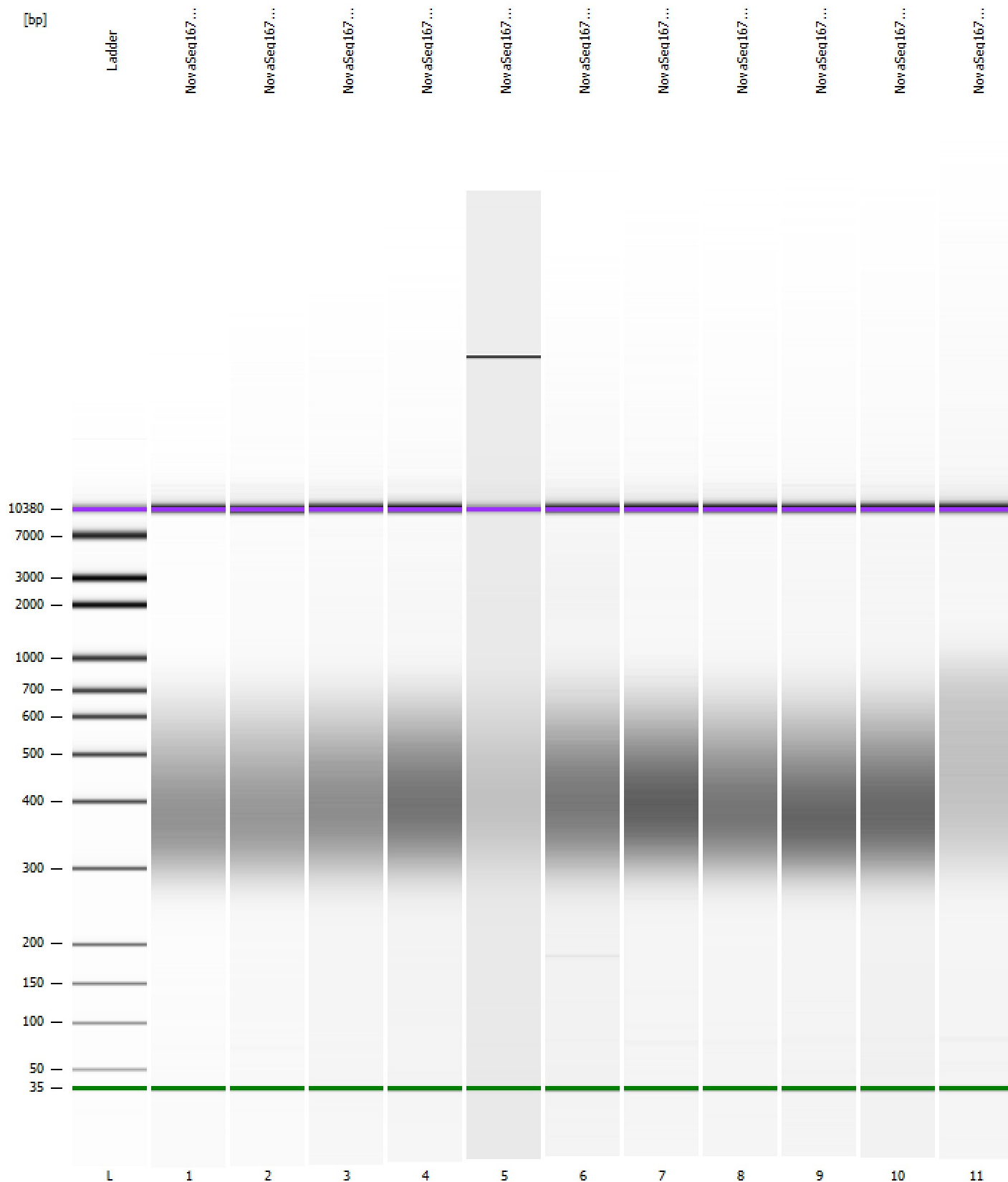
Region table for sample 11 : NovaSeq167 - 1 library_no soni_Gold

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
240	1,933	764.9	87	537	42.3	635.56	2,118.3	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
Modified: 5/28/2020 4:52:07 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-05-28_001.xad

Created: 5/28/2020 4:10:00 PM
 Modified: 5/28/2020 4:52:07 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		5/28/2020 4:51:20 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-05-28\Bioanalyze r1_High Sensitivity DNA Assay_2020-05-28_001.xad)		Instrument	Run		5/28/2020 4:10:06 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		5/28/2020 4:10:06 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		5/28/2020 4:10:06 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		5/28/2020 4:10:06 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		5/28/2020 4:10:06 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		5/28/2020 4:10:06 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		5/28/2020 4:10:06 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB