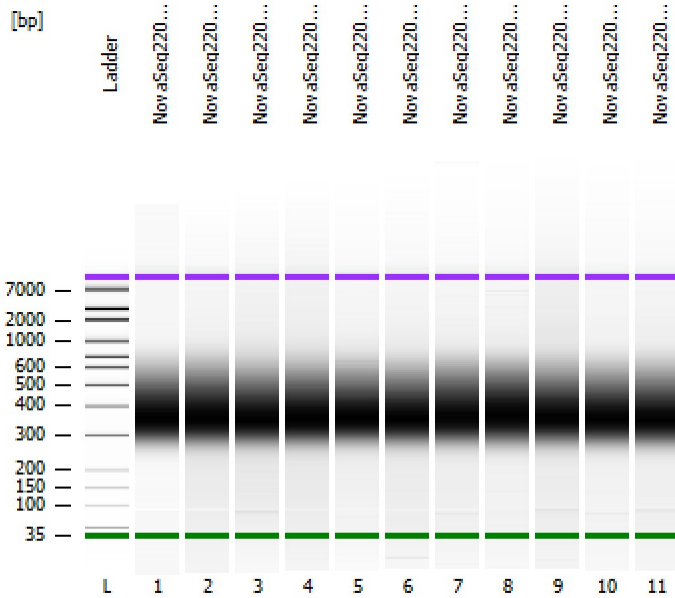


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
Modified: 7/31/2020 3:43:15 PM

Electrophoresis File Run Summary



Instrument Information:

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

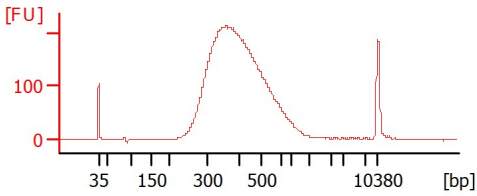
Assay Information:

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

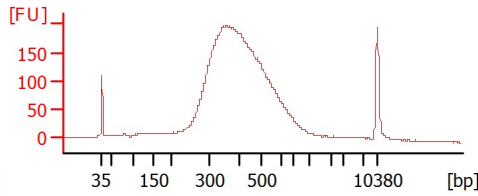
Chip Information:

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

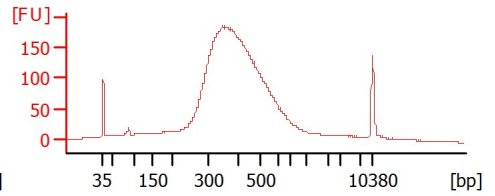
NovaSeq220-34 lib



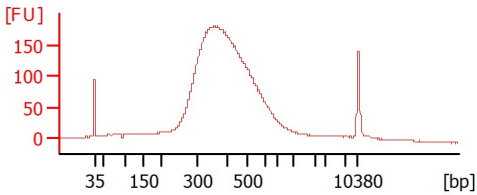
NovaSeq220-35 lib



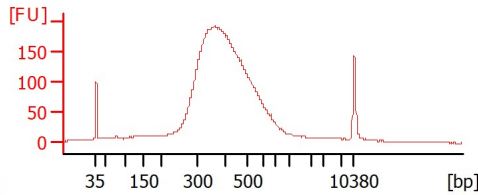
NovaSeq220-36 lib



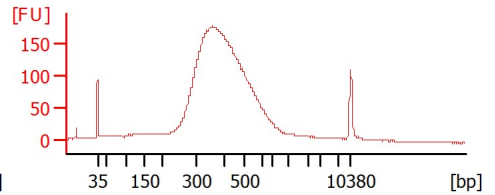
NovaSeq220-37 lib



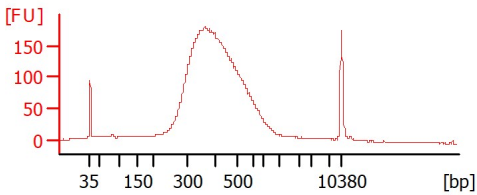
NovaSeq220-38 lib



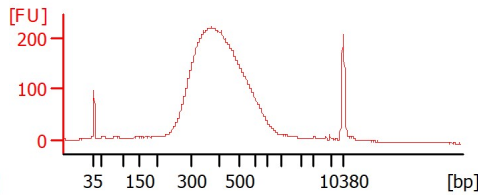
NovaSeq220-39 lib



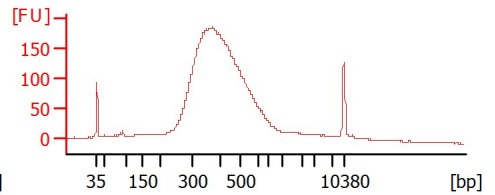
NovaSeq220-40 lib



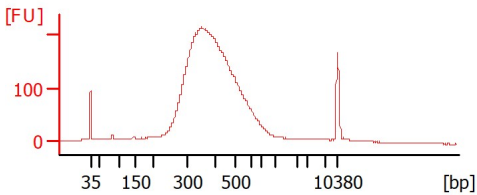
NovaSeq220-41 lib



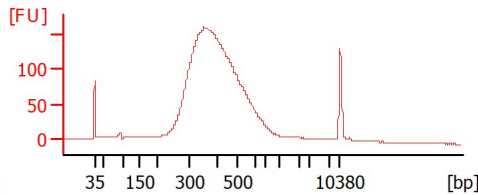
NovaSeq220-42 lib



NovaSeq220-43 lib



NovaSeq220-44 lib



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NovaSeq220-34 lib		<input type="checkbox"/>	✓			
NovaSeq220-35 lib		<input type="checkbox"/>	✓			
NovaSeq220-36 lib		<input type="checkbox"/>	✓			
NovaSeq220-37 lib		<input type="checkbox"/>	✓			
NovaSeq220-38 lib		<input type="checkbox"/>	✓			
NovaSeq220-39 lib		<input type="checkbox"/>	✓			
NovaSeq220-40 lib		<input type="checkbox"/>	✓			
NovaSeq220-41 lib		<input type="checkbox"/>	✓			
NovaSeq220-42 lib		<input type="checkbox"/>	✓			
NovaSeq220-43 lib		<input type="checkbox"/>	✓			
NovaSeq220-44 lib		<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_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 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

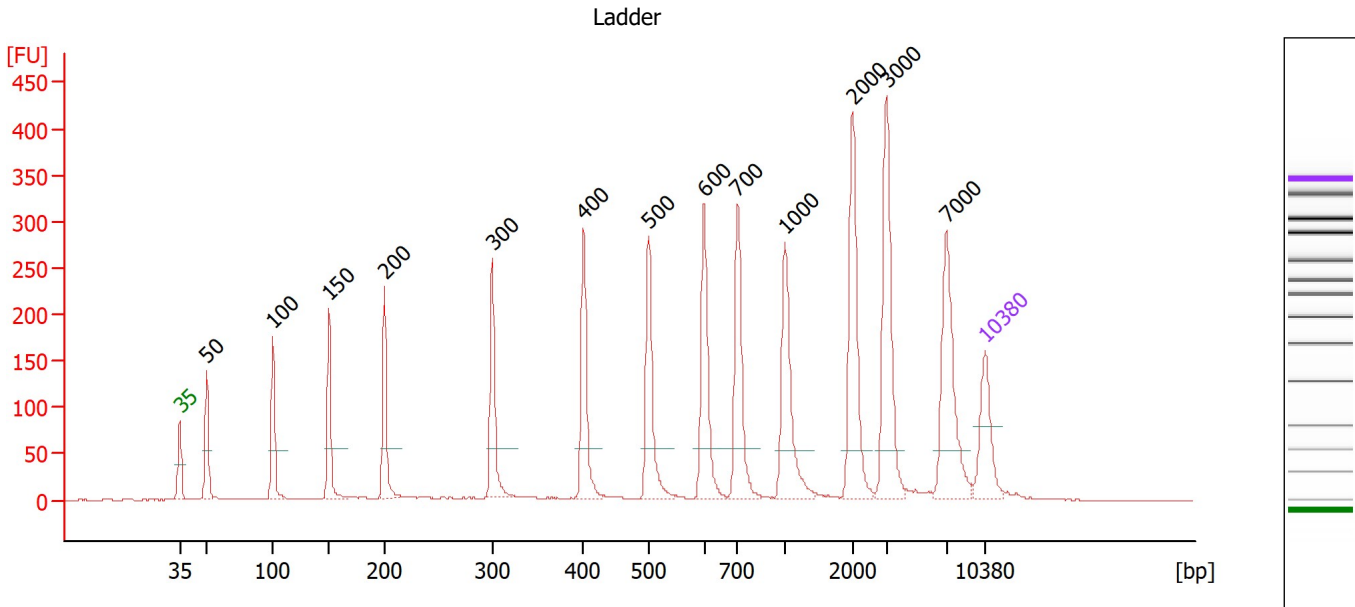
Ladder

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_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.4

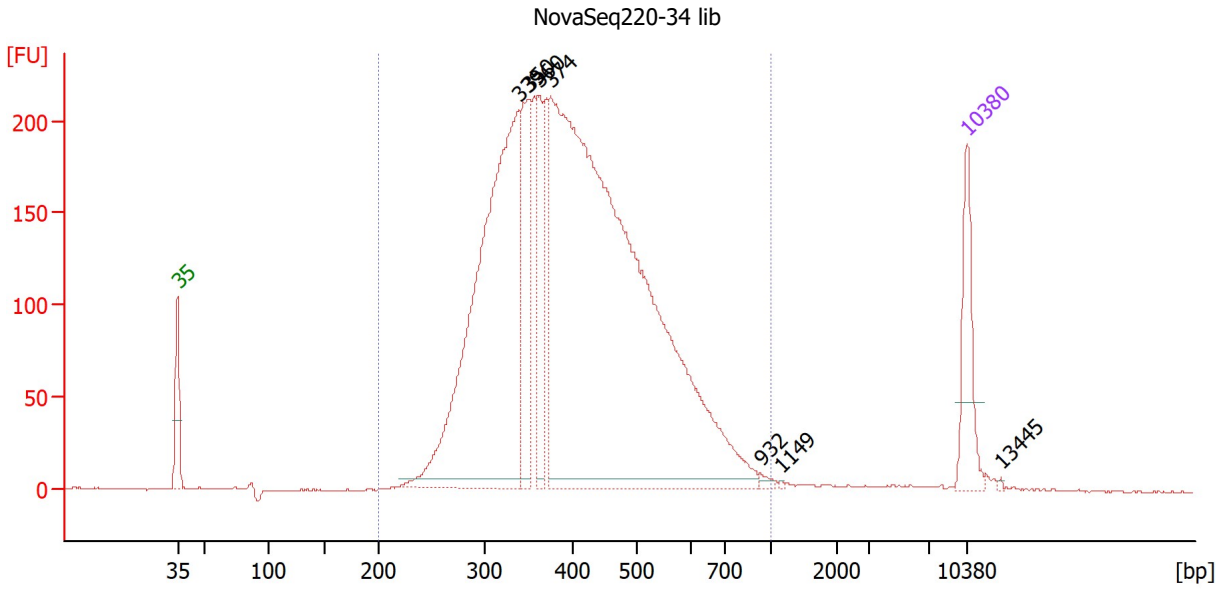
Peak table for Ladder

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_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NovaSeq220-34 lib

Number of peaks found: 7 Corr. Area 1: 4,600.6
 Noise: 0.4

Peak table for sample 1 : NovaSeq220-34 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	339	842.93	3,772.1	
3	350	201.66	873.2	
4	360	117.87	496.0	
5	374	1,739.52	7,040.0	
6	932	5.32	8.6	
7	1,149	1.47	1.9	
8	10,380	75.00	10.9	Upper Marker
9	13,445	0.00	0.0	

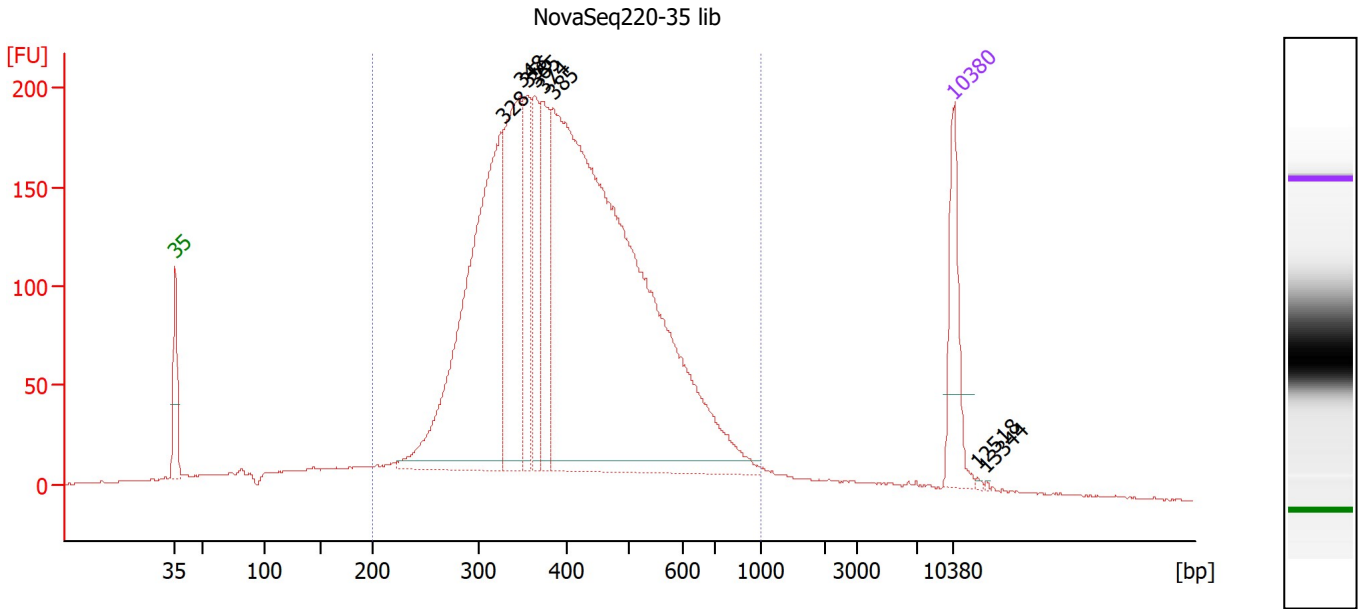
Region table for sample 1 : NovaSeq220-34 lib

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	4,600.6	99	414	26.0	2,965.05	11,761.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : NovaSeq220-35 lib

Number of peaks found: 8 Corr. Area 1: 4,618.8
 Noise: 0.4

Peak table for sample 2 : NovaSeq220-35 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	328	606.29	2,797.8	
3	348	279.21	1,216.7	
4	356	126.36	538.4	
5	365	115.59	480.3	
6	374	148.62	602.5	
7	385	1,364.89	5,376.7	
8	10,380	75.00	10.9	Upper Marker
9	12,518	0.00	0.0	
10	13,344	0.00	0.0	

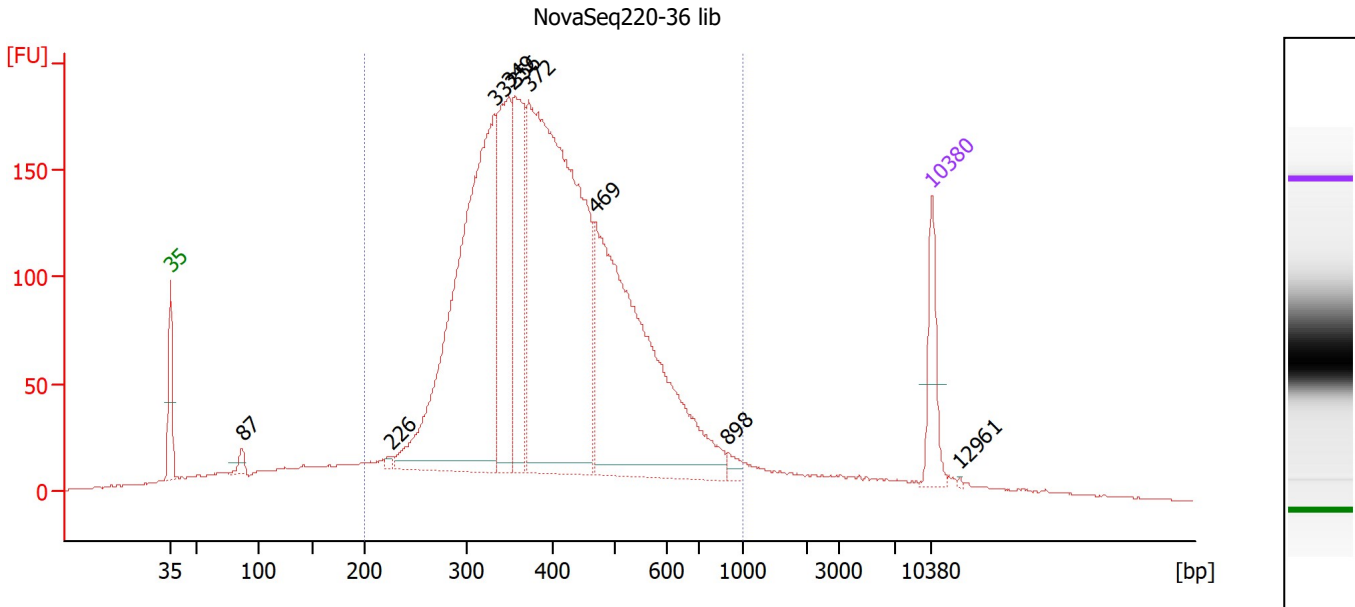
Region table for sample 2 : NovaSeq220-35 lib

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	4,618.8	91	419	28.8	2,873.59	11,492.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : NovaSeq220-36 lib

Number of peaks found: 9 Corr. Area 1: 4,214.2
 Noise: 0.4

Peak table for sample 3 : NovaSeq220-36 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	87	21.57	377.4	
3	226	8.75	58.6	
4	332	1,042.94	4,758.5	
5	349	340.56	1,476.9	
6	356	302.48	1,286.7	
7	372	1,265.97	5,152.5	
8	469	853.69	2,760.2	
9	898	14.85	25.1	
10	10,380	75.00	10.9	Upper Marker
11	12,961	0.00	0.0	

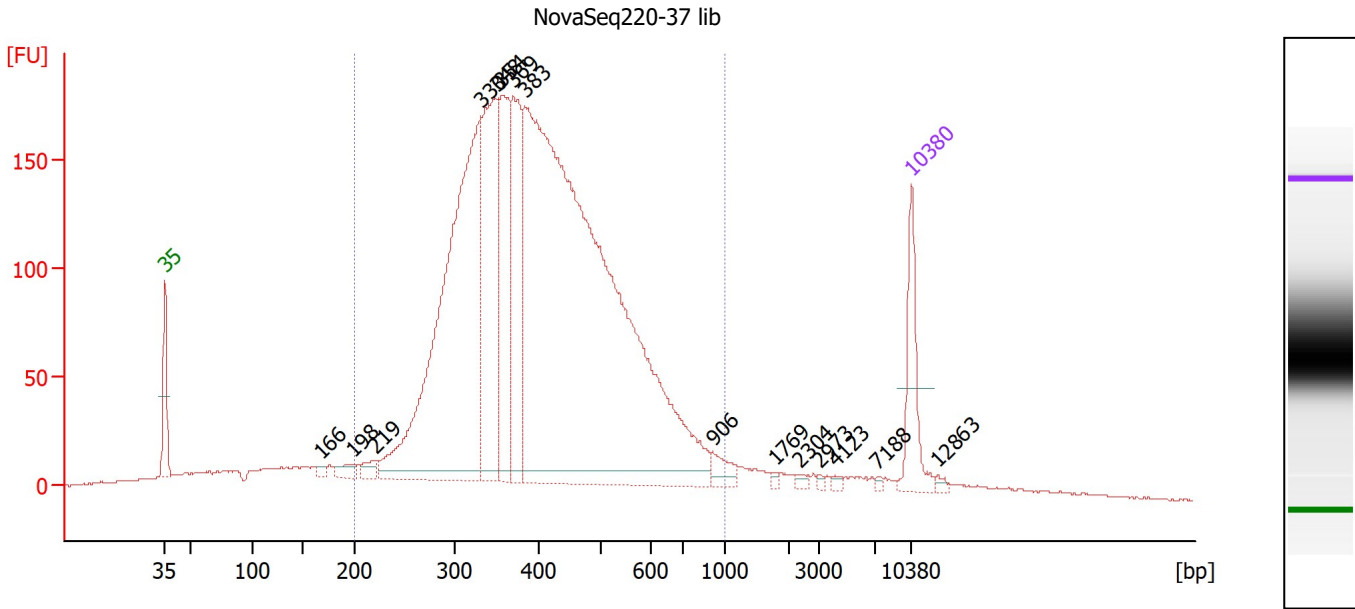
Region table for sample 3 : NovaSeq220-36 lib

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	4,214.2	87	414	29.5	4,285.60	17,369.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : NovaSeq220-37 lib

Number of peaks found: 15 Corr. Area 1: 4,148.9
 Noise: 0.5

Peak table for sample 4 : NovaSeq220-37 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	166	8.39	76.7	
3	198	22.19	169.8	
4	219	18.51	128.2	
5	330	883.82	4,053.1	
6	348	333.56	1,452.0	
7	354	260.41	1,113.4	
8	369	218.34	896.8	
9	383	1,856.96	7,350.3	
10	906	24.39	40.8	
11	1,769	3.33	2.9	
12	2,304	5.62	3.7	
13	2,973	2.73	1.4	
14	4,123	4.34	1.6	
15	7,188	3.18	0.7	
16	10,380	75.00	10.9	Upper Marker
17	12,863	0.00	0.0	

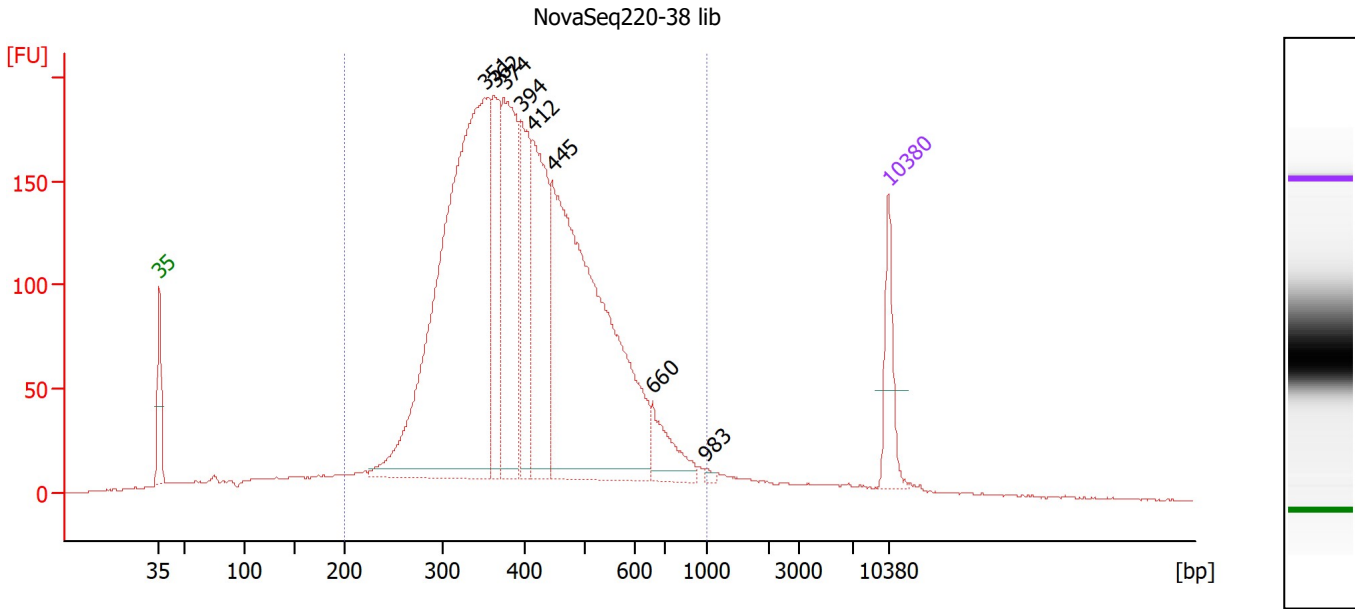
Region table for sample 4 : NovaSeq220-37 lib

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	4,148.9	89	417	29.2	3,663.32	14,720.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NovaSeq220-38 lib

Number of peaks found: 8 Corr. Area 1: 4,193.2
 Noise: 0.4

Peak table for sample 5 : NovaSeq220-38 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	351	1,342.61	5,799.5	
3	362	231.87	969.4	
4	374	394.36	1,597.5	
5	394	219.52	844.1	
6	412	327.99	1,204.8	
7	445	989.60	3,368.9	
8	660	85.18	195.6	
9	983	5.46	8.4	
10	10,380	75.00	10.9	Upper Marker

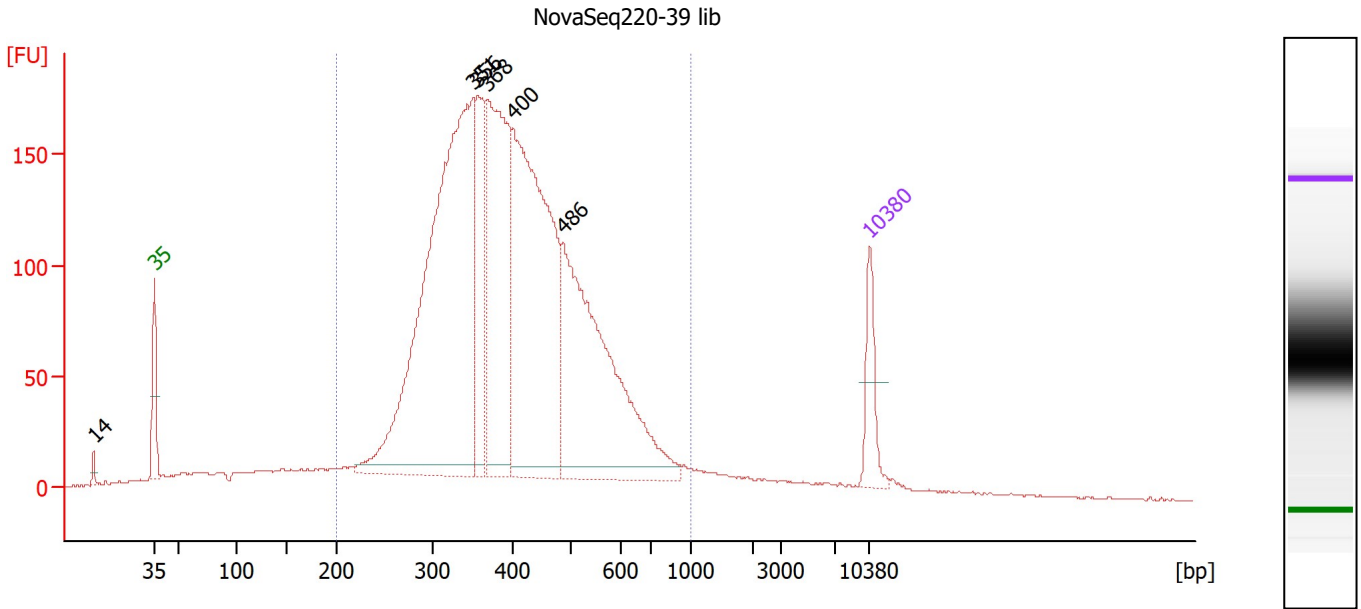
Region table for sample 5 : NovaSeq220-38 lib

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	4,193.2	90	417	28.3	4,027.34	16,072.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NovaSeq220-39 lib

Number of peaks found: 6 Corr. Area 1: 3,847.9
 Noise: 0.4

Peak table for sample 6 : NovaSeq220-39 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	14	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	351	1,414.57	6,108.5	
4	356	277.79	1,181.9	
5	368	598.70	2,465.2	
6	400	929.10	3,523.2	
7	486	753.24	2,347.9	
8	10,380	75.00	10.9	Upper Marker

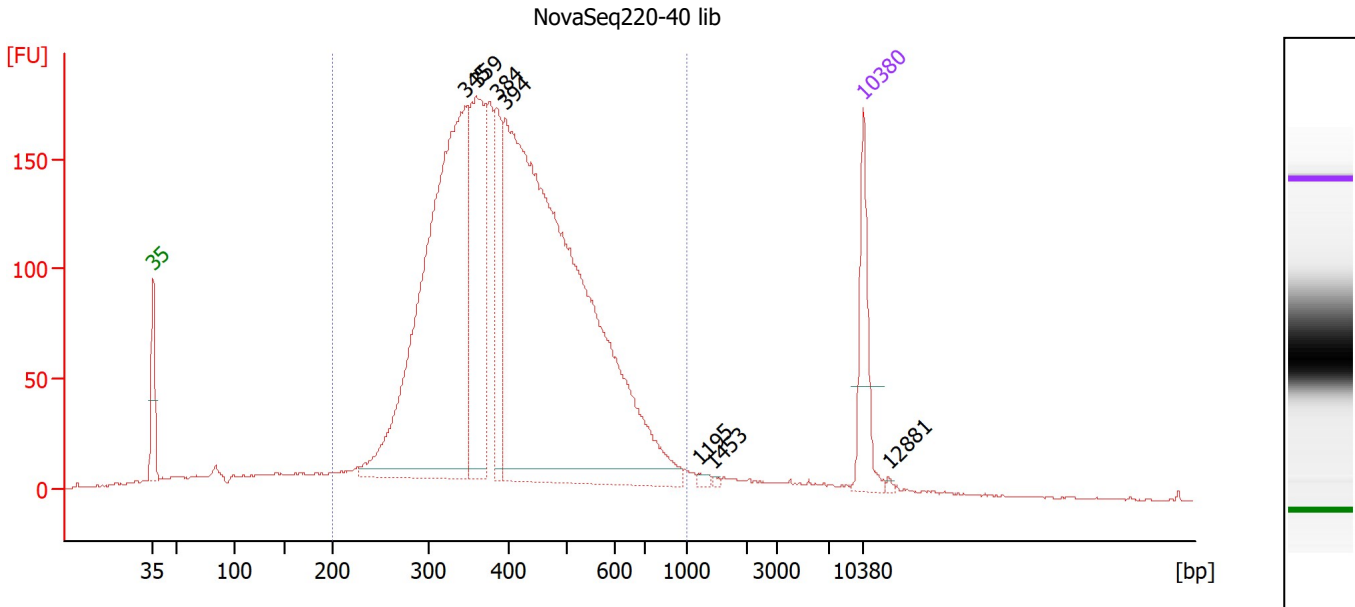
Region table for sample 6 : NovaSeq220-39 lib

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	3,847.9	90	413	27.9	4,378.06	17,624.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NovaSeq220-40 lib

Number of peaks found: 7 Corr. Area 1: 3,989.9
 Noise: 0.4

Peak table for sample 7 : NovaSeq220-40 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	345	881.69	3,869.8	
3	359	322.78	1,361.8	
4	384	135.85	536.5	
5	394	1,373.24	5,277.3	
6	1,195	4.47	5.7	
7	1,453	2.06	2.2	
8	10,380	75.00	10.9	Upper Marker
9	12,881	0.00	0.0	

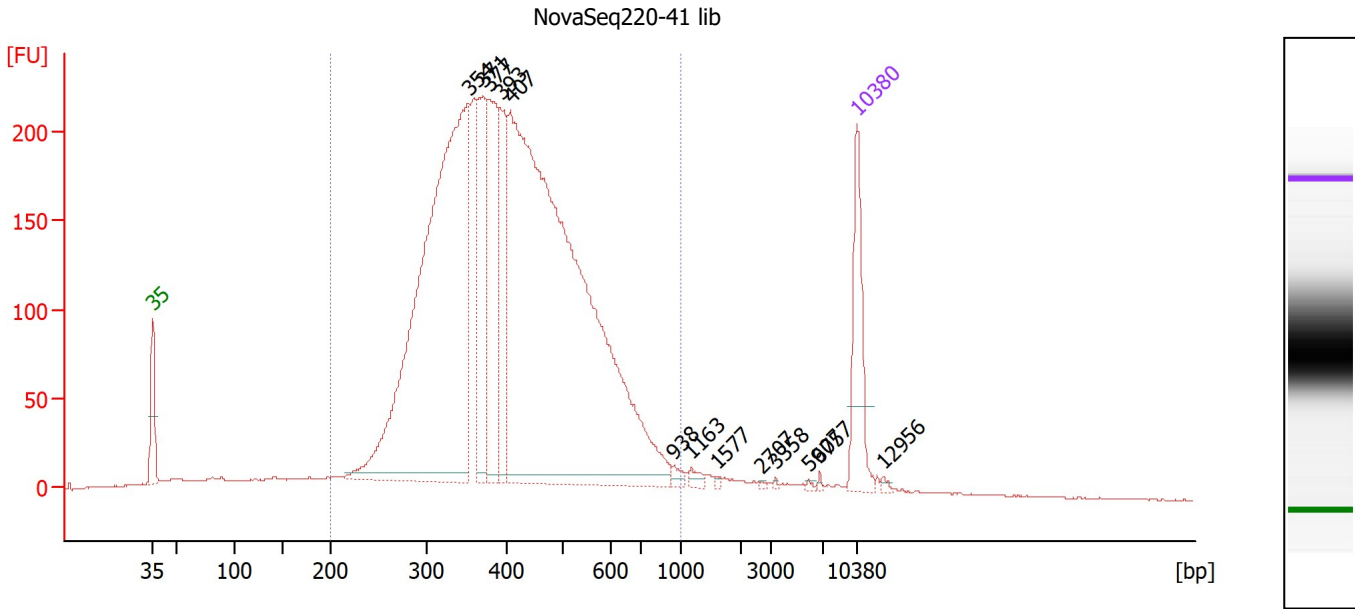
Region table for sample 7 : NovaSeq220-40 lib

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	3,989.9	91	419	28.1	2,986.99	11,868.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : NovaSeq220-41 lib

Number of peaks found: 13 Corr. Area 1: 5,045.1
 Noise: 0.4

Peak table for sample 8 : NovaSeq220-41 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	354	904.45	3,873.4	
3	371	165.60	677.2	
4	377	169.90	682.5	
5	393	136.61	527.3	
6	407	1,238.60	4,606.7	
7	938	6.42	10.4	
8	1,163	6.54	8.5	
9	1,577	1.87	1.8	
10	2,707	1.48	0.8	
11	3,358	1.35	0.6	
12	5,907	1.60	0.4	
13	6,757	1.64	0.4	
14	10,380	75.00	10.9	Upper Marker
15	12,956	0.00	0.0	

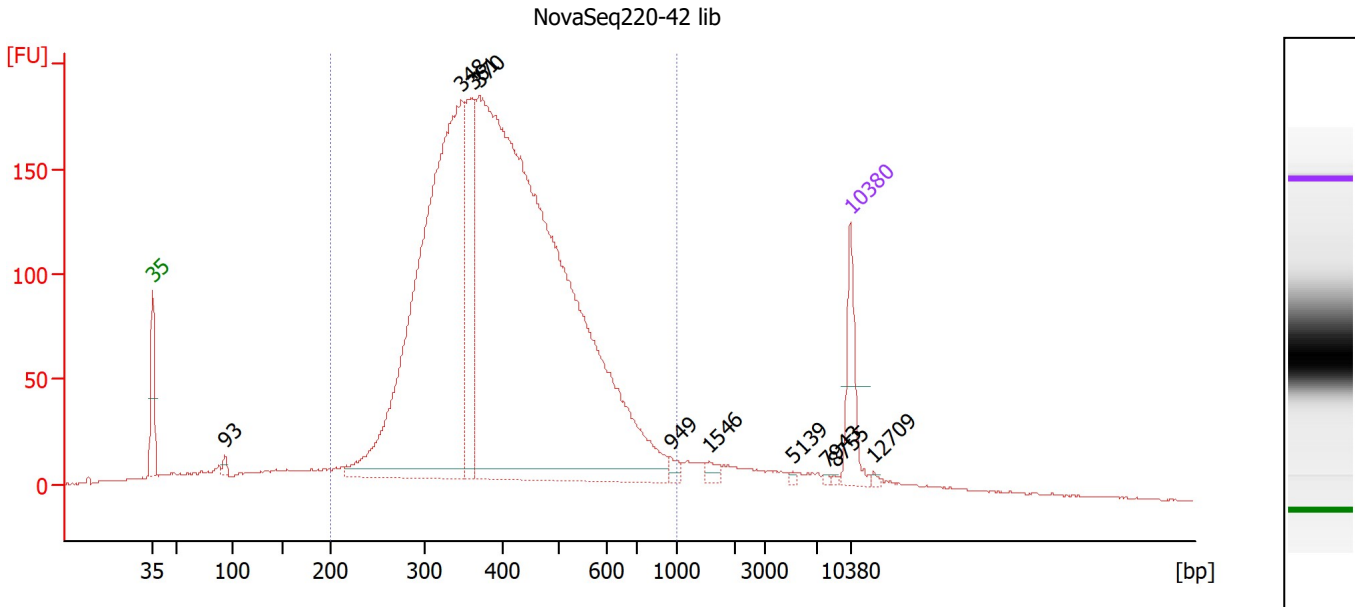
Region table for sample 8 : NovaSeq220-41 lib

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	5,045.1	92	422	27.9	2,898.46	11,447.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : NovaSeq220-42 lib

Number of peaks found: 10 Corr. Area 1: 4,088.8
 Noise: 0.4

Peak table for sample 9 : NovaSeq220-42 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	93	12.99	212.4	
3	348	1,378.76	6,003.1	
4	361	258.19	1,084.2	
5	370	2,508.04	10,263.5	
6	949	12.79	20.4	
7	1,546	11.33	11.1	
8	5,139	2.95	0.9	
9	7,943	2.96	0.6	
10	8,755	2.12	0.4	
11	10,380	75.00	10.9	Upper Marker
12	12,709	0.00	0.0	

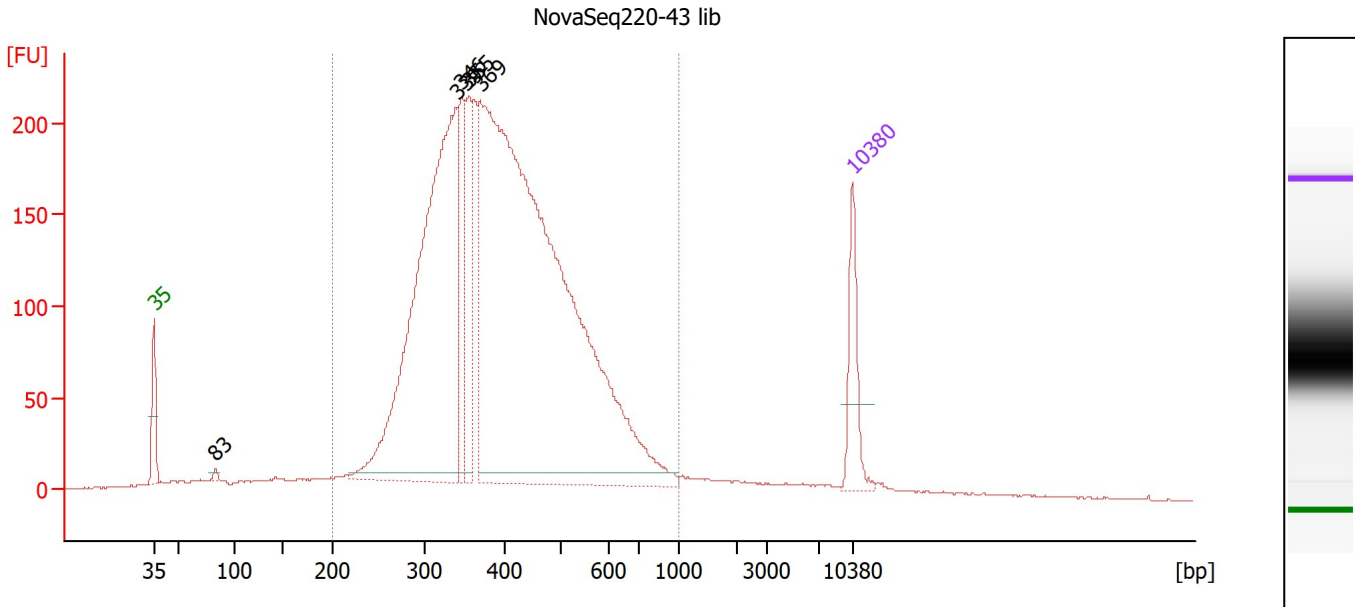
Region table for sample 9 : NovaSeq220-42 lib

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	4,088.8	88	418	28.8	4,273.18	17,081.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NovaSeq220-43 lib

Number of peaks found: 5 Corr. Area 1: 4,573.0
 Noise: 0.4

Peak table for sample 10 : NovaSeq220-43 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	83	8.22	150.2	
3	339	995.33	4,449.5	
4	346	163.56	716.9	
5	355	149.83	639.3	
6	369	1,976.41	8,109.6	
7	10,380	75.00	10.9	Upper Marker

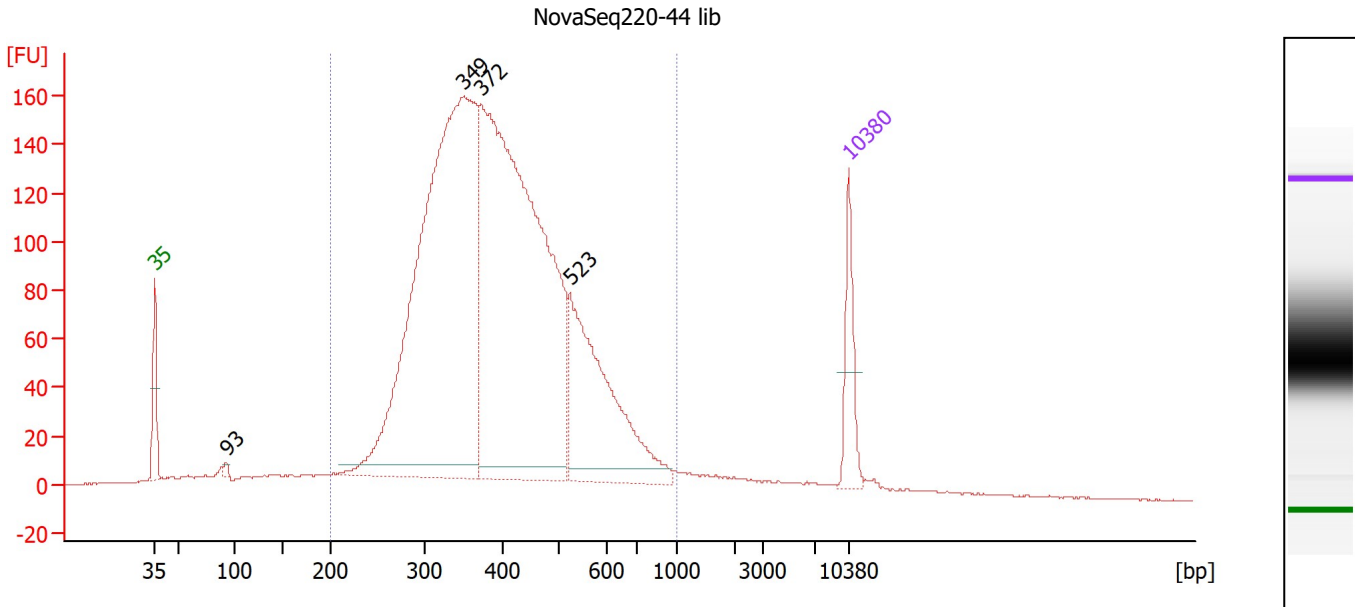
Region table for sample 10 : NovaSeq220-43 lib

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	4,573.0	93	411	27.3	3,469.80	13,979.9	■

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : NovaSeq220-44 lib

Number of peaks found: 4 Corr. Area 1: 3,436.3
 Noise: 0.3

Peak table for sample 11 : NovaSeq220-44 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	93	8.23	134.7	
3	349	1,510.22	6,548.7	
4	372	1,464.94	5,970.0	
5	523	413.92	1,200.2	
6	10,380	75.00	10.9	Upper Marker

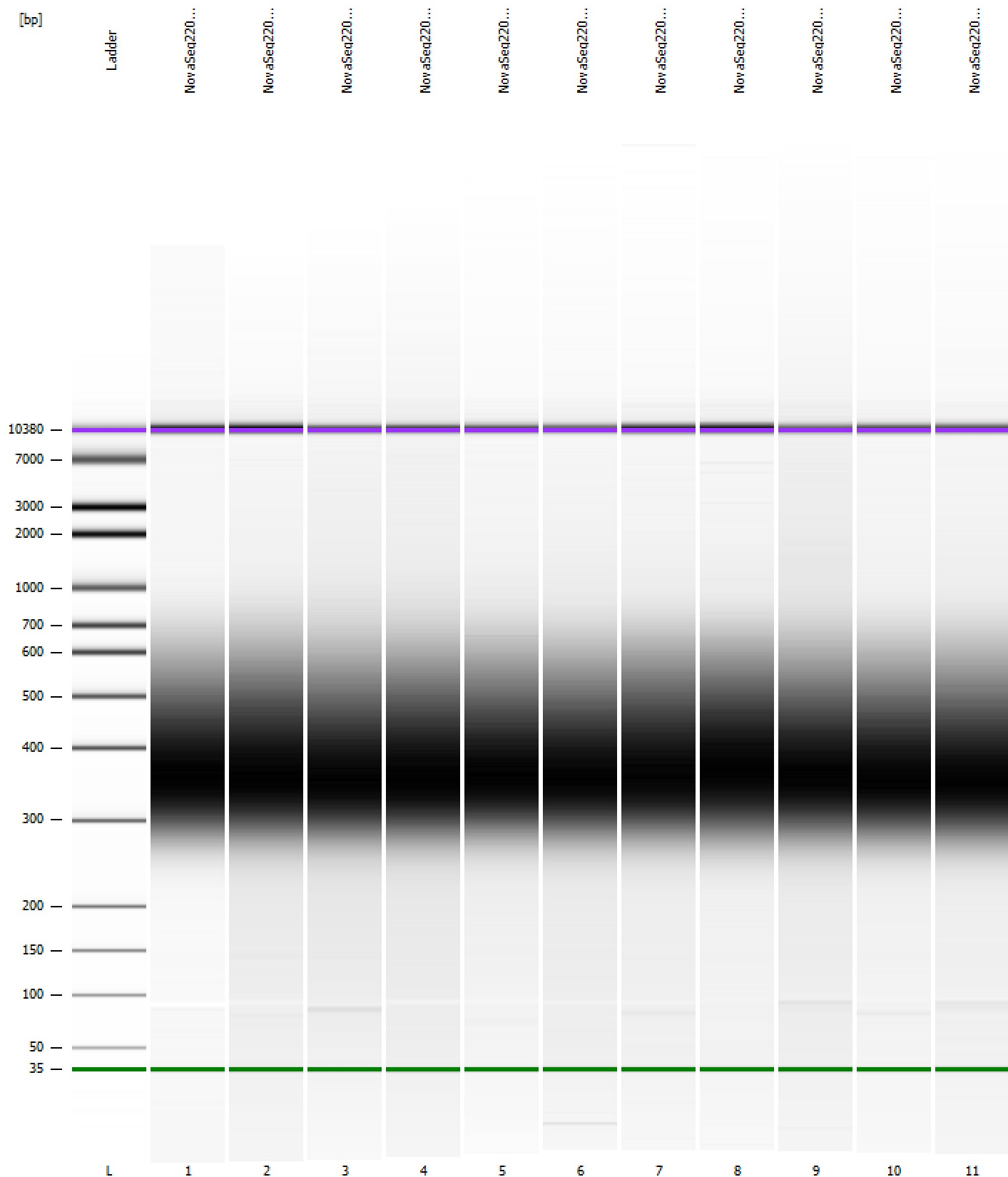
Region table for sample 11 : NovaSeq220-44 lib

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	3,436.3	92	411	28.0	3,610.91	14,583.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
Modified: 7/31/2020 3:43:15 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-31_002.xad

Created: 7/31/2020 2:20:21 PM
 Modified: 7/31/2020 3:43:15 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		7/31/2020 3:00:47 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-07-31\Bioanalyze r1_High Sensitivity DNA Assay_2020-07-31_002.xad)		Instrument	Run		7/31/2020 2:20:26 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		7/31/2020 2:20:26 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		7/31/2020 2:20:26 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		7/31/2020 2:20:26 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		7/31/2020 2:20:26 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		7/31/2020 2:20:26 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		7/31/2020 2:20:26 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB