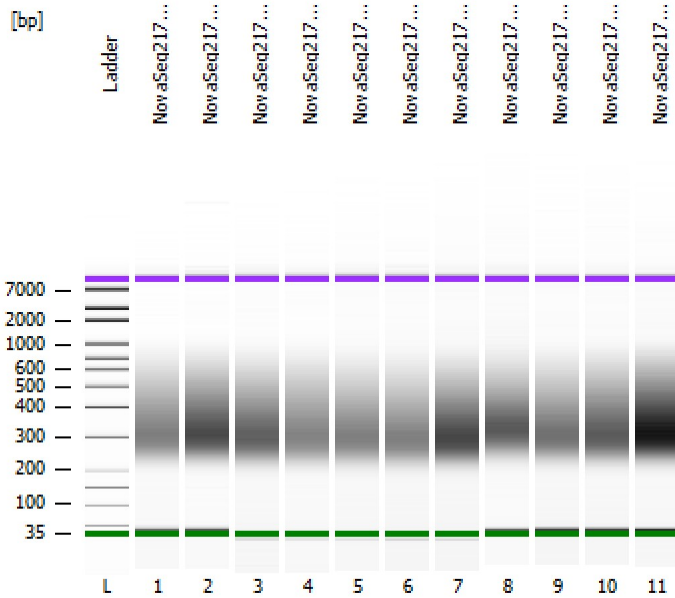


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
Modified: 7/27/2020 2:06:08 PM

Electrophoresis File Run Summary



Instrument Information:

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

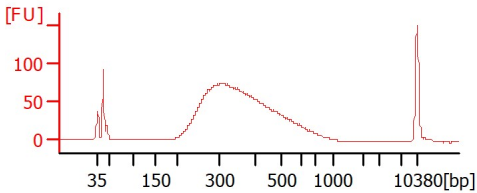
Assay Information:

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

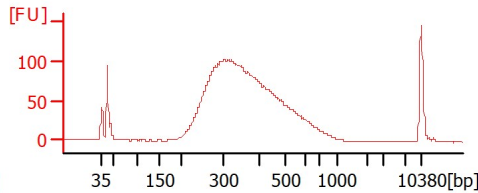
Chip Information:

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

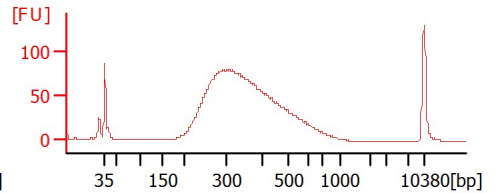
NovaSeq217Lib-34



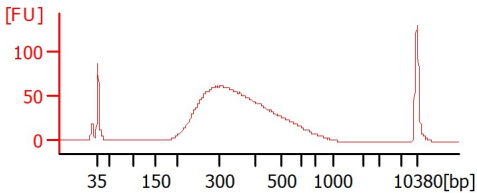
NovaSeq217Lib-35



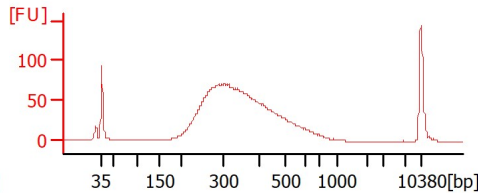
NovaSeq217Lib-36



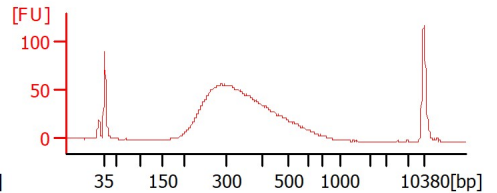
NovaSeq217Lib-37



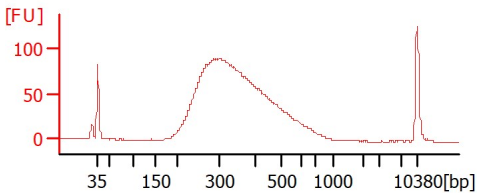
NovaSeq217Lib-38



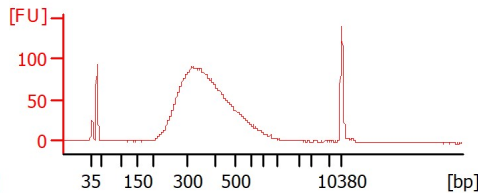
NovaSeq217Lib-39



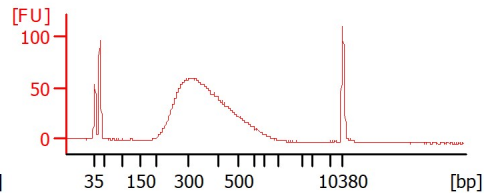
NovaSeq217Lib-40



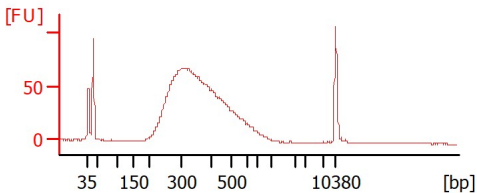
NovaSeq217Lib-41



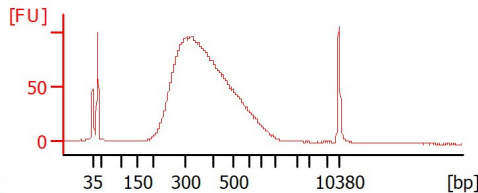
NovaSeq217Lib-42



NovaSeq217Lib-43



NovaSeq217Lib-44



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
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NovaSeq217Lib-35		<input type="checkbox"/>	✓			
NovaSeq217Lib-36		<input type="checkbox"/>	✓			
NovaSeq217Lib-37		<input type="checkbox"/>	✓			
NovaSeq217Lib-38		<input type="checkbox"/>	✓			
NovaSeq217Lib-39		<input type="checkbox"/>	✓			
NovaSeq217Lib-40		<input type="checkbox"/>	✓			
NovaSeq217Lib-41		<input type="checkbox"/>	✓			
NovaSeq217Lib-42		<input type="checkbox"/>	✓			
NovaSeq217Lib-43		<input type="checkbox"/>	✓			
NovaSeq217Lib-44		<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_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 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

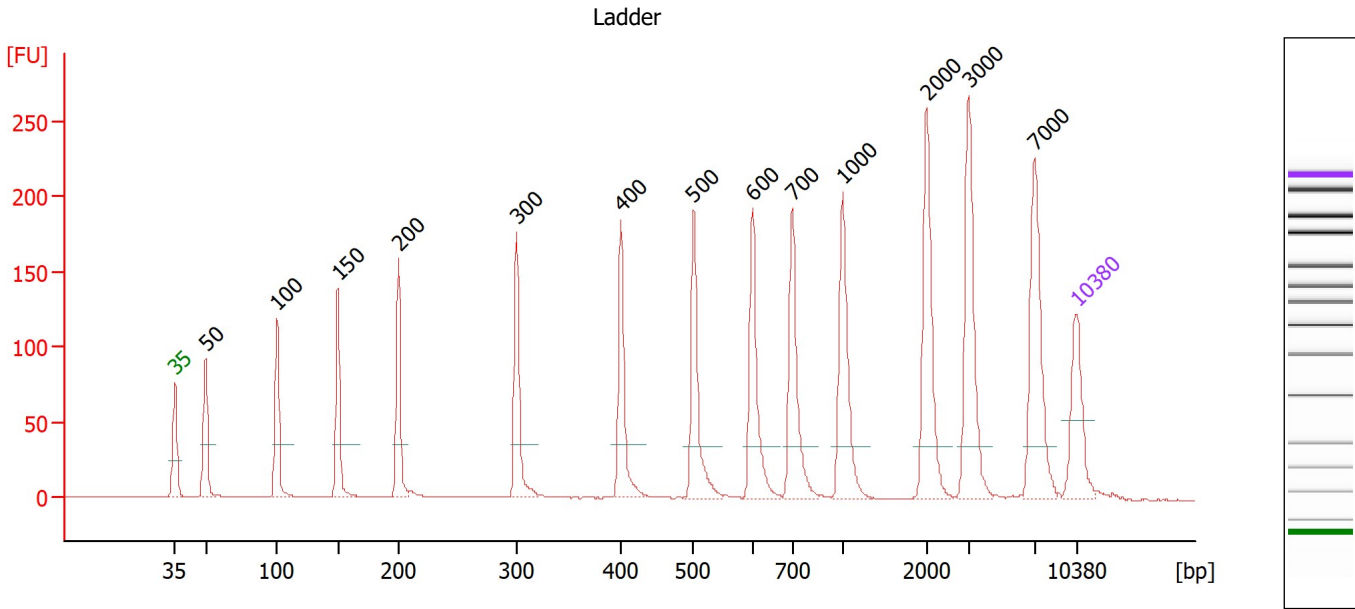
Ladder

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_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

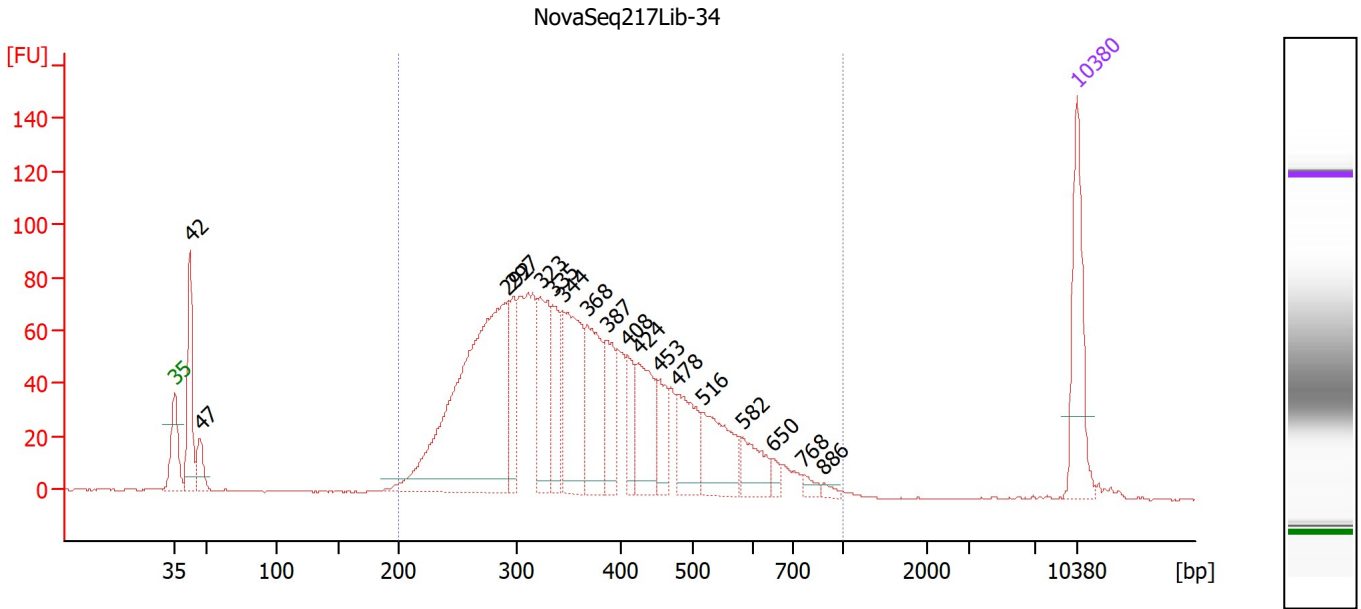
Peak table for Ladder

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_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NovaSeq217Lib-34

Number of peaks found: 18 Corr. Area 1: 1,875.1
 Noise: 0.3

Peak table for sample 1 : NovaSeq217Lib-34

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	118.55	4,252.6	
3	47	32.66	1,051.3	
4	292	465.97	2,416.5	
5	297	70.45	359.5	
6	323	107.92	506.8	
7	335	61.58	278.9	
8	344	150.72	663.8	
9	368	109.58	451.4	
10	387	60.16	235.6	
11	408	38.25	141.9	
12	424	87.15	311.6	
13	453	43.54	145.7	
14	478	69.70	221.1	
15	516	81.78	240.0	
16	582	37.74	98.2	
17	650	9.41	21.9	
18	768	7.73	15.3	
19	886	4.63	7.9	
20	10,380	75.00	10.9	Upper Marker

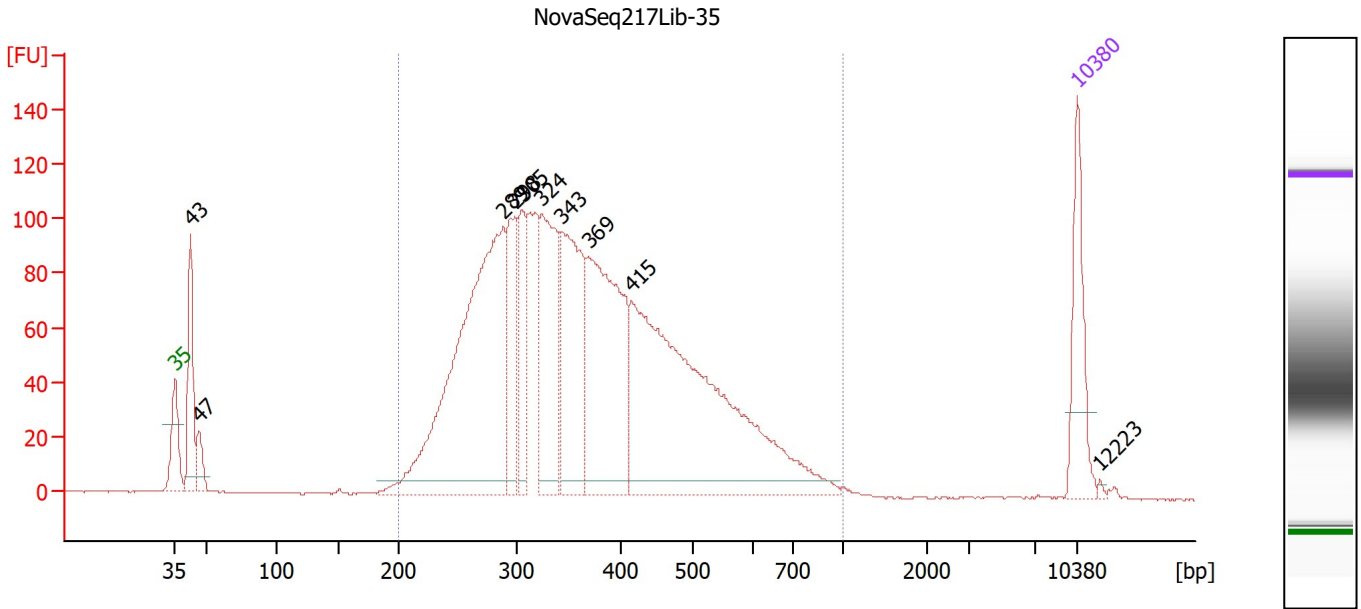
Region table for sample 1 : NovaSeq217Lib-34

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	1,875.1	93	377	30.2	1,689.42	7,563.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : NovaSeq217Lib-35

Number of peaks found: 10 Corr. Area 1: 2,571.7
 Noise: 0.3

Peak table for sample 2 : NovaSeq217Lib-35

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	127.00	4,514.2	
3	47	34.82	1,132.4	
4	289	620.20	3,252.3	
5	298	127.30	646.3	
6	305	99.81	496.0	
7	324	210.32	985.0	
8	343	233.50	1,032.1	
9	369	331.15	1,361.1	
10	415	611.61	2,235.5	
11	10,380	75.00	10.9	Upper Marker
12	12,223	0.00	0.0	

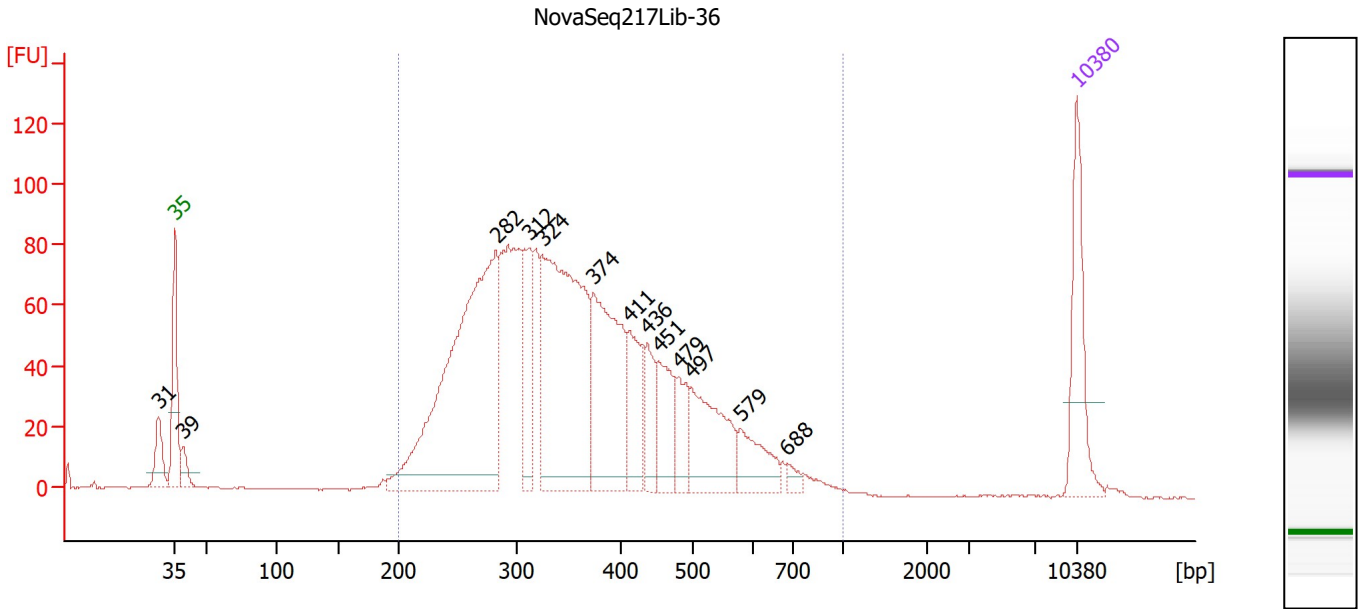
Region table for sample 2 : NovaSeq217Lib-35

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	2,571.7	94	380	30.6	2,363.00	10,514.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : NovaSeq217Lib-36

Number of peaks found: 13 Corr. Area 1: 1,978.3
 Noise: 0.3

Peak table for sample 3 : NovaSeq217Lib-36

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	39	22.54	873.7	
4	282	526.53	2,824.9	
5	312	86.81	422.0	
6	324	388.19	1,815.0	
7	374	199.05	807.0	
8	411	74.17	273.3	
9	436	45.01	156.4	
10	451	65.13	218.7	
11	479	42.52	134.6	
12	497	110.96	338.0	
13	579	50.98	133.5	
14	688	9.11	20.1	
15	10,380	75.00	10.9	Upper Marker

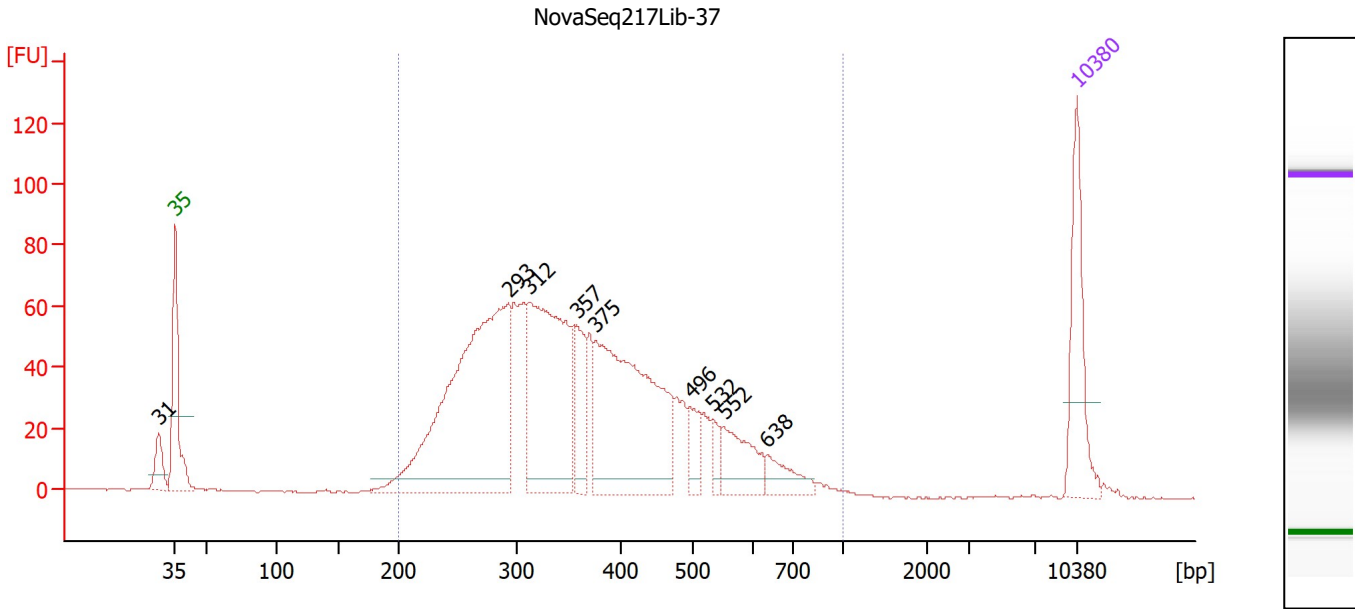
Region table for sample 3 : NovaSeq217Lib-36

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	1,978.3	95	369	30.4	1,943.11	8,880.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : NovaSeq217Lib-37

Number of peaks found: 9 Corr. Area 1: 1,566.6
 Noise: 0.3

Peak table for sample 4 : NovaSeq217Lib-37

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	293	477.46	2,470.8	
4	312	293.65	1,426.3	
5	357	61.02	258.8	
6	375	305.80	1,234.0	
7	496	26.43	80.8	
8	532	15.37	43.8	
9	552	57.82	158.7	
10	638	29.23	69.4	
11	10,380	75.00	10.9	Upper Marker

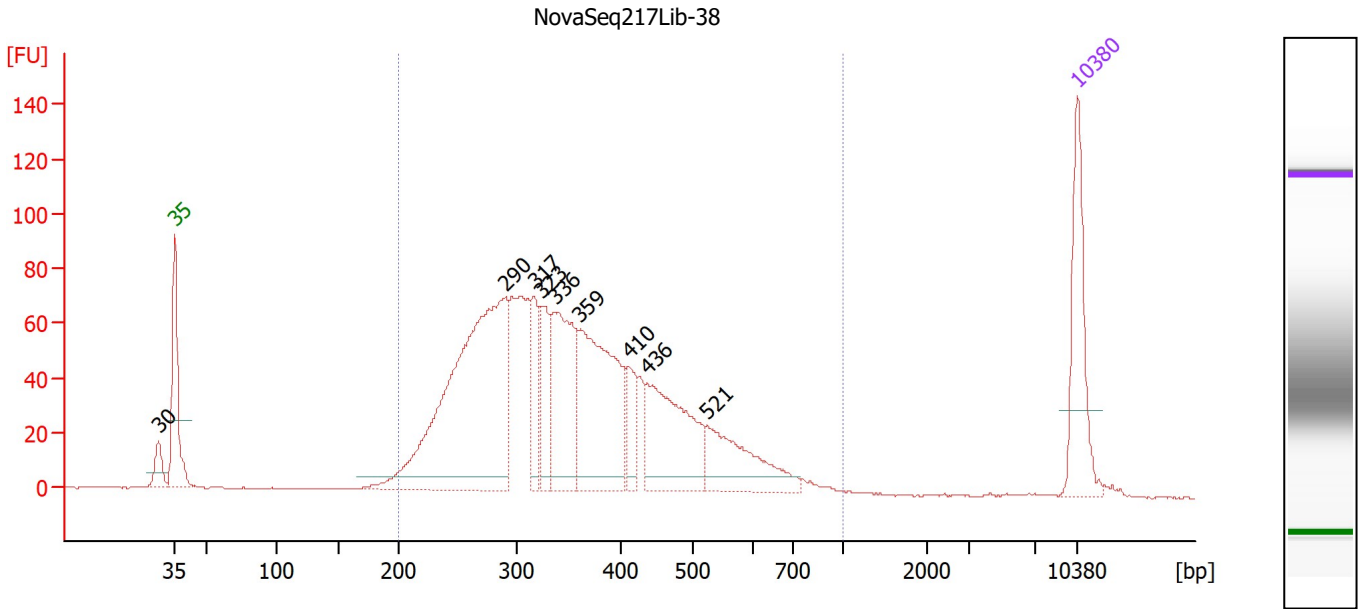
Region table for sample 4 : NovaSeq217Lib-37

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	1,566.6	97	373	31.1	1,474.90	6,704.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NovaSeq217Lib-38

Number of peaks found: 9 Corr. Area 1: 1,707.0
 Noise: 0.2

Peak table for sample 5 : NovaSeq217Lib-38

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	30	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	290	470.96	2,457.5	
4	317	57.21	273.7	
5	323	62.28	292.1	
6	336	148.41	669.3	
7	359	210.65	888.8	
8	410	39.00	144.3	
9	436	143.10	497.0	
10	521	93.47	271.7	
11	10,380	75.00	10.9	Upper Marker

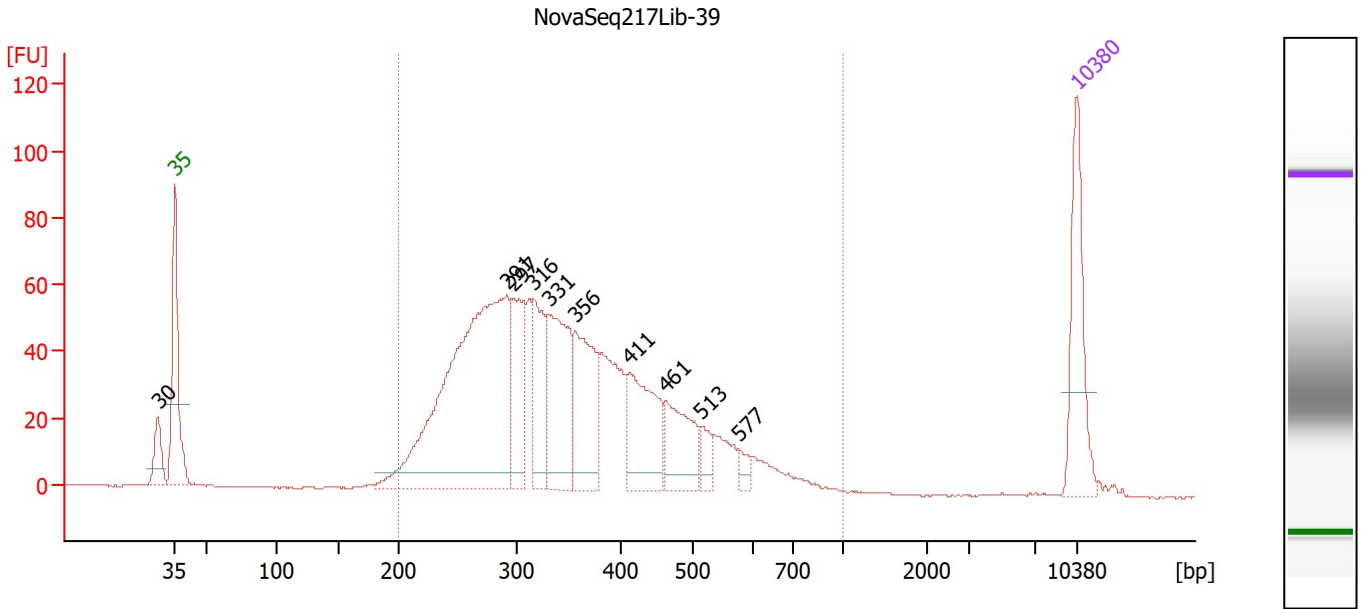
Region table for sample 5 : NovaSeq217Lib-38

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	1,707.0	96	365	30.3	1,457.18	6,718.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NovaSeq217Lib-39

Number of peaks found: 10 Corr. Area 1: 1,360.3
 Noise: 0.2

Peak table for sample 6 : NovaSeq217Lib-39

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	30	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	291	514.00	2,677.8	
4	297	94.58	482.3	
5	316	86.59	415.5	
6	331	146.36	669.0	
7	356	119.17	506.7	
8	411	106.86	393.5	
9	461	73.32	240.9	
10	513	20.65	61.0	
11	577	11.19	29.4	
12	10,380	75.00	10.9	Upper Marker

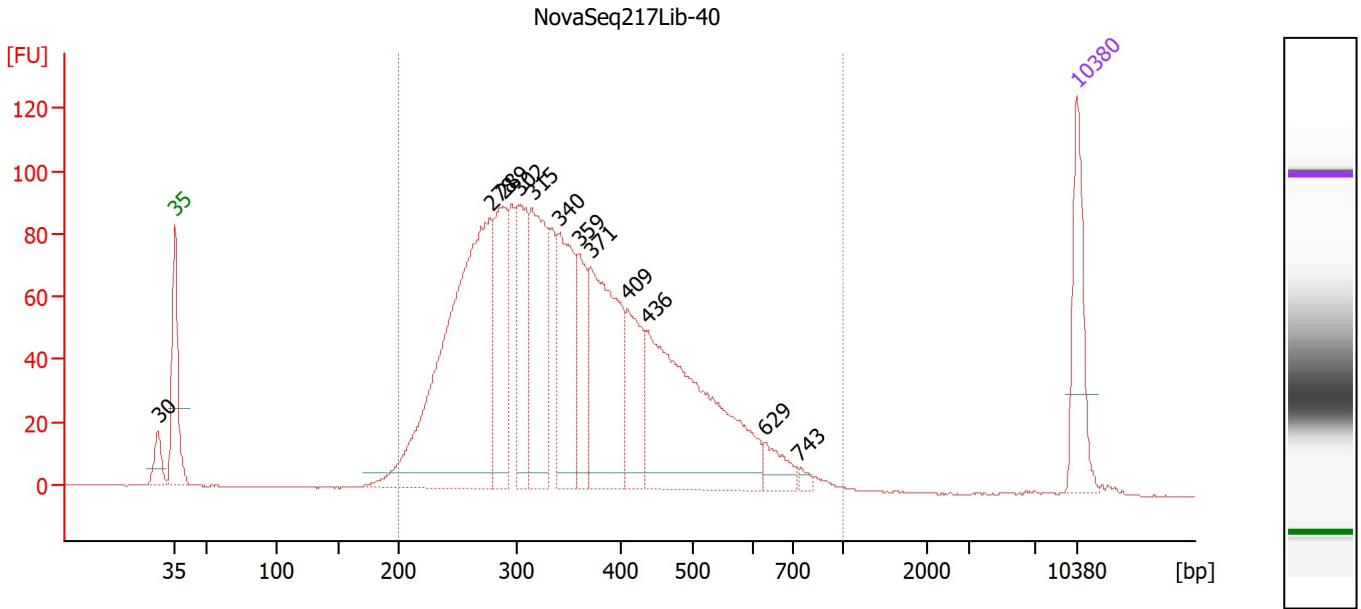
Region table for sample 6 : NovaSeq217Lib-39

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	1,360.3	96	359	30.0	1,438.14	6,722.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NovaSeq217Lib-40

Number of peaks found: 12 Corr. Area 1: 2,151.9
 Noise: 0.2

Peak table for sample 7 : NovaSeq217Lib-40

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	30	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	278	630.01	3,439.3	
4	289	165.50	868.7	
5	302	146.60	736.3	
6	315	194.60	936.3	
7	340	166.28	740.8	
8	359	92.72	391.7	
9	371	247.63	1,010.6	
10	409	103.40	382.9	
11	436	362.27	1,259.7	
12	629	30.09	72.5	
13	743	6.70	13.7	
14	10,380	75.00	10.9	Upper Marker

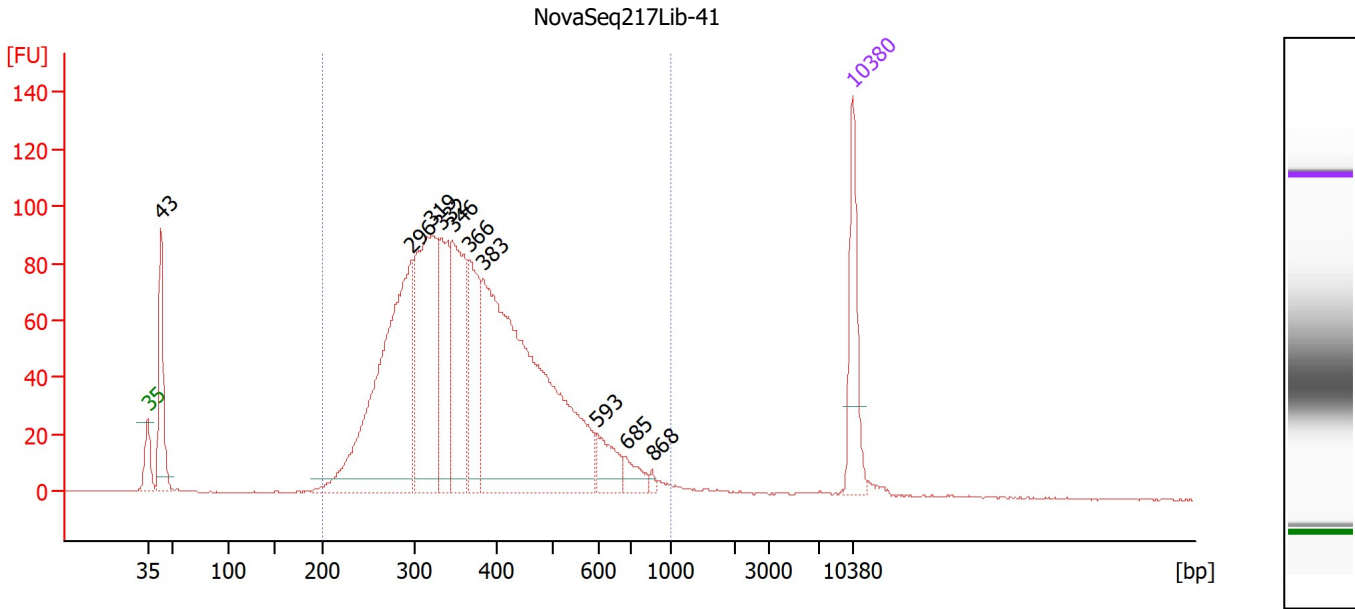
Region table for sample 7 : NovaSeq217Lib-40

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	2,151.9	97	364	30.5	2,357.77	10,903.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : NovaSeq217Lib-41

Number of peaks found: 10 Corr. Area 1: 2,038.4
 Noise: 0.2

Peak table for sample 8 : NovaSeq217Lib-41

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	155.49	5,441.1	
3	296	493.90	2,526.2	
4	319	325.67	1,545.5	
5	332	139.27	634.9	
6	346	197.87	866.1	
7	366	130.73	541.5	
8	383	653.78	2,583.3	
9	593	44.60	113.9	
10	685	22.93	50.7	
11	868	4.12	7.2	
12	10,380	75.00	10.9	Upper Marker

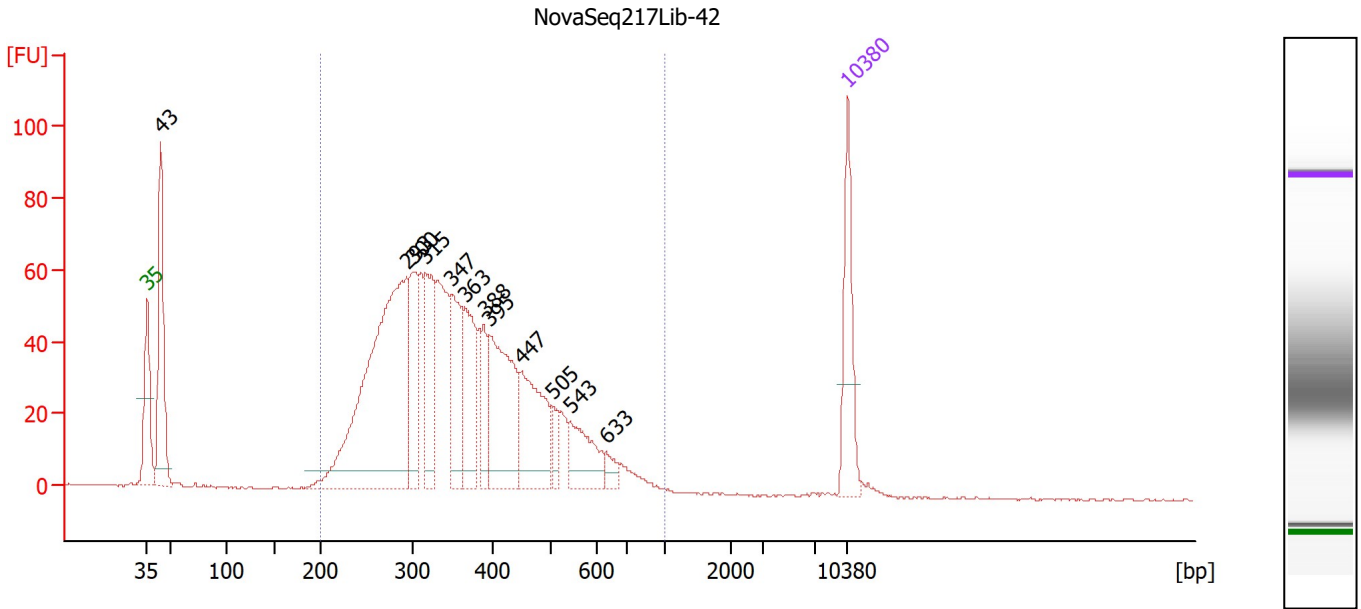
Region table for sample 8 : NovaSeq217Lib-41

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	2,038.4	93	386	29.6	2,022.37	8,776.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : NovaSeq217Lib-42

Number of peaks found: 12 Corr. Area 1: 1,420.9
 Noise: 0.3

Peak table for sample 9 : NovaSeq217Lib-42

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	223.03	7,794.2	
3	293	533.45	2,759.0	
4	300	109.02	550.7	
5	315	115.34	554.7	
6	347	104.17	454.4	
7	363	113.35	472.8	
8	388	47.13	183.9	
9	395	178.28	684.1	
10	447	127.11	430.5	
11	505	21.62	64.9	
12	543	68.44	190.9	
13	633	15.64	37.4	
14	10,380	75.00	10.9	Upper Marker

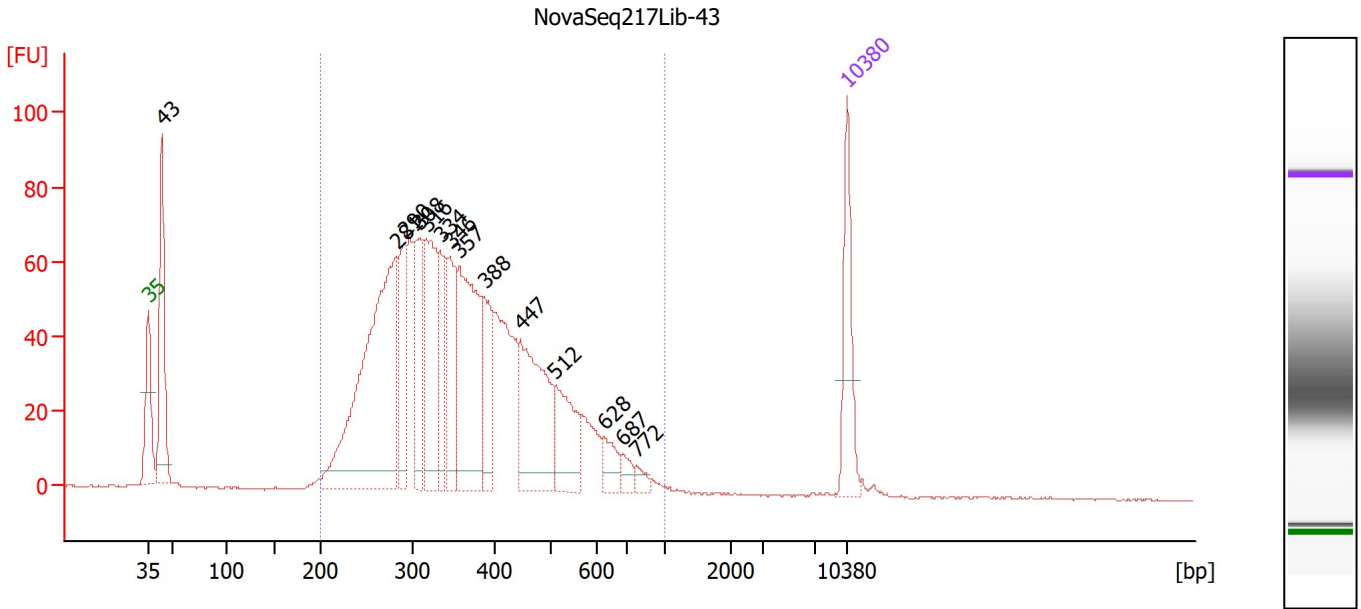
Region table for sample 9 : NovaSeq217Lib-42

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	1,420.9	91	372	29.5	1,765.53	7,956.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NovaSeq217Lib-43

Number of peaks found: 14 Corr. Area 1: 1,647.9
 Noise: 0.2

Peak table for sample 10 : NovaSeq217Lib-43

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	220.24	7,693.3	
3	281	506.05	2,724.8	
4	290	114.92	600.2	
5	308	129.03	634.9	
6	316	186.77	895.9	
7	334	82.81	376.0	
8	346	107.61	471.8	
9	357	242.67	1,028.5	
10	388	84.91	331.7	
11	447	188.63	639.4	
12	512	92.96	275.3	
13	628	30.07	72.6	
14	687	14.67	32.3	
15	772	10.67	20.9	
16	10,380	75.00	10.9	Upper Marker

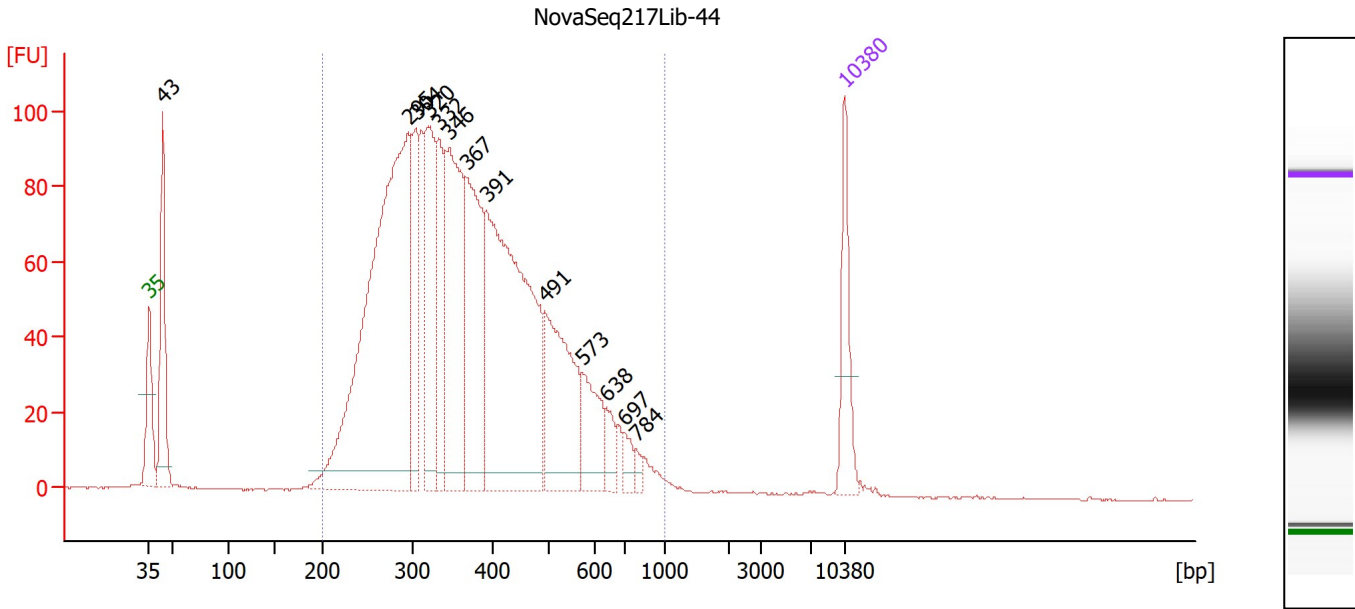
Region table for sample 10 : NovaSeq217Lib-43

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	1,647.9	92	377	30.8	2,213.27	9,921.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : NovaSeq217Lib-44

Number of peaks found: 13 Corr. Area 1: 2,377.9
 Noise: 0.2

Peak table for sample 11 : NovaSeq217Lib-44

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	235.75	8,226.4	
3	295	972.80	4,994.3	
4	304	150.33	749.8	
5	320	227.39	1,077.7	
6	332	145.00	661.1	
7	346	329.67	1,445.3	
8	367	276.16	1,140.5	
9	391	612.79	2,371.9	
10	491	235.28	725.4	
11	573	87.95	232.7	
12	638	31.17	74.1	
13	697	20.22	43.9	
14	784	10.99	21.2	
15	10,380	75.00	10.9	Upper Marker

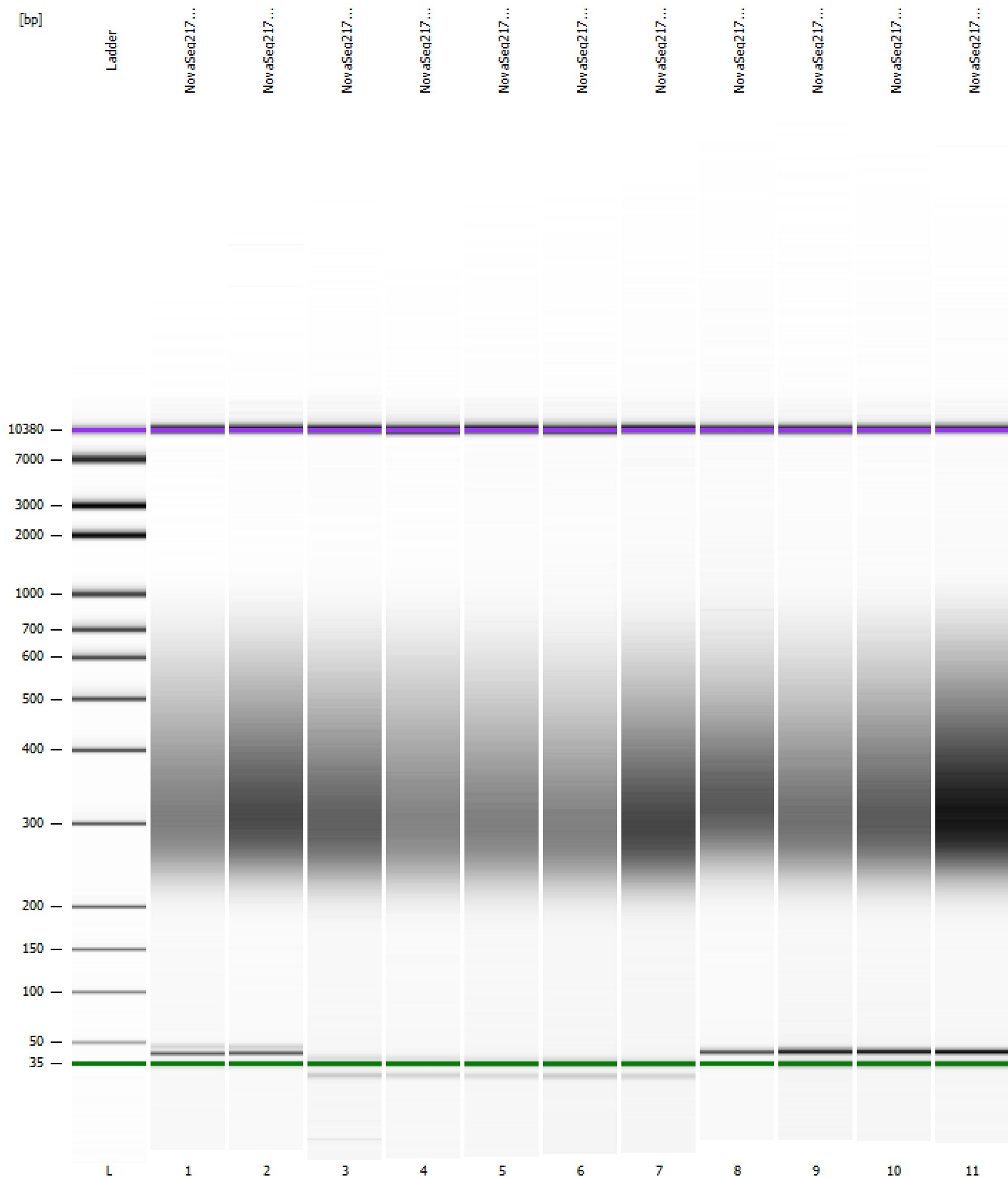
Region table for sample 11 : NovaSeq217Lib-44

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	2,377.9	94	384	31.5	3,316.89	14,665.9	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
Modified: 7/27/2020 2:06:08 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-27_002.xad

Created: 7/27/2020 1:25:44 PM
 Modified: 7/27/2020 2:06:08 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		7/27/2020 2:06:05 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-07-27\Bioanalyze r1_High Sensitivity DNA Assay_2020-07-27_002.xad)		Instrument	Run		7/27/2020 1:25:45 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		7/27/2020 1:25:45 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		7/27/2020 1:25:45 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		7/27/2020 1:25:45 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		7/27/2020 1:25:45 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		7/27/2020 1:25:45 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		7/27/2020 1:25:45 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB