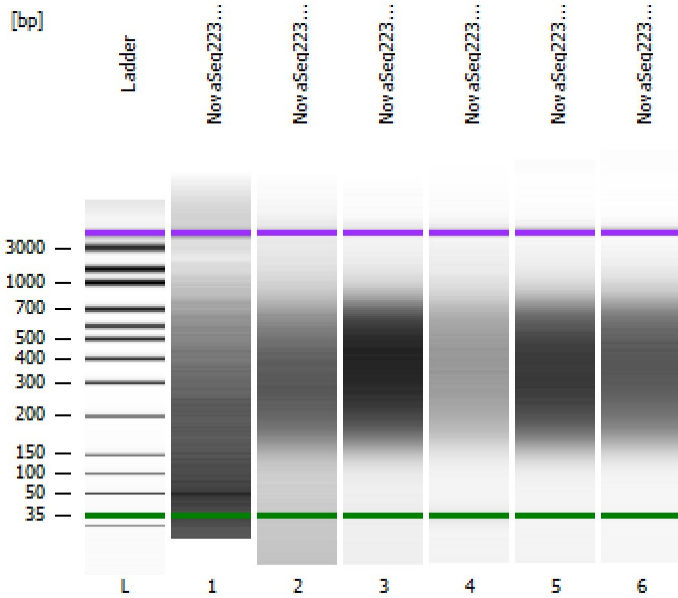


Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electrophoresis File Run Summary



Instrument Information:

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

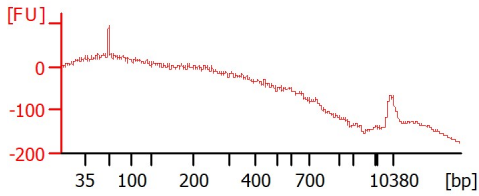
Assay Information:

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

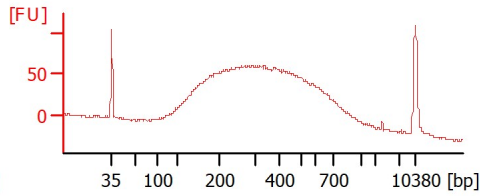
Chip Information:

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

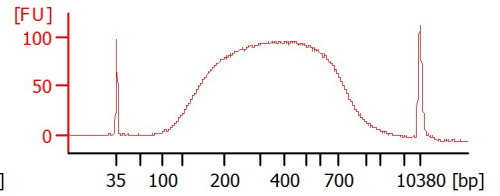
NovaSeq223-A12 Soni (1:2)



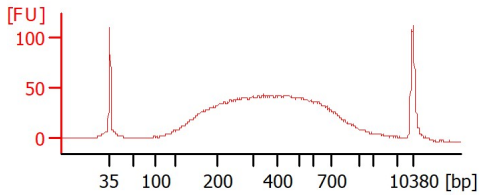
NovaSeq223-B12 Soni (1:2)



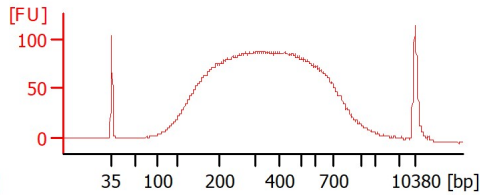
NovaSeq223-C12 Soni (1:3)



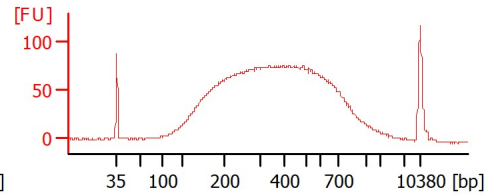
NovaSeq223-D12 Soni (1:2)



NovaSeq223-E12 Soni (1:3)



NovaSeq223-F12 Soni (1:2)



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NovaSeq223-A12 Soni (1:2)		<input type="checkbox"/>	✓			
NovaSeq223-B12 Soni (1:2)		<input type="checkbox"/>	✓			
NovaSeq223-C12 Soni (1:3)		<input type="checkbox"/>	✓			
NovaSeq223-D12 Soni (1:2)		<input type="checkbox"/>	✓			
NovaSeq223-E12 Soni (1:3)		<input type="checkbox"/>	✓			
NovaSeq223-F12 Soni (1:2)		<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_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
Modified: 7/22/2020 5:07:23 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

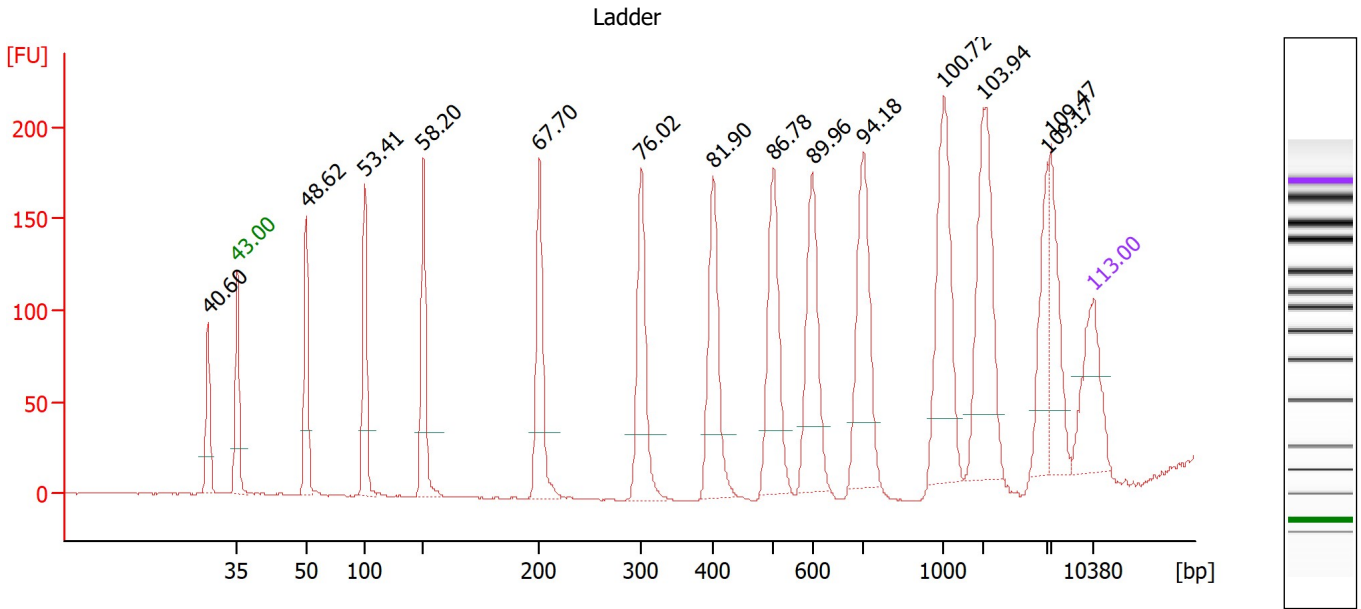
Ladder

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_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.4

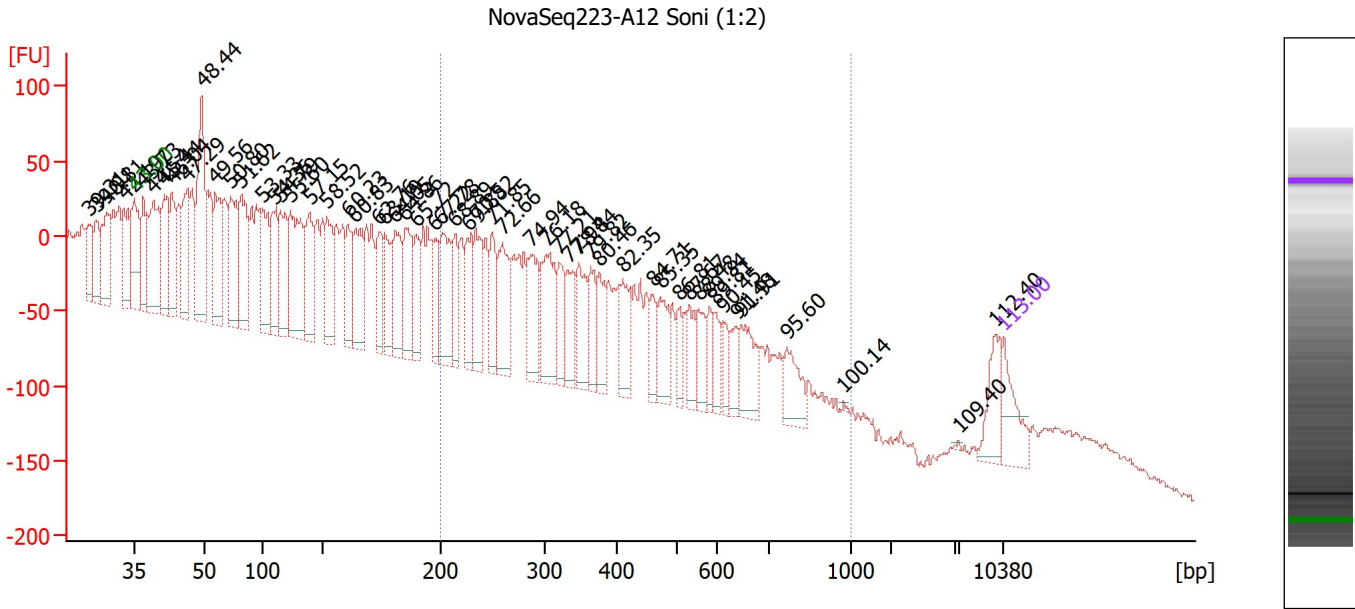
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	27	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	50	150.00	4,545.5	Ladder Peak
4	100	150.00	2,272.7	Ladder Peak
5	150	150.00	1,515.2	Ladder Peak
6	200	150.00	1,136.4	Ladder Peak
7	300	150.00	757.6	Ladder Peak
8	400	150.00	568.2	Ladder Peak
9	500	150.00	454.5	Ladder Peak
10	600	150.00	378.8	Ladder Peak
11	700	150.00	324.7	Ladder Peak
12	1,000	150.00	227.3	Ladder Peak
13	2,000	150.00	113.6	Ladder Peak
14	3,000	150.00	75.8	Ladder Peak
15	7,000	150.00	32.5	Ladder Peak
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NovaSeq223-A12 Soni (1:2)

Number of peaks found: 55 Corr. Area 1: 2,021.1
 Noise: 3.5

Peak table for sample 1 : NovaSeq223-A12 Soni (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	22	0.00	0.0	
2	24	0.00	0.0	
3	27	0.00	0.0	
4	32	0.00	0.0	
5	35	125.00	5,411.3	Lower Marker
6	37	171.05	7,014.9	
7	39	324.30	12,560.7	
8	42	216.93	7,915.8	
9	43	174.28	6,123.3	
10	46	205.08	6,690.5	
11	50	389.05	11,900.6	
12	60	217.07	5,499.7	
13	73	235.99	4,913.4	
14	81	242.58	4,522.4	
15	99	201.91	3,084.9	
16	110	185.80	2,561.6	
17	114	184.48	2,443.9	
18	123	318.49	3,927.3	
19	139	187.90	2,048.5	
20	152	152.43	1,522.8	
21	161	131.59	1,240.8	
22	164	173.21	1,601.7	
23	174	114.84	999.9	
24	176	120.03	1,031.8	
25	181	161.90	1,357.0	
26	185	171.86	1,407.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...**... Peak table for sample 1 : NovaSeq223-A12 Soni (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	190	101.65	812.4	
28	197	99.14	760.6	
29	201	184.91	1,394.3	
30	214	97.38	688.4	
31	226	110.21	738.3	
32	234	141.61	917.3	
33	250	96.85	587.2	
34	260	173.35	1,011.4	
35	287	137.51	726.0	
36	303	179.35	897.7	
37	320	81.40	385.2	
38	333	87.36	398.0	
39	348	115.51	503.1	
40	365	82.76	343.8	
41	376	82.82	334.1	
42	409	98.26	363.7	
43	458	54.23	179.6	
44	471	89.46	287.9	
45	501	48.03	145.3	
46	528	60.37	173.3	
47	554	62.33	170.6	
48	581	42.30	110.4	
49	595	46.10	117.3	
50	612	36.71	90.9	
51	636	47.04	112.0	
52	646	101.15	237.2	
53	765	82.84	164.1	
54	974	1.61	2.5	
55	6,050	1.68	0.4	
56	9,805	67.37	10.4	
57	10,380	75.00	10.9	Upper Marker

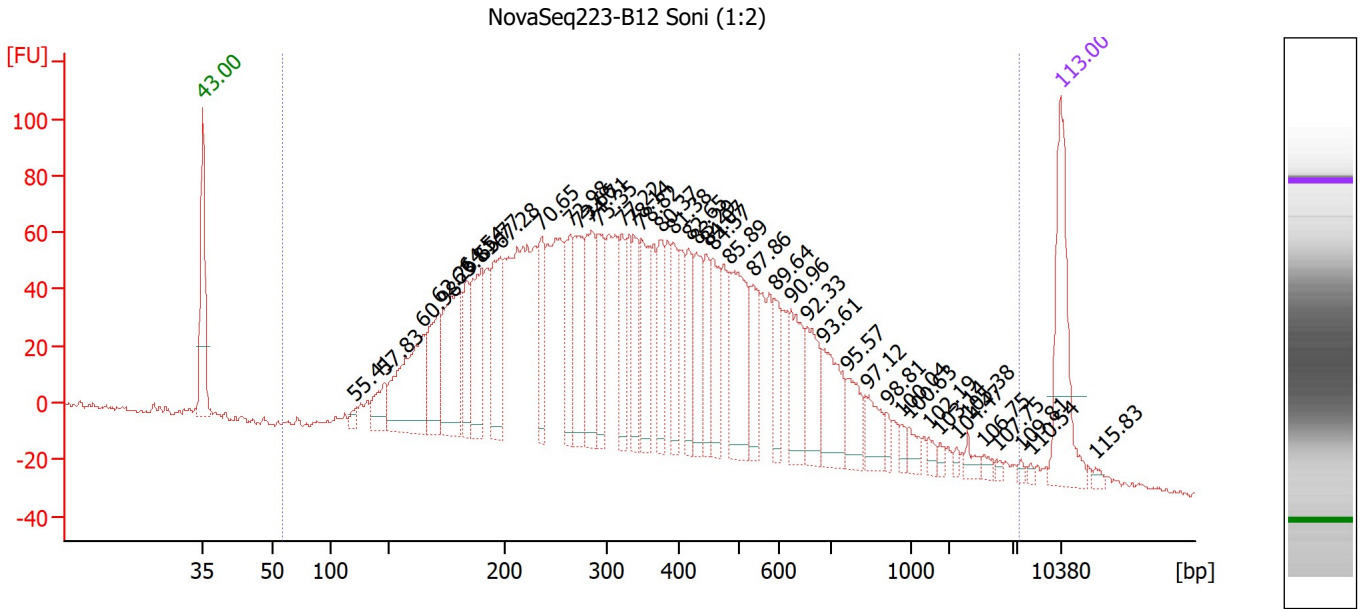
Region table for sample 1 : NovaSeq223-A12 Soni (1:2)

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	2,021.1	41	419	41.4	2,111.26	9,522.6	

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : NovaSeq223-B12 Soni (1:2)

Number of peaks found: 42 Corr. Area 1: 3,199.0
Noise: 1.0

Peak table for sample 2 : NovaSeq223-B12 Soni (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	121	8.03	100.6	
3	146	35.81	371.3	
4	165	139.45	1,283.5	
5	171	81.04	716.6	
6	180	121.70	1,027.2	
7	183	49.77	411.3	
8	190	90.63	723.3	
9	198	100.45	769.5	
10	236	60.18	387.2	
11	263	70.39	404.7	
12	272	78.34	436.9	
13	284	89.43	476.6	
14	292	60.06	311.6	
15	321	48.88	231.1	
16	336	51.02	230.1	
17	348	62.66	273.1	
18	374	43.62	176.7	
19	391	41.79	161.9	
20	415	42.68	155.6	
21	429	47.84	169.1	
22	444	38.18	130.1	
23	455	50.85	169.4	
24	482	100.03	314.5	
25	534	44.74	126.9	
26	590	30.29	77.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : NovaSeq223-B12 Soni (1:2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	624	52.61	127.8	
28	656	47.03	108.6	
29	686	56.53	124.8	
30	764	30.28	60.1	
31	835	25.42	46.1	
32	912	7.88	13.1	
33	969	6.39	10.0	
34	996	10.69	16.3	
35	1,456	5.79	6.0	
36	1,753	4.42	3.8	
37	2,101	3.06	2.2	
38	2,275	7.19	4.8	
39	2,537	4.16	2.5	
40	2,729	2.14	1.2	
41	7,320	2.30	0.5	
42	8,019	2.01	0.4	
43	10,380	75.00	10.9	Upper Marker
44	13,090	0.00	0.0	

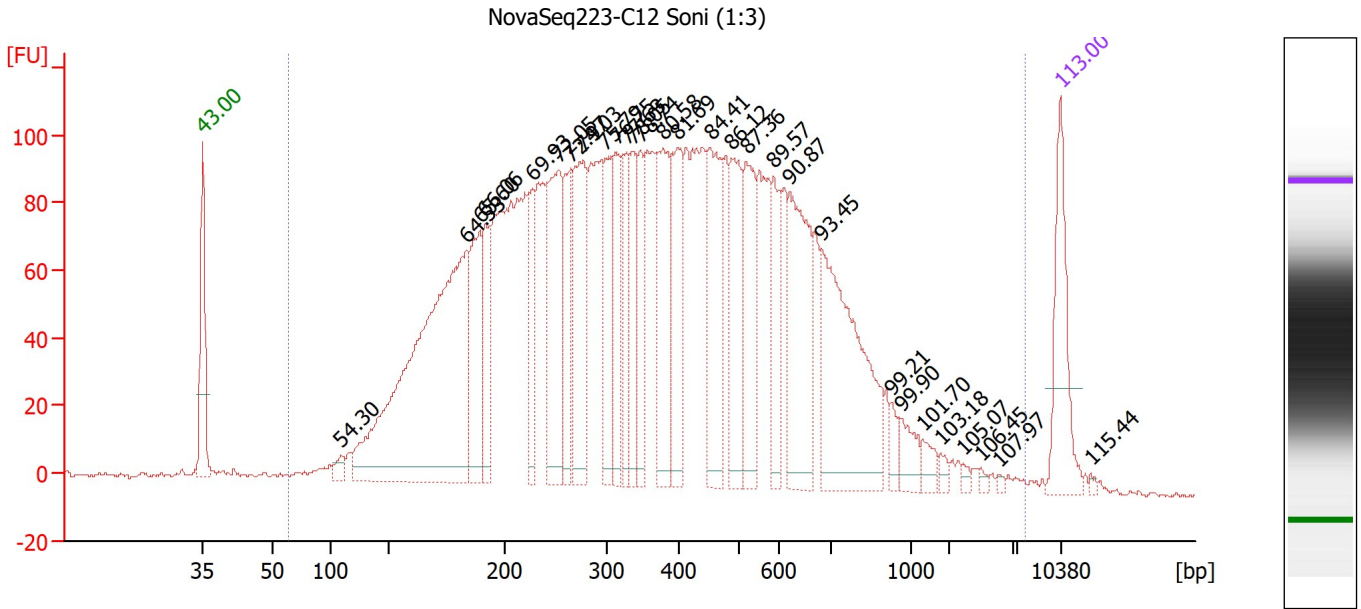
Region table for sample 2 : NovaSeq223-B12 Soni (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
59	7,206	3,199.0	99	433	88.7	2,682.30	14,769.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\..._Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : NovaSeq223-C12 Soni (1:3)

Number of peaks found: 29 Corr. Area 1: 4,429.4
 Noise: 0.7

Peak table for sample 3 : NovaSeq223-C12 Soni (1:3)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	109	14.27	197.9	
3	183	668.86	5,527.4	
4	189	132.49	1,062.5	
5	191	81.35	644.1	
6	227	83.96	560.9	
7	252	185.53	1,114.1	
8	263	88.58	509.5	
9	276	176.29	967.2	
10	297	98.39	501.6	
11	313	84.51	409.7	
12	327	76.29	353.0	
13	334	75.35	341.3	
14	346	73.62	322.1	
15	378	128.58	515.9	
16	396	114.14	436.2	
17	451	138.68	465.4	
18	486	108.87	339.1	
19	518	112.38	328.5	
20	588	62.28	160.5	
21	622	157.69	384.4	
22	683	237.81	527.8	
23	931	13.22	21.5	
24	963	24.72	38.9	
25	1,306	13.57	15.7	
26	1,764	6.23	5.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...

... Peak table for sample 3 : NovaSeq223-C12 Soni (1:3)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,216	3.89	2.7	
28	2,481	3.69	2.3	
29	2,772	2.33	1.3	
30	10,380	75.00	10.9	Upper Marker
31	12,721	0.00	0.0	

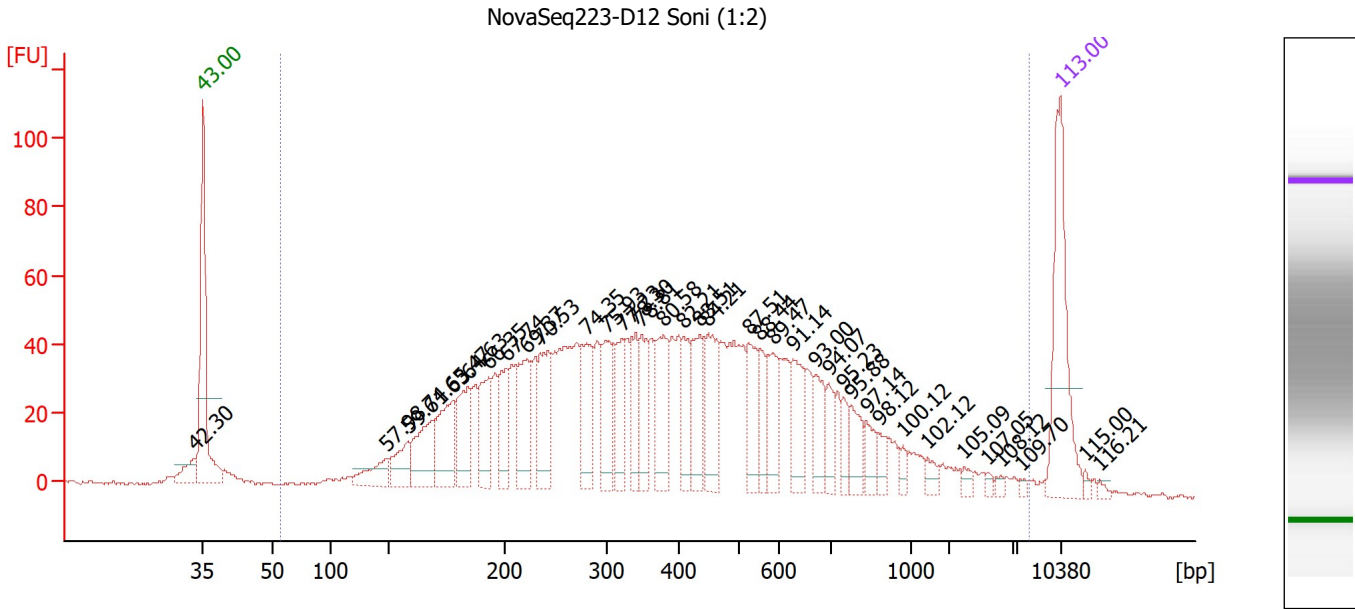
Region table for sample 3 : NovaSeq223-C12 Soni (1:3)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
65	7,591	4,429.4	99	434	84.6	4,416.42	24,099.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\..._Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : NovaSeq223-D12 Soni (1:2)

Number of peaks found: 37 Corr. Area 1: 1,954.7
 Noise: 0.5

Peak table for sample 4 : NovaSeq223-D12 Soni (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	148	30.91	317.2	
4	158	32.80	314.3	
5	168	57.93	522.0	
6	178	64.49	549.9	
7	184	58.88	485.3	
8	193	51.55	404.9	
9	201	42.31	319.7	
10	220	69.06	475.4	
11	234	66.03	427.4	
12	280	56.32	304.9	
13	299	52.60	266.6	
14	321	41.08	194.1	
15	339	31.08	139.0	
16	348	39.76	173.3	
17	378	57.63	231.2	
18	406	31.74	118.4	
19	433	46.16	161.5	
20	447	56.00	189.6	
21	523	40.55	117.4	
22	552	23.93	65.7	
23	585	33.77	87.5	
24	628	40.08	96.7	
25	672	27.34	61.6	
26	697	20.55	44.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...

... Peak table for sample 4 : NovaSeq223-D12 Soni (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	748	14.43	29.2	
28	778	21.05	41.0	
29	836	16.15	29.3	
30	881	9.07	15.6	
31	972	6.11	9.5	
32	1,434	7.07	7.5	
33	2,221	4.42	3.0	
34	2,594	2.39	1.4	
35	2,799	2.55	1.4	
36	7,216	2.01	0.4	
37	10,380	75.00	10.9	Upper Marker
38	12,296	0.00	0.0	
39	13,454	0.00	0.0	

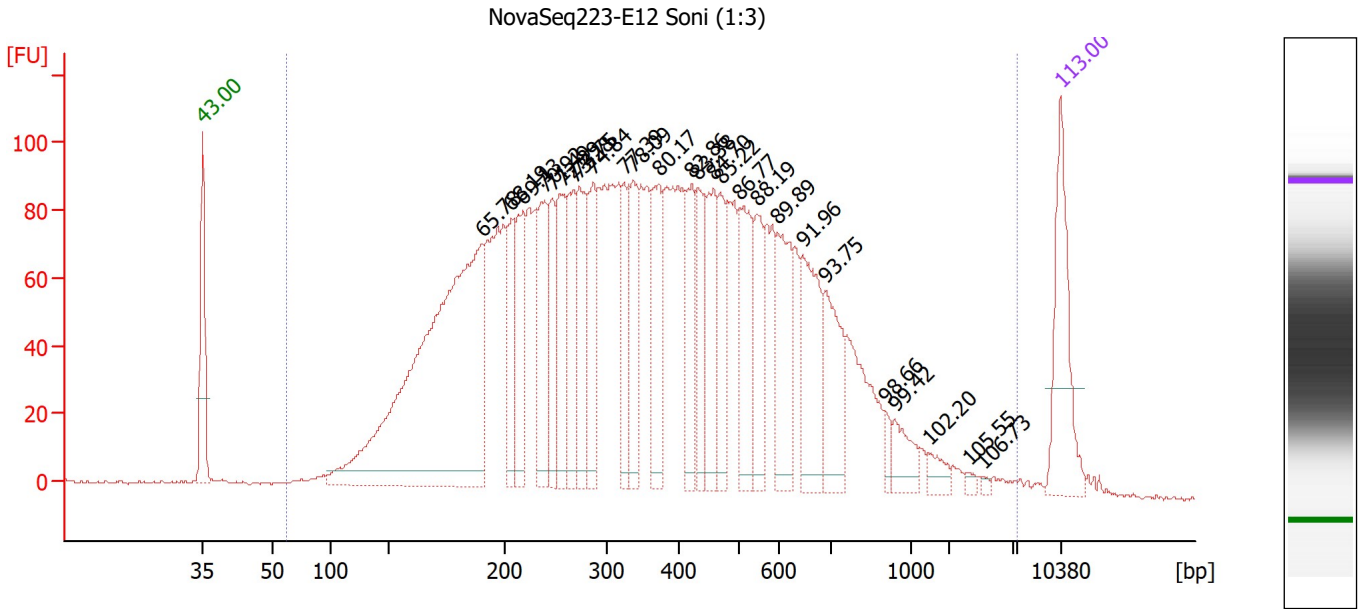
Region table for sample 4 : NovaSeq223-D12 Soni (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
57	7,937	1,954.7	97	497	100.0	1,764.47	9,199.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\..._Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NovaSeq223-E12 Soni (1:3)

Number of peaks found: 26 Corr. Area 1: 3,955.8
 Noise: 0.4

Peak table for sample 5 : NovaSeq223-E12 Soni (1:3)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	190	682.69	5,446.5	
3	206	72.22	531.5	
4	217	94.13	656.6	
5	239	109.82	696.9	
6	246	70.95	437.7	
7	255	97.65	579.7	
8	267	90.88	515.5	
9	273	90.66	503.5	
10	286	93.83	497.4	
11	323	63.58	298.0	
12	335	81.39	367.8	
13	371	92.95	380.0	
14	420	70.12	253.2	
15	430	69.18	243.6	
16	457	79.37	262.9	
17	468	62.25	201.5	
18	500	94.61	286.7	
19	544	63.53	176.8	
20	598	86.68	219.7	
21	647	96.10	224.9	
22	690	78.34	172.1	
23	906	9.93	16.6	
24	940	27.02	43.5	
25	1,460	12.39	12.9	
26	2,308	2.99	2.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...

... Peak table for sample 5 : NovaSeq223-E12 Soni (1:3)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,533	2.00	1.2	
28	10,380	75.00	10.9	Upper Marker

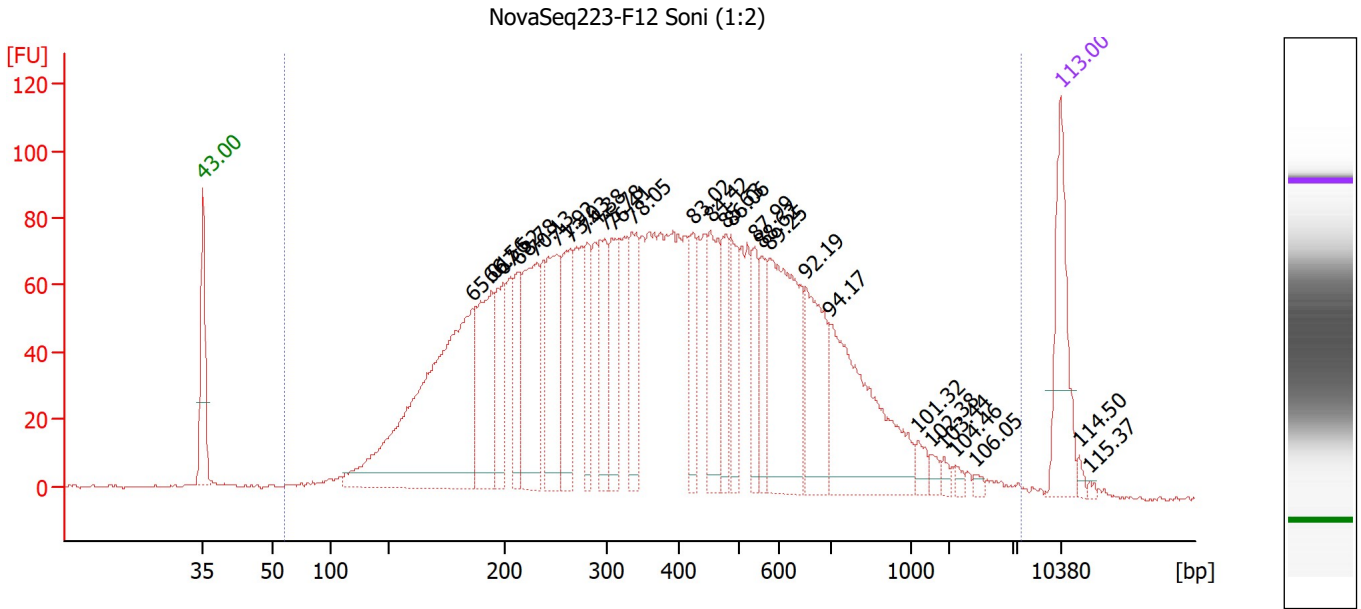
Region table for sample 5 : NovaSeq223-E12 Soni (1:3)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
63	6,920	3,955.8	100	415	71.2	3,535.68	19,559.5	■

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\..._Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NovaSeq223-F12 Soni (1:2)

Number of peaks found: 27 Corr. Area 1: 3,312.4
 Noise: 0.5

Peak table for sample 6 : NovaSeq223-F12 Soni (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	186	507.86	4,140.0	
3	194	152.84	1,193.7	
4	199	84.50	643.1	
5	213	71.79	510.7	
6	229	157.72	1,042.4	
7	251	126.98	767.4	
8	264	105.77	606.9	
9	280	65.08	351.8	
10	297	88.40	450.8	
11	307	87.25	431.2	
12	335	88.78	402.1	
13	423	57.01	204.2	
14	452	87.08	292.1	
15	476	50.93	162.0	
16	485	57.06	178.1	
17	538	48.39	136.2	
18	558	42.76	116.1	
19	578	189.43	496.8	
20	653	103.04	239.1	
21	700	199.90	432.8	
22	1,186	11.71	14.9	
23	1,516	6.95	6.9	
24	1,845	5.69	4.7	
25	2,099	4.42	3.2	
26	2,403	3.91	2.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 PM

Electropherogram Summary Continued ...

... Peak table for sample 6 : NovaSeq223-F12 Soni (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	10,380	75.00	10.9	Upper Marker
28	11,814	0.00	0.0	
29	12,646	0.00	0.0	

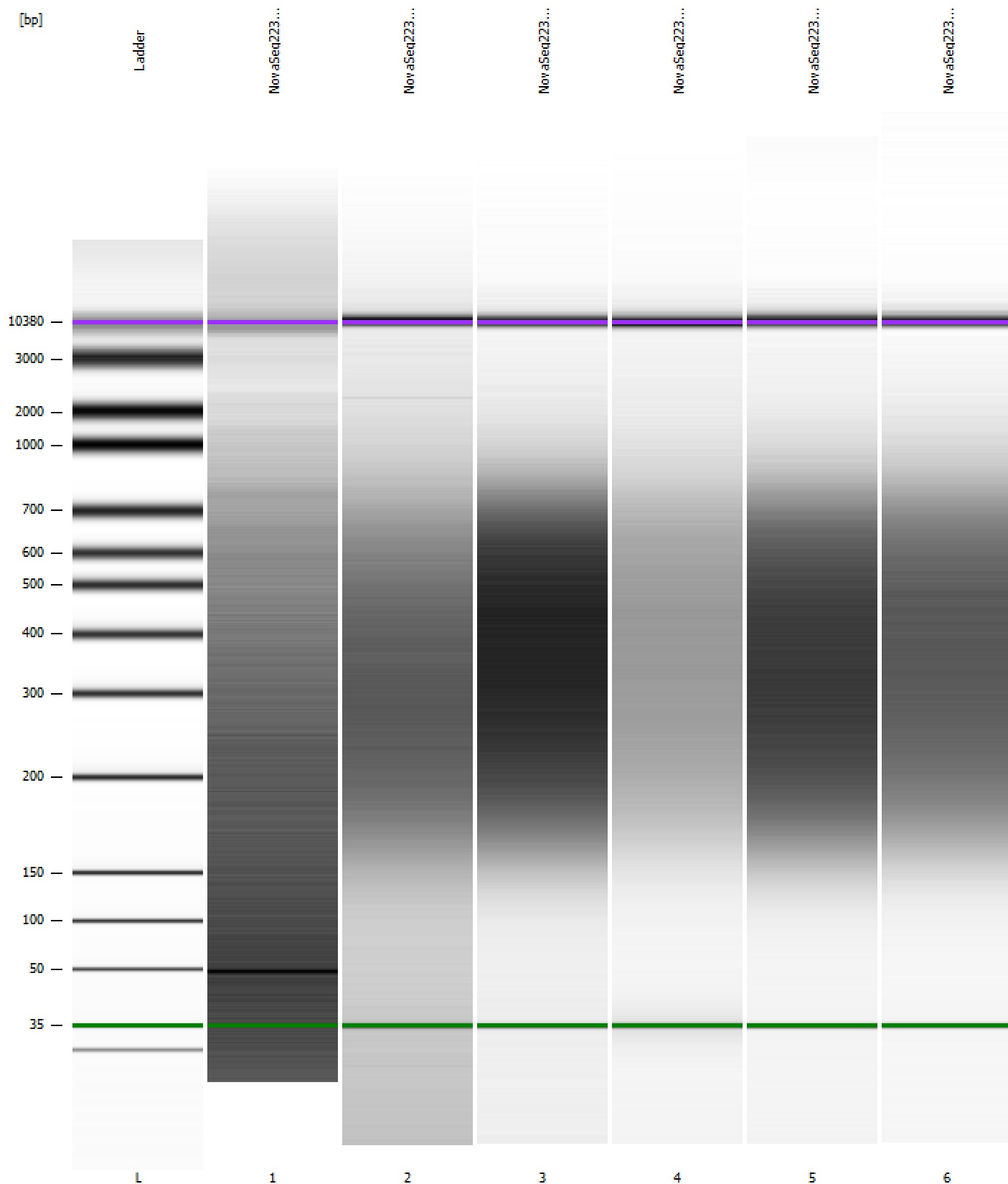
Region table for sample 6 : NovaSeq223-F12 Soni (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
61	7,258	3,312.4	99	437	77.0	3,308.82	17,727.5	■

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\..._Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
Modified: 7/22/2020 5:07:23 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\..._Bioanalyzer1_High Sensitivity DNA Assay_2020-07-22_001.xad

Created: 7/22/2020 4:15:04 PM
 Modified: 7/22/2020 5:07:23 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		7/22/2020 4:56:22 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-07-22\Bioanalyze r1_High Sensitivity DNA Assay_2020-07-22_001.xad)		Instrument	Run		7/22/2020 4:15:09 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		7/22/2020 4:15:09 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		7/22/2020 4:15:09 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		7/22/2020 4:15:09 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		7/22/2020 4:15:09 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		7/22/2020 4:15:09 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		7/22/2020 4:15:09 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB