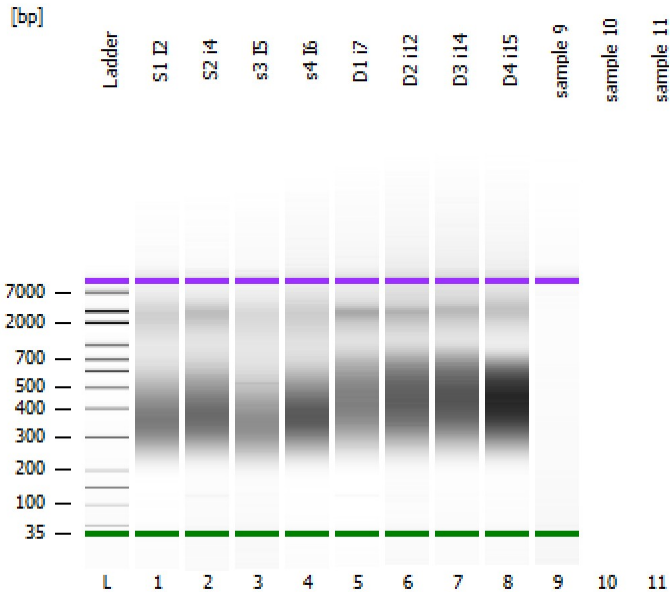


Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

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

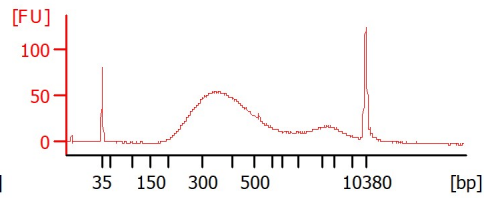
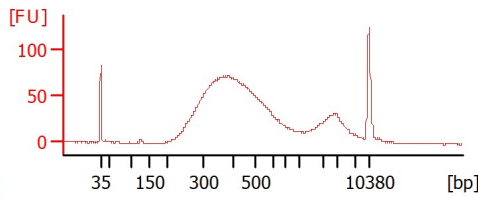
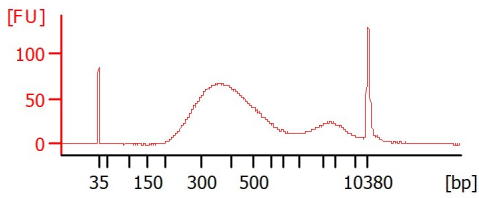
Chip Information:

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

S1 I2

S2 I4

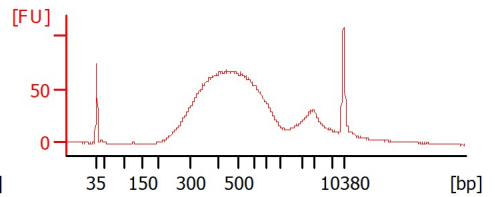
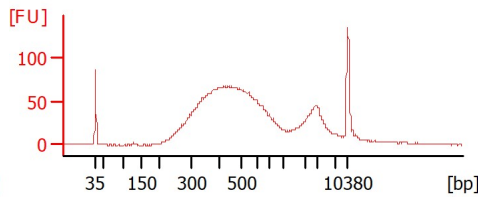
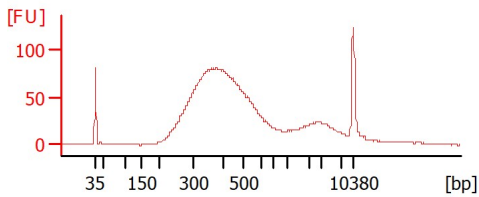
S3 I5



S4 I6

D1 I7

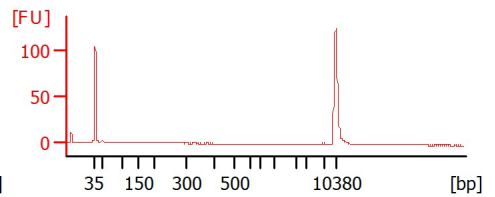
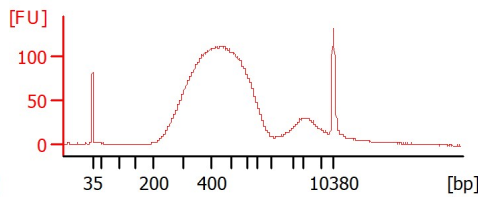
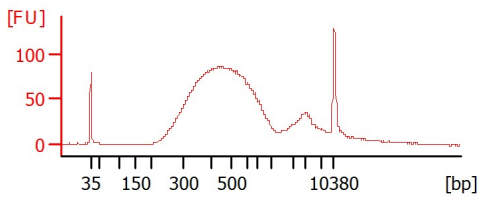
D2 i12



D3 i14

D4 i15

sample 9



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
S1 I2		<input type="checkbox"/>	✓			
S2 i4		<input type="checkbox"/>	✓			
s3 I5		<input type="checkbox"/>	✓			
s4 I6		<input type="checkbox"/>	✓			
D1 i7		<input type="checkbox"/>	✓			
D2 i12		<input type="checkbox"/>	✓			
D3 i14		<input type="checkbox"/>	✓			
D4 i15		<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>	✓			
sample 10		<input type="checkbox"/>				
sample 11		<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_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

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

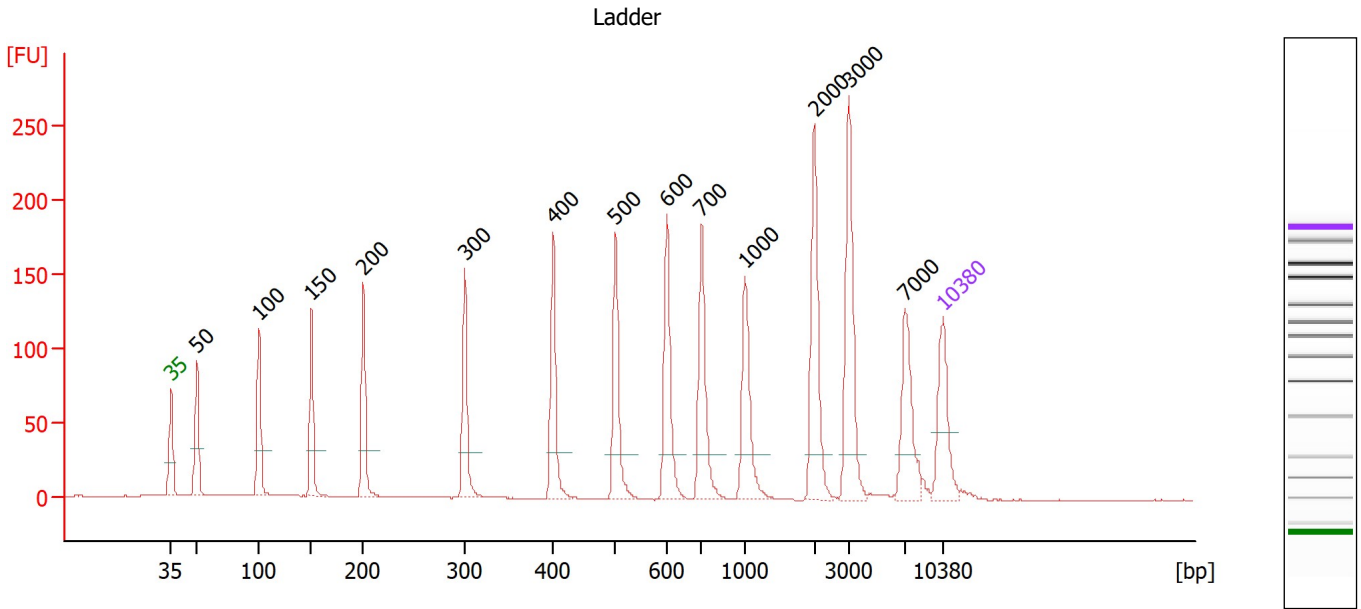
Ladder

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_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

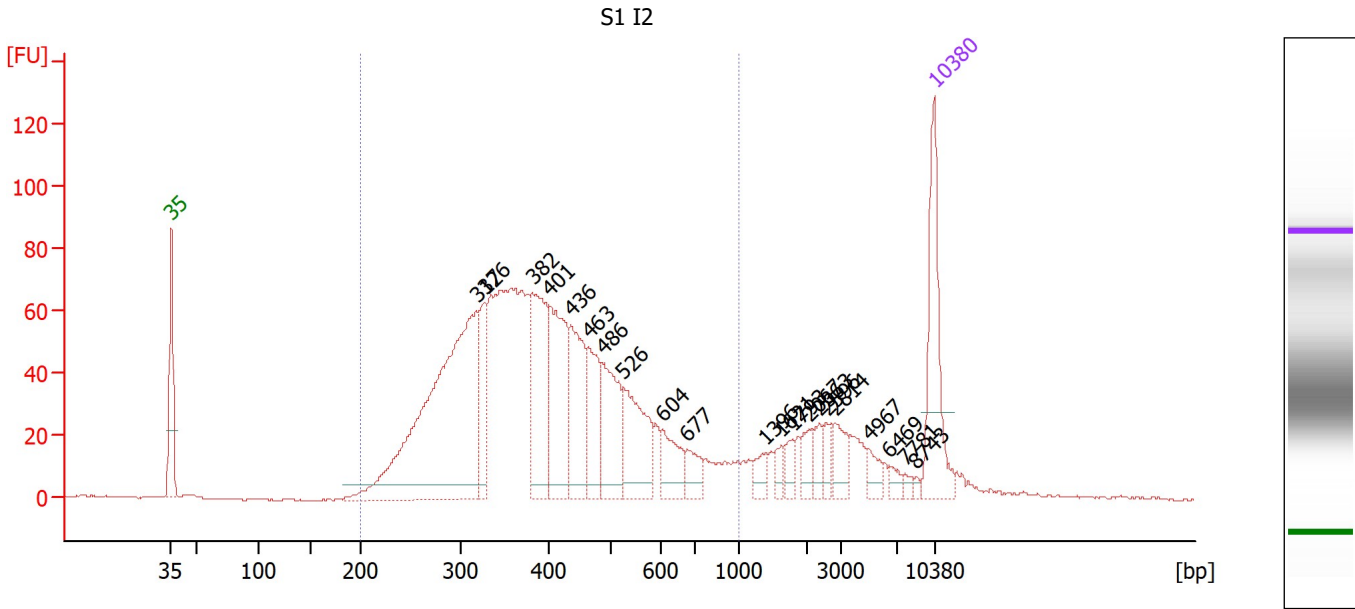
Peak table for Ladder

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_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : S1 I2

Number of peaks found: 21 Corr. Area 1: 1,701.9
 Noise: 0.3

Peak table for sample 1 : S1 I2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	317	425.18	2,034.8	
3	326	52.14	242.5	
4	382	127.71	507.1	
5	401	121.35	458.8	
6	436	88.62	308.0	
7	463	62.79	205.3	
8	486	79.27	247.3	
9	526	83.77	241.5	
10	604	35.32	88.7	
11	677	21.42	48.0	
12	1,396	12.44	13.5	
13	1,621	9.03	8.4	
14	1,793	11.03	9.3	
15	2,067	14.35	10.5	
16	2,363	13.23	8.5	
17	2,596	11.46	6.7	
18	2,814	19.41	10.4	
19	4,967	11.68	3.6	
20	6,469	6.69	1.6	
21	7,781	4.09	0.8	
22	8,743	2.45	0.4	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...

... Region table for sample 1 :

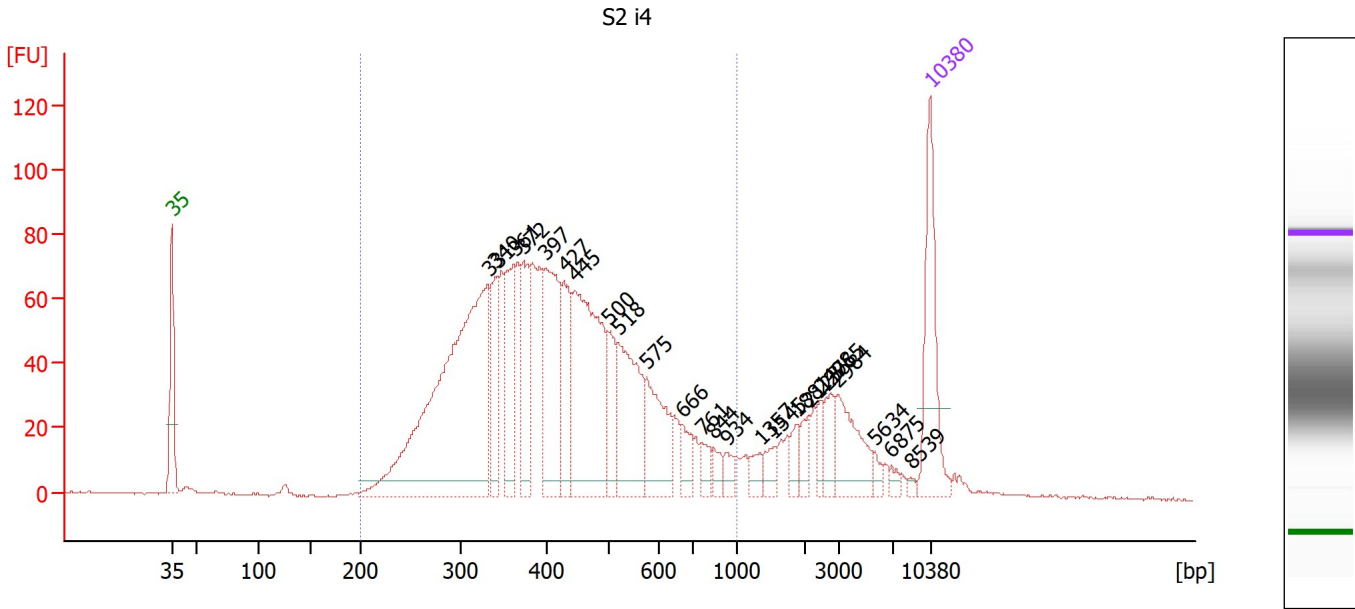
S1 I2

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	1,701.9	85	412	32.2	1,491.27	6,179.2	■

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : S2 i4

Number of peaks found: 24 Corr. Area 1: 1,845.6
 Noise: 0.4

Peak table for sample 2 : S2 i4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	331	465.69	2,130.7	
3	340	60.51	269.8	
4	361	82.09	344.2	
5	372	72.98	296.8	
6	397	132.77	506.5	
7	427	67.99	241.2	
8	445	211.23	718.9	
9	500	46.32	140.2	
10	518	109.81	320.9	
11	575	72.72	191.7	
12	666	20.99	47.8	
13	761	14.47	28.8	
14	844	12.07	21.7	
15	934	10.27	16.6	
16	1,357	11.42	12.7	
17	1,545	12.51	12.3	
18	1,881	12.24	9.9	
19	2,123	14.30	10.2	
20	2,498	12.74	7.7	
21	2,765	20.13	11.0	
22	2,984	47.07	23.9	
23	5,634	7.10	1.9	
24	6,875	4.92	1.1	
25	8,539	2.53	0.4	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...

... Region table for sample 2 :

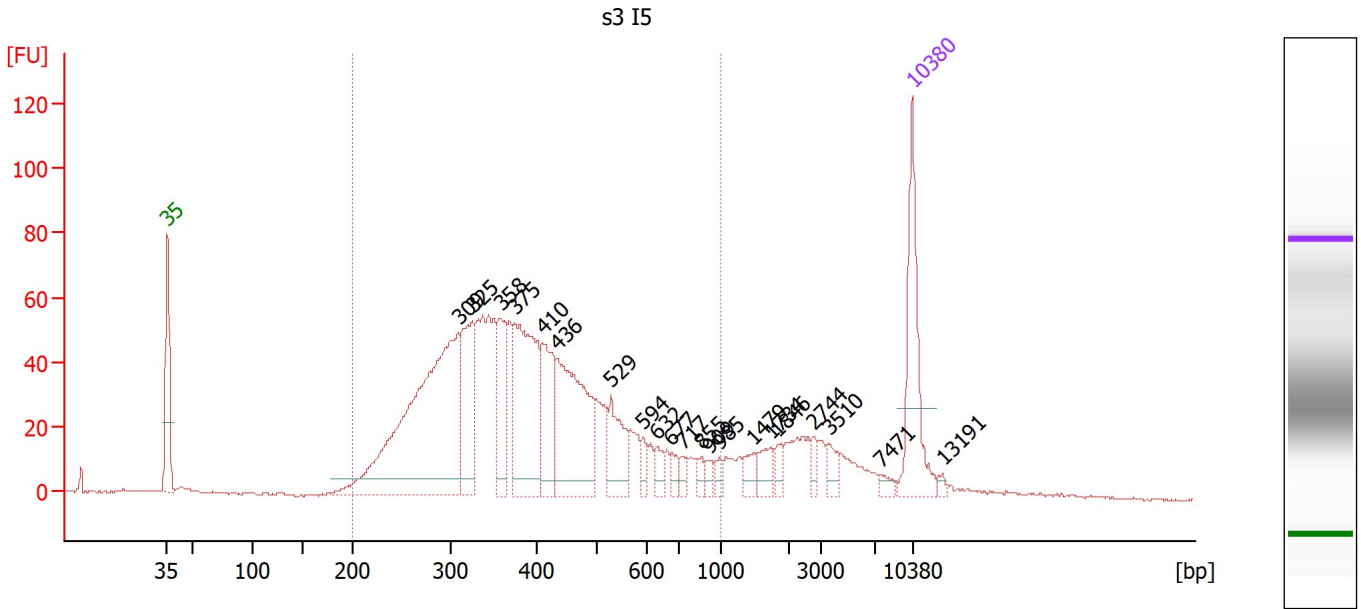
S2 i4

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	1,845.6	84	428	31.5	1,660.59	6,621.7	■

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : s3 I5

Number of peaks found: 21 Corr. Area 1: 1,416.9
 Noise: 0.3

Peak table for sample 3 : s3 I5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	309	396.03	1,939.1	
3	325	99.28	462.6	
4	358	67.11	284.2	
5	375	162.83	657.3	
6	410	71.55	264.2	
7	436	156.19	543.1	
8	529	49.20	140.9	
9	594	10.65	27.2	
10	632	13.06	31.3	
11	677	10.22	22.9	
12	717	7.44	15.7	
13	855	6.60	11.7	
14	909	7.02	11.7	
15	985	6.44	9.9	
16	1,479	11.71	12.0	
17	1,734	15.58	13.6	
18	1,846	9.21	7.6	
19	2,744	7.68	4.2	
20	3,510	10.75	4.6	
21	7,471	5.70	1.2	
22	10,380	75.00	10.9	Upper Marker
23	13,191	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...

... Region table for sample 3 :

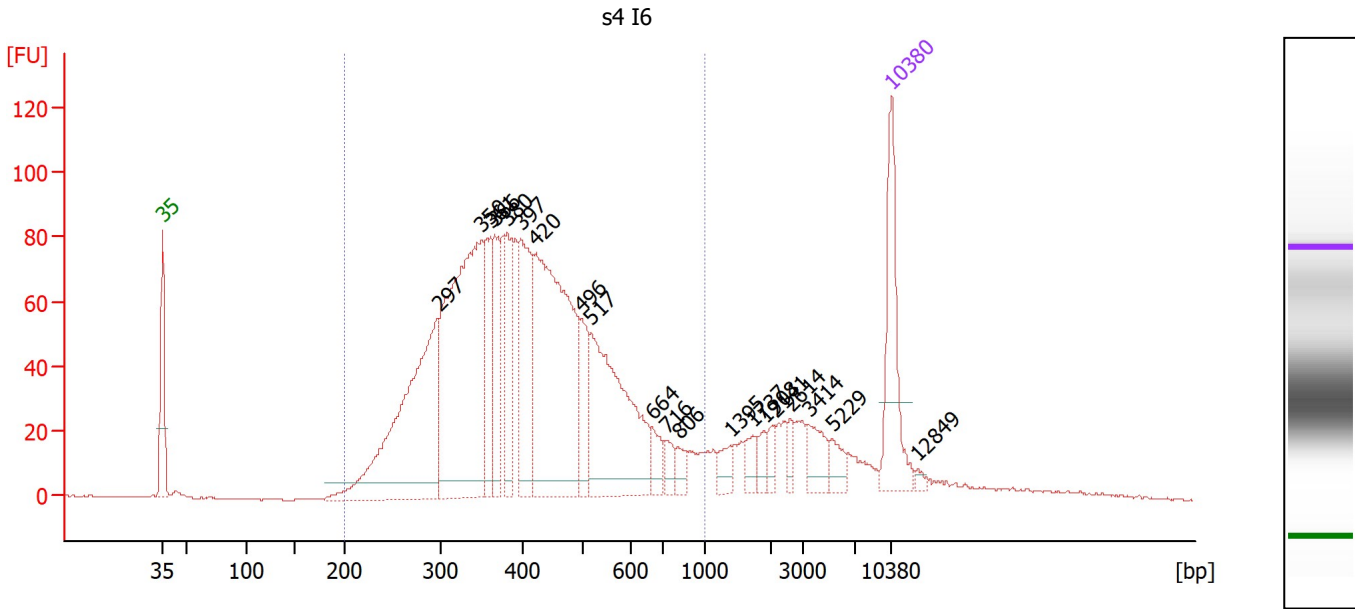
s3 I5

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	1,416.9	84	406	34.3	1,350.11	5,741.1	■

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : s4 I6

Number of peaks found: 20 Corr. Area 1: 2,019.2
 Noise: 0.2

Peak table for sample 4 : s4 I6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	297	315.58	1,607.4	
3	350	380.31	1,647.8	
4	361	74.94	314.9	
5	366	69.38	287.4	
6	380	72.22	287.6	
7	397	129.12	492.6	
8	420	320.53	1,155.6	
9	496	50.92	155.7	
10	517	207.53	608.6	
11	664	19.84	45.3	
12	716	13.75	29.1	
13	806	12.83	24.1	
14	1,395	14.08	15.3	
15	1,737	12.79	11.2	
16	1,908	10.36	8.2	
17	2,141	10.45	7.4	
18	2,614	9.20	5.3	
19	3,414	25.66	11.4	
20	5,229	14.13	4.1	
21	10,380	75.00	10.9	Upper Marker
22	12,849	0.00	0.0	

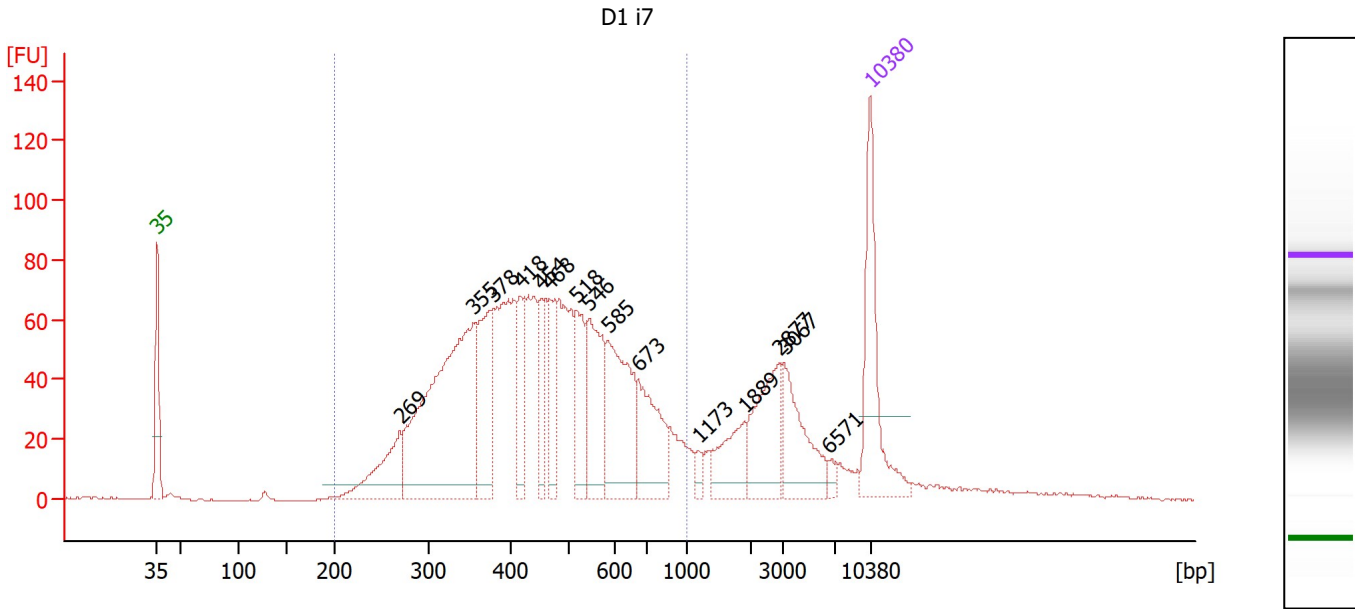
Region table for sample 4 : s4 I6

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	2,019.2	85	422	31.6	1,810.80	7,314.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : D1 i7

Number of peaks found: 15 Corr. Area 1: 1,836.3
 Noise: 0.3

Peak table for sample 5 : D1 i7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	269	75.23	423.5	
3	355	304.66	1,300.2	
4	378	94.36	378.3	
5	418	44.00	159.6	
6	454	39.36	131.5	
7	468	47.78	154.6	
8	518	57.54	168.1	
9	546	83.17	231.0	
10	585	104.82	271.5	
11	673	71.74	161.6	
12	1,173	6.27	8.1	
13	1,889	37.56	30.1	
14	2,877	61.57	32.4	
15	3,067	56.21	27.8	
16	6,571	5.05	1.2	
17	10,380	75.00	10.9	Upper Marker

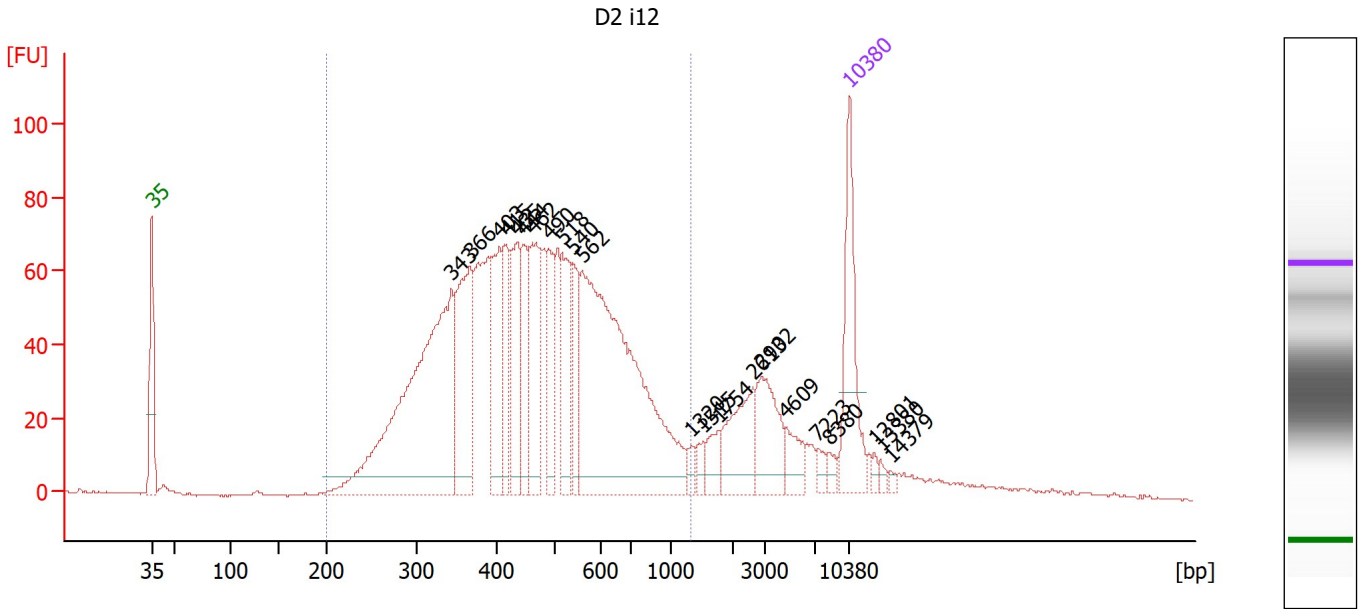
Region table for sample 5 : D1 i7

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	1,836.3	81	467	31.6	1,301.01	4,812.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : D2 i12

Number of peaks found: 22 Corr. Area 1: 1,874.5
 Noise: 0.2

Peak table for sample 6 : D2 i12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	343	410.91	1,817.4	
3	366	140.90	583.3	
4	403	85.76	322.4	
5	415	60.97	222.5	
6	435	85.70	298.6	
7	444	59.77	203.8	
8	462	88.50	290.2	
9	490	56.46	174.5	
10	518	75.64	221.3	
11	540	49.36	138.6	
12	562	403.29	1,088.0	
13	1,320	7.56	8.7	
14	1,515	9.42	9.4	
15	1,754	17.44	15.1	
16	2,613	51.88	30.1	
17	2,902	52.60	27.5	
18	4,609	21.57	7.1	
19	7,223	7.76	1.6	
20	8,380	7.15	1.3	
21	10,380	75.00	10.9	Upper Marker
22	12,801	0.00	0.0	
23	13,380	0.00	0.0	
24	14,379	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...

... Region table for sample 6 :

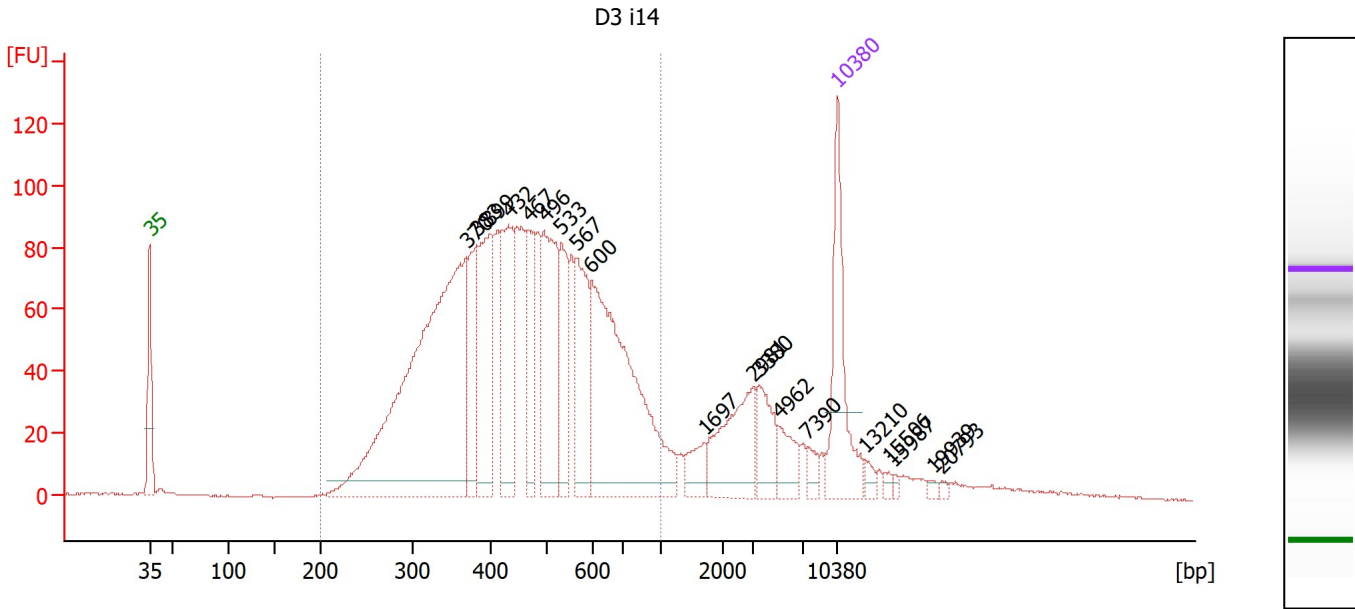
D2 i12

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,316	1,874.5	84	485	35.7	1,799.54	6,513.0	■

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : D3 i14

Number of peaks found: 19 Corr. Area 1: 2,327.8
 Noise: 0.2

Peak table for sample 7 : D3 i14

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	370	502.87	2,059.9	
3	383	78.73	311.6	
4	399	126.08	478.7	
5	432	114.81	402.7	
6	467	65.72	213.1	
7	496	132.55	405.1	
8	533	63.80	181.3	
9	567	90.02	240.5	
10	600	264.84	668.9	
11	1,697	19.43	17.4	
12	2,981	67.45	34.3	
13	3,380	34.40	15.4	
14	4,962	22.01	6.7	
15	7,390	8.64	1.8	
16	10,380	75.00	10.9	Upper Marker
17	13,210	0.00	0.0	
18	15,506	0.00	0.0	
19	15,987	0.00	0.0	
20	19,939	0.00	0.0	
21	20,793	0.00	0.0	

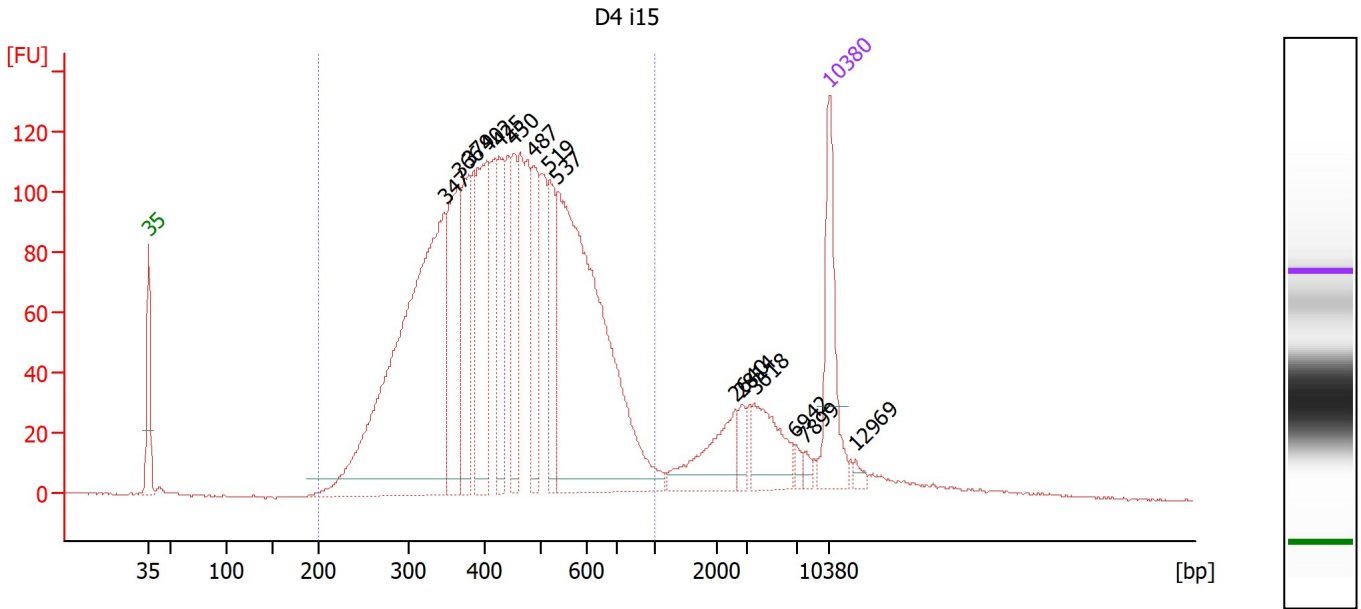
Region table for sample 7 : D3 i14

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	2,327.8	84	474	31.0	1,697.85	6,164.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : D4 i15

Number of peaks found: 15 Corr. Area 1: 2,915.9
 Noise: 0.2

Peak table for sample 8 : D4 i15

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	347	592.94	2,592.6	
3	366	167.24	692.8	
4	379	100.65	402.6	
5	402	152.89	576.2	
6	425	82.64	294.6	
7	450	75.87	255.4	
8	487	81.98	255.3	
9	519	79.62	232.5	
10	537	480.81	1,357.7	
11	2,640	56.39	32.4	
12	2,814	13.36	7.2	
13	3,618	52.66	22.1	
14	6,942	6.38	1.4	
15	7,899	5.28	1.0	
16	10,380	75.00	10.9	Upper Marker
17	12,969	0.00	0.0	

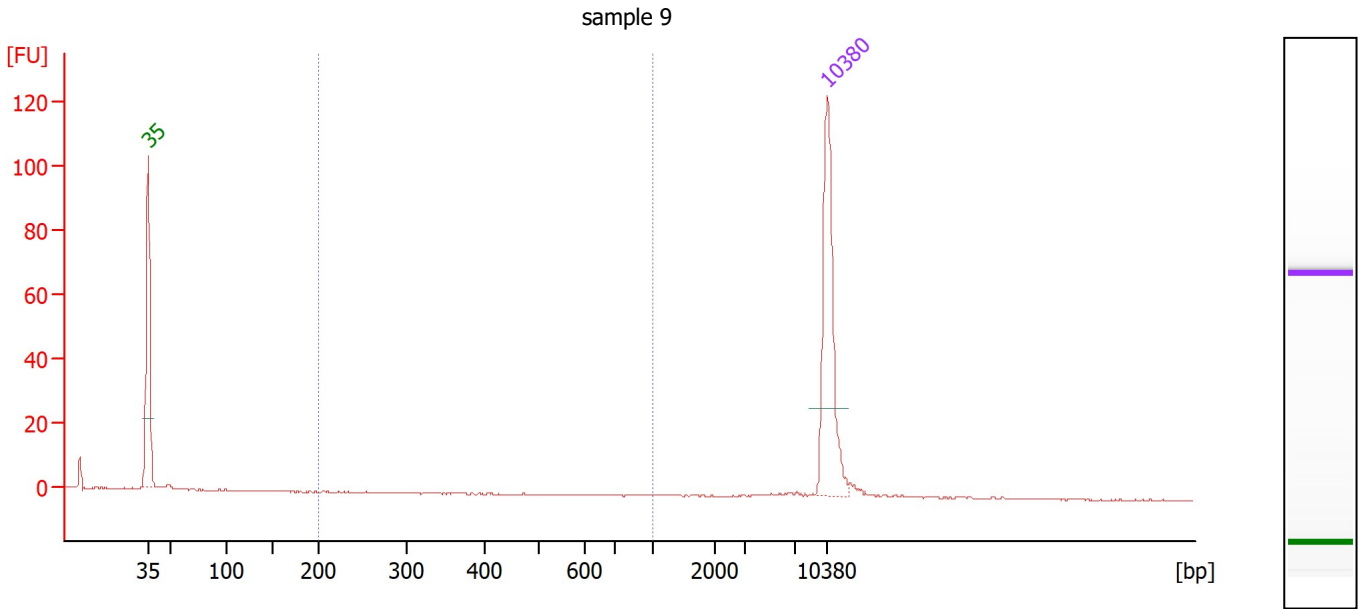
Region table for sample 8 : D4 i15

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	2,915.9	88	452	28.7	2,298.31	8,620.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 0 Corr. Area 1: 0.0
 Noise: 0.1

Peak table for sample 9 : sample 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

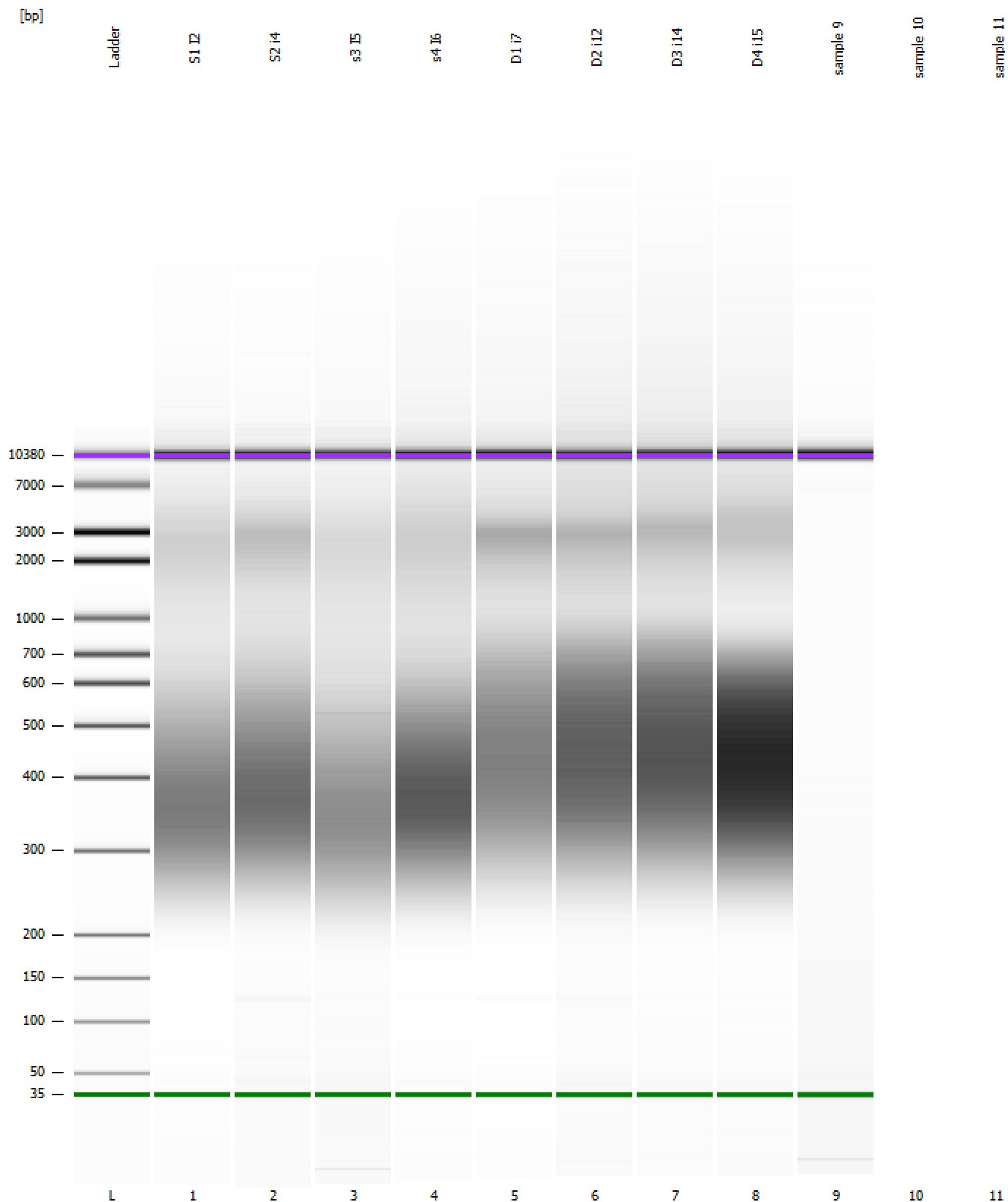
Region table for sample 9 : sample 9

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	0.0	0	0	0.0	0.00	0.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
Modified: 3/3/2020 11:44:44 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
Modified: 3/3/2020 11:44:44 AM

Invalid Samples

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-03-03_001.xad

Created: 3/3/2020 11:09:07 AM
 Modified: 3/3/2020 11:44:44 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		3/3/2020 11:44:41 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-03-03\Bioanalyze r1_High Sensitivity DNA Assay_2020-03-03_001.xad)		Instrument	Run		3/3/2020 11:09:13 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		3/3/2020 11:09:13 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		3/3/2020 11:09:13 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		3/3/2020 11:09:13 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		3/3/2020 11:09:13 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		3/3/2020 11:09:13 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		3/3/2020 11:09:12 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB