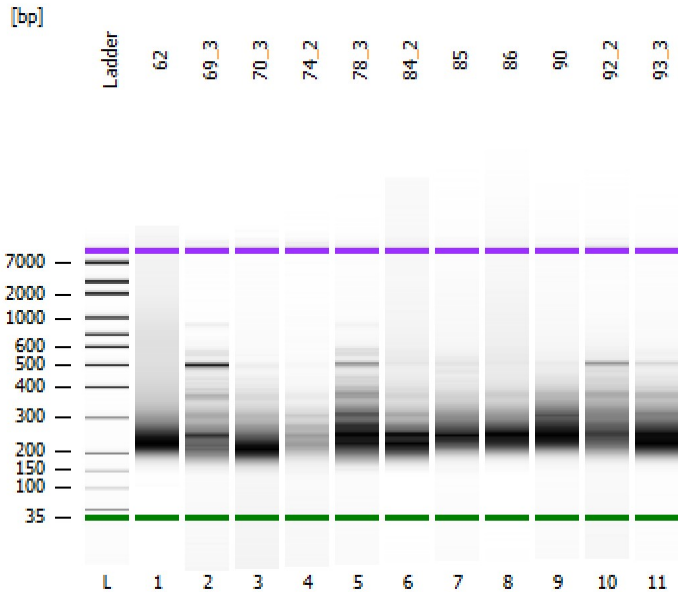


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
Modified: 11/26/2019 4:45:00 PM

Electrophoresis File Run Summary



Instrument Information:

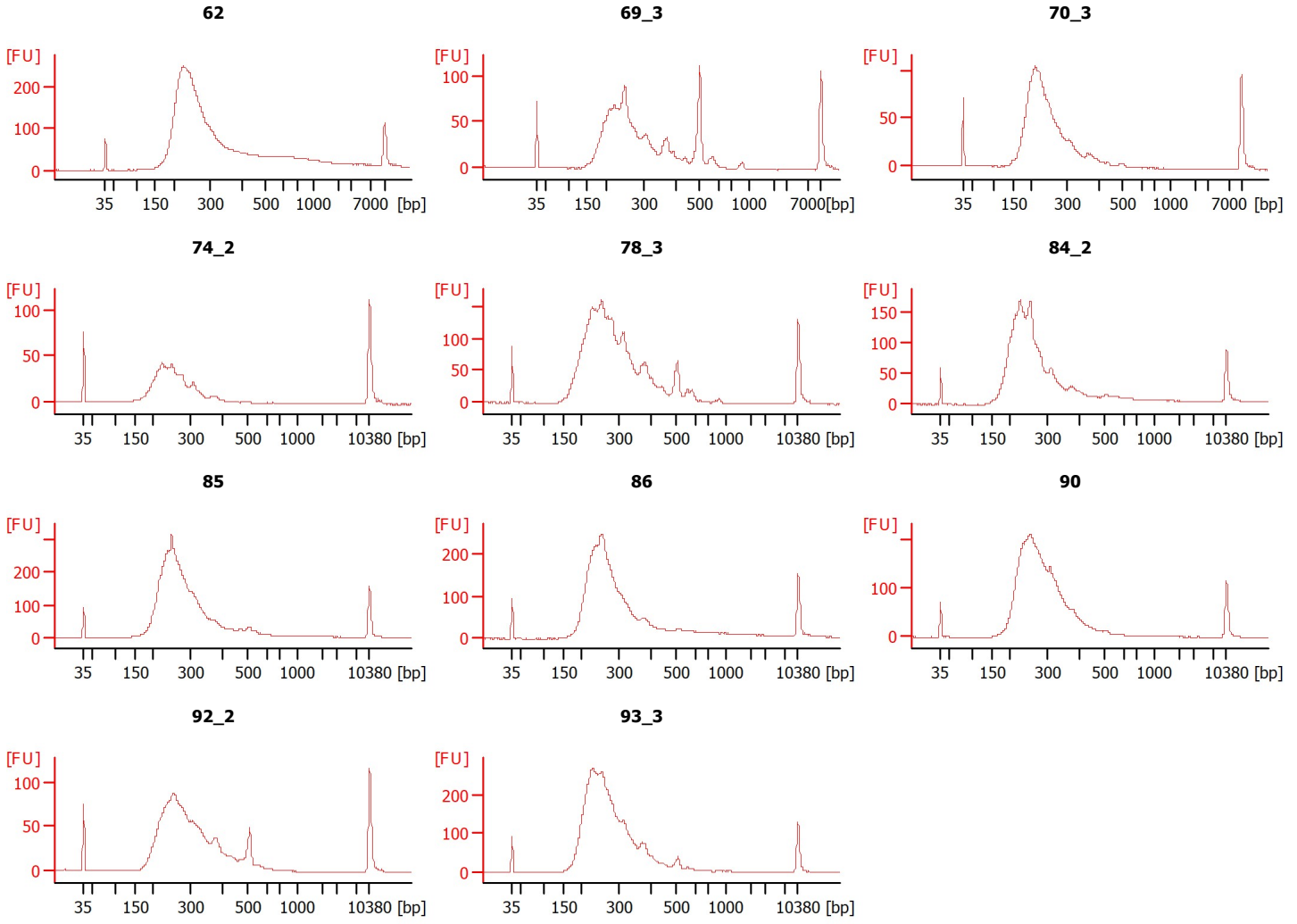
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
62		<input type="checkbox"/>	✓			
69_3		<input type="checkbox"/>	✓			
70_3		<input type="checkbox"/>	✓			
74_2		<input type="checkbox"/>	✓			
78_3		<input type="checkbox"/>	✓			
84_2		<input type="checkbox"/>	✓			
85		<input type="checkbox"/>	✓			
86		<input type="checkbox"/>	✓			
90		<input type="checkbox"/>	✓			
92_2		<input type="checkbox"/>	✓			
93_3		<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_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 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

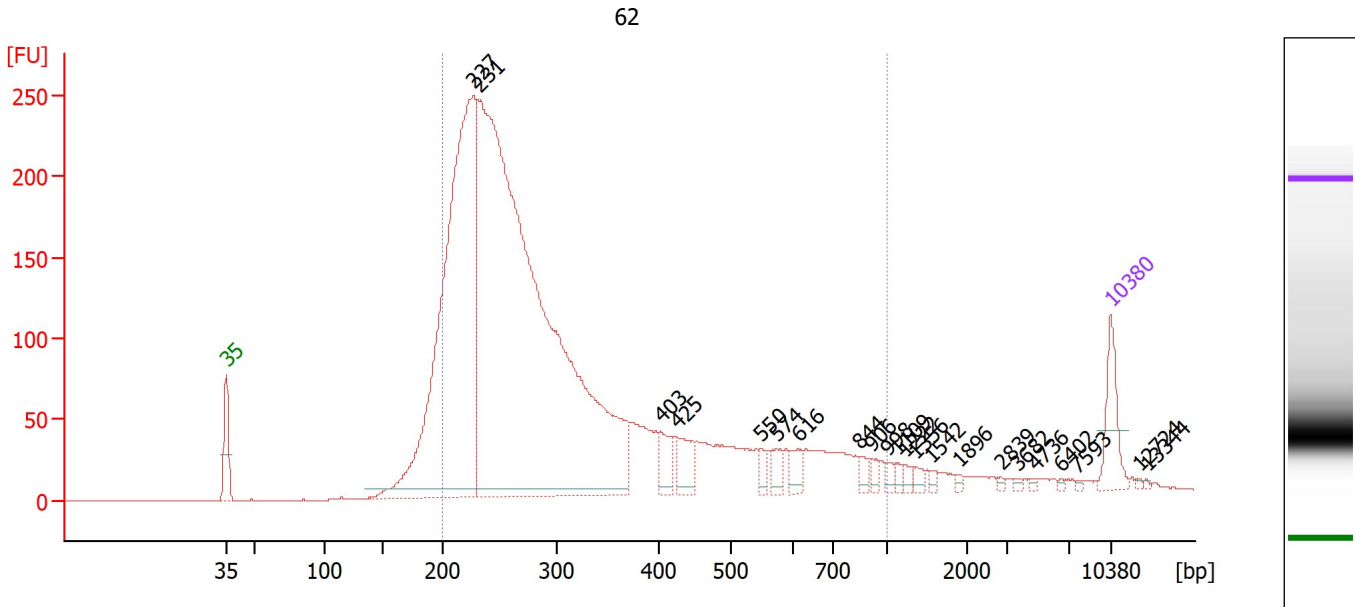
Ladder

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_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary



Overall Results for sample 1 : 62

Number of peaks found: 22 Corr. Area 1: 4,022.5
 Noise: 0.3

Peak table for sample 1 : 62

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	227	1,732.93	11,573.7	
3	231	3,276.59	21,487.2	
4	403	63.21	237.4	
5	425	73.61	262.2	
6	550	19.15	52.7	
7	574	33.71	89.0	
8	616	33.53	82.5	
9	844	19.15	34.4	
10	906	14.60	24.4	
11	998	13.03	19.8	
12	1,109	10.08	13.8	
13	1,222	11.12	13.8	
14	1,356	12.14	13.6	
15	1,542	7.44	7.3	
16	1,896	6.28	5.0	
17	2,839	3.92	2.1	
18	3,682	4.45	1.8	
19	4,736	4.05	1.3	
20	6,402	2.92	0.7	
21	7,593	2.60	0.5	
22	10,380	75.00	10.9	Upper Marker
23	12,724	0.00	0.0	
24	13,344	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...

... Region table for sample 1 :

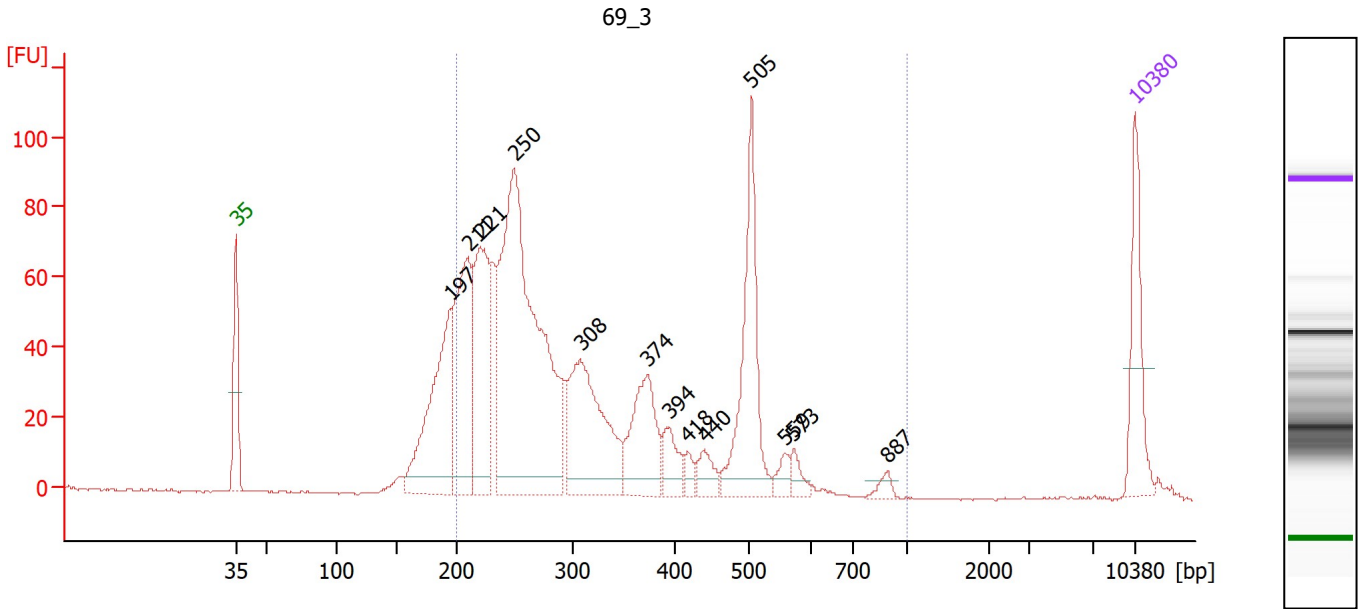
62

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	4,022.5	89	326	45.2	5,050.92	27,729.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 69_3

Number of peaks found: 13 Corr. Area 1: 1,396.6
 Noise: 0.3

Peak table for sample 2 : 69_3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	197	270.59	2,086.1	
3	211	258.05	1,856.4	
4	221	241.80	1,656.8	
5	250	723.88	4,388.2	
6	308	244.71	1,203.5	
7	374	133.83	542.6	
8	394	42.11	161.7	
9	418	17.07	61.9	
10	440	30.38	104.6	
11	505	204.43	613.7	
12	559	18.69	50.7	
13	573	18.68	49.4	
14	887	10.48	17.9	
15	10,380	75.00	10.9	Upper Marker

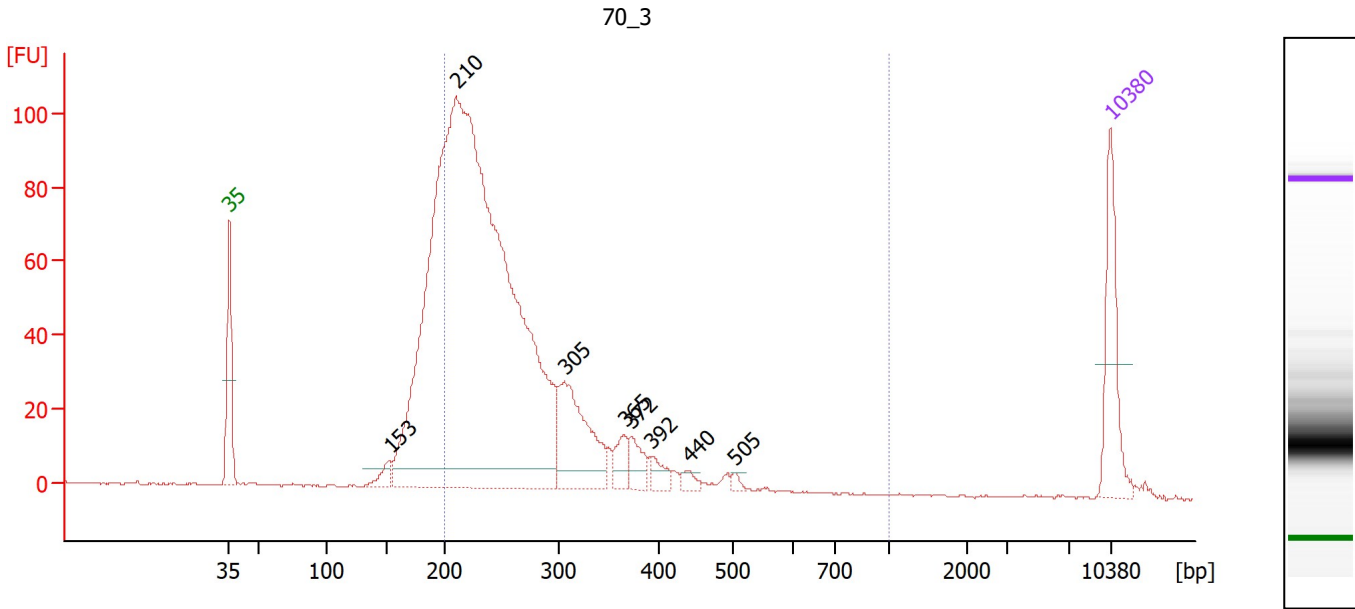
Region table for sample 2 : 69_3

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	1,396.6	87	323	35.6	1,965.92	10,558.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 70_3

Number of peaks found: 8 Corr. Area 1: 1,212.4
 Noise: 0.3

Peak table for sample 3 : 70_3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	153	20.69	204.4	
3	210	1,968.54	14,185.0	
4	305	160.92	799.3	
5	365	27.77	115.3	
6	372	30.62	124.7	
7	392	18.16	70.3	
8	440	10.28	35.4	
9	505	5.76	17.3	
10	10,380	75.00	10.9	Upper Marker

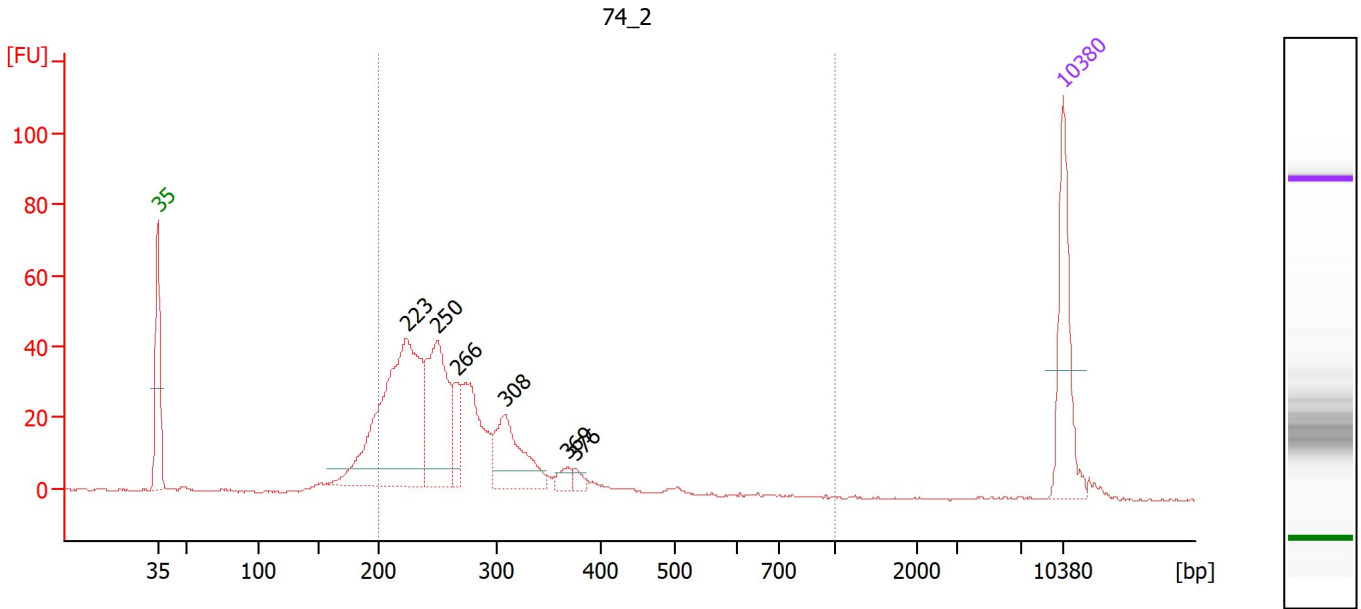
Region table for sample 3 : 70_3

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	1,212.4	78	264	23.4	1,703.03	10,254.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 74_2

Number of peaks found: 6 Corr. Area 1: 591.8
 Noise: 0.3

Peak table for sample 4 : 74_2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	223	332.77	2,259.4	
3	250	155.97	946.4	
4	266	38.19	217.8	
5	308	91.91	451.9	
6	369	11.62	47.8	
7	376	7.61	30.7	
8	10,380	75.00	10.9	Upper Marker

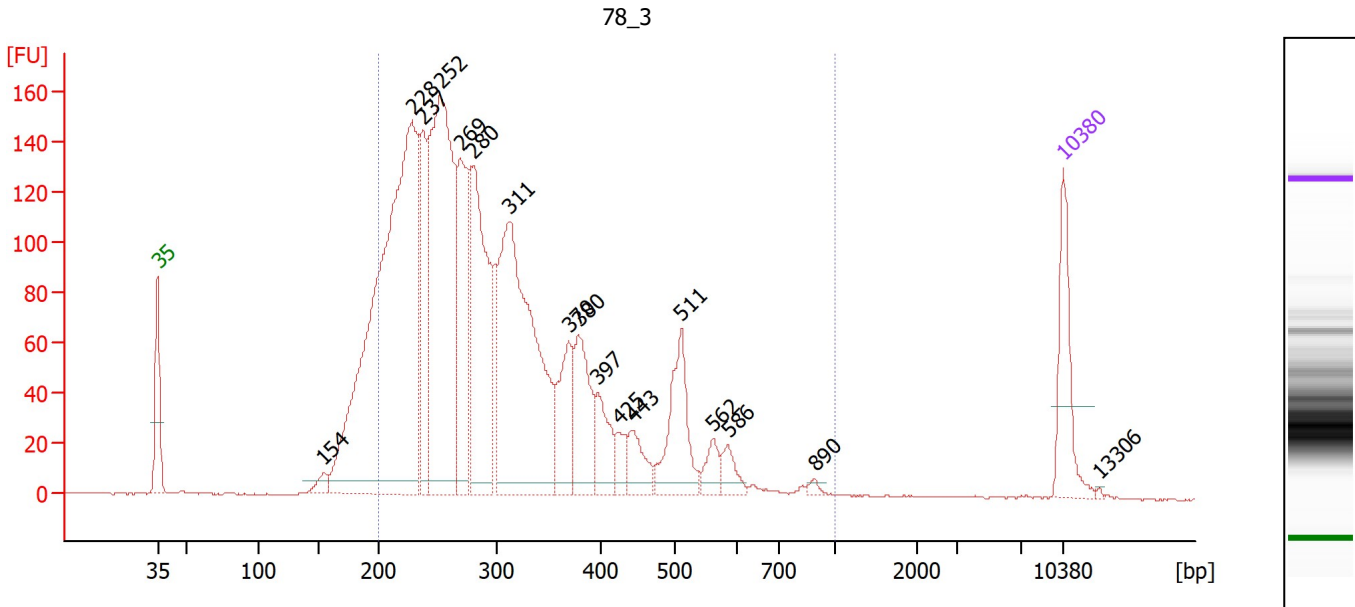
Region table for sample 4 : 74_2

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	591.8	88	270	21.9	750.76	4,389.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 78_3

Number of peaks found: 17 Corr. Area 1: 2,953.1
 Noise: 0.3

Peak table for sample 5 : 78_3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	154	18.49	182.4	
3	228	990.64	6,586.6	
4	237	152.96	976.0	
5	252	557.91	3,353.5	
6	269	199.81	1,126.7	
7	280	302.94	1,637.6	
8	311	508.31	2,473.1	
9	370	97.90	401.0	
10	380	112.72	449.8	
11	397	59.96	228.6	
12	425	25.22	89.9	
13	443	44.97	153.7	
14	511	114.74	340.3	
15	562	25.74	69.4	
16	586	25.33	65.5	
17	890	5.30	9.0	
18	10,380	75.00	10.9	Upper Marker
19	13,306	0.00	0.0	

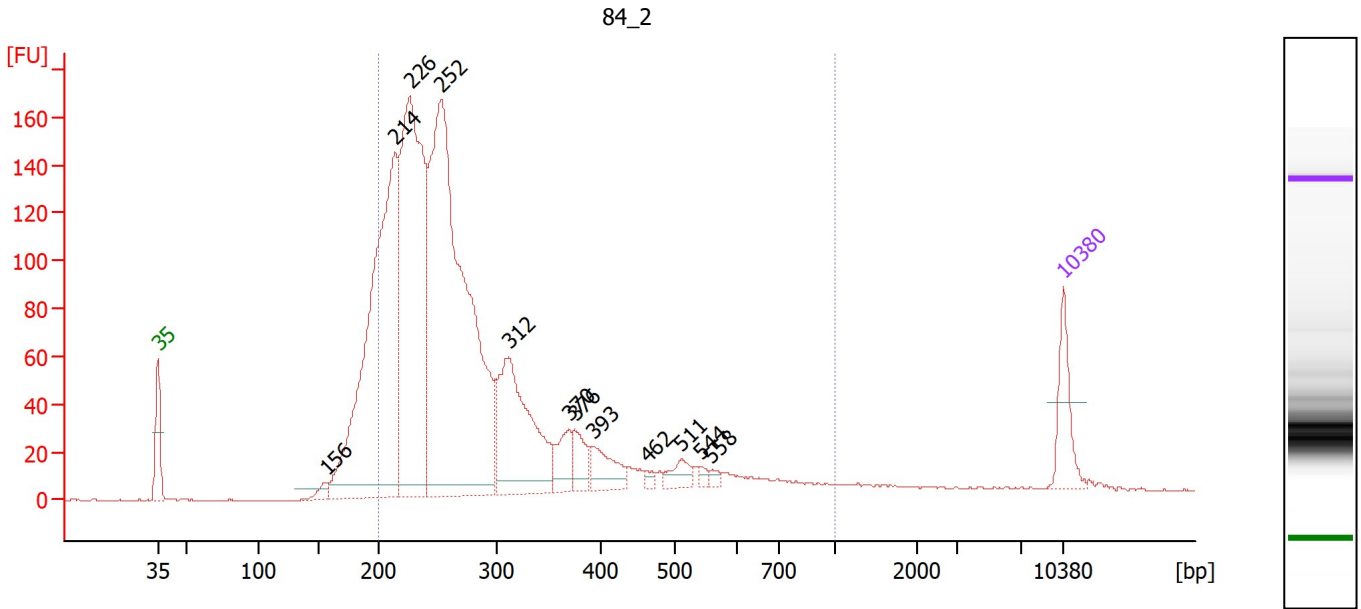
Region table for sample 5 : 78_3

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	2,953.1	90	312	32.9	3,083.27	16,573.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 84_2

Number of peaks found: 12 Corr. Area 1: 2,288.4
 Noise: 0.3

Peak table for sample 6 : 84_2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	156	24.45	237.1	
3	214	1,121.65	7,956.0	
4	226	998.80	6,691.3	
5	252	1,460.17	8,768.2	
6	312	393.86	1,913.8	
7	370	69.82	285.8	
8	376	52.44	211.6	
9	393	77.96	300.3	
10	462	11.25	36.9	
11	511	35.11	104.1	
12	544	9.31	25.9	
13	558	9.78	26.5	
14	10,380	75.00	10.9	Upper Marker

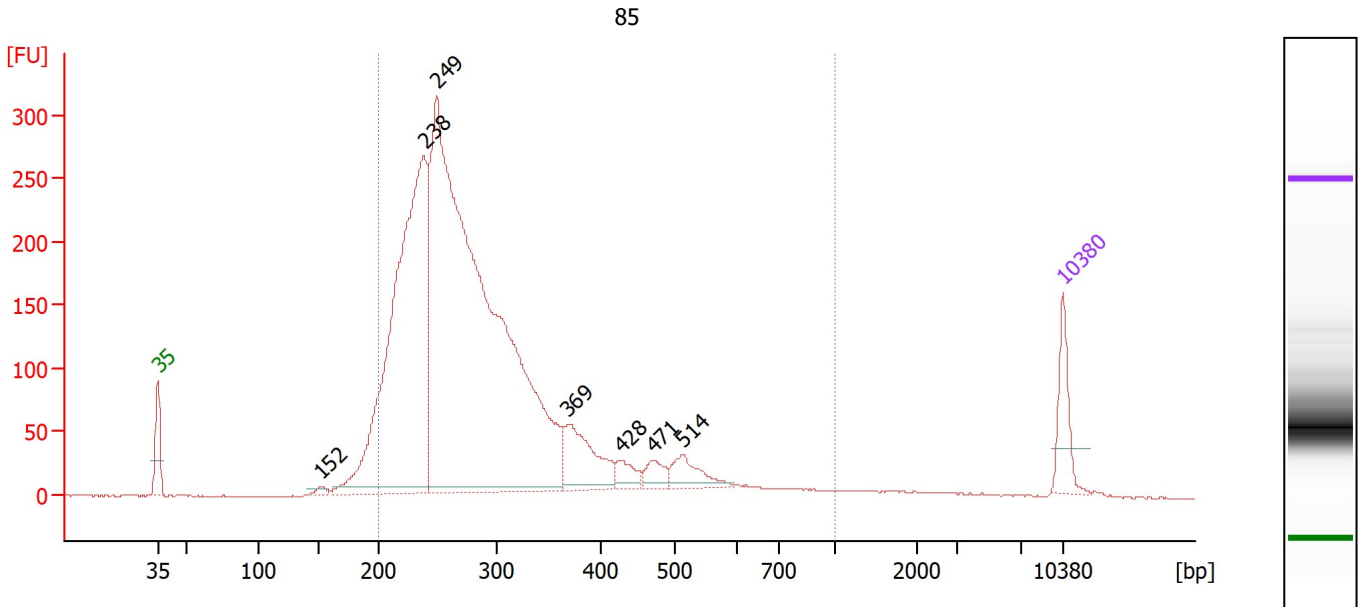
Region table for sample 6 : 84_2

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	2,288.4	86	295	38.4	3,917.79	22,431.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 85

Number of peaks found: 7 Corr. Area 1: 4,161.2
 Noise: 0.6

Peak table for sample 7 : 85

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	152	11.47	114.2	
3	238	1,344.05	8,555.4	
4	249	2,519.60	15,340.2	
5	369	167.19	686.9	
6	428	42.73	151.4	
7	471	40.89	131.5	
8	514	67.15	197.9	
9	10,380	75.00	10.9	Upper Marker

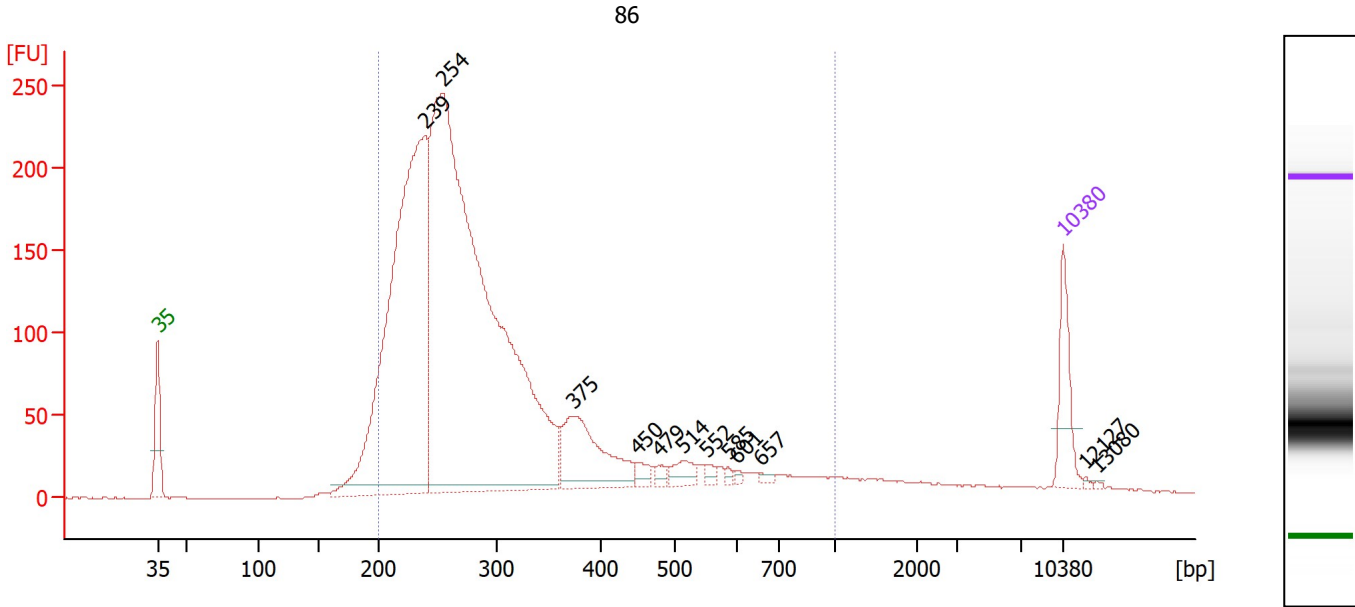
Region table for sample 7 : 85

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	4,161.2	94	300	33.5	4,083.80	22,520.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 86

Number of peaks found: 12 Corr. Area 1: 3,544.8
 Noise: 0.4

Peak table for sample 8 : 86

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	239	1,288.58	8,180.0	
3	254	2,166.52	12,910.6	
4	375	209.23	846.3	
5	450	20.39	68.7	
6	479	13.53	42.8	
7	514	30.78	90.7	
8	552	11.53	31.7	
9	585	5.90	15.3	
10	601	4.98	12.6	
11	657	6.68	15.4	
12	10,380	75.00	10.9	Upper Marker
13	12,127	0.00	0.0	
14	13,080	0.00	0.0	

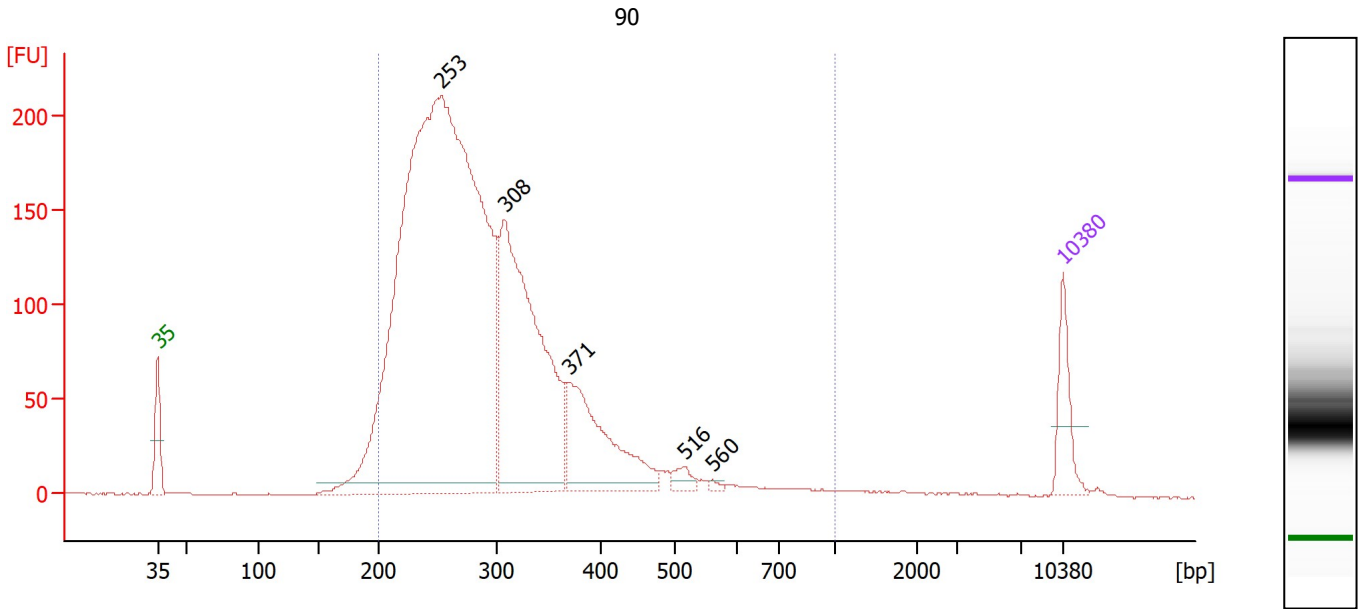
Region table for sample 8 : 86

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	3,544.8	91	311	39.9	3,790.41	20,832.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 90

Number of peaks found: 5 Corr. Area 1: 3,461.2
 Noise: 0.4

Peak table for sample 9 : 90

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	253	3,001.10	17,974.6	
3	308	863.45	4,248.5	
4	371	313.94	1,283.2	
5	516	26.34	77.3	
6	560	5.81	15.7	
7	10,380	75.00	10.9	Upper Marker

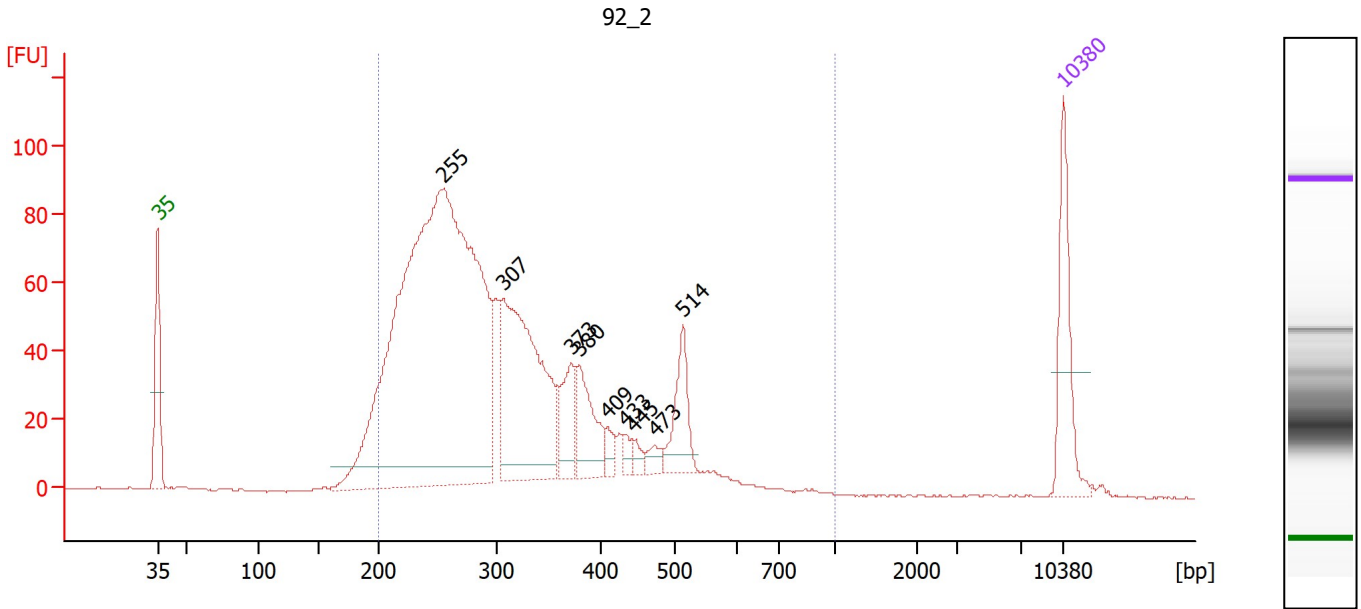
Region table for sample 9 : 90

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	3,461.2	95	300	29.4	4,211.40	22,882.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 92_2

Number of peaks found: 9 Corr. Area 1: 1,588.6
 Noise: 0.2

Peak table for sample 10 : 92_2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	255	1,233.71	7,334.2	
3	307	320.98	1,585.2	
4	373	60.65	246.6	
5	380	74.10	295.7	
6	409	15.11	56.0	
7	433	10.42	36.5	
8	445	10.58	36.0	
9	473	13.34	42.8	
10	514	63.11	186.1	
11	10,380	75.00	10.9	Upper Marker

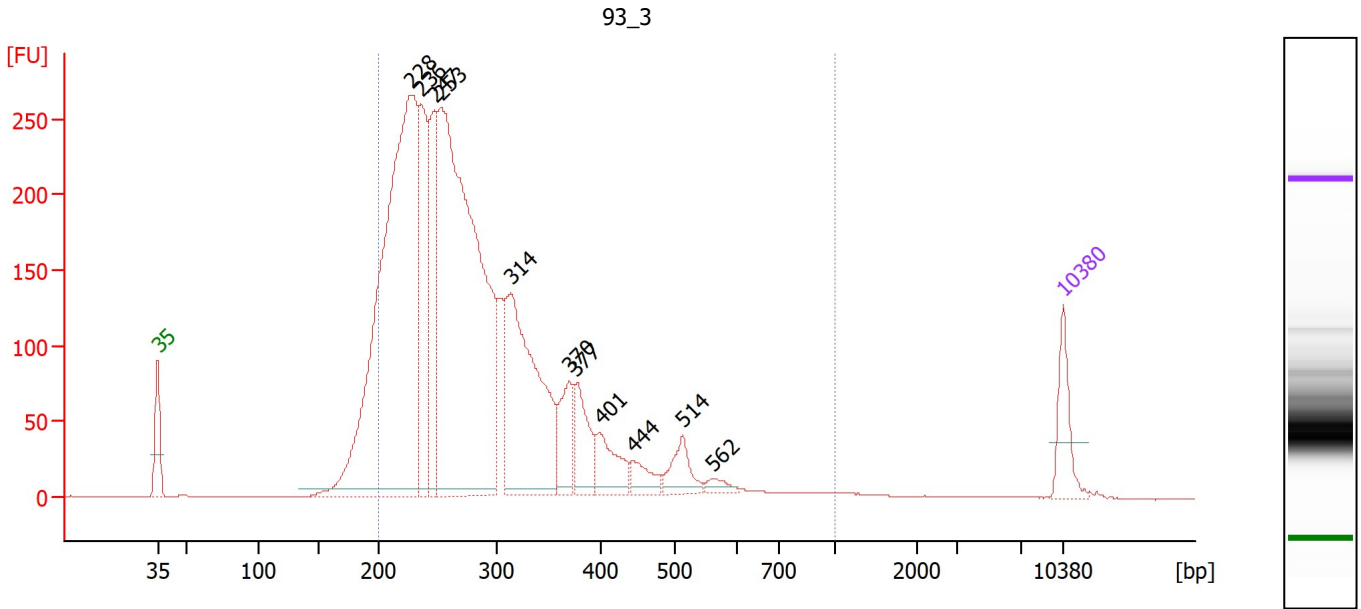
Region table for sample 10 : 92_2

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	1,588.6	95	316	30.4	1,981.35	10,438.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 93_3

Number of peaks found: 11 Corr. Area 1: 4,245.4
 Noise: 0.2

Peak table for sample 11 : 93_3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	228	1,699.19	11,312.9	
3	236	371.45	2,384.5	
4	247	310.00	1,899.3	
5	253	1,629.68	9,762.0	
6	314	607.35	2,932.5	
7	370	121.45	497.0	
8	377	125.64	505.3	
9	401	99.03	374.5	
10	444	50.60	172.6	
11	514	71.47	210.8	
12	562	21.00	56.6	
13	10,380	75.00	10.9	Upper Marker

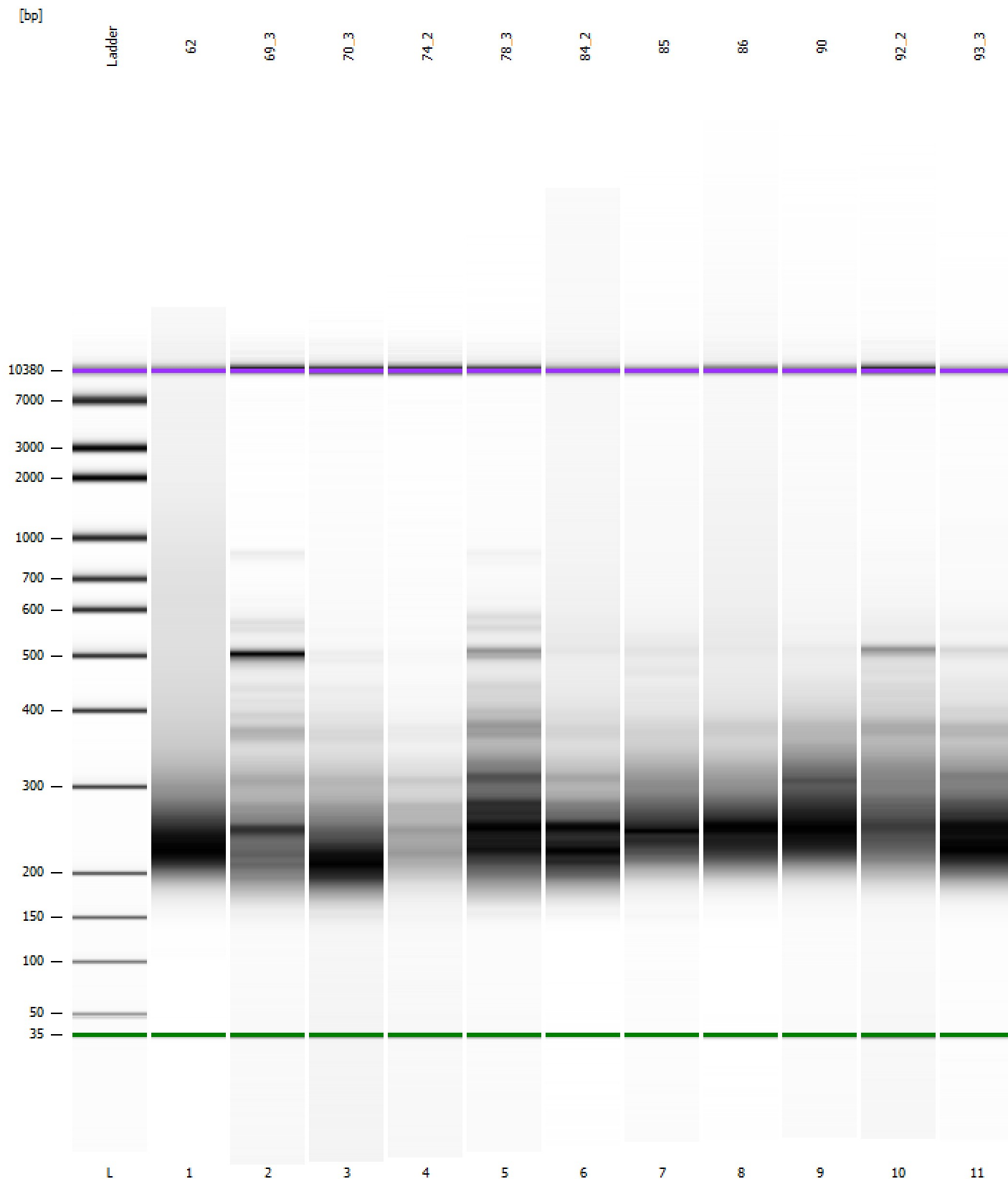
Region table for sample 11 : 93_3

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	4,245.4	92	293	30.7	4,907.05	27,478.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
Modified: 11/26/2019 4:45:00 PM

Gel Image

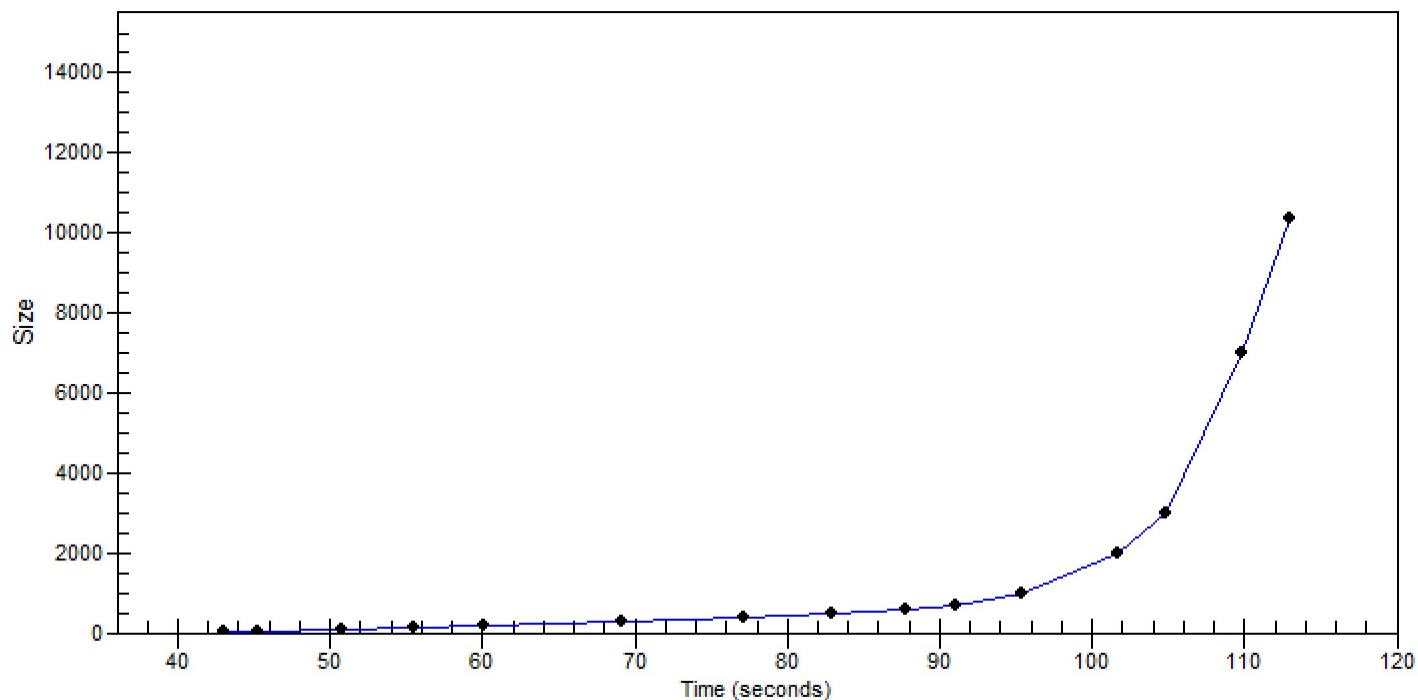


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
Modified: 11/26/2019 4:45:00 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-26_003.xad

Created: 11/26/2019 4:01:58 PM
 Modified: 11/26/2019 4:45:00 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		11/26/2019 4:42:28 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2019-11-26\Bioanalyze r1_High Sensitivity DNA Assay_2019-11-26_003.xad)		Instrument	Run		11/26/2019 4:02:04 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		11/26/2019 4:02:04 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		11/26/2019 4:02:04 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		11/26/2019 4:02:04 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		11/26/2019 4:02:04 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		11/26/2019 4:02:04 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		11/26/2019 4:02:04 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB