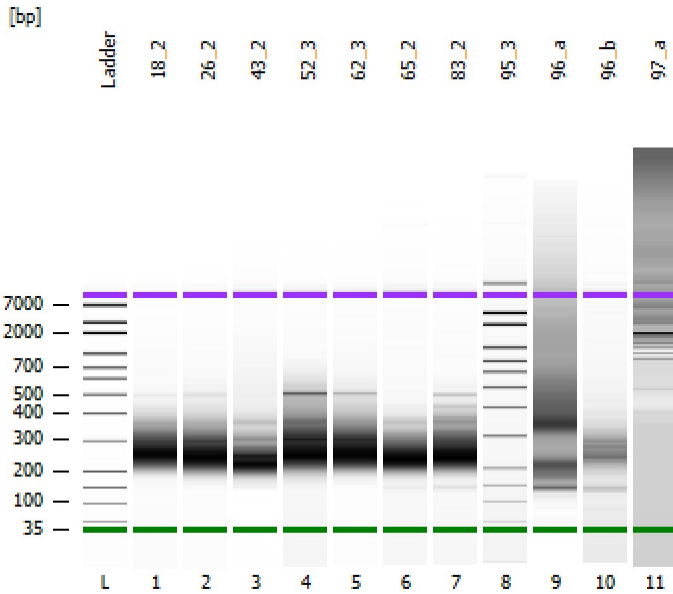


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
Modified: 12/16/2019 11:22:57 AM

Electrophoresis File Run Summary



Instrument Information:

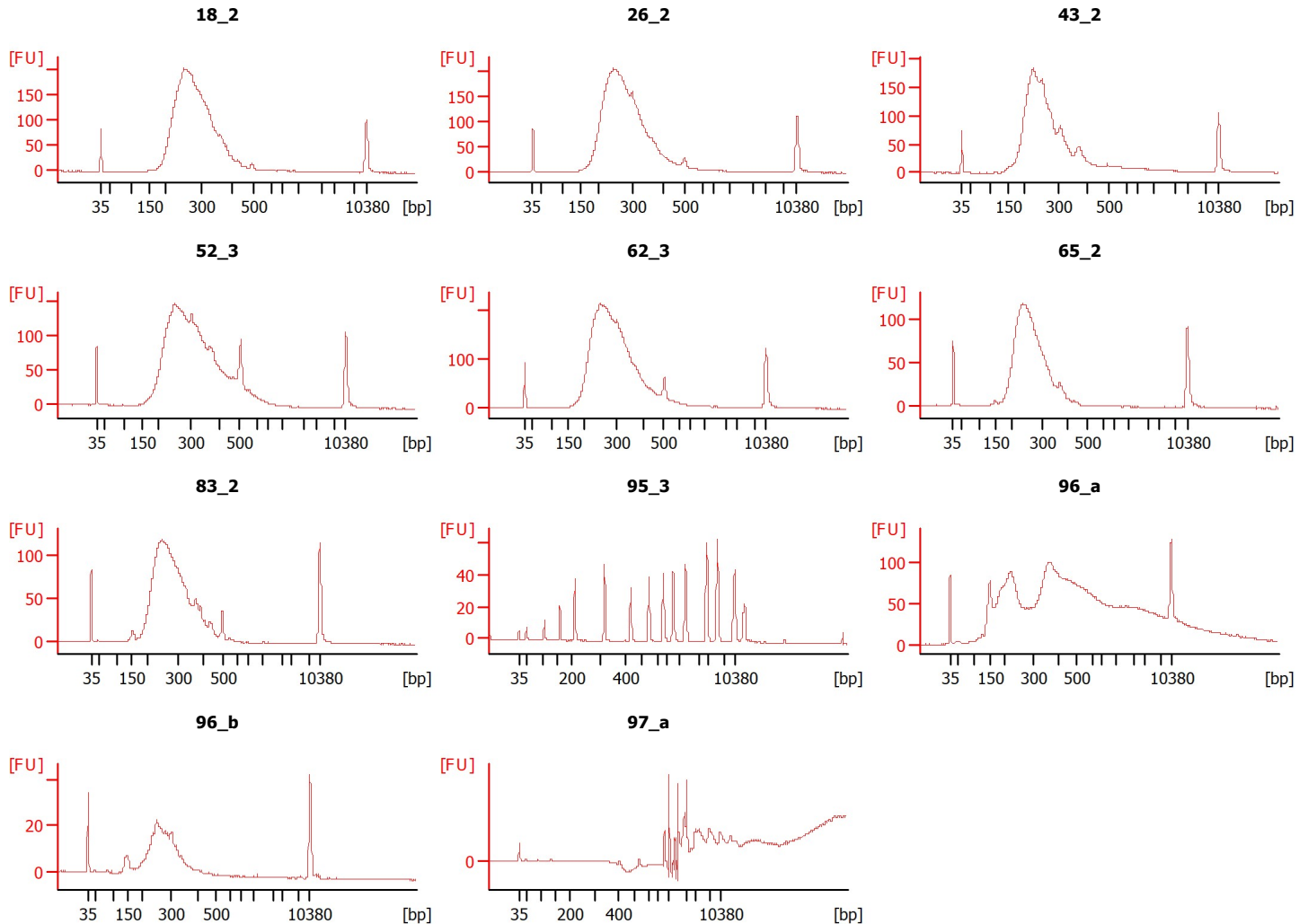
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
18_2		<input type="checkbox"/>	✓			
26_2		<input type="checkbox"/>	✓			
43_2		<input type="checkbox"/>	✓			
52_3		<input type="checkbox"/>	✓			
62_3		<input type="checkbox"/>	✓			
65_2		<input type="checkbox"/>	✓			
83_2		<input type="checkbox"/>	✓			
95_3		<input type="checkbox"/>	✓			
96_a		<input type="checkbox"/>	✓			
96_b		<input type="checkbox"/>	✓			
97_a		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 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

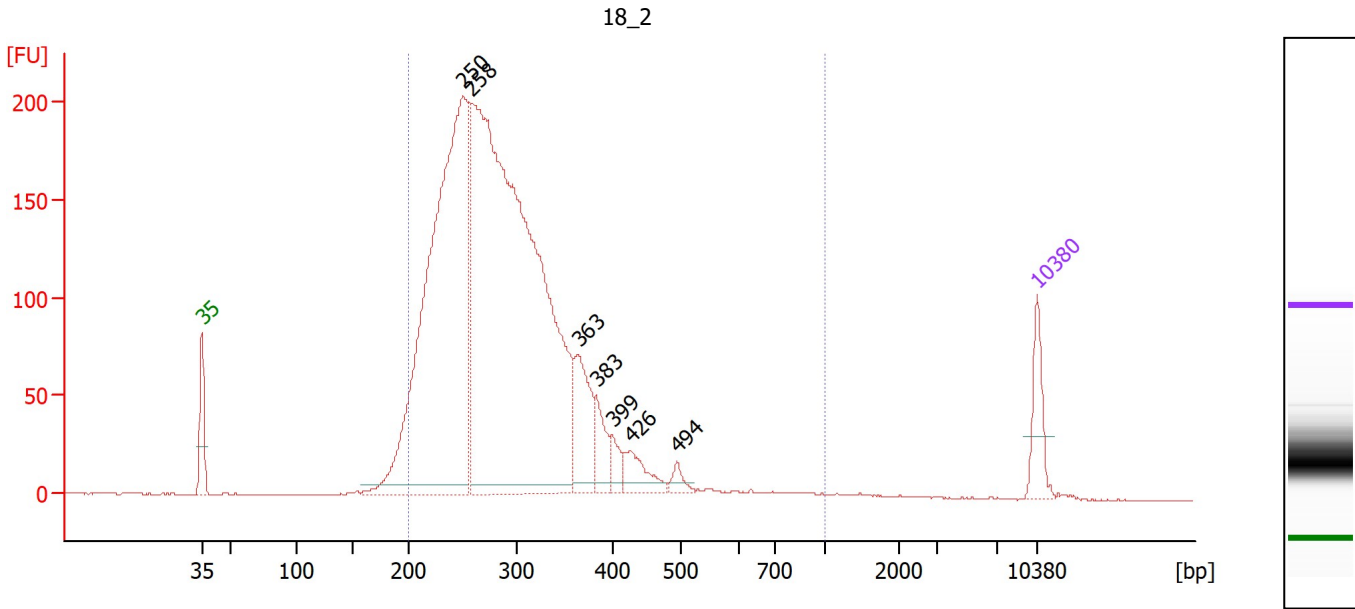
Ladder

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:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary



Overall Results for sample 1 : 18_2

Number of peaks found: 7 Corr. Area 1: 3,467.2
 Noise: 0.3

Peak table for sample 1 : 18_2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	250	1,799.15	10,886.7	
3	258	2,806.03	16,496.9	
4	363	194.00	808.9	
5	383	89.06	352.4	
6	399	42.33	160.7	
7	426	78.69	279.8	
8	494	25.85	79.3	
9	10,380	75.00	10.9	Upper Marker

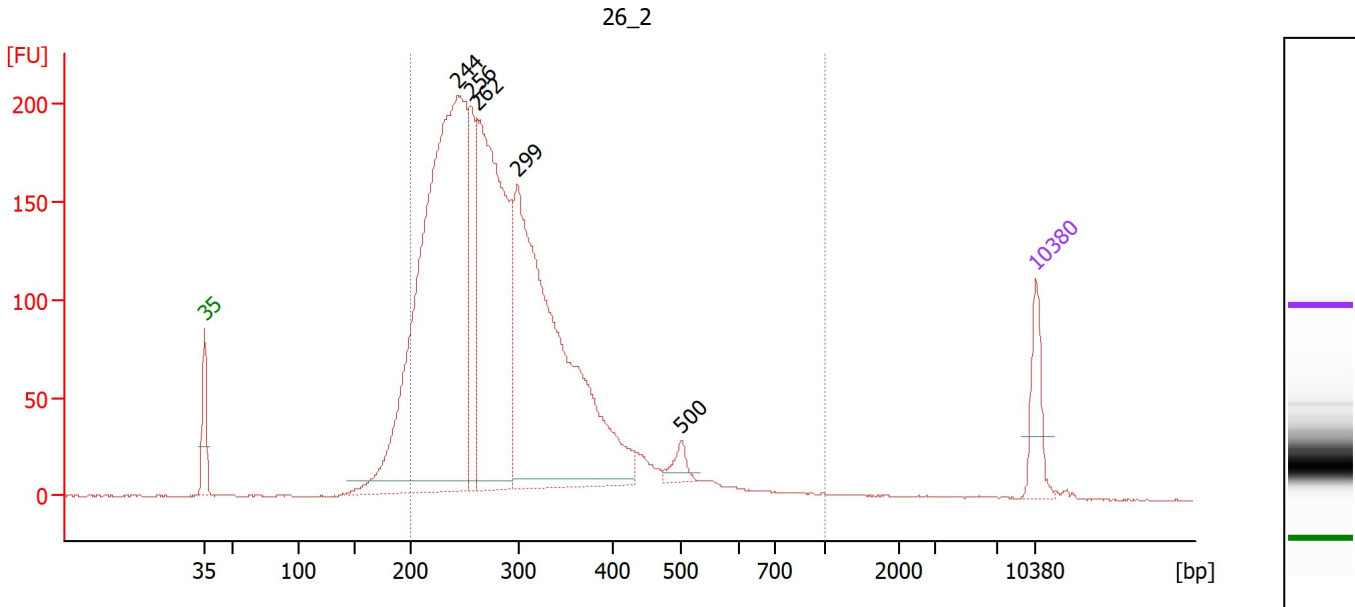
Region table for sample 1 : 18_2

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	3,467.2	97	294	25.2	4,888.66	26,587.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 26_2

Number of peaks found: 5 Corr. Area 1: 3,673.3
 Noise: 0.2

Peak table for sample 2 : 26_2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	244	1,917.33	11,916.9	
3	256	242.92	1,437.5	
4	262	985.36	5,689.3	
5	299	1,277.30	6,467.9	
6	500	37.27	112.9	
7	10,380	75.00	10.9	Upper Marker

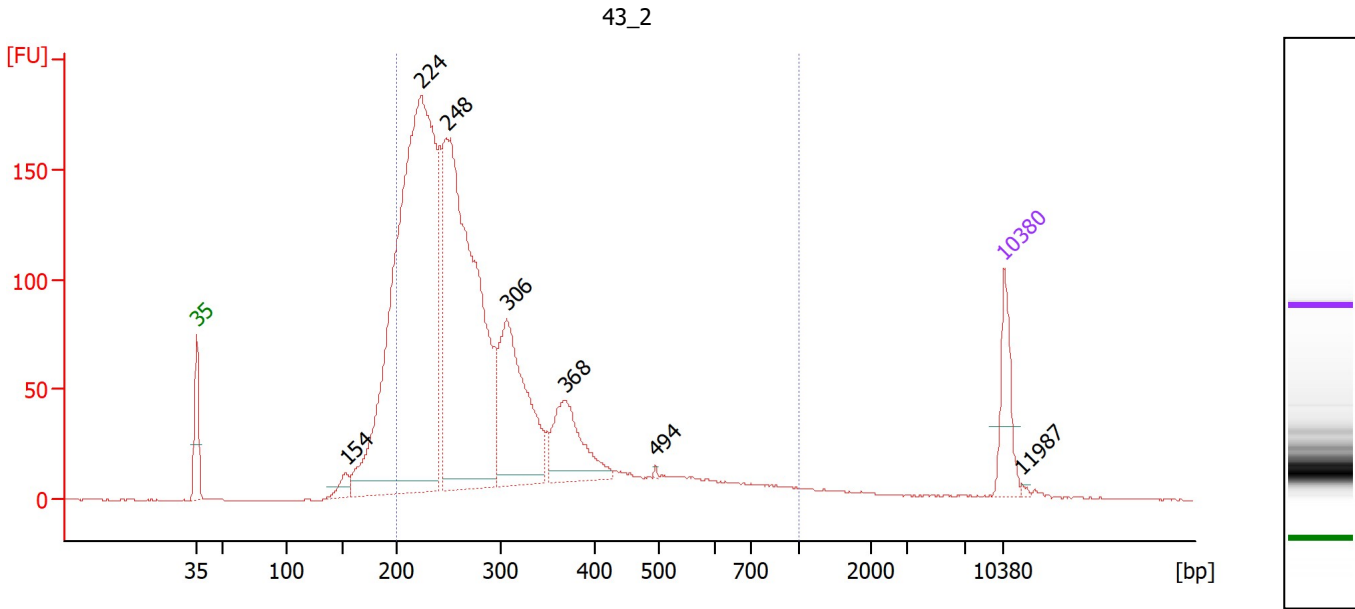
Region table for sample 2 : 26_2

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	3,673.3	93	296	28.5	4,488.02	24,627.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 43_2

Number of peaks found: 7 Corr. Area 1: 2,676.9
 Noise: 0.2

Peak table for sample 3 : 43_2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	154	33.01	325.3	
3	224	1,752.98	11,869.2	
4	248	1,199.71	7,344.3	
5	306	402.20	1,992.8	
6	368	181.61	748.4	
7	494	2.40	7.4	
8	10,380	75.00	10.9	Upper Marker
9	11,987	0.00	0.0	

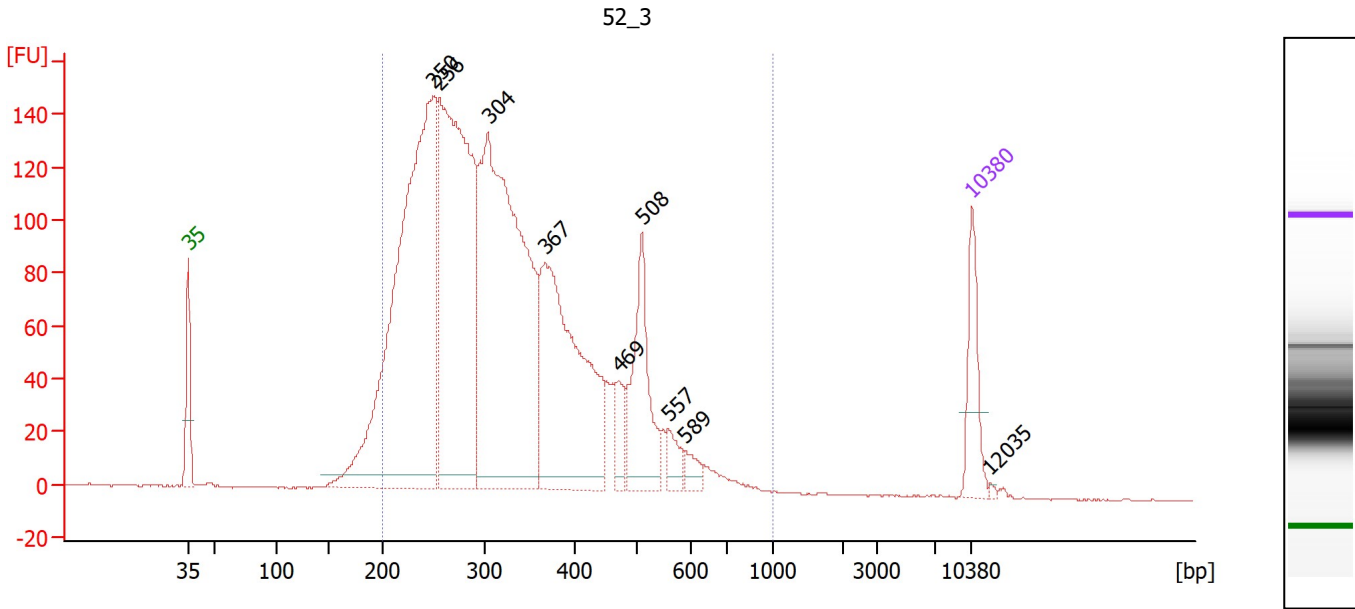
Region table for sample 3 : 43_2

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	2,676.9	87	294	37.1	3,651.27	20,825.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 52_3

Number of peaks found: 9 Corr. Area 1: 3,352.1
 Noise: 0.2

Peak table for sample 4 : 52_3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	250	1,220.57	7,400.5	
3	256	953.34	5,639.4	
4	304	1,050.73	5,237.6	
5	367	560.26	2,312.5	
6	469	51.59	166.7	
7	508	196.28	585.9	
8	557	35.33	96.0	
9	589	24.05	61.8	
10	10,380	75.00	10.9	Upper Marker
11	12,035	0.00	0.0	

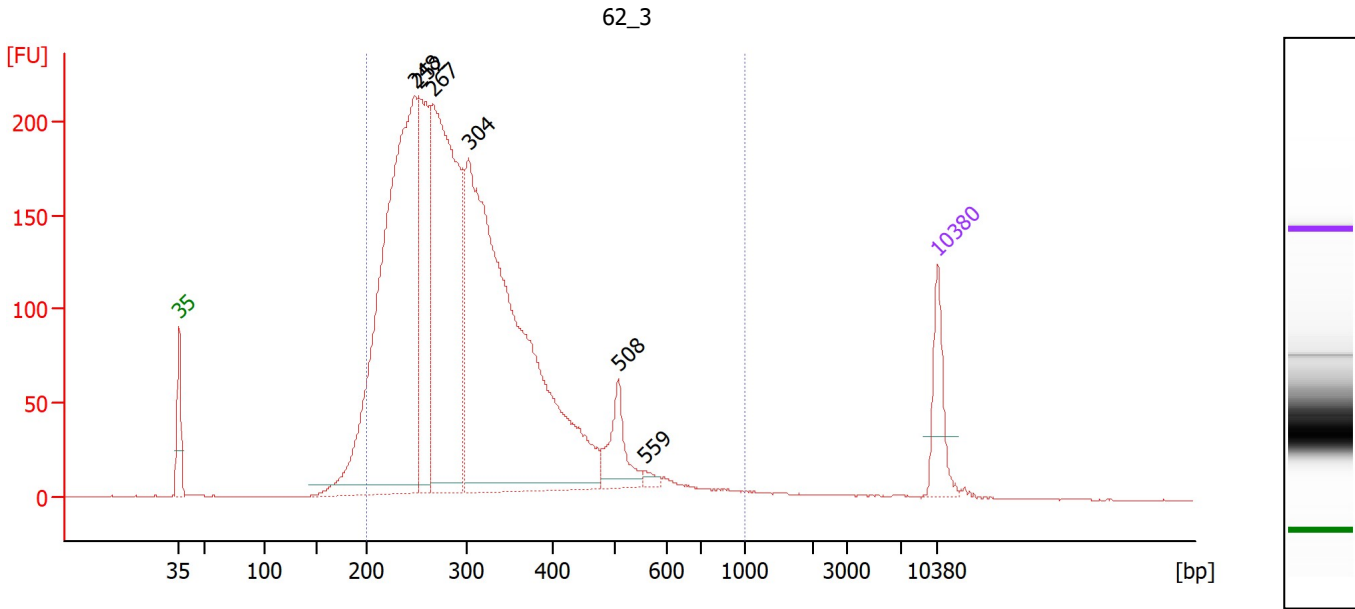
Region table for sample 4 : 52_3

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	3,352.1	96	333	31.0	4,029.01	20,389.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 62_3

Number of peaks found: 6 Corr. Area 1: 4,194.5
 Noise: 0.2

Peak table for sample 5 : 62_3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	248	1,368.26	8,355.6	
3	252	377.49	2,266.0	
4	267	948.23	5,382.7	
5	304	1,523.55	7,595.0	
6	508	100.20	298.9	
7	559	10.79	29.2	
8	10,380	75.00	10.9	Upper Marker

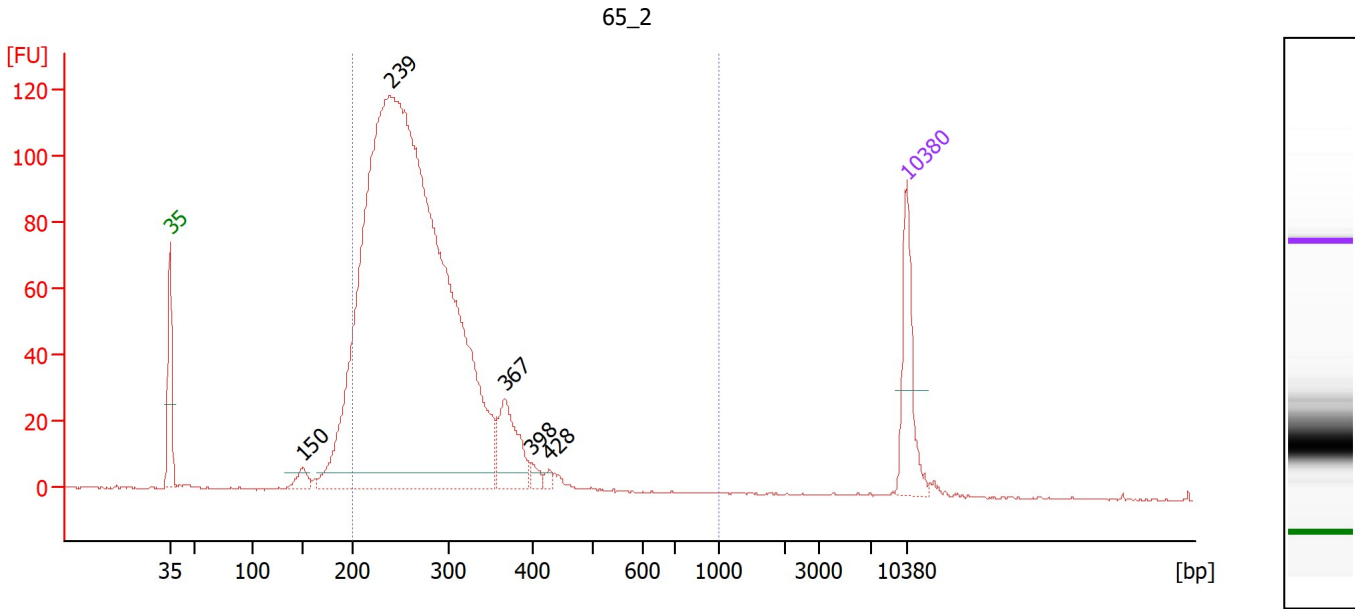
Region table for sample 5 : 62_3

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	4,194.5	95	313	30.0	4,279.98	22,574.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 65_2

Number of peaks found: 5 Corr. Area 1: 1,702.6
 Noise: 0.2

Peak table for sample 6 : 65_2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	150	23.47	236.7	
3	239	2,420.64	15,328.9	
4	367	96.68	399.4	
5	398	12.05	45.8	
6	428	7.14	25.3	
7	10,380	75.00	10.9	Upper Marker

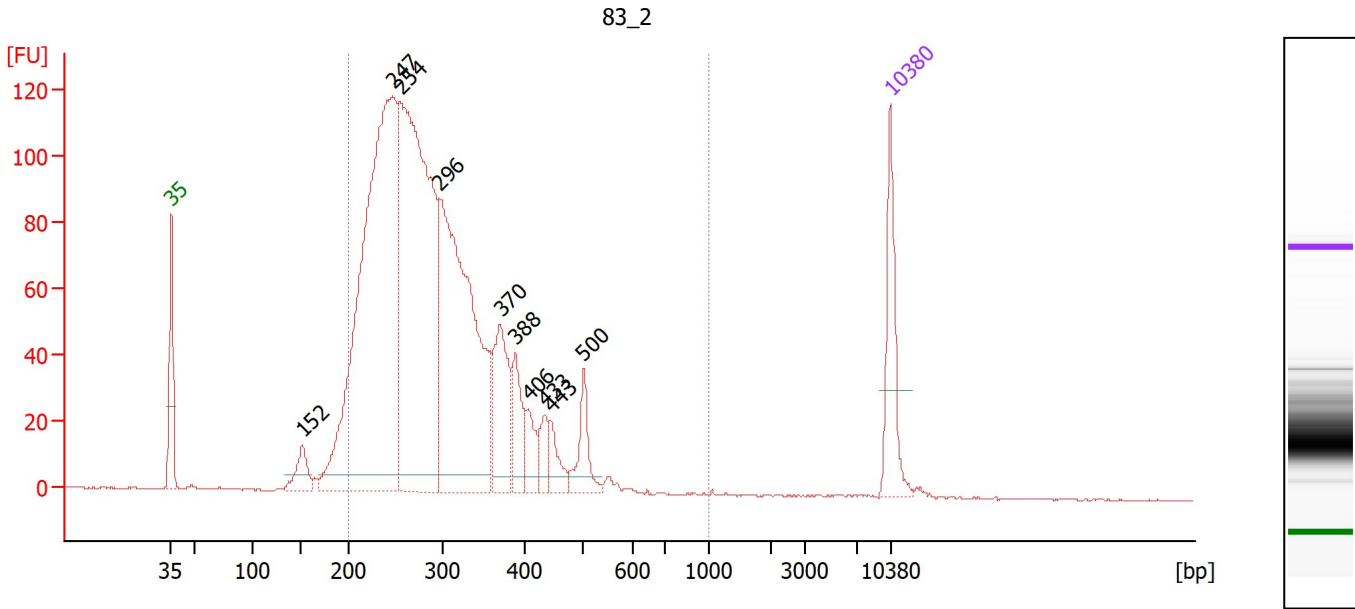
Region table for sample 6 : 65_2

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	1,702.6	94	271	18.0	2,315.64	13,328.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 83_2

Number of peaks found: 10 Corr. Area 1: 2,078.2
 Noise: 0.2

Peak table for sample 7 : 83_2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	152	45.16	450.8	
3	247	963.87	5,914.0	
4	254	801.71	4,776.6	
5	296	586.29	2,998.7	
6	370	124.22	508.3	
7	388	63.49	247.6	
8	406	36.33	135.7	
9	433	30.33	106.2	
10	443	31.41	107.5	
11	500	50.53	153.1	
12	10,380	75.00	10.9	Upper Marker

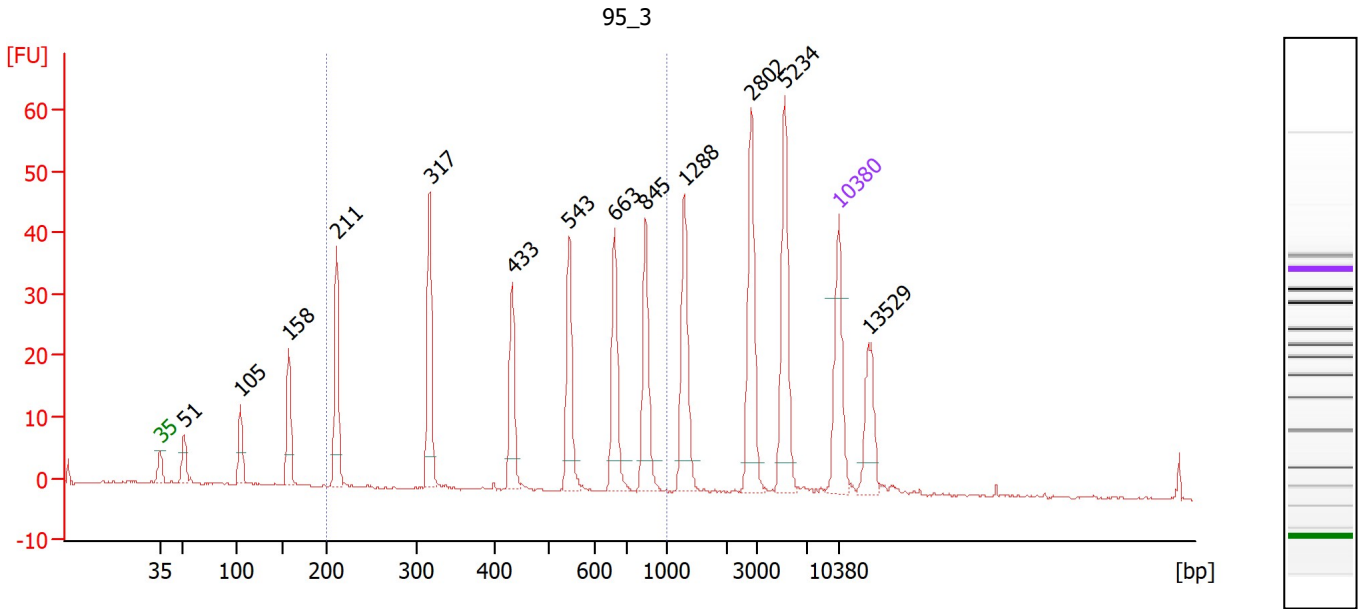
Region table for sample 7 : 83_2

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	2,078.2	95	298	24.3	2,594.87	14,040.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 95_3

Number of peaks found: 13 Corr. Area 1: 196.6
 Noise: 0.2

Peak table for sample 8 : 95_3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	51	34.34	1,012.9	
3	105	47.72	690.9	
4	158	74.48	716.2	
5	211	115.56	831.5	
6	317	114.74	548.0	
7	433	74.93	262.0	
8	543	86.98	242.5	
9	663	90.89	207.8	
10	845	88.79	159.2	
11	1,288	94.40	111.1	
12	2,802	105.29	56.9	
13	5,234	107.59	31.1	
14	10,380	75.00	10.9	Upper Marker
15	13,529	0.00	0.0	

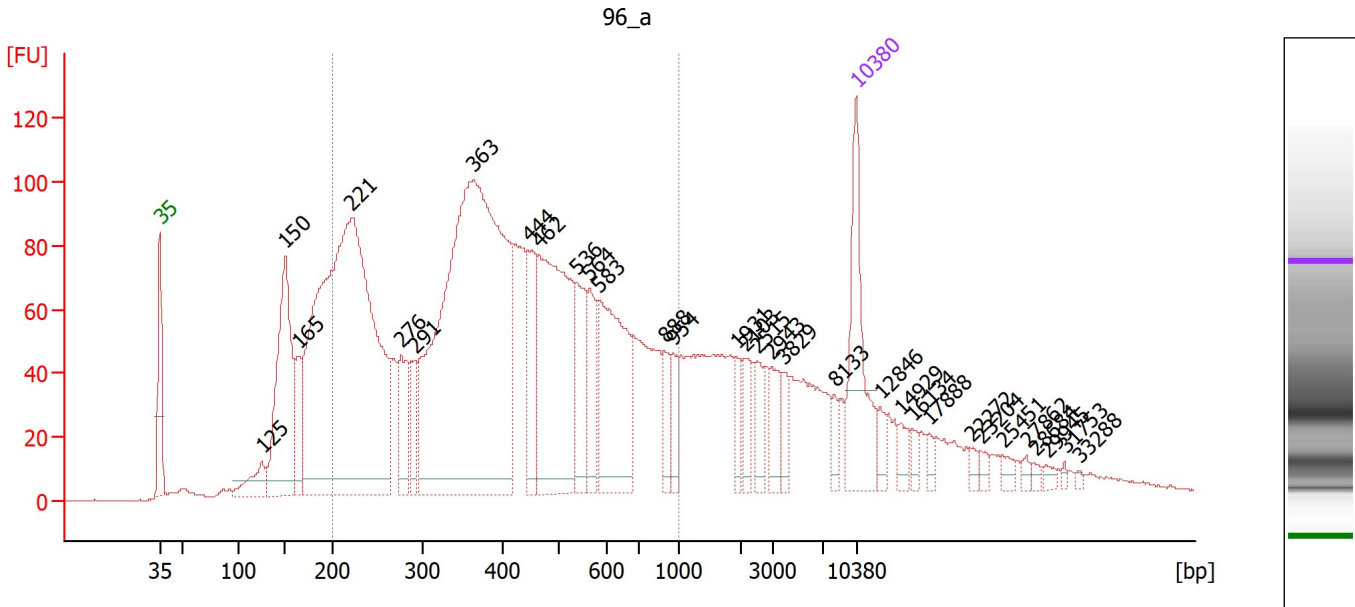
Region table for sample 8 : 95_3

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	196.6	47	532	40.5	590.34	2,337.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : **96_a**

Number of peaks found: 32 Corr. Area 1: 2,945.5
 Noise: 0.2

Peak table for sample 9 : **96_a**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	125	33.04	400.3	
3	150	204.61	2,067.0	
4	165	47.03	432.2	
5	221	752.46	5,150.9	
6	276	51.65	283.2	
7	291	32.21	167.7	
8	363	670.58	2,795.8	
9	444	60.71	207.0	
10	462	214.28	702.4	
11	536	60.37	170.8	
12	564	41.23	110.8	
13	583	132.96	345.7	
14	888	21.96	37.4	
15	954	18.00	28.6	
16	1,931	14.43	11.3	
17	2,103	19.46	14.0	
18	2,515	18.63	11.2	
19	2,943	21.38	11.0	
20	3,829	13.14	5.2	
21	8,133	9.27	1.7	
22	10,380	75.00	10.9	Upper Marker
23	12,846	0.00	0.0	
24	14,929	0.00	0.0	
25	16,134	0.00	0.0	
26	17,888	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...

... Peak table for sample 9 : 96_a

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	22,272	0.00	0.0	
28	23,204	0.00	0.0	
29	25,451	0.00	0.0	
30	27,862	0.00	0.0	
31	28,684	0.00	0.0	
32	29,945	0.00	0.0	
33	31,753	0.00	0.0	
34	33,288	0.00	0.0	

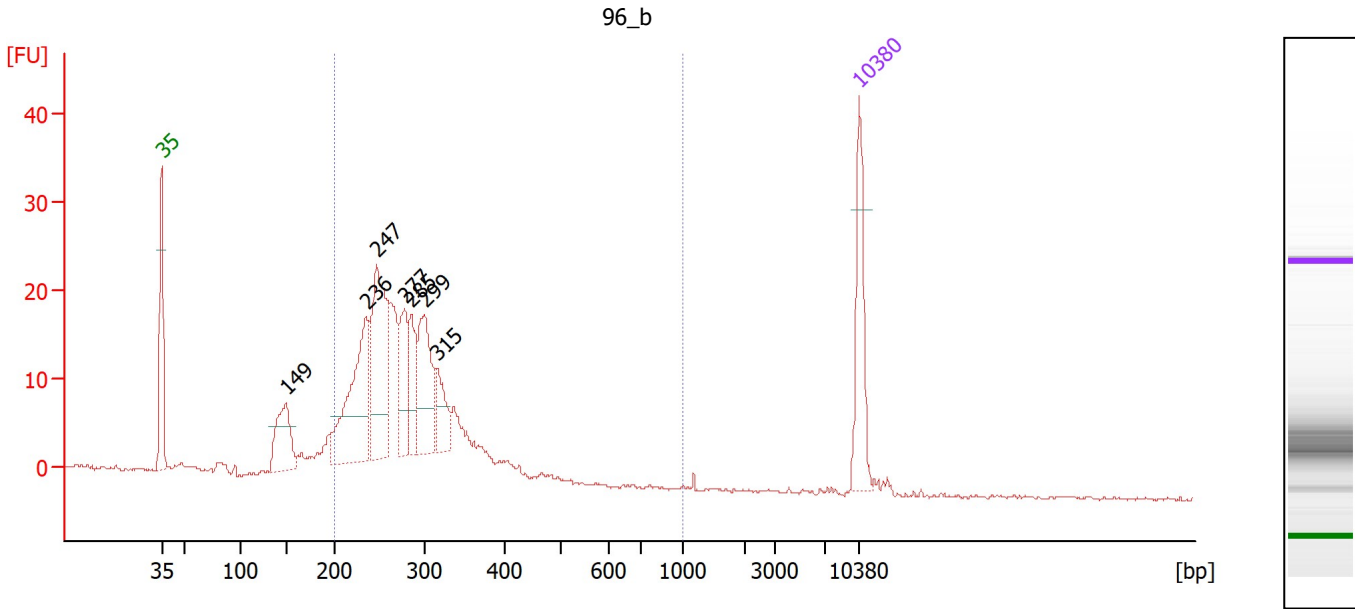
Region table for sample 9 : 96_a

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	2,945.5	66	435	40.6	2,090.34	9,074.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 96_b

Number of peaks found: 7 Corr. Area 1: 295.0
 Noise: 0.2

Peak table for sample 10 : 96_b

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	149	94.85	963.2	
3	236	203.00	1,305.4	
4	247	191.35	1,172.3	
5	277	75.92	415.1	
6	285	64.44	342.9	
7	299	110.75	560.6	
8	315	47.90	230.2	
9	10,380	75.00	10.9	Upper Marker

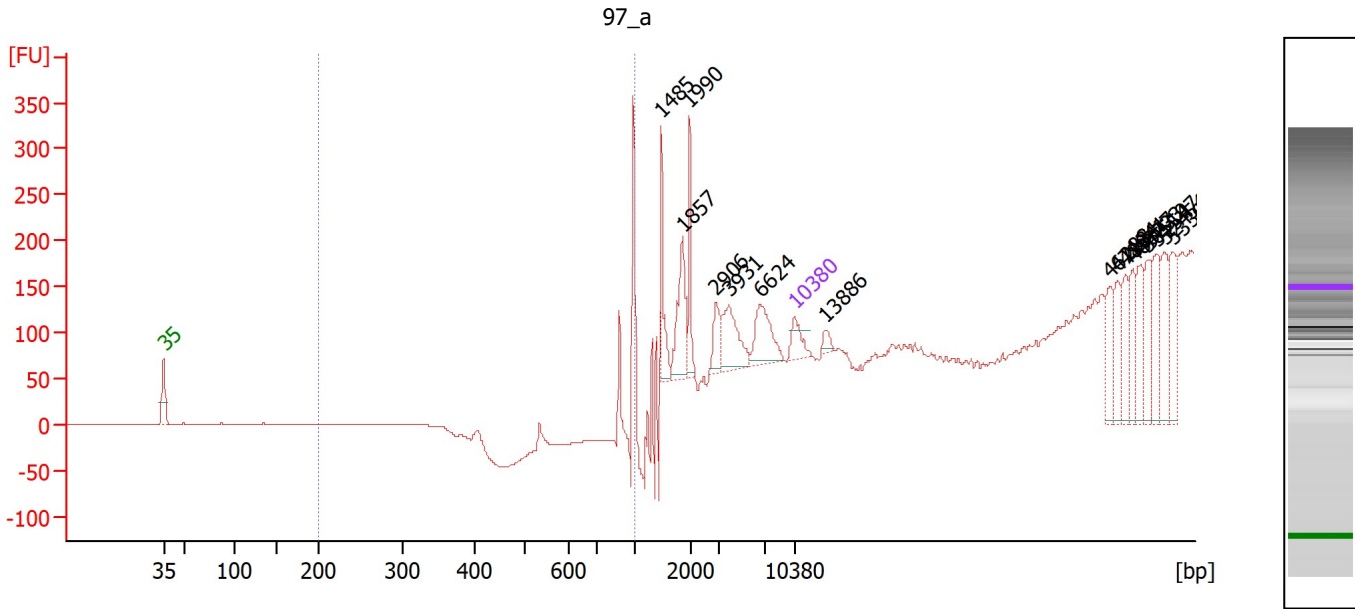
Region table for sample 10 : 96_b

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	295.0	86	280	17.2	1,064.51	5,923.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 97_a

Number of peaks found: 16 Corr. Area 1: 44.5
 Noise: 0.2

Peak table for sample 11 : 97_a

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,485	163.17	166.5	
3	1,857	232.97	190.1	
4	1,990	147.54	112.3	
5	2,906	97.27	50.7	
6	3,931	212.41	81.9	
7	6,624	198.00	45.3	
8	10,380	75.00	10.9	Upper Marker
9	13,886	0.00	0.0	
10	46,288	0.00	0.0	
11	47,134	0.00	0.0	
12	48,041	0.00	0.0	
13	48,827	0.00	0.0	
14	49,733	0.00	0.0	
15	50,519	0.00	0.0	
16	51,547	0.00	0.0	
17	52,454	0.00	0.0	
18	53,361	0.00	0.0	

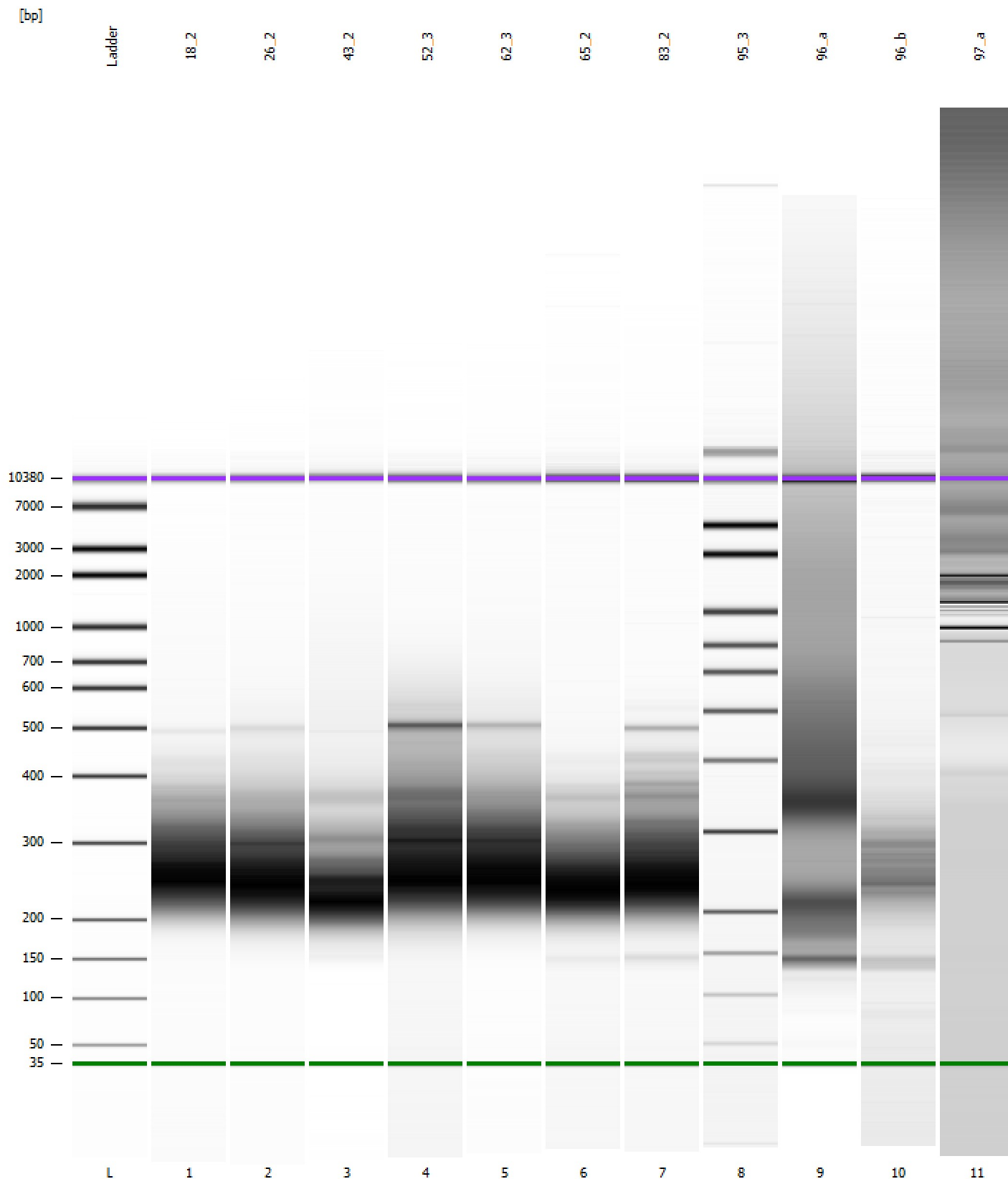
Region table for sample 11 : 97_a

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	44.5	15	982	3.1	82.02	126.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
Modified: 12/16/2019 11:22:57 AM

Gel Image

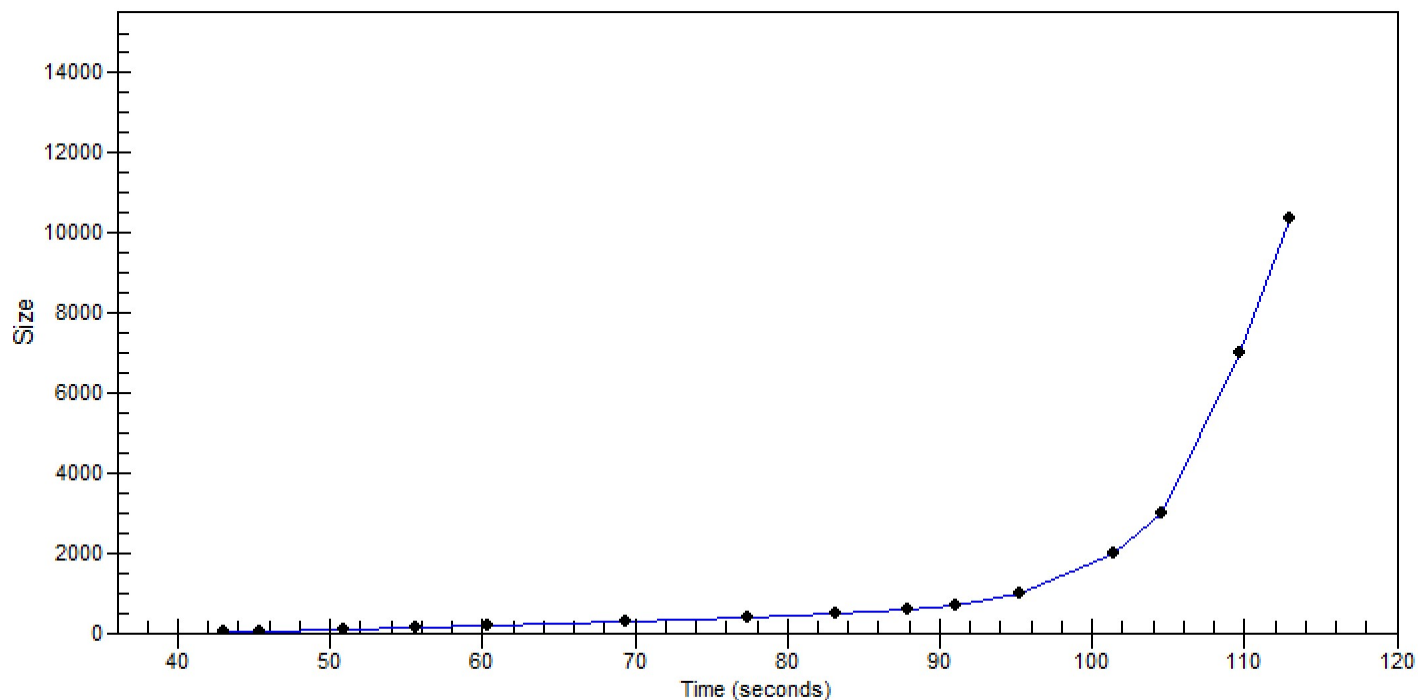


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
Modified: 12/16/2019 11:22:57 AM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...6\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad

Created: 12/16/2019 10:41:36 AM
 Modified: 12/16/2019 11:22:57 AM

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		12/16/2019 11:22:54 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2019-12-16\Bioanalyzer_High Sensitivity DNA Assay_2019-12-16_001.xad)		Instrument	Run		12/16/2019 10:41:42 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		12/16/2019 10:41:42 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		12/16/2019 10:41:42 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		12/16/2019 10:41:42 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		12/16/2019 10:41:42 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		12/16/2019 10:41:42 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		12/16/2019 10:41:42 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB