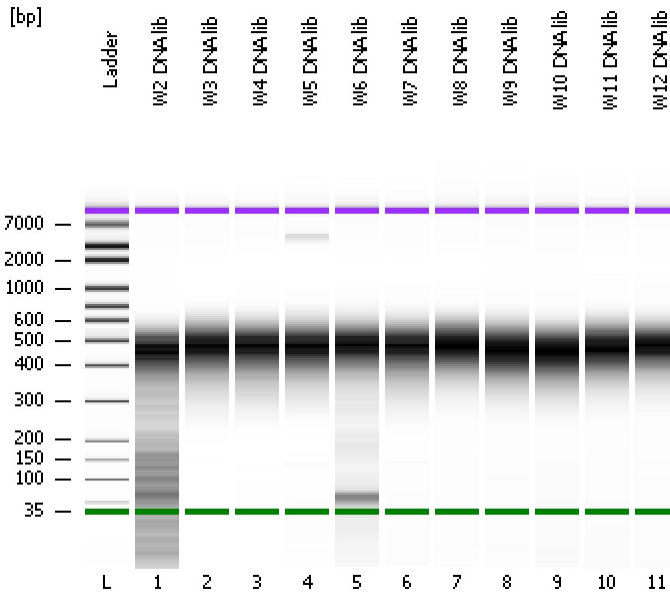


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
Modified: 11/24/2014 11:03:57 AM

Electrophoresis File Run Summary



Instrument Information:

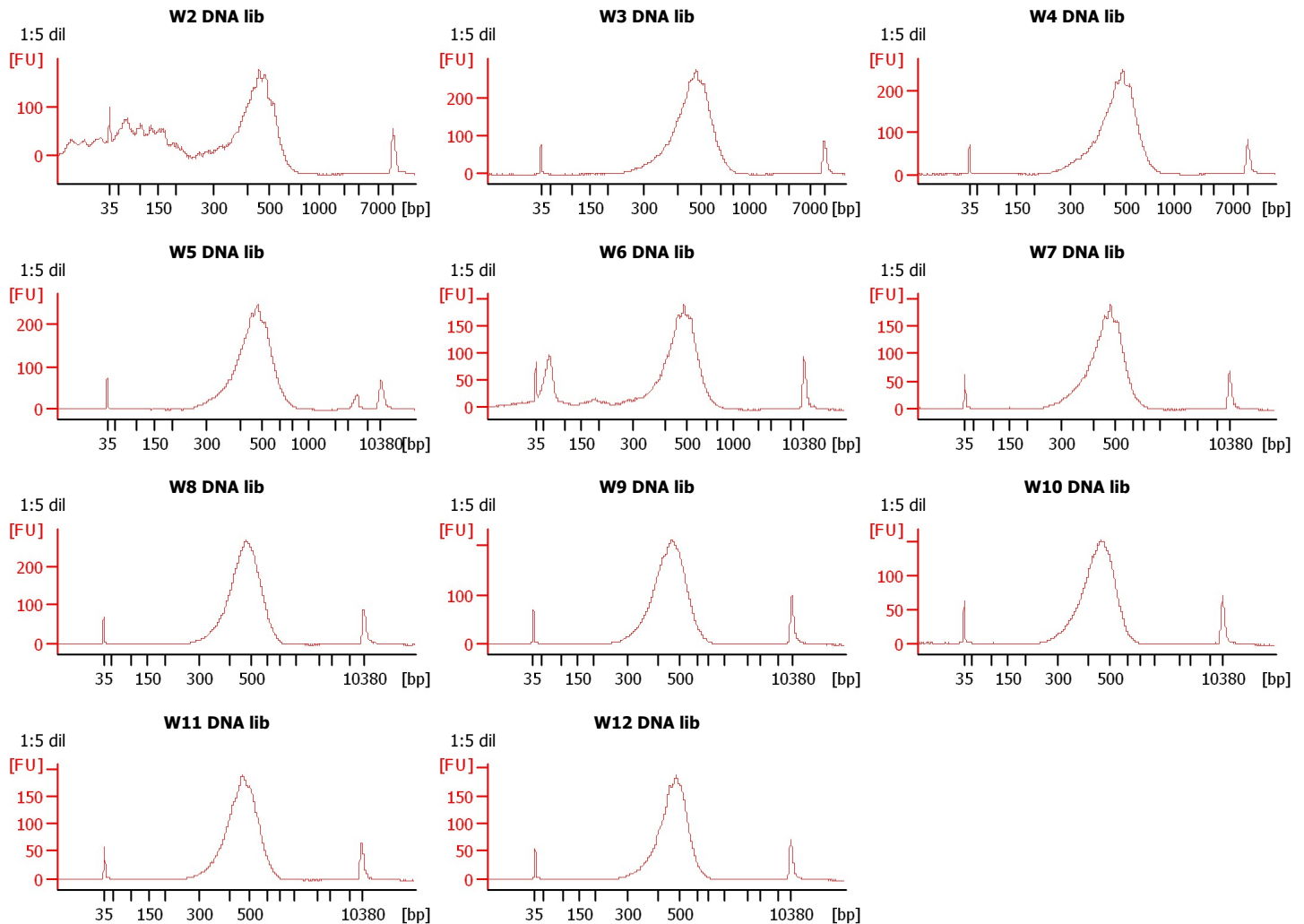
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

Assay Information:

Assay Origin Path: C:\Program Files\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: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
W2 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
W3 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
W4 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
W5 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
W6 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
W7 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
W8 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
W9 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
W10 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
W11 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
W12 DNA lib	1:5 dil	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
Modified: 11/24/2014 11:03:57 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

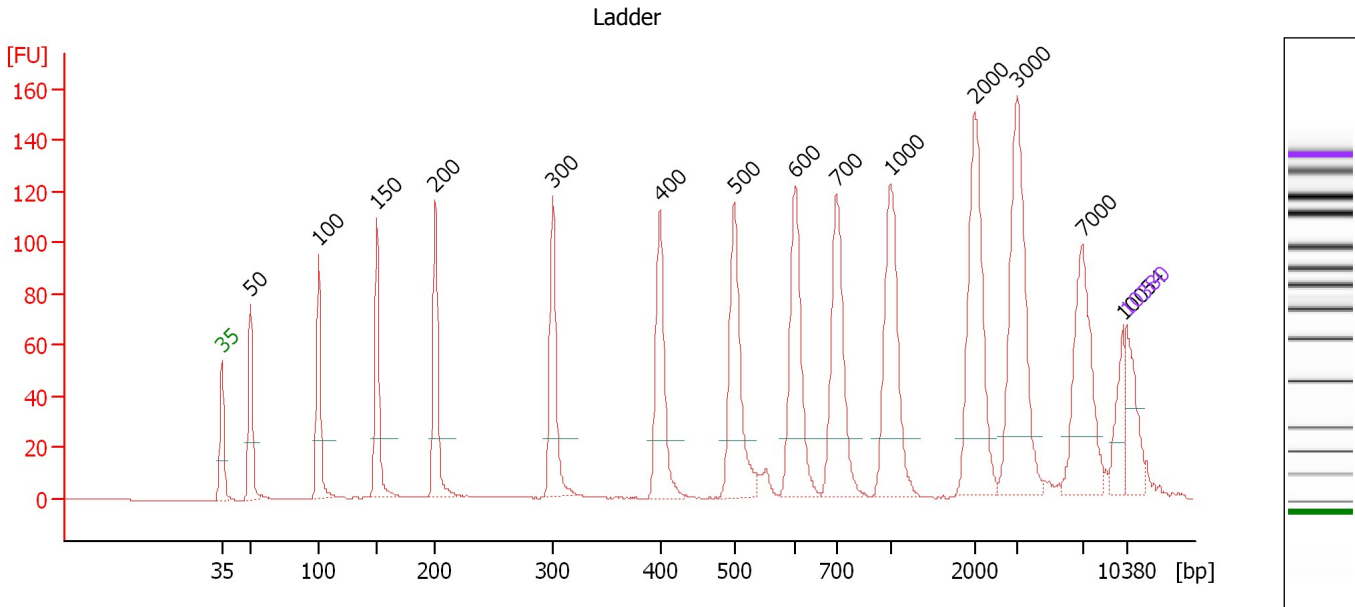
Ladder

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: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

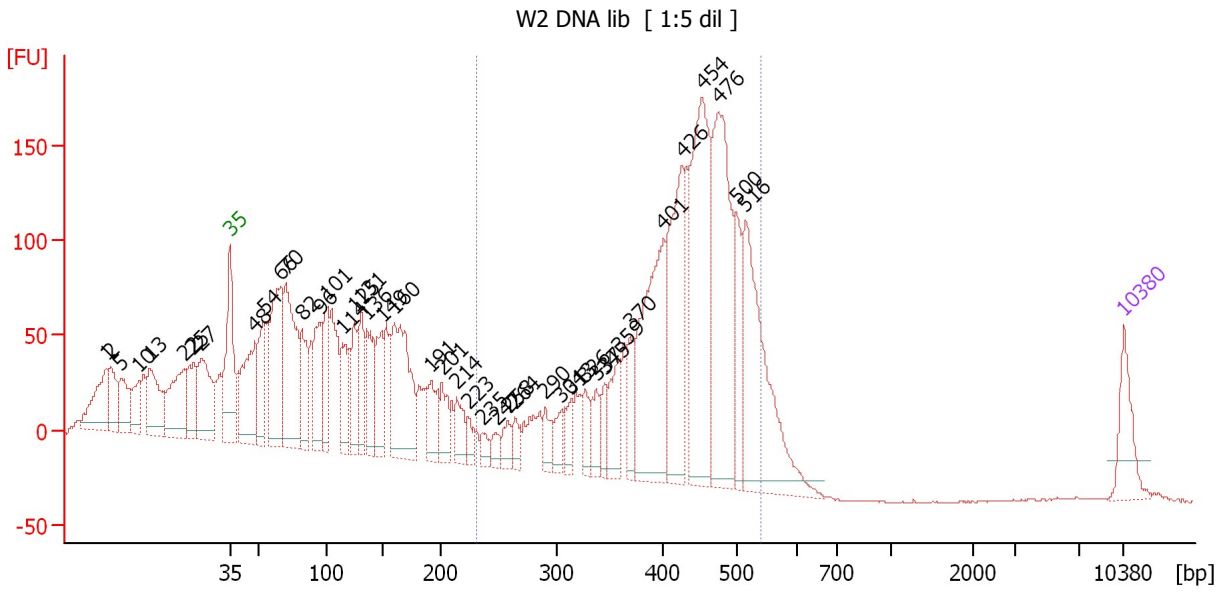
Peak table for Ladder

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	10,054	0.00	0.0	
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : W2 DNA lib

Number of peaks found: 43 Corr. Area 1: 2,260.3
 Noise: 0.3

Peak table for sample 1 : W2 DNA lib


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	1	0.00	0.0	
2	2	0.00	0.0	
3	5	0.00	0.0	
4	10	0.00	0.0	
5	13	0.00	0.0	
6	22	0.00	0.0	
7	25	0.00	0.0	
8	27	0.00	0.0	
9	35	125.00	5,411.3	Lower Marker
10	48	267.71	8,420.0	
11	54	152.64	4,266.9	
12	66	341.68	7,790.3	
13	70	363.07	7,813.2	
14	82	137.18	2,526.6	
15	96	177.22	2,805.7	
16	101	141.45	2,112.5	
17	114	129.03	1,708.1	
18	125	116.01	1,404.7	
19	131	132.98	1,536.1	
20	136	128.32	1,431.7	
21	149	139.49	1,420.3	
22	160	362.42	3,425.3	
23	191	104.81	830.8	
24	201	77.83	587.3	
25	214	70.71	501.4	
26	223	29.55	200.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad


Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...

... Peak table for sample 1 : W2 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	235	28.96	186.5	
28	247	33.48	205.2	
29	258	41.01	240.6	
30	264	40.46	232.4	
31	290	52.66	275.5	
32	304	40.36	201.4	
33	313	44.80	216.7	
34	326	50.37	233.8	
35	337	52.89	237.8	
36	345	49.74	218.5	
37	359	97.57	412.3	
38	370	67.87	278.2	
39	401	405.19	1,530.1	
40	426	327.49	1,164.8	
41	454	501.62	1,675.4	
42	476	480.54	1,528.9	
43	500	129.93	393.5	
44	516	434.99	1,277.0	
45	 10,380	75.00	10.9	Upper Marker

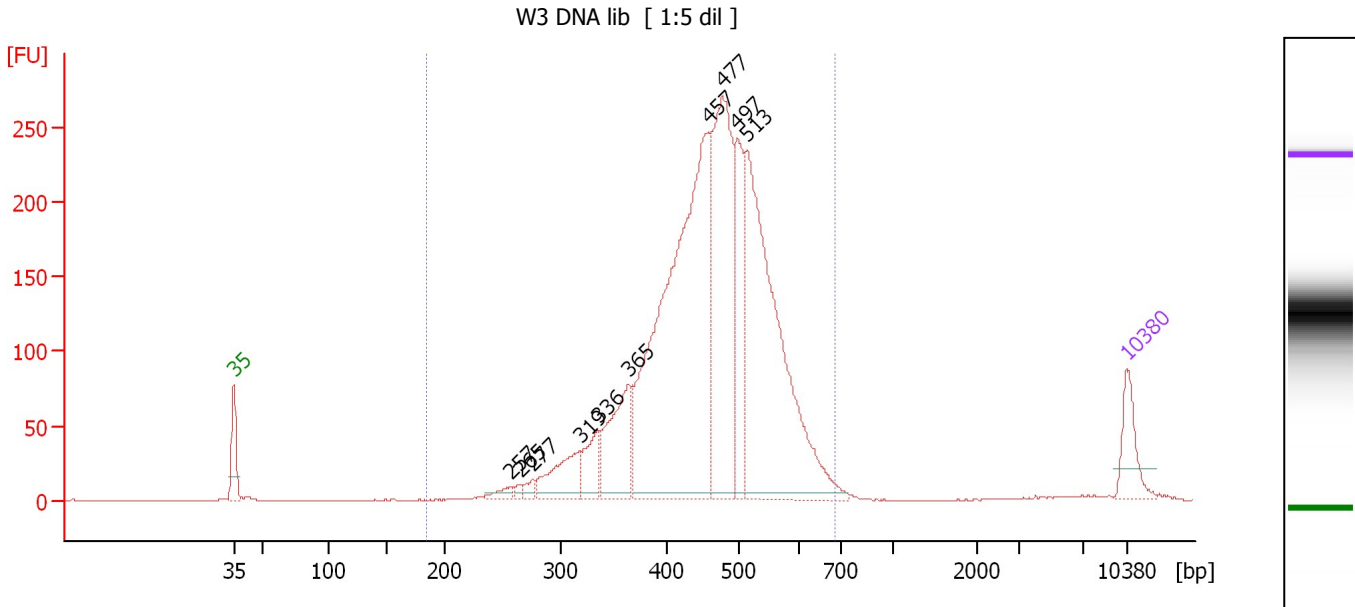
Region table for sample 1 : W2 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
231	426	540	2,260.3	44	15.9	2,699.28	10,030.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : W3 DNA lib

Number of peaks found: 10 Corr. Area 1: 3,476.0
 Noise: 0.2

Peak table for sample 2 : W3 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	257	26.85	158.5	
3	265	14.32	81.9	
4	277	22.23	121.8	
5	319	151.45	720.1	
6	336	98.87	446.1	
7	365	248.20	1,031.6	
8	457	1,394.48	4,620.0	
9	477	673.45	2,139.1	
10	497	252.26	768.4	
11	513	985.28	2,911.5	
12	10,380	75.00	10.9	Upper Marker

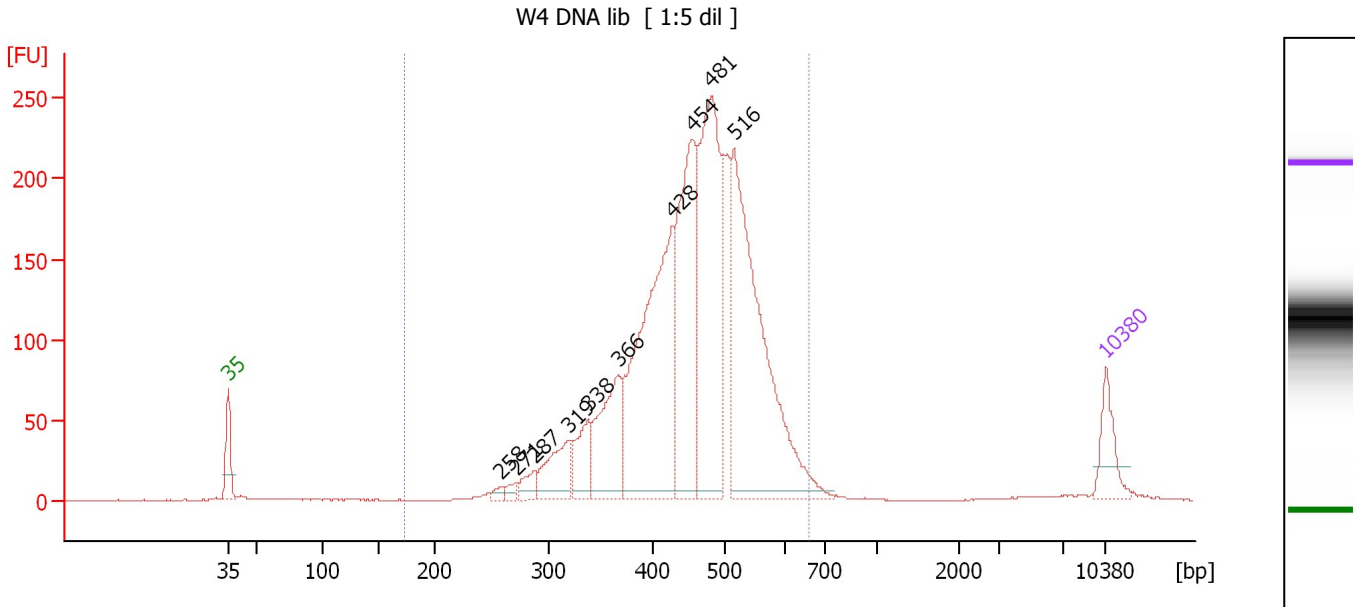
Region table for sample 2 : W3 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
185	460	688	3,476.0	99	17.0	3,909.67	13,486.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : W4 DNA lib

Number of peaks found: 10 Corr. Area 1: 3,169.8
 Noise: 0.2

Peak table for sample 3 : W4 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	258	16.23	95.1	
3	271	21.61	120.8	
4	287	47.28	249.6	
5	319	150.67	715.4	
6	338	117.03	525.3	
7	366	271.07	1,121.3	
8	428	788.47	2,794.0	
9	454	591.14	1,971.7	
10	481	711.99	2,243.0	
11	516	902.35	2,652.1	
12	10,380	75.00	10.9	Upper Marker

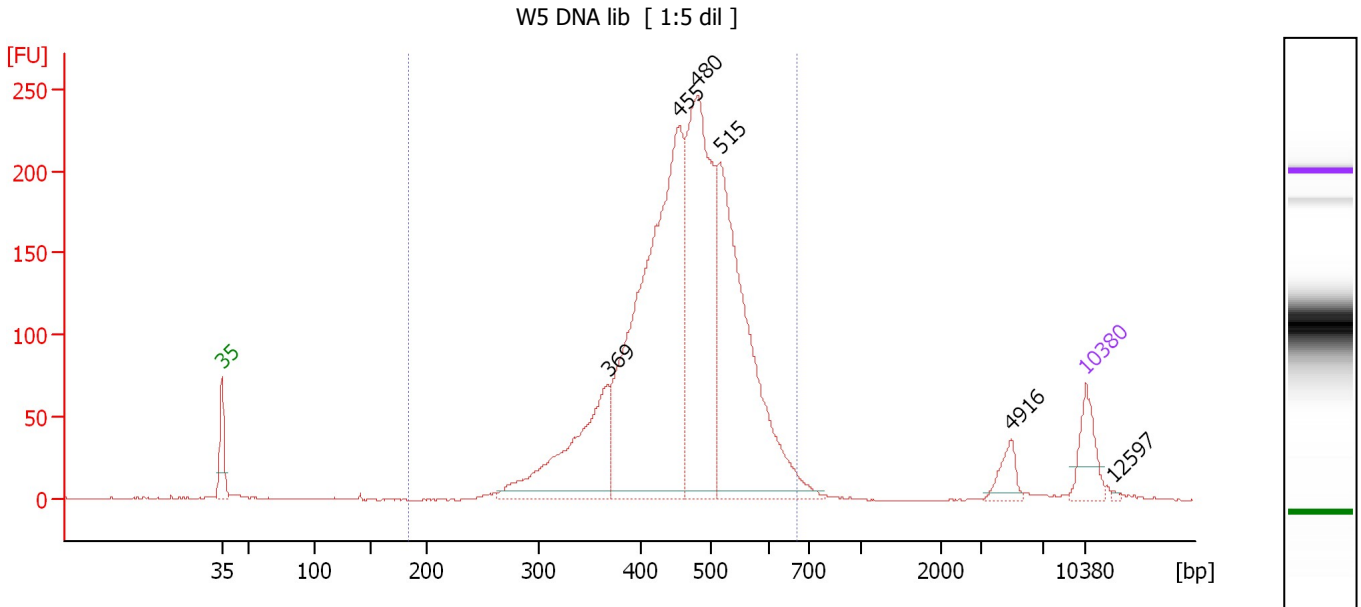
Region table for sample 3 : W4 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
173	456	661	3,169.8	98	16.9	3,858.66	13,411.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : W5 DNA lib

Number of peaks found: 6 Corr. Area 1: 3,035.0
 Noise: 0.2

Peak table for sample 4 : W5 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	369	457.22	1,876.6	
3	455	1,357.76	4,523.1	
4	480	860.72	2,714.5	
5	515	903.38	2,655.2	
6	4,916	45.93	14.2	
7	10,380	75.00	10.9	Upper Marker
8	12,597	0.00	0.0	

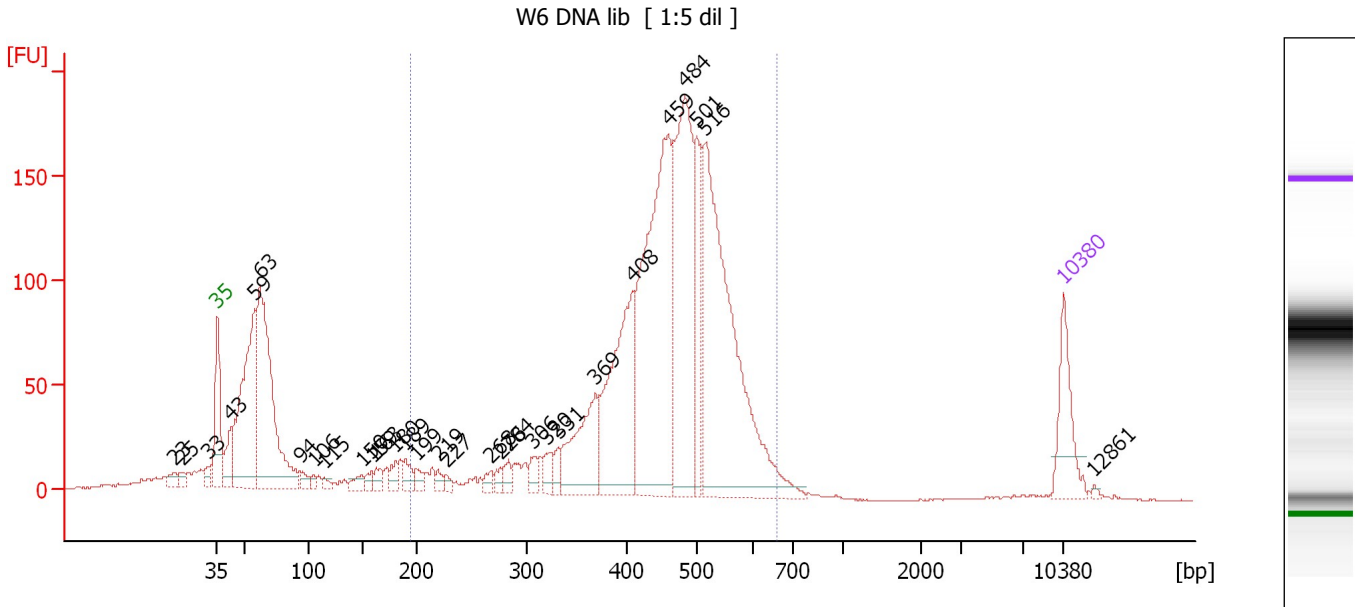
Region table for sample 4 : W5 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
185	461	668	3,035.0	96	16.0	3,601.91	12,302.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : W6 DNA lib

Number of peaks found: 30 Corr. Area 1: 2,319.6
 Noise: 0.3

Peak table for sample 5 : W6 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	23	0.00	0.0	
2	25	0.00	0.0	
3	33	0.00	0.0	
4	35	125.00	5,411.3	Lower Marker
5	43	59.83	2,129.9	
6	59	382.17	9,895.1	
7	63	490.71	11,859.2	
8	94	19.10	307.9	
9	106	11.13	159.5	
10	115	10.45	137.7	
11	150	19.45	196.1	
12	159	14.42	137.4	
13	163	21.59	200.7	
14	180	23.42	196.7	
15	189	26.85	215.0	
16	199	19.25	146.7	
17	219	13.64	94.2	
18	227	10.30	68.9	
19	268	15.56	88.0	
20	276	14.72	80.8	
21	284	19.94	106.4	
22	306	23.26	115.1	
23	320	25.96	123.1	
24	331	20.12	92.0	
25	369	158.29	650.8	
26	408	301.12	1,119.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad


Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...

... Peak table for sample 5 : W6 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	459	576.67	1,903.5	
28	484	427.90	1,340.6	
29	501	136.94	414.4	
30	516	627.35	1,840.5	
31	10,380	75.00	10.9	Upper Marker
32	12,861	0.00	0.0	

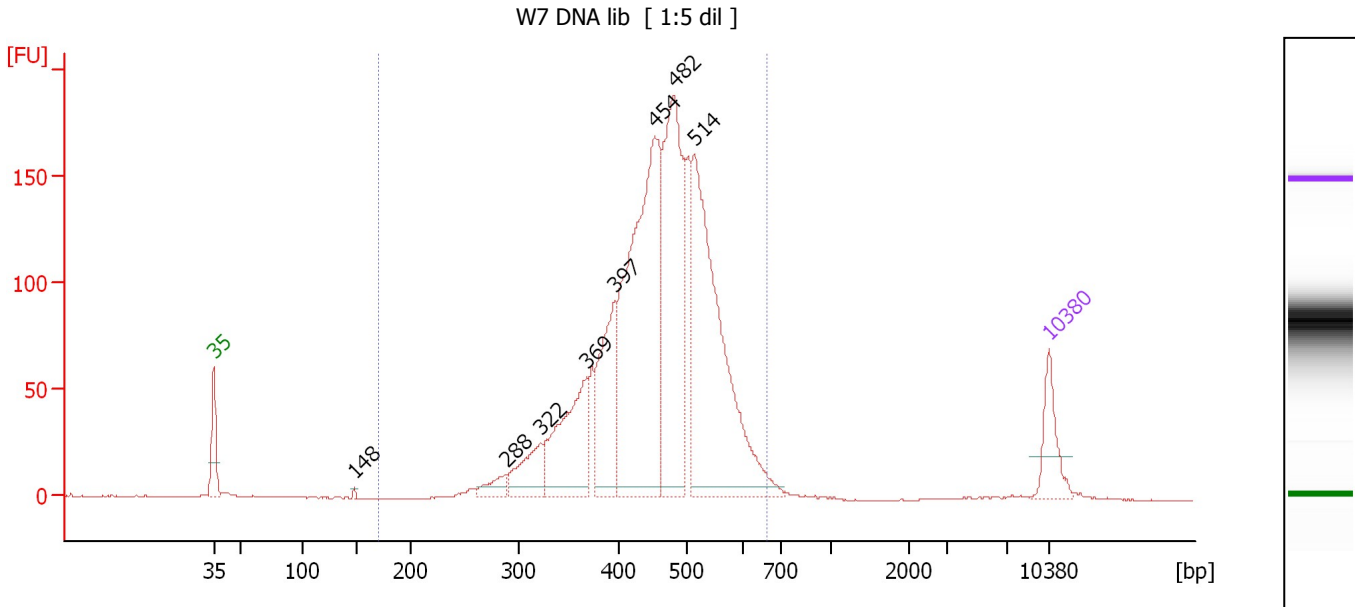
Region table for sample 5 : W6 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
195	457	660	2,319.6	71	18.1	2,468.91	8,733.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
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Electropherogram Summary Continued ...



Overall Results for sample 6 : W7 DNA lib

Number of peaks found: 8 Corr. Area 1: 2,301.8
 Noise: 0.2

Peak table for sample 6 : W7 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	4.99	51.0	
3	288	43.47	228.7	
4	322	120.00	564.0	
5	369	294.43	1,209.9	
6	397	256.44	978.0	
7	454	892.73	2,976.2	
8	482	592.53	1,863.5	
9	514	770.54	2,272.6	
10	10,380	75.00	10.9	Upper Marker

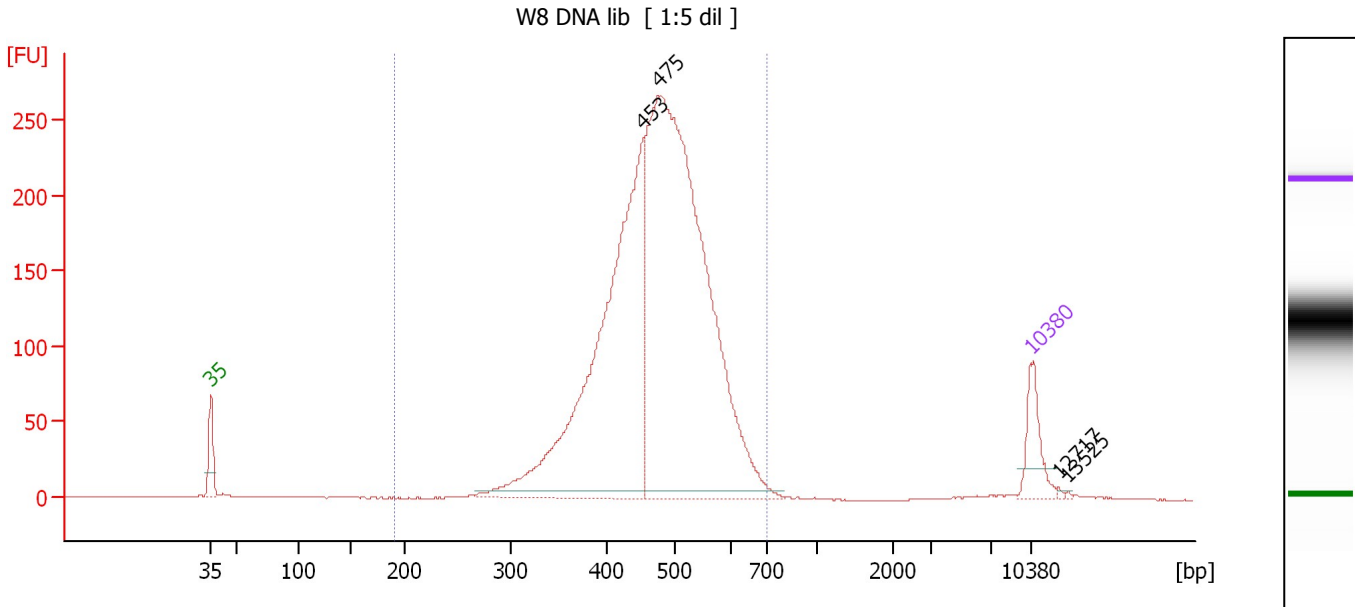
Region table for sample 6 : W7 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
171	458	664	2,301.8	97	16.5	3,223.86	11,135.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : W8 DNA lib

Number of peaks found: 4 Corr. Area 1: 3,237.3
 Noise: 0.2

Peak table for sample 7 : W8 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	453	1,259.49	4,211.1	
3	475	1,911.63	6,102.9	
4	10,380	75.00	10.9	Upper Marker
5	12,717	0.00	0.0	
6	13,525	0.00	0.0	

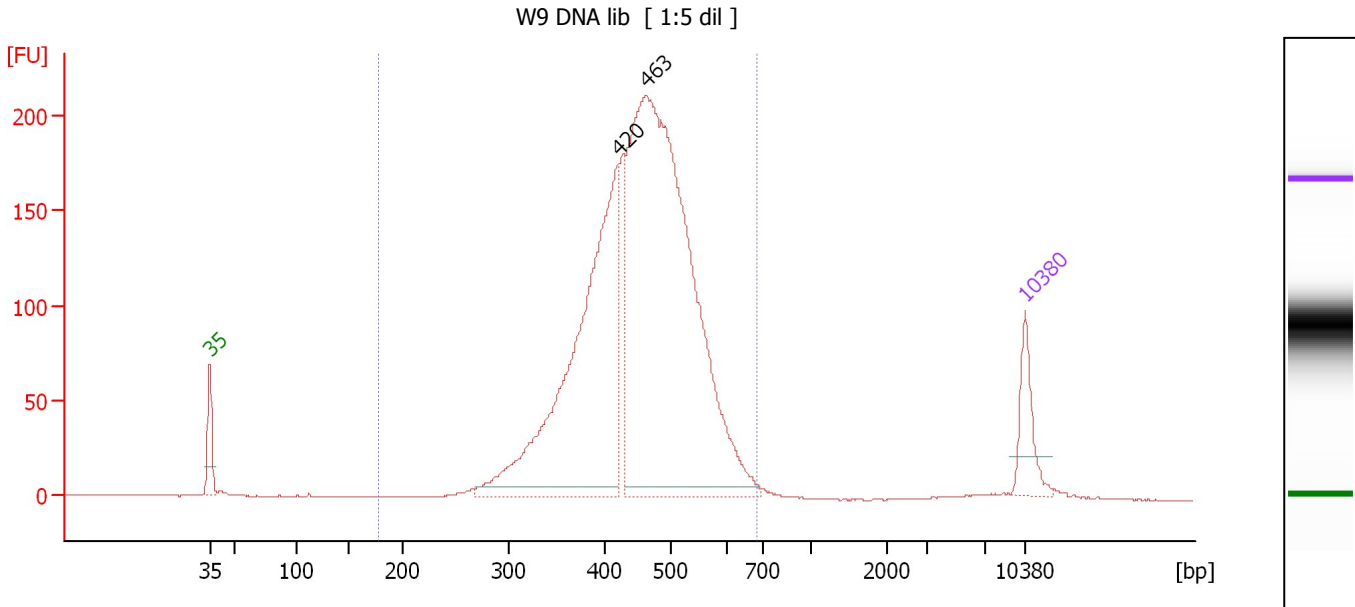
Region table for sample 7 : W8 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
191	473	700	3,237.3	98	15.4	3,177.01	10,527.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : W9 DNA lib

Number of peaks found: 2 Corr. Area 1: 2,796.7
 Noise: 0.2

Peak table for sample 8 : W9 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	420	1,009.45	3,639.7	
3	463	1,762.59	5,773.7	
4	10,380	75.00	10.9	Upper Marker

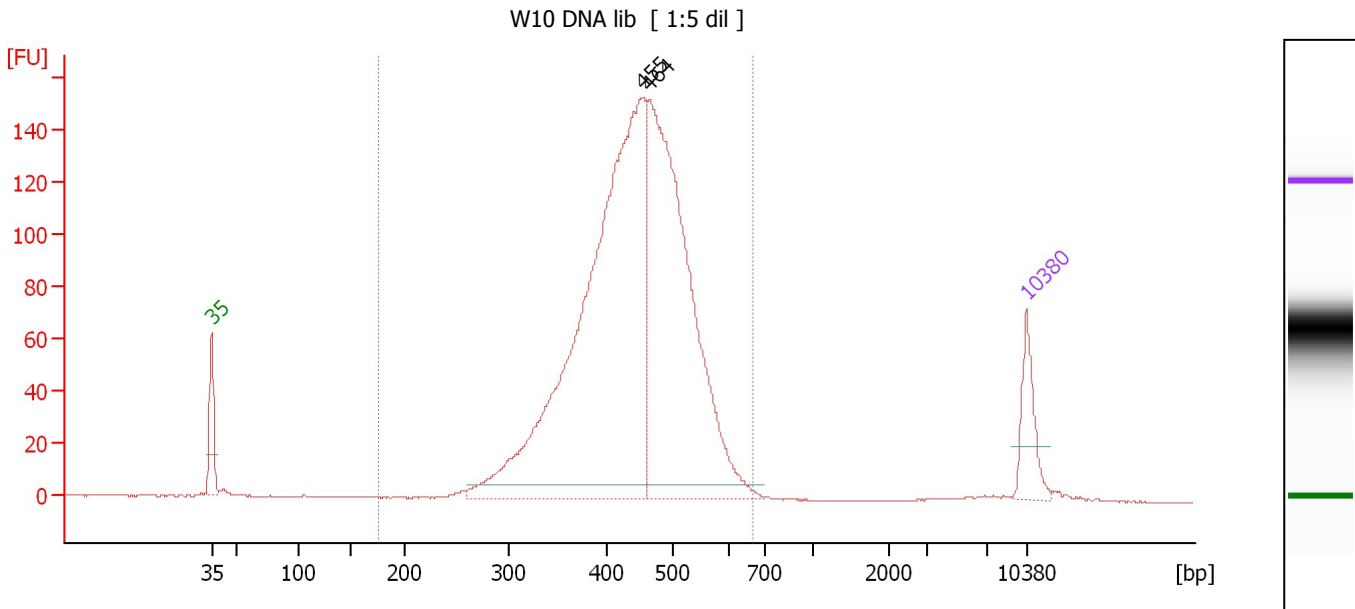
Region table for sample 8 : W9 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
178	453	680	2,796.7	98	16.1	2,949.25	10,230.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : W10 DNA lib

Number of peaks found: 2 Corr. Area 1: 2,029.4
 Noise: 0.2

Peak table for sample 9 : W10 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	455	1,587.74	5,292.3	
3	464	1,079.27	3,523.2	
4	10,380	75.00	10.9	Upper Marker

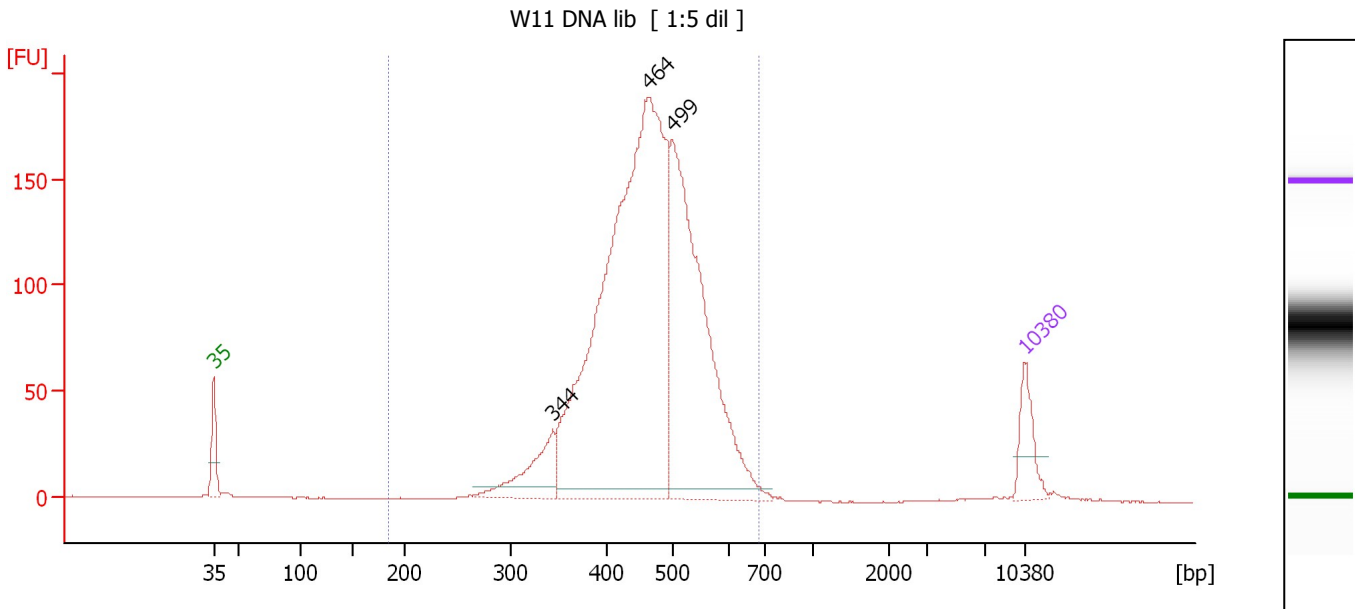
Region table for sample 9 : W10 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
176	444	665	2,029.4	98	15.9	2,787.83	9,875.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : W11 DNA lib

Number of peaks found: 3 Corr. Area 1: 2,299.1
 Noise: 0.1

Peak table for sample 10 : W11 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	344	177.75	782.6	
3	464	2,000.33	6,538.7	
4	499	1,007.15	3,059.4	
5	10,380	75.00	10.9	Upper Marker

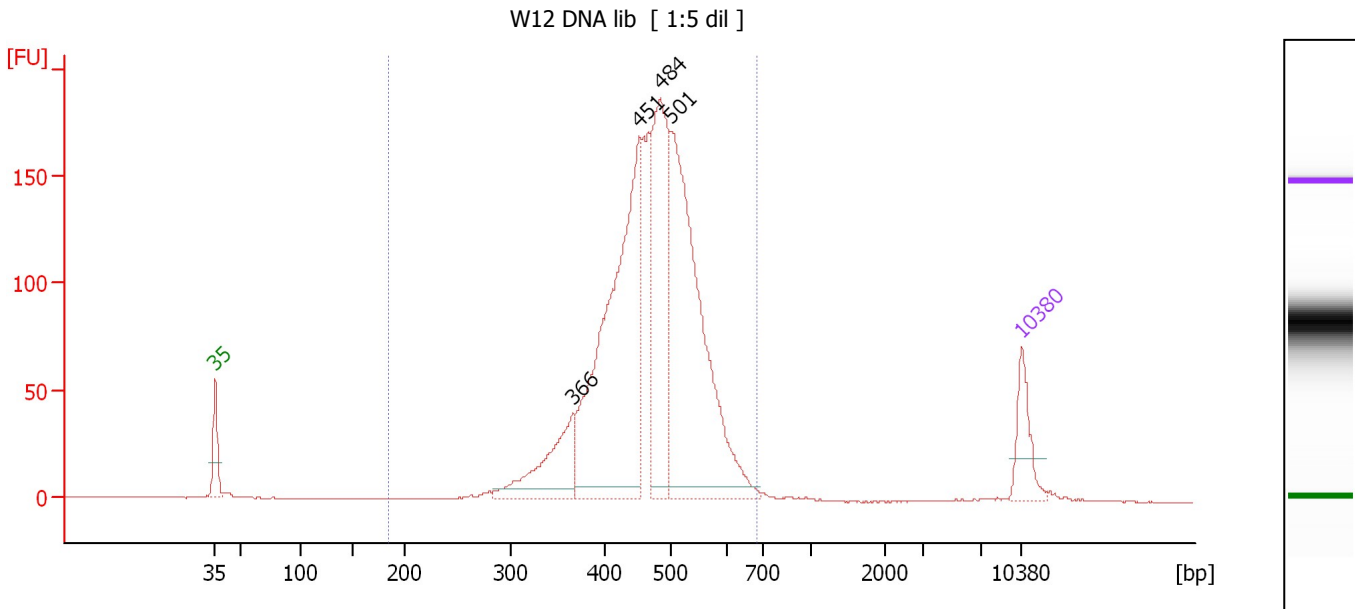
Region table for sample 10 : W11 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
184	463	686	2,299.1	99	15.4	3,210.59	10,859.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : W12 DNA lib

Number of peaks found: 4 Corr. Area 1: 2,050.6
 Noise: 0.1

Peak table for sample 11 : W12 DNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	366	219.91	909.8	
3	451	892.28	2,995.5	
4	484	457.61	1,433.7	
5	501	858.62	2,598.3	
6	10,380	75.00	10.9	Upper Marker

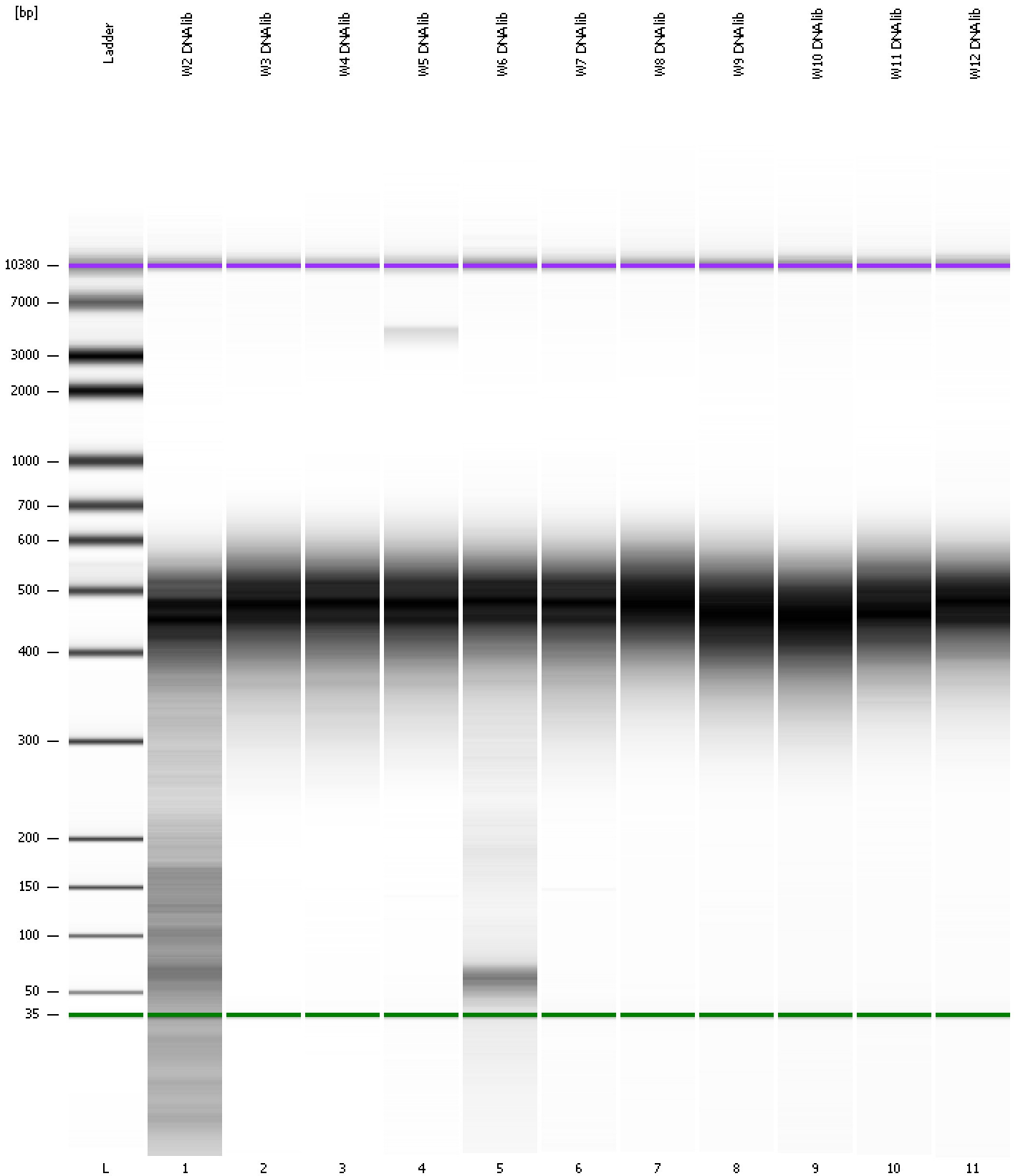
Region table for sample 11 : W12 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
185	468	684	2,050.6	98	14.6	2,708.25	9,039.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
Modified: 11/24/2014 11:03:57 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/24/2014 11:03:57 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		11/18/2014 11:18:17 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad)		Instrument	Run		11/18/2014 10:37:54 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/18/2014 10:37:54 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/18/2014 10:37:54 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/18/2014 10:37:54 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/18/2014 10:37:54 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/18/2014 10:37:54 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/18/2014 10:37:54 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1