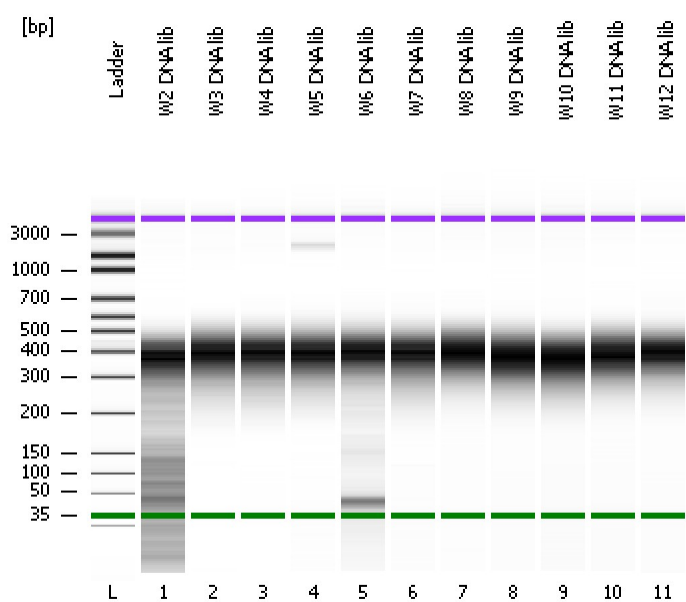


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
Modified: 11/18/2014 11:18:38 AM

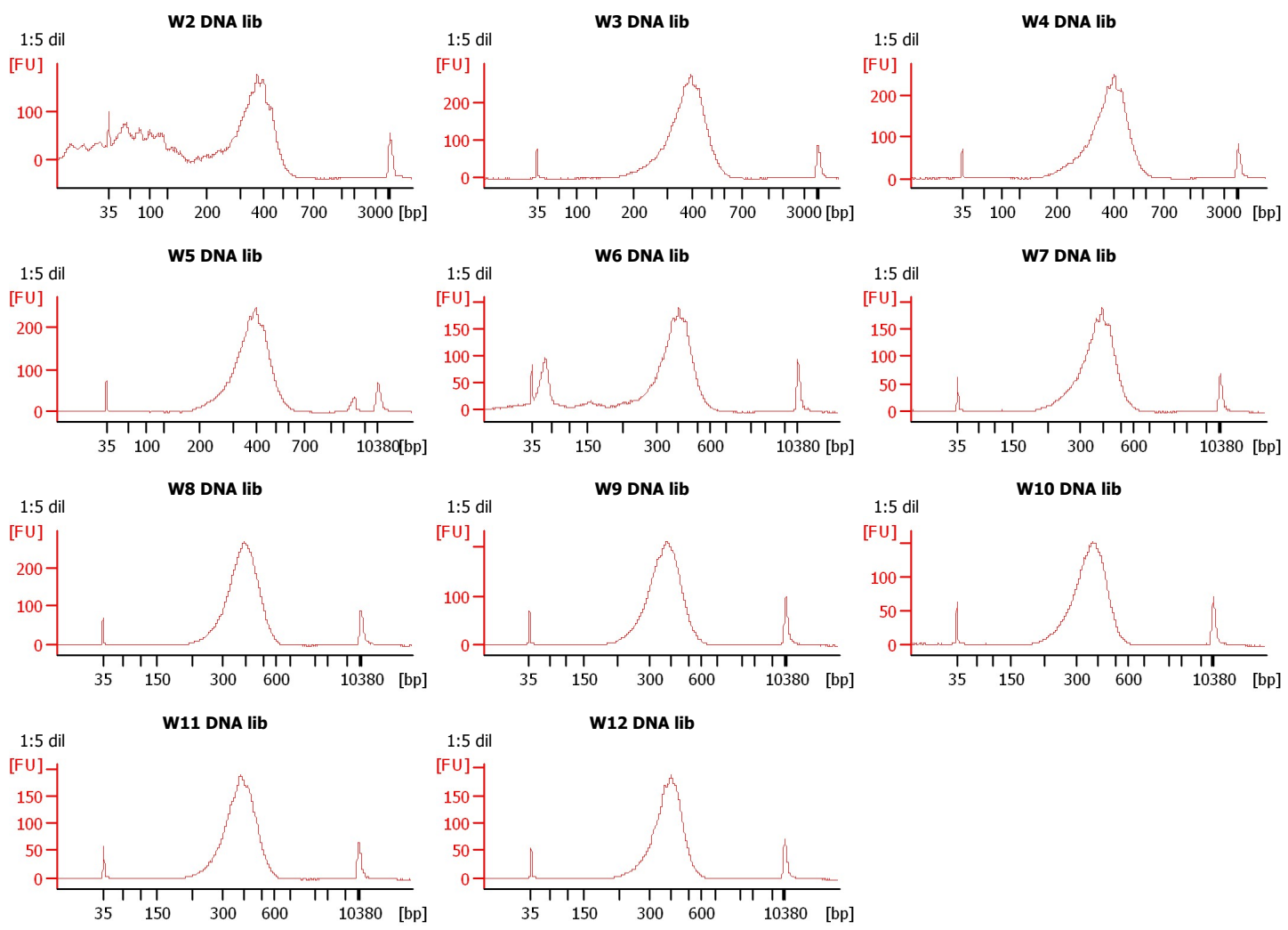
Electrophoresis File Run Summary



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: 11/18/2014 11:18:38 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: 11/18/2014 11:18:38 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

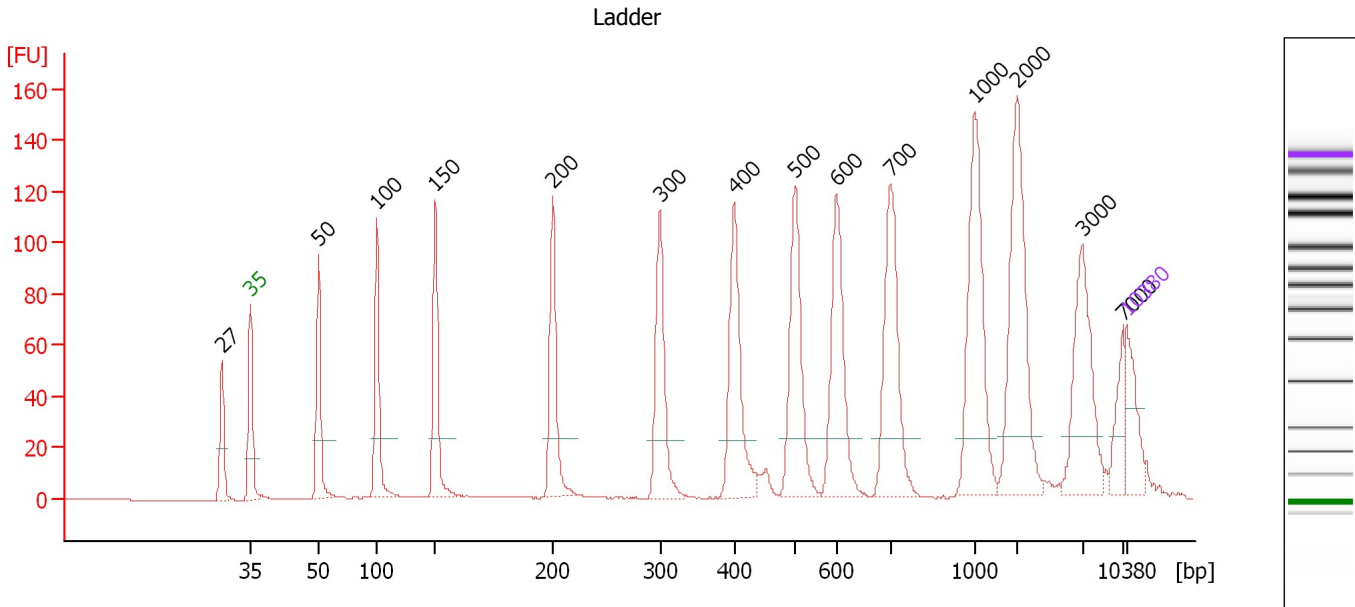
Ladder

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: 11/18/2014 11:18:38 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

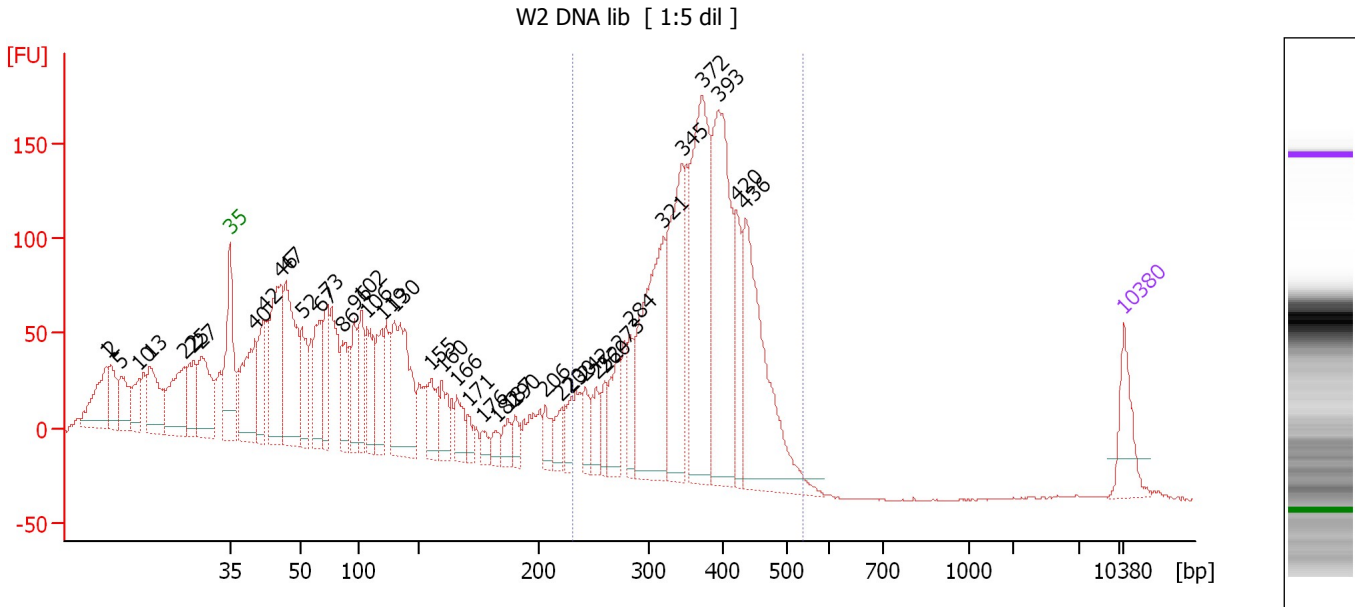
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	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: C:\...ents and Settings\Bioanalyzer\2014-11-18\2014-11-18_002.xad

Created: 11/18/2014 10:37:48 AM
 Modified: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : W2 DNA lib

Number of peaks found: 43 Corr. Area 1: 2,171.4
 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	40	280.33	10,543.4	
11	42	159.51	5,722.0	
12	46	348.96	11,544.6	
13	47	368.10	11,879.7	
14	52	136.44	4,010.8	
15	67	176.31	3,997.3	
16	73	141.03	2,922.1	
17	86	131.02	2,316.0	
18	96	119.57	1,885.9	
19	102	137.83	2,049.6	
20	106	133.01	1,895.0	
21	119	144.59	1,843.7	
22	130	378.33	4,410.7	
23	155	111.85	1,094.0	
24	160	83.69	794.5	
25	166	76.29	697.1	
26	171	31.96	284.0	

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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	176	31.42	270.0	
28	182	36.43	303.2	
29	187	44.75	361.7	
30	190	44.21	352.3	
31	206	57.75	425.5	
32	220	44.22	304.1	
33	230	49.17	324.5	
34	242	55.39	346.5	
35	252	58.27	349.7	
36	260	54.88	319.5	
37	273	107.87	597.7	
38	284	75.16	400.7	
39	321	445.24	2,102.5	
40	345	349.84	1,537.1	
41	372	519.73	2,118.9	
42	393	485.98	1,871.2	
43	420	130.48	470.4	
44	436	443.27	1,541.8	
45	 10,380	75.00	10.9	Upper Marker

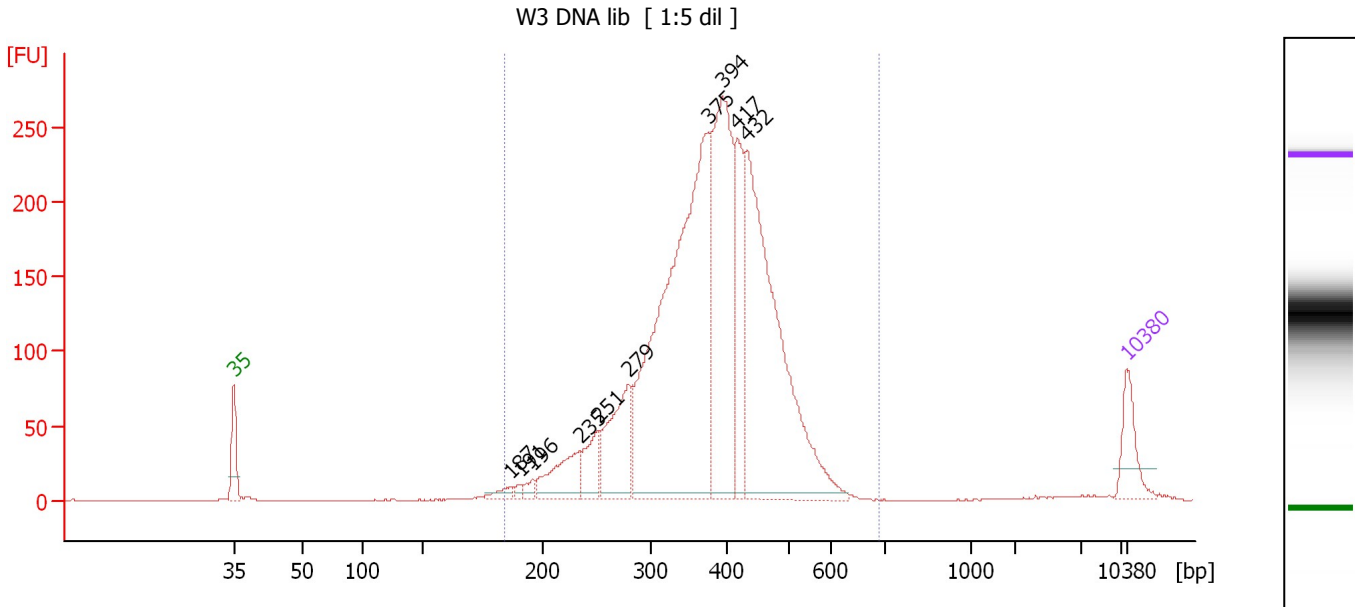
Region table for sample 1 : W2 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
231	363	540	2,171.4	42	16.8	2,695.61	11,717.3	

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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : W3 DNA lib

Number of peaks found: 10 Corr. Area 1: 3,472.2
 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	187	29.29	237.7	
3	191	15.65	124.3	
4	196	24.37	188.1	
5	235	166.35	1,073.4	
6	251	108.91	656.3	
7	279	274.66	1,490.2	
8	375	1,439.05	5,811.1	
9	394	680.50	2,615.1	
10	417	253.29	920.4	
11	432	1,000.92	3,507.8	
12	10,380	75.00	10.9	Upper Marker

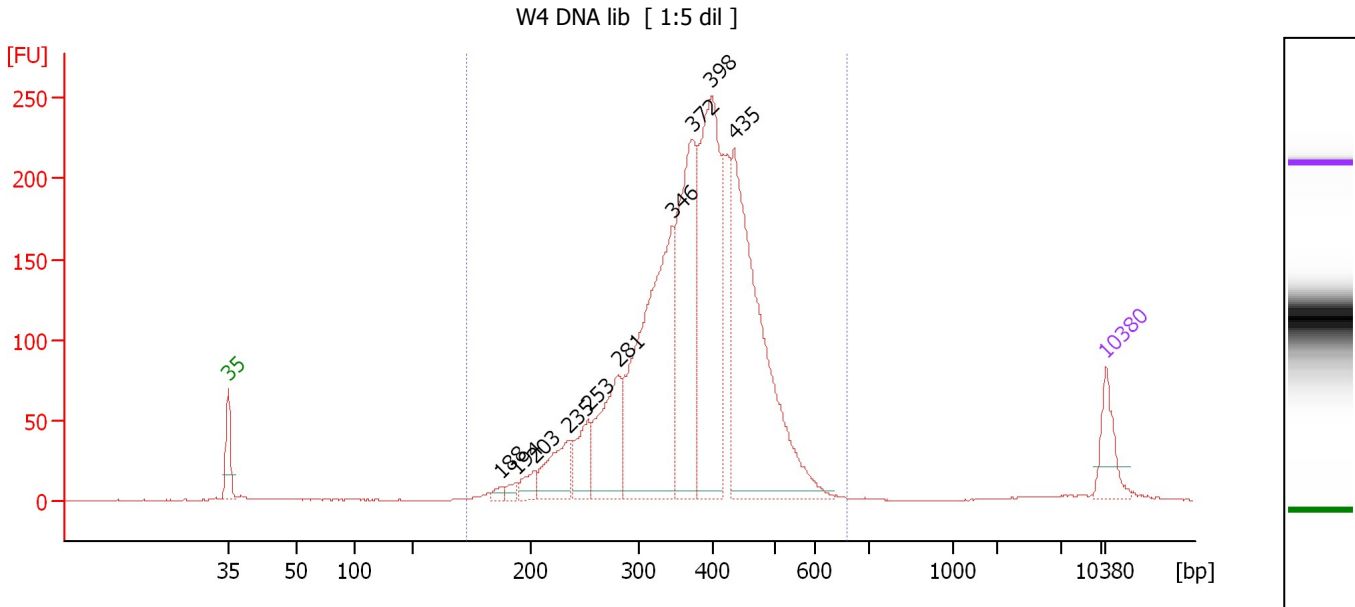
Region table for sample 2 : W3 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
185	380	688	3,472.2	99	21.0	4,111.84	17,582.1	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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : W4 DNA lib

Number of peaks found: 10 Corr. Area 1: 3,189.2
 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	188	17.71	143.1	
3	194	23.65	185.0	
4	203	51.88	387.3	
5	235	165.51	1,066.0	
6	253	128.95	771.9	
7	281	300.04	1,618.2	
8	346	840.77	3,677.6	
9	372	612.06	2,491.3	
10	398	716.45	2,726.8	
11	435	919.00	3,200.8	
12	10,380	75.00	10.9	Upper Marker

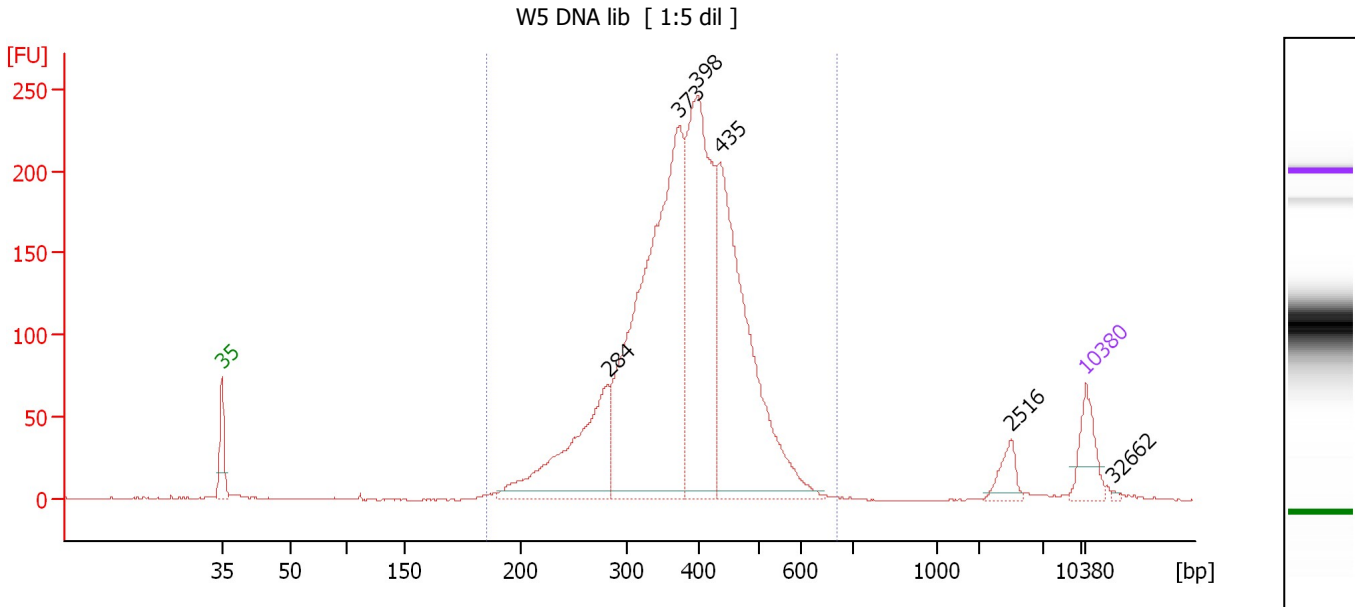
Region table for sample 3 : W4 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
173	376	661	3,189.2	99	21.3	4,094.41	17,755.7	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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : W5 DNA lib

Number of peaks found: 6 Corr. Area 1: 3,055.6
 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	284	506.31	2,703.8	
3	373	1,404.96	5,710.4	
4	398	866.59	3,302.4	
5	435	920.05	3,204.6	
6	2,516	45.22	27.2	
7	10,380	75.00	10.9	Upper Marker
8	32,662	0.00	0.0	

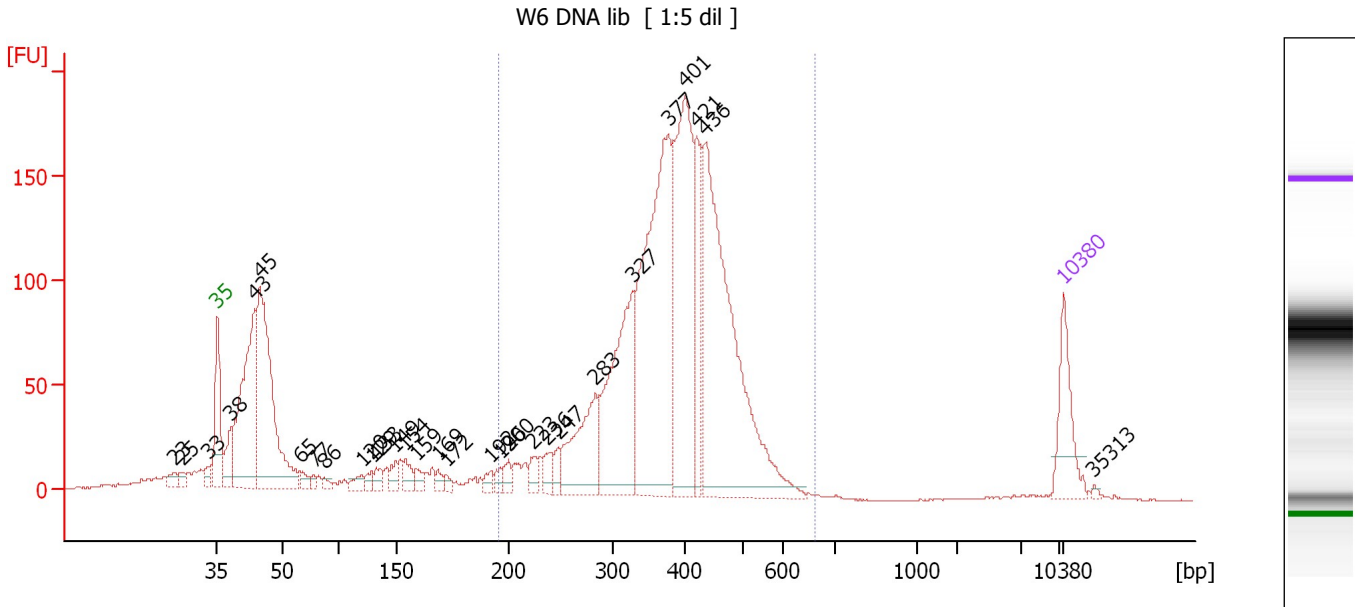
Region table for sample 4 : W5 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
185	381	668	3,055.6	97	20.4	3,817.19	16,157.4	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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : W6 DNA lib

Number of peaks found: 30 Corr. Area 1: 2,242.6
 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	38	61.47	2,448.9	
6	43	396.15	13,800.5	
7	45	504.68	17,104.5	
8	65	19.00	443.6	
9	77	11.16	218.9	
10	86	10.62	186.6	
11	120	20.17	254.1	
12	129	15.04	177.0	
13	133	22.57	258.1	
14	149	24.77	251.1	
15	154	28.60	281.5	
16	159	20.68	197.5	
17	169	14.74	132.5	
18	172	11.15	98.2	
19	192	17.02	134.3	
20	196	16.13	124.6	
21	200	21.89	166.0	
22	223	25.50	173.4	
23	236	28.52	183.3	
24	247	22.15	135.9	
25	283	175.27	938.1	
26	327	328.49	1,522.3	

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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	377	594.01	2,388.3	
28	401	429.69	1,624.3	
29	421	137.57	495.5	
30	436	639.48	2,222.6	
31	10,380	75.00	10.9	Upper Marker
32	35,313	0.00	0.0	

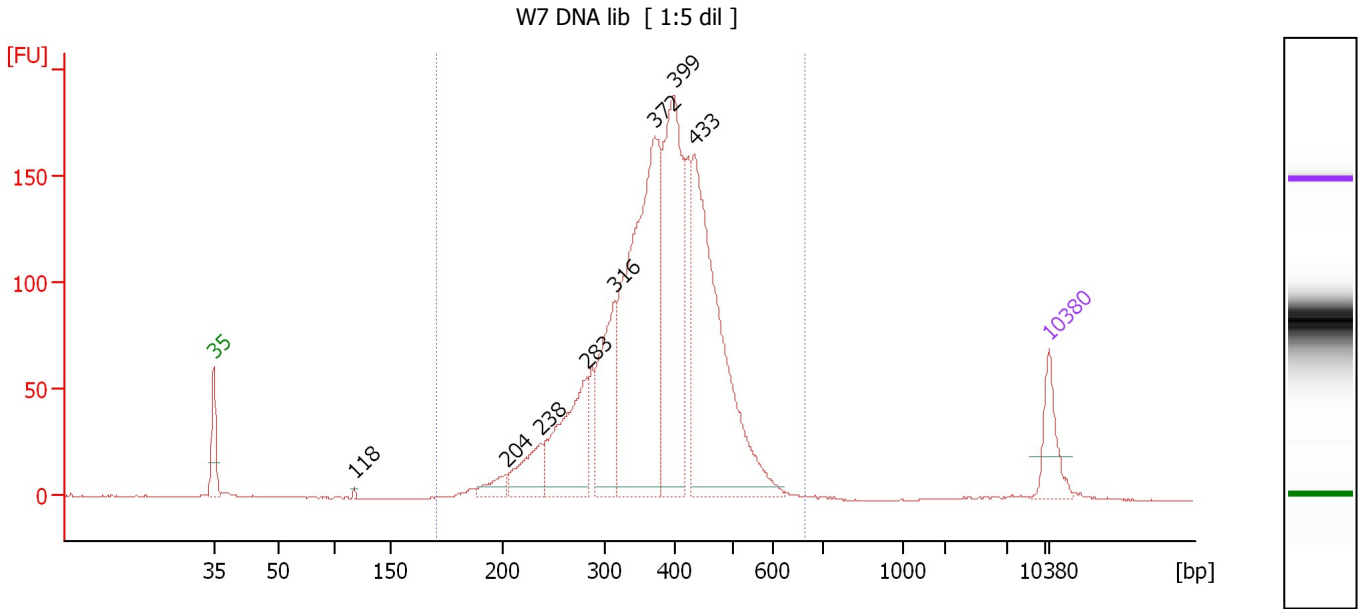
Region table for sample 5 : W6 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
195	385	660	2,242.6	69	20.0	2,485.46	10,411.6	

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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : W7 DNA lib

Number of peaks found: 8 Corr. Area 1: 2,317.4
 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	118	5.17	66.3	
3	204	47.69	354.3	
4	238	131.90	838.3	
5	283	326.02	1,743.7	
6	316	282.67	1,356.0	
7	372	924.10	3,759.3	
8	399	595.74	2,262.9	
9	433	783.50	2,739.7	
10	10,380	75.00	10.9	Upper Marker

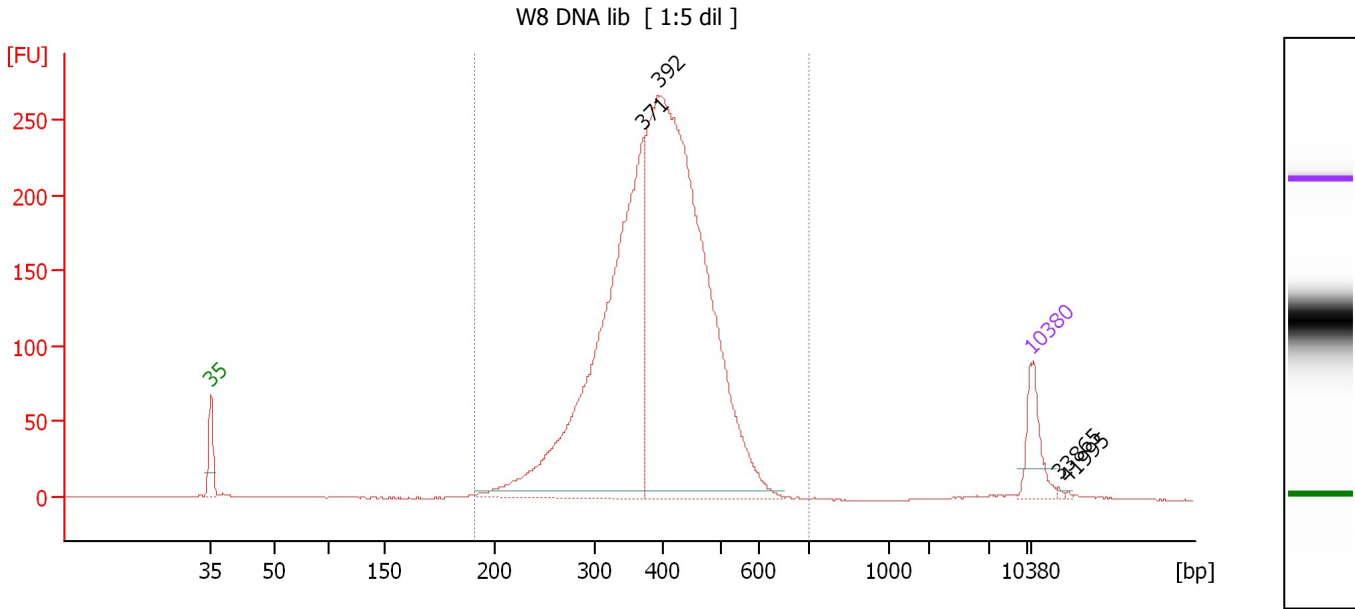
Region table for sample 6 : W7 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
171	378	664	2,317.4	98	20.9	3,420.51	14,707.9	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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : W8 DNA lib

Number of peaks found: 4 Corr. Area 1: 3,241.8
 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	371	1,305.63	5,329.6	
3	392	1,936.57	7,486.4	
4	10,380	75.00	10.9	Upper Marker
5	33,865	0.00	0.0	
6	41,995	0.00	0.0	

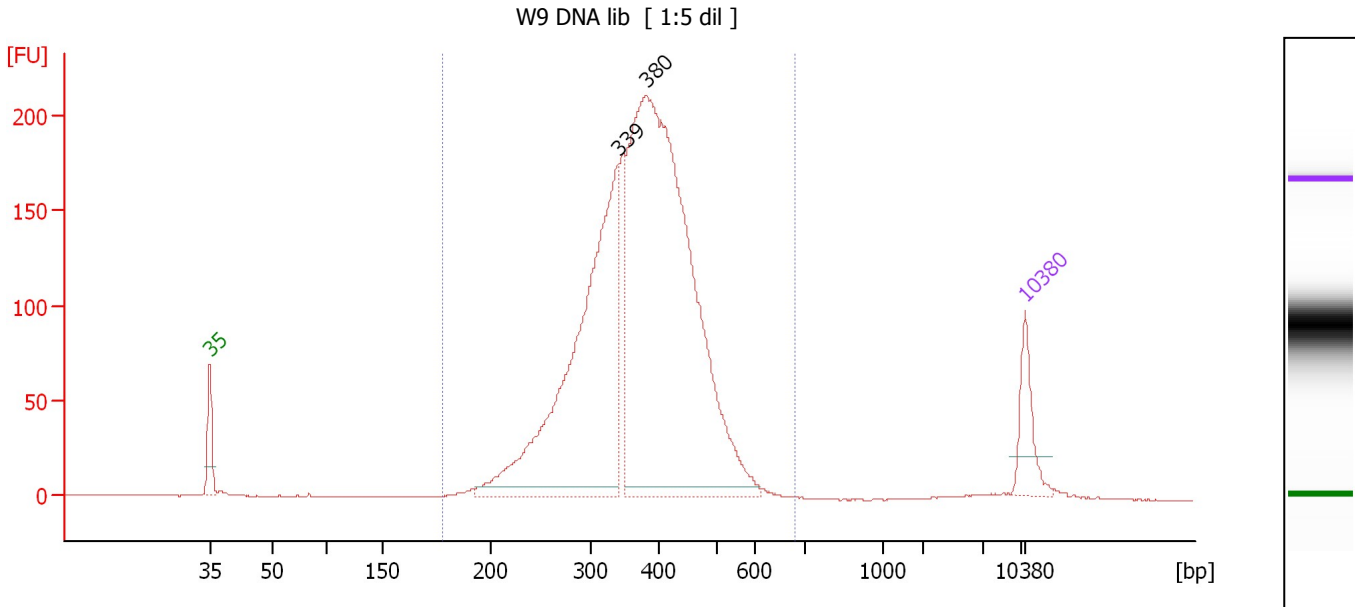
Region table for sample 7 : W8 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
191	393	700	3,241.8	98	19.1	3,338.23	13,589.8	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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : W9 DNA lib

Number of peaks found: 2 Corr. Area 1: 2,807.0
 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	339	1,085.36	4,847.2	
3	380	1,808.70	7,206.8	
4	10,380	75.00	10.9	Upper Marker

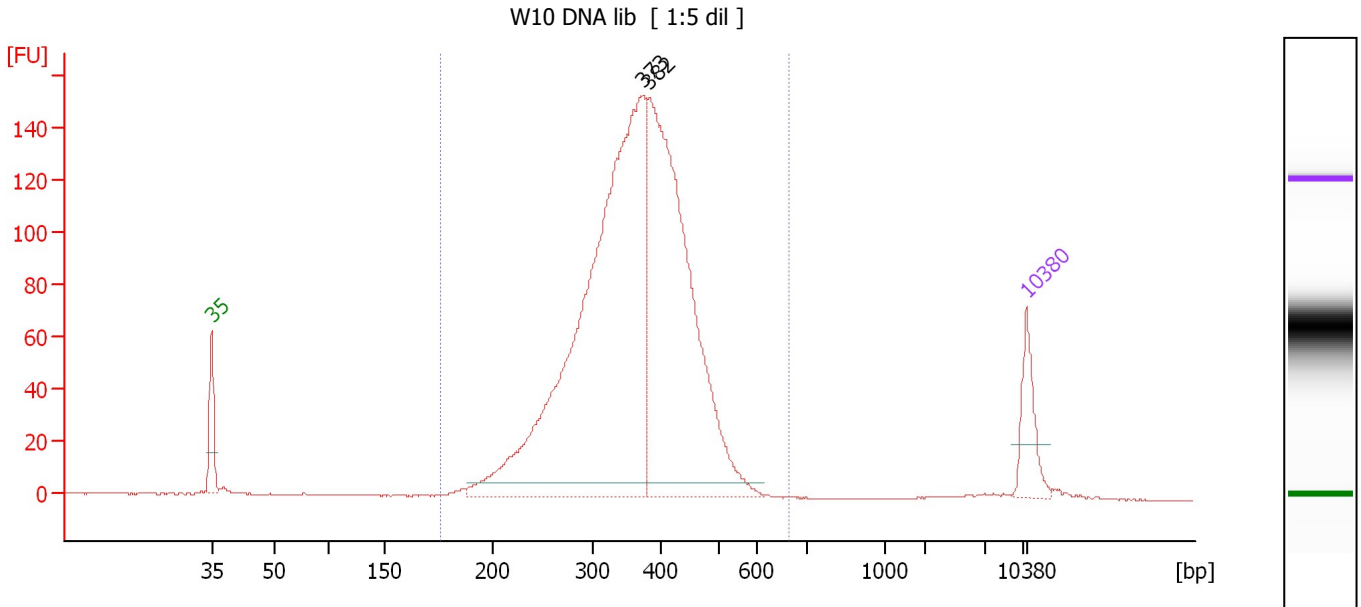
Region table for sample 8 : W9 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
178	372	680	2,807.0	98	20.3	3,127.86	13,512.7	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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : W10 DNA lib

Number of peaks found: 2 Corr. Area 1: 2,033.4
 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	373	1,643.40	6,684.1	
3	382	1,105.61	4,387.4	
4	10,380	75.00	10.9	Upper Marker

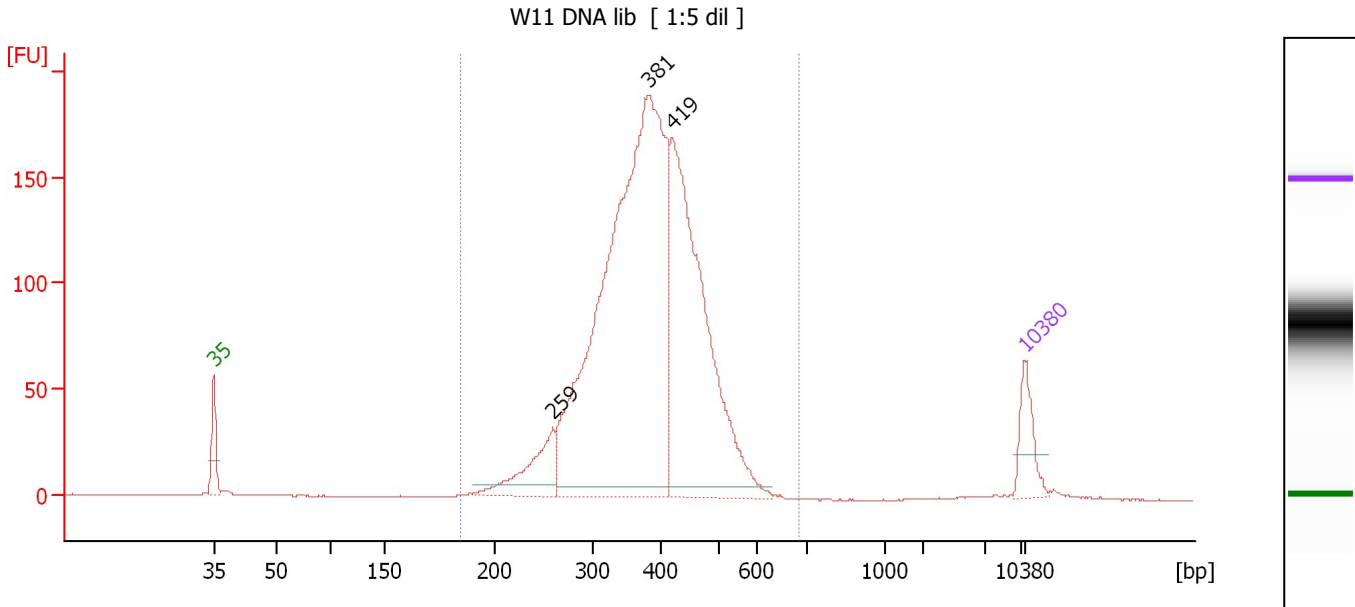
Region table for sample 9 : W10 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
176	362	665	2,033.4	98	20.0	2,959.52	13,137.5	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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : W11 DNA lib

Number of peaks found: 3 Corr. Area 1: 2,304.6
 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	259	196.06	1,144.8	
3	381	2,050.53	8,150.1	
4	419	1,011.22	3,660.3	
5	10,380	75.00	10.9	Upper Marker

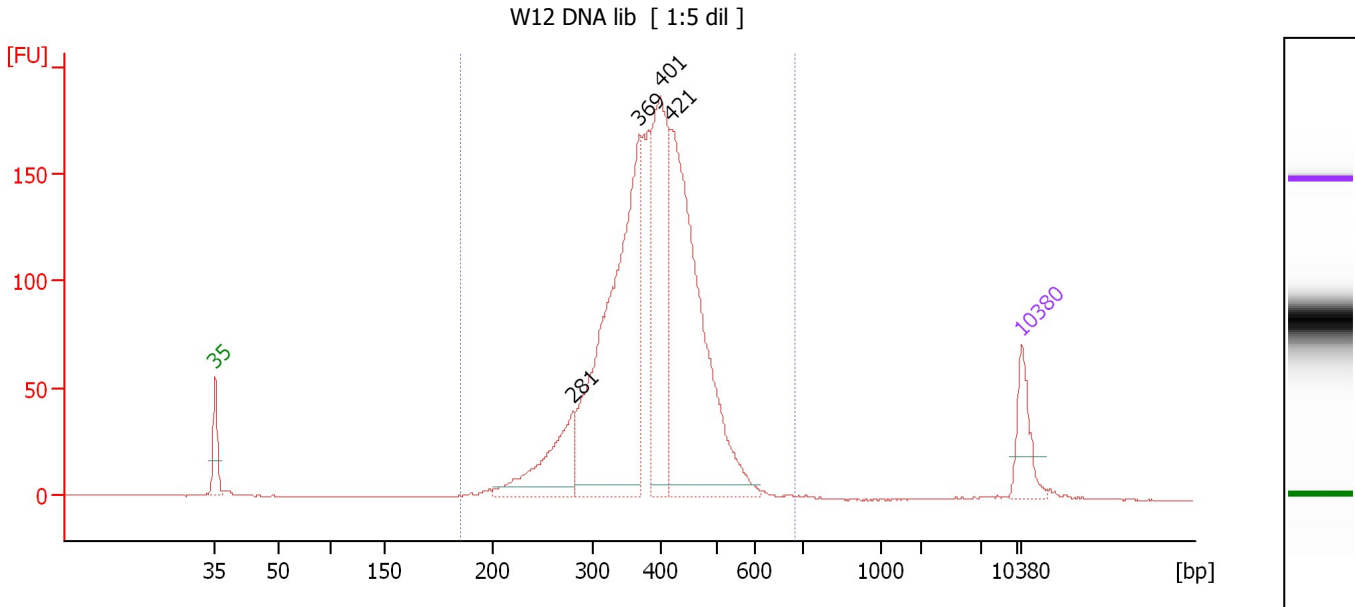
Region table for sample 10 : W11 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
184	382	686	2,304.6	99	19.3	3,388.46	14,181.8	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: 11/18/2014 11:18:38 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : W12 DNA lib

Number of peaks found: 4 Corr. Area 1: 2,058.4
 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	281	243.42	1,313.0	
3	369	926.82	3,801.6	
4	401	459.53	1,737.1	
5	421	862.65	3,107.0	
6	10,380	75.00	10.9	Upper Marker

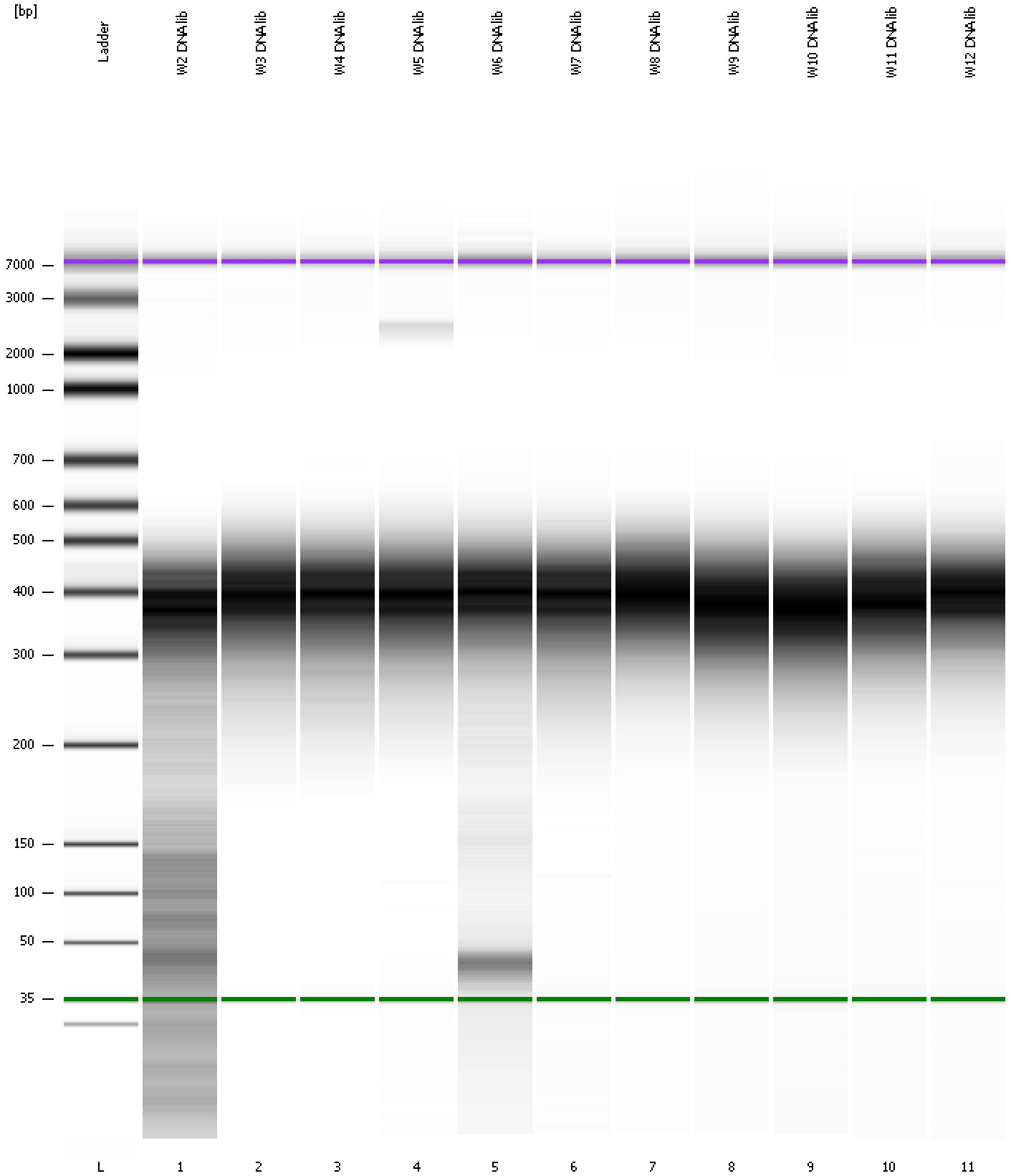
Region table for sample 11 : W12 DNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
185	387	684	2,058.4	99	18.4	2,851.17	11,722.1	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: 11/18/2014 11:18:38 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: 11/18/2014 11:18:38 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