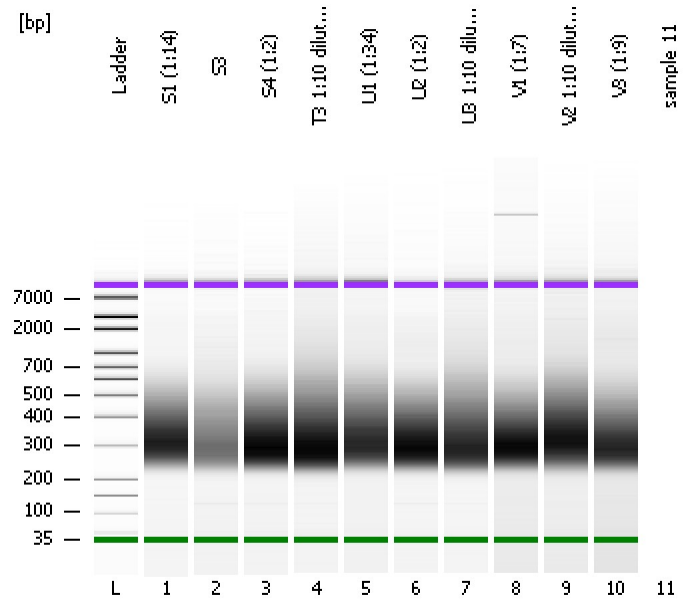
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electrophoresis File Run Summary



Instrument Information:

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

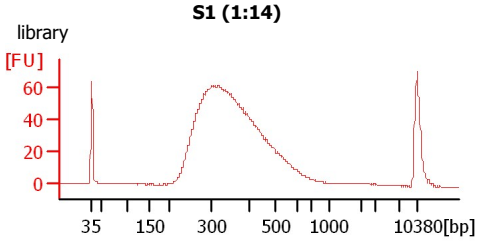
Assay Information:

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

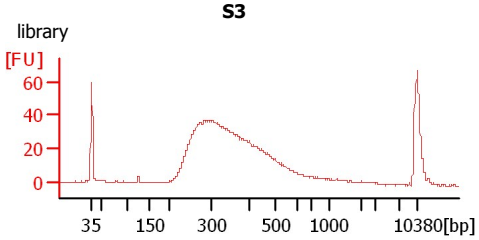
Chip Information:

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

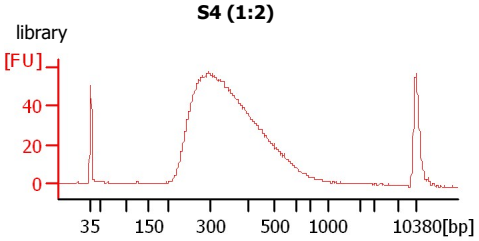
S1 (1:14)



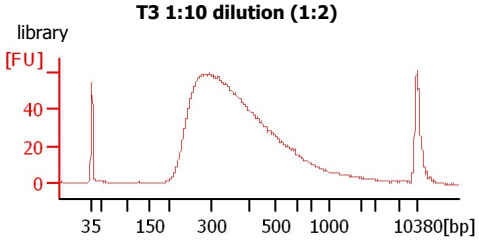
S3



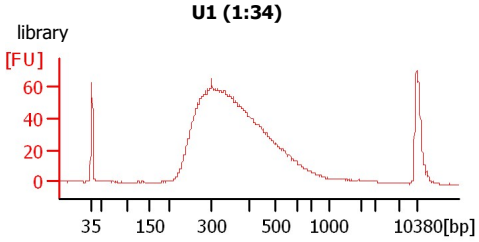
S4 (1:2)



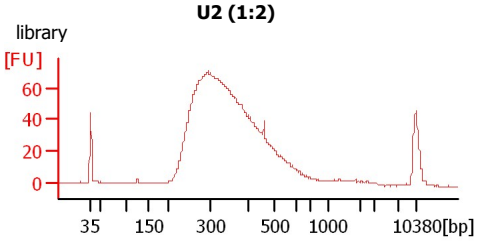
T3 1:10 dilution (1:2)



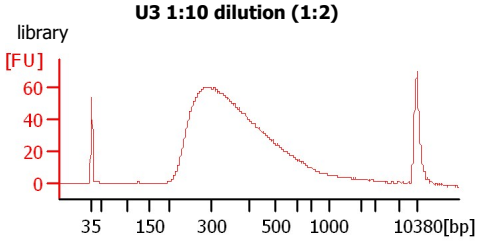
U1 (1:34)



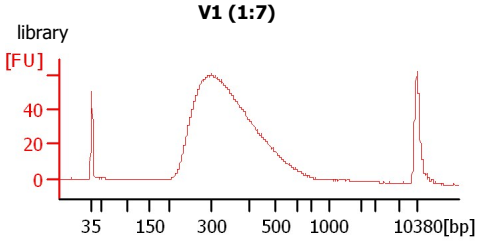
U2 (1:2)



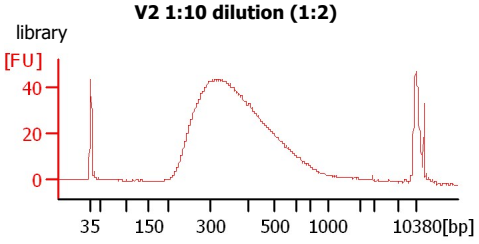
U3 1:10 dilution (1:2)



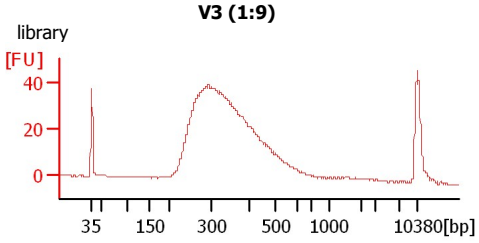
V1 (1:7)



V2 1:10 dilution (1:2)



V3 (1:9)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
S1 (1:14)	library	☐	✓			
S3	library	☐	✓			
S4 (1:2)	library	☐	✓			
T3 1:10 dilution (1:2)	library	☐	✓			
U1 (1:34)	library	☐	✓			
U2 (1:2)	library	☐	✓			
U3 1:10 dilution (1:2)	library	☐	✓			
V1 (1:7)	library	☐	✓			
V2 1:10 dilution (1:2)	library	☐	✓			
V3 (1:9)	library	☐	✓			
sample 11		☐				
Ladder		☐	✓			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 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

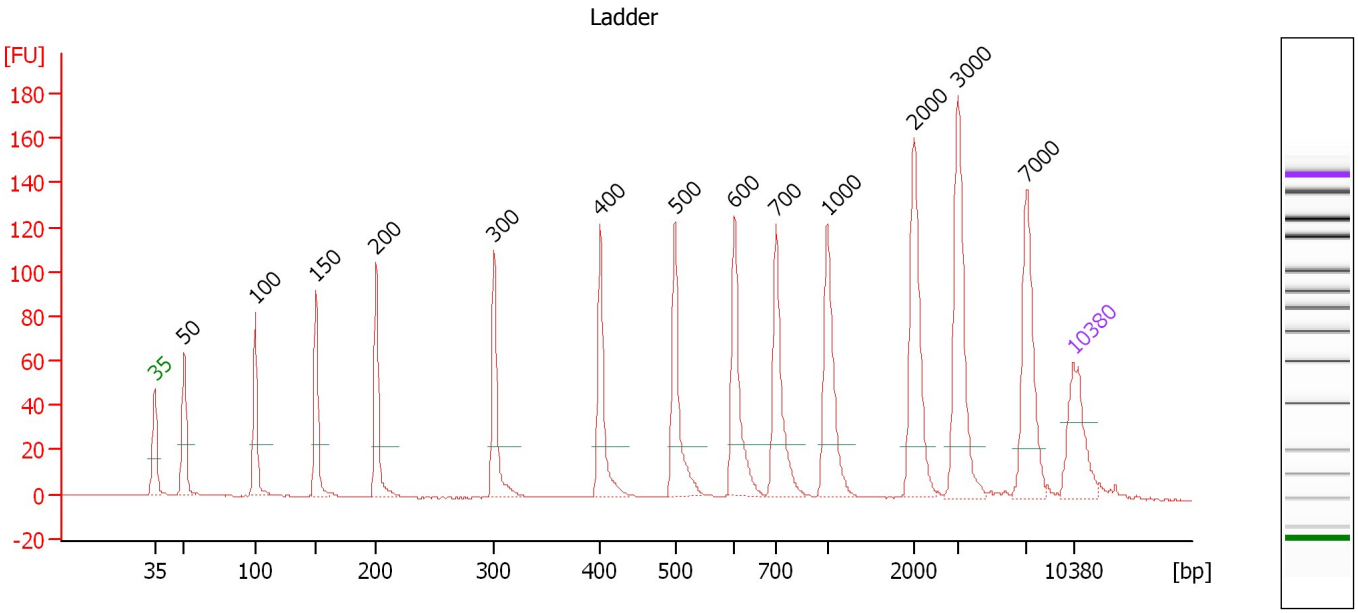
Ladder

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: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

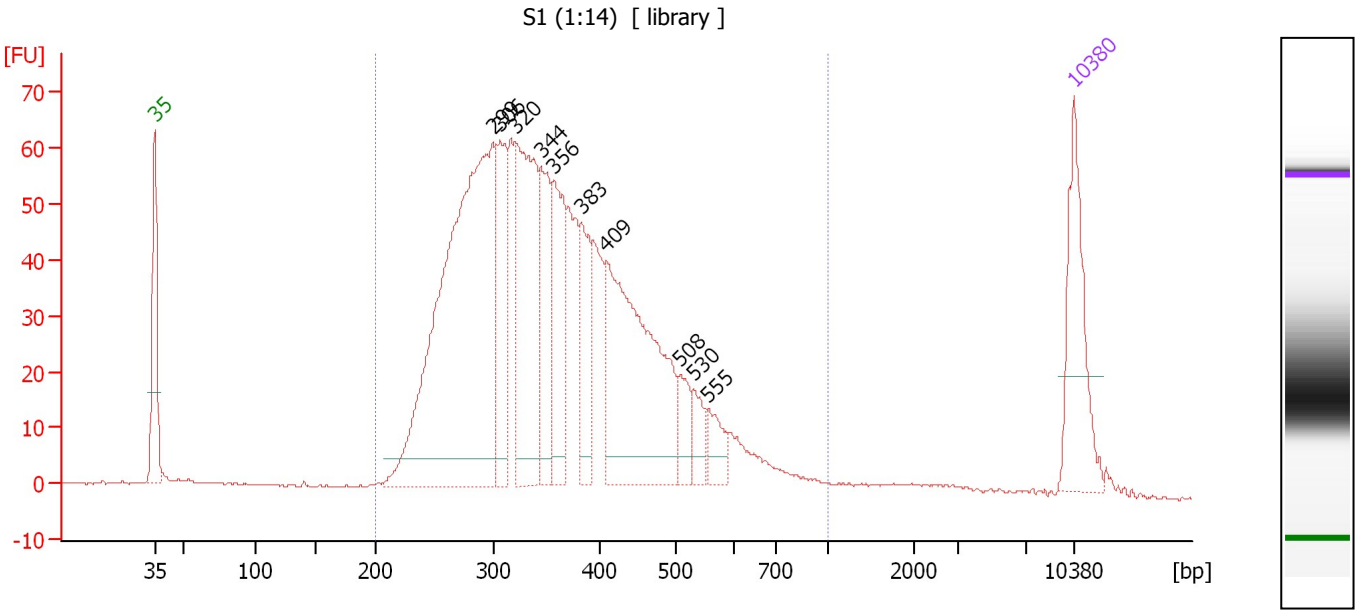
Peak table for Ladder

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		35	125.00	5,411.3	Lower Marker	43.00
2		50	150.00	4,545.5	Ladder Peak	45.24
3		100	150.00	2,272.7	Ladder Peak	50.66
4		150	150.00	1,515.2	Ladder Peak	55.32
5		200	150.00	1,136.4	Ladder Peak	59.89
6		300	150.00	757.6	Ladder Peak	68.89
7		400	150.00	568.2	Ladder Peak	76.93
8		500	150.00	454.5	Ladder Peak	82.64
9		600	150.00	378.8	Ladder Peak	87.16
10		700	150.00	324.7	Ladder Peak	90.35
11		1,000	150.00	227.3	Ladder Peak	94.25
12		2,000	150.00	113.6	Ladder Peak	100.87
13		3,000	150.00	75.8	Ladder Peak	104.20
14		7,000	150.00	32.5	Ladder Peak	109.43
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : S1 (1:14)

Number of peaks found:	10	Corr. Area 1:	1,420.4
Noise:	0.2		

Peak table for sample 1 : S1 (1:14)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	299	572.22	2,904.0		68.76
3	306	100.54	498.6		69.33
4	320	209.55	992.4		70.49
5	344	88.57	390.2		72.42
6	356	107.74	458.0		73.43
7	383	69.21	273.9		75.54
8	409	256.41	950.7		77.42
9	508	26.42	78.8		83.01
10	530	21.16	60.4		84.02
11	555	24.27	66.3		85.13
12	10,380	75.00	10.9	Upper Marker	113.00

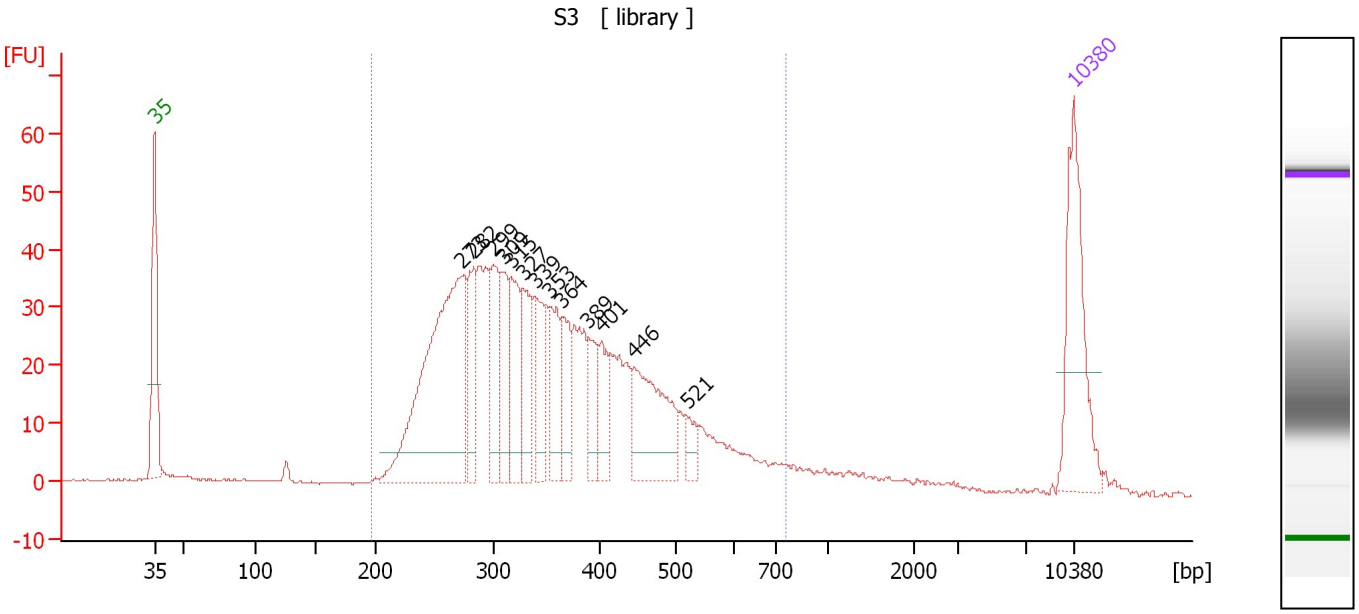
Region table for sample 1 : S1 (1:14)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	369	1,000	1,420.4	97	28.3	1,827.49	8,220.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : S3

Number of peaks found:	13	Corr. Area 1:	918.0
Noise:	0.1		

Peak table for sample 2 : S3

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	273	271.02	1,504.8		66.45
3	282	49.29	264.7		67.28
4	299	55.76	283.0		68.75
5	309	45.92	225.4		69.59
6	315	56.34	270.6		70.13
7	327	49.21	228.0		71.06
8	339	48.19	215.2		72.04
9	353	46.86	201.3		73.12
10	364	40.49	168.7		74.00
11	389	29.65	115.4		76.06
12	401	32.67	123.4		76.99
13	446	88.87	302.0		79.55
14	521	13.95	40.6		83.57
15	10,380	75.00	10.9	Upper Marker	113.00

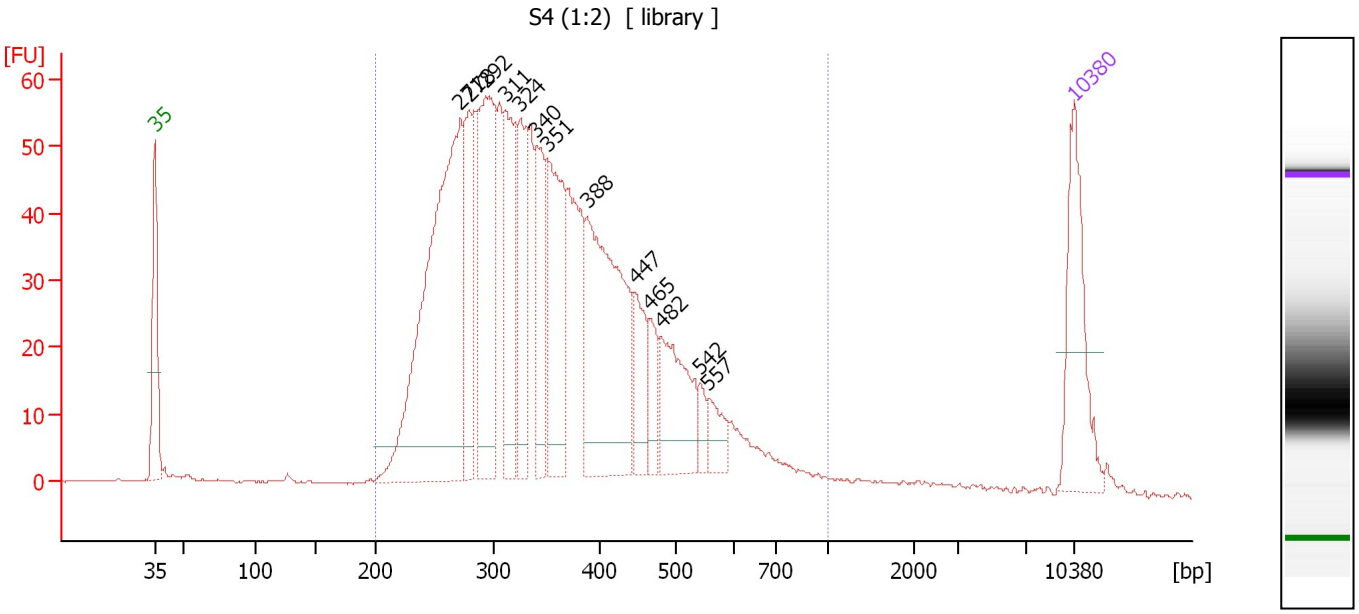
Region table for sample 2 : S3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
196	363	761	918.0	92	28.2	1,198.99	5,526.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : S4 (1:2)

Number of peaks found:	13	Corr. Area 1:	1,358.7
Noise:	0.2		

Peak table for sample 3 : S4 (1:2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	271	431.61	2,411.0		66.30
3	278	88.67	482.5		66.95
4	292	197.36	1,022.8		68.20
5	311	105.78	515.8		69.75
6	324	88.63	414.0		70.85
7	340	83.92	374.0		72.10
8	351	132.96	574.7		72.95
9	388	228.57	893.0		75.95
10	447	50.44	171.1		79.60
11	465	31.57	102.8		80.65
12	482	87.99	276.7		81.60
13	542	14.15	39.5		84.55
14	557	23.11	62.9		85.20
15	10,380	75.00	10.9	Upper Marker	113.00

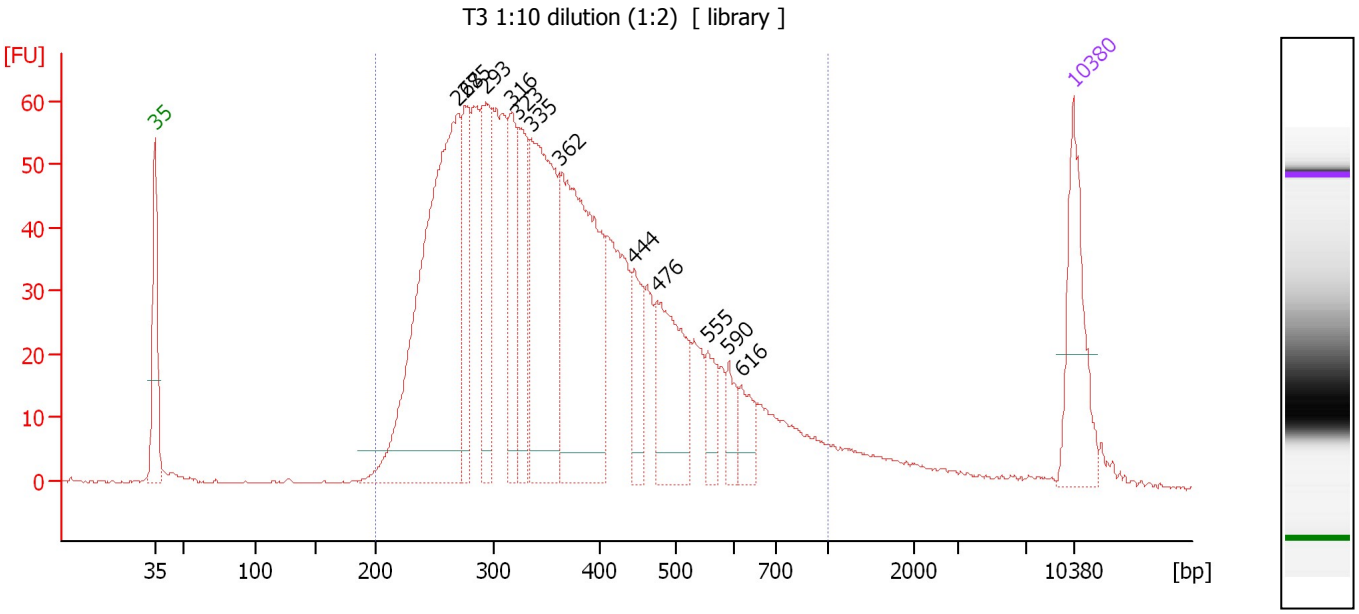
Region table for sample 3 : S4 (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	364	1,000	1,358.7	96	30.0	2,072.21	9,528.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : T3 1:10 dilution (1:2)

Number of peaks found:	12	Corr. Area 1:	1,590.1
Noise:	0.2		

Peak table for sample 4 : T3 1:10 dilution (1:2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	268	497.21	2,808.9		66.03
3	275	103.29	569.1		66.64
4	293	121.15	626.1		68.27
5	316	91.20	437.5		70.16
6	323	98.87	464.0		70.72
7	335	235.00	1,063.2		71.69
8	362	309.30	1,296.1		73.84
9	444	52.74	179.9		79.46
10	476	115.51	367.4		81.29
11	555	31.45	85.9		85.12
12	590	24.18	62.1		86.71
13	616	28.42	69.9		87.68
14	10,380	75.00	10.9	Upper Marker	113.00

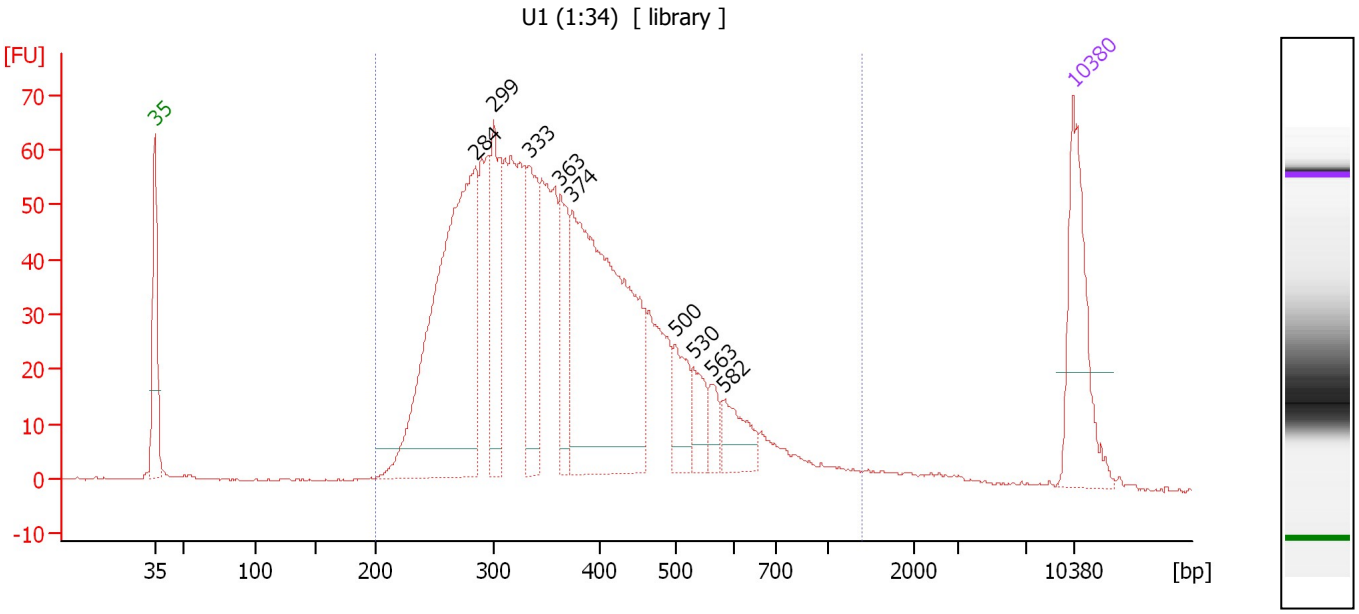
Region table for sample 4 : T3 1:10 dilution (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	383	1,000	1,590.1	93	35.2	2,355.71	10,664.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : U1 (1:34)

Number of peaks found:	9	Corr. Area 1:	1,488.3
Noise:	0.2		

Peak table for sample 5 : U1 (1:34)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	284	391.92	2,094.1		67.41
3	299	106.64	540.0		68.81
4	333	90.85	412.9		71.57
5	363	67.66	282.8		73.91
6	374	336.65	1,365.6		74.80
7	500	39.66	120.1		82.66
8	530	27.83	79.5		84.01
9	563	15.99	43.1		85.47
10	582	33.35	86.8		86.35
11	10,380	75.00	10.9	Upper Marker	113.00

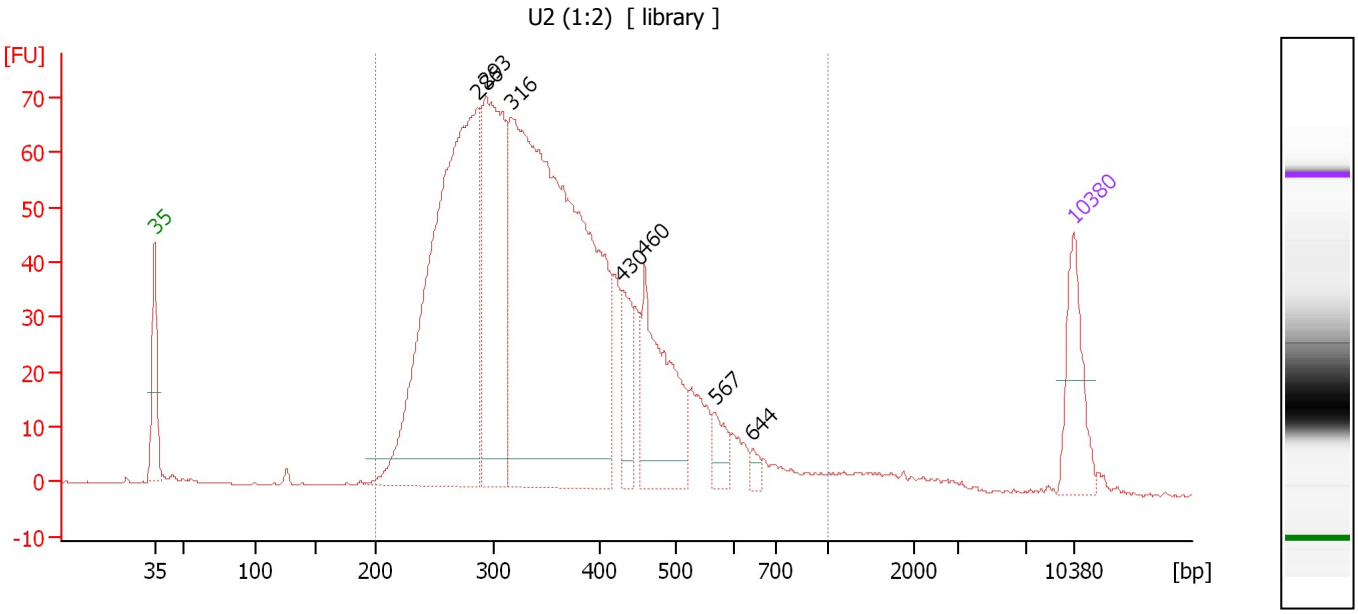
Region table for sample 5 : U1 (1:34)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	388	1,392	1,488.3	95	36.9	1,722.13	7,638.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : U2 (1:2)

Number of peaks found:	7	Corr. Area 1:	1,583.2
Noise:	0.1		

Peak table for sample 6 : U2 (1:2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	286	887.23	4,706.9		67.59
3	293	397.59	2,054.8		68.27
4	316	1,213.88	5,811.2		70.21
5	430	73.93	260.4		78.66
6	460	199.28	656.9		80.33
7	567	32.37	86.5		85.68
8	644	11.01	25.9		88.57
9	10,380	75.00	10.9	Upper Marker	113.00

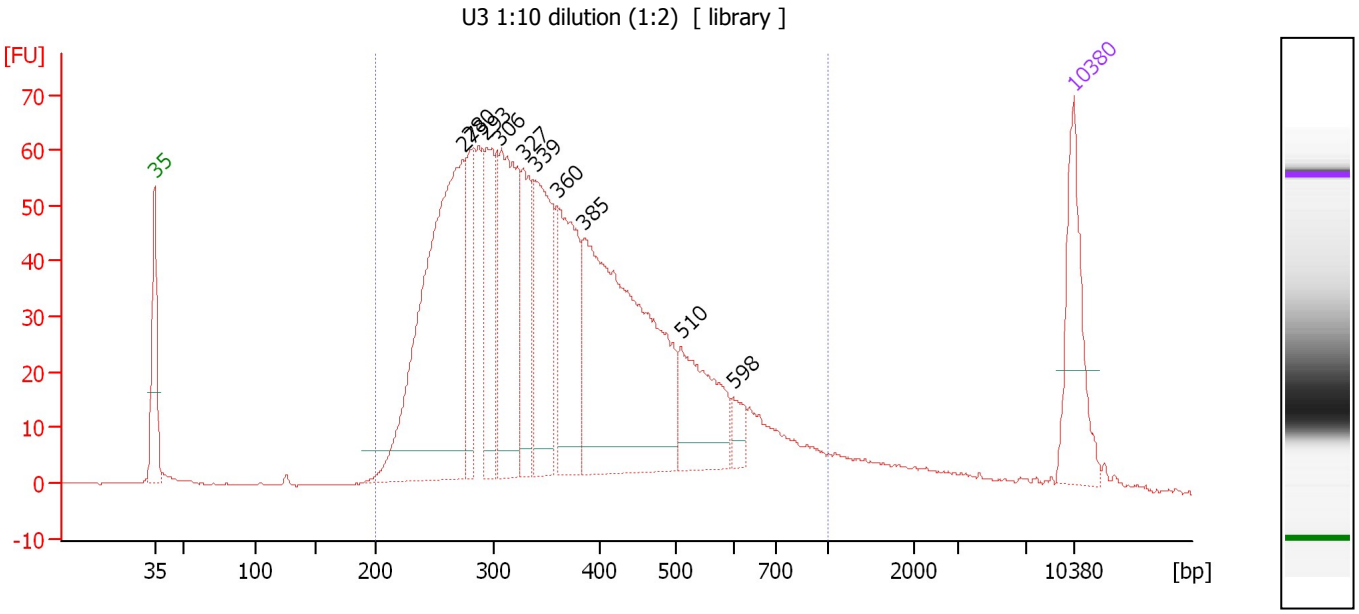
Region table for sample 6 : U2 (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	361	1,000	1,583.2	96	29.5	3,019.42	13,955.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : U3 1:10 dilution (1:2)

Number of peaks found:	10	Corr. Area 1:	1,565.3
Noise:	0.1		

Peak table for sample 7 : U3 1:10 dilution (1:2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	273	464.82	2,578.1		66.47
3	280	88.19	477.8		67.06
4	293	111.92	578.2		68.28
5	306	197.43	978.6		69.34
6	327	95.09	440.9		71.04
7	339	148.40	663.9		72.00
8	360	151.51	638.0		73.70
9	385	394.31	1,552.1		75.72
10	510	105.43	313.1		83.10
11	598	18.19	46.1		87.08
12	10,380	75.00	10.9	Upper Marker	113.00

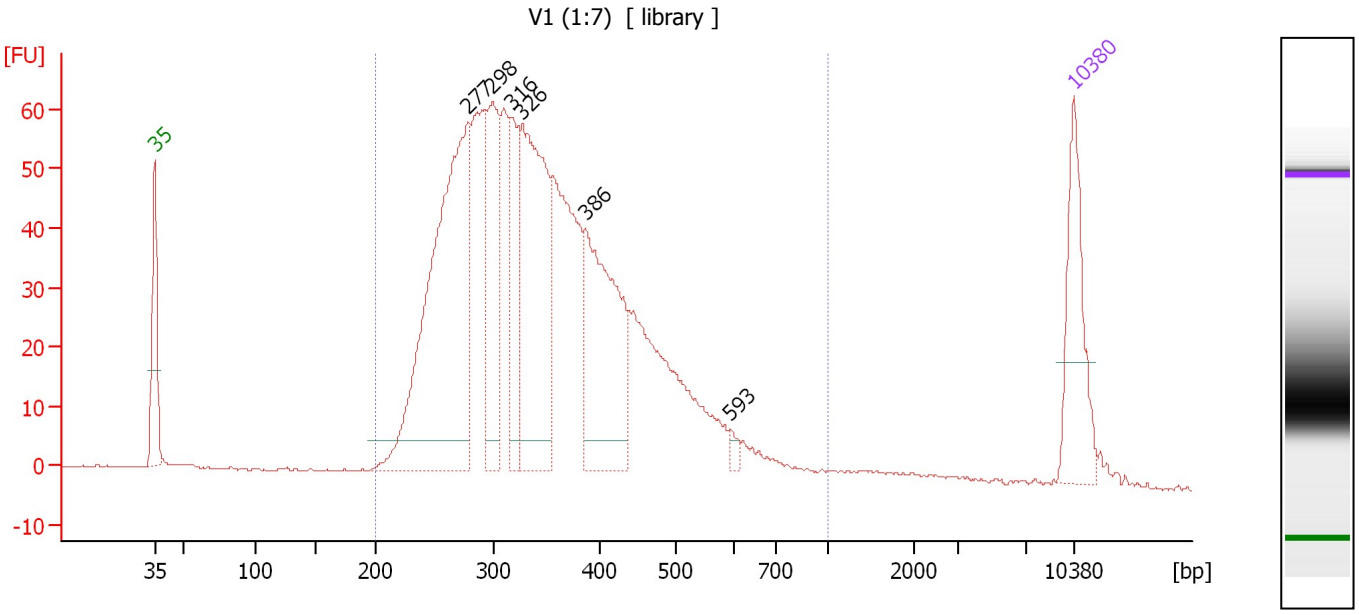
Region table for sample 7 : U3 1:10 dilution (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	381	1,000	1,565.3	94	34.6	2,103.84	9,522.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : V1 (1:7)

Number of peaks found:	6	Corr. Area 1:	1,318.4
Noise:	0.2		

Peak table for sample 8 : V1 (1:7)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	277	461.78	2,522.6		66.85
3	298	137.50	698.7		68.72
4	316	86.70	415.8		70.17
5	326	276.19	1,284.1		70.97
6	386	211.92	832.5		75.78
7	593	6.83	17.4		86.85
8	10,380	75.00	10.9	Upper Marker	113.00

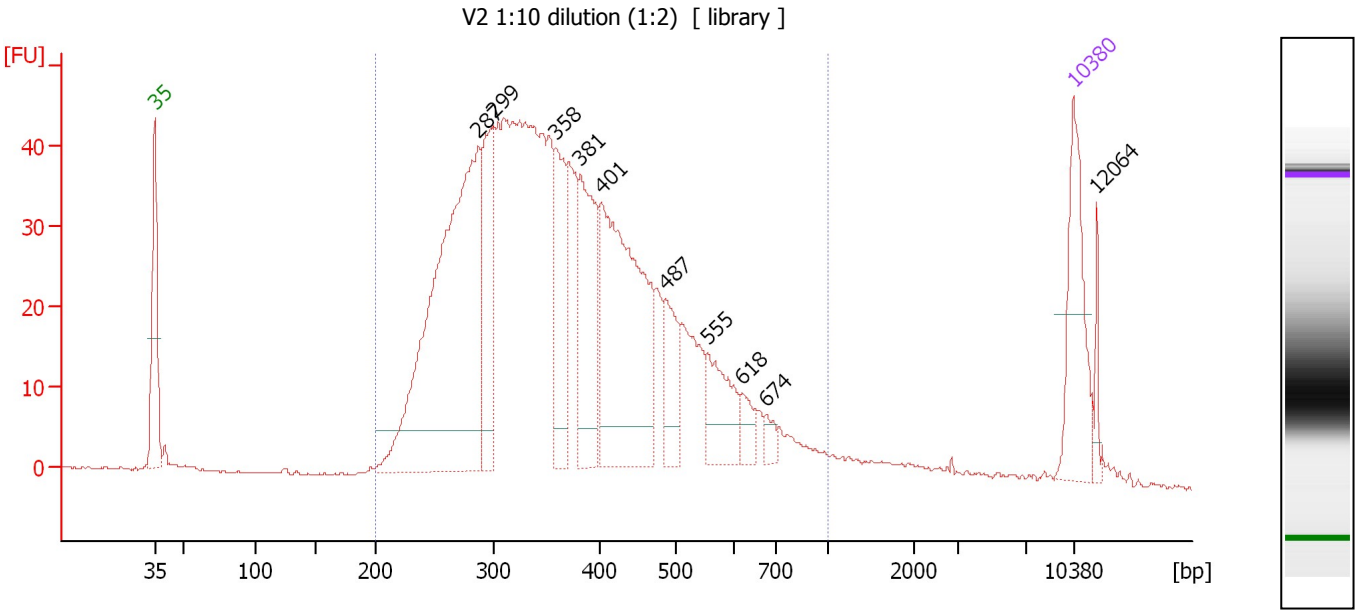
Region table for sample 8 : V1 (1:7)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	356	1,000	1,318.4	97	27.7	1,917.63	8,892.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : V2 1:10 dilution (1:2)

Number of peaks found:	10	Corr. Area 1:	1,098.7
Noise:	0.1		

Peak table for sample 9 : V2 1:10 dilution (1:2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	287	507.75	2,684.4		67.68
3	299	123.95	629.0		68.76
4	358	100.40	424.9		73.55
5	381	126.25	501.4		75.44
6	401	281.37	1,062.4		77.00
7	487	56.66	176.2		81.91
8	555	59.54	162.5		85.14
9	618	17.45	42.8		87.73
10	674	10.88	24.5		89.51
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,064	0.00	0.0		114.78

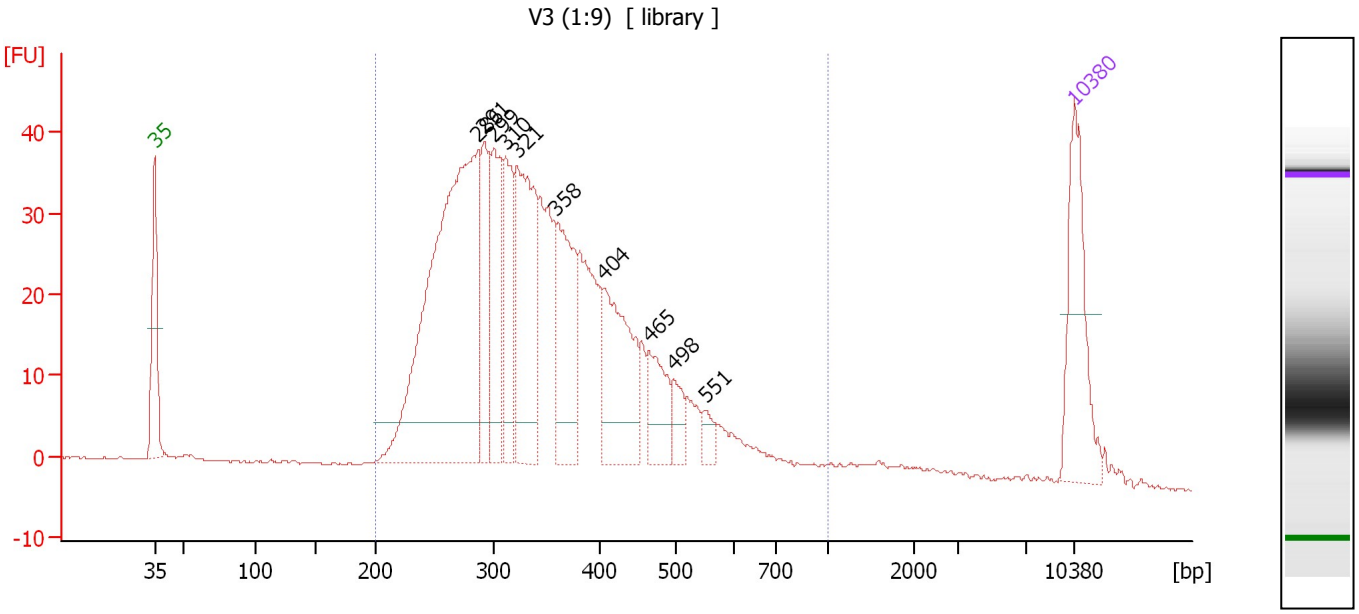
Region table for sample 9 : V2 1:10 dilution (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	387	1,000	1,098.7	94	32.0	2,189.63	9,628.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : V3 (1:9)

Number of peaks found:	10	Corr. Area 1:	847.9
Noise:	0.1		

Peak table for sample 10 : V3 (1:9)

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	◀	35	125.00	5,411.3	Lower Marker	43.00
2		286	472.15	2,503.7		67.60
3		291	79.07	411.4		68.09
4		299	99.59	504.6		68.80
5		310	77.71	380.1		69.67
6		321	163.28	770.1		70.60
7		358	111.92	473.0		73.59
8		404	115.71	433.5		77.18
9		465	48.44	157.7		80.67
10		498	21.46	65.3		82.52
11		551	11.29	31.0		84.97
12	▶	10,380	75.00	10.9	Upper Marker	113.00

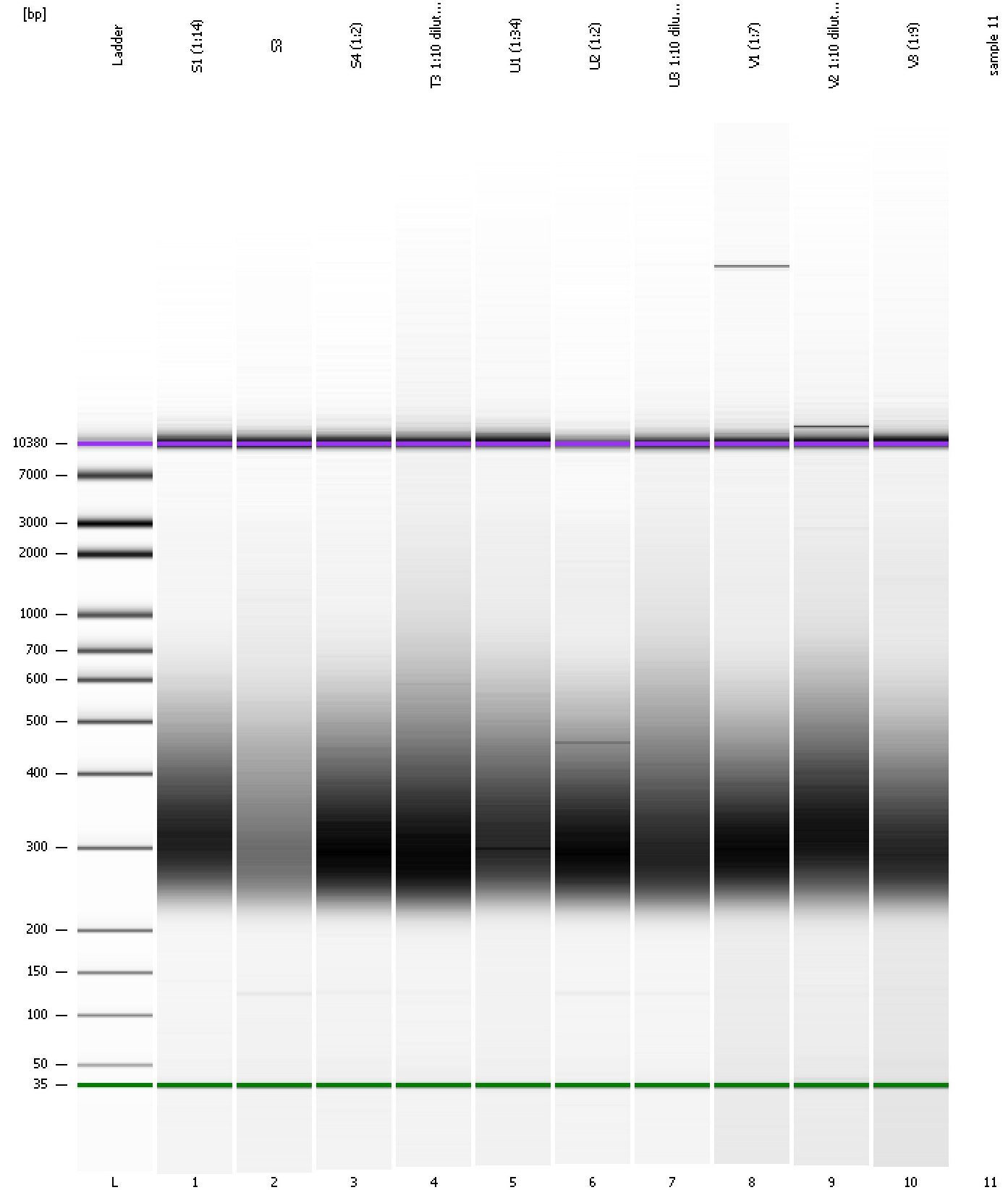
Region table for sample 10 : V3 (1:9)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	357	1,000	847.9	96	29.5	1,601.56	7,462.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Invalid Samples

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad

Created: 1/12/2015 3:33:44 PM
Modified: 1/12/2015 4:17:23 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		1/12/2015 4:12:11 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-01-12\2015-01-12_004.xad)		Instrument	Run		1/12/2015 3:33:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/12/2015 3:33:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/12/2015 3:33:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/12/2015 3:33:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/12/2015 3:33:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/12/2015 3:33:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/12/2015 3:33:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1