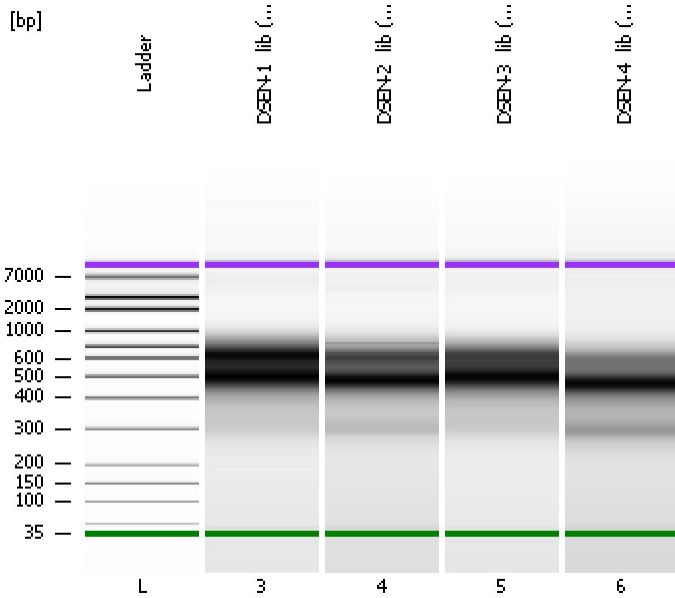


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ings\Bioanalyzer\2015-12-07\2015-12-07\_001\_DSEN1-4 Libs.xad

Created: 12/7/2015 10:31:26 AM  
Modified: 12/7/2015 11:15:22 AM

**Electrophoresis File Run Summary**



Instrument Information:

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

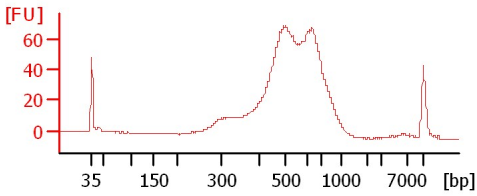
Assay Information:

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

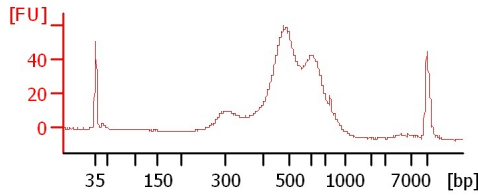
Chip Information:

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

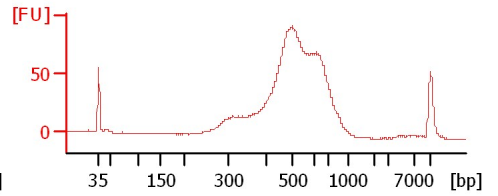
**DSEN-1 lib (1:2)**



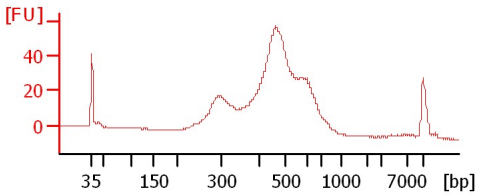
**DSEN-2 lib (1:2)**



**DSEN-3 lib (1:4)**



**DSEN-4 lib (1:2)**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ings\Bioanalyzer\2015-12-07\2015-12-07\_001\_DSEN1-4 Libs.xad

Created: 12/7/2015 10:31:26 AM  
 Modified: 12/7/2015 11:15:22 AM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
DSEN-1 lib (1:2)		<input type="checkbox"/>				
DSEN-2 lib (1:2)		<input type="checkbox"/>				
DSEN-3 lib (1:4)		<input type="checkbox"/>				
DSEN-4 lib (1:2)		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>				

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ings\Bioanalyzer\2015-12-07\2015-12-07\_001\_DSEN1-4 Libs.xad

Created: 12/7/2015 10:31:26 AM  
 Modified: 12/7/2015 11:15:22 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

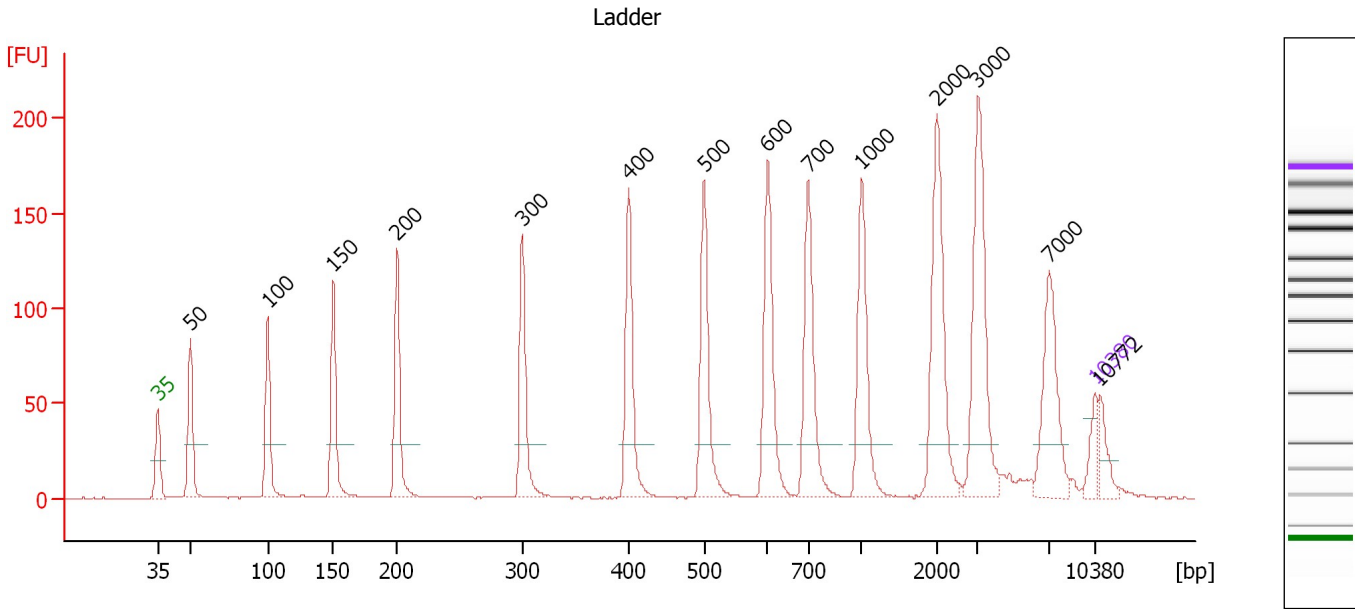
**Ladder**

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:\...ings\Bioanalyzer\2015-12-07\2015-12-07\_001\_DSEN1-4 Libs.xad

Created: 12/7/2015 10:31:26 AM  
 Modified: 12/7/2015 11:15:22 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

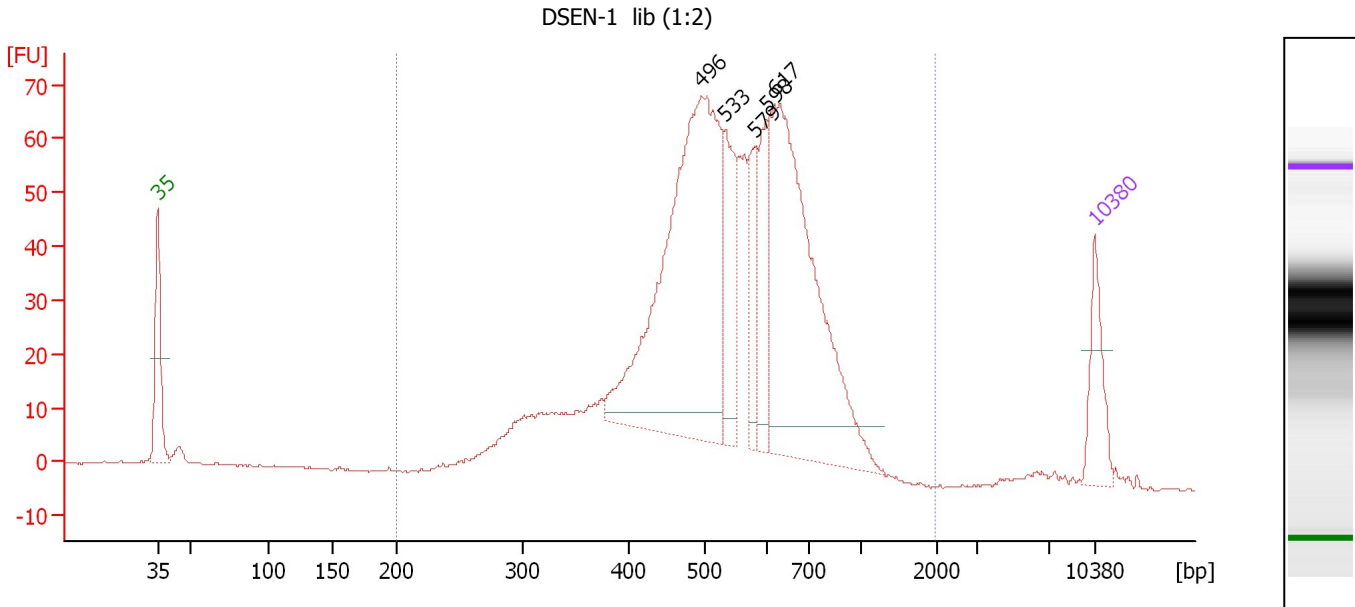
**Peak table for Ladder**

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	45.45
3	100	150.00	2,272.7	Ladder Peak	51.25
4	150	150.00	1,515.2	Ladder Peak	56.11
5	200	150.00	1,136.4	Ladder Peak	60.92
6	300	150.00	757.6	Ladder Peak	70.24
7	400	150.00	568.2	Ladder Peak	78.20
8	500	150.00	454.5	Ladder Peak	83.84
9	600	150.00	378.8	Ladder Peak	88.55
10	700	150.00	324.7	Ladder Peak	91.60
11	1,000	150.00	227.3	Ladder Peak	95.57
12	2,000	150.00	113.6	Ladder Peak	101.22
13	3,000	150.00	75.8	Ladder Peak	104.26
14	7,000	150.00	32.5	Ladder Peak	109.61
15	10,380	75.00	10.9	Upper Marker	113.00
16	10,772	0.00	0.0		113.39

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ings\Bioanalyzer\2015-12-07\2015-12-07\_001\_DSEN1-4 Libs.xad

Created: 12/7/2015 10:31:26 AM  
 Modified: 12/7/2015 11:15:22 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : DSEN-1 lib (1:2)**

Number of peaks found: 5                      Corr. Area 1: 1,189.2  
 Noise: 0.2

**Peak table for sample 3 : DSEN-1 lib (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	496	909.37	2,776.3		83.63
3	533	176.40	501.5		85.39
4	579	104.24	272.9		87.55
5	598	131.76	333.8		88.46
6	617	661.17	1,624.3		89.06
7	10,380	75.00	10.9	Upper Marker	113.00

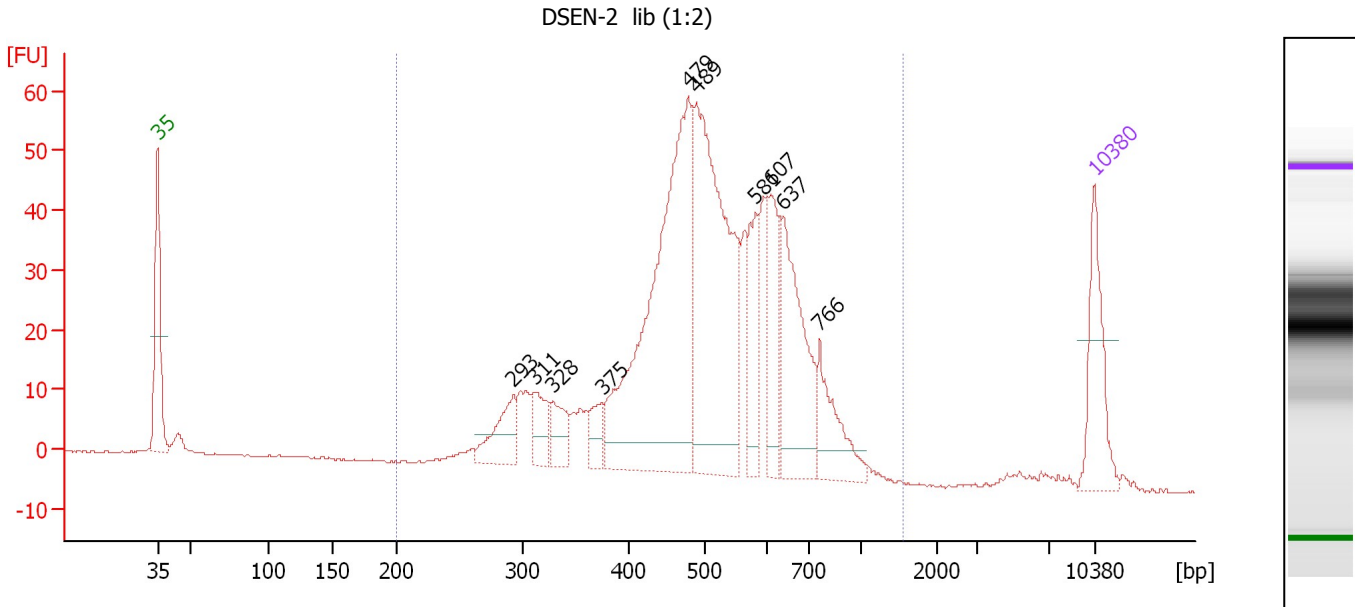
**Region table for sample 3 : DSEN-1 lib (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,977	550	1,189.2	8,903.9	2,902.47	96	28.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ings\Bioanalyzer\2015-12-07\2015-12-07\_001\_DSEN1-4 Libs.xad

Created: 12/7/2015 10:31:26 AM  
 Modified: 12/7/2015 11:15:22 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : DSEN-2 lib (1:2)**

Number of peaks found: 10                      Corr. Area 1: 893.1  
 Noise: 0.2

**Peak table for sample 4 : DSEN-2 lib (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	293	67.45	349.2		69.56
3	311	43.70	212.8		71.13
4	328	44.28	204.3		72.50
5	375	29.84	120.6		76.20
6	479	539.07	1,706.3		82.64
7	489	430.86	1,333.8		83.25
8	581	80.13	209.0		87.66
9	607	89.22	222.7		88.77
10	637	174.59	415.2		89.68
11	766	77.70	153.7		92.47
12	10,380	75.00	10.9	Upper Marker	113.00

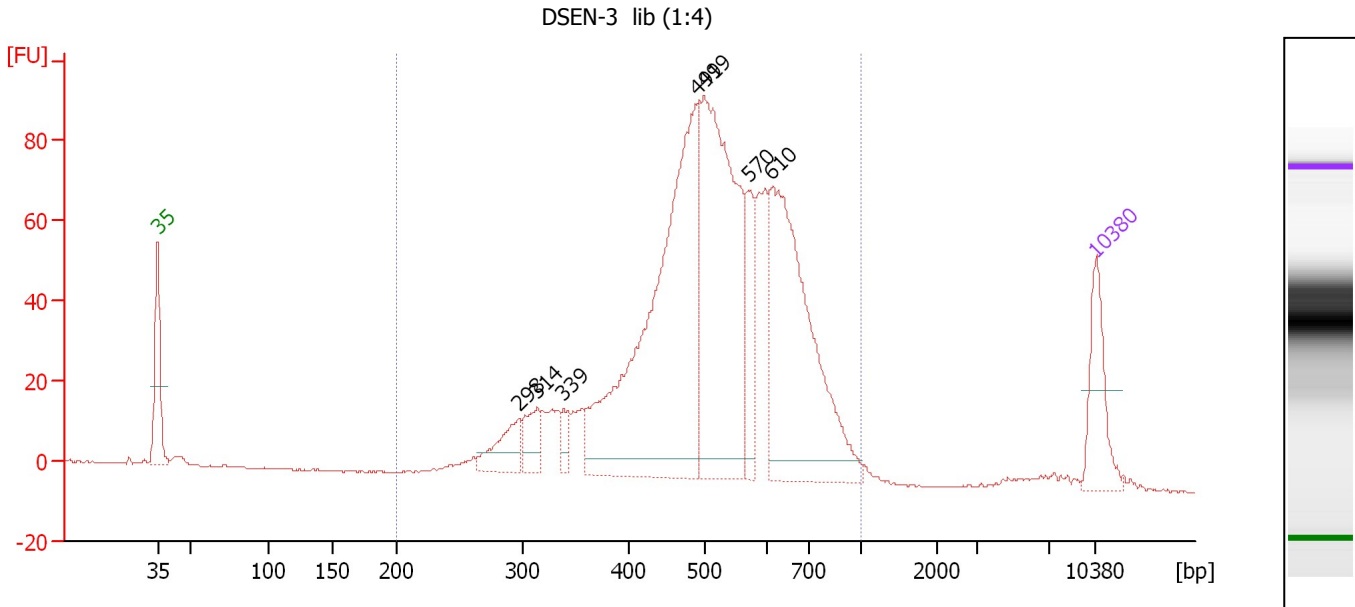
**Region table for sample 4 : DSEN-2 lib (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,544	517	893.1	5,877.6	1,819.30	97	25.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ings\Bioanalyzer\2015-12-07\2015-12-07\_001\_DSEN1-4 Libs.xad

Created: 12/7/2015 10:31:26 AM  
 Modified: 12/7/2015 11:15:22 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : DSEN-3 lib (1:4)**

Number of peaks found: 7                      Corr. Area 1: 1,400.2  
 Noise: 0.2

**Peak table for sample 5 : DSEN-3 lib (1:4)**

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	298	71.52	363.9		70.03
3	314	52.45	253.0		71.37
4	339	25.10	112.3		73.32
5	491	737.95	2,276.2		83.35
6	499	548.21	1,663.2		83.81
7	570	90.87	241.5		87.15
8	610	441.07	1,096.4		88.84
9	10,380	75.00	10.9	Upper Marker	113.00

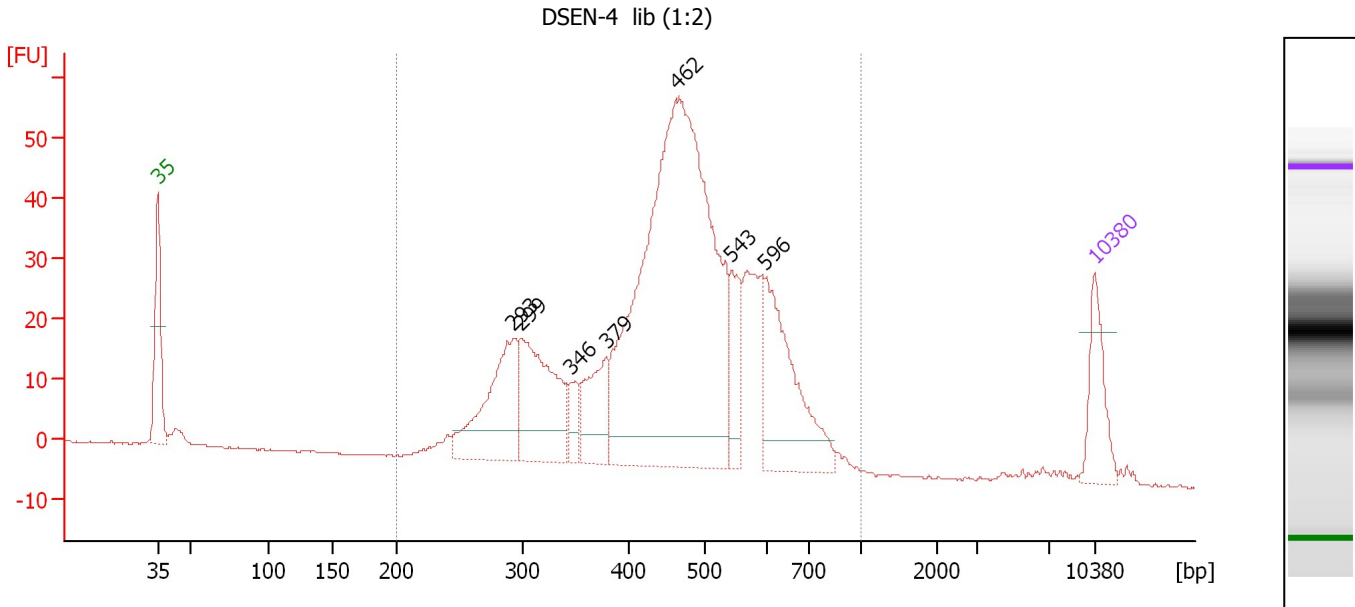
**Region table for sample 5 : DSEN-3 lib (1:4)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	523	1,400.2	7,155.5	2,265.70	98	23.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ings\Bioanalyzer\2015-12-07\2015-12-07\_001\_DSEN1-4 Libs.xad

Created: 12/7/2015 10:31:26 AM  
 Modified: 12/7/2015 11:15:22 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : DSEN-4 lib (1:2)**

Number of peaks found: 7                      Corr. Area 1: 870.7  
 Noise: 0.2

**Peak table for sample 6 : DSEN-4 lib (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	293	244.17	1,264.3		69.56
3	299	259.26	1,312.5		70.18
4	346	35.53	155.5		73.92
5	379	118.45	473.7		76.52
6	462	1,239.06	4,060.5		81.72
7	543	86.65	241.7		85.87
8	596	241.53	614.0		88.37
9	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 6 : DSEN-4 lib (1:2)**

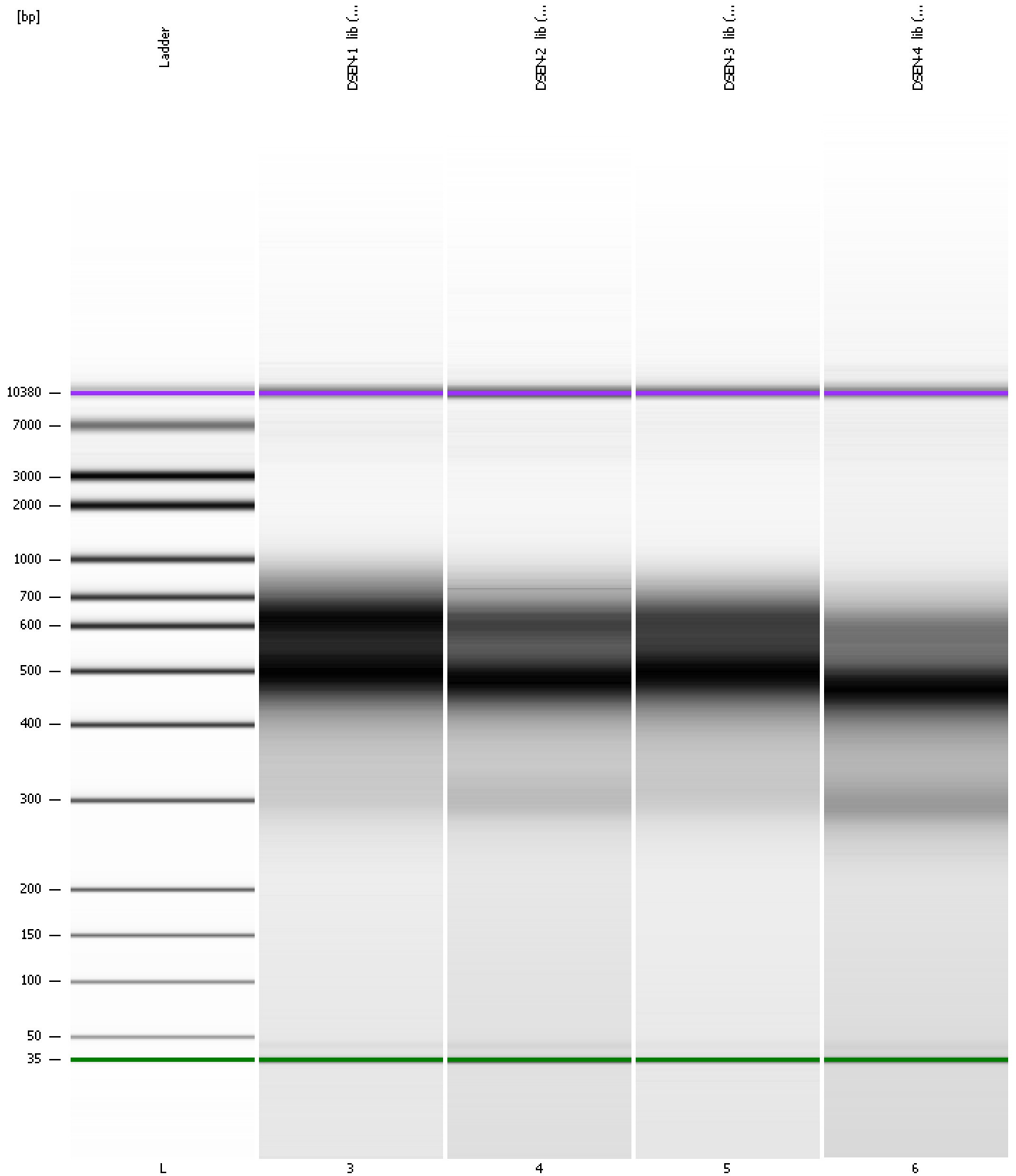
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	466	870.7	8,721.2	2,427.57	98	25.1



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ings\Bioanalyzer\2015-12-07\2015-12-07\_001\_DSEN1-4 Libs.xad

Created: 12/7/2015 10:31:26 AM  
Modified: 12/7/2015 11:15:22 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ings\Bioanalyzer\2015-12-07\2015-12-07\_001\_DSEN1-4 Libs.xad

Created: 12/7/2015 10:31:26 AM  
 Modified: 12/7/2015 11:15:22 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		12/7/2015 11:13:13 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-12-07\2015-12-07_001.xad)		Instrument	Run		12/7/2015 10:31:31 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/7/2015 10:31:31 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/7/2015 10:31:31 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/7/2015 10:31:31 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/7/2015 10:31:31 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/7/2015 10:31:31 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/7/2015 10:31:31 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1