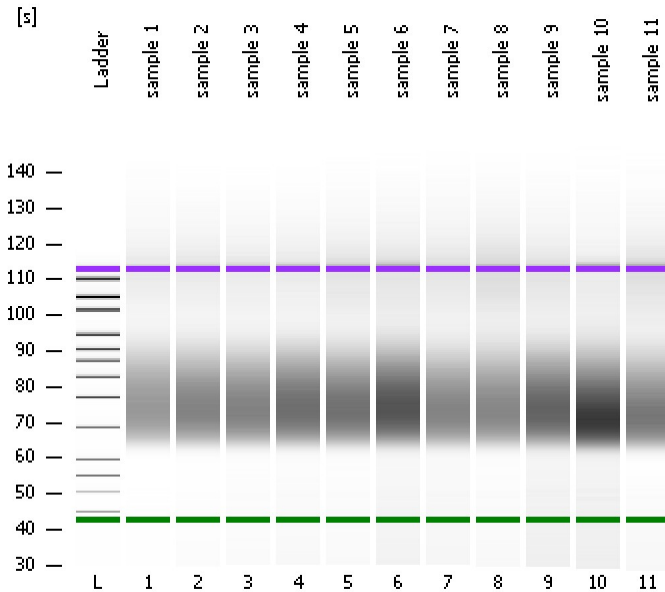


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
Modified: 10/30/2015 10:42:15 AM

Electrophoresis File Run Summary



Instrument Information:

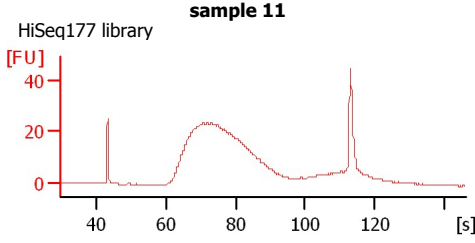
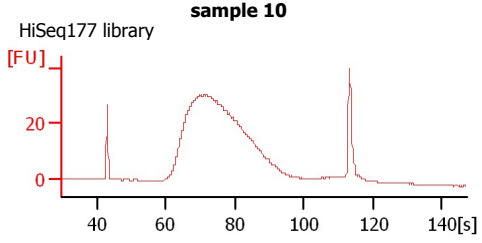
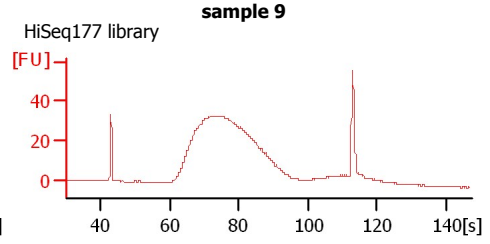
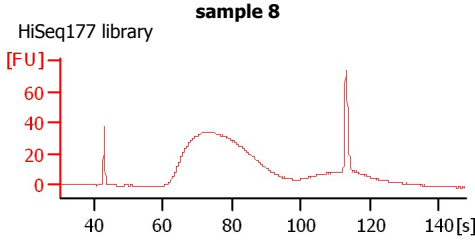
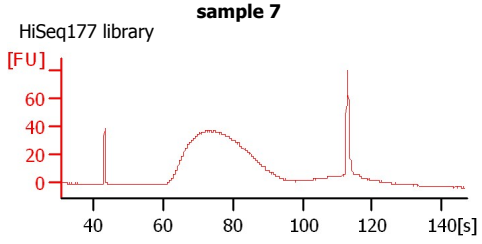
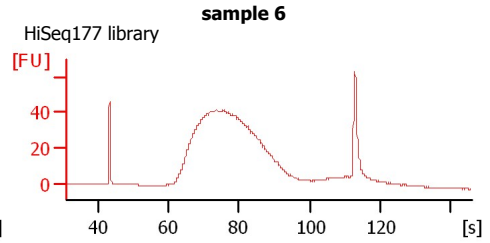
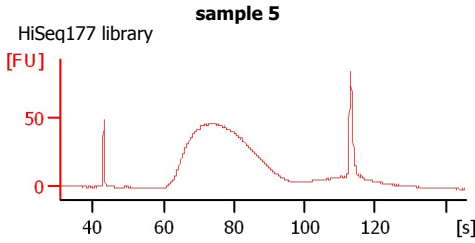
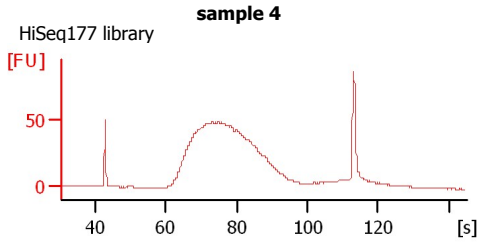
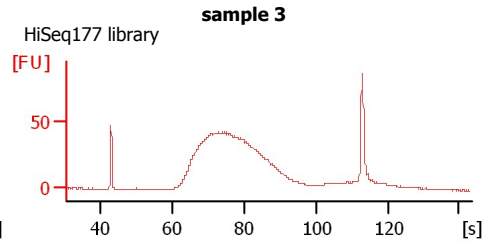
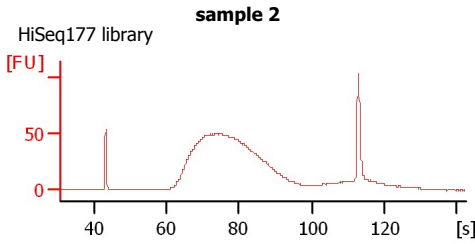
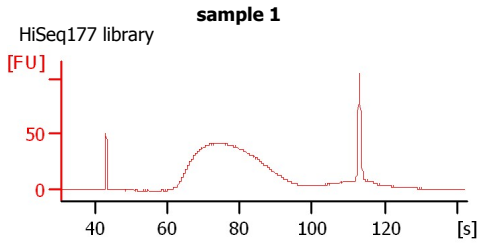
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
Modified: 10/30/2015 10:42:15 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1	HiSeq177 library	<input type="checkbox"/>	✓			
sample 2	HiSeq177 library	<input type="checkbox"/>	✓			
sample 3	HiSeq177 library	<input type="checkbox"/>	✓			
sample 4	HiSeq177 library	<input type="checkbox"/>	✓			
sample 5	HiSeq177 library	<input type="checkbox"/>	✓			
sample 6	HiSeq177 library	<input type="checkbox"/>	✓			
sample 7	HiSeq177 library	<input type="checkbox"/>	✓			
sample 8	HiSeq177 library	<input type="checkbox"/>	✓			
sample 9	HiSeq177 library	<input type="checkbox"/>	✓			
sample 10	HiSeq177 library	<input type="checkbox"/>	✓			
sample 11	HiSeq177 library	<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\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
Modified: 10/30/2015 10:42:15 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

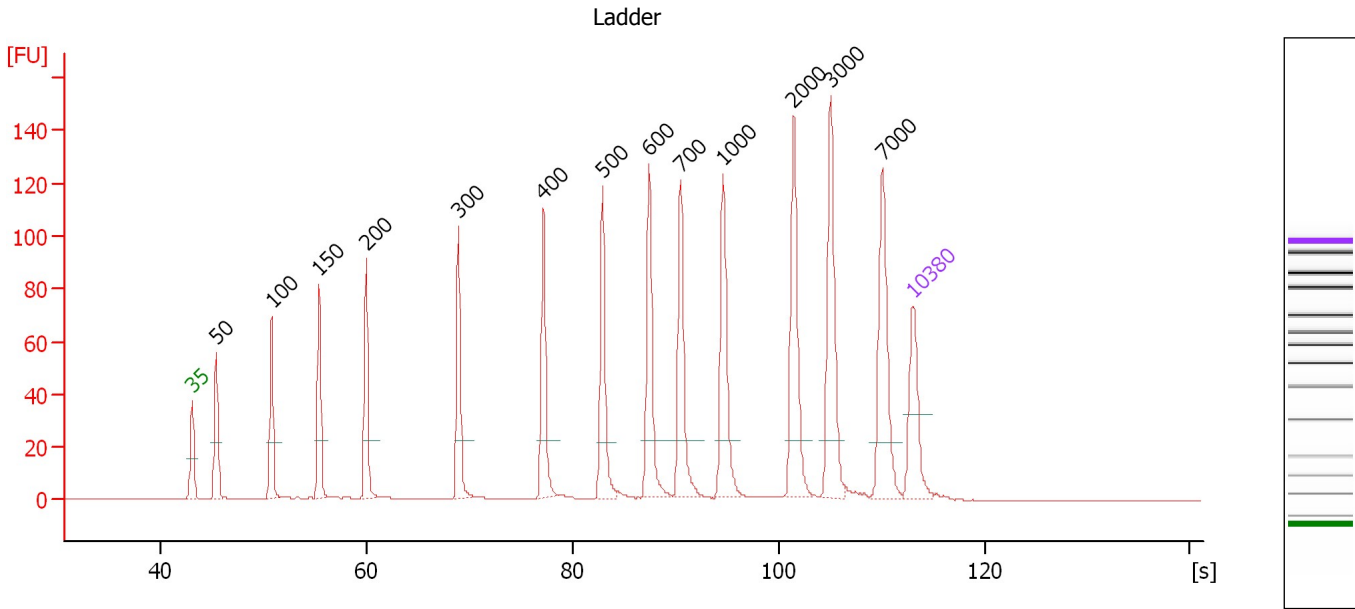
Ladder

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\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

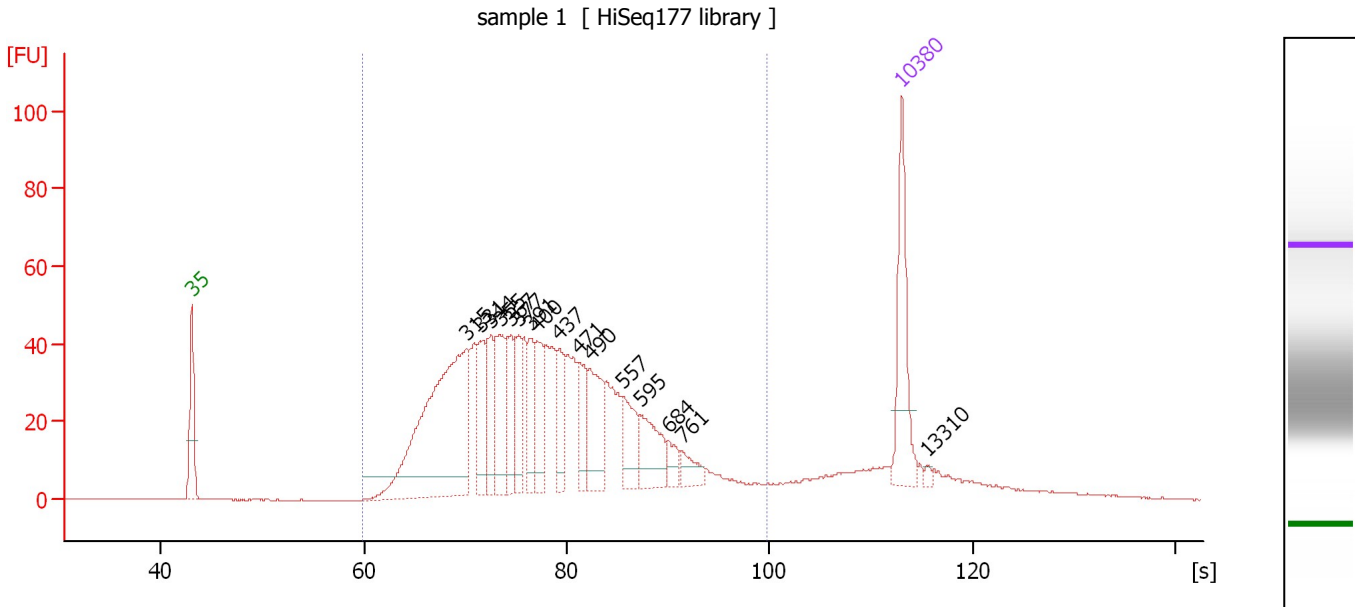
Peak table for Ladder

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	45.35
3	100	150.00	2,272.7	Ladder Peak	50.73
4	150	150.00	1,515.2	Ladder Peak	55.32
5	200	150.00	1,136.4	Ladder Peak	59.91
6	300	150.00	757.6	Ladder Peak	68.89
7	400	150.00	568.2	Ladder Peak	77.14
8	500	150.00	454.5	Ladder Peak	82.88
9	600	150.00	378.8	Ladder Peak	87.42
10	700	150.00	324.7	Ladder Peak	90.50
11	1,000	150.00	227.3	Ladder Peak	94.63
12	2,000	150.00	113.6	Ladder Peak	101.46
13	3,000	150.00	75.8	Ladder Peak	105.07
14	7,000	150.00	32.5	Ladder Peak	110.13
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 16 Corr. Area 1: 1,145.5
 Noise: 0.1

Peak table for sample 1 : sample 1

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	315	351.95	1,694.1		70.11
3	331	60.83	278.0		71.49
4	344	56.50	249.1		72.49
5	355	77.80	332.5		73.39
6	367	53.66	221.3		74.45
7	377	45.41	182.5		75.25
8	391	46.35	179.8		76.36
9	400	50.84	192.8		77.10
10	437	46.28	160.4		79.27
11	471	42.86	137.8		81.23
12	490	73.24	226.6		82.29
13	557	48.22	131.2		85.47
14	595	52.39	133.3		87.21
15	684	17.24	38.2		90.02
16	761	18.99	37.8		91.34
17	10,380	75.00	10.9	Upper Marker	113.00
18	13,310	0.00	0.0		115.49

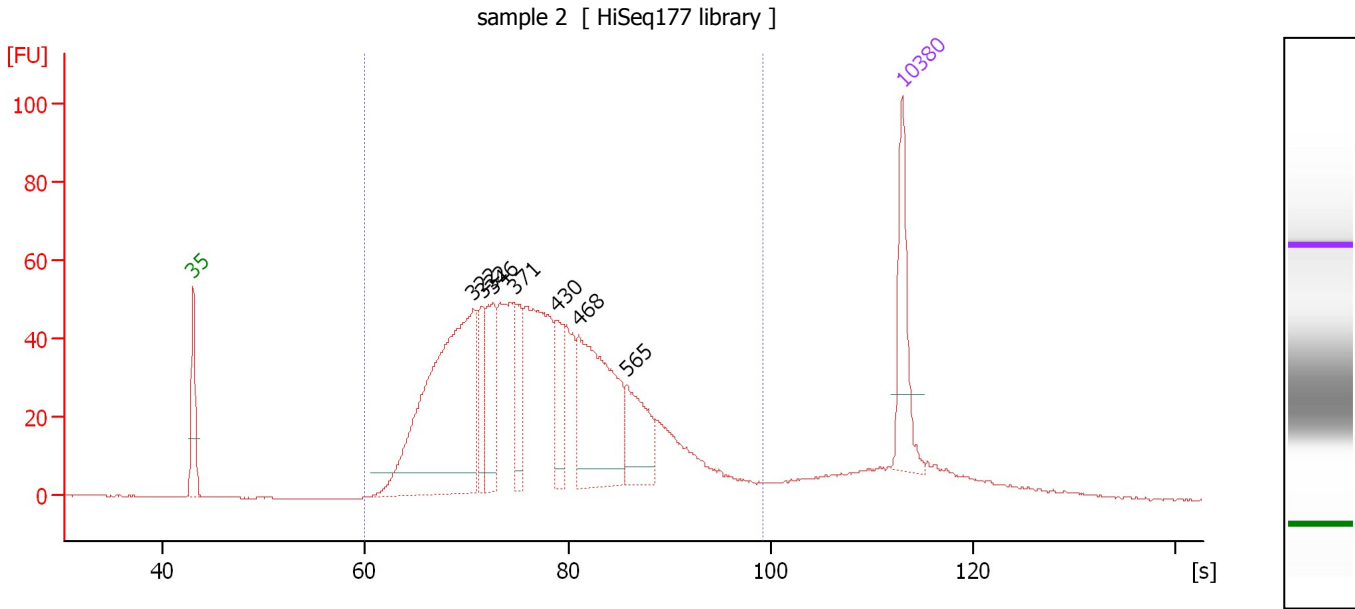
Region table for sample 1 : sample 1

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
59.91	99.81	452	1,145.5	5,864.6	1,482.96	90	44.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 7 Corr. Area 1: 1,328.1
 Noise: 0.1

Peak table for sample 2 : sample 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	322	475.74	2,240.6		70.68
3	332	58.38	266.4		71.53
4	346	92.45	405.4		72.64
5	371	70.29	287.4		74.71
6	430	61.29	216.1		78.85
7	468	227.50	737.1		81.02
8	565	84.57	226.6		85.85
9	10,380	75.00	10.9	Upper Marker	113.00

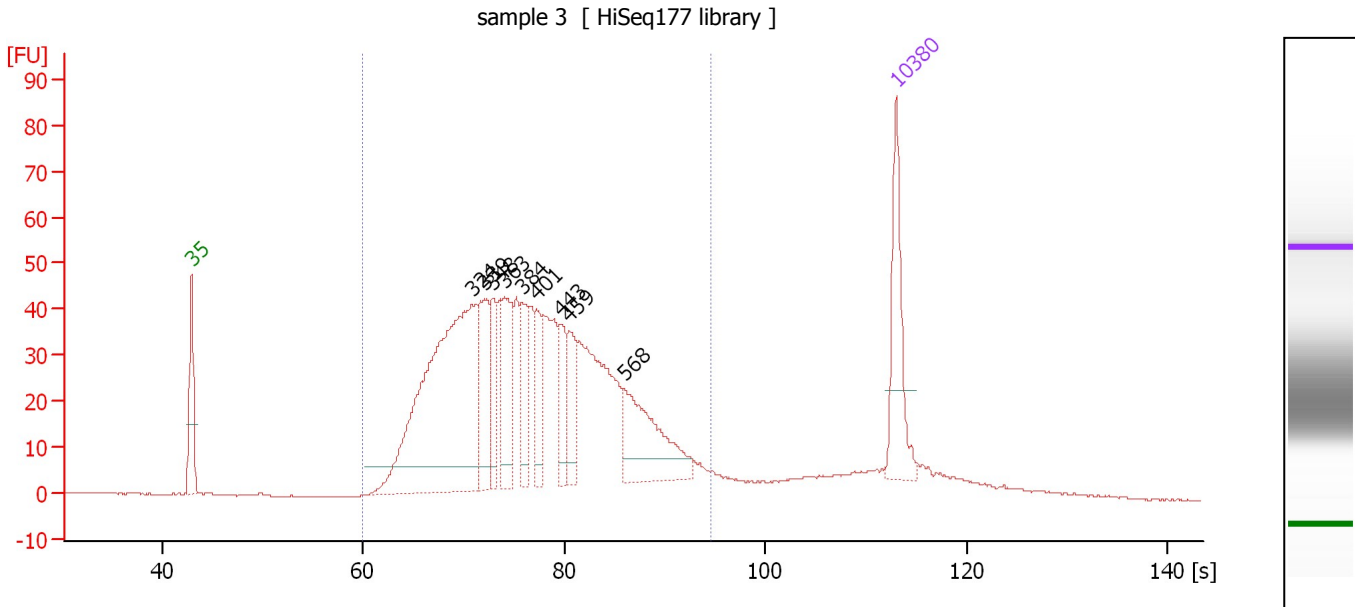
Region table for sample 2 : sample 2

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
59.91	99.32	443	1,328.1	6,845.7	1,713.25	91	42.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 9 Corr. Area 1: 1,120.5
 Noise: 0.2

Peak table for sample 3 : sample 3

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	324	481.79	2,250.2		70.90
3	339	89.29	399.5		72.08
4	348	54.19	235.7		72.88
5	363	88.49	369.1		74.11
6	384	56.08	221.3		75.81
7	401	44.68	168.8		77.20
8	443	42.13	144.1		79.60
9	459	51.03	168.6		80.51
10	568	116.18	310.1		85.95
11	10,380	75.00	10.9	Upper Marker	113.00

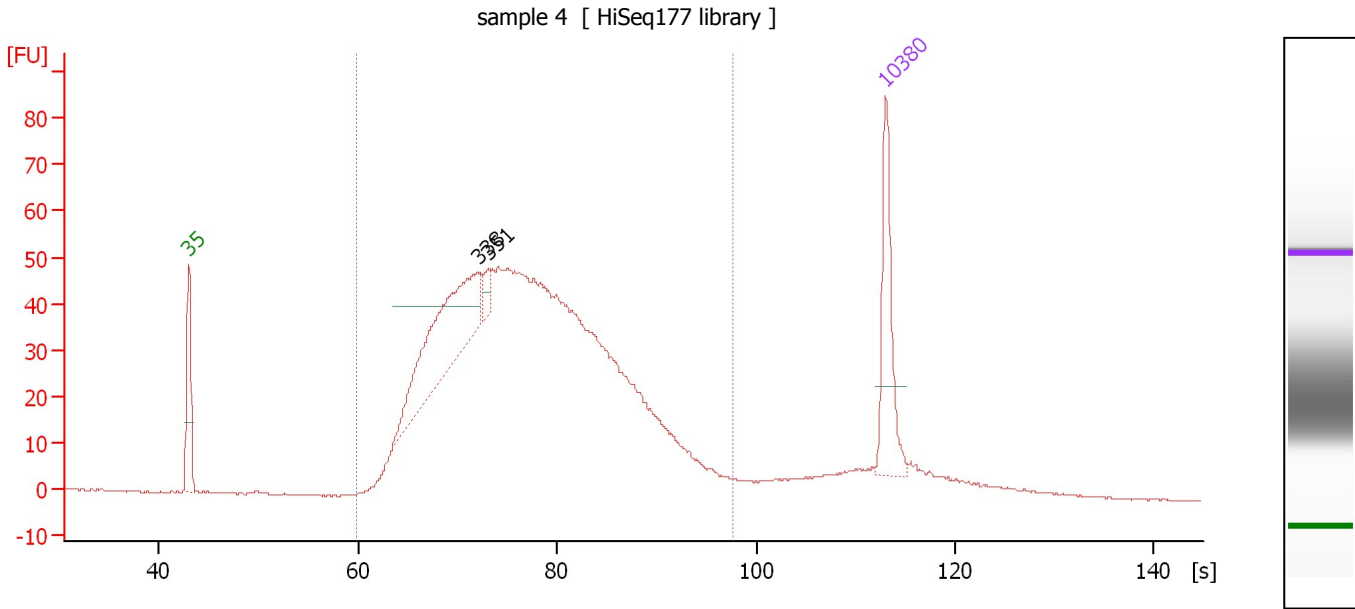
Region table for sample 3 : sample 3

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
59.91	94.63	421	1,120.5	6,493.1	1,600.74	90	32.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 2 Corr. Area 1: 1,295.2
 Noise: 0.1

Peak table for sample 4 : sample 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	338	203.36	911.3		72.04
3	351	15.34	66.3		73.06
4	10,380	75.00	10.9	Upper Marker	113.00

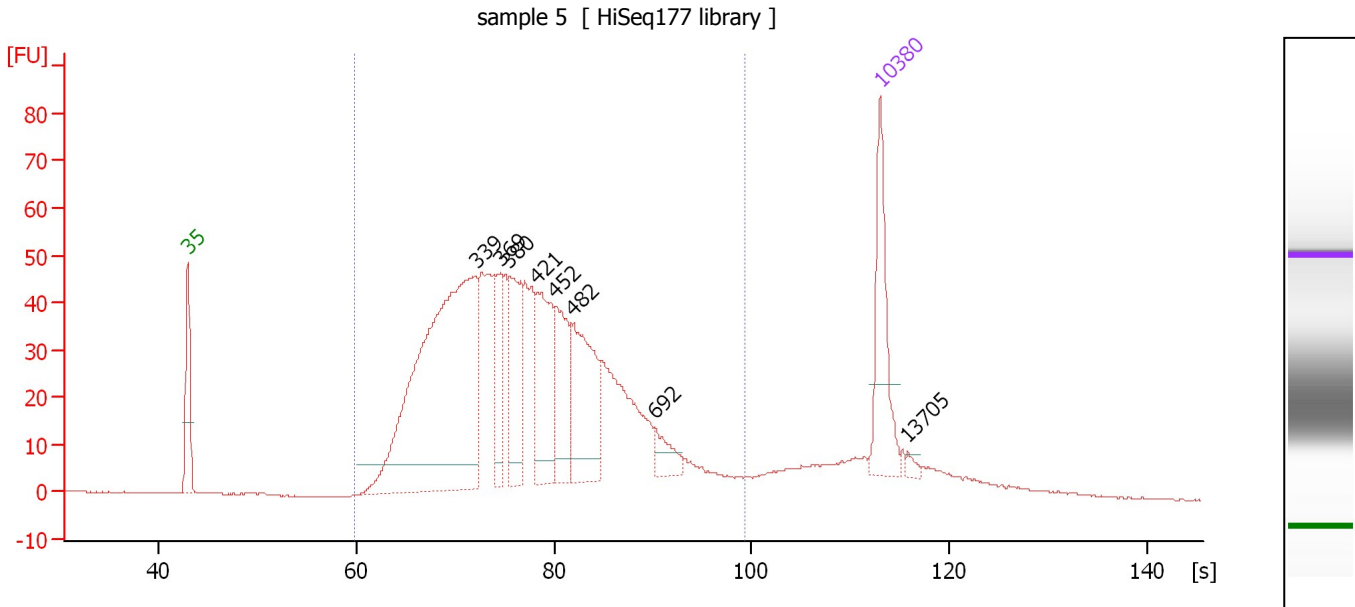
Region table for sample 4 : sample 4

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
59.91	97.57	436	1,295.2	7,443.9	1,860.01	93	37.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 8 Corr. Area 1: 1,230.0
 Noise: 0.1

Peak table for sample 5 : sample 5

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	339	548.02	2,449.4		72.11
3	369	61.59	253.1		74.55
4	380	104.69	417.6		75.47
5	421	115.05	413.9		78.35
6	452	87.26	292.3		80.15
7	482	125.95	396.2		81.83
8	692	25.66	56.2		90.25
9	10,380	75.00	10.9	Upper Marker	113.00
10	13,705	0.00	0.0		115.82

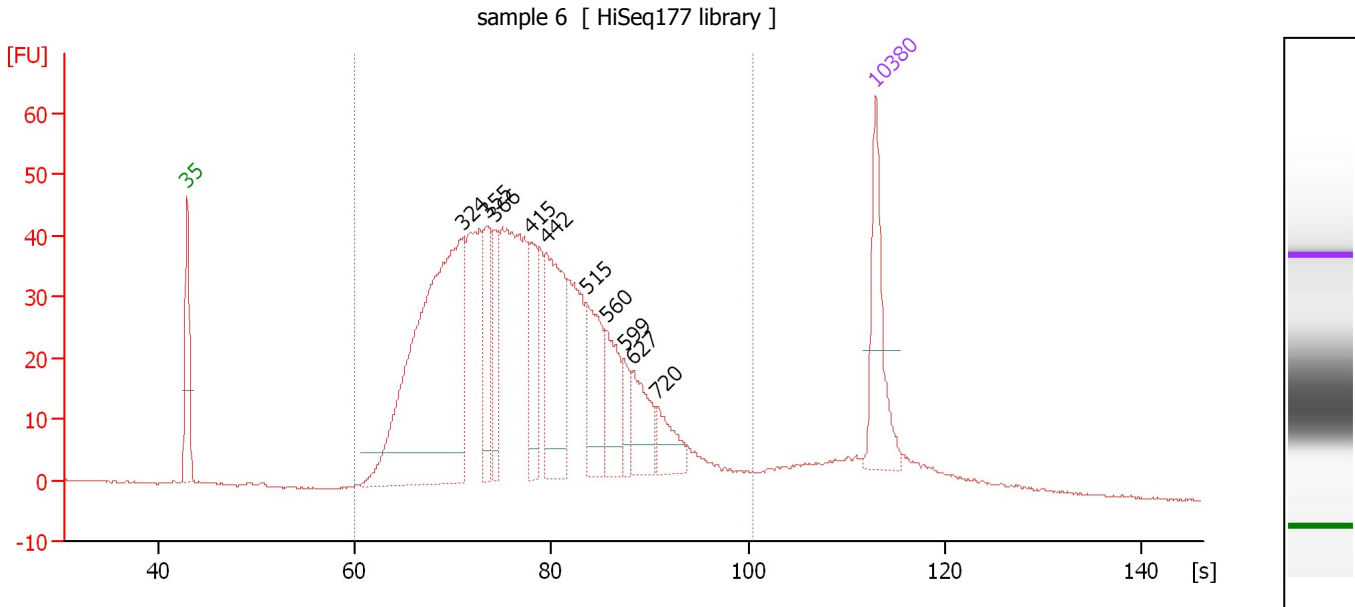
Region table for sample 5 : sample 5

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
59.91	99.30	440	1,230.0	6,554.0	1,631.48	91	42.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 10 Corr. Area 1: 1,142.5
 Noise: 0.1

Peak table for sample 6 : sample 6

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	324	521.59	2,436.3		70.90
3	355	76.91	327.8		73.47
4	366	60.40	250.0		74.34
5	415	63.99	233.6		78.00
6	442	149.38	512.5		79.53
7	515	88.35	259.8		83.57
8	560	61.83	167.4		85.59
9	599	21.34	54.0		87.39
10	627	53.31	128.7		88.27
11	720	36.60	77.0		90.78
12	10,380	75.00	10.9	Upper Marker	113.00

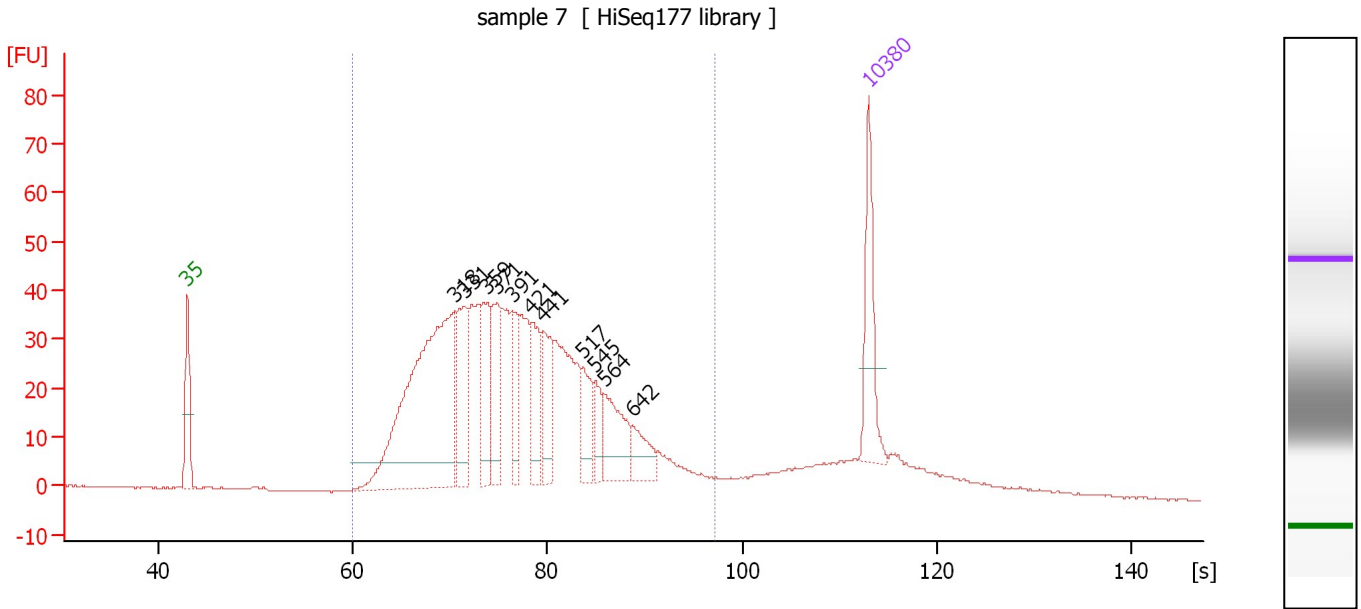
Region table for sample 6 : sample 6

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
59.91	100.52	452	1,142.5	7,372.3	1,856.47	93	46.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 11 Corr. Area 1: 990.2
 Noise: 0.1

Peak table for sample 7 : sample 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	318	495.06	2,355.2		70.42
3	331	107.05	489.7		71.46
4	359	87.67	369.7		73.78
5	371	89.44	364.9		74.77
6	391	60.26	233.7		76.37
7	421	68.40	246.0		78.36
8	441	73.99	254.0		79.52
9	517	55.05	161.3		83.65
10	545	34.42	95.7		84.92
11	564	74.41	199.8		85.81
12	642	38.55	90.9		88.73
13	10,380	75.00	10.9	Upper Marker	113.00

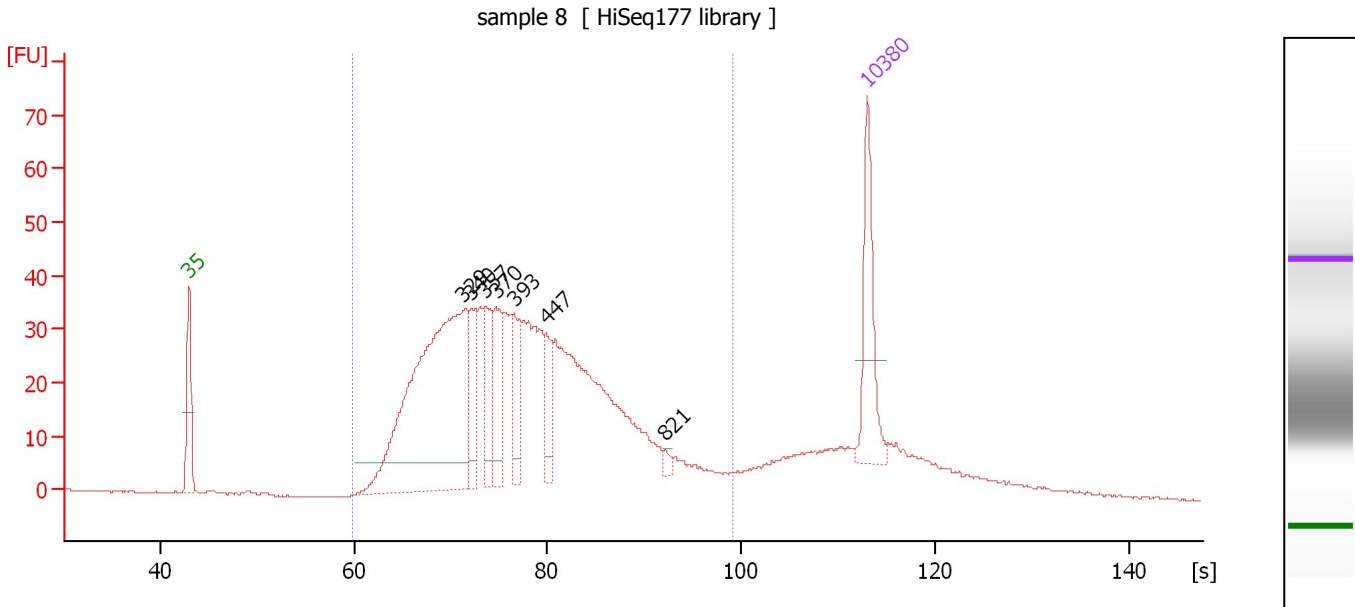
Region table for sample 7 : sample 7

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
59.91	97.21	426	990.2	7,484.5	1,837.68	89	36.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 7 Corr. Area 1: 923.1
 Noise: 0.1

Peak table for sample 8 : sample 8

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	329	507.71	2,339.6		71.27
3	340	67.68	302.0		72.15
4	357	56.70	240.6		73.59
5	370	73.85	302.1		74.70
6	393	63.41	244.7		76.53
7	447	43.83	148.5		79.86
8	821	5.60	10.3		92.16
9	10,380	75.00	10.9	Upper Marker	113.00

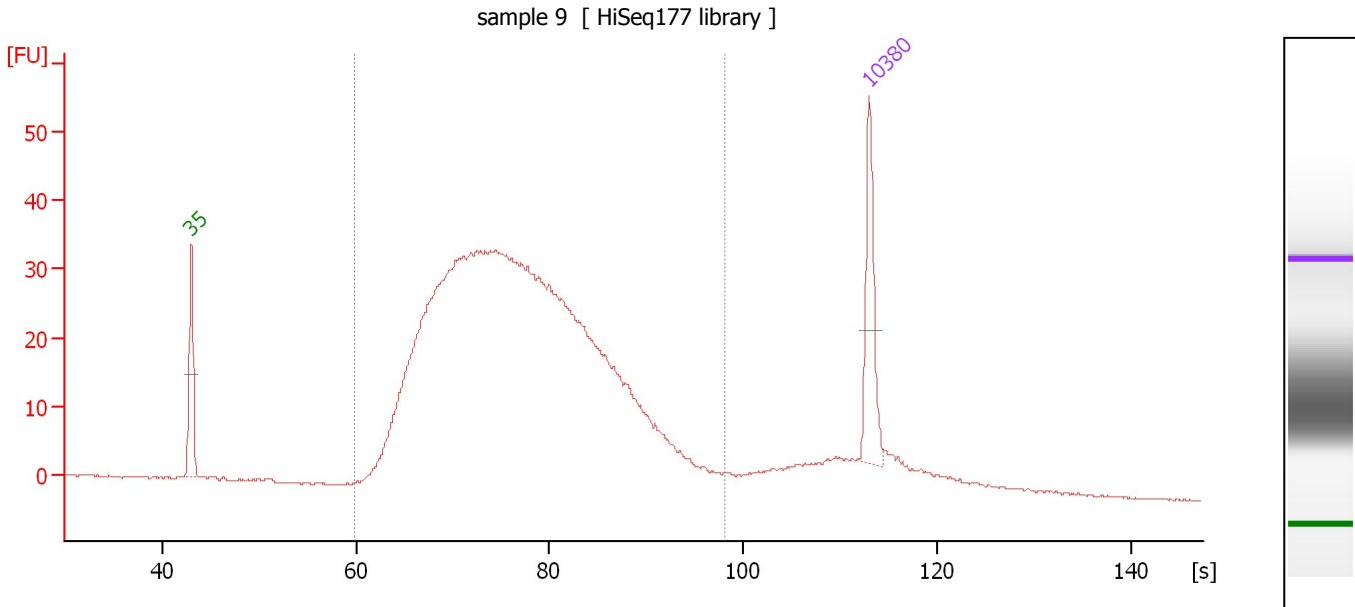
Region table for sample 8 : sample 8

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
59.91	99.04	447	923.1	6,335.5	1,578.77	86	45.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 0 Corr. Area 1: 878.5
 Noise: 0.1

Peak table for sample 9 : sample 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	10,380	75.00	10.9	Upper Marker	113.00

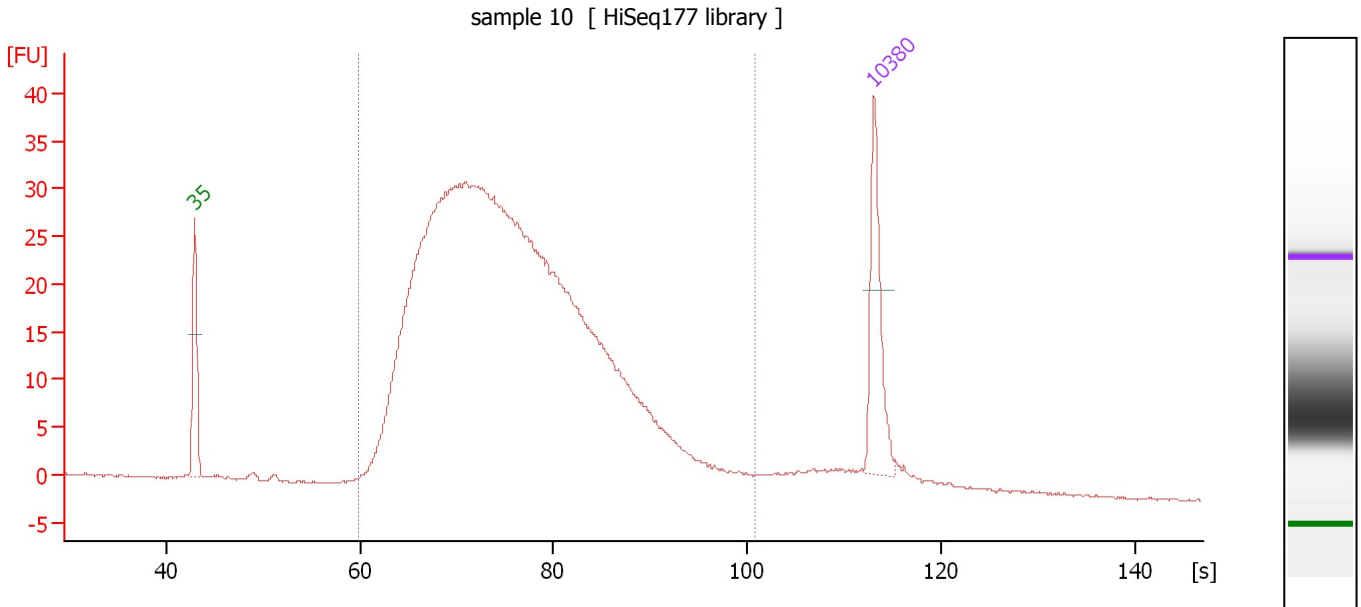
Region table for sample 9 : sample 9

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
59.91	98.16	431	878.5	9,067.5	2,242.08	92	38.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 0 Corr. Area 1: 788.8
 Noise: 0.1

Peak table for sample 10 : sample 10

Pea k	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	10,380	75.00	10.9	Upper Marker	113.00

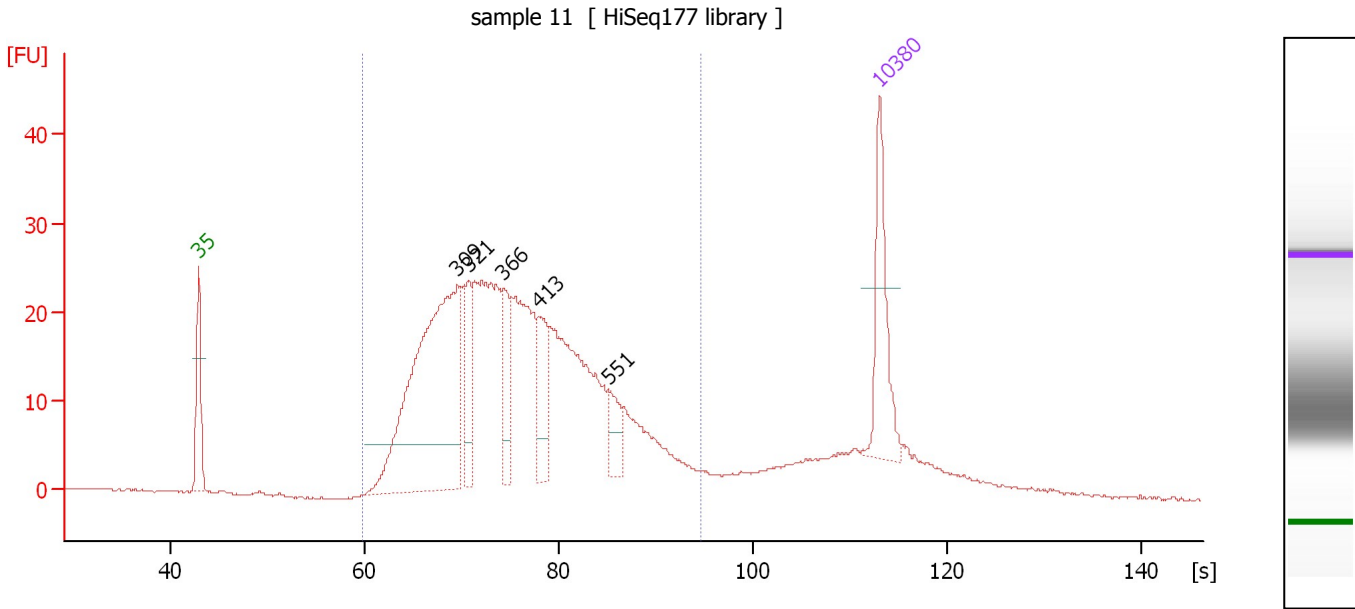
Region table for sample 10 : sample 10

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
59.91	100.82	420	788.8	9,287.9	2,193.14	96	46.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 5 Corr. Area 1: 589.4
 Noise: 0.1

Peak table for sample 11 : sample 11

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	309	442.40	2,171.4		69.61
3	321	62.41	294.2		70.66
4	366	56.96	235.6		74.36
5	413	59.02	216.5		77.89
6	551	31.14	85.7		85.18
7	10,380	75.00	10.9	Upper Marker	113.00

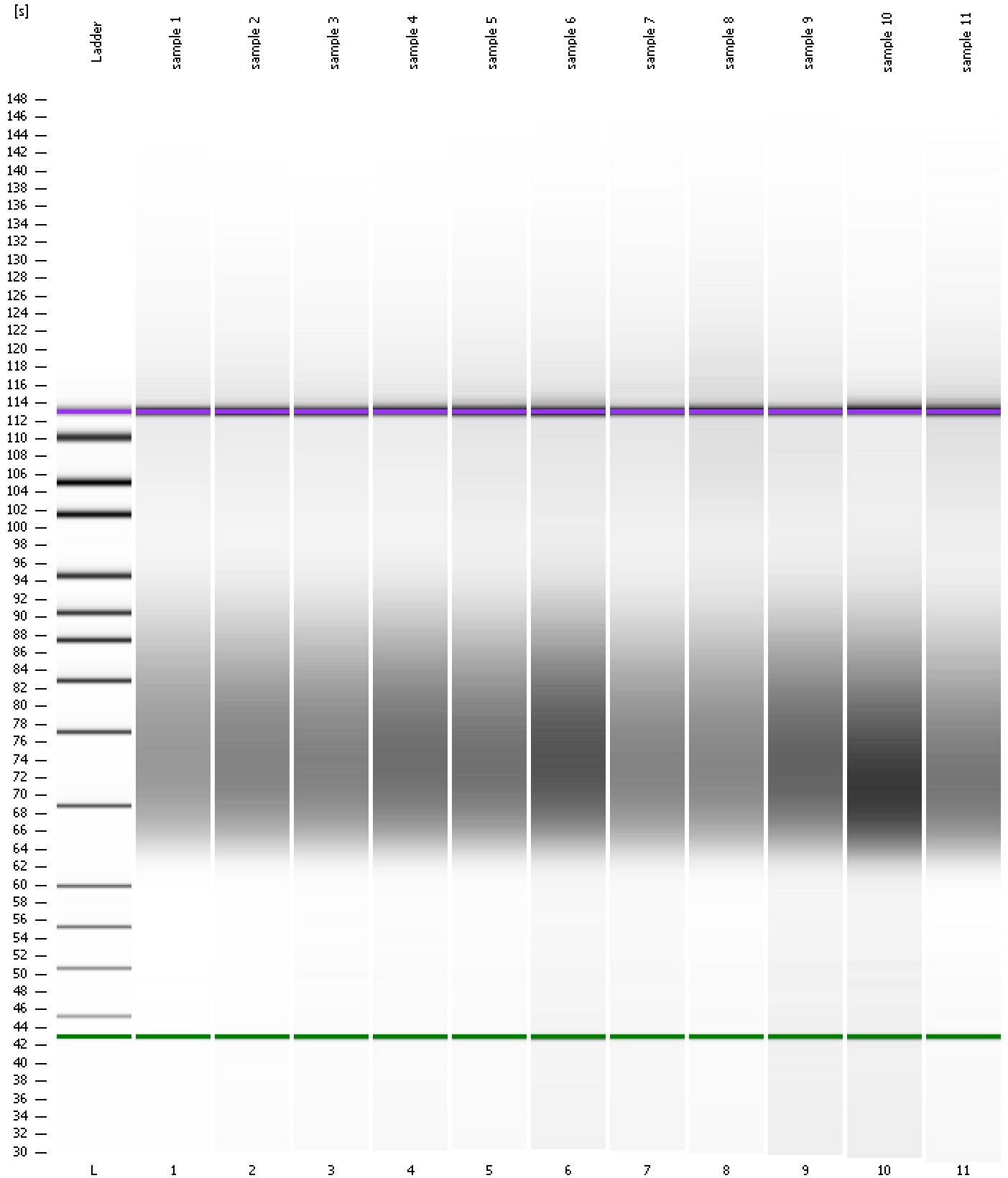
Region table for sample 11 : sample 11

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
59.91	94.63	405	589.4	6,413.5	1,521.07	87	32.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
Modified: 10/30/2015 10:42:15 AM

Gel Image

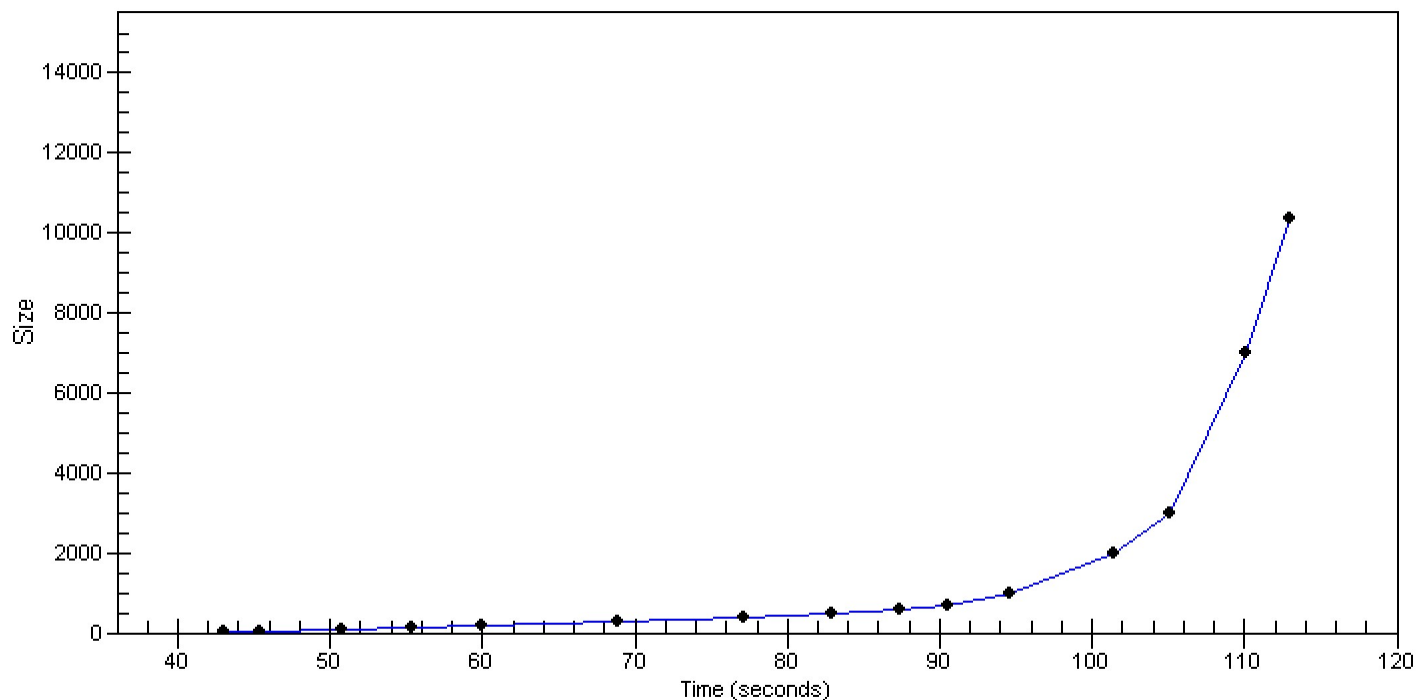


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
Modified: 10/30/2015 10:42:15 AM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad

Created: 10/30/2015 9:57:32 AM
 Modified: 10/30/2015 10:42:15 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		10/30/2015 10:38:49 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-10-30\2015-10-30_001.xad)		Instrument	Run		10/30/2015 9:57:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/30/2015 9:57:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/30/2015 9:57:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/30/2015 9:57:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/30/2015 9:57:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/30/2015 9:57:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/30/2015 9:57:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1