

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-22\2015-09-22\_005.xad

Created: 9/22/2015 3:15:37 PM  
Modified: 9/22/2015 3:56:05 PM

### Electrophoresis File Run Summary

Instrument Information:

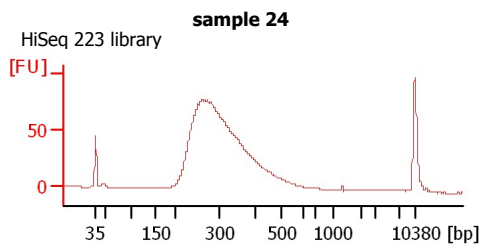
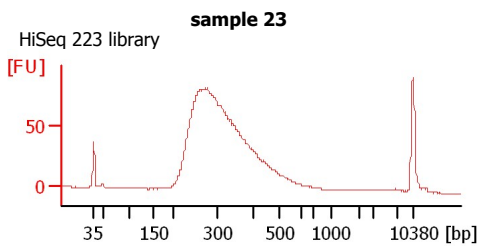
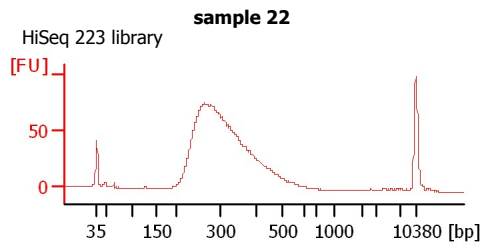
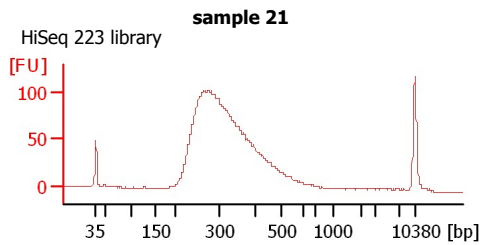
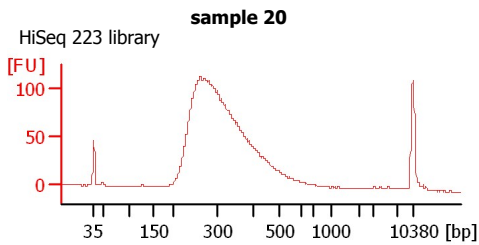
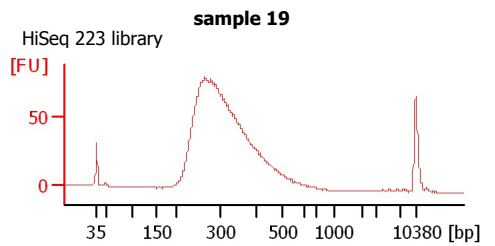
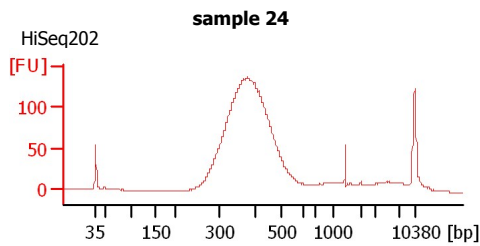
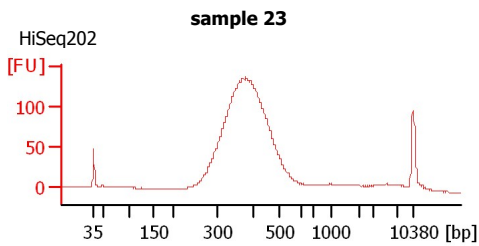
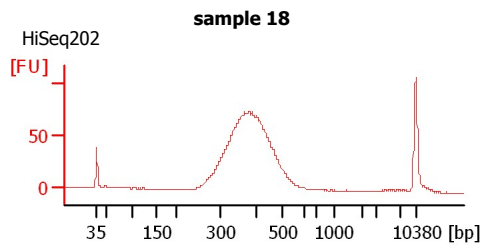
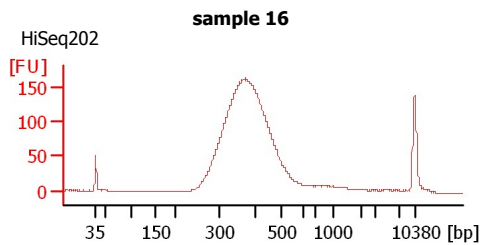
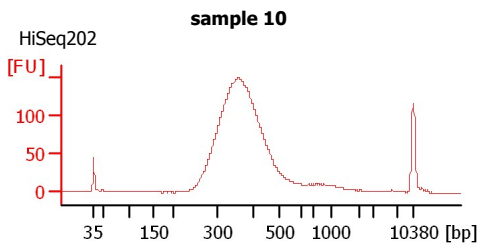
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



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 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-22\2015-09-22\_005.xad

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 10	HiSeq202	<input type="checkbox"/>	✓			
sample 16	HiSeq202	<input type="checkbox"/>	✓			
sample 18	HiSeq202	<input type="checkbox"/>	✓			
sample 23	HiSeq202	<input type="checkbox"/>	✓			
sample 24	HiSeq202	<input type="checkbox"/>	✓			
sample 19	HiSeq 223 library	<input type="checkbox"/>	✓			
sample 20	HiSeq 223 library	<input type="checkbox"/>	✓			
sample 21	HiSeq 223 library	<input type="checkbox"/>	✓			
sample 22	HiSeq 223 library	<input type="checkbox"/>	✓			
sample 23	HiSeq 223 library	<input type="checkbox"/>	✓			
sample 24	HiSeq 223 library	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

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**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

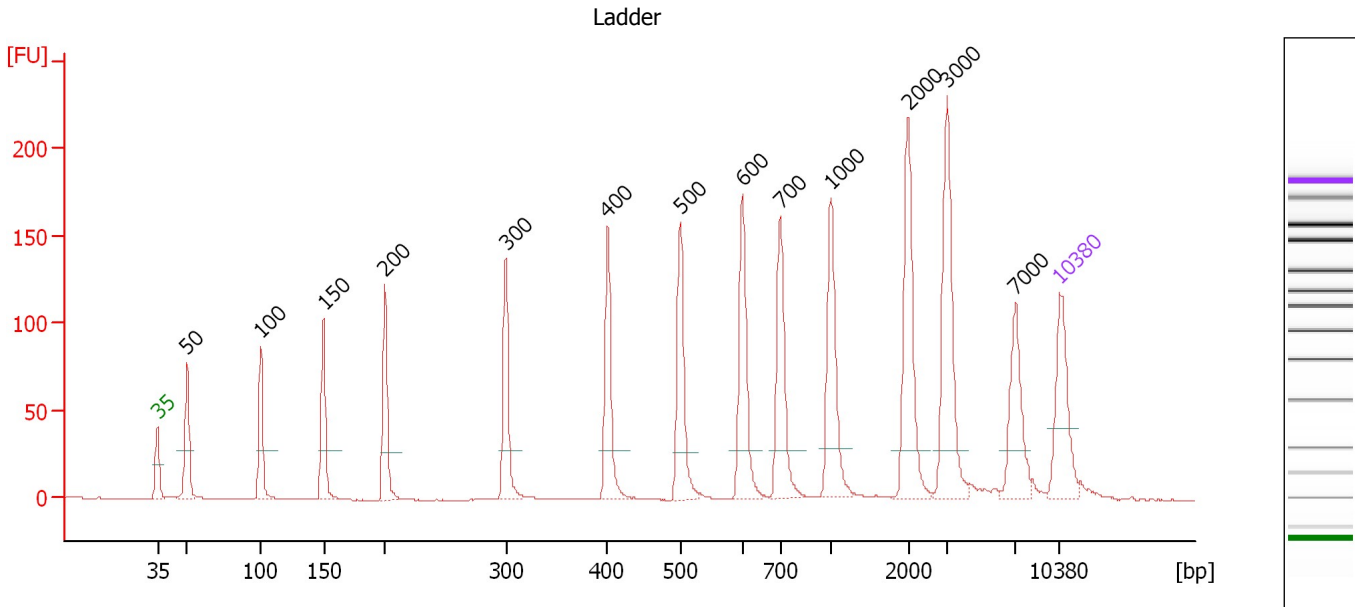
**Ladder**

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

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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

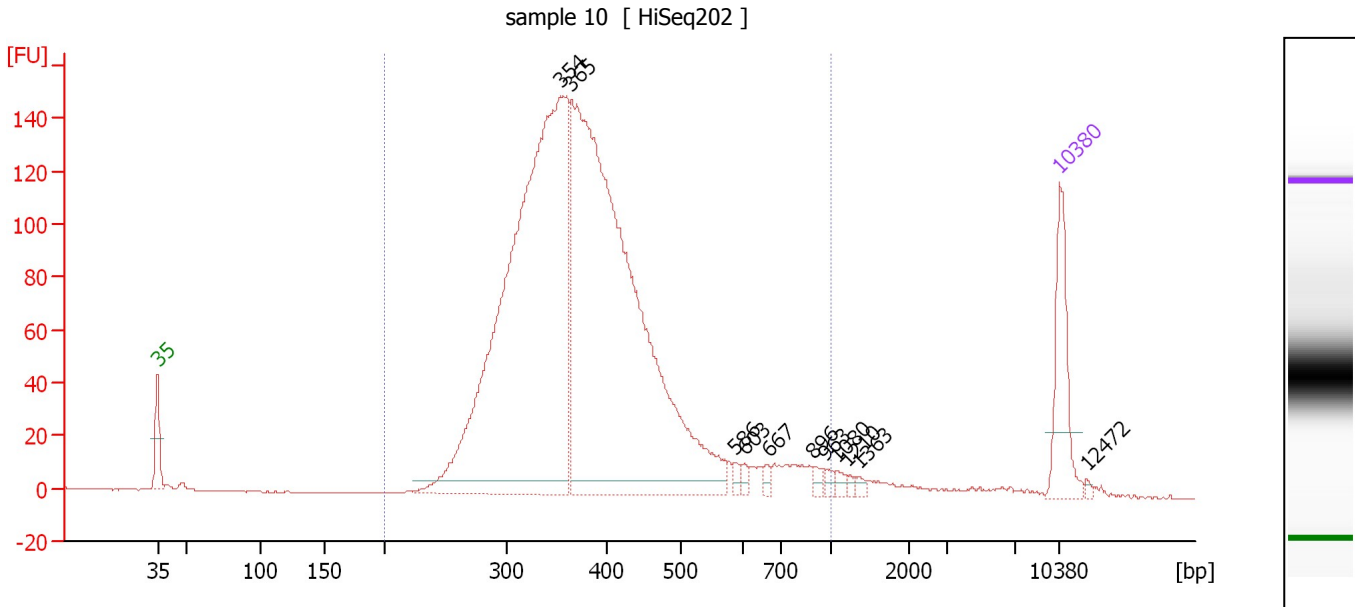
**Peak table for Ladder**

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	45.31
3	100	150.00	2,272.7	Ladder Peak	51.03
4	150	150.00	1,515.2	Ladder Peak	55.88
5	200	150.00	1,136.4	Ladder Peak	60.65
6	300	150.00	757.6	Ladder Peak	70.04
7	400	150.00	568.2	Ladder Peak	77.93
8	500	150.00	454.5	Ladder Peak	83.60
9	600	150.00	378.8	Ladder Peak	88.41
10	700	150.00	324.7	Ladder Peak	91.36
11	1,000	150.00	227.3	Ladder Peak	95.26
12	2,000	150.00	113.6	Ladder Peak	101.25
13	3,000	150.00	75.8	Ladder Peak	104.29
14	7,000	150.00	32.5	Ladder Peak	109.60
15	10,380	75.00	10.9	Upper Marker	113.00

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 10**

Number of peaks found: 11                      Corr. Area 1: 2,465.4  
 Noise: 0.2

**Peak table for sample 1 : sample 10**

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	354	1,127.64	4,832.0		74.27
3	365	1,156.37	4,805.3		75.14
4	586	7.95	20.6		87.73
5	603	7.37	18.5		88.51
6	667	7.90	18.0		90.38
7	896	7.51	12.7		93.91
8	963	6.72	10.6		94.78
9	1,080	6.47	9.1		95.74
10	1,210	3.99	5.0		96.52
11	1,363	4.53	5.0		97.43
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,472	0.00	0.0		115.11

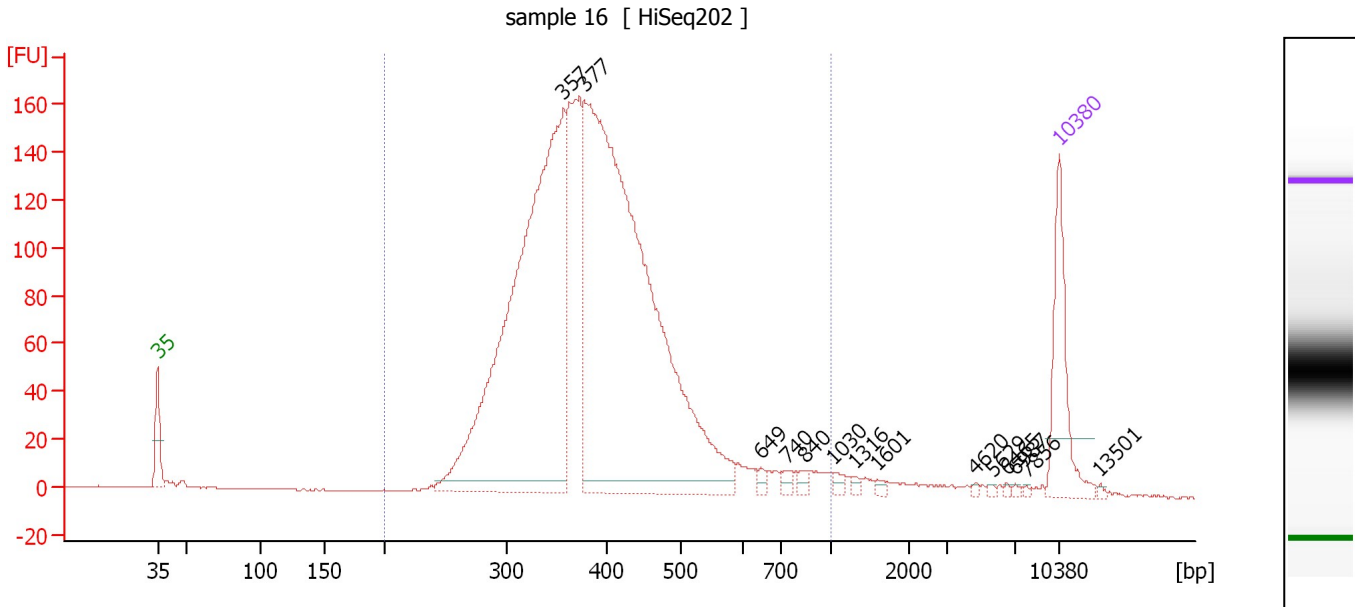
**Region table for sample 1 : sample 10**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	390	1,000	2,465.4	9,823.7	97	26.7	2,366.75

Assay Class: High Sensitivity DNA Assay  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 16**

Number of peaks found: 14                      Corr. Area 1: 2,752.5  
 Noise: 0.2

**Peak table for sample 2 : sample 16**

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	357	797.33	3,387.1		74.51
3	377	997.82	4,014.8		76.08
4	649	5.34	12.5		89.85
5	740	7.52	15.4		91.88
6	840	6.81	12.3		93.18
7	1,030	6.25	9.2		95.44
8	1,316	3.40	3.9		97.15
9	1,601	3.53	3.3		98.86
10	4,620	1.99	0.7		106.44
11	5,629	1.93	0.5		107.78
12	6,465	1.62	0.4		108.89
13	6,987	1.67	0.4		109.58
14	7,856	1.35	0.3		110.46
15	10,380	75.00	10.9	Upper Marker	113.00
16	13,501	0.00	0.0		116.14

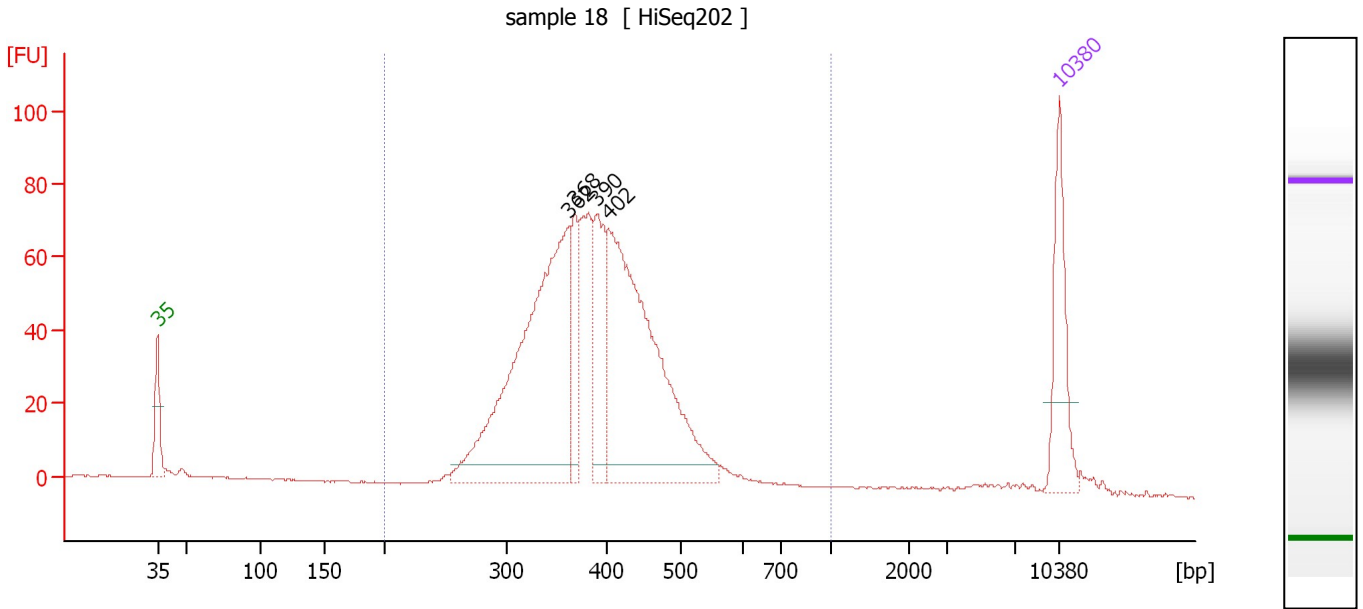
**Region table for sample 2 : sample 16**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	397	1,000	2,752.5	8,433.6	96	24.4	2,084.60

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 18**

Number of peaks found: 4                      Corr. Area 1: 1,179.4  
 Noise: 0.2

**Peak table for sample 3 : sample 18**

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	362	492.38	2,060.8		74.93
3	368	74.82	308.1		75.40
4	390	115.62	449.3		77.13
5	402	431.71	1,628.7		78.02
6	10,380	75.00	10.9	Upper Marker	113.00

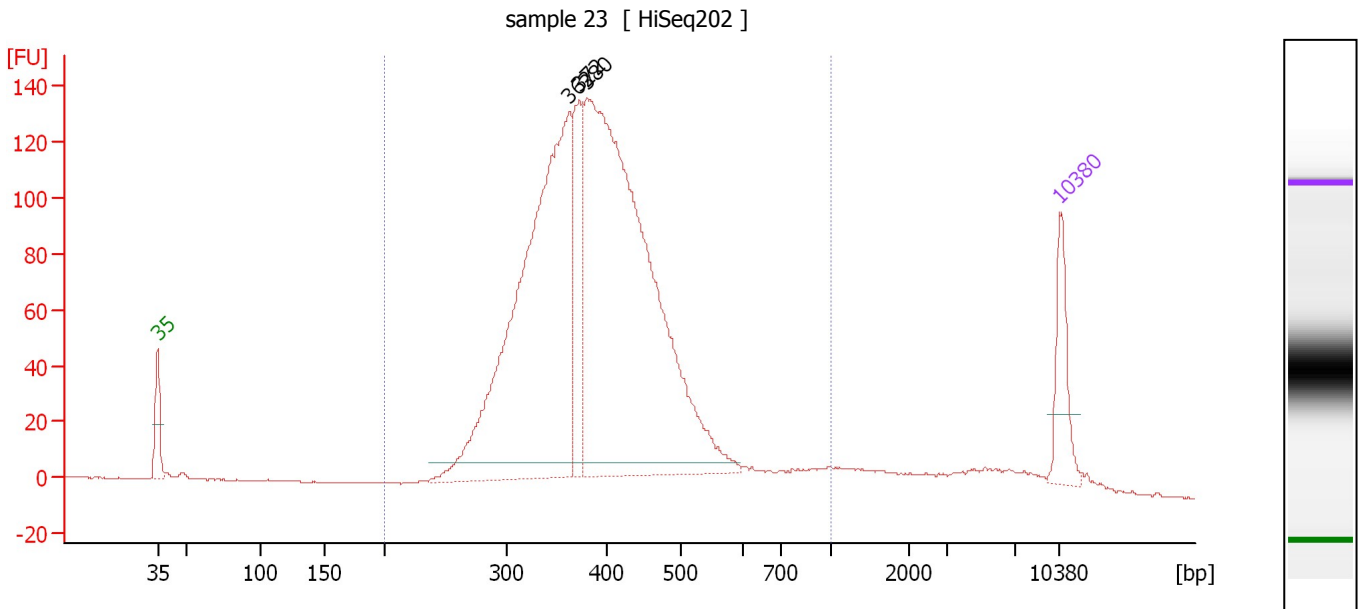
**Region table for sample 3 : sample 18**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	393	1,000	1,179.4	5,345.3	96	19.2	1,328.05

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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 23**

Number of peaks found: 3                      Corr. Area 1: 2,271.6  
 Noise: 0.2

**Peak table for sample 4 : sample 23**

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	362	1,054.35	4,410.5		74.95
3	372	186.10	758.3		75.71
4	380	1,348.66	5,381.4		76.33
5	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : sample 23**

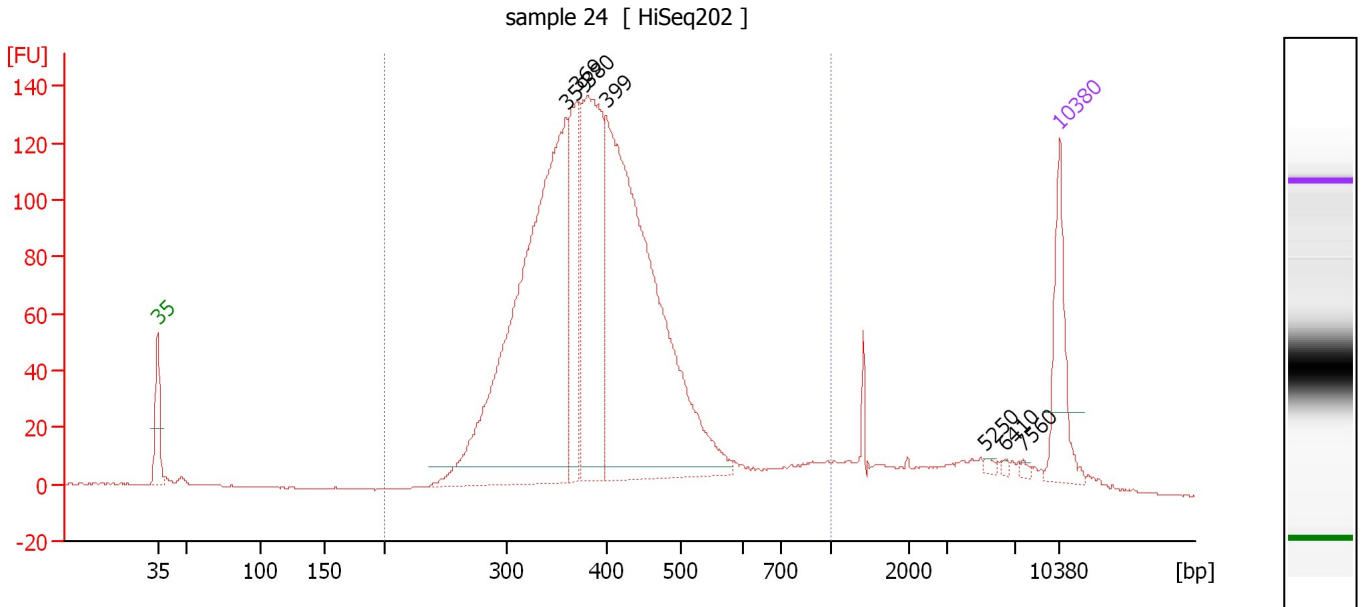
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	401	1,000	2,271.6	11,294.2	92	24.0	2,822.24



Assay Class: High Sensitivity DNA Assay  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 24**

Number of peaks found: 7                      Corr. Area 1: 2,257.9  
 Noise: 0.2

**Peak table for sample 5 : sample 24**

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	359	832.01	3,510.4		74.70
3	369	165.37	678.1		75.52
4	380	333.72	1,329.1		76.39
5	399	758.16	2,881.0		77.83
6	5,250	3.59	1.0		107.27
7	6,410	2.74	0.6		108.81
8	7,560	3.16	0.6		110.16
9	10,380	75.00	10.9	Upper Marker	113.00

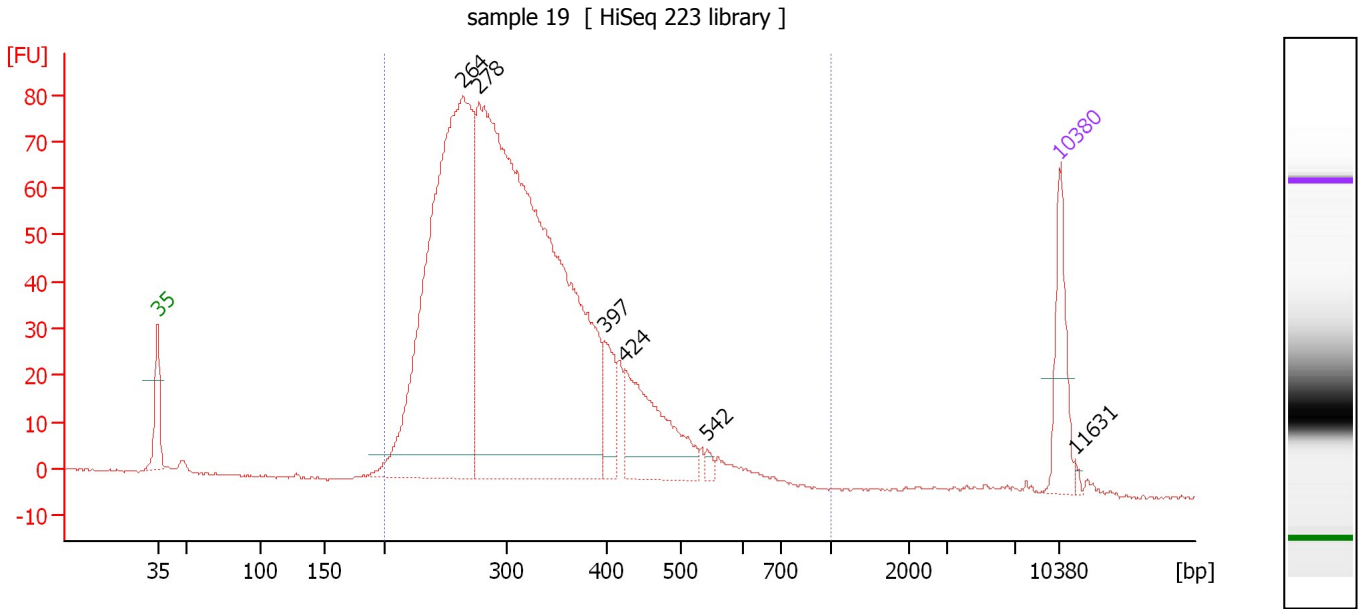
**Region table for sample 5 : sample 24**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	404	1,000	2,257.9	9,332.8	91	25.1	2,340.60

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-22\2015-09-22\_005.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 19**

Number of peaks found: 6                      Corr. Area 1: 1,546.1  
 Noise: 0.2

**Peak table for sample 6 : sample 19**

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	264	1,062.81	6,092.1		66.69
3	278	1,704.90	9,300.6		67.95
4	397	69.38	264.9		77.69
5	424	189.06	675.9		79.28
6	542	8.32	23.3		85.63
7	10,380	75.00	10.9	Upper Marker	113.00
8	11,631	0.00	0.0		114.26

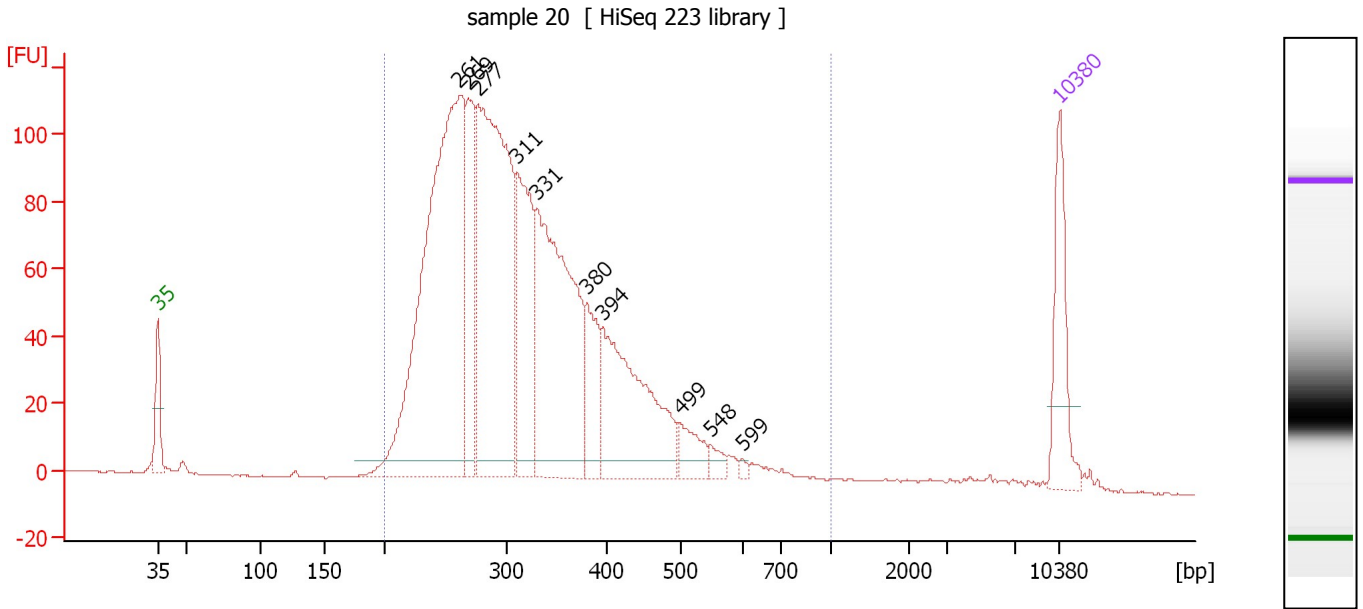
**Region table for sample 6 : sample 19**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	322	1,000	1,546.1	14,994.9	99	24.4	2,977.16

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 20**

Number of peaks found: 10                      Corr. Area 1: 2,290.7  
 Noise: 0.2

**Peak table for sample 7 : sample 20**

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	261	769.77	4,461.6		66.41
3	269	151.66	853.6		67.15
4	277	565.83	3,095.0		67.88
5	311	210.23	1,024.4		70.90
6	331	406.67	1,863.1		72.46
7	380	84.08	335.6		76.32
8	394	243.55	935.7		77.49
9	499	37.88	115.1		83.54
10	548	13.23	36.6		85.93
11	599	3.77	9.5		88.37
12	10,380	75.00	10.9	Upper Marker	113.00

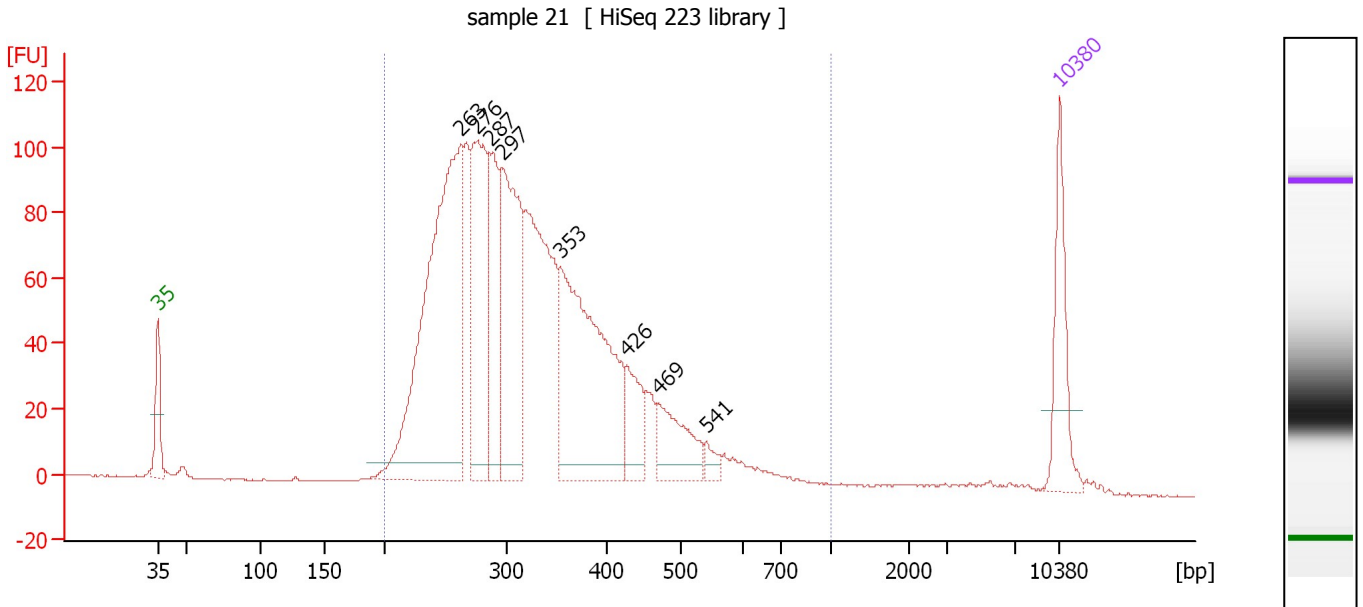
**Region table for sample 7 : sample 20**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	330	1,000	2,290.7	12,925.6	96	29.3	2,582.76

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 21**

Number of peaks found: 8                      Corr. Area 1: 2,134.3  
 Noise: 0.2

**Peak table for sample 8 : sample 21**

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	263	630.69	3,628.8		66.59
3	276	271.76	1,489.7		67.82
4	287	148.94	786.7		68.80
5	297	280.50	1,432.1		69.73
6	353	393.54	1,687.6		74.25
7	426	67.63	240.6		79.40
8	469	83.98	271.2		81.85
9	541	15.45	43.3		85.58
10	10,380	75.00	10.9	Upper Marker	113.00

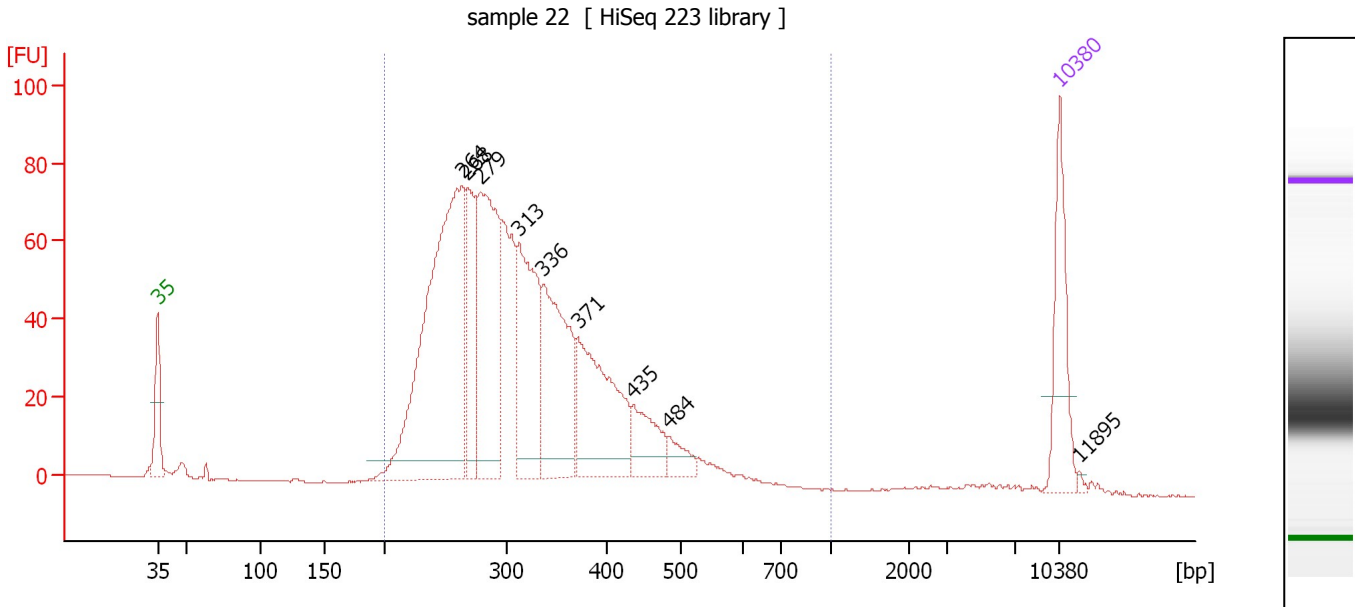
**Region table for sample 8 : sample 21**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	333	1,000	2,134.3	12,230.1	97	28.4	2,473.33

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample 22**

Number of peaks found: 9                      Corr. Area 1: 1,450.5  
 Noise: 0.2

**Peak table for sample 9 : sample 22**

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	264	555.04	3,191.3		66.61
3	268	122.62	692.7		67.05
4	279	272.79	1,480.2		68.09
5	313	199.68	967.6		71.04
6	336	200.34	902.4		72.91
7	371	190.86	780.2		75.61
8	435	60.13	209.6		79.89
9	484	23.67	74.1		82.70
10	10,380	75.00	10.9	Upper Marker	113.00
11	11,895	0.00	0.0		114.52

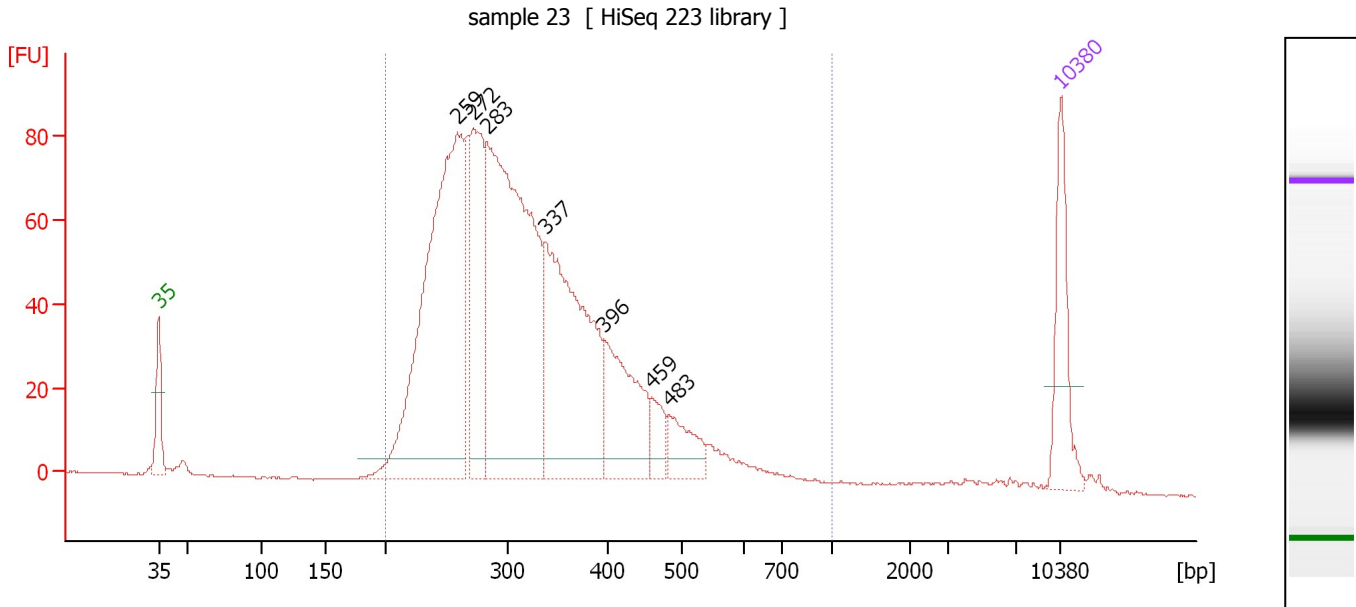
**Region table for sample 9 : sample 22**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	321	1,000	1,450.5	9,450.8	98	24.5	1,874.05

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**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sample 23**

Number of peaks found: 7                      Corr. Area 1: 1,675.0  
 Noise: 0.2

**Peak table for sample 10 : sample 23**

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	259	640.36	3,744.0		66.20
3	272	227.86	1,267.8		67.44
4	283	636.48	3,403.1		68.48
5	337	379.27	1,703.9		72.98
6	396	149.56	572.0		77.63
7	459	33.52	110.6		81.29
8	483	54.50	171.0		82.63
9	10,380	75.00	10.9	Upper Marker	113.00

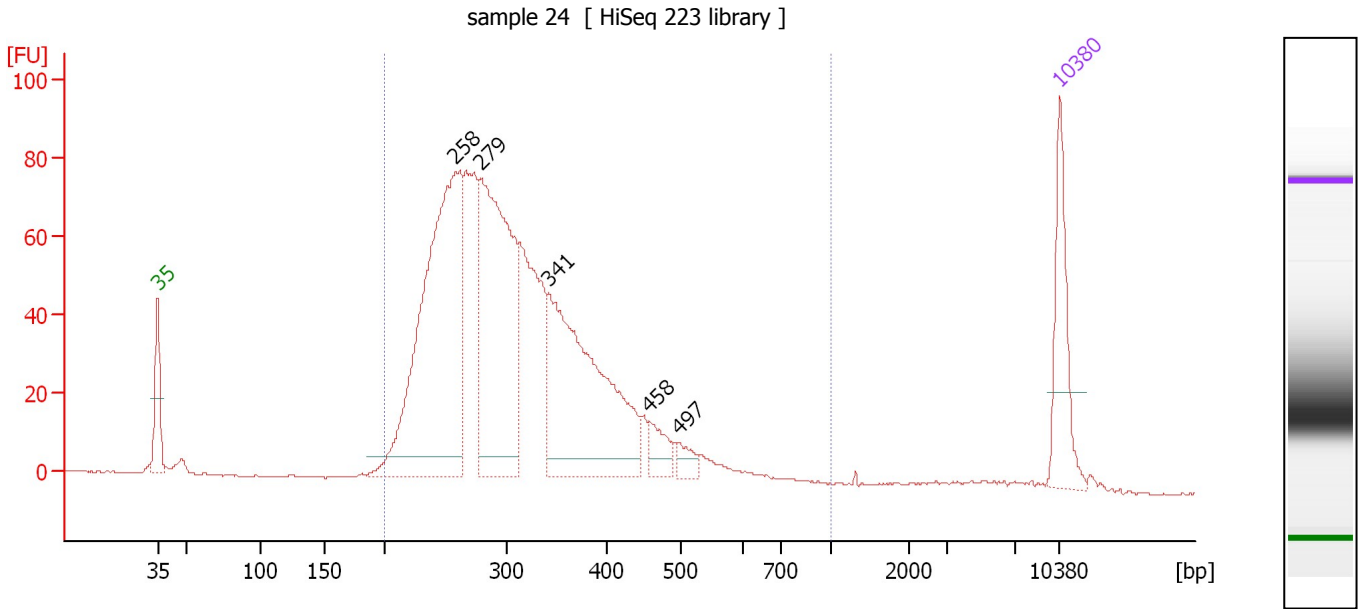
**Region table for sample 10 : sample 23**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	331	1,000	1,675.0	11,186.3	97	28.8	2,241.77

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-22\2015-09-22\_005.xad

Created: 9/22/2015 3:15:37 PM  
 Modified: 9/22/2015 3:56:05 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : sample 24**

Number of peaks found: 5                      Corr. Area 1: 1,492.4  
 Noise: 0.2

**Peak table for sample 11 : sample 24**

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	258	579.73	3,401.4		66.12
3	279	414.84	2,253.0		68.06
4	341	373.13	1,656.0		73.31
5	458	31.80	105.3		81.20
6	497	16.96	51.7		83.44
7	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : sample 24**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	322	1,000	1,492.4	9,650.7	97	27.7	1,897.12

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Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-22\2015-09-22\_005.xad

Created: 9/22/2015 3:15:37 PM  
Modified: 9/22/2015 3:56:05 PM

**Gel Image**

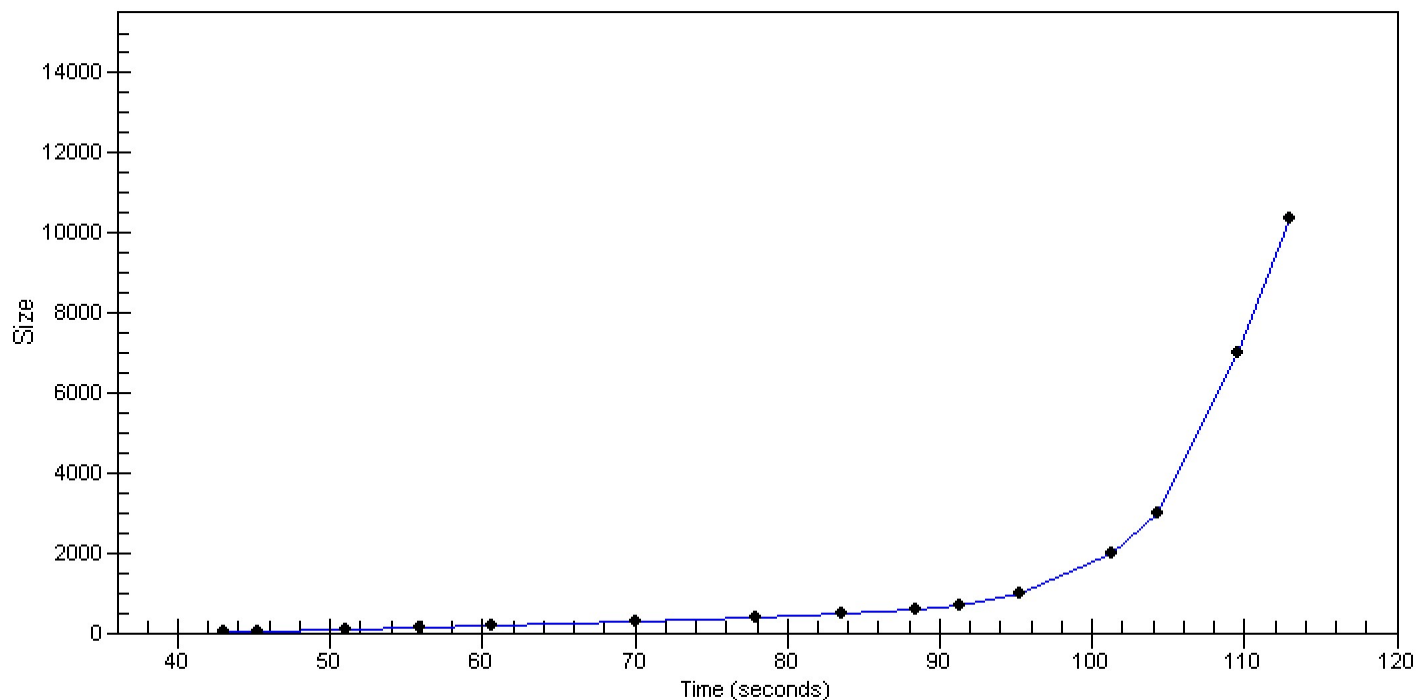


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-22\2015-09-22\_005.xad

Created: 9/22/2015 3:15:37 PM  
Modified: 9/22/2015 3:56:05 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-22\2015-09-22\_005.xad

Created: 9/22/2015 3:15:37 PM  
 Modified: 9/22/2015 3:56:05 PM

**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		9/22/2015 3:56:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-09-22\2015-09-22_005.xad)		Instrument	Run		9/22/2015 3:15:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/22/2015 3:15:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/22/2015 3:15:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/22/2015 3:15:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/22/2015 3:15:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/22/2015 3:15:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/22/2015 3:15:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1