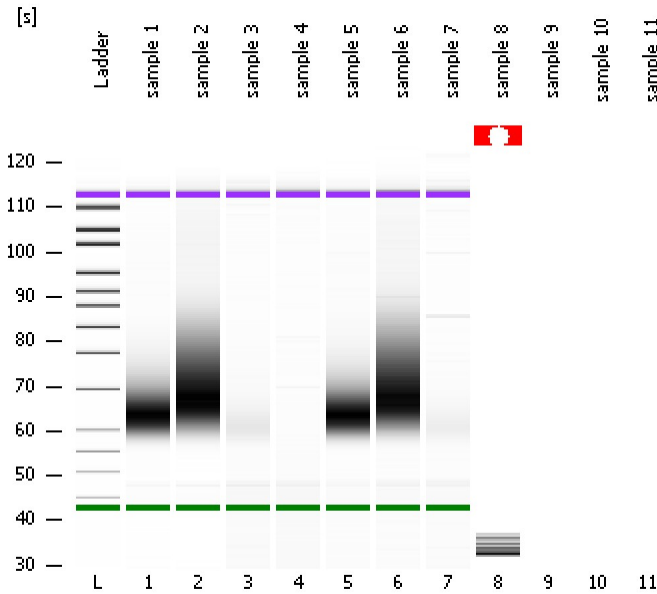


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
Modified: 10/30/2015 11:25:48 AM

### Electrophoresis File Run Summary



#### Instrument Information:

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

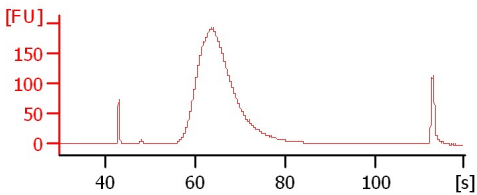
#### Assay Information:

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

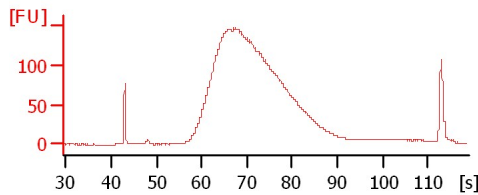
#### Chip Information:

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

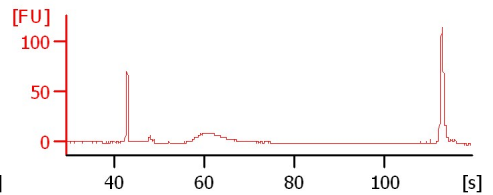
sample 1



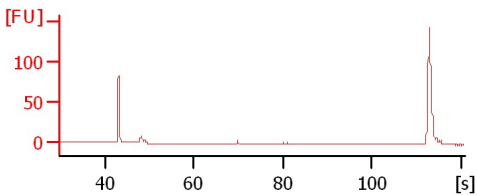
sample 2



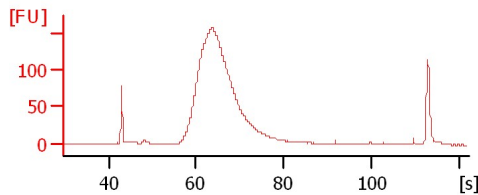
sample 3



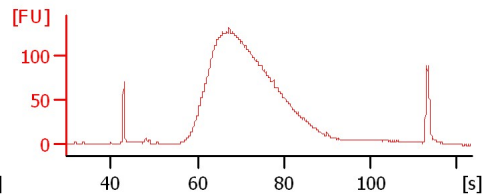
sample 4



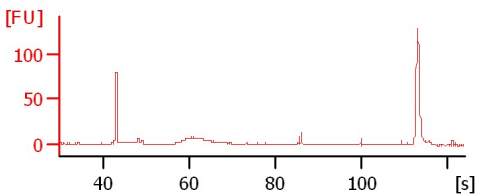
sample 5



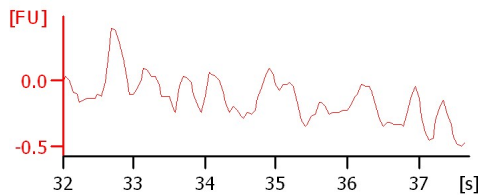
sample 6



sample 7



sample 8



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>	✓			
sample 8		<input type="checkbox"/>	✗			
sample 9		<input type="checkbox"/>	✗			
sample 10		<input type="checkbox"/>	✗			
sample 11		<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\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 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

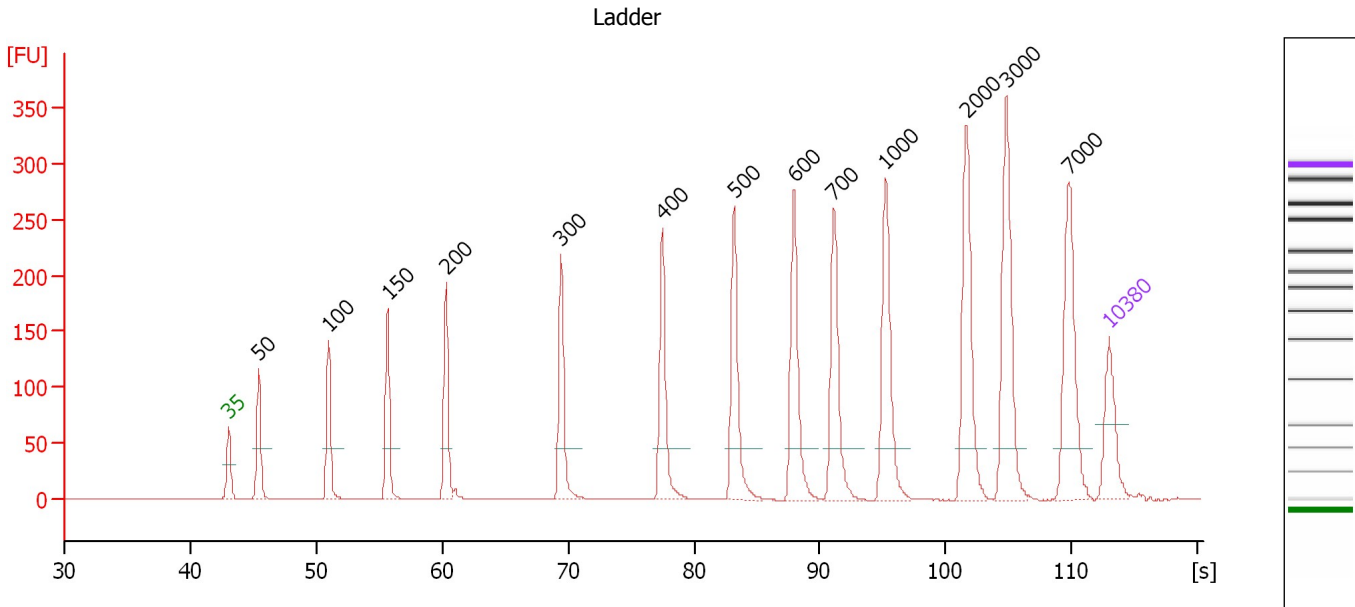
**Ladder**

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\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

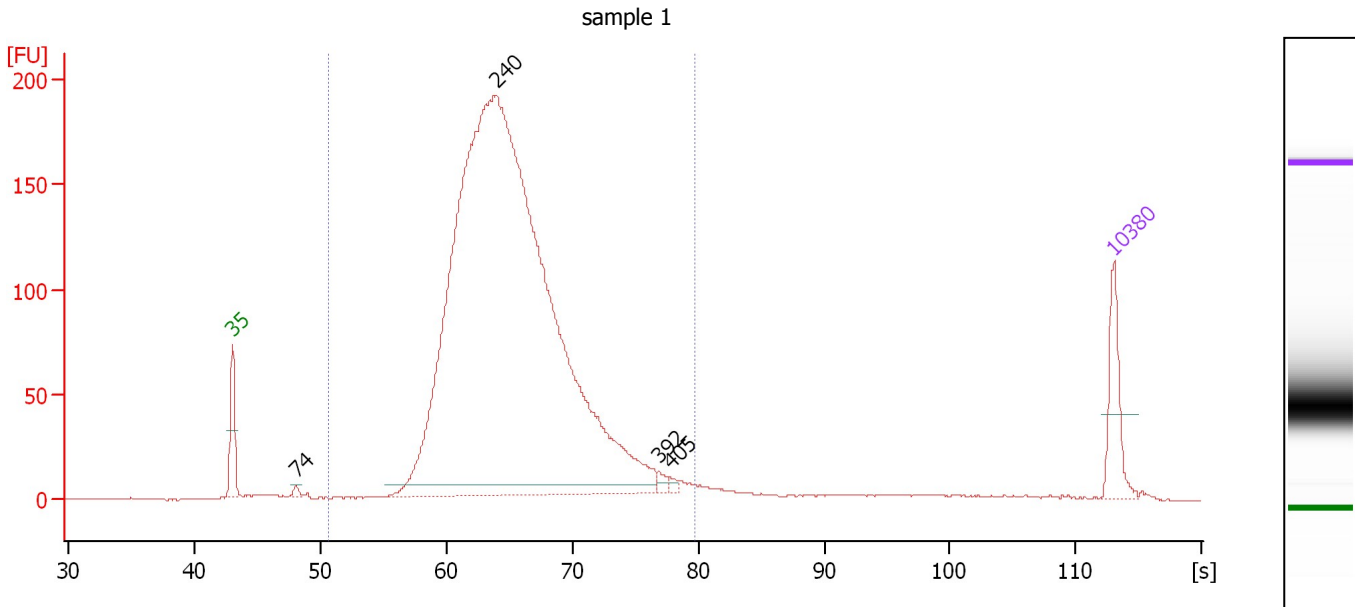
**Peak table for Ladder**

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	45.39
3	100	150.00	2,272.7	Ladder Peak	50.94
4	150	150.00	1,515.2	Ladder Peak	55.64
5	200	150.00	1,136.4	Ladder Peak	60.30
6	300	150.00	757.6	Ladder Peak	69.44
7	400	150.00	568.2	Ladder Peak	77.51
8	500	150.00	454.5	Ladder Peak	83.19
9	600	150.00	378.8	Ladder Peak	87.97
10	700	150.00	324.7	Ladder Peak	91.13
11	1,000	150.00	227.3	Ladder Peak	95.28
12	2,000	150.00	113.6	Ladder Peak	101.68
13	3,000	150.00	75.8	Ladder Peak	104.84
14	7,000	150.00	32.5	Ladder Peak	109.80
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\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 4                      Corr. Area 1: 2,853.5  
 Noise: 0.2

**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	74	8.82	180.2		48.08
3	240	3,674.84	23,208.7		63.94
4	392	11.80	45.6		76.87
5	405	7.93	29.7		77.77
6	10,380	75.00	10.9	Upper Marker	113.00

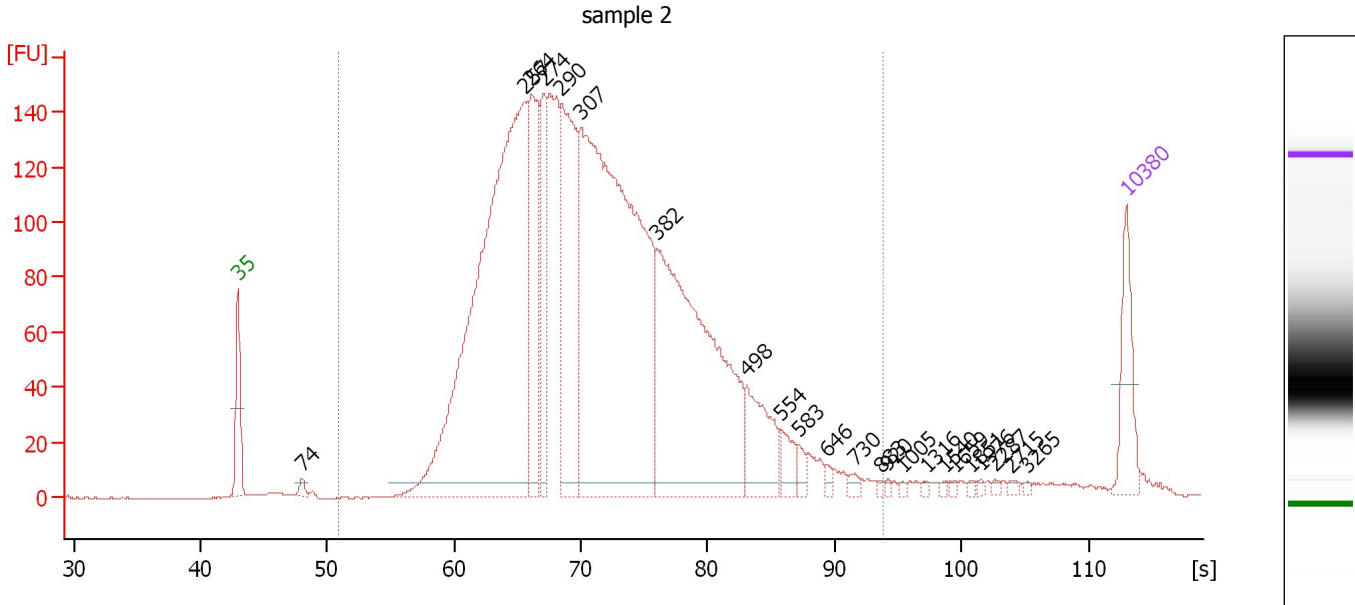
**Region table for sample 1 : sample 1**

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
50.66	79.76	255	2,853.5	23,172.0	3,740.79	96	19.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 23                      Corr. Area 1: 3,709.0  
 Noise: 0.2

**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	74	13.04	267.7		48.04
3	257	1,397.20	8,234.3		65.52
4	264	275.18	1,581.9		66.11
5	274	167.11	923.3		67.08
6	290	375.25	1,963.9		68.48
7	307	1,320.90	6,519.3		70.00
8	382	731.98	2,903.5		76.05
9	498	125.71	382.4		83.08
10	554	34.75	95.0		85.79
11	583	16.72	43.5		87.14
12	646	7.95	18.6		89.43
13	730	9.16	19.0		91.54
14	883	3.66	6.3		93.66
15	920	3.67	6.0		94.17
16	1,005	3.01	4.5		95.31
17	1,316	3.85	4.4		97.30
18	1,540	2.63	2.6		98.74
19	1,659	3.46	3.2		99.50
20	1,851	2.85	2.3		100.73
21	1,976	2.65	2.0		101.53
22	2,287	3.33	2.2		102.59
23	2,715	4.09	2.3		103.94
24	3,265	2.34	1.1		105.17
25	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\_002.xad

Created: 10/30/2015 10:55:37 AM  
Modified: 10/30/2015 11:25:48 AM

**Electropherogram Summary Continued ...**

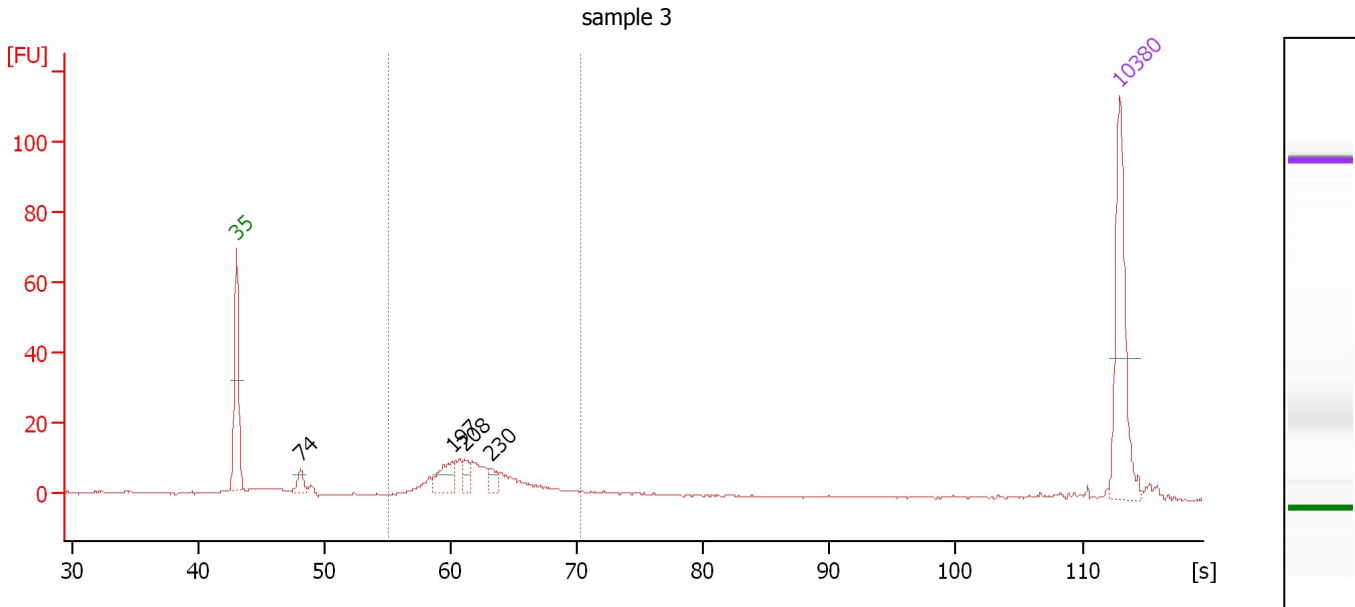
... Region table for sample 2 : sample 2

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ $\mu$ l]	% of Total	Size distribution in CV [%]
50.93	93.75	332	3,709.0	24,628.4	 4,830.45	97	30.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 4                      Corr. Area 1: 117.8  
 Noise: 0.3

**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	74	13.51	276.4		48.06
3	197	31.68	243.0		60.06
4	208	12.01	87.4		61.04
5	230	10.85	71.5		63.04
6	10,380	75.00	10.9	Upper Marker	113.00

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

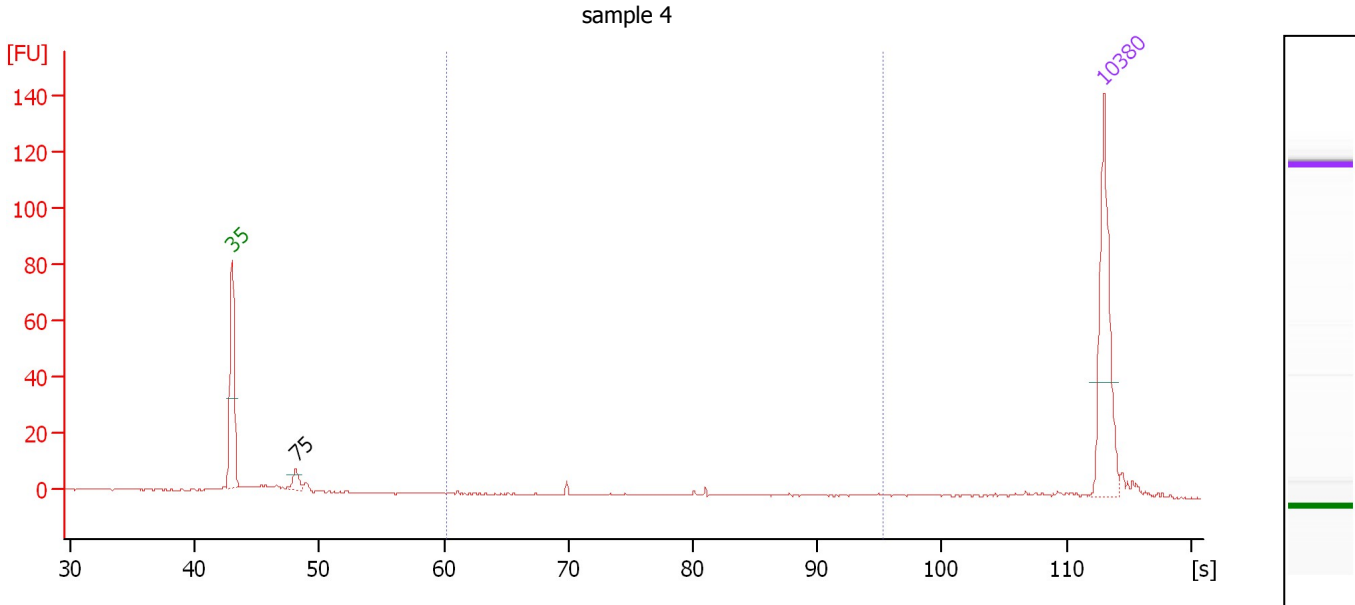
From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
55.09	70.24	221	117.8	1,147.1	164.05	63	14.9



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 1                      Corr. Area 1: 4.0  
 Noise: 0.2

**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	75	11.62	235.8		48.13
3	10,380	75.00	10.9	Upper Marker	113.00

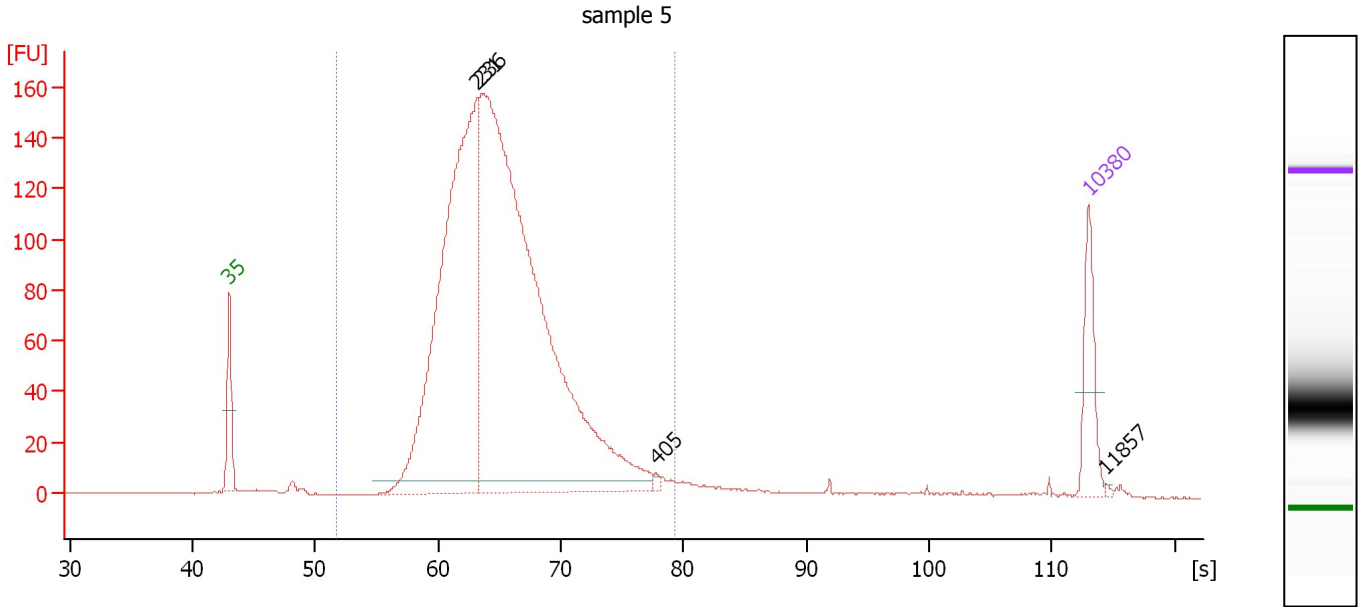
**Region table for sample 4 : sample 4**

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.30	95.28	580	4.0	12.9	3.70	6	42.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 4                      Corr. Area 1: 2,280.9  
 Noise: 0.2

**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	231	1,147.53	7,513.1		63.17
3	236	1,893.58	12,171.1		63.56
4	405	5.11	19.1		77.78
5	10,380	75.00	10.9	Upper Marker	113.00
6	11,857	0.00	0.0		114.40

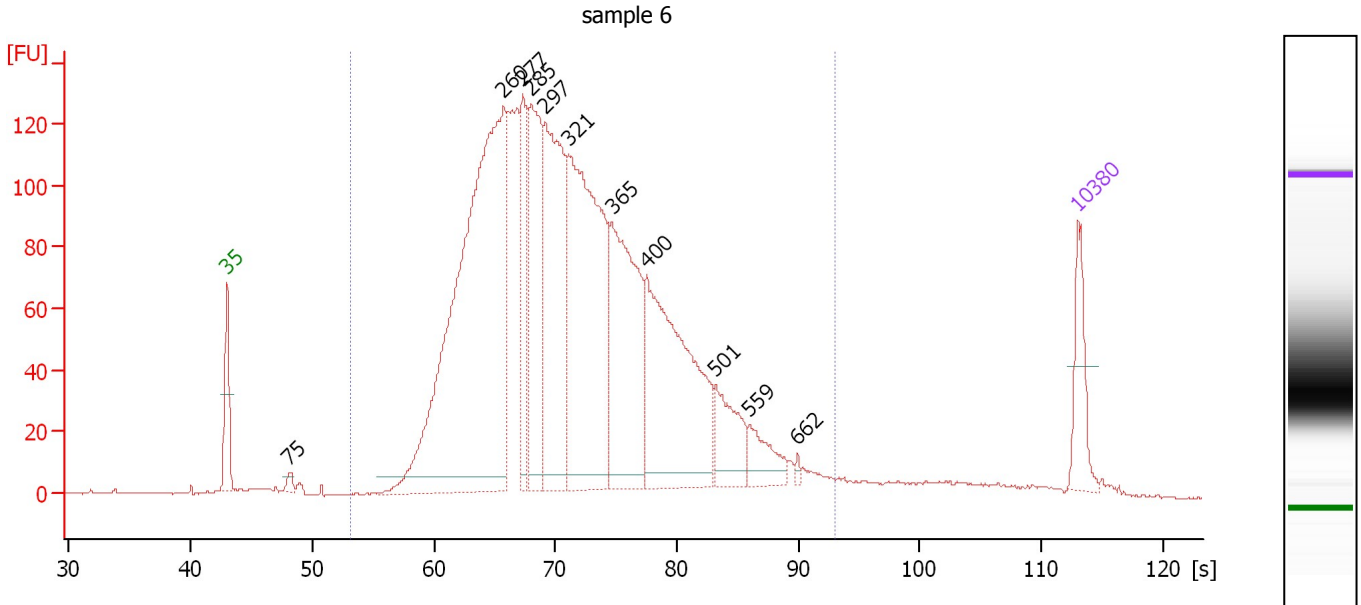
**Region table for sample 5 : sample 5**

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
51.78	79.32	254	2,280.9	18,574.9	3,006.46	95	18.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 11                      Corr. Area 1: 3,192.9  
 Noise: 0.2

**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	75	15.08	306.1		48.13
3	260	1,476.97	8,615.1		65.76
4	277	192.88	1,054.4		67.35
5	285	342.18	1,819.8		68.06
6	297	511.84	2,611.3		69.16
7	321	760.93	3,589.1		71.15
8	365	452.87	1,879.8		74.69
9	400	523.25	1,981.6		77.51
10	501	120.33	364.3		83.21
11	559	70.62	191.5		86.00
12	662	6.49	14.9		89.93
13	10,380	75.00	10.9	Upper Marker	113.00

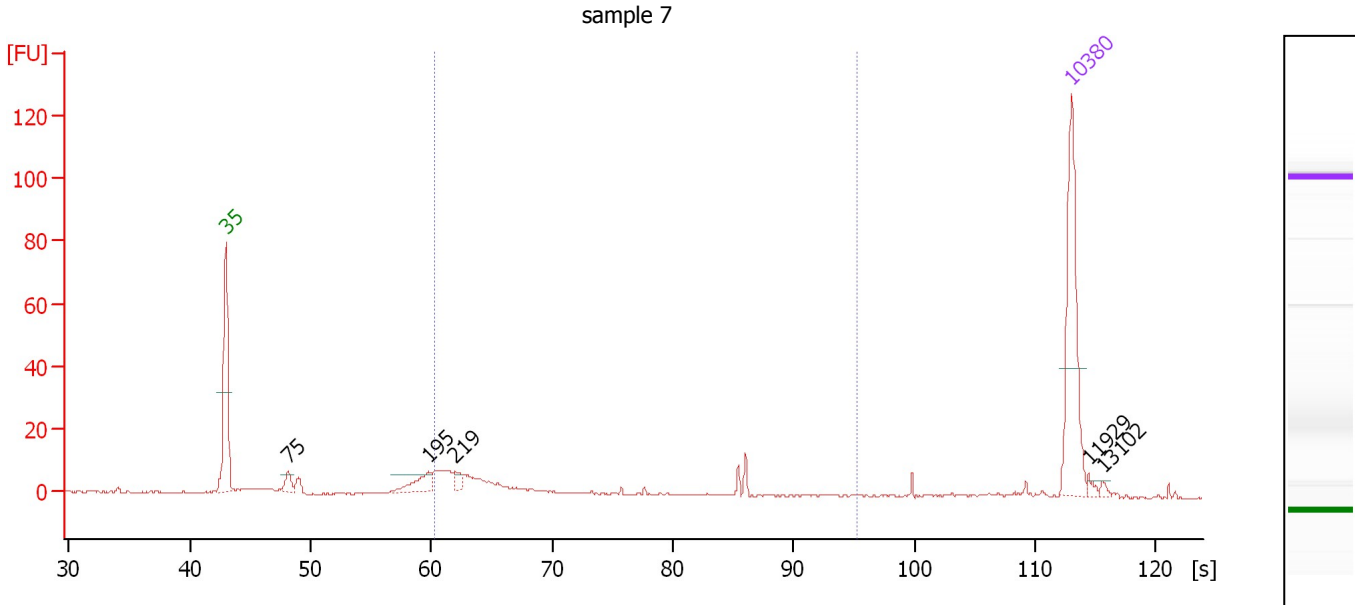
**Region table for sample 6 : sample 6**

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
53.20	92.95	334	3,192.9	25,421.0	5,014.75	96	30.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 5                      Corr. Area 1: 81.5  
 Noise: 0.2

**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	75	10.91	220.6		48.16
3	195	21.92	170.5		59.81
4	219	7.34	50.9		61.99
5	10,380	75.00	10.9	Upper Marker	113.00
6	11,929	0.00	0.0		114.47
7	13,102	0.00	0.0		115.58

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

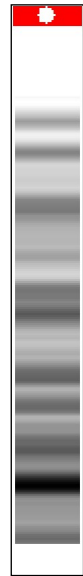
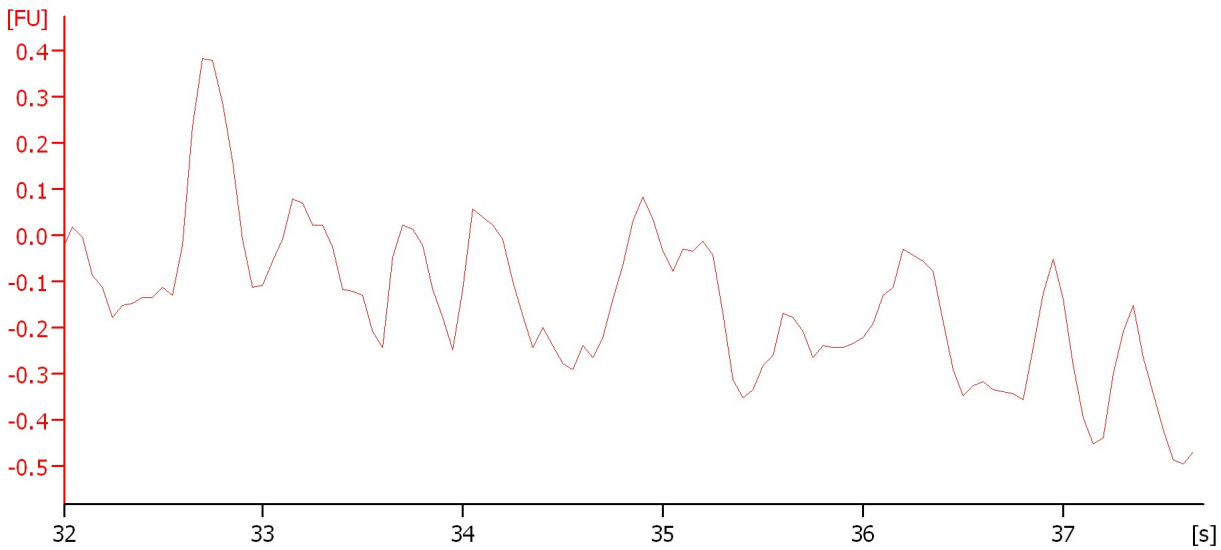
From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.30	95.28	313	81.5	557.9	95.97	51	47.1

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
Modified: 10/30/2015 11:25:48 AM

**Electropherogram Summary Continued ...**

sample 8



**Setpoint Deviations for sample 8 : sample 8**

End Analysis Time Range [s] : 37.7

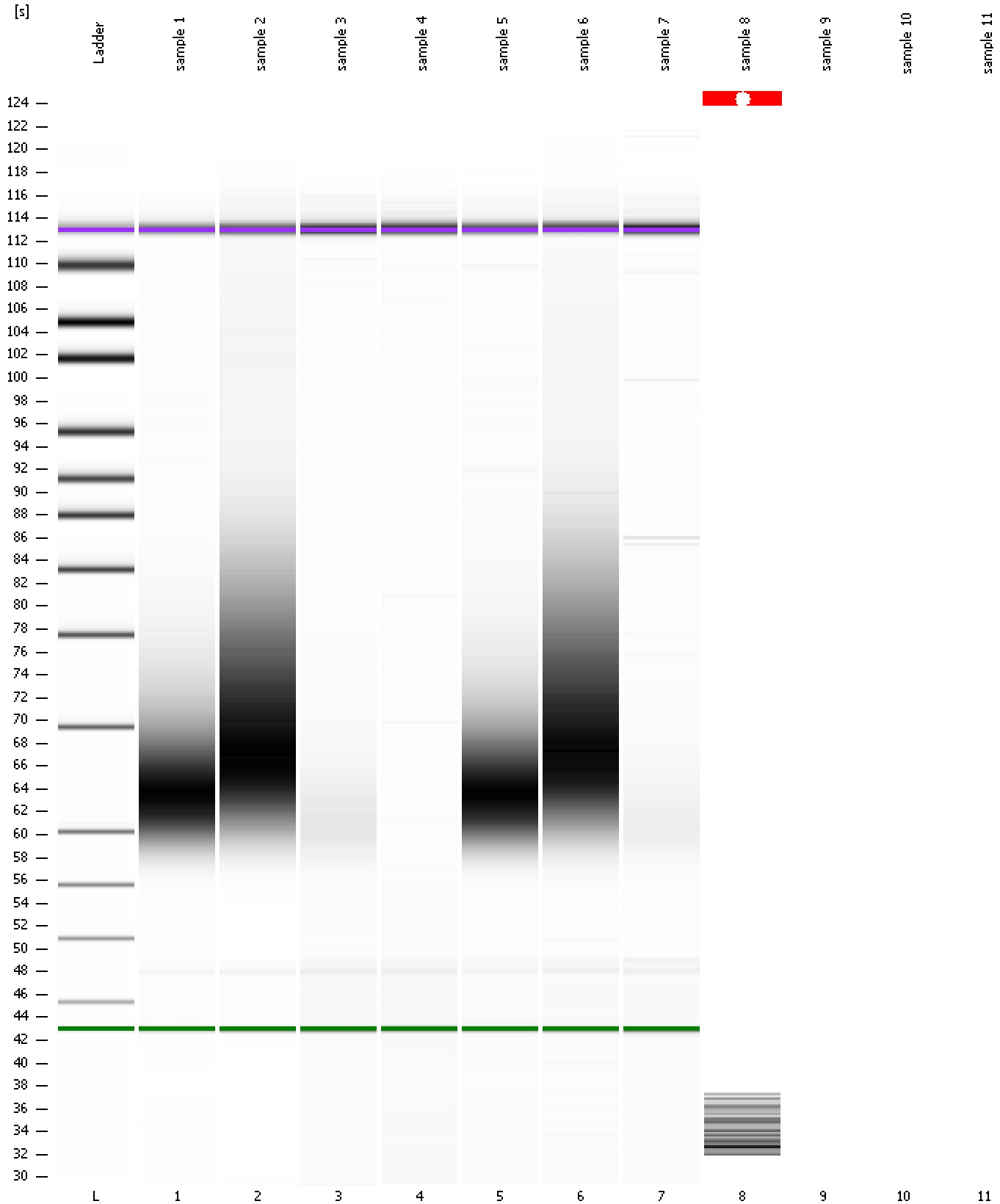
**Overall Results for sample 8 : sample 8**

Noise: 0.2

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
Modified: 10/30/2015 11:25:48 AM

**Gel Image**

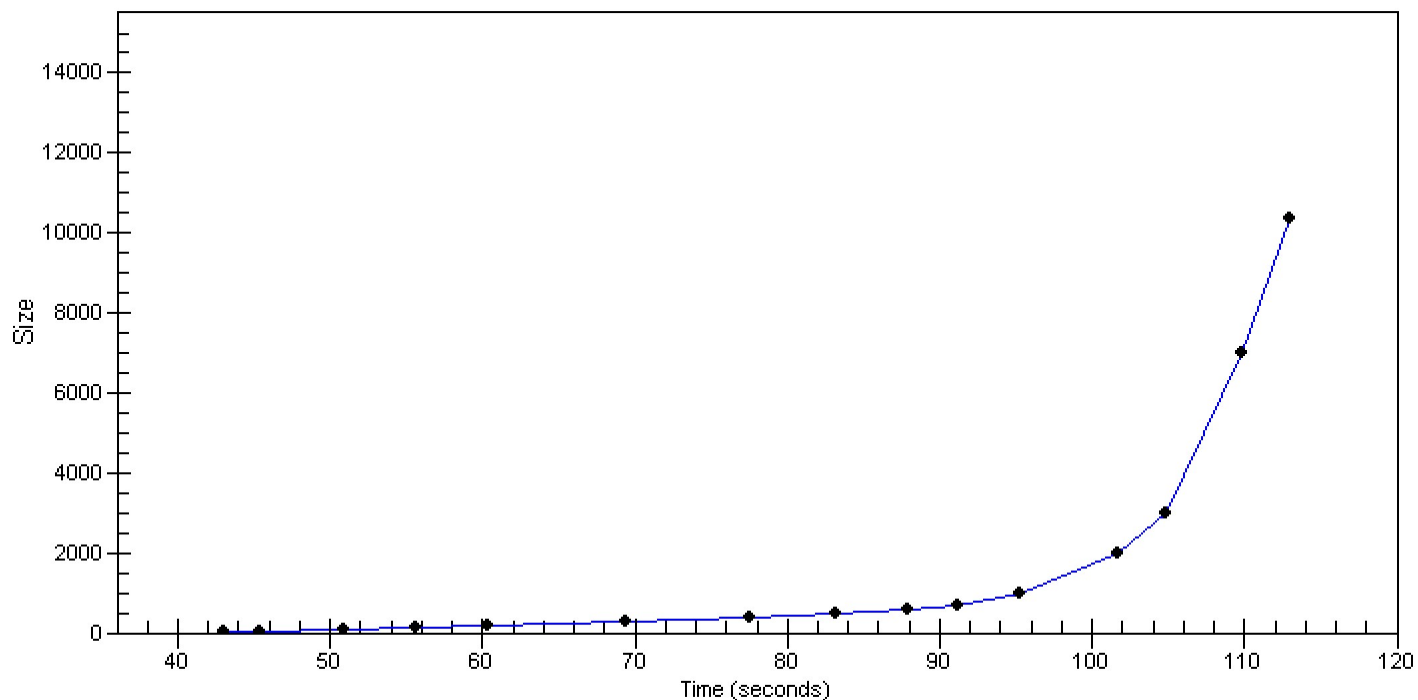


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
Modified: 10/30/2015 11:25:48 AM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
Modified: 10/30/2015 11:25:48 AM

**Invalid Samples**

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-30\2015-10-30\_002.xad

Created: 10/30/2015 10:55:37 AM  
 Modified: 10/30/2015 11:25:48 AM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run aborted on port 1		Instrument	Run		10/30/2015 11:25:47 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_002.xad)		Instrument	Run		10/30/2015 10:55:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/30/2015 10:55:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/30/2015 10:55:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/30/2015 10:55:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/30/2015 10:55:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/30/2015 10:55:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/30/2015 10:55:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1