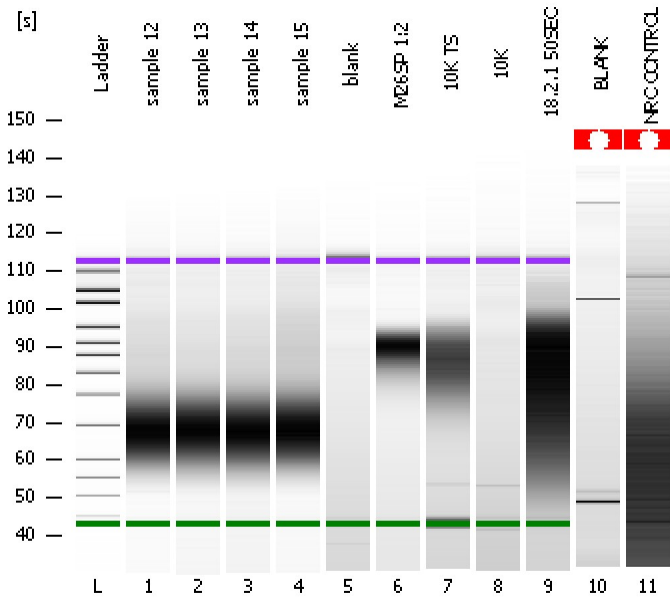


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
Modified: 3/18/2016 1:01:21 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

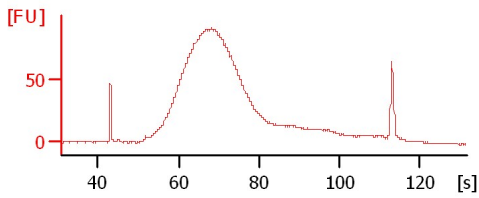
Assay Information:

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

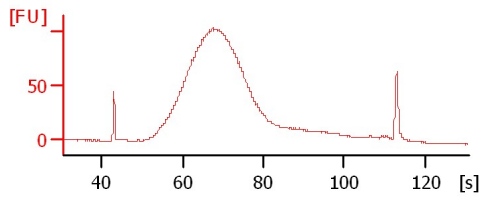
Chip Information:

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

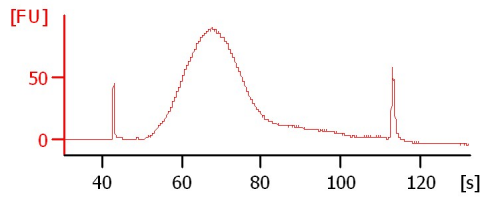
sample 12



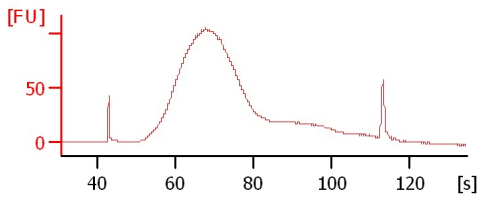
sample 13



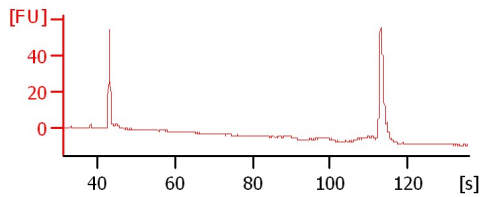
sample 14



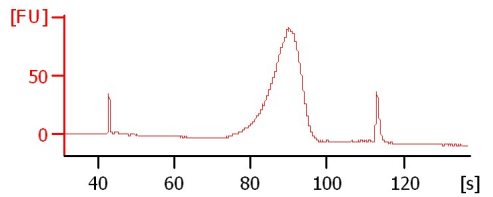
sample 15



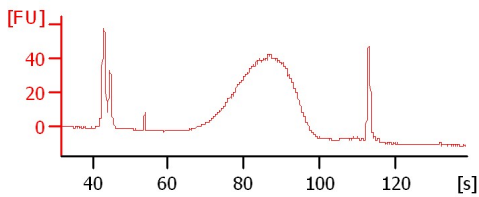
blank



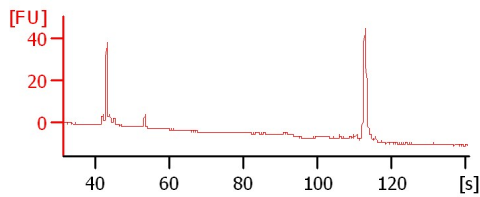
M26SP 1:2



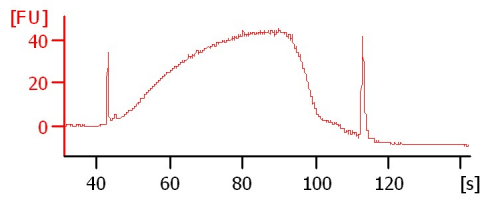
10K TS



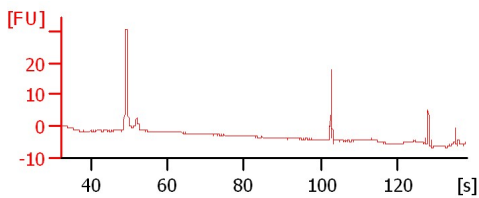
10K



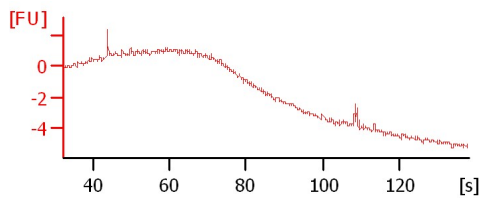
18.2.1 50SEC



BLANK



NRC CONTROL



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
Modified: 3/18/2016 1:01:21 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 12		<input type="checkbox"/>	✓			
sample 13		<input type="checkbox"/>	✓			
sample 14		<input type="checkbox"/>	✓			
sample 15		<input type="checkbox"/>	✓			
blank		<input type="checkbox"/>	✓			
M26SP 1:2		<input type="checkbox"/>	✓			
10K TS		<input type="checkbox"/>	✓			
10K		<input type="checkbox"/>	✓			
18.2.1 50SEC		<input type="checkbox"/>	✓			
BLANK		<input type="checkbox"/>	✓			
NRC CONTROL		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
Modified: 3/18/2016 1:01:21 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

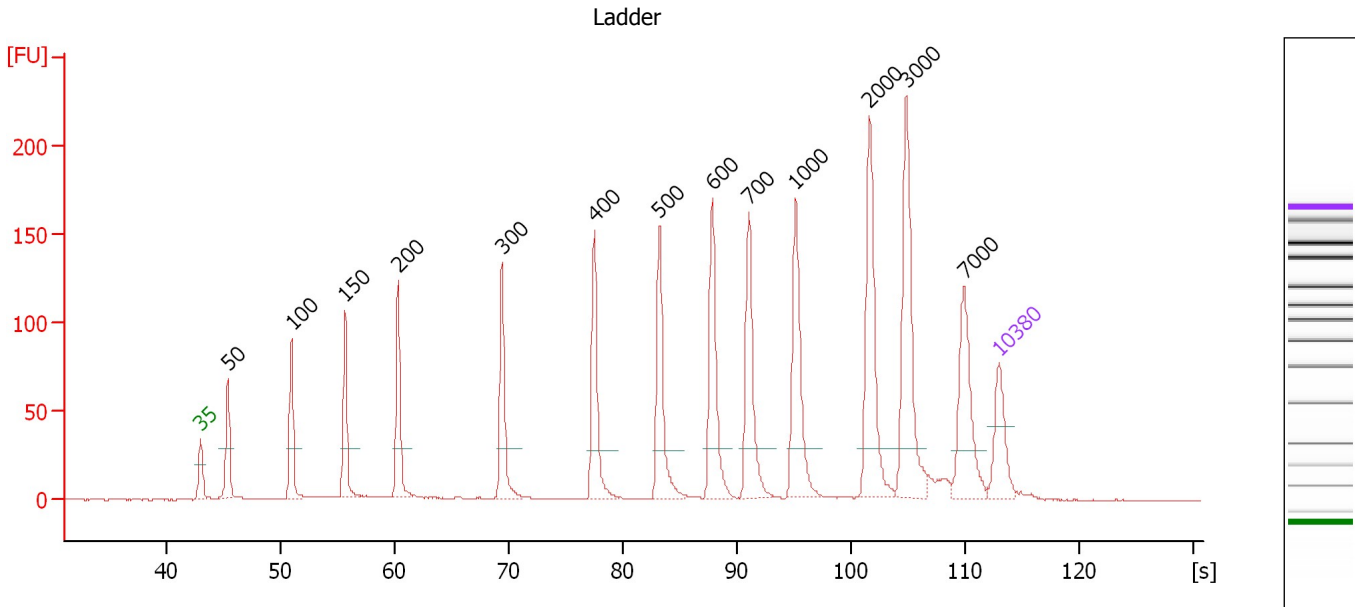
**Ladder**

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:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
 Modified: 3/18/2016 1:01:21 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

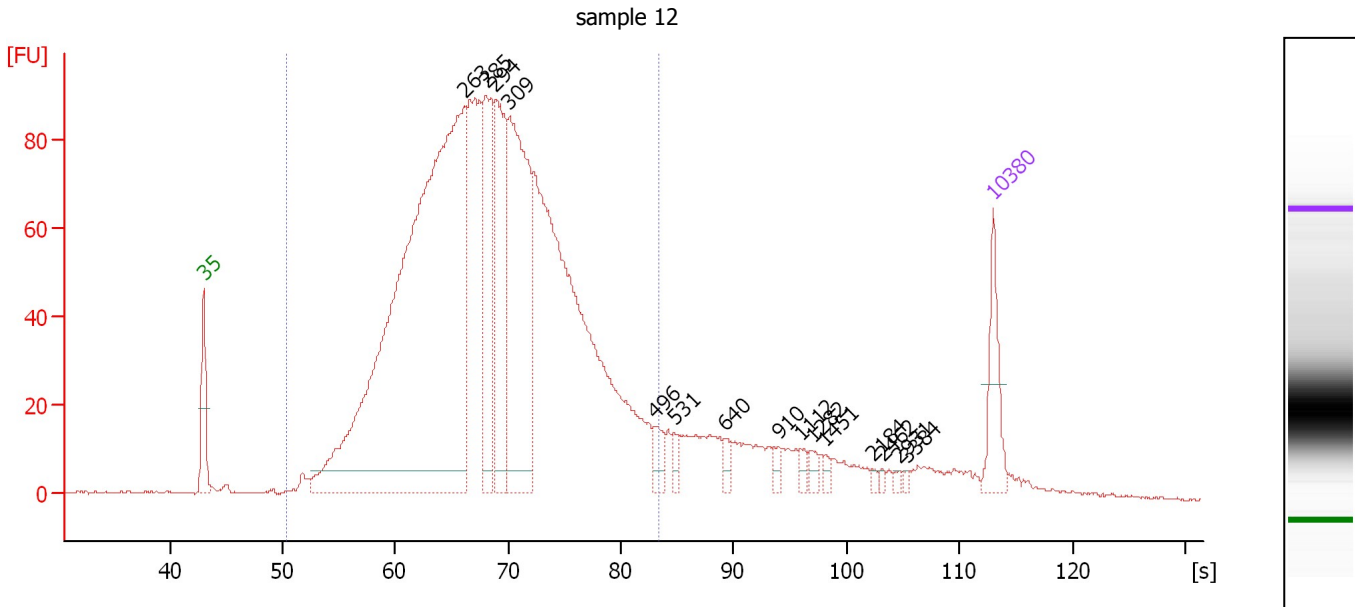
**Peak table for Ladder**

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	45.36
3	100	150.00	2,272.7	Ladder Peak	50.96
4	150	150.00	1,515.2	Ladder Peak	55.67
5	200	150.00	1,136.4	Ladder Peak	60.34
6	300	150.00	757.6	Ladder Peak	69.43
7	400	150.00	568.2	Ladder Peak	77.53
8	500	150.00	454.5	Ladder Peak	83.23
9	600	150.00	378.8	Ladder Peak	87.89
10	700	150.00	324.7	Ladder Peak	91.10
11	1,000	150.00	227.3	Ladder Peak	95.19
12	2,000	150.00	113.6	Ladder Peak	101.65
13	3,000	150.00	75.8	Ladder Peak	104.90
14	7,000	150.00	32.5	Ladder Peak	109.99
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
 Modified: 3/18/2016 1:01:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 12**

Number of peaks found: 15                      Corr. Area 1: 2,241.6  
 Noise: 0.3

**Peak table for sample 1 : sample 12**

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	2,103.46	12,109.6		66.08
3	285	302.81	1,611.8		68.03
4	294	344.06	1,772.8		68.89
5	309	569.30	2,795.0		70.12
6	496	35.33	108.0		82.97
7	531	19.08	54.4		84.69
8	640	18.24	43.2		89.16
9	910	15.58	25.9		93.97
10	1,112	13.78	18.8		95.92
11	1,282	14.20	16.8		97.01
12	1,451	8.36	8.7		98.11
13	2,184	5.12	3.6		102.25
14	2,462	5.01	3.1		103.15
15	2,931	5.39	2.8		104.67
16	3,384	4.43	2.0		105.39
17	10,380	75.00	10.9	Upper Marker	113.00

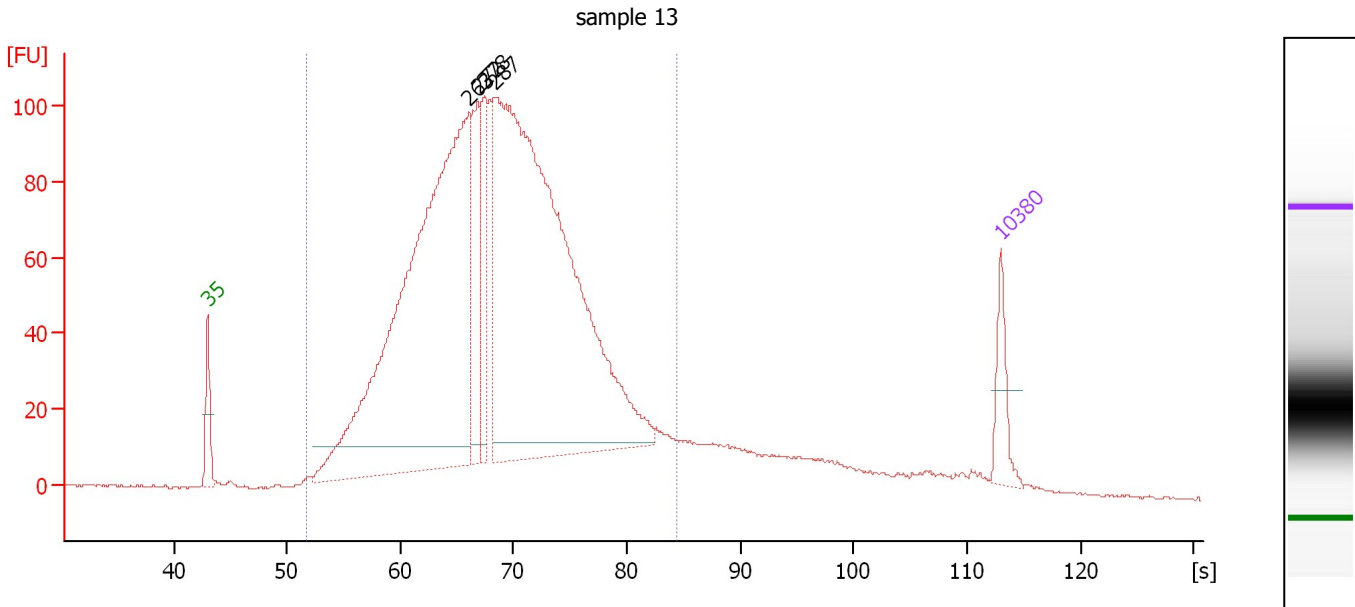
**Region table for sample 1 : sample 12**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
95	504	291	2,241.5	30,120.3	5,191.32	88	26.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
 Modified: 3/18/2016 1:01:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 13**

Number of peaks found: 4                      Corr. Area 1: 2,575.1  
 Noise: 0.3

**Peak table for sample 2 : sample 13**

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	2,166.80	12,498.5		66.03
3	272	283.31	1,580.9		66.84
4	278	222.02	1,210.9		67.41
5	287	2,446.24	12,906.5		68.26
6	10,380	75.00	10.9	Upper Marker	113.00

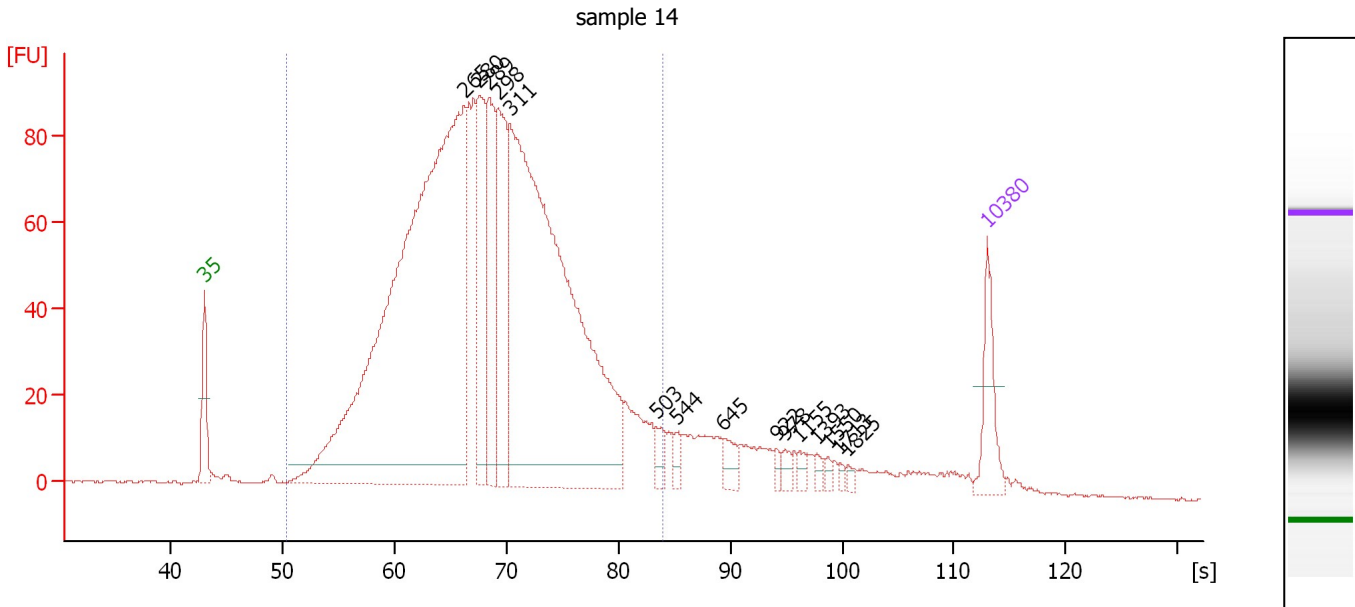
**Region table for sample 2 : sample 13**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
108	524	293	2,575.1	34,991.2	6,053.55	90	26.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
 Modified: 3/18/2016 1:01:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 14**

Number of peaks found: 15                      Corr. Area 1: 2,278.1  
 Noise: 0.3

**Peak table for sample 3 : sample 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	265	2,155.35	12,327.0		66.24
3	280	261.26	1,415.2		67.58
4	289	266.17	1,394.4		68.45
5	298	305.40	1,551.8		69.26
6	311	1,594.73	7,769.2		70.32
7	503	29.85	89.9		83.38
8	544	23.35	65.0		85.30
9	645	33.19	78.0		89.33
10	922	10.55	17.3		94.13
11	978	14.70	22.8		94.90
12	1,155	12.93	17.0		96.20
13	1,393	10.04	10.9		97.73
14	1,550	7.33	7.2		98.74
15	1,713	5.93	5.2		99.80
16	1,825	7.28	6.0		100.52
17	10,380	75.00	10.9	Upper Marker	113.00

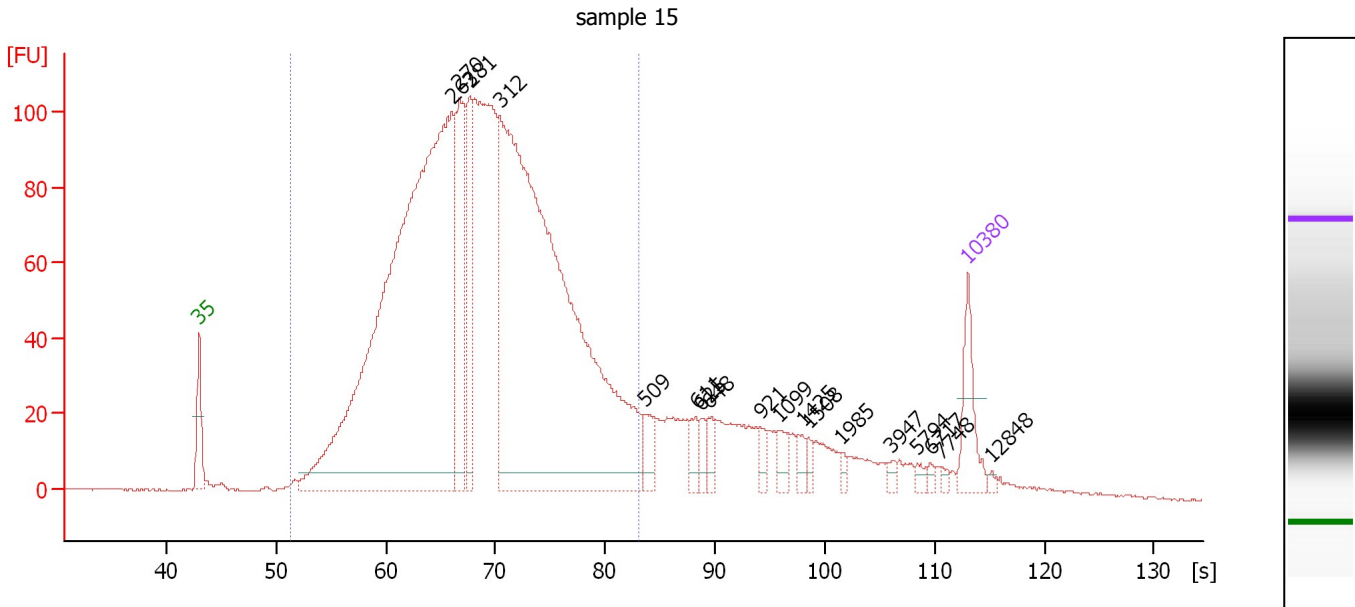
**Region table for sample 3 : sample 14**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
95	515	290	2,278.1	30,773.1	5,233.45	89	27.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
 Modified: 3/18/2016 1:01:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 15**

Number of peaks found: 18                      Corr. Area 1: 2,647.5  
 Noise: 0.2

**Peak table for sample 4 : sample 15**

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	2,318.95	13,372.4		66.04
3	270	313.78	1,759.0		66.72
4	281	212.38	1,145.0		67.70
5	312	2,124.28	10,318.3		70.39
6	509	46.22	137.6		83.65
7	611	31.59	78.3		88.25
8	625	24.16	58.6		88.69
9	648	28.11	65.8		89.42
10	921	19.87	32.7		94.12
11	1,099	28.04	38.7		95.83
12	1,425	17.89	19.0		97.93
13	1,508	13.41	13.5		98.47
14	1,985	8.99	6.9		101.55
15	3,947	9.60	3.7		106.10
16	5,794	9.64	2.5		108.45
17	6,717	6.48	1.5		109.62
18	7,748	6.31	1.2		110.65
19	10,380	75.00	10.9	Upper Marker	113.00
20	12,848	0.00	0.0		115.20

**Region table for sample 4 : sample 15**

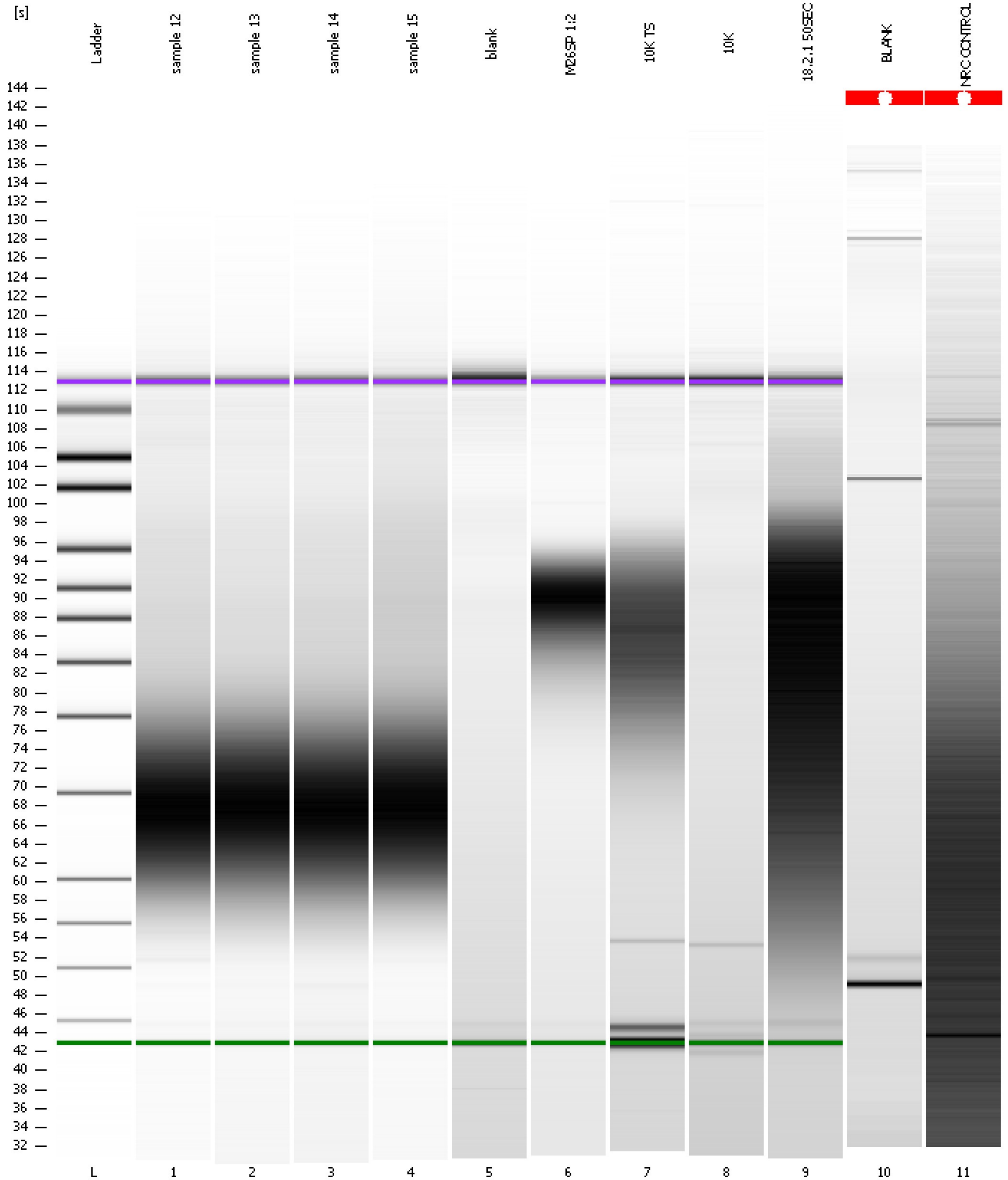
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
103	498	294	2,647.5	33,453.6	5,818.54	85	26.3



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
Modified: 3/18/2016 1:01:21 PM

**Gel Image**

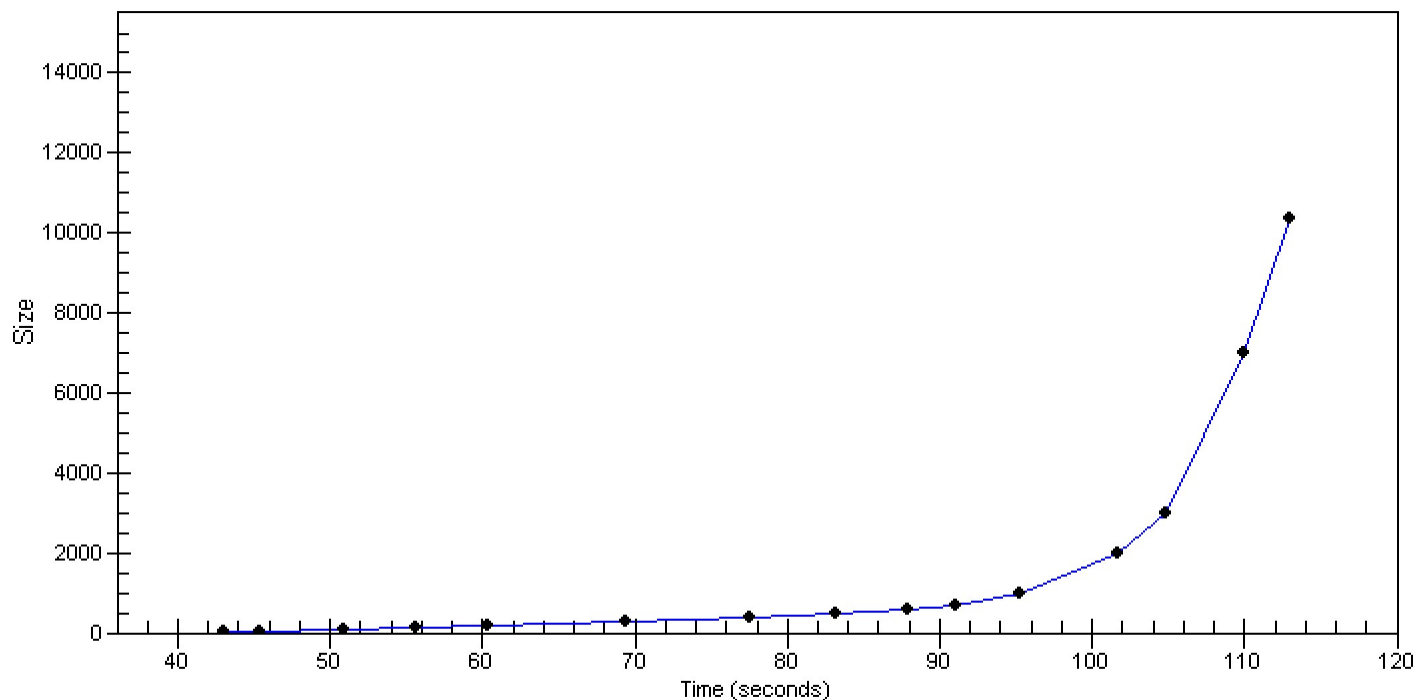


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
Modified: 3/18/2016 1:01:21 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-18\2016-03-18\_003.xad

Created: 3/18/2016 12:20:54 PM  
 Modified: 3/18/2016 1:01:21 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		3/18/2016 1:01:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-03-18\2016-03-18_003.xad)		Instrument	Run		3/18/2016 12:21:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/18/2016 12:21:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/18/2016 12:21:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/18/2016 12:21:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/18/2016 12:21:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/18/2016 12:21:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/18/2016 12:21:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1