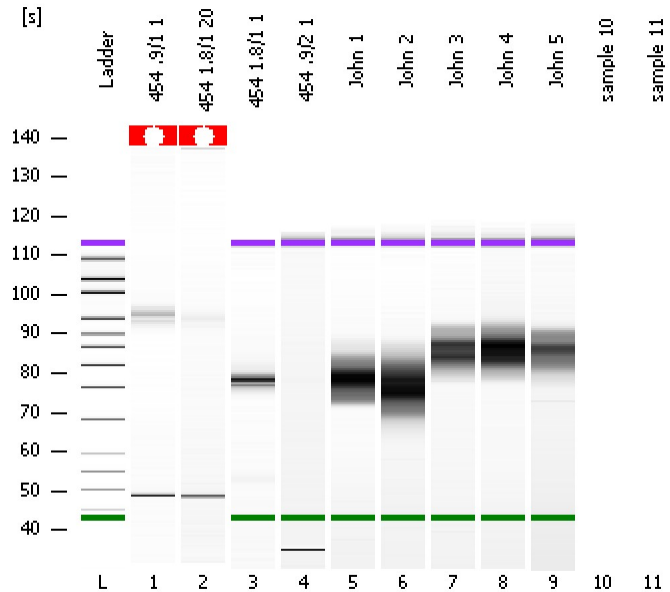


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
Modified: 6/18/2012 12:01:53 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

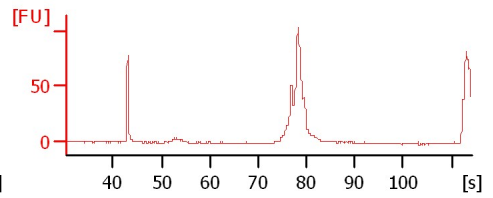
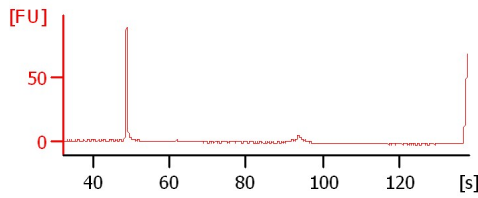
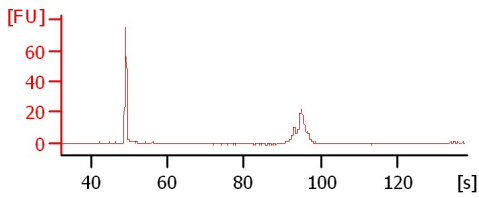
#### Chip Information:

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

454 .9/1 1

454 1.8/1 20

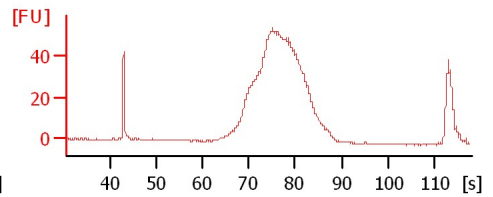
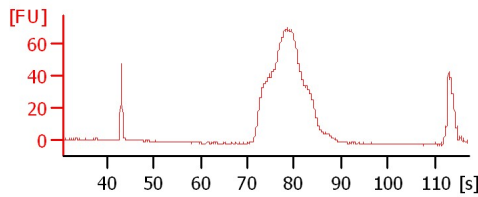
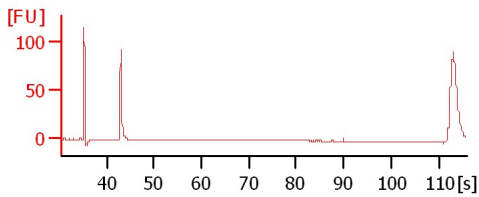
454 1.8/1 1



454 .9/2 1

John 1

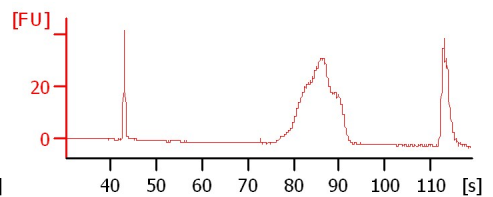
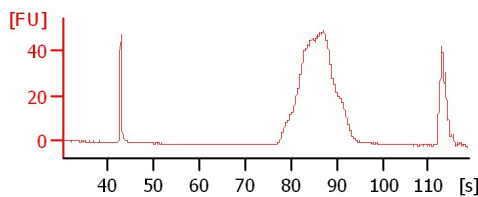
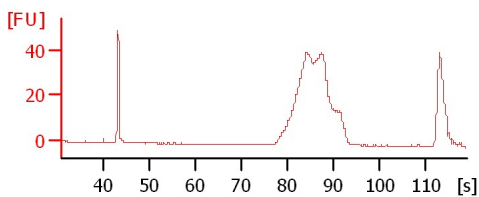
John 2



John 3

John 4

John 5



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
 Modified: 6/18/2012 12:01:53 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
454 .9/1 1		<input type="checkbox"/>	✓			
454 1.8/1 20		<input type="checkbox"/>	✓			
454 1.8/1 1		<input type="checkbox"/>	✓			
454 .9/2 1		<input type="checkbox"/>	✓			
John 1		<input type="checkbox"/>	✓			
John 2		<input type="checkbox"/>	✓			
John 3		<input type="checkbox"/>	✓			
John 4		<input type="checkbox"/>	✓			
John 5		<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\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
Modified: 6/18/2012 12:01:53 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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ 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

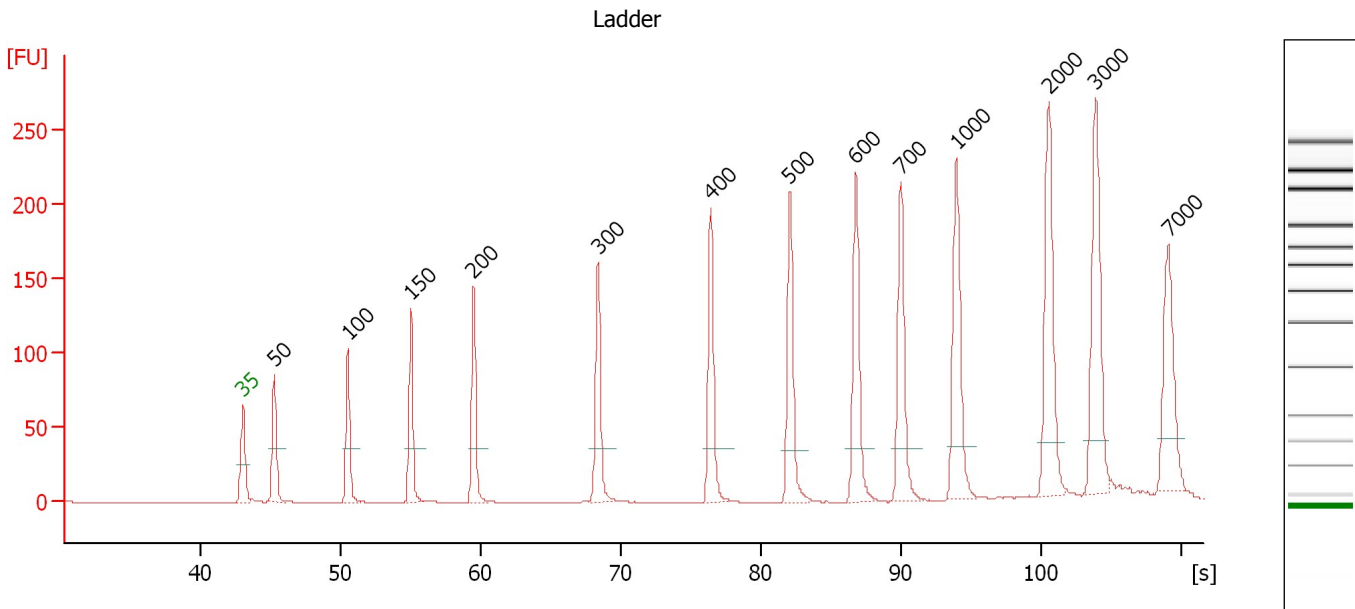
**Ladder**

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\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
 Modified: 6/18/2012 12:01:53 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

**Peak table for Ladder**

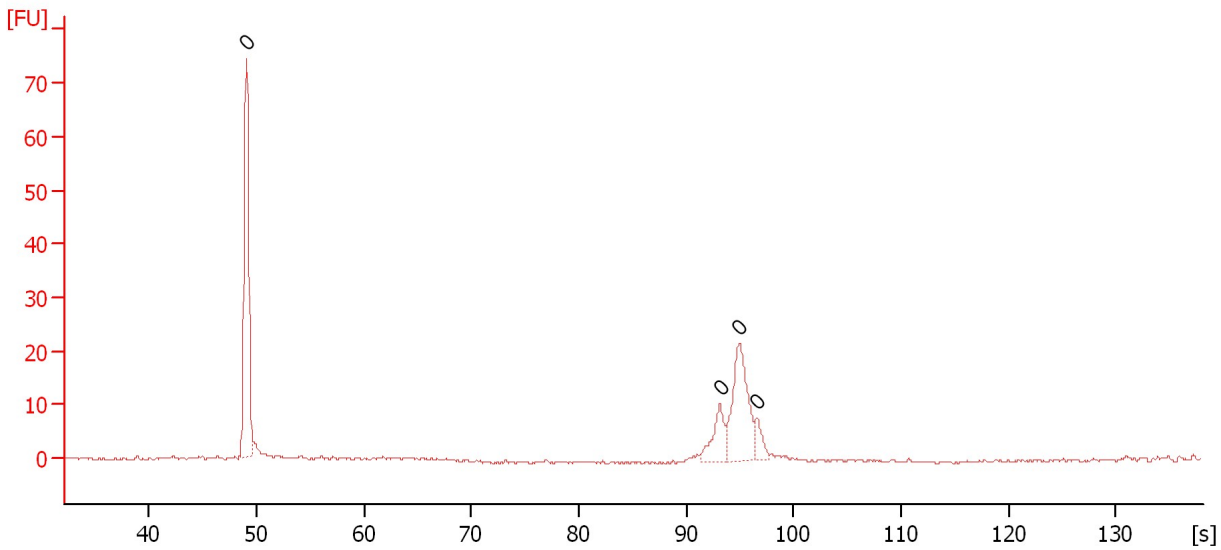
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
Modified: 6/18/2012 12:01:53 PM

**Electropherogram Summary Continued ...**

454.9/1 1



**Overall Results for sample 1 : 454.9/1 1**

Number of peaks found: 0                      Noise: 0.2

**Peak table for sample 1 : 454.9/1 1**

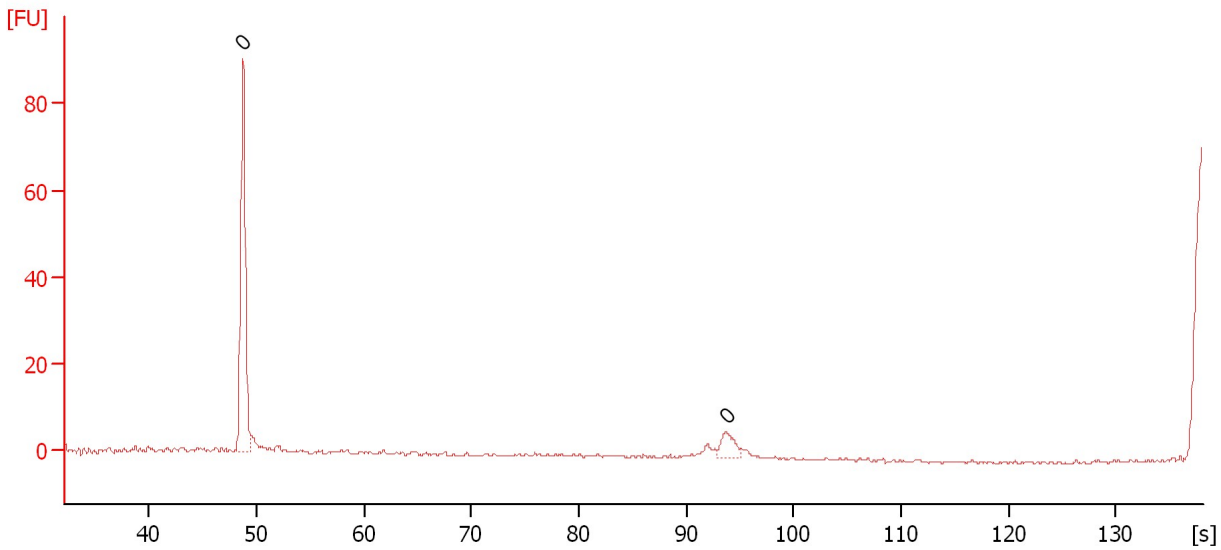
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	0	0.00	0.0	
3	0	0.00	0.0	
4	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
Modified: 6/18/2012 12:01:53 PM

**Electropherogram Summary Continued ...**

454 1.8/1 20



**Overall Results for sample 2 : 454 1.8/1 20**

Number of peaks found: 0                      Noise: 0.2

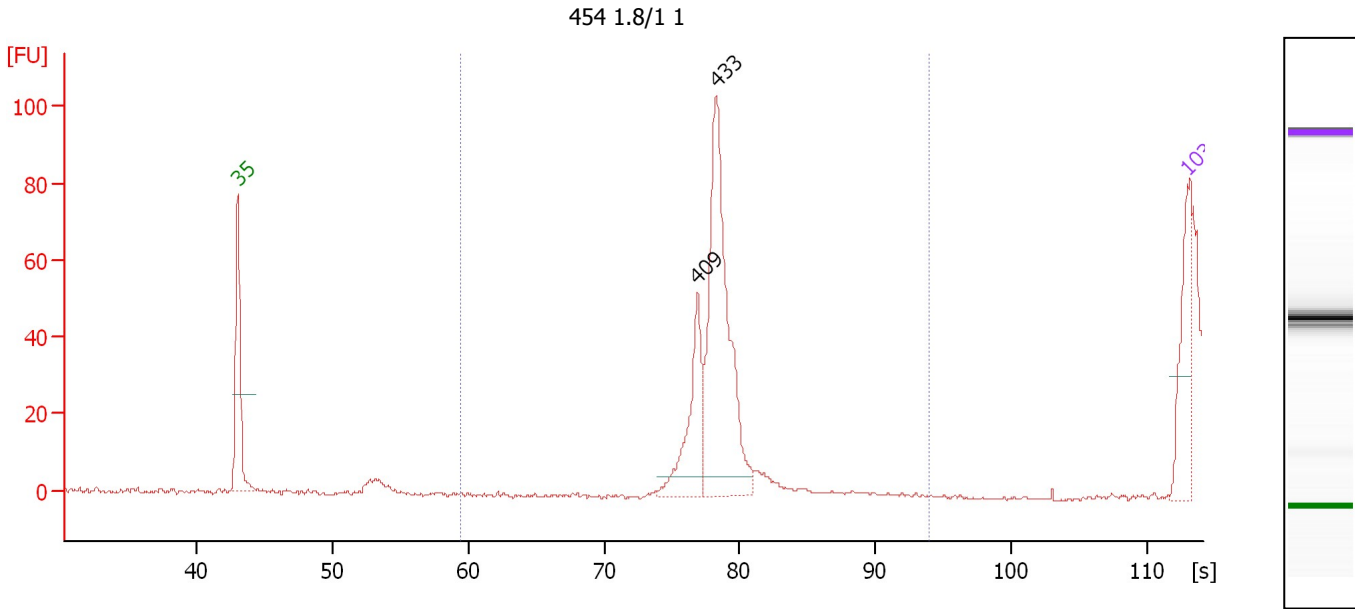
**Peak table for sample 2 : 454 1.8/1 20**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
 Modified: 6/18/2012 12:01:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 454 1.8/1 1**

Number of peaks found: 2                      Corr. Area 1: 81.6  
 Noise: 0.4

**Peak table for sample 3 : 454 1.8/1 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	409	135.88	503.5	
3	433	379.81	1,327.5	
4	10,380	75.00	10.9	Upper Marker

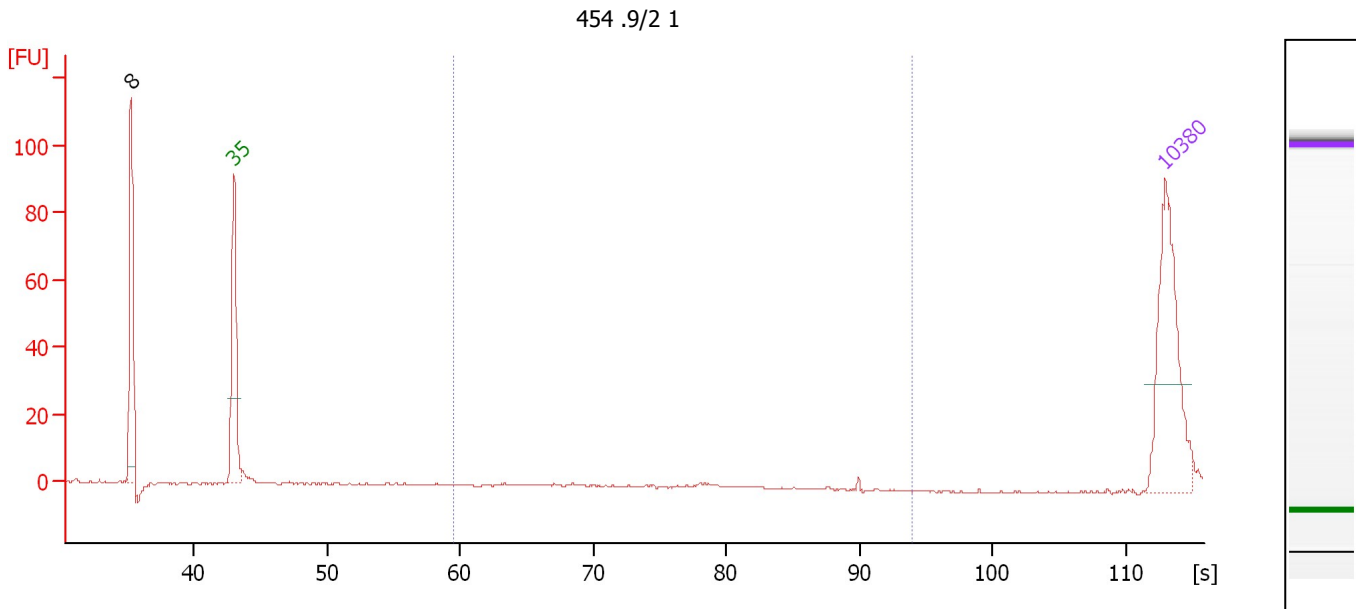
**Region table for sample 3 : 454 1.8/1 1**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
59.45	93.91	433	481.7	137.53	81.6	97	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
 Modified: 6/18/2012 12:01:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 454.9/2 1**

Number of peaks found: 1                      Corr. Area 1: 0.0  
 Noise: 0.2

**Peak table for sample 4 : 454.9/2 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	8	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : 454.9/2 1**

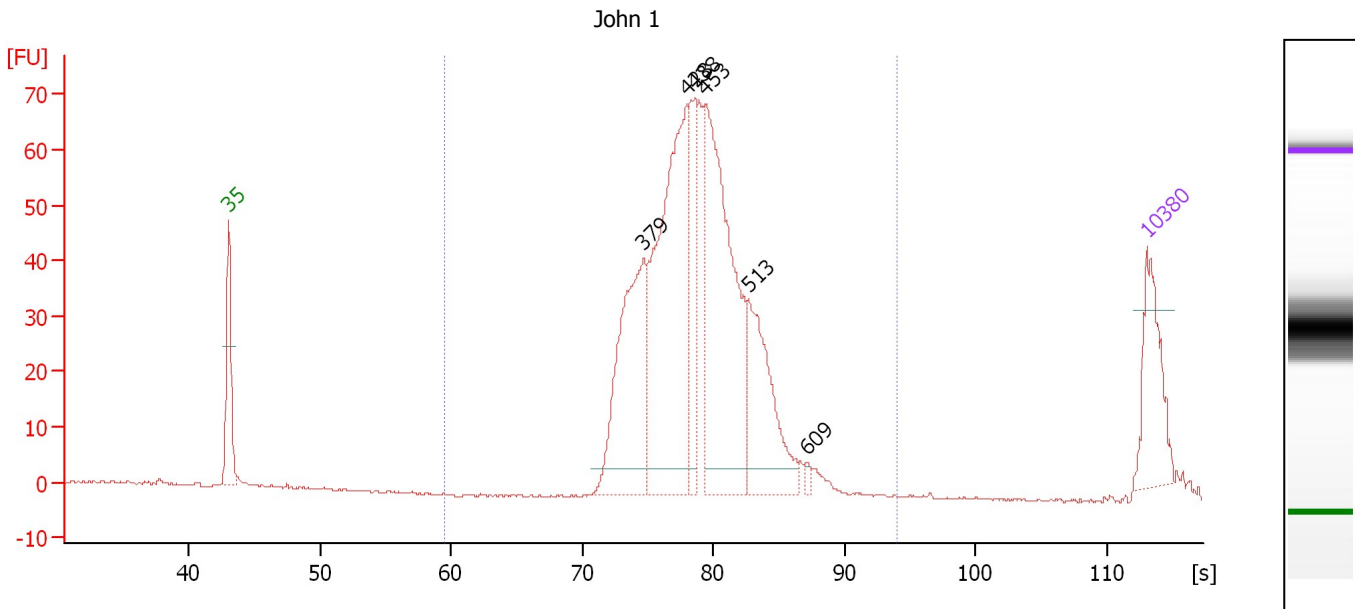
From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
59.45	93.91	0	0.0	0.00	0.0	0	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
 Modified: 6/18/2012 12:01:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : John 1**

Number of peaks found: 6                      Corr. Area 1: 800.3  
 Noise: 0.2

**Peak table for sample 5 : John 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	379	262.27	1,049.8	
3	428	415.00	1,468.4	
4	438	96.60	333.9	
5	453	393.55	1,316.5	
6	513	170.04	502.0	
7	609	6.10	15.2	
8	10,380	75.00	10.9	Upper Marker

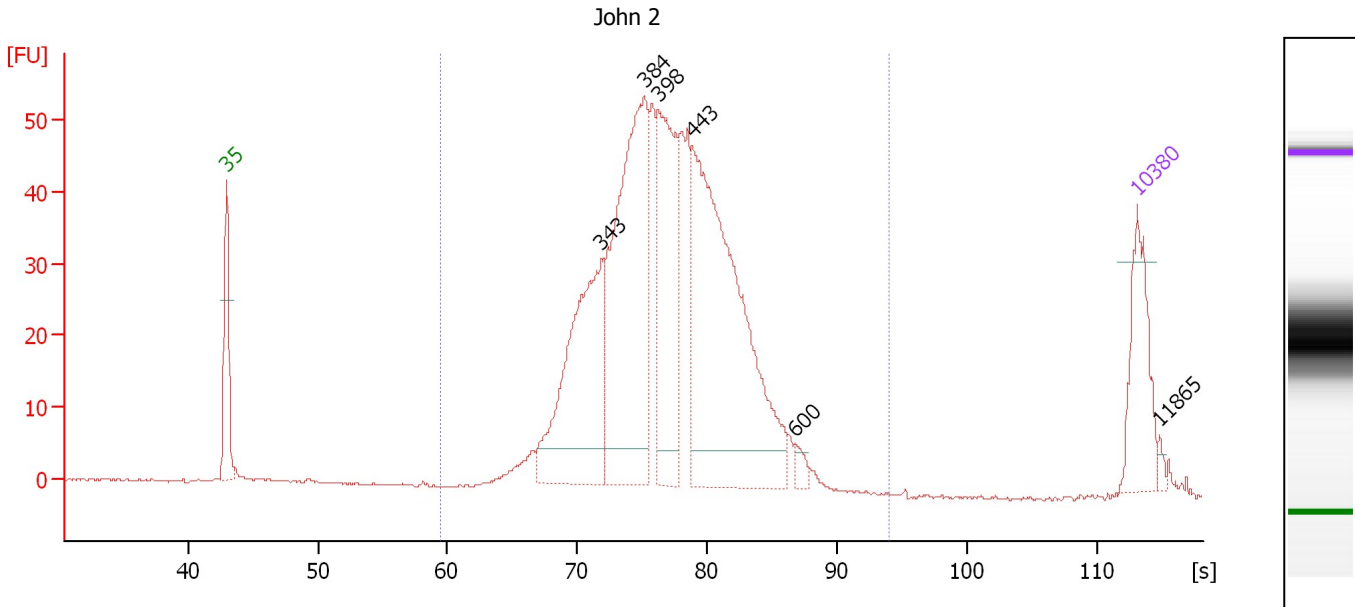
**Region table for sample 5 : John 1**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color	
59.45	93.91	442	4,937.3	1,411.76	800.3	99	13.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
 Modified: 6/18/2012 12:01:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : John 2**

Number of peaks found: 6                      Corr. Area 1: 891.2  
 Noise: 0.1

**Peak table for sample 6 : John 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	343	294.90	1,303.5	
3	384	408.33	1,609.7	
4	398	225.55	859.3	
5	443	503.72	1,723.3	
6	600	11.72	29.6	
7	10,380	75.00	10.9	Upper Marker
8	11,865	0.00	0.0	

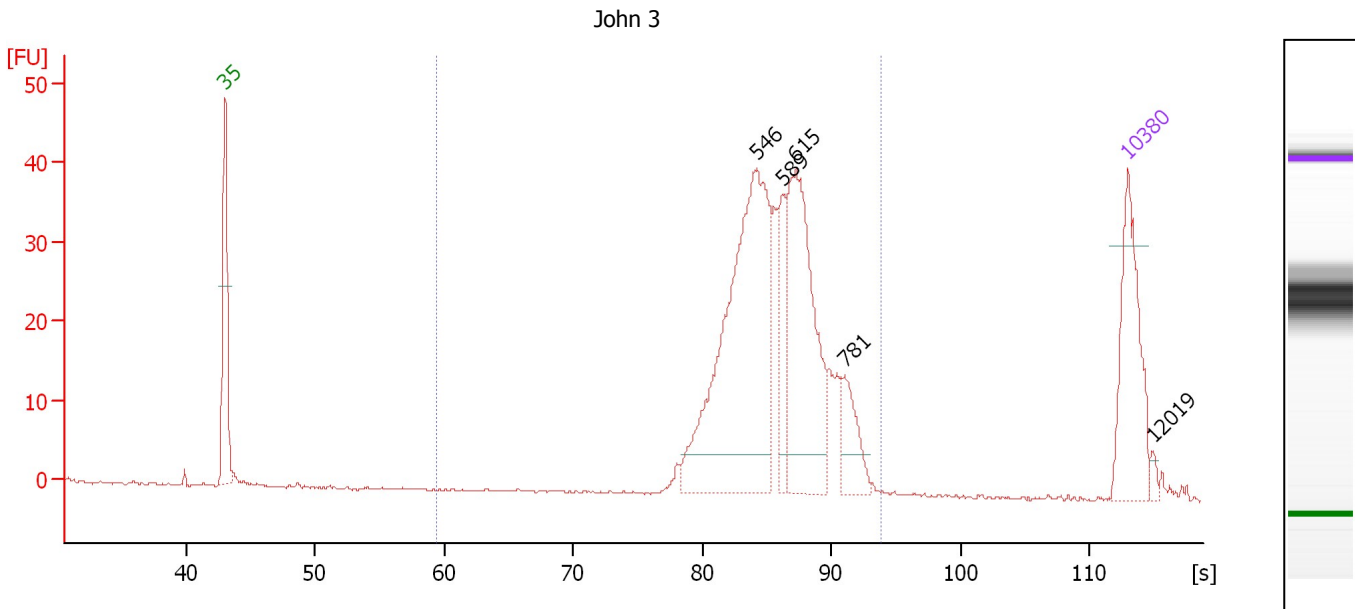
**Region table for sample 6 : John 2**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
59.45	93.91	415	6,609.8	1,737.06	891.2	98	17.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
 Modified: 6/18/2012 12:01:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : John 3**

Number of peaks found: 5                      Corr. Area 1: 411.2  
 Noise: 0.1

**Peak table for sample 7 : John 3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	546	329.62	914.5	
3	589	50.52	130.1	
4	615	173.75	427.7	
5	781	36.33	70.5	
6	10,380	75.00	10.9	Upper Marker
7	12,019	0.00	0.0	

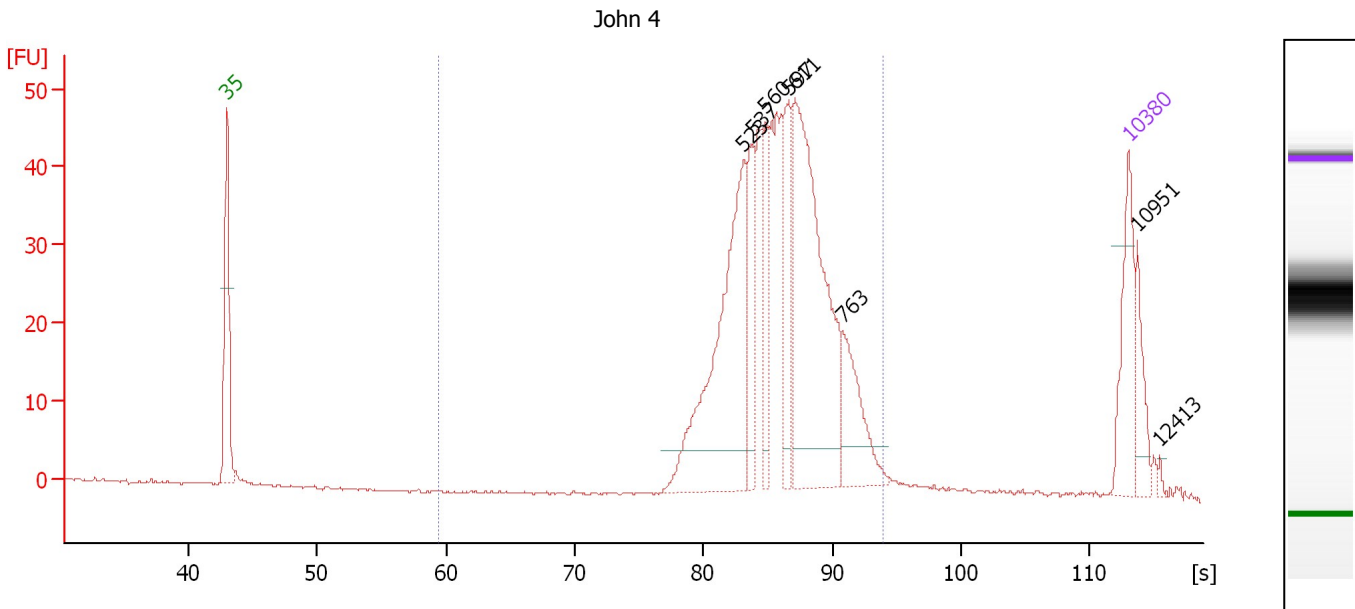
**Region table for sample 7 : John 3**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
59.45	93.91	589	1,766.0	668.52	411.2 98	15.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
 Modified: 6/18/2012 12:01:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : John 4**

Number of peaks found: 8                      Corr. Area 1: 538.8  
 Noise: 0.1

**Peak table for sample 8 : John 4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	523	341.15	987.7	
3	537	89.69	252.8	
4	560	75.10	203.4	
5	597	92.01	233.6	
6	611	374.61	929.5	
7	763	90.88	180.4	
8	10,380	75.00	10.9	Upper Marker
9	10,951	0.00	0.0	
10	12,413	0.00	0.0	

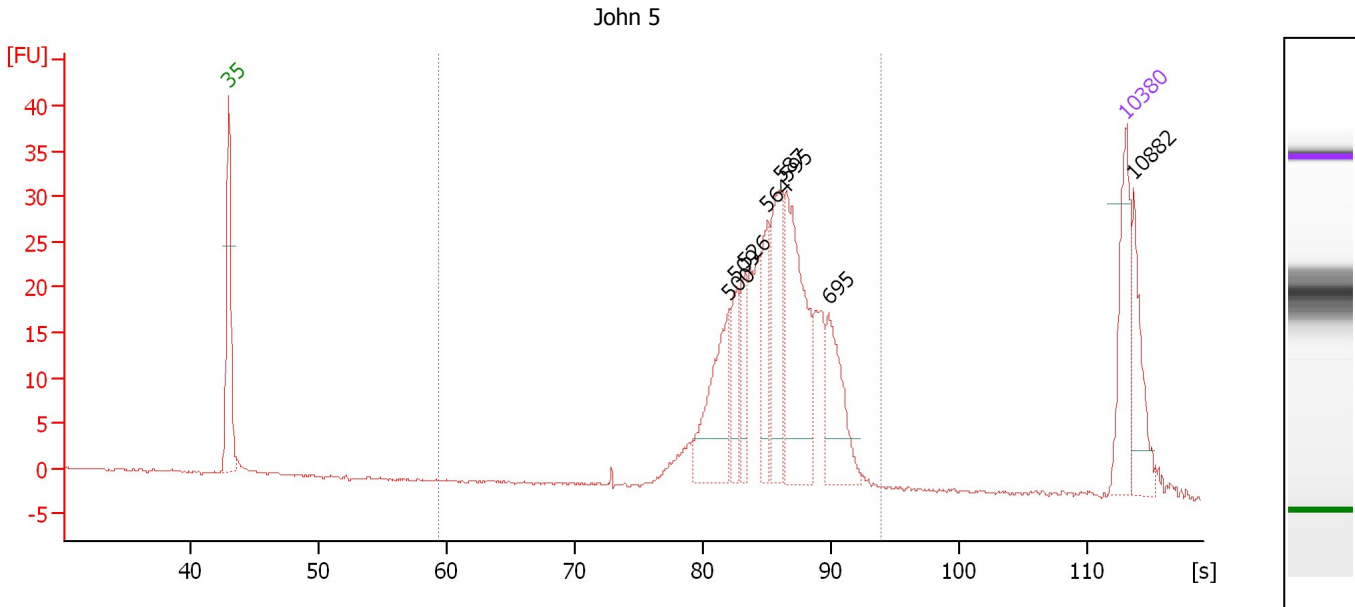
**Region table for sample 8 : John 4**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.45	93.91	598	3,426.5	1,311.88	538.8	94	16.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
 Modified: 6/18/2012 12:01:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : John 5**

Number of peaks found: 8                      Corr. Area 1: 320.0  
 Noise: 0.1

**Peak table for sample 9 : John 5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	500	124.49	377.6	
3	509	44.52	132.5	
4	526	43.84	126.3	
5	564	65.84	176.8	
6	587	98.28	253.5	
7	595	175.42	447.0	
8	695	91.89	200.4	
9	10,380	75.00	10.9	Upper Marker
10	10,882	0.00	0.0	

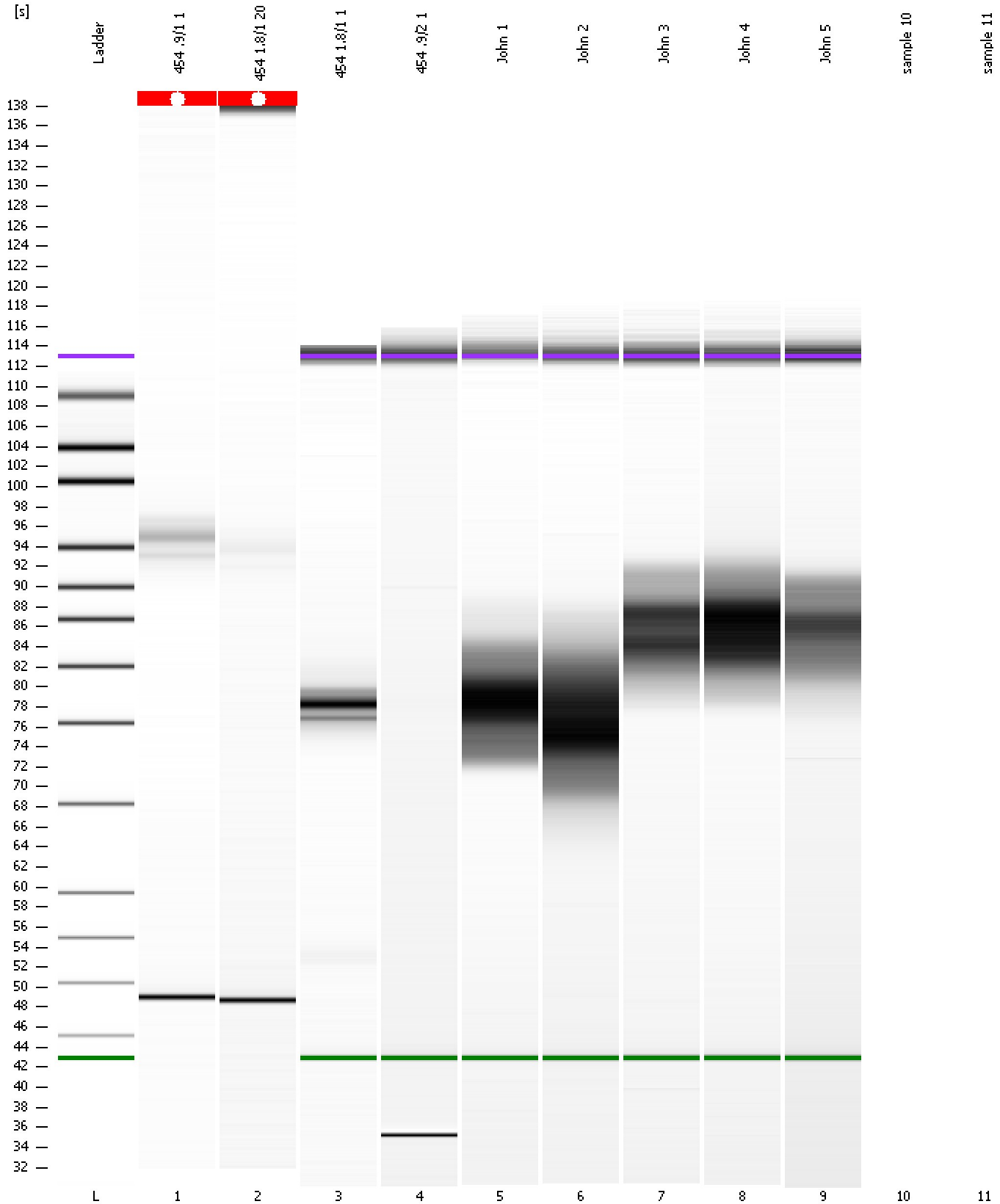
**Region table for sample 9 : John 5**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.45	93.91	585	2,375.7	893.11	320.0	88	15.1	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
Modified: 6/18/2012 12:01:53 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
Modified: 6/18/2012 12:01:53 PM

**Invalid Samples**

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\2012-06-18\2012-06-18\_002.xad

Created: 6/18/2012 11:24:47 AM  
 Modified: 6/18/2012 12:01:53 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		6/18/2012 12:00:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-18\2012-06-18_002.xad)		Instrument	Run		6/18/2012 11:24:47 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/18/2012 11:24:47 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/18/2012 11:24:47 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/18/2012 11:24:47 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/18/2012 11:24:47 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/18/2012 11:24:47 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/18/2012 11:24:47 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1