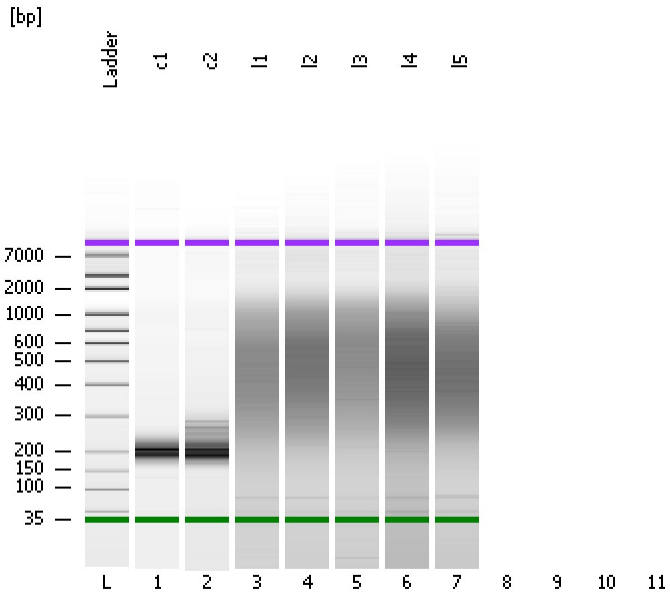


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
Modified: 2/23/2016 4:05:38 PM

### Electrophoresis File Run Summary



#### Instrument Information:

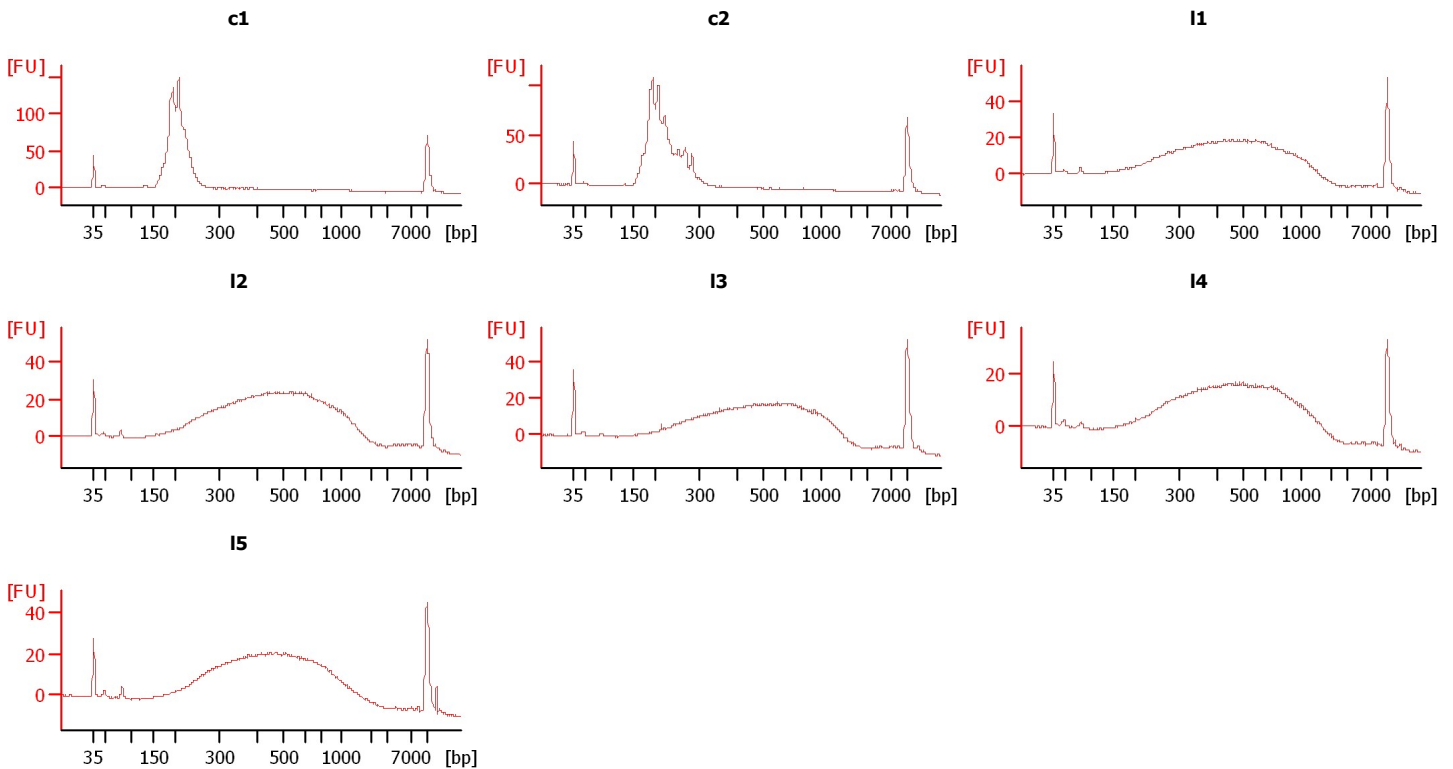
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### 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:



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
Modified: 2/23/2016 4:05:38 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
c1		<input type="checkbox"/>	✓			
c2		<input type="checkbox"/>	✓			
l1		<input type="checkbox"/>	✓			
l2		<input type="checkbox"/>	✓			
l3		<input type="checkbox"/>	✓			
l4		<input type="checkbox"/>	✓			
l5		<input type="checkbox"/>	✓			
		<input type="checkbox"/>				
		<input type="checkbox"/>				
		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>	✓			
<b>Chip Lot #</b>				<b>Reagent Kit Lot #</b>		

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
Modified: 2/23/2016 4:05:38 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

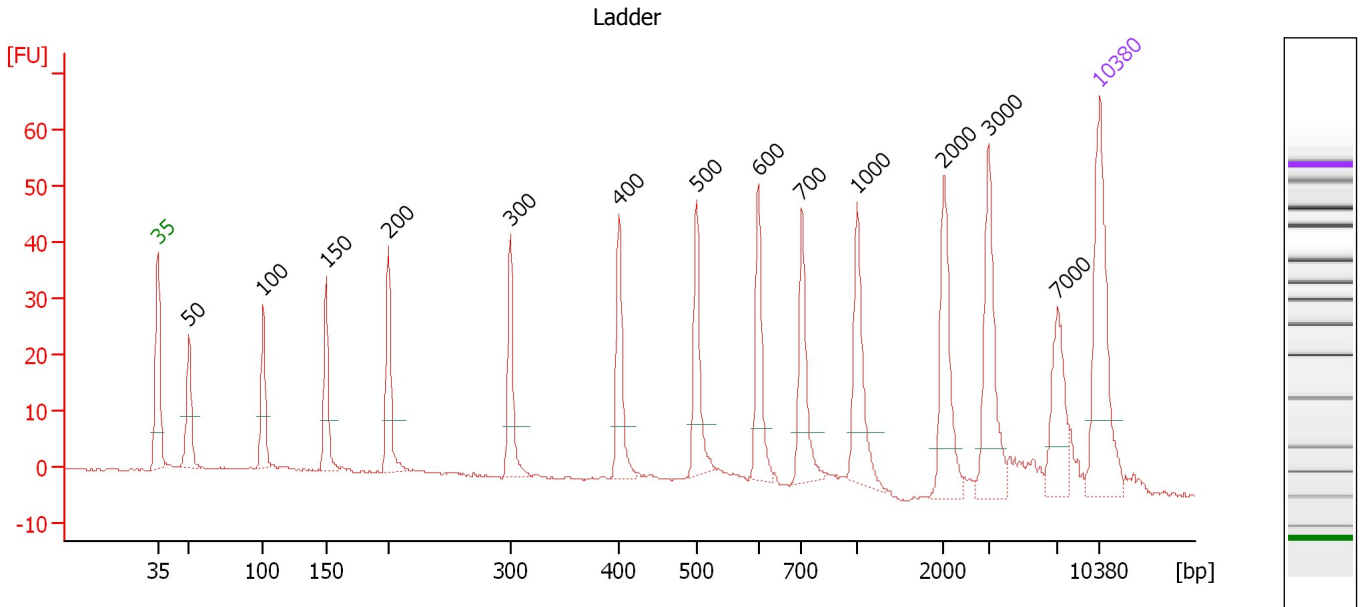
**Ladder**

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:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
 Modified: 2/23/2016 4:05:38 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

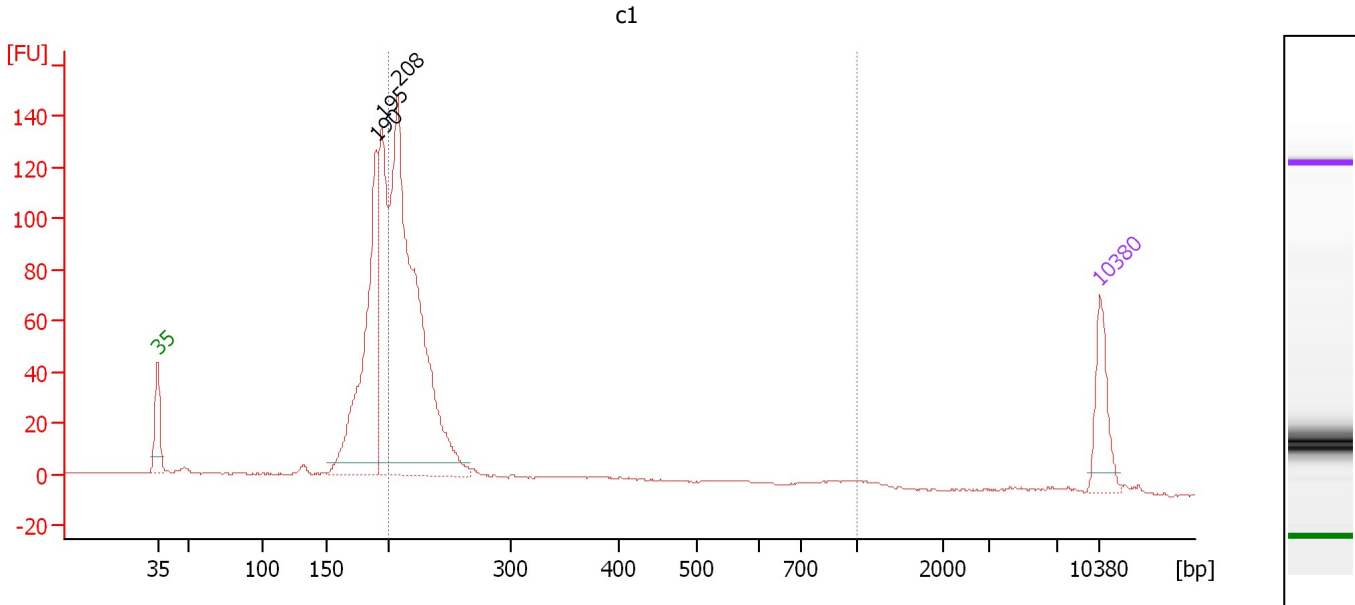
**Peak table for Ladder**

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	50.86
4	150	150.00	1,515.2	Ladder Peak	55.53
5	200	150.00	1,136.4	Ladder Peak	60.15
6	300	150.00	757.6	Ladder Peak	69.22
7	400	150.00	568.2	Ladder Peak	77.26
8	500	150.00	454.5	Ladder Peak	83.04
9	600	150.00	378.8	Ladder Peak	87.62
10	700	150.00	324.7	Ladder Peak	90.85
11	1,000	150.00	227.3	Ladder Peak	94.97
12	2,000	150.00	113.6	Ladder Peak	101.39
13	3,000	150.00	75.8	Ladder Peak	104.72
14	7,000	150.00	32.5	Ladder Peak	109.86
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
 Modified: 2/23/2016 4:05:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : c1**

Number of peaks found: 3                      Corr. Area 1: 644.0  
 Noise: 0.2

**Peak table for sample 1 : c1**

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	190	480.76	3,824.6		59.27
3	195	317.00	2,464.0		59.68
4	208	1,029.72	7,518.8		60.83
5	10,380	75.00	10.9	Upper Marker	113.00

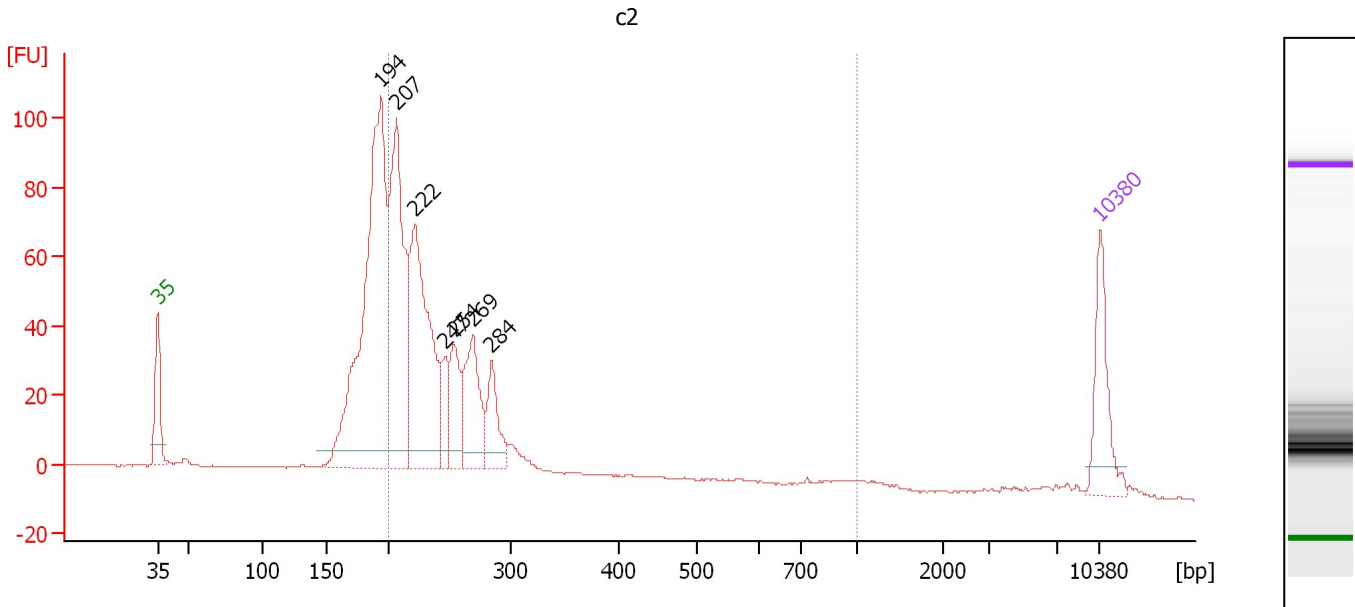
**Region table for sample 1 : c1**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	257	644.0	7,833.9	1,185.68	56	46.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
 Modified: 2/23/2016 4:05:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : c2**

Number of peaks found: 7                      Corr. Area 1: 702.7  
 Noise: 0.2

**Peak table for sample 2 : c2**

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	194	649.57	5,076.6		59.59
3	207	365.34	2,676.0		60.77
4	222	345.17	2,356.0		62.14
5	247	51.42	315.8		64.38
6	254	83.76	500.1		65.02
7	269	127.67	718.1		66.44
8	285	71.99	383.4		67.81
9	10,380	75.00	10.9	Upper Marker	113.00

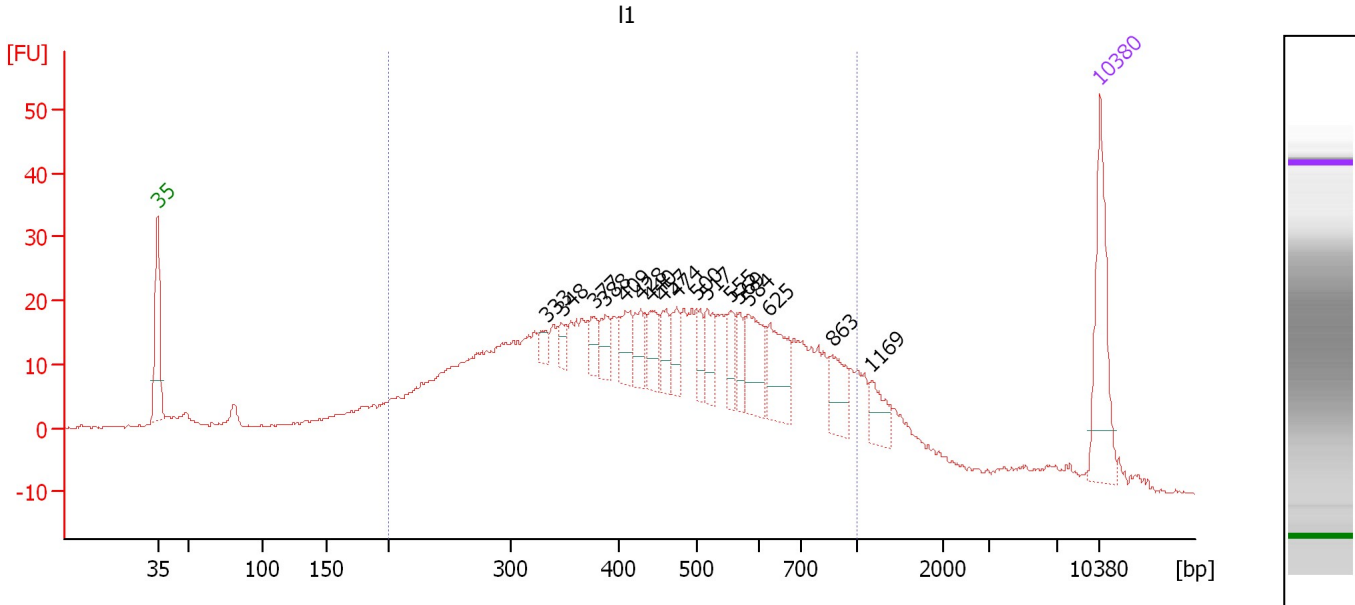
**Region table for sample 2 : c2**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	262	702.7	7,564.8	1,214.40	62	38.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
 Modified: 2/23/2016 4:05:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : I1**

Number of peaks found: 17                      Corr. Area 1: 867.5  
 Noise: 0.3

**Peak table for sample 3 : I1**

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	333	12.01	54.7		71.84
3	348	14.91	65.0		73.05
4	377	19.61	78.8		75.41
5	388	22.90	89.4		76.29
6	409	32.53	120.6		77.77
7	428	26.67	94.4		78.88
8	440	32.39	111.5		79.57
9	457	25.28	83.9		80.55
10	474	25.90	82.7		81.56
11	500	22.07	66.9		83.05
12	517	30.21	88.5		83.83
13	555	23.49	64.2		85.55
14	569	21.44	57.1		86.19
15	584	49.24	127.7		86.89
16	625	55.77	135.3		88.42
17	863	37.66	66.1		93.09
18	1,169	24.94	32.3		96.06
19	10,380	75.00	10.9	Upper Marker	113.00

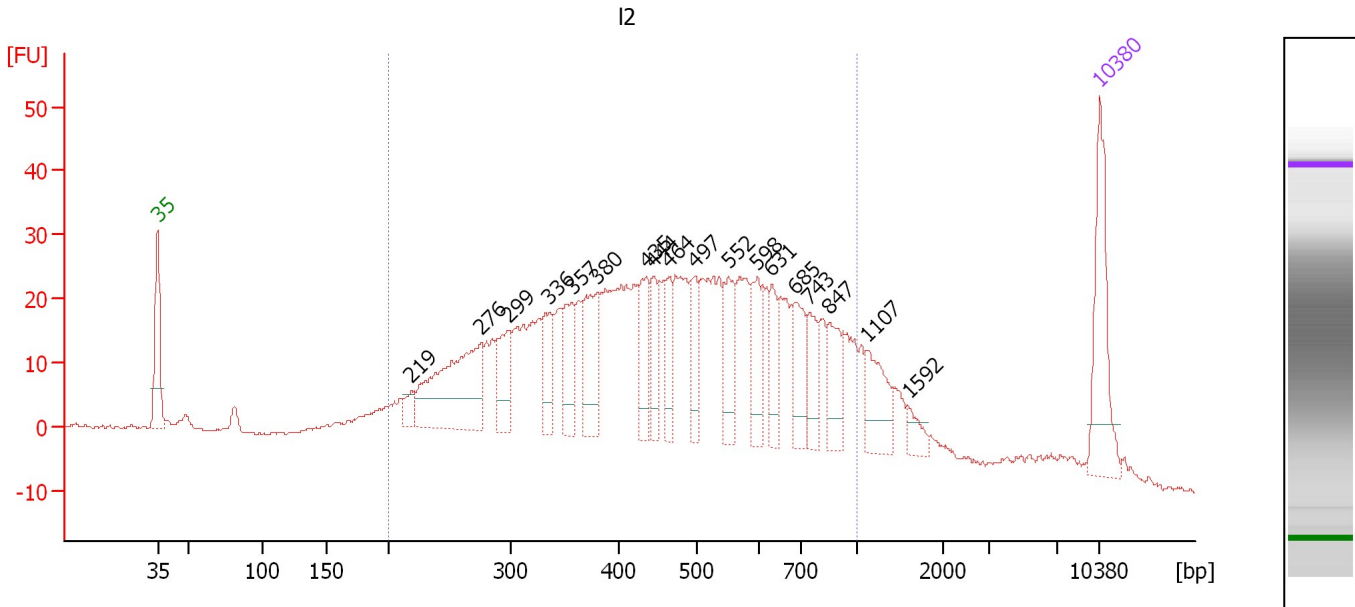
**Region table for sample 3 : I1**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	473	867.5	7,486.3	1,906.37	79	38.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
 Modified: 2/23/2016 4:05:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : I2**

Number of peaks found: 18                      Corr. Area 1: 1,004.5  
 Noise: 0.3

**Peak table for sample 4 : I2**

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	219	16.94	117.3		61.86
3	276	172.89	948.4		67.06
4	299	56.78	288.1		69.09
5	336	47.89	215.9		72.12
6	357	52.53	223.2		73.77
7	380	70.48	280.9		75.66
8	435	53.56	186.4		79.30
9	444	38.84	132.5		79.82
10	464	38.46	125.6		80.95
11	497	37.99	115.9		82.84
12	552	45.73	125.6		85.40
13	598	47.82	121.2		87.52
14	631	31.23	75.0		88.61
15	685	50.25	111.2		90.36
16	743	34.06	69.4		91.45
17	847	43.58	78.0		92.86
18	1,107	47.08	64.5		95.65
19	1,592	13.05	12.4		98.77
20	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : I2**

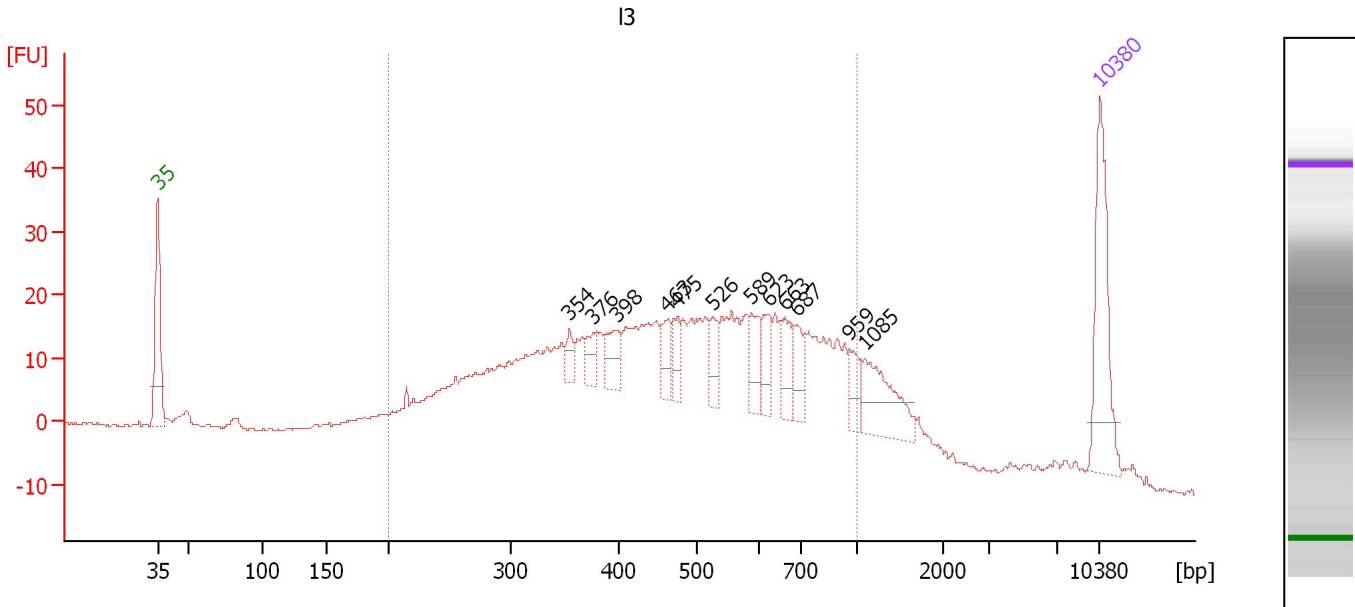
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	484	1,004.5	7,786.7	2,038.27	82	37.6



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
 Modified: 2/23/2016 4:05:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : I3**

Number of peaks found: 12                      Corr. Area 1: 764.6  
 Noise: 0.2

**Peak table for sample 5 : I3**

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	13.10	56.0		73.58
3	376	16.28	65.5		75.37
4	398	26.74	101.8		77.11
5	463	18.47	60.5		80.87
6	475	19.17	61.1		81.60
7	526	19.64	56.6		84.21
8	589	26.09	67.1		87.11
9	623	24.64	59.9		88.36
10	663	31.67	72.3		89.67
11	687	23.09	50.9		90.44
12	959	19.52	30.9		94.40
13	1,085	54.14	75.6		95.51
14	10,380	75.00	10.9	Upper Marker	113.00

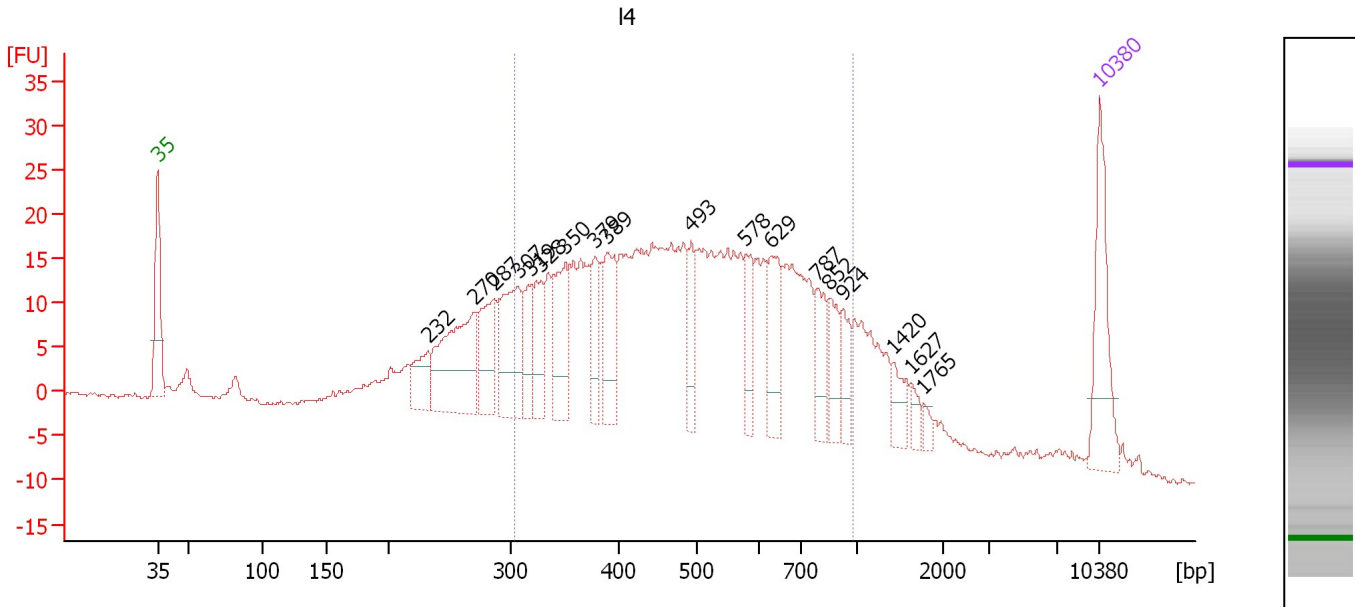
**Region table for sample 5 : I3**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	496	764.6	5,666.6	1,510.92	82	37.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
 Modified: 2/23/2016 4:05:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : I4**

Number of peaks found: 18                      Corr. Area 1: 608.4  
 Noise: 0.2

**Peak table for sample 6 : I4**

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	232	43.38	283.2		63.06
3	270	152.99	857.9		66.51
4	287	72.20	381.8		67.99
5	307	112.07	553.4		69.77
6	319	41.52	197.5		70.70
7	328	55.12	254.8		71.44
8	350	85.29	368.8		73.27
9	379	45.02	180.2		75.54
10	389	72.89	283.9		76.37
11	493	45.11	138.7		82.63
12	578	41.97	110.0		86.63
13	629	60.89	146.7		88.55
14	787	46.10	88.7		92.05
15	852	37.19	66.1		92.94
16	924	30.89	50.7		93.92
17	1,420	20.78	22.2		97.67
18	1,627	10.81	10.1		99.00
19	1,765	6.72	5.8		99.89
20	10,380	75.00	10.9	Upper Marker	113.00

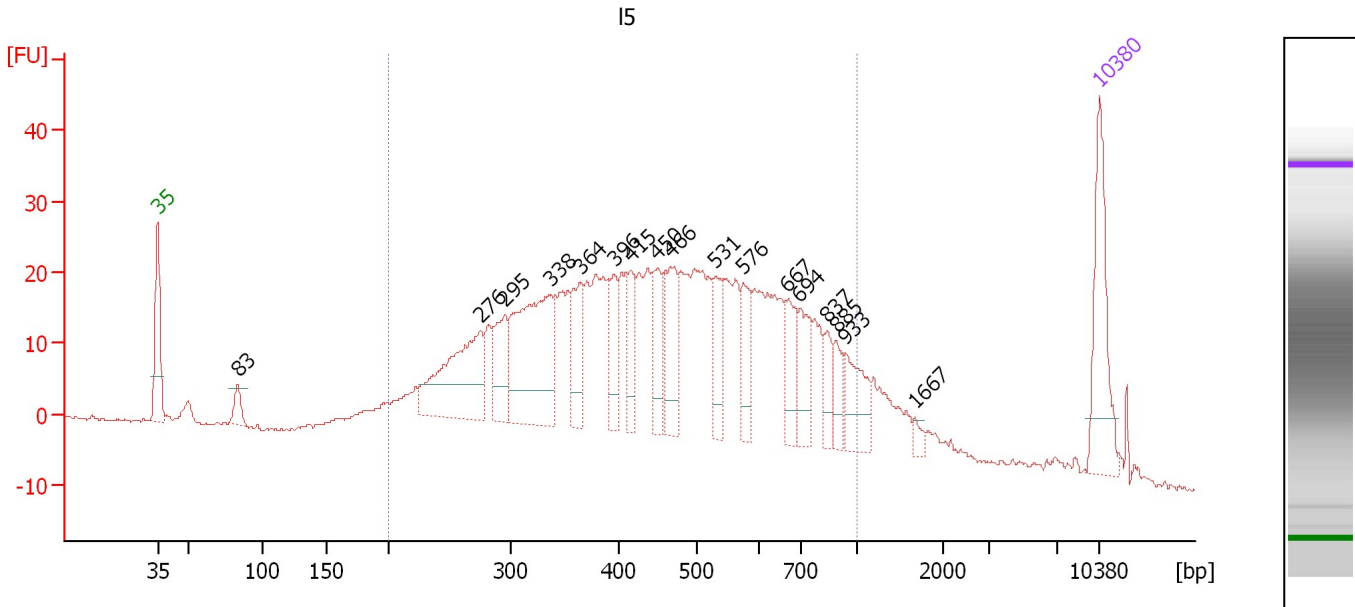
**Region table for sample 6 : I4**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
304	975	519	608.4	5,595.8	1,704.11	66	30.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
 Modified: 2/23/2016 4:05:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : I5**

Number of peaks found: 17                      Corr. Area 1: 851.5  
 Noise: 0.2

**Peak table for sample 7 : I5**

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	83	21.29	389.1		48.96
3	276	146.88	807.4		67.01
4	295	55.75	286.7		68.73
5	338	183.85	824.4		72.26
6	364	54.42	226.4		74.39
7	396	42.97	164.5		76.91
8	415	40.67	148.5		78.13
9	450	46.93	158.0		80.15
10	466	65.54	213.2		81.06
11	531	42.58	121.6		84.44
12	576	38.16	100.4		86.52
13	667	40.81	92.6		89.80
14	694	40.41	88.2		90.66
15	837	23.42	42.4		92.73
16	885	19.27	33.0		93.39
17	933	44.41	72.1		94.05
18	1,667	6.31	5.7		99.25
19	10,380	75.00	10.9	Upper Marker	113.00

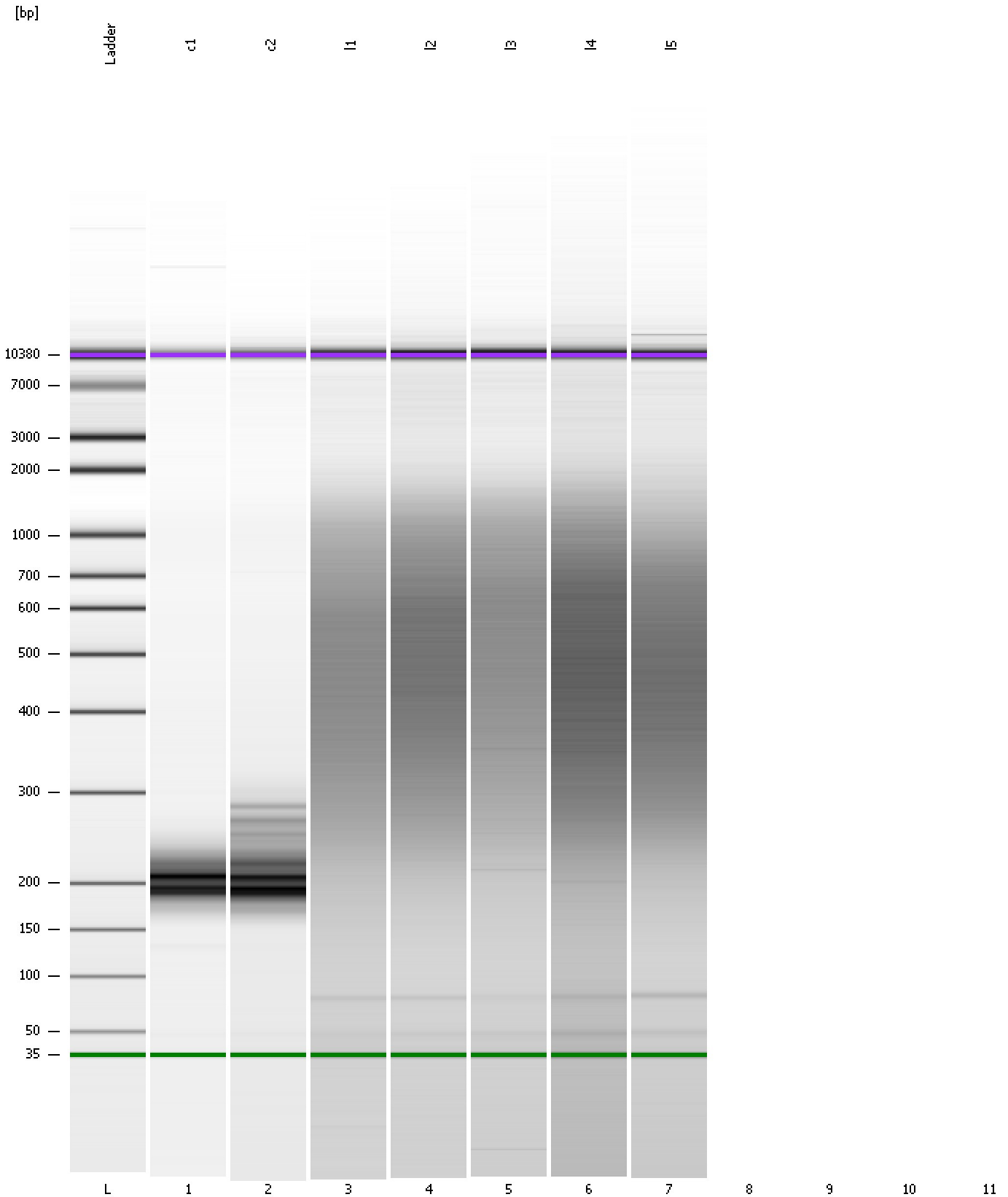
**Region table for sample 7 : I5**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	475	851.5	7,331.0	1,911.28	87	36.7

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
Modified: 2/23/2016 4:05:38 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-23\2016-02-23\_003.xad

Created: 2/23/2016 3:35:44 PM  
 Modified: 2/23/2016 4:05:38 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		2/23/2016 4:05:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2016-02-23\2016-02-23_003.xad)		Instrument	Run		2/23/2016 3:35:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/23/2016 3:35:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/23/2016 3:35:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/23/2016 3:35:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/23/2016 3:35:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/23/2016 3:35:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/23/2016 3:35:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1