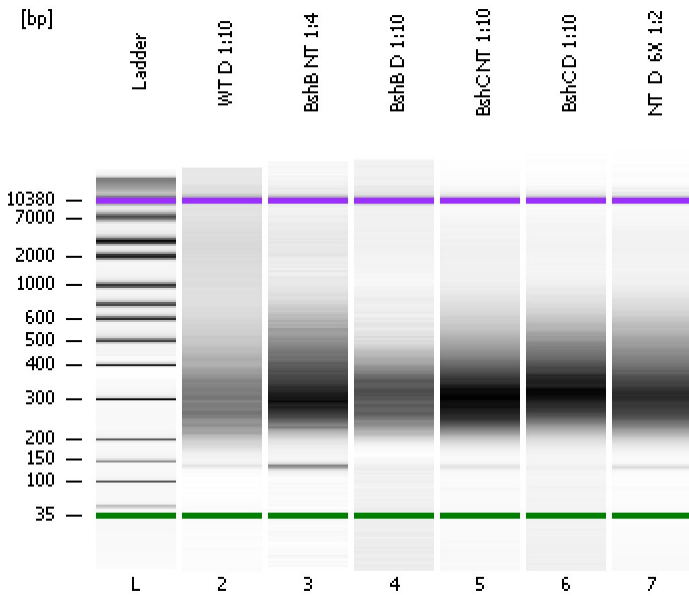


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 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

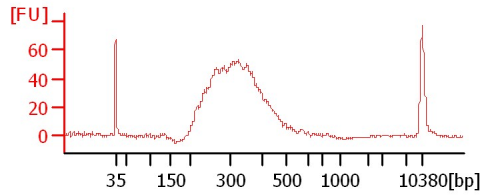
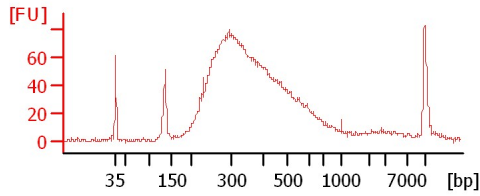
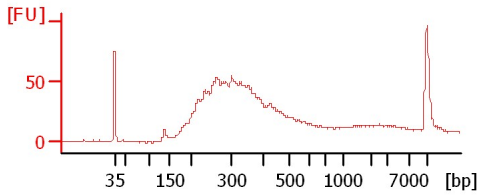
Chip Information:

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

**WT D 1:10**

**BshB NT 1:4**

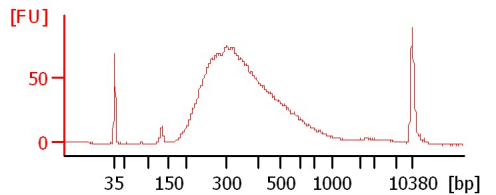
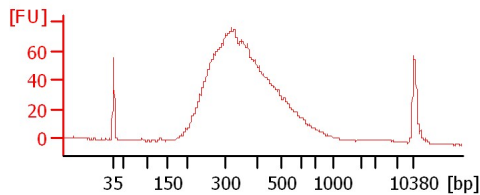
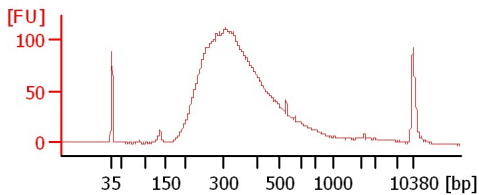
**BshB D 1:10**



**BshC NT 1:10**

**BshC D 1:10**

**NT\_D\_6X 1:2**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WT D 1:10		<input type="checkbox"/>	✓			
BshB NT 1:4		<input type="checkbox"/>	✓			
BshB D 1:10		<input type="checkbox"/>	✓			
BshC NT 1:10		<input type="checkbox"/>	✓			
BshC D 1:10		<input type="checkbox"/>	✓			
NT_D_6X 1:2		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 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

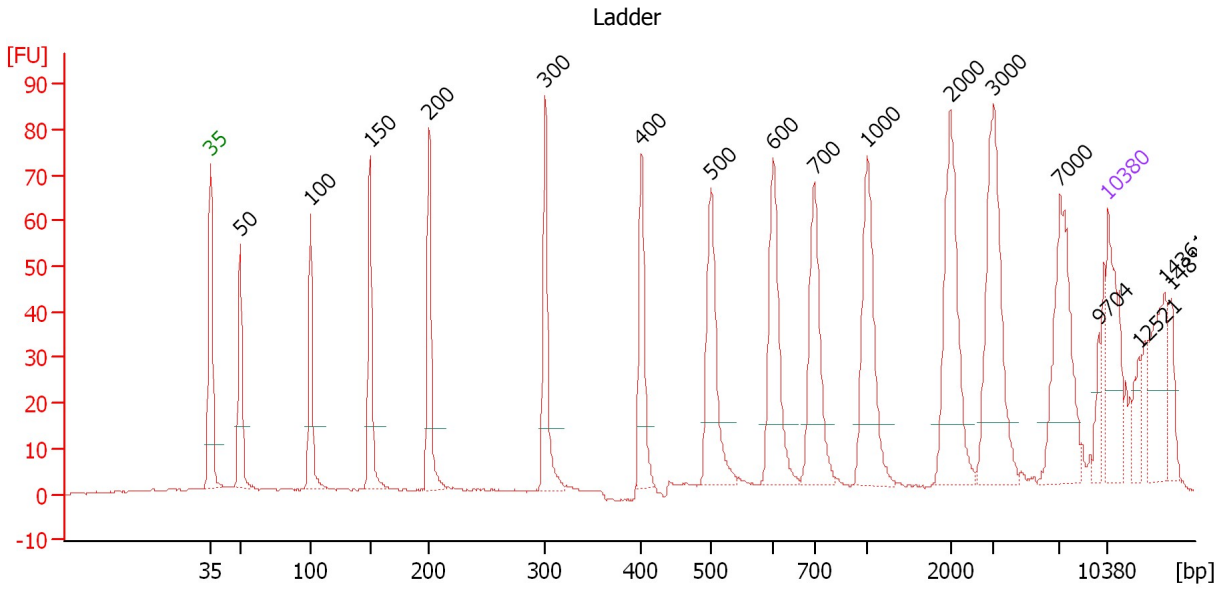
**Ladder**

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:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

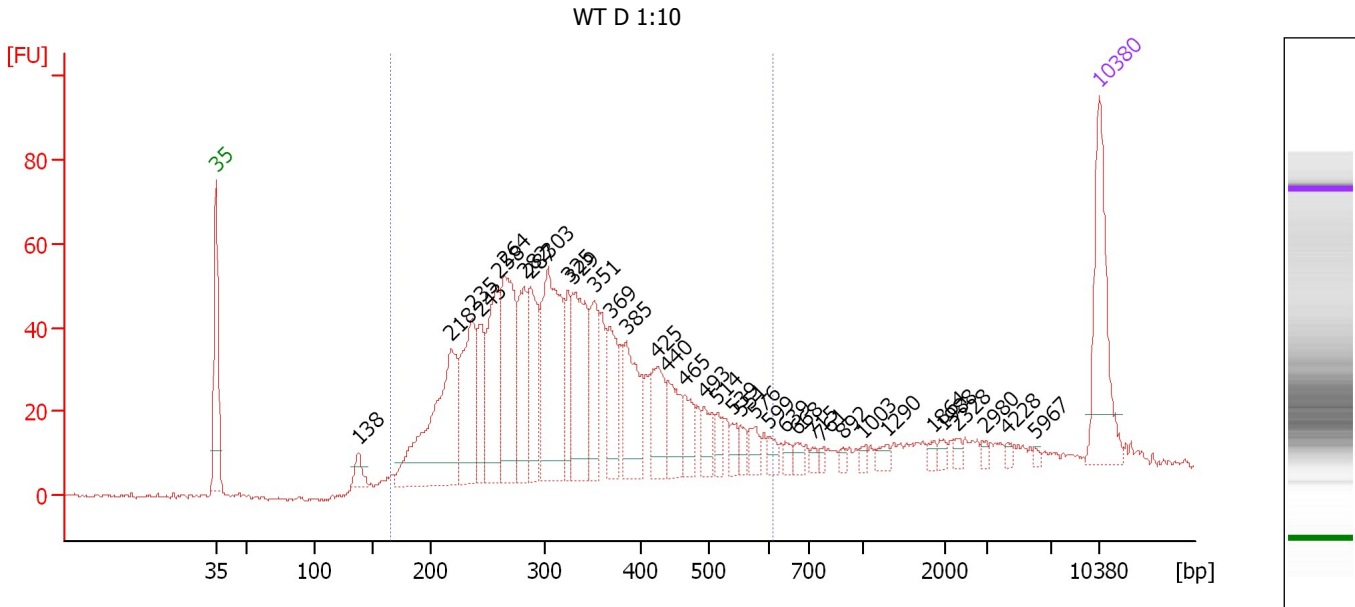
**Peak table for Ladder**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.33	50	150.00	4,545.5	Ladder Peak
3	50.78	100	150.00	2,272.7	Ladder Peak
4	55.44	150	150.00	1,515.2	Ladder Peak
5	60.05	200	150.00	1,136.4	Ladder Peak
6	69.12	300	150.00	757.6	Ladder Peak
7	76.61	400	150.00	568.2	Ladder Peak
8	82.06	500	150.00	454.5	Ladder Peak
9	86.88	600	150.00	378.8	Ladder Peak
10	90.08	700	150.00	324.7	Ladder Peak
11	94.24	1,000	150.00	227.3	Ladder Peak
12	100.73	2,000	150.00	113.6	Ladder Peak
13	104.10	3,000	150.00	75.8	Ladder Peak
14	109.26	7,000	150.00	32.5	Ladder Peak
15	112.25	9,704	0.00	0.0	
16	113.00	10,380	75.00	10.9	Upper Marker
17	115.37	12,521	0.00	0.0	
18	117.41	14,361	0.00	0.0	
19	117.91	14,812	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : WT D 1:10**

Number of peaks found: 36                      Corr. Area 1: 1,261.5  
 Noise: 0.6

**Peak table for sample 2 : WT D 1:10**


Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	54.29	138	17.64	194.0	
3	61.65	218	202.20	1,407.7	
4	63.26	235	110.82	713.4	
5	63.98	243	54.36	338.5	
6	65.33	258	111.94	656.8	
7	65.84	264	135.01	775.3	
8	67.45	282	76.21	410.1	
9	67.95	287	84.95	448.2	
10	69.35	303	176.01	879.9	
11	70.96	325	45.64	213.1	
12	71.25	329	108.90	502.3	
13	72.95	351	55.98	241.6	
14	74.26	369	59.70	245.4	
15	75.48	385	72.51	285.4	
16	77.98	425	50.02	178.2	
17	78.78	440	40.36	139.0	
18	80.14	465	25.84	84.3	
19	81.70	493	22.39	68.8	
20	82.72	514	12.49	36.8	
21	83.94	539	12.10	34.0	
22	84.53	551	9.17	25.2	
23	85.72	576	14.79	38.9	
24	86.82	599	8.99	22.8	
25	88.13	639	7.03	16.7	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad


Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 2 : WT D 1:10**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	89.06	668	7.28	16.5	
27	90.29	715	5.01	10.6	
28	90.92	761	4.26	8.5	
29	92.74	892	3.81	6.5	
30	94.26	1,003	4.54	6.9	
31	96.12	1,290	7.43	8.7	
32	99.85	1,864	4.75	3.9	
33	100.65	1,988	4.83	3.7	
34	101.83	2,328	4.20	2.7	
35	104.03	2,980	3.60	1.8	
36	105.68	4,228	3.04	1.1	
37	107.92	5,967	2.38	0.6	
38	 113.00	10,380	75.00	10.9	Upper Marker

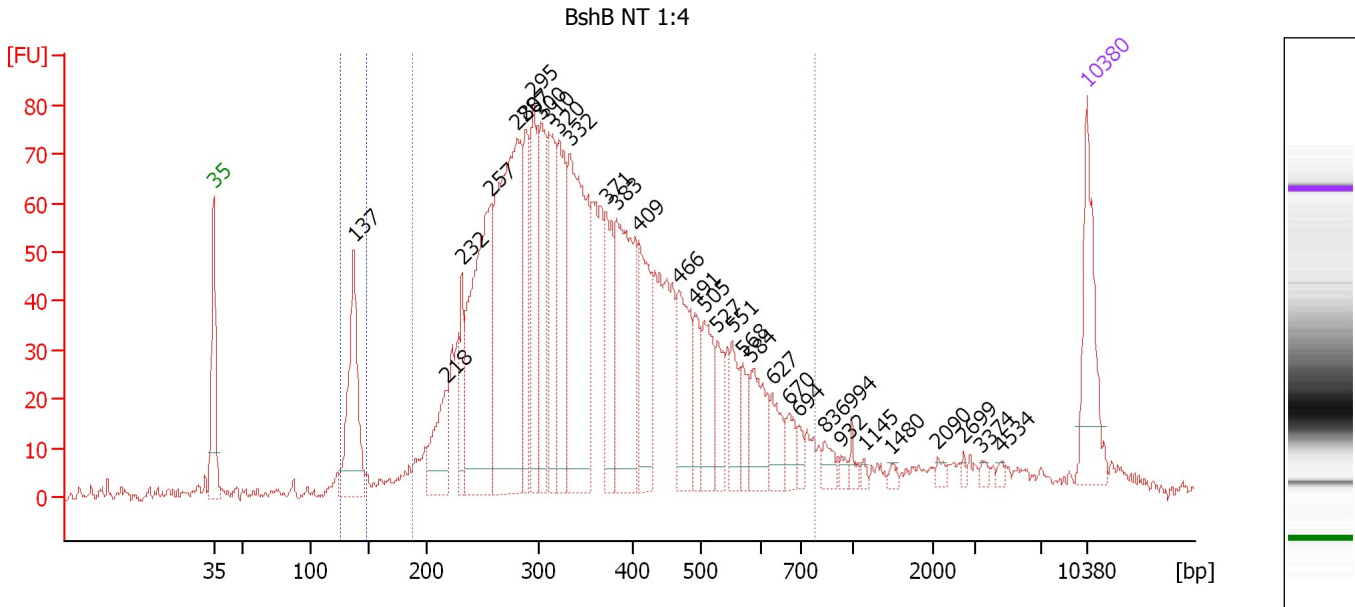
**Region table for sample 2 : WT D 1:10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
165	607	332	8,273.0	1,625.29	 1,261.5	88	28.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : BshB NT 1:4**

Number of peaks found: 33                      Corr. Area 1: 1,979.8  
 Noise: 1.2    Corr. Area 2: 87.7

**Peak table for sample 3 : BshB NT 1:4**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	54.24	137	170.59	1,884.5	
3	61.68	218	80.90	562.5	
4	62.91	232	60.65	396.8	
5	65.26	257	295.04	1,736.2	
6	67.27	280	408.86	2,215.3	
7	67.96	287	103.34	545.2	
8	68.64	295	121.60	625.1	
9	69.15	300	133.56	673.5	
10	69.88	310	119.99	586.2	
11	70.61	320	140.53	665.7	
12	71.55	332	280.09	1,276.7	
13	74.45	371	93.96	383.5	
14	75.31	383	194.24	769.1	
15	77.10	409	98.65	365.4	
16	80.22	466	97.96	318.3	
17	81.55	491	41.31	127.6	
18	82.32	505	63.12	189.2	
19	83.34	527	39.37	113.3	
20	84.54	551	37.50	103.0	
21	85.35	568	29.00	77.3	
22	86.12	584	55.48	143.9	
23	87.74	627	31.25	75.5	
24	89.11	670	21.27	48.1	
25	89.88	694	10.69	23.3	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 3 : BshB NT 1:4

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	91.97	836	15.09	27.3	
27	93.30	932	6.78	11.0	
28	94.15	994	8.56	13.1	
29	95.18	1,145	3.75	5.0	
30	97.36	1,480	4.39	4.5	
31	101.03	2,090	5.16	3.7	
32	103.09	2,699	3.19	1.8	
33	104.58	3,374	4.14	1.9	
34	106.08	4,534	3.78	1.3	
35	▶ 113.00	10,380	75.00	10.9	Upper Marker

#### Region table for sample 3 : BshB NT 1:4

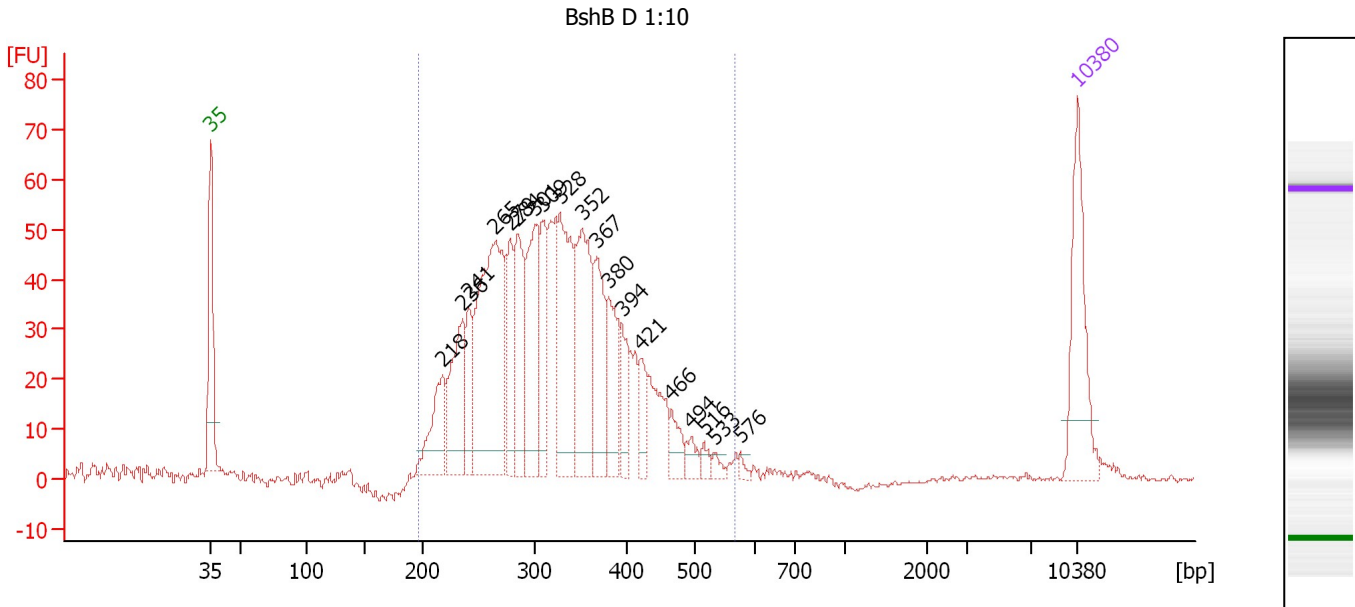
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
125	149	136	1,967.9	177.02	87.7	4	3.4
189	781	372	14,236.4	3,084.39	1,979.8	86	31.3



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : BshB D 1:10**

Number of peaks found: 19                      Corr. Area 1: 1,122.6  
 Noise: 0.5

**Peak table for sample 4 : BshB D 1:10**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	61.68	218	71.03	493.7	
3	63.32	236	97.21	624.0	
4	63.79	241	46.58	292.5	
5	65.95	265	264.97	1,515.0	
6	67.19	279	69.08	375.5	
7	67.71	284	96.15	512.2	
8	69.17	301	118.51	597.1	
9	69.78	309	70.67	346.8	
10	71.20	328	144.12	666.2	
11	73.01	352	127.42	548.6	
12	74.17	367	83.60	344.7	
13	75.12	380	67.19	267.9	
14	76.19	394	39.10	150.2	
15	77.74	421	28.99	104.4	
16	80.20	466	22.21	72.2	
17	81.70	494	13.18	40.5	
18	82.82	516	8.48	24.9	
19	83.64	533	6.86	19.5	
20	85.71	576	4.63	12.2	
21	113.00	10,380	75.00	10.9	Upper Marker

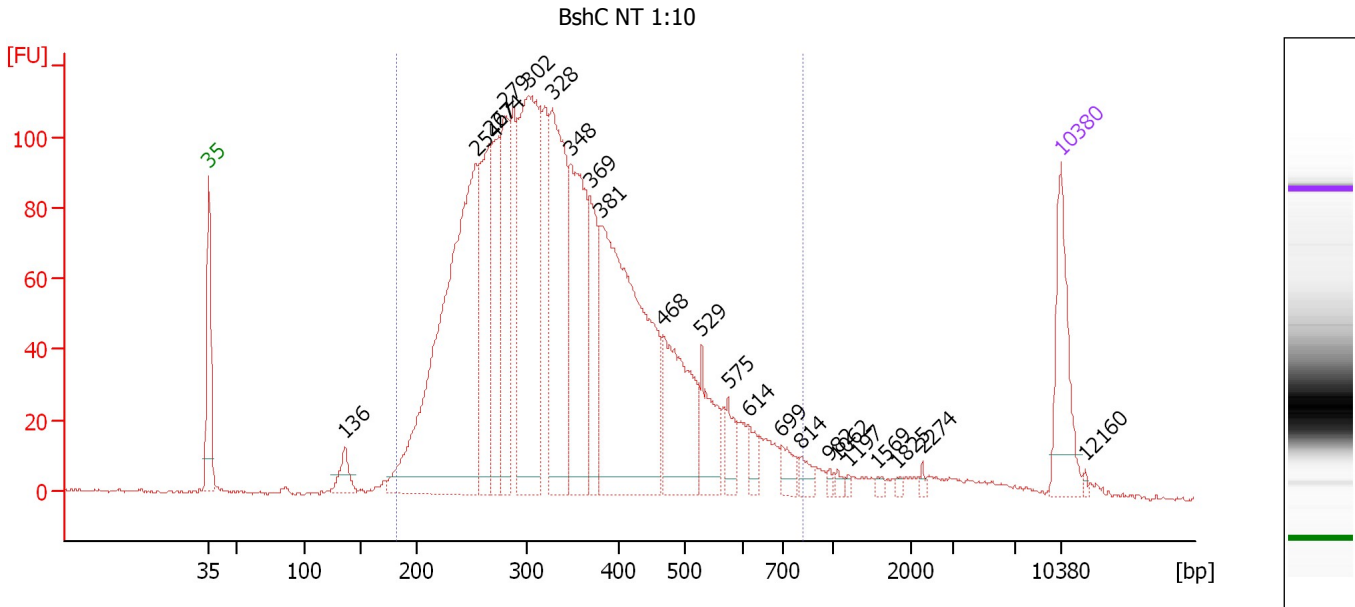
**Region table for sample 4 : BshB D 1:10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
196	568	325	7,964.0	1,606.50	1,122.6	93	21.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : BshC NT 1:10**

Number of peaks found: 23                      Corr. Area 1: 2,787.3  
 Noise: 0.5


**Peak table for sample 5 : BshC NT 1:10**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	54.17	136	34.32	381.2	
3	64.95	254	660.67	3,941.5	
4	66.09	267	200.67	1,140.8	
5	66.79	274	136.82	755.8	
6	67.22	279	168.61	915.4	
7	69.24	302	404.70	2,033.2	
8	71.21	328	283.42	1,309.5	
9	72.70	348	237.23	1,033.4	
10	74.32	369	103.94	426.3	
11	75.15	381	459.50	1,829.3	
12	80.32	468	156.93	507.9	
13	83.48	529	68.26	195.3	
14	85.67	575	29.34	77.3	
15	87.33	614	17.55	43.3	
16	90.05	699	21.03	45.6	
17	91.67	814	13.94	25.9	
18	93.99	982	4.17	6.4	
19	94.65	1,062	5.04	7.2	
20	95.52	1,197	2.93	3.7	
21	97.93	1,569	3.75	3.6	
22	99.60	1,825	2.46	2.0	
23	101.65	2,274	3.10	2.1	
24	113.00	10,380	75.00	10.9	Upper Marker
25	114.97	12,160	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
Modified: 4/3/2014 6:55:10 PM

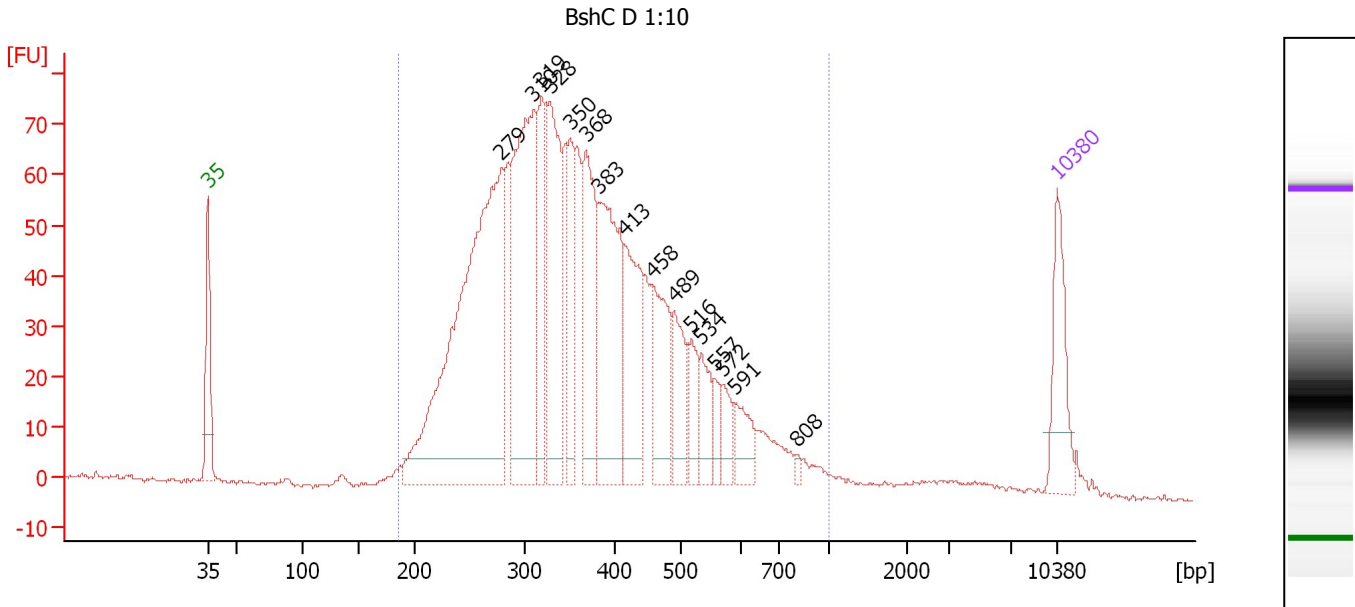
**Electropherogram Summary Continued ...****... Region table for sample 5 :      BshC NT 1:10**

<b>From [bp]</b>	<b>To [bp]</b>	<b>Average Size [bp]</b>	<b>Molarity [pmol/l]</b>	<b>Conc. [pg/μl]</b>	<b>Co Corr. lor Area</b>	<b>% of Total</b>	<b>Size distribution in CV [%]</b>
182	829	354	15,750.7	3,269.69	 2,787.3	94	31.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : BshC D 1:10**

Number of peaks found: 16                      Corr. Area 1: 1,839.8  
 Noise: 0.4

**Peak table for sample 6 : BshC D 1:10**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	67.23	279	824.72	4,476.7	
3	69.87	310	429.51	2,099.5	
4	70.53	319	136.26	647.7	
5	71.23	328	261.99	1,209.6	
6	72.90	350	113.53	490.8	
7	74.17	368	179.32	739.3	
8	75.32	383	275.71	1,091.3	
9	77.34	413	163.22	598.1	
10	79.76	458	126.72	419.4	
11	81.47	489	84.62	262.0	
12	82.84	516	49.48	145.2	
13	83.67	534	53.48	151.9	
14	84.82	557	27.73	75.4	
15	85.52	572	31.77	84.2	
16	86.44	591	45.67	117.1	
17	91.59	808	5.59	10.5	
18	113.00	10,380	75.00	10.9	Upper Marker

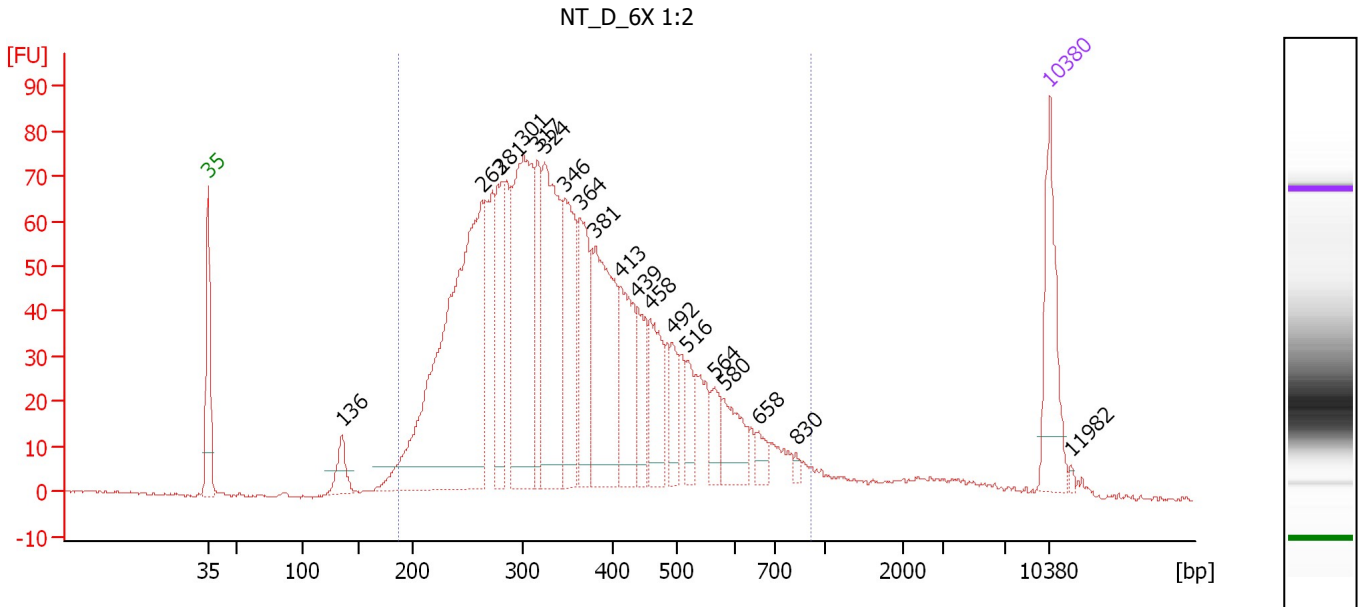
**Region table for sample 6 : BshC D 1:10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
186	1,000	375	15,073.0	3,311.18	1,839.8	97	32.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
 Modified: 4/3/2014 6:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : NT\_D\_6X 1:2**

Number of peaks found: 19      Corr. Area 1: 1,932.7  
 Noise: 0.3

**Peak table for sample 7 : NT\_D\_6X 1:2**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	54.13	136	37.84	421.5	
3	65.76	263	582.39	3,356.4	
4	67.35	281	106.60	575.8	
5	69.22	301	294.61	1,481.5	
6	70.37	317	84.53	404.4	
7	70.95	324	229.40	1,071.4	
8	72.59	346	147.32	644.5	
9	73.92	364	120.73	502.4	
10	75.21	381	191.42	760.7	
11	77.29	413	106.18	390.0	
12	78.71	439	58.04	200.5	
13	79.77	458	74.52	246.5	
14	81.59	492	38.45	118.5	
15	82.84	516	28.87	84.7	
16	85.14	564	29.91	80.4	
17	85.90	580	49.02	128.1	
18	88.74	658	16.87	38.9	
19	91.88	830	4.42	8.1	
20	113.00	10,380	75.00	10.9	Upper Marker
21	114.77	11,982	0.00	0.0	

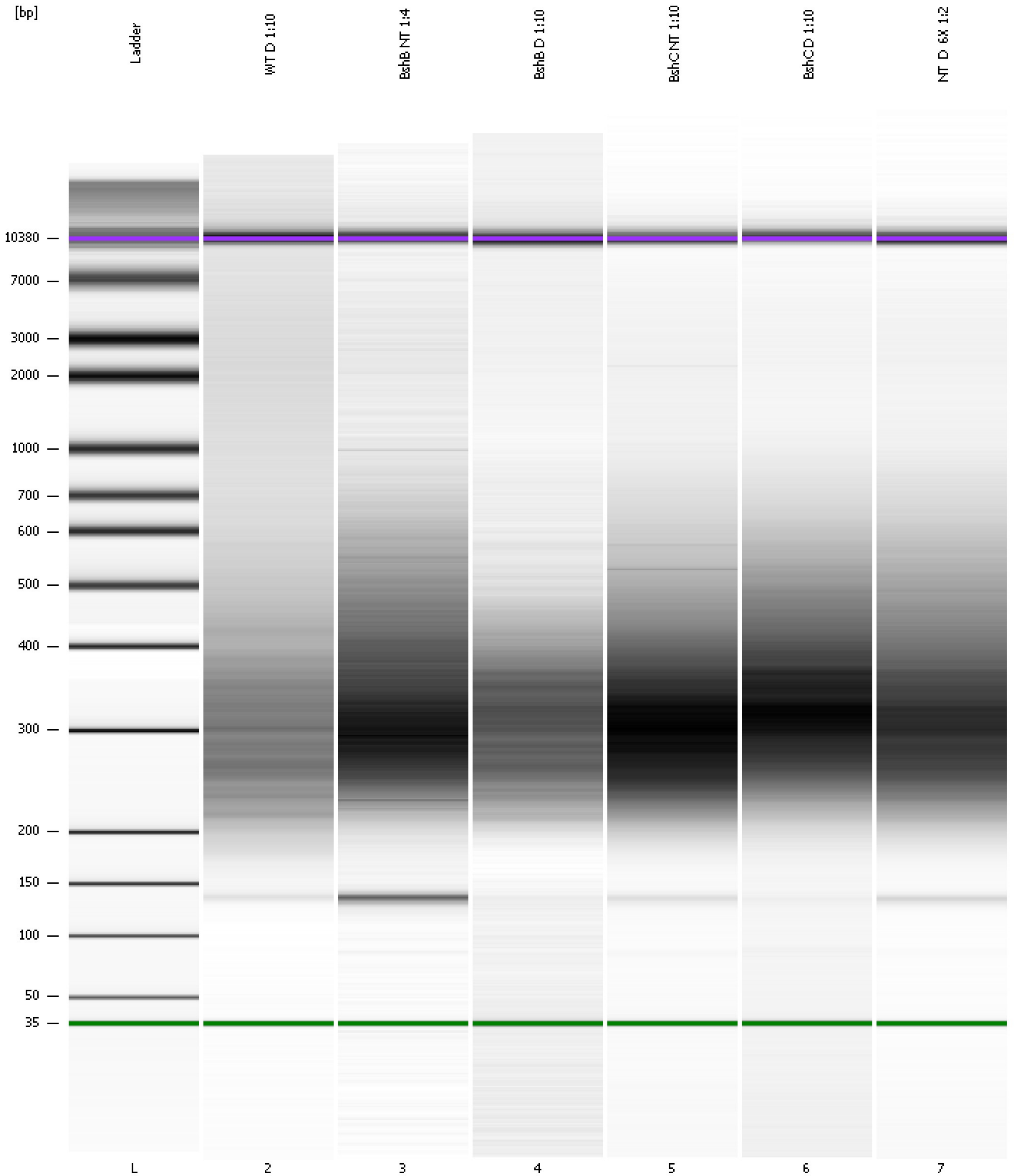
**Region table for sample 7 : NT\_D\_6X 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
187	917	368	12,345.3	2,632.11	1,932.7	95	33.4

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad

Created: 4/3/2014 1:31:05 PM  
Modified: 4/3/2014 6:55:10 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay Created: 4/3/2014 1:31:05 PM  
 Data Path: C:\...gs\Bioanalyzer\2014-04-03\2014-04-03\_003\_Teresa2\_6\_Pool.xad Modified: 4/3/2014 6:55:10 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		4/3/2014 2:11:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-04-03\2014-04-03_005.xad)		Instrument	Run		4/3/2014 1:31:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/3/2014 1:31:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/3/2014 1:31:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/3/2014 1:31:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/3/2014 1:31:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/3/2014 1:31:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/3/2014 1:31:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1