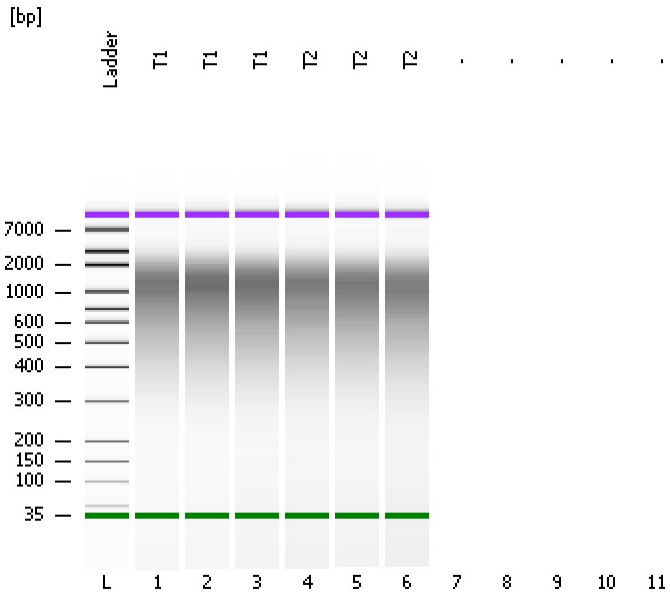


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
Modified: 5/9/2013 11:56:19 AM

Electrophoresis File Run Summary



Instrument Information:

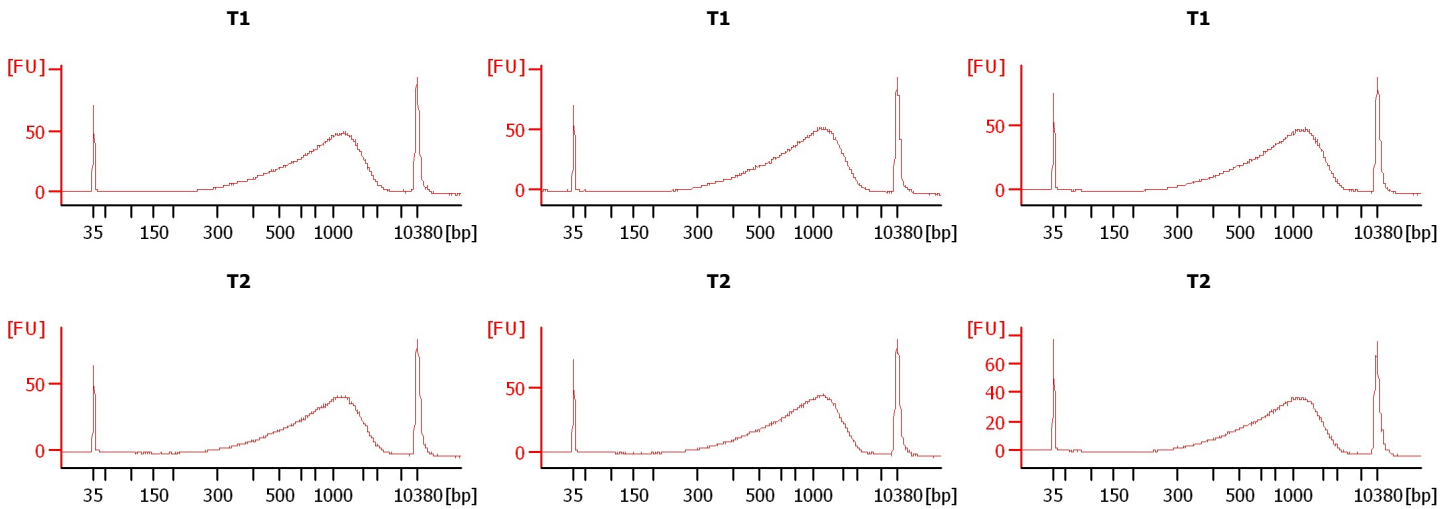
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
 Modified: 5/9/2013 11:56:19 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
T1		<input type="checkbox"/>	✓			
T1		<input type="checkbox"/>	✓			
T1		<input type="checkbox"/>	✓			
T2		<input type="checkbox"/>	✓			
T2		<input type="checkbox"/>	✓			
T2		<input type="checkbox"/>	✓			
-		<input type="checkbox"/>				
-		<input type="checkbox"/>				
-		<input type="checkbox"/>				
-		<input type="checkbox"/>				
-		<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\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
Modified: 5/9/2013 11:56:19 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

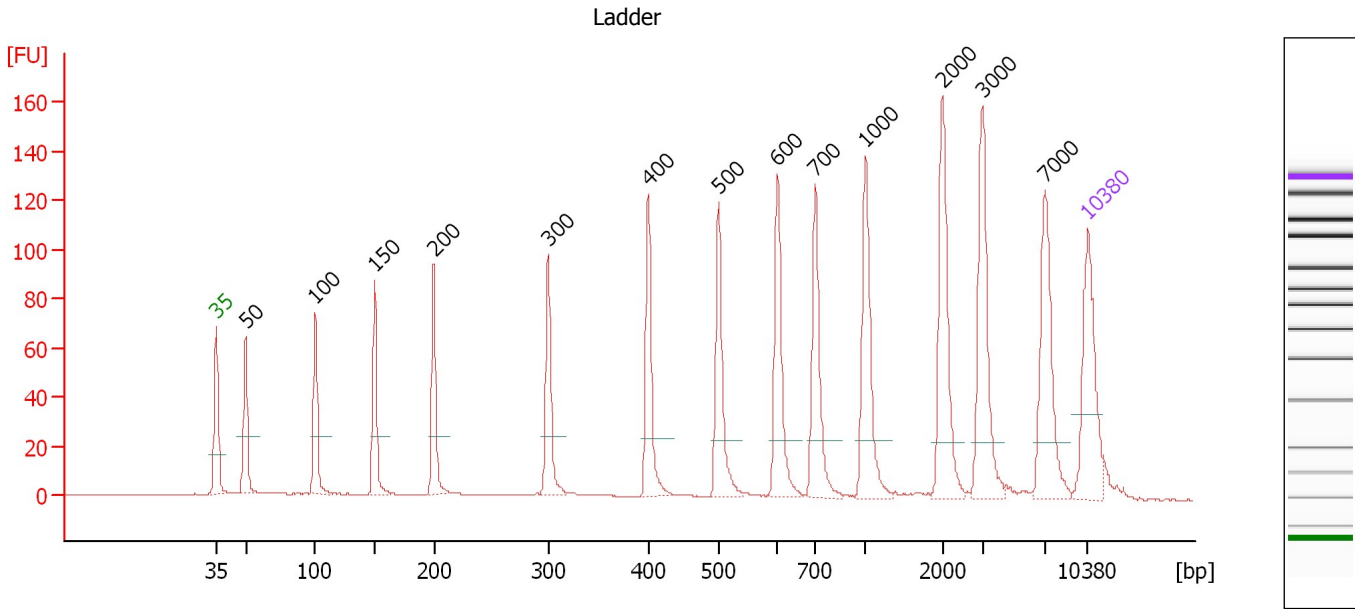
Ladder

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\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
 Modified: 5/9/2013 11:56:19 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

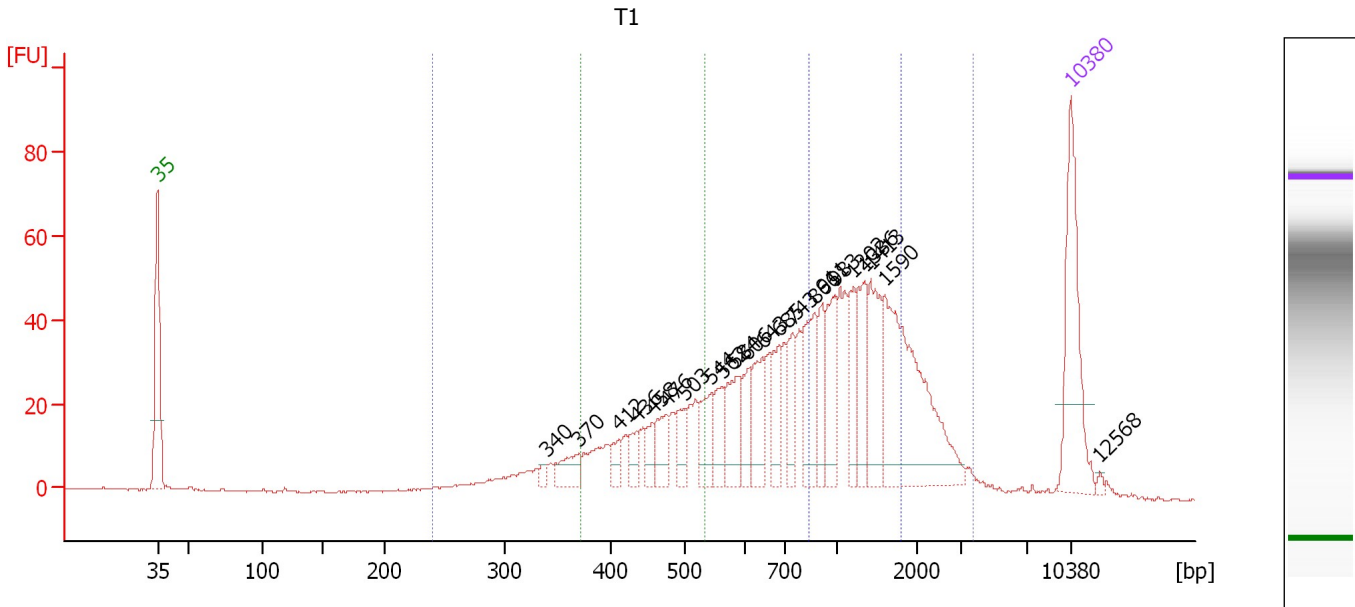
Peak table for Ladder

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\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
 Modified: 5/9/2013 11:56:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : T1

Number of peaks found: 22 Corr. Area 2: 355.1
 Noise: 0.2 Corr. Area 3: 189.2
 Corr. Area 1: 1,018.9




Peak table for sample 1 : T1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	340	5.62	25.1	
3	370	22.69	92.9	
4	412	11.01	40.5	
5	436	15.51	53.8	
6	458	13.70	45.3	
7	476	25.41	80.9	
8	503	20.91	63.0	
9	544	27.71	77.2	
10	562	24.36	65.7	
11	584	36.32	94.2	
12	606	25.57	63.9	
13	643	35.72	84.2	
14	685	31.04	68.7	
15	743	29.33	59.8	
16	866	51.20	89.6	
17	911	25.67	42.7	
18	983	37.59	58.0	
19	1,202	27.91	35.2	
20	1,336	37.73	42.8	
21	1,413	47.57	51.0	
22	1,590	144.29	137.5	
23	10,380	75.00	10.9	Upper Marker
24	12,568	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
Modified: 5/9/2013 11:56:19 AM

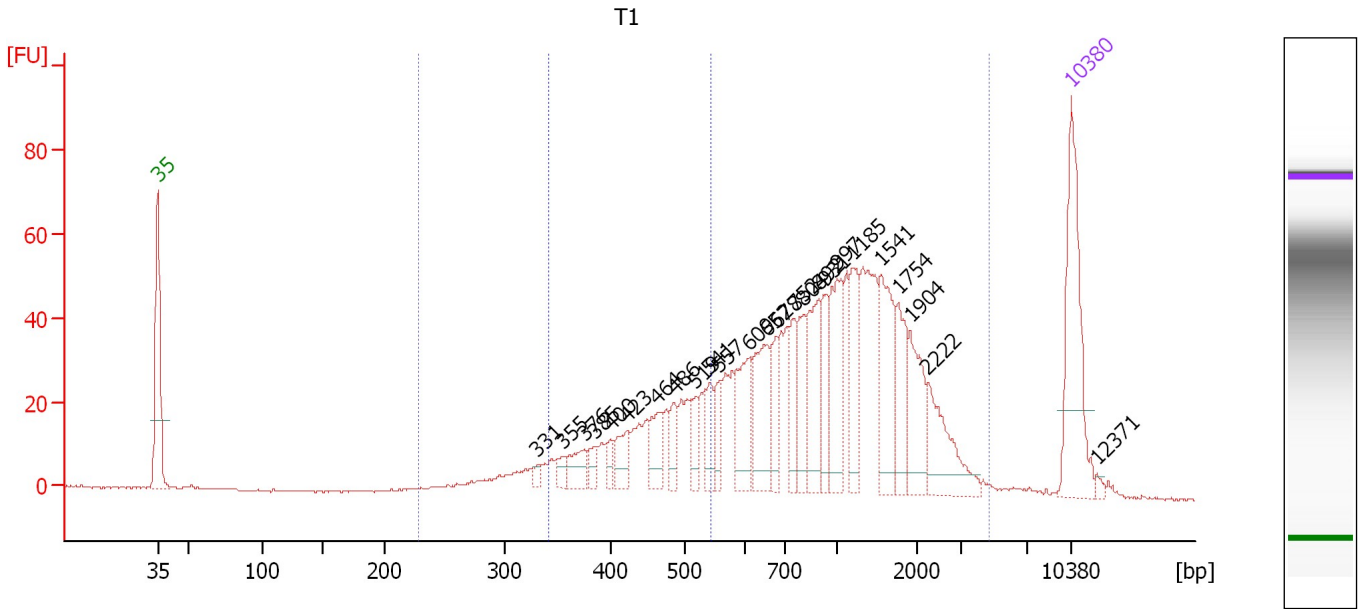
Electropherogram Summary Continued ...**... Region table for sample 1 : T1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
239	3,818	1,029	2,329.8	1,032.64	1,018.9	98	60.4	
372	533	457	719.1	214.38	189.2	18	10.1	
833	1,798	1,242	420.7	329.17	355.1	34	23.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
 Modified: 5/9/2013 11:56:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : T1

Number of peaks found: 25 Corr. Area 1: 1,103.2
 Noise: 0.2 Corr. Area 2: 249.1

Peak table for sample 2 : T1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	331	4.79	21.9	
3	355	8.76	37.3	
4	376	18.99	76.6	
5	385	9.24	36.4	
6	400	9.06	34.3	
7	423	20.80	74.6	
8	464	25.74	84.1	
9	486	17.19	53.5	
10	519	15.76	46.0	
11	541	21.07	59.0	
12	557	17.32	47.1	
13	609	36.98	92.0	
14	652	51.42	119.5	
15	678	23.18	51.8	
16	752	25.36	51.1	
17	804	29.29	55.2	
18	892	46.88	79.6	
19	931	26.31	42.8	
20	997	49.58	75.4	
21	1,185	38.21	48.9	
22	1,541	54.93	54.0	
23	1,754	32.11	27.7	
24	1,904	38.41	30.6	
25	2,222	41.92	28.6	
26	10,380	75.00	10.9	Upper Marker



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
Modified: 5/9/2013 11:56:19 AM

Electropherogram Summary Continued ...**... Peak table for sample 2 : T1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	12,371	0.00	0.0	

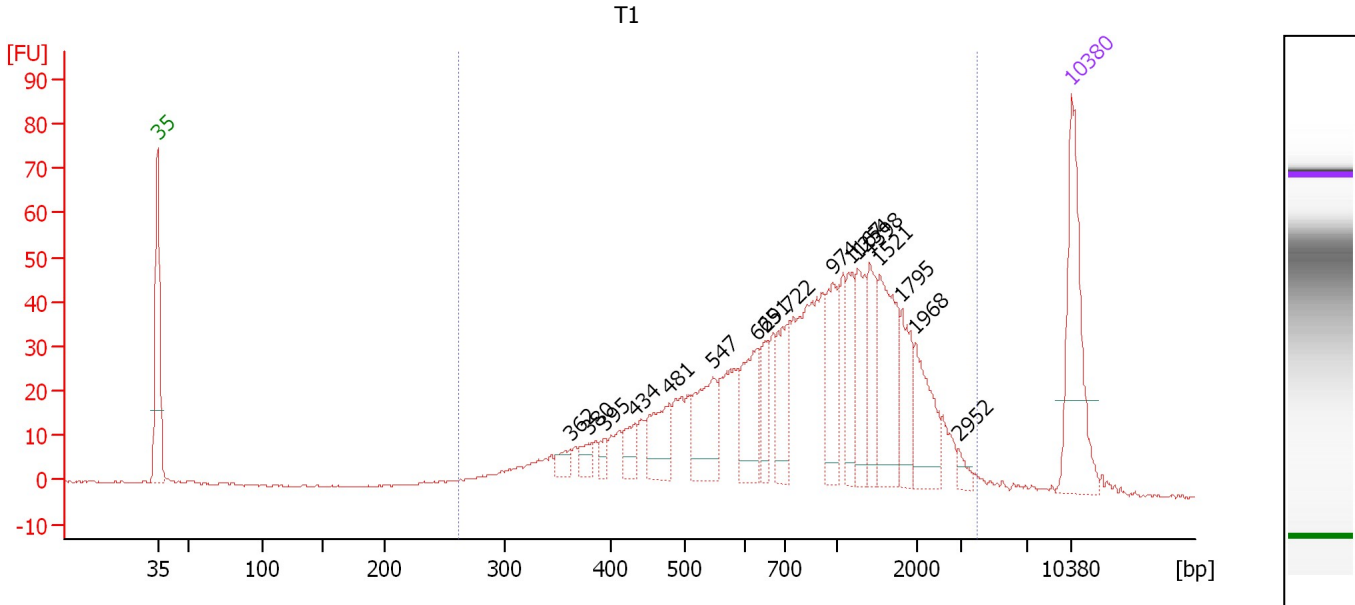
Region table for sample 2 : T1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
228	4,722	1,046	2,331.6	1,035.70	1,103.2	98	63.2	
341	545	452	899.5	262.55	249.1	22	12.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
 Modified: 5/9/2013 11:56:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : T1

Number of peaks found: 17 Corr. Area 1: 1,000.7
 Noise: 0.2

Peak table for sample 3 : T1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	362	11.53	48.3	
3	380	10.71	42.7	
4	395	7.85	30.1	
5	434	18.30	63.9	
6	481	39.15	123.3	
7	547	54.32	150.5	
8	629	50.78	122.3	
9	651	22.84	53.1	
10	722	42.93	90.1	
11	974	43.36	67.5	
12	1,167	30.27	39.3	
13	1,254	37.82	45.7	
14	1,398	35.14	38.1	
15	1,521	67.67	67.4	
16	1,795	32.62	27.5	
17	1,968	41.25	31.8	
18	2,952	5.80	3.0	
19	10,380	75.00	10.9	Upper Marker

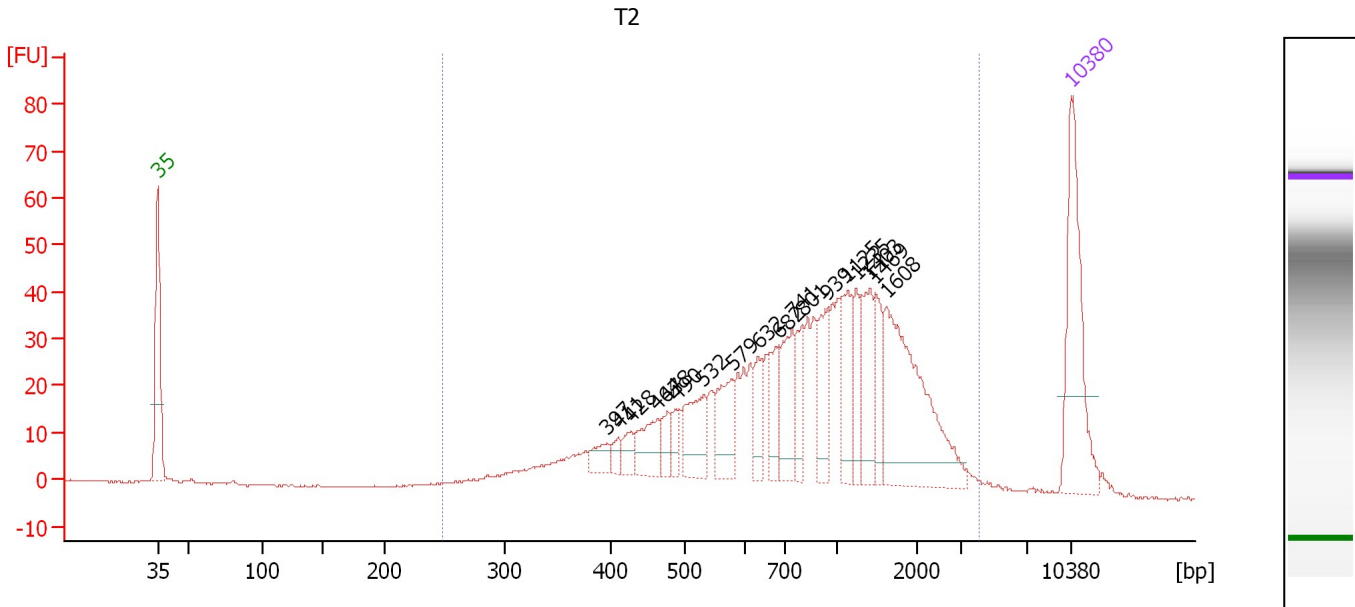
Region table for sample 3 : T1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
261	3,953	1,032	2,166.9	976.69	1,000.7	98	60.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
 Modified: 5/9/2013 11:56:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : T2

Number of peaks found: 18 Corr. Area 1: 864.6
 Noise: 0.2

Peak table for sample 4 : T2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	397	13.76	52.5	
3	411	7.50	27.7	
4	428	12.28	43.5	
5	464	28.96	94.5	
6	478	14.73	46.7	
7	490	12.32	38.1	
8	532	40.14	114.3	
9	579	36.32	95.0	
10	632	19.24	46.1	
11	682	25.55	56.7	
12	741	43.58	89.2	
13	801	23.26	44.0	
14	939	32.19	51.9	
15	1,125	35.76	48.2	
16	1,235	22.91	28.1	
17	1,403	39.41	42.6	
18	1,469	26.02	26.8	
19	1,608	119.30	112.4	
20	10,380	75.00	10.9	Upper Marker

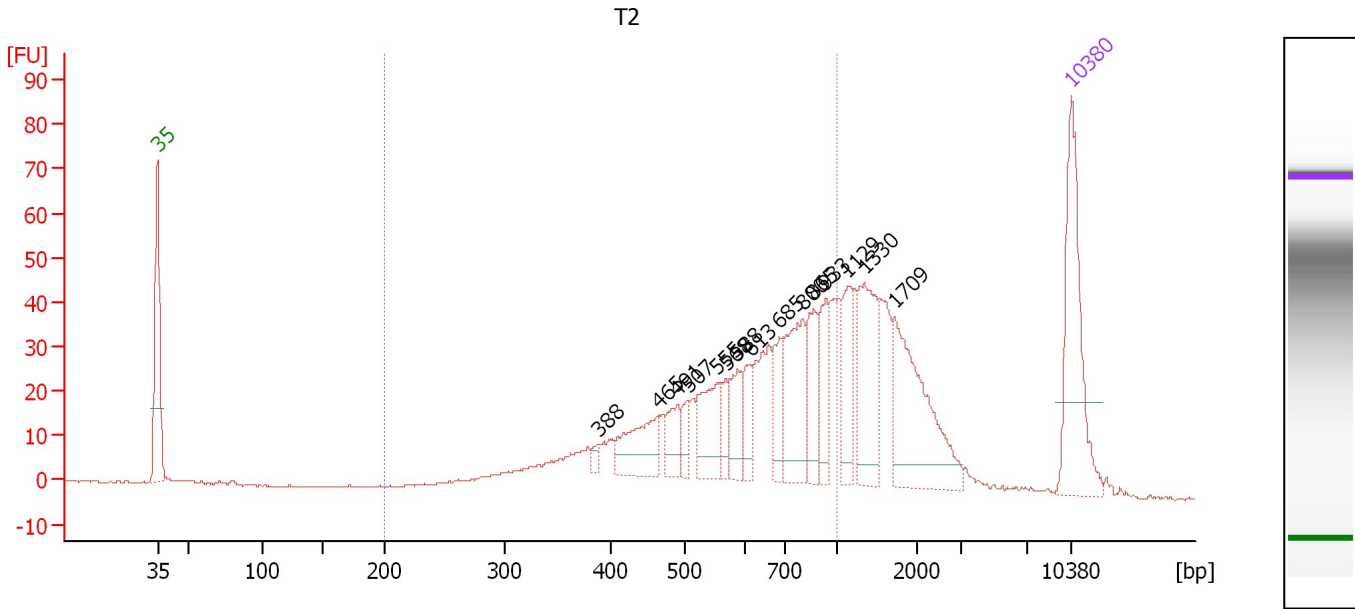
Region table for sample 4 : T2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
248	4,085	1,028	1,922.2	864.89	864.6	97	60.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
 Modified: 5/9/2013 11:56:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : T2

Number of peaks found: 15 Corr. Area 1: 619.1
 Noise: 0.2

Peak table for sample 5 : T2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	388	5.37	21.0	
3	465	45.47	148.1	
4	491	21.78	67.2	
5	507	13.12	39.2	
6	555	43.77	119.5	
7	568	14.73	39.3	
8	588	24.70	63.7	
9	613	20.00	49.5	
10	685	26.41	58.4	
11	800	62.61	118.6	
12	865	34.03	59.6	
13	933	29.45	47.8	
14	1,129	31.94	42.8	
15	1,330	61.67	70.2	
16	1,709	88.12	78.1	
17	10,380	75.00	10.9	Upper Marker

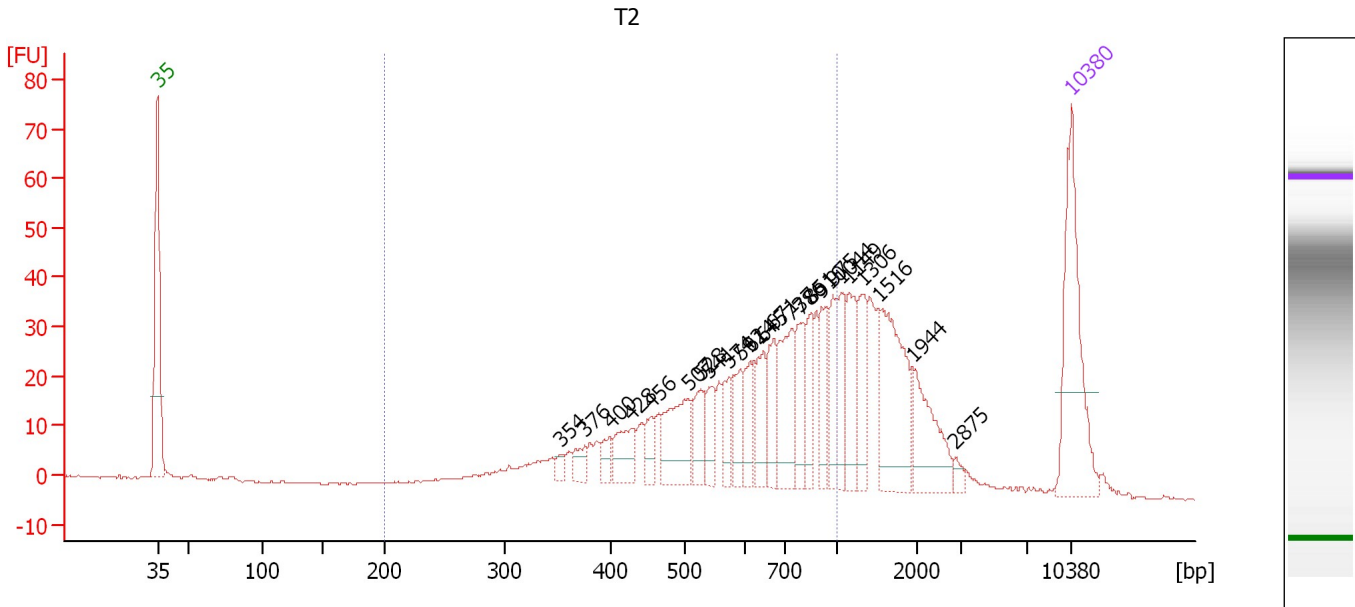
Region table for sample 5 : T2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	622	1,686.5	598.33	619.1	64	30.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
 Modified: 5/9/2013 11:56:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : T2

Number of peaks found: 24 Corr. Area 1: 549.2
 Noise: 0.2

Peak table for sample 6 : T2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	354	6.32	27.1	
3	376	11.11	44.8	
4	400	10.86	41.2	
5	428	24.61	87.1	
6	456	14.67	48.7	
7	507	49.49	147.8	
8	528	24.02	69.0	
9	541	18.99	53.2	
10	574	18.55	49.0	
11	592	23.08	59.1	
12	614	20.36	50.2	
13	645	26.36	61.9	
14	671	28.76	65.0	
15	737	46.84	96.3	
16	786	26.39	50.9	
17	851	24.76	44.1	
18	910	25.19	42.0	
19	975	23.64	36.7	
20	1,044	25.55	37.1	
21	1,149	33.79	44.6	
22	1,306	27.73	32.2	
23	1,516	74.85	74.8	
24	1,944	40.88	31.9	
25	2,875	4.56	2.4	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
Modified: 5/9/2013 11:56:19 AM

Electropherogram Summary Continued ...

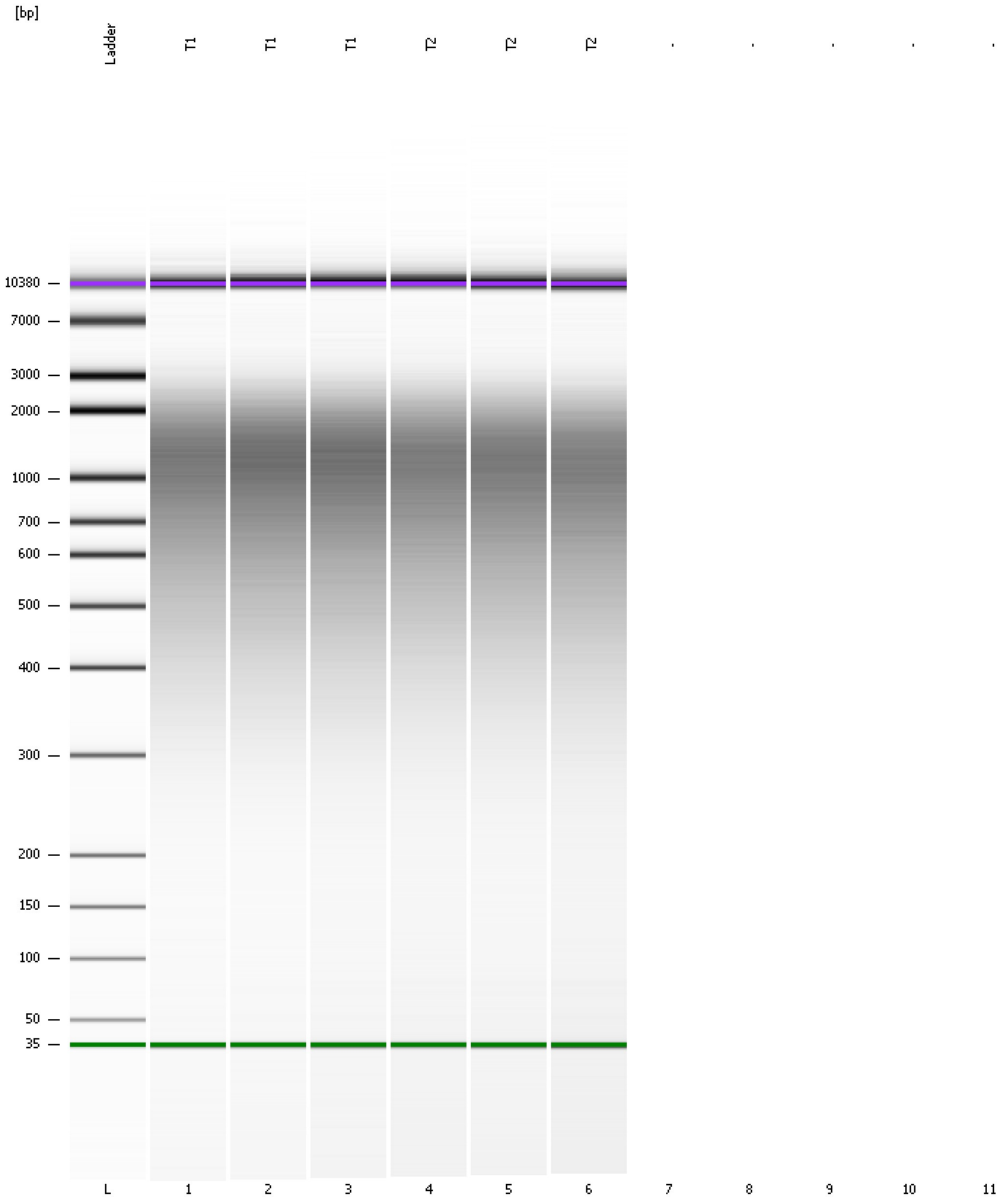
... Region table for sample 6 : T2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	619	1,689.9	596.43	549.2	65	30.4	■

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
Modified: 5/9/2013 11:56:19 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
Modified: 5/9/2013 11:56:19 AM

Invalid Samples

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

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\2013-05-09\2013-05-09_001.xad

Created: 5/9/2013 11:29:14 AM
 Modified: 5/9/2013 11:56:19 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 7)		Instrument	Run		5/9/2013 11:56:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-09\2013-05-09_001.xad)		Instrument	Run		5/9/2013 11:29:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/9/2013 11:29:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/9/2013 11:29:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/9/2013 11:29:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/9/2013 11:29:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/9/2013 11:29:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/9/2013 11:29:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1