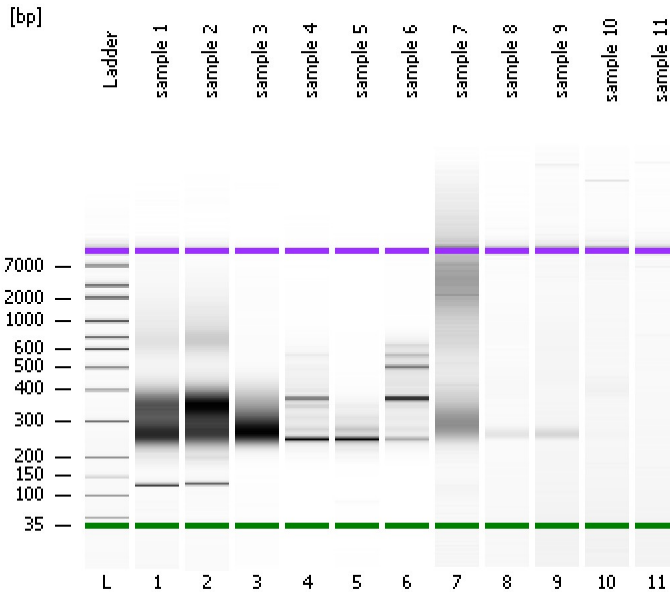


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
Modified: 8/12/2013 10:58:23 AM

Electrophoresis File Run Summary



Instrument Information:

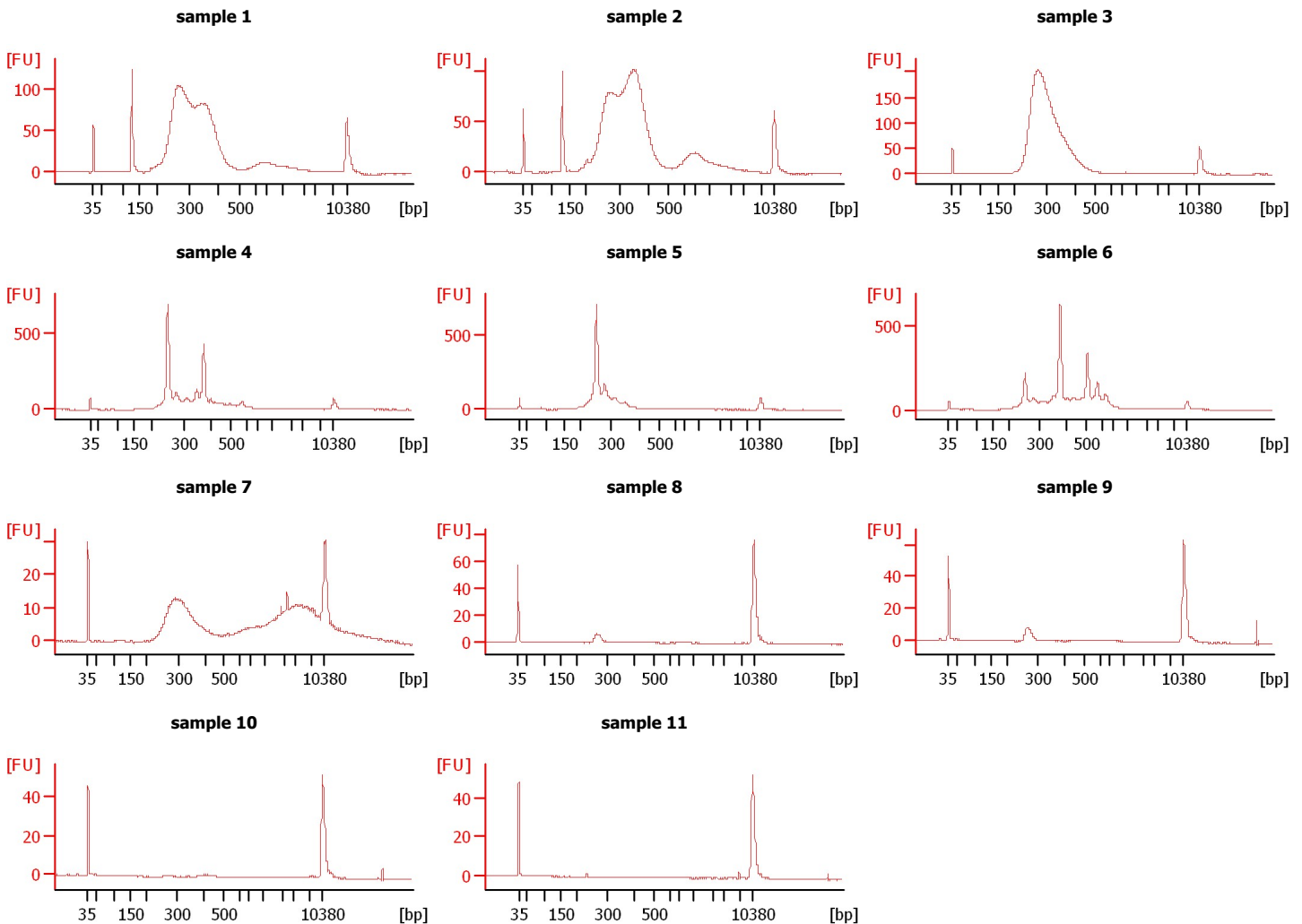
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>	✓			
sample 8		<input type="checkbox"/>	✓			
sample 9		<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\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
Modified: 8/12/2013 10:58:23 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

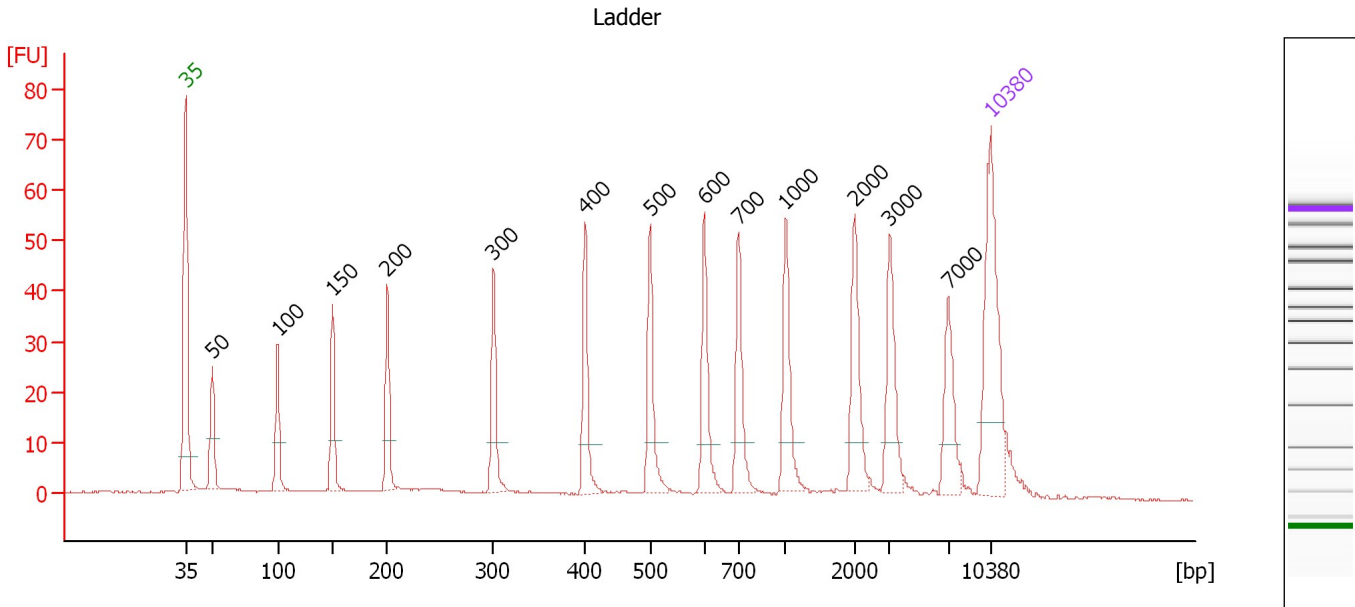
Ladder

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\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

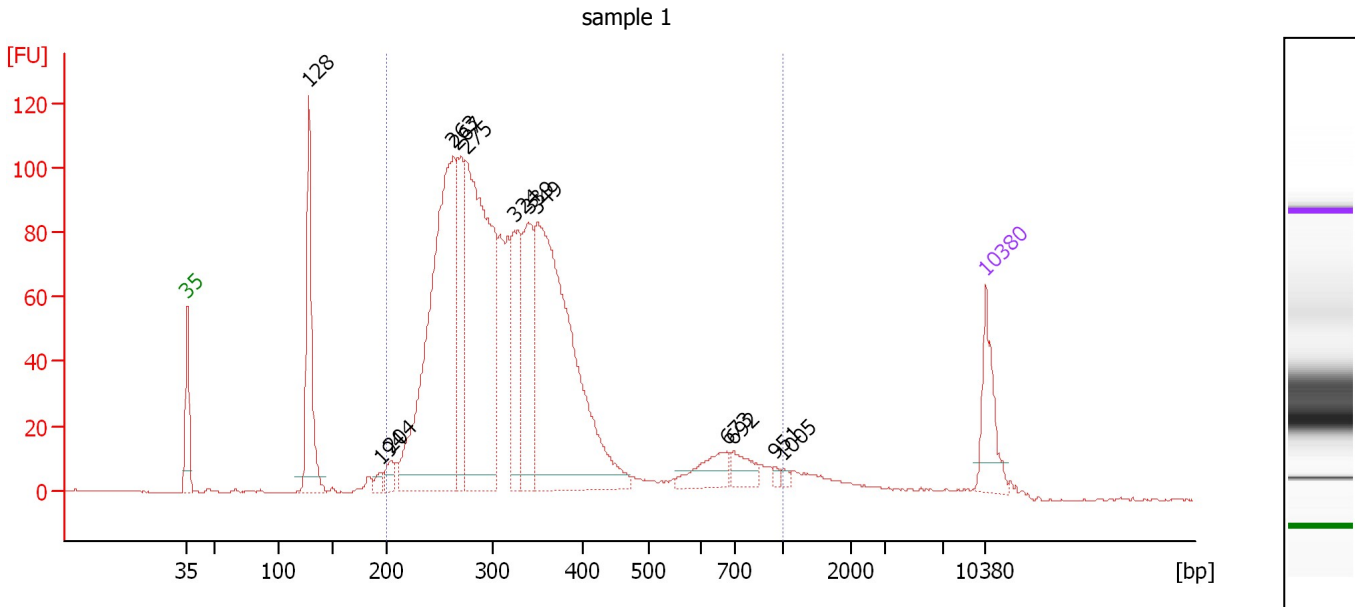
Peak table for Ladder

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\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 13 Corr. Area 1: 1,936.7
 Noise: 0.2

Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	302.68	3,592.4	
3	194	17.24	134.8	
4	204	29.80	221.7	
5	263	875.21	5,042.4	
6	267	221.18	1,257.3	
7	275	753.38	4,156.3	
8	324	188.59	881.9	
9	339	234.35	1,048.4	
10	349	817.76	3,547.8	
11	673	61.98	139.5	
12	692	40.47	88.6	
13	951	5.72	9.1	
14	1,005	6.71	10.1	
15	10,380	75.00	10.9	Upper Marker

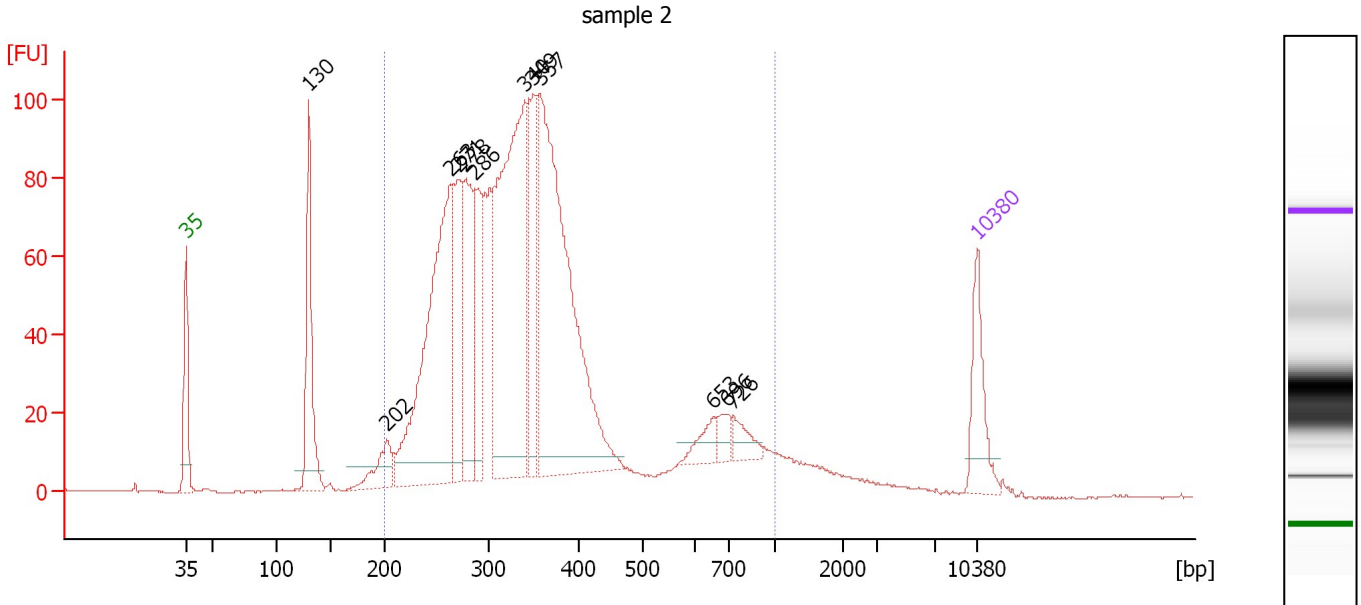
Region table for sample 1 : sample 1

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	342	17,746.6	3,607.35	1,936.7	90	35.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 12 Corr. Area 1: 1,934.4
 Noise: 0.2

Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	130	237.21	2,771.0	
3	202	66.30	496.2	
4	263	593.33	3,413.9	
5	271	180.59	1,009.7	
6	278	206.69	1,127.9	
7	286	157.97	835.8	
8	340	640.52	2,850.6	
9	349	189.02	819.9	
10	357	734.87	3,118.7	
11	653	35.73	82.9	
12	696	26.65	58.0	
13	726	34.60	72.2	
14	10,380	75.00	10.9	Upper Marker

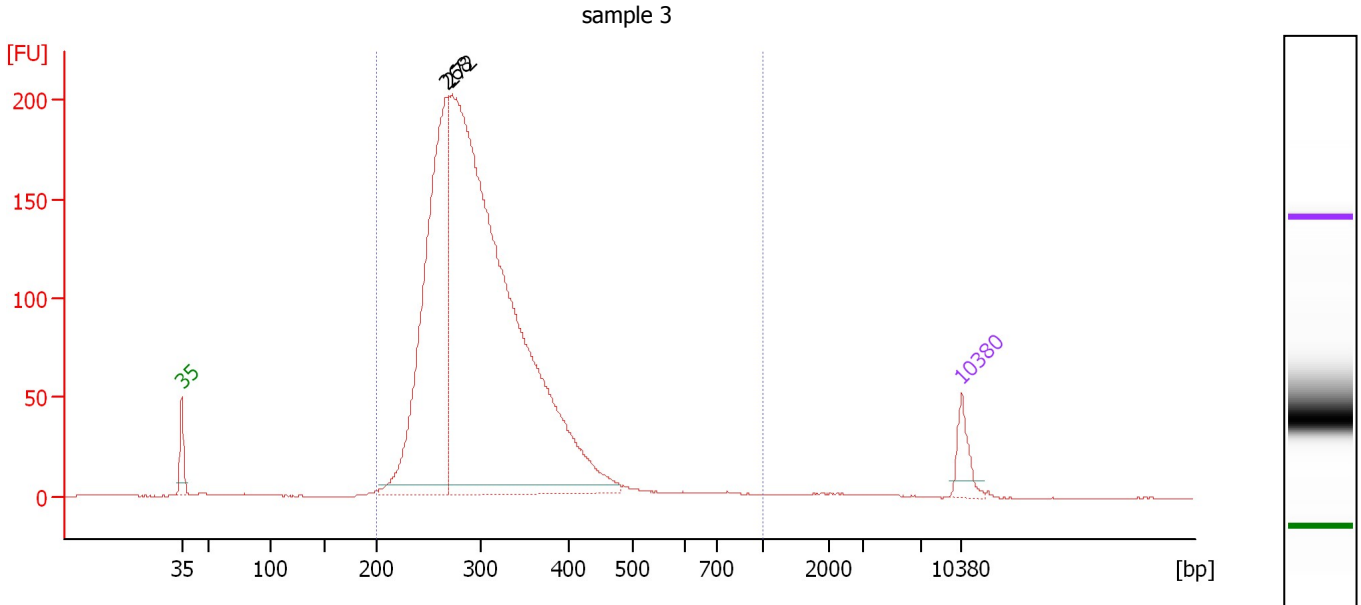
Region table for sample 2 : sample 2

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	364	16,254.7	3,453.62	1,934.4	90	37.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 2 Corr. Area 1: 2,692.6
 Noise: 0.2

Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	268	1,804.39	10,200.8	
3	272	4,324.71	24,076.1	
4	10,380	75.00	10.9	Upper Marker

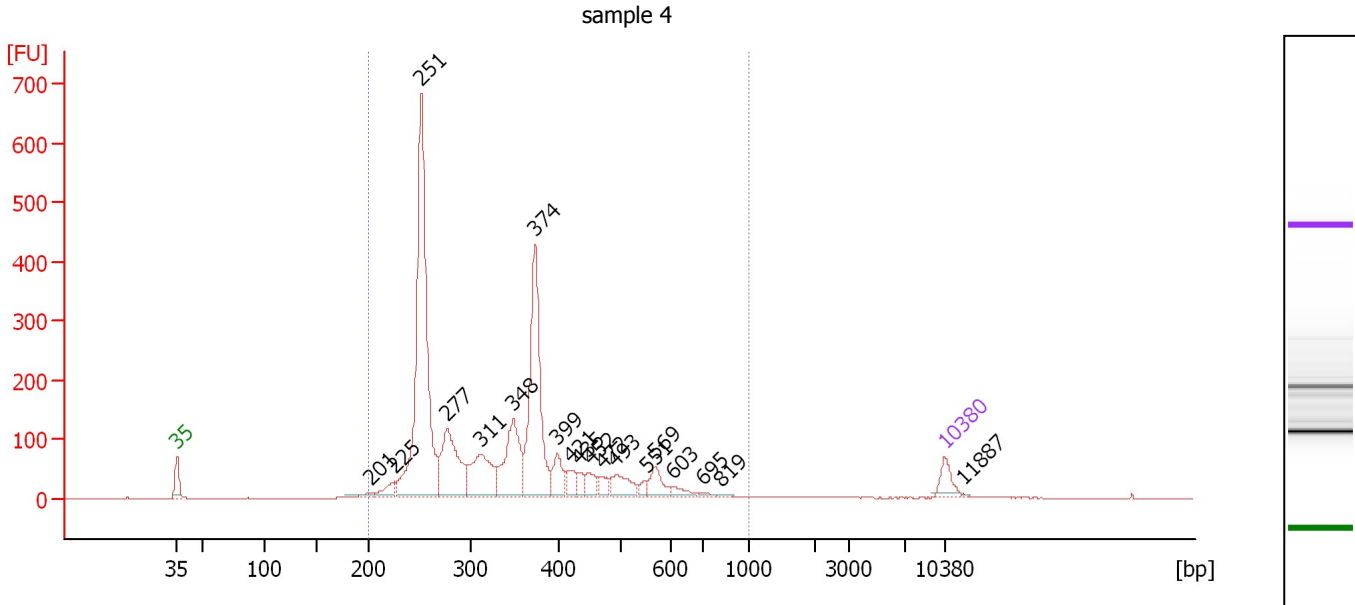
Region table for sample 3 : sample 3

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	308	30,449.7	5,928.39	2,692.6	98	22.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 19 Corr. Area 1: 3,338.7
 Noise: 0.2

Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	201	33.67	253.2	
3	225	91.36	614.6	
4	251	1,999.26	12,066.2	
5	277	526.05	2,878.6	
6	311	398.40	1,940.5	
7	348	436.13	1,897.3	
8	374	924.91	3,747.8	
9	399	140.74	534.6	
10	421	80.00	288.0	
11	435	51.49	179.5	
12	452	78.29	262.5	
13	472	52.40	168.3	
14	493	137.90	423.7	
15	551	36.40	100.1	
16	569	109.77	292.5	
17	603	42.43	106.6	
18	695	15.96	34.8	
19	819	10.10	18.7	
20	10,380	75.00	10.9	Upper Marker
21	11,887	0.00	0.0	

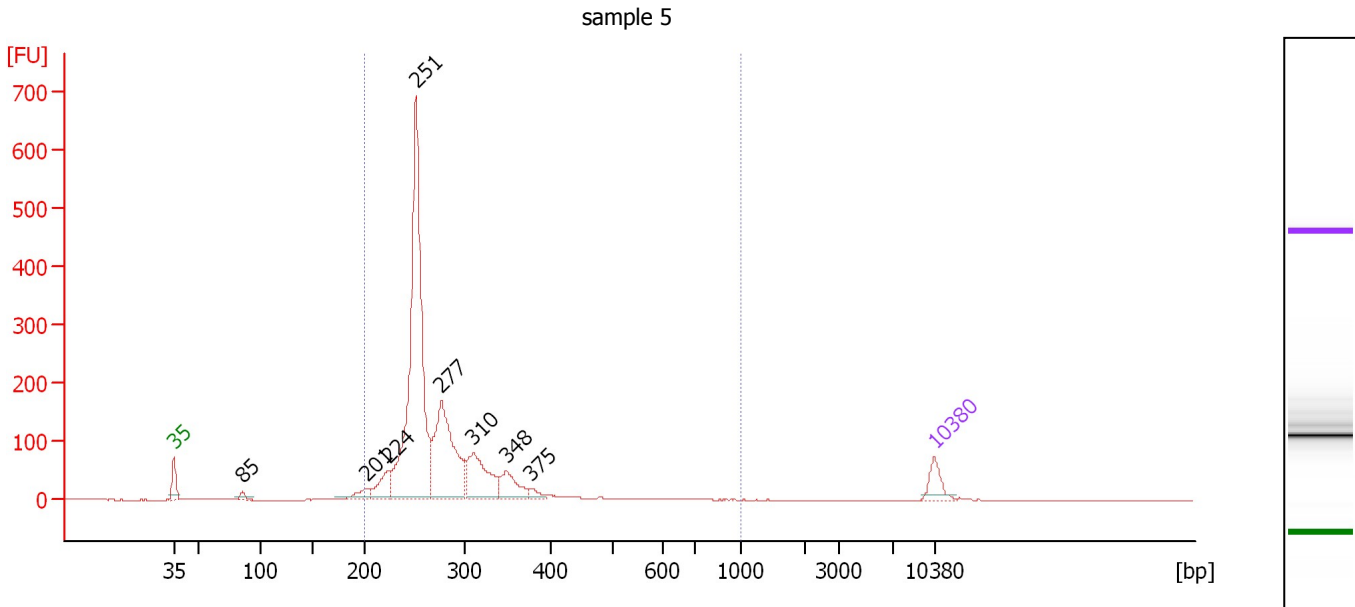
Region table for sample 4 : sample 4

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	343	25,866.5	5,253.92	3,338.7	99	30.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 8 Corr. Area 1: 2,462.8
 Noise: 0.2

Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	85	34.77	618.0	
3	201	78.10	588.0	
4	224	166.28	1,126.8	
5	251	2,032.69	12,256.2	
6	277	780.92	4,273.9	
7	310	363.01	1,773.3	
8	348	168.02	732.0	
9	375	37.20	150.1	
10	10,380	75.00	10.9	Upper Marker

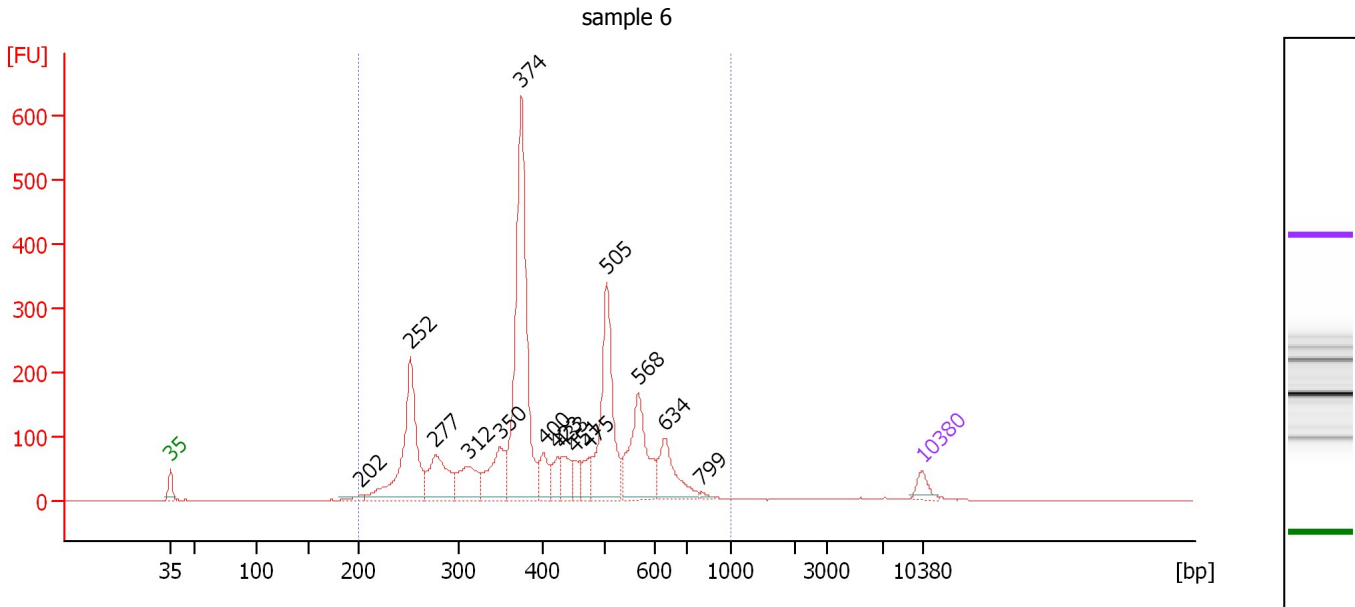
Region table for sample 5 : sample 5

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	279	20,830.9	3,705.02	2,462.8	96	21.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 15 Corr. Area 1: 3,661.0
 Noise: 0.1

Peak table for sample 6 : sample 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	202	43.60	326.5	
3	252	1,281.55	7,709.1	
4	277	525.13	2,870.4	
5	312	388.44	1,884.9	
6	350	433.18	1,877.3	
7	374	2,121.87	8,598.1	
8	400	203.44	770.4	
9	423	146.02	523.1	
10	433	196.39	687.8	
11	451	100.86	338.8	
12	475	142.83	455.8	
13	505	1,063.23	3,192.9	
14	568	685.16	1,827.0	
15	634	386.27	923.8	
16	799	22.48	42.6	
17	10,380	75.00	10.9	Upper Marker

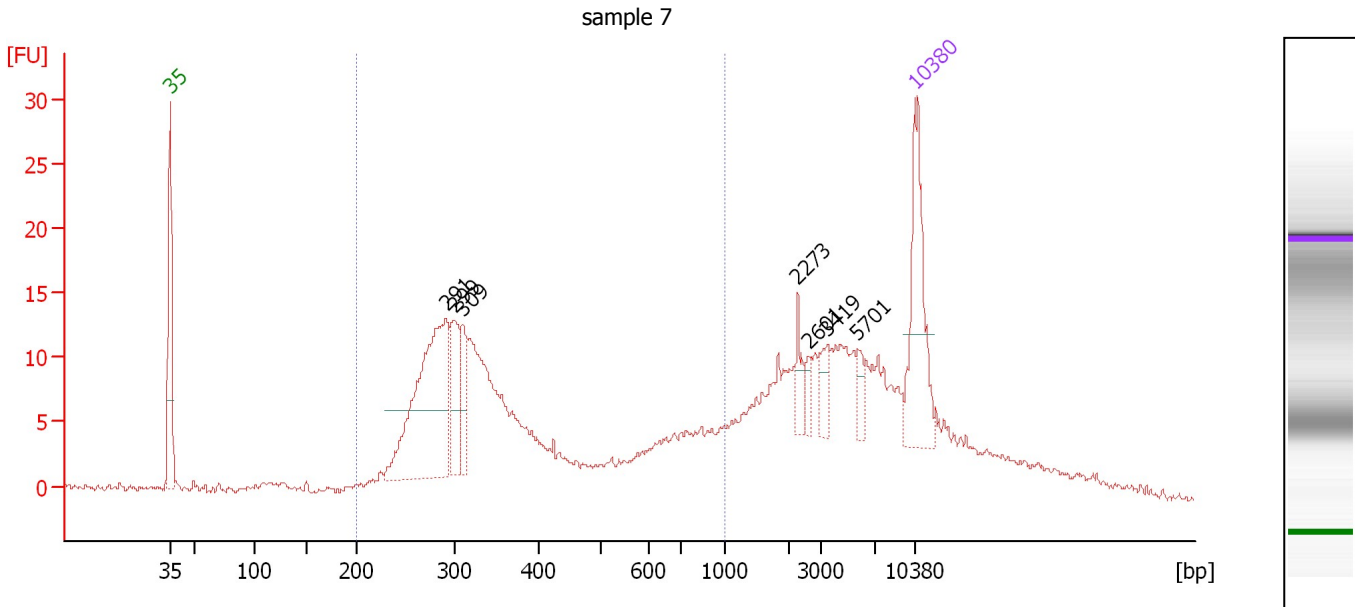
Region table for sample 6 : sample 6

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	420	32,376.0	7,891.06	3,661.0	98	29.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 7 Corr. Area 1: 242.2
 Noise: 0.2

Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	291	224.29	1,167.5	
3	299	56.48	286.0	
4	309	37.85	185.5	
5	2,273	15.17	10.1	
6	2,601	9.06	5.3	
7	3,419	16.49	7.3	
8	5,701	10.83	2.9	
9	10,380	75.00	10.9	Upper Marker

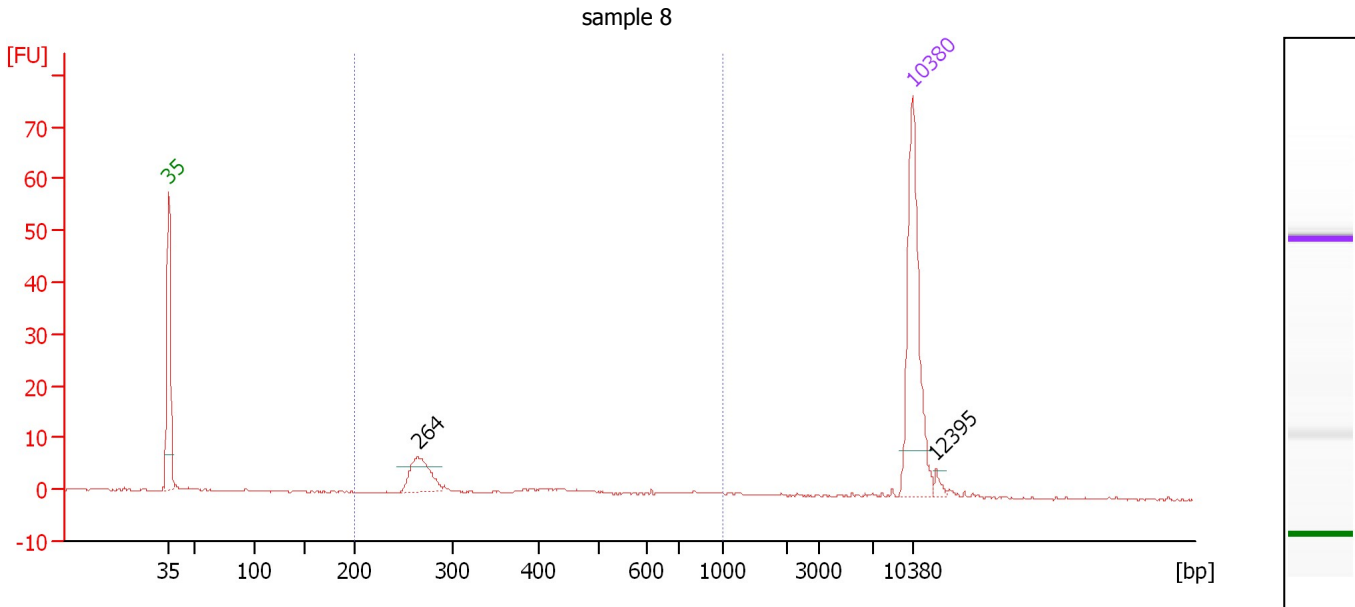
Region table for sample 7 : sample 7

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	418	3,691.5	835.18	242.2	55	45.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 2 Corr. Area 1: 37.9
 Noise: 0.1

Peak table for sample 8 : sample 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	264	34.02	195.3	
3	10,380	75.00	10.9	Upper Marker
4	12,395	0.00	0.0	

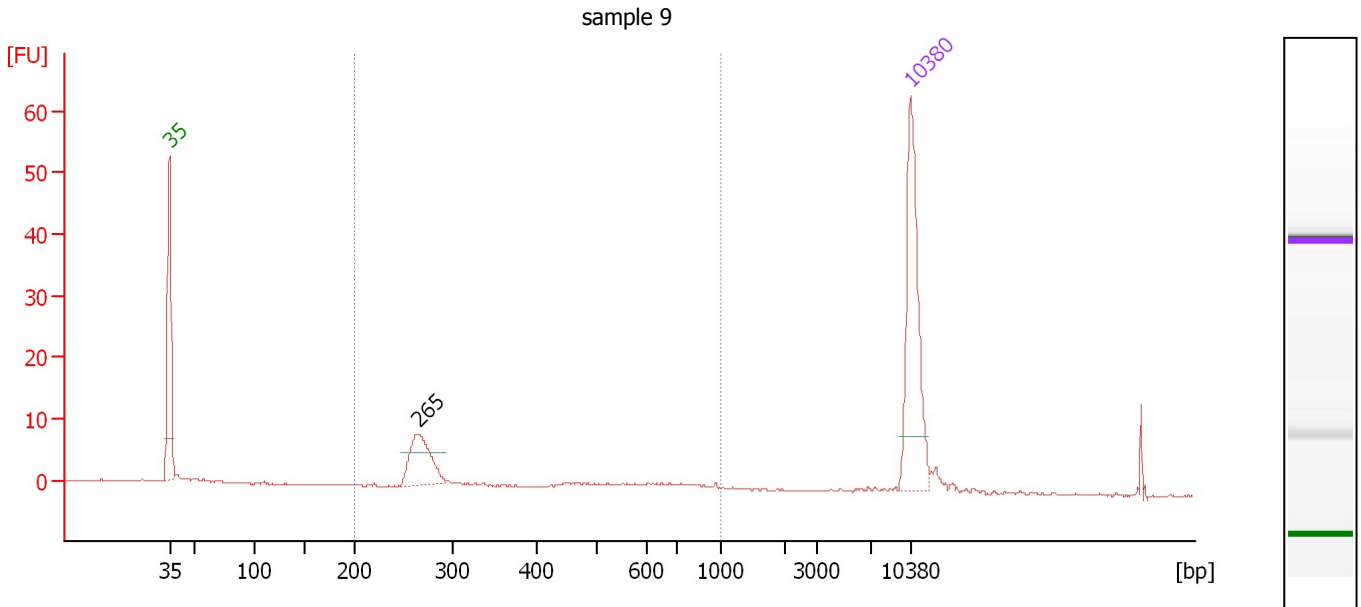
Region table for sample 8 : sample 8

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	380	252.4	51.98	37.9	72	46.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 1 Corr. Area 1: 44.9
 Noise: 0.1

Peak table for sample 9 : sample 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	265	49.52	282.8	
3	10,380	75.00	10.9	Upper Marker

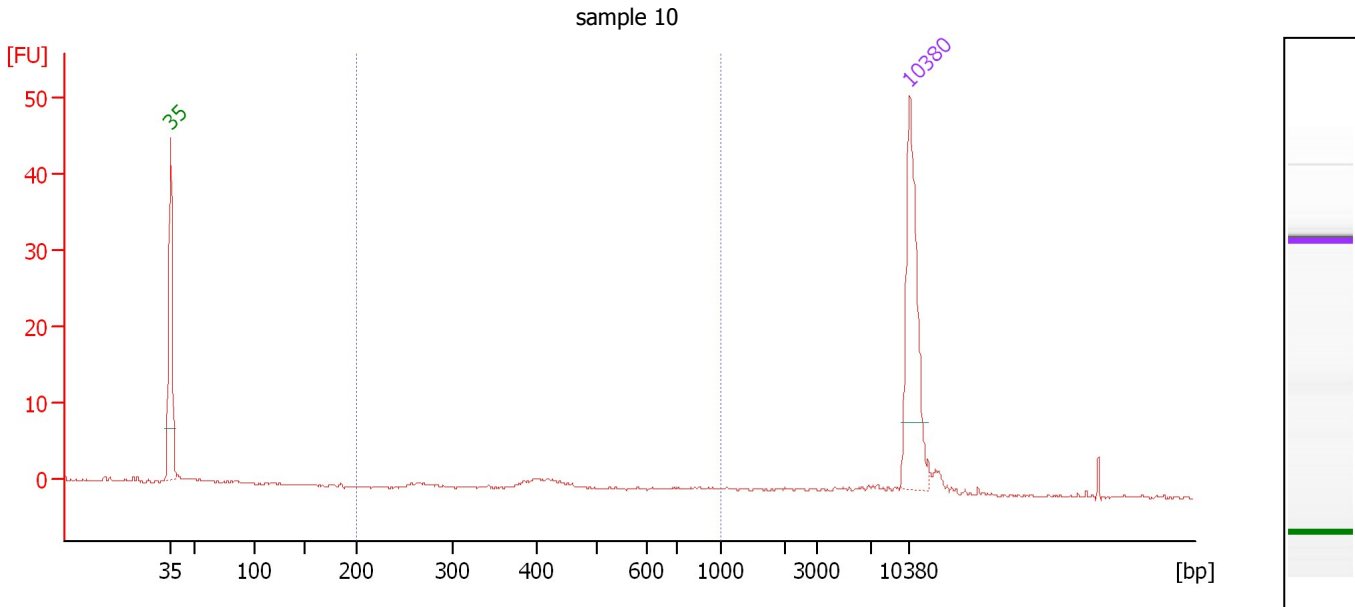
Region table for sample 9 : sample 9

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	388	359.0	73.62	44.9	71	47.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 0 Corr. Area 1: 8.8
 Noise: 0.1

Peak table for sample 10 : sample 10

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

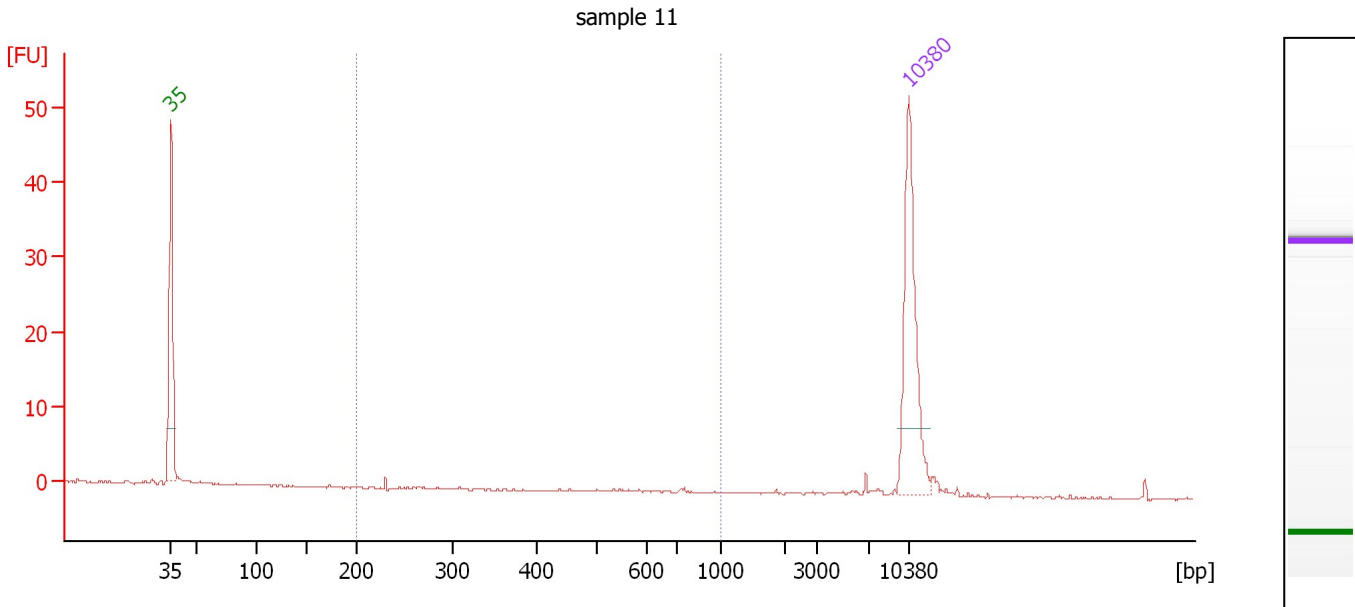
Region table for sample 10 : sample 10

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	479	62.5	17.24	8.8	31	35.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 0 Corr. Area 1: 0.4
 Noise: 0.1

Peak table for sample 11 : sample 11

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

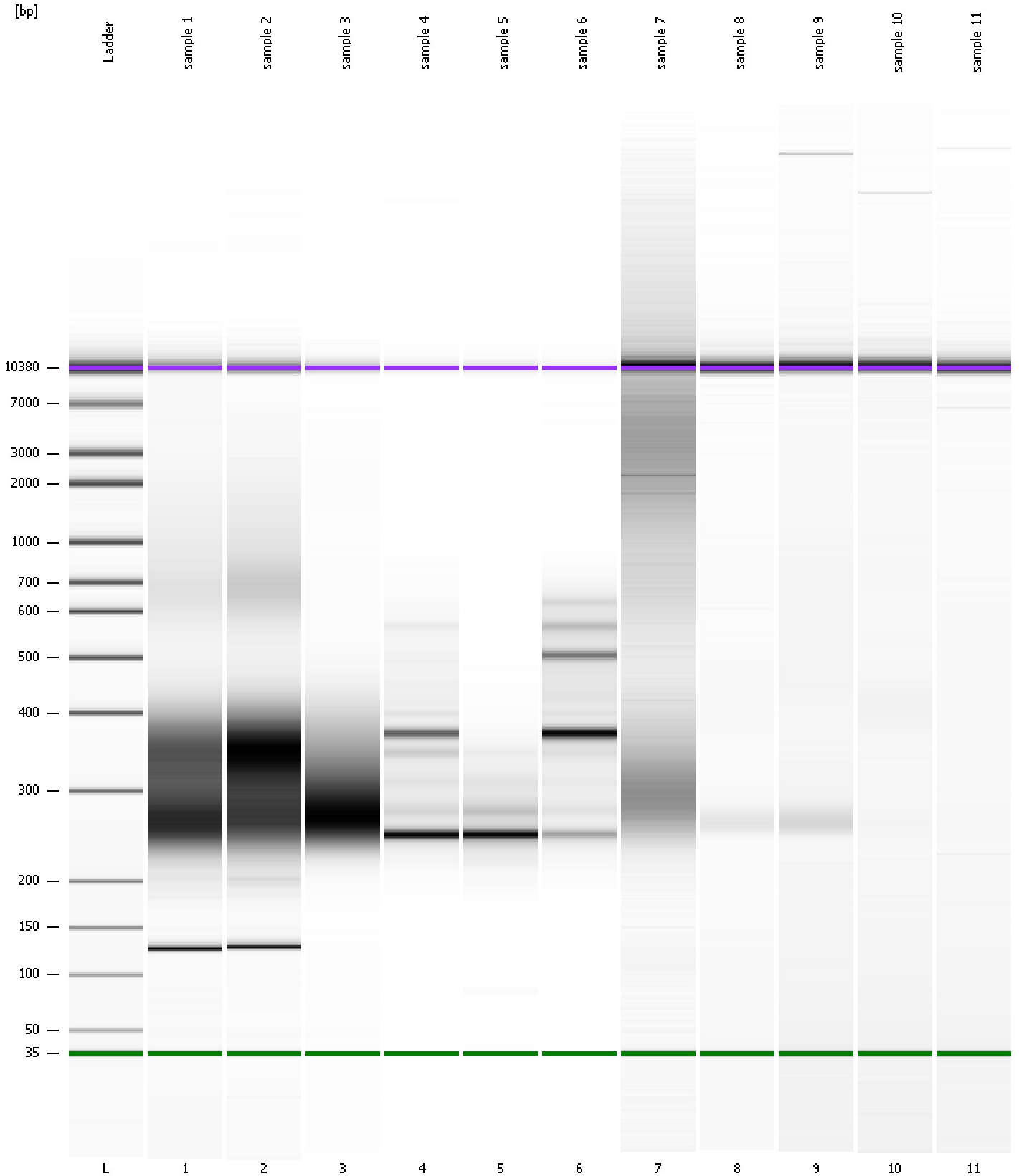
Region table for sample 11 : sample 11

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	413	4.5	0.81	0.4	6	58.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
Modified: 8/12/2013 10:58:23 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad

Created: 8/12/2013 10:17:01 AM
 Modified: 8/12/2013 10:58:23 AM

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		8/12/2013 10:58:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-12\2013-08-12_001.xad)		Instrument	Run		8/12/2013 10:17:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/12/2013 10:17:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/12/2013 10:17:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/12/2013 10:17:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/12/2013 10:17:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/12/2013 10:17:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/12/2013 10:17:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1