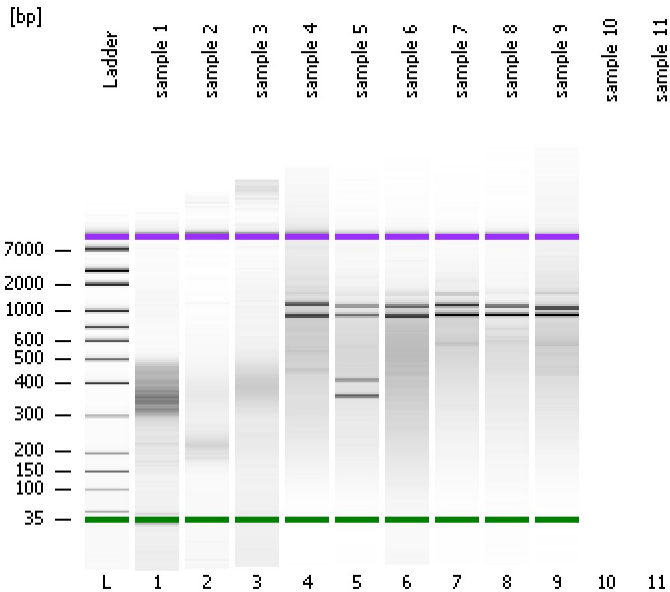


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
Modified: 4/4/2013 5:03:44 PM

Electrophoresis File Run Summary



Instrument Information:

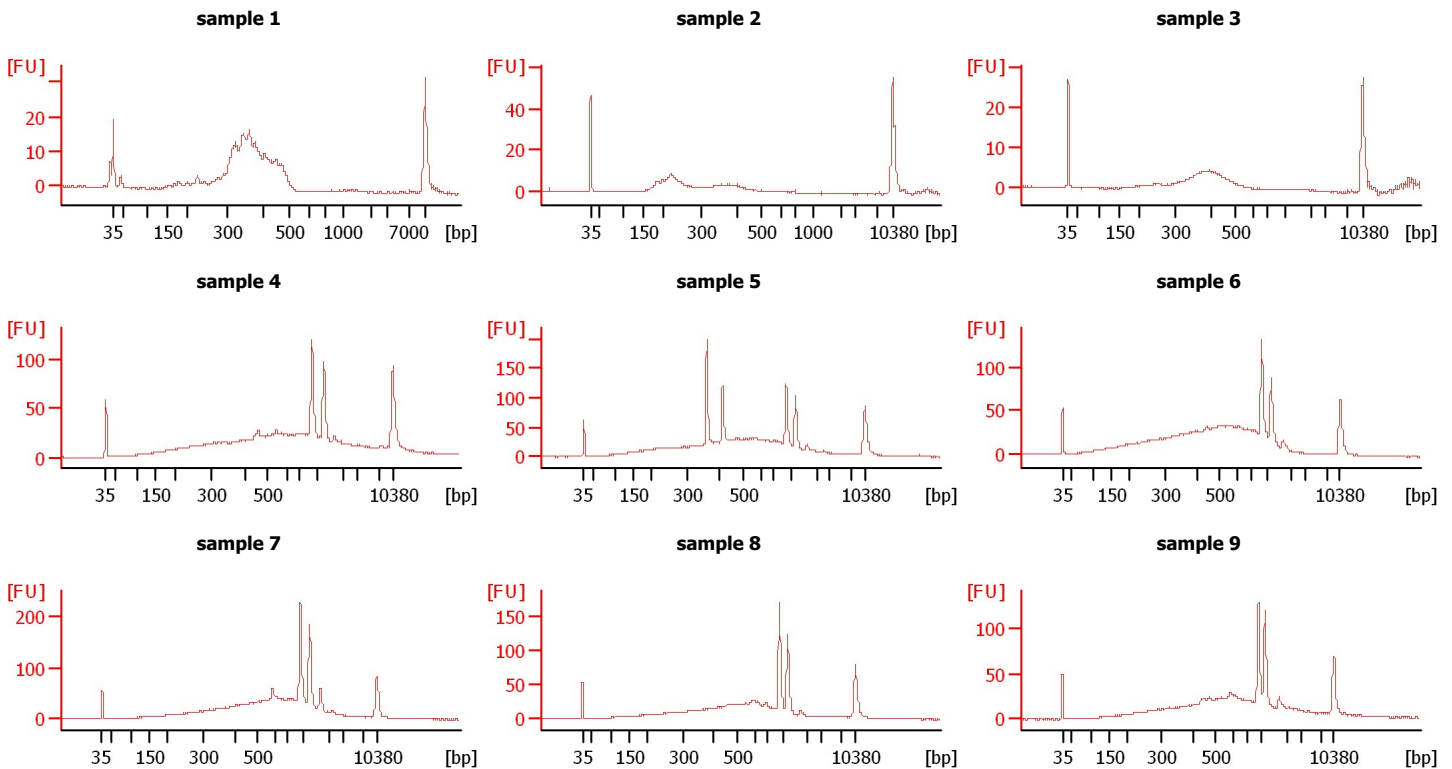
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
Modified: 4/4/2013 5:03:44 PM

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\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
Modified: 4/4/2013 5:03:44 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

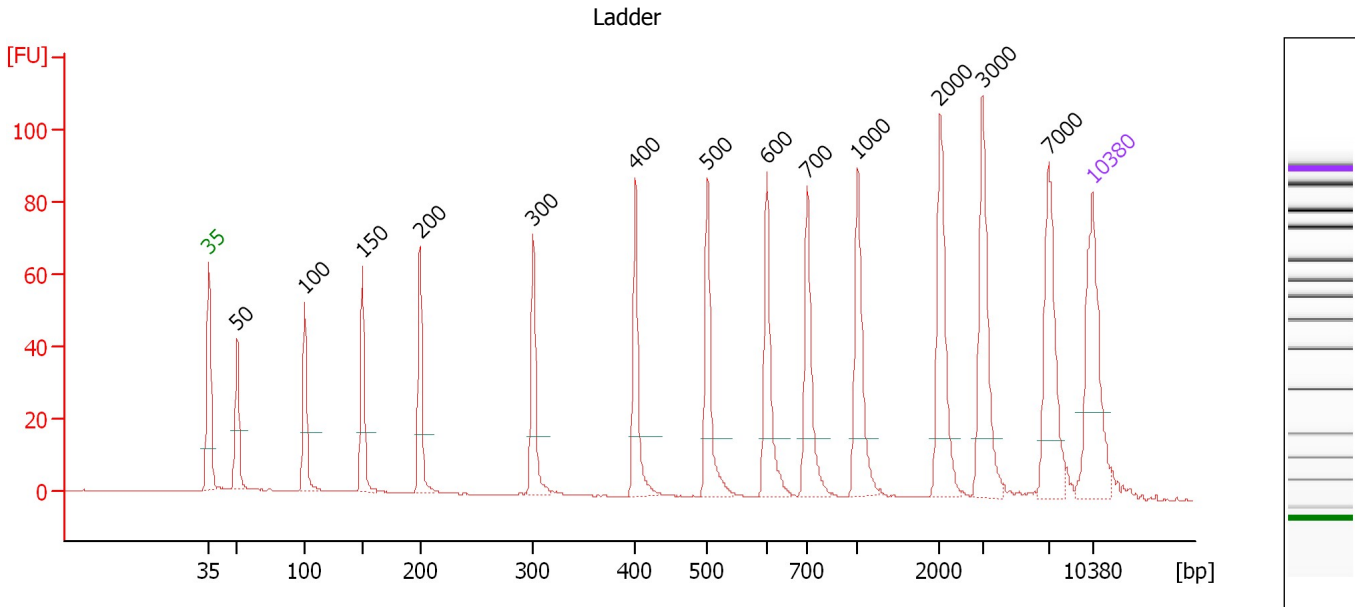
Ladder

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\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

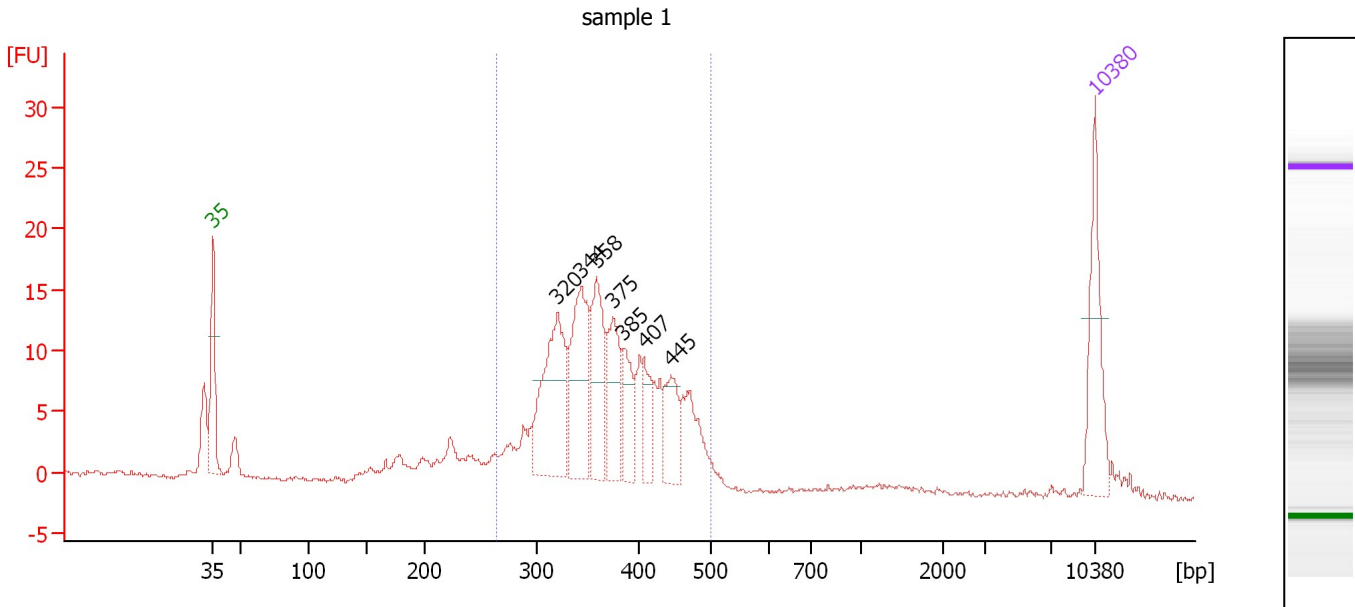
Peak table for Ladder

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\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : sample 1

Height Threshold [FU] : 8

Overall Results for sample 1 : sample 1

Number of peaks found: 7 Corr. Area 1: 222.1
 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	320	174.69	826.1	
3	344	146.03	643.4	
4	358	104.46	441.5	
5	375	81.74	330.5	
6	385	52.86	208.0	
7	407	38.22	142.3	
8	445	56.42	192.2	
9	10,380	75.00	10.9	Upper Marker

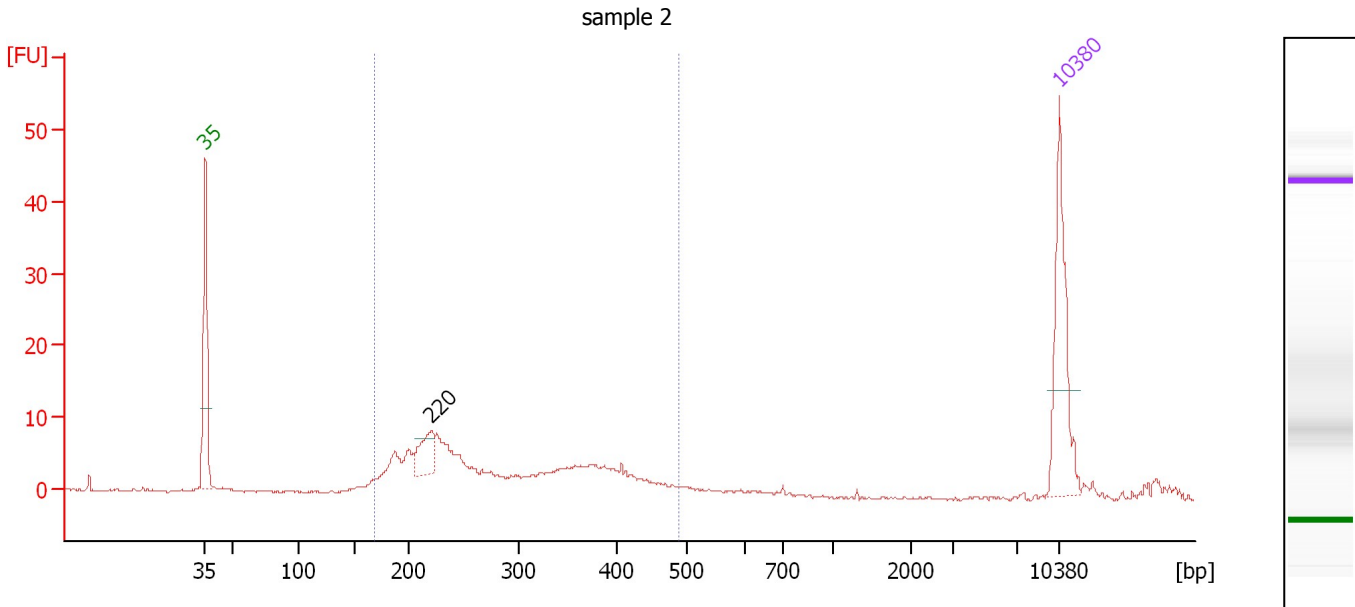
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
264	500	371	3,897.7	929.10	222.1	79	14.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 1 Corr. Area 1: 137.2
 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	220	41.18	283.5	
3	10,380	75.00	10.9	Upper Marker

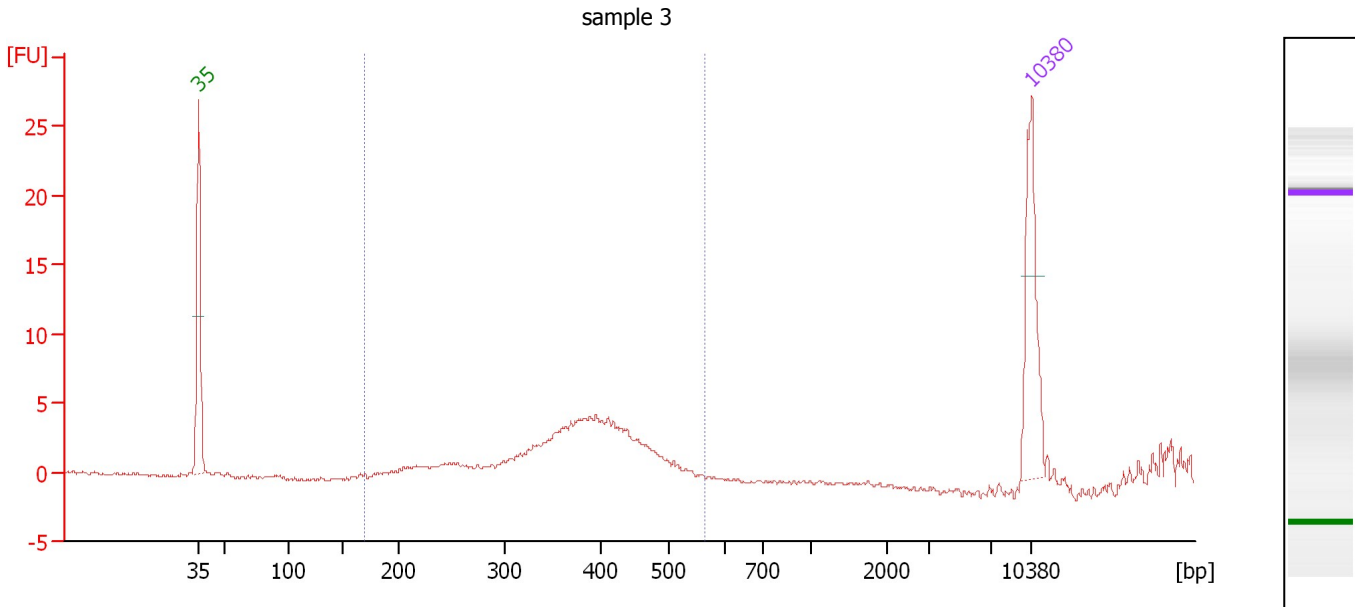
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
169	489	287	2,056.3	348.14	137.2	89	28.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 0 Corr. Area 1: 40.6
 Noise: 0.1

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	10,380	75.00	10.9	Upper Marker

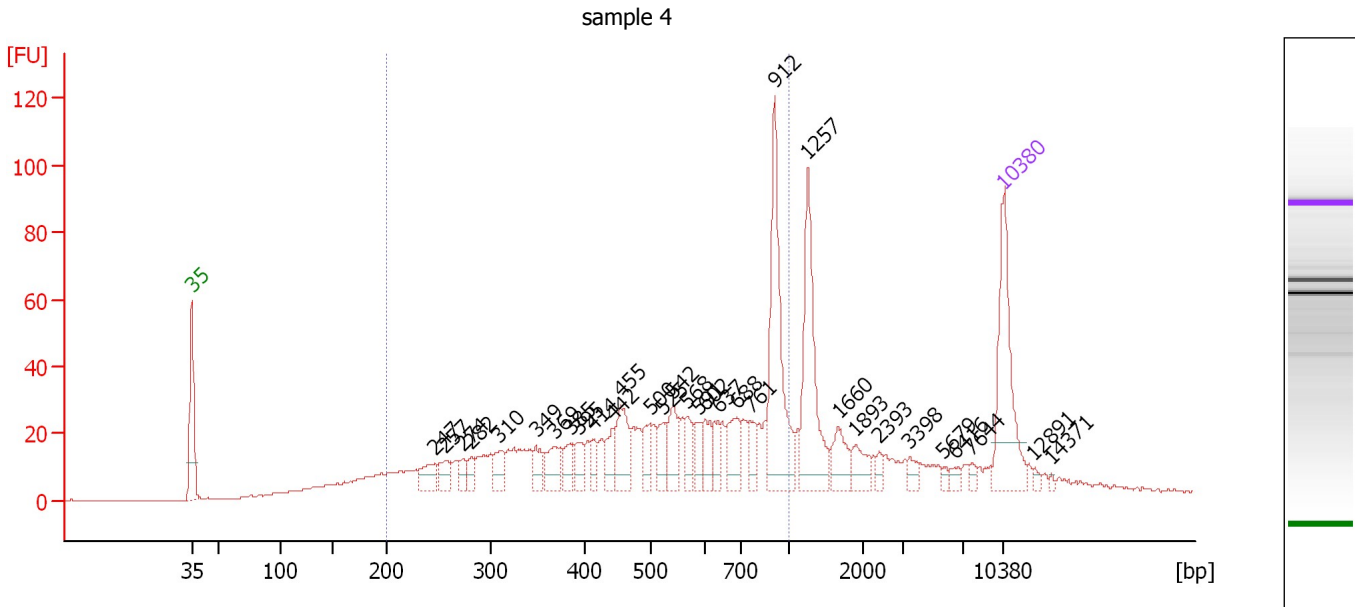
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
169	565	387	709.3	176.98	40.6	98	12.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 32 Corr. Area 1: 831.4
 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	247	23.41	143.8	
3	257	18.89	111.1	
4	274	11.36	62.8	
5	282	10.87	58.5	
6	310	21.63	105.6	
7	349	17.15	74.5	
8	369	29.03	119.3	
9	385	17.56	69.1	
10	395	15.32	58.8	
11	414	13.64	49.9	
12	442	19.43	66.5	
13	455	40.45	134.6	
14	500	20.10	60.9	
15	525	19.88	57.4	
16	542	30.15	84.3	
17	568	18.78	50.1	
18	591	15.24	39.1	
19	602	19.44	48.9	
20	637	16.04	38.2	
21	688	30.06	66.2	
22	761	16.91	33.7	
23	912	122.00	202.7	
24	1,257	95.51	115.1	
25	1,660	22.78	20.8	
26	1,893	16.86	13.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad


Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...

... Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,393	5.62	3.6	
28	3,398	6.87	3.1	
29	5,679	3.14	0.8	
30	6,416	5.23	1.2	
31	7,644	4.24	0.8	
32	10,380	75.00	10.9	Upper Marker
33	12,891	0.00	0.0	
34	14,371	0.00	0.0	

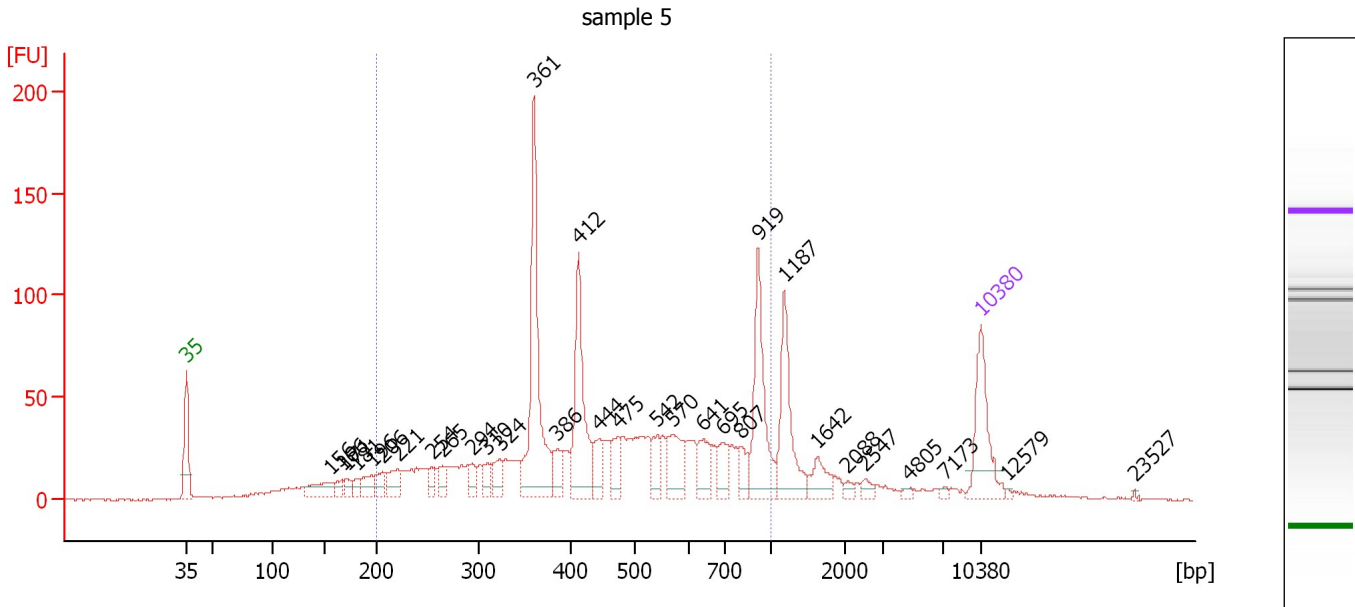
Region table for sample 4 : sample 4

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	548	3,216.1	892.37	831.4	68	40.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 31 Corr. Area 1: 1,326.0
 Noise: 0.5

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	156	42.38	412.7	
3	166	16.12	146.8	
4	171	15.33	135.8	
5	181	14.43	120.6	
6	196	30.00	232.2	
7	206	24.07	177.4	
8	221	37.47	257.1	
9	254	19.71	117.4	
10	265	24.23	138.3	
11	294	20.96	108.0	
12	310	19.35	94.7	
13	324	27.86	130.4	
14	361	249.32	1,047.2	
15	386	31.33	123.1	
16	412	152.36	559.7	
17	444	37.28	127.3	
18	475	33.83	107.9	
19	542	30.23	84.6	
20	570	54.45	144.8	
21	641	39.31	93.0	
22	695	33.64	73.4	
23	807	19.82	37.2	
24	919	127.67	210.5	
25	1,187	100.14	127.8	
26	1,642	28.10	25.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad


Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...

... Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,088	6.13	4.5	
28	2,547	8.23	4.9	
29	4,805	4.03	1.3	
30	7,173	3.86	0.8	
31	10,380	75.00	10.9	Upper Marker
32	12,579	0.00	0.0	
33	23,527	0.00	0.0	

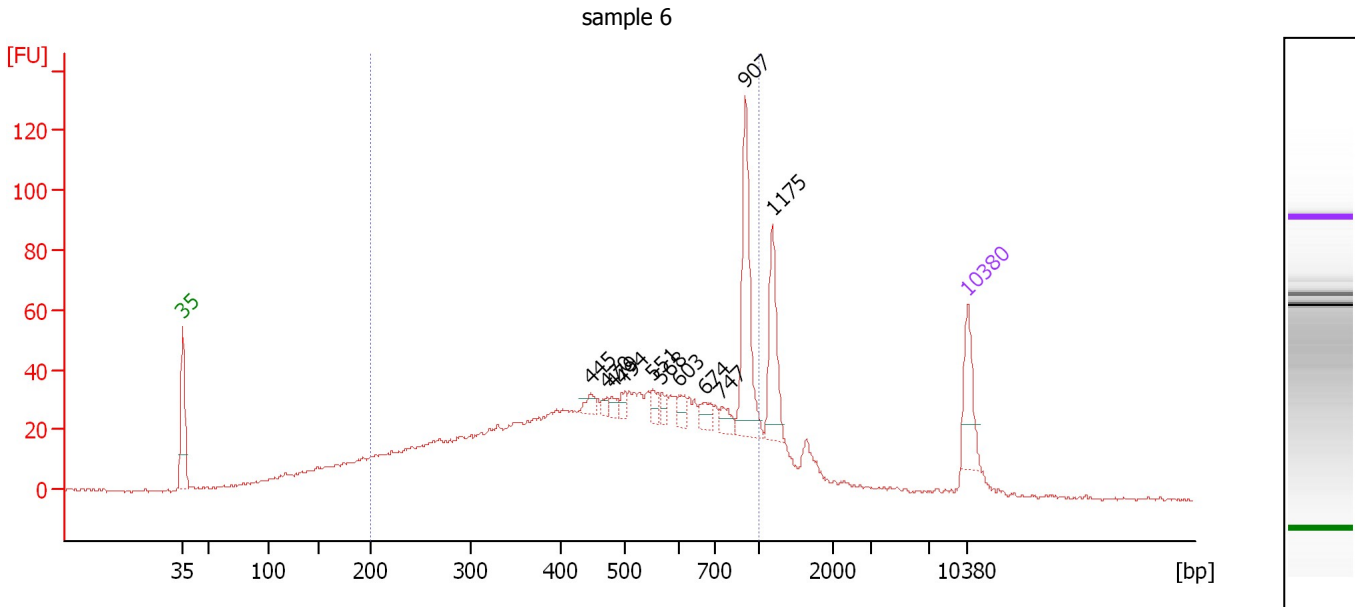
Region table for sample 5 : sample 5

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	499	5,574.4	1,465.79	1,326.0	77	41.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 11 Corr. Area 1: 1,226.1
 Noise: 0.4

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	445	19.03	64.8	
3	470	12.28	39.6	
4	479	15.87	50.2	
5	494	15.40	47.2	
6	551	23.95	65.8	
7	568	16.21	43.2	
8	603	21.92	55.1	
9	674	29.08	65.4	
10	747	24.96	50.6	
11	907	209.98	350.7	
12	1,175	115.73	149.3	
13	10,380	75.00	10.9	Upper Marker

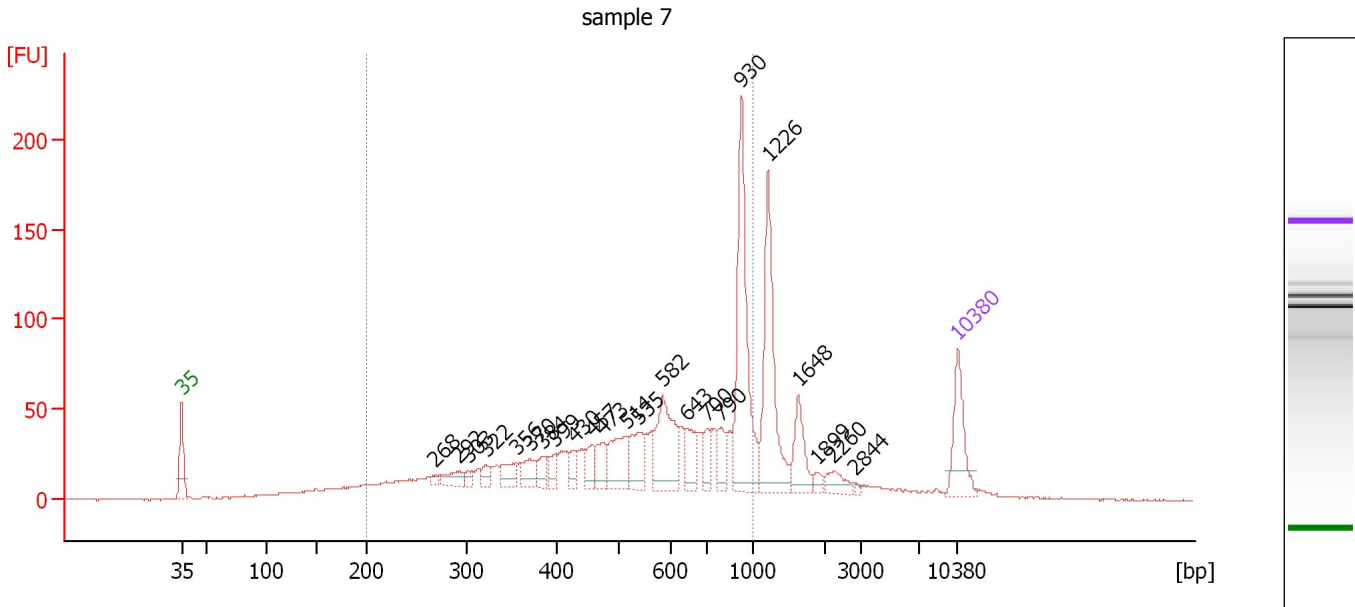
Region table for sample 6 : sample 6

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	523	10,884.9	2,932.03	1,226.1	77	40.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 23 Corr. Area 1: 1,289.2
 Noise: 0.4

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	268	9.45	53.4	
3	292	34.61	179.4	
4	303	13.01	65.1	
5	322	19.31	90.9	
6	356	39.90	169.7	
7	370	40.58	166.0	
8	384	27.95	110.3	
9	399	26.89	102.1	
10	430	22.98	81.0	
11	457	34.36	114.0	
12	473	43.01	137.9	
13	514	89.05	262.6	
14	535	65.22	184.6	
15	582	135.93	353.6	
16	643	53.34	125.6	
17	700	30.49	66.0	
18	790	36.00	69.0	
19	930	275.39	448.5	
20	1,226	208.04	257.0	
21	1,648	62.01	57.0	
22	1,899	10.05	8.0	
23	2,260	24.92	16.7	
24	2,844	3.53	1.9	
25	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...

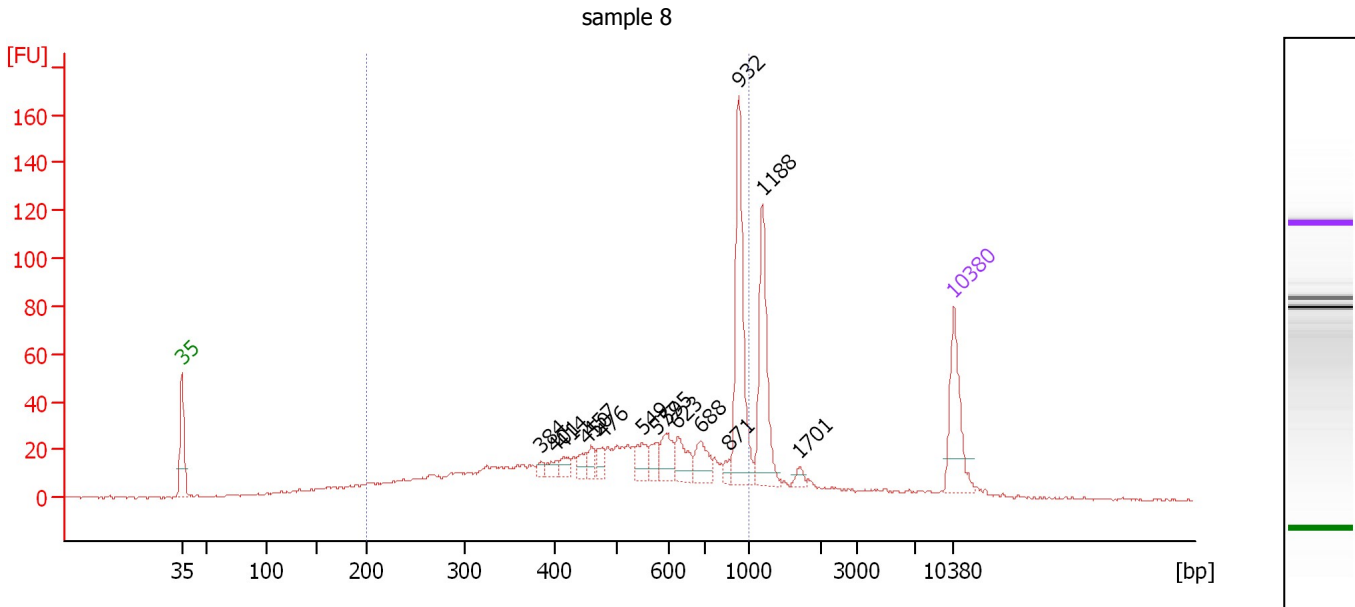
... Region table for sample 7 : sample 7

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	582	5,738.6	1,712.29	1,289.2	71	38.7	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 15 Corr. Area 1: 790.4
 Noise: 0.4

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	384	7.89	31.1	
3	401	14.34	54.1	
4	414	15.85	58.0	
5	450	18.45	62.1	
6	457	15.30	50.7	
7	476	17.60	56.0	
8	549	28.47	78.6	
9	577	22.35	58.7	
10	595	37.79	96.2	
11	623	37.06	90.1	
12	688	37.55	82.7	
13	871	8.72	15.2	
14	932	178.95	290.9	
15	1,188	123.91	158.1	
16	1,701	7.70	6.9	
17	10,380	75.00	10.9	Upper Marker

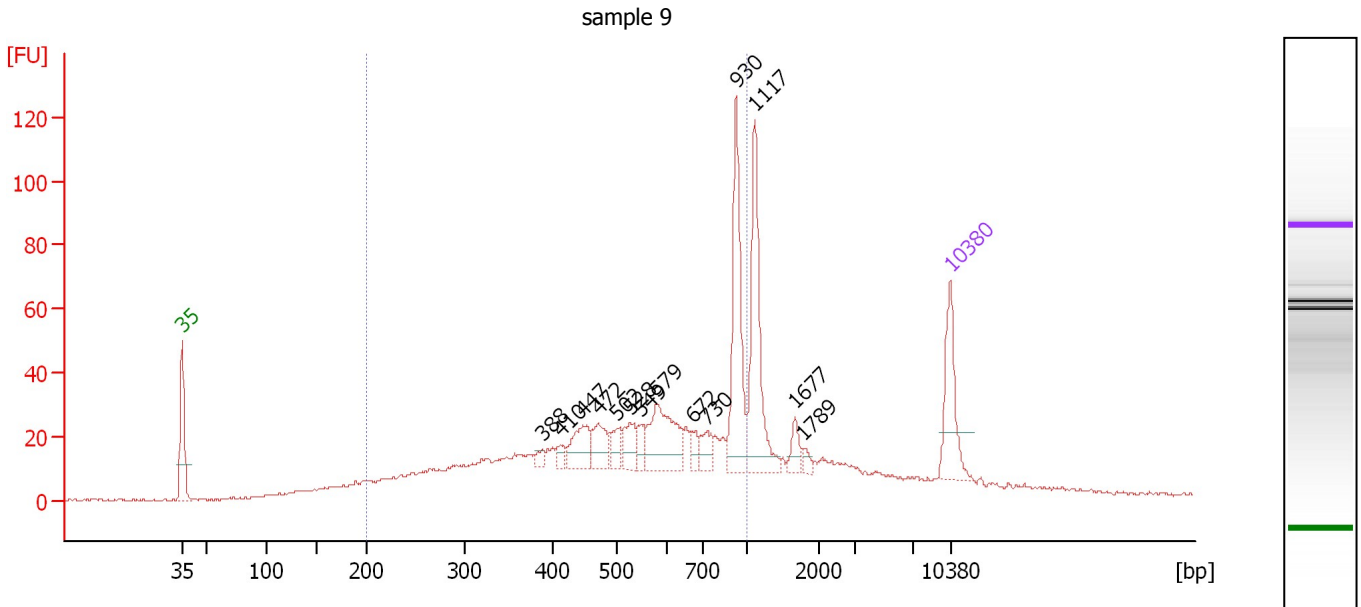
Region table for sample 8 : sample 8

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	577	3,896.0	1,135.04	790.4	74	40.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 14 Corr. Area 1: 765.3
 Noise: 0.3

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	388	11.87	46.3	
3	410	12.81	47.3	
4	447	58.56	198.5	
5	472	47.45	152.4	
6	502	29.69	89.6	
7	528	39.24	112.6	
8	549	19.80	54.7	
9	579	111.54	292.1	
10	672	20.70	46.7	
11	730	29.40	61.0	
12	930	170.20	277.4	
13	1,117	163.48	221.8	
14	1,677	20.84	18.8	
15	1,789	8.52	7.2	
16	10,380	75.00	10.9	Upper Marker

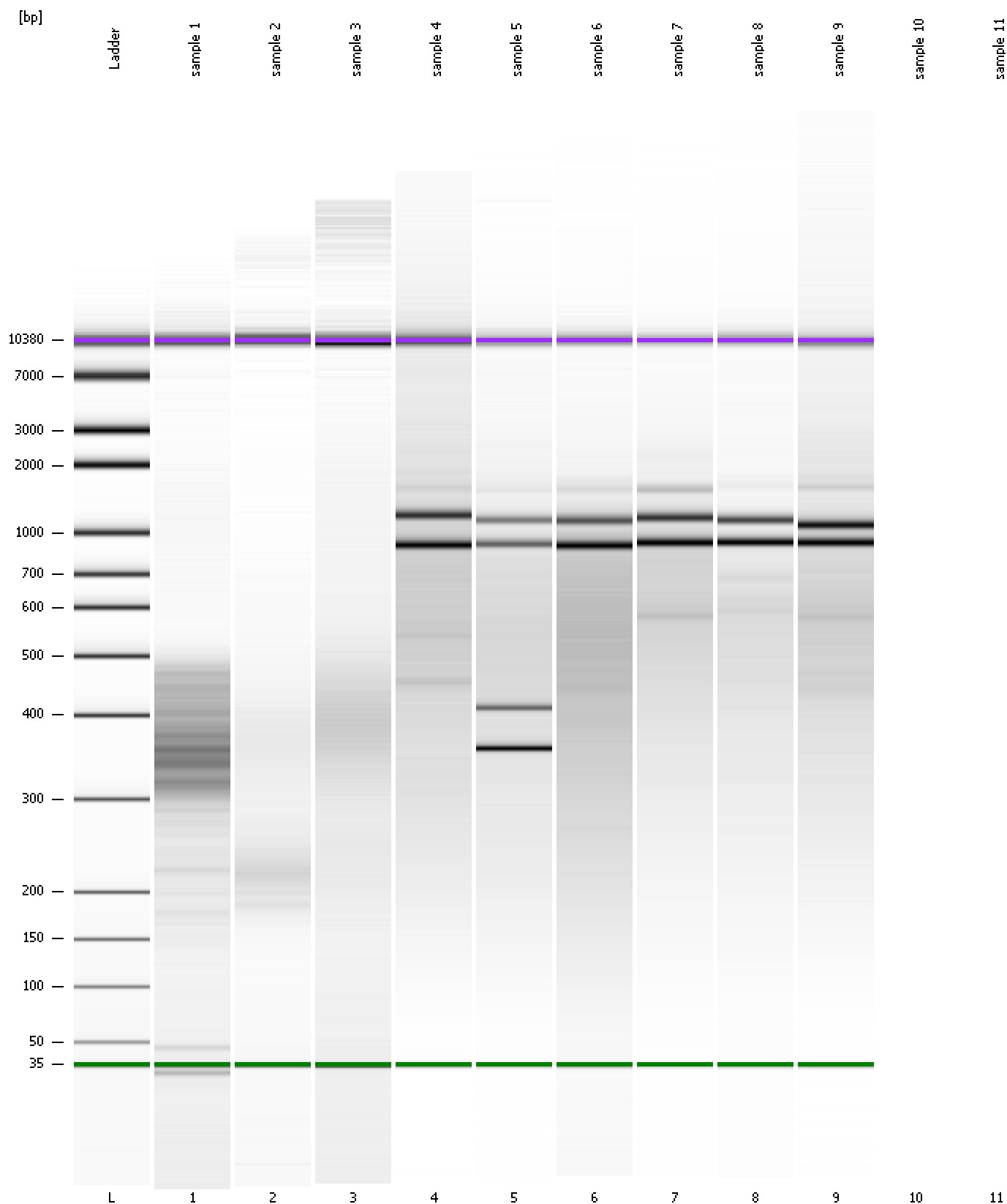
Region table for sample 9 : sample 9

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	563	4,870.4	1,410.11	765.3	69	39.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
Modified: 4/4/2013 5:03:44 PM

Gel Image

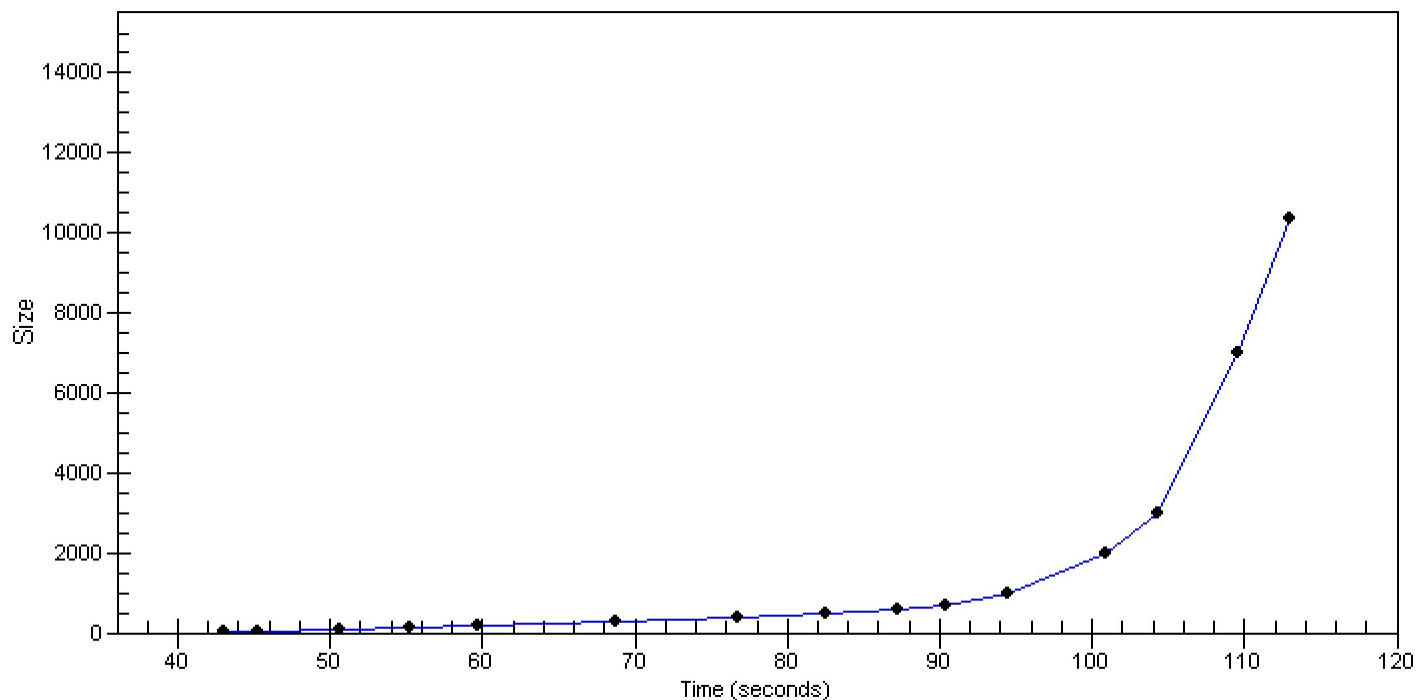


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
Modified: 4/4/2013 5:03:44 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
Modified: 4/4/2013 5:03:44 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\2013-04-04\2013-04-04_004.xad

Created: 4/4/2013 4:28:10 PM
 Modified: 4/4/2013 5:03:44 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		4/4/2013 5:03:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-04-04\2013-04-04_004.xad)		Instrument	Run		4/4/2013 4:28:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/4/2013 4:28:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/4/2013 4:28:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/4/2013 4:28:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/4/2013 4:28:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/4/2013 4:28:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/4/2013 4:28:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1