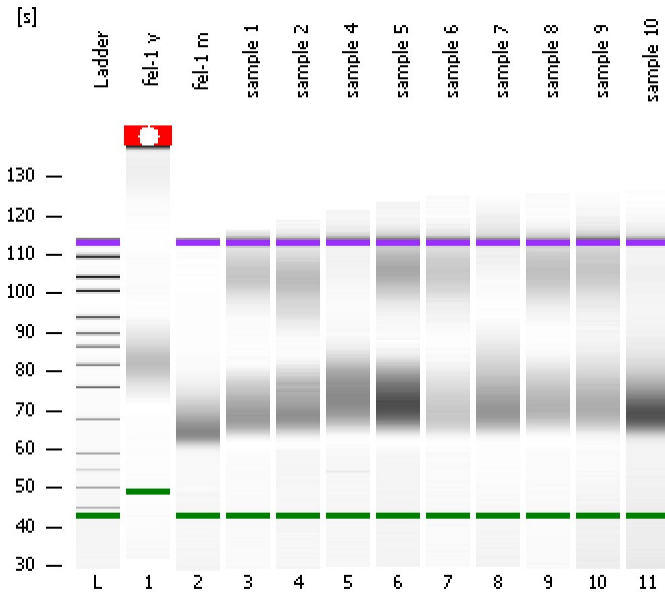


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
Modified: 4/17/2012 12:26:07 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

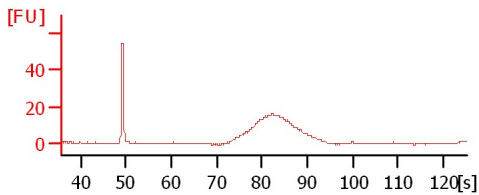
Chip Information:

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

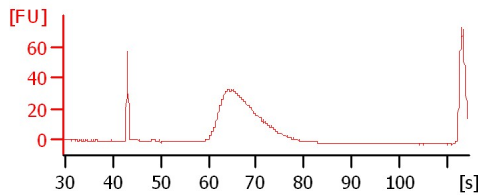
fel-1 y

fel-1 m

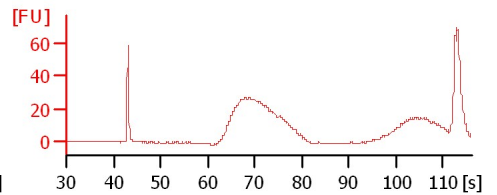
sample 1



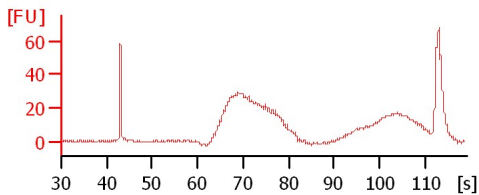
sample 2



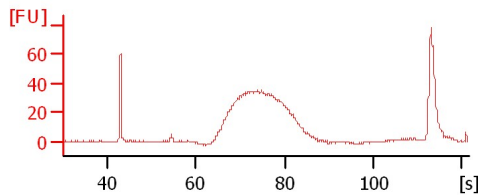
sample 4



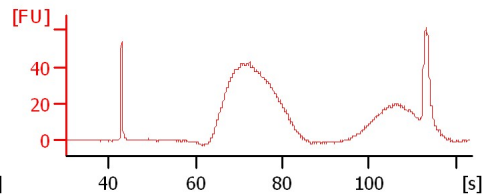
sample 5



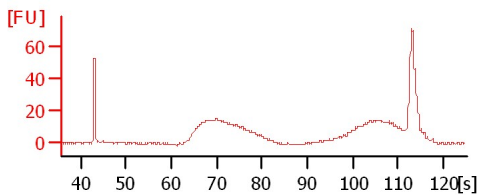
sample 6



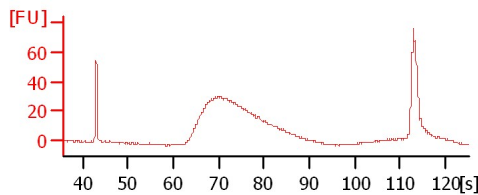
sample 7



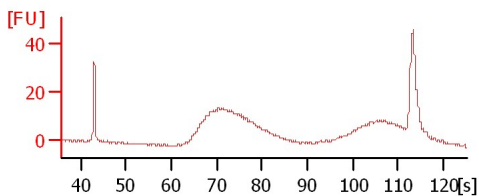
sample 8



sample 9



sample 10



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
fel-1 y		<input type="checkbox"/>	✓			
fel-1 m		<input type="checkbox"/>	✓			
sample 1		<input type="checkbox"/>	✓			
sample 2		<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"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
Modified: 4/17/2012 12:26:07 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

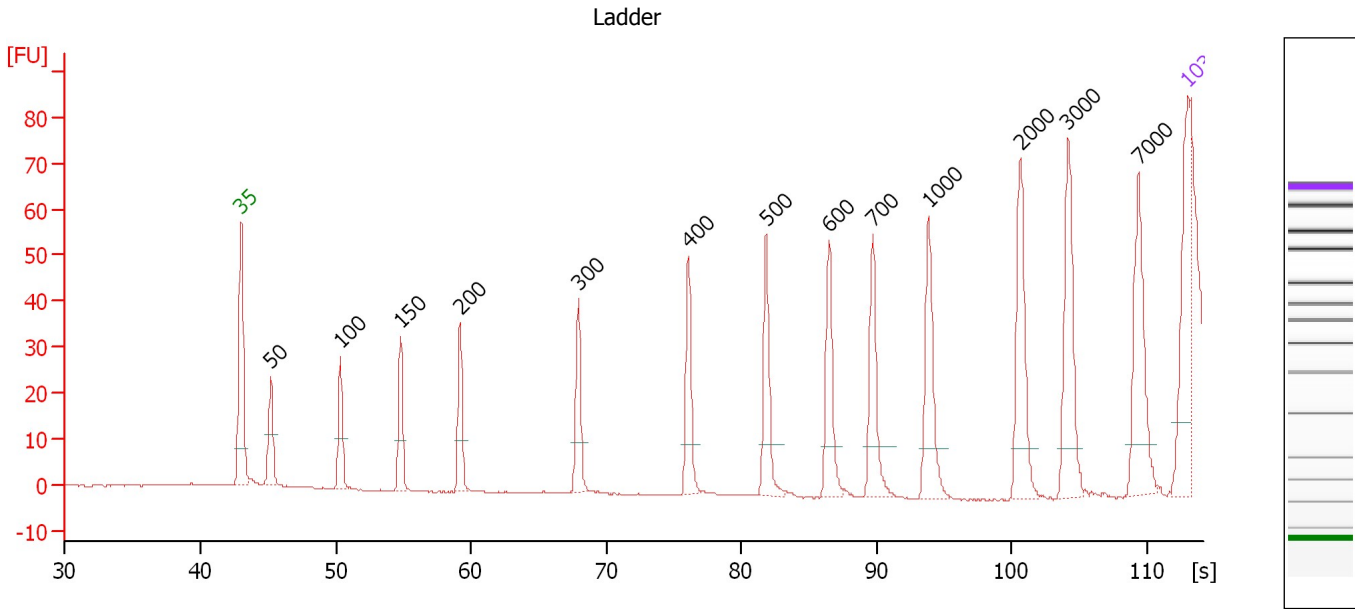
Ladder

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\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

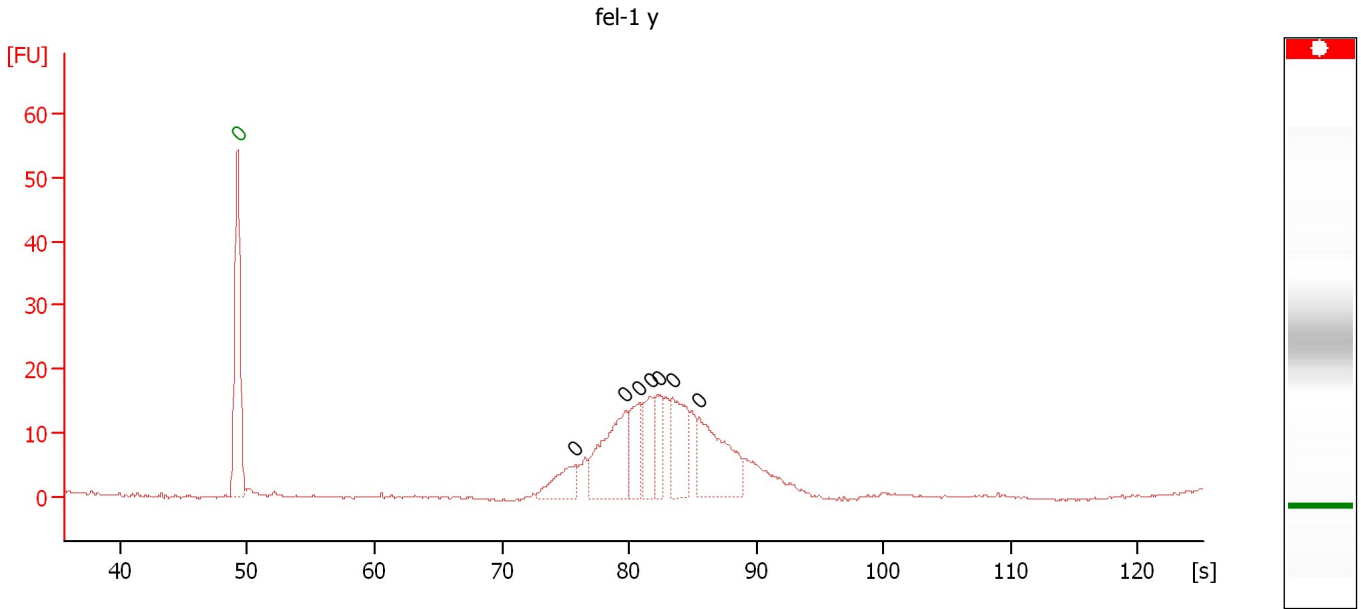
Peak table for Ladder

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\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : fel-1 y

Number of peaks found: 7 Noise: 0.2

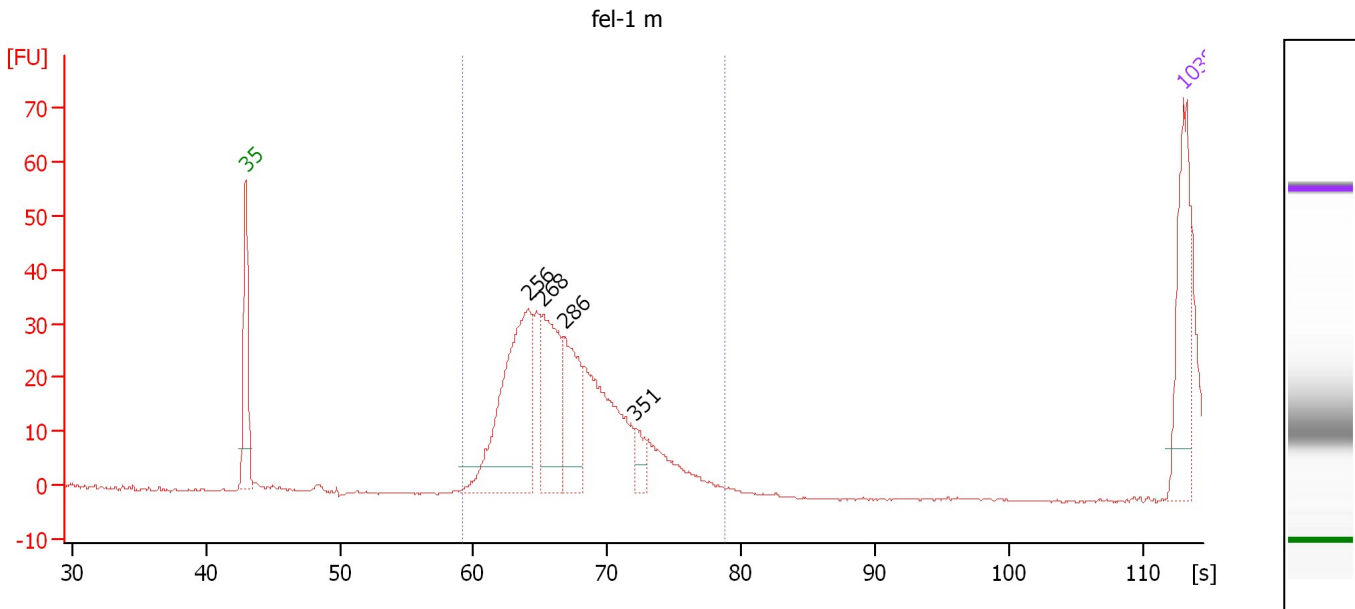
Peak table for sample 1 : fel-1 y

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	Lower Marker
2	0	0.00	0.0	
3	0	0.00	0.0	
4	0	0.00	0.0	
5	0	0.00	0.0	
6	0	0.00	0.0	
7	0	0.00	0.0	
8	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : fel-1 m

Number of peaks found: 4 Corr. Area 1: 176.9
 Noise: 0.2

Peak table for sample 2 : fel-1 m

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	256	260.95	1,544.7	
3	268	143.70	811.4	
4	286	108.23	572.8	
5	351	21.63	93.4	
6	10,380	75.00	10.9	Upper Marker

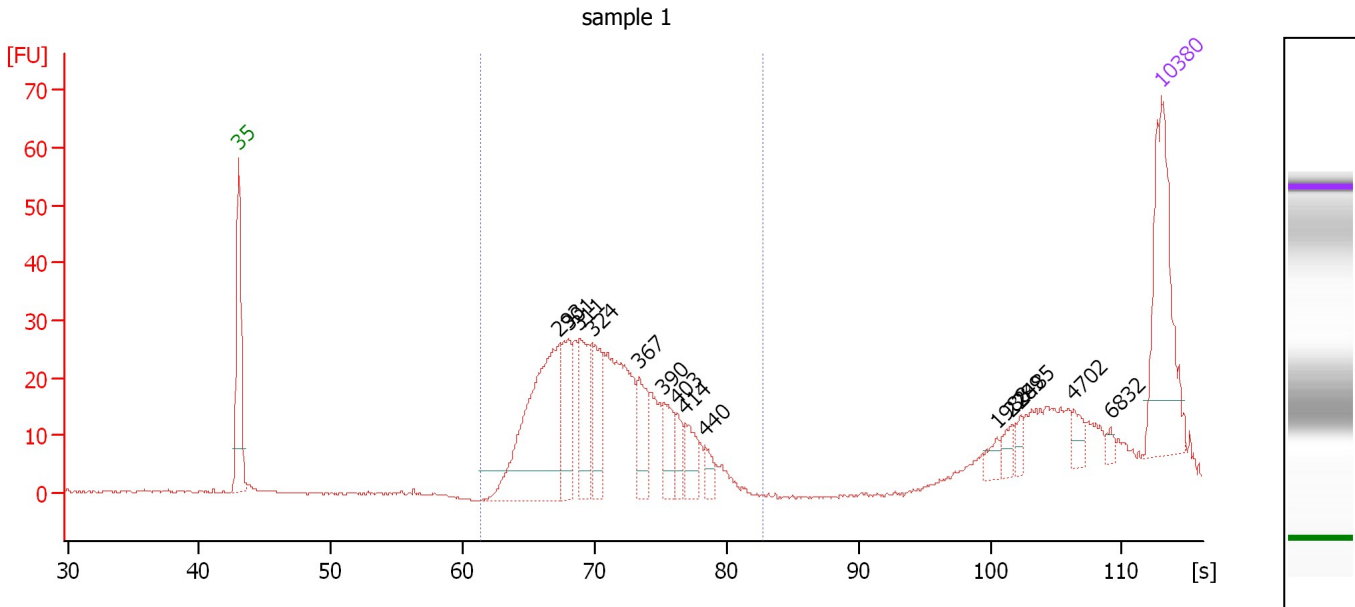
Region table for sample 2 : fel-1 m

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,761.7	271	313.39	446	176.9	97	8.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 1

Number of peaks found: 14 Corr. Area 1: 363.5
 Noise: 0.2

Peak table for sample 3 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	293	169.25	875.2	
3	301	45.41	228.9	
4	311	57.51	280.1	
5	324	42.93	201.0	
6	367	35.11	145.1	
7	390	25.72	100.0	
8	403	15.26	57.4	
9	414	20.80	76.1	
10	440	10.75	37.0	
11	1,988	6.98	5.3	
12	2,289	7.26	4.8	
13	2,485	5.14	3.1	
14	4,702	8.84	2.8	
15	6,832	3.27	0.7	
16	10,380	75.00	10.9	Upper Marker

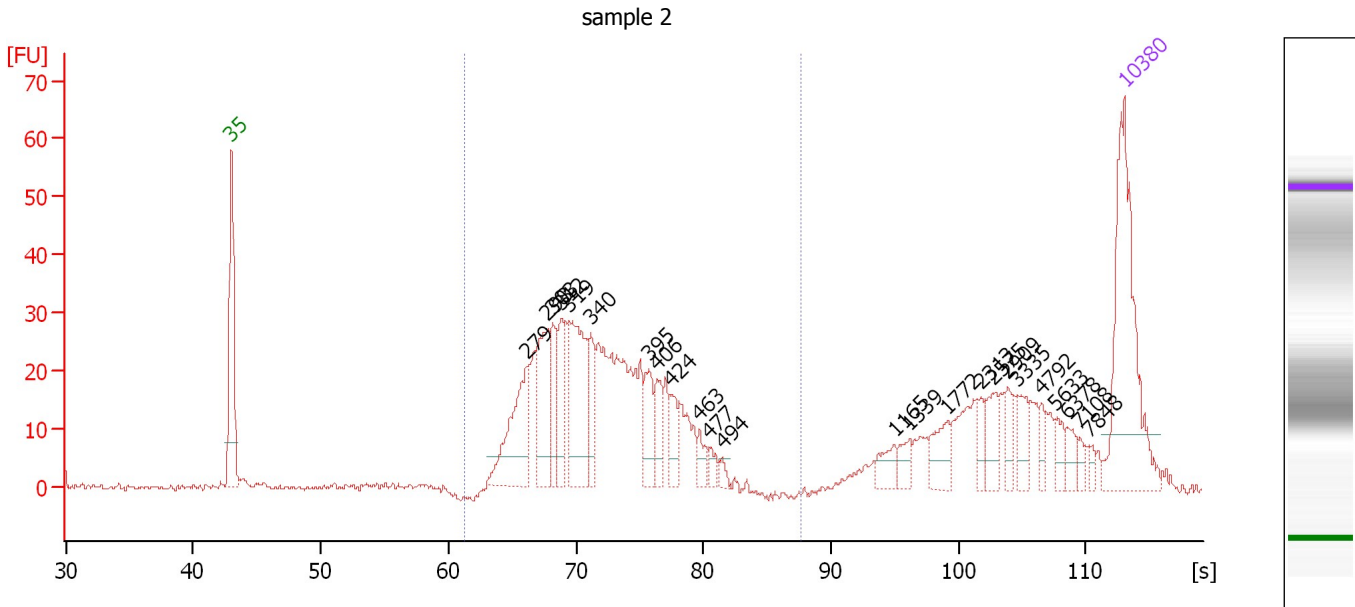
Region table for sample 3 : sample 1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
224	2,254.4	331	481.16	519	363.5	83	13.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 2

Number of peaks found: 24 Corr. Area 1: 485.2
 Noise: 0.5

Peak table for sample 4 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	279	63.13	342.7	
3	298	49.63	252.4	
4	303	26.01	130.1	
5	312	28.05	136.4	
6	319	66.02	313.1	
7	340	23.52	104.8	
8	395	21.12	80.9	
9	406	17.44	65.1	
10	424	13.92	49.7	
11	463	8.05	26.3	
12	477	5.32	16.9	
13	494	3.69	11.3	
14	1,165	9.96	13.0	
15	1,339	7.72	8.7	
16	1,772	14.29	12.2	
17	2,313	6.42	4.2	
18	2,575	12.76	7.5	
19	2,909	9.54	5.0	
20	3,335	11.00	5.0	
21	4,792	5.70	1.8	
22	5,633	7.20	1.9	
23	6,378	6.66	1.6	
24	7,108	3.92	0.8	
25	7,848	2.89	0.6	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...

... Region table for sample 4 :

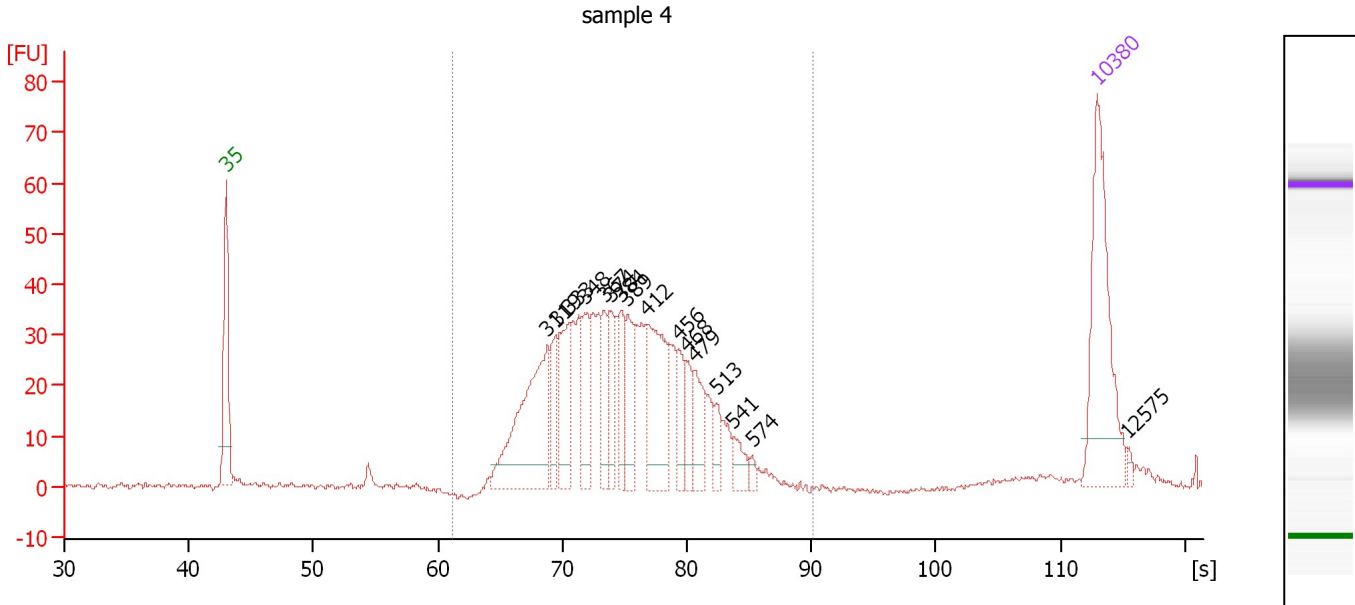
sample 2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
224	2,357.6	350	525.43	635	485.2	69	16.3	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 4

Number of peaks found: 16 Corr. Area 1: 608.0
 Noise: 0.5

Peak table for sample 5 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	311	117.66	573.1	
3	319	26.09	123.9	
4	333	49.87	227.1	
5	348	34.96	152.4	
6	367	27.53	113.7	
7	374	27.12	110.0	
8	384	26.31	103.9	
9	389	31.02	120.7	
10	412	72.41	266.2	
11	456	20.24	67.2	
12	468	18.51	60.0	
13	479	26.41	83.6	
14	513	12.36	36.5	
15	541	12.77	35.7	
16	574	3.90	10.3	
17	10,380	75.00	10.9	Upper Marker
18	12,575	0.00	0.0	

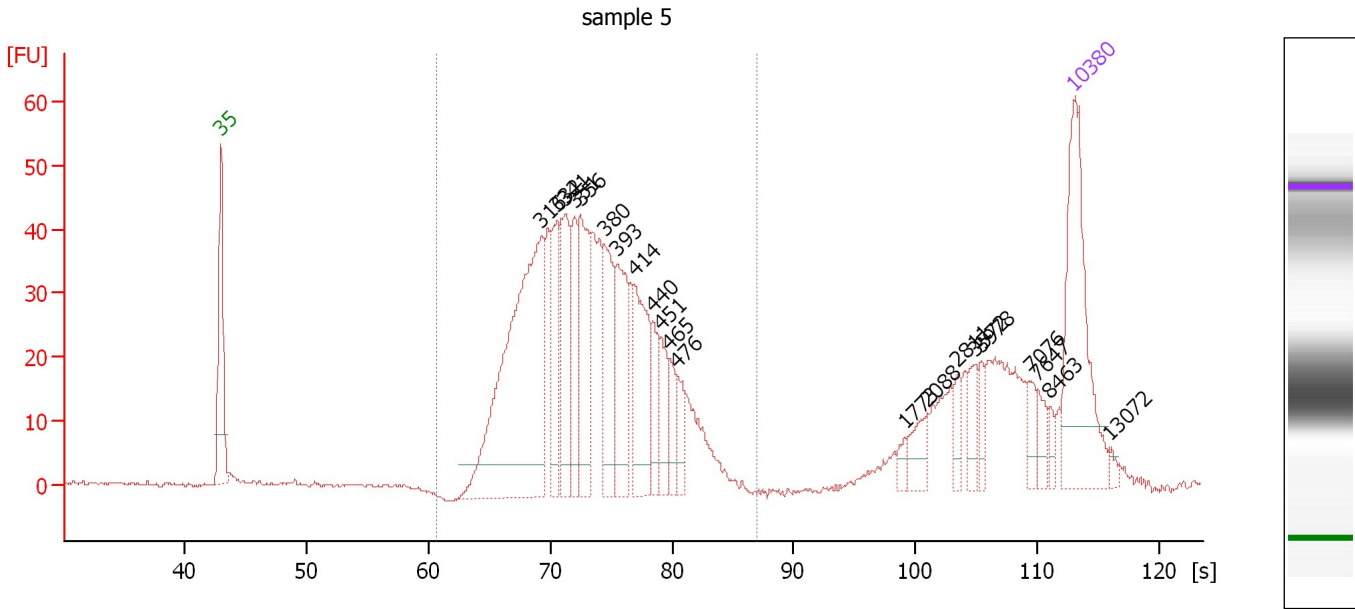
Region table for sample 5 : sample 4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
222	2,484.6	386	609.13	736	608.0	99	17.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 5

Number of peaks found: 21 Corr. Area 1: 737.7
 Noise: 0.2

Peak table for sample 6 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	316	244.06	1,168.6	
3	332	45.95	209.6	
4	341	61.24	272.3	
5	351	38.66	167.1	
6	356	66.44	282.8	
7	380	58.53	233.2	
8	393	54.77	211.0	
9	414	58.47	213.8	
10	440	20.33	69.9	
11	451	24.66	82.8	
12	465	15.40	50.2	
13	476	16.30	51.8	
14	1,773	4.77	4.1	
15	2,088	13.24	9.6	
16	2,811	8.76	4.7	
17	3,572	12.07	5.1	
18	3,978	8.44	3.2	
19	7,076	8.52	1.8	
20	7,647	8.47	1.7	
21	8,463	5.33	1.0	
22	10,380	75.00	10.9	Upper Marker
23	13,072	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...

... Region table for sample 6 :

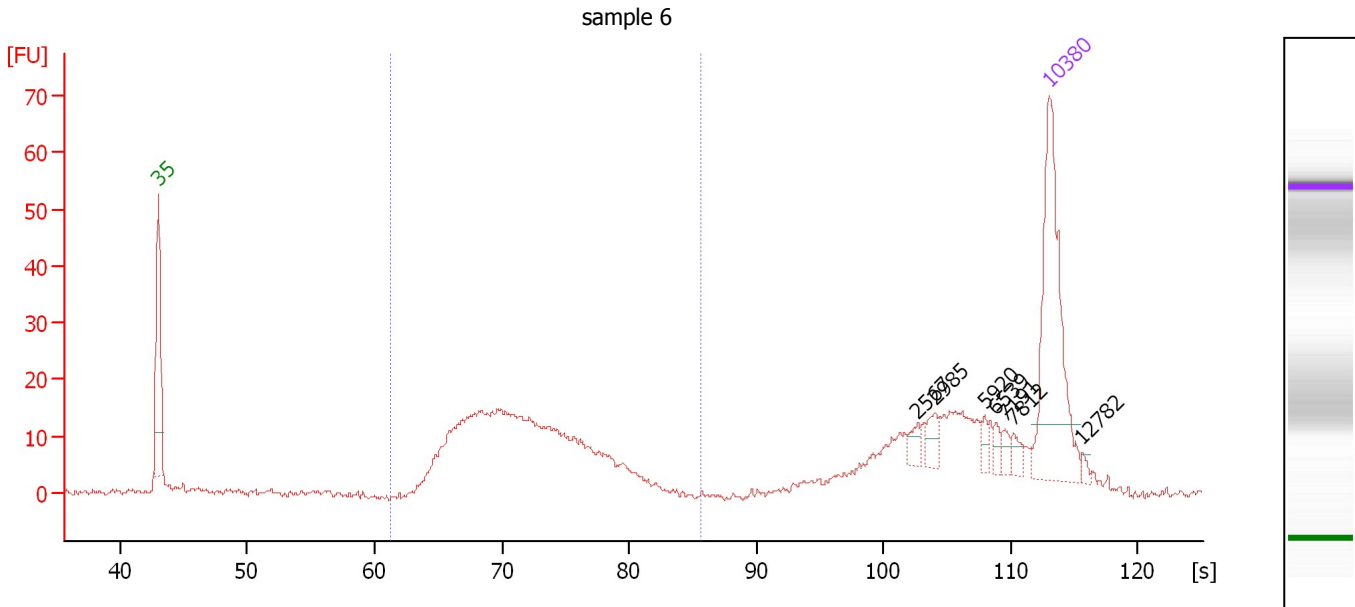
sample 5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
217	3,447.1	368	807.74	614	737.7	79	16.8	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 6

Number of peaks found: 7 Corr. Area 1: 243.7
 Noise: 0.6

Peak table for sample 7 : sample 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	2,567	5.34	3.1	
3	2,985	7.78	4.0	
4	5,920	4.19	1.1	
5	6,539	4.02	0.9	
6	7,191	4.18	0.9	
7	7,812	4.75	0.9	
8	10,380	75.00	10.9	Upper Marker
9	12,782	0.00	0.0	

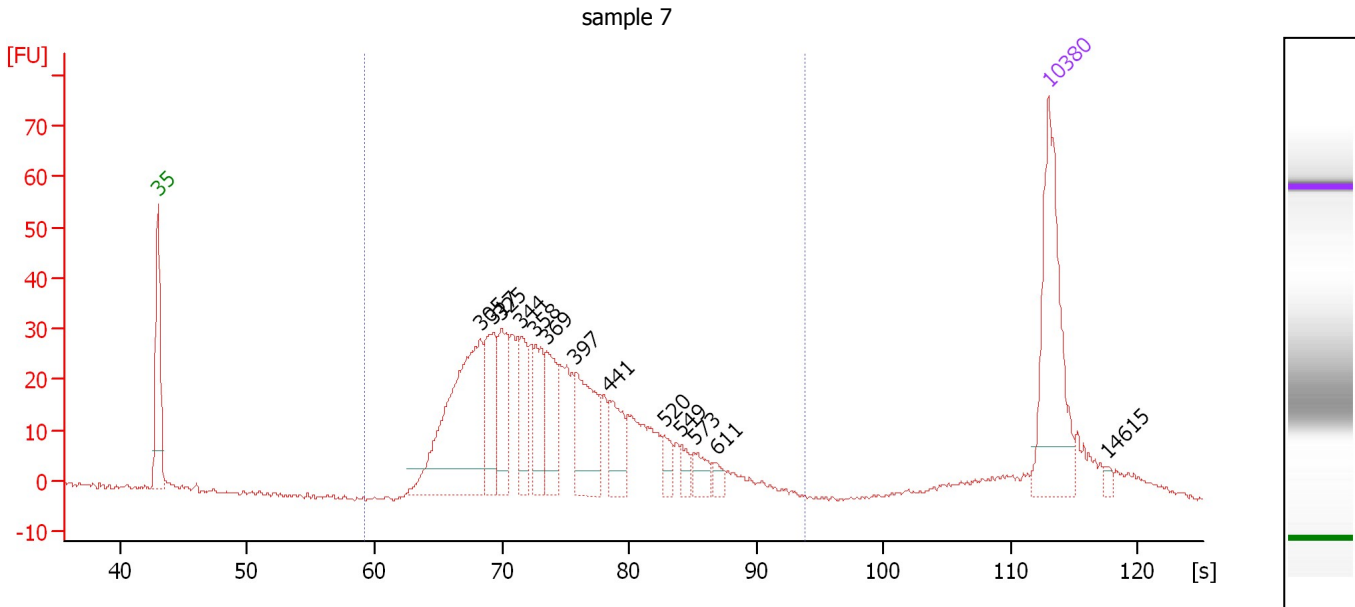
Region table for sample 7 : sample 6

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
223	1,284.3	349	285.53	582	243.7	59	16.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 7

Number of peaks found: 13 Corr. Area 1: 619.7
 Noise: 0.5

Peak table for sample 8 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	305	152.21	757.2	
3	317	49.38	236.2	
4	325	44.90	209.3	
5	344	35.33	155.5	
6	358	34.06	144.1	
7	369	42.80	176.0	
8	397	54.41	207.8	
9	441	28.41	97.6	
10	520	10.80	31.5	
11	549	7.60	21.0	
12	573	11.56	30.6	
13	611	6.07	15.0	
14	10,380	75.00	10.9	Upper Marker
15	14,615	0.00	0.0	

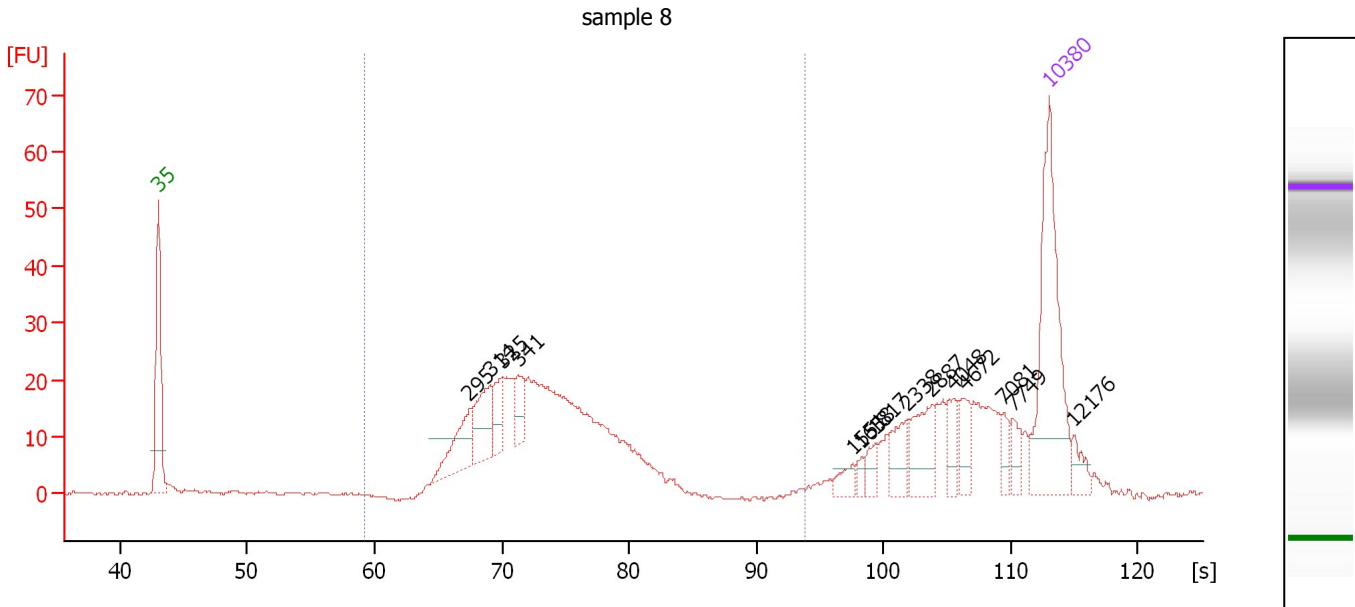
Region table for sample 8 : sample 7

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,574.9	388	612.44	1,000	619.7	91	24.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 8

Number of peaks found: 14 Corr. Area 1: 340.1
 Noise: 0.3

Peak table for sample 9 : sample 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	295	32.34	166.4	
3	314	31.48	151.8	
4	325	16.82	78.4	
5	341	16.53	73.5	
6	1,551	7.03	6.9	
7	1,658	3.56	3.3	
8	1,817	6.34	5.3	
9	2,338	14.16	9.2	
10	2,887	22.22	11.7	
11	4,048	10.51	3.9	
12	4,672	11.10	3.6	
13	7,081	6.14	1.3	
14	7,749	8.32	1.6	
15	10,380	75.00	10.9	Upper Marker
16	12,176	0.00	0.0	

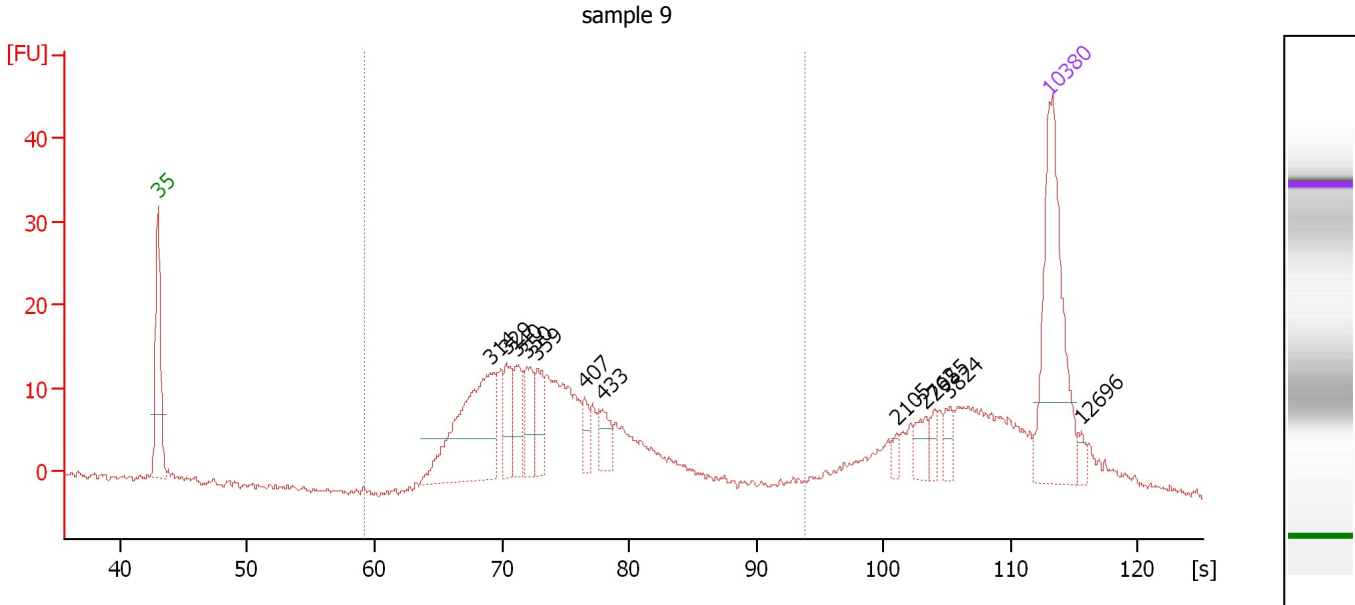
Region table for sample 9 : sample 8

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,664.1	367	388.69	1,000	340.1	64	17.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 9

Number of peaks found: 12 Corr. Area 1: 245.9
 Noise: 0.4

Peak table for sample 10 : sample 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	314	107.73	519.7	
3	329	23.76	109.4	
4	340	22.89	102.1	
5	350	21.90	94.8	
6	359	20.70	87.3	
7	407	9.66	35.9	
8	433	14.96	52.4	
9	2,105	3.31	2.4	
10	2,762	8.97	4.9	
11	2,955	5.44	2.8	
12	3,824	6.96	2.8	
13	10,380	75.00	10.9	Upper Marker
14	12,696	0.00	0.0	

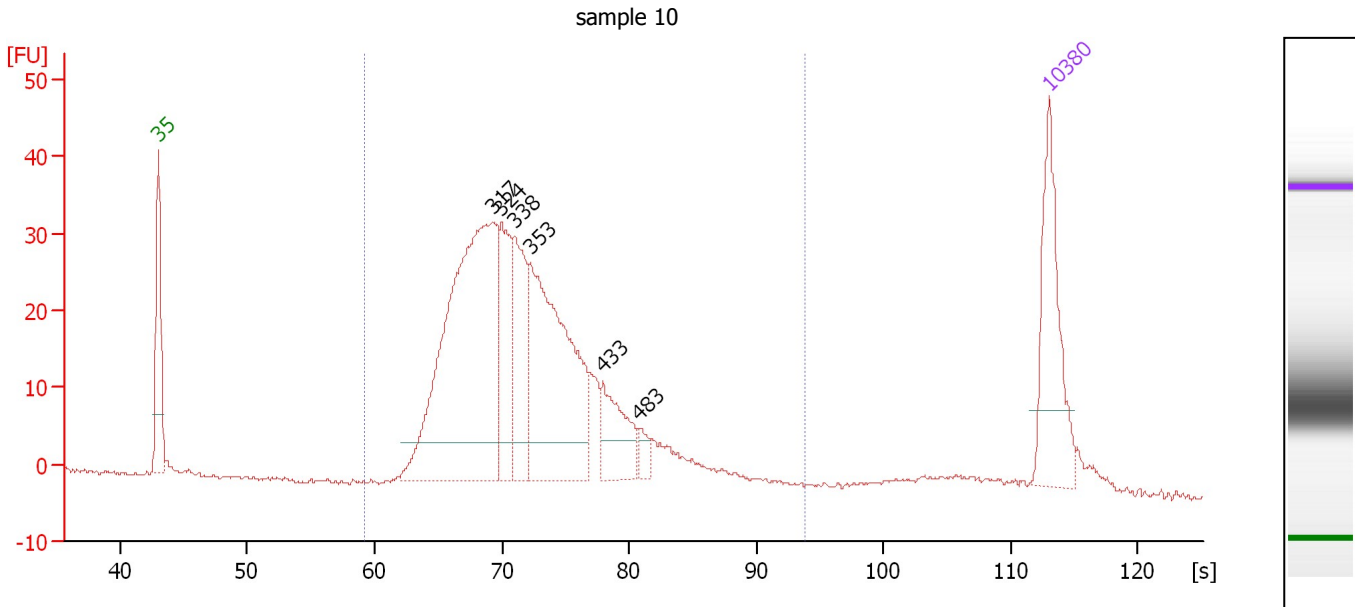
Region table for sample 10 : sample 9

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,613.0	380	383.00	1,000	245.9	66	23.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 10

Number of peaks found: 6 Corr. Area 1: 543.1
 Noise: 0.3

Peak table for sample 11 : sample 10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	317	391.87	1,875.5	
3	324	80.71	376.9	
4	338	89.03	399.2	
5	353	232.73	998.9	
6	433	54.83	192.0	
7	483	11.30	35.5	
8	10,380	75.00	10.9	Upper Marker

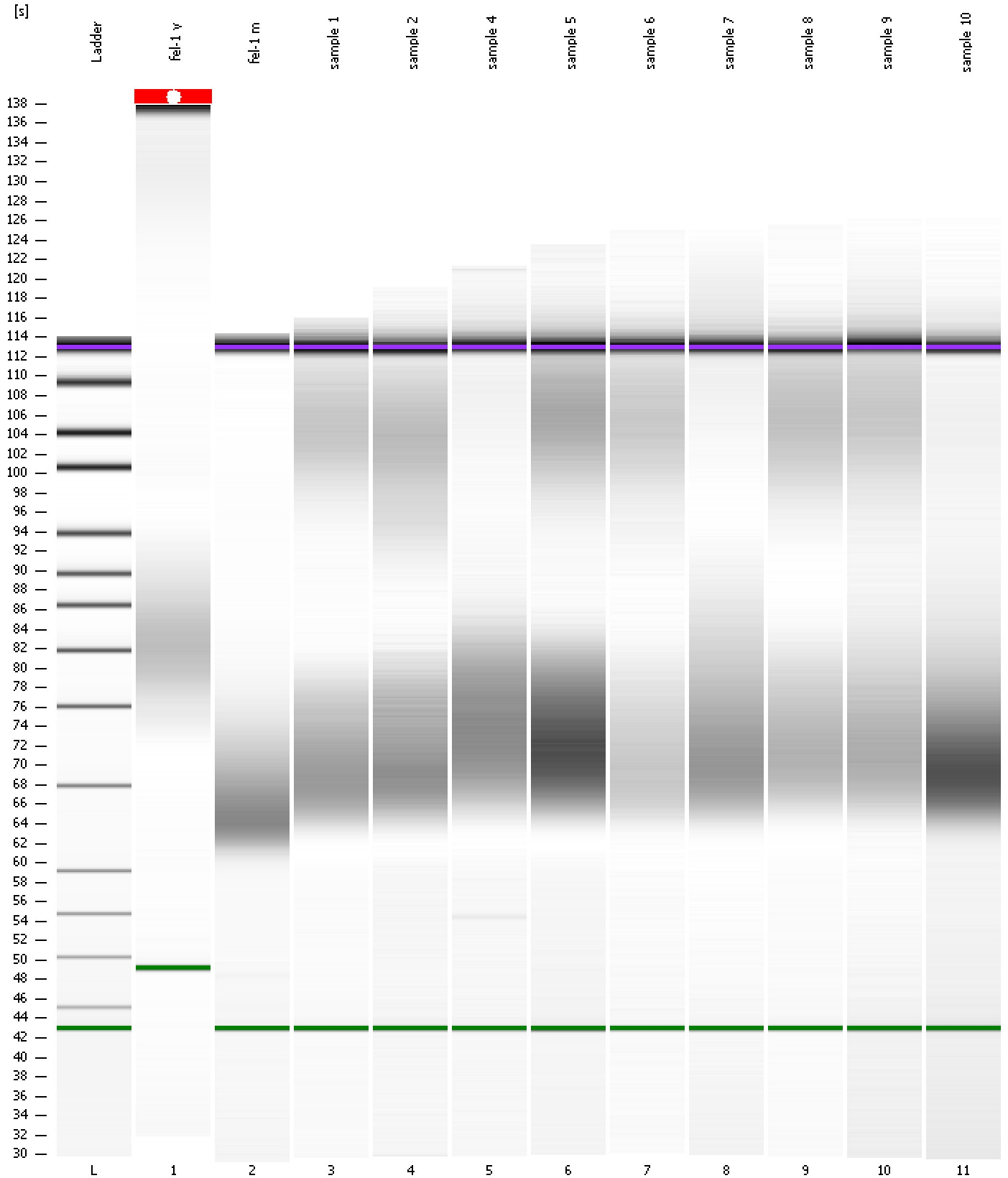
Region table for sample 11 : sample 10

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	4,139.6	356	922.46	1,000	543.1	96	21.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
Modified: 4/17/2012 12:26:07 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad

Created: 4/12/2012 1:16:05 PM
 Modified: 4/17/2012 12:26:07 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		4/12/2012 1:57:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-04-12\2012-04-12_004.xad)		Instrument	Run		4/12/2012 1:16:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/12/2012 1:16:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/12/2012 1:16:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/12/2012 1:16:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/12/2012 1:16:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/12/2012 1:16:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/12/2012 1:16:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1