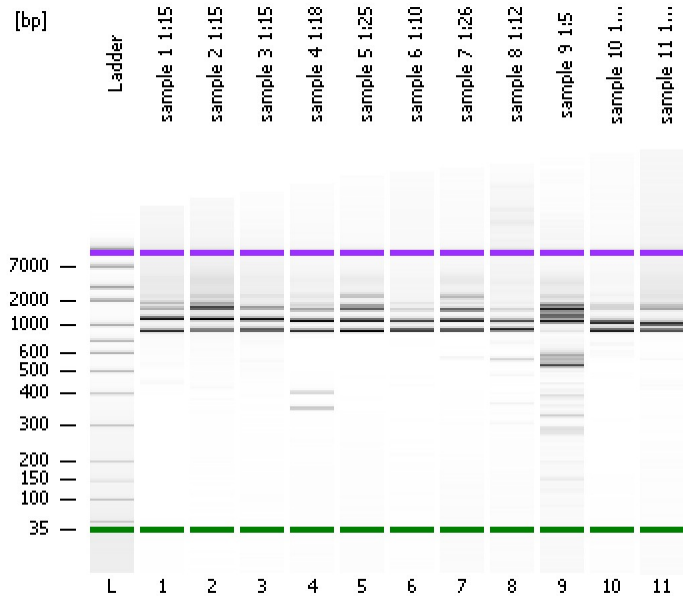


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
Modified: 4/1/2013 4:05:19 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

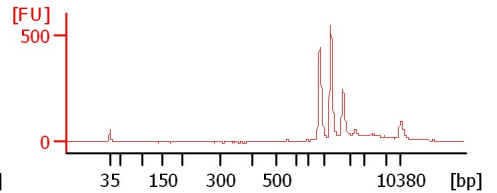
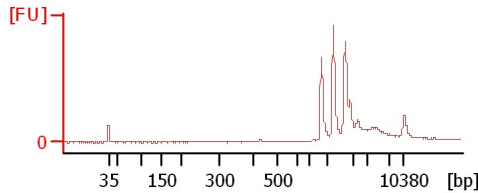
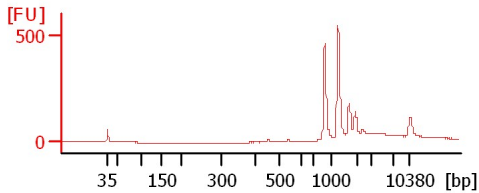
Chip Information:

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

sample 1 1:15

sample 2 1:15

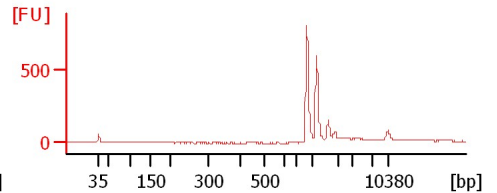
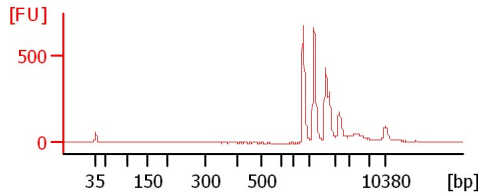
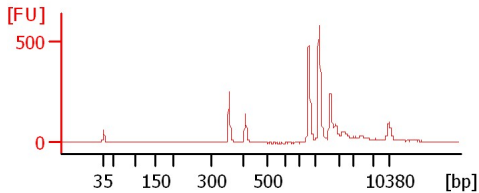
sample 3 1:15



sample 4 1:18

sample 5 1:25

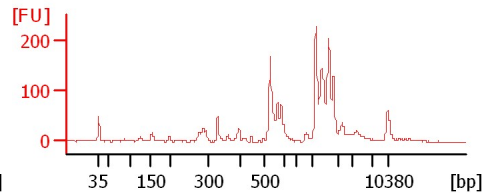
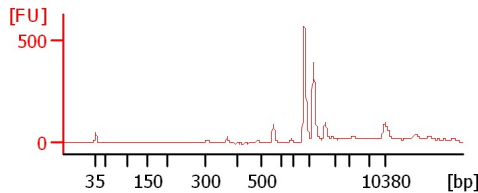
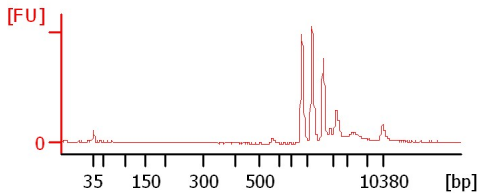
sample 6 1:10



sample 7 1:26

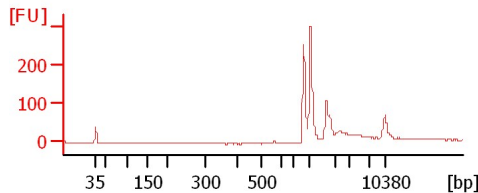
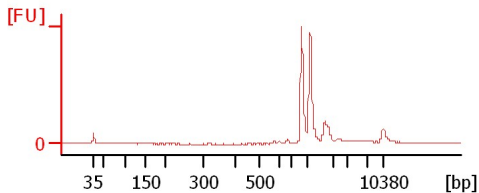
sample 8 1:12

sample 9 1:5



sample 10 1:20

sample 11 1:18



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1 1:15		<input type="checkbox"/>	✓			
sample 2 1:15		<input type="checkbox"/>	✓			
sample 3 1:15		<input type="checkbox"/>	✓			
sample 4 1:18		<input type="checkbox"/>	✓			
sample 5 1:25		<input type="checkbox"/>	✓			
sample 6 1:10		<input type="checkbox"/>	✓			
sample 7 1:26		<input type="checkbox"/>	✓			
sample 8 1:12		<input type="checkbox"/>	✓			
sample 9 1:5		<input type="checkbox"/>	✓			
sample 10 1:20		<input type="checkbox"/>	✓			
sample 11 1:18		<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\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
Modified: 4/1/2013 4:05:19 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

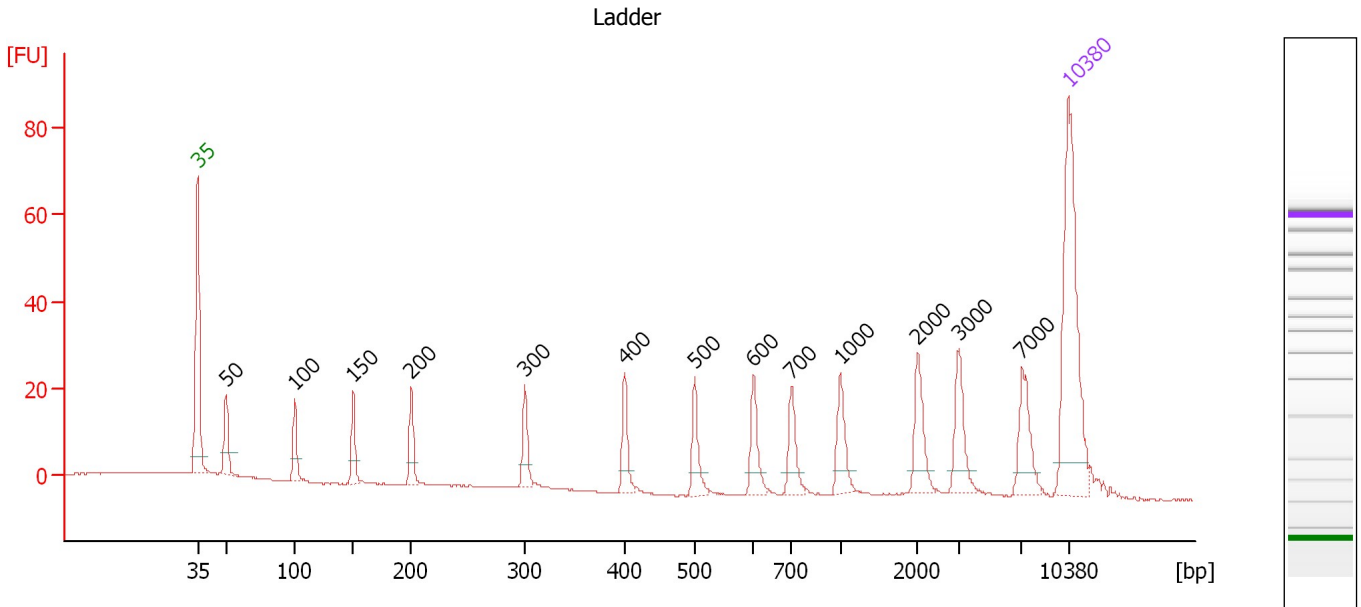
Ladder

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\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

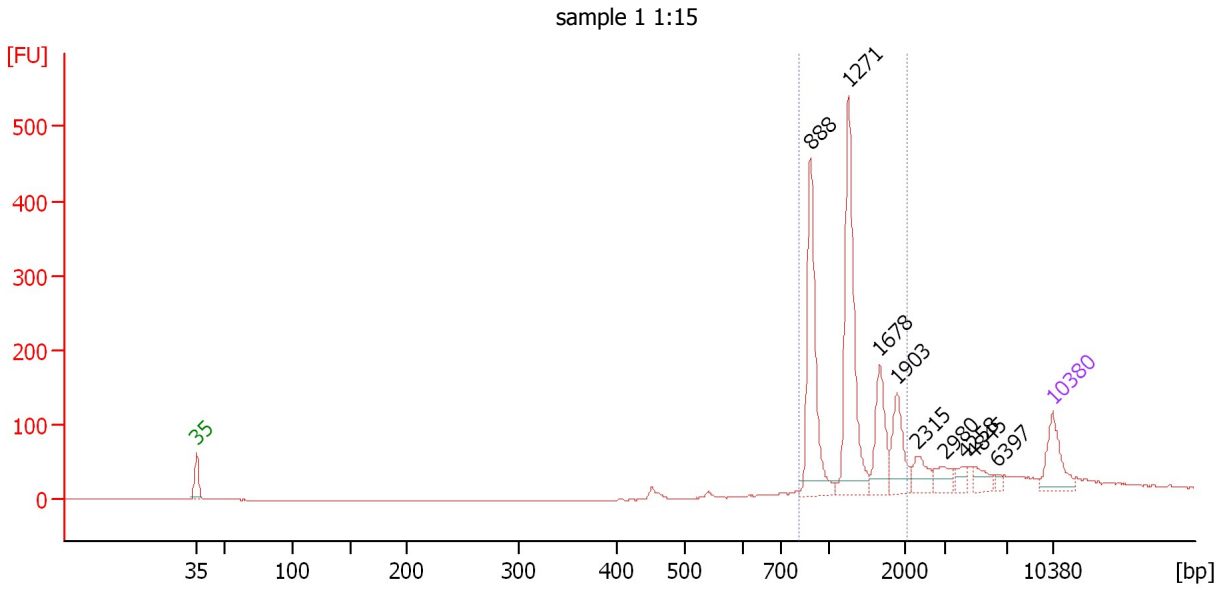
Peak table for Ladder

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\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : sample 1 1:15

Height Threshold [FU] : 20

Overall Results for sample 1 : sample 1 1:15

Number of peaks found: 9 Corr. Area 1: 1,174.0
 Noise: 0.1

Peak table for sample 1 : sample 1 1:15

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	888	301.85	514.9	
3	1,271	341.72	407.3	
4	1,678	111.56	100.7	
5	1,903	90.25	71.9	
6	2,315	44.42	29.1	
7	2,980	35.24	17.9	
8	4,258	20.78	7.4	
9	4,845	27.11	8.5	
10	6,397	8.78	2.1	
11	10,380	75.00	10.9	Upper Marker

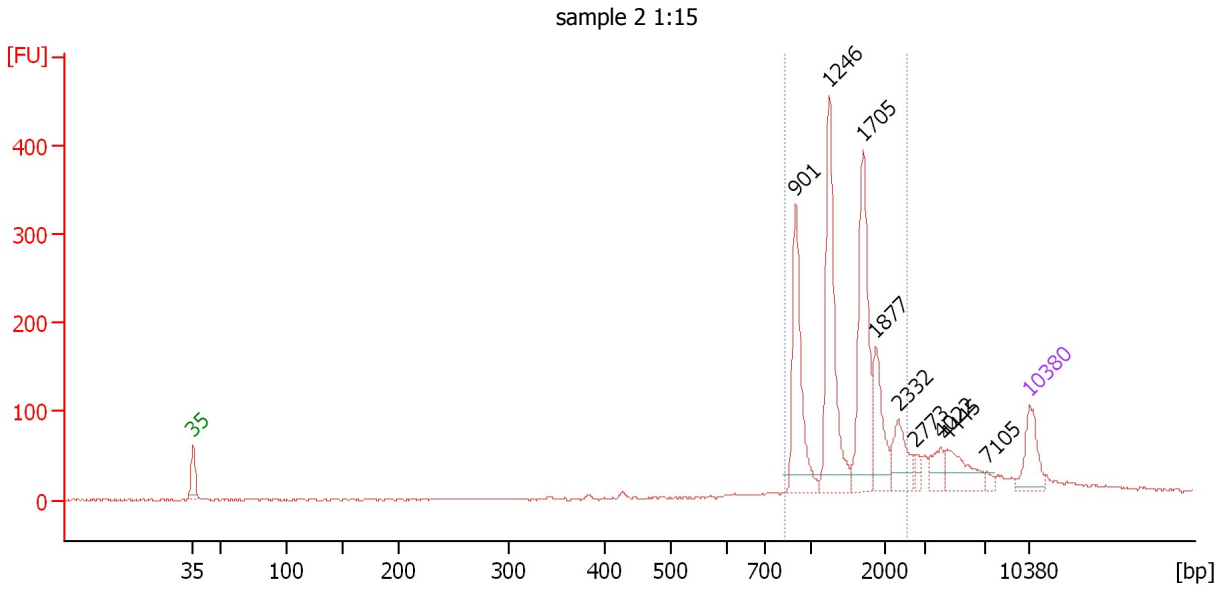
Region table for sample 1 : sample 1 1:15

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
817	2,089	1,295	1,010.2	803.52	1,174.0	79	26.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : sample 2 1:15

Height Threshold [FU] : 20

Overall Results for sample 2 : sample 2 1:15

Number of peaks found: 9 Corr. Area 1: 1,369.0
 Noise: 1.3

Peak table for sample 2 : sample 2 1:15

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	901	264.16	444.1	
3	1,246	330.57	402.1	
4	1,705	286.28	254.4	
5	1,877	118.87	95.9	
6	2,332	84.30	54.8	
7	2,773	17.06	9.3	
8	4,022	41.69	15.7	
9	4,445	79.90	27.2	
10	7,105	10.71	2.3	
11	10,380	75.00	10.9	Upper Marker

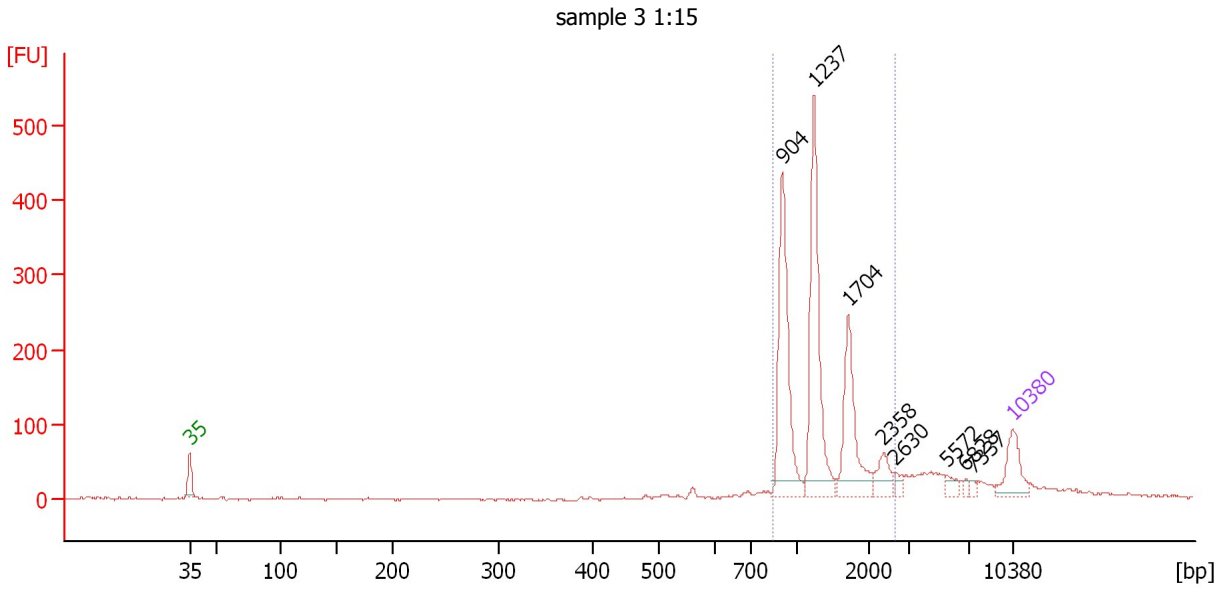
Region table for sample 2 : sample 2 1:15

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
839	2,540	1,478	1,199.3	1,074.50	1,369.0	79	28.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : sample 3 1:15

Height Threshold [FU] : 20

Overall Results for sample 3 : sample 3 1:15

Number of peaks found: 8 Corr. Area 1: 1,334.0
 Noise: 1.4

Peak table for sample 3 : sample 3 1:15

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	904	362.92	608.5	
3	1,237	374.19	458.5	
4	1,704	197.45	175.6	
5	2,358	51.90	33.3	
6	2,630	16.38	9.4	
7	5,572	19.26	5.2	
8	6,828	8.67	1.9	
9	7,337	8.10	1.7	
10	10,380	75.00	10.9	Upper Marker

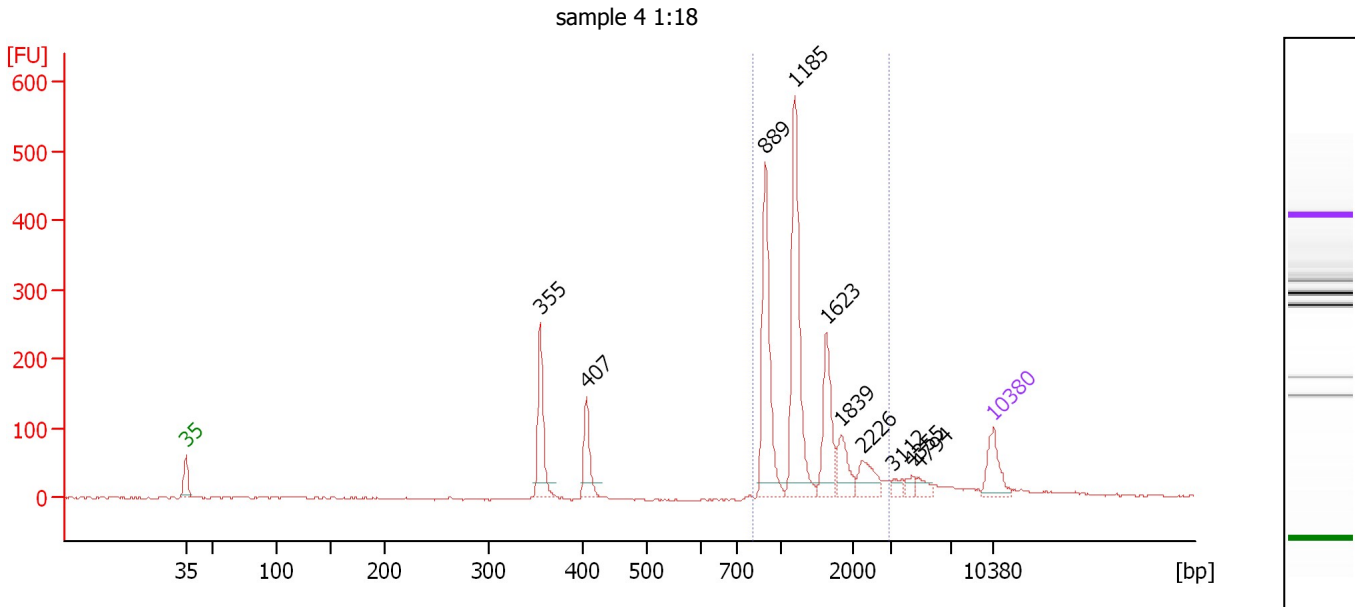
Region table for sample 3 : sample 3 1:15

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
849	2,644	1,329	1,238.5	995.35	1,334.0	79	31.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : sample 4 1:18

Height Threshold [FU] : 20

Overall Results for sample 4 : sample 4 1:18

Number of peaks found: 10 Corr. Area 1: 1,331.9
 Noise: 1.3

Peak table for sample 4 : sample 4 1:18

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	355	199.98	854.4	
3	407	109.46	407.6	
4	889	352.22	600.2	
5	1,185	408.84	522.9	
6	1,623	159.62	149.0	
7	1,839	75.89	62.5	
8	2,226	65.20	44.4	
9	3,112	17.65	8.6	
10	4,355	17.88	6.2	
11	4,794	22.61	7.1	
12	10,380	75.00	10.9	Upper Marker

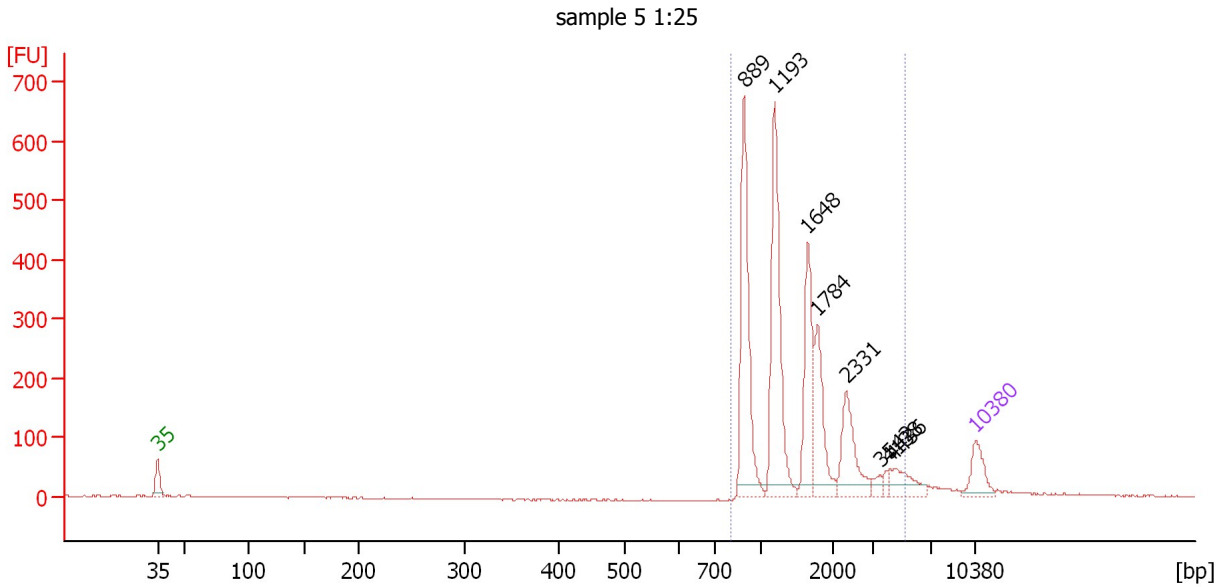
Region table for sample 4 : sample 4 1:18

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
811	2,899	1,342	1,340.3	1,078.37	1,331.9	70	33.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : sample 5 1:25

Height Threshold [FU] : 20

Overall Results for sample 5 : sample 5 1:25

Number of peaks found: 8 Corr. Area 1: 2,132.2
 Noise: 1.2

Peak table for sample 5 : sample 5 1:25

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	889	467.70	796.8	
3	1,193	460.48	584.8	
4	1,648	244.96	225.2	
5	1,784	186.78	158.6	
6	2,331	162.29	105.5	
7	3,542	19.68	8.4	
8	4,138	18.03	6.6	
9	4,436	71.87	24.5	
10	10,380	75.00	10.9	Upper Marker

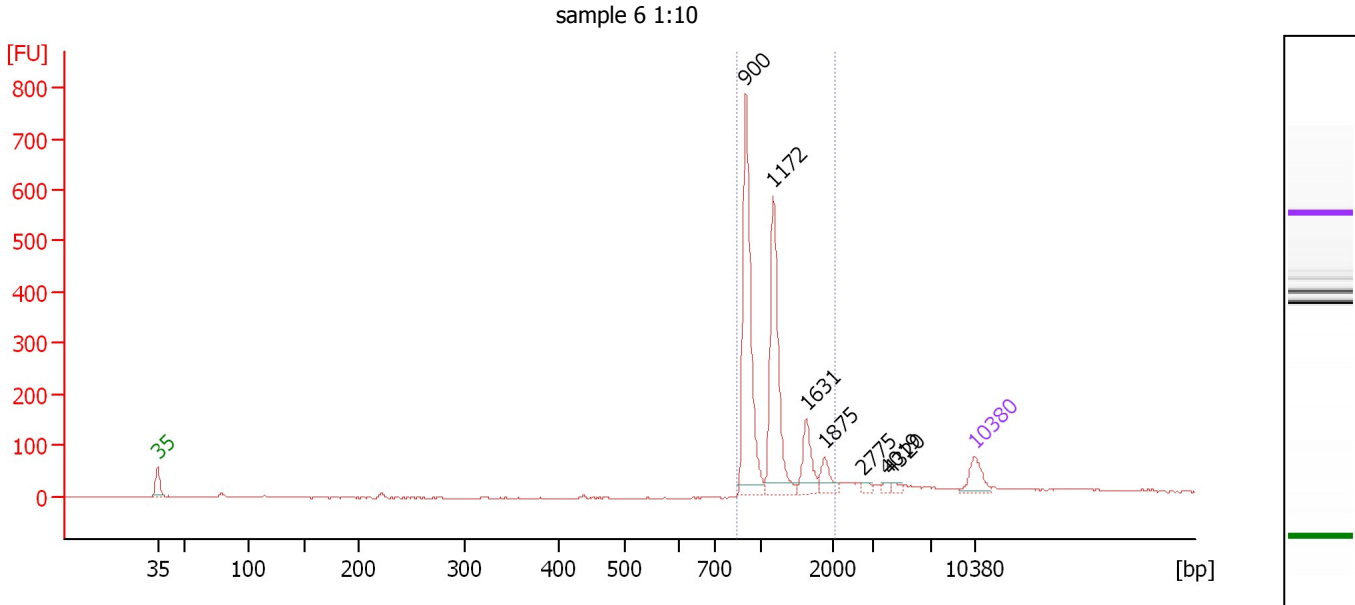
Region table for sample 5 : sample 5 1:25

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
809	5,235	1,589	1,824.7	1,594.01	2,132.2	94	50.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : sample 6 1:10

Height Threshold [FU] : 20

Overall Results for sample 6 : sample 6 1:10

Number of peaks found: 7 Corr. Area 1: 1,396.0
 Noise: 1.2

Peak table for sample 6 : sample 6 1:10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	900	728.98	1,227.3	
3	1,172	529.93	684.8	
4	1,631	129.59	120.4	
5	1,875	67.66	54.7	
6	2,775	16.99	9.3	
7	4,019	14.70	5.5	
8	4,320	18.73	6.6	
9	10,380	75.00	10.9	Upper Marker

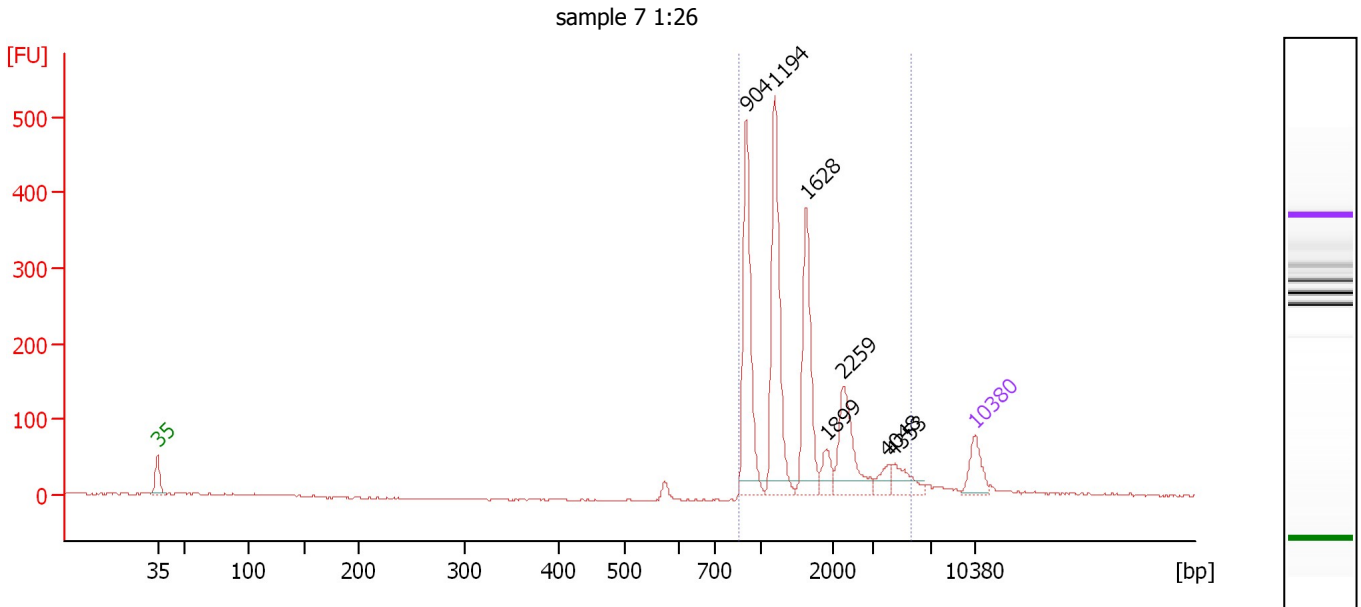
Region table for sample 6 : sample 6 1:10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
846	2,066	1,144	1,992.5	1,432.00	1,396.0	86	25.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : sample 7 1:26

Height Threshold [FU] : 20

Overall Results for sample 7 : sample 7 1:26

Number of peaks found: 7 Corr. Area 1: 1,567.2
 Noise: 1.3

Peak table for sample 7 : sample 7 1:26

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	904	441.23	739.5	
3	1,194	449.29	570.0	
4	1,628	305.92	284.7	
5	1,899	53.67	42.8	
6	2,259	194.60	130.5	
7	4,048	38.68	14.5	
8	4,353	72.14	25.1	
9	10,380	75.00	10.9	Upper Marker

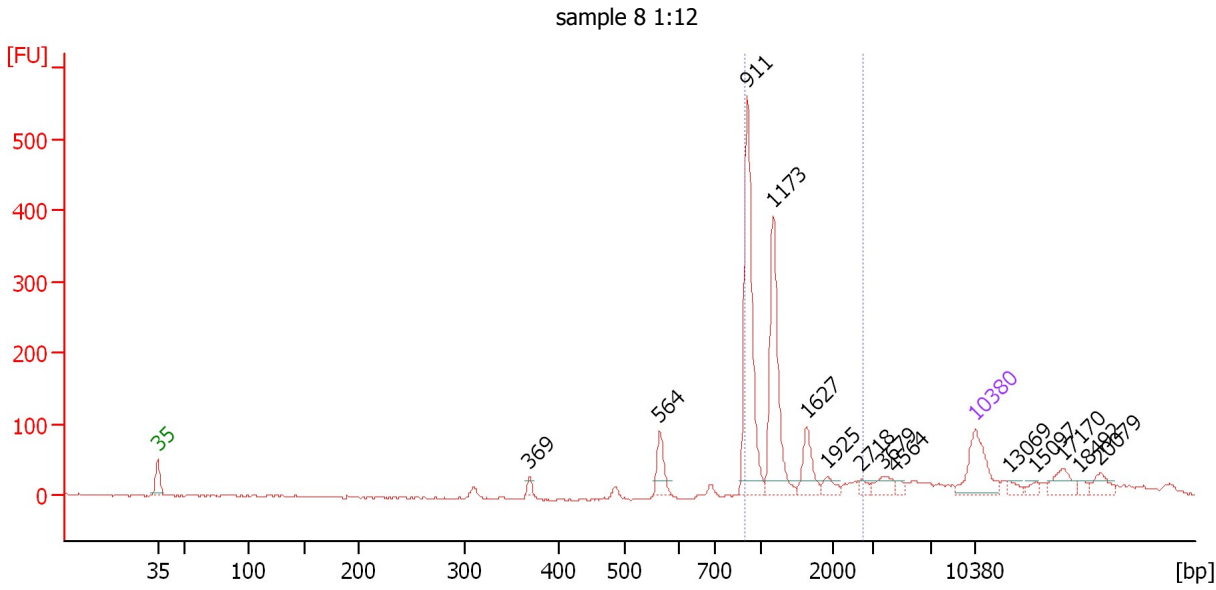
Region table for sample 7 : sample 7 1:26

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
851	5,604	1,646	1,735.5	1,531.67	1,567.2	93	55.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : sample 8 1:12

Height Threshold [FU] : 20

Overall Results for sample 8 : sample 8 1:12

Number of peaks found: 14 Corr. Area 1: 977.8
 Noise: 1.5

Peak table for sample 8 : sample 8 1:12

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	369	11.23	46.1	
3	564	47.72	128.2	
4	911	292.92	487.3	
5	1,173	206.94	267.2	
6	1,627	50.96	47.5	
7	1,925	16.90	13.3	
8	2,718	10.80	6.0	
9	3,679	22.99	9.5	
10	4,564	8.42	2.8	
11	10,380	75.00	10.9	Upper Marker
12	13,069	0.00	0.0	
13	15,097	0.00	0.0	
14	17,170	0.00	0.0	
15	18,492	0.00	0.0	
16	20,079	0.00	0.0	

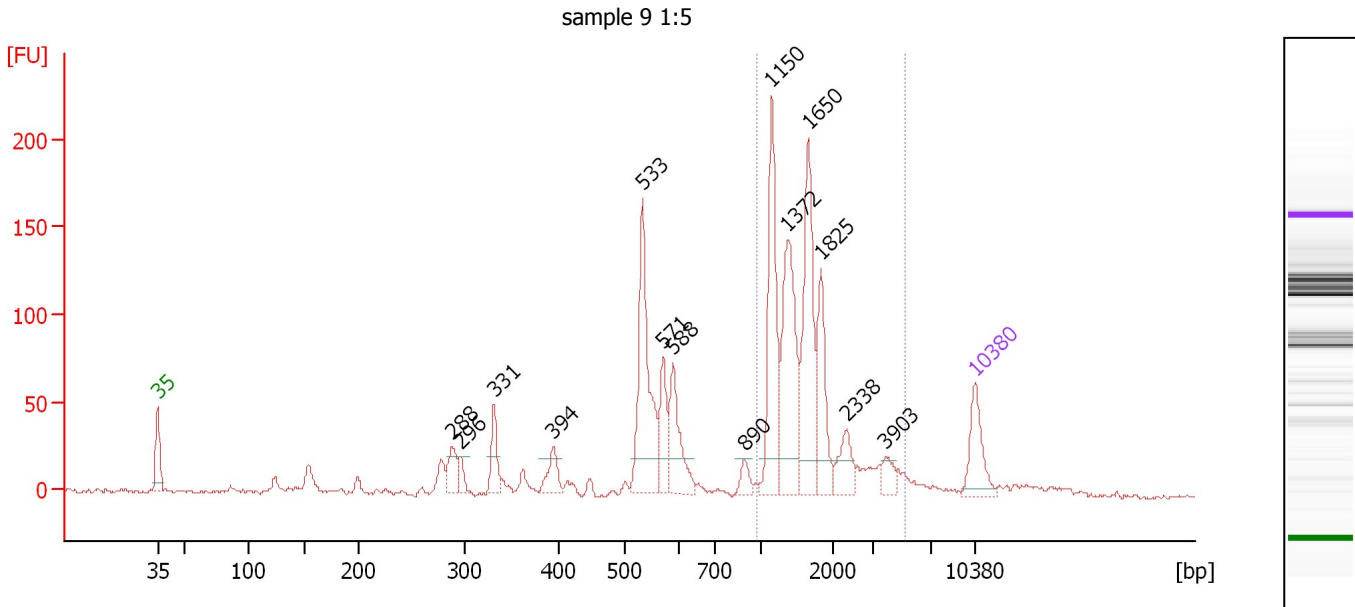
Region table for sample 8 : sample 8 1:12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
890	2,773	1,194	775.6	569.59	977.8	64	31.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : sample 9 1:5

Height Threshold [FU] : 20

Overall Results for sample 9 : sample 9 1:5

Number of peaks found: 14 Corr. Area 1: 820.0
 Noise: 1.4

Peak table for sample 9 : sample 9 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	288	56.87	299.4	
3	296	26.55	136.0	
4	331	66.02	302.1	
5	394	49.97	191.9	
6	533	289.71	823.1	
7	571	89.40	237.4	
8	588	123.25	317.4	
9	890	24.39	41.5	
10	1,150	237.60	313.0	
11	1,372	242.78	268.0	
12	1,650	233.24	214.2	
13	1,825	123.75	102.8	
14	2,338	53.84	34.9	
15	3,903	28.32	11.0	
16	10,380	75.00	10.9	Upper Marker

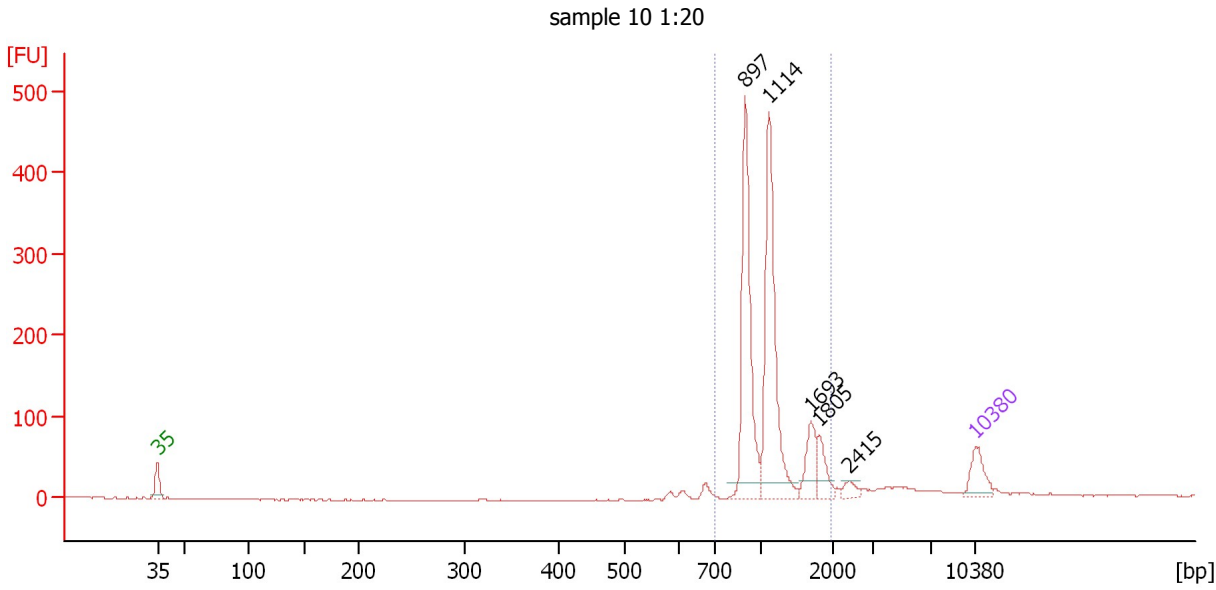
Region table for sample 9 : sample 9 1:5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
979	5,236	1,722	938.2	978.92	820.0	53	41.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : sample 10 1:20

Height Threshold [FU] : 20

Overall Results for sample 10 : sample 10 1:20

Number of peaks found: 5 Corr. Area 1: 1,069.9
 Noise: 0.6

Peak table for sample 10 : sample 10 1:20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	897	536.58	906.4	
3	1,114	548.63	746.1	
4	1,693	97.64	87.4	
5	1,805	70.23	58.9	
6	2,415	27.09	17.0	
7	10,380	75.00	10.9	Upper Marker

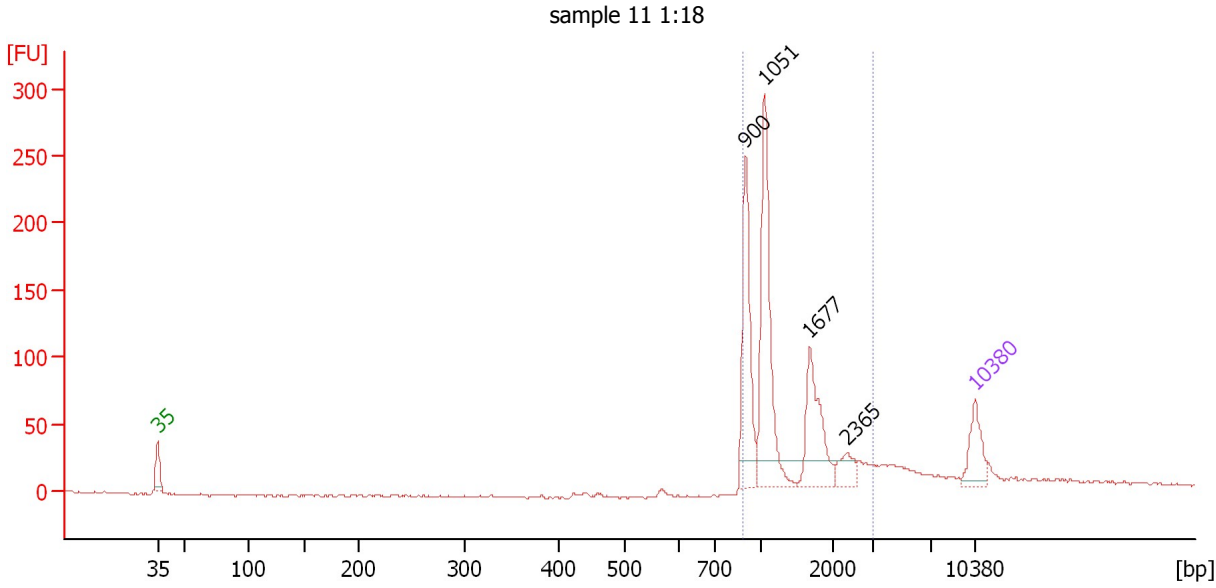
Region table for sample 10 : sample 10 1:20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
701	1,960	1,140	1,695.2	1,225.60	1,069.9	86	24.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : sample 11 1:18

Height Threshold [FU] : 20

Overall Results for sample 11 : sample 11 1:18

Number of peaks found: 4 Corr. Area 1: 658.5
 Noise: 0.9

Peak table for sample 11 : sample 11 1:18

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	900	279.47	470.5	
3	1,051	369.56	532.8	
4	1,677	180.53	163.1	
5	2,365	47.28	30.3	
6	10,380	75.00	10.9	Upper Marker

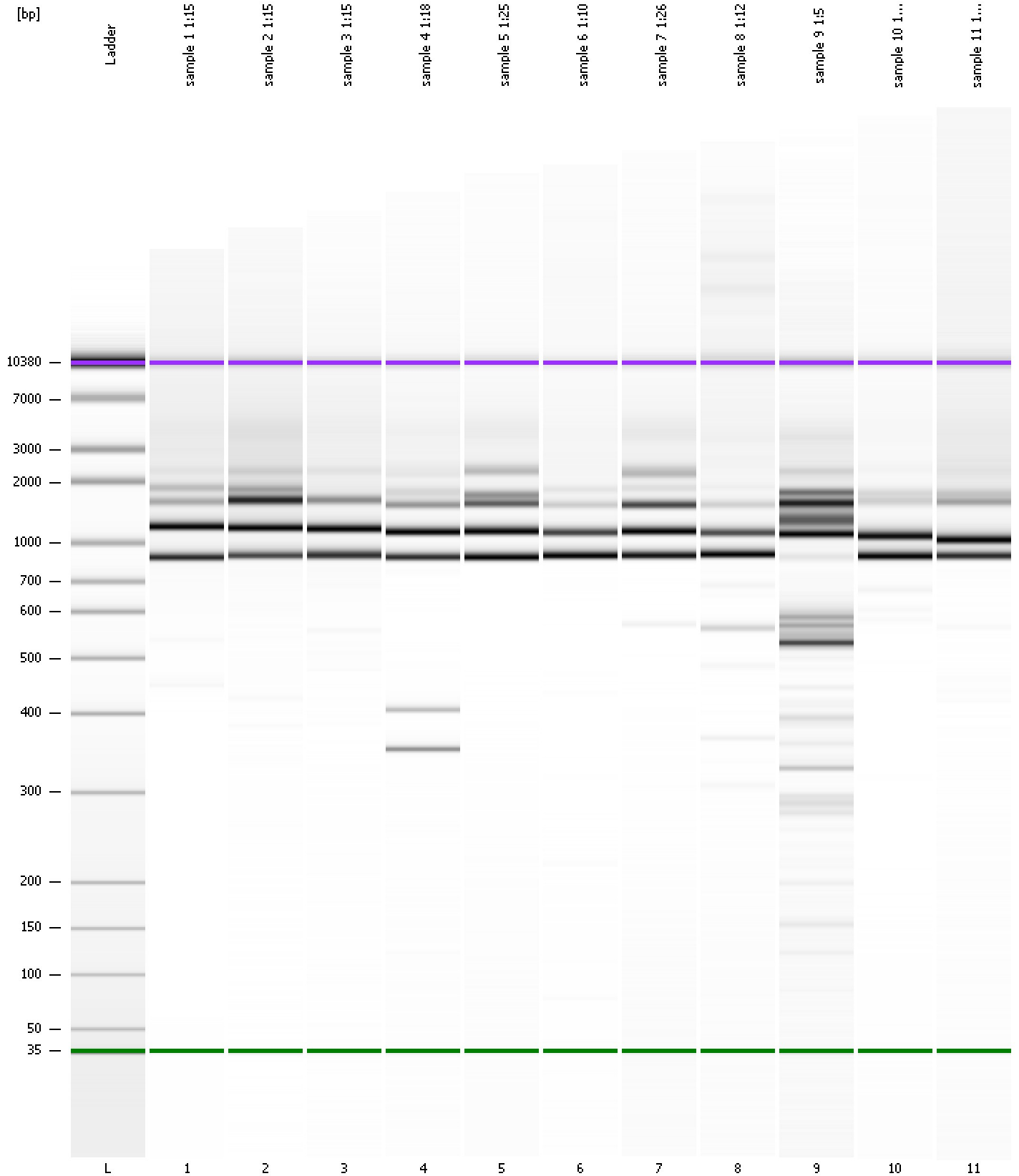
Region table for sample 11 : sample 11 1:18

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
885	2,993	1,326	1,067.7	851.74	658.5	82	37.9	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
Modified: 4/1/2013 4:05:19 PM

Gel Image

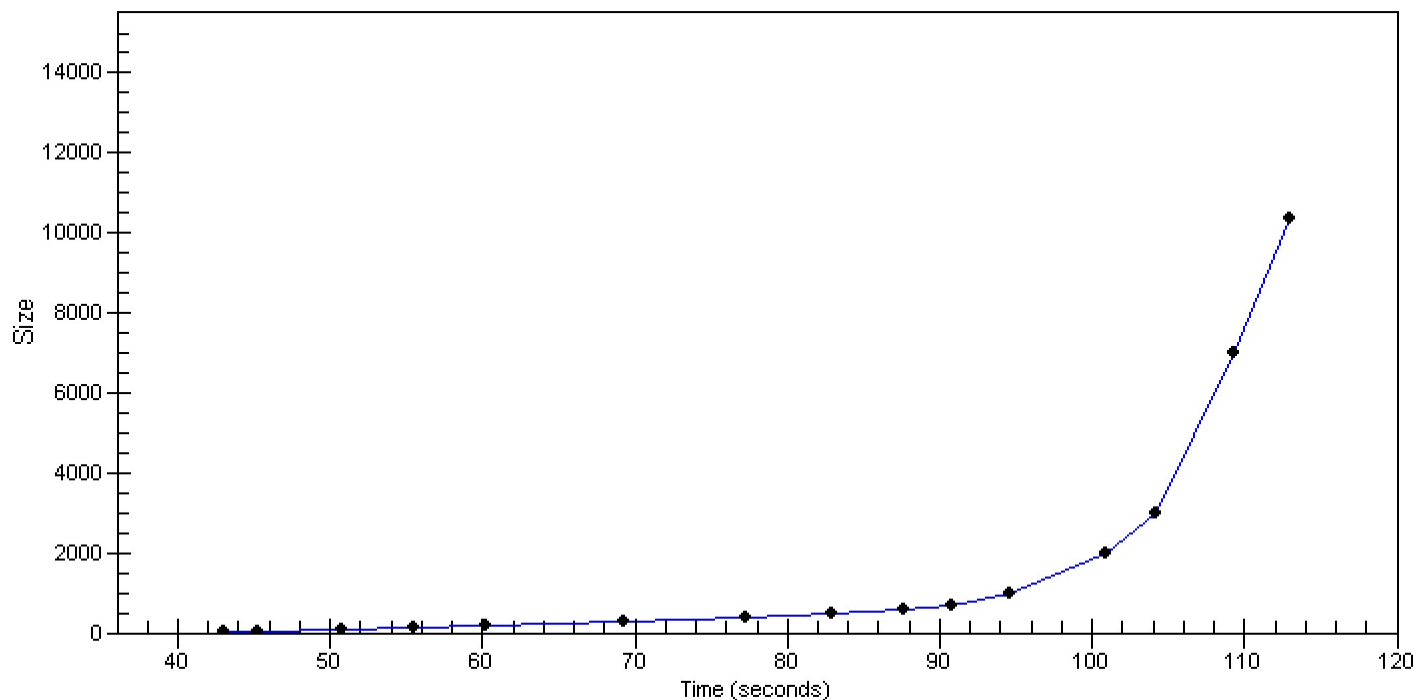


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
Modified: 4/1/2013 4:05:19 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad

Created: 4/1/2013 12:27:41 PM
 Modified: 4/1/2013 4:05:19 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		4/1/2013 1:08:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-04-01\2013-04-01_003.xad)		Instrument	Run		4/1/2013 12:27:46 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/1/2013 12:27:46 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/1/2013 12:27:46 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/1/2013 12:27:46 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/1/2013 12:27:46 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/1/2013 12:27:46 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/1/2013 12:27:46 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1