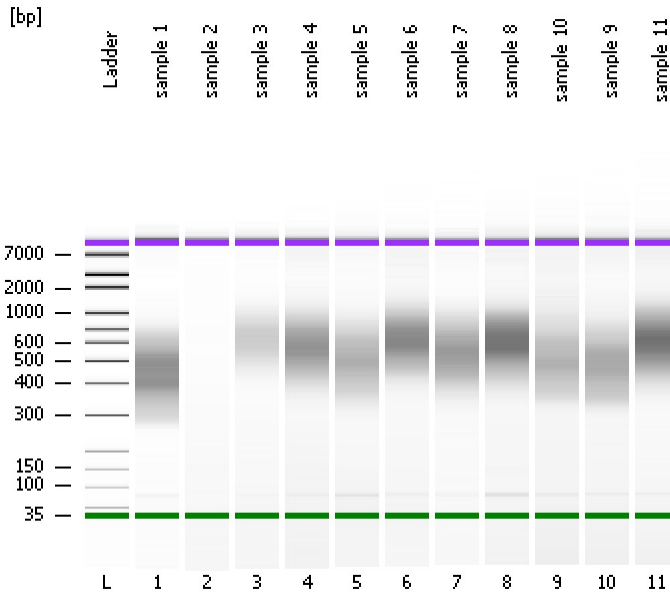


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
Modified: 7/28/2014 10:22:05 PM

Electrophoresis File Run Summary



Instrument Information:

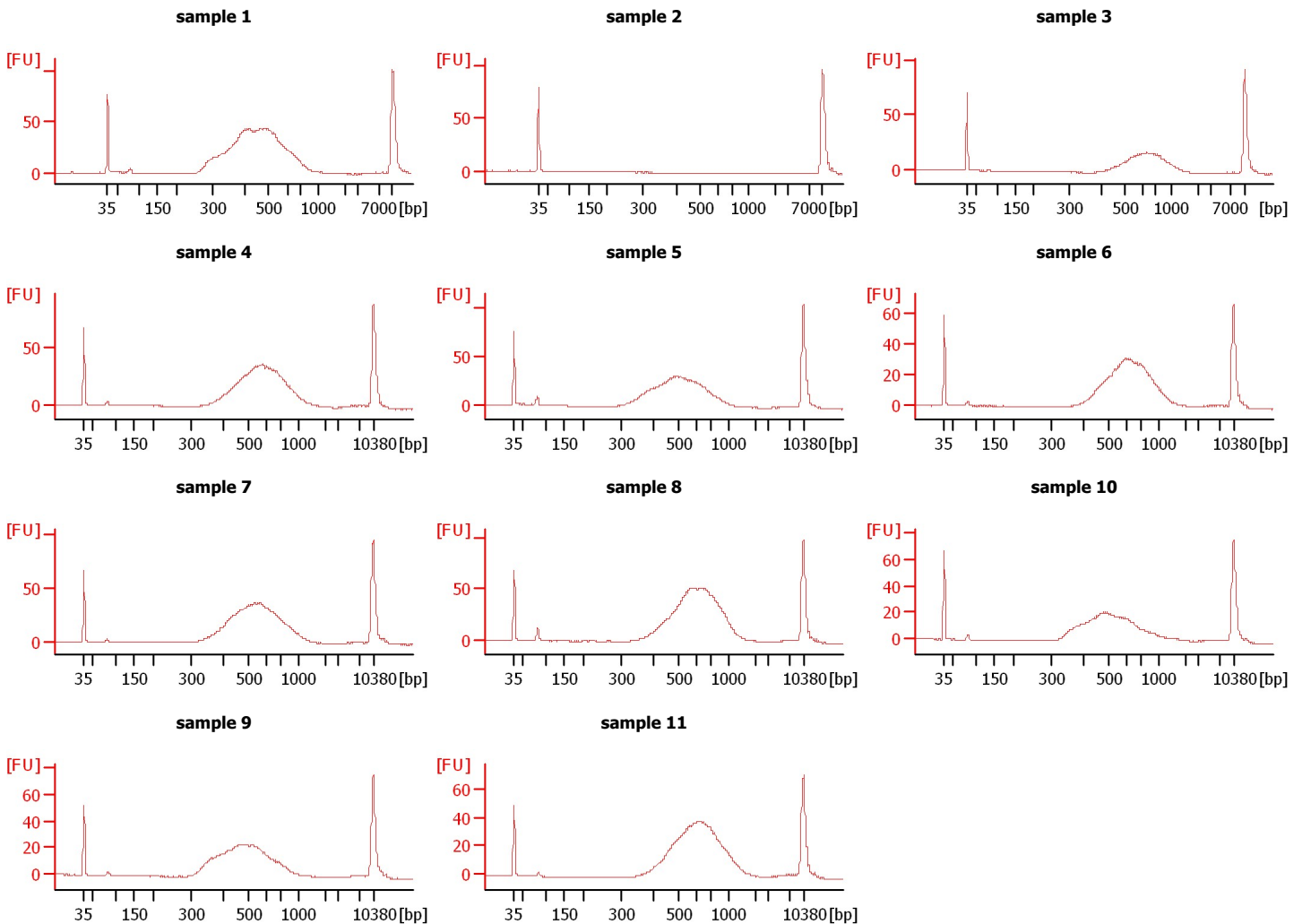
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 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 10		<input type="checkbox"/>	✓			
sample 9		<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:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
Modified: 7/28/2014 10:22:05 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

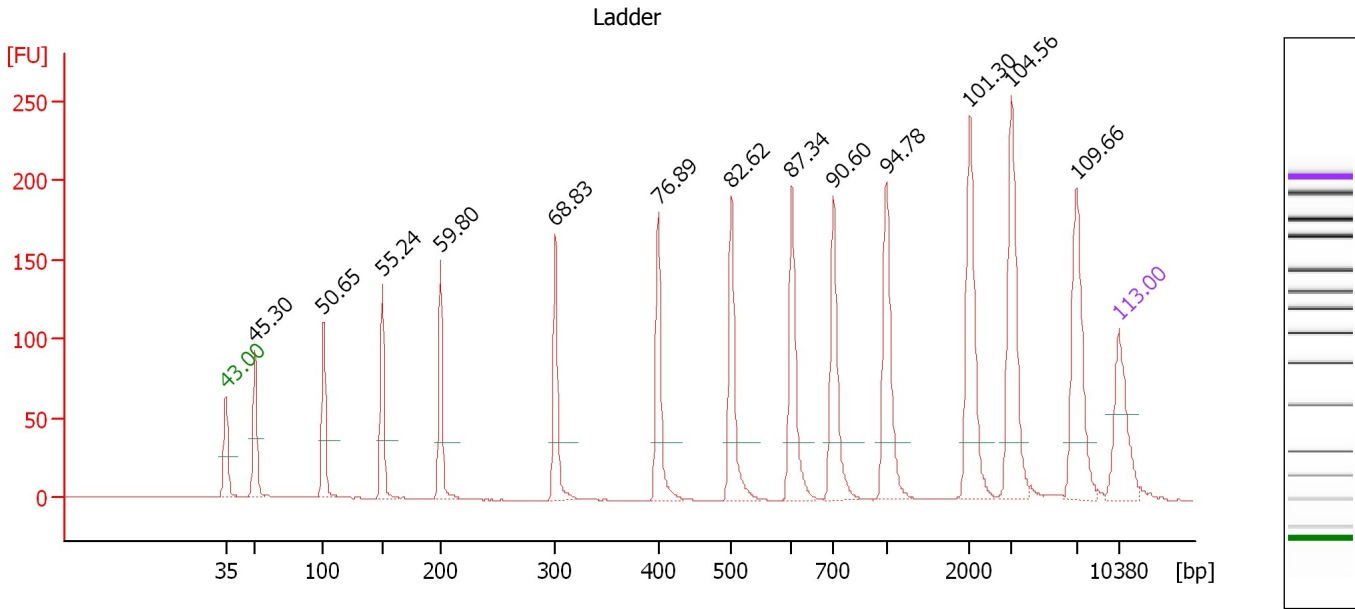
Ladder

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:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

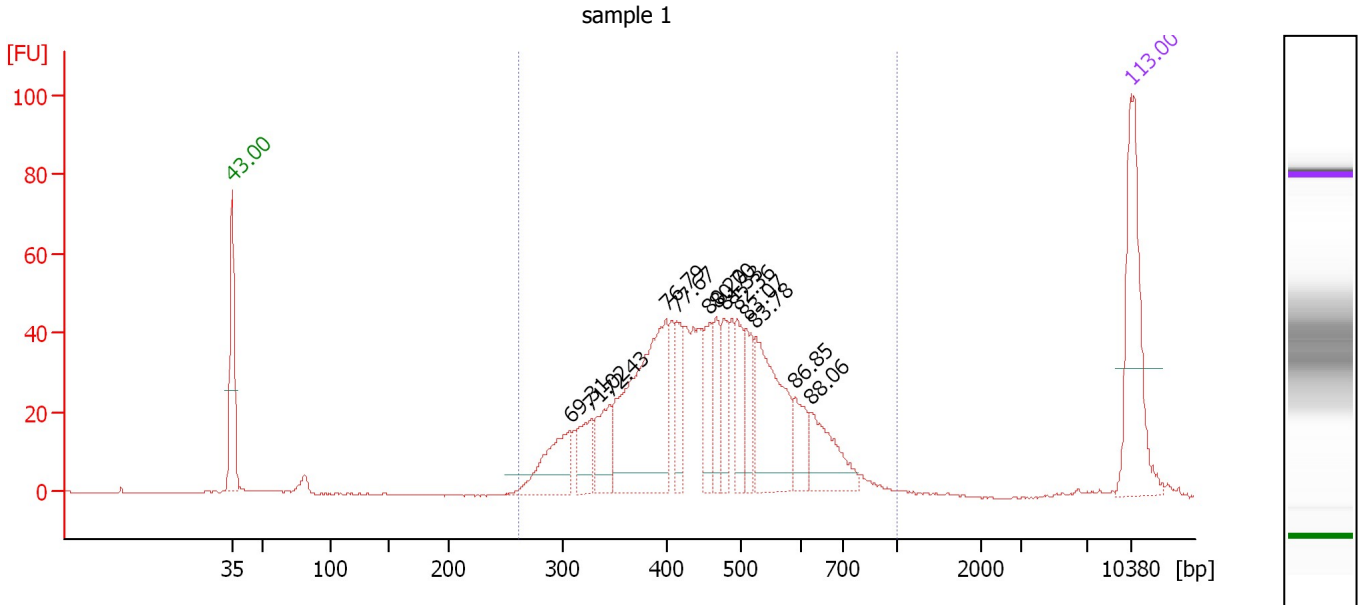
Peak table for Ladder

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:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 13 Corr. Area 1: 919.9
 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	306	59.13	292.7	
3	327	32.57	150.8	
4	345	40.16	176.5	
5	399	173.61	659.6	
6	414	31.92	117.0	
7	458	34.36	113.7	
8	467	30.99	100.6	
9	477	28.66	91.0	
10	496	35.59	108.8	
11	510	33.22	98.8	
12	525	98.00	283.1	
13	590	27.50	70.7	
14	622	45.07	109.8	
15	10,380	75.00	10.9	Upper Marker

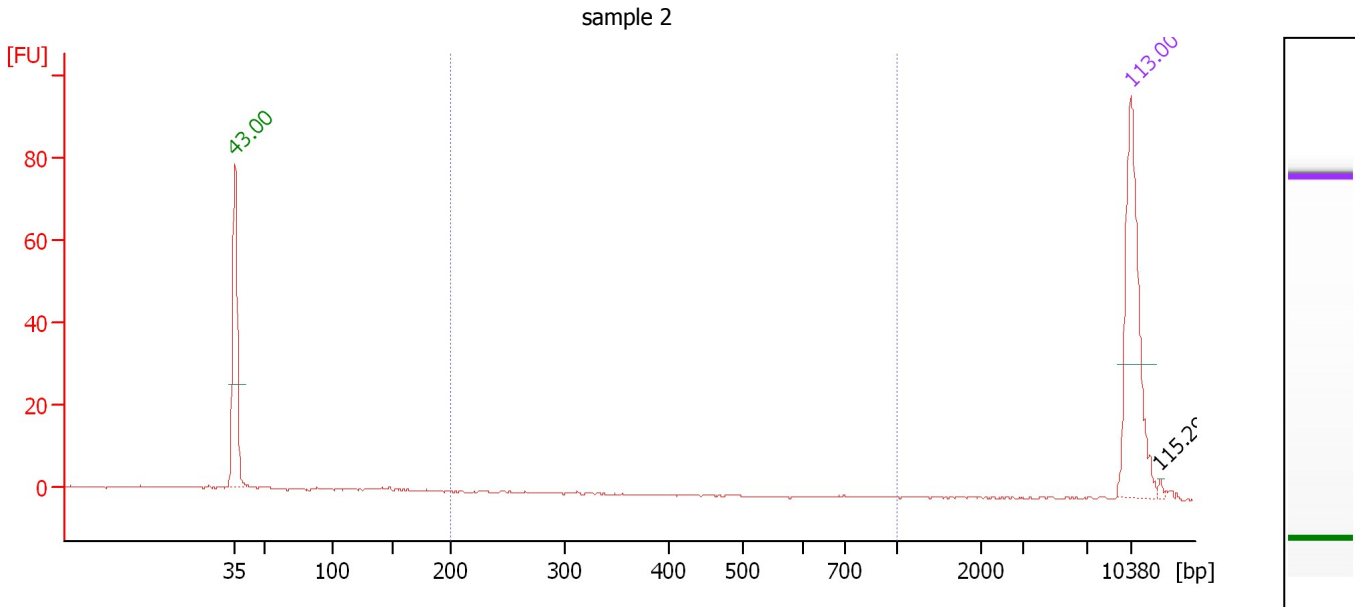
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
261	1,000	460	2,931.9	826.02	919.9	98	23.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 1 Corr. Area 1: 0.3
 Noise: 0.1

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	10,380	75.00	10.9	Upper Marker
3	12,697	0.00	0.0	

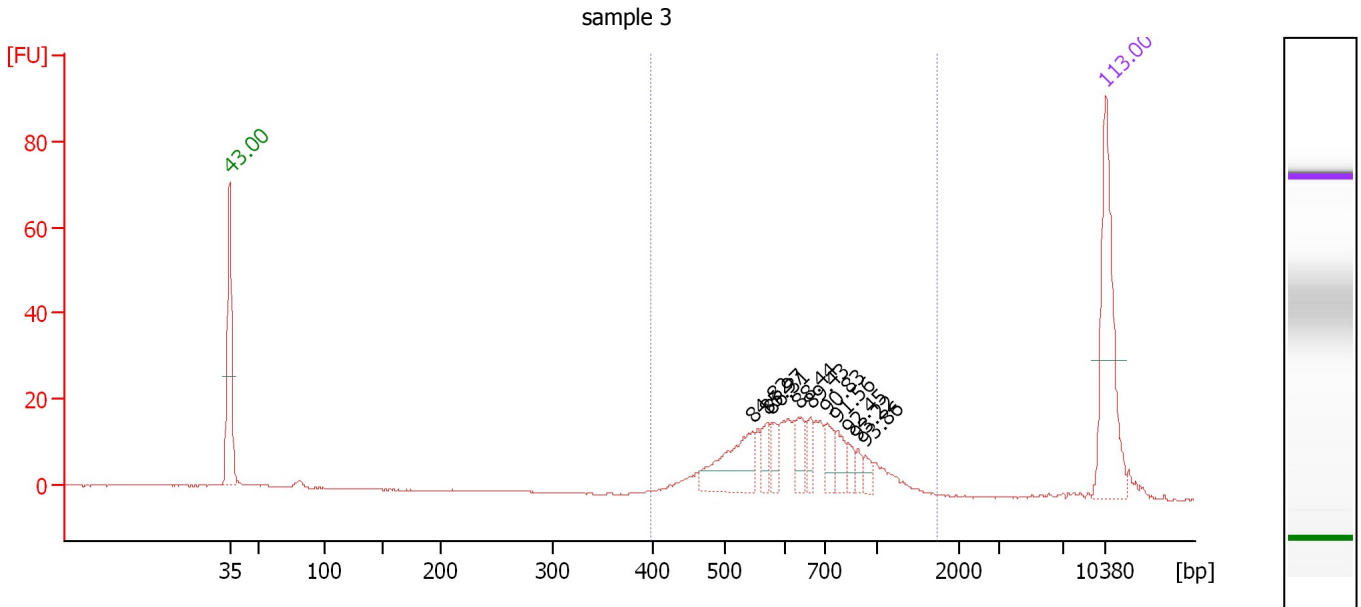
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	251	2.0	0.33	0.3	1	17.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 10 Corr. Area 1: 244.3
 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	547	54.48	151.0	
3	571	12.71	33.7	
4	578	12.09	31.7	
5	634	16.94	40.5	
6	664	12.42	28.3	
7	717	16.12	34.1	
8	769	15.91	31.4	
9	833	7.47	13.6	
10	888	6.28	10.7	
11	934	6.39	10.4	
12	10,380	75.00	10.9	Upper Marker

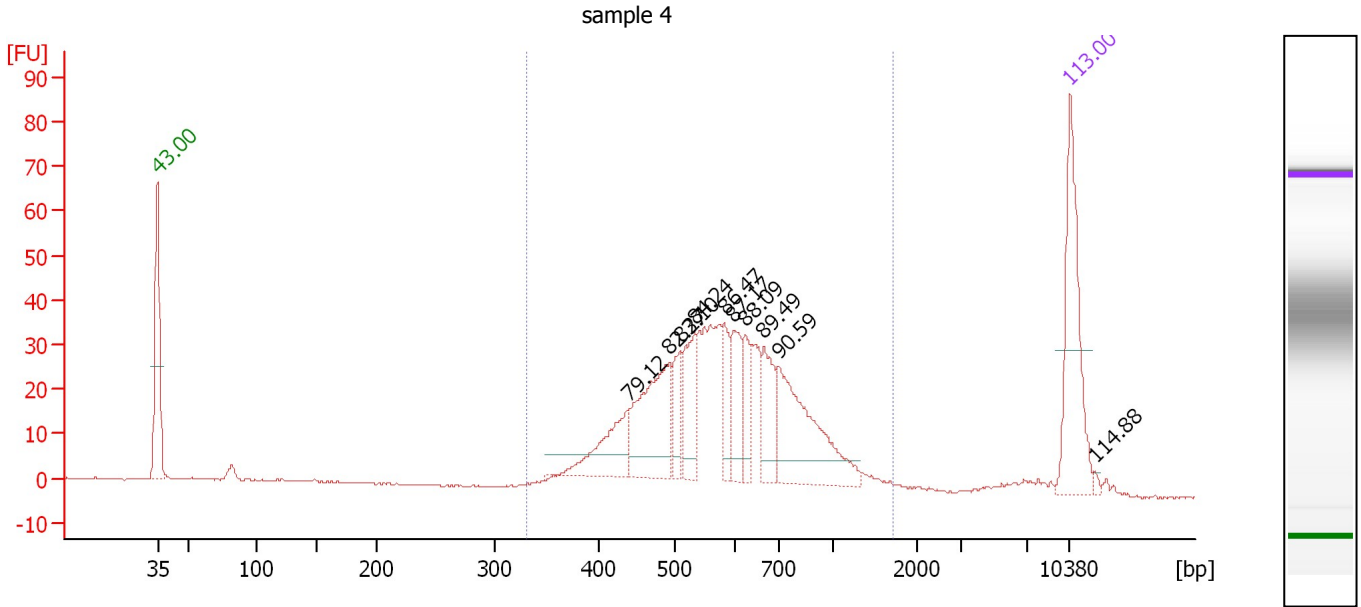
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
397	1,735	681	626.7	259.33	244.3	91	29.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 10 Corr. Area 1: 594.8
 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	439	53.10	183.3	
3	494	96.20	295.1	
4	510	25.03	74.3	
5	534	45.22	128.2	
6	582	27.86	72.6	
7	596	33.72	85.7	
8	623	27.15	66.0	
9	666	38.77	88.2	
10	700	106.99	231.7	
11	10,380	75.00	10.9	Upper Marker
12	12,283	0.00	0.0	

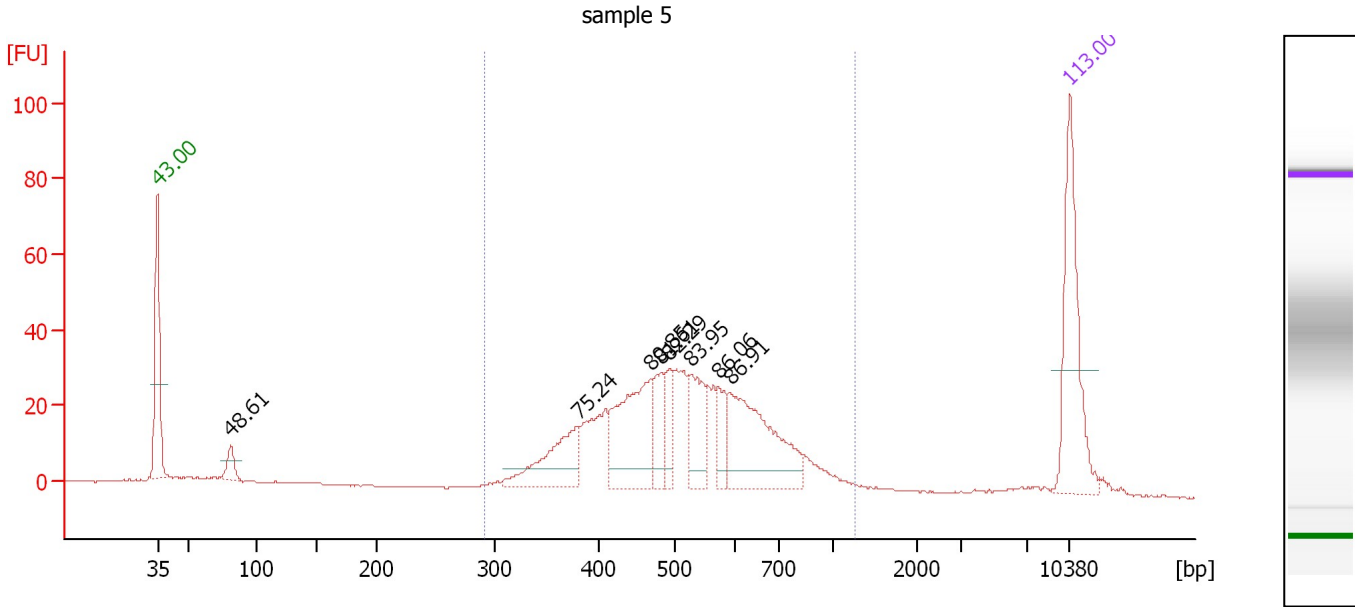
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
330	1,721	618	1,734.3	643.27	594.8	94	31.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 8 Corr. Area 1: 586.5
 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	81	17.52	327.9	
3	379	64.03	255.7	
4	469	100.45	324.4	
5	482	30.35	95.3	
6	494	23.10	70.8	
7	528	43.51	124.8	
8	573	23.19	61.3	
9	591	104.07	266.8	
10	10,380	75.00	10.9	Upper Marker

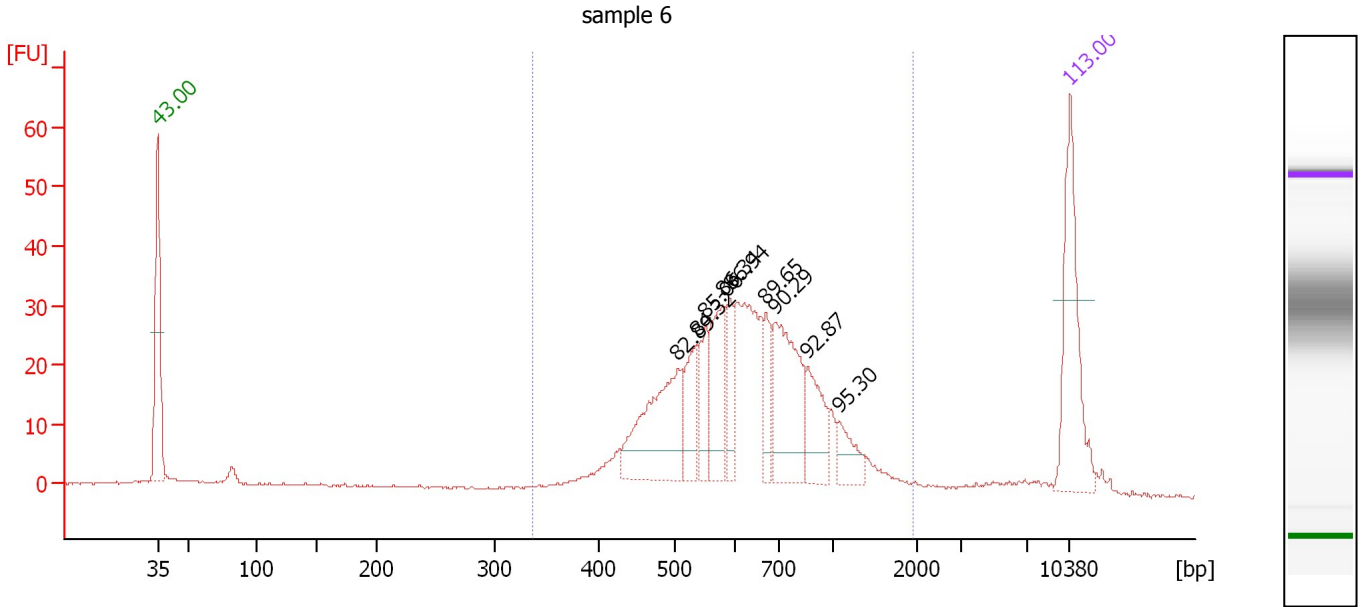
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
293	1,264	531	1,680.7	542.47	586.5	90	27.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 9 Corr. Area 1: 485.0
 Noise: 0.2

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	506	107.83	323.0	
3	536	39.76	112.4	
4	552	31.83	87.4	
5	579	58.30	152.6	
6	592	30.60	78.4	
7	671	27.79	62.8	
8	691	95.58	209.7	
9	863	41.23	72.4	
10	1,081	20.54	28.8	
11	10,380	75.00	10.9	Upper Marker

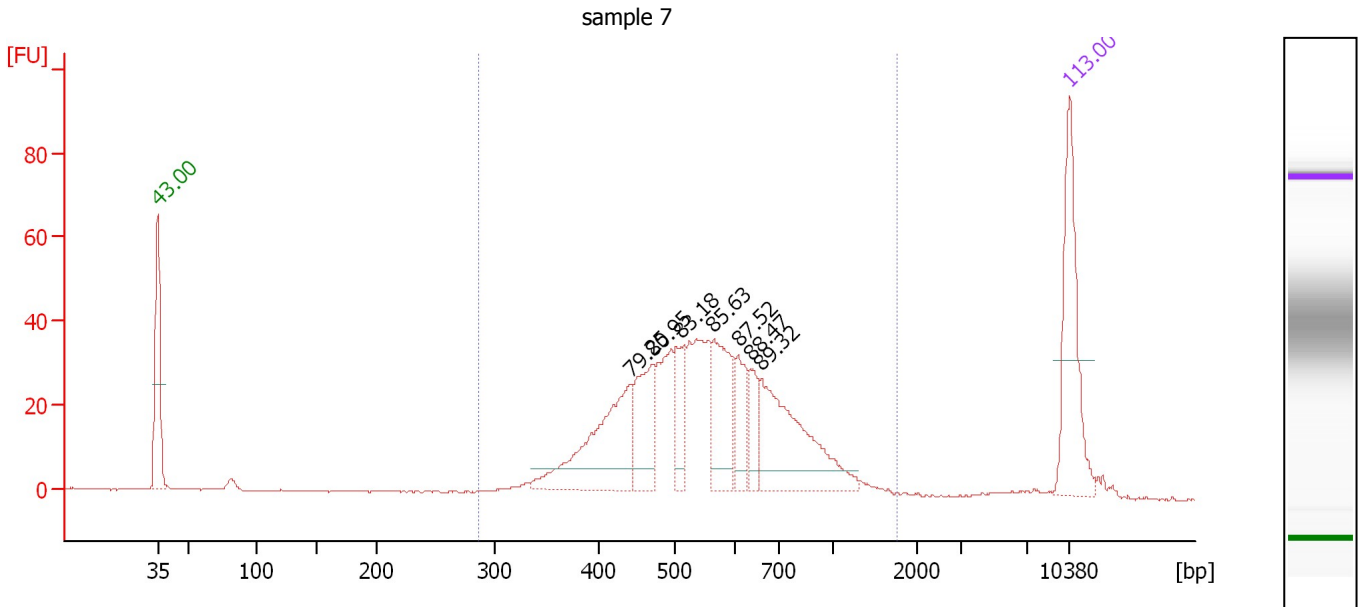
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
337	1,951	683	1,683.3	676.08	485.0	90	36.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 7 Corr. Area 1: 648.4
 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	441	122.83	421.8	
3	471	61.39	197.5	
4	512	34.94	103.4	
5	564	68.45	183.9	
6	606	32.45	81.2	
7	635	23.97	57.2	
8	661	118.36	271.4	
9	10,380	75.00	10.9	Upper Marker

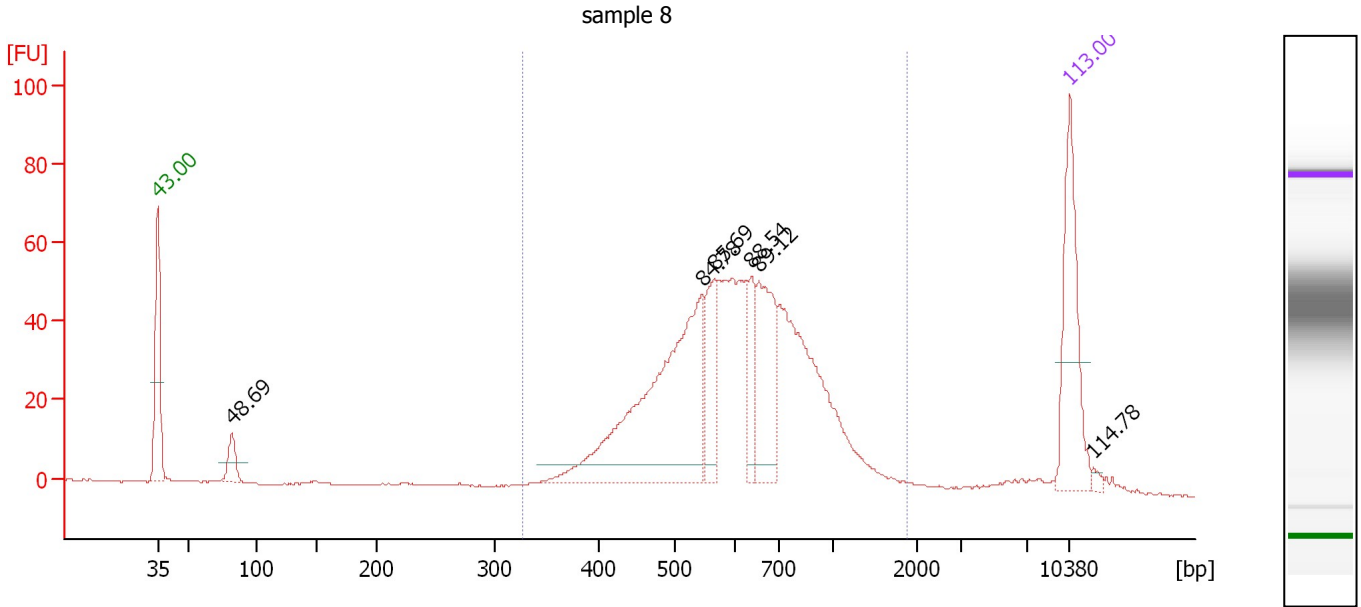
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
287	1,767	581	1,923.5	668.46	648.4	95	31.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 6 Corr. Area 1: 847.6
 Noise: 0.2

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	82	25.20	467.1	
3	546	259.16	719.5	
4	565	53.54	143.5	
5	637	34.11	81.1	
6	655	87.24	201.9	
7	10,380	75.00	10.9	Upper Marker
8	12,185	0.00	0.0	

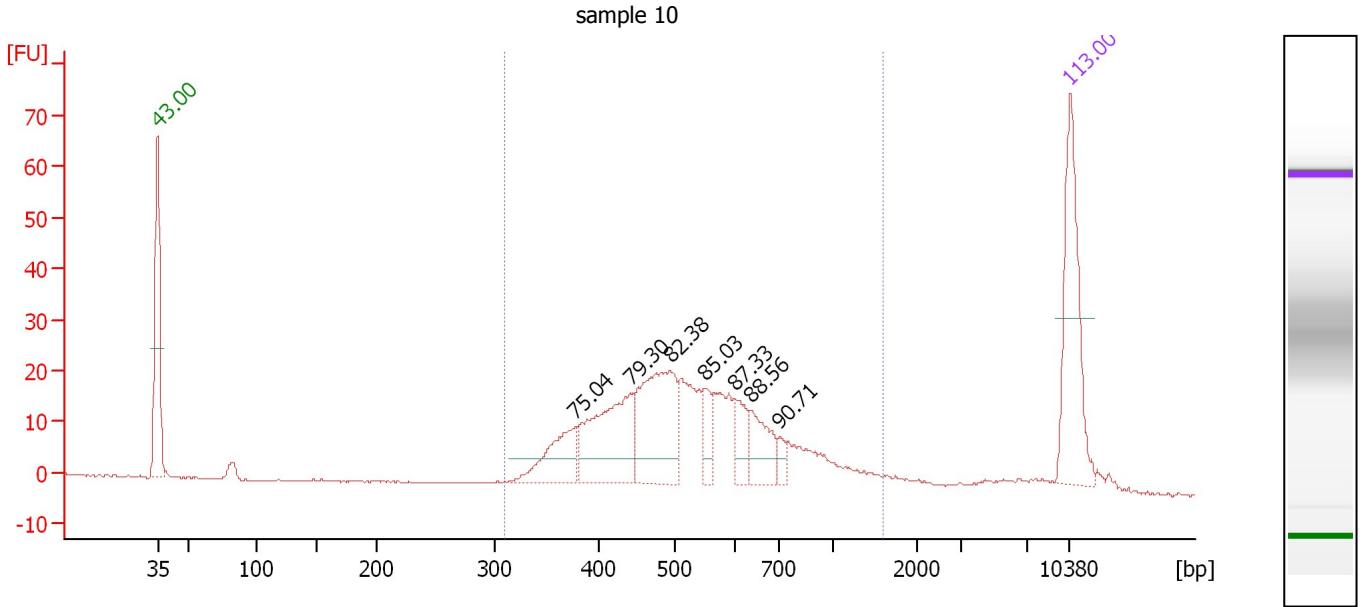
Region table for sample 8 : sample 8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
327	1,864	656	2,059.7	803.01	847.6	94	33.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 10

Number of peaks found: 7 Corr. Area 1: 400.6
 Noise: 0.2

Peak table for sample 9 : sample 10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	377	48.04	193.1	
3	442	96.00	329.1	
4	496	106.79	326.3	
5	551	18.74	51.5	
6	600	22.14	55.9	
7	637	32.39	77.0	
8	708	7.38	15.8	
9	10,380	75.00	10.9	Upper Marker

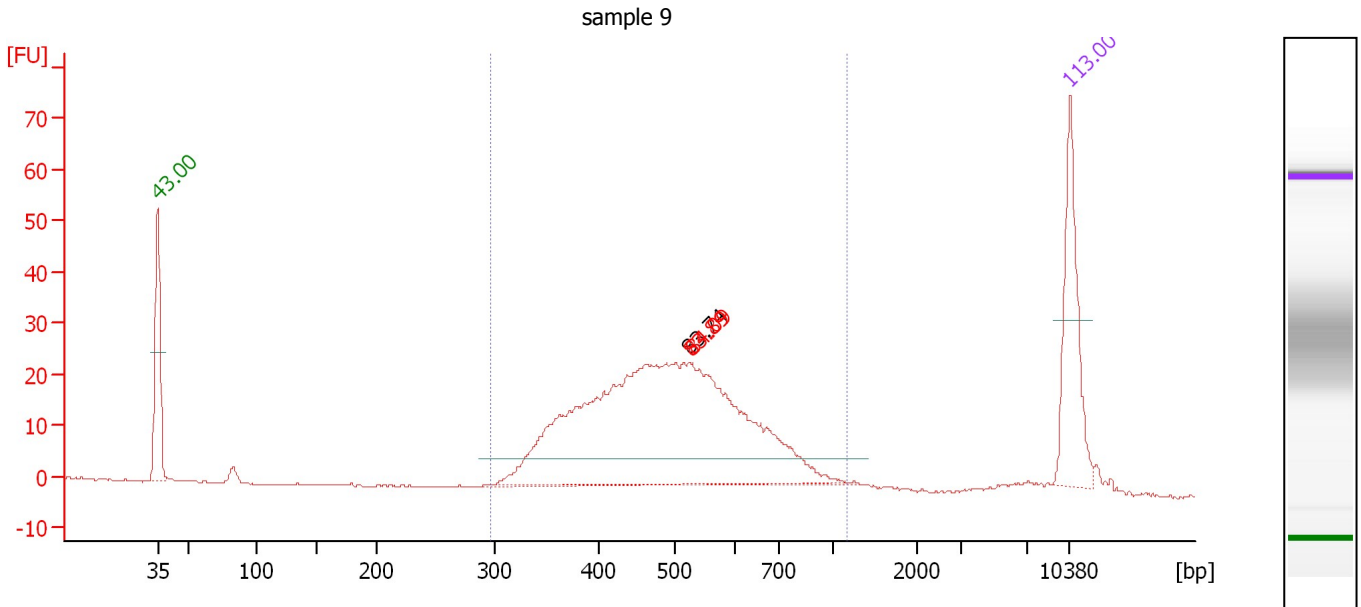
Region table for sample 9 : sample 10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
310	1,603	562	1,468.6	486.38	400.6	92	35.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 9

Number of peaks found: 1 Corr. Area 1: 448.4
 Noise: 0.1

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	524	553.95	1,602.6	
3	527	537.68	1,546.2	excluded peak
4	531	540.99	1,543.4	excluded peak
5	10,380	75.00	10.9	Upper Marker

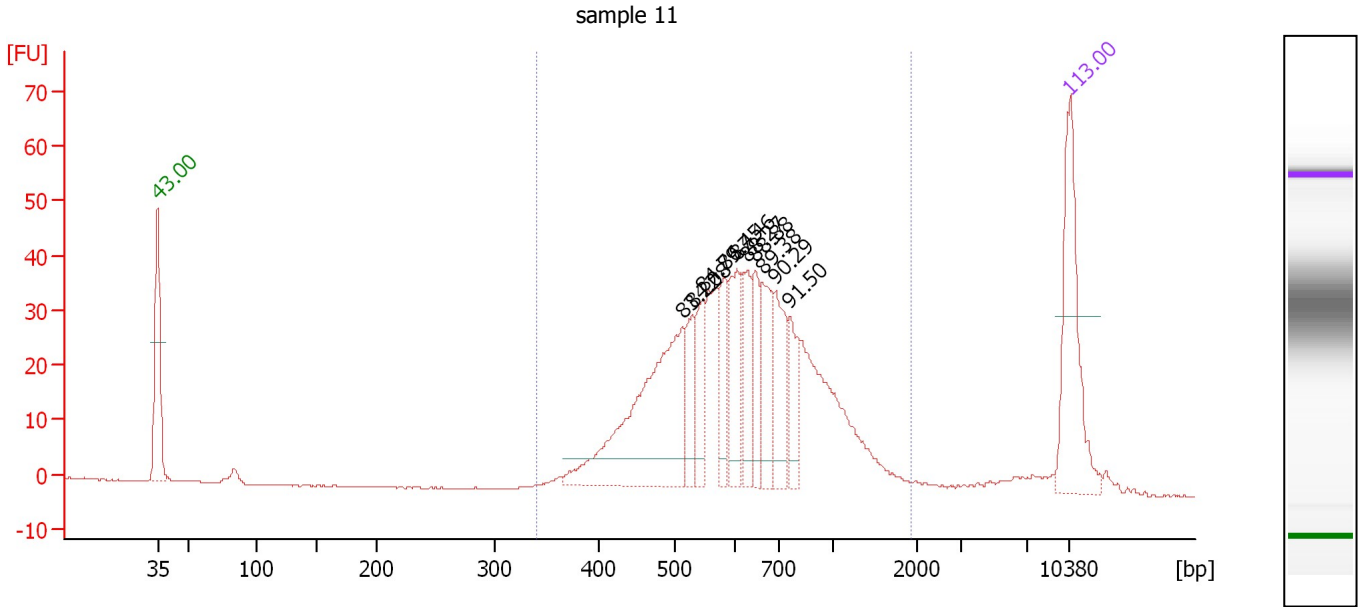
Region table for sample 10 : sample 9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
297	1,159	508	1,898.5	591.70	448.4	95	25.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 10 Corr. Area 1: 601.6
 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	513	176.36	521.1	
3	531	32.27	92.1	
4	546	32.03	88.9	
5	581	34.56	90.1	
6	604	47.41	119.0	
7	629	35.22	84.9	
8	647	32.21	75.4	
9	663	40.27	92.1	
10	690	49.88	109.5	
11	765	25.49	50.5	
12	10,380	75.00	10.9	Upper Marker

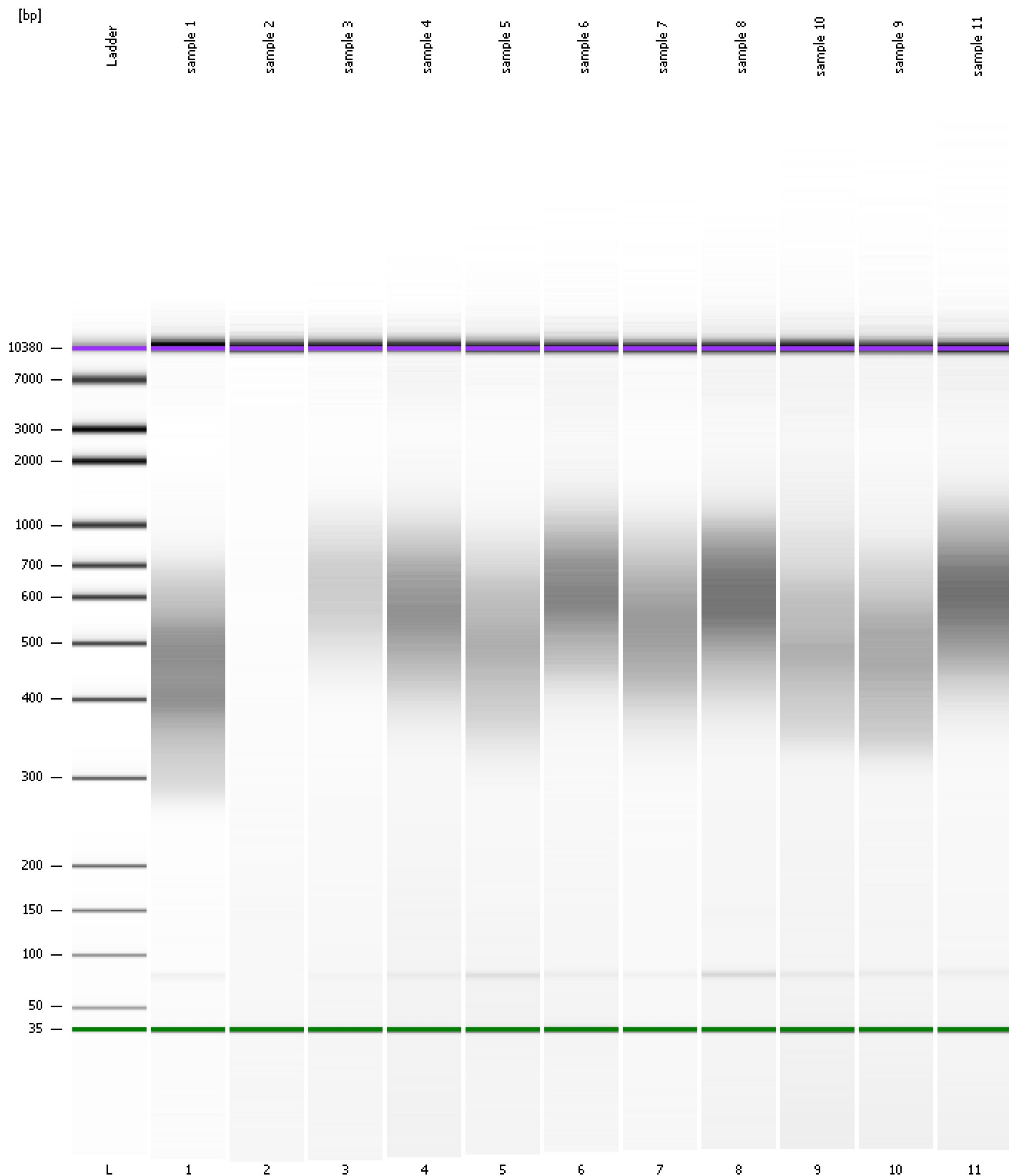
Region table for sample 11 : sample 11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
341	1,924	673	1,768.0	701.52	601.6	96	35.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
Modified: 7/28/2014 10:22:05 PM

Gel Image

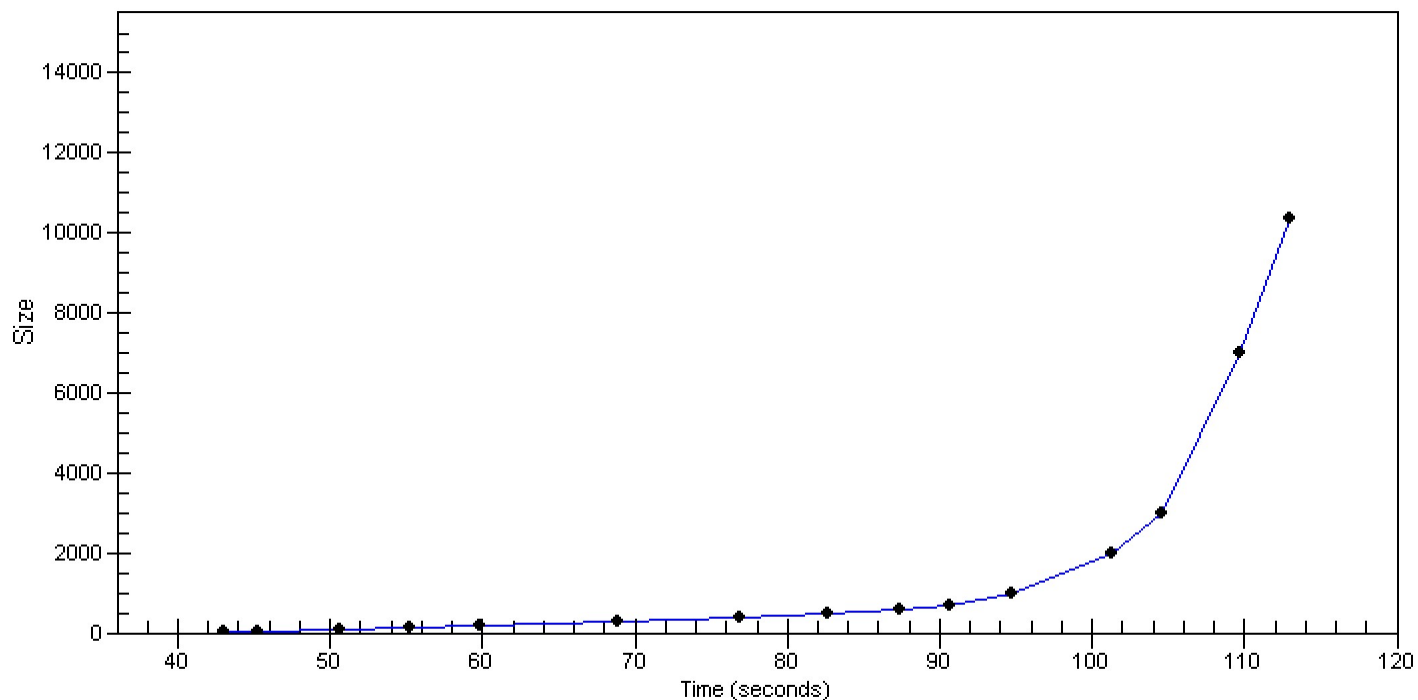


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
Modified: 7/28/2014 10:22:05 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_002.xad

Created: 7/28/2014 11:57:45 AM
 Modified: 7/28/2014 10:22:05 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		7/28/2014 12:39:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28_002.xad)		Instrument	Run		7/28/2014 11:57:51 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/28/2014 11:57:51 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/28/2014 11:57:51 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/28/2014 11:57:51 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/28/2014 11:57:51 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/28/2014 11:57:51 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/28/2014 11:57:51 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1