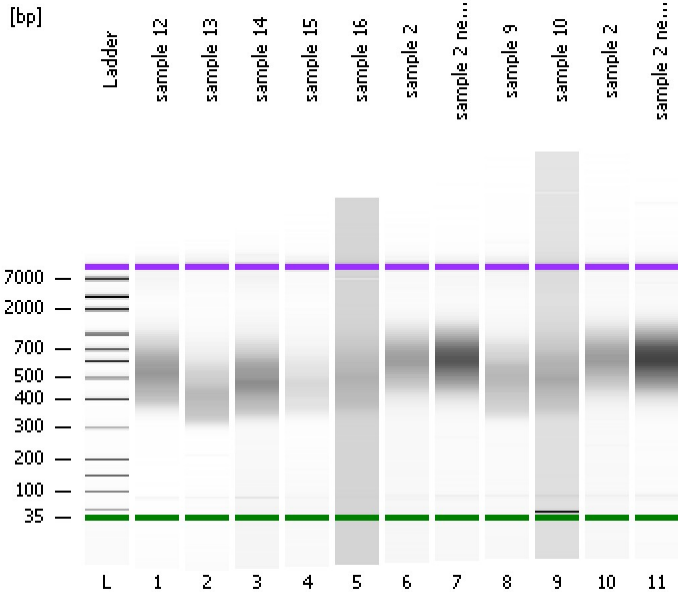


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
Modified: 7/28/2014 10:13:52 PM

Electrophoresis File Run Summary



Instrument Information:

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

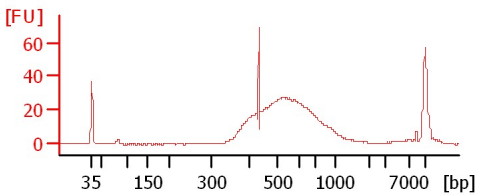
Assay Information:

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

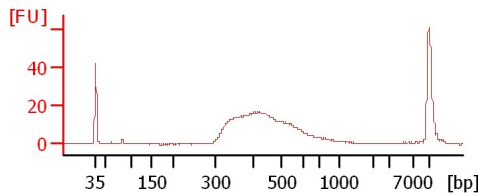
Chip Information:

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

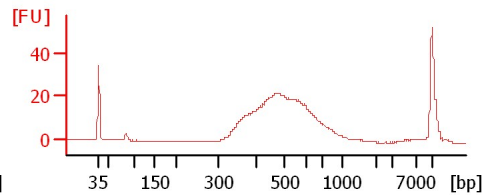
sample 12



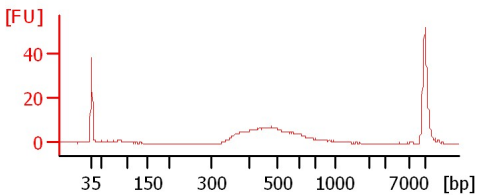
sample 13



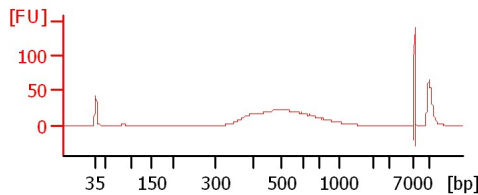
sample 14



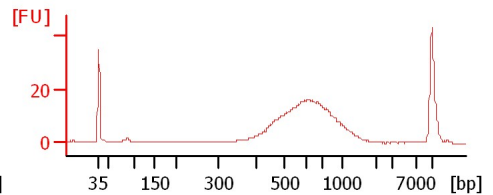
sample 15



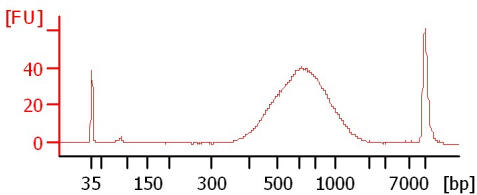
sample 16



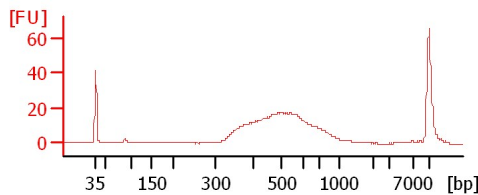
sample 2



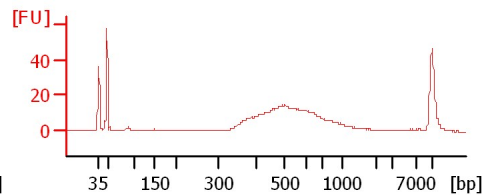
sample 2 new dil



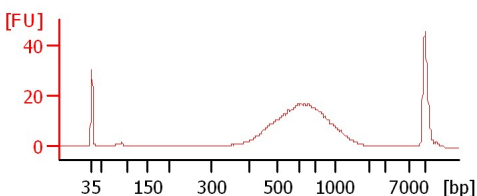
sample 9



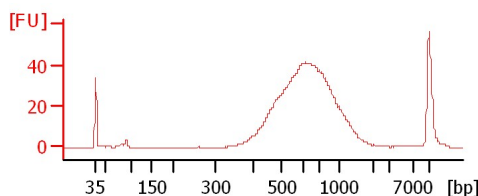
sample 10



sample 2



sample 2 new dil



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 12		<input type="checkbox"/>	✓			
sample 13		<input type="checkbox"/>	✓			
sample 14		<input type="checkbox"/>	✓			
sample 15		<input type="checkbox"/>	✓			
sample 16		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 2 new dil		<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>	✓			
sample 10		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 2 new dil		<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_007.xad

Created: 7/28/2014 8:31:18 PM
Modified: 7/28/2014 10:13:52 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

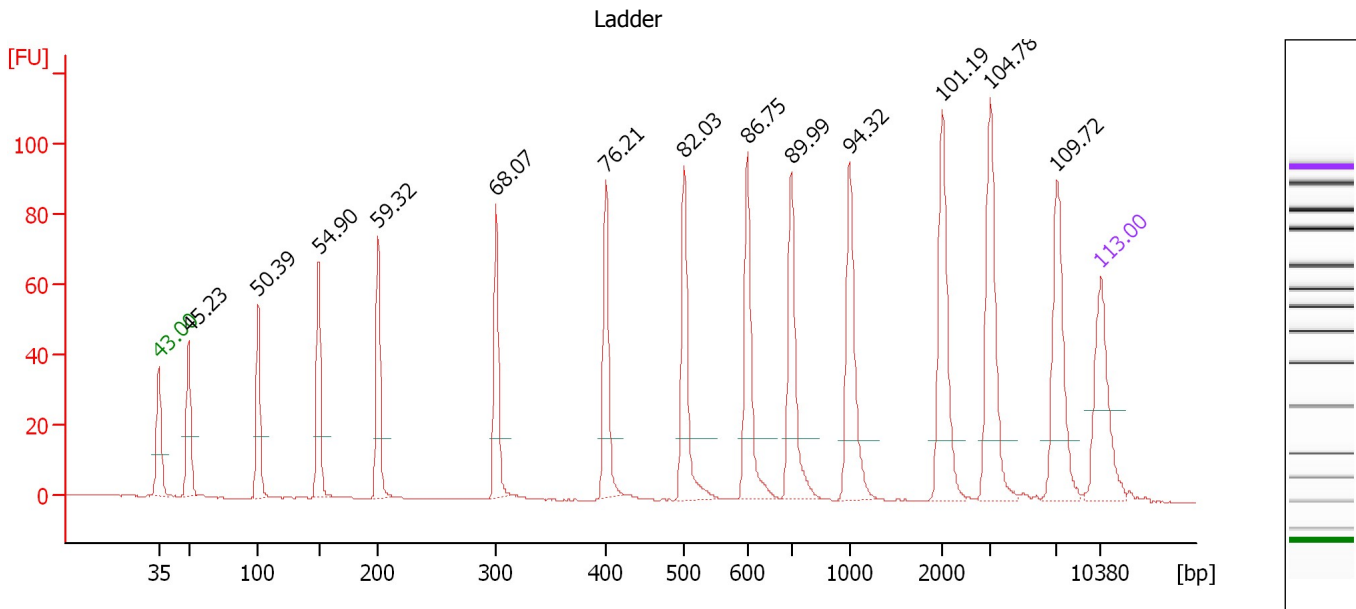
Ladder

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_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

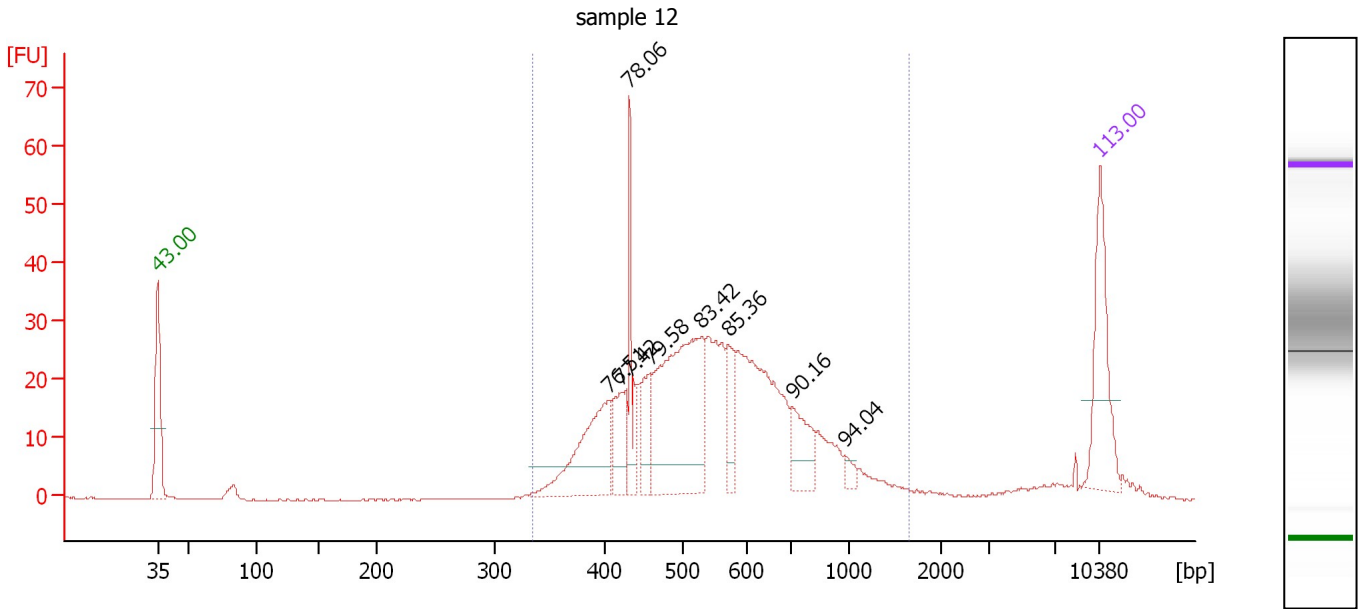
Peak table for Ladder

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_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 12

Number of peaks found: 8 Corr. Area 1: 507.0
 Noise: 0.1

Peak table for sample 1 : sample 12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	405	118.58	443.4	
3	421	47.06	169.4	
4	432	59.18	207.6	
5	458	42.37	140.2	
6	530	226.08	646.9	
7	571	35.85	95.2	
8	712	47.09	100.2	
9	981	8.52	13.2	
10	10,380	75.00	10.9	Upper Marker

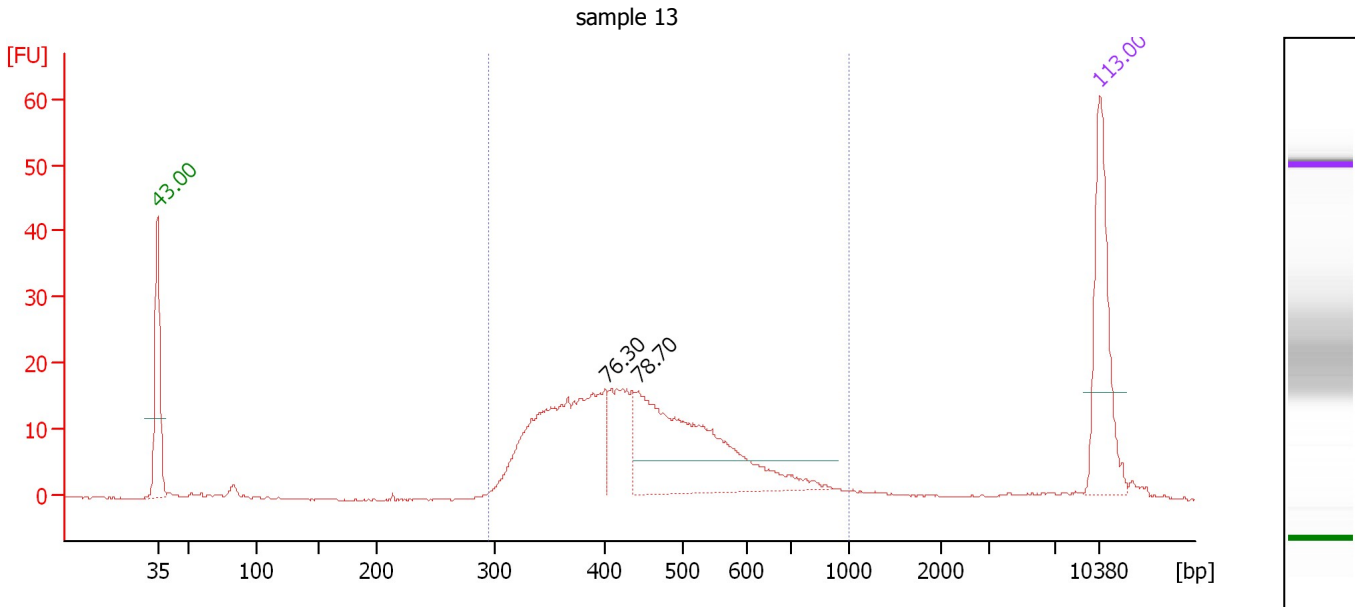
Region table for sample 1 : sample 12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
334	1,662	577	2,833.4	978.06	507.0	96	32.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 13

Number of peaks found: 3 Corr. Area 1: 315.7
 Noise: 0.1

Peak table for sample 2 : sample 13

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	402	4.50	17.0	
3	0	0.00	0.0	
4	443	217.87	745.5	
5	10,380	75.00	10.9	Upper Marker

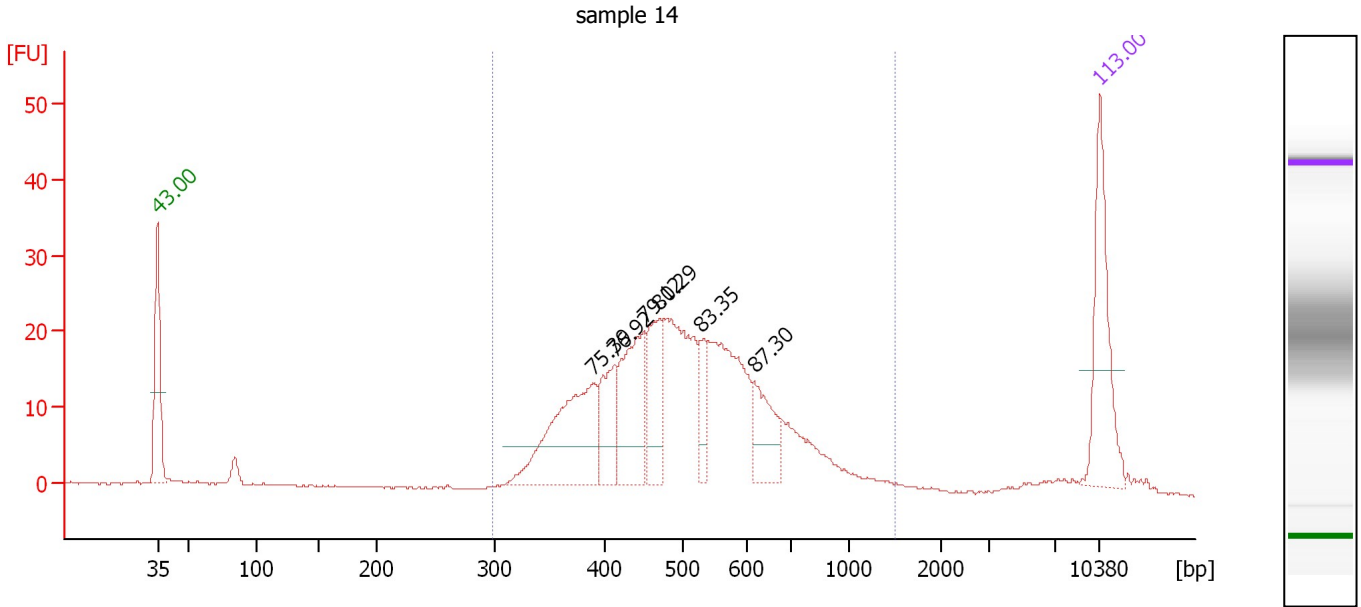
Region table for sample 2 : sample 13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
294	1,000	456	1,880.7	528.21	315.7	95	25.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 14

Number of peaks found: 6 Corr. Area 1: 419.6
 Noise: 0.1

Peak table for sample 3 : sample 14

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	390	141.52	549.8	
3	412	52.96	194.6	
4	450	99.76	335.8	
5	470	63.71	205.3	
6	528	28.54	81.9	
7	617	47.26	116.1	
8	10,380	75.00	10.9	Upper Marker

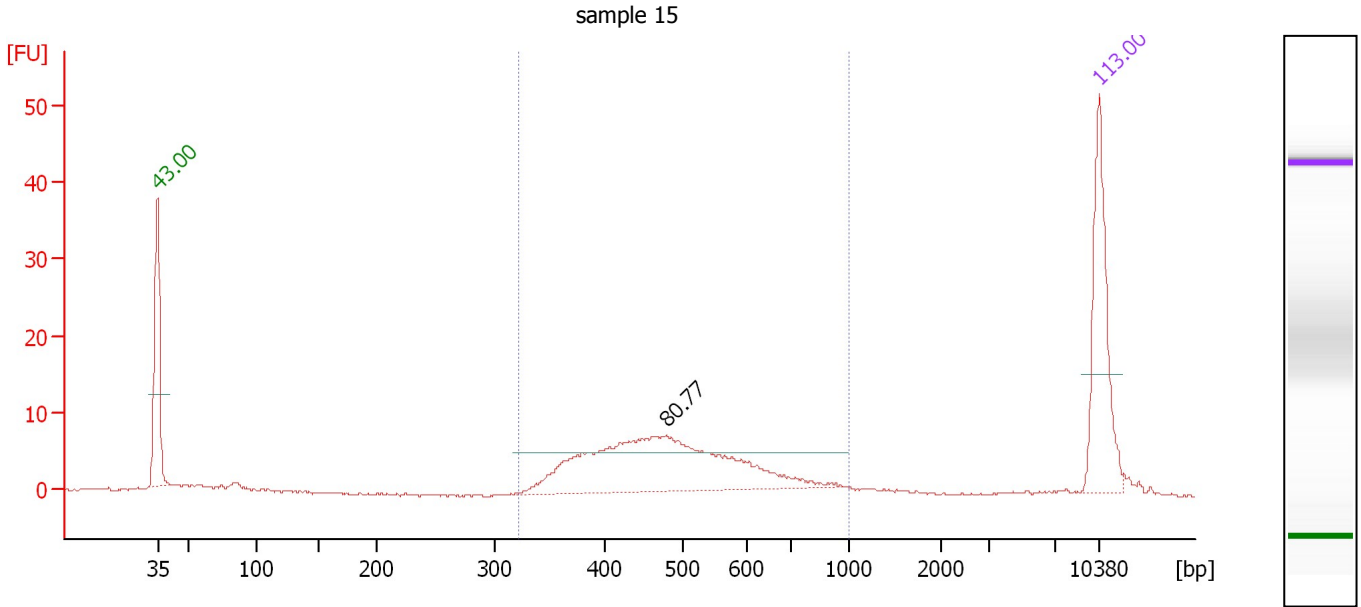
Region table for sample 3 : sample 14

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
298	1,498	526	2,659.2	843.82	419.6	91	30.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 15

Number of peaks found: 1 Corr. Area 1: 122.7
 Noise: 0.1

Peak table for sample 4 : sample 15

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	478	225.28	713.4	
3	10,380	75.00	10.9	Upper Marker

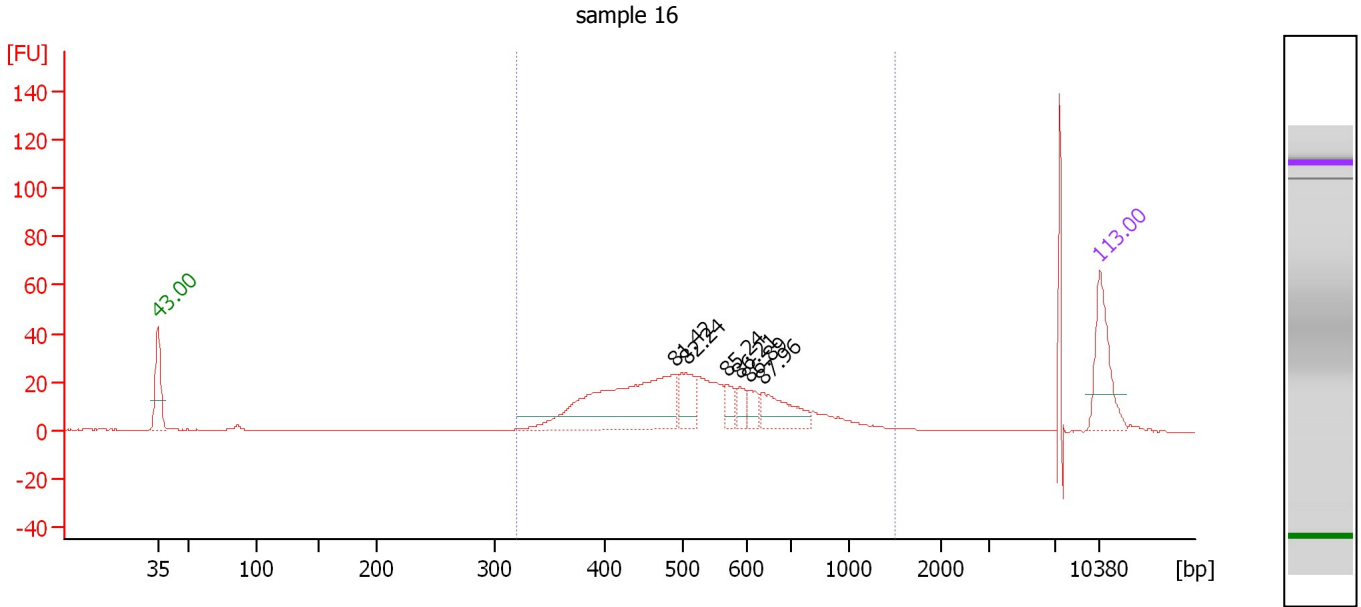
Region table for sample 4 : sample 15

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
321	1,000	502	777.3	241.09	122.7	88	24.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 16

Number of peaks found: 6 Corr. Area 1: 427.9
 Noise: 0.1

Peak table for sample 5 : sample 16

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	490	286.32	886.2	
3	505	59.28	178.0	
4	568	21.86	58.3	
5	589	22.91	59.0	
6	604	22.22	55.7	
7	637	66.16	157.3	
8	10,380	75.00	10.9	Upper Marker

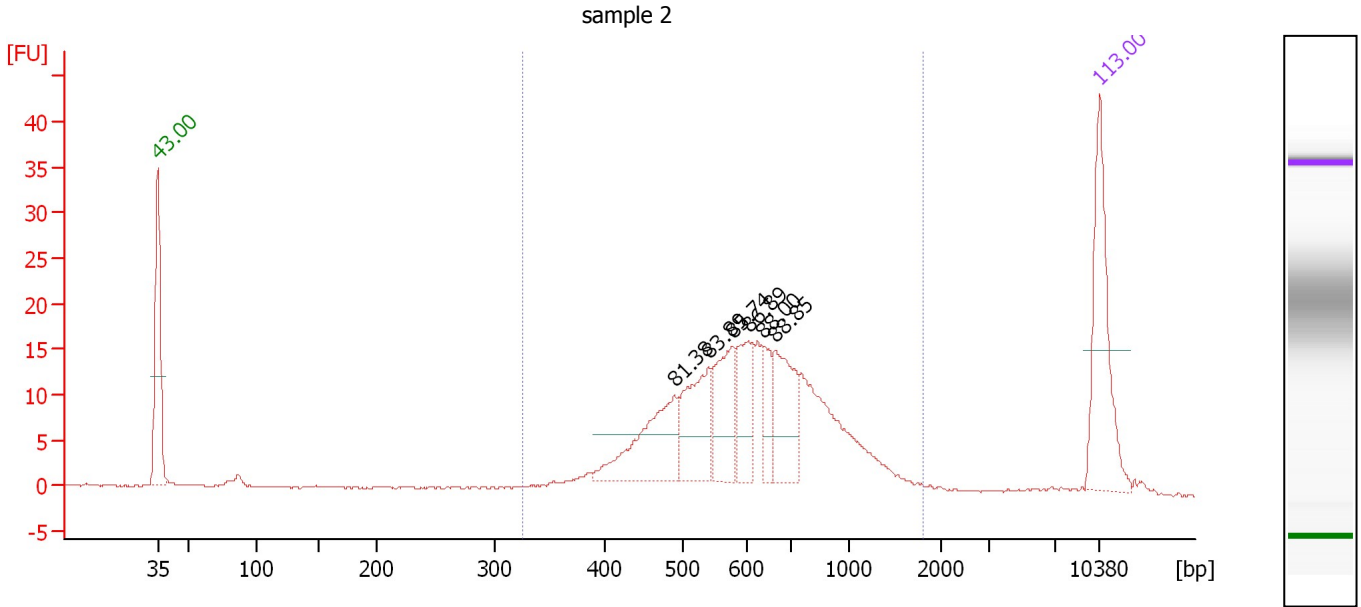
Region table for sample 5 : sample 16

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
320	1,494	547	1,964.3	646.24	427.9	90	30.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 2

Number of peaks found: 6 Corr. Area 1: 258.5
 Noise: 0.1

Peak table for sample 6 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	489	84.30	261.2	
3	539	66.27	186.1	
4	579	55.76	146.0	
5	604	43.37	108.7	
6	638	24.47	58.1	
7	665	60.63	138.2	
8	10,380	75.00	10.9	Upper Marker

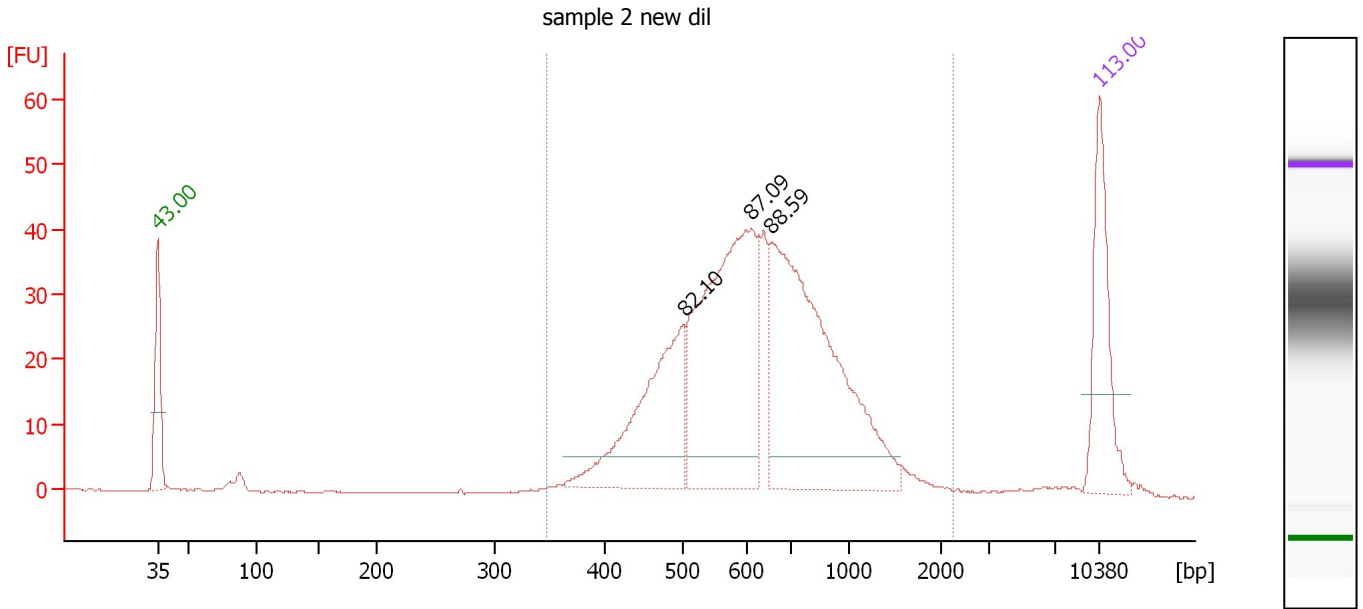
Region table for sample 6 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
325	1,810	666	1,434.3	560.57	258.5	90	35.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 2 new dil

Number of peaks found: 3 Corr. Area 1: 620.3
 Noise: 0.1

Peak table for sample 7 : sample 2 new dil

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	502	180.22	544.3	
3	610	300.56	746.0	
4	657	335.68	774.2	
5	10,380	75.00	10.9	Upper Marker

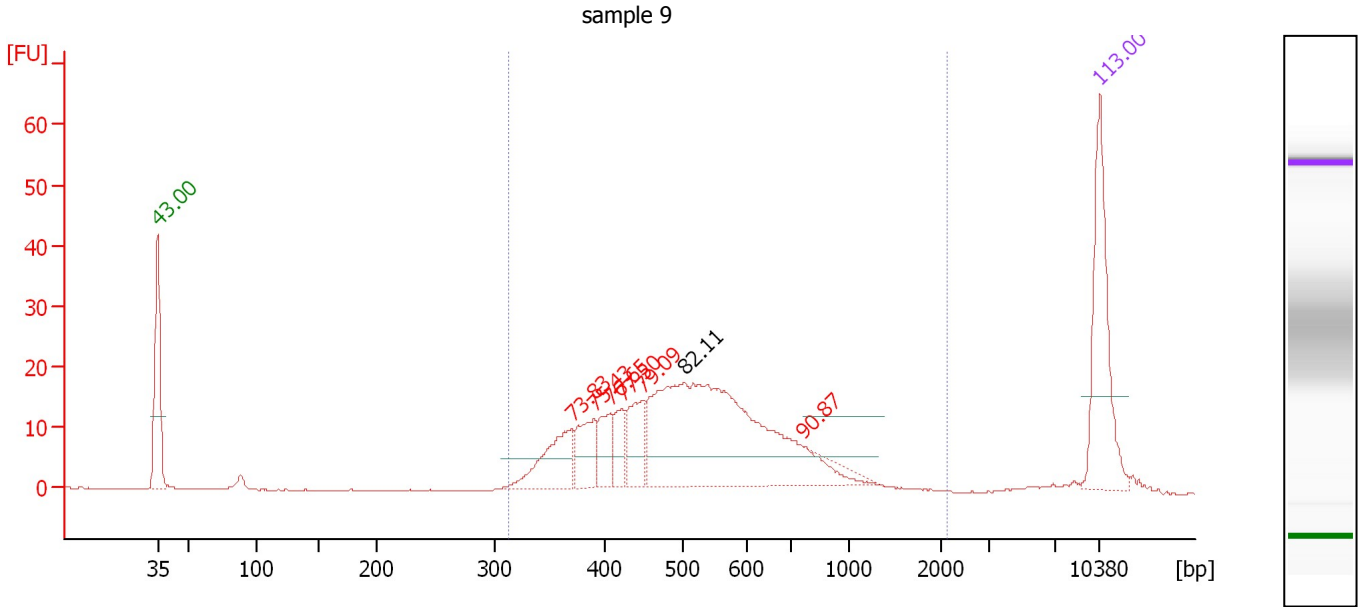
Region table for sample 7 : sample 2 new dil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
346	2,268	685	2,280.9	913.27	620.3	97	37.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 9

Number of peaks found: 1 Corr. Area 1: 340.8
 Noise: 0.1

Peak table for sample 8 : sample 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	371	51.91	212.1	excluded peak
3	390	34.38	133.4	excluded peak
4	408	24.92	92.6	excluded peak
5	422	22.34	80.2	excluded peak
6	450	37.86	127.6	excluded peak
7	502	308.86	932.5	
8	761	0.08	0.2	excluded peak
9	10,380	75.00	10.9	Upper Marker

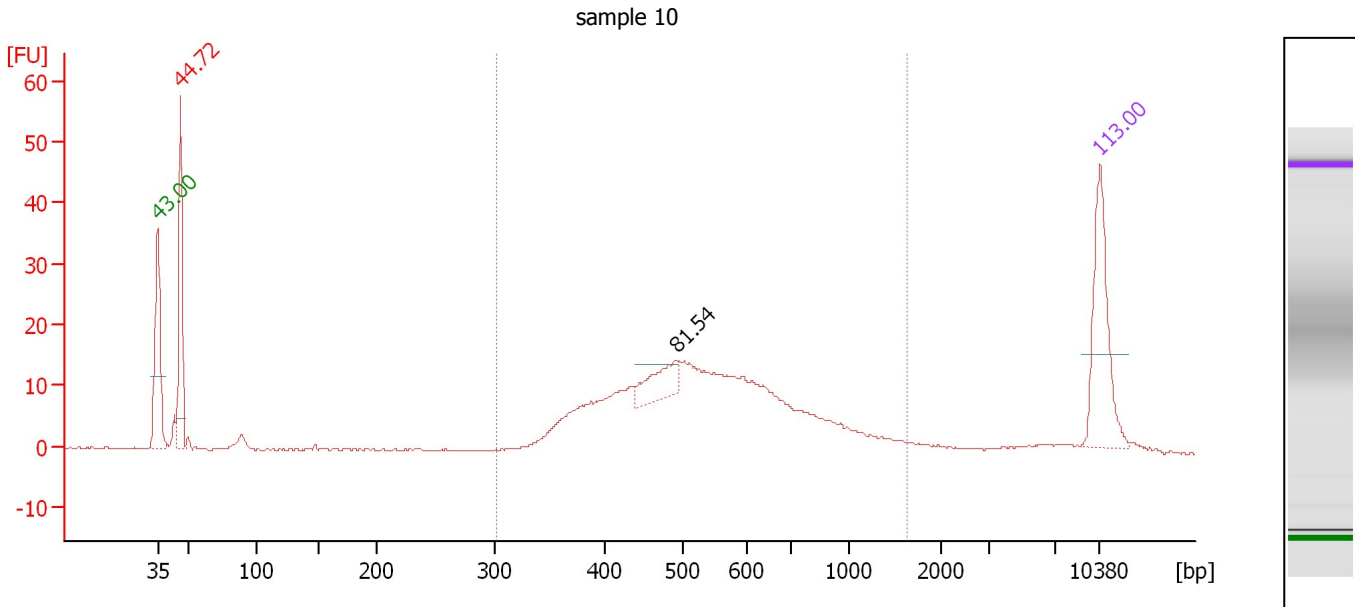
Region table for sample 8 : sample 9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
312	2,132	546	1,619.7	522.22	340.8	95	37.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 10

Number of peaks found: 1 Corr. Area 1: 274.7
 Noise: 0.1

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	47	116.13	3,781.4	excluded peak
3	492	37.93	116.9	
4	10,380	75.00	10.9	Upper Marker

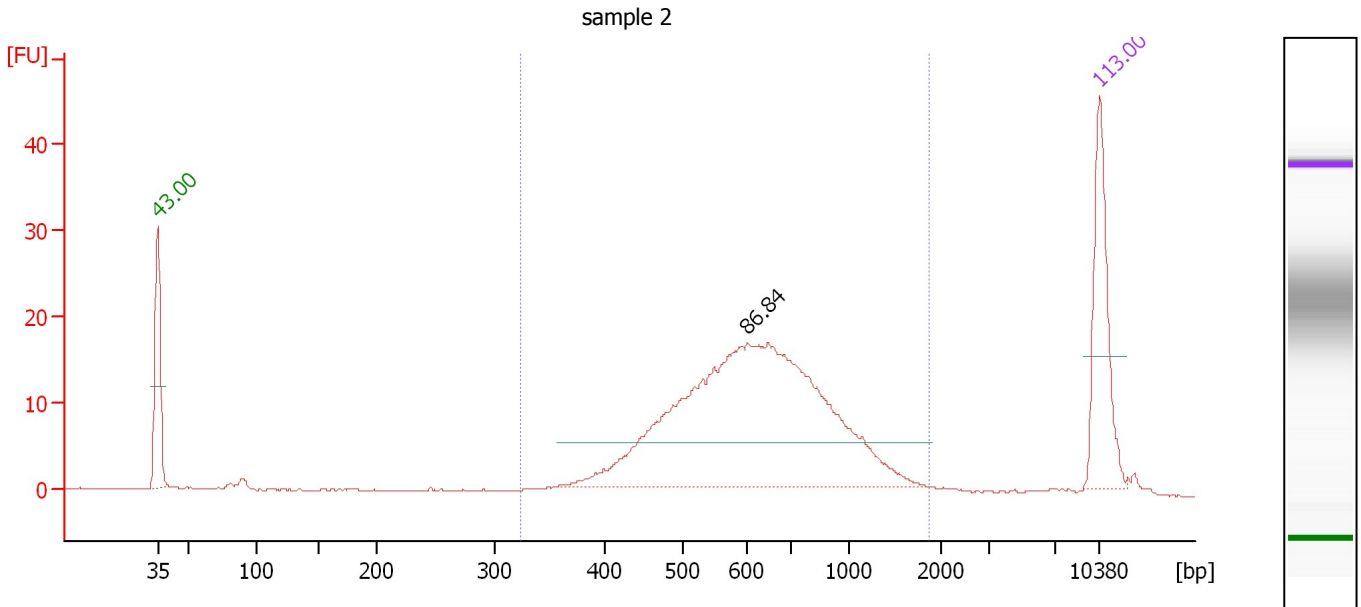
Region table for sample 9 : sample 10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
302	1,631	579	1,697.2	572.69	274.7	76	37.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 2

Number of peaks found: 1 Corr. Area 1: 268.5
 Noise: 0.1

Peak table for sample 10 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	603	496.95	1,249.3	
3	10,380	75.00	10.9	Upper Marker

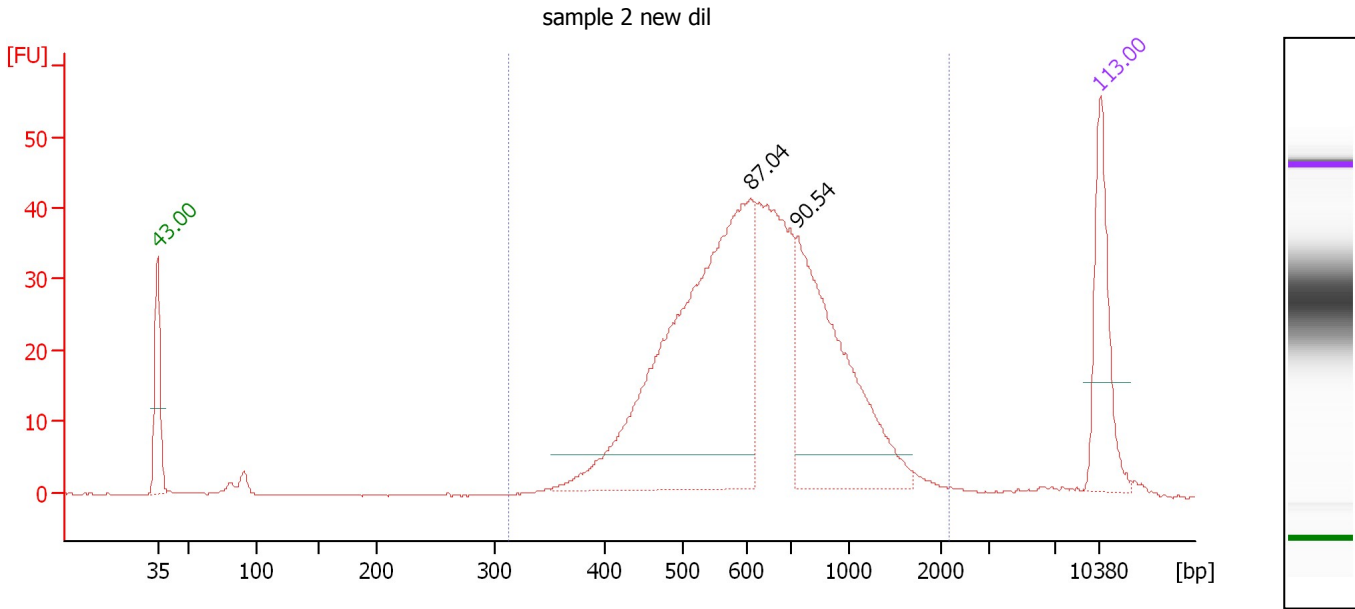
Region table for sample 10 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
323	1,882	683	1,428.8	570.12	268.5	94	36.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 2 new dil

Number of peaks found: 2 Corr. Area 1: 639.3
 Noise: 0.1

Peak table for sample 11 : sample 2 new dil

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	609	525.51	1,307.3	
3	738	274.26	562.8	
4	10,380	75.00	10.9	Upper Marker

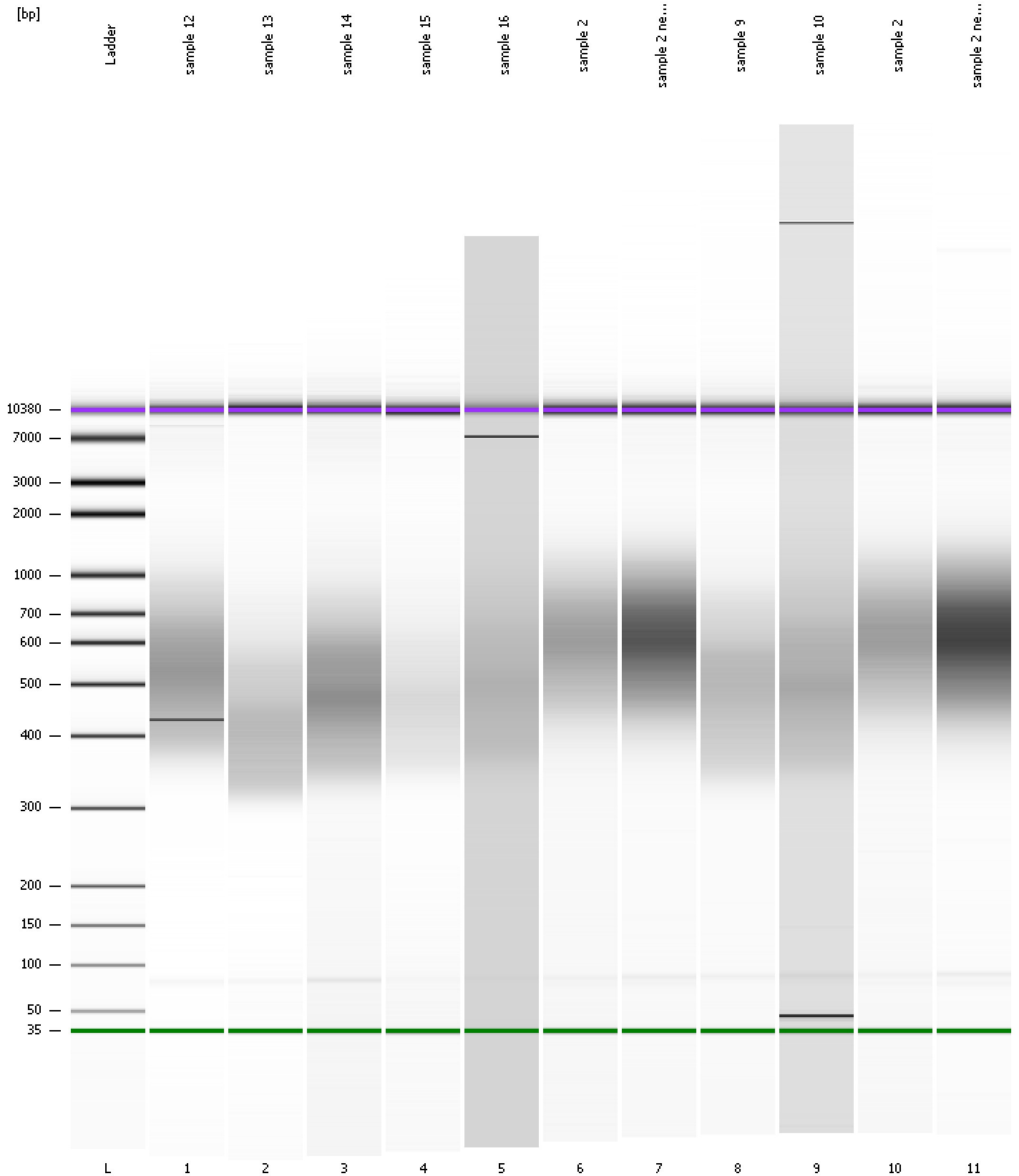
Region table for sample 11 : sample 2 new dil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
313	2,183	691	2,746.3	1,103.93	639.3	96	37.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
Modified: 7/28/2014 10:13:52 PM

Gel Image

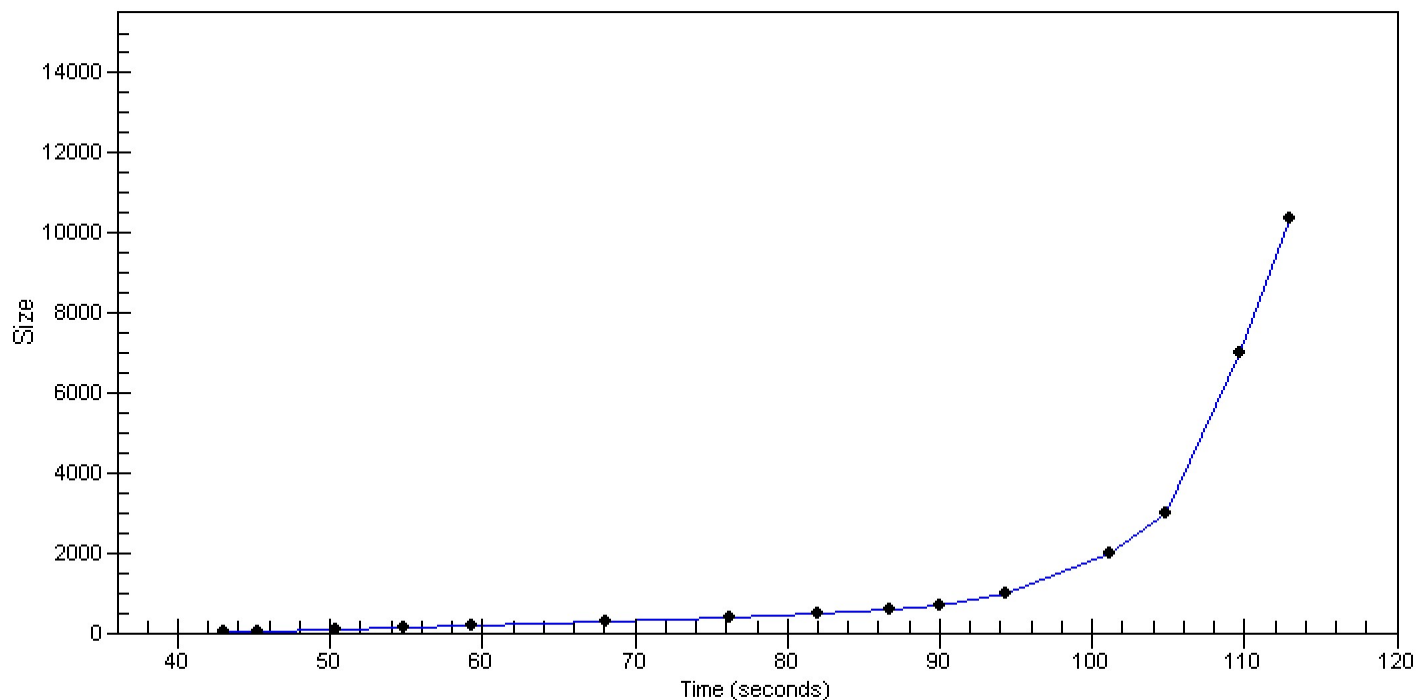


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
Modified: 7/28/2014 10:13:52 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-28\2014-07-28_007.xad

Created: 7/28/2014 8:31:18 PM
 Modified: 7/28/2014 10:13:52 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 9:12:35 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_007.xad)		Instrument	Run		7/28/2014 8:31:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/28/2014 8:31:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/28/2014 8:31:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/28/2014 8:31:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/28/2014 8:31:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/28/2014 8:31:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/28/2014 8:31:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1