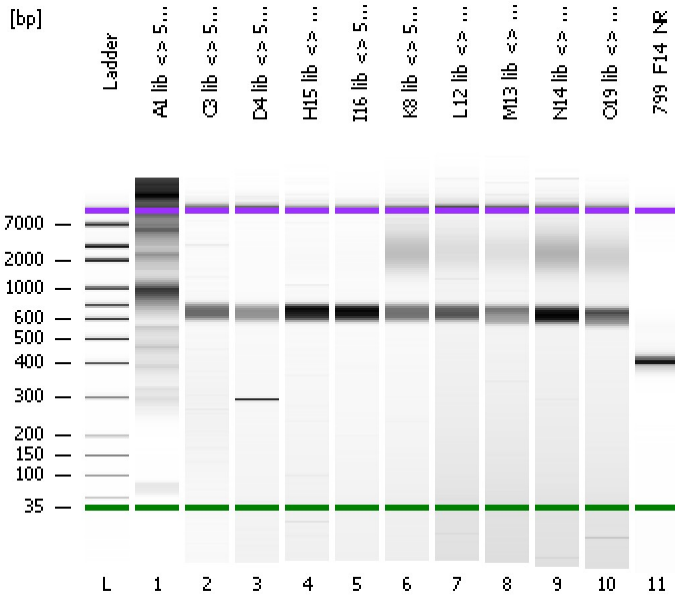


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
Modified: 10/1/2014 4:28:41 PM

Electrophoresis File Run Summary



Instrument Information:

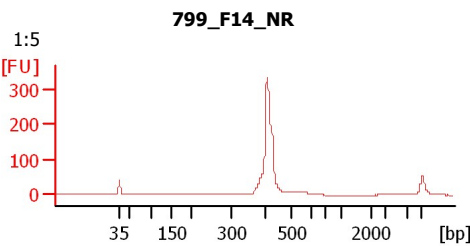
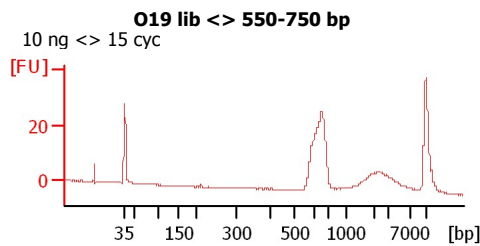
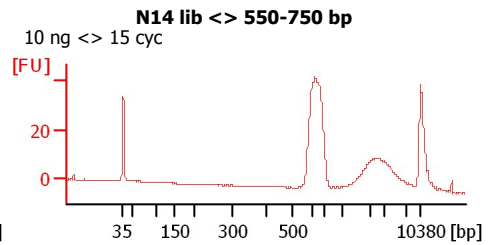
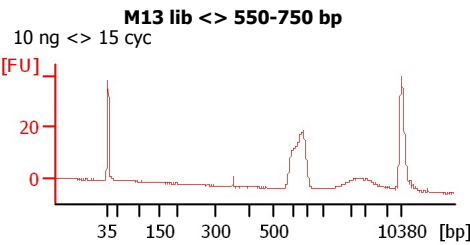
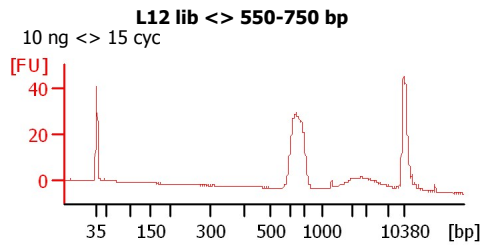
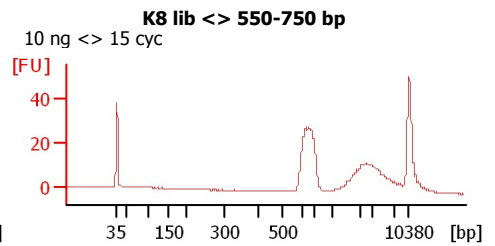
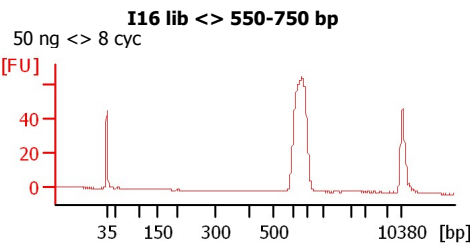
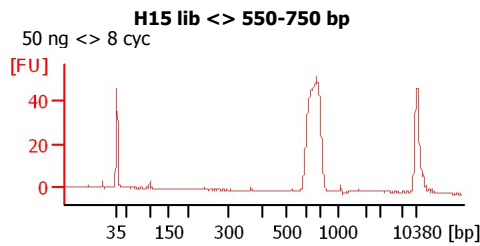
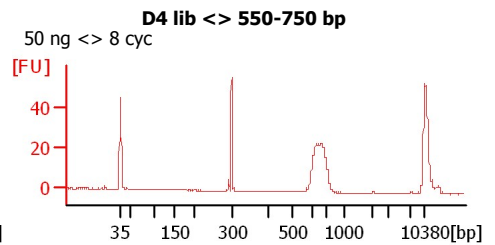
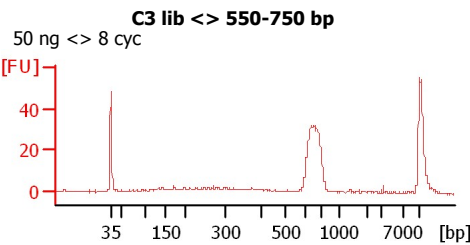
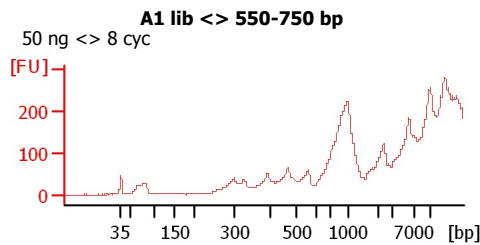
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
Modified: 10/1/2014 4:28:41 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
A1 lib <> 550-750 bp	50 ng <> 8 cyc	<input type="checkbox"/>	✓			
C3 lib <> 550-750 bp	50 ng <> 8 cyc	<input type="checkbox"/>	✓			
D4 lib <> 550-750 bp	50 ng <> 8 cyc	<input type="checkbox"/>	✓			
H15 lib <> 550-750 bp	50 ng <> 8 cyc	<input type="checkbox"/>	✓			
I16 lib <> 550-750 bp	50 ng <> 8 cyc	<input type="checkbox"/>	✓			
K8 lib <> 550-750 bp	10 ng <> 15 cyc	<input type="checkbox"/>	✓			
L12 lib <> 550-750 bp	10 ng <> 15 cyc	<input type="checkbox"/>	✓			
M13 lib <> 550-750 bp	10 ng <> 15 cyc	<input type="checkbox"/>	✓			
N14 lib <> 550-750 bp	10 ng <> 15 cyc	<input type="checkbox"/>	✓			
O19 lib <> 550-750 bp	10 ng <> 15 cyc	<input type="checkbox"/>	✓			
799_F14_NR	1:5	<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\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
Modified: 10/1/2014 4:28:41 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

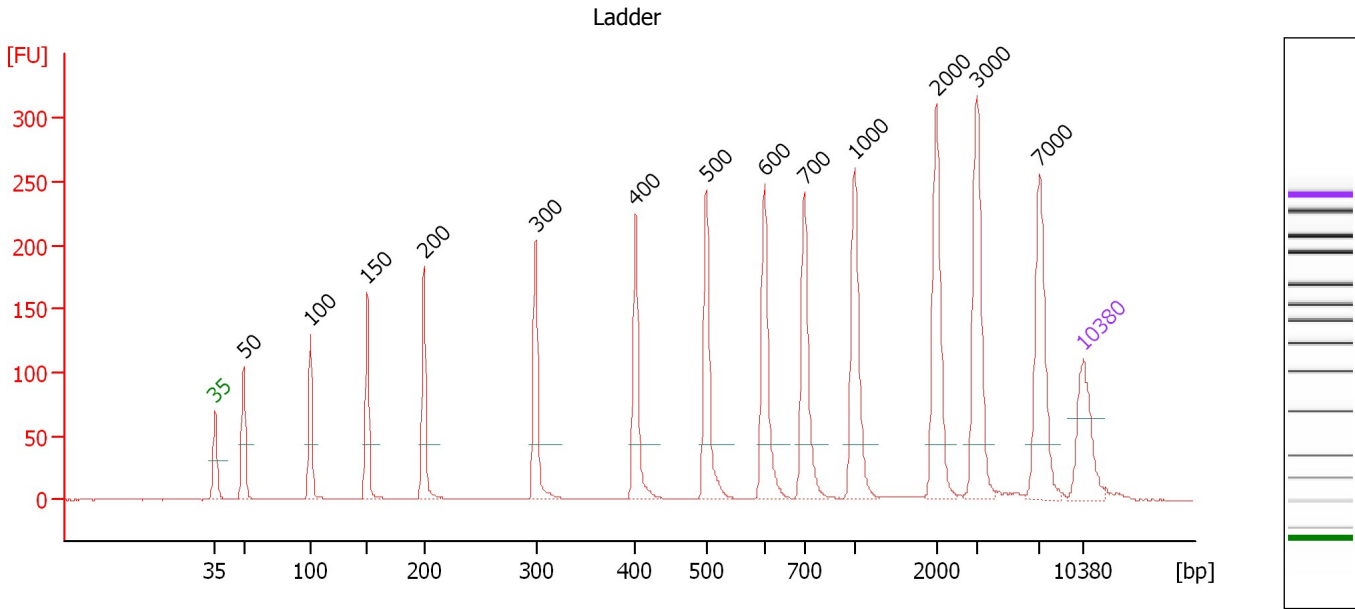
Ladder

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\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

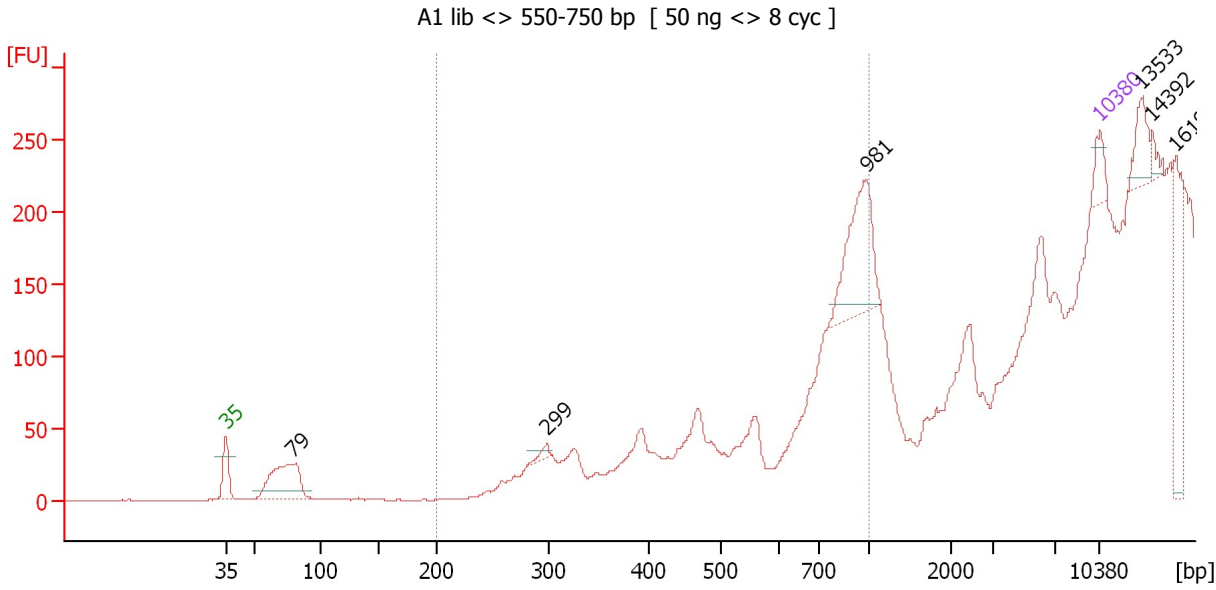
Peak table for Ladder

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\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : A1 lib <> 550-750 bp

Number of peaks found: 6 Corr. Area 1: 132.7
 Noise: 0.2

Peak table for sample 1 : A1 lib <> 550-750 bp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	79	552.83	10,621.3	
3	299	37.81	191.9	
4	981	508.55	785.7	
5	10,380	75.00	10.9	Upper Marker
6	13,533	0.00	0.0	
7	14,392	0.00	0.0	
8	16,194	0.00	0.0	

Region table for sample 1 : A1 lib <> 550-750 bp

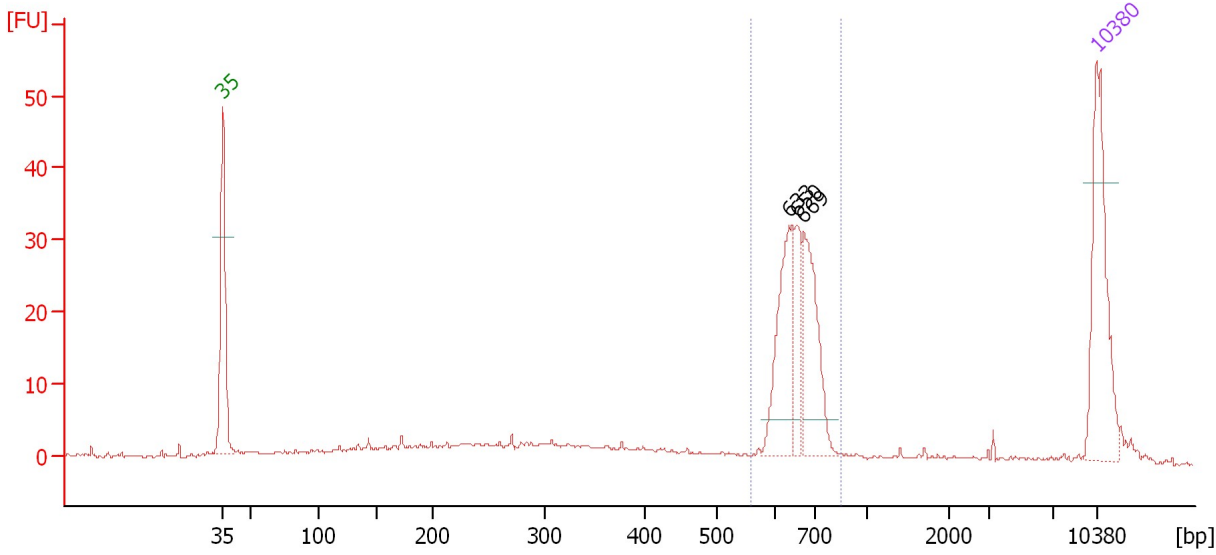
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	928	1,000	132.7	41	5.0	302.80	494.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...

C3 lib <> 550-750 bp [50 ng <> 8 cyc]



Overall Results for sample 2 : C3 lib <> 550-750 bp

Number of peaks found: 3 Corr. Area 1: 134.8
 Noise: 0.2

Peak table for sample 2 : C3 lib <> 550-750 bp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	633	73.48	175.8	
3	650	39.54	92.1	
4	669	74.87	169.6	
5	10,380	75.00	10.9	Upper Marker

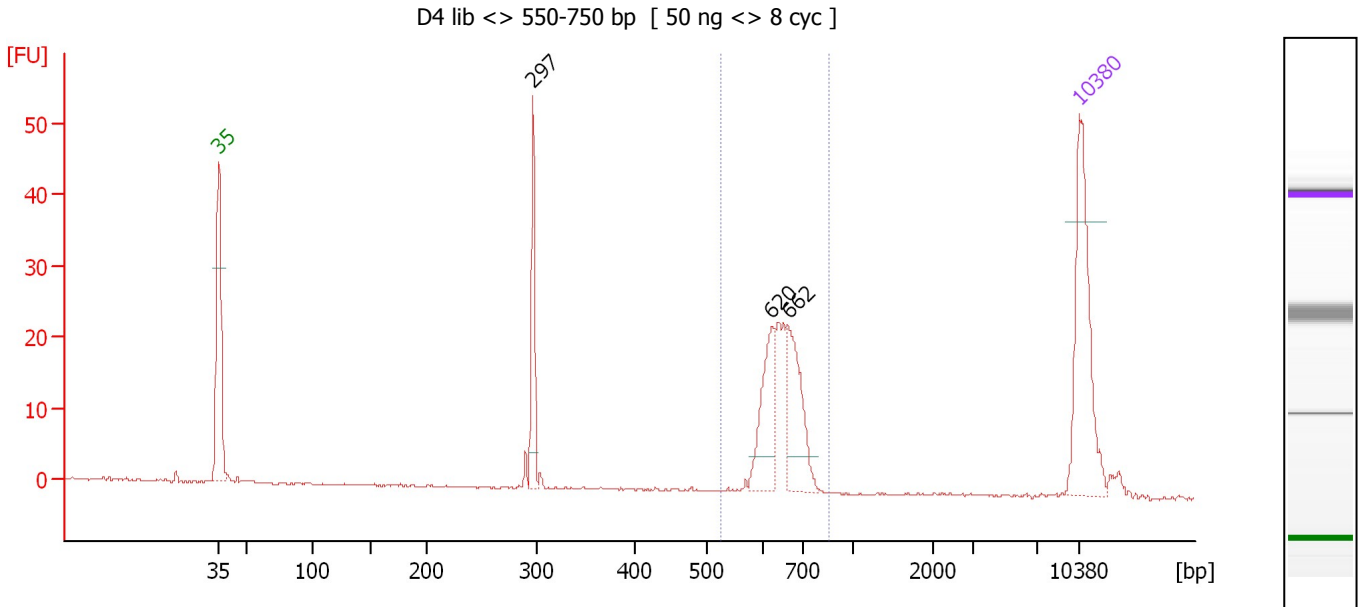
Region table for sample 2 : C3 lib <> 550-750 bp

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
556	657	852	134.8	53	6.5	201.90	467.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : D4 lib <> 550-750 bp

Number of peaks found: 3 Corr. Area 1: 98.4
 Noise: 0.1

Peak table for sample 3 : D4 lib <> 550-750 bp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	297	48.51	247.7	
3	620	50.77	124.1	
4	662	55.48	127.0	
5	10,380	75.00	10.9	Upper Marker

Region table for sample 3 : D4 lib <> 550-750 bp

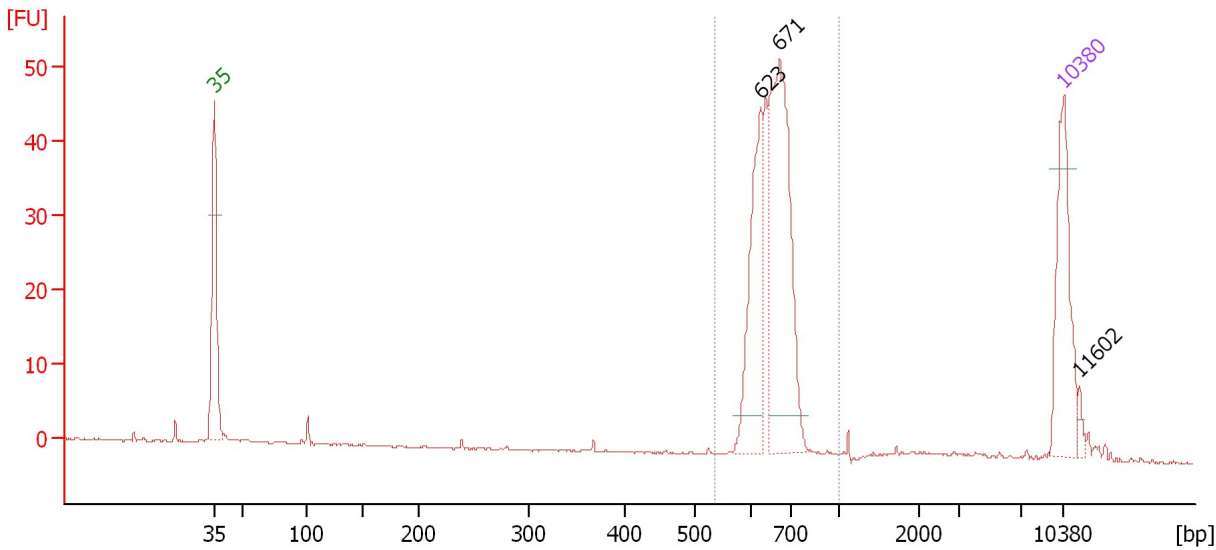
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
527	647	855	98.4	70	6.1	153.35	360.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...

H15 lib <> 550-750 bp [50 ng <> 8 cyc]



Overall Results for sample 4 : H15 lib <> 550-750 bp

Number of peaks found: 3 Corr. Area 1: 208.6
 Noise: 0.1

Peak table for sample 4 : H15 lib <> 550-750 bp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	623	113.18	275.1	
3	671	213.46	482.0	
4	10,380	75.00	10.9	Upper Marker
5	11,602	0.00	0.0	

Region table for sample 4 : H15 lib <> 550-750 bp

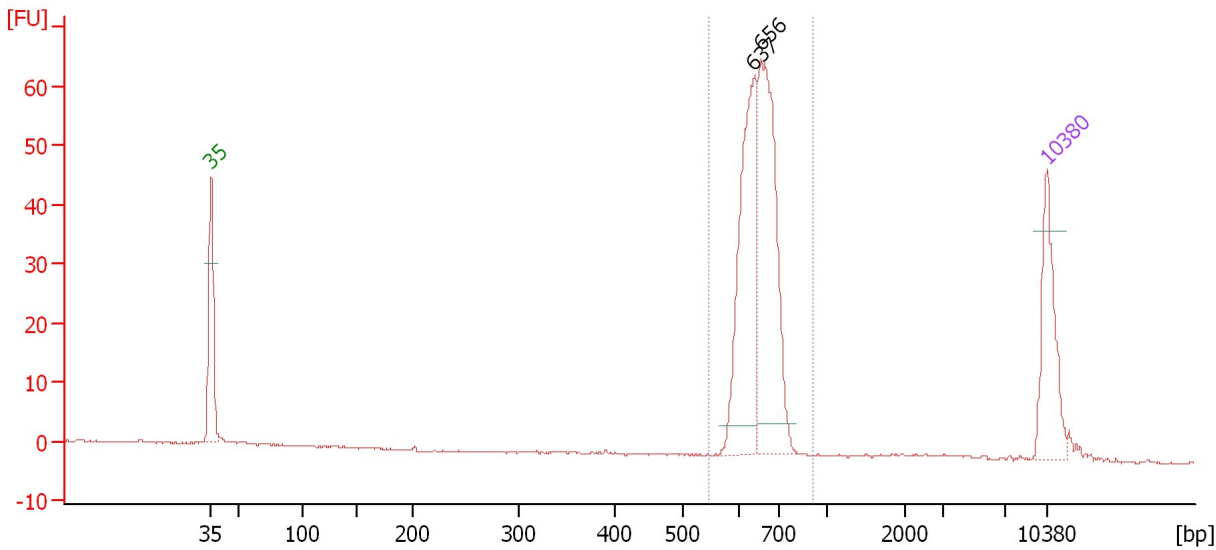
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
536	653	1,000	208.6	89	6.3	372.31	865.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...

I16 lib <> 550-750 bp [50 ng <> 8 cyc]



Overall Results for sample 5 : I16 lib <> 550-750 bp

Number of peaks found: 2 Corr. Area 1: 259.5
 Noise: 0.1

Peak table for sample 5 : I16 lib <> 550-750 bp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	637	210.75	501.4	
3	656	243.18	561.5	
4	10,380	75.00	10.9	Upper Marker

Region table for sample 5 : I16 lib <> 550-750 bp

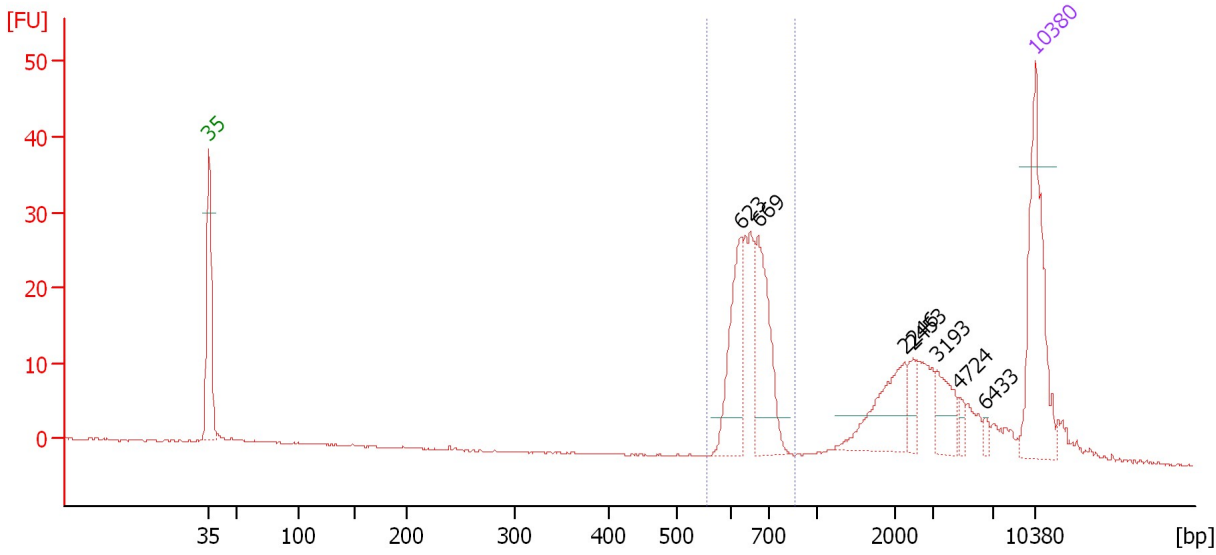
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
545	650	917	259.5	94	5.8	467.83	1,092.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...

K8 lib <> 550-750 bp [10 ng <> 15 cyc]



Overall Results for sample 6 : K8 lib <> 550-750 bp

Number of peaks found: 7 Corr. Area 1: 122.6
 Noise: 0.1

Peak table for sample 6 : K8 lib <> 550-750 bp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	623	64.26	156.3	
3	669	74.42	168.5	
4	2,246	43.83	29.6	
5	2,453	10.93	6.8	
6	3,193	21.60	10.3	
7	4,724	5.19	1.7	
8	6,433	3.35	0.8	
9	10,380	75.00	10.9	Upper Marker

Region table for sample 6 : K8 lib <> 550-750 bp

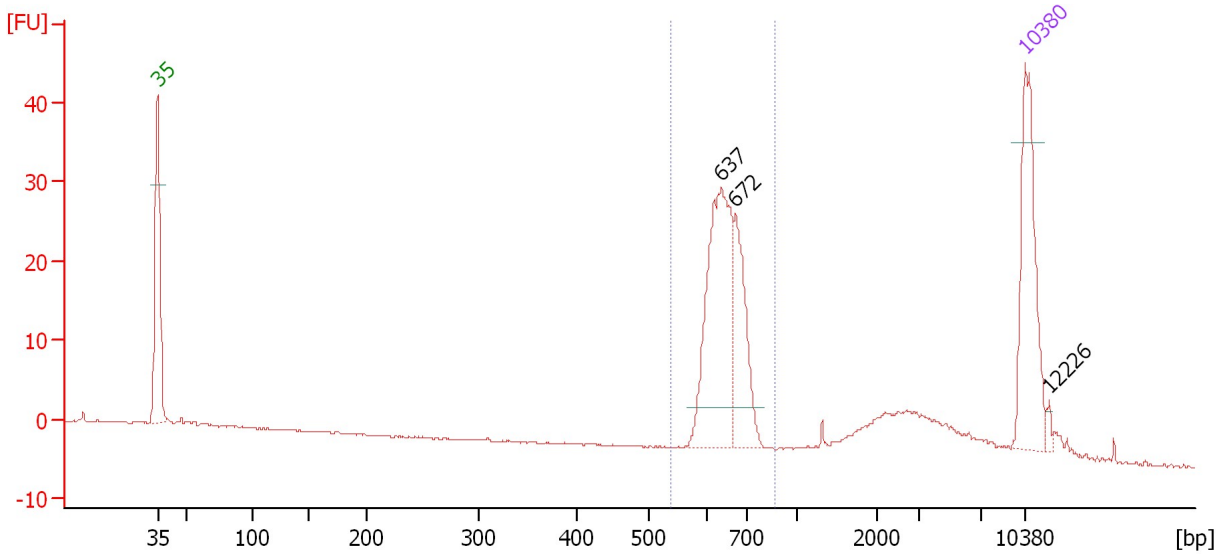
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
553	650	853	122.6	47	6.2	192.15	448.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...

L12 lib <> 550-750 bp [10 ng <> 15 cyc]



Overall Results for sample 7 : L12 lib <> 550-750 bp

Number of peaks found: 3 Corr. Area 1: 125.6
 Noise: 0.1

Peak table for sample 7 : L12 lib <> 550-750 bp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	637	144.57	344.0	
3	672	65.14	146.8	
4	10,380	75.00	10.9	Upper Marker
5	12,226	0.00	0.0	

Region table for sample 7 : L12 lib <> 550-750 bp

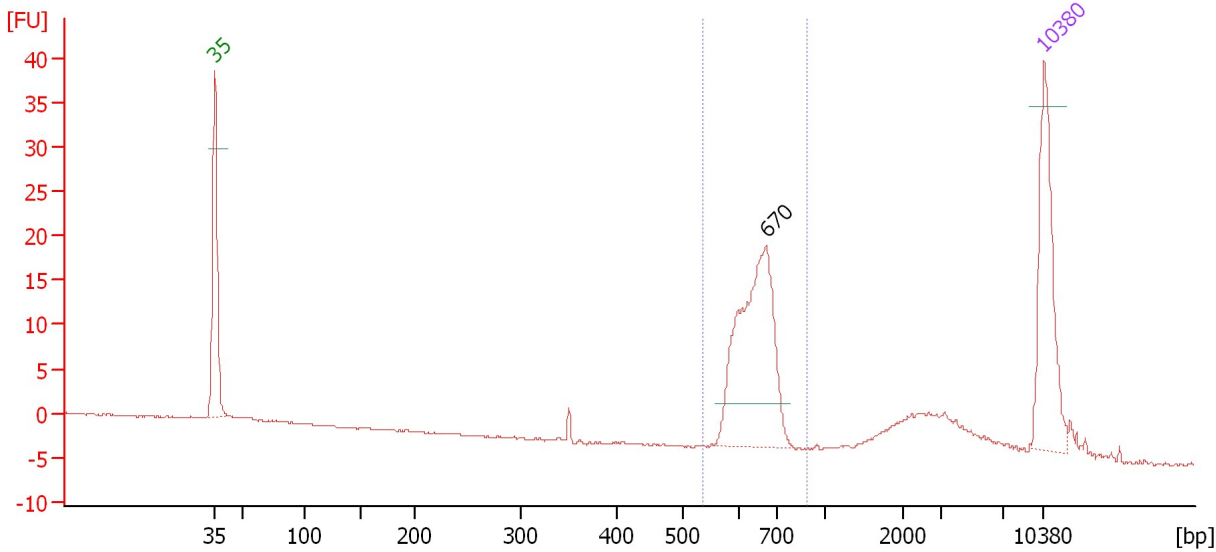
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
540	649	875	125.6	64	5.9	213.73	499.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...

M13 lib <> 550-750 bp [10 ng <> 15 cyc]



Overall Results for sample 8 : M13 lib <> 550-750 bp

Number of peaks found: 1 Corr. Area 1: 86.7
 Noise: 0.1

Peak table for sample 8 : M13 lib <> 550-750 bp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	670	168.50	381.0	
3	10,380	75.00	10.9	Upper Marker

Region table for sample 8 : M13 lib <> 550-750 bp

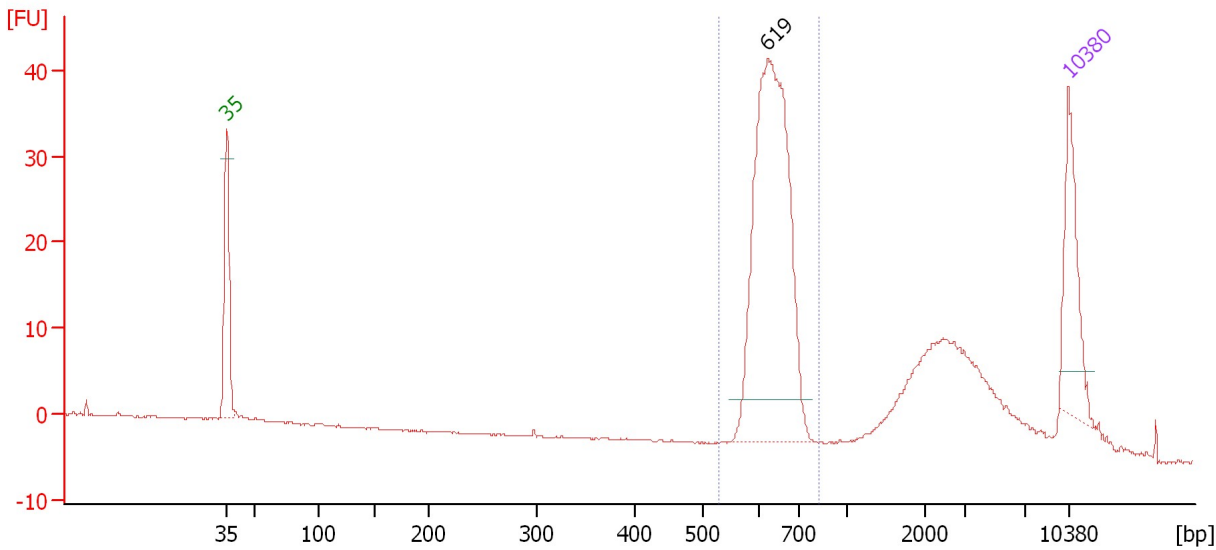
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
534	641	883	86.7	65	6.1	164.36	389.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...

N14 lib <> 550-750 bp [10 ng <> 15 cyc]



Overall Results for sample 9 : N14 lib <> 550-750 bp

Number of peaks found: 1 Corr. Area 1: 180.0
 Noise: 0.1

Peak table for sample 9 : N14 lib <> 550-750 bp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	619	420.65	1,030.1	
3	10,380	75.00	10.9	Upper Marker

Region table for sample 9 : N14 lib <> 550-750 bp

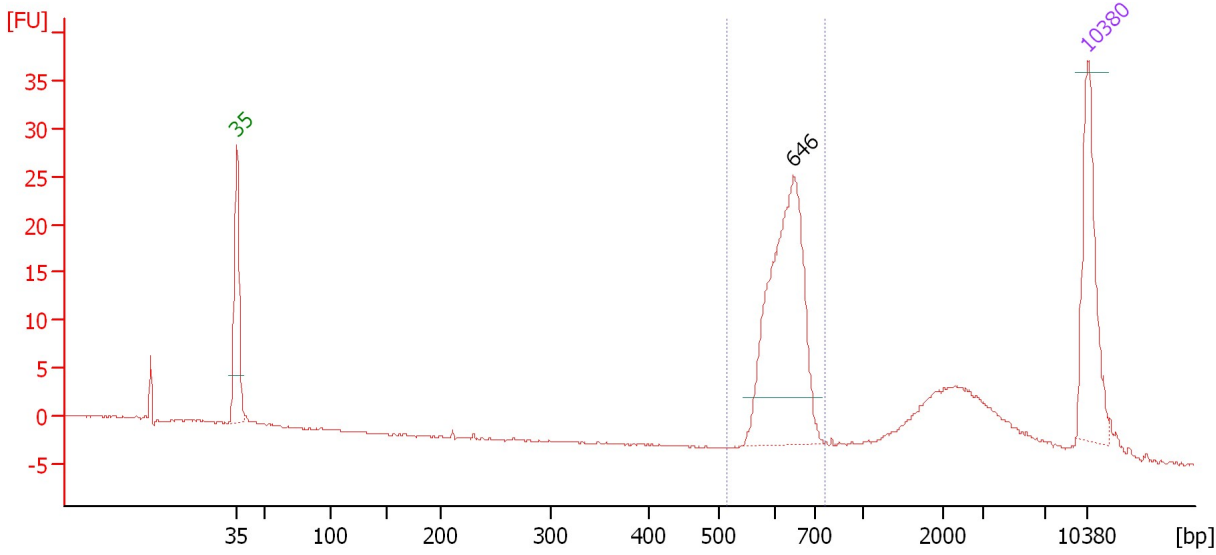
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
528	635	831	180.0	59	5.8	426.08	1,019.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...

O19 lib <> 550-750 bp [10 ng <> 15 cyc]



Overall Results for sample 10 : O19 lib <> 550-750 bp

Number of peaks found: 1 Corr. Area 1: 105.8
 Noise: 0.1

Peak table for sample 10 : O19 lib <> 550-750 bp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	646	234.86	551.1	
3	10,380	75.00	10.9	Upper Marker

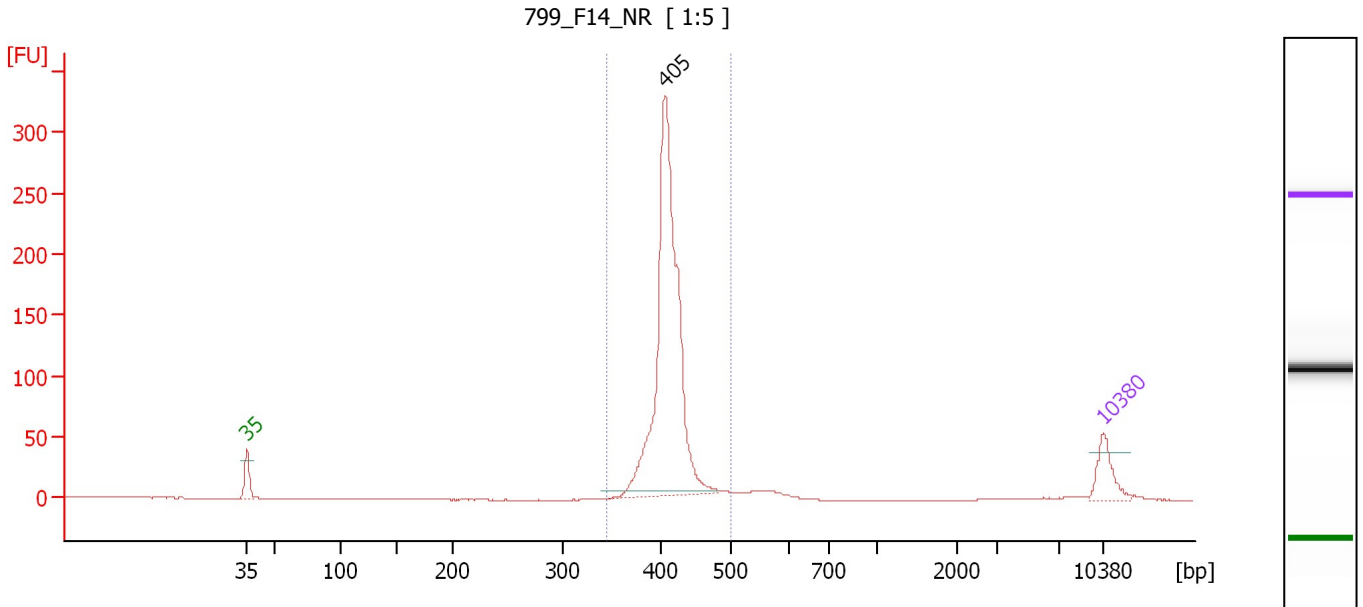
Region table for sample 10 : O19 lib <> 550-750 bp

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
516	627	768	105.8	60	5.7	237.47	575.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 799 F14 NR

Number of peaks found: 1 Corr. Area 1: 858.2
 Noise: 0.1

Peak table for sample 11 : 799 F14 NR

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	405	1,257.35	4,703.1	
3	10,380	75.00	10.9	Upper Marker

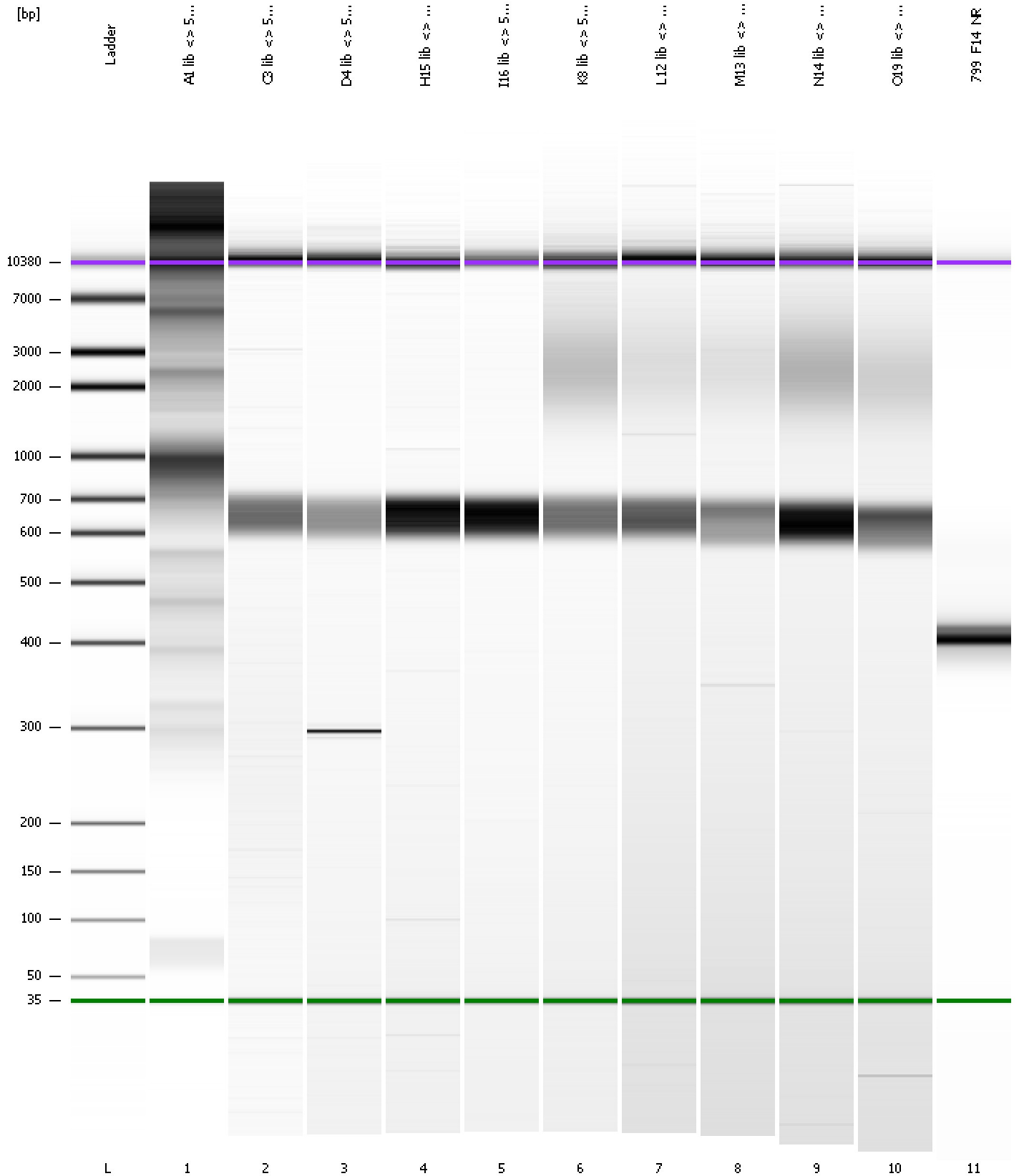
Region table for sample 11 : 799 F14 NR

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
344	411	499	858.2	93	4.8	1,318.39	4,862.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
Modified: 10/1/2014 4:28:41 PM

Gel Image

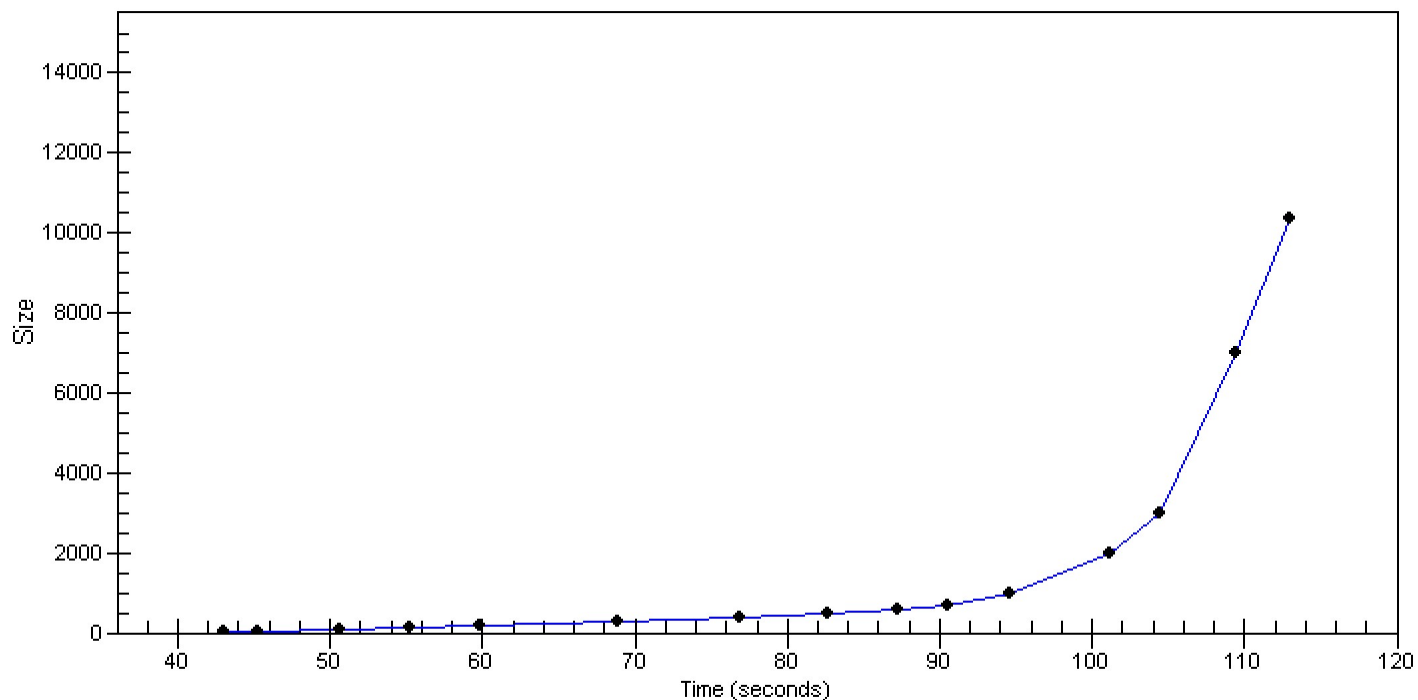


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
Modified: 10/1/2014 4:28:41 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad

Created: 10/1/2014 3:43:04 PM
 Modified: 10/1/2014 4:28:41 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		10/1/2014 4:24:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-10-01\2014-10-01_005.xad)		Instrument	Run		10/1/2014 3:43:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/1/2014 3:43:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/1/2014 3:43:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/1/2014 3:43:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/1/2014 3:43:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/1/2014 3:43:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/1/2014 3:43:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1