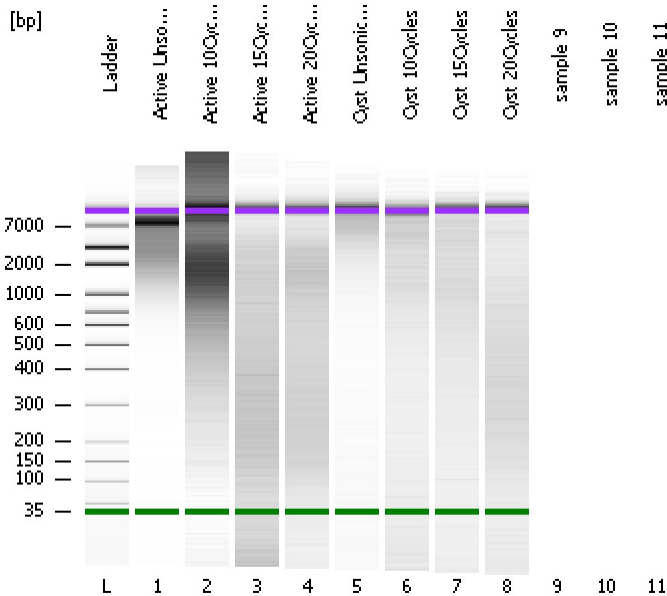


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
Modified: 3/10/2015 3:30:04 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

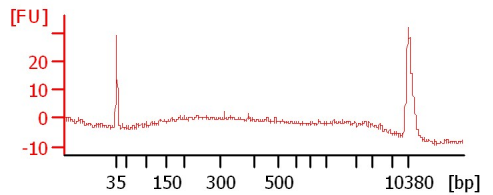
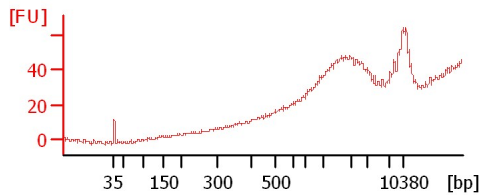
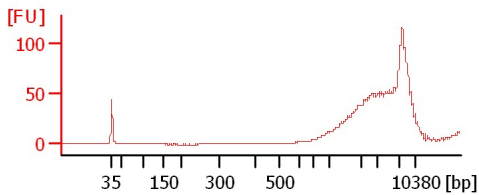
Chip Information:

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

Active Unsonicated

Active 10Cycles

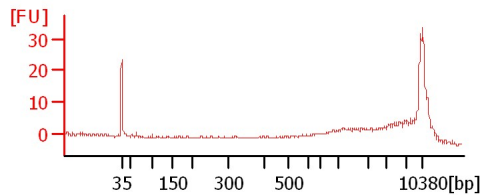
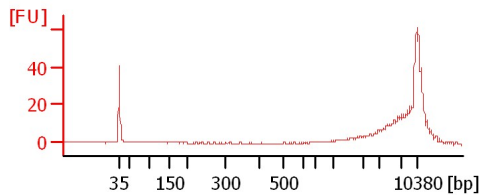
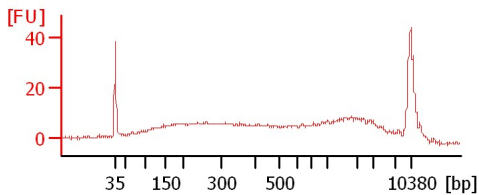
Active 15Cycles



Active 20Cycles

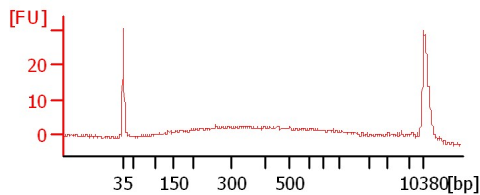
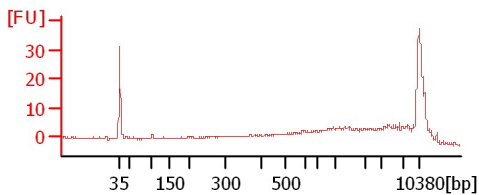
Cyst Unsonicated

Cyst 10Cycles



Cyst 15Cycles

Cyst 20Cycles



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Active Unsonicated		<input type="checkbox"/>	✓			
Active 10Cycles		<input type="checkbox"/>	✓			
Active 15Cycles		<input type="checkbox"/>	✓			
Active 20Cycles		<input type="checkbox"/>	✓			
Cyst Unsonicated		<input type="checkbox"/>	✓			
Cyst 10Cycles		<input type="checkbox"/>	✓			
Cyst 15Cycles		<input type="checkbox"/>	✓			
Cyst 20Cycles		<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>				
sample 10		<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:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 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

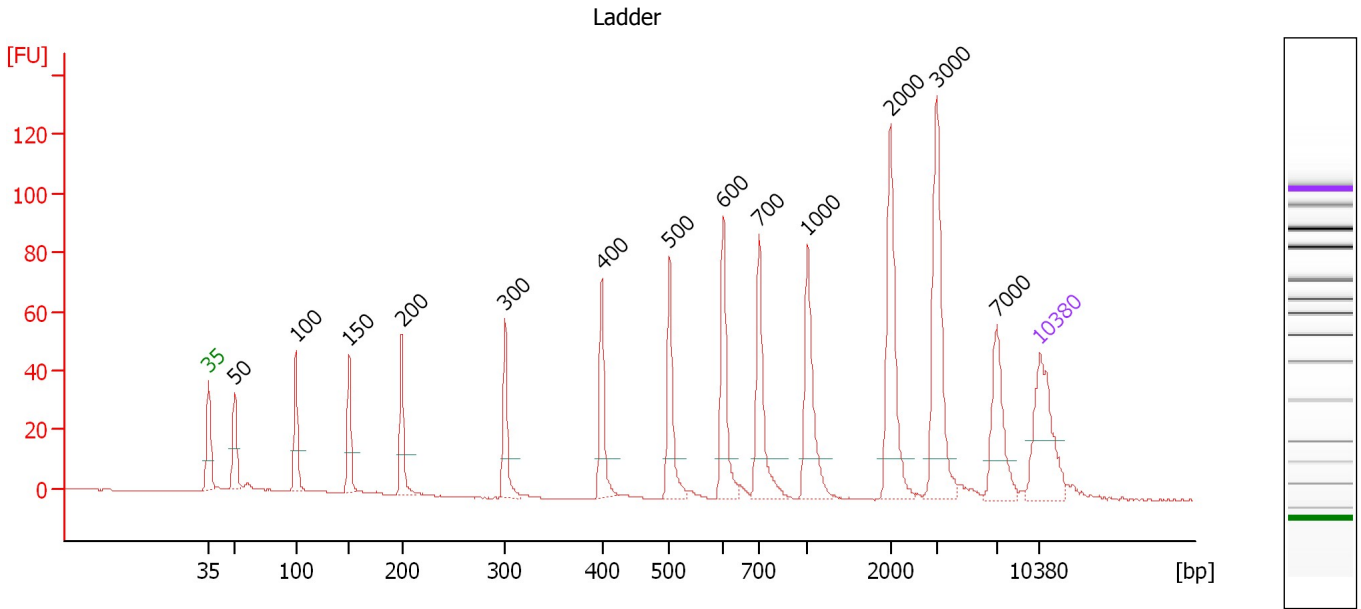
Ladder

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\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

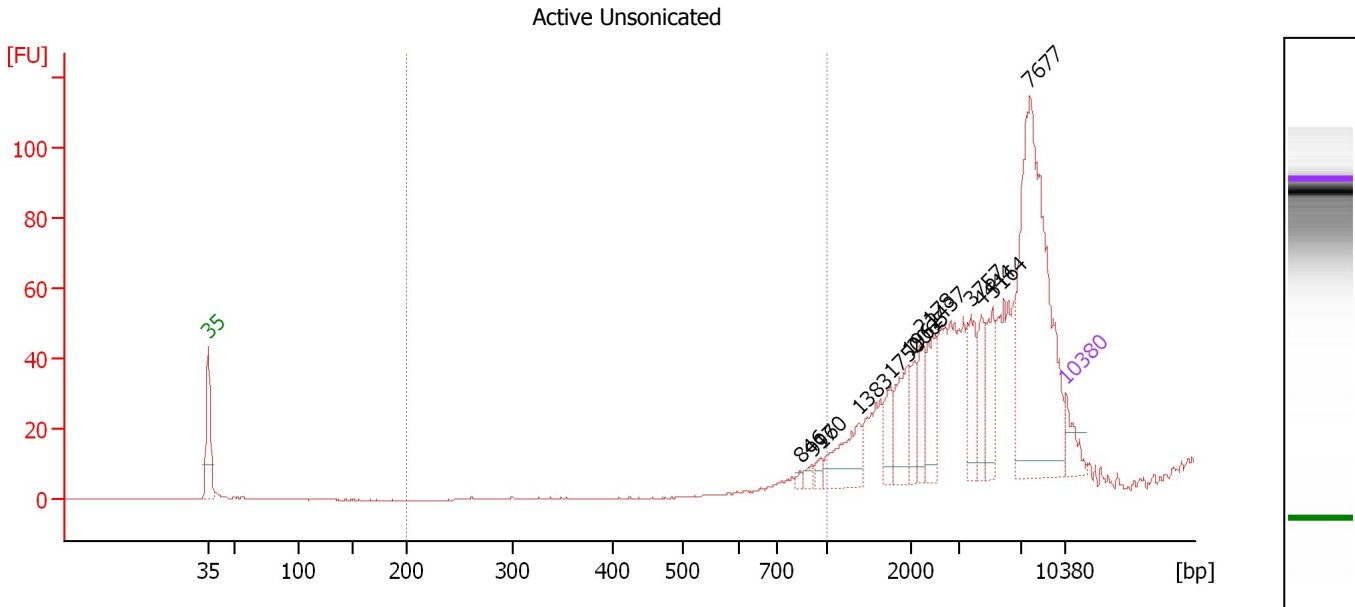
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.20
3	100	150.00	2,272.7	Ladder Peak	50.32
4	150	150.00	1,515.2	Ladder Peak	54.82
5	200	150.00	1,136.4	Ladder Peak	59.26
6	300	150.00	757.6	Ladder Peak	67.94
7	400	150.00	568.2	Ladder Peak	76.11
8	500	150.00	454.5	Ladder Peak	81.82
9	600	150.00	378.8	Ladder Peak	86.36
10	700	150.00	324.7	Ladder Peak	89.37
11	1,000	150.00	227.3	Ladder Peak	93.46
12	2,000	150.00	113.6	Ladder Peak	100.46
13	3,000	150.00	75.8	Ladder Peak	104.33
14	7,000	150.00	32.5	Ladder Peak	109.41
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Active Unsonicated

Number of peaks found: 13 Corr. Area 1: 5.6
 Noise: 0.2

Peak table for sample 1 : Active Unsonicated

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	846	14.35	25.7		91.35
3	916	26.66	44.1		92.31
4	970	30.76	48.0		93.05
5	1,383	181.11	198.4		96.14
6	1,750	86.09	74.5		98.71
7	1,961	155.14	119.8		100.19
8	2,065	82.79	60.7		100.72
9	2,178	105.45	73.4		101.15
10	2,437	136.93	85.1		102.15
11	3,757	140.54	56.7		105.29
12	4,444	111.88	38.1		106.16
13	5,164	151.93	44.6		107.08
14	7,677	1,008.66	199.1		110.13
15	10,380	75.00	10.9	Upper Marker	113.00

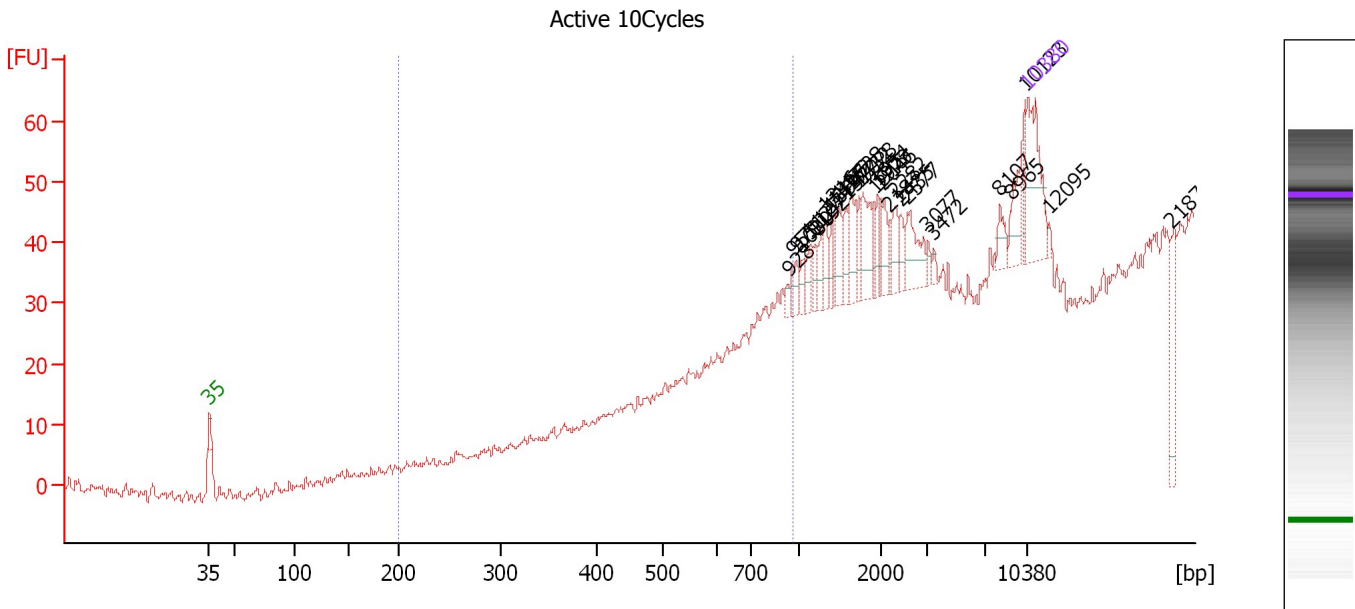
Region table for sample 1 : Active Unsonicated

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	942	1,000	5.6	40.5	1	4.1	25.17	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : Active 10Cycles

Width Threshold [s] : 0.2

Overall Results for sample 2 : Active 10Cycles

Number of peaks found: 30 Corr. Area 1: 7.3
 Noise: 0.9

Peak table for sample 2 : Active 10Cycles

Pea k	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	928	7.81	12.8		92.48
3	955	7.27	11.5		92.84
4	979	12.32	19.1		93.16
5	1,030	12.88	18.9		93.66
6	1,127	11.86	15.9		94.35
7	1,192	11.36	14.4		94.80
8	1,271	13.46	16.1		95.35
9	1,316	21.75	25.0		95.67
10	1,394	10.34	11.2		96.22
11	1,427	9.32	9.9		96.45
12	1,472	24.66	25.4		96.77
13	1,570	18.66	18.0		97.45
14	1,628	33.98	31.6		97.86
15	1,732	11.67	10.2		98.59
16	1,778	39.58	33.7		98.91
17	1,915	8.80	7.0		99.87
18	1,954	10.76	8.3		100.14
19	1,973	10.81	8.3		100.28
20	2,046	18.99	14.1		100.64
21	2,187	7.94	5.5		101.19
22	2,282	20.72	13.8		101.55

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad


Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : Active 10Cycles

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
23	2,435	15.39	9.6		102.15
24	2,577	38.99	22.9		102.69
25	3,077	7.02	3.5		104.43
26	3,472	4.64	2.0		104.93
27	8,107	15.43	2.9		110.58
28	8,965	33.94	5.7		111.50
29	10,123	14.38	2.2		112.73
30	10,380	75.00	10.9	Upper Marker	113.00
31	12,095	0.00	0.0		114.82
32	21,873	0.00	0.0		125.22

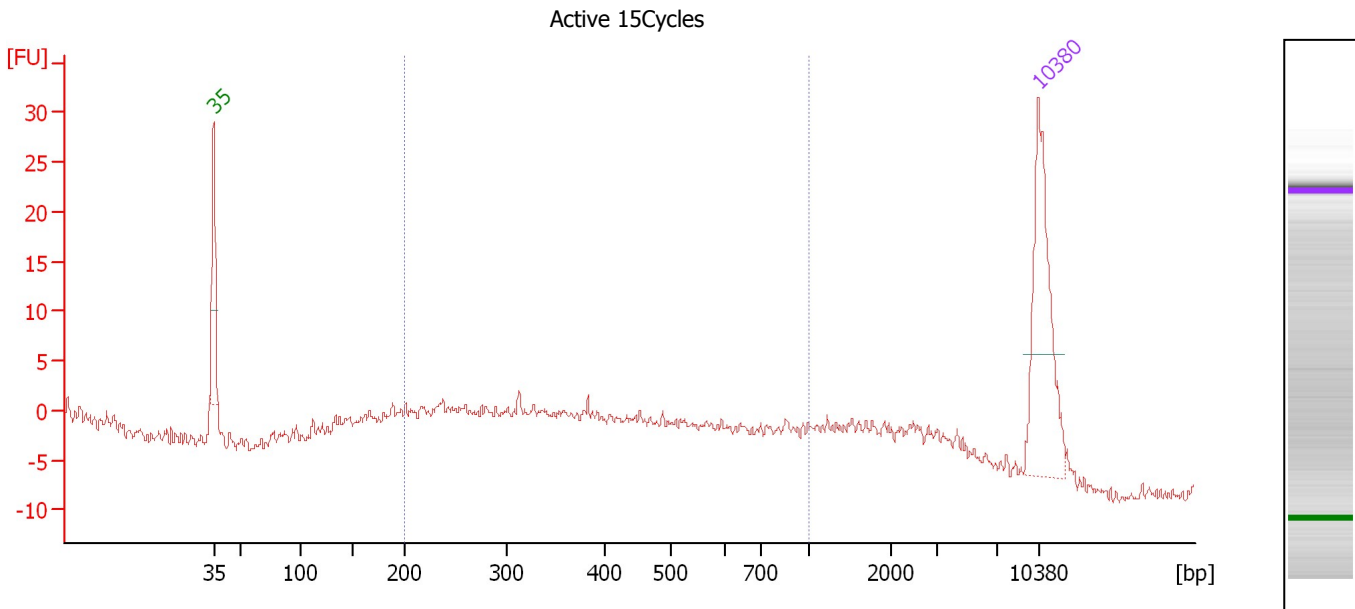
Region table for sample 2 : Active 10Cycles

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	884	956	7.3	36.0	4	6.3	20.99	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Active 15Cycles

Number of peaks found: 0 Corr. Area 1: 152.5
 Noise: 0.7

Peak table for sample 3 : Active 15Cycles

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

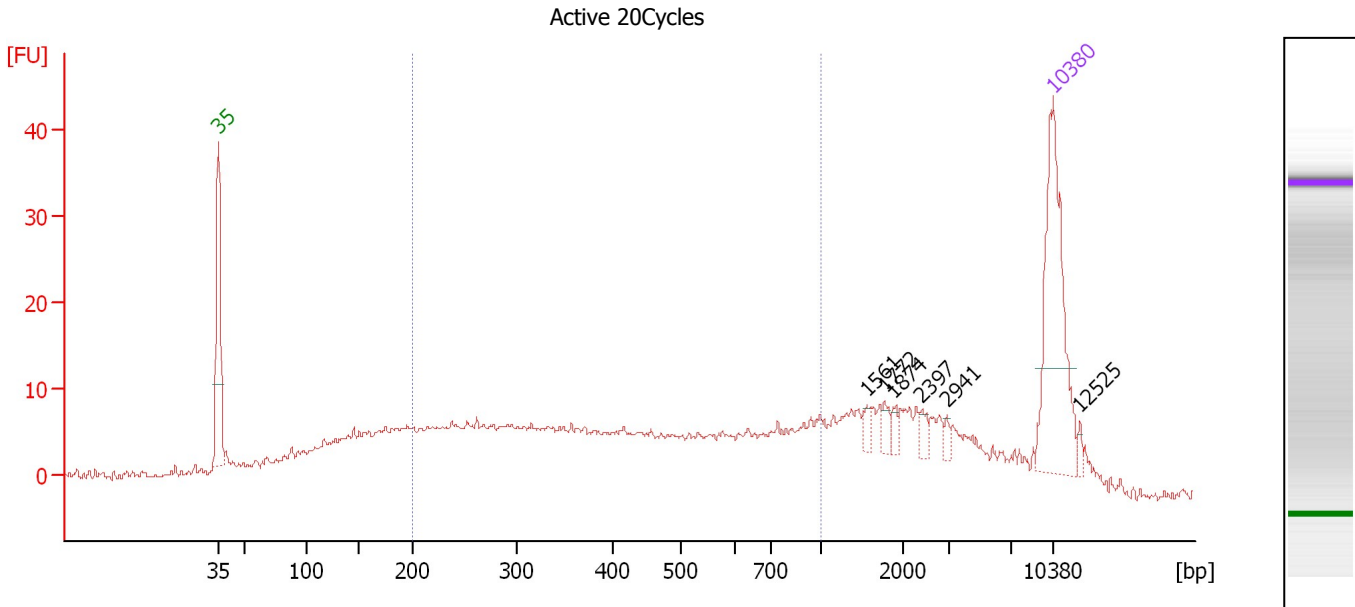
Region table for sample 3 : Active 15Cycles

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	459	1,000	152.5	1,303.2	64	42.7	310.60	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Active 20Cycles

Number of peaks found: 6 Corr. Area 1: 286.4
 Noise: 0.4

Peak table for sample 4 : Active 20Cycles

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	1,561	4.25	4.1		97.39
3	1,772	5.26	4.5		98.87
4	1,874	3.68	3.0		99.58
5	2,397	4.58	2.9		102.00
6	2,941	2.99	1.5		104.10
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,525	0.00	0.0		115.28

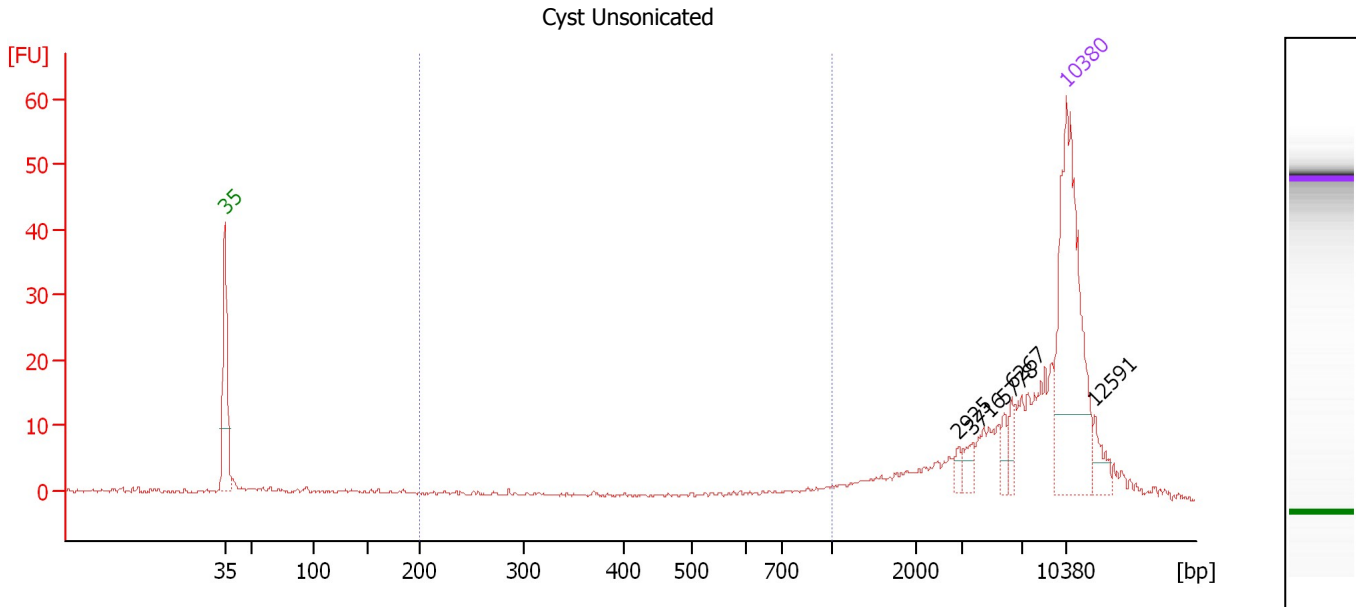
Region table for sample 4 : Active 20Cycles

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	458	1,000	286.4	2,038.9	53	44.1	478.00	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Cyst Unsonicated

Number of peaks found: 5 Corr. Area 1: 7.7
 Noise: 0.2

Peak table for sample 5 : Cyst Unsonicated

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	2,925	3.66	1.9		104.04
3	3,716	4.55	1.9		105.24
4	5,778	4.63	1.2		107.85
5	6,267	5.83	1.4		108.48
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,591	0.00	0.0		115.35

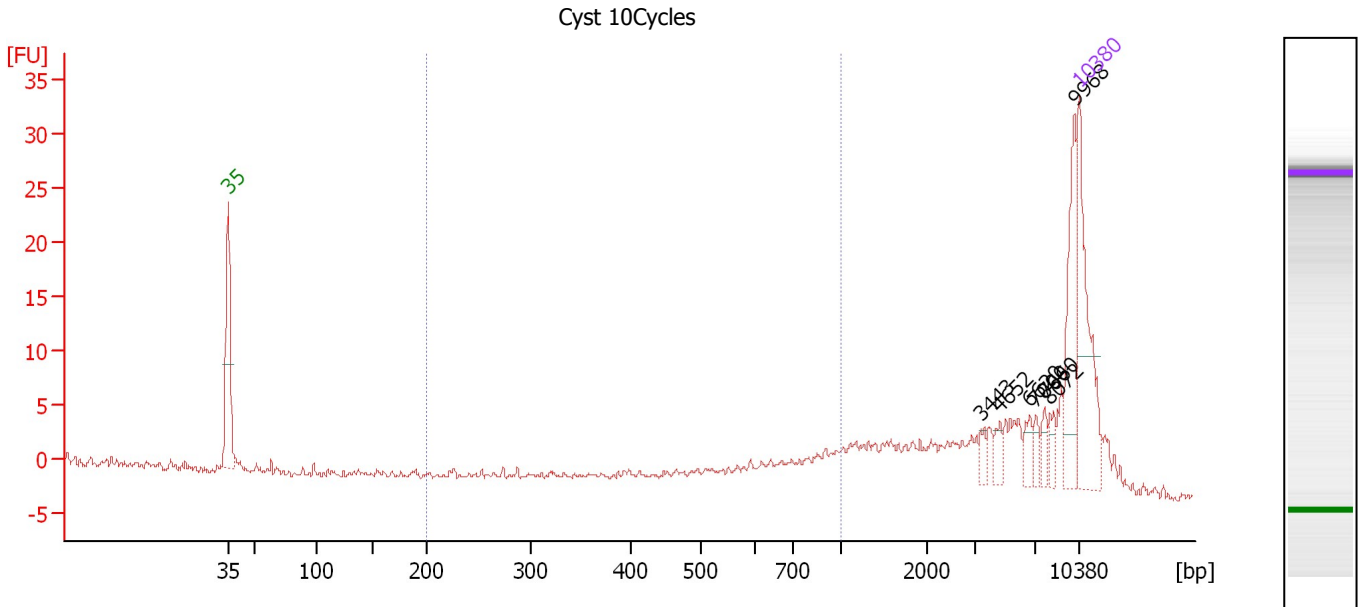
Region table for sample 5 : Cyst Unsonicated

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	683	1,000	7.7	22.4	5	34.3	7.38	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Cyst 10Cycles

Number of peaks found: 7 Corr. Area 1: 22.6
 Noise: 0.3

Peak table for sample 6 : Cyst 10Cycles

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	3,443	6.93	3.1		104.89
3	4,652	8.52	2.8		106.43
4	6,620	10.51	2.4		108.92
5	7,000	7.53	1.6		109.41
6	7,660	8.47	1.7		110.11
7	8,072	8.02	1.5		110.55
8	9,968	53.10	8.1		112.56
9	10,380	75.00	10.9	Upper Marker	113.00

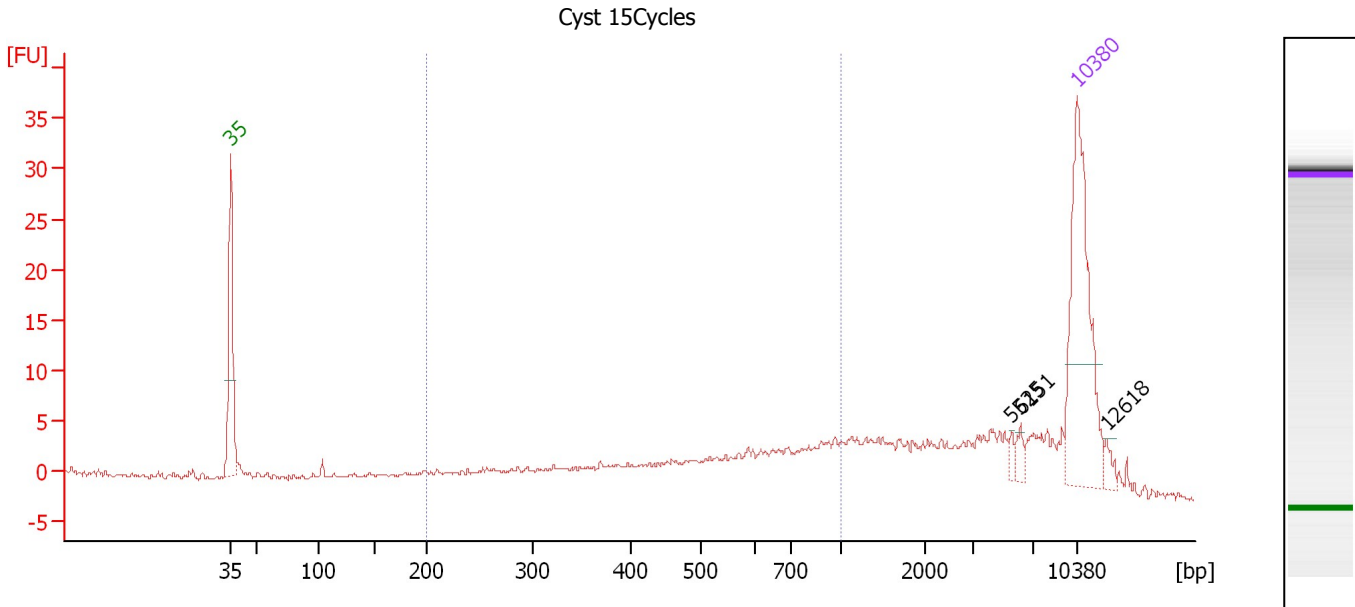
Region table for sample 6 : Cyst 10Cycles

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	713	1,000	22.6	150.6	17	23.4	65.31	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Cyst 15Cycles

Number of peaks found: 3 Corr. Area 1: 100.1
 Noise: 0.2

Peak table for sample 7 : Cyst 15Cycles

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	5,525	3.15	0.9		107.53
3	6,151	4.23	1.0		108.33
4	10,380	75.00	10.9	Upper Marker	113.00
5	12,618	0.00	0.0		115.38

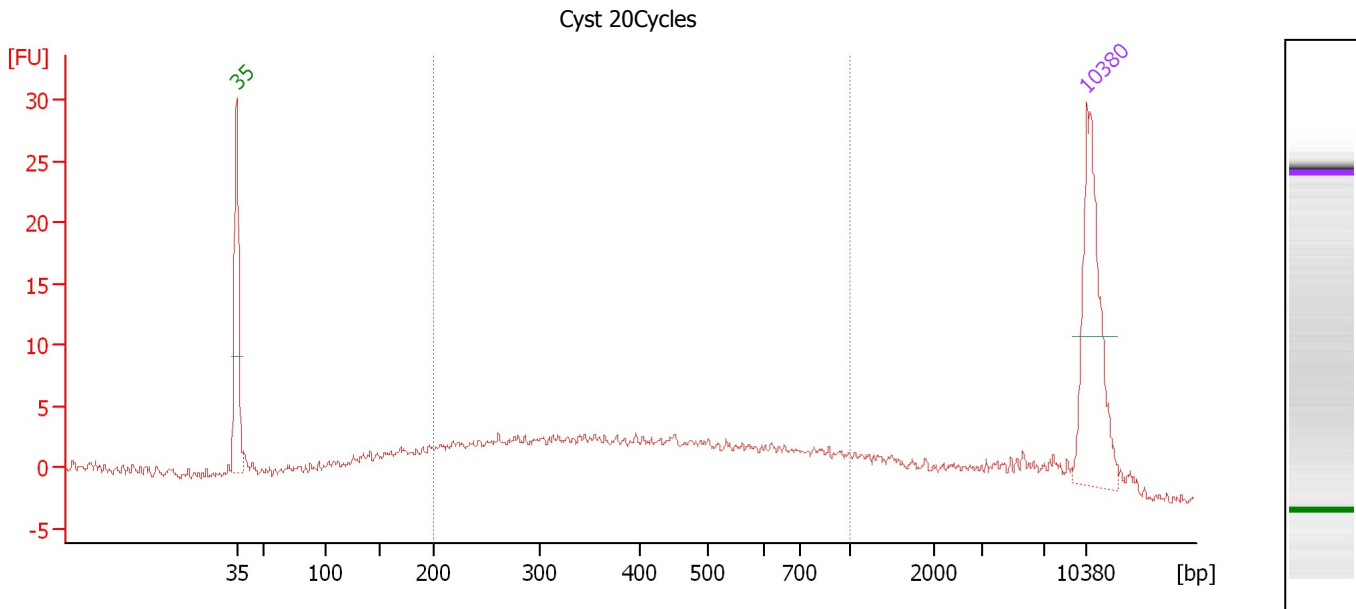
Region table for sample 7 : Cyst 15Cycles

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	548	1,000	100.1	620.0	47	38.0	176.97	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Cyst 20Cycles

Number of peaks found: 0 Corr. Area 1: 147.7
 Noise: 0.3

Peak table for sample 8 : Cyst 20Cycles

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

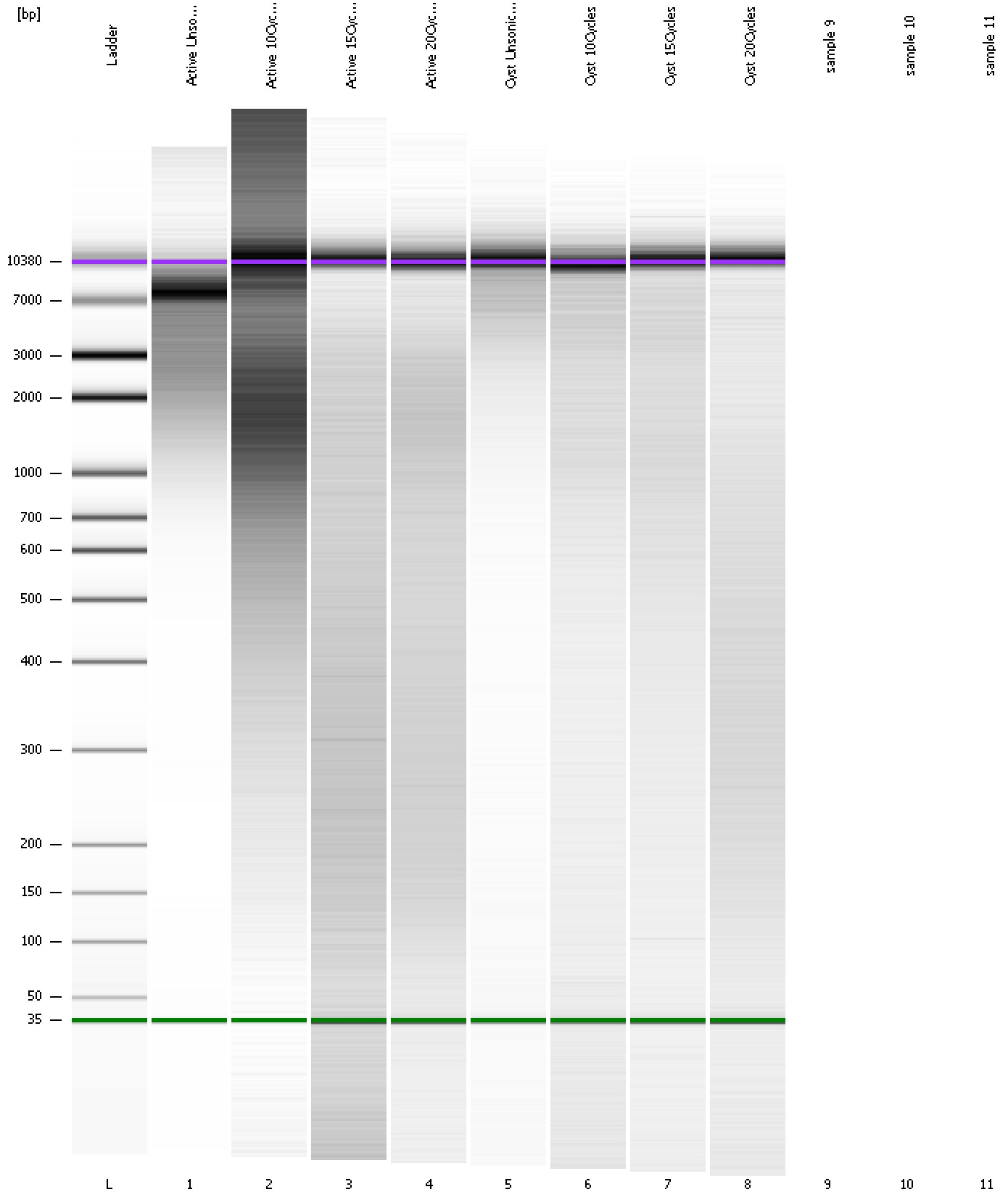
Region table for sample 8 : Cyst 20Cycles

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	456	1,000	147.7	1,517.8	65	41.5	363.72	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
Modified: 3/10/2015 3:30:04 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad

Created: 3/10/2015 2:55:34 PM
 Modified: 3/10/2015 3:30:04 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		3/10/2015 5:27:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-03-10\2015-03-10_004.xad)		Instrument	Run		3/10/2015 4:55:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/10/2015 4:55:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/10/2015 4:55:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/10/2015 4:55:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/10/2015 4:55:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/10/2015 4:55:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/10/2015 4:55:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1