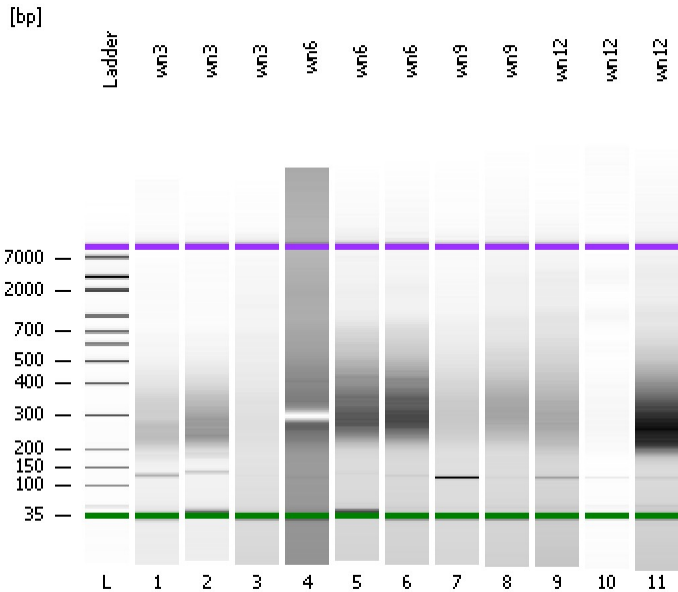


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
Modified: 4/27/2016 3:02:28 PM

Electrophoresis File Run Summary



Instrument Information:

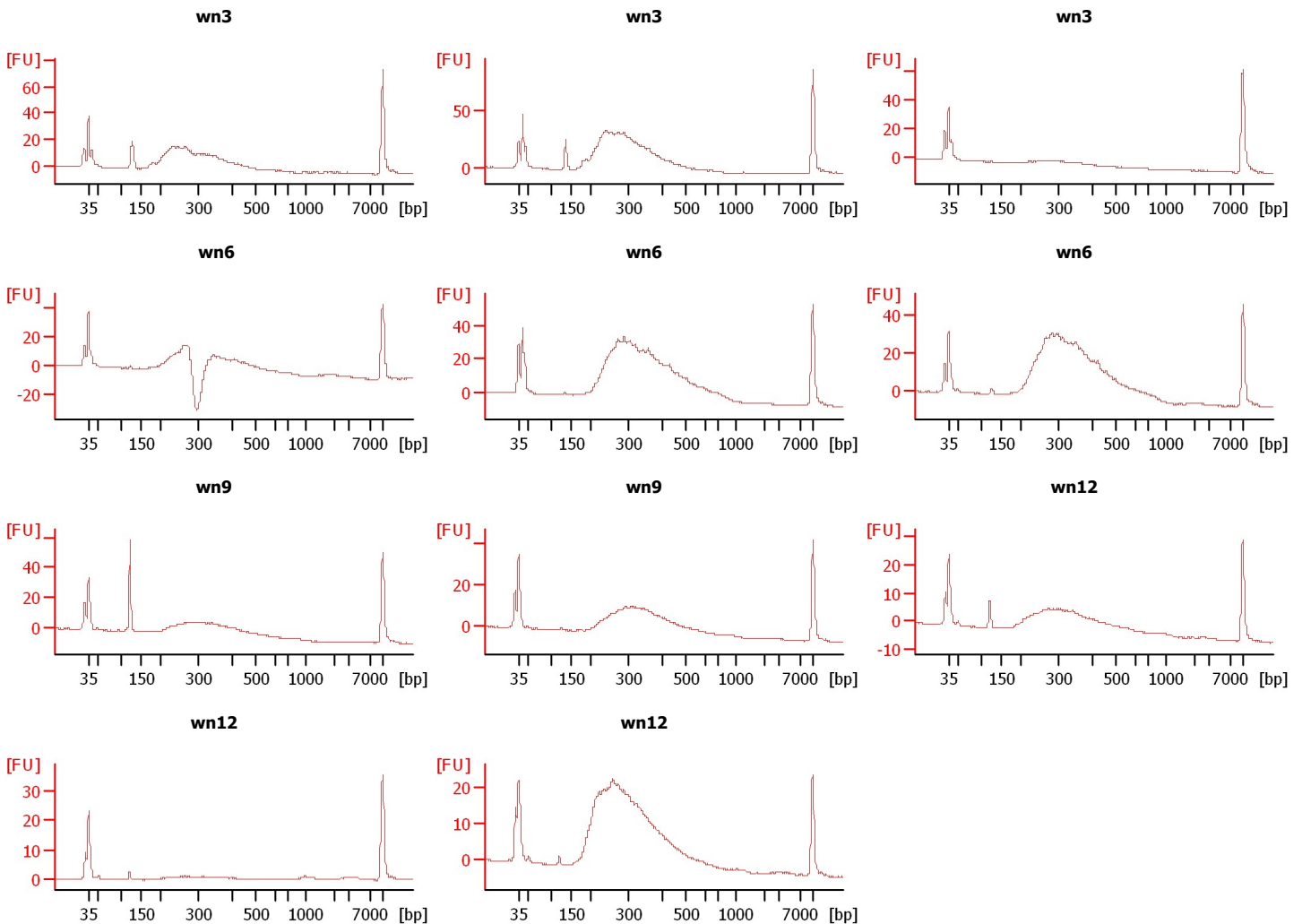
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
wn3		<input type="checkbox"/>	✓			
wn3		<input type="checkbox"/>	✓			
wn3		<input type="checkbox"/>	✓			
wn6		<input type="checkbox"/>	✓			
wn6		<input type="checkbox"/>	✓			
wn6		<input type="checkbox"/>	✓			
wn9		<input type="checkbox"/>	✓			
wn9		<input type="checkbox"/>	✓			
wn12		<input type="checkbox"/>	✓			
wn12		<input type="checkbox"/>	✓			
wn12		<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\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
Modified: 4/27/2016 3:02:28 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

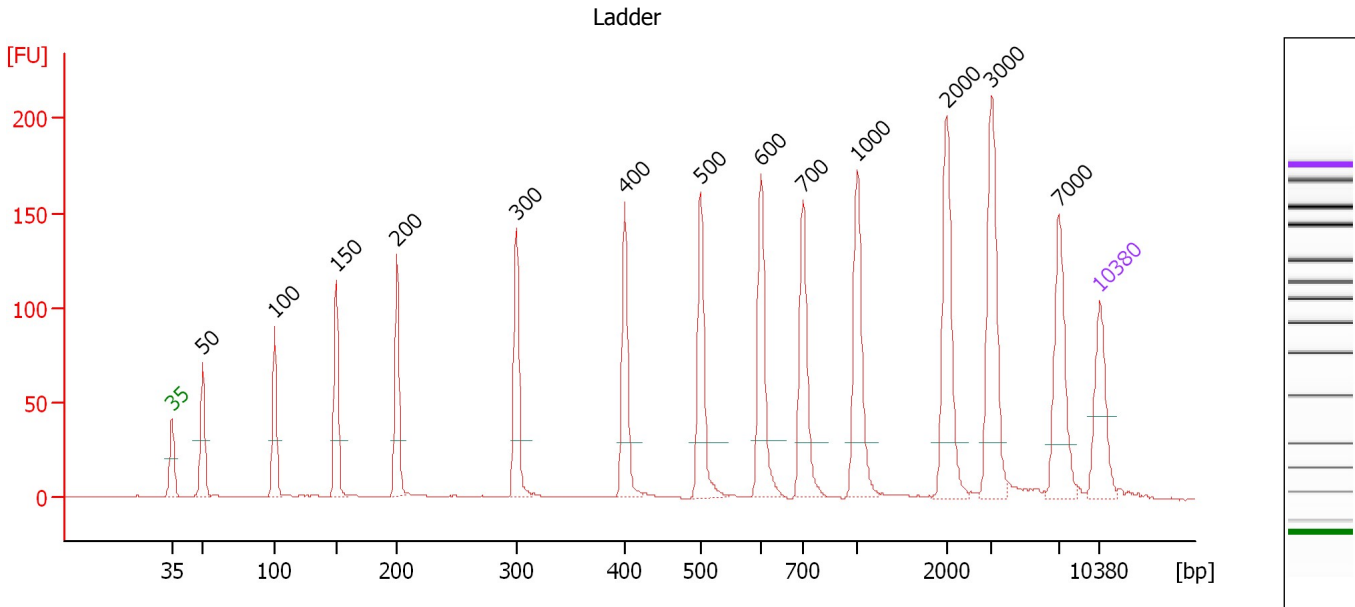
Ladder

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\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

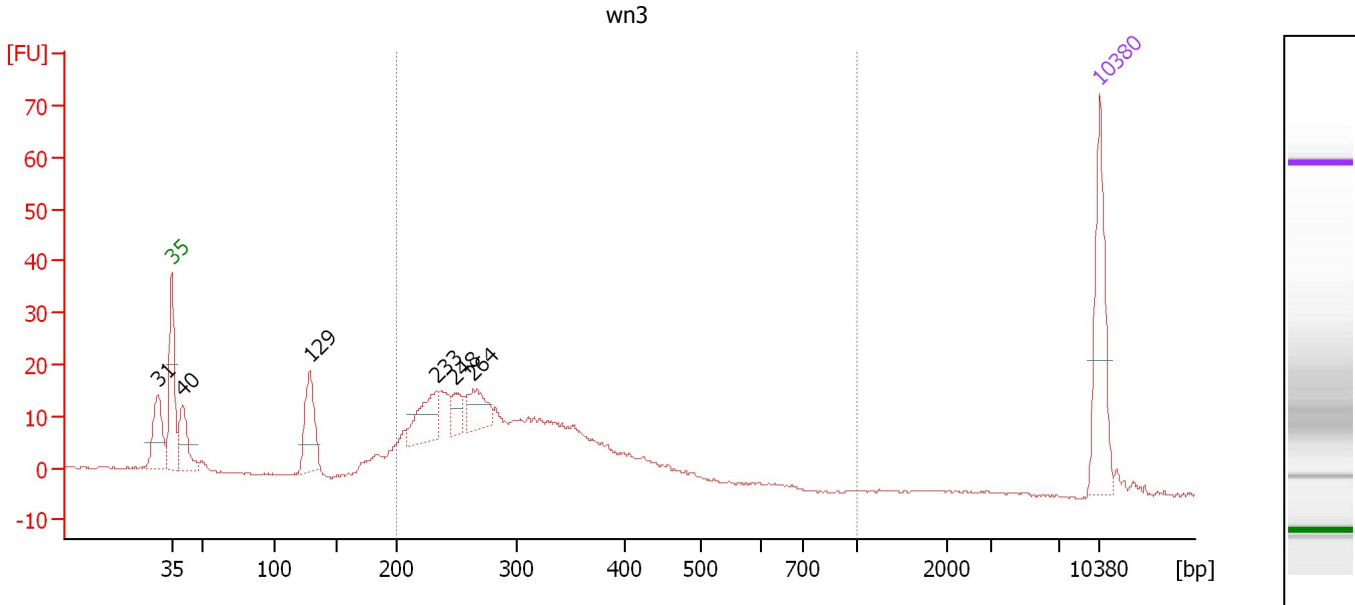
Peak table for Ladder

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	45.33
3	100	150.00	2,272.7	Ladder Peak	50.77
4	150	150.00	1,515.2	Ladder Peak	55.42
5	200	150.00	1,136.4	Ladder Peak	59.98
6	300	150.00	757.6	Ladder Peak	69.00
7	400	150.00	568.2	Ladder Peak	77.14
8	500	150.00	454.5	Ladder Peak	82.86
9	600	150.00	378.8	Ladder Peak	87.42
10	700	150.00	324.7	Ladder Peak	90.58
11	1,000	150.00	227.3	Ladder Peak	94.72
12	2,000	150.00	113.6	Ladder Peak	101.47
13	3,000	150.00	75.8	Ladder Peak	104.81
14	7,000	150.00	32.5	Ladder Peak	109.88
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : wn3

Number of peaks found: 6 Corr. Area 1: 319.5
 Noise: 0.3

Peak table for sample 1 : wn3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.92
2	35	125.00	5,411.3	Lower Marker	43.00
3	40	59.79	2,256.3		43.80
4	129	77.05	908.2		53.42
5	233	60.09	390.8		62.95
6	248	23.18	141.5		64.31
7	264	41.76	240.0		65.72
8	10,380	75.00	10.9	Upper Marker	113.00

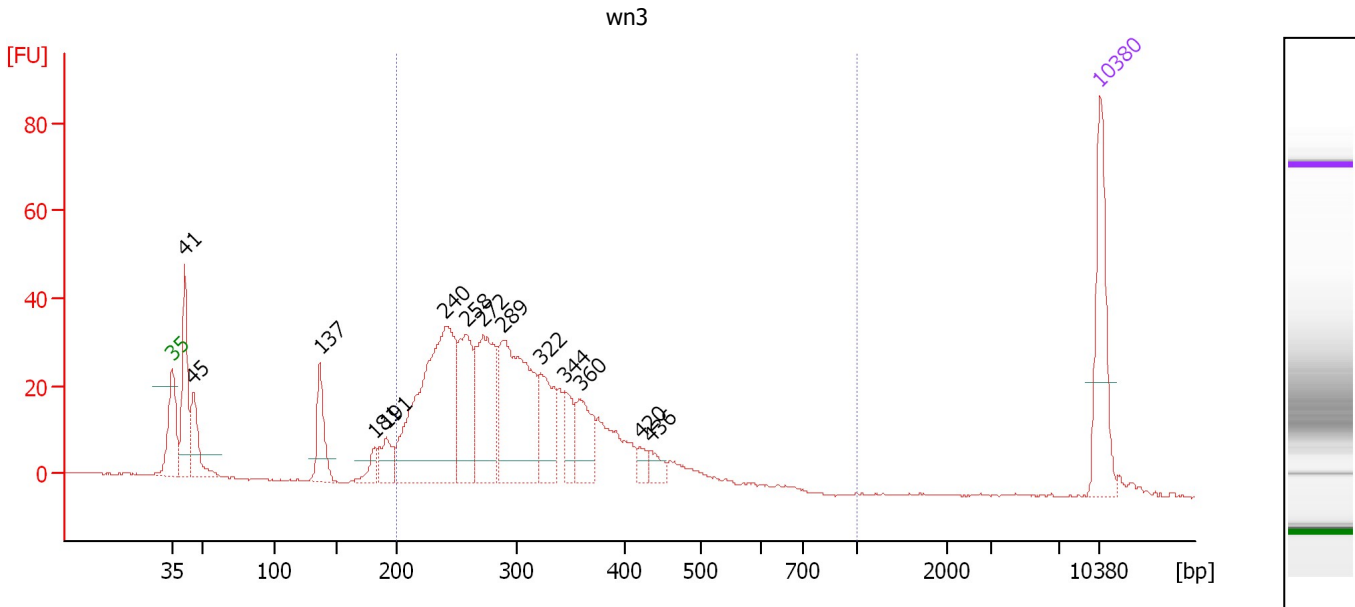
Region table for sample 1 : wn3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	299	319.5	3,535.4	657.73	72	22.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : wn3

Number of peaks found: 14 Corr. Area 1: 689.8
 Noise: 0.2

Peak table for sample 2 : wn3

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	41	117.38	4,309.0		43.97
3	45	64.26	2,141.9		44.62
4	137	61.77	685.6		54.16
5	181	18.52	154.6		58.29
6	191	33.48	265.4		59.17
7	240	315.80	1,991.0		63.62
8	258	109.12	641.4		65.19
9	272	134.05	746.3		66.49
10	289	212.97	1,116.2		68.02
11	322	70.97	333.9		70.80
12	344	35.50	156.3		72.60
13	360	56.89	239.7		73.85
14	420	12.26	44.2		78.30
15	436	14.56	50.6		79.18
16	10,380	75.00	10.9	Upper Marker	113.00

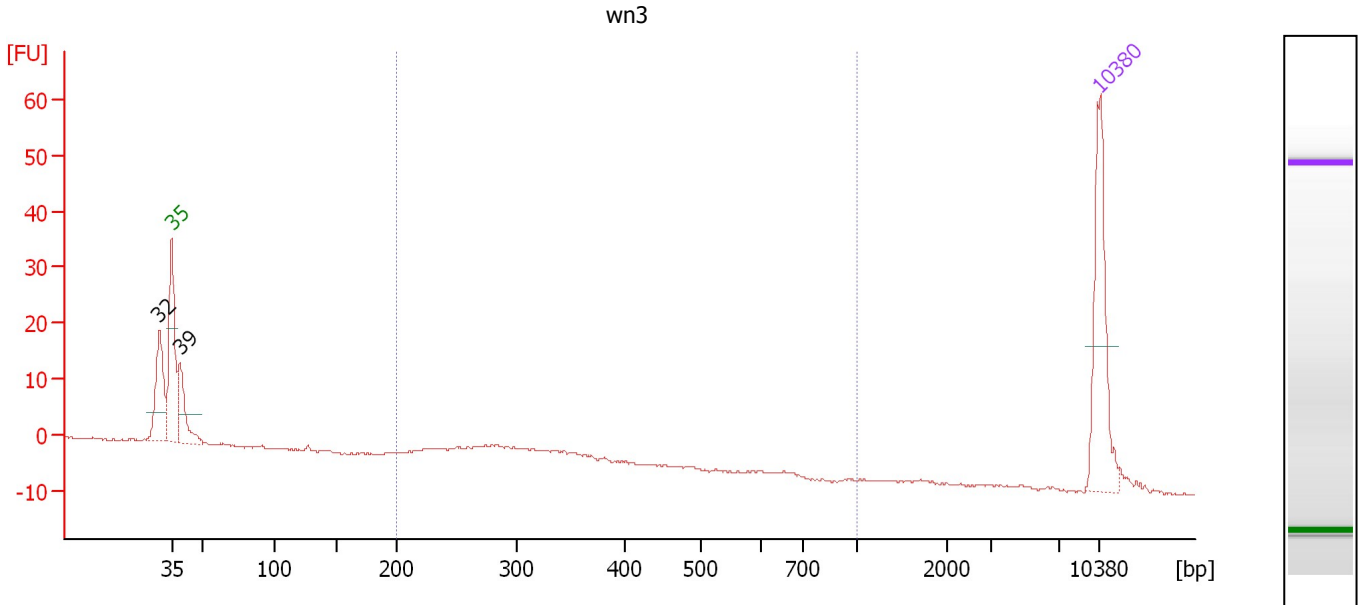
Region table for sample 2 : wn3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	307	689.8	5,895.4	1,118.96	82	24.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : wn3

Number of peaks found: 2 Corr. Area 1: 38.2
 Noise: 0.2

Peak table for sample 3 : wn3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.05
2	35	125.00	5,411.3	Lower Marker	43.00
3	39	56.44	2,211.1		43.57
4	10,380	75.00	10.9	Upper Marker	113.00

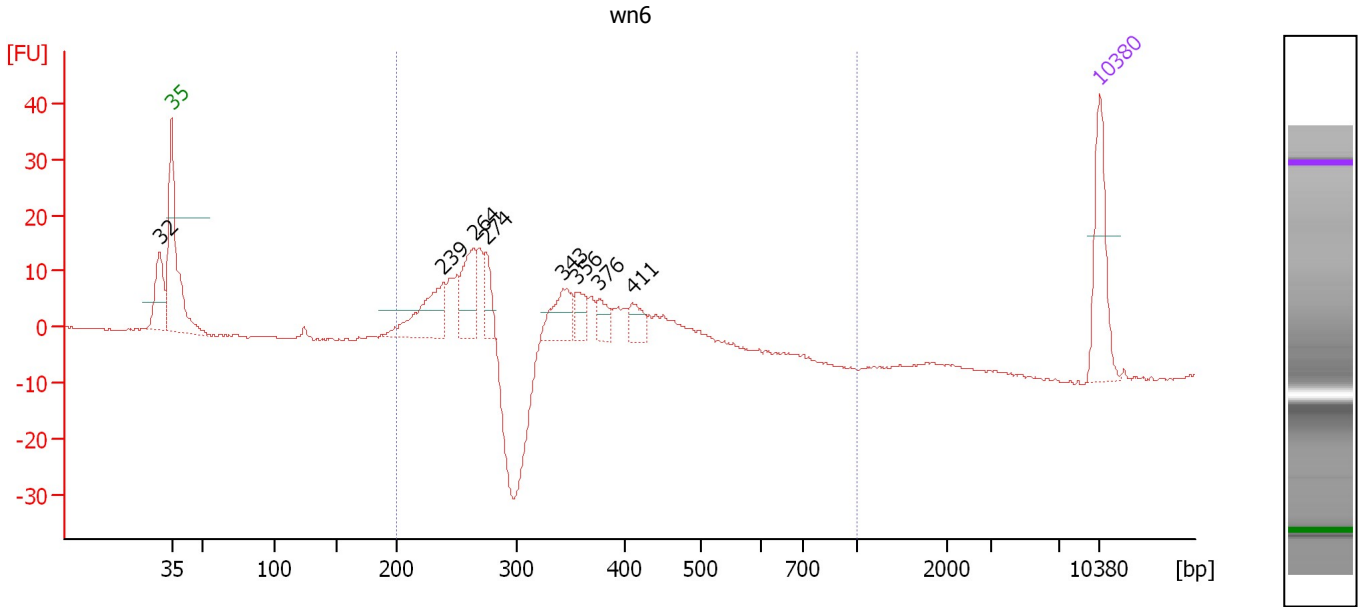
Region table for sample 3 : wn3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	306	38.2	380.5	73.73	37	19.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : wn6

Number of peaks found: 8 Corr. Area 1: 201.6
 Noise: 0.2

Peak table for sample 4 : wn6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.08
2	35	125.00	5,411.3	Lower Marker	43.00
3	239	98.06	622.1		63.48
4	264	76.04	436.2		65.77
5	274	37.09	204.8		66.69
6	343	54.13	238.9		72.53
7	356	27.53	117.0		73.60
8	376	23.58	95.0		75.20
9	411	24.20	89.2		77.78
10	10,380	75.00	10.9	Upper Marker	113.00

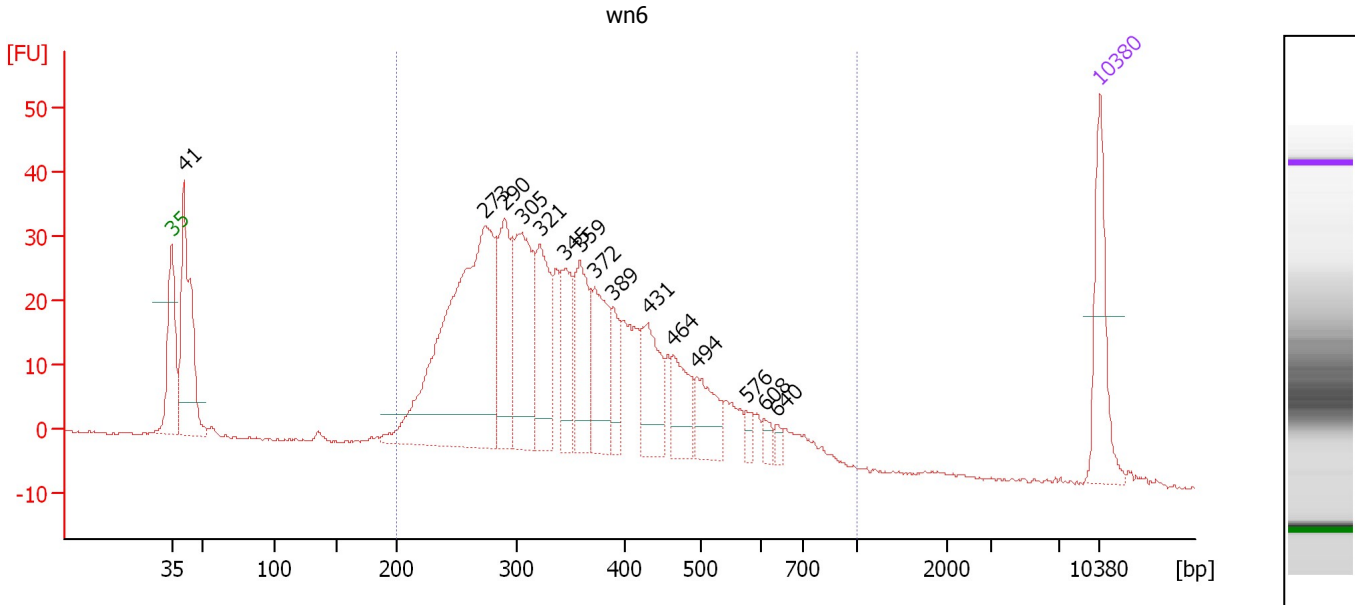
Region table for sample 4 : wn6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	325	201.6	2,720.5	532.86	86	25.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : wn6

Number of peaks found: 15 Corr. Area 1: 834.4
 Noise: 0.2

Peak table for sample 5 : wn6

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	41	241.00	8,986.9		43.87
3	273	518.64	2,877.0		66.58
4	290	135.51	708.5		68.08
5	305	182.60	907.7		69.39
6	321	124.33	586.0		70.75
7	345	77.93	342.5		72.64
8	359	101.93	430.2		73.80
9	372	100.03	407.3		74.87
10	389	40.53	157.7		76.28
11	431	85.75	301.6		78.90
12	464	62.74	205.0		80.79
13	494	56.83	174.2		82.54
14	576	10.73	28.2		86.32
15	608	11.12	27.7		87.68
16	640	7.84	18.5		88.70
17	10,380	75.00	10.9	Upper Marker	113.00

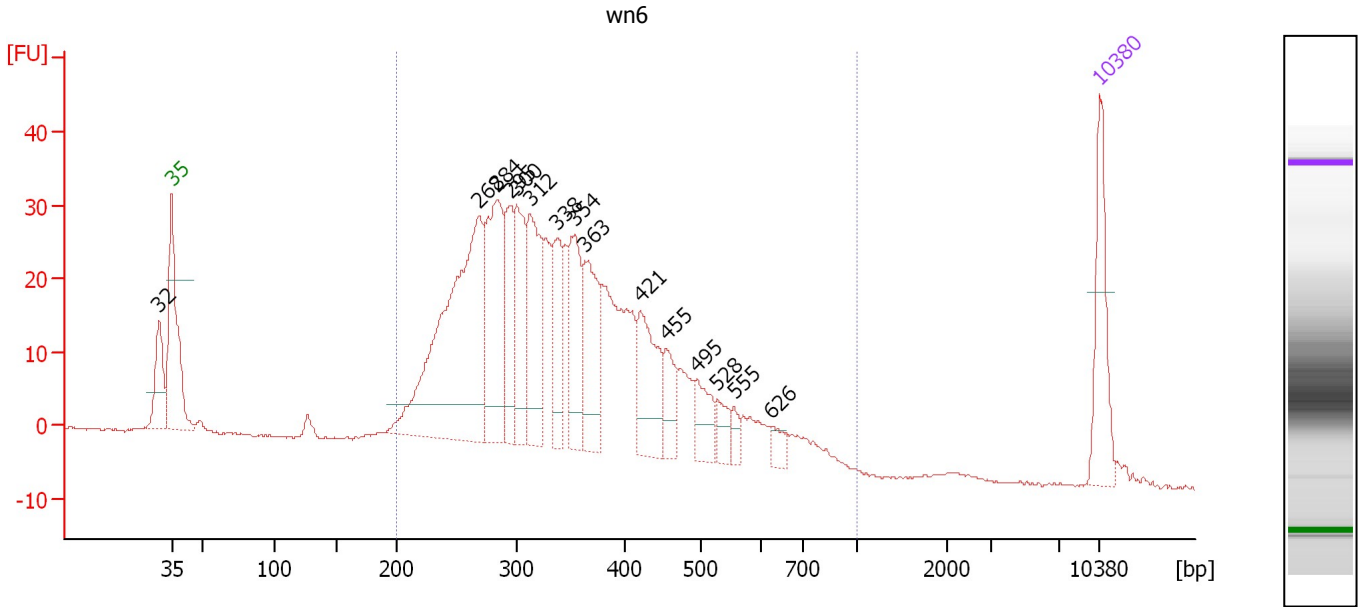
Region table for sample 5 : wn6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	366	834.4	8,534.6	1,842.61	89	31.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : wn6

Number of peaks found: 15 Corr. Area 1: 757.1
 Noise: 0.2

Peak table for sample 6 : wn6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.05
2	35	125.00	5,411.3	Lower Marker	43.00
3	268	456.47	2,580.2		66.12
4	284	198.70	1,059.7		67.56
5	295	91.90	471.7		68.56
6	300	114.50	578.0		69.01
7	312	141.11	684.3		70.01
8	338	83.19	373.4		72.06
9	354	113.88	487.2		73.41
10	363	115.24	480.6		74.16
11	421	106.42	382.9		78.35
12	455	44.58	148.4		80.30
13	495	45.45	139.0		82.59
14	528	23.91	68.6		84.14
15	555	13.72	37.4		85.39
16	626	17.54	42.5		88.24
17	10,380	75.00	10.9	Upper Marker	113.00

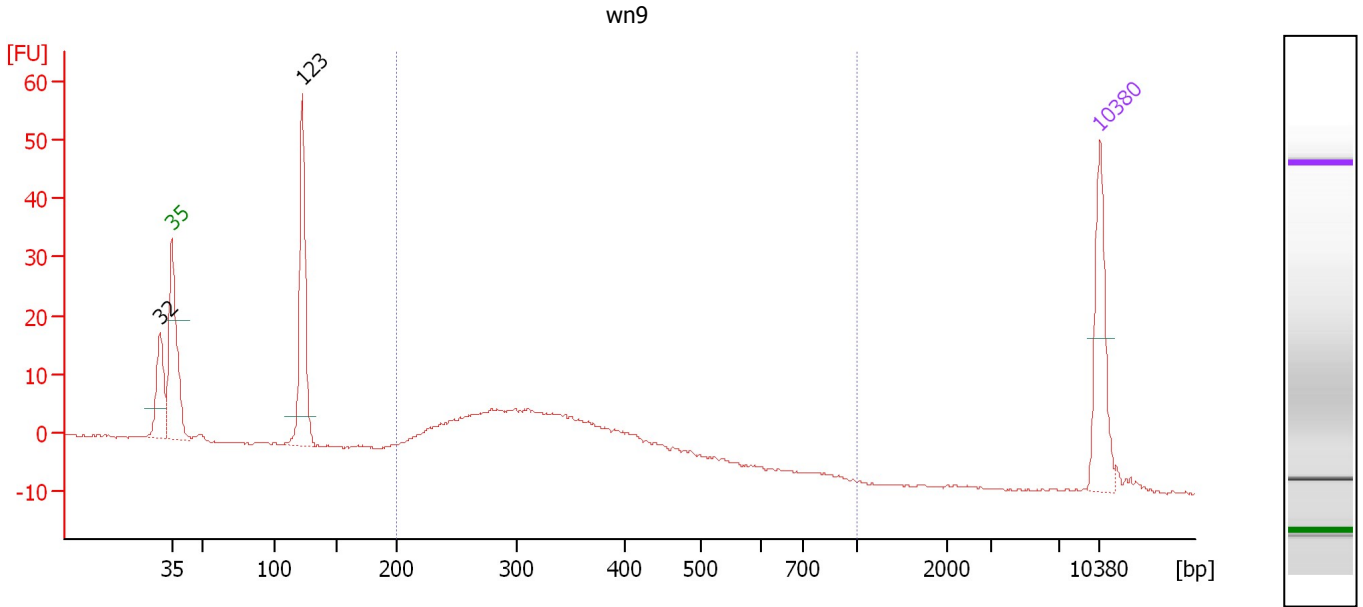
Region table for sample 6 : wn6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	360	757.1	9,746.0	2,084.01	93	30.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : wn9

Number of peaks found: 2 Corr. Area 1: 171.6
 Noise: 0.2

Peak table for sample 7 : wn9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.09
2	35	125.00	5,411.3	Lower Marker	43.00
3	123	166.22	2,052.9		52.88
4	10,380	75.00	10.9	Upper Marker	113.00

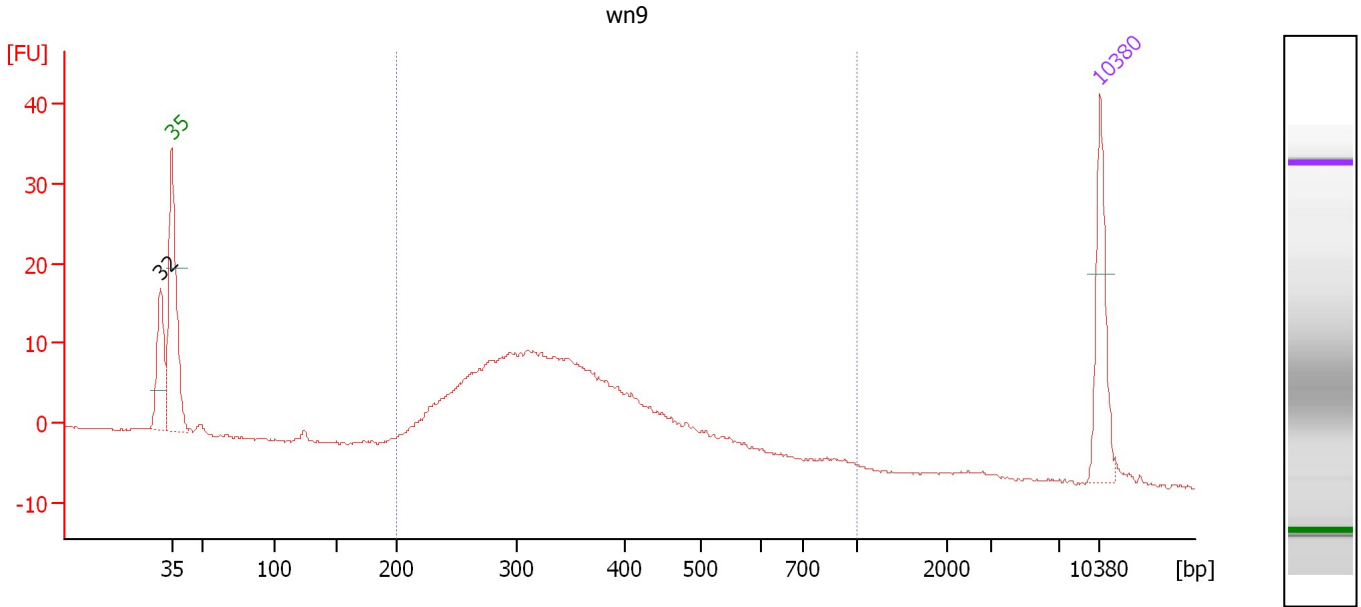
Region table for sample 7 : wn9

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	332	171.6	2,068.1	423.93	65	22.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : wn9

Number of peaks found: 1 Corr. Area 1: 269.3
 Noise: 0.2

Peak table for sample 8 : wn9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.13
2	35	125.00	5,411.3	Lower Marker	43.00
3	10,380	75.00	10.9	Upper Marker	113.00

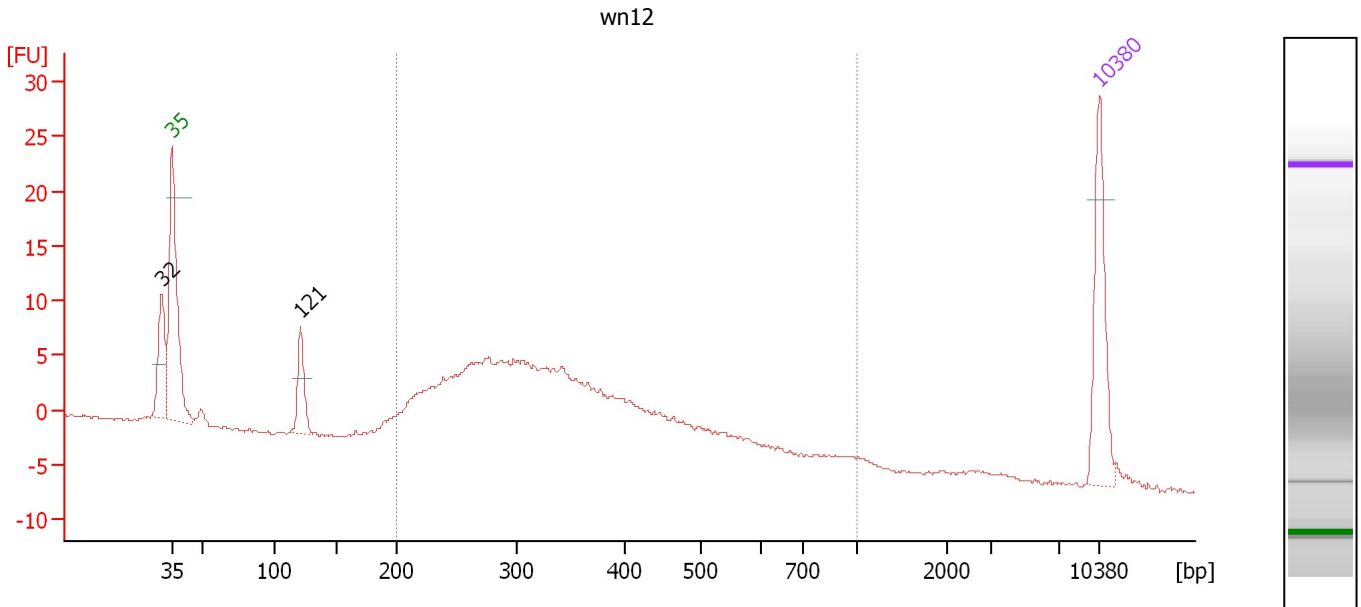
Region table for sample 8 : wn9

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	359	269.3	4,100.0	882.32	90	30.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : wn12

Number of peaks found: 2 Corr. Area 1: 176.2
 Noise: 0.2

Peak table for sample 9 : wn12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.23
2	35	125.00	5,411.3	Lower Marker	43.00
3	121	53.89	676.2		52.70
4	10,380	75.00	10.9	Upper Marker	113.00

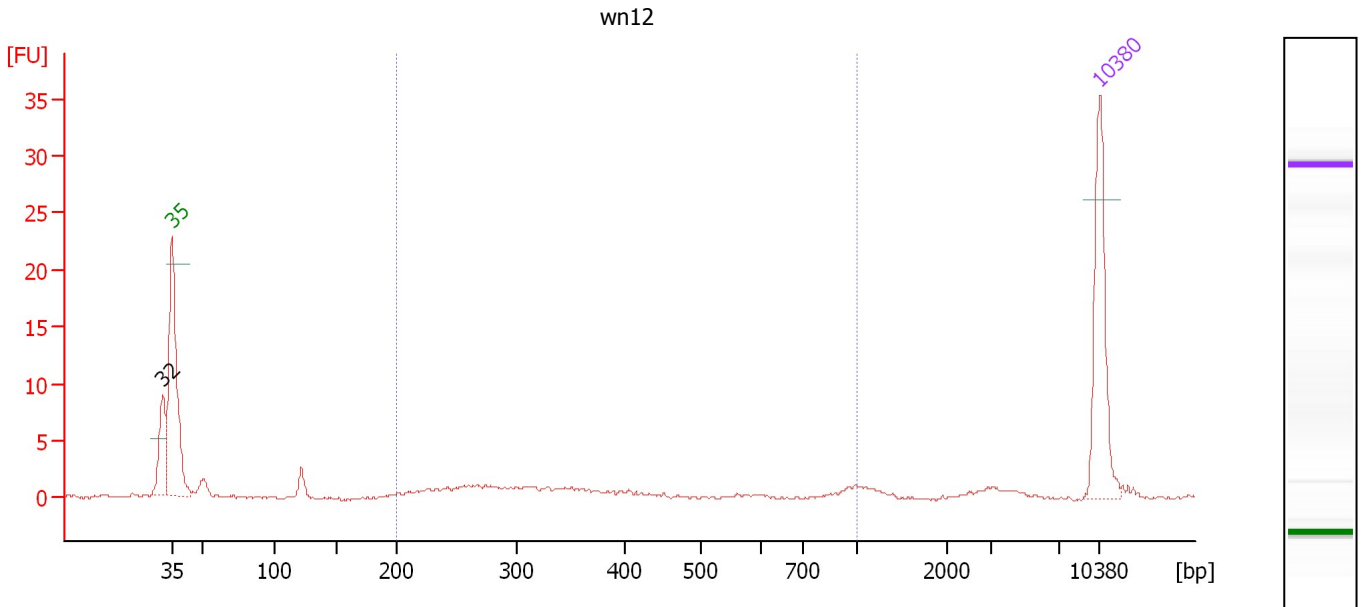
Region table for sample 9 : wn12

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	352	176.2	3,494.1	724.90	85	32.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : wn12

Number of peaks found: 1 Corr. Area 1: 14.6
 Noise: 0.1

Peak table for sample 10 : wn12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.28
2	35	125.00	5,411.3	Lower Marker	43.00
3	10,380	75.00	10.9	Upper Marker	113.00

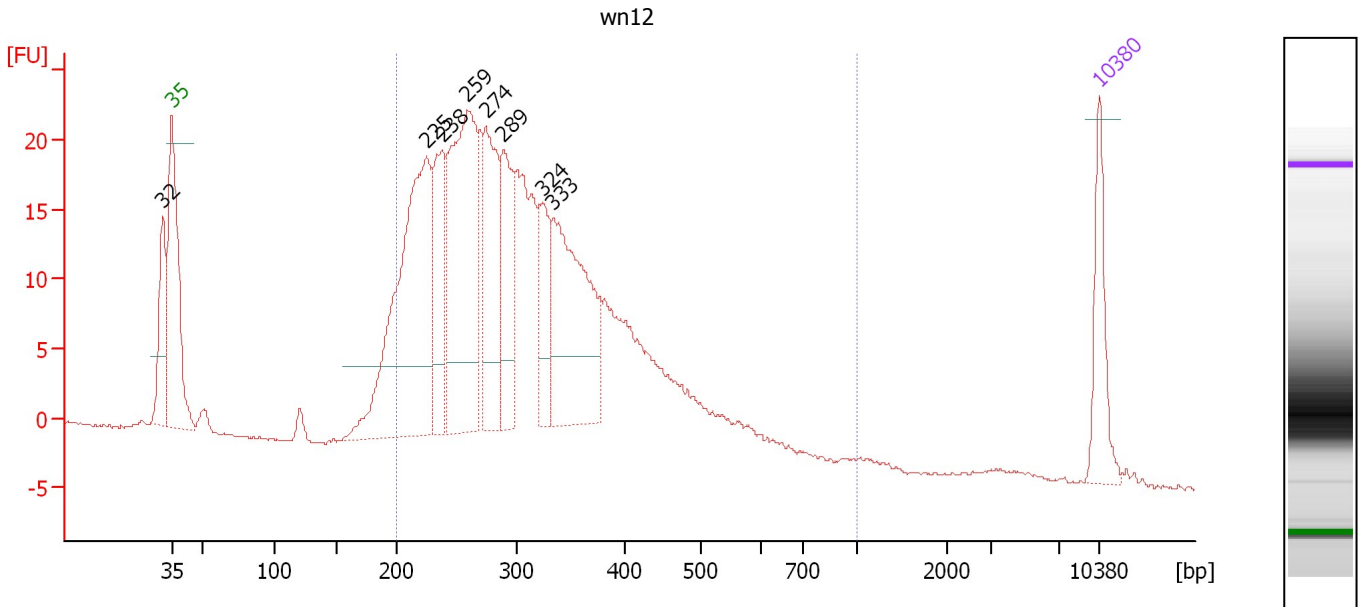
Region table for sample 10 : wn12

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	363	14.6	300.6	59.91	44	53.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : wn12

Number of peaks found: 8 Corr. Area 1: 483.2
 Noise: 0.1

Peak table for sample 11 : wn12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.28
2	35	125.00	5,411.3	Lower Marker	43.00
3	225	545.68	3,681.5		62.19
4	238	173.87	1,108.0		63.38
5	259	424.11	2,481.2		65.30
6	274	208.26	1,149.7		66.70
7	289	164.85	864.9		67.99
8	324	87.81	410.9		70.94
9	333	317.45	1,442.9		71.71
10	10,380	75.00	10.9	Upper Marker	113.00

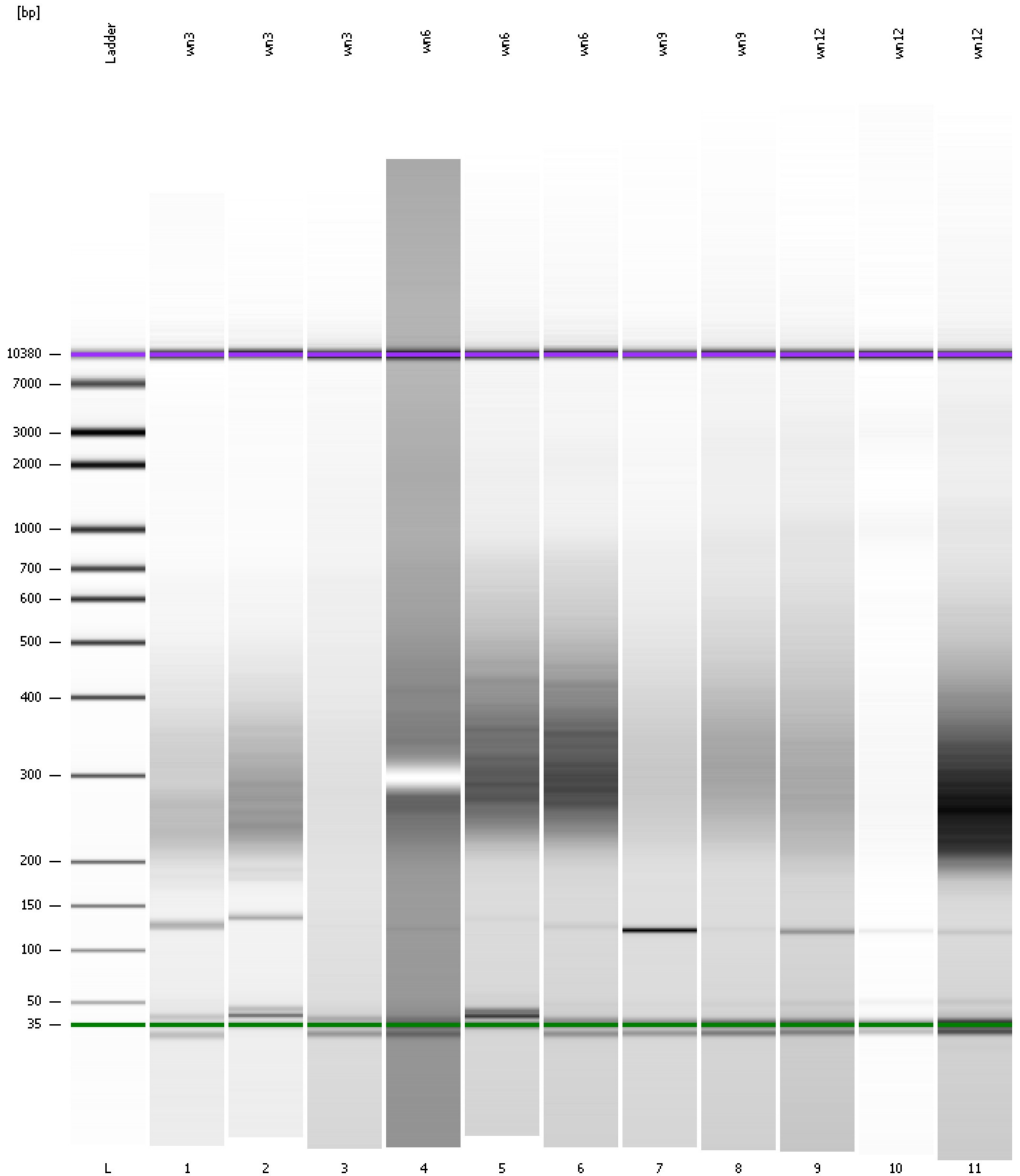
Region table for sample 11 : wn12

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	320	483.2	13,967.6	2,685.76	91	30.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
Modified: 4/27/2016 3:02:28 PM

Gel Image

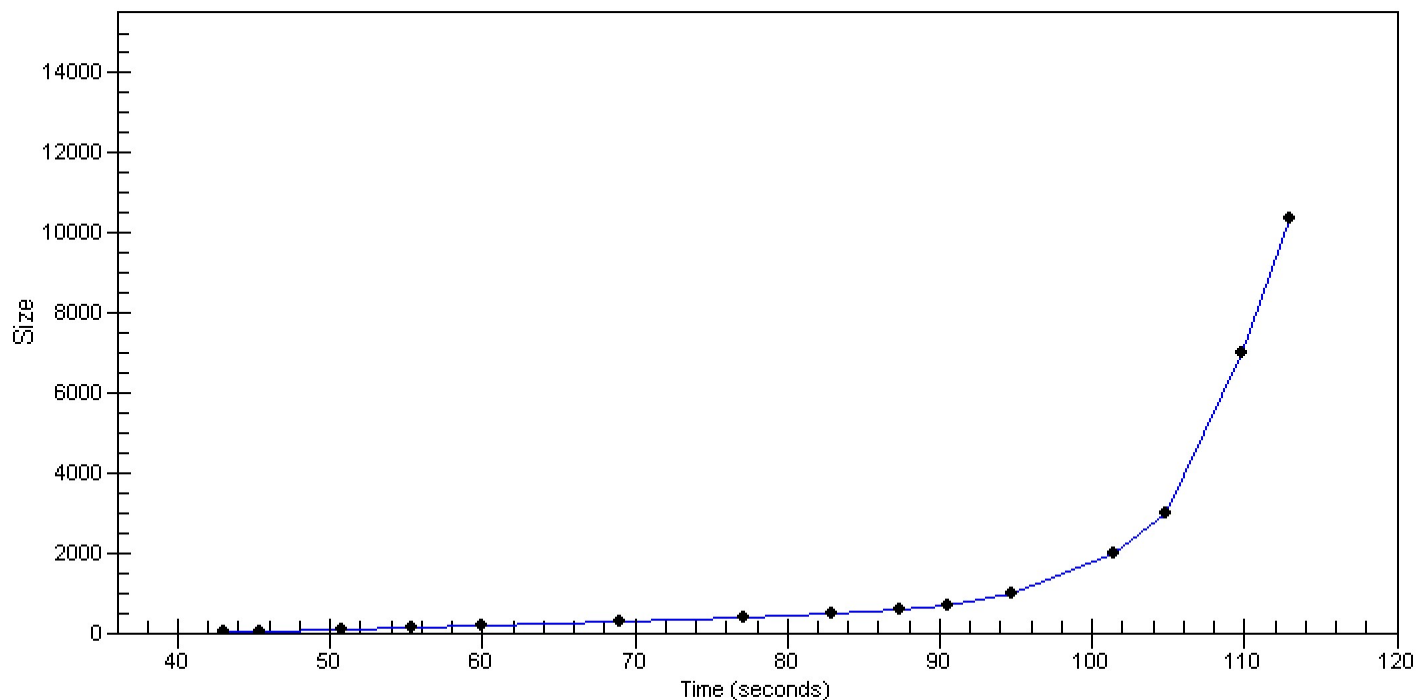


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
Modified: 4/27/2016 3:02:28 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_002.xad

Created: 4/27/2016 2:19:08 PM
 Modified: 4/27/2016 3:02:28 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		4/27/2016 3:00:27 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\2016-04-27\2016-04-27_002.xad)		Instrument	Run		4/27/2016 2:19:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/27/2016 2:19:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/27/2016 2:19:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/27/2016 2:19:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/27/2016 2:19:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/27/2016 2:19:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/27/2016 2:19:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1