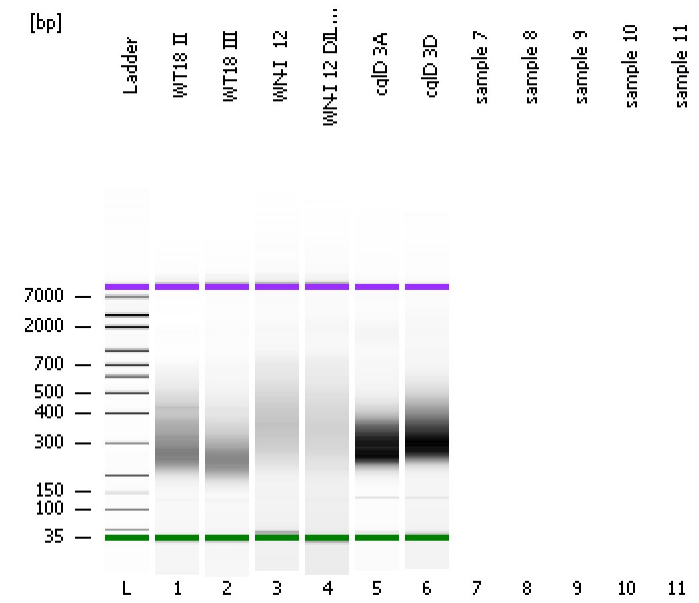
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Electrophoresis File Run Summary



Instrument Information:

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

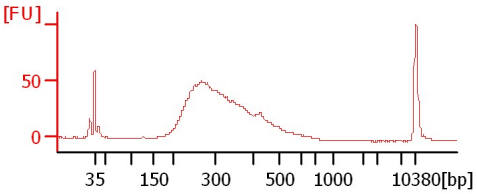
Assay Information:

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

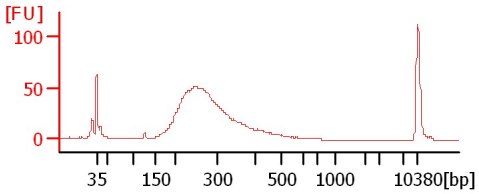
Chip Information:

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

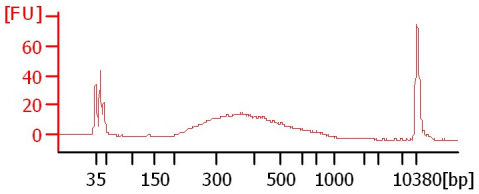
WT18 II



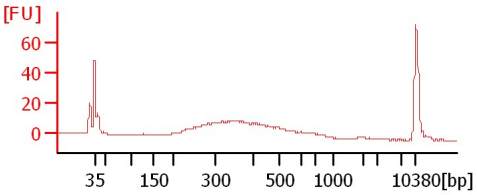
WT18 III



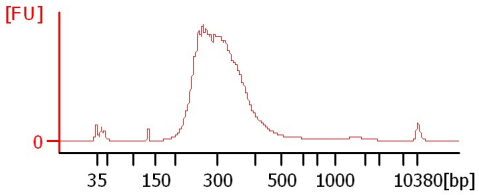
WN-I 12



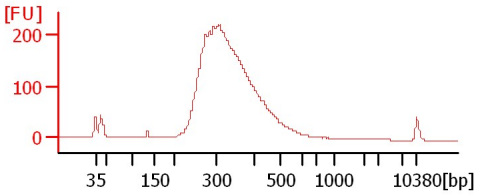
WN-I 12 DILUTED



cgID 3A



cgID 3D



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WT18 II		☐	✔			
WT18 III		☐	✔			
WN-I 12		☐	✔			
WN-I 12 DILUTED		☐	✔			
cglD 3A		☐	✔			
cglD 3D		☐	✔			
sample 7		☐				
sample 8		☐				
sample 9		☐				
sample 10		☐				
sample 11		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 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

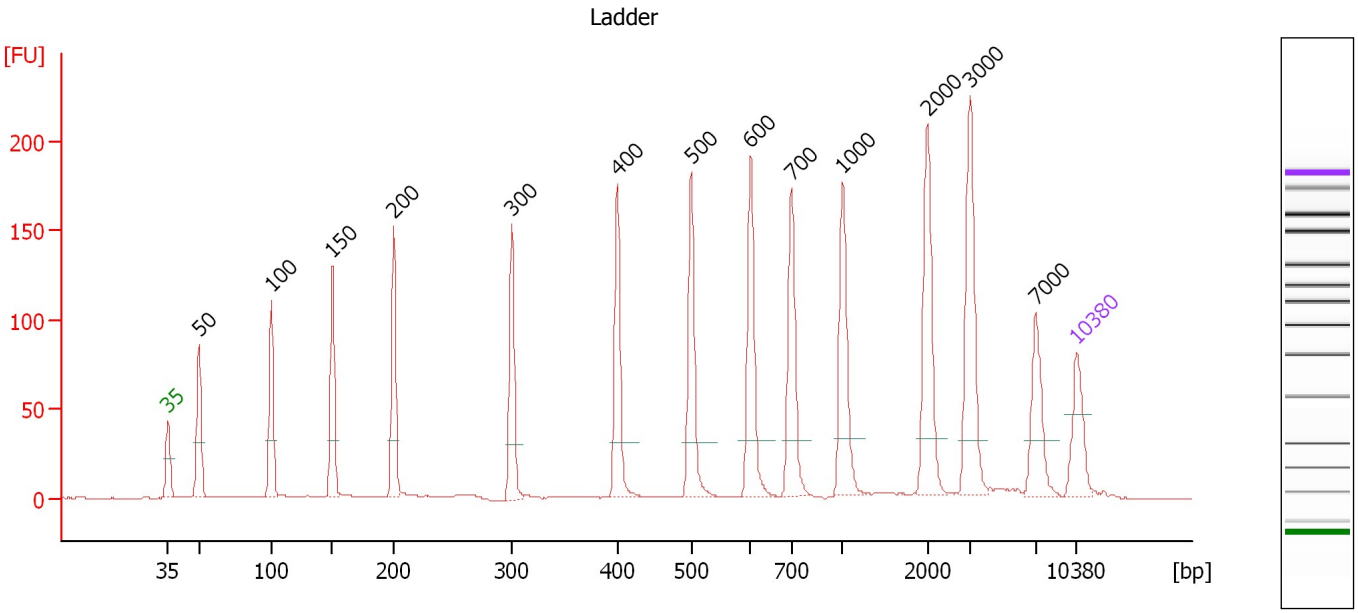
Ladder

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\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

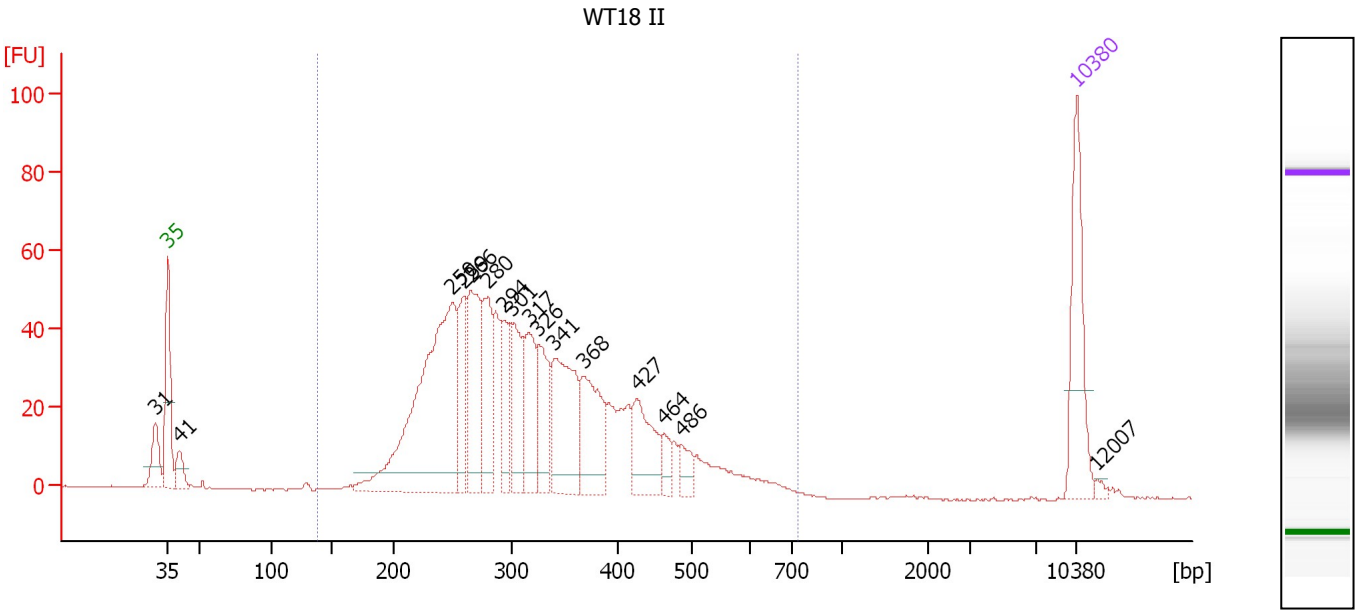
Peak table for Ladder

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	45.32
3		100	150.00	2,272.7	Ladder Peak	50.94
4		150	150.00	1,515.2	Ladder Peak	55.64
5		200	150.00	1,136.4	Ladder Peak	60.34
6		300	150.00	757.6	Ladder Peak	69.43
7		400	150.00	568.2	Ladder Peak	77.57
8		500	150.00	454.5	Ladder Peak	83.28
9		600	150.00	378.8	Ladder Peak	87.83
10		700	150.00	324.7	Ladder Peak	90.96
11		1,000	150.00	227.3	Ladder Peak	94.96
12		2,000	150.00	113.6	Ladder Peak	101.48
13		3,000	150.00	75.8	Ladder Peak	104.76
14		7,000	150.00	32.5	Ladder Peak	109.82
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : WT18 II

Number of peaks found:	16	Corr. Area 1:	1,057.2
Noise:	0.2		

Peak table for sample 1 : WT18 II

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.98
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	25.37	946.8		43.87
4	250	356.46	2,161.9		64.87
5	259	68.88	403.2		65.69
6	266	123.35	703.8		66.30
7	280	80.11	434.1		67.58
8	294	56.53	291.2		68.91
9	301	73.55	370.2		69.52
10	317	78.65	376.2		70.80
11	326	66.40	309.0		71.51
12	341	124.48	553.8		72.74
13	368	91.29	375.6		74.99
14	427	66.12	234.5		79.12
15	464	15.66	51.2		81.22
16	486	19.88	61.9		82.50
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,007	0.00	0.0		114.53

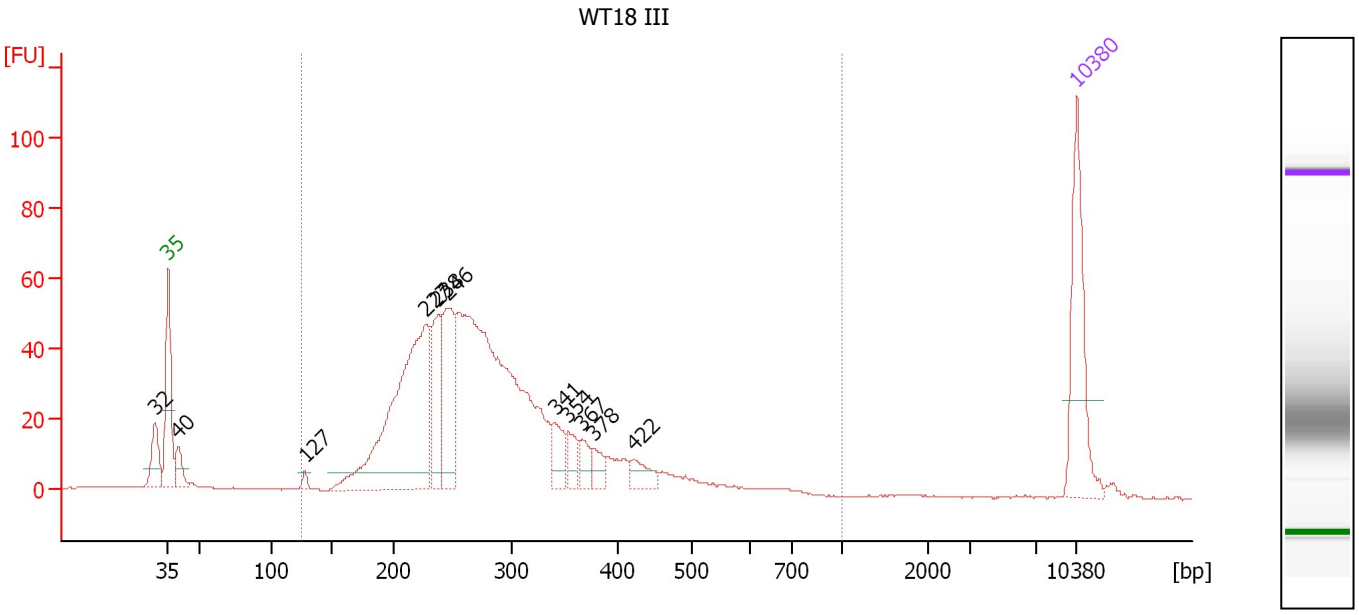
Region table for sample 1 : WT18 II

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
139	739	326	1,057.2	7,121.5	1,398.88	96	27.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : WT18 III

Number of peaks found:	11	Corr. Area 1:	970.8
Noise:	0.1		

Peak table for sample 2 : WT18 III

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.02
2	35	125.00	5,411.3	Lower Marker	43.00
3	40	24.53	929.6		43.77
4	127	6.25	74.4		53.49
5	227	301.88	2,014.0		62.80
6	238	76.76	489.0		63.78
7	246	98.66	608.3		64.50
8	341	27.10	120.4		72.78
9	354	18.12	77.6		73.81
10	367	16.23	67.0		74.89
11	378	15.78	63.3		75.76
12	422	18.56	66.6		78.85
13	10,380	75.00	10.9	Upper Marker	113.00

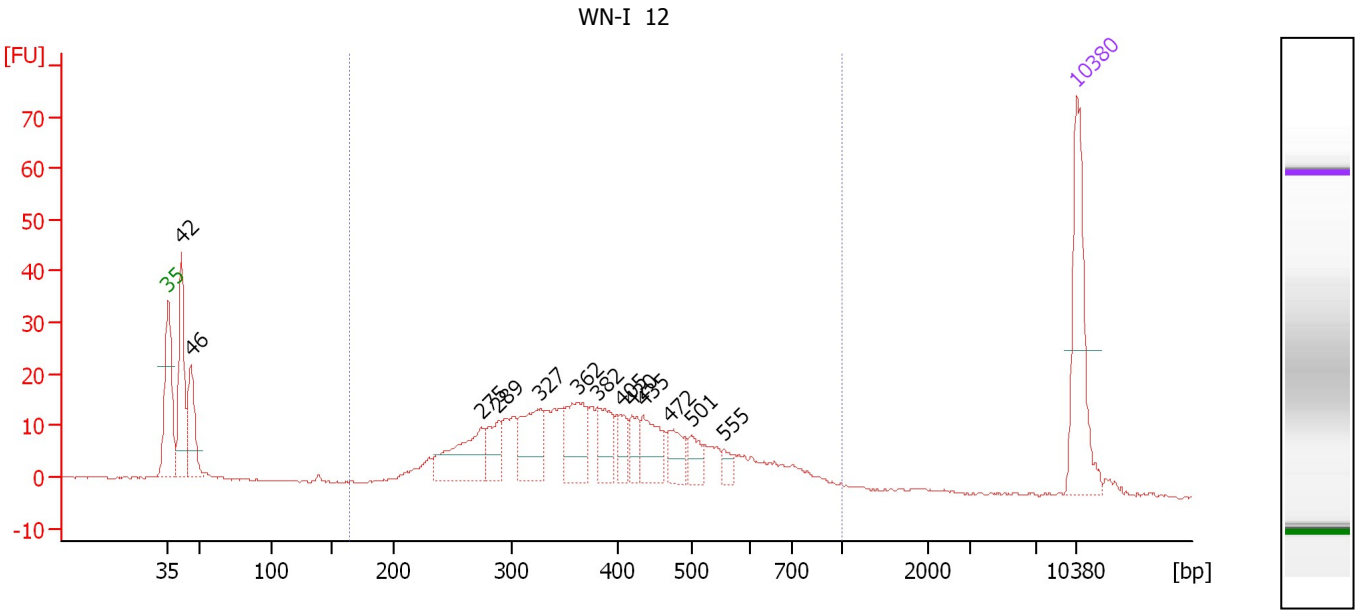
Region table for sample 2 : WT18 III

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
125	1,000	287	970.8	6,612.3	1,143.54	93	29.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : WN-I 12

Number of peaks found:	13	Corr. Area 1:	417.9
Noise:	0.2		

Peak table for sample 3 : WN-I 12

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	42	106.94	3,891.4		44.03
3	46	67.13	2,197.6		44.75
4	275	71.99	397.2		67.12
5	289	31.54	165.5		68.41
6	327	60.10	278.8		71.60
7	362	57.74	241.7		74.48
8	382	37.07	147.0		76.12
9	405	21.62	80.8		77.87
10	420	19.65	70.9		78.69
11	435	37.54	130.8		79.57
12	472	26.38	84.7		81.68
13	501	17.89	54.1		83.32
14	555	9.50	25.9		85.79
15	10,380	75.00	10.9	Upper Marker	113.00

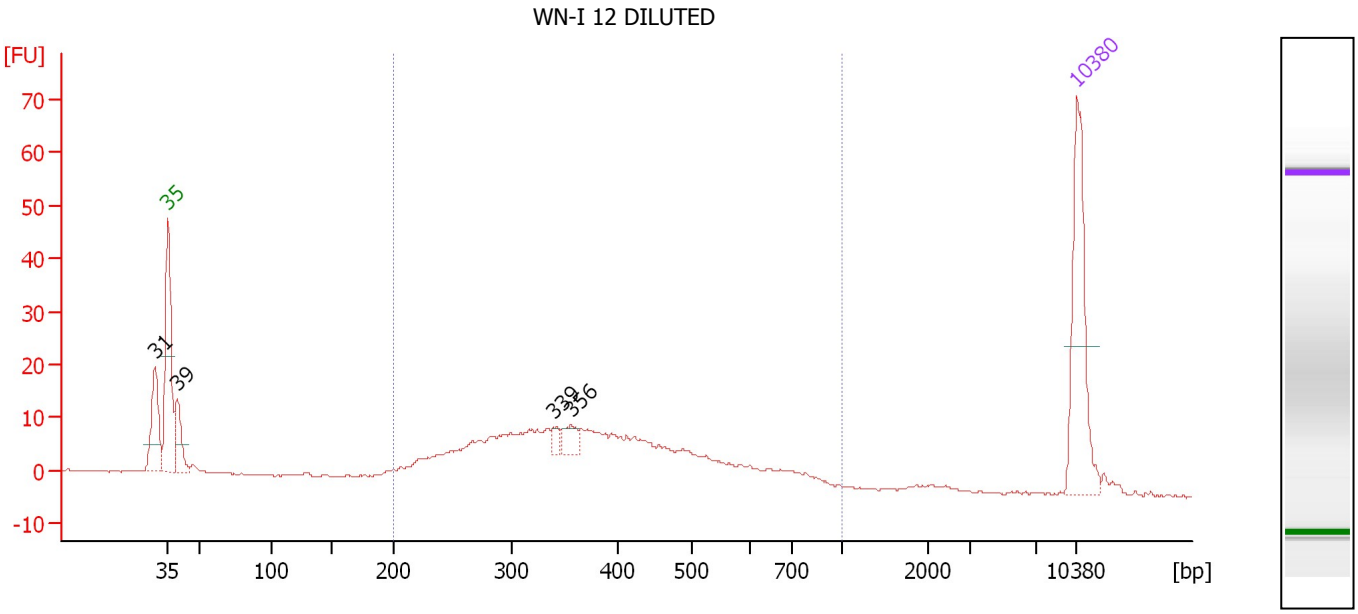
Region table for sample 3 : WN-I 12

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
165	1,000	405	417.9	2,729.5	642.86	82	32.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : WN-I 12 DILUTED

Number of peaks found:	4	Corr. Area 1:	262.1
Noise:	0.2		

Peak table for sample 4 : WN-I 12 DILUTED

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.94
2	35	125.00	5,411.3	Lower Marker	43.00
3	39	40.88	1,583.2		43.64
4	339	7.72	34.5		72.63
5	356	14.54	61.8		74.01
6	10,380	75.00	10.9	Upper Marker	113.00

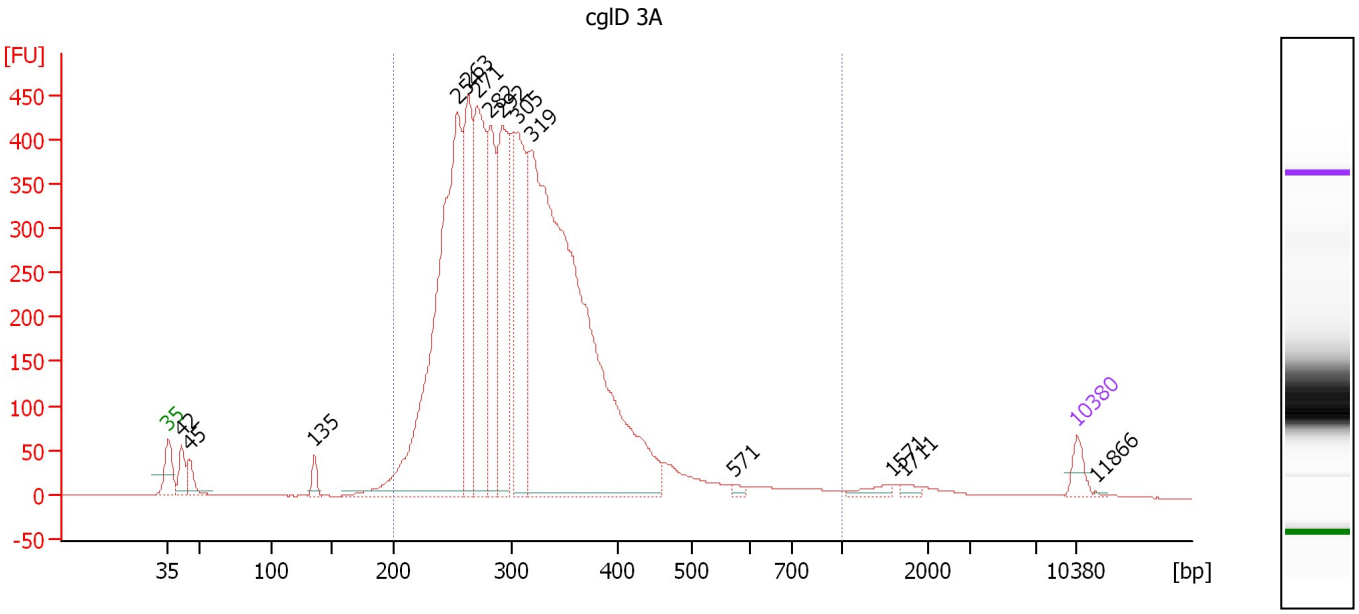
Region table for sample 4 : WN-I 12 DILUTED

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	394	262.1	1,812.0	415.33	81	32.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : cglD 3A

Number of peaks found:	14	Corr. Area 1:	7,527.2
Noise:	0.2		

Peak table for sample 5 : cglD 3A

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	42	168.47	6,135.7		44.02
3	45	139.72	4,660.5		44.62
4	135	81.92	917.4		54.25
5	254	3,182.42	18,947.6		65.29
6	263	1,117.77	6,430.7		66.10
7	271	1,281.50	7,163.3		66.80
8	282	873.90	4,690.4		67.82
9	292	1,104.78	5,725.4		68.74
10	305	1,108.65	5,501.0		69.87
11	319	5,162.26	24,499.6		71.00
12	571	25.48	67.6		86.51
13	1,571	45.50	43.9		98.68
14	1,711	26.46	23.4		99.59
15	10,380	75.00	10.9	Upper Marker	113.00
16	11,866	0.00	0.0		114.40

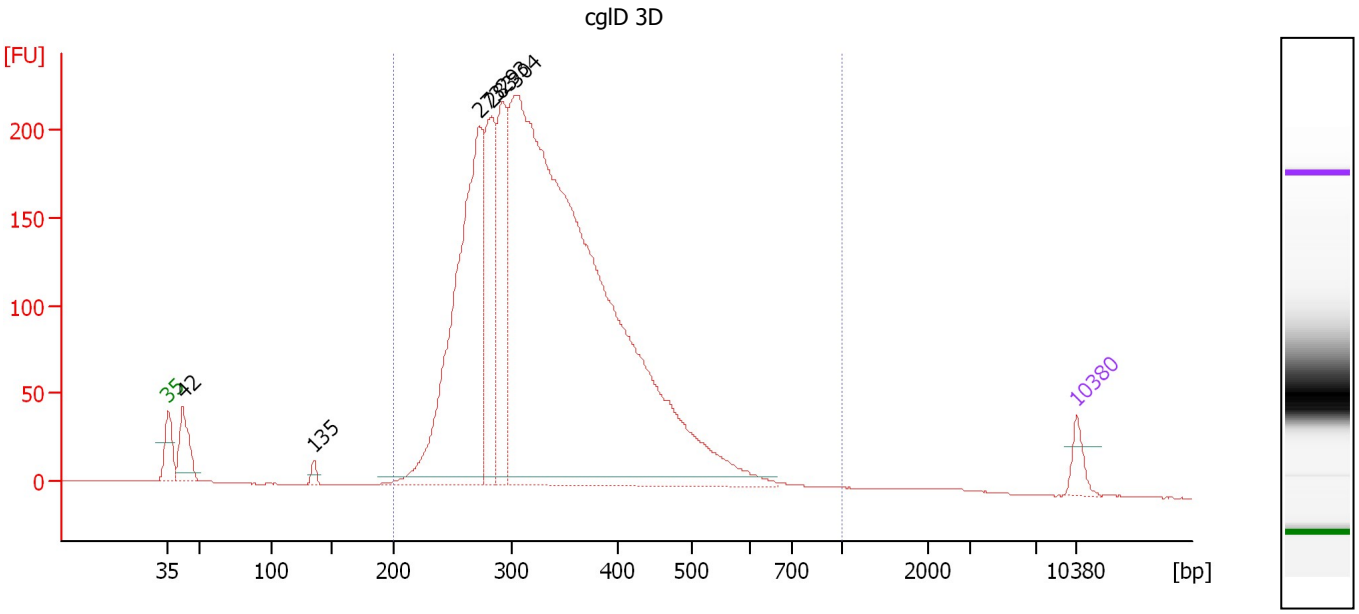
Region table for sample 5 : cglD 3A

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	317	7,527.2	72,231.1	14,249.03	95	25.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : cglD 3D

Number of peaks found:	6	Corr. Area 1:	3,850.1
Noise:	0.2		

Peak table for sample 6 : cglD 3D

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	42	323.56	11,656.6		44.09
3	135	41.83	470.0		54.21
4	273	2,446.30	13,590.0		66.95
5	283	867.41	4,644.7		67.88
6	293	827.00	4,282.7		68.76
7	304	7,816.64	38,984.5		69.74
8	10,380	75.00	10.9	Upper Marker	113.00

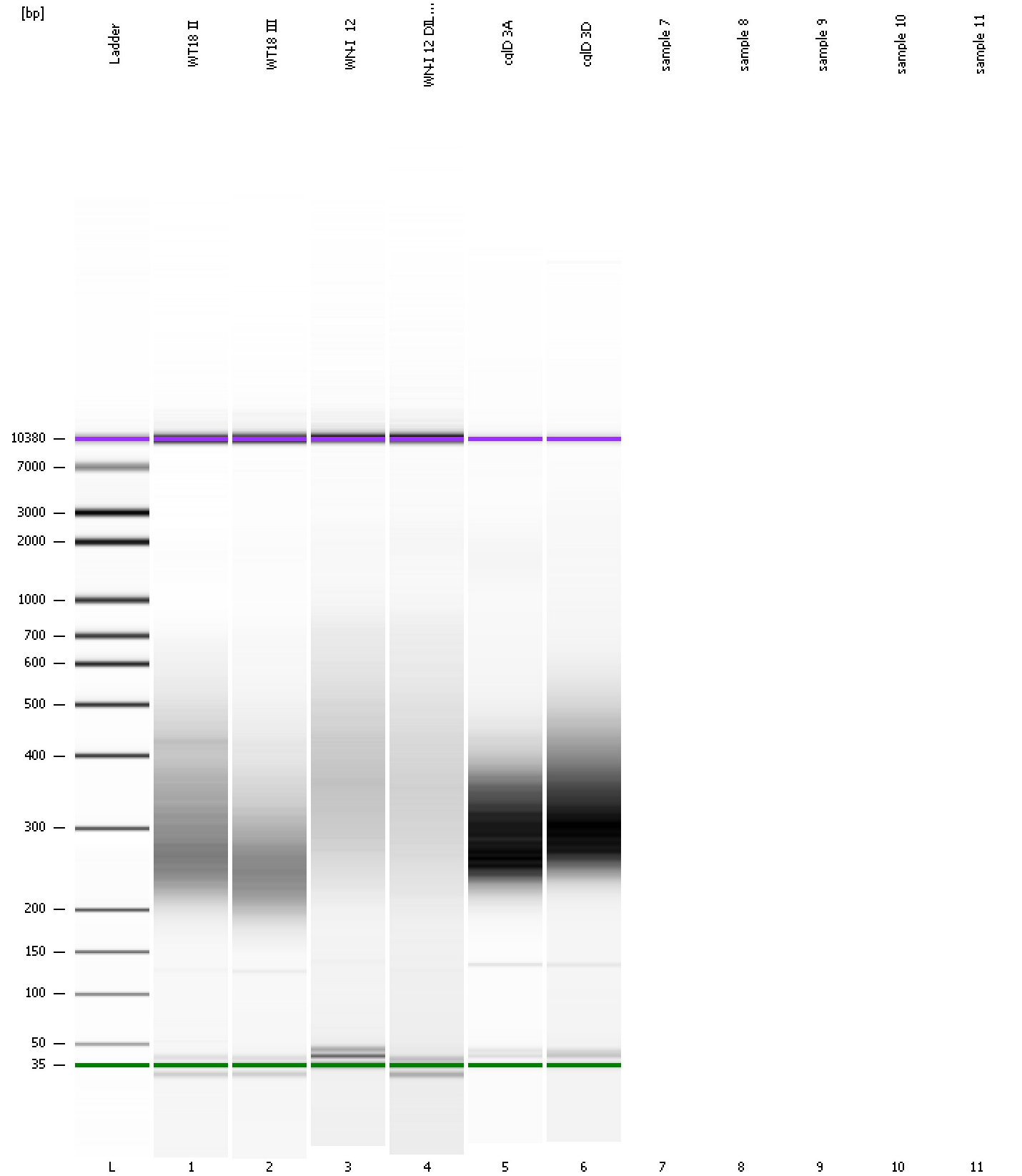
Region table for sample 6 : cglD 3D

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	341	3,850.1	53,344.8	11,301.05	97	23.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Invalid Samples

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-01\2016-08-01_006.xad

Created: 8/1/2016 1:24:07 PM
Modified: 8/1/2016 2:22:30 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 7)		Instrument	Run		8/1/2016 1:51:10 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\2016-08-01\2016-08-01_006.xad)		Instrument	Run		8/1/2016 1:24:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/1/2016 1:24:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/1/2016 1:24:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/1/2016 1:24:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/1/2016 1:24:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/1/2016 1:24:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/1/2016 1:24:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1