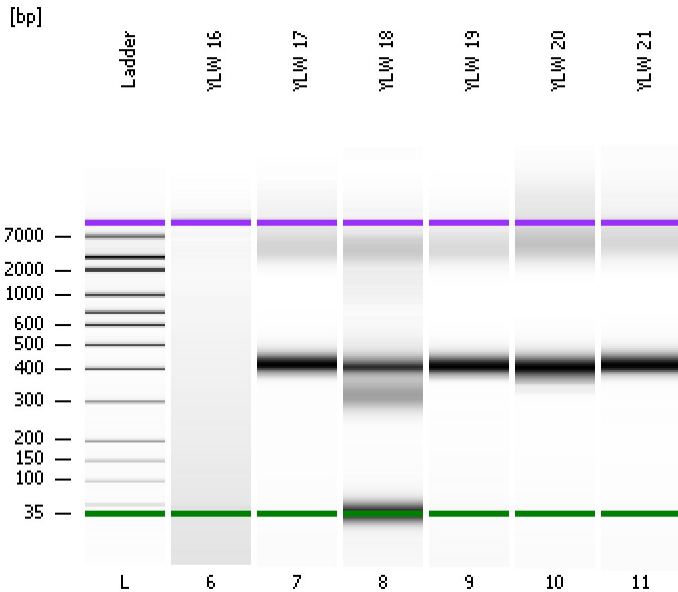


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
Modified: 12/10/2015 5:14:49 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

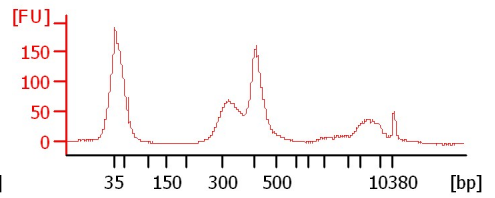
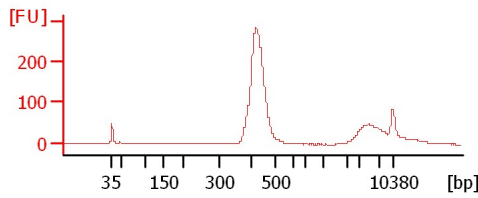
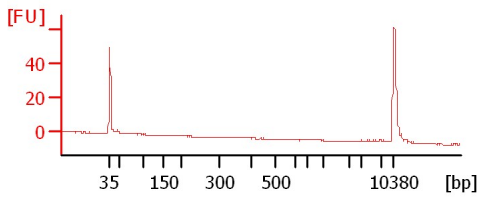
Chip Information:

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

YLW 16

YLW 17

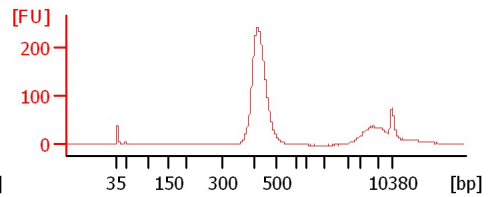
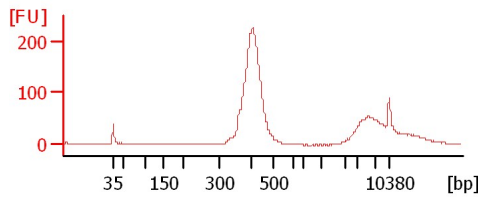
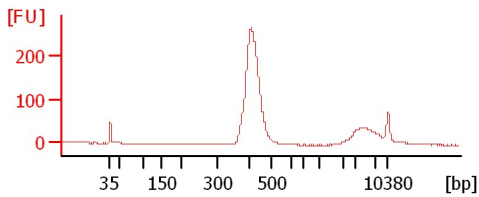
YLW 18



YLW 19

YLW 20

YLW 21



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
 Modified: 12/10/2015 5:14:49 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
YLW 16		<input type="checkbox"/>	✓			
YLW 17		<input type="checkbox"/>	✓			
YLW 18		<input type="checkbox"/>	✓			
YLW 19		<input type="checkbox"/>	✓			
YLW 20		<input type="checkbox"/>	✓			
YLW 21		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
Modified: 12/10/2015 5:14:49 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

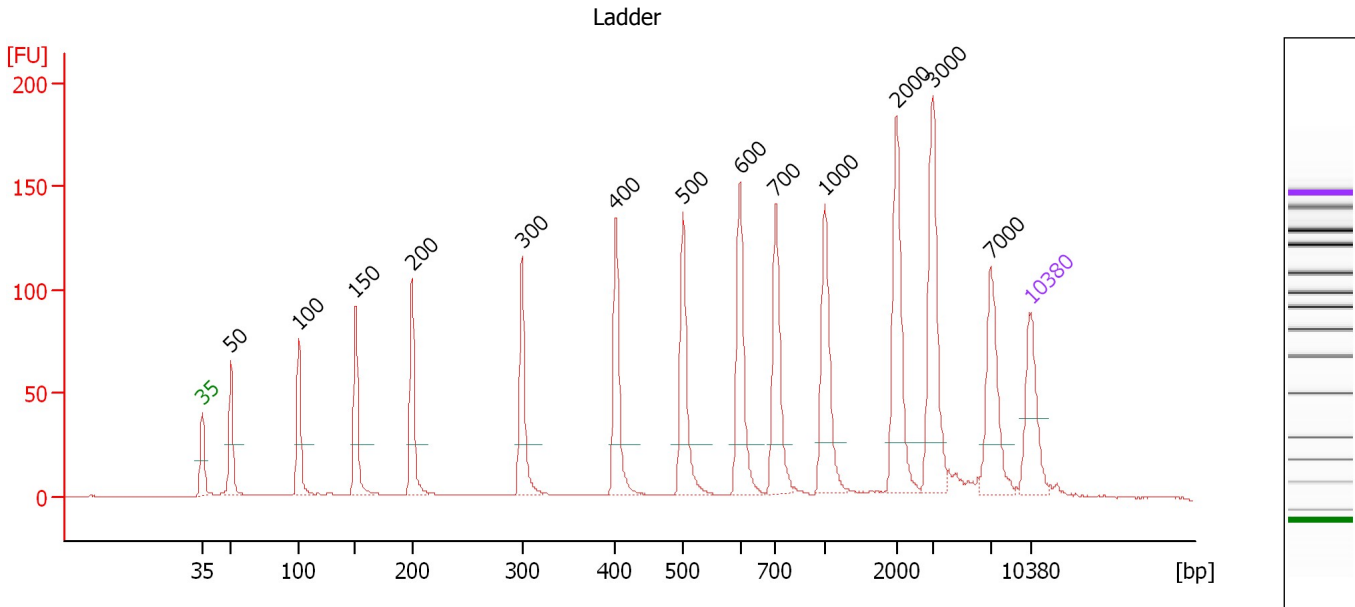
Ladder

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:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
 Modified: 12/10/2015 5:14:49 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

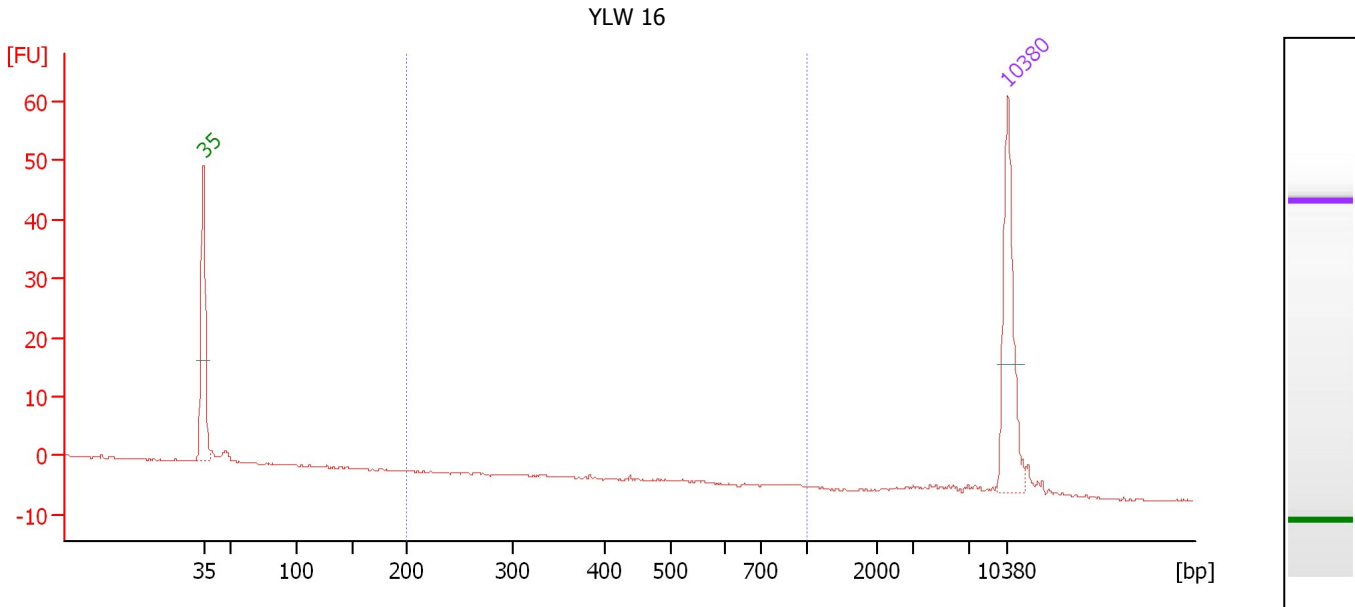
Peak table for Ladder

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	45.39
3	100	150.00	2,272.7	Ladder Peak	51.16
4	150	150.00	1,515.2	Ladder Peak	55.94
5	200	150.00	1,136.4	Ladder Peak	60.71
6	300	150.00	757.6	Ladder Peak	70.00
7	400	150.00	568.2	Ladder Peak	77.93
8	500	150.00	454.5	Ladder Peak	83.61
9	600	150.00	378.8	Ladder Peak	88.43
10	700	150.00	324.7	Ladder Peak	91.45
11	1,000	150.00	227.3	Ladder Peak	95.60
12	2,000	150.00	113.6	Ladder Peak	101.69
13	3,000	150.00	75.8	Ladder Peak	104.75
14	7,000	150.00	32.5	Ladder Peak	109.62
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
 Modified: 12/10/2015 5:14:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : YLW 16

Number of peaks found: 0 Corr. Area 1: 0.2
 Noise: 0.2

Peak table for sample 6 : YLW 16

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

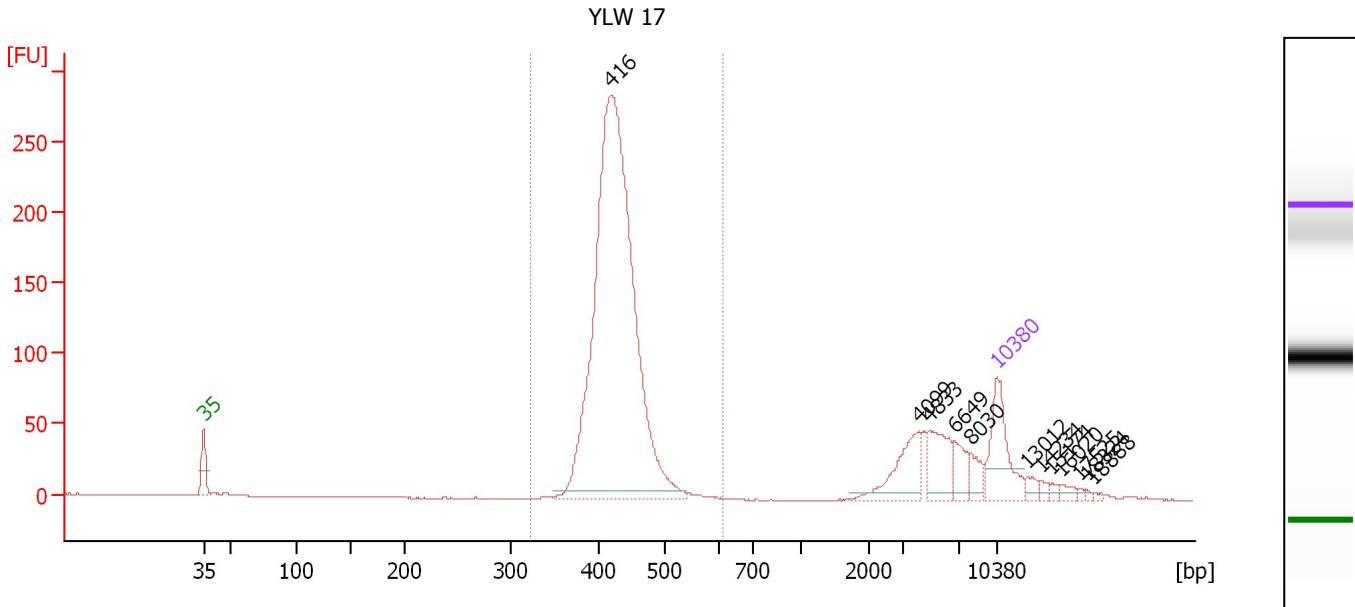
Region table for sample 6 : YLW 16

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	420	0.2	1.5	0.40	1	14.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
 Modified: 12/10/2015 5:14:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : YLW 17

Number of peaks found: 12 Corr. Area 1: 1,440.5
 Noise: 0.2

Peak table for sample 7 : YLW 17

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	416	1,153.97	4,206.3		78.82
3	4,099	68.63	25.4		106.09
4	4,833	59.41	18.6		106.98
5	6,649	30.42	6.9		109.19
6	8,030	20.14	3.8		110.65
7	10,380	75.00	10.9	Upper Marker	113.00
8	13,012	0.00	0.0		115.63
9	14,234	0.00	0.0		116.85
10	15,174	0.00	0.0		117.80
11	16,020	0.00	0.0		118.64
12	17,525	0.00	0.0		120.15
13	18,324	0.00	0.0		120.94
14	18,888	0.00	0.0		121.51

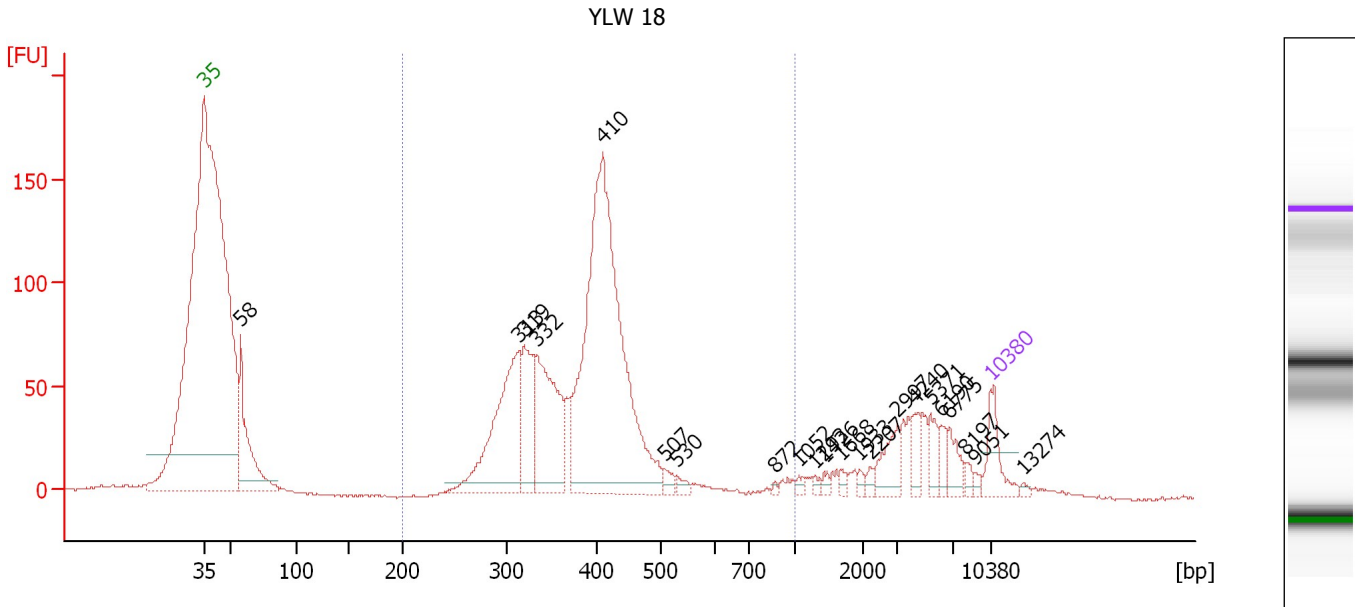
Region table for sample 7 : YLW 17

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
324	614	426	1,440.5	4,082.2	1,143.20	79	7.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
 Modified: 12/10/2015 5:14:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : YLW 18

Number of peaks found: 22 Corr. Area 1: 1,430.6
 Noise: 0.6


Peak table for sample 8 : YLW 18

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	58	359.25	9,437.7		46.27
3	313	511.77	2,480.4		71.00
4	319	215.34	1,022.2		71.52
5	332	396.99	1,809.8		72.57
6	410	1,369.58	5,061.7		78.50
7	507	25.51	76.2		83.96
8	530	18.99	54.3		85.05
9	872	5.82	10.1		93.83
10	1,052	11.83	17.0		95.92
11	1,293	9.78	11.5		97.39
12	1,426	11.37	12.1		98.19
13	1,668	10.92	9.9		99.66
14	1,933	10.06	7.9		101.28
15	2,207	12.30	8.4		102.32
16	2,997	72.20	36.5		104.74
17	4,240	44.96	16.1		106.26
18	5,371	43.37	12.2		107.64
19	6,190	28.08	6.9		108.63
20	6,775	47.91	10.7		109.35
21	8,197	14.32	2.6		110.82
22	9,051	9.35	1.6		111.67
23	10,380	75.00	10.9	Upper Marker	113.00
24	13,274	0.00	0.0		115.89

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
Modified: 12/10/2015 5:14:49 PM

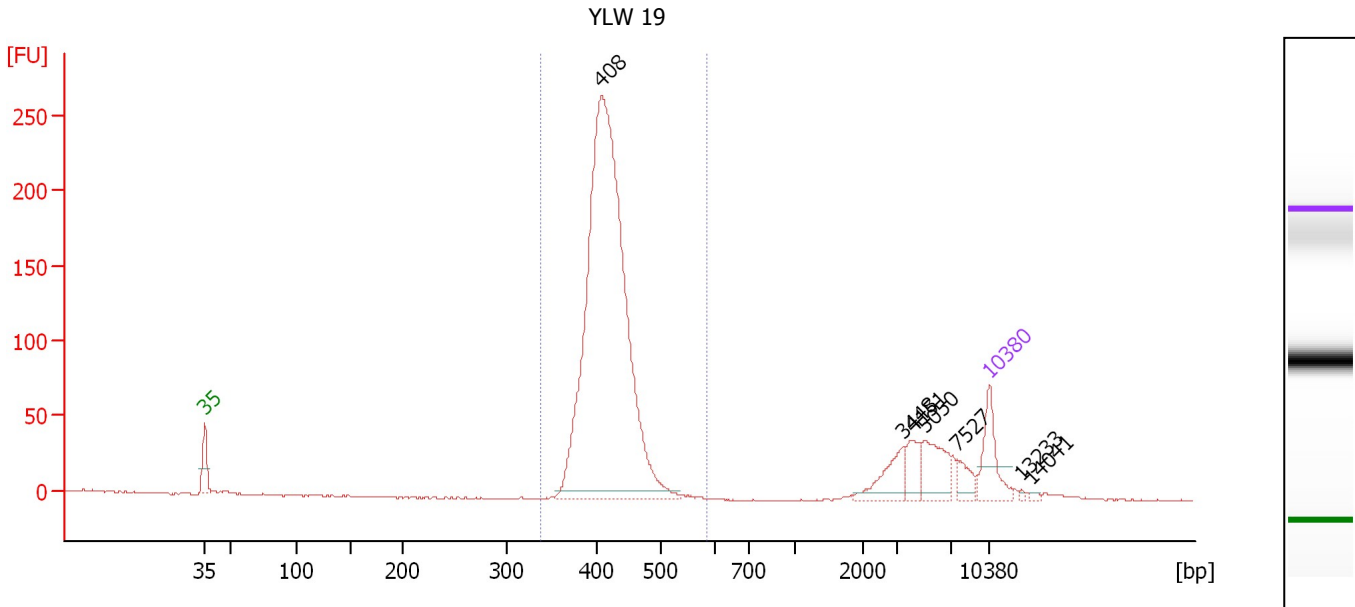
Electropherogram Summary Continued ...**... Region table for sample 8 : YLW 18**

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	391	1,430.6	10,841.5	 2,659.63	74	22.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
 Modified: 12/10/2015 5:14:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : YLW 19

Number of peaks found: 7 Corr. Area 1: 1,315.7
 Noise: 0.5

Peak table for sample 9 : YLW 19

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	408	1,679.41	6,238.3		78.38
3	3,448	68.49	30.1		105.30
4	4,151	44.55	16.3		106.15
5	5,050	82.01	24.6		107.25
6	7,527	30.76	6.2		110.15
7	10,380	75.00	10.9	Upper Marker	113.00
8	13,233	0.00	0.0		115.85
9	14,041	0.00	0.0		116.66

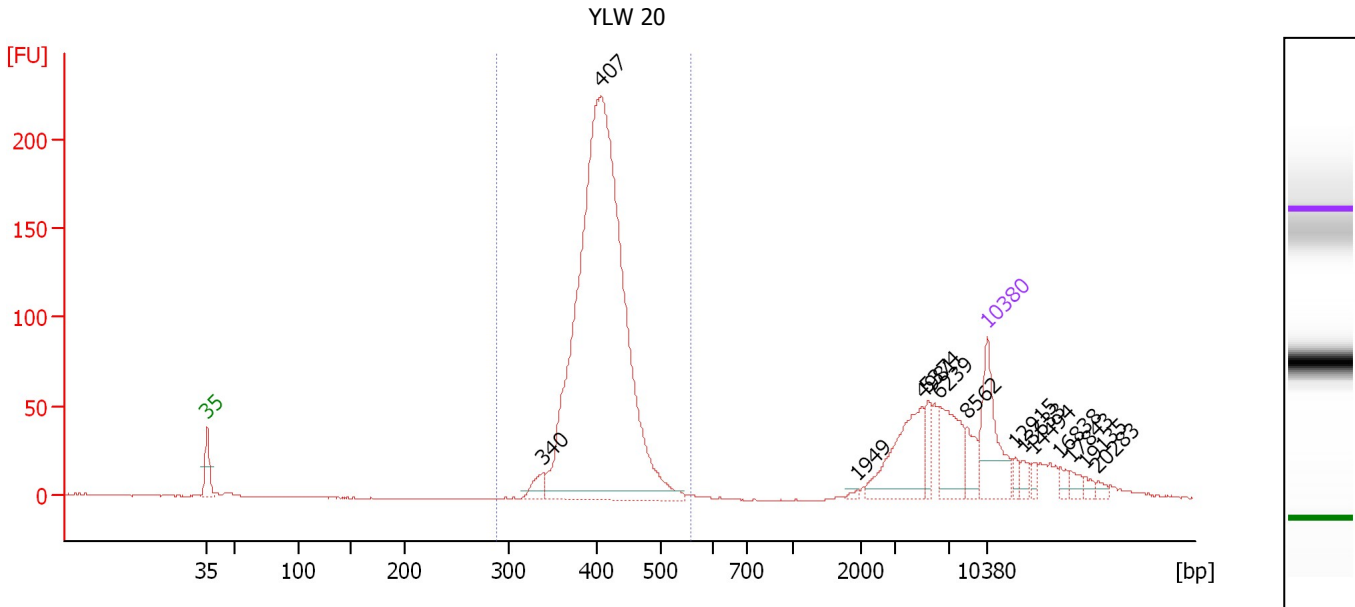
Region table for sample 9 : YLW 19

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
337	585	418	1,315.7	5,917.7	1,628.22	83	6.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
 Modified: 12/10/2015 5:14:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : YLW 20

Number of peaks found: 14 Corr. Area 1: 1,375.0
 Noise: 0.3

Peak table for sample 10 : YLW 20

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	340	24.62	109.8		73.14
3	407	1,220.00	4,545.4		78.31
4	1,949	2.47	1.9		101.37
5	4,981	99.70	30.3		107.16
6	5,374	22.02	6.2		107.64
7	6,239	67.30	16.3		108.69
8	8,562	25.18	4.5		111.18
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,915	0.00	0.0		115.54
11	13,633	0.00	0.0		116.25
12	14,494	0.00	0.0		117.11
13	16,838	0.00	0.0		119.46
14	17,843	0.00	0.0		120.46
15	19,135	0.00	0.0		121.76
16	20,283	0.00	0.0		122.90

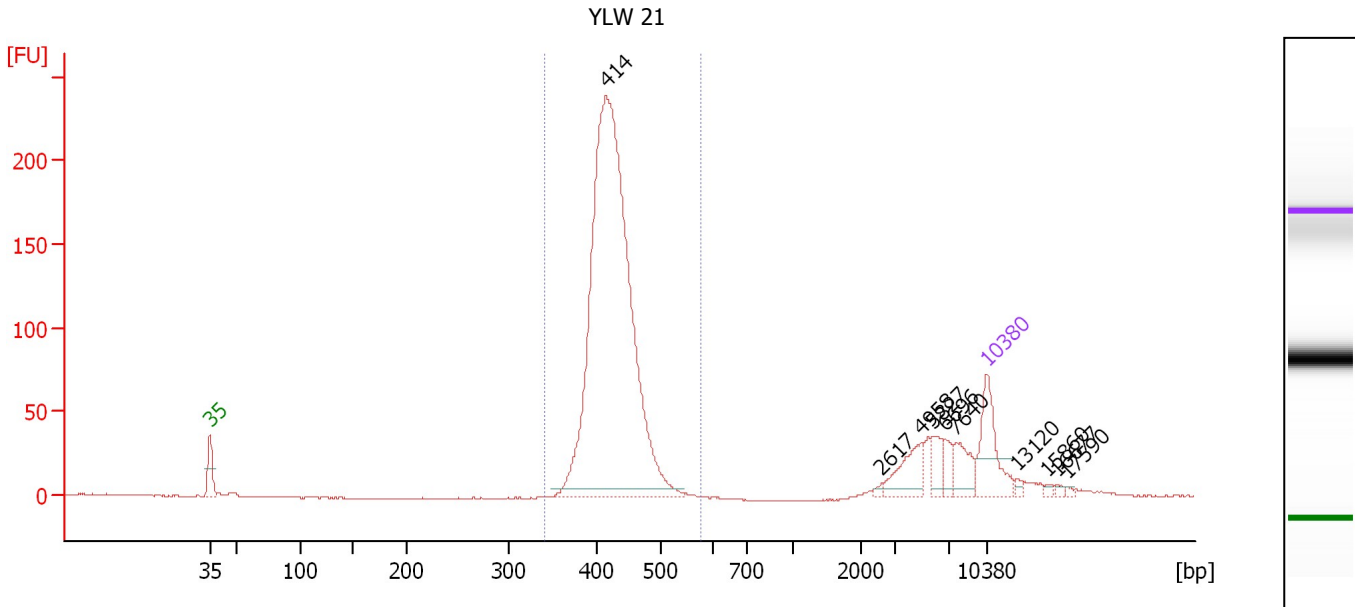
Region table for sample 10 : YLW 20

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
289	558	410	1,375.0	4,527.3	1,216.13	74	8.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
 Modified: 12/10/2015 5:14:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : YLW 21

Number of peaks found: 10 Corr. Area 1: 1,208.9
 Noise: 0.3

Peak table for sample 11 : YLW 21

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	414	1,286.37	4,709.1		78.72
3	2,617	4.44	2.6		103.58
4	4,958	54.89	16.8		107.13
5	5,827	26.79	7.0		108.19
6	6,696	23.79	5.4		109.25
7	7,640	38.39	7.6		110.26
8	10,380	75.00	10.9	Upper Marker	113.00
9	13,120	0.00	0.0		115.74
10	15,860	0.00	0.0		118.48
11	16,677	0.00	0.0		119.30
12	17,590	0.00	0.0		120.21

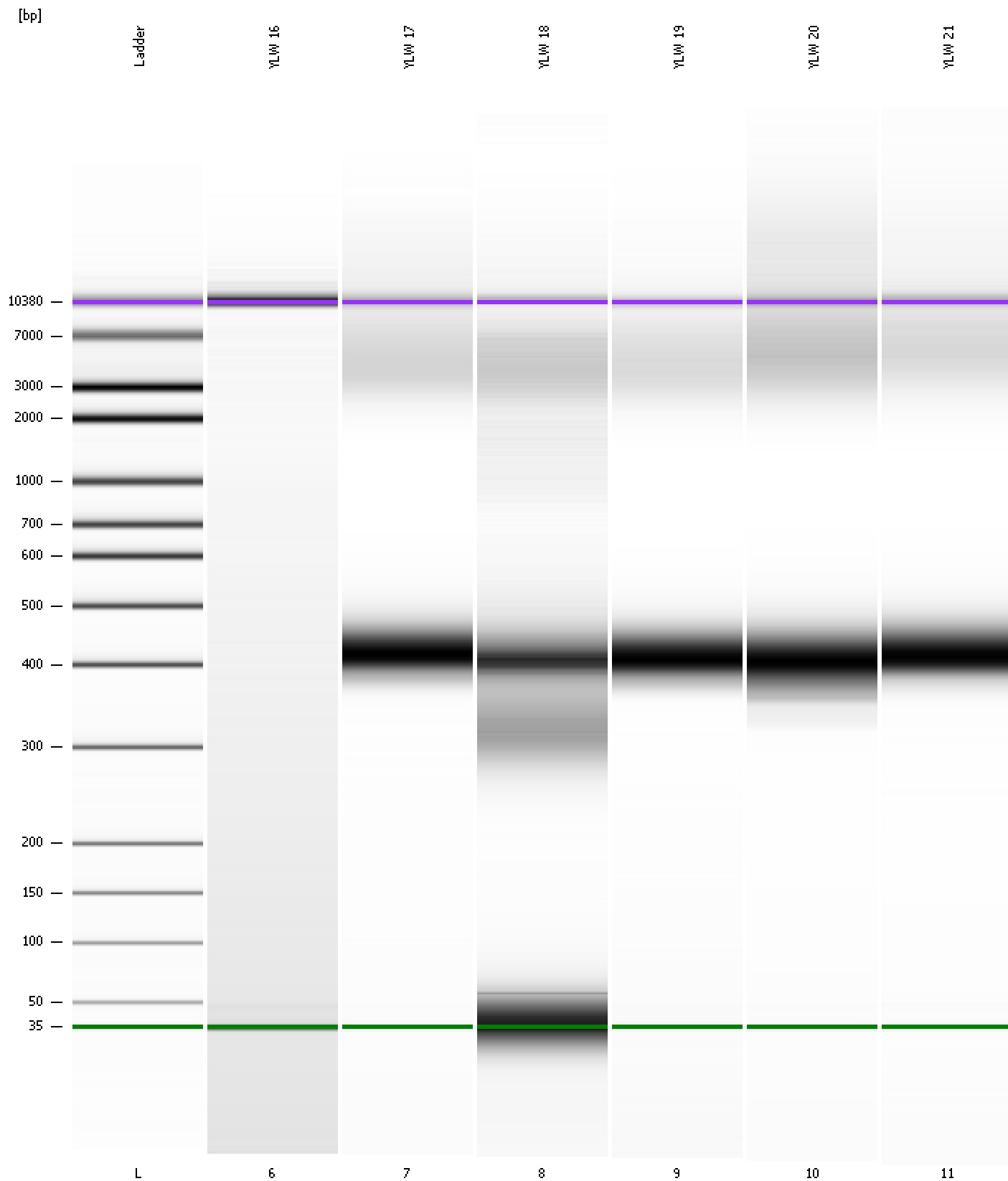
Region table for sample 11 : YLW 21

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
340	574	424	1,208.9	4,519.8	1,261.50	83	6.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad

Created: 12/10/2015 4:31:58 PM
Modified: 12/10/2015 5:14:49 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 12/10/2015 4:31:58 PM
 Data Path: C:\...ettings\Bioanalyzer\2015-12-10\2015-12-10_004_YLW_16-21.xad Modified: 12/10/2015 5:14:49 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		12/10/2015 5:13:48 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-12-10\2015-12-10_004.xad)		Instrument	Run		12/10/2015 4:32:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/10/2015 4:32:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/10/2015 4:32:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/10/2015 4:32:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/10/2015 4:32:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/10/2015 4:32:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/10/2015 4:32:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1