

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-15\2014-08-15\_003.xad

Created: 8/15/2014 8:54:36 AM  
Modified: 8/15/2014 10:03:35 AM

**Electrophoresis File Run Summary**

Instrument Information:

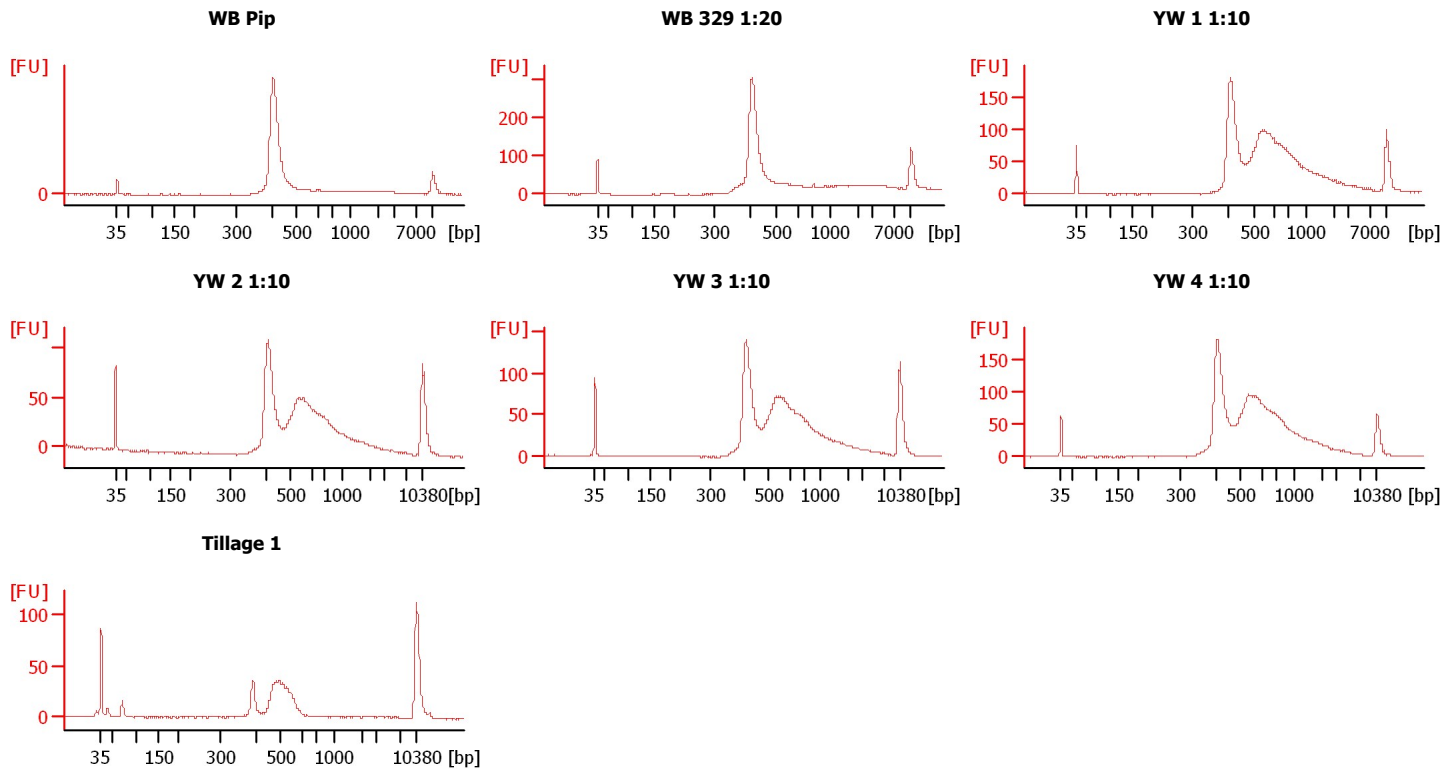
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



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**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WB Pip		<input type="checkbox"/>	✓			
WB 329 1:20		<input type="checkbox"/>	✓			
YW 1 1:10		<input type="checkbox"/>	✓			
YW 2 1:10		<input type="checkbox"/>	✓			
YW 3 1:10		<input type="checkbox"/>	✓			
YW 4 1:10		<input type="checkbox"/>	✓			
Tillage 1		<input type="checkbox"/>	✓			
sample 8		<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 :**

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**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

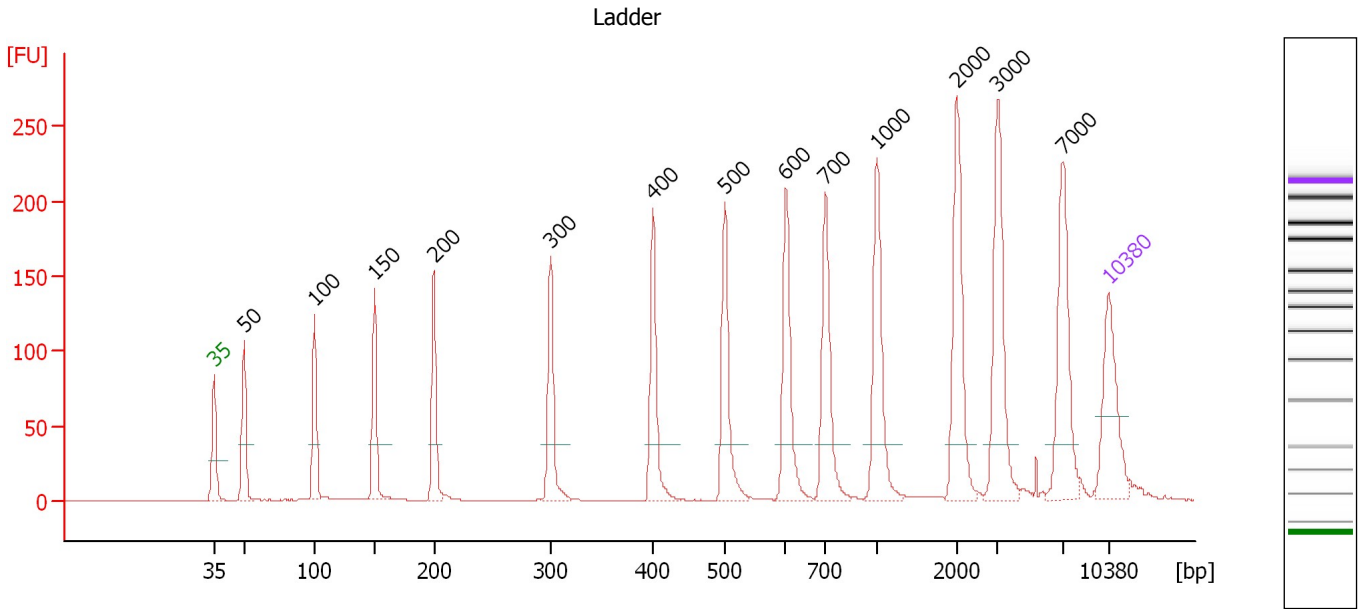
**Ladder**

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

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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

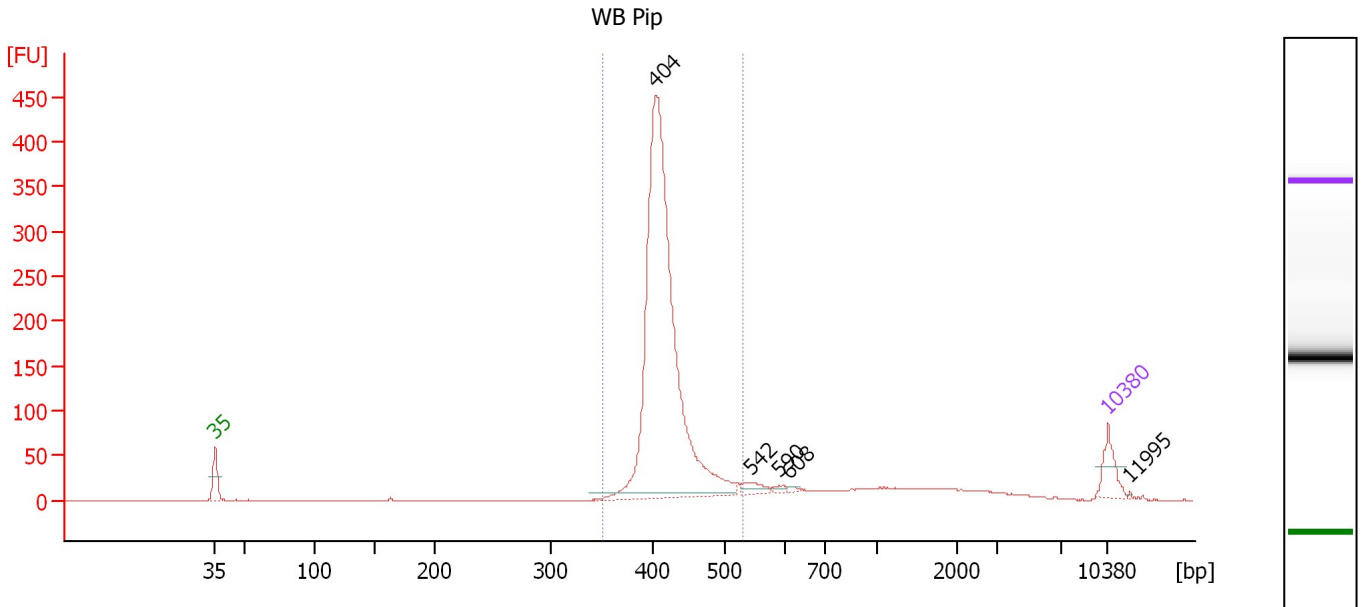
**Peak table for Ladder**

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

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : WB Pip**

Number of peaks found: 5                      Corr. Area 1: 1,566.0  
 Noise: 0.2

**Peak table for sample 1 : WB Pip**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	404	2,192.10	8,227.6	
3	542	41.47	115.8	
4	590	12.44	32.0	
5	608	9.64	24.0	
6	10,380	75.00	10.9	Upper Marker
7	11,995	0.00	0.0	

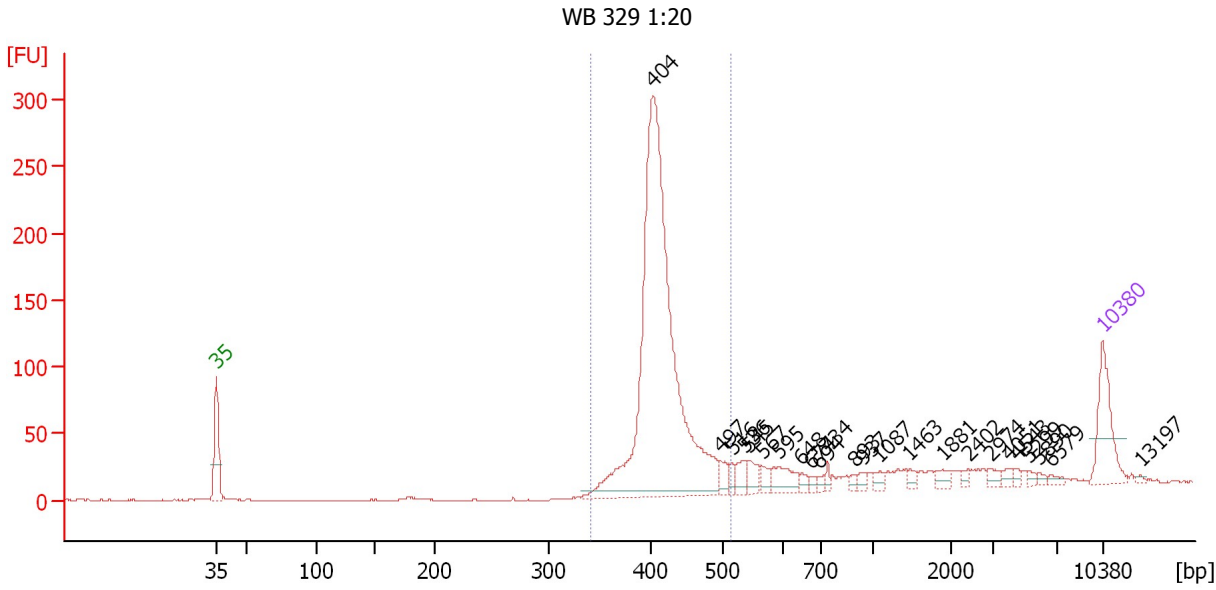
**Region table for sample 1 : WB Pip**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
351	531	418	8,254.6	2,270.37	1,566.0	82	6.8

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**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : WB 329 1:20**

Number of peaks found: 24                      Corr. Area 1: 1,072.8  
 Noise: 0.2

**Peak table for sample 2 : WB 329 1:20**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	404	1,047.07	3,930.5	
3	497	22.03	67.1	
4	516	14.44	42.4	
5	536	22.69	64.1	
6	545	25.79	71.7	
7	567	15.64	41.8	
8	595	38.83	98.9	
9	648	9.14	21.4	
10	674	6.55	14.7	
11	694	6.41	14.0	
12	734	8.28	17.1	
13	893	7.23	12.3	
14	937	9.38	15.2	
15	1,087	9.61	13.4	
16	1,463	8.29	8.6	
17	1,881	13.02	10.5	
18	2,402	5.85	3.7	
19	2,974	10.42	5.3	
20	4,051	8.59	3.2	
21	4,543	5.16	1.7	
22	5,299	5.03	1.4	
23	5,890	4.84	1.2	
24	6,579	6.07	1.4	
25	10,380	75.00	10.9	Upper Marker
26	13,197	0.00	0.0	

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**Electropherogram Summary Continued ...**

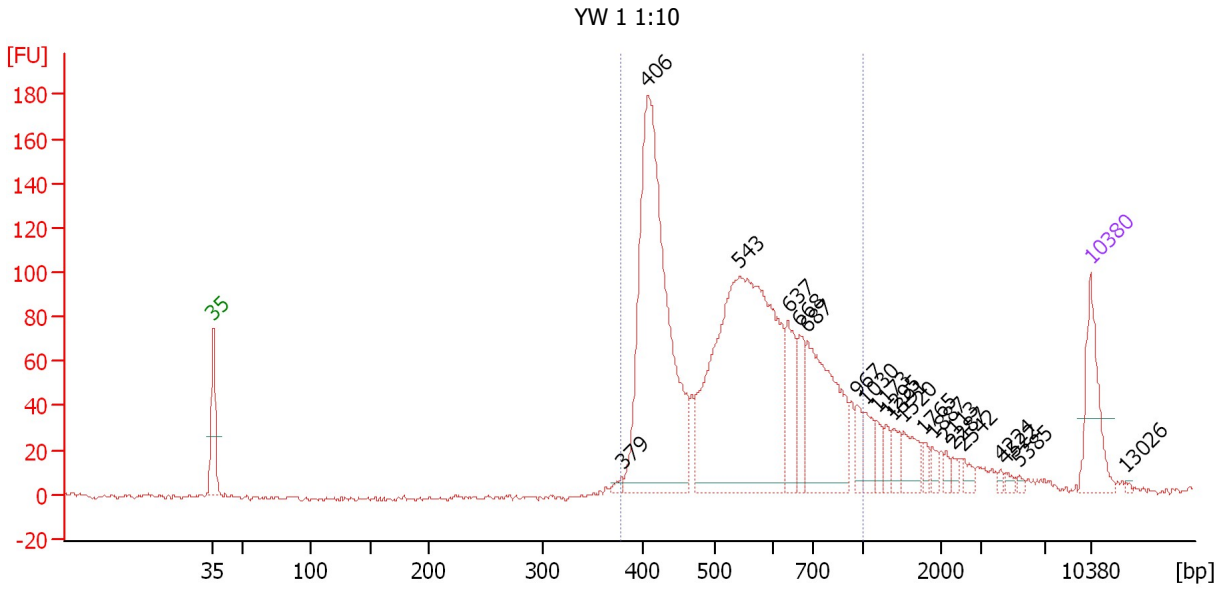
... Region table for sample 2 : WB 329 1:20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
341	513	416	3,684.6	1,008.26	 1,072.8	75	6.9

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : YW 1 1:10**

Number of peaks found: 21                      Corr. Area 1: 1,723.9  
 Noise: 1.0

**Peak table for sample 3 : YW 1 1:10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	379	7.48	29.9	
3	406	655.10	2,443.6	
4	543	698.29	1,949.2	
5	637	77.64	184.6	
6	668	57.12	129.6	
7	687	214.89	474.0	
8	967	23.78	37.3	
9	1,030	29.43	43.3	
10	1,173	19.59	25.3	
11	1,295	15.67	18.3	
12	1,391	18.77	20.5	
13	1,520	34.53	34.4	
14	1,765	10.66	9.1	
15	1,887	10.55	8.5	
16	2,113	7.46	5.3	
17	2,287	7.67	5.1	
18	2,542	10.01	6.0	
19	4,224	3.98	1.4	
20	4,522	5.21	1.7	
21	5,385	3.42	1.0	
22	10,380	75.00	10.9	Upper Marker
23	13,026	0.00	0.0	



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-15\2014-08-15\_003.xad

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**Electropherogram Summary Continued ...**

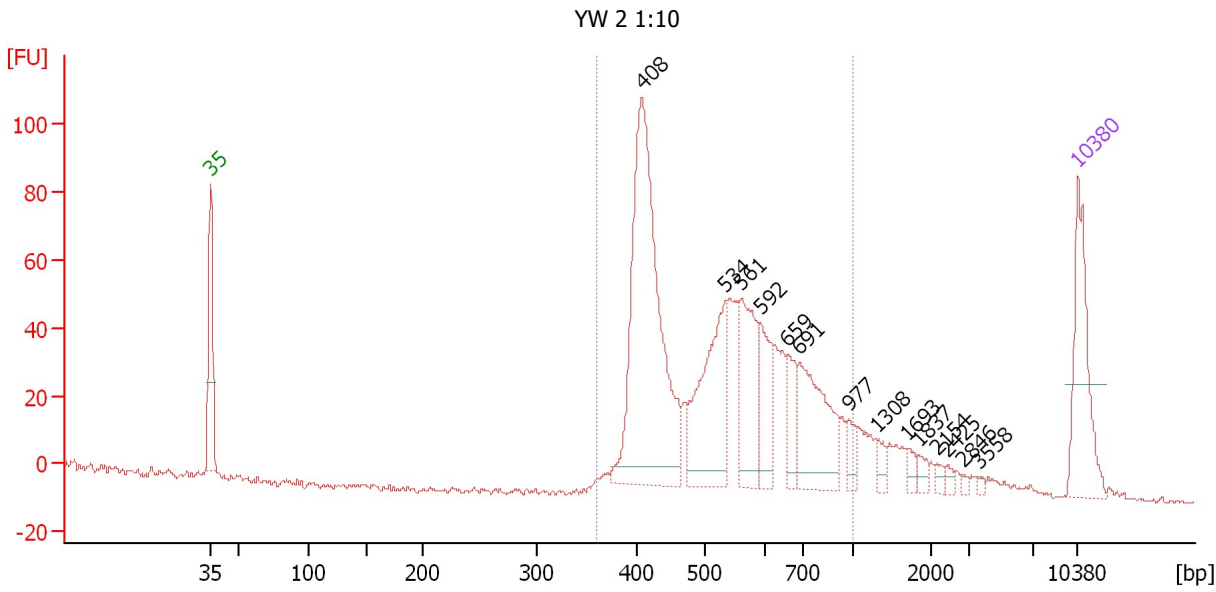
... Region table for sample 3 : YW 1 1:10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
378	1,000	557	5,066.2	1,727.74	 1,723.9	87	25.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-15\2014-08-15\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : YW 2 1:10**

Number of peaks found: 14                      Corr. Area 1: 991.6  
 Noise: 0.8

**Peak table for sample 4 : YW 2 1:10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	408	377.89	1,401.9	
3	534	142.00	403.2	
4	561	95.98	259.4	
5	592	52.03	133.1	
6	659	33.15	76.2	
7	691	108.49	237.8	
8	977	16.27	25.2	
9	1,308	9.94	11.5	
10	1,693	8.22	7.4	
11	1,837	7.73	6.4	
12	2,154	5.11	3.6	
13	2,425	4.13	2.6	
14	2,846	2.31	1.2	
15	3,558	2.24	1.0	
16	10,380	75.00	10.9	Upper Marker

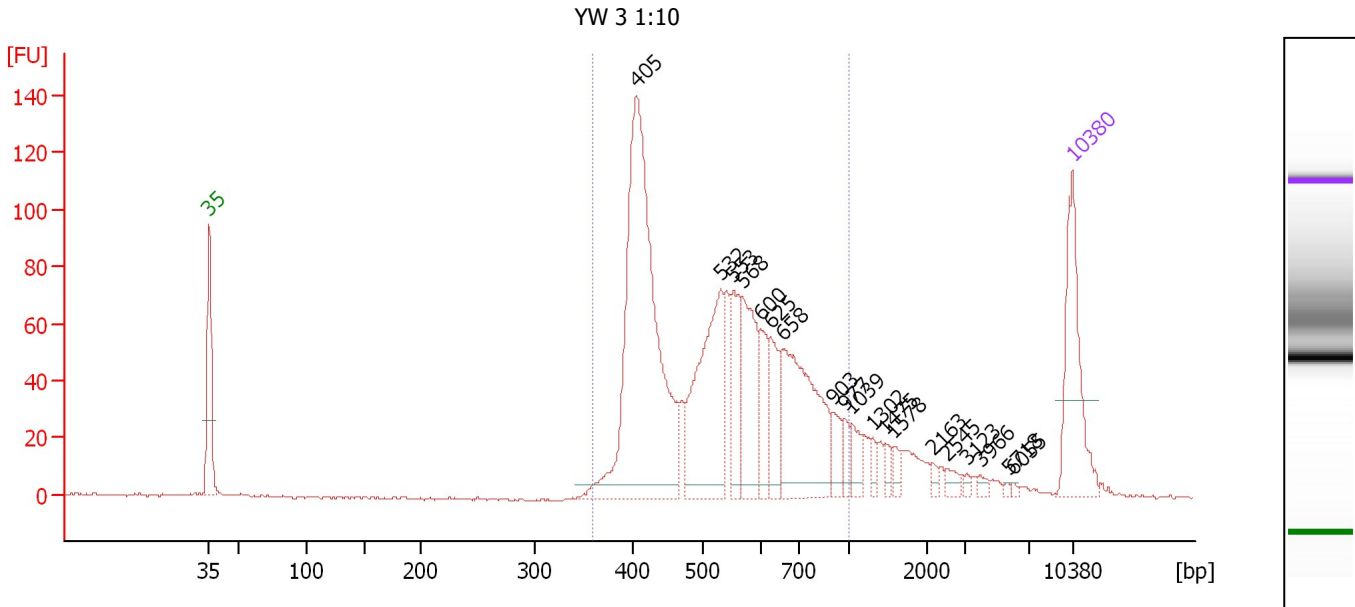
**Region table for sample 4 : YW 2 1:10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
361	1,000	551	2,771.9	934.95	991.6	88	25.6

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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : YW 3 1:10**

Number of peaks found: 19      Corr. Area 1: 1,323.3  
 Noise: 0.4

**Peak table for sample 5 : YW 3 1:10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	405	415.72	1,554.0	
3	532	158.67	452.3	
4	553	56.32	154.2	
5	568	83.16	221.9	
6	600	36.36	91.9	
7	625	41.80	101.4	
8	658	151.14	347.8	
9	903	18.96	31.8	
10	977	12.67	19.7	
11	1,039	15.48	22.6	
12	1,302	7.71	9.0	
13	1,475	6.80	7.0	
14	1,578	7.23	6.9	
15	2,163	4.40	3.1	
16	2,545	7.39	4.4	
17	3,123	2.72	1.3	
18	3,966	3.83	1.5	
19	5,718	1.49	0.4	
20	6,055	1.61	0.4	
21	10,380	75.00	10.9	Upper Marker

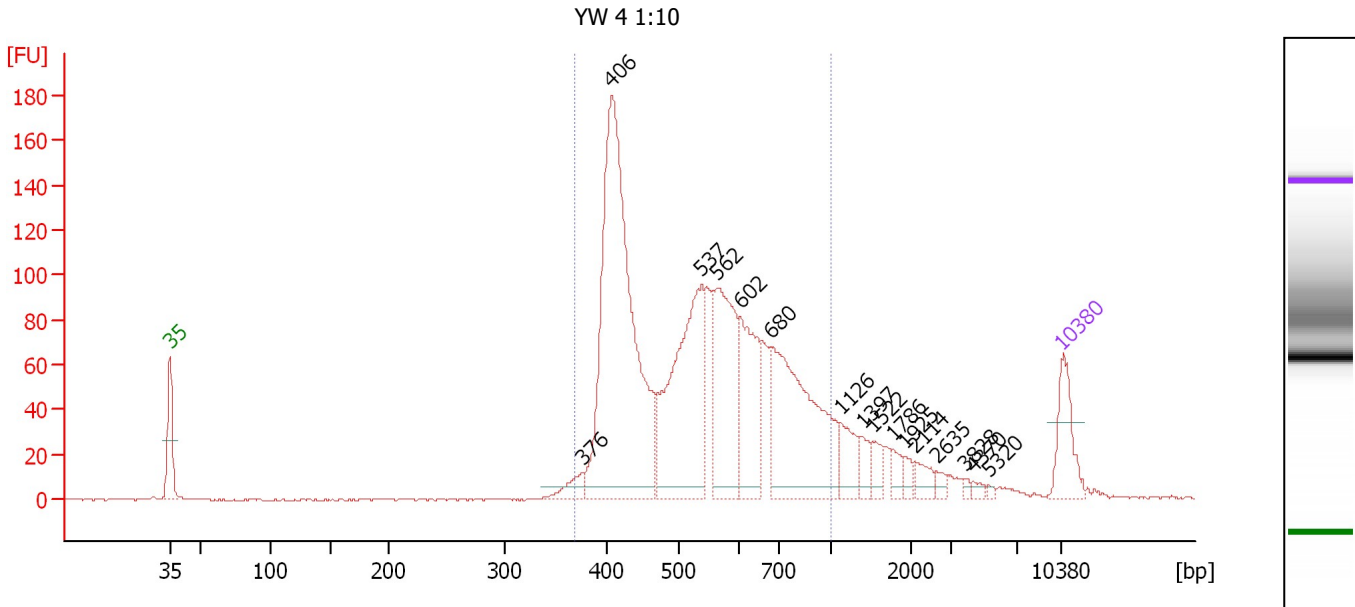
**Region table for sample 5 : YW 3 1:10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
360	1,000	549	2,999.4	1,007.00	1,323.3	87	25.8

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : YW 4 1:10**

Number of peaks found: 16                      Corr. Area 1: 1,763.9  
 Noise: 0.3

**Peak table for sample 6 : YW 4 1:10**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	376	36.08	145.4	
3	406	928.62	3,465.0	
4	537	437.21	1,233.7	
5	562	288.09	777.2	
6	602	194.54	490.0	
7	680	405.03	901.9	
8	1,126	60.34	81.2	
9	1,397	28.80	31.2	
10	1,522	27.35	27.2	
11	1,786	19.80	16.8	
12	1,925	15.91	12.5	
13	2,114	23.91	17.1	
14	2,635	11.94	6.9	
15	3,828	5.21	2.1	
16	4,370	7.73	2.7	
17	5,320	3.93	1.1	
18	10,380	75.00	10.9	Upper Marker

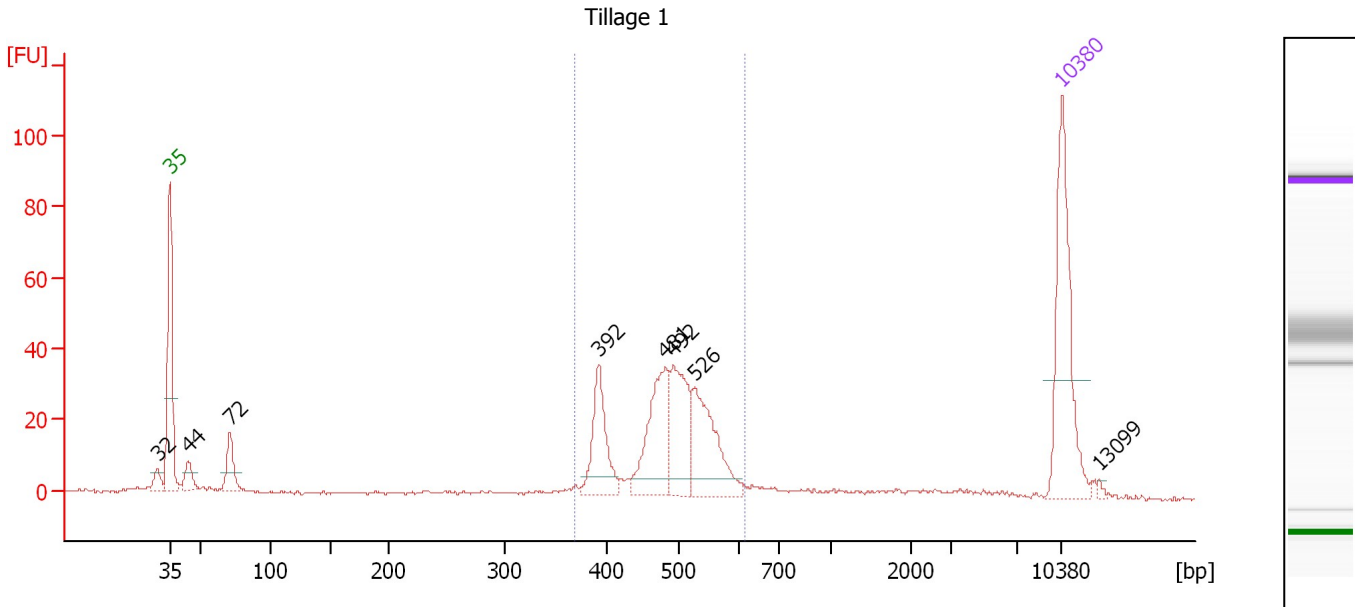
**Region table for sample 6 : YW 4 1:10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
367	1,000	554	7,103.1	2,405.65	1,763.9	87	25.9

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Tillage 1**

Number of peaks found: 8                      Corr. Area 1: 308.9  
 Noise: 0.4

**Peak table for sample 7 : Tillage 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	44	16.68	570.8	
4	72	27.17	574.4	
5	392	51.63	199.7	
6	481	71.53	225.5	
7	492	60.25	185.5	
8	526	67.04	193.2	
9	10,380	75.00	10.9	Upper Marker
10	13,099	0.00	0.0	

**Region table for sample 7 : Tillage 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
369	615	484	812.2	254.41	308.9	70	11.7

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**Gel Image**

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**Invalid Samples**

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\2014-08-15\2014-08-15\_003.xad

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**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		8/15/2014 9:23:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-08-15\2014-08-15_003.xad)		Instrument	Run		8/15/2014 8:54:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/15/2014 8:54:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/15/2014 8:54:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/15/2014 8:54:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/15/2014 8:54:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/15/2014 8:54:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/15/2014 8:54:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1