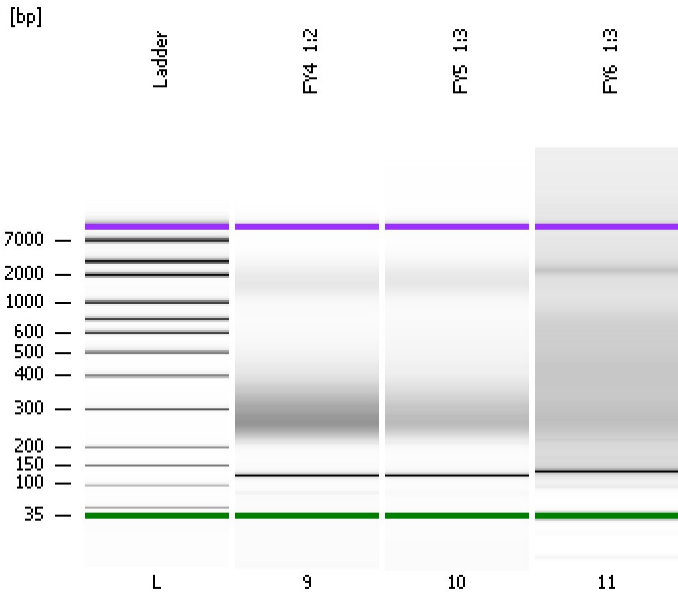


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad

Created: 3/31/2014 9:51:47 AM
Modified: 4/1/2014 3:20:12 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

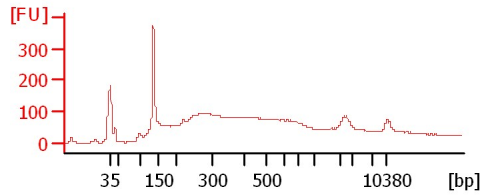
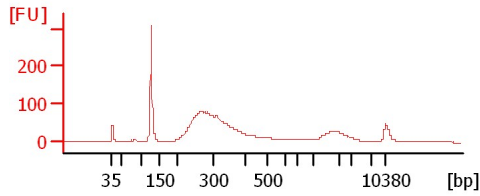
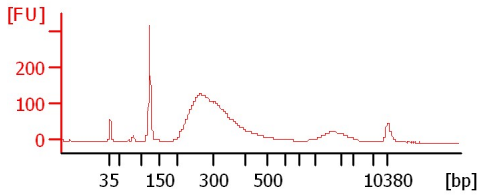
Chip Information:

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

FY4_1:2

FY5_1:3

FY6_1:3



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad

Created: 3/31/2014 9:51:47 AM
Modified: 4/1/2014 3:20:12 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
FY4_1:2		<input type="checkbox"/>	✓			
FY5_1:3		<input type="checkbox"/>	✓			
FY6_1:3		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

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

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad

Created: 3/31/2014 9:51:47 AM
 Modified: 4/1/2014 3:20:12 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

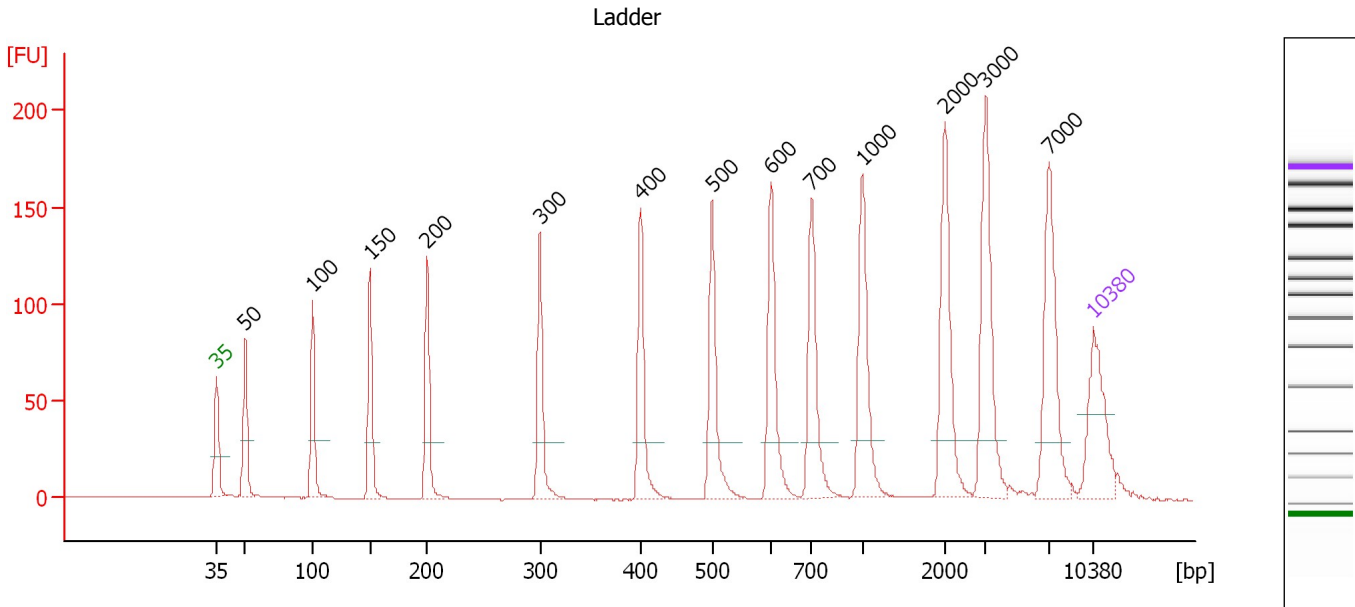
Ladder

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:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad

Created: 3/31/2014 9:51:47 AM
 Modified: 4/1/2014 3:20:12 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

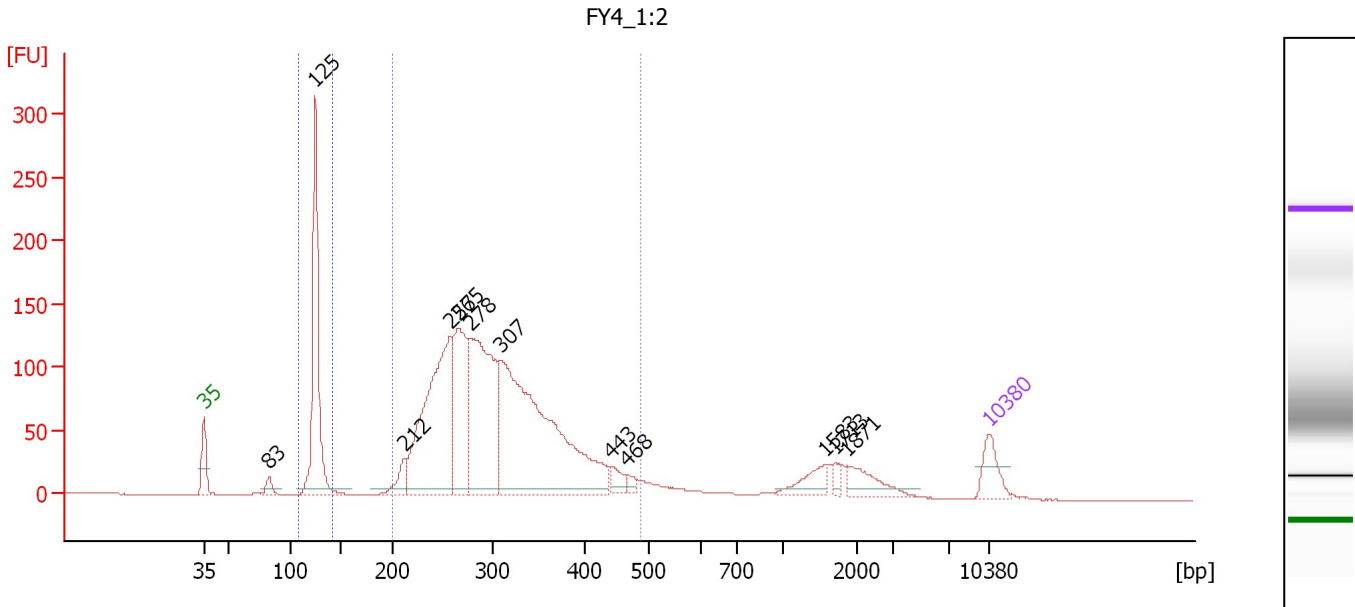
Peak table for Ladder

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.26	50	150.00	4,545.5	Ladder Peak
3	50.66	100	150.00	2,272.7	Ladder Peak
4	55.22	150	150.00	1,515.2	Ladder Peak
5	59.78	200	150.00	1,136.4	Ladder Peak
6	68.80	300	150.00	757.6	Ladder Peak
7	76.85	400	150.00	568.2	Ladder Peak
8	82.56	500	150.00	454.5	Ladder Peak
9	87.24	600	150.00	378.8	Ladder Peak
10	90.48	700	150.00	324.7	Ladder Peak
11	94.56	1,000	150.00	227.3	Ladder Peak
12	101.16	2,000	150.00	113.6	Ladder Peak
13	104.40	3,000	150.00	75.8	Ladder Peak
14	109.42	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad

Created: 3/31/2014 9:51:47 AM
 Modified: 4/1/2014 3:20:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : FY4 1:2

Number of peaks found: 12 Corr. Area 1: 2,175.2
 Noise: 0.2 Corr. Area 2: 345.4

Peak table for sample 9 : FY4 1:2

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	48.80	83	44.70	818.5	
3	52.93	125	763.44	9,262.0	
4	60.87	212	87.59	625.7	
5	64.96	257	933.12	5,493.2	
6	65.67	265	492.08	2,810.6	
7	66.81	278	761.44	4,151.4	
8	69.37	307	1,380.11	6,809.0	
9	79.31	443	47.07	161.0	
10	80.73	468	23.19	75.1	
11	98.41	1,583	70.78	67.7	
12	99.27	1,713	21.06	18.6	
13	100.31	1,871	86.59	70.1	
14	113.00	10,380	75.00	10.9	Upper Marker

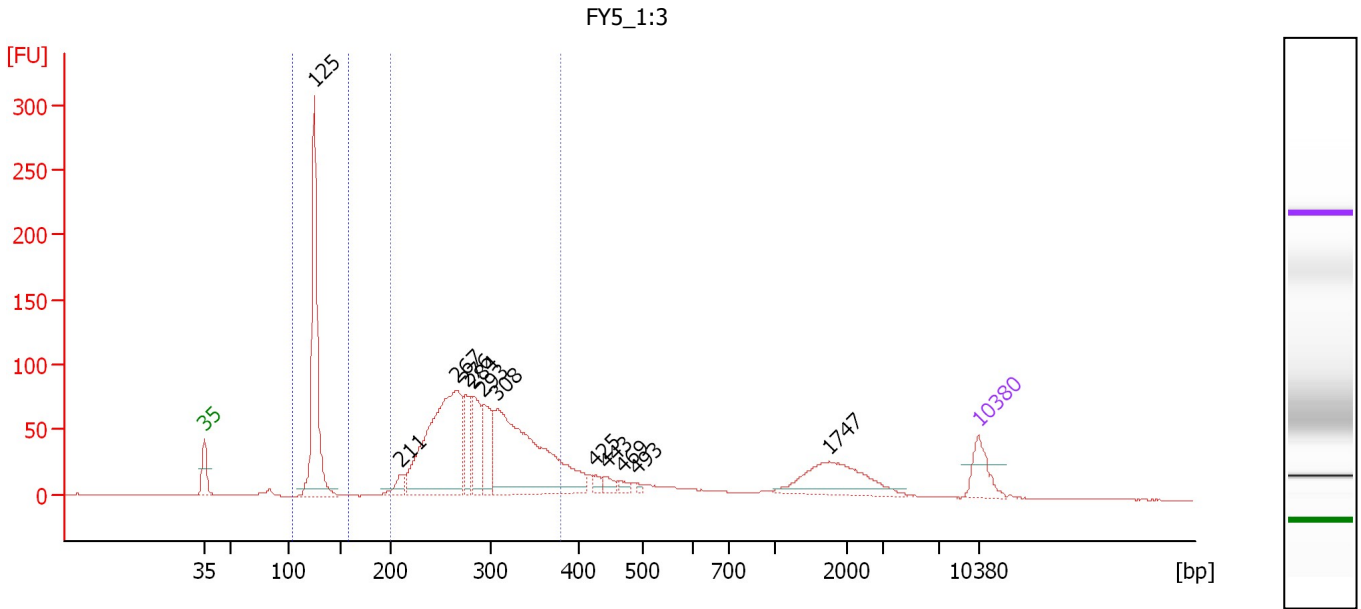
Region table for sample 9 : FY4 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
109	141	125	8,971.6	741.72	345.4	12	3.1
200	489	305	19,261.1	3,708.85	2,175.2	76	19.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad

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Electropherogram Summary Continued ...



Overall Results for sample 10 : FY5 1:3

Number of peaks found: 12 Corr. Area 1: 1,175.8
 Noise: 0.2 Corr. Area 2: 336.6

Peak table for sample 10 : FY5 1:3

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	52.94	125	745.21	9,036.2	
3	60.75	211	52.04	374.0	
4	65.82	267	790.20	4,485.2	
5	66.64	276	137.98	757.4	
6	67.31	284	176.20	941.6	
7	68.18	293	150.35	777.2	
8	69.44	308	791.91	3,897.2	
9	78.27	425	19.96	71.2	
10	79.33	443	28.41	97.1	
11	80.77	469	17.29	55.9	
12	82.17	493	8.14	25.0	
13	99.49	1,747	199.63	173.2	
14	113.00	10,380	75.00	10.9	Upper Marker

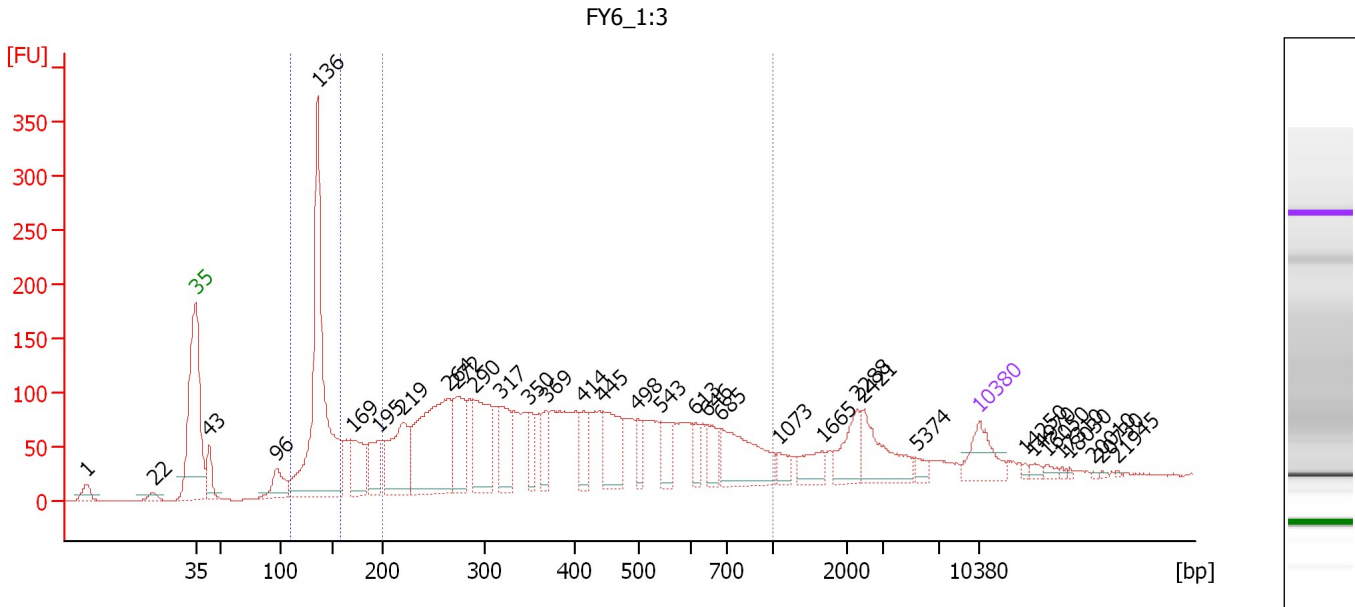
Region table for sample 10 : FY5 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
104	159	126	8,965.0	744.53	336.6	17	3.6
200	381	290	11,179.6	2,091.71	1,175.8	59	14.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad

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Electropherogram Summary Continued ...



Overall Results for sample 11 : FY6 1:3

Number of peaks found: 34 Corr. Area 1: 3,059.4
 Noise: 0.2 Corr. Area 2: 706.2

Peak table for sample 11 : FY6 1:3

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	33.29	1	0.00	0.0	
2	39.24	22	0.00	0.0	
3	43.00	35	125.00	5,411.3	Lower Marker
4	44.24	43	85.56	2,998.7	
5	50.24	96	91.07	1,436.4	
6	53.90	136	984.72	11,005.9	
7	56.95	169	155.31	1,392.4	
8	59.33	195	112.55	873.9	
9	61.52	219	243.94	1,684.9	
10	65.52	264	474.44	2,726.3	
11	66.29	272	185.01	1,030.2	
12	67.86	290	228.73	1,197.0	
13	70.19	317	130.08	621.3	
14	72.81	350	61.13	264.8	
15	74.33	369	59.02	242.5	
16	77.67	414	74.74	273.3	
17	79.43	445	143.60	488.7	
18	82.43	498	47.99	146.1	
19	84.57	543	76.42	213.2	
20	87.67	613	35.57	87.9	
21	88.71	646	64.88	152.3	
22	90.00	685	200.26	442.8	
23	95.05	1,073	29.39	41.5	
24	98.95	1,665	52.48	47.8	
25	102.10	2,288	81.14	53.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad

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Electropherogram Summary Continued ...

... Peak table for sample 11 : FY6 1:3

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	102.52	2,421	114.08	71.4	
27	107.38	5,374	15.62	4.4	
28	113.00	10,380	75.00	10.9	Upper Marker
29	117.10	14,250	0.00	0.0	
30	117.86	14,970	0.00	0.0	
31	119.00	16,050	0.00	0.0	
32	120.33	17,310	0.00	0.0	
33	121.10	18,030	0.00	0.0	
34	123.19	20,010	0.00	0.0	
35	123.95	20,730	0.00	0.0	
36	125.24	21,945	0.00	0.0	

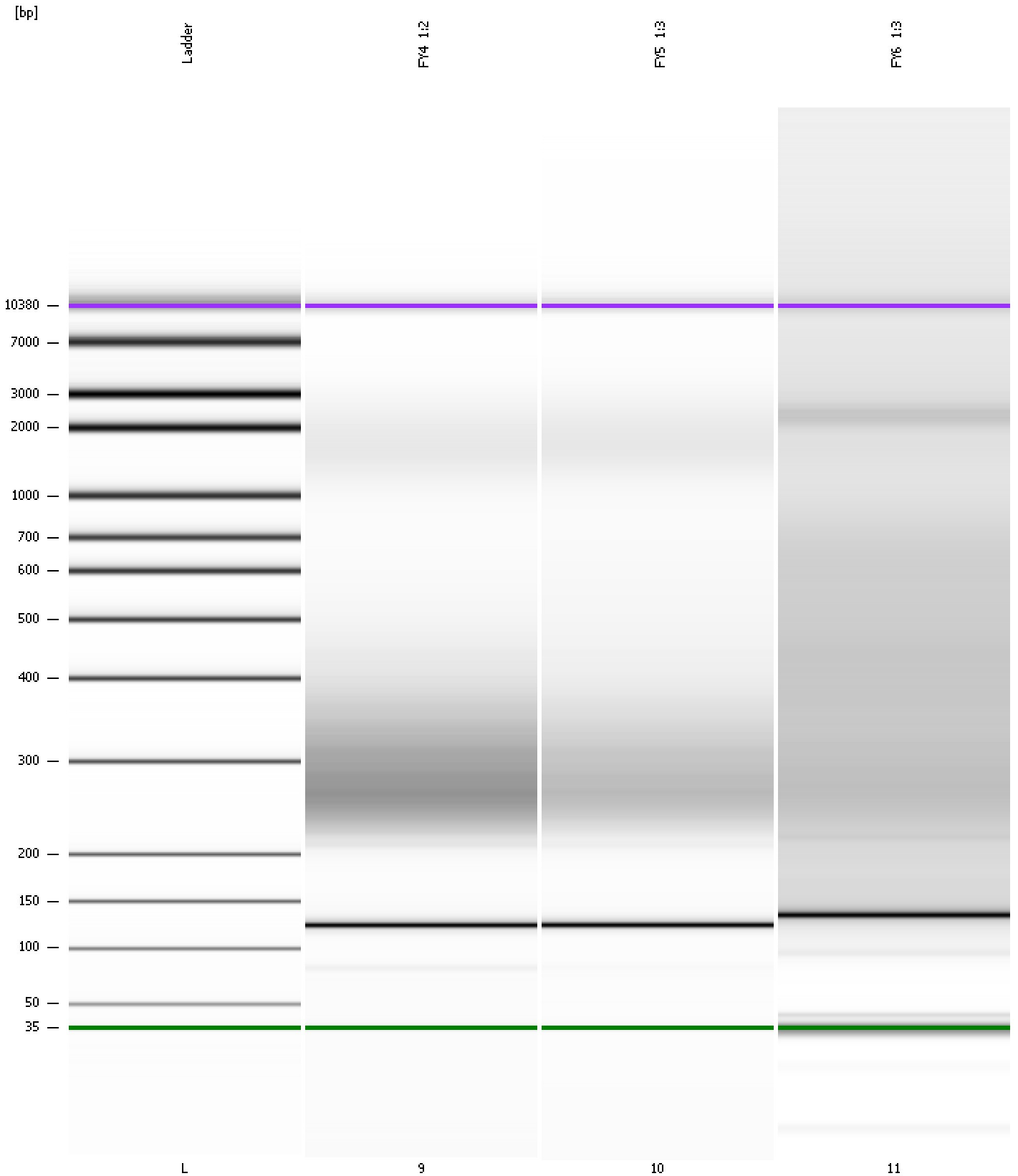
Region table for sample 11 : FY6 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
110	157	137	10,185.2	917.10	706.2	15	6.6
200	1,000	421	13,326.7	3,017.17	3,059.4	63	40.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad

Created: 3/31/2014 9:51:47 AM
Modified: 4/1/2014 3:20:12 PM

Gel Image

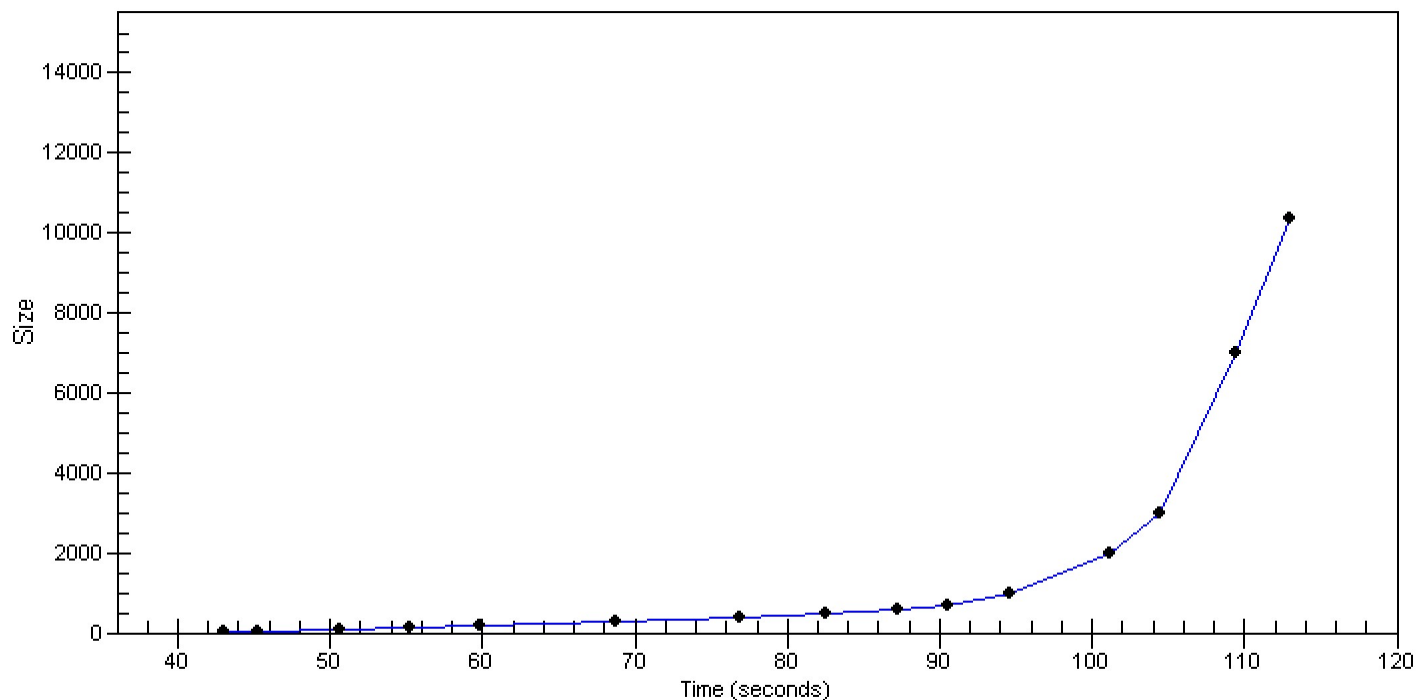


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad

Created: 3/31/2014 9:51:47 AM
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Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay Created: 3/31/2014 9:51:47 AM
 Data Path: C:\...nd Settings\Bioanalyzer\2014-03-31\2014-03-31_001_Cheng.xad Modified: 4/1/2014 3:20:12 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		3/31/2014 10:33:04 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-03-31\2014-03-31_001.xad)		Instrument	Run		3/31/2014 9:51:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/31/2014 9:51:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/31/2014 9:51:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/31/2014 9:51:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/31/2014 9:51:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/31/2014 9:51:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/31/2014 9:51:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1