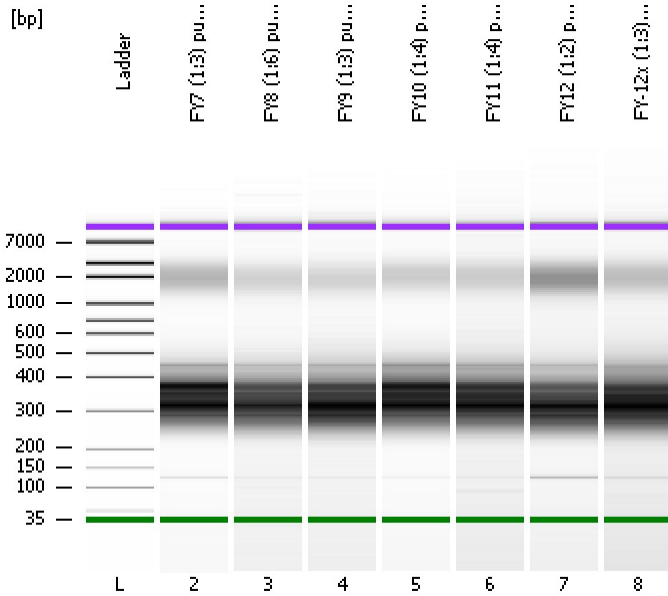


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
Modified: 4/17/2014 1:04:20 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

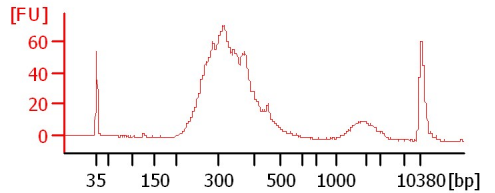
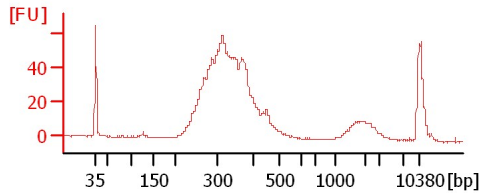
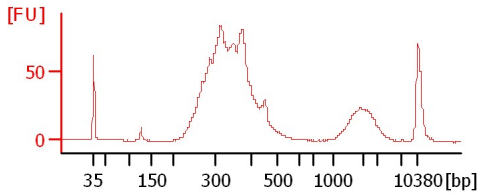
Chip Information:

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

**FY7 (1:3) purified**

**FY8 (1:6) purified**

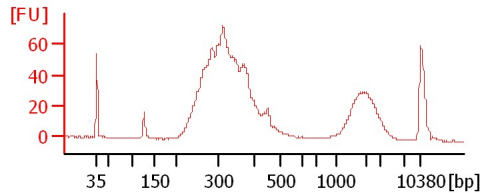
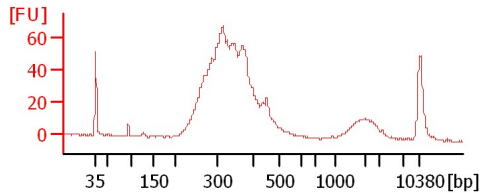
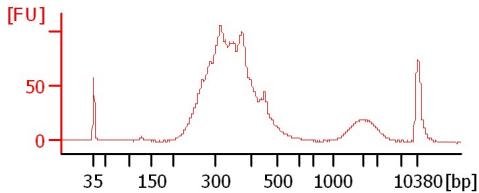
**FY9 (1:3) purified**



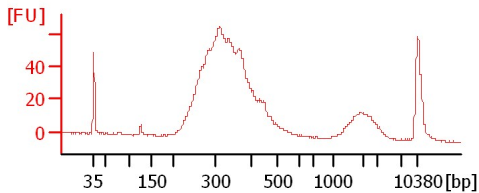
**FY10 (1:4) purified**

**FY11 (1:4) purified**

**FY12 (1:2) purified**



**FY-12x (1:3) purified**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
 Modified: 4/17/2014 1:04:20 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
FY7 (1:3) purified		<input type="checkbox"/>	✓			
FY8 (1:6) purified		<input type="checkbox"/>	✓			
FY9 (1:3) purified		<input type="checkbox"/>	✓			
FY10 (1:4) purified		<input type="checkbox"/>	✓			
FY11 (1:4) purified		<input type="checkbox"/>	✓			
FY12 (1:2) purified		<input type="checkbox"/>	✓			
FY-12x (1:3) purified		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #	Reagent Kit Lot #

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
Modified: 4/17/2014 1:04:20 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

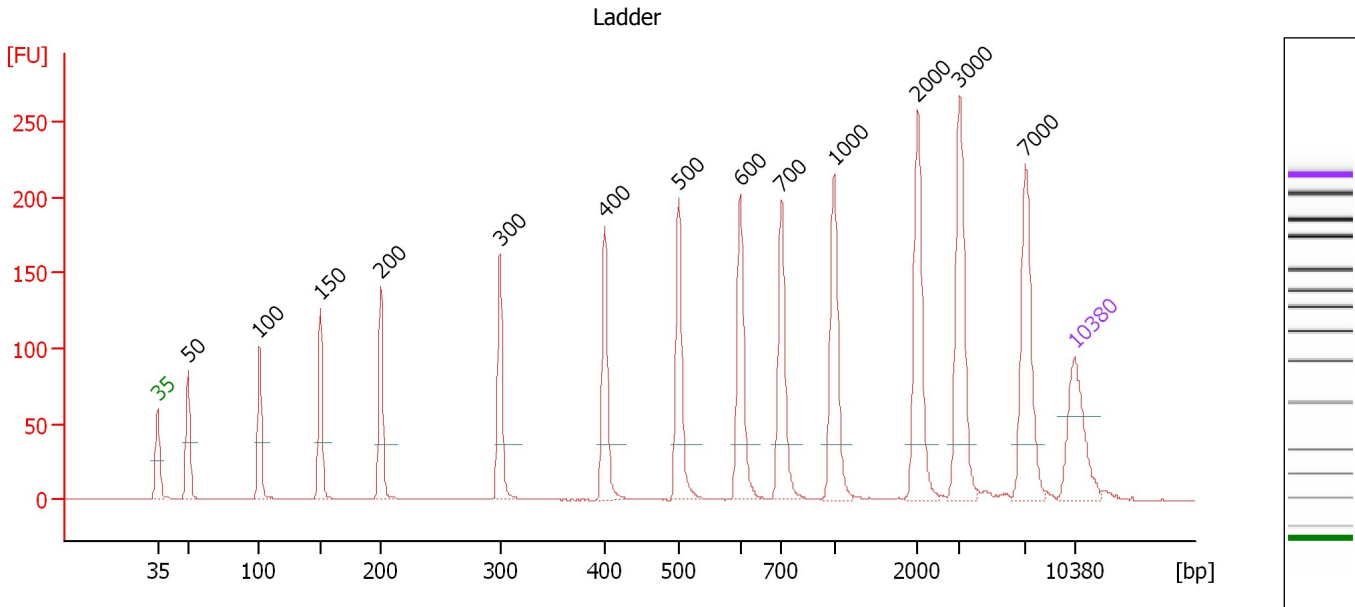
**Ladder**

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:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
 Modified: 4/17/2014 1:04:20 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

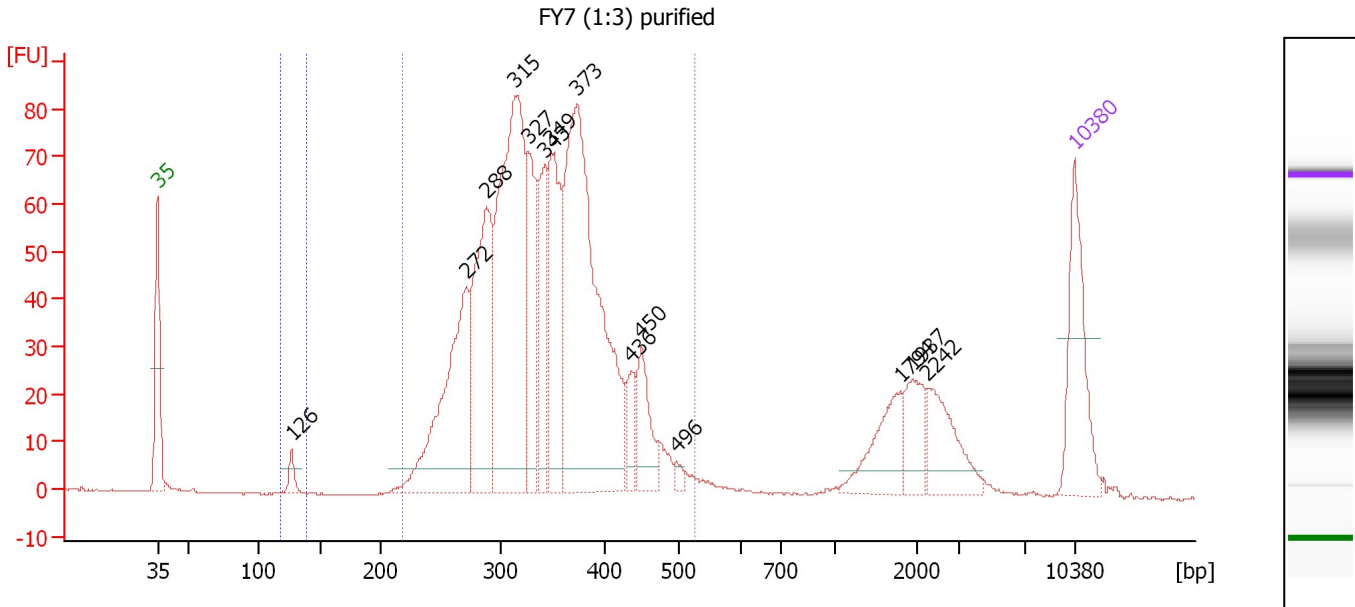
**Peak table for Ladder**

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	45.33	50	150.00	4,545.5	Ladder Peak
3	50.78	100	150.00	2,272.7	Ladder Peak
4	55.44	150	150.00	1,515.2	Ladder Peak
5	60.07	200	150.00	1,136.4	Ladder Peak
6	69.14	300	150.00	757.6	Ladder Peak
7	77.14	400	150.00	568.2	Ladder Peak
8	82.80	500	150.00	454.5	Ladder Peak
9	87.46	600	150.00	378.8	Ladder Peak
10	90.62	700	150.00	324.7	Ladder Peak
11	94.64	1,000	150.00	227.3	Ladder Peak
12	101.03	2,000	150.00	113.6	Ladder Peak
13	104.23	3,000	150.00	75.8	Ladder Peak
14	109.24	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:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
 Modified: 4/17/2014 1:04:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : FY7 (1:3) purified**

Number of peaks found: 14                      Corr. Area 1: 1,277.2  
 Noise: 0.1                                      Corr. Area 2: 7.4

**Peak table for sample 2 : FY7 (1:3) purified**

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	53.24	126	15.13	181.4	
3	66.57	272	222.93	1,243.6	
4	68.09	288	204.56	1,074.6	
5	70.31	315	375.31	1,807.3	
6	71.31	327	95.22	441.0	
7	72.58	343	89.45	395.2	
8	73.06	349	144.35	626.8	
9	74.97	373	424.15	1,723.2	
10	79.20	436	29.31	101.8	
11	79.94	450	53.54	180.4	
12	82.60	496	6.90	21.1	
13	99.71	1,794	52.86	44.6	
14	100.63	1,937	36.13	28.3	
15	101.81	2,242	52.35	35.4	
16	113.00	10,380	75.00	10.9	Upper Marker

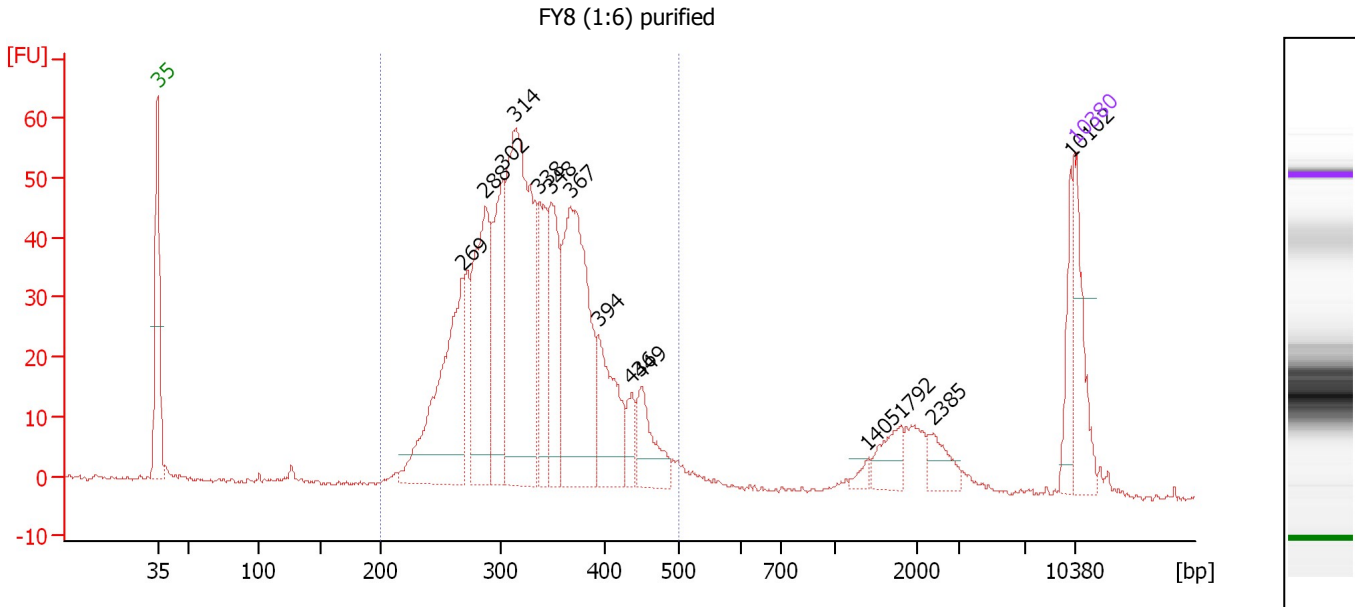
**Region table for sample 2 : FY7 (1:3) purified**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
118	138	127	156.2	13.04	7.4	1	1.5
218	526	342	7,887.7	1,716.26	1,277.2	87	16.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
 Modified: 4/17/2014 1:04:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : FY8 (1:6) purified**

Number of peaks found: 14                      Corr. Area 1: 887.5  
 Noise: 0.4

**Peak table for sample 3 : FY8 (1:6) purified**

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	66.29	269	326.67	1,843.0	
3	68.01	288	276.31	1,455.9	
4	69.34	302	203.32	1,018.5	
5	70.22	314	518.14	2,504.1	
6	72.17	338	115.11	516.3	
7	73.01	348	158.02	687.3	
8	74.51	367	365.46	1,508.2	
9	76.63	394	130.06	500.6	
10	79.19	436	36.58	127.0	
11	79.90	449	80.10	270.4	
12	97.22	1,405	10.16	11.0	
13	99.70	1,792	38.53	32.6	
14	102.26	2,385	32.05	20.4	
15	112.69	10,102	49.87	7.5	
16	113.00	10,380	75.00	10.9	Upper Marker

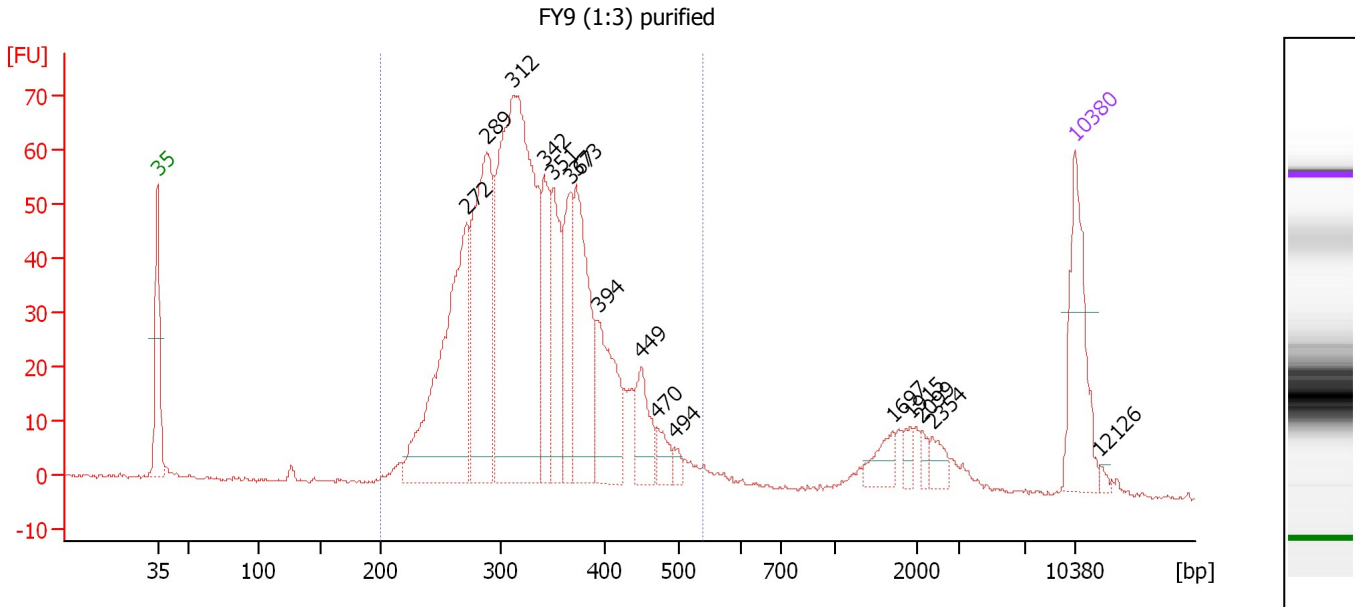
**Region table for sample 3 : FY8 (1:6) purified**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	500	332	10,967.2	2,319.57	887.5	88	16.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
 Modified: 4/17/2014 1:04:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : FY9 (1:3) purified**

Number of peaks found: 16                      Corr. Area 1: 1,123.4  
 Noise: 0.4

**Peak table for sample 4 : FY9 (1:3) purified**

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	66.57	272	290.52	1,620.1	
3	68.11	289	240.54	1,262.7	
4	70.10	312	512.56	2,489.5	
5	72.54	342	89.10	394.2	
6	73.21	351	85.31	368.3	
7	74.52	367	83.36	343.9	
8	74.97	373	142.70	579.7	
9	76.65	394	98.41	378.6	
10	79.90	449	45.69	154.2	
11	81.12	470	18.45	59.4	
12	82.47	494	7.69	23.6	
13	99.09	1,697	19.65	17.6	
14	100.49	1,915	9.34	7.4	
15	101.35	2,099	6.44	4.6	
16	102.16	2,354	12.63	8.1	
17	113.00	10,380	75.00	10.9	Upper Marker
18	114.94	12,126	0.00	0.0	

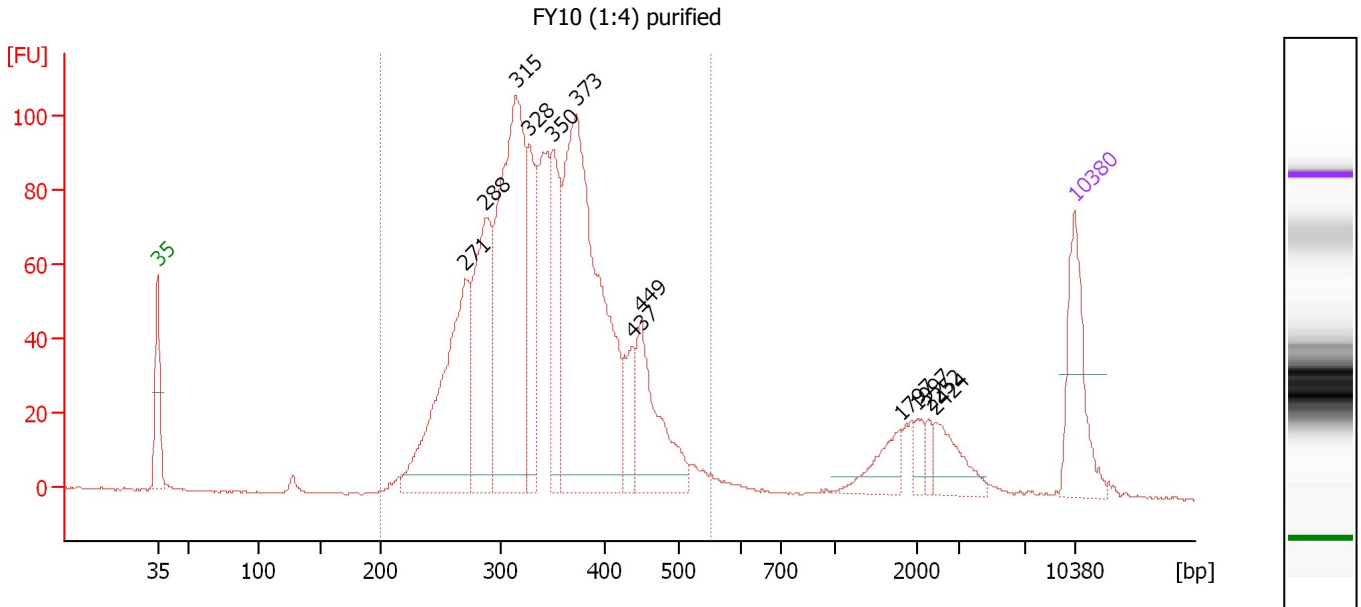
**Region table for sample 4 : FY9 (1:3) purified**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	540	334	8,071.2	1,704.48	1,123.4	90	18.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
 Modified: 4/17/2014 1:04:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : FY10 (1:4) purified**

Number of peaks found: 12                      Corr. Area 1: 1,710.8  
 Noise: 0.2

**Peak table for sample 5 : FY10 (1:4) purified**

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	66.52	271	280.97	1,570.5	
3	68.03	288	211.47	1,113.7	
4	70.36	315	418.17	2,009.9	
5	71.37	328	105.33	486.8	
6	73.15	350	123.41	534.0	
7	74.98	373	487.23	1,979.0	
8	79.24	437	45.79	158.7	
9	79.92	449	125.90	424.7	
10	99.73	1,797	33.78	28.5	
11	101.01	1,997	13.19	10.0	
12	101.84	2,252	9.33	6.3	
13	102.39	2,424	37.65	23.5	
14	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 5 : FY10 (1:4) purified**

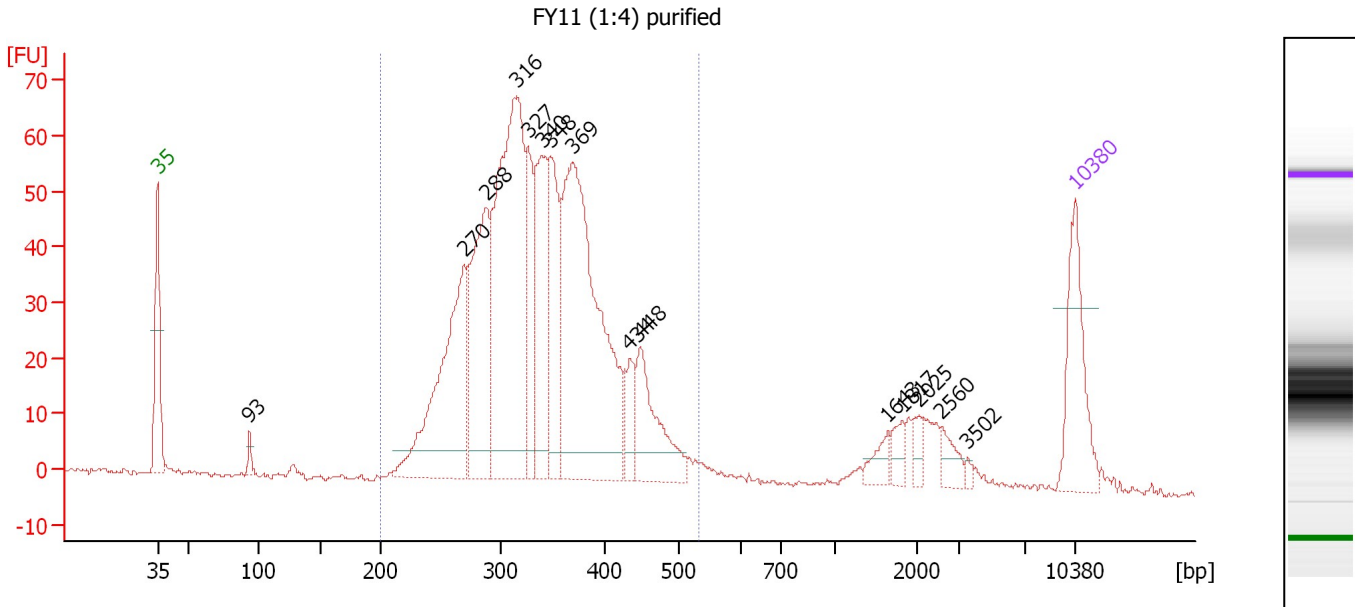
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	553	345	9,080.8	1,981.34	1,710.8	91	18.0



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
 Modified: 4/17/2014 1:04:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : FY11 (1:4) purified**

Number of peaks found: 15                      Corr. Area 1: 1,051.2  
 Noise: 0.5

**Peak table for sample 6 : FY11 (1:4) purified**

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	49.99	93	9.37	153.0	
3	66.41	270	259.02	1,454.1	
4	68.08	288	201.01	1,056.6	
5	70.44	316	422.55	2,024.9	
6	71.27	327	88.11	408.8	
7	72.33	340	142.75	636.3	
8	72.98	348	127.04	553.1	
9	74.65	369	414.61	1,703.1	
10	79.04	434	34.22	119.6	
11	79.83	448	93.34	316.0	
12	98.75	1,643	16.01	14.8	
13	99.86	1,817	13.62	11.4	
14	101.11	2,025	13.06	9.8	
15	102.82	2,560	16.47	9.7	
16	104.86	3,502	3.34	1.4	
17	113.00	10,380	75.00	10.9	Upper Marker

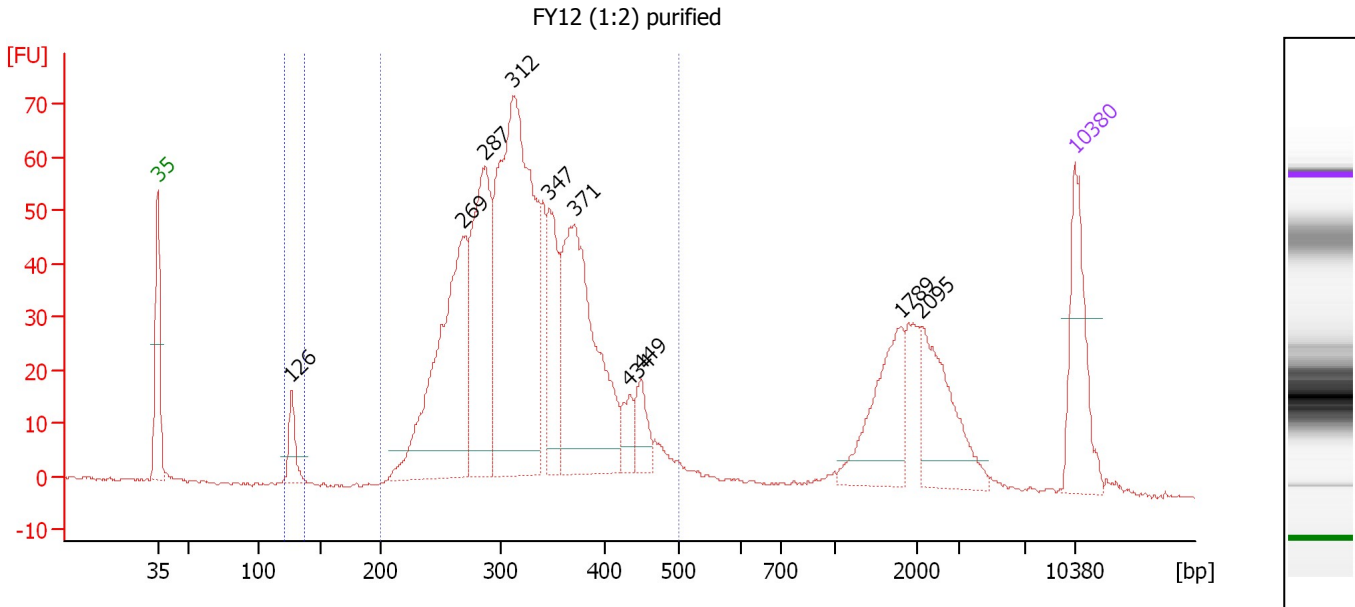
**Region table for sample 6 : FY11 (1:4) purified**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
200	532	339	8,547.7	1,838.18	1,051.2	89	17.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
 Modified: 4/17/2014 1:04:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : FY12 (1:2) purified**

Number of peaks found: 10      Corr. Area 1: 1,046.9  
 Noise: 0.3      Corr. Area 2: 16.8

**Peak table for sample 7 : FY12 (1:2) purified**

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	53.20	126	37.63	452.6	
3	66.33	269	308.47	1,737.2	
4	67.99	287	228.83	1,207.0	
5	70.11	312	492.60	2,391.1	
6	72.90	347	97.33	425.0	
7	74.79	371	285.52	1,167.2	
8	79.04	434	24.45	85.4	
9	79.89	449	31.71	107.1	
10	99.68	1,789	87.65	74.2	
11	101.33	2,095	85.04	61.5	
12	113.00	10,380	75.00	10.9	Upper Marker

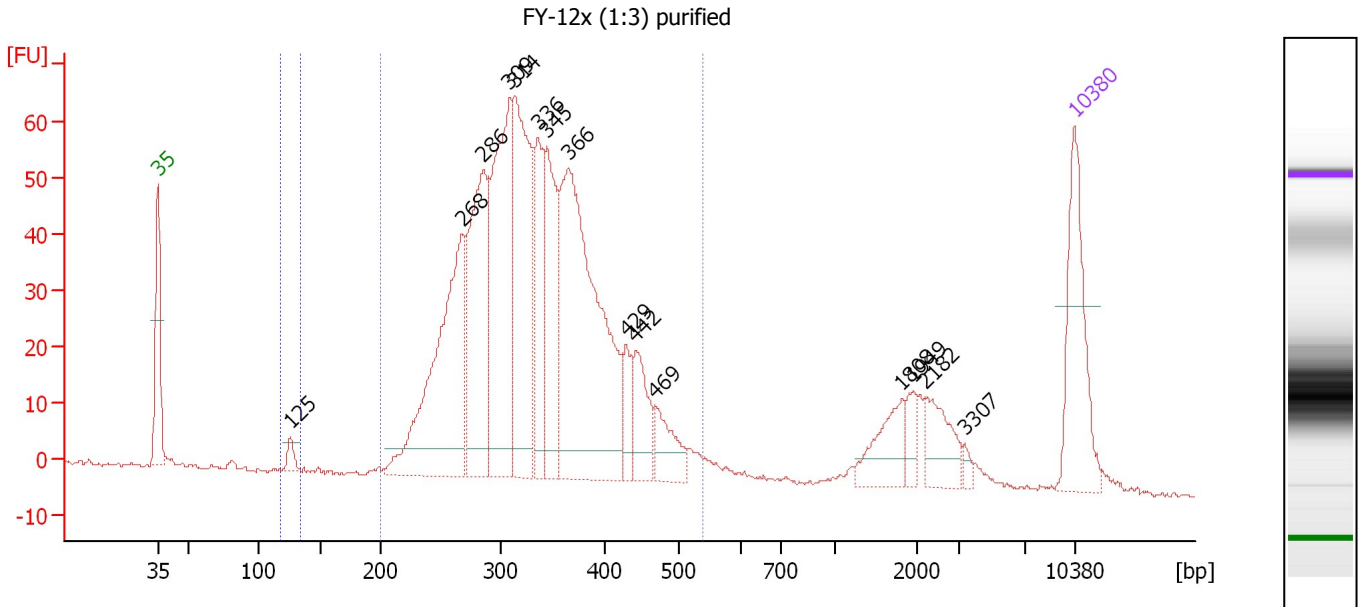
**Region table for sample 7 : FY12 (1:2) purified**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
121	137	127	401.6	33.66	16.8	1	2.1
200	500	327	7,838.7	1,628.96	1,046.9	80	17.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
 Modified: 4/17/2014 1:04:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : FY-12x (1:3) purified**

Number of peaks found: 15                      Corr. Area 1: 1,088.0  
 Noise: 0.4    Corr. Area 2: 5.5

**Peak table for sample 8 : FY-12x (1:3) purified**

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	53.15	125	11.53	139.2	
3	66.25	268	249.78	1,411.2	
4	67.87	286	191.89	1,016.5	
5	69.88	309	212.09	1,039.4	
6	70.26	314	200.97	969.9	
7	72.02	336	87.18	393.1	
8	72.73	345	114.24	501.8	
9	74.40	366	336.27	1,392.8	
10	78.79	429	26.73	94.4	
11	79.50	442	47.71	163.6	
12	81.03	469	34.58	111.8	
13	99.80	1,808	36.40	30.5	
14	100.71	1,949	14.13	11.0	
15	101.61	2,182	33.44	23.2	
16	104.61	3,307	4.50	2.1	
17	113.00	10,380	75.00	10.9	Upper Marker

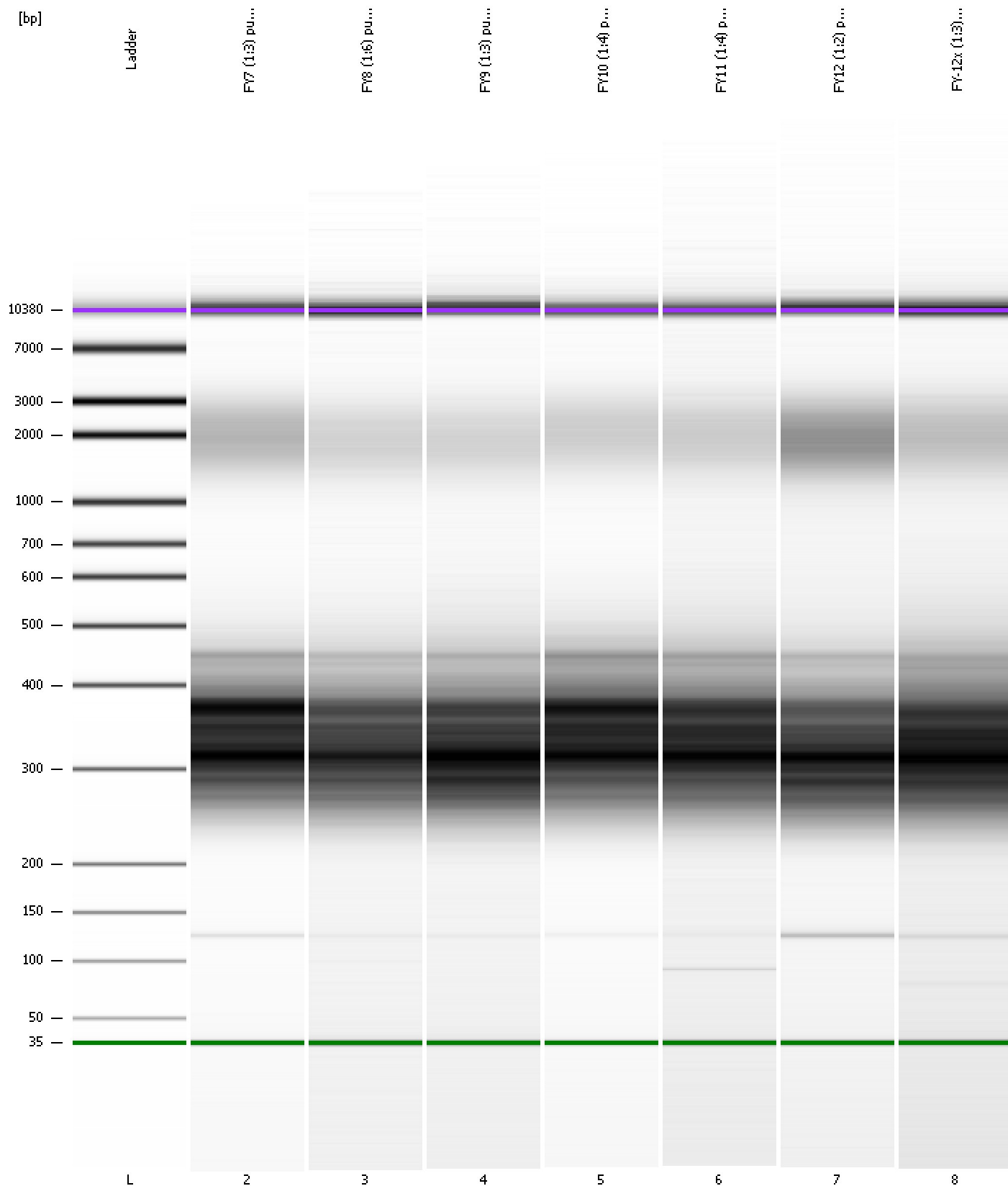
**Region table for sample 8 : FY-12x (1:3) purified**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
117	133	126	121.3	10.07	5.5	0	1.8
200	540	336	7,180.0	1,523.38	1,088.0	88	18.4

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
Modified: 4/17/2014 1:04:20 PM

**Gel Image**

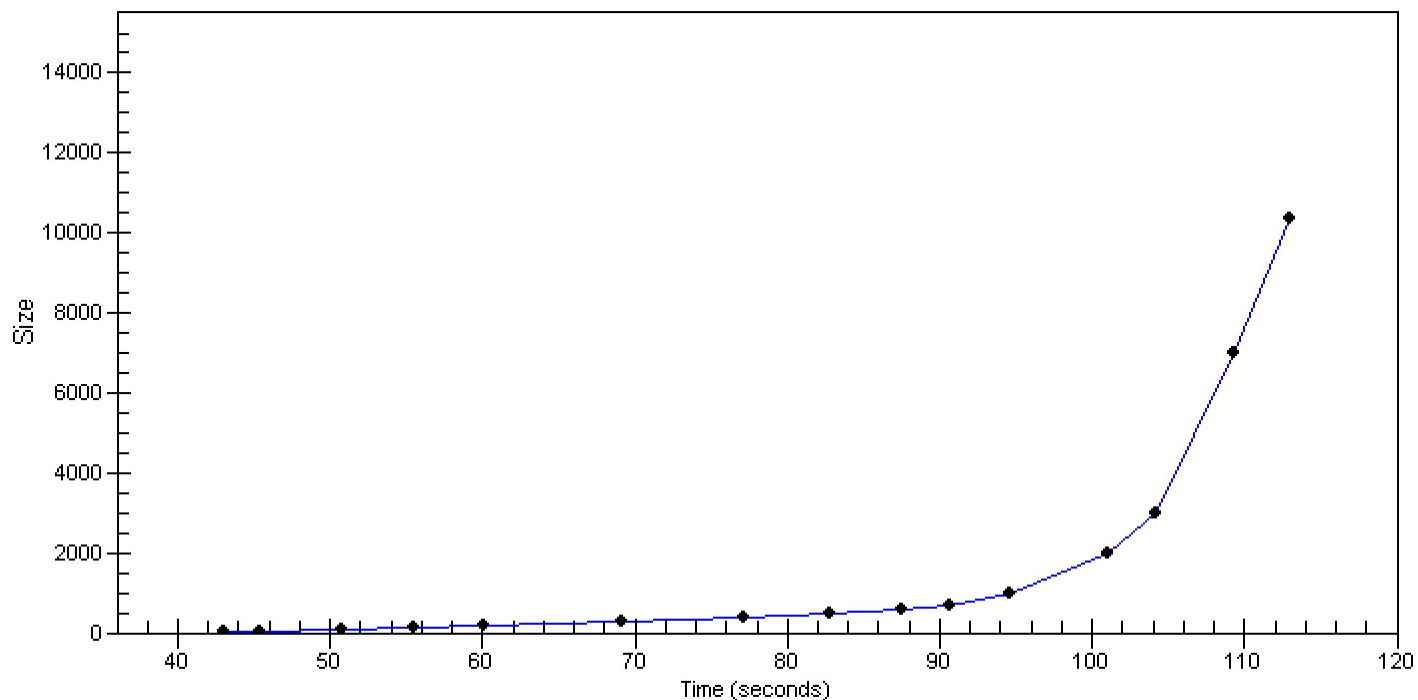


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
Modified: 4/17/2014 1:04:20 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... Settings\Bioanalyzer\2014-04-17\2014-04-17\_003-FY7to12.xad

Created: 4/17/2014 12:27:10 PM  
 Modified: 4/17/2014 1:04:20 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		4/17/2014 12:59:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-04-17\2014-04-17_003.xad)		Instrument	Run		4/17/2014 12:27:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/17/2014 12:27:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/17/2014 12:27:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/17/2014 12:27:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/17/2014 12:27:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/17/2014 12:27:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/17/2014 12:27:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1