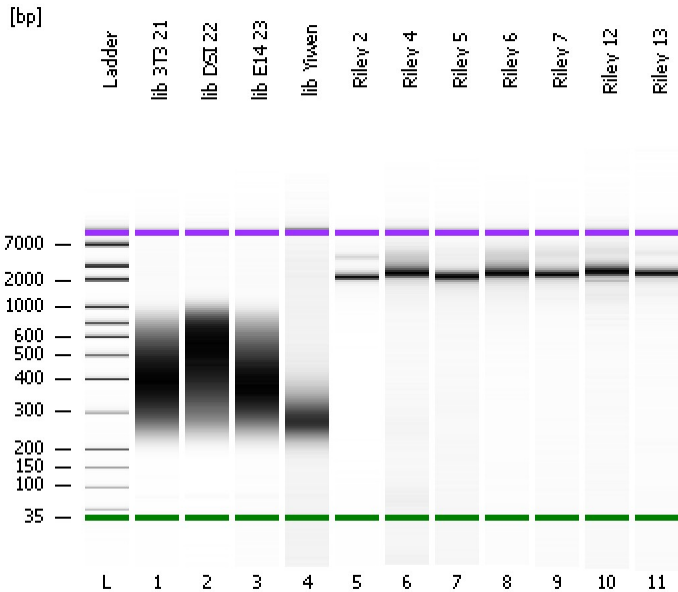


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

Created: 3/3/2014 4:41:46 PM  
Modified: 3/3/2014 5:22:52 PM

### Electrophoresis File Run Summary



#### Instrument Information:

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

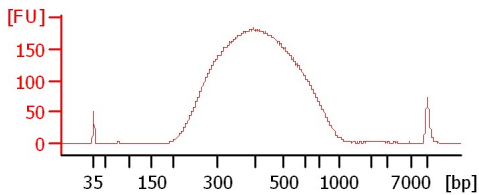
#### Assay Information:

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

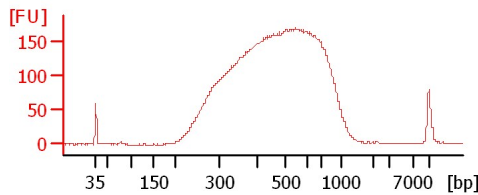
#### Chip Information:

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

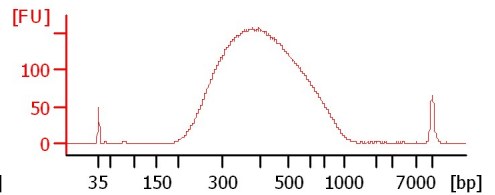
lib 3T3 21



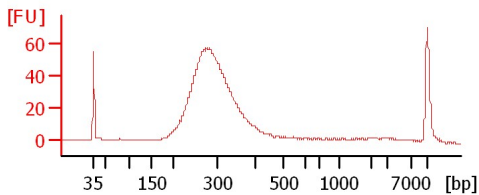
lib DSI 22



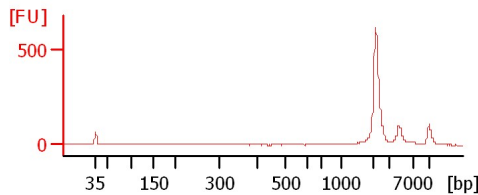
lib E14 23



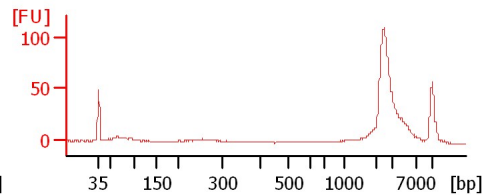
lib Yiwen



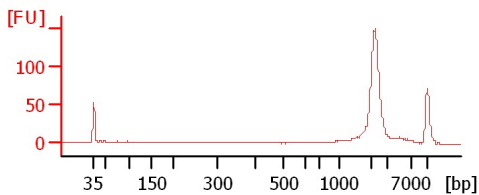
Riley 2



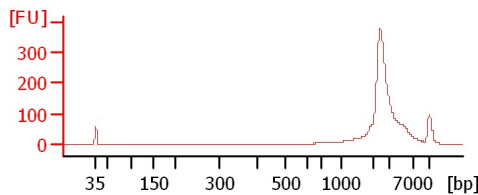
Riley 4



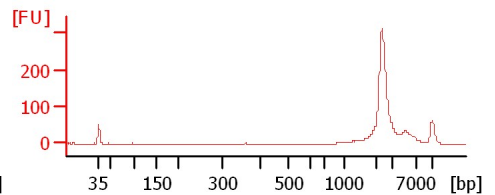
Riley 5



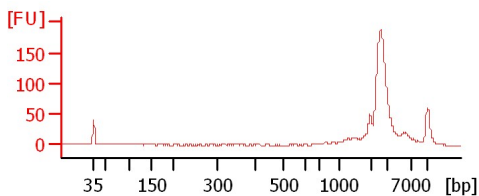
Riley 6



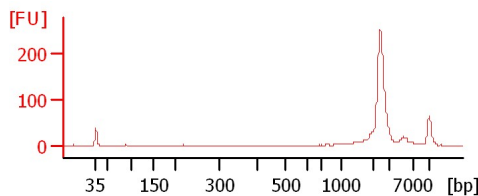
Riley 7



Riley 12



Riley 13



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

Created: 3/3/2014 4:41:46 PM  
 Modified: 3/3/2014 5:22:52 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
lib 3T3 21		<input type="checkbox"/>	✓			
lib DSI 22		<input type="checkbox"/>	✓			
lib E14 23		<input type="checkbox"/>	✓			
lib Yiwon		<input type="checkbox"/>	✓			
Riley 2		<input type="checkbox"/>	✓			
Riley 4		<input type="checkbox"/>	✓			
Riley 5		<input type="checkbox"/>	✓			
Riley 6		<input type="checkbox"/>	✓			
Riley 7		<input type="checkbox"/>	✓			
Riley 12		<input type="checkbox"/>	✓			
Riley 13		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

Created: 3/3/2014 4:41:46 PM  
Modified: 3/3/2014 5:22:52 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

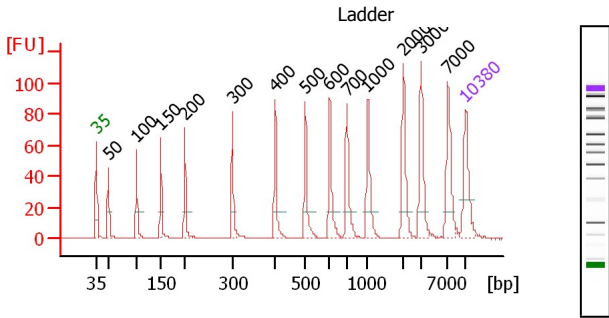
**Ladder**

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:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

Created: 3/3/2014 4:41:46 PM  
 Modified: 3/3/2014 5:22:52 PM

**Electropherogram Summary**



**Peak table for Ladder**

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.28	50	150.00	4,545.5	Ladder Peak
3	50.64	100	150.00	2,272.7	Ladder Peak
4	55.25	150	150.00	1,515.2	Ladder Peak
5	59.81	200	150.00	1,136.4	Ladder Peak
6	68.84	300	150.00	757.6	Ladder Peak
7	76.97	400	150.00	568.2	Ladder Peak
8	82.65	500	150.00	454.5	Ladder Peak
9	87.30	600	150.00	378.8	Ladder Peak
10	90.52	700	150.00	324.7	Ladder Peak
11	94.49	1,000	150.00	227.3	Ladder Peak
12	101.24	2,000	150.00	113.6	Ladder Peak
13	104.60	3,000	150.00	75.8	Ladder Peak

**Overall Results for Ladder**

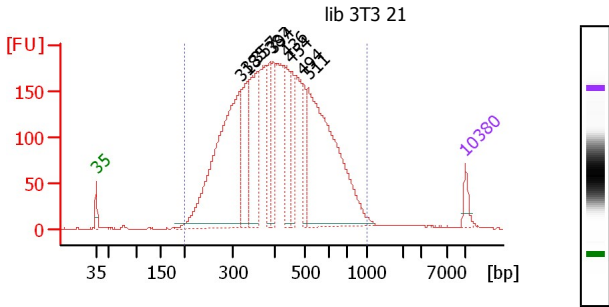
Noise: 0.1

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
14	109.69	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:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

Created: 3/3/2014 4:41:46 PM  
 Modified: 3/3/2014 5:22:52 PM

**Electropherogram Summary Continued ...**



Peak table for sample 1 : **lib 3T3 21**

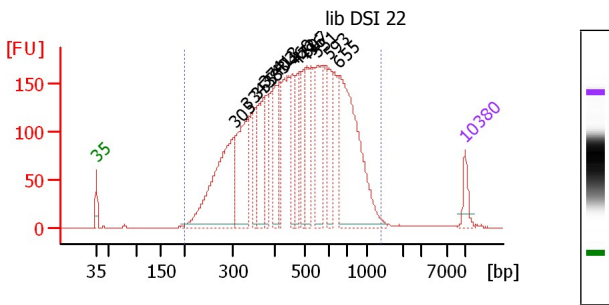
Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	70.30	318	2,240.83	10,677.3	
3	71.65	335	544.47	2,465.9	
4	73.44	357	737.50	3,133.4	
5	75.91	387	351.34	1,375.6	
6	76.50	394	239.06	919.0	
7	79.01	436	388.72	1,351.1	
8	80.04	454	276.52	922.6	
9	82.29	494	257.45	790.2	
10	83.14	511	1,978.61	5,871.4	
11	113.00	10,380	75.00	10.9	Upper Marker

**Overall Results for sample 1 : lib 3T3 21**

Number of peaks found: 9  
 Noise: 0.2  
 Corr. Area 1: 5,311.0

**Region table for sample 1 : lib 3T3 21**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
200	1,000	431	36,720.5	9,200.1	5,311.98	30.8



Peak table for sample 2 : **lib DSI 22**

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	69.23	305	1,027.51	5,106.5	
3	71.58	334	535.93	2,433.5	
4	73.29	355	180.35	770.3	
5	74.87	374	412.02	1,668.6	
6	75.59	383	189.08	748.0	
7	77.17	403	218.76	821.6	
8	77.71	413	160.05	587.2	
9	80.37	460	238.17	784.8	
10	81.04	472	187.21	601.3	
11	82.39	496	187.99	574.8	
12	82.98	507	276.41	825.8	
13	85.01	551	379.70	1,044.5	
14	86.99	593	272.10	694.7	
15	89.07	655	1,028.01	2,378.2	
16	113.00	10,380	75.00	10.9	Upper Marker

**Overall Results for sample 2 : lib DSI 22**

Number of peaks found: 14  
 Noise: 0.2  
 Corr. Area 1: 5,190.4

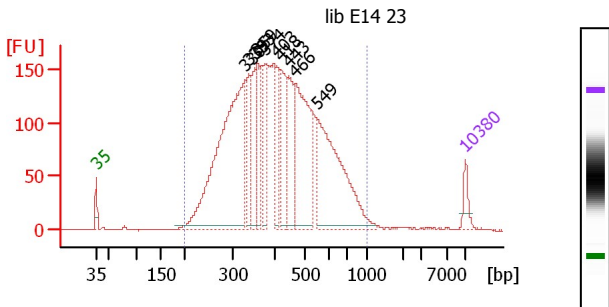
**Region table for sample 2 : lib DSI 22**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
200	1,394	502	25,711.5	7,166.8	5,190.99	36.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

Created: 3/3/2014 4:41:46 PM  
 Modified: 3/3/2014 5:22:52 PM

**Electropherogram Summary Continued ...**



**Peak table for sample 3 : lib E14 23**

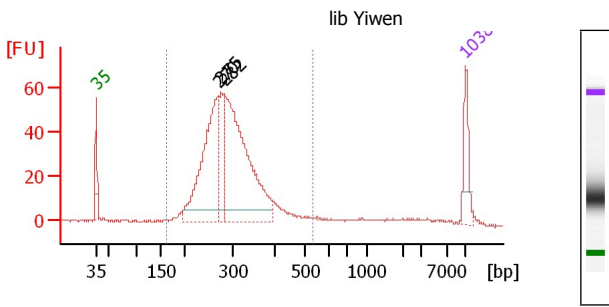
Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	71.29	330	2,167.58	9,946.3	
3	71.98	339	362.91	1,623.8	
4	73.17	353	361.17	1,549.0	
5	73.63	359	332.16	1,402.3	
6	74.82	374	222.71	903.4	
7	77.15	403	268.58	1,009.3	
8	77.98	418	438.56	1,590.8	
9	79.40	443	439.05	1,502.6	
10	80.72	466	959.62	3,119.5	
11	84.94	549	1,143.91	3,155.9	
12	113.00	10,380	75.00	10.9	Upper Marker

**Overall Results for sample 3 : lib E14 23**

Number of peaks found: 10  
 Noise: 0.3  
 Corr. Area 1: 4,421.2

**Region table for sample 3 : lib E14 23**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
200	1,000	428	31,128.4	7,775.2	4,421.98	31.0



**Peak table for sample 4 : lib Yiwen**

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	66.15	270	538.17	3,017.6	
3	66.57	275	130.00	716.6	
4	67.22	282	766.61	4,118.1	
5	113.00	10,380	75.00	10.9	Upper Marker

**Overall Results for sample 4 : lib Yiwen**

Number of peaks found: 3  
 Noise: 0.5  
 Corr. Area 1: 894.2

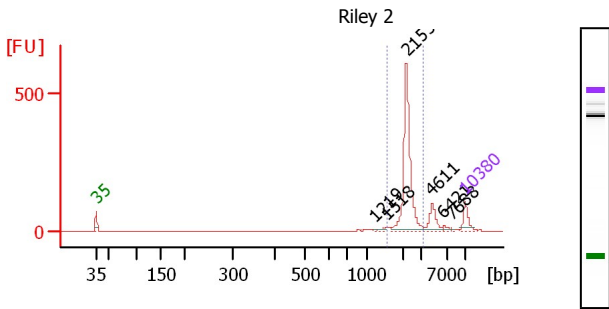
**Region table for sample 4 : lib Yiwen**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
162	527	299	8,242.4	1,554.4	894.2	19.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

Created: 3/3/2014 4:41:46 PM  
 Modified: 3/3/2014 5:22:52 PM

**Electropherogram Summary Continued ...**



Peak table for sample 5 :

Riley 2

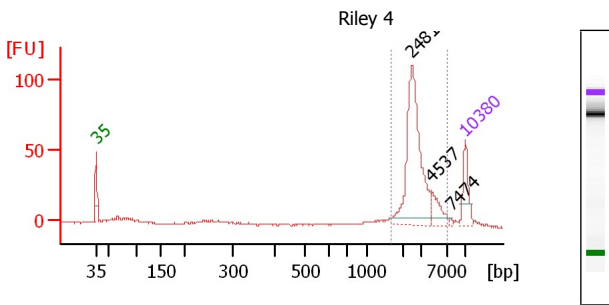
Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	95.97	1,219	3.04	3.8	
3	97.99	1,518	12.55	12.5	
4	101.76	2,153	673.71	474.1	
5	106.65	4,611	111.70	36.7	
6	108.95	6,421	14.86	3.5	
7	110.37	7,688	5.24	1.0	
8	113.00	10,380	75.00	10.9	Upper Marker

**Overall Results for sample 5 :** Riley 2

Number of peaks found: 6  
 Noise: 0.3  
 Corr. Area 1: 902.2

**Region table for sample 5 :** Riley 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
1,525	3,209	2,220	467.2	680.70	902.2	79
						10.7



Peak table for sample 6 :

Riley 4

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	102.86	2,481	403.59	246.4	
3	106.55	4,537	59.87	20.0	
4	110.16	7,474	4.78	1.0	
5	113.00	10,380	75.00	10.9	Upper Marker

**Overall Results for sample 6 :** Riley 4

Number of peaks found: 3  
 Noise: 0.3  
 Corr. Area 1: 376.2

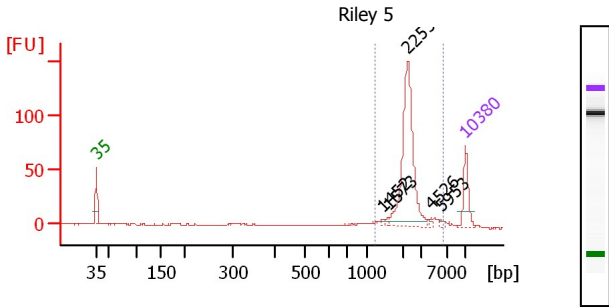
**Region table for sample 6 :** Riley 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
1,640	6,957	3,027	255.1	470.46	376.2	84
						35.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

Created: 3/3/2014 4:41:46 PM  
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**Electropherogram Summary Continued ...**



Peak table for sample 7 : Riley 5

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	97.55	1,452	5.27	5.5	
3	98.36	1,573	5.73	5.5	
4	102.09	2,253	379.97	255.6	
5	106.54	4,526	5.32	1.8	
6	108.36	5,953	5.73	1.5	
7	113.00	10,380	75.00	10.9	Upper Marker

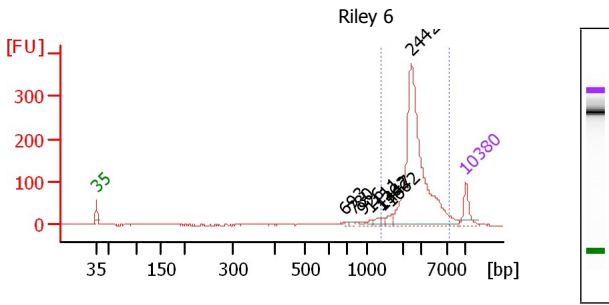
**Overall Results for sample 7 : Riley 5**

Number of peaks found: 5  
 Noise: 0.4  
 Corr. Area 1: 398.6

**Region table for sample 7 : Riley 5**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
1,212	6,269	2,403	291.2	435.85	398.6	83
						32.0

1,212 6,269 2,403 291.2 435.85 398.6 83 32.0



Peak table for sample 8 : Riley 6

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	90.28	693	3.46	7.6	
3	91.58	780	6.44	12.5	
4	93.51	926	10.48	17.2	
5	95.25	1,111	9.49	12.9	
6	96.94	1,362	20.22	22.5	
7	97.51	1,447	8.99	9.4	
8	98.96	1,662	20.53	18.7	
9	102.72	2,442	921.28	571.7	
10	113.00	10,380	75.00	10.9	Upper Marker

**Overall Results for sample 8 : Riley 6**

Number of peaks found: 8  
 Noise: 0.3  
 Corr. Area 1: 1,300.7

**Region table for sample 8 : Riley 6**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
1,373	7,270	2,998	520.3	931.34	1,300.88	88
						39.0

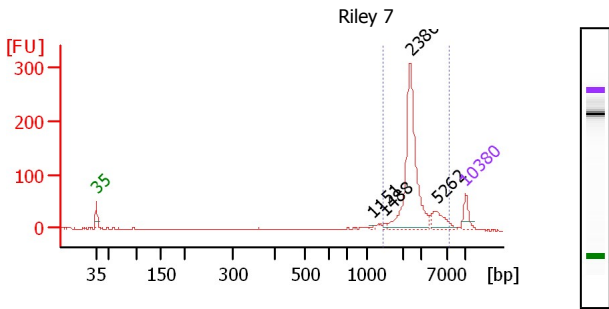
1,373 7,270 2,998 520.3 931.34 1,300.88 88 39.0



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

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**Electropherogram Summary Continued ...**



Peak table for sample 9 : Riley 7

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	95.51	1,151	5.64	7.4	
3	97.79	1,488	9.86	10.0	
4	102.54	2,386	774.09	491.7	
5	107.48	5,262	117.29	33.8	
6	113.00	10,380	75.00	10.9	Upper Marker

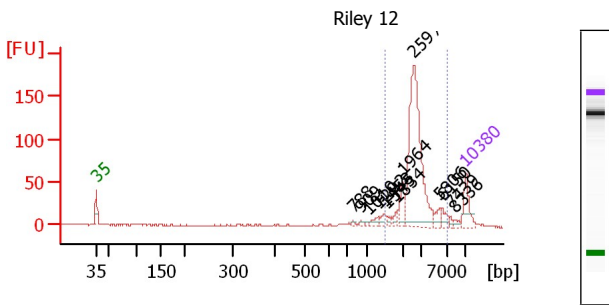
**Overall Results for sample 9 : Riley 7**

Number of peaks found: 4  
 Noise: 0.5  
 Corr. Area 1: 793.2

**Region table for sample 9 : Riley 7**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
1,423	7,307	2,868	541.8	927.70	793.2	90
						41.0

1,423 7,307 2,868 541.8 927.70 793.2 90 41.0



Peak table for sample 10 : Riley 12

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	91.68	788	8.37	16.1	
3	93.29	909	8.14	13.6	
4	94.56	1,010	5.38	8.1	
5	96.46	1,292	22.14	26.0	
6	97.59	1,458	18.66	19.4	
7	98.17	1,545	11.48	11.3	
8	100.12	1,834	19.25	15.9	
9	101.00	1,964	60.07	46.3	
10	103.24	2,597	547.04	319.2	
11	108.17	5,806	23.86	6.2	
12	108.61	6,150	30.79	7.6	
13	110.12	7,439	7.63	1.6	
14	111.00	8,336	10.22	1.9	
15	113.00	10,380	75.00	10.9	Upper Marker

**Overall Results for sample 10 : Riley 12**

Number of peaks found: 13  
 Noise: 0.5  
 Corr. Area 1: 586.9

**Region table for sample 10 : Riley 12**

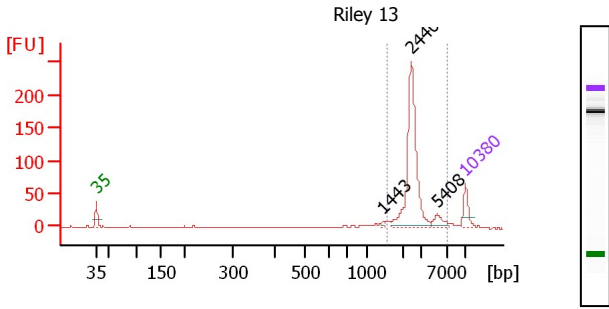
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
1,494	6,789	2,887	391.2	692.28	586.9	85
						34.9

1,494 6,789 2,887 391.2 692.28 586.9 85 34.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

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**Electropherogram Summary Continued ...**



**Peak table for sample 11 :**

**Riley 13**

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	97.48	1,443	10.21	10.7	
3	102.72	2,440	583.61	362.3	
4	107.66	5,408	51.15	14.3	
5	113.00	10,380	75.00	10.9	Upper Marker

**Overall Results for sample 11 :** **Riley 13**

Number of peaks found: 3  
 Noise: 0.5  
 Corr. Area 1: 529.3

**Region table for sample 11 :** **Riley 13**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Area	Corr. Total in CV [%]	% of Size distribution
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1,559 6,882 2,733 380.3 643.17 529.3 87 34.2

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03\_005.xad

Created: 3/3/2014 4:41:46 PM  
Modified: 3/3/2014 5:22:52 PM

**Gel Image**

