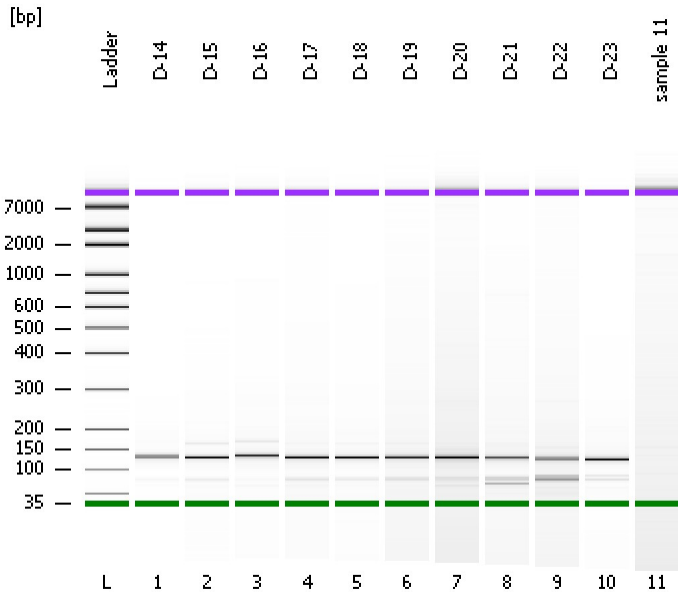


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
Modified: 11/15/2013 2:29:35 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

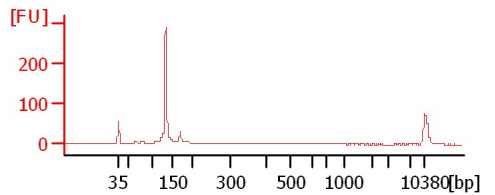
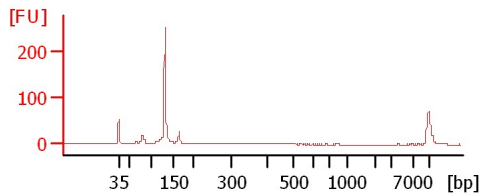
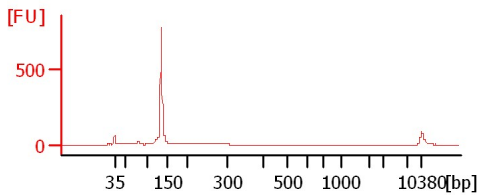
#### Chip Information:

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

D-14

D-15

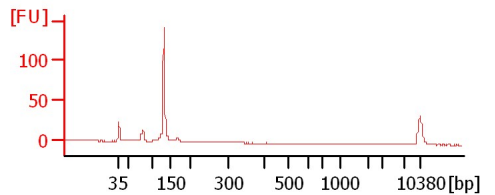
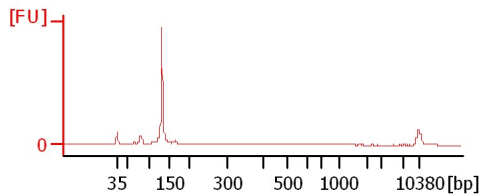
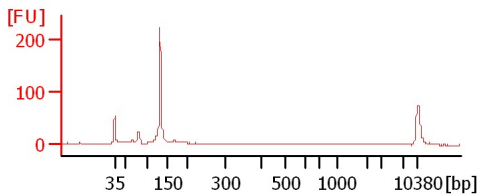
D-16



D-17

D-18

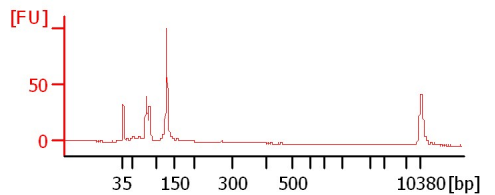
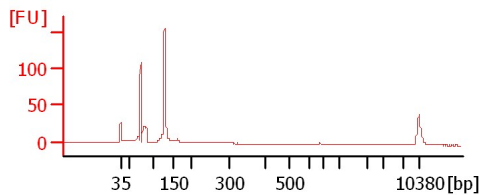
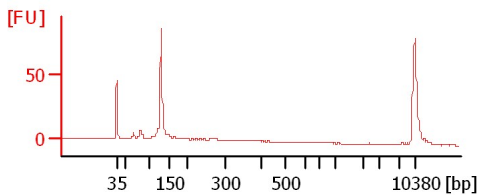
D-19



D-20

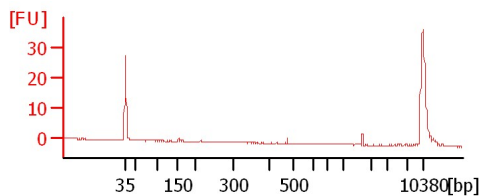
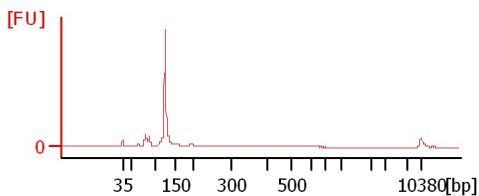
D-21

D-22



D-23

sample 11



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
D-14		<input type="checkbox"/>	✓			
D-15		<input type="checkbox"/>	✓			
D-16		<input type="checkbox"/>	✓			
D-17		<input type="checkbox"/>	✓			
D-18		<input type="checkbox"/>	✓			
D-19		<input type="checkbox"/>	✓			
D-20		<input type="checkbox"/>	✓			
D-21		<input type="checkbox"/>	✓			
D-22		<input type="checkbox"/>	✓			
D-23		<input type="checkbox"/>	✓			
sample 11		<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\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
Modified: 11/15/2013 2:29:35 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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ l] : 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

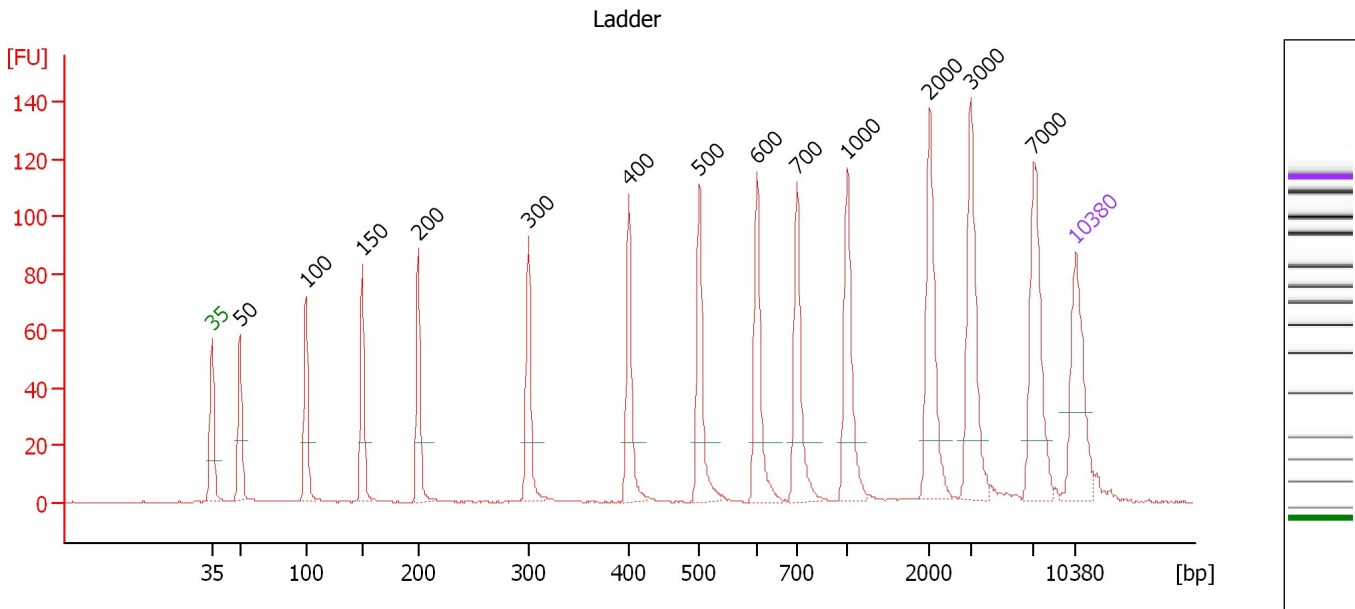
**Ladder**

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\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

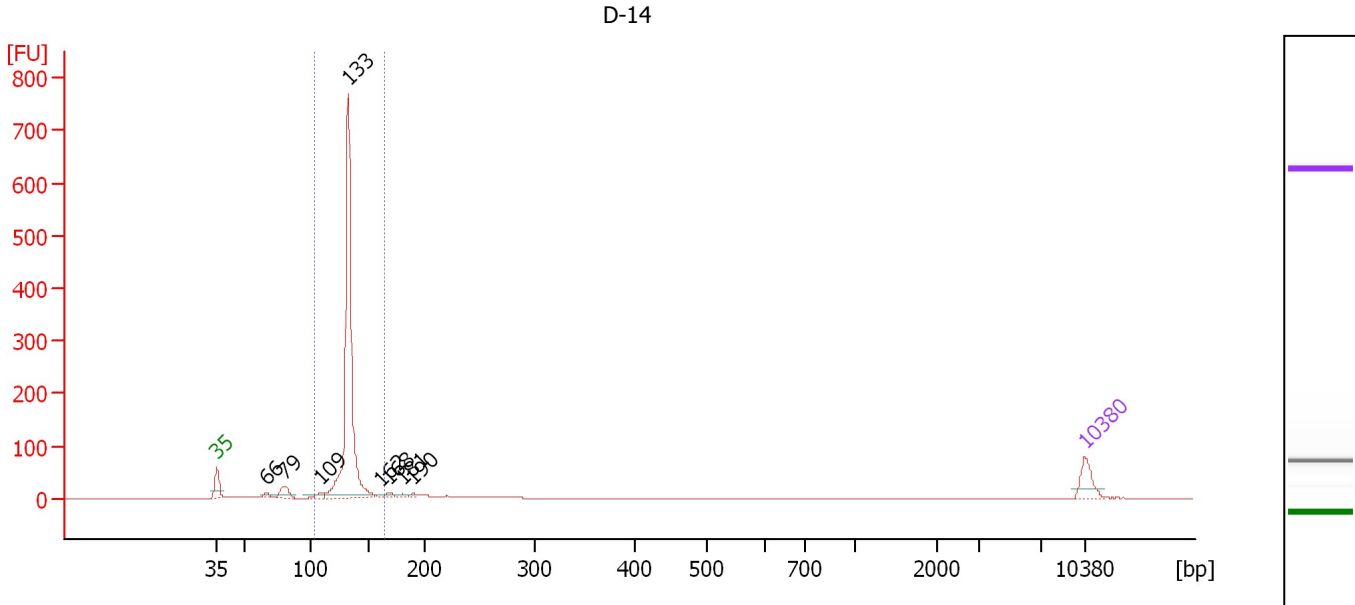
**Peak table for Ladder**

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	45.25	50	150.00	4,545.5	Ladder Peak
3	50.60	100	150.00	2,272.7	Ladder Peak
4	55.19	150	150.00	1,515.2	Ladder Peak
5	59.72	200	150.00	1,136.4	Ladder Peak
6	68.62	300	150.00	757.6	Ladder Peak
7	76.79	400	150.00	568.2	Ladder Peak
8	82.49	500	150.00	454.5	Ladder Peak
9	87.16	600	150.00	378.8	Ladder Peak
10	90.40	700	150.00	324.7	Ladder Peak
11	94.51	1,000	150.00	227.3	Ladder Peak
12	101.16	2,000	150.00	113.6	Ladder Peak
13	104.49	3,000	150.00	75.8	Ladder Peak
14	109.59	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\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : D-14**

Number of peaks found: 8                      Corr. Area 1: 905.3  
 Noise: 0.2

**Peak table for sample 1 : D-14**

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	47.00	66	22.48	513.2	
3	48.38	79	81.31	1,555.2	
4	51.43	109	34.86	484.5	
5	53.58	133	1,642.78	18,782.5	
6	56.25	162	14.73	138.0	
7	56.85	168	22.24	200.1	
8	58.02	181	25.77	215.5	
9	58.83	190	13.97	111.3	
10	113.00	10,380	75.00	10.9	Upper Marker

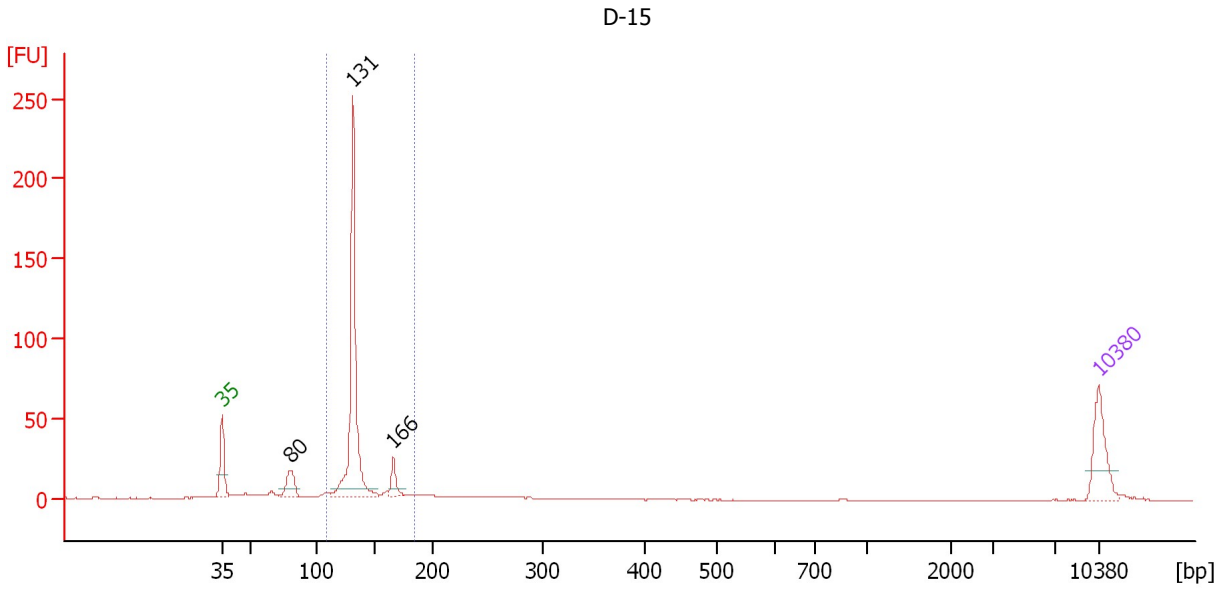
**Region table for sample 1 : D-14**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
103	166	133	19,618.9	1,720.68	905.3	81	5.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : D-15**

Number of peaks found: 3                      Corr. Area 1: 290.3  
 Noise: 0.2

**Peak table for sample 2 : D-15**

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	48.45	80	60.28	1,143.2	
3	53.43	131	509.95	5,904.4	
4	56.67	166	40.75	371.1	
5	113.00	10,380	75.00	10.9	Upper Marker

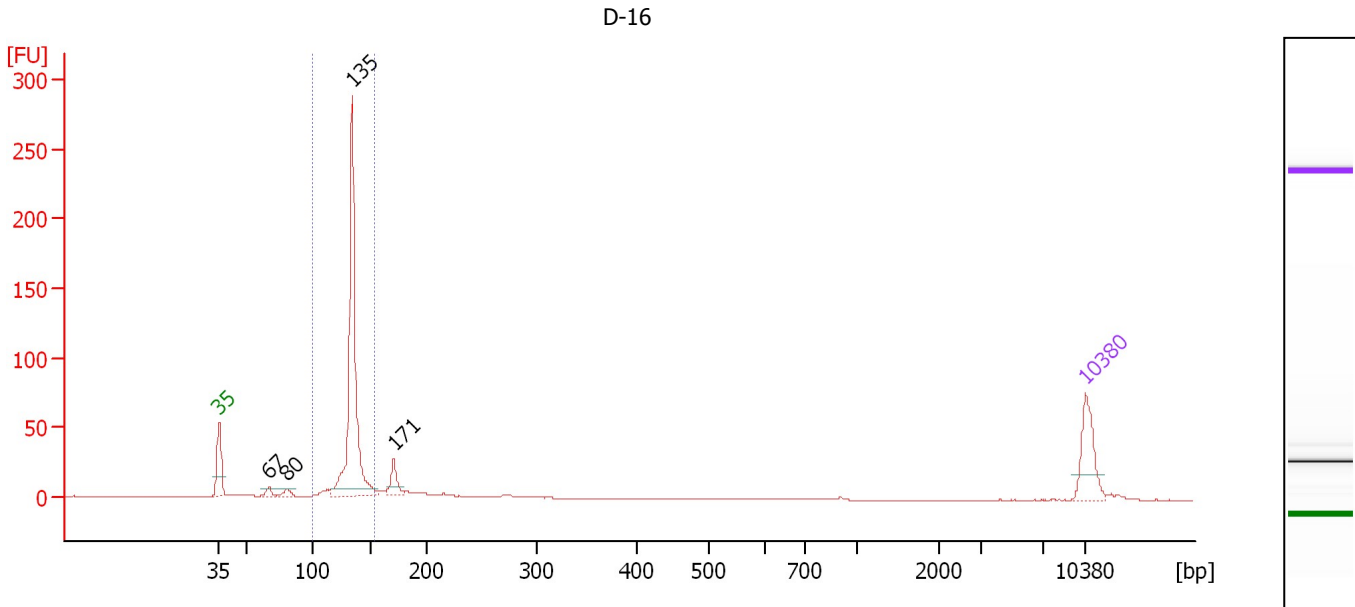
**Region table for sample 2 : D-15**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
109	185	135	6,817.1	603.96	290.3	76	9.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : D-16**

Number of peaks found: 4                      Corr. Area 1: 351.2  
 Noise: 0.1

**Peak table for sample 3 : D-16**

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	47.05	67	14.86	337.0	
3	48.51	80	18.03	339.4	
4	53.77	135	633.76	7,137.1	
5	57.13	171	47.25	417.6	
6	113.00	10,380	75.00	10.9	Upper Marker

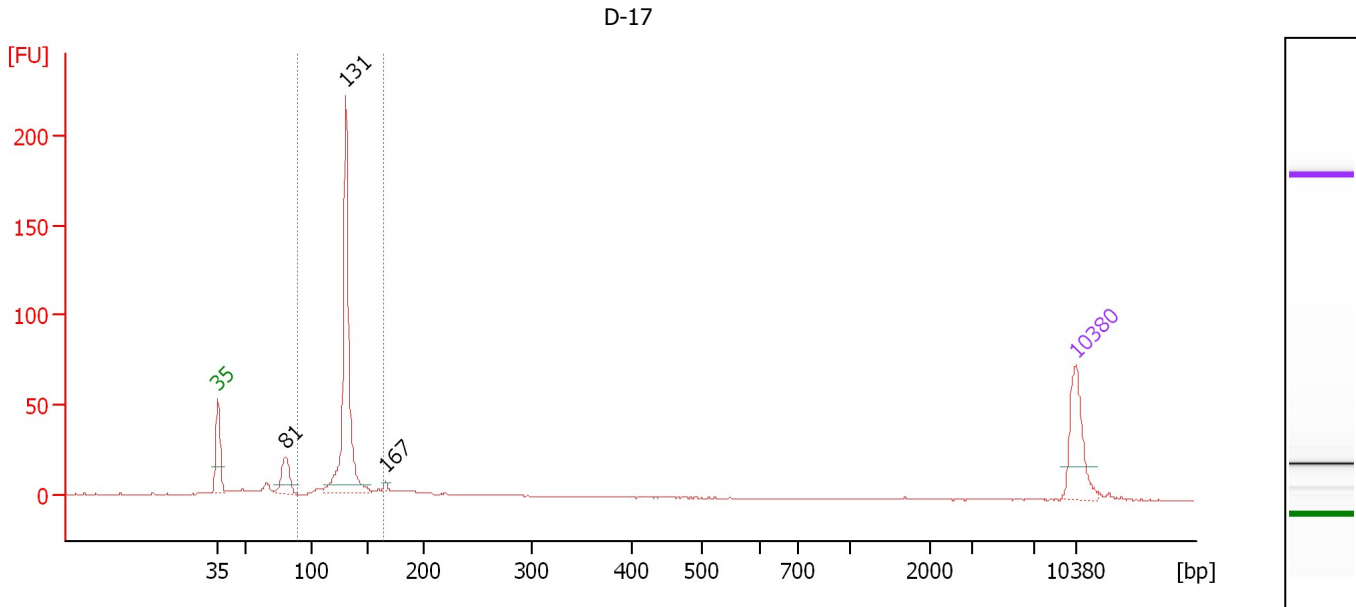
**Region table for sample 3 : D-16**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
100	155	134	7,540.4	666.42	351.2	76	5.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : D-17**

Number of peaks found: 3                      Corr. Area 1: 270.7  
 Noise: 0.1

**Peak table for sample 4 : D-17**

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	48.53	81	65.33	1,228.1	
3	53.44	131	445.60	5,155.3	
4	56.70	167	7.06	64.1	
5	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : D-17**

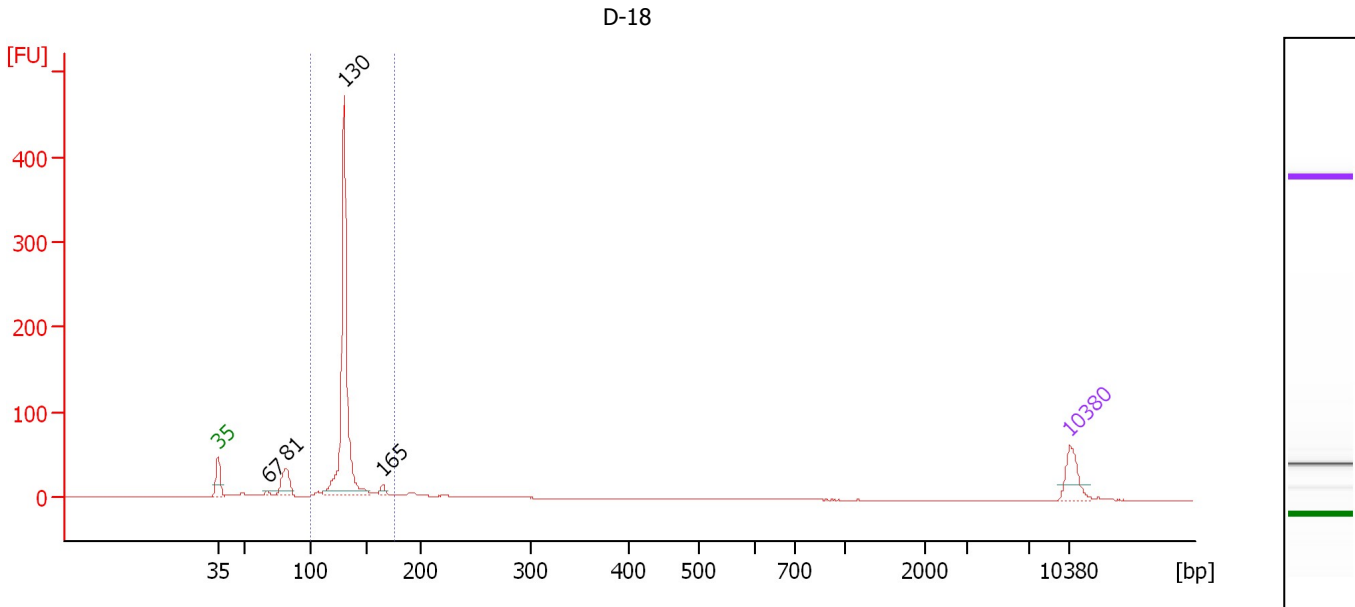
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
89	164	131	5,722.3	493.45	270.7	71	6.4	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : D-18**

Number of peaks found: 4                      Corr. Area 1: 538.1  
 Noise: 0.2

**Peak table for sample 5 : D-18**

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	47.07	67	10.81	244.2	
3	48.56	81	119.71	2,240.7	
4	53.38	130	1,055.19	12,268.8	
5	56.54	165	24.83	228.2	
6	113.00	10,380	75.00	10.9	Upper Marker

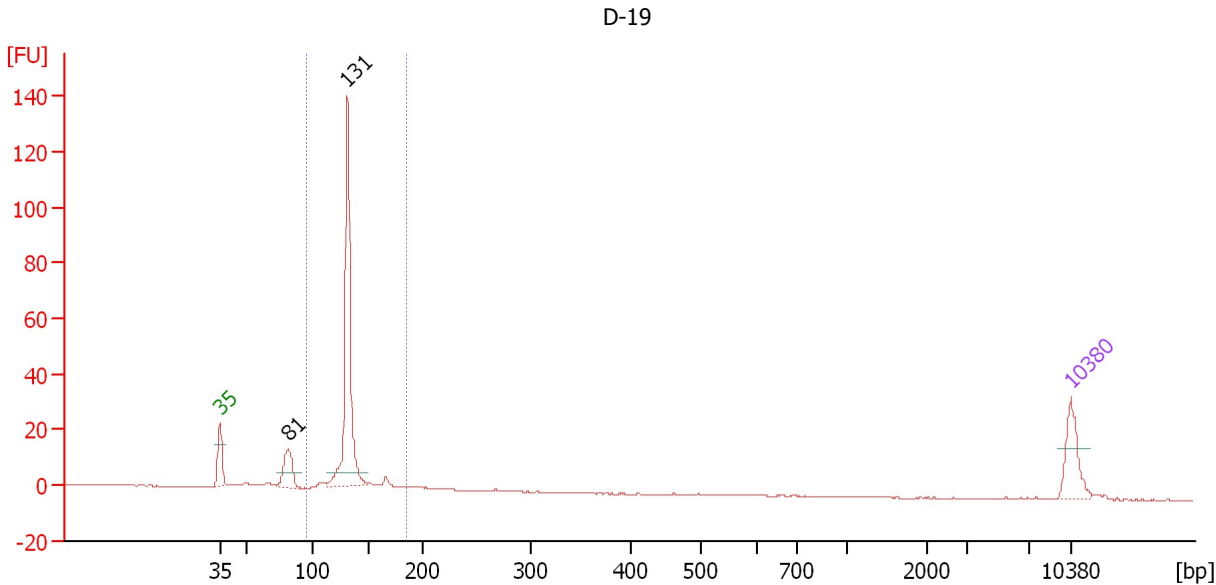
**Region table for sample 5 : D-18**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
100	175	132	13,572.1	1,176.66	538.1	77	7.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : D-19**

Number of peaks found: 2                      Corr. Area 1: 162.1  
 Noise: 0.1

**Peak table for sample 6 : D-19**

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	48.61	81	101.61	1,890.8	
3	53.48	131	568.61	6,555.9	
4	113.00	10,380	75.00	10.9	Upper Marker

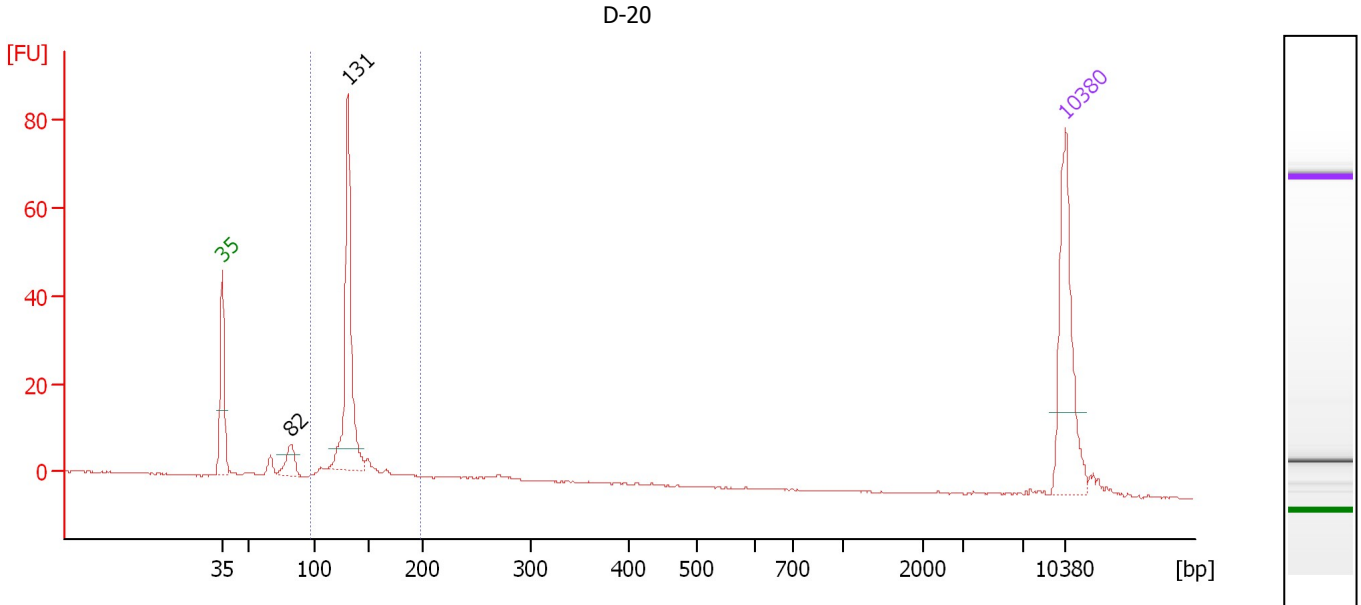
**Region table for sample 6 : D-19**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
95	185	133	7,383.3	646.46	162.1	78	7.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : D-20**

Number of peaks found: 2                      Corr. Area 1: 126.3  
 Noise: 0.1

**Peak table for sample 7 : D-20**

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	48.71	82	23.40	430.6	
3	53.45	131	163.27	1,887.7	
4	113.00	10,380	75.00	10.9	Upper Marker

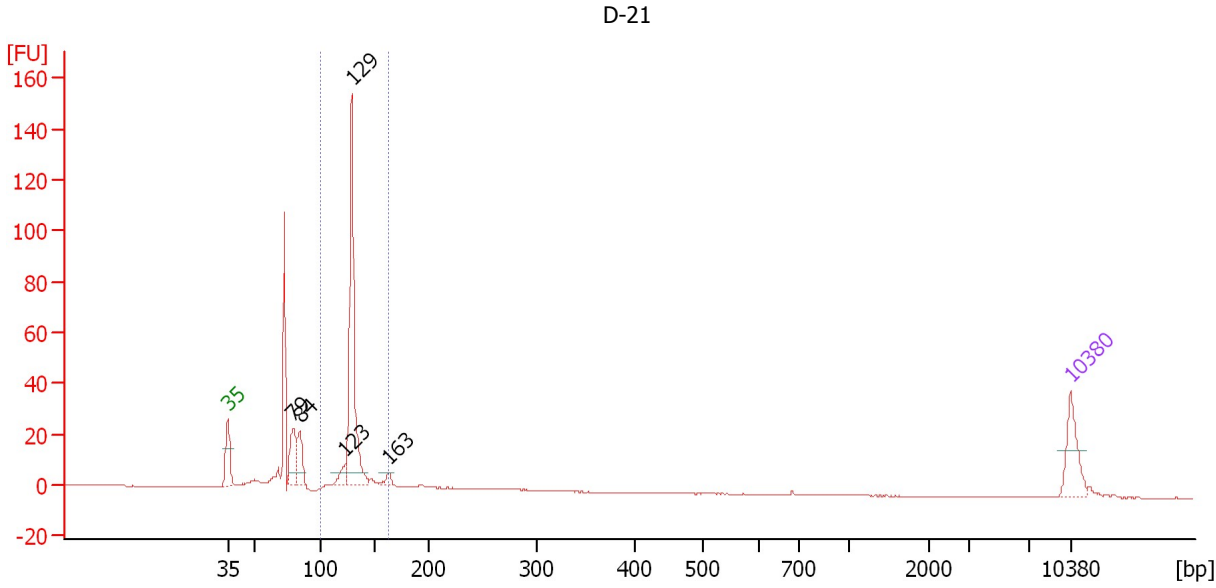
**Region table for sample 7 : D-20**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
97	198	134	2,411.4	211.81	126.3	73	10.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : D-21**

Number of peaks found: 5                      Corr. Area 1: 160.0  
 Noise: 0.1

**Peak table for sample 8 : D-21**

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	48.41	79	110.47	2,106.1	
3	48.94	84	84.47	1,515.8	
4	52.70	123	38.92	479.9	
5	53.28	129	534.83	6,272.7	
6	56.38	163	20.58	191.1	
7	113.00	10,380	75.00	10.9	Upper Marker

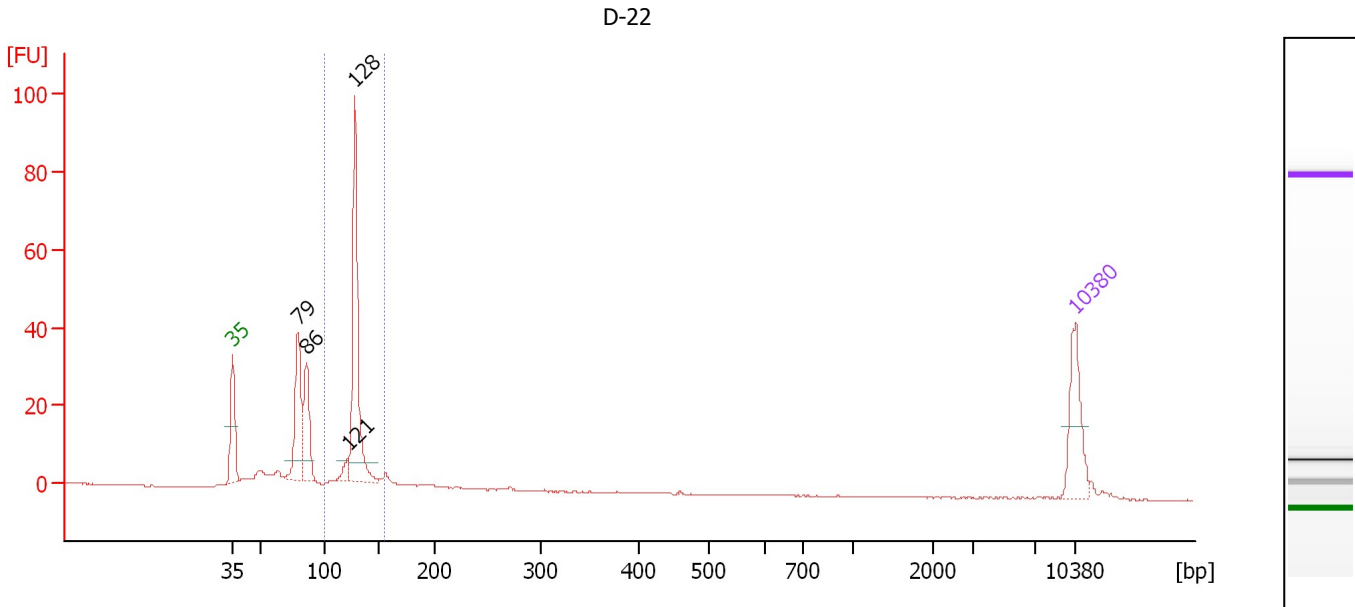
**Region table for sample 8 : D-21**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
101	162	131	7,394.8	636.02	160.0	53	5.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : D-22**

Number of peaks found: 4                      Corr. Area 1: 115.0  
 Noise: 0.1

**Peak table for sample 9 : D-22**

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	48.41	79	165.19	3,149.4	
3	49.11	86	117.97	2,076.3	
4	52.57	121	21.40	267.0	
5	53.15	128	322.56	3,826.1	
6	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 9 : D-22**

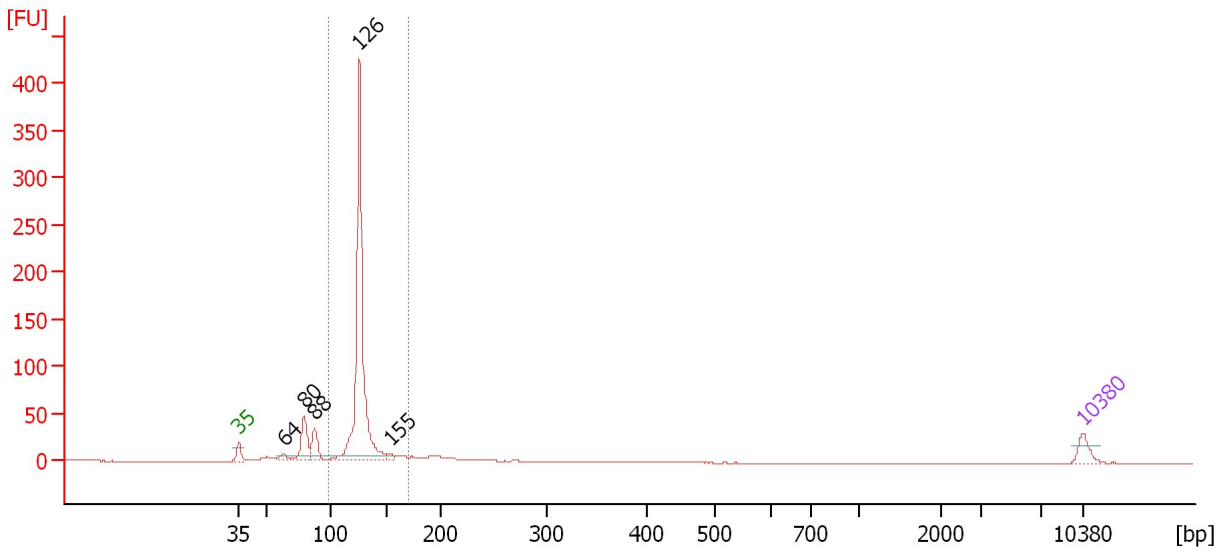
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
101	156	128	4,667.6	395.25	115.0	47	5.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**

D-23



**Overall Results for sample 10 : D-23**

Number of peaks found: 5                      Corr. Area 1: 507.7  
 Noise: 0.1

**Peak table for sample 10 : D-23**

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	46.71	64	60.21	1,432.3	
3	48.44	80	305.22	5,796.0	
4	49.28	88	201.18	3,478.5	
5	52.99	126	2,336.36	28,077.6	
6	55.60	155	31.06	304.4	
7	113.00	10,380	75.00	10.9	Upper Marker

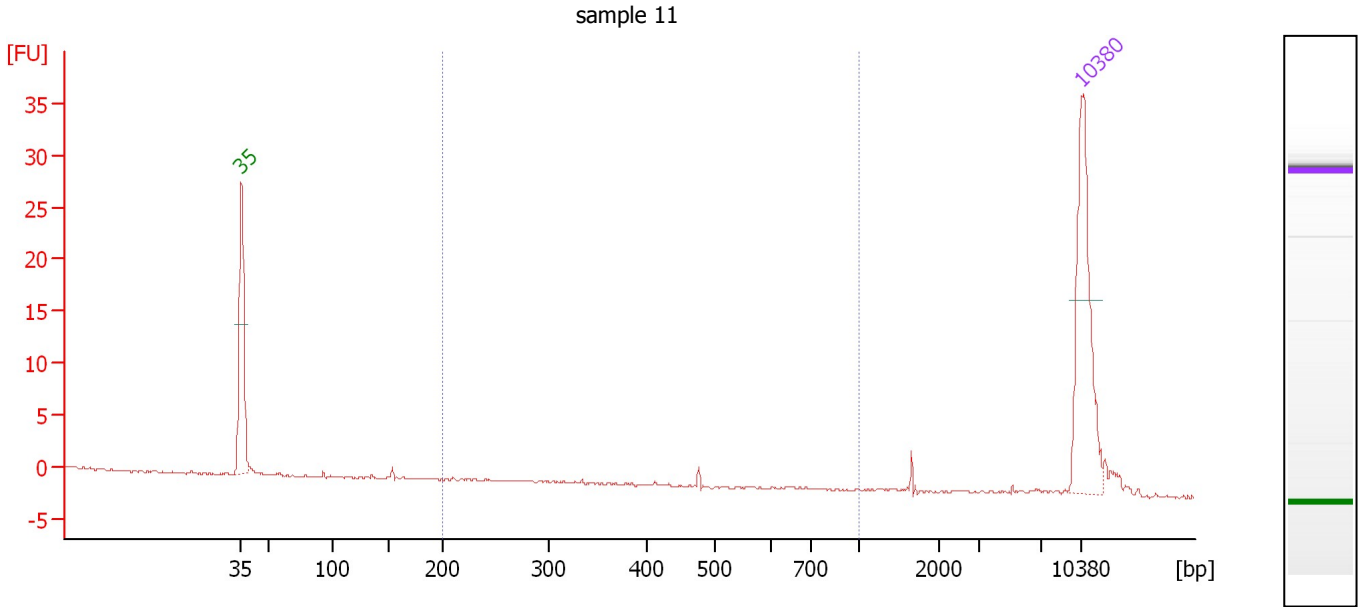
**Region table for sample 10 : D-23**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
99	171	128	29,579.3	2,497.48	507.7	72	7.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
 Modified: 11/15/2013 2:29:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : sample 11**

Number of peaks found: 0                      Corr. Area 1: 0.3  
 Noise: 0.1

**Peak table for sample 11 : sample 11**

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	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : sample 11**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	473	2.2	0.69	0.3	6	2.6	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-15\2013-11-15\_006.xad

Created: 11/15/2013 1:47:45 PM  
Modified: 11/15/2013 2:29:35 PM

**Gel Image**

