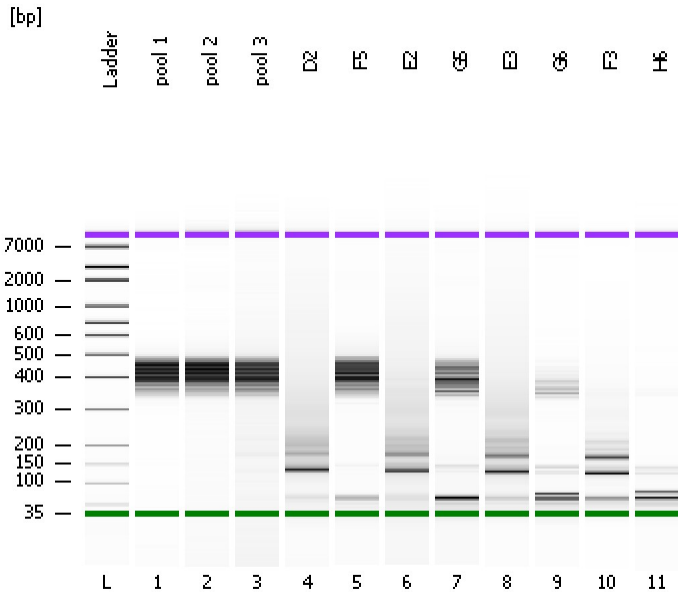


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
Modified: 1/22/2014 4:04:22 PM

### Electrophoresis File Run Summary



#### Instrument Information:

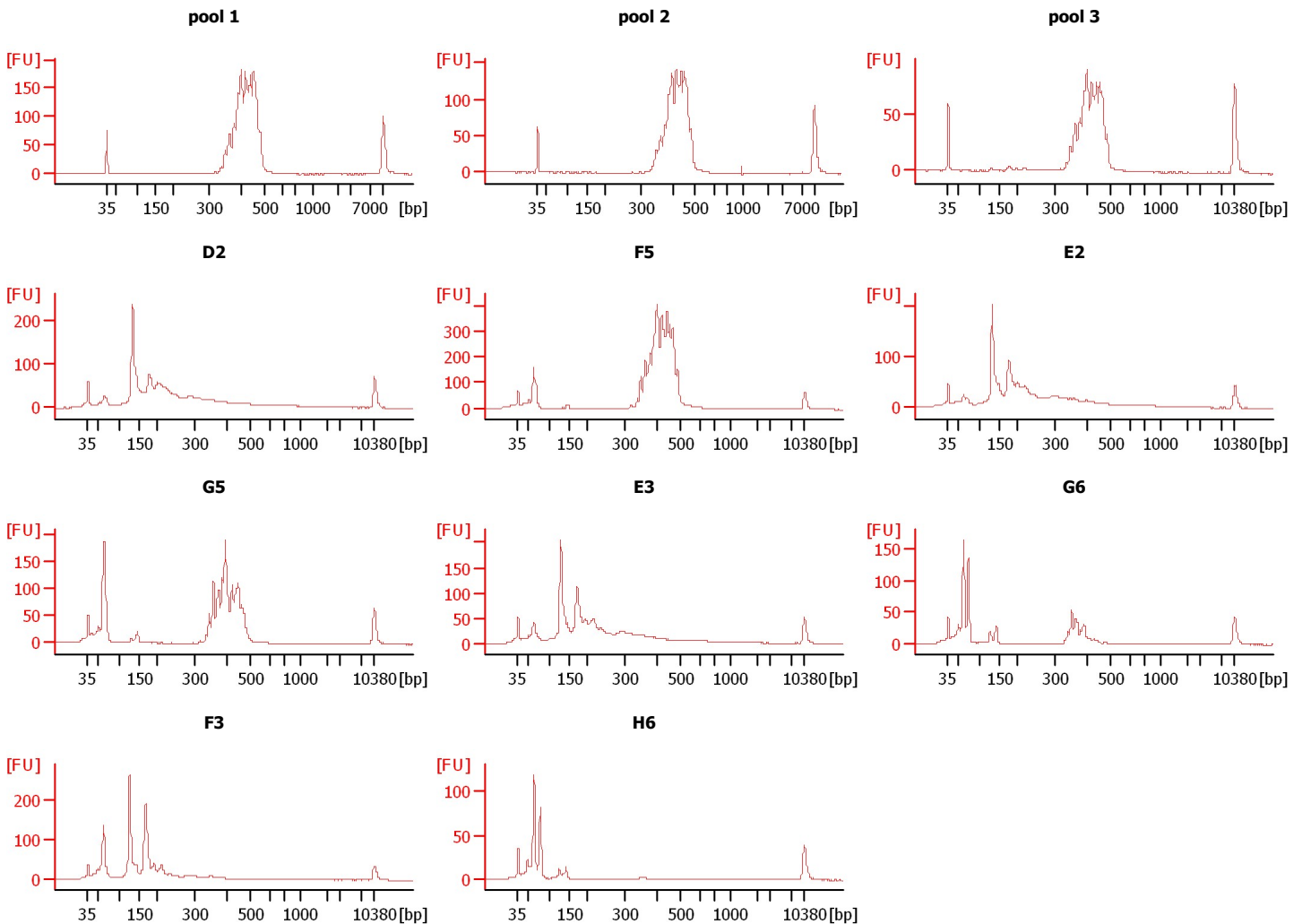
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### 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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
pool 1		<input type="checkbox"/>	✓			
pool 2		<input type="checkbox"/>	✓			
pool 3		<input type="checkbox"/>	✓			
D2		<input type="checkbox"/>	✓			
F5		<input type="checkbox"/>	✓			
E2		<input type="checkbox"/>	✓			
G5		<input type="checkbox"/>	✓			
E3		<input type="checkbox"/>	✓			
G6		<input type="checkbox"/>	✓			
F3		<input type="checkbox"/>	✓			
H6		<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\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
Modified: 1/22/2014 4:04:22 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

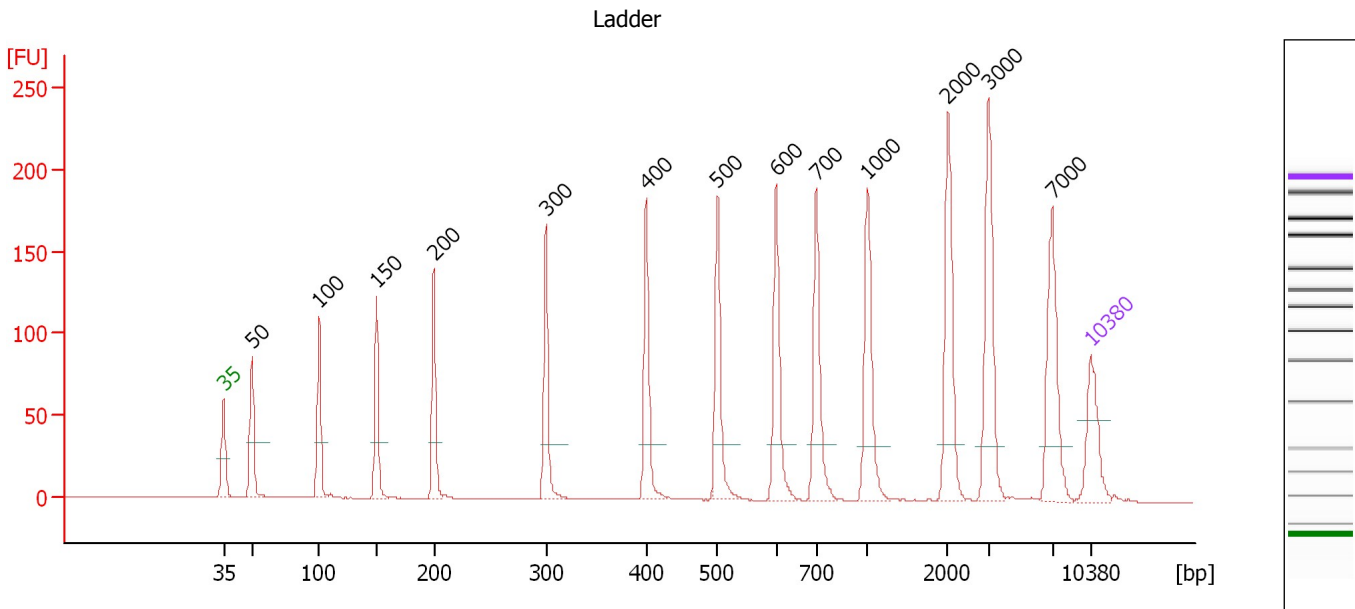
**Ladder**

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\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

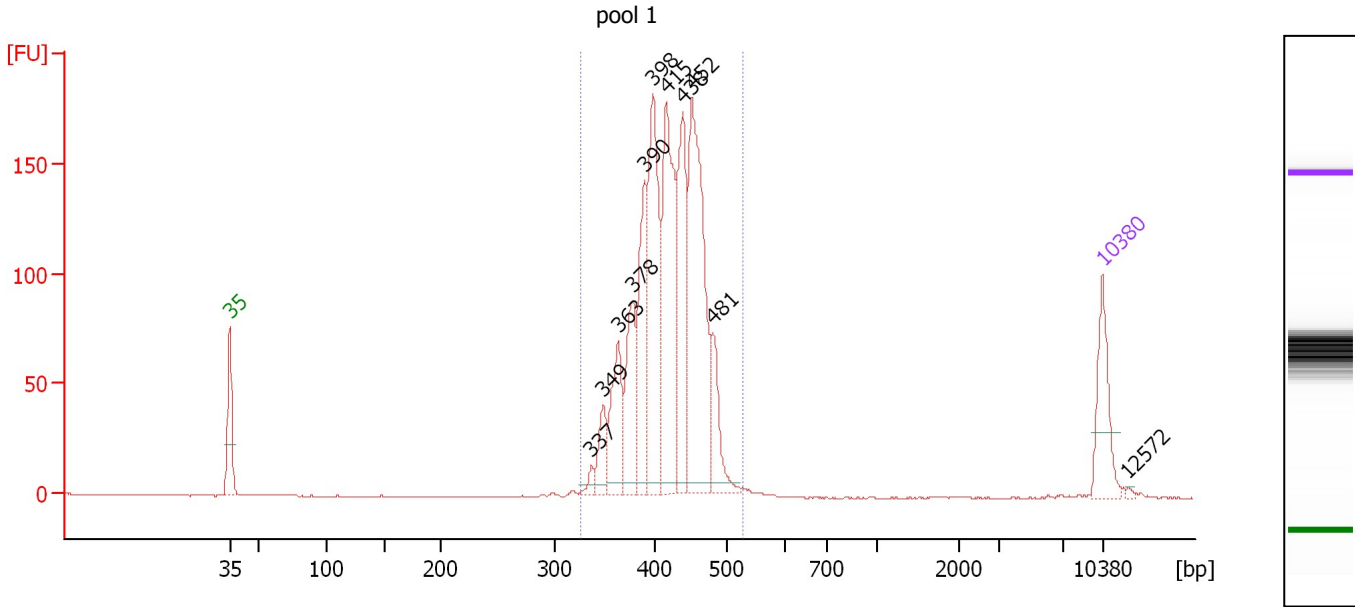
**Peak table for Ladder**

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	45.28	50	150.00	4,545.5	Ladder Peak
3	50.71	100	150.00	2,272.7	Ladder Peak
4	55.36	150	150.00	1,515.2	Ladder Peak
5	59.96	200	150.00	1,136.4	Ladder Peak
6	69.00	300	150.00	757.6	Ladder Peak
7	77.10	400	150.00	568.2	Ladder Peak
8	82.86	500	150.00	454.5	Ladder Peak
9	87.60	600	150.00	378.8	Ladder Peak
10	90.83	700	150.00	324.7	Ladder Peak
11	94.96	1,000	150.00	227.3	Ladder Peak
12	101.46	2,000	150.00	113.6	Ladder Peak
13	104.73	3,000	150.00	75.8	Ladder Peak
14	109.90	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\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : pool 1**

Number of peaks found: 11      Corr. Area 1: 1,461.1  
 Noise: 0.1

**Peak table for sample 1 : pool 1**

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	72.03	337	14.42	64.7	
3	72.93	349	53.48	232.5	
4	74.13	363	111.37	464.4	
5	75.33	378	130.21	521.7	
6	76.27	390	165.09	641.8	
7	76.95	398	270.38	1,028.7	
8	77.98	415	284.76	1,038.9	
9	79.30	438	203.48	703.4	
10	80.07	452	384.27	1,289.2	
11	81.74	481	84.28	265.7	
12	113.00	10,380	75.00	10.9	Upper Marker
13	115.01	12,572	0.00	0.0	

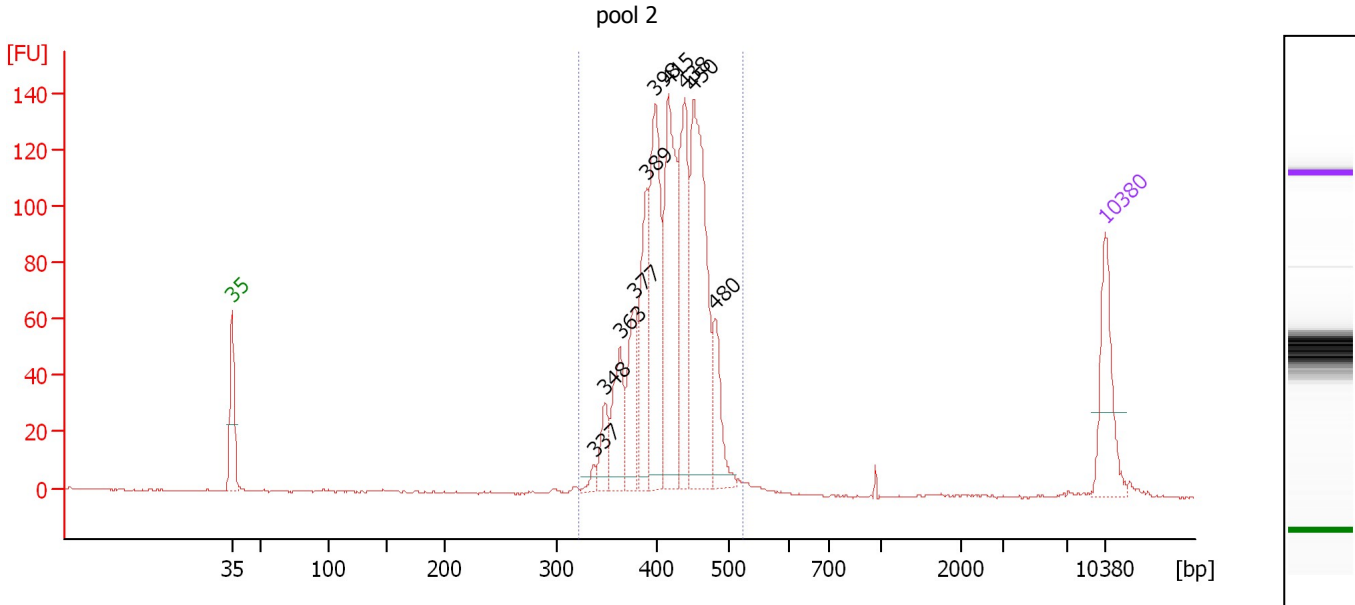
**Region table for sample 1 : pool 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
326	528	419	6,309.1	1,731.77	1,461.1	99	8.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : pool 2**

Number of peaks found: 10                      Corr. Area 1: 1,152.1  
 Noise: 0.3

**Peak table for sample 2 : pool 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	71.99	337	10.36	46.6	
3	72.89	348	40.63	176.9	
4	74.09	363	86.10	359.5	
5	75.20	377	89.57	360.4	
6	76.23	389	115.90	451.1	
7	76.95	398	212.95	810.2	
8	77.98	415	225.49	822.7	
9	79.30	438	170.63	589.9	
10	79.99	450	298.04	1,003.2	
11	81.70	480	71.47	225.7	
12	113.00	10,380	75.00	10.9	Upper Marker

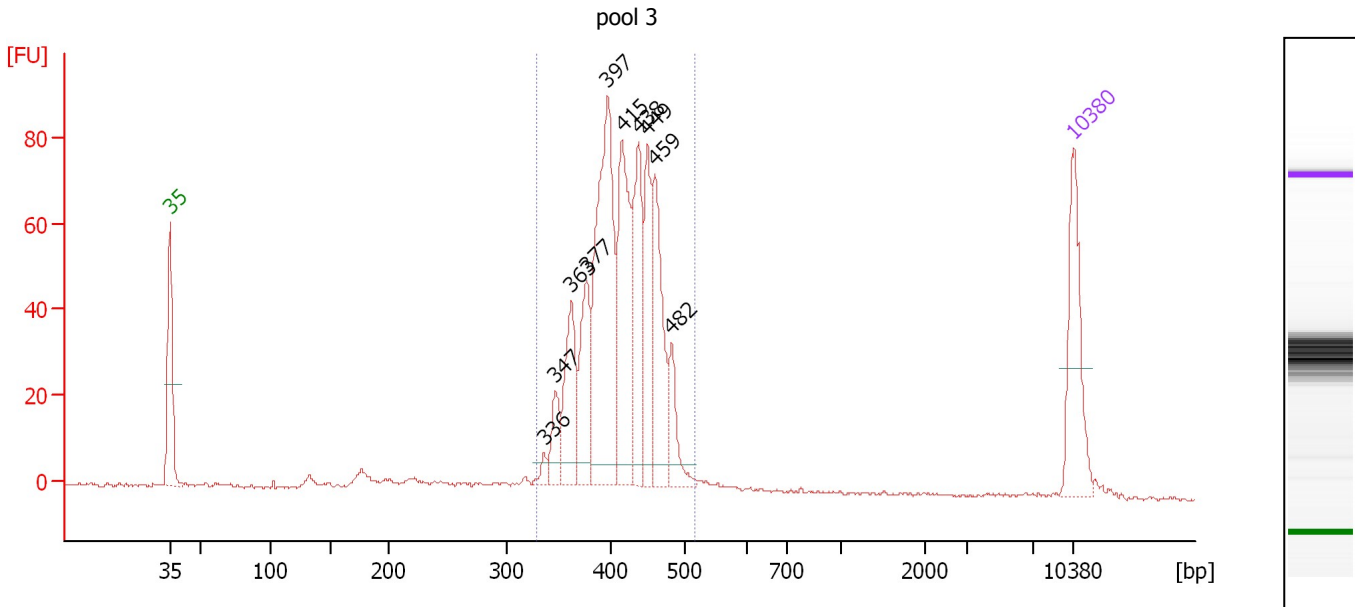
**Region table for sample 2 : pool 2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
321	524	420	4,939.7	1,356.18	1,152.1	98	8.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : pool 3**

Number of peaks found: 10      Corr. Area 1: 710.7  
 Noise: 0.4

**Peak table for sample 3 : pool 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	71.94	336	8.85	39.9	
3	72.81	347	33.02	144.2	
4	74.08	363	79.51	332.1	
5	75.26	377	80.15	321.8	
6	76.88	397	250.60	955.5	
7	77.98	415	155.36	566.8	
8	79.29	438	110.95	383.8	
9	79.95	449	83.67	282.1	
10	80.52	459	116.42	384.1	
11	81.83	482	41.91	131.7	
12	113.00	10,380	75.00	10.9	Upper Marker

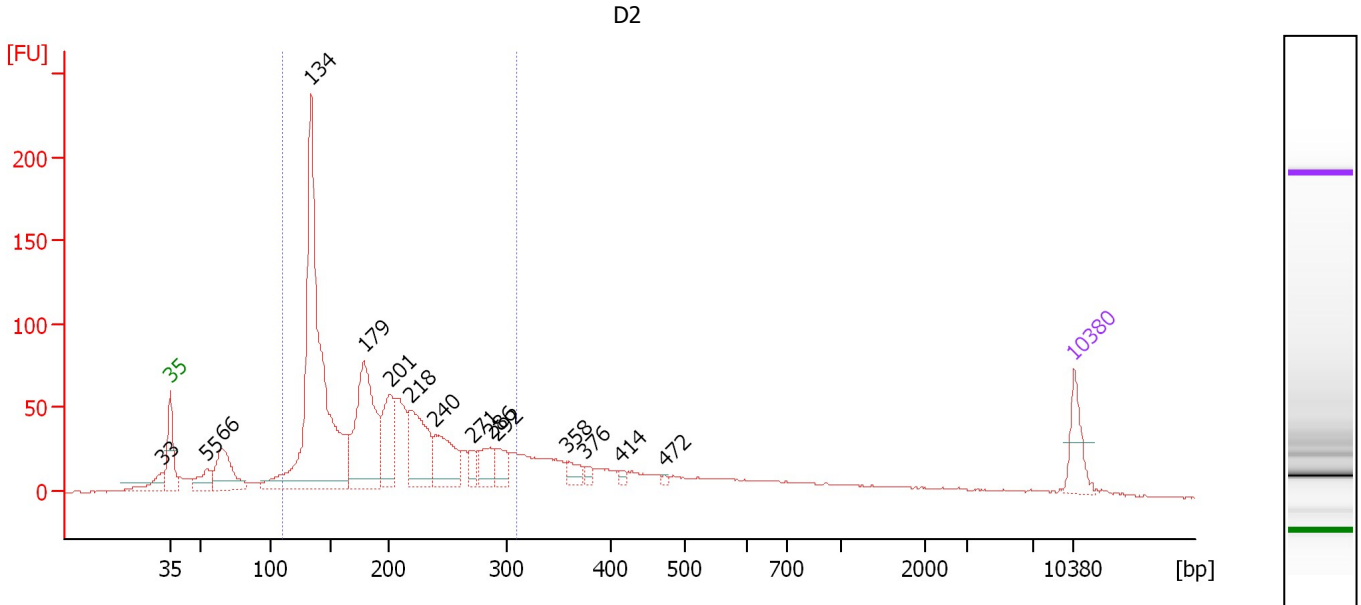
**Region table for sample 3 : pool 3**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
330	516	415	3,659.6	994.45	710.7	90	9.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : D2**

Number of peaks found: 15                      Corr. Area 1: 1,441.7  
 Noise: 0.4

**Peak table for sample 4 : D2**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	42.37	33	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	45.85	55	76.43	2,096.1	
4	46.98	66	195.22	4,504.0	
5	53.90	134	1,393.73	15,712.0	
6	58.02	179	493.12	4,175.2	
7	60.01	201	190.48	1,438.9	
8	61.55	218	251.31	1,750.0	
9	63.54	240	186.27	1,177.8	
10	66.35	271	40.03	224.1	
11	67.75	286	77.43	410.0	
12	68.29	292	66.81	346.5	
13	73.72	358	39.95	168.9	
14	75.13	376	16.88	68.1	
15	77.93	414	10.76	39.3	
16	81.24	472	6.09	19.5	
17	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : D2**

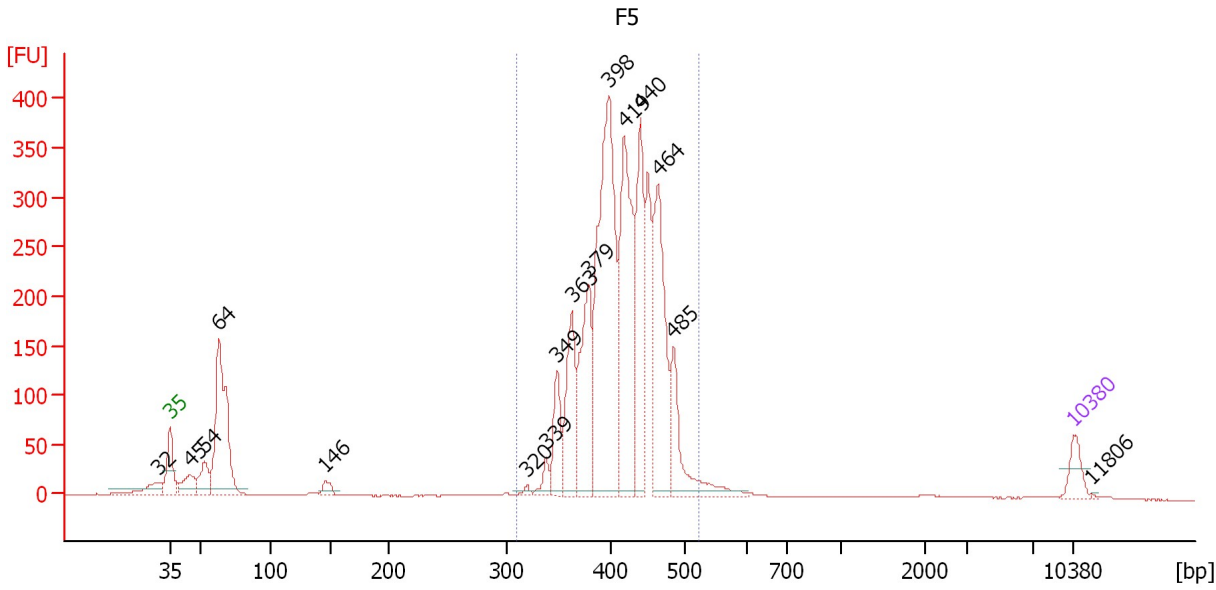
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
111	310	192	27,227.1	3,127.14	1,441.7	66	27.2	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : F5**

Number of peaks found: 16      Corr. Area 1: 3,074.4  
 Noise: 0.2

**Peak table for sample 5 : F5**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	42.02	32	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	44.49	45	138.42	4,678.8	
4	45.66	54	144.63	4,095.7	
5	46.78	64	860.77	20,430.9	
6	55.00	146	48.35	501.1	
7	70.65	320	17.94	84.9	
8	72.14	339	62.11	277.8	
9	72.93	349	210.47	914.9	
10	74.10	363	377.42	1,575.4	
11	75.41	379	511.78	2,045.2	
12	76.95	398	1,439.28	5,476.6	
13	78.16	419	925.08	3,349.1	
14	79.42	440	587.16	2,020.3	
15	80.78	464	711.97	2,325.7	
16	81.99	485	343.77	1,074.2	
17	113.00	10,380	75.00	10.9	Upper Marker
18	114.31	11,806	0.00	0.0	

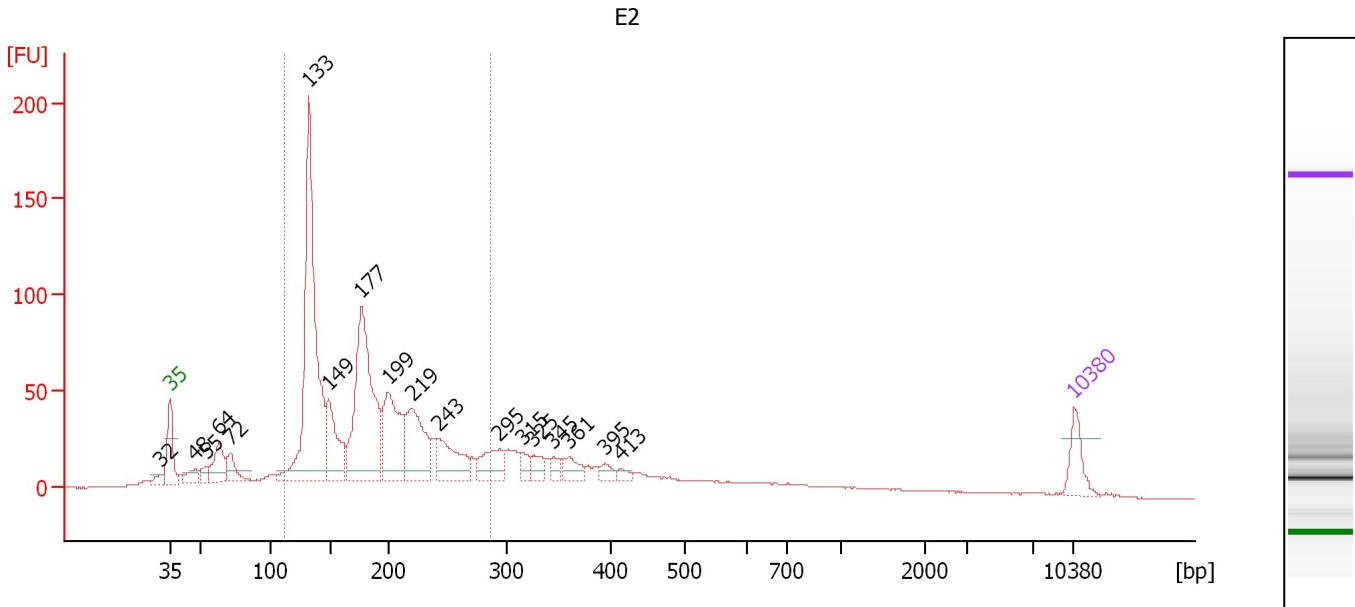
**Region table for sample 5 : F5**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
310	523	417	20,298.0	5,538.13	3,074.4	82	9.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : E2**

Number of peaks found: 18                      Corr. Area 1: 1,129.1  
 Noise: 0.2

**Peak table for sample 6 : E2**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	42.23	32	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	44.92	48	61.46	1,956.1	
4	45.78	55	38.00	1,054.5	
5	46.79	64	137.92	3,271.3	
6	47.65	72	86.68	1,828.2	
7	53.74	133	1,212.37	13,850.6	
8	55.27	149	254.56	2,586.4	
9	57.82	177	785.58	6,736.2	
10	59.88	199	346.11	2,634.2	
11	61.70	219	304.27	2,103.1	
12	63.81	243	190.23	1,188.3	
13	68.51	295	121.28	623.9	
14	70.23	315	37.70	181.2	
15	71.05	325	47.48	221.2	
16	72.63	345	35.93	157.9	
17	73.92	361	60.84	255.5	
18	76.71	395	30.83	118.2	
19	77.86	413	20.93	76.8	
20	113.00	10,380	75.00	10.9	Upper Marker

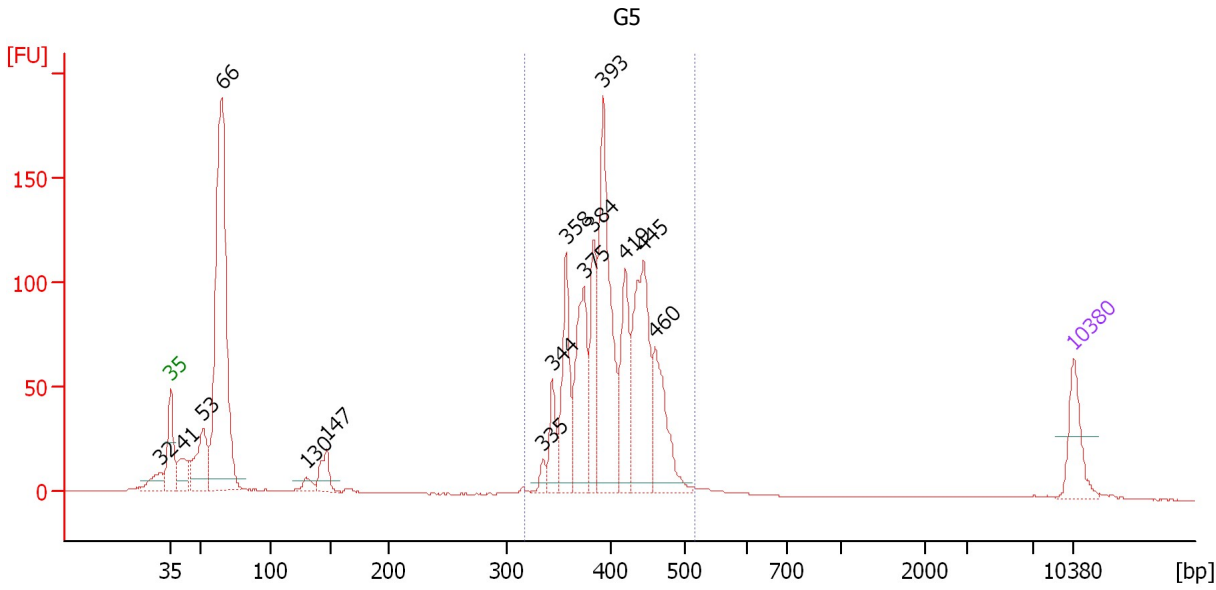
**Region table for sample 6 : E2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
113	286	183	32,818.5	3,662.00	1,129.1	64	24.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : G5**

Number of peaks found: 15                      Corr. Area 1: 1,041.6  
 Noise: 0.1

**Peak table for sample 7 : G5**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	42.21	32	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	43.93	41	72.81	2,681.5	
4	45.56	53	156.50	4,514.1	
5	46.98	66	908.72	20,966.0	
6	53.52	130	22.02	256.2	
7	55.09	147	63.93	658.2	
8	71.86	335	21.89	98.9	
9	72.59	344	77.11	339.3	
10	73.67	358	177.83	753.2	
11	75.05	375	224.38	907.2	
12	75.79	384	157.22	620.6	
13	76.53	393	405.26	1,562.6	
14	78.20	419	173.16	626.1	
15	79.67	445	308.77	1,052.1	
16	80.56	460	182.36	600.7	
17	113.00	10,380	75.00	10.9	Upper Marker

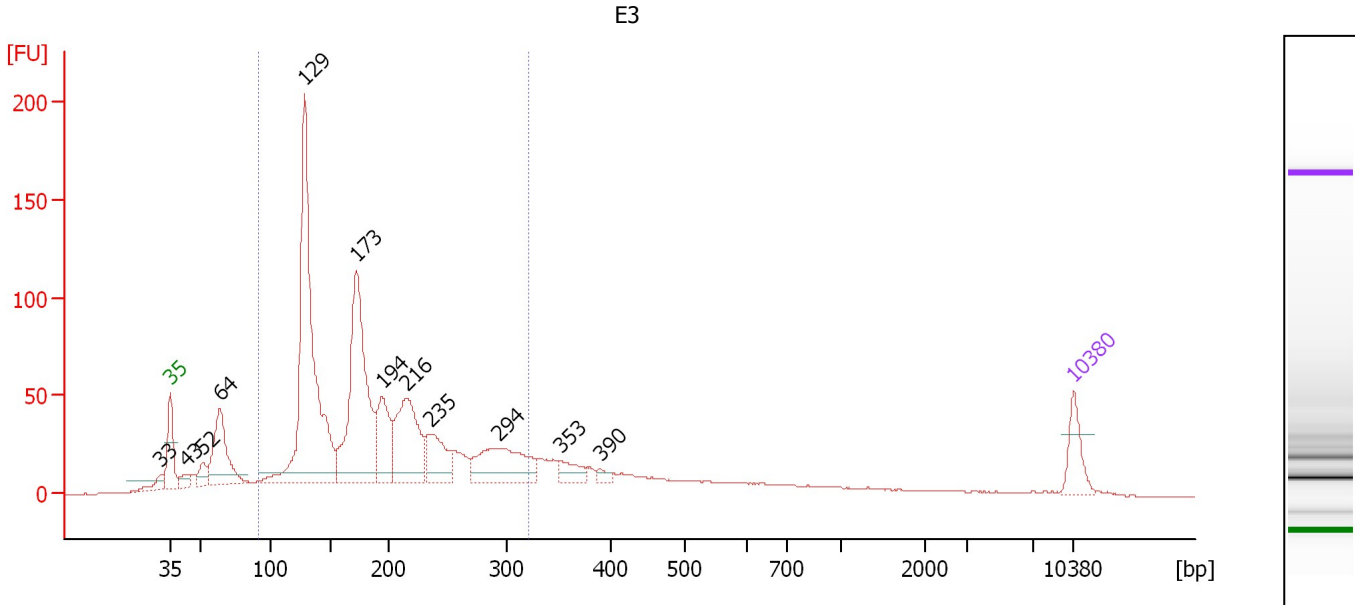
**Region table for sample 7 : G5**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
318	515	405	6,638.6	1,757.02	1,041.6	63	9.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : E3**

Number of peaks found: 12                      Corr. Area 1: 1,295.9  
 Noise: 0.2

**Peak table for sample 8 : E3**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	42.30	33	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	44.19	43	42.15	1,490.3	
4	45.54	52	56.64	1,638.7	
5	46.83	64	292.62	6,894.7	
6	53.41	129	1,225.59	14,391.7	
7	57.44	173	772.54	6,781.4	
8	59.38	194	220.66	1,726.2	
9	61.37	216	358.21	2,517.5	
10	63.16	235	167.60	1,078.7	
11	68.49	294	270.05	1,390.1	
12	73.27	353	61.99	266.3	
13	76.31	390	20.89	81.1	
14	113.00	10,380	75.00	10.9	Upper Marker

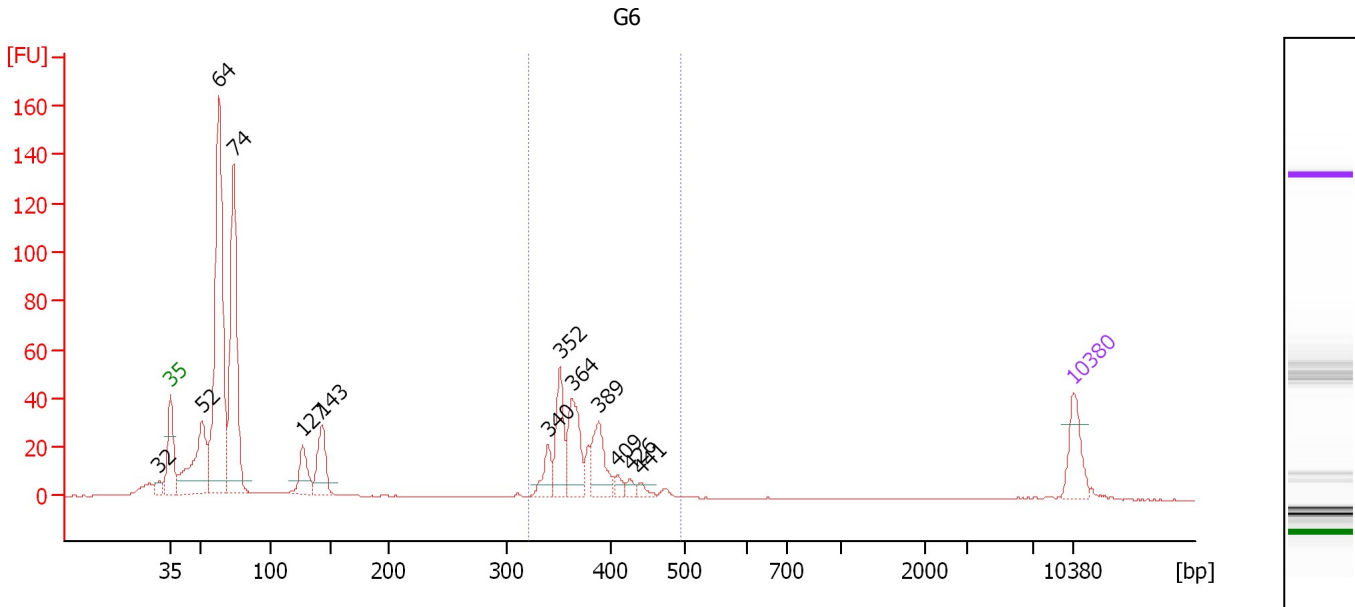
**Region table for sample 8 : E3**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
93	322	190	32,898.3	3,675.63	1,295.9	69	29.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : G6**

Number of peaks found: 13                      Corr. Area 1: 214.3  
 Noise: 0.1

**Peak table for sample 9 : G6**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	42.15	32	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	45.49	52	291.34	8,505.6	
4	46.78	64	863.66	20,503.7	
5	47.93	74	596.01	12,142.8	
6	53.25	127	93.35	1,110.7	
7	54.74	143	132.15	1,396.4	
8	72.25	340	57.14	254.5	
9	73.20	352	127.45	548.8	
10	74.14	364	151.60	631.9	
11	76.18	389	115.47	450.0	
12	77.63	409	20.30	75.2	
13	78.62	426	15.69	55.8	
14	79.47	441	15.75	54.1	
15	113.00	10,380	75.00	10.9	Upper Marker

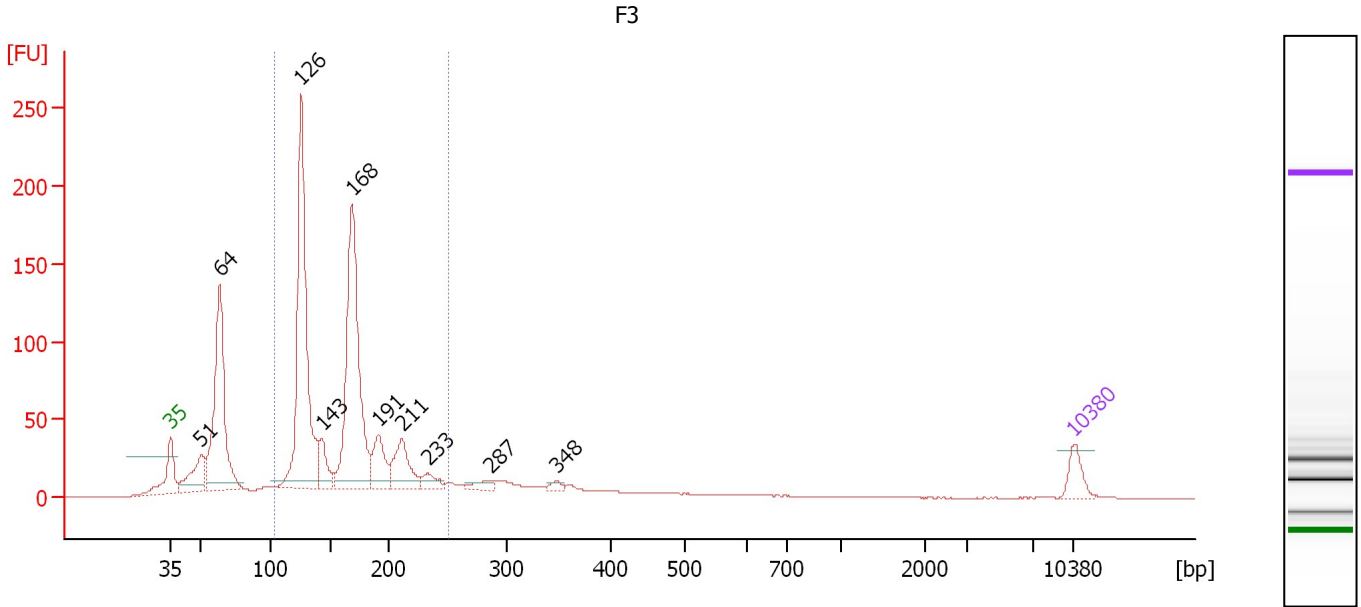
**Region table for sample 9 : G6**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
321	493	375	2,316.6	570.50	214.3	26	8.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : F3**

Number of peaks found: 10      Corr. Area 1: 1,032.1  
 Noise: 0.1

**Peak table for sample 10 : F3**

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	45.38	51	261.91	7,788.8	
3	46.83	64	1,044.42	24,637.5	
4	53.13	126	1,529.43	18,374.0	
5	54.72	143	170.82	1,807.2	
6	57.06	168	1,346.69	12,109.6	
7	59.15	191	223.35	1,770.4	
8	60.93	211	256.63	1,844.9	
9	62.97	233	75.71	491.7	
10	67.79	287	52.41	277.1	
11	72.91	348	27.75	120.7	
12	113.00	10,380	75.00	10.9	Upper Marker

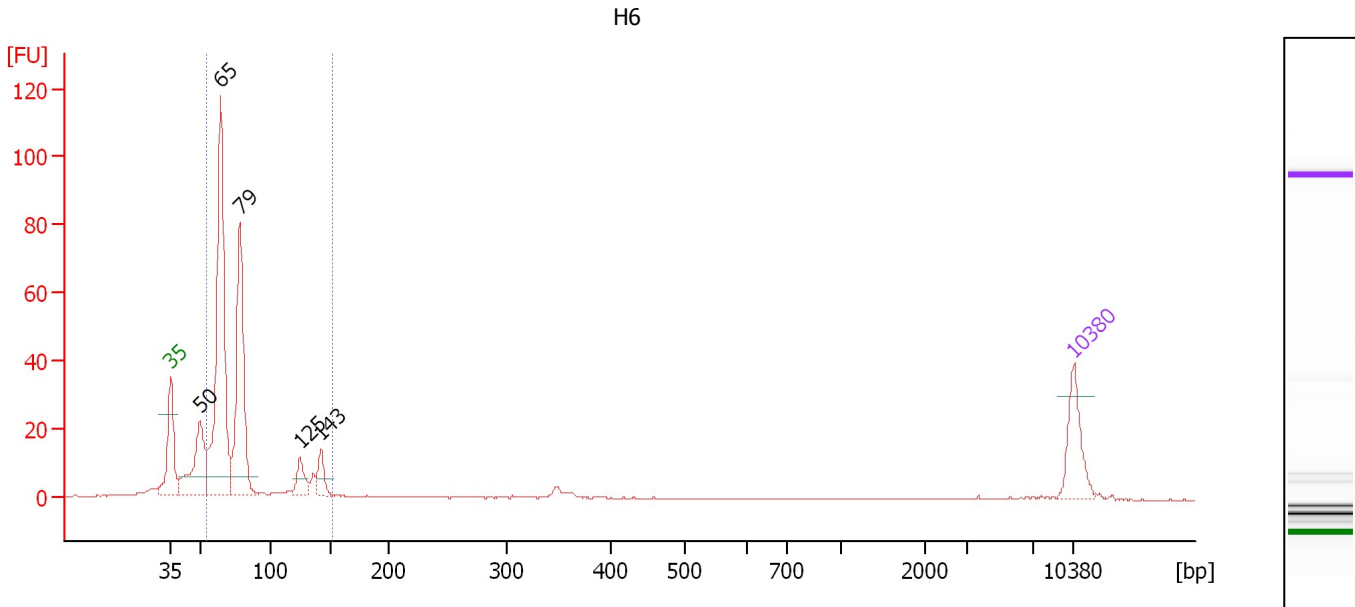
**Region table for sample 10 : F3**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
105	250	161	40,712.0	4,107.99	1,032.1	64	20.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
 Modified: 1/22/2014 4:04:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : H6**

Number of peaks found: 5                      Corr. Area 1: 322.6  
 Noise: 0.1

**Peak table for sample 11 : H6**

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	45.28	50	186.46	5,652.4	
3	46.91	65	669.48	15,595.2	
4	48.40	79	404.40	7,781.4	
5	53.06	125	53.67	649.1	
6	54.69	143	49.76	527.8	
7	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : H6**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
55	153	79	25,966.5	1,273.24	322.6	80	29.1	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22\_005.xad

Created: 1/22/2014 3:22:34 PM  
Modified: 1/22/2014 4:04:22 PM

**Gel Image**

