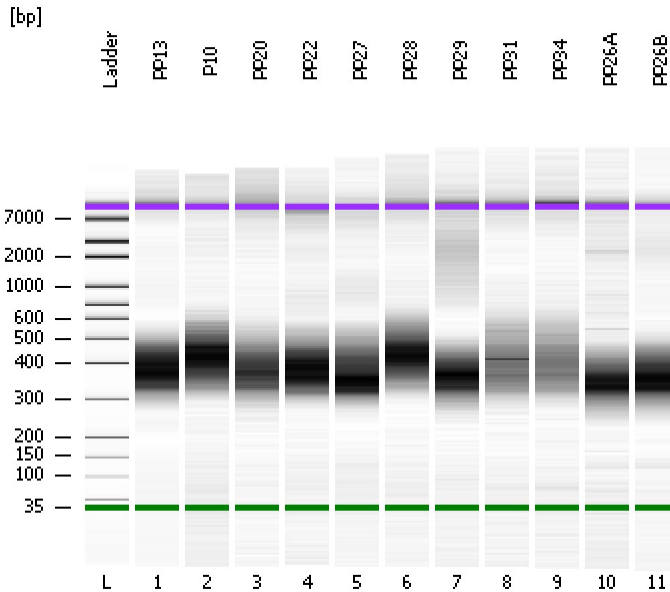


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
Modified: 2/12/2014 11:12:35 AM

Electrophoresis File Run Summary



Instrument Information:

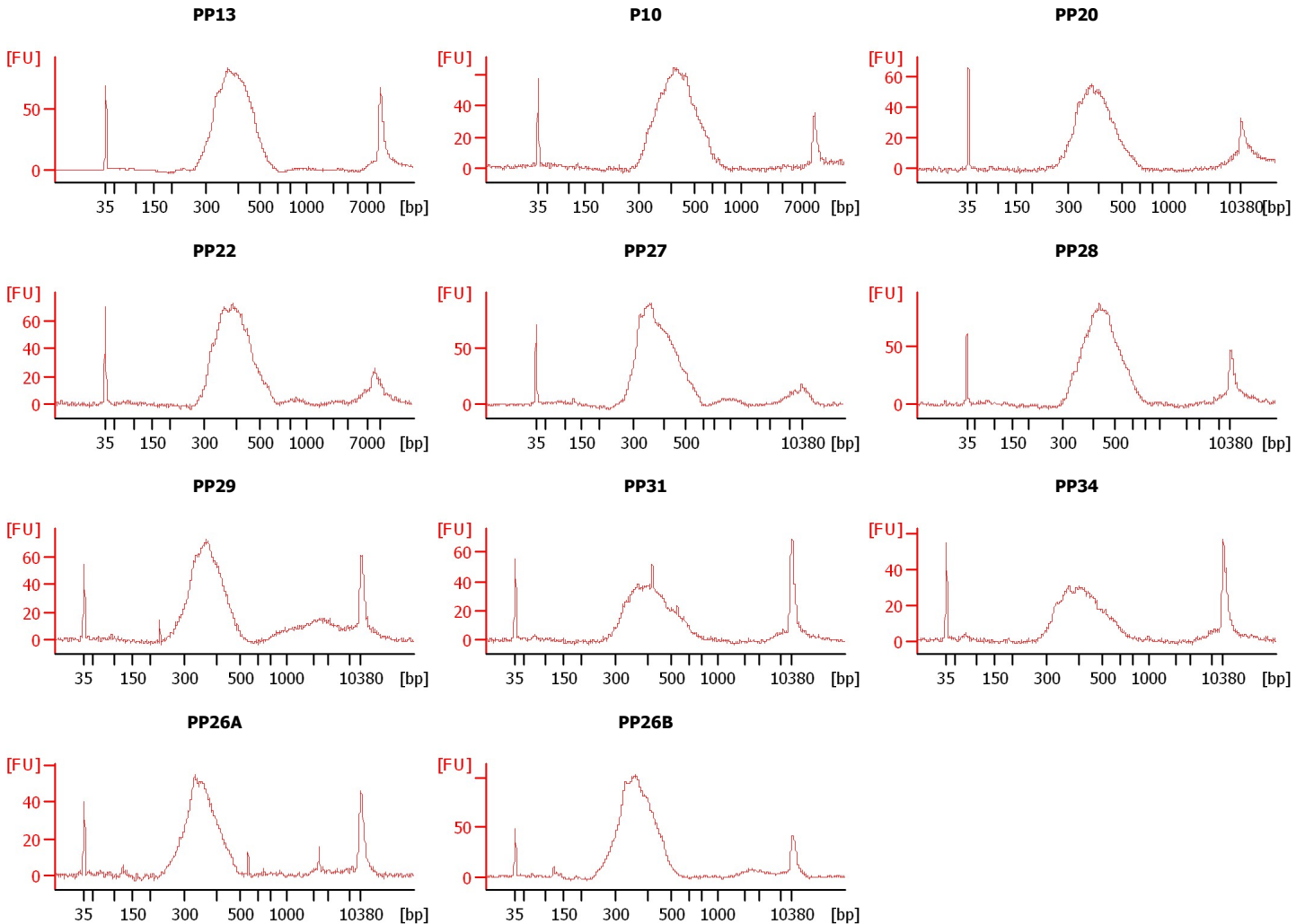
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
PP13		<input type="checkbox"/>	✓			
P10		<input type="checkbox"/>	✓			
PP20		<input type="checkbox"/>	✓			
PP22		<input type="checkbox"/>	✓			
PP27		<input type="checkbox"/>	✓			
PP28		<input type="checkbox"/>	✓			
PP29		<input type="checkbox"/>	✓			
PP31		<input type="checkbox"/>	✓			
PP34		<input type="checkbox"/>	✓			
PP26A		<input type="checkbox"/>	✓			
PP26B		<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\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
Modified: 2/12/2014 11:12:35 AM

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

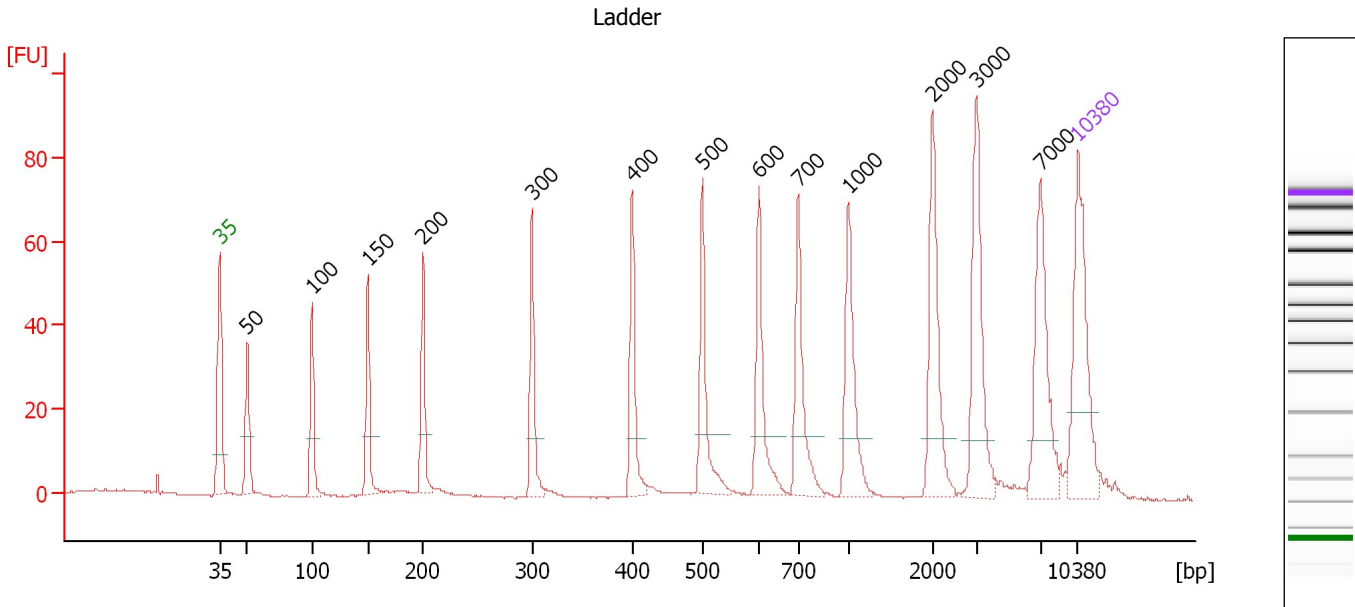
Ladder

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\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

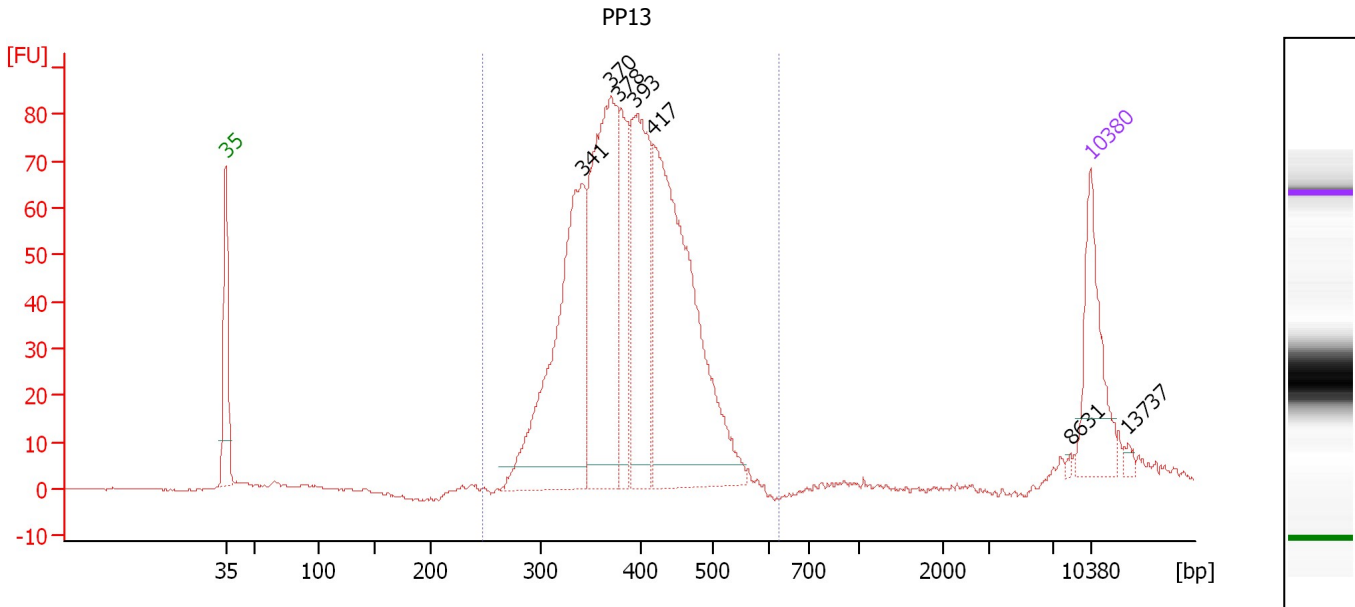
Peak table for Ladder

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	50.57	100	150.00	2,272.7	Ladder Peak
4	55.09	150	150.00	1,515.2	Ladder Peak
5	59.61	200	150.00	1,136.4	Ladder Peak
6	68.48	300	150.00	757.6	Ladder Peak
7	76.65	400	150.00	568.2	Ladder Peak
8	82.39	500	150.00	454.5	Ladder Peak
9	87.00	600	150.00	378.8	Ladder Peak
10	90.17	700	150.00	324.7	Ladder Peak
11	94.26	1,000	150.00	227.3	Ladder Peak
12	101.13	2,000	150.00	113.6	Ladder Peak
13	104.74	3,000	150.00	75.8	Ladder Peak
14	109.91	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\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : PP13

Number of peaks found: 7 Corr. Area 1: 1,186.2
 Noise: 0.2

Peak table for sample 1 : PP13

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	71.85	341	366.71	1,628.4	
3	74.18	370	336.03	1,377.0	
4	74.83	378	121.50	487.5	
5	76.08	393	217.53	838.7	
6	77.63	417	437.91	1,590.8	
7	111.40	8,631	1.91	0.3	
8	113.00	10,380	75.00	10.9	Upper Marker
9	116.07	13,737	0.00	0.0	

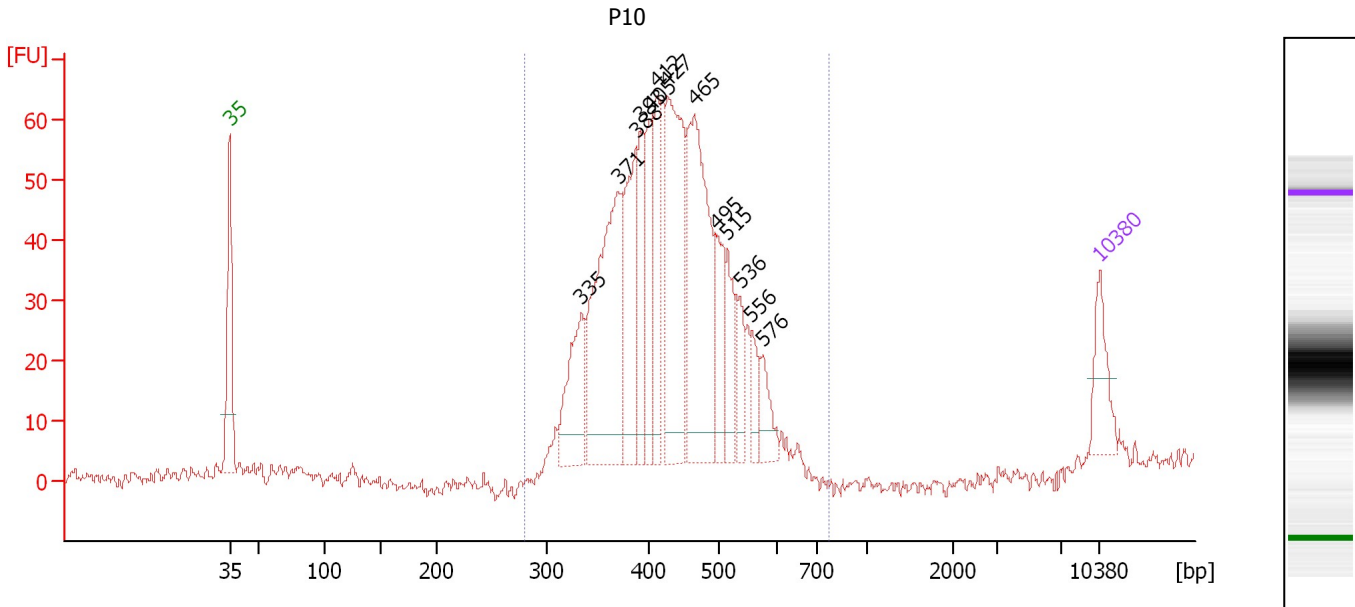
Region table for sample 1 : PP13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	623	392	5,786.5	1,460.18	1,186.2	98	14.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : P10

Number of peaks found: 13 Corr. Area 1: 900.1
 Noise: 1.1

Peak table for sample 2 : P10

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	71.31	335	204.40	925.5	
3	74.27	371	521.29	2,129.9	
4	75.68	388	231.02	901.8	
5	76.07	393	160.53	619.1	
6	76.93	405	142.17	532.1	
7	77.36	412	160.15	588.6	
8	78.21	427	431.65	1,530.9	
9	80.40	465	484.41	1,577.2	
10	82.12	495	124.61	381.3	
11	83.06	515	104.03	306.3	
12	84.05	536	69.64	196.9	
13	84.99	556	49.47	134.7	
14	85.89	576	66.21	174.2	
15	113.00	10,380	75.00	10.9	Upper Marker

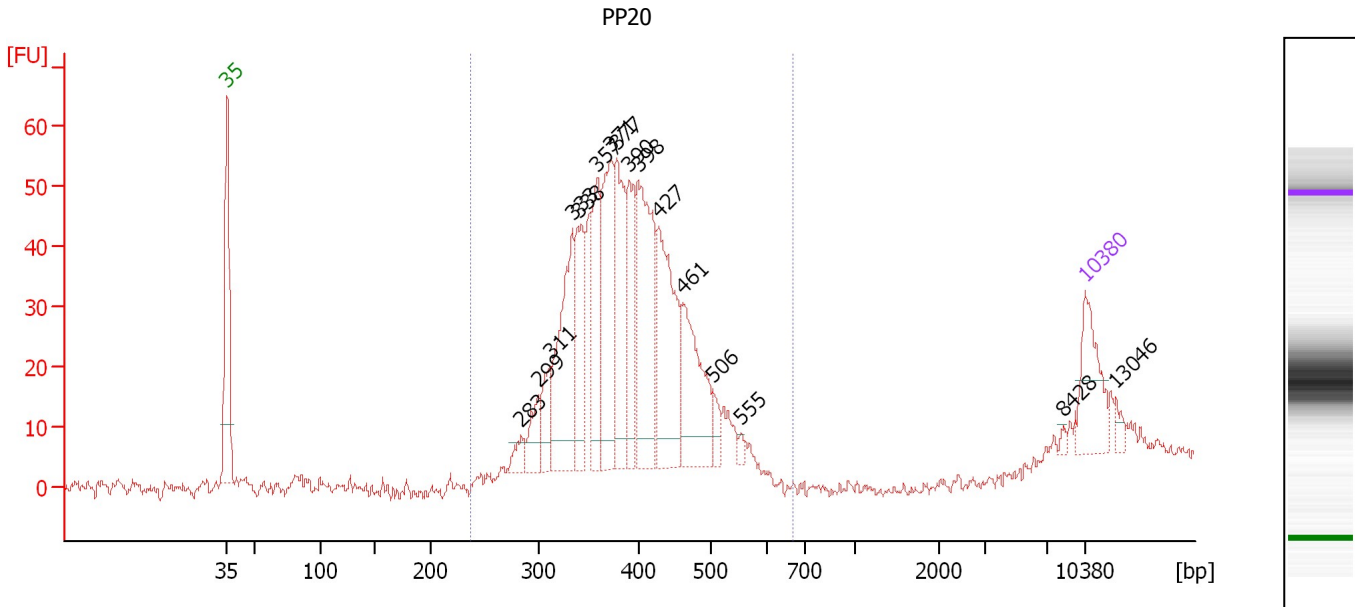
Region table for sample 2 : P10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
280	778	432	11,085.0	3,062.41	900.1	99	15.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : PP20

Number of peaks found: 16 Corr. Area 1: 718.8
 Noise: 1.3

Peak table for sample 3 : PP20

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	67.00	283	26.22	140.2	
3	68.39	299	53.39	270.5	
4	69.35	311	54.14	264.1	
5	71.17	333	224.64	1,022.2	
6	71.61	338	128.01	573.3	
7	73.17	357	140.51	595.6	
8	74.26	371	203.65	832.3	
9	74.78	377	165.45	664.7	
10	75.83	390	118.17	459.2	
11	76.52	398	252.80	961.4	
12	78.17	427	232.47	825.8	
13	80.17	461	169.11	555.4	
14	82.65	506	23.17	69.4	
15	84.91	555	8.10	22.1	
16	111.22	8,428	4.17	0.7	
17	113.00	10,380	75.00	10.9	Upper Marker
18	115.43	13,046	0.00	0.0	

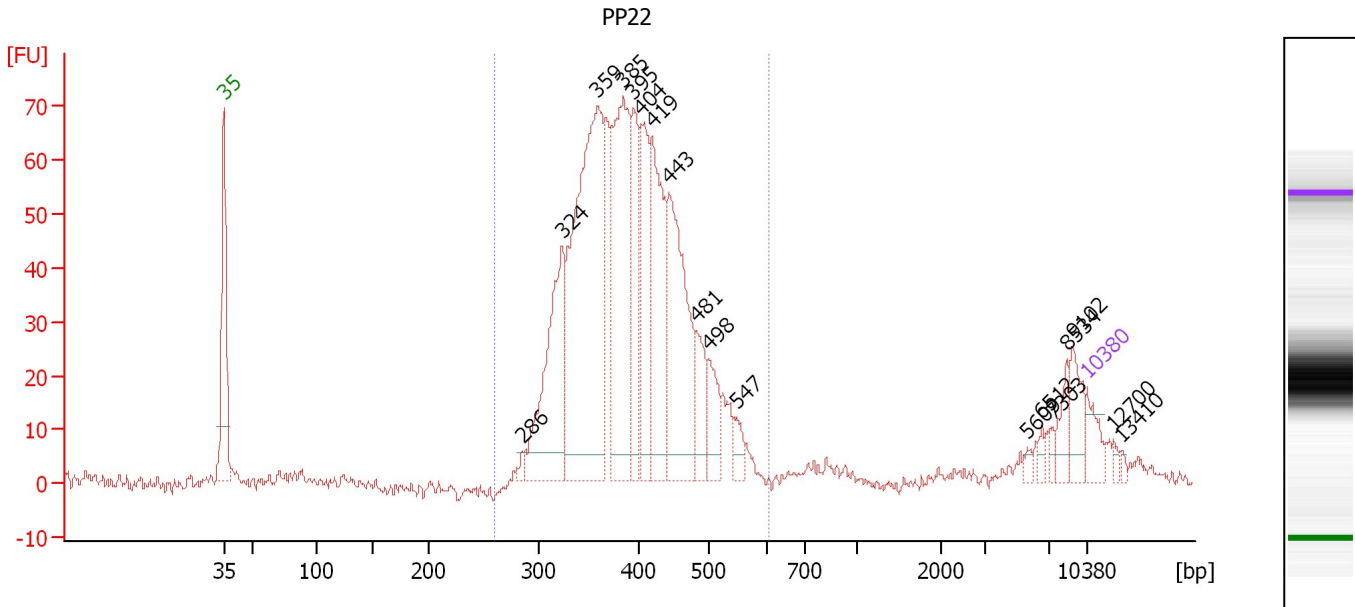
Region table for sample 3 : PP20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
236	669	391	7,806.0	1,964.42	718.8	96	14.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : PP22

Number of peaks found: 18 Corr. Area 1: 1,026.2
 Noise: 1.3

Peak table for sample 4 : PP22

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	67.21	286	30.06	159.4	
3	70.41	324	717.61	3,359.4	
4	73.31	359	1,608.35	6,786.2	
5	75.43	385	954.36	3,755.7	
6	76.21	395	403.37	1,549.1	
7	76.85	404	406.17	1,525.1	
8	77.72	419	589.78	2,134.8	
9	79.10	443	753.37	2,578.5	
10	81.31	481	175.16	551.6	
11	82.26	498	166.63	507.3	
12	84.55	547	64.70	179.3	
13	108.11	5,609	16.20	4.4	
14	109.28	6,512	21.02	4.9	
15	110.19	7,303	23.14	4.8	
16	111.31	8,534	70.09	12.4	
17	111.83	9,102	106.67	17.8	
18	113.00	10,380	75.00	10.9	Upper Marker
19	115.12	12,700	0.00	0.0	
20	115.77	13,410	0.00	0.0	

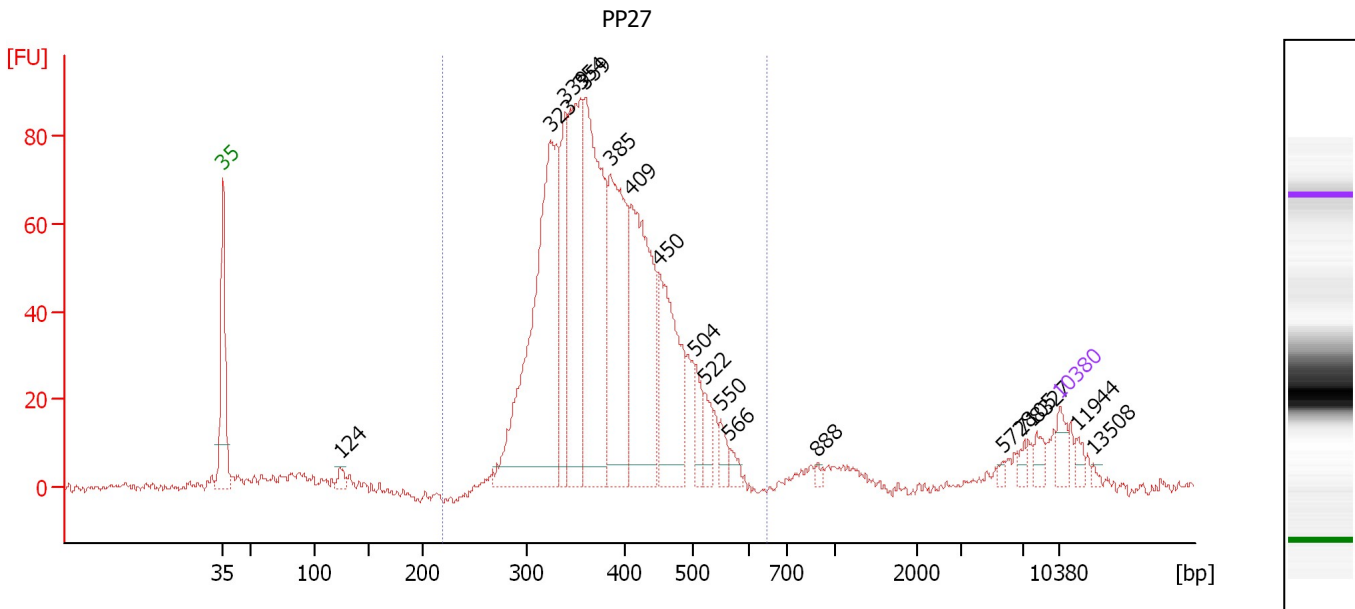
Region table for sample 4 : PP22

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
260	608	396	24,816.6	6,325.93	1,026.2	91	14.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : PP27

Number of peaks found: 18 Corr. Area 1: 1,327.8
 Noise: 0.9

Peak table for sample 5 : PP27

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	52.78	124	58.04	706.6	
3	70.37	323	2,228.95	10,452.6	
4	71.66	339	573.11	2,562.0	
5	72.91	354	1,169.89	5,004.0	
6	73.31	359	1,562.69	6,592.7	
7	75.41	385	1,105.04	4,351.0	
8	77.20	409	1,256.96	4,650.9	
9	79.52	450	769.58	2,591.6	
10	82.55	504	139.01	418.3	
11	83.40	522	122.80	356.5	
12	84.70	550	79.36	218.6	
13	85.41	566	57.79	154.8	
14	92.73	888	19.89	34.0	
15	108.27	5,728	15.11	4.0	
16	110.01	7,105	31.83	6.8	
17	111.13	8,327	51.89	9.4	
18	113.00	10,380	75.00	10.9	Upper Marker
19	114.43	11,944	0.00	0.0	
20	115.86	13,508	0.00	0.0	

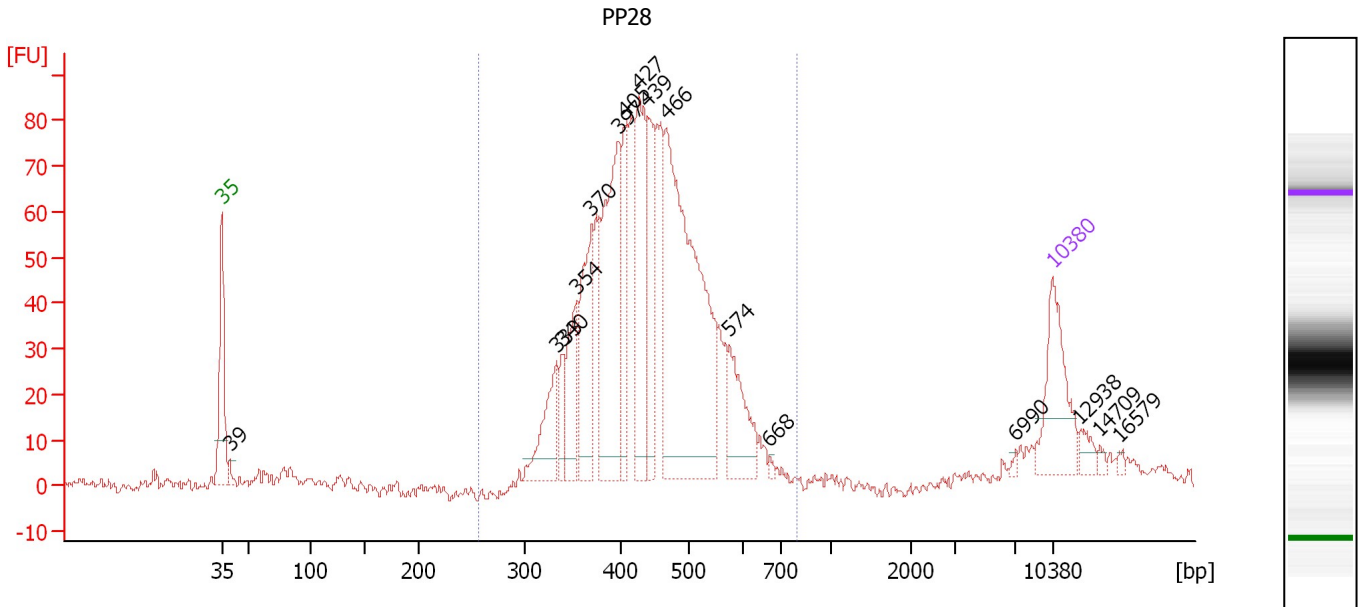
Region table for sample 5 : PP27

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
220	646	386	38,457.8	9,468.38	1,327.8	88	16.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : PP28

Number of peaks found: 16 Corr. Area 1: 1,141.7
 Noise: 1.5

Peak table for sample 6 : PP28

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	43.67	39	8.84	339.4	
3	71.22	333	77.50	352.1	
4	71.75	340	34.31	152.9	
5	72.92	354	73.81	315.6	
6	74.18	370	127.53	522.6	
7	76.38	397	219.90	839.9	
8	76.97	405	84.80	316.9	
9	78.18	427	156.26	555.0	
10	78.90	439	91.63	316.1	
11	80.43	466	436.66	1,420.5	
12	85.82	574	74.70	197.1	
13	89.14	668	3.34	7.6	
14	109.90	6,990	2.58	0.6	
15	113.00	10,380	75.00	10.9	Upper Marker
16	115.34	12,938	0.00	0.0	
17	116.95	14,709	0.00	0.0	
18	118.66	16,579	0.00	0.0	

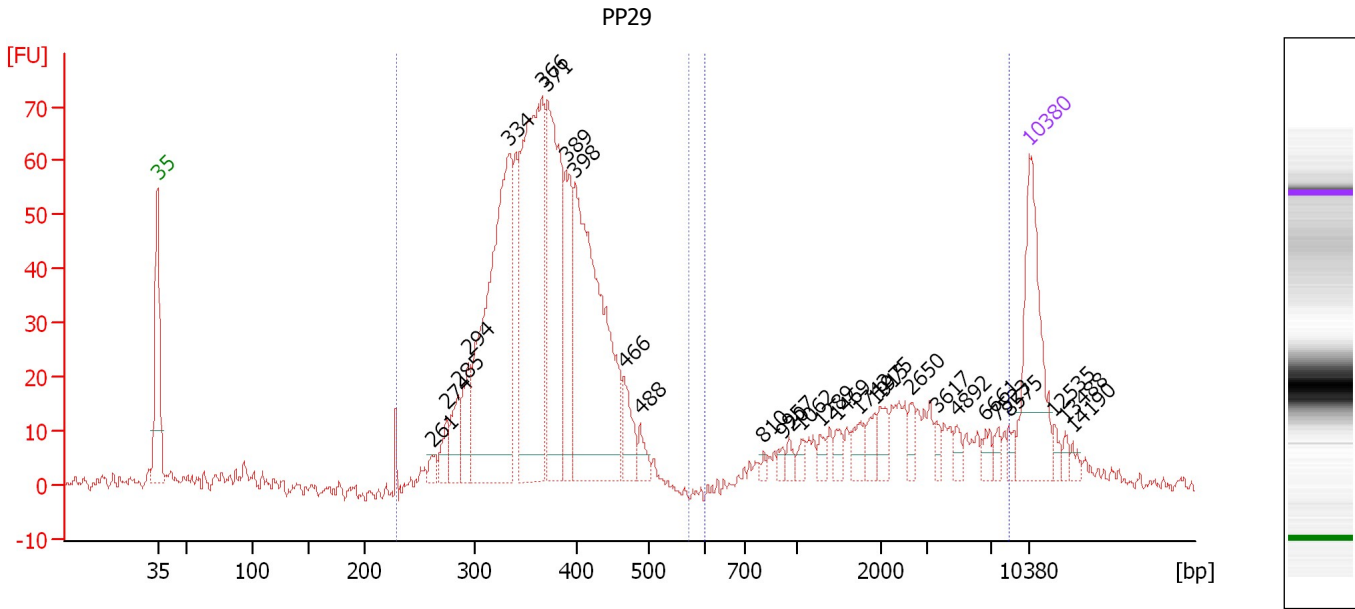
Region table for sample 6 : PP28

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
257	792	442	5,874.4	1,659.33	1,141.7	96	16.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : PP29

Number of peaks found: 29 Corr. Area 1: 897.9
 Noise: 1.0 Corr. Area 2: 191.6

Peak table for sample 7 : PP29

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	65.02	261	8.45	49.0	
3	66.21	274	17.00	93.9	
4	67.13	285	27.48	146.2	
5	67.95	294	36.61	188.7	
6	71.25	334	285.15	1,294.0	
7	73.90	366	263.04	1,087.9	
8	74.27	371	169.61	693.0	
9	75.78	389	73.08	284.4	
10	76.47	398	255.94	975.0	
11	80.45	466	24.93	81.0	
12	81.73	488	12.05	37.4	
13	91.67	810	3.25	6.1	
14	93.18	920	4.56	7.5	
15	93.68	957	5.75	9.1	
16	94.69	1,062	6.05	8.6	
17	96.24	1,289	6.38	7.5	
18	97.48	1,469	7.92	8.2	
19	99.36	1,742	10.72	9.3	
20	100.55	1,915	9.88	7.8	
21	100.96	1,975	12.98	10.0	
22	103.48	2,650	9.00	5.1	
23	105.54	3,617	5.82	2.4	
24	107.19	4,892	6.05	1.9	
25	109.47	6,661	6.76	1.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad



Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...

... Peak table for sample 7 : PP29

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	110.39	7,523	5.00	1.0	
27	111.35	8,575	5.76	1.0	
28	113.00	10,380	75.00	10.9	Upper Marker
29	114.97	12,535	0.00	0.0	
30	115.84	13,488	0.00	0.0	
31	116.48	14,190	0.00	0.0	

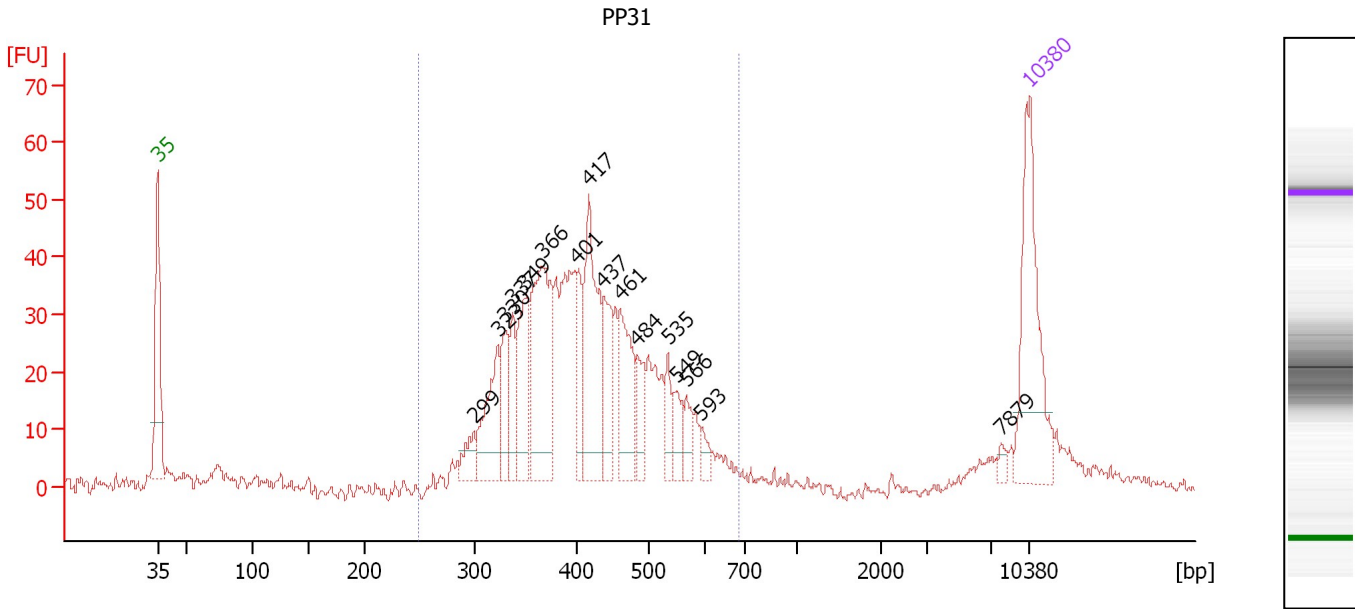
Region table for sample 7 : PP29

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
230	572	369	5,241.5	1,248.69	897.9	79	13.3	
598	8,527	2,931	155.1	196.05	191.6	17	67.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : PP31

Number of peaks found: 16 Corr. Area 1: 656.2
 Noise: 1.1

Peak table for sample 8 : PP31

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	68.40	299	15.75	79.8	
3	70.32	323	53.62	251.8	
4	70.92	330	32.93	151.3	
5	71.51	337	28.20	126.8	
6	72.52	349	52.22	226.5	
7	73.84	366	109.12	452.2	
8	76.72	401	32.44	122.5	
9	77.63	417	85.79	311.6	
10	78.78	437	38.17	132.3	
11	80.15	461	51.98	170.9	
12	81.47	484	22.16	69.4	
13	83.99	535	16.10	45.6	
14	84.67	549	17.06	47.1	
15	85.45	566	13.15	35.2	
16	86.68	593	8.24	21.1	
17	110.72	7,879	4.04	0.8	
18	113.00	10,380	75.00	10.9	Upper Marker

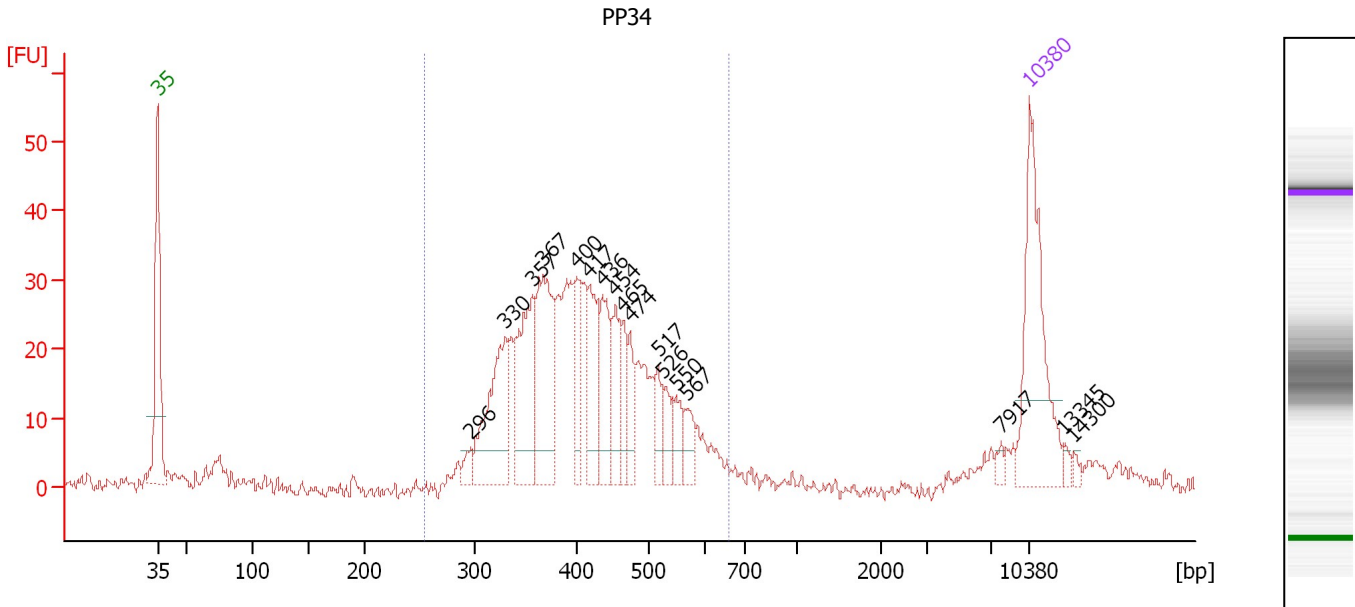
Region table for sample 8 : PP31

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
249	682	420	2,964.1	785.37	656.2	91	19.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : PP34

Number of peaks found: 17 Corr. Area 1: 494.0
 Noise: 0.7

Peak table for sample 9 : PP34

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	68.11	296	8.33	42.7	
3	70.91	330	78.94	362.7	
4	73.11	357	75.43	320.4	
5	73.98	367	81.49	336.1	
6	76.65	400	30.87	116.9	
7	77.66	417	43.57	158.1	
8	78.71	436	38.48	133.8	
9	79.77	454	30.07	100.3	
10	80.36	465	22.53	73.5	
11	80.91	474	19.59	62.6	
12	83.16	517	15.98	46.8	
13	83.58	526	17.12	49.3	
14	84.68	550	15.48	42.7	
15	85.46	567	13.95	37.3	
16	110.75	7,917	3.79	0.7	
17	113.00	10,380	75.00	10.9	Upper Marker
18	115.71	13,345	0.00	0.0	
19	116.58	14,300	0.00	0.0	

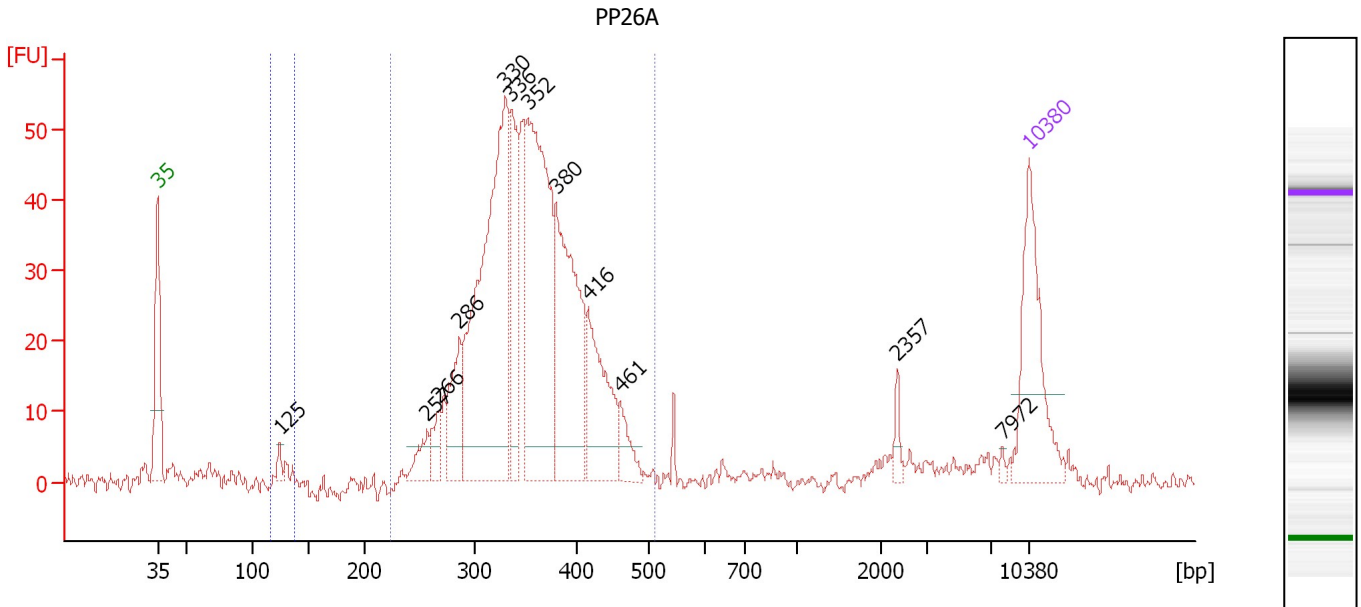
Region table for sample 9 : PP34

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
254	657	418	2,543.3	673.38	494.0	92	18.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : PP26A

Number of peaks found: 12 Corr. Area 1: 658.9
 Noise: 1.2 Corr. Area 2: 5.3

Peak table for sample 10 : PP26A

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	52.80	125	8.03	97.5	
3	64.62	257	21.35	126.1	
4	65.49	266	18.99	108.0	
5	67.23	286	56.40	298.8	
6	70.95	330	324.37	1,488.5	
7	71.40	336	77.56	350.0	
8	72.73	352	242.79	1,045.0	
9	75.02	380	169.31	675.0	
10	77.54	416	87.40	318.7	
11	80.15	461	22.26	73.2	
12	102.42	2,357	8.10	5.2	
13	110.80	7,972	2.41	0.5	
14	113.00	10,380	75.00	10.9	Upper Marker

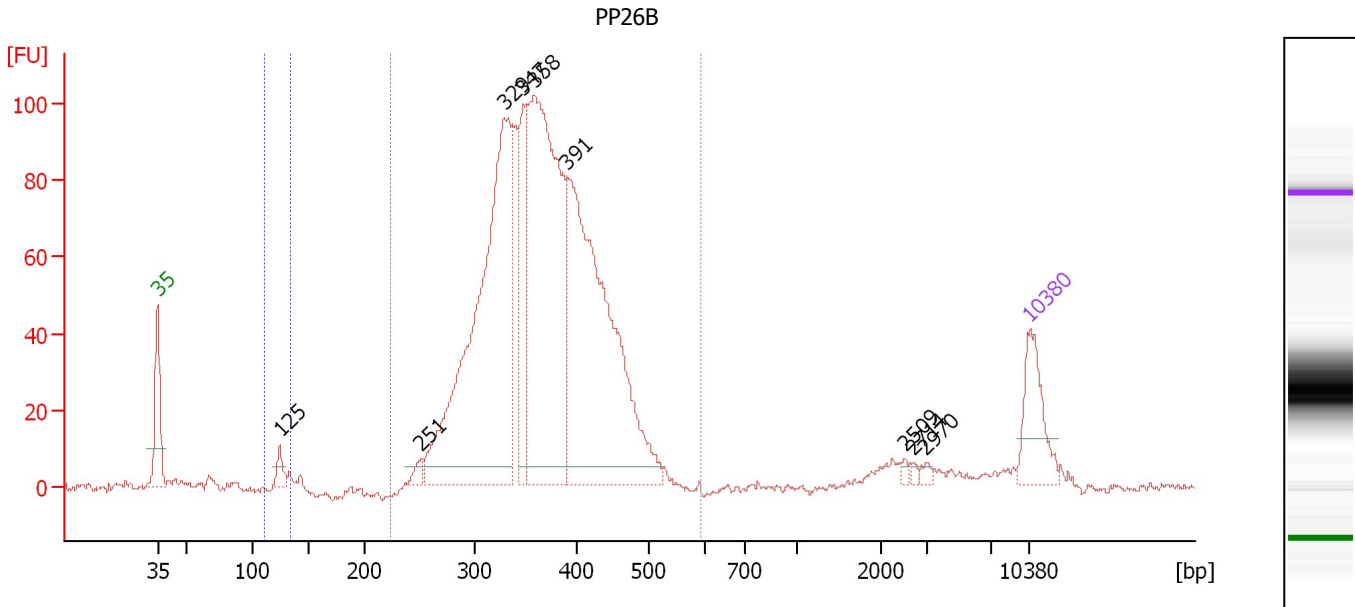
Region table for sample 10 : PP26A

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
117	137	127	140.6	11.82	5.3	1	3.3	Blue
223	511	353	4,825.2	1,099.02	658.9	91	13.5	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
 Modified: 2/12/2014 11:12:35 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : PP26B

Number of peaks found: 9 Corr. Area 1: 1,406.5
 Noise: 1.1 Corr. Area 2: 11.7

Peak table for sample 11 : PP26B

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	52.80	125	23.71	288.1	
3	64.18	251	17.33	104.4	
4	70.83	329	812.33	3,743.1	
5	72.36	347	156.17	681.0	
6	73.24	358	702.58	2,971.6	
7	75.92	391	699.56	2,710.6	
8	102.97	2,509	5.63	3.4	
9	103.71	2,714	4.87	2.7	
10	104.63	2,970	6.55	3.3	
11	113.00	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : PP26B

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
111	134	126	339.4	28.26	11.7	1	2.7	Blue
224	591	367	10,696.6	2,520.64	1,406.5	94	14.6	Dark Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_002.xad

Created: 2/12/2014 10:29:34 AM
Modified: 2/12/2014 11:12:35 AM

Gel Image

