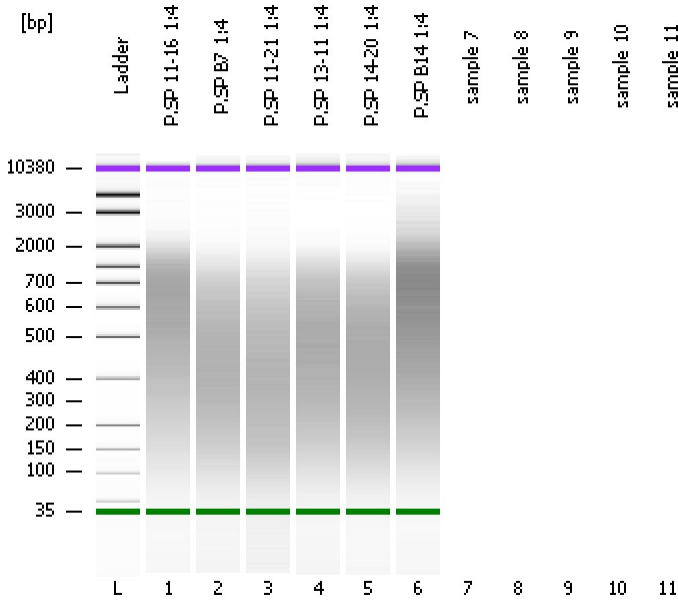


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
Modified: 7/10/2015 11:23:12 AM

### Electrophoresis File Run Summary



#### Instrument Information:

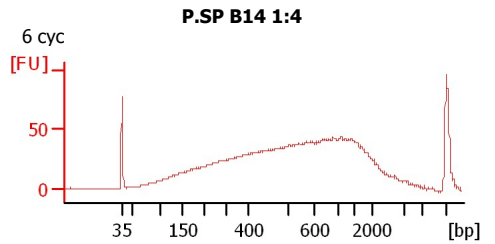
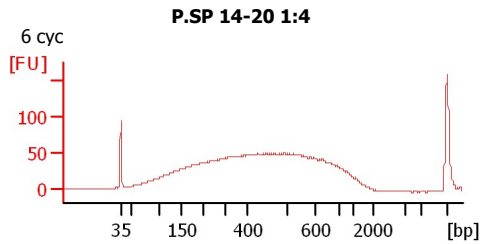
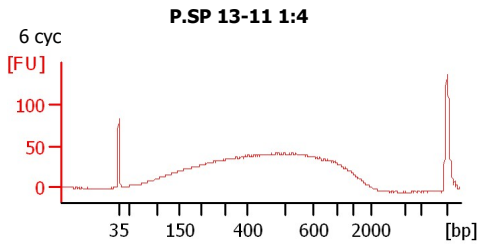
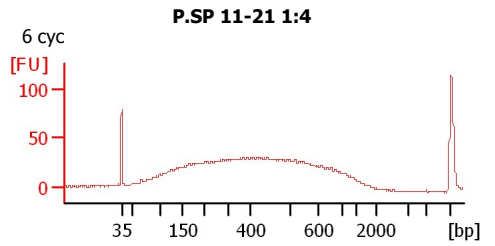
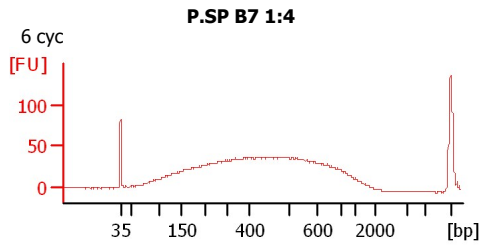
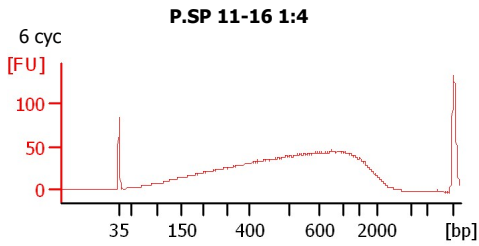
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### 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\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
Modified: 7/10/2015 11:23:12 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
P.SP 11-16 1:4	6 cyc	<input type="checkbox"/>	✓			
P.SP B7 1:4	6 cyc	<input type="checkbox"/>	✓			
P.SP 11-21 1:4	6 cyc	<input type="checkbox"/>	✓			
P.SP 13-11 1:4	6 cyc	<input type="checkbox"/>	✓			
P.SP 14-20 1:4	6 cyc	<input type="checkbox"/>	✓			
P.SP B14 1:4	6 cyc	<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<input type="checkbox"/>				
sample 10		<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\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
Modified: 7/10/2015 11:23:12 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

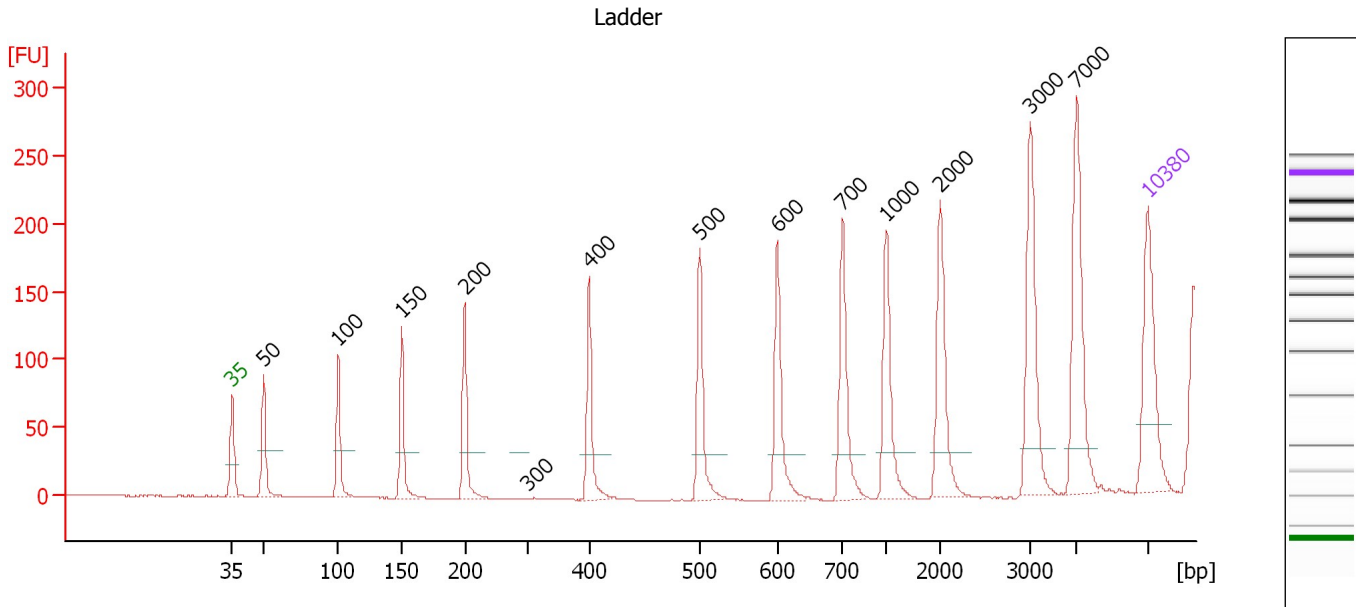
**Ladder**

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\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

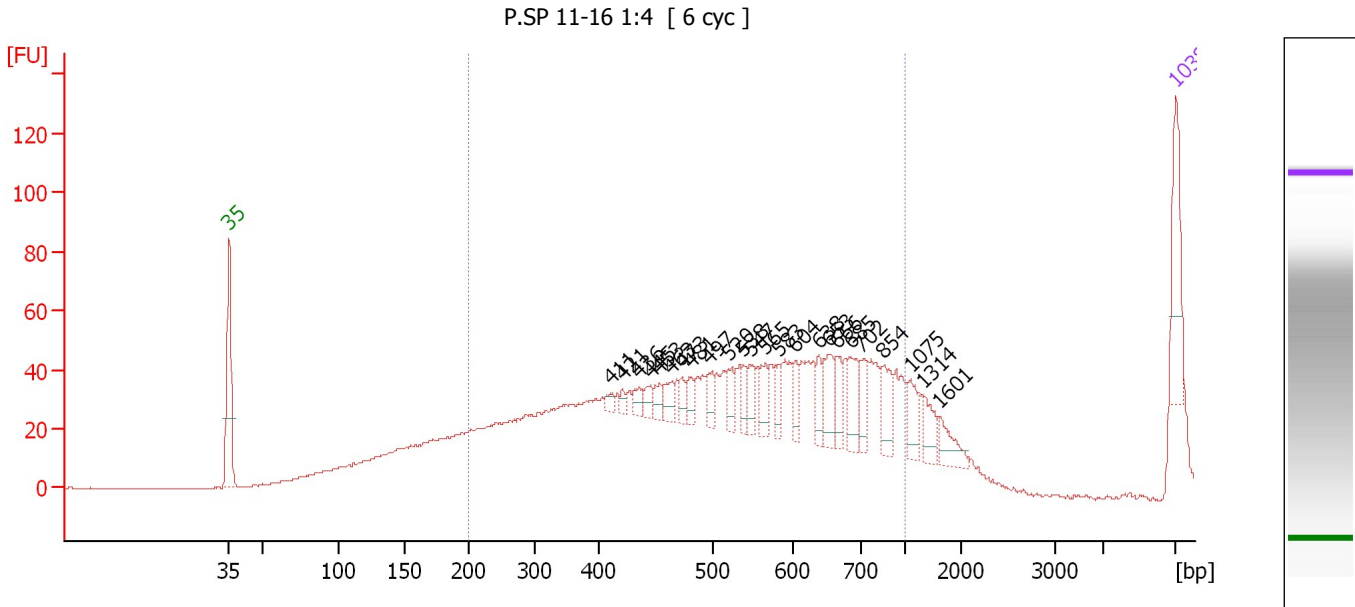
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.41
3	100	150.00	2,272.7	Ladder Peak	51.11
4	150	150.00	1,515.2	Ladder Peak	55.96
5	200	150.00	1,136.4	Ladder Peak	60.78
6	300	150.00	757.6	Ladder Peak	65.59
7	400	150.00	568.2	Ladder Peak	70.27
8	500	150.00	454.5	Ladder Peak	78.75
9	600	150.00	378.8	Ladder Peak	84.67
10	700	150.00	324.7	Ladder Peak	89.68
11	1,000	150.00	227.3	Ladder Peak	93.02
12	2,000	150.00	113.6	Ladder Peak	97.14
13	3,000	150.00	75.8	Ladder Peak	104.03
14	7,000	150.00	32.5	Ladder Peak	107.58
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
 Modified: 7/10/2015 11:23:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : P.SP 11-16 1:4**

Number of peaks found: 24                      Corr. Area 1: 1,096.8  
 Noise: 0.2

**Peak table for sample 1 : P.SP 11-16 1:4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	411	11.01	40.6		71.22
3	421	8.92	32.1		72.05
4	436	17.55	61.0		73.31
5	445	16.94	57.7		74.10
6	453	18.66	62.4		74.81
7	463	21.93	71.8		75.60
8	473	16.94	54.3		76.46
9	481	20.17	63.6		77.13
10	497	25.08	76.4		78.51
11	520	25.51	74.4		79.93
12	538	23.55	66.3		81.00
13	547	29.23	81.0		81.51
14	565	29.33	78.6		82.61
15	583	25.86	67.2		83.68
16	604	25.05	62.8		84.86
17	638	27.00	64.1		86.59
18	653	52.10	121.0		87.30
19	666	30.55	69.5		87.97
20	685	48.78	107.9		88.92
21	702	35.56	76.7		89.71
22	854	43.96	78.0		91.40
23	1,075	29.95	42.2		93.33
24	1,314	30.60	35.3		94.32
25	1,601	29.95	28.3		95.50

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
Modified: 7/10/2015 11:23:12 AM

**Electropherogram Summary Continued ...****... Peak table for sample 1 : P.SP 11-16 1:4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	10,380	75.00	10.9	Upper Marker	113.00

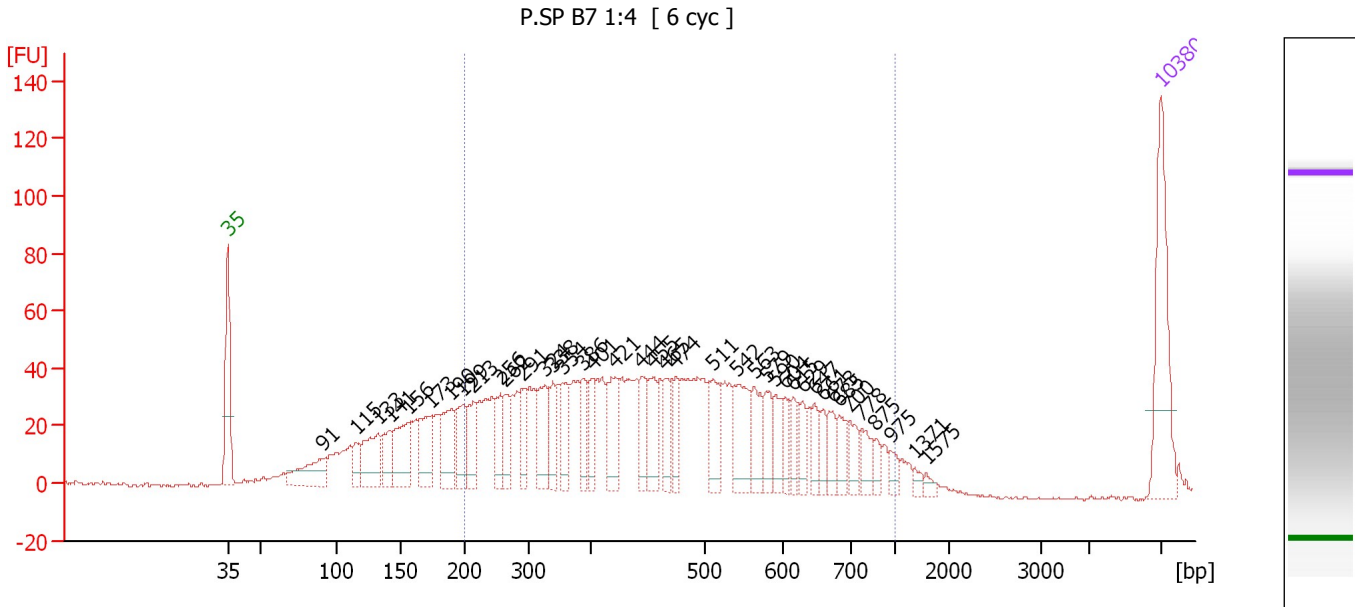
**Region table for sample 1 : P.SP 11-16 1:4**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	527	1,000	1,096.8	5,992.3	84	31.6	1,746.46

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : P.SP B7 1:4**

Number of peaks found: 40                      Corr. Area 1: 1,452.5  
 Noise: 0.4

**Peak table for sample 2 : P.SP B7 1:4**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	91	55.41	922.7		50.08
3	115	21.06	276.6		52.61
4	133	60.01	685.2		54.29
5	141	35.34	378.7		55.13
6	156	62.44	605.4		56.57
7	173	52.87	463.3		58.17
8	190	59.02	471.8		59.77
9	199	43.41	331.0		60.65
10	213	41.38	294.1		61.41
11	256	35.10	208.0		63.45
12	262	28.77	166.2		63.77
13	291	31.07	161.5		65.17
14	324	46.86	218.8		66.73
15	338	27.64	123.9		67.37
16	354	35.46	152.0		68.09
17	386	28.47	111.8		69.62
18	401	25.89	97.9		70.34
19	421	48.64	174.8		72.10
20	444	30.74	104.9		74.02
21	455	35.80	119.2		74.94
22	465	26.06	84.8		75.82
23	474	24.06	76.8		76.58
24	511	42.88	127.2		79.38
25	542	50.01	139.7		81.26

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad


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**Electropherogram Summary Continued ...**

**... Peak table for sample 2 : P.SP B7 1:4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	563	31.71	85.3		82.50
27	579	23.56	61.7		83.42
28	590	22.21	57.1		84.06
29	604	16.52	41.5		84.86
30	615	16.24	40.0		85.42
31	629	15.48	37.3		86.10
32	647	17.33	40.6		87.03
33	661	14.35	32.9		87.71
34	673	19.31	43.5		88.35
35	685	19.21	42.5		88.91
36	700	17.46	37.8		89.67
37	778	18.47	36.0		90.55
38	875	9.60	16.6		91.63
39	975	8.91	13.8		92.75
40	1,371	5.11	5.7		94.55
41	1,575	4.15	4.0		95.39
42	 10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 2 : P.SP B7 1:4**

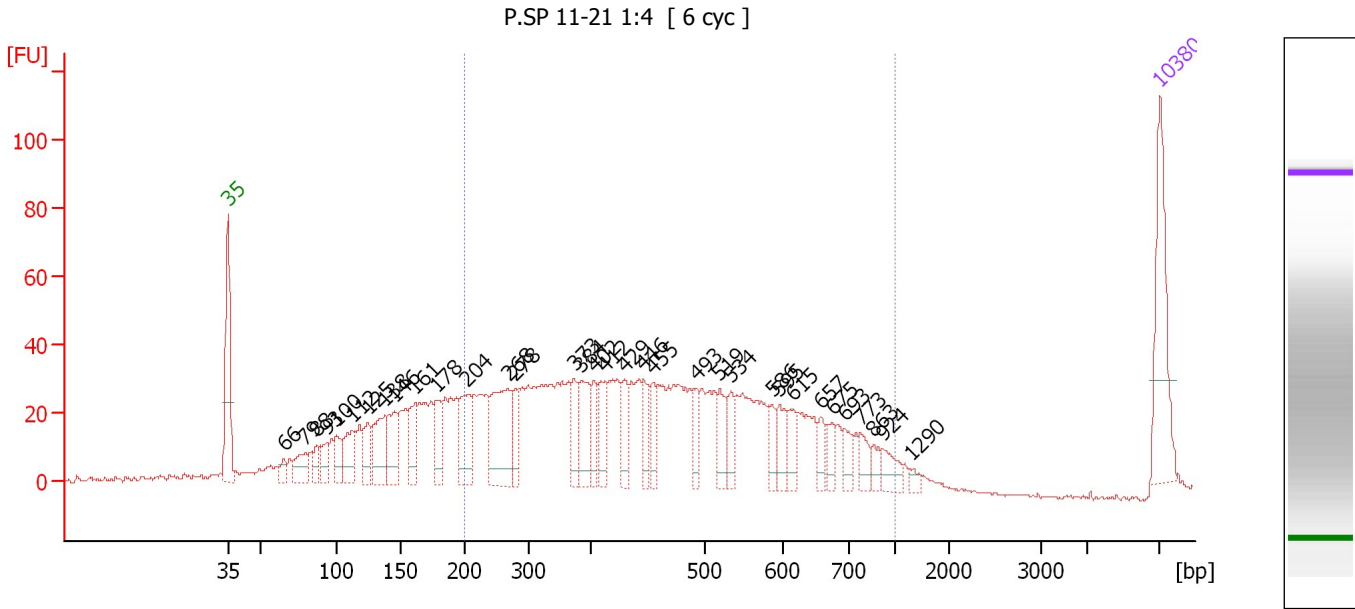
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	471	1,000	1,452.5	4,783.0	 75	32.3	1,250.82



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : P.SP 11-21 1:4**

Number of peaks found: 34                      Corr. Area 1: 1,168.1  
 Noise: 0.4

**Peak table for sample 3 : P.SP 11-21 1:4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	66	13.21	304.3		47.20
3	79	33.15	632.2		48.77
4	88	19.46	336.9		49.69
5	93	26.74	433.5		50.37
6	100	28.96	438.1		51.13
7	112	50.09	676.8		52.29
8	125	36.53	443.1		53.53
9	138	64.66	711.3		54.77
10	146	48.93	509.3		55.53
11	161	43.59	410.4		57.02
12	178	40.72	346.6		58.66
13	204	64.17	476.0		60.98
14	268	107.14	606.8		64.02
15	278	32.59	177.4		64.54
16	373	32.03	130.2		68.99
17	384	50.90	201.0		69.51
18	402	27.69	104.3		70.47
19	412	36.07	132.6		71.31
20	429	26.99	95.3		72.75
21	446	26.36	89.6		74.16
22	455	25.60	85.3		74.92
23	493	23.51	72.3		78.16
24	519	28.31	82.6		79.88
25	534	20.94	59.4		80.76

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

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 Modified: 7/10/2015 11:23:12 AM

**Electropherogram Summary Continued ...**

**... Peak table for sample 3 : P.SP 11-21 1:4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	586	16.81	43.5		83.85
27	595	26.21	66.7		84.37
28	615	20.56	50.7		85.41
29	657	15.86	36.6		87.53
30	675	16.98	38.1		88.41
31	693	16.96	37.1		89.33
32	773	16.28	31.9		90.49
33	863	10.88	19.1		91.50
34	924	18.36	30.1		92.18
35	1,290	5.37	6.3		94.22
36	10,380	75.00	10.9	Upper Marker	113.00

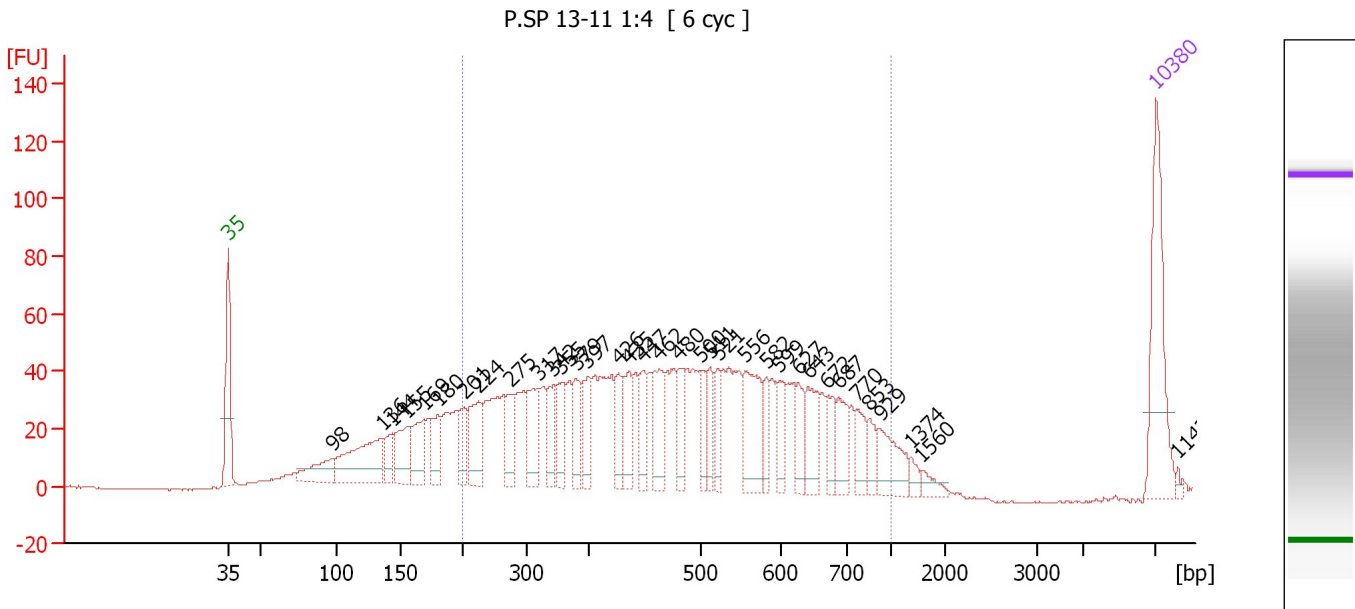
**Region table for sample 3 : P.SP 11-21 1:4**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	462	1,000	1,168.1	5,334.0	67	32.9	1,363.71

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : P.SP 13-11 1:4**

Number of peaks found: 35                      Corr. Area 1: 1,603.7  
 Noise: 0.2

**Peak table for sample 4 : P.SP 13-11 1:4**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	98	41.46	643.1		50.85
3	136	100.57	1,121.5		54.59
4	144	25.35	267.2		55.36
5	155	47.13	459.5		56.48
6	169	47.18	422.4		57.81
7	180	35.41	298.6		58.82
8	201	33.27	250.5		60.83
9	224	53.45	361.9		61.92
10	275	32.63	179.9		64.37
11	317	47.79	228.4		66.39
12	342	33.32	147.6		67.55
13	355	35.66	152.2		68.16
14	379	33.04	132.1		69.29
15	397	32.61	124.5		70.13
16	426	26.79	95.2		72.51
17	435	32.53	113.2		73.27
18	447	28.85	97.7		74.28
19	462	42.06	138.0		75.52
20	480	28.73	90.6		77.09
21	500	24.03	72.8		78.74
22	511	23.66	70.2		79.39
23	521	23.32	67.8		79.99
24	556	61.86	168.7		82.05
25	582	19.65	51.1		83.62

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad


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 Modified: 7/10/2015 11:23:12 AM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 4 : P.SP 13-11 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	599	25.91	65.5		84.62
27	627	26.22	63.3		86.03
28	643	37.28	87.8		86.84
29	672	22.30	50.3		88.28
30	687	29.61	65.3		89.05
31	770	21.94	43.2		90.46
32	853	15.89	28.2		91.38
33	929	35.50	57.9		92.23
34	1,374	6.68	7.4		94.56
35	1,560	8.68	8.4		95.33
36	 10,380	75.00	10.9	Upper Marker	113.00
37	11,434	0.00	0.0		114.69

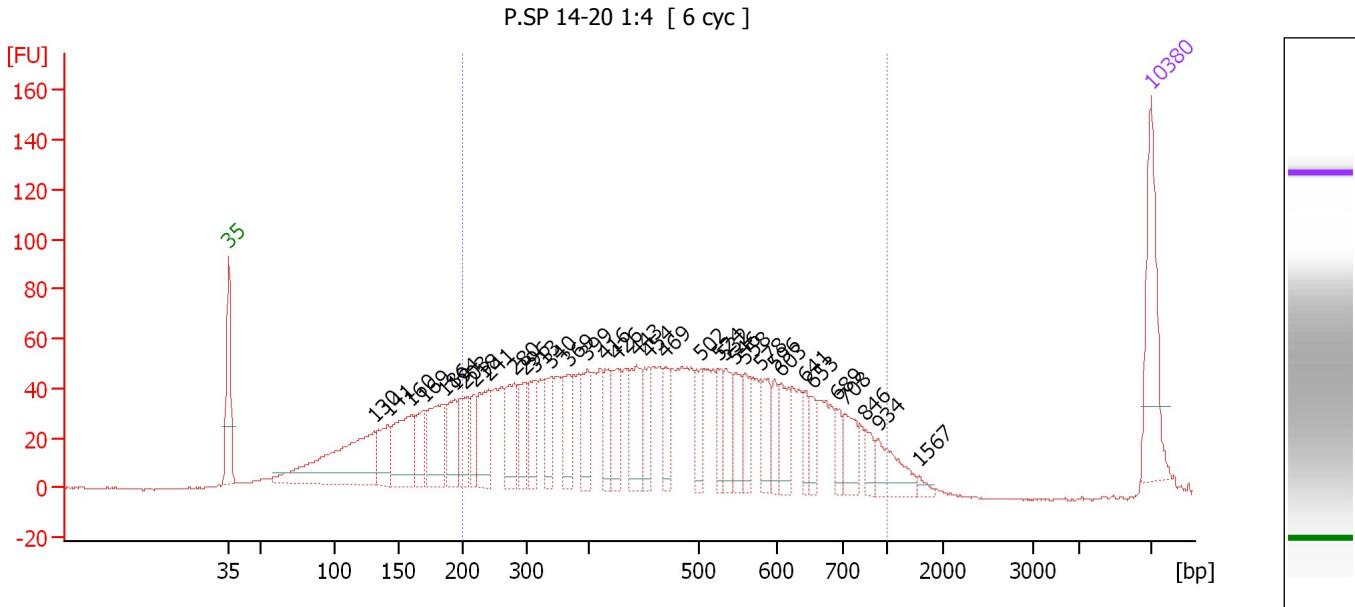
#### Region table for sample 4 : P.SP 13-11 1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	486	1,000	1,603.7	4,922.4	 77	32.4	1,324.01

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : P.SP 14-20 1:4**

Number of peaks found: 35                      Corr. Area 1: 1,897.0  
 Noise: 0.3

**Peak table for sample 5 : P.SP 14-20 1:4**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	130	210.04	2,443.7		54.05
3	141	56.95	611.6		55.10
4	160	97.94	930.4		56.88
5	169	46.56	417.0		57.81
6	186	90.30	737.2		59.39
7	194	52.06	406.6		60.20
8	203	50.15	374.1		60.92
9	218	34.42	239.0		61.65
10	241	68.58	431.3		62.75
11	280	62.89	339.7		64.65
12	296	44.29	226.3		65.42
13	313	43.70	211.7		66.18
14	340	45.35	201.9		67.48
15	369	46.46	190.8		68.82
16	399	45.37	172.3		70.23
17	416	33.35	121.5		71.61
18	426	44.99	160.0		72.50
19	443	56.39	192.7		73.95
20	454	39.33	131.1		74.88
21	469	32.03	103.4		76.14
22	502	34.80	105.1		78.85
23	524	27.41	79.3		80.14
24	532	34.90	99.3		80.67
25	546	31.36	87.0		81.48

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad


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**Electropherogram Summary Continued ...**

**... Peak table for sample 5 : P.SP 14-20 1:4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	558	26.66	72.3		82.21
27	578	36.92	96.7		83.38
28	596	21.76	55.3		84.43
29	603	38.77	97.3		84.84
30	641	21.18	50.0		86.74
31	653	18.77	43.6		87.31
32	689	16.21	35.6		89.13
33	708	33.01	70.6		89.77
34	846	17.69	31.7		91.31
35	934	38.34	62.2		92.28
36	1,567	4.95	4.8		95.36
37	 10,380	75.00	10.9	Upper Marker	113.00

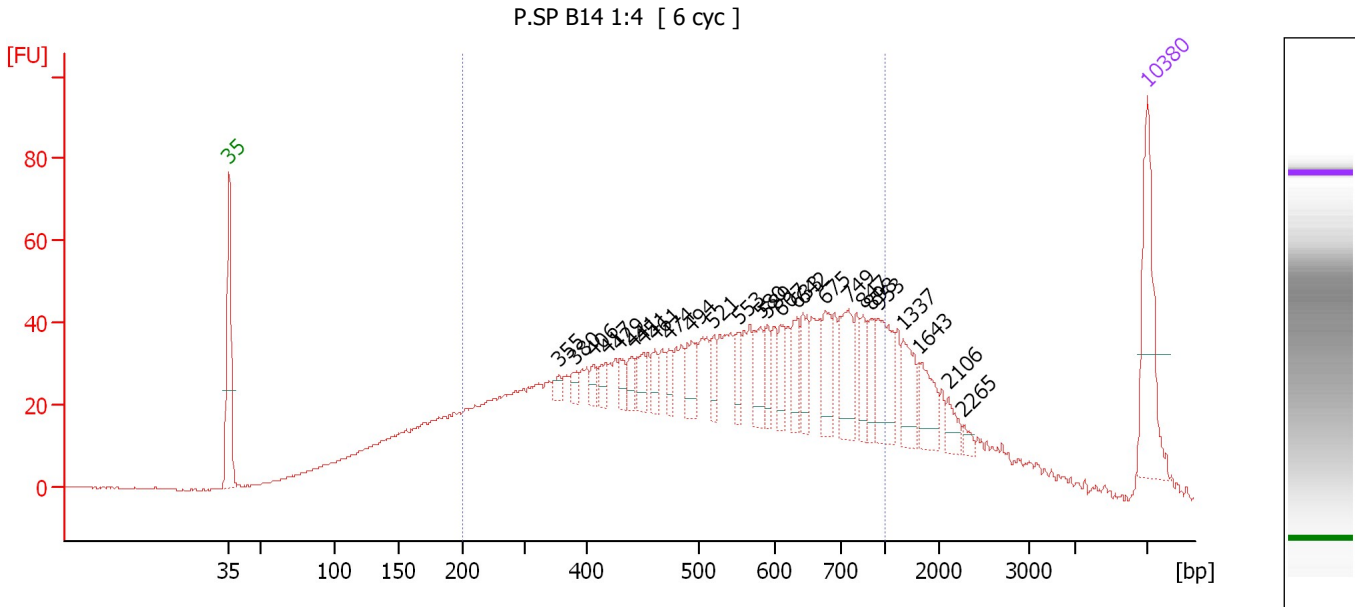
**Region table for sample 5 : P.SP 14-20 1:4**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	475	1,000	1,897.0	6,004.9	 75	32.3	1,580.24

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
 Modified: 7/10/2015 11:23:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : P.SP B14 1:4**

Number of peaks found: 26                      Corr. Area 1: 1,474.8  
 Noise: 0.2

**Peak table for sample 6 : P.SP B14 1:4**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	355	8.20	35.0		68.18
3	380	9.59	38.3		69.32
4	406	10.97	41.0		70.78
5	417	12.61	45.8		71.76
6	429	14.37	50.7		72.77
7	441	15.81	54.3		73.75
8	451	19.00	63.8		74.60
9	461	15.11	49.7		75.46
10	474	14.69	47.0		76.52
11	494	28.99	88.9		78.26
12	521	17.45	50.8		79.97
13	553	19.60	53.7		81.88
14	580	27.17	70.9		83.51
15	589	18.82	48.4		84.04
16	607	21.97	54.8		85.02
17	633	26.42	63.2		86.32
18	642	27.51	64.9		86.77
19	675	35.76	80.2		88.43
20	749	50.60	102.4		90.22
21	847	20.47	36.6		91.32
22	898	22.88	38.6		91.89
23	953	49.26	78.3		92.50
24	1,337	33.63	38.1		94.41
25	1,643	30.54	28.2		95.67

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad


Created: 7/10/2015 10:53:22 AM  
 Modified: 7/10/2015 11:23:12 AM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 6 : P.SP B14 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,106	12.28	8.8		97.87
27	2,265	5.45	3.6		98.97
28	 10,380	75.00	10.9	Upper Marker	113.00

#### Region table for sample 6 : P.SP B14 1:4

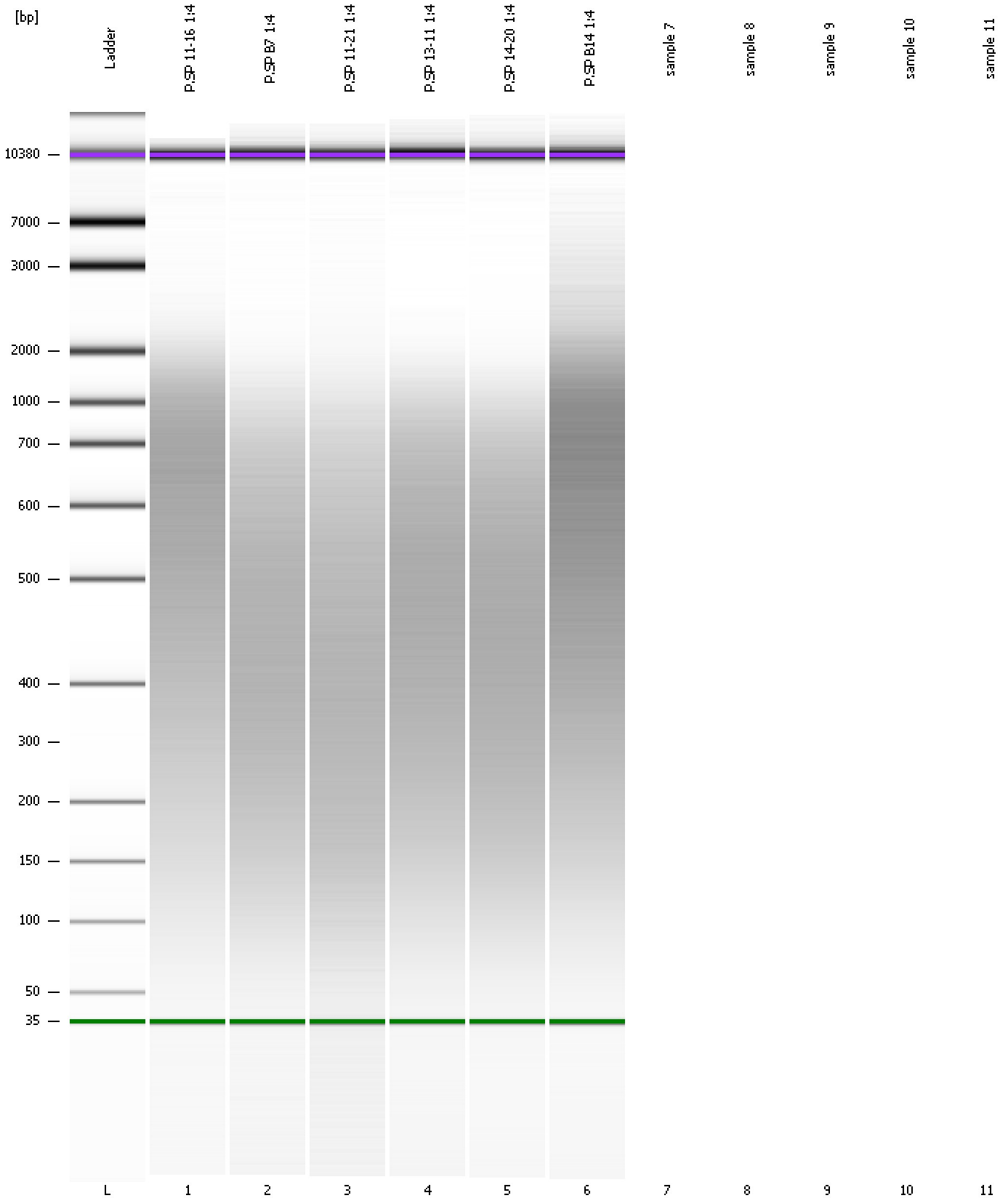
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	531	1,000	1,474.8	6,403.5	 73	32.9	1,857.77



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
Modified: 7/10/2015 11:23:12 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-10\2015-07-10\_001.xad

Created: 7/10/2015 10:53:22 AM  
Modified: 7/10/2015 11:23:12 AM

**Invalid Samples**

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.