

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
Modified: 8/28/2015 3:06:13 PM

**Electrophoresis File Run Summary**

Instrument Information:

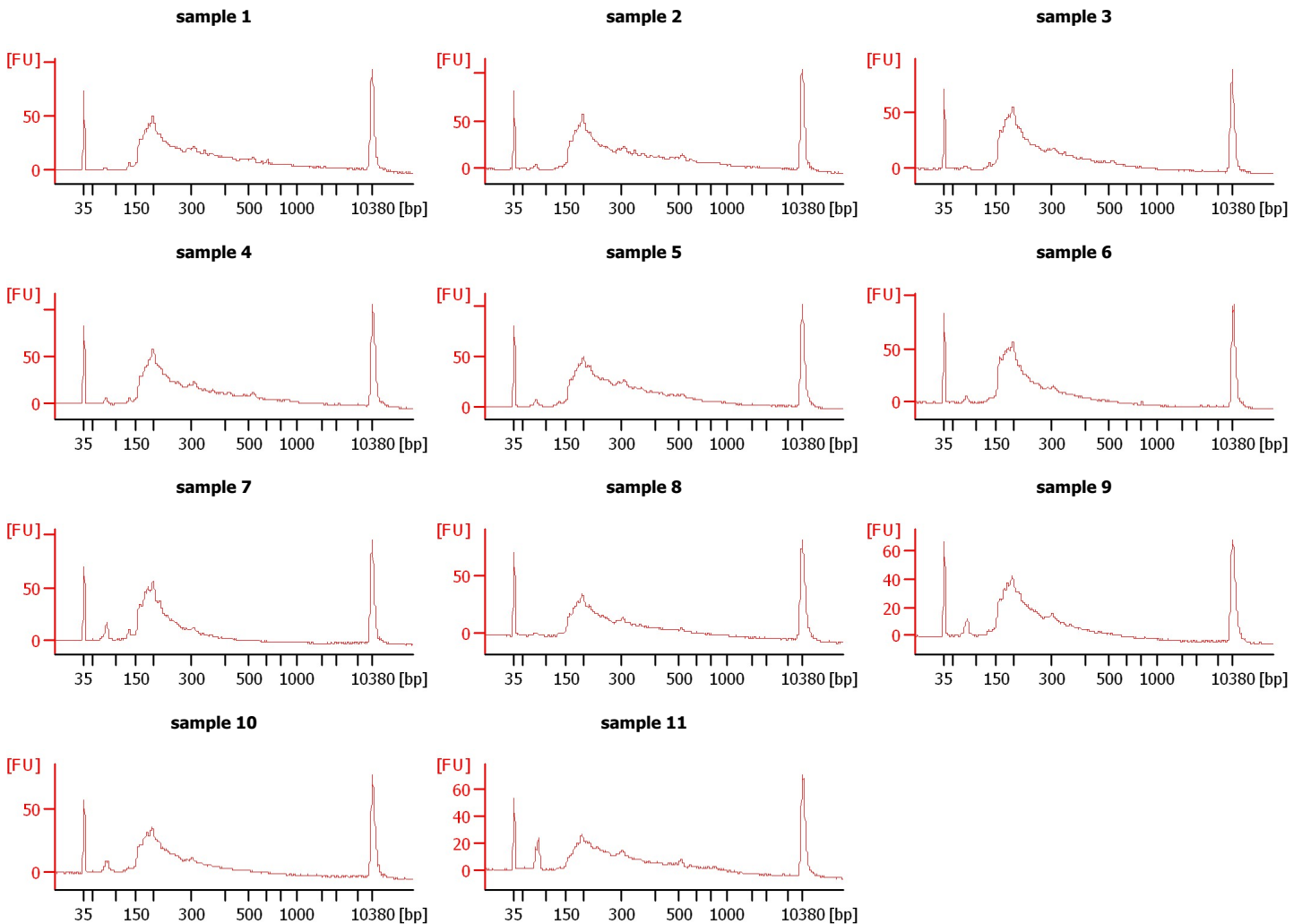
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



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Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
Modified: 8/28/2015 3:06:13 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<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 :**

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Created: 8/28/2015 2:24:55 PM  
Modified: 8/28/2015 3:06:13 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

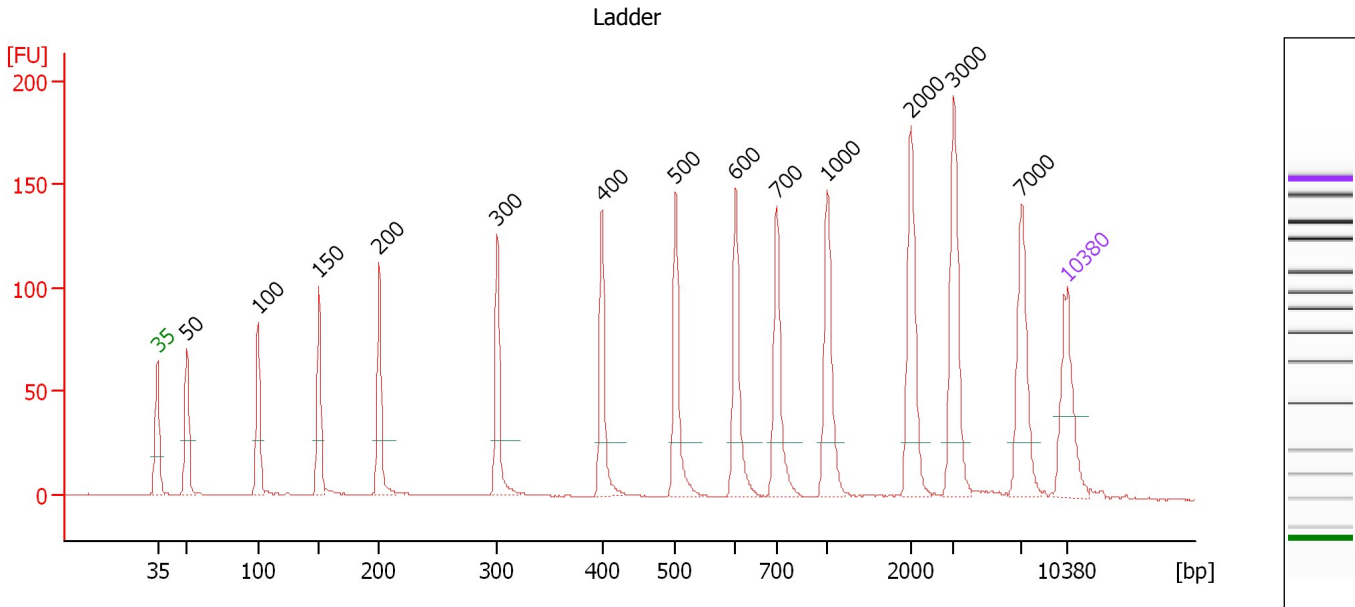
**Ladder**

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

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Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

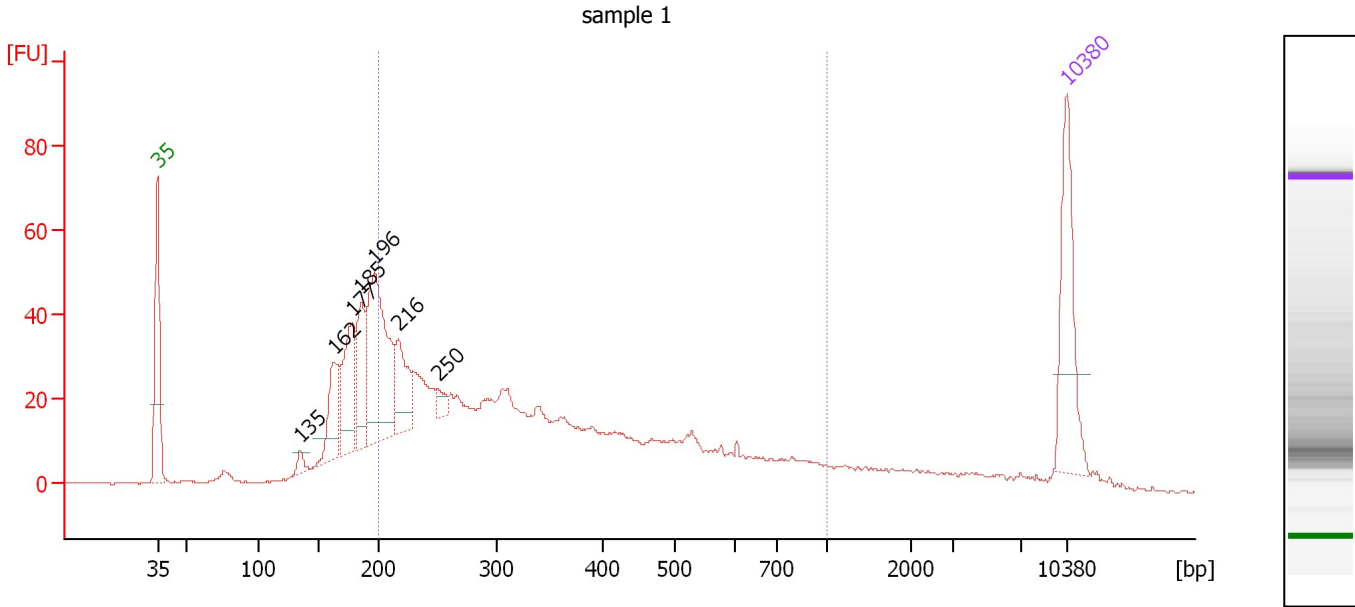
**Peak table for Ladder**

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	45.27
3	100	150.00	2,272.7	Ladder Peak	50.73
4	150	150.00	1,515.2	Ladder Peak	55.41
5	200	150.00	1,136.4	Ladder Peak	60.08
6	300	150.00	757.6	Ladder Peak	69.16
7	400	150.00	568.2	Ladder Peak	77.21
8	500	150.00	454.5	Ladder Peak	82.86
9	600	150.00	378.8	Ladder Peak	87.49
10	700	150.00	324.7	Ladder Peak	90.64
11	1,000	150.00	227.3	Ladder Peak	94.53
12	2,000	150.00	113.6	Ladder Peak	101.01
13	3,000	150.00	75.8	Ladder Peak	104.30
14	7,000	150.00	32.5	Ladder Peak	109.53
15	10,380	75.00	10.9	Upper Marker	113.00

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Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 7                      Corr. Area 1: 789.6  
 Noise: 0.2

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

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	135	9.72	109.5		53.96
3	162	63.53	592.9		56.56
4	177	85.53	731.0		57.96
5	185	66.61	545.0		58.70
6	196	182.11	1,410.4		59.68
7	216	60.38	422.6		61.58
8	250	10.93	66.3		64.60
9	10,380	75.00	10.9	Upper Marker	113.00

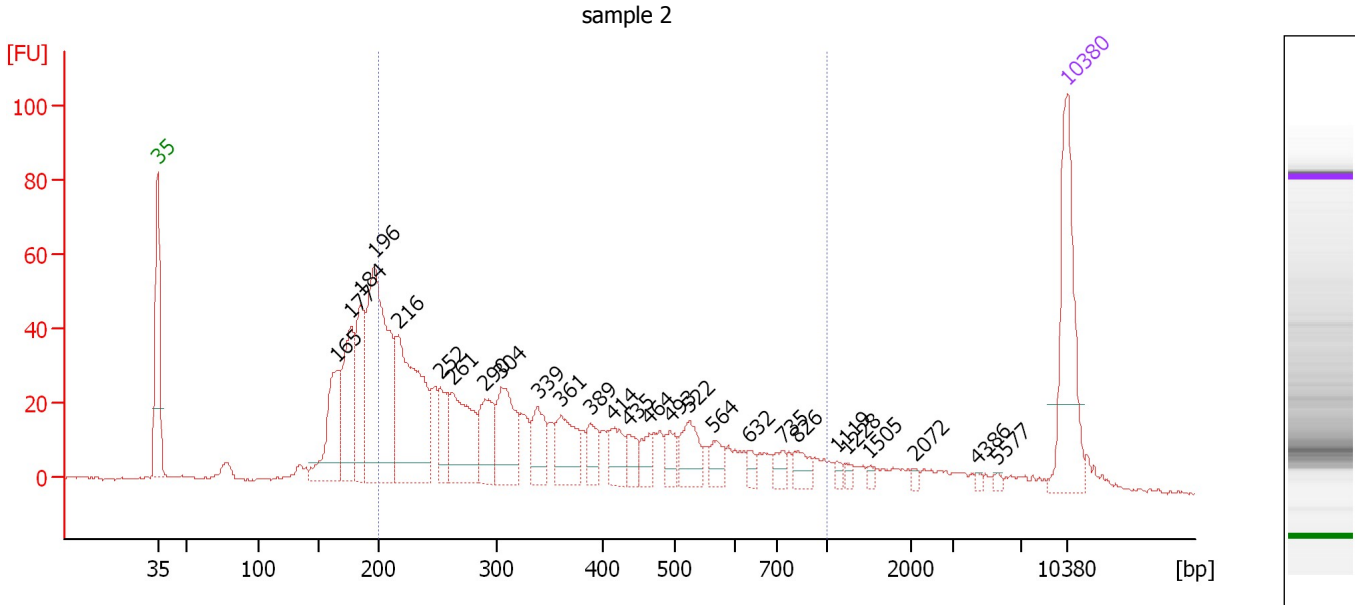
**Region table for sample 1 : sample 1**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	373	1,000	789.6	5,126.4	65	44.1	1,025.56

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 27                      Corr. Area 1: 885.6  
 Noise: 0.4

**Peak table for sample 2 : sample 2**

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	165	84.16	774.2		56.78
3	177	86.85	744.2		57.92
4	184	76.01	624.6		58.62
5	196	213.43	1,649.9		59.71
6	216	163.08	1,145.8		61.50
7	252	32.49	195.7		64.76
8	261	80.87	468.7		65.66
9	290	46.87	245.3		68.21
10	304	64.00	319.0		69.48
11	339	34.62	154.9		72.27
12	361	43.96	184.6		74.06
13	389	20.12	78.4		76.32
14	414	24.22	88.7		77.98
15	435	14.80	51.5		79.20
16	464	15.79	51.5		80.86
17	493	15.06	46.3		82.46
18	522	30.67	89.0		83.88
19	564	13.55	36.4		85.81
20	632	6.68	16.0		88.50
21	735	9.49	19.6		91.10
22	826	13.37	24.5		92.28
23	1,119	4.10	5.5		95.30
24	1,228	3.26	4.0		96.01
25	1,505	2.86	2.9		97.80

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 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,072	2.31	1.7		101.25
27	4,386	1.94	0.7		106.11
28	5,577	2.28	0.6		107.67
29	10,380	75.00	10.9	Upper Marker	113.00

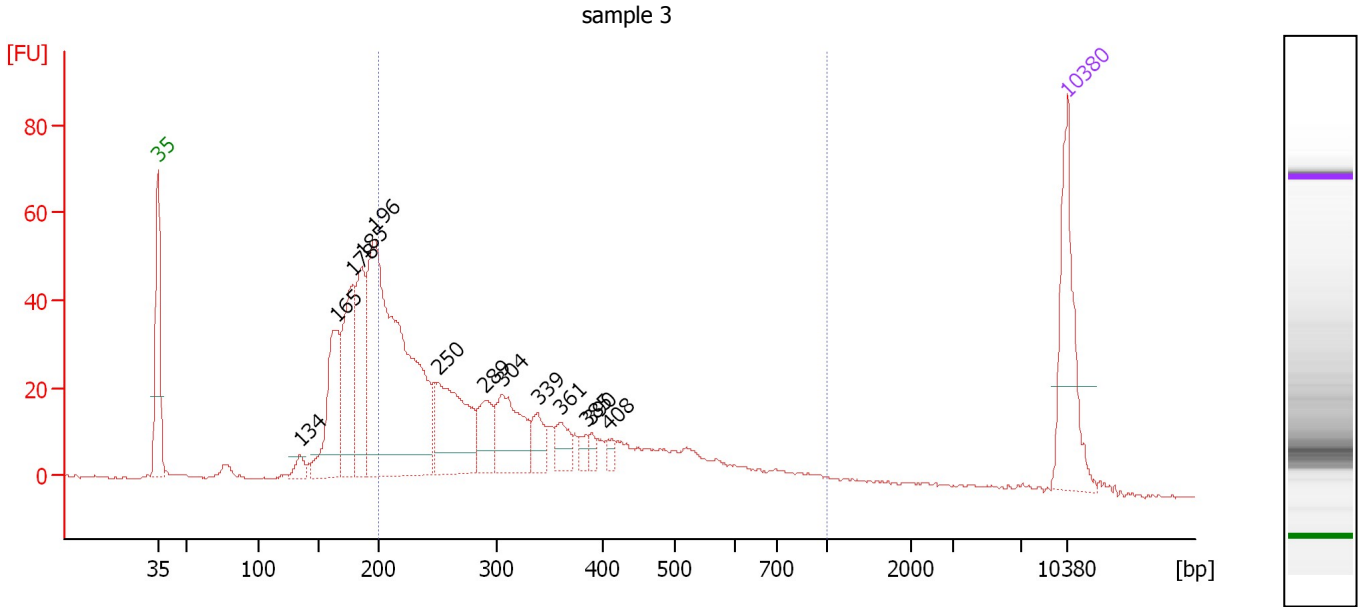
#### Region table for sample 2 : sample 2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/ $\mu$ l]
200	380	1,000	885.6	4,383.5	66	44.9	883.37

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 13                      Corr. Area 1: 683.2  
 Noise: 0.4

**Peak table for sample 3 : sample 3**

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	134	13.64	154.0		53.93
3	165	107.82	990.7		56.80
4	178	120.11	1,024.4		57.99
5	185	96.21	786.7		58.71
6	196	440.44	3,413.1		59.66
7	250	119.16	723.4		64.58
8	289	42.69	223.8		68.16
9	304	74.70	372.0		69.50
10	339	24.83	111.1		72.27
11	361	22.84	96.0		74.04
12	385	8.25	32.5		75.99
13	390	8.20	31.9		76.38
14	408	7.36	27.3		77.67
15	10,380	75.00	10.9	Upper Marker	113.00

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

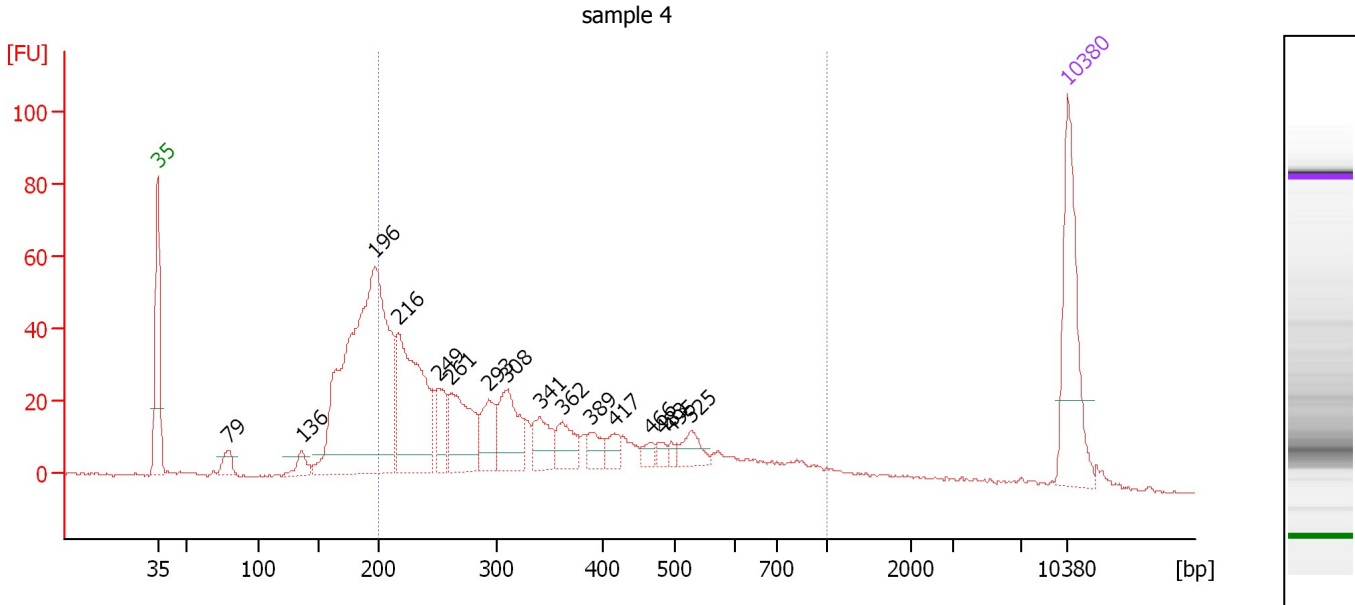
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/µl]
200	343	1,000	683.2	4,487.5	63	42.1	853.07



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 4**

Number of peaks found: 16                      Corr. Area 1: 798.6  
 Noise: 0.4

**Peak table for sample 4 : sample 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	79	16.65	318.7		48.45
3	136	14.71	163.8		54.10
4	196	426.70	3,292.0		59.75
5	216	161.71	1,136.5		61.50
6	249	34.10	207.2		64.56
7	261	73.56	427.6		65.59
8	293	37.08	191.9		68.51
9	308	56.41	277.3		69.82
10	341	30.84	137.1		72.45
11	362	27.04	113.2		74.15
12	389	14.30	55.7		76.34
13	417	11.76	42.7		78.19
14	466	6.96	22.6		80.92
15	483	6.38	20.0		81.89
16	495	4.52	13.8		82.58
17	525	17.66	50.9		84.04
18	10,380	75.00	10.9	Upper Marker	113.00

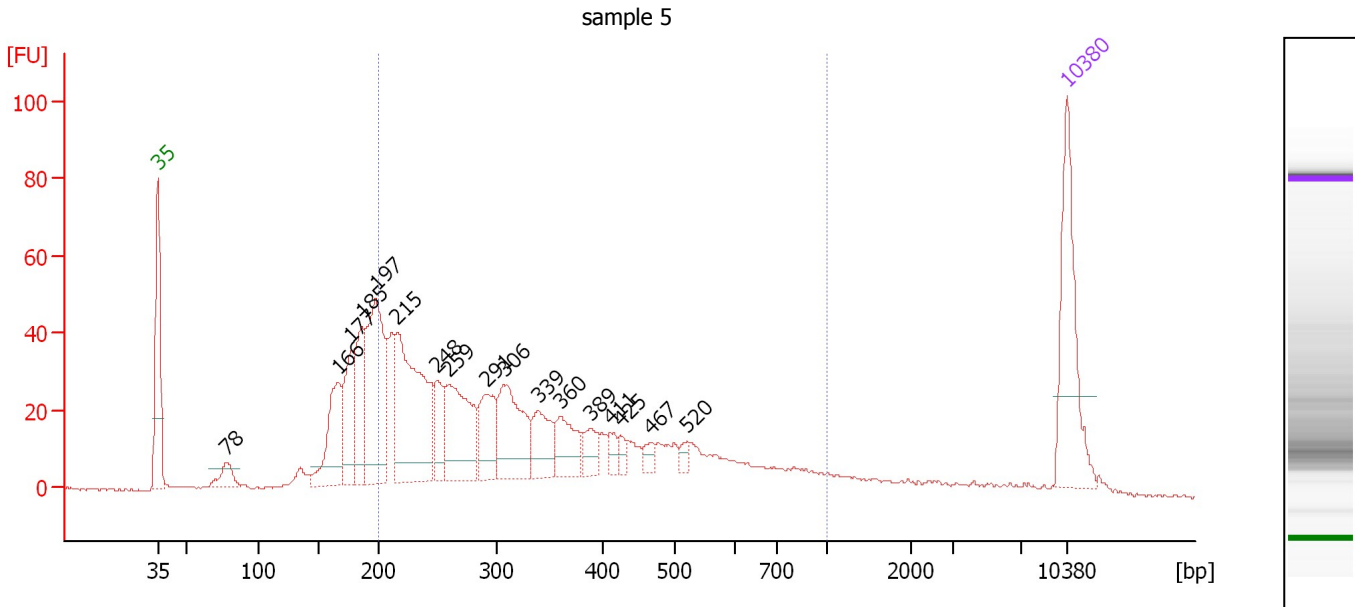
**Region table for sample 4 : sample 4**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	359	1,000	798.6	4,120.2	67	44.2	800.67

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 5**

Number of peaks found: 17                      Corr. Area 1: 870.6  
 Noise: 0.3

**Peak table for sample 5 : sample 5**

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	78	22.46	436.9		48.32
3	166	78.56	718.1		56.88
4	177	62.56	536.1		57.92
5	185	71.49	584.8		58.70
6	197	151.40	1,165.5		59.79
7	215	177.36	1,248.9		61.46
8	248	36.88	225.1		64.46
9	259	97.98	572.9		65.45
10	291	50.47	263.2		68.30
11	306	85.25	421.4		69.68
12	339	41.06	183.6		72.29
13	360	37.35	157.1		74.01
14	389	18.62	72.5		76.33
15	411	10.51	38.7		77.85
16	425	8.23	29.3		78.64
17	467	8.57	27.8		81.00
18	520	5.91	17.2		83.81
19	10,380	75.00	10.9	Upper Marker	113.00

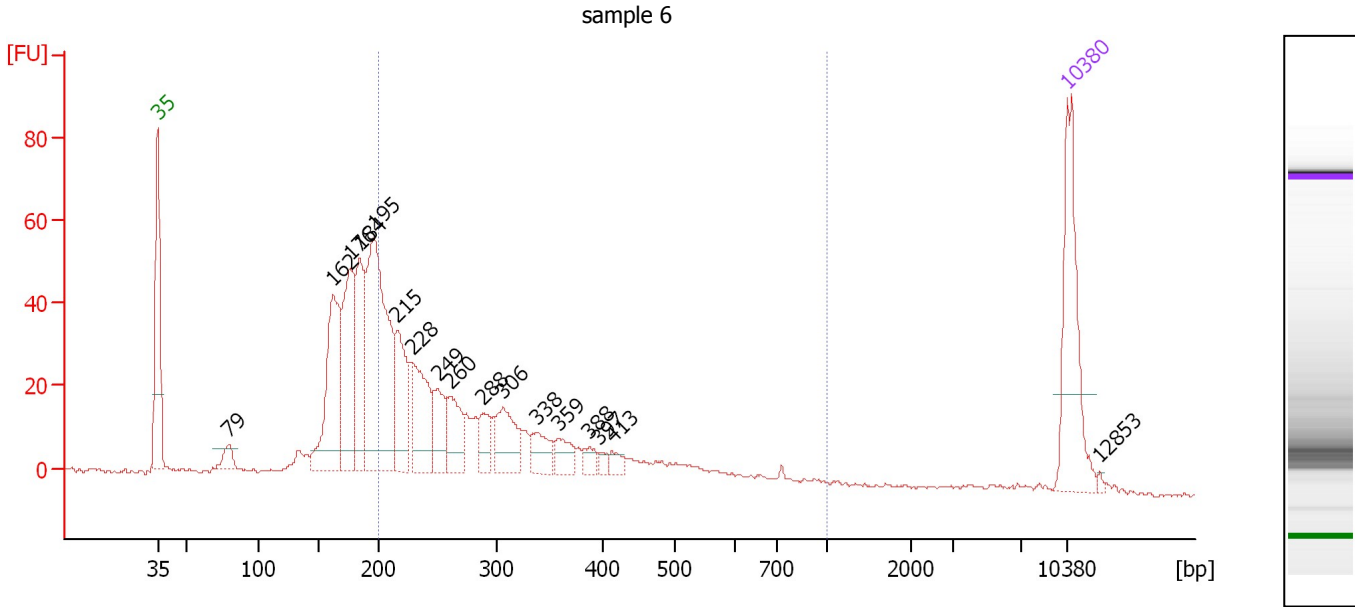
**Region table for sample 5 : sample 5**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	360	1,000	870.6	4,738.8	70	42.7	934.42

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 6**

Number of peaks found: 17                      Corr. Area 1: 525.9  
 Noise: 0.3

**Peak table for sample 6 : sample 6**

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	79	16.76	319.9		48.48
3	162	134.92	1,264.2		56.50
4	176	106.35	915.1		57.85
5	184	90.56	745.4		58.59
6	195	225.39	1,748.9		59.64
7	215	69.98	493.4		61.43
8	228	74.48	494.8		62.63
9	249	36.61	222.3		64.57
10	260	40.42	235.6		65.52
11	288	22.85	120.2		68.06
12	306	46.72	231.7		69.60
13	338	22.12	99.0		72.25
14	359	17.94	75.6		73.94
15	388	9.35	36.5		76.23
16	397	5.16	19.7		76.98
17	413	7.75	28.4		77.98
18	10,380	75.00	10.9	Upper Marker	113.00
19	12,853	0.00	0.0		115.54

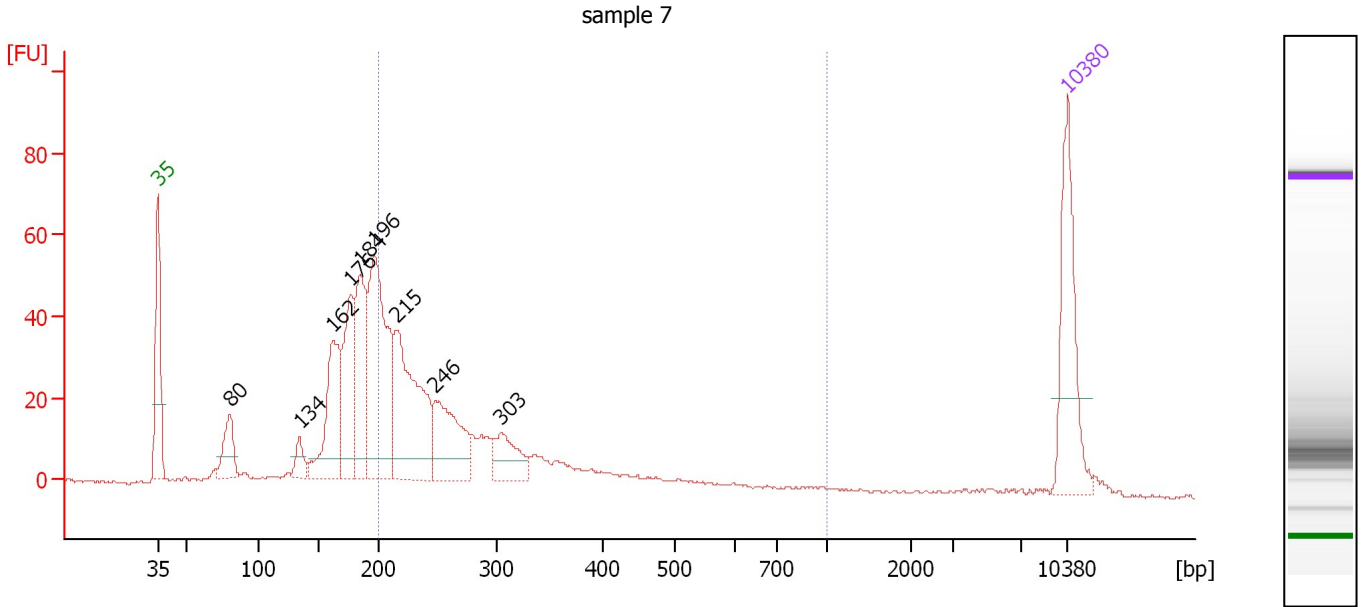
**Region table for sample 6 : sample 6**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	308	1,000	525.9	3,386.1	57	37.9	606.88

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 7**

Number of peaks found: 9                      Corr. Area 1: 418.8  
 Noise: 0.4

**Peak table for sample 7 : sample 7**

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	80	44.64	846.2		48.54
3	134	20.01	225.9		53.93
4	162	111.71	1,047.1		56.50
5	176	96.46	829.5		57.86
6	184	100.80	828.8		58.61
7	196	202.99	1,568.3		59.72
8	215	169.00	1,191.7		61.43
9	246	90.18	554.3		64.30
10	303	42.47	212.0		69.44
11	10,380	75.00	10.9	Upper Marker	113.00

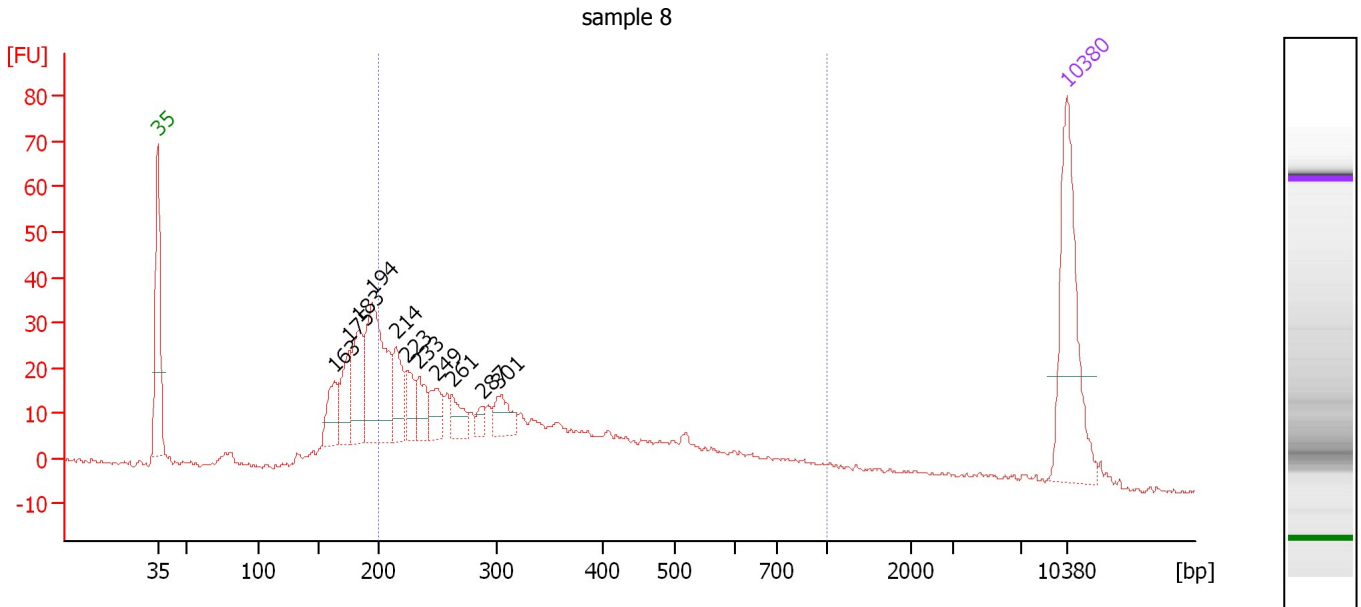
**Region table for sample 7 : sample 7**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	274	1,000	418.8	3,023.2	52	29.6	509.41

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 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 8**

Number of peaks found: 11                      Corr. Area 1: 517.1  
 Noise: 0.4

**Peak table for sample 8 : sample 8**

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	163	30.67	285.2		56.62
3	175	33.48	289.3		57.78
4	183	48.56	402.3		58.48
5	194	111.54	872.6		59.49
6	214	34.63	245.1		61.36
7	223	21.35	144.8		62.21
8	233	24.53	159.2		63.12
9	249	20.43	124.3		64.53
10	261	17.26	100.1		65.64
11	287	6.56	34.7		67.96
12	301	20.87	104.9		69.28
13	10,380	75.00	10.9	Upper Marker	113.00

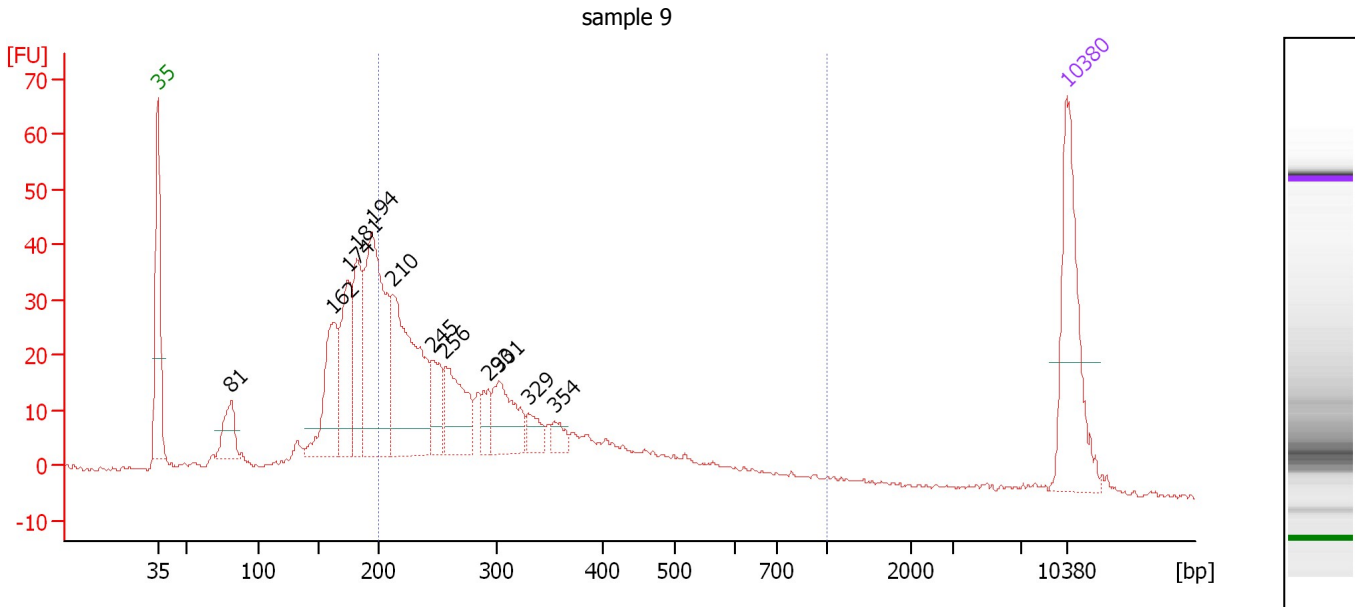
**Region table for sample 8 : sample 8**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	363	1,000	517.1	2,798.0	67	43.8	549.93

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 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample 9**

Number of peaks found: 12                      Corr. Area 1: 476.6  
 Noise: 0.4

**Peak table for sample 9 : sample 9**

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	81	35.86	672.1		48.64
3	162	82.47	772.2		56.51
4	174	73.13	637.6		57.63
5	181	75.27	628.8		58.34
6	194	171.45	1,339.9		59.51
7	210	157.43	1,133.3		61.03
8	245	34.34	212.2		64.18
9	256	58.94	349.1		65.15
10	293	15.31	79.2		68.50
11	301	49.64	249.6		69.26
12	329	16.25	74.8		71.50
13	354	11.32	48.4		73.53
14	10,380	75.00	10.9	Upper Marker	113.00

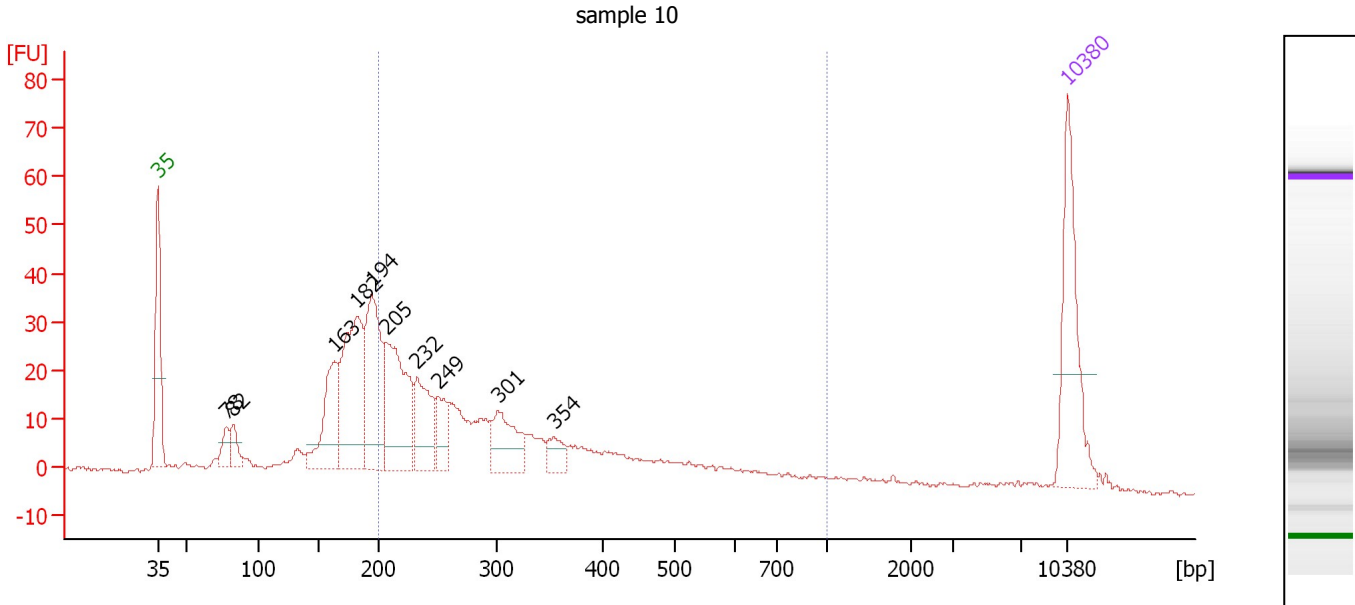
**Region table for sample 9 : sample 9**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	311	1,000	476.6	3,418.9	60	37.1	619.64

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sample 10**

Number of peaks found: 10                      Corr. Area 1: 402.6  
 Noise: 0.3

**Peak table for sample 10 : sample 10**

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	78	19.69	383.6		48.30
3	82	20.96	385.1		48.82
4	163	81.57	757.4		56.64
5	182	148.26	1,235.0		58.39
6	194	127.06	992.4		59.52
7	205	122.70	906.2		60.55
8	232	61.89	404.5		62.97
9	249	30.85	187.4		64.57
10	301	52.57	265.0		69.20
11	354	18.08	77.3		73.52
12	10,380	75.00	10.9	Upper Marker	113.00

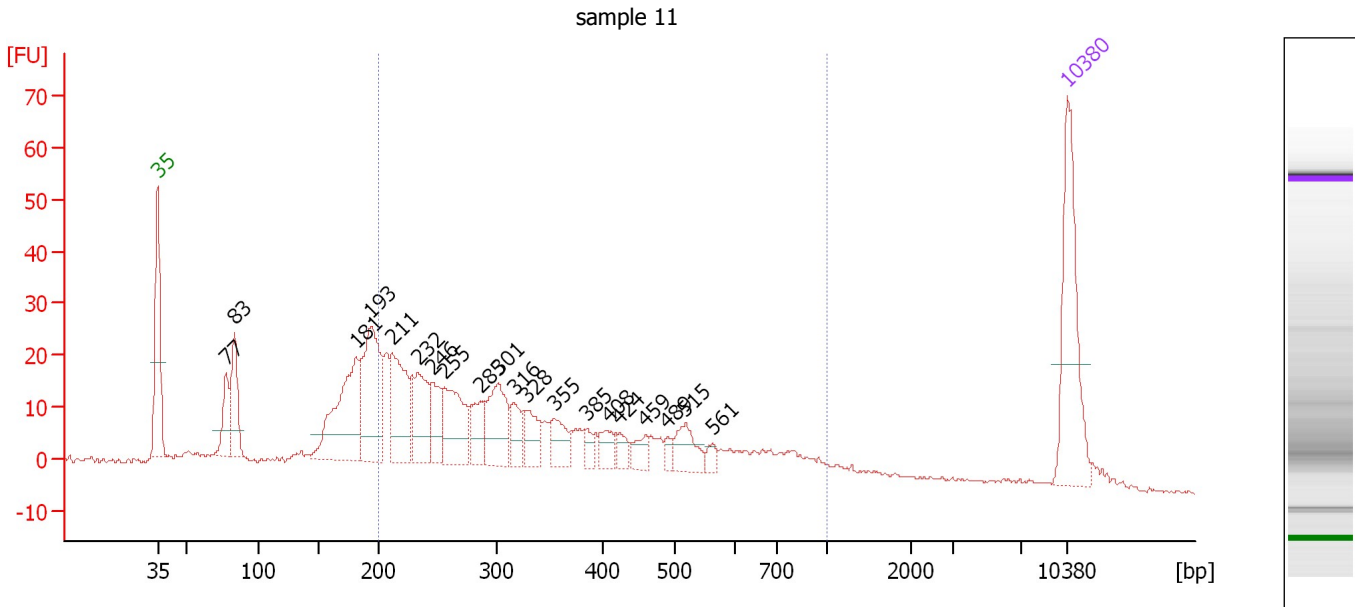
**Region table for sample 10 : sample 10**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	324	1,000	402.6	3,025.4	58	40.8	556.71

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
 Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 20                      Corr. Area 1: 475.9  
 Noise: 0.3

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

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	77	35.03	686.6		48.25
3	83	51.26	930.1		48.93
4	181	112.42	942.0		58.29
5	193	106.88	838.9		59.43
6	211	73.62	529.6		61.05
7	232	56.74	369.9		63.02
8	246	31.57	194.8		64.22
9	255	59.61	353.8		65.10
10	285	27.84	148.0		67.81
11	301	53.61	270.2		69.21
12	316	21.42	102.6		70.46
13	328	24.14	111.6		71.40
14	355	23.88	101.9		73.58
15	385	10.07	39.7		75.97
16	408	13.93	51.7		77.69
17	424	9.57	34.2		78.57
18	459	13.08	43.2		80.55
19	489	6.54	20.3		82.26
20	515	23.52	69.2		83.56
21	561	6.59	17.8		85.70
22	10,380	75.00	10.9	Upper Marker	113.00




Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
Modified: 8/28/2015 3:06:13 PM

**Electropherogram Summary Continued ...**

... Region table for sample 11 : sample 11

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/ $\mu$ l]
200	371	1,000	475.9	3,383.1	 66	44.3	675.74

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Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-28\2015-08-28\_003.xad

Created: 8/28/2015 2:24:55 PM  
Modified: 8/28/2015 3:06:13 PM

**Gel Image**