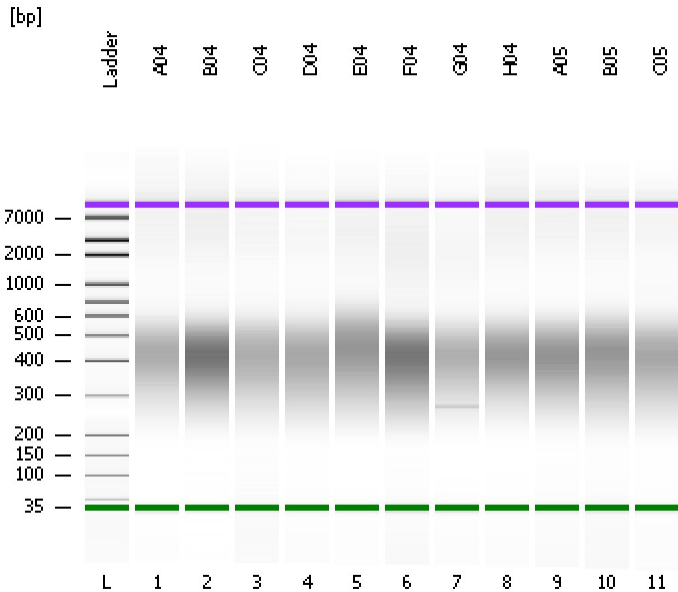


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
Modified: 8/17/2017 3:39:52 PM

**Electrophoresis File Run Summary**



Instrument Information:

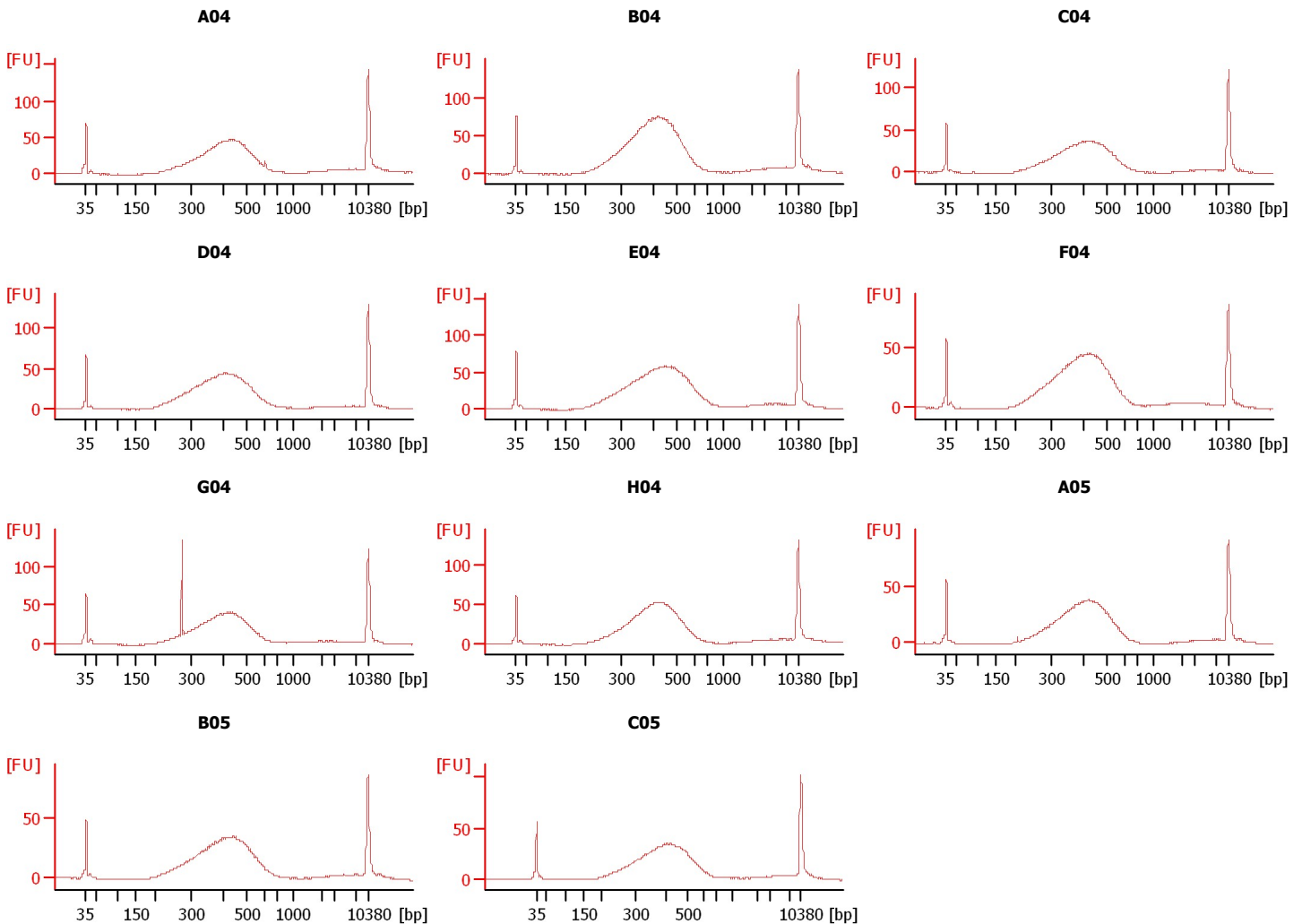
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
A04		<input type="checkbox"/>	✓			
B04		<input type="checkbox"/>	✓			
C04		<input type="checkbox"/>	✓			
D04		<input type="checkbox"/>	✓			
E04		<input type="checkbox"/>	✓			
F04		<input type="checkbox"/>	✓			
G04		<input type="checkbox"/>	✓			
H04		<input type="checkbox"/>	✓			
A05		<input type="checkbox"/>	✓			
B05		<input type="checkbox"/>	✓			
C05		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

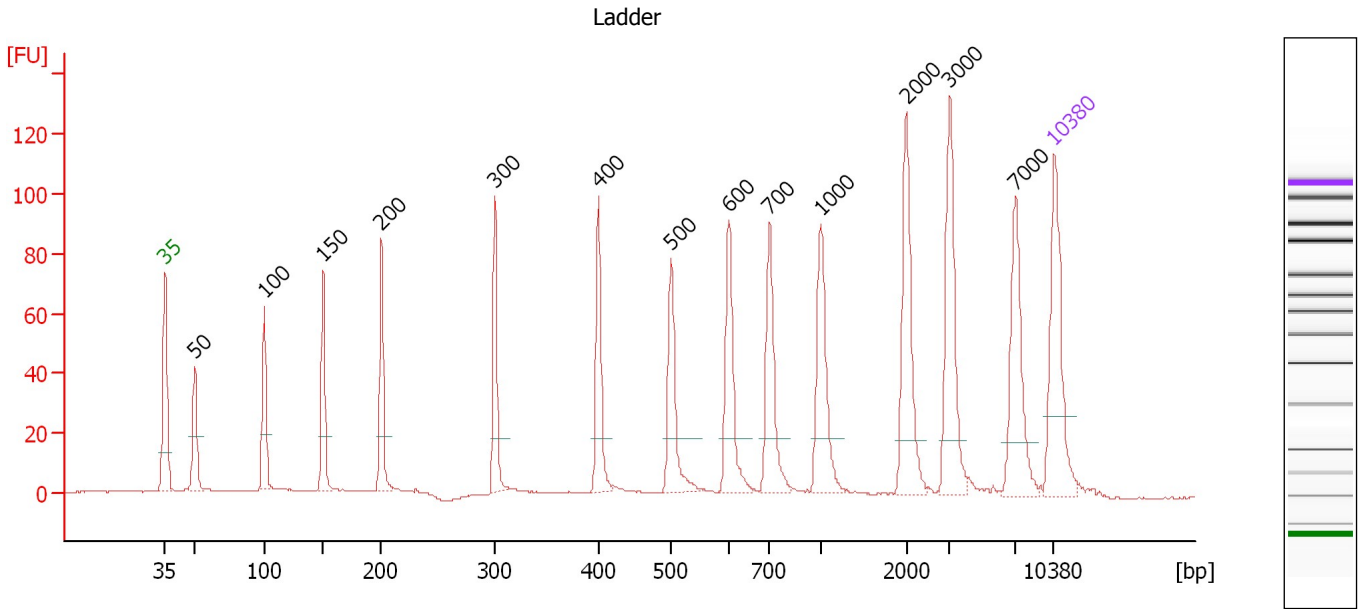
**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

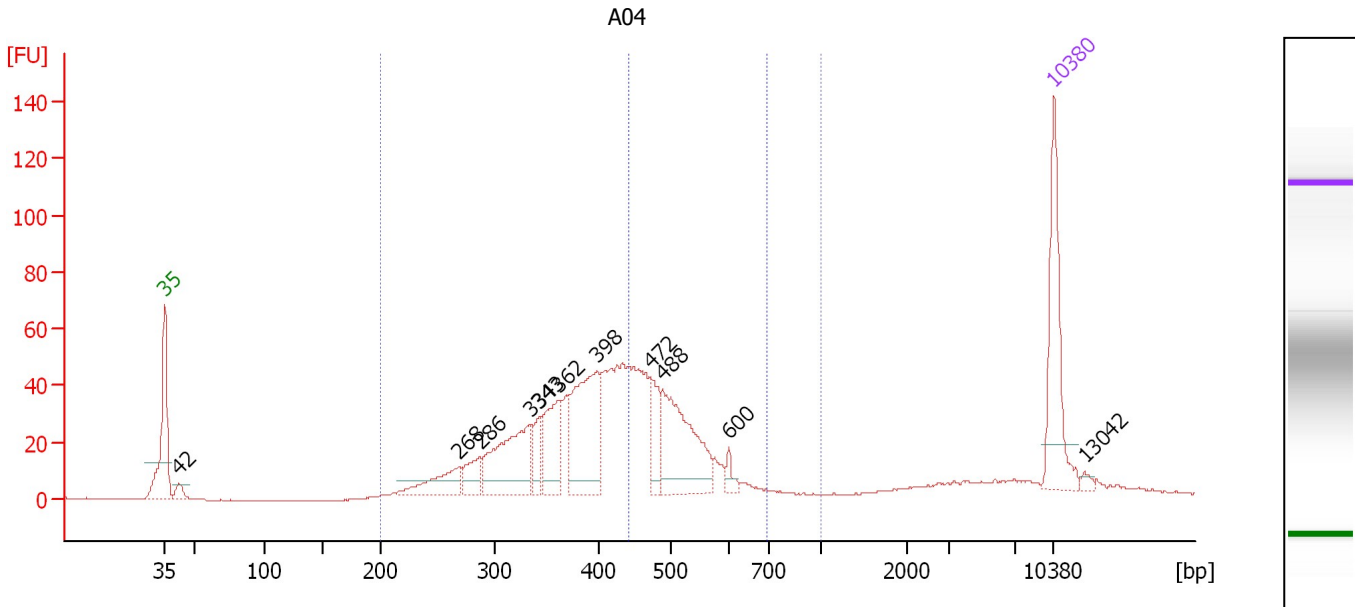
**Peak table for Ladder**

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	45.36
3	100	150.00	2,272.7	Ladder Peak	50.81
4	150	150.00	1,515.2	Ladder Peak	55.45
5	200	150.00	1,136.4	Ladder Peak	60.04
6	300	150.00	757.6	Ladder Peak	69.01
7	400	150.00	568.2	Ladder Peak	77.13
8	500	150.00	454.5	Ladder Peak	82.84
9	600	150.00	378.8	Ladder Peak	87.39
10	700	150.00	324.7	Ladder Peak	90.60
11	1,000	150.00	227.3	Ladder Peak	94.62
12	2,000	150.00	113.6	Ladder Peak	101.36
13	3,000	150.00	75.8	Ladder Peak	104.79
14	7,000	150.00	32.5	Ladder Peak	109.97
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : A04**

Number of peaks found: 11                      Corr. Area 1: 896.5  
 Noise: 0.2    Corr. Area 2: 302.2

**Peak table for sample 1 : A04**

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	42	12.53	450.6		44.13
3	268	42.04	237.4		66.17
4	286	26.47	140.1		67.79
5	334	104.32	472.7		71.80
6	343	21.68	95.8		72.48
7	362	63.41	265.3		74.06
8	398	121.96	464.0		76.99
9	472	38.71	124.3		81.22
10	488	119.58	371.1		82.17
11	600	8.80	22.2		87.40
12	10,380	75.00	10.9	Upper Marker	113.00
13	13,042	0.00	0.0		115.39

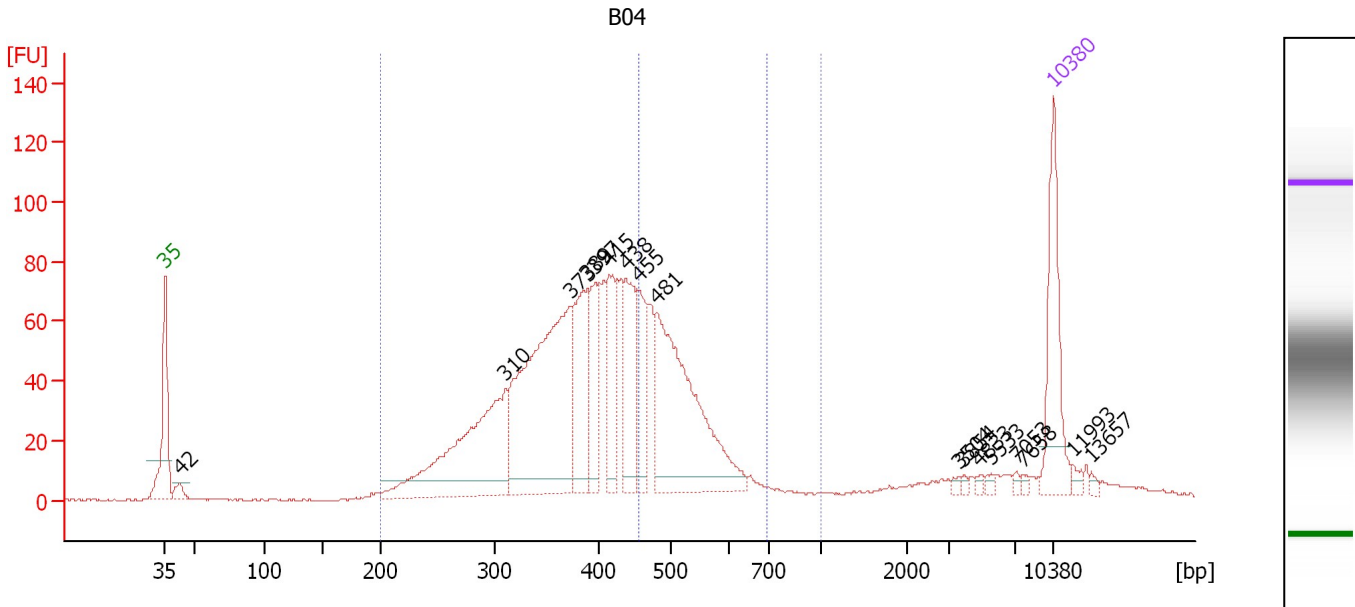
**Region table for sample 1 : A04**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	416	896.5	3,379.4	859.53	91	22.6
443	695	506	302.2	833.0	274.81	31	10.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : B04**

Number of peaks found: 17                      Corr. Area 1: 1,514.1  
 Noise: 0.3    Corr. Area 2: 404.5

**Peak table for sample 2 : B04**

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	42	12.90	460.4		44.18
3	310	235.48	1,152.5		69.79
4	373	322.21	1,310.4		74.90
5	389	110.97	432.0		76.26
6	397	69.02	263.4		76.89
7	415	69.88	255.2		77.98
8	438	85.29	295.1		79.29
9	455	61.78	205.6		80.29
10	481	240.63	758.6		81.73
11	3,504	2.79	1.2		105.44
12	3,854	2.36	0.9		105.90
13	4,833	2.65	0.8		107.16
14	5,533	3.33	0.9		108.07
15	7,053	2.74	0.6		110.01
16	7,658	2.99	0.6		110.56
17	10,380	75.00	10.9	Upper Marker	113.00
18	11,993	0.00	0.0		114.45
19	13,657	0.00	0.0		115.94

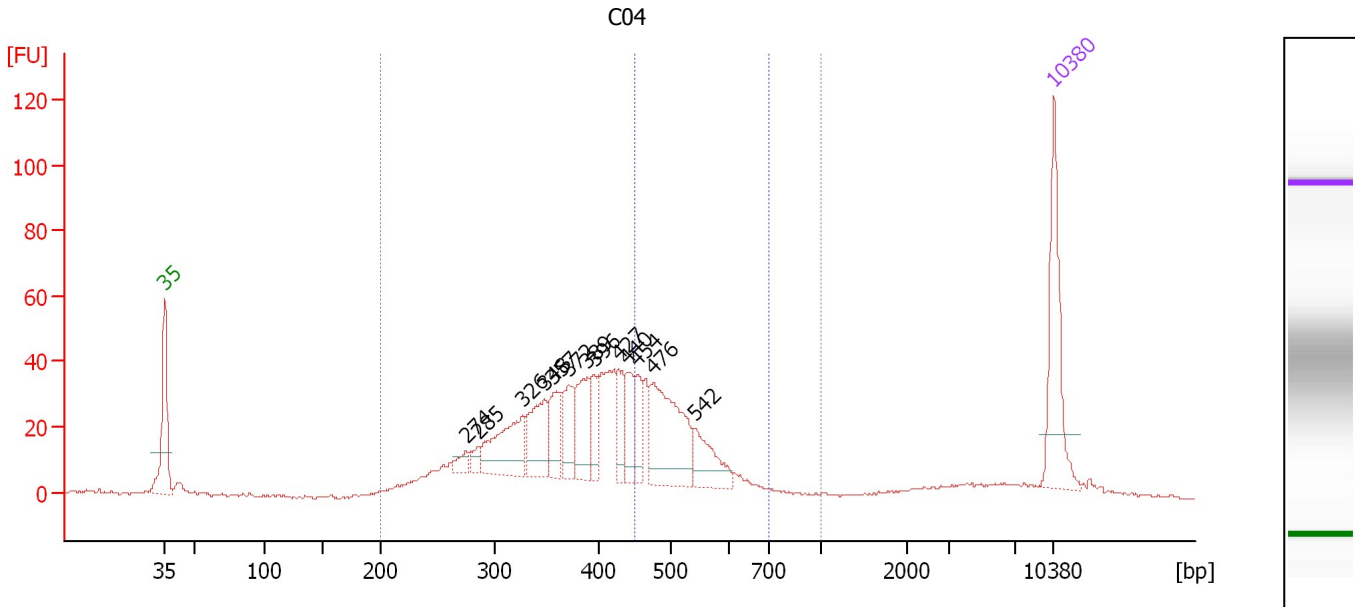
**Region table for sample 2 : B04**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	410	1,514.1	5,720.9	1,429.83	92	23.5
454	693	514	404.5	1,071.5	359.71	25	9.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : C04**

Number of peaks found: 13                      Corr. Area 1: 821.4  
 Noise: 0.4    Corr. Area 2: 242.8

**Peak table for sample 3 : C04**

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	274	11.58	64.0		66.71
3	285	10.94	58.2		67.66
4	326	82.78	384.2		71.15
5	348	61.66	268.8		72.88
6	357	37.84	160.8		73.60
7	372	35.89	146.3		74.83
8	389	57.80	224.8		76.28
9	396	28.13	107.7		76.78
10	427	33.09	117.4		78.68
11	440	32.56	112.1		79.41
12	454	29.24	97.6		80.22
13	476	120.47	383.8		81.45
14	542	43.55	121.7		84.76
15	10,380	75.00	10.9	Upper Marker	113.00

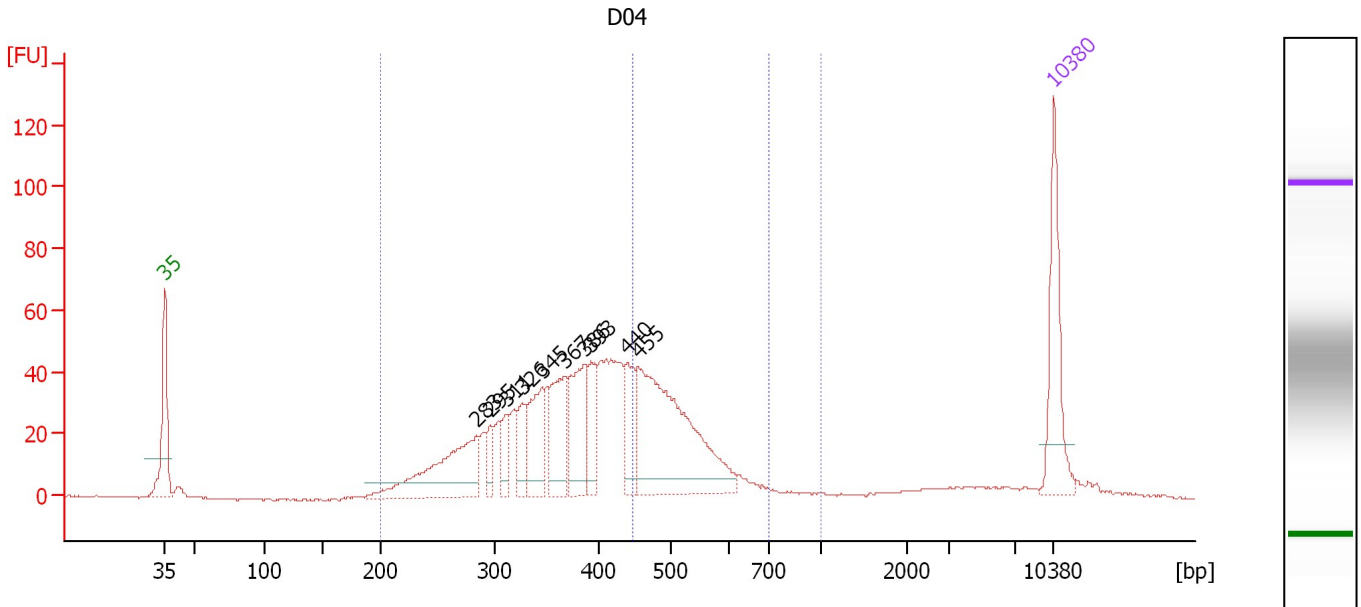
**Region table for sample 3 : C04**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	412	821.4	3,797.0	949.32	92	24.2
450	697	514	242.8	787.9	264.08	27	10.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : D04**

Number of peaks found: 10                      Corr. Area 1: 993.0  
 Noise: 0.2    Corr. Area 2: 279.0

**Peak table for sample 4 : D04**

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	283	151.35	809.4		67.51
3	295	23.80	122.0		68.60
4	311	28.72	139.8		69.92
5	326	33.46	155.7		71.10
6	345	68.41	300.2		72.69
7	367	79.86	329.6		74.46
8	386	90.56	355.4		76.00
9	393	41.50	160.0		76.55
10	440	51.79	178.4		79.41
11	455	258.14	859.6		80.27
12	10,380	75.00	10.9	Upper Marker	113.00

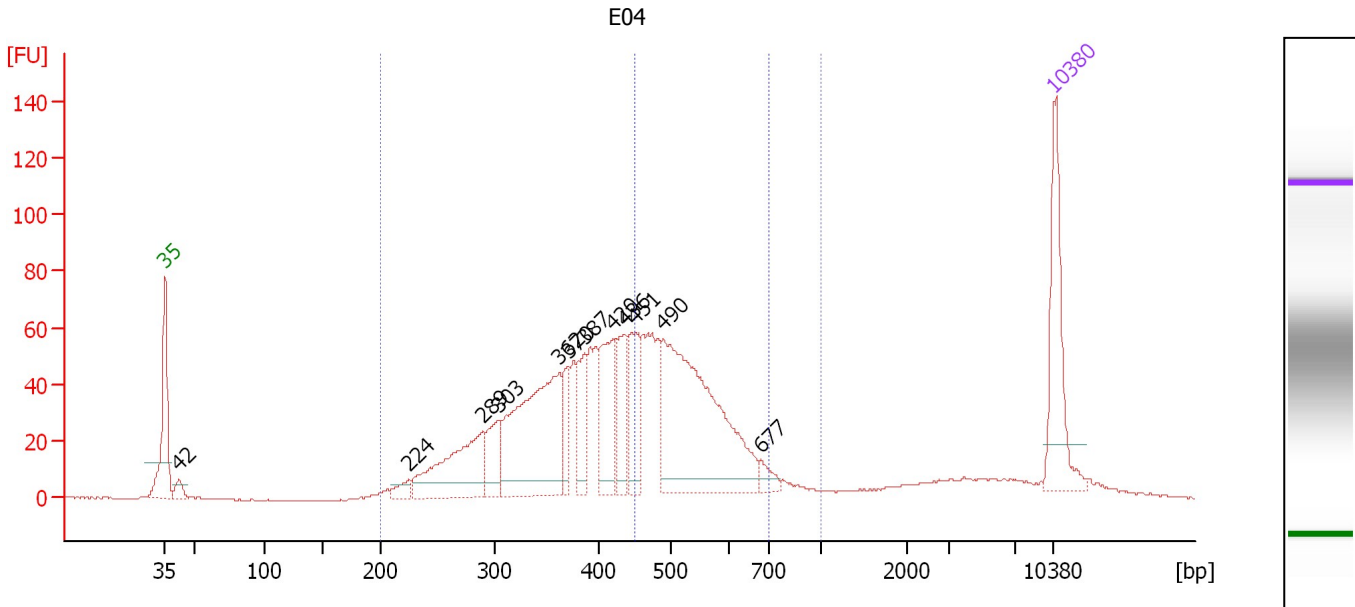
**Region table for sample 4 : D04**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	407	993.0	4,487.0	1,100.93	93	25.4
447	698	513	279.0	867.6	289.87	26	10.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : E04**

Number of peaks found: 12                      Corr. Area 1: 1,367.6  
 Noise: 0.2    Corr. Area 2: 506.5

**Peak table for sample 5 : E04**

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	42	14.07	508.7		44.09
3	224	12.55	84.7		62.24
4	289	120.52	631.4		68.04
5	303	43.03	215.4		69.22
6	362	204.22	853.9		74.08
7	370	31.30	128.1		74.71
8	387	43.13	168.9		76.07
9	420	77.74	280.7		78.25
10	436	49.61	172.3		79.20
11	451	58.07	195.3		80.02
12	490	275.39	852.4		82.24
13	677	12.10	27.1		89.86
14	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 5 : E04**

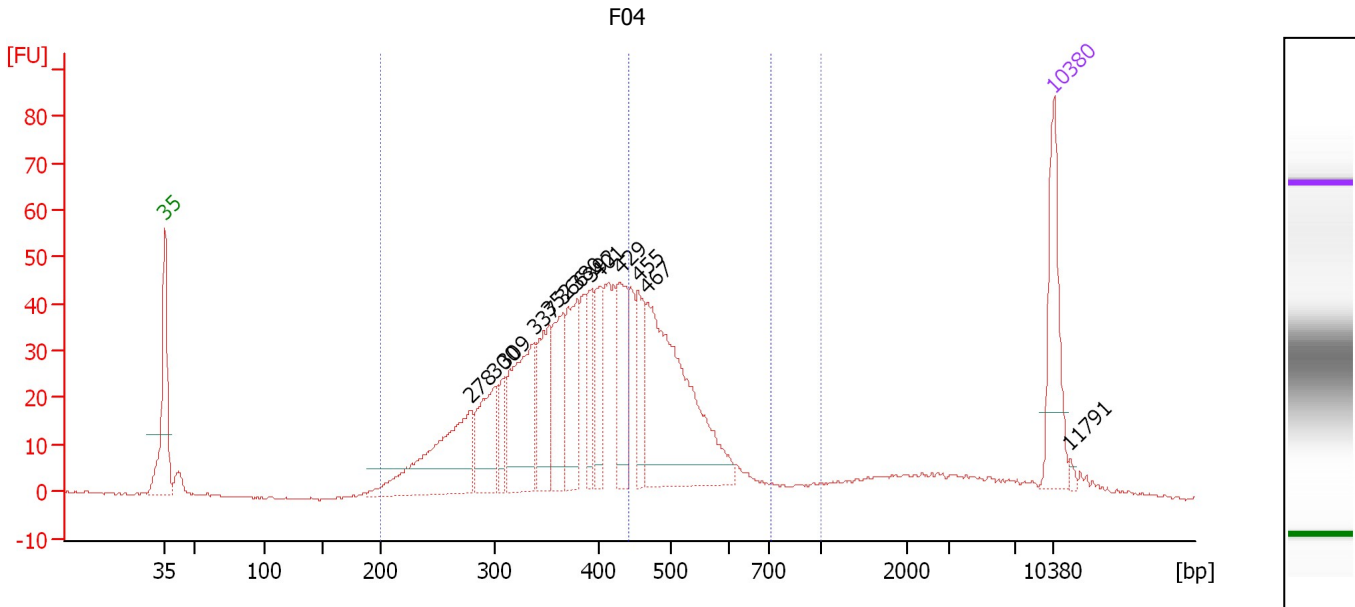
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	436	1,367.6	4,595.2	1,189.25	91	27.1
449	702	529	506.5	1,207.8	415.40	34	11.5



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : F04**

Number of peaks found: 13                      Corr. Area 1: 985.4  
 Noise: 0.2                                      Corr. Area 2: 294.6

**Peak table for sample 6 : F04**

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	278	179.72	980.5		67.01
3	300	92.47	467.2		69.00
4	309	33.96	166.6		69.72
5	337	143.78	646.0		72.03
6	352	82.91	356.6		73.25
7	366	80.69	334.4		74.34
8	380	87.23	348.3		75.47
9	392	49.49	191.1		76.51
10	401	53.30	201.4		77.19
11	429	82.49	291.0		78.81
12	455	58.60	195.2		80.26
13	467	279.48	905.8		80.98
14	10,380	75.00	10.9	Upper Marker	113.00
15	11,791	0.00	0.0		114.27

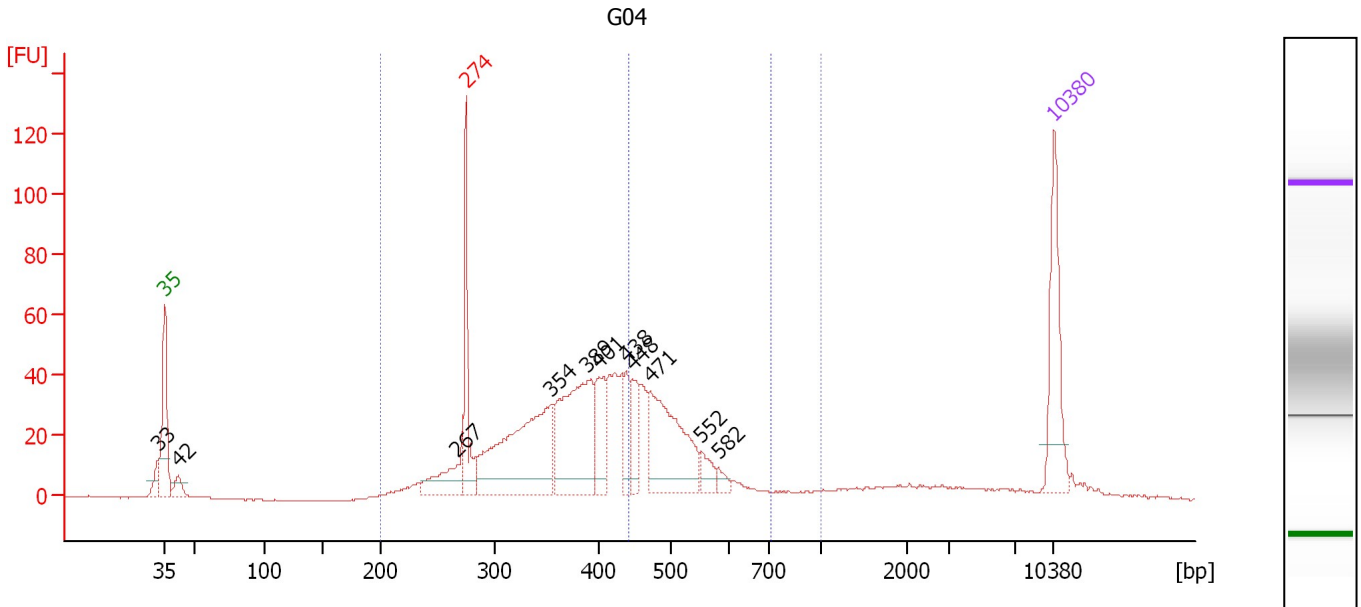
**Region table for sample 6 : F04**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	408	985.4	6,199.2	1,524.59	91	26.0
441	707	506	294.6	1,300.7	428.63	27	10.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : G04**

Number of peaks found: 11                      Corr. Area 1: 865.1  
 Noise: 0.2    Corr. Area 2: 251.9

**Peak table for sample 7 : G04**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.46
2	35	125.00	5,411.3	Lower Marker	43.00
3	42	21.24	773.3		44.04
4	267	50.65	287.7		66.03
5	274	83.01	458.4	excluded peak	66.71
6	354	219.41	938.2		73.42
7	389	172.51	671.1		76.28
8	401	53.50	202.2		77.18
9	438	34.56	119.5		79.31
10	448	37.77	127.8		79.86
11	471	145.27	467.5		81.17
12	552	18.92	51.9		85.21
13	582	9.61	25.0		86.57
14	10,380	75.00	10.9	Upper Marker	113.00

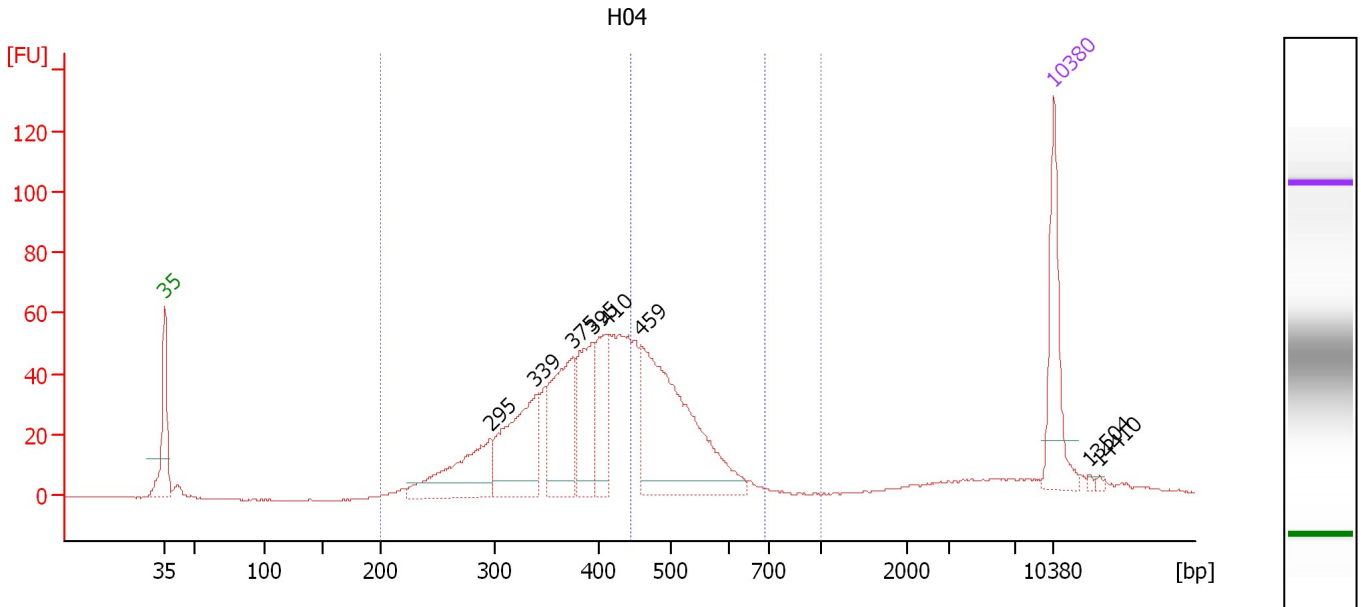
**Region table for sample 7 : G04**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	407	865.1	4,318.0	1,059.28	89	26.1
442	702	505	251.9	880.8	289.93	26	10.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

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 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : H04**

Number of peaks found: 8                      Corr. Area 1: 994.8  
 Noise: 0.2                                      Corr. Area 2: 319.7

**Peak table for sample 8 : H04**

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	295	122.12	626.4		68.59
3	339	147.56	659.7		72.17
4	375	133.21	538.1		75.11
5	395	100.60	386.3		76.69
6	410	80.52	297.2		77.73
7	459	282.21	932.0		80.49
8	10,380	75.00	10.9	Upper Marker	113.00
9	13,504	0.00	0.0		115.80
10	14,410	0.00	0.0		116.62

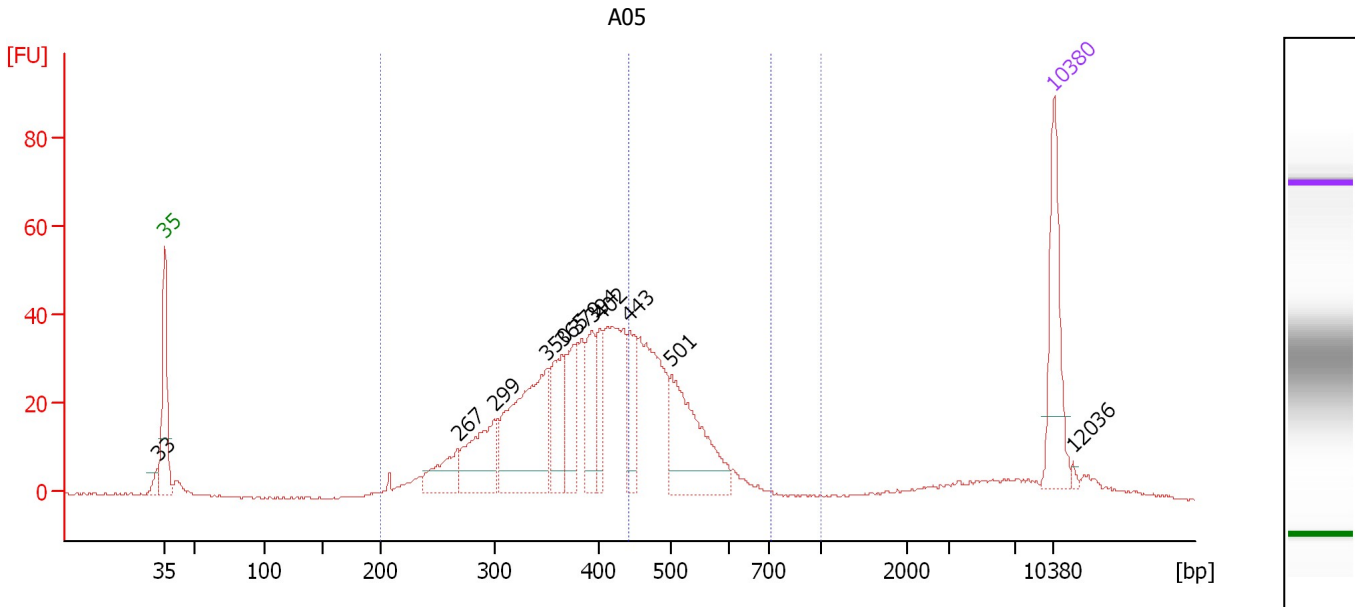
**Region table for sample 8 : H04**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	413	994.8	4,201.7	1,071.02	93	21.2
444	689	505	319.7	990.8	326.79	30	9.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : A05**

Number of peaks found: 11                      Corr. Area 1: 769.6  
 Noise: 0.2    Corr. Area 2: 241.5

**Peak table for sample 9 : A05**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.41
2	35	125.00	5,411.3	Lower Marker	43.00
3	267	49.18	278.9		66.06
4	299	90.55	459.2		68.90
5	350	191.52	828.5		73.09
6	365	74.50	309.5		74.26
7	379	61.08	244.1		75.43
8	394	58.28	224.4		76.60
9	402	40.39	152.3		77.23
10	443	52.95	181.1		79.58
11	501	134.07	405.8		82.86
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,036	0.00	0.0		114.49

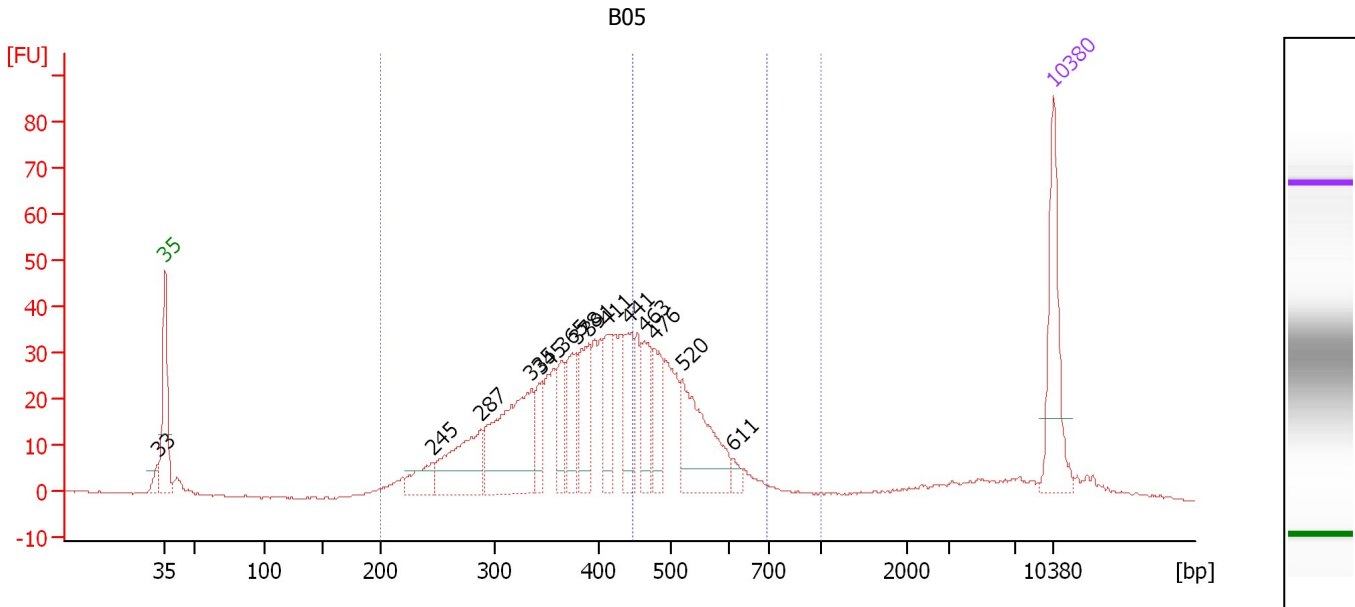
**Region table for sample 9 : A05**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	408	769.6	4,575.5	1,143.23	92	22.6
442	707	505	241.5	1,028.8	338.81	29	10.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : B05**

Number of peaks found: 14                      Corr. Area 1: 751.3  
 Noise: 0.2    Corr. Area 2: 235.3

**Peak table for sample 10 : B05**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.42
2	35	125.00	5,411.3	Lower Marker	43.00
3	245	35.83	221.6		64.08
4	287	102.92	543.4		67.84
5	335	173.10	782.4		71.87
6	345	31.15	137.0		72.63
7	365	41.20	171.1		74.29
8	378	53.32	213.6		75.36
9	391	63.40	245.4		76.43
10	411	48.81	179.8		77.78
11	441	59.86	205.6		79.48
12	463	49.73	162.7		80.73
13	476	48.74	155.0		81.49
14	520	113.92	332.2		83.73
15	611	8.12	20.1		87.76
16	10,380	75.00	10.9	Upper Marker	113.00

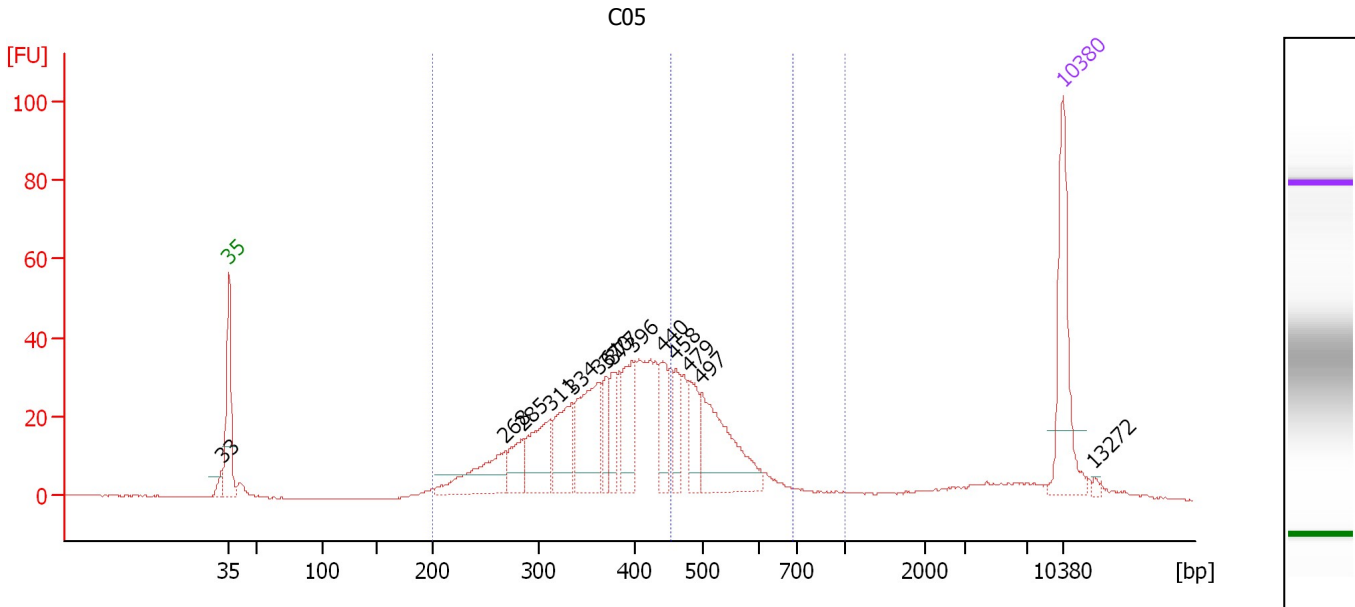
**Region table for sample 10 : B05**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	415	751.3	4,739.9	1,188.75	92	24.4
448	693	515	235.3	1,043.8	350.43	29	10.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
 Modified: 8/17/2017 3:39:52 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : C05**

Number of peaks found: 14                      Corr. Area 1: 767.3  
 Noise: 0.1    Corr. Area 2: 205.7

**Peak table for sample 11 : C05**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.42
2	35	125.00	5,411.3	Lower Marker	43.00
3	268	74.40	419.9		66.18
4	285	36.03	191.3		67.71
5	311	67.85	330.0		69.94
6	334	65.73	298.1		71.78
7	361	92.73	389.1		73.97
8	370	27.85	114.1		74.69
9	377	28.63	115.2		75.23
10	396	64.69	247.3		76.84
11	440	36.97	127.5		79.39
12	458	30.14	99.6		80.46
13	479	36.78	116.4		81.63
14	497	105.60	322.1		82.65
15	10,380	75.00	10.9	Upper Marker	113.00
16	13,272	0.00	0.0		115.60

**Region table for sample 11 : C05**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	410	767.3	3,837.7	944.47	91	26.1
453	693	517	205.7	703.3	237.11	24	10.2

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-17\2017-08-17\_006.xad

Created: 8/17/2017 2:14:34 PM  
Modified: 8/17/2017 3:39:52 PM

**Gel Image**

