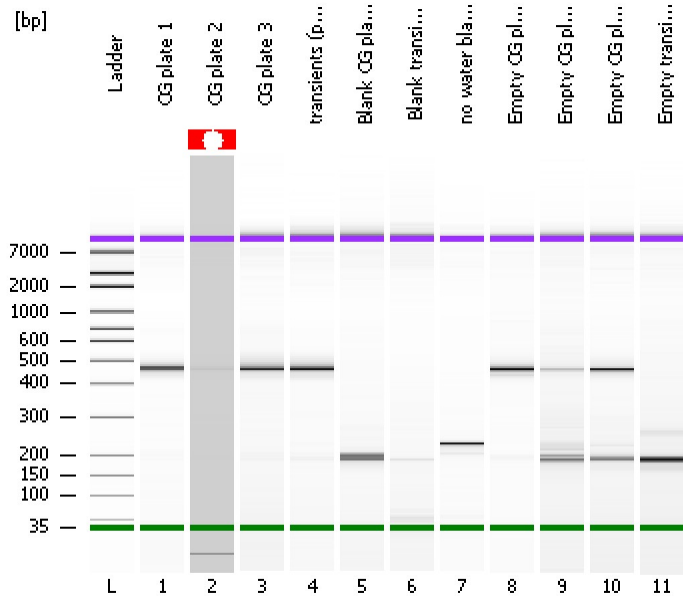


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
Modified: 8/22/2017 9:14:57 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

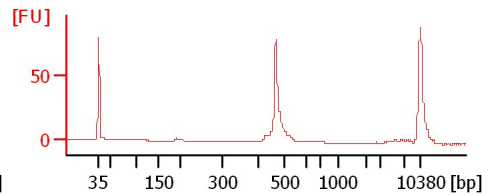
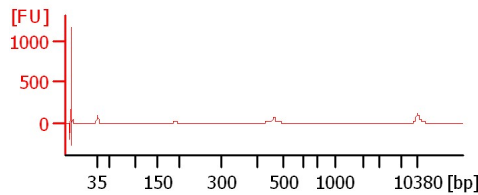
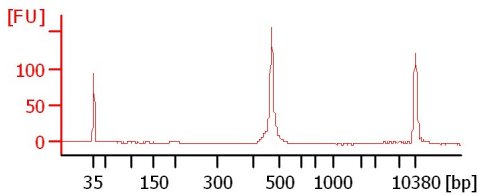
Chip Information:

Chip Lot #:   
Reagent Kit Lot #:   
Chip Comments:

**CG plate 1**

**CG plate 2**

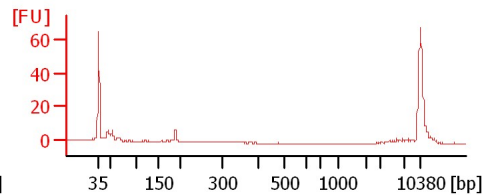
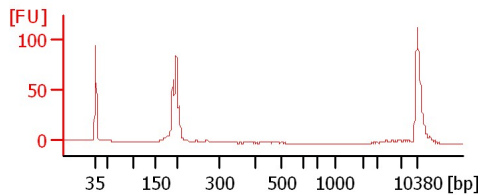
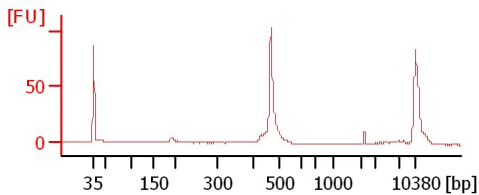
**CG plate 3**



**transients (plate 4)**

**Blank CG plate 1-3**

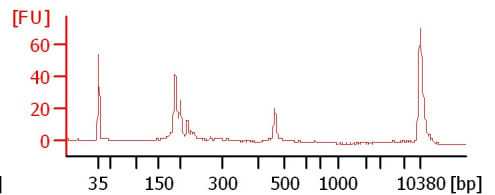
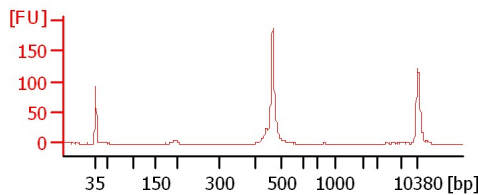
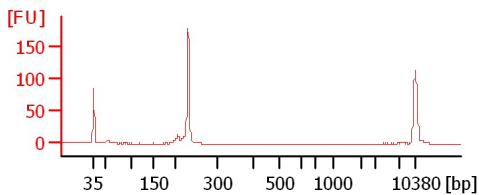
**Blank transients**



**no water blanks transients**

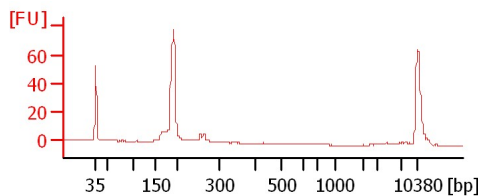
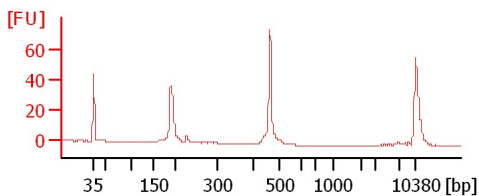
**Empty CG plate 1**

**Empty CG plate 2**



**Empty CG plate 3**

**Empty transients**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CG plate 1		<input type="checkbox"/>	✓			
CG plate 2		<input type="checkbox"/>	⚠			
CG plate 3		<input type="checkbox"/>	✓			
transients (plate 4)		<input type="checkbox"/>	✓			
Blank CG plate 1-3		<input type="checkbox"/>	✓			
Blank transients		<input type="checkbox"/>	✓			
no water blanks transients		<input type="checkbox"/>	✓			
Empty CG plate 1		<input type="checkbox"/>	✓			
Empty CG plate 2		<input type="checkbox"/>	✓			
Empty CG plate 3		<input type="checkbox"/>	✓			
Empty transients		<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\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
Modified: 8/22/2017 9:14:57 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

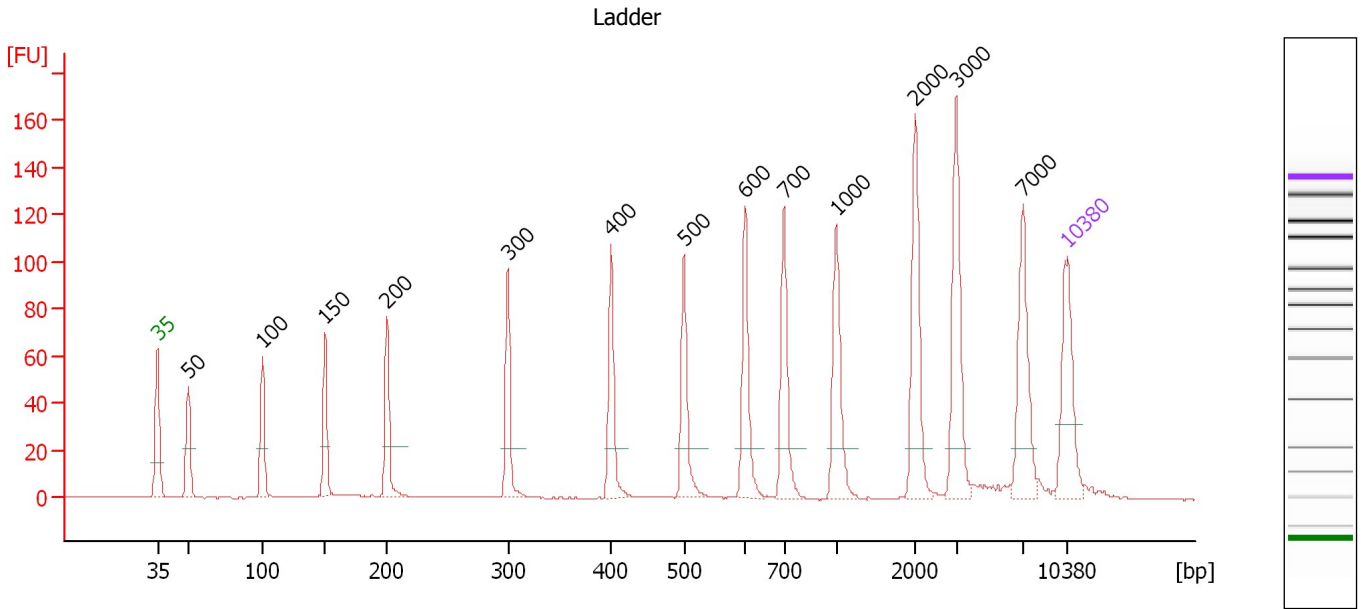
**Ladder**

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:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

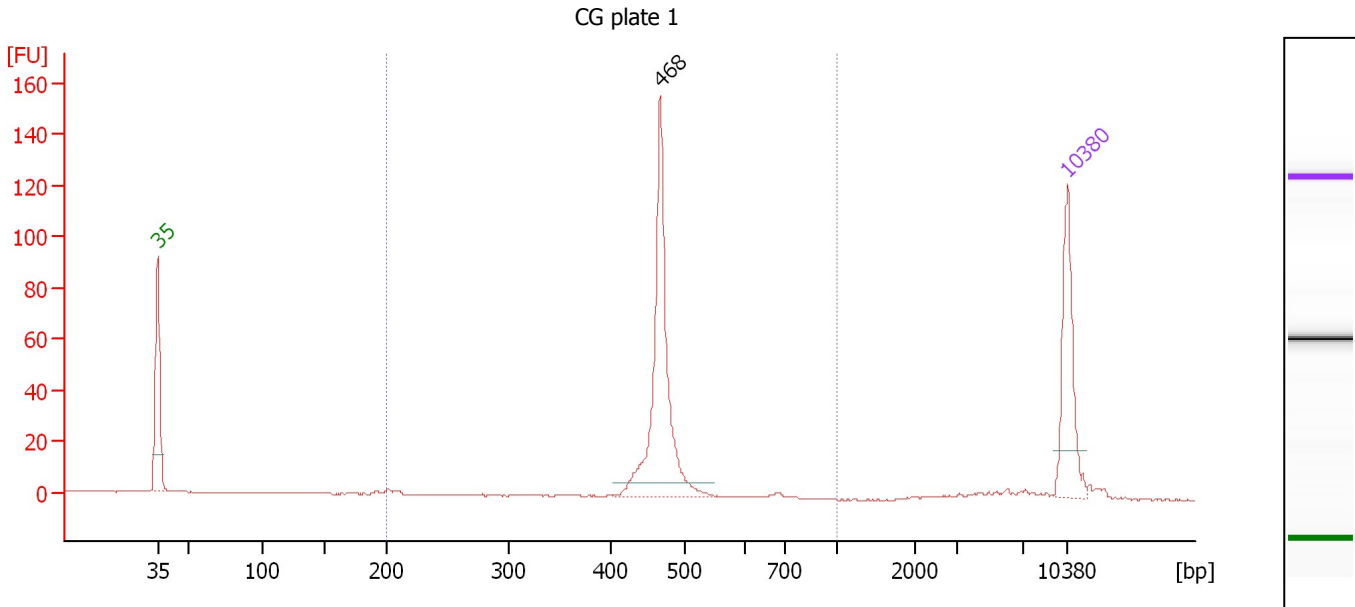
**Peak table for Ladder**

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	45.37
3	100	150.00	2,272.7	Ladder Peak	51.06
4	150	150.00	1,515.2	Ladder Peak	55.89
5	200	150.00	1,136.4	Ladder Peak	60.67
6	300	150.00	757.6	Ladder Peak	69.96
7	400	150.00	568.2	Ladder Peak	77.89
8	500	150.00	454.5	Ladder Peak	83.49
9	600	150.00	378.8	Ladder Peak	88.18
10	700	150.00	324.7	Ladder Peak	91.18
11	1,000	150.00	227.3	Ladder Peak	95.19
12	2,000	150.00	113.6	Ladder Peak	101.30
13	3,000	150.00	75.8	Ladder Peak	104.44
14	7,000	150.00	32.5	Ladder Peak	109.58
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : CG plate 1**

Number of peaks found: 1                      Corr. Area 1: 225.5  
 Noise: 0.2

**Peak table for sample 1 : CG plate 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	468	227.08	735.7		81.68
3	10,380	75.00	10.9	Upper Marker	113.00

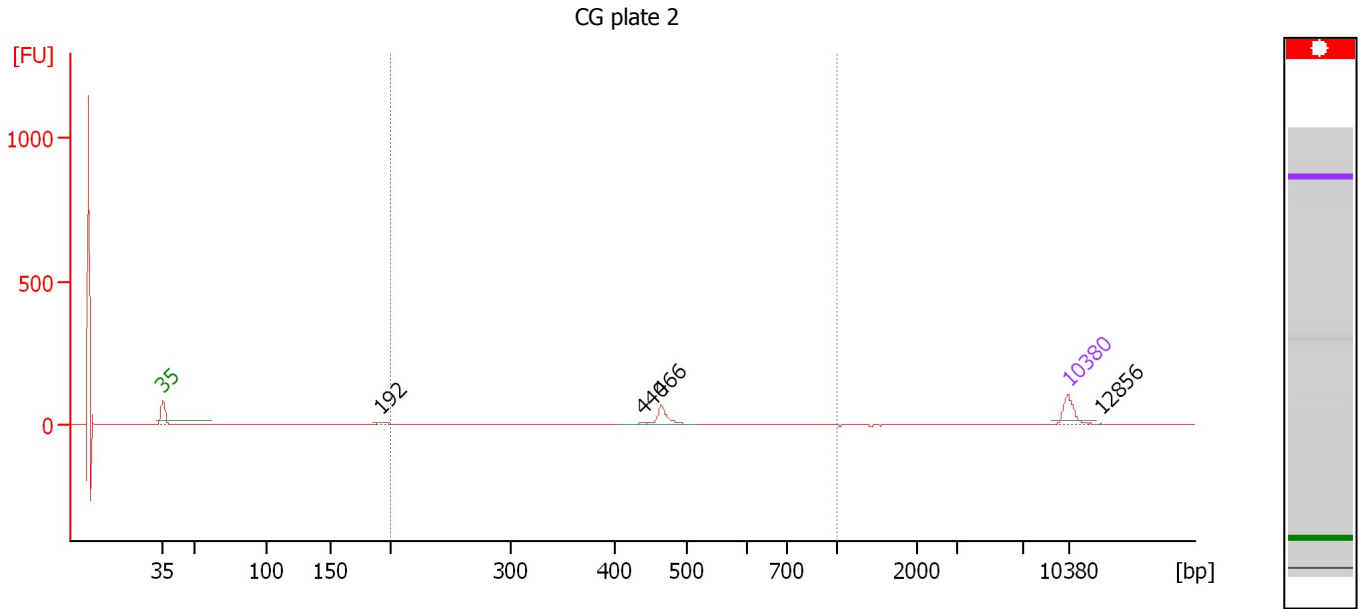
**Region table for sample 1 : CG plate 1**

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	467	225.5	764.5	231.60	83	7.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : CG plate 2**

Number of peaks found: 4                      Corr. Area 1: 118.4  
 Noise: 0.2

**Peak table for sample 2 : CG plate 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	192	14.56	114.9		59.90
3	440	9.18	31.6		80.10
4	466	91.17	296.7		81.56
5	10,380	75.00	10.9	Upper Marker	113.00
6	12,856	0.00	0.0		115.50

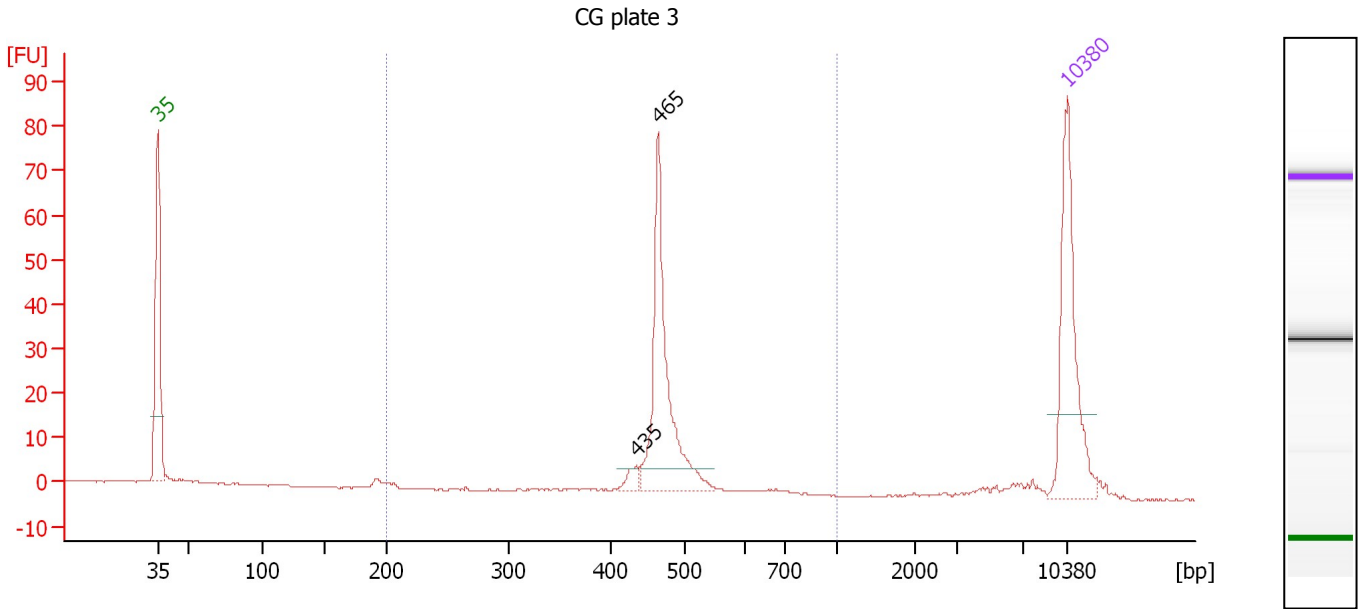
**Region table for sample 2 : CG plate 2**

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	438	118.4	500.5	131.48	15	18.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : CG plate 3**

Number of peaks found: 2                      Corr. Area 1: 127.4  
 Noise: 0.2

**Peak table for sample 3 : CG plate 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	435	7.39	25.7		79.84
3	465	125.13	408.1		81.50
4	10,380	75.00	10.9	Upper Marker	113.00

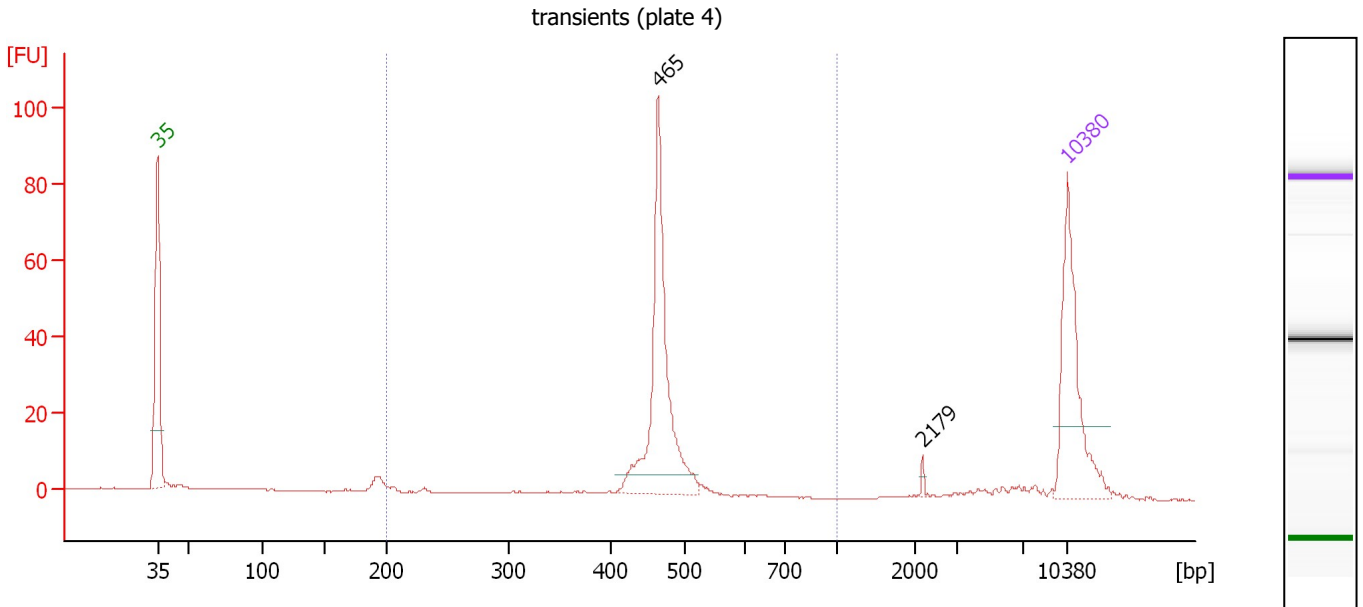
**Region table for sample 3 : CG plate 3**

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	471	127.4	436.2	134.27	82	6.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : transients (plate 4)**

Number of peaks found: 2                      Corr. Area 1: 170.3  
 Noise: 0.1

**Peak table for sample 4 : transients (plate 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	465	162.03	528.0		81.52
3	2,179	1.90	1.3		101.86
4	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : transients (plate 4)**

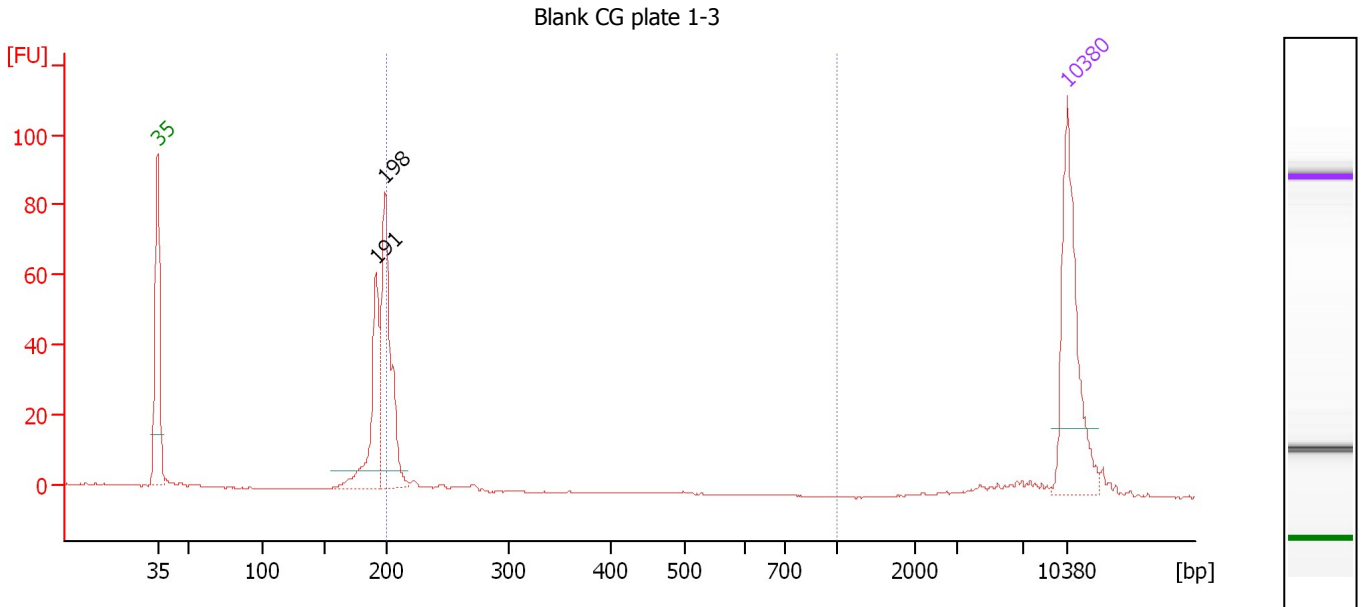
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	463	170.3	583.2	174.79	80	8.3



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Blank CG plate 1-3**

Number of peaks found: 2                      Corr. Area 1: 67.4  
 Noise: 0.1

**Peak table for sample 5 : Blank CG plate 1-3**

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	191	77.86	617.7		59.81
3	198	122.23	933.1		60.52
4	10,380	75.00	10.9	Upper Marker	113.00

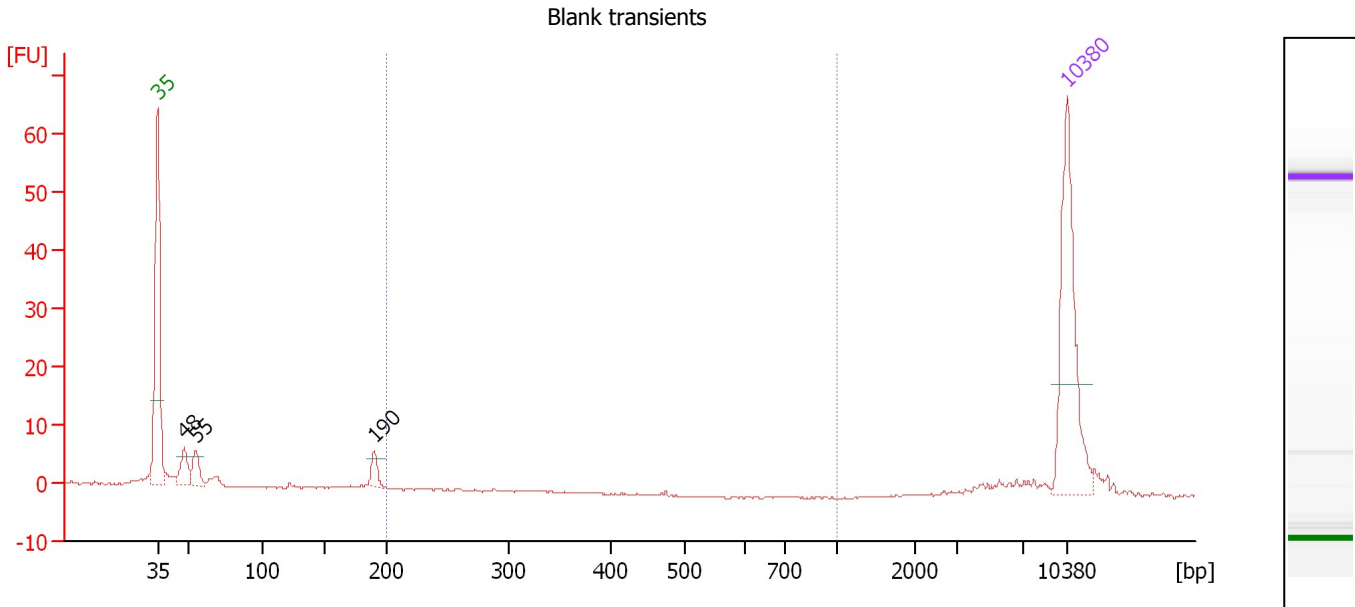
**Region table for sample 5 : Blank CG plate 1-3**

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	208	67.4	486.0	66.81	28	7.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Blank transients**

Number of peaks found: 3                      Corr. Area 1: 0.0  
 Noise: 0.1

**Peak table for sample 6 : Blank transients**

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	48	20.34	642.7		45.04
3	55	17.55	482.6		45.95
4	190	10.77	86.0		59.69
5	10,380	75.00	10.9	Upper Marker	113.00

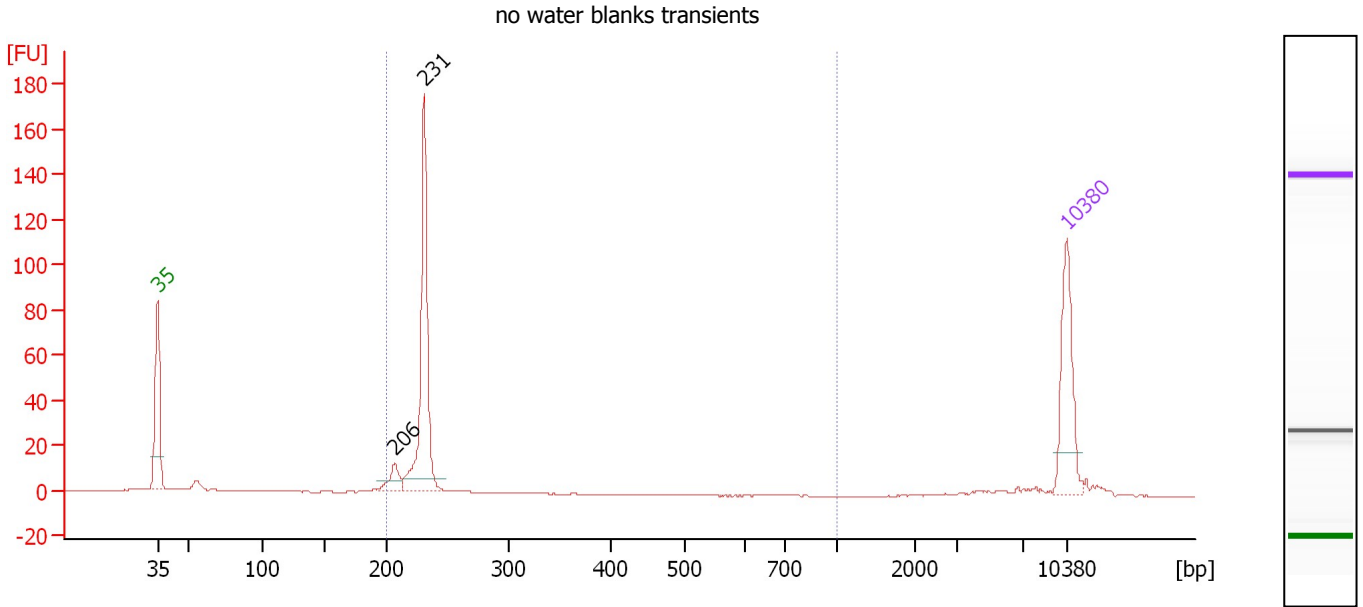
**Region table for sample 6 : Blank transients**

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	324	0.0	0.1	0.02	0	22.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : no water blanks transients**

Number of peaks found: 2                      Corr. Area 1: 198.4  
 Noise: 0.2

**Peak table for sample 7 : no water blanks transients**

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	206	24.45	180.1		61.21
3	231	217.60	1,430.2		63.51
4	10,380	75.00	10.9	Upper Marker	113.00

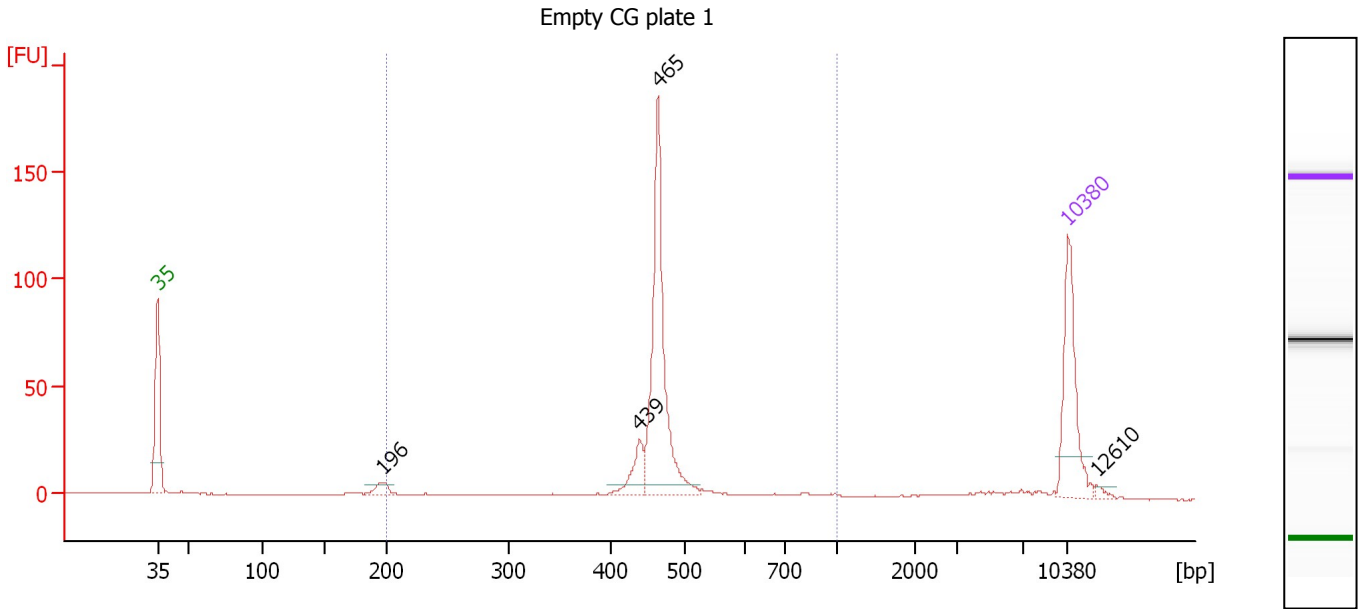
**Region table for sample 7 : no water blanks transients**

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	230	198.4	1,682.2	254.30	76	6.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Empty CG plate 1**

Number of peaks found: 4                      Corr. Area 1: 298.7  
 Noise: 0.1

**Peak table for sample 8 : Empty CG plate 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	196	14.27	110.5		60.26
3	439	29.84	103.0		80.06
4	465	207.87	678.0		81.50
5	10,380	75.00	10.9	Upper Marker	113.00
6	12,610	0.00	0.0		115.25

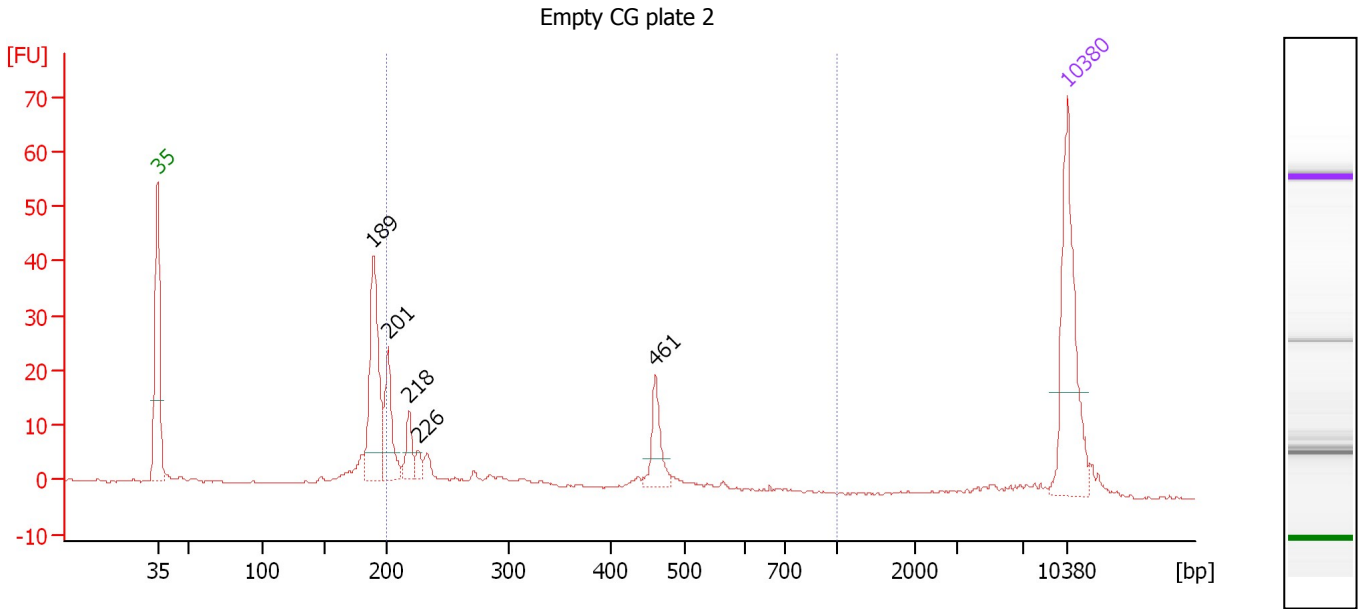
**Region table for sample 8 : Empty CG plate 1**

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	473	298.7	896.9	271.44	85	16.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : Empty CG plate 2**

Number of peaks found: 5                      Corr. Area 1: 103.1  
 Noise: 0.2

**Peak table for sample 9 : Empty CG plate 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	189	105.69	847.9		59.61
3	201	46.86	353.5		60.75
4	218	19.59	136.0		62.37
5	226	7.62	51.1		63.09
6	461	29.12	95.7		81.32
7	10,380	75.00	10.9	Upper Marker	113.00

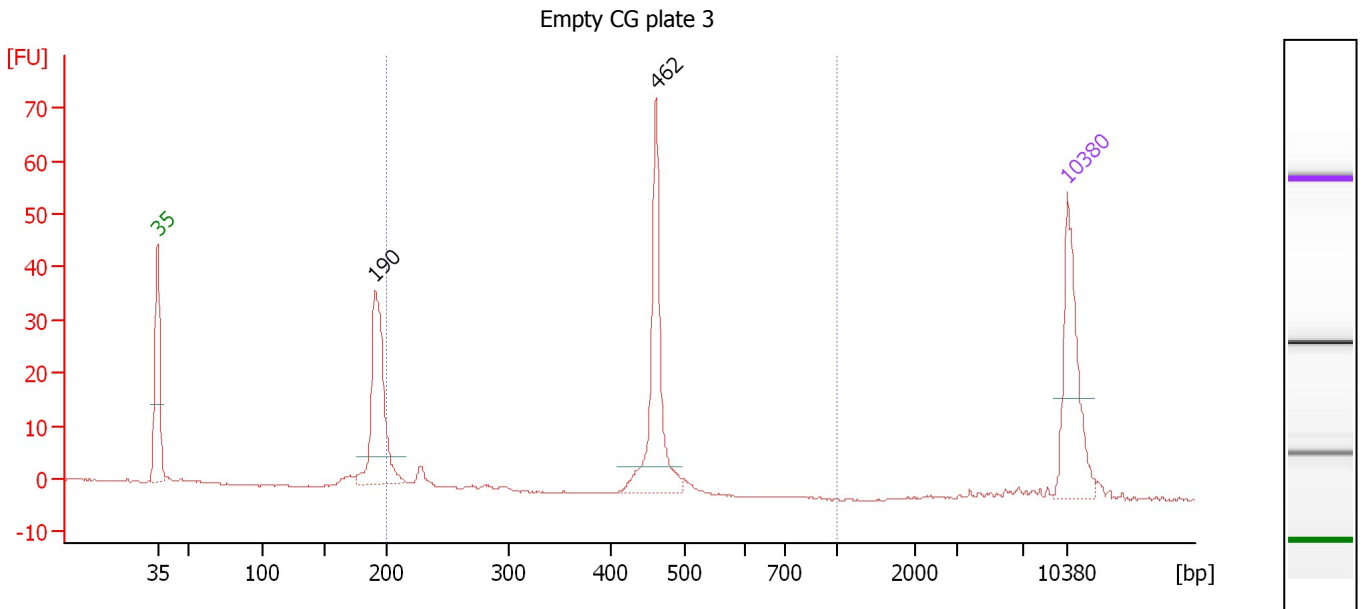
**Region table for sample 9 : Empty CG plate 2**

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	337	103.1	903.2	164.78	50	38.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Empty CG plate 3**

Number of peaks found: 2                      Corr. Area 1: 91.4  
 Noise: 0.1

**Peak table for sample 10 : Empty CG plate 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	190	153.22	1,218.8		59.76
3	462	131.23	430.7		81.34
4	10,380	75.00	10.9	Upper Marker	113.00

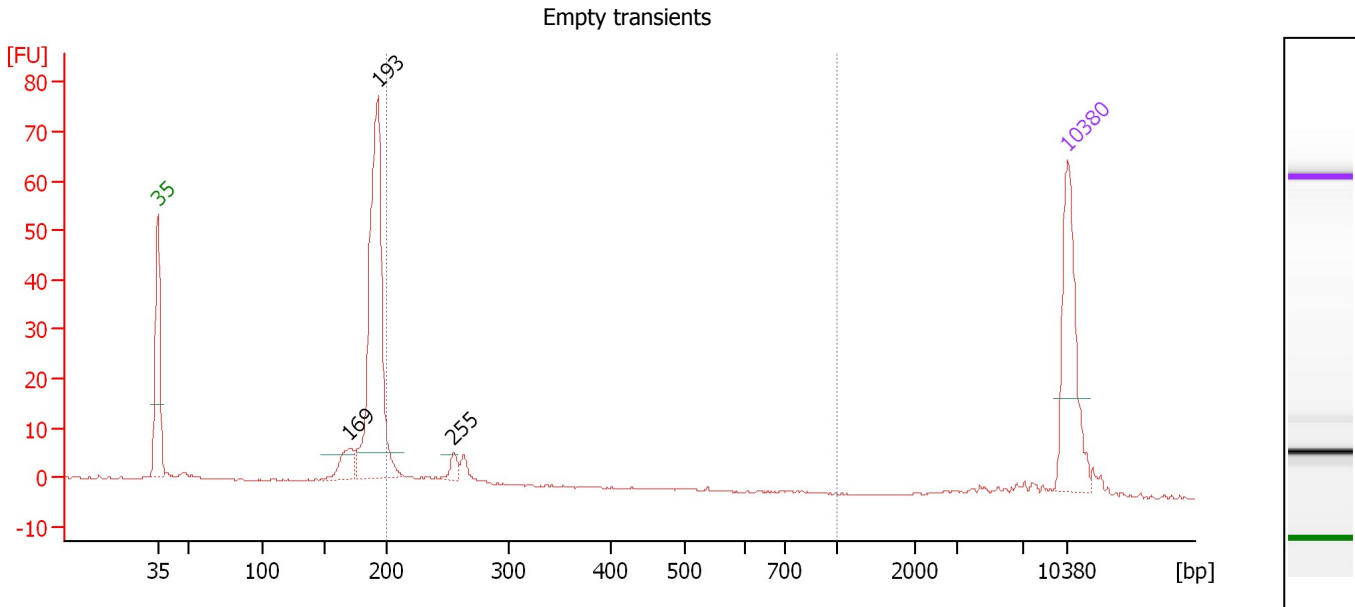
**Region table for sample 10 : Empty CG plate 3**

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	432	91.4	635.2	160.09	54	19.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
 Modified: 8/22/2017 9:14:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : Empty transients**

Number of peaks found: 3                      Corr. Area 1: 31.4  
 Noise: 0.1

**Peak table for sample 11 : Empty transients**

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	169	26.10	233.7		57.73
3	193	277.75	2,183.7		59.97
4	255	9.95	59.2		65.76
5	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : Empty transients**

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	244	31.4	347.4	55.38	14	14.8

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-22\2017-08-22\_001.xad

Created: 8/22/2017 8:33:39 AM  
Modified: 8/22/2017 9:14:57 AM

**Gel Image**

