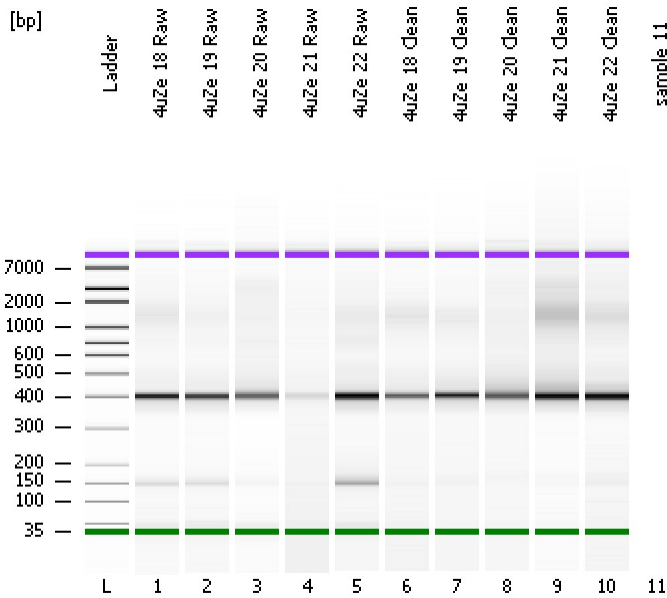


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
Modified: 9/3/2015 11:02:05 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

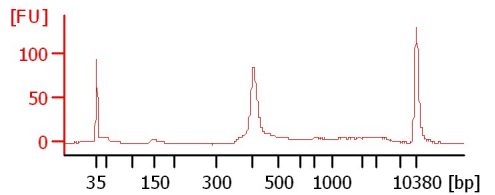
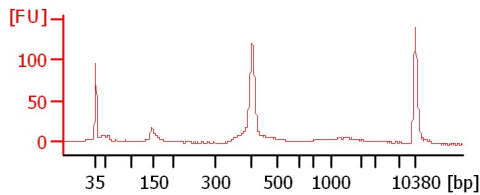
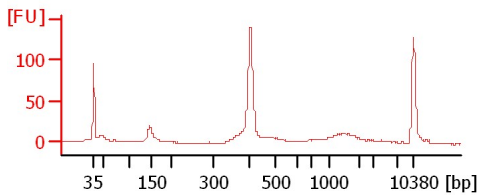
Chip Information:

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

4uZe 18 Raw

4uZe 19 Raw

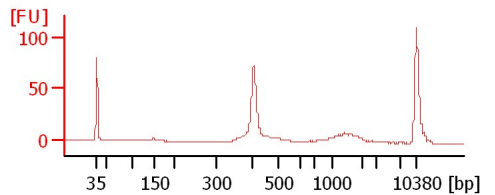
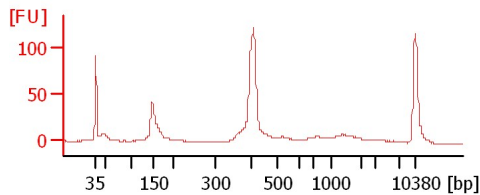
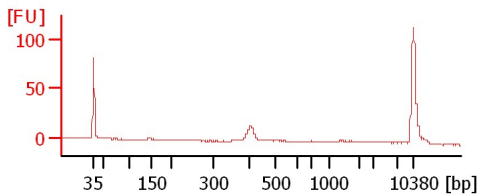
4uZe 20 Raw



4uZe 21 Raw

4uZe 22 Raw

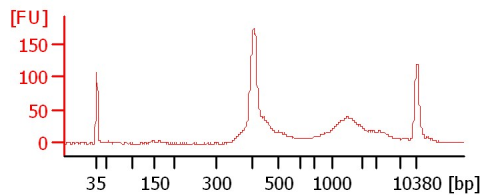
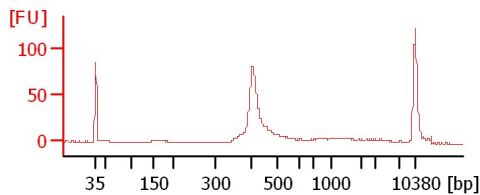
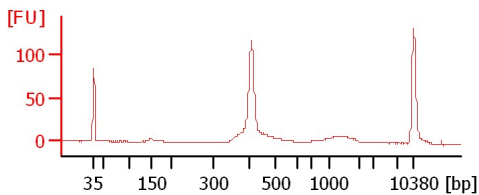
4uZe 18 Clean



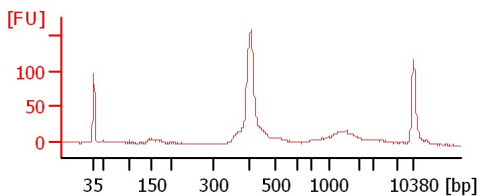
4uZe 19 Clean

4uZe 20 Clean

4uZe 21 Clean



4uZe 22 Clean



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
4uZe 18 Raw		<input type="checkbox"/>	✓			
4uZe 19 Raw		<input type="checkbox"/>	✓			
4uZe 20 Raw		<input type="checkbox"/>	✓			
4uZe 21 Raw		<input type="checkbox"/>	✓			
4uZe 22 Raw		<input type="checkbox"/>	✓			
4uZe 18 Clean		<input type="checkbox"/>	✓			
4uZe 19 Clean		<input type="checkbox"/>	✓			
4uZe 20 Clean		<input type="checkbox"/>	✓			
4uZe 21 Clean		<input type="checkbox"/>	✓			
4uZe 22 Clean		<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\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
Modified: 9/3/2015 11:02:05 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

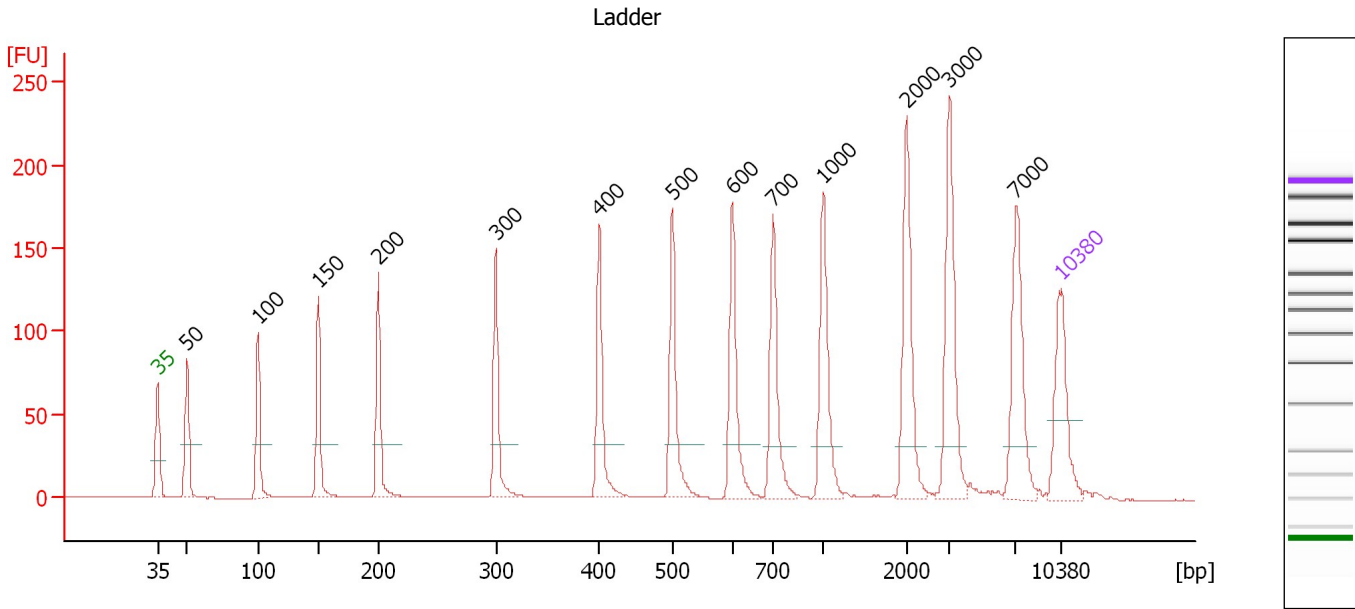
**Ladder**

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\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

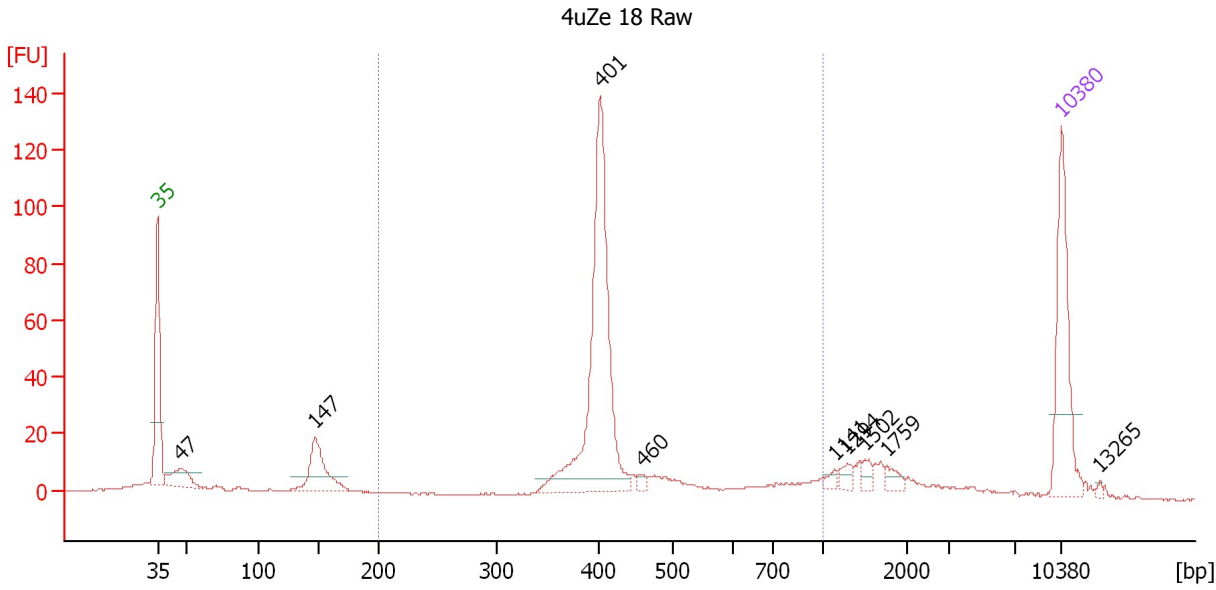
**Peak table for Ladder**

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	45.31
3	100	150.00	2,272.7	Ladder Peak	50.77
4	150	150.00	1,515.2	Ladder Peak	55.47
5	200	150.00	1,136.4	Ladder Peak	60.09
6	300	150.00	757.6	Ladder Peak	69.19
7	400	150.00	568.2	Ladder Peak	77.22
8	500	150.00	454.5	Ladder Peak	82.86
9	600	150.00	378.8	Ladder Peak	87.52
10	700	150.00	324.7	Ladder Peak	90.67
11	1,000	150.00	227.3	Ladder Peak	94.58
12	2,000	150.00	113.6	Ladder Peak	101.02
13	3,000	150.00	75.8	Ladder Peak	104.34
14	7,000	150.00	32.5	Ladder Peak	109.49
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 4uZe 18 Raw**

Number of peaks found: 9                      Corr. Area 1: 388.4  
 Noise: 0.2

**Peak table for sample 1 : 4uZe 18 Raw**

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	47	35.30	1,140.3		44.83
3	147	63.34	652.7		55.20
4	401	261.48	988.7		77.26
5	460	5.18	17.1		80.61
6	1,141	4.68	6.2		95.49
7	1,294	6.76	7.9		96.47
8	1,502	6.44	6.5		97.81
9	1,759	7.75	6.7		99.46
10	10,380	75.00	10.9	Upper Marker	113.00
11	13,265	0.00	0.0		115.99

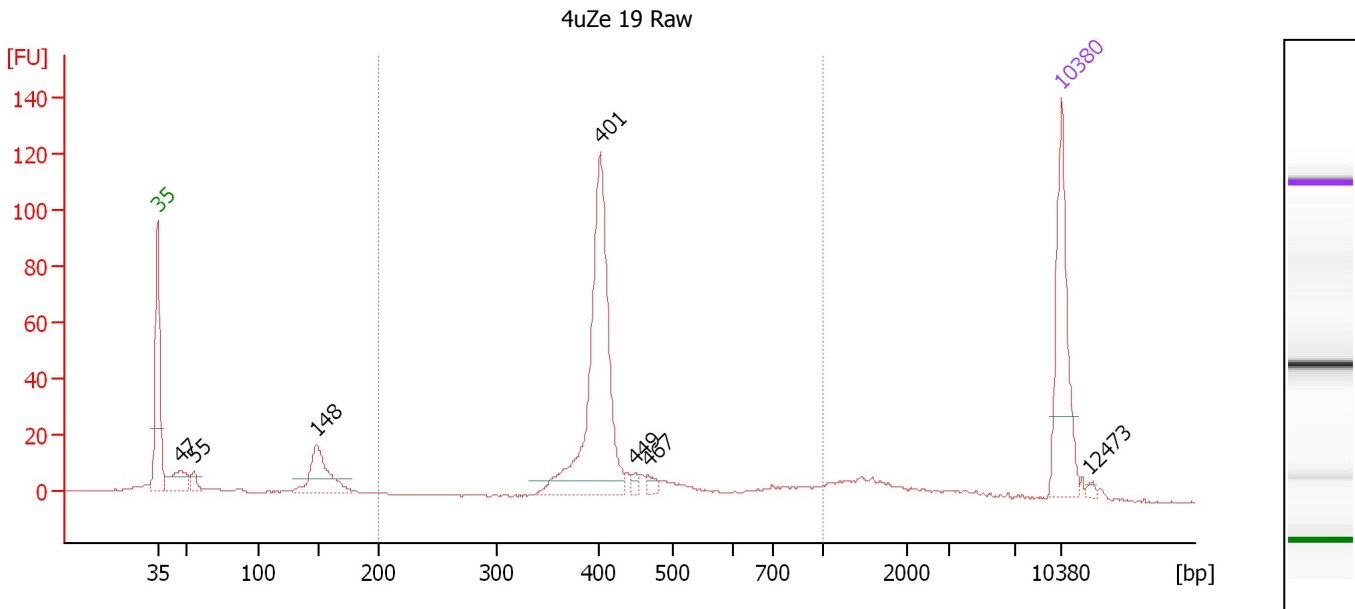
**Region table for sample 1 : 4uZe 18 Raw**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	452	1,000	388.4	1,222.7	61	28.2	342.62

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 4uZe 19 Raw**

Number of peaks found: 7                      Corr. Area 1: 343.9  
 Noise: 0.2

**Peak table for sample 2 : 4uZe 19 Raw**

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	47	34.87	1,129.8		44.81
3	55	11.58	321.6		45.81
4	148	61.74	631.0		55.31
5	401	233.40	881.1		77.30
6	449	4.67	15.8		79.97
7	467	6.37	20.6		81.01
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,473	0.00	0.0		115.17

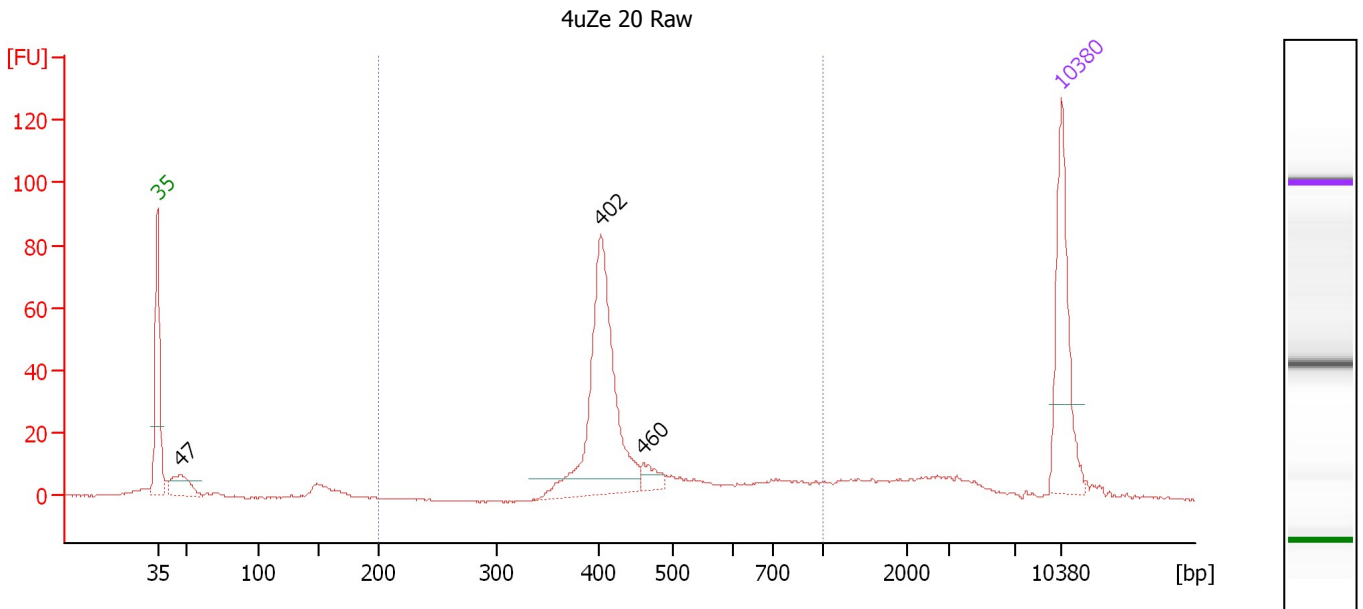
**Region table for sample 2 : 4uZe 19 Raw**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	441	1,000	343.9	1,048.4	67	25.6	290.91

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 4uZe 20 Raw**

Number of peaks found: 3                      Corr. Area 1: 357.4  
 Noise: 0.2

**Peak table for sample 3 : 4uZe 20 Raw**

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	47	34.67	1,125.5		44.80
3	402	210.74	793.6		77.36
4	460	13.91	45.9		80.58
5	10,380	75.00	10.9	Upper Marker	113.00

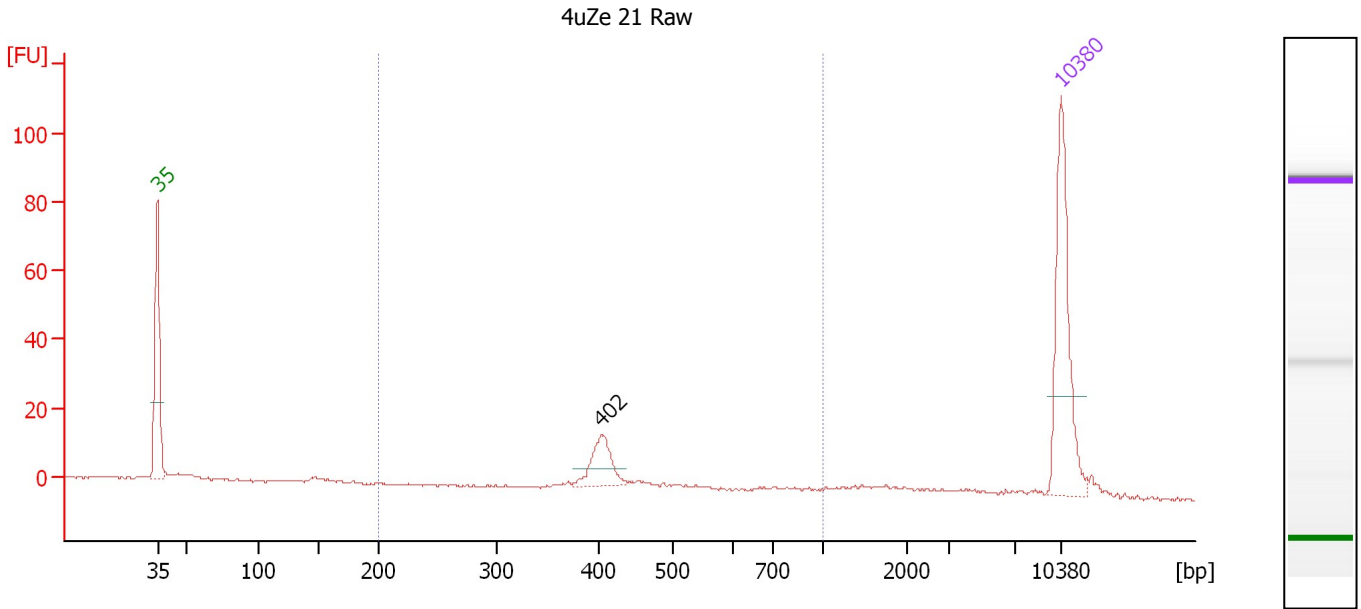
**Region table for sample 3 : 4uZe 20 Raw**

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	357.4	1,041.4	67	28.2	304.91

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 4uZe 21 Raw**

Number of peaks found: 1                      Corr. Area 1: 53.5  
 Noise: 0.3

**Peak table for sample 4 : 4uZe 21 Raw**

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	402	33.29	125.4		77.34
3	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : 4uZe 21 Raw**

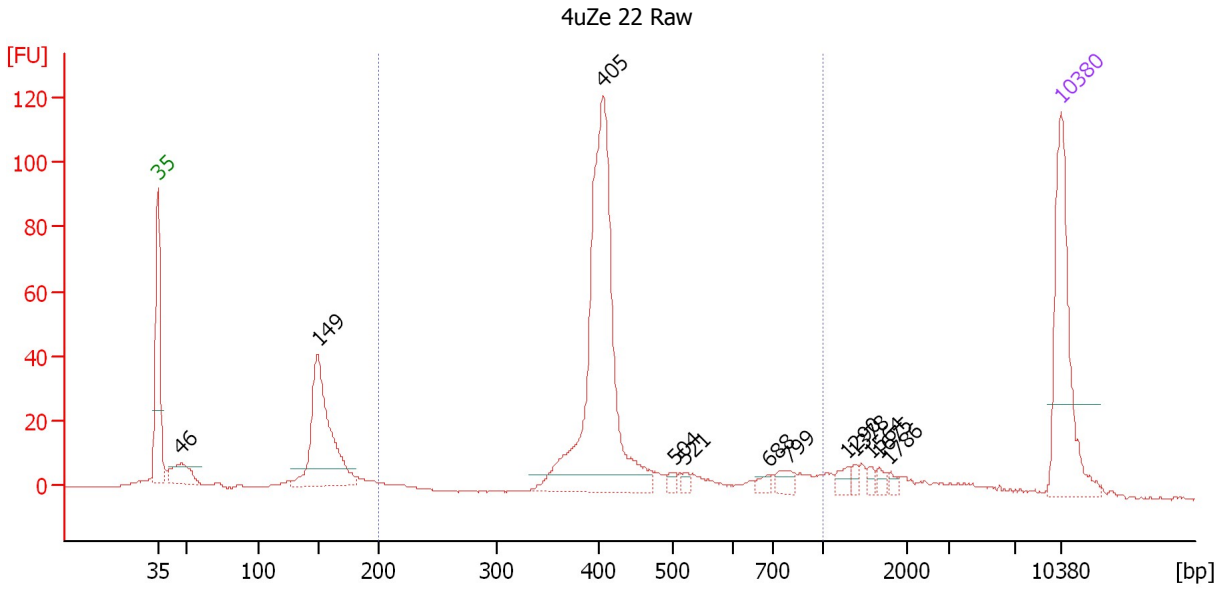
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	451	1,000	53.5	168.9	55	25.3	47.82



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 4uZe 22 Raw**

Number of peaks found: 12                      Corr. Area 1: 450.2  
 Noise: 0.3

**Peak table for sample 5 : 4uZe 22 Raw**

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	46	28.58	931.8		44.77
3	149	134.33	1,363.3		55.41
4	405	270.89	1,013.7		77.50
5	504	4.23	12.7		83.03
6	521	4.48	13.0		83.85
7	688	5.37	11.8		90.29
8	799	8.66	16.4		91.96
9	1,290	6.23	7.3		96.44
10	1,378	3.61	4.0		97.01
11	1,564	3.66	3.5		98.21
12	1,675	3.91	3.5		98.92
13	1,786	2.83	2.4		99.64
14	10,380	75.00	10.9	Upper Marker	113.00

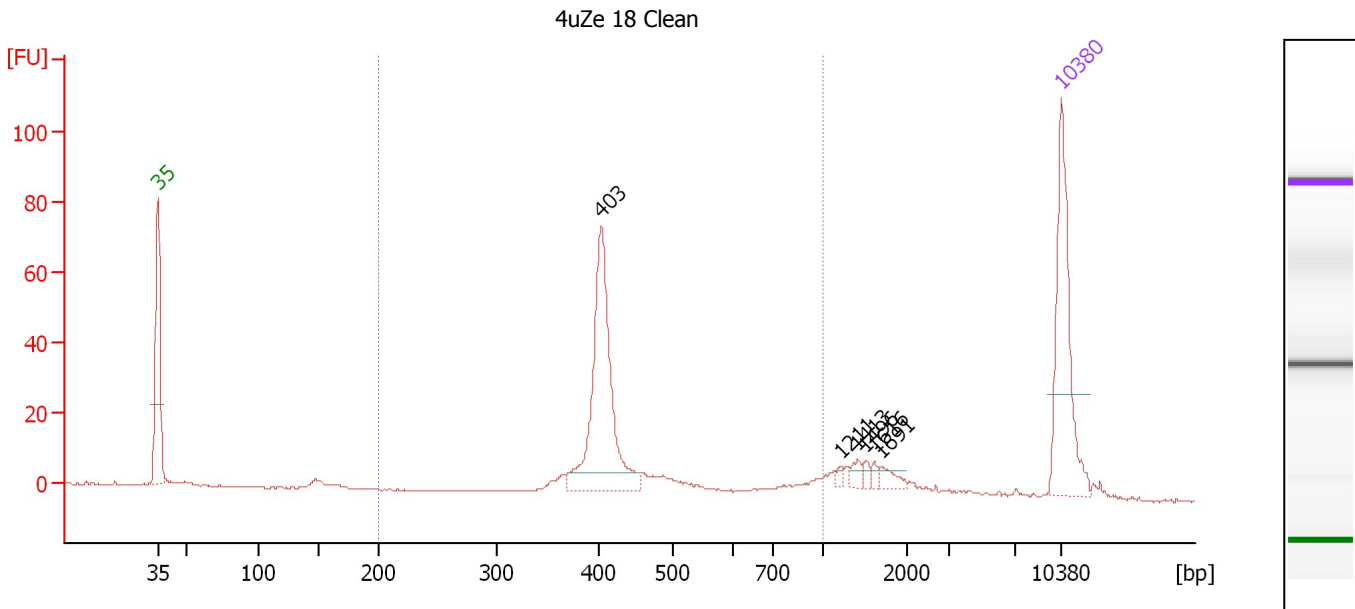
**Region table for sample 5 : 4uZe 22 Raw**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	454	1,000	450.2	1,233.4	61	29.0	341.26

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 4uZe 18 Clean**

Number of peaks found: 6                      Corr. Area 1: 216.0  
 Noise: 0.1

**Peak table for sample 6 : 4uZe 18 Clean**

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	403	154.48	581.3		77.37
3	1,211	2.73	3.4		95.94
4	1,413	5.28	5.7		97.24
5	1,496	3.44	3.5		97.77
6	1,616	3.19	3.0		98.55
7	1,691	6.87	6.2		99.03
8	10,380	75.00	10.9	Upper Marker	113.00

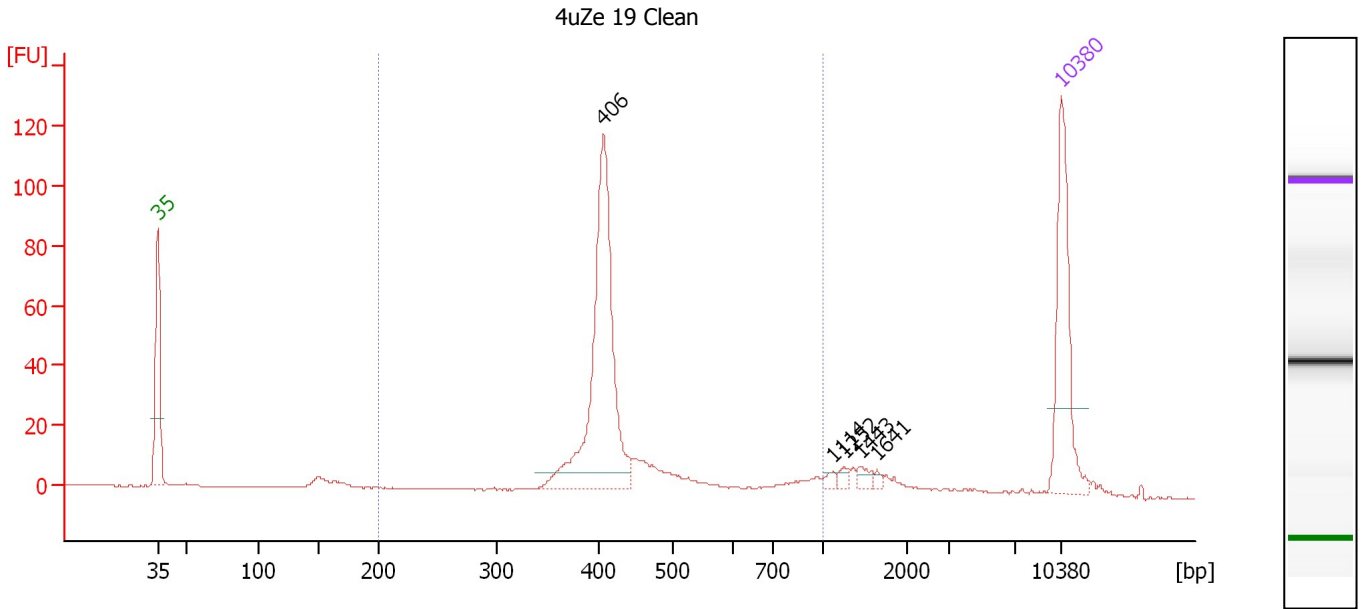
**Region table for sample 6 : 4uZe 18 Clean**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	454	1,000	216.0	710.2	72	28.3	200.59

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 4uZe 19 Clean**

Number of peaks found: 5                      Corr. Area 1: 366.4  
 Noise: 0.2

**Peak table for sample 7 : 4uZe 19 Clean**

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	406	224.72	839.7		77.53
3	1,114	3.39	4.6		95.32
4	1,252	4.40	5.3		96.20
5	1,443	5.83	6.1		97.43
6	1,641	2.42	2.2		98.71
7	10,380	75.00	10.9	Upper Marker	113.00

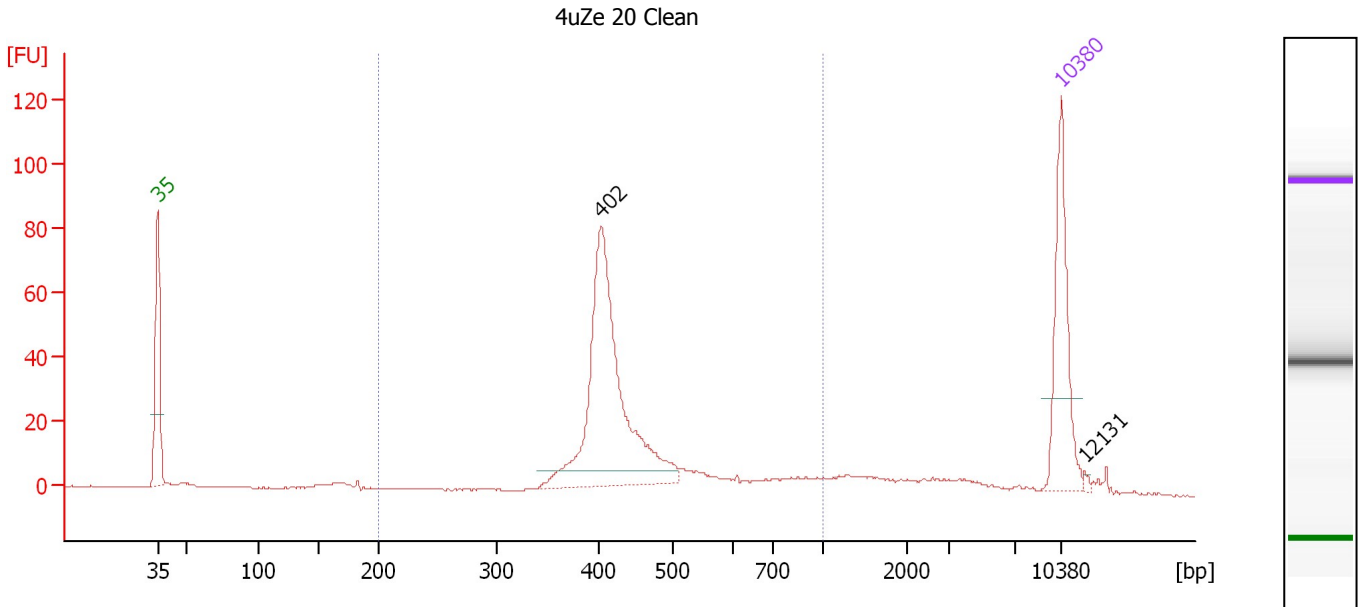
**Region table for sample 7 : 4uZe 19 Clean**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	447	1,000	366.4	1,072.9	79	26.4	299.93

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 4uZe 20 Clean**

Number of peaks found: 2                      Corr. Area 1: 397.1  
 Noise: 0.2

**Peak table for sample 8 : 4uZe 20 Clean**

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	402	272.49	1,025.8		77.36
3	10,380	75.00	10.9	Upper Marker	113.00
4	12,131	0.00	0.0		114.82

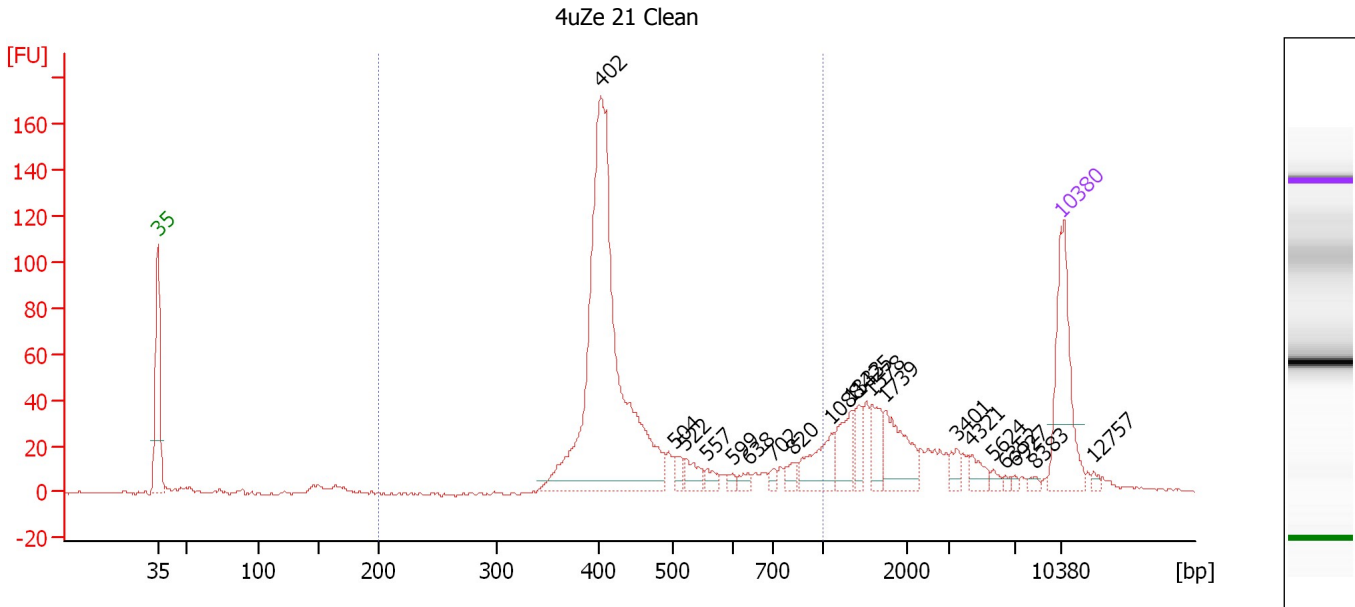
**Region table for sample 8 : 4uZe 20 Clean**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	463	1,000	397.1	1,245.7	77	26.7	357.02

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 4uZe 21 Clean**

Number of peaks found: 20                      Corr. Area 1: 811.2  
 Noise: 0.6

**Peak table for sample 9 : 4uZe 21 Clean**


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	402	474.09	1,787.0		77.33
3	504	10.74	32.3		83.06
4	522	15.75	45.7		83.89
5	557	8.81	24.0		85.52
6	599	4.46	11.3		87.50
7	638	6.59	15.6		88.73
8	702	5.46	11.8		90.70
9	820	8.77	16.2		92.23
10	1,088	35.18	49.0		95.14
11	1,333	30.36	34.5		96.72
12	1,425	15.48	16.5		97.31
13	1,578	21.69	20.8		98.30
14	1,739	43.00	37.5		99.34
15	3,401	9.13	4.1		104.86
16	4,321	10.82	3.8		106.04
17	5,624	4.03	1.1		107.72
18	6,352	2.23	0.5		108.66
19	6,927	2.19	0.5		109.40
20	8,383	2.97	0.5		110.93
21	10,380	75.00	10.9	Upper Marker	113.00
22	12,757	0.00	0.0		115.47

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**

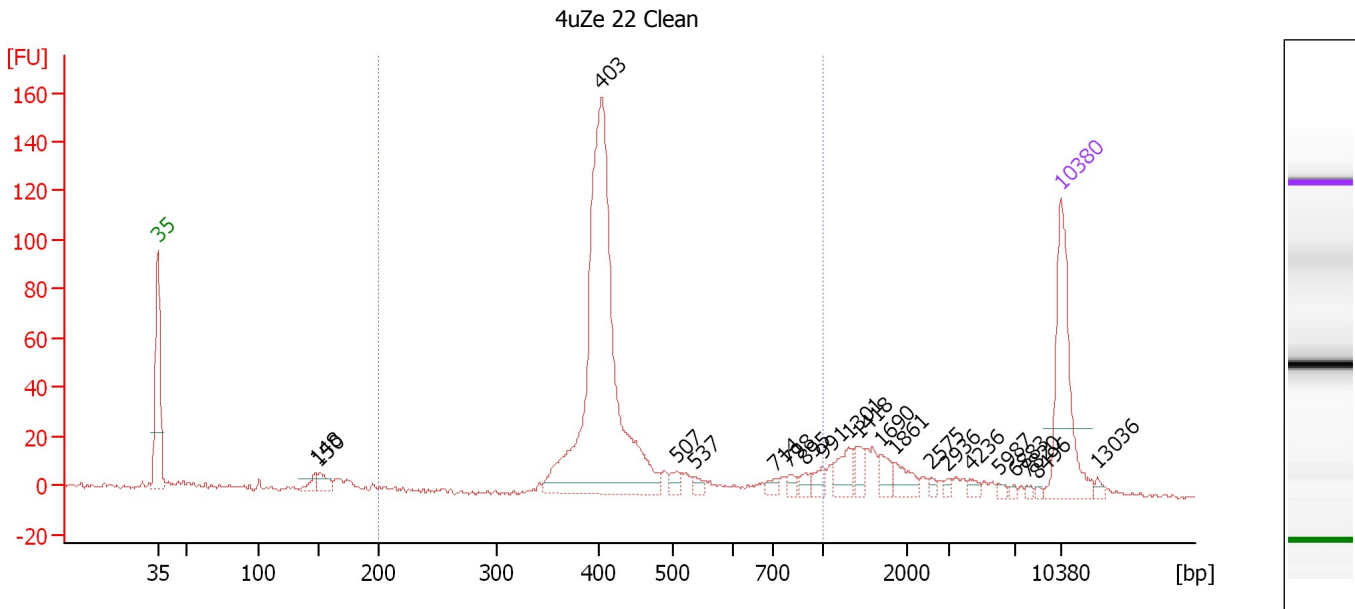
... Region table for sample 9 : 4uZe 21 Clean

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	481	1,000	811.2	2,182.3	 62	30.6	637.69

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
 Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 4uZe 22 Clean**

Number of peaks found: 21                      Corr. Area 1: 578.2  
 Noise: 0.4

**Peak table for sample 10 : 4uZe 22 Clean**


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	148	9.03	92.6		55.28
3	150	13.01	131.4		55.48
4	403	395.68	1,488.8		77.37
5	507	7.71	23.0		83.19
6	537	6.34	17.9		84.59
7	714	5.71	12.1		90.85
8	798	4.87	9.2		91.95
9	895	5.92	10.0		93.21
10	991	8.81	13.5		94.46
11	1,301	16.25	18.9		96.51
12	1,418	9.69	10.4		97.27
13	1,690	10.73	9.6		99.02
14	1,861	12.69	10.3		100.12
15	2,575	3.21	1.9		102.93
16	2,936	2.68	1.4		104.13
17	4,236	3.89	1.4		105.93
18	5,987	2.22	0.6		108.19
19	6,883	1.96	0.4		109.34
20	7,820	1.65	0.3		110.34
21	8,496	1.52	0.3		111.05
22	10,380	75.00	10.9	Upper Marker	113.00
23	13,036	0.00	0.0		115.76

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
Modified: 9/3/2015 11:02:05 AM

**Electropherogram Summary Continued ...**

... Region table for sample 10 : 4uZe 22 Clean

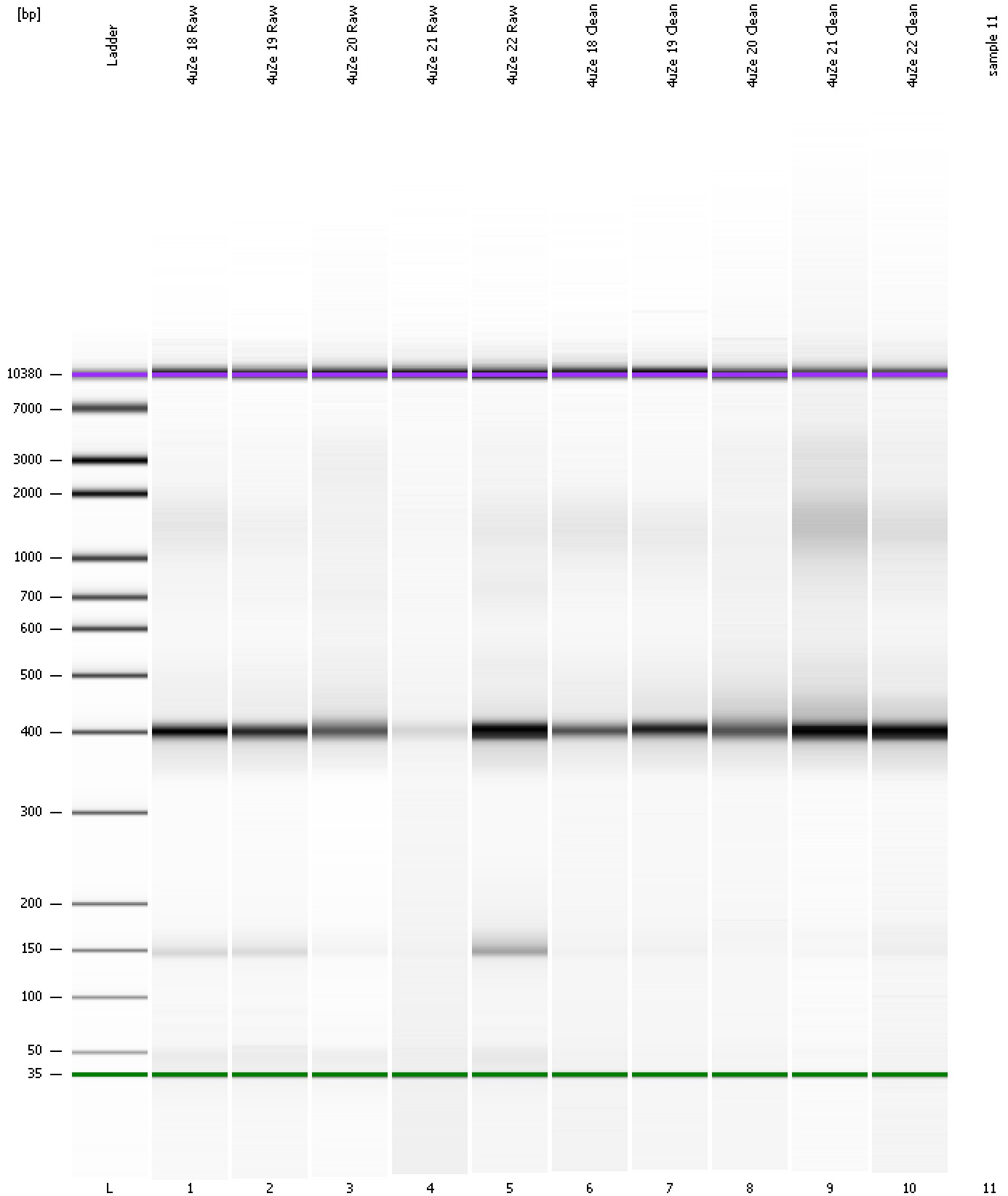
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	450	1,000	578.2	1,607.9	 73	27.7	450.66



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
Modified: 9/3/2015 11:02:05 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-03\2015-09-03\_001.xad

Created: 9/3/2015 10:23:21 AM  
Modified: 9/3/2015 11:02:05 AM

**Invalid Samples**

Sample 11 has not been run, no results available.