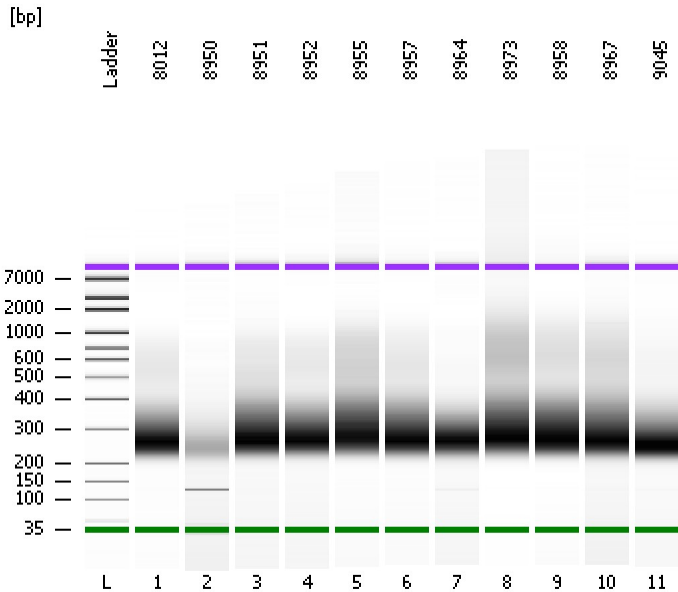


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

Created: 3/11/2019 11:26:57 AM  
Modified: 3/11/2019 12:07:26 PM

### Electrophoresis File Run Summary



#### Instrument Information:

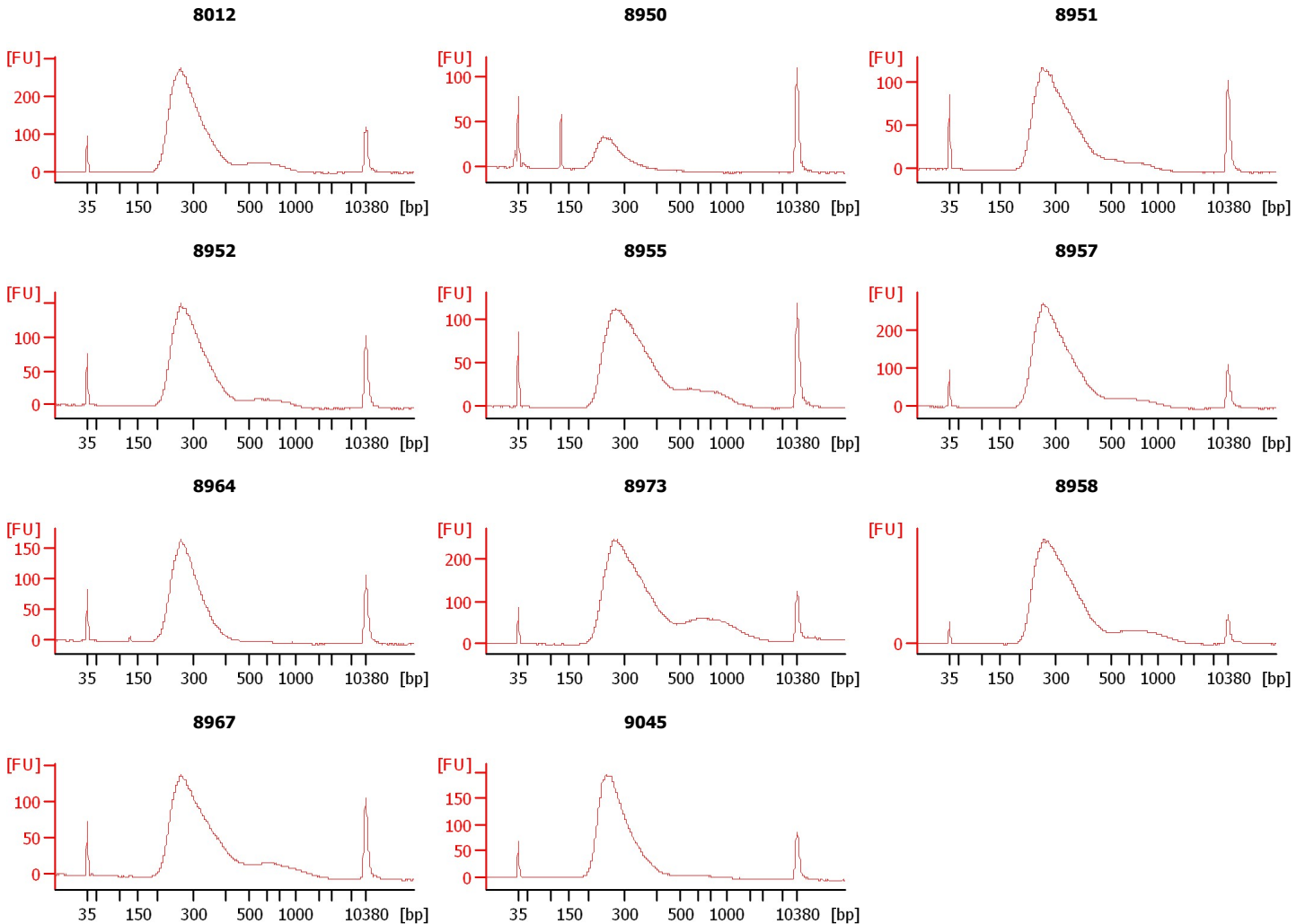
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

#### 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\2019-03-11\2019-03-11\_003.xad

Created: 3/11/2019 11:26:57 AM  
 Modified: 3/11/2019 12:07:26 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
8012		<input type="checkbox"/>	✓			
8950		<input type="checkbox"/>	✓			
8951		<input type="checkbox"/>	✓			
8952		<input type="checkbox"/>	✓			
8955		<input type="checkbox"/>	✓			
8957		<input type="checkbox"/>	✓			
8964		<input type="checkbox"/>	✓			
8973		<input type="checkbox"/>	✓			
8958		<input type="checkbox"/>	✓			
8967		<input type="checkbox"/>	✓			
9045		<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\2019-03-11\2019-03-11\_003.xad

Created: 3/11/2019 11:26:57 AM  
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**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

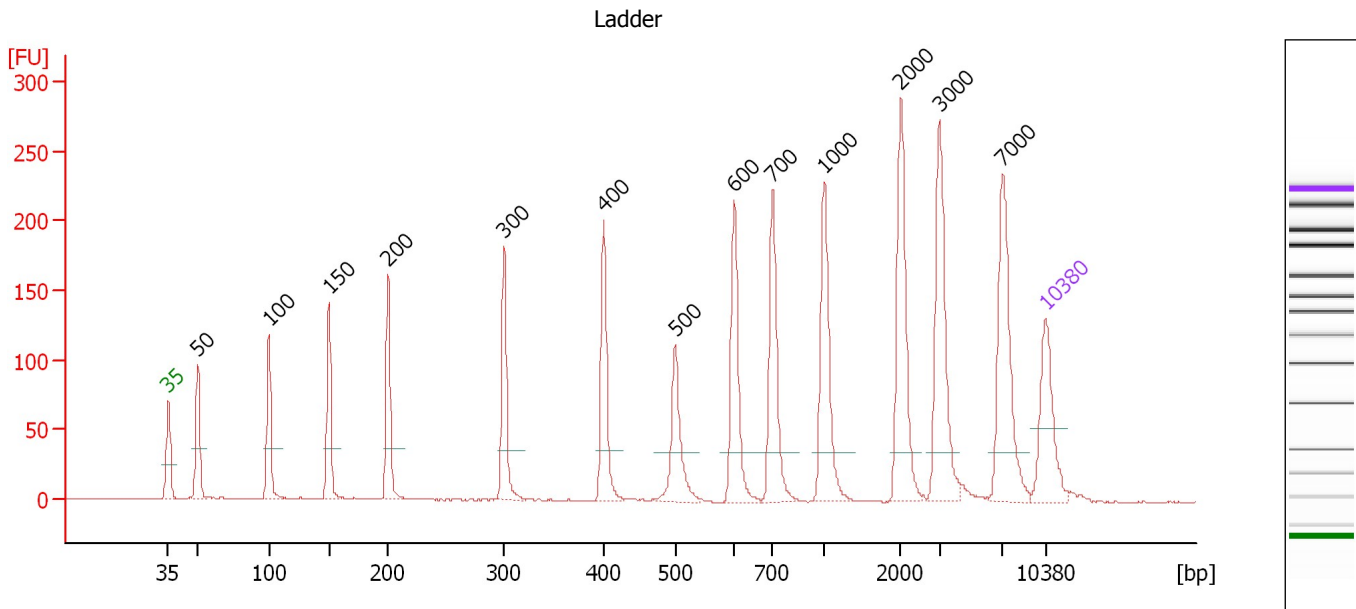
**Ladder**

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\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.4

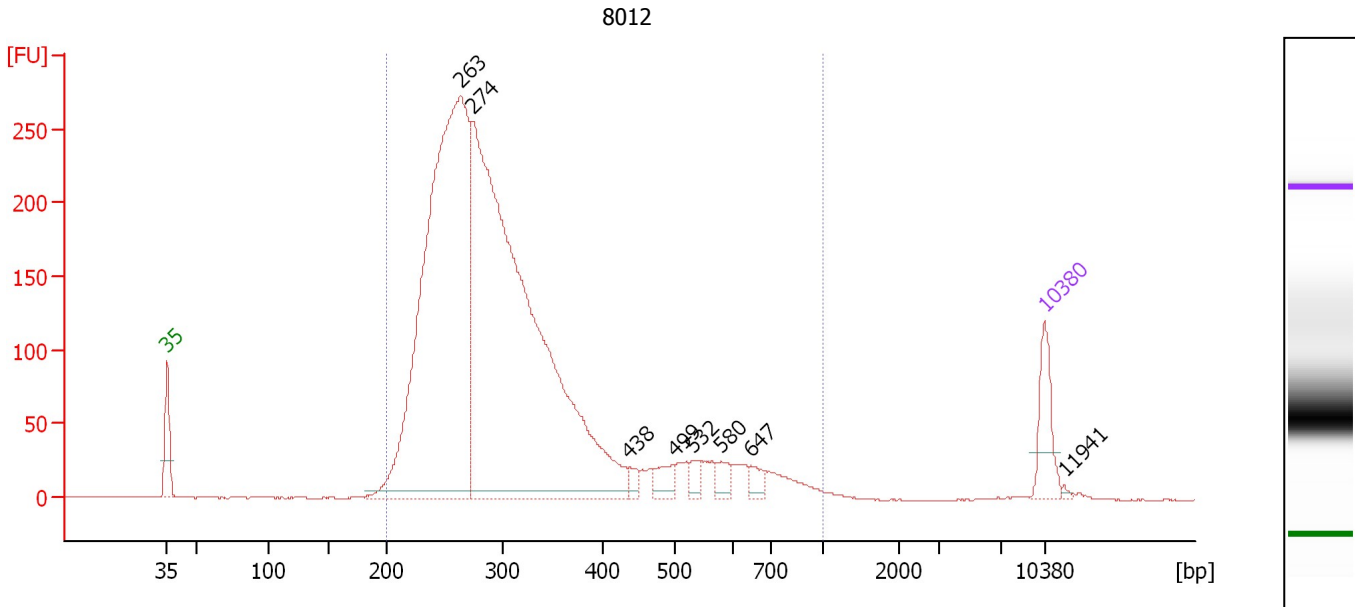
**Peak table for Ladder**

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	51.02
4	150	150.00	1,515.2	Ladder Peak	55.81
5	200	150.00	1,136.4	Ladder Peak	60.55
6	300	150.00	757.6	Ladder Peak	69.80
7	400	150.00	568.2	Ladder Peak	77.73
8	500	150.00	454.5	Ladder Peak	83.47
9	600	150.00	378.8	Ladder Peak	88.16
10	700	150.00	324.7	Ladder Peak	91.22
11	1,000	150.00	227.3	Ladder Peak	95.36
12	2,000	150.00	113.6	Ladder Peak	101.47
13	3,000	150.00	75.8	Ladder Peak	104.52
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\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 8012**

Number of peaks found: 8                      Corr. Area 1: 4,195.5  
 Noise: 0.4

**Peak table for sample 1 : 8012**

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	263	1,832.67	10,548.8		66.40
3	274	2,242.23	12,409.5		67.37
4	438	19.75	68.3		79.90
5	499	41.57	126.1		83.43
6	532	23.92	68.1		84.96
7	580	29.29	76.5		87.24
8	647	26.87	62.9		89.60
9	10,380	75.00	10.9	Upper Marker	113.00
10	11,941	0.00	0.0		114.58

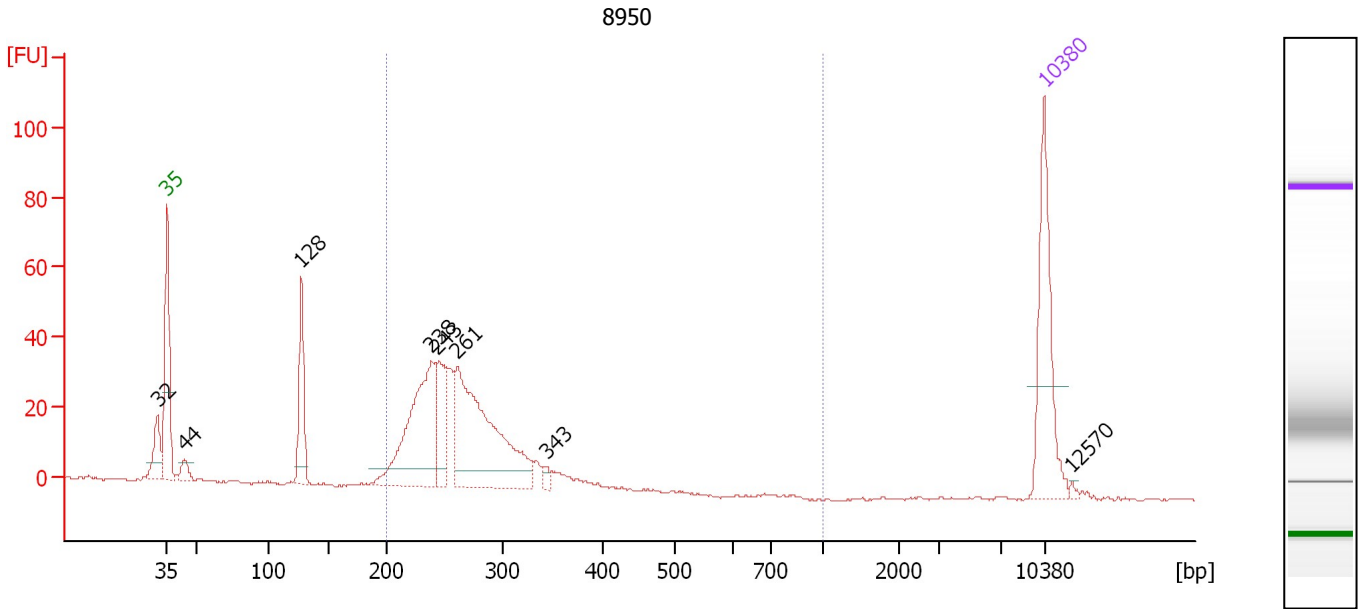
**Region table for sample 1 : 8012**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	320	4,208.92	4,195.5	21,982.7	99	35.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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 Modified: 3/11/2019 12:07:26 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 8950**

Number of peaks found: 8                      Corr. Area 1: 413.0  
 Noise: 0.4

**Peak table for sample 2 : 8950**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.22
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	14.33	496.0		44.38
4	128	66.99	792.6		53.71
5	238	159.69	1,015.4		64.09
6	243	57.72	360.2		64.50
7	261	211.58	1,229.5		66.16
8	343	5.84	25.8		73.22
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,570	0.00	0.0		115.21

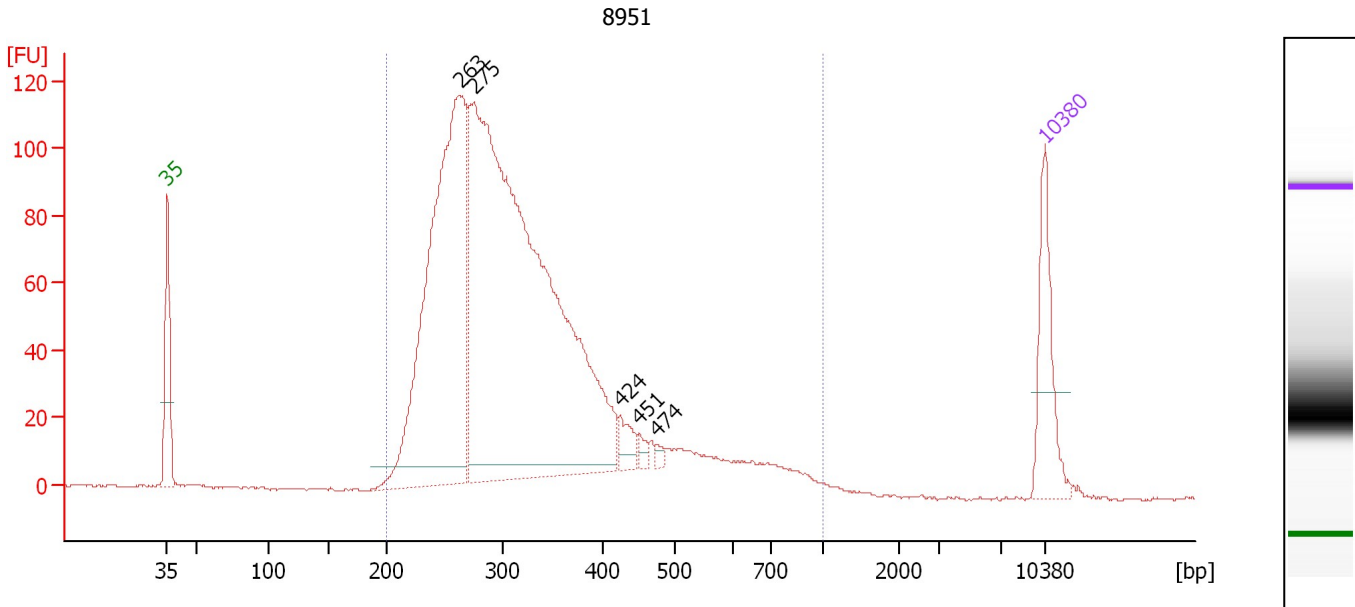
**Region table for sample 2 : 8950**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	265	467.84	413.0	2,717.2	80	14.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 8951**

Number of peaks found: 5                      Corr. Area 1: 2,026.6  
 Noise: 0.3

**Peak table for sample 3 : 8951**

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	263	703.52	4,051.9		66.38
3	275	1,311.19	7,230.4		67.46
4	424	24.39	87.1		79.13
5	451	8.86	29.8		80.63
6	474	5.65	18.0		82.00
7	10,380	75.00	10.9	Upper Marker	113.00

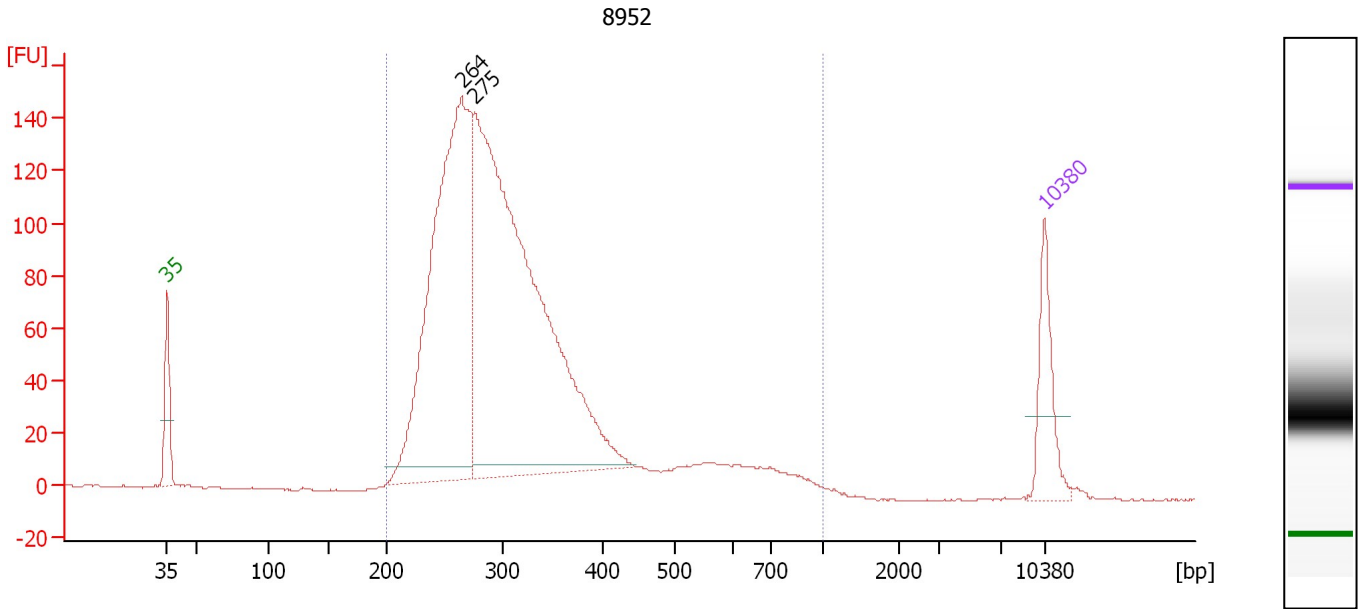
**Region table for sample 3 : 8951**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	331	2,177.40	2,026.6	10,970.2	100	32.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 8952**

Number of peaks found: 2                      Corr. Area 1: 2,246.9  
 Noise: 0.4

**Peak table for sample 4 : 8952**

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	264	895.33	5,132.7		66.49
3	275	1,287.09	7,085.6		67.50
4	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : 8952**

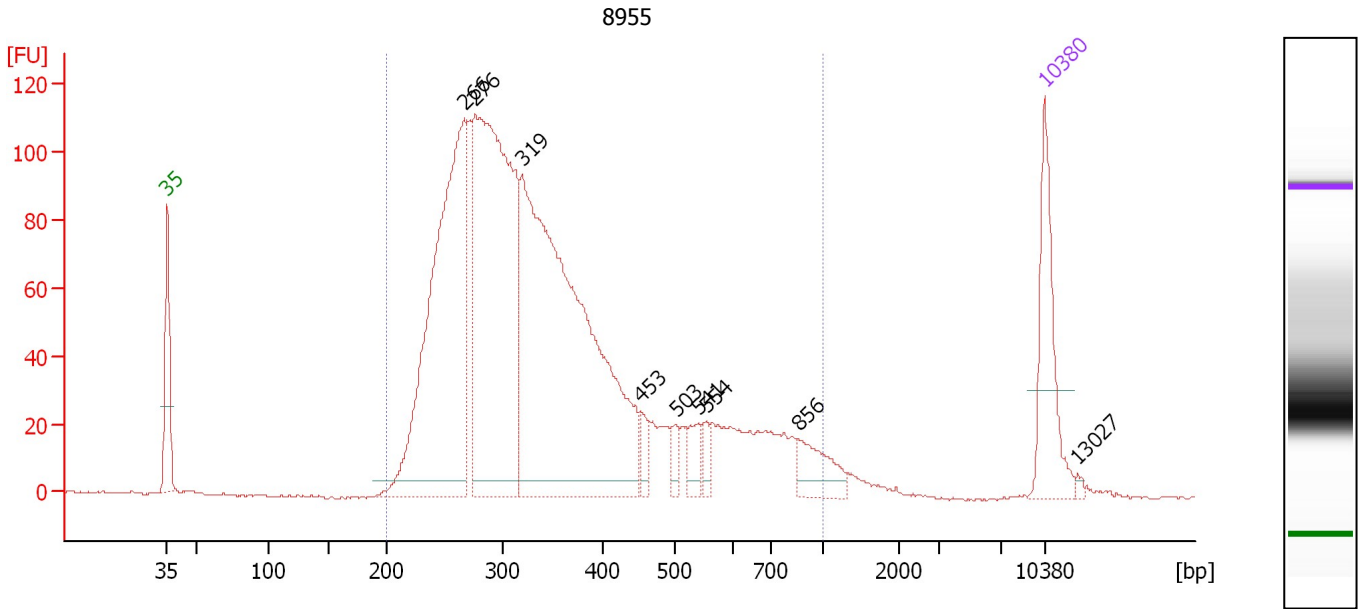
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	321	2,375.63	2,246.9	12,209.3	100	32.8



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 8955**

Number of peaks found: 9                      Corr. Area 1: 2,220.4  
 Noise: 0.3

**Peak table for sample 5 : 8955**

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	266	520.17	2,957.4		66.70
3	276	583.82	3,209.6		67.54
4	319	721.73	3,427.5		71.31
5	453	18.64	62.3		80.78
6	503	14.71	44.3		83.60
7	541	22.98	64.4		85.39
8	554	13.14	36.0		85.98
9	856	40.37	71.5		93.37
10	10,380	75.00	10.9	Upper Marker	113.00
11	13,027	0.00	0.0		115.68

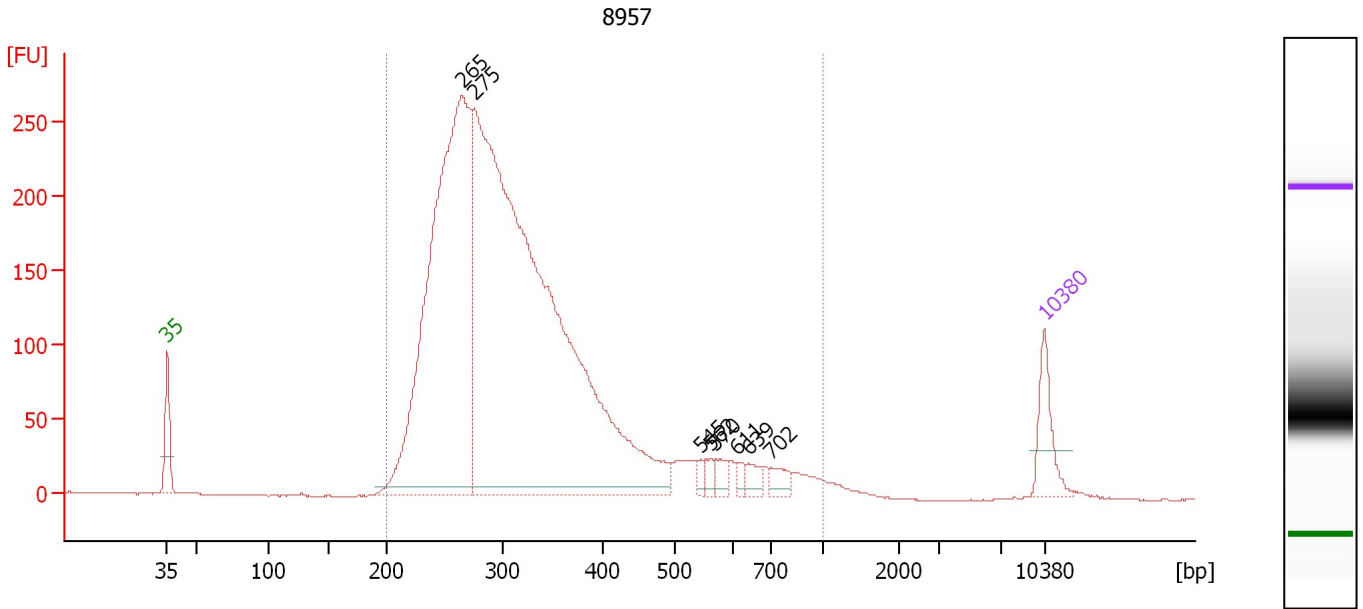
**Region table for sample 5 : 8955**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	364	2,025.11	2,220.4	9,653.9	98	38.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 8957**

Number of peaks found: 8                      Corr. Area 1: 4,390.5  
 Noise: 0.4

**Peak table for sample 6 : 8957**

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	265	1,633.10	9,346.0		66.54
3	275	2,880.03	15,858.0		67.50
4	545	17.59	49.0		85.56
5	562	16.20	43.7		86.37
6	570	25.56	67.9		86.78
7	611	14.01	34.7		88.50
8	639	27.19	64.5		89.36
9	702	29.16	63.0		91.24
10	10,380	75.00	10.9	Upper Marker	113.00

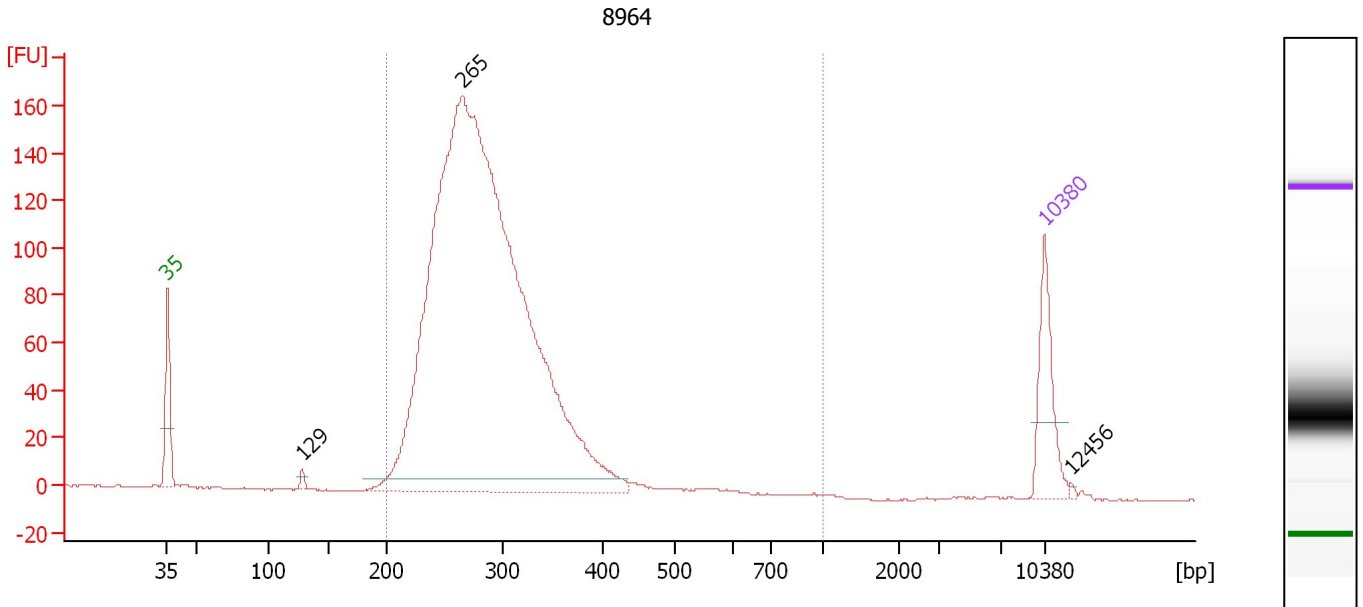
**Region table for sample 6 : 8957**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	331	4,488.36	4,390.5	22,686.9	99	34.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 8964**

Number of peaks found: 3                      Corr. Area 1: 2,037.5  
 Noise: 0.3

**Peak table for sample 7 : 8964**

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	129	8.36	98.5		53.75
3	265	2,247.06	12,849.6		66.56
4	10,380	75.00	10.9	Upper Marker	113.00
5	12,456	0.00	0.0		115.10

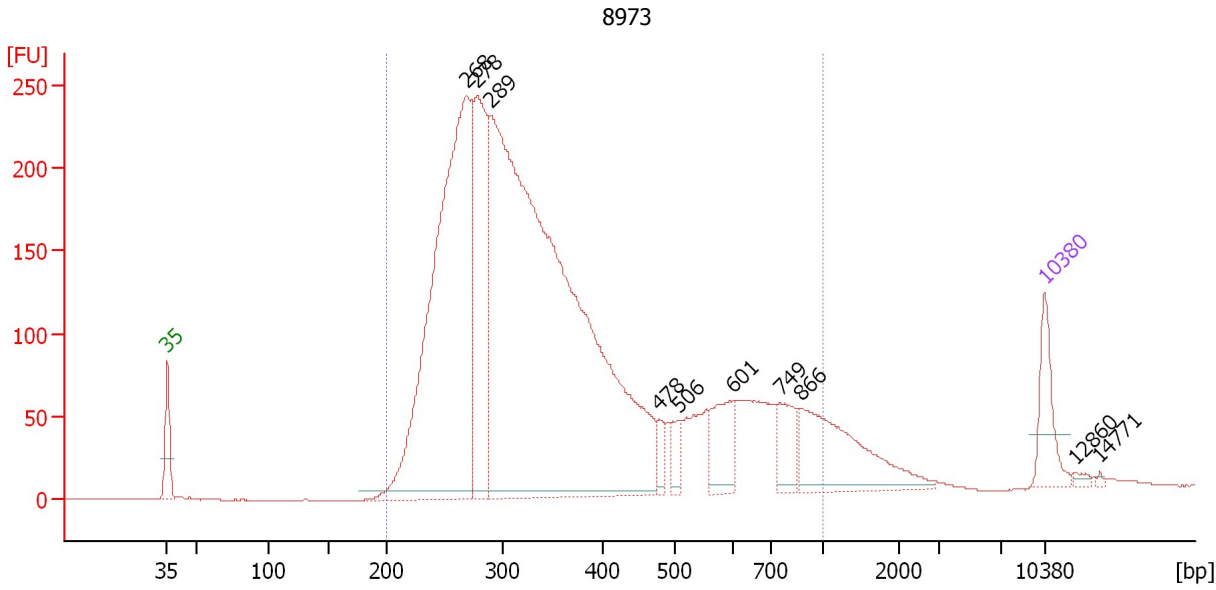
**Region table for sample 7 : 8964**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	286	2,132.58	2,037.5	11,565.4	99	15.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 8973**

Number of peaks found: 10                      Corr. Area 1: 4,752.0  
 Noise: 0.3

**Peak table for sample 8 : 8973**

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	268	1,320.49	7,454.4		66.87
3	278	500.24	2,726.5		67.76
4	289	2,565.16	13,435.0		68.81
5	478	33.22	105.2		82.23
6	506	39.84	119.3		83.75
7	601	105.08	265.0		88.19
8	749	78.12	158.0		91.90
9	866	242.93	424.9		93.51
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,860	0.00	0.0		115.51
12	14,771	0.00	0.0		117.44

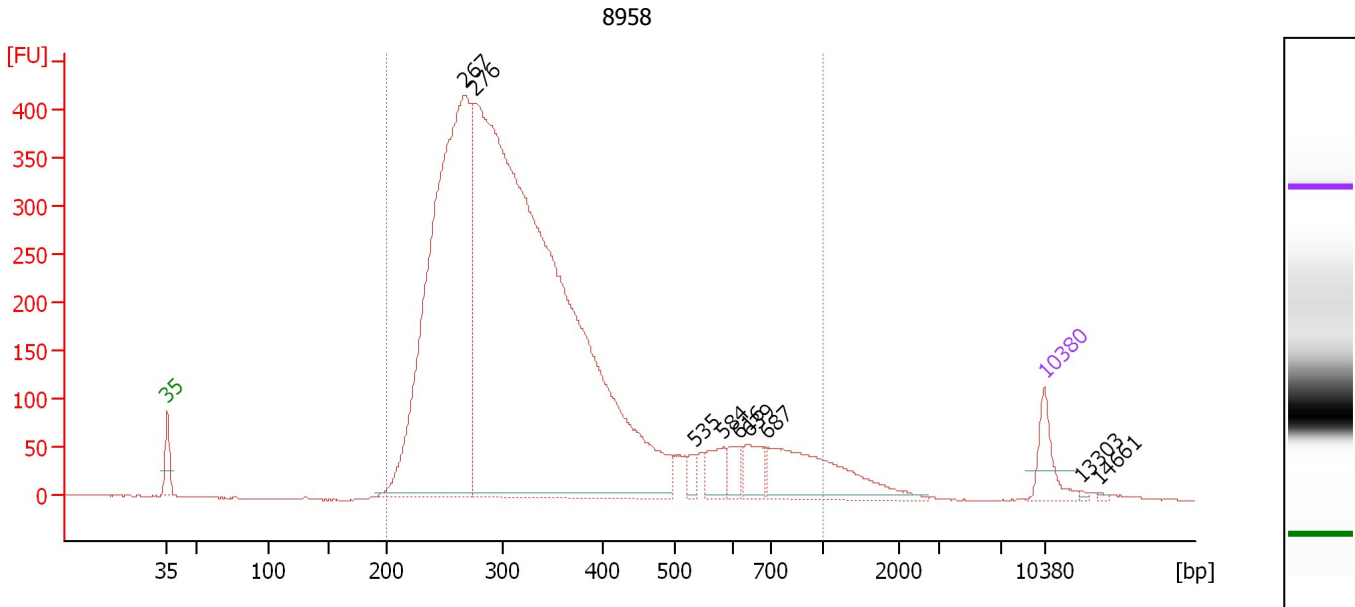
**Region table for sample 8 : 8973**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	379	4,677.10	4,752.0	21,983.8	95	41.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 8958**

Number of peaks found: 9                      Corr. Area 1: 7,547.8  
 Noise: 0.5

**Peak table for sample 9 : 8958**

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	267	2,230.66	12,652.4		66.76
3	276	4,551.92	24,965.3		67.60
4	535	37.24	105.4		85.13
5	584	73.53	190.9		87.40
6	616	48.09	118.2		88.66
7	639	77.59	184.0		89.35
8	687	329.59	726.6		90.83
9	10,380	75.00	10.9	Upper Marker	113.00
10	13,303	0.00	0.0		115.96
11	14,661	0.00	0.0		117.33

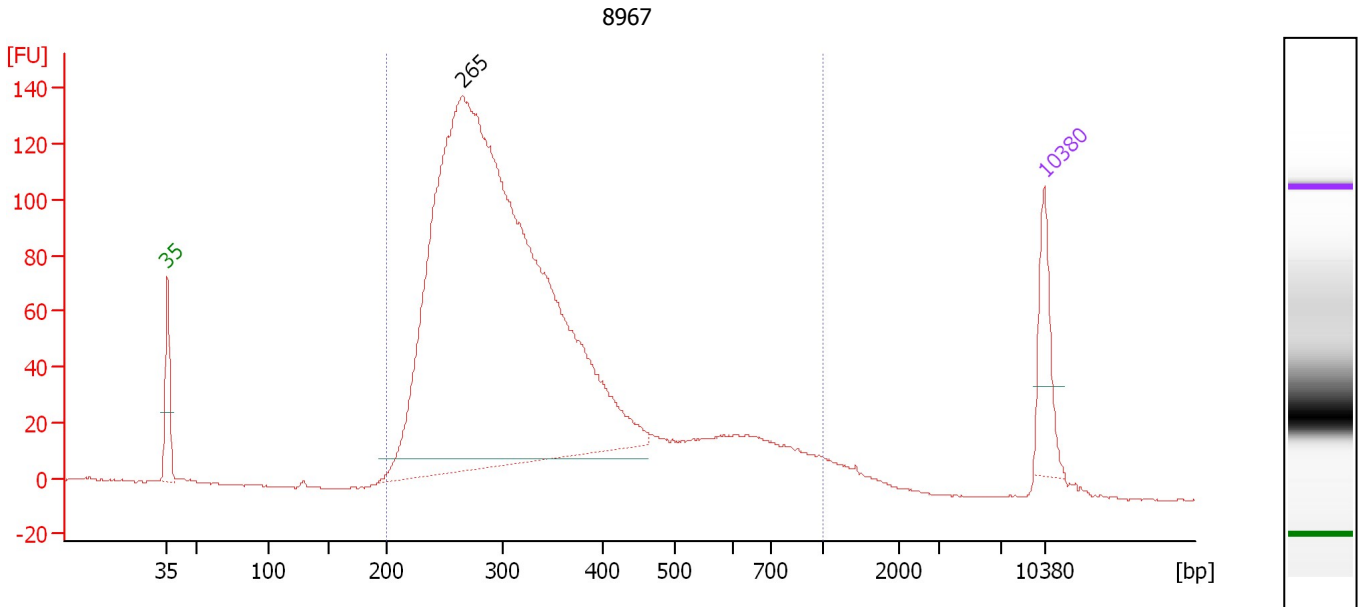
**Region table for sample 9 : 8958**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	348	6,738.98	7,547.8	33,181.9	98	38.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 8967**

Number of peaks found: 1                      Corr. Area 1: 2,403.1  
 Noise: 0.4

**Peak table for sample 10 : 8967**

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	265	2,576.03	14,748.2		66.53
3	10,380	75.00	10.9	Upper Marker	113.00

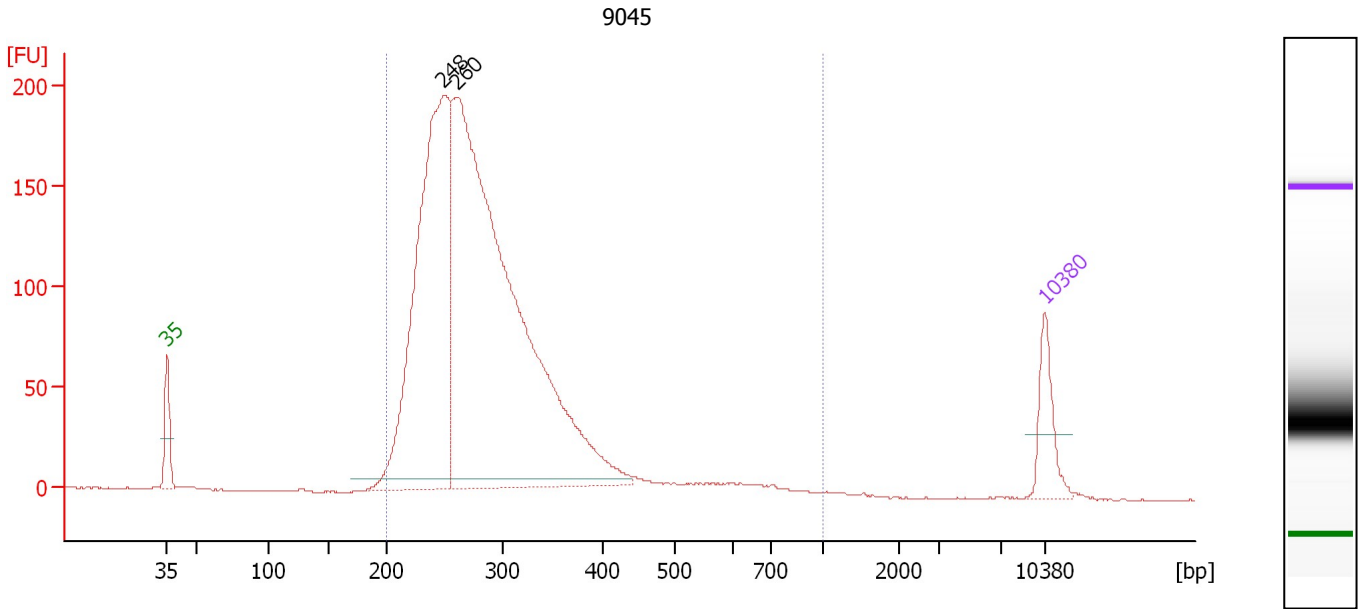
**Region table for sample 10 : 8967**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	348	2,937.08	2,403.1	14,542.6	98	38.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 9045**

Number of peaks found: 2                      Corr. Area 1: 2,637.8  
 Noise: 0.2

**Peak table for sample 11 : 9045**

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	248	1,175.64	7,174.9		65.01
3	260	2,073.24	12,095.7		66.07
4	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : 9045**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	290	3,209.79	2,637.8	17,646.0	99	25.6

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Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-03-11\2019-03-11\_003.xad

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**Gel Image**