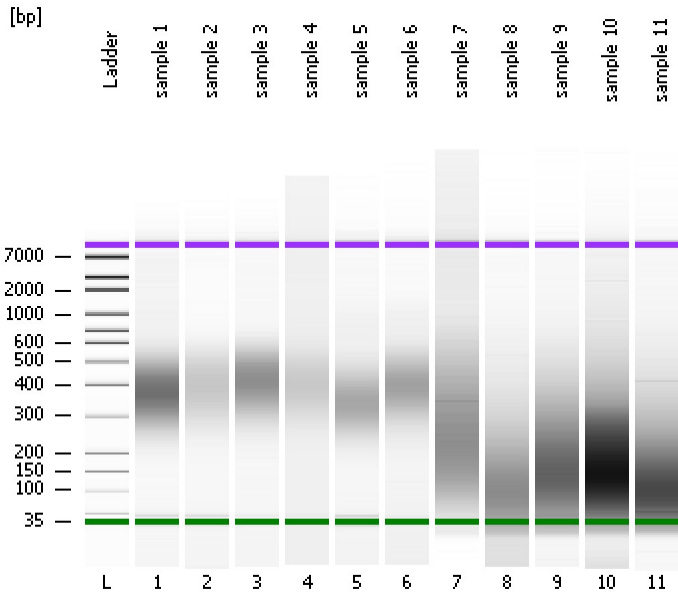


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

Created: 2/23/2018 10:31:23 AM  
Modified: 2/23/2018 11:12:43 AM

### Electrophoresis File Run Summary



#### Instrument Information:

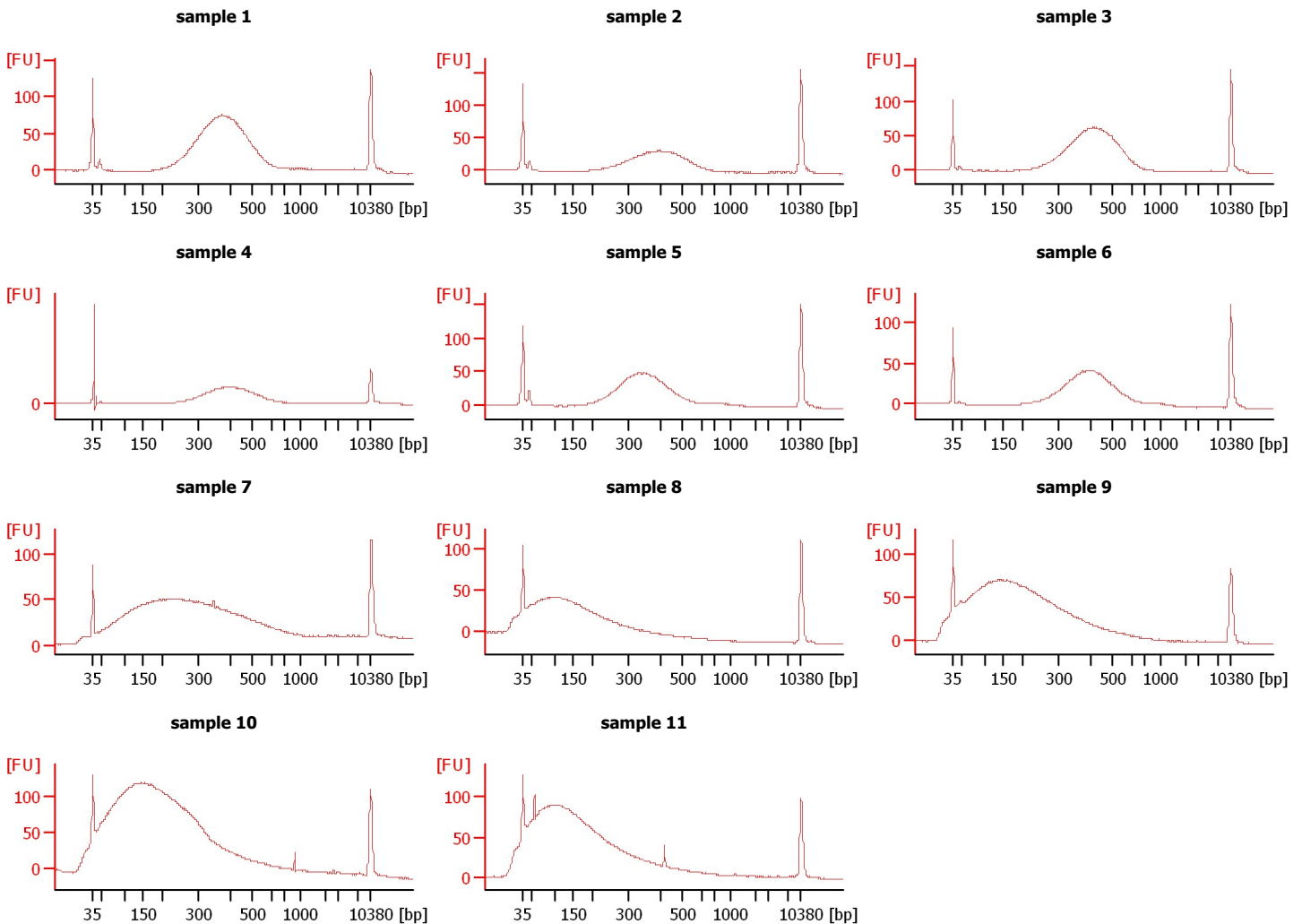
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

#### 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\2018-02-23\2018-02-23\_001.xad

Created: 2/23/2018 10:31:23 AM  
 Modified: 2/23/2018 11:12:43 AM

**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 #**

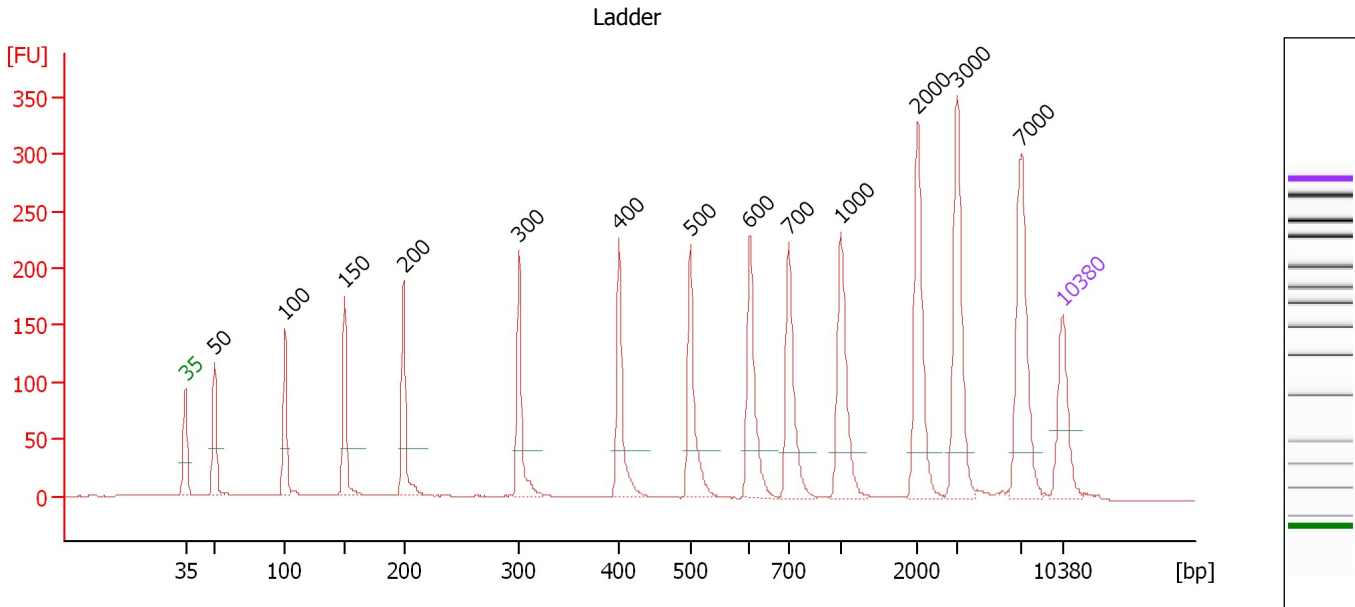
**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

Created: 2/23/2018 10:31:23 AM  
 Modified: 2/23/2018 11:12:43 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

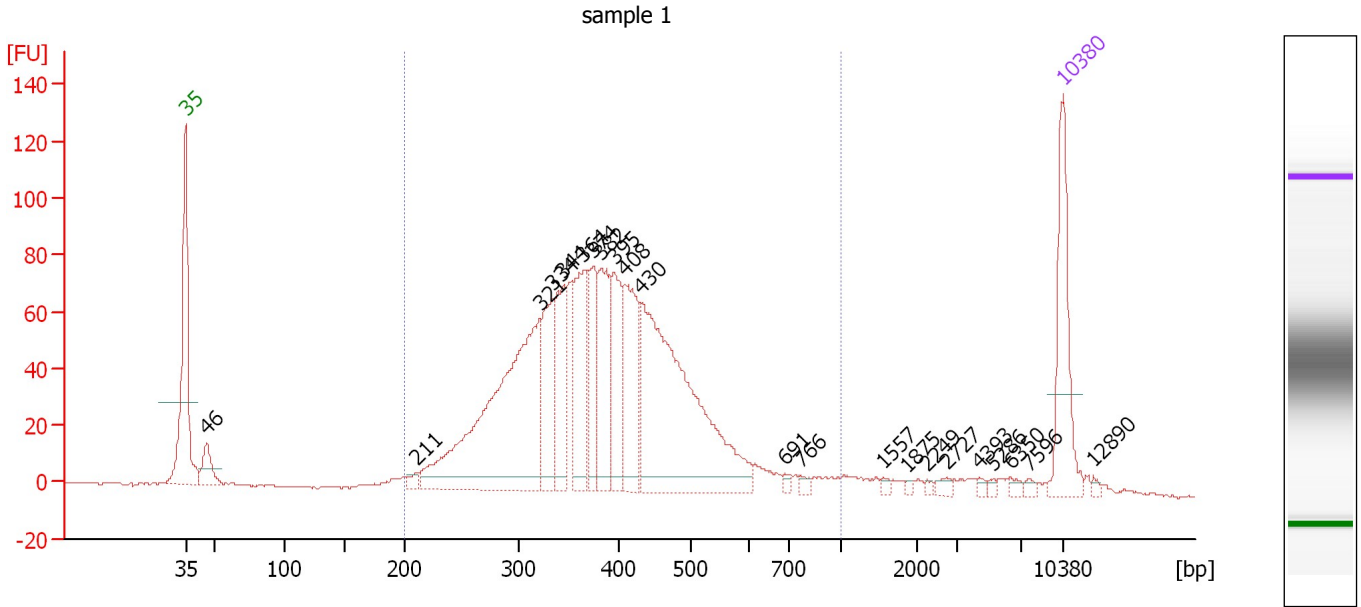
**Peak table for Ladder**

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	45.32
3	100	150.00	2,272.7	Ladder Peak	50.96
4	150	150.00	1,515.2	Ladder Peak	55.69
5	200	150.00	1,136.4	Ladder Peak	60.41
6	300	150.00	757.6	Ladder Peak	69.60
7	400	150.00	568.2	Ladder Peak	77.61
8	500	150.00	454.5	Ladder Peak	83.29
9	600	150.00	378.8	Ladder Peak	88.02
10	700	150.00	324.7	Ladder Peak	91.13
11	1,000	150.00	227.3	Ladder Peak	95.28
12	2,000	150.00	113.6	Ladder Peak	101.41
13	3,000	150.00	75.8	Ladder Peak	104.56
14	7,000	150.00	32.5	Ladder Peak	109.72
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 22                      Corr. Area 1: 1,656.2  
 Noise: 0.3

**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	46	34.48	1,138.3		44.68
3	211	8.81	63.4		61.39
4	321	370.61	1,750.4		71.27
5	334	88.37	400.8		72.33
6	344	77.94	343.2		73.13
7	364	100.77	419.5		74.72
8	374	68.66	278.2		75.52
9	382	90.25	358.3		76.14
10	395	81.42	312.3		77.20
11	408	102.44	380.7		78.04
12	430	339.41	1,195.2		79.33
13	691	3.87	8.5		90.85
14	766	4.67	9.2		92.04
15	1,557	3.12	3.0		98.69
16	1,875	2.30	1.9		100.64
17	2,249	2.18	1.5		102.19
18	2,727	4.81	2.7		103.70
19	4,393	2.56	0.9		106.35
20	5,286	2.50	0.7		107.51
21	6,350	3.93	0.9		108.88
22	7,596	3.18	0.6		110.30
23	10,380	75.00	10.9	Upper Marker	113.00
24	12,890	0.00	0.0		115.44


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

Created: 2/23/2018 10:31:23 AM  
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**Electropherogram Summary Continued ...**

... Region table for sample 1 :

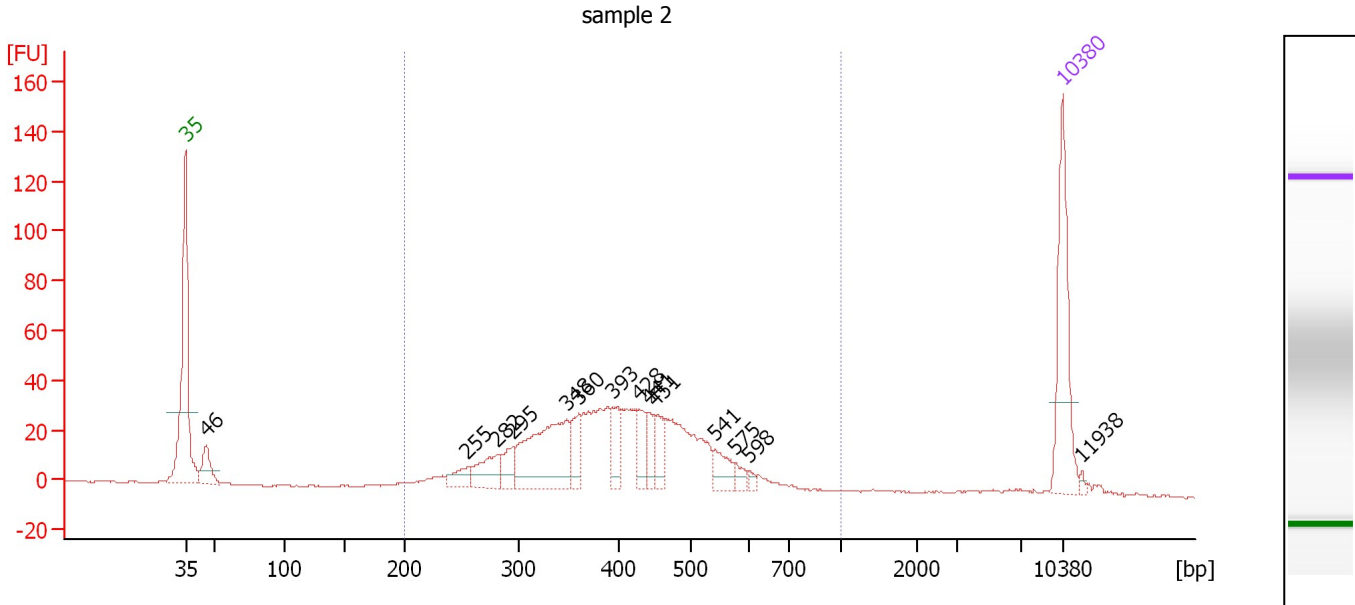
sample 1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	395	1,656.2	1,419.21	5,919.6	 93	26.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 14                      Corr. Area 1: 743.3  
 Noise: 0.3

**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	46	34.91	1,158.7		44.65
3	255	19.28	114.4		65.50
4	282	35.60	191.6		67.90
5	295	23.14	119.0		69.11
6	348	120.62	525.6		73.42
7	360	30.18	127.0		74.40
8	393	28.59	110.3		77.02
9	428	23.64	83.7		79.20
10	441	19.74	67.9		79.91
11	451	25.45	85.5		80.49
12	541	21.59	60.4		85.25
13	575	7.97	21.0		86.85
14	598	4.18	10.6		87.92
15	10,380	75.00	10.9	Upper Marker	113.00
16	11,938	0.00	0.0		114.51

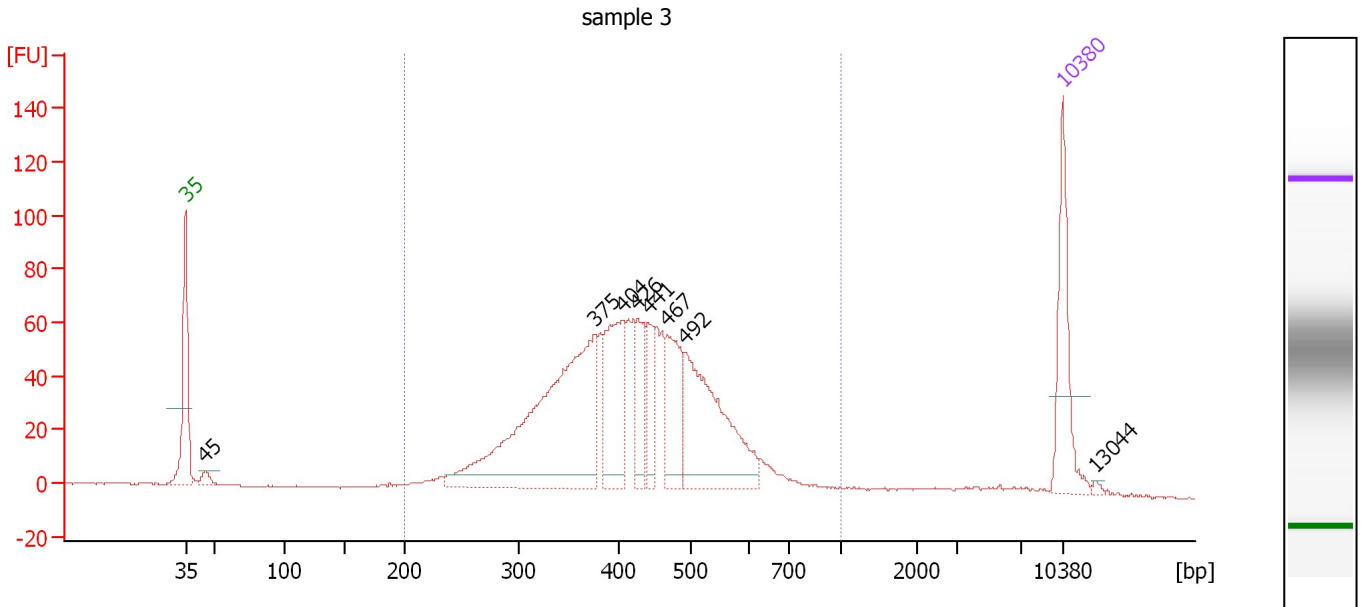
**Region table for sample 2 : sample 2**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	409	743.3	621.00	2,506.2	91	25.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 8                      Corr. Area 1: 1,308.1  
 Noise: 0.3

**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	45	13.18	441.2		44.59
3	375	410.98	1,659.8		75.62
4	404	125.70	471.3		77.84
5	426	59.84	213.0		79.07
6	441	45.20	155.4		79.93
7	467	90.15	292.4		81.43
8	492	202.63	624.2		82.83
9	10,380	75.00	10.9	Upper Marker	113.00
10	13,044	0.00	0.0		115.59

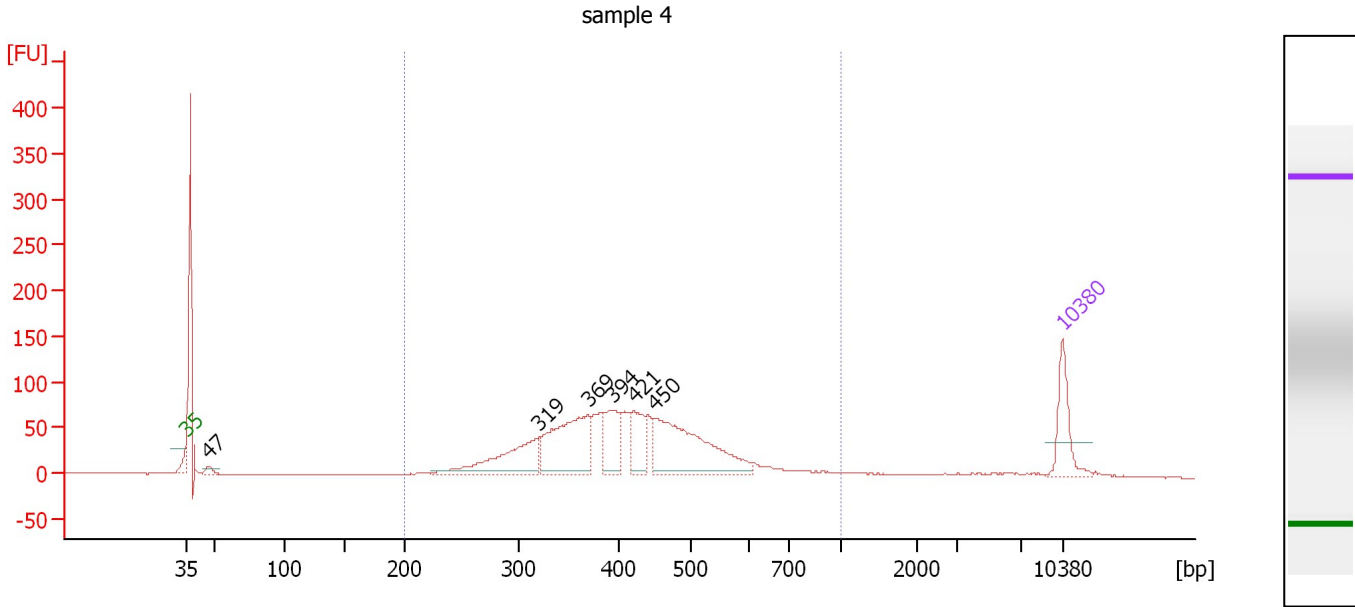
**Region table for sample 3 : sample 3**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	426	1,308.1	1,209.99	4,655.1	94	24.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 6                      Corr. Area 1: 1,460.9  
 Noise: 0.3

**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	47	16.73	536.7		44.89
3	319	188.19	892.9		71.15
4	369	258.33	1,061.0		75.12
5	394	107.73	414.6		77.10
6	421	81.37	292.8		78.81
7	450	307.14	1,035.3		80.42
8	10,380	75.00	10.9	Upper Marker	113.00

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

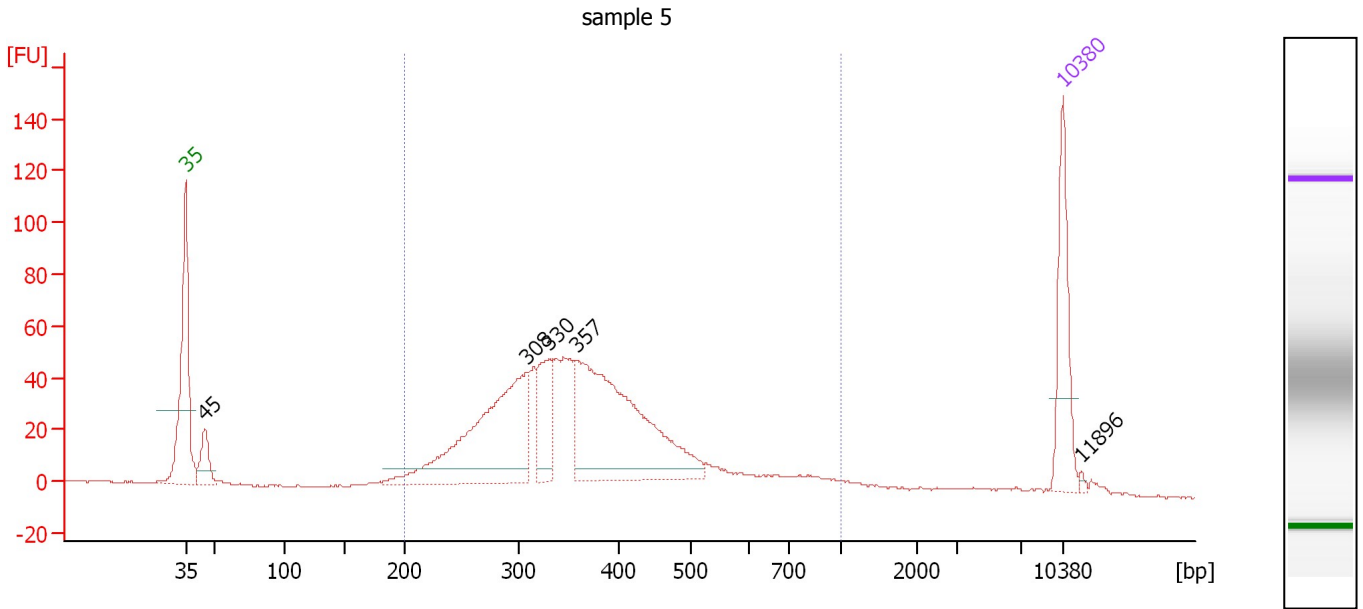
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	422	1,460.9	1,215.12	4,741.4	80	26.1



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 5                      Corr. Area 1: 1,093.3  
 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	45	48.94	1,653.9		44.52
3	308	295.37	1,454.7		70.21
4	330	75.53	347.2		71.97
5	357	341.22	1,448.7		74.15
6	10,380	75.00	10.9	Upper Marker	113.00
7	11,896	0.00	0.0		114.47

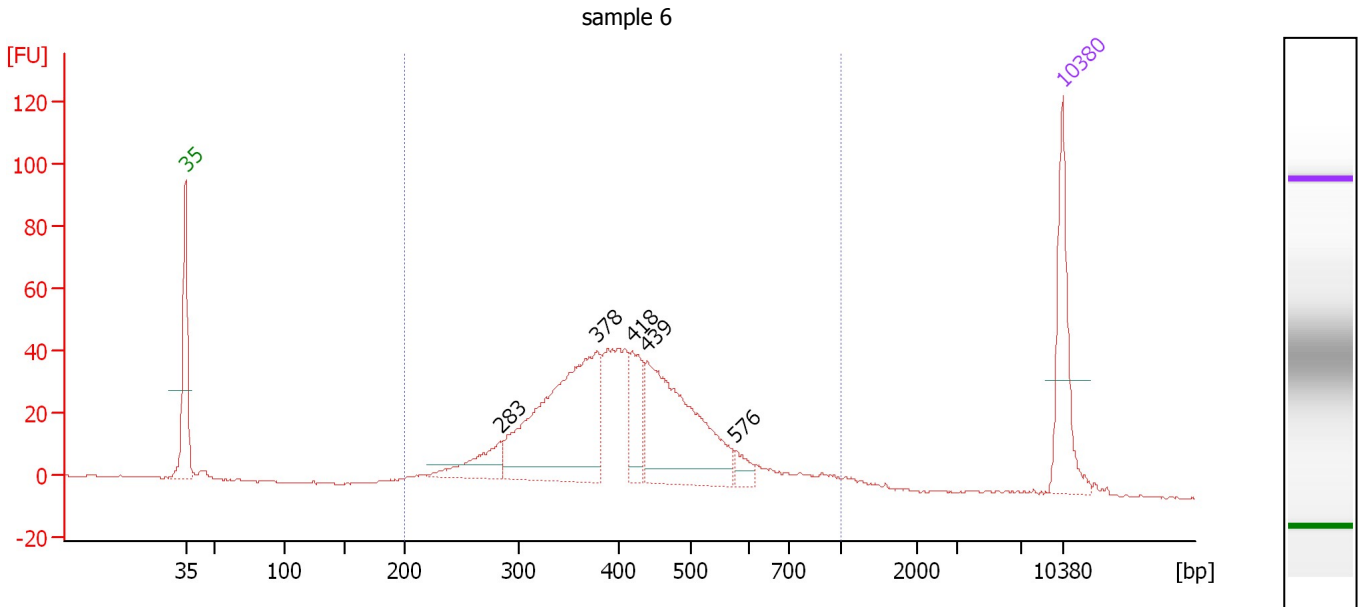
**Region table for sample 5 : sample 5**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	379	1,093.3	997.83	4,430.1	90	32.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

Created: 2/23/2018 10:31:23 AM  
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**Electropherogram Summary Continued ...**



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

Number of peaks found: 5                      Corr. Area 1: 873.2  
 Noise: 0.2

**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	283	55.72	297.9		68.08
3	378	290.94	1,167.1		75.82
4	418	58.62	212.5		78.63
5	439	216.98	748.4		79.84
6	576	16.15	42.5		86.91
7	10,380	75.00	10.9	Upper Marker	113.00

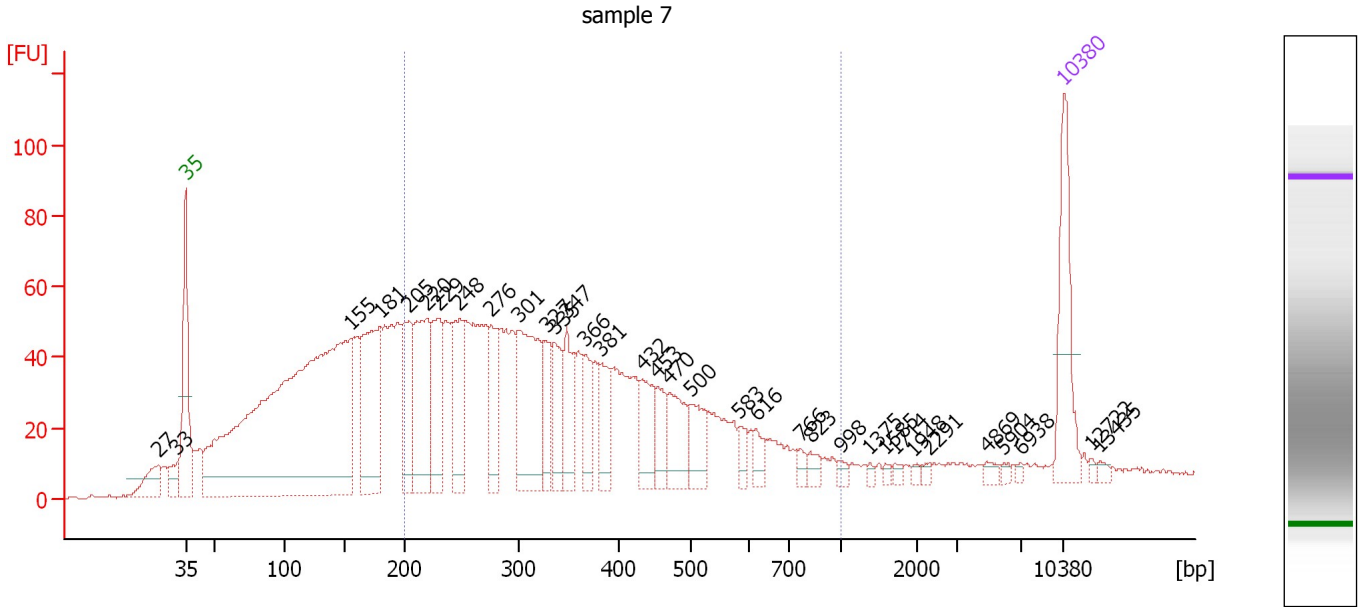
**Region table for sample 6 : sample 6**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	420	873.2	859.78	3,391.1	97	27.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 34                      Corr. Area 1: 1,529.3  
 Noise: 0.6

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	27	0.00	0.0		40.78
2	33	0.00	0.0		42.36
3	35	125.00	5,411.3	Lower Marker	43.00
4	155	925.79	9,056.2		56.15
5	181	179.77	1,508.9		58.57
6	205	100.79	745.9		60.85
7	220	138.45	954.4		62.23
8	229	100.37	662.7		63.12
9	248	85.74	523.2		64.85
10	276	59.94	329.3		67.37
11	301	159.21	802.6		69.65
12	327	47.81	221.4		71.77
13	335	55.34	250.2		72.41
14	347	63.07	275.0		73.40
15	366	41.72	172.7		74.89
16	381	42.81	170.1		76.12
17	432	50.39	176.7		79.43
18	453	33.39	111.7		80.62
19	470	56.60	182.3		81.61
20	500	41.13	124.7		83.29
21	583	14.32	37.2		87.19
22	616	14.81	36.4		88.53
23	766	8.07	16.0		92.04
24	823	11.18	20.6		92.83
25	998	5.76	8.8		95.25

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

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### Electropherogram Summary Continued ...

#### ... Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,375	3.29	3.6		97.58
27	1,585	3.42	3.3		98.86
28	1,714	3.65	3.2		99.65
29	1,948	3.78	2.9		101.09
30	2,291	3.21	2.1		102.32
31	4,869	5.62	1.7		106.97
32	5,904	3.50	0.9		108.30
33	6,938	2.68	0.6		109.64
34	10,380	75.00	10.9	Upper Marker	113.00
35	12,722	0.00	0.0		115.27
36	13,435	0.00	0.0		115.97

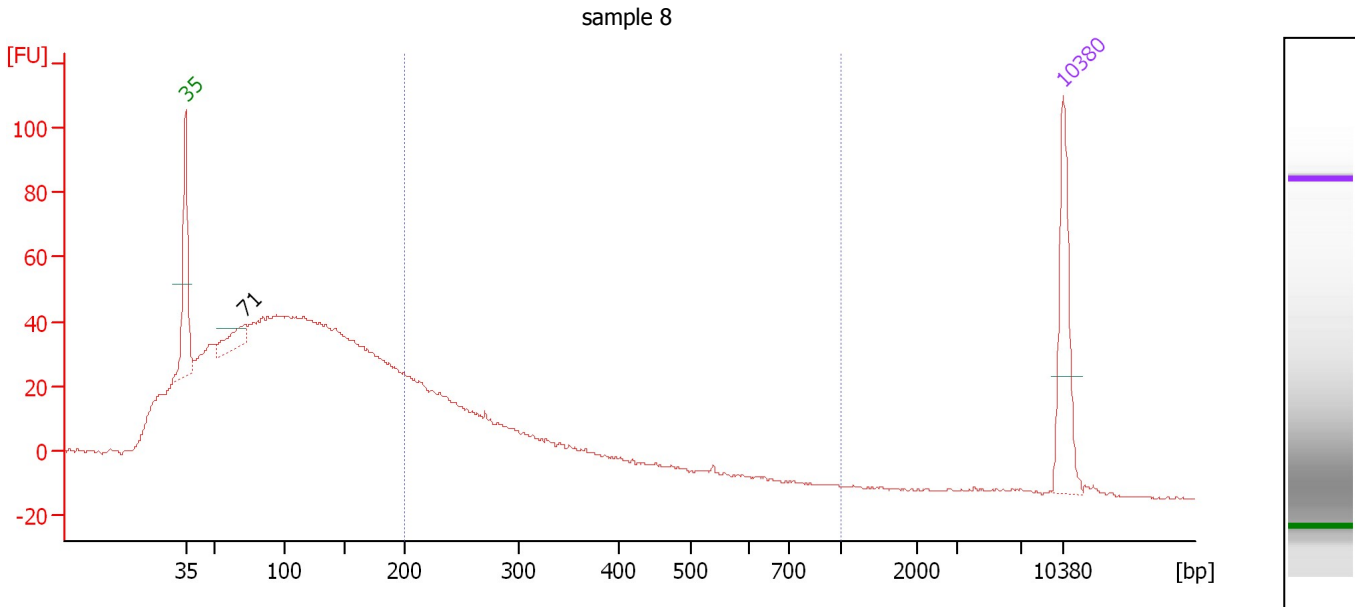
#### Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	369	1,529.3	1,795.28	8,745.6	55	39.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 1                      Corr. Area 1: 378.1  
 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	71	40.25	858.9		47.69
3	10,380	75.00	10.9	Upper Marker	113.00

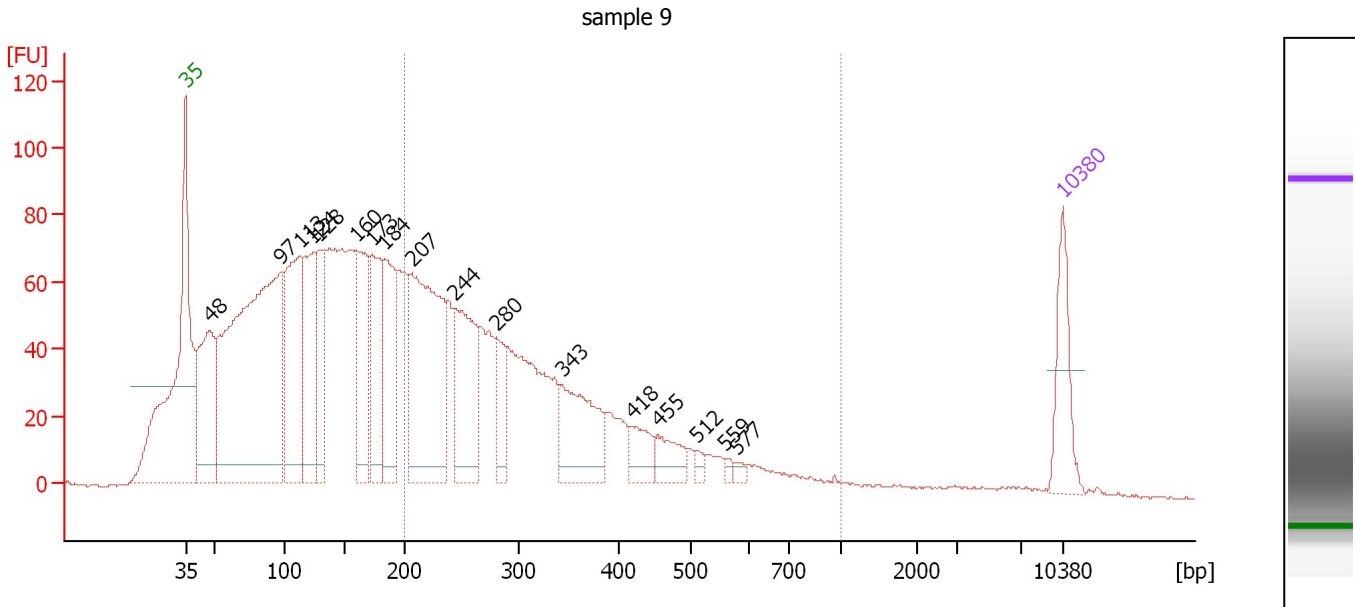
**Region table for sample 8 : sample 8**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	282	378.1	460.45	2,640.6	22	26.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 17                      Corr. Area 1: 1,285.0  
 Noise: 0.5

**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	48	274.61	8,751.5		44.94
3	97	1,039.62	16,191.0		50.66
4	113	343.57	4,625.4		52.15
5	124	229.47	2,813.2		53.19
6	128	172.70	2,039.1		53.64
7	160	216.92	2,048.8		56.67
8	173	184.26	1,613.3		57.87
9	184	217.97	1,799.1		58.86
10	207	443.82	3,250.0		61.05
11	244	237.87	1,475.6		64.48
12	280	72.15	389.7		67.81
13	343	167.93	742.2		73.03
14	418	50.16	181.7		78.65
15	455	49.40	164.5		80.73
16	512	9.55	28.3		83.87
17	559	6.67	18.1		86.10
18	577	8.26	21.7		86.95
19	10,380	75.00	10.9	Upper Marker	113.00

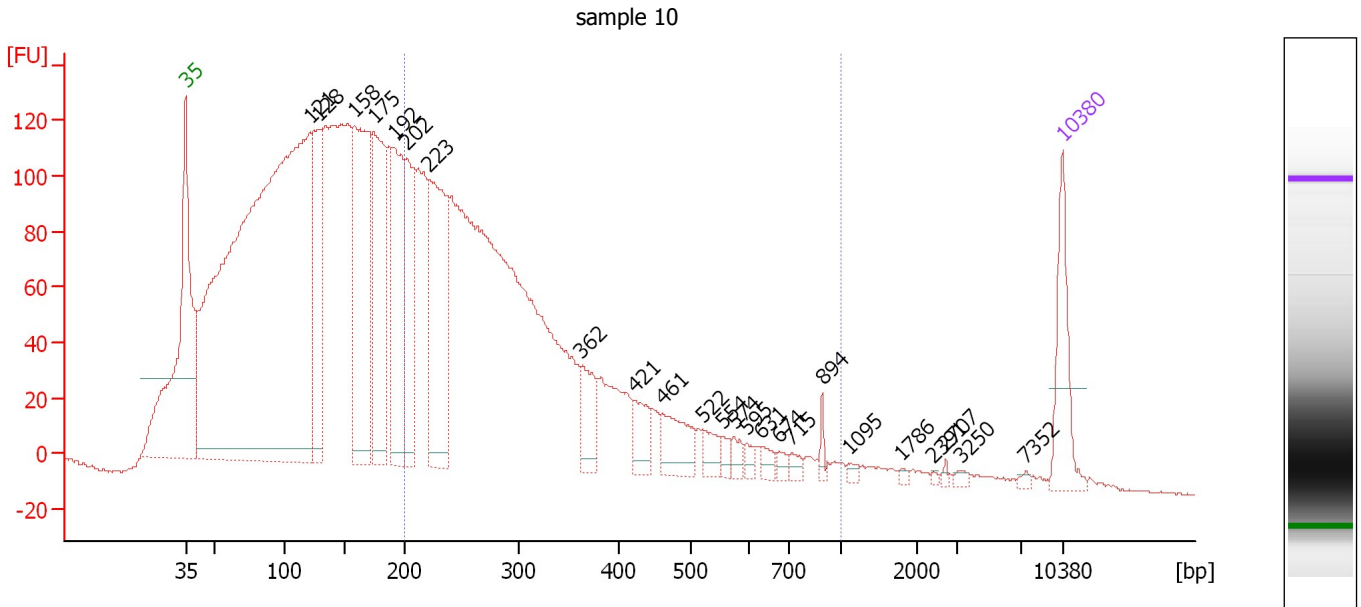
**Region table for sample 9 : sample 9**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	327	1,285.0	1,836.10	9,741.6	39	37.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 24                      Corr. Area 1: 2,141.3  
 Noise: 0.4

**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	121	2,165.85	27,079.3		52.96
3	128	246.67	2,918.9		53.61
4	158	438.39	4,201.6		56.45
5	175	298.74	2,587.1		58.05
6	192	247.81	1,957.3		59.64
7	202	176.62	1,321.9		60.64
8	223	309.54	2,107.8		62.48
9	362	69.91	292.4		74.59
10	421	42.84	154.4		78.77
11	461	65.73	216.1		81.06
12	522	24.11	69.9		84.35
13	554	12.56	34.4		85.85
14	574	13.52	35.7		86.79
15	595	9.84	25.0		87.79
16	631	12.60	30.3		88.99
17	674	9.50	21.4		90.33
18	715	10.64	22.6		91.33
19	894	9.33	15.8		93.82
20	1,095	5.80	8.0		95.86
21	1,786	3.06	2.6		100.10
22	2,391	2.08	1.3		102.64
23	2,707	3.01	1.7		103.63
24	3,250	4.57	2.1		104.88
25	7,352	3.87	0.8		110.06

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

Created: 2/23/2018 10:31:23 AM  
 Modified: 2/23/2018 11:12:43 AM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 10 : sample 10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	10,380	75.00	10.9	Upper Marker	113.00

#### Region table for sample 10 : sample 10

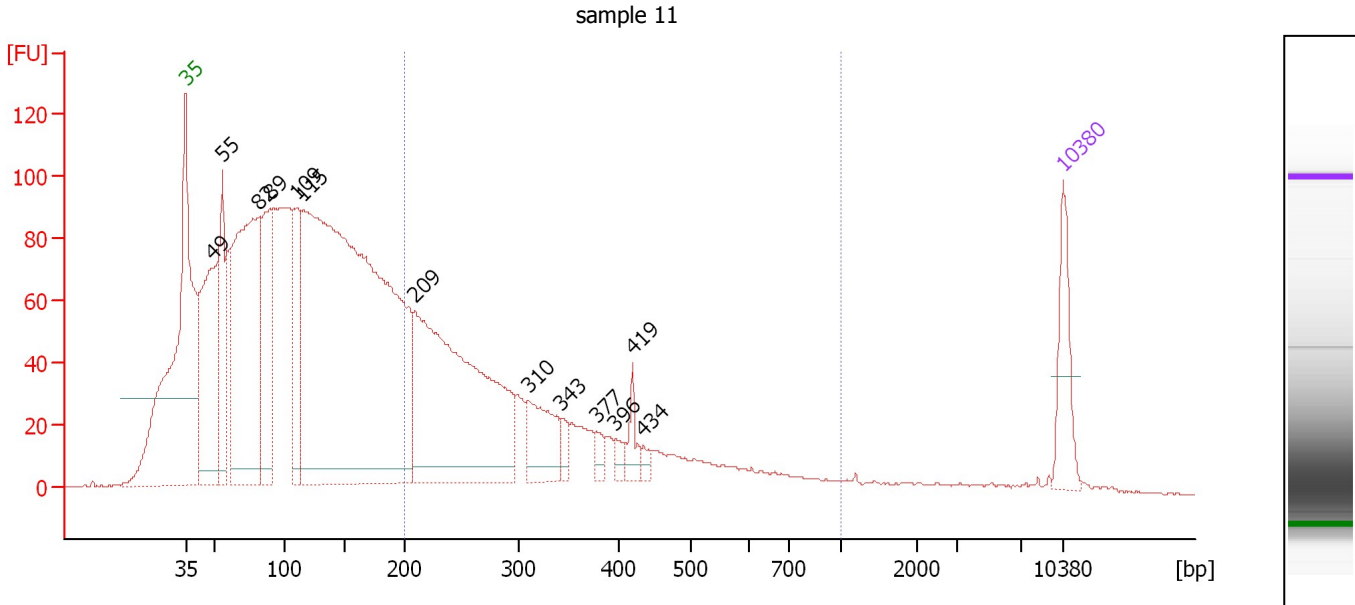
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	326	2,141.3	2,394.63	12,839.3	39	40.8



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

Created: 2/23/2018 10:31:23 AM  
 Modified: 2/23/2018 11:12:43 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 13                      Corr. Area 1: 1,050.5  
 Noise: 0.2

**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	49	413.10	12,851.8		45.12
3	55	225.30	6,165.0		45.93
4	82	726.44	13,466.6		48.90
5	89	268.93	4,584.4		49.71
6	109	197.26	2,738.7		51.83
7	115	2,186.10	28,801.3		52.38
8	209	815.93	5,909.9		61.26
9	310	122.26	597.9		70.38
10	343	25.14	111.2		73.01
11	377	19.32	77.6		75.78
12	396	17.44	66.7		77.29
13	419	34.11	123.3		78.71
14	434	12.82	44.7		79.56
15	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : sample 11**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	332	1,050.5	1,470.43	7,818.0	29	40.8

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-02-23\2018-02-23\_001.xad

Created: 2/23/2018 10:31:23 AM  
Modified: 2/23/2018 11:12:43 AM

**Gel Image**

