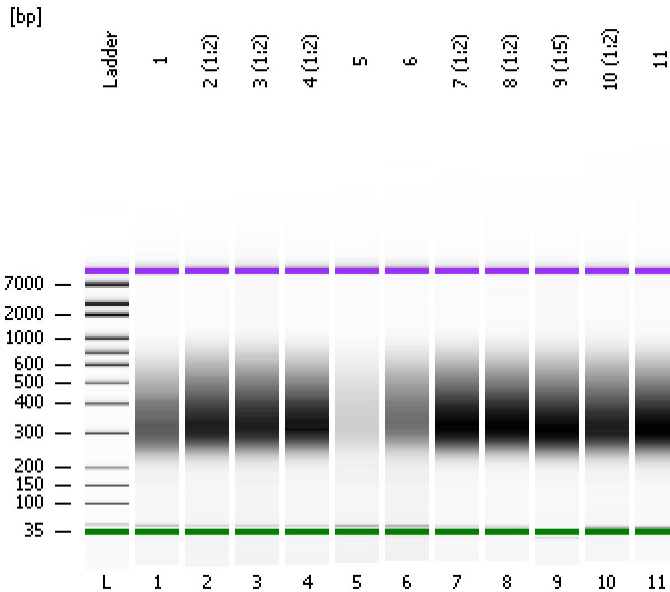


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
Modified: 1/18/2019 4:05:04 PM

**Electrophoresis File Run Summary**



Instrument Information:

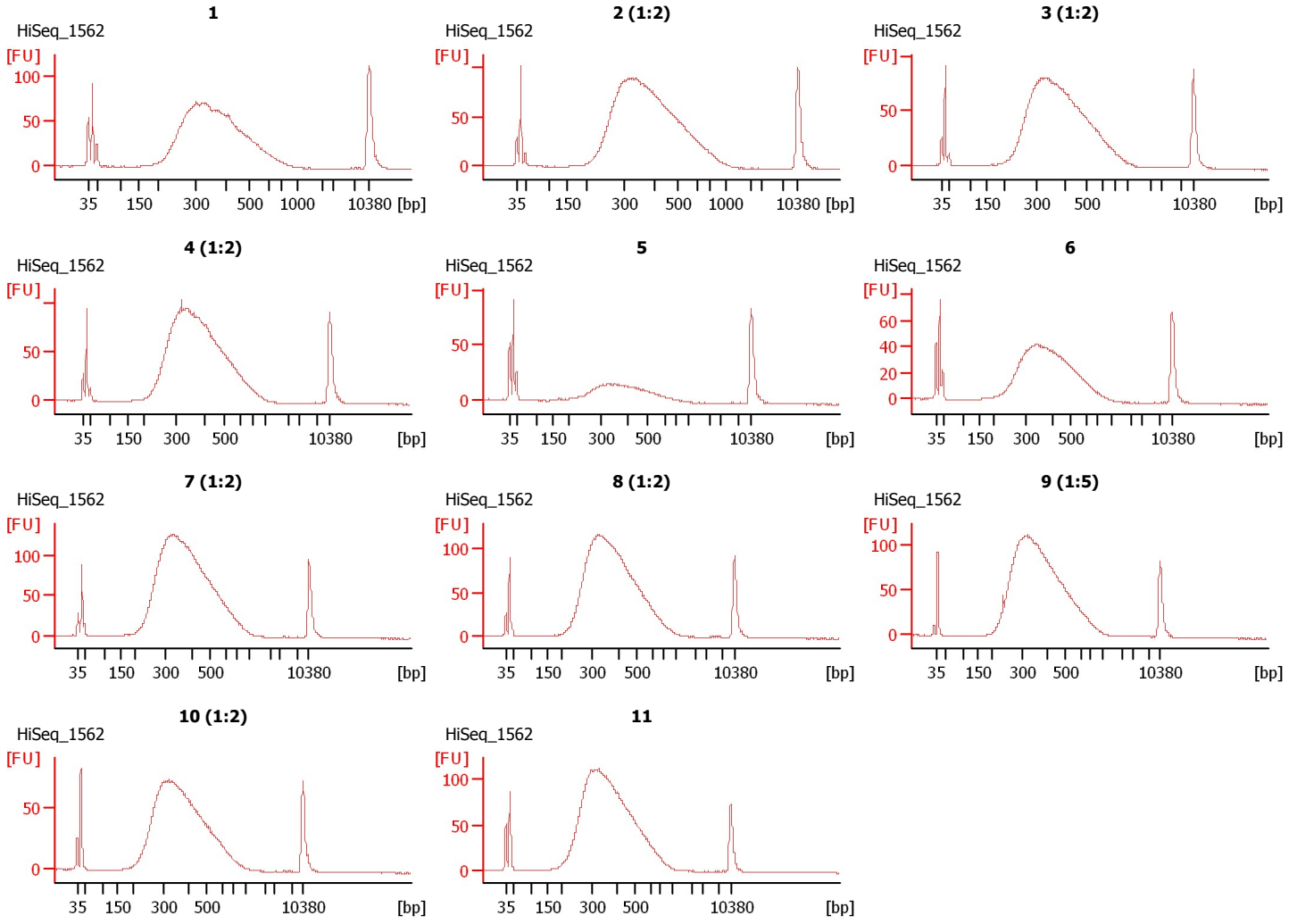
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

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\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1	HiSeq_1562	<input type="checkbox"/>	✓			
2 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
3 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
4 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
5	HiSeq_1562	<input type="checkbox"/>	✓			
6	HiSeq_1562	<input type="checkbox"/>	✓			
7 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
8 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
9 (1:5)	HiSeq_1562	<input type="checkbox"/>	✓			
10 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
11	HiSeq_1562	<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\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
Modified: 1/18/2019 4:05:04 PM

**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

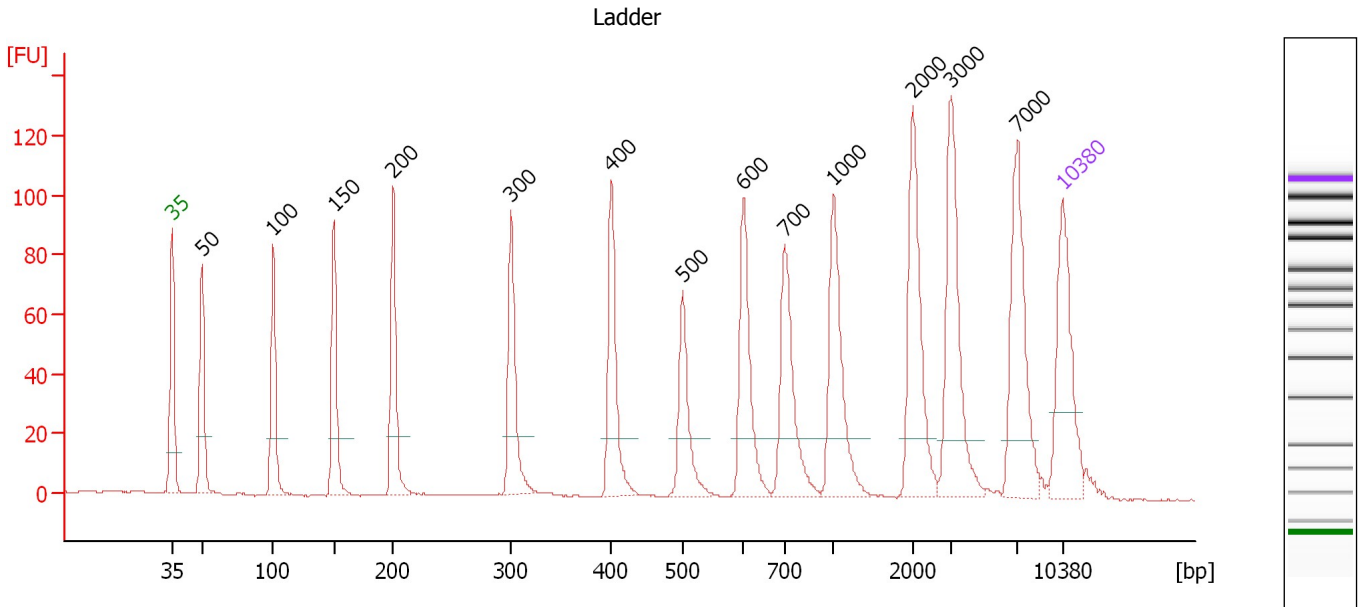
**Ladder**

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\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

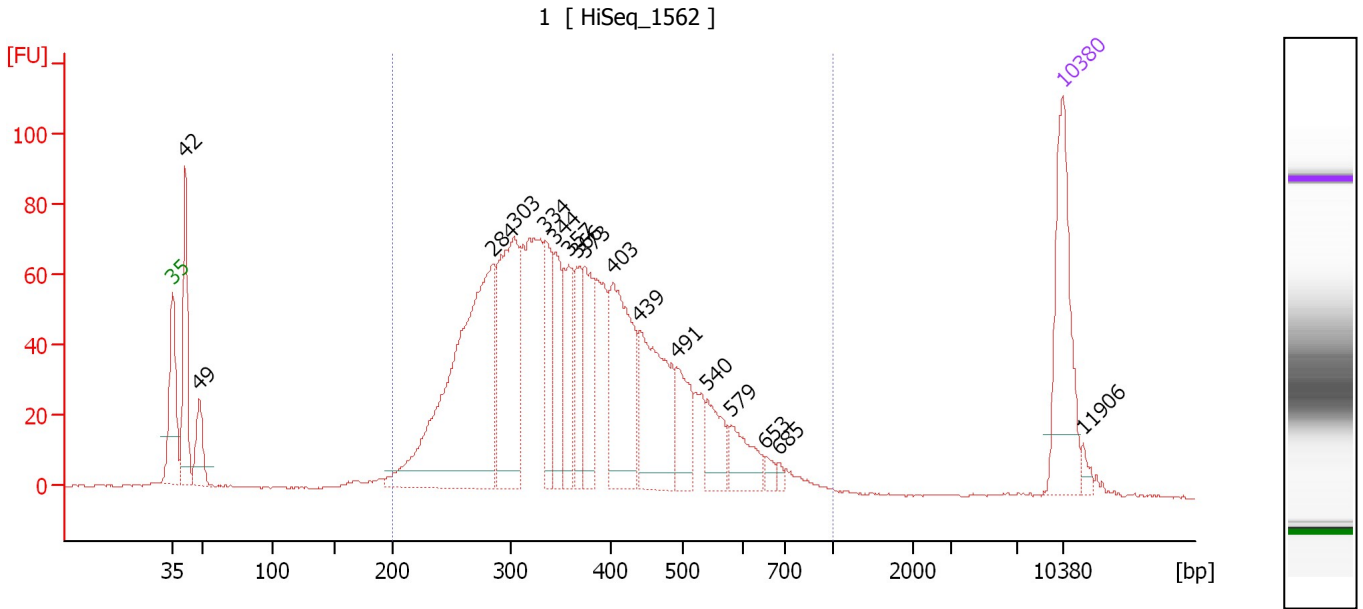
**Peak table for Ladder**

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	45.31
3	100	150.00	2,272.7	Ladder Peak	50.94
4	150	150.00	1,515.2	Ladder Peak	55.69
5	200	150.00	1,136.4	Ladder Peak	60.35
6	300	150.00	757.6	Ladder Peak	69.62
7	400	150.00	568.2	Ladder Peak	77.52
8	500	150.00	454.5	Ladder Peak	83.10
9	600	150.00	378.8	Ladder Peak	87.90
10	700	150.00	324.7	Ladder Peak	91.13
11	1,000	150.00	227.3	Ladder Peak	94.96
12	2,000	150.00	113.6	Ladder Peak	101.19
13	3,000	150.00	75.8	Ladder Peak	104.19
14	7,000	150.00	32.5	Ladder Peak	109.45
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 1**

Number of peaks found: 17                      Corr. Area 1: 1,833.8  
 Noise: 0.4

**Peak table for sample 1 : 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	42	109.52	3,993.1		44.01
3	49	42.38	1,318.2		45.11
4	284	339.51	1,809.5		68.17
5	303	164.71	823.6		69.86
6	334	60.65	274.8		72.34
7	344	62.96	277.6		73.07
8	357	55.57	235.8		74.13
9	366	44.80	185.6		74.81
10	373	61.59	250.0		75.41
11	403	123.20	463.7		77.66
12	439	112.64	388.4		79.72
13	491	42.85	132.2		82.61
14	540	33.66	94.4		85.04
15	579	33.48	87.7		86.87
16	653	6.29	14.6		89.62
17	685	3.55	7.9		90.63
18	10,380	75.00	10.9	Upper Marker	113.00
19	11,906	0.00	0.0		114.60

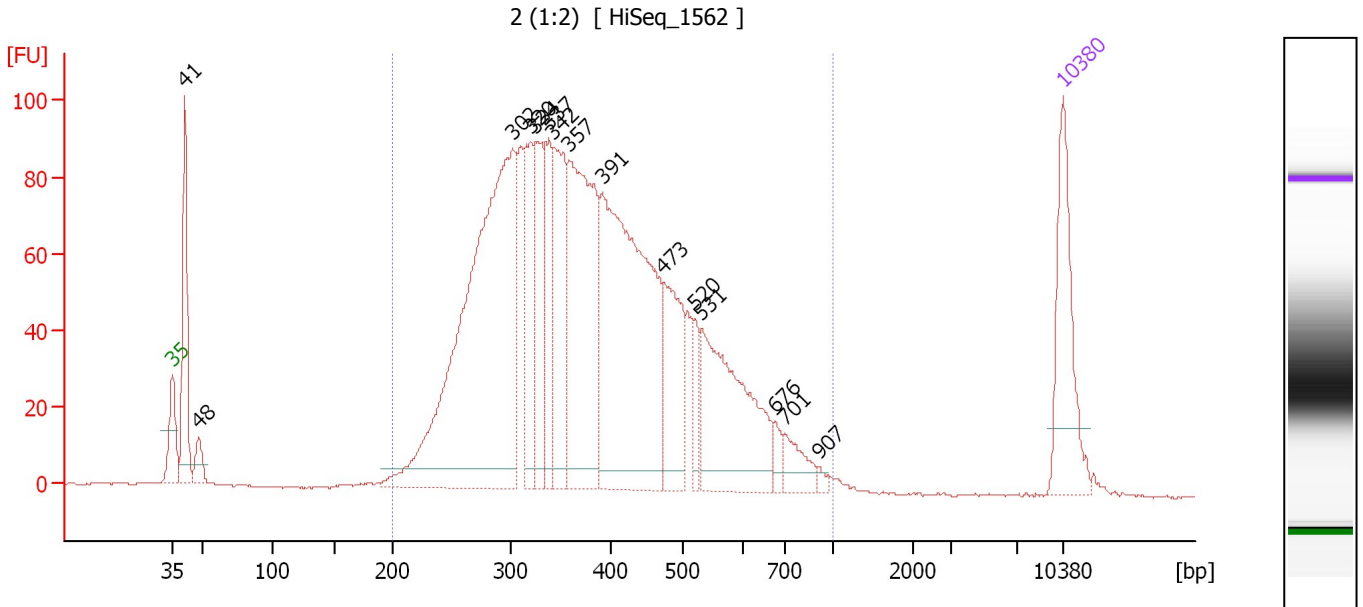
**Region table for sample 1 : 1**

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	377	1,461.84	1,833.8	6,509.0	91	28.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 2 (1:2)**

Number of peaks found: 15                      Corr. Area 1: 2,368.4  
 Noise: 0.3

**Peak table for sample 2 : 2 (1:2)**

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	41	135.48	4,970.6		43.97
3	48	22.81	712.6		45.08
4	302	579.42	2,911.5		69.75
5	320	90.93	431.0		71.18
6	324	101.77	476.3		71.50
7	337	71.20	320.0		72.56
8	342	126.04	557.7		72.97
9	357	255.36	1,083.6		74.13
10	391	377.22	1,461.9		76.80
11	473	96.29	308.4		81.60
12	520	26.87	78.3		84.04
13	531	168.44	480.5		84.59
14	676	12.14	27.2		90.36
15	701	25.53	55.2		91.14
16	907	3.91	6.5		93.77
17	10,380	75.00	10.9	Upper Marker	113.00

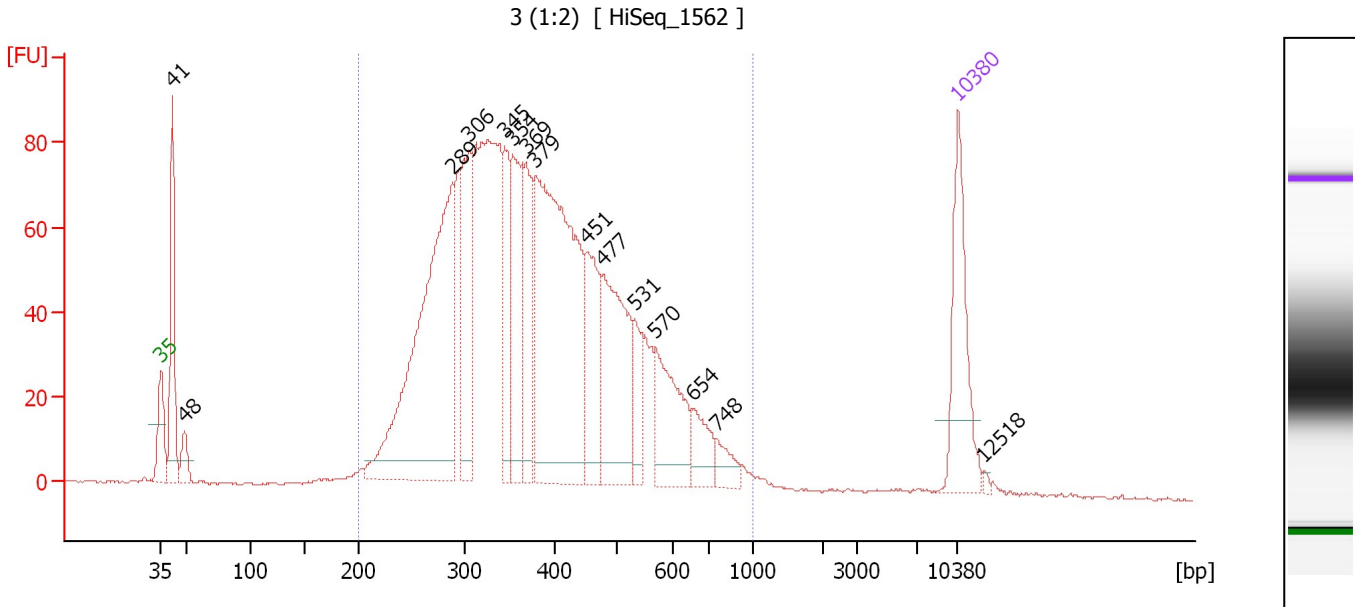
**Region table for sample 2 : 2 (1:2)**

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	395	2,080.93	2,368.4	8,928.6	93	30.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 3 (1:2)**

Number of peaks found: 15                      Corr. Area 1: 2,157.5  
 Noise: 0.3

**Peak table for sample 3 : 3 (1:2)**

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	41	139.37	5,101.5		43.98
3	48	26.00	813.9		45.06
4	289	408.18	2,139.4		68.61
5	306	131.16	649.1		70.11
6	345	74.17	326.0		73.15
7	354	111.14	475.4		73.90
8	369	85.38	350.5		75.07
9	379	384.25	1,535.6		75.87
10	451	88.30	296.6		80.36
11	477	145.83	463.2		81.82
12	531	37.57	107.2		84.58
13	570	84.51	224.7		86.45
14	654	33.17	76.9		89.64
15	748	18.58	37.6		91.74
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,518	0.00	0.0		115.25

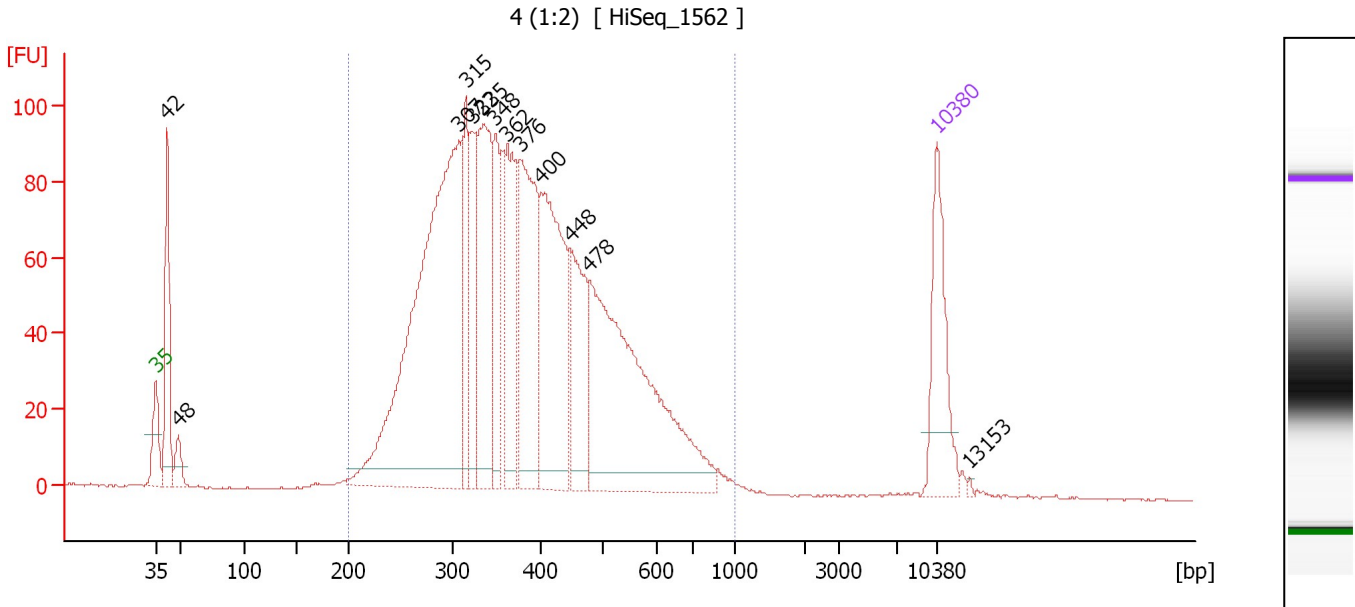
**Region table for sample 3 : 3 (1:2)**

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	398	2,128.08	2,157.5	9,078.8	93	30.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 4 (1:2)**

Number of peaks found: 13                      Corr. Area 1: 2,388.7  
 Noise: 0.3

**Peak table for sample 4 : 4 (1:2)**

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	42	136.09	4,928.8		44.05
3	48	26.69	841.8		45.01
4	307	630.89	3,112.3		70.19
5	315	93.33	448.9		70.81
6	322	83.58	393.7		71.33
7	335	187.71	849.0		72.39
8	348	87.95	382.6		73.44
9	362	120.66	505.5		74.49
10	376	194.99	785.4		75.63
11	400	226.68	859.1		77.50
12	448	110.72	374.8		80.17
13	478	375.18	1,190.3		81.85
14	10,380	75.00	10.9	Upper Marker	113.00
15	13,153	0.00	0.0		115.91

**Region table for sample 4 : 4 (1:2)**

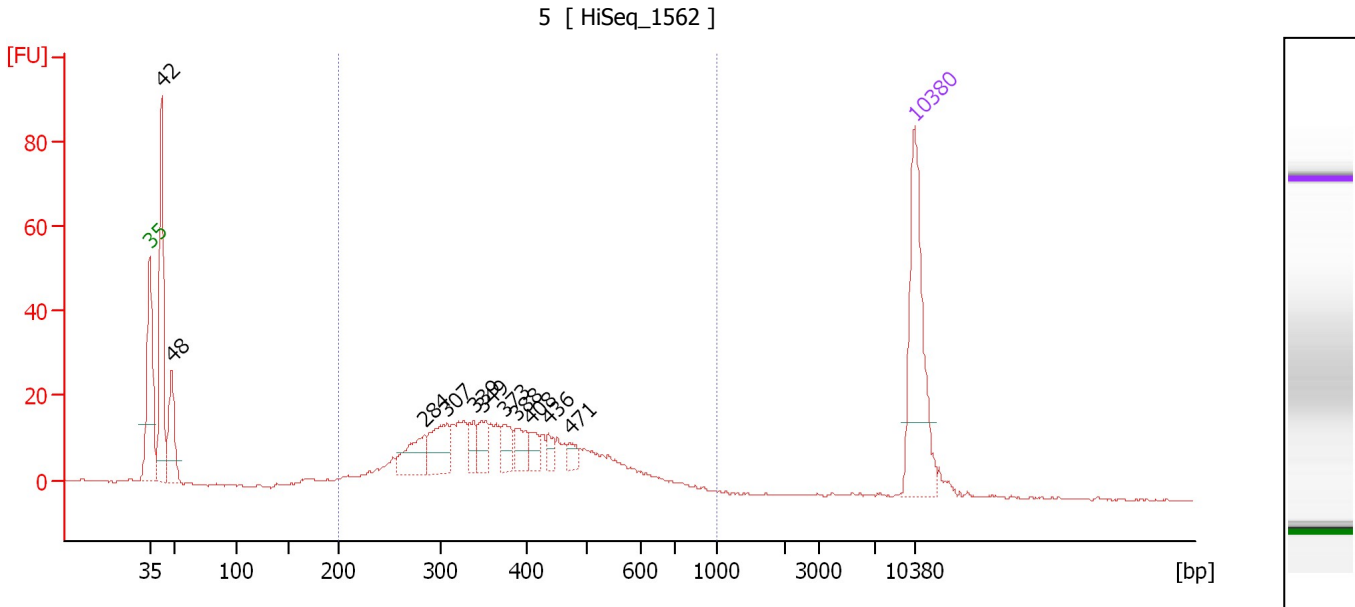
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	393	2,211.10	2,388.7	9,458.9	94	29.2



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 5**

Number of peaks found: 11                      Corr. Area 1: 406.0  
 Noise: 0.2

**Peak table for sample 5 : 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	42	137.41	4,959.0		44.07
3	48	54.33	1,714.5		45.00
4	284	32.45	173.1		68.14
5	307	35.73	176.3		70.19
6	339	14.26	63.8		72.68
7	349	18.21	79.1		73.46
8	373	16.30	66.2		75.41
9	388	17.47	68.3		76.54
10	408	10.99	40.8		77.95
11	436	8.08	28.1		79.51
12	471	7.17	23.1		81.47
13	10,380	75.00	10.9	Upper Marker	113.00

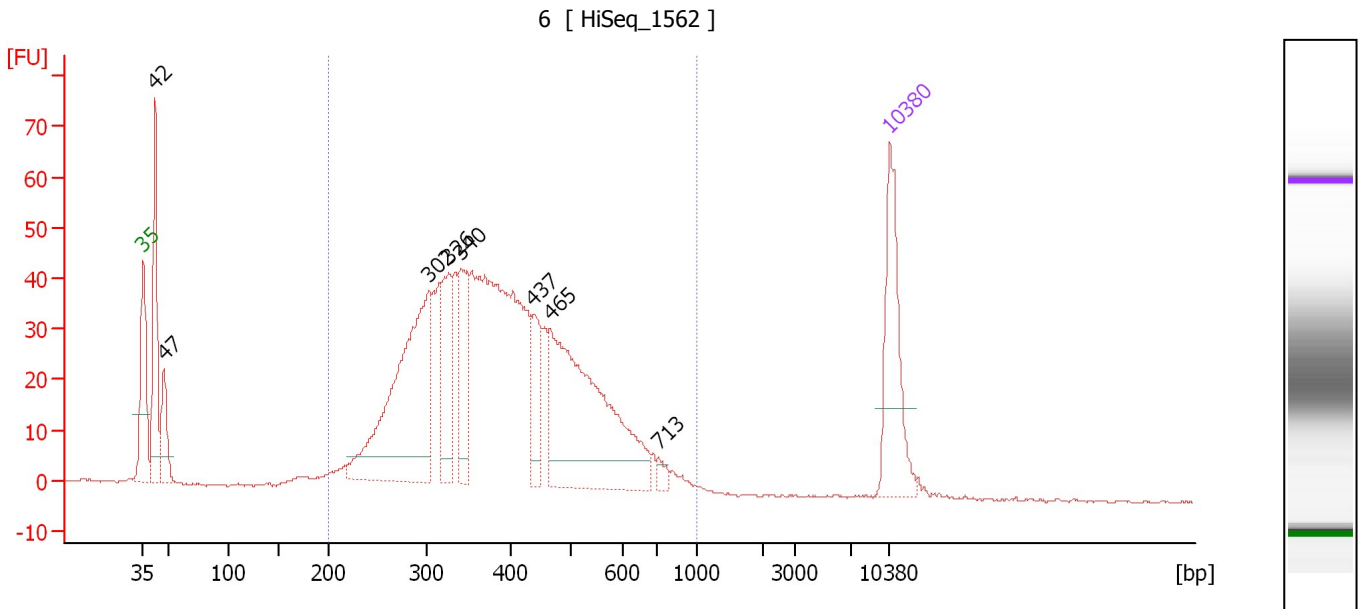
**Region table for sample 5 : 5**

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	392	402.31	406.0	1,727.0	73	28.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 6**

Number of peaks found: 8                      Corr. Area 1: 1,097.7  
 Noise: 0.2

**Peak table for sample 6 : 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	42	142.31	5,115.4		44.10
3	47	57.22	1,830.9		44.90
4	302	278.02	1,393.8		69.80
5	326	74.06	344.6		71.65
6	340	73.72	328.3		72.80
7	437	46.69	161.7		79.60
8	465	266.04	866.7		81.15
9	713	8.11	17.2		91.30
10	10,380	75.00	10.9	Upper Marker	113.00

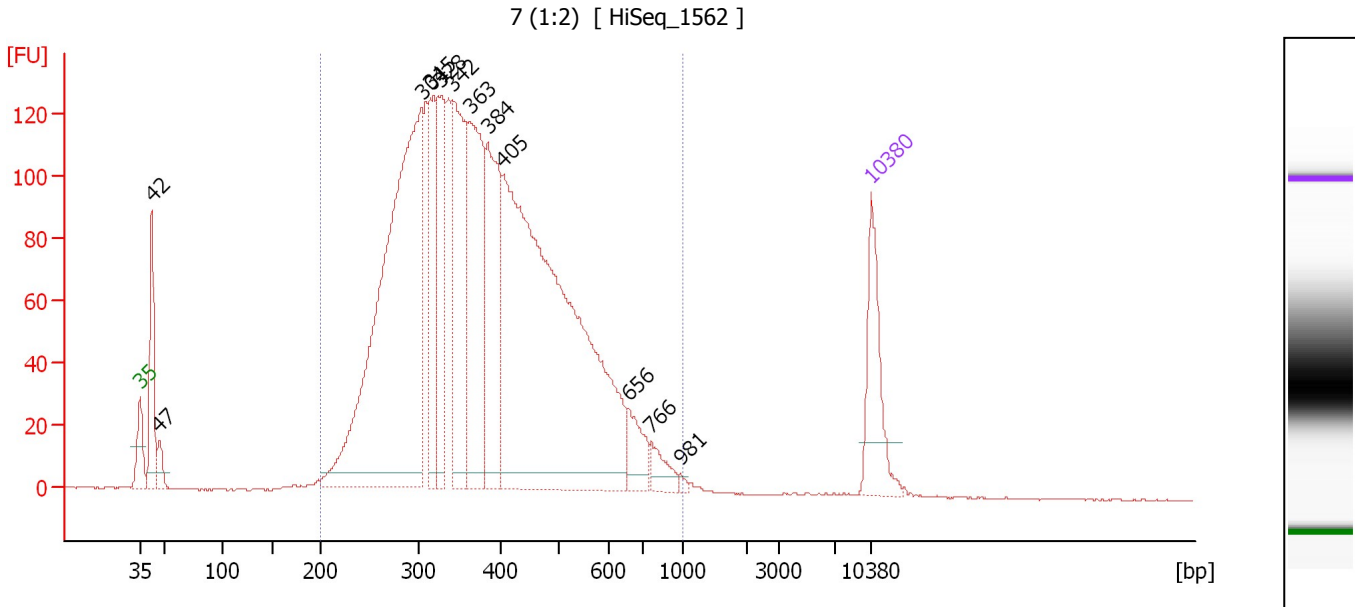
**Region table for sample 6 : 6**

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	401	1,307.24	1,097.7	5,477.8	89	28.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 7 (1:2)**

Number of peaks found: 12                      Corr. Area 1: 3,189.1  
 Noise: 0.2

**Peak table for sample 7 : 7 (1:2)**

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	42	131.84	4,722.0		44.12
3	47	27.96	902.4		44.84
4	304	799.11	3,979.8		69.96
5	315	138.27	664.6		70.83
6	328	162.17	750.2		71.80
7	342	242.71	1,076.0		72.92
8	363	243.03	1,014.1		74.60
9	384	207.21	816.6		76.29
10	405	899.24	3,367.8		77.77
11	656	43.37	100.1		89.72
12	766	25.93	51.3		91.96
13	981	3.42	5.3		94.72
14	10,380	75.00	10.9	Upper Marker	113.00

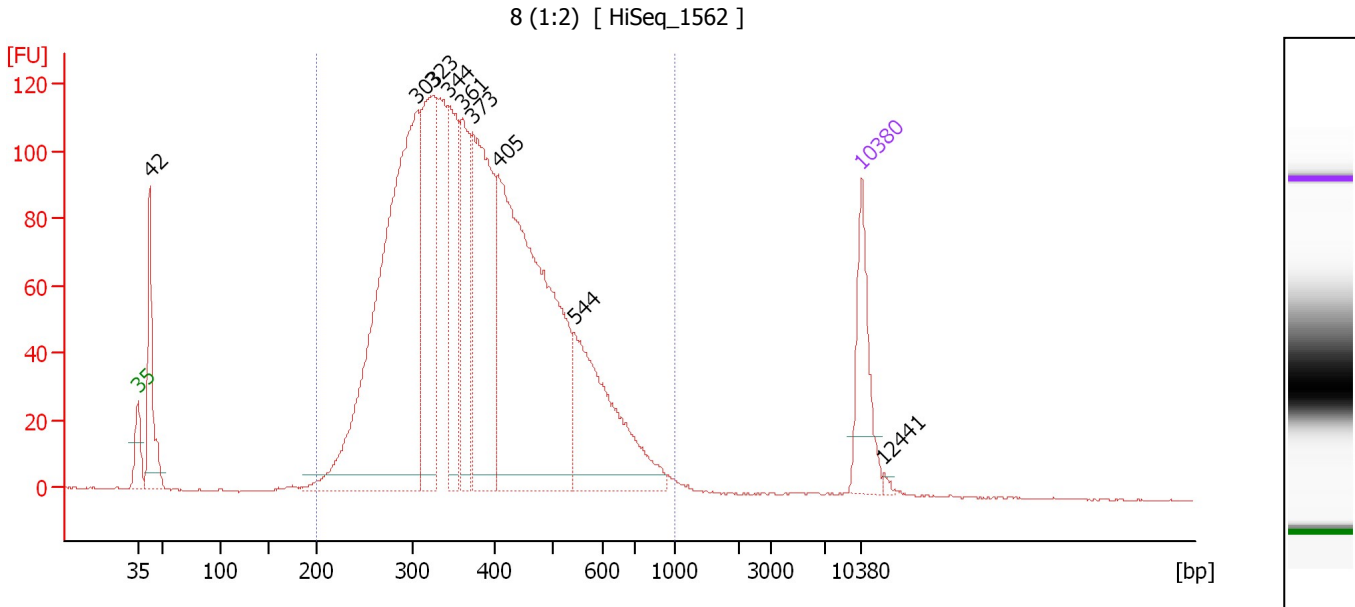
**Region table for sample 7 : 7 (1:2)**

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	395	3,000.22	3,189.1	12,842.6	95	30.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 8 (1:2)**

Number of peaks found: 9                      Corr. Area 1: 2,857.4  
 Noise: 0.2

**Peak table for sample 8 : 8 (1:2)**

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	42	171.62	6,136.0		44.13
3	303	821.89	4,107.5		69.88
4	323	281.65	1,322.1		71.42
5	344	175.55	773.9		73.07
6	361	147.60	620.0		74.41
7	373	314.24	1,276.0		75.39
8	405	643.83	2,406.0		77.82
9	544	240.20	669.4		85.20
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,441	0.00	0.0		115.17

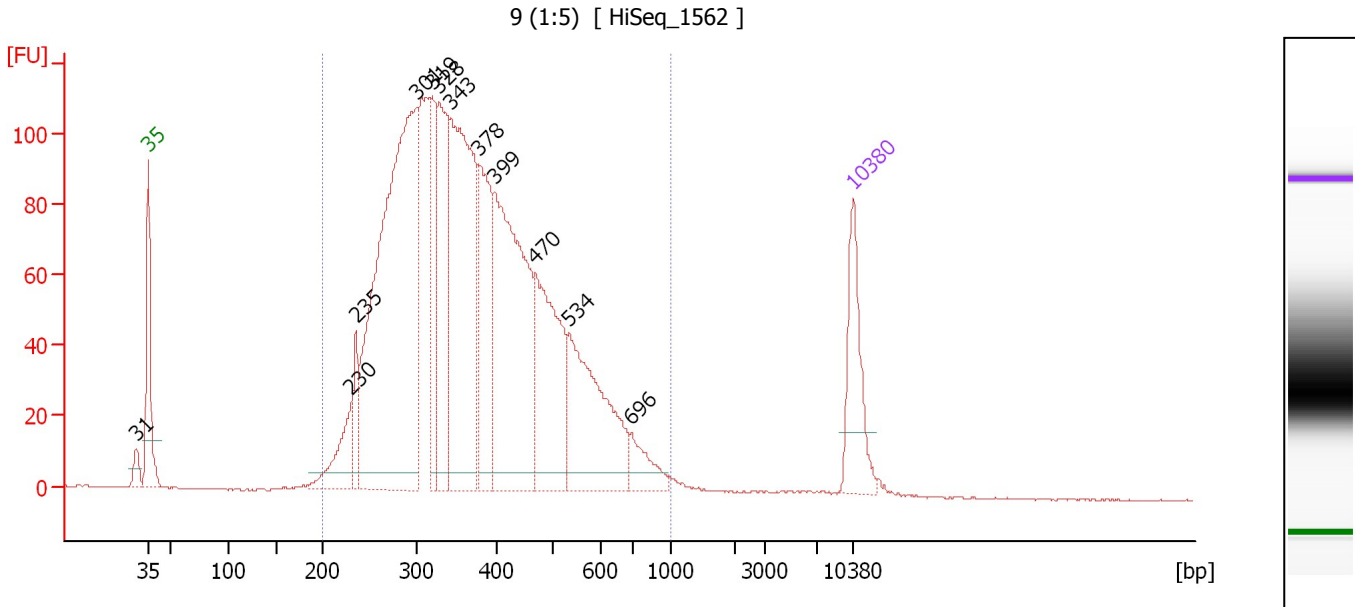
**Region table for sample 8 : 8 (1:2)**

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	393	2,870.54	2,857.4	12,271.1	95	29.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 9 (1:5)**

Number of peaks found: 12                      Corr. Area 1: 2,699.3  
 Noise: 0.2

**Peak table for sample 9 : 9 (1:5)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.84
2	35	125.00	5,411.3	Lower Marker	43.00
3	230	77.13	507.5		63.16
4	235	45.36	291.9		63.63
5	301	750.49	3,775.3		69.72
6	319	116.69	553.7		71.15
7	328	197.23	911.0		71.84
8	343	404.87	1,786.1		73.05
9	378	175.90	704.5		75.80
10	399	378.46	1,436.8		77.44
11	470	205.48	662.7		81.41
12	534	207.44	588.2		84.75
13	696	37.88	82.5		90.99
14	10,380	75.00	10.9	Upper Marker	113.00

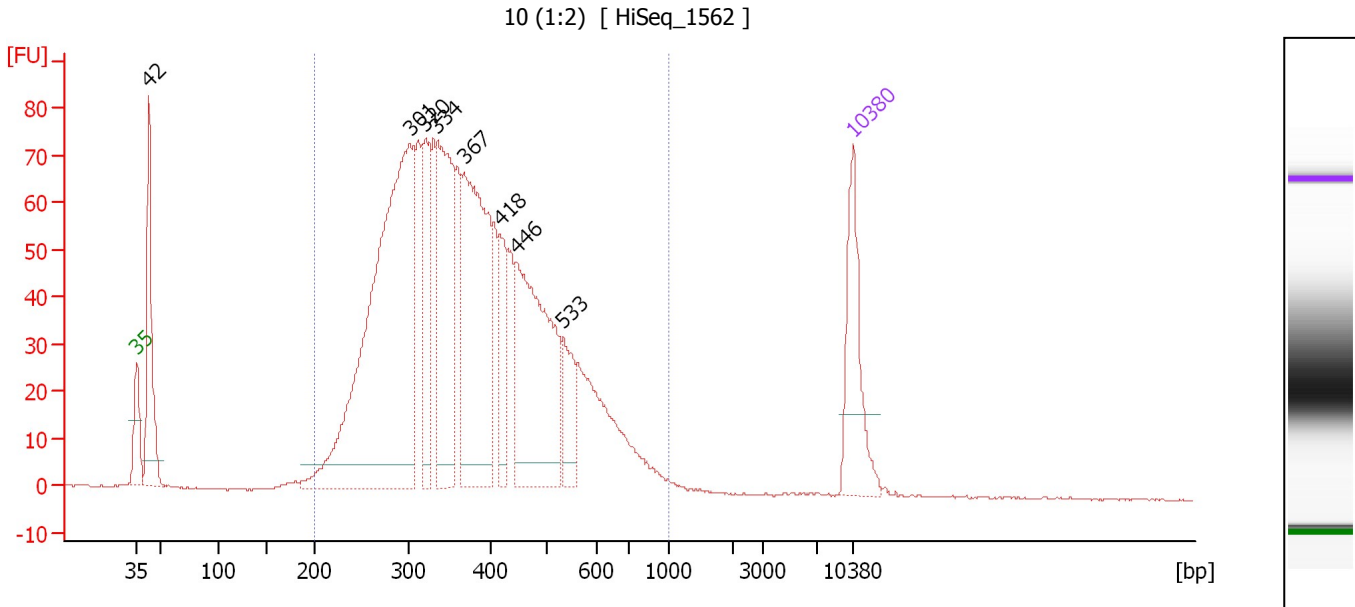
**Region table for sample 9 : 9 (1:5)**

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	385	2,819.27	2,699.3	12,399.4	98	30.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 10 (1:2)**

Number of peaks found: 8                      Corr. Area 1: 1,855.6  
 Noise: 0.2

**Peak table for sample 10 : 10 (1:2)**

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	42	180.09	6,427.1		44.15
3	301	644.36	3,245.9		69.69
4	320	104.65	495.6		71.20
5	334	213.47	967.0		72.34
6	367	281.57	1,160.9		74.95
7	418	69.07	250.6		78.50
8	446	246.19	837.2		80.06
9	533	50.95	144.8		84.70
10	10,380	75.00	10.9	Upper Marker	113.00

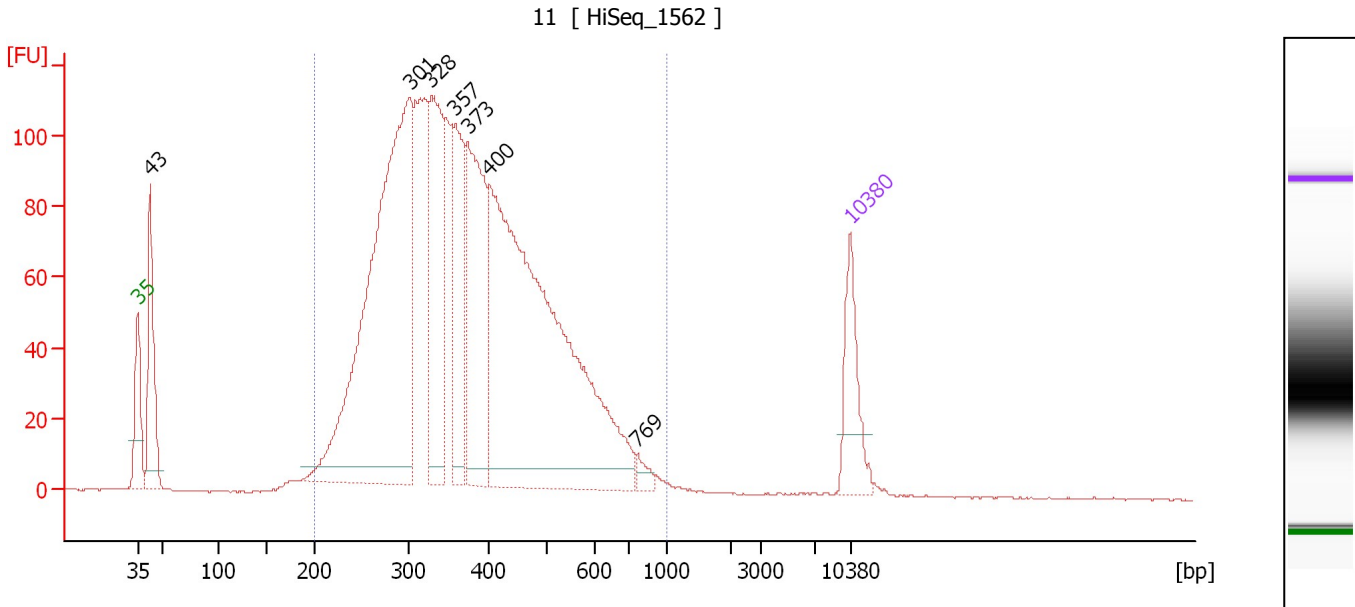
**Region table for sample 10 : 10 (1:2)**

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	389	2,106.60	1,855.6	9,147.8	93	30.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
 Modified: 1/18/2019 4:05:04 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 11**

Number of peaks found: 7                      Corr. Area 1: 2,773.6  
 Noise: 0.2

**Peak table for sample 11 : 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	43	214.31	7,581.6		44.20
3	301	948.60	4,775.4		69.70
4	328	291.13	1,346.8		71.80
5	357	184.23	781.1		74.15
6	373	304.06	1,234.1		75.41
7	400	972.65	3,685.8		77.50
8	769	14.77	29.1		92.01
9	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : 11**

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	385	3,258.42	2,773.6	14,282.4	94	29.9

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18\_001.xad

Created: 1/18/2019 3:23:48 PM  
Modified: 1/18/2019 4:05:04 PM

**Gel Image**

