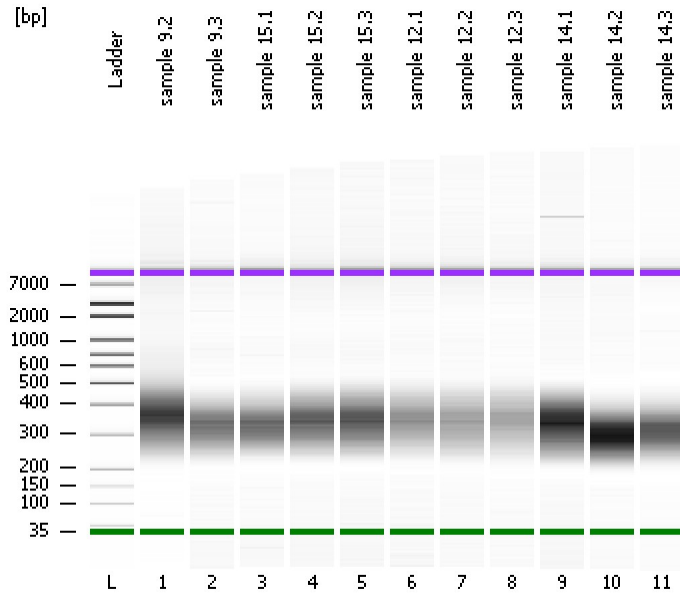


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

Created: 6/30/2015 11:11:56 AM  
Modified: 6/30/2015 11:58:56 AM

**Electrophoresis File Run Summary**



Instrument Information:

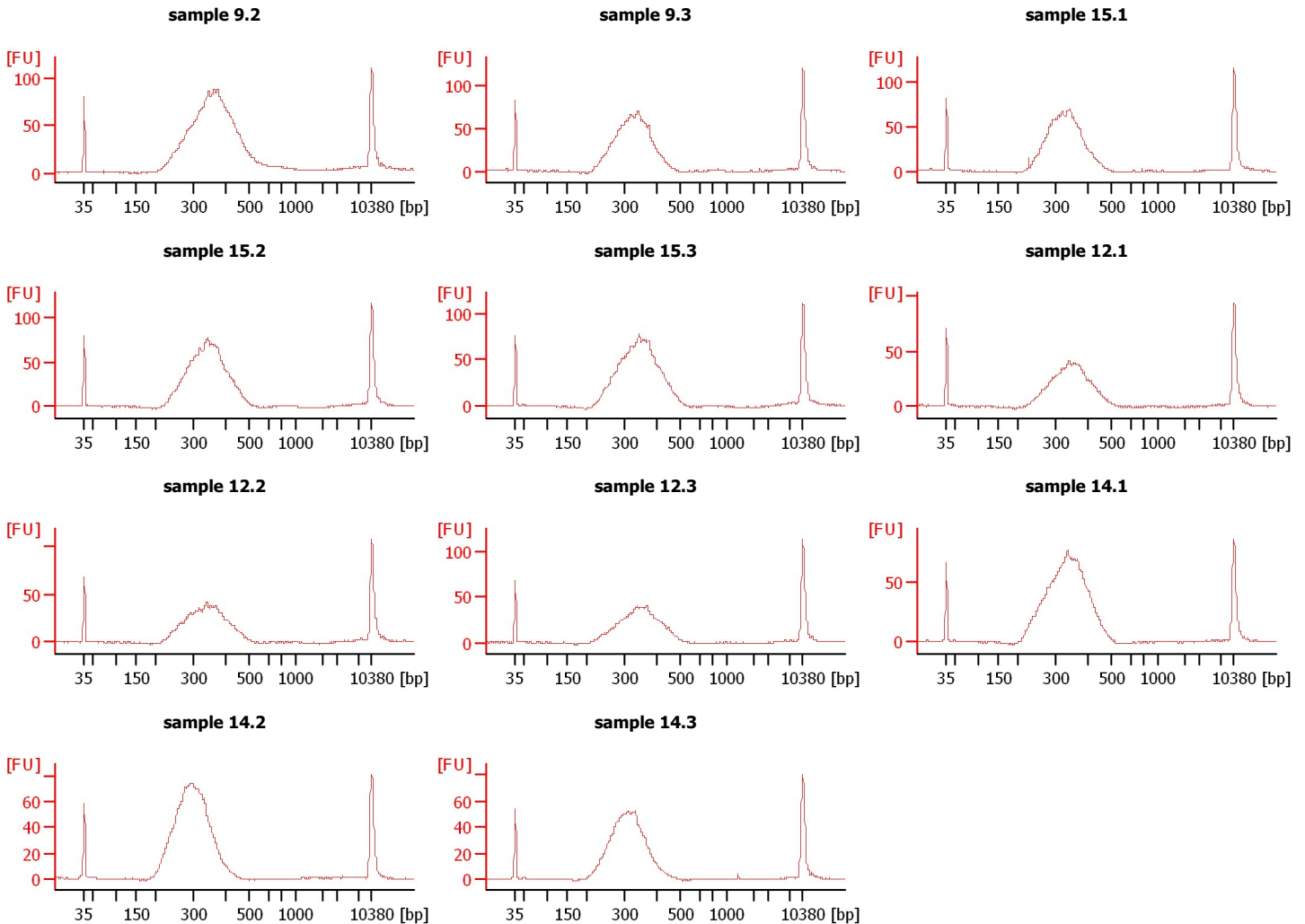
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

Created: 6/30/2015 11:11:56 AM  
 Modified: 6/30/2015 11:58:56 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 9.2		<input type="checkbox"/>	✓			
sample 9.3		<input type="checkbox"/>	✓			
sample 15.1		<input type="checkbox"/>	✓			
sample 15.2		<input type="checkbox"/>	✓			
sample 15.3		<input type="checkbox"/>	✓			
sample 12.1		<input type="checkbox"/>	✓			
sample 12.2		<input type="checkbox"/>	✓			
sample 12.3		<input type="checkbox"/>	✓			
sample 14.1		<input type="checkbox"/>	✓			
sample 14.2		<input type="checkbox"/>	✓			
sample 14.3		<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\2015-06-30\2015-06-30\_003.xad

Created: 6/30/2015 11:11:56 AM  
Modified: 6/30/2015 11:58:56 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

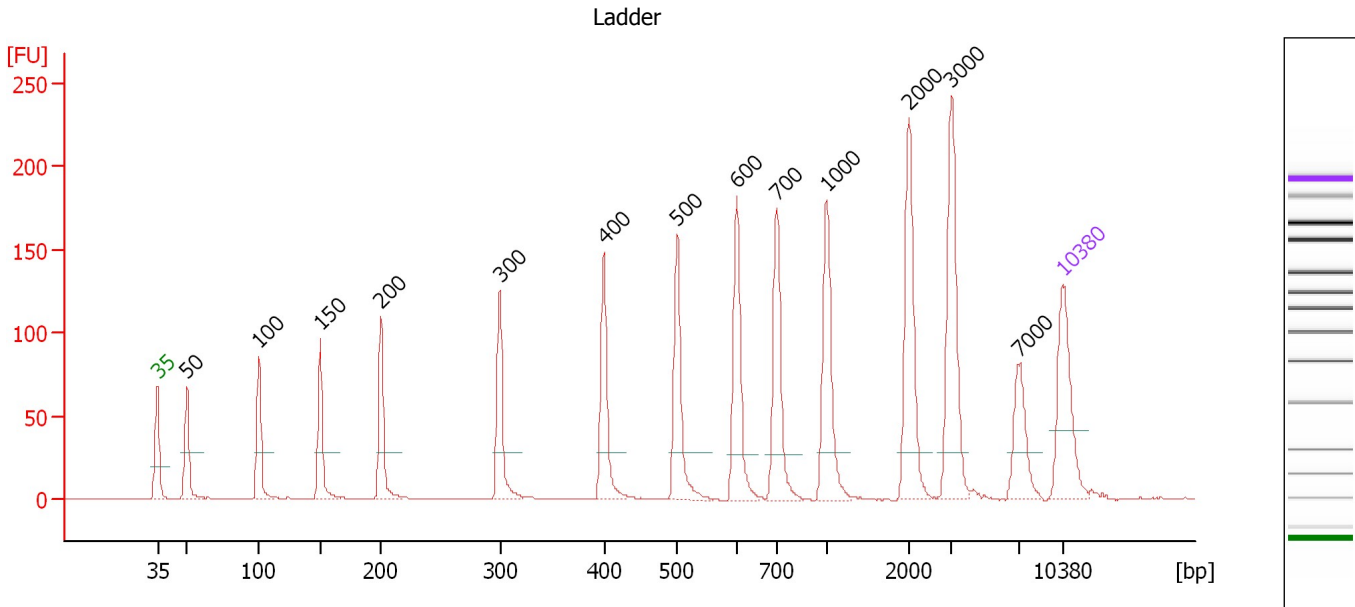
**Ladder**

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\2015-06-30\2015-06-30\_003.xad

Created: 6/30/2015 11:11:56 AM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

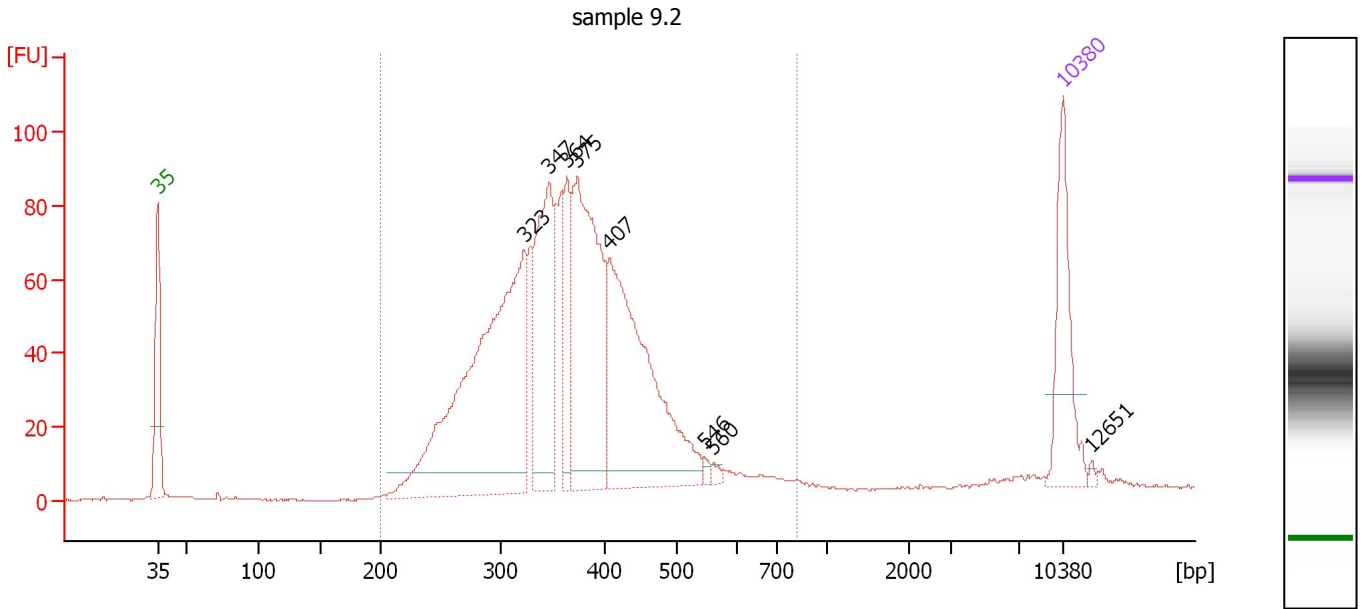
**Peak table for Ladder**

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	45.27
3	100	150.00	2,272.7	Ladder Peak	50.85
4	150	150.00	1,515.2	Ladder Peak	55.57
5	200	150.00	1,136.4	Ladder Peak	60.25
6	300	150.00	757.6	Ladder Peak	69.47
7	400	150.00	568.2	Ladder Peak	77.50
8	500	150.00	454.5	Ladder Peak	83.18
9	600	150.00	378.8	Ladder Peak	87.76
10	700	150.00	324.7	Ladder Peak	90.88
11	1,000	150.00	227.3	Ladder Peak	94.71
12	2,000	150.00	113.6	Ladder Peak	101.09
13	3,000	150.00	75.8	Ladder Peak	104.40
14	7,000	150.00	32.5	Ladder Peak	109.64
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

Created: 6/30/2015 11:11:56 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 9.2**

Number of peaks found: 8                      Corr. Area 1: 1,550.3  
 Noise: 0.2

**Peak table for sample 1 : sample 9.2**

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	323	476.41	2,235.6		71.31
3	347	192.66	840.4		73.27
4	364	75.93	316.0		74.62
5	375	265.78	1,074.4		75.48
6	407	298.50	1,109.9		77.93
7	546	4.42	12.3		85.27
8	560	4.44	12.0		85.94
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,651	0.00	0.0		115.25

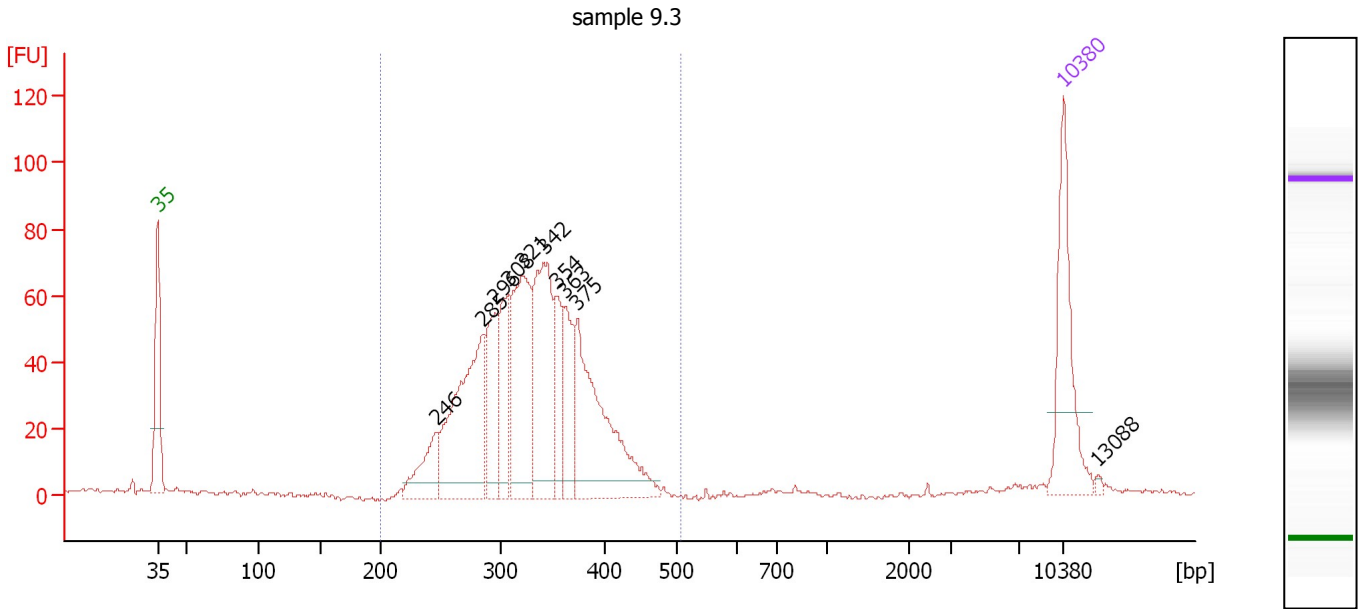
**Region table for sample 1 : sample 9.2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	372	819	1,550.3	6,739.9	94	22.8	1,552.36

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

Created: 6/30/2015 11:11:56 AM  
 Modified: 6/30/2015 11:58:56 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 9.3**

Number of peaks found: 10                      Corr. Area 1: 998.0  
 Noise: 0.6

**Peak table for sample 2 : sample 9.3**

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	246	52.84	325.2		64.51
3	285	183.86	976.0		68.13
4	296	77.10	394.6		69.10
5	308	69.98	344.0		70.13
6	321	147.81	697.7		71.16
7	342	146.24	647.3		72.87
8	354	52.30	223.9		73.80
9	363	56.94	237.7		74.53
10	375	172.81	699.1		75.46
11	10,380	75.00	10.9	Upper Marker	113.00
12	13,088	0.00	0.0		115.69

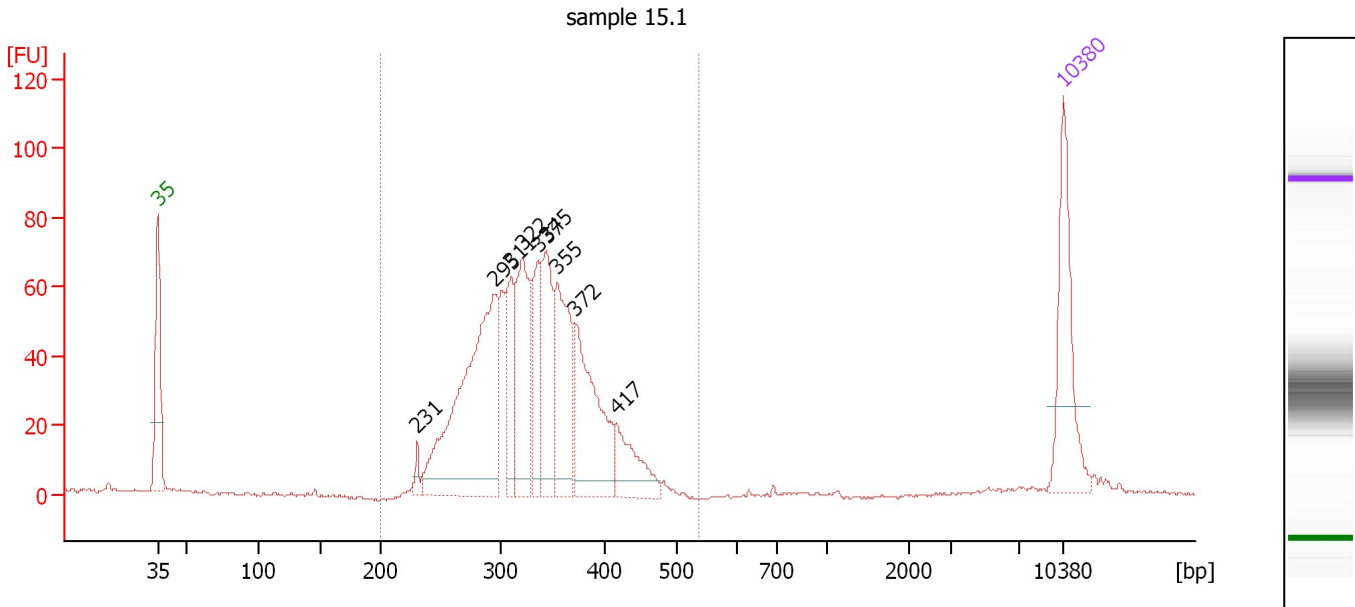
**Region table for sample 2 : sample 9.3**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	329	507	998.0	4,438.0	96	14.7	938.23

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

Created: 6/30/2015 11:11:56 AM  
 Modified: 6/30/2015 11:58:56 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 15.1**

Number of peaks found: 9                      Corr. Area 1: 975.6  
 Noise: 0.4

**Peak table for sample 3 : sample 15.1**

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	231	9.40	61.7		63.09
3	295	289.58	1,485.2		69.05
4	311	63.90	311.5		70.34
5	322	107.52	506.1		71.23
6	337	64.43	289.9		72.42
7	345	91.35	401.5		73.06
8	355	112.45	479.6		73.91
9	372	130.23	530.5		75.25
10	417	52.50	190.7		78.47
11	10,380	75.00	10.9	Upper Marker	113.00

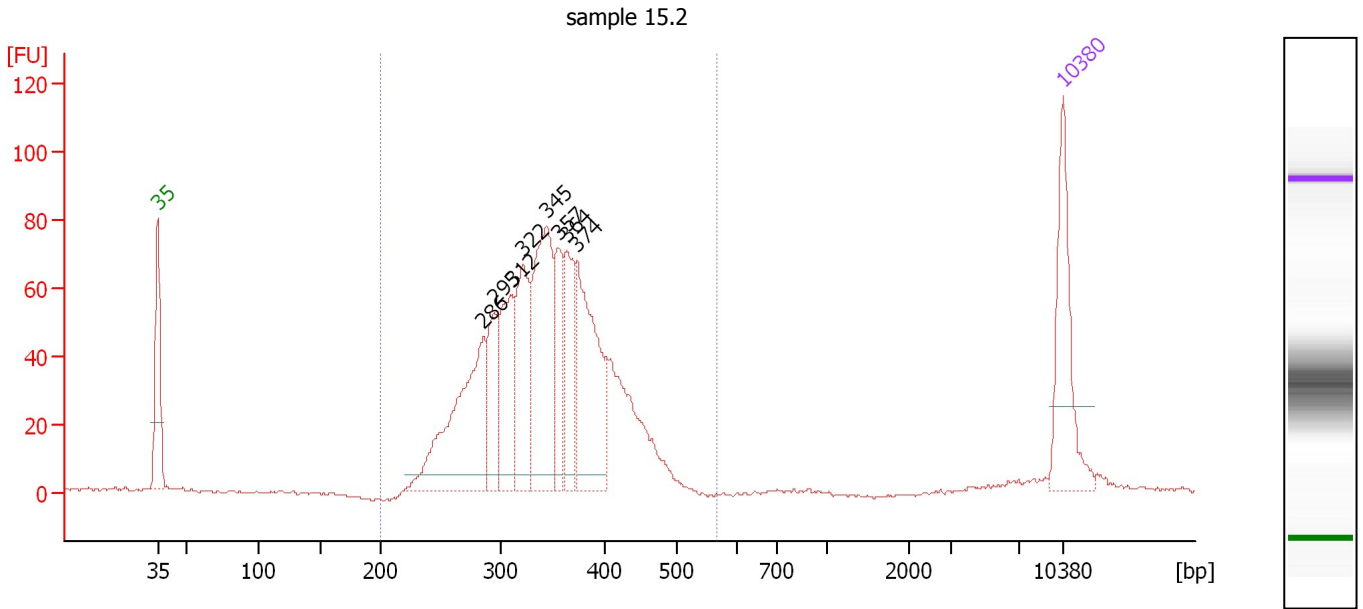
**Region table for sample 3 : sample 15.1**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	332	538	975.6	4,555.9	98	14.6	970.92

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 15.2**

Number of peaks found: 8                      Corr. Area 1: 1,115.5  
 Noise: 0.5

**Peak table for sample 4 : sample 15.2**

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	286	192.92	1,021.4		68.19
3	295	71.16	365.6		69.00
4	312	95.64	464.9		70.41
5	322	114.51	538.3		71.26
6	345	167.39	735.5		73.07
7	357	64.00	271.8		74.03
8	364	66.15	275.2		74.63
9	374	151.23	612.2		75.44
10	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : sample 15.2**

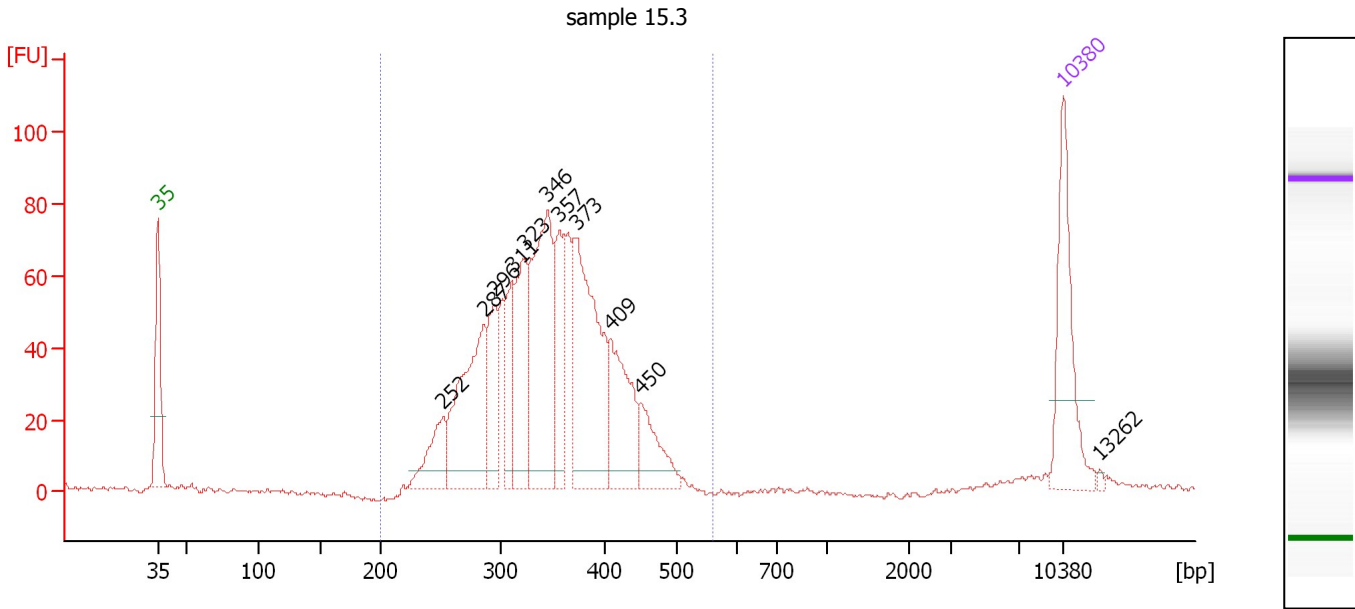
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	345	567	1,115.5	4,819.0	98	15.6	1,062.59



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

Created: 6/30/2015 11:11:56 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 15.3**

Number of peaks found: 11      Corr. Area 1: 1,152.8  
 Noise: 0.8

**Peak table for sample 5 : sample 15.3**

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	252	51.09	306.8		65.07
3	287	155.59	822.3		68.24
4	296	63.39	325.0		69.06
5	311	52.61	256.0		70.39
6	323	99.97	469.1		71.31
7	346	178.42	781.8		73.15
8	357	69.39	294.3		74.07
9	373	187.55	761.6		75.34
10	409	89.50	331.8		78.00
11	450	49.82	167.7		80.35
12	10,380	75.00	10.9	Upper Marker	113.00
13	13,262	0.00	0.0		115.86

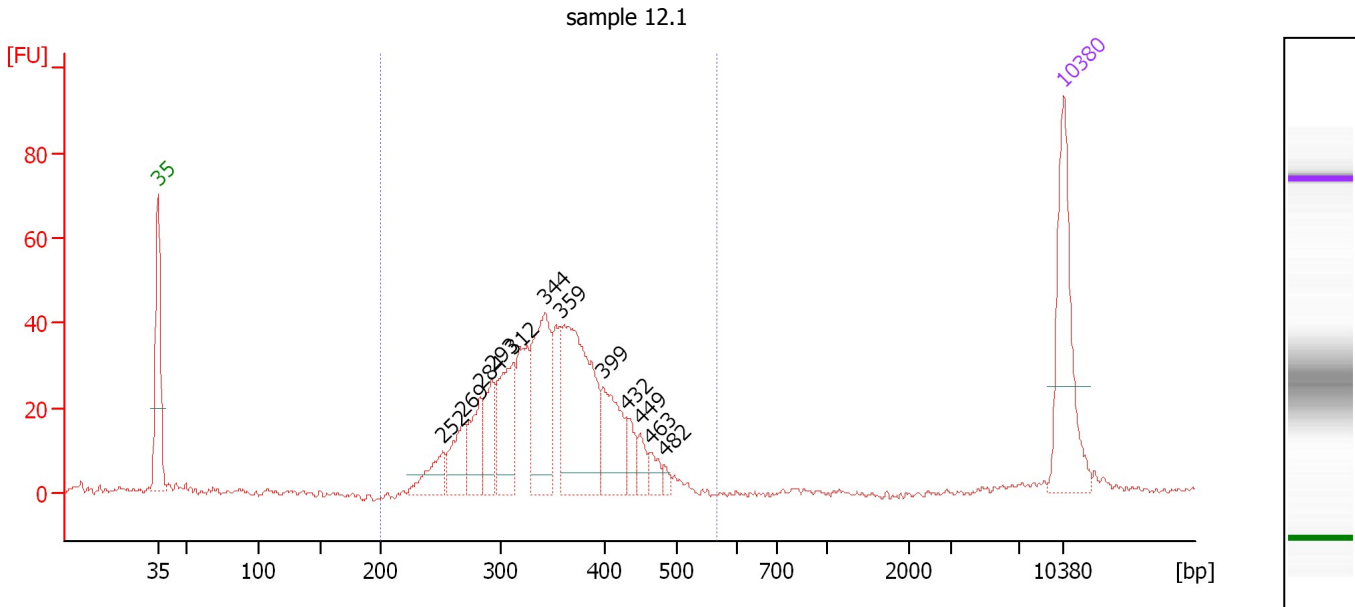
**Region table for sample 5 : sample 15.3**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	348	561	1,152.8	4,985.1	97	16.2	1,103.31

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

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 Modified: 6/30/2015 11:58:56 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 12.1**

Number of peaks found: 12                      Corr. Area 1: 589.0  
 Noise: 0.8

**Peak table for sample 6 : sample 12.1**

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	252	30.40	182.7		65.05
3	269	37.08	208.6		66.64
4	284	45.47	242.8		67.97
5	293	39.79	205.6		68.85
6	312	70.81	343.8		70.44
7	344	100.76	443.9		73.00
8	359	158.79	670.9		74.18
9	399	57.41	217.7		77.46
10	432	17.26	60.6		79.31
11	449	13.96	47.1		80.28
12	463	11.15	36.5		81.10
13	482	4.81	15.1		82.18
14	10,380	75.00	10.9	Upper Marker	113.00

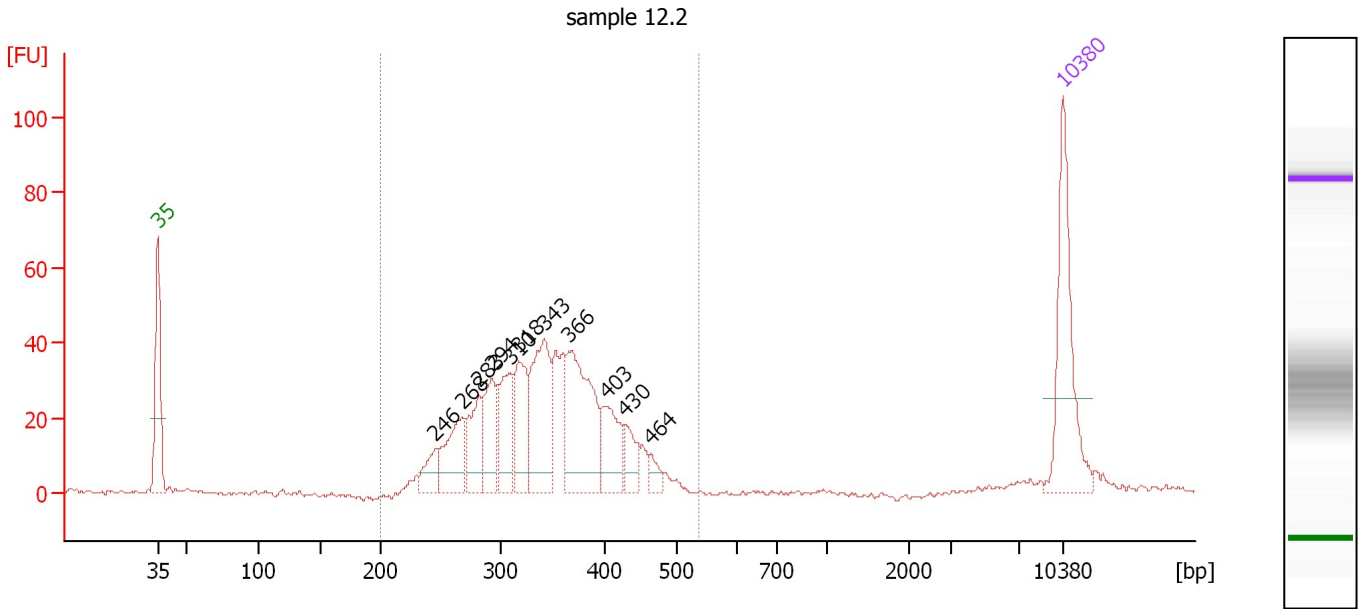
**Region table for sample 6 : sample 12.1**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	349	565	589.0	2,881.8	98	15.6	642.96

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 12.2**

Number of peaks found: 11                      Corr. Area 1: 611.7  
 Noise: 0.7

**Peak table for sample 7 : sample 12.2**

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	246	22.92	141.5		64.45
3	268	54.92	310.4		66.52
4	283	47.58	255.0		67.87
5	294	51.31	264.4		68.91
6	310	55.98	273.7		70.26
7	318	57.11	271.9		70.94
8	343	92.17	407.3		72.91
9	366	114.43	473.6		74.78
10	403	43.37	162.9		77.69
11	430	21.48	75.7		79.19
12	464	9.76	31.9		81.12
13	10,380	75.00	10.9	Upper Marker	113.00

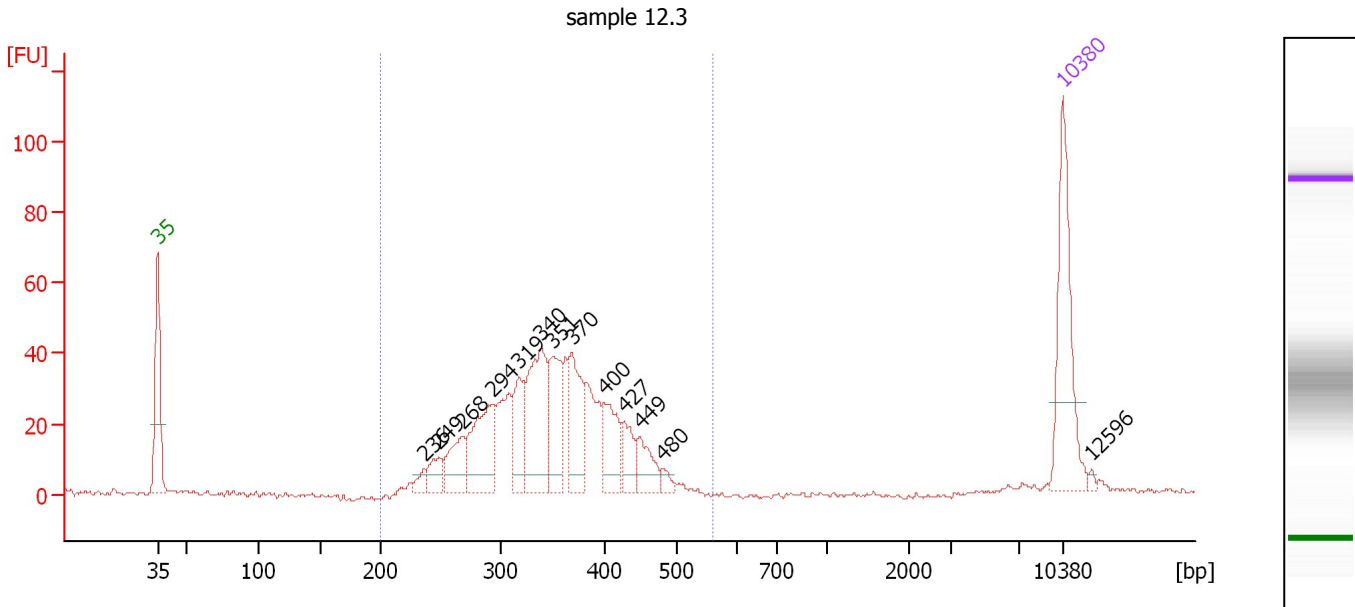
**Region table for sample 7 : sample 12.2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	343	536	611.7	2,897.8	97	16.5	632.33

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 12.3**

Number of peaks found: 13                      Corr. Area 1: 610.1  
 Noise: 0.6

**Peak table for sample 8 : sample 12.3**

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	236	9.05	58.0		63.59
3	249	19.59	119.3		64.74
4	268	37.84	213.9		66.53
5	294	72.42	373.7		68.88
6	319	43.03	204.5		70.98
7	340	92.94	414.6		72.66
8	351	54.59	235.4		73.60
9	370	58.45	239.6		75.07
10	400	38.84	146.9		77.53
11	427	23.69	84.0		79.05
12	449	25.91	87.3		80.31
13	480	5.88	18.6		82.03
14	10,380	75.00	10.9	Upper Marker	113.00
15	12,596	0.00	0.0		115.20

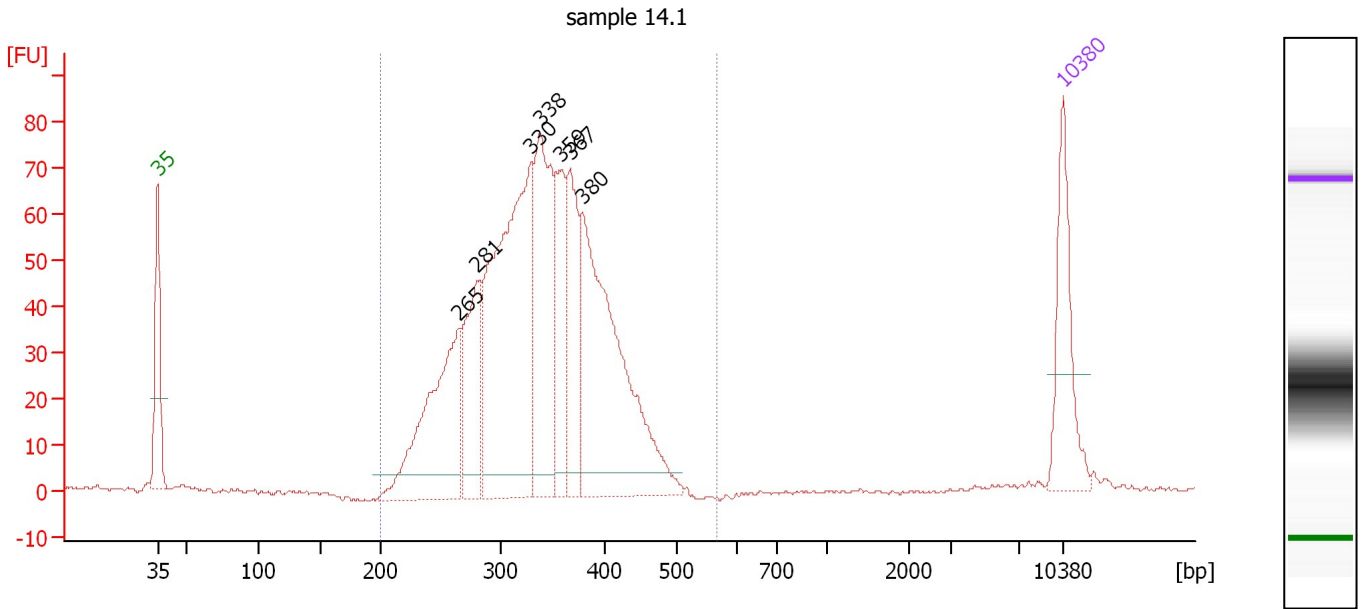
**Region table for sample 8 : sample 12.3**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	349	560	610.1	2,825.1	97	16.6	625.91

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample 14.1**

Number of peaks found: 7                      Corr. Area 1: 1,154.1  
 Noise: 0.4

**Peak table for sample 9 : sample 14.1**

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	265	223.11	1,273.7		66.28
3	281	122.82	662.6		67.70
4	330	413.02	1,893.6		71.92
5	338	211.78	948.4		72.55
6	359	96.57	408.0		74.18
7	367	112.24	463.2		74.87
8	380	331.30	1,322.2		75.87
9	10,380	75.00	10.9	Upper Marker	113.00

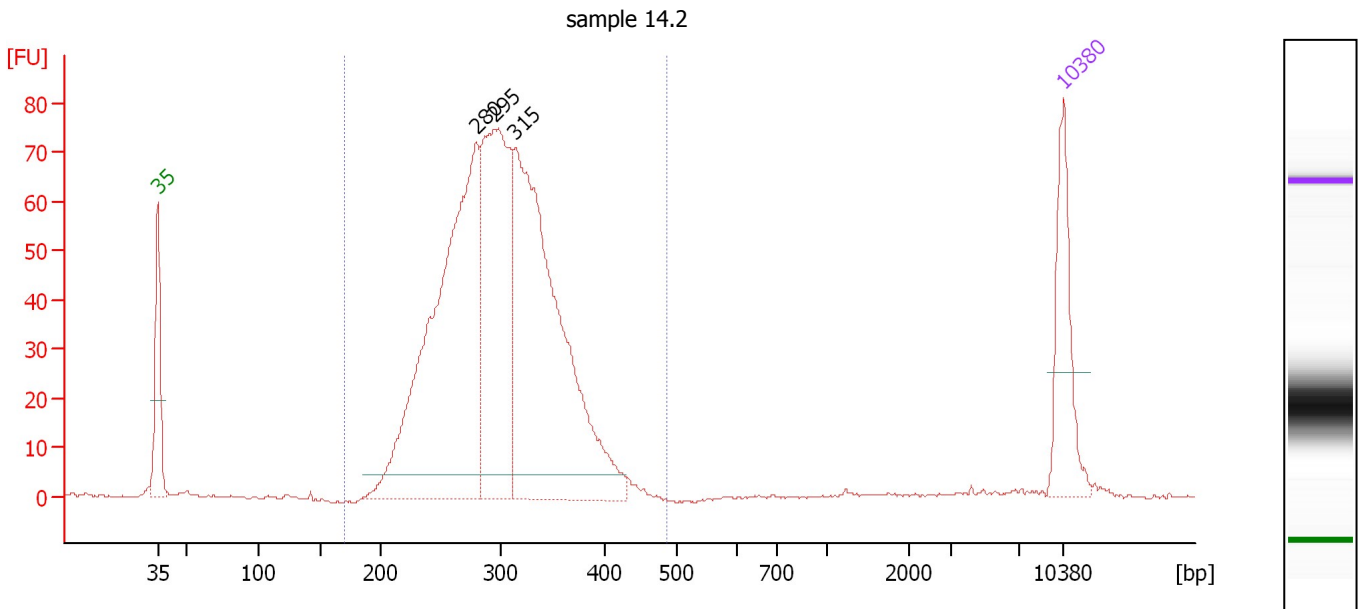
**Region table for sample 9 : sample 14.1**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	338	567	1,154.1	6,739.8	99	16.5	1,447.11

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sample 14.2**

Number of peaks found: 3                      Corr. Area 1: 1,084.2  
 Noise: 0.2

**Peak table for sample 10 : sample 14.2**

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	280	582.68	3,148.9		67.66
3	295	360.93	1,851.7		69.04
4	315	548.09	2,635.5		70.68
5	10,380	75.00	10.9	Upper Marker	113.00

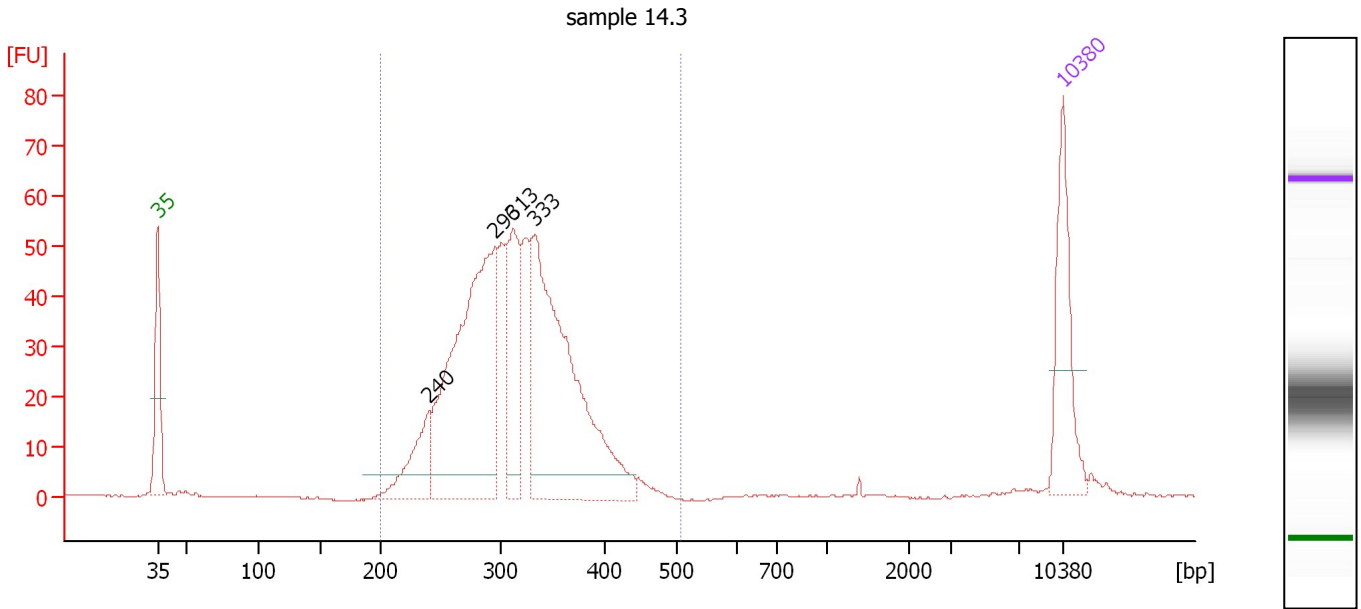
**Region table for sample 10 : sample 14.2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
171	301	485	1,084.2	7,625.9	99	15.0	1,475.43

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : sample 14.3**

Number of peaks found: 4                      Corr. Area 1: 732.7  
 Noise: 0.2

**Peak table for sample 11 : sample 14.3**

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	240	70.07	442.0		63.96
3	296	383.35	1,962.1		69.10
4	313	117.72	570.2		70.50
5	333	373.68	1,697.9		72.16
6	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : sample 14.3**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	314	506	732.7	5,192.8	99	14.7	1,047.80

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30\_003.xad

Created: 6/30/2015 11:11:56 AM  
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**Gel Image**

