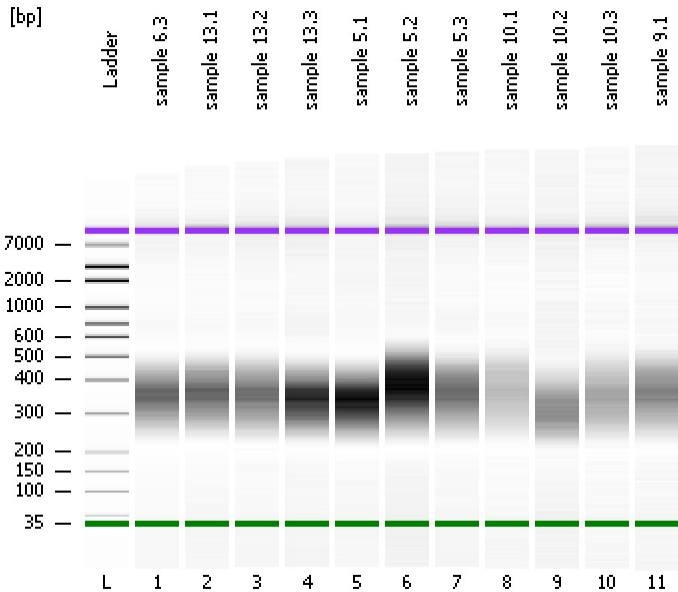


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

Created: 6/30/2015 10:20:12 AM
Modified: 6/30/2015 11:58:25 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

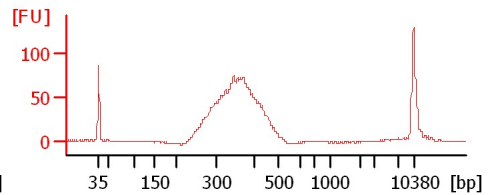
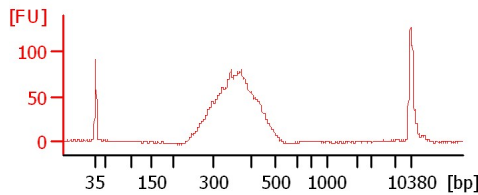
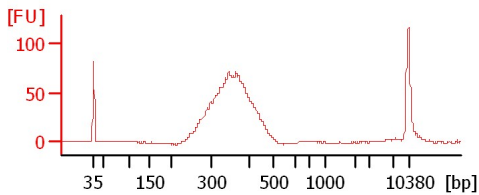
Chip Information:

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

sample 6.3

sample 13.1

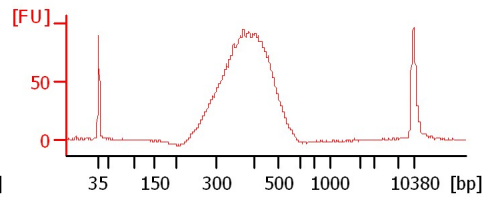
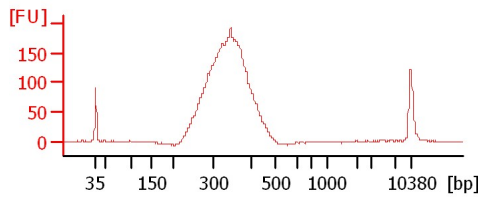
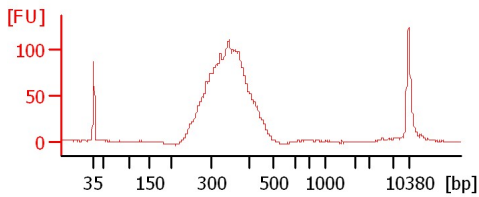
sample 13.2



sample 13.3

sample 5.1

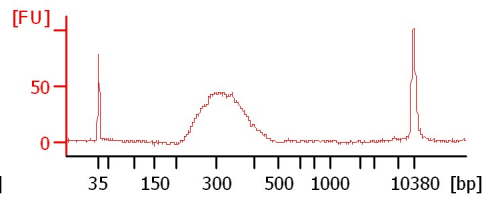
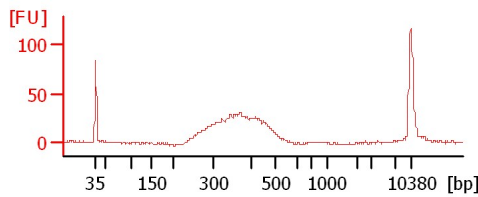
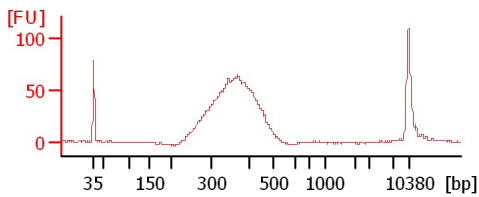
sample 5.2



sample 5.3

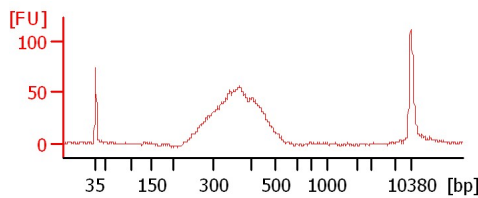
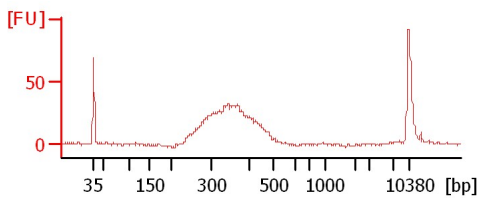
sample 10.1

sample 10.2



sample 10.3

sample 9.1



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

Created: 6/30/2015 10:20:12 AM
 Modified: 6/30/2015 11:58:25 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 6.3		<input type="checkbox"/>	✓			
sample 13.1		<input type="checkbox"/>	✓			
sample 13.2		<input type="checkbox"/>	✓			
sample 13.3		<input type="checkbox"/>	✓			
sample 5.1		<input type="checkbox"/>	✓			
sample 5.2		<input type="checkbox"/>	✓			
sample 5.3		<input type="checkbox"/>	✓			
sample 10.1		<input type="checkbox"/>	✓			
sample 10.2		<input type="checkbox"/>	✓			
sample 10.3		<input type="checkbox"/>	✓			
sample 9.1		<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_002.xad

Created: 6/30/2015 10:20:12 AM
Modified: 6/30/2015 11:58:25 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

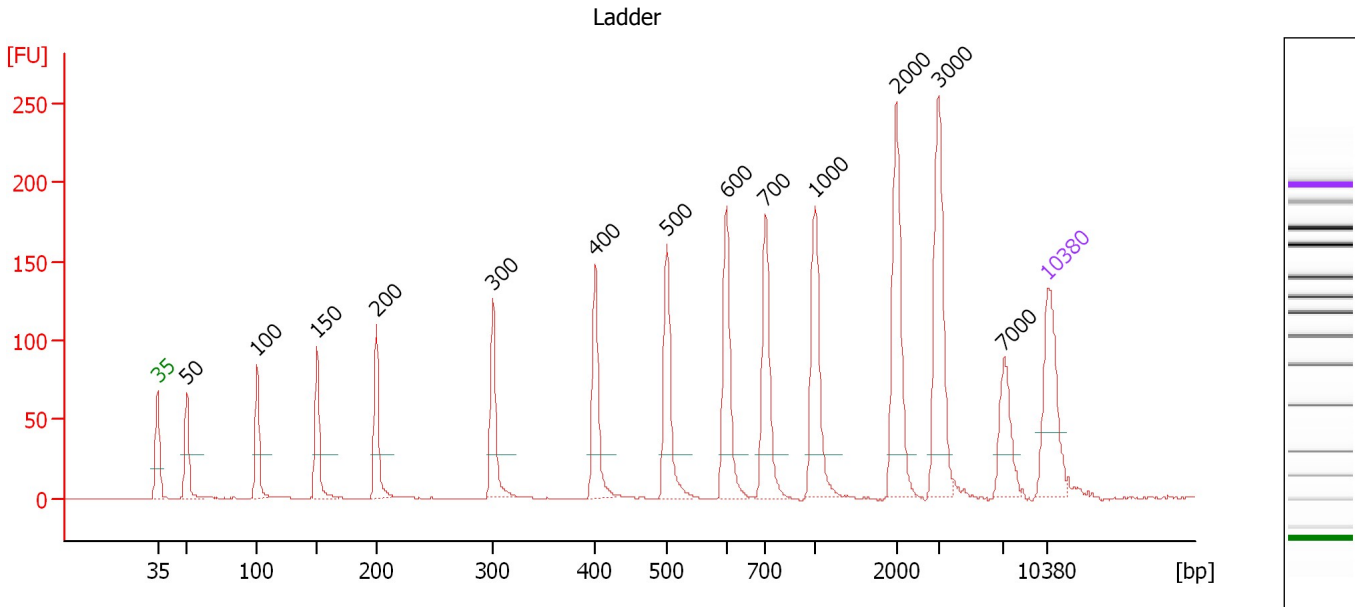
Ladder

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_002.xad

Created: 6/30/2015 10:20:12 AM
 Modified: 6/30/2015 11:58:25 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

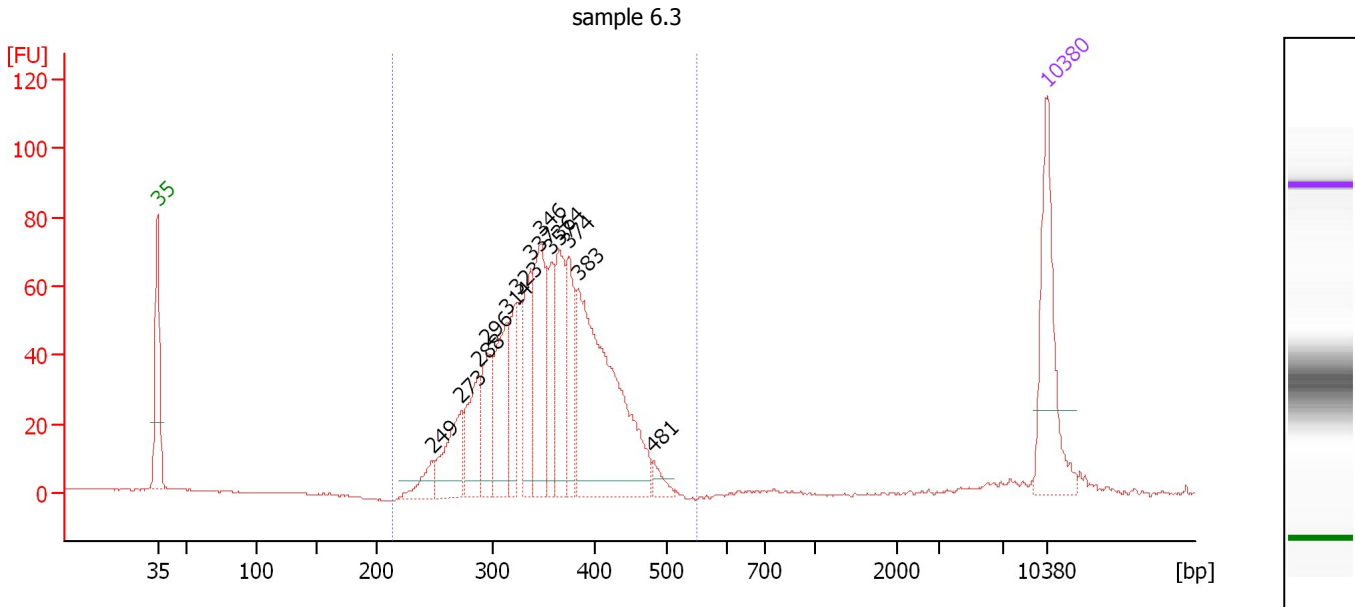
Peak table for Ladder

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	50.86
4	150	150.00	1,515.2	Ladder Peak	55.52
5	200	150.00	1,136.4	Ladder Peak	60.19
6	300	150.00	757.6	Ladder Peak	69.36
7	400	150.00	568.2	Ladder Peak	77.43
8	500	150.00	454.5	Ladder Peak	83.06
9	600	150.00	378.8	Ladder Peak	87.73
10	700	150.00	324.7	Ladder Peak	90.83
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	109.55
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_002.xad

Created: 6/30/2015 10:20:12 AM
 Modified: 6/30/2015 11:58:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 6.3

Number of peaks found: 13 Corr. Area 1: 1,012.9
 Noise: 0.3

Peak table for sample 1 : sample 6.3

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	249	21.60	131.4		64.69
3	273	61.44	341.3		66.87
4	288	61.13	321.9		68.24
5	296	54.31	278.4		68.95
6	314	78.38	378.7		70.46
7	323	49.60	232.7		71.21
8	337	69.25	311.6		72.32
9	346	96.63	423.1		73.08
10	357	56.86	241.3		73.96
11	364	73.10	304.1		74.54
12	374	60.22	244.3		75.29
13	383	249.68	988.1		76.05
14	481	10.64	33.5		81.99
15	10,380	75.00	10.9	Upper Marker	113.00

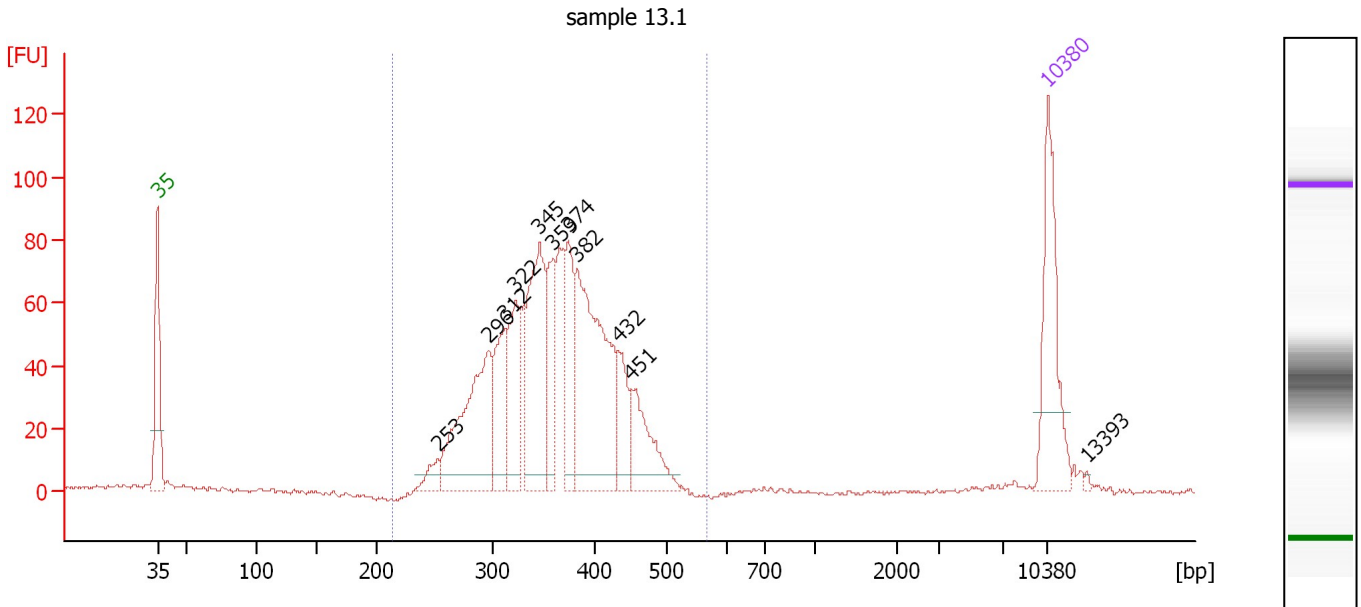
Region table for sample 1 : sample 6.3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
214	354	552	1,012.9	3,991.6	99	14.5	906.16

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

Created: 6/30/2015 10:20:12 AM
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Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 13.1

Number of peaks found: 11 Corr. Area 1: 1,180.0
 Noise: 0.7

Peak table for sample 2 : sample 13.1

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	253	16.39	98.2		65.05
3	296	158.98	814.0		68.98
4	312	68.38	331.9		70.34
5	322	81.36	382.6		71.15
6	345	145.43	638.4		73.01
7	359	57.92	244.7		74.09
8	374	69.59	281.7		75.36
9	382	204.84	812.2		75.99
10	432	44.49	156.0		79.24
11	451	62.33	209.6		80.28
12	10,380	75.00	10.9	Upper Marker	113.00
13	13,393	0.00	0.0		116.07

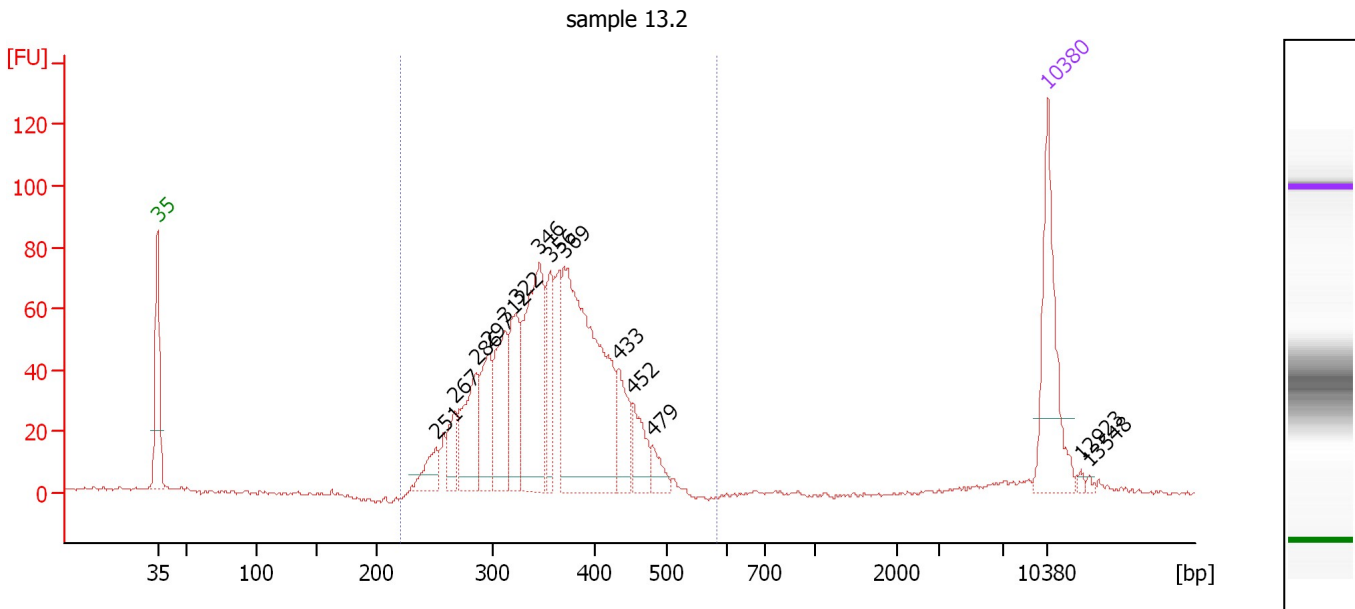
Region table for sample 2 : sample 13.1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
215	361	567	1,180.0	4,293.3	97	15.3	989.95

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 13.2

Number of peaks found: 14 Corr. Area 1: 1,157.1
 Noise: 0.6

Peak table for sample 3 : sample 13.2

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	251	28.28	170.5		64.89
3	267	30.06	170.5		66.35
4	286	74.92	397.5		68.03
5	297	61.85	315.6		69.08
6	312	80.34	389.8		70.35
7	322	73.41	344.9		71.17
8	346	155.50	681.8		73.04
9	356	50.04	212.8		73.90
10	369	280.24	1,149.9		74.95
11	433	42.77	149.8		79.27
12	452	33.87	113.5		80.37
13	479	15.62	49.4		81.87
14	10,380	75.00	10.9	Upper Marker	113.00
15	12,923	0.00	0.0		115.59
16	13,548	0.00	0.0		116.23

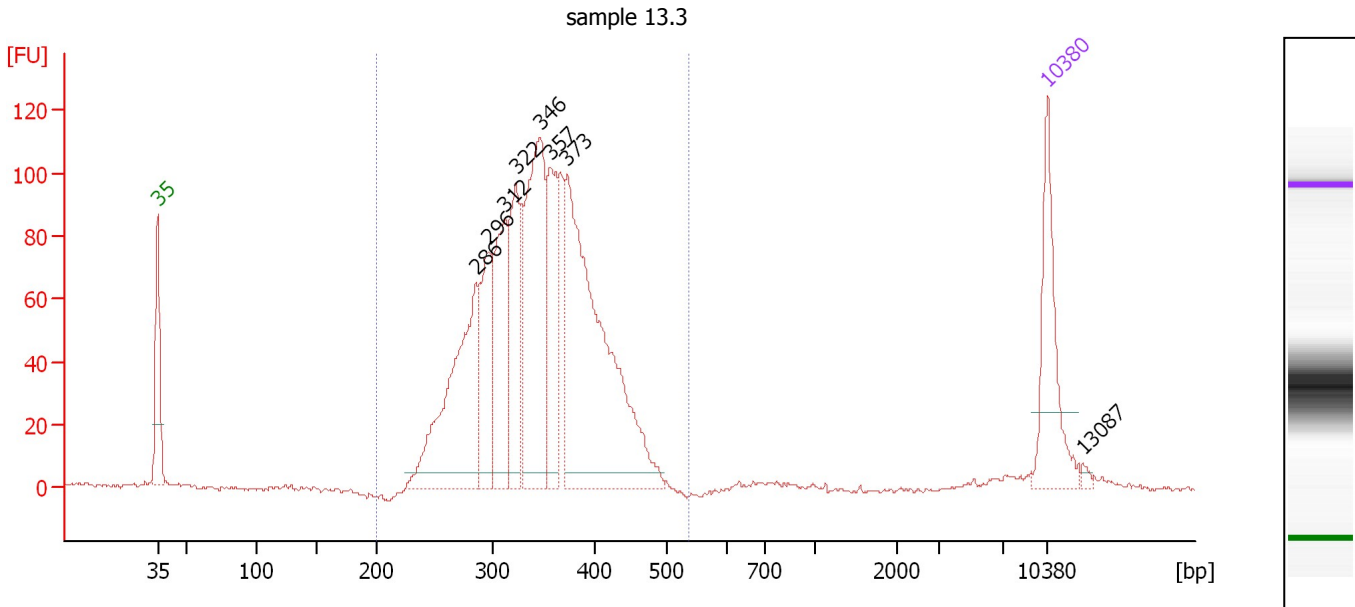
Region table for sample 3 : sample 13.2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
221	356	585	1,157.1	4,412.6	96	15.9	1,000.44

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

Created: 6/30/2015 10:20:12 AM
 Modified: 6/30/2015 11:58:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 13.3

Number of peaks found: 8 Corr. Area 1: 1,592.0
 Noise: 0.7

Peak table for sample 4 : sample 13.3

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	286	234.19	1,242.5		68.04
3	296	102.85	526.2		69.00
4	312	122.07	592.6		70.34
5	322	122.62	576.3		71.17
6	346	231.19	1,013.1		73.05
7	357	103.16	438.3		73.93
8	373	382.07	1,553.9		75.22
9	10,380	75.00	10.9	Upper Marker	113.00
10	13,087	0.00	0.0		115.76

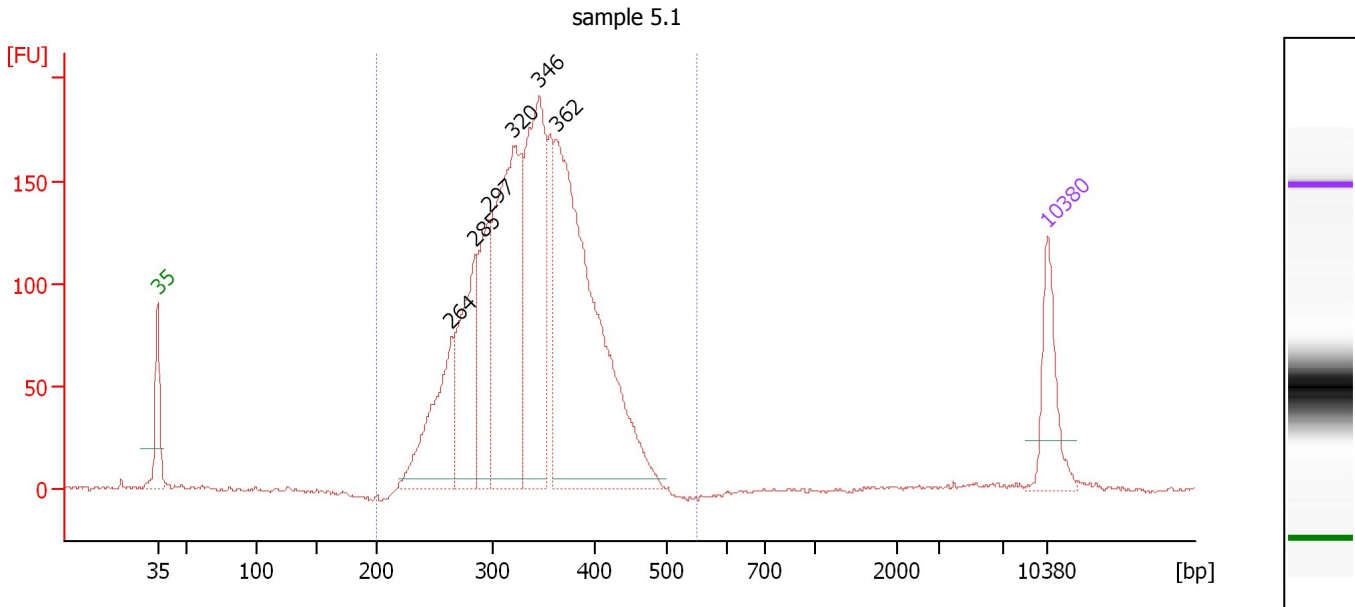
Region table for sample 4 : sample 13.3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	344	538	1,592.0	6,105.9	98	14.8	1,347.05

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

Created: 6/30/2015 10:20:12 AM
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Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5.1

Number of peaks found: 6 Corr. Area 1: 2,757.7
 Noise: 1.1

Peak table for sample 5 : sample 5.1

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	264	207.30	1,189.2		66.07
3	285	227.79	1,211.5		67.97
4	297	172.47	879.7		69.09
5	320	482.02	2,280.8		70.99
6	346	383.66	1,682.4		73.03
7	362	725.25	3,034.0		74.38
8	10,380	75.00	10.9	Upper Marker	113.00

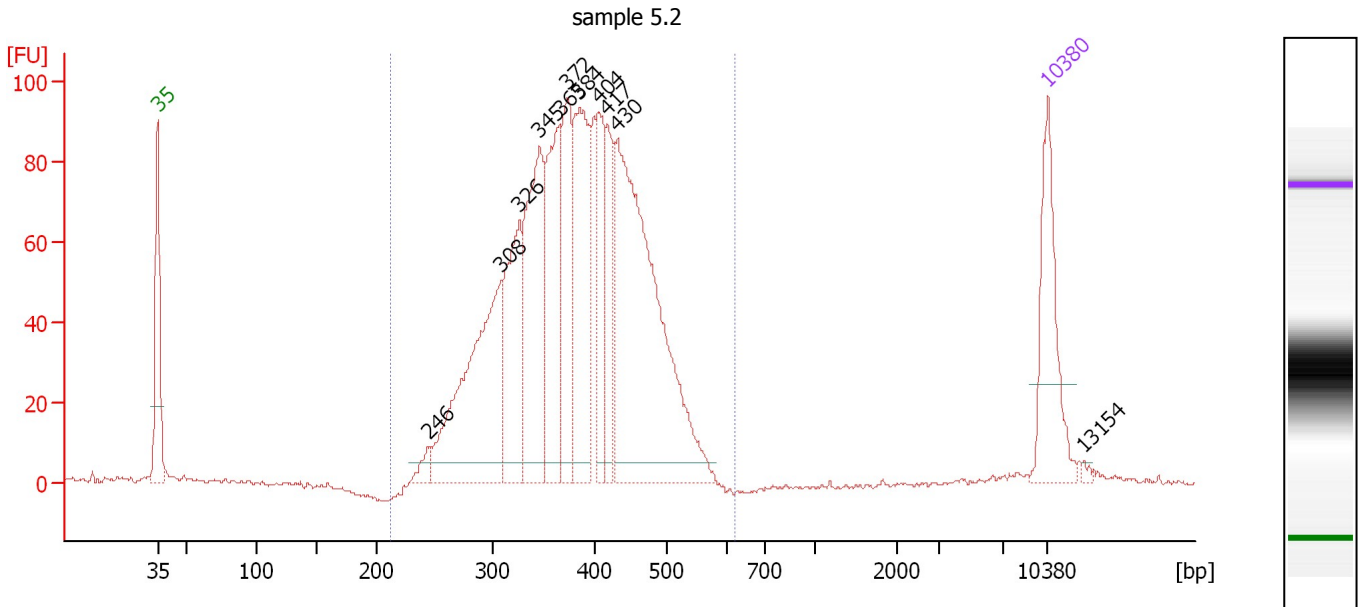
Region table for sample 5 : sample 5.1

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	551	2,757.7	10,512.8	98	14.9	2,279.27

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 5.2

Number of peaks found: 11 Corr. Area 1: 1,656.1
 Noise: 0.5

Peak table for sample 6 : sample 5.2

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	14.48	89.3		64.39
3	308	244.65	1,201.6		70.04
4	326	128.45	597.5		71.44
5	345	183.13	803.6		73.01
6	365	139.50	578.5		74.64
7	372	105.62	429.9		75.19
8	384	154.47	609.0		76.17
9	404	81.44	305.5		77.65
10	417	67.79	246.2		78.39
11	430	387.67	1,365.1		79.14
12	10,380	75.00	10.9	Upper Marker	113.00
13	13,154	0.00	0.0		115.83

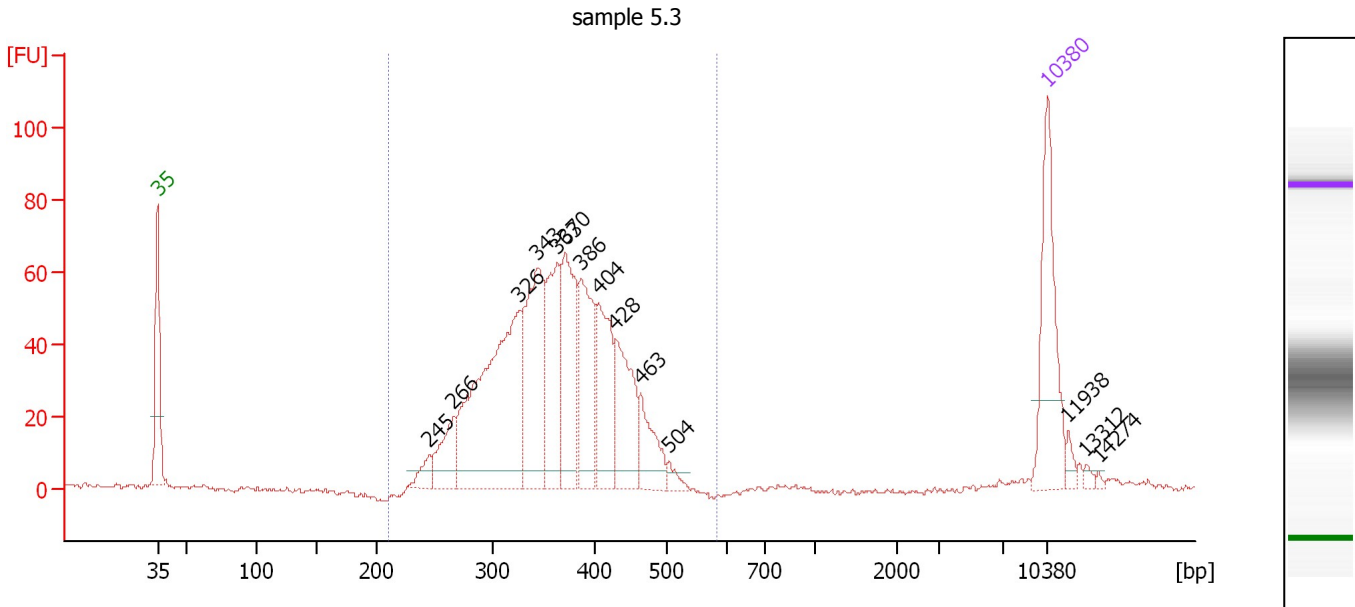
Region table for sample 6 : sample 5.2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
212	384	621	1,656.1	6,424.2	98	17.4	1,561.07

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

Created: 6/30/2015 10:20:12 AM
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Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 5.3

Number of peaks found: 14 Corr. Area 1: 991.6
 Noise: 0.7

Peak table for sample 7 : sample 5.3

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	245	16.20	100.0		64.36
3	266	44.46	253.0		66.27
4	326	252.84	1,175.1		71.46
5	343	138.51	611.2		72.86
6	363	98.59	411.5		74.45
7	370	102.32	419.0		75.01
8	386	91.31	358.2		76.32
9	404	81.95	307.1		77.67
10	428	76.62	271.5		78.98
11	463	40.71	133.2		80.99
12	504	7.84	23.6		83.23
13	10,380	75.00	10.9	Upper Marker	113.00
14	11,938	0.00	0.0		114.59
15	13,312	0.00	0.0		115.99
16	14,274	0.00	0.0		116.97

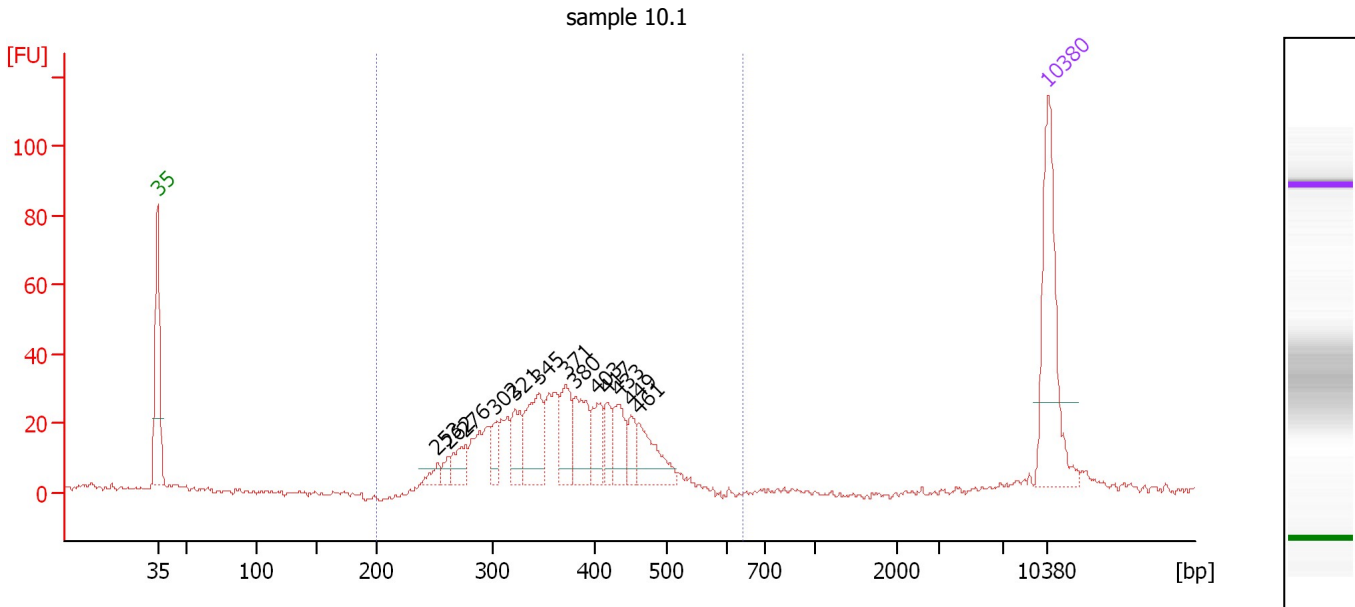
Region table for sample 7 : sample 5.3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
211	362	585	991.6	4,068.6	98	15.8	937.83

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 10.1

Number of peaks found: 13 Corr. Area 1: 520.5
 Noise: 0.7

Peak table for sample 8 : sample 10.1

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	253	8.77	52.6		65.02
3	262	7.98	46.2		65.86
4	276	20.83	114.2		67.18
5	302	15.48	77.8		69.49
6	321	26.47	124.8		71.08
7	345	52.05	228.8		72.97
8	371	35.55	145.0		75.13
9	380	39.20	156.2		75.84
10	403	25.53	96.1		77.58
11	417	17.07	62.1		78.38
12	433	26.98	94.3		79.32
13	449	16.50	55.6		80.21
14	461	36.14	118.8		80.87
15	10,380	75.00	10.9	Upper Marker	113.00

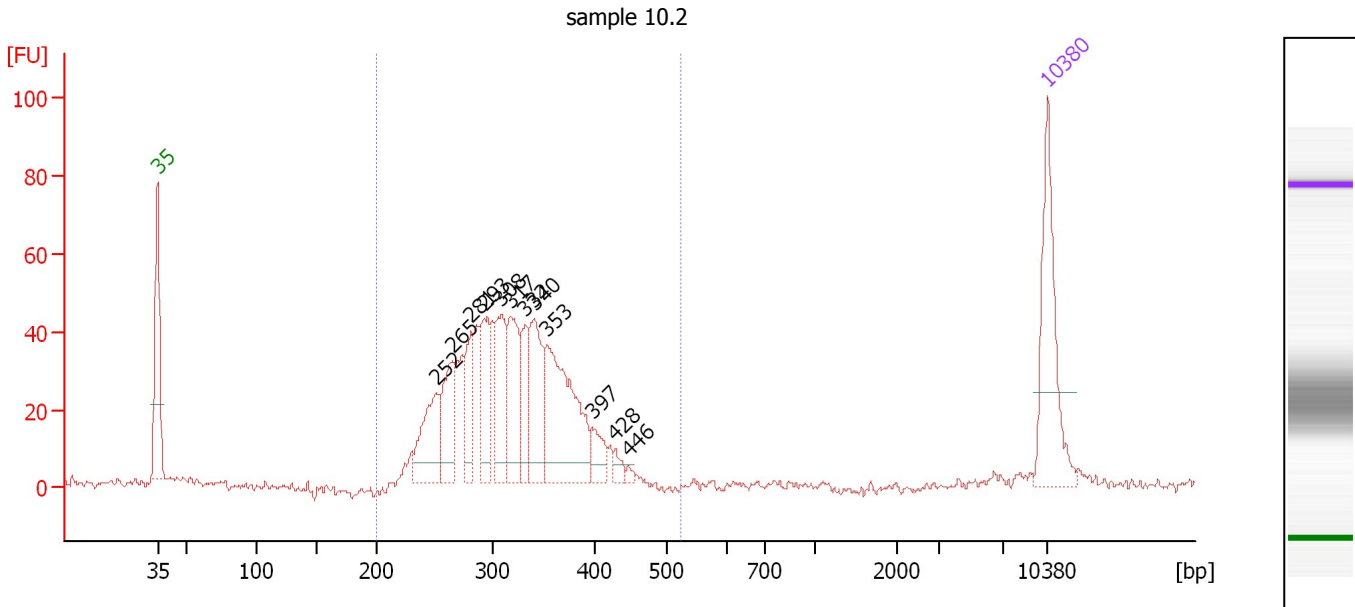
Region table for sample 8 : sample 10.1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	370	640	520.5	1,996.9	94	17.8	466.22

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 10.2

Number of peaks found: 12 Corr. Area 1: 684.7
 Noise: 0.9

Peak table for sample 9 : sample 10.2

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	252	69.96	420.8		64.95
3	265	55.82	318.8		66.18
4	281	48.47	261.2		67.64
5	293	64.46	333.3		68.72
6	308	66.41	326.3		70.04
7	317	72.80	347.8		70.75
8	332	38.54	176.0		71.92
9	340	71.49	318.7		72.58
10	353	140.73	603.4		73.67
11	397	21.99	84.0		77.15
12	428	8.59	30.4		78.99
13	446	3.31	11.2		80.03
14	10,380	75.00	10.9	Upper Marker	113.00

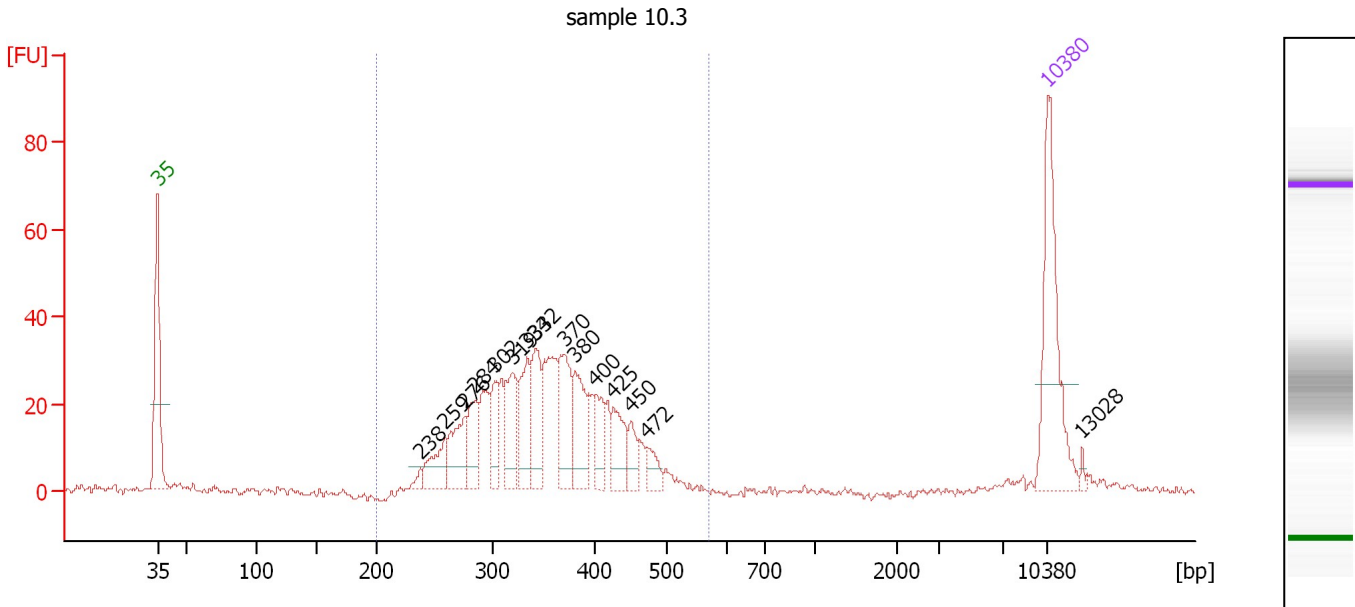
Region table for sample 9 : sample 10.2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	318	522	684.7	3,774.7	98	15.0	770.90

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

Created: 6/30/2015 10:20:12 AM
 Modified: 6/30/2015 11:58:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10.3

Number of peaks found: 15 Corr. Area 1: 530.5
 Noise: 0.8

Peak table for sample 10 : sample 10.3

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	238	5.19	33.1		63.66
3	259	30.92	180.9		65.61
4	276	40.26	220.9		67.17
5	284	31.89	169.9		67.93
6	302	25.77	129.4		69.49
7	319	42.81	203.2		70.91
8	333	40.62	184.6		72.05
9	342	43.86	194.6		72.72
10	370	52.08	213.4		74.99
11	380	42.46	169.4		75.80
12	400	24.98	94.5		77.45
13	425	28.26	100.8		78.83
14	450	14.96	50.3		80.25
15	472	12.57	40.4		81.48
16	10,380	75.00	10.9	Upper Marker	113.00
17	13,028	0.00	0.0		115.70

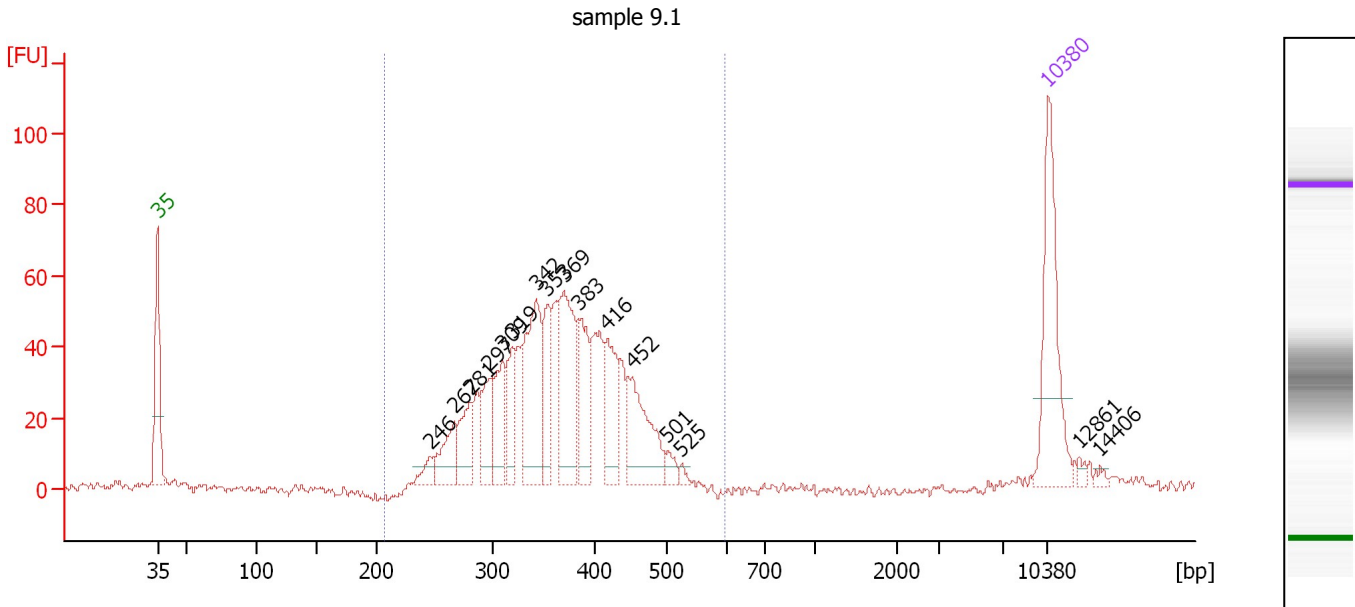
Region table for sample 10 : sample 10.3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	352	570	530.5	2,681.7	95	17.2	599.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

Created: 6/30/2015 10:20:12 AM
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Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 9.1

Number of peaks found: 16 Corr. Area 1: 871.5
 Noise: 1.3

Peak table for sample 11 : sample 9.1

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	246	12.94	79.6		64.44
3	267	37.38	212.0		66.35
4	281	36.16	195.2		67.59
5	297	38.40	196.0		69.07
6	309	46.93	229.8		70.12
7	319	37.37	177.2		70.93
8	342	99.81	442.2		72.75
9	353	42.92	184.1		73.65
10	369	88.62	363.7		74.94
11	383	51.57	203.8		76.09
12	416	53.13	193.5		78.33
13	452	66.83	224.2		80.34
14	501	9.40	28.4		83.11
15	525	3.77	10.9		84.21
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,861	0.00	0.0		115.53
18	14,406	0.00	0.0		117.11

Region table for sample 11 : sample 9.1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
207	365	597	871.5	3,539.8	95	16.9	819.45

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-30\2015-06-30_002.xad

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Gel Image

