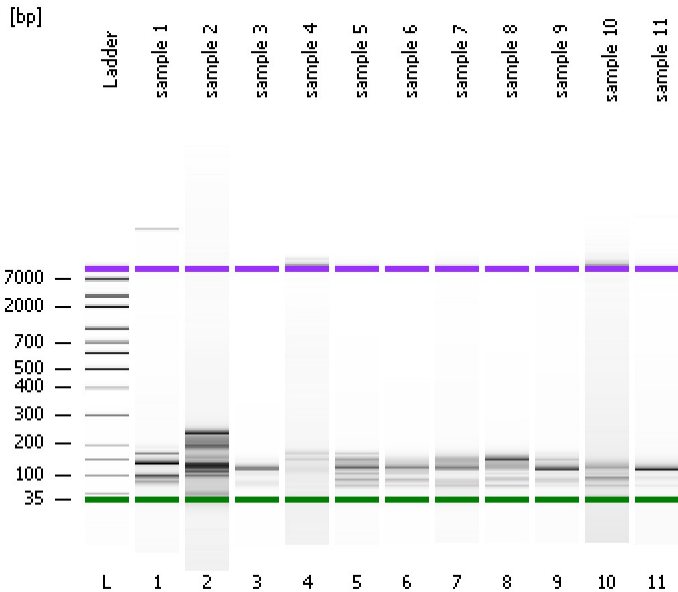


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
Modified: 1/22/2014 1:36:36 PM

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

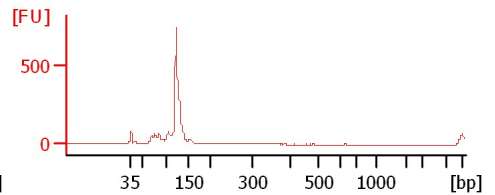
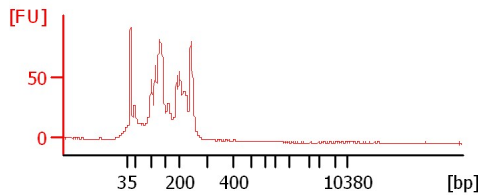
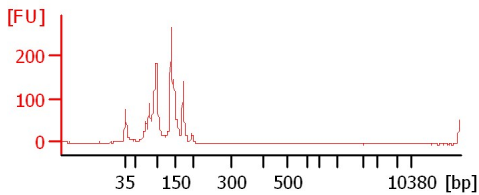
Chip Information:

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

sample 1

sample 2

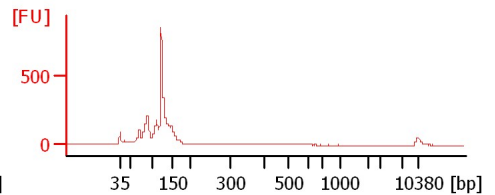
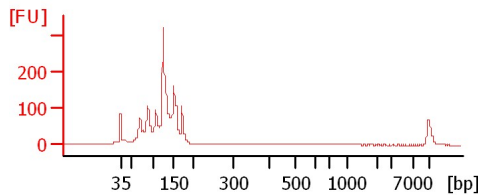
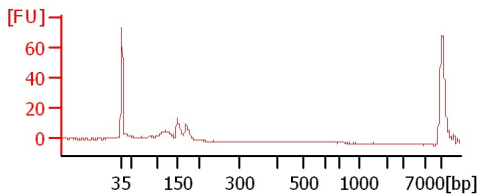
sample 3



sample 4

sample 5

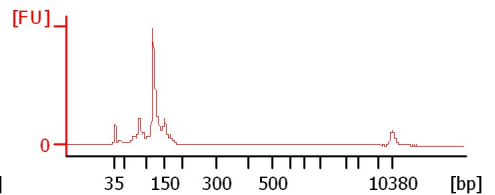
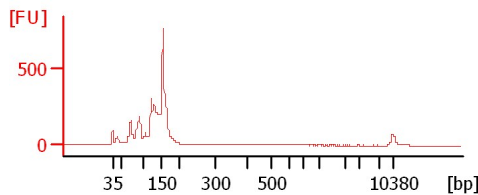
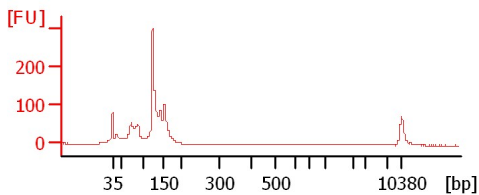
sample 6



sample 7

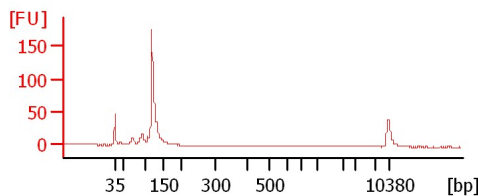
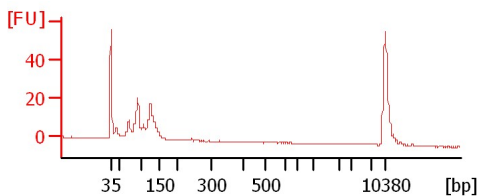
sample 8

sample 9



sample 10

sample 11



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

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:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
Modified: 1/22/2014 1:36:36 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

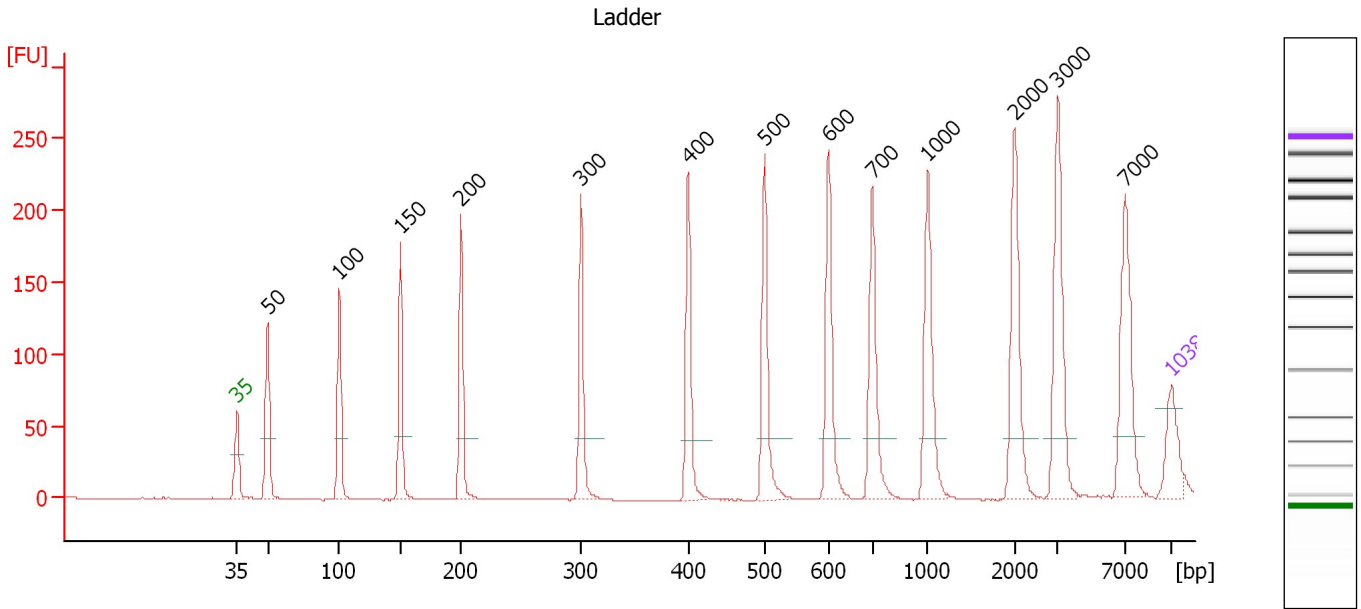
Ladder

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:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

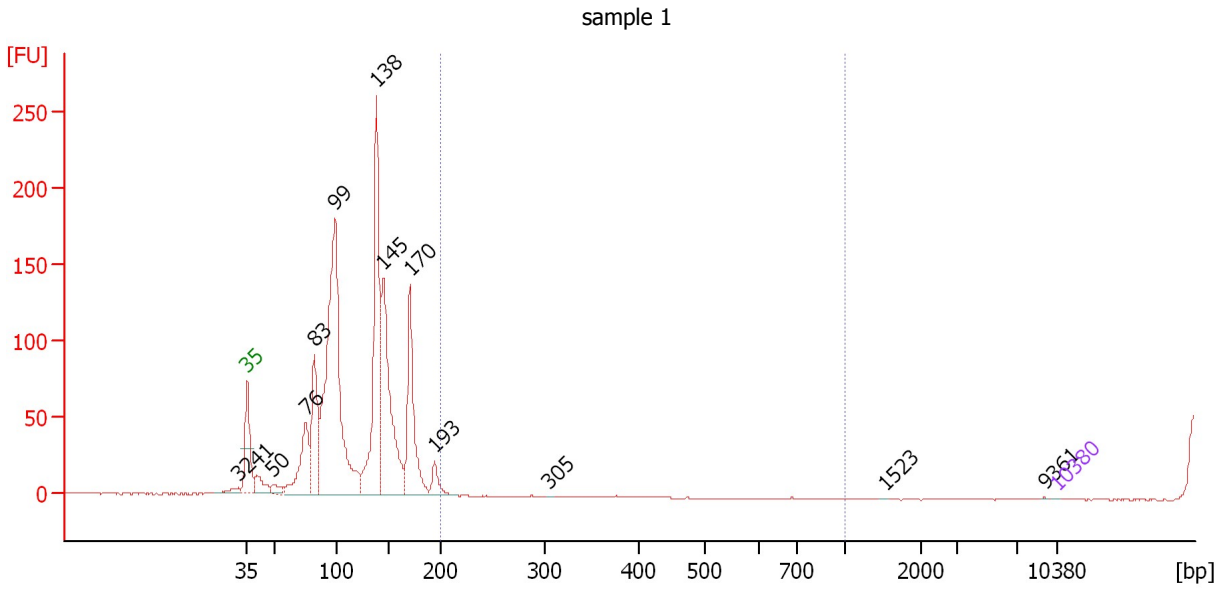
Peak table for Ladder

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.28	50	150.00	4,545.5	Ladder Peak
3	50.67	100	150.00	2,272.7	Ladder Peak
4	55.22	150	150.00	1,515.2	Ladder Peak
5	59.77	200	150.00	1,136.4	Ladder Peak
6	68.76	300	150.00	757.6	Ladder Peak
7	76.78	400	150.00	568.2	Ladder Peak
8	82.49	500	150.00	454.5	Ladder Peak
9	87.28	600	150.00	378.8	Ladder Peak
10	90.56	700	150.00	324.7	Ladder Peak
11	94.71	1,000	150.00	227.3	Ladder Peak
12	101.22	2,000	150.00	113.6	Ladder Peak
13	104.41	3,000	150.00	75.8	Ladder Peak
14	109.49	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : sample 1

Height Threshold [FU] : 0.1

Overall Results for sample 1 : sample 1

Number of peaks found: 13 Corr. Area 1: 0.0
 Noise: 0.3

Peak table for sample 1 : sample 1

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	42.17	32	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	43.88	41	38,986.55	1,448,862.8	
4	45.26	50	17,551.31	533,124.6	
5	48.07	76	126,787.42	2,530,799.5	
6	48.81	83	155,656.45	2,850,255.8	
7	50.60	99	688,274.44	10,489,853.0	
8	54.15	138	395,908.09	4,337,991.5	
9	54.75	145	320,817.88	3,355,549.5	
10	57.06	170	193,933.63	1,726,748.0	
11	59.18	193	31,014.62	242,911.6	
12	69.13	305	173.71	863.9	
13	98.12	1,523	187.16	186.2	
14	111.94	9,361	196.81	31.9	
15	113.00	10,380	75.00	10.9	Upper Marker

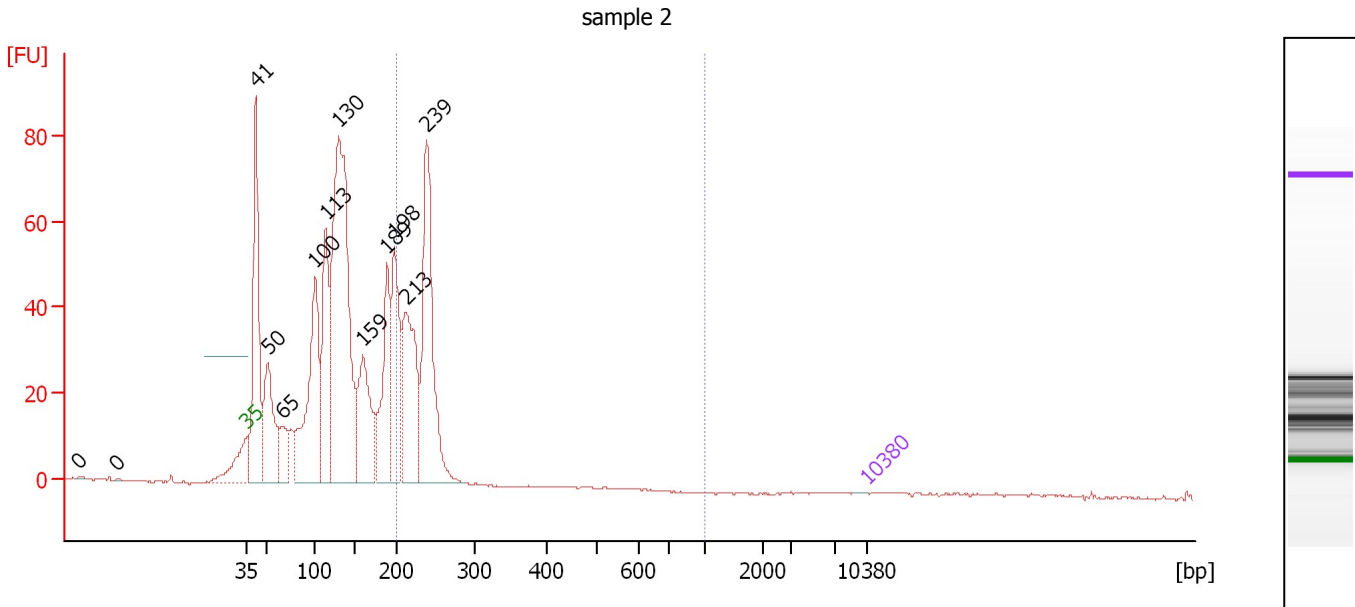
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	0	0.0	0.00	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : sample 2

Height Threshold [FU] : 0.01

Overall Results for sample 2 : sample 2

Number of peaks found: 13 Corr. Area 1: 267.1
 Noise: 0.2

Peak table for sample 2 : sample 2

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	24.02	0	0.00	0.0	
2	28.24	0	0.00	0.0	
3	43.00	35	125.00	5,411.3	Lower Marker
4	43.96	41	154,303.75	5,653,734.0	
5	45.29	50	82,044.55	2,480,188.3	
6	46.92	65	26,723.61	620,948.3	
7	50.71	100	144,038.83	2,171,910.8	
8	51.86	113	101,058.41	1,354,374.4	
9	53.36	130	321,521.69	3,758,999.8	
10	56.07	159	86,941.13	826,551.1	
11	58.78	189	83,253.59	666,898.1	
12	59.63	198	86,186.60	658,159.9	
13	60.95	213	104,975.67	746,242.1	
14	63.24	239	152,422.06	967,830.6	
15	113.00	10,380	75.00	10.9	Upper Marker

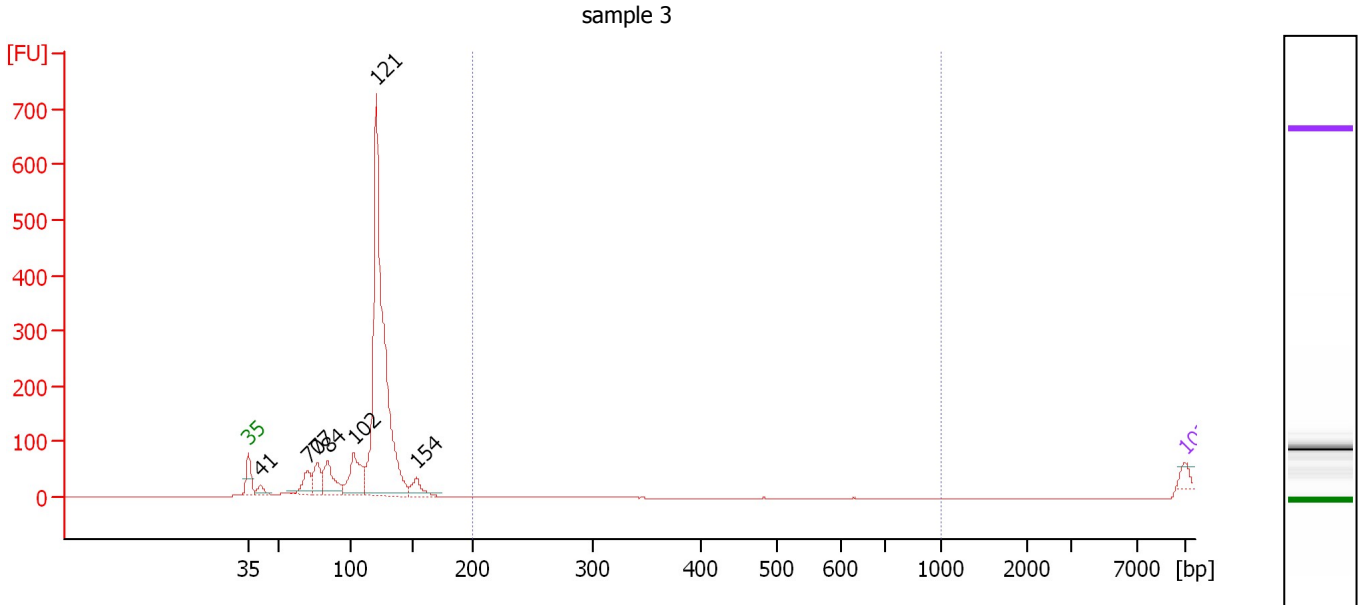
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	228	2,036,583.9	306,099.69	267.1	25	7.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 7 Corr. Area 1: 0.0
 Noise: 0.1

Peak table for sample 3 : sample 3

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	43.92	41	112.85	4,166.3	
3	47.42	70	309.04	6,698.2	
4	48.14	77	358.41	7,093.2	
5	48.94	84	528.76	9,543.3	
6	50.89	102	692.51	10,243.2	
7	52.56	121	5,485.25	68,792.1	
8	55.59	154	234.35	2,304.6	
9	113.00	10,380	75.00	10.9	Upper Marker

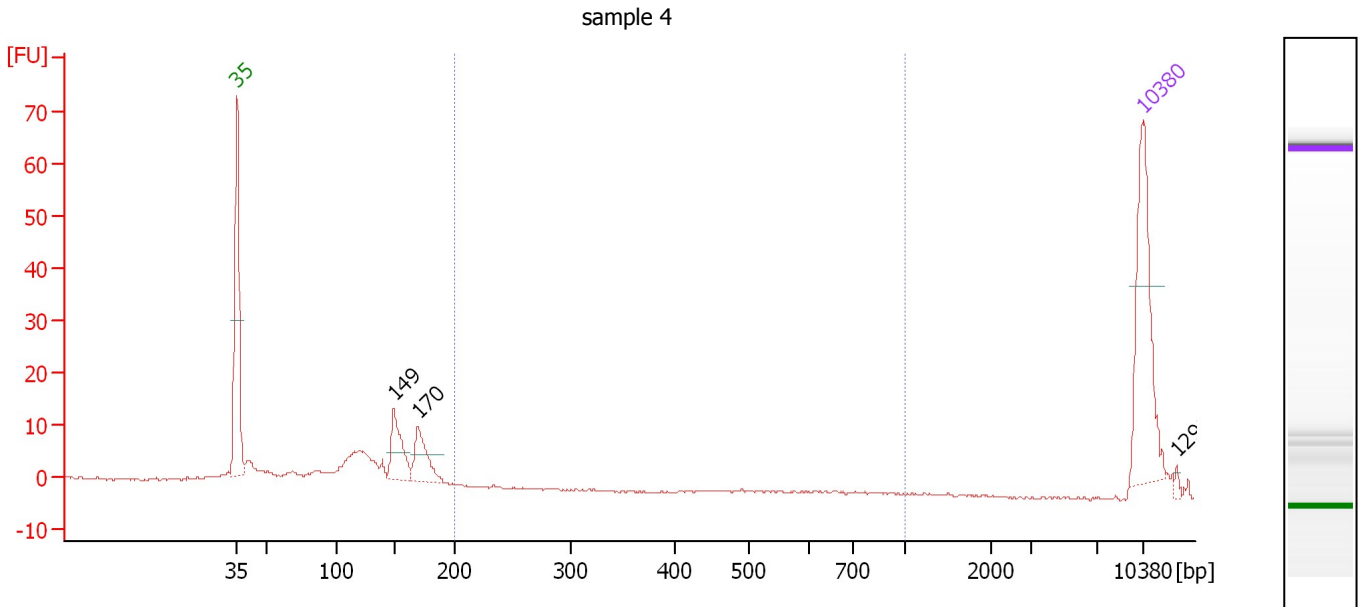
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	0	0.0	0.00	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 3 Corr. Area 1: 0.0
 Noise: 0.2

Peak table for sample 4 : sample 4

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	55.12	149	44.95	457.3	
3	57.02	170	39.11	349.1	
4	113.00	10,380	75.00	10.9	Upper Marker
5	115.64	12,918	0.00	0.0	

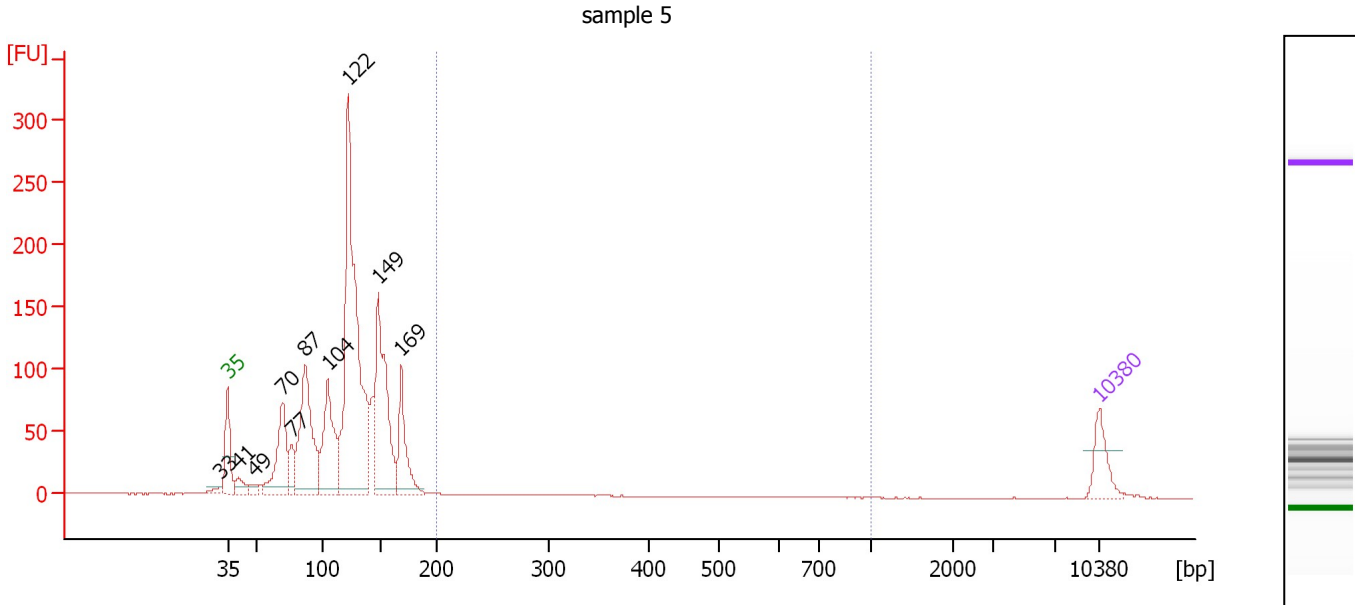
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	0	0.0	0.00	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 10 Corr. Area 1: 3.1
 Noise: 0.2

Peak table for sample 5 : sample 5

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	42.36	33	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	43.90	41	58.81	2,177.4	
4	45.14	49	26.08	804.5	
5	47.41	70	293.64	6,374.9	
6	48.14	77	88.55	1,752.9	
7	49.25	87	505.01	8,808.6	
8	51.05	104	361.58	5,257.9	
9	52.68	122	1,310.76	16,269.9	
10	55.12	149	576.88	5,871.3	
11	56.96	169	221.11	1,981.3	
12	113.00	10,380	75.00	10.9	Upper Marker

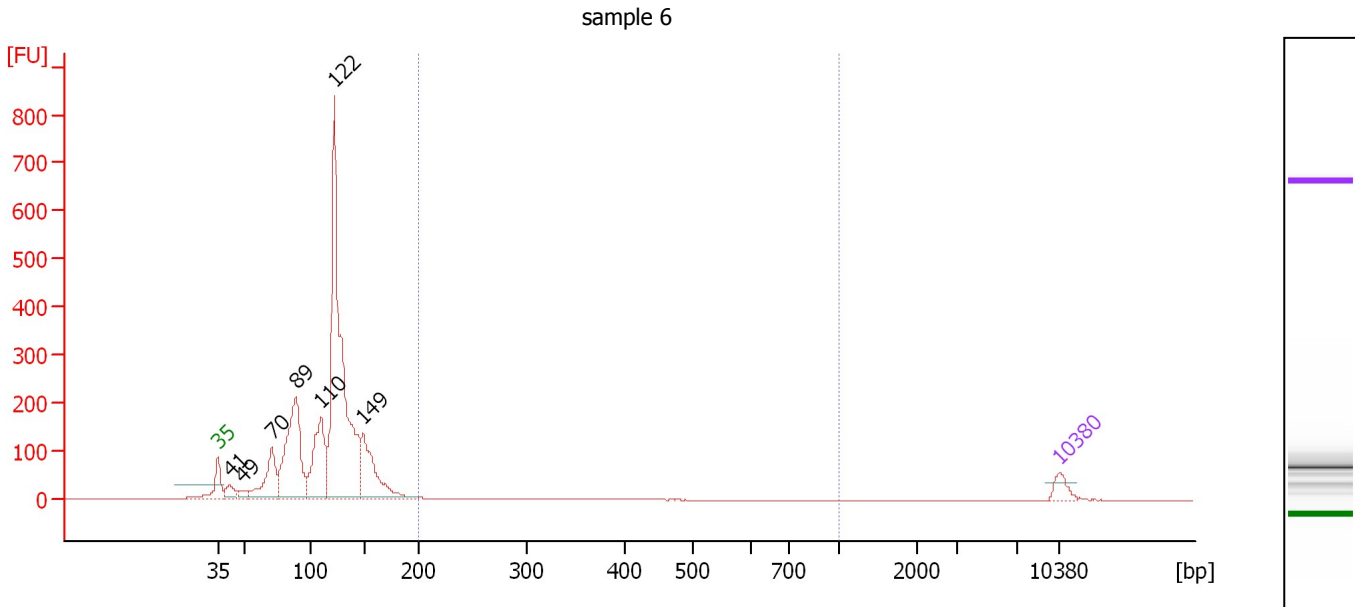
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	246	33.0	5.12	3.1	0	20.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 7 Corr. Area 1: 42.6
 Noise: 0.2

Peak table for sample 6 : sample 6

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	43.98	41	134.41	4,915.5	
3	45.08	49	74.28	2,309.0	
4	47.48	70	529.59	11,390.7	
5	49.48	89	1,363.26	23,218.9	
6	51.56	110	830.02	11,450.9	
7	52.67	122	3,334.13	41,405.0	
8	55.11	149	738.91	7,523.6	
9	113.00	10,380	75.00	10.9	Upper Marker

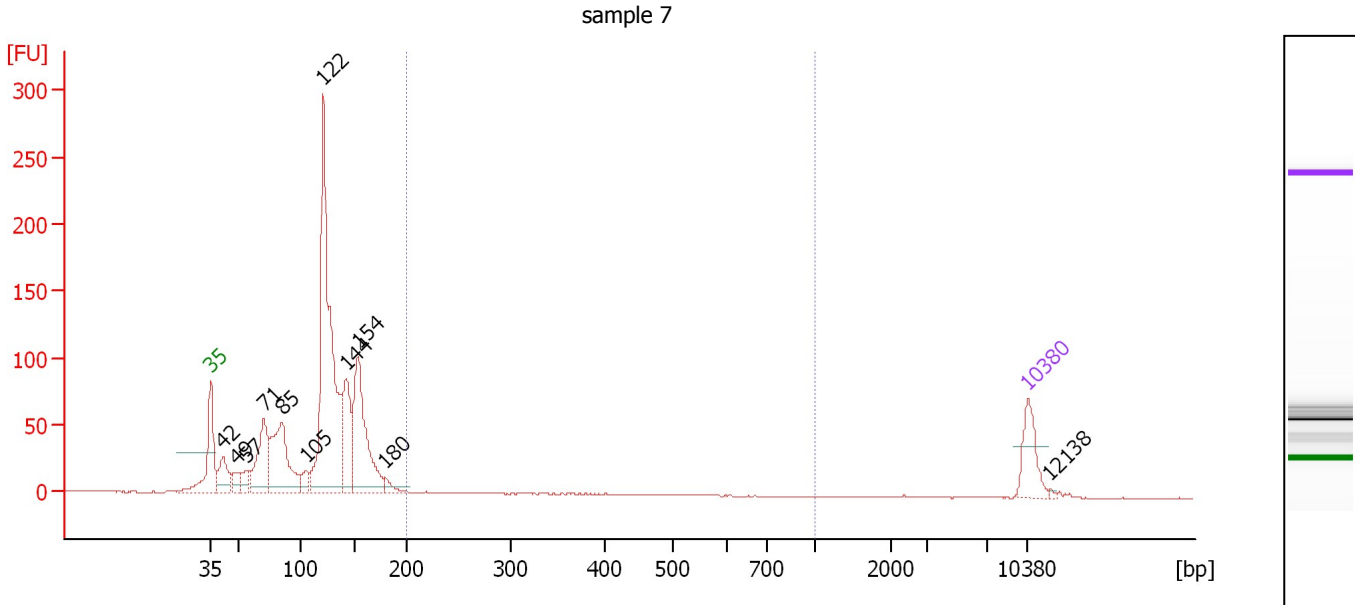
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	295	423.4	75.72	42.6	1	31.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 11 Corr. Area 1: 15.6
 Noise: 0.2

Peak table for sample 7 : sample 7

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	44.05	42	106.62	3,853.0	
3	45.19	49	37.15	1,138.3	
4	46.06	57	47.85	1,265.7	
5	47.52	71	222.01	4,748.1	
6	49.08	85	322.71	5,735.3	
7	51.13	105	44.74	644.9	
8	52.64	122	971.66	12,098.7	
9	54.65	144	212.91	2,243.8	
10	55.61	154	390.51	3,834.5	
11	57.94	180	25.97	218.7	
12	113.00	10,380	75.00	10.9	Upper Marker
13	114.83	12,138	0.00	0.0	

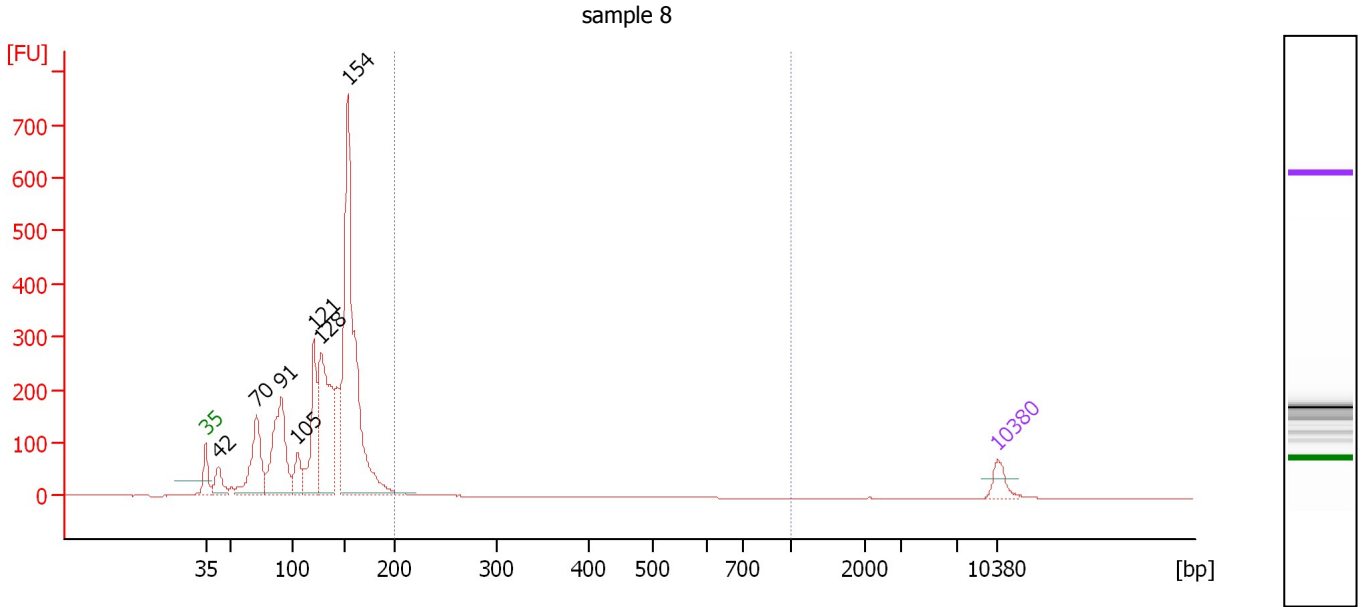
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	327	109.6	21.58	15.6	1	26.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 7 Corr. Area 1: 44.8
 Noise: 0.1

Peak table for sample 8 : sample 8

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	44.13	42	188.97	6,743.8	
3	47.48	70	627.61	13,502.8	
4	49.69	91	913.90	15,221.0	
5	51.11	105	202.77	2,930.4	
6	52.57	121	640.66	8,029.4	
7	53.18	128	1,146.19	13,607.6	
8	55.59	154	2,583.66	25,414.9	
9	113.00	10,380	75.00	10.9	Upper Marker

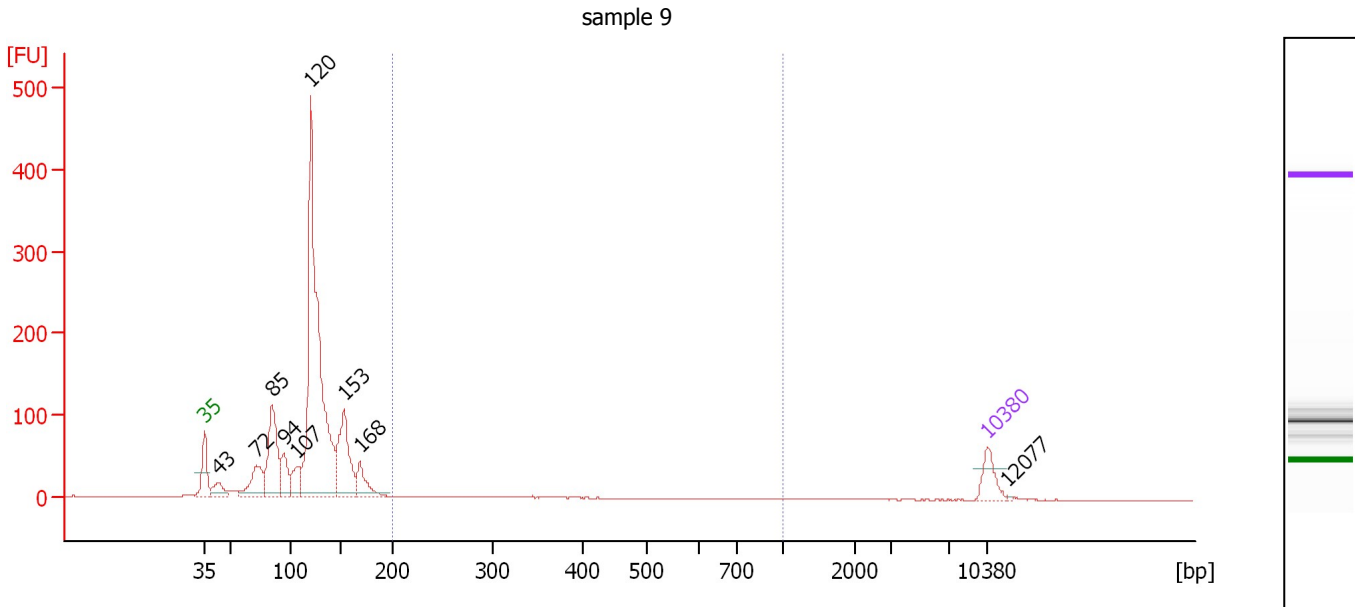
Region table for sample 8 : sample 8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	264	406.9	67.52	44.8	1	22.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 9 Corr. Area 1: 25.5
 Noise: 0.1

Peak table for sample 9 : sample 9

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	44.24	43	90.05	3,160.5	
3	47.63	72	214.58	4,528.8	
4	49.06	85	458.44	8,166.2	
5	50.06	94	152.91	2,455.6	
6	51.30	107	126.52	1,792.9	
7	52.49	120	2,030.26	25,631.3	
8	55.49	153	428.49	4,243.0	
9	56.88	168	138.94	1,251.6	
10	113.00	10,380	75.00	10.9	Upper Marker
11	114.76	12,077	0.00	0.0	

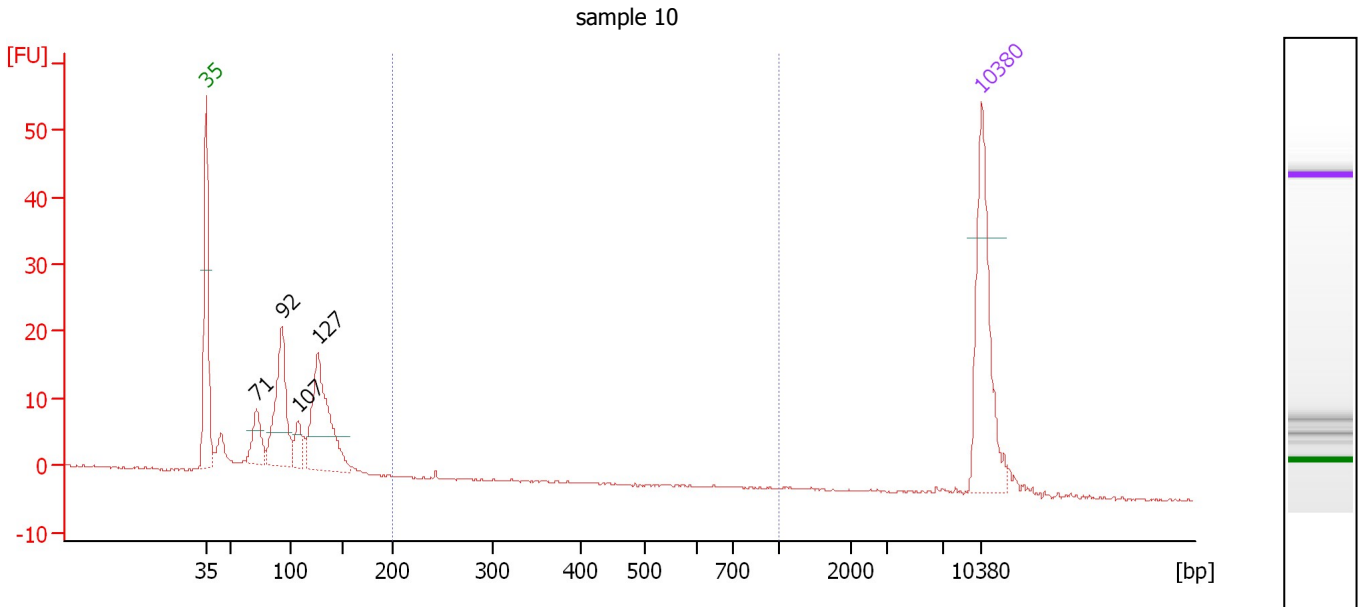
Region table for sample 9 : sample 9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	348	203.1	41.37	25.5	1	32.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 4 Corr. Area 1: 0.4
 Noise: 0.1

Peak table for sample 10 : sample 10

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	47.52	71	34.68	741.8	
3	49.83	92	100.50	1,650.6	
4	51.27	107	21.11	299.8	
5	53.10	127	121.24	1,449.2	
6	113.00	10,380	75.00	10.9	Upper Marker

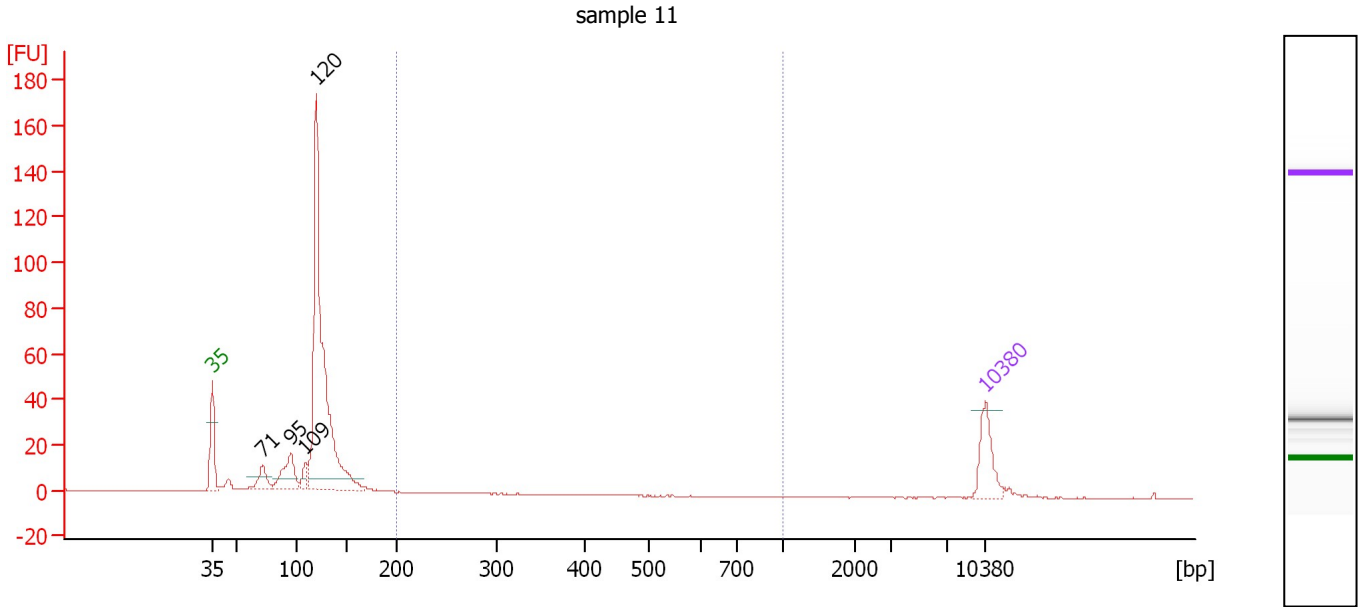
Region table for sample 10 : sample 10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	337	4.4	0.77	0.4	0	56.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
 Modified: 1/22/2014 1:36:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 4 Corr. Area 1: 0.9
 Noise: 0.1

Peak table for sample 11 : sample 11

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	47.59	71	62.27	1,320.9	
3	50.14	95	125.55	1,999.1	
4	51.45	109	35.23	491.6	
5	52.46	120	1,005.40	12,724.4	
6	113.00	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : sample 11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	225	17.7	2.57	0.9	0	17.5	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_002.xad

Created: 1/22/2014 12:36:22 PM
Modified: 1/22/2014 1:36:36 PM

Gel Image

