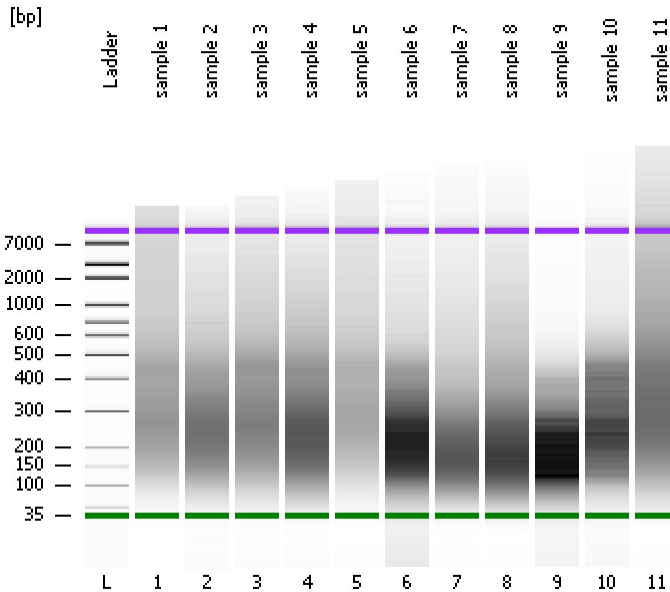


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03_004.xad

Created: 3/3/2014 3:48:02 PM
Modified: 3/3/2014 4:29:28 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

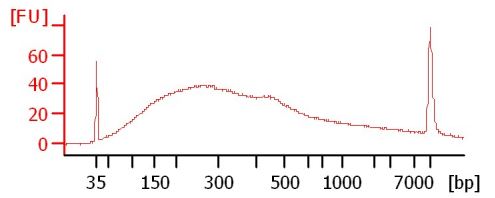
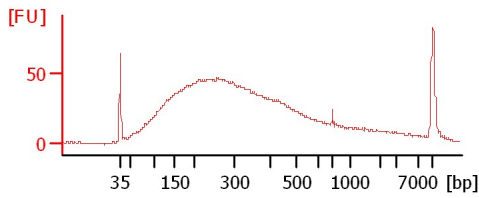
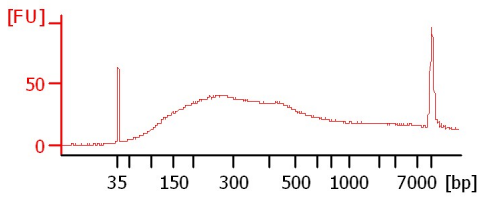
Chip Information:

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

sample 1

sample 2

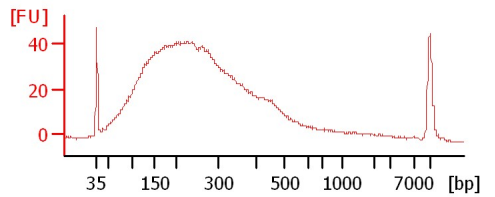
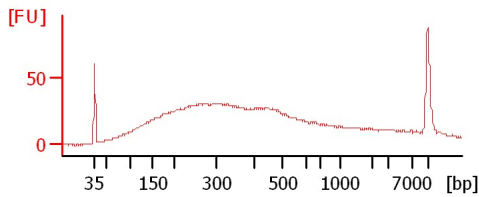
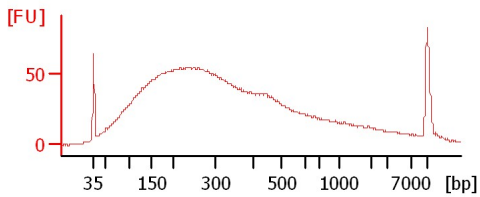
sample 3



sample 4

sample 5

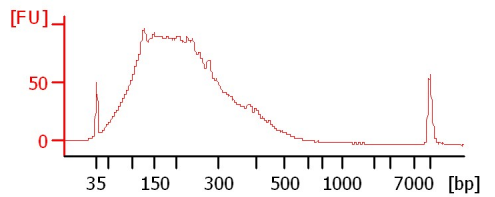
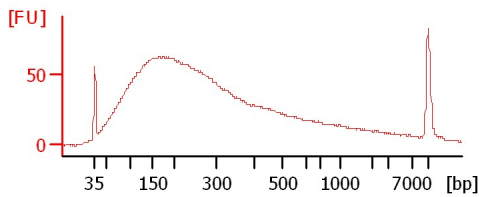
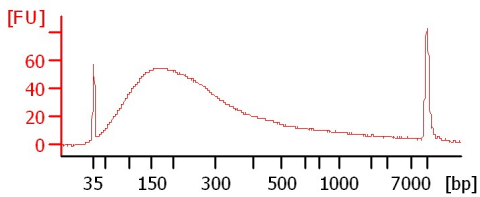
sample 6



sample 7

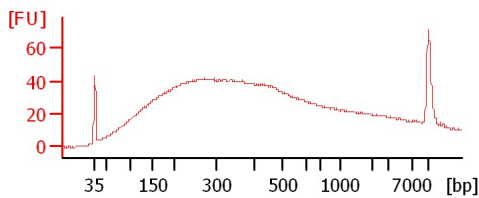
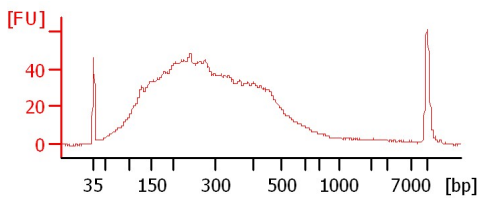
sample 8

sample 9



sample 10

sample 11



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03_004.xad

Created: 3/3/2014 3:48:02 PM
 Modified: 3/3/2014 4:29:28 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\2014-03-03\2014-03-03_004.xad

Created: 3/3/2014 3:48:02 PM
Modified: 3/3/2014 4:29:28 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

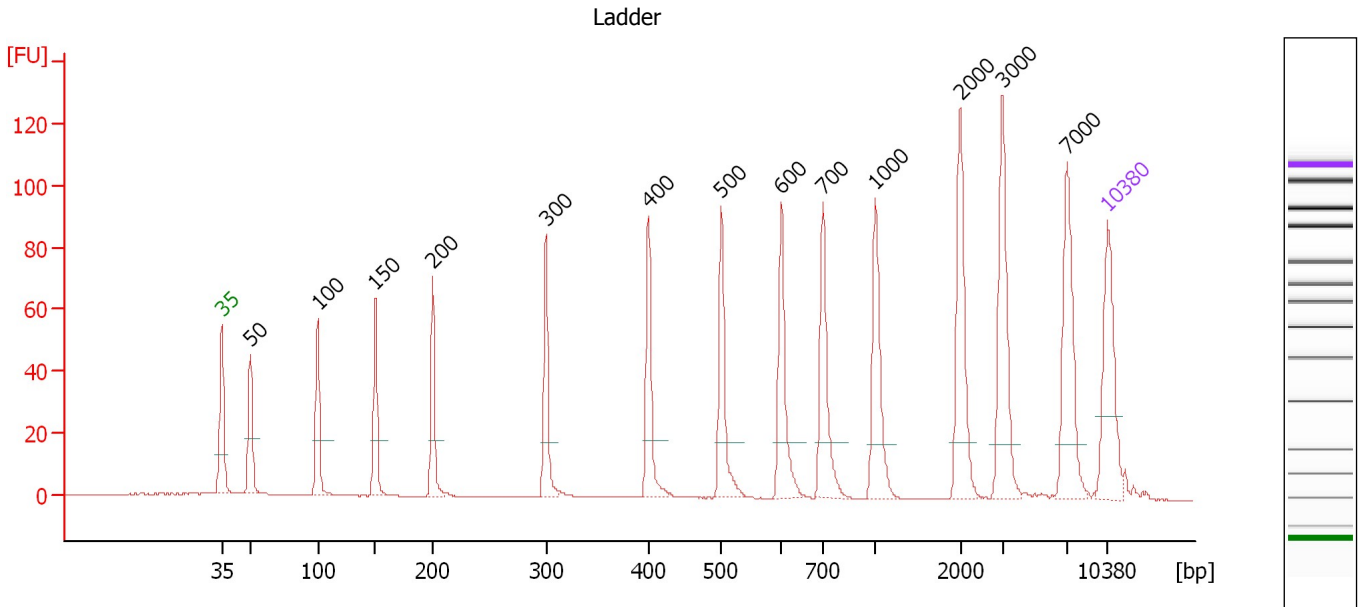
Ladder

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\2014-03-03\2014-03-03_004.xad

Created: 3/3/2014 3:48:02 PM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

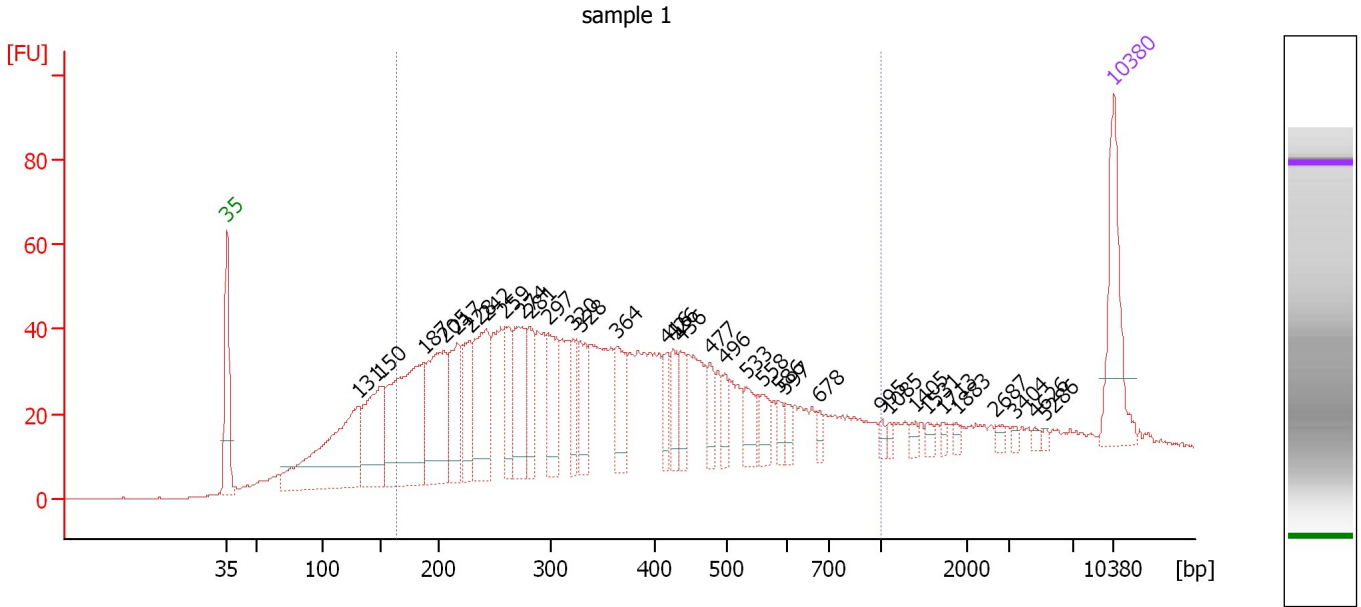
Peak table for Ladder

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	50.59	100	150.00	2,272.7	Ladder Peak
4	55.14	150	150.00	1,515.2	Ladder Peak
5	59.69	200	150.00	1,136.4	Ladder Peak
6	68.62	300	150.00	757.6	Ladder Peak
7	76.71	400	150.00	568.2	Ladder Peak
8	82.49	500	150.00	454.5	Ladder Peak
9	87.25	600	150.00	378.8	Ladder Peak
10	90.54	700	150.00	324.7	Ladder Peak
11	94.67	1,000	150.00	227.3	Ladder Peak
12	101.37	2,000	150.00	113.6	Ladder Peak
13	104.70	3,000	150.00	75.8	Ladder Peak
14	109.80	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\2014-03-03\2014-03-03_004.xad

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 Modified: 3/3/2014 4:29:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 34 Corr. Area 1: 1,393.6
 Noise: 0.2

Peak table for sample 1 : sample 1

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	53.40	131	254.86	2,950.3	
3	55.12	150	138.59	1,401.4	
4	58.53	187	256.52	2,075.2	
5	60.17	205	156.64	1,155.3	
6	61.18	217	87.65	612.7	
7	62.19	228	72.64	482.7	
8	63.46	242	124.07	776.2	
9	64.93	259	57.86	338.9	
10	66.32	274	92.42	510.7	
11	66.91	281	57.21	308.7	
12	68.34	297	71.39	364.4	
13	70.28	320	38.55	182.3	
14	70.87	328	45.17	208.8	
15	73.77	364	58.39	243.3	
16	77.64	416	27.08	98.6	
17	78.23	426	35.57	126.4	
18	78.78	436	26.69	92.8	
19	81.14	477	27.57	87.7	
20	82.27	496	21.35	65.2	
21	84.04	533	27.68	78.7	
22	85.26	558	22.96	62.3	
23	86.57	586	14.58	37.7	
24	87.11	597	11.20	28.4	
25	89.81	678	10.03	22.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03_004.xad

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 Modified: 3/3/2014 4:29:28 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : sample 1

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	94.61	995	5.77	8.8	
27	95.24	1,085	5.92	8.3	
28	97.38	1,405	7.20	7.8	
29	98.23	1,531	6.40	6.3	
30	99.45	1,713	4.50	4.0	
31	100.58	1,883	4.33	3.5	
32	103.66	2,687	5.04	2.8	
33	105.21	3,404	3.01	1.3	
34	106.77	4,626	3.71	1.2	
35	107.61	5,286	2.88	0.8	
36	113.00	10,380	75.00	10.9	Upper Marker

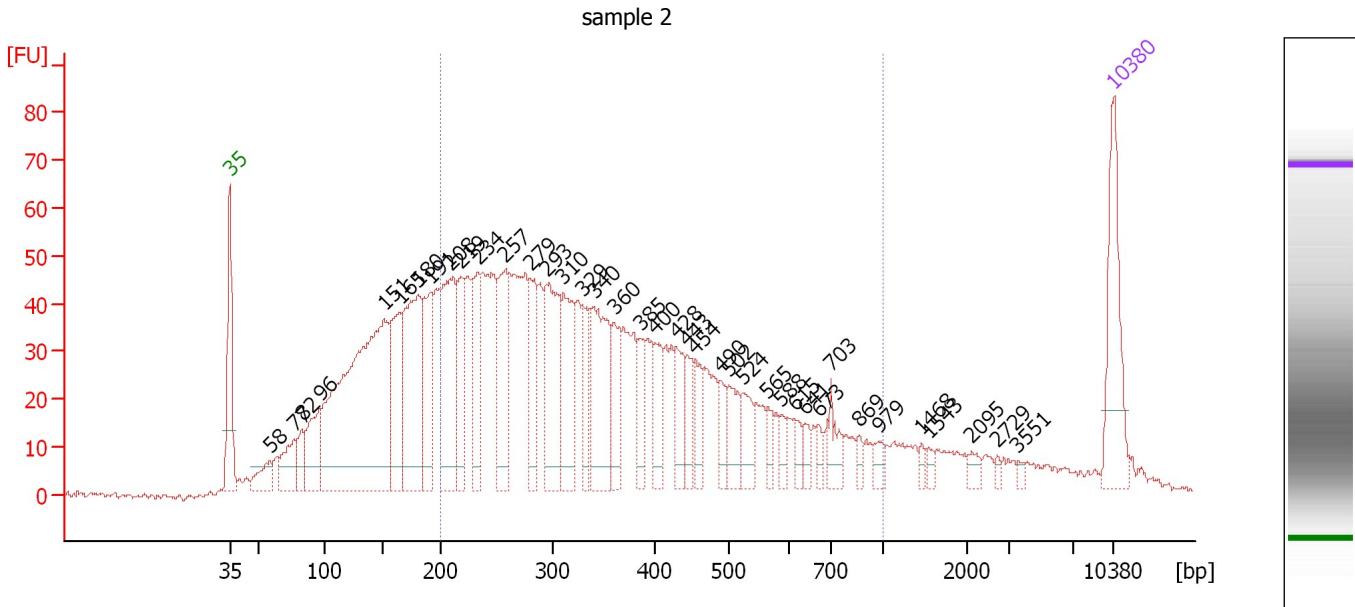
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
163	1,000	368	10,774.8	2,071.56	1,393.6	79	43.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03_004.xad

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 Modified: 3/3/2014 4:29:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 39 Corr. Area 1: 1,484.0
 Noise: 0.7

Peak table for sample 2 : sample 2


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	46.17	58	34.09	884.5	
3	48.11	77	55.46	1,095.9	
4	48.70	82	30.78	567.1	
5	50.14	96	80.66	1,276.2	
6	55.20	151	526.79	5,296.2	
7	56.47	165	115.18	1,060.1	
8	57.90	180	197.92	1,662.4	
9	58.87	191	101.69	806.4	
10	60.44	208	162.34	1,180.5	
11	61.37	219	75.03	519.7	
12	62.72	234	78.43	508.1	
13	64.74	257	109.35	645.8	
14	66.77	279	67.78	367.7	
15	68.04	293	137.84	711.8	
16	69.43	310	99.60	486.8	
17	70.95	329	45.58	210.1	
18	71.84	340	123.78	552.1	
19	73.44	360	55.28	233.0	
20	75.51	385	35.44	139.4	
21	76.69	400	42.53	161.2	
22	78.34	428	41.88	148.2	
23	79.18	443	29.06	99.5	
24	79.82	454	33.08	110.5	
25	81.88	490	20.88	64.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03_004.xad

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Electropherogram Summary Continued ...

... Peak table for sample 2 : sample 2

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	82.56	502	35.66	107.7	
27	83.62	524	33.35	96.5	
28	85.60	565	15.02	40.3	
29	86.70	588	14.27	36.8	
30	87.75	615	12.98	32.0	
31	88.60	641	13.14	31.1	
32	89.65	673	11.01	24.8	
33	90.58	703	24.01	51.7	
34	92.86	869	8.34	14.5	
35	94.38	979	10.63	16.5	
36	97.80	1,468	5.39	5.6	
37	98.31	1,543	5.40	5.3	
38	101.69	2,095	7.81	5.7	
39	103.80	2,729	3.33	1.8	
40	105.40	3,551	2.96	1.3	
41	 113.00	10,380	75.00	10.9	Upper Marker

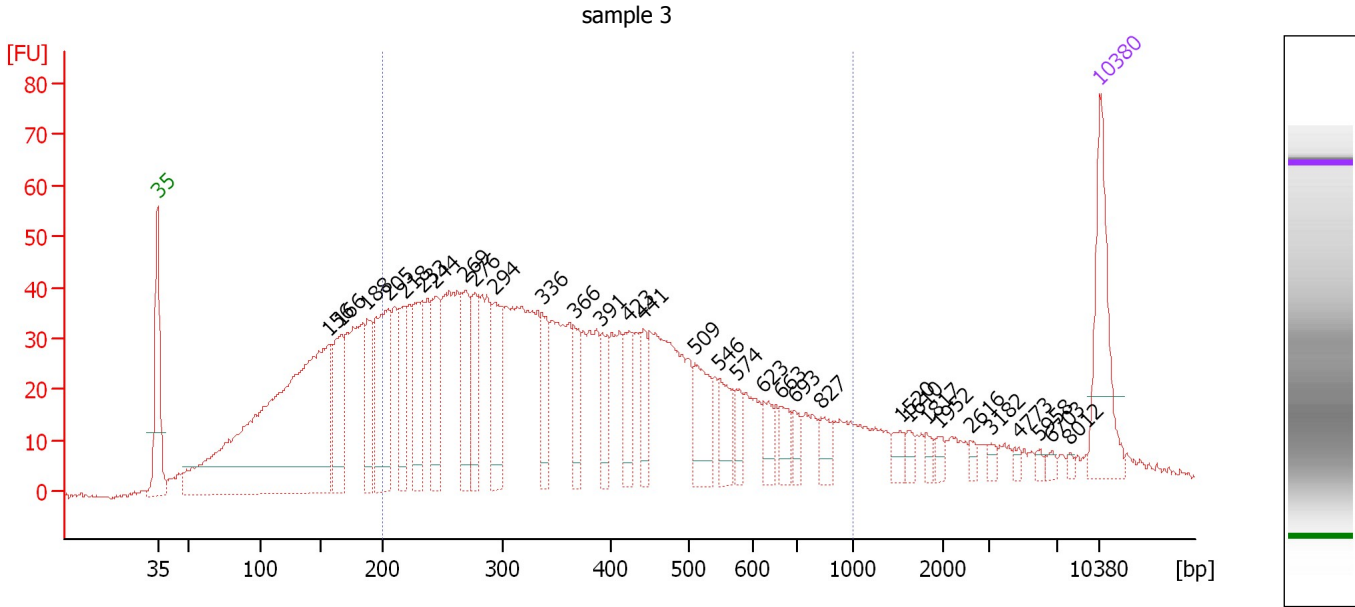
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
200	1,000	376	10,649.7	2,204.28	 1,484.0	64	40.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03_004.xad

Created: 3/3/2014 3:48:02 PM
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Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 32 Corr. Area 1: 1,327.2
 Noise: 0.4

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	55.69	156	629.74	6,114.3	
3	56.64	166	86.38	786.2	
4	58.58	188	70.02	564.9	
5	60.18	205	137.54	1,014.3	
6	61.34	218	59.82	414.8	
7	62.64	233	81.48	529.9	
8	63.63	244	72.13	447.7	
9	65.87	269	64.85	365.0	
10	66.52	276	58.86	322.6	
11	68.07	294	76.41	394.0	
12	71.57	336	44.66	201.2	
13	73.94	366	35.90	148.7	
14	75.97	391	35.09	136.0	
15	78.04	423	43.96	157.5	
16	79.08	441	31.30	107.5	
17	82.92	509	54.06	160.9	
18	84.69	546	36.26	100.6	
19	86.03	574	20.14	53.1	
20	88.01	623	21.70	52.8	
21	89.31	663	18.49	42.3	
22	90.30	693	14.69	32.1	
23	92.28	827	18.42	33.7	
24	98.15	1,520	10.78	10.7	
25	98.76	1,610	8.13	7.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03_004.xad

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Electropherogram Summary Continued ...

... Peak table for sample 3 : sample 3

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	100.14	1,817	6.33	5.3	
27	101.05	1,952	7.06	5.5	
28	103.42	2,616	5.09	2.9	
29	104.93	3,182	4.64	2.2	
30	106.96	4,773	4.28	1.4	
31	108.47	5,958	3.74	1.0	
32	109.42	6,703	4.50	1.0	
33	110.76	8,012	2.60	0.5	
34	▶ 113.00	10,380	75.00	10.9	Upper Marker

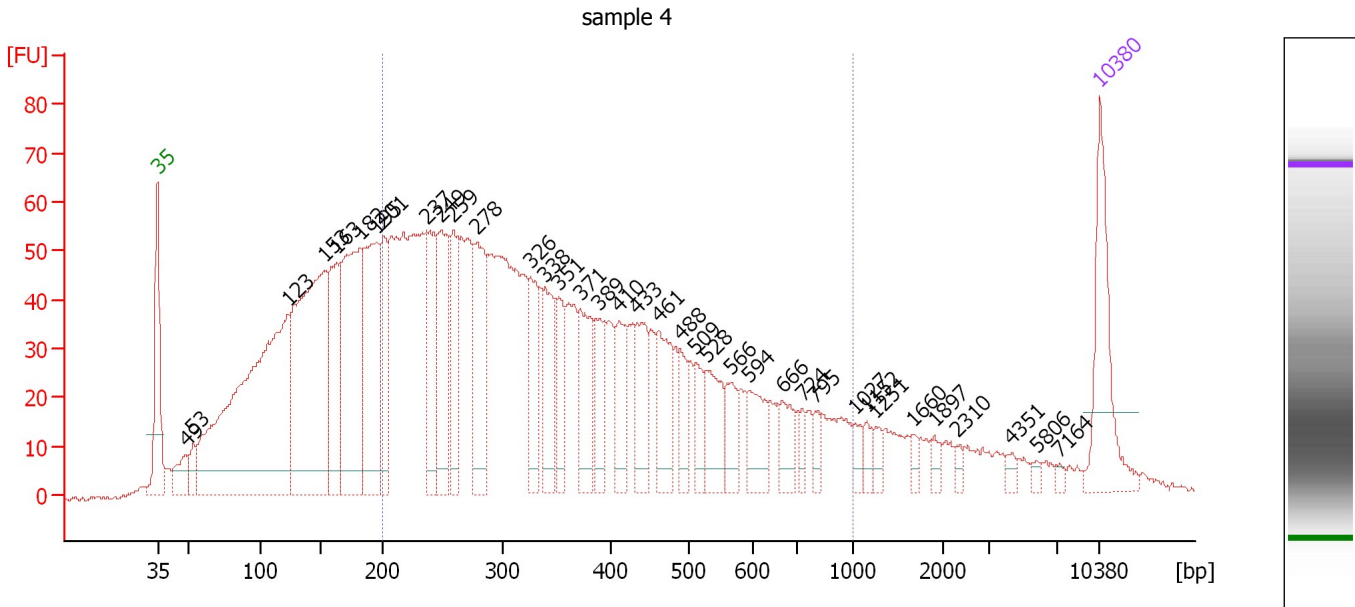
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	393	9,472.3	2,027.13	■ 1,327.2	66	40.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03_004.xad

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Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 37 Corr. Area 1: 1,750.0
 Noise: 0.5

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	45.08	49	35.27	1,097.9	
3	45.61	53	22.56	643.5	
4	52.67	123	560.73	6,911.9	
5	55.45	153	369.65	3,649.1	
6	56.34	163	119.96	1,113.8	
7	58.06	182	236.38	1,966.7	
8	59.25	195	172.94	1,342.3	
9	59.78	201	80.29	605.1	
10	63.01	237	103.89	663.8	
11	64.07	249	111.90	680.9	
12	64.95	259	70.75	414.1	
13	66.67	278	118.00	642.8	
14	70.69	326	68.05	316.7	
15	71.71	338	72.64	325.5	
16	72.72	351	48.48	209.5	
17	74.40	371	74.17	302.6	
18	75.81	389	45.43	177.0	
19	77.32	410	47.85	176.7	
20	78.64	433	54.00	188.8	
21	80.23	461	63.58	209.0	
22	81.82	488	26.89	83.4	
23	82.92	509	29.41	87.5	
24	83.81	528	52.27	150.1	
25	85.62	566	29.74	79.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03_004.xad

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Electropherogram Summary Continued ...

... Peak table for sample 4 : sample 4

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	86.94	594	43.28	110.5	
27	89.42	666	28.21	64.2	
28	90.87	724	12.59	26.3	
29	91.85	795	11.86	22.6	
30	94.85	1,027	10.81	15.9	
31	95.69	1,152	9.88	13.0	
32	96.35	1,251	10.49	12.7	
33	99.09	1,660	6.57	6.0	
34	100.68	1,897	8.37	6.7	
35	102.40	2,310	5.66	3.7	
36	106.42	4,351	5.30	1.8	
37	108.27	5,806	4.05	1.1	
38	109.95	7,164	3.44	0.7	
39	113.00	10,380	75.00	10.9	Upper Marker

Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	386	11,273.0	2,356.55	1,750.0	61	42.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-03\2014-03-03_004.xad

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Gel Image

