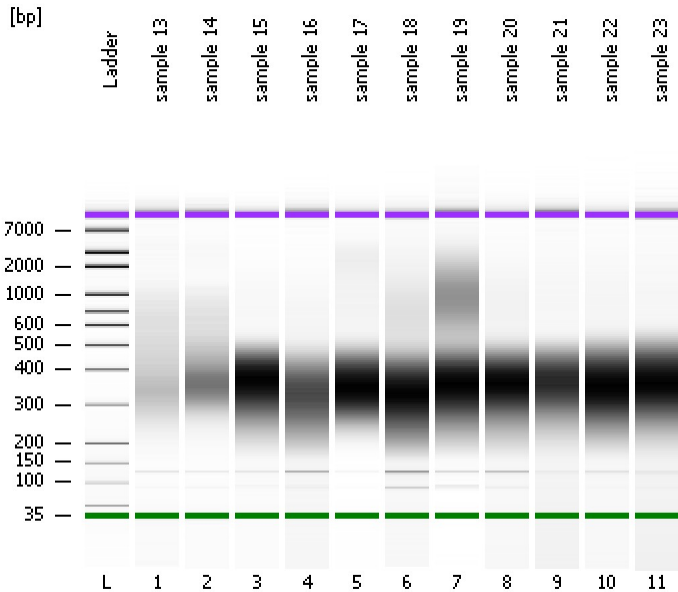


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
Modified: 10/22/2013 1:12:21 PM

Electrophoresis File Run Summary



Instrument Information:

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

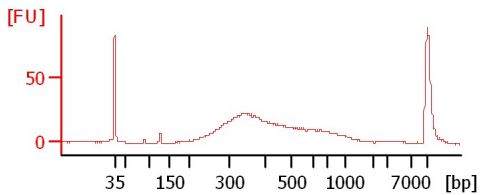
Assay Information:

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

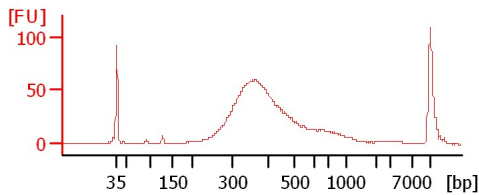
Chip Information:

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

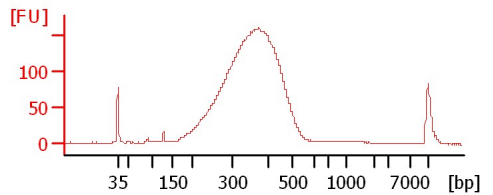
sample 13



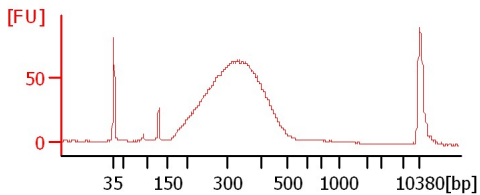
sample 14



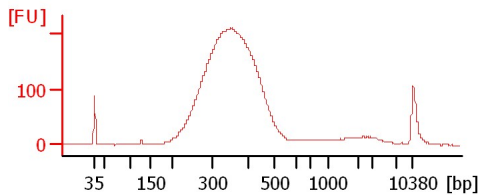
sample 15



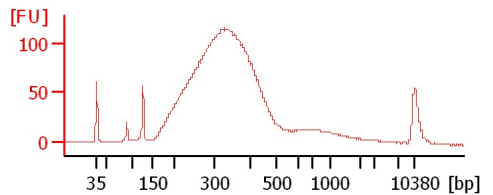
sample 16



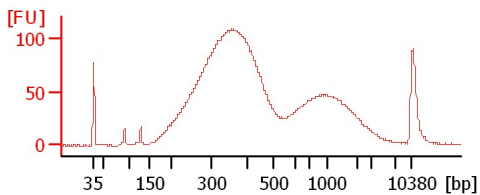
sample 17



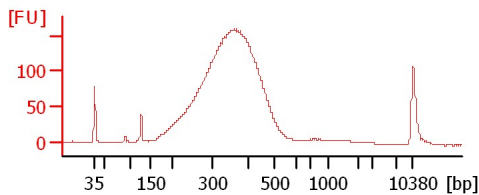
sample 18



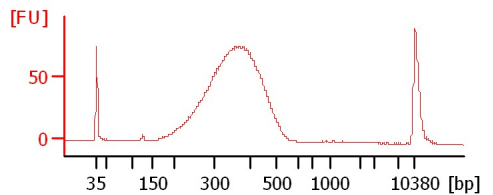
sample 19



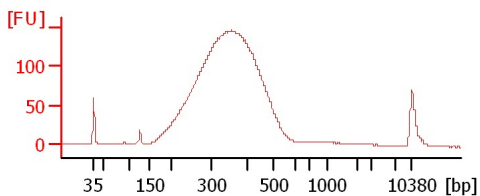
sample 20



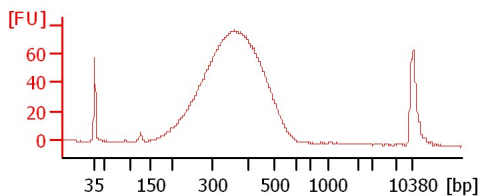
sample 21



sample 22



sample 23



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 13		<input type="checkbox"/>	✓			
sample 14		<input type="checkbox"/>	✓			
sample 15		<input type="checkbox"/>	✓			
sample 16		<input type="checkbox"/>	✓			
sample 17		<input type="checkbox"/>	✓			
sample 18		<input type="checkbox"/>	✓			
sample 19		<input type="checkbox"/>	✓			
sample 20		<input type="checkbox"/>	✓			
sample 21		<input type="checkbox"/>	✓			
sample 22		<input type="checkbox"/>	✓			
sample 23		<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\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
Modified: 10/22/2013 1:12:21 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

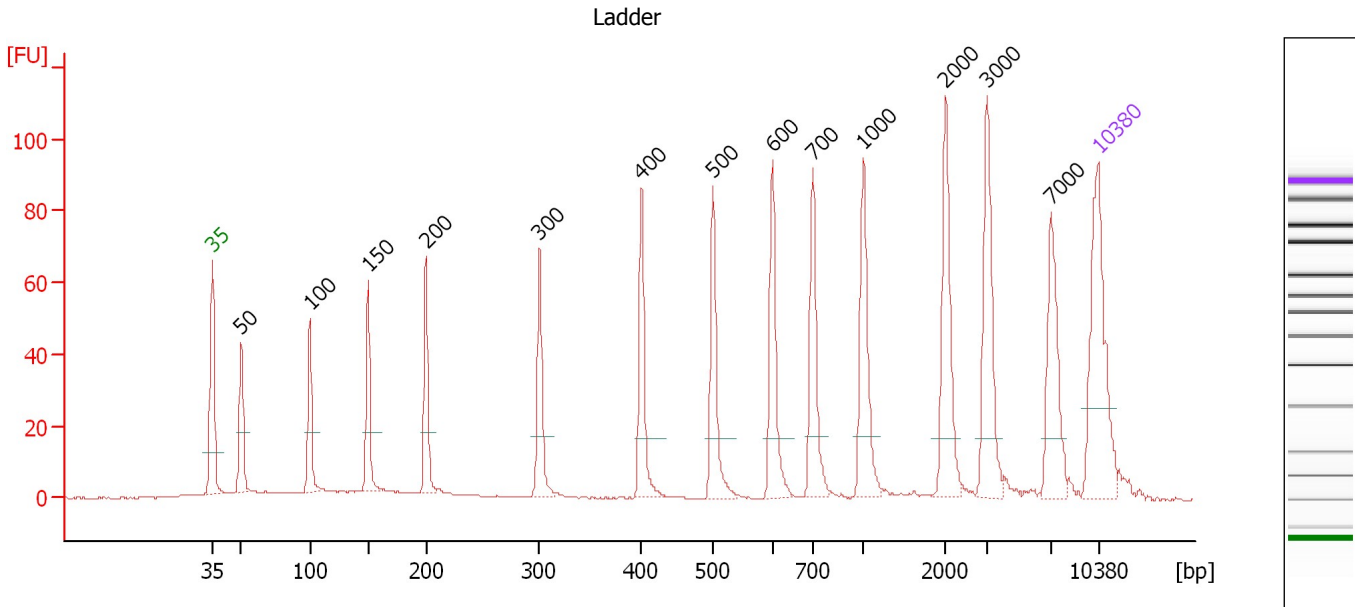
Ladder

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\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

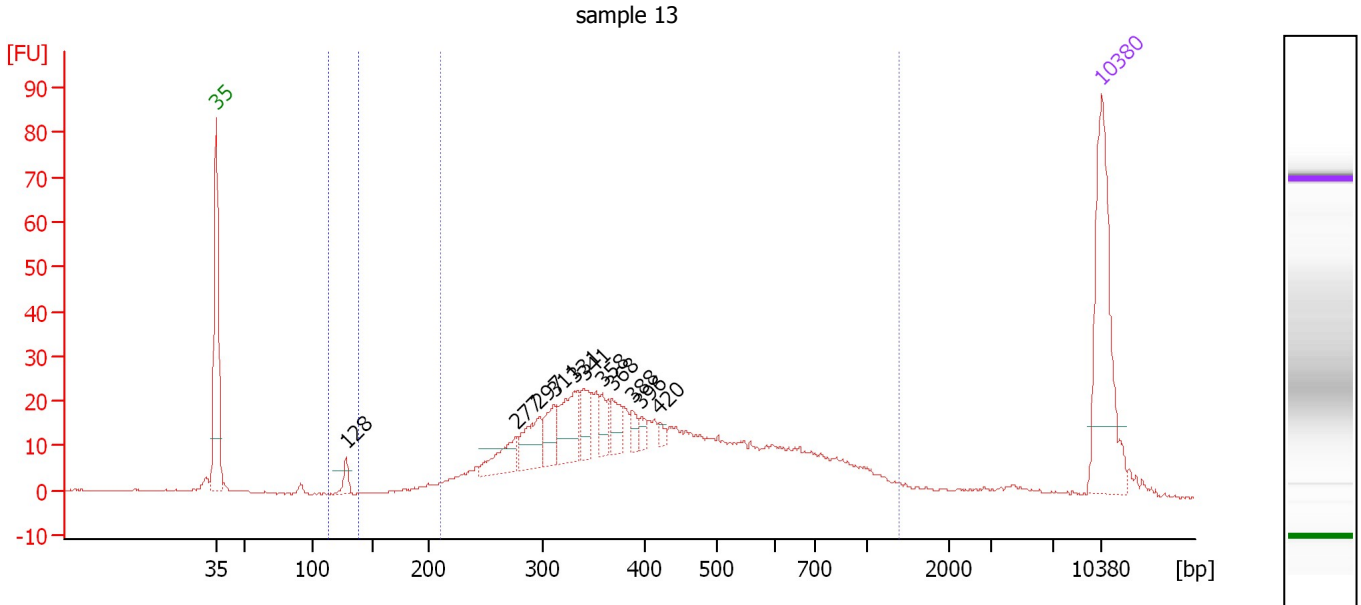
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 13

Number of peaks found: 11 Corr. Area 1: 592.1
 Noise: 0.1 Corr. Area 2: 5.9

Peak table for sample 1 : sample 13

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	9.86	116.5	
3	277	26.02	142.5	
4	297	29.62	151.2	
5	311	21.43	104.5	
6	331	37.72	172.9	
7	341	19.37	86.2	
8	358	14.15	59.9	
9	368	14.08	57.9	
10	388	7.38	28.8	
11	396	6.45	24.7	
12	420	3.58	12.9	
13	10,380	75.00	10.9	Upper Marker

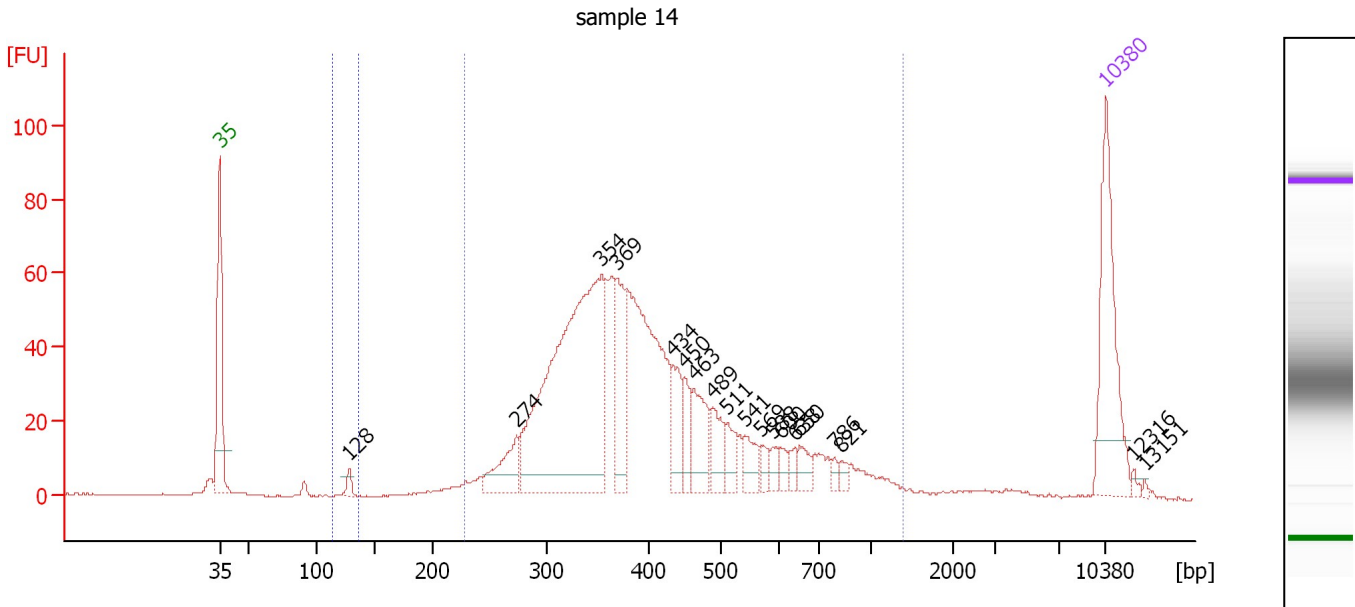
Region table for sample 1 : sample 13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
112	139	128	93.8	7.92	5.9	1	1.3	Blue
210	1,390	452	2,334.0	581.25	592.1	93	42.2	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 14

Number of peaks found: 19 Corr. Area 1: 1,180.0
 Noise: 0.2 Corr. Area 2: 6.3

Peak table for sample 2 : sample 14

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	7.70	91.4	
3	274	40.20	222.3	
4	354	350.88	1,503.1	
5	369	62.41	256.4	
6	434	31.54	110.0	
7	450	22.21	74.8	
8	463	40.24	131.6	
9	489	25.75	79.7	
10	511	17.59	52.1	
11	541	17.97	50.3	
12	569	8.41	22.4	
13	588	8.05	20.7	
14	600	7.13	18.0	
15	638	7.02	16.7	
16	650	12.08	28.2	
17	786	4.12	7.9	
18	821	4.62	8.5	
19	10,380	75.00	10.9	Upper Marker
20	12,316	0.00	0.0	
21	13,151	0.00	0.0	

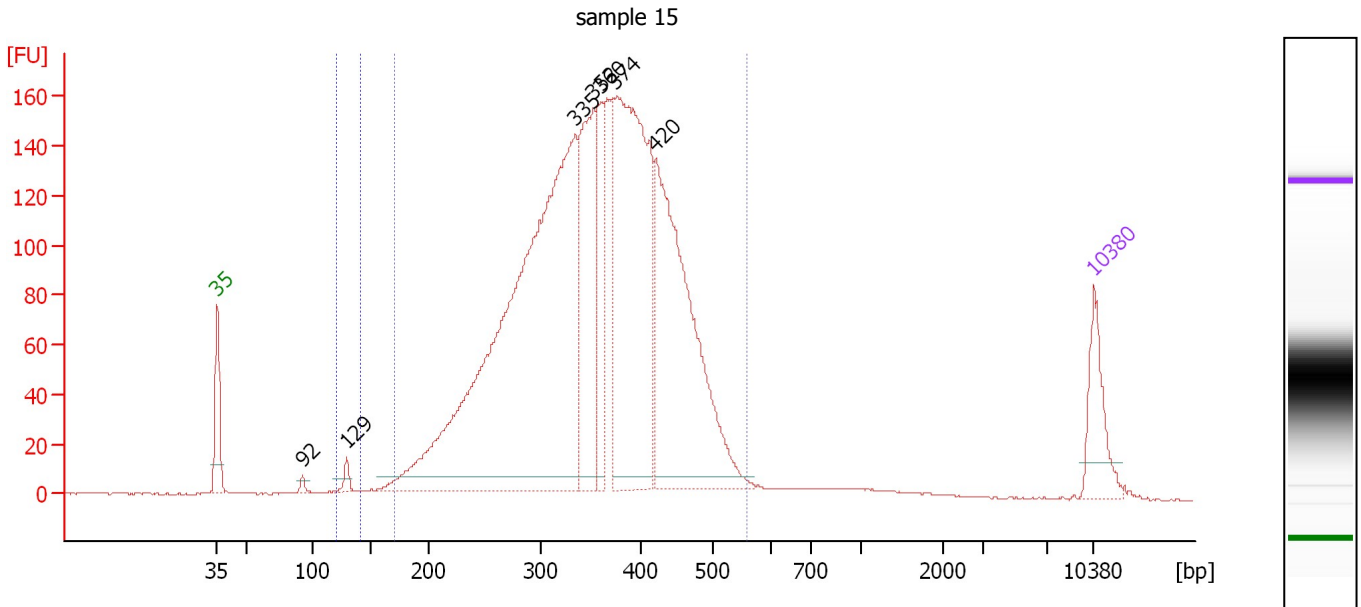
Region table for sample 2 : sample 14

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
113	136	127	91.0	7.65	6.3	1	1.8	Blue
228	1,392	429	4,147.2	1,039.55	1,180.0	95	37.1	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 15

Number of peaks found: 7 Corr. Area 1: 3,407.1
 Noise: 0.2 Corr. Area 2: 18.5

Peak table for sample 3 : sample 15

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	92	9.24	152.1	
3	129	18.02	211.9	
4	335	1,512.16	6,848.9	
5	352	330.08	1,420.8	
6	360	153.87	647.8	
7	374	717.71	2,910.1	
8	420	629.46	2,272.8	
9	10,380	75.00	10.9	Upper Marker

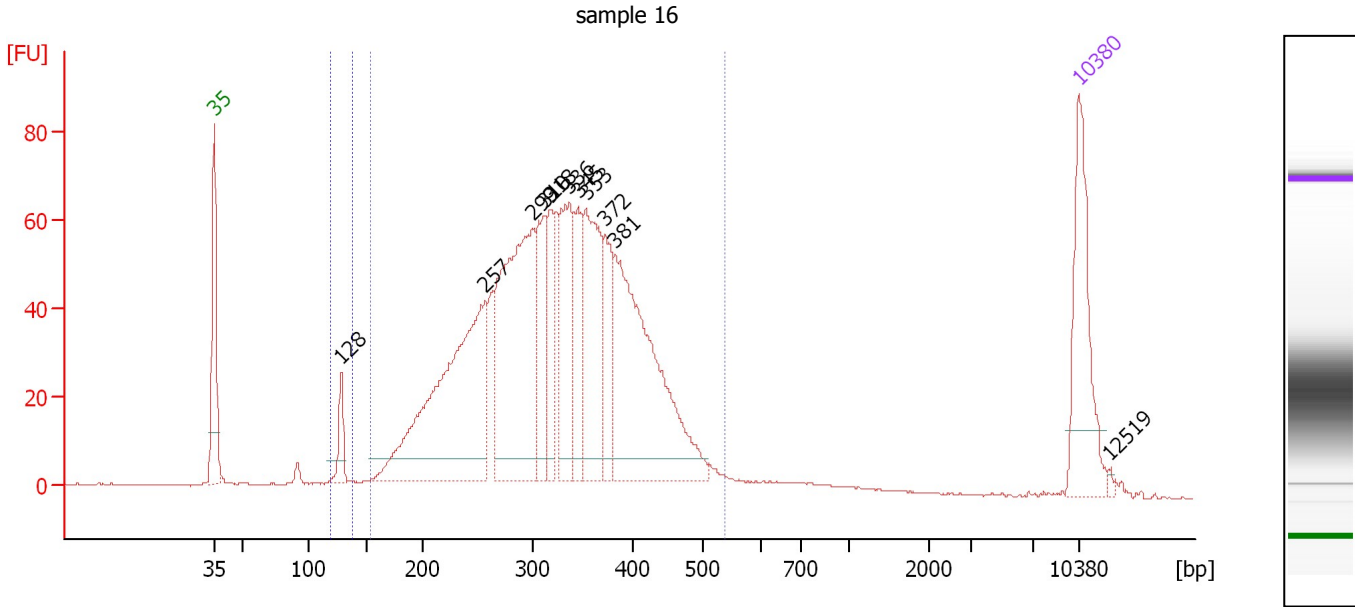
Region table for sample 3 : sample 15

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
120	141	129	320.2	27.25	18.5	1	3.3	Blue
170	557	355	17,437.7	3,812.87	3,407.1	96	20.6	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 16

Number of peaks found: 11 Corr. Area 1: 1,513.5
 Noise: 0.2 Corr. Area 2: 26.2

Peak table for sample 4 : sample 16

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	28.04	331.7	
3	257	313.23	1,847.3	
4	299	269.55	1,364.9	
5	310	76.77	374.7	
6	318	50.65	241.4	
7	336	101.92	459.4	
8	345	62.24	273.6	
9	353	127.67	548.4	
10	372	57.62	234.6	
11	381	253.41	1,007.3	
12	10,380	75.00	10.9	Upper Marker
13	12,519	0.00	0.0	

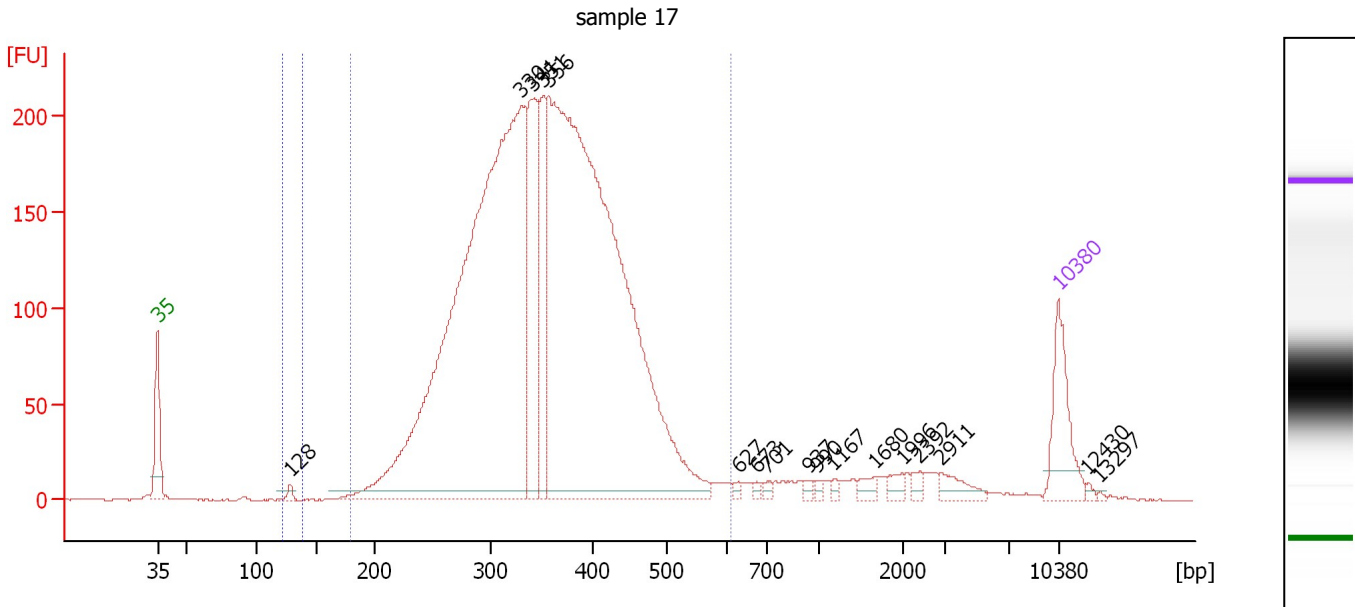
Region table for sample 4 : sample 16

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
118	138	128	396.8	33.47	26.2	2	2.6	Blue
153	539	324	7,654.6	1,514.46	1,513.5	94	22.4	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 17

Number of peaks found: 17 Corr. Area 1: 4,199.9
 Noise: 0.1 Corr. Area 2: 6.7

Peak table for sample 5 : sample 17

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	8.41	99.5	
3	330	1,581.00	7,255.2	
4	341	255.43	1,134.8	
5	351	148.54	640.5	
6	356	1,700.40	7,231.7	
7	627	4.50	10.9	
8	673	4.63	10.4	
9	701	6.13	13.2	
10	937	5.81	9.4	
11	990	4.63	7.1	
12	1,167	4.66	6.0	
13	1,680	11.53	10.4	
14	1,996	11.02	8.4	
15	2,392	8.89	5.6	
16	2,911	21.11	11.0	
17	10,380	75.00	10.9	Upper Marker
18	12,430	0.00	0.0	
19	13,297	0.00	0.0	

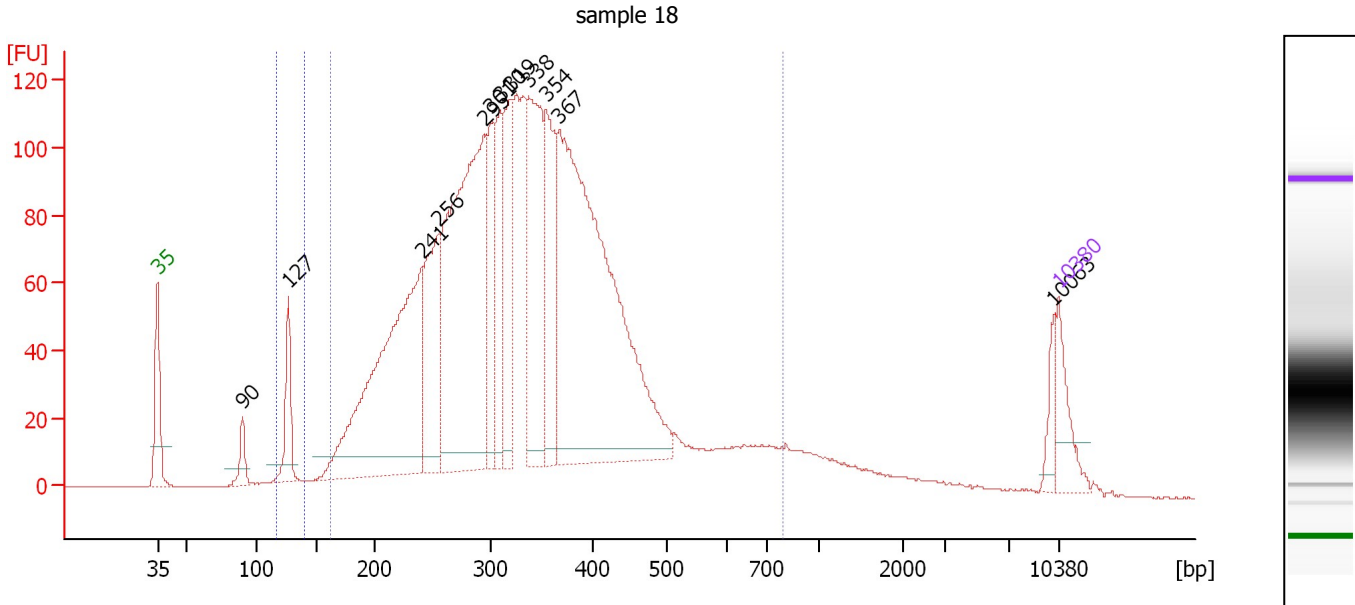
Region table for sample 5 : sample 17

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
122	138	128	92.8	7.84	6.7	0	1.5	Blue
179	609	354	16,801.8	3,723.99	4,199.9	94	19.5	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 18

Number of peaks found: 12 Corr. Area 1: 2,916.5
 Noise: 0.2 Corr. Area 2: 60.7

Peak table for sample 6 : sample 18

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	90	52.66	886.5	
3	127	131.38	1,570.5	
4	241	874.37	5,490.2	
5	256	302.65	1,791.4	
6	295	973.79	5,007.2	
7	301	179.84	906.5	
8	310	222.78	1,089.3	
9	319	252.87	1,200.4	
10	338	401.79	1,802.6	
11	354	280.68	1,201.0	
12	367	1,232.88	5,094.7	
13	10,063	35.77	5.4	
14	10,380	75.00	10.9	Upper Marker

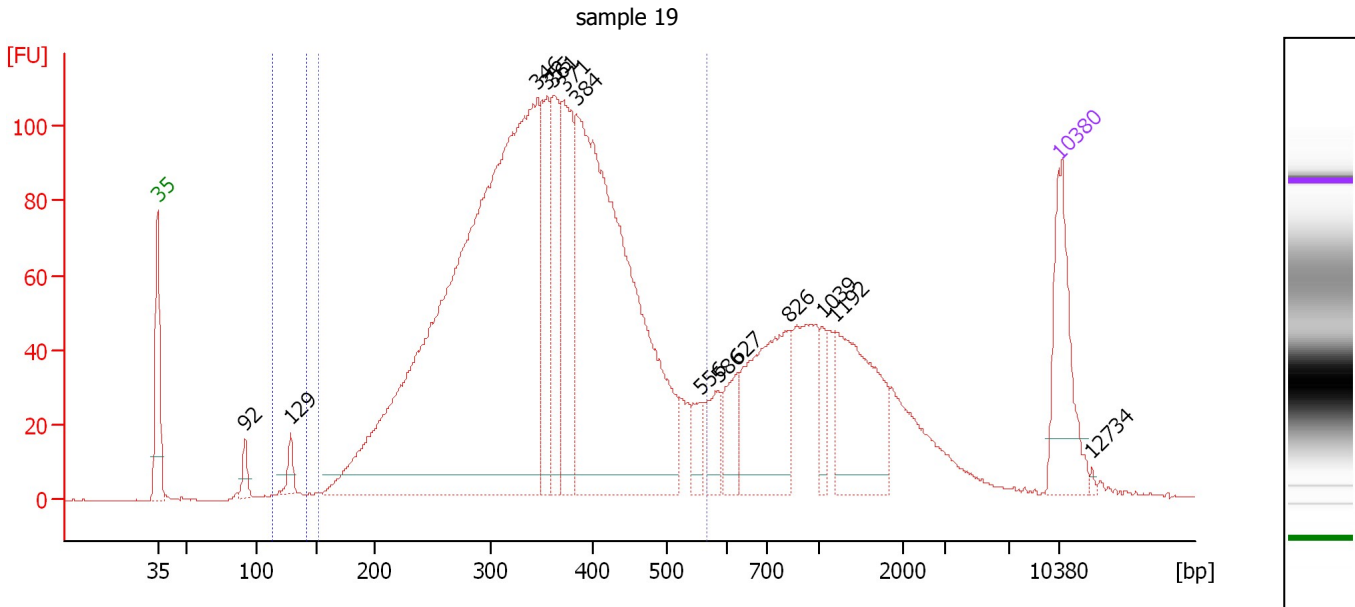
Region table for sample 6 : sample 18

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
117	141	127	1,872.0	156.73	60.7	2	3.1	Blue
162	785	341	29,037.3	5,851.95	2,916.5	91	29.4	Light Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 19

Number of peaks found: 14 Corr. Area 1: 2,462.7
 Noise: 0.1 Corr. Area 2: 21.7

Peak table for sample 7 : sample 19

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	92	18.13	298.7	
3	129	18.88	221.7	
4	346	1,119.76	4,909.1	
5	355	93.26	397.9	
6	361	116.80	489.9	
7	371	134.83	550.1	
8	384	634.13	2,504.3	
9	556	23.06	62.8	
10	586	30.80	79.6	
11	627	37.10	89.7	
12	826	139.88	256.4	
13	1,039	22.16	32.3	
14	1,192	120.49	153.2	
15	10,380	75.00	10.9	Upper Marker
16	12,734	0.00	0.0	

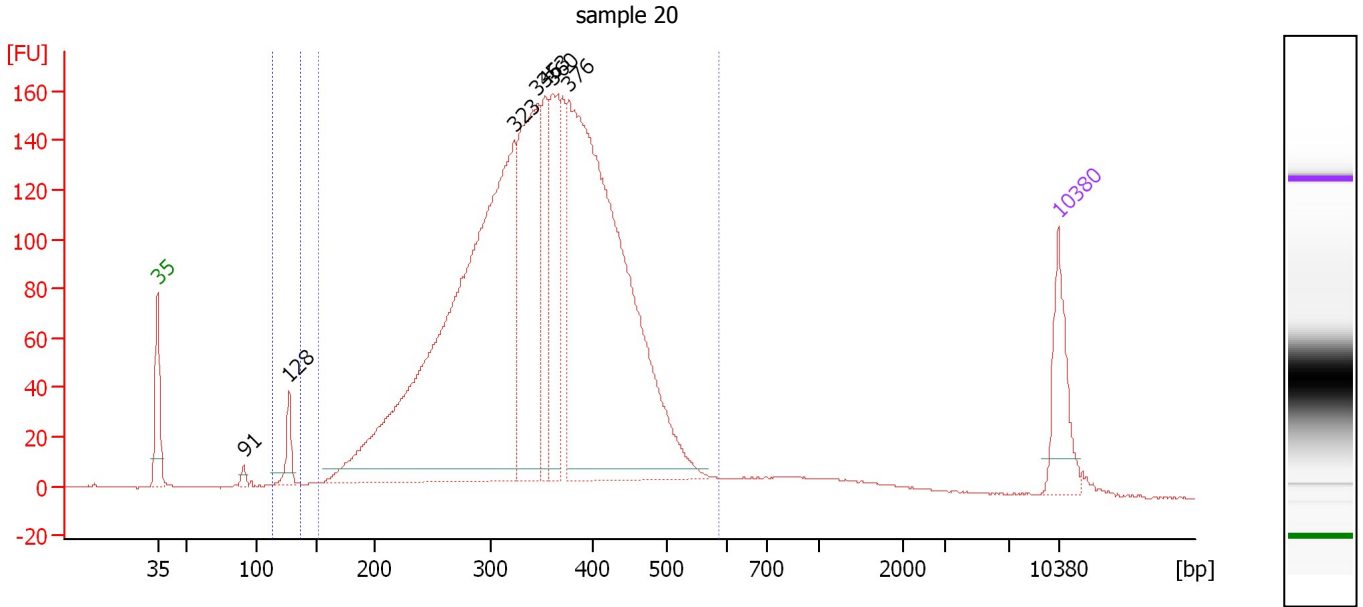
Region table for sample 7 : sample 19

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
114	142	128	320.3	27.09	21.7	1	3.9	Blue
152	568	352	11,069.0	2,359.07	2,462.7	76	23.2	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 20

Number of peaks found: 7 Corr. Area 1: 3,327.6
 Noise: 0.1 Corr. Area 2: 40.6

Peak table for sample 8 : sample 20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	91	10.29	171.8	
3	128	43.09	512.0	
4	323	1,200.68	5,627.0	
5	346	379.69	1,663.3	
6	353	124.39	533.6	
7	360	199.07	837.9	
8	376	1,034.13	4,169.6	
9	10,380	75.00	10.9	Upper Marker

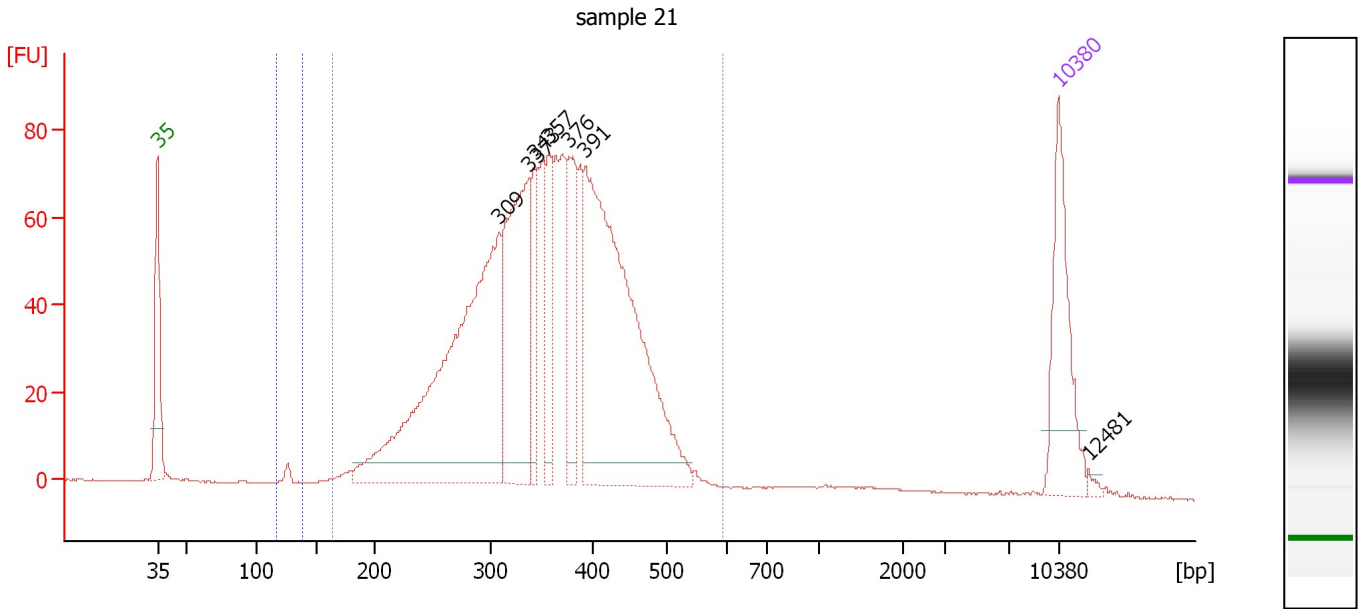
Region table for sample 8 : sample 20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
114	137	127	633.3	52.94	40.6	1	3.0	Blue
153	587	349	15,501.4	3,317.06	3,327.6	94	21.4	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 21

Number of peaks found: 7 Corr. Area 1: 1,530.2
 Noise: 0.2 Corr. Area 2: 6.1

Peak table for sample 9 : sample 21

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	309	434.78	2,131.4	
3	337	202.44	908.9	
4	343	60.16	266.1	
5	357	60.92	258.7	
6	376	80.24	323.2	
7	391	404.74	1,566.6	
8	10,380	75.00	10.9	Upper Marker
9	12,481	0.00	0.0	

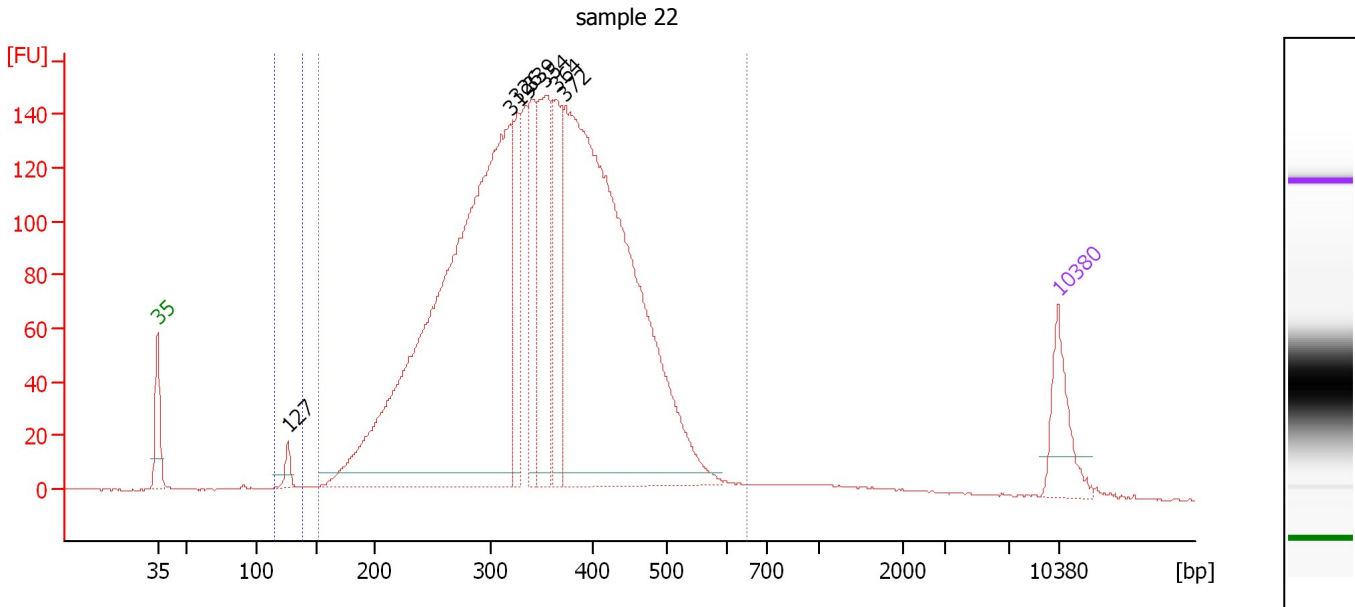
Region table for sample 9 : sample 21

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
116	139	127	95.9	8.02	6.1	0	3.6	Blue
165	592	356	6,997.1	1,539.13	1,530.2	96	20.3	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 22

Number of peaks found: 7 Corr. Area 1: 3,404.5
 Noise: 0.1 Corr. Area 2: 21.5

Peak table for sample 10 : sample 22

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	25.34	302.8	
3	319	1,590.75	7,550.3	
4	326	147.43	685.0	
5	339	171.40	765.4	
6	354	256.12	1,097.3	
7	364	172.05	716.2	
8	372	1,392.20	5,670.4	
9	10,380	75.00	10.9	Upper Marker

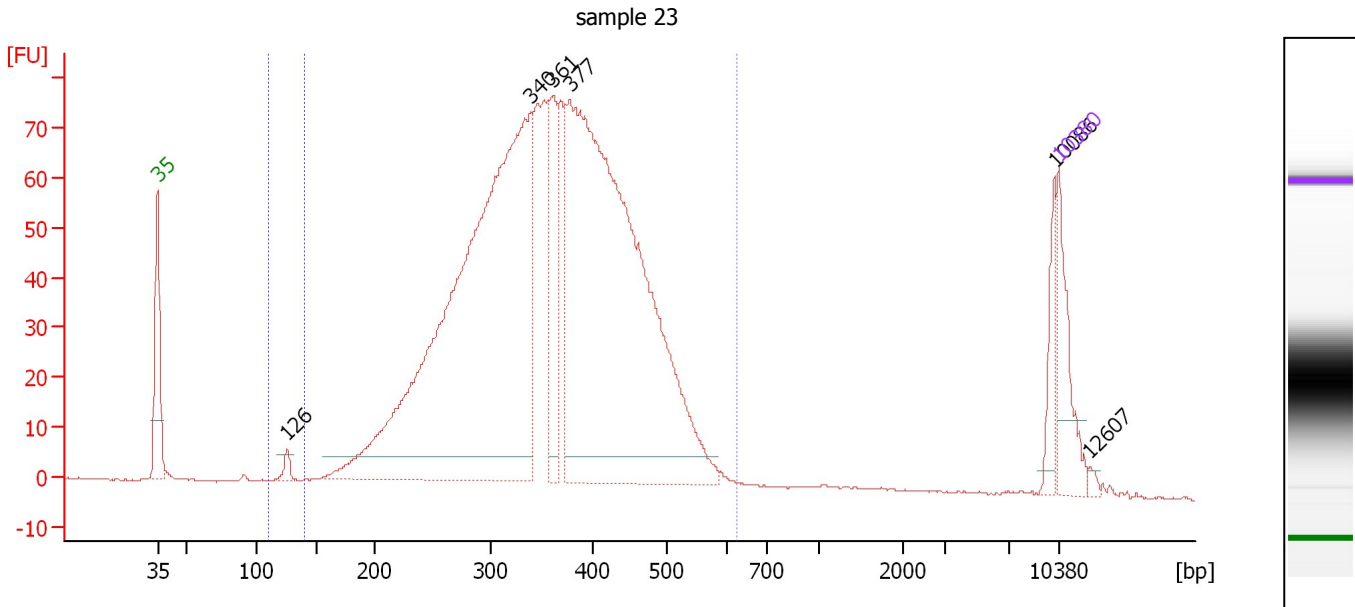
Region table for sample 10 : sample 22

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
115	138	126	415.0	34.59	21.5	1	3.3	Blue
152	647	350	19,761.2	4,198.88	3,404.5	97	23.1	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
 Modified: 10/22/2013 1:12:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 23

Number of peaks found: 6 Corr. Area 1: 1,710.7
 Noise: 0.2 Corr. Area 2: 8.2

Peak table for sample 11 : sample 23

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	126	14.82	178.3	
3	340	1,310.68	5,840.7	
4	361	142.93	600.1	
5	377	1,214.86	4,881.4	
6	10,086	43.35	6.5	
7	10,380	75.00	10.9	Upper Marker
8	12,607	0.00	0.0	

Region table for sample 11 : sample 23

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
111	141	126	243.9	20.22	8.2	0	3.9	Blue
141	625	360	14,578.0	3,204.16	1,710.7	96	22.4	Dark Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-22\2013-10-22_003.xad

Created: 10/22/2013 12:31:01 PM
Modified: 10/22/2013 1:12:21 PM

Gel Image

