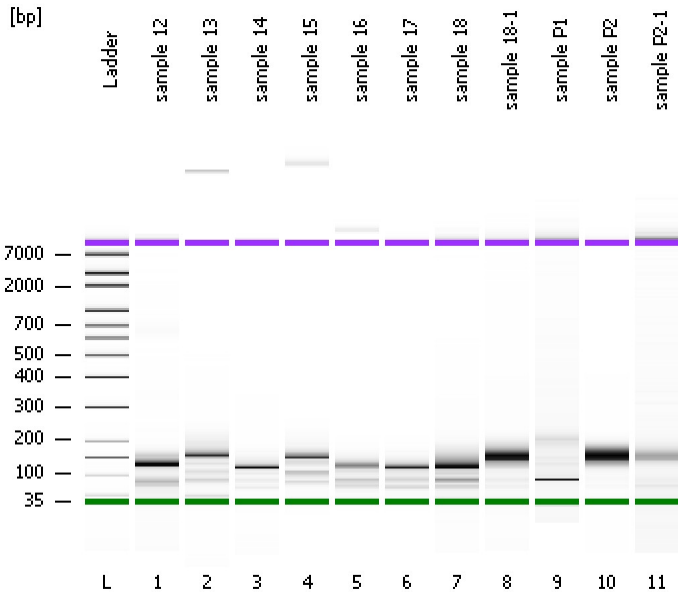


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
Modified: 1/22/2014 2:09:04 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

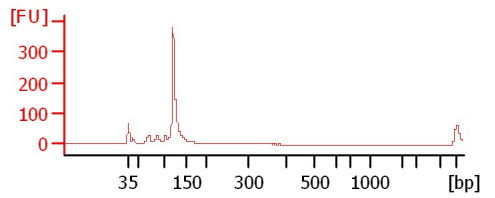
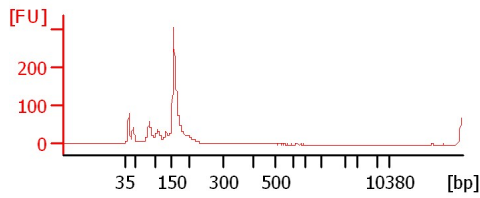
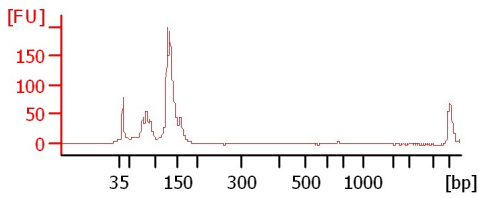
Chip Information:

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

sample 12

sample 13

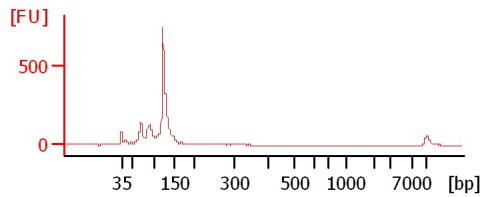
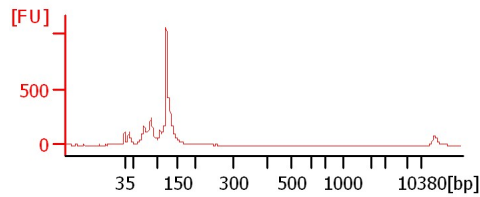
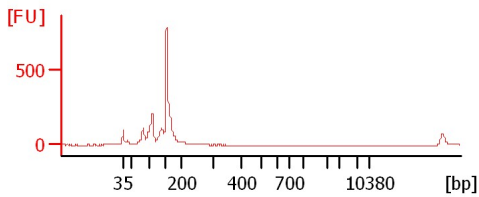
sample 14



sample 15

sample 16

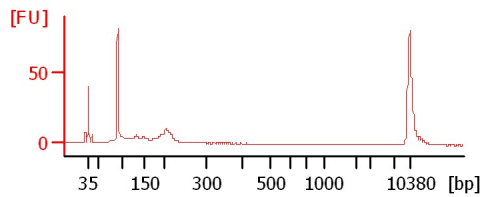
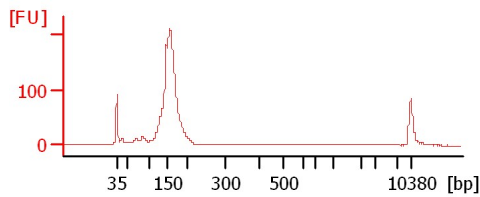
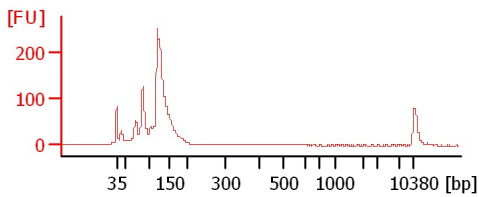
sample 17



sample 18

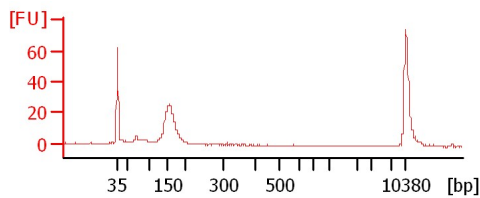
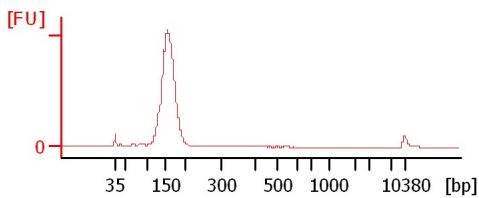
sample 18-1

sample P1



sample P2

sample P2-1



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 12		<input type="checkbox"/>	✓			
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 18-1		<input type="checkbox"/>	✓			
sample P1		<input type="checkbox"/>	✓			
sample P2		<input type="checkbox"/>	✓			
sample P2-1		<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\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
Modified: 1/22/2014 2:09:04 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

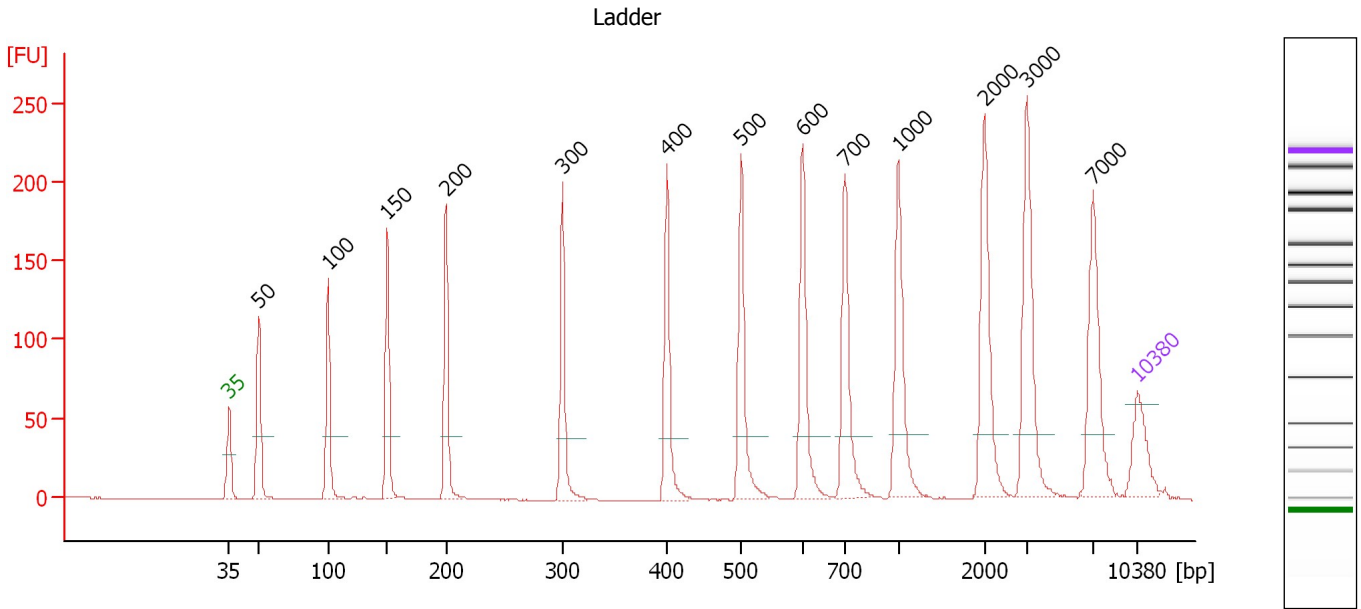
Ladder

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_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

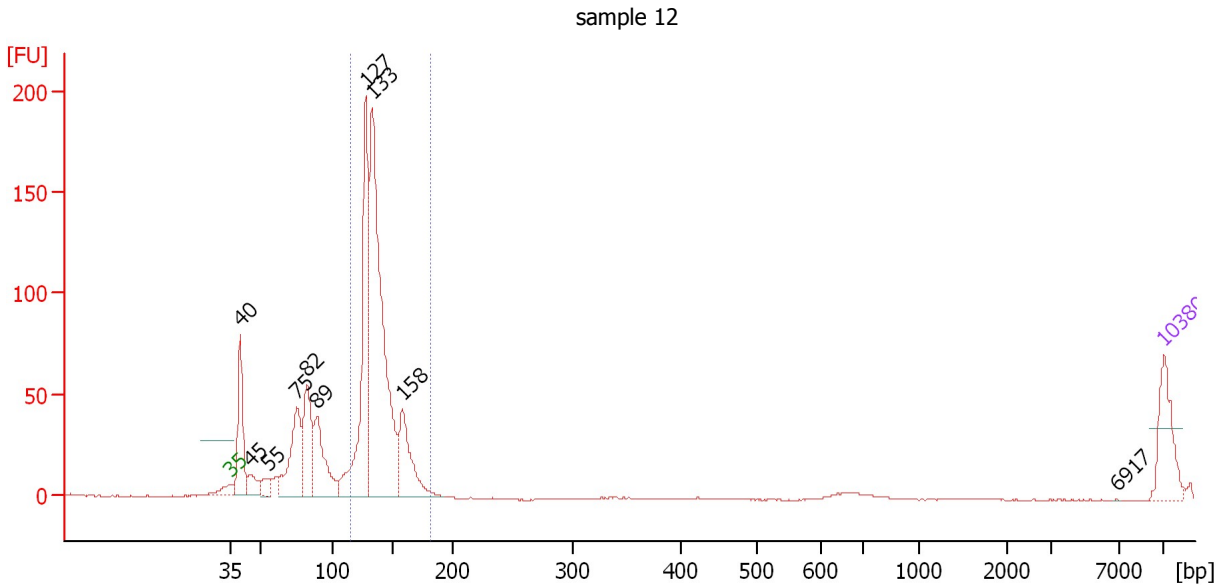
Peak table for Ladder

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	45.30	50	150.00	4,545.5	Ladder Peak
3	50.65	100	150.00	2,272.7	Ladder Peak
4	55.21	150	150.00	1,515.2	Ladder Peak
5	59.73	200	150.00	1,136.4	Ladder Peak
6	68.69	300	150.00	757.6	Ladder Peak
7	76.75	400	150.00	568.2	Ladder Peak
8	82.46	500	150.00	454.5	Ladder Peak
9	87.23	600	150.00	378.8	Ladder Peak
10	90.48	700	150.00	324.7	Ladder Peak
11	94.59	1,000	150.00	227.3	Ladder Peak
12	101.20	2,000	150.00	113.6	Ladder Peak
13	104.49	3,000	150.00	75.8	Ladder Peak
14	109.59	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_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : sample 12

Height Threshold [FU] : 0.01

Overall Results for sample 1 : sample 12

Number of peaks found: 10 Corr. Area 1: 707.3
 Noise: 0.2

Peak table for sample 1 : sample 12

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	43.76	40	186.24	7,063.4	
3	44.52	45	46.35	1,564.2	
4	45.88	55	28.70	785.0	
5	48.00	75	197.42	3,976.6	
6	48.76	82	179.42	3,302.1	
7	49.52	89	172.03	2,914.3	
8	53.15	127	465.33	5,530.0	
9	53.63	133	843.29	9,624.8	
10	55.91	158	167.30	1,606.4	
11	109.48	6,917	0.21	0.0	
12	113.00	10,380	75.00	10.9	Upper Marker

Region table for sample 1 : sample 12

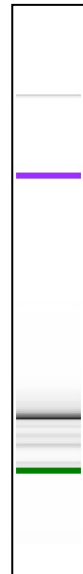
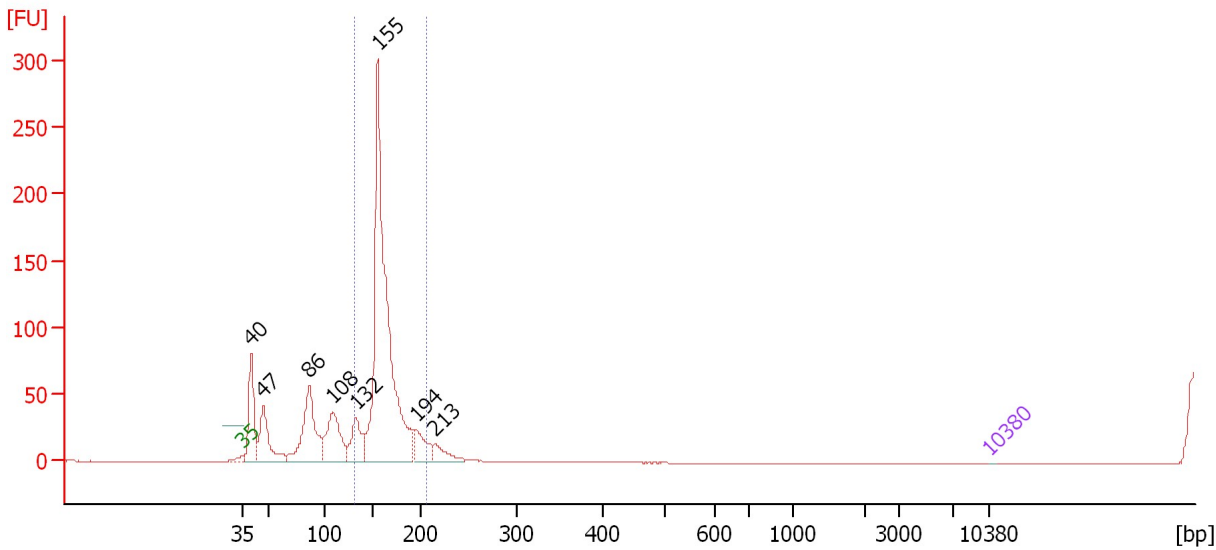
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
116	180	137	15,205.9	1,370.54	707.3	64	8.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...

sample 13



Setpoint Deviations for sample 2 : sample 13

Height Threshold [FU] : 0.01

Overall Results for sample 2 : sample 13

Number of peaks found: 8 Corr. Area 1: 607.5
 Noise: 0.2

Peak table for sample 2 : sample 13

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	43.75	40	150,374.13	5,712,557.5	
3	44.90	47	127,739.80	4,085,586.3	
4	49.20	86	214,374.20	3,757,870.0	
5	51.39	108	147,997.25	2,072,354.4	
6	53.59	132	88,639.43	1,015,157.7	
7	55.64	155	899,017.31	8,799,997.0	
8	59.19	194	64,352.26	502,545.6	
9	60.94	213	37,206.02	264,065.7	
10	113.00	10,380	75.00	10.9	Upper Marker

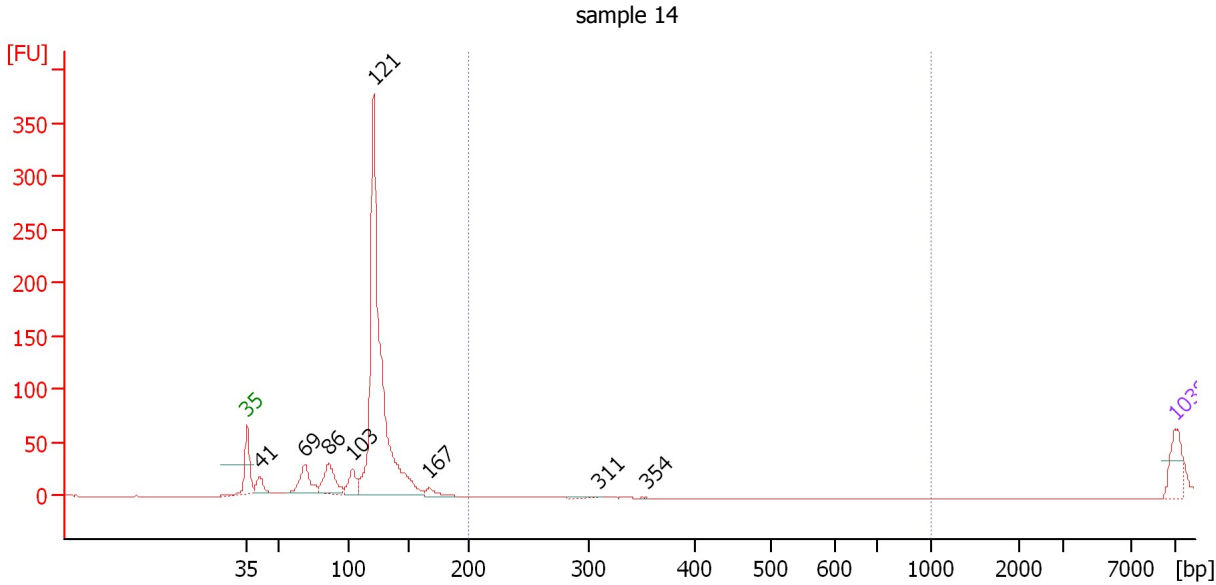
Region table for sample 2 : sample 13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
131	205	161	8,143,421.0	861,759.13	607.5	65	7.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : sample 14

Height Threshold [FU] : 0.01

Overall Results for sample 3 : sample 14

Number of peaks found: 8 Corr. Area 1: 0.0
 Noise: 0.2

Peak table for sample 3 : sample 14

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	66.49	2,455.8	
3	47.34	69	150.64	3,304.5	
4	49.15	86	168.83	2,974.9	
5	50.92	103	88.78	1,306.3	
6	52.52	121	1,756.26	22,067.8	
7	56.70	167	33.70	306.6	
8	69.56	311	1.26	6.1	
9	73.06	354	0.33	1.4	
10	113.00	10,380	75.00	10.9	Upper Marker

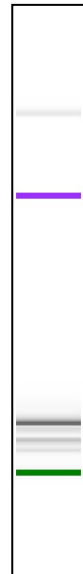
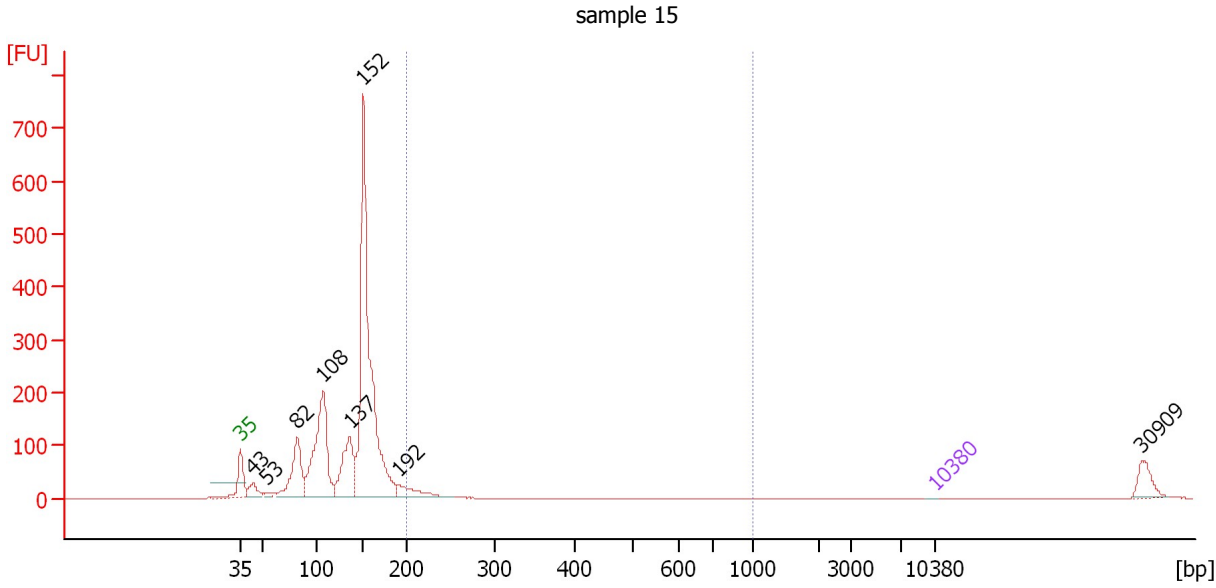
Region table for sample 3 : sample 14

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_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : sample 15

Height Threshold [FU] : 0.01

Overall Results for sample 4 : sample 15

Number of peaks found: 8 Corr. Area 1: 59.4
 Noise: 0.2

Peak table for sample 4 : sample 15

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	44.23	43	71,778.11	2,526,488.0	
3	45.63	53	16,382.79	467,692.2	
4	48.74	82	283,032.88	5,216,513.5	
5	51.37	108	597,327.13	8,380,944.5	
6	54.00	137	292,278.19	3,236,851.8	
7	55.40	152	1,442,336.75	14,365,245.0	
8	59.00	192	95,284.76	752,318.4	
9	113.00	10,380	75.00	10.9	Upper Marker
10	133.72	30,909	0.00	0.0	

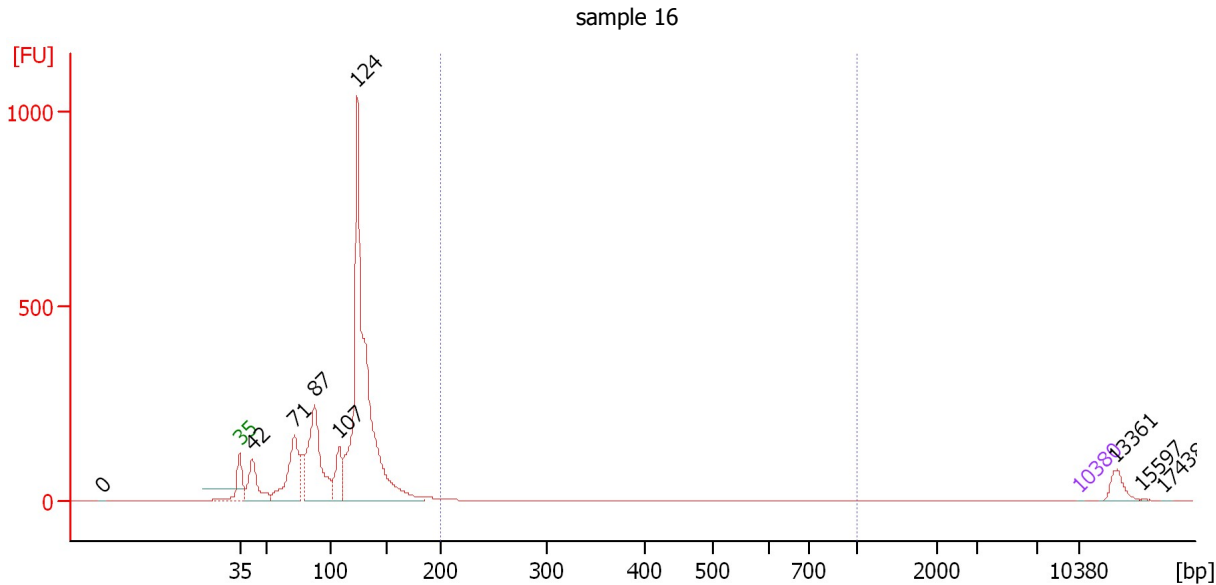
Region table for sample 4 : sample 15

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	218	439,333.2	63,067.20	59.4	2	6.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : sample 16

Height Threshold [FU] : 0.01

Overall Results for sample 5 : sample 16

Number of peaks found: 9 Corr. Area 1: 20.0
 Noise: 0.1

Peak table for sample 5 : sample 16

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31.54	0	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	44.06	42	120,428.00	4,352,704.5	
4	47.56	71	208,871.59	4,450,649.0	
5	49.28	87	327,859.59	5,693,210.5	
6	51.27	107	94,836.96	1,344,260.8	
7	52.82	124	1,117,564.38	13,670,378.0	
8	113.00	10,380	75.00	10.9	Upper Marker
9	116.01	13,361	0.00	0.0	
10	118.27	15,597	0.00	0.0	
11	120.12	17,438	0.00	0.0	

Region table for sample 5 : sample 16

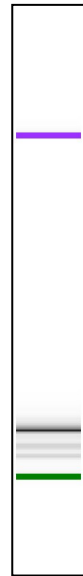
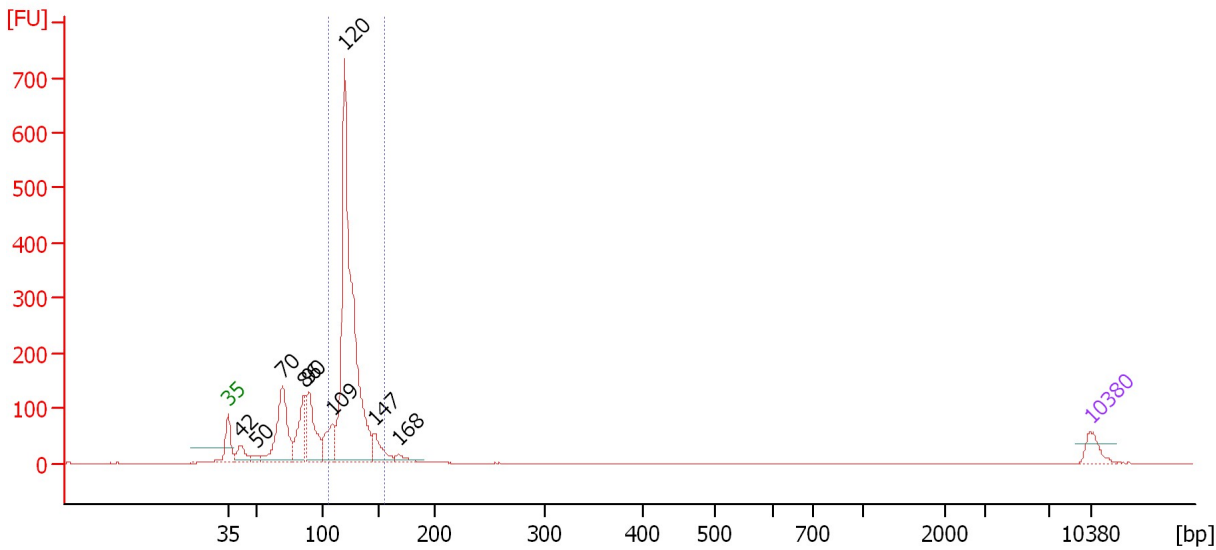
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	243	57,294.5	8,946.18	20.0	1	18.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...

sample 17



Overall Results for sample 6 : sample 17

Number of peaks found: 9 Corr. Area 1: 1,534.7
 Noise: 0.2

Peak table for sample 6 : sample 17

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	44.04	42	148.88	5,400.4	
3	45.25	50	45.14	1,376.9	
4	47.42	70	718.11	15,592.7	
5	49.19	86	377.31	6,617.7	
6	49.54	90	496.43	8,392.1	
7	51.48	109	270.42	3,752.1	
8	52.48	120	3,022.84	38,131.7	
9	54.90	147	185.60	1,917.2	
10	56.81	168	63.49	573.6	
11	113.00	10,380	75.00	10.9	Upper Marker

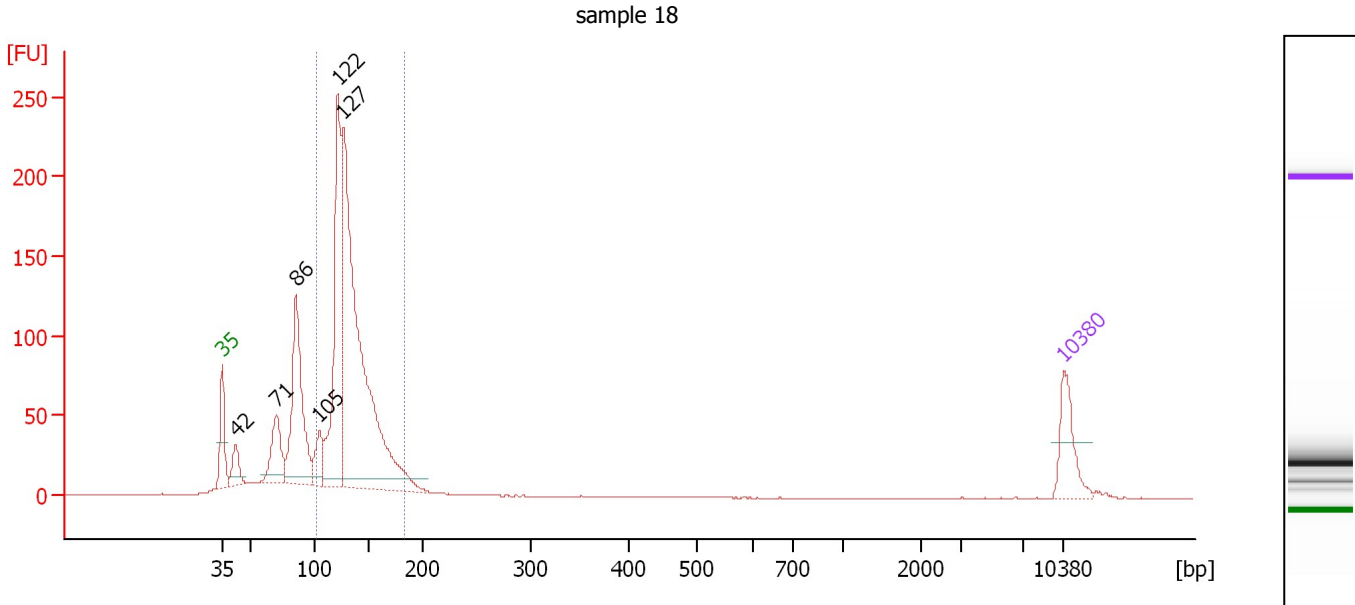
Region table for sample 6 : sample 17

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
105	155	125	40,337.5	3,317.81	1,534.7	61	7.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 18

Number of peaks found: 6 Corr. Area 1: 1,163.9
 Noise: 0.2

Peak table for sample 7 : sample 18

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	44.11	42	65.16	2,338.0	
3	47.52	71	145.22	3,107.7	
4	49.12	86	402.04	7,104.5	
5	51.07	105	81.77	1,183.4	
6	52.63	122	535.68	6,668.8	
7	53.07	127	1,220.65	14,612.4	
8	113.00	10,380	75.00	10.9	Upper Marker

Region table for sample 7 : sample 18

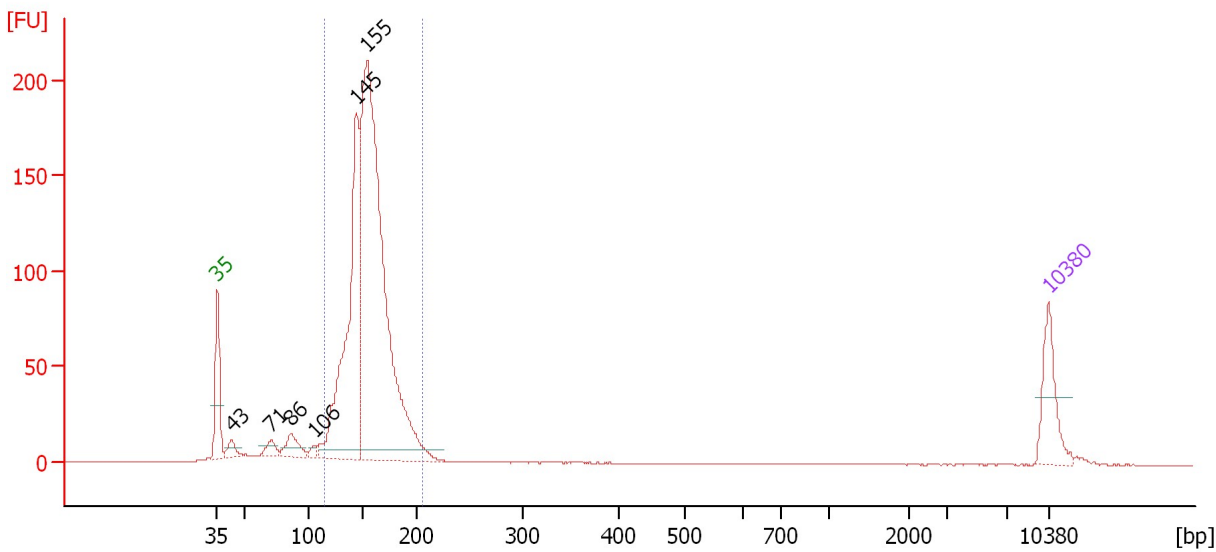
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
103	183	134	21,120.3	1,848.06	1,163.9	67	12.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...

sample 18-1



Overall Results for sample 8 : sample 18-1

Number of peaks found: 6 Corr. Area 1: 1,260.8
 Noise: 0.2

Peak table for sample 8 : sample 18-1

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	44.21	43	30.58	1,079.9	
3	47.54	71	28.39	606.5	
4	49.16	86	53.06	934.3	
5	51.22	106	12.03	171.5	
6	54.73	145	628.00	6,574.6	
7	55.63	155	1,339.16	13,123.1	
8	113.00	10,380	75.00	10.9	Upper Marker

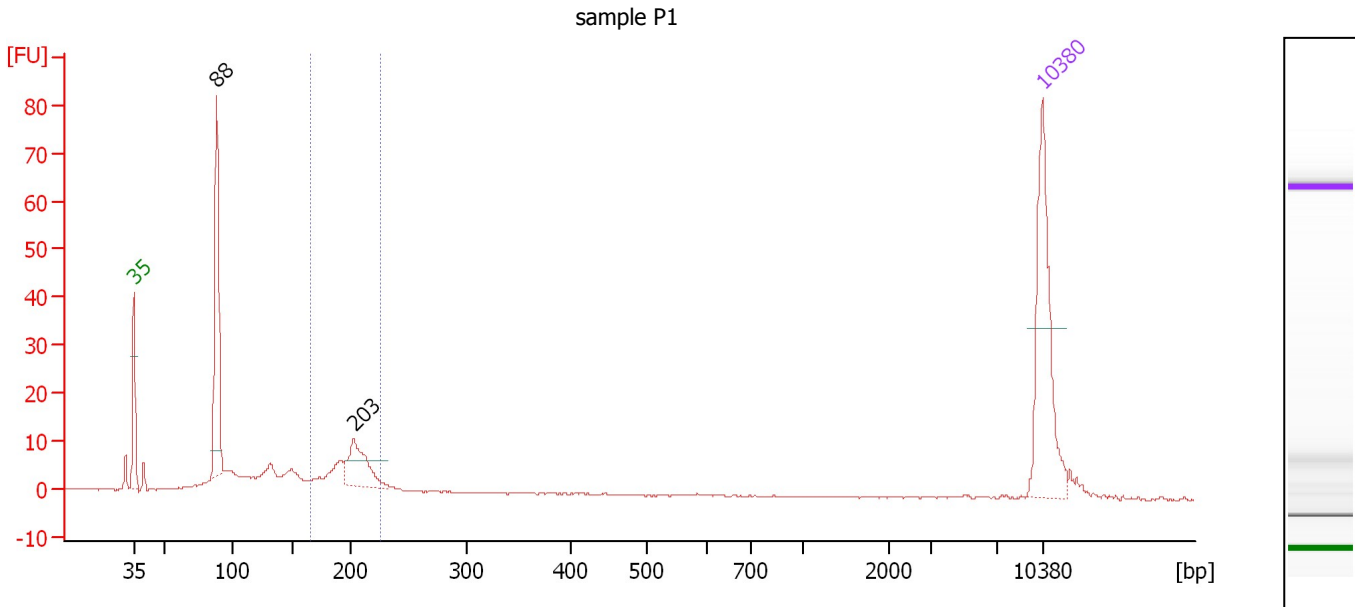
Region table for sample 8 : sample 18-1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
115	206	156	19,214.7	1,954.14	1,260.8	88	10.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample P1

Number of peaks found: 2 Corr. Area 1: 61.2
 Noise: 0.1

Peak table for sample 9 : sample P1

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	49.41	88	129.23	2,214.2	
3	59.97	203	46.32	346.3	
4	113.00	10,380	75.00	10.9	Upper Marker

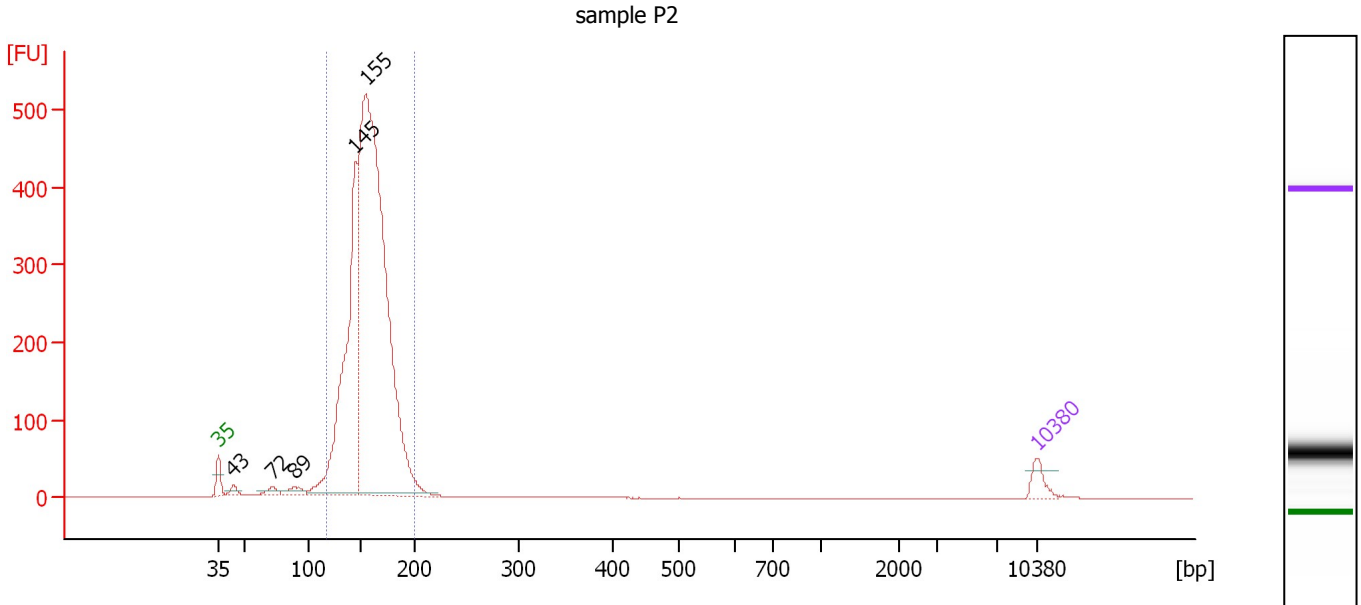
Region table for sample 9 : sample P1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
165	225	198	684.1	89.06	61.2	26	7.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample P2

Number of peaks found: 5 Corr. Area 1: 3,376.0
 Noise: 0.2

Peak table for sample 10 : sample P2

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	44.28	43	51.43	1,798.7	
3	47.61	72	56.78	1,201.7	
4	49.48	89	86.54	1,471.7	
5	54.73	145	2,402.06	25,145.7	
6	55.64	155	6,177.07	60,467.5	
7	113.00	10,380	75.00	10.9	Upper Marker

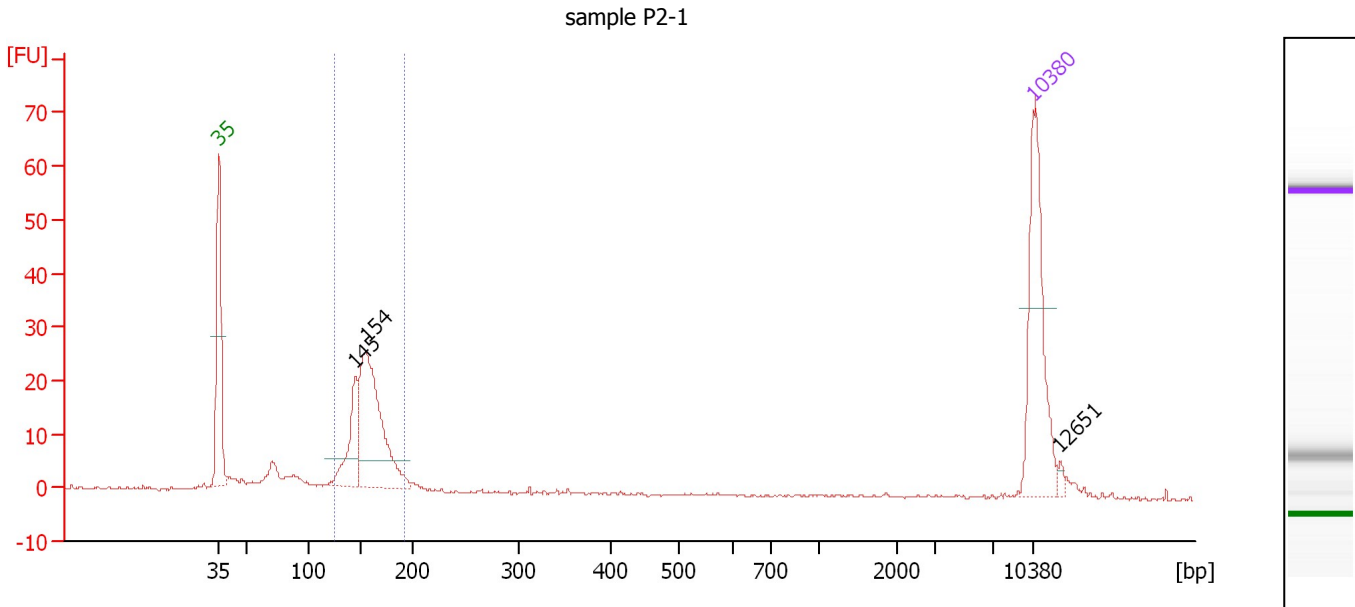
Region table for sample 10 : sample P2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
118	201	157	81,516.2	8,358.17	3,376.0	93	10.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
 Modified: 1/22/2014 2:09:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample P2-1

Number of peaks found: 3 Corr. Area 1: 139.0
 Noise: 0.2

Peak table for sample 11 : sample P2-1

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	54.74	145	55.18	577.3	
3	55.61	154	156.28	1,533.5	
4	113.00	10,380	75.00	10.9	Upper Marker
5	115.29	12,651	0.00	0.0	

Region table for sample 11 : sample P2-1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
124	192	156	2,156.1	221.01	139.0	66	8.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-22\2014-01-22_003.xad

Created: 1/22/2014 1:26:01 PM
Modified: 1/22/2014 2:09:04 PM

Gel Image

