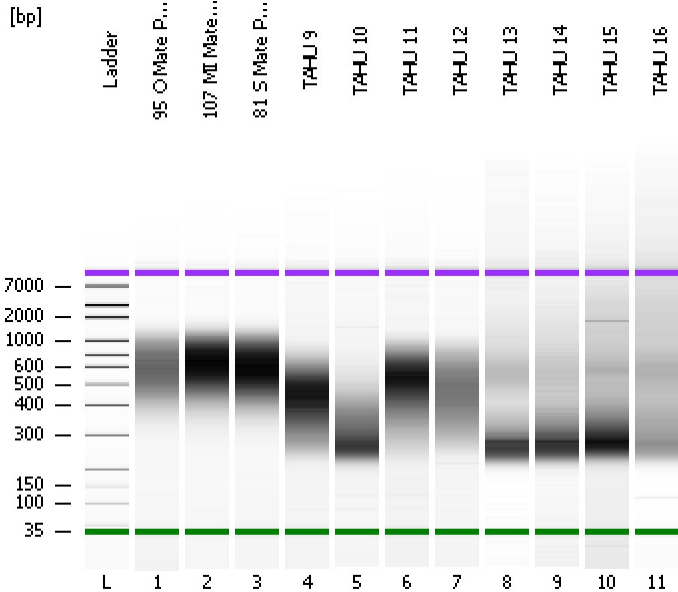


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
Modified: 6/8/2015 1:51:26 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

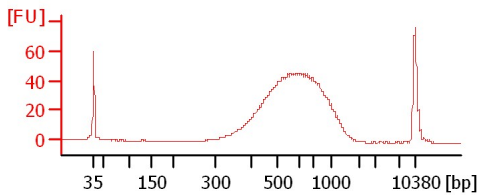
Chip Information:

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

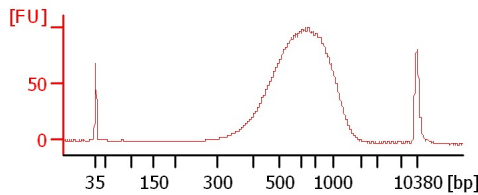
95 O Mate Pair Lib 2nd PCR

107 MI Mate Pair Lib 2nd PCR

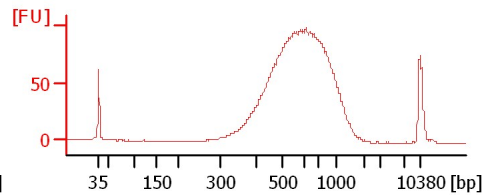
81 S Mate Pair Lib 2nd PCR



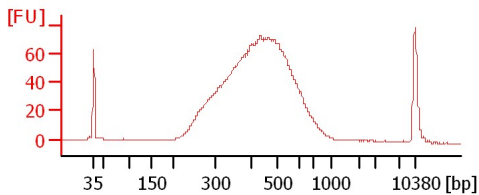
TAHU 9



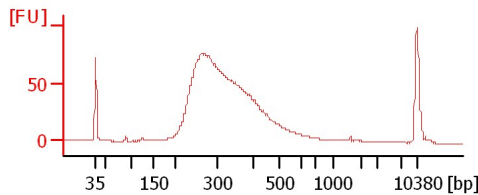
TAHU 10



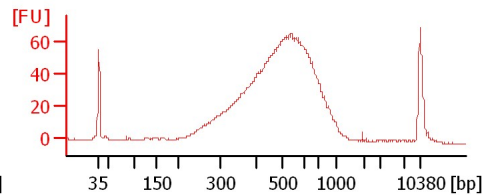
TAHU 11



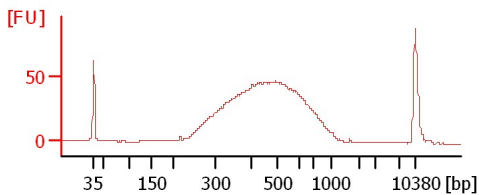
TAHU 12



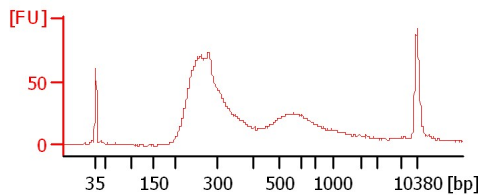
TAHU 13



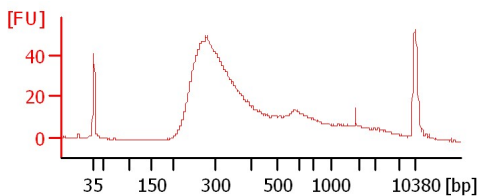
TAHU 14



TAHU 15



TAHU 16



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
Modified: 6/8/2015 1:51:26 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
95 O Mate Pair Lib 2nd PCR		<input type="checkbox"/>	✓			
107 MI Mate Pair Lib 2nd PCR		<input type="checkbox"/>	✓			
81 S Mate Pair Lib 2nd PCR		<input type="checkbox"/>	✓			
TAHU 9		<input type="checkbox"/>	✓			
TAHU 10		<input type="checkbox"/>	✓			
TAHU 11		<input type="checkbox"/>	✓			
TAHU 12		<input type="checkbox"/>	✓			
TAHU 13		<input type="checkbox"/>	✓			
TAHU 14		<input type="checkbox"/>	✓			
TAHU 15		<input type="checkbox"/>	✓			
TAHU 16		<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\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
Modified: 6/8/2015 1:51:26 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

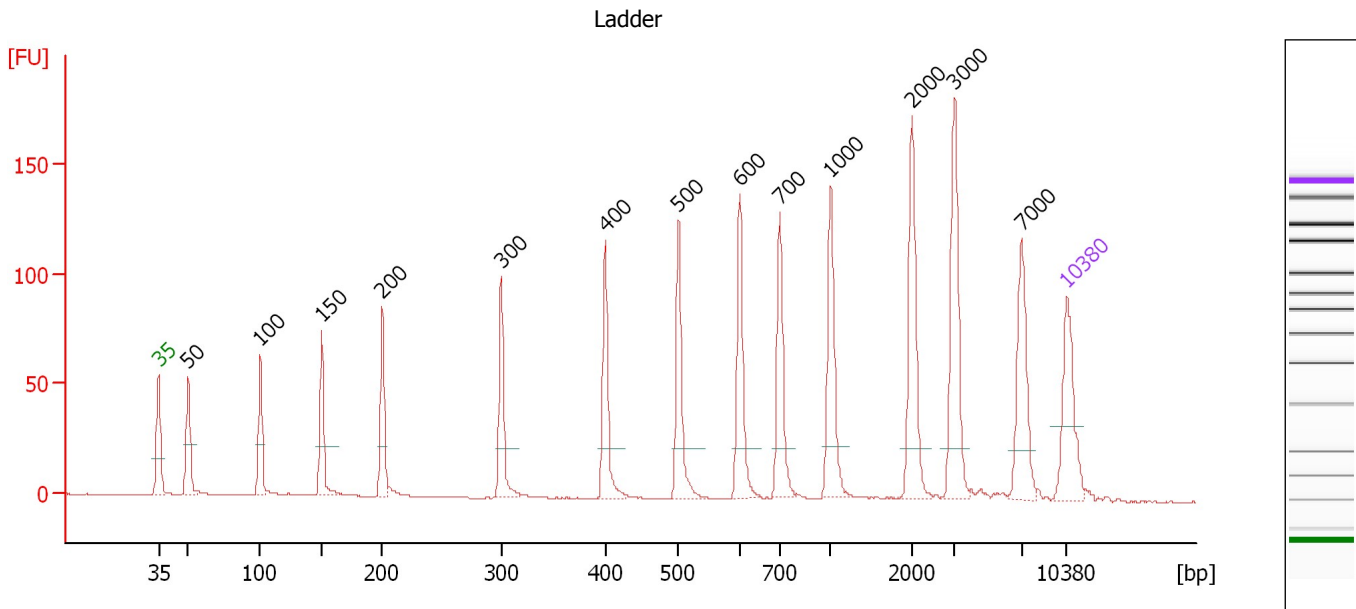
Ladder

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\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

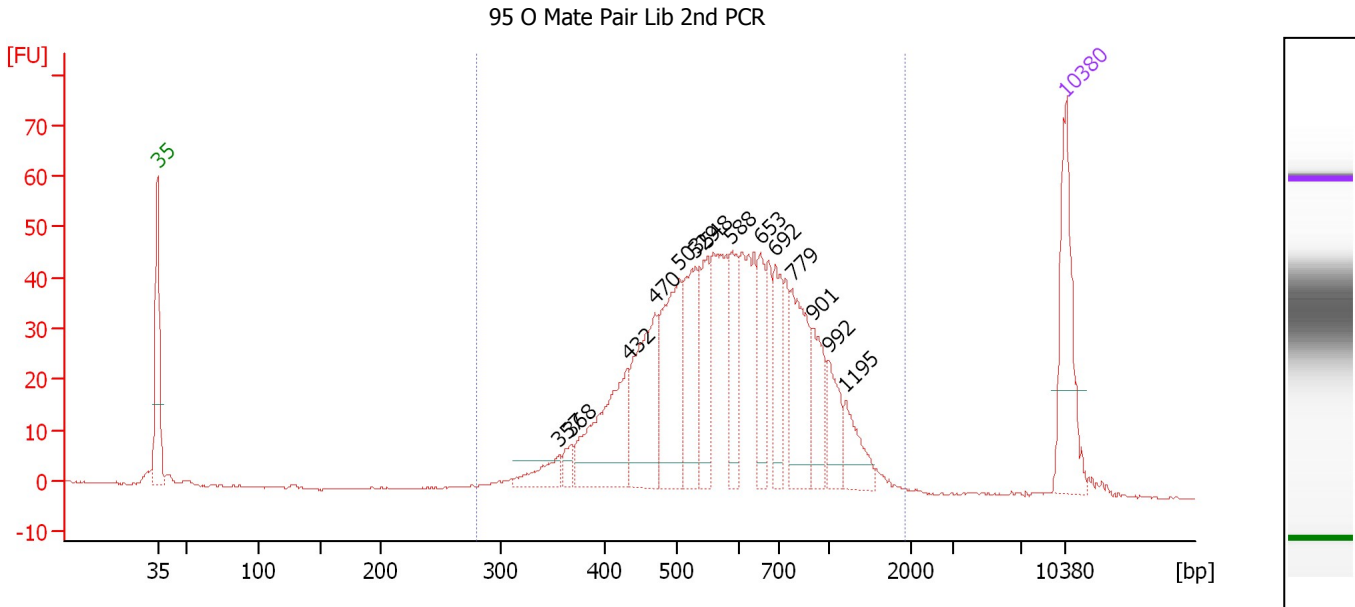
Peak table for Ladder

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	45.30
3	100	150.00	2,272.7	Ladder Peak	50.84
4	150	150.00	1,515.2	Ladder Peak	55.58
5	200	150.00	1,136.4	Ladder Peak	60.26
6	300	150.00	757.6	Ladder Peak	69.41
7	400	150.00	568.2	Ladder Peak	77.44
8	500	150.00	454.5	Ladder Peak	83.07
9	600	150.00	378.8	Ladder Peak	87.80
10	700	150.00	324.7	Ladder Peak	90.87
11	1,000	150.00	227.3	Ladder Peak	94.79
12	2,000	150.00	113.6	Ladder Peak	101.06
13	3,000	150.00	75.8	Ladder Peak	104.35
14	7,000	150.00	32.5	Ladder Peak	109.53
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 95 O Mate Pair Lib 2nd PCR

Number of peaks found: 14 Corr. Area 1: 921.4
 Noise: 0.2

Peak table for sample 1 : 95 O Mate Pair Lib 2nd PCR

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	357	27.02	114.8		73.96
3	368	12.50	51.5		74.87
4	432	120.14	421.1		79.26
5	470	113.96	367.7		81.36
6	503	118.58	357.0		83.23
7	529	89.57	256.4		84.46
8	548	58.92	163.0		85.33
9	588	54.20	139.6		87.25
10	653	46.10	106.9		89.44
11	692	51.96	113.8		90.63
12	779	82.09	159.6		91.90
13	901	46.41	78.0		93.50
14	992	34.85	53.2		94.69
15	1,195	31.60	40.1		96.01
16	10,380	75.00	10.9	Upper Marker	113.00

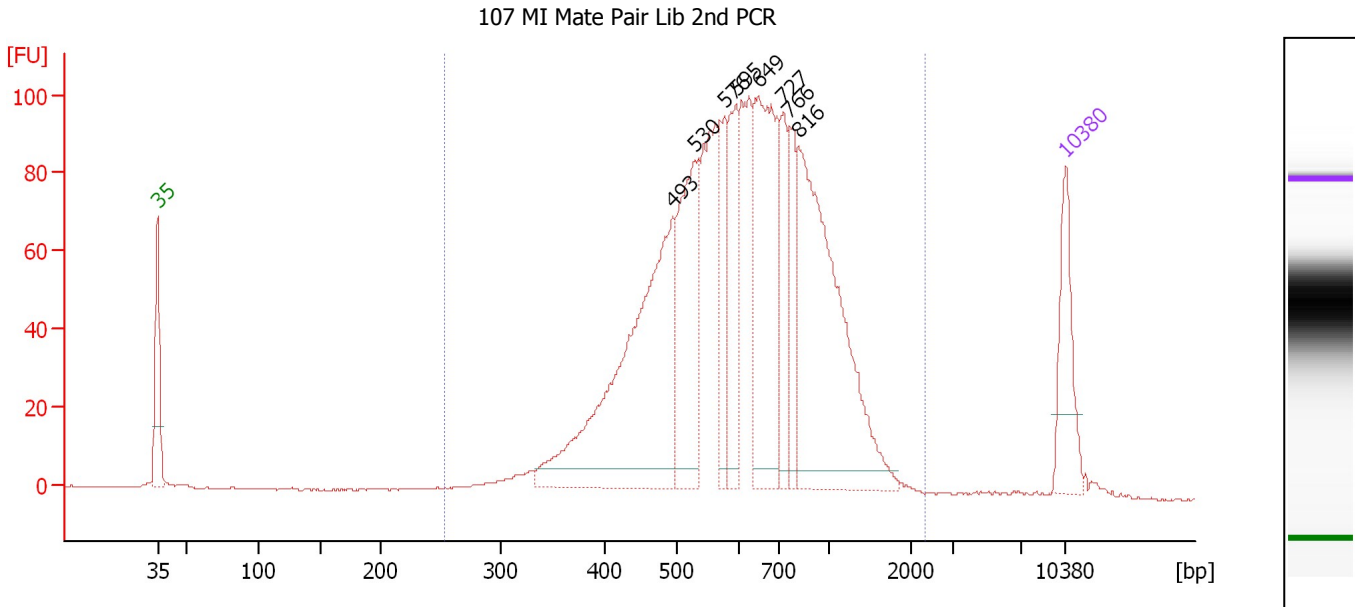
Region table for sample 1 : 95 O Mate Pair Lib 2nd PCR

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
280	641	1,928	921.4	3,236.3	98	36.8	1,197.46

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 107 MI Mate Pair Lib 2nd PCR

Number of peaks found: 8 Corr. Area 1: 1,864.2
 Noise: 0.2

Peak table for sample 2 : 107 MI Mate Pair Lib 2nd PCR

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	493	491.30	1,508.6		82.70
3	530	218.03	623.8		84.47
4	576	91.79	241.5		86.66
5	595	115.46	293.8		87.59
6	649	270.01	630.2		89.31
7	727	82.70	172.4		91.22
8	766	82.67	163.6		91.73
9	816	406.78	755.6		92.38
10	10,380	75.00	10.9	Upper Marker	113.00

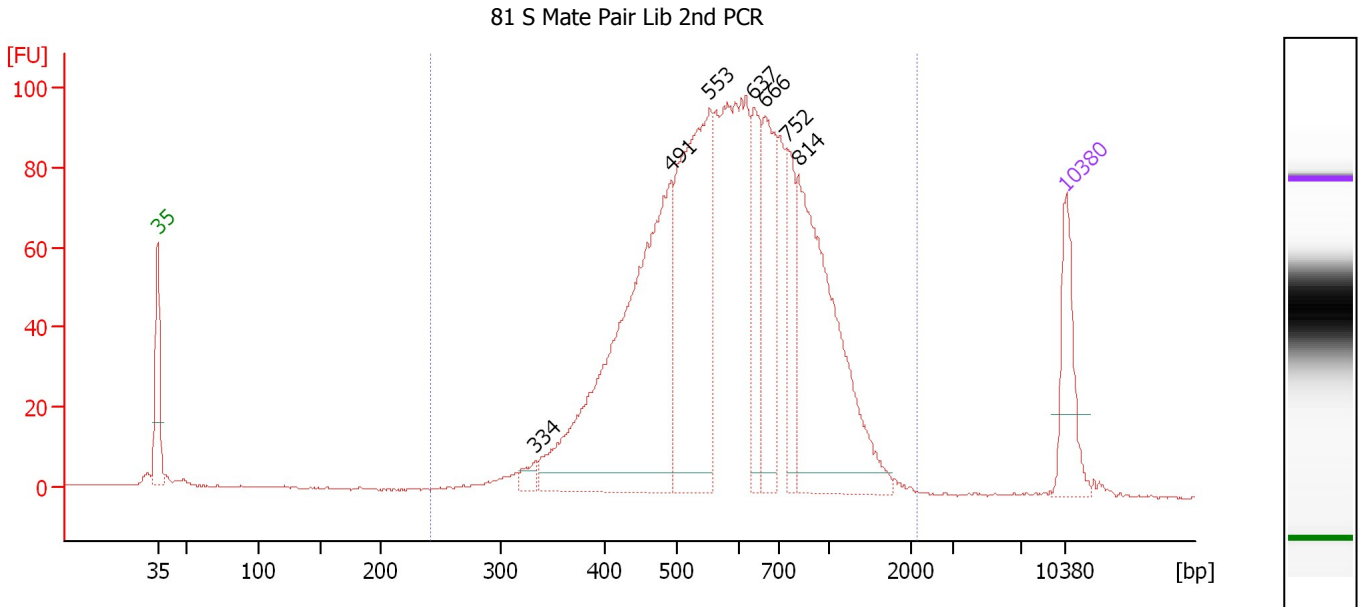
Region table for sample 2 : 107 MI Mate Pair Lib 2nd PCR

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
253	674	2,314	1,864.2	5,685.1	98	38.1	2,186.75

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 81 S Mate Pair Lib 2nd PCR

Number of peaks found: 7 Corr. Area 1: 1,885.5
 Noise: 0.2

Peak table for sample 3 : 81 S Mate Pair Lib 2nd PCR

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	334	18.73	85.1		72.10
3	491	652.48	2,013.4		82.57
4	553	425.80	1,167.4		85.56
5	637	120.12	285.7		88.94
6	666	156.39	355.5		89.84
7	752	85.88	173.0		91.55
8	814	393.79	732.8		92.36
9	10,380	75.00	10.9	Upper Marker	113.00

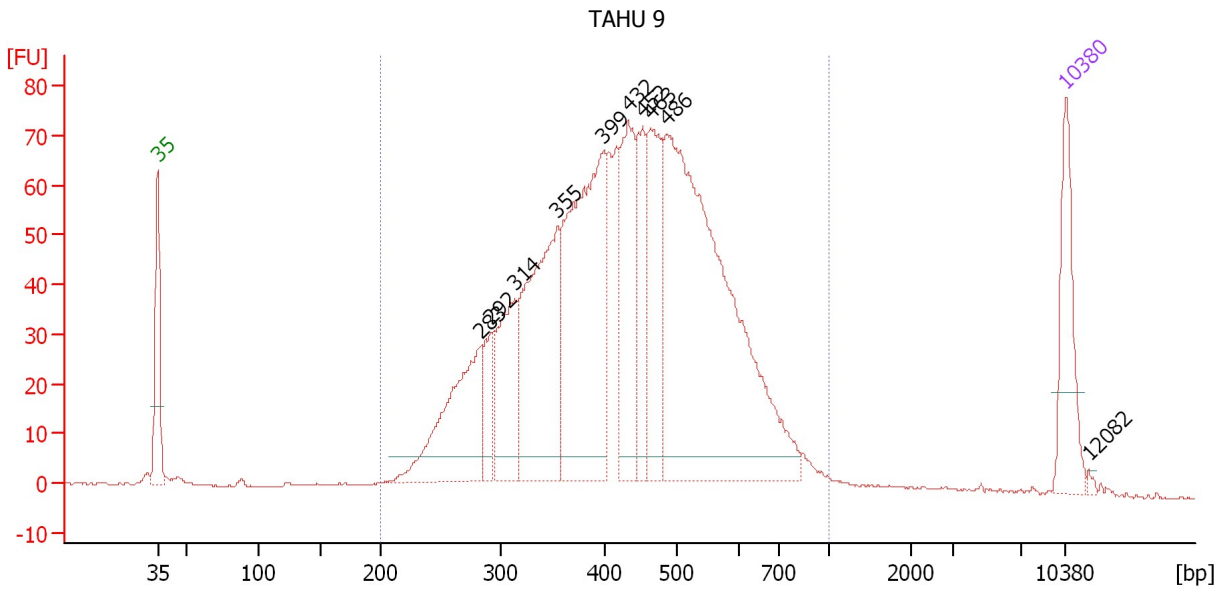
Region table for sample 3 : 81 S Mate Pair Lib 2nd PCR

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
242	644	2,138	1,885.5	6,631.9	97	37.4	2,454.62

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : TAHU 9

Number of peaks found: 10 Corr. Area 1: 1,725.3
 Noise: 0.2

Peak table for sample 4 : TAHU 9

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	283	198.41	1,060.4		67.90
3	292	57.26	297.1		68.68
4	314	134.17	647.7		70.52
5	355	279.52	1,193.0		73.83
6	399	367.30	1,396.4		77.32
7	432	157.92	553.4		79.26
8	452	92.67	310.5		80.38
9	463	137.42	449.3		81.01
10	486	668.91	2,086.2		82.27
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,082	0.00	0.0		114.75

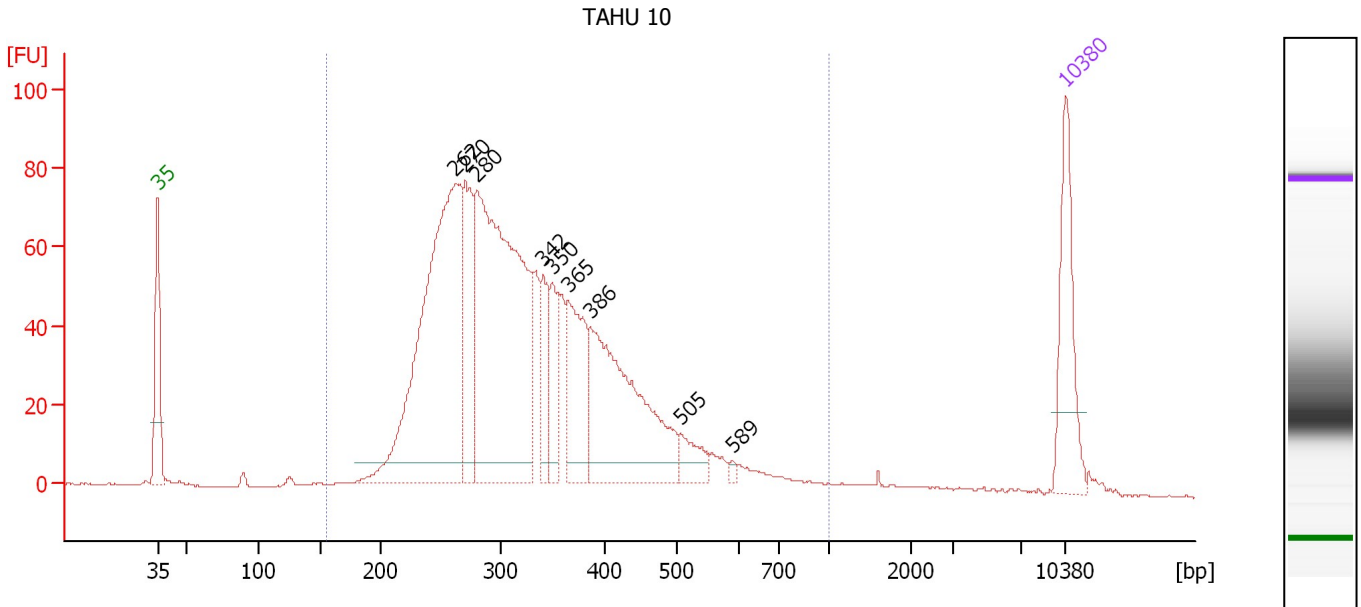
Region table for sample 4 : TAHU 9

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	440	1,000	1,725.3	8,938.2	97	27.0	2,340.76

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : TAHU 10

Number of peaks found: 9 Corr. Area 1: 1,613.5
 Noise: 0.2

Peak table for sample 5 : TAHU 10

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	262	503.02	2,913.0		65.90
3	270	132.78	744.3		66.70
4	280	518.23	2,803.6		67.59
5	342	52.47	232.8		72.75
6	350	53.41	231.1		73.44
7	365	109.38	454.0		74.63
8	386	249.04	977.5		76.31
9	505	29.23	87.7		83.30
10	589	4.17	10.7		87.27
11	10,380	75.00	10.9	Upper Marker	113.00

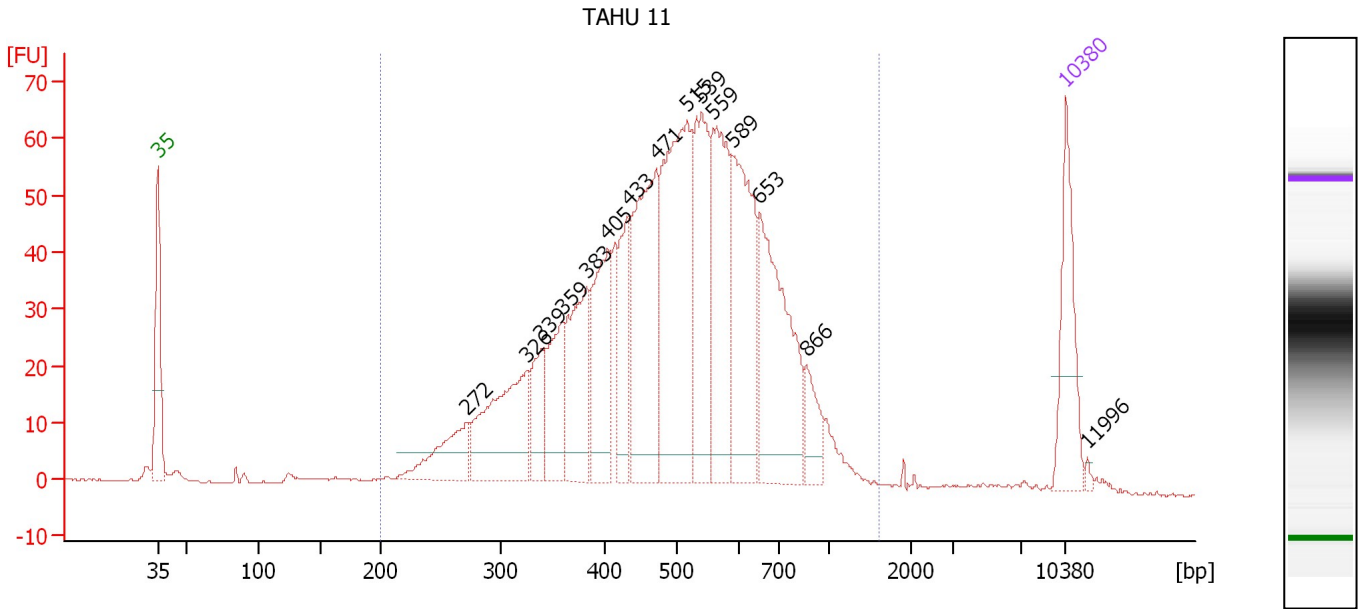
Region table for sample 5 : TAHU 10

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
155	339	1,000	1,613.5	9,226.5	96	30.7	1,869.87

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : TAHU 11

Number of peaks found: 15 Corr. Area 1: 1,398.7
 Noise: 0.2

Peak table for sample 6 : TAHU 11

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	272	81.56	453.7		66.89
3	326	169.17	785.9		71.51
4	339	59.45	265.4		72.57
5	359	87.52	369.0		74.18
6	383	135.00	533.8		76.09
7	405	134.28	502.8		77.70
8	433	83.83	293.2		79.31
9	471	233.86	752.8		81.42
10	515	303.59	893.1		83.78
11	539	154.29	433.3		84.94
12	559	171.48	465.1		85.84
13	589	186.64	479.8		87.30
14	653	204.29	474.3		89.42
15	866	39.07	68.4		93.04
16	10,380	75.00	10.9	Upper Marker	113.00
17	11,996	0.00	0.0		114.66

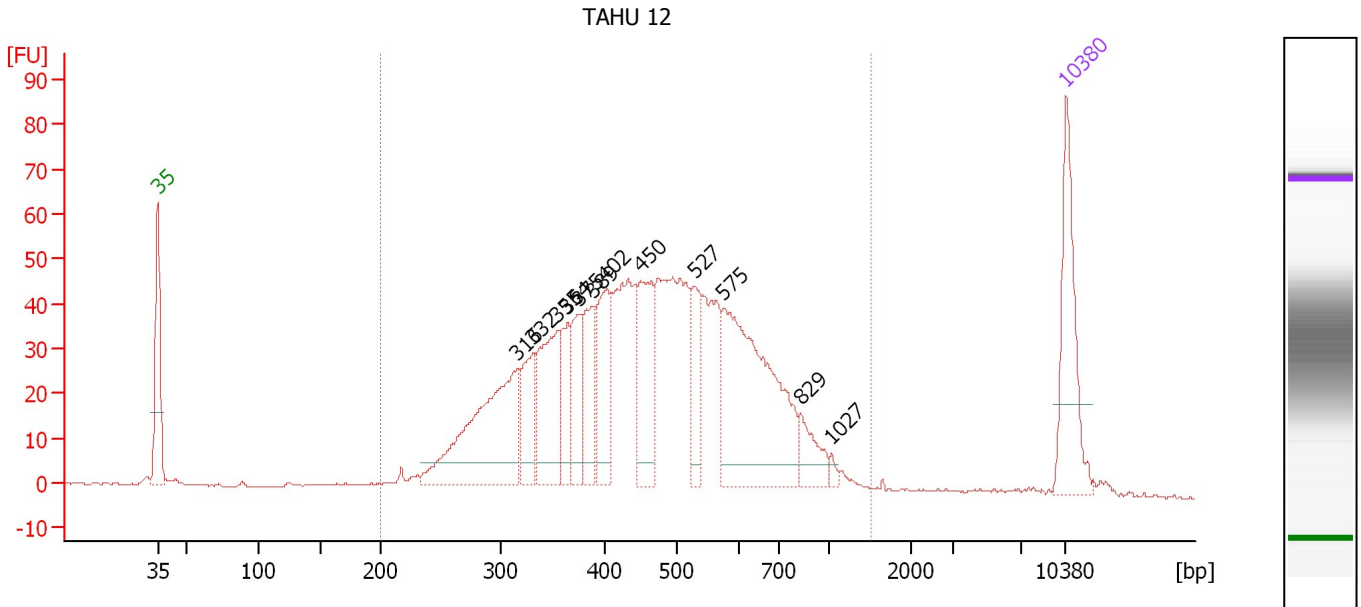
Region table for sample 6 : TAHU 11

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	516	1,617	1,398.7	7,576.9	96	32.5	2,248.70

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : TAHU 12

Number of peaks found: 12 Corr. Area 1: 1,248.6
 Noise: 0.2

Peak table for sample 7 : TAHU 12

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	316	197.48	945.9		70.72
3	332	57.44	262.4		71.95
4	355	102.72	438.8		73.80
5	364	39.82	165.7		74.57
6	375	53.77	217.2		75.44
7	389	54.63	213.1		76.51
8	402	77.92	293.8		77.54
9	450	90.34	304.2		80.25
10	527	49.82	143.2		84.35
11	575	223.14	588.2		86.61
12	829	30.10	55.0		92.55
13	1,027	4.52	6.7		94.96
14	10,380	75.00	10.9	Upper Marker	113.00

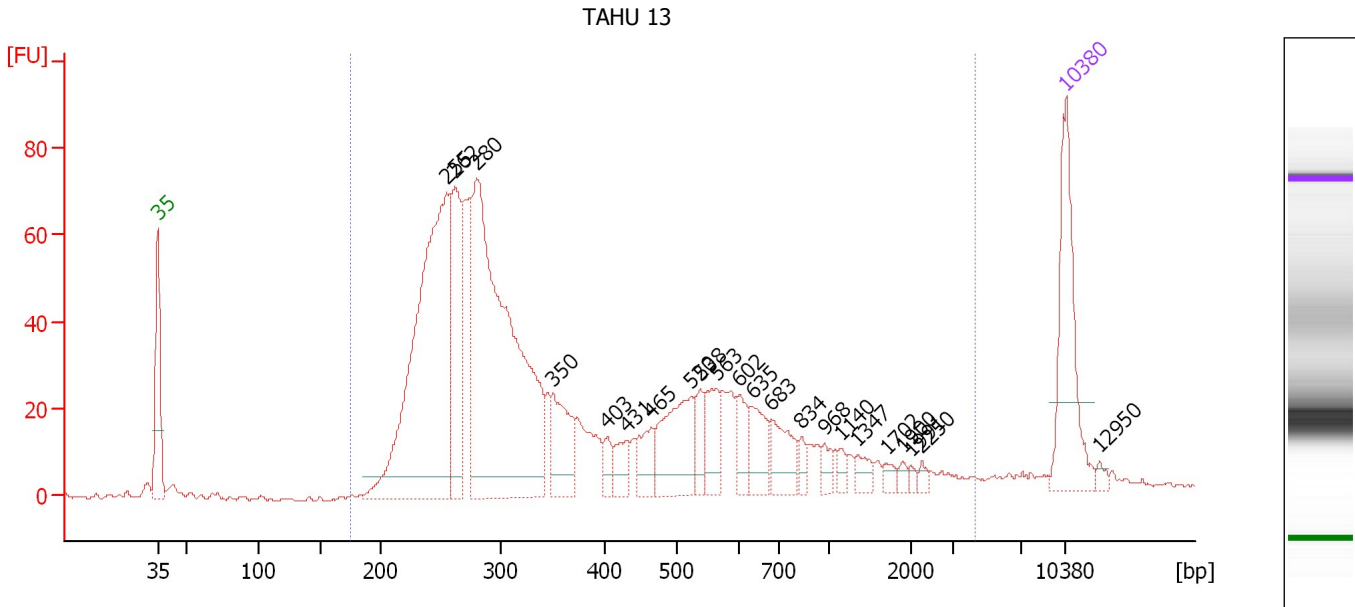
Region table for sample 7 : TAHU 12

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	481	1,521	1,248.6	5,399.6	98	33.6	1,494.99

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : TAHU 13

Number of peaks found: 22 Corr. Area 1: 1,384.4
 Noise: 0.5


Peak table for sample 8 : TAHU 13

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	255	404.16	2,401.2		65.30
3	262	113.65	657.7		65.92
4	280	450.59	2,439.1		67.58
5	350	54.86	237.5		73.42
6	403	12.38	46.5		77.61
7	431	19.86	69.9		79.16
8	465	26.73	87.2		81.08
9	520	70.62	205.7		84.03
10	538	20.00	56.4		84.86
11	563	30.87	83.1		86.05
12	602	23.96	60.3		87.86
13	635	30.45	72.6		88.89
14	683	31.91	70.8		90.34
15	834	8.23	15.0		92.62
16	968	9.08	14.2		94.37
17	1,140	7.13	9.5		95.67
18	1,347	9.45	10.6		96.96
19	1,702	5.24	4.7		99.19
20	1,900	4.00	3.2		100.43
21	1,991	2.84	2.2		101.00
22	2,250	3.97	2.7		101.88
23	10,380	75.00	10.9	Upper Marker	113.00
24	12,950	0.00	0.0		115.64

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
Modified: 6/8/2015 1:51:26 PM

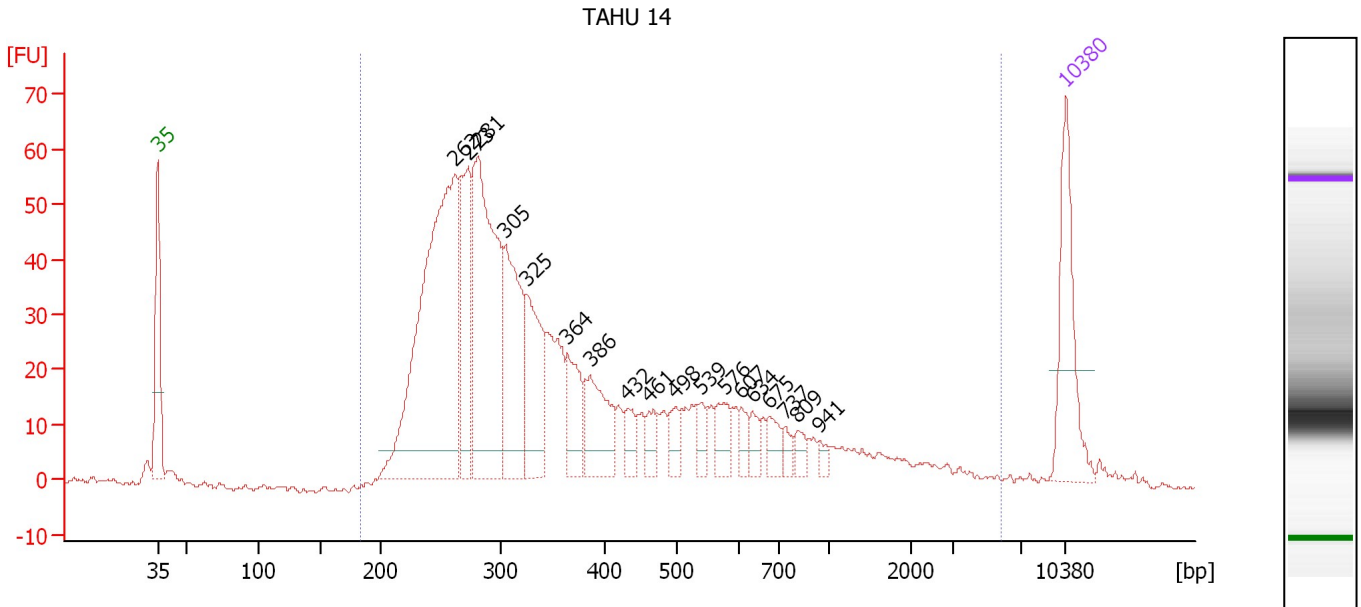
Electropherogram Summary Continued ...**... Region table for sample 8 : TAHU 13**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
175	483	4,249	1,384.4	7,150.6	 96	93.5	1,520.73

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : TAHU 14

Number of peaks found: 18 Corr. Area 1: 1,197.5
 Noise: 0.4

Peak table for sample 9 : TAHU 14

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	262	445.44	2,580.1		65.90
3	273	122.39	679.3		66.94
4	281	283.16	1,526.8		67.68
5	305	141.17	701.2		69.82
6	325	103.12	481.4		71.39
7	364	55.17	229.4		74.58
8	386	71.54	280.4		76.35
9	432	21.62	75.9		79.23
10	461	19.56	64.3		80.85
11	498	19.97	60.8		82.94
12	539	16.76	47.1		84.93
13	576	24.33	64.0		86.65
14	607	13.94	34.8		88.01
15	634	13.89	33.2		88.85
16	675	18.21	40.9		90.10
17	737	9.51	19.5		91.36
18	809	10.90	20.4		92.30
19	941	6.22	10.0		94.02
20	10,380	75.00	10.9	Upper Marker	113.00

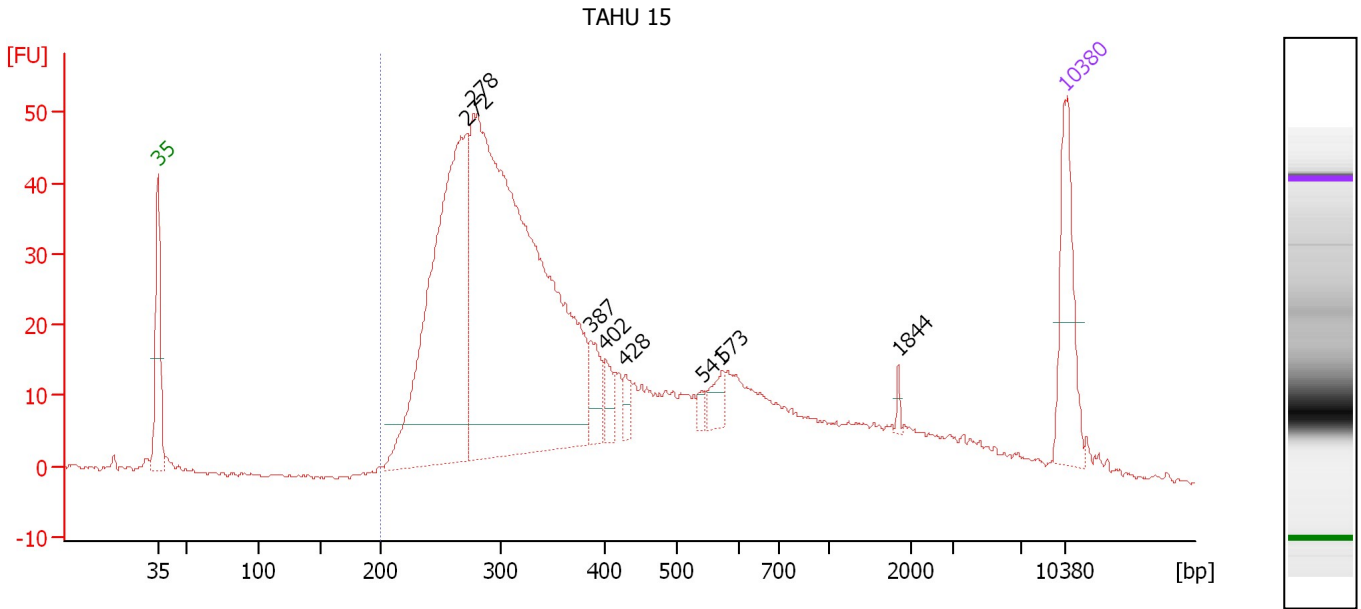
Region table for sample 9 : TAHU 14

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
183	521	5,828	1,197.5	8,480.7	96	100.0	1,836.84

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : TAHU 15

Number of peaks found: 8 Corr. Area 1: 1,110.2
 Noise: 0.3

Peak table for sample 10 : TAHU 15

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	272	511.42	2,845.5		66.88
3	278	944.94	5,158.9		67.36
4	387	34.58	135.5		76.36
5	402	22.52	85.0		77.52
6	428	14.56	51.6		79.01
7	541	8.69	24.4		84.99
8	573	19.85	52.5		86.52
9	1,844	4.17	3.4		100.08
10	10,380	75.00	10.9	Upper Marker	113.00

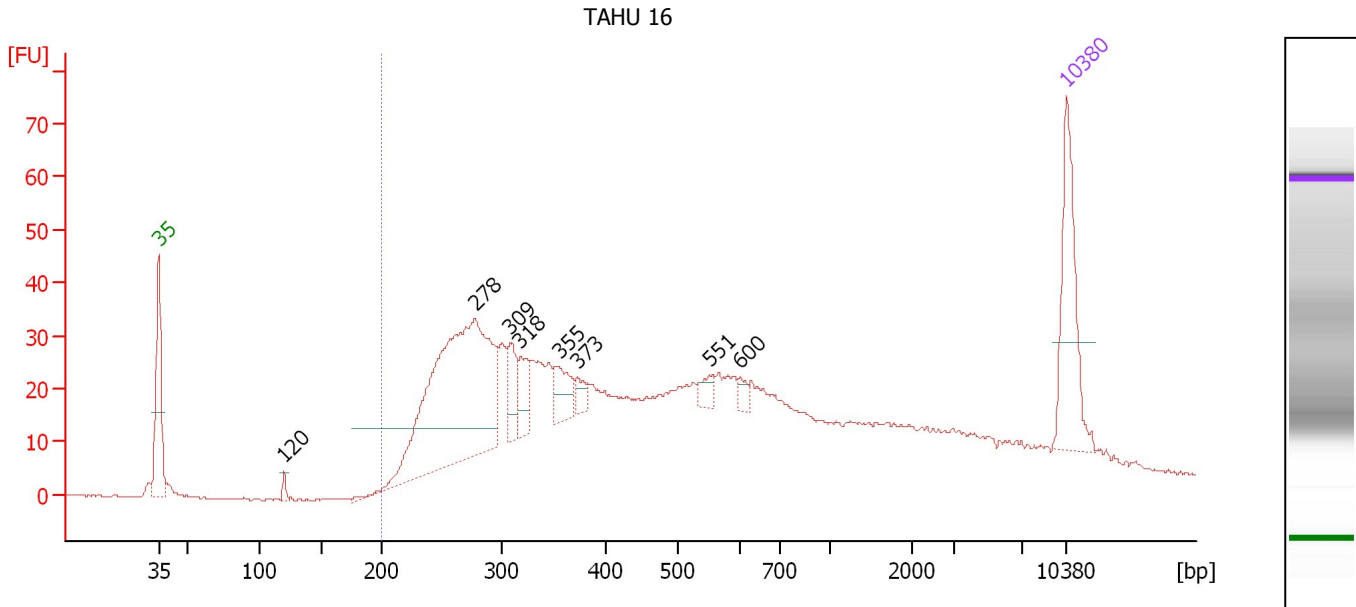
Region table for sample 10 : TAHU 15

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	1,899	23,177	1,110.2	9,544.1	99	100.0	2,224.18

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
 Modified: 6/8/2015 1:51:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : TAHU 16

Number of peaks found: 8 Corr. Area 1: 1,192.5
 Noise: 0.2

Peak table for sample 11 : TAHU 16

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	120	6.17	78.2		52.69
3	278	373.52	2,036.4		67.39
4	309	33.45	164.0		70.14
5	318	31.17	148.3		70.89
6	355	30.63	130.6		73.85
7	373	11.70	47.6		75.25
8	551	11.68	32.1		85.48
9	600	8.00	20.2		87.80
10	10,380	75.00	10.9	Upper Marker	113.00

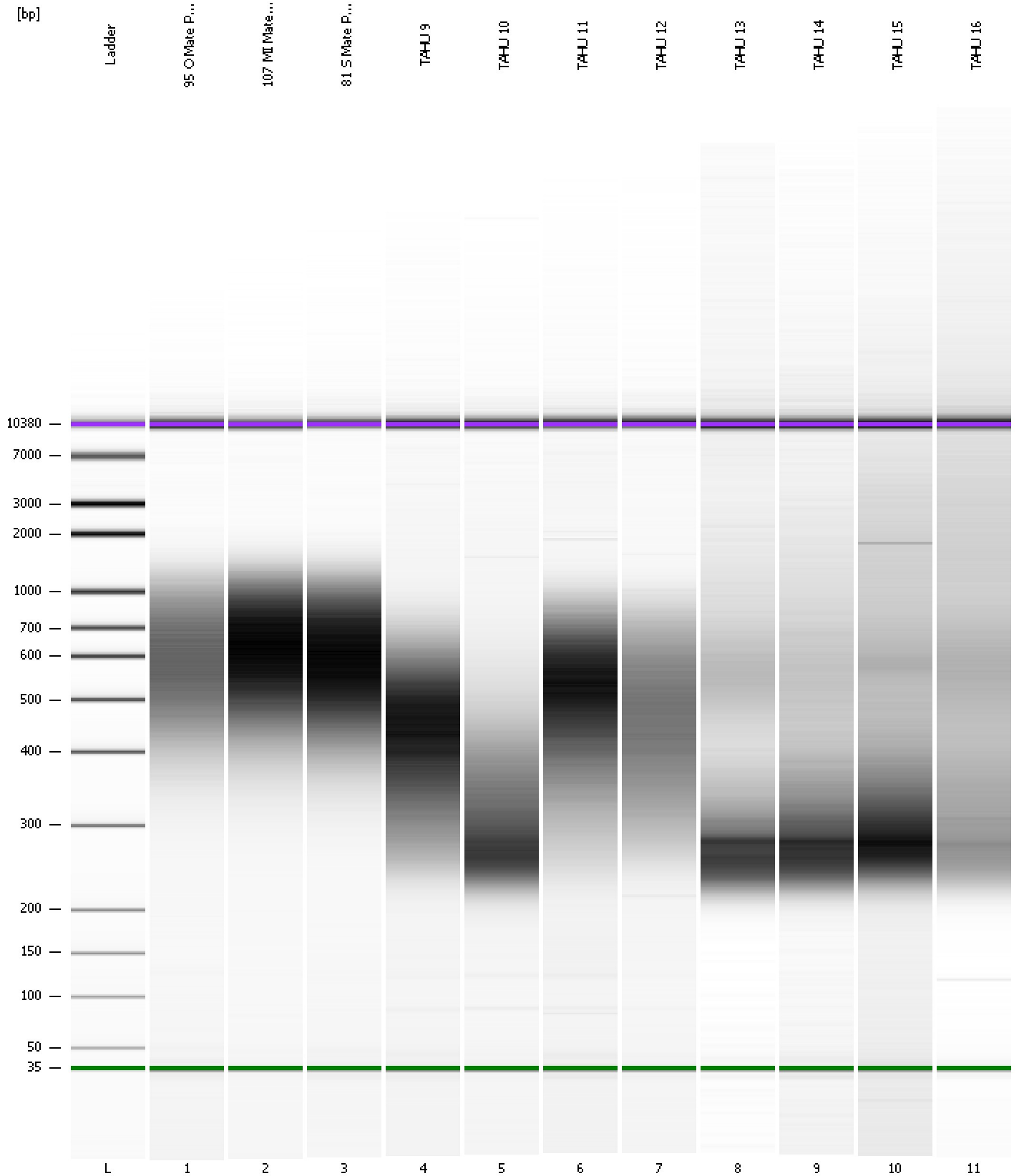
Region table for sample 11 : TAHU 16

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	3,351	31,511	1,192.5	6,561.6	99	100.0	1,797.99

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
Modified: 6/8/2015 1:51:26 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-08\2015-06-08_001.xad

Created: 6/8/2015 1:03:45 PM
Modified: 6/8/2015 1:51:26 PM

Curves

Standard Curve

