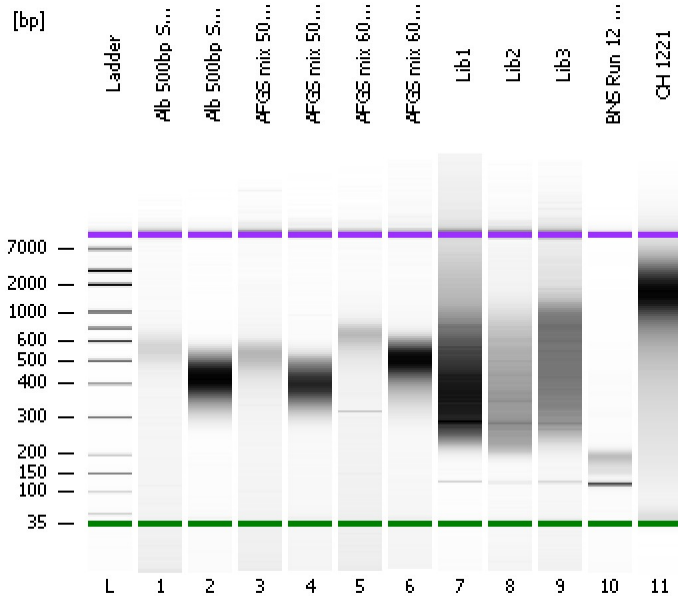


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electrophoresis File Run Summary



Instrument Information:

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

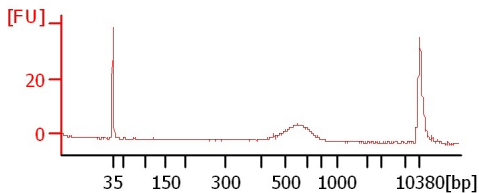
Assay Information:

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

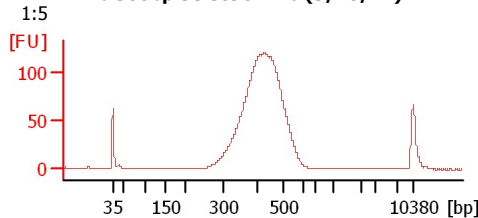
Chip Information:

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

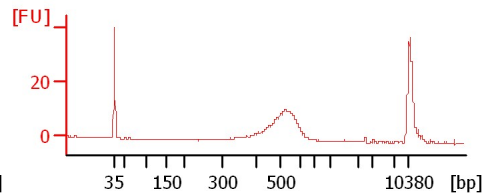
Alb 500bp Selection Lig (5/9/12)



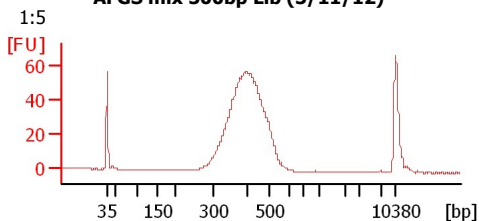
Alb 500bp Selection Lib (5/10/12)



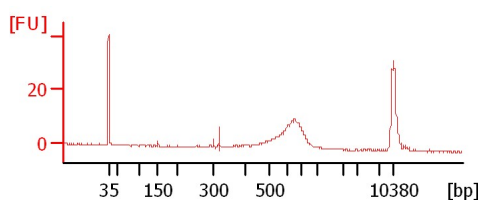
AFGS mix 500bp Lig (5/11/12)



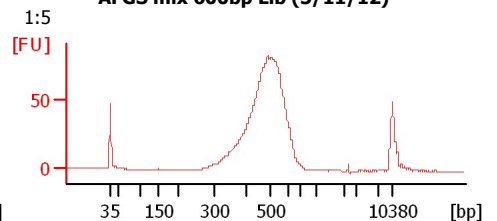
AFGS mix 500bp Lib (5/11/12)



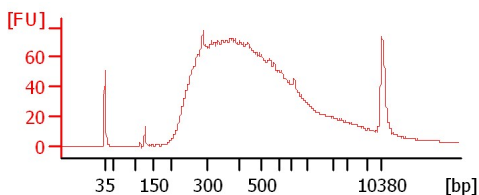
AFGS mix 600bp Lig (5/11/12)



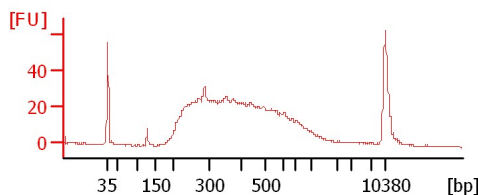
AFGS mix 600bp Lib (5/11/12)



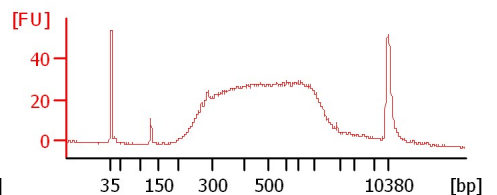
Lib1



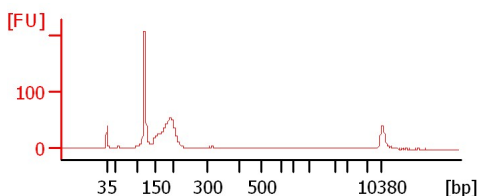
Lib2



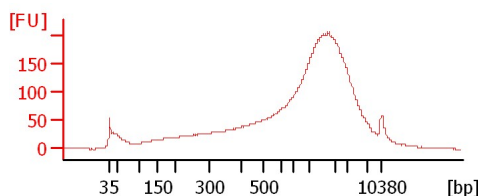
Lib3



BNS Run 12 1:5



OH 1221



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Alb 500bp Selection Lig (5/9/12)		<input type="checkbox"/>	✓			
Alb 500bp Selection Lib (5/10/12)	1:5	<input type="checkbox"/>	✓			
AFGS mix 500bp Lig (5/11/12)		<input type="checkbox"/>	✓			
AFGS mix 500bp Lib (5/11/12)	1:5	<input type="checkbox"/>	✓			
AFGS mix 600bp Lig (5/11/12)		<input type="checkbox"/>	✓			
AFGS mix 600bp Lib (5/11/12)	1:5	<input type="checkbox"/>	✓			
Lib1		<input type="checkbox"/>	✓			
Lib2		<input type="checkbox"/>	✓			
Lib3		<input type="checkbox"/>	✓			
BNS Run 12 1:5		<input type="checkbox"/>	✓			
OH 1221		<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\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 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

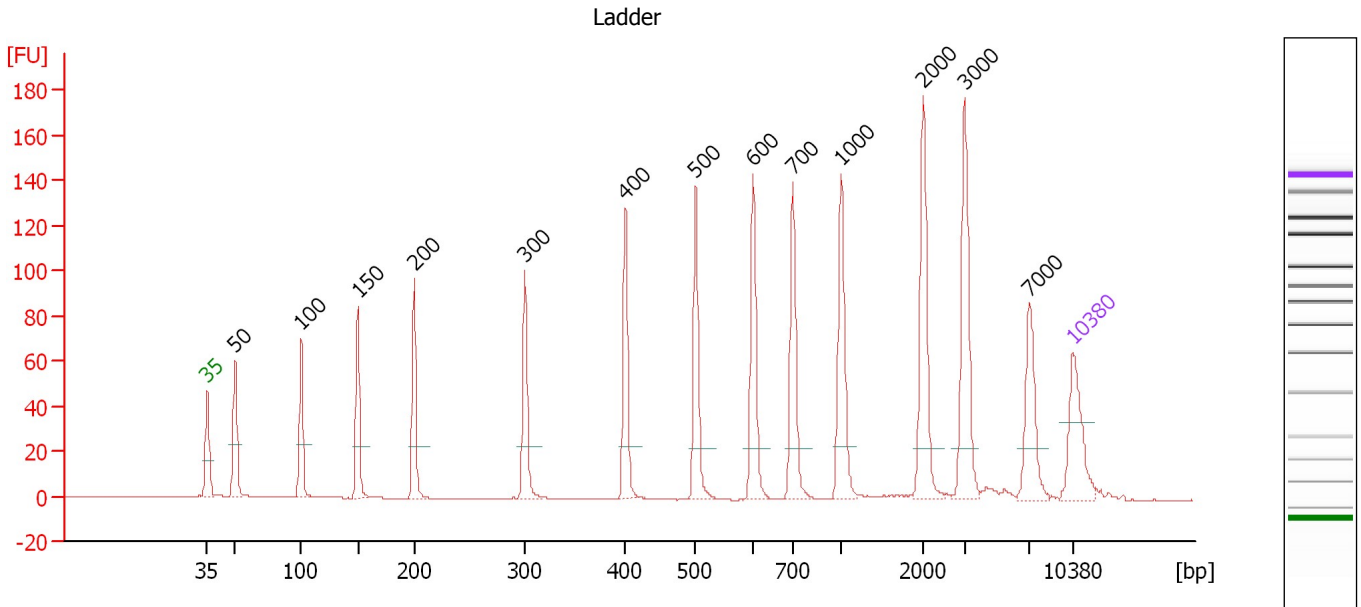
Ladder

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\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

Peak table for Ladder

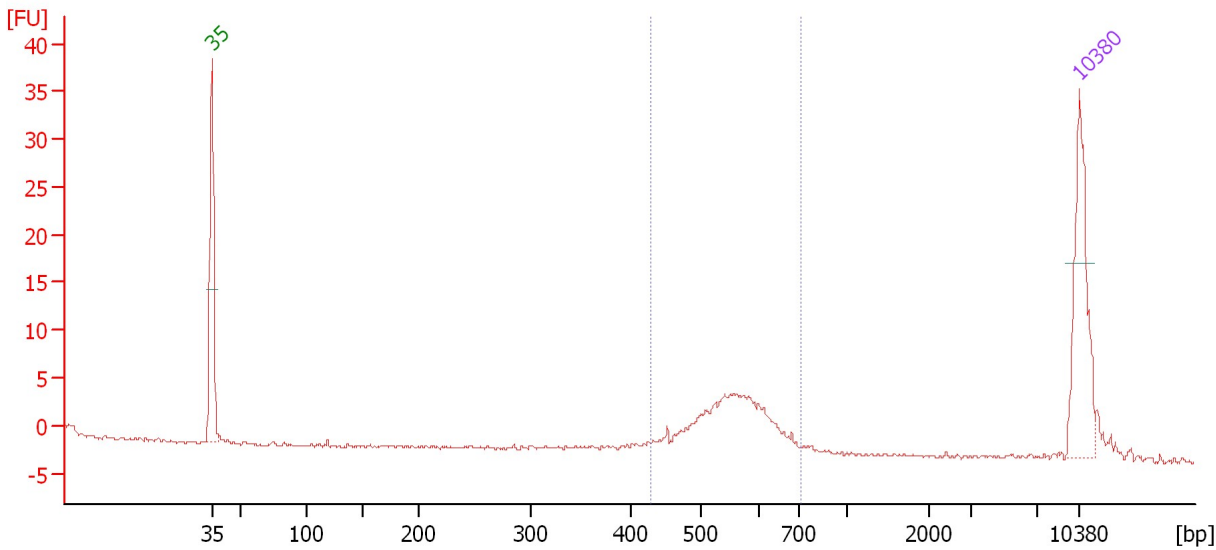
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	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\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...

Alb 500bp Selection Lig (5/9/12)



Overall Results for sample 1 : Alb 500bp Selection Lig (5/9/12)

Number of peaks found: 0 Corr. Area 1: 43.6
 Noise: 0.1

Peak table for sample 1 : Alb 500bp Selection Lig (5/9/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

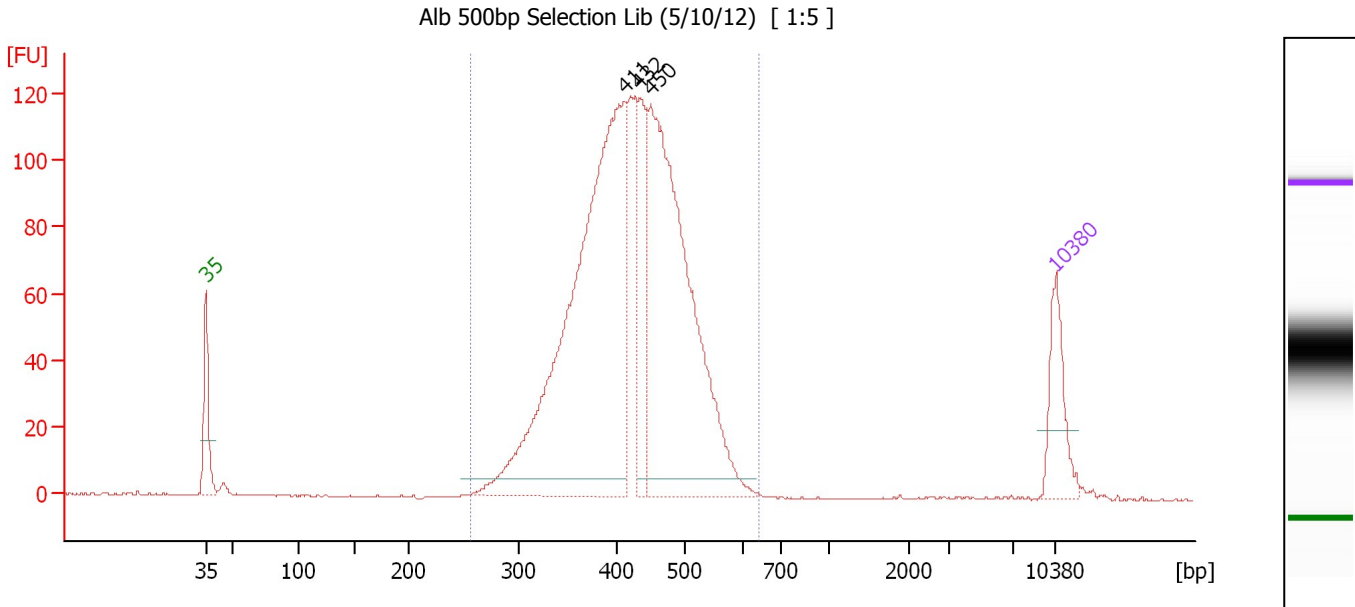
Region table for sample 1 : Alb 500bp Selection Lig (5/9/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
427	298.1	557	108.27	717	43.6	88	9.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Alb 500bp Selection Lib (5/10/12)

Number of peaks found: 3 Corr. Area 1: 1,717.9
 Noise: 0.1

Peak table for sample 2 : Alb 500bp Selection Lib (5/10/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	411	1,020.51	3,760.4	
3	432	164.24	576.0	
4	450	761.63	2,565.7	
5	10,380	75.00	10.9	Upper Marker

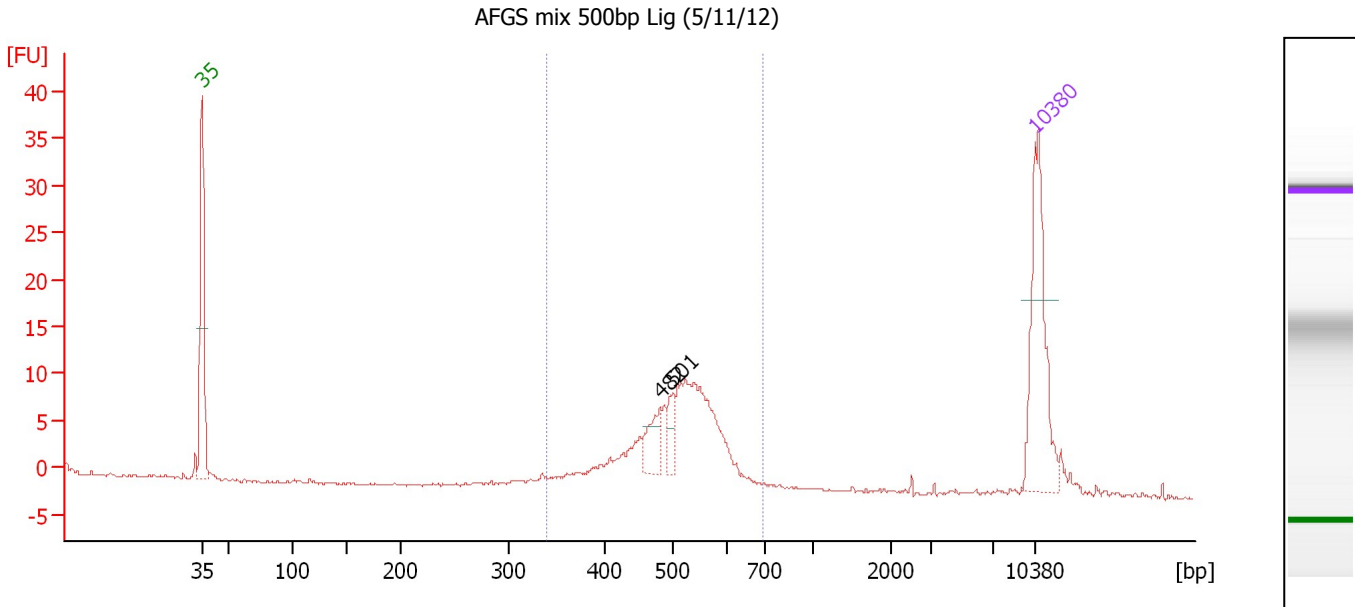
Region table for sample 2 : Alb 500bp Selection Lib (5/10/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
256	8,113.3	424	2,201.26	644	1,717.9	98	15.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : AFGS mix 500bp Lig (5/11/12)

Number of peaks found: 2 Corr. Area 1: 103.2
 Noise: 0.1

Peak table for sample 3 : AFGS mix 500bp Lig (5/11/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	482	24.06	75.7	
3	501	16.74	50.6	
4	10,380	75.00	10.9	Upper Marker

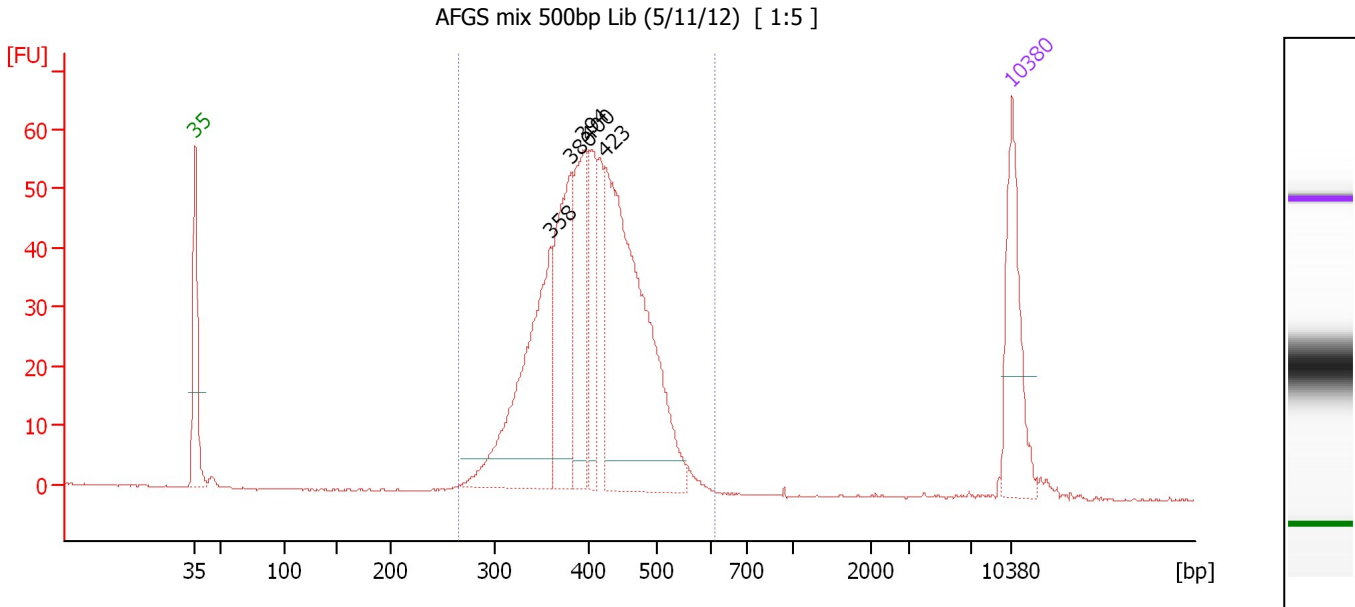
Region table for sample 3 : AFGS mix 500bp Lig (5/11/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
340	705.1	508	231.15	694	103.2	90	12.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : AFGS mix 500bp Lib (5/11/12)

Number of peaks found: 5 Corr. Area 1: 782.1
 Noise: 0.1

Peak table for sample 4 : AFGS mix 500bp Lib (5/11/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	358	227.99	964.2	
3	380	153.17	610.3	
4	394	107.74	414.6	
5	400	77.14	292.2	
6	423	368.54	1,319.3	
7	10,380	75.00	10.9	Upper Marker

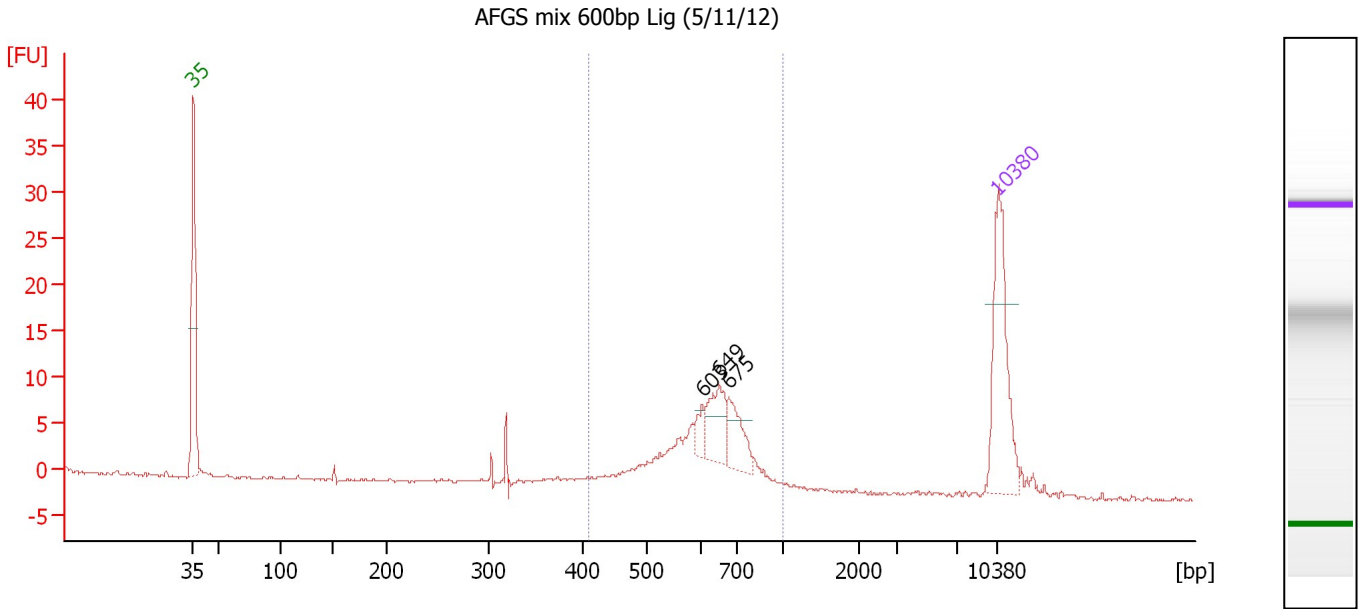
Region table for sample 4 : AFGS mix 500bp Lib (5/11/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
265	3,933.0	408	1,033.33	612	782.1	99	14.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : AFGS mix 600bp Lig (5/11/12)

Number of peaks found: 3 Corr. Area 1: 83.9
 Noise: 0.2

Peak table for sample 5 : AFGS mix 600bp Lig (5/11/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	603	12.02	30.2	
3	649	37.23	86.9	
4	675	31.05	69.7	
5	10,380	75.00	10.9	Upper Marker

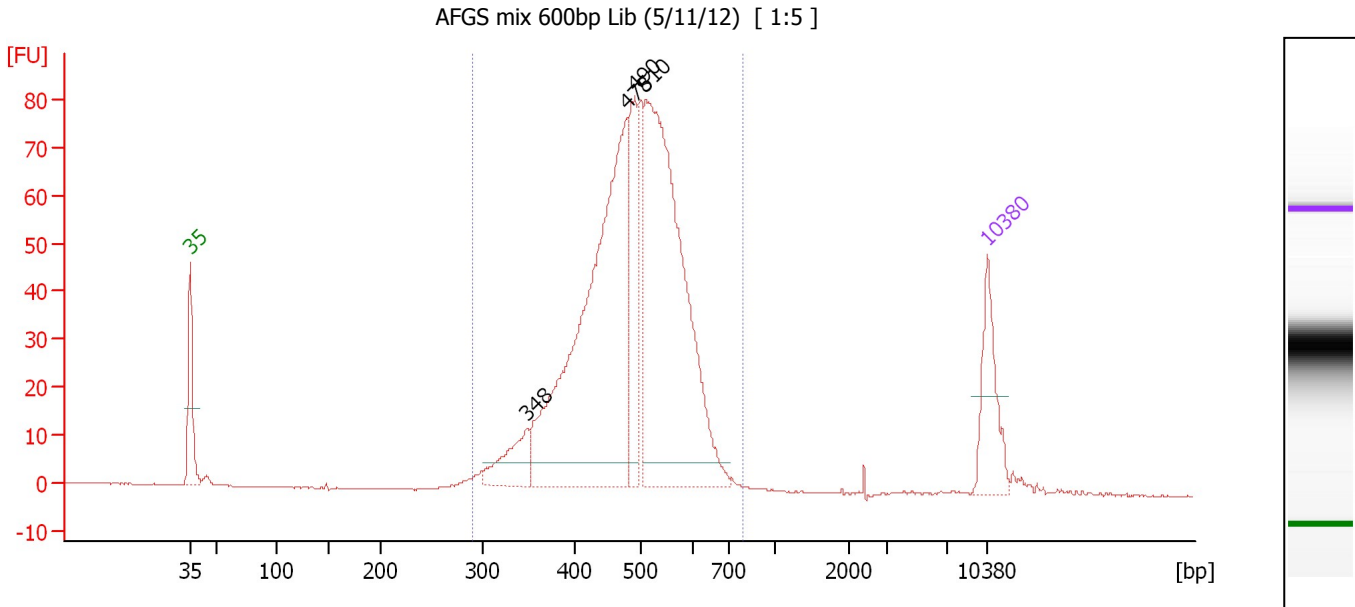
Region table for sample 5 : AFGS mix 600bp Lig (5/11/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
411	514.2	626	206.14	1,000	83.9	85	16.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : AFGS mix 600bp Lib (5/11/12)

Number of peaks found: 4 Corr. Area 1: 1,010.8
 Noise: 0.2

Peak table for sample 6 : AFGS mix 600bp Lib (5/11/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	348	75.66	329.5	
3	478	708.94	2,247.2	
4	490	152.24	470.4	
5	510	675.32	2,005.1	
6	10,380	75.00	10.9	Upper Marker

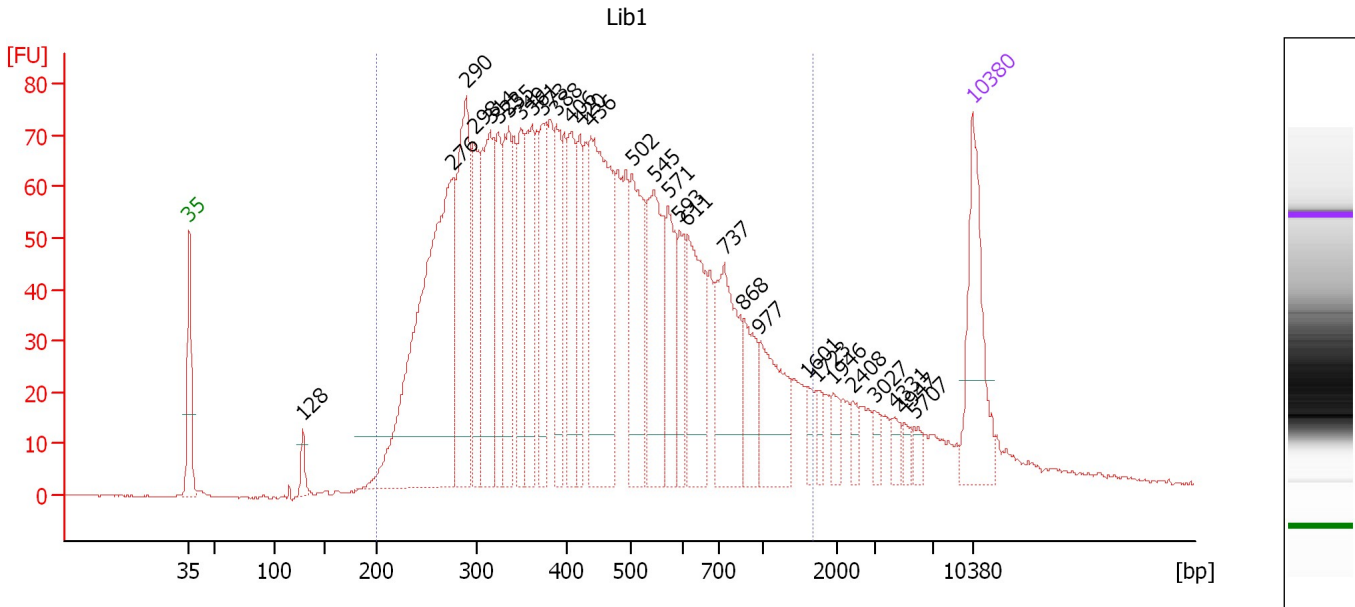
Region table for sample 6 : AFGS mix 600bp Lib (5/11/12)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
291	5,544.7	487	1,721.15	794	1,010.8	98	15.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : Lib1

Height Threshold [FU] : 10

Overall Results for sample 7 : Lib1

Number of peaks found: 30 Corr. Area 1: 2,536.9
 Noise: 0.2

Peak table for sample 7 : Lib1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	16.09	190.5	
3	276	436.18	2,395.7	
4	290	183.68	960.8	
5	298	87.25	444.2	
6	314	152.59	735.3	
7	323	78.55	368.2	
8	335	104.00	470.4	
9	349	74.86	325.4	
10	361	104.67	439.5	
11	373	72.49	294.3	
12	388	78.71	307.5	
13	406	84.29	314.4	
14	420	59.51	214.9	
15	436	212.53	738.0	
16	502	114.18	344.6	
17	545	105.48	293.3	
18	571	71.07	188.7	
19	593	40.87	104.4	
20	611	99.24	246.2	
21	737	108.36	222.7	
22	868	45.49	79.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...

... Peak table for sample 7 : Lib1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
23	977	67.80	105.1	
24	1,601	11.04	10.5	
25	1,723	10.45	9.2	
26	1,946	12.23	9.5	
27	2,408	10.90	6.9	
28	3,027	9.62	4.8	
29	4,331	8.03	2.8	
30	4,947	6.95	2.1	
31	5,707	8.77	2.3	
32	▶ 10,380	75.00	10.9	Upper Marker

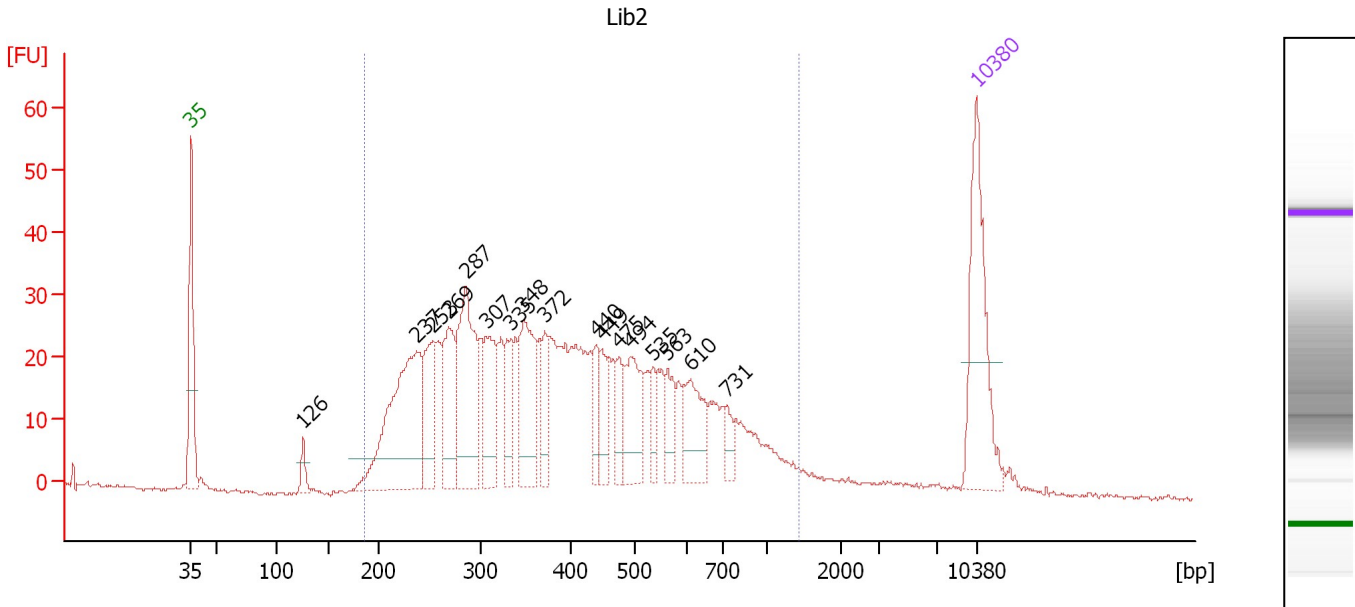
Region table for sample 7 : Lib1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	11,416.0	485	2,865.63	1,675	2,536.9	92	52.2	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
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Electropherogram Summary Continued ...



Overall Results for sample 8 : Lib2

Number of peaks found: 17 Corr. Area 1: 926.5
 Noise: 0.3

Peak table for sample 8 : Lib2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	126	14.01	168.3	
3	237	178.91	1,143.7	
4	253	64.01	382.7	
5	269	69.30	390.6	
6	287	120.52	636.7	
7	307	56.08	276.7	
8	335	30.16	136.6	
9	348	77.75	338.4	
10	372	26.52	108.1	
11	440	23.46	80.7	
12	449	28.64	96.7	
13	475	20.74	66.2	
14	494	51.97	159.4	
15	535	16.45	46.5	
16	563	22.54	60.7	
17	610	42.71	106.1	
18	731	11.66	24.2	
19	10,380	75.00	10.9	Upper Marker

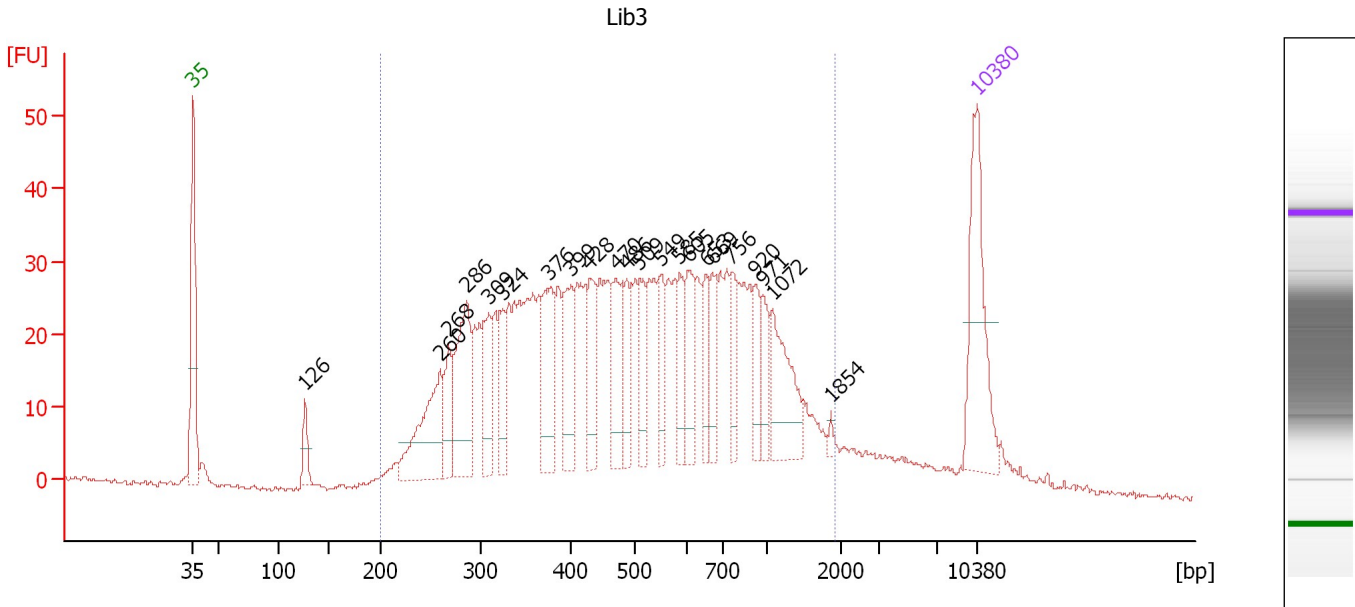
Region table for sample 8 : Lib2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
185	5,363.7	431	1,227.17	1,425	926.5	97	45.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Lib3

Number of peaks found: 22 Corr. Area 1: 1,132.4
 Noise: 0.2

Peak table for sample 9 : Lib3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	126	21.94	263.2	
3	260	93.96	548.1	
4	268	35.24	199.1	
5	286	95.29	505.2	
6	309	50.04	245.4	
7	324	34.42	160.9	
8	376	62.30	251.1	
9	399	56.79	215.5	
10	428	42.47	150.2	
11	470	50.32	162.1	
12	486	30.57	95.3	
13	509	34.65	103.2	
14	549	30.70	84.6	
15	585	26.96	69.8	
16	605	39.11	97.9	
17	653	28.28	65.6	
18	669	30.64	69.4	
19	756	27.53	55.1	
20	920	24.69	40.7	
21	971	23.39	36.5	
22	1,072	56.96	80.5	
23	1,854	3.01	2.5	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...

... Region table for sample 9 :

Lib3

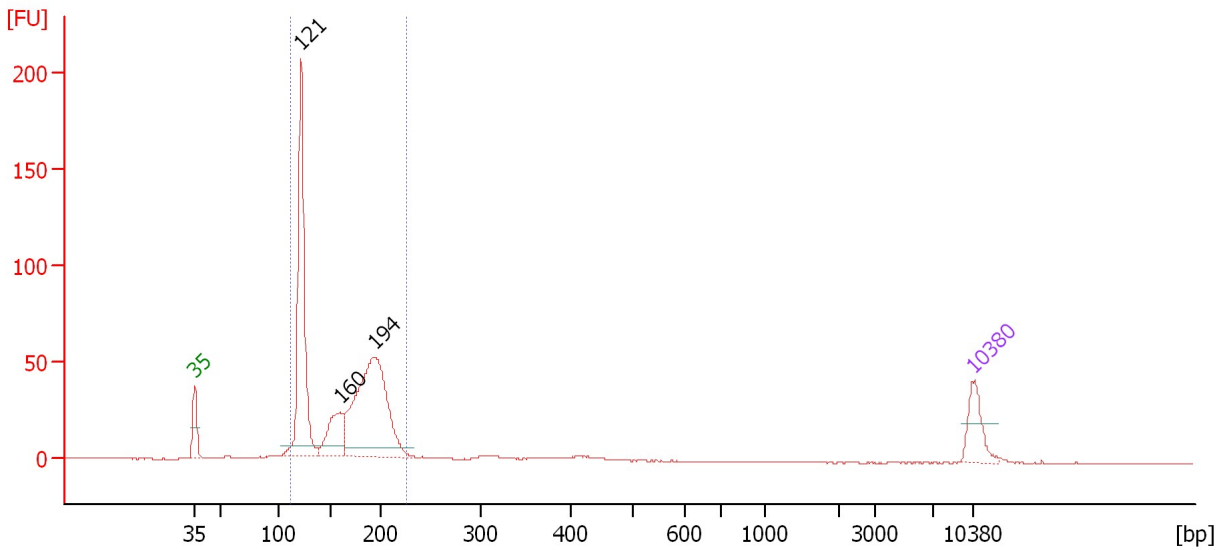
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	6,258.1	579	1,768.77	1,911	1,132.4	93	55.2	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...

BNS Run 12 1:5



Overall Results for sample 10 : BNS Run 12 1:5

Number of peaks found: 3 Corr. Area 1: 650.6
 Noise: 0.2

Peak table for sample 10 : BNS Run 12 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	121	733.22	9,145.6	
3	160	172.04	1,625.8	
4	194	720.75	5,631.0	
5	10,380	75.00	10.9	Upper Marker

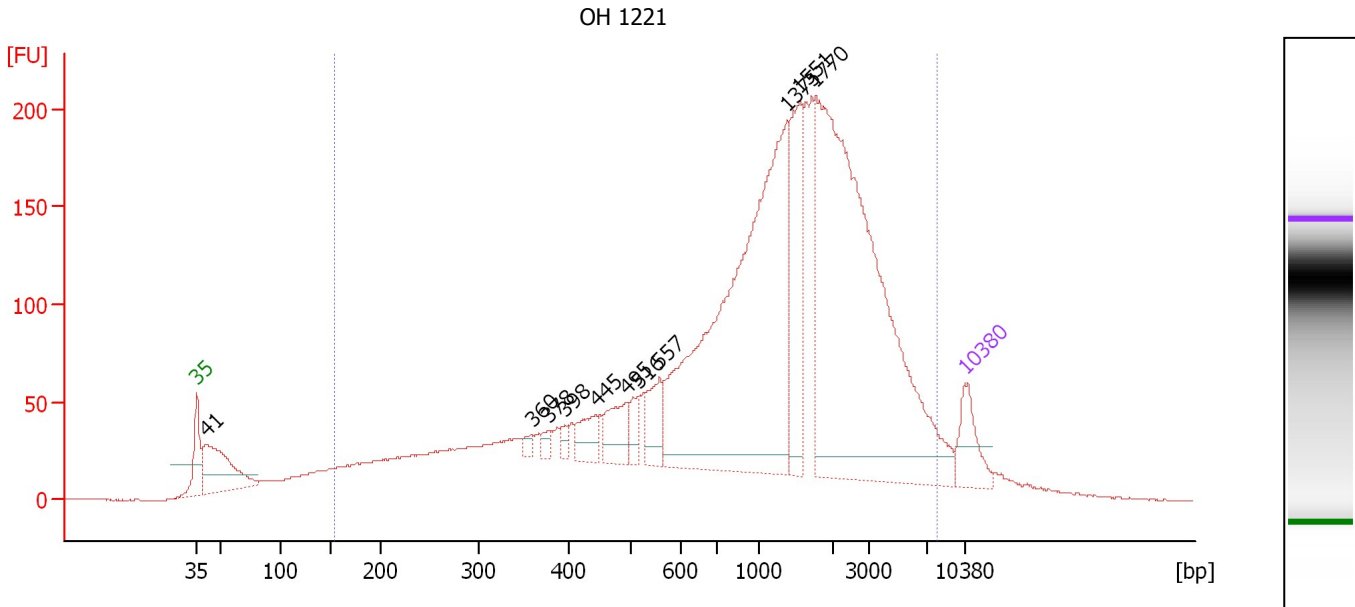
Region table for sample 10 : BNS Run 12 1:5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
111	17,297.3	160	1,713.62	226	650.6	92	21.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : OH 1221

Height Threshold [FU] : 10

Overall Results for sample 11 : OH 1221

Number of peaks found: 11 Corr. Area 1: 4,549.6
 Noise: 0.1

Peak table for sample 11 : OH 1221

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	299.95	11,125.8	
3	360	16.20	68.2	
4	378	22.72	91.0	
5	398	19.59	74.7	
6	445	70.11	238.6	
7	495	100.01	306.3	
8	516	44.80	131.5	
9	557	85.93	233.7	
10	1,375	1,146.76	1,263.3	
11	1,551	230.50	225.2	
12	1,770	1,218.04	1,042.5	
13	10,380	75.00	10.9	Upper Marker

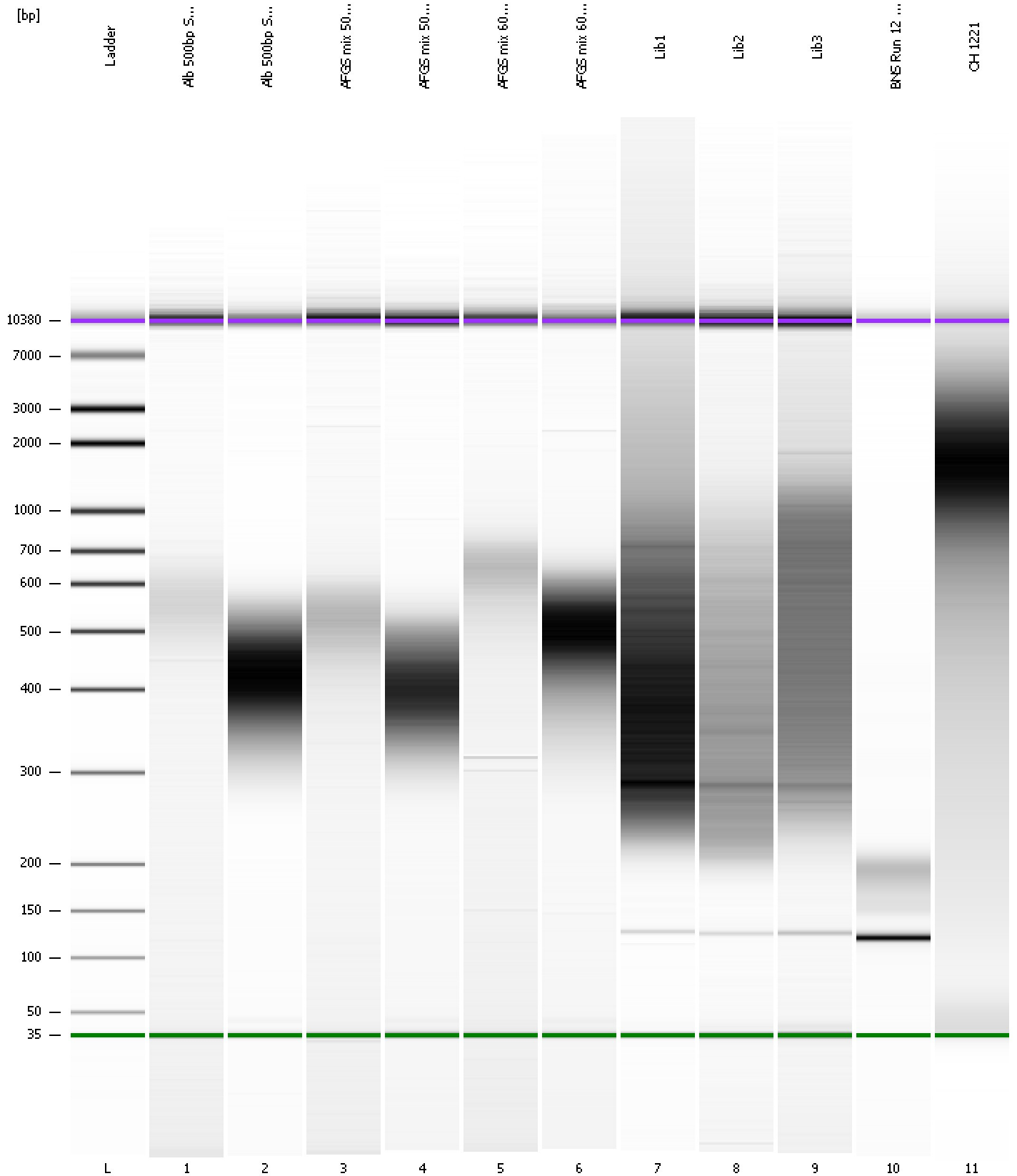
Region table for sample 11 : OH 1221

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
154	12,448.0	1,614	4,950.84	7,835	4,549.6	90	89.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
Modified: 5/14/2012 12:08:10 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad

Created: 5/14/2012 11:24:56 AM
 Modified: 5/14/2012 12:08:10 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		5/14/2012 12:06:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-14\2012-05-14_002.xad)		Instrument	Run		5/14/2012 11:25:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/14/2012 11:25:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/14/2012 11:25:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/14/2012 11:25:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/14/2012 11:25:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/14/2012 11:25:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/14/2012 11:25:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1