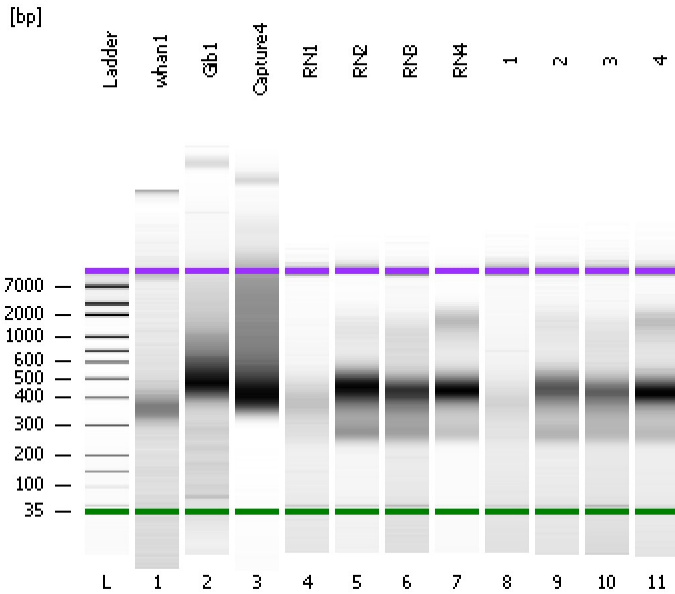


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
Modified: 3/19/2012 2:55:36 PM

Electrophoresis File Run Summary



Instrument Information:

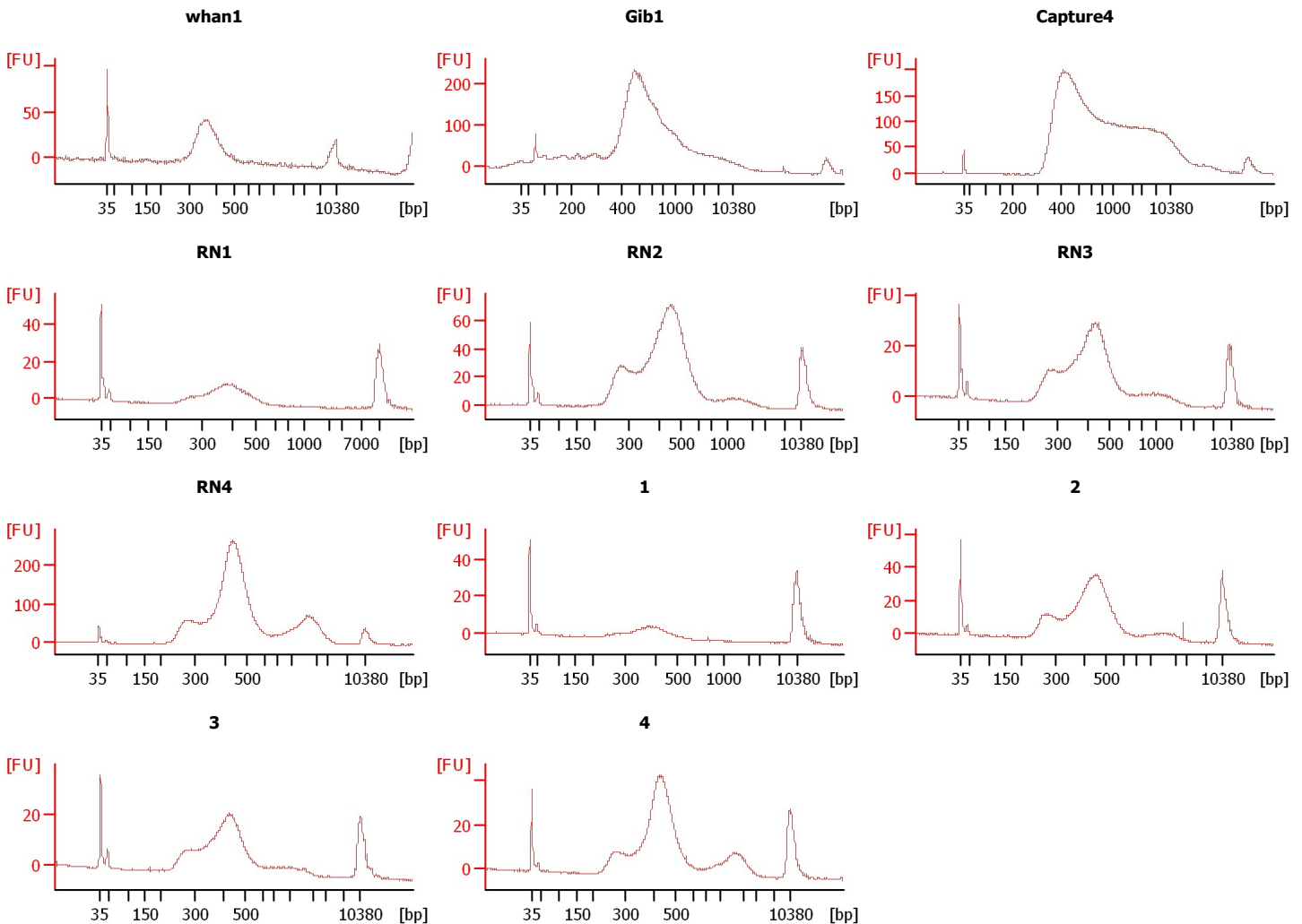
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
whan1		<input type="checkbox"/>	✓			
Gib1		<input type="checkbox"/>	✓			
Capture4		<input type="checkbox"/>	✓			
RN1		<input type="checkbox"/>	✓			
RN2		<input type="checkbox"/>	✓			
RN3		<input type="checkbox"/>	✓			
RN4		<input type="checkbox"/>	✓			
1		<input type="checkbox"/>	✓			
2		<input type="checkbox"/>	✓			
3		<input type="checkbox"/>	✓			
4		<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\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
Modified: 3/19/2012 2:55:36 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

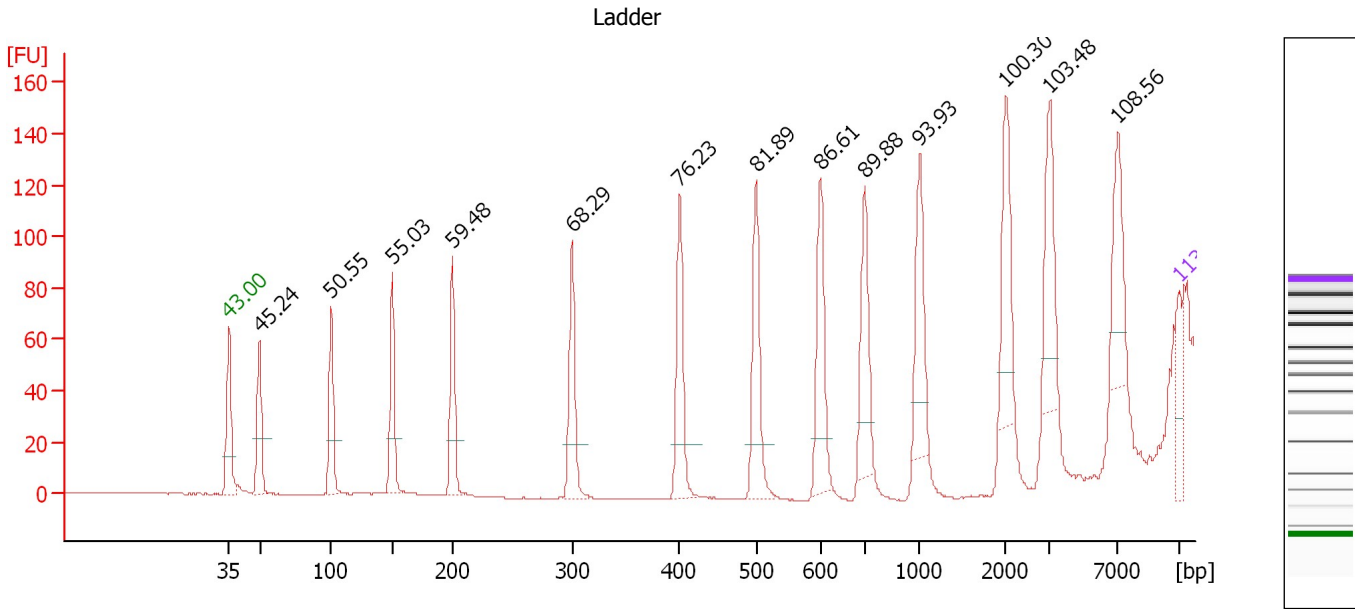
Ladder

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\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

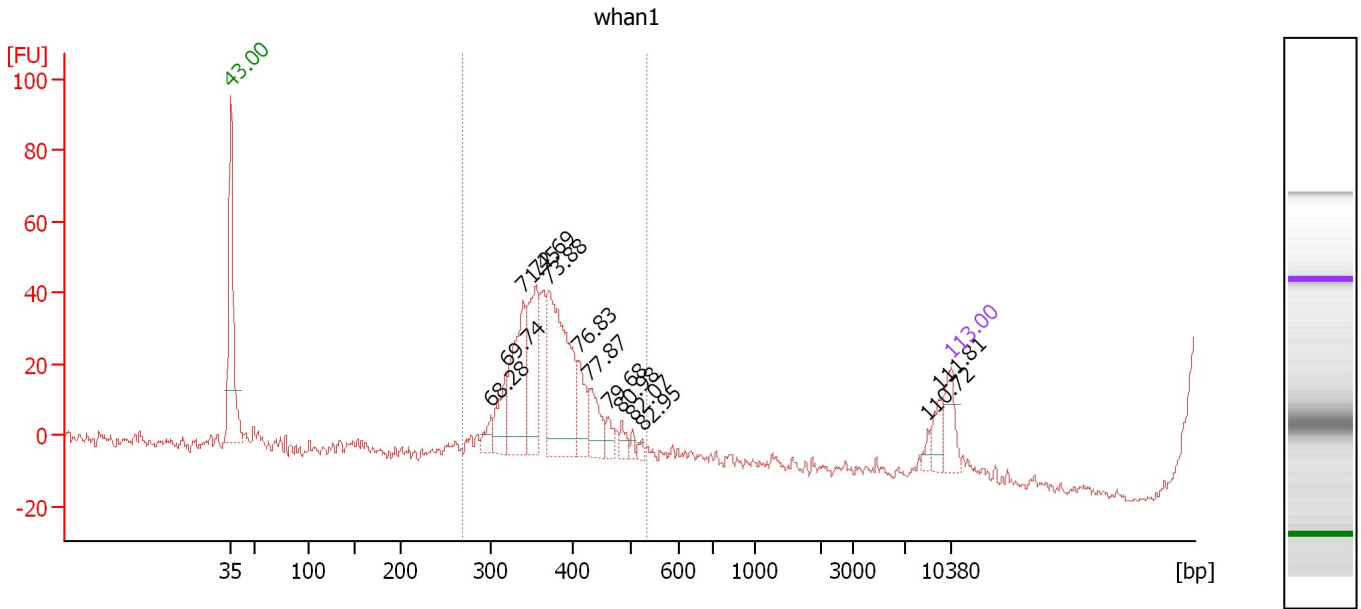
Peak table for Ladder

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\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : whan1

Number of peaks found: 13 Corr. Area 1: 289.2
 Noise: 0.9

Peak table for sample 1 : whan1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	300	44.54	225.0	
3	318	114.42	544.7	
4	340	302.94	1,350.9	
5	355	259.45	1,106.0	
6	370	486.07	1,988.2	
7	411	110.15	406.4	
8	429	105.02	370.9	
9	461	33.62	110.5	
10	484	30.83	96.5	
11	504	13.61	40.9	
12	522	14.12	41.0	
13	8,646	16.44	2.9	
14	9,474	42.67	6.8	
15	10,380	75.00	10.9	Upper Marker

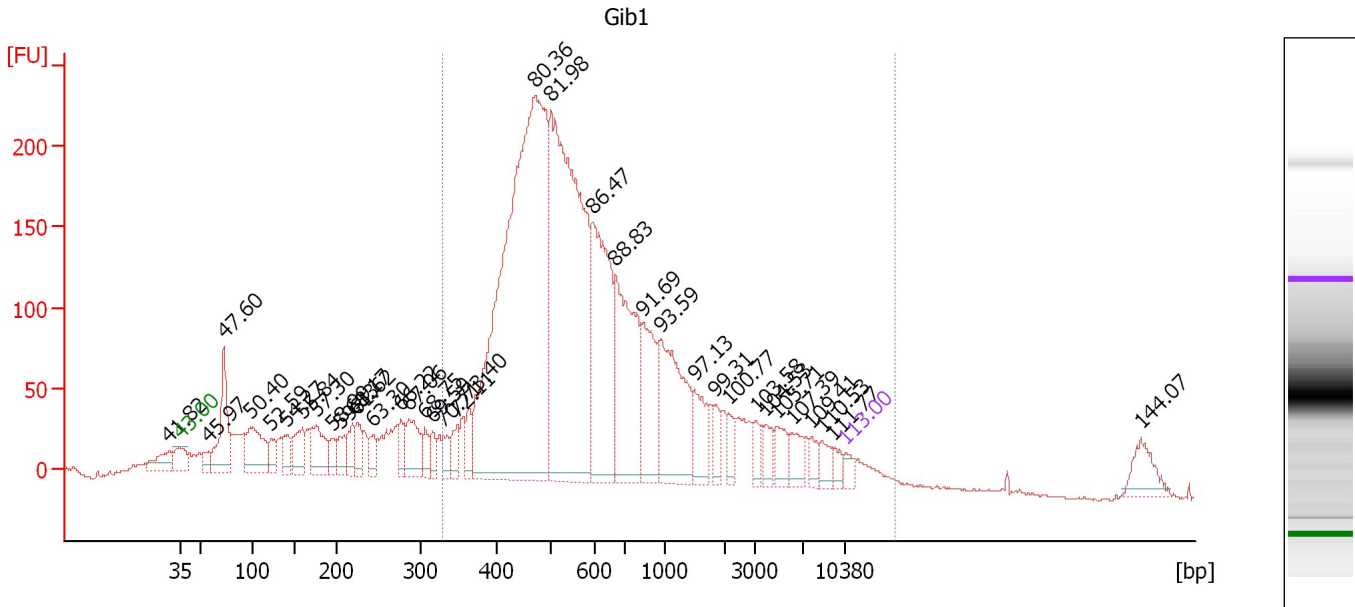
Region table for sample 1 : whan1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
268	4,425.2	366	1,064.25	534	289.2	99	8.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Gib1

Number of peaks found: 37 Corr. Area 1: 4,340.8
 Noise: 0.9

Peak table for sample 2 : Gib1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	57	143.58	3,824.2	
4	72	1,041.33	21,851.2	
5	99	867.66	13,330.6	
6	123	213.41	2,633.9	
7	142	277.32	2,968.9	
8	159	444.72	4,234.6	
9	176	598.64	5,167.3	
10	194	197.49	1,538.7	
11	204	232.19	1,724.8	
12	219	256.58	1,773.1	
13	224	252.41	1,704.7	
14	243	189.01	1,176.4	
15	277	211.59	1,159.2	
16	286	474.11	2,510.8	
17	306	186.46	923.9	
18	316	150.23	719.5	
19	330	153.59	704.1	
20	348	206.06	896.8	
21	364	210.56	875.6	
22	473	7,774.93	24,913.2	
23	502	5,292.71	15,978.1	
24	597	1,871.16	4,749.1	
25	668	1,656.87	3,759.2	
26	834	803.79	1,460.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad


Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : Gib1

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	975	1,214.13	1,886.3	
28	1,502	381.26	384.5	
29	1,846	135.53	111.3	
30	2,149	135.59	95.6	
31	3,074	128.17	63.2	
32	3,826	159.27	63.1	
33	4,755	203.50	64.8	
34	6,081	184.28	45.9	
35	7,650	103.79	20.6	
36	8,503	123.78	22.1	
37	9,441	86.97	14.0	
38	10,380	75.00	10.9	Upper Marker
39	34,015	0.00	0.0	

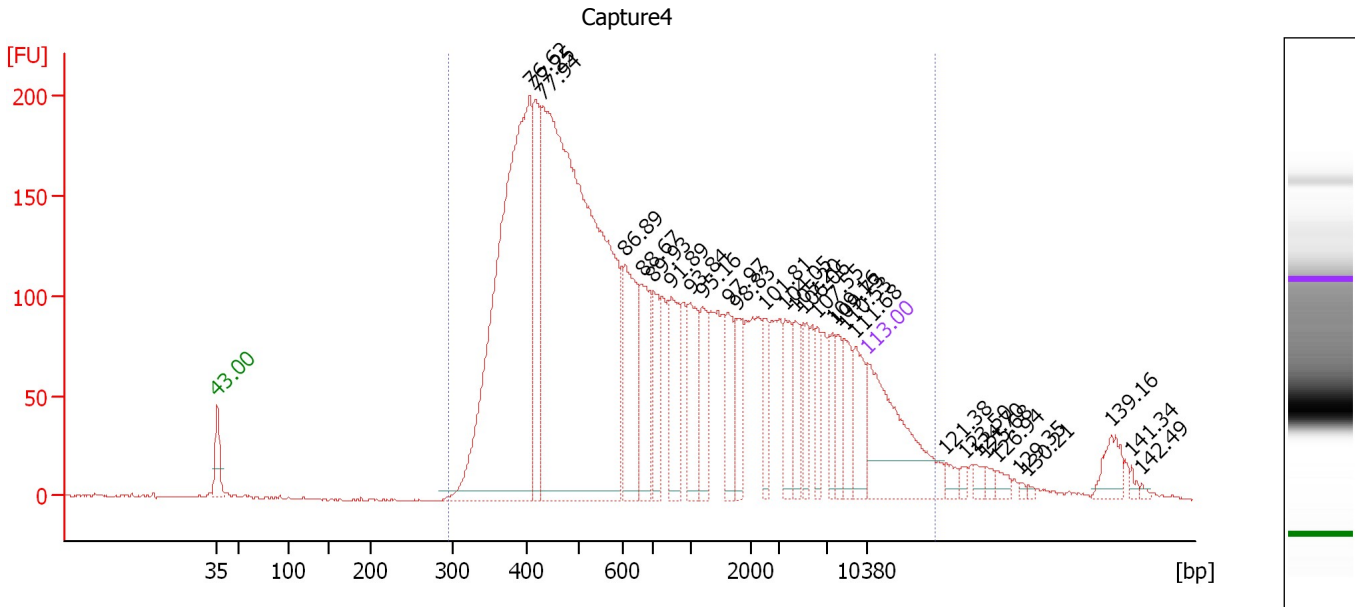
Region table for sample 2 : Gib1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
329	56,324.7	1,343	21,549.88	14,370	4,340.8	78	100.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Capture4

Number of peaks found: 30 Corr. Area 1: 4,889.3
 Noise: 0.4

Peak table for sample 3 : Capture4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	407	411.50	1,532.2	
3	418	79.29	287.4	
4	430	624.14	2,198.0	
5	609	78.63	195.8	
6	663	49.15	112.3	
7	704	31.72	68.2	
8	849	46.43	82.9	
9	993	43.40	66.2	
10	1,193	27.39	34.8	
11	1,634	24.48	22.7	
12	1,769	23.45	20.1	
13	2,475	18.06	11.1	
14	3,446	22.97	10.1	
15	4,351	20.06	7.0	
16	5,030	17.08	5.1	
17	6,206	16.61	4.1	
18	7,456	15.76	3.2	
19	7,892	17.72	3.4	
20	8,503	20.06	3.6	
21	9,376	25.17	4.1	
22	10,380	75.00	10.9	Upper Marker
23	16,752	0.00	0.0	
24	18,366	0.00	0.0	
25	19,283	0.00	0.0	
26	20,025	0.00	0.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...**... Peak table for sample 3 : Capture4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	20,985	0.00	0.0	
28	22,818	0.00	0.0	
29	23,472	0.00	0.0	
30	30,281	0.00	0.0	
31	31,939	0.00	0.0	
32	32,812	0.00	0.0	

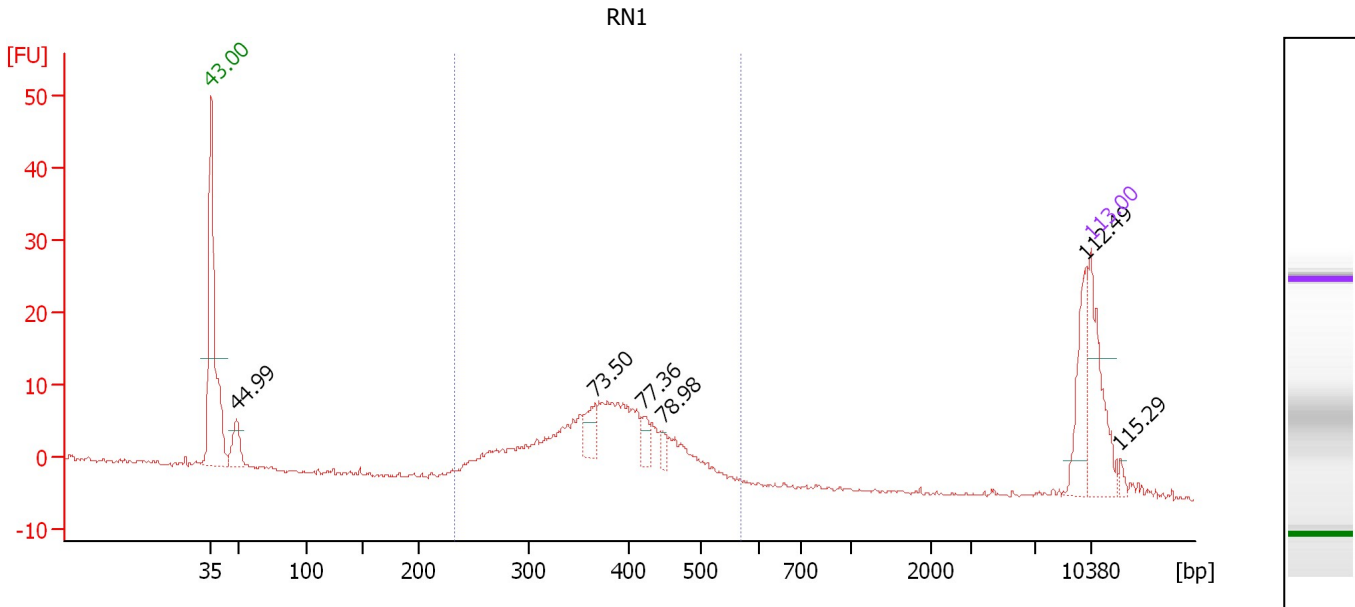
Region table for sample 3 : Capture4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
296	4,615.3	2,361	1,813.39	15,802	4,889.3	96	100.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : RN1

Number of peaks found: 6 Corr. Area 1: 164.2
 Noise: 0.3

Peak table for sample 4 : RN1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	45.79	1,435.1	
3	366	29.00	120.2	
4	420	17.38	62.7	
5	448	11.32	38.2	
6	9,993	54.09	8.2	
7	10,380	75.00	10.9	Upper Marker
8	12,122	0.00	0.0	

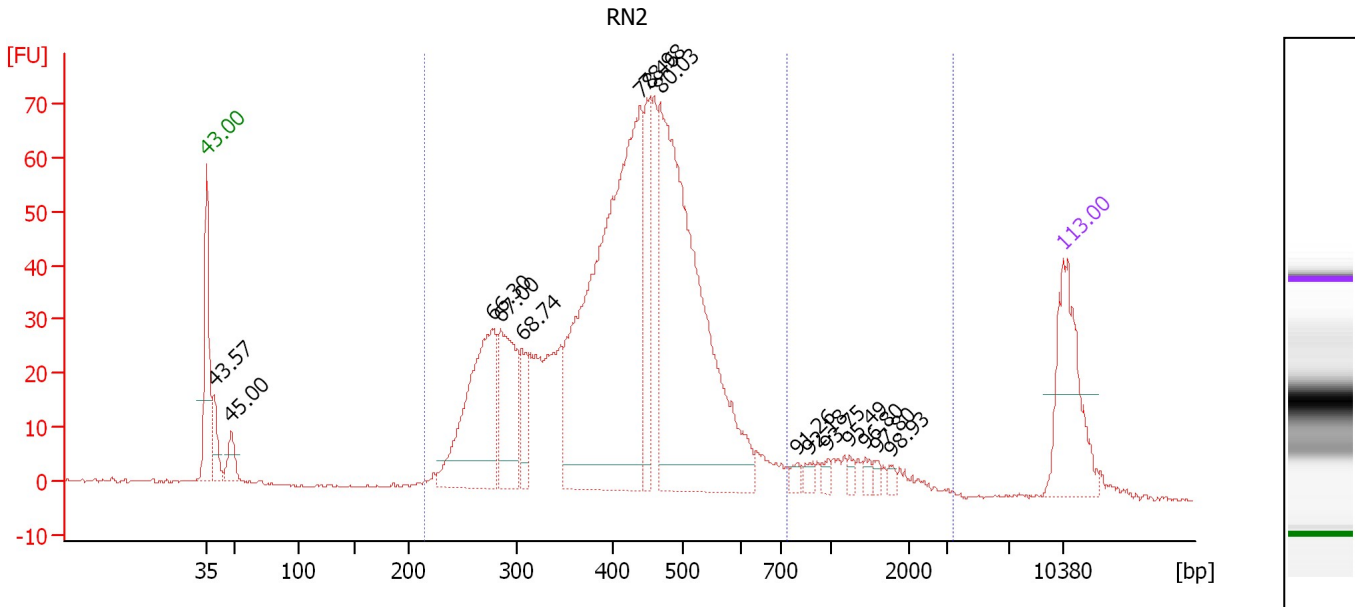
Region table for sample 4 : RN1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
232	2,035.7	379	487.25	570	164.2	80	17.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : RN2

Number of peaks found: 15 Corr. Area 1: 1,274.4
 Noise: 0.2 Corr. Area 2: 69.1

Peak table for sample 5 : RN2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	37.61	1,468.9	
3	48	27.13	849.1	
4	277	190.02	1,037.5	
5	285	107.16	568.9	
6	306	35.15	174.2	
7	439	517.14	1,783.5	
8	449	77.03	260.2	
9	467	457.48	1,484.2	
10	803	6.34	12.0	
11	871	6.20	10.8	
12	987	5.66	8.7	
13	1,245	4.39	5.3	
14	1,450	5.09	5.3	
15	1,608	4.50	4.2	
16	1,785	3.91	3.3	
17	10,380	75.00	10.9	Upper Marker

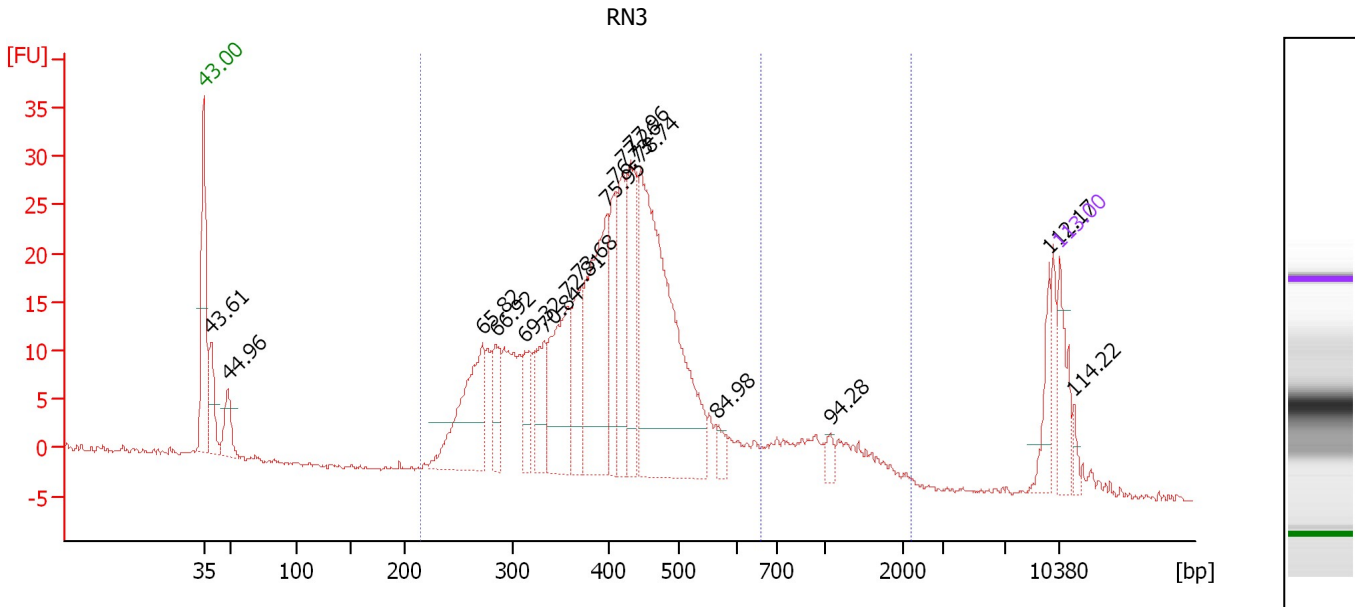
Region table for sample 5 : RN2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
215	6,403.7	419	1,629.04	733	1,274.4	91	22.5	Blue
733	86.9	1,380	69.53	3,443	69.1	5	37.5	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : RN3

Number of peaks found: 17 Corr. Area 1: 532.9
 Noise: 0.2 Corr. Area 2: 48.6

Peak table for sample 6 : RN3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	116.99	4,534.6	
3	48	88.30	2,779.0	
4	272	301.17	1,677.4	
5	284	93.69	499.1	
6	313	79.92	386.9	
7	332	115.24	525.6	
8	357	245.86	1,043.7	
9	368	130.86	538.9	
10	396	372.66	1,424.2	
11	409	129.87	481.2	
12	418	167.61	607.3	
13	430	213.20	750.4	
14	444	749.29	2,554.9	
15	565	26.41	70.8	
16	1,055	18.73	26.9	
17	9,749	53.36	8.3	
18	10,380	75.00	10.9	Upper Marker
19	11,309	0.00	0.0	

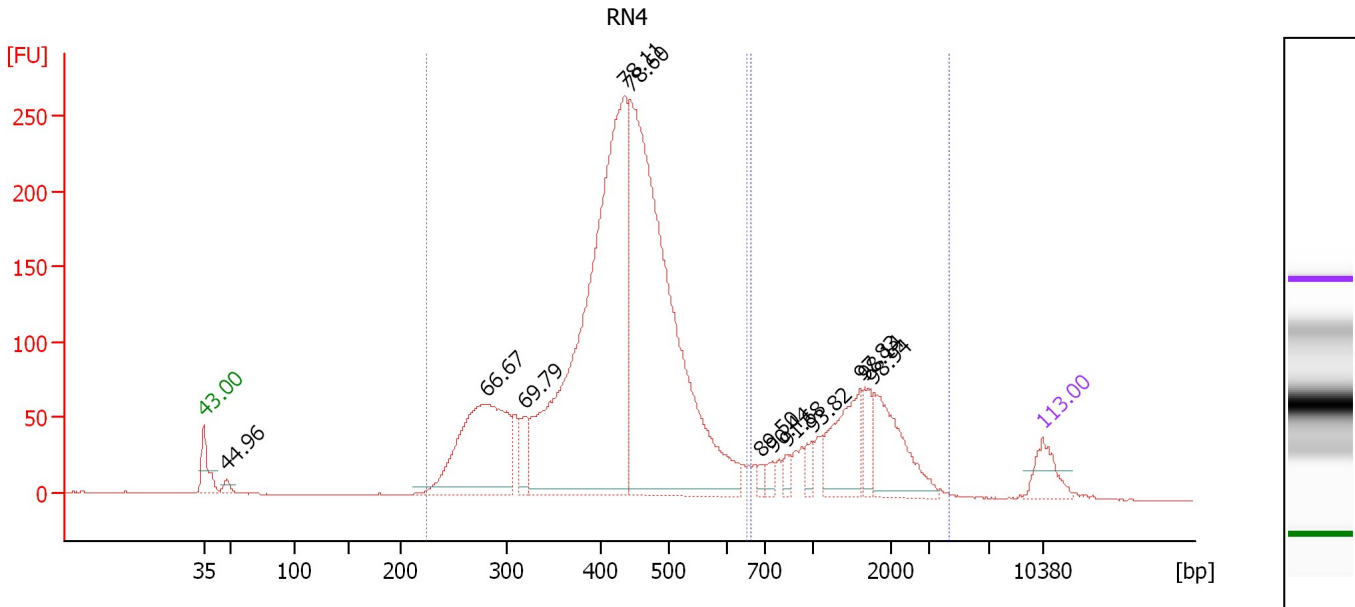
Region table for sample 6 : RN3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
214	12,278.3	402	3,035.96	661	532.9	82	21.2	Blue
661	343.1	1,116	225.70	2,190	48.6	7	33.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : RN4

Number of peaks found: 12 Corr. Area 1: 3,462.8
 Noise: 0.1 Corr. Area 2: 673.5

Peak table for sample 7 : RN4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	30.57	962.8	
3	282	763.18	4,104.8	
4	319	94.22	447.6	
5	433	2,139.17	7,481.7	
6	442	2,053.63	7,042.0	
7	689	22.54	49.6	
8	742	29.62	60.5	
9	834	29.93	54.4	
10	992	35.89	54.8	
11	1,612	216.70	203.7	
12	1,661	71.21	65.0	
13	1,787	229.52	194.7	
14	10,380	75.00	10.9	Upper Marker

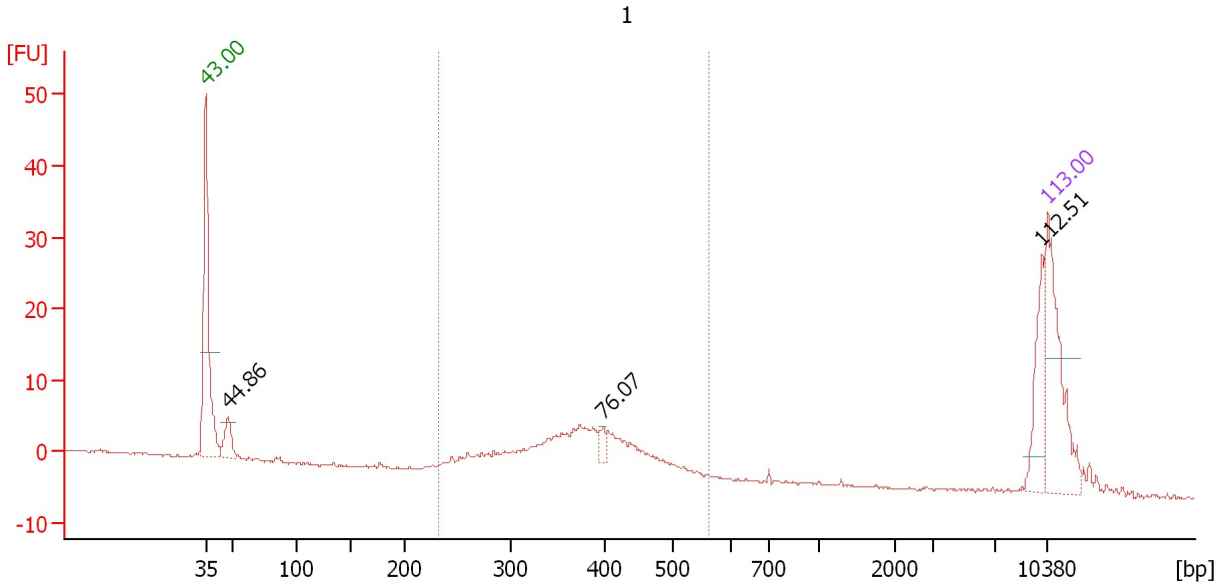
Region table for sample 7 : RN4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
224	20,024.6	420	5,215.60	653	3,462.8	83	19.3	Blue
663	913.5	1,558	791.08	4,309	673.5	16	38.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 1

Number of peaks found: 3 Corr. Area 1: 96.7
 Noise: 0.2

Peak table for sample 8 : 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	28.72	916.9	
3	398	7.41	28.2	
4	10,009	37.48	5.7	
5	10,380	75.00	10.9	Upper Marker

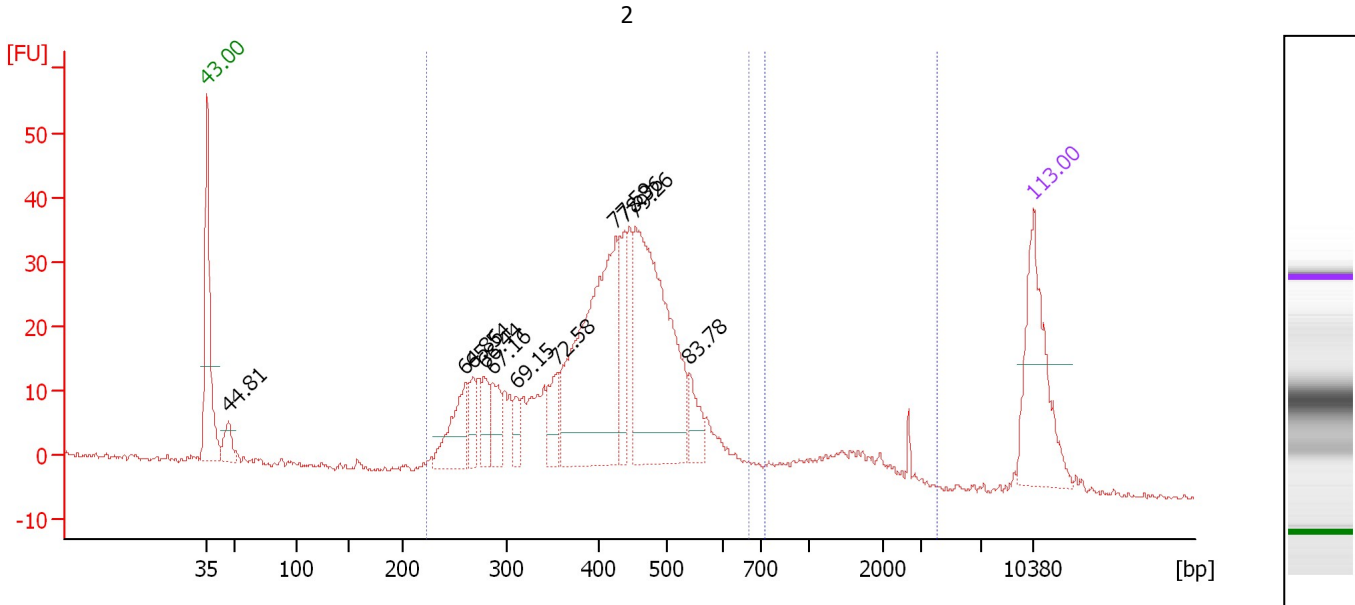
Region table for sample 8 : 1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
233	880.1	377	209.66	561	96.7	70	17.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 2

Number of peaks found: 11 Corr. Area 1: 640.8
 Noise: 0.5 Corr. Area 2: 52.5

Peak table for sample 9 : 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	24.57	790.5	
3	261	56.18	326.0	
4	269	20.81	117.3	
5	279	24.95	135.5	
6	287	29.40	155.1	
7	311	15.83	77.1	
8	354	29.69	127.1	
9	424	227.67	813.4	
10	438	41.68	144.3	
11	454	228.84	764.4	
12	540	23.53	66.0	
13	10,380	75.00	10.9	Upper Marker

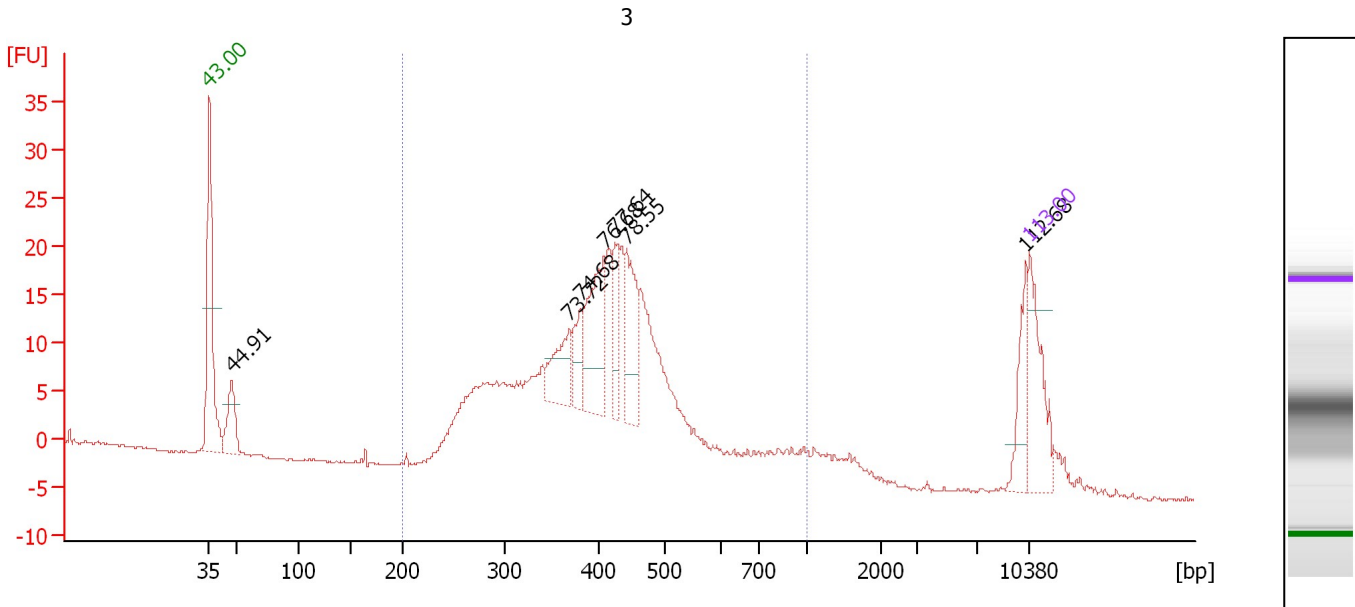
Region table for sample 9 : 2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
224	3,697.8	415	936.26	669	640.8	89	21.6	Blue
724	66.8	1,575	59.20	4,004	52.5	7	39.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 3

Number of peaks found: 7 Corr. Area 1: 379.1
 Noise: 0.1

Peak table for sample 10 : 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	69.75	2,211.3	
3	368	64.93	267.0	
4	380	41.89	166.8	
5	408	119.44	443.6	
6	425	49.53	176.6	
7	441	94.85	326.0	
8	10,138	44.45	6.6	
9	10,380	75.00	10.9	Upper Marker

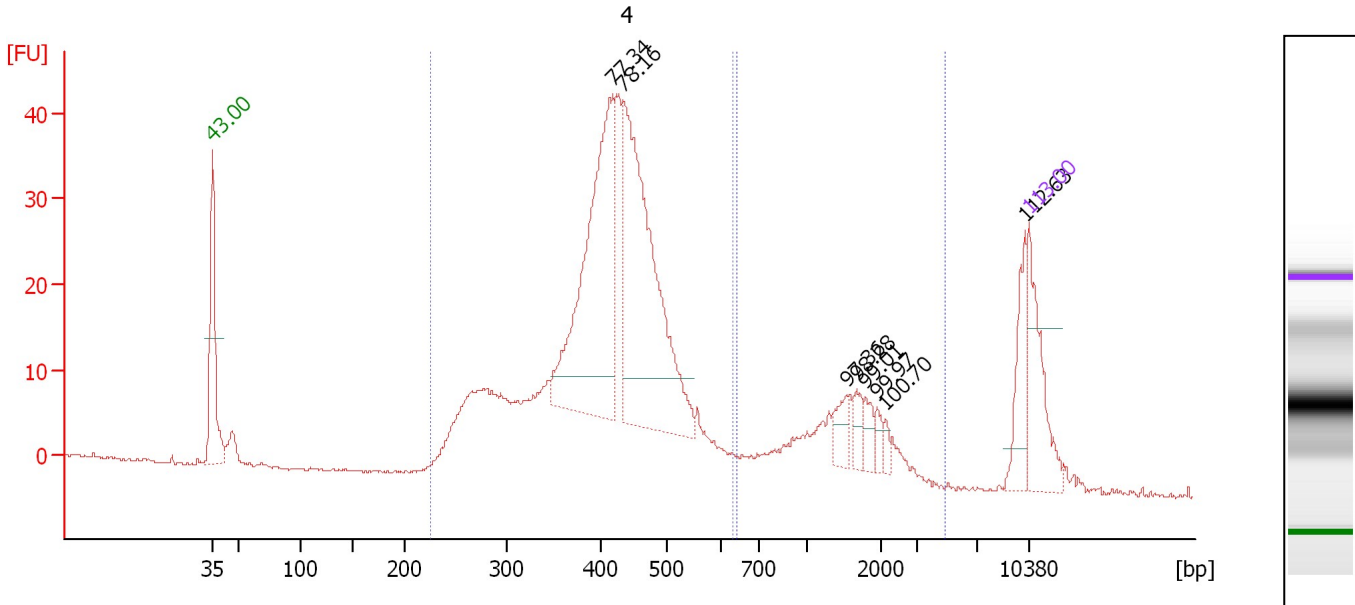
Region table for sample 10 : 3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	5,522.4	422	1,396.75	1,000	379.1	89	29.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 4

Number of peaks found: 8
 Noise: 0.1
 Corr. Area 1: 536.3
 Corr. Area 2: 84.5

Peak table for sample 11 : 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	420	377.98	1,365.1	
3	434	406.62	1,419.3	
4	1,539	24.44	24.1	
5	1,683	16.19	14.6	
6	1,798	15.13	12.7	
7	1,948	10.06	7.8	
8	2,127	6.42	4.6	
9	10,102	48.88	7.3	
10	10,380	75.00	10.9	Upper Marker

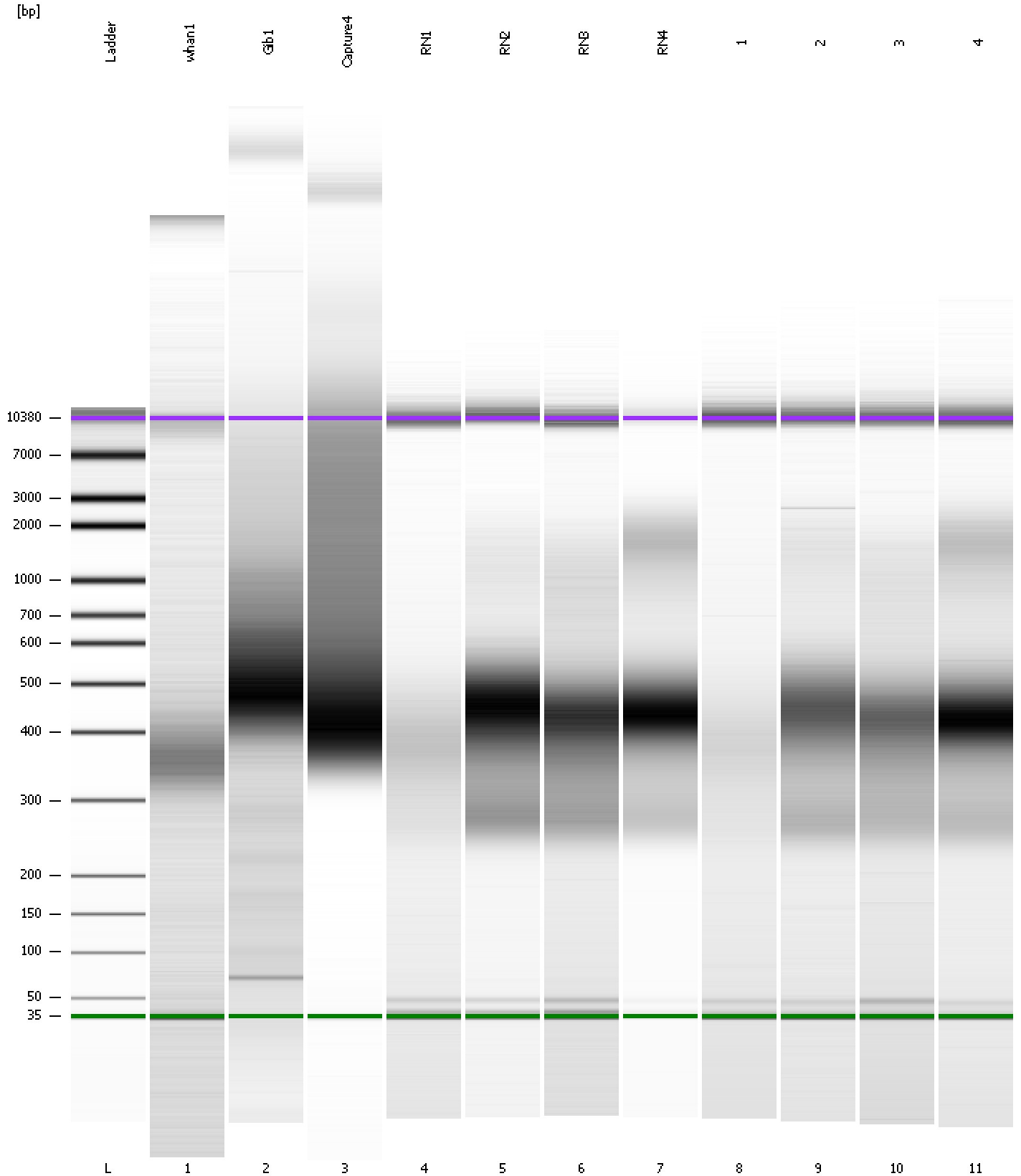
Region table for sample 11 : 4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
224	5,843.1	412	1,500.43	631	536.3	82	18.3	Blue
642	217.6	1,493	184.26	4,895	84.5	13	35.0	Dark Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
Modified: 3/19/2012 2:55:36 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad

Created: 3/19/2012 2:13:29 PM
 Modified: 3/19/2012 2:55:36 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		3/19/2012 2:54:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-19\2012-03-19_002.xad)		Instrument	Run		3/19/2012 2:13:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/19/2012 2:13:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/19/2012 2:13:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/19/2012 2:13:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/19/2012 2:13:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/19/2012 2:13:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/19/2012 2:13:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1