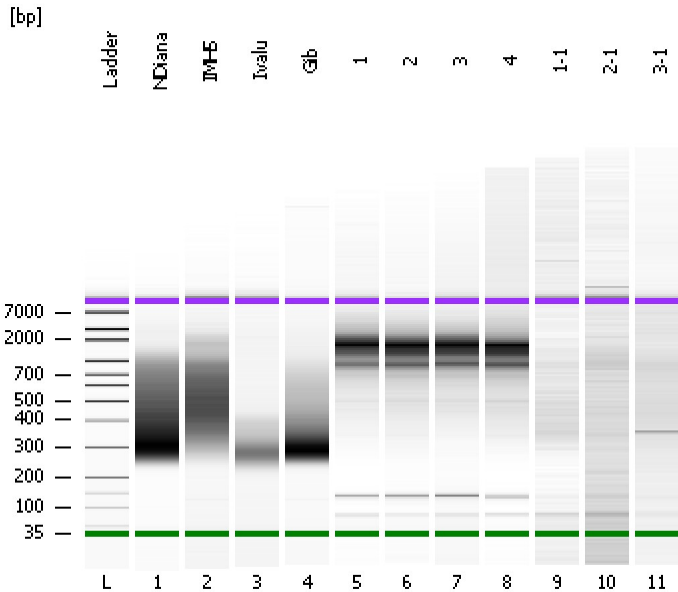


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
Modified: 3/26/2012 12:24:55 PM

Electrophoresis File Run Summary



Instrument Information:

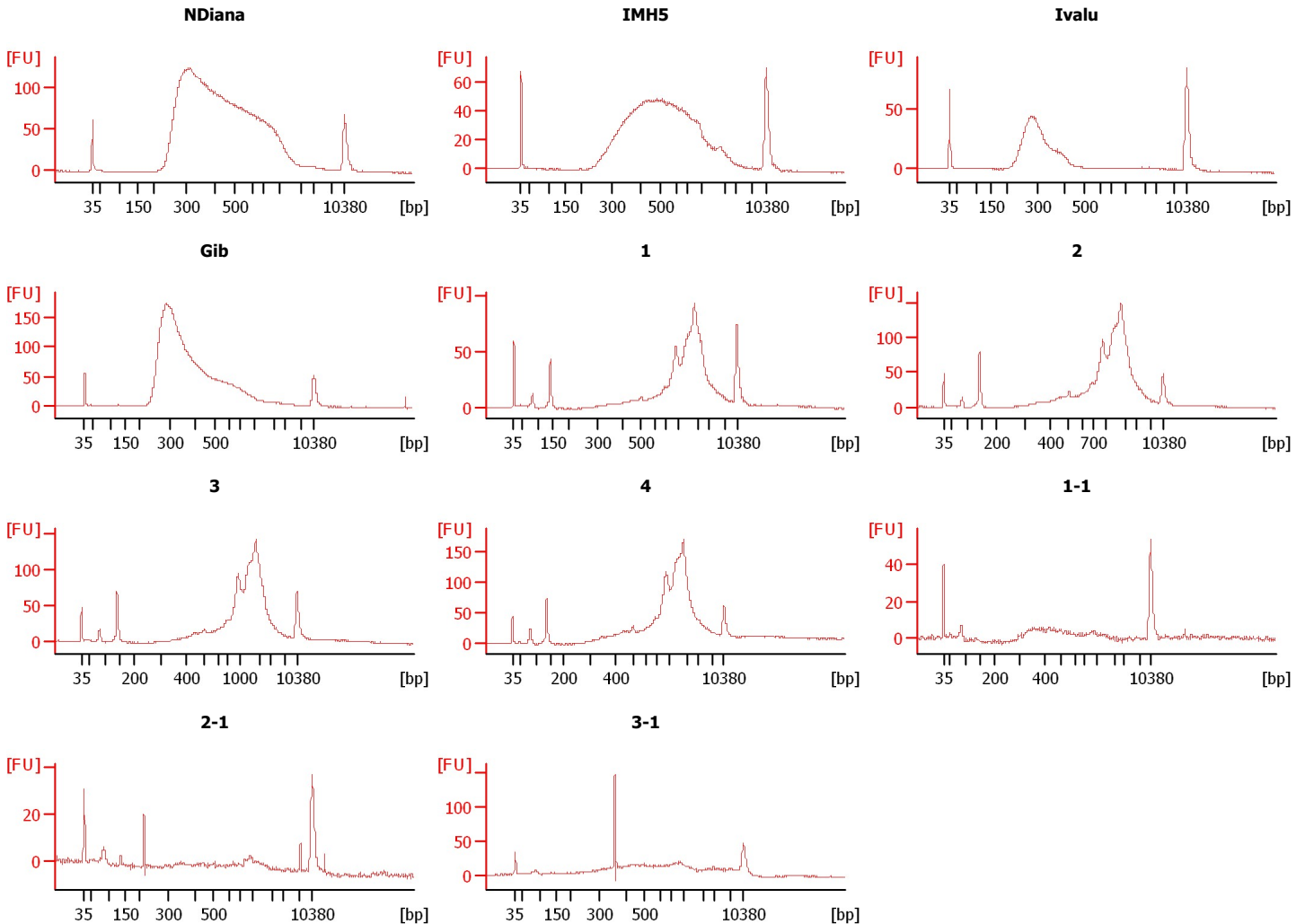
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NDiana		<input type="checkbox"/>	✓			
IMH5		<input type="checkbox"/>	✓			
Ivalu		<input type="checkbox"/>	✓			
Gib		<input type="checkbox"/>	✓			
1		<input type="checkbox"/>	✓			
2		<input type="checkbox"/>	✓			
3		<input type="checkbox"/>	✓			
4		<input type="checkbox"/>	✓			
1-1		<input type="checkbox"/>	✓			
2-1		<input type="checkbox"/>	✓			
3-1		<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\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
Modified: 3/26/2012 12:24:55 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

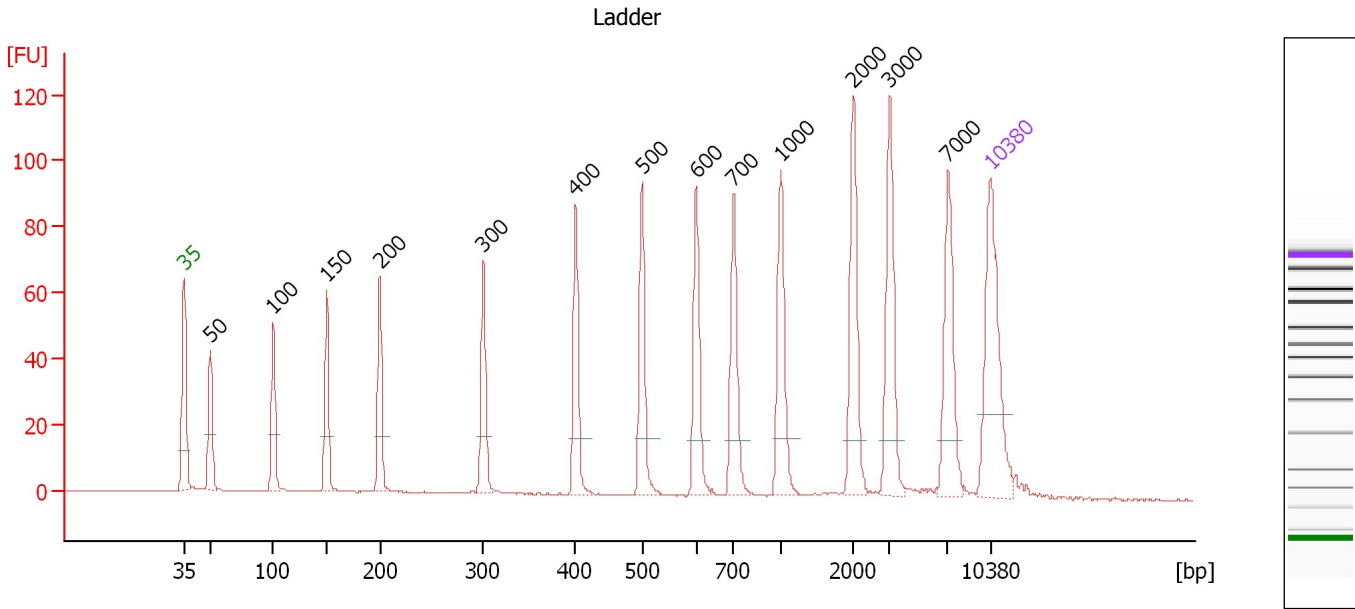
Ladder

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\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

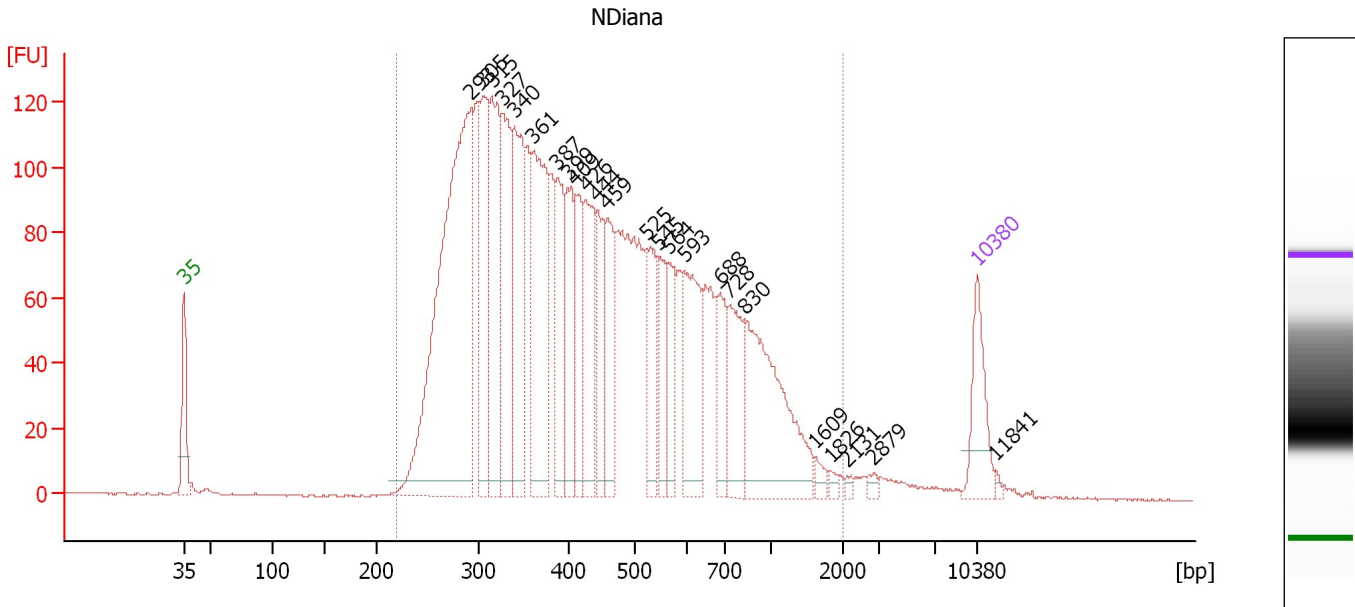
Peak table for Ladder

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\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NDiana

Number of peaks found: 24 Corr. Area 1: 3,585.0
 Noise: 0.2

Peak table for sample 1 : NDiana

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	293	894.06	4,626.3	
3	305	257.60	1,280.2	
4	315	260.00	1,251.2	
5	327	231.51	1,073.9	
6	340	269.08	1,200.7	
7	361	313.27	1,315.9	
8	387	149.70	585.9	
9	399	142.41	540.9	
10	409	123.52	457.4	
11	426	170.47	607.0	
12	444	126.36	431.6	
13	459	128.16	422.9	
14	525	107.90	311.3	
15	545	95.74	266.1	
16	564	75.64	203.2	
17	593	163.56	418.0	
18	688	82.62	181.8	
19	728	117.43	244.6	
20	830	283.04	516.4	
21	1,609	12.90	12.1	
22	1,826	6.89	5.7	
23	2,131	5.24	3.7	
24	2,879	7.22	3.8	
25	10,380	75.00	10.9	Upper Marker
26	11,841	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...

... Region table for sample 1 :

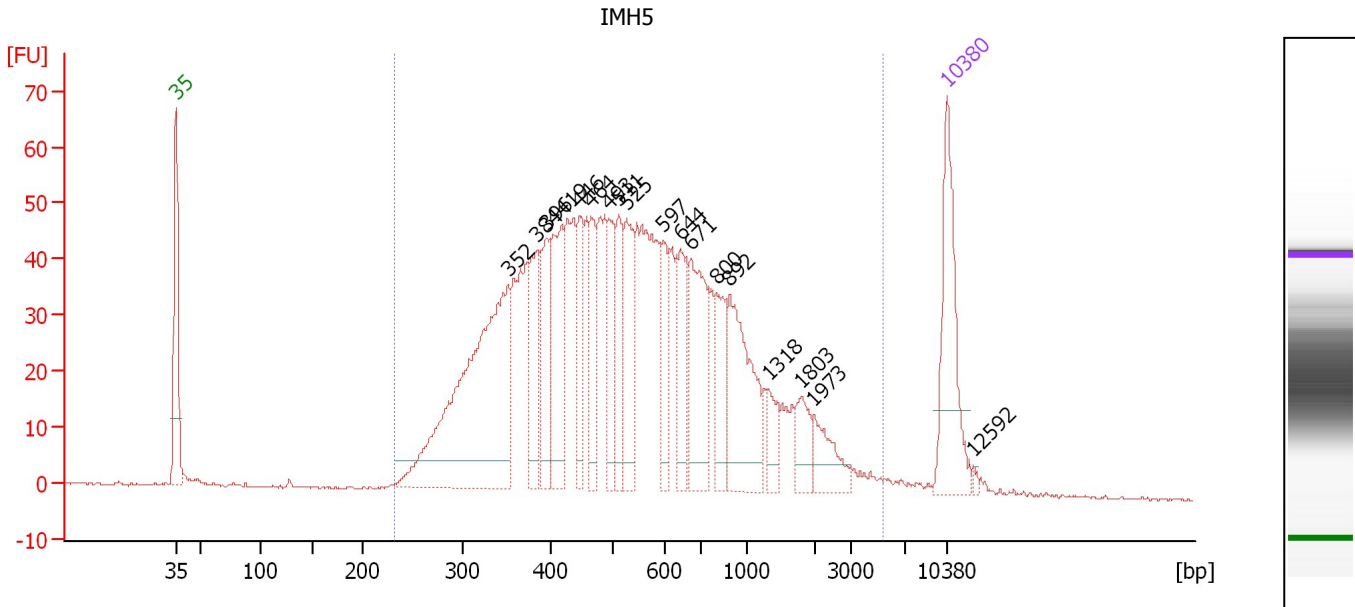
NDiana

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
220	19,347.7	486	4,946.71	1,999	3,585.0	98	51.6	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : IMH5

Number of peaks found: 18 Corr. Area 1: 1,537.2
 Noise: 0.2

Peak table for sample 2 : IMH5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	352	318.96	1,372.1	
3	384	63.33	249.7	
4	396	61.54	235.6	
5	419	93.95	340.0	
6	446	46.66	158.3	
7	464	49.25	160.8	
8	493	51.47	158.2	
9	511	47.14	139.8	
10	525	64.78	186.9	
11	597	35.13	89.1	
12	644	54.48	128.2	
13	671	84.13	190.1	
14	800	46.41	87.9	
15	892	96.79	164.5	
16	1,318	19.85	22.8	
17	1,803	23.03	19.3	
18	1,973	27.08	20.8	
19	10,380	75.00	10.9	Upper Marker
20	12,592	0.00	0.0	

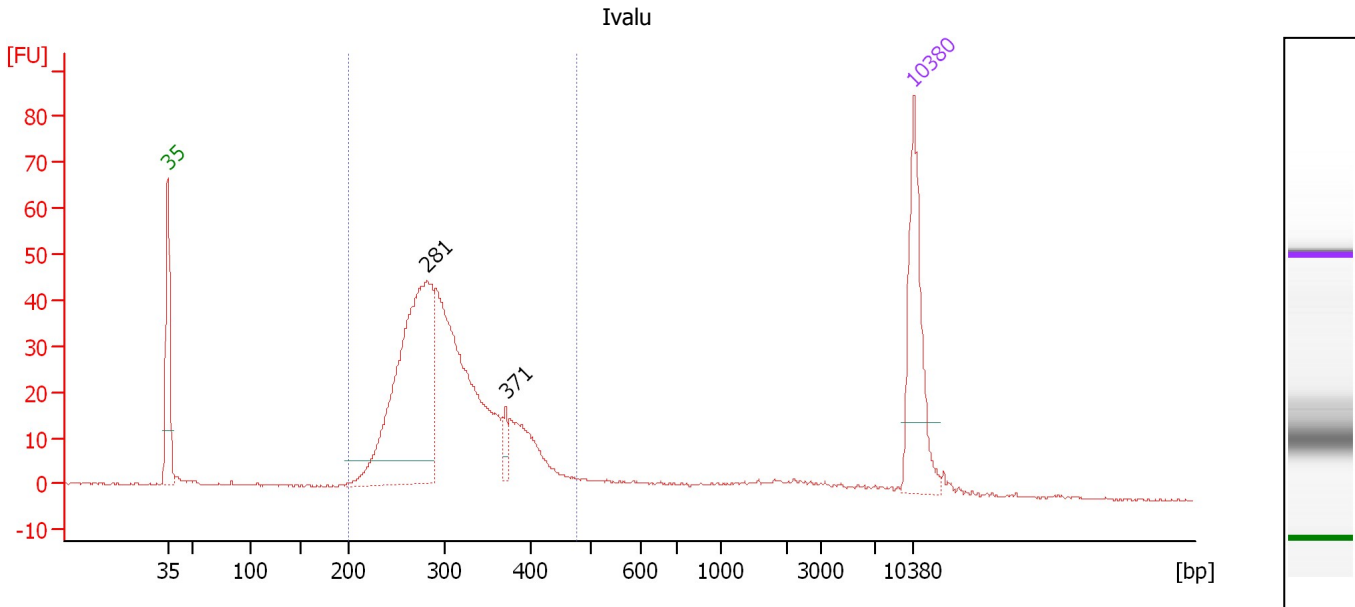
Region table for sample 2 : IMH5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
232	5,733.9	668	1,791.01	5,346	1,537.2	98	79.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Ivalu

Number of peaks found: 2 Corr. Area 1: 606.7
 Noise: 0.2

Peak table for sample 3 : Ivalu

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	281	308.61	1,665.9	
3	371	13.06	53.3	
4	10,380	75.00	10.9	Upper Marker

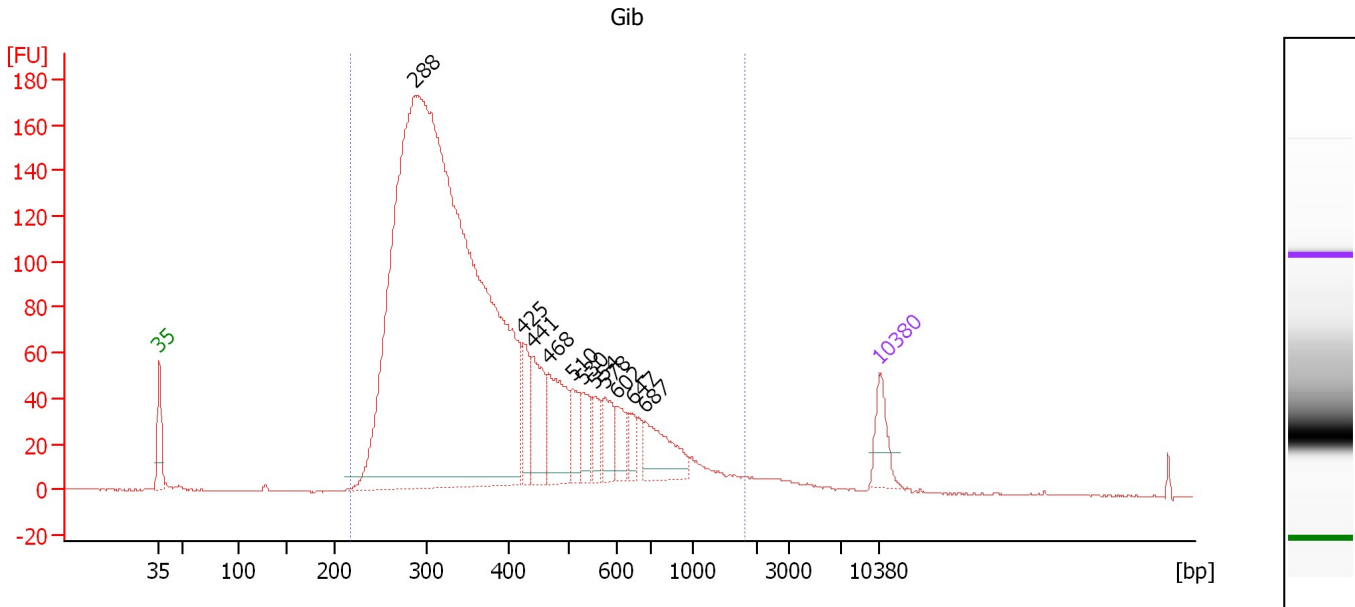
Region table for sample 3 : Ivalu

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	3,536.4	307	693.27	475	606.7	87	16.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Gib

Number of peaks found: 11 Corr. Area 1: 3,193.7
 Noise: 0.2

Peak table for sample 4 : Gib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	288	5,010.74	26,397.3	
3	425	122.33	436.6	
4	441	173.79	597.3	
5	468	223.98	725.2	
6	510	99.21	294.5	
7	530	79.98	228.5	
8	554	62.03	169.5	
9	578	82.40	216.2	
10	602	62.65	157.6	
11	647	37.34	87.4	
12	687	155.18	342.1	
13	10,380	75.00	10.9	Upper Marker

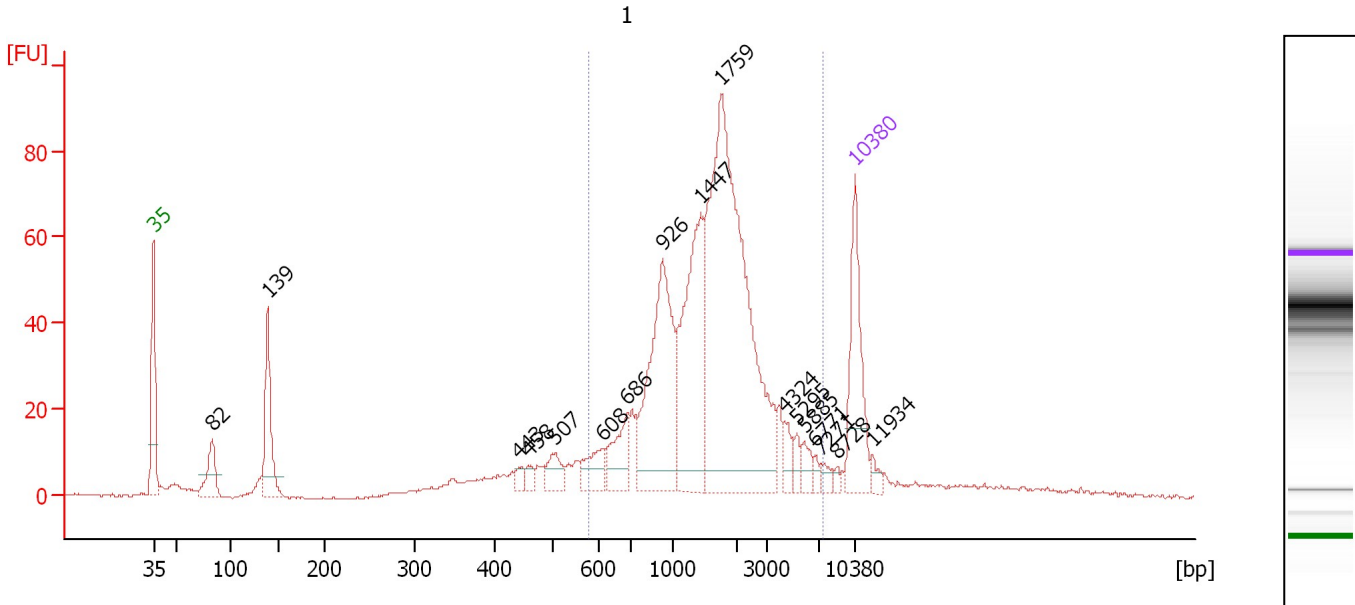
Region table for sample 4 : Gib

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
217	26,966.1	410	6,161.62	1,807	3,193.7	98	48.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 1

Number of peaks found: 17 Corr. Area 1: 835.3
 Noise: 0.2

Peak table for sample 5 : 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	82	48.76	896.5	
3	139	97.77	1,065.6	
4	443	7.94	27.1	
5	458	7.62	25.2	
6	507	22.66	67.8	
7	608	27.74	69.1	
8	686	42.66	94.3	
9	926	176.16	288.3	
10	1,447	158.54	166.1	
11	1,759	400.92	345.3	
12	4,324	12.20	4.3	
13	5,295	8.83	2.5	
14	5,885	12.02	3.1	
15	6,771	5.10	1.1	
16	7,271	6.81	1.4	
17	8,728	3.40	0.6	
18	10,380	75.00	10.9	Upper Marker
19	11,934	0.00	0.0	

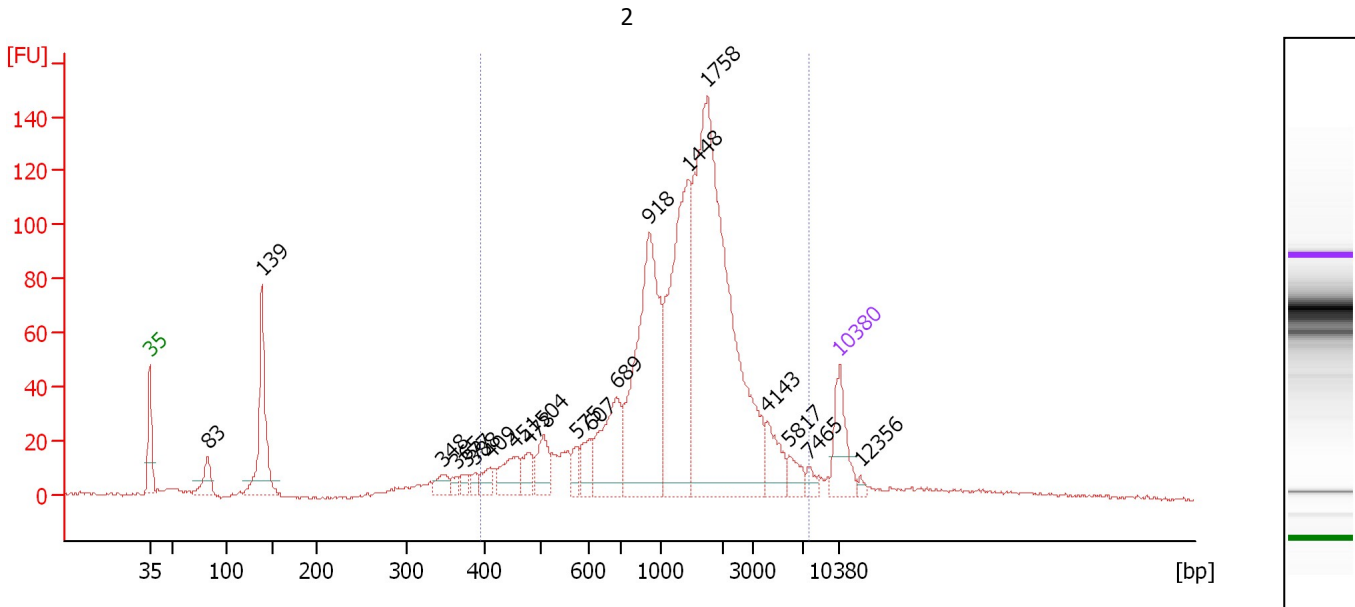
Region table for sample 5 : 1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
578	1,024.6	1,828	898.35	7,389	835.3	76	64.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 2

Number of peaks found: 20 Corr. Area 1: 1,567.8
 Noise: 0.6

Peak table for sample 6 : 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	83	60.92	1,114.6	
3	139	253.68	2,769.8	
4	348	27.96	121.9	
5	365	14.24	59.1	
6	377	17.15	68.9	
7	388	15.88	62.0	
8	409	26.19	97.1	
9	451	65.18	218.8	
10	478	40.94	129.9	
11	504	64.85	195.0	
12	575	26.43	69.7	
13	607	44.87	112.0	
14	689	155.07	341.2	
15	918	426.36	703.9	
16	1,448	387.72	405.7	
17	1,758	809.41	697.8	
18	4,143	56.96	20.8	
19	5,817	29.12	7.6	
20	7,465	14.79	3.0	
21	10,380	75.00	10.9	Upper Marker
22	12,356	0.00	0.0	

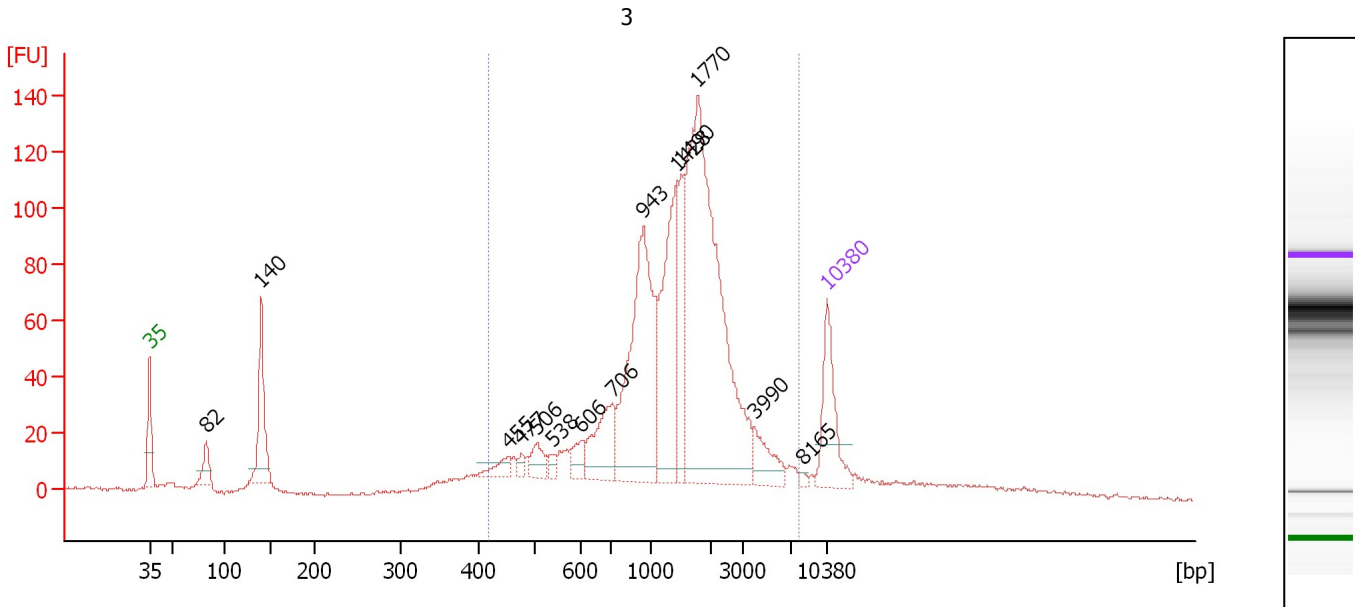
Region table for sample 6 : 2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
394	3,264.9	1,608	2,244.29	7,607	1,567.8	84	70.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 3

Number of peaks found: 14 Corr. Area 1: 1,426.1
 Noise: 0.7

Peak table for sample 7 : 3

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	82	40.37	743.0	
3	140	135.47	1,460.9	
4	455	20.27	67.5	
5	477	9.43	30.0	
6	506	27.22	81.5	
7	538	9.12	25.7	
8	606	25.06	62.7	
9	706	85.18	182.7	
10	943	286.37	460.0	
11	1,428	180.84	191.9	
12	1,490	77.69	79.0	
13	1,770	506.17	433.3	
14	3,990	38.88	14.8	
15	8,165	3.72	0.7	
16	10,380	75.00	10.9	Upper Marker

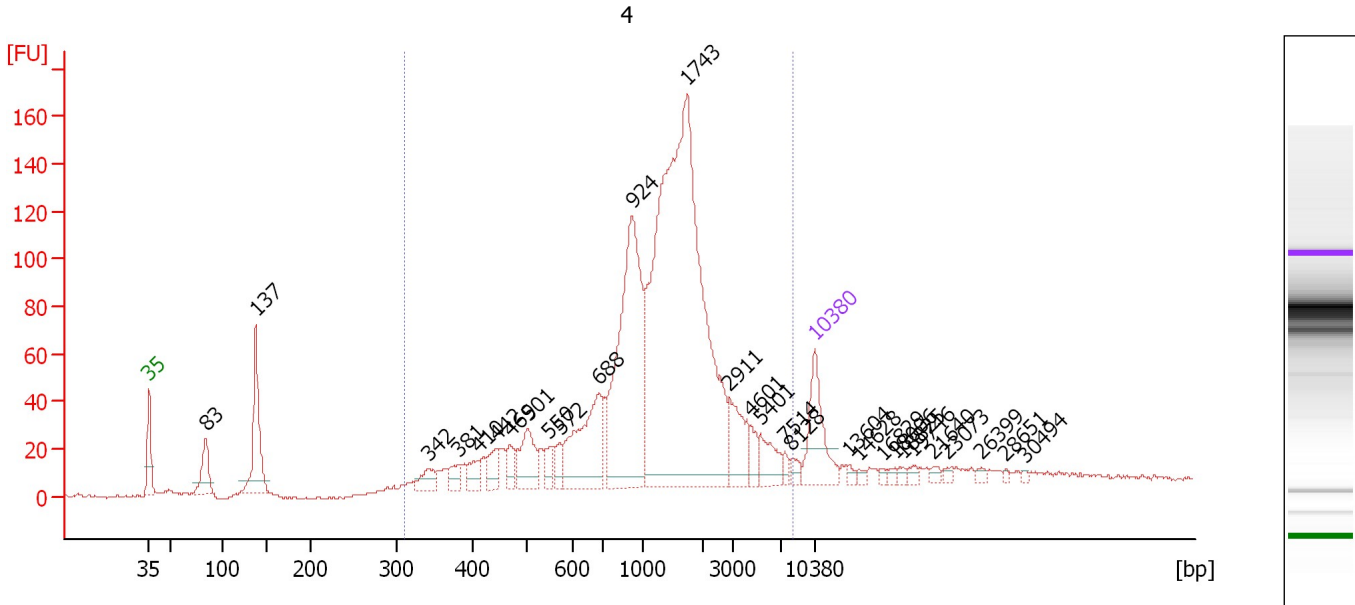
Region table for sample 7 : 3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
419	2,028.6	1,633	1,468.14	7,719	1,426.1	85	67.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 4

Number of peaks found: 29 Corr. Area 1: 1,760.1
 Noise: 0.7

Peak table for sample 8 : 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	83	71.27	1,297.5	
3	137	157.87	1,744.3	
4	342	30.29	134.2	
5	381	23.71	94.2	
6	410	25.18	93.1	
7	442	32.94	112.8	
8	469	25.39	82.1	
9	501	68.76	207.9	
10	550	22.87	63.0	
11	572	22.10	58.5	
12	688	152.52	336.0	
13	924	354.70	581.5	
14	1,743	853.58	742.0	
15	2,911	61.81	32.2	
16	4,601	18.54	6.1	
17	5,401	35.95	10.1	
18	7,514	8.65	1.7	
19	8,128	9.41	1.8	
20	10,380	75.00	10.9	Upper Marker
21	13,604	0.00	0.0	
22	14,628	0.00	0.0	
23	16,829	0.00	0.0	
24	18,006	0.00	0.0	
25	18,825	0.00	0.0	
26	19,746	0.00	0.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...**... Peak table for sample 8 : 4**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	21,640	0.00	0.0	
28	23,073	0.00	0.0	
29	26,399	0.00	0.0	
30	28,651	0.00	0.0	
31	30,494	0.00	0.0	

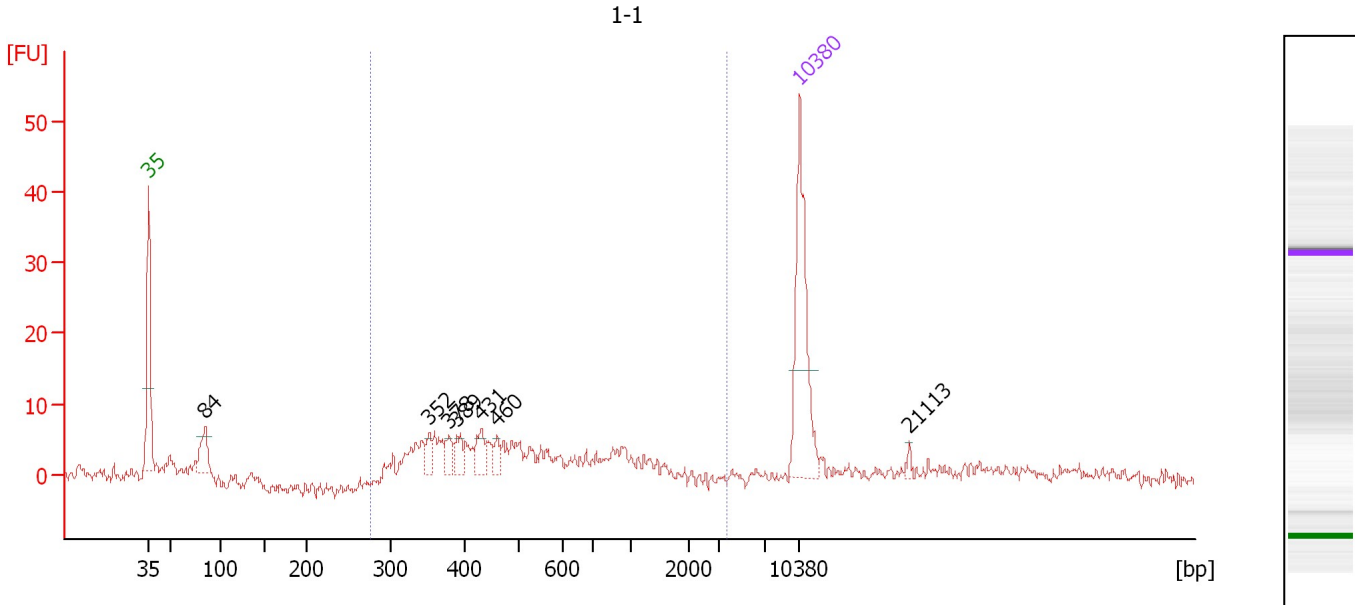
Region table for sample 8 : 4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/ μ l]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
311	2,992.7	1,568	1,860.42	8,172	1,760.1	87	77.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 1-1

Number of peaks found: 7 Corr. Area 1: 145.0
 Noise: 0.9

Peak table for sample 9 : 1-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	84	27.97	501.8	
3	352	9.66	41.6	
4	378	10.61	42.5	
5	389	12.41	48.3	
6	431	14.71	51.7	
7	460	7.48	24.7	
8	10,380	75.00	10.9	Upper Marker
9	21,113	0.00	0.0	

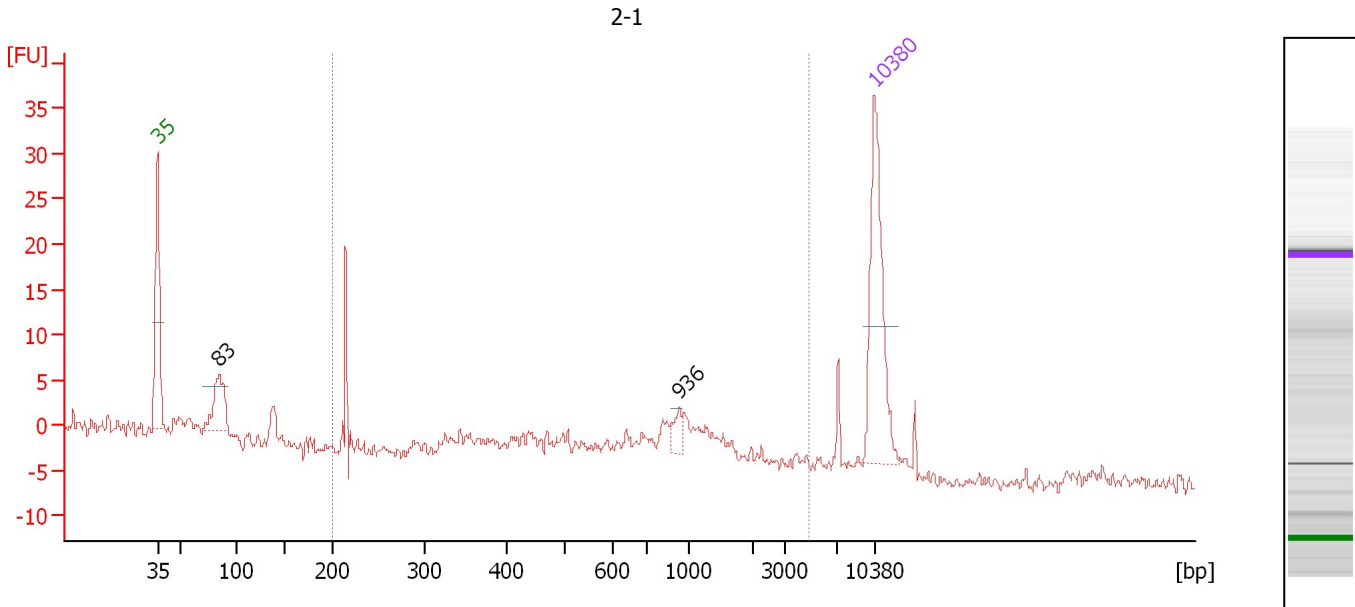
Region table for sample 9 : 1-1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
275	840.6	615	258.36	3,720	145.0	63	64.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 2-1

Number of peaks found: 2 Corr. Area 1: 69.9
 Noise: 0.8

Peak table for sample 10 : 2-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	83	47.95	873.0	
3	936	9.35	15.1	
4	10,380	75.00	10.9	Upper Marker

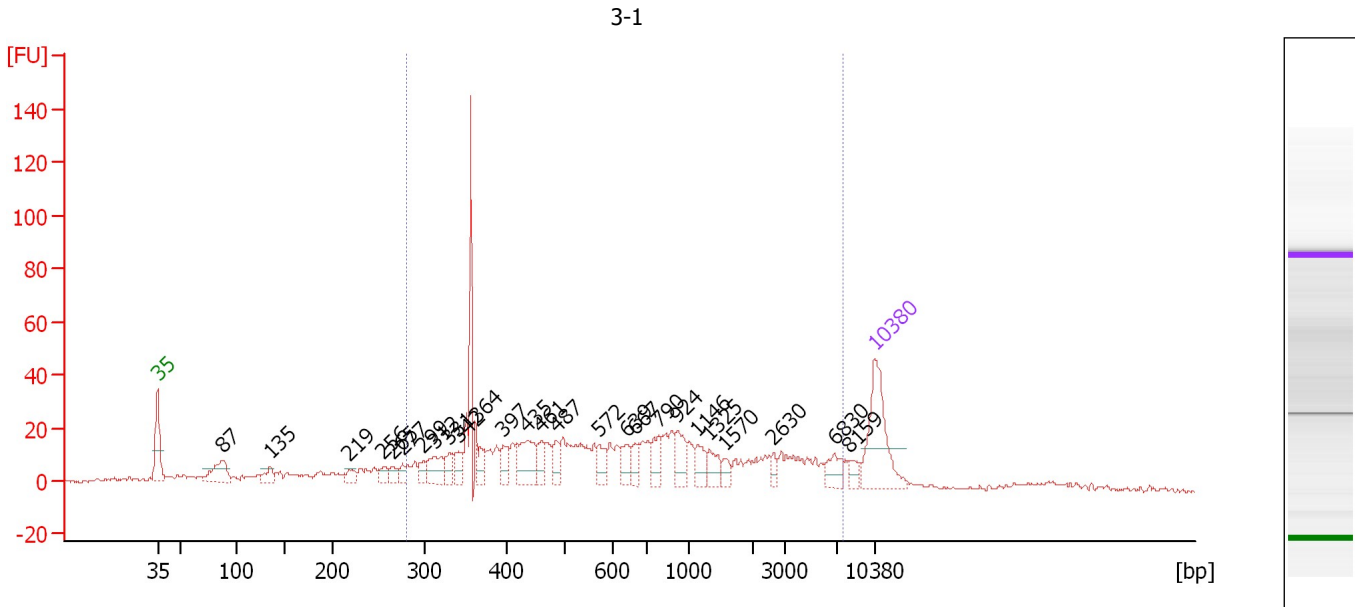
Region table for sample 10 : 2-1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	462.9	882	148.48	4,925	69.9	58	76.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 3-1

Number of peaks found: 26 Corr. Area 1: 666.3
 Noise: 0.6

Peak table for sample 11 : 3-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	87	48.64	842.3	
3	135	16.38	183.5	
4	219	13.47	93.4	
5	256	12.50	73.9	
6	265	12.34	70.5	
7	277	10.66	58.4	
8	299	13.11	66.4	
9	312	33.67	163.3	
10	331	17.81	81.5	
11	342	18.64	82.6	
12	364	22.40	93.2	
13	397	19.70	75.2	
14	435	51.63	179.9	
15	461	19.61	64.5	
16	487	19.18	59.7	
17	572	17.83	47.3	
18	639	17.94	42.5	
19	667	17.53	39.8	
20	790	25.63	49.1	
21	924	26.89	44.1	
22	1,146	17.21	22.7	
23	1,325	19.24	22.0	
24	1,570	10.09	9.7	
25	2,630	8.26	4.8	
26	6,830	18.37	4.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
Modified: 3/26/2012 12:24:55 PM

Electropherogram Summary Continued ...**... Peak table for sample 11 : 3-1**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	8,159	9.34	1.7	
28	▶ 10,380	75.00	10.9	Upper Marker

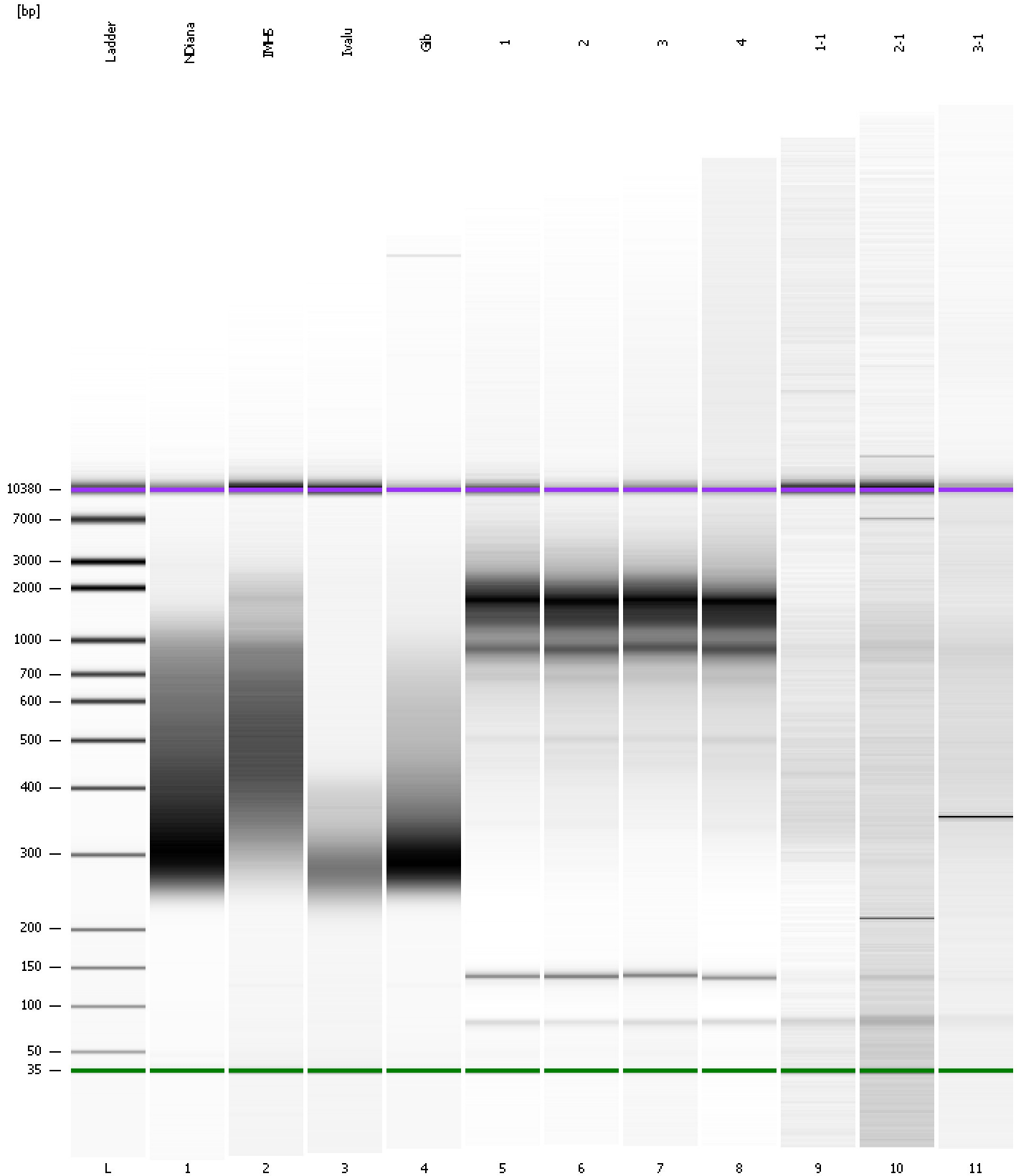
Region table for sample 11 : 3-1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/ μ l]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
281	2,396.7	1,214	844.31	7,510	666.3	77	100.0	■

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
Modified: 3/26/2012 12:24:55 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad

Created: 3/26/2012 11:43:08 AM
 Modified: 3/26/2012 12:24:55 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		3/26/2012 12:24:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-26\2012-03-26_003.xad)		Instrument	Run		3/26/2012 11:43:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/26/2012 11:43:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/26/2012 11:43:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/26/2012 11:43:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/26/2012 11:43:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/26/2012 11:43:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/26/2012 11:43:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1