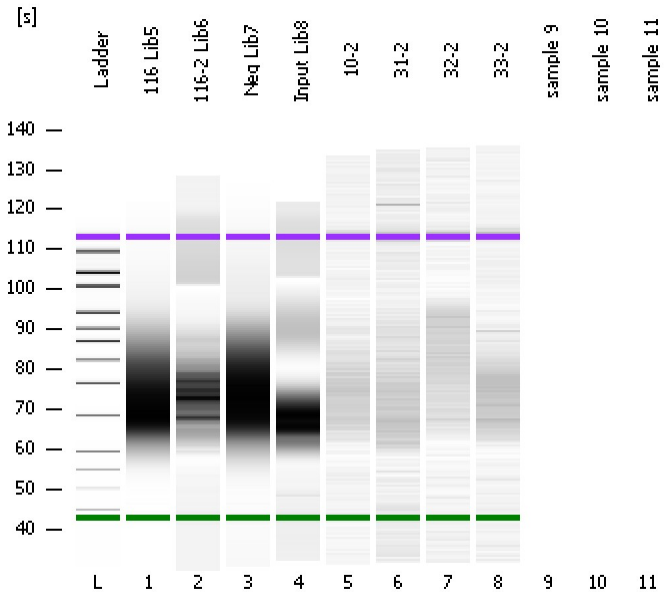


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
Modified: 5/8/2012 10:35:42 AM

Electrophoresis File Run Summary



Instrument Information:

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

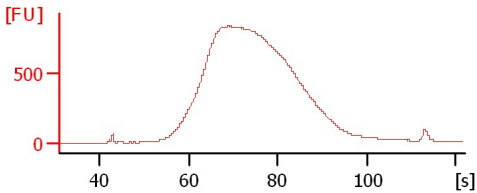
Assay Information:

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

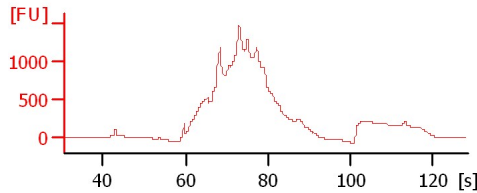
Chip Information:

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

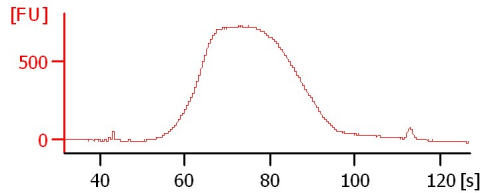
116 Lib5



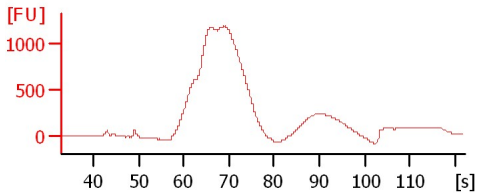
116-2 Lib6



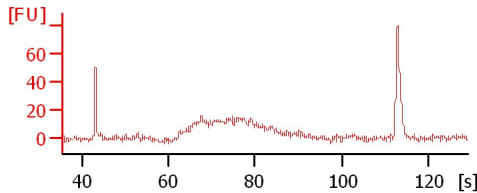
Neg Lib7



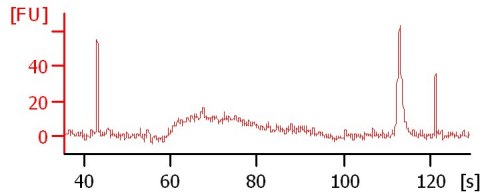
Input Lib8



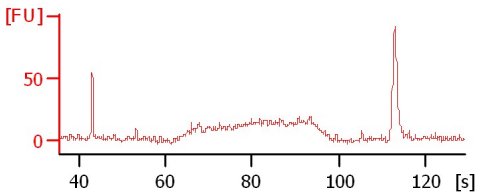
10-2



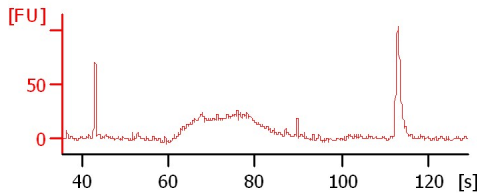
31-2



32-2



33-2



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
116 Lib5		<input type="checkbox"/>	✓			
116-2 Lib6		<input type="checkbox"/>	✓			
Neg Lib7		<input type="checkbox"/>	✓			
Input Lib8		<input type="checkbox"/>	✓			
10-2		<input type="checkbox"/>	✓			
31-2		<input type="checkbox"/>	✓			
32-2		<input type="checkbox"/>	✓			
33-2		<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<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\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

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

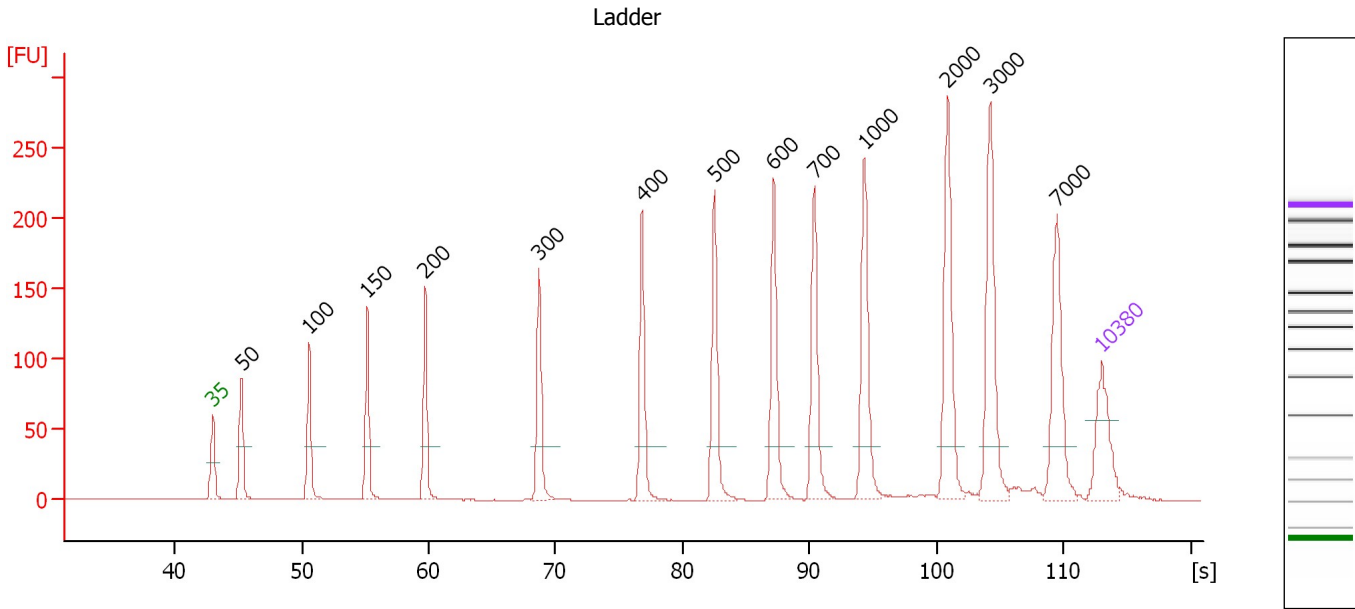
Ladder

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\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

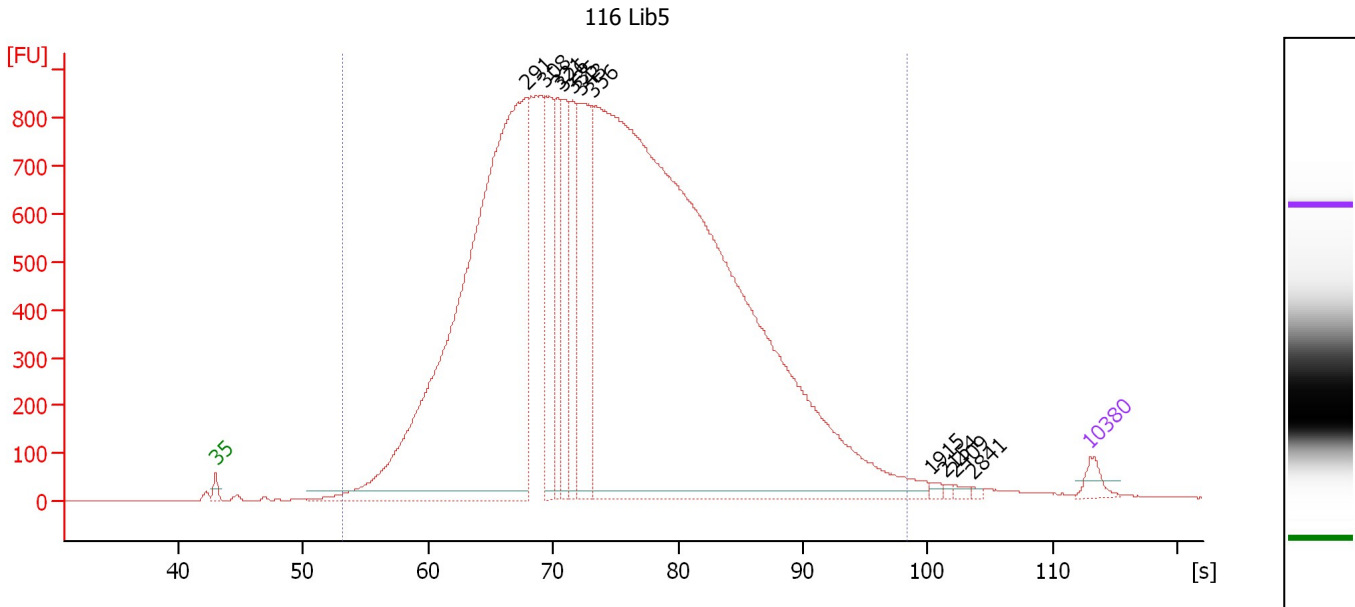
Peak table for Ladder

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\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : 116 Lib5

Height Threshold [FU] : 20

Overall Results for sample 1 : 116 Lib5

Number of peaks found: 11 Corr. Area 1: 28,395.6
 Noise: 0.2

Peak table for sample 1 : 116 Lib5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	291	8,095.15	42,146.4	
3	308	1,023.55	5,033.6	
4	321	676.25	3,193.9	
5	326	767.13	3,564.2	
6	335	697.77	3,154.8	
7	343	1,410.63	6,239.8	
8	356	13,933.40	59,338.4	
9	1,915	22.61	17.9	
10	2,154	14.59	10.3	
11	2,409	23.94	15.1	
12	2,841	11.96	6.4	
13	10,380	75.00	10.9	Upper Marker

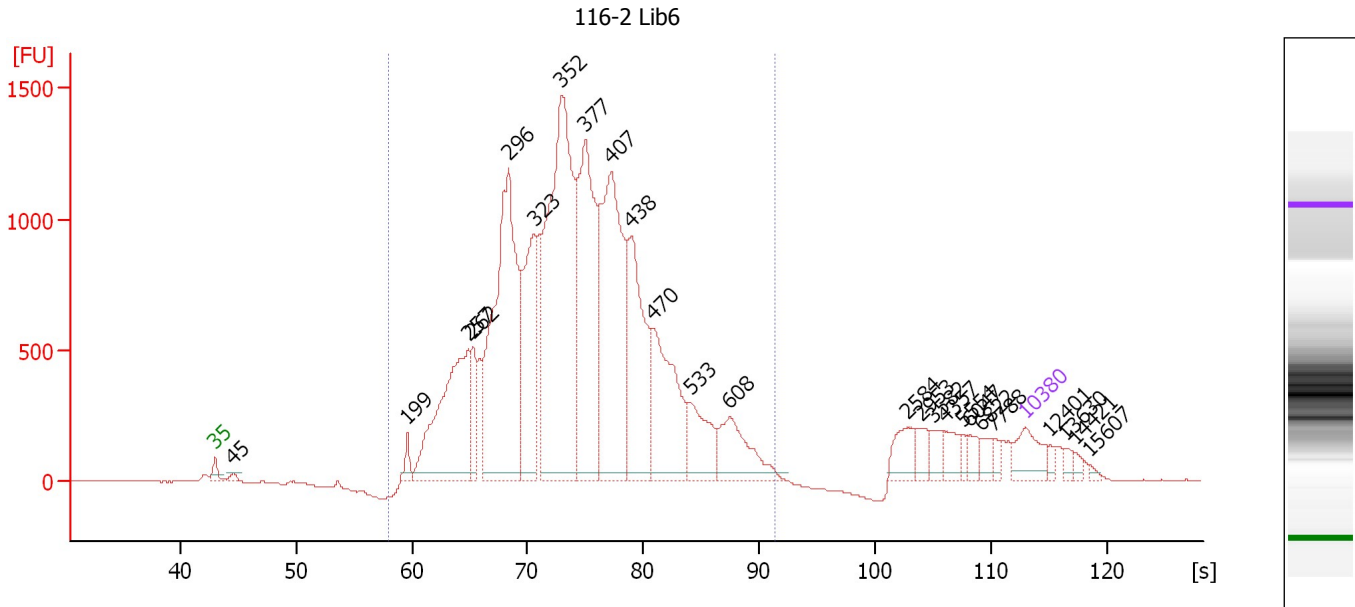
Region table for sample 1 : 116 Lib5

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
53.17	123,374.3	399	26,870.42	98.28	28,395.5	99	42.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : 116-2 Lib6

Height Threshold [FU] : 30

Overall Results for sample 2 : 116-2 Lib6

Number of peaks found: 25 Corr. Area 1: 26,392.3
 Noise: 0.6

Peak table for sample 2 : 116-2 Lib6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	18.18	608.0	
3	199	41.41	315.9	
4	257	654.80	3,856.2	
5	262	125.12	723.8	
6	296	1,084.10	5,551.2	
7	323	449.54	2,110.3	
8	352	1,240.48	5,343.2	
9	377	718.60	2,885.4	
10	407	794.26	2,959.8	
11	438	487.69	1,686.5	
12	470	396.72	1,279.8	
13	533	172.44	490.0	
14	608	184.51	459.6	
15	2,584	68.92	40.4	
16	2,953	40.00	20.5	
17	3,582	40.07	16.9	
18	4,357	43.73	15.2	
19	5,554	17.34	4.7	
20	6,047	30.91	7.7	
21	6,822	30.77	6.8	
22	7,788	15.13	2.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad


Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...

... Peak table for sample 2 : 116-2 Lib6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
23	10,380	75.00	10.9	Upper Marker
24	12,401	0.00	0.0	
25	13,630	0.00	0.0	
26	14,421	0.00	0.0	
27	15,607	0.00	0.0	

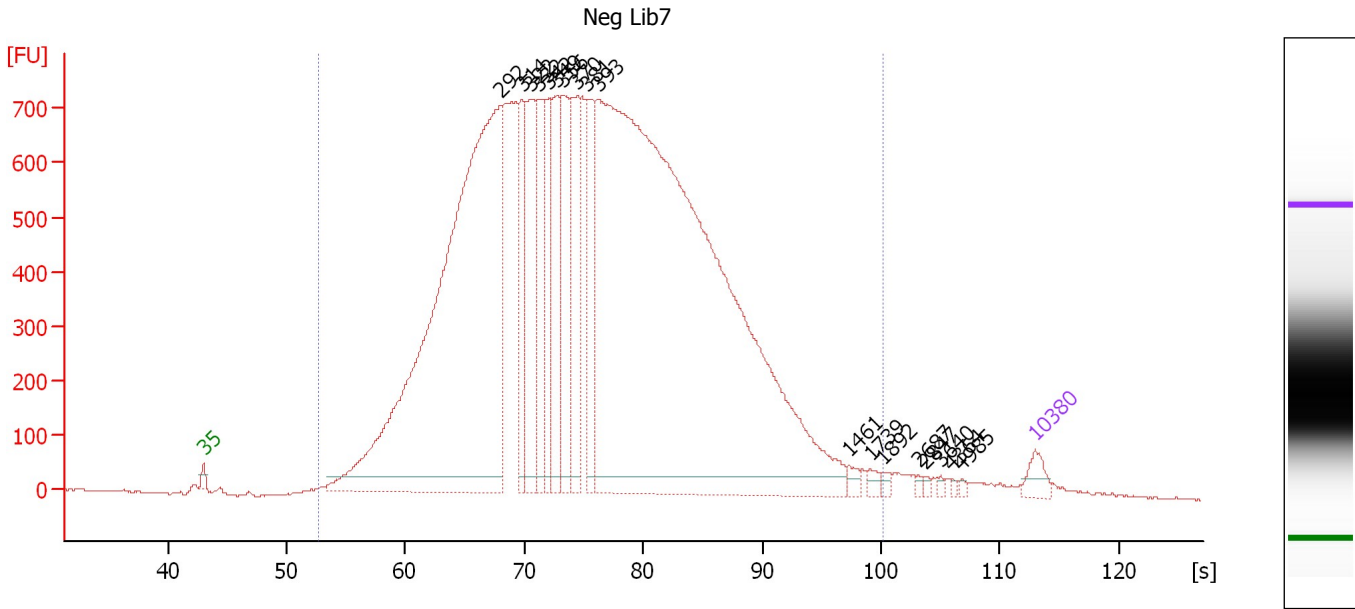
Region table for sample 2 : 116-2 Lib6

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Color	
58.03	28,939.9	375	6,593.27	91.44	26,392.3	92	24.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : Neg Lib7

Height Threshold [FU] : 30

Overall Results for sample 3 : Neg Lib7

Number of peaks found: 18 Corr. Area 1: 26,216.1
 Noise: 1.7

Peak table for sample 3 : Neg Lib7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	292	6,292.87	32,644.5	
3	314	570.84	2,758.7	
4	322	861.49	4,048.3	
5	332	632.48	2,887.4	
6	342	535.82	2,374.4	
7	349	652.96	2,838.0	
8	356	802.15	3,410.2	
9	370	620.10	2,537.2	
10	381	639.75	2,544.8	
11	393	9,637.88	37,196.2	
12	1,461	41.52	43.1	
13	1,739	35.23	30.7	
14	1,892	23.42	18.8	
15	2,687	15.32	8.6	
16	2,847	12.62	6.7	
17	3,640	12.34	5.1	
18	4,364	10.69	3.7	
19	4,985	11.22	3.4	
20	10,380	75.00	10.9	Upper Marker


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...

... Region table for sample 3 :

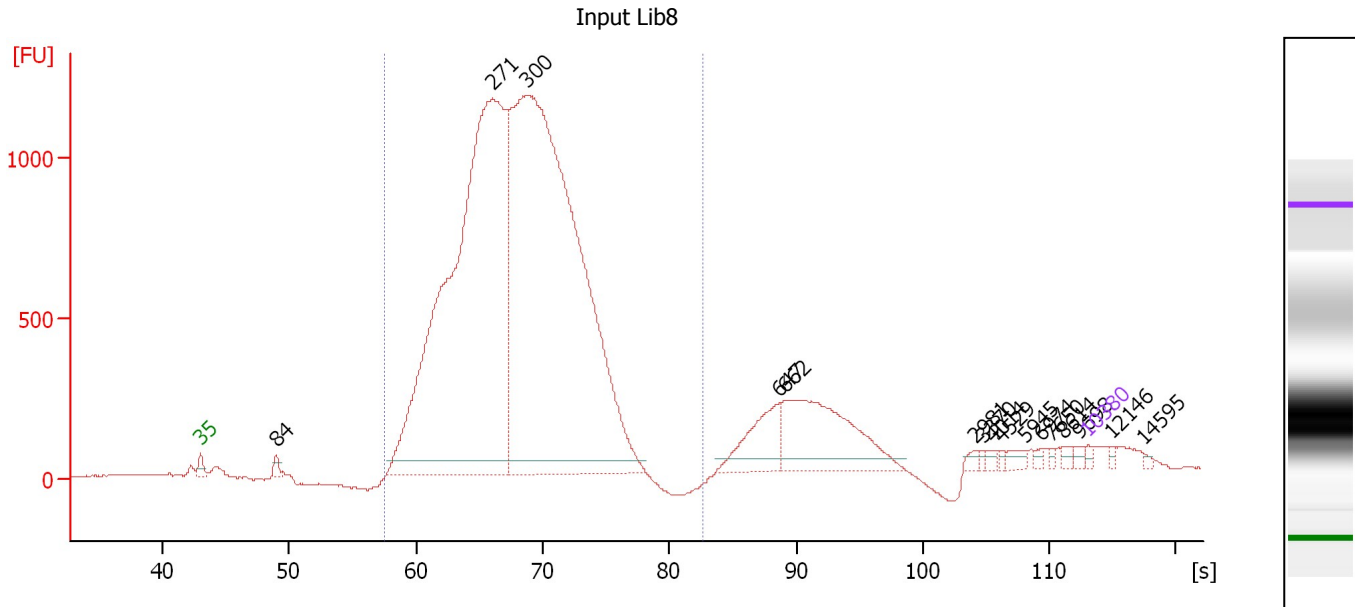
Neg Lib7

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/ μ l]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
52.72	102,219.7	422	22,921.88	100.12	26,216.1	98	47.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : Input Lib8

Height Threshold [FU] : 40

Overall Results for sample 4 : Input Lib8

Number of peaks found: 16 Corr. Area 1: 21,794.1
 Noise: 2.5

Peak table for sample 4 : Input Lib8

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	84	261.20	4,689.6	
3	271	31,164.76	174,495.4	
4	300	34,916.34	176,474.7	
5	647	1,765.35	4,132.9	
6	662	4,296.32	9,835.9	
7	2,981	121.61	61.8	
8	3,370	66.18	29.8	
9	4,014	110.11	41.6	
10	4,529	63.49	21.2	
11	5,945	203.92	52.0	
12	6,974	93.44	20.3	
13	7,650	69.34	13.7	
14	8,614	119.64	21.0	
15	9,698	122.75	19.2	
16	10,380	75.00	10.9	Upper Marker
17	12,146	0.00	0.0	
18	14,595	0.00	0.0	

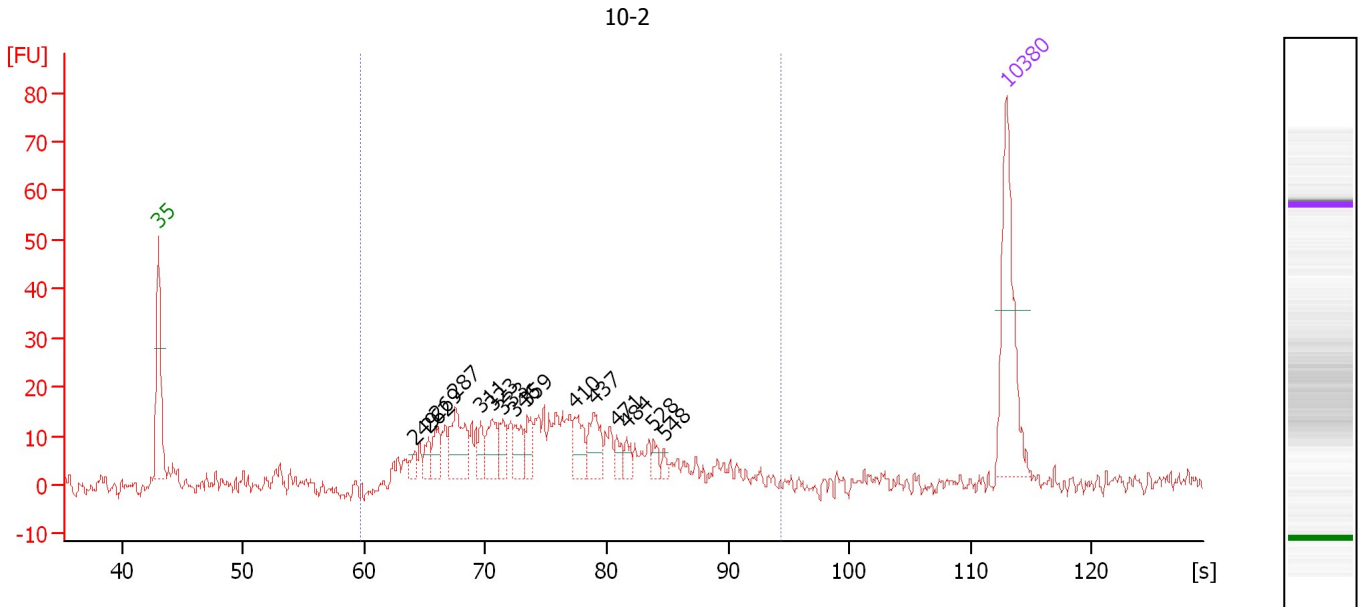
Region table for sample 4 : Input Lib8

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
57.54	352,754.3	292	65,738.42	82.71	21,794.1	86	16.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 10-2

Number of peaks found: 15 Corr. Area 1: 333.1
 Noise: 1.9

Peak table for sample 5 : 10-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	249	7.53	45.9	
3	262	12.05	69.8	
4	269	17.85	100.7	
5	287	44.62	235.7	
6	311	15.27	74.3	
7	323	26.17	122.9	
8	333	15.94	72.6	
9	346	18.34	80.2	
10	359	16.38	69.2	
11	410	22.03	81.4	
12	437	26.43	91.6	
13	471	8.95	28.8	
14	484	8.30	26.0	
15	528	7.07	20.3	
16	548	4.24	11.7	
17	10,380	75.00	10.9	Upper Marker

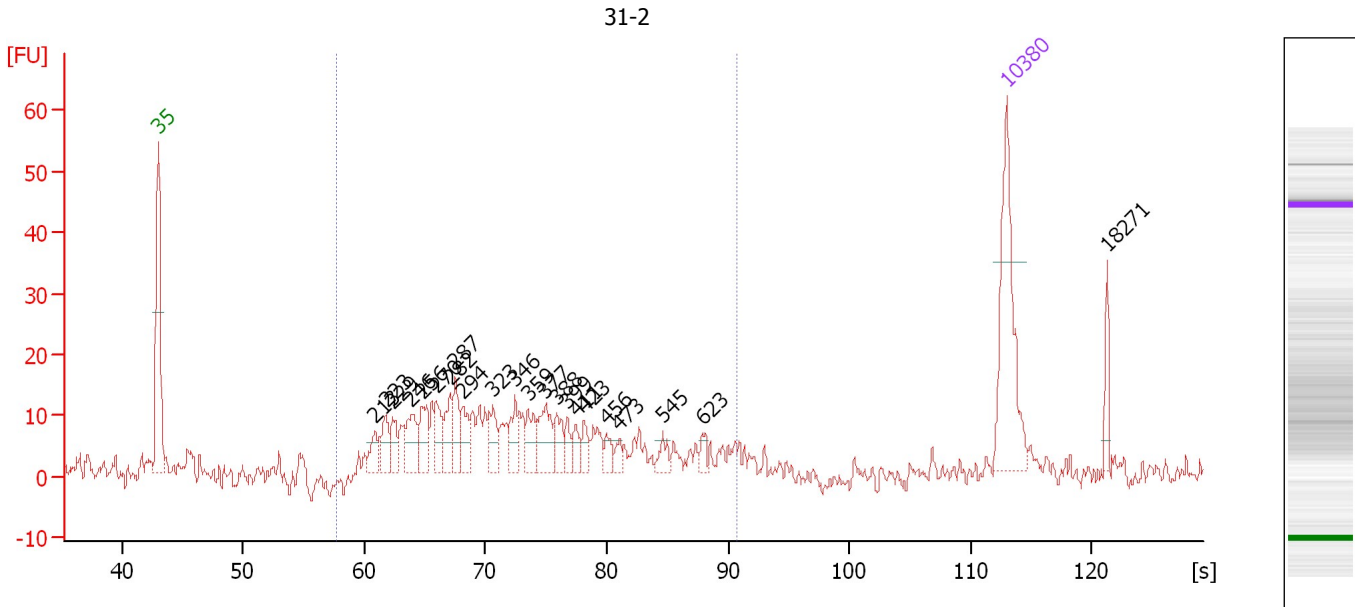
Region table for sample 5 : 10-2

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.74	2,086.4	393	488.22	94.32	333.1	90	29.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 31-2

Number of peaks found: 22 Corr. Area 1: 234.6
 Noise: 2.4

Peak table for sample 6 : 31-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	213	16.43	117.0	
3	223	22.10	150.4	
4	229	18.75	124.1	
5	246	31.35	192.8	
6	256	28.90	171.0	
7	270	21.89	123.0	
8	282	25.32	136.0	
9	287	24.10	127.3	
10	294	22.07	113.8	
11	323	20.21	94.7	
12	346	22.40	98.1	
13	359	20.95	88.4	
14	377	31.13	125.1	
15	388	16.78	65.5	
16	399	10.15	38.5	
17	411	9.97	36.7	
18	423	11.46	41.0	
19	456	8.93	29.7	
20	473	7.30	23.4	
21	545	9.07	25.2	
22	623	6.35	15.5	
23	10,380	75.00	10.9	Upper Marker
24	18,271	0.00	0.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...

... Region table for sample 6 :

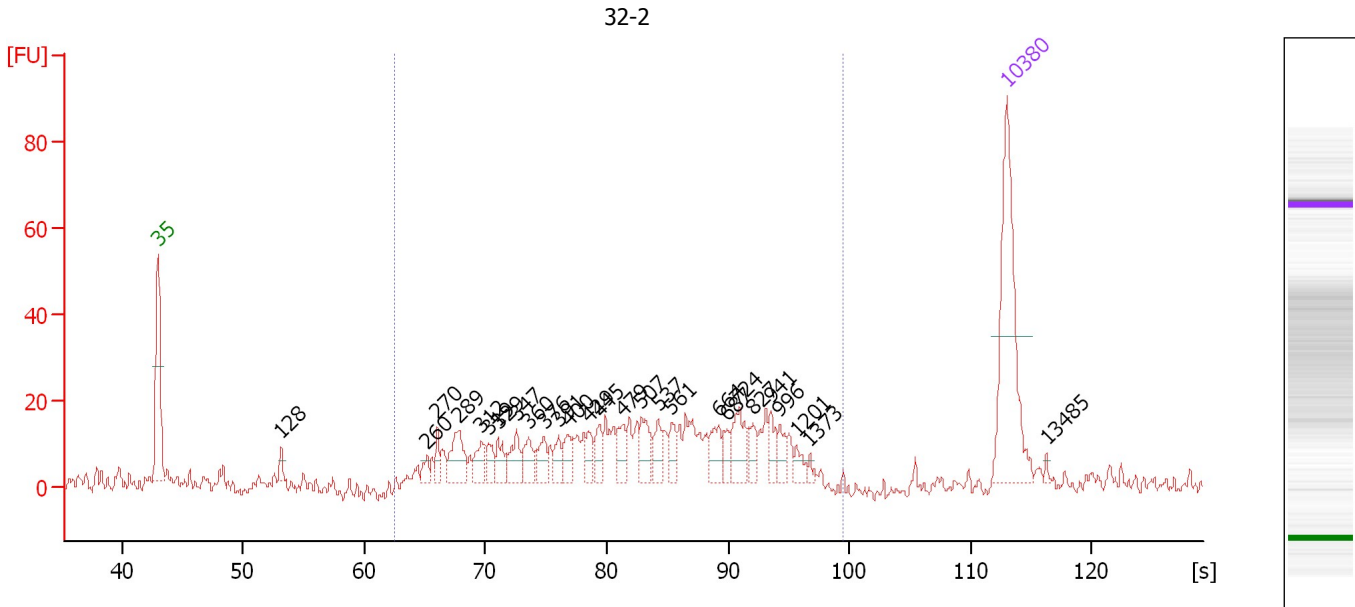
31-2

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Color	
57.75	2,127.2	353	443.26	90.68	234.6	90	30.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
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Electropherogram Summary Continued ...



Overall Results for sample 7 : 32-2

Number of peaks found: 27 Corr. Area 1: 402.7
 Noise: 2.2

Peak table for sample 7 : 32-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	7.12	84.6	
3	260	6.48	37.7	
4	270	9.00	50.5	
5	289	26.11	136.8	
6	312	13.63	66.2	
7	319	10.39	49.3	
8	329	11.20	51.6	
9	347	17.05	74.4	
10	360	13.66	57.5	
11	376	11.75	47.4	
12	391	9.37	36.3	
13	400	13.01	49.3	
14	429	10.03	35.4	
15	445	10.30	35.1	
16	479	12.92	40.9	
17	507	17.21	51.4	
18	537	12.32	34.8	
19	561	10.72	29.0	
20	664	14.74	33.6	
21	687	8.40	18.5	
22	724	22.61	47.3	
23	827	8.26	15.1	
24	941	8.64	13.9	
25	996	8.48	12.9	
26	1,201	5.98	7.5	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...**... Peak table for sample 7 : 32-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	1,373	2.24	2.5	
28	10,380	75.00	10.9	Upper Marker
29	13,485	0.00	0.0	

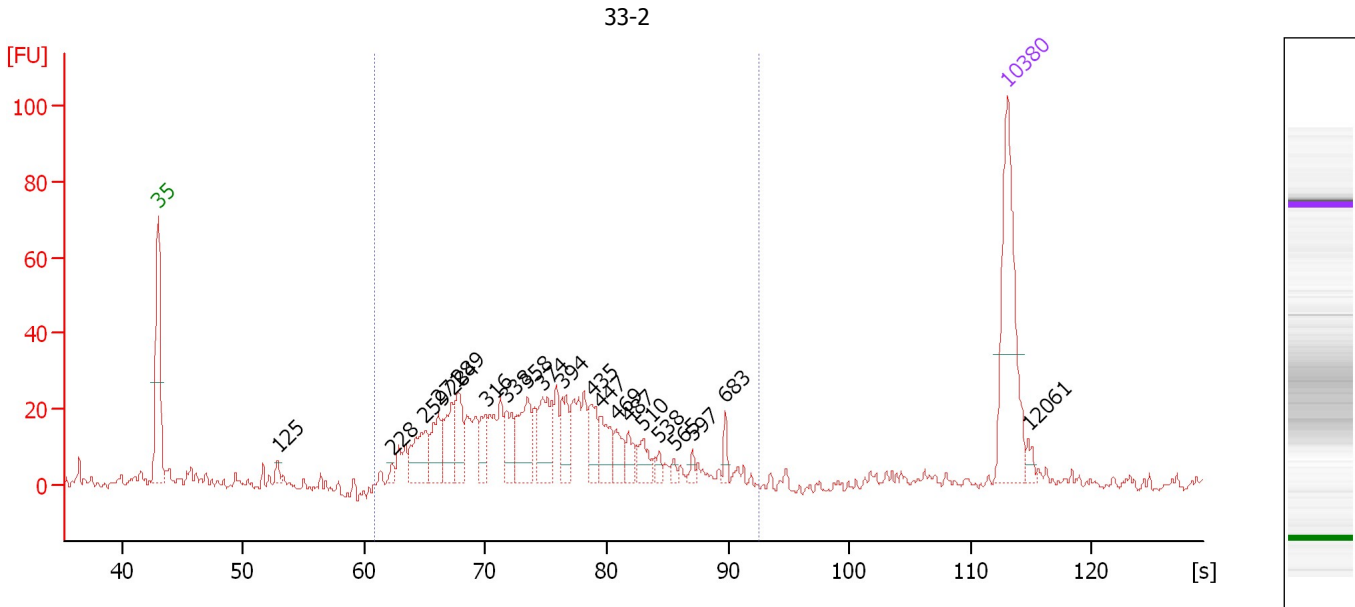
Region table for sample 7 : 32-2

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
62.55	1,395.5	570	417.52	99.54	402.7	93	43.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 33-2

Number of peaks found: 21 Corr. Area 1: 431.5
 Noise: 1.8

Peak table for sample 8 : 33-2


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	125	5.25	63.8	
3	228	4.01	26.6	
4	259	35.30	206.5	
5	271	28.49	159.3	
6	284	29.65	158.4	
7	289	29.70	155.7	
8	316	16.68	79.9	
9	338	22.83	102.5	
10	358	37.71	159.6	
11	374	34.45	139.6	
12	394	20.99	80.8	
13	435	20.96	73.0	
14	447	20.81	70.6	
15	469	13.79	44.5	
16	487	11.39	35.4	
17	510	13.30	39.5	
18	538	4.44	12.5	
19	565	3.17	8.5	
20	597	3.78	9.6	
21	683	5.90	13.1	
22	10,380	75.00	10.9	Upper Marker
23	12,061	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
Modified: 5/8/2012 10:35:42 AM

Electropherogram Summary Continued ...

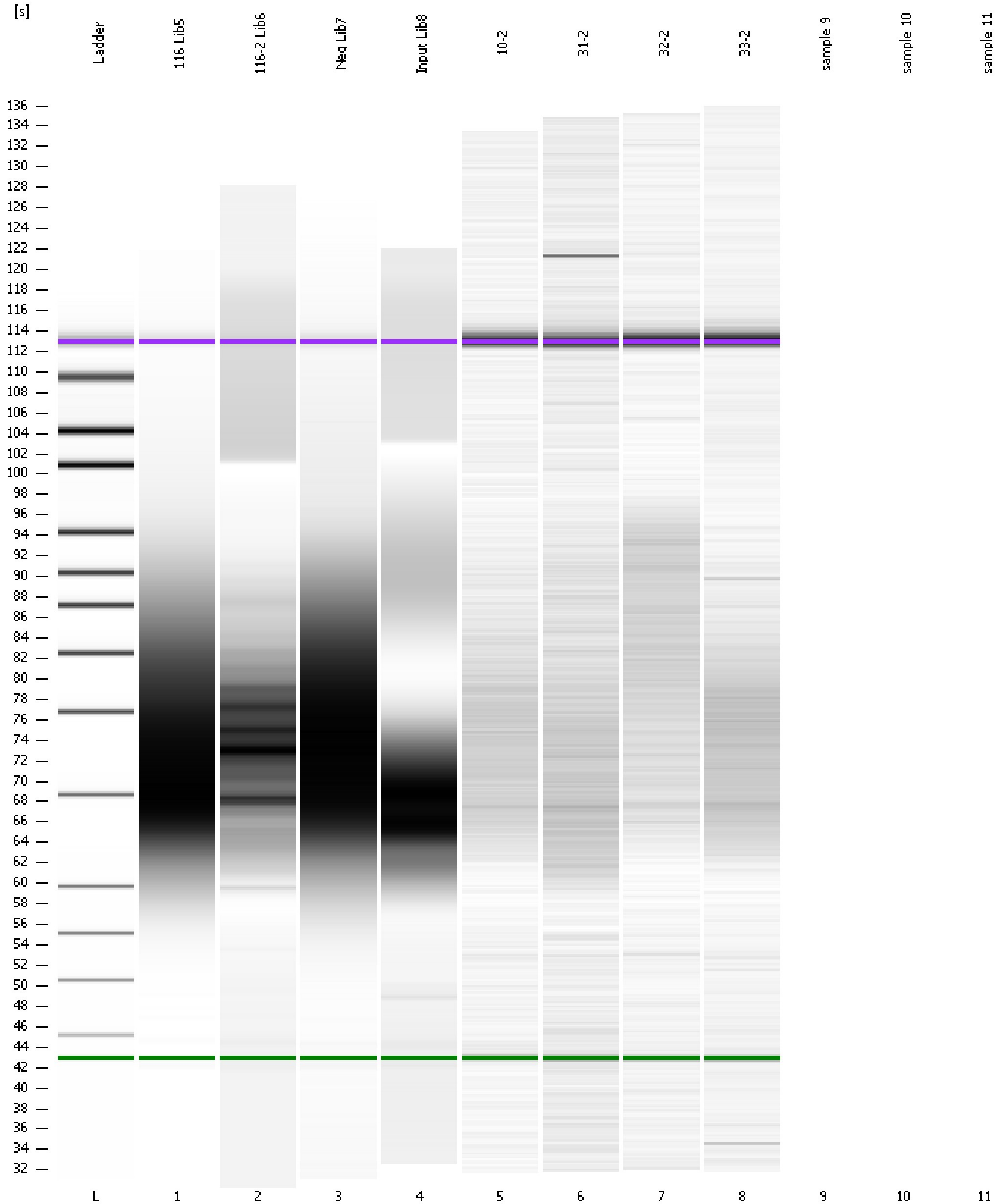
... Region table for sample 8 : 33-2

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.81	1,890.2	377	434.92	92.57	431.5	94	24.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
Modified: 5/8/2012 10:35:42 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
Modified: 5/8/2012 10:35:42 AM

Invalid Samples

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad

Created: 5/8/2012 9:57:00 AM
 Modified: 5/8/2012 10:35:42 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		5/8/2012 10:29:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-08\2012-05-08_001.xad)		Instrument	Run		5/8/2012 9:57:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/8/2012 9:57:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/8/2012 9:57:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/8/2012 9:57:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/8/2012 9:57:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/8/2012 9:57:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/8/2012 9:57:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1