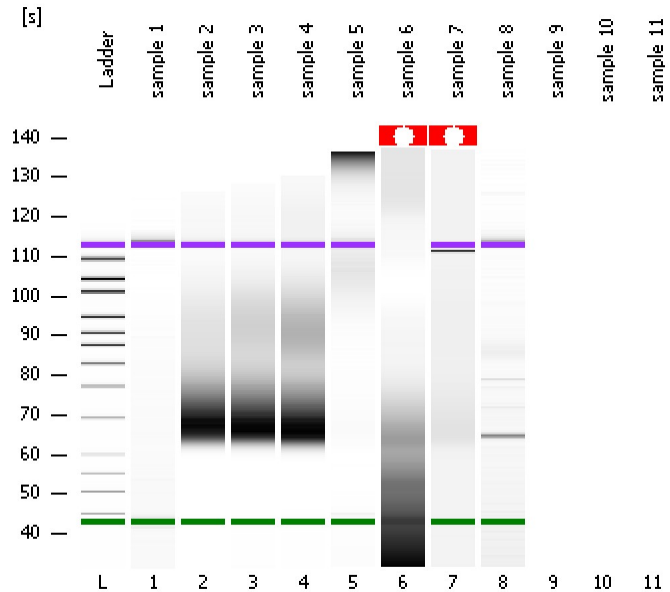


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
Modified: 8/6/2014 10:49:33 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

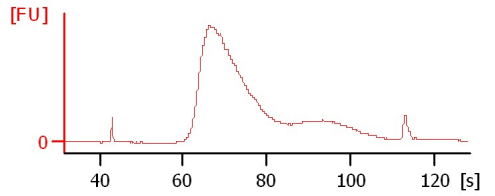
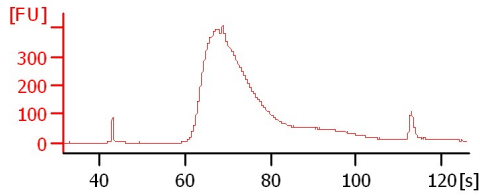
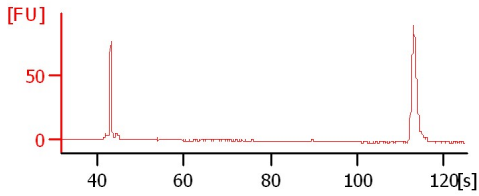
Chip Information:

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

sample 1

sample 2

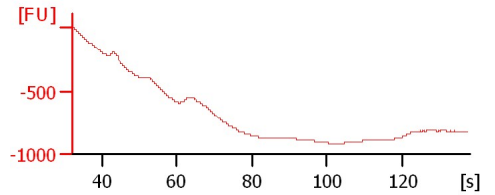
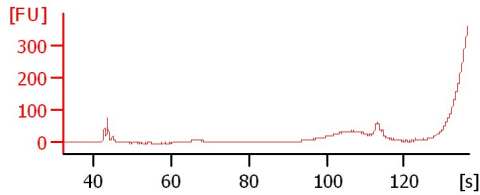
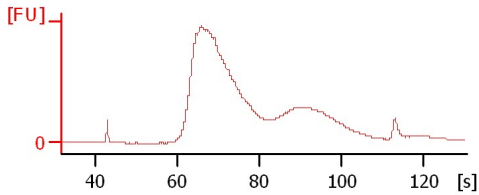
sample 3



sample 4

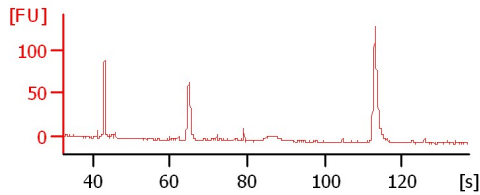
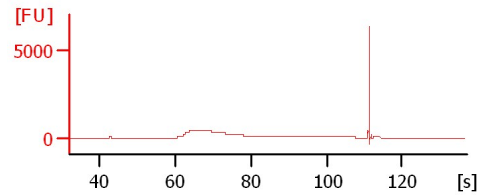
sample 5

sample 6



sample 7

sample 8



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>	⚠			
sample 8		<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:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
Modified: 8/6/2014 10:49:33 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

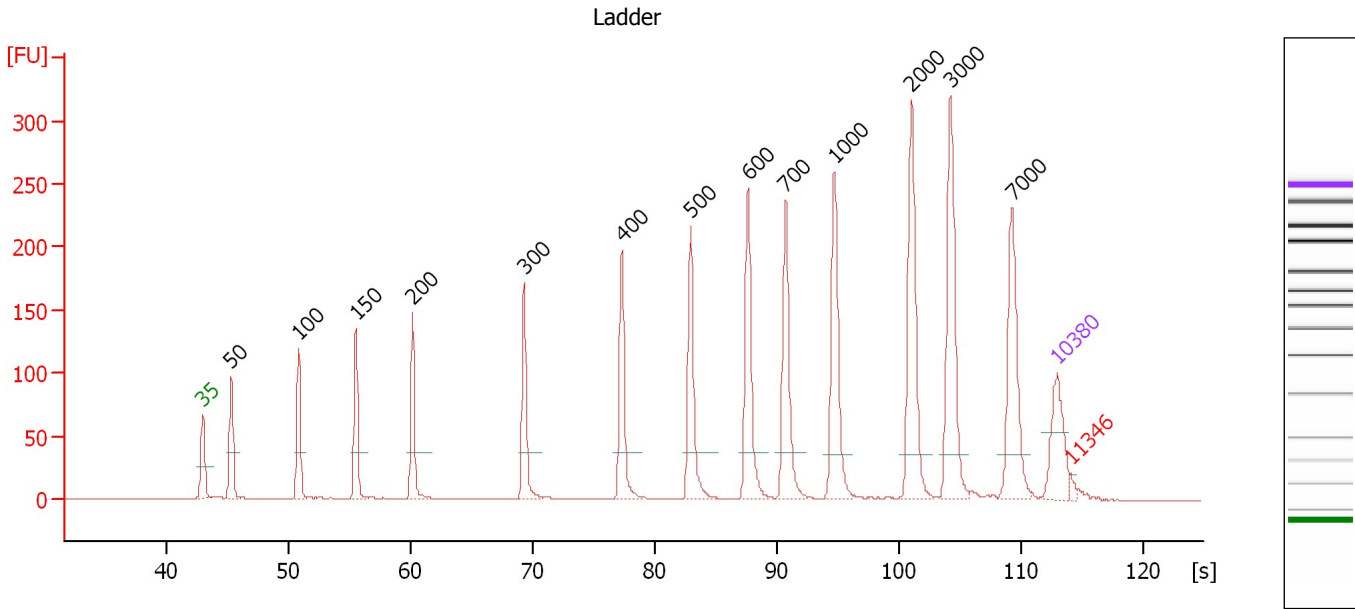
Ladder

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:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

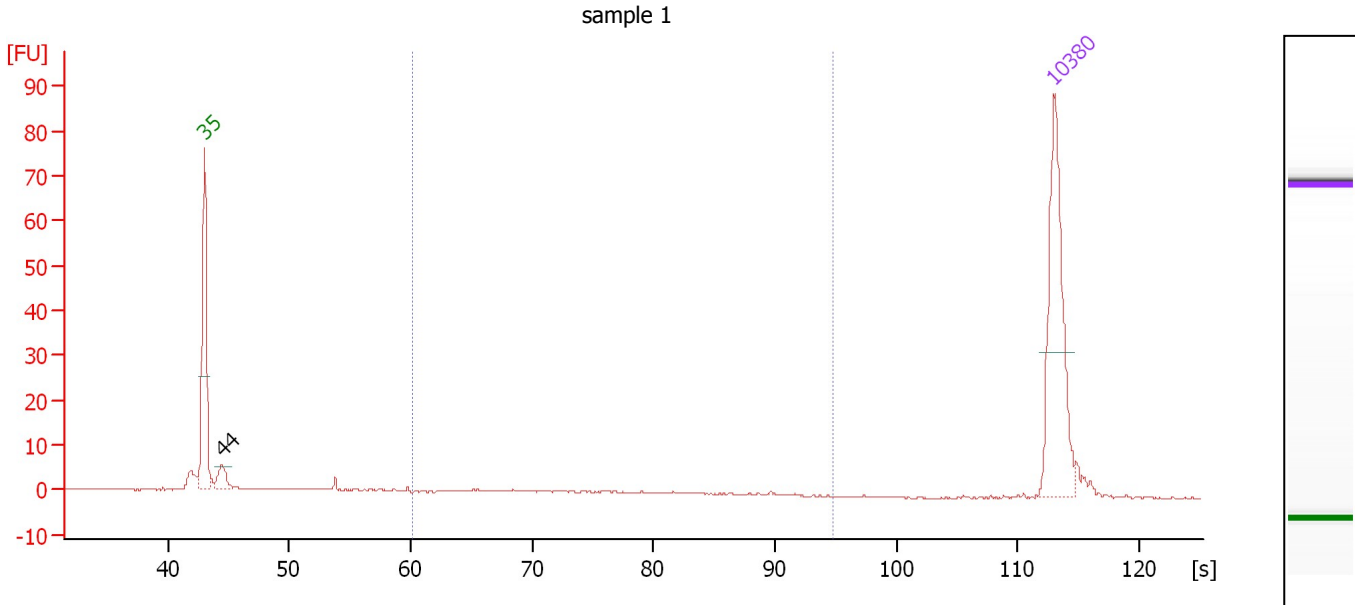
Peak table for Ladder

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
16	11,346	0.00	0.0	excluded peak

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 1 Corr. Area 1: 14.8
 Noise: 0.2

Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	15.08	518.0	
3	10,380	75.00	10.9	Upper Marker

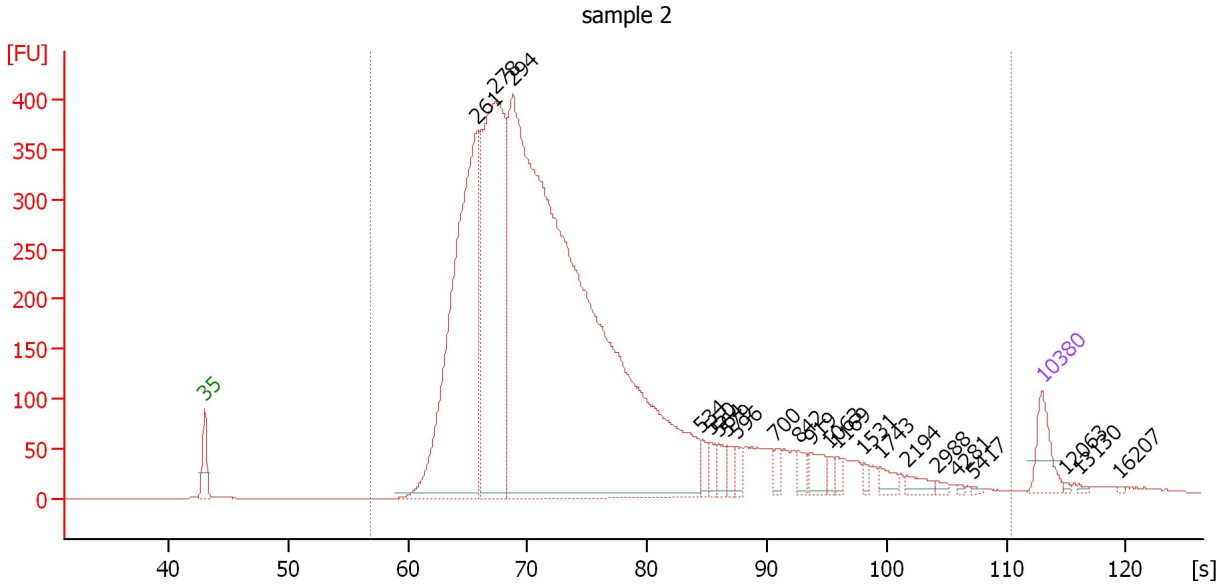
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	385	70.7	15.70	14.8	23	32.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 22 Corr. Area 1: 7,979.0
 Noise: 0.1

Peak table for sample 2 : sample 2


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	1,469.22	8,532.2	
3	278	1,272.71	6,932.8	
4	294	4,585.44	23,638.1	
5	534	38.14	108.2	
6	550	31.09	85.6	
7	564	35.96	96.7	
8	579	34.44	90.2	
9	596	30.76	78.2	
10	700	25.53	55.2	
11	842	30.05	54.1	
12	919	51.82	85.4	
13	1,063	19.04	27.1	
14	1,169	20.52	26.6	
15	1,531	12.64	12.5	
16	1,743	26.41	23.0	
17	2,194	25.48	17.6	
18	2,988	8.95	4.5	
19	4,281	4.01	1.4	
20	5,417	3.89	1.1	
21	10,380	75.00	10.9	Upper Marker
22	12,063	0.00	0.0	
23	13,130	0.00	0.0	
24	16,207	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...

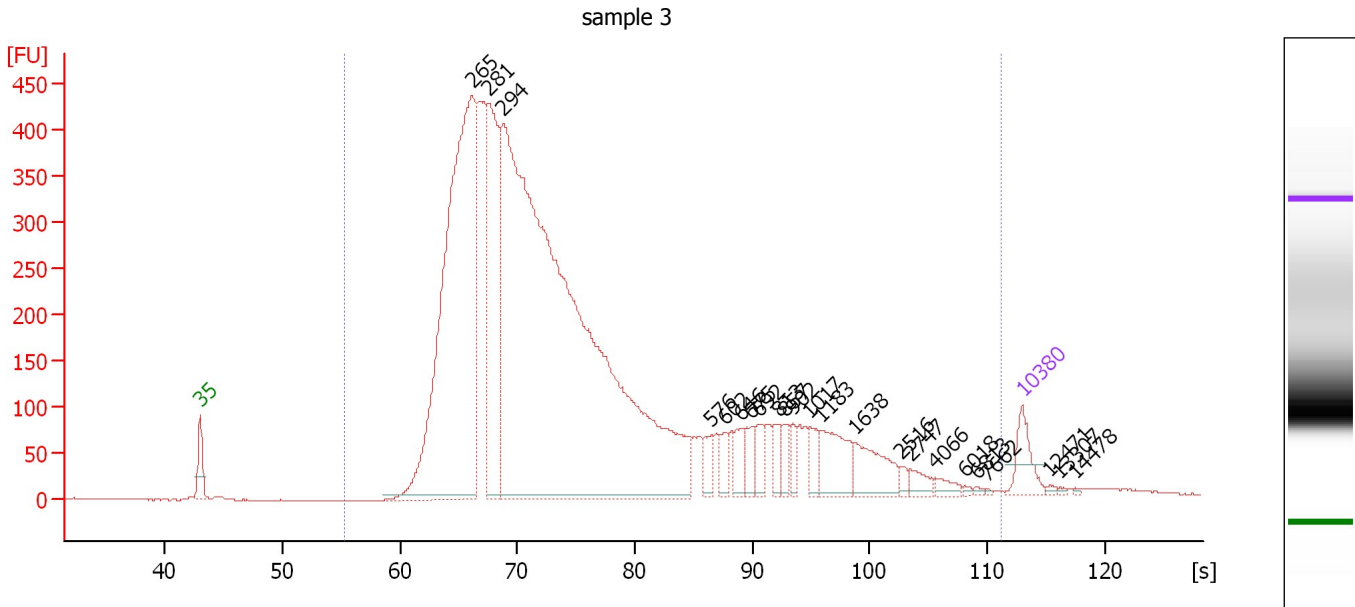
... Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
164	7,974	445	35,594.7	7,577.99	 7,979.0	99	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 23 Corr. Area 1: 9,056.6
 Noise: 0.5

Peak table for sample 3 : sample 3


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	265	2,189.35	12,511.3	
3	281	710.60	3,835.7	
4	294	4,644.46	23,915.0	
5	576	50.02	131.6	
6	602	50.41	126.9	
7	646	63.60	149.1	
8	675	62.08	139.4	
9	692	70.89	155.1	
10	813	56.90	106.1	
11	857	46.53	82.2	
12	902	38.84	65.3	
13	1,017	53.46	79.6	
14	1,183	148.37	190.0	
15	1,638	125.93	116.5	
16	2,516	15.65	9.4	
17	2,747	30.57	16.9	
18	4,066	22.65	8.4	
19	6,018	6.06	1.5	
20	6,813	4.95	1.1	
21	7,662	2.73	0.5	
22	10,380	75.00	10.9	Upper Marker
23	12,471	0.00	0.0	
24	13,307	0.00	0.0	
25	14,478	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...

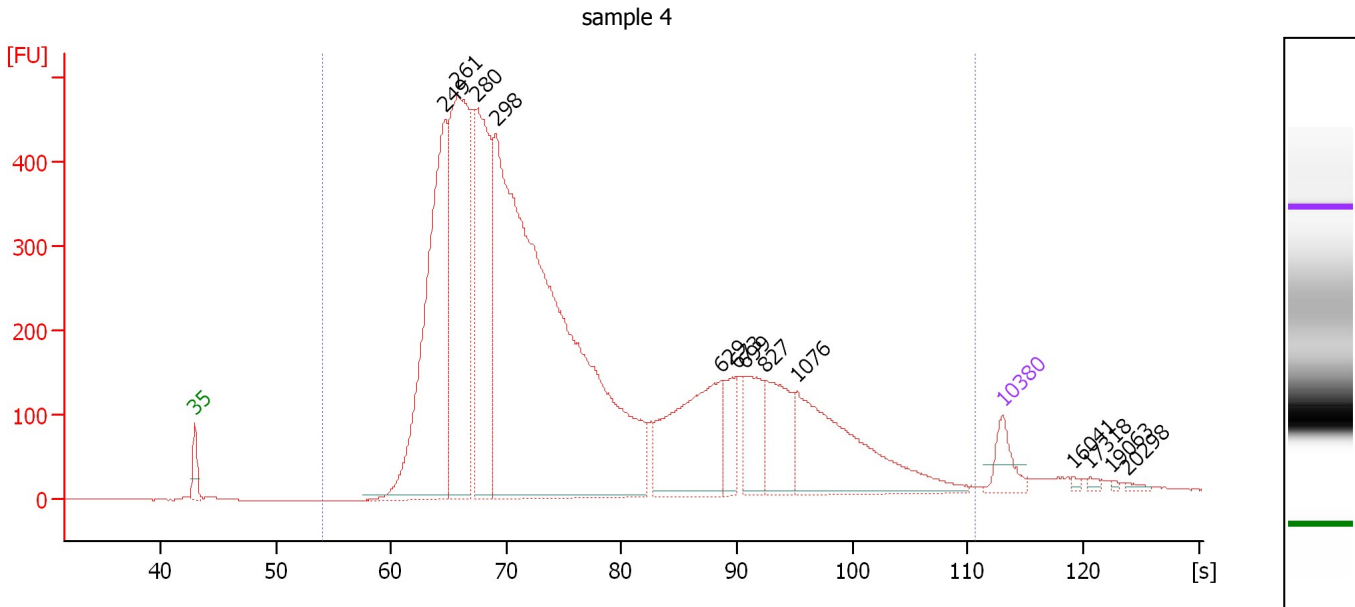
... Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
148	8,691	525	39,277.3	8,570.56	 9,056.6	99	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 13 Corr. Area 1: 10,808.5
 Noise: 0.5

Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	249	1,477.81	8,983.2	
3	261	1,332.60	7,735.7	
4	280	981.75	5,314.1	
5	298	3,865.93	19,668.9	
6	629	574.19	1,382.1	
7	673	147.05	330.9	
8	699	225.95	489.8	
9	827	260.01	476.5	
10	1,076	560.99	790.2	
11	10,380	75.00	10.9	Upper Marker
12	16,041	0.00	0.0	
13	17,318	0.00	0.0	
14	19,063	0.00	0.0	
15	20,298	0.00	0.0	

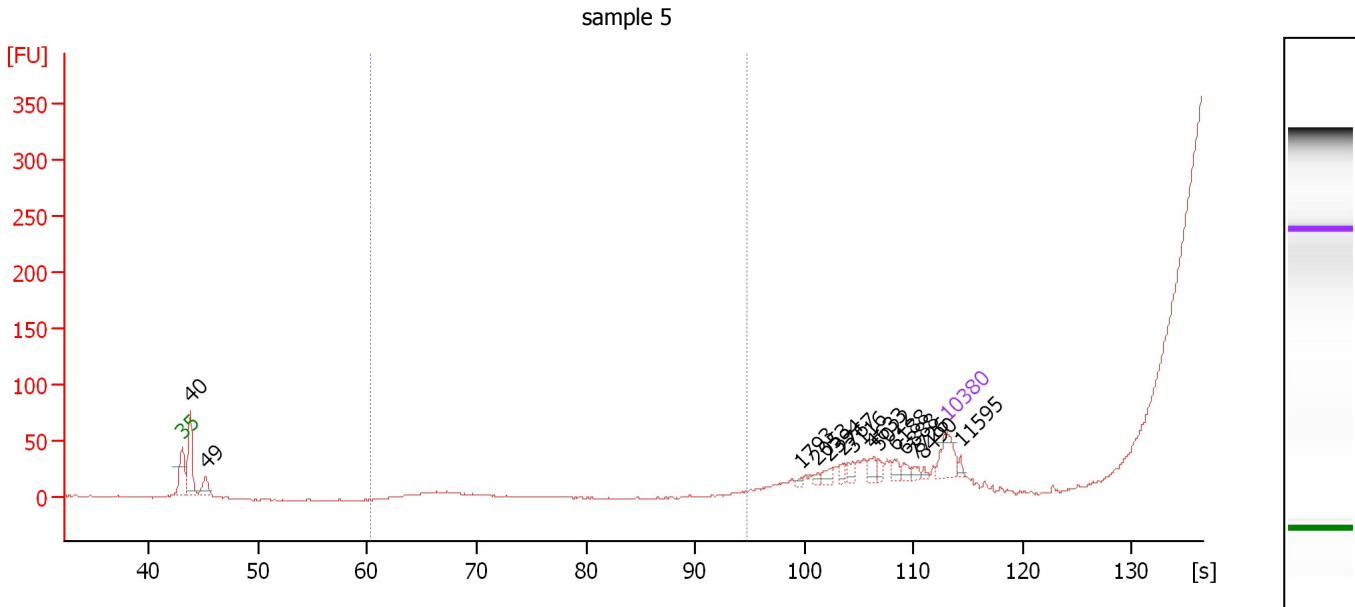
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
134	8,238	554	41,033.4	9,097.08	10,808.5	99	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 14 Corr. Area 1: 0.0
 Noise: 0.6

Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	246.48	9,395.9	
3	49	72.74	2,252.8	
4	1,793	6.41	5.4	
5	2,053	9.63	7.1	
6	2,394	21.73	13.8	
7	2,767	15.93	8.7	
8	3,116	20.81	10.1	
9	4,633	26.67	8.7	
10	5,022	16.88	5.1	
11	6,188	23.01	5.6	
12	6,888	17.76	3.9	
13	7,726	13.12	2.6	
14	8,490	7.37	1.3	
15	10,380	75.00	10.9	Upper Marker
16	11,595	0.00	0.0	

Region table for sample 5 : sample 5

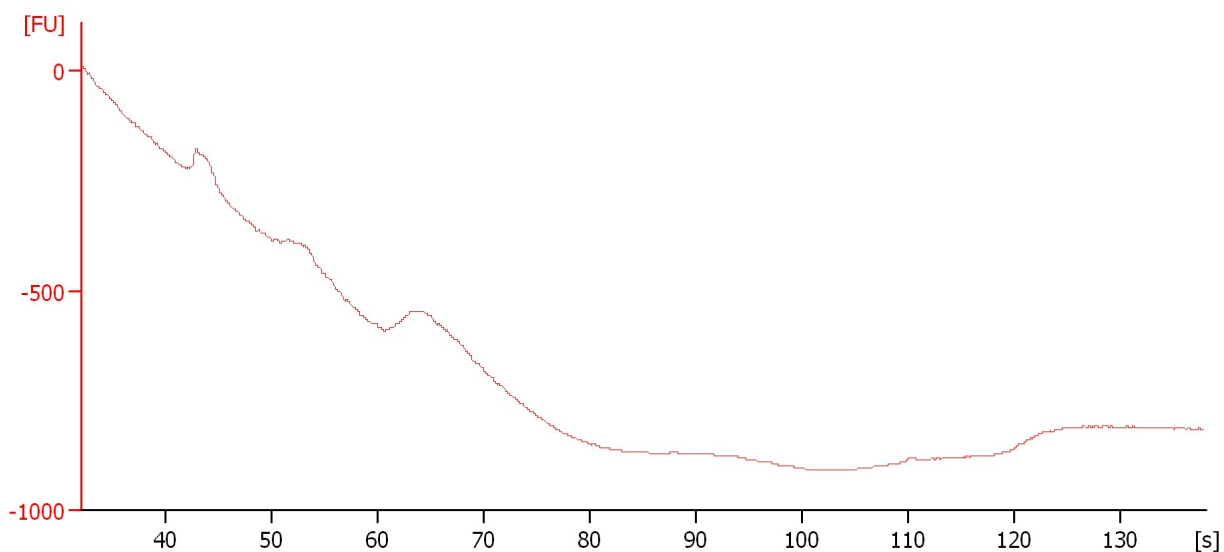
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	0	0.0	0.00	0.0	0	0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...

sample 6



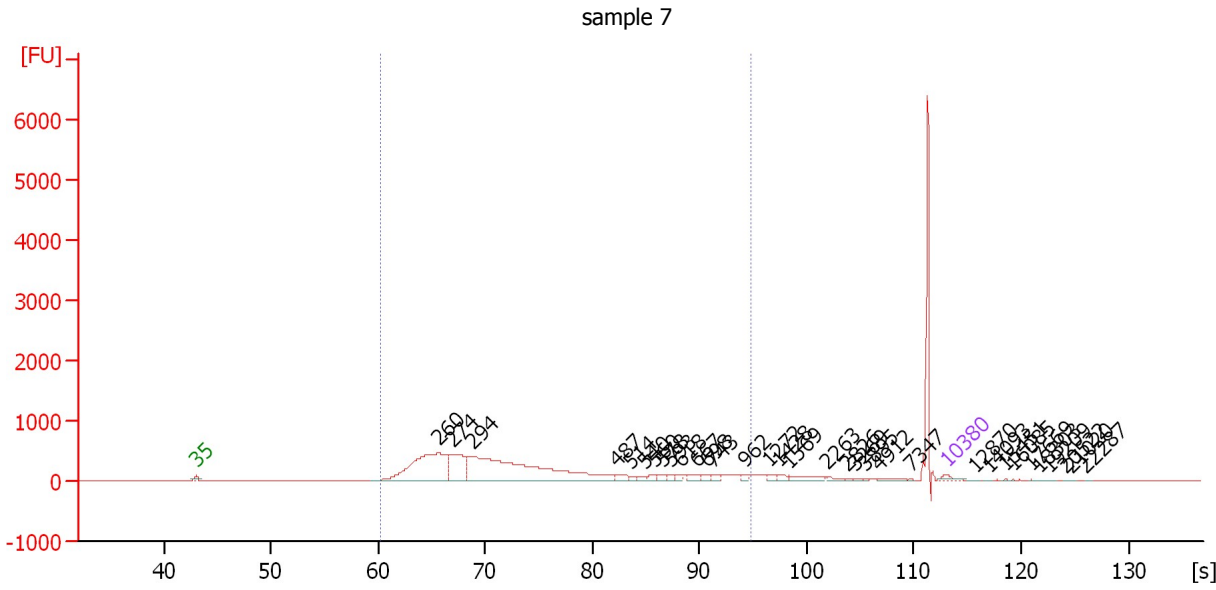
Overall Results for sample 6 : sample 6

Noise: 0.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 33 Corr. Area 1: 9,272.0
 Noise: 1.2

Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	260	2,966.30	17,318.1	
3	274	1,131.80	6,266.5	
4	294	4,744.77	24,472.2	
5	487	131.51	409.3	
6	514	65.23	192.4	
7	540	74.87	210.1	
8	560	70.69	191.3	
9	578	88.07	230.9	
10	593	57.34	146.6	
11	618	80.68	198.0	
12	667	108.03	245.3	
13	698	88.10	191.3	
14	743	97.28	198.3	
15	962	66.62	104.9	
16	1,272	63.30	75.4	
17	1,428	66.85	70.9	
18	1,569	167.86	162.1	
19	2,263	50.24	33.6	
20	2,826	22.35	12.0	
21	3,269	17.25	8.0	
22	3,895	12.69	4.9	
23	4,912	38.54	11.9	
24	7,347	6.20	1.3	
25	10,380	75.00	10.9	Upper Marker
26	12,870	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad


Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...

... Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	14,093	0.00	0.0	
28	15,451	0.00	0.0	
29	16,085	0.00	0.0	
30	17,669	0.00	0.0	
31	18,303	0.00	0.0	
32	19,209	0.00	0.0	
33	20,522	0.00	0.0	
34	21,020	0.00	0.0	
35	22,287	0.00	0.0	

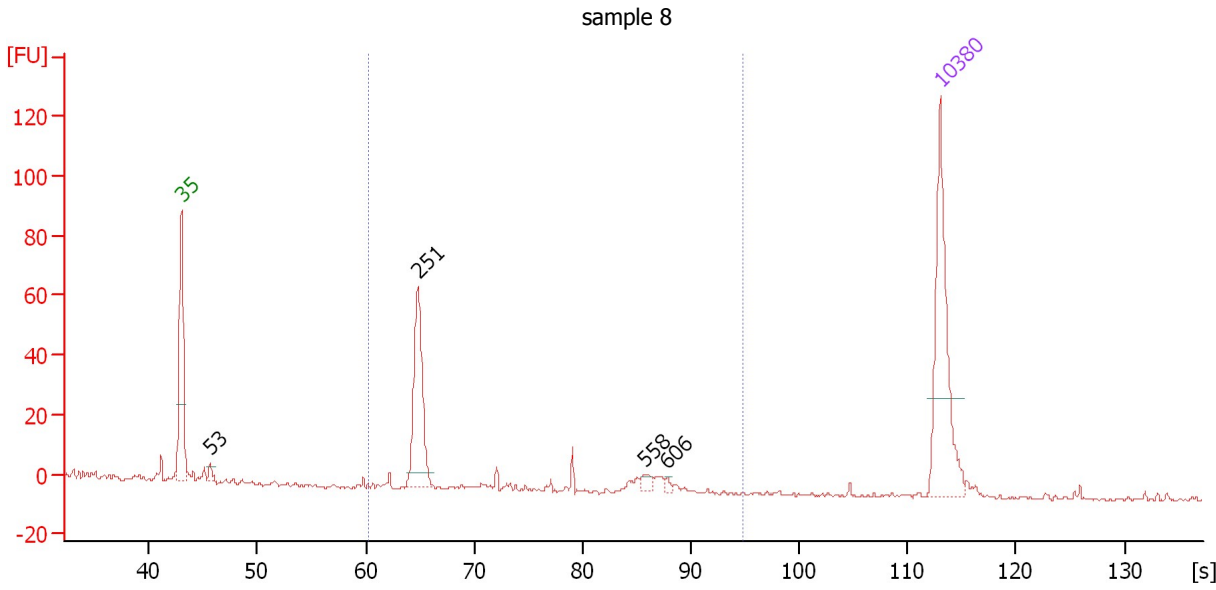
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	374	45,786.2	9,541.16	 9,272.0	80	43.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 4 Corr. Area 1: 101.0
 Noise: 0.5

Peak table for sample 8 : sample 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	5.36	154.1	
3	251	89.54	540.5	
4	558	5.61	15.2	
5	606	2.15	5.4	
6	10,380	75.00	10.9	Upper Marker

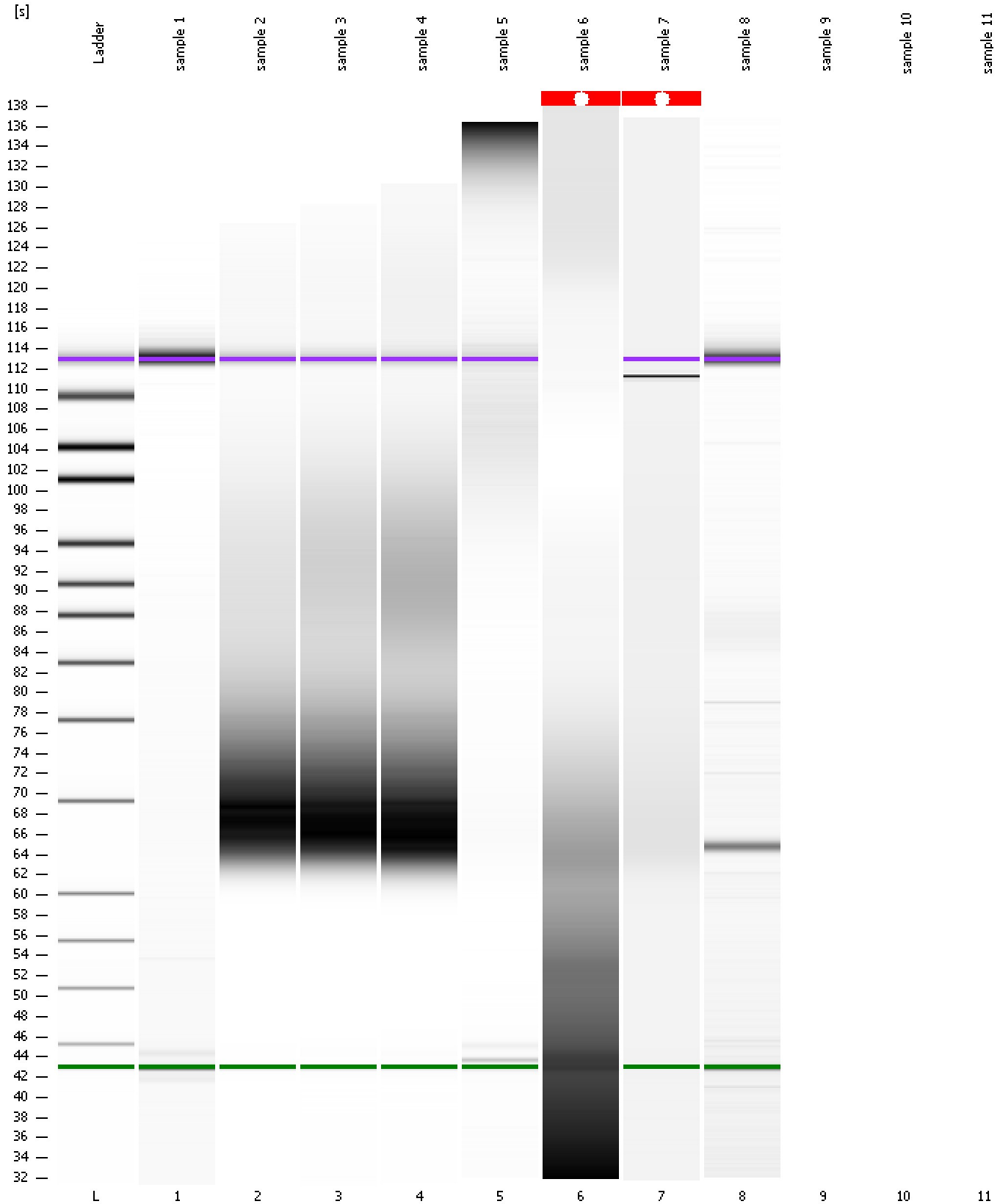
Region table for sample 8 : sample 8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	300	516.6	90.92	101.0	92	36.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
Modified: 8/6/2014 10:49:33 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
Modified: 8/6/2014 10:49:33 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:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad

Created: 8/6/2014 10:14:01 AM
 Modified: 8/6/2014 10:49:33 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		8/6/2014 10:46:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_002.xad)		Instrument	Run		8/6/2014 10:14:06 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/6/2014 10:14:06 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/6/2014 10:14:06 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/6/2014 10:14:06 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/6/2014 10:14:06 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/6/2014 10:14:06 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/6/2014 10:14:06 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1