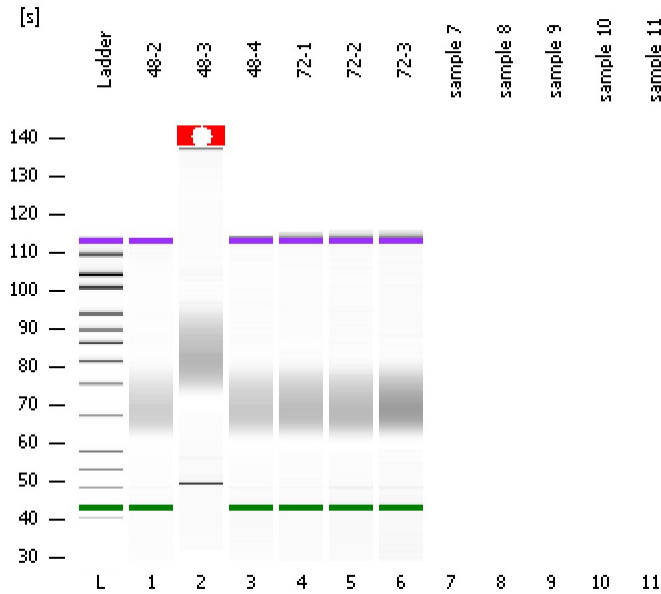


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
Modified: 10/13/2014 1:49:00 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

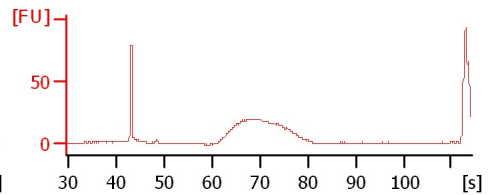
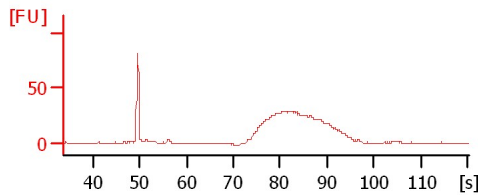
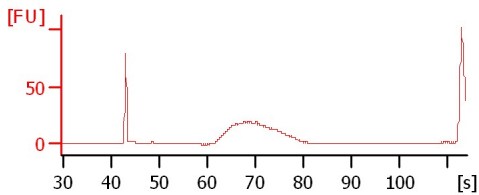
Chip Information:

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

48-2

48-3

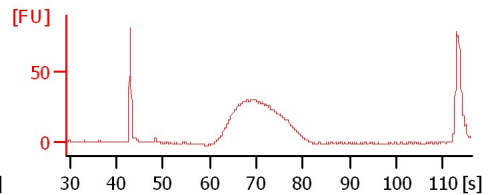
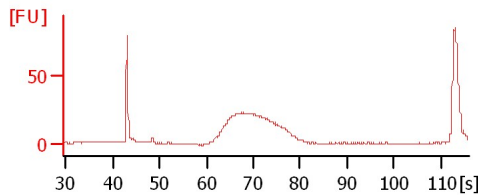
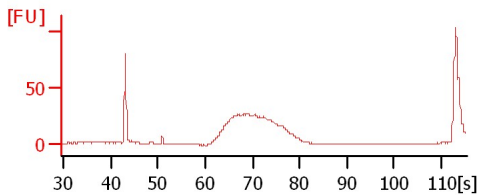
48-4



72-1

72-2

72-3



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
 Modified: 10/13/2014 1:49:00 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
48-2		<input type="checkbox"/>	✓			
48-3		<input type="checkbox"/>	✓			
48-4		<input type="checkbox"/>	✓			
72-1		<input type="checkbox"/>	✓			
72-2		<input type="checkbox"/>	✓			
72-3		<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:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
 Modified: 10/13/2014 1:49:00 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

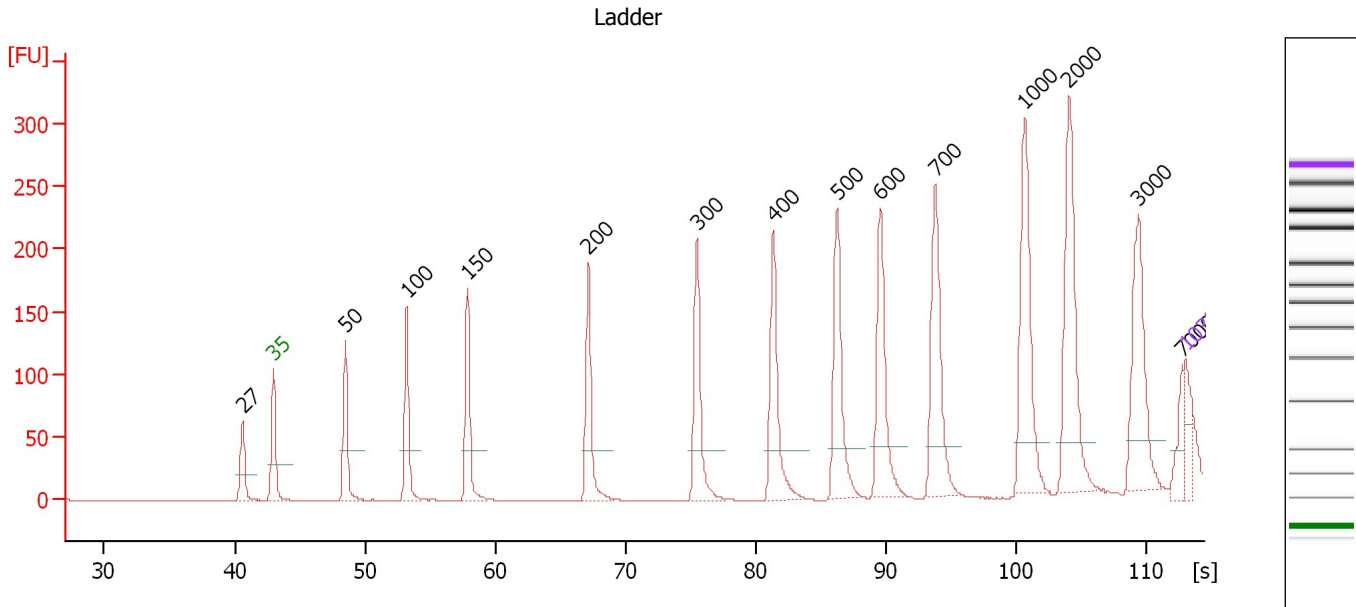
Ladder

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\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
 Modified: 10/13/2014 1:49:00 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

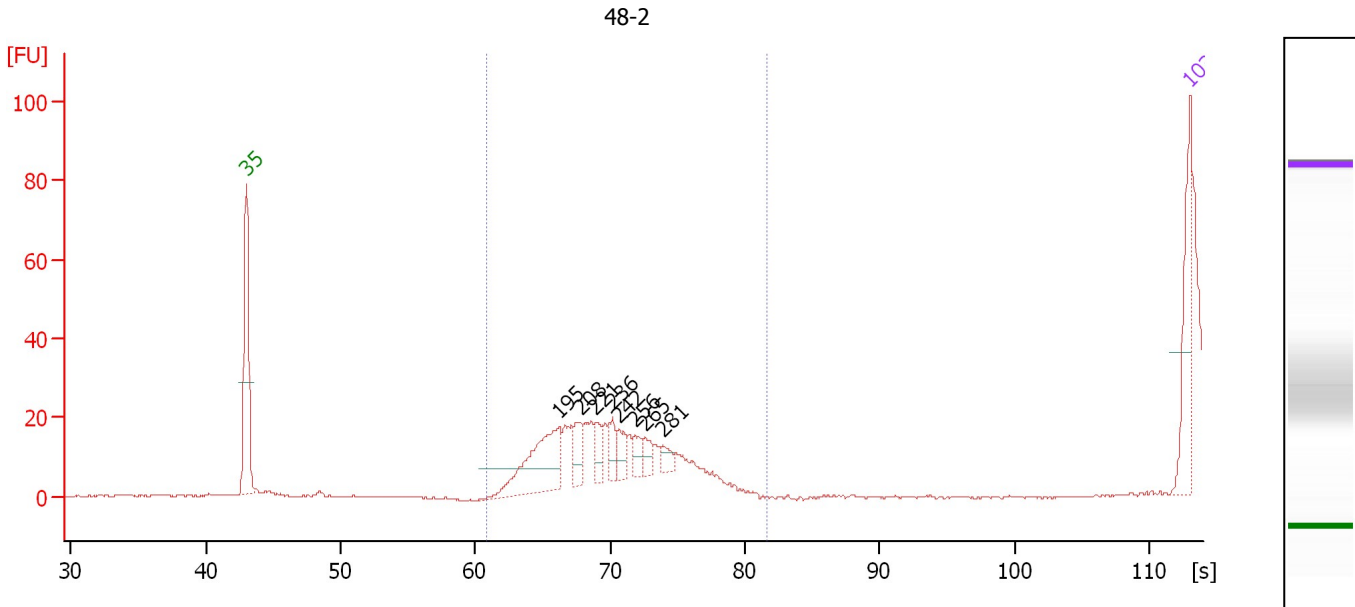
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	27	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	50	150.00	4,545.5	Ladder Peak
4	100	150.00	2,272.7	Ladder Peak
5	150	150.00	1,515.2	Ladder Peak
6	200	150.00	1,136.4	Ladder Peak
7	300	150.00	757.6	Ladder Peak
8	400	150.00	568.2	Ladder Peak
9	500	150.00	454.5	Ladder Peak
10	600	150.00	378.8	Ladder Peak
11	700	150.00	324.7	Ladder Peak
12	1,000	150.00	227.3	Ladder Peak
13	2,000	150.00	113.6	Ladder Peak
14	3,000	150.00	75.8	Ladder Peak
15	7,000	150.00	32.5	Ladder Peak
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
 Modified: 10/13/2014 1:49:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 48-2

Number of peaks found: 8 Corr. Area 1: 0.0
 Noise: 0.2

Peak table for sample 1 : 48-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	195	192.04	1,493.4	
3	208	49.06	358.0	
4	221	30.71	210.5	
5	236	28.51	182.7	
6	242	32.57	204.2	
7	256	26.44	156.2	
8	265	24.99	142.8	
9	281	20.59	111.1	
10	10,380	75.00	10.9	Upper Marker

Region table for sample 1 : 48-2

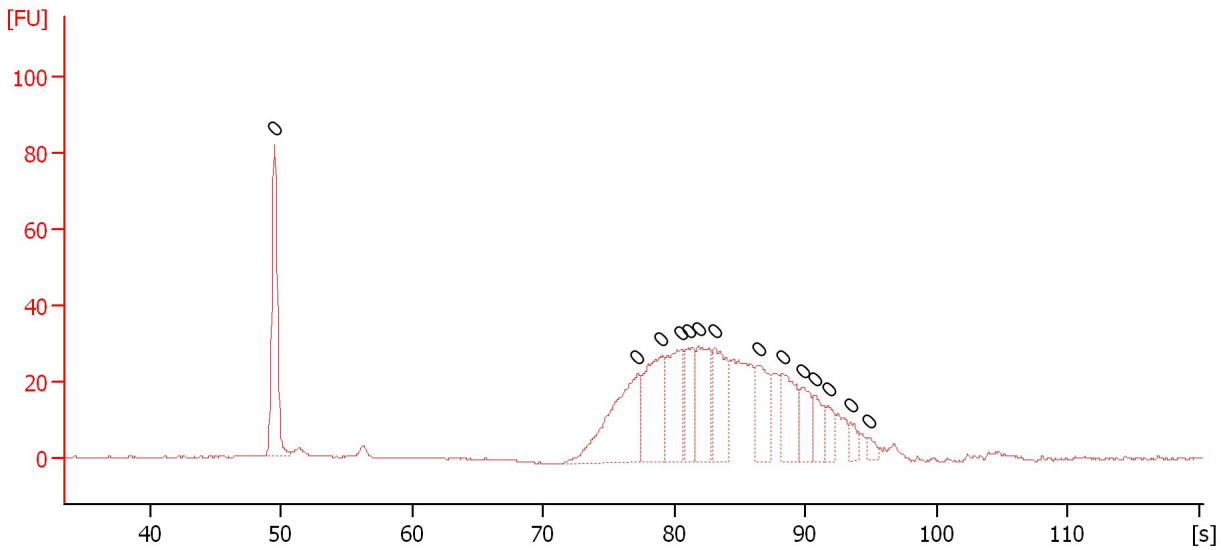
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
166	0	406	0.0	0	0.0	0.00	0.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
Modified: 10/13/2014 1:49:00 PM

Electropherogram Summary Continued ...

48-3



Overall Results for sample 2 : 48-3

Number of peaks found: 0 Noise: 0.1

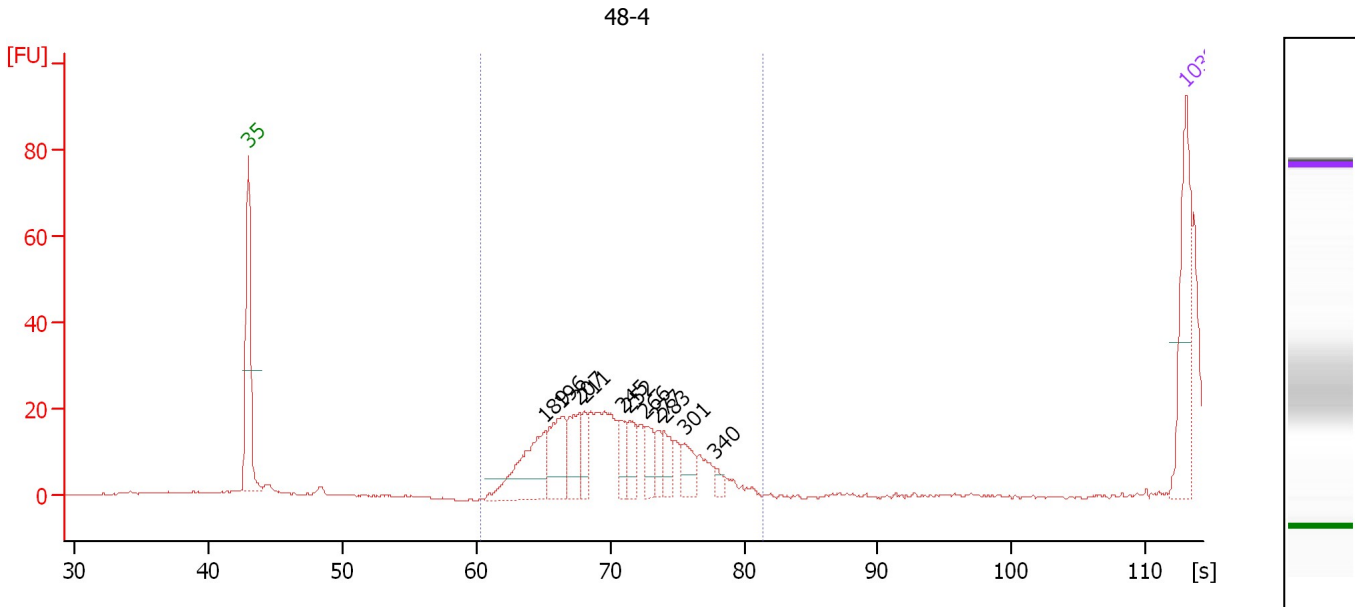
Peak table for sample 2 : 48-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	0	0.00	0.0	
3	0	0.00	0.0	
4	0	0.00	0.0	
5	0	0.00	0.0	
6	0	0.00	0.0	
7	0	0.00	0.0	
8	0	0.00	0.0	
9	0	0.00	0.0	
10	0	0.00	0.0	
11	0	0.00	0.0	
12	0	0.00	0.0	
13	0	0.00	0.0	
14	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
 Modified: 10/13/2014 1:49:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 48-4

Number of peaks found: 11 Corr. Area 1: 0.0
 Noise: 0.2

Peak table for sample 3 : 48-4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	189	117.95	944.1	
3	196	82.94	641.2	
4	207	60.39	442.1	
5	211	30.83	221.1	
6	245	25.71	159.0	
7	252	35.93	216.3	
8	266	32.02	182.3	
9	277	20.55	112.5	
10	283	30.38	162.7	
11	301	31.85	160.2	
12	340	9.75	43.4	
13	10,380	75.00	10.9	Upper Marker

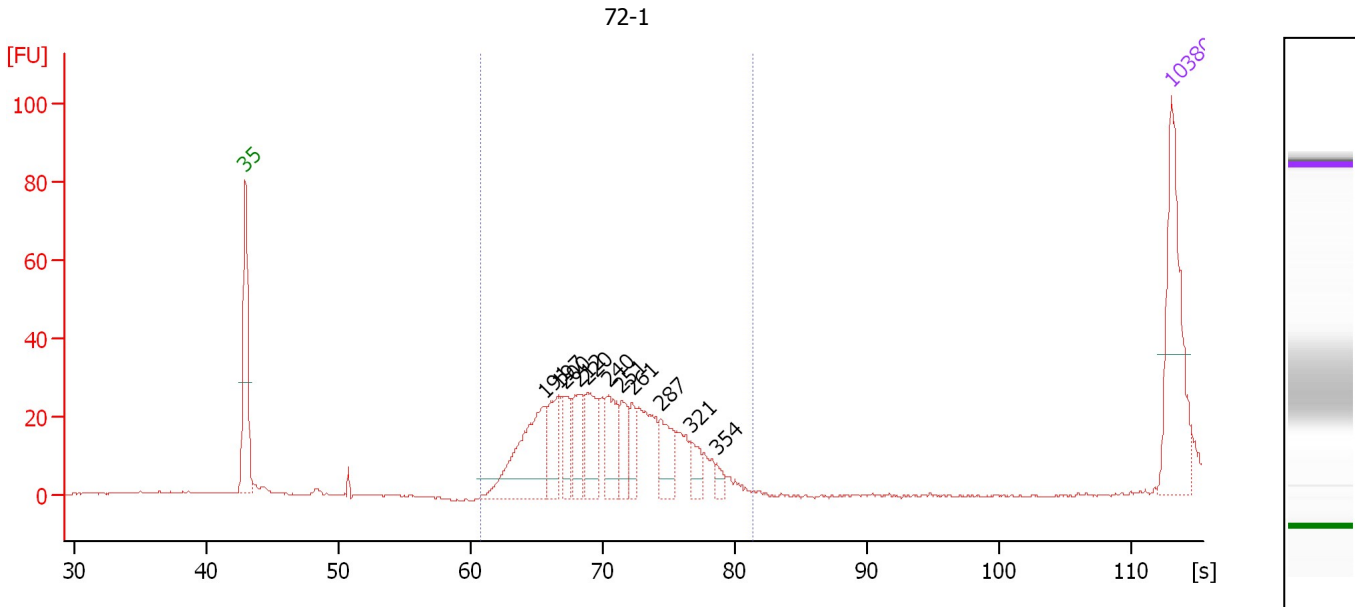
Region table for sample 3 : 48-4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
163	0	403	0.0	0	0.0	0.00	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
 Modified: 10/13/2014 1:49:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 72-1

Number of peaks found: 11 Corr. Area 1: 304.5
 Noise: 0.2

Peak table for sample 4 : 72-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	191	116.58	922.5	
3	197	44.56	342.0	
4	200	33.92	257.5	
5	212	42.87	306.1	
6	220	51.62	355.5	
7	240	43.65	276.1	
8	251	27.62	166.6	
9	261	23.32	135.4	
10	287	35.84	189.3	
11	321	17.57	83.0	
12	354	7.04	30.1	
13	10,380	75.00	10.9	Upper Marker

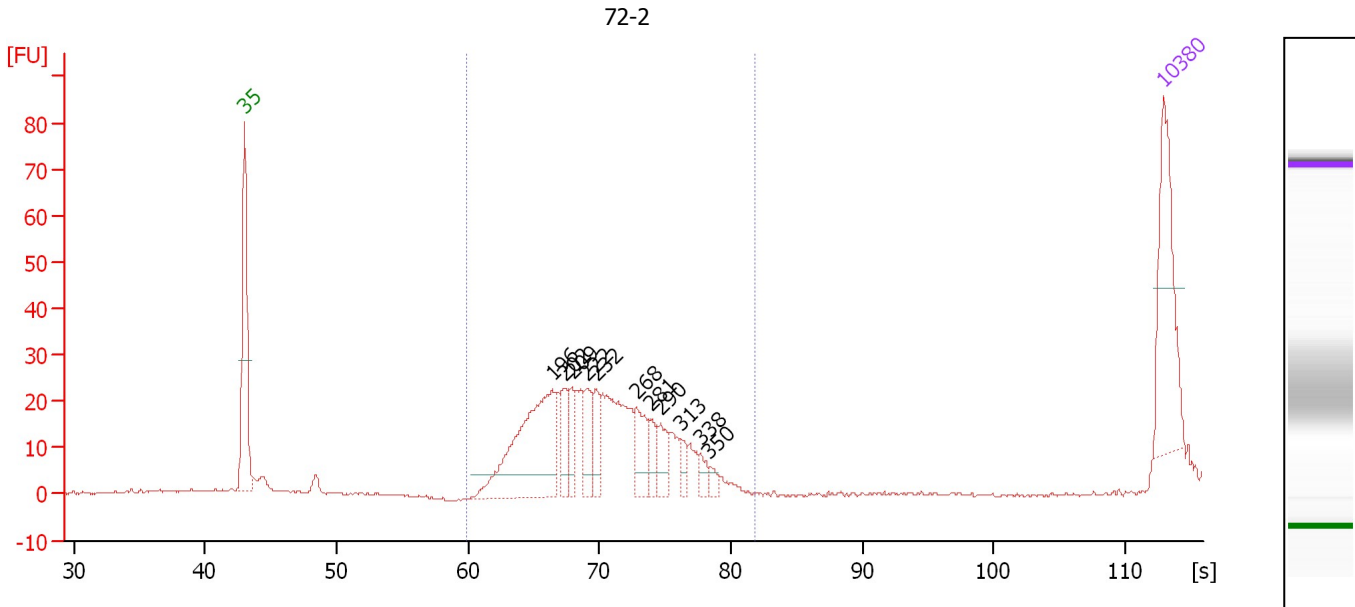
Region table for sample 4 : 72-1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
165	235	400	304.5	100	17.0	352.26	2,345.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
 Modified: 10/13/2014 1:49:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 72-2

Number of peaks found: 11 Corr. Area 1: 331.4
 Noise: 0.2

Peak table for sample 5 : 72-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	196	187.50	1,448.4	
3	202	33.81	253.3	
4	209	29.00	210.2	
5	222	36.33	248.1	
6	232	26.72	174.7	
7	268	40.05	226.4	
8	281	22.07	118.9	
9	290	24.36	127.2	
10	313	11.60	56.2	
11	338	10.85	48.6	
12	350	6.77	29.3	
13	10,380	75.00	10.9	Upper Marker

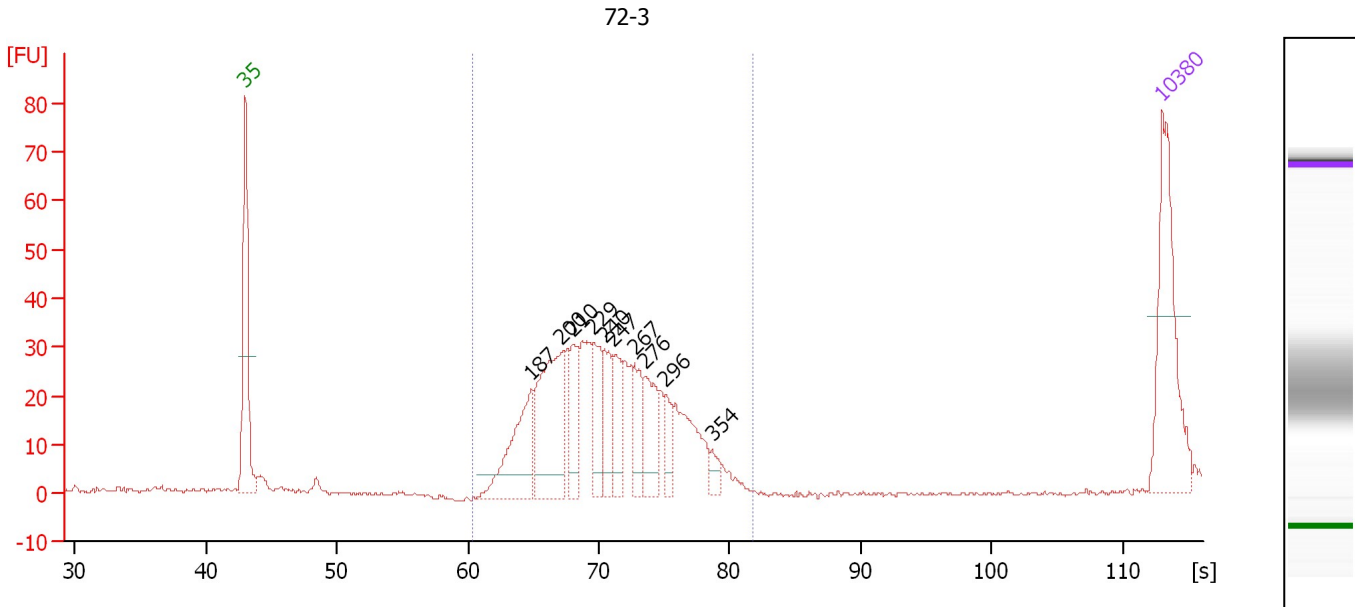
Region table for sample 5 : 72-2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
161	235	412	331.4	97	18.4	491.67	3,292.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
 Modified: 10/13/2014 1:49:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 72-3

Number of peaks found: 10 Corr. Area 1: 453.0
 Noise: 0.3

Peak table for sample 6 : 72-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	187	90.81	734.1	
3	200	128.97	976.5	
4	210	43.16	311.4	
5	229	45.86	303.2	
6	240	38.18	241.0	
7	247	40.60	248.6	
8	267	36.81	208.8	
9	276	45.52	249.4	
10	296	19.96	102.3	
11	354	9.70	41.5	
12	10,380	75.00	10.9	Upper Marker

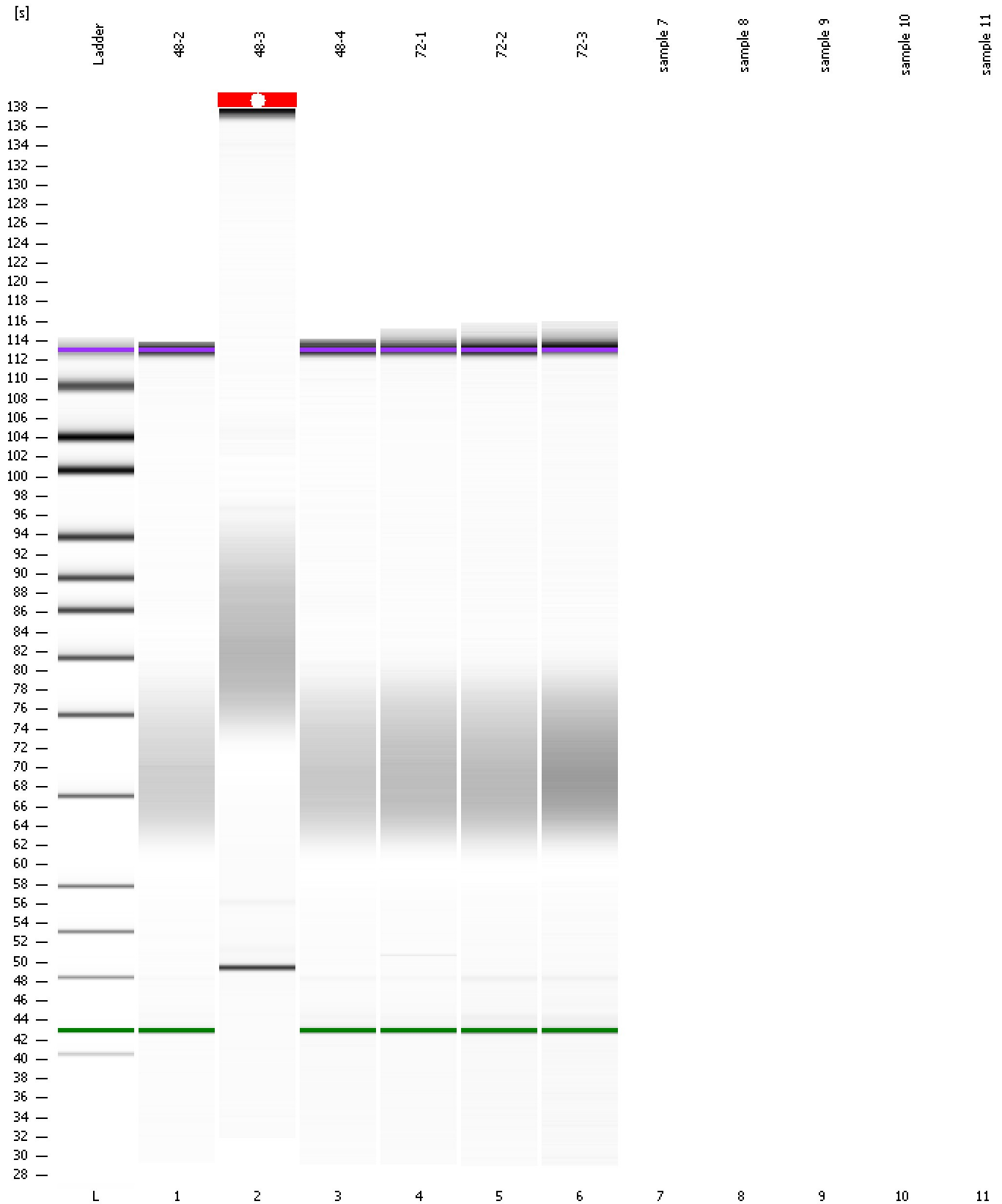
Region table for sample 6 : 72-3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
164	241	409	453.0	99	18.6	567.54	3,701.9	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
Modified: 10/13/2014 1:49:00 PM

Gel Image

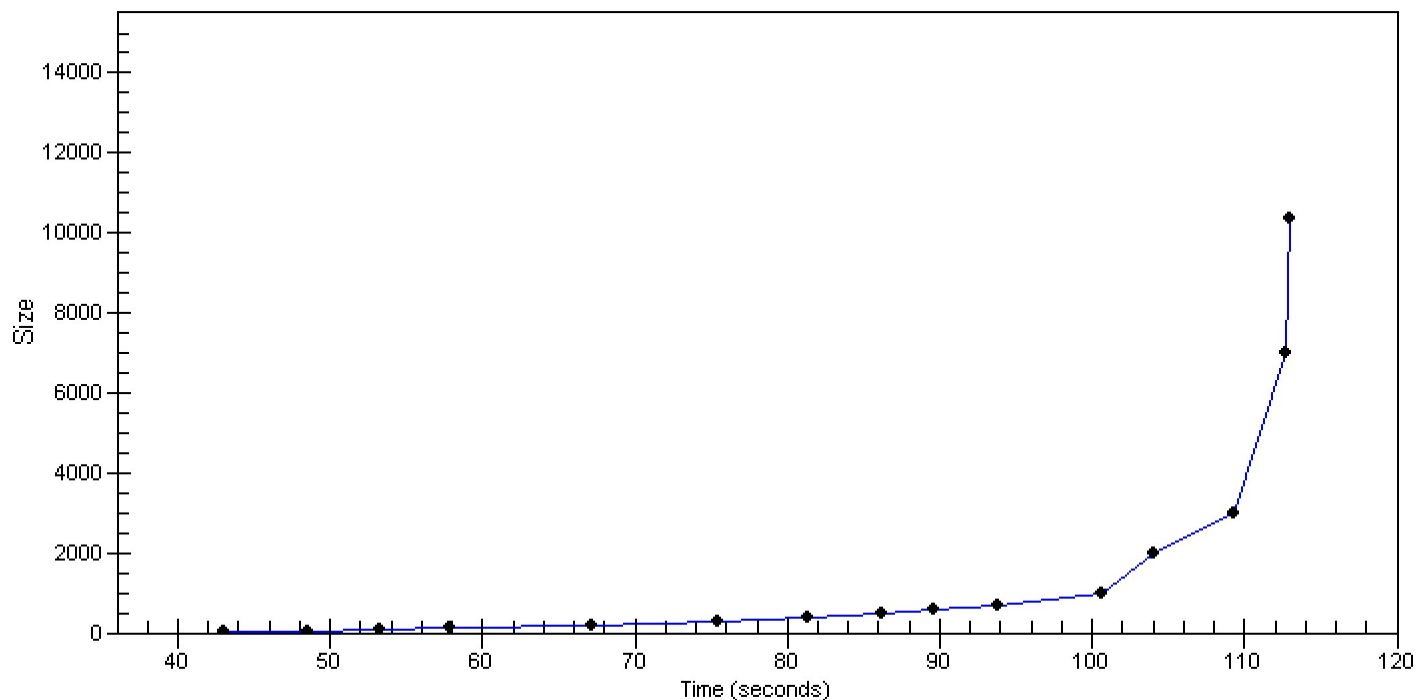


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
Modified: 10/13/2014 1:49:00 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
Modified: 10/13/2014 1:49:00 PM

Invalid Samples

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

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\2014-10-13\2014-10-13_001.xad

Created: 10/13/2014 1:20:52 PM
 Modified: 10/13/2014 1:49:00 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 7)		Instrument	Run		10/13/2014 1:47:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-10-13\2014-10-13_001.xad)		Instrument	Run		10/13/2014 1:20:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/13/2014 1:20:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/13/2014 1:20:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/13/2014 1:20:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/13/2014 1:20:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/13/2014 1:20:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/13/2014 1:20:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1