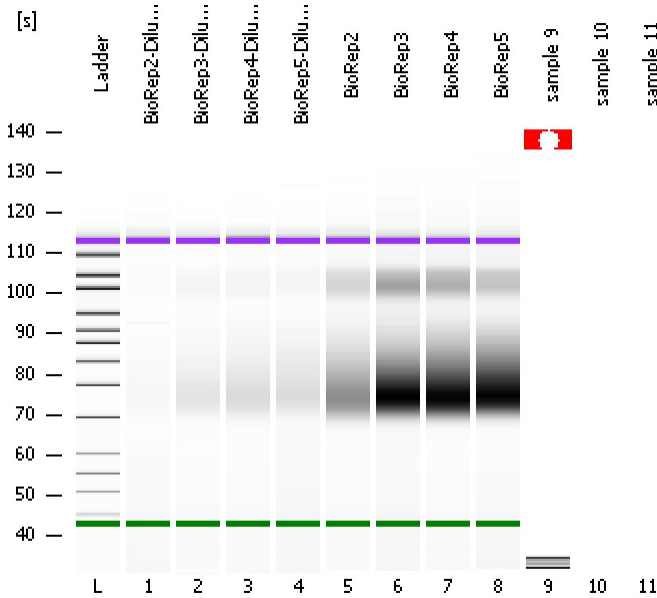


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
Modified: 8/22/2013 12:33:02 PM

Electrophoresis File Run Summary



Instrument Information:

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

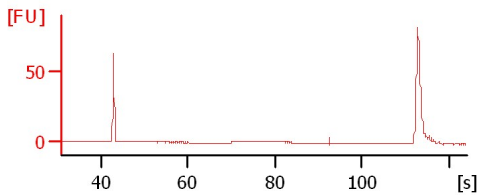
Assay Information:

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

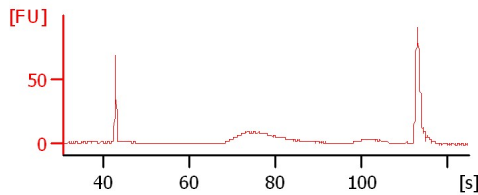
Chip Information:

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

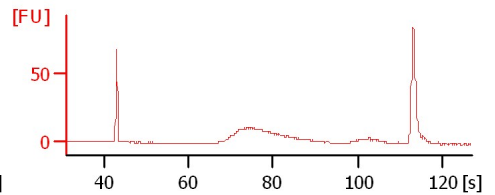
BioRep2-Diluted



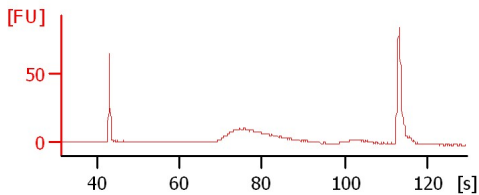
BioRep3-Diluted



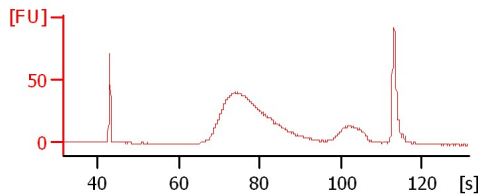
BioRep4-Diluted



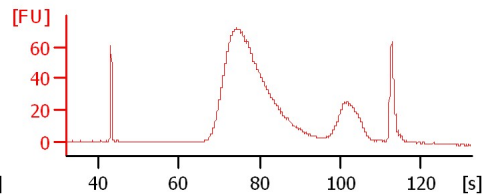
BioRep5-Diluted



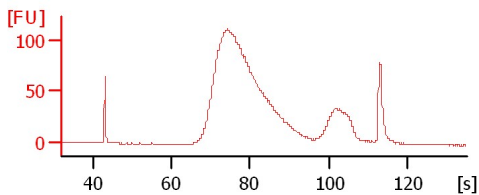
BioRep2



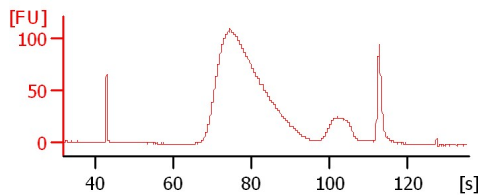
BioRep3



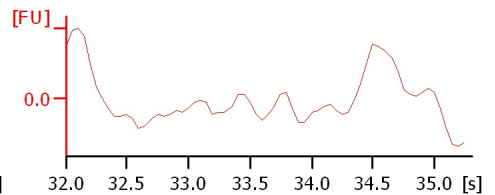
BioRep4



BioRep5



sample 9



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
Modified: 8/22/2013 12:33:02 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
BioRep2-Diluted		<input type="checkbox"/>	✓			
BioRep3-Diluted		<input type="checkbox"/>	✓			
BioRep4-Diluted		<input type="checkbox"/>	✓			
BioRep5-Diluted		<input type="checkbox"/>	✓			
BioRep2		<input type="checkbox"/>	✓			
BioRep3		<input type="checkbox"/>	✓			
BioRep4		<input type="checkbox"/>	✓			
BioRep5		<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\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
Modified: 8/22/2013 12:33:02 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

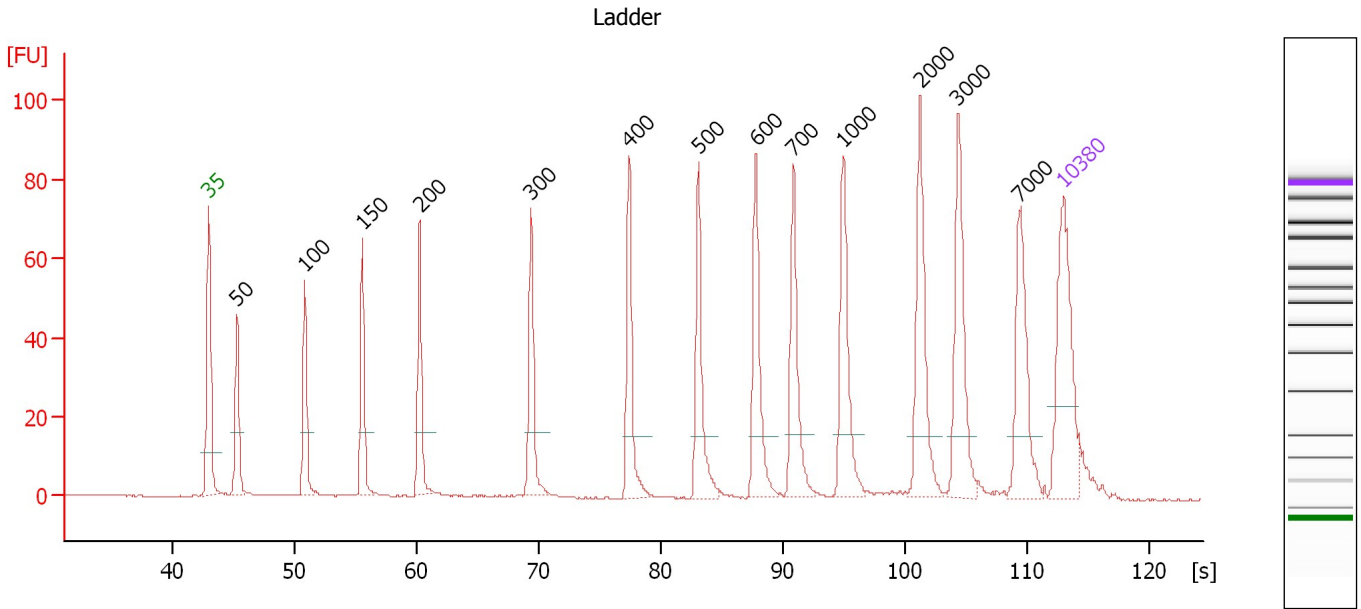
Ladder

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\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
 Modified: 8/22/2013 12:33:02 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

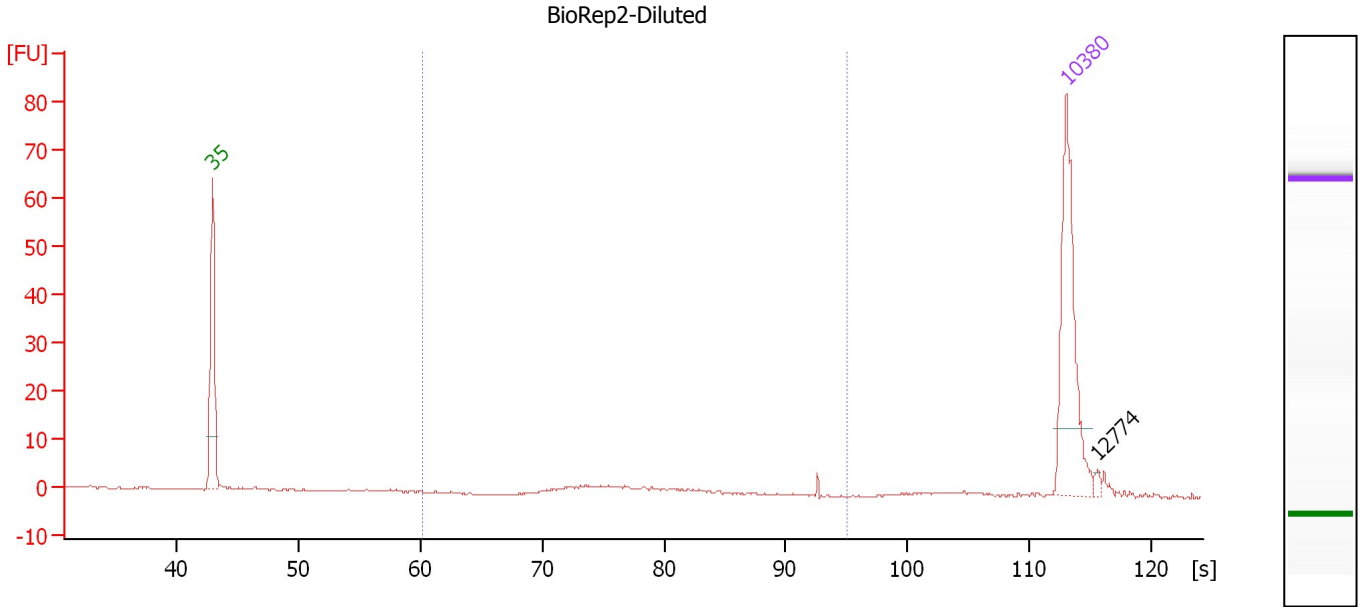
Peak table for Ladder

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\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
 Modified: 8/22/2013 12:33:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : BioRep2-Diluted

Number of peaks found: 1 Corr. Area 1: 14.5
 Noise: 0.1

Peak table for sample 1 : BioRep2-Diluted

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,774	0.00	0.0	

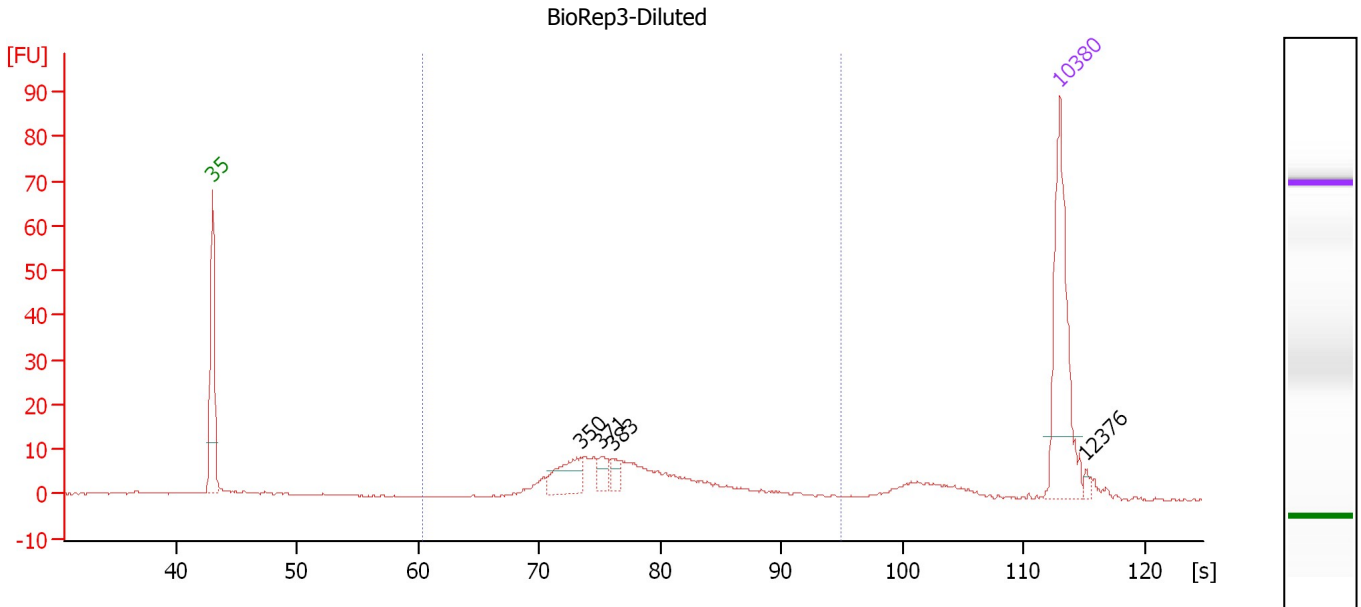
Region table for sample 1 : BioRep2-Diluted

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	425	65.6	17.33	14.5	56	27.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
 Modified: 8/22/2013 12:33:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : BioRep3-Diluted

Number of peaks found: 4 Corr. Area 1: 141.5
 Noise: 0.1

Peak table for sample 2 : BioRep3-Diluted

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	350	30.56	132.2	
3	371	11.26	46.0	
4	383	8.89	35.1	
5	10,380	75.00	10.9	Upper Marker
6	12,376	0.00	0.0	

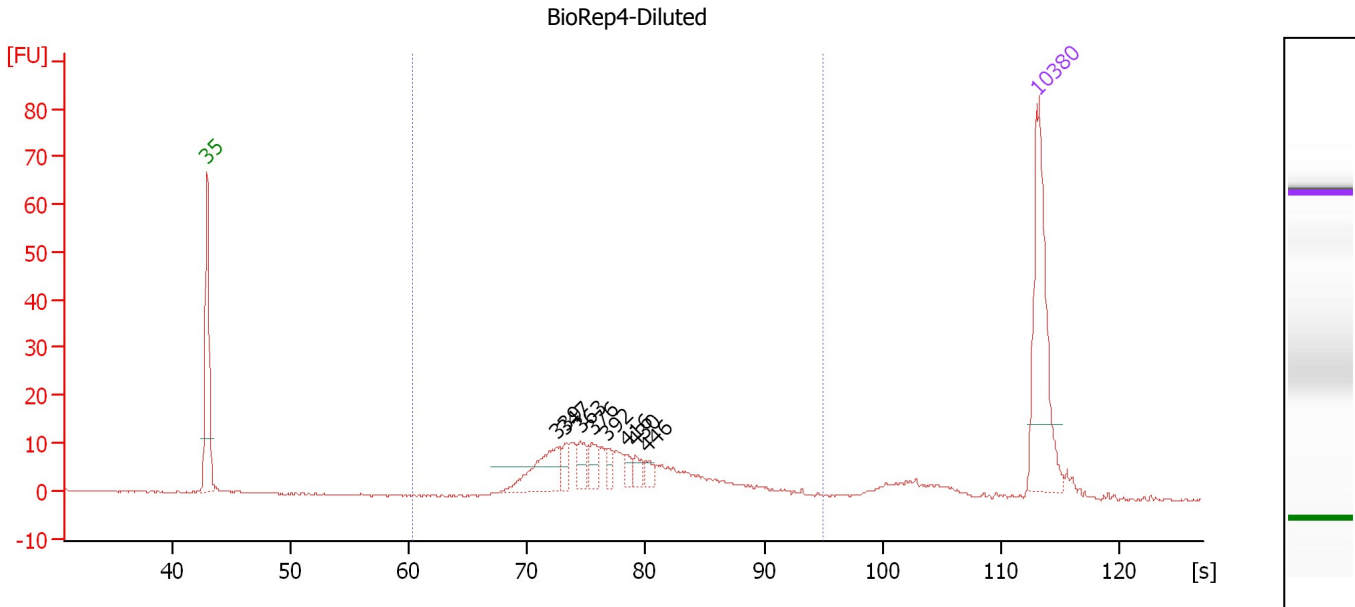
Region table for sample 2 : BioRep3-Diluted

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	419	599.7	156.55	141.5	76	24.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
 Modified: 8/22/2013 12:33:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : BioRep4-Diluted

Number of peaks found: 8 Corr. Area 1: 187.2
 Noise: 0.2

Peak table for sample 3 : BioRep4-Diluted

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	339	42.75	191.2	
3	347	9.84	42.9	
4	363	13.97	58.3	
5	376	13.64	55.0	
6	392	7.58	29.3	
7	416	6.82	24.8	
8	430	8.50	29.9	
9	446	5.81	19.7	
10	10,380	75.00	10.9	Upper Marker

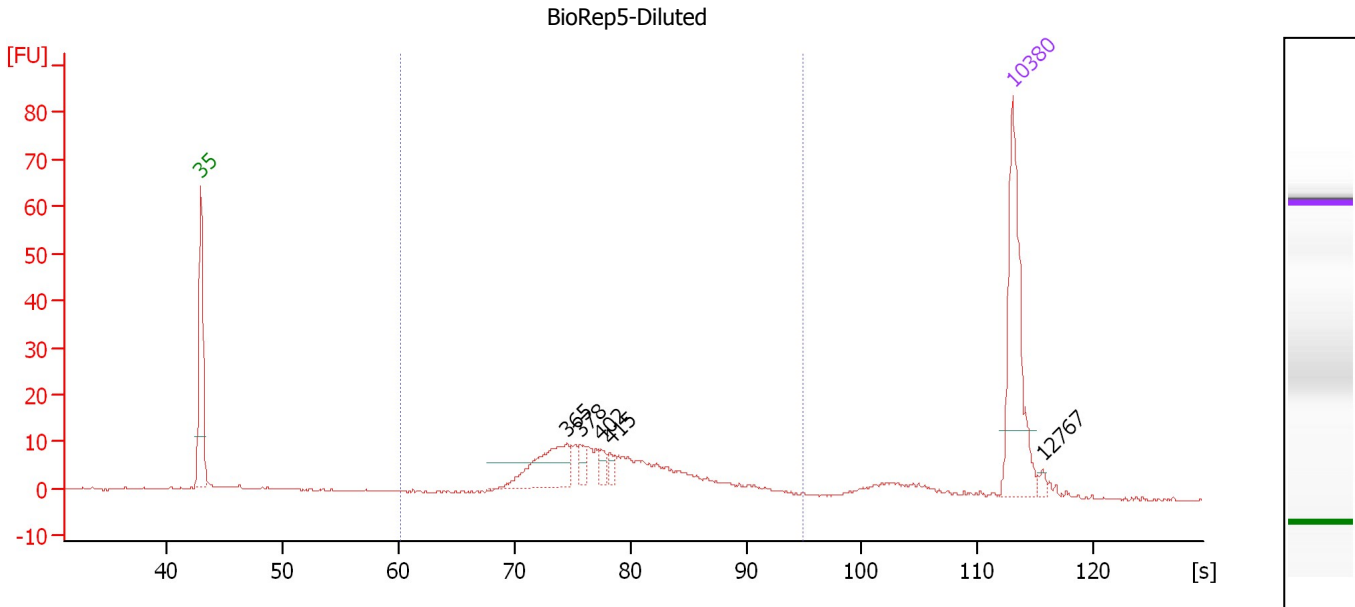
Region table for sample 3 : BioRep4-Diluted

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	427	856.5	225.53	187.2	85	25.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
 Modified: 8/22/2013 12:33:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : BioRep5-Diluted

Number of peaks found: 5 Corr. Area 1: 179.0
 Noise: 0.2

Peak table for sample 4 : BioRep5-Diluted

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	365	51.01	212.0	
3	378	9.41	37.7	
4	402	7.54	28.4	
5	415	5.76	21.0	
6	10,380	75.00	10.9	Upper Marker
7	12,767	0.00	0.0	

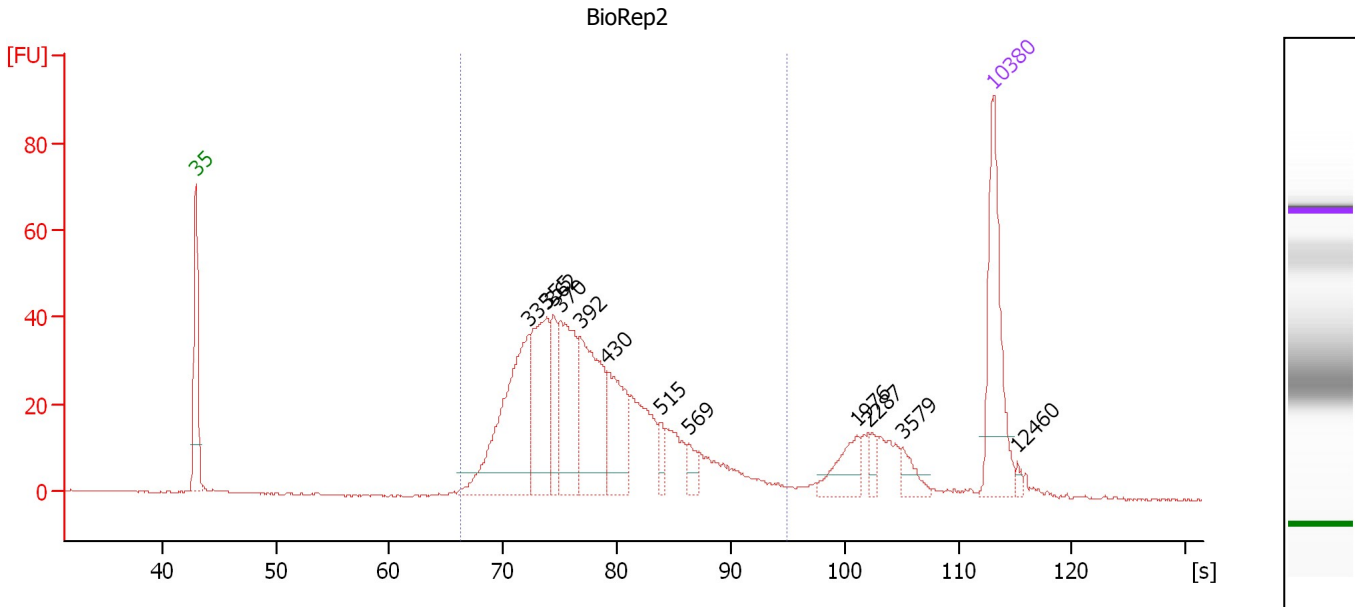
Region table for sample 4 : BioRep5-Diluted

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	439	777.3	209.75	179.0	81	25.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
 Modified: 8/22/2013 12:33:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : BioRep2

Number of peaks found: 12 Corr. Area 1: 713.0
 Noise: 0.1

Peak table for sample 5 : BioRep2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	335	160.42	725.0	
3	355	102.65	437.9	
4	362	39.32	164.5	
5	370	97.20	397.5	
6	392	114.27	442.2	
7	430	67.78	238.6	
8	515	13.06	38.4	
9	569	10.97	29.2	
10	1,976	25.00	19.2	
11	2,287	8.54	5.7	
12	3,579	12.06	5.1	
13	10,380	75.00	10.9	Upper Marker
14	12,460	0.00	0.0	

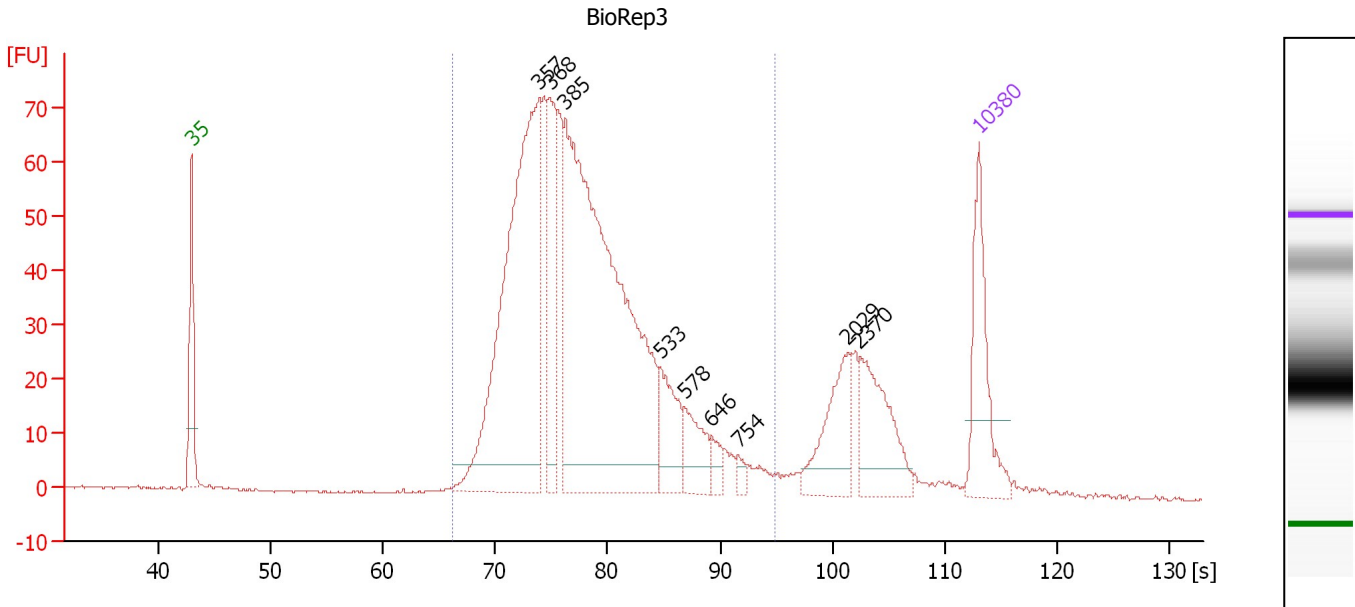
Region table for sample 5 : BioRep2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
265	1,000	423	2,903.0	754.39	713.0	85	26.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
 Modified: 8/22/2013 12:33:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : BioRep3

Number of peaks found: 9 Corr. Area 1: 1,166.7
 Noise: 0.2

Peak table for sample 6 : BioRep3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	357	485.45	2,062.2	
3	368	122.08	502.7	
4	385	673.55	2,649.7	
5	533	64.73	184.1	
6	578	45.75	119.9	
7	646	14.61	34.3	
8	754	7.95	16.0	
9	2,029	65.12	48.6	
10	2,370	76.34	48.8	
11	10,380	75.00	10.9	Upper Marker

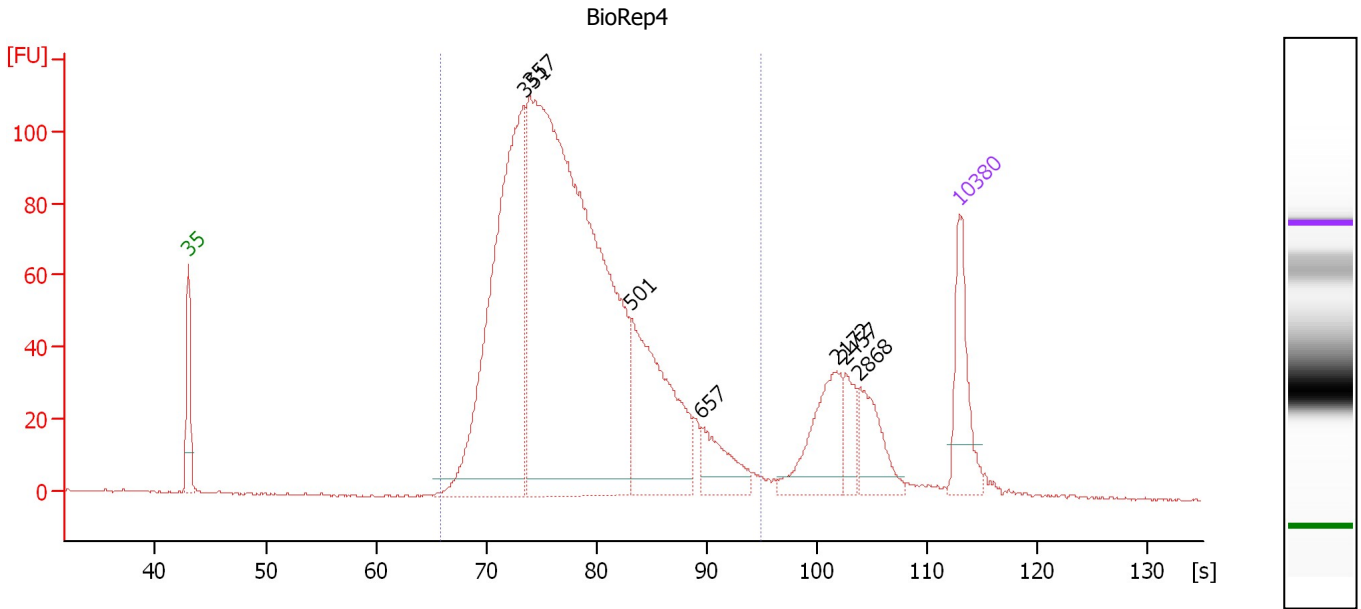
Region table for sample 6 : BioRep3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
266	1,000	422	6,097.5	1,592.75	1,166.7	85	25.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
 Modified: 8/22/2013 12:33:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : BioRep4

Number of peaks found: 7 Corr. Area 1: 1,858.8
 Noise: 0.2

Peak table for sample 7 : BioRep4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	351	610.95	2,639.0	
3	357	1,282.62	5,437.1	
4	501	271.52	820.5	
5	657	68.30	157.6	
6	2,172	94.98	66.3	
7	2,457	32.19	19.9	
8	2,868	60.14	31.8	
9	10,380	75.00	10.9	Upper Marker

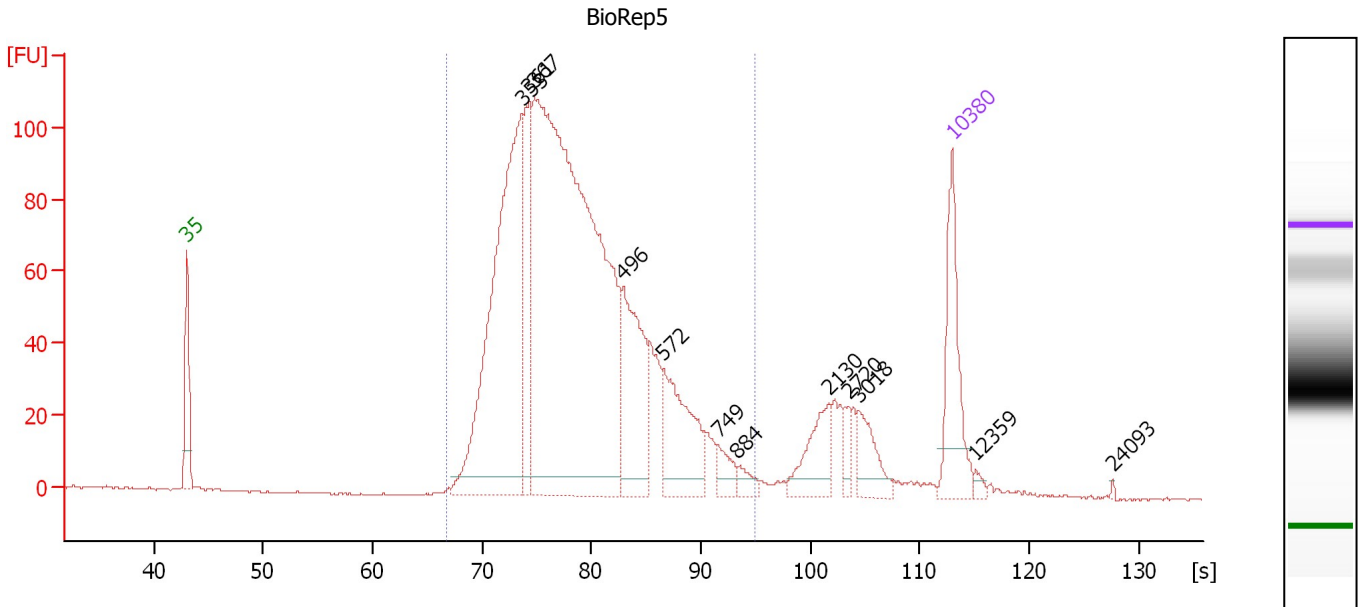
Region table for sample 7 : BioRep4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
261	1,000	426	8,262.2	2,169.40	1,858.8	88	25.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
 Modified: 8/22/2013 12:33:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : BioRep5

Number of peaks found: 12 Corr. Area 1: 1,824.6
 Noise: 0.2

Peak table for sample 8 : BioRep5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	353	458.42	1,968.7	
3	361	111.17	466.1	
4	367	981.80	4,055.1	
5	496	146.70	448.3	
6	572	108.30	286.8	
7	749	21.71	43.9	
8	884	12.06	20.7	
9	2,130	45.48	32.4	
10	2,720	12.22	6.8	
11	3,018	33.51	16.8	
12	10,380	75.00	10.9	Upper Marker
13	12,359	0.00	0.0	
14	24,093	0.00	0.0	

Region table for sample 8 : BioRep5

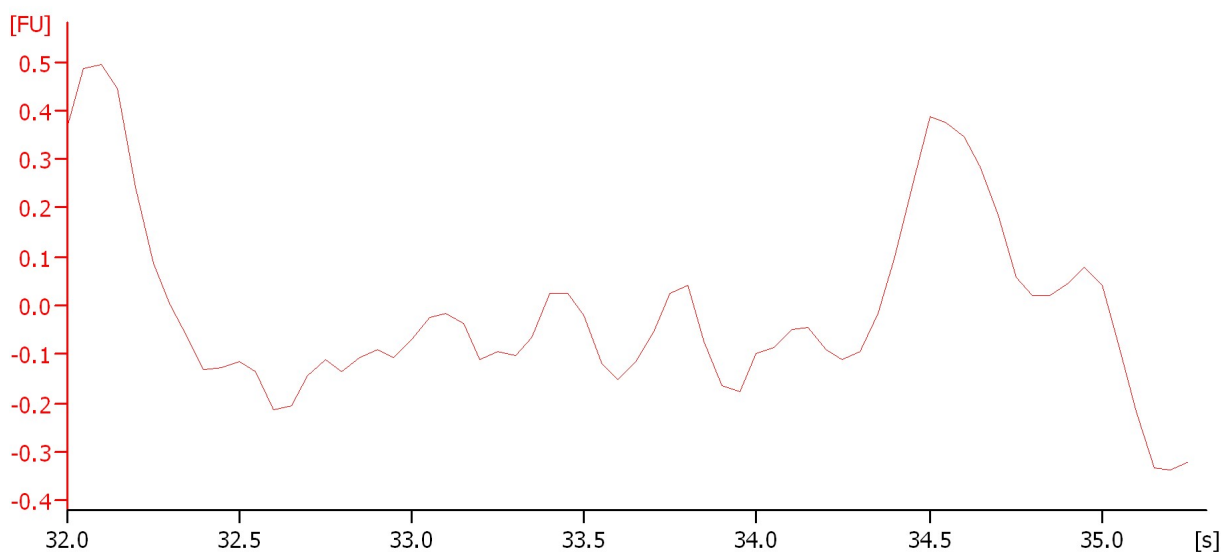
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
271	1,000	433	6,851.2	1,835.71	1,824.6	90	24.9	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
Modified: 8/22/2013 12:33:02 PM

Electropherogram Summary Continued ...

sample 9



Setpoint Deviations for sample 9 : sample 9

End Analysis Time Range [s] : 35.3

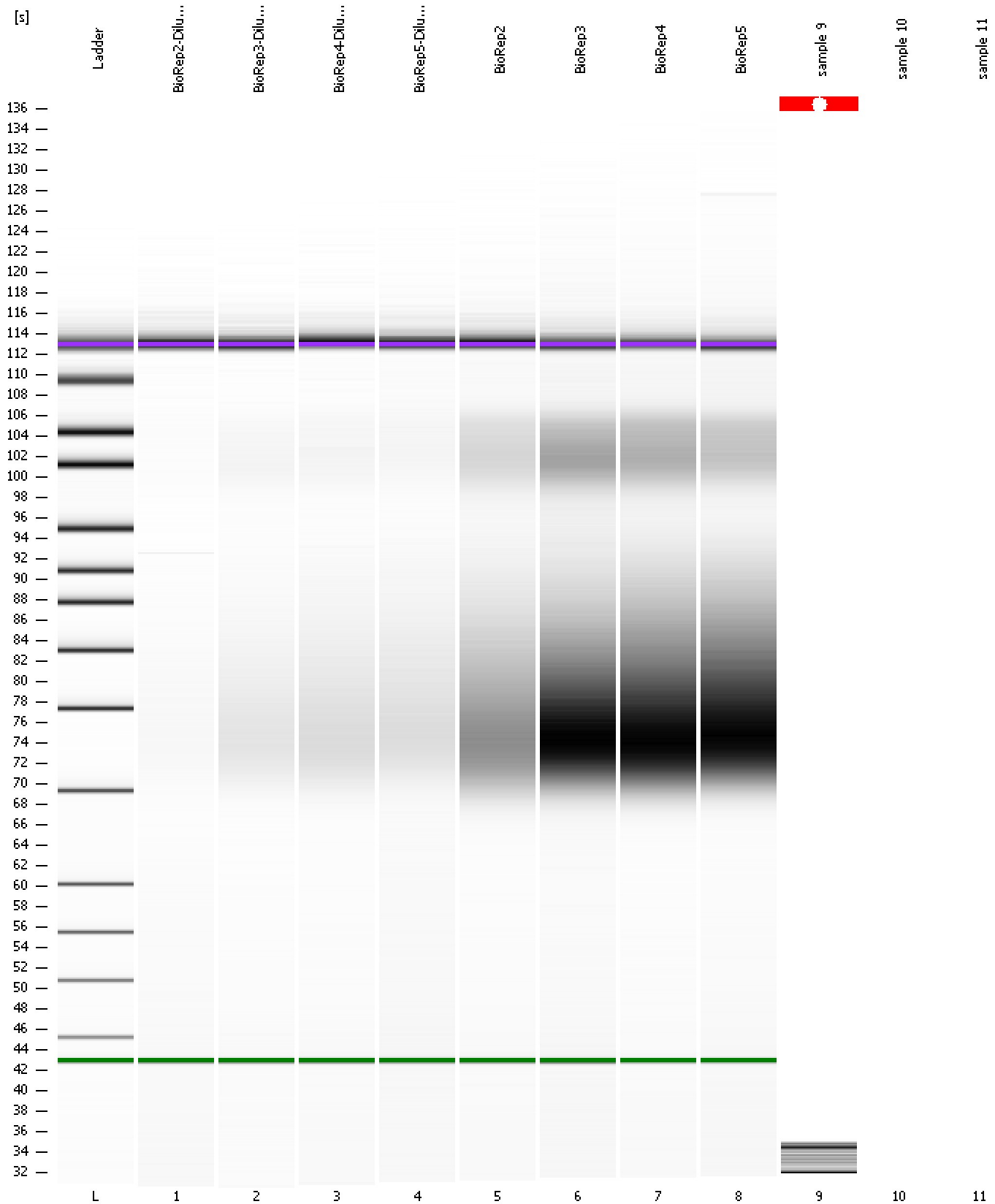
Overall Results for sample 9 : sample 9

Noise: 0.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
Modified: 8/22/2013 12:33:02 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
Modified: 8/22/2013 12:33:02 PM

Invalid Samples

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\2013-08-22\2013-08-22_003.xad

Created: 8/22/2013 11:57:59 AM
 Modified: 8/22/2013 12:33:02 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run aborted on port 1		Instrument	Run		8/22/2013 12:31:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-22\2013-08-22_003.xad)		Instrument	Run		8/22/2013 11:58:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/22/2013 11:58:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/22/2013 11:58:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/22/2013 11:58:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/22/2013 11:58:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/22/2013 11:58:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/22/2013 11:58:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1