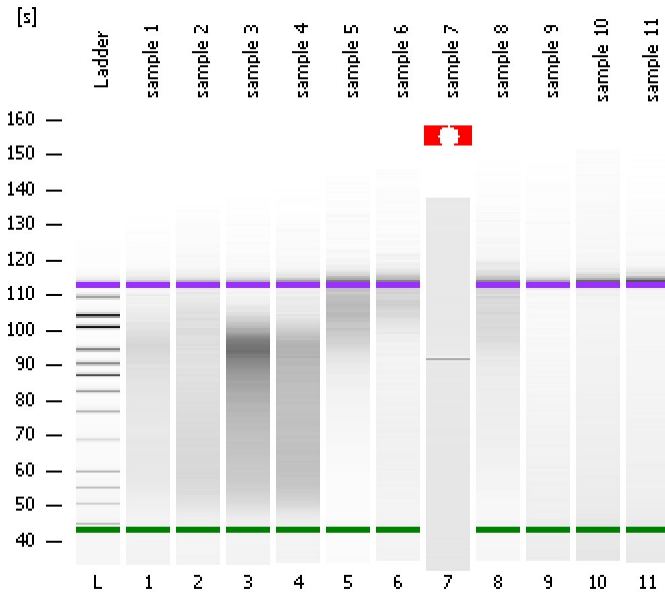


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
Modified: 3/2/2015 11:02:15 AM

Electrophoresis File Run Summary



Instrument Information:

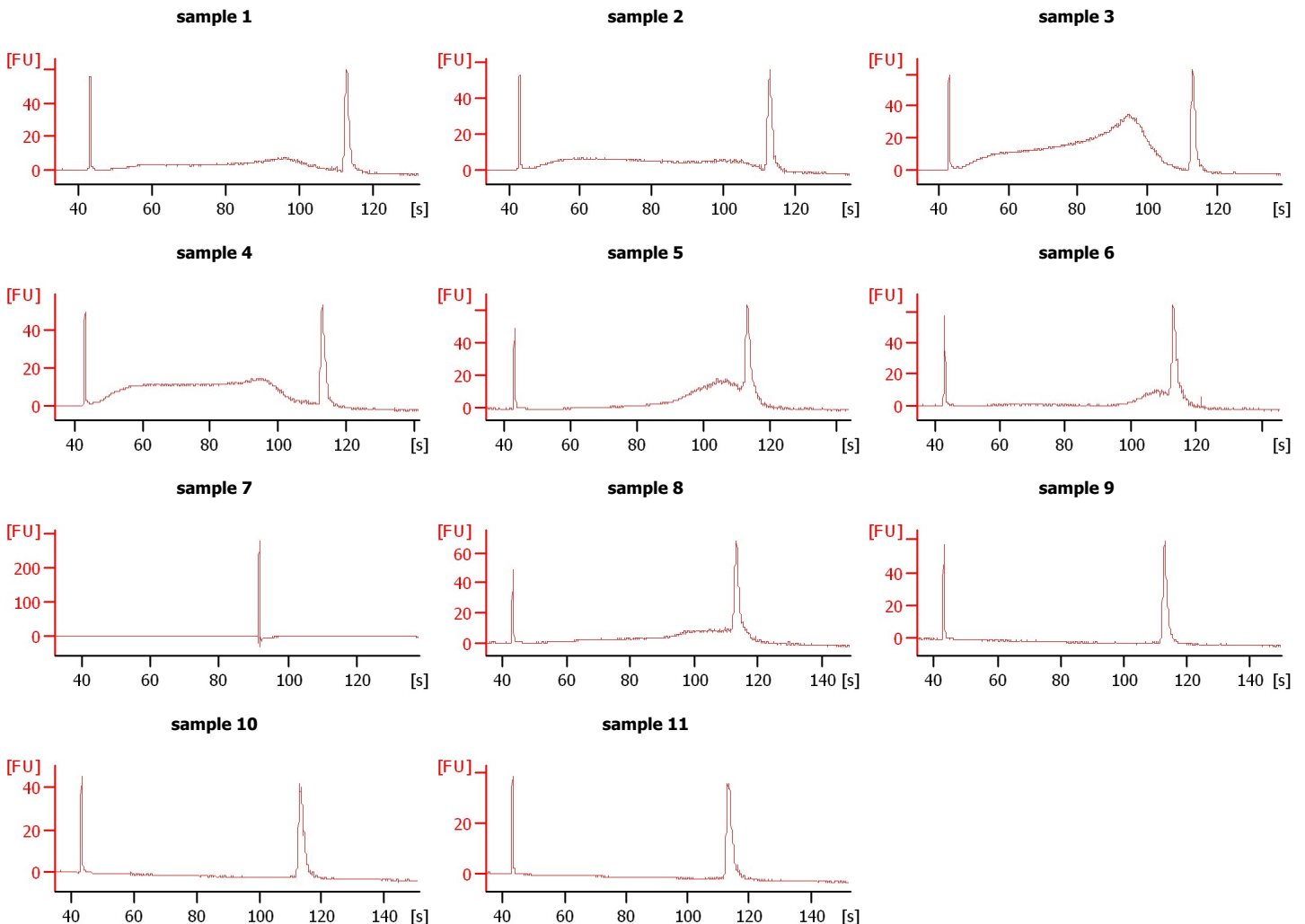
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 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:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
Modified: 3/2/2015 11:02:15 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

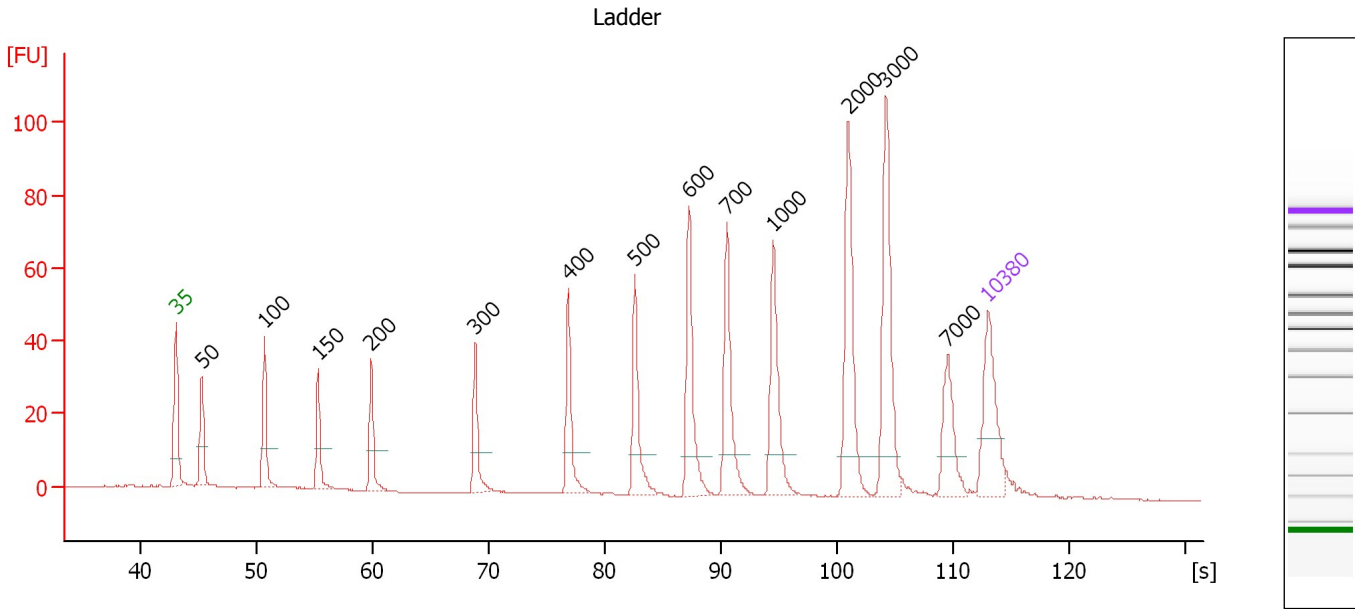
Ladder

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\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

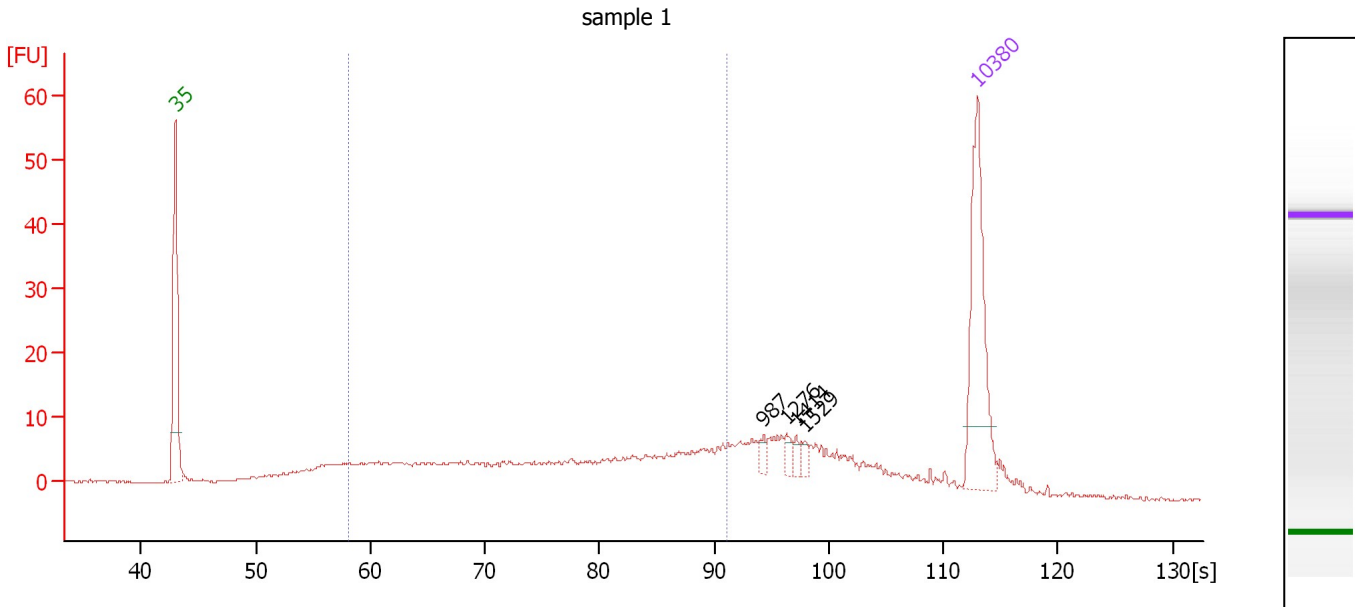
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.22
3	100	150.00	2,272.7	Ladder Peak	50.64
4	150	150.00	1,515.2	Ladder Peak	55.27
5	200	150.00	1,136.4	Ladder Peak	59.85
6	300	150.00	757.6	Ladder Peak	68.79
7	400	150.00	568.2	Ladder Peak	76.84
8	500	150.00	454.5	Ladder Peak	82.58
9	600	150.00	378.8	Ladder Peak	87.21
10	700	150.00	324.7	Ladder Peak	90.50
11	1,000	150.00	227.3	Ladder Peak	94.48
12	2,000	150.00	113.6	Ladder Peak	100.96
13	3,000	150.00	75.8	Ladder Peak	104.20
14	7,000	150.00	32.5	Ladder Peak	109.53
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 4 Corr. Area 1: 200.0
 Noise: 0.1

Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	987	5.37	8.2		94.31
3	1,276	5.93	7.0		96.27
4	1,414	4.21	4.5		97.16
5	1,529	3.81	3.8		97.91
6	10,380	75.00	10.9	Upper Marker	113.00

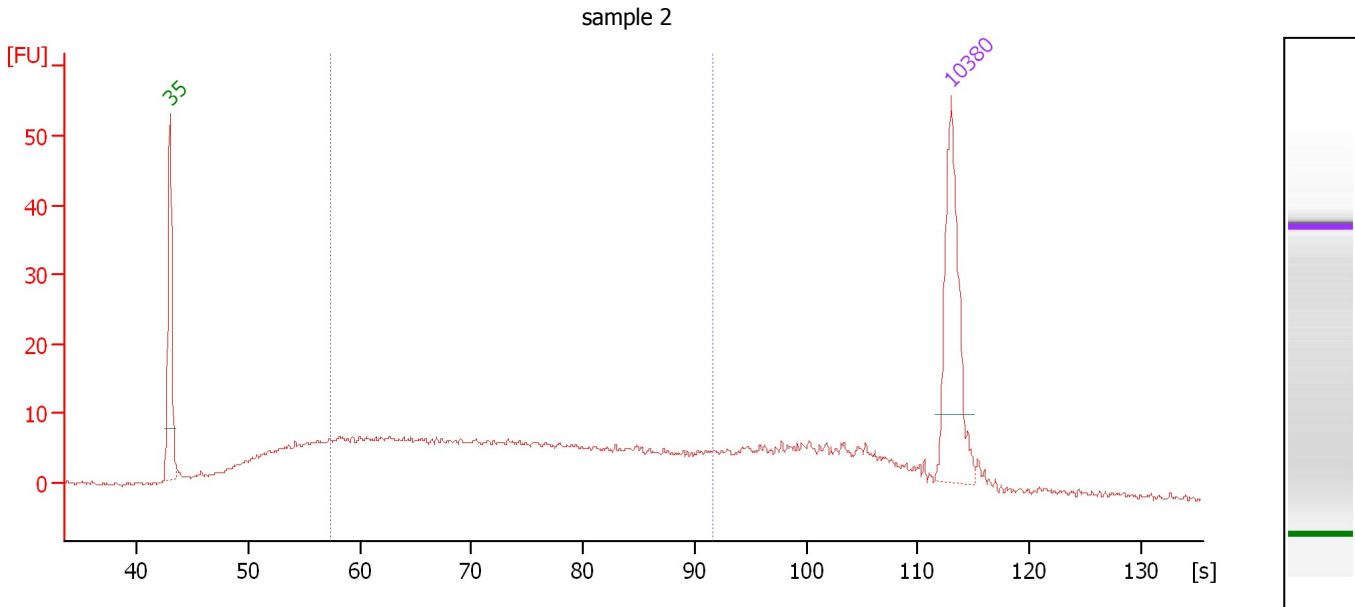
Region table for sample 1 : sample 1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
182	426	742	200.0	54	36.0	310.74	1,385.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 0 Corr. Area 1: 314.8
 Noise: 0.3

Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

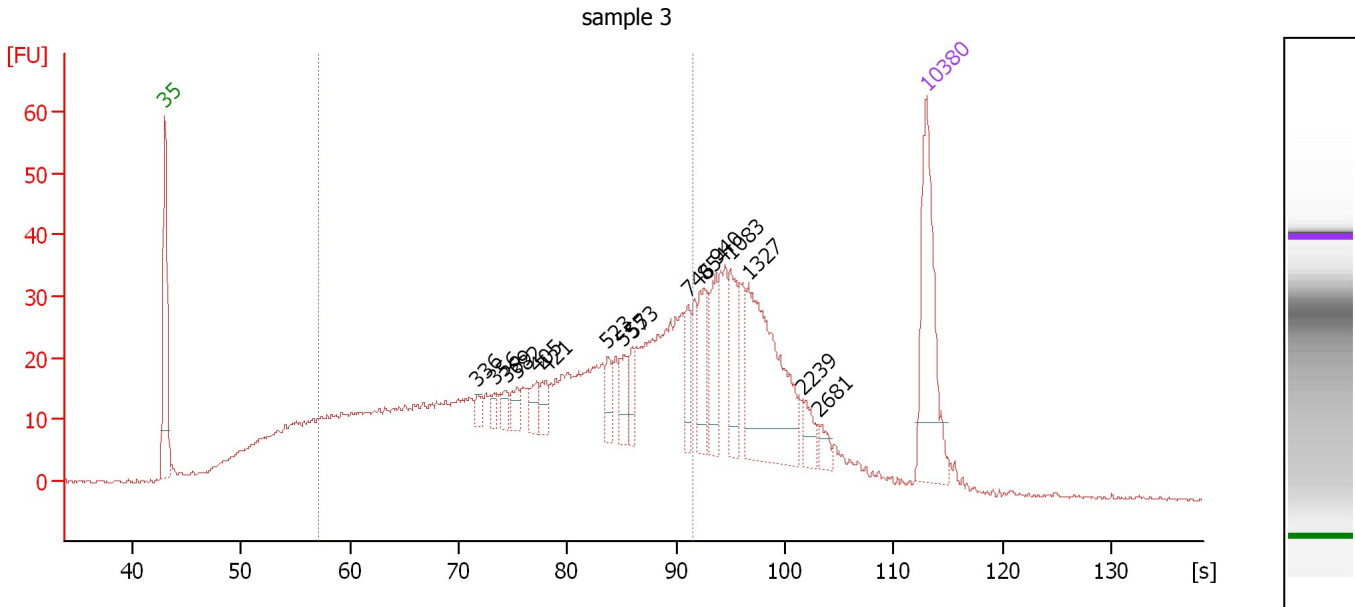
Region table for sample 2 : sample 2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
172	384	782	314.8	57	39.2	507.19	2,516.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 16 Corr. Area 1: 794.4
 Noise: 0.2

Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	336	7.44	33.5		71.70
3	356	7.20	30.7		73.28
4	369	8.25	33.8		74.37
5	382	11.65	46.2		75.41
6	405	13.39	50.1		77.14
7	421	13.29	47.9		78.02
8	523	14.86	43.0		83.66
9	555	18.56	50.6		85.14
10	573	15.01	39.7		85.98
11	746	21.24	43.1		91.12
12	854	32.98	58.5		92.55
13	940	26.55	42.8		93.68
14	1,083	35.02	49.0		95.02
15	1,327	112.61	128.6		96.60
16	2,239	11.73	7.9		101.74
17	2,681	7.10	4.0		103.17
18	10,380	75.00	10.9	Upper Marker	113.00

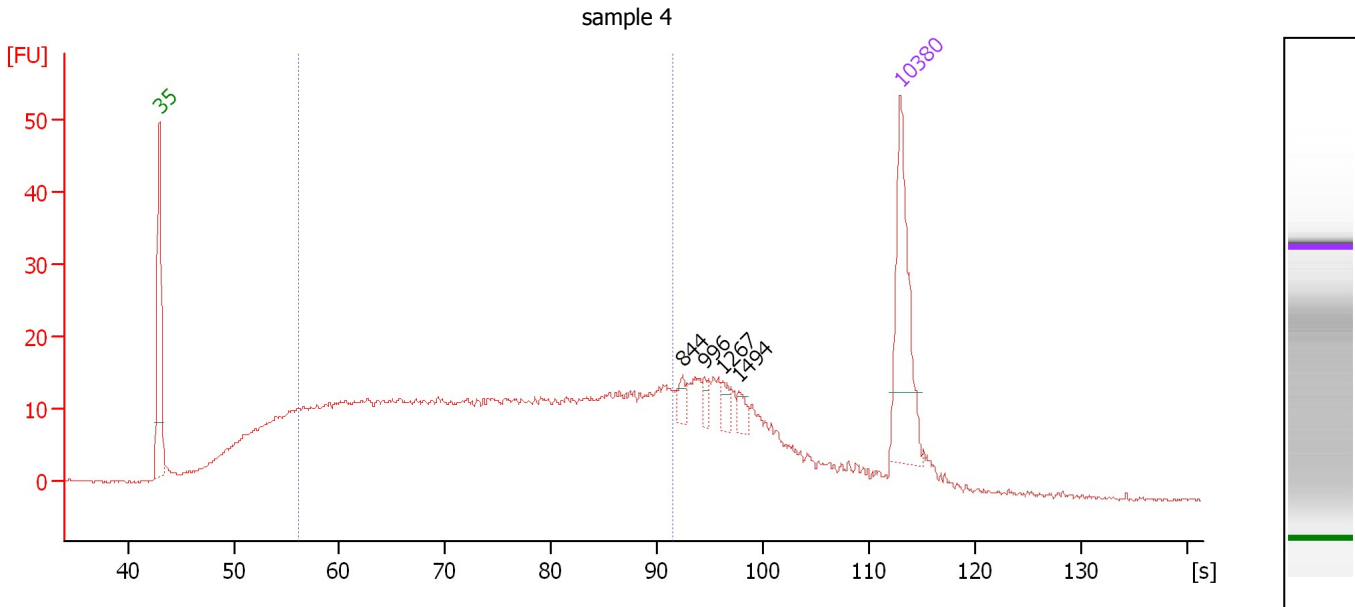
Region table for sample 3 : sample 3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
170	437	774	794.4	59	36.6	1,147.75	5,085.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 4 Corr. Area 1: 597.0
 Noise: 0.2

Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	844	8.19	14.7		92.41
3	996	6.68	10.2		94.43
4	1,267	7.94	9.5		96.21
5	1,494	7.97	8.1		97.68
6	10,380	75.00	10.9	Upper Marker	113.00

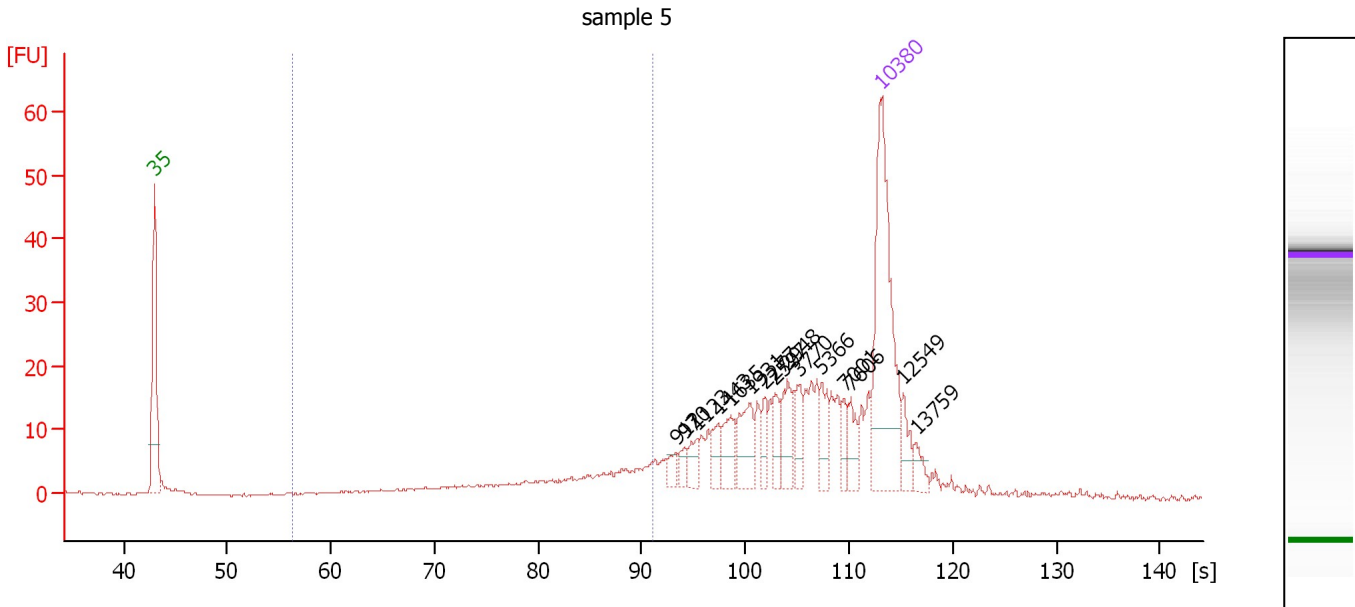
Region table for sample 4 : sample 4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
159	396	772	597.0	64	39.8	1,104.00	5,478.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 15 Corr. Area 1: 62.8
 Noise: 0.1

Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	912	5.15	8.6		93.31
3	970	4.27	6.7		94.09
4	1,123	6.75	9.1		95.28
5	1,443	8.63	9.1		97.35
6	1,635	12.57	11.7		98.60
7	1,931	17.69	13.9		100.51
8	2,277	7.38	4.9		101.86
9	2,597	9.03	5.3		102.90
10	2,948	14.22	7.3		104.04
11	3,770	11.05	4.4		105.23
12	5,366	10.67	3.0		107.35
13	7,001	7.25	1.6		109.53
14	7,606	9.29	1.9		110.15
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,549	0.00	0.0		115.23
17	13,759	0.00	0.0		116.47

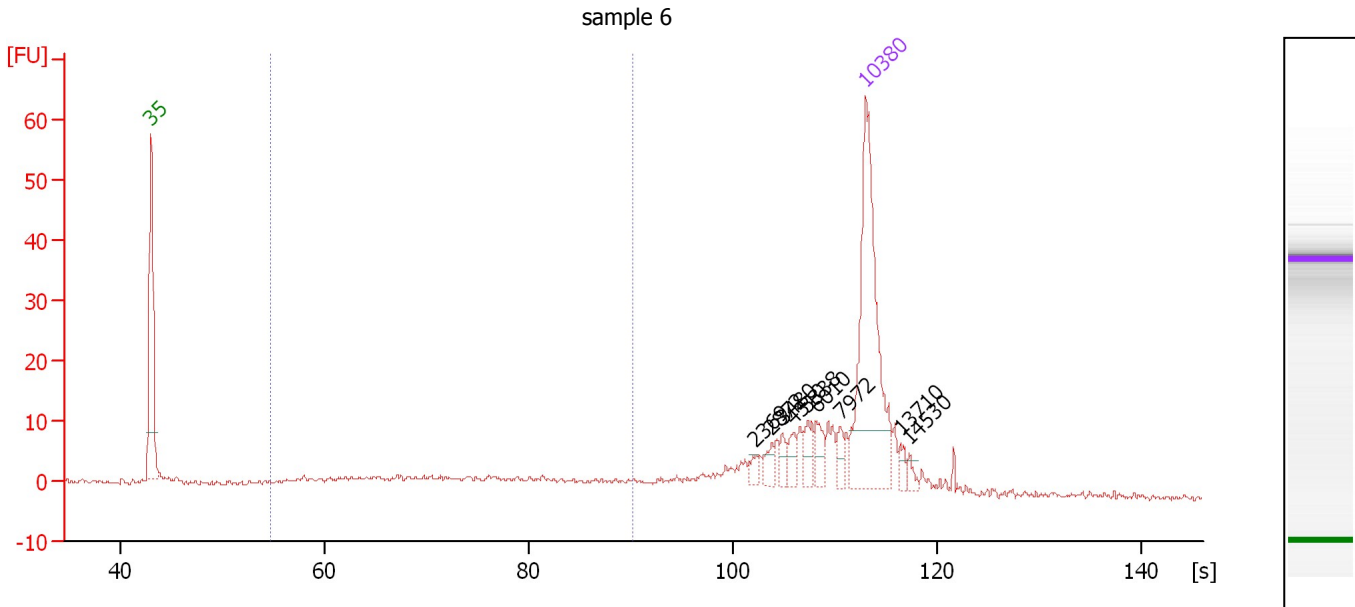
Region table for sample 5 : sample 5

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
162	506	742	62.8	18	26.6	69.47	239.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 9 Corr. Area 1: 79.3
 Noise: 0.4

Peak table for sample 6 : sample 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	2,369	3.23	2.1		102.16
3	2,872	4.57	2.4		103.79
4	3,480	4.02	1.7		104.84
5	4,310	5.10	1.8		105.95
6	5,338	5.93	1.7		107.32
7	6,010	6.81	1.7		108.21
8	7,972	4.58	0.9		110.53
9	10,380	75.00	10.9	Upper Marker	113.00
10	13,710	0.00	0.0		116.42
11	14,530	0.00	0.0		117.26

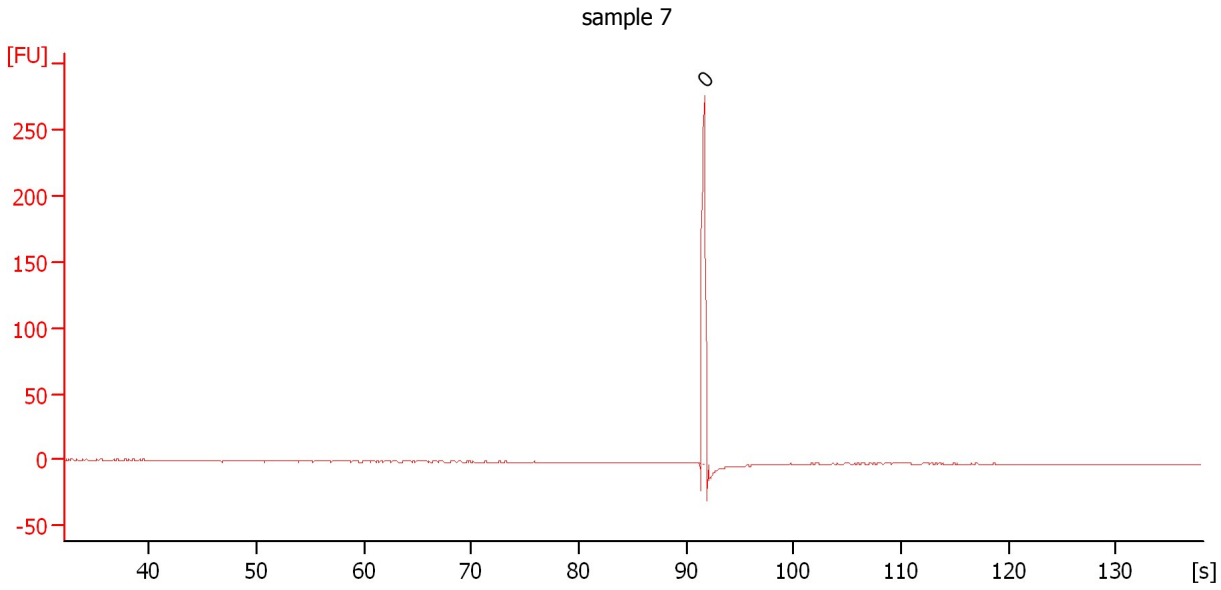
Region table for sample 6 : sample 6

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
143	378	690	79.3	32	37.4	84.76	431.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 0 Noise: 0.3

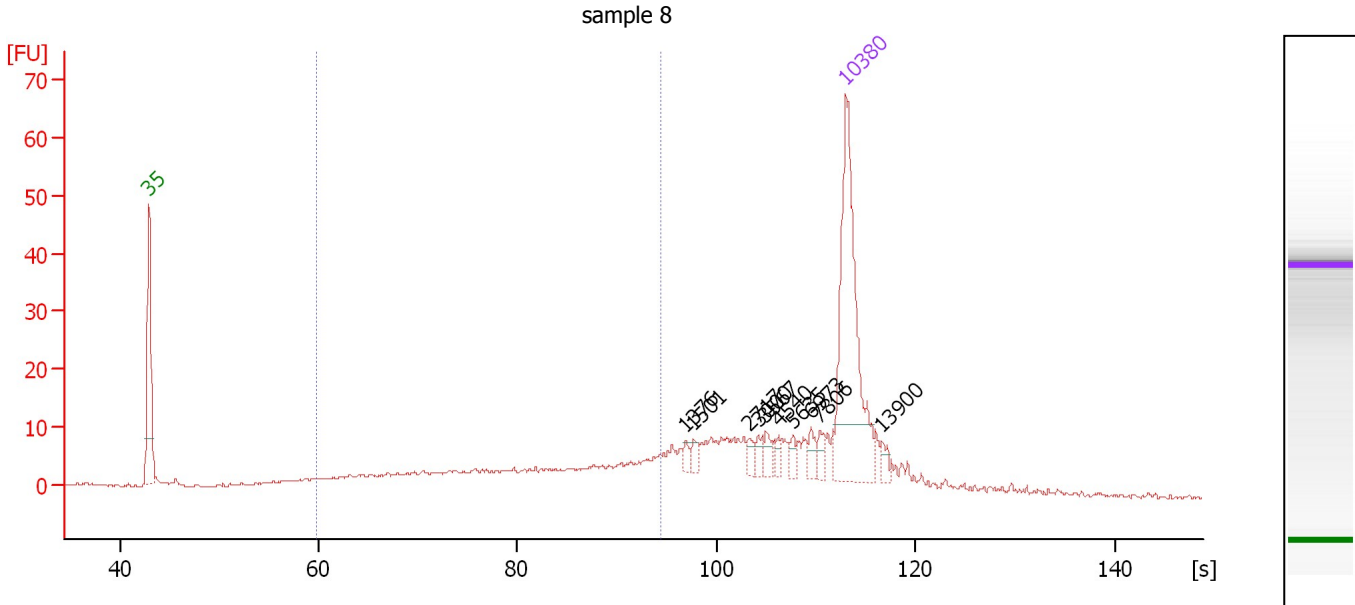
Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		91.65

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 10 Corr. Area 1: 145.8
 Noise: 0.2

Peak table for sample 8 : sample 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	1,376	2.79	3.1		96.92
3	1,501	3.72	3.8		97.73
4	2,717	3.51	2.0		103.29
5	3,000	3.43	1.7		104.20
6	3,567	5.37	2.3		104.96
7	4,540	3.25	1.1		106.25
8	5,635	3.17	0.9		107.71
9	6,973	4.65	1.0		109.49
10	7,806	3.92	0.8		110.36
11	10,380	75.00	10.9	Upper Marker	113.00
12	13,900	0.00	0.0		116.62

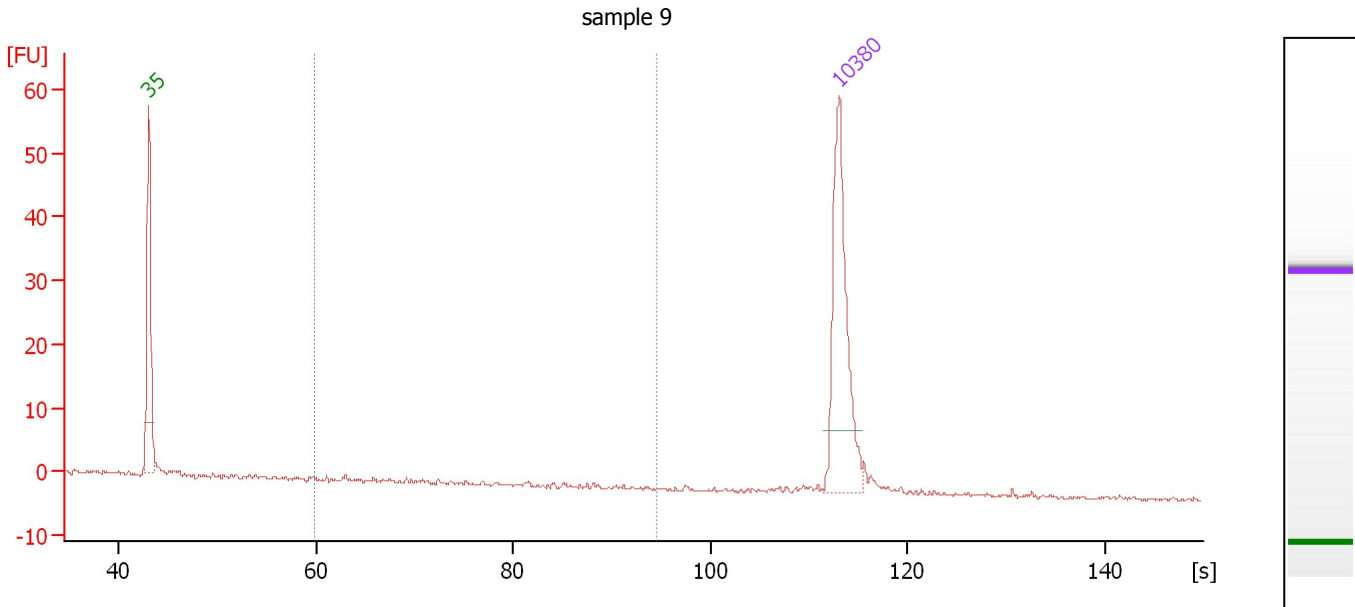
Region table for sample 8 : sample 8

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	511	1,000	145.8	41	40.8	147.83	562.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 0 Corr. Area 1: 0.0
 Noise: 0.3

Peak table for sample 9 : sample 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

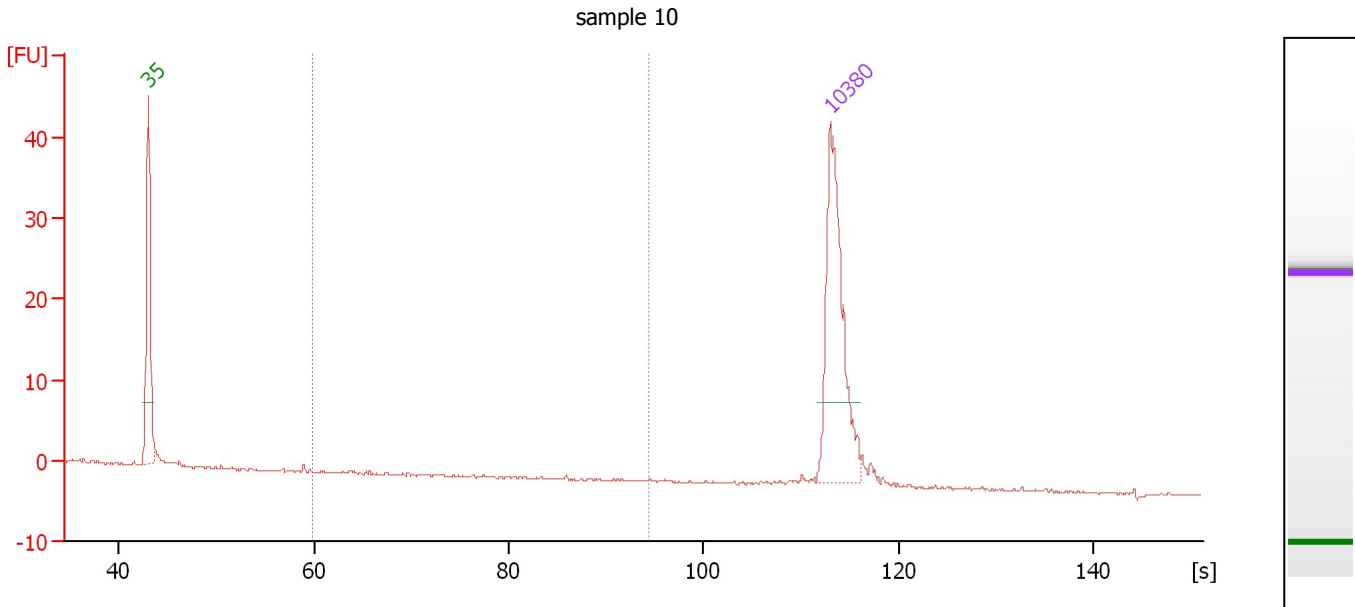
Region table for sample 9 : sample 9

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	300	1,000	0.0	1	31.9	0.06	0.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 0 Corr. Area 1: 0.0
 Noise: 0.1

Peak table for sample 10 : sample 10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

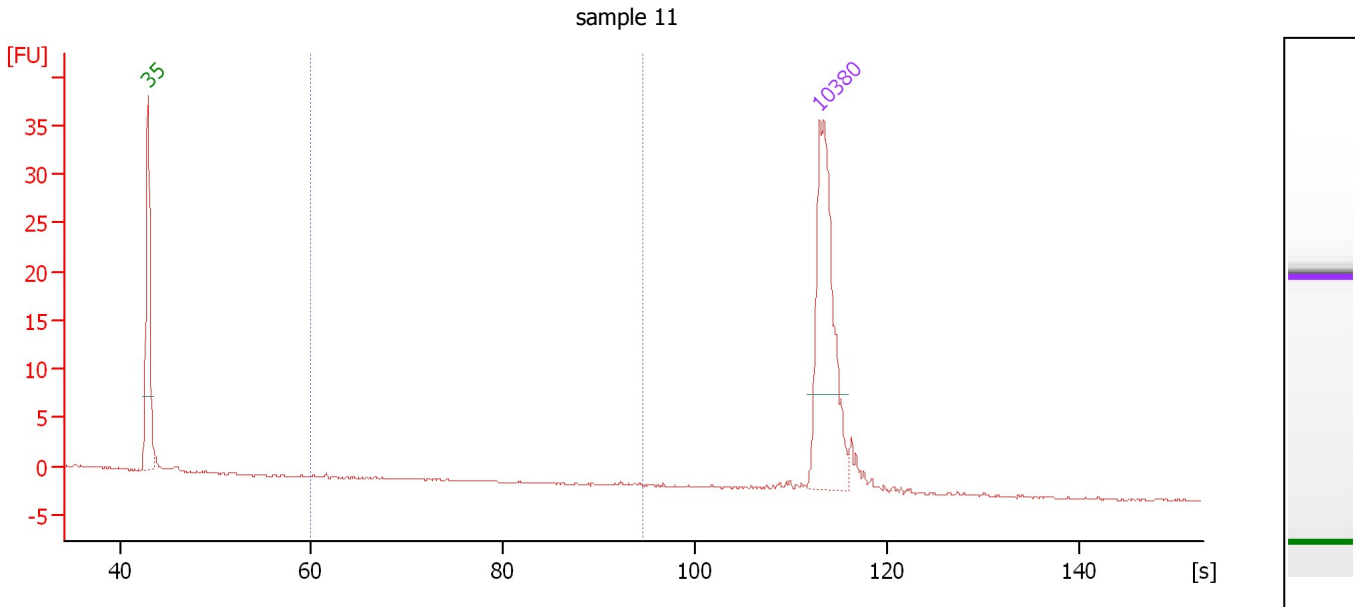
Region table for sample 10 : sample 10

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	571	1,000	0.0	0	0.1	0.01	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 0 Corr. Area 1: 0.0
 Noise: 0.1

Peak table for sample 11 : sample 11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

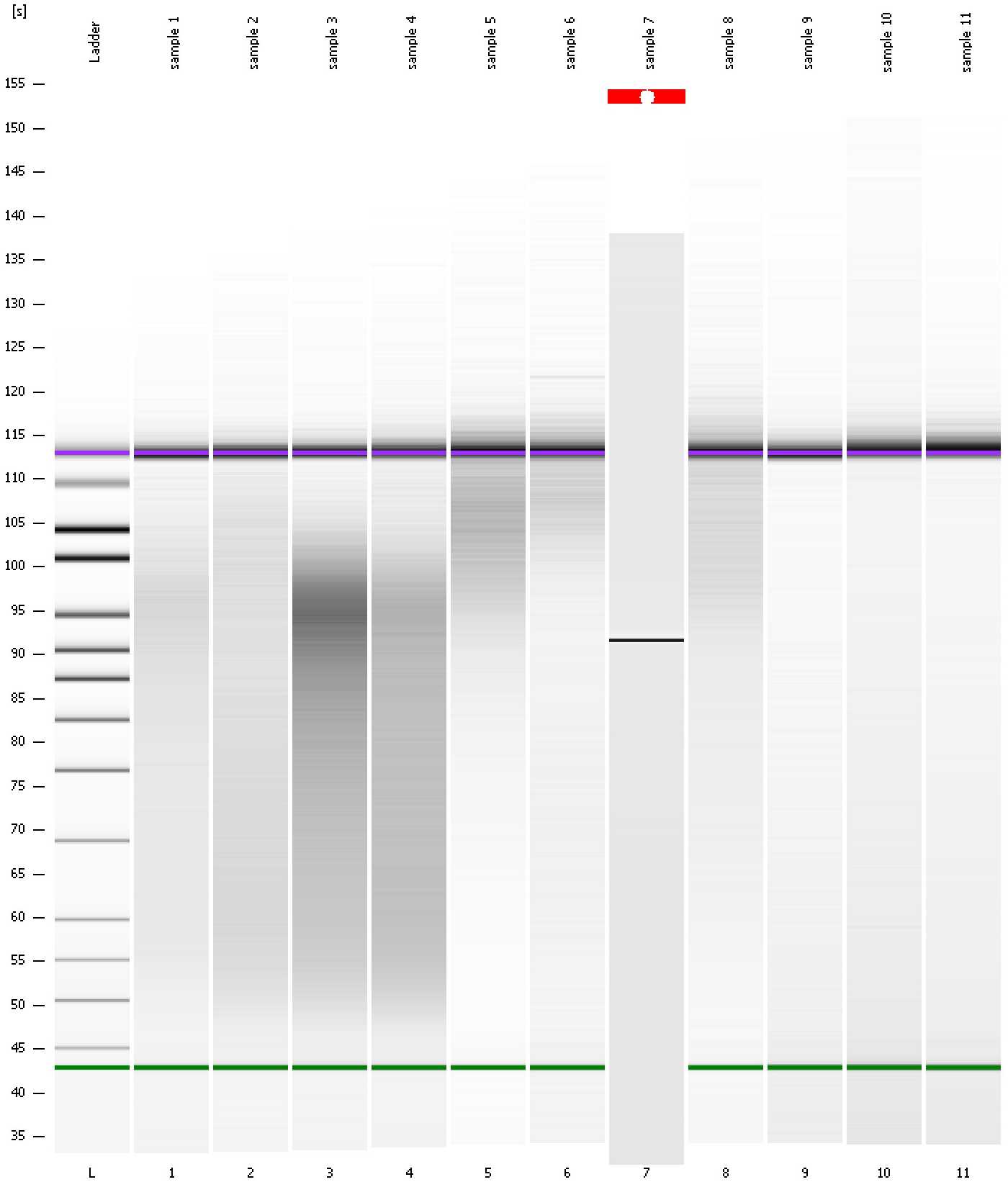
Region table for sample 11 : sample 11

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	905	1,000	0.0	0	6.7	0.05	0.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
Modified: 3/2/2015 11:02:15 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad

Created: 3/2/2015 10:20:11 AM
 Modified: 3/2/2015 11:02:15 AM

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		3/2/2015 11:01:25 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-03-02\2015-03-02_002.xad)		Instrument	Run		3/2/2015 10:20:11 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/2/2015 10:20:11 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/2/2015 10:20:11 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/2/2015 10:20:11 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/2/2015 10:20:11 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/2/2015 10:20:11 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/2/2015 10:20:11 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1