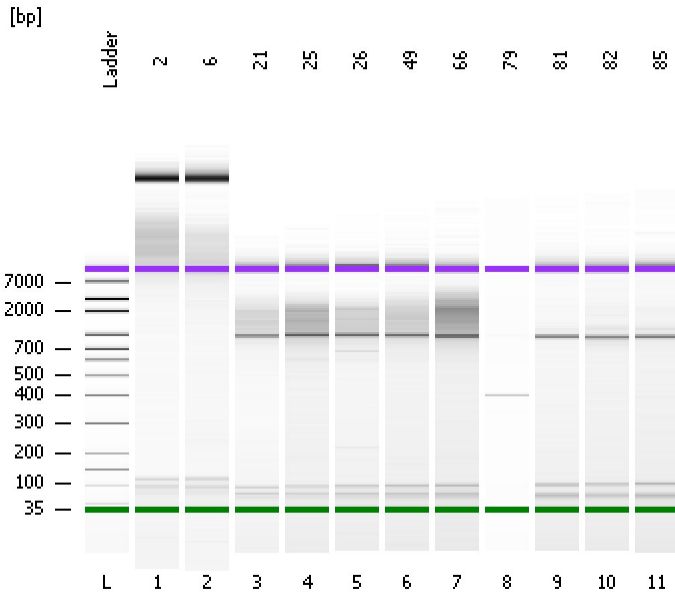


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
Modified: 2/9/2015 4:35:40 PM

Electrophoresis File Run Summary



Instrument Information:

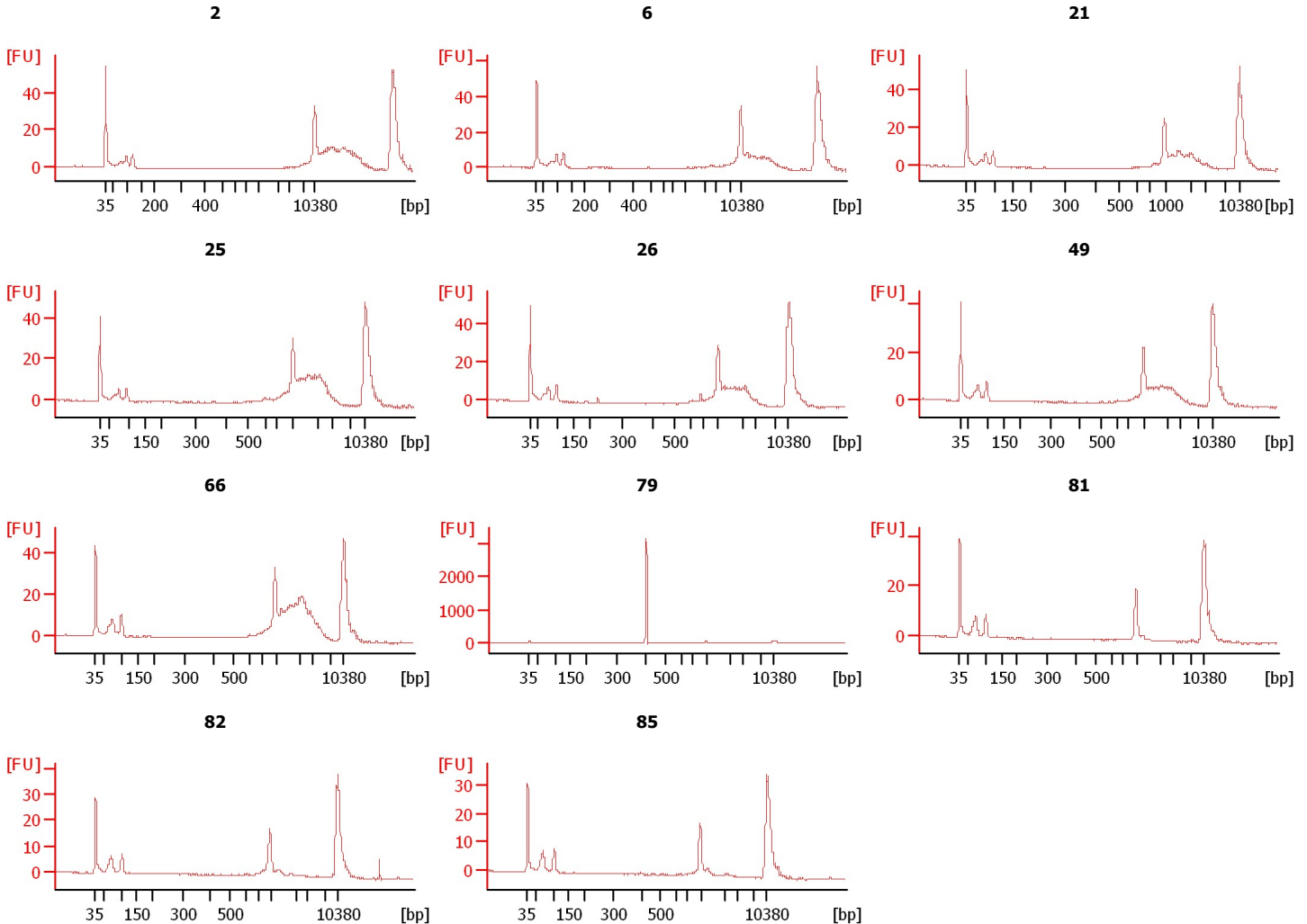
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
Modified: 2/9/2015 4:35:40 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
2		<input type="checkbox"/>	✓			
6		<input type="checkbox"/>	✓			
21		<input type="checkbox"/>	✓			
25		<input type="checkbox"/>	✓			
26		<input type="checkbox"/>	✓			
49		<input type="checkbox"/>	✓			
66		<input type="checkbox"/>	✓			
79		<input type="checkbox"/>	✓			
81		<input type="checkbox"/>	✓			
82		<input type="checkbox"/>	✓			
85		<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\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
Modified: 2/9/2015 4:35:40 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

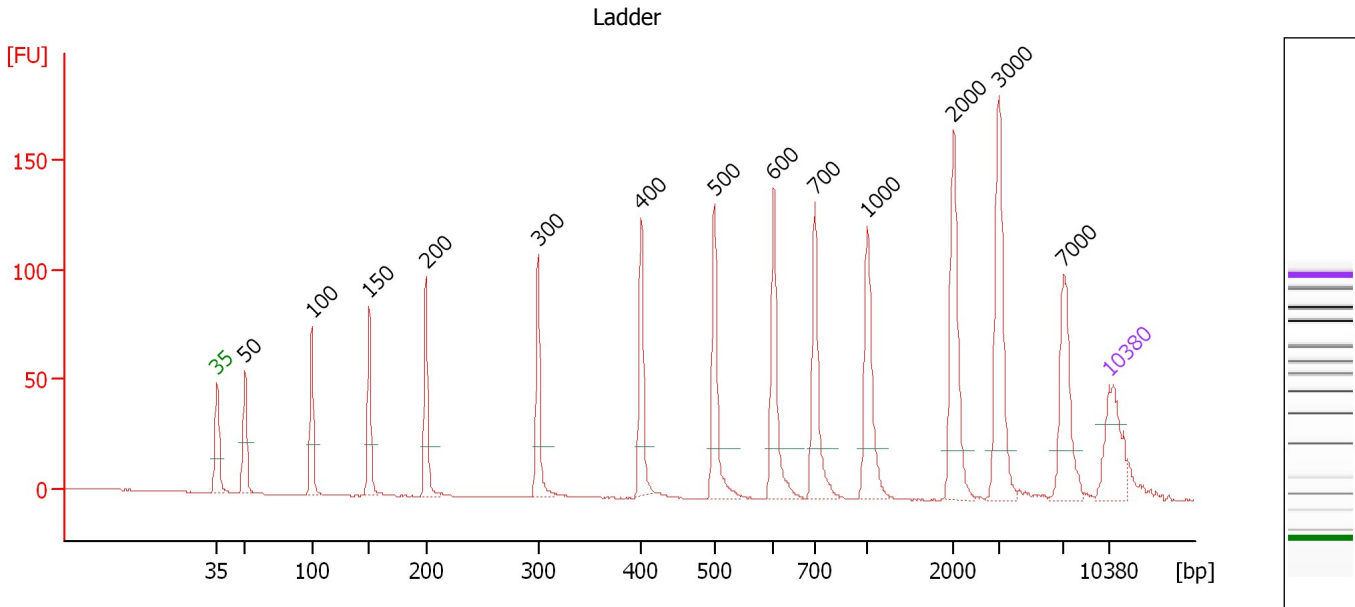
Ladder

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\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

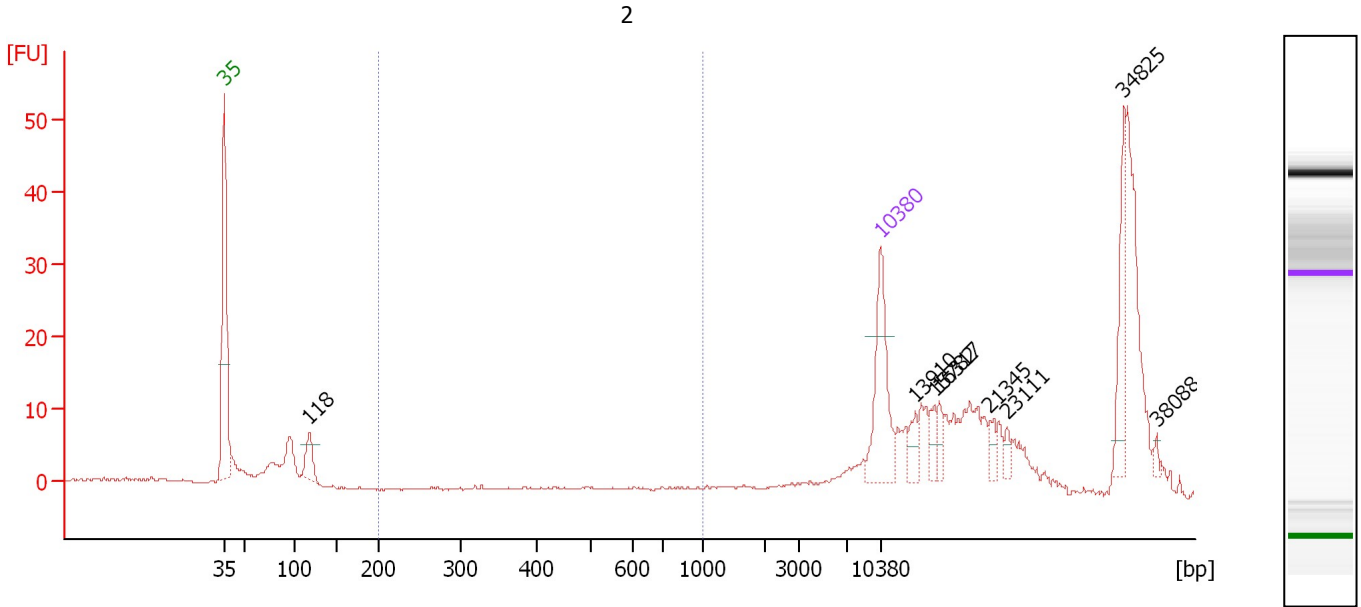
Peak table for Ladder

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	50.44
4	150	150.00	1,515.2	Ladder Peak	54.96
5	200	150.00	1,136.4	Ladder Peak	59.39
6	300	150.00	757.6	Ladder Peak	68.17
7	400	150.00	568.2	Ladder Peak	76.29
8	500	150.00	454.5	Ladder Peak	82.01
9	600	150.00	378.8	Ladder Peak	86.66
10	700	150.00	324.7	Ladder Peak	89.88
11	1,000	150.00	227.3	Ladder Peak	94.02
12	2,000	150.00	113.6	Ladder Peak	100.79
13	3,000	150.00	75.8	Ladder Peak	104.34
14	7,000	150.00	32.5	Ladder Peak	109.40
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 2

Number of peaks found: 8 Corr. Area 1: 2.4
 Noise: 0.1

Peak table for sample 1 : 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	118	35.83	461.0		52.05
3	10,380	75.00	10.9	Upper Marker	113.00
4	13,910	0.00	0.0		116.76
5	15,782	0.00	0.0		118.75
6	16,317	0.00	0.0		119.32
7	21,345	0.00	0.0		124.67
8	23,111	0.00	0.0		126.54
9	34,825	0.00	0.0		139.01
10	38,088	0.00	0.0		142.48

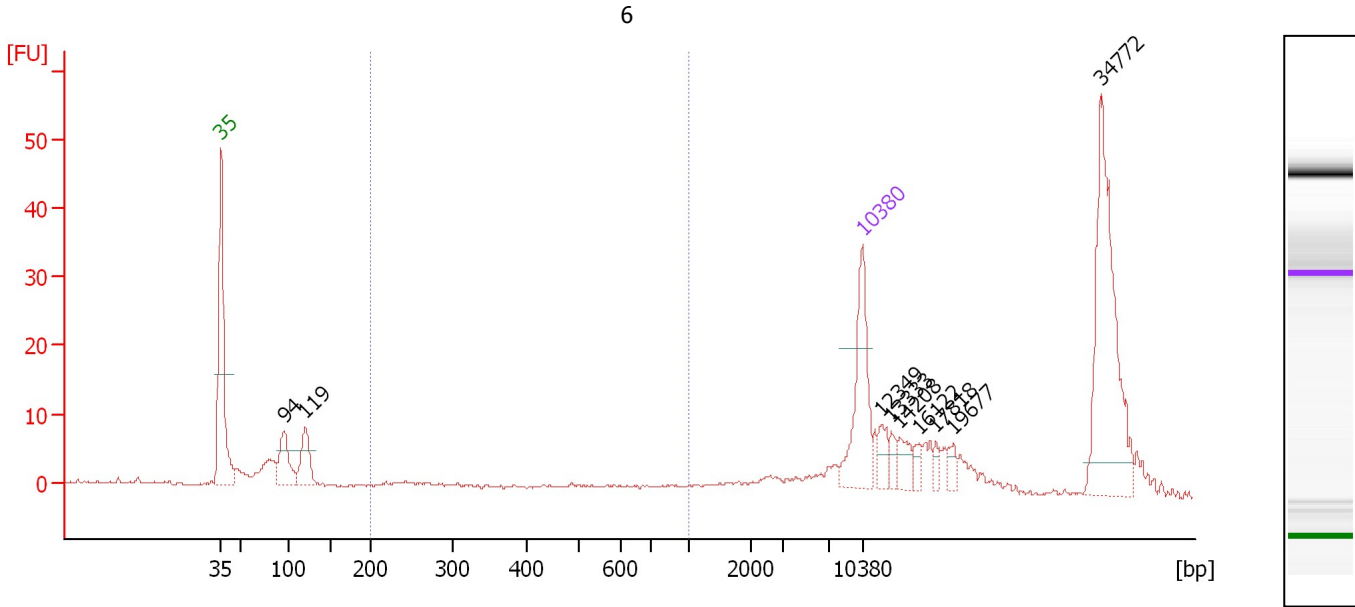
Region table for sample 1 : 2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	719	1,000	2.4	1	23.1	6.06	13.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 6

Number of peaks found: 9 Corr. Area 1: 14.6
 Noise: 0.1

Peak table for sample 2 : 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	94	54.00	865.9		49.87
3	119	49.20	624.4		52.19
4	10,380	75.00	10.9	Upper Marker	113.00
5	12,349	0.00	0.0		115.09
6	13,333	0.00	0.0		116.14
7	14,208	0.00	0.0		117.07
8	16,122	0.00	0.0		119.11
9	17,818	0.00	0.0		120.91
10	19,677	0.00	0.0		122.89
11	34,772	0.00	0.0		138.95

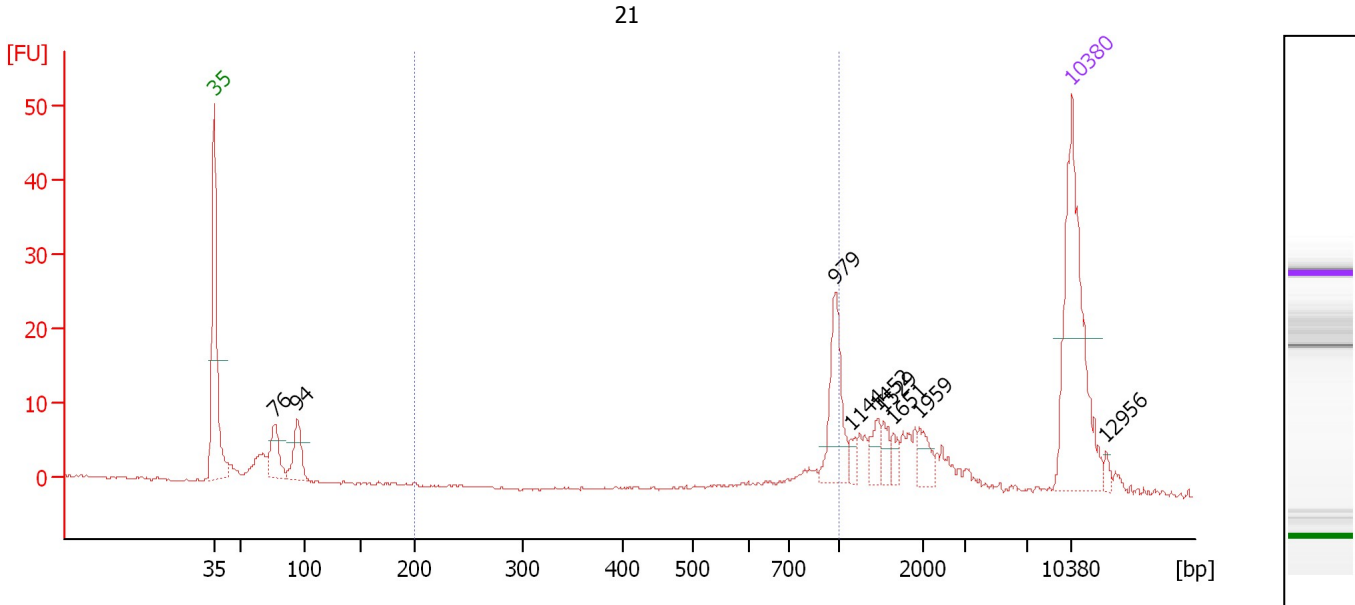
Region table for sample 2 : 6

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	490	1,000	14.6	6	44.4	36.64	151.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 21

Number of peaks found: 9 Corr. Area 1: 31.4
 Noise: 0.2

Peak table for sample 3 : 21

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	76	25.94	515.6		47.96
3	94	26.00	420.3		49.79
4	979	35.64	55.2		93.73
5	1,144	4.09	5.4		94.99
6	1,452	8.54	8.9		97.08
7	1,529	6.27	6.2		97.60
8	1,651	4.56	4.2		98.43
9	1,959	9.02	7.0		100.51
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,956	0.00	0.0		115.74

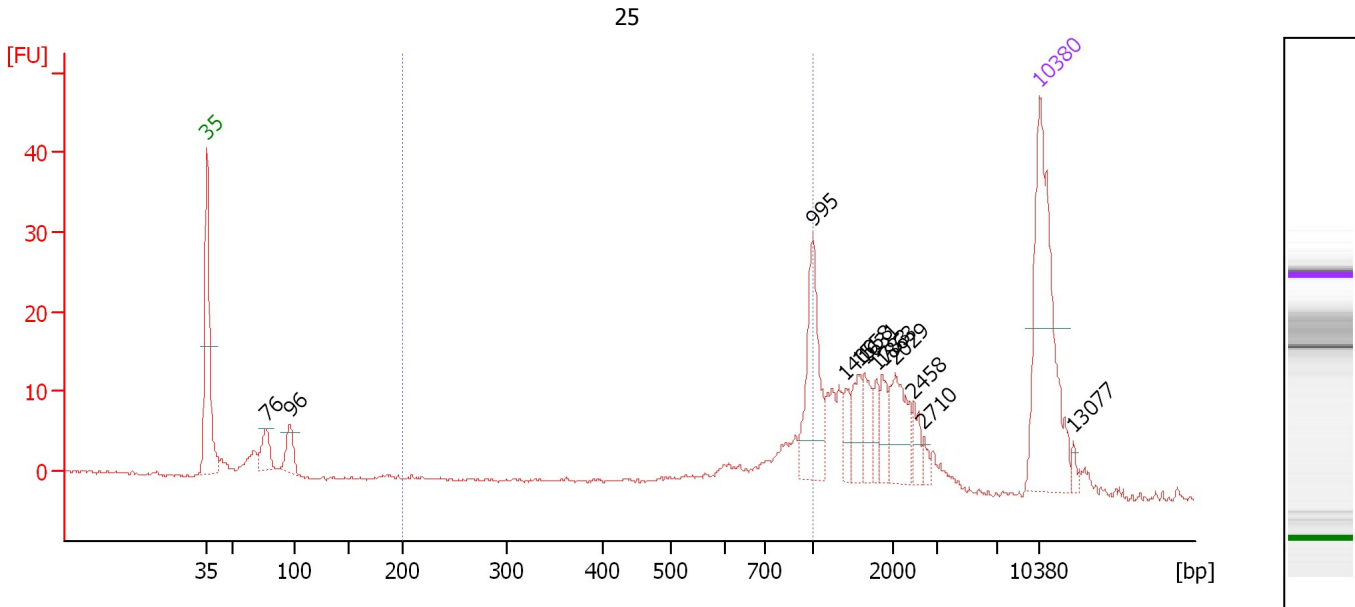
Region table for sample 3 : 21

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	916	1,000	31.4	21	10.8	36.52	61.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 25

Number of peaks found: 12 Corr. Area 1: 68.3
 Noise: 0.2

Peak table for sample 4 : 25

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	76	17.20	341.0		47.98
3	96	17.53	277.5		50.00
4	995	45.74	69.7		93.94
5	1,400	8.74	9.5		96.72
6	1,558	13.16	12.8		97.80
7	1,631	11.94	11.1		98.29
8	1,783	7.61	6.5		99.32
9	1,863	9.39	7.6		99.86
10	2,029	23.78	17.8		100.89
11	2,458	7.07	4.4		102.42
12	2,710	3.21	1.8		103.31
13	10,380	75.00	10.9	Upper Marker	113.00
14	13,077	0.00	0.0		115.87

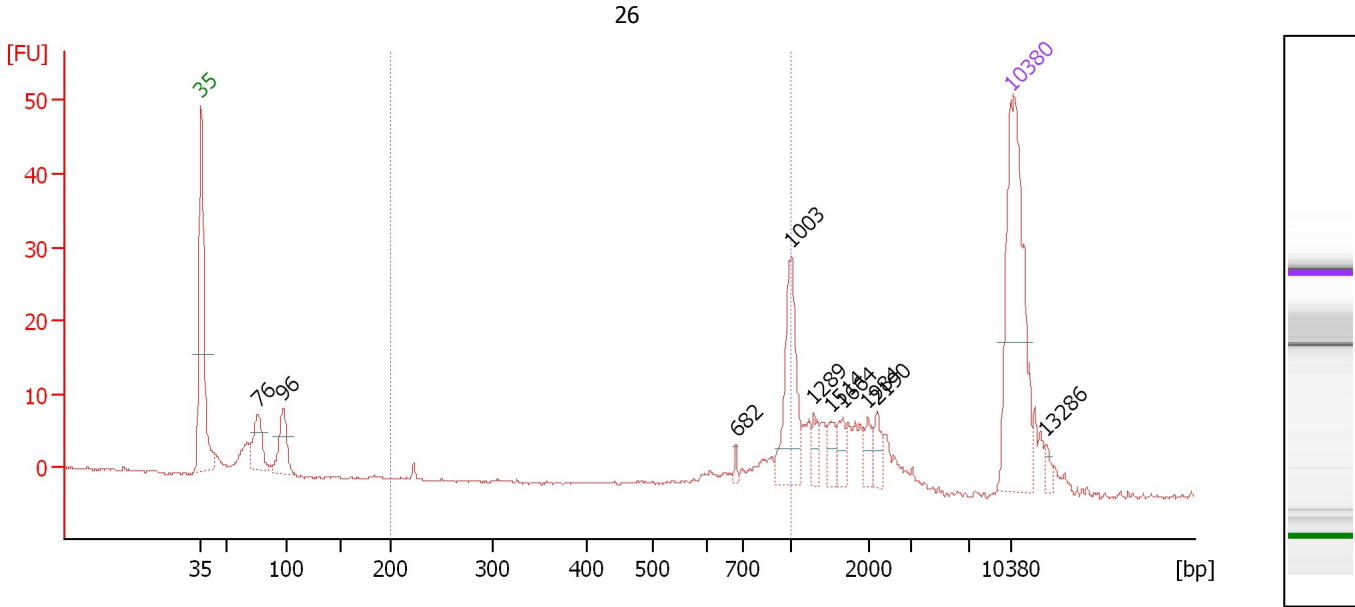
Region table for sample 4 : 25

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	756	1,000	68.3	27	28.2	85.28	207.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 26

Number of peaks found: 10 Corr. Area 1: 40.5
 Noise: 0.2

Peak table for sample 5 : 26

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	76	26.09	522.9		47.89
3	96	26.36	414.6		50.06
4	682	2.18	4.9		89.28
5	1,003	41.34	62.4		94.03
6	1,289	7.25	8.5		95.97
7	1,514	6.46	6.5		97.50
8	1,664	7.23	6.6		98.51
9	1,984	6.54	5.0		100.68
10	2,190	6.57	4.5		101.46
11	10,380	75.00	10.9	Upper Marker	113.00
12	13,286	0.00	0.0		116.09

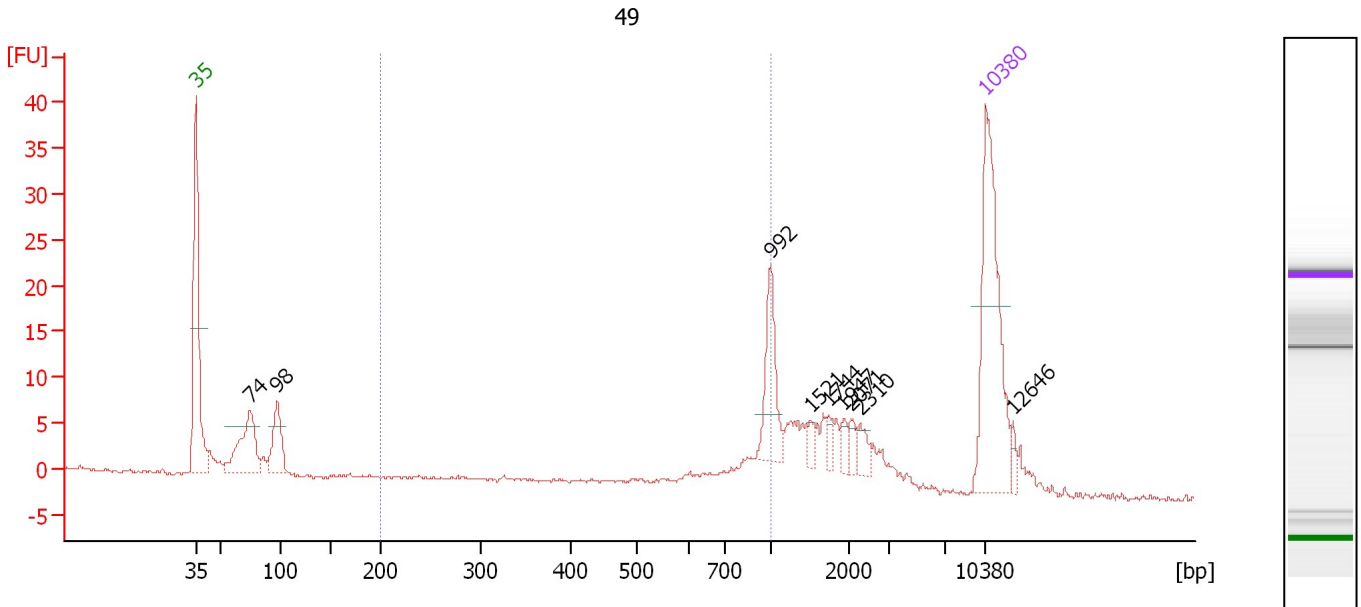
Region table for sample 5 : 26

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	847	1,000	40.5	20	18.9	44.88	88.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 49

Number of peaks found: 9 Corr. Area 1: 35.8
 Noise: 0.2

Peak table for sample 6 : 49

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	74	57.04	1,160.6		47.77
3	98	33.26	516.7		50.18
4	992	33.60	51.3		93.90
5	1,521	4.73	4.7		97.54
6	1,744	5.01	4.4		99.06
7	1,947	4.94	3.8		100.43
8	2,071	4.88	3.6		101.04
9	2,310	6.86	4.5		101.89
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,646	0.00	0.0		115.41

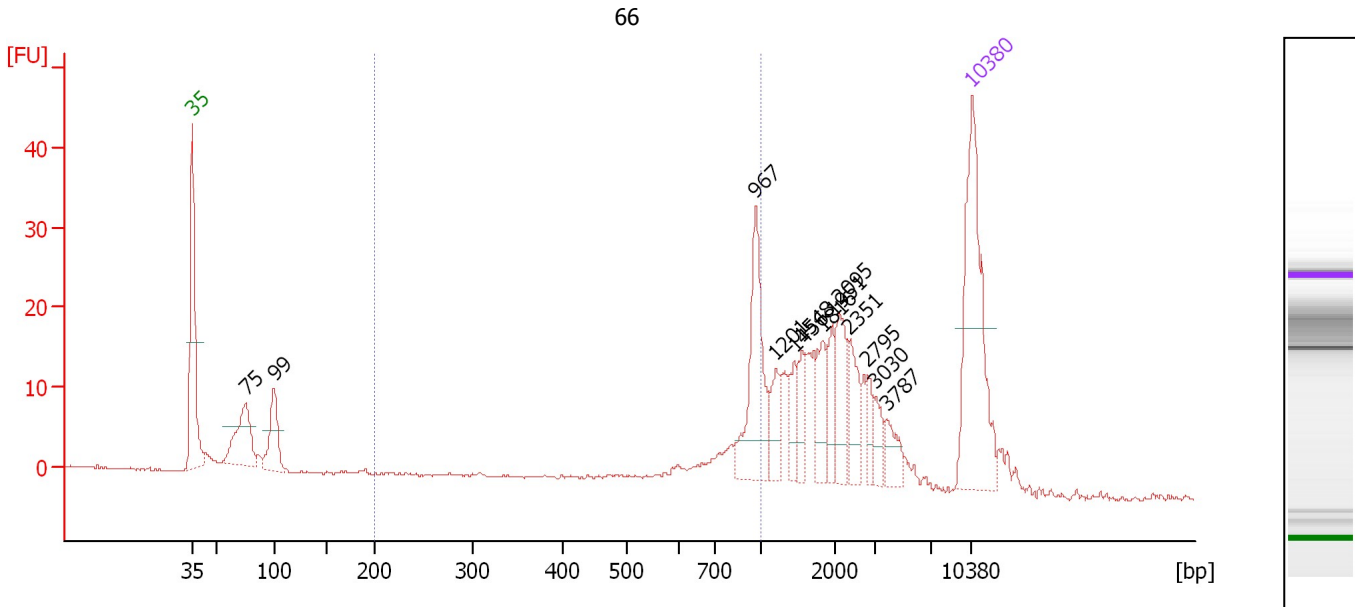
Region table for sample 6 : 49

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	809	1,000	35.8	21	24.4	54.26	118.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 66

Number of peaks found: 13 Corr. Area 1: 69.8
 Noise: 0.2

Peak table for sample 7 : 66

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	75	50.18	1,019.1		47.79
3	99	35.07	537.4		50.33
4	967	58.78	92.1		93.56
5	1,201	14.64	18.5		95.38
6	1,456	9.97	10.4		97.10
7	1,548	11.80	11.6		97.73
8	1,816	17.23	14.4		99.55
9	1,951	12.93	10.0		100.46
10	2,095	22.45	16.2		101.13
11	2,351	17.44	11.2		102.04
12	2,795	7.87	4.3		103.62
13	3,030	8.91	4.5		104.38
14	3,787	11.07	4.4		105.34
15	10,380	75.00	10.9	Upper Marker	113.00

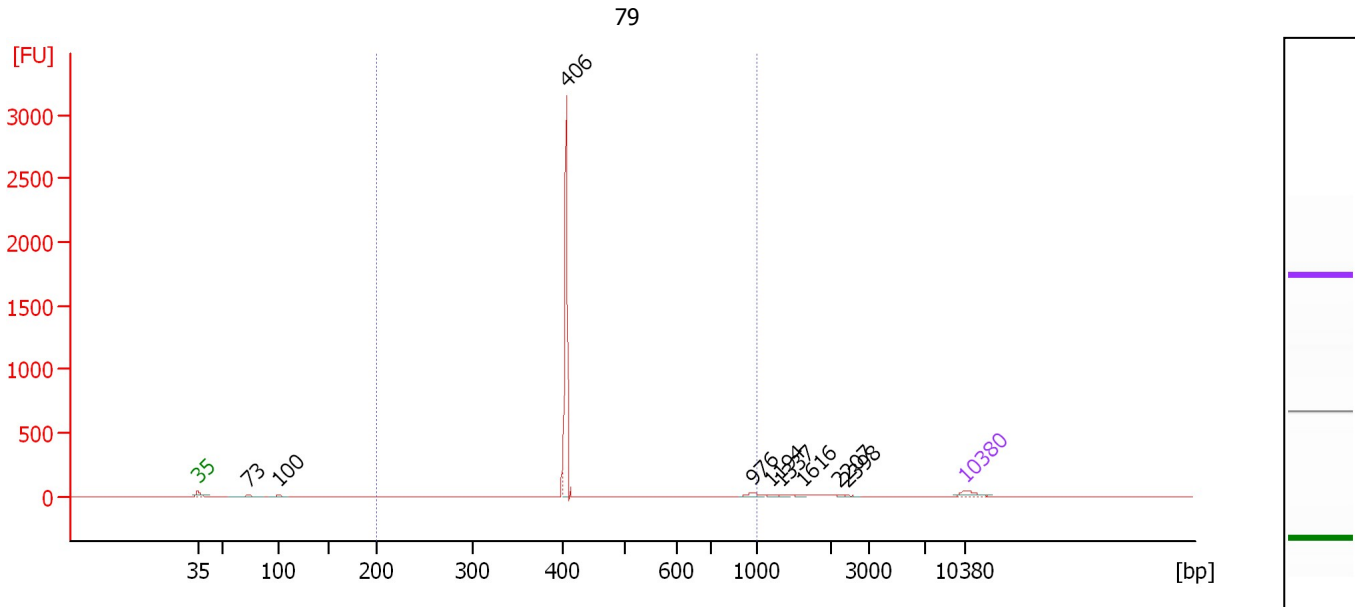
Region table for sample 7 : 66

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	798	1,000	69.8	21	25.4	87.64	199.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 79

Number of peaks found: 9 Corr. Area 1: 1,206.2
 Noise: 0.2

Peak table for sample 8 : 79

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	73	37.53	776.2		47.65
3	100	25.89	393.6		50.41
4	406	1,552.27	5,789.1		76.64
5	976	46.18	71.7		93.68
6	1,194	15.71	19.9		95.33
7	1,337	13.41	15.2		96.30
8	1,616	15.23	14.3		98.19
9	2,207	6.56	4.5		101.53
10	2,398	10.45	6.6		102.20
11	10,380	75.00	10.9	Upper Marker	113.00

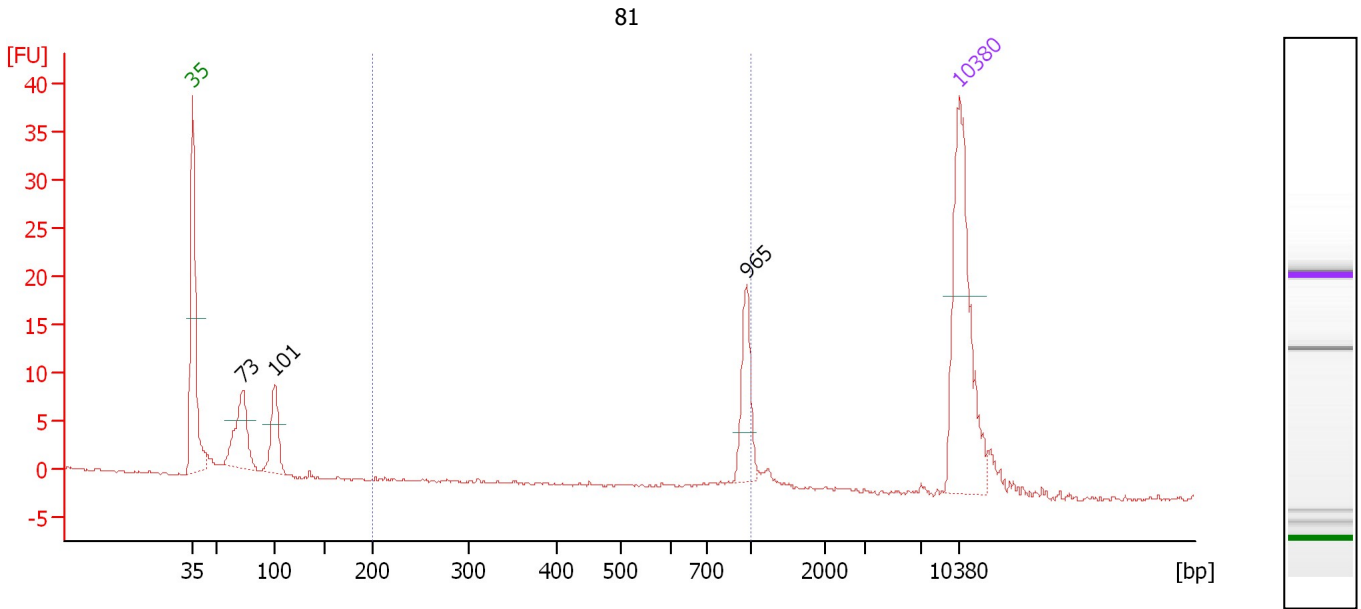
Region table for sample 8 : 79

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	431	1,000	1,206.2	87	25.3	1,679.97	6,148.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 81

Number of peaks found: 3 Corr. Area 1: 20.6
 Noise: 0.2

Peak table for sample 9 : 81

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	73	50.55	1,055.3		47.58
3	101	33.33	502.0		50.50
4	965	29.12	45.7		93.53
5	10,380	75.00	10.9	Upper Marker	113.00

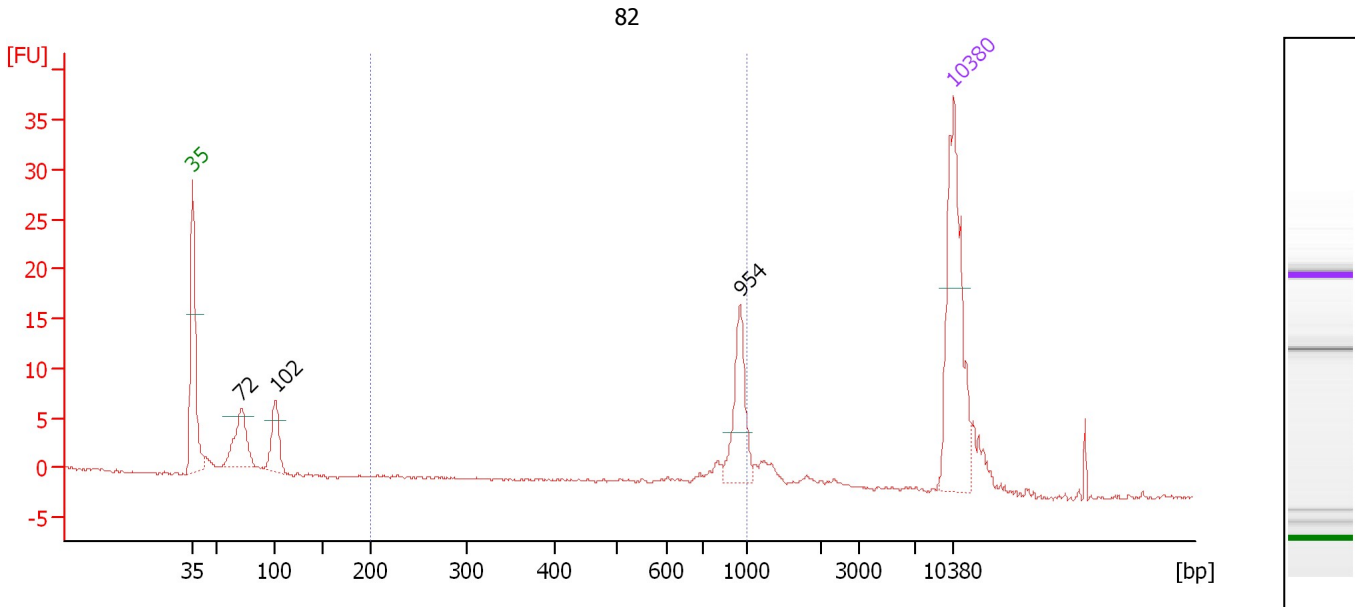
Region table for sample 9 : 81

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	948	1,000	20.6	27	5.3	28.53	45.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 82

Number of peaks found: 3 Corr. Area 1: 28.2
 Noise: 0.1

Peak table for sample 10 : 82

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	72	45.00	953.6		47.46
3	102	31.59	470.3		50.60
4	954	37.46	59.5		93.38
5	10,380	75.00	10.9	Upper Marker	113.00

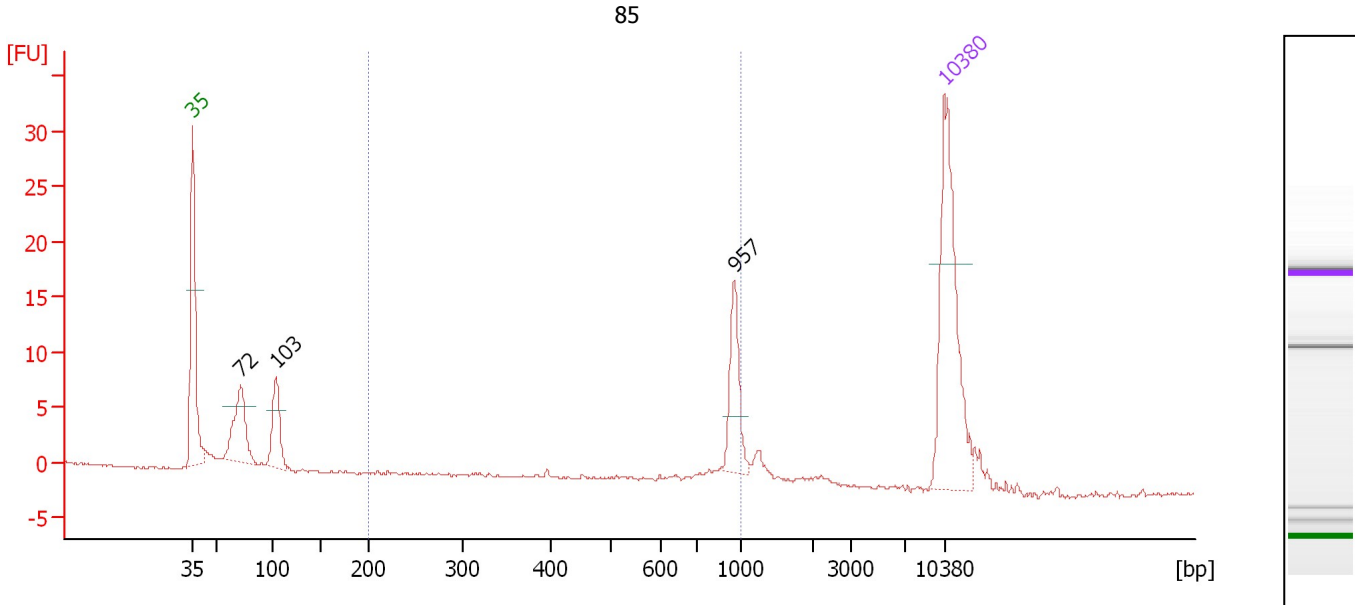
Region table for sample 10 : 82

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	877	1,000	28.2	33	15.2	48.34	88.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 85

Number of peaks found: 3 Corr. Area 1: 21.4
 Noise: 0.1

Peak table for sample 11 : 85

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	72	49.88	1,055.9		47.47
3	103	35.36	518.1		50.75
4	957	30.55	48.4		93.43
5	10,380	75.00	10.9	Upper Marker	113.00

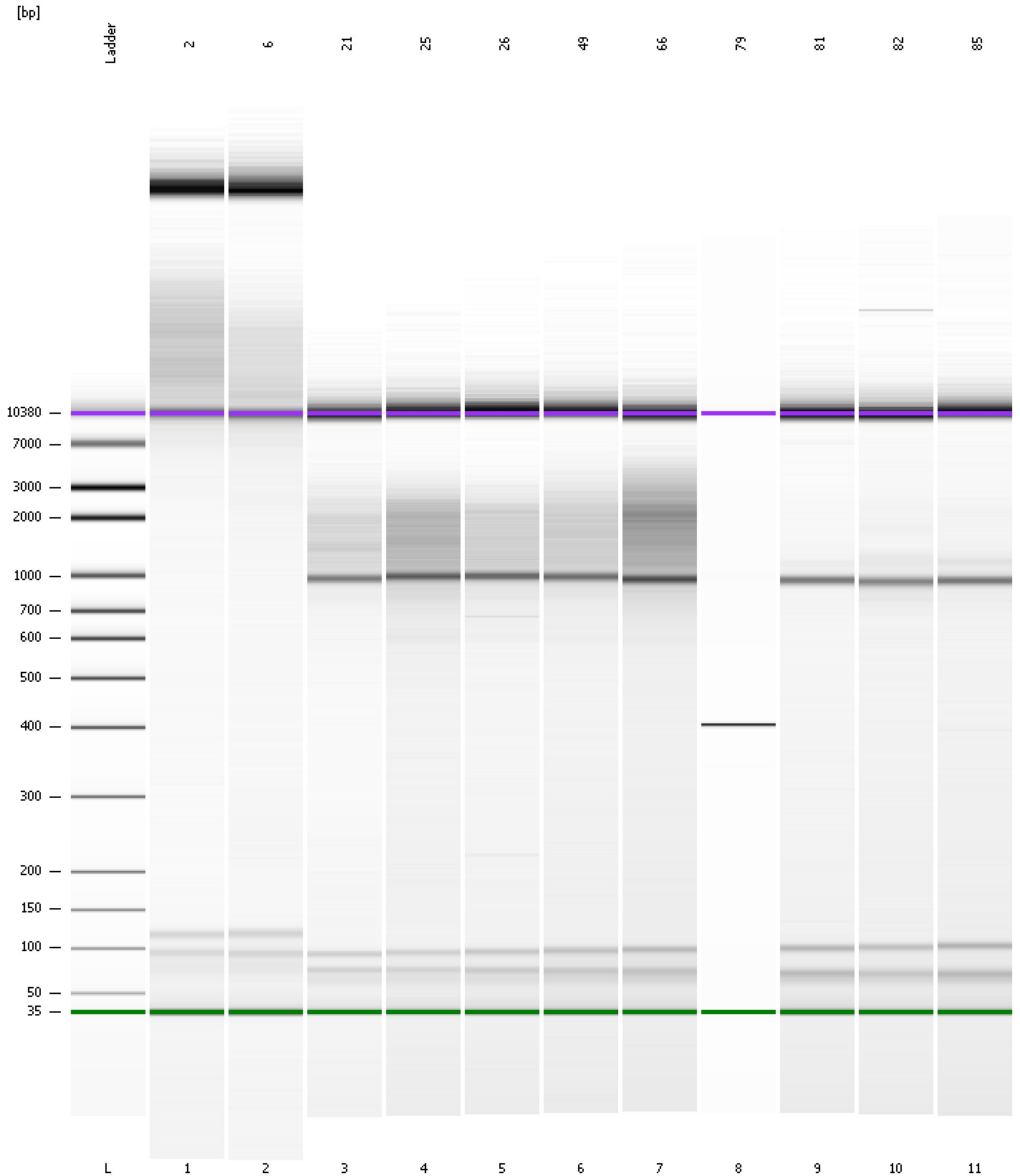
Region table for sample 11 : 85

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	913	1,000	21.4	29	12.3	35.77	61.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
Modified: 2/9/2015 4:35:40 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad

Created: 2/9/2015 3:54:20 PM
 Modified: 2/9/2015 4:35:40 PM

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		2/9/2015 4:35:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-02-09\2015-02-09_004.xad)		Instrument	Run		2/9/2015 3:54:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/9/2015 3:54:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/9/2015 3:54:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/9/2015 3:54:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/9/2015 3:54:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/9/2015 3:54:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/9/2015 3:54:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1