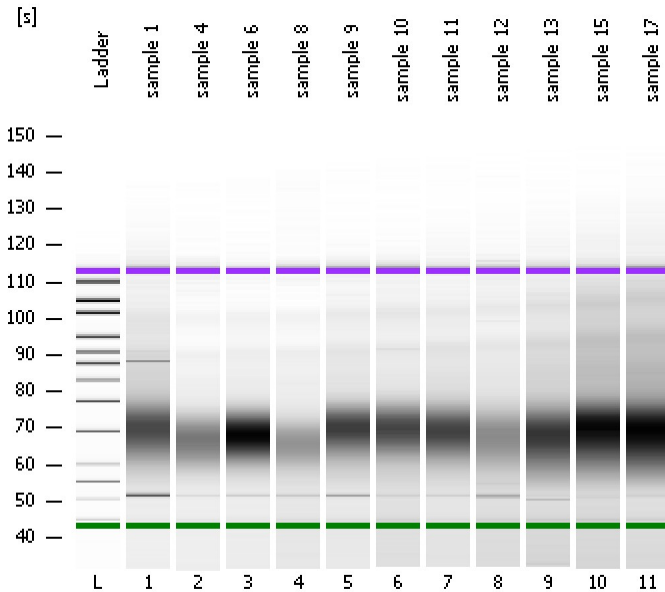


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
Modified: 8/29/2016 1:44:33 PM

Electrophoresis File Run Summary



Instrument Information:

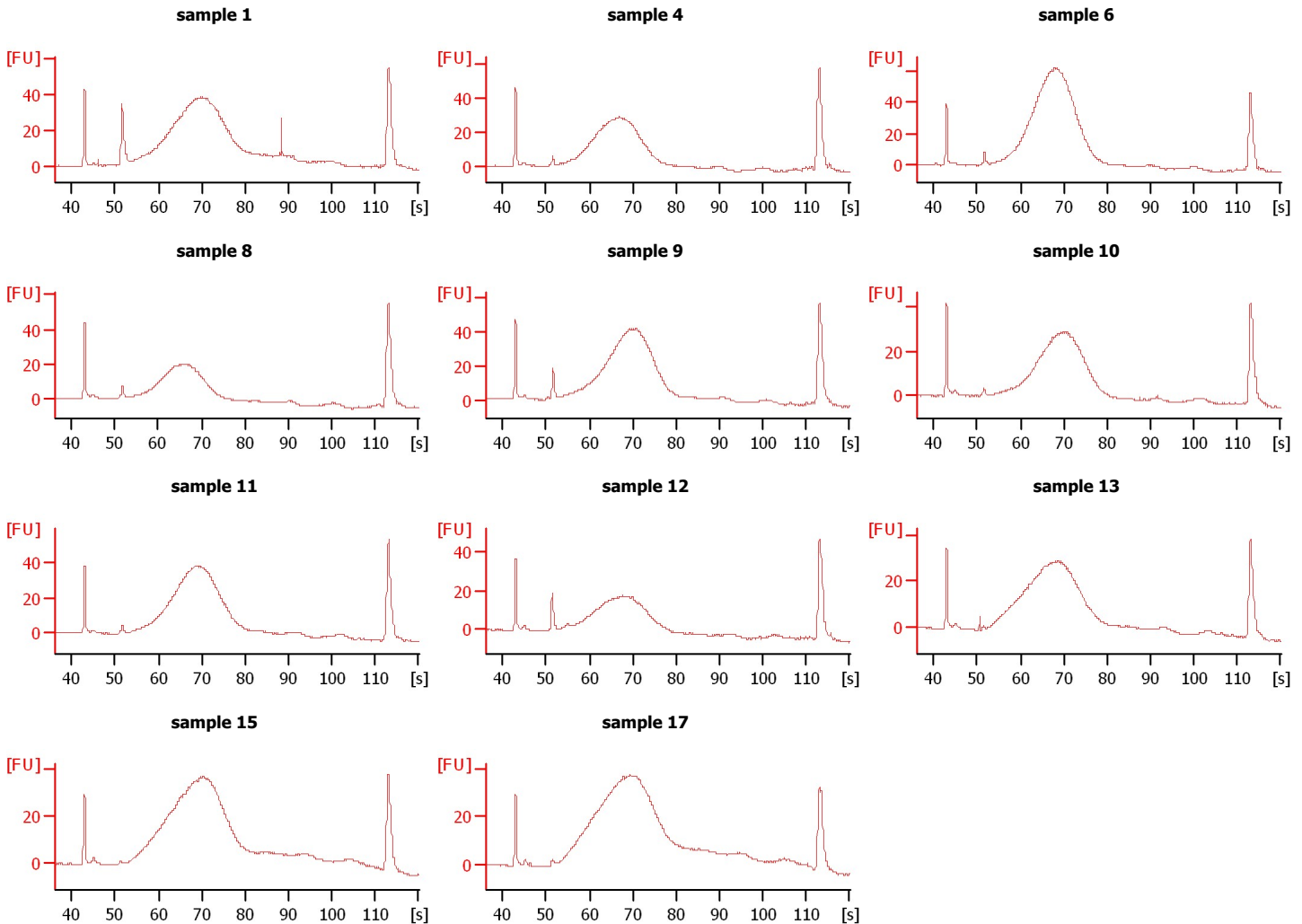
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>	✓			
sample 8		<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>	✓			
sample 10		<input type="checkbox"/>	✓			
sample 11		<input type="checkbox"/>	✓			
sample 12		<input type="checkbox"/>	✓			
sample 13		<input type="checkbox"/>	✓			
sample 15		<input type="checkbox"/>	✓			
sample 17		<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\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
Modified: 8/29/2016 1:44:33 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

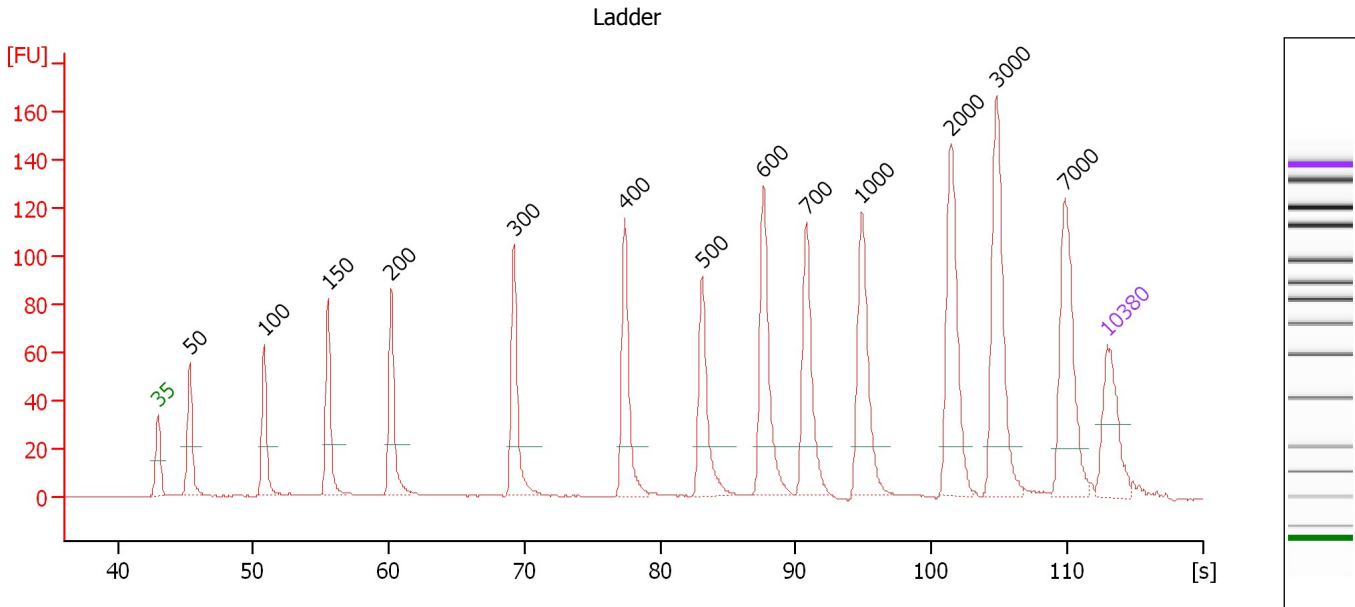
Ladder

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:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

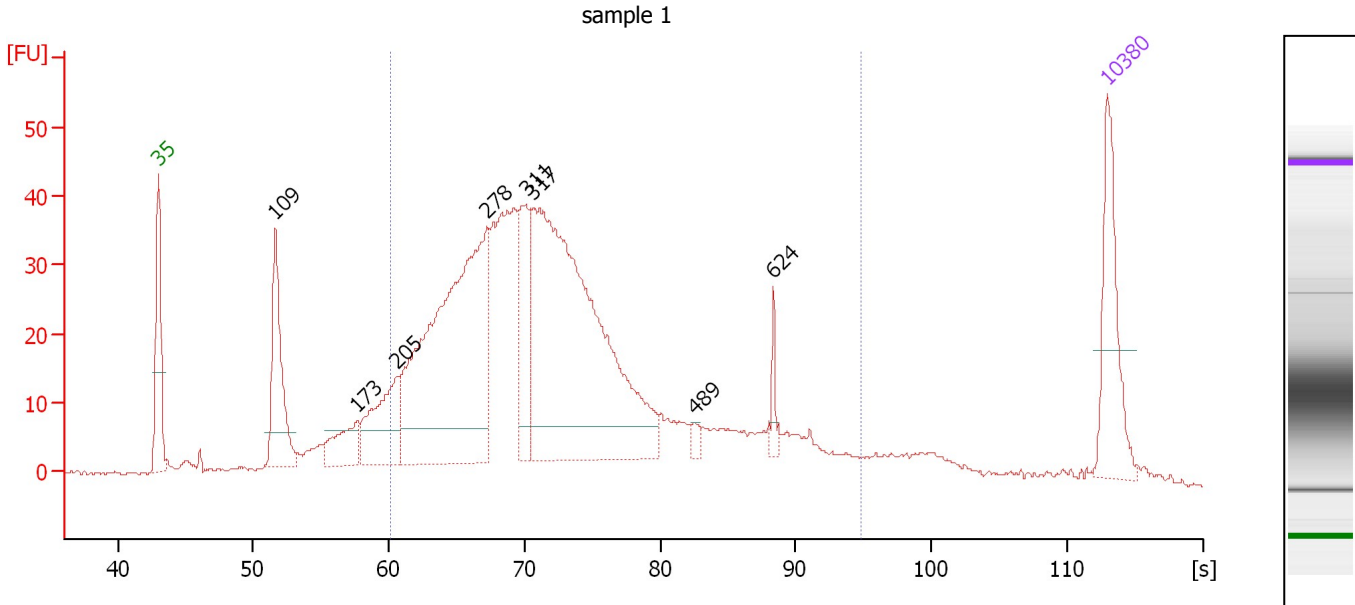
Peak table for Ladder

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	45.31
3	100	150.00	2,272.7	Ladder Peak	50.80
4	150	150.00	1,515.2	Ladder Peak	55.51
5	200	150.00	1,136.4	Ladder Peak	60.17
6	300	150.00	757.6	Ladder Peak	69.24
7	400	150.00	568.2	Ladder Peak	77.39
8	500	150.00	454.5	Ladder Peak	83.13
9	600	150.00	378.8	Ladder Peak	87.64
10	700	150.00	324.7	Ladder Peak	90.78
11	1,000	150.00	227.3	Ladder Peak	94.90
12	2,000	150.00	113.6	Ladder Peak	101.47
13	3,000	150.00	75.8	Ladder Peak	104.81
14	7,000	150.00	32.5	Ladder Peak	109.91
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 8 Corr. Area 1: 893.2
 Noise: 0.3

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	109	138.62	1,932.2		51.62
3	173	51.23	447.5		57.70
4	205	101.35	750.5		60.59
5	278	476.98	2,598.0		67.26
6	311	84.58	412.7		70.10
7	317	577.25	2,756.6		70.65
8	489	6.94	21.5		82.51
9	624	13.97	33.9		88.39
10	10,380	75.00	10.9	Upper Marker	113.00

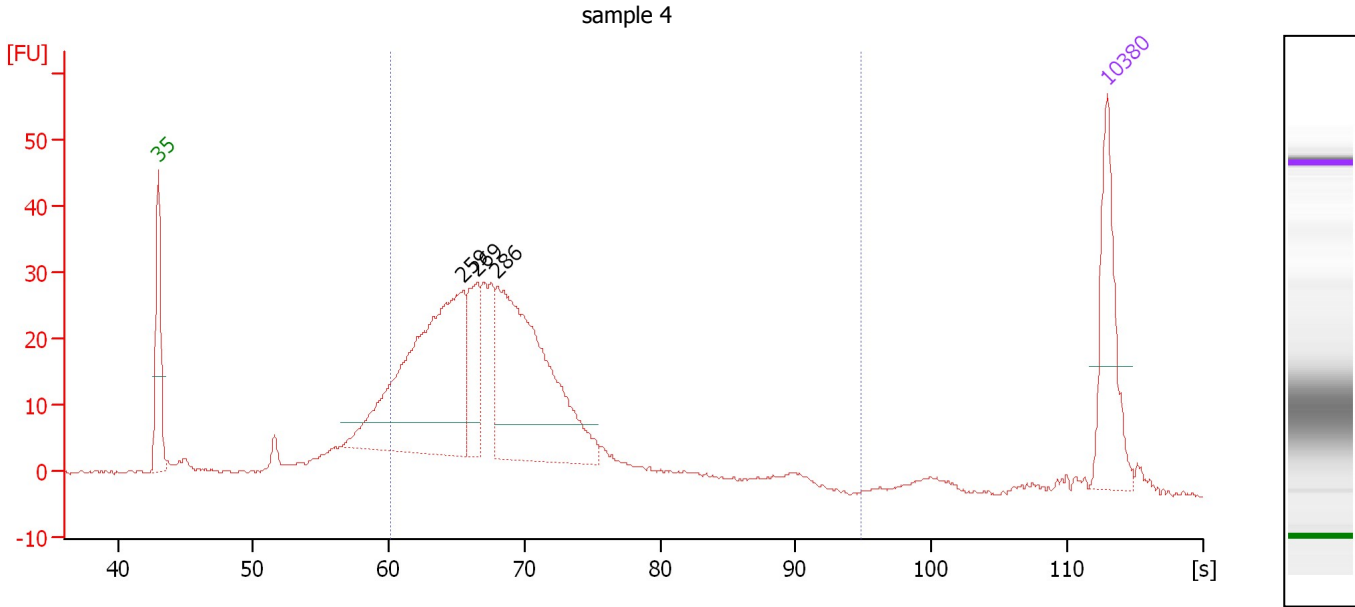
Region table for sample 1 : sample 1

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	360	893.2	8,571.9	1,779.40	80	37.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 4

Number of peaks found: 3 Corr. Area 1: 506.7
 Noise: 0.2

Peak table for sample 2 : 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	259	356.81	2,087.7		65.52
3	269	69.30	389.7		66.47
4	286	315.00	1,666.4		68.01
5	10,380	75.00	10.9	Upper Marker	113.00

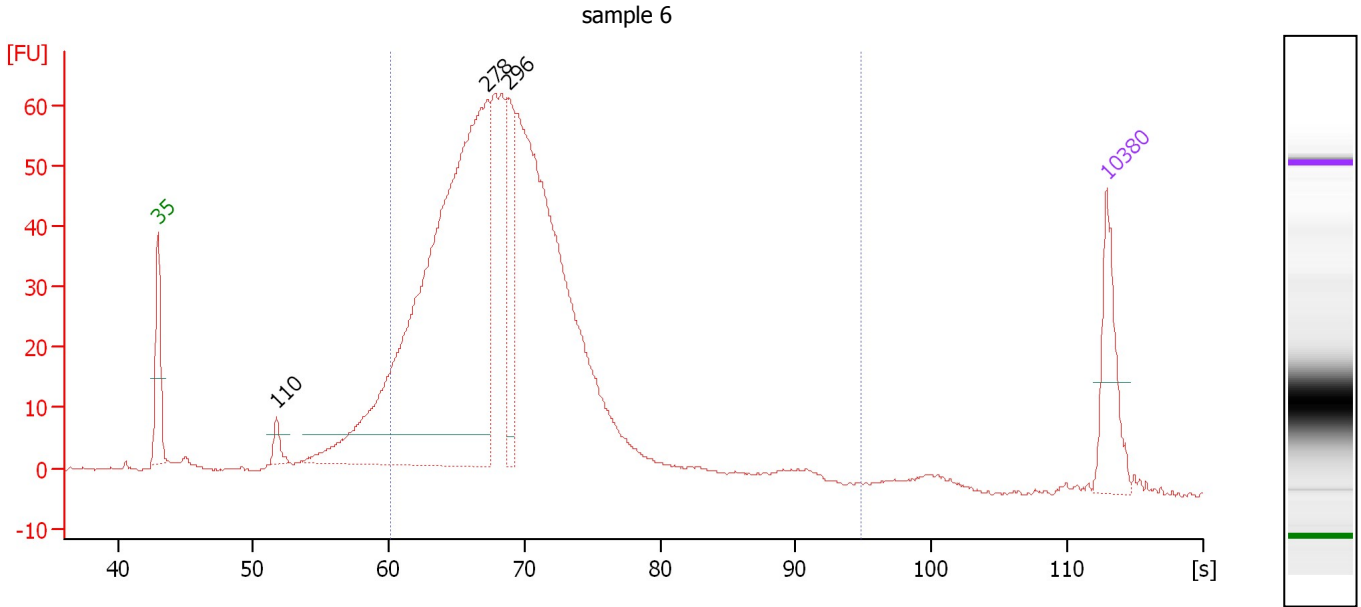
Region table for sample 2 : sample 4

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	291	506.7	5,239.0	955.79	84	24.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 6

Number of peaks found: 3 Corr. Area 1: 1,038.8
 Noise: 0.2

Peak table for sample 3 : 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	110	25.08	345.8		51.73
3	278	1,169.63	6,367.6		67.28
4	296	133.48	684.3		68.84
5	10,380	75.00	10.9	Upper Marker	113.00

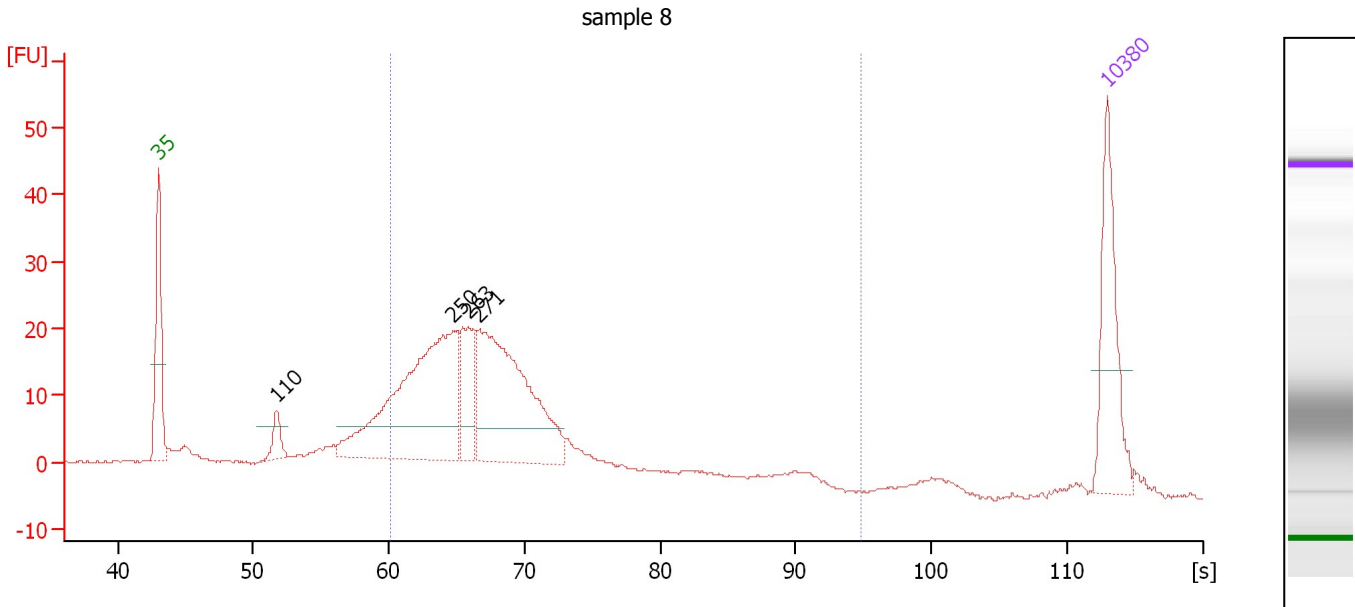
Region table for sample 3 : sample 6

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	301	1,038.8	13,015.6	2,452.37	89	24.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 8

Number of peaks found: 4 Corr. Area 1: 346.8
 Noise: 0.2

Peak table for sample 4 : 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	110	23.43	322.4		51.75
3	250	291.23	1,761.9		64.75
4	263	62.80	362.0		65.87
5	271	239.97	1,340.1		66.64
6	10,380	75.00	10.9	Upper Marker	113.00

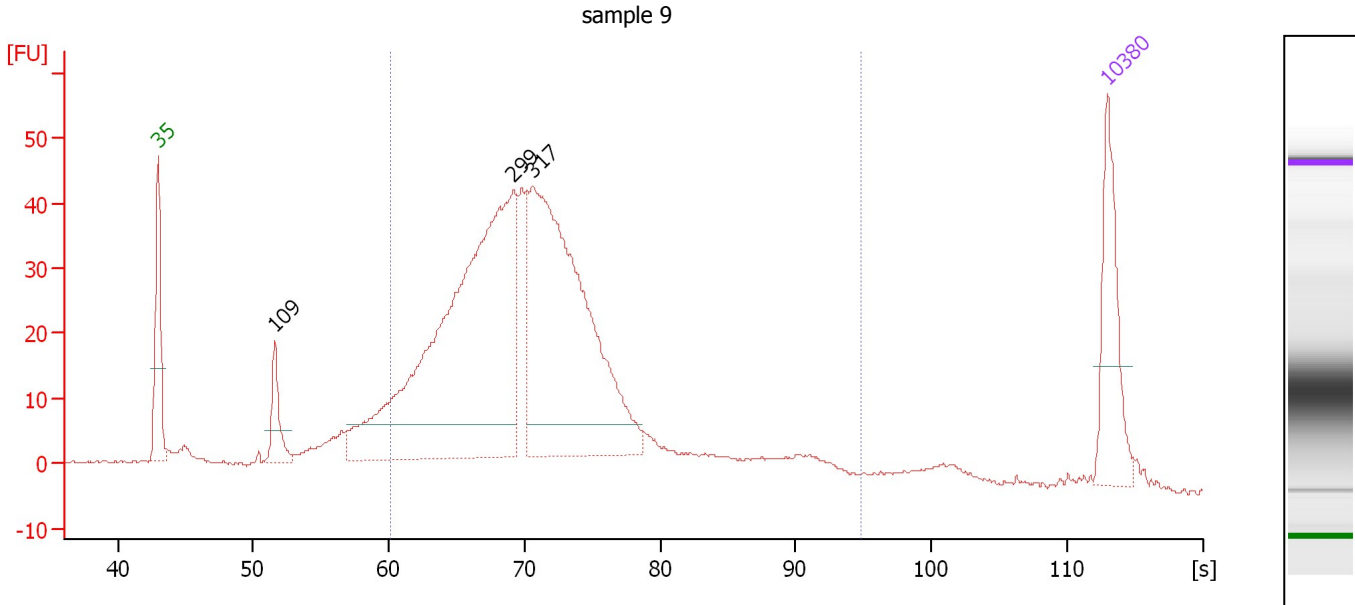
Region table for sample 4 : sample 8

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	287	346.8	3,777.3	676.42	76	27.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 9

Number of peaks found: 3 Corr. Area 1: 794.9
 Noise: 0.2

Peak table for sample 5 : 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	109	52.41	730.0		51.63
3	299	653.61	3,307.4		69.19
4	317	499.95	2,392.7		70.59
5	10,380	75.00	10.9	Upper Marker	113.00

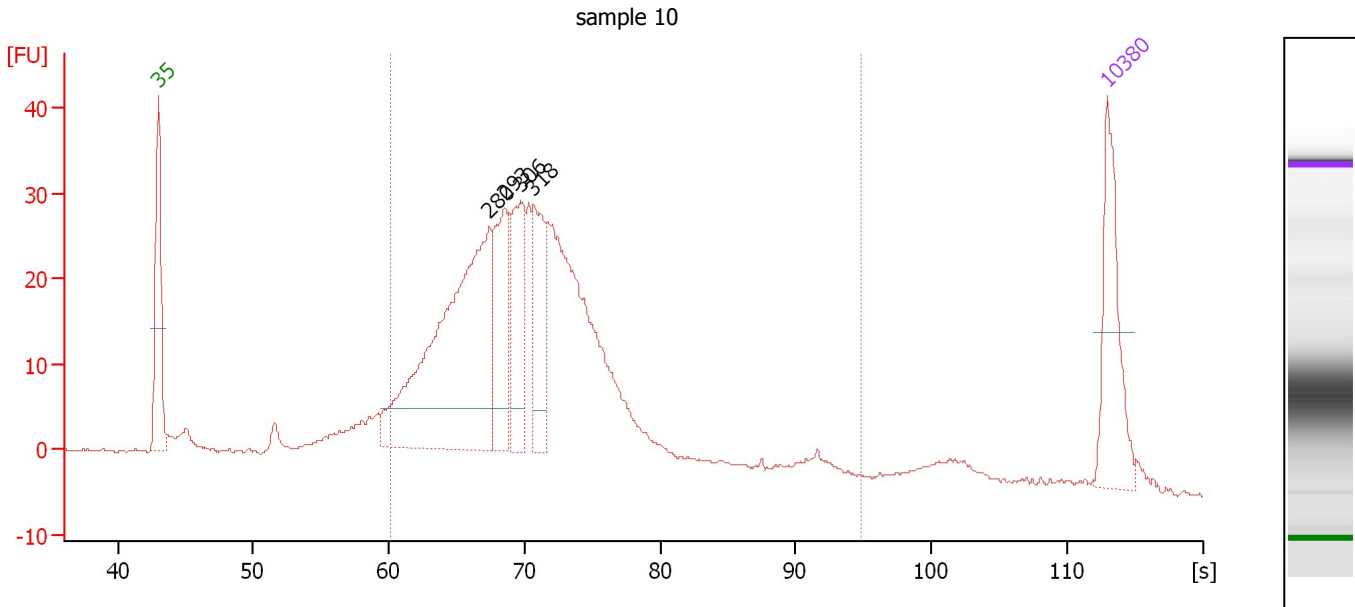
Region table for sample 5 : sample 9

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	332	794.9	7,034.3	1,413.42	84	31.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 10

Number of peaks found: 4 Corr. Area 1: 541.1
 Noise: 0.2

Peak table for sample 6 : 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	280	403.22	2,182.8		67.42
3	293	109.52	567.1		68.57
4	306	97.28	481.8		69.73
5	318	96.33	459.6		70.67
6	10,380	75.00	10.9	Upper Marker	113.00

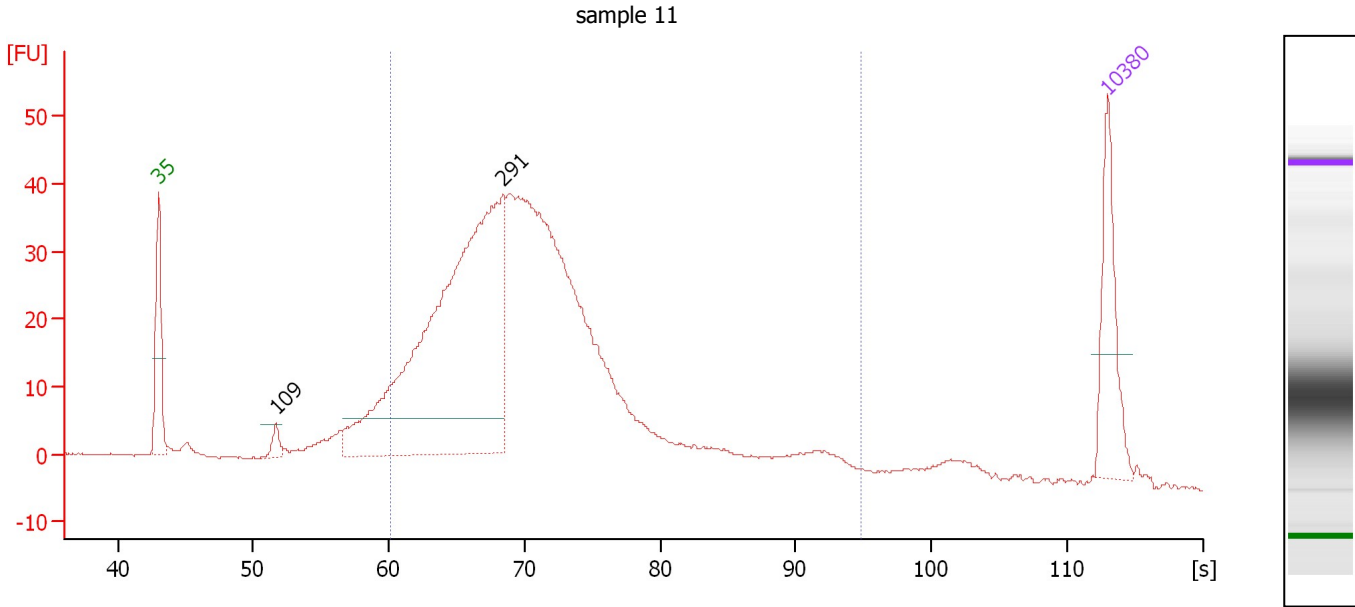
Region table for sample 6 : sample 10

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	322	541.1	6,229.1	1,235.64	86	28.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 11

Number of peaks found: 2 Corr. Area 1: 752.8
 Noise: 0.2

Peak table for sample 7 : 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	109	16.74	232.3		51.66
3	291	716.30	3,732.5		68.41
4	10,380	75.00	10.9	Upper Marker	113.00

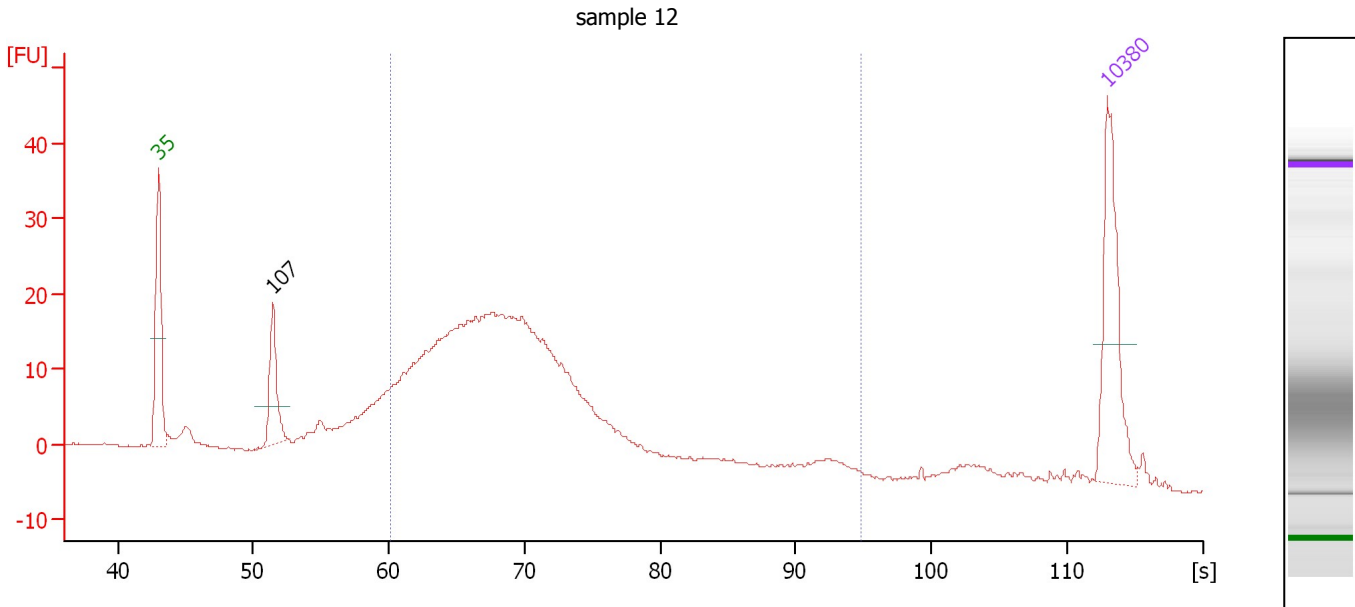
Region table for sample 7 : sample 11

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	331	752.8	8,108.6	1,608.86	87	33.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 12

Number of peaks found: 1 Corr. Area 1: 373.3
 Noise: 0.2

Peak table for sample 8 : sample 12

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	107	58.77	831.9		51.46
3	10,380	75.00	10.9	Upper Marker	113.00

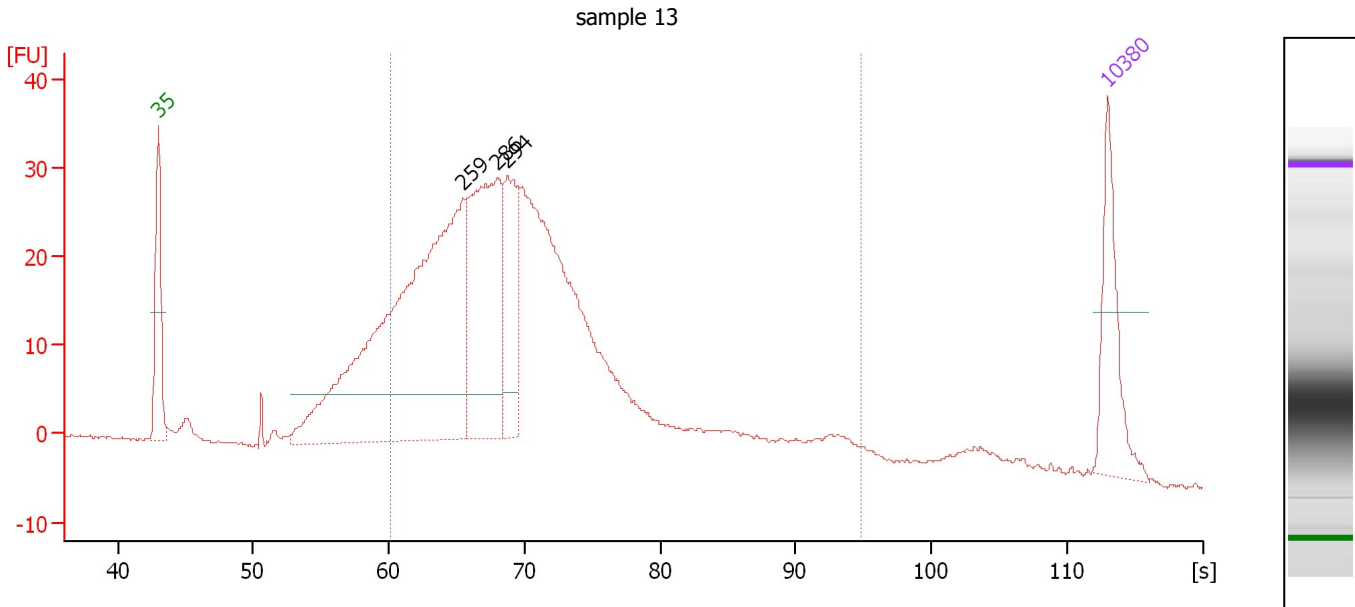
Region table for sample 8 : sample 12

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	314	373.3	4,313.0	818.61	77	34.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 13

Number of peaks found: 3 Corr. Area 1: 589.8
 Noise: 0.2

Peak table for sample 9 : sample 13

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	259	708.36	4,146.6		65.51
3	286	287.96	1,524.9		67.98
4	294	117.64	605.4		68.74
5	10,380	75.00	10.9	Upper Marker	113.00

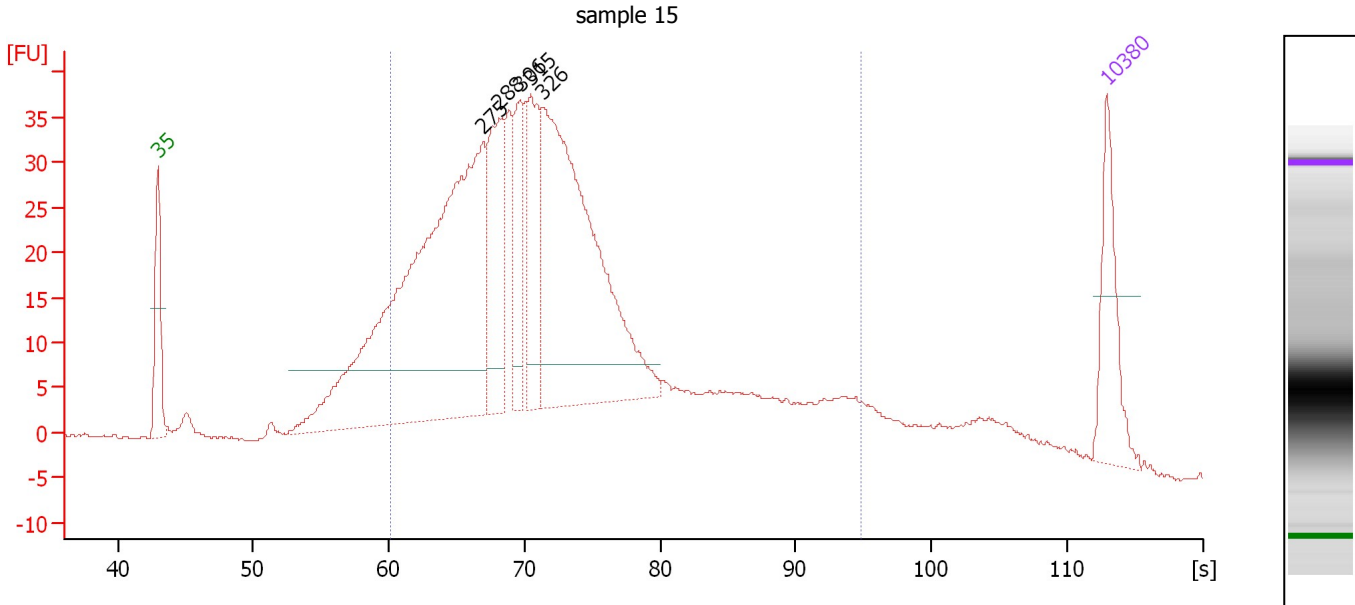
Region table for sample 9 : sample 13

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	325	589.8	8,144.7	1,571.04	85	36.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 15

Number of peaks found: 5 Corr. Area 1: 868.5
 Noise: 0.2

Peak table for sample 10 : sample 15

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	275	808.18	4,460.8		66.93
3	288	155.75	818.7		68.18
4	306	90.15	447.0		69.70
5	315	129.42	622.7		70.46
6	326	531.71	2,474.5		71.33
7	10,380	75.00	10.9	Upper Marker	113.00

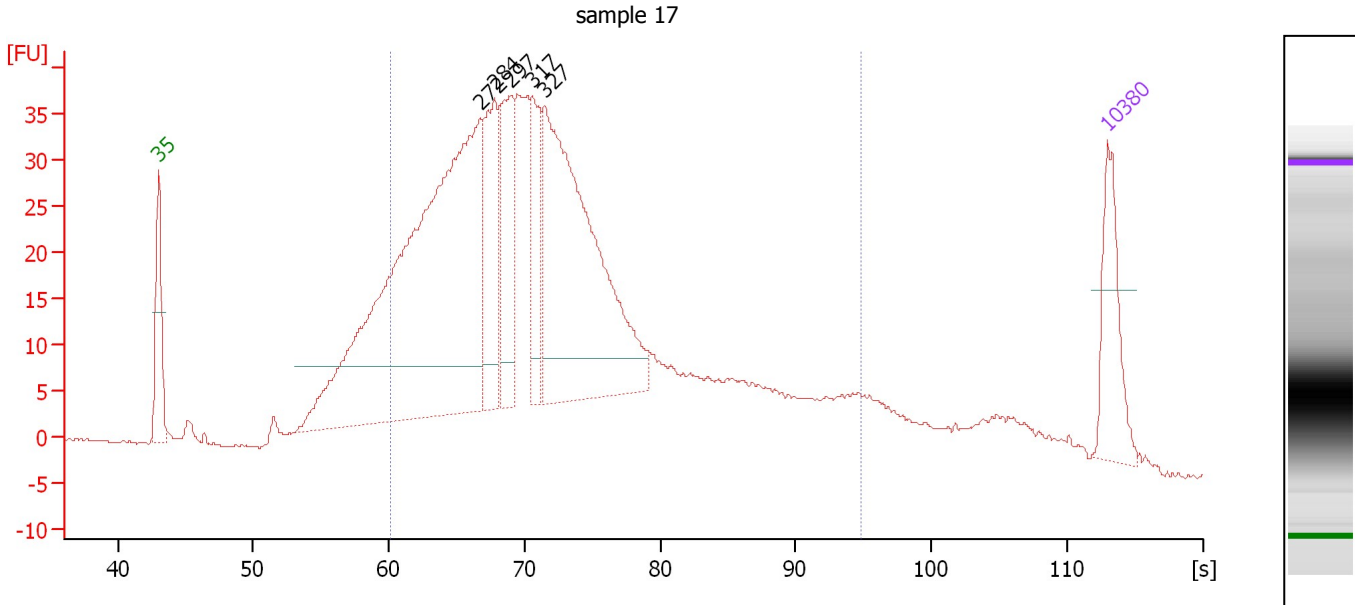
Region table for sample 10 : sample 15

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	363	868.5	11,287.7	2,326.92	81	41.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 17

Number of peaks found: 5 Corr. Area 1: 915.4
 Noise: 0.2

Peak table for sample 11 : sample 17

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	272	944.74	5,259.8		66.72
3	284	156.24	833.0		67.81
4	297	141.10	720.2		68.96
5	317	97.15	464.9		70.60
6	327	519.54	2,404.8		71.47
7	10,380	75.00	10.9	Upper Marker	113.00

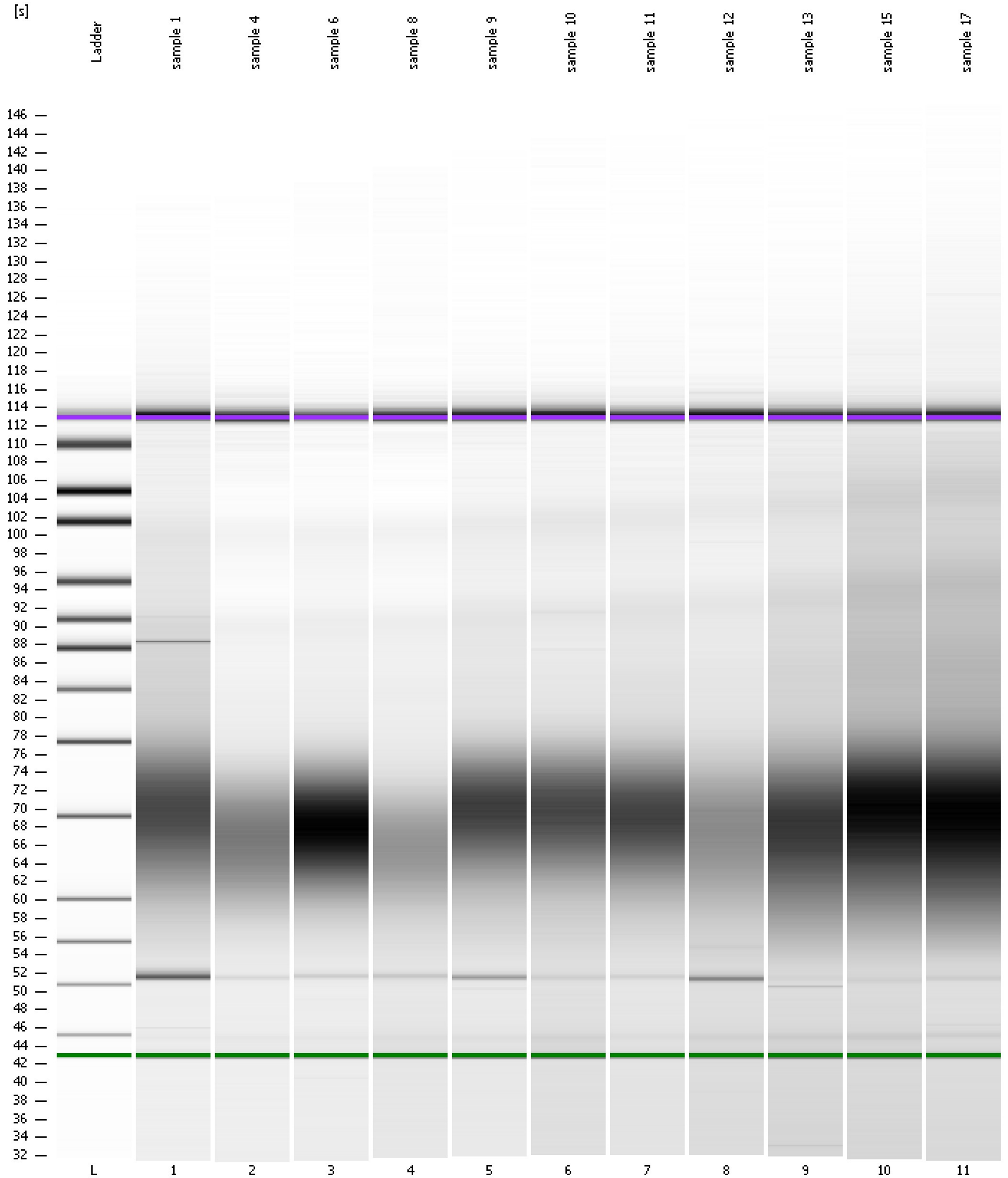
Region table for sample 11 : sample 17

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.17	94.90	364	915.4	12,691.2	2,605.76	80	41.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
Modified: 8/29/2016 1:44:33 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad

Created: 8/29/2016 1:03:14 PM
 Modified: 8/29/2016 1:44:33 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		8/29/2016 1:44:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-08-29\2016-08-29_001.xad)		Instrument	Run		8/29/2016 1:03:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/29/2016 1:03:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/29/2016 1:03:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/29/2016 1:03:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/29/2016 1:03:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/29/2016 1:03:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/29/2016 1:03:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1