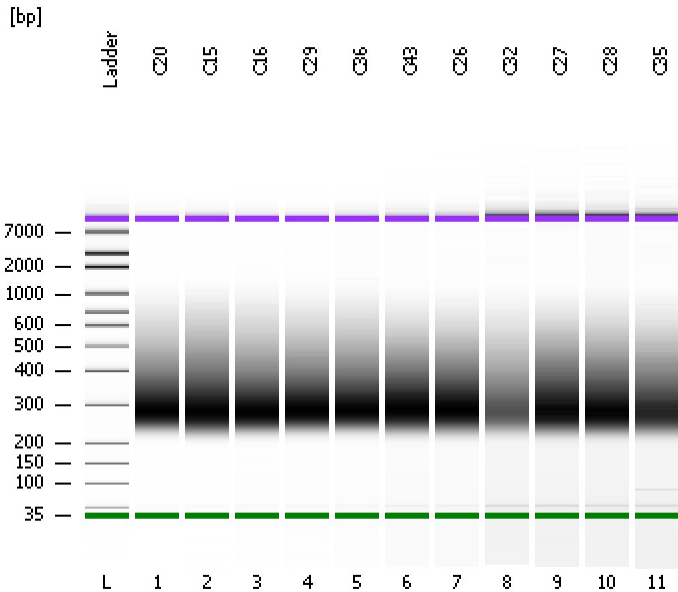


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
Modified: 10/9/2017 12:36:33 PM

Electrophoresis File Run Summary



Instrument Information:

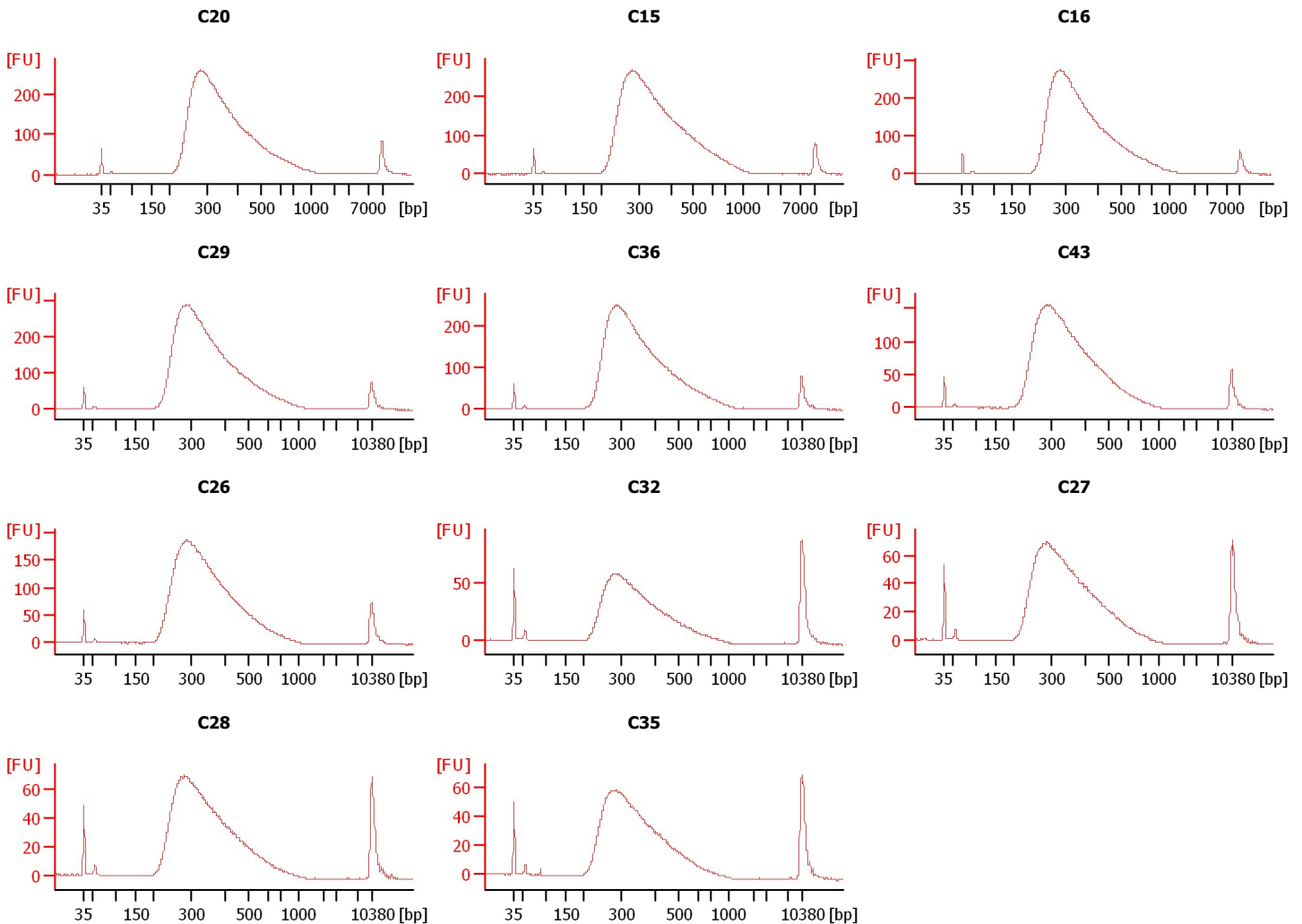
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
C20		<input type="checkbox"/>	✓			
C15		<input type="checkbox"/>	✓			
C16		<input type="checkbox"/>	✓			
C29		<input type="checkbox"/>	✓			
C36		<input type="checkbox"/>	✓			
C43		<input type="checkbox"/>	✓			
C26		<input type="checkbox"/>	✓			
C32		<input type="checkbox"/>	✓			
C27		<input type="checkbox"/>	✓			
C28		<input type="checkbox"/>	✓			
C35		<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\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
Modified: 10/9/2017 12:36:33 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

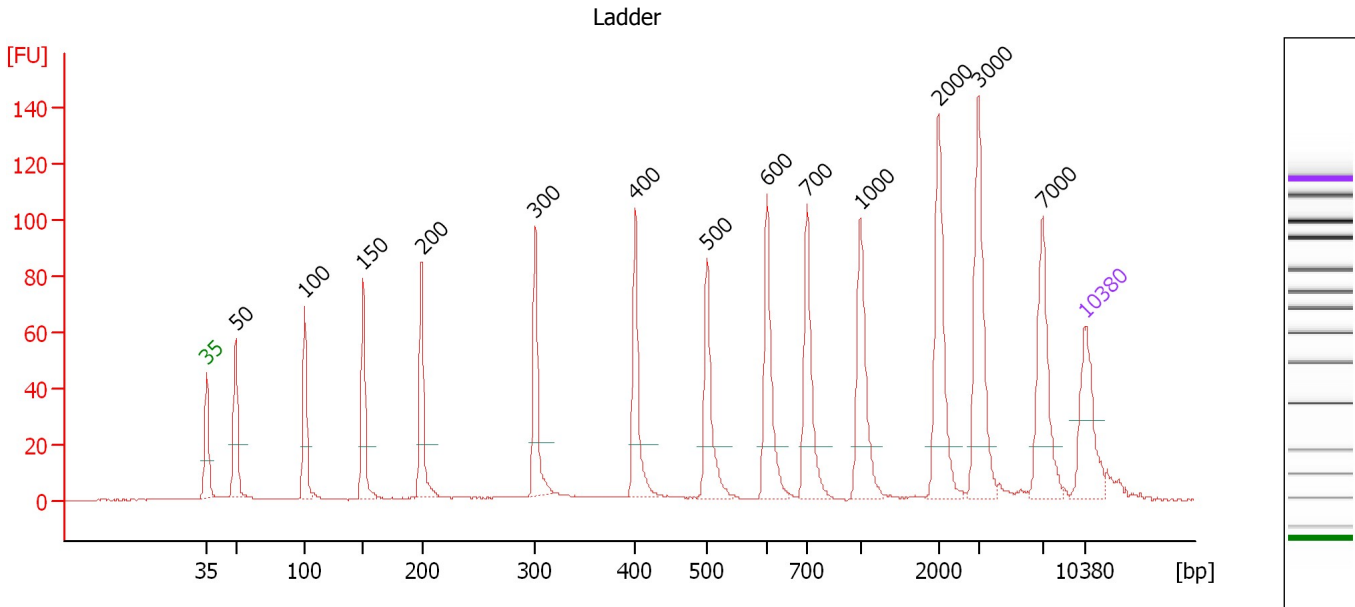
Ladder

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\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

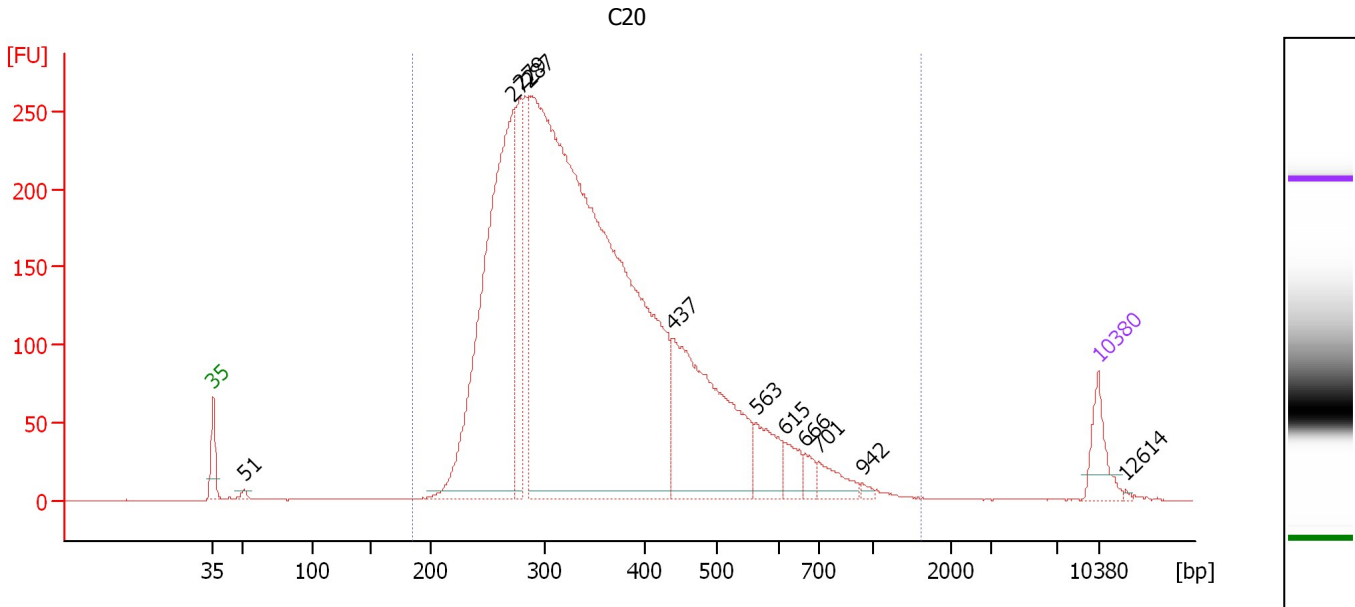
Peak table for Ladder

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	45.30
3	100	150.00	2,272.7	Ladder Peak	50.83
4	150	150.00	1,515.2	Ladder Peak	55.50
5	200	150.00	1,136.4	Ladder Peak	60.14
6	300	150.00	757.6	Ladder Peak	69.20
7	400	150.00	568.2	Ladder Peak	77.19
8	500	150.00	454.5	Ladder Peak	82.89
9	600	150.00	378.8	Ladder Peak	87.70
10	700	150.00	324.7	Ladder Peak	90.89
11	1,000	150.00	227.3	Ladder Peak	95.14
12	2,000	150.00	113.6	Ladder Peak	101.35
13	3,000	150.00	75.8	Ladder Peak	104.54
14	7,000	150.00	32.5	Ladder Peak	109.68
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : C20

Number of peaks found: 11 Corr. Area 1: 5,515.6
 Noise: 0.2

Peak table for sample 1 : C20

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	51	13.24	390.8		45.45
3	272	1,562.37	8,689.5		66.70
4	279	298.57	1,621.8		67.29
5	287	4,224.85	22,315.5		68.01
6	437	755.01	2,617.0		79.31
7	563	134.68	362.3		85.93
8	615	64.20	158.3		88.16
9	666	37.57	85.5		89.81
10	701	70.98	153.4		90.90
11	942	10.43	16.8		94.32
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,614	0.00	0.0		115.19

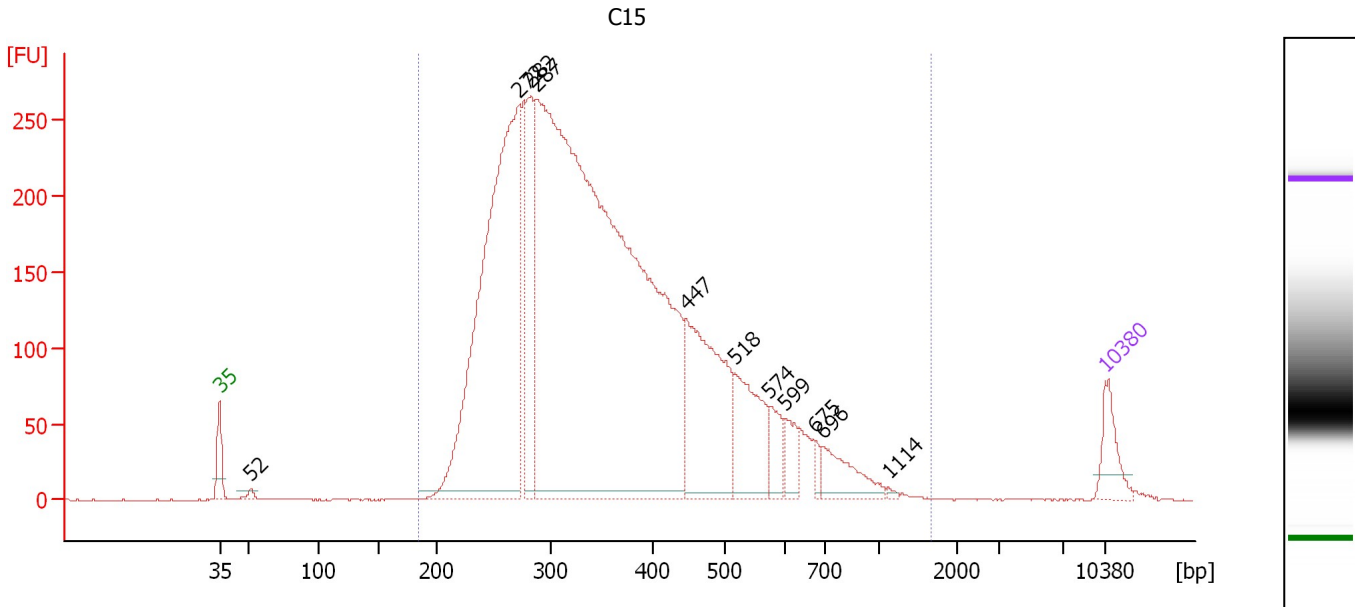
Region table for sample 1 : C20

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
185	1,619	367	5,515.6	32,300.5	6,983.80	99	34.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : C15

Number of peaks found: 11 Corr. Area 1: 6,286.1
 Noise: 0.2

Peak table for sample 2 : C15

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	52	15.51	454.5		45.49
3	272	1,848.06	10,302.0		66.64
4	282	361.29	1,940.9		67.57
5	287	4,433.23	23,429.7		67.99
6	447	579.06	1,962.4		79.88
7	518	275.84	806.9		83.75
8	574	85.74	226.3		86.45
9	599	67.20	169.9		87.67
10	675	24.92	56.0		90.07
11	696	128.84	280.6		90.75
12	1,114	5.69	7.7		95.85
13	10,380	75.00	10.9	Upper Marker	113.00

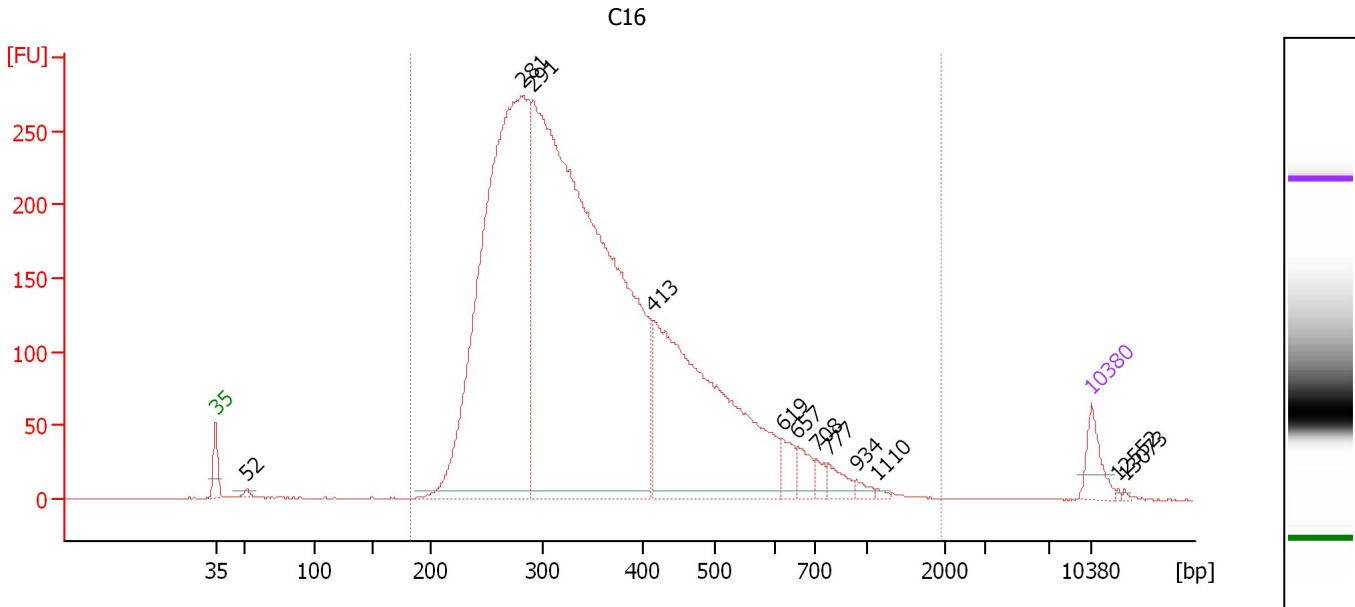
Region table for sample 2 : C15

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
185	1,667	372	6,286.1	35,479.6	7,662.26	99	36.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : C16

Number of peaks found: 12 Corr. Area 1: 5,904.9
 Noise: 0.2

Peak table for sample 3 : C16

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	52	18.60	546.2		45.47
3	281	3,117.01	16,810.6		67.47
4	291	4,624.92	24,056.4		68.41
5	413	1,509.54	5,532.2		77.96
6	619	72.76	178.0		88.32
7	657	67.33	155.3		89.51
8	708	35.60	76.2		91.00
9	777	57.26	111.6		91.98
10	934	21.43	34.8		94.20
11	1,110	7.53	10.3		95.82
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,552	0.00	0.0		115.13
14	13,073	0.00	0.0		115.64

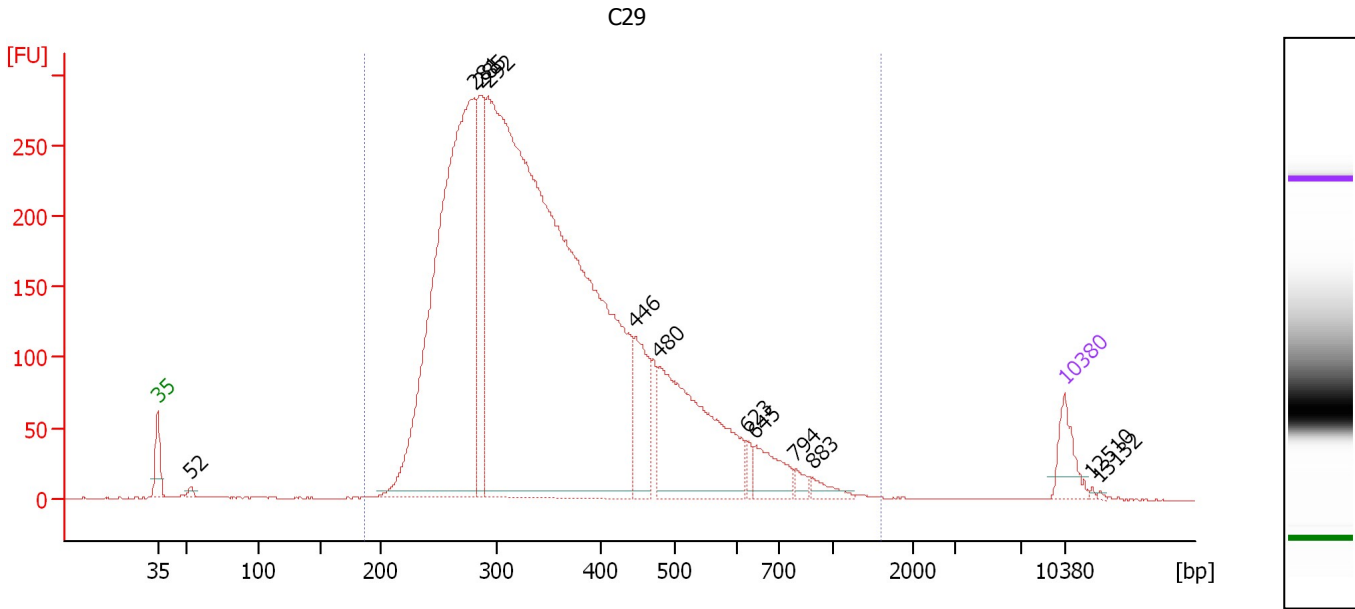
Region table for sample 3 : C16

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
184	1,932	366	5,904.9	42,753.2	9,164.07	99	36.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : C29

Number of peaks found: 12 Corr. Area 1: 6,153.9
 Noise: 0.2

Peak table for sample 4 : C29

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	52	14.59	421.2		45.57
3	281	2,159.05	11,659.4		67.44
4	285	364.18	1,933.5		67.87
5	292	4,593.05	23,823.6		68.48
6	446	223.46	759.3		79.81
7	480	668.39	2,111.9		81.72
8	623	28.14	68.4		88.43
9	645	114.84	269.8		89.13
10	794	25.13	47.9		92.22
11	883	30.86	52.9		93.49
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,510	0.00	0.0		115.09
14	13,132	0.00	0.0		115.70

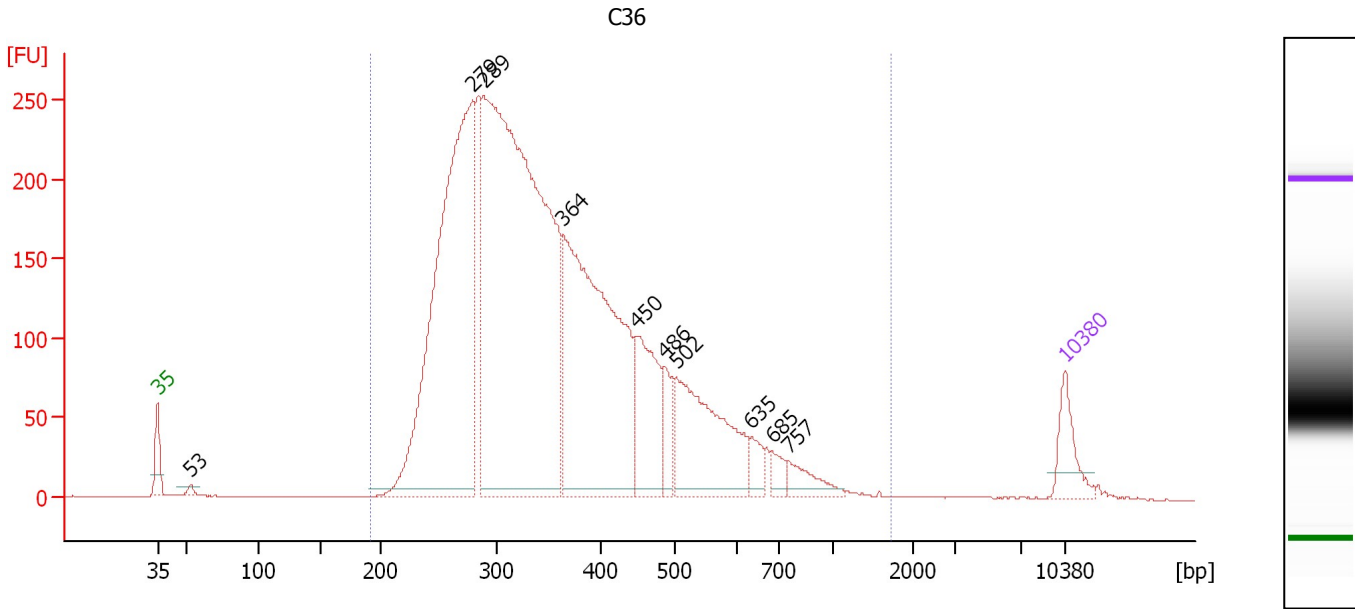
Region table for sample 4 : C29

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
187	1,583	367	6,153.9	36,508.3	7,900.30	99	34.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : C36

Number of peaks found: 10 Corr. Area 1: 5,414.9
 Noise: 0.1

Peak table for sample 5 : C36

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	53	14.34	413.8		45.57
3	279	1,634.85	8,883.3		67.28
4	289	2,522.60	13,241.7		68.17
5	364	1,163.36	4,845.8		74.29
6	450	285.24	961.2		80.02
7	486	87.03	271.2		82.11
8	502	430.79	1,299.8		82.99
9	635	46.82	111.7		88.81
10	685	36.67	81.1		90.41
11	757	64.99	130.1		91.69
12	10,380	75.00	10.9	Upper Marker	113.00

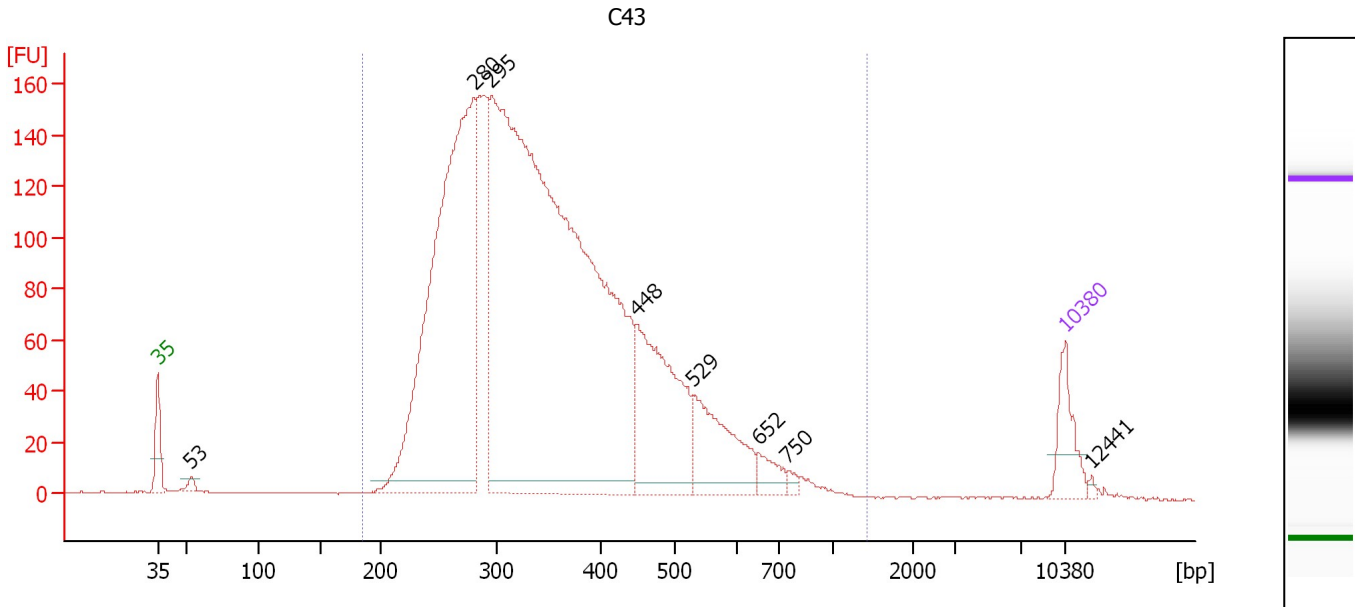
Region table for sample 5 : C36

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
193	1,704	372	5,414.9	29,354.4	6,410.14	99	35.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : C43

Number of peaks found: 8 Corr. Area 1: 3,486.8
 Noise: 0.2

Peak table for sample 6 : C43

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	53	18.65	535.1		45.61
3	280	1,508.08	8,151.9		67.41
4	295	3,124.19	16,035.9		68.76
5	448	438.49	1,481.3		79.96
6	529	233.72	669.7		84.27
7	652	48.06	111.7		89.35
8	750	12.50	25.2		91.60
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,441	0.00	0.0		115.02

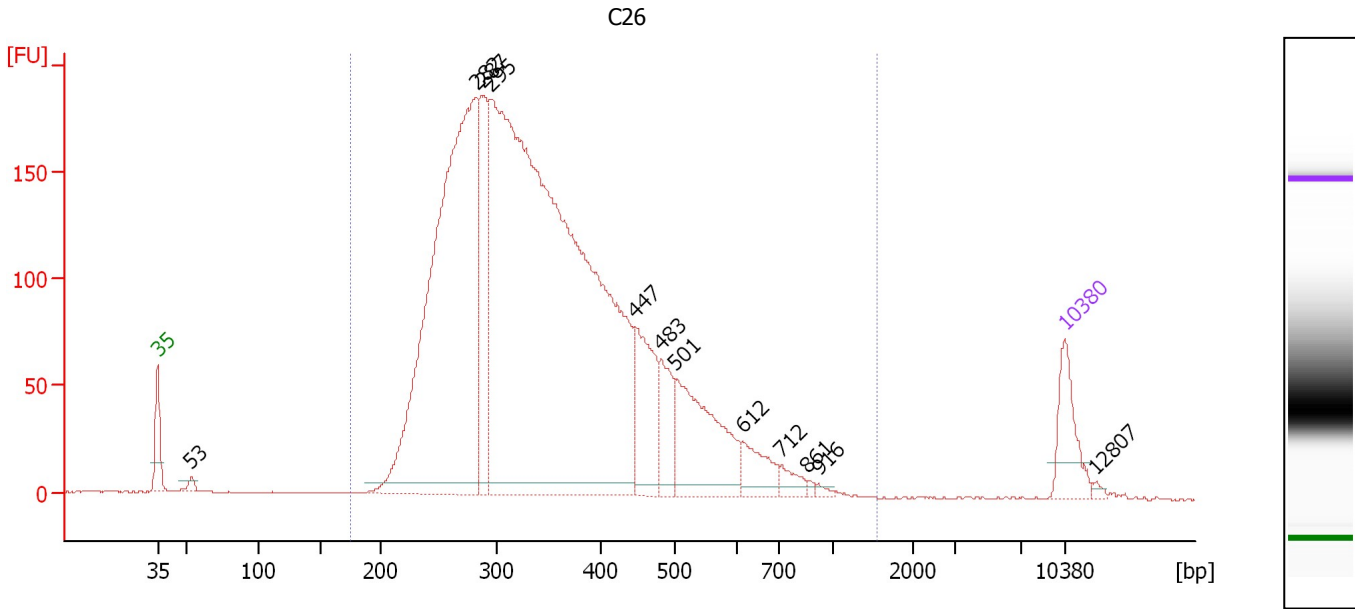
Region table for sample 6 : C43

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
186	1,426	362	3,486.8	25,654.4	5,524.02	98	31.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : C26

Number of peaks found: 12 Corr. Area 1: 4,099.4
 Noise: 0.2

Peak table for sample 7 : C26

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	53	13.77	394.7		45.61
3	282	1,390.94	7,463.3		67.60
4	287	270.07	1,426.1		68.01
5	295	2,689.07	13,810.2		68.75
6	447	184.21	624.2		79.88
7	483	91.81	288.3		81.89
8	501	267.83	809.7		82.95
9	612	65.21	161.4		88.08
10	712	27.54	58.6		91.06
11	861	4.87	8.6		93.16
12	916	6.44	10.7		93.94
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,807	0.00	0.0		115.38

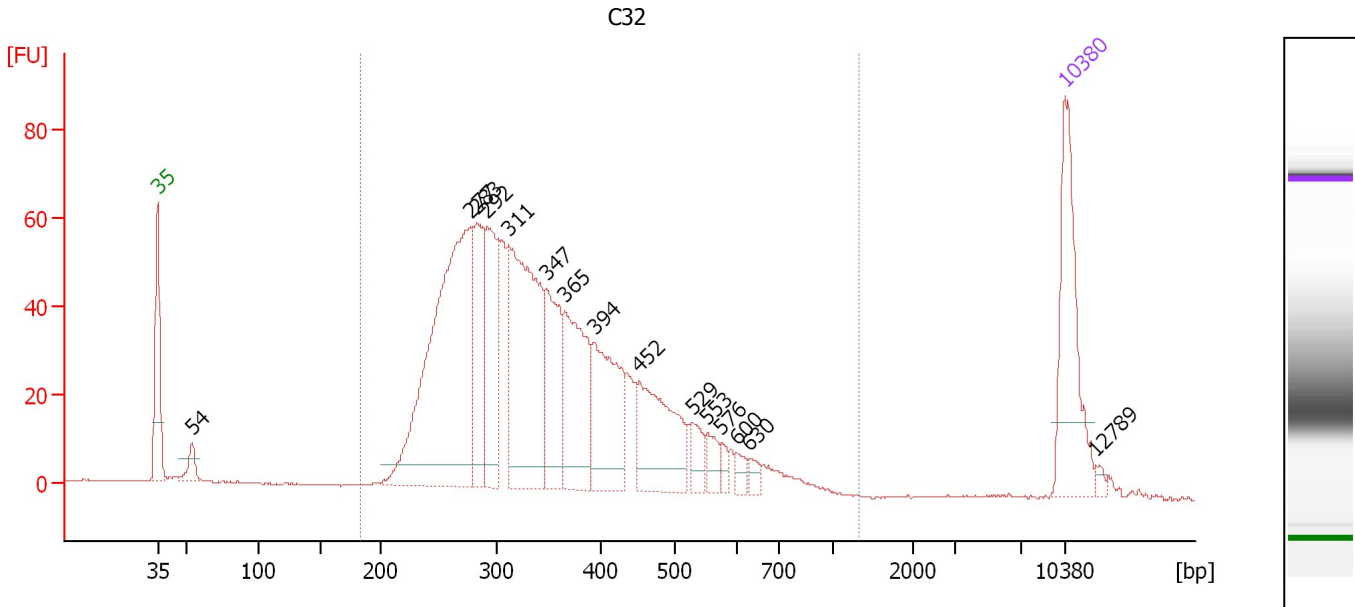
Region table for sample 7 : C26

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
176	1,543	360	4,099.4	22,314.9	4,783.93	99	31.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : C32

Number of peaks found: 15 Corr. Area 1: 1,285.2
 Noise: 0.2

Peak table for sample 8 : C32

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	54	15.58	440.9		45.69
3	277	337.52	1,843.3		67.15
4	283	83.17	446.0		67.62
5	292	87.89	456.4		68.45
6	311	209.78	1,022.2		70.07
7	347	78.24	341.7		72.95
8	365	103.14	428.3		74.38
9	394	95.57	367.6		76.70
10	452	91.97	308.0		80.18
11	529	18.41	52.7		84.30
12	553	13.19	36.2		85.42
13	576	7.01	18.5		86.53
14	600	8.16	20.6		87.69
15	630	7.08	17.0		88.66
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,789	0.00	0.0		115.36

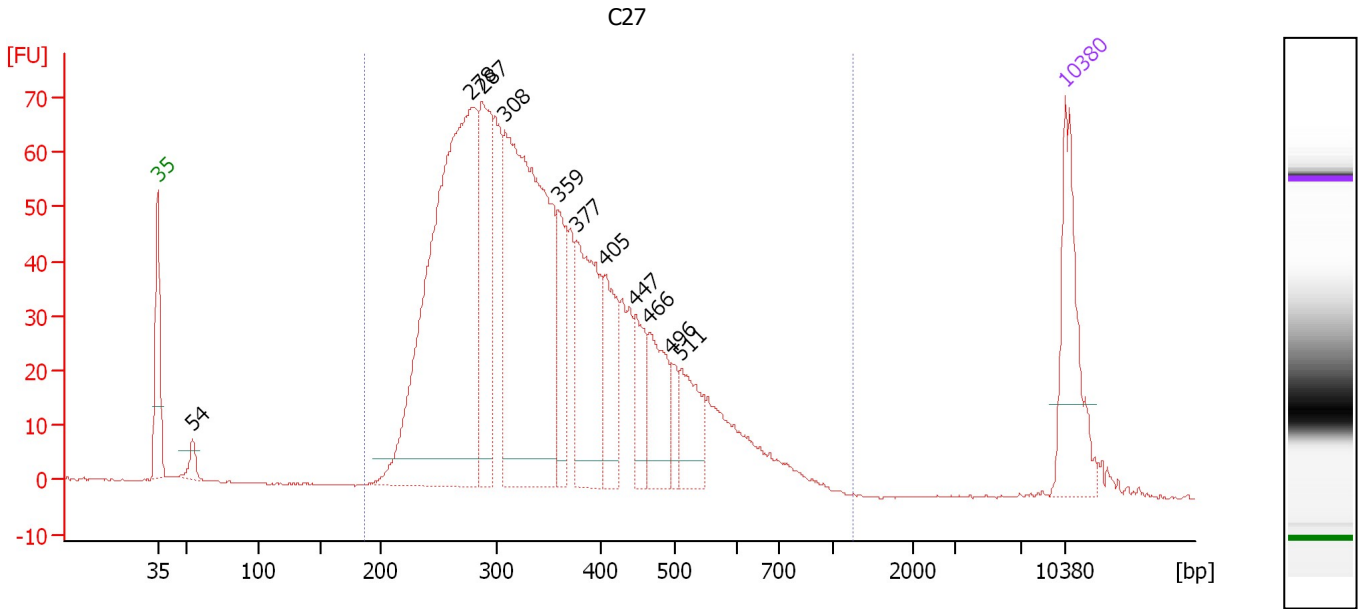
Region table for sample 8 : C32

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
184	1,323	358	1,285.2	5,952.8	1,273.47	96	29.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : C27

Number of peaks found: 11 Corr. Area 1: 1,578.4
 Noise: 0.1

Peak table for sample 9 : C27

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	54	15.54	439.4		45.69
3	278	581.59	3,170.2		67.20
4	287	150.57	794.4		68.04
5	308	446.06	2,197.4		69.80
6	359	63.84	269.7		73.89
7	377	141.17	567.8		75.33
8	405	65.74	246.1		77.47
9	447	44.30	150.1		79.88
10	466	66.48	216.2		80.95
11	496	18.88	57.6		82.67
12	511	52.90	156.9		83.41
13	10,380	75.00	10.9	Upper Marker	113.00

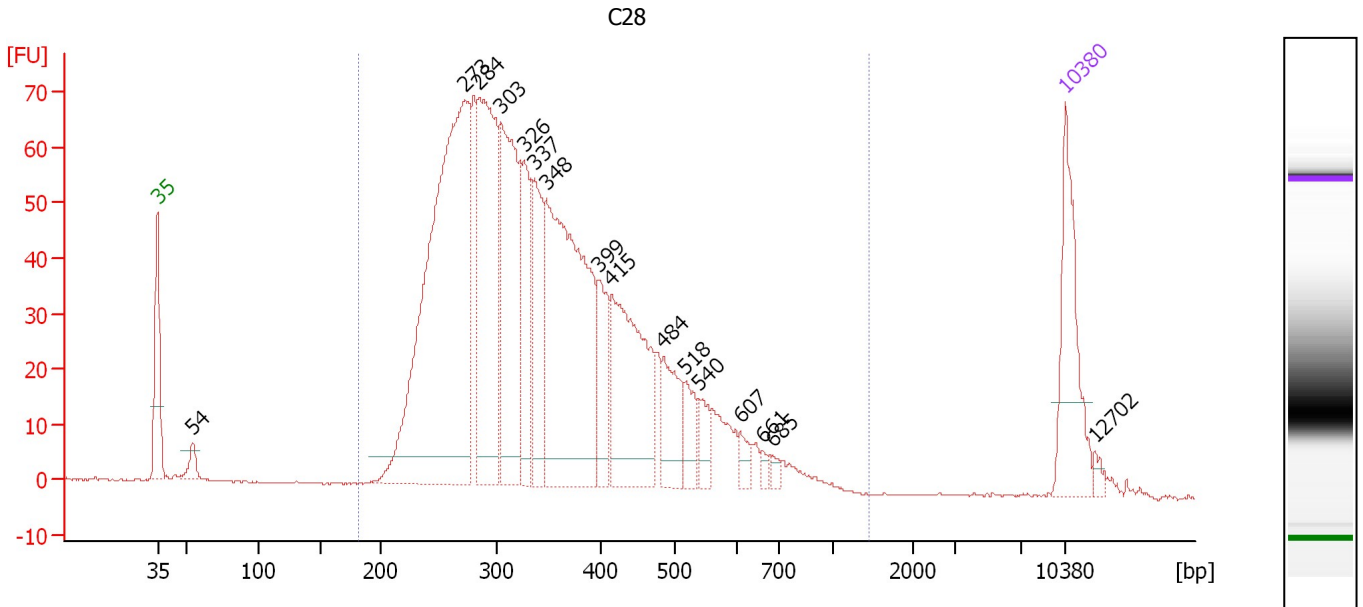
Region table for sample 9 : C27

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
188	1,244	360	1,578.4	9,049.8	1,939.73	98	30.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : C28

Number of peaks found: 16 Corr. Area 1: 1,538.0
 Noise: 0.1

Peak table for sample 10 : C28

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	54	17.29	488.5		45.70
3	273	573.59	3,187.3		66.72
4	284	251.37	1,338.8		67.79
5	303	201.08	1,004.3		69.47
6	326	90.18	419.1		71.28
7	337	92.07	414.5		72.12
8	348	342.58	1,493.4		73.00
9	399	56.41	214.3		77.09
10	415	171.63	627.2		78.02
11	484	55.61	174.1		81.98
12	518	30.11	88.1		83.74
13	540	20.05	56.3		84.81
14	607	11.25	28.1		87.93
15	661	6.15	14.1		89.65
16	685	5.75	12.7		90.40
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,702	0.00	0.0		115.28

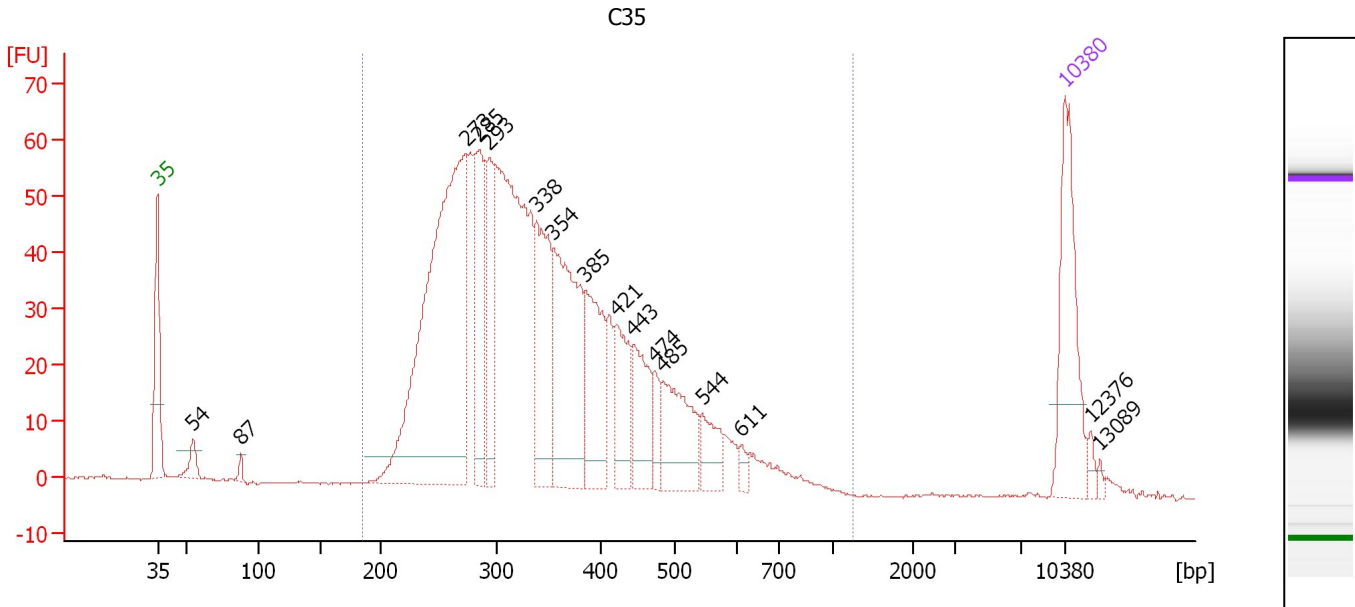
Region table for sample 10 : C28

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
182	1,447	359	1,538.0	10,026.2	2,134.12	98	31.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
 Modified: 10/9/2017 12:36:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : C35

Number of peaks found: 16 Corr. Area 1: 1,293.0
 Noise: 0.2

Peak table for sample 11 : C35

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	54	16.44	460.4		45.75
3	87	5.33	92.4		49.44
4	273	440.14	2,439.5		66.78
5	285	102.07	543.2		67.81
6	293	76.27	394.5		68.56
7	338	110.30	494.3		72.24
8	354	160.00	684.0		73.55
9	385	89.75	352.9		76.02
10	421	57.45	206.7		78.40
11	443	54.89	187.6		79.66
12	474	19.67	62.9		81.38
13	485	70.51	220.3		82.03
14	544	29.42	81.9		85.02
15	611	7.41	18.4		88.05
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,376	0.00	0.0		114.96
18	13,089	0.00	0.0		115.66

Region table for sample 11 : C35

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
186	1,253	354	1,293.0	7,991.1	1,690.02	97	29.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-09\2017-10-09_002.xad

Created: 10/9/2017 11:53:30 AM
Modified: 10/9/2017 12:36:33 PM

Gel Image

