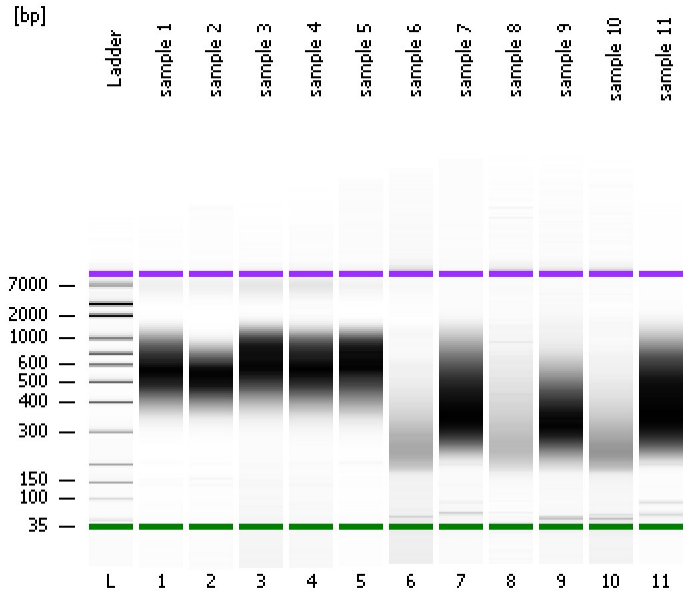
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

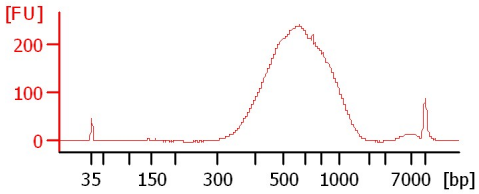
Assay Information:

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

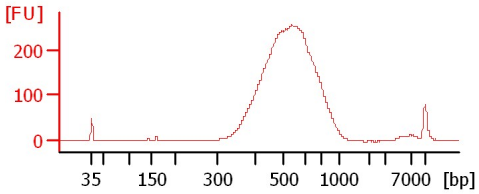
Chip Information:

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

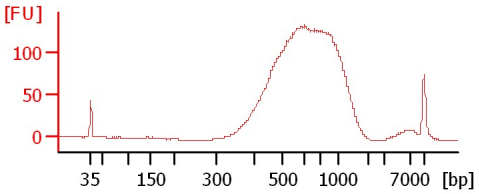
sample 1



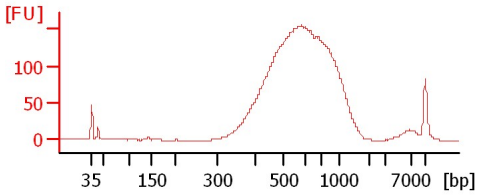
sample 2



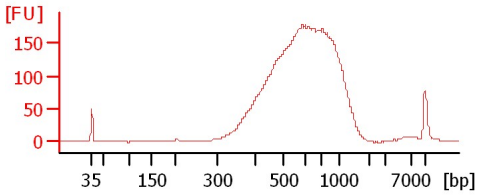
sample 3



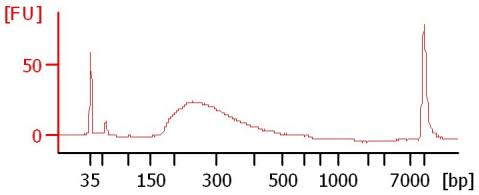
sample 4



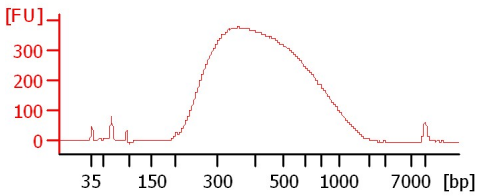
sample 5



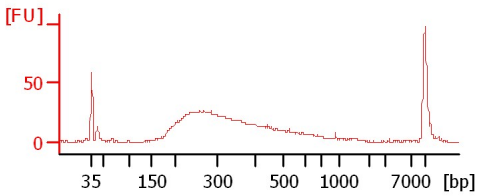
sample 6



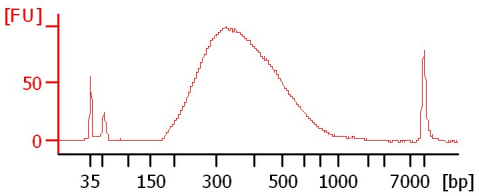
sample 7



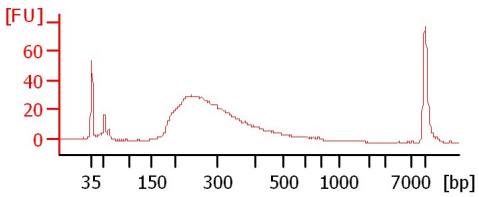
sample 8



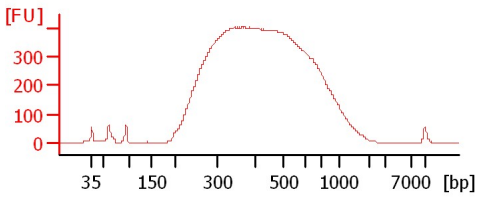
sample 9



sample 10



sample 11



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		☐	✔			
sample 2		☐	✔			
sample 3		☐	✔			
sample 4		☐	✔			
sample 5		☐	✔			
sample 6		☐	✔			
sample 7		☐	✔			
sample 8		☐	✔			
sample 9		☐	✔			
sample 10		☐	✔			
sample 11		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 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

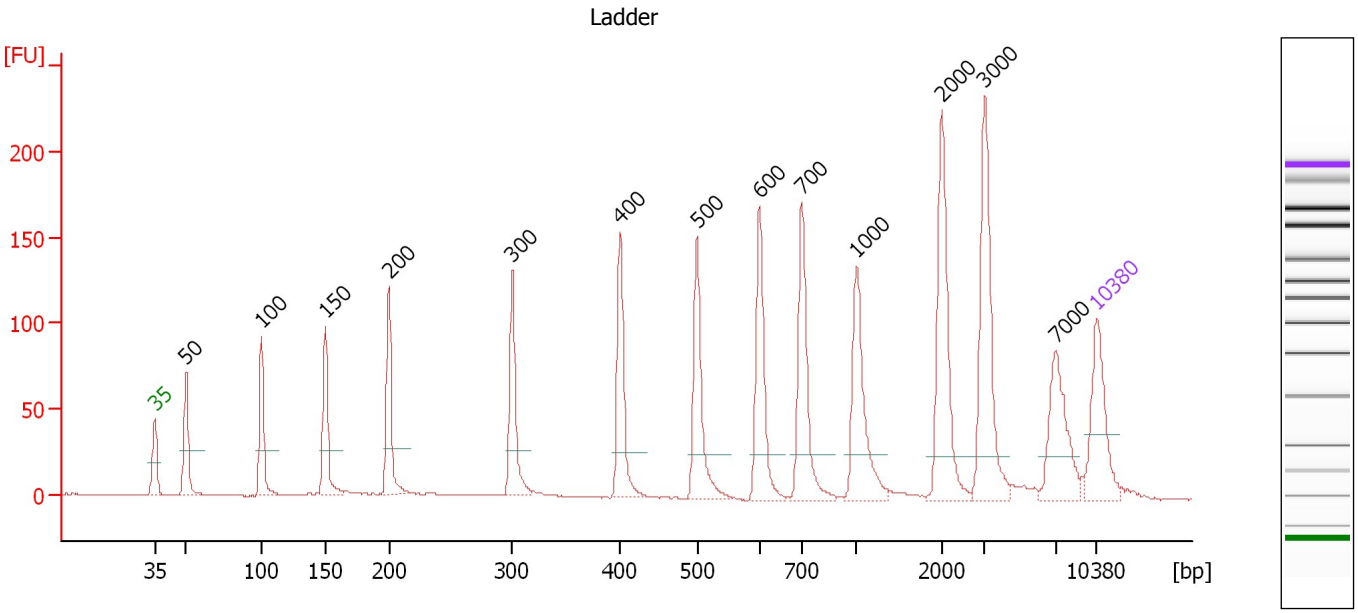
Ladder

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\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

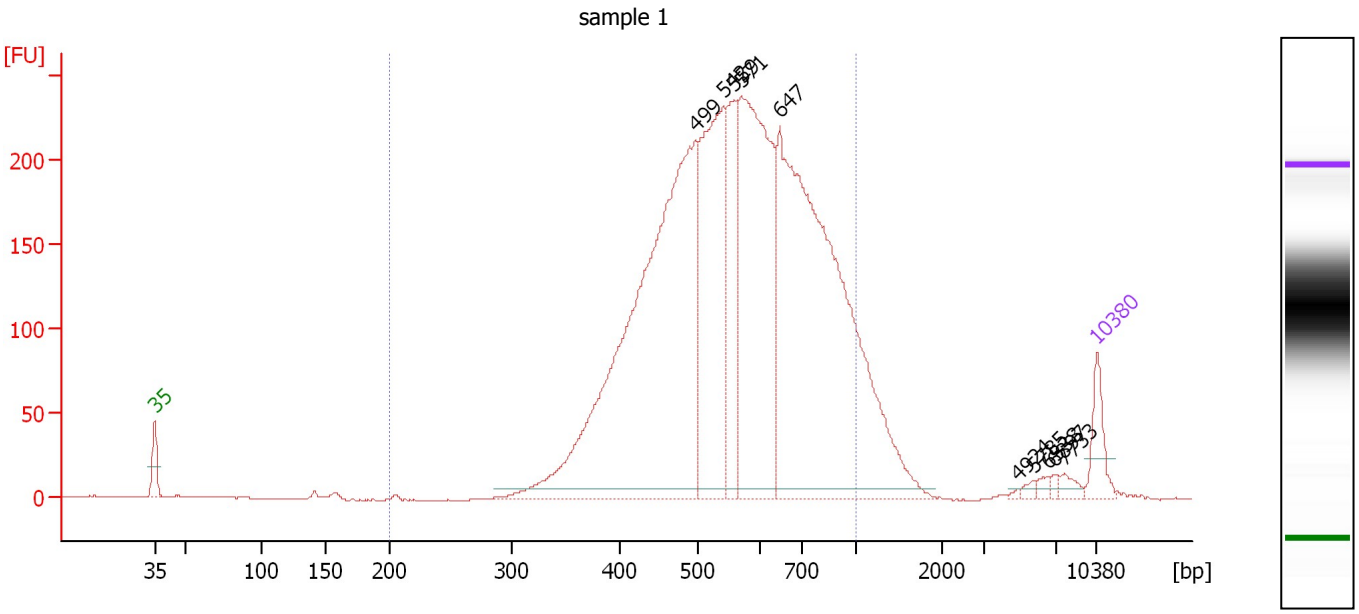
Peak table for Ladder

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	45.33
3		100	150.00	2,272.7	Ladder Peak	50.95
4		150	150.00	1,515.2	Ladder Peak	55.70
5		200	150.00	1,136.4	Ladder Peak	60.40
6		300	150.00	757.6	Ladder Peak	69.56
7		400	150.00	568.2	Ladder Peak	77.56
8		500	150.00	454.5	Ladder Peak	83.28
9		600	150.00	378.8	Ladder Peak	87.93
10		700	150.00	324.7	Ladder Peak	91.09
11		1,000	150.00	227.3	Ladder Peak	95.14
12		2,000	150.00	113.6	Ladder Peak	101.47
13		3,000	150.00	75.8	Ladder Peak	104.67
14		7,000	150.00	32.5	Ladder Peak	109.93
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found:	10	Corr. Area 1:	4,161.3
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	499	2,092.77	6,357.3		83.21
3	542	792.64	2,215.5		85.24
4	559	308.35	835.3		86.04
5	571	1,043.05	2,765.5		86.60
6	647	1,860.99	4,355.1		89.43
7	4,924	3.41	1.1		107.20
8	5,785	9.54	2.5		108.33
9	6,538	13.46	3.1		109.32
10	6,897	8.52	1.9		109.79
11	7,733	20.85	4.1		110.60
12	10,380	75.00	10.9	Upper Marker	113.00

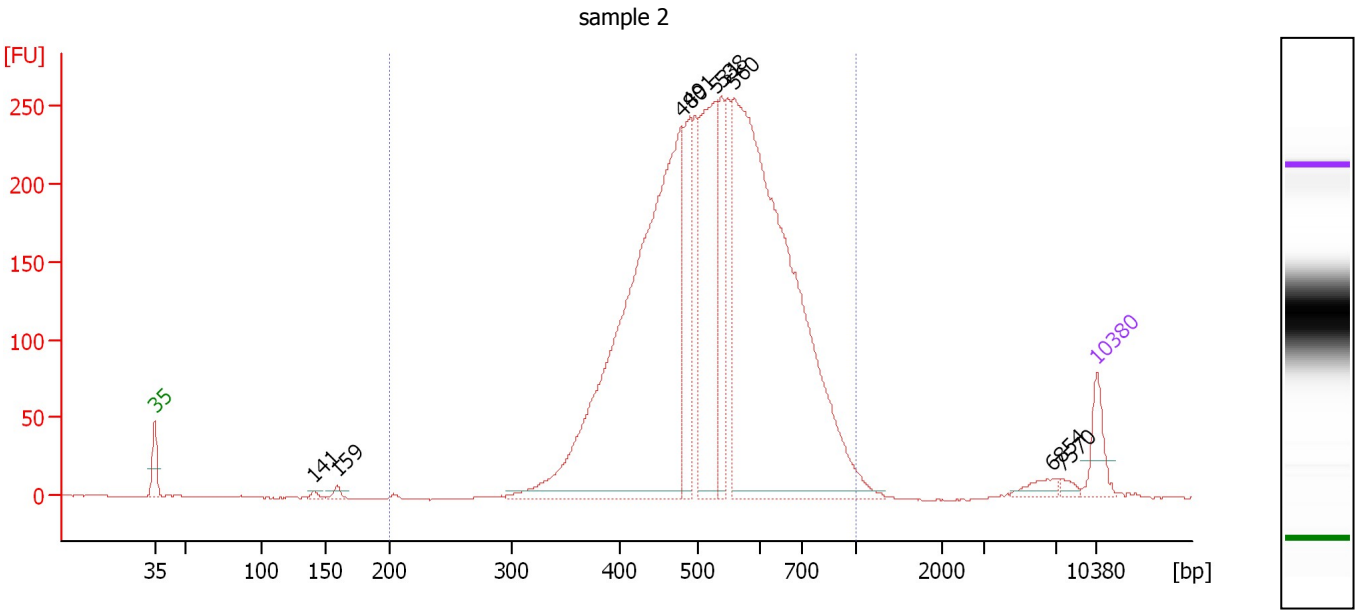
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	581	5,820.15	4,161.3	16,430.9	93	25.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found:	9	Corr. Area 1:	4,028.3
Noise:	0.5		

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	141	10.70	114.8		54.86
3	159	18.93	180.1		56.57
4	480	2,032.53	6,415.6		82.14
5	491	283.27	874.6		82.75
6	531	575.13	1,640.1		84.74
7	538	261.55	736.0		85.07
8	560	2,153.97	5,830.3		86.06
9	6,854	30.94	6.8		109.74
10	7,570	14.66	2.9		110.45
11	10,380	75.00	10.9	Upper Marker	113.00

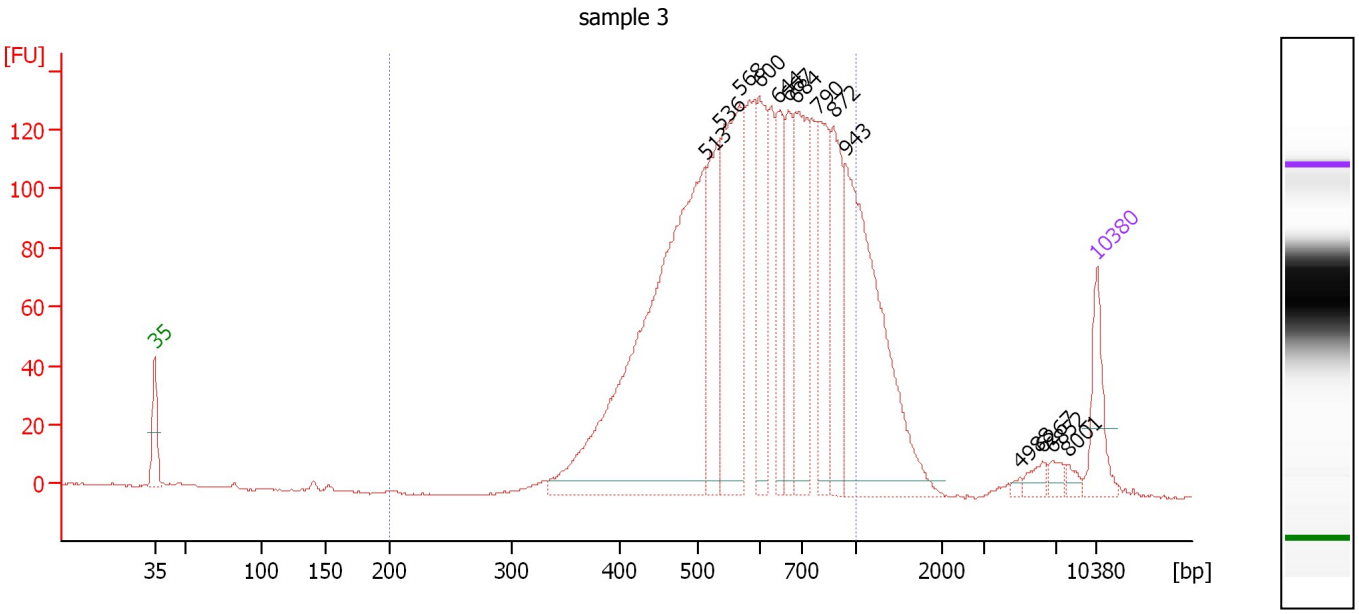
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	540	5,615.07	4,028.3	16,667.8	98	21.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found:	14	Corr. Area 1:	2,305.7
Noise:	0.3		

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	513	1,102.00	3,251.8		83.91
3	536	213.78	604.1		84.96
4	568	382.20	1,019.2		86.45
5	600	201.26	508.0		87.94
6	644	144.88	340.7		89.33
7	667	134.62	305.8		90.05
8	684	268.36	594.7		90.58
9	790	182.18	349.4		92.31
10	872	182.77	317.6		93.41
11	943	516.04	829.1		94.37
12	4,988	5.58	1.7		107.29
13	6,267	18.48	4.5		108.97
14	6,852	15.44	3.4		109.74
15	8,001	10.81	2.0		110.84
16	10,380	75.00	10.9	Upper Marker	113.00

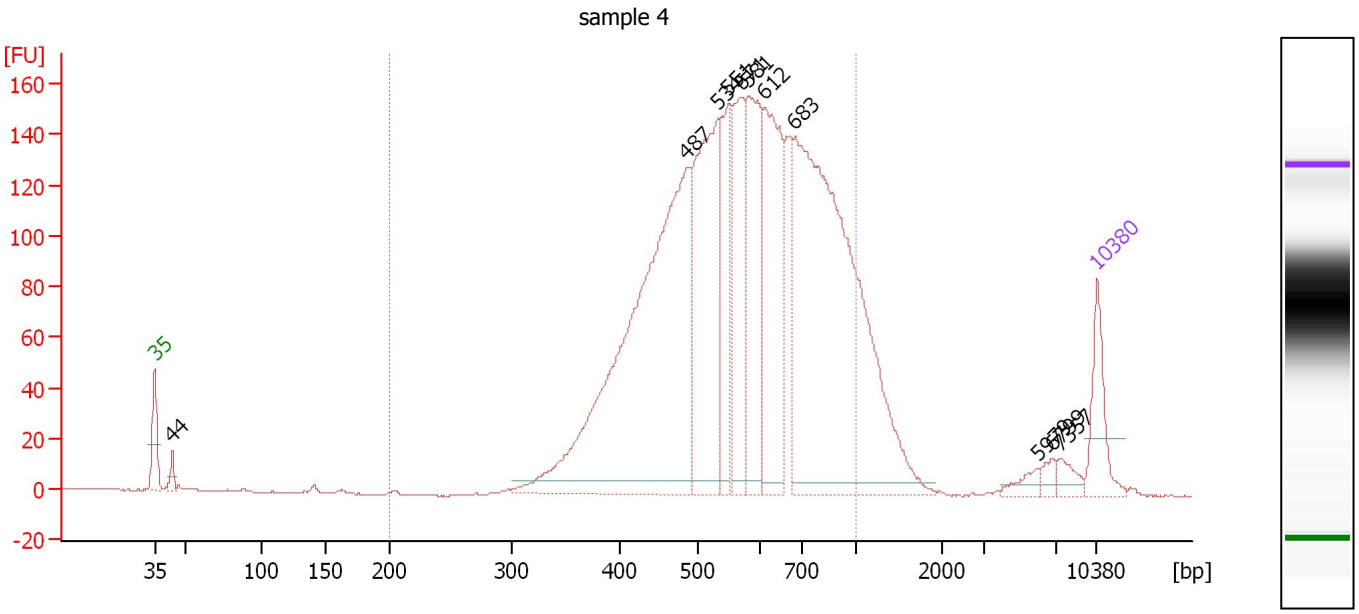
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	616	3,449.99	2,305.7	9,201.7	87	25.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found:	11	Corr. Area 1:	2,773.9
Noise:	0.3		

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	44	22.39	779.2		44.32
3	487	1,121.00	3,490.8		82.51
4	534	474.00	1,344.8		84.86
5	551	182.21	501.1		85.65
6	571	216.31	574.0		86.58
7	581	291.06	758.4		87.07
8	612	341.74	846.8		88.29
9	683	1,108.16	2,459.0		90.55
10	5,979	19.74	5.0		108.59
11	6,799	14.66	3.3		109.67
12	7,357	22.11	4.6		110.25
13	10,380	75.00	10.9	Upper Marker	113.00

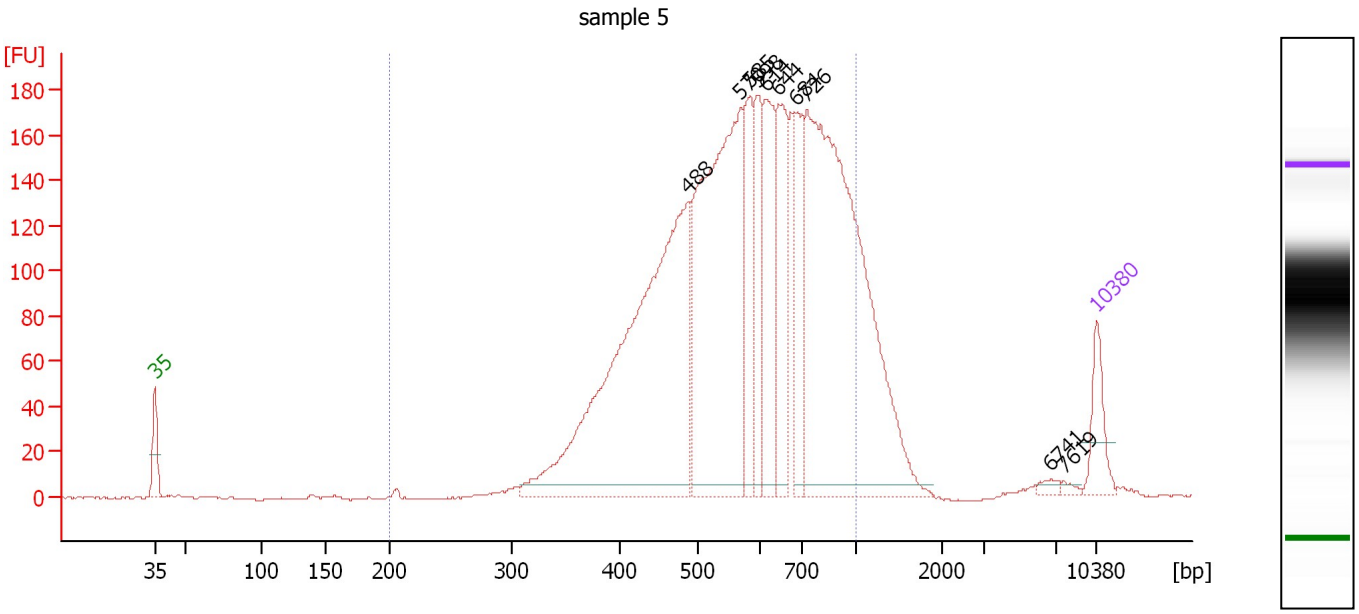
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	593	3,632.01	2,773.9	10,074.8	91	25.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found:	10	Corr. Area 1:	3,164.9
Noise:	0.3		

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	488	1,375.26	4,266.8		82.61
3	570	976.93	2,597.9		86.52
4	585	229.62	594.9		87.23
5	598	184.24	467.0		87.83
6	614	252.24	622.2		88.38
7	644	277.09	651.6		89.33
8	684	178.32	395.0		90.59
9	726	1,369.68	2,860.1		91.44
10	6,741	12.22	2.7		109.59
11	7,619	7.66	1.5		110.49
12	10,380	75.00	10.9	Upper Marker	113.00

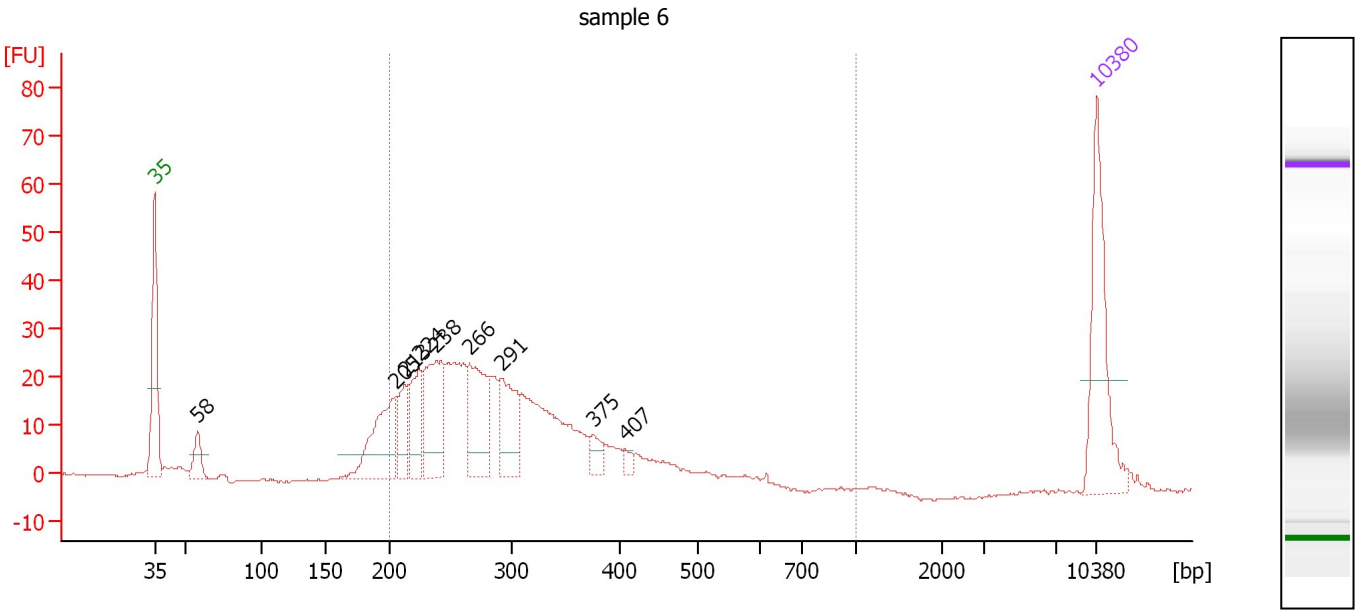
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	602	4,648.53	3,164.9	12,836.4	91	26.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found:	9	Corr. Area 1:	492.3
Noise:	0.3		

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	58	25.56	672.7		46.18
3	205	85.82	635.0		60.83
4	213	40.93	290.9		61.60
5	224	50.93	344.0		62.63
6	238	89.39	568.3		63.91
7	266	83.14	474.0		66.42
8	291	60.26	313.8		68.72
9	375	12.54	50.6		75.59
10	407	5.48	20.4		77.95
11	10,380	75.00	10.9	Upper Marker	113.00

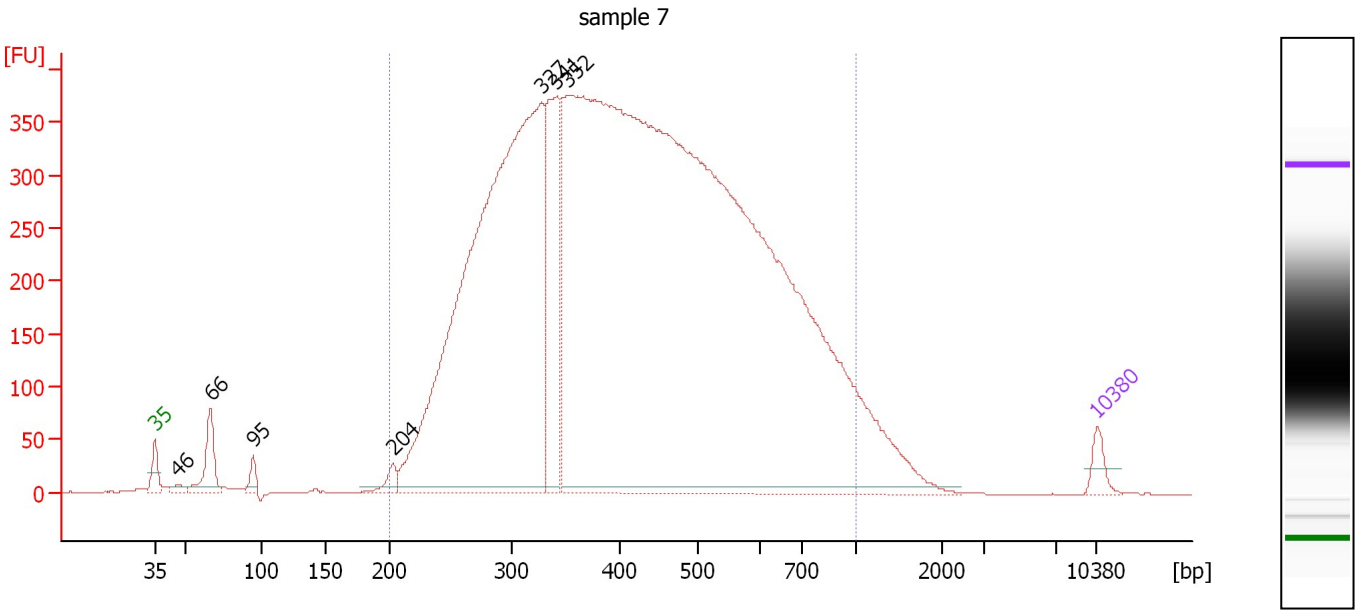
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	301	707.66	492.3	3,826.7	88	26.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found:	7	Corr. Area 1:	11,514.7
Noise:	0.2		

Peak table for sample 7 : sample 7

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	46	43.15	1,414.9		44.74
3	66	318.28	7,276.0		47.16
4	95	80.67	1,289.3		50.37
5	204	93.44	694.9		60.74
6	327	6,288.91	29,118.8		71.74
7	341	1,123.55	4,991.5		72.84
8	352	16,315.37	70,312.6		73.68
9	10,380	75.00	10.9	Upper Marker	113.00

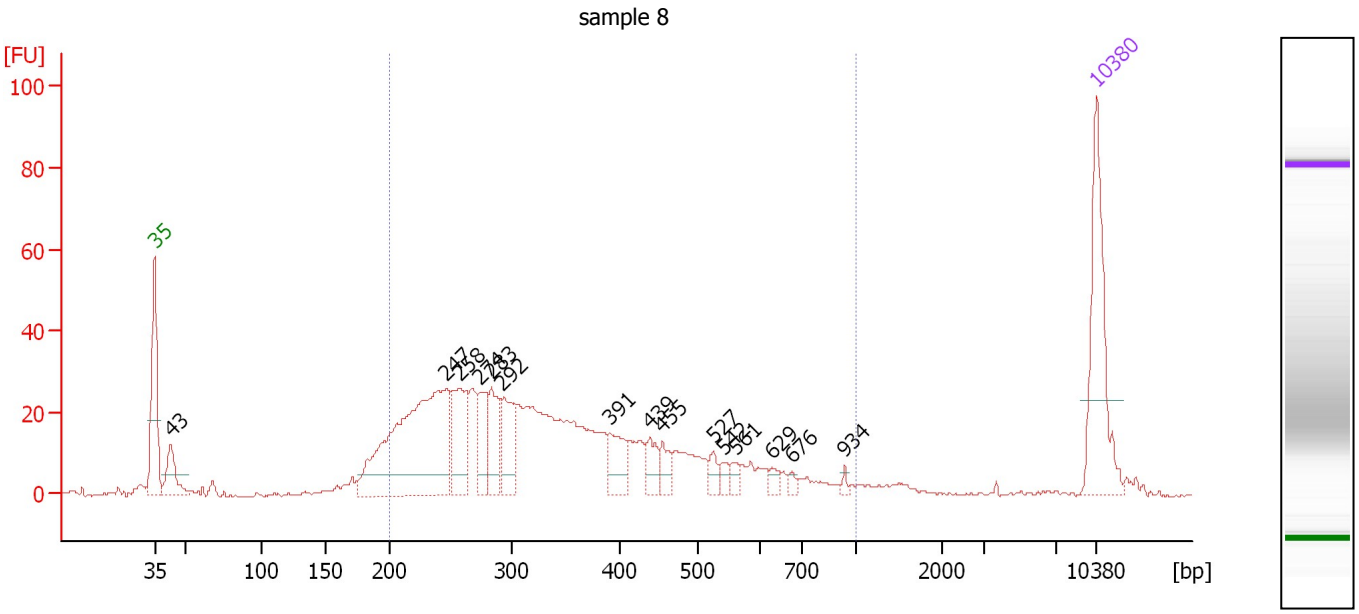
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	441	21,253.28	11,514.7	84,971.6	96	34.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found:	15	Corr. Area 1:	701.1
Noise:	0.3		

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	43	37.64	1,331.3		44.22
3	247	253.50	1,557.9		64.66
4	258	63.30	372.5		65.66
5	274	33.47	184.9		67.20
6	283	44.59	238.4		68.04
7	292	47.38	246.2		68.78
8	391	29.90	116.0		76.81
9	439	17.86	61.7		79.77
10	455	14.96	49.8		80.72
11	527	9.10	26.2		84.52
12	542	7.08	19.8		85.21
13	561	6.41	17.3		86.11
14	629	5.99	14.4		88.86
15	676	3.80	8.5		90.34
16	934	2.65	4.3		94.25
17	10,380	75.00	10.9	Upper Marker	113.00

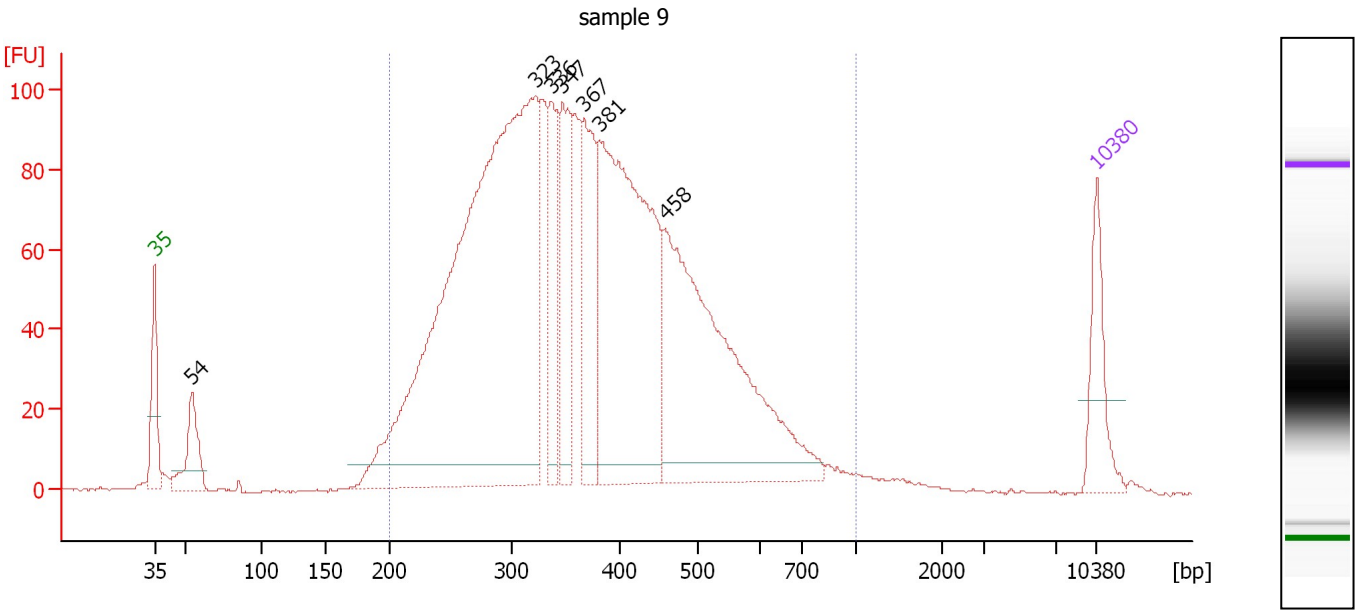
Region table for sample 8 : sample 8

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	362	867.95	701.1	4,255.3	84	38.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found:	7	Corr. Area 1:	2,535.8
Noise:	0.4		

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	54	105.99	2,977.6		45.77
3	323	1,501.01	7,048.0		71.37
4	336	145.67	656.9		72.44
5	347	190.84	834.2		73.29
6	367	208.71	862.6		74.89
7	381	666.11	2,652.0		76.00
8	458	617.45	2,040.7		80.90
9	10,380	75.00	10.9	Upper Marker	113.00

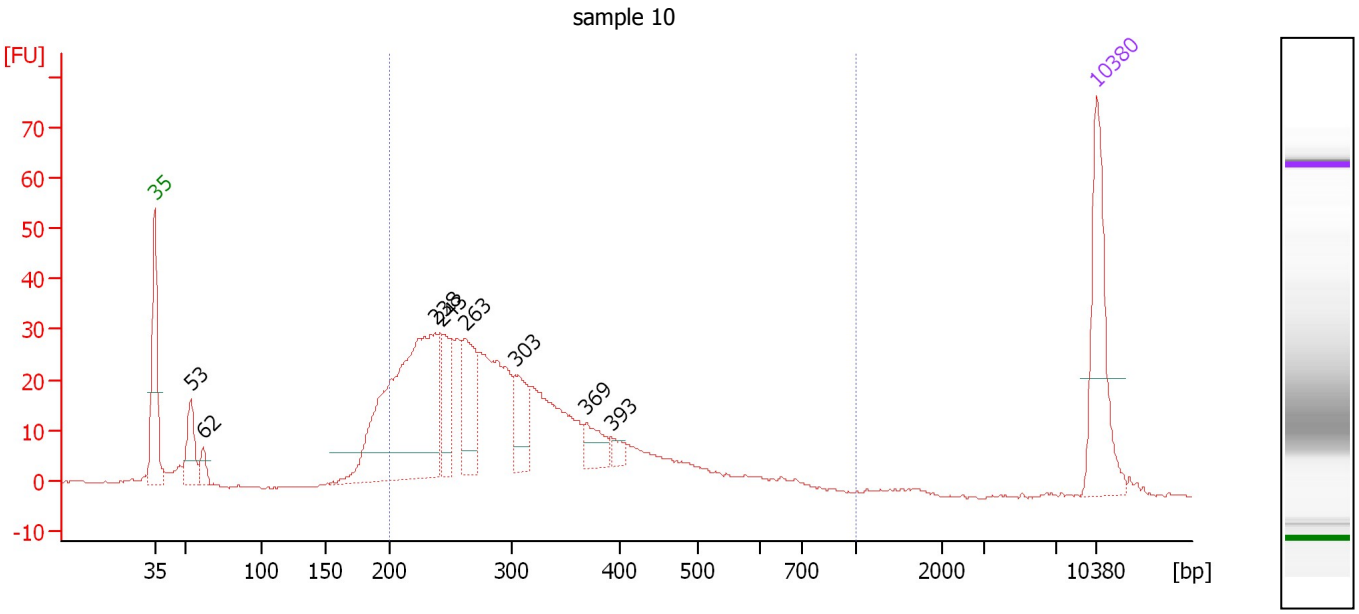
Region table for sample 9 : sample 9

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	380	3,785.70	2,535.8	16,880.9	95	30.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found:	8	Corr. Area 1:	605.1
Noise:	0.3		

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	53	45.69	1,304.2		45.67
3	62	16.11	396.1		46.63
4	238	298.64	1,899.8		63.89
5	243	56.64	353.4		64.32
6	263	69.00	398.0		66.14
7	303	42.10	210.7		69.77
8	369	24.90	102.3		75.06
9	393	8.85	34.1		76.98
10	10,380	75.00	10.9	Upper Marker	113.00

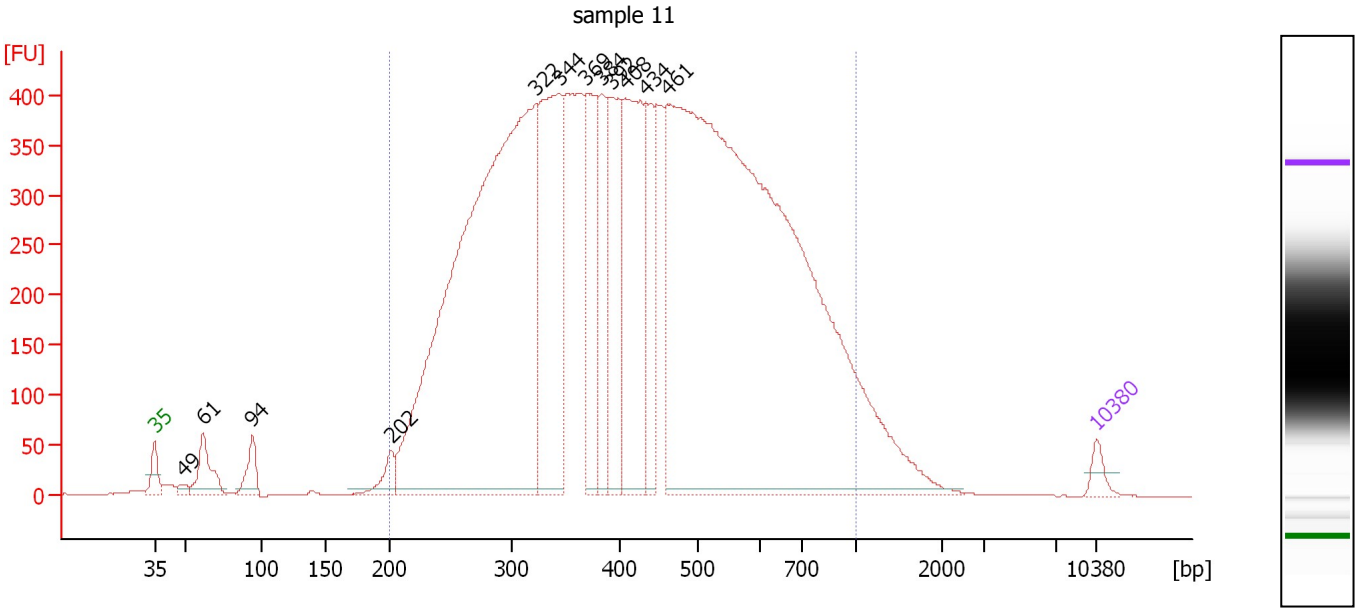
Region table for sample 10 : sample 10

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	310	884.02	605.1	4,733.8	86	30.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found:	12	Corr. Area 1:	13,369.9
Noise:	0.2		

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	49	52.12	1,620.2		45.13
3	61	386.05	9,533.2		46.60
4	94	241.14	3,892.7		50.26
5	202	184.43	1,383.1		60.58
6	322	7,959.13	37,421.5		71.34
7	344	2,153.23	9,481.3		73.09
8	369	1,027.00	4,220.8		75.05
9	384	757.18	2,990.1		76.25
10	392	1,024.15	3,959.8		76.91
11	408	1,765.70	6,561.6		78.00
12	434	697.10	2,431.1		79.53
13	461	11,048.49	36,299.1		81.06
14	10,380	75.00	10.9	Upper Marker	113.00

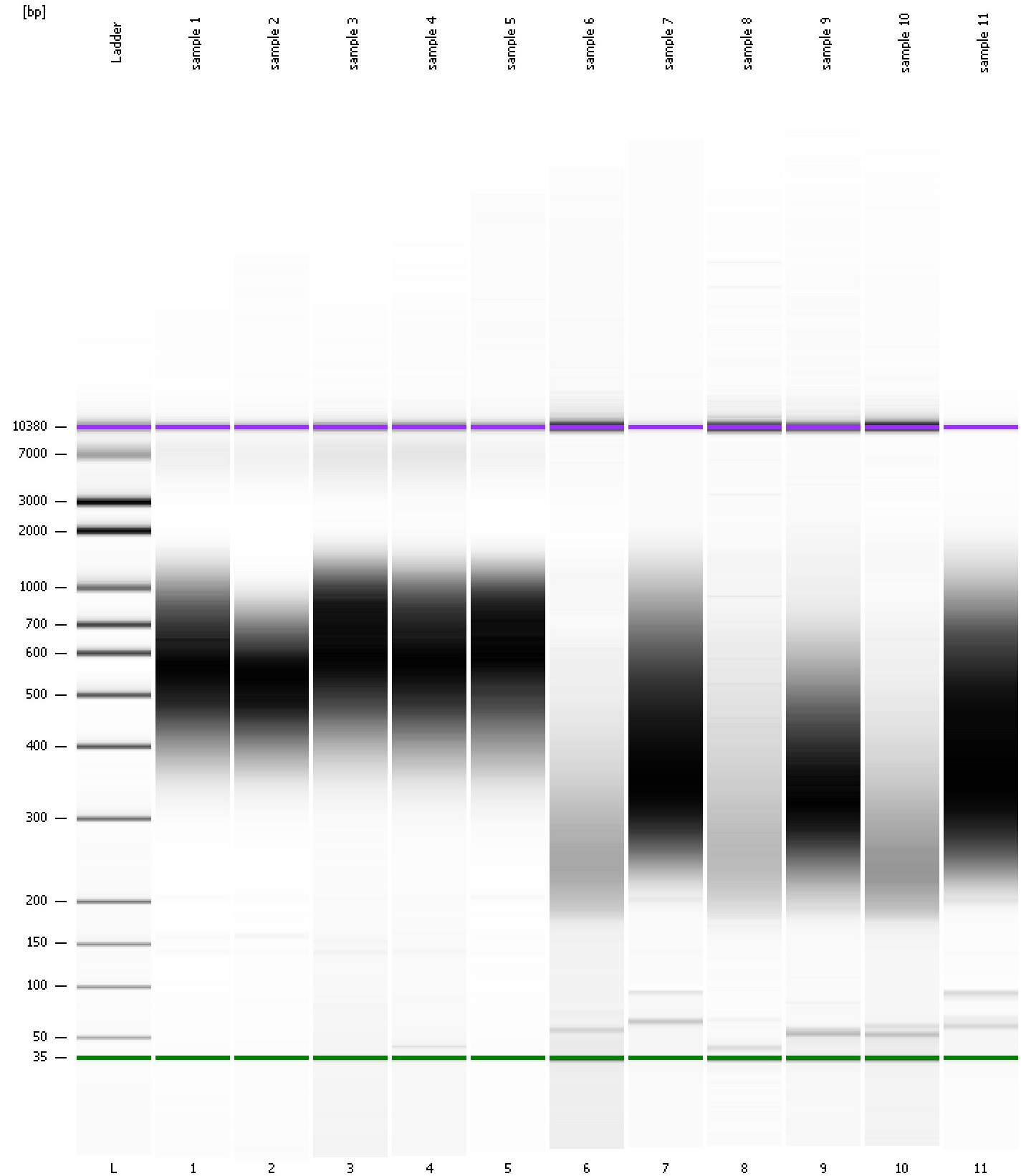
Region table for sample 11 : sample 11

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	445	28,316.19	13,369.9	113,596.8	95	35.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-10\2019-04-10_001.xad

Created: 4/10/2019 2:09:08 PM
Modified: 4/10/2019 2:50:25 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		4/10/2019 2:50:25 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\2019-04-10\2019-04-10_001.xad)		Instrument	Run		4/10/2019 2:09:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		4/10/2019 2:09:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/10/2019 2:09:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/10/2019 2:09:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		4/10/2019 2:09:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/10/2019 2:09:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/10/2019 2:09:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1