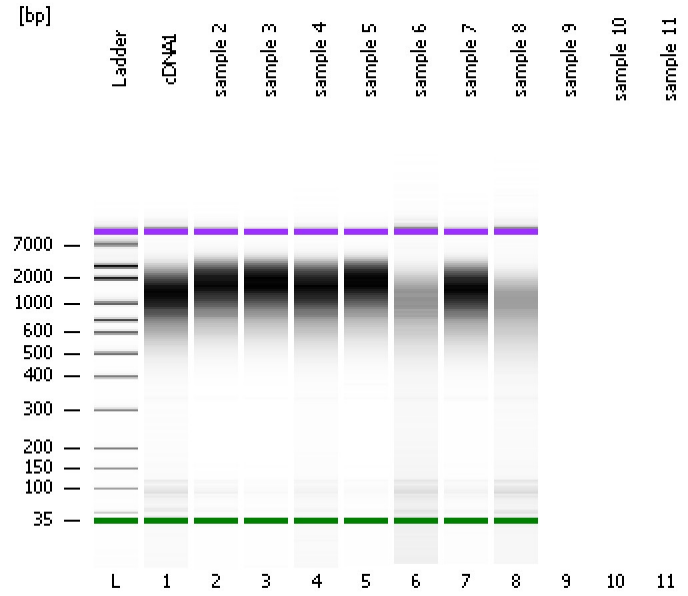
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

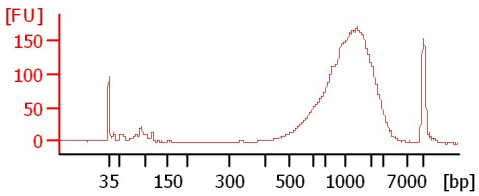
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

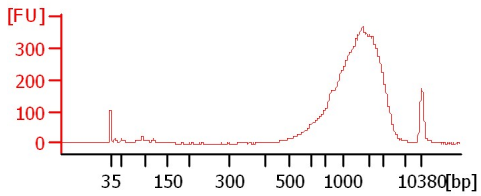
Chip Information:

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

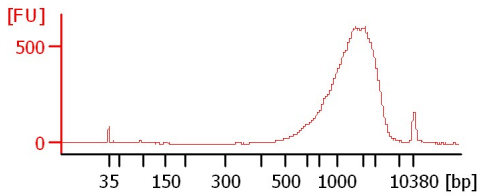
cDNA1



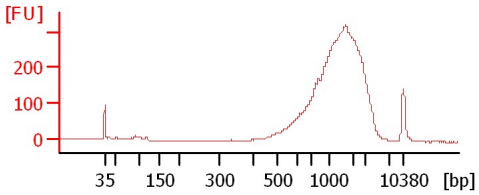
sample 2



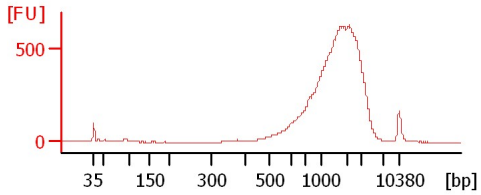
sample 3



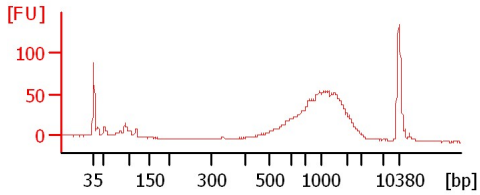
sample 4



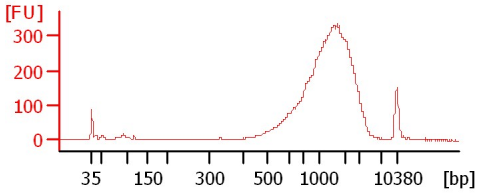
sample 5



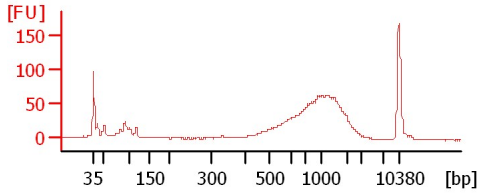
sample 6



sample 7



sample 8



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
cDNA1		☐	✔			
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\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 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

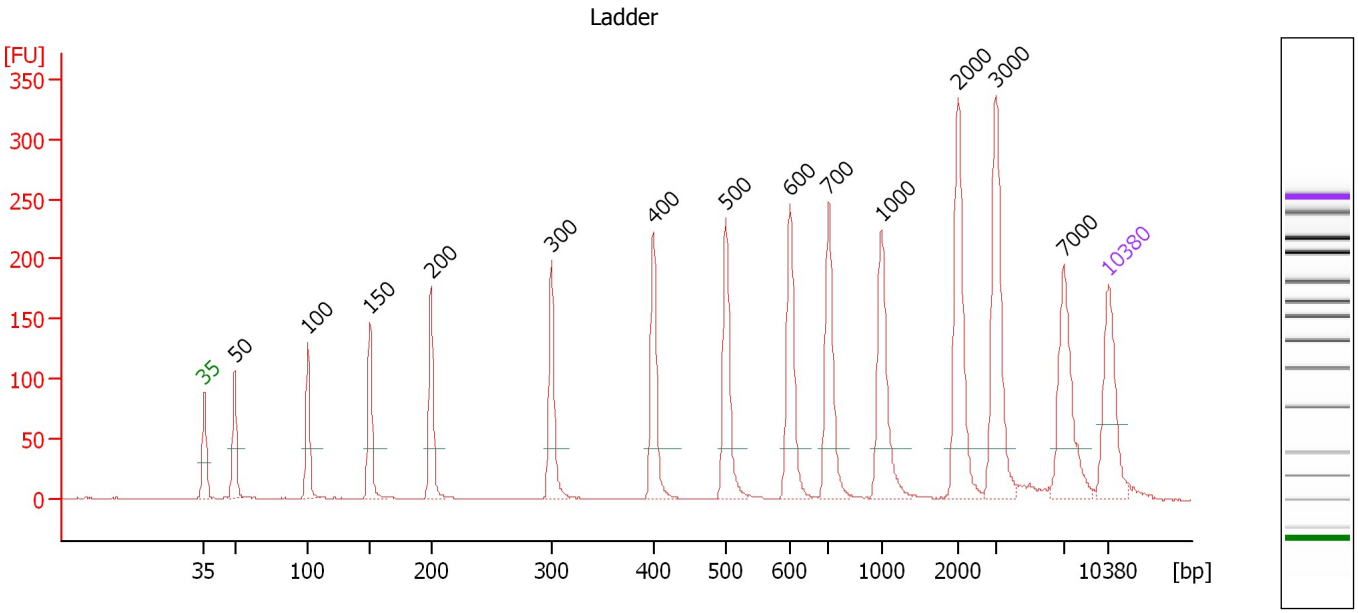
Ladder

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:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

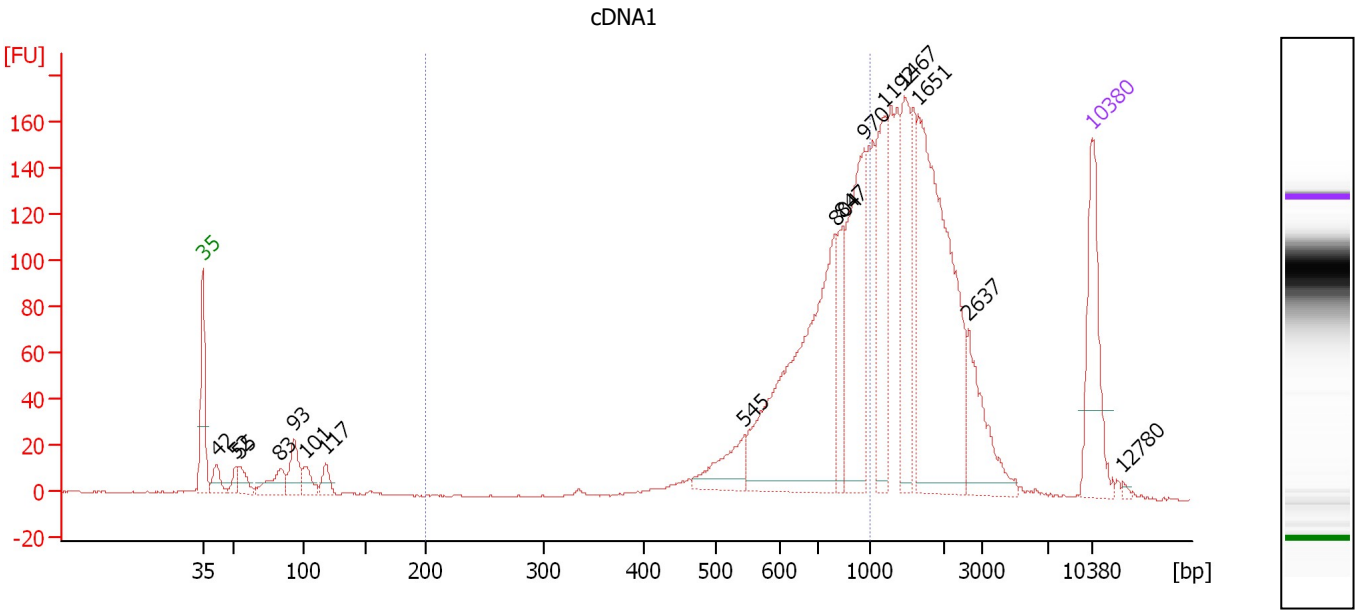
Peak table for Ladder

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	45.35
3		100	150.00	2,272.7	Ladder Peak	51.01
4		150	150.00	1,515.2	Ladder Peak	55.84
5		200	150.00	1,136.4	Ladder Peak	60.55
6		300	150.00	757.6	Ladder Peak	69.88
7		400	150.00	568.2	Ladder Peak	77.77
8		500	150.00	454.5	Ladder Peak	83.39
9		600	150.00	378.8	Ladder Peak	88.39
10		700	150.00	324.7	Ladder Peak	91.36
11		1,000	150.00	227.3	Ladder Peak	95.45
12		2,000	150.00	113.6	Ladder Peak	101.40
13		3,000	150.00	75.8	Ladder Peak	104.33
14		7,000	150.00	32.5	Ladder Peak	109.57
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : cDNA1

Number of peaks found:	16	Corr. Area 1:	1,004.3
Noise:	0.3		

Peak table for sample 1 : cDNA1

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	42	24.30	877.8		44.09
3	52	12.63	366.7		45.60
4	55	22.67	626.9		45.90
5	83	36.40	664.7		49.09
6	93	42.67	698.0		50.18
7	101	22.42	336.6		51.10
8	117	19.17	247.4		52.69
9	545	44.75	124.4		85.64
10	804	298.61	563.0		92.77
11	847	42.40	75.9		93.36
12	970	142.29	222.3		95.04
13	1,192	92.82	118.0		96.59
14	1,467	85.37	88.1		98.23
15	1,651	265.99	244.1		99.32
16	2,637	59.19	34.0		103.26
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,780	0.00	0.0		115.43

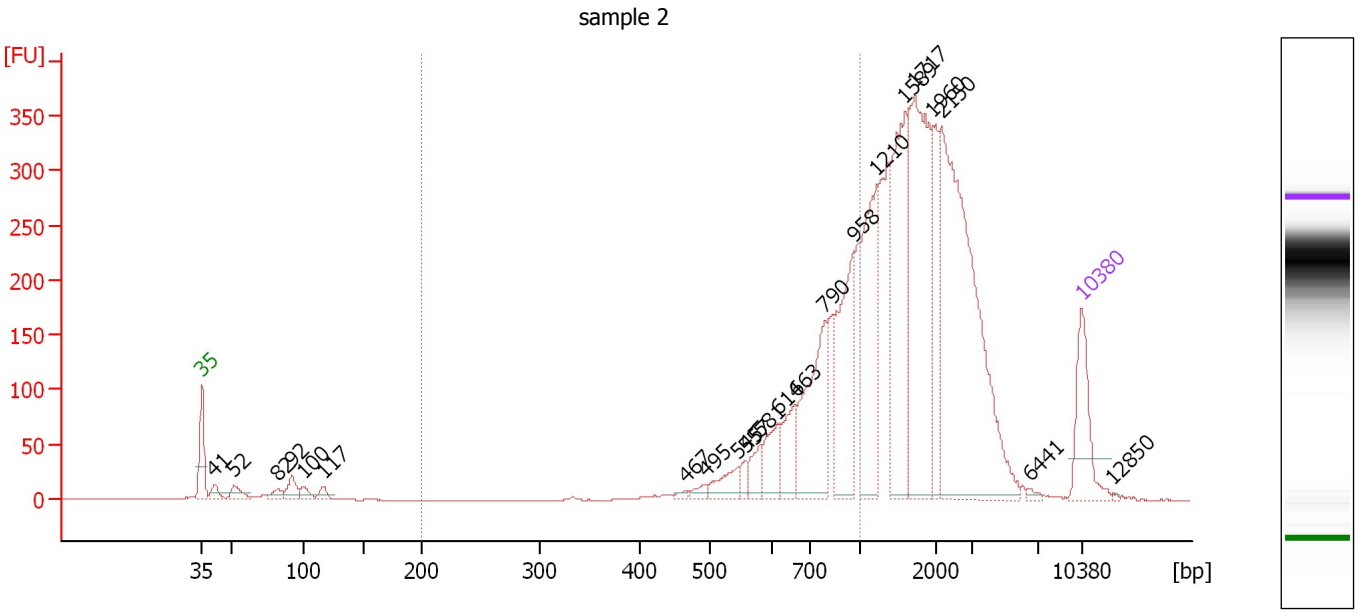
Region table for sample 1 : cDNA1

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	746	624.82	1,004.3	1,348.0	40	20.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found:	22	Corr. Area 1:	1,344.0
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	41	19.68	723.4		43.98
3	52	25.16	737.3		45.55
4	82	16.40	301.3		49.03
5	92	30.91	507.8		50.13
6	100	16.89	255.7		51.02
7	117	14.42	187.0		52.64
8	467	4.87	15.8		81.54
9	495	11.17	34.2		83.12
10	545	33.61	93.4		85.66
11	557	13.59	36.9		86.26
12	581	30.34	79.1		87.45
13	614	53.48	132.0		88.80
14	663	60.52	138.4		90.25
15	790	170.02	326.2		92.58
16	958	167.40	264.8		94.87
17	1,210	188.87	236.4		96.70
18	1,589	215.93	205.9		98.95
19	1,717	311.38	274.8		99.71
20	1,960	81.20	62.8		101.16
21	2,150	472.77	333.1		101.84
22	6,441	3.87	0.9		108.84
23	10,380	75.00	10.9	Upper Marker	113.00
24	12,850	0.00	0.0		115.50

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...

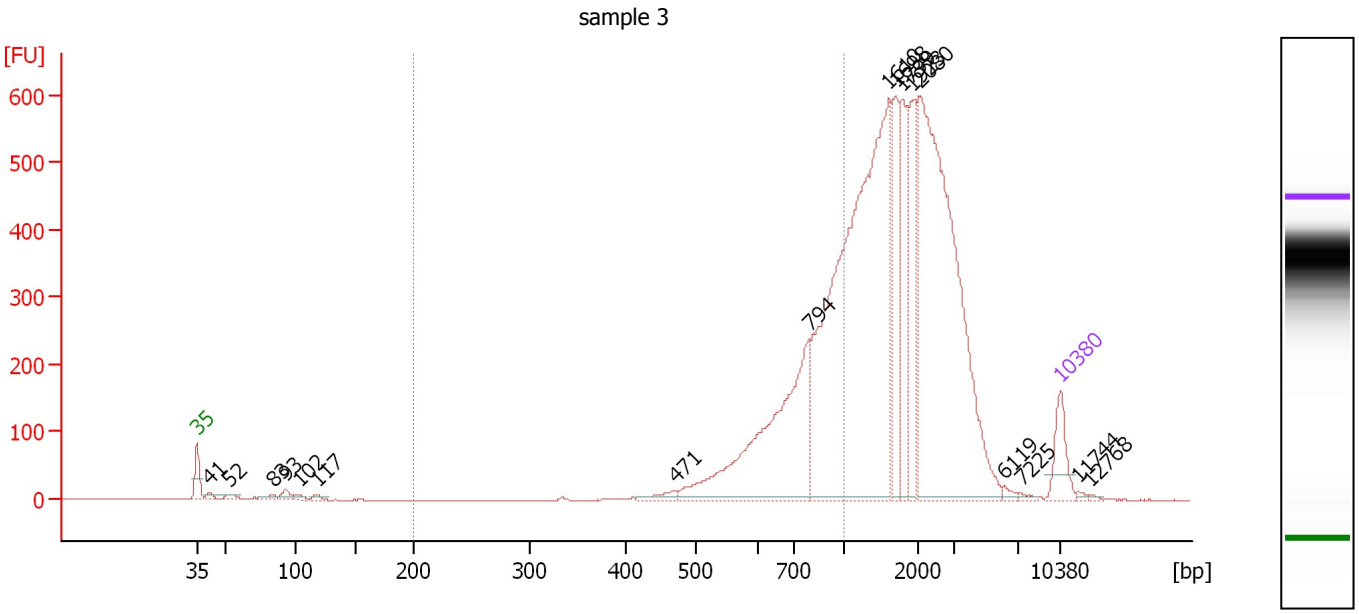
... Region table for sample 2 : sample 2

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	765	684.81	1,344.0	1,430.6	28	19.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found:	17	Corr. Area 1:	2,038.7
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	41	15.00	550.0		43.99
3	52	17.34	507.9		45.55
4	83	15.56	283.8		49.10
5	93	25.84	422.6		50.18
6	102	14.53	215.6		51.21
7	117	12.50	161.5		52.68
8	471	27.12	87.3		81.74
9	794	652.03	1,244.8		92.64
10	1,610	1,439.67	1,354.6		99.08
11	1,698	193.20	172.4		99.60
12	1,799	201.00	169.3		100.20
13	1,923	196.91	155.2		100.94
14	2,080	1,091.36	795.1		101.63
15	6,119	10.48	2.6		108.42
16	7,225	6.08	1.3		109.80
17	10,380	75.00	10.9	Upper Marker	113.00
18	11,744	0.00	0.0		114.38
19	12,768	0.00	0.0		115.42

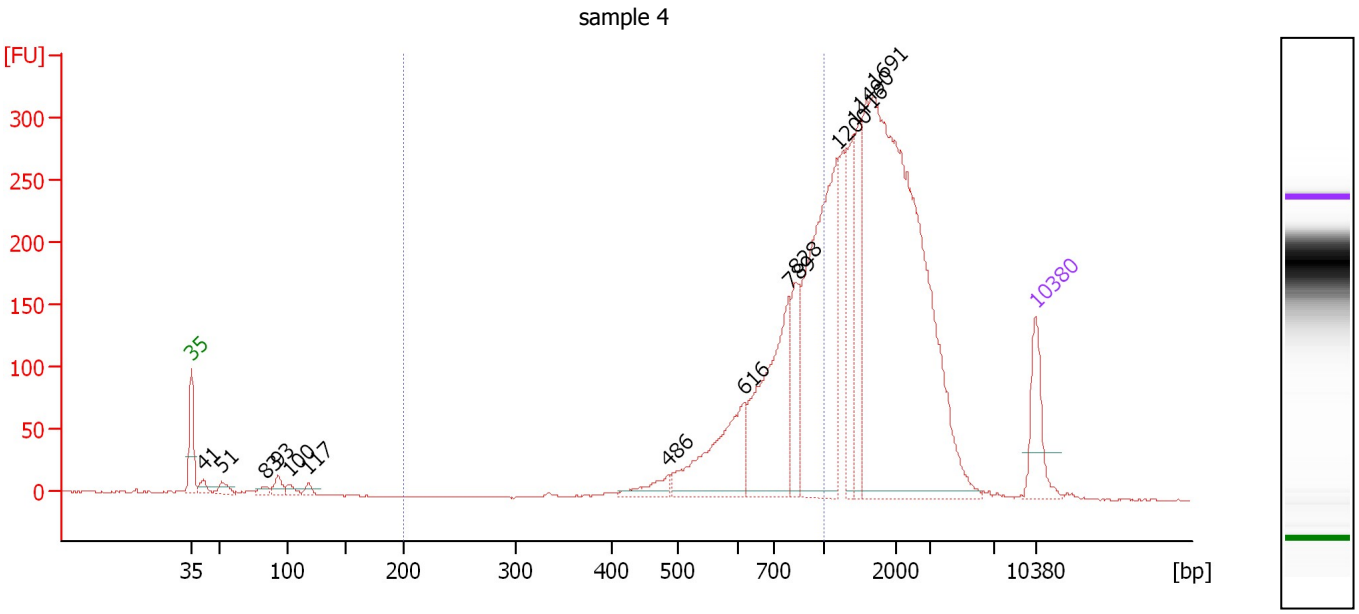
Region table for sample 3 : sample 3

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	765	1,226.40	2,038.7	2,557.5	27	19.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found:	14	Corr. Area 1:	1,403.1
Noise:	0.4		

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	41	22.53	828.7		43.97
3	51	25.10	738.9		45.52
4	83	14.89	272.7		49.06
5	93	27.39	446.8		50.21
6	100	16.74	252.6		51.05
7	117	14.90	192.4		52.68
8	486	39.11	122.1		82.58
9	616	214.34	527.4		88.86
10	789	305.95	587.7		92.57
11	828	101.66	186.1		93.10
12	1,200	468.64	591.6		96.64
13	1,416	143.37	153.4		97.92
14	1,490	107.32	109.1		98.36
15	1,691	1,074.52	962.8		99.56
16	10,380	75.00	10.9	Upper Marker	113.00

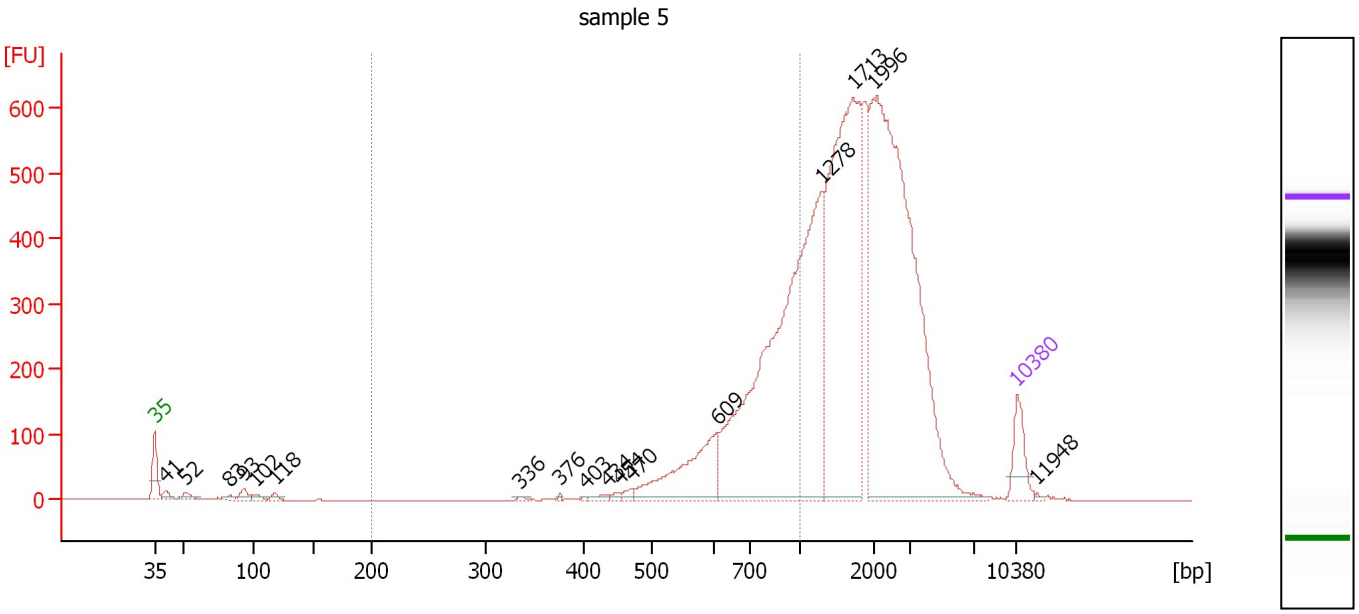
Region table for sample 4 : sample 4

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	752	958.79	1,403.1	2,044.7	33	20.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found:	17	Corr. Area 1:	2,069.5
Noise:	0.2		

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	41	23.08	851.3		43.95
3	52	24.04	704.8		45.54
4	83	14.55	264.3		49.13
5	93	27.07	440.9		50.22
6	102	17.32	256.8		51.22
7	118	14.79	189.6		52.77
8	336	5.41	24.4		72.71
9	376	3.30	13.3		75.89
10	403	3.08	11.6		77.93
11	434	11.50	40.1		79.70
12	454	9.74	32.5		80.79
13	470	11.85	38.2		81.70
14	609	265.20	659.9		88.65
15	1,278	1,337.86	1,586.2		97.10
16	1,713	966.70	854.9		99.69
17	1,996	1,345.67	1,021.5		101.37
18	10,380	75.00	10.9	Upper Marker	113.00
19	11,948	0.00	0.0		114.59

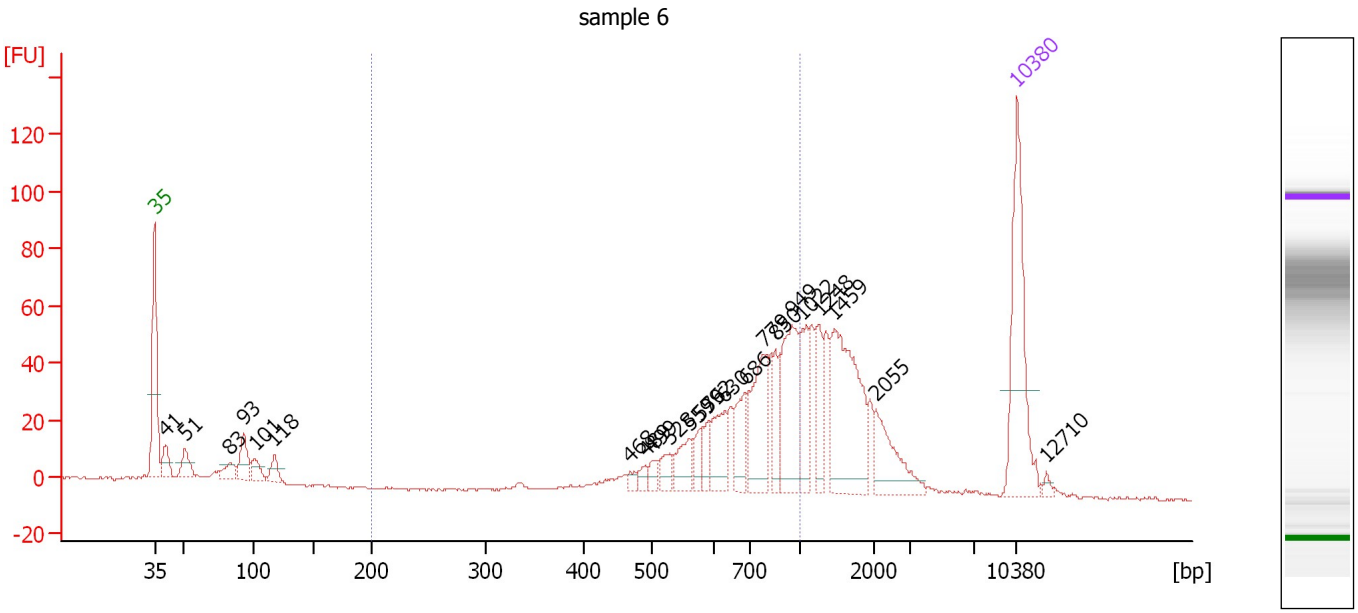
Region table for sample 5 : sample 5

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	758	1,306.35	2,069.5	2,772.1	26	20.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found:	23	Corr. Area 1:	447.4
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	41	19.34	721.6		43.88
3	51	19.03	566.6		45.46
4	83	14.23	260.3		49.07
5	93	27.72	451.3		50.23
6	101	14.60	218.0		51.15
7	118	13.46	173.1		52.73
8	468	4.87	15.8		81.59
9	489	5.76	17.8		82.79
10	499	7.95	24.1		83.35
11	528	11.27	32.3		84.79
12	559	20.58	55.7		86.36
13	576	13.66	35.9		87.20
14	592	12.66	32.4		87.98
15	630	29.23	70.3		89.28
16	686	27.23	60.1		90.95
17	779	51.28	99.8		92.43
18	850	22.03	39.3		93.40
19	949	61.99	99.0		94.75
20	1,022	31.11	46.1		95.58
21	1,248	22.82	27.7		96.92
22	1,459	93.24	96.9		98.18
23	2,055	33.17	24.5		101.56
24	10,380	75.00	10.9	Upper Marker	113.00
25	12,710	0.00	0.0		115.36

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...

... 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	727	314.80	447.4	698.2	47	21.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

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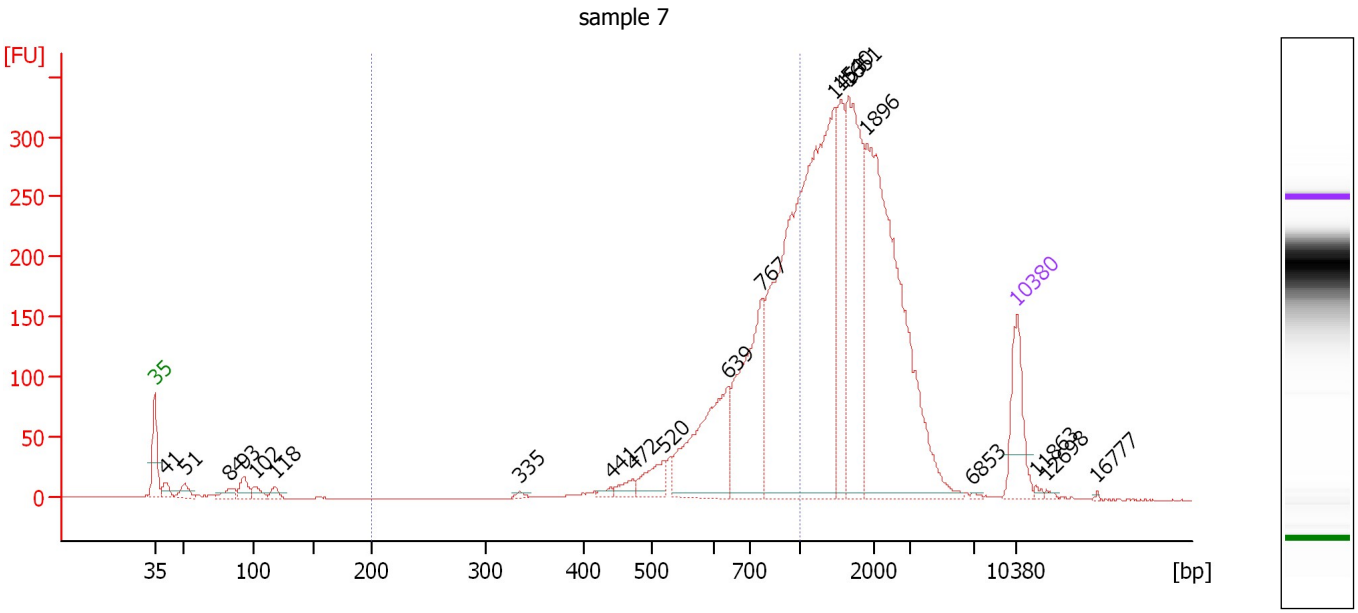
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found:	20	Corr. Area 1:	1,570.5
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	35	125.00	5,411.3	Lower Marker	43.00
2	41	21.66	806.7		43.89
3	51	24.79	739.5		45.44
4	84	21.22	384.5		49.16
5	93	31.04	504.8		50.24
6	102	17.67	261.9		51.23
7	118	15.29	195.9		52.78
8	335	4.99	22.6		72.66
9	441	8.46	29.0		80.09
10	472	17.66	56.7		81.83
11	520	46.25	134.9		84.37
12	639	216.82	514.2		89.54
13	767	251.85	497.8		92.27
14	1,453	850.33	886.5		98.14
15	1,540	123.27	121.3		98.66
16	1,651	275.21	252.6		99.32
17	1,896	547.14	437.2		100.78
18	6,853	2.10	0.5		109.38
19	10,380	75.00	10.9	Upper Marker	113.00
20	11,863	0.00	0.0		114.50
21	12,698	0.00	0.0		115.35
22	16,777	0.00	0.0		119.49

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...

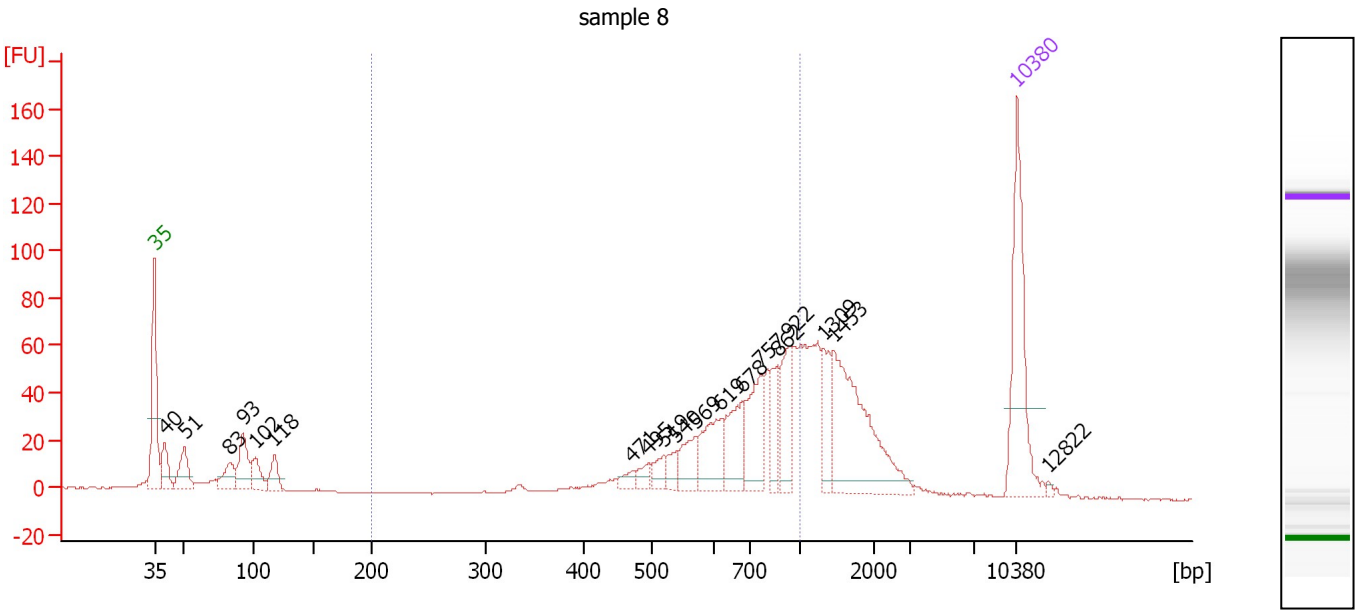
... Region table for sample 7 : sample 7

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	746	1,002.61	1,570.5	2,176.2	35	21.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found:	19	Corr. Area 1:	556.7
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	40	30.01	1,132.3		43.81
3	51	33.31	996.2		45.43
4	83	25.69	468.7		49.10
5	93	40.91	668.4		50.19
6	102	24.29	361.3		51.19
7	118	20.59	265.3		52.71
8	471	7.71	24.8		81.76
9	495	9.31	28.5		83.10
10	519	11.70	34.2		84.33
11	540	11.03	31.0		85.38
12	569	23.88	63.6		86.86
13	619	40.67	99.6		88.95
14	678	41.36	92.4		90.71
15	757	46.90	93.8		92.14
16	862	24.69	43.4		93.57
17	922	35.33	58.1		94.38
18	1,309	27.86	32.2		97.29
19	1,453	110.44	115.2		98.14
20	10,380	75.00	10.9	Upper Marker	113.00
21	12,822	0.00	0.0		115.48

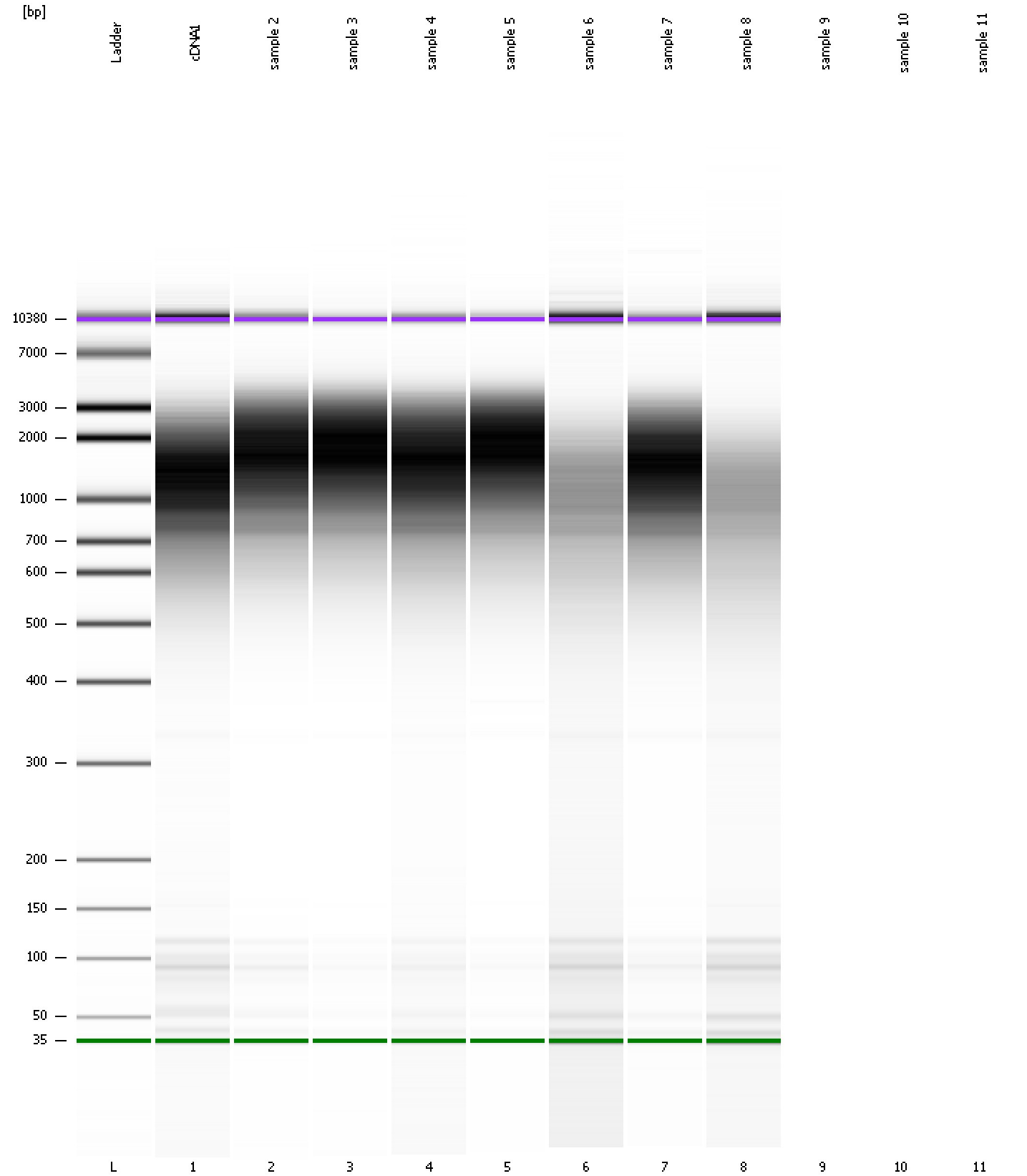
Region table for sample 8 : sample 8

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	703	349.98	556.7	817.3	48	23.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Invalid Samples

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad

Created: 5/30/2019 11:01:27 AM
Modified: 5/30/2019 11:34:10 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		5/30/2019 11:34:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_001.xad)		Instrument	Run		5/30/2019 11:01:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		5/30/2019 11:01:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/30/2019 11:01:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/30/2019 11:01:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		5/30/2019 11:01:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/30/2019 11:01:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/30/2019 11:01:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1