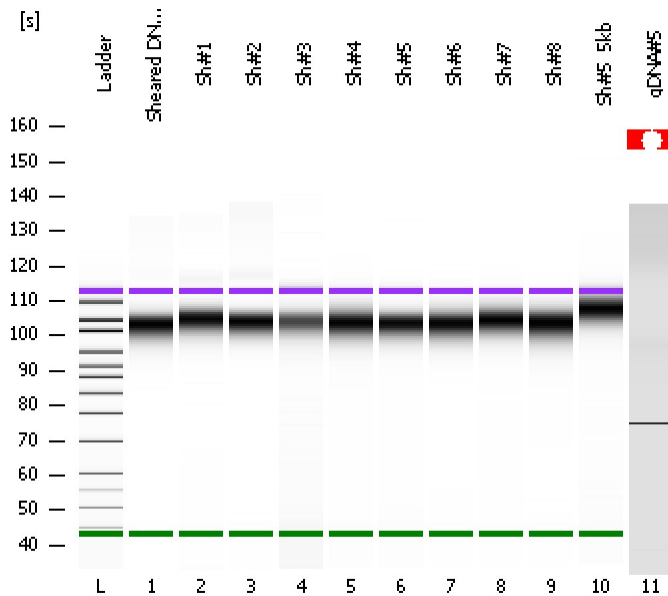


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
Modified: 7/5/2019 2:45:00 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

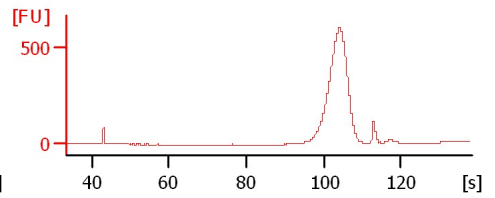
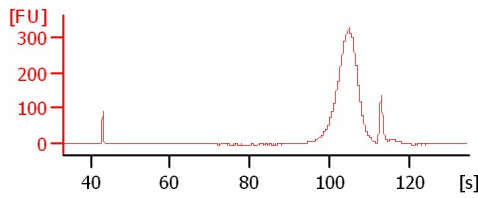
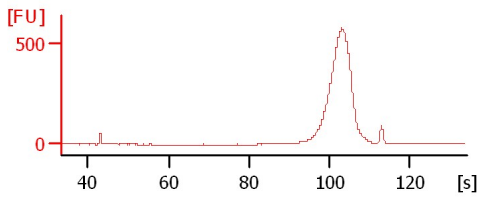
Chip Information:

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

Sheared DNA#0 Chimp3\_3kb

Sh#1

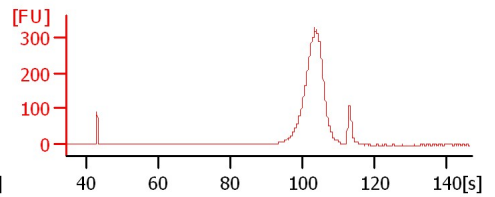
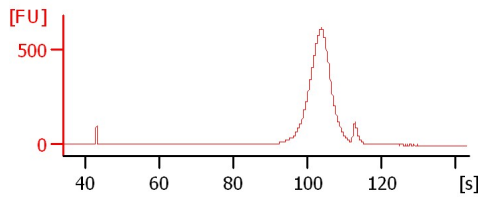
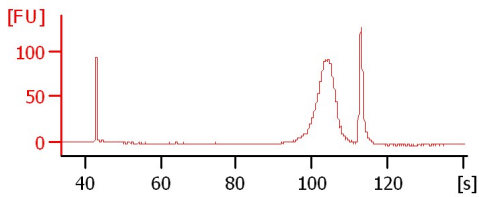
Sh#2



Sh#3

Sh#4

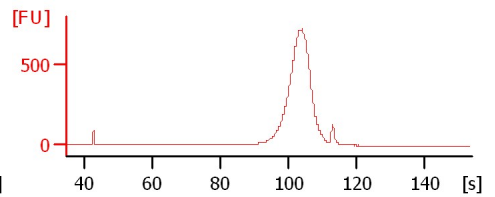
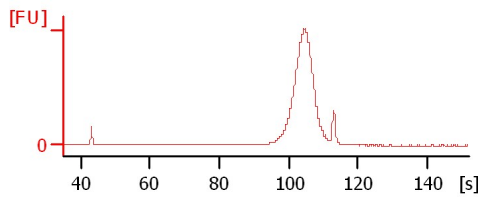
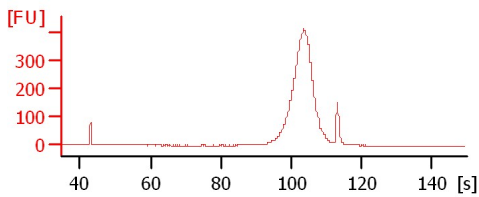
Sh#5



Sh#6

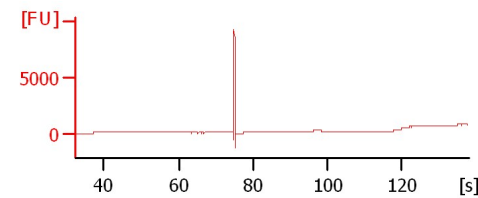
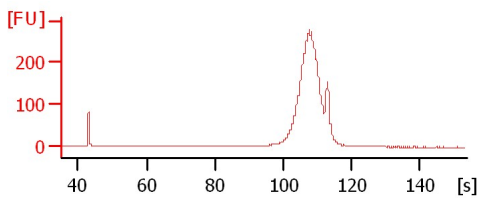
Sh#7

Sh#8



Sh#5\_5kb

gDNA#5



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
Modified: 7/5/2019 2:45:00 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Sheared DNA#0 Chimp3_3kb		<input type="checkbox"/>				
Sh#1		<input type="checkbox"/>				
Sh#2		<input type="checkbox"/>				
Sh#3		<input type="checkbox"/>				
Sh#4		<input type="checkbox"/>				
Sh#5		<input type="checkbox"/>				
Sh#6		<input type="checkbox"/>				
Sh#7		<input type="checkbox"/>				
Sh#8		<input type="checkbox"/>				
Sh#5_5kb		<input type="checkbox"/>				
gDNA#5		<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\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
Modified: 7/5/2019 2:45:00 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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ l] : 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

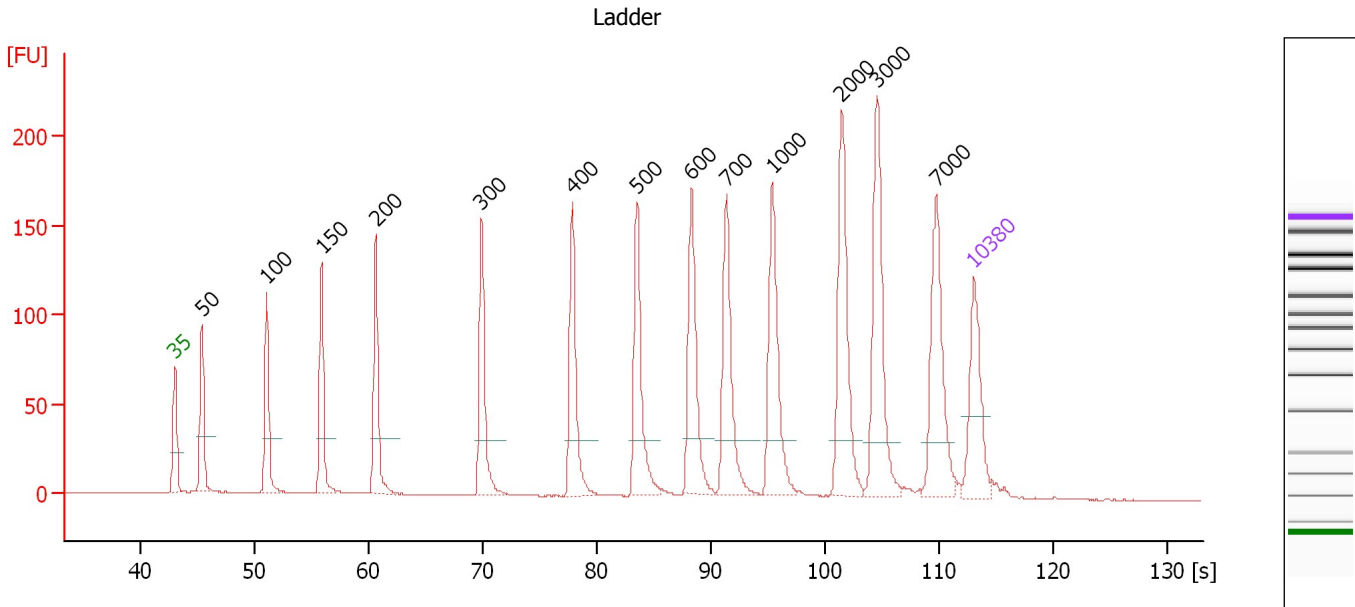
### Ladder

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\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
 Modified: 7/5/2019 2:45:00 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

**Peak table for Ladder**

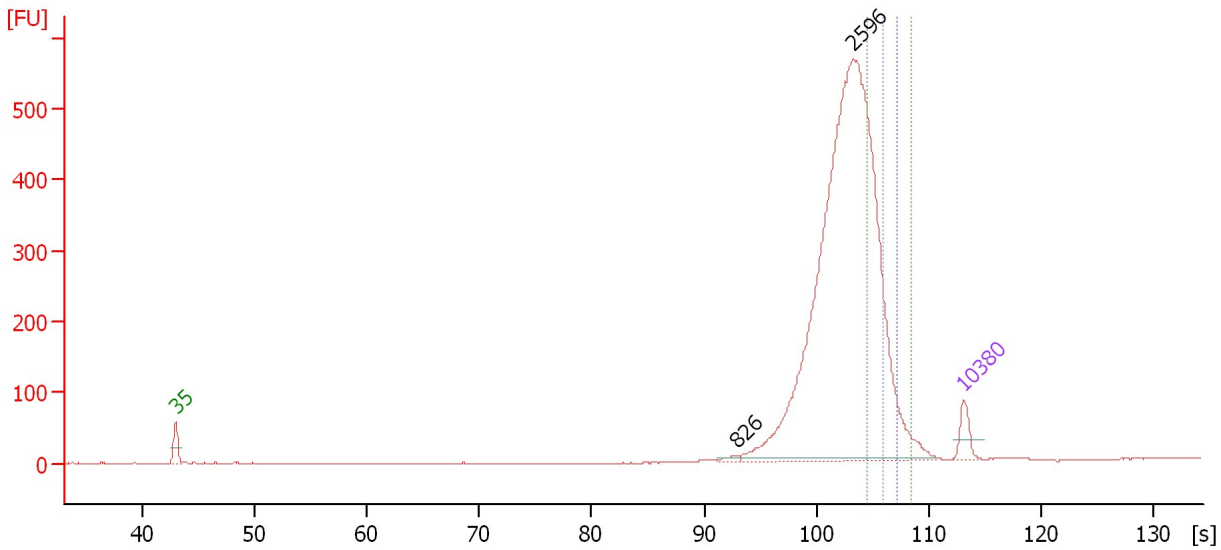
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.35
3	100	150.00	2,272.7	Ladder Peak	51.04
4	150	150.00	1,515.2	Ladder Peak	55.84
5	200	150.00	1,136.4	Ladder Peak	60.59
6	300	150.00	757.6	Ladder Peak	69.86
7	400	150.00	568.2	Ladder Peak	77.81
8	500	150.00	454.5	Ladder Peak	83.50
9	600	150.00	378.8	Ladder Peak	88.26
10	700	150.00	324.7	Ladder Peak	91.31
11	1,000	150.00	227.3	Ladder Peak	95.31
12	2,000	150.00	113.6	Ladder Peak	101.38
13	3,000	150.00	75.8	Ladder Peak	104.53
14	7,000	150.00	32.5	Ladder Peak	109.71
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
 Modified: 7/5/2019 2:45:00 PM

**Electropherogram Summary Continued ...**

Sheared DNA#0 Chimp3\_3kb



**Overall Results for sample 1 : Sheared DNA#0 Chimp3 3kb**

Number of peaks found:	2	Corr. Area 2:	66.1
Noise:	0.2	Corr. Area 3:	757.9
Corr. Area 1:	489.9		

**Peak table for sample 1 : Sheared DNA#0 Chimp3 3kb**

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	826	18.58	34.1		92.99
3	2,596	3,635.10	2,121.5		103.26
4	10,380	75.00	10.9	Upper Marker	113.00

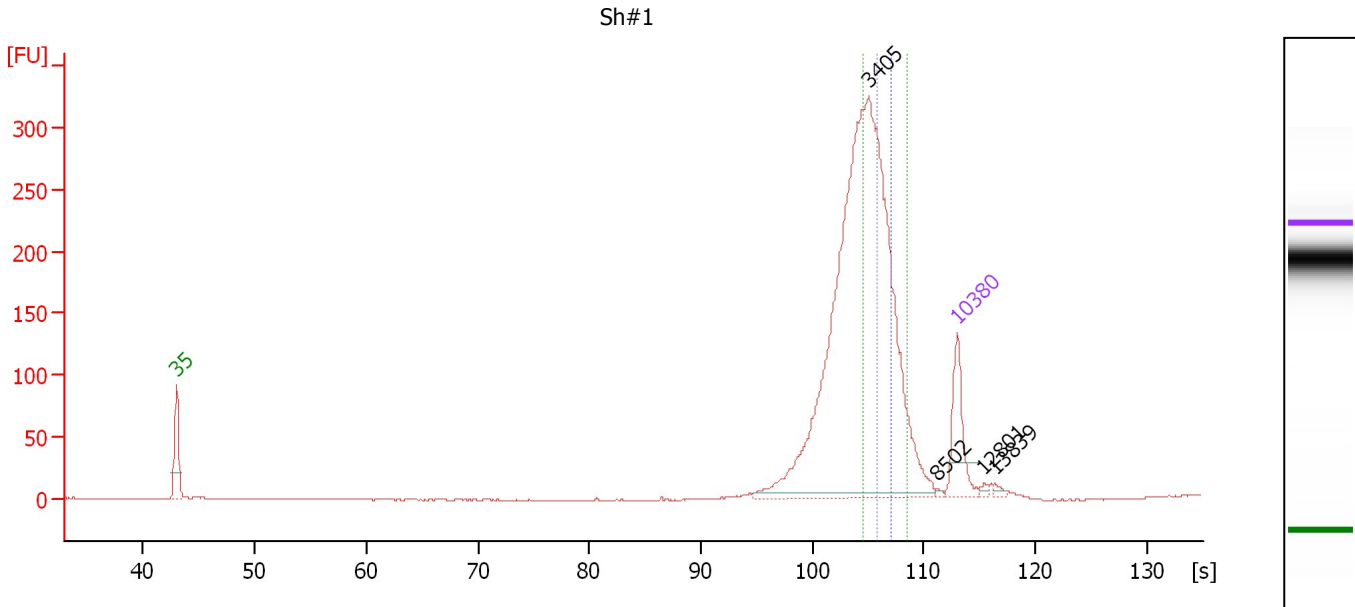
**Region table for sample 1 : Sheared DNA#0 Chimp3 3kb**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
3,000	4,000	3,423	524.99	489.9	232.4	14	8.5
3,000	6,000	3,845	814.62	757.9	328.1	22	18.2
5,000	6,000	5,381	71.84	66.1	20.2	2	5.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
 Modified: 7/5/2019 2:45:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Sh#1**

Number of peaks found: 4  
 Noise: 0.2  
 Corr. Area 1: 393.1  
 Corr. Area 2: 152.8  
 Corr. Area 3: 850.9

**Peak table for sample 2 : Sh#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	3,405	1,181.99	525.9		105.06
3	8,502	2.42	0.4		111.17
4	10,380	75.00	10.9	Upper Marker	113.00
5	12,801	0.00	0.0		115.36
6	13,839	0.00	0.0		116.37

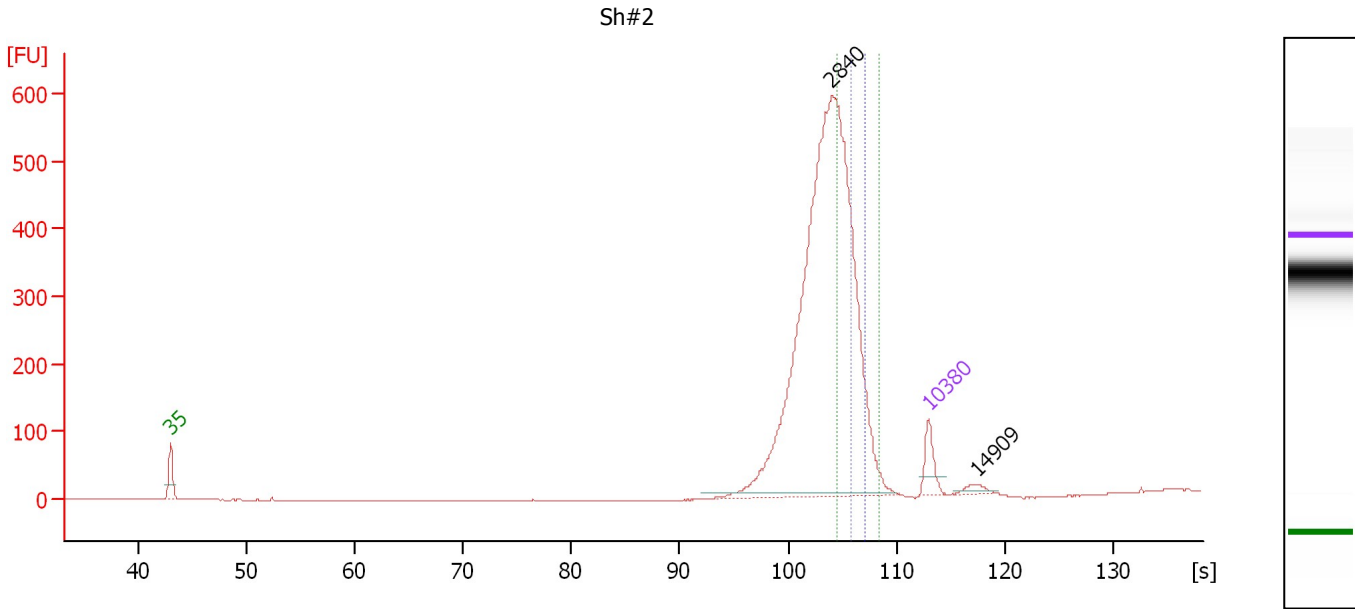
**Region table for sample 2 : Sh#1**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
3,000	4,000	3,456	249.41	393.1	109.3	21	8.6
3,000	6,000	4,153	542.66	850.9	203.7	45	19.1
5,000	6,000	5,393	98.34	152.8	27.6	8	5.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
 Modified: 7/5/2019 2:45:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Sh#2**

Number of peaks found: 2                      Corr. Area 2: 109.6  
 Noise: 0.3                                      Corr. Area 3: 1,095.7  
 Corr. Area 1: 632.9

**Peak table for sample 3 : Sh#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	2,840	2,702.13	1,441.8		104.03
3	10,380	75.00	10.9	Upper Marker	113.00
4	14,909	0.00	0.0		117.41

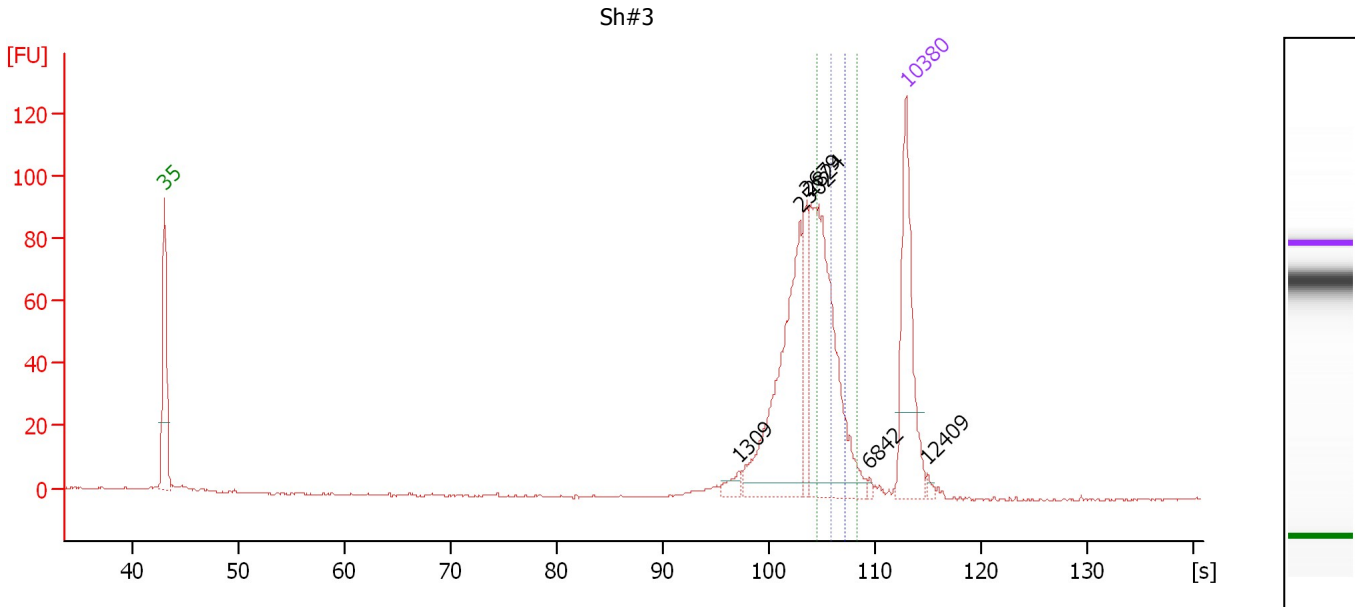
**Region table for sample 3 : Sh#2**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
3,000	4,000	3,425	530.74	632.9	234.8	20	8.6
3,000	6,000	3,916	922.22	1,095.7	364.8	34	17.9
5,000	6,000	5,309	93.17	109.6	26.6	3	5.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
 Modified: 7/5/2019 2:45:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Sh#3**

Number of peaks found: 6  
 Noise: 0.2  
 Corr. Area 1: 100.9  
 Corr. Area 2: 20.6  
 Corr. Area 3: 180.1

**Peak table for sample 4 : Sh#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	1,309	7.63	8.8		97.19
3	2,502	122.47	74.2		102.96
4	2,679	37.41	21.2		103.52
5	2,824	145.97	78.3		103.98
6	6,842	1.97	0.4		109.50
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,409	0.00	0.0		114.98

**Region table for sample 4 : Sh#3**

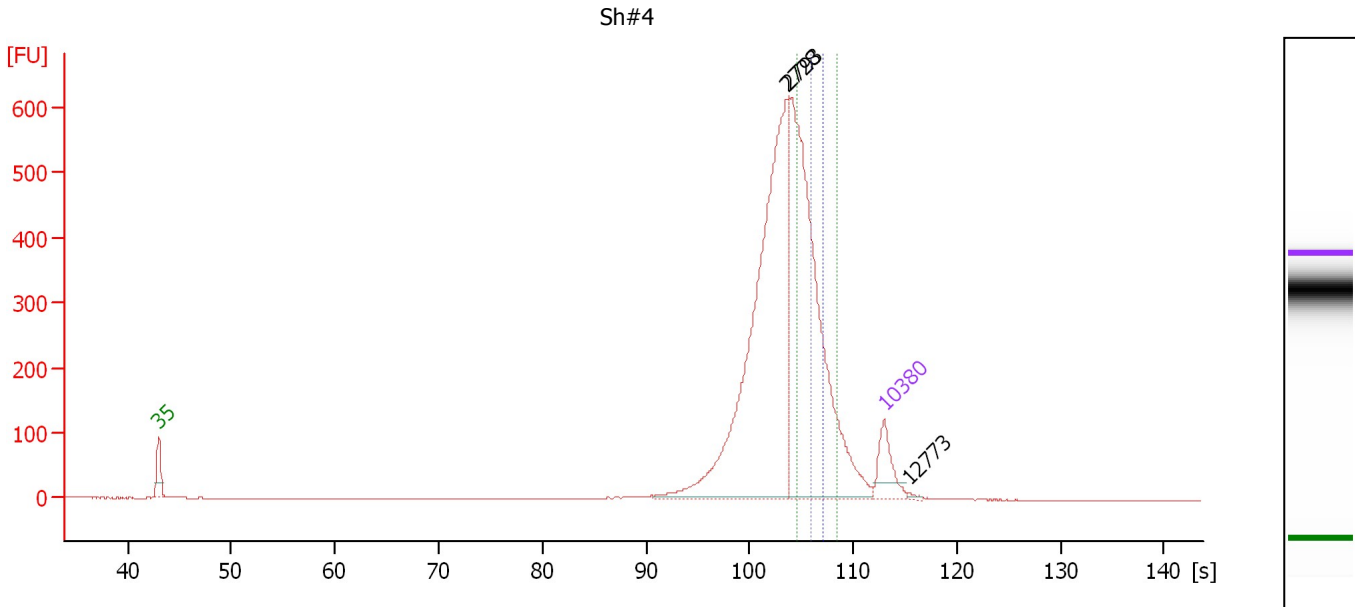
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
3,000	4,000	3,426	59.71	100.9	26.4	19	8.4
3,000	6,000	3,955	106.99	180.1	42.0	34	18.5
5,000	6,000	5,374	12.35	20.6	3.5	4	5.5



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
 Modified: 7/5/2019 2:45:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Sh#4**

Number of peaks found:	3	Corr. Area 2:	210.5
Noise:	0.2	Corr. Area 3:	1,262.1
Corr. Area 1:	646.3		

**Peak table for sample 5 : Sh#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	2,728	1,077.70	598.7		103.67
3	2,793	913.04	495.3		103.88
4	10,380	75.00	10.9	Upper Marker	113.00
5	12,773	0.00	0.0		115.33

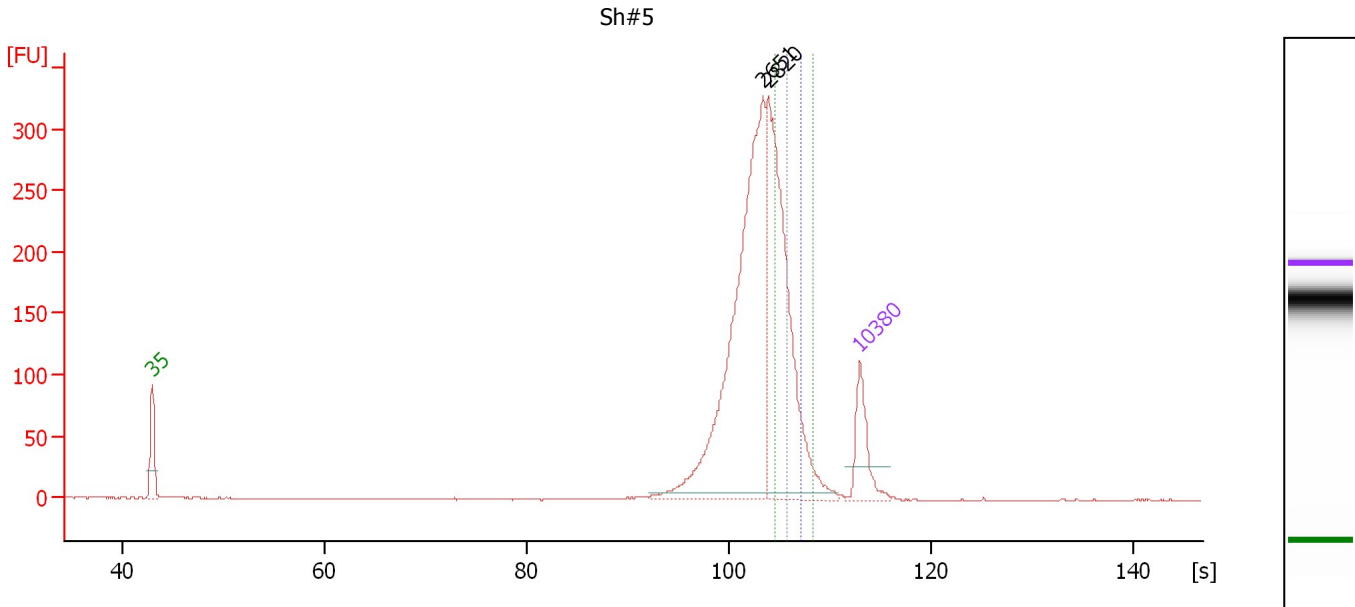
**Region table for sample 5 : Sh#4**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
3,000	4,000	3,452	314.46	646.3	138.0	15	8.6
3,000	6,000	4,092	616.94	1,262.1	235.1	30	19.4
5,000	6,000	5,406	103.90	210.5	29.1	5	5.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
 Modified: 7/5/2019 2:45:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Sh#5**

Number of peaks found:	2	Corr. Area 2:	57.3
Noise:	0.3	Corr. Area 3:	510.8
Corr. Area 1:	302.3		

**Peak table for sample 6 : Sh#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	2,651	672.15	384.1		103.43
3	2,820	478.30	257.0		103.96
4	10,380	75.00	10.9	Upper Marker	113.00

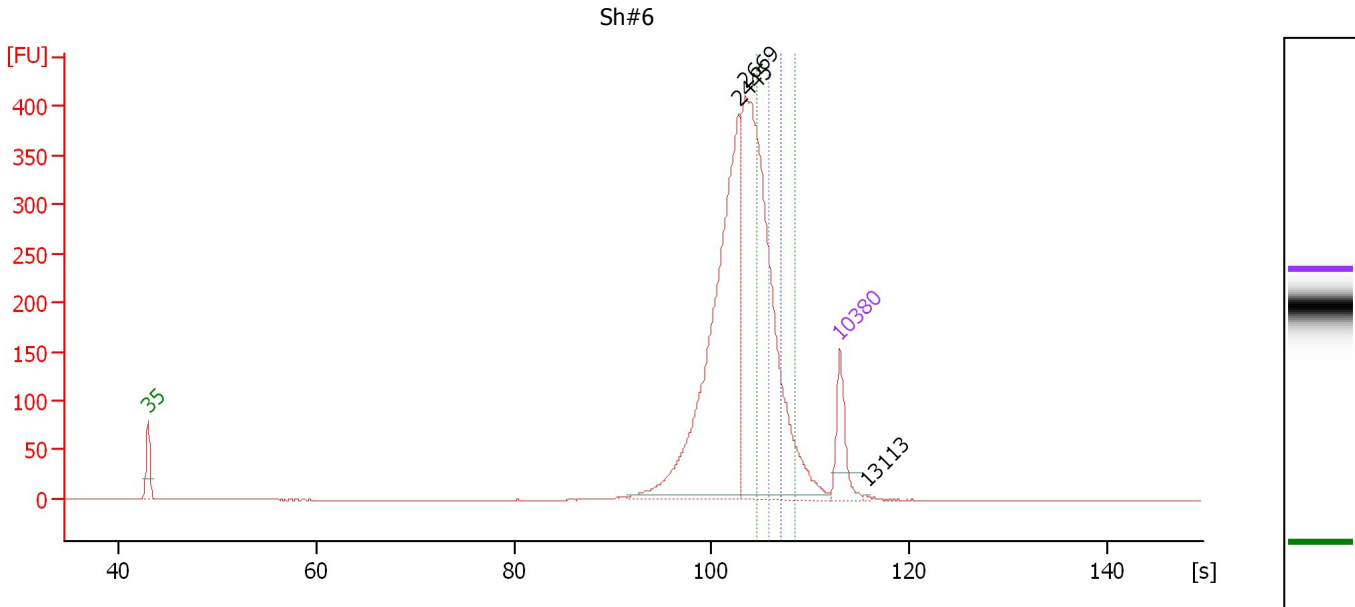
**Region table for sample 6 : Sh#5**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
3,000	4,000	3,426	186.72	302.3	82.6	16	8.5
3,000	6,000	3,921	316.66	510.8	125.3	27	18.6
5,000	6,000	5,363	35.90	57.3	10.1	3	5.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
 Modified: 7/5/2019 2:45:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Sh#6**

Number of peaks found:	3	Corr. Area 2:	107.4
Noise:	0.2	Corr. Area 3:	736.3
Corr. Area 1:	403.0		

**Peak table for sample 7 : Sh#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	2,445	688.72	426.8		102.78
3	2,669	791.23	449.2		103.49
4	10,380	75.00	10.9	Upper Marker	113.00
5	13,113	0.00	0.0		115.66

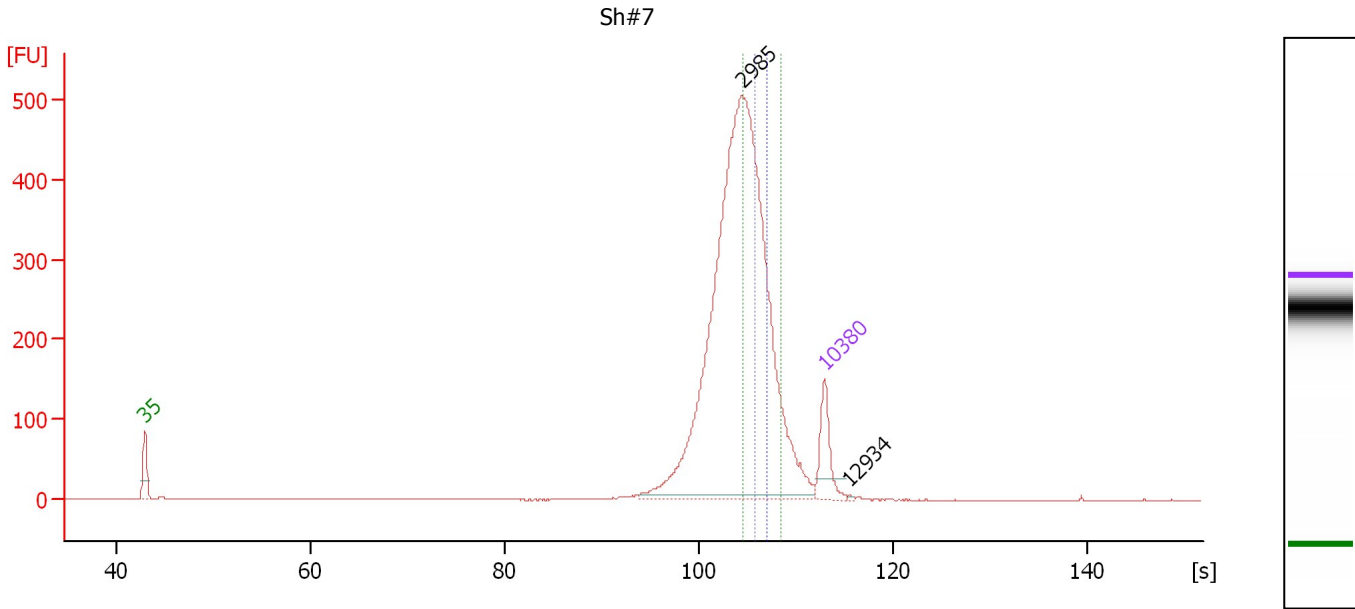
**Region table for sample 7 : Sh#6**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
3,000	4,000	3,418	227.35	403.0	100.8	15	8.7
3,000	6,000	4,008	417.17	736.3	162.2	28	19.7
5,000	6,000	5,406	61.45	107.4	17.2	4	5.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Sh#7**

Number of peaks found:	2	Corr. Area 2:	232.2
Noise:	0.2	Corr. Area 3:	1,261.7
Corr. Area 1:	581.4		

**Peak table for sample 8 : Sh#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	2,985	1,596.41	810.3		104.48
3	10,380	75.00	10.9	Upper Marker	113.00
4	12,934	0.00	0.0		115.49

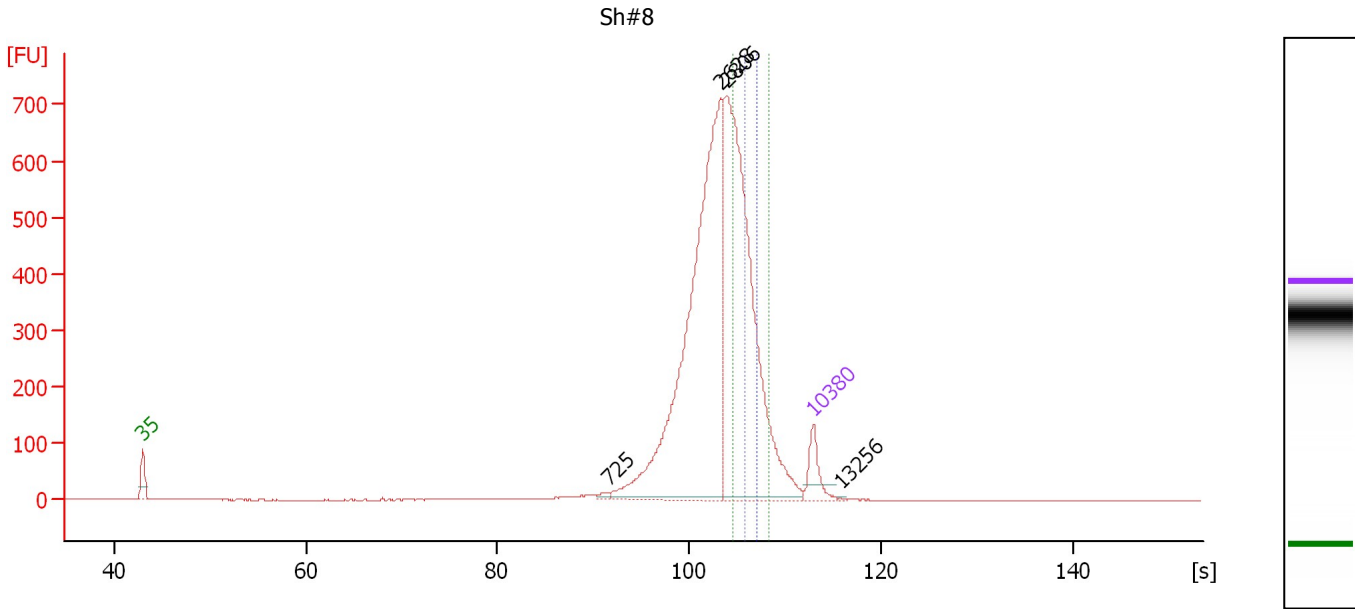
**Region table for sample 8 : Sh#7**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
3,000	4,000	3,444	300.00	581.4	132.0	19	8.5
3,000	6,000	4,151	654.42	1,261.7	246.0	40	19.3
5,000	6,000	5,398	121.54	232.2	34.1	7	5.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : Sh#8**

Number of peaks found: 4                      Corr. Area 2: 246.9  
 Noise: 0.3                                      Corr. Area 3: 1,504.2  
 Corr. Area 1: 760.8

**Peak table for sample 9 : Sh#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	725	12.45	26.0		91.65
3	2,628	1,522.97	878.0		103.36
4	2,806	1,332.78	719.7		103.92
5	10,380	75.00	10.9	Upper Marker	113.00
6	13,256	0.00	0.0		115.80

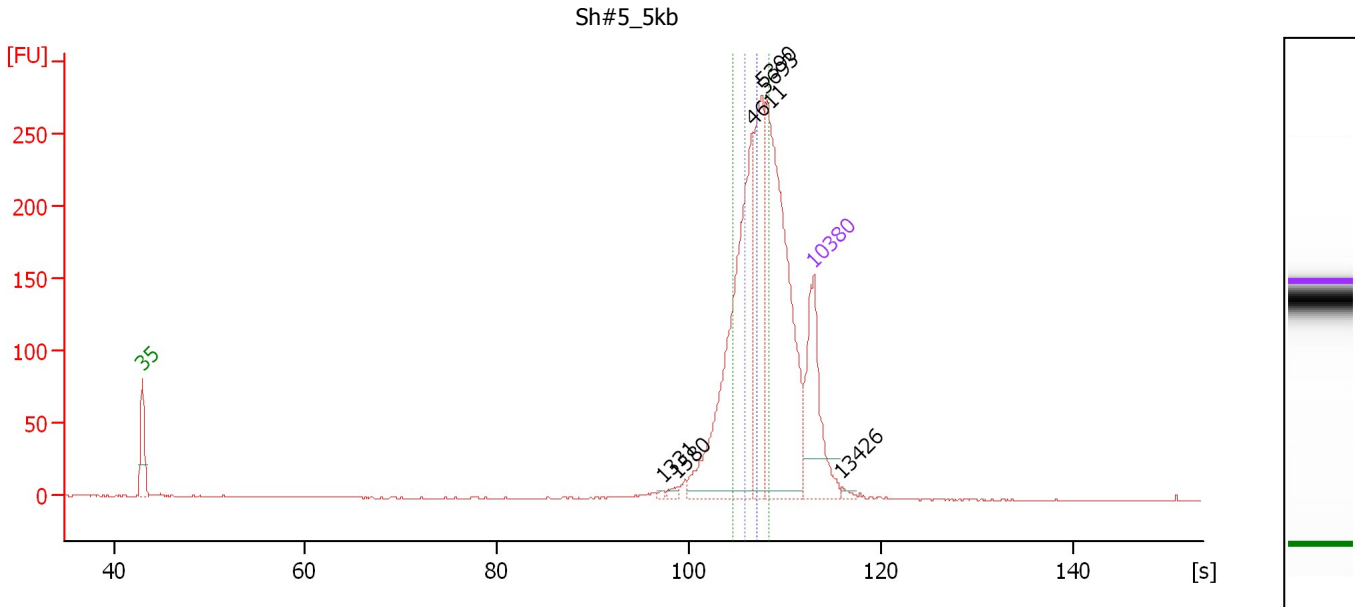
**Region table for sample 9 : Sh#8**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
3,000	4,000	3,438	435.51	760.8	192.0	15	8.6
3,000	6,000	4,076	865.08	1,504.2	330.8	29	19.3
5,000	6,000	5,383	143.34	246.9	40.3	5	5.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Sh#5 5kb**

Number of peaks found: 6  
 Noise: 0.4  
 Corr. Area 1: 204.3  
 Corr. Area 2: 322.3  
 Corr. Area 3: 813.3

**Peak table for sample 10 : Sh#5 5kb**

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	1,331	1.63	1.9		97.32
3	1,580	3.46	3.3		98.83
4	4,611	223.62	73.5		106.62
5	5,390	107.63	30.3		107.62
6	5,693	235.24	62.6		108.02
7	10,380	75.00	10.9	Upper Marker	113.00
8	13,426	0.00	0.0		115.97

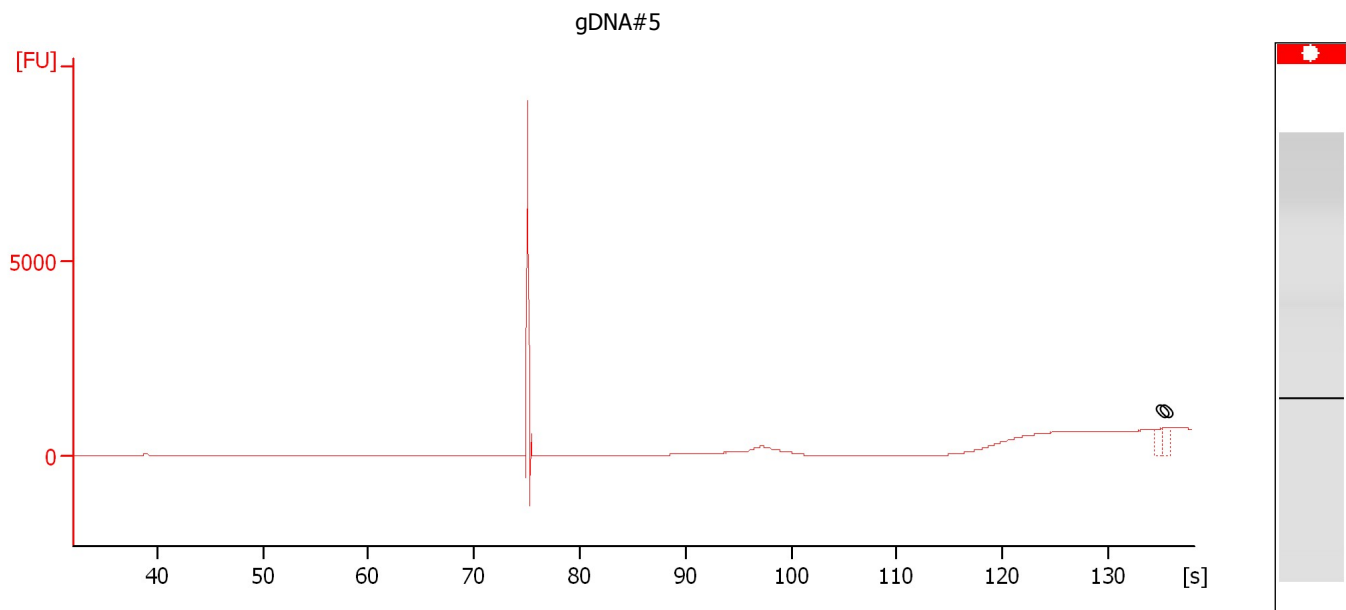
**Region table for sample 10 : Sh#5 5kb**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
3,000	4,000	3,506	71.58	204.3	30.9	12	8.4
3,000	6,000	4,632	287.28	813.3	96.9	49	18.0
5,000	6,000	5,456	114.53	322.3	31.8	20	5.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
 Modified: 7/5/2019 2:45:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : gDNA#5**

Number of peaks found: 0                      Noise: 1.6

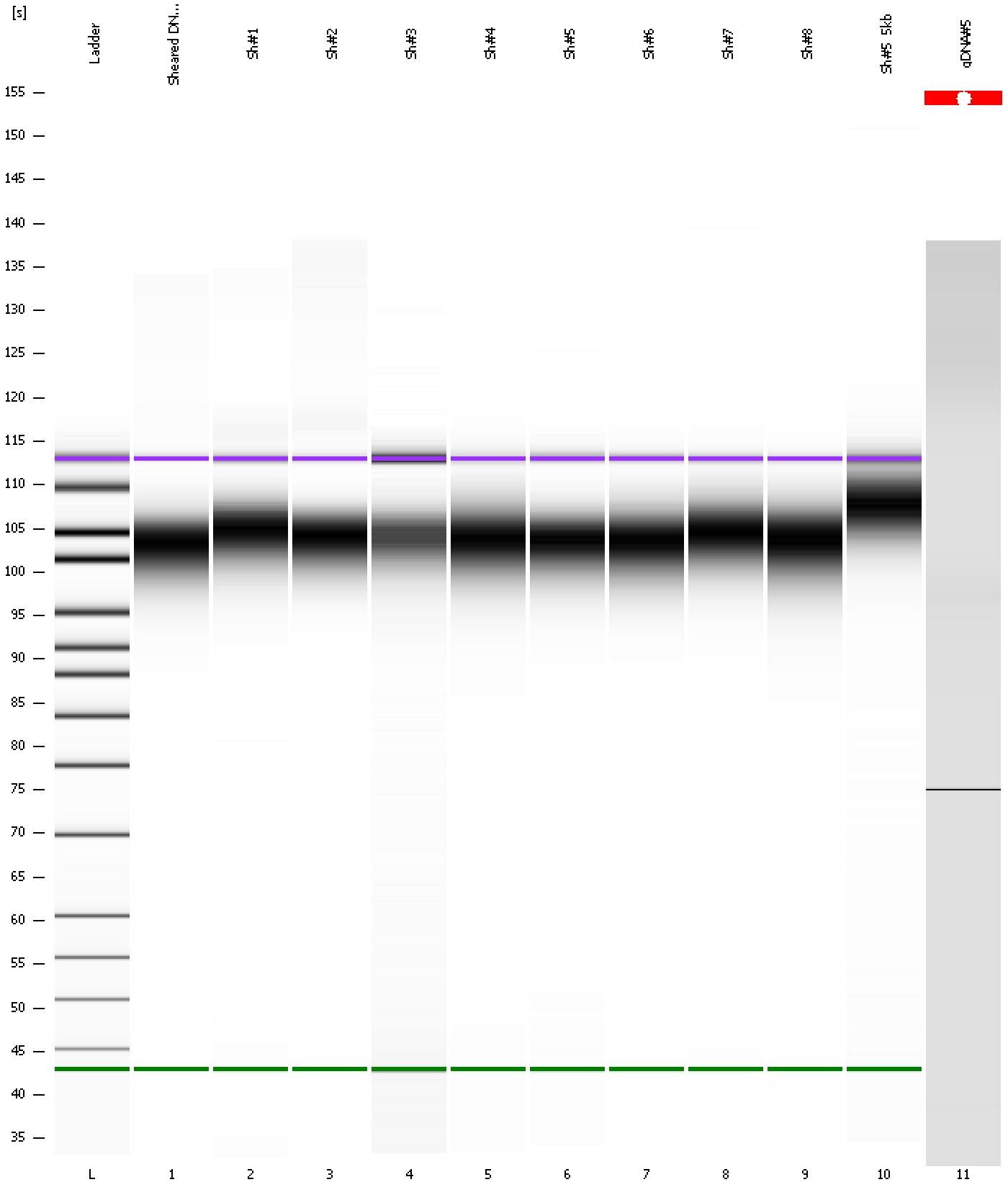
**Peak table for sample 11 : gDNA#5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		135.10
2	0	0.00	0.0		135.45

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
Modified: 7/5/2019 2:45:00 PM

**Gel Image**



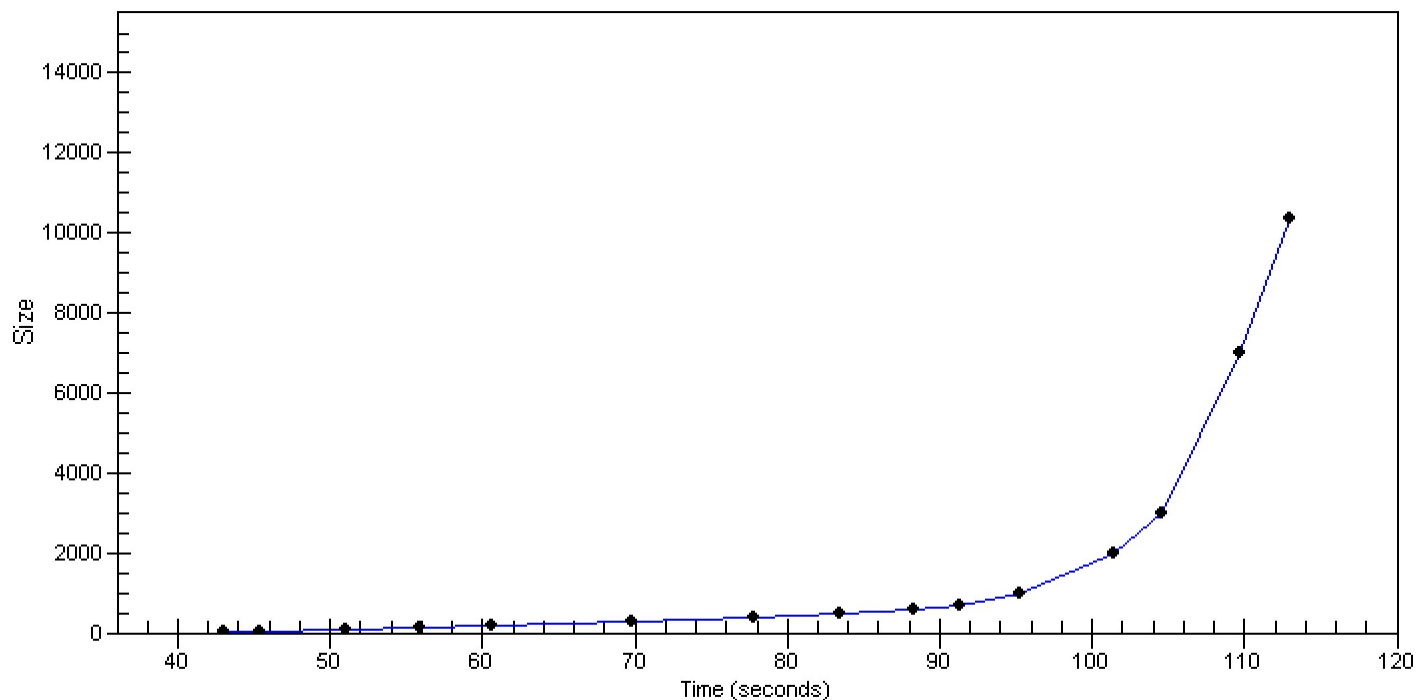


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
Modified: 7/5/2019 2:45:00 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-05\2019-07-05\_001.xad

Created: 7/5/2019 10:32:16 AM  
 Modified: 7/5/2019 2:45:00 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		7/5/2019 11:13:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Instrument error occurred on port 1, Optical signal too high (1605h)	559	Instrument	Run	Sample 11	7/5/2019 11:12:15 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\2019-07-05\2019-07-05_001.xad)		Instrument	Run		7/5/2019 10:32:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		7/5/2019 10:32:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/5/2019 10:32:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/5/2019 10:32:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		7/5/2019 10:32:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/5/2019 10:32:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/5/2019 10:32:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1