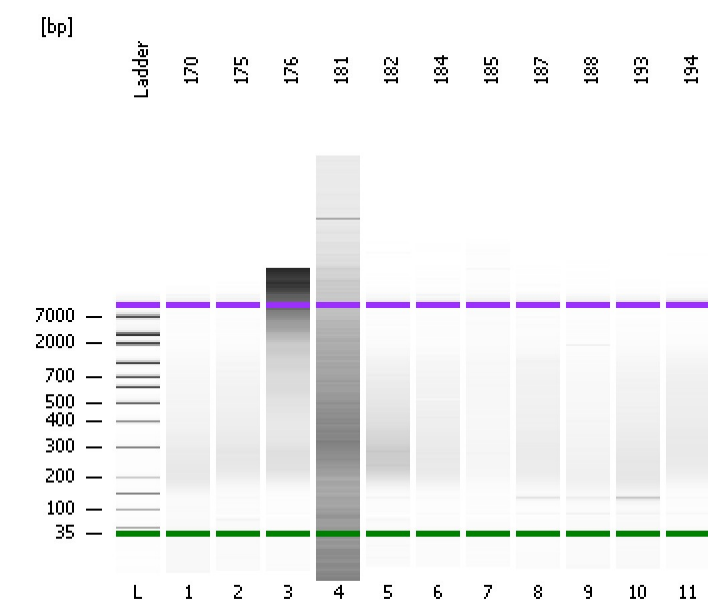


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
Modified: 12/16/2016 7:46:01 PM

Electrophoresis File Run Summary



Instrument Information:

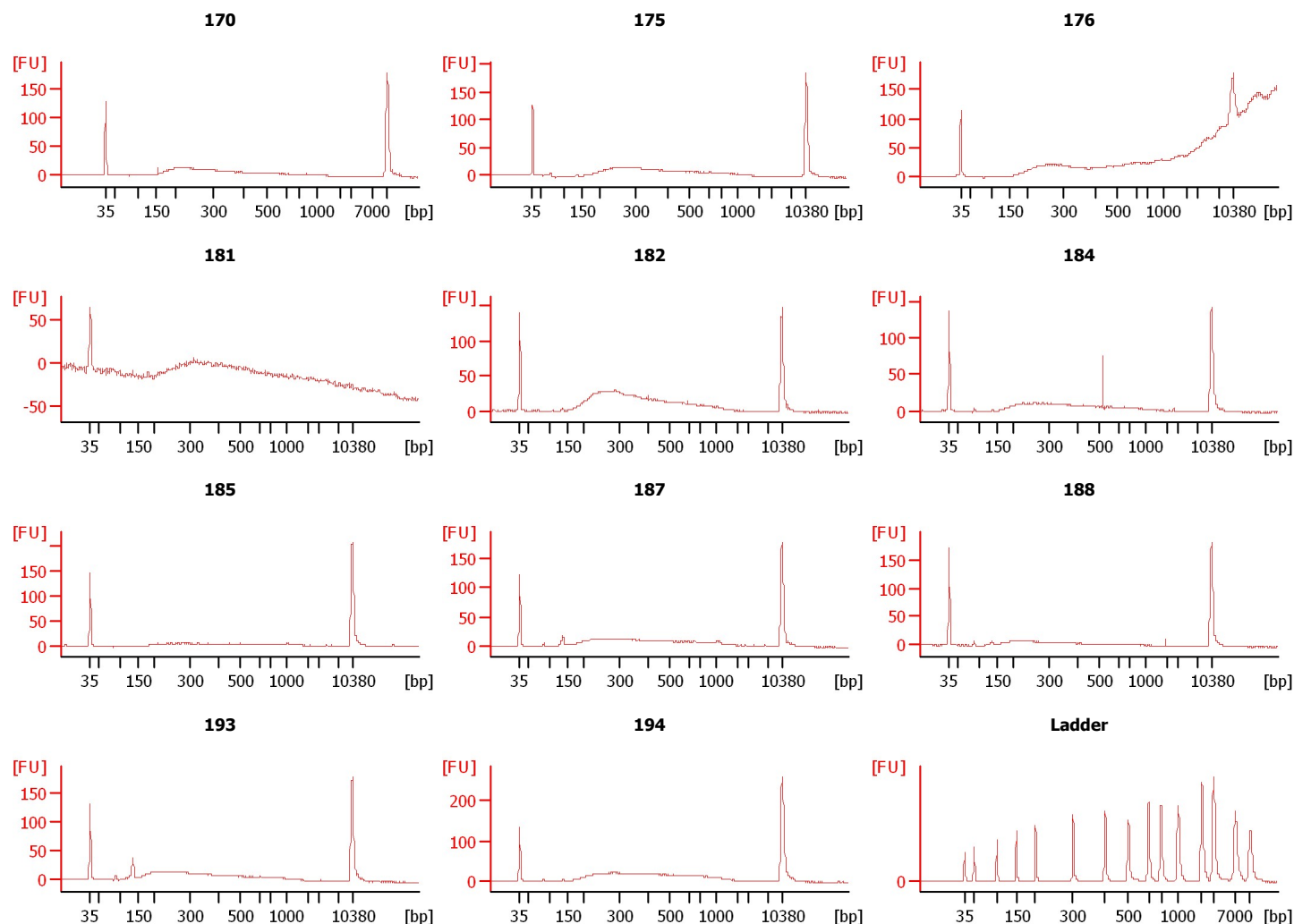
Instrument Name: DE72902486 Firmware: C.01.069
Serial#: DE72902486 Type: G2939A

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: 1.0
Assay Comments: Copyright © 2003-2009 Agilent Technologies

Chip Information:

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



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
Modified: 12/16/2016 7:46:01 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Stat us	Observation	Result Label	Result Color
170		<input type="checkbox"/>	✓			
175		<input type="checkbox"/>	✓			
176		<input type="checkbox"/>	✓			
181		<input type="checkbox"/>	✓			
182		<input type="checkbox"/>	✓			
184		<input type="checkbox"/>	✓			
185		<input type="checkbox"/>	✓			
187		<input type="checkbox"/>	✓			
188		<input type="checkbox"/>	✓			
193		<input type="checkbox"/>	✓			
194		<input type="checkbox"/>	✓			

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

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
Modified: 12/16/2016 7:46:01 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

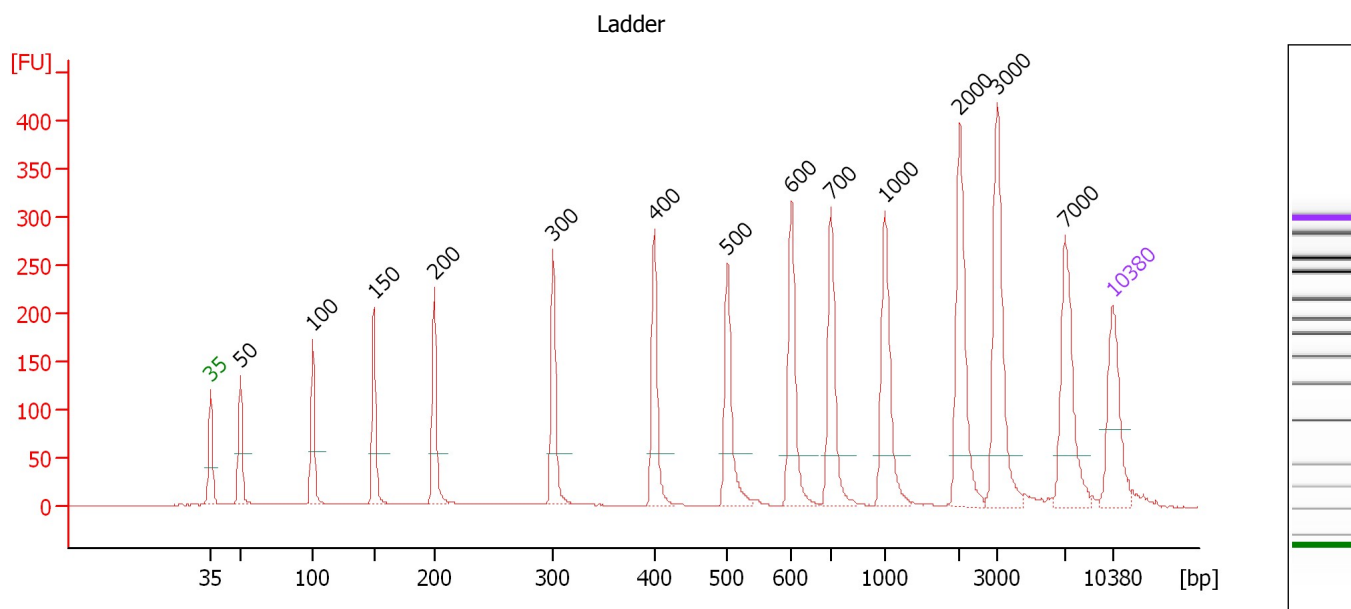
Ladder

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:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
 Modified: 12/16/2016 7:46:01 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

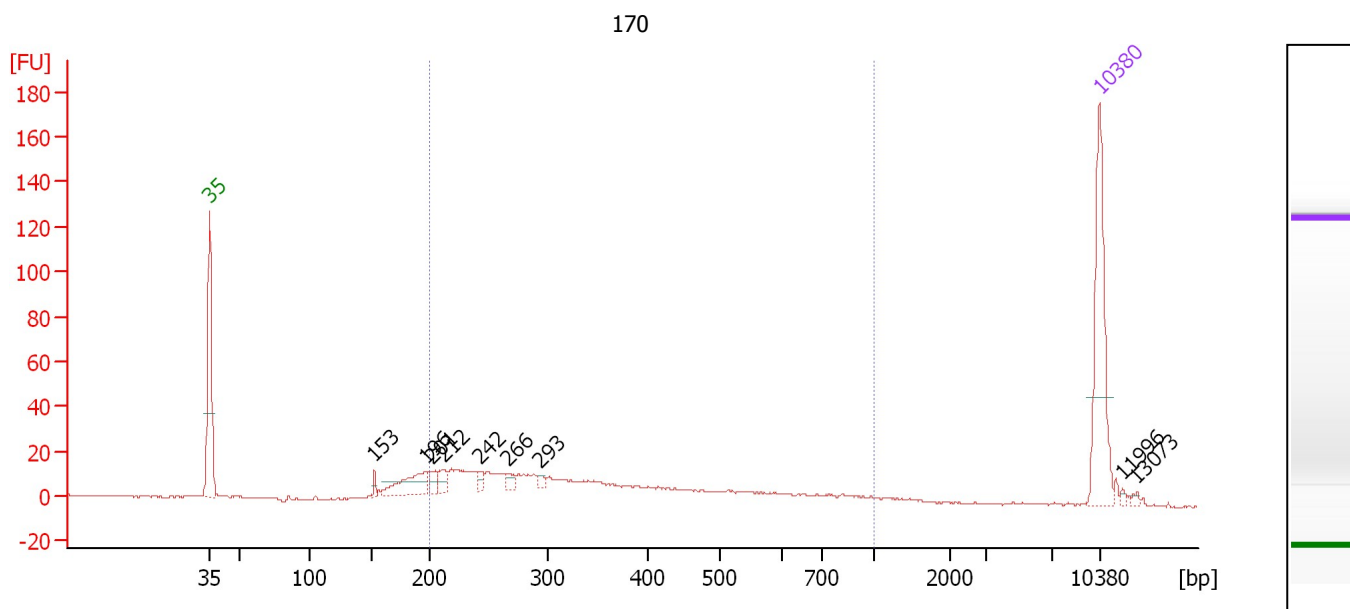
Peak table for Ladder

Peak		Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2	└	50	150.00	4,545.5	Ladder Peak
3	└	100	150.00	2,272.7	Ladder Peak
4	└	150	150.00	1,515.2	Ladder Peak
5	└	200	150.00	1,136.4	Ladder Peak
6	└	300	150.00	757.6	Ladder Peak
7	└	400	150.00	568.2	Ladder Peak
8	└	500	150.00	454.5	Ladder Peak
9	└	600	150.00	378.8	Ladder Peak
10	└	700	150.00	324.7	Ladder Peak
11	└	1,000	150.00	227.3	Ladder Peak
12	└	2,000	150.00	113.6	Ladder Peak
13	└	3,000	150.00	75.8	Ladder Peak
14	└	7,000	150.00	32.5	Ladder Peak
15	▶	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
 Modified: 12/16/2016 7:46:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 170

Number of peaks found: 9 Corr. Area 1: 372.4
 Noise: 0.3

Peak table for sample 1 : 170

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	153	4.94	48.8	
3	196	41.78	323.4	
4	201	11.27	84.9	
5	212	13.24	94.6	
6	242	7.52	47.0	
7	266	7.62	43.4	
8	293	4.76	24.6	
9	10,380	75.00	10.9	Upper Marker
10	11,996	0.00	0.0	
11	13,073	0.00	0.0	

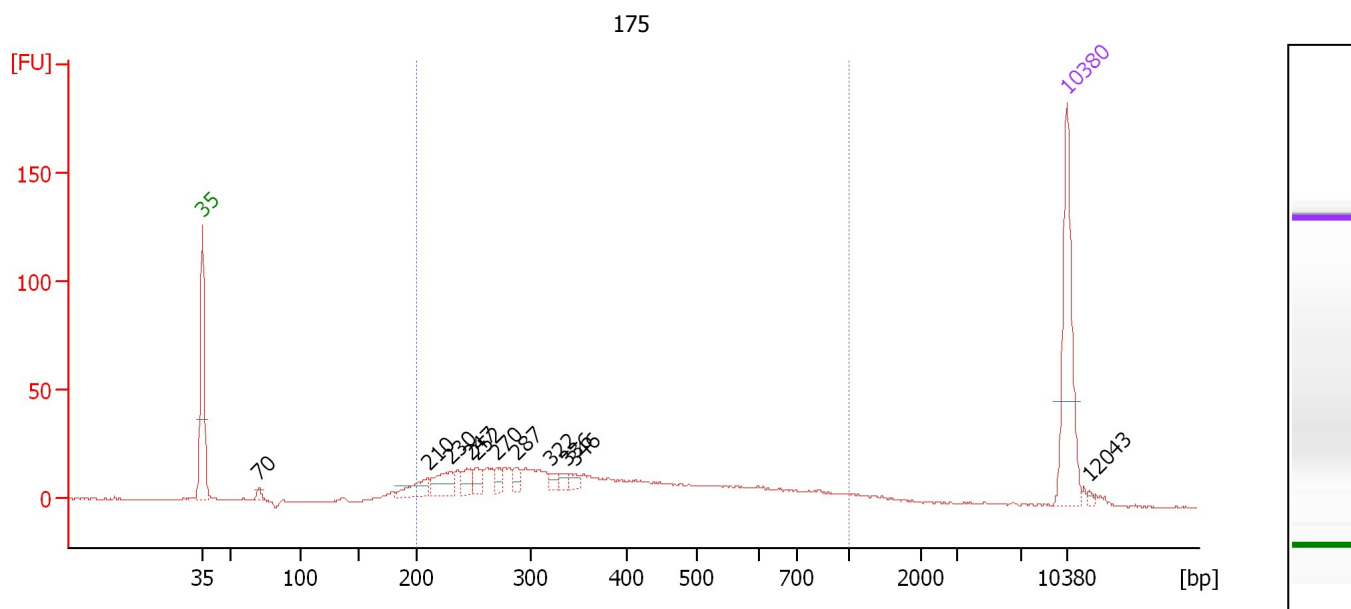
Region table for sample 1 : 170

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	372.4	78	371	43.8	310.42	1,543.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
 Modified: 12/16/2016 7:46:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 175

Number of peaks found: 11 Corr. Area 1: 521.2
 Noise: 0.3

Peak table for sample 2 : 175

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	6.43	138.7	
3	210	25.31	182.7	
4	230	29.12	191.9	
5	247	16.09	98.6	
6	252	13.15	79.0	
7	270	9.53	53.4	
8	287	9.43	49.7	
9	322	6.66	31.4	
10	336	6.50	29.3	
11	346	6.85	30.0	
12	10,380	75.00	10.9	Upper Marker
13	12,043	0.00	0.0	

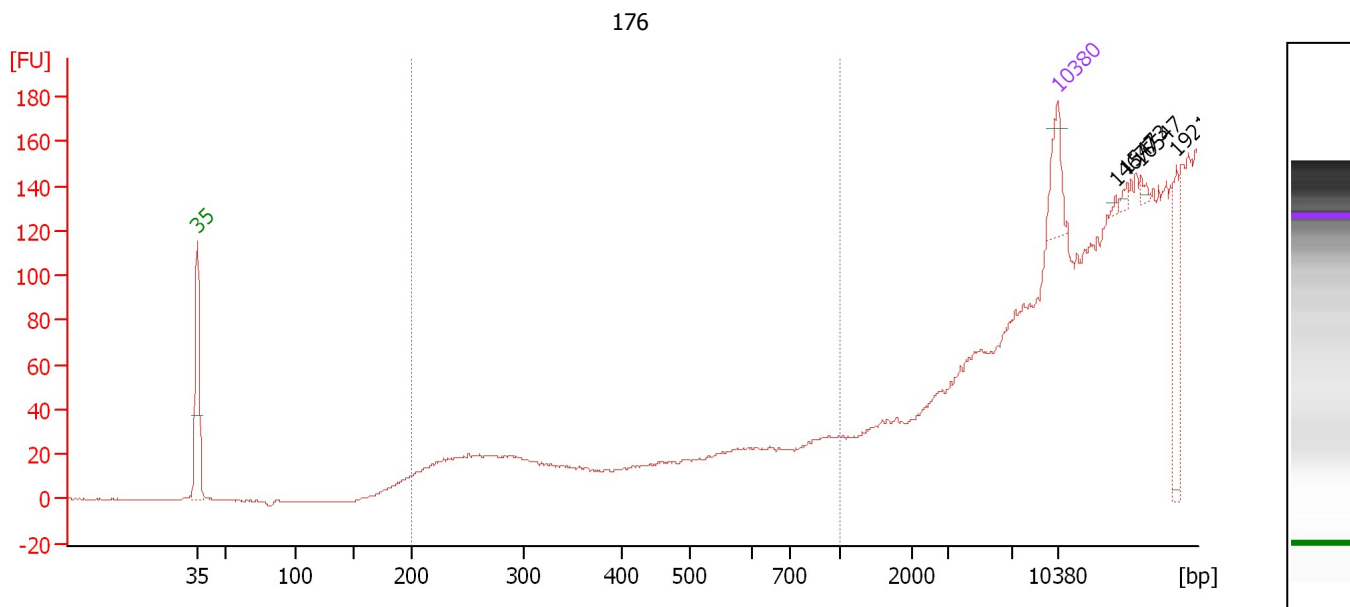
Region table for sample 2 : 175

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	521.2	86	401	42.4	419.77	1,945.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
 Modified: 12/16/2016 7:46:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 176

Number of peaks found: 4 Corr. Area 1: 0.0
 Noise: 0.3

Peak table for sample 3 : 176

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	14,677	0.00	0.0	
4	15,473	0.00	0.0	
5	16,547	0.00	0.0	
6	19,213	0.00	0.0	

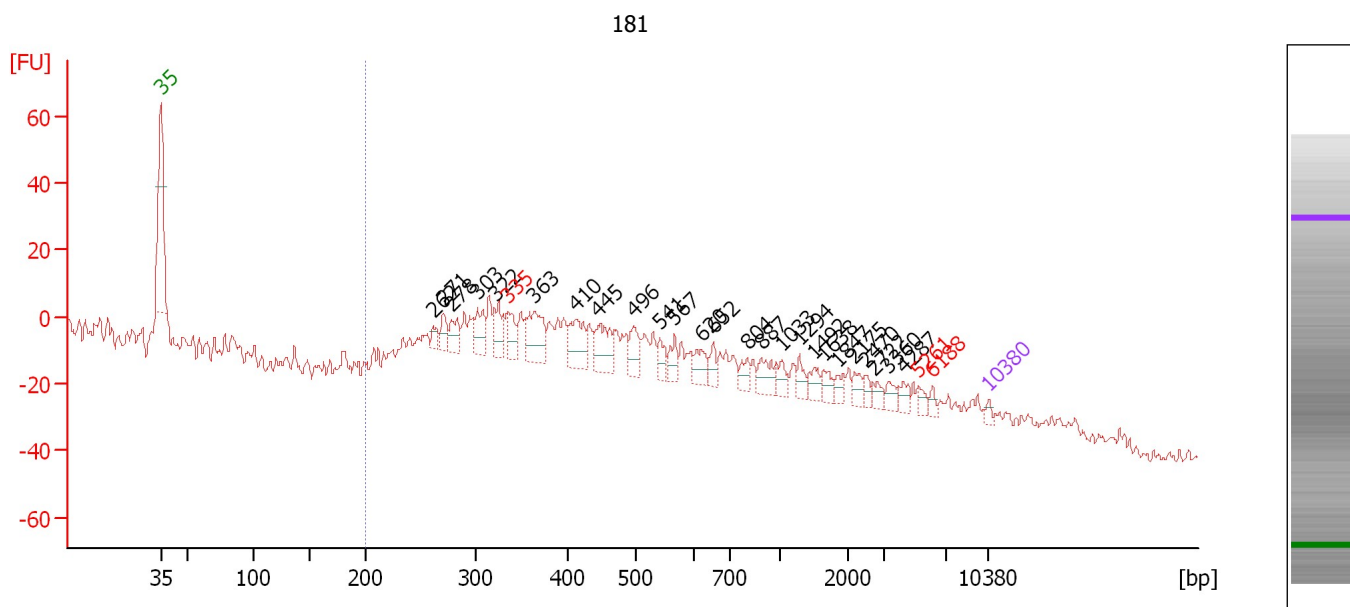
Region table for sample 3 : 176

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	0.0	0	0	0.0	0.00	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
 Modified: 12/16/2016 7:46:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 181

Number of peaks found: 25 Corr. Area 1: 572.8
 Noise: 0.6




Peak table for sample 4 : 181

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	262	178.78	1,035.6	
3	271	287.45	1,608.2	
4	278	381.73	2,080.0	
5	303	519.67	2,599.3	
6	322	440.77	2,077.2	
7	335	388.85	1,756.3	excluded peak
8	363	847.48	3,534.0	
9	410	702.78	2,594.6	
10	445	675.89	2,302.5	
11	496	402.45	1,228.6	
12	541	246.98	691.5	
13	567	250.39	669.2	
14	620	342.54	837.1	
15	652	218.12	507.0	
16	804	210.77	397.3	
17	887	351.66	600.7	
18	1,033	220.05	322.8	
19	1,294	211.96	248.2	
20	1,492	192.69	195.7	
21	1,638	172.16	159.2	
22	1,847	137.09	112.5	
23	2,175	175.05	121.9	
24	2,470	129.53	79.5	
25	2,722	117.38	65.3	
26	3,360	176.53	79.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
Modified: 12/16/2016 7:46:01 PM

Electropherogram Summary Continued ...**... Peak table for sample 4 : 181**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	4,287	142.87	50.5	
28	 5,261	113.18	32.6	excluded peak
29	 6,188	94.40	23.1	excluded peak
30	 10,380	75.00	10.9	Upper Marker

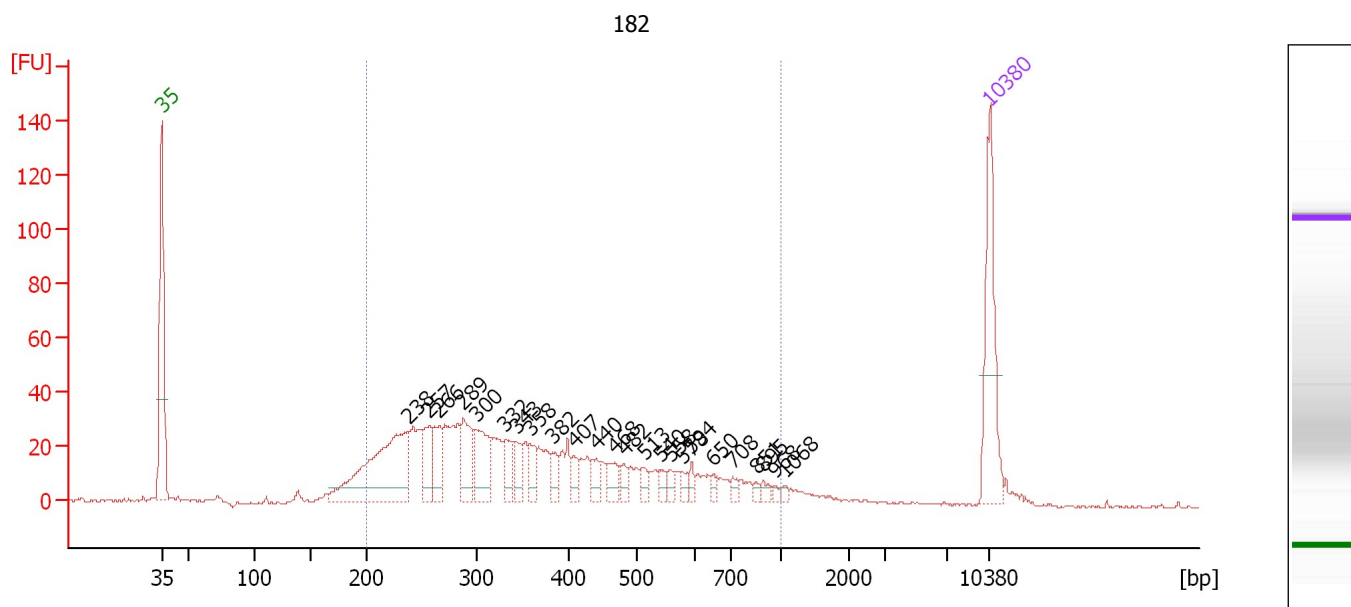
Region table for sample 4 : 181

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	35,539	572.8	98	1,780	100.0	16,272.37	55,177.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
 Modified: 12/16/2016 7:46:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 182

Number of peaks found: 24 Corr. Area 1: 877.5
 Noise: 0.5

Peak table for sample 5 : 182

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	238	179.56	1,144.9	
3	257	35.00	206.5	
4	266	34.46	196.0	
5	289	46.05	241.8	
6	300	52.73	266.6	
7	332	22.33	102.0	
8	343	21.13	93.4	
9	358	19.32	81.9	
10	382	15.70	62.3	
11	407	12.01	44.7	
12	440	13.47	46.4	
13	468	17.27	55.9	
14	482	9.28	29.2	
15	513	10.04	29.7	
16	540	7.94	22.3	
17	558	7.18	19.5	
18	578	7.11	18.7	
19	594	6.95	17.7	
20	650	5.69	13.3	
21	708	6.49	13.9	
22	851	3.72	6.6	
23	895	5.08	8.6	
24	968	2.83	4.4	
25	1,068	3.16	4.5	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

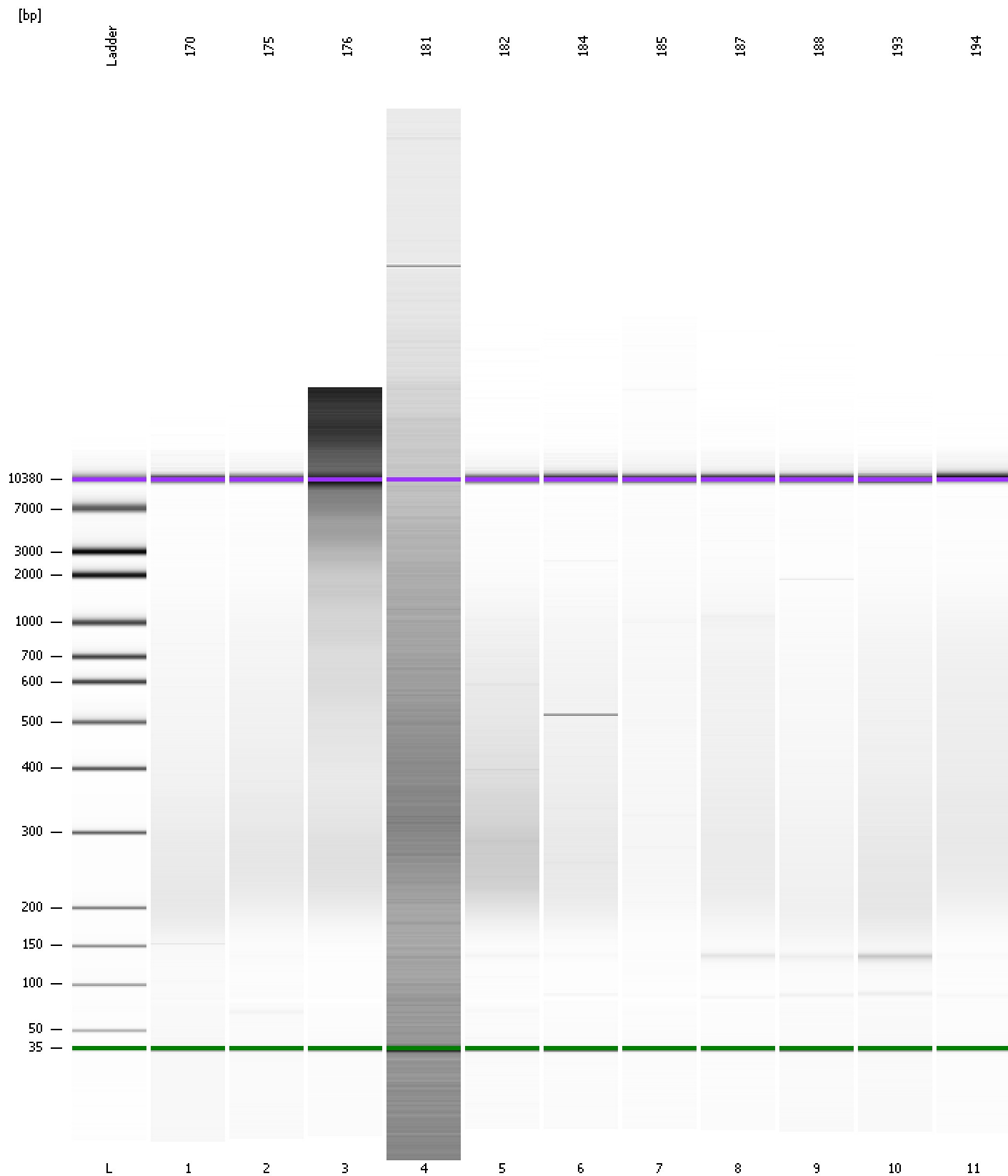
Created: 12/16/2016 7:04:42 PM
Modified: 12/16/2016 7:46:01 PM

Electropherogram Summary Continued ...**... Region table for sample 5 : 182**

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Co lor
200	1,000	877.5	89	387	41.4	863.38	4,082.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
Modified: 12/16/2016 7:46:01 PM

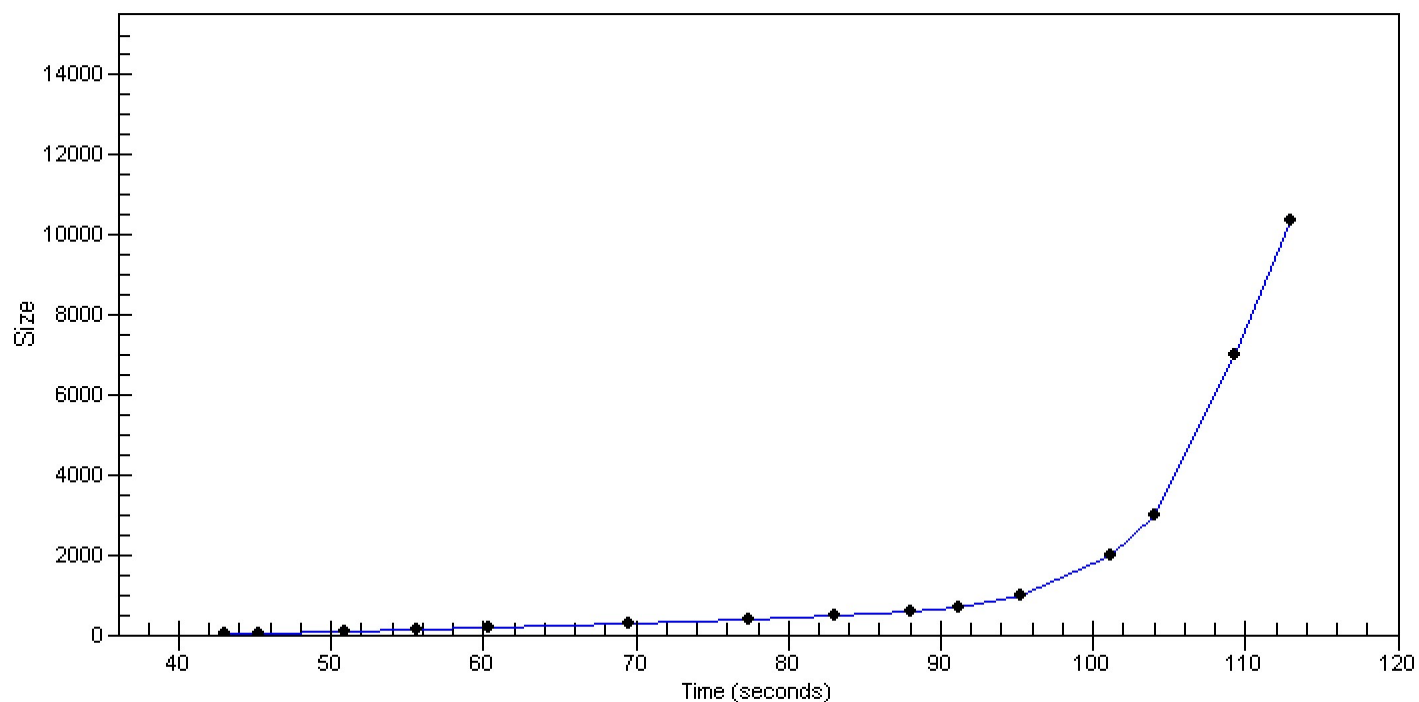
Gel Image

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
Modified: 12/16/2016 7:46:01 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...gh Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad

Created: 12/16/2016 7:04:42 PM
 Modified: 12/16/2016 7:46:01 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time Stamp	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		12/16/2016 7:45:59 PM	(GMT --08:00) Pacific Standard Time	Administrator	DATASYSTEM01
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2016-12-16\2100 expert_High Sensitivity DNA Assay_DE72902486_2016-12-16_19-04-42.xad)		Instrument	Run		12/16/2016 7:04:47 PM	(GMT --08:00) Pacific Standard Time	Administrator	DATASYSTEM01
Product Number : G2939A		Instrument	Run		12/16/2016 7:04:47 PM	(GMT --08:00) Pacific Standard Time	Administrator	DATASYSTEM01
Name :		Instrument	Run		12/16/2016 7:04:47 PM	(GMT --08:00) Pacific Standard Time	Administrator	DATASYSTEM01
Vendor : Agilent Technologies		Instrument	Run		12/16/2016 7:04:47 PM	(GMT --08:00) Pacific Standard Time	Administrator	DATASYSTEM01
Serial# : DE72902486		Instrument	Run		12/16/2016 7:04:47 PM	(GMT --08:00) Pacific Standard Time	Administrator	DATASYSTEM01
Firmware : C.01.069		Instrument	Run		12/16/2016 7:04:47 PM	(GMT --08:00) Pacific Standard Time	Administrator	DATASYSTEM01
Cartridge : Electrode		Instrument	Run		12/16/2016 7:04:47 PM	(GMT --08:00) Pacific Standard Time	Administrator	DATASYSTEM01