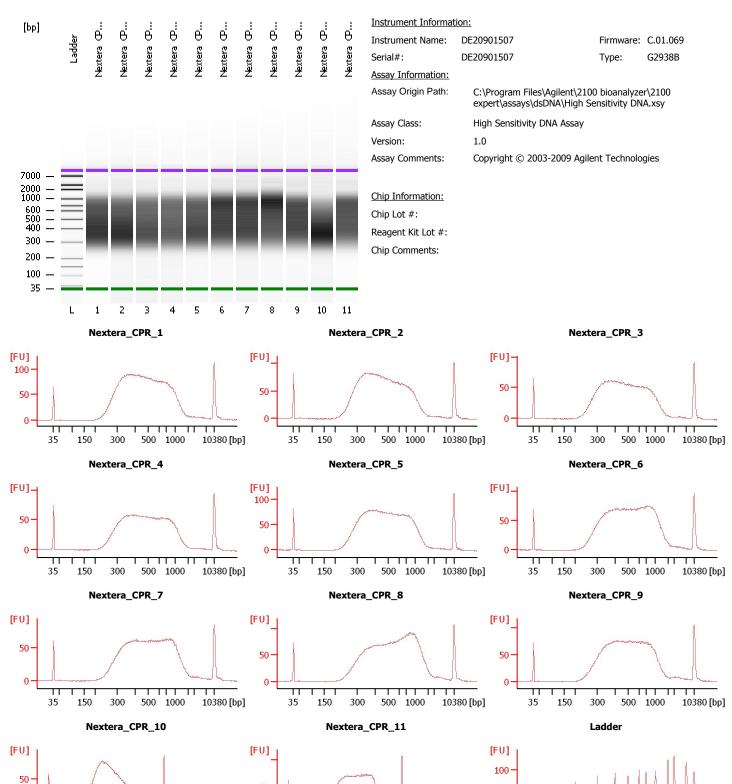
Assay Class: High Sensitivity DNA Assay Created: 8/3/2016 4:40:31 PM C:\...gh Sensitivity DNA Assay\_DE20901507\_2016-08-03\_16-40-31.xad Modified: 8/3/2016 5:27:13 PM

## **Electrophoresis File Run Summary**



400

35 150

10380

400

10380

50

35 150

[bp]

300

500 1000

150

50

35

[bp]

10380 [bp]

Page 2 of 21

Assay Class: High Sensitivity DNA Assay Created: 8/3/2016 4:40:31 PM Data Path: C:\...gh Sensitivity DNA Assay\_DE20901507\_2016-08-03\_16-40-31.xad Modified: 8/3/2016 5:27:13 PM Electrophoresis File Run Summary (Chip Summary)

Sample Name Sample Rest. Statu Observation Result Label Result Color

Sample Name	Sample Comment	Rest. Digest	Statu Observation s	Result Label Result Color
Nextera_CPR_1			~	
Nextera_CPR_2			<b>✓</b>	
Nextera_CPR_3			✓	
Nextera_CPR_4			<b>✓</b>	
Nextera_CPR_5			<b>✓</b>	
Nextera_CPR_6			✓	
Nextera_CPR_7			<b>✓</b>	
Nextera_CPR_8			✓	
Nextera_CPR_9			✓	
Nextera_CPR_10			<b>✓</b>	
Nextera_CPR_11			~	
Chip Lot #				Reagent Kit Lot #

**Chip Comments:** 

Page 3 of 21

Assay Class: High Sensitivity DNA Assay Created: 8/3/2016 4:40:31 PM Data Path: C:\...gh Sensitivity DNA Assay\_DE20901507\_2016-08-03\_16-40-31.xad Created: 8/3/2016 5:27:13 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

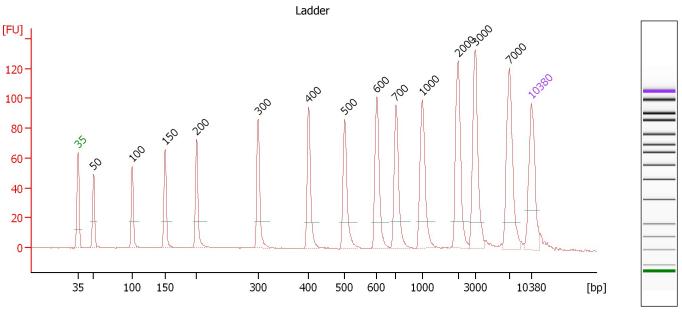
#### **Filter Settings**

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

#### **Electropherogram Summary**



### Setpoint Deviations for sample 12: <u>Ladder</u>

Height Threshold [FU]: 20 Baseline Plateau [s]: 0.3

Area Threshold: 0

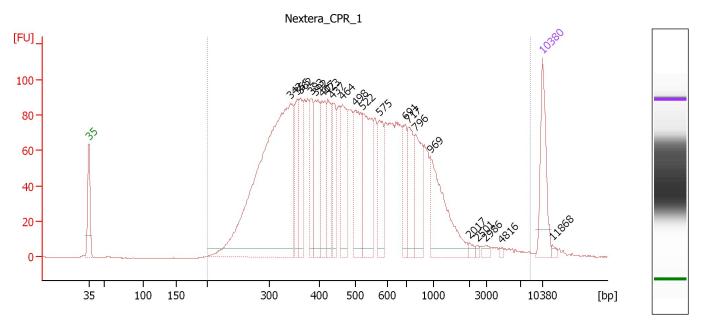
### **Overall Results for Ladder**

Noise: 0.1

# **Peak table for Ladder**

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	4	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

### **Electropherogram Summary Continued ...**



# Overall Results for sample 1 : Nextera CPR 1

Number of peaks found: 21 Corr. Area 1: 3,091.5

Peak table	for sample 1:	Nextera CPR 1		
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.2	Lower Marker
2	342	838.66	3,711.9	
3	355	94.53	403.1	
4	362	87.47	365.6	
5	383	83.12	328.6	
6	392	118.48	458.2	
7	407	109.11	406.5	
8	423	83.76	300.0	
9	437	75.20	260.9	
10	464	112.38	367.0	
11	498	142.57	433.3	
12	522	162.65	472.4	
13	575	91.97	242.5	
14	691	62.05	136.1	
15	717	79.52	167.9	
16	796	98.14	186.7	
17	969	151.31	236.5	
18	2,017	5.37	4.0	
19	2,501	3.51	2.1	
20	2,986	6.93	3.5	
21	4,816	2.79	0.9	
22	10,380	75.00	10.9	Upper Marker
23	11,868	0.00	0.0	

Page 6 of 21

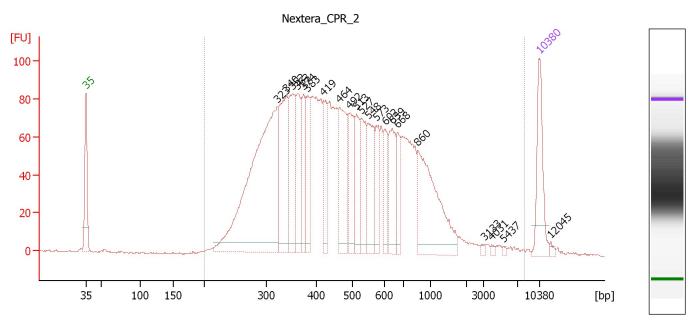
Assay Class: Data Path: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay\_DE20901507\_2016-08-03\_16-40-31.xad Created: Modified: 8/3/2016 4:40:31 PM 8/3/2016 5:27:13 PM

**Electropherogram Summary Continued ...** 

... Region table for sample 1: Nextera\_CPR\_1

From [bp]	To [bp	] Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]		Molarity [pmol/l]	Co Ior
200	8,526	3,091.5	99	625	100.0	3,236.35	11,446.9	

### **Electropherogram Summary Continued ...**



# Overall Results for sample 2: Nextera CPR 2

Number of peaks found: 21 Corr. Area 1: 2,804.8

Peak table	e for sample 2:	Nextera CPR 2		
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/I]	Observations
1	35	125.00	5,411.2	Lower Marker
2	323	618.78	2,899.9	
3	340	197.89	880.6	
4	352	133.43	573.7	
5	363	110.47	461.1	
6	374	81.90	331.6	
7	383	80.27	317.7	
8	419	73.83	266.7	
9	464	144.94	473.5	
10	492	98.57	303.2	
11	513	75.66	223.3	
12	527	85.25	245.2	
13	548	96.87	267.6	
14	573	59.84	158.1	
15	602	48.52	122.1	
16	639	89.39	212.1	
17	668	47.63	108.0	
18	860	203.72	359.1	
19	3,133	3.31	1.6	
20	4,031	2.87	1.1	
21	5,437	2.28	0.6	
22	10,380	75.00	10.9	Upper Marker
23	12,045	0.00	0.0	

Page 8 of 21

Assay Class:

High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay\_DE20901507\_2016-08-03\_16-40-31.xad 8/3/2016 4:40:31 PM 8/3/2016 5:27:13 PM Created: Modified: Data Path:

**Electropherogram Summary Continued ...** 

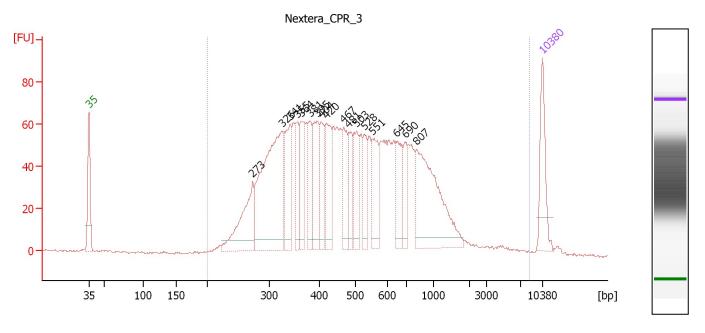
... Region table for sample 2: Nextera\_CPR\_2

Size distribution in Conc. From To [bp] Corr. % of **Average Size** Molarity Co Area Total [bp] CV [%] [pg/µl] [pmol/l] lor [bp] 200 2,804.8 99 609 100.0 3,030.34 10,938.2 8,087

Page 9 of 21

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay\_DE20901507\_2016-08-03\_16-40-31.xad C:\...gh Sensitivity DNA Assay\_DE20901507\_2016-08-03\_16-40-31.xad S/3/2016 5:27:13 PM

### **Electropherogram Summary Continued ...**



# Overall Results for sample 3: Nextera CPR 3

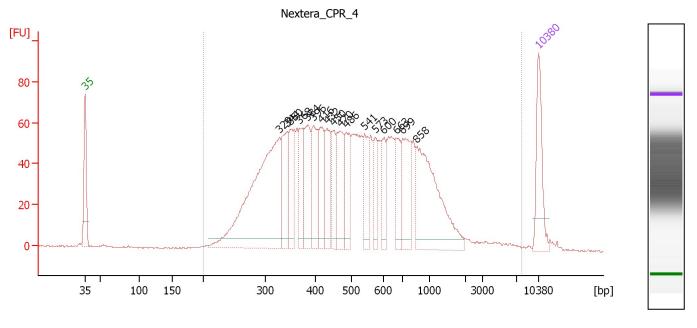
Number of peaks found: 17 Corr. Area 1: 2,169.8

able	for sample 3:	Nextera CPR 3		
	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
4	35	125.00	5,411.3	Lower Marker
	273	175.80	975.4	
	326	437.30	2,032.9	
	341	122.33	543.1	
	355	80.33	342.5	
	364	91.59	381.2	
	381	93.46	371.3	
	395	113.28	434.1	
	404	72.29	271.2	
	420	113.10	408.3	
	467	89.44	289.9	
	481	62.77	197.6	
	503	75.46	227.2	
	528	61.77	177.2	
	551	90.00	247.4	
	645	70.66	166.1	
	690	52.05	114.2	
	807	267.05	501.7	
	10,380	75.00	10.9	Upper Marker
	•	35 273 326 341 355 364 381 395 404 420 467 481 503 528 551 645 690 807	Size [bp]       Conc. [pg/μl]         4       35       125.00         273       175.80         326       437.30         341       122.33         355       80.33         364       91.59         381       93.46         395       113.28         404       72.29         420       113.10         467       89.44         481       62.77         503       75.46         528       61.77         551       90.00         645       70.66         690       52.05         807       267.05	Size [bp]       Conc. [pg/μl]       Molarity [pmol/l]         35       125.00       5,411.3         273       175.80       975.4         326       437.30       2,032.9         341       122.33       543.1         355       80.33       342.5         364       91.59       381.2         381       93.46       371.3         395       113.28       434.1         404       72.29       271.2         420       113.10       408.3         467       89.44       289.9         481       62.77       197.6         503       75.46       227.2         528       61.77       177.2         551       90.00       247.4         645       70.66       166.1         690       52.05       114.2         807       267.05       501.7

			_				_
Region	table 1	for sample	.3	•	Nextera	CPR	- 3

From [bp]	To [bp	] Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]		Molarity [pmol/l]	Co lor
200	8,456	2,169.8	99	623	100.0	2,968.88	10,501.6	

### **Electropherogram Summary Continued ...**



# Overall Results for sample 4: Nextera CPR 4

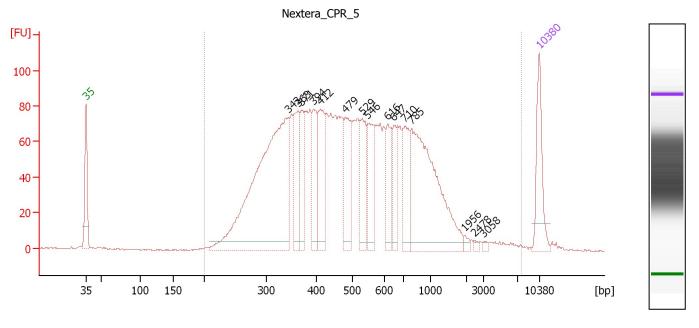
Number of peaks found: 17 Corr. Area 1: 2,094.1

able	for sample 4:	Nextera CPR 4		
	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
◀ .	35	125.00	5,411.2	Lower Marker
	329	493.22	2,272.9	
	344	106.80	470.8	
	350	93.64	405.6	
	368	71.03	292.4	
	384	103.56	408.3	
	396	100.62	385.2	
	416	84.04	306.2	
	432	77.41	271.5	
	450	62.25	209.6	
	470	100.22	323.2	
	486	80.98	252.5	
	541	65.77	184.1	
	573	50.48	133.4	
	600	51.74	130.8	
	663	55.87	127.6	
	699	101.09	219.1	
	858	234.00	413.0	
	10,380	75.00	10.9	Upper Marker
	•	35 329 344 350 368 384 396 416 432 450 470 486 541 573 600 663 699 858	Size [bp]       Conc. [pg/μl]         35       125.00         329       493.22         344       106.80         350       93.64         368       71.03         384       103.56         396       100.62         416       84.04         432       77.41         450       62.25         470       100.22         486       80.98         541       65.77         573       50.48         600       51.74         663       55.87         699       101.09         858       234.00	Size [bp] Conc. [pg/µl] Molarity [pmol/l]  35

Region table for sample 4:	<b>Nextera</b>	CPR 4	<u>4</u>

From [bp]		] Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]		Molarity [pmol/l]	Co lor
200	7,786	2,094.1	99	629	100.0	2,461.28	8,549.5	

### **Electropherogram Summary Continued ...**



# Overall Results for sample 5 : Nextera CPR 5

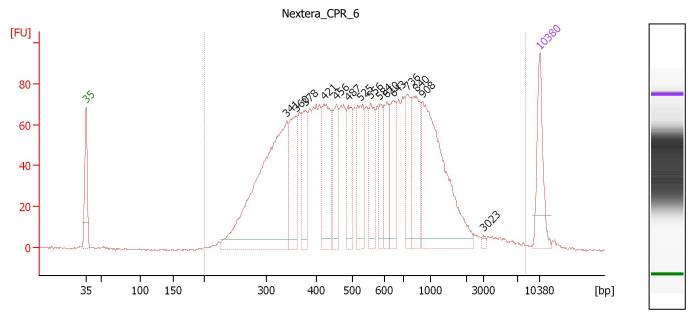
Number of peaks found: 15 Corr. Area 1: 2,723.8

Peak table for sample 5:			Nextera CPR 5		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	4	35	125.00	5,411.2	Lower Marker
2		343	667.85	2,946.7	
3		363	114.82	478.9	
4		371	78.05	318.9	
5		394	91.49	351.7	
6		412	122.99	452.4	
7		479	110.52	349.6	
8		529	92.90	266.1	
9		546	88.45	245.4	
10		616	60.30	148.3	
11		647	64.71	151.6	
12		710	91.77	196.0	
13		785	346.81	669.5	
14		1,956	5.87	4.5	
15		2,478	3.66	2.2	
16		3,058	3.37	1.7	
17		10,380	75.00	10.9	Upper Marker

Pegion to	able for san	nnle 5 ·	Nextera	CDD 5

From [bp]	To [bp	] Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]		Molarity [pmol/l]	Co lor
200	7,637	2,723.8	99	627	100.0	2.816.35	9,782.3	

### **Electropherogram Summary Continued ...**



Overall Results for sample 6: Nextera CPR 6

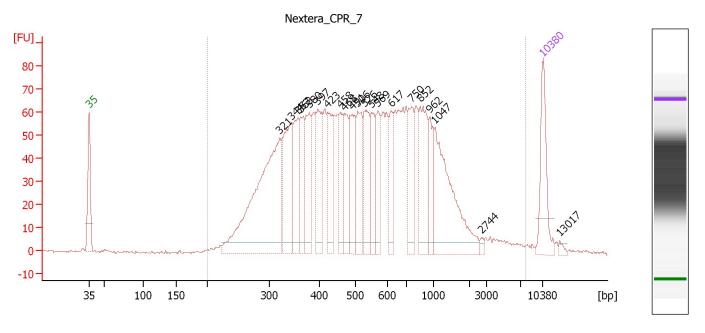
Number of peaks found: 15 Corr. Area 1: 2,610.1

Peak table for sample 6:		e for sample 6:	<u>Nextera CPR 6</u>		
	Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
	1	35	125.00	5,411.2	Lower Marker
	2	341	571.18	2,537.2	
	3	360	135.83	572.0	
	4	378	102.99	413.0	
	5	421	149.61	538.0	
	6	456	107.20	356.0	
	7	487	94.37	293.4	
	8	525	120.86	348.9	
	9	556	90.94	247.7	
	10	584	60.28	156.3	
	11	610	87.04	216.0	
	12	643	93.31	219.8	
	13	736	90.95	187.3	
	14	840	115.20	207.8	
	15	908	332.14	554.1	
	16	3,023	3.80	1.9	
	17	10,380	75.00	10.9	Upper Marker

Region table for sample 6:	:	<u>Nextera</u>	CPR	<u>6</u>

From [bp]	To [bp	] Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Co lor
200	8,202	2,610.1	98	707	100.0	2,978.84	9,755.6	

### **Electropherogram Summary Continued ...**



# Overall Results for sample 7: Nextera CPR 7

Number of peaks found: 21 Corr. Area 1: 2,266.2

Peak table	for sample 7:	Nextera CPR 7		
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.2	Lower Marker
2	321	444.13	2,095.3	
3	344	165.23	726.8	
4	357	109.19	463.2	
5	363	81.20	339.1	
6	380	107.92	430.7	
7	397	101.36	387.2	
8	423	97.13	348.0	
9	458	68.53	226.5	
10	468	82.76	267.8	
11	491	86.61	267.3	
12	506	101.35	303.2	
13	526	99.41	286.2	
14	548	61.73	170.5	
15	569	64.69	172.2	
16	617	57.84	142.0	
17	750	80.95	163.4	
18	852	112.10	199.3	
19	962	50.41	79.4	
20	1,047	204.48	295.9	
21	2,744	4.55	2.5	
22	10,380	75.00	10.9	Upper Marker
23	13,017	0.00	0.0	

Page 14 of 21

Assay Class:

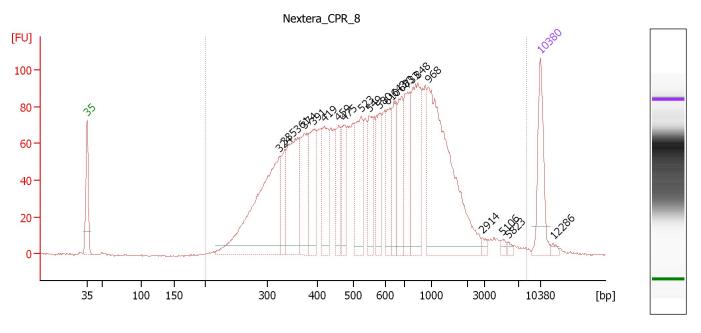
High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay\_DE20901507\_2016-08-03\_16-40-31.xad 8/3/2016 4:40:31 PM 8/3/2016 5:27:13 PM Created: Modified: Data Path:

**Electropherogram Summary Continued ...** 

... Region table for sample 7: Nextera\_CPR\_7

Size distribution in Conc. From To [bp] Corr. % of **Average Size** Molarity Co Area Total [bp] CV [%] [pg/µl] [pmol/l] lor [bp] 200 98 706 100.0 2,877.90 9,538.6 7,760 2,266.2

### **Electropherogram Summary Continued ...**



# Overall Results for sample 8: Nextera CPR 8

Number of peaks found: 21 Corr. Area 1: 2,815.3

Peak table for sample 8:			Nextera CPR 8		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.2	Lower Marker
2		324	388.35	1,814.7	
3		335	67.32	304.5	
4		361	194.64	817.7	
5		374	118.45	479.6	
6		391	118.22	457.7	
7		419	106.88	386.6	
8		459	69.71	230.3	
9		475	74.53	237.9	
10		523	122.82	355.8	
11		549	81.99	226.4	
12		580	79.61	208.0	
13		610	80.64	200.4	
14		643	69.17	162.9	
15		683	97.07	215.4	
16		733	99.16	205.1	
17		848	161.88	289.2	
18		968	372.62	583.4	
19		2,914	6.37	3.3	
20		5,106	6.12	1.8	
21		5,823	4.53	1.2	
22		10,380	75.00	10.9	Upper Marker
23		12,286	0.00	0.0	

Page 16 of 21

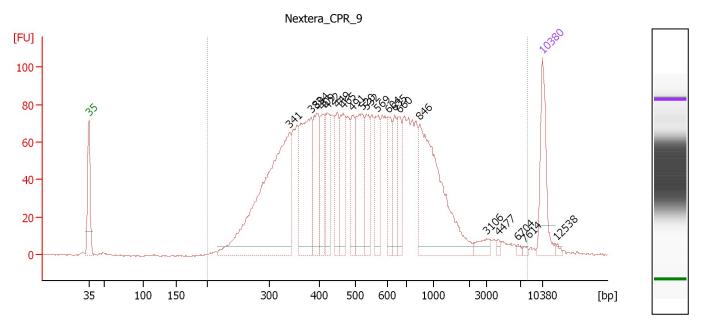
Assay Class: Data Path: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay\_DE20901507\_2016-08-03\_16-40-31.xad Created: Modified: 8/3/2016 4:40:31 PM 8/3/2016 5:27:13 PM

**Electropherogram Summary Continued ...** 

... Region table for sample 8: Nextera\_CPR\_8

From [bp]	To [bp	] Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]		Molarity [pmol/l]	Co lor
200	8,288	2,815.3	98	780	100.0	2,870.75	8,936.8	

### **Electropherogram Summary Continued ...**



# Overall Results for sample 9: Nextera CPR 9

Number of peaks found: 20 Corr. Area 1: 2,593.3

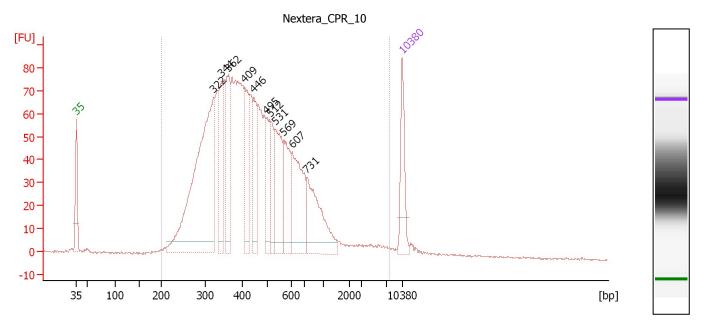
Noise: 0.4

Peak table	for sample 9:	Nextera CPR 9		
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.2	Lower Marker
2	341	529.30	2,354.9	
3	383	209.99	830.0	
4	394	115.82	445.2	
5	409	74.41	275.6	
6	422	85.44	306.5	
7	449	72.12	243.5	
8	465	93.12	303.5	
9	491	69.20	213.4	
10	520	124.22	362.1	
11	532	75.90	216.1	
12	569	71.31	190.0	
13	604	63.13	158.3	
14	635	58.86	140.5	
15	660	63.44	145.7	
16	846	293.59	525.6	
17	3,106	15.93	7.8	
18	4,477	4.47	1.5	
19	6,704	3.59	0.8	
20	7,614	3.24	0.6	
21	10,380	75.00	10.9	Upper Marker
22	12,538	0.00	0.0	
Danian tal	olo for comple 0	. Novetowa CDD	n	

Region table for sample 9: Nextera CPR 9

From	To [bp	] Corr.	% of	Average Size	Size distribution in	Conc.	Molarity	Co
[bp]		Area	Total	[bp]	CV [%]	[pg/µl]	[pmol/l]	lor
200	8,101	2,593.3	98	697	100.0	2,736.52	9,119.3	

### **Electropherogram Summary Continued ...**



Overall Results for sample 10 : Nextera CPR 10

Number of peaks found: 11 Corr. Area 1: 2,113.8

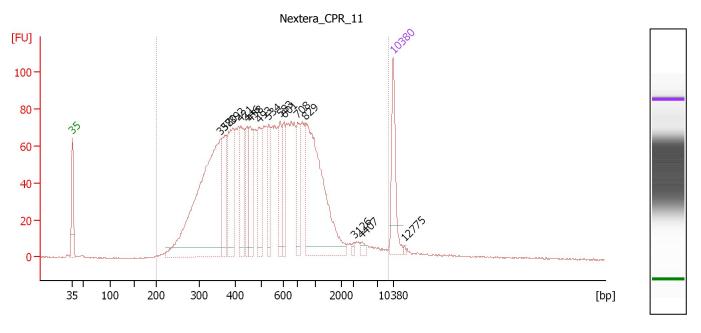
Peak t	Peak table for sample 10 : <u>Nextera_CPR_10</u>							
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations			
1	4	35	125.00	5,411.3	Lower Marker			
2		322	665.84	3,136.0				
3		344	148.80	655.8				
4		362	165.59	692.7				
5		409	140.64	521.1				
6		446	115.14	391.2				
7		495	92.45	282.7				
8		512	71.71	212.1				
9		531	142.84	407.9				
10		569	118.04	314.5				
11		607	176.68	440.8				
12		731	170.28	353.1				
13		10,380	75.00	10.9	Upper Marker			

|--|

From To [bp] Corr.		] Corr.	% of	Average Size	Size distribution in	Conc.	Molarity	Co
[bp]		Area	Total	[bp]	CV [%]	[pg/µl]	[pmol/l]	lor
200	7,765	2,113.8	98	567	100.0	2,986.91	11,286.6	

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay\_DE20901507\_2016-08-03\_16-40-31.xad Created: 8/3/2016 4:40:31 PM Modified: 8/3/2016 5:27:13 PM

### **Electropherogram Summary Continued ...**



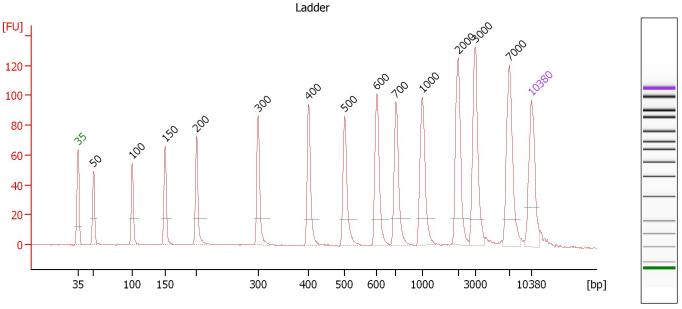
# Overall Results for sample 11: Nextera CPR 11

Number of peaks found: 15 Corr. Area 1: 2,433.3

Peak table for sample 11: Nextera CPR 11								
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations			
1	4	35	125.00	5,411.3	Lower Marker			
2		358	575.37	2,435.0				
3		370	107.47	440.1				
4		392	163.41	631.0				
5		421	106.22	382.5				
6		446	77.00	261.7				
7		458	102.97	340.4				
8		493	110.84	340.8				
9		534	65.82	186.7				
10		583	66.49	172.7				
11		601	65.18	164.2				
12		708	79.95	171.1				
13		829	344.19	629.1				
14		3,126	3.83	1.9				
15		4,407	6.05	2.1				
16		10,380	75.00	10.9	Upper Marker			
17		12,775	0.00	0.0				

Region table for Sample 11.				Nextera CPR 11					
From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Co lor	
200	9,275	2,433.3	98	733	100.0	2,667.70	8,668.0		

### **Electropherogram Summary Continued ...**



Setpoint Deviations for sample 12 : <u>Ladder</u>

Height Threshold [FU]: 20 Baseline Plateau [s]: 0.3

Area Threshold: 0

### **Overall Results for Ladder**

Noise: 0.1

## **Peak table for Ladder**

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

Assay Class: Data Path: <b>Gel Image</b>	High C:\									Created: Modified:	8/3/2016 4:40:31 PM 8/3/2016 5:27:13 PM	
[bp]	Ladder	⊭xtera ⊕	extera ⊕	€xtera ⊕	<b>e</b> xtera ⊕	textera ⊕	<b>e</b> xtera ⊕	€xtera ⊕	<b>e</b> xtera ⊕	textera ⊕	€xtera ⊕	extera Q

