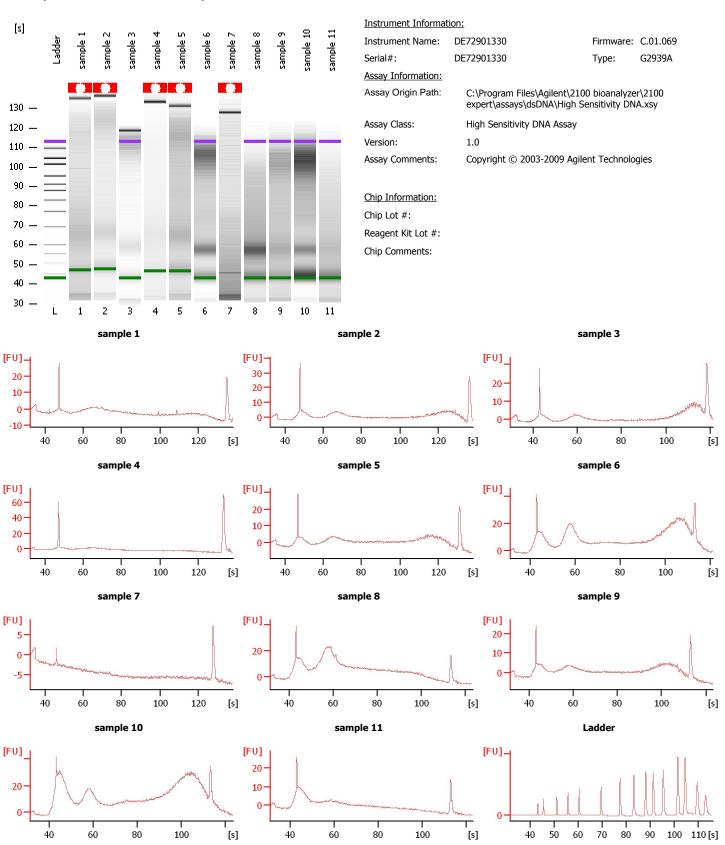
Assay Class: High Sensitivity DNA Assay Created: 1/28/2014 3:02:22 PM Data Path: C:\...gh Sensitivity DNA Assay_DE72901330_2014-01-28_15-02-22.xad Created: 1/28/2014 3:02:22 PM Modified: 1/28/2014 3:43:52 PM

Electrophoresis File Run Summary



Page 2 of 19

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72901330_2014-01-28_15-02-22.xad Created: 1/28/2014 3:02:22 PM Modified: 1/28/2014 3:43:52 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Statu Observation s	Result Label	Result Color
sample 1		\vdash	~ .		
sample 2		\sqcup	✓		
sample 3			~		
sample 4			✓		
sample 5			✓		
sample 6			✓		
sample 7			✓		
sample 8			✓		
sample 9			✓		
sample 10			✓		
sample 11			~		
Chip Lot #				Reagent Kit Lot #	

Chip Comments:

Page 3 of 19

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72901330_2014-01-28_15-02-22.xad Created: 1/28/2014 3:02:22 PM Modified: 1/28/2014 3:43:52 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

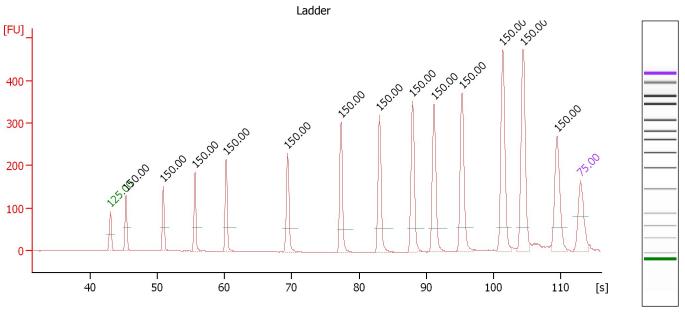
Ladder

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

Printed:

1/28/2014 3:45:05 PM

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: 0.3

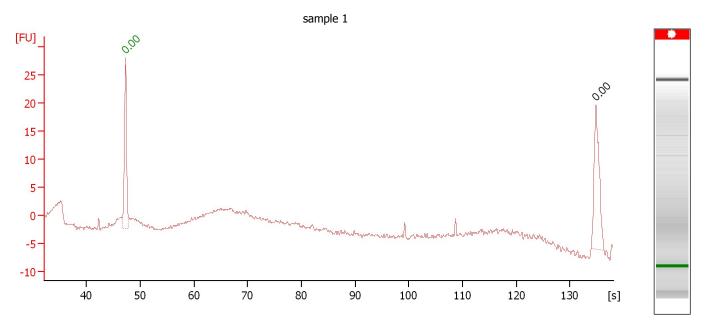
Peak	table	for	Ladder
· cun	CUDIC		Luuuci

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	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	L	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	L	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	L	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

Page 5 of 19

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72901330_2014-01-28_15-02-22.xad Created: 1/28/2014 3:02:22 PM Modified: 1/28/2014 3:43:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

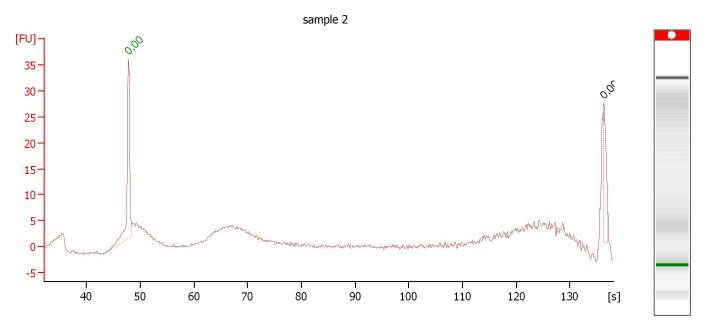
Number of peaks found: 1 Noise: 0.2

Peak tab	ole '	for sample 1:	sample 1		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀ -	0	0.00	0.0	Lower Marker
2		0	0.00	0.0	

Page 6 of 19

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72901330_2014-01-28_15-02-22.xad Created: 1/28/2014 3:02:22 PM Modified: 1/28/2014 3:43:52 PM

Electropherogram Summary Continued ...

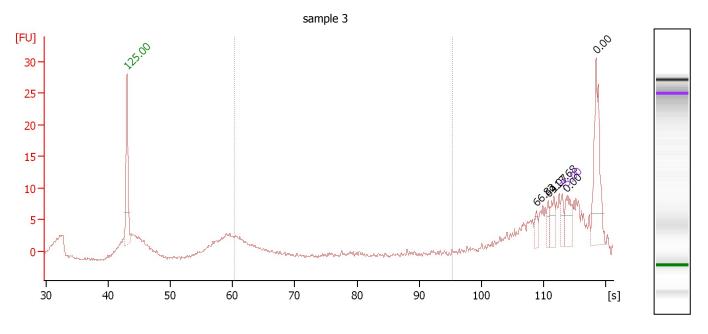


Overall Results for sample 2: sample 2

Number of peaks found: 1 Noise: 0.3

Peak t	able	for sample 2:	sample 2		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	4	0	0.00	0.0	Lower Marker
2		0	0.00	0.0	

Electropherogram Summary Continued ...



Overall Results for sample 3: sample 3

Number of peaks found: 5 Corr. Area 1: 6.9

Noise: 0.2

Peak	table	for sample 3	: <u>sample 3</u>		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	•	35	125.00	5,411.2	Lower Marker
2		6,465	66.82	15.7	
3		8,221	69.07	12.7	
4		9,135	113.68	18.9	
5		10,380	75.00	10.9	Upper Marker
6		11,044	0.00	0.0	
7		15,652	0.00	0.0	

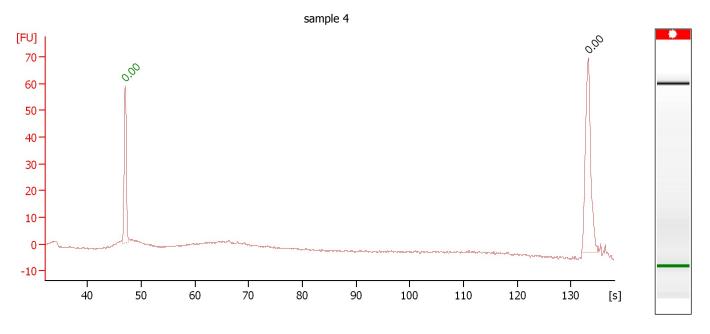
Region table for sample 3: sample 3

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]		Molarity [pmol/l]	Co lor
200	1,000	6.9	5	214	5.1	231.77	1.638.8	

Page 8 of 19

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72901330_2014-01-28_15-02-22.xad Created: 1/28/2014 3:02:22 PM Modified: 1/28/2014 3:43:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 4: sample 4

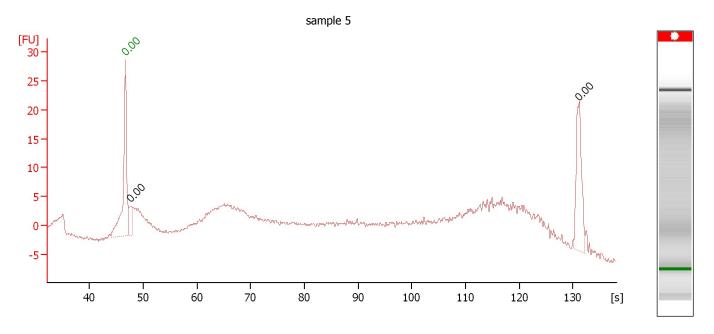
Number of peaks found: 1 Noise: 0.2

Peak tab	e for sample 4:	sample 4		
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	Lower Marker
2	0	0.00	0.0	

Page 9 of 19

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72901330_2014-01-28_15-02-22.xad Created: 1/28/2014 3:02:22 PM Modified: 1/28/2014 3:43:52 PM

Electropherogram Summary Continued ...

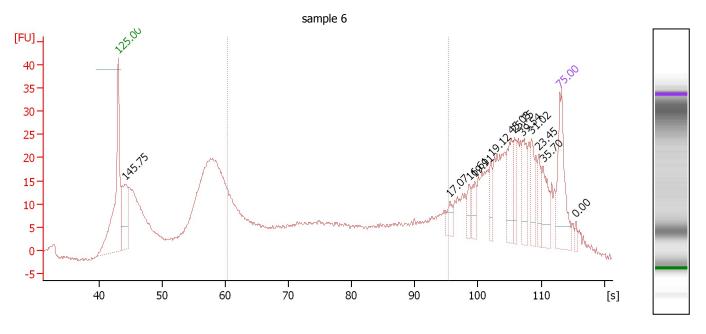


Overall Results for sample 5 : sample 5

Number of peaks found: 2 Noise: 0.3

Peak table	for sample 5:	sample 5		
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	Lower Marker
2	0	0.00	0.0	
3	0	0.00	0.0	

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 12 Corr. Area 1: 330.6

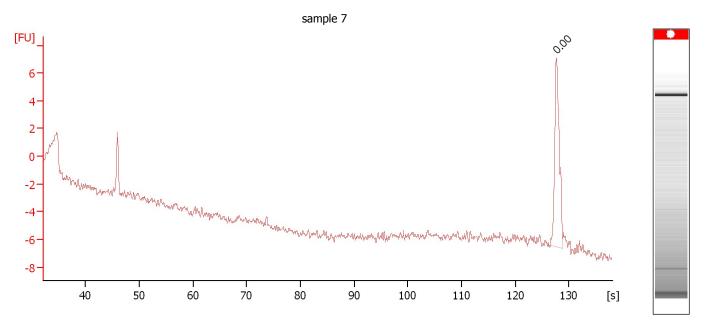
Noise: 0.3

Peak table for sample 6:			for sample 6:	<u>sample 6</u>		
	Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
	1	4	35	125.00	5,411.3	Lower Marker
	2		42	145.75	5,272.8	
	3		1,037	17.07	24.9	
	4		1,534	16.61	16.4	
	5		1,688	19.91	17.9	
	6		2,216	19.12	13.1	
	7		3,644	45.03	18.7	
	8		4,049	25.75	9.6	
	9		5,063	39.54	11.8	
	10		6,212	31.02	7.6	
	11		7,150	23.45	5.0	
	12		7,804	35.70	6.9	
	13		10,380	75.00	10.9	Upper Marker
	14		12,792	0.00	0.0	

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

Fron [bp])] Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]		Molarity [pmol/l]	Co lor
200	1,000	330.6	33	463	45.8	920.85	4,029.7	

Electropherogram Summary Continued ...



Overall Results for sample 7: sample 7

Number of peaks found: 0 Noise: 0.3

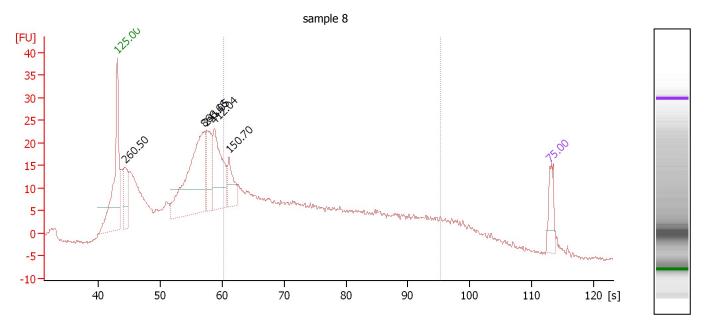
Peak table for sample 7: sample 7

Peak Size [hn] Conc [ng/ul]

Peak Size [bp] Conc. [pg/ μ l] Molarity [pmol/l] Observations

1 0 0.00 0.0

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 5 Corr. Area 1: 429.3

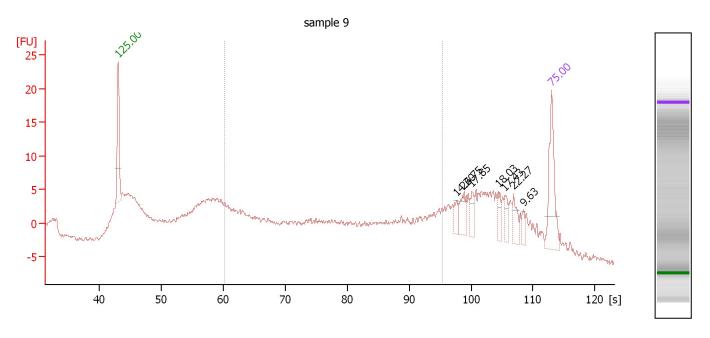
Noise: 0.4

Peak table for sample 8:		: <u>sample 8</u>				
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations		
1	35	125.00	5,411.3	Lower Marker		
2	43	260.50	9,087.7			
3	166	866.66	7,887.7			
4	170	241.05	2,145.5			
5	184	412.04	3,396.5			
6	209	150.70	1,091.3			
7	10,380	75.00	10.9	Upper Marker		

Region table for sample 8: sample 8

From [bp]	To [bp] Cor Are		•	Size distribution in CV [%]		Molarity [pmol/l]	Co lor
200	1.000 429	.3 45	423	45.3	2.714.28	12.567.6	

Electropherogram Summary Continued ...



Overall Results for sample 9: sample 9

Number of peaks found: 7 Corr. Area 1: 155.8

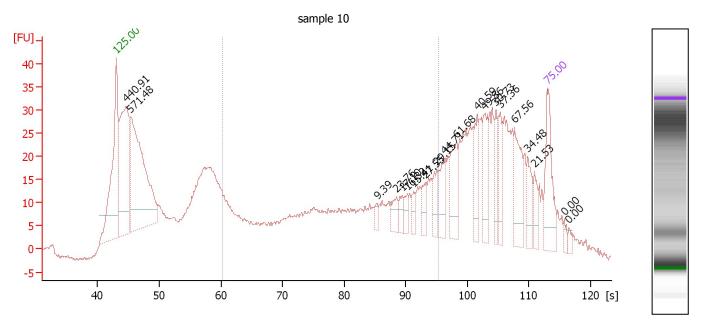
Noise: 0.3

Peak table for sample 9:			sample 9		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	- ∢	35	125.00	5,411.3	Lower Marker
2		1,389	14.20	15.5	
3		1,574	26.75	25.8	
4		1,788	17.85	15.1	
5		2,975	18.03	9.2	
6		3,801	17.43	6.9	
7		4,938	22.27	6.8	
8		6,178	9.63	2.4	
9		10,380	75.00	10.9	Upper Marker

Region table for sample 9: <u>sample 9</u>

From	To [bp] Corr.	o] Corr. % of A	Average Size	Size distribution in	Conc.	Molarity	Co
[bp]	Area	Total	[bp]	CV [%]	[pg/µl]	[pmol/l]	lor
200	1 000 155 8	39	494	44 3	808 27	3 342 1	

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 20 Corr. Area 1: 449.0

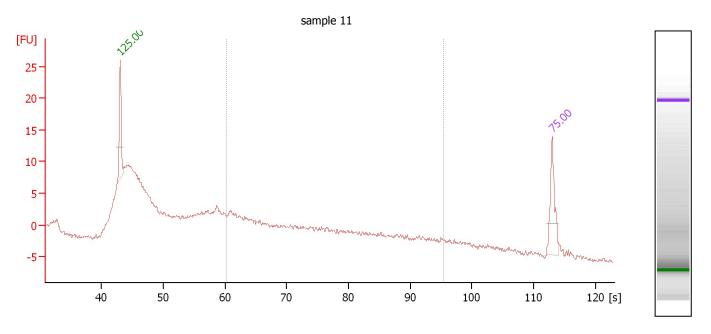
Noise: 0.4

Peak table for sample 10 : sample 10								
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations				
1	35	125.00	5,411.2	Lower Marker				
2	45	440.91	14,703.9					
3	50	571.48	17,209.4					
4	547	9.39	26.0					
5	615	23.76	58.5					
6	644	17.10	40.2					
7	670	16.32	36.9					
8	706	15.41	33.1					
9	850	27.55	49.1					
10	976	29.15	45.2					
11	1,146	44.71	59.1					
12	1,476	61.68	63.3					
13	2,057	40.59	29.9					
14	2,459	49.86	30.7					
15	3,148	30.73	14.8					
16	3,702	37.36	15.3					
17	5,571	67.56	18.4					
18	7,281	34.48	7.2					
19	8,328	21.53	3.9					
20	10,380	75.00	10.9	Upper Marker				
21	12,976	0.00	0.0					
22	13,688	0.00	0.0					

Region table for sample 10 : <u>sample 10</u>

From	To [bp] Corr.	% of	Average Size	Size distribution in	Conc.	Molarity	Co
[bp]		Area	Total	[bp]	CV [%]	[pg/µl]	[pmol/l]	lor
200	1,000	449.0	31	507	42.7	1,236.20	4,921.7	

Electropherogram Summary Continued ...



Overall Results for sample 11: sample 11

Number of peaks found: 0 Corr. Area 1: 97.3

Noise: 0.3

Peak table for sample 11 : sample 11

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

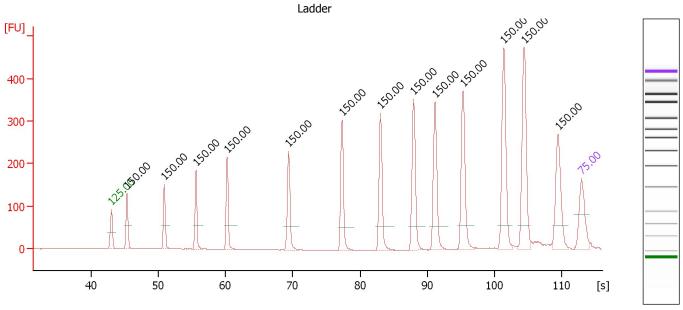
 1
 ◀
 35
 125.00
 5,411.3
 Lower Marker

 2
 ▶
 10,380
 75.00
 10.9
 Upper Marker

Region table for sample 11: sample 11

From To [bp] Corr. % of **Average Size** Size distribution in Conc. Molarity Co **Total** [pmol/l] [bp] Area [bp] CV [%] [pg/µl] lor 200 97.3 34 420 45.1 783.21 3,632.4 1,000

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: 0.3

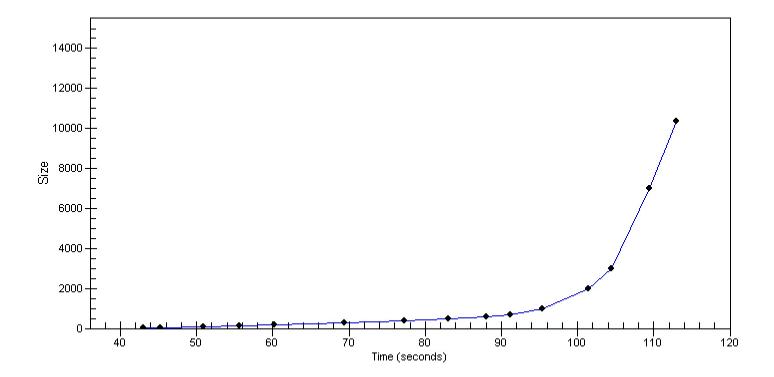
Peak table for Ladder

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		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	L	300	150.00	757.6	Ladder Peak
7	L	400	150.00	568.2	Ladder Peak
8	L	500	150.00	454.5	Ladder Peak
9	L	600	150.00	378.8	Ladder Peak
10		700	150.00	324.7	Ladder Peak
11	L	1,000	150.00	227.3	Ladder Peak
12	L	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

1/28/2014 3:02:22 PM 1/28/2014 3:43:52 PM Assay Class: High Sensitivity DNA Assay Created: C:\...gh Sensitivity DNA Assay_DE72901330_2014-01-28_15-02-22.xad Data Path: Modified: **Gel Image** [5] sample 10 sample 11 sample 2 sample 8 sample 4 sample 5 Ladder 138 — 136 — 134 — 132 — 130 — 128 — 126 — 124 — 122 — 120 — 118 — 116 — 114 — 112 — 110 — 108 — 106 — 104 — 102 — 100 — 98 — 96 94 — 92 — 90 — 88 — 86 — 84 — 82 — 80 — 78 — 76 — 74 — 72 — 70 68 — 66 — 64 — 62 — 60 — 58 — 56 **—** 54 — 52 **—** 50 — 48 — 46 — 44 — 42 — 40 — 38 **—** 36 — 34 — 32 **—** 30 **—** L 1 2 3 4 5 6 7 8 9 10 11

Curves

Standard Curve



Printed:

1/28/2014 3:45:05 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		1/28/2014 3:43:43 PM	(GMT05:00) Eastern Standard Time	foran103	RUTGERS-4341 E48
Run started on port 1 (File: C:\Program Files\Agilent\21 00 bioanalyzer\210 0 expert\Data\2014-01-28\2100 expert_High Sensitivity DNA Assay_DE72901 330_2014-01-28_15-02-22.xad)	ı	Instrument	Run		1/28/2014 3:02:29 PM	(GMT05:00) Eastern Standard Time	foran103	RUTGERS-4341 E48
Product Number : G2939A		Instrument	Run		1/28/2014 3:02:29 PM	(GMT05:00) Eastern Standard Time	foran103	RUTGERS-4341 E48
Name :		Instrument	Run		1/28/2014 3:02:29 PM	(GMT05:00) Eastern Standard Time	foran103	RUTGERS-4341 E48
Vendor : Agilent Technologies		Instrument	Run		1/28/2014 3:02:29 PM	(GMT05:00) Eastern Standard Time	foran103	RUTGERS-4341 E48
Serial# : DE72901330		Instrument	Run		1/28/2014 3:02:29 PM	(GMT05:00) Eastern Standard Time	foran103	RUTGERS-4341 E48
Firmware : C.01.069		Instrument	Run		1/28/2014 3:02:29 PM	(GMT05:00) Eastern Standard Time	foran103	RUTGERS-4341 E48
Cartridge : Electrode		Instrument	Run		1/28/2014 3:02:29 PM	(GMT05:00) Eastern Standard Time	foran103	RUTGERS-4341 E48