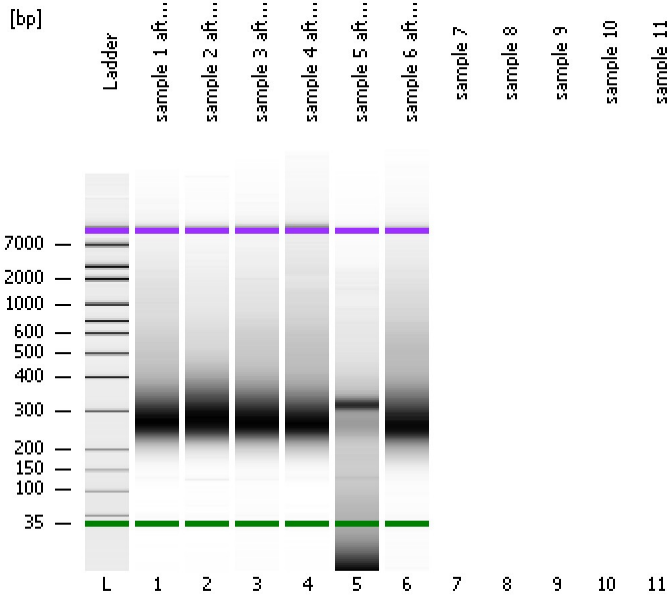


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
Modified: 6/27/2013 12:47:07 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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

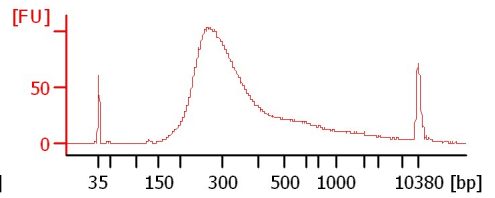
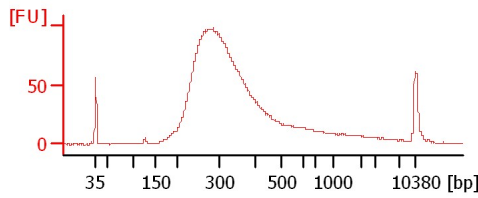
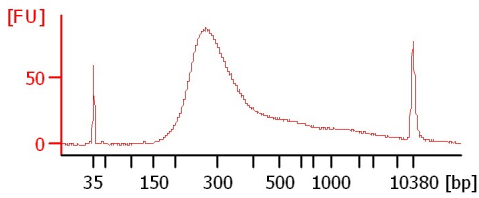
Chip Information:

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

sample 1 after PCR1

sample 2 after PCR1

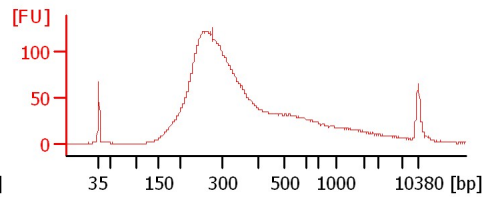
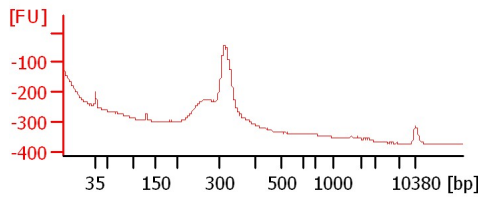
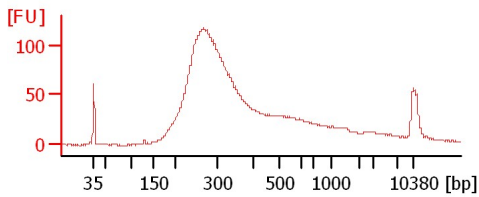
sample 3 after PCR1



sample 4 after PCR1

sample 5 after PCR1

sample 6 after PCR1



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
Modified: 6/27/2013 12:47:07 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1 after PCR1		<input type="checkbox"/>	✓			
sample 2 after PCR1		<input type="checkbox"/>	✓			
sample 3 after PCR1		<input type="checkbox"/>	✓			
sample 4 after PCR1		<input type="checkbox"/>	✓			
sample 5 after PCR1		<input type="checkbox"/>	✓			
sample 6 after PCR1		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>	✓			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
Modified: 6/27/2013 12:47:07 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

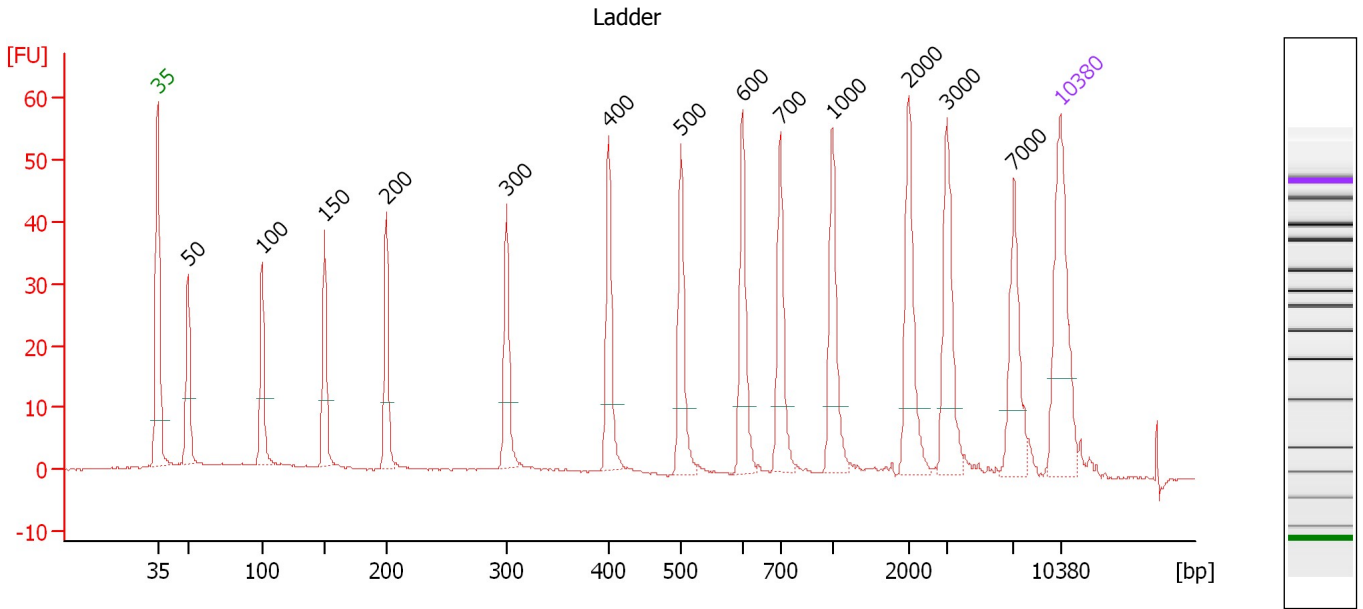
Ladder

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:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
 Modified: 6/27/2013 12:47:07 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

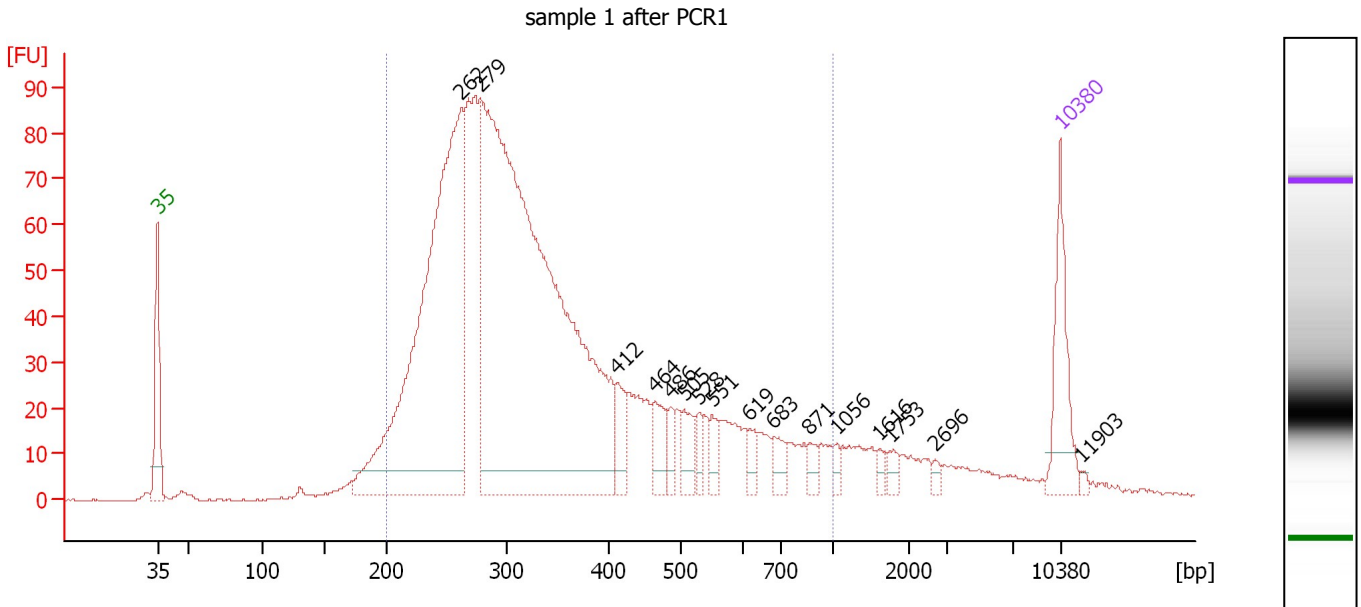
Peak table for Ladder

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:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
 Modified: 6/27/2013 12:47:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1 after PCR1

Number of peaks found: 16 Corr. Area 1: 1,797.6
 Noise: 0.2

Peak table for sample 1 : sample 1 after PCR1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	262	868.99	5,017.9	
3	279	1,460.13	7,932.5	
4	412	42.43	156.0	
5	464	42.32	138.3	
6	486	20.83	64.9	
7	505	34.30	102.8	
8	528	18.38	52.7	
9	551	23.48	64.6	
10	619	16.46	40.3	
11	683	22.25	49.3	
12	871	13.17	22.9	
13	1,056	8.62	12.4	
14	1,616	8.57	8.0	
15	1,753	11.03	9.5	
16	2,696	6.18	3.5	
17	10,380	75.00	10.9	Upper Marker
18	11,903	0.00	0.0	

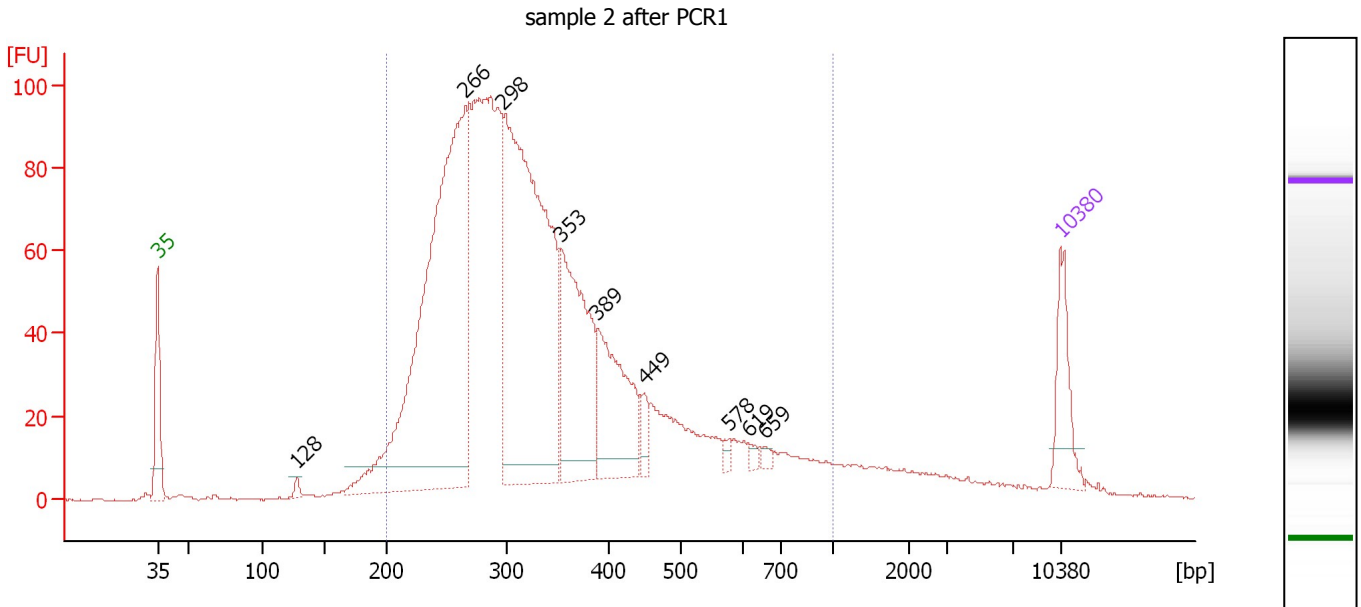
Region table for sample 1 : sample 1 after PCR1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	359	14,733.8	3,007.77	1,797.6	89	40.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
 Modified: 6/27/2013 12:47:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2 after PCR1

Number of peaks found: 9 Corr. Area 1: 2,049.2
 Noise: 0.3

Peak table for sample 2 : sample 2 after PCR1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	12.03	142.4	
3	266	1,175.76	6,701.0	
4	298	978.87	4,982.0	
5	353	351.33	1,506.4	
6	389	229.53	894.4	
7	449	28.52	96.2	
8	578	9.11	23.9	
9	619	8.38	20.5	
10	659	10.15	23.3	
11	10,380	75.00	10.9	Upper Marker

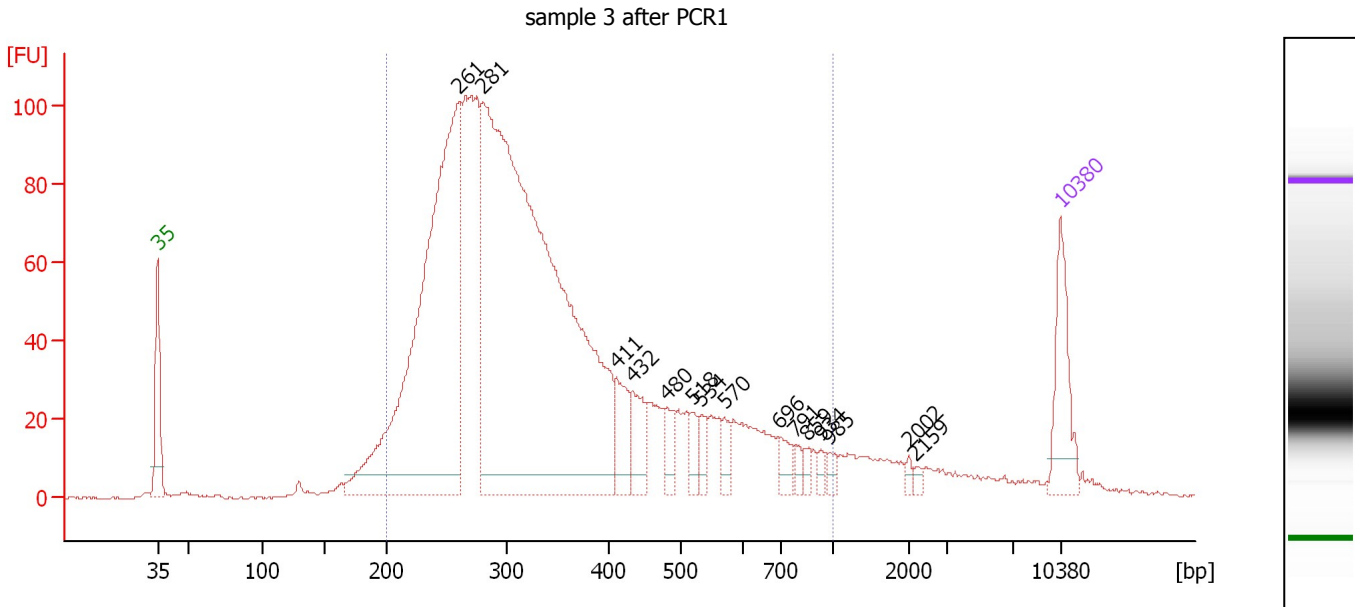
Region table for sample 2 : sample 2 after PCR1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	349	20,125.3	4,109.51	2,049.2	93	36.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
 Modified: 6/27/2013 12:47:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3 after PCR1

Number of peaks found: 15 Corr. Area 1: 2,138.3
 Noise: 0.3

Peak table for sample 3 : sample 3 after PCR1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	973.08	5,657.0	
3	281	1,684.53	9,085.3	
4	411	61.60	227.1	
5	432	58.55	205.2	
6	480	31.00	97.8	
7	518	23.11	67.6	
8	534	23.55	66.9	
9	570	19.74	52.4	
10	696	23.74	51.7	
11	791	10.83	20.8	
12	859	10.71	18.9	
13	934	9.01	14.6	
14	985	10.88	16.7	
15	2,002	5.48	4.1	
16	2,159	5.59	3.9	
17	10,380	75.00	10.9	Upper Marker

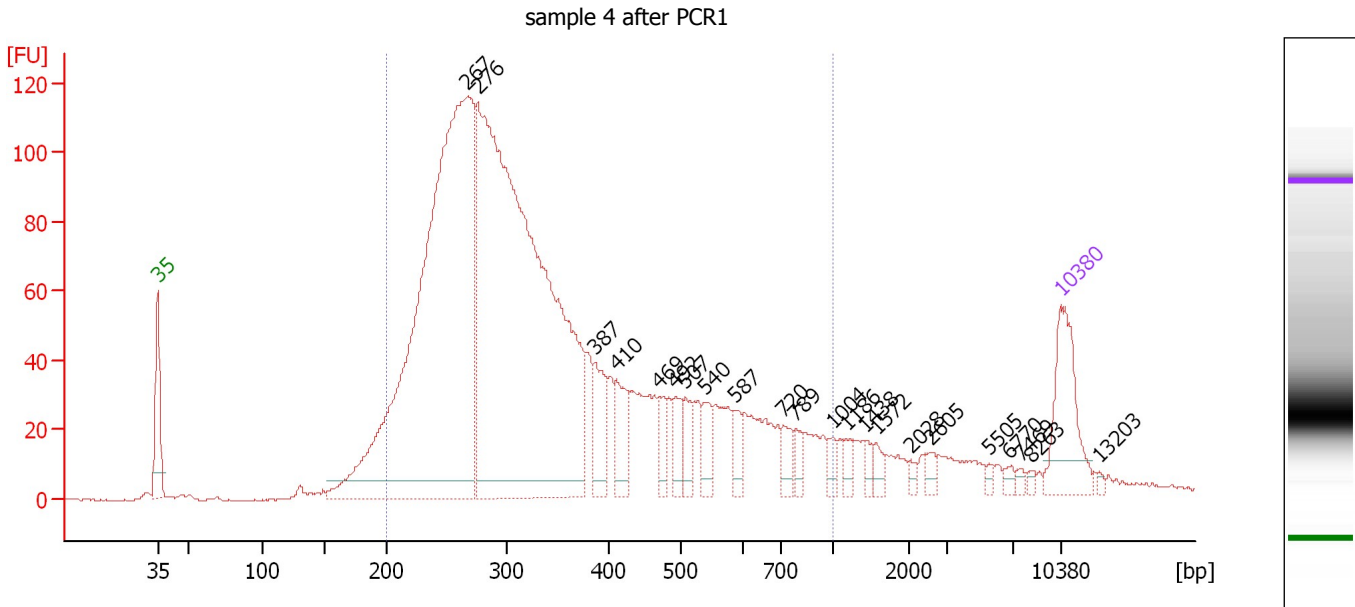
Region table for sample 3 : sample 3 after PCR1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	356	16,929.0	3,450.23	2,138.3	90	39.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
 Modified: 6/27/2013 12:47:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4 after PCR1

Number of peaks found: 22 Corr. Area 1: 2,378.0
 Noise: 0.3

Peak table for sample 4 : sample 4 after PCR1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	267	1,138.25	6,458.1	
3	276	1,256.60	6,894.5	
4	387	59.43	232.8	
5	410	47.74	176.2	
6	469	26.08	84.2	
7	492	30.79	94.9	
8	507	29.54	88.2	
9	540	28.77	80.8	
10	587	21.84	56.4	
11	720	20.63	43.4	
12	789	12.80	24.6	
13	1,004	11.60	17.5	
14	1,186	12.31	15.7	
15	1,438	8.56	9.0	
16	1,572	10.93	10.5	
17	2,028	5.65	4.2	
18	2,605	8.79	5.1	
19	5,505	4.22	1.2	
20	6,770	5.46	1.2	
21	7,469	4.24	0.9	
22	8,263	3.60	0.7	
23	10,380	75.00	10.9	Upper Marker
24	13,203	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
Modified: 6/27/2013 12:47:07 PM

Electropherogram Summary Continued ...

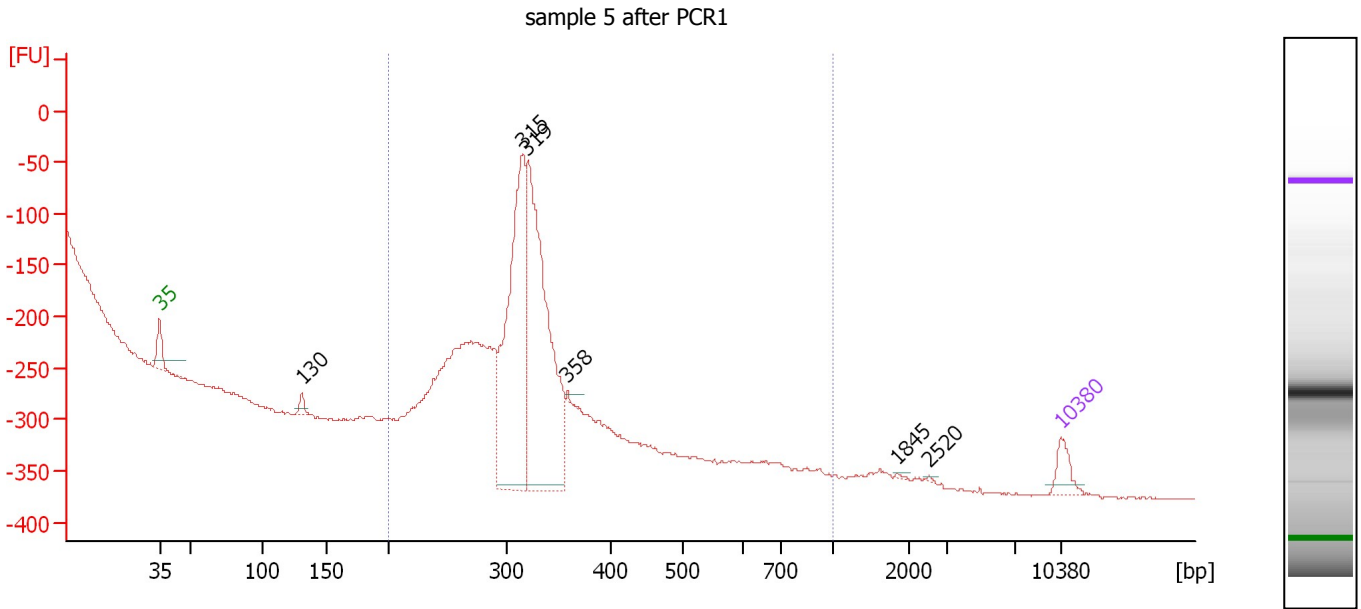
... Region table for sample 4 : sample 4 after PCR1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	363	14,164.8	2,889.82	2,378.0	89	41.4	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
 Modified: 6/27/2013 12:47:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5 after PCR1

Number of peaks found: 6 Corr. Area 1: 254.9
 Noise: 0.7

Peak table for sample 5 : sample 5 after PCR1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	130	43.01	500.1	
3	315	1,450.70	6,987.7	
4	319	1,639.22	7,778.8	
5	358	5.04	21.3	
6	1,845	4.83	4.0	
7	2,520	3.77	2.3	
8	10,380	75.00	10.9	Upper Marker

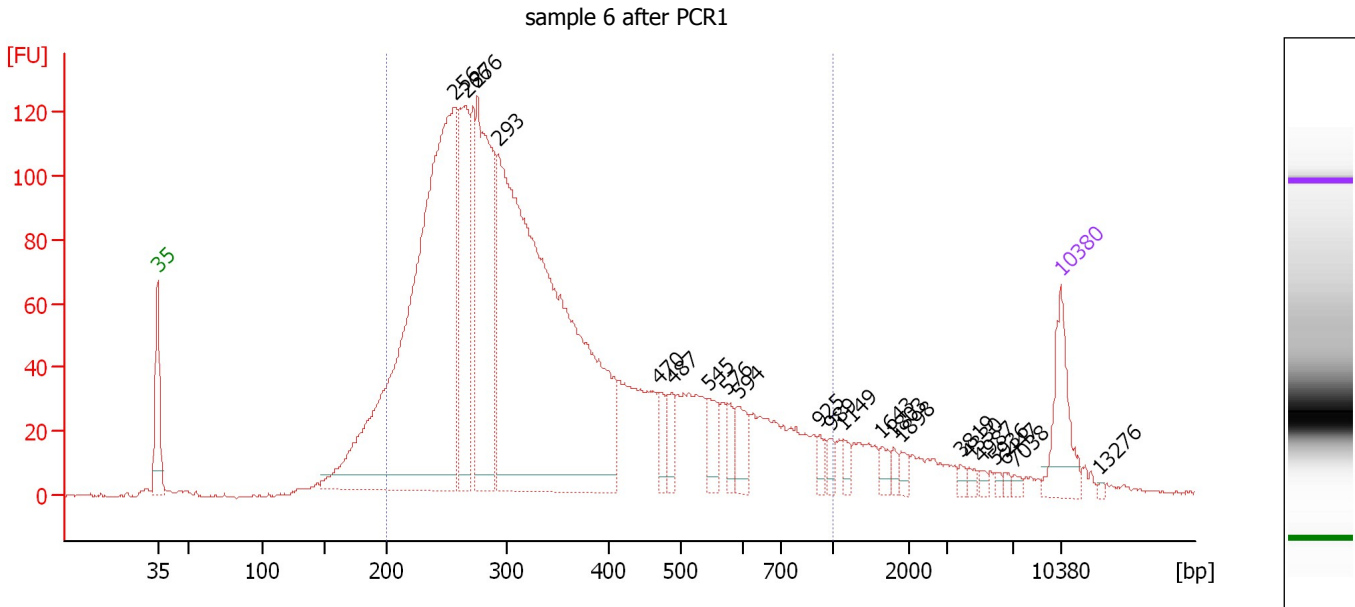
Region table for sample 5 : sample 5 after PCR1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	318	2,369.4	497.69	254.9	100	2.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
 Modified: 6/27/2013 12:47:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6 after PCR1

Number of peaks found: 22 Corr. Area 1: 2,689.2
 Noise: 0.5

Peak table for sample 6 : sample 6 after PCR1


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	256	1,297.73	7,668.9	
3	266	268.18	1,527.0	
4	276	438.59	2,409.4	
5	293	1,419.38	7,335.5	
6	470	35.60	114.7	
7	487	37.32	116.0	
8	545	41.13	114.4	
9	576	25.70	67.6	
10	594	44.00	112.3	
11	925	15.43	25.3	
12	989	15.19	23.3	
13	1,149	13.33	17.6	
14	1,643	13.54	12.5	
15	1,803	9.27	7.8	
16	1,898	10.59	8.5	
17	3,819	6.99	2.8	
18	4,330	6.04	2.1	
19	4,987	5.66	1.7	
20	5,936	4.51	1.2	
21	6,447	5.03	1.2	
22	7,038	5.42	1.2	
23	10,380	75.00	10.9	Upper Marker
24	13,276	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
Modified: 6/27/2013 12:47:07 PM

Electropherogram Summary Continued ...

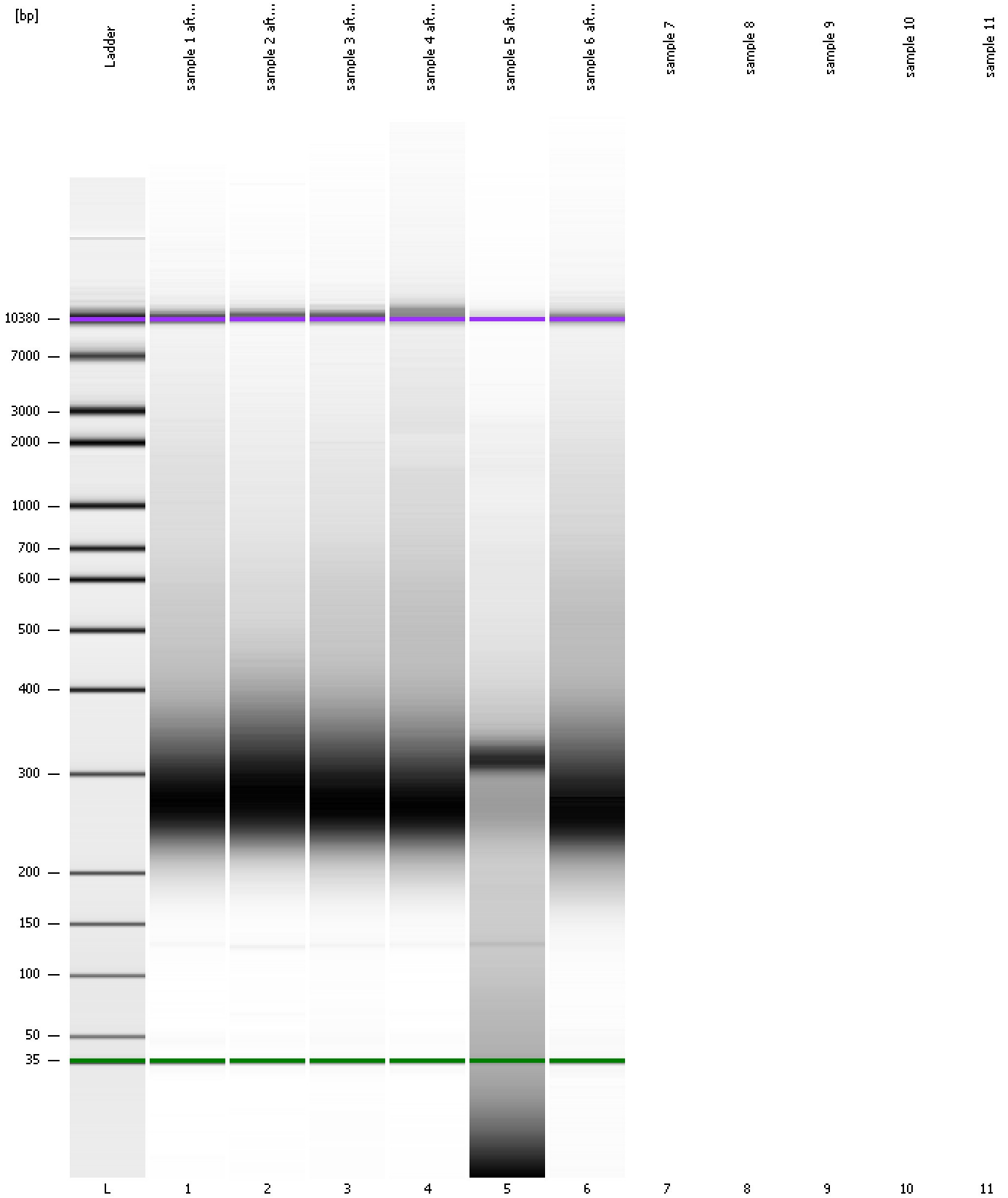
... Region table for sample 6 : sample 6 after PCR1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	362	20,180.7	4,092.45	2,689.2	87	41.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
Modified: 6/27/2013 12:47:07 PM

Gel Image

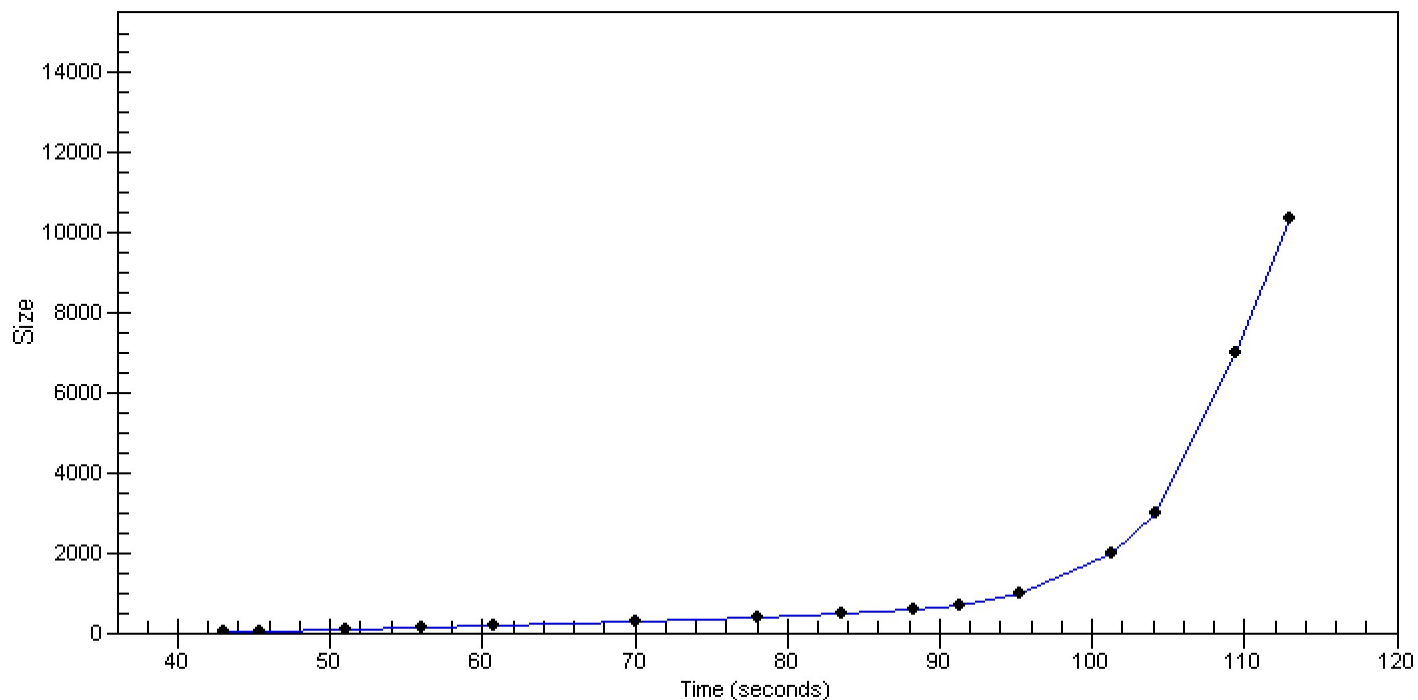


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
Modified: 6/27/2013 12:47:07 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
Modified: 6/27/2013 12:47:07 PM

Invalid Samples

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

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:\...ents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad

Created: 6/27/2013 12:20:04 PM
 Modified: 6/27/2013 12:47:07 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 7)		Instrument	Run		6/27/2013 12:47:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-27\2013-06-27_002.xad)		Instrument	Run		6/27/2013 12:20:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/27/2013 12:20:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/27/2013 12:20:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/27/2013 12:20:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/27/2013 12:20:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/27/2013 12:20:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/27/2013 12:20:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1