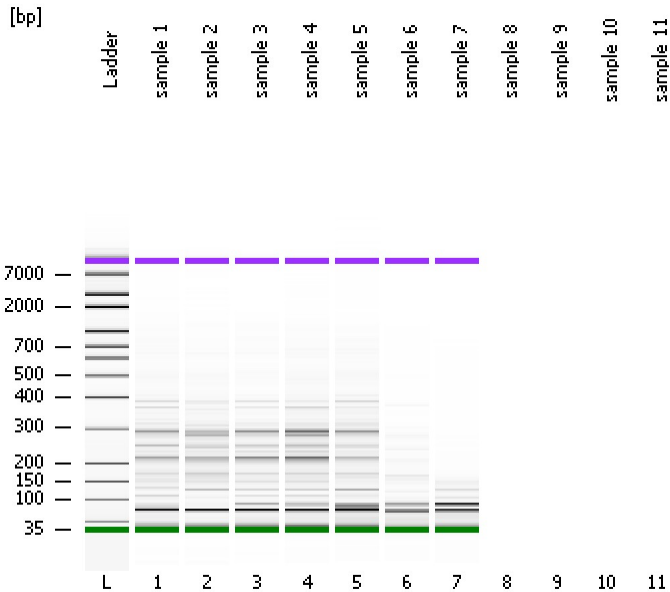


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
Modified: 5/21/2012 1:52:03 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

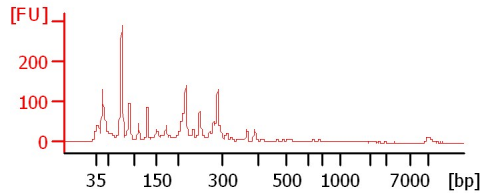
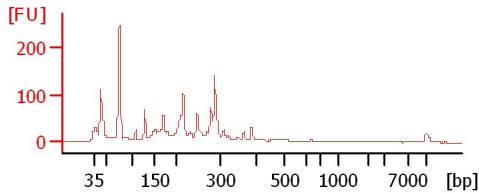
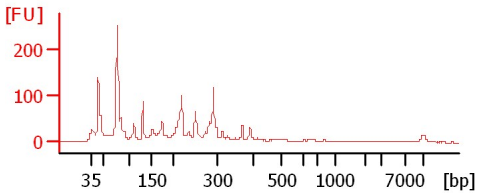
Chip Information:

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

sample 1

sample 2

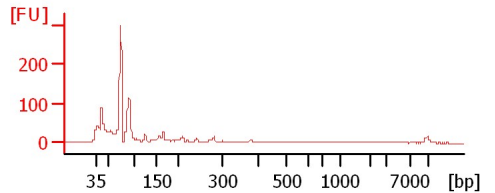
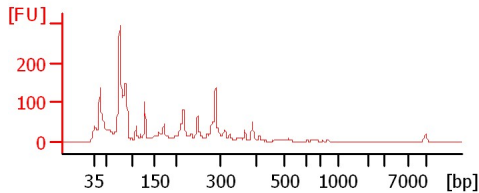
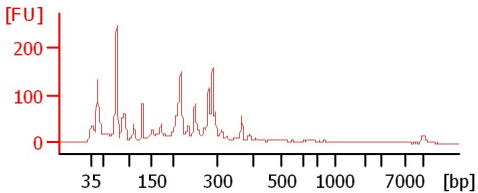
sample 3



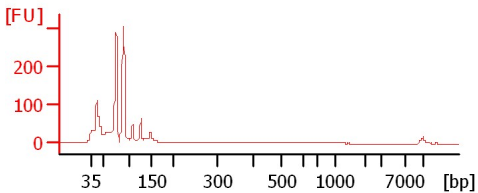
sample 4

sample 5

sample 6



sample 7



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
Modified: 5/21/2012 1:52:03 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<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\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
Modified: 5/21/2012 1:52:03 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

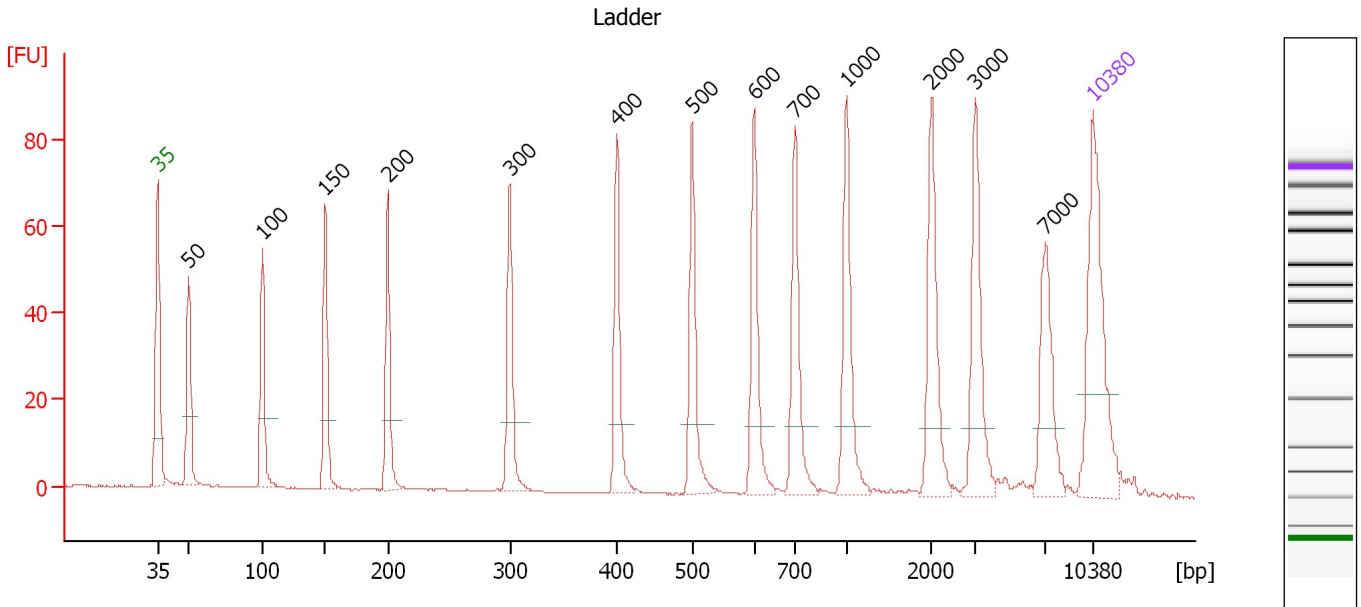
Ladder

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\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

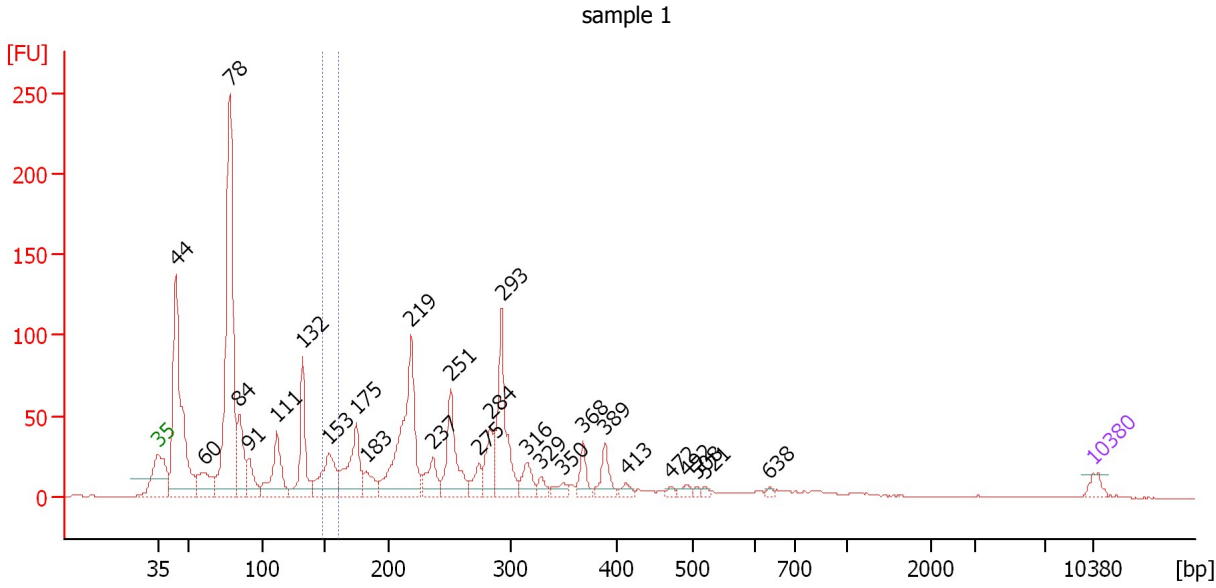
Peak table for Ladder

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\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 27 Corr. Area 1: 50.0
 Noise: 0.2

Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	2,774.86	96,062.2	
3	60	484.09	12,132.8	
4	78	3,920.89	76,200.0	
5	84	669.84	12,013.8	
6	91	346.38	5,767.7	
7	111	728.44	9,906.8	
8	132	822.98	9,450.3	
9	153	680.10	6,756.6	
10	175	771.14	6,669.7	
11	183	251.74	2,085.5	
12	219	1,782.24	12,332.9	
13	237	340.08	2,172.7	
14	251	776.25	4,678.0	
15	275	206.74	1,141.0	
16	284	372.35	1,987.3	
17	293	1,091.85	5,641.7	
18	316	227.99	1,093.4	
19	329	93.30	429.0	
20	350	98.26	425.6	
21	368	201.68	829.4	
22	389	242.19	943.9	
23	413	73.47	269.7	
24	472	37.94	121.9	
25	492	55.64	171.3	
26	508	27.55	82.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...**... Peak table for sample 1 : sample 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	521	31.35	91.2	
28	638	24.28	57.7	
29	▶ 10,380	75.00	10.9	Upper Marker

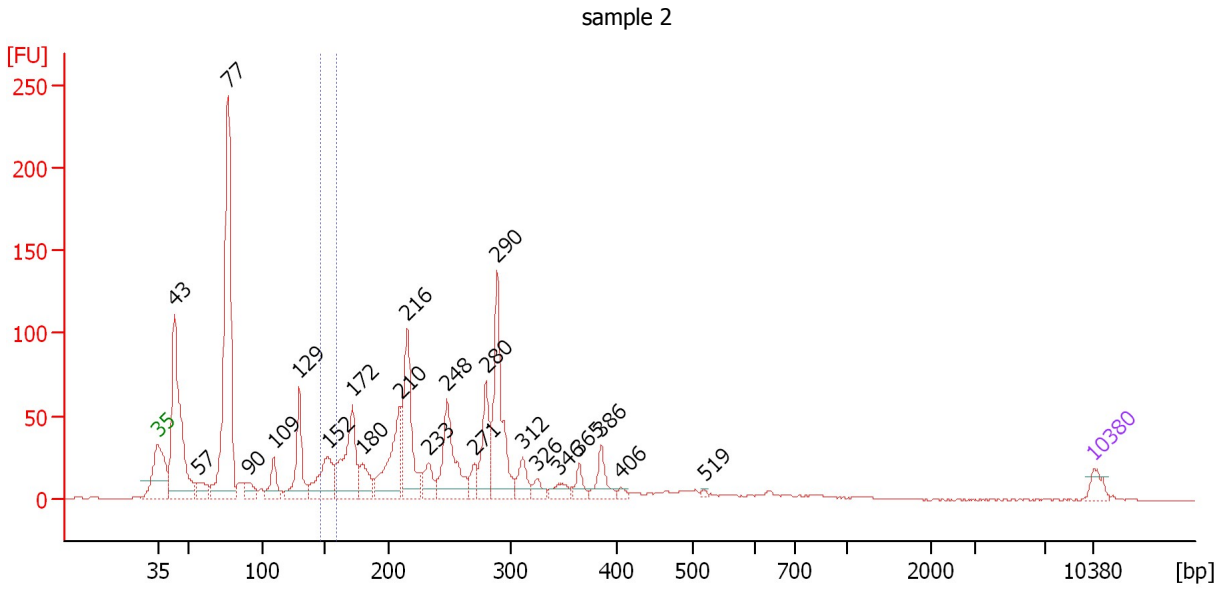
Region table for sample 1 : sample 1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	4,955.0	153	501.46	160	50.0	3	2.3	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 23 Corr. Area 1: 48.6
 Noise: 0.2

Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	1,929.32	67,698.3	
3	57	188.71	5,015.9	
4	77	2,929.12	57,895.2	
5	90	161.53	2,718.7	
6	109	247.01	3,432.2	
7	129	569.50	6,672.0	
8	152	502.39	4,994.5	
9	172	824.60	7,265.6	
10	180	250.44	2,109.5	
11	210	727.84	5,243.0	
12	216	873.98	6,129.7	
13	233	205.87	1,338.0	
14	248	709.26	4,327.7	
15	271	139.88	781.8	
16	280	479.26	2,592.2	
17	290	972.37	5,086.9	
18	312	193.22	939.8	
19	326	85.03	395.6	
20	346	104.10	456.1	
21	365	108.66	451.1	
22	386	199.01	781.9	
23	406	36.84	137.5	
24	519	19.15	55.9	
25	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...

... Region table for sample 2 :

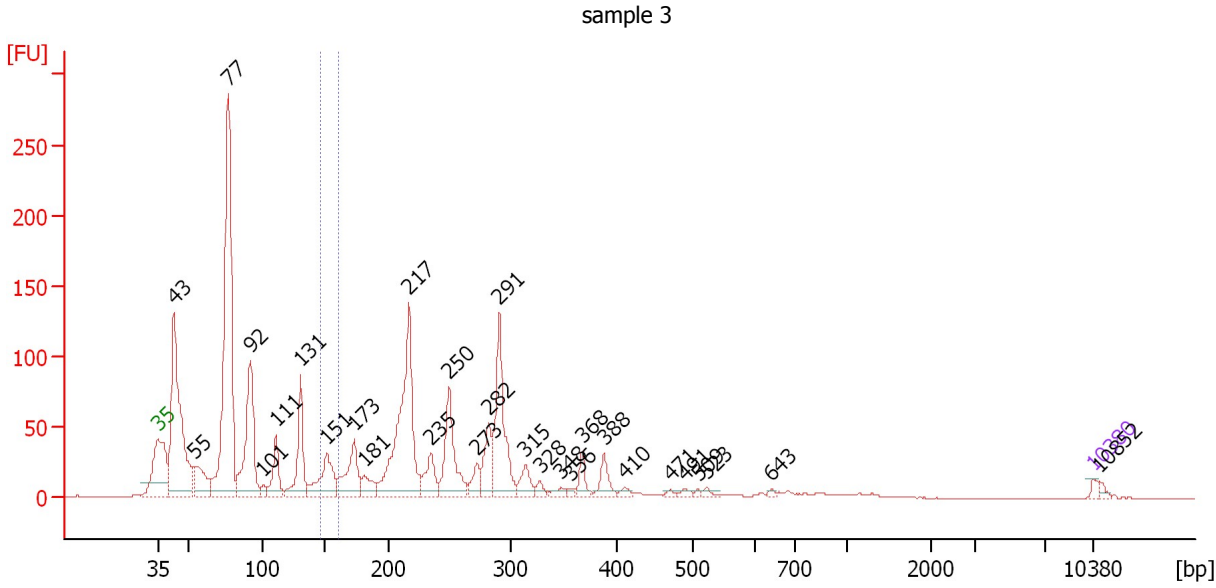
sample 2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	3,773.8	152	379.06	158	48.6	3	2.2	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 29 Corr. Area 1: 53.2
 Noise: 0.2

Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	5,456.22	192,426.6	
3	55	1,006.64	27,947.5	
4	77	8,051.96	158,084.1	
5	92	2,916.61	48,051.5	
6	101	185.41	2,789.8	
7	111	878.81	12,015.2	
8	131	1,555.37	18,046.9	
9	151	1,280.33	12,861.0	
10	173	1,273.80	11,141.6	
11	181	476.44	3,988.1	
12	217	4,255.76	29,665.1	
13	235	711.80	4,584.8	
14	250	1,646.73	9,975.3	
15	273	402.82	2,236.0	
16	282	834.35	4,476.7	
17	291	2,155.37	11,210.1	
18	315	426.29	2,053.5	
19	328	150.99	697.1	
20	348	155.43	677.5	
21	356	68.89	293.1	
22	368	314.45	1,296.4	
23	388	408.15	1,593.8	
24	410	111.65	412.2	
25	471	65.92	211.9	
26	491	97.91	302.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad


Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...

... Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	509	46.07	137.1	
28	523	85.92	249.0	
29	643	52.68	124.2	
30	10,380	75.00	10.9	Upper Marker
31	10,852	0.00	0.0	

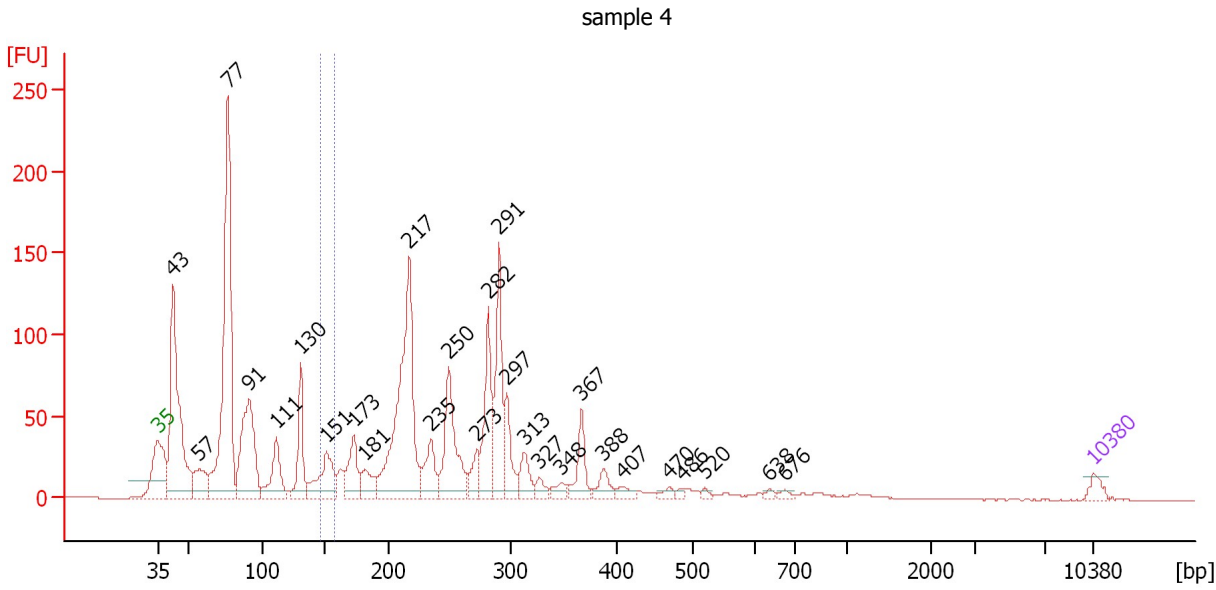
Region table for sample 3 : sample 3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
146	9,409.4	152	945.83	160	53.2	3	2.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 27 Corr. Area 1: 45.8
 Noise: 0.2

Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	2,566.88	91,221.9	
3	57	436.35	11,561.6	
4	77	3,627.71	71,608.2	
5	91	1,474.54	24,490.2	
6	111	578.14	7,879.3	
7	130	660.47	7,689.3	
8	151	652.28	6,539.9	
9	173	487.20	4,272.1	
10	181	286.18	2,390.8	
11	217	2,559.39	17,830.4	
12	235	420.86	2,713.9	
13	250	1,008.45	6,115.0	
14	273	234.56	1,301.8	
15	282	854.32	4,586.1	
16	291	998.83	5,200.8	
17	297	397.93	2,029.0	
18	313	258.71	1,251.3	
19	327	104.58	483.9	
20	348	105.70	460.1	
21	367	336.56	1,389.7	
22	388	162.66	635.9	
23	407	86.07	320.1	
24	470	54.41	175.5	
25	486	39.30	122.4	
26	520	33.16	96.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...

... Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	638	28.43	67.5	
28	676	36.51	81.8	
29	▶ 10,380	75.00	10.9	Upper Marker

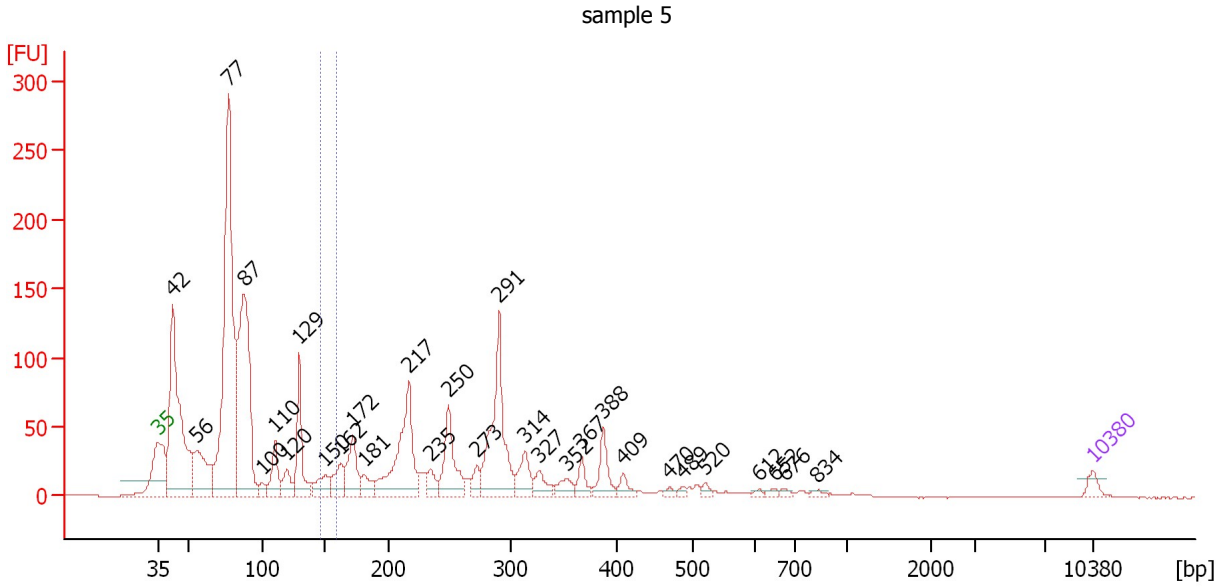
Region table for sample 4 : sample 4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
146	4,208.3	152	421.61	158	45.8	2	2.1	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 30 Corr. Area 1: 30.8
 Noise: 0.2

Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	2,951.92	105,890.7	
3	56	872.43	23,669.5	
4	77	4,696.40	92,538.4	
5	87	2,904.14	50,334.6	
6	100	107.87	1,639.4	
7	110	424.07	5,844.7	
8	120	236.66	2,995.4	
9	129	804.98	9,419.8	
10	150	271.52	2,741.6	
11	162	330.51	3,091.2	
12	172	517.63	4,549.5	
13	181	192.86	1,612.5	
14	217	1,369.84	9,570.5	
15	235	179.03	1,154.9	
16	250	690.91	4,192.3	
17	273	158.03	877.0	
18	291	1,429.47	7,442.3	
19	314	322.49	1,556.1	
20	327	186.62	863.7	
21	352	157.84	678.8	
22	367	159.45	658.5	
23	388	303.72	1,187.4	
24	409	110.73	410.2	
25	470	41.40	133.5	
26	489	40.30	125.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad


Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...

... Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	520	53.55	156.1	
28	612	28.78	71.3	
29	652	38.51	89.5	
30	676	33.67	75.5	
31	834	38.39	69.8	
32	10,380	75.00	10.9	Upper Marker

Region table for sample 5 : sample 5

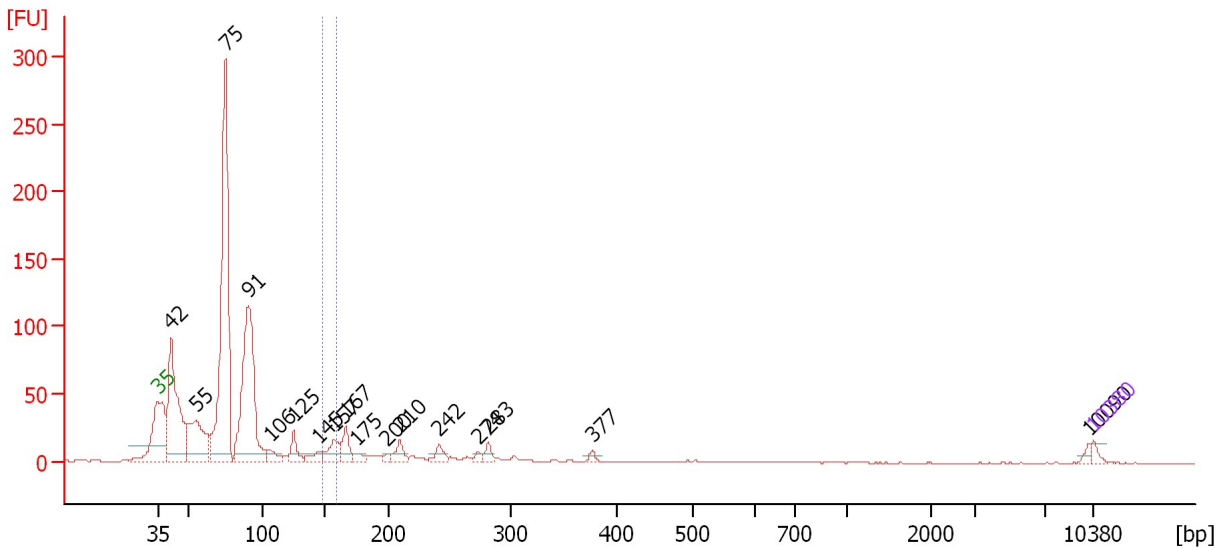
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	2,658.5	152	266.67	159	30.8	1	2.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...

sample 6



Overall Results for sample 6 : sample 6

Number of peaks found: 17 Corr. Area 1: 25.4
 Noise: 0.1

Peak table for sample 6 : sample 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	3,454.75	125,984.5	
3	55	1,713.50	47,301.6	
4	75	7,011.35	141,416.7	
5	91	4,387.15	73,374.3	
6	106	262.24	3,758.4	
7	125	360.77	4,379.9	
8	145	212.91	2,227.6	
9	157	440.67	4,253.2	
10	167	435.86	3,958.0	
11	175	143.00	1,235.9	
12	200	73.38	556.6	
13	210	276.84	1,999.3	
14	242	213.83	1,339.2	
15	274	88.52	489.5	
16	283	145.52	780.1	
17	377	70.96	284.9	
18	10,090	53.16	8.0	
19	10,380	75.00	10.9	Upper Marker

Region table for sample 6 : sample 6

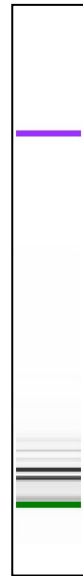
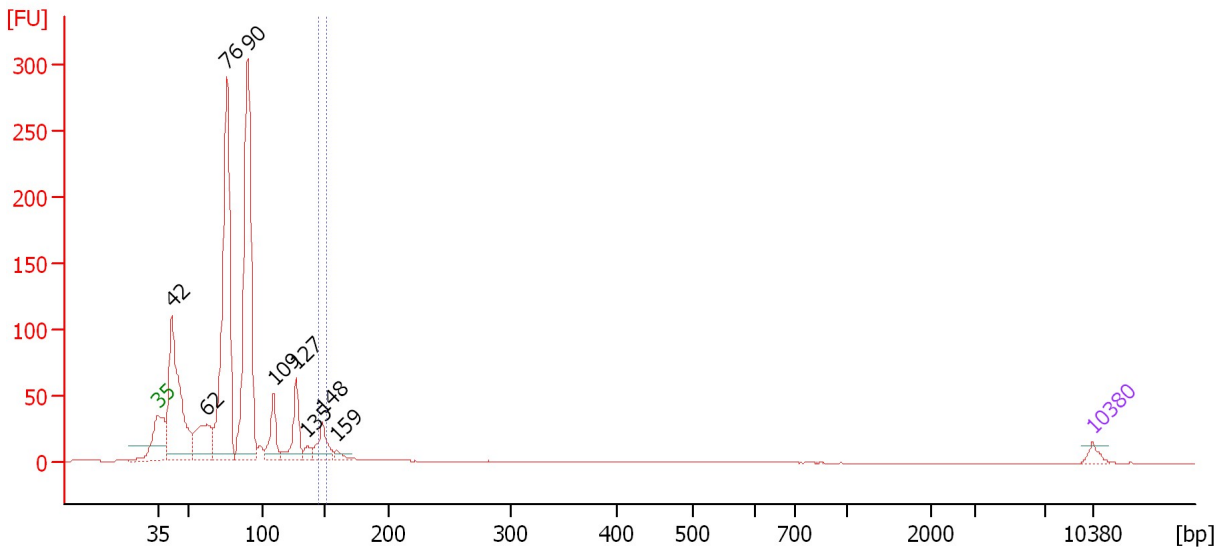
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	3,698.1	154	376.54	160	25.4	2	2.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Electropherogram Summary Continued ...

sample 7



Overall Results for sample 7 : sample 7

Number of peaks found: 9 Corr. Area 1: 25.9
 Noise: 0.1

Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	2,970.36	107,257.0	
3	62	960.52	23,340.8	
4	76	4,771.42	94,865.4	
5	90	4,829.54	81,248.7	
6	109	562.71	7,827.0	
7	127	687.16	8,175.4	
8	135	132.86	1,485.8	
9	148	467.15	4,784.4	
10	159	106.18	1,012.7	
11	10,380	75.00	10.9	Upper Marker

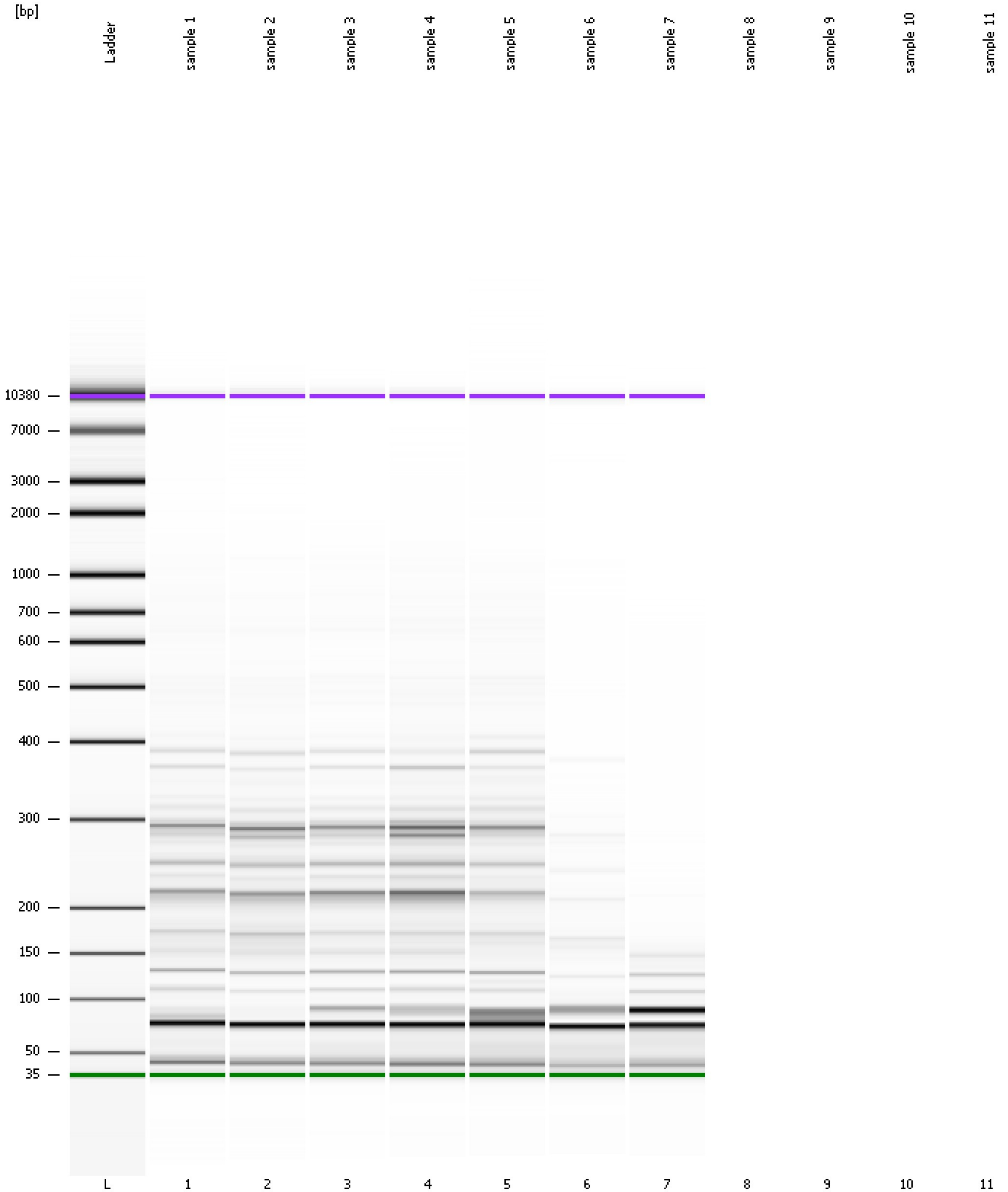
Region table for sample 7 : sample 7

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
145	2,866.0	148	279.89	152	25.9	2	1.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
Modified: 5/21/2012 1:52:03 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
Modified: 5/21/2012 1:52:03 PM

Invalid Samples

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\2012-05-21\2012-05-21_002.xad

Created: 5/21/2012 1:13:06 PM
 Modified: 5/21/2012 1:52:03 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		5/21/2012 1:42:57 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-21\2012-05-21_002.xad)		Instrument	Run		5/21/2012 1:13:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/21/2012 1:13:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/21/2012 1:13:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/21/2012 1:13:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/21/2012 1:13:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/21/2012 1:13:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/21/2012 1:13:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1