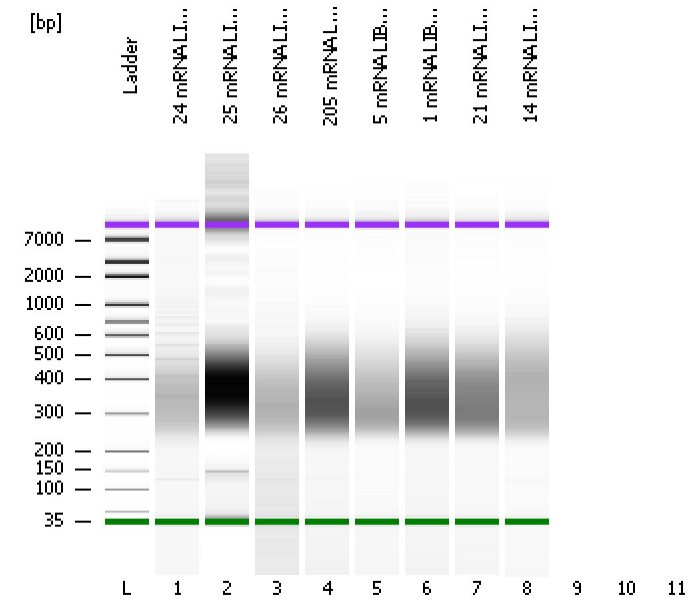
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 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

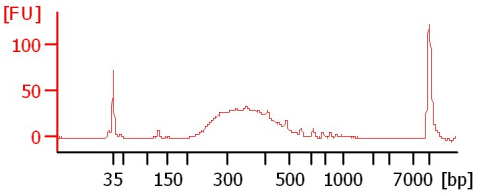
Chip Information:

Chip Lot #:

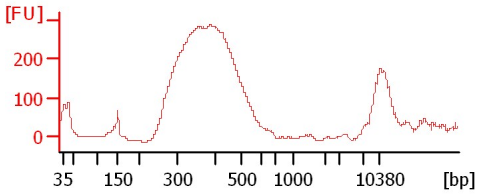
Reagent Kit Lot #:

Chip Comments:

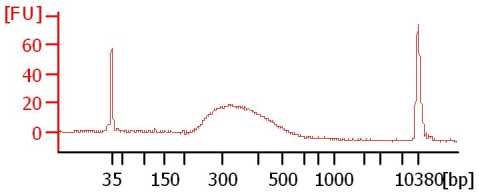
24 mRNA LIB (1/11/13) O'Neil



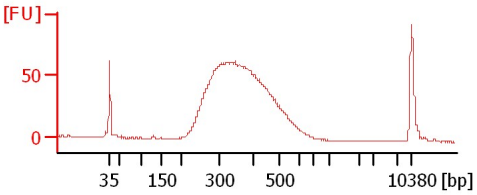
25 mRNA LIB (1/11/13) O'Neil



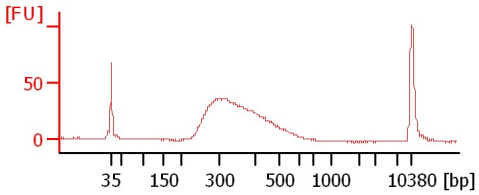
26 mRNA LIB (1/11/13) O'Neil



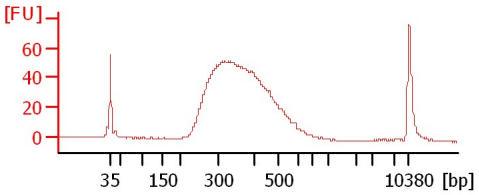
205 mRNA LIB (1/11/13) O'Neil



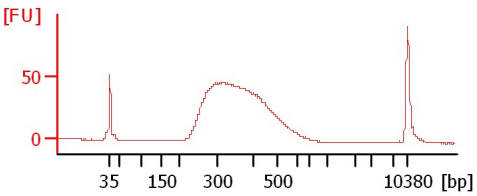
5 mRNA LIB (1/10/13) O'Neil



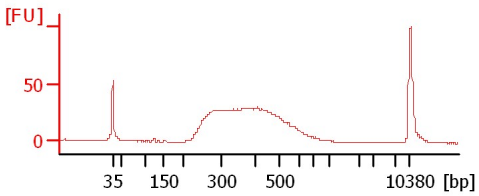
1 mRNA LIB (1/10/13) O'Neil



21 mRNA LIB (1/10/13) O'Neil



14 mRNA LIB (1/10/13) O'Neil



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
24 mRNA LIB (1/11/13) O'Neil		☐	✔			
25 mRNA LIB (1/11/13) O'Neil		☐	✔			
26 mRNA LIB (1/11/13) O'Neil		☐	✔			
205 mRNA LIB (1/11/13) O'Neil		☐	✔			
5 mRNA LIB (1/10/13) O'Neil		☐	✔			
1 mRNA LIB (1/10/13) O'Neil		☐	✔			
21 mRNA LIB (1/10/13) O'Neil		☐	✔			
14 mRNA LIB (1/10/13) O'Neil		☐	✔			
		☐				
		☐				
		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 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

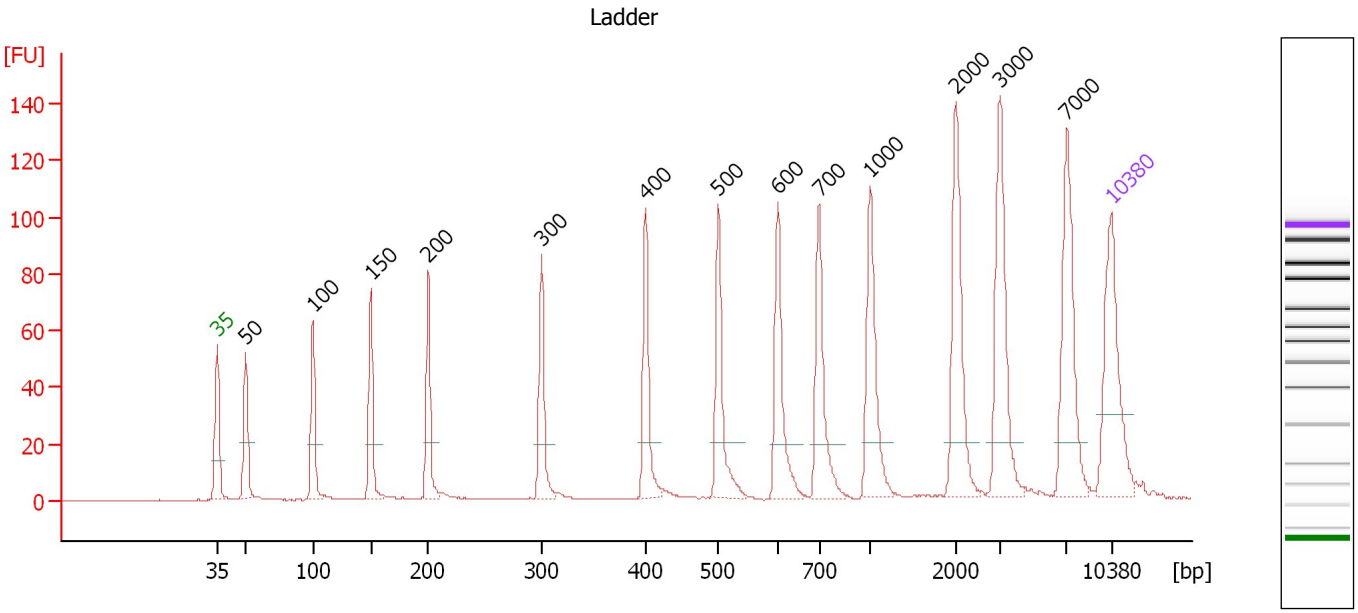
Ladder

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\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

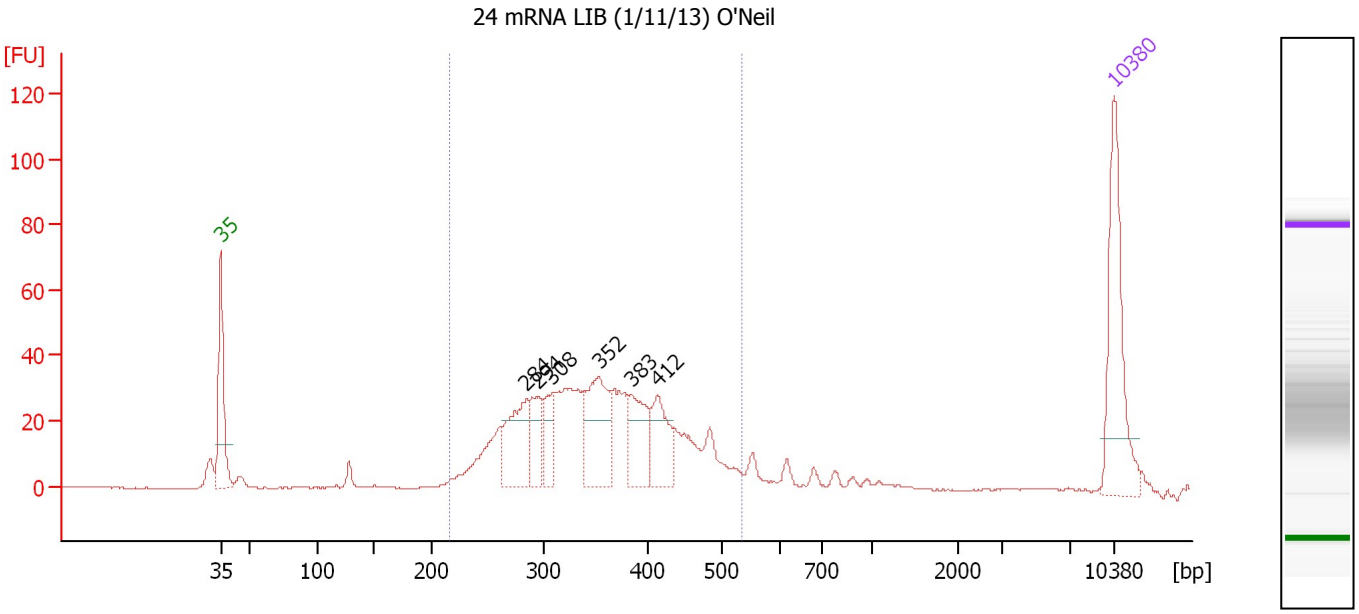
Peak table for Ladder

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\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : 24 mRNA LIB (1/11/13) O'Neil

Height Threshold [FU] : 20

Overall Results for sample 1 : 24 mRNA LIB (1/11/13) O'Neil

Number of peaks found:	6	Corr. Area 1:	679.1
Noise:	0.2		

Peak table for sample 1 : 24 mRNA LIB (1/11/13) O'Neil

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	284	68.54	365.7	
3	294	38.15	196.7	
4	308	34.90	171.8	
5	352	83.51	359.3	
6	383	47.12	186.2	
7	412	46.20	169.8	
8	10,380	75.00	10.9	Upper Marker

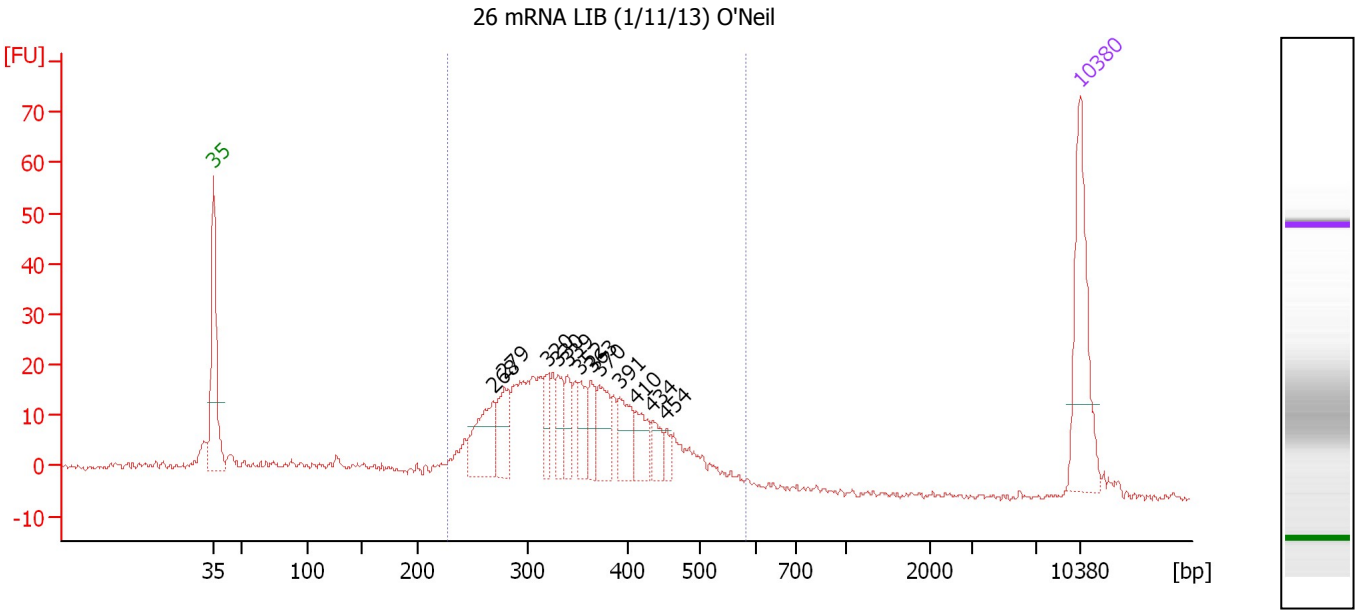
Region table for sample 1 : 24 mRNA LIB (1/11/13) O'Neil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
216	534	352	2,650.8	585.05	679.1	91	19.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : 26 mRNA LIB (1/11/13) O'Neil

Height Threshold [FU] : 10

Overall Results for sample 3 : 26 mRNA LIB (1/11/13) O'Neil

Number of peaks found:	12	Corr. Area 1:	434.4
Noise:	0.7		

Peak table for sample 3 : 26 mRNA LIB (1/11/13) O'Neil

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	268	64.61	365.1	
3	279	40.51	220.1	
4	320	24.23	114.6	
5	330	28.29	129.7	
6	339	24.13	107.7	
7	352	25.50	109.8	
8	363	24.85	103.9	
9	370	38.91	159.2	
10	391	38.81	150.4	
11	410	27.93	103.3	
12	434	18.64	65.1	
13	454	9.18	30.6	
14	10,380	75.00	10.9	Upper Marker

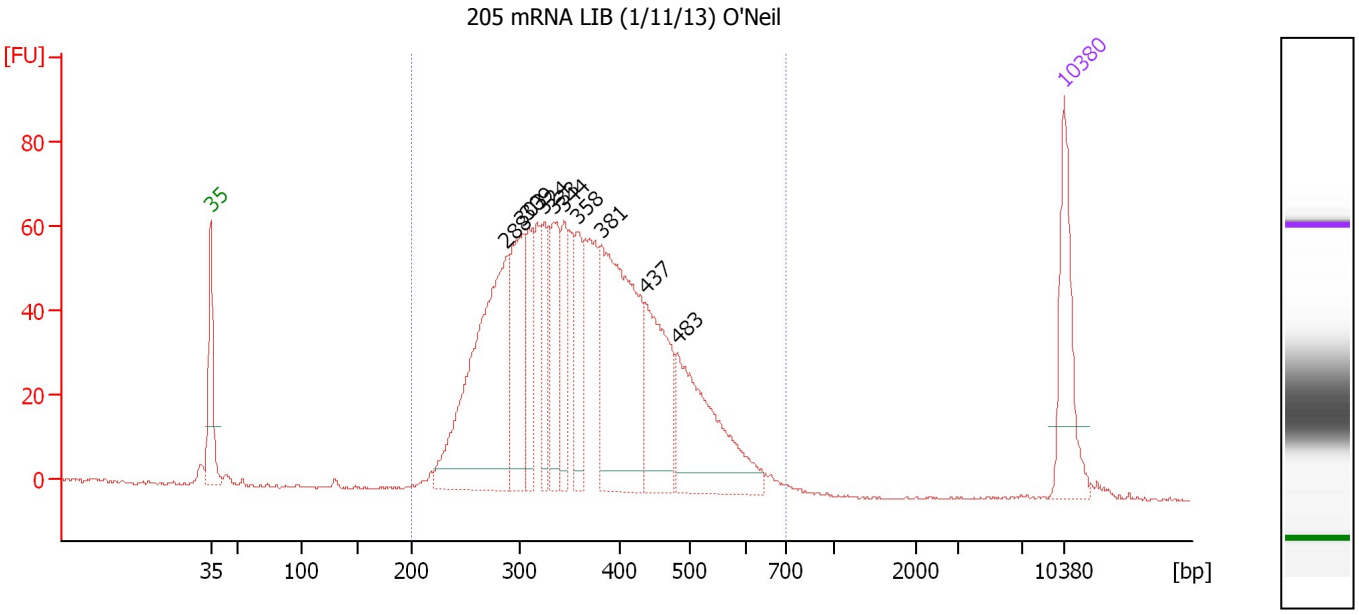
Region table for sample 3 : 26 mRNA LIB (1/11/13) O'Neil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
226	580	351	2,761.2	605.83	434.4	85	19.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 205 mRNA LIB (1/11/13) O'Neil

Number of peaks found:	10	Corr. Area 1:	1,502.9
Noise:	0.2		

Peak table for sample 4 : 205 mRNA LIB (1/11/13) O'Neil

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	288	360.28	1,898.1	
3	303	137.97	690.8	
4	309	73.46	360.8	
5	324	67.47	315.5	
6	333	89.58	407.5	
7	344	68.57	301.7	
8	358	68.60	290.6	
9	381	292.33	1,161.8	
10	437	139.61	484.1	
11	483	177.47	556.5	
12	10,380	75.00	10.9	Upper Marker

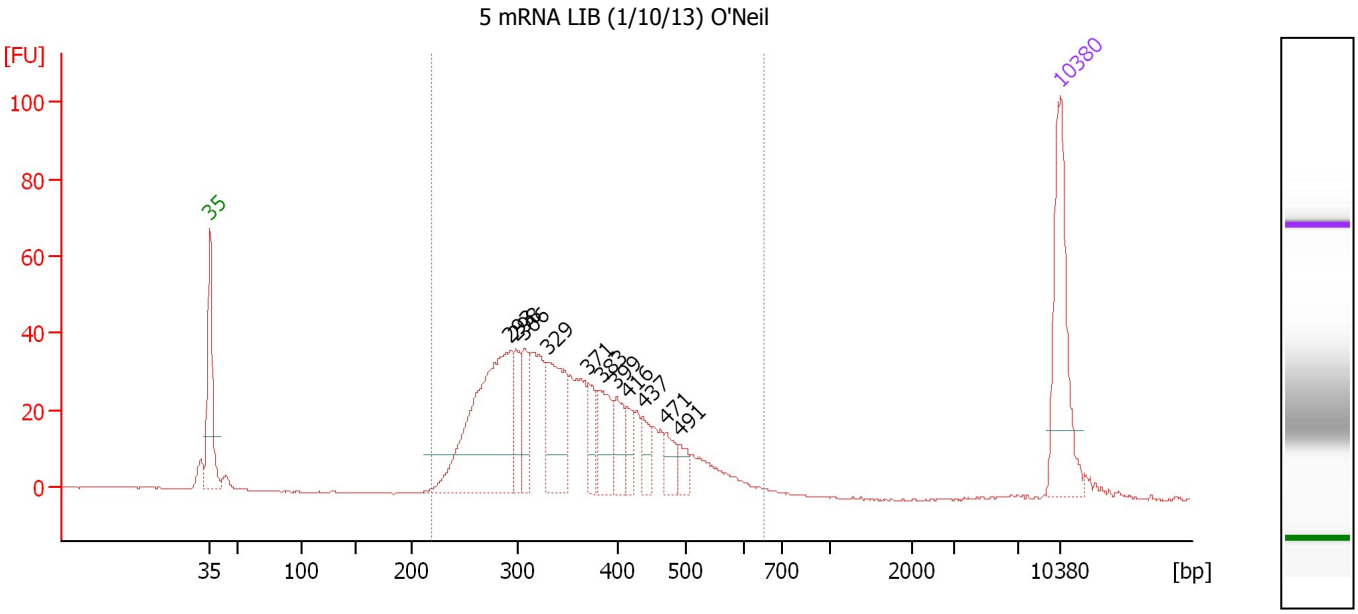
Region table for sample 4 : 205 mRNA LIB (1/11/13) O'Neil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	704	372	7,602.9	1,731.06	1,502.9	99	23.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : 5 mRNA LIB (1/10/13) O'Neil

Height Threshold [FU] : 10

Overall Results for sample 5 : 5 mRNA LIB (1/10/13) O'Neil

Number of peaks found:	11	Corr. Area 1:	790.9
Noise:	0.2		

Peak table for sample 5 : 5 mRNA LIB (1/10/13) O'Neil

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	293	217.86	1,127.5	
3	298	35.02	178.2	
4	306	31.96	158.2	
5	329	84.33	388.1	
6	371	23.67	96.6	
7	383	42.93	169.6	
8	399	29.27	111.1	
9	416	16.26	59.3	
10	437	18.33	63.5	
11	471	18.00	57.9	
12	491	14.09	43.5	
13	10,380	75.00	10.9	Upper Marker

Region table for sample 5 : 5 mRNA LIB (1/10/13) O'Neil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
220	654	359	3,446.3	761.92	790.9	95	23.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

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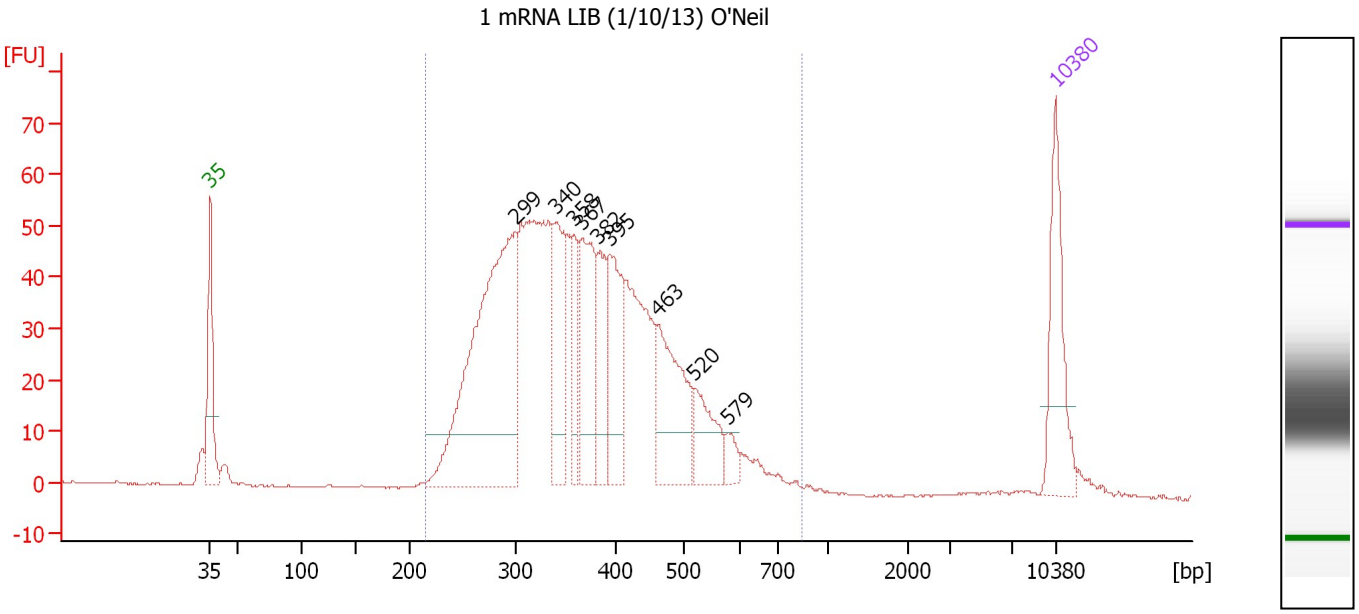


Setpoint Deviations for sample 6 : 1 mRNA LIB (1/10/13) O'Neil

Height Threshold [FU] : 10

Overall Results for sample 6 : 1 mRNA LIB (1/10/13) O'Neil

Number of peaks found:	9	Corr. Area 1:	1,252.9
Noise:	0.2		

Peak table for sample 6 : 1 mRNA LIB (1/10/13) O'Neil

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	299	440.69	2,234.3	
3	340	106.80	475.5	
4	358	57.14	241.7	
5	367	124.52	514.3	
6	382	68.24	270.3	
7	395	106.27	407.8	
8	463	122.26	399.7	
9	520	56.49	164.6	
10	579	14.94	39.1	
11	10,380	75.00	10.9	Upper Marker

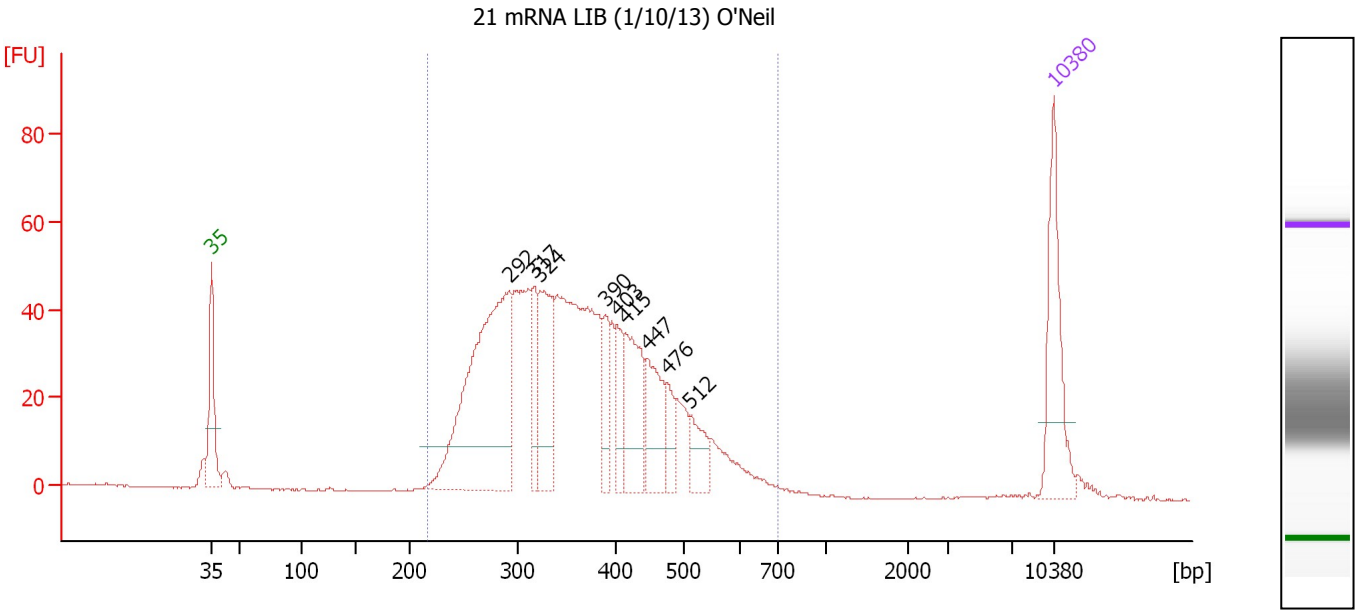
Region table for sample 6 : 1 mRNA LIB (1/10/13) O'Neil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
215	846	376	7,523.4	1,724.11	1,252.9	97	24.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : 21 mRNA LIB (1/10/13) O'Neil

Height Threshold [FU] : 10

Overall Results for sample 7 : 21 mRNA LIB (1/10/13) O'Neil

Number of peaks found:	9	Corr. Area 1:	1,110.4
Noise:	0.2		

Peak table for sample 7 : 21 mRNA LIB (1/10/13) O'Neil

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	292	363.79	1,885.0	
3	317	50.30	240.2	
4	324	108.16	506.1	
5	390	39.43	153.0	
6	403	38.63	145.3	
7	415	88.28	322.1	
8	447	70.55	239.0	
9	476	26.09	83.0	
10	512	35.14	104.0	
11	10,380	75.00	10.9	Upper Marker

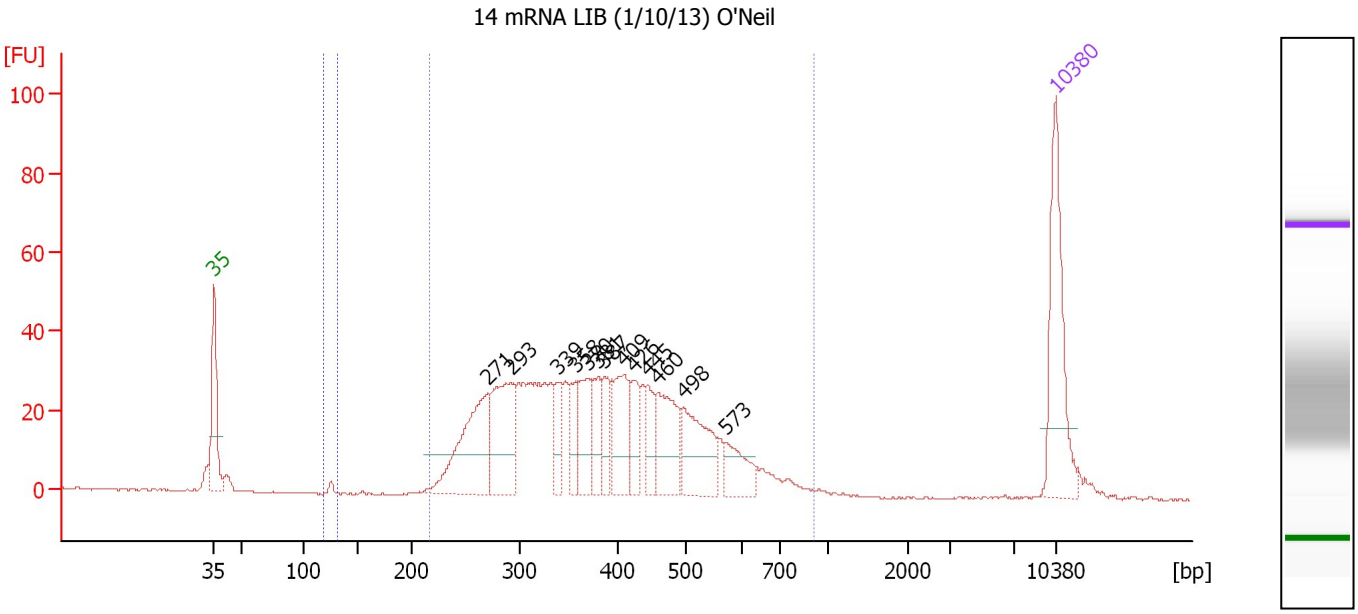
Region table for sample 7 : 21 mRNA LIB (1/10/13) O'Neil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
216	702	368	6,110.4	1,377.79	1,110.4	98	23.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : 14 mRNA LIB (1/10/13) O'Neil

Height Threshold [FU] : 10

Overall Results for sample 8 : 14 mRNA LIB (1/10/13) O'Neil

Number of peaks found:	13	Corr. Area 1:	857.5
Noise:	0.2	Corr. Area 2:	1.7

Peak table for sample 8 : 14 mRNA LIB (1/10/13) O'Neil

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	271	122.73	686.1	
3	293	97.08	502.7	
4	339	28.57	127.6	
5	358	29.08	123.0	
6	370	41.92	171.9	
7	381	32.34	128.6	
8	387	26.66	104.4	
9	409	60.35	223.4	
10	426	29.49	105.0	
11	445	28.84	98.2	
12	460	62.38	205.4	
13	498	67.17	204.5	
14	573	29.53	78.1	
15	10,380	75.00	10.9	Upper Marker

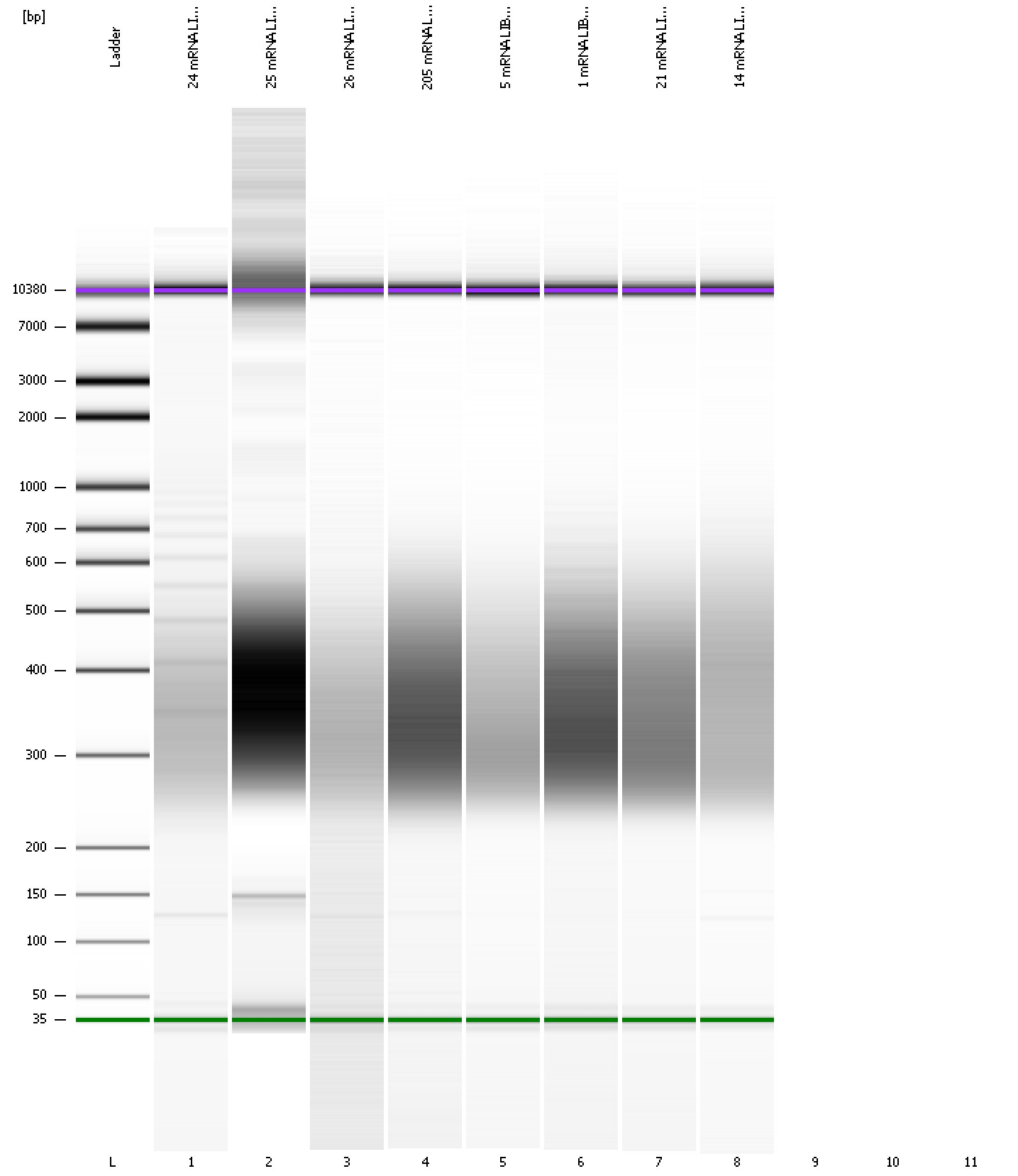
Region table for sample 8 : 14 mRNA LIB (1/10/13) O'Neil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
117	130	125	28.6	2.36	1.7	0	1.1	
217	914	397	3,763.6	887.49	857.5	96	28.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad

Created: 1/11/2013 12:11:33 PM
Modified: 1/29/2013 12:19:56 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		1/11/2013 12:44:16 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-01-11\2013-01-11_001.xad)		Instrument	Run		1/11/2013 12:11:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/11/2013 12:11:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/11/2013 12:11:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/11/2013 12:11:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/11/2013 12:11:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/11/2013 12:11:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/11/2013 12:11:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1