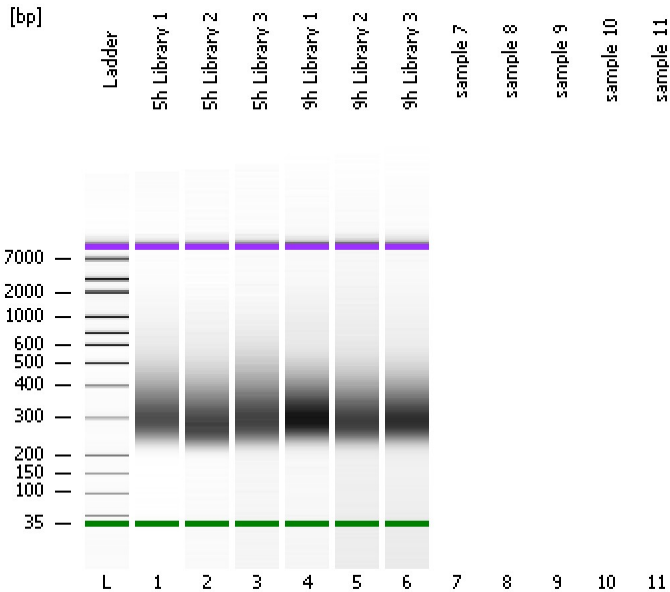


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
Modified: 7/1/2013 4:46:45 PM

Electrophoresis File Run Summary



Instrument Information:

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

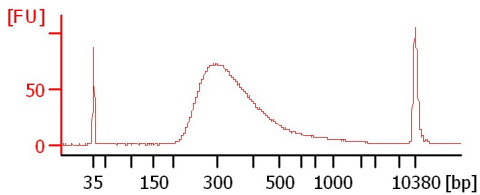
Assay Information:

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

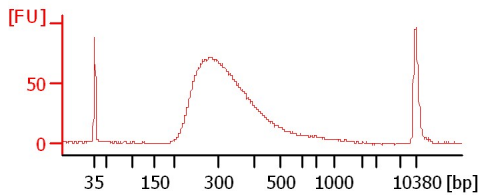
Chip Information:

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

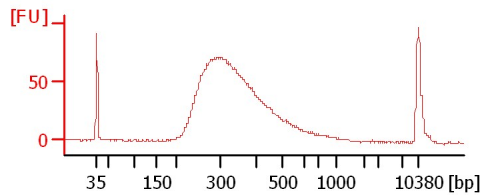
5h Library 1



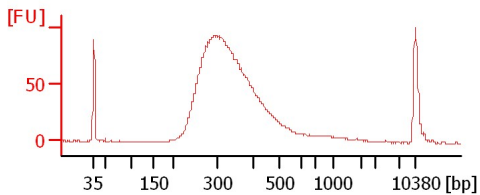
5h Library 2



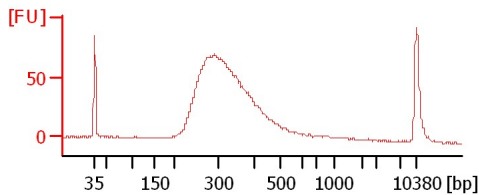
5h Library 3



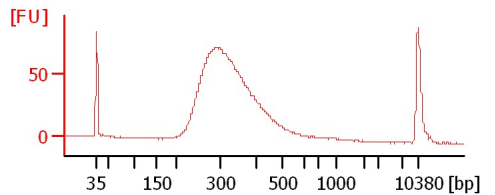
9h Library 1



9h Library 2



9h Library 3



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
 Modified: 7/1/2013 4:46:45 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
5h Library 1		<input type="checkbox"/>	✓			
5h Library 2		<input type="checkbox"/>	✓			
5h Library 3		<input type="checkbox"/>	✓			
9h Library 1		<input type="checkbox"/>	✓			
9h Library 2		<input type="checkbox"/>	✓			
9h Library 3		<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\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
 Modified: 7/1/2013 4:46:45 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

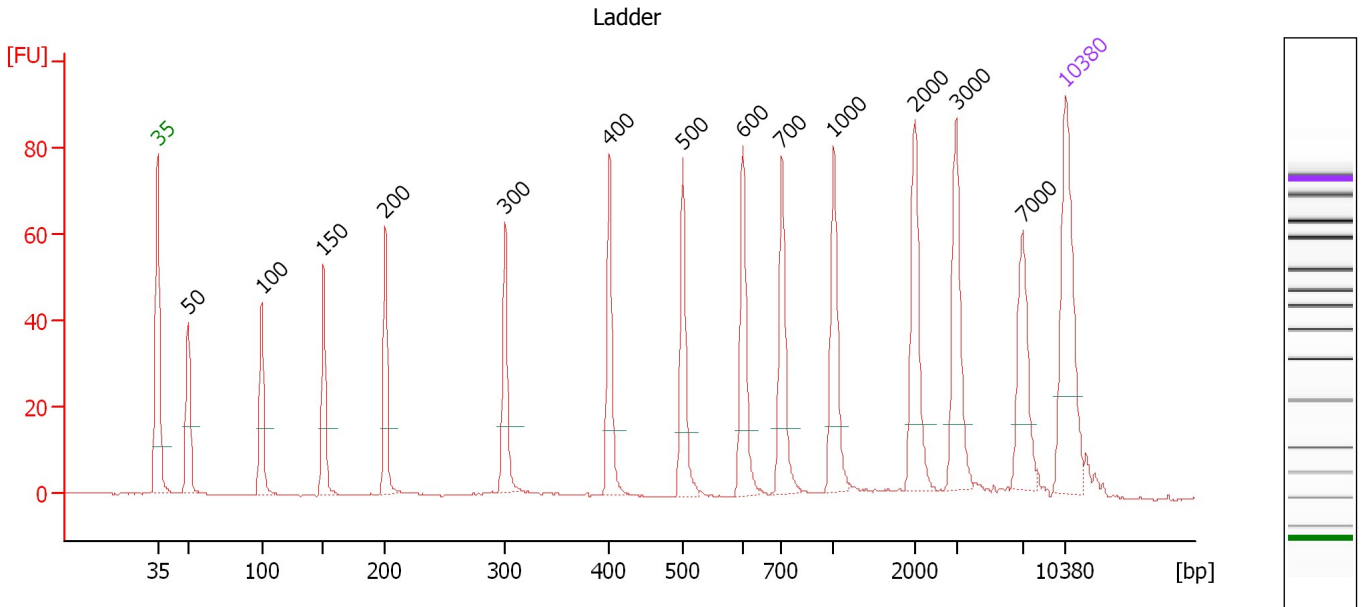
Ladder

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\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
 Modified: 7/1/2013 4:46:45 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

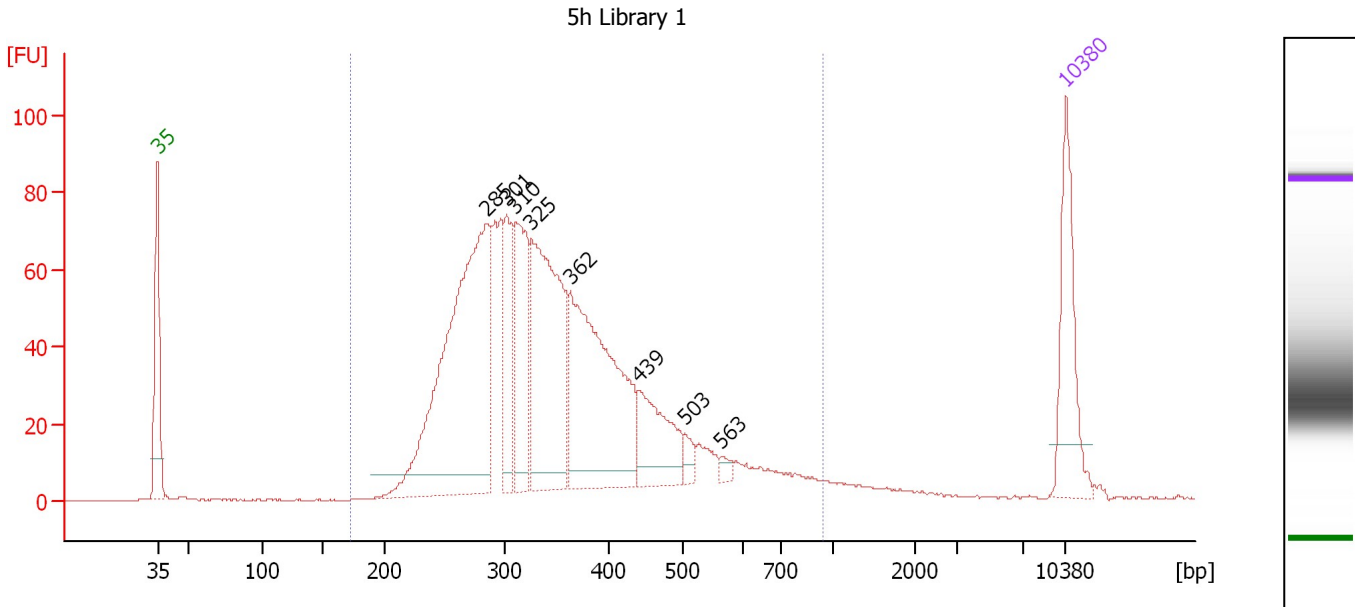
Peak table for Ladder

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\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
 Modified: 7/1/2013 4:46:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 5h Library 1

Number of peaks found: 8 Corr. Area 1: 1,482.0
 Noise: 0.2

Peak table for sample 1 : 5h Library 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	285	466.50	2,480.2	
3	301	76.03	382.2	
4	310	128.48	628.7	
5	325	263.79	1,228.2	
6	362	281.86	1,178.9	
7	439	83.37	287.6	
8	503	12.60	37.9	
9	563	6.60	17.8	
10	10,380	75.00	10.9	Upper Marker

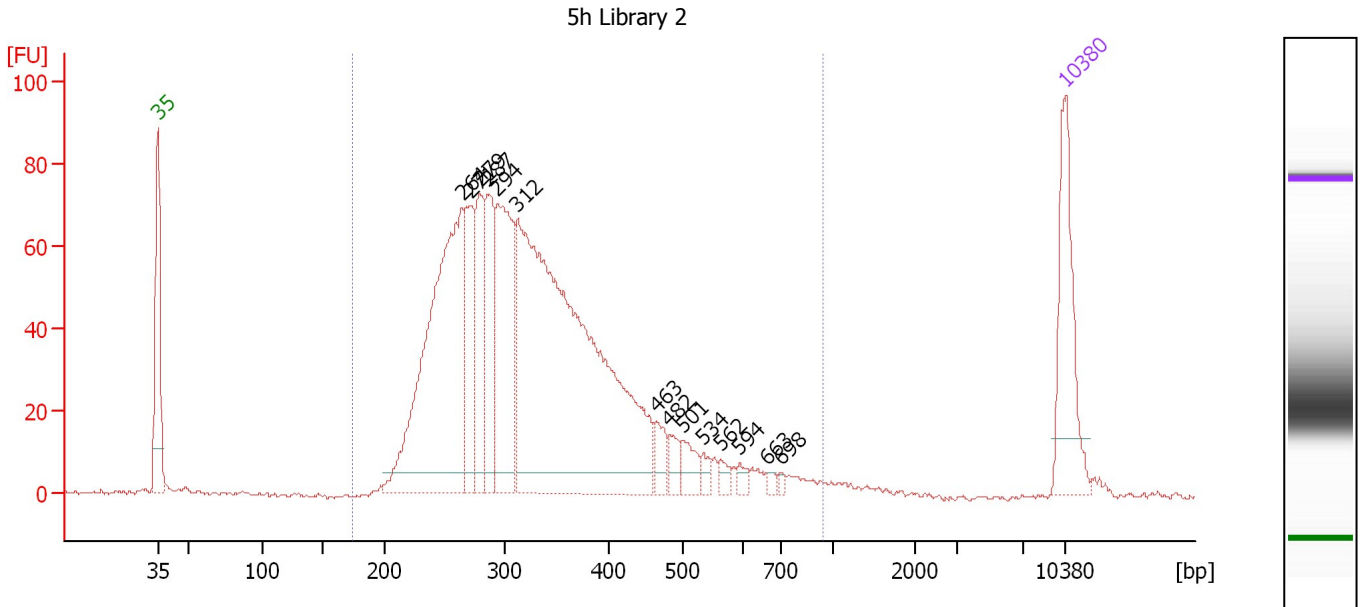
Region table for sample 1 : 5h Library 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
171	935	357	7,410.8	1,592.14	1,482.0	98	29.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
 Modified: 7/1/2013 4:46:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 5h Library 2

Number of peaks found: 14 Corr. Area 1: 1,488.9
 Noise: 0.6

Peak table for sample 2 : 5h Library 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	264	389.02	2,228.4	
3	271	84.56	472.5	
4	279	90.89	494.0	
5	287	89.14	470.6	
6	294	167.90	866.4	
7	312	666.75	3,237.3	
8	463	20.33	66.5	
9	482	14.59	45.9	
10	501	19.44	58.8	
11	534	8.65	24.6	
12	562	7.49	20.2	
13	594	6.36	16.2	
14	663	4.47	10.2	
15	698	3.11	6.8	
16	10,380	75.00	10.9	Upper Marker

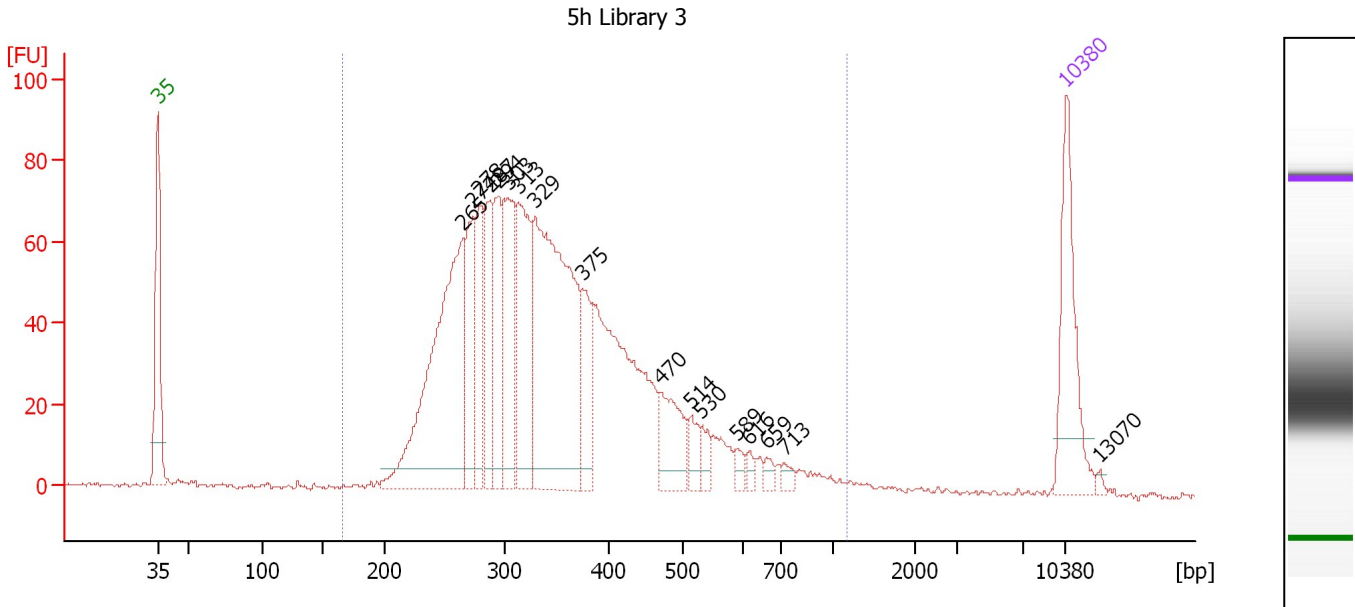
Region table for sample 2 : 5h Library 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
174	937	339	7,738.8	1,583.19	1,488.9	98	30.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
 Modified: 7/1/2013 4:46:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 5h Library 3

Number of peaks found: 17 Corr. Area 1: 1,570.8
 Noise: 0.5

Peak table for sample 3 : 5h Library 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	265	304.98	1,744.5	
3	274	86.13	476.8	
4	278	78.91	430.3	
5	287	73.28	386.6	
6	294	84.08	433.4	
7	303	115.11	576.4	
8	313	133.94	648.9	
9	329	334.31	1,540.3	
10	375	56.27	227.4	
11	470	55.32	178.4	
12	514	18.13	53.5	
13	530	13.67	39.1	
14	589	8.35	21.5	
15	616	6.23	15.3	
16	659	7.07	16.3	
17	713	7.24	15.4	
18	10,380	75.00	10.9	Upper Marker
19	13,070	0.00	0.0	

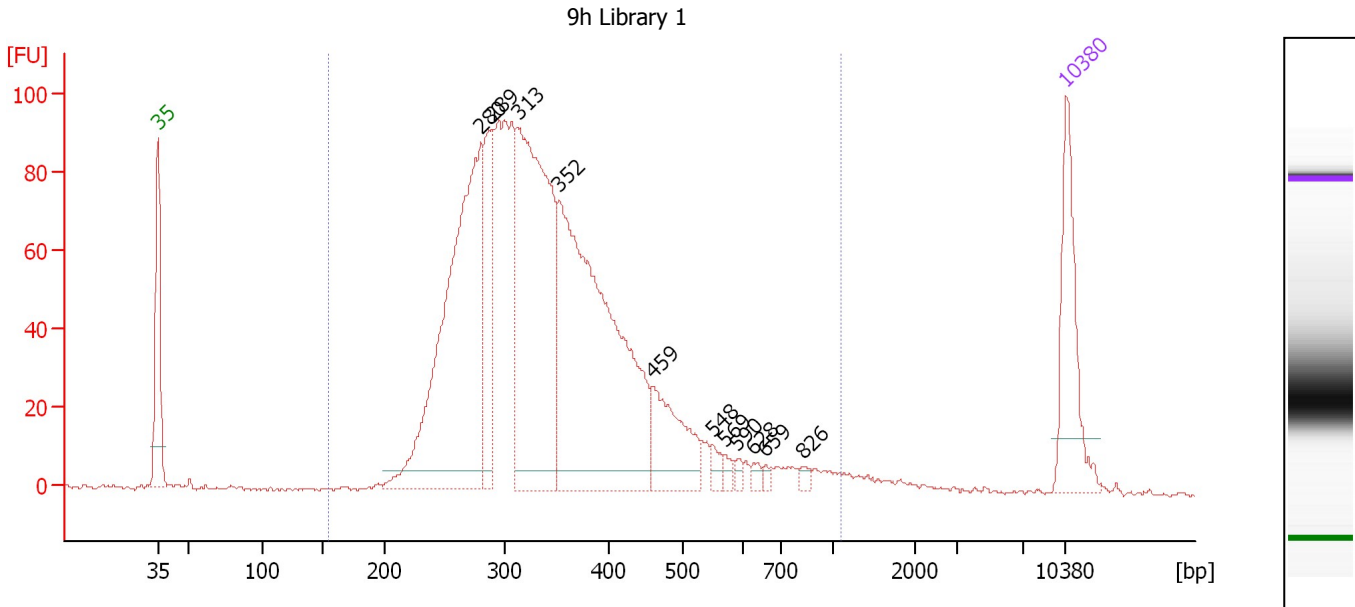
Region table for sample 3 : 5h Library 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
166	1,161	359	7,841.9	1,675.15	1,570.8	98	32.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
 Modified: 7/1/2013 4:46:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 9h Library 1

Number of peaks found: 11 Corr. Area 1: 1,829.6
 Noise: 0.6

Peak table for sample 4 : 9h Library 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	280	459.26	2,486.6	
3	289	119.54	627.2	
4	313	400.33	1,940.6	
5	352	485.85	2,091.4	
6	459	86.07	284.2	
7	548	8.87	24.5	
8	569	6.58	17.5	
9	590	4.88	12.5	
10	628	5.96	14.4	
11	659	3.76	8.7	
12	826	4.44	8.2	
13	10,380	75.00	10.9	Upper Marker

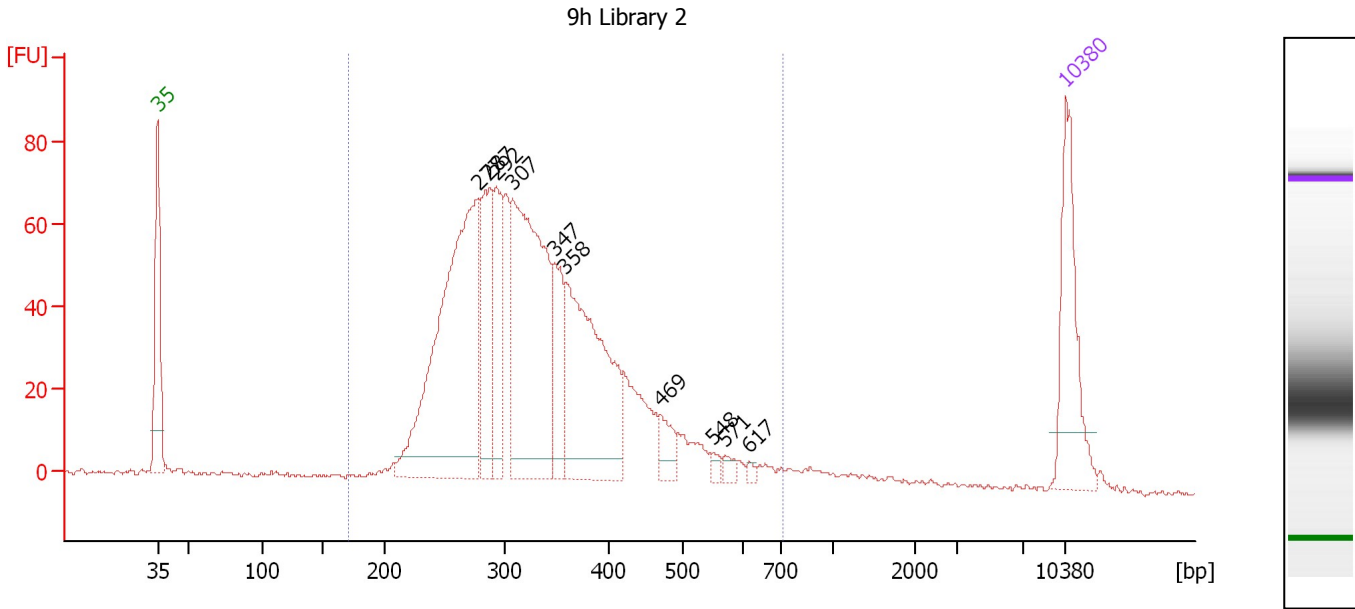
Region table for sample 4 : 9h Library 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
155	1,085	356	8,769.9	1,876.87	1,829.6	97	31.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
 Modified: 7/1/2013 4:46:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 9h Library 2

Number of peaks found: 10 Corr. Area 1: 1,348.2
 Noise: 0.4

Peak table for sample 5 : 9h Library 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	277	382.50	2,089.3	
3	287	109.82	579.8	
4	292	76.34	395.7	
5	307	293.01	1,445.5	
6	347	66.33	289.6	
7	358	218.31	923.7	
8	469	23.21	75.0	
9	548	6.24	17.2	
10	571	6.20	16.5	
11	617	3.49	8.6	
12	10,380	75.00	10.9	Upper Marker

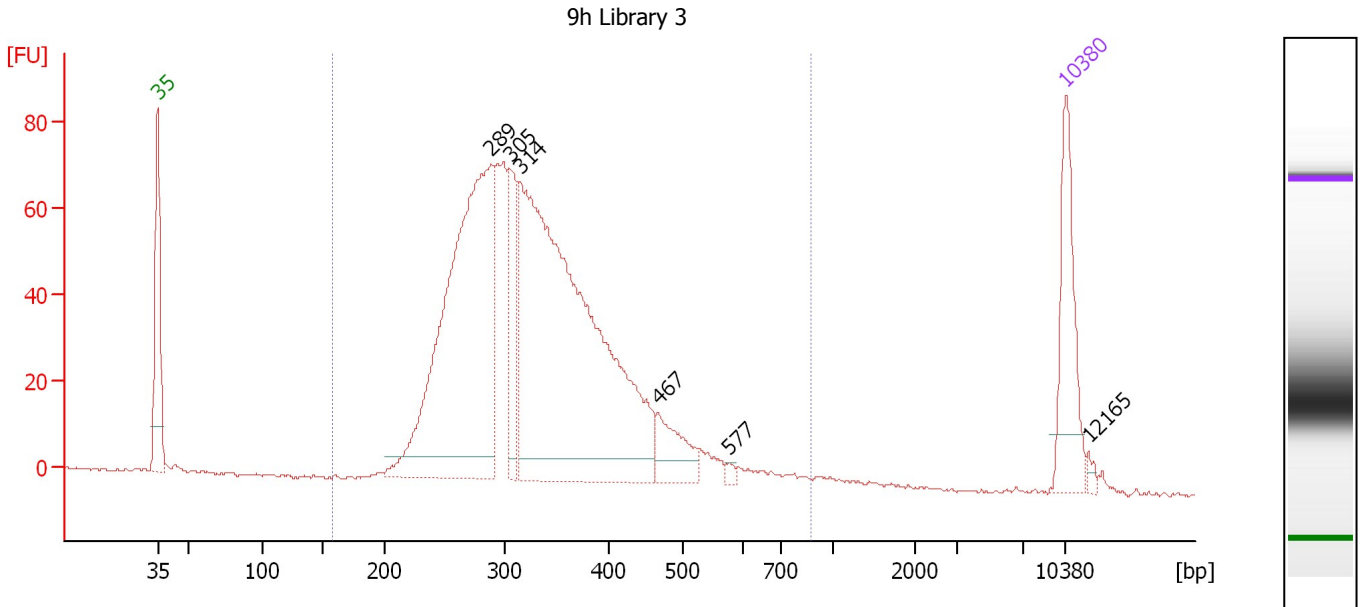
Region table for sample 5 : 9h Library 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
170	708	338	6,805.7	1,411.77	1,348.2	95	25.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
 Modified: 7/1/2013 4:46:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 9h Library 3

Number of peaks found: 6 Corr. Area 1: 1,316.8
 Noise: 0.4

Peak table for sample 6 : 9h Library 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	289	555.38	2,913.9	
3	305	79.65	396.3	
4	314	737.31	3,552.2	
5	467	50.07	162.6	
6	577	4.21	11.1	
7	10,380	75.00	10.9	Upper Marker
8	12,165	0.00	0.0	

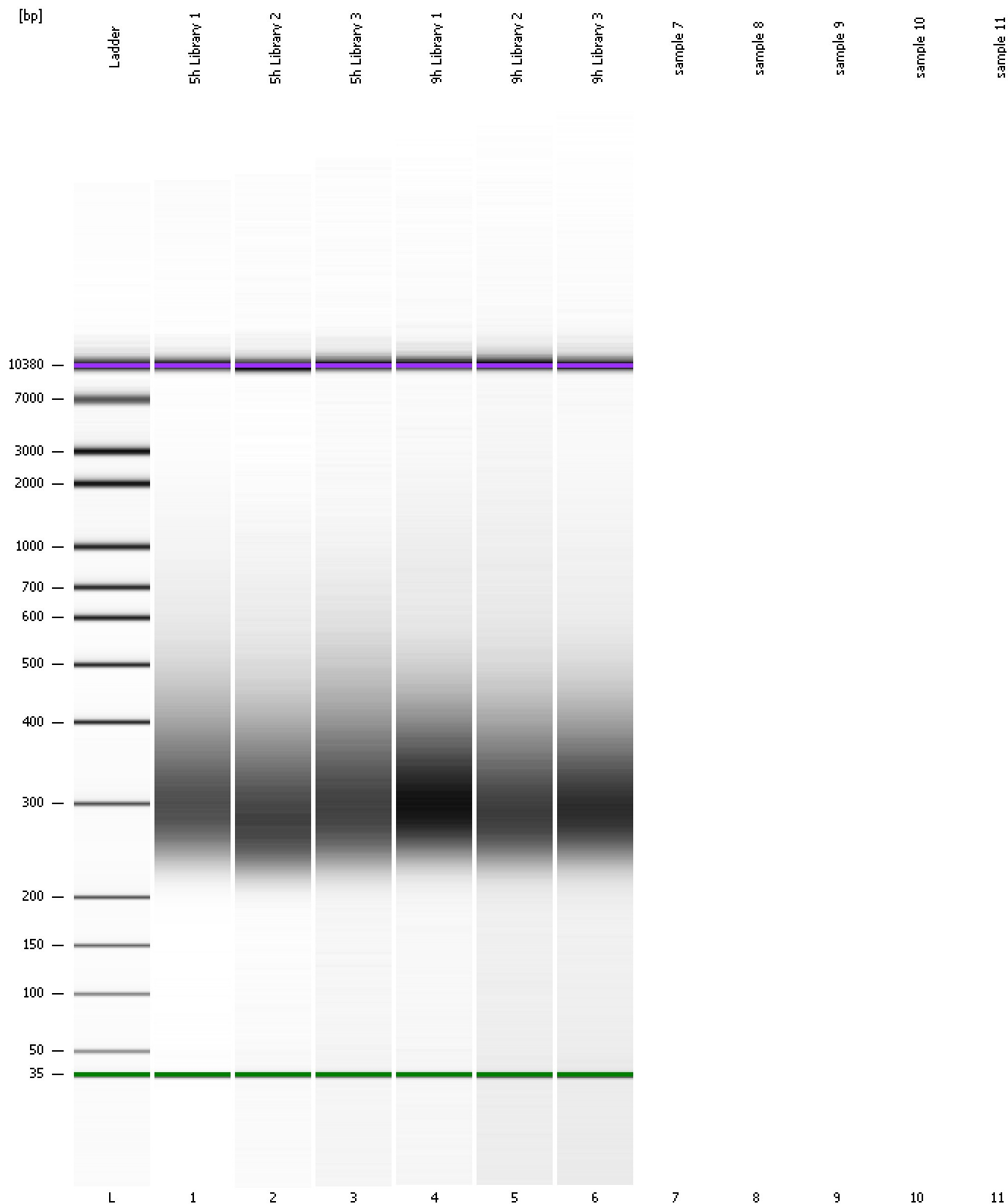
Region table for sample 6 : 9h Library 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
157	866	337	7,518.0	1,565.80	1,316.8	98	24.8	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
Modified: 7/1/2013 4:46:45 PM

Gel Image

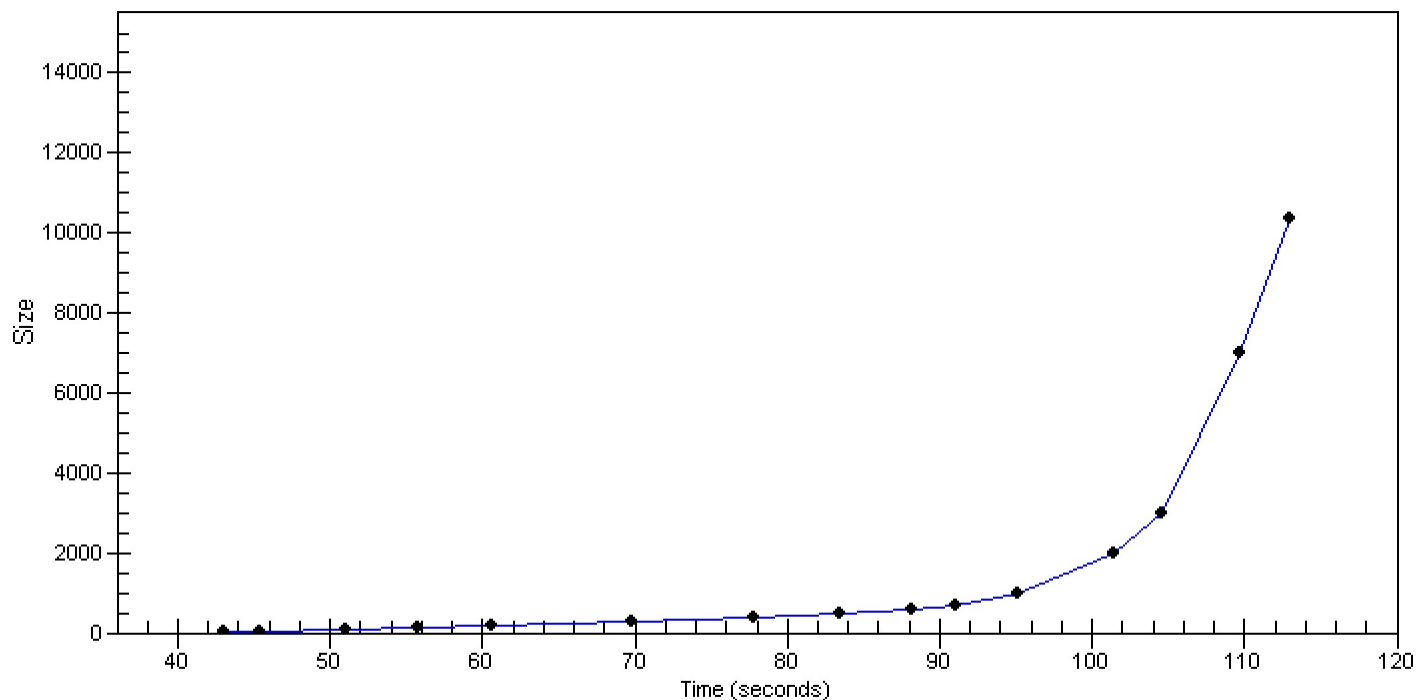


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
Modified: 7/1/2013 4:46:45 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
Modified: 7/1/2013 4:46:45 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\2013-07-01\2013-07-01_002.xad

Created: 7/1/2013 4:19:07 PM
 Modified: 7/1/2013 4:46:45 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		7/1/2013 4:46:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-01\2013-07-01_002.xad)		Instrument	Run		7/1/2013 4:19:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/1/2013 4:19:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/1/2013 4:19:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/1/2013 4:19:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/1/2013 4:19:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/1/2013 4:19:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/1/2013 4:19:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1