

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
Modified: 4/16/2015 2:15:55 PM

**Electrophoresis File Run Summary**

Instrument Information:

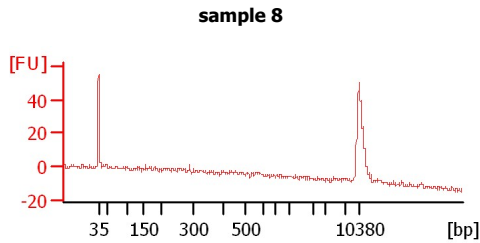
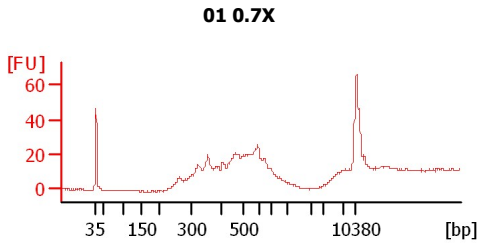
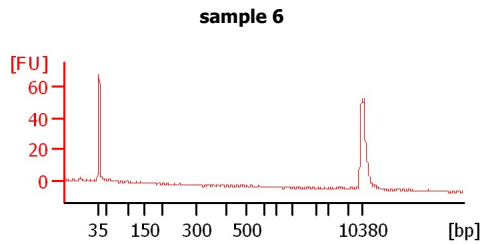
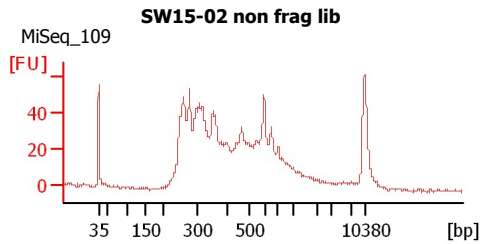
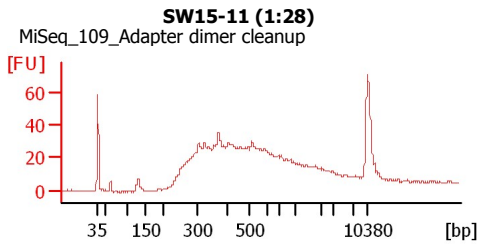
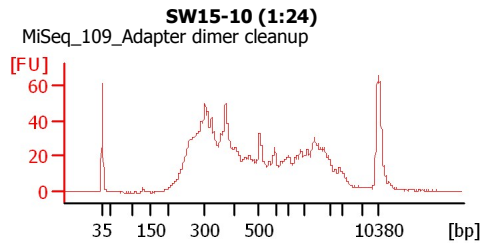
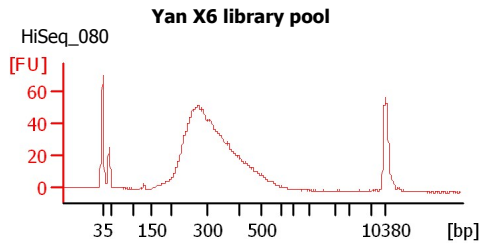
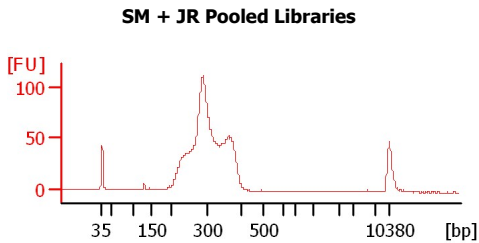
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
Modified: 4/16/2015 2:15:55 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
SM + JR Pooled Libraries		<input type="checkbox"/>	✓			
Yan X6 library pool	HiSeq_080	<input type="checkbox"/>	✓			
SW15-10 (1:24)	MiSeq_109_Adapter dimer cleanup	<input type="checkbox"/>	✓			
SW15-11 (1:28)	MiSeq_109_Adapter dimer cleanup	<input type="checkbox"/>	✓			
SW15-02 non frag lib	MiSeq_109	<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>	✓			
01 0.7X		<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\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
Modified: 4/16/2015 2:15:55 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

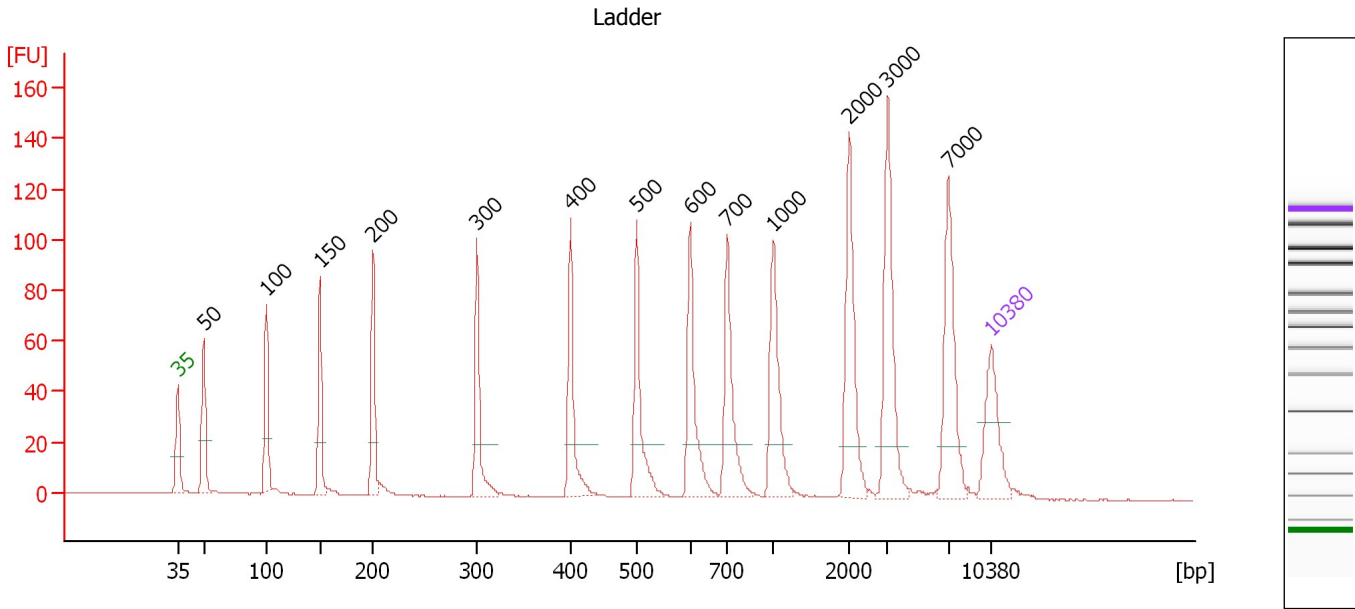
**Ladder**

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\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

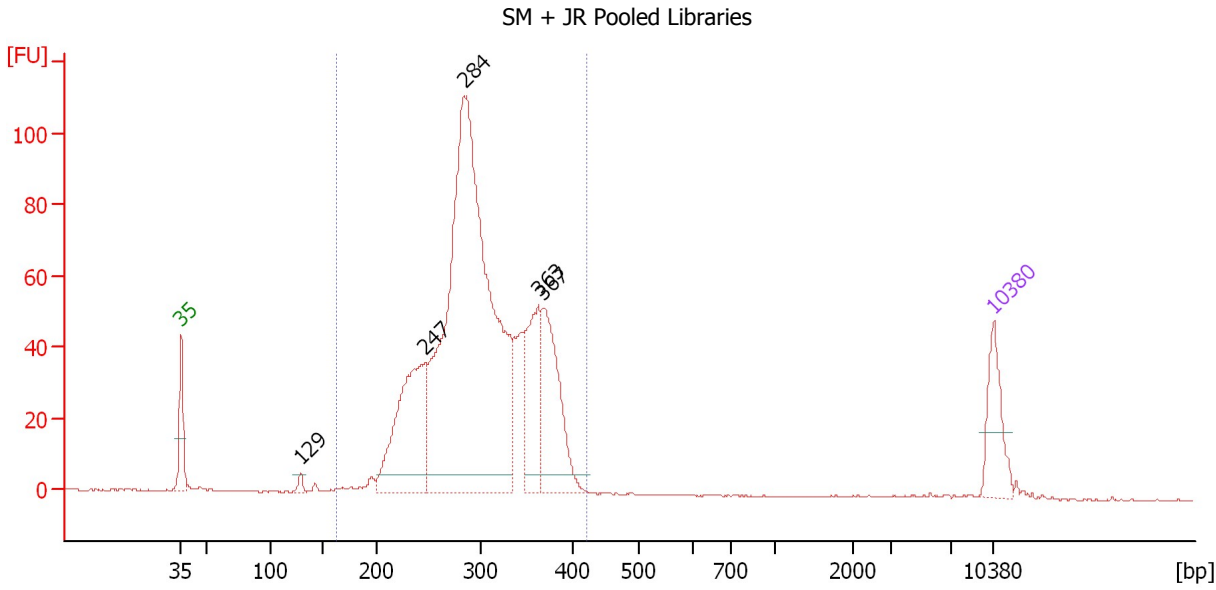
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.20
3	100	150.00	2,272.7	Ladder Peak	50.62
4	150	150.00	1,515.2	Ladder Peak	55.21
5	200	150.00	1,136.4	Ladder Peak	59.80
6	300	150.00	757.6	Ladder Peak	68.75
7	400	150.00	568.2	Ladder Peak	76.78
8	500	150.00	454.5	Ladder Peak	82.48
9	600	150.00	378.8	Ladder Peak	87.11
10	700	150.00	324.7	Ladder Peak	90.28
11	1,000	150.00	227.3	Ladder Peak	94.23
12	2,000	150.00	113.6	Ladder Peak	100.79
13	3,000	150.00	75.8	Ladder Peak	104.10
14	7,000	150.00	32.5	Ladder Peak	109.33
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : SM + JR Pooled Libraries**

Number of peaks found: 5                      Corr. Area 1: 1,227.4  
 Noise: 0.2

**Peak table for sample 1 : SM + JR Pooled Libraries**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	129	11.73	137.7		53.29
3	247	359.13	2,204.6		63.99
4	284	1,467.75	7,822.7		67.34
5	363	184.92	772.8		73.77
6	367	232.68	960.3		74.14
7	10,380	75.00	10.9	Upper Marker	113.00

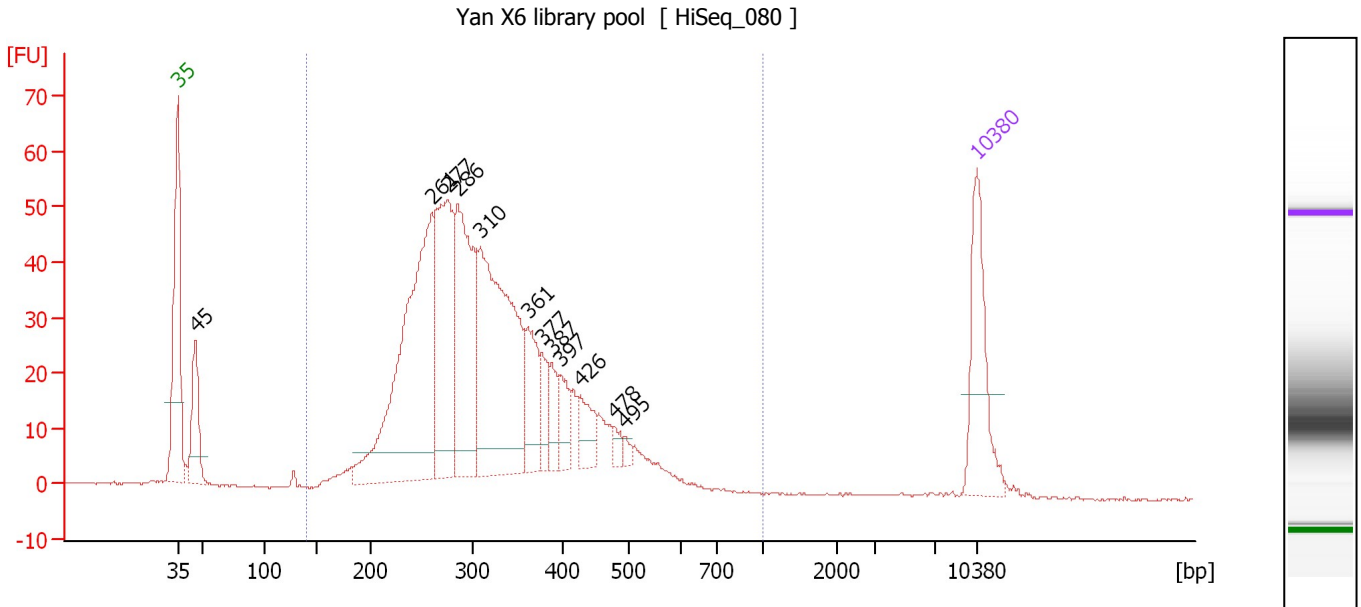
**Region table for sample 1 : SM + JR Pooled Libraries**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
162	301	421	1,227.4	12,408.5	97	15.6	2,394.60	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Yan X6 library pool**

Number of peaks found: 12                      Corr. Area 1: 1,046.9  
 Noise: 0.2

**Peak table for sample 2 : Yan X6 library pool**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	45	87.32	2,908.0		44.54
3	261	386.42	2,244.8		65.24
4	277	219.56	1,201.0		66.69
5	286	209.74	1,109.6		67.53
6	310	313.24	1,531.7		69.54
7	361	63.89	268.1		73.65
8	377	31.49	126.7		74.92
9	387	27.41	107.3		75.76
10	397	28.92	110.3		76.55
11	426	34.59	122.9		78.28
12	478	9.58	30.4		81.22
13	495	5.64	17.3		82.21
14	10,380	75.00	10.9	Upper Marker	113.00

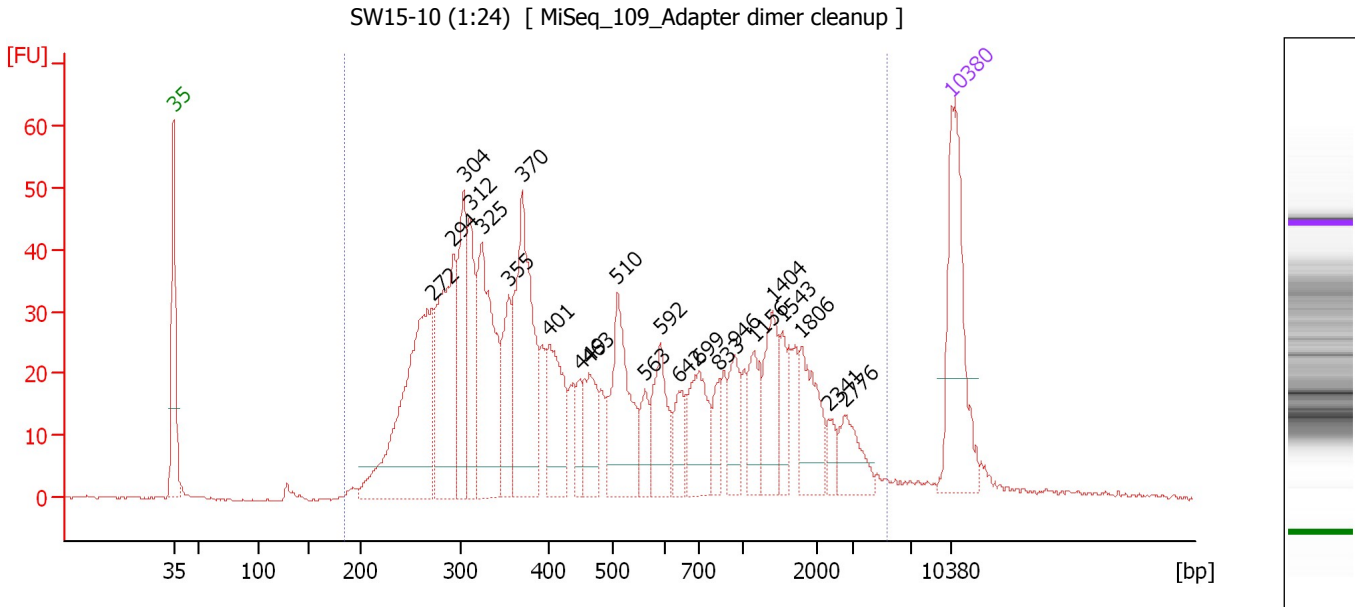
**Region table for sample 2 : Yan X6 library pool**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
139	324	1,000	1,046.9	8,005.2	95	26.2	1,575.61	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : SW15-10 (1:24)**

Number of peaks found: 23                      Corr. Area 1: 1,295.5  
 Noise: 0.2

**Peak table for sample 3 : SW15-10 (1:24)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	272	203.91	1,134.7		66.27
3	294	134.42	693.4		68.19
4	304	79.99	398.2		69.10
5	312	62.47	303.8		69.68
6	325	124.82	582.5		70.73
7	355	49.66	212.2		73.13
8	370	141.80	580.6		74.38
9	401	61.71	233.3		76.82
10	449	16.90	57.1		79.56
11	463	37.42	122.4		80.37
12	510	82.15	244.3		82.92
13	563	19.16	51.5		85.41
14	592	43.63	111.6		86.76
15	642	21.01	49.6		88.44
16	699	49.33	106.9		90.26
17	833	14.85	27.0		92.03
18	946	26.39	42.2		93.52
19	1,156	28.60	37.5		95.25
20	1,404	38.68	41.7		96.88
21	1,543	17.70	17.4		97.79
22	1,806	39.57	33.2		99.52
23	2,341	9.19	6.0		101.92
24	2,776	23.49	12.8		103.36
25	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**

... Region table for sample 3 : SW15-10 (1:24)

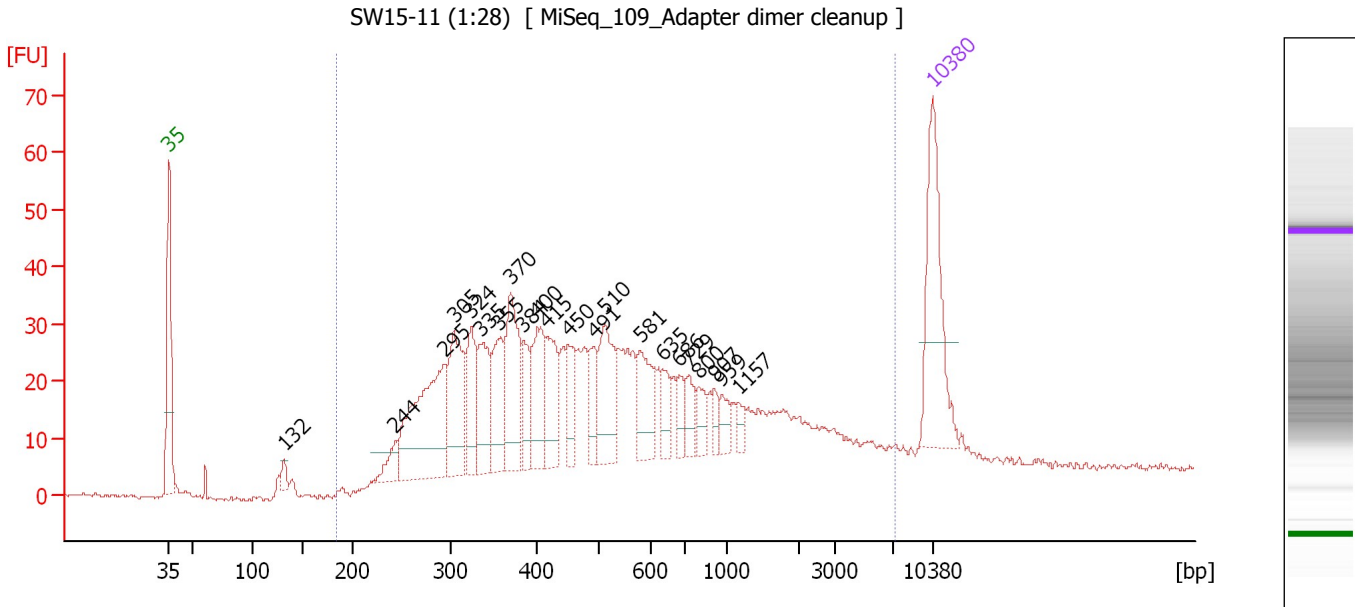
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
184	746	5,374	1,295.5	5,517.5	98	95.7	1,460.59	■



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : SW15-11 (1:28)**

Number of peaks found: 22                      Corr. Area 1: 1,019.1  
 Noise: 0.4

**Peak table for sample 4 : SW15-11 (1:28)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	132	9.24	106.1		53.56
3	244	18.13	112.4		63.78
4	295	142.05	730.4		68.27
5	305	79.54	395.1		69.15
6	324	51.20	239.1		70.72
7	335	53.48	242.0		71.55
8	355	52.14	222.6		73.16
9	370	75.77	310.7		74.33
10	384	26.56	104.8		75.51
11	400	52.51	198.9		76.78
12	415	47.23	172.3		77.66
13	450	28.52	96.1		79.61
14	491	26.63	82.2		81.96
15	510	57.94	172.1		82.94
16	581	44.46	116.0		86.21
17	635	16.13	38.5		88.22
18	686	14.01	30.9		89.83
19	729	16.47	34.2		90.66
20	800	13.76	26.1		91.59
21	907	8.27	13.8		93.01
22	959	11.58	18.3		93.69
23	1,157	6.68	8.7		95.26
24	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**

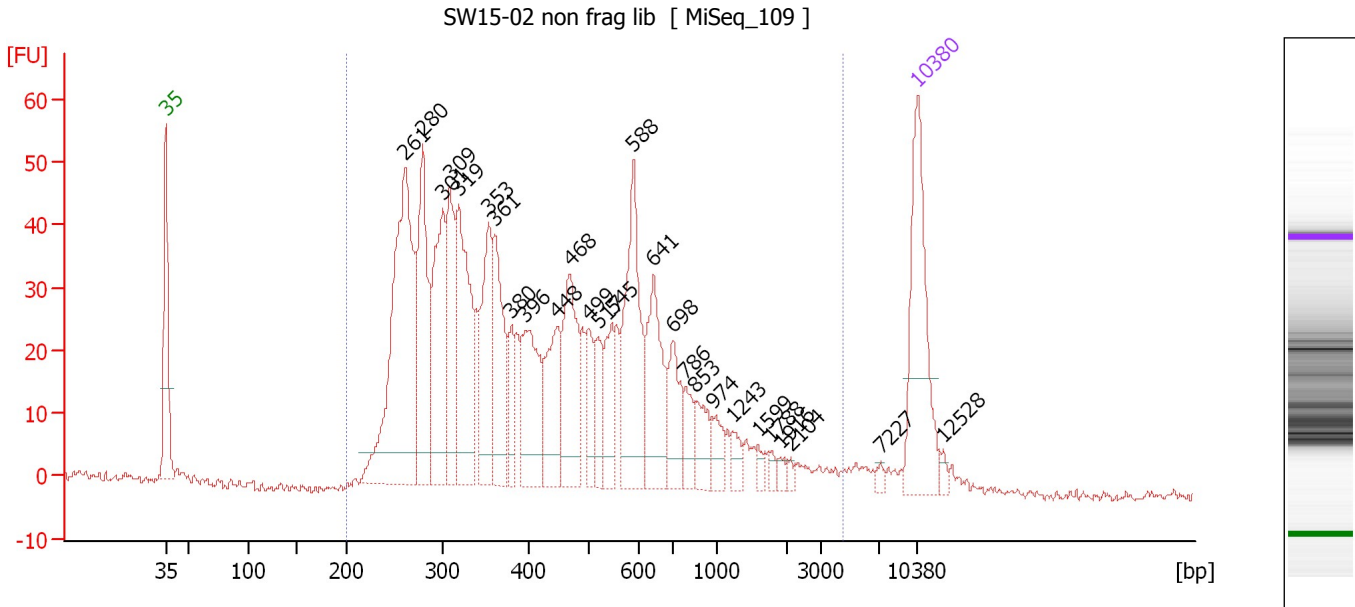
... Region table for sample 4 : SW15-11 (1:28)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
184	822	7,291	1,019.1	4,479.5	96	100.0	1,281.90	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : SW15-02 non frag lib**

Number of peaks found: 27                      Corr. Area 1: 1,243.4  
 Noise: 0.7

**Peak table for sample 5 : SW15-02 non frag lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	261	240.61	1,394.9		65.29
3	280	106.03	574.5		66.93
4	301	102.31	515.3		68.82
5	309	73.23	359.2		69.46
6	319	119.95	569.1		70.30
7	353	75.68	324.5		73.04
8	361	69.99	293.9		73.63
9	380	24.85	99.1		75.17
10	396	72.18	276.2		76.46
11	448	54.46	184.4		79.49
12	468	72.86	236.1		80.63
13	499	25.17	76.4		82.42
14	517	26.51	77.7		83.26
15	545	31.35	87.2		84.55
16	588	95.27	245.6		86.54
17	641	62.47	147.5		88.43
18	698	35.08	76.1		90.21
19	786	17.25	33.3		91.40
20	853	22.02	39.1		92.30
21	974	14.73	22.9		93.89
22	1,243	9.01	11.0		95.82
23	1,599	4.65	4.4		98.16
24	1,788	4.01	3.4		99.40
25	1,916	3.88	3.1		100.24

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad


Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 5 : SW15-02 non frag lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,104	2.51	1.8		101.13
27	7,227	2.94	0.6		109.57
28	10,380	75.00	10.9	Upper Marker	113.00
29	12,528	0.00	0.0		115.33

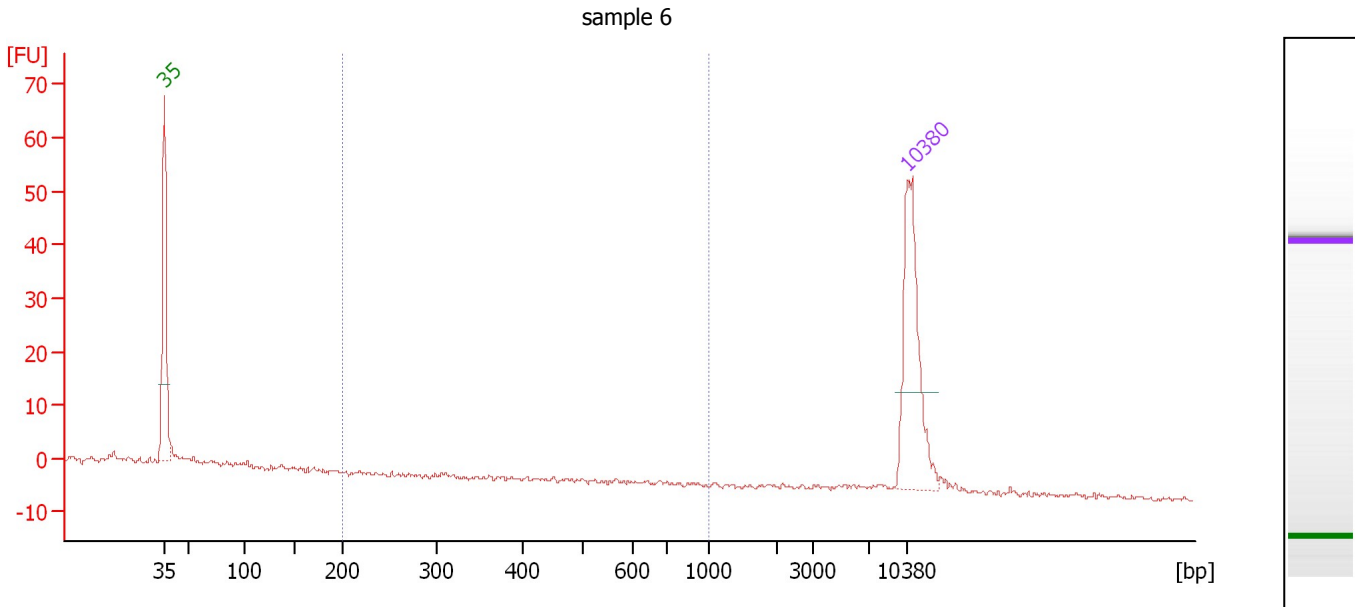
**Region table for sample 5 : SW15-02 non frag lib**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	525	4,454	1,243.4	5,816.0	98	81.2	1,440.74	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 6**

Number of peaks found: 0                      Corr. Area 1: 0.0  
 Noise: 0.5

**Peak table for sample 6 : sample 6**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

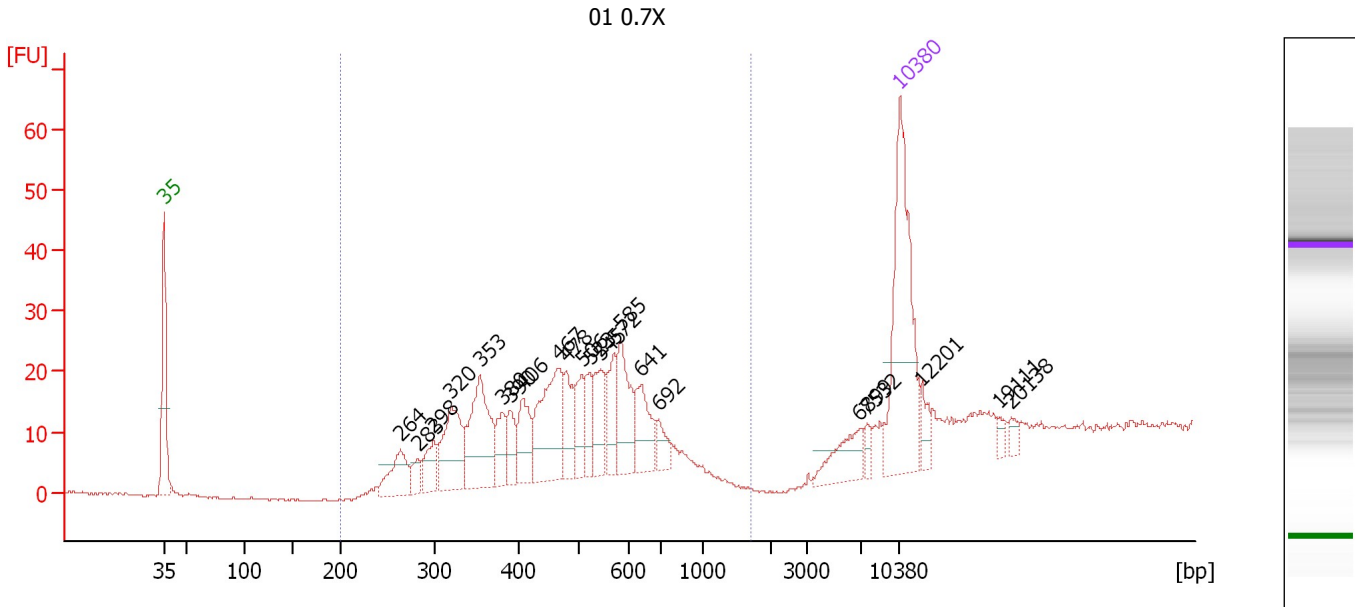
**Region table for sample 6 : sample 6**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	0	1,000	0.0	0.0	0	0.0	0.00	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 01 0.7X**

Number of peaks found: 22                      Corr. Area 1: 327.1  
 Noise: 0.2

**Peak table for sample 7 : 01 0.7X**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	264	26.79	153.8		65.52
3	283	8.74	46.9		67.20
4	298	16.96	86.1		68.62
5	320	45.61	216.1		70.34
6	353	59.25	254.1		73.03
7	380	16.42	65.4		75.21
8	390	15.25	59.3		75.97
9	406	23.76	88.6		77.14
10	467	58.77	190.7		80.59
11	478	22.54	71.4		81.25
12	506	18.63	55.8		82.77
13	523	14.76	42.8		83.53
14	545	22.79	63.4		84.54
15	572	18.30	48.5		85.81
16	585	32.76	84.8		86.42
17	641	23.62	55.9		88.40
18	692	10.18	22.3		90.02
19	6,899	19.51	4.3		109.20
20	7,532	4.16	0.8		109.91
21	10,380	75.00	10.9	Upper Marker	113.00
22	12,201	0.00	0.0		114.98
23	19,111	0.00	0.0		122.49
24	20,138	0.00	0.0		123.60

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**

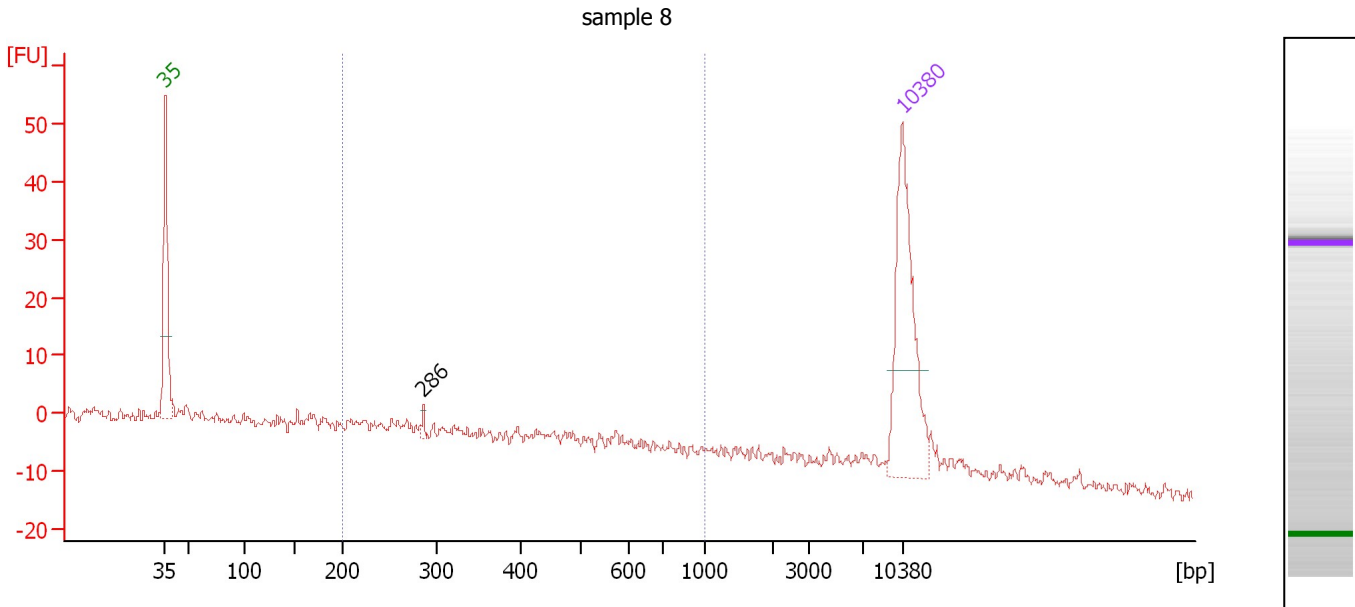
... Region table for sample 7 : 01 0.7X

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	475	1,688	327.1	1,190.6	84	24.1	341.15	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 8**

Number of peaks found: 1                      Corr. Area 1: 75.9  
 Noise: 1.3

**Peak table for sample 8 : sample 8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	286	3.73	19.7		67.52
3	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 8 : sample 8**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	436	1,000	75.9	359.7	47	41.4	82.52	Blue



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
Modified: 4/16/2015 2:15:55 PM

**Gel Image**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
Modified: 4/16/2015 2:15:55 PM

**Invalid Samples**

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\2015-04-16\2015-04-16\_001.xad

Created: 4/16/2015 1:43:06 PM  
 Modified: 4/16/2015 2:15:55 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		4/16/2015 2:15:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-16\2015-04-16_001.xad)		Instrument	Run		4/16/2015 1:43:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/16/2015 1:43:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/16/2015 1:43:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/16/2015 1:43:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/16/2015 1:43:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/16/2015 1:43:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/16/2015 1:43:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1