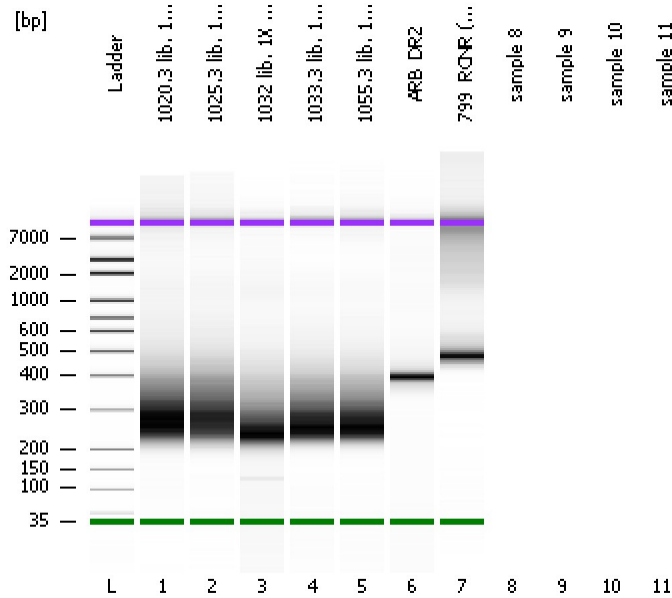


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
Modified: 11/16/2014 4:11:53 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

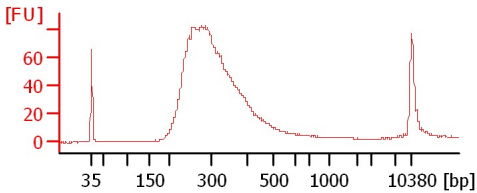
Assay Information:

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

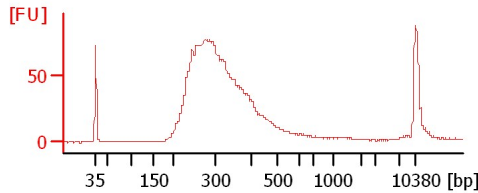
Chip Information:

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

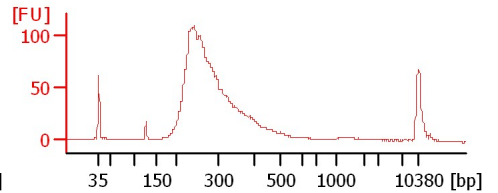
1020.3 lib. 1X cleanup (1:6)



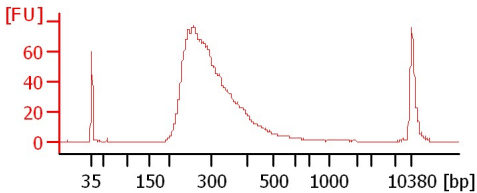
1025.3 lib. 1X cleanup (1:5)



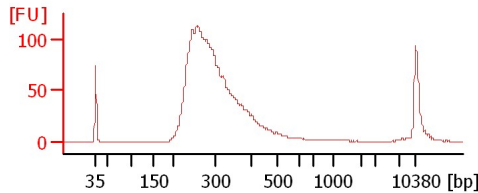
1032 lib. 1X cleanup



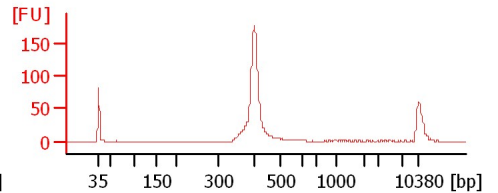
1033.3 lib. 1X cleanup (1:3)



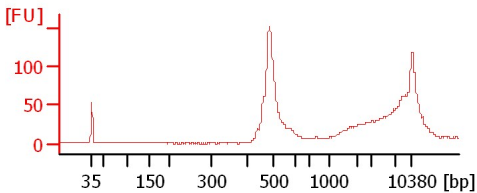
1055.3 lib. 1X cleanup (1:3)



ARB\_DR2



799\_RCNR (1:3)



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
Modified: 11/16/2014 4:11:53 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1020.3 lib. 1X cleanup (1:6)		<input type="checkbox"/>	✓			
1025.3 lib. 1X cleanup (1:5)		<input type="checkbox"/>	✓			
1032 lib. 1X cleanup		<input type="checkbox"/>	✓			
1033.3 lib. 1X cleanup (1:3)		<input type="checkbox"/>	✓			
1055.3 lib. 1X cleanup (1:3)		<input type="checkbox"/>	✓			
ARB_DR2		<input type="checkbox"/>	✓			
799_RCNR (1:3)		<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\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
Modified: 11/16/2014 4:11:53 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

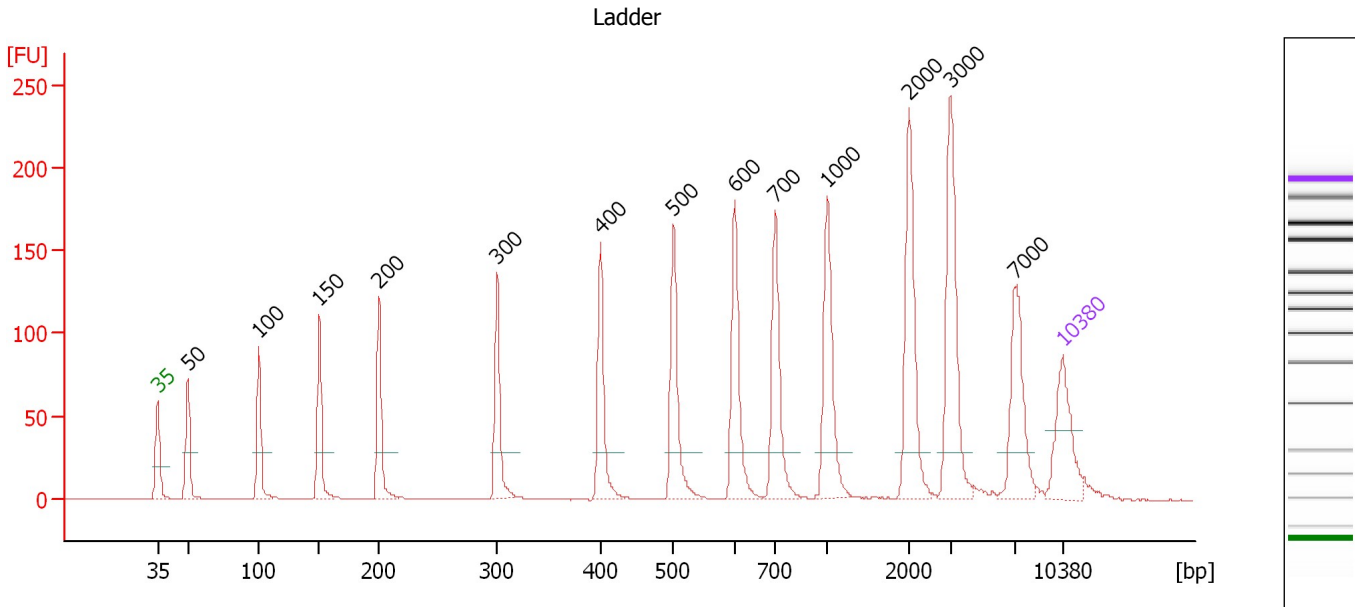
**Ladder**

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\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
 Modified: 11/16/2014 4:11:53 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

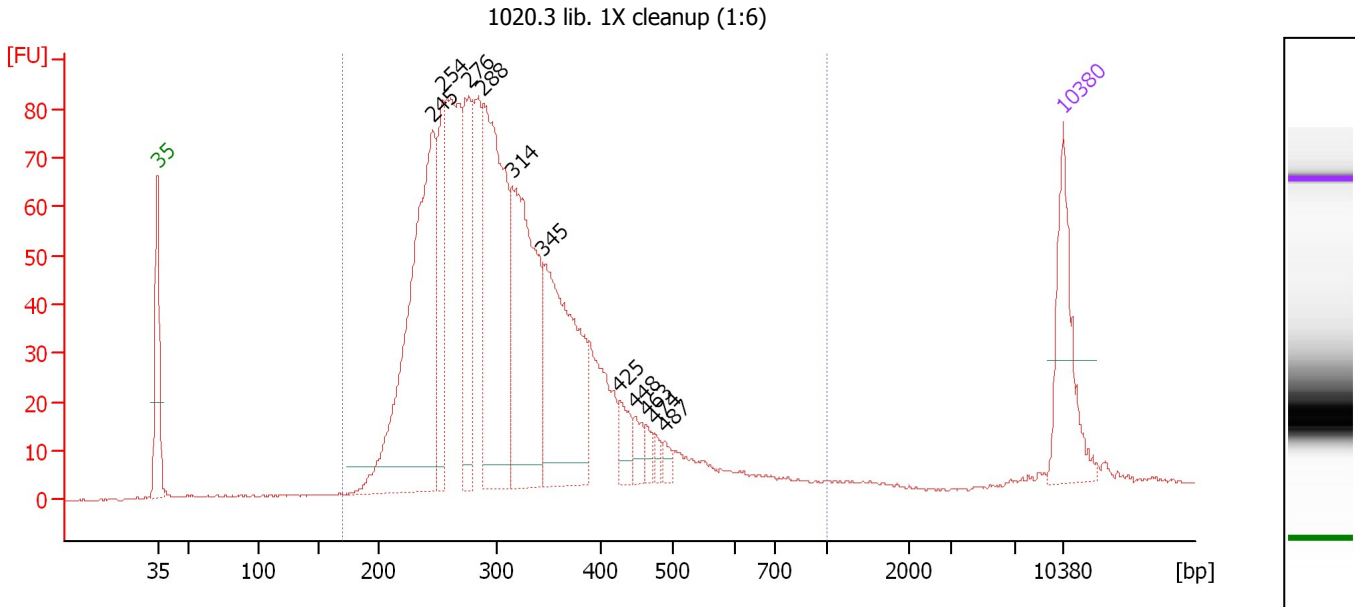
**Peak table for Ladder**

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\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
 Modified: 11/16/2014 4:11:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 1020.3 lib. 1X cleanup (1:6)**

Number of peaks found: 11      Corr. Area 1: 1,578.7  
 Noise: 0.2

**Peak table for sample 1 : 1020.3 lib. 1X cleanup (1:6)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	245	418.12	2,585.2	
3	254	107.42	640.3	
4	276	127.96	703.0	
5	288	311.19	1,635.8	
6	314	271.03	1,307.7	
7	345	233.93	1,027.8	
8	425	26.75	95.3	
9	448	17.31	58.6	
10	463	9.69	31.7	
11	474	8.05	25.7	
12	487	8.85	27.5	
13	10,380	75.00	10.9	Upper Marker

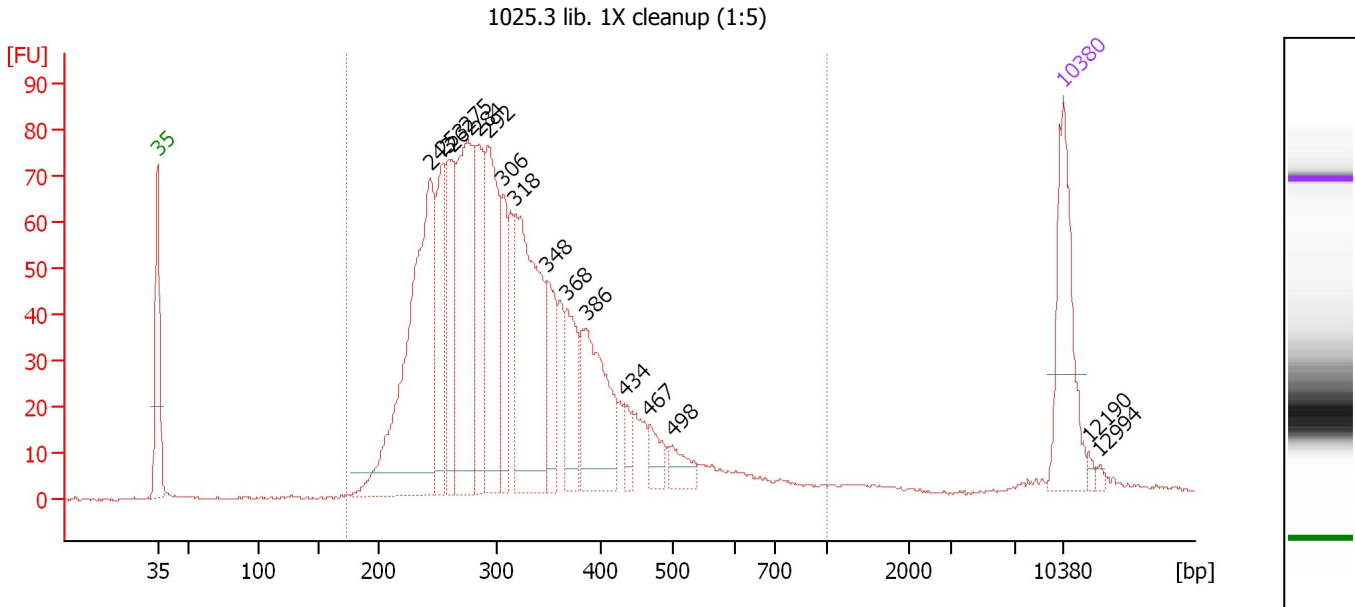
**Region table for sample 1 : 1020.3 lib. 1X cleanup (1:6)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
169	318	1,000	1,578.7	98	28.3	2,109.40	10,860.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
 Modified: 11/16/2014 4:11:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 1025.3 lib. 1X cleanup (1:5)**

Number of peaks found: 16                      Corr. Area 1: 1,548.8  
 Noise: 0.2

**Peak table for sample 2 : 1025.3 lib. 1X cleanup (1:5)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	243	328.62	2,047.3	
3	253	94.24	564.6	
4	262	102.41	593.1	
5	275	198.89	1,096.9	
6	284	100.80	537.9	
7	292	147.55	765.1	
8	306	60.92	301.6	
9	318	205.02	977.7	
10	348	56.09	244.0	
11	368	60.19	248.0	
12	386	115.67	453.9	
13	434	13.57	47.4	
14	467	19.92	64.6	
15	498	19.28	58.7	
16	10,380	75.00	10.9	Upper Marker
17	12,190	0.00	0.0	
18	12,994	0.00	0.0	

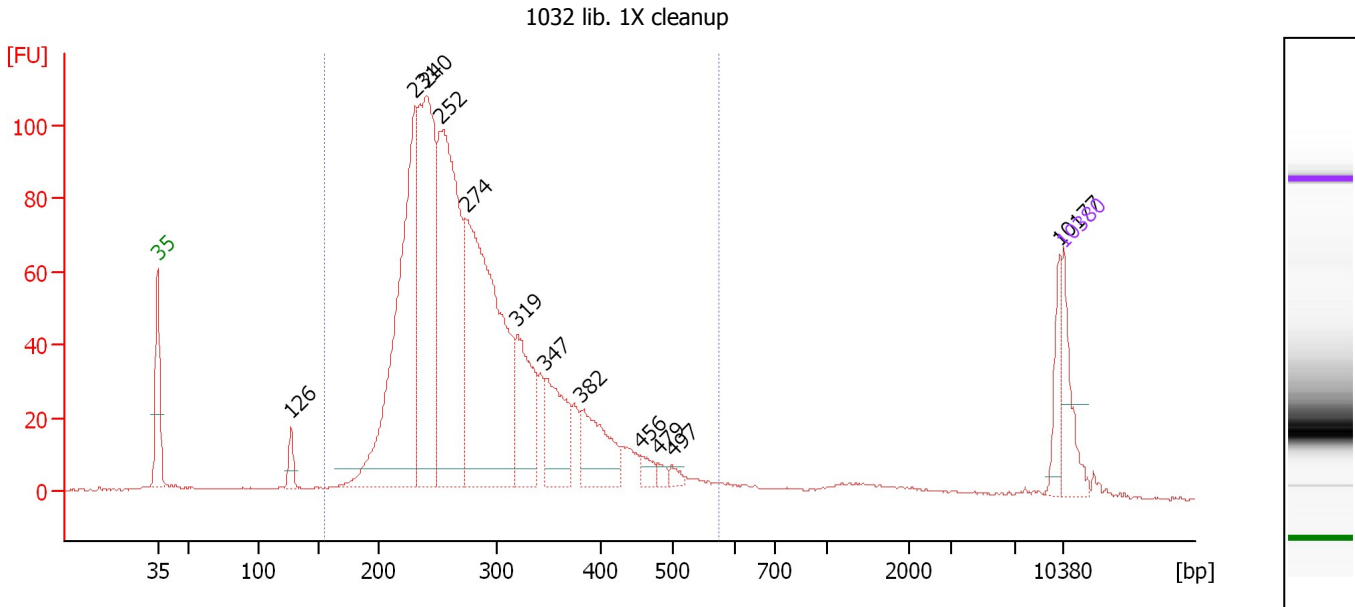
**Region table for sample 2 : 1025.3 lib. 1X cleanup (1:5)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
173	325	1,000	1,548.8	98	29.4	1,749.65	8,897.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
 Modified: 11/16/2014 4:11:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 1032 lib. 1X cleanup**

Number of peaks found: 12                      Corr. Area 1: 1,634.5  
 Noise: 0.2

**Peak table for sample 3 : 1032 lib. 1X cleanup**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	126	36.89	442.3	
3	231	706.06	4,641.0	
4	240	612.08	3,859.1	
5	252	666.87	4,008.2	
6	274	756.18	4,179.2	
7	319	191.41	908.3	
8	347	158.12	690.8	
9	382	132.52	526.1	
10	456	20.75	68.9	
11	479	11.93	37.8	
12	497	11.85	36.1	
13	10,177	42.67	6.4	
14	10,380	75.00	10.9	Upper Marker

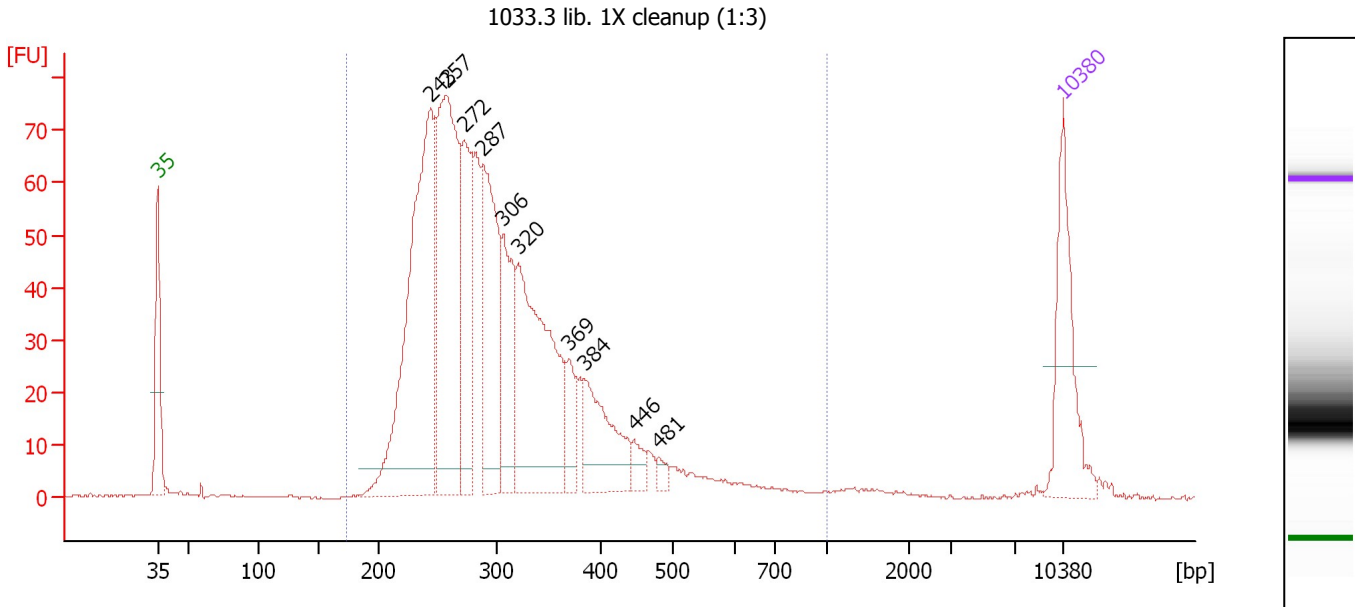
**Region table for sample 3 : 1032 lib. 1X cleanup**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
154	289	575	1,634.5	90	24.4	3,631.47	20,313.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
 Modified: 11/16/2014 4:11:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 1033.3 lib. 1X cleanup (1:3)**

Number of peaks found: 10                      Corr. Area 1: 1,270.4  
 Noise: 0.2

**Peak table for sample 4 : 1033.3 lib. 1X cleanup (1:3)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	243	380.74	2,374.2	
3	257	306.39	1,806.6	
4	272	121.97	678.3	
5	287	170.27	897.6	
6	306	98.17	486.7	
7	320	241.49	1,141.7	
8	369	33.11	135.9	
9	384	87.47	345.1	
10	446	14.06	47.8	
11	481	7.90	24.9	
12	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : 1033.3 lib. 1X cleanup (1:3)**

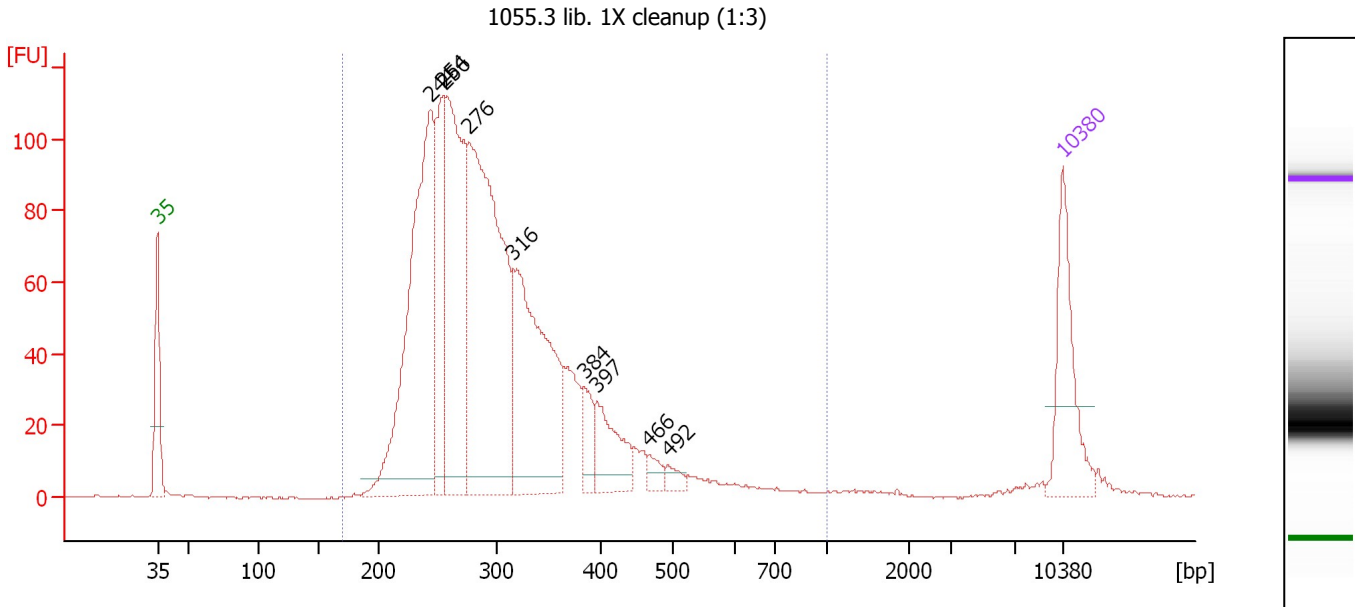
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
173	311	1,000	1,270.4	96	29.1	1,695.90	8,916.5	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
 Modified: 11/16/2014 4:11:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 1055.3 lib. 1X cleanup (1:3)**

Number of peaks found: 9                      Corr. Area 1: 1,804.1  
 Noise: 0.2

**Peak table for sample 5 : 1055.3 lib. 1X cleanup (1:3)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	244	430.86	2,680.5	
3	254	129.85	775.7	
4	256	321.38	1,904.7	
5	276	467.77	2,564.6	
6	316	278.92	1,338.5	
7	384	30.75	121.3	
8	397	65.03	248.3	
9	466	13.15	42.7	
10	492	10.35	31.9	
11	10,380	75.00	10.9	Upper Marker

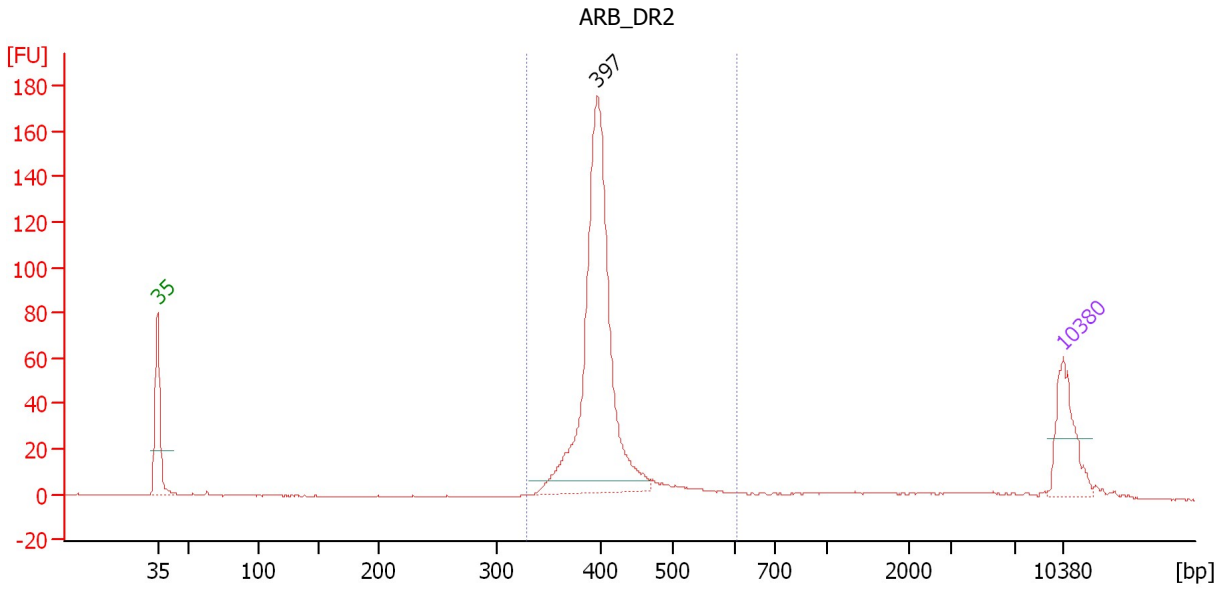
**Region table for sample 5 : 1055.3 lib. 1X cleanup (1:3)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
169	309	1,000	1,804.1	97	28.5	1,879.15	9,911.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
 Modified: 11/16/2014 4:11:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : ARB\_DR2**

Number of peaks found: 1                      Corr. Area 1: 561.7  
 Noise: 0.1

**Peak table for sample 6 : ARB\_DR2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	397	602.59	2,297.8	
3	10,380	75.00	10.9	Upper Marker

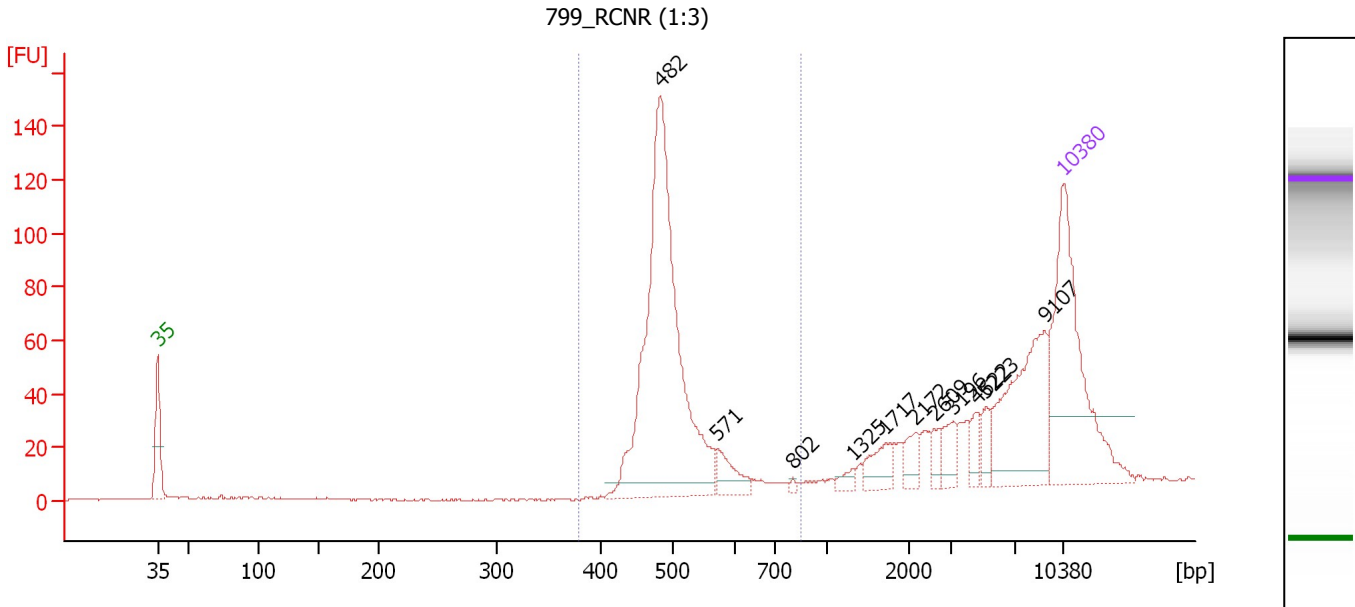
**Region table for sample 6 : ARB\_DR2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
328	407	604	561.7	88	9.2	672.61	2,524.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
 Modified: 11/16/2014 4:11:53 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 799 RCNR (1:3)**

Number of peaks found: 11      Corr. Area 1: 500.1  
 Noise: 0.4

**Peak table for sample 7 : 799 RCNR (1:3)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	482	223.41	702.7	
3	571	13.97	37.1	
4	802	1.28	2.4	
5	1,325	3.51	4.0	
6	1,717	11.92	10.5	
7	2,172	8.31	5.8	
8	2,609	5.58	3.2	
9	3,196	9.38	4.4	
10	4,622	6.69	2.2	
11	5,223	6.73	2.0	
12	9,107	55.91	9.3	
13	10,380	75.00	10.9	Upper Marker

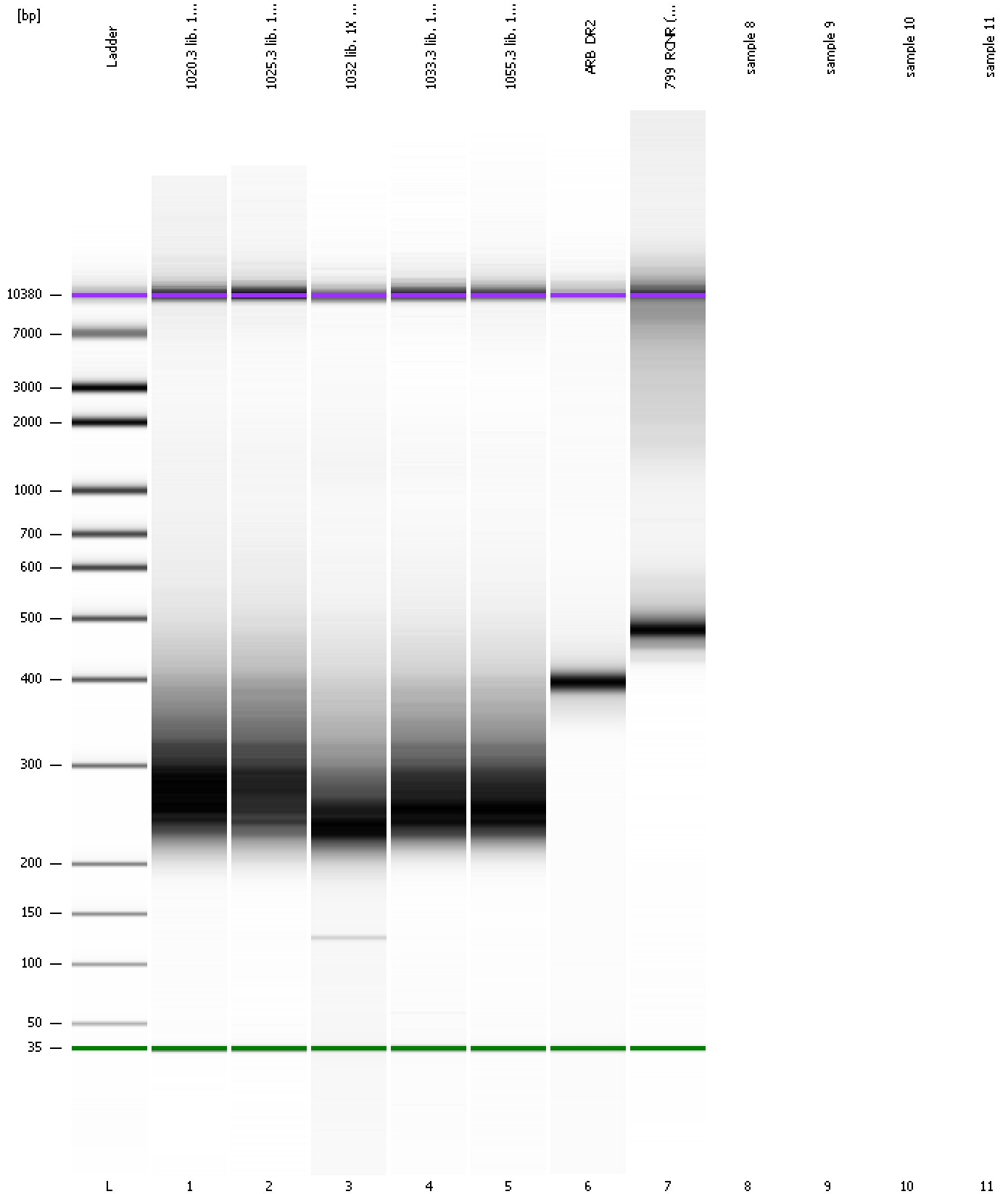
**Region table for sample 7 : 799 RCNR (1:3)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
380	495	849	500.1	59	8.0	216.95	668.5	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
Modified: 11/16/2014 4:11:53 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
Modified: 11/16/2014 4:11:53 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\2014-11-16\2014-11-16\_001.xad

Created: 11/16/2014 3:40:46 PM  
 Modified: 11/16/2014 4:11:53 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		11/16/2014 4:10:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-11-16\2014-11-16_001.xad)		Instrument	Run		11/16/2014 3:40:52 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/16/2014 3:40:52 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/16/2014 3:40:52 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/16/2014 3:40:52 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/16/2014 3:40:52 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/16/2014 3:40:52 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/16/2014 3:40:52 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1