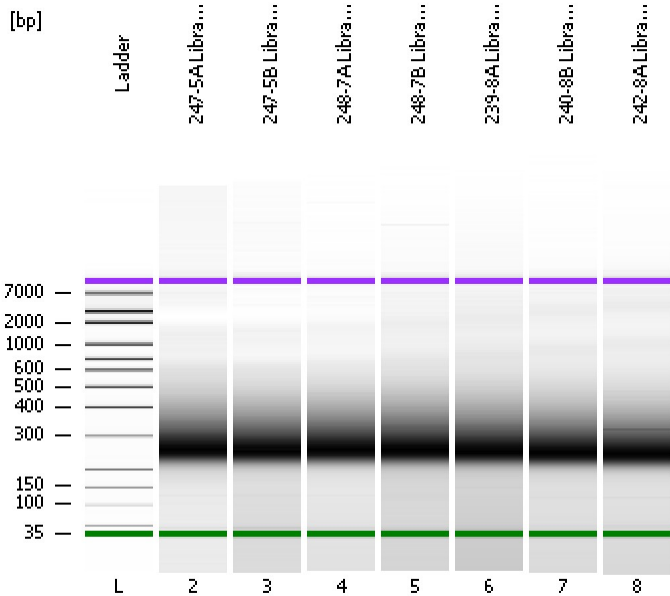


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
Modified: 8/8/2016 1:16:24 PM

**Electrophoresis File Run Summary**



Instrument Information:

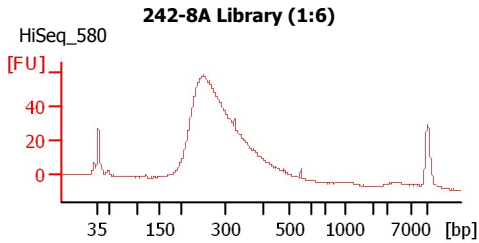
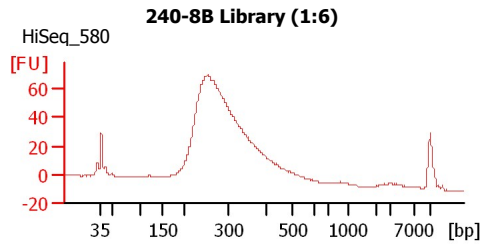
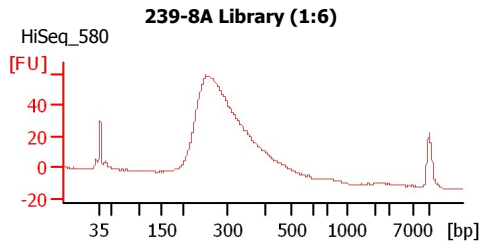
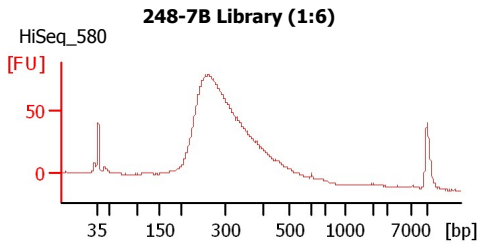
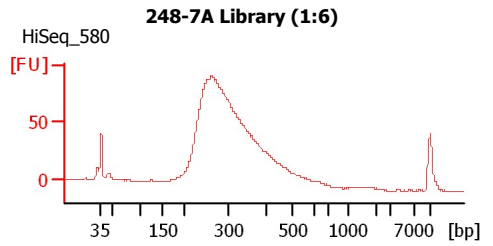
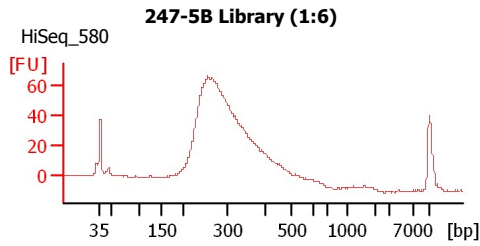
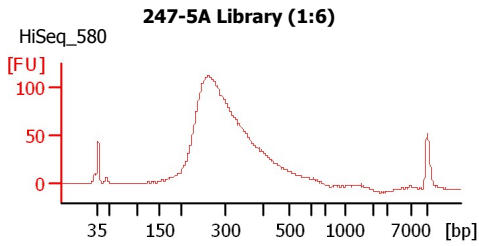
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
 Modified: 8/8/2016 1:16:24 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
247-5A Library (1:6)	HiSeq_580	<input type="checkbox"/>	✓			
247-5B Library (1:6)	HiSeq_580	<input type="checkbox"/>	✓			
248-7A Library (1:6)	HiSeq_580	<input type="checkbox"/>	✓			
248-7B Library (1:6)	HiSeq_580	<input type="checkbox"/>	✓			
239-8A Library (1:6)	HiSeq_580	<input type="checkbox"/>	✓			
240-8B Library (1:6)	HiSeq_580	<input type="checkbox"/>	✓			
242-8A Library (1:6)	HiSeq_580	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
Modified: 8/8/2016 1:16:24 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

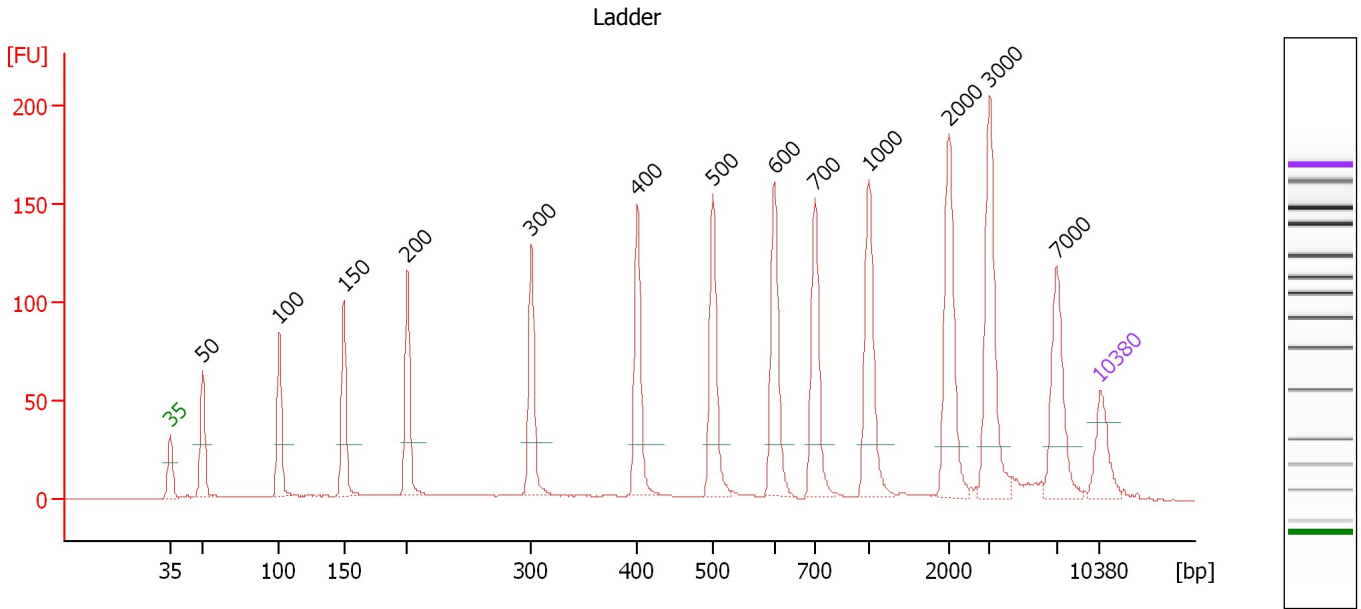
**Ladder**

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:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
 Modified: 8/8/2016 1:16:24 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

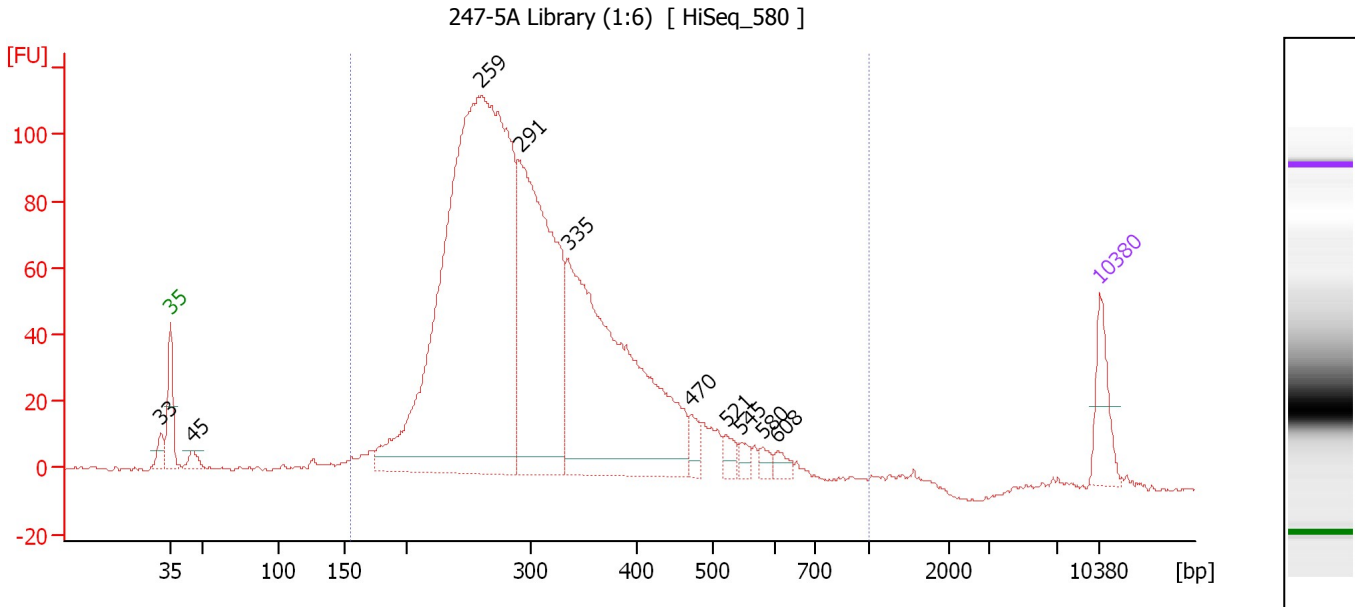
**Peak table for Ladder**

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	45.39
3	100	150.00	2,272.7	Ladder Peak	51.18
4	150	150.00	1,515.2	Ladder Peak	56.06
5	200	150.00	1,136.4	Ladder Peak	60.85
6	300	150.00	757.6	Ladder Peak	70.17
7	400	150.00	568.2	Ladder Peak	78.15
8	500	150.00	454.5	Ladder Peak	83.83
9	600	150.00	378.8	Ladder Peak	88.47
10	700	150.00	324.7	Ladder Peak	91.51
11	1,000	150.00	227.3	Ladder Peak	95.60
12	2,000	150.00	113.6	Ladder Peak	101.63
13	3,000	150.00	75.8	Ladder Peak	104.67
14	7,000	150.00	32.5	Ladder Peak	109.71
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
 Modified: 8/8/2016 1:16:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 247-5A Library (1:6)**

Number of peaks found: 10                      Corr. Area 1: 2,045.3  
 Noise: 0.4

**Peak table for sample 2 : 247-5A Library (1:6)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.29
2	35	125.00	5,411.3	Lower Marker	43.00
3	45	27.23	907.6		44.67
4	259	2,341.60	13,688.6		66.37
5	291	907.73	4,732.0		69.30
6	335	1,035.38	4,686.8		72.94
7	470	33.78	108.8		82.15
8	521	28.11	81.7		84.83
9	545	20.10	55.8		85.94
10	580	19.55	51.0		87.56
11	608	20.90	52.1		88.72
12	10,380	75.00	10.9	Upper Marker	113.00

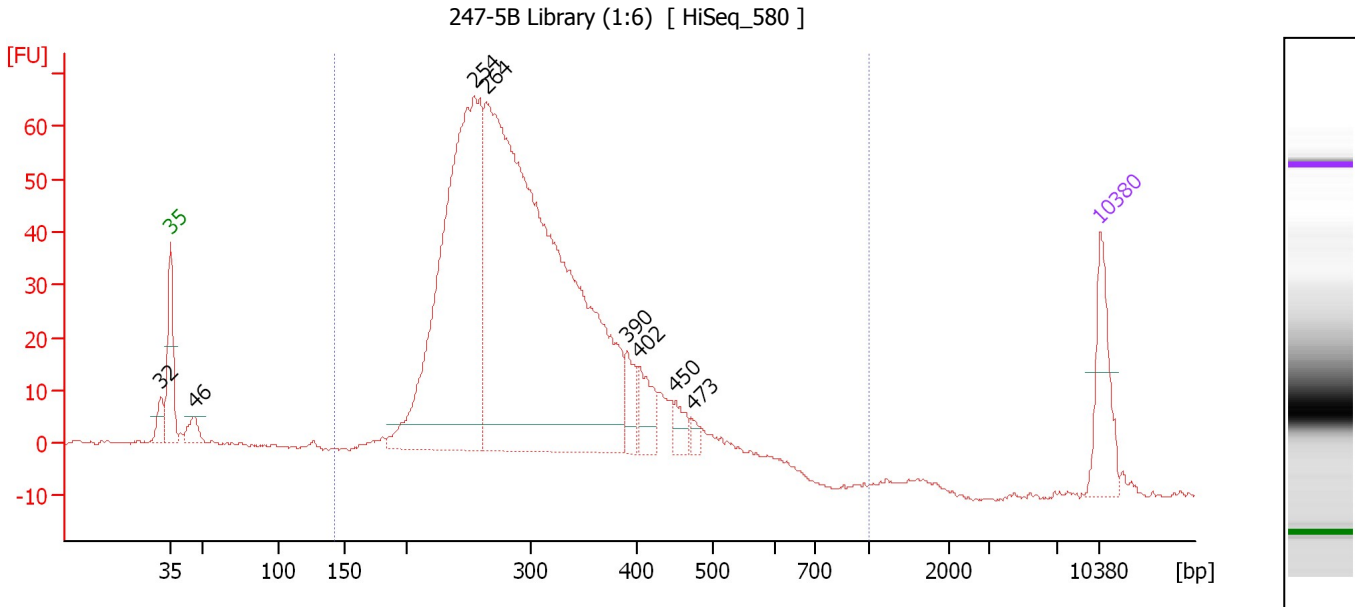
**Region table for sample 2 : 247-5A Library (1:6)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
155	1,000	313	2,045.3	23,423.4	4,448.30	98	27.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
 Modified: 8/8/2016 1:16:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 247-5B Library (1:6)**

Number of peaks found: 8                      Corr. Area 1: 1,178.2  
 Noise: 0.3

**Peak table for sample 3 : 247-5B Library (1:6)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.28
2	35	125.00	5,411.3	Lower Marker	43.00
3	46	31.39	1,029.2		44.79
4	254	886.57	5,287.0		65.89
5	264	1,584.90	9,098.2		66.81
6	390	44.11	171.2		77.39
7	402	54.57	205.7		78.26
8	450	27.79	93.7		80.96
9	473	11.54	37.0		82.29
10	10,380	75.00	10.9	Upper Marker	113.00

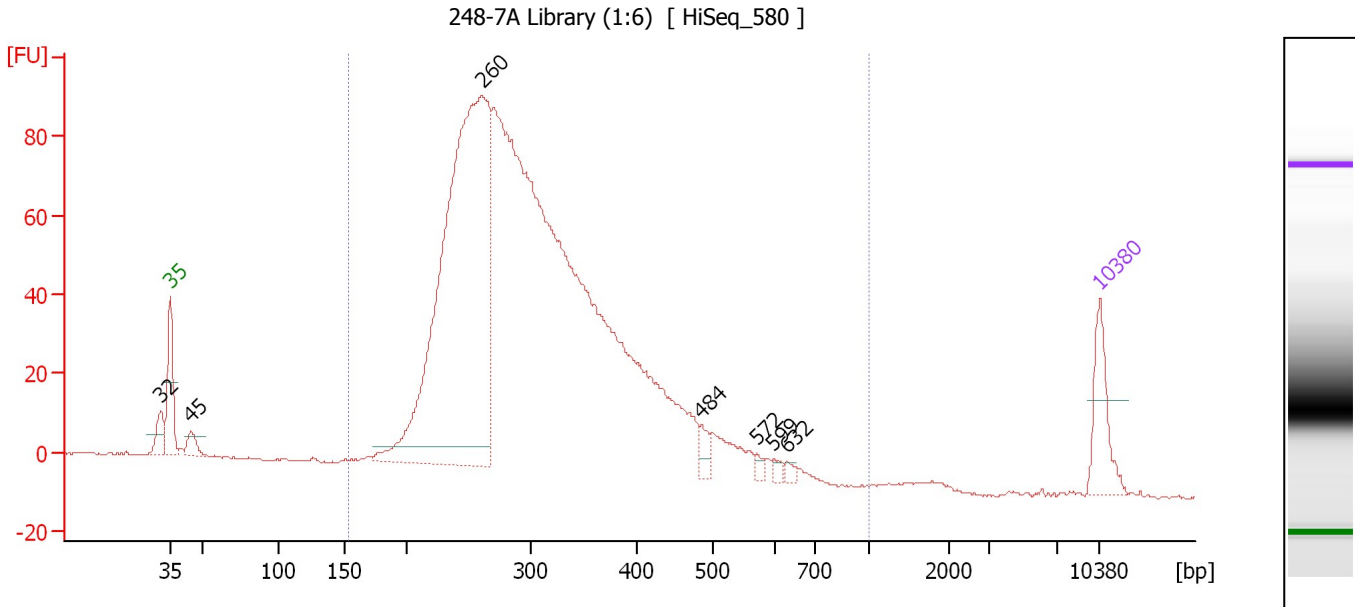
**Region table for sample 3 : 247-5B Library (1:6)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
143	1,000	305	1,178.2	14,681.2	2,760.34	95	24.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
 Modified: 8/8/2016 1:16:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 248-7A Library (1:6)**

Number of peaks found: 7                      Corr. Area 1: 1,633.1  
 Noise: 0.3

**Peak table for sample 4 : 248-7A Library (1:6)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.22
2	35	125.00	5,411.3	Lower Marker	43.00
3	45	35.28	1,194.3		44.56
4	260	1,440.70	8,391.8		66.45
5	484	24.60	77.1		82.90
6	572	9.41	24.9		87.16
7	599	10.12	25.6		88.40
8	632	9.84	23.6		89.44
9	10,380	75.00	10.9	Upper Marker	113.00

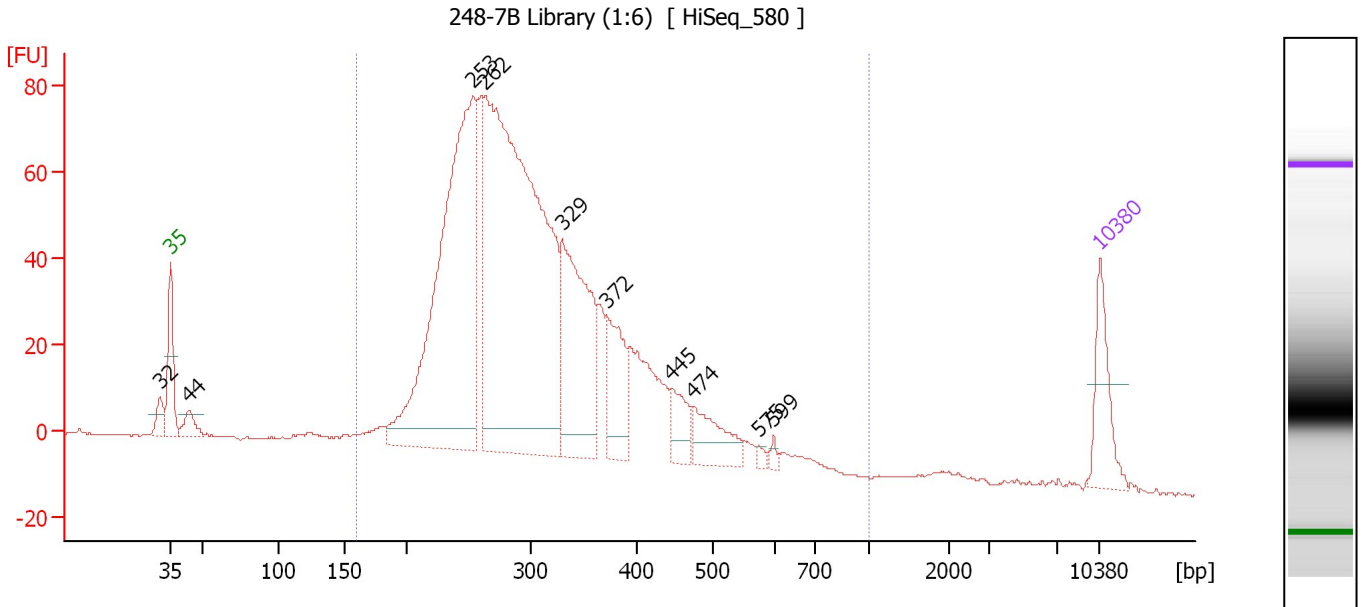
**Region table for sample 4 : 248-7A Library (1:6)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
153	1,000	312	1,633.1	20,303.7	3,885.98	98	25.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
 Modified: 8/8/2016 1:16:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 248-7B Library (1:6)**

Number of peaks found: 10                      Corr. Area 1: 1,456.3  
 Noise: 0.2

**Peak table for sample 5 : 248-7B Library (1:6)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.21
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	37.85	1,315.1		44.37
4	253	930.30	5,563.7		65.82
5	262	1,337.33	7,738.3		66.62
6	329	355.29	1,636.6		72.48
7	372	127.58	519.7		75.91
8	445	58.17	198.0		80.72
9	474	87.34	279.1		82.36
10	575	6.94	18.3		87.32
11	599	7.59	19.2		88.43
12	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 5 : 248-7B Library (1:6)**

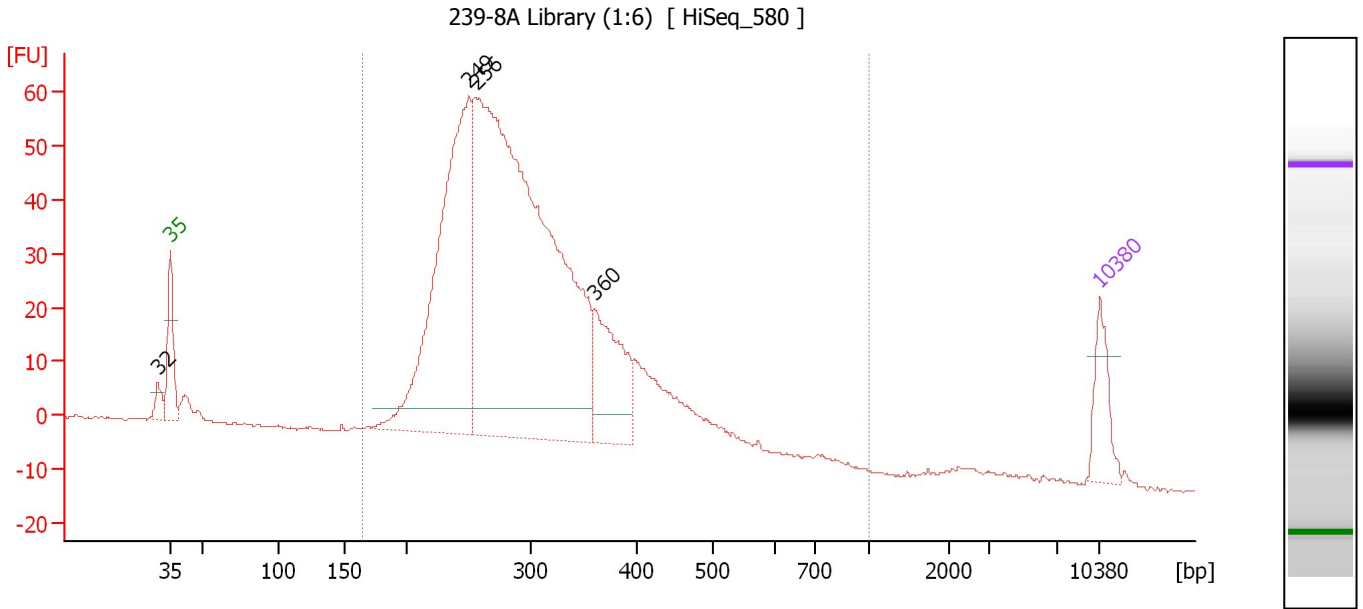
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
160	1,000	311	1,456.3	17,411.1	3,303.98	96	26.3



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
 Modified: 8/8/2016 1:16:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 239-8A Library (1:6)**

Number of peaks found: 4                                      Corr. Area 1: 1,038.7  
 Noise: 0.2

**Peak table for sample 6 : 239-8A Library (1:6)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.03
2	35	125.00	5,411.3	Lower Marker	43.00
3	249	955.36	5,804.2		65.45
4	256	2,070.38	12,266.0		66.05
5	360	236.60	996.8		74.93
6	10,380	75.00	10.9	Upper Marker	113.00

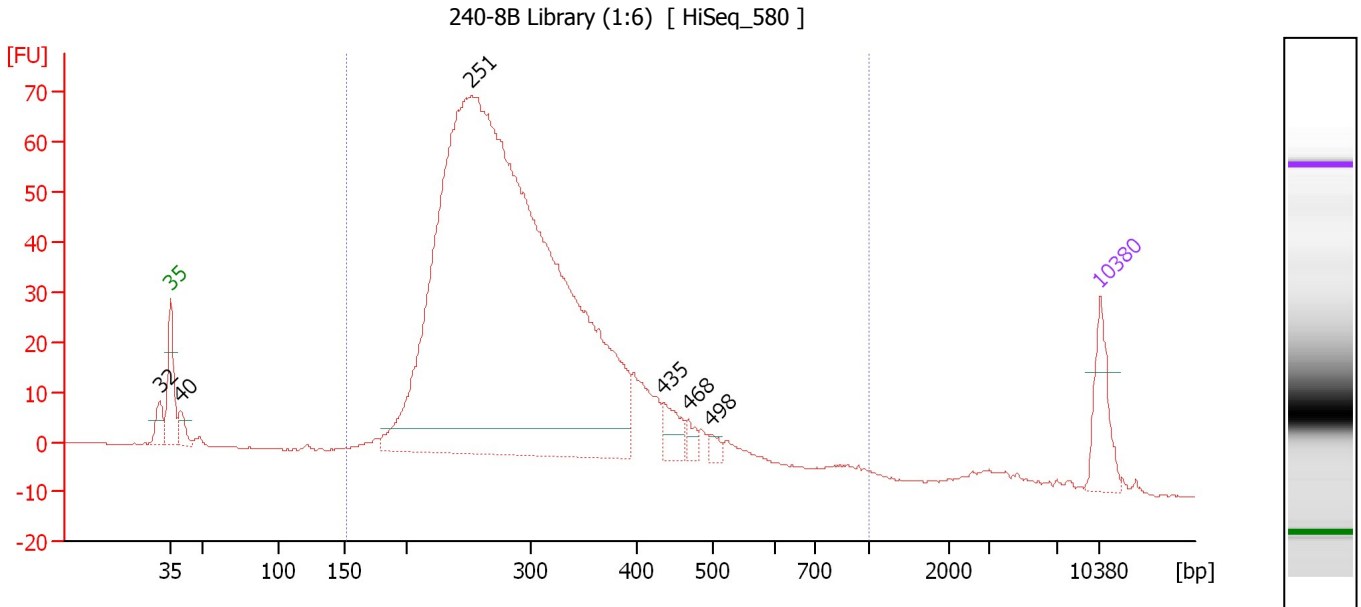
**Region table for sample 6 : 239-8A Library (1:6)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
165	1,000	302	1,038.7	18,448.4	3,458.80	97	23.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
 Modified: 8/8/2016 1:16:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 240-8B Library (1:6)**

Number of peaks found: 6                      Corr. Area 1: 1,198.4  
 Noise: 0.2

**Peak table for sample 7 : 240-8B Library (1:6)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.18
2	35	125.00	5,411.3	Lower Marker	43.00
3	40	39.66	1,509.0		43.77
4	251	3,440.66	20,772.7		65.60
5	435	55.74	194.3		80.12
6	468	22.26	72.2		81.99
7	498	14.86	45.2		83.75
8	10,380	75.00	10.9	Upper Marker	113.00

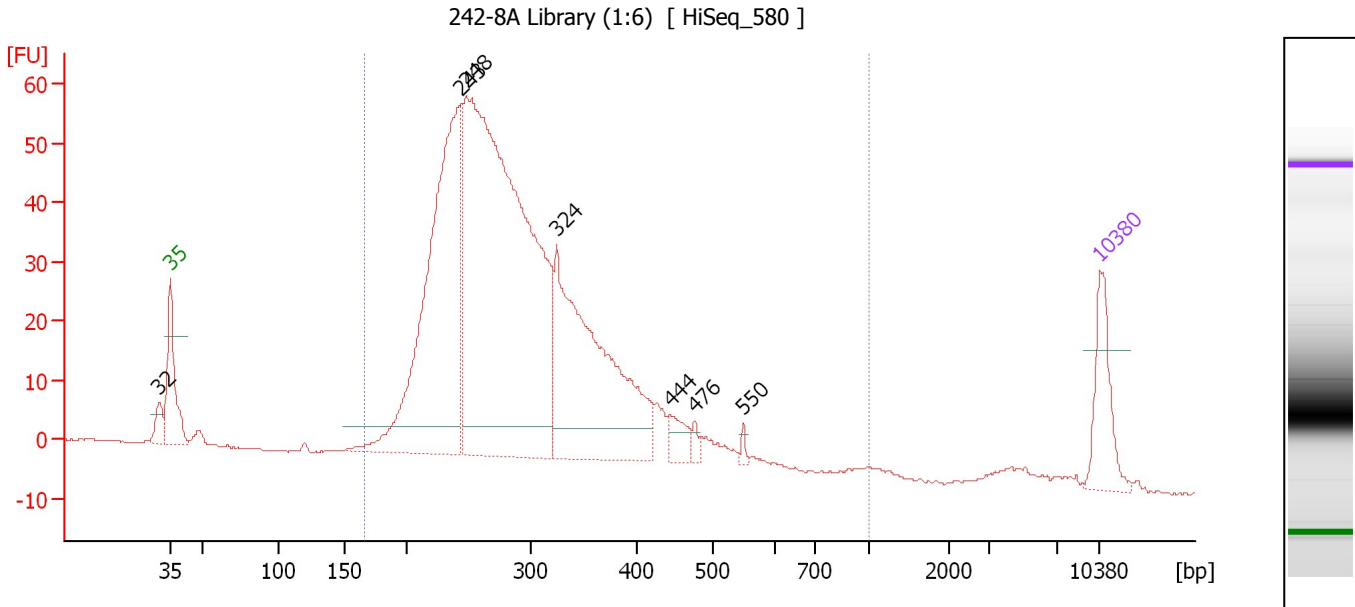
**Region table for sample 7 : 240-8B Library (1:6)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
153	1,000	303	1,198.4	19,692.2	3,639.47	96	28.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
 Modified: 8/8/2016 1:16:24 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 242-8A Library (1:6)**

Number of peaks found: 7                      Corr. Area 1: 959.5  
 Noise: 0.2

**Peak table for sample 8 : 242-8A Library (1:6)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.17
2	35	125.00	5,411.3	Lower Marker	43.00
3	243	752.97	4,692.1		64.87
4	248	1,400.78	8,561.2		65.32
5	324	534.94	2,501.5		72.09
6	444	33.51	114.4		80.64
7	476	11.81	37.6		82.47
8	550	6.55	18.0		86.13
9	10,380	75.00	10.9	Upper Marker	113.00

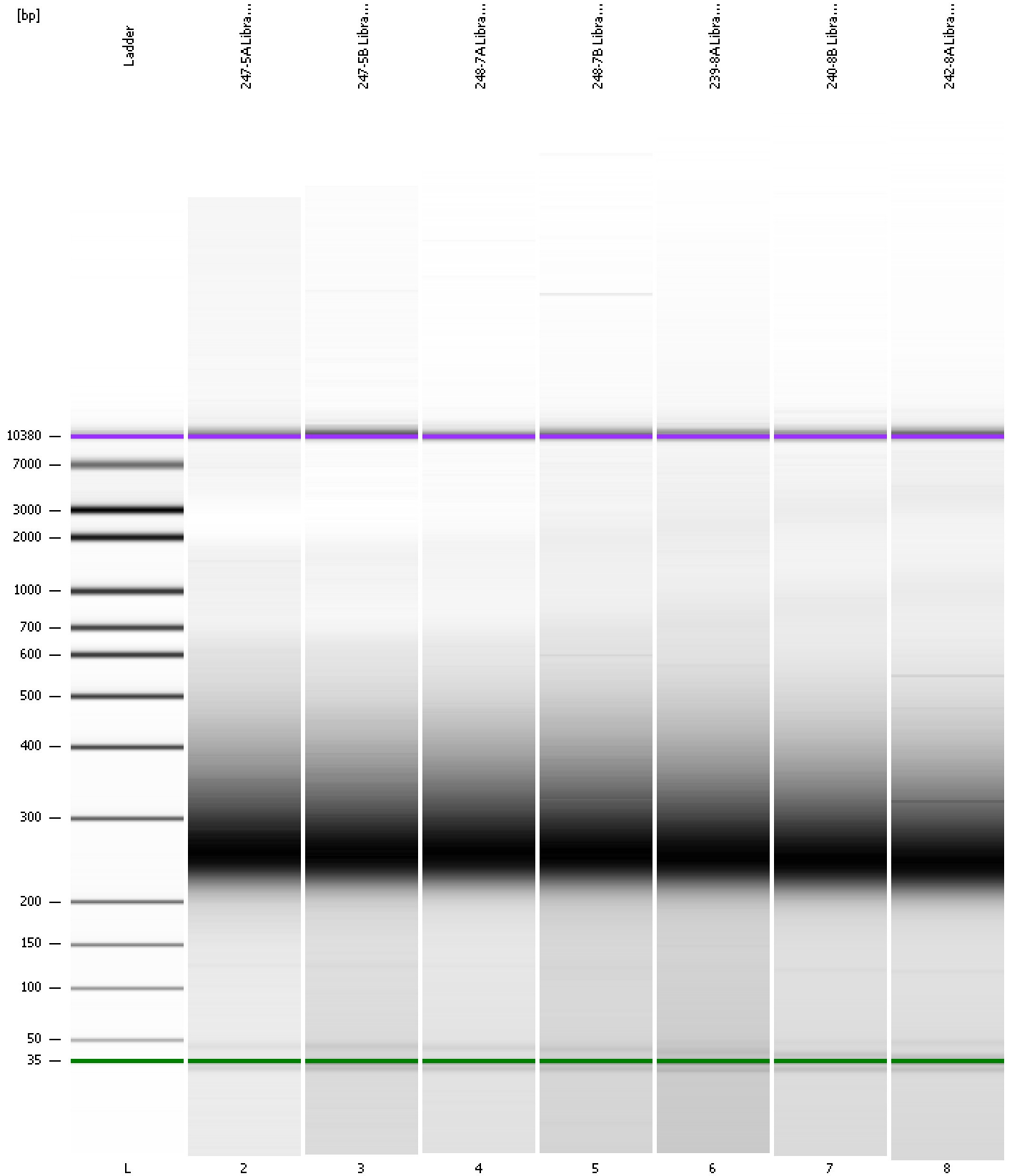
**Region table for sample 8 : 242-8A Library (1:6)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
166	1,000	295	959.5	15,063.8	2,750.00	97	25.2

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad

Created: 8/8/2016 12:28:12 PM  
Modified: 8/8/2016 1:16:24 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...data\2016-08-08\2016-08-08\_002\_HiSeq580\_Libraries\_12-18.xad  
 Created: 8/8/2016 12:28:12 PM  
 Modified: 8/8/2016 1:16:24 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		8/8/2016 1:08:38 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-08-08\2016-08-08_002.xad)		Instrument	Run		8/8/2016 12:28:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/8/2016 12:28:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/8/2016 12:28:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/8/2016 12:28:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/8/2016 12:28:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/8/2016 12:28:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/8/2016 12:28:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1