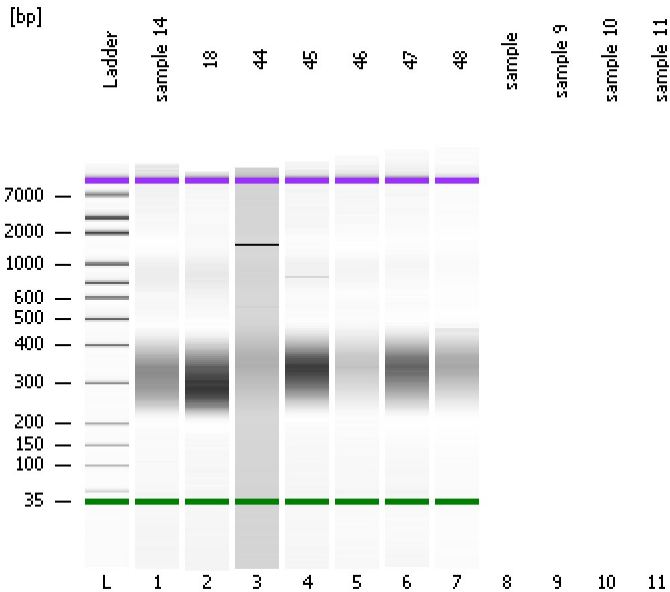


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
Modified: 3/16/2016 9:59:42 AM

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

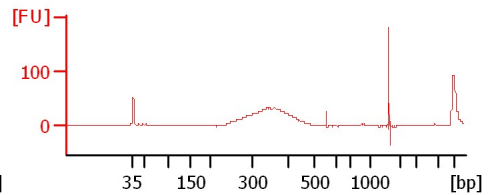
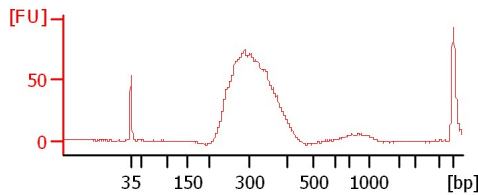
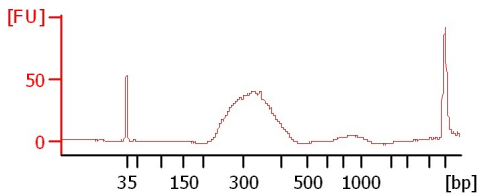
Chip Information:

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

sample 14

18

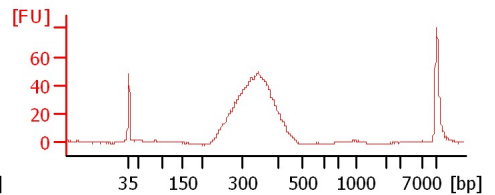
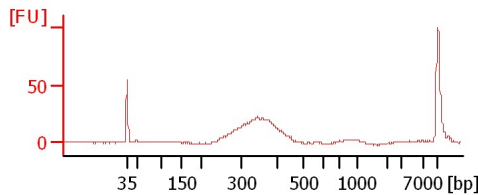
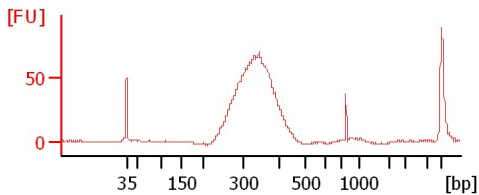
44



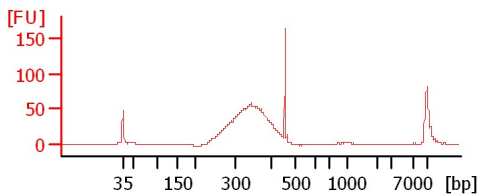
45

46

47



48



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
Modified: 3/16/2016 9:59:42 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 14		<input type="checkbox"/>	✓			
18		<input type="checkbox"/>	✓			
44		<input type="checkbox"/>	✓			
45		<input type="checkbox"/>	✓			
46		<input type="checkbox"/>	✓			
47		<input type="checkbox"/>	✓			
48		<input type="checkbox"/>	✓			
sample		<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:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
Modified: 3/16/2016 9:59:42 AM

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

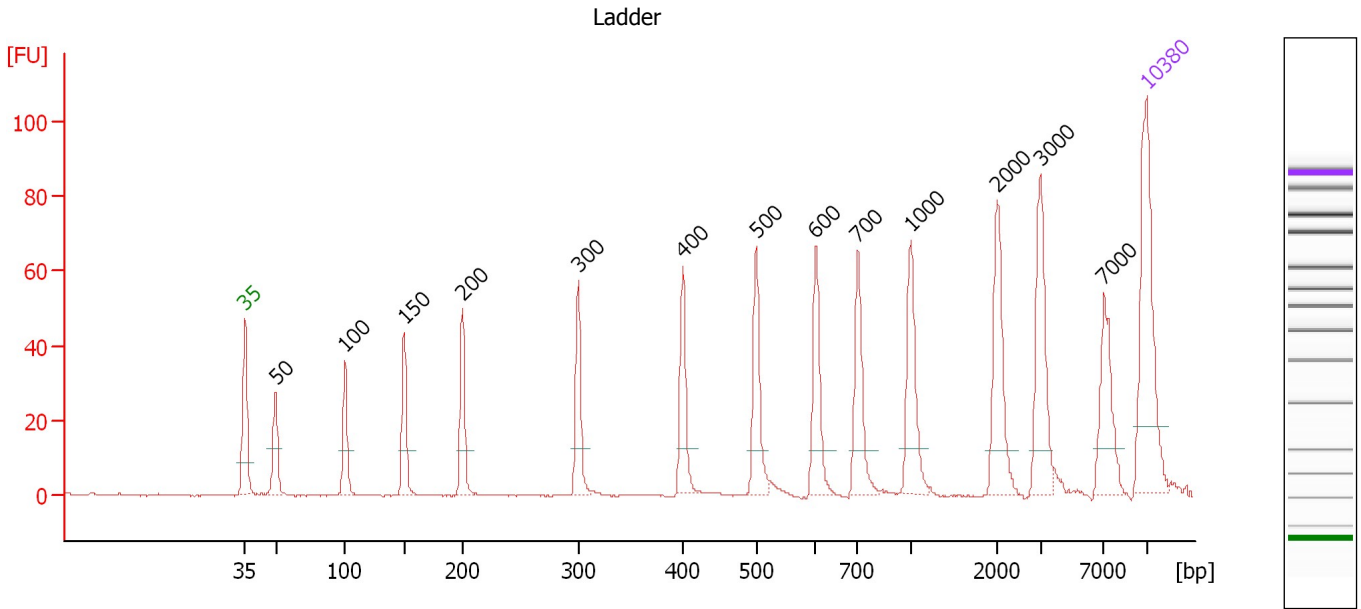
Ladder

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:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
 Modified: 3/16/2016 9:59:42 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

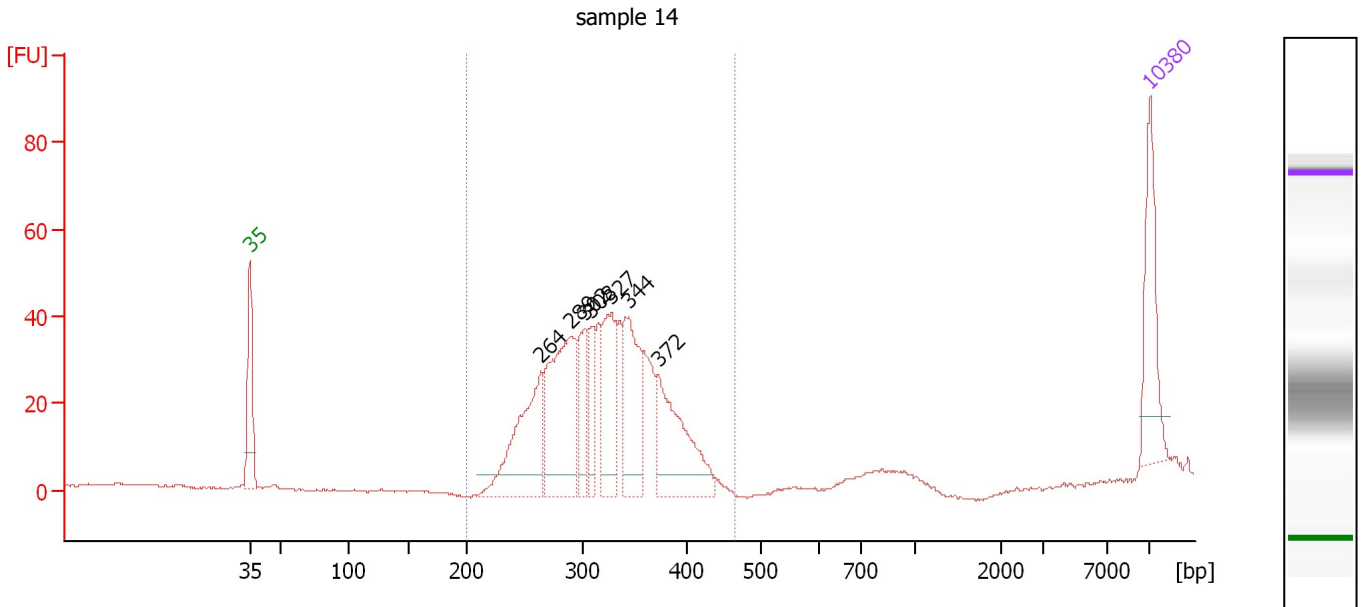
Peak table for Ladder

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	45.36
3	100	150.00	2,272.7	Ladder Peak	50.75
4	150	150.00	1,515.2	Ladder Peak	55.34
5	200	150.00	1,136.4	Ladder Peak	59.90
6	300	150.00	757.6	Ladder Peak	68.89
7	400	150.00	568.2	Ladder Peak	77.01
8	500	150.00	454.5	Ladder Peak	82.68
9	600	150.00	378.8	Ladder Peak	87.32
10	700	150.00	324.7	Ladder Peak	90.59
11	1,000	150.00	227.3	Ladder Peak	94.69
12	2,000	150.00	113.6	Ladder Peak	101.44
13	3,000	150.00	75.8	Ladder Peak	104.76
14	7,000	150.00	32.5	Ladder Peak	109.73
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
 Modified: 3/16/2016 9:59:42 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 14

Number of peaks found: 7 Corr. Area 1: 520.6
 Noise: 0.2

Peak table for sample 1 : sample 14

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	177.34	1,018.2		65.64
3	289	226.03	1,183.9		67.92
4	302	66.51	333.8		69.04
5	308	55.80	274.5		69.54
6	327	112.28	520.3		71.07
7	344	130.93	577.0		72.44
8	372	151.45	617.0		74.72
9	10,380	75.00	10.9	Upper Marker	113.00

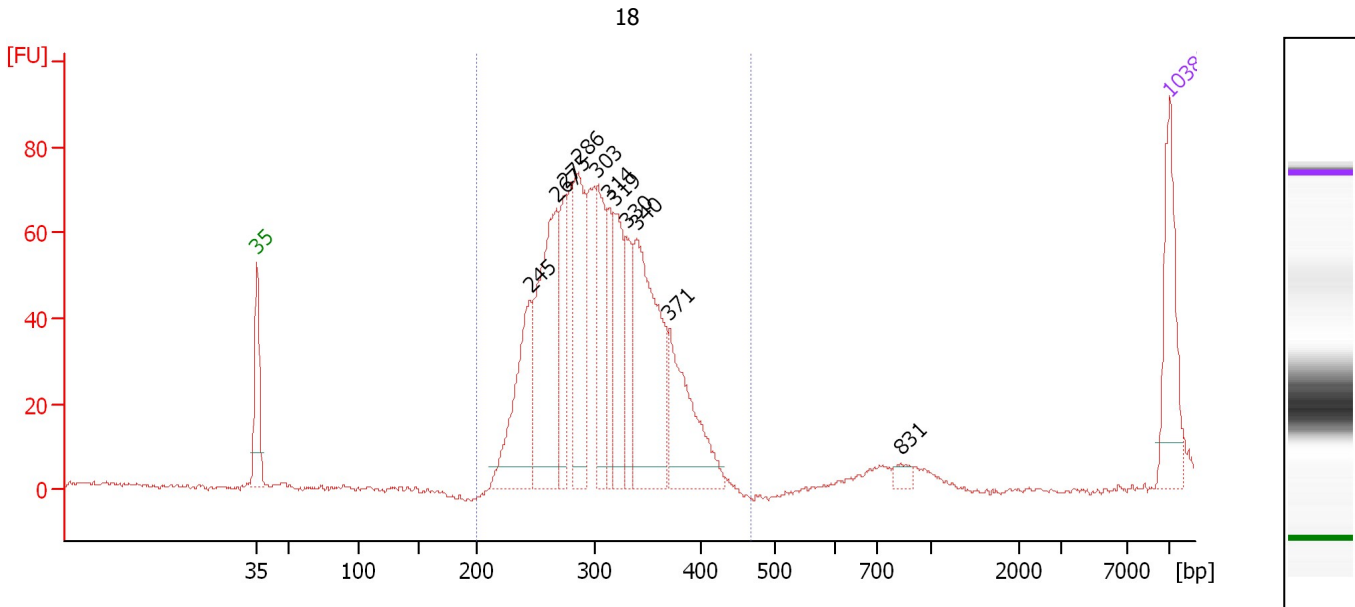
Region table for sample 1 : sample 14

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	465	318	520.6	4,189.8	859.92	100	13.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
 Modified: 3/16/2016 9:59:42 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 18

Number of peaks found: 11 Corr. Area 1: 1,031.1
 Noise: 0.5

Peak table for sample 2 : 18

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	245	167.34	1,034.7		63.95
3	267	262.02	1,485.1		65.95
4	275	100.86	555.6		66.65
5	286	149.87	792.7		67.67
6	303	113.29	566.2		69.14
7	314	71.93	346.8		70.04
8	319	114.78	545.6		70.41
9	330	66.37	304.4		71.35
10	340	243.59	1,084.1		72.17
11	371	144.05	588.0		74.67
12	831	10.57	19.3		92.38
13	10,380	75.00	10.9	Upper Marker	113.00

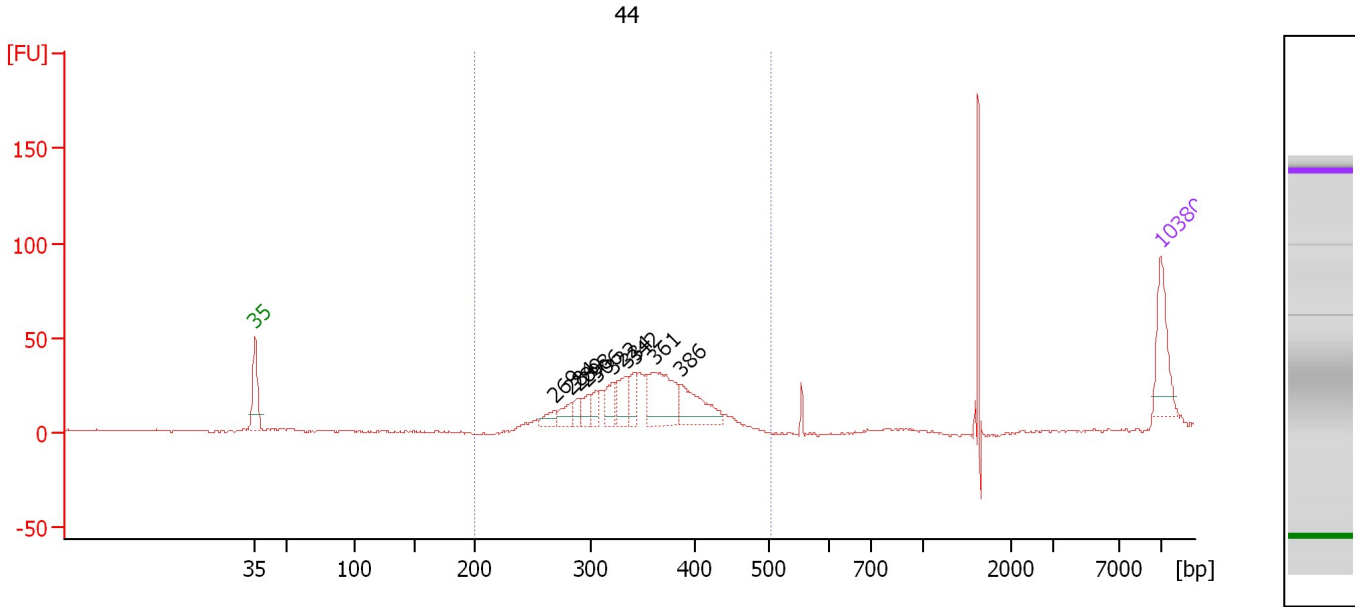
Region table for sample 2 : 18

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	469	305	1,031.1	7,491.1	1,473.46	100	14.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
 Modified: 3/16/2016 9:59:42 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 44

Number of peaks found: 10 Corr. Area 1: 408.9
 Noise: 0.5

Peak table for sample 3 : 44

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	269	26.23	147.6		66.13
3	284	34.61	185.0		67.41
4	289	20.32	106.4		67.94
5	298	28.49	145.0		68.68
6	306	27.99	138.5		69.38
7	322	45.76	215.4		70.66
8	334	53.44	242.4		71.65
9	342	44.32	196.3		72.31
10	361	143.55	601.7		73.88
11	386	94.28	369.7		75.90
12	10,380	75.00	10.9	Upper Marker	113.00

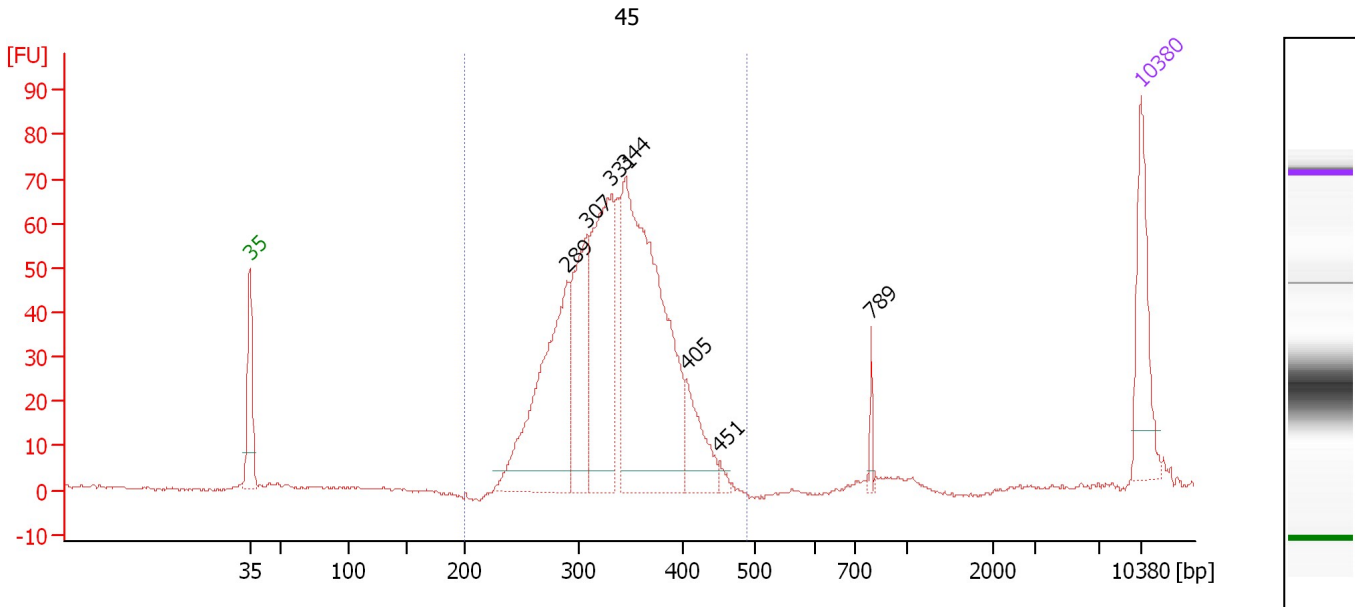
Region table for sample 3 : 44

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	503	346	408.9	2,984.2	666.25	90	13.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
 Modified: 3/16/2016 9:59:42 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 45

Number of peaks found: 7 Corr. Area 1: 919.6
 Noise: 0.3

Peak table for sample 4 : 45

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	289	314.43	1,646.8		67.93
3	307	165.82	817.8		69.48
4	331	271.43	1,242.6		71.40
5	344	533.56	2,347.4		72.49
6	405	73.04	273.5		77.27
7	451	8.26	27.8		79.91
8	789	11.03	21.2		91.80
9	10,380	75.00	10.9	Upper Marker	113.00

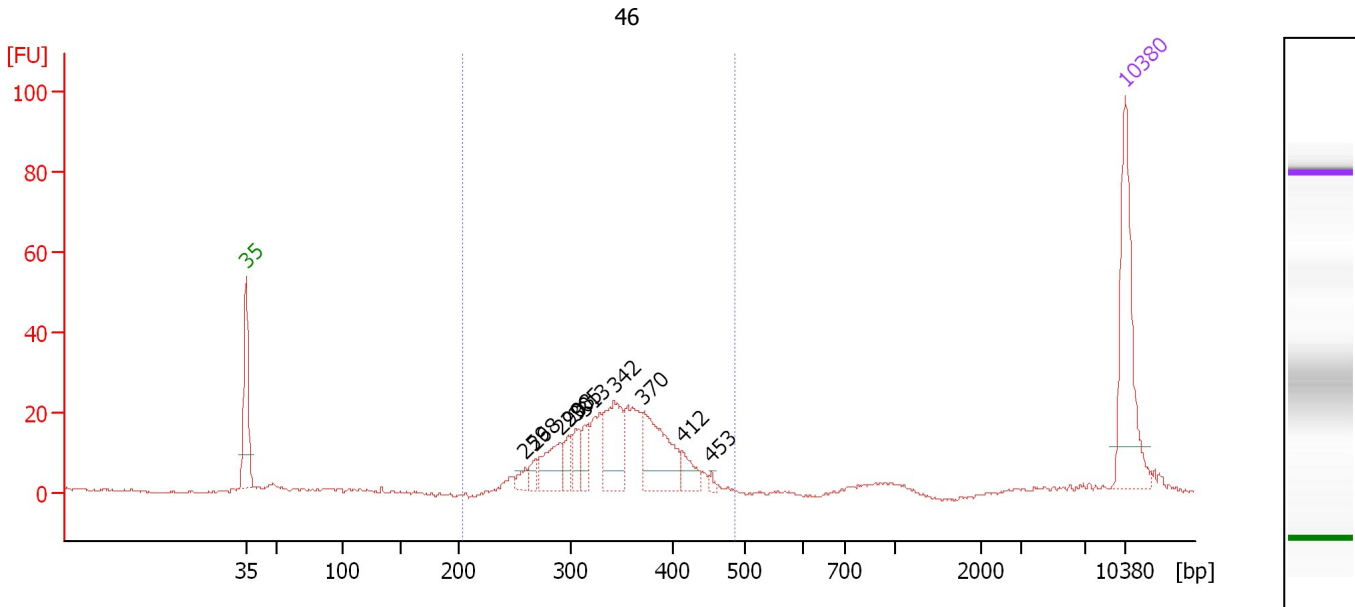
Region table for sample 4 : 45

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	490	334	919.6	6,423.2	1,382.47	97	13.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
 Modified: 3/16/2016 9:59:42 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 46

Number of peaks found: 10 Corr. Area 1: 291.2
 Noise: 0.4

Peak table for sample 5 : 46

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	259	8.90	51.9		65.24
3	268	10.03	56.7		66.01
4	290	36.73	192.1		67.96
5	298	16.66	84.8		68.68
6	305	17.66	87.8		69.28
7	313	17.48	84.6		69.96
8	342	60.13	266.5		72.29
9	370	71.47	292.5		74.58
10	412	17.04	62.7		77.68
11	453	3.12	10.4		80.02
12	10,380	75.00	10.9	Upper Marker	113.00

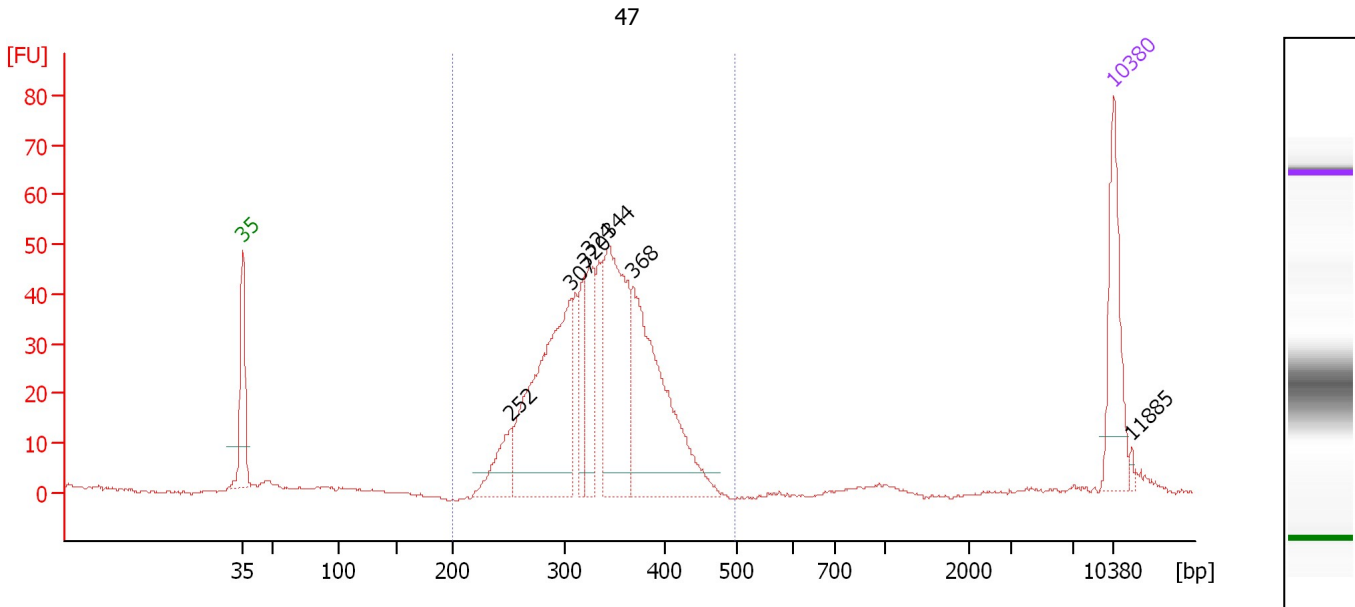
Region table for sample 5 : 46

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
203	486	343	291.2	1,613.4	356.69	93	13.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
 Modified: 3/16/2016 9:59:42 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 47

Number of peaks found: 7 Corr. Area 1: 666.7
 Noise: 0.2

Peak table for sample 6 : 47

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	252	62.38	375.2		64.56
3	307	315.72	1,558.7		69.45
4	320	56.23	266.6		70.48
5	324	86.46	404.6		70.82
6	344	242.19	1,067.2		72.45
7	368	275.21	1,134.3		74.38
8	10,380	75.00	10.9	Upper Marker	113.00
9	11,885	0.00	0.0		114.46

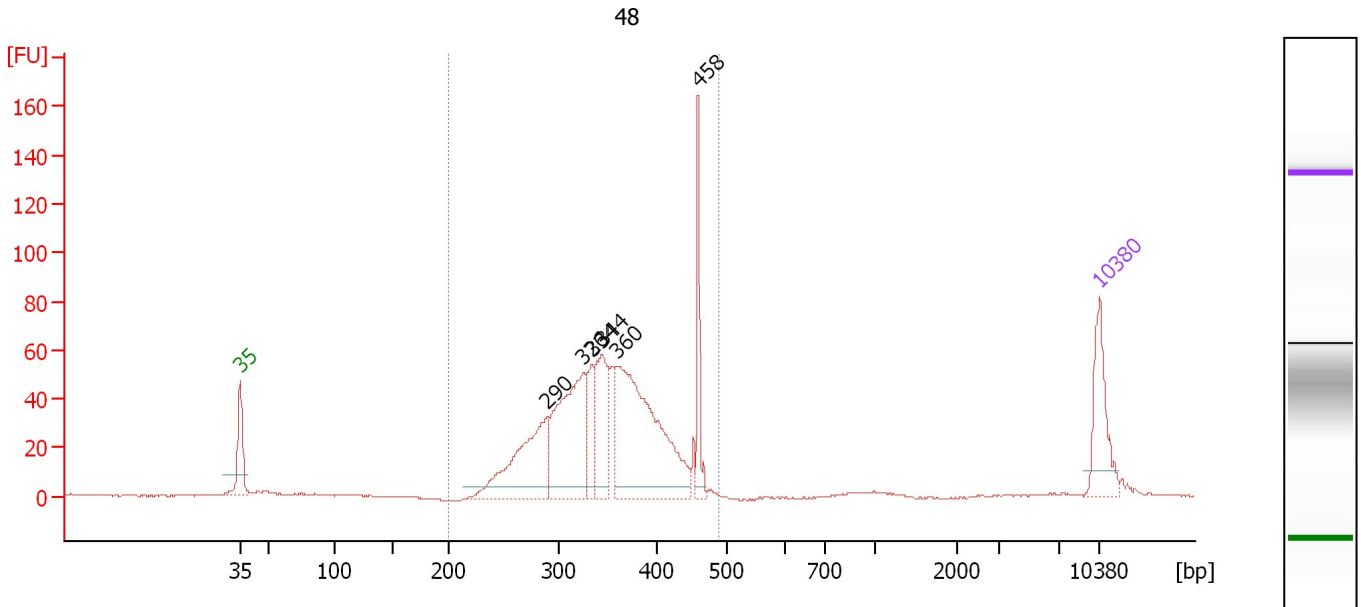
Region table for sample 6 : 47

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	498	334	666.7	4,981.2	1,071.50	97	13.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
 Modified: 3/16/2016 9:59:42 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 48

Number of peaks found: 6 Corr. Area 1: 831.0
 Noise: 0.3

Peak table for sample 7 : 48

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	290	228.21	1,190.5		68.03
3	326	261.01	1,213.8		70.98
4	334	69.02	312.8		71.68
5	344	128.45	565.8		72.46
6	360	396.50	1,671.0		73.72
7	458	72.28	238.9		80.32
8	10,380	75.00	10.9	Upper Marker	113.00

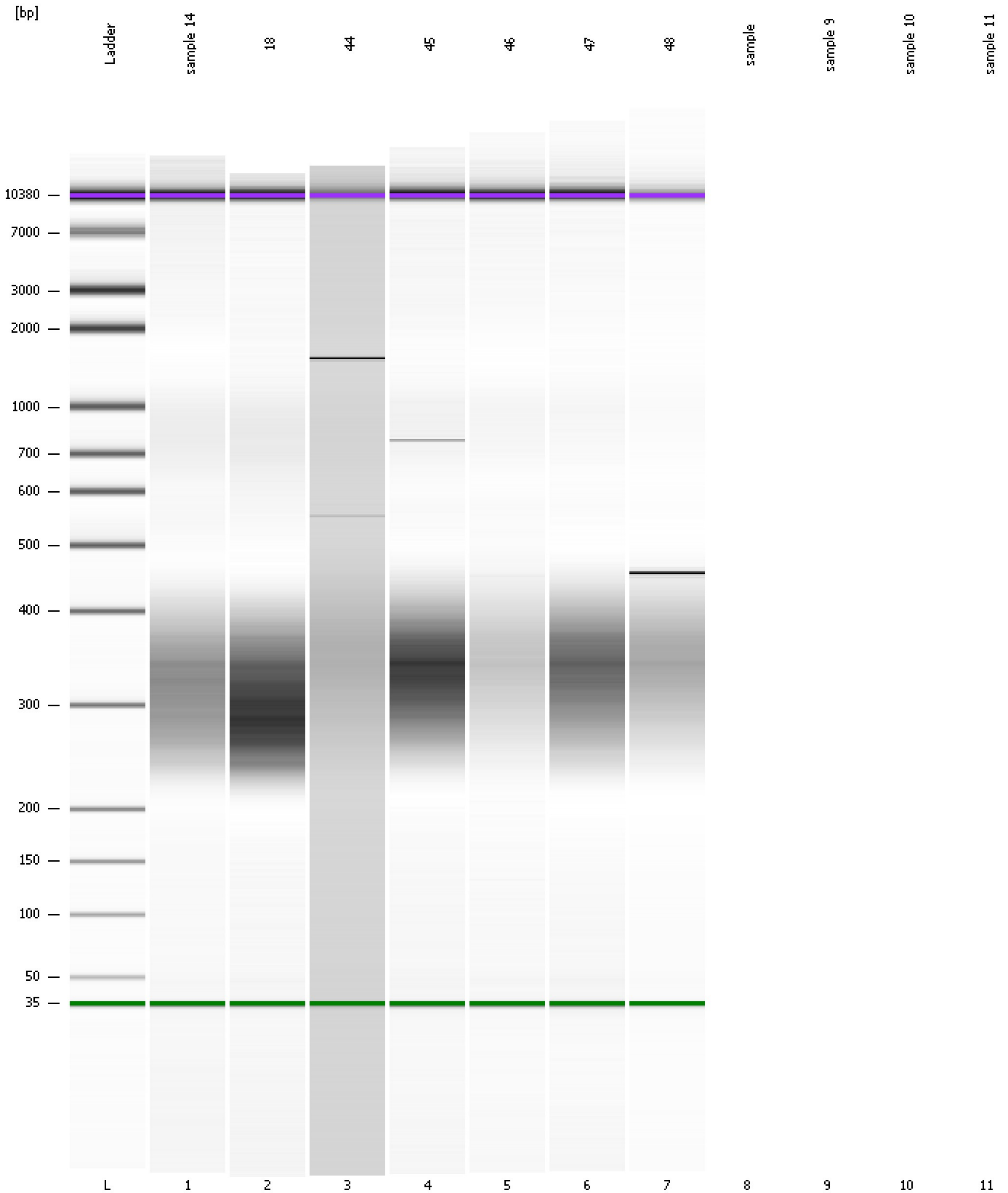
Region table for sample 7 : 48

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	488	350	831.0	5,177.0	1,156.36	98	15.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
Modified: 3/16/2016 9:59:42 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
Modified: 3/16/2016 9:59:42 AM

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:\... bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad

Created: 3/16/2016 9:25:19 AM
 Modified: 3/16/2016 9:59:42 AM

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		3/16/2016 9:55:11 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-03-16\2016-03-16_001.xad)		Instrument	Run		3/16/2016 9:25:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/16/2016 9:25:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/16/2016 9:25:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/16/2016 9:25:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/16/2016 9:25:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/16/2016 9:25:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/16/2016 9:25:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1