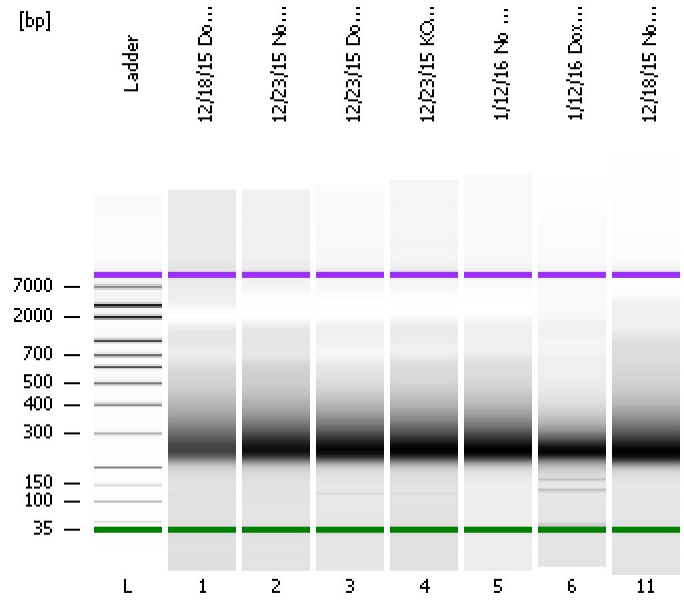
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Electrophoresis File Run Summary



Instrument Information:

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

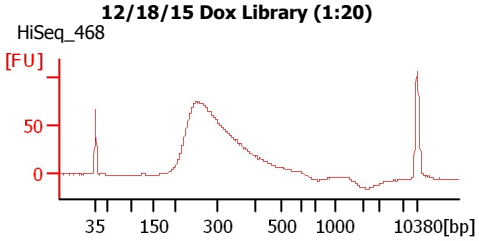
Assay Information:

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

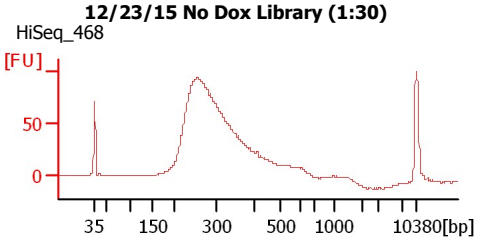
Chip Information:

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

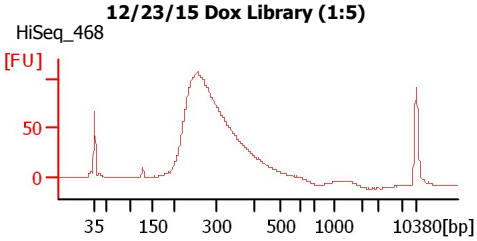
12/18/15 Dox Library (1:20)



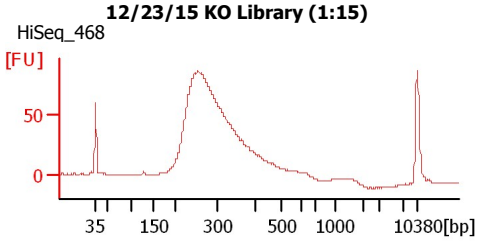
12/23/15 No Dox Library (1:30)



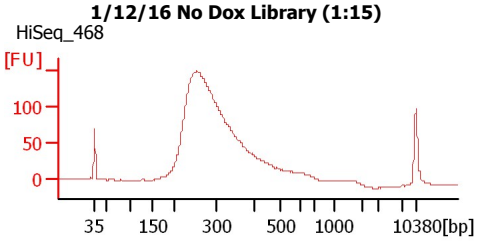
12/23/15 Dox Library (1:5)



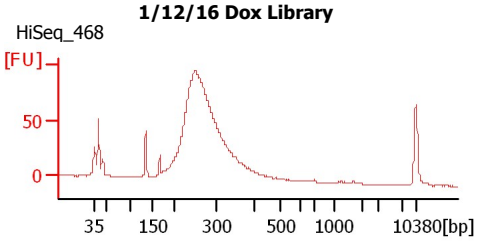
12/23/15 KO Library (1:15)



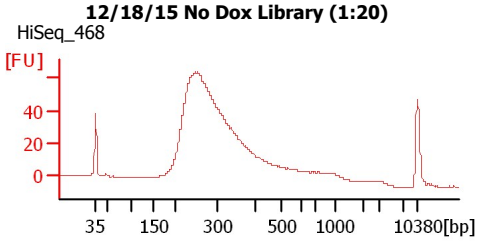
1/12/16 No Dox Library (1:15)



1/12/16 Dox Library



12/18/15 No Dox Library (1:20)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
12/18/15 Dox Library (1:20)	HiSeq_468	☐	✔			
12/23/15 No Dox Library (1:30)	HiSeq_468	☐	✔			
12/23/15 Dox Library (1:5)	HiSeq_468	☐	✔			
12/23/15 KO Library (1:15)	HiSeq_468	☐	✔			
1/12/16 No Dox Library (1:15)	HiSeq_468	☐	✔			
1/12/16 Dox Library	HiSeq_468	☐	✔			
12/18/15 No Dox Library (1:20)	HiSeq_468	☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 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

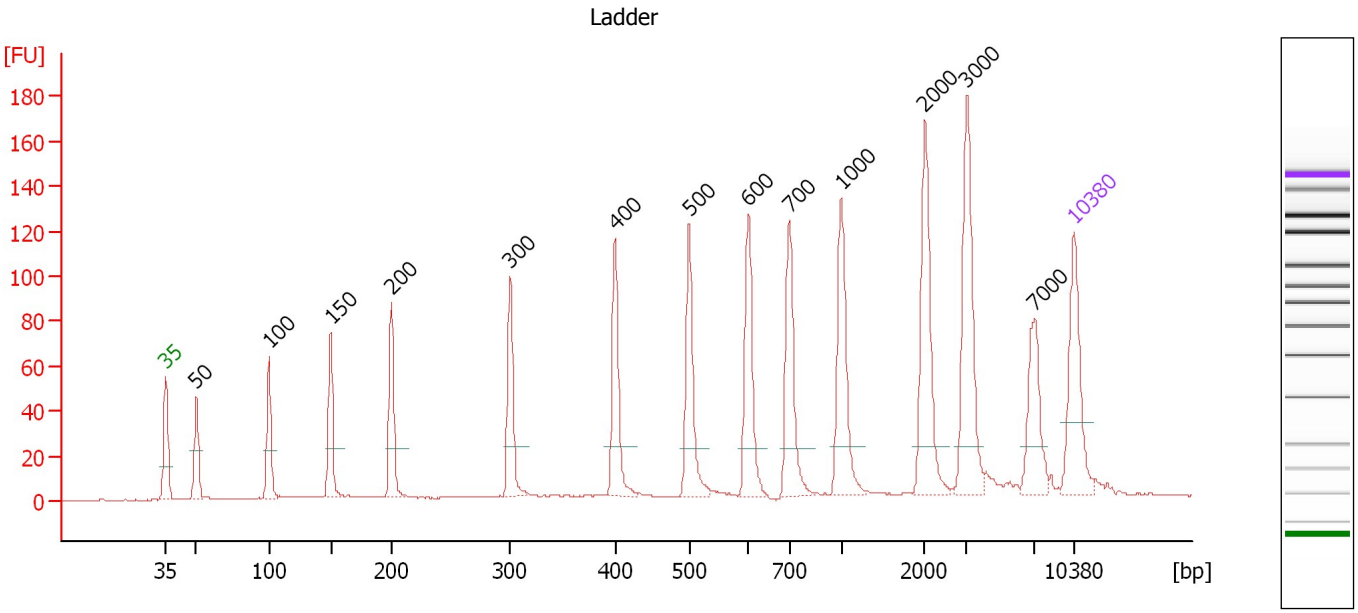
Ladder

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:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

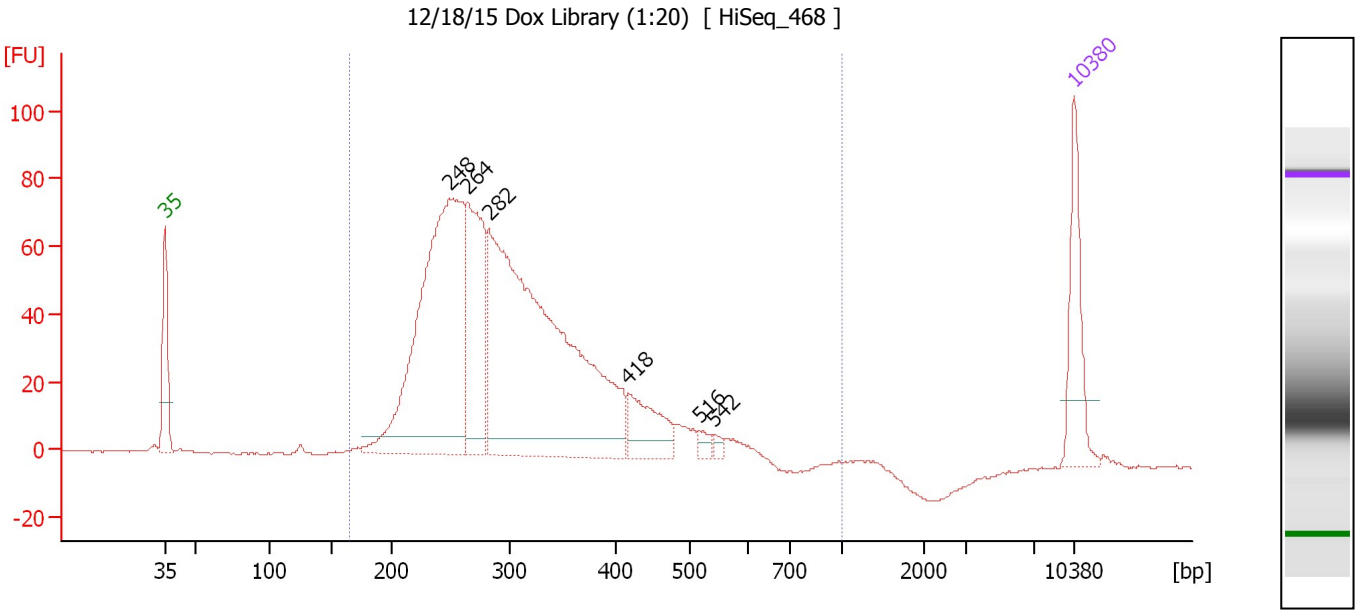
Peak table for Ladder

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	45.37
3		100	150.00	2,272.7	Ladder Peak	50.98
4		150	150.00	1,515.2	Ladder Peak	55.72
5		200	150.00	1,136.4	Ladder Peak	60.42
6		300	150.00	757.6	Ladder Peak	69.56
7		400	150.00	568.2	Ladder Peak	77.64
8		500	150.00	454.5	Ladder Peak	83.35
9		600	150.00	378.8	Ladder Peak	87.89
10		700	150.00	324.7	Ladder Peak	91.04
11		1,000	150.00	227.3	Ladder Peak	95.05
12		2,000	150.00	113.6	Ladder Peak	101.49
13		3,000	150.00	75.8	Ladder Peak	104.73
14		7,000	150.00	32.5	Ladder Peak	109.95
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 12/18/15 Dox Library (1:20)

Number of peaks found:	6	Corr. Area 1:	1,369.2
Noise:	0.3		

Peak table for sample 1 : 12/18/15 Dox Library (1:20)

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	248	626.99	3,824.3		64.84
3	264	234.67	1,346.8		66.27
4	282	833.14	4,480.1		67.89
5	418	76.02	275.6		78.66
6	516	11.47	33.7		84.08
7	542	6.47	18.1		85.26
8	10,380	75.00	10.9	Upper Marker	113.00

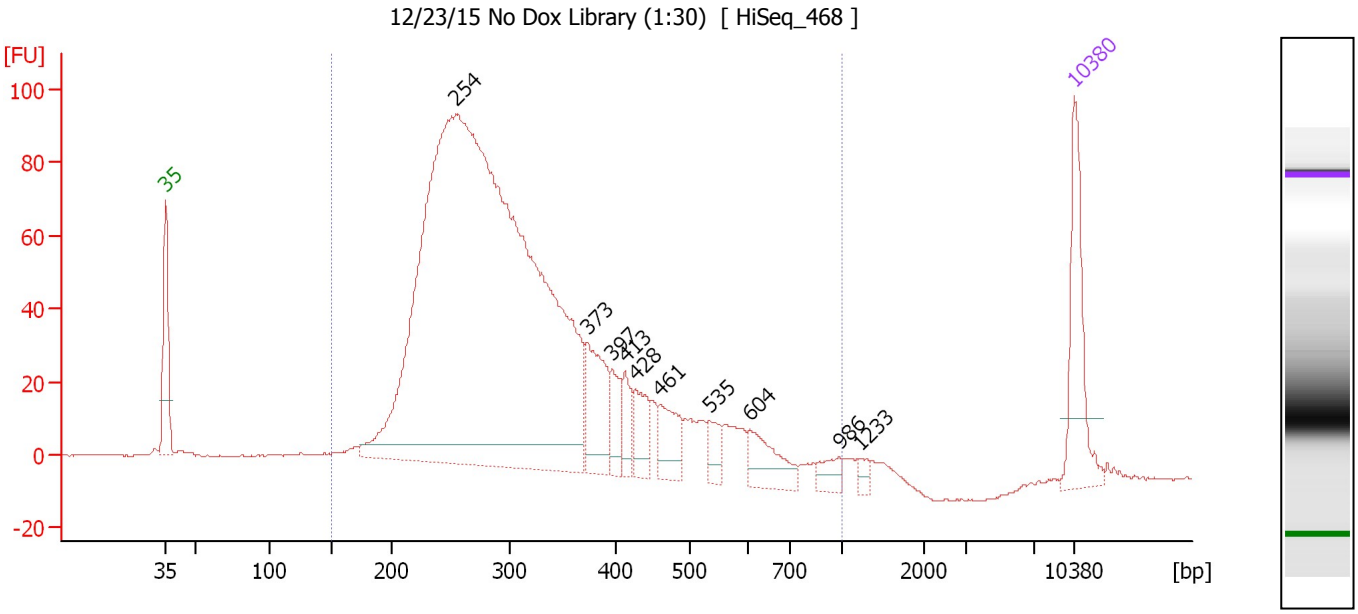
Region table for sample 1 : 12/18/15 Dox Library (1:20)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
166	1,000	309	1,369.2	9,310.3	1,764.27	99	25.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 12/23/15 No Dox Library (1:30)

Number of peaks found:	10	Corr. Area 1:	1,751.1
Noise:	0.2		

Peak table for sample 2 : 12/23/15 No Dox Library (1:30)

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	254	1,792.25	10,679.2		65.38
3	373	88.10	357.9		75.46
4	397	31.19	119.1		77.38
5	413	30.84	113.2		78.37
6	428	39.40	139.6		79.21
7	461	44.95	147.6		81.14
8	535	21.00	59.5		84.94
9	604	44.75	112.4		88.00
10	986	16.15	24.8		94.87
11	1,233	8.29	10.2		96.55
12	10,380	75.00	10.9	Upper Marker	113.00

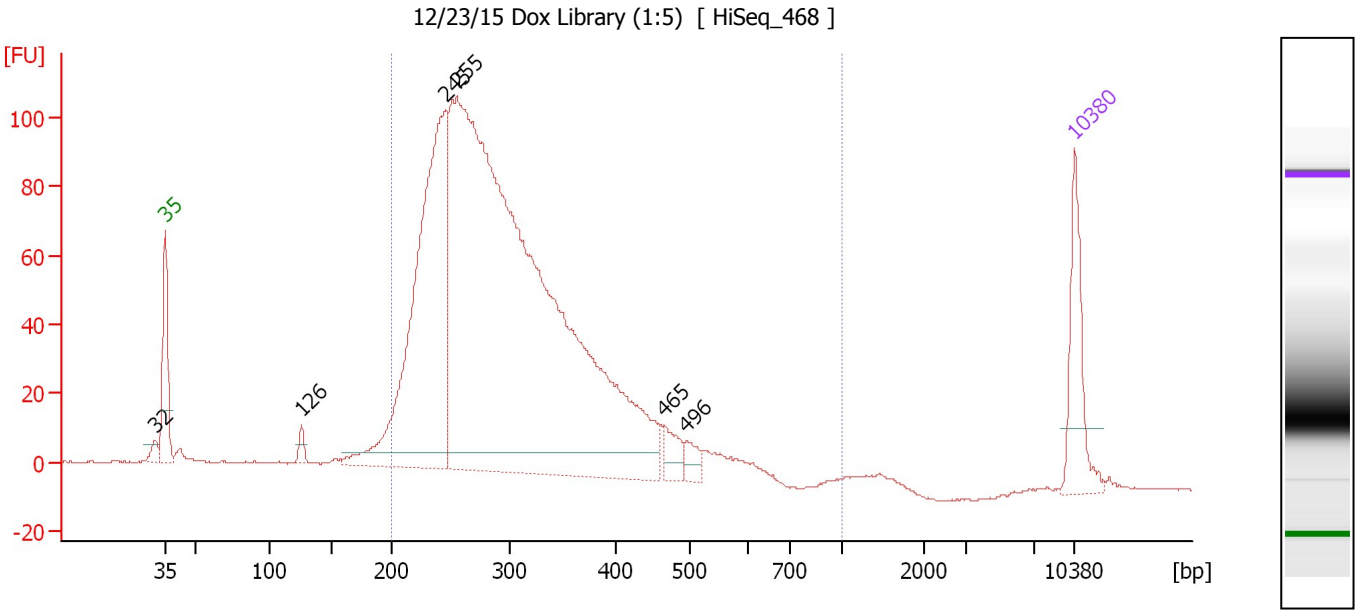
Region table for sample 2 : 12/23/15 No Dox Library (1:30)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
151	1,000	319	1,751.1	10,681.3	2,027.75	97	32.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 12/23/15 Dox Library (1:5)

Number of peaks found:	6	Corr. Area 1:	1,818.9
Noise:	0.3		

Peak table for sample 3 : 12/23/15 Dox Library (1:5)

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		32	0.00	0.0		42.15
2	◀	35	125.00	5,411.3	Lower Marker	43.00
3		126	13.79	165.7		53.46
4		245	629.66	3,886.5		64.57
5		255	1,915.28	11,367.6		65.47
6		465	30.65	99.8		81.36
7		496	20.42	62.4		83.11
8	▶	10,380	75.00	10.9	Upper Marker	113.00

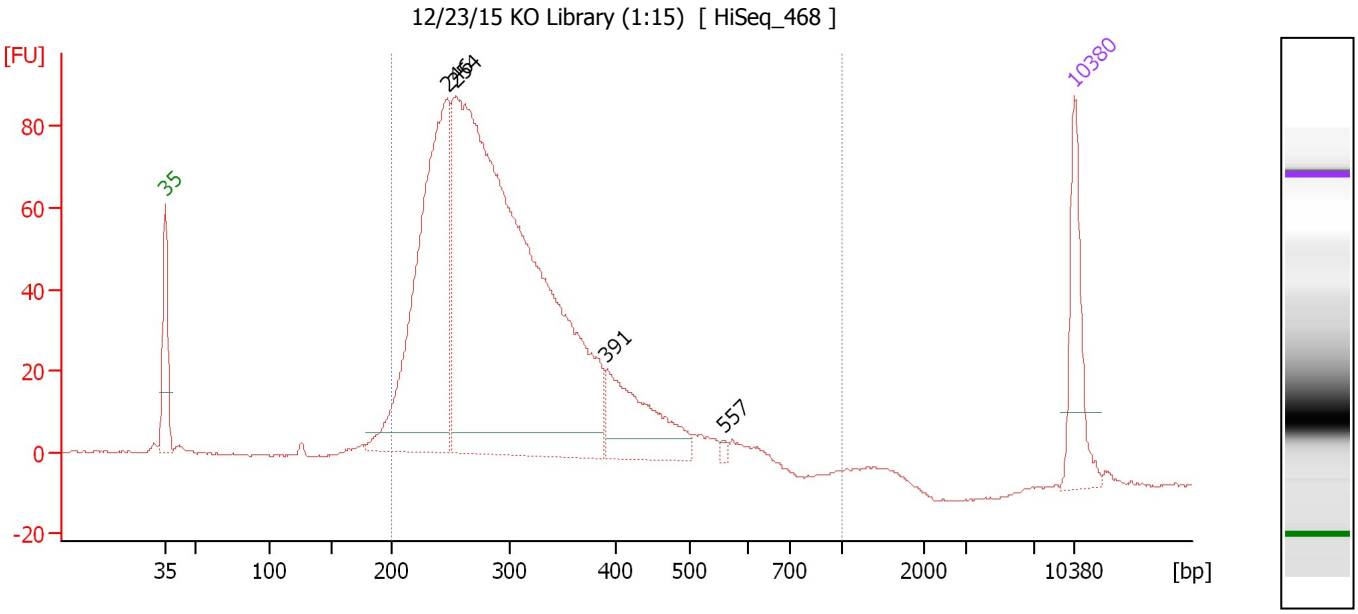
Region table for sample 3 : 12/23/15 Dox Library (1:5)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	305	1,818.9	12,661.5	2,388.85	94	25.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 12/23/15 KO Library (1:15)

Number of peaks found:	4	Corr. Area 1:	1,522.9
Noise:	0.2		

Peak table for sample 4 : 12/23/15 KO Library (1:15)

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	246	547.34	3,364.4		64.67
3	254	1,379.29	8,238.1		65.32
4	391	141.94	549.5		76.94
5	557	4.48	12.2		85.93
6	10,380	75.00	10.9	Upper Marker	113.00

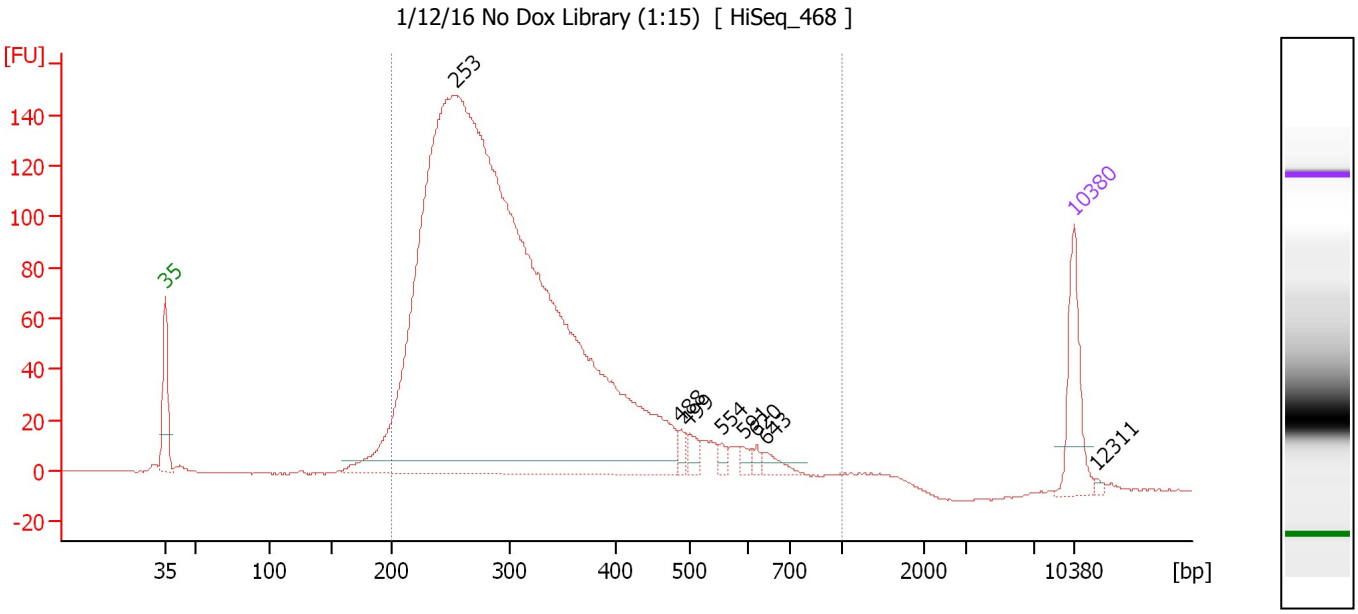
Region table for sample 4 : 12/23/15 KO Library (1:15)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	309	1,522.9	10,946.1	2,072.96	95	26.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 1/12/16 No Dox Library (1:15)

Number of peaks found:	8	Corr. Area 1:	2,593.5
Noise:	0.3		

Peak table for sample 5 : 1/12/16 No Dox Library (1:15)

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	253	3,303.10	19,769.5		65.28
3	488	14.81	45.9		82.69
4	499	18.68	56.7		83.30
5	554	9.96	27.2		85.81
6	591	10.99	28.2		87.50
7	620	7.50	18.3		88.52
8	643	17.28	40.7		89.24
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,311	0.00	0.0		114.74

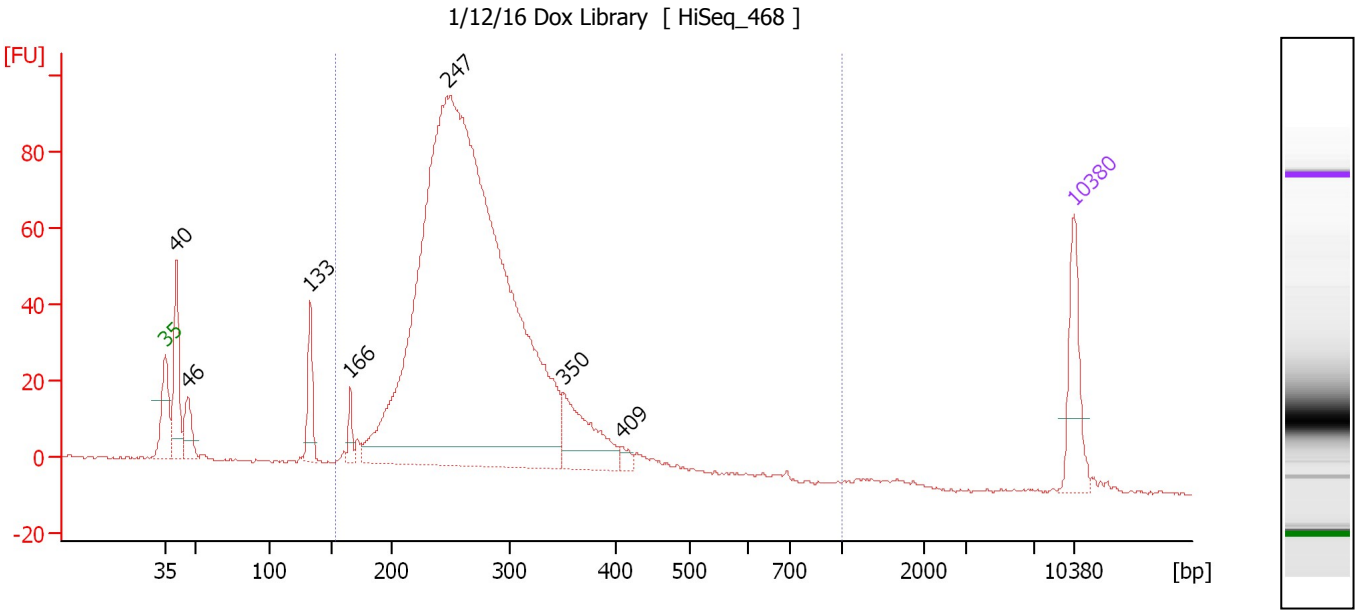
Region table for sample 5 : 1/12/16 No Dox Library (1:15)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	318	2,593.5	16,672.6	3,184.20	96	31.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 1/12/16 Dox Library

Number of peaks found:	7	Corr. Area 1:	1,308.7
Noise:	0.3		

Peak table for sample 6 : 1/12/16 Dox Library

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	40	147.37	5,560.8		43.81
3	46	62.86	2,087.4		44.68
4	133	80.13	910.1		54.15
5	166	26.77	244.7		57.20
6	247	2,400.18	14,739.7		64.69
7	350	136.50	590.9		73.60
8	409	12.69	47.1		78.13
9	10,380	75.00	10.9	Upper Marker	113.00

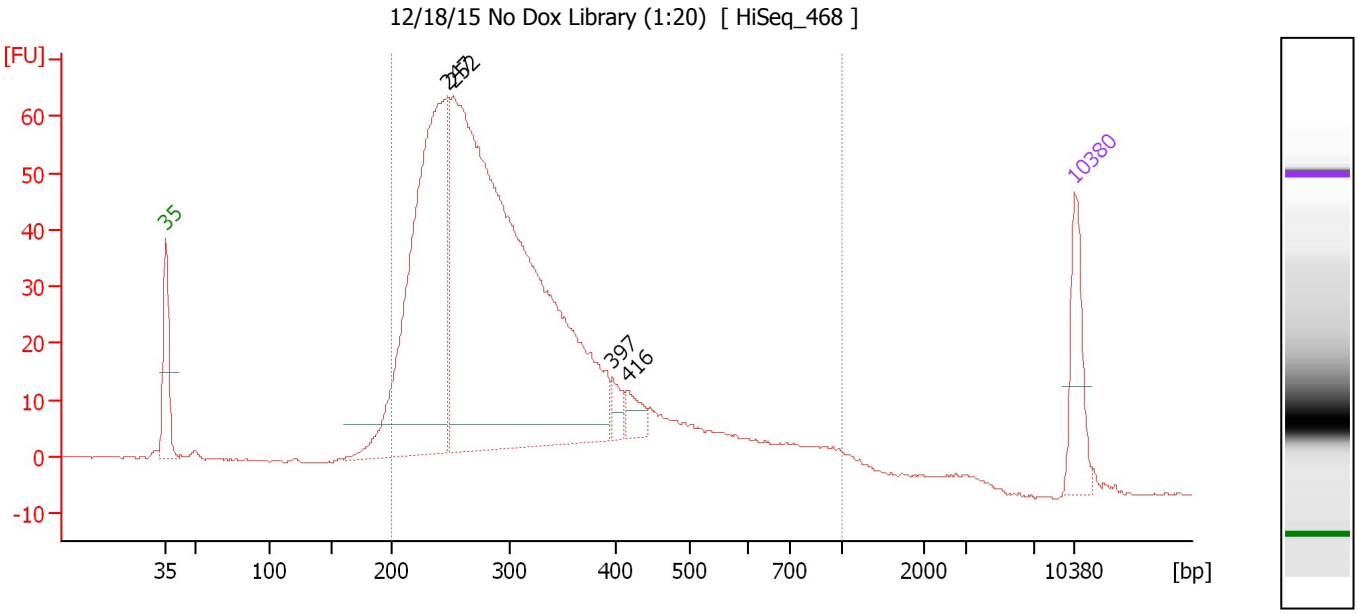
Region table for sample 6 : 1/12/16 Dox Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
153	1,000	278	1,308.7	15,050.4	2,618.14	90	22.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 12/18/15 No Dox Library (1:20)

Number of peaks found:	4	Corr. Area 1:	1,142.3
Noise:	0.2		

Peak table for sample 11 : 12/18/15 No Dox Library (1:20)

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	247	797.10	4,895.3		64.69
3	252	1,635.15	9,826.8		65.18
4	397	24.63	93.9		77.42
5	416	29.03	105.6		78.58
6	10,380	75.00	10.9	Upper Marker	113.00

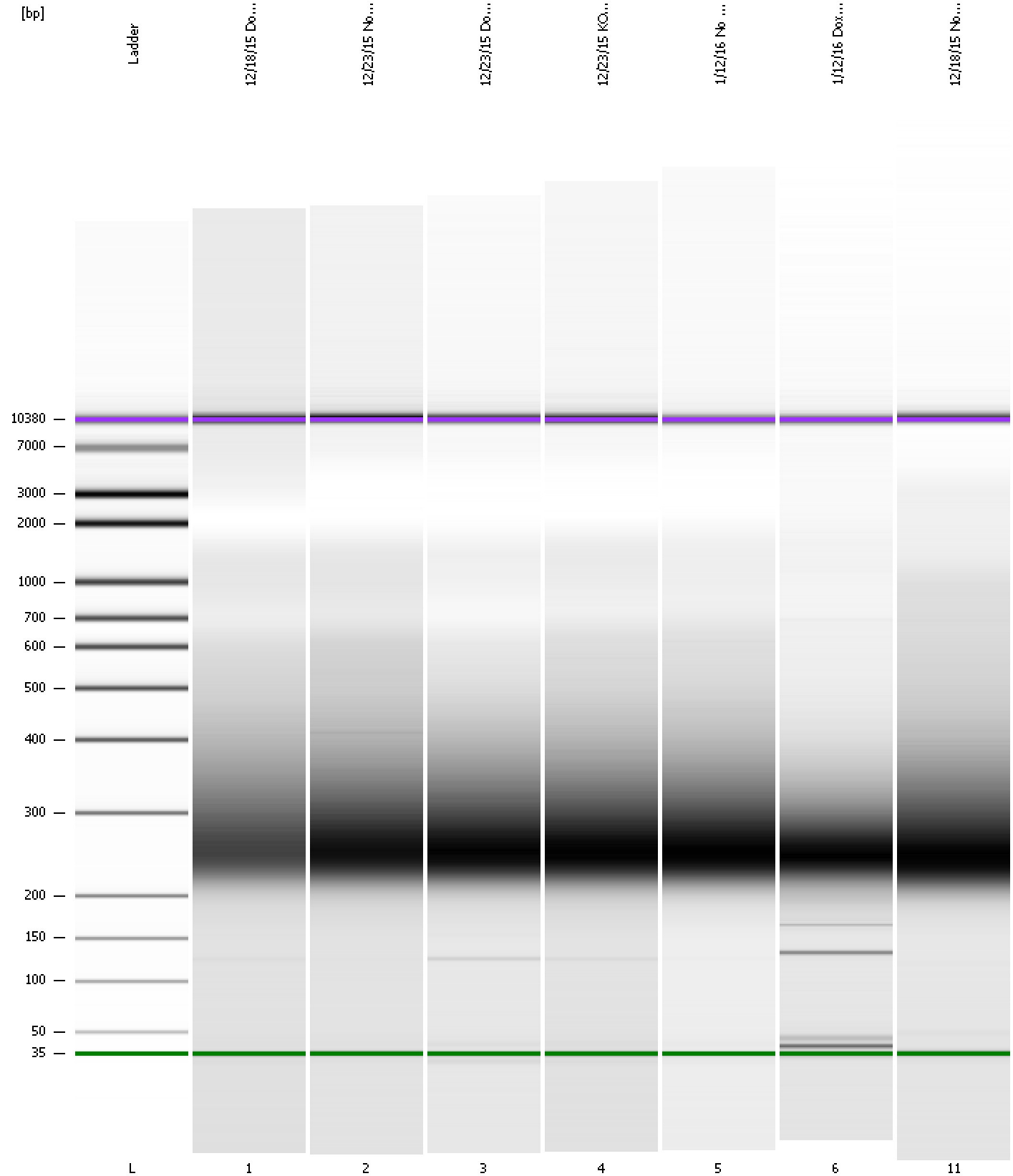
Region table for sample 11 : 12/18/15 No Dox Library (1:20)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	330	1,142.3	14,789.0	2,832.64	94	39.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ata\2016-05-12\2016-05-12_002_HiSeq_468_Libraries_11-17.xad

Created: 5/12/2016 4:32:29 PM
Modified: 5/13/2016 8:49:24 AM

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		5/12/2016 5:12:55 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\2016-05-12\2016-05-12_002.xad)		Instrument	Run		5/12/2016 4:32:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/12/2016 4:32:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/12/2016 4:32:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/12/2016 4:32:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/12/2016 4:32:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/12/2016 4:32:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/12/2016 4:32:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1