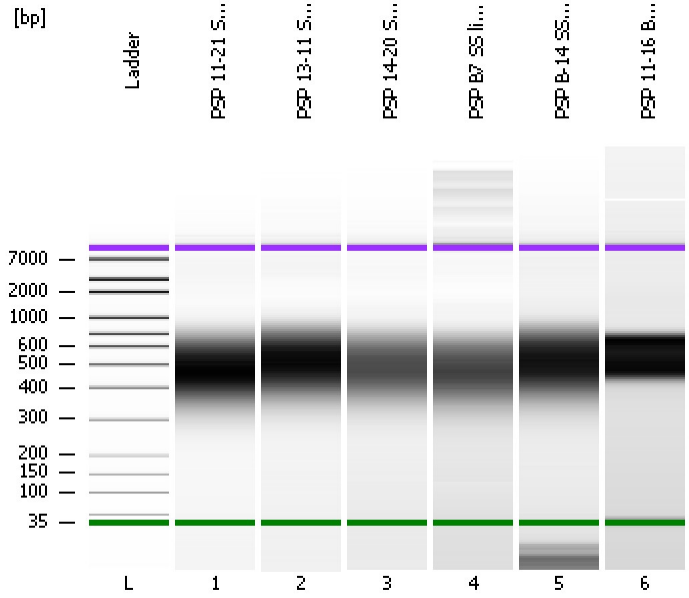
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Electrophoresis File Run Summary



Instrument Information:

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

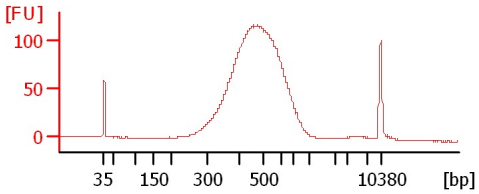
Assay Information:

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

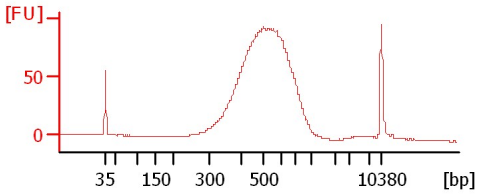
Chip Information:

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

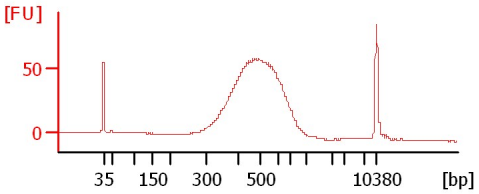
PSP 11-21 SS lib with 6 cyc PCR (1:2)



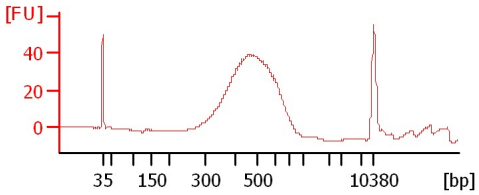
PSP 13-11 SS lib with 6 cyc PCR (1:3)



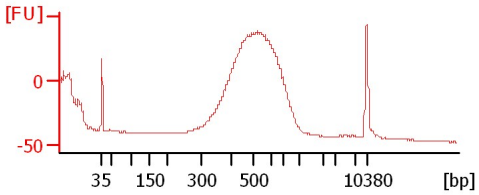
PSP 14-20 SS lib with 6 cyc PCR (1:2)



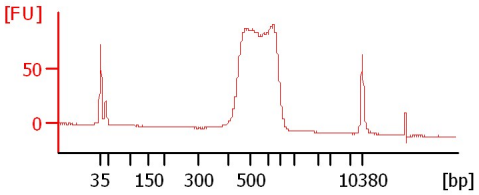
PSP B7 SS lib with 6 cyc PCR (1:3)



PSP B-14 SS lib with 6 cyc PCR (1:2)



PSP 11-16 BP with 12 cyc PCR



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
PSP 11-21 SS lib with 6 cyc PCR (1:2)		☐	✔			
PSP 13-11 SS lib with 6 cyc PCR (1:3)		☐	✔			
PSP 14-20 SS lib with 6 cyc PCR (1:2)		☐	✔			
PSP B7 SS lib with 6 cyc PCR (1:3)		☐	✔			
PSP B-14 SS lib with 6 cyc PCR (1:2)		☐	✔			
PSP 11-16 BP with 12 cyc PCR		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 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

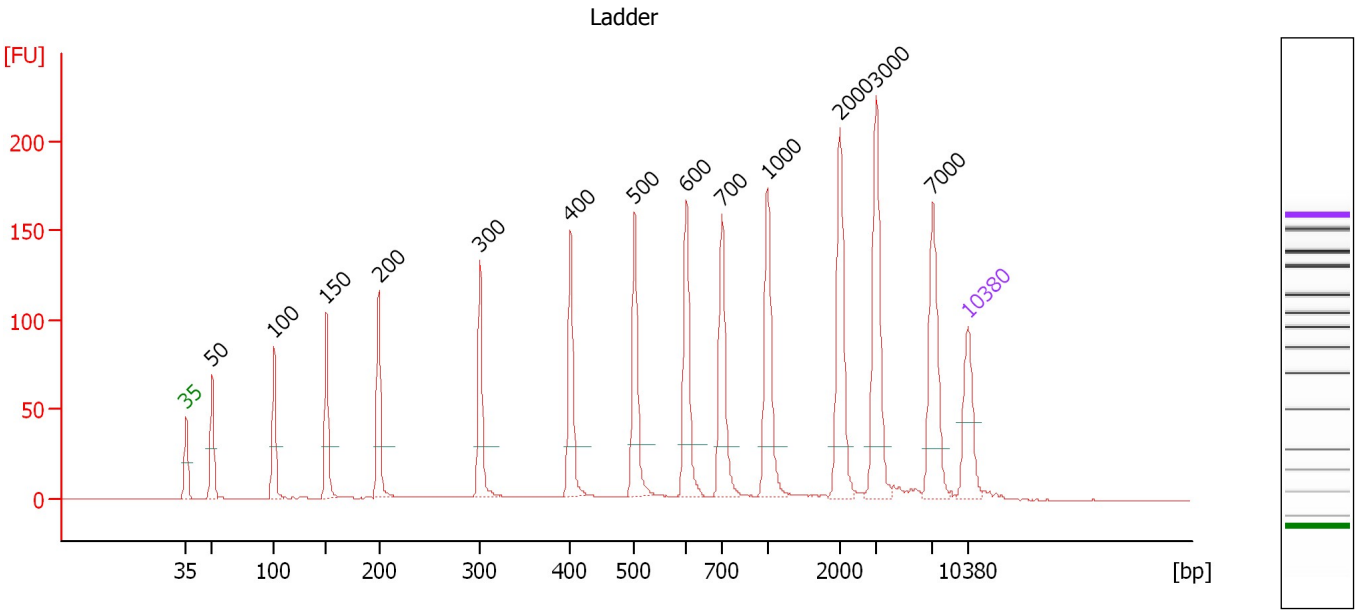
Ladder

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:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

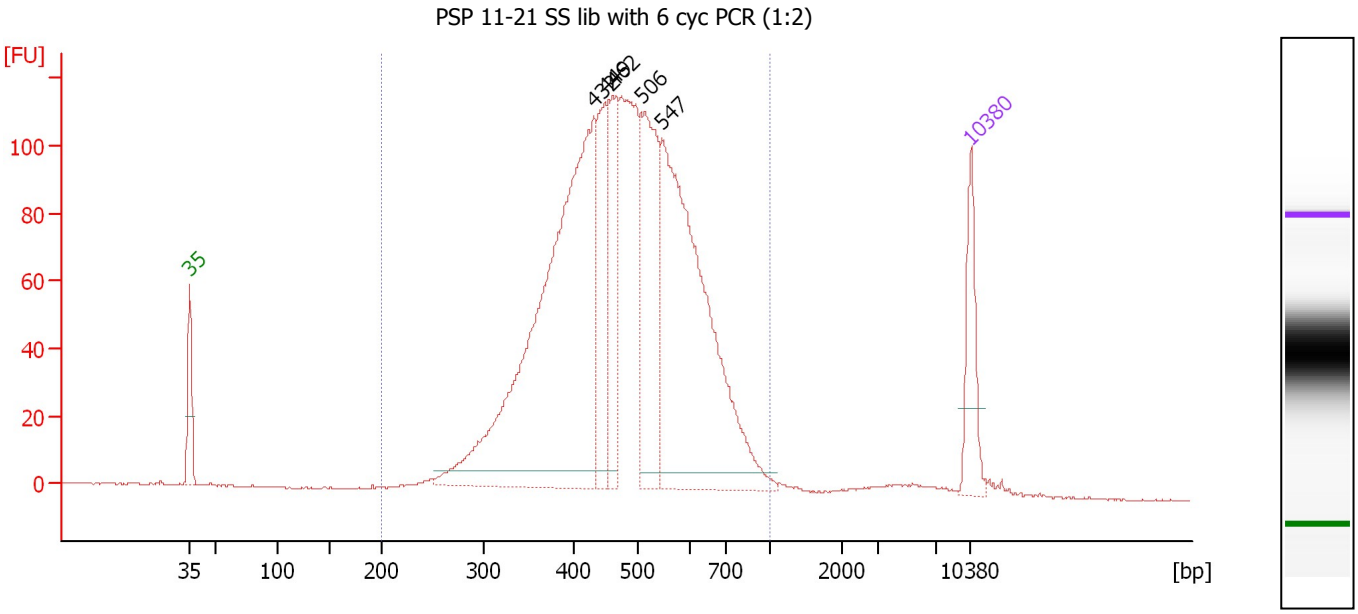
Peak table for Ladder

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	45.34
3		100	150.00	2,272.7	Ladder Peak	50.87
4		150	150.00	1,515.2	Ladder Peak	55.55
5		200	150.00	1,136.4	Ladder Peak	60.23
6		300	150.00	757.6	Ladder Peak	69.29
7		400	150.00	568.2	Ladder Peak	77.40
8		500	150.00	454.5	Ladder Peak	83.13
9		600	150.00	378.8	Ladder Peak	87.76
10		700	150.00	324.7	Ladder Peak	90.96
11		1,000	150.00	227.3	Ladder Peak	95.01
12		2,000	150.00	113.6	Ladder Peak	101.50
13		3,000	150.00	75.8	Ladder Peak	104.75
14		7,000	150.00	32.5	Ladder Peak	109.80
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : PSP 11-21 SS lib with 6 cyc PCR (1:2)

Number of peaks found:	5	Corr. Area 1:	2,218.4
Noise:	0.2		

Peak table for sample 1 : PSP 11-21 SS lib with 6 cyc PCR (1:2)

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	432	952.41	3,342.7		79.22
3	449	180.20	607.8		80.22
4	462	158.57	520.3		80.94
5	506	292.26	874.5		83.42
6	547	655.93	1,818.2		85.29
7	10,380	75.00	10.9	Upper Marker	113.00

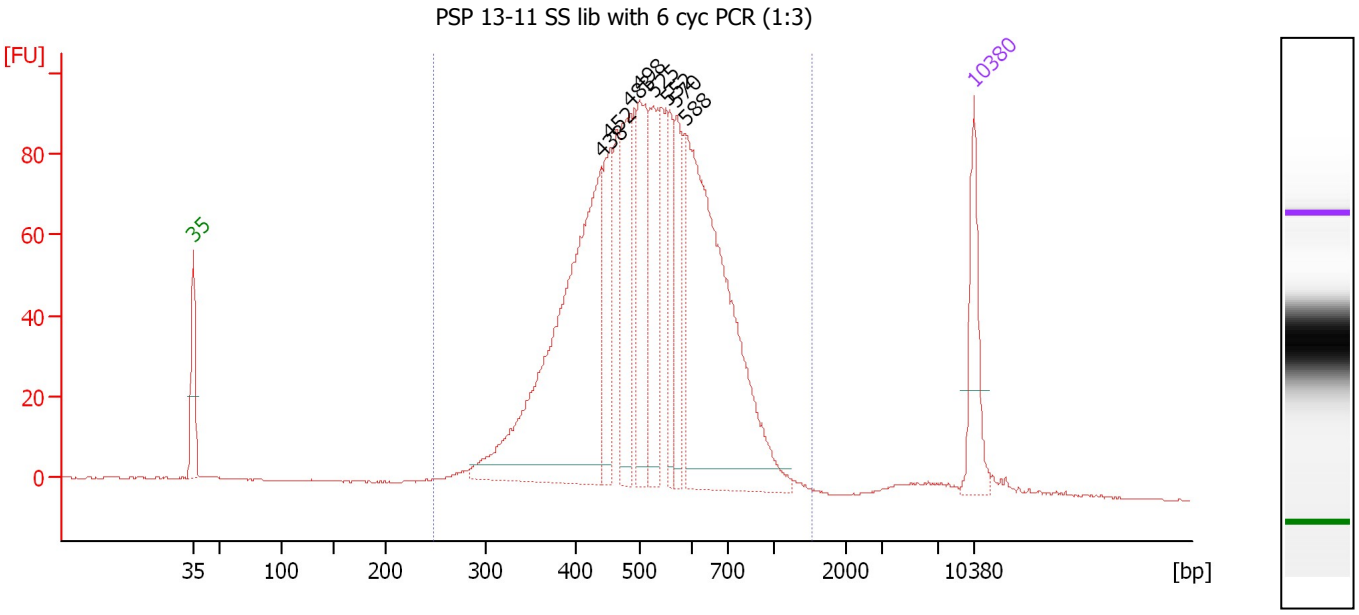
Region table for sample 1 : PSP 11-21 SS lib with 6 cyc PCR (1:2)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	486	2,218.4	8,987.4	2,675.38	97	23.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : PSP 13-11 SS lib with 6 cyc PCR (1:3)

Number of peaks found:	8	Corr. Area 1:	1,772.3
Noise:	0.2		

Peak table for sample 2 : PSP 13-11 SS lib with 6 cyc PCR (1:3)

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	438	614.53	2,125.9		79.58
3	452	121.26	406.3		80.39
4	483	151.92	476.5		82.16
5	498	157.04	477.7		83.02
6	525	136.46	394.2		84.26
7	552	83.62	229.4		85.55
8	570	86.08	228.8		86.37
9	588	542.77	1,399.8		87.18
10	10,380	75.00	10.9	Upper Marker	113.00

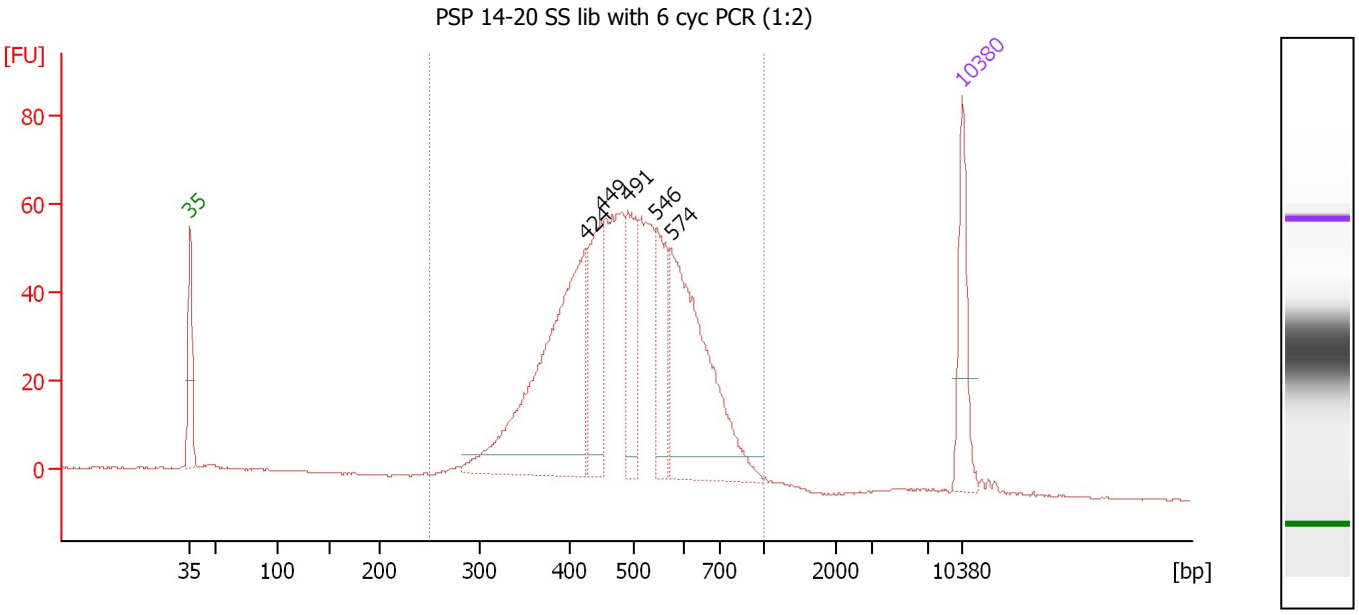
Region table for sample 2 : PSP 13-11 SS lib with 6 cyc PCR (1:3)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
249	1,549	529	1,772.3	7,088.7	2,274.56	97	26.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : PSP 14-20 SS lib with 6 cyc PCR (1:2)

Number of peaks found:	5	Corr. Area 1:	1,136.2
Noise:	0.2		

Peak table for sample 3 : PSP 14-20 SS lib with 6 cyc PCR (1:2)

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	424	460.75	1,646.8		78.77
3	449	149.97	505.8		80.22
4	491	130.30	401.7		82.64
5	546	110.73	307.4		85.25
6	574	334.74	883.5		86.56
7	10,380	75.00	10.9	Upper Marker	113.00

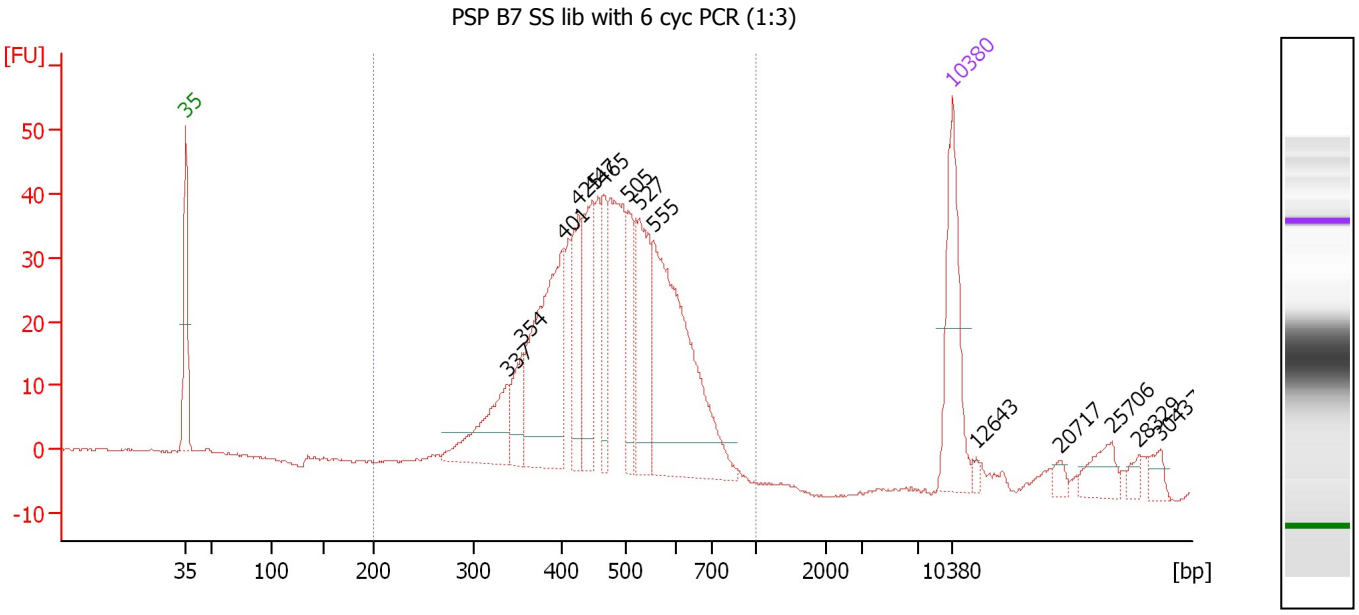
Region table for sample 3 : PSP 14-20 SS lib with 6 cyc PCR (1:2)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
250	1,000	498	1,136.2	5,463.0	1,675.91	95	22.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : PSP B7 SS lib with 6 cyc PCR (1:3)

Number of peaks found:	14	Corr. Area 1:	789.7
Noise:	0.2		

Peak table for sample 4 : PSP B7 SS lib with 6 cyc PCR (1:3)

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	337	79.90	358.7		72.33
3	354	40.58	173.5		73.69
4	401	185.03	699.8		77.44
5	425	65.06	231.8		78.85
6	447	86.85	294.2		80.12
7	465	48.48	157.9		81.14
8	505	47.84	143.5		83.38
9	527	93.87	269.7		84.40
10	555	235.76	644.0		85.66
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,643	0.00	0.0		115.14
13	20,717	0.00	0.0		122.78
14	25,706	0.00	0.0		127.50
15	28,329	0.00	0.0		129.98
16	30,437	0.00	0.0		131.97

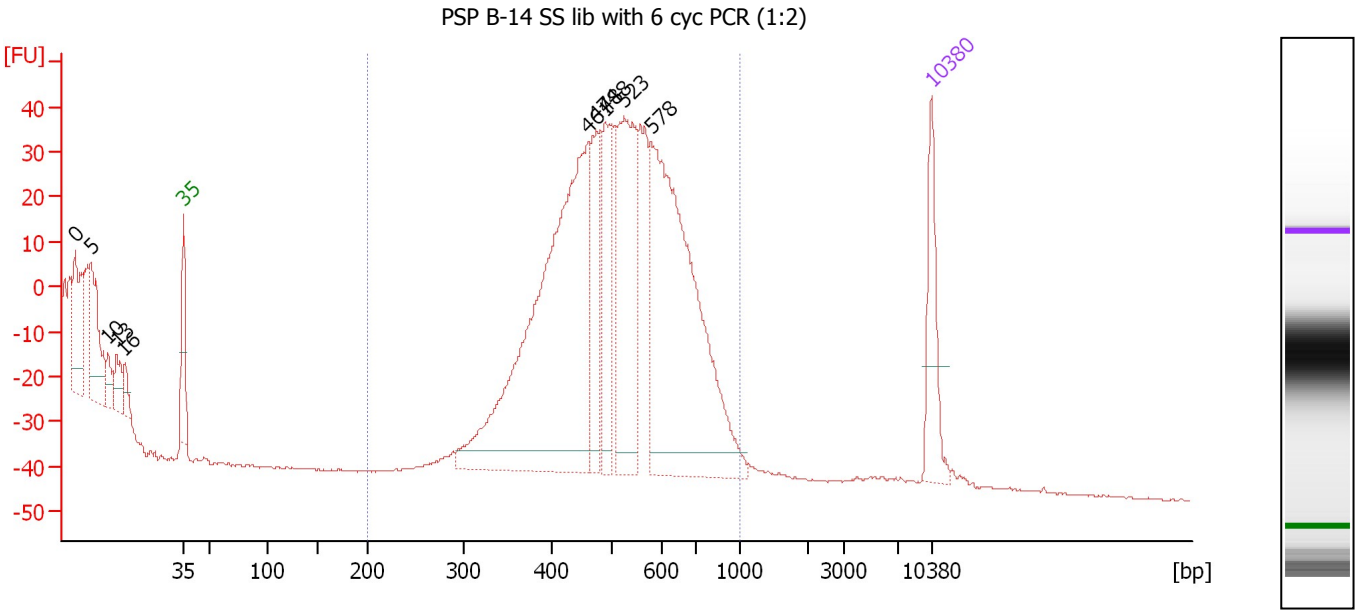
Region table for sample 4 : PSP B7 SS lib with 6 cyc PCR (1:3)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color	Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	477	789.7	3,879.8		1,141.41	91	21.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : PSP B-14 SS lib with 6 cyc PCR (1:2)

Number of peaks found:	10	Corr. Area 1:	888.8
Noise:	0.2		

Peak table for sample 5 : PSP B-14 SS lib with 6 cyc PCR (1:2)

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		0	0.00	0.0		32.87
2		5	0.00	0.0		34.32
3		10	0.00	0.0		35.97
4		13	0.00	0.0		36.76
5		16	0.00	0.0		37.46
6	◀	35	125.00	5,411.3	Lower Marker	43.00
7		461	753.95	2,480.6		80.87
8		474	108.34	346.6		81.62
9		488	123.91	384.4		82.47
10		523	266.01	770.1		84.21
11		578	573.05	1,501.2		86.76
12	▶	10,380	75.00	10.9	Upper Marker	113.00

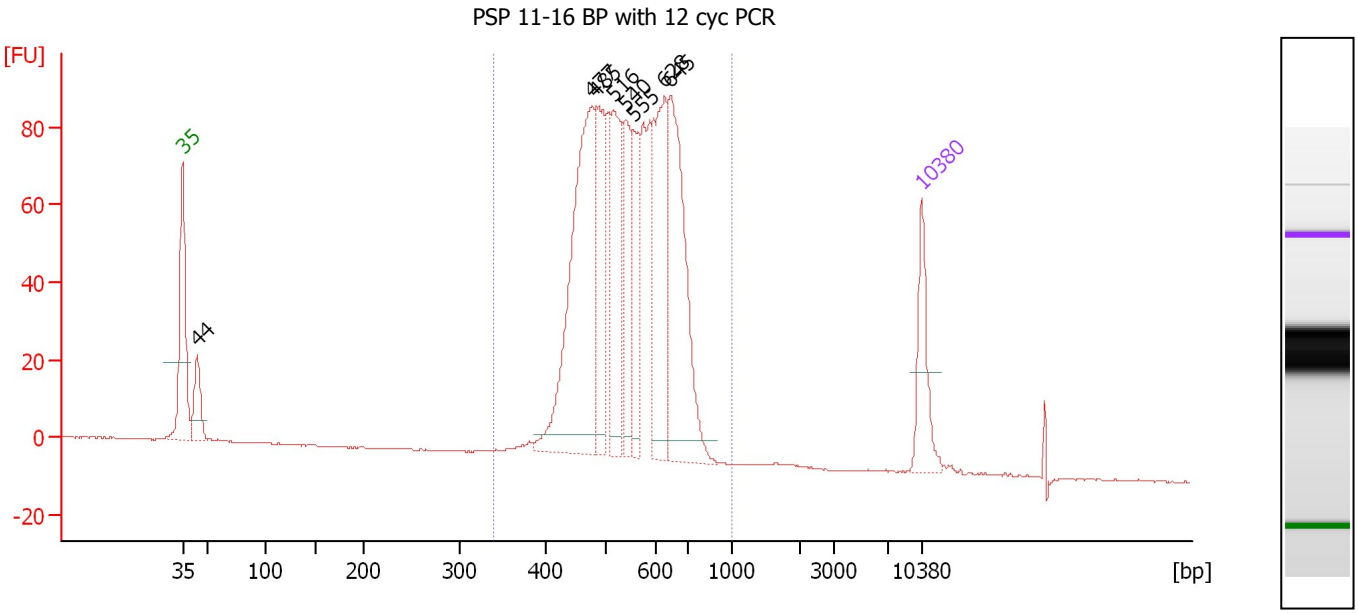
Region table for sample 5 : PSP B-14 SS lib with 6 cyc PCR (1:2)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	531	888.8	3,795.2	1,278.40	98	17.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : PSP 11-16 BP with 12 cyc PCR

Number of peaks found:	8	Corr. Area 1:	1,204.2
Noise:	0.1		

Peak table for sample 6 : PSP 11-16 BP with 12 cyc PCR

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	44	91.04	3,130.0		44.41
3	477	486.89	1,548.0		81.79
4	485	187.45	586.2		82.24
5	516	196.14	576.2		83.86
6	540	142.94	401.2		84.97
7	555	112.66	307.5		85.68
8	628	250.43	604.1		88.66
9	645	325.46	763.9		89.21
10	10,380	75.00	10.9	Upper Marker	113.00

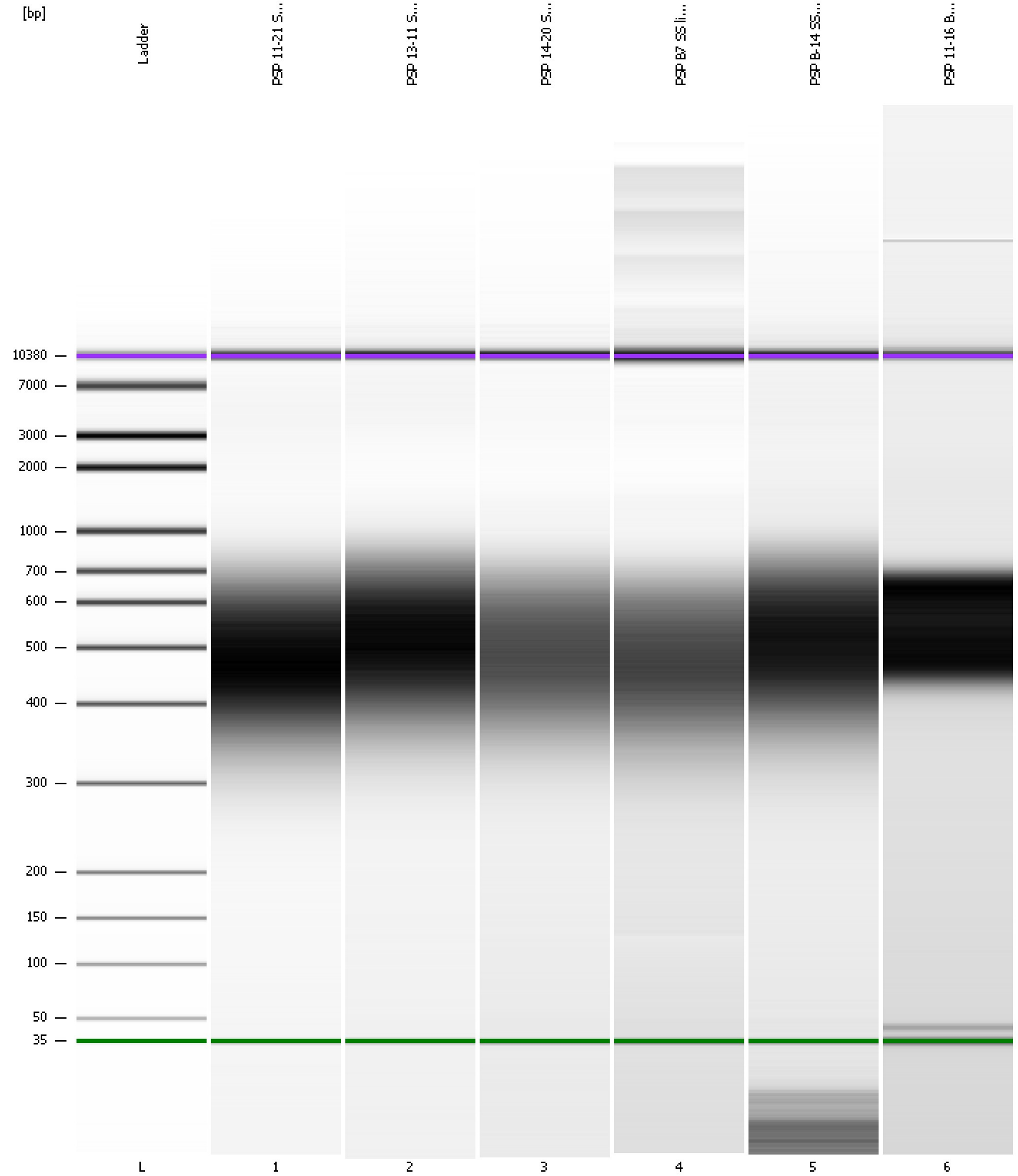
Region table for sample 6 : PSP 11-16 BP with 12 cyc PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
340	1,000	551	1,204.2	5,687.7	2,008.88	95	14.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Gel Image

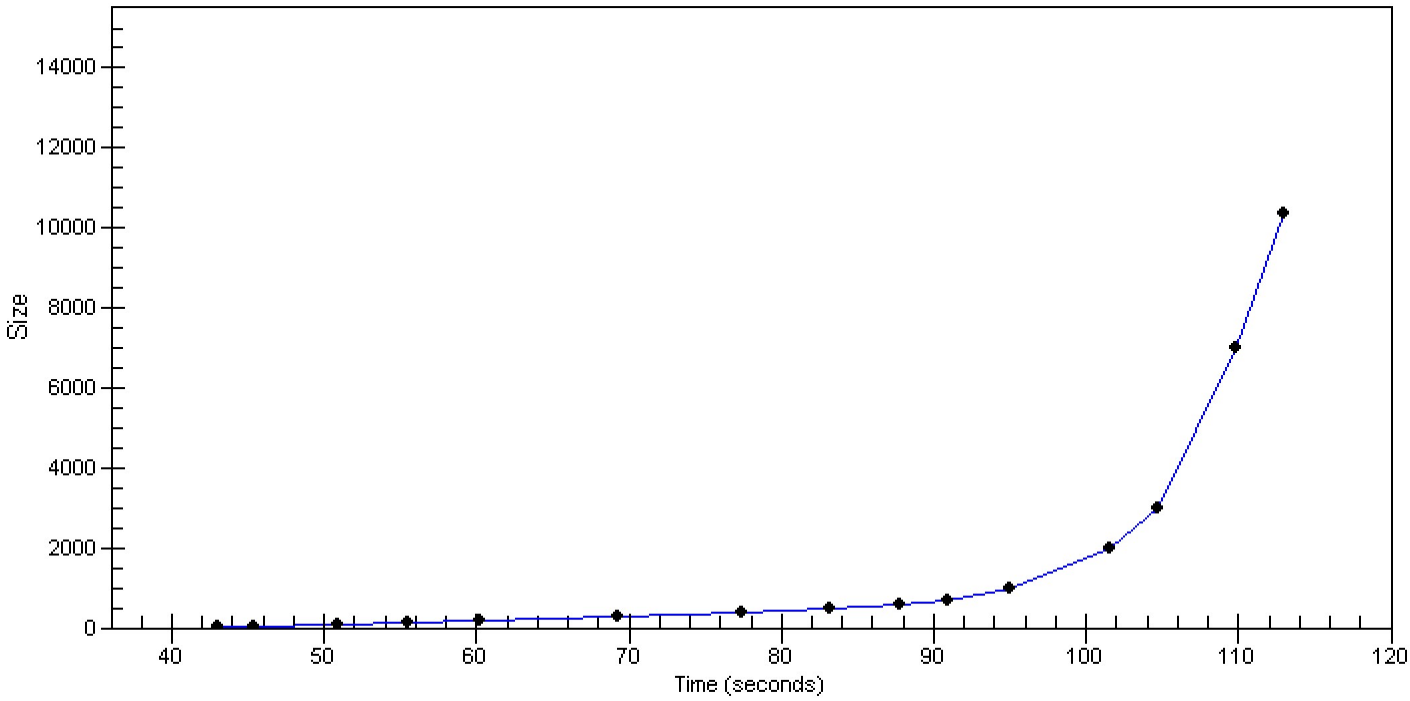


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...4-20\2016-04-20_004_FrankMartinLibraries_with_extra_PCR.xad

Created: 4/20/2016 2:50:52 PM
Modified: 4/20/2016 3:33:52 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		4/20/2016 3:26:27 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\2016-04-20\2016-04-20_004.xad)		Instrument	Run		4/20/2016 2:50:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/20/2016 2:50:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/20/2016 2:50:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/20/2016 2:50:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/20/2016 2:50:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/20/2016 2:50:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/20/2016 2:50:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1