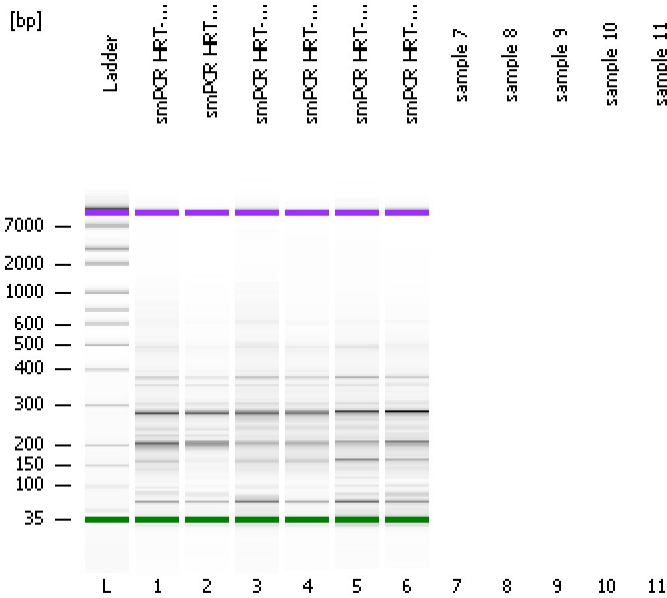


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
Modified: 1/8/2013 11:42:07 AM

Electrophoresis File Run Summary



Instrument Information:

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

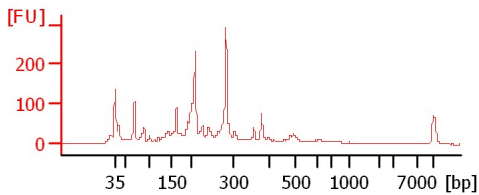
Assay Information:

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

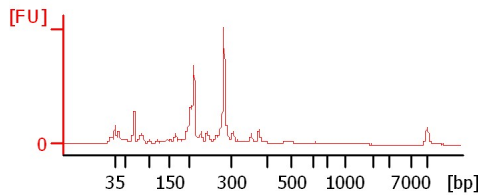
Chip Information:

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

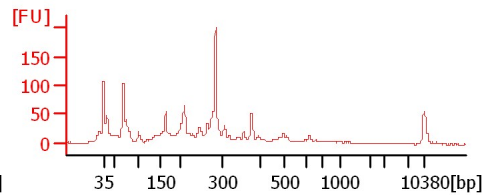
smPCR HRT-EP-1 (1/5)



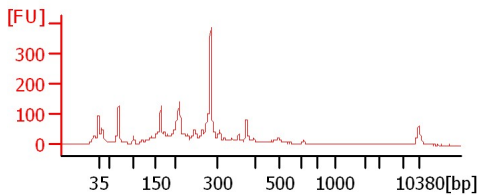
smPCR HRT-EP-2 (1/5)



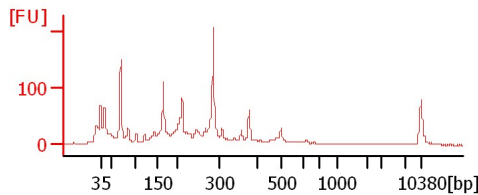
smPCR HRT-II-1 (1/5)



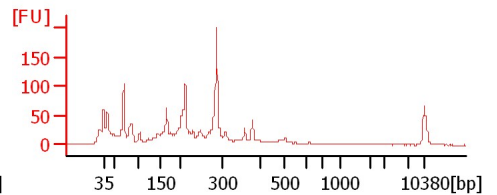
smPCR HRT-II-2 (1/5)



smPCR HRT-OI-1 (1/5)



smPCR HRT-OI-2 (1/5)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
Modified: 1/8/2013 11:42:07 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
smPCR HRT-EP-1 (1/5)		<input type="checkbox"/>	✓			
smPCR HRT-EP-2 (1/5)		<input type="checkbox"/>	✓			
smPCR HRT-II-1 (1/5)		<input type="checkbox"/>	✓			
smPCR HRT-II-2 (1/5)		<input type="checkbox"/>	✓			
smPCR HRT-OI-1 (1/5)		<input type="checkbox"/>	✓			
smPCR HRT-OI-2 (1/5)		<input type="checkbox"/>	✓			
sample 7		<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\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
Modified: 1/8/2013 11:42:07 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

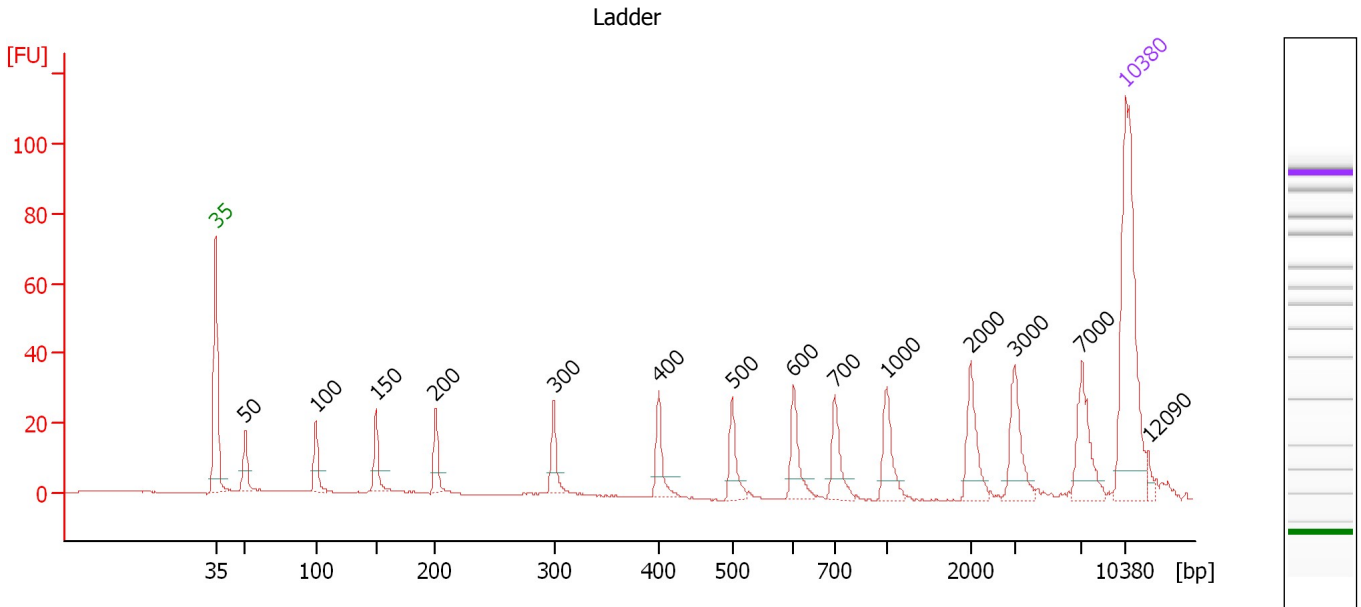
Ladder

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\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

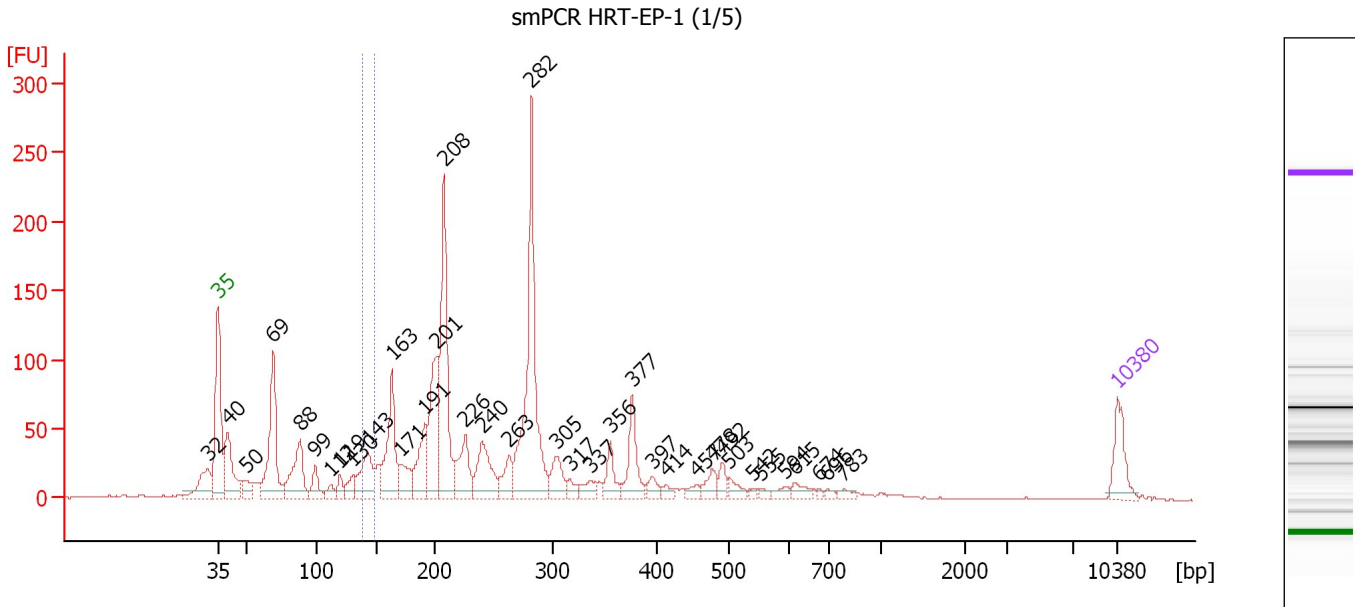
Peak table for Ladder

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
16	12,090	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
 Modified: 1/8/2013 11:42:07 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : smPCR HRT-EP-1 (1/5)

Number of peaks found: 37 Corr. Area 1: 51.3
 Noise: 0.4

Peak table for sample 1 : smPCR HRT-EP-1 (1/5)


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	40	223.88	8,487.2	
4	50	52.97	1,617.2	
5	69	369.60	8,129.4	
6	88	211.46	3,644.7	
7	99	68.55	1,049.8	
8	112	29.98	406.5	
9	119	36.65	465.2	
10	130	54.36	633.1	
11	143	164.33	1,745.7	
12	163	265.33	2,459.5	
13	171	96.71	855.8	
14	191	169.66	1,344.0	
15	201	295.75	2,226.2	
16	208	485.94	3,545.4	
17	226	145.29	974.5	
18	240	171.72	1,083.9	
19	263	78.17	449.9	
20	282	640.48	3,436.1	
21	305	85.83	426.6	
22	317	26.69	127.5	
23	337	38.08	171.1	
24	356	67.83	288.5	
25	377	125.88	505.5	
26	397	30.97	118.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad


Created: 1/8/2013 11:13:31 AM
 Modified: 1/8/2013 11:42:07 AM

Electropherogram Summary Continued ...

... Peak table for sample 1 : smPCR HRT-EP-1 (1/5)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	414	17.65	64.6	
28	457	22.16	73.4	
29	478	42.05	133.3	
30	492	33.41	102.9	
31	503	30.70	92.5	
32	542	9.66	27.0	
33	555	11.54	31.5	
34	594	18.50	47.1	
35	615	26.88	66.2	
36	674	6.76	15.2	
37	696	10.09	22.0	
38	783	14.81	28.7	
39	 10,380	75.00	10.9	Upper Marker

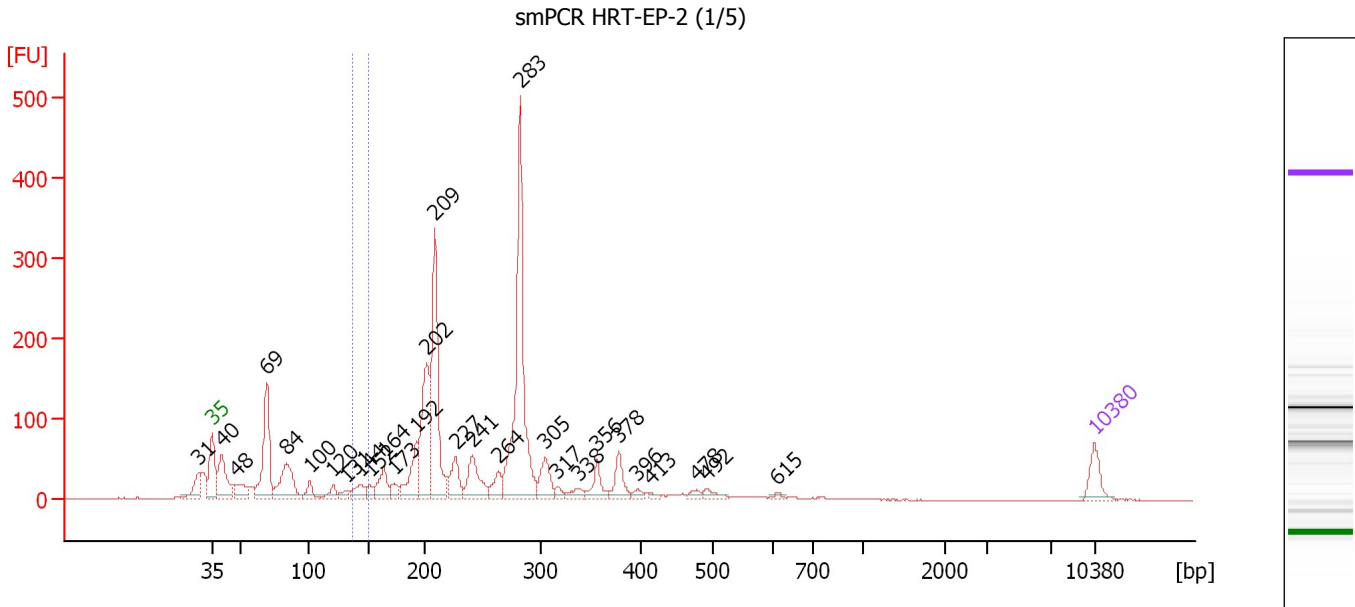
Region table for sample 1 : smPCR HRT-EP-1 (1/5)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
138	148	143	1,240.1	116.68	51.3	2	2.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
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Electropherogram Summary Continued ...



Overall Results for sample 2 : smPCR HRT-EP-2 (1/5)

Number of peaks found: 29 Corr. Area 1: 39.2
 Noise: 0.3

Peak table for sample 2 : smPCR HRT-EP-2 (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	40	281.17	10,633.4	
4	48	115.07	3,658.3	
5	69	479.64	10,492.4	
6	84	299.05	5,419.3	
7	100	72.71	1,098.1	
8	120	58.95	741.8	
9	131	38.81	447.6	
10	144	88.38	929.0	
11	152	46.91	467.8	
12	164	139.33	1,287.1	
13	173	56.96	499.3	
14	192	213.18	1,679.1	
15	202	481.15	3,615.2	
16	209	717.03	5,207.6	
17	227	149.22	997.1	
18	241	203.52	1,278.7	
19	264	89.66	514.8	
20	283	1,057.67	5,663.5	
21	305	137.90	684.1	
22	317	29.39	140.3	
23	338	44.49	199.5	
24	356	99.20	422.0	
25	378	109.35	438.7	
26	396	25.60	97.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad


Created: 1/8/2013 11:13:31 AM
 Modified: 1/8/2013 11:42:07 AM

Electropherogram Summary Continued ...

... Peak table for sample 2 : smPCR HRT-EP-2 (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	413	14.37	52.7	
28	478	27.21	86.3	
29	492	37.80	116.4	
30	615	12.57	31.0	
31	10,380	75.00	10.9	Upper Marker

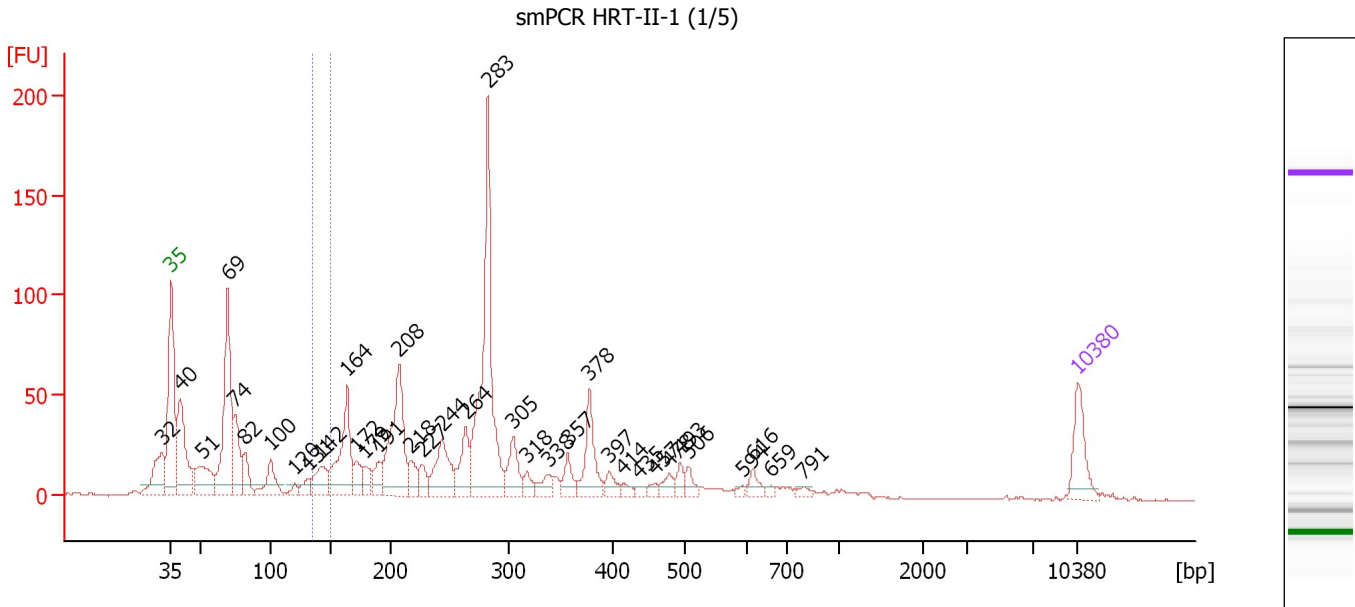
Region table for sample 2 : smPCR HRT-EP-2 (1/5)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
137	151	143	981.5	92.94	39.2	1	2.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
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Electropherogram Summary Continued ...



Overall Results for sample 3 : smPCR HRT-II-1 (1/5)

Number of peaks found: 36 Corr. Area 1: 37.7
 Noise: 0.3

Peak table for sample 3 : smPCR HRT-II-1 (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	40	264.46	10,120.5	
4	51	144.89	4,331.0	
5	69	428.54	9,371.8	
6	74	140.07	2,851.5	
7	82	73.29	1,361.6	
8	100	91.95	1,396.7	
9	120	18.84	238.4	
10	131	32.00	369.1	
11	142	89.50	957.5	
12	164	238.76	2,209.3	
13	172	50.02	441.2	
14	179	45.34	383.9	
15	191	51.00	405.1	
16	208	308.40	2,248.3	
17	218	51.30	356.1	
18	227	44.28	295.2	
19	244	142.02	880.7	
20	264	100.01	573.4	
21	283	558.68	2,989.0	
22	305	81.83	406.4	
23	318	28.26	134.4	
24	338	40.60	181.9	
25	357	44.47	188.5	
26	378	118.91	476.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad


Created: 1/8/2013 11:13:31 AM
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Electropherogram Summary Continued ...

... Peak table for sample 3 : smPCR HRT-II-1 (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	397	29.97	114.4	
28	414	14.38	52.6	
29	435	11.97	41.7	
30	457	13.43	44.5	
31	478	28.45	90.2	
32	493	25.91	79.6	
33	506	26.17	78.4	
34	594	8.66	22.1	
35	616	26.02	64.0	
36	659	8.36	19.2	
37	791	11.57	22.2	
38	▶ 10,380	75.00	10.9	Upper Marker

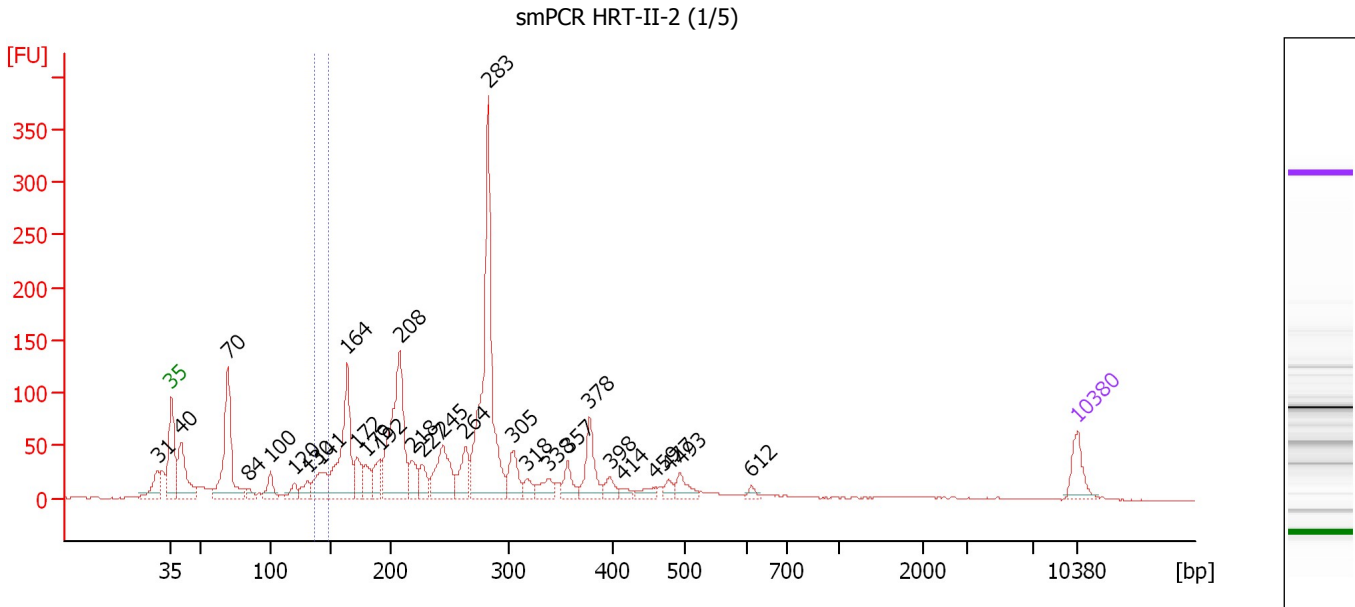
Region table for sample 3 : smPCR HRT-II-1 (1/5)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
134	150	143	1,088.7	102.40	37.7	2	3.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
 Modified: 1/8/2013 11:42:07 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : smPCR HRT-II-2 (1/5)

Number of peaks found: 29 Corr. Area 1: 51.8
 Noise: 0.3

Peak table for sample 4 : smPCR HRT-II-2 (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	40	282.59	10,714.4	
4	70	498.95	10,868.5	
5	84	30.37	550.1	
6	100	74.92	1,138.2	
7	120	43.39	549.9	
8	130	60.24	699.6	
9	141	139.51	1,495.4	
10	164	466.10	4,309.8	
11	172	113.72	1,001.5	
12	179	84.18	711.4	
13	192	100.69	795.4	
14	208	620.13	4,512.7	
15	218	97.95	679.7	
16	227	78.17	520.6	
17	245	235.43	1,456.8	
18	264	131.27	753.0	
19	283	940.06	5,025.6	
20	305	122.10	606.1	
21	318	42.71	203.3	
22	338	60.82	272.4	
23	357	71.61	303.6	
24	378	150.86	604.7	
25	398	44.96	171.1	
26	414	20.70	75.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
 Modified: 1/8/2013 11:42:07 AM

Electropherogram Summary Continued ...

... Peak table for sample 4 : smPCR HRT-II-2 (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	459	31.68	104.6	
28	477	28.03	89.0	
29	493	56.33	173.3	
30	612	15.50	38.4	
31	10,380	75.00	10.9	Upper Marker

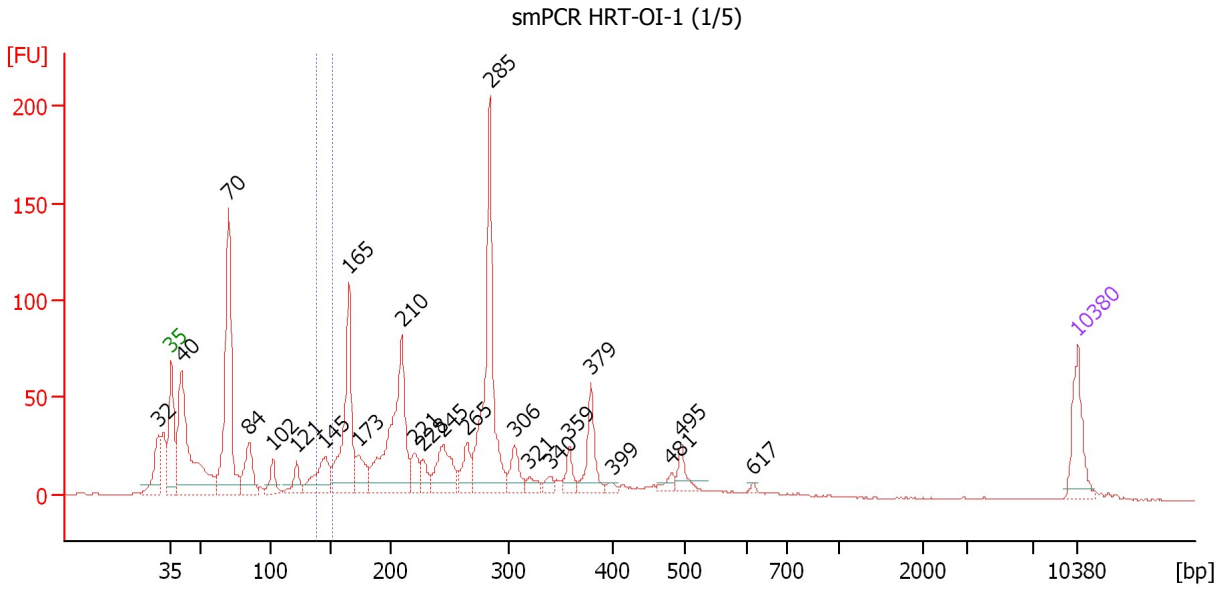
Region table for sample 4 : smPCR HRT-II-2 (1/5)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
136	148	142	1,405.8	131.38	51.8	2	2.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
 Modified: 1/8/2013 11:42:07 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : smPCR HRT-OI-1 (1/5)

Number of peaks found: 24 Corr. Area 1: 42.4
 Noise: 0.2


Peak table for sample 5 : smPCR HRT-OI-1 (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	40	448.34	16,846.0	
4	70	468.96	10,137.1	
5	84	105.19	1,889.2	
6	102	46.95	699.1	
7	121	45.73	570.6	
8	145	110.00	1,149.9	
9	165	299.71	2,746.1	
10	173	71.59	626.3	
11	210	362.02	2,614.2	
12	221	48.24	331.4	
13	228	37.56	249.7	
14	245	112.19	693.8	
15	265	58.13	332.3	
16	285	414.14	2,205.1	
17	306	53.72	265.8	
18	321	20.55	97.1	
19	340	16.23	72.2	
20	359	33.86	143.1	
21	379	87.45	349.2	
22	399	9.27	35.2	
23	481	17.95	56.5	
24	495	36.49	111.7	
25	617	4.51	11.1	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
Modified: 1/8/2013 11:42:07 AM

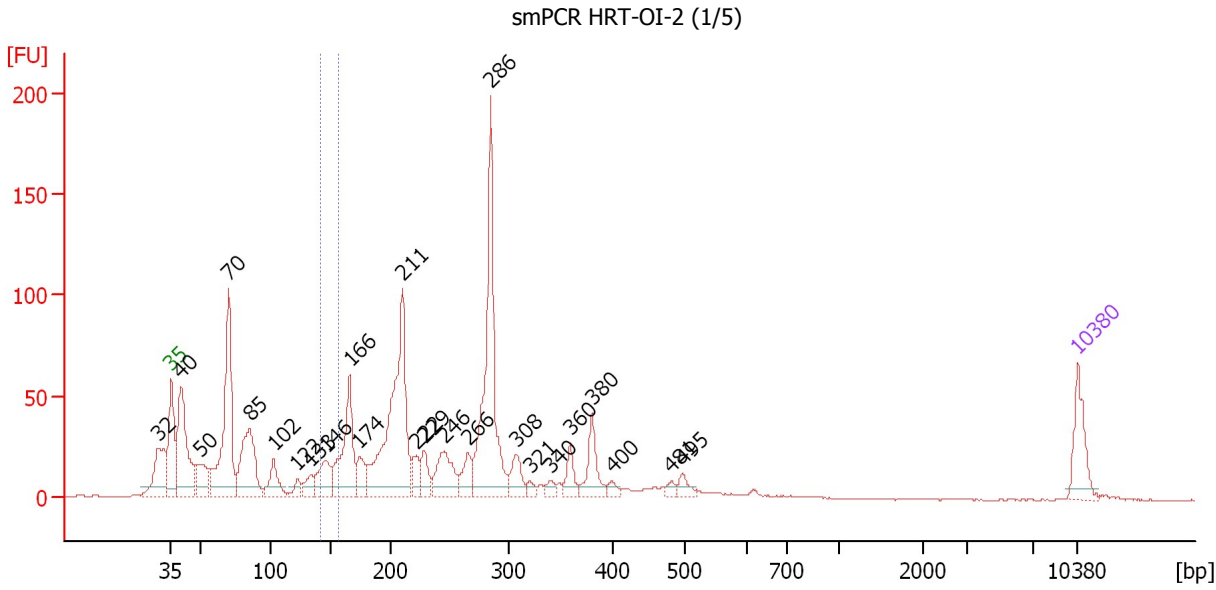
Electropherogram Summary Continued ...**... Region table for sample 5 : smPCR HRT-OI-1 (1/5)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
137	152	144	1,015.5	96.69	42.4	3	2.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
 Modified: 1/8/2013 11:42:07 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : smPCR HRT-OI-2 (1/5)

Number of peaks found: 25 Corr. Area 1: 43.7
 Noise: 0.2

Peak table for sample 6 : smPCR HRT-OI-2 (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	40	334.45	12,645.2	
4	50	98.10	2,995.4	
5	70	449.69	9,726.7	
6	85	253.04	4,518.1	
7	102	82.05	1,218.5	
8	122	26.88	334.2	
9	133	41.86	476.9	
10	146	99.78	1,038.3	
11	166	247.38	2,261.6	
12	174	62.65	545.2	
13	211	548.52	3,946.6	
14	222	48.00	327.7	
15	229	59.62	394.8	
16	246	124.40	766.0	
17	266	58.09	330.5	
18	286	496.10	2,632.7	
19	308	62.06	305.2	
20	321	16.88	79.7	
21	340	18.31	81.5	
22	360	47.70	200.9	
23	380	83.49	332.6	
24	400	15.25	57.8	
25	481	12.61	39.7	
26	495	24.28	74.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
Modified: 1/8/2013 11:42:07 AM

Electropherogram Summary Continued ...**... Peak table for sample 6 : smPCR HRT-OI-2 (1/5)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	10,380	75.00	10.9	Upper Marker

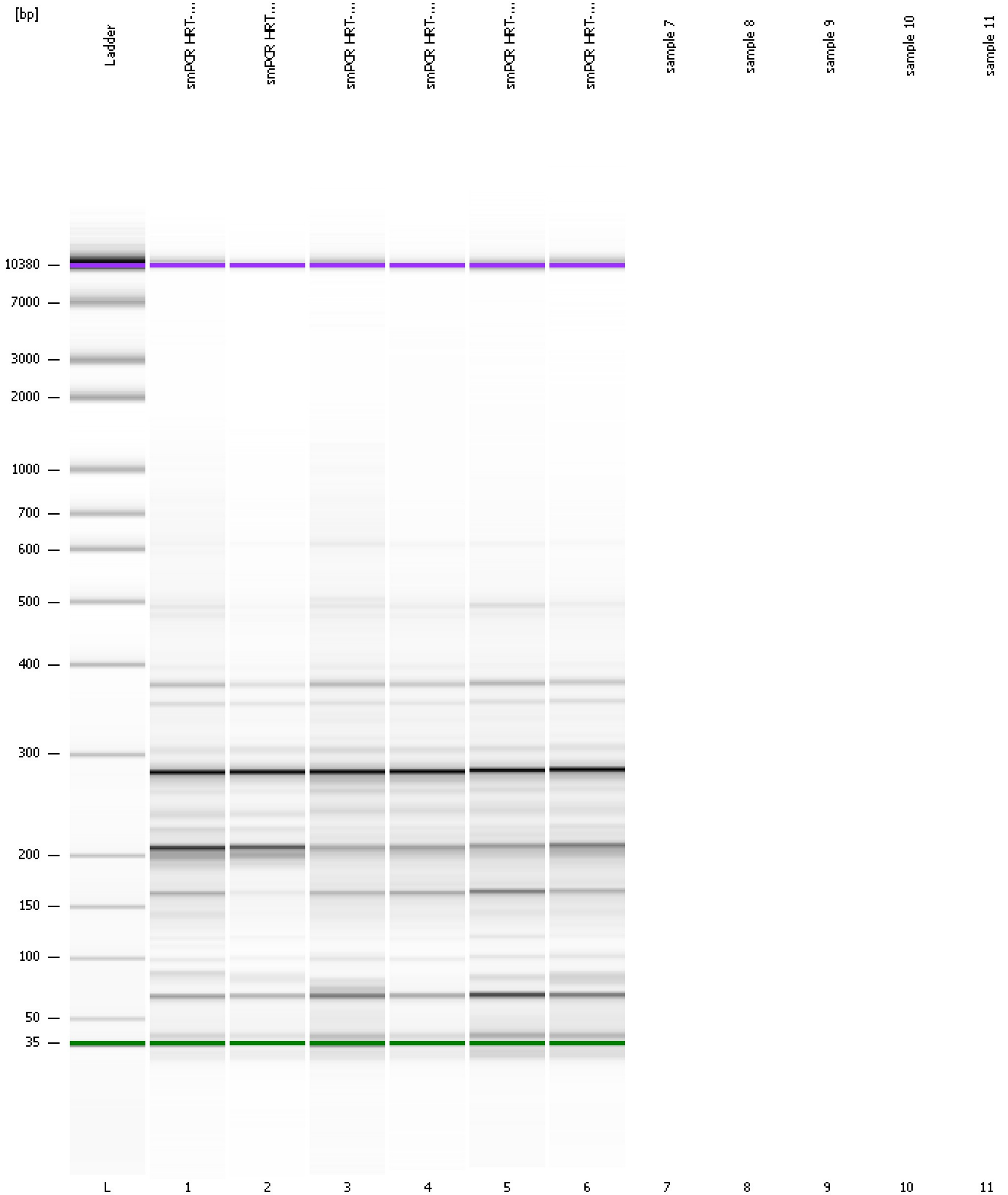
Region table for sample 6 : smPCR HRT-OI-2 (1/5)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
141	156	148	1,169.1	114.16	43.7	3	2.9	■

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
Modified: 1/8/2013 11:42:07 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad

Created: 1/8/2013 11:13:31 AM
 Modified: 1/8/2013 11:42:07 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 7)		Instrument	Run		1/8/2013 11:40:34 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-01-08\2013-01-08_001.xad)		Instrument	Run		1/8/2013 11:13:36 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/8/2013 11:13:36 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/8/2013 11:13:36 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/8/2013 11:13:36 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/8/2013 11:13:36 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/8/2013 11:13:36 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/8/2013 11:13:36 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1