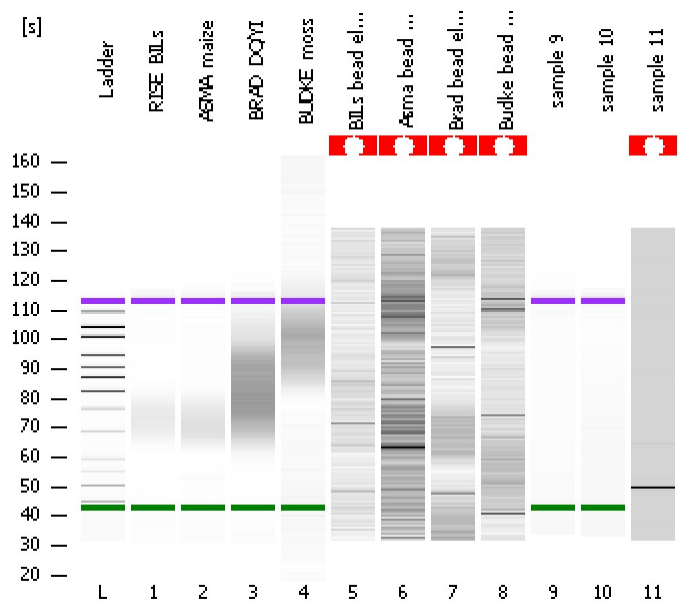


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
Modified: 3/20/2015 12:13:42 PM

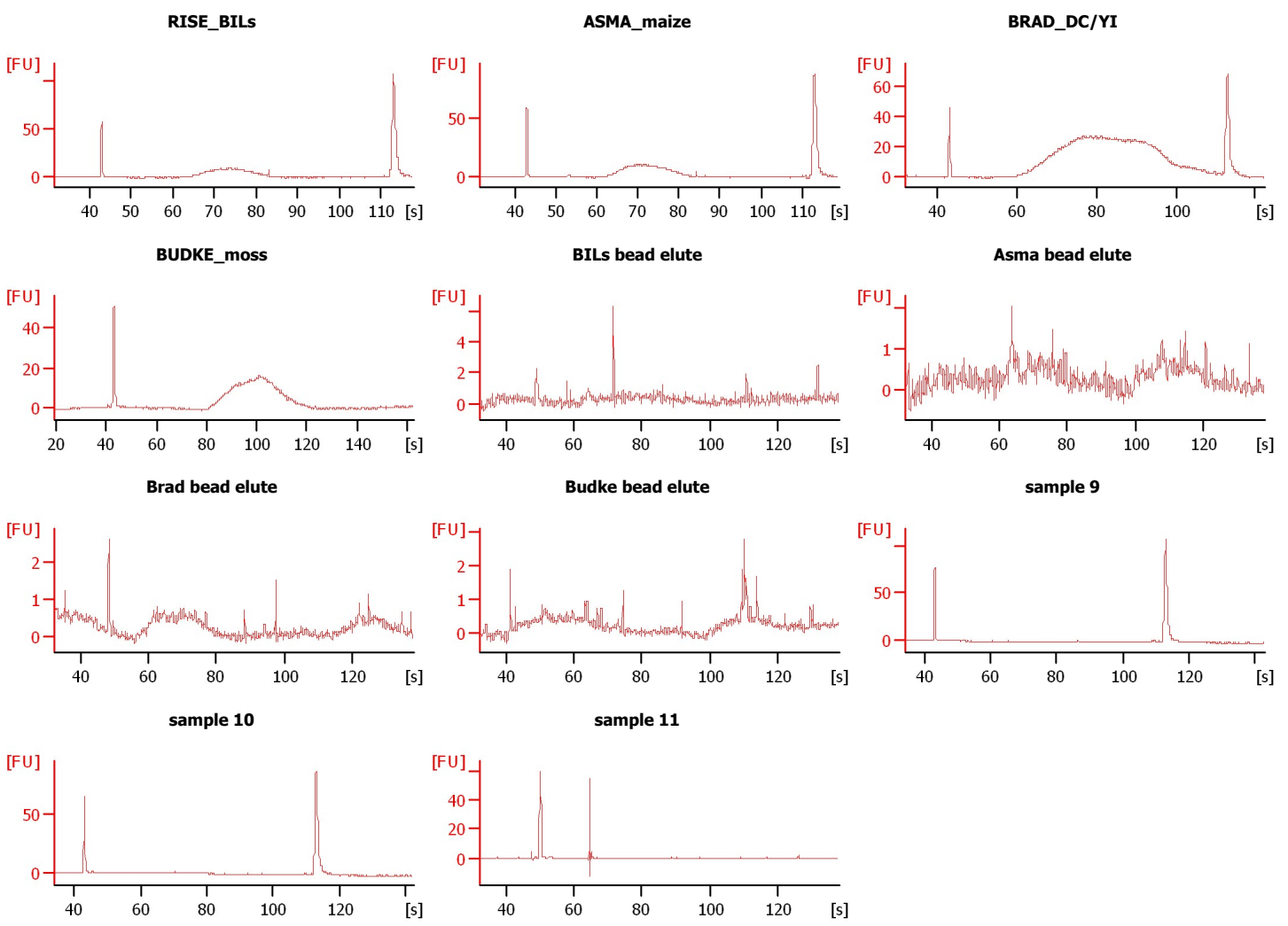
### Electrophoresis File Run Summary



**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:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
Modified: 3/20/2015 12:13:42 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
RISE_BILs		<input type="checkbox"/>	✓			
ASMA_maize		<input type="checkbox"/>	✓			
BRAD_DC/YI		<input type="checkbox"/>	✓			
BUDKE_moss		<input type="checkbox"/>	✓			
BILs bead elute		<input type="checkbox"/>	✓			
Asma bead elute		<input type="checkbox"/>	✓			
Brad bead elute		<input type="checkbox"/>	✓			
Budke bead elute		<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\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
Modified: 3/20/2015 12:13:42 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

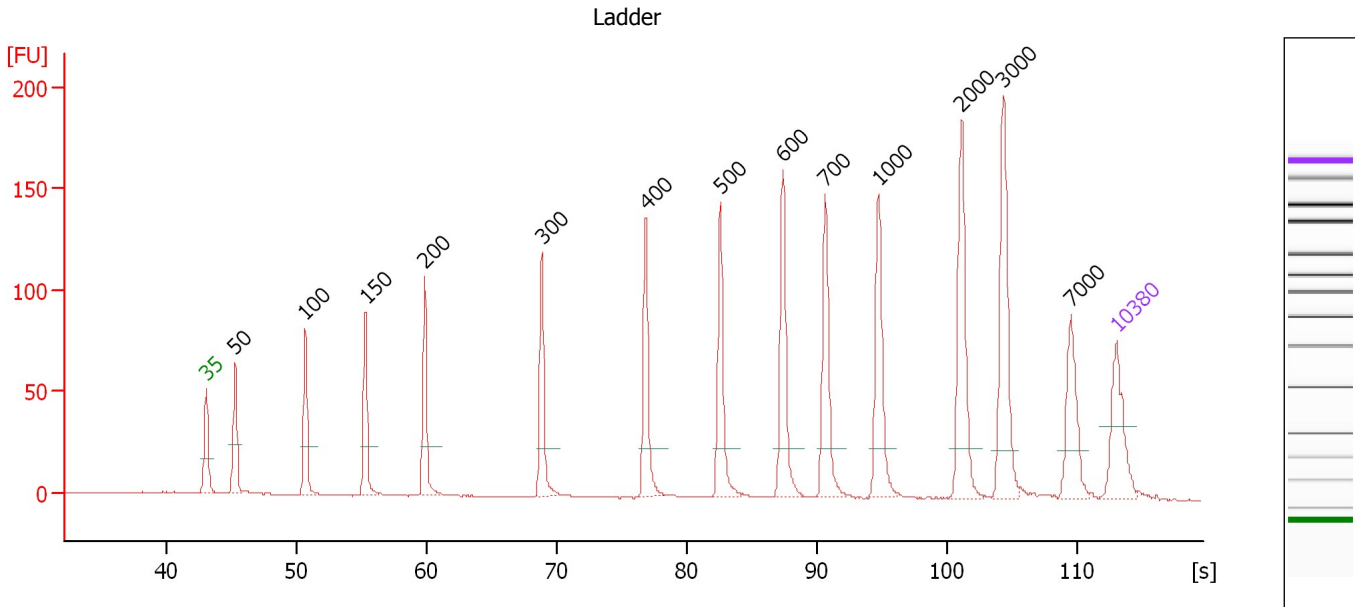
**Ladder**

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:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
 Modified: 3/20/2015 12:13:42 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

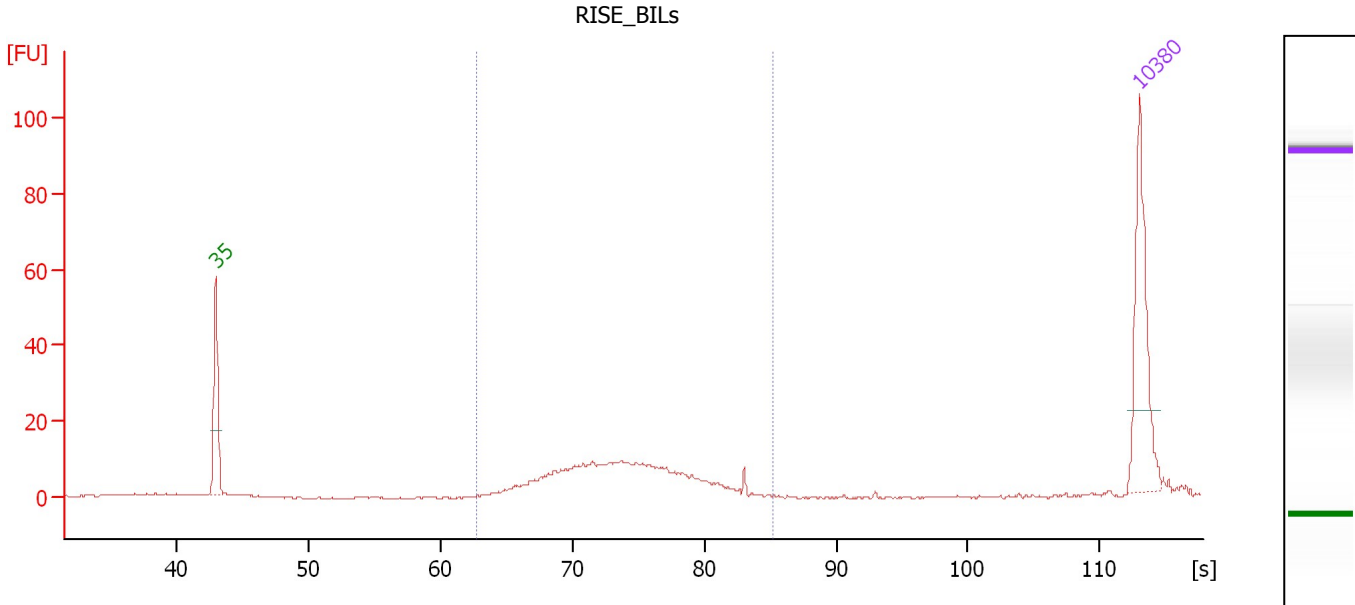
**Peak table for Ladder**

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	45.23
3	100	150.00	2,272.7	Ladder Peak	50.64
4	150	150.00	1,515.2	Ladder Peak	55.26
5	200	150.00	1,136.4	Ladder Peak	59.80
6	300	150.00	757.6	Ladder Peak	68.80
7	400	150.00	568.2	Ladder Peak	76.80
8	500	150.00	454.5	Ladder Peak	82.54
9	600	150.00	378.8	Ladder Peak	87.33
10	700	150.00	324.7	Ladder Peak	90.59
11	1,000	150.00	227.3	Ladder Peak	94.67
12	2,000	150.00	113.6	Ladder Peak	101.03
13	3,000	150.00	75.8	Ladder Peak	104.29
14	7,000	150.00	32.5	Ladder Peak	109.45
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
 Modified: 3/20/2015 12:13:42 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : RISE\_BILs**

Number of peaks found: 0                      Corr. Area 1: 153.1  
 Noise: 0.2

**Peak table for sample 1 : RISE\_BILs**

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	10,380	75.00	10.9	Upper Marker	113.00

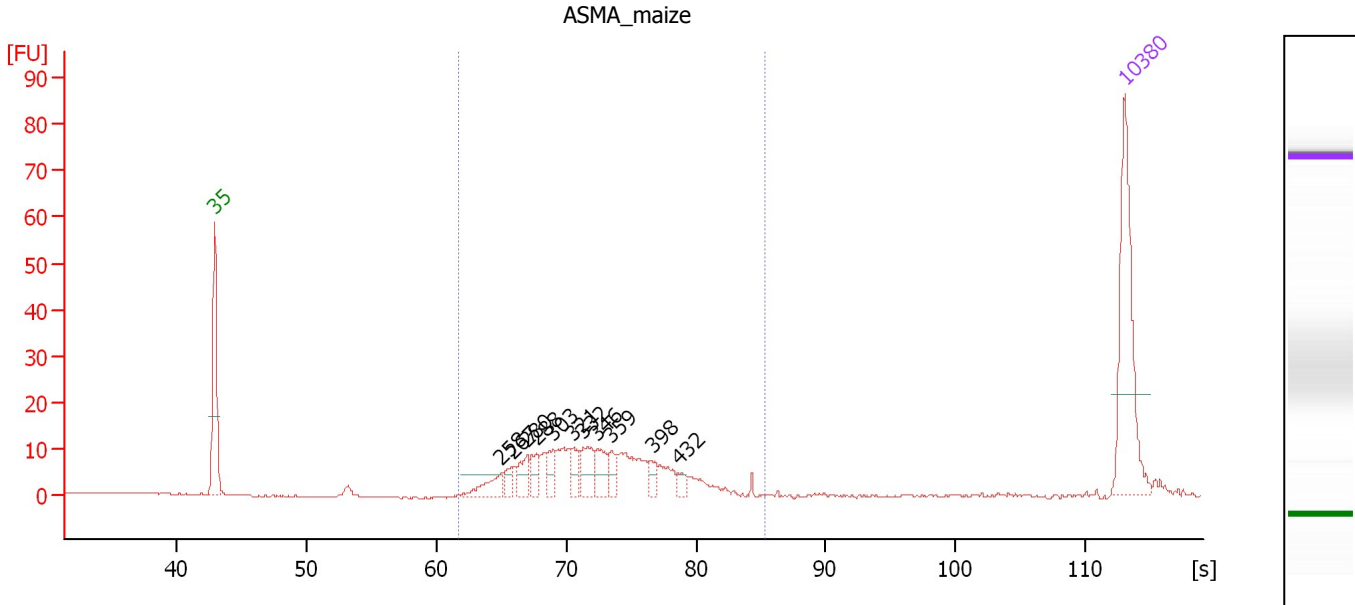
**Region table for sample 1 : RISE\_BILs**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
232	364	557	153.1	805.3	88	16.2	186.66	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
 Modified: 3/20/2015 12:13:42 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : ASMA\_maize**

Number of peaks found: 11      Corr. Area 1: 191.3  
 Noise: 0.2

**Peak table for sample 2 : ASMA\_maize**

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	258	21.69	127.2		65.05
3	267	10.49	59.5		65.84
4	280	17.65	95.5		66.99
5	288	15.59	81.9		67.74
6	303	14.79	74.0		69.02
7	321	14.57	68.7		70.50
8	332	24.24	110.6		71.37
9	346	19.01	83.3		72.45
10	359	12.29	51.9		73.52
11	398	8.87	33.8		76.62
12	432	7.43	26.1		78.64
13	10,380	75.00	10.9	Upper Marker	113.00

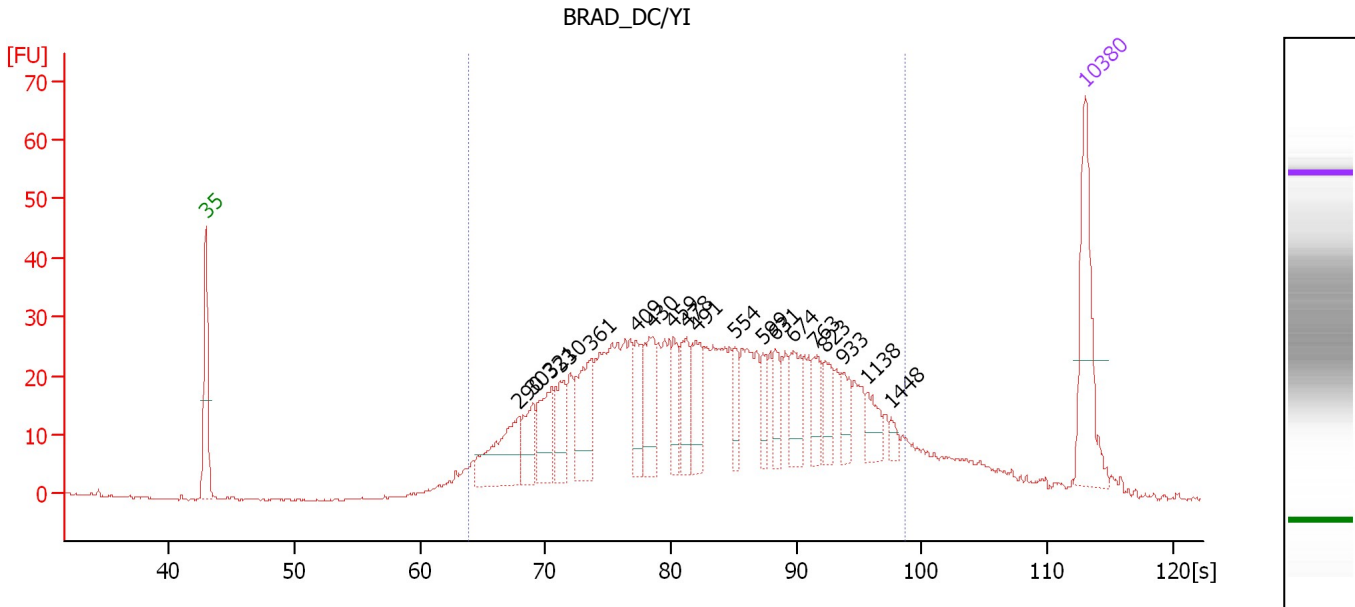
**Region table for sample 2 : ASMA\_maize**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
222	346	558	191.3	1,208.8	94	17.6	264.66	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
 Modified: 3/20/2015 12:13:42 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : BRAD\_DC/YI**

Number of peaks found: 19                      Corr. Area 1: 928.6  
 Noise: 0.2

**Peak table for sample 3 : BRAD\_DC/YI**

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	85.79	447.6		67.93
3	303	39.88	199.7		69.00
4	321	55.78	263.1		70.50
5	330	44.41	203.7		71.22
6	361	71.72	300.8		73.70
7	409	35.48	131.6		77.29
8	430	51.13	180.1		78.53
9	459	29.44	97.1		80.20
10	478	39.57	125.5		81.27
11	491	48.32	149.2		82.00
12	554	22.46	61.4		85.12
13	599	21.04	53.2		87.30
14	631	24.32	58.4		88.33
15	674	36.22	81.4		89.74
16	763	24.82	49.3		91.45
17	823	26.25	48.3		92.26
18	933	20.28	33.0		93.76
19	1,138	21.43	28.5		95.55
20	1,448	6.64	6.9		97.52
21	10,380	75.00	10.9	Upper Marker	113.00

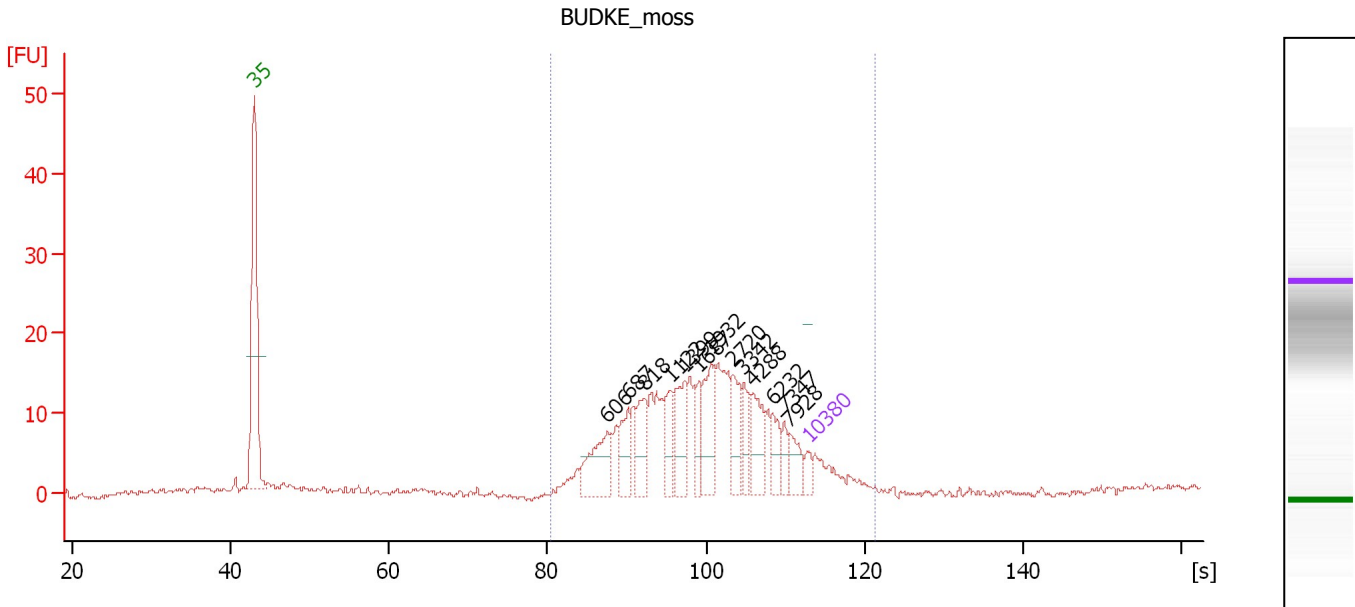
**Region table for sample 3 : BRAD\_DC/YI**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
245	573	1,633	928.6	5,157.6	91	48.0	1,536.24	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : BUDKE\_moss**

Number of peaks found: 13                      Corr. Area 1: 256.5  
 Noise: 0.3

**Peak table for sample 4 : BUDKE\_moss**

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	606	501.48	1,254.0		87.52
3	687	299.92	661.5		90.16
4	818	353.56	654.8		92.20
5	1,122	217.60	293.9		95.45
6	1,399	364.78	395.0		97.21
7	1,687	198.62	178.4		99.04
8	1,932	385.62	302.4		100.60
9	2,720	264.92	147.6		103.38
10	3,342	177.21	80.3		104.73
11	4,288	296.00	104.6		105.95
12	6,232	171.31	41.7		108.46
13	7,347	108.24	22.3		109.82
14	7,928	179.88	34.4		110.42
15	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : BUDKE\_moss**

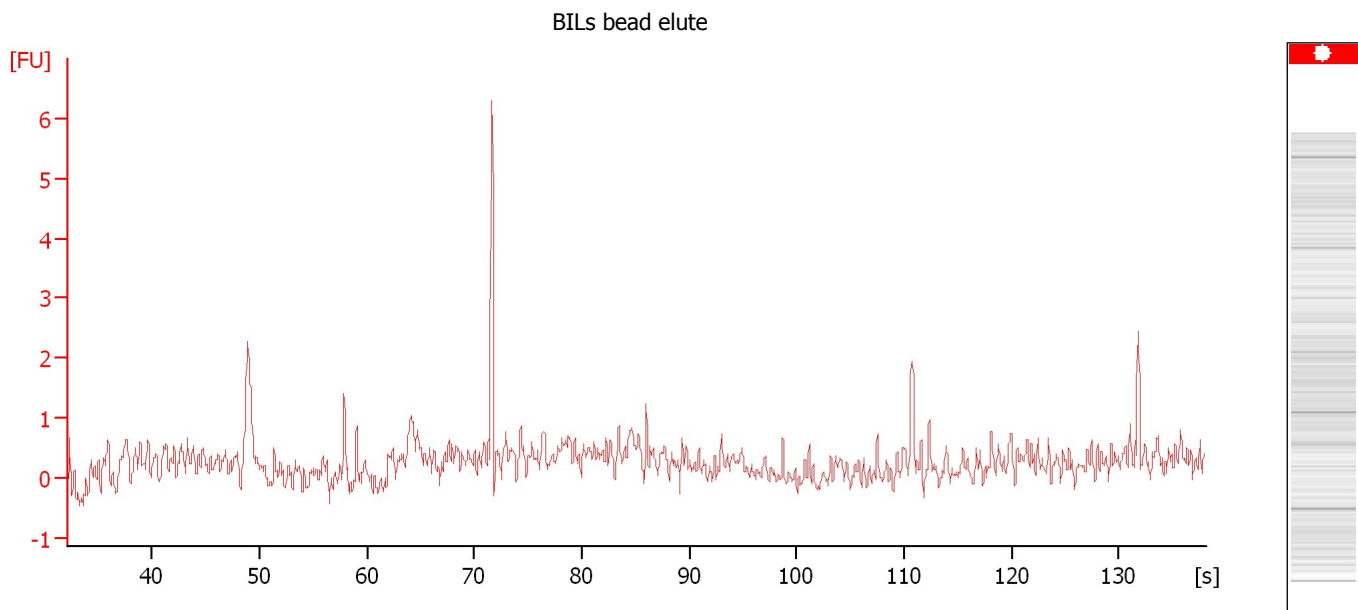
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
463	3,027	18,234	256.5	6,451.6	87	100.0	5,377.78	Blue



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
Modified: 3/20/2015 12:13:42 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : BILs bead elute**

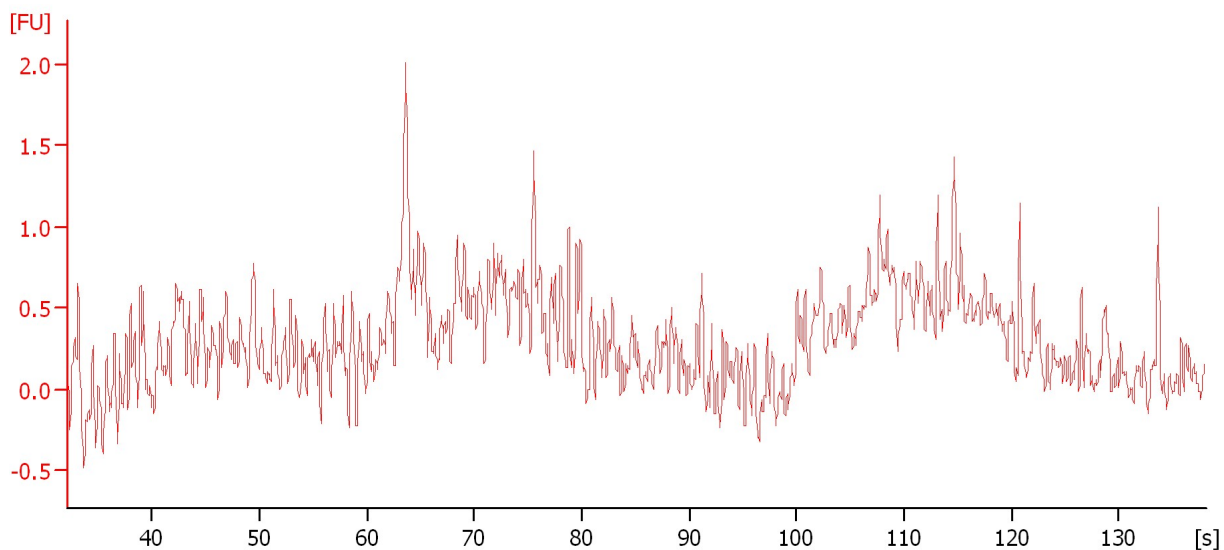
Noise: 0.3

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
Modified: 3/20/2015 12:13:42 PM

**Electropherogram Summary Continued ...**

Asma bead elute



**Overall Results for sample 6 : Asma bead elute**

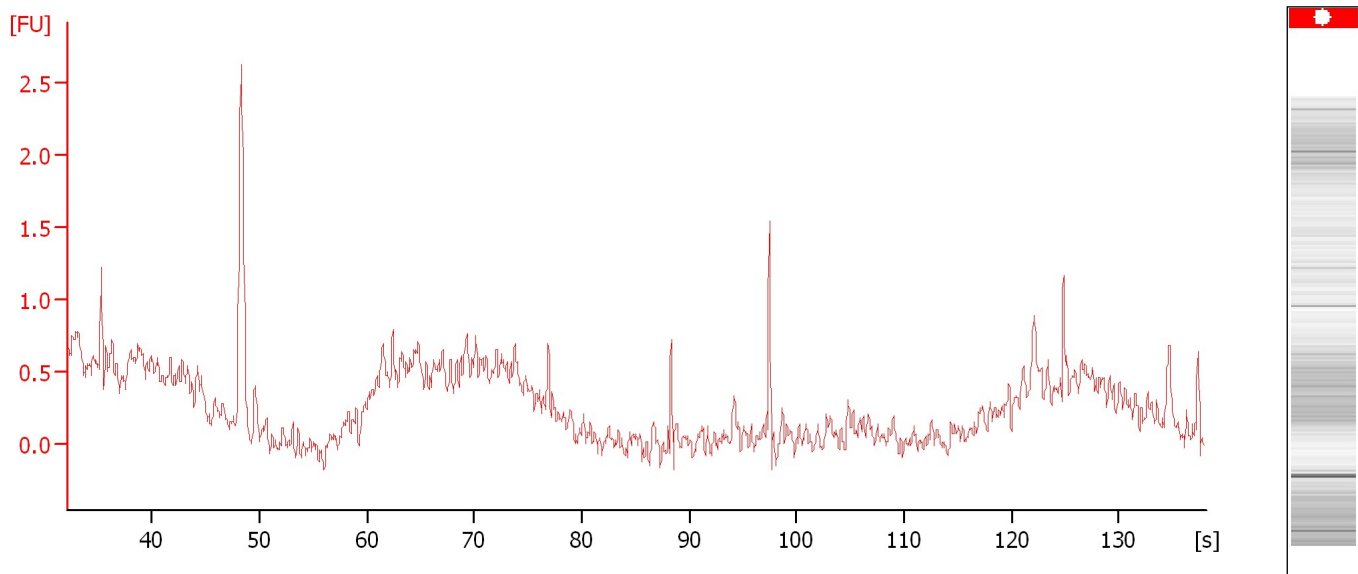
Noise: 0.2

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
Modified: 3/20/2015 12:13:42 PM

**Electropherogram Summary Continued ...**

Brad bead elute



**Overall Results for sample 7 : Brad bead elute**

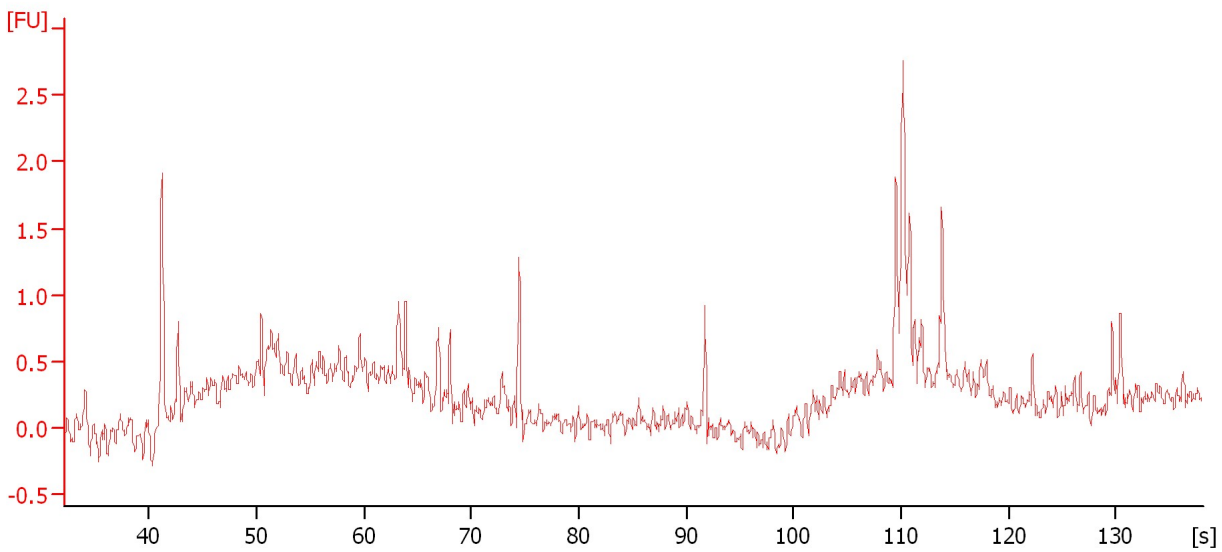
Noise: 0.1

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
Modified: 3/20/2015 12:13:42 PM

**Electropherogram Summary Continued ...**

Budke bead elute



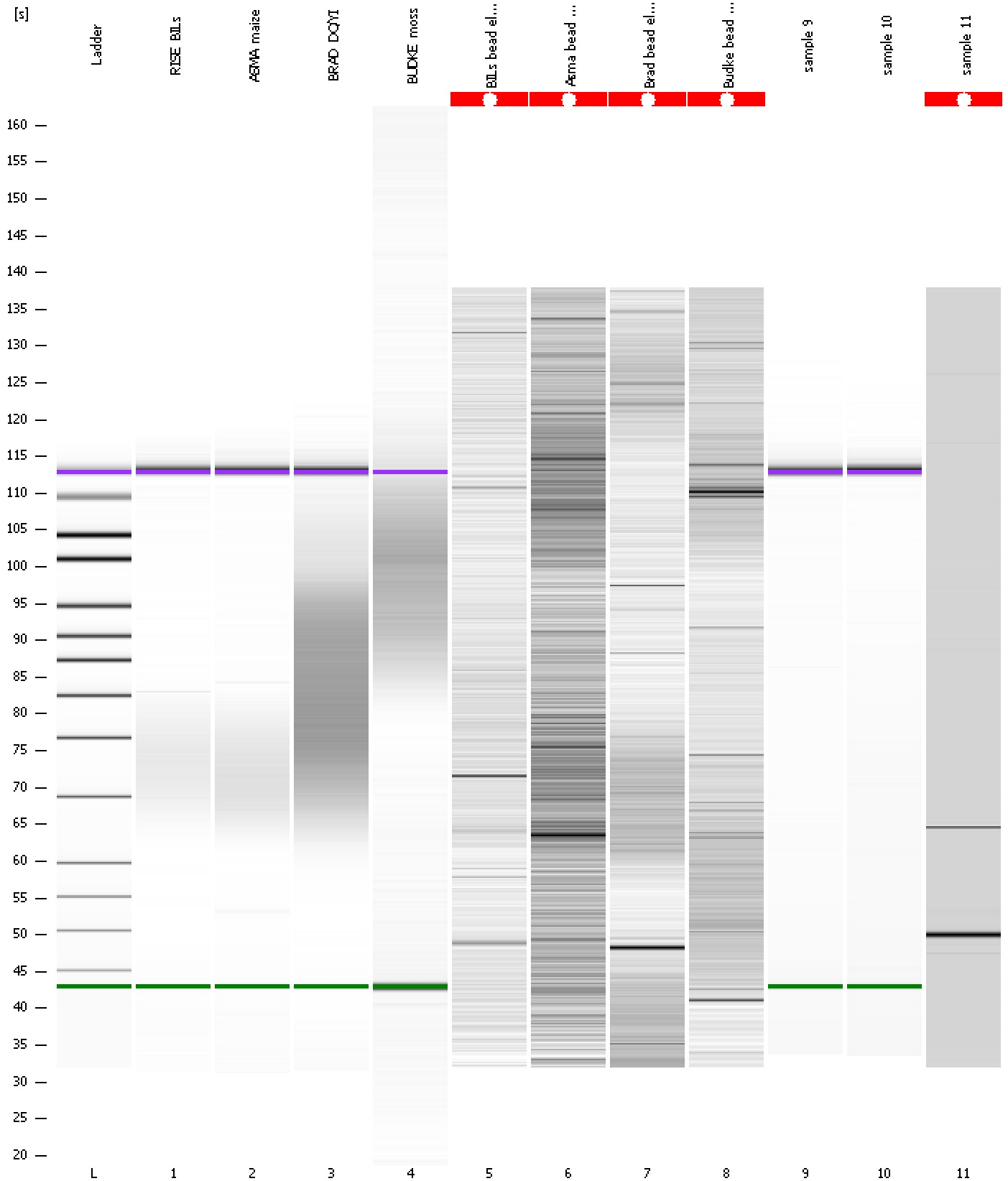
**Overall Results for sample 8 : Budke bead elute**

Noise: 0.1

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
Modified: 3/20/2015 12:13:42 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-20\2015-03-20\_001.xad

Created: 3/20/2015 11:30:56 AM  
 Modified: 3/20/2015 12:13:42 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		3/20/2015 12:12:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-03-20\2015-03-20_001.xad)		Instrument	Run		3/20/2015 11:31:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/20/2015 11:31:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/20/2015 11:31:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/20/2015 11:31:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/20/2015 11:31:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/20/2015 11:31:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/20/2015 11:31:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1