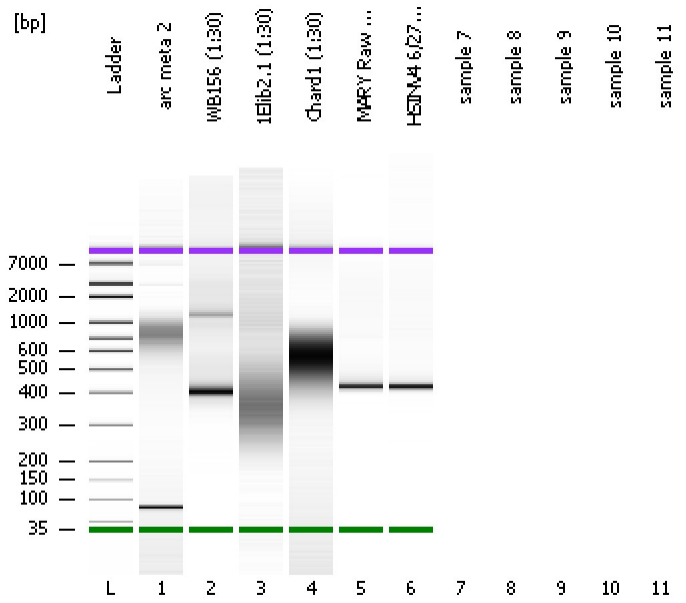
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 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

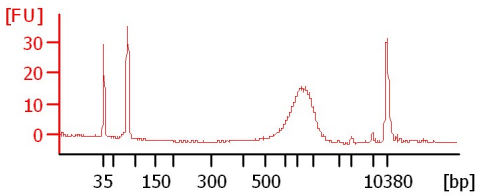
Chip Information:

Chip Lot #:

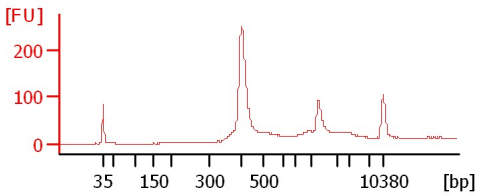
Reagent Kit Lot #:

Chip Comments:

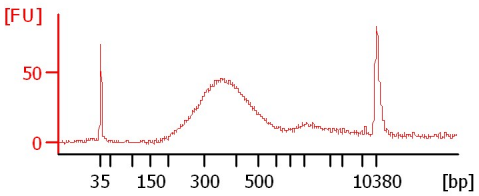
arc meta 2



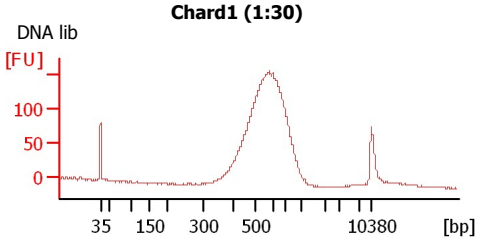
WB156 (1:30)



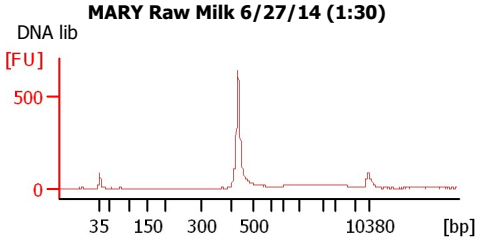
1Elib2.1 (1:30)



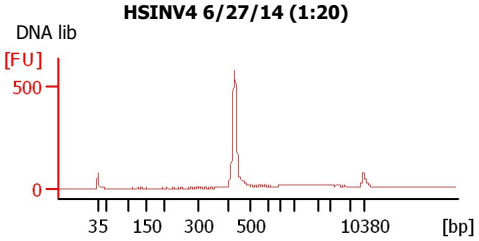
Chard1 (1:30)



MARY Raw Milk 6/27/14 (1:30)



HSINV4 6/27/14 (1:20)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
arc meta 2		☐	✔			
WB156 (1:30)		☐	✔			
1Elib2.1 (1:30)		☐	✔			
Chard1 (1:30)	DNA lib	☐	✔			
MARY Raw Milk 6/27/14 (1:30)	DNA lib	☐	✔			
HSINV4 6/27/14 (1:20)	DNA lib	☐	✔			
sample 7		☐				
sample 8		☐				
sample 9		☐				
sample 10		☐				
sample 11		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad
Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 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

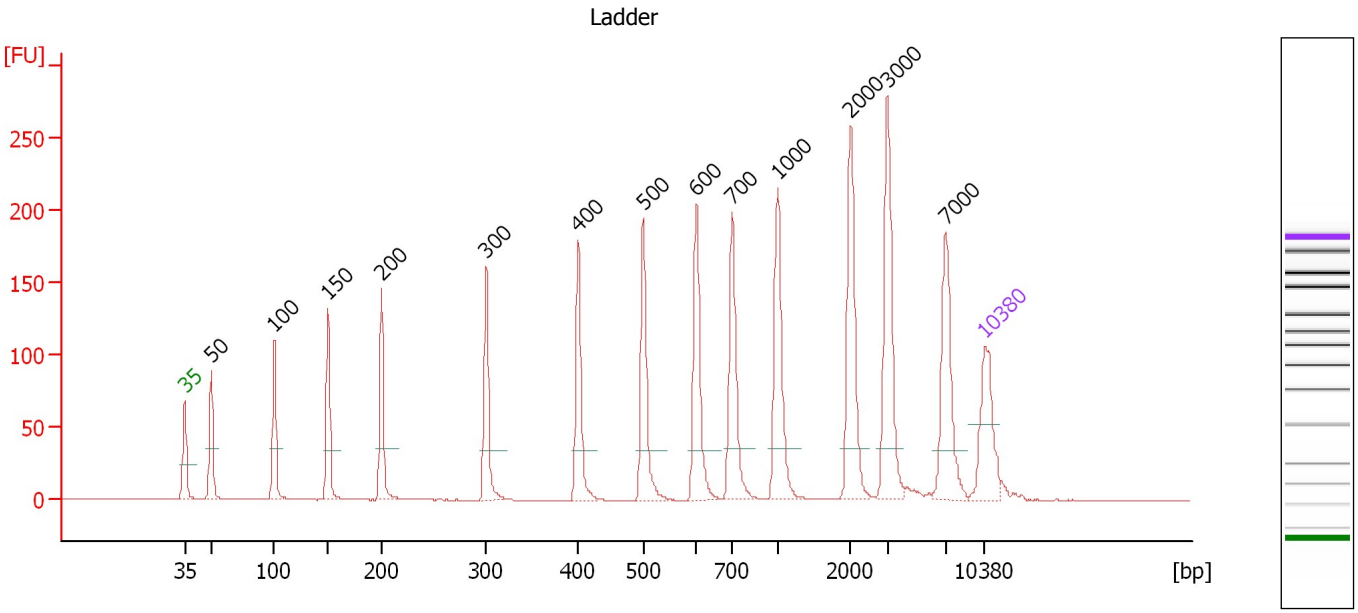
Ladder

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:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

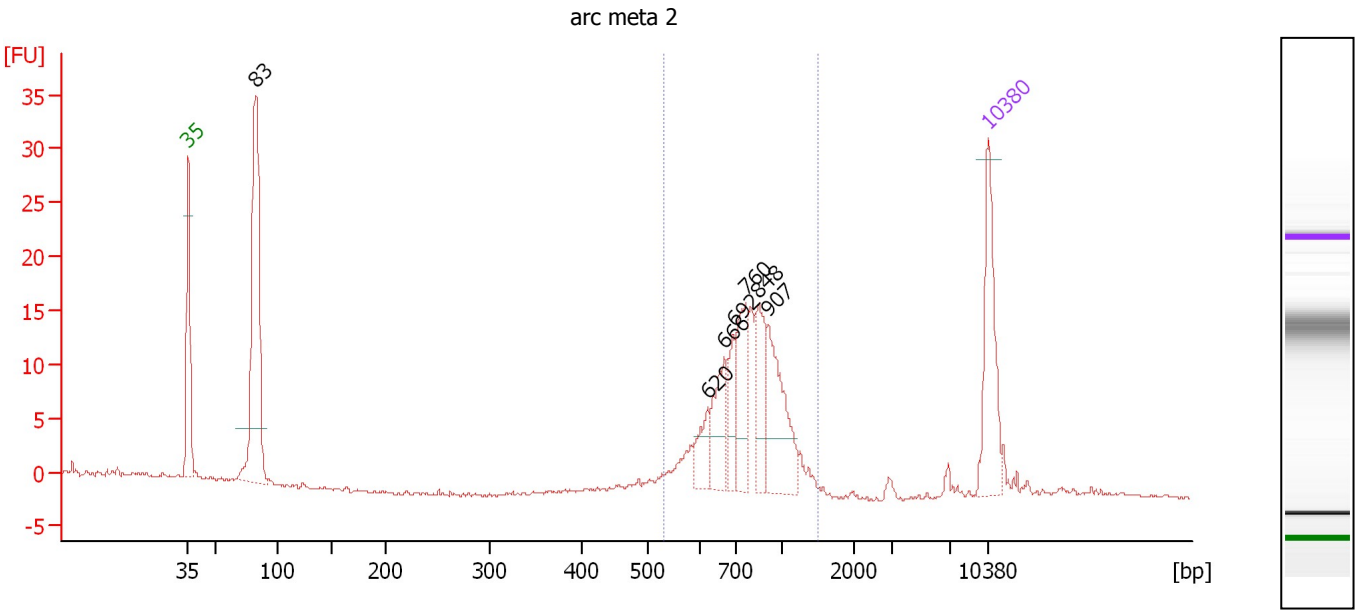
Peak table for Ladder

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

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : arc meta 2

Number of peaks found:	7	Corr. Area 1:	121.1
Noise:	0.2		

Peak table for sample 1 : arc meta 2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	83	321.21	5,892.7	
3	620	30.44	74.4	
4	666	55.75	126.8	
5	692	35.80	78.4	
6	760	68.12	135.7	
7	848	56.80	101.5	
8	907	93.50	156.2	
9	10,380	75.00	10.9	Upper Marker

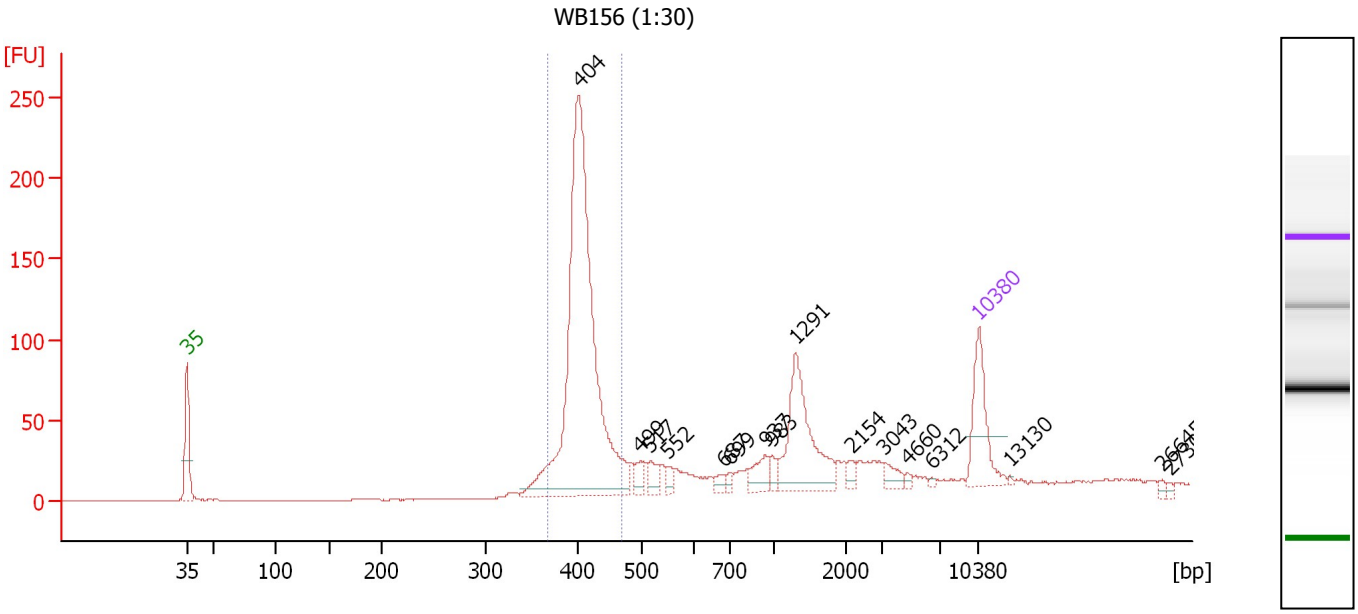
Region table for sample 1 : arc meta 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
531	1,496	802	770.8	390.48	121.1	65	20.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : WB156 (1:30)

Number of peaks found:	16	Corr. Area 1:	758.1
Noise:	0.2		

Peak table for sample 2 : WB156 (1:30)

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		404	765.50	2,873.6	
3		499	19.94	60.6	
4		517	23.86	70.0	
5		552	10.54	28.9	
6		687	10.22	22.6	
7		699	7.07	15.3	
8		937	29.80	48.2	
9		983	13.19	20.3	
10		1,291	148.74	174.6	
11		2,154	8.88	6.3	
12		3,043	15.71	7.8	
13		4,660	4.28	1.4	
14		6,312	2.45	0.6	
15	▶	10,380	75.00	10.9	Upper Marker
16		13,130	0.00	0.0	
17		26,645	0.00	0.0	
18		27,308	0.00	0.0	

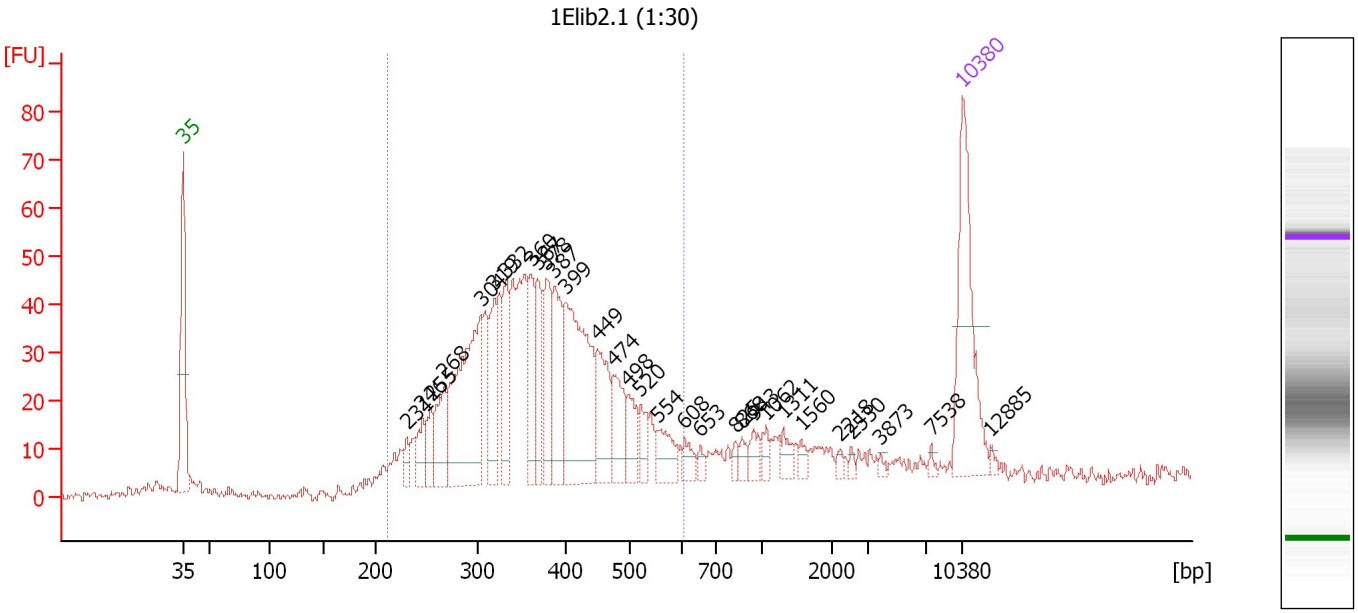
Region table for sample 2 : WB156 (1:30)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
368	469	410	2,586.6	698.72	758.1	56	4.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 1Elib2.1 (1:30)

Number of peaks found:	30	Corr. Area 1:	920.7
Noise:	1.2		

Peak table for sample 3 : 1Elib2.1 (1:30)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	231	11.68	76.6	
3	246	20.84	128.2	
4	255	19.49	116.0	
5	268	41.17	233.0	
6	304	148.39	738.6	
7	319	47.58	225.8	
8	332	47.75	218.0	
9	360	40.56	170.5	
10	367	38.66	159.6	
11	378	46.14	185.1	
12	387	53.76	210.6	
13	399	133.29	505.9	
14	449	48.44	163.6	
15	474	34.99	111.9	
16	498	21.08	64.1	
17	520	15.98	46.5	
18	554	21.19	57.9	
19	608	10.47	26.1	
20	653	5.17	12.0	
21	825	4.99	9.2	
22	868	6.74	11.8	
23	943	9.60	15.4	
24	1,062	7.25	10.3	
25	1,311	7.91	9.1	
26	1,560	5.11	5.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Electropherogram Summary Continued ...

... Peak table for sample 3 : 1Elib2.1 (1:30)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	2,218	3.12	2.1	
28	2,530	2.52	1.5	
29	3,873	2.20	0.9	
30	7,538	2.46	0.5	
31	10,380	75.00	10.9	Upper Marker
32	12,885	0.00	0.0	

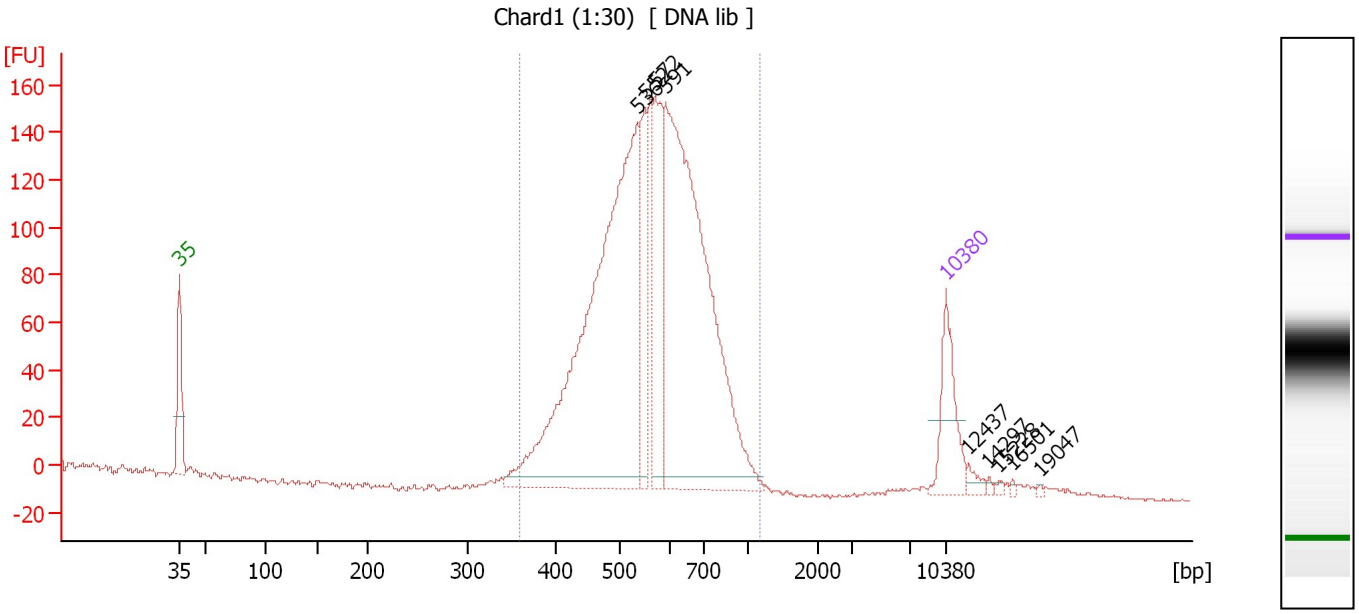
Region table for sample 3 : 1Elib2.1 (1:30)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
212	608	373	4,514.7	1,035.29	920.7	83	22.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Chard1 (1:30)

Number of peaks found:	9	Corr. Area 1:	2,124.7
Noise:	0.6		

Peak table for sample 4 : Chard1 (1:30)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	536	862.62	2,438.3	
3	552	116.13	318.9	
4	572	174.34	462.2	
5	591	746.96	1,913.9	
6	10,380	75.00	10.9	Upper Marker
7	12,437	0.00	0.0	
8	14,297	0.00	0.0	
9	15,228	0.00	0.0	
10	16,501	0.00	0.0	
11	19,047	0.00	0.0	

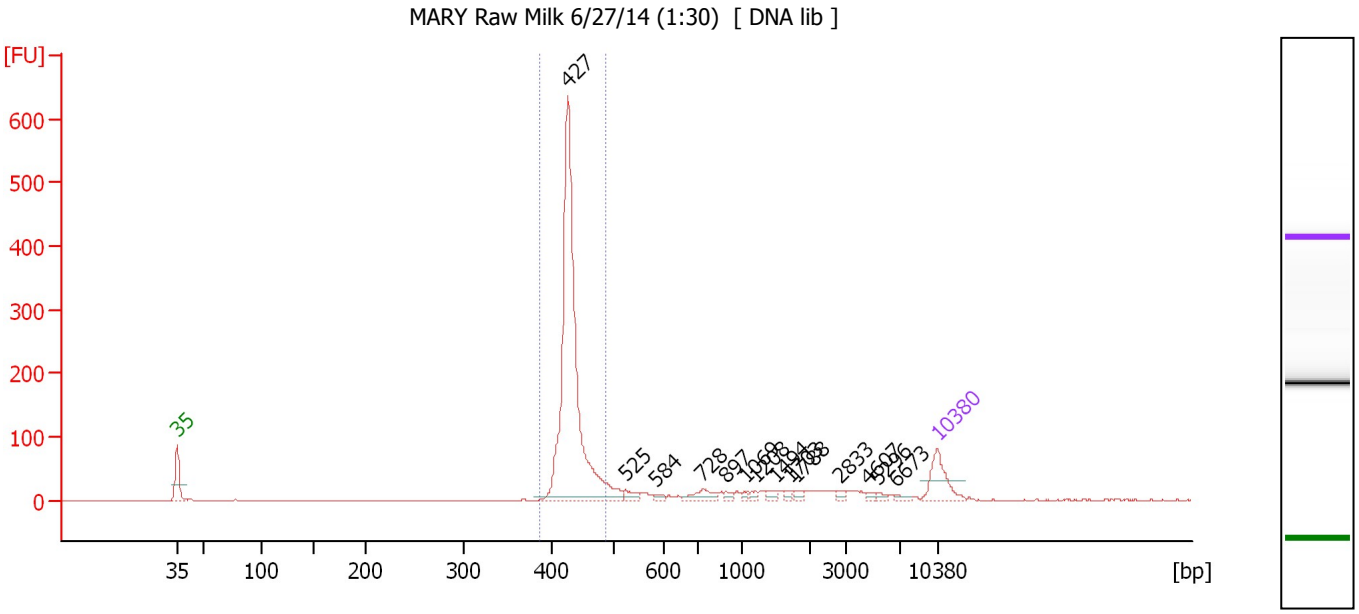
Region table for sample 4 : Chard1 (1:30)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
359	1,172	577	5,374.5	1,950.64	2,124.7	97	20.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : MARY Raw Milk 6/27/14 (1:30)

Number of peaks found:	14	Corr. Area 1:	1,097.5
Noise:	0.4		

Peak table for sample 5 : MARY Raw Milk 6/27/14 (1:30)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	427	1,069.92	3,795.8	
3	525	23.15	66.8	
4	584	10.73	27.9	
5	728	38.22	79.5	
6	897	10.38	17.5	
7	1,069	7.08	10.0	
8	1,208	9.20	11.5	
9	1,494	12.52	12.7	
10	1,703	9.38	8.3	
11	1,788	10.57	9.0	
12	2,833	9.28	5.0	
13	4,607	7.08	2.3	
14	5,296	7.31	2.1	
15	6,673	7.55	1.7	
16	10,380	75.00	10.9	Upper Marker

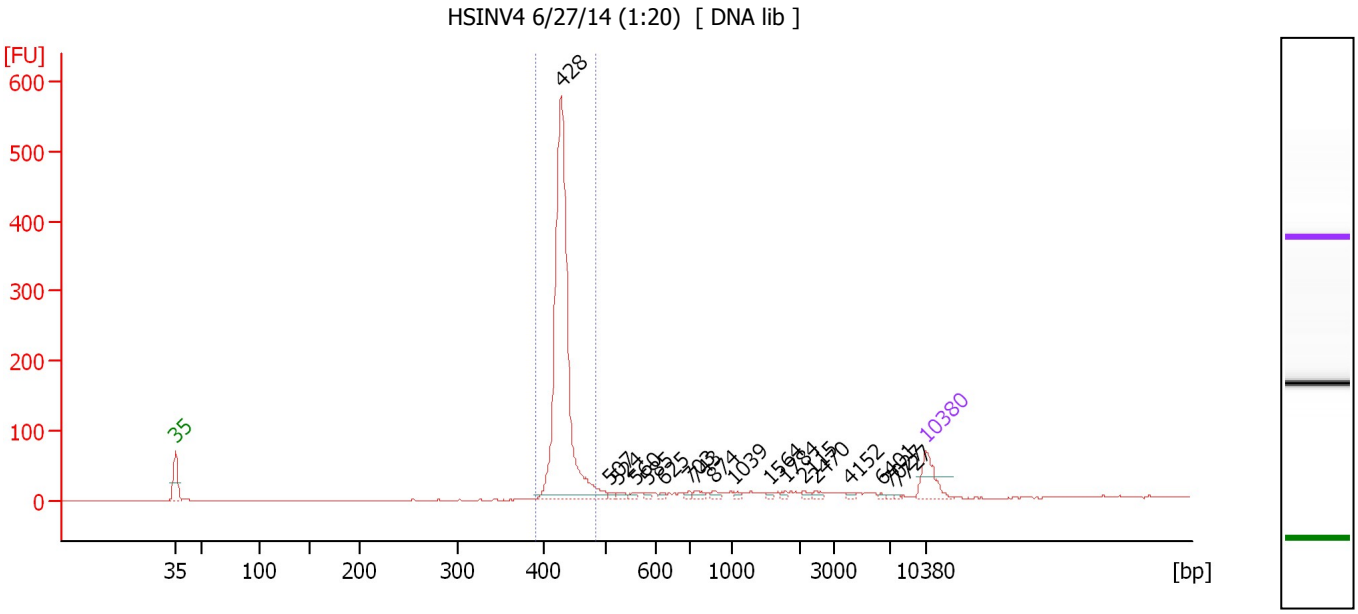
Region table for sample 5 : MARY Raw Milk 6/27/14 (1:30)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
387	488	432	3,564.9	1,017.10	1,097.5	74	3.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HSINV4 6/27/14 (1:20)

Number of peaks found:	18	Corr. Area 1:	1,007.3
Noise:	0.6		

Peak table for sample 6 : HSINV4 6/27/14 (1:20)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	428	1,279.88	4,533.5	
3	507	8.83	26.4	
4	524	13.44	38.9	
5	560	9.78	26.5	
6	585	8.43	21.9	
7	625	7.35	17.8	
8	703	10.25	22.1	
9	743	15.18	30.9	
10	874	12.05	20.9	
11	1,039	7.12	10.4	
12	1,564	6.06	5.9	
13	1,784	6.41	5.4	
14	2,115	8.00	5.7	
15	2,470	9.19	5.6	
16	4,152	6.52	2.4	
17	6,401	4.07	1.0	
18	7,027	2.97	0.6	
19	7,727	2.57	0.5	
20	10,380	75.00	10.9	Upper Marker

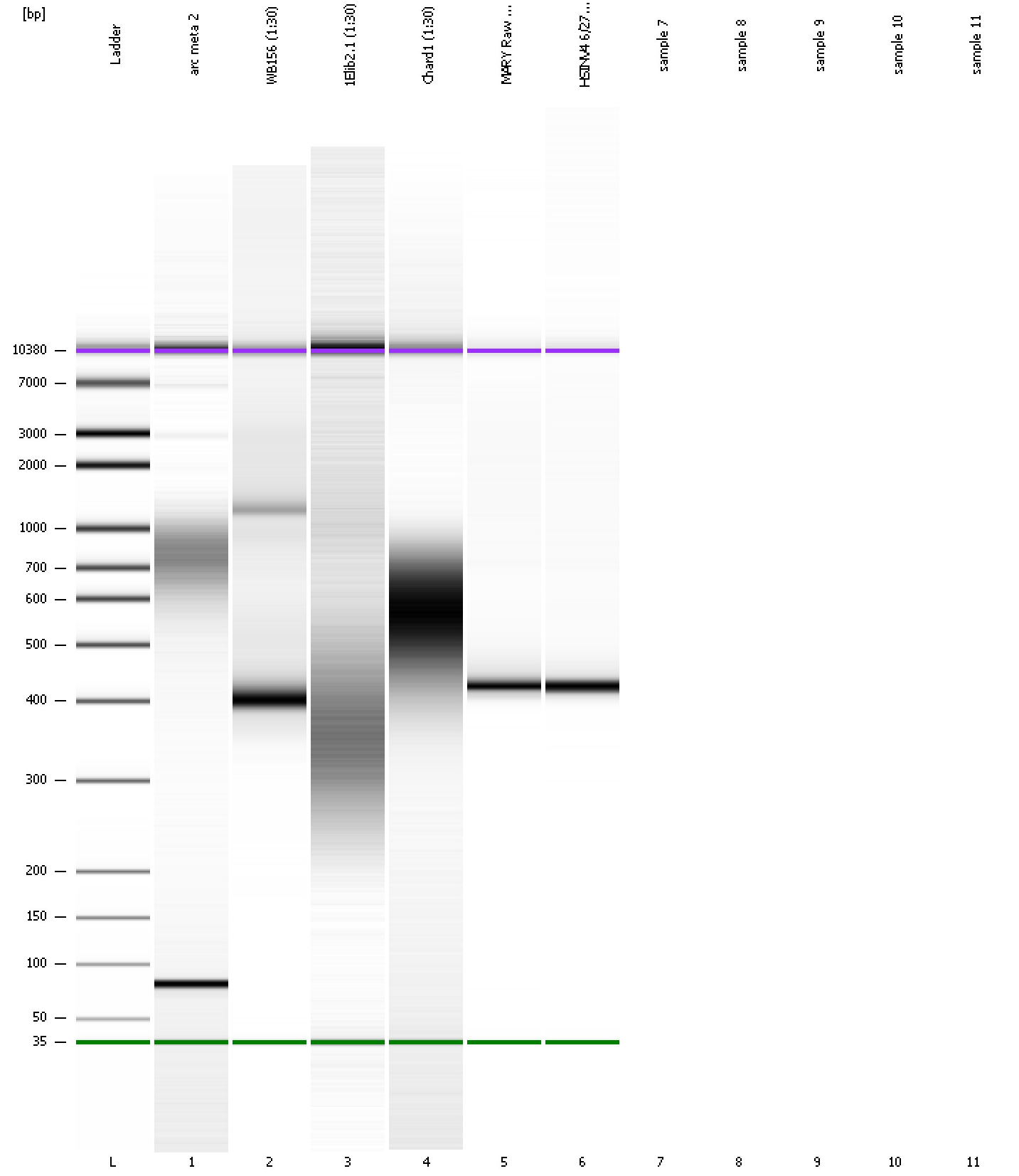
Region table for sample 6 : HSINV4 6/27/14 (1:20)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
390	485	430	4,416.6	1,252.30	1,007.3	79	3.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Gel Image

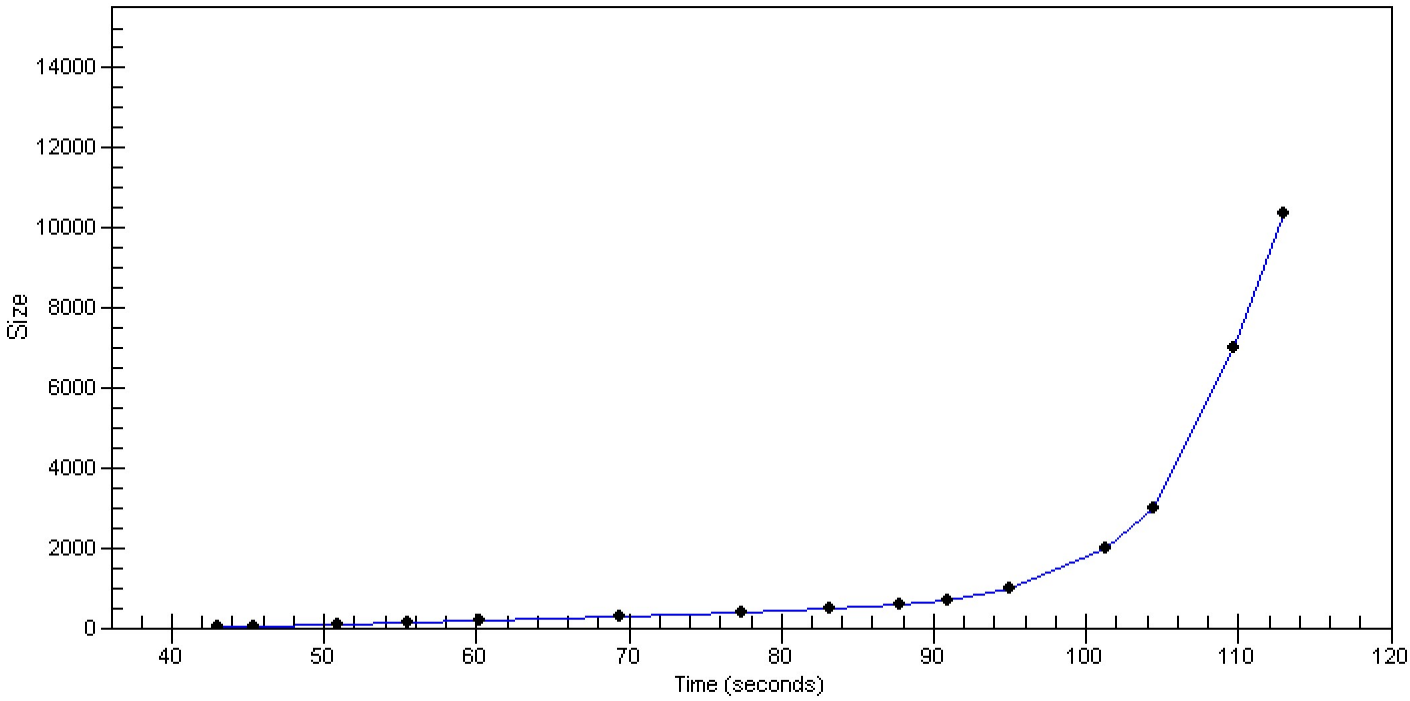


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay Created: 7/7/2014 4:35:36 PM
Data Path: C:\... bioanalyzer\2100 expert\data\2014-07-07\2014-07-07_002.xad Modified: 7/7/2014 5:03:41 PM

Invalid Samples

Sample 7 has not been run, no results available.

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\2014-07-07\2014-07-07_002.xad

Created: 7/7/2014 4:35:36 PM
Modified: 7/7/2014 5:03:41 PM

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		7/7/2014 5:02:32 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\2014-07-07\2014-07-07_002.xad)		Instrument	Run		7/7/2014 4:35:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/7/2014 4:35:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/7/2014 4:35:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/7/2014 4:35:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/7/2014 4:35:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/7/2014 4:35:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/7/2014 4:35:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1