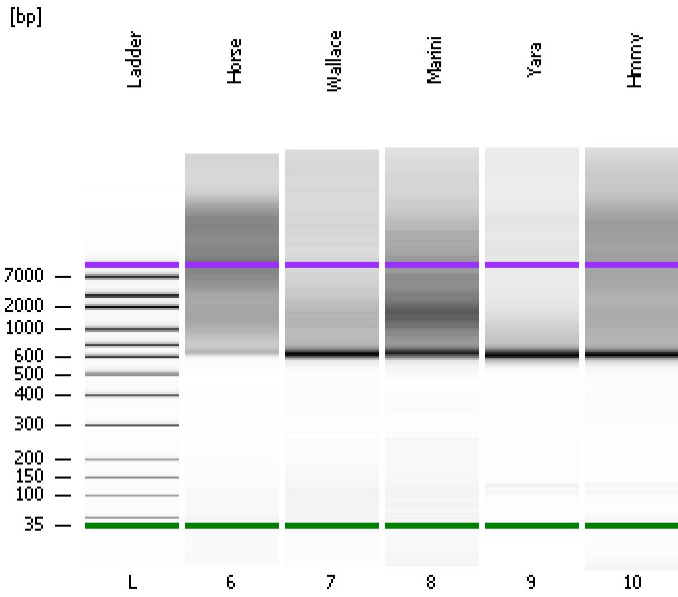


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
Modified: 10/20/2016 4:01:12 PM

**Electrophoresis File Run Summary**



Instrument Information:

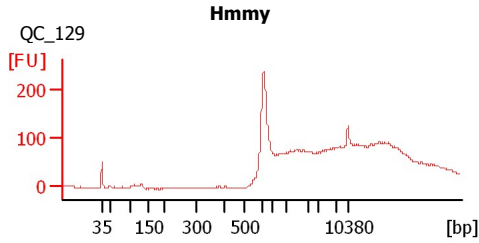
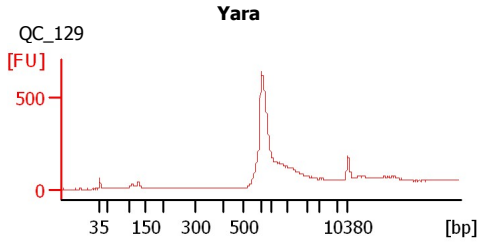
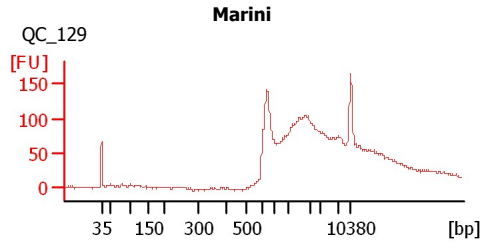
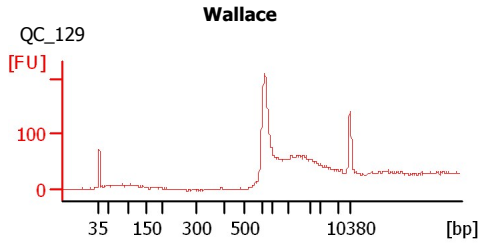
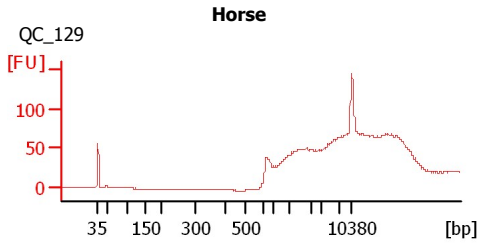
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Horse	QC_129	<input type="checkbox"/>	✓			
Wallace	QC_129	<input type="checkbox"/>	✓			
Marini	QC_129	<input type="checkbox"/>	✓			
Yara	QC_129	<input type="checkbox"/>	✓			
Hmmy	QC_129	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
Modified: 10/20/2016 4:01:12 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

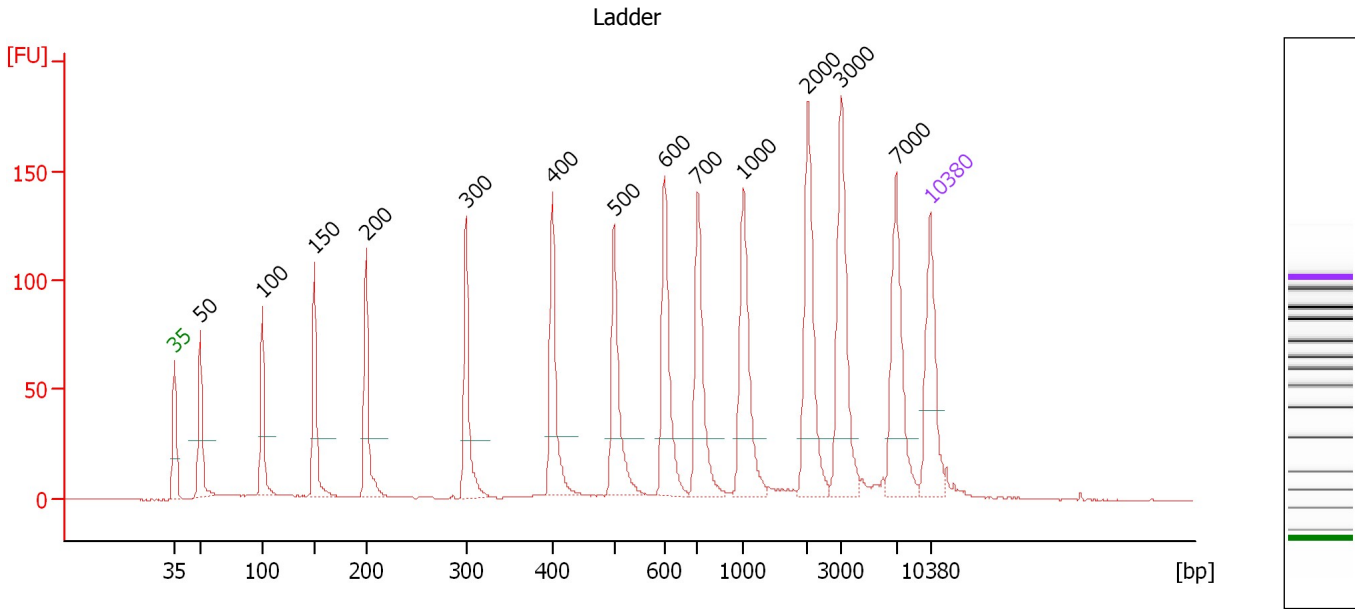
**Ladder**

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:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

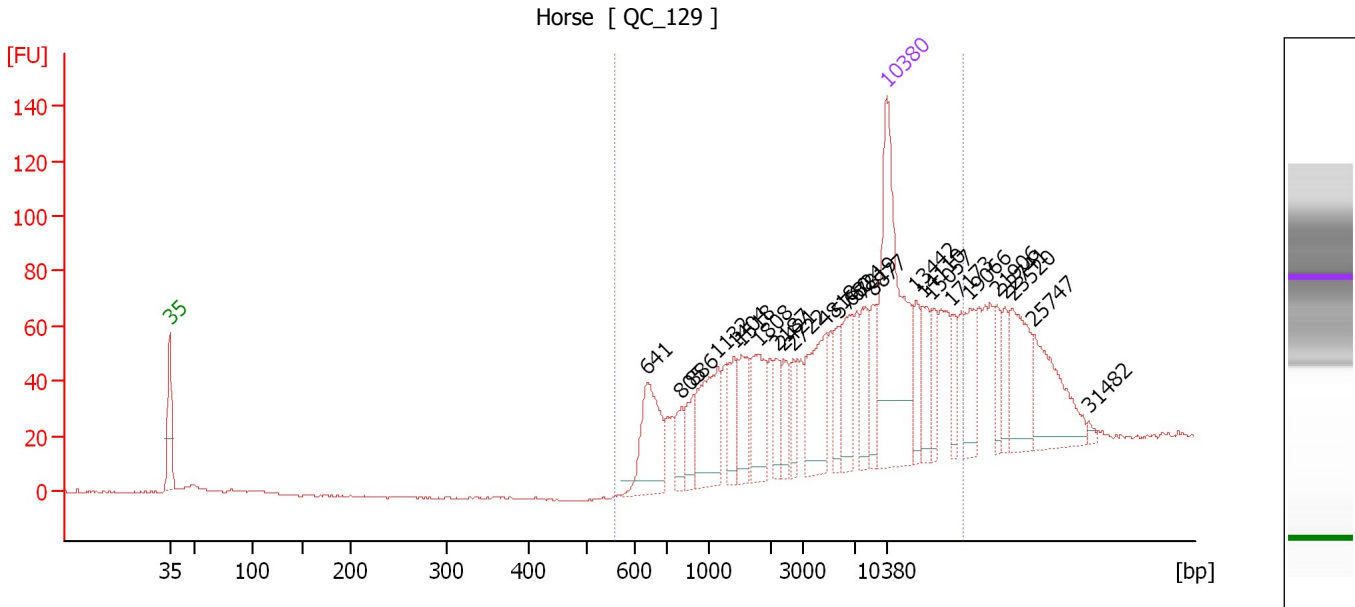
**Peak table for Ladder**

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	45.42
3	100	150.00	2,272.7	Ladder Peak	51.15
4	150	150.00	1,515.2	Ladder Peak	55.98
5	200	150.00	1,136.4	Ladder Peak	60.77
6	300	150.00	757.6	Ladder Peak	70.00
7	400	150.00	568.2	Ladder Peak	78.00
8	500	150.00	454.5	Ladder Peak	83.73
9	600	150.00	378.8	Ladder Peak	88.42
10	700	150.00	324.7	Ladder Peak	91.48
11	1,000	150.00	227.3	Ladder Peak	95.72
12	2,000	150.00	113.6	Ladder Peak	101.65
13	3,000	150.00	75.8	Ladder Peak	104.76
14	7,000	150.00	32.5	Ladder Peak	109.84
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Horse**

Number of peaks found: 25                      Corr. Area 1: 978.6  
 Noise: 0.4

**Peak table for sample 6 : Horse**

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	641	38.53	91.0		89.68
3	805	10.50	19.8		92.96
4	886	11.77	20.1		94.11
5	1,132	35.64	47.7		96.50
6	1,404	15.97	17.2		98.12
7	1,518	15.11	15.1		98.79
8	1,808	23.87	20.0		100.51
9	2,187	10.31	7.1		102.23
10	2,421	9.33	5.8		102.96
11	2,722	9.30	5.2		103.89
12	4,818	31.54	9.9		107.07
13	5,760	10.49	2.8		108.26
14	6,824	19.54	4.3		109.62
15	7,819	15.60	3.0		110.61
16	8,877	12.81	2.2		111.59
17	10,380	75.00	10.9	Upper Marker	113.00
18	13,442	0.00	0.0		115.86
19	14,110	0.00	0.0		116.49
20	15,057	0.00	0.0		117.37
21	17,173	0.00	0.0		119.35
22	19,066	0.00	0.0		121.12
23	21,906	0.00	0.0		123.77
24	22,741	0.00	0.0		124.55
25	23,520	0.00	0.0		125.28

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad


Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 6 : Horse

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	25,747	0.00	0.0		127.36
27	31,482	0.00	0.0		132.72

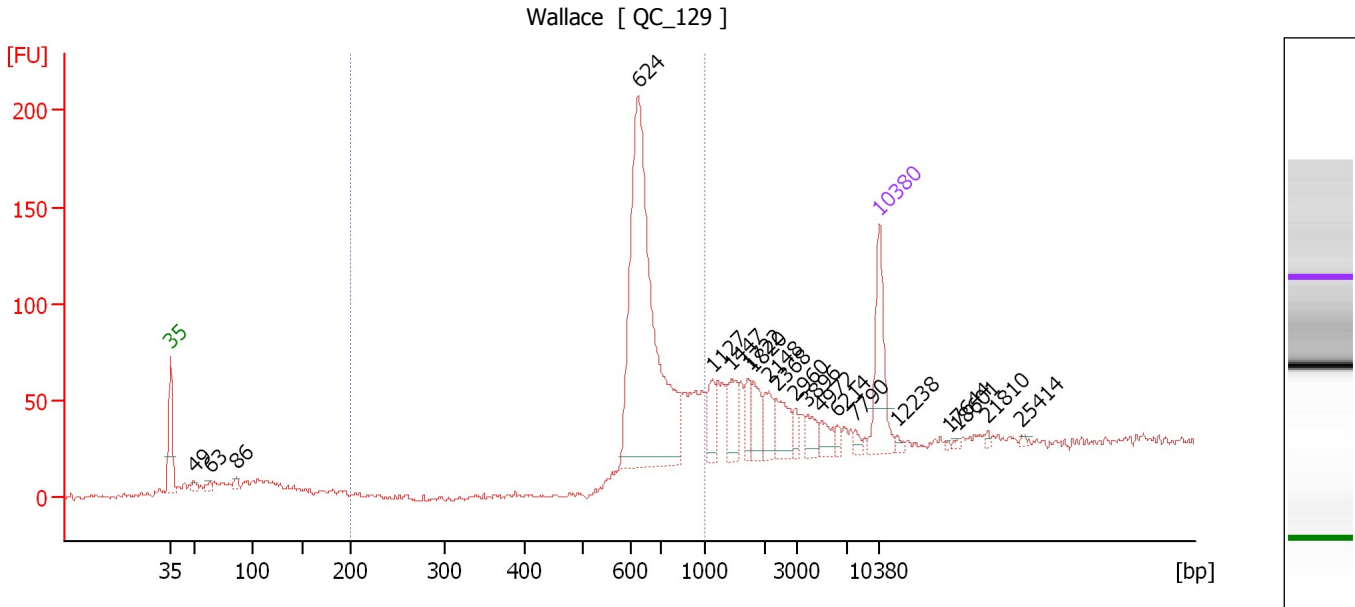
#### Region table for sample 6 : Horse

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ $\mu$ l]	% of Total	Size distribution in CV [%]
558	18,416	7,293	978.6	240.1	 317.58	73	75.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Wallace**

Number of peaks found: 20                      Corr. Area 1: 652.3  
 Noise: 1.3

**Peak table for sample 7 : Wallace**

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	49	9.60	294.7		45.32
3	63	8.97	216.1		46.89
4	86	10.01	176.7		49.53
5	624	512.57	1,244.1		89.16
6	1,127	32.45	43.6		96.47
7	1,447	39.86	41.7		98.37
8	1,722	21.18	18.6		100.00
9	1,820	30.67	25.5		100.58
10	2,148	26.63	18.8		102.11
11	2,368	36.11	23.1		102.79
12	2,960	11.60	5.9		104.63
13	3,896	19.44	7.6		105.89
14	4,972	17.09	5.2		107.26
15	6,214	6.93	1.7		108.84
16	7,790	5.94	1.2		110.58
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,238	0.00	0.0		114.74
19	17,644	0.00	0.0		119.79
20	18,601	0.00	0.0		120.68
21	21,810	0.00	0.0		123.68
22	25,414	0.00	0.0		127.05

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
Modified: 10/20/2016 4:01:12 PM

**Electropherogram Summary Continued ...**

... Region table for sample 7 :

Wallace

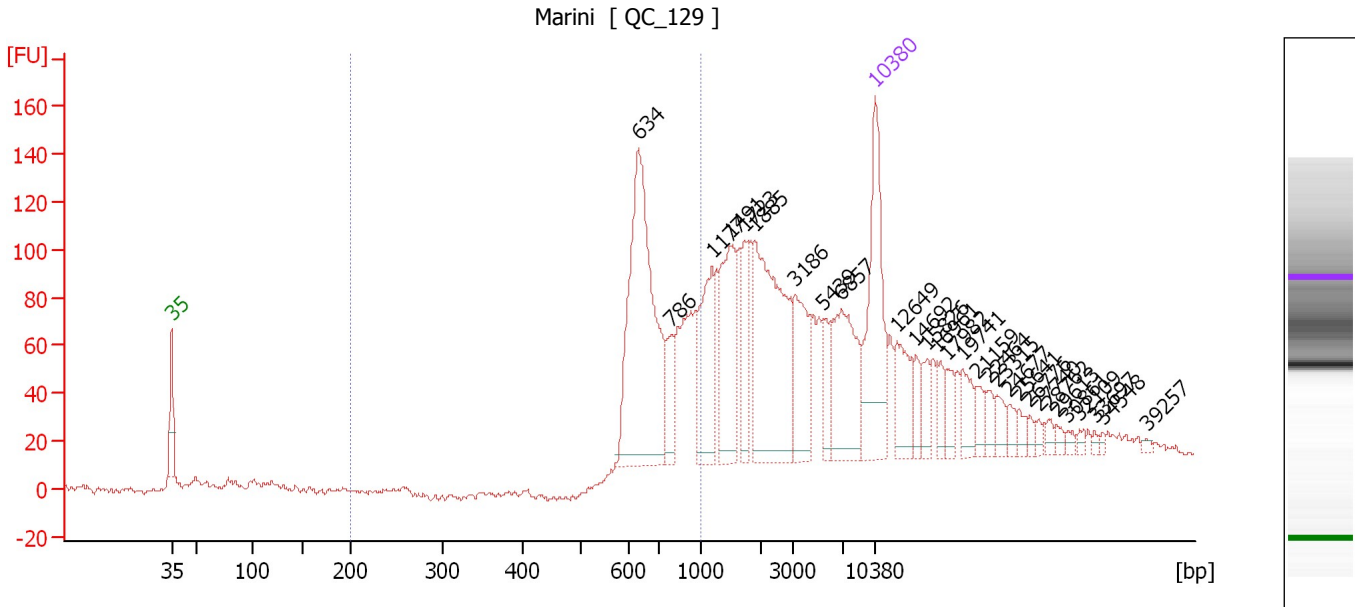
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	694	652.3	1,338.9	■ 599.68	49	15.7



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Marini**

Number of peaks found: 29                      Corr. Area 1: 644.8  
 Noise: 1.4

**Peak table for sample 8 : Marini**

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	634	193.60	462.7		89.45
3	786	24.51	47.3		92.69
4	1,177	57.50	74.0		96.77
5	1,491	64.46	65.5		98.63
6	1,723	25.00	22.0		100.01
7	1,885	117.13	94.2		100.96
8	3,186	43.14	20.5		104.99
9	5,439	15.83	4.4		107.86
10	6,857	63.45	14.0		109.66
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,649	0.00	0.0		115.12
13	14,692	0.00	0.0		117.03
14	15,826	0.00	0.0		118.09
15	16,961	0.00	0.0		119.15
16	17,982	0.00	0.0		120.11
17	19,741	0.00	0.0		121.75
18	21,159	0.00	0.0		123.08
19	22,464	0.00	0.0		124.30
20	23,315	0.00	0.0		125.09
21	24,677	0.00	0.0		126.36
22	25,641	0.00	0.0		127.27
23	26,776	0.00	0.0		128.33
24	27,740	0.00	0.0		129.23
25	28,762	0.00	0.0		130.18

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 8 : Marini

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	29,613	0.00	0.0		130.98
27	30,861	0.00	0.0		132.14
28	32,109	0.00	0.0		133.31
29	33,697	0.00	0.0		134.80
30	34,548	0.00	0.0		135.59
31	39,257	0.00	0.0		139.99

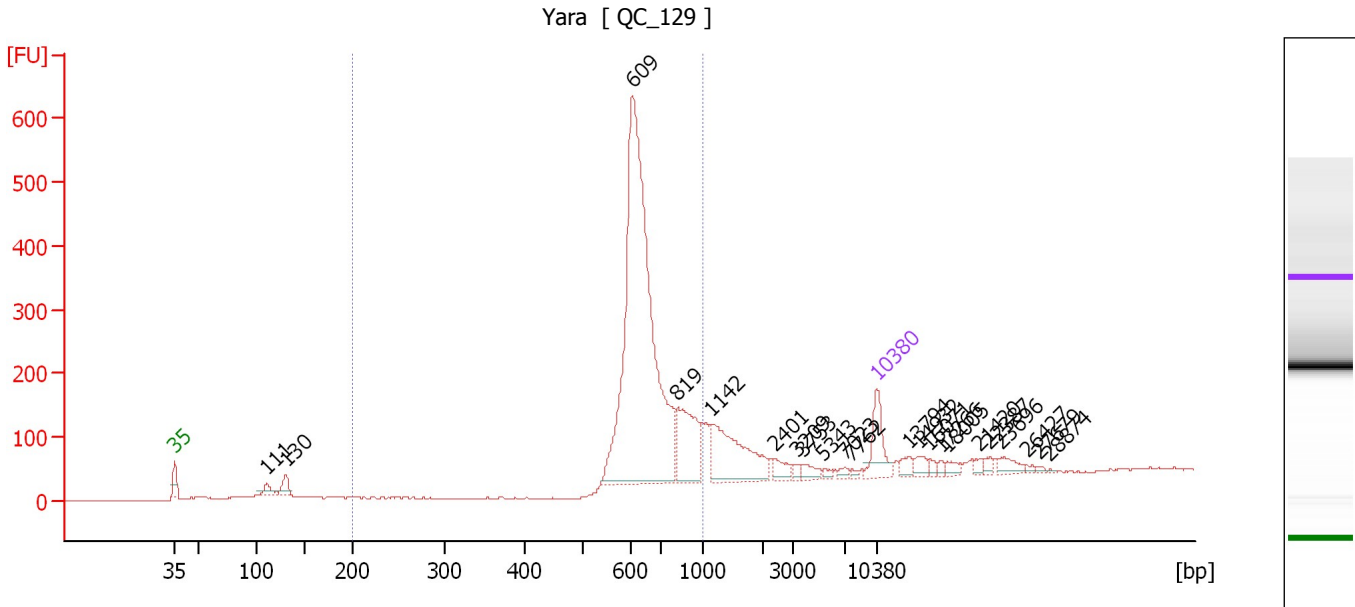
#### Region table for sample 8 : Marini

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	731	644.8	654.1	307.19	28	16.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : Yara**

Number of peaks found: 22                      Corr. Area 1: 2,266.0  
 Noise: 1.3

**Peak table for sample 9 : Yara**

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	111	28.19	385.1		52.20
3	130	37.88	441.0		54.06
4	609	1,270.56	3,161.1		88.69
5	819	182.71	338.0		93.16
6	1,142	206.71	274.2		96.56
7	2,401	25.53	16.1		102.89
8	3,209	11.19	5.3		105.02
9	3,753	19.15	7.7		105.71
10	5,343	7.32	2.1		107.73
11	7,023	9.38	2.0		109.86
12	7,762	5.23	1.0		110.55
13	10,380	75.00	10.9	Upper Marker	113.00
14	13,794	0.00	0.0		116.19
15	14,932	0.00	0.0		117.26
16	16,071	0.00	0.0		118.32
17	17,266	0.00	0.0		119.44
18	18,005	0.00	0.0		120.13
19	21,420	0.00	0.0		123.32
20	22,387	0.00	0.0		124.22
21	23,696	0.00	0.0		125.45
22	26,427	0.00	0.0		128.00
23	27,679	0.00	0.0		129.17
24	28,874	0.00	0.0		130.29

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
Modified: 10/20/2016 4:01:12 PM

**Electropherogram Summary Continued ...**

... Region table for sample 9 :

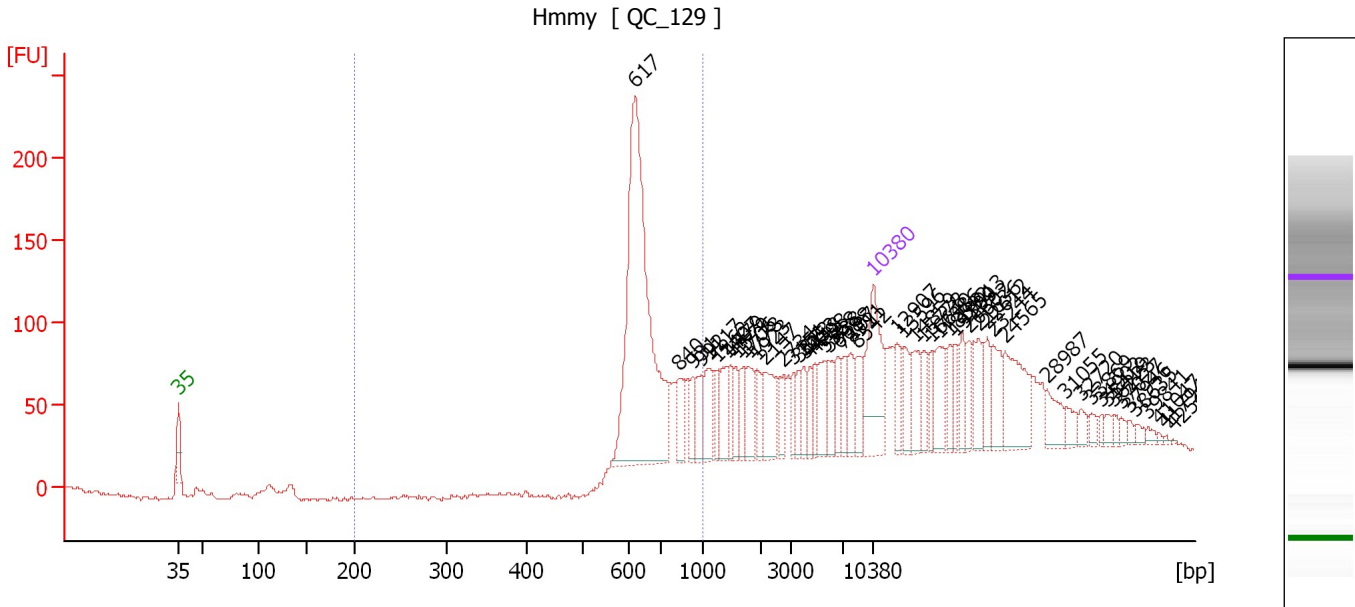
Yara

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	674	2,266.0	3,363.5	1,465.42	70	15.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 10 : Hmmy**

Height Threshold [FU] : 2                      Width Threshold [s] : 0.4

**Overall Results for sample 10 : Hmmy**

Number of peaks found: 53                      Corr. Area 1: 787.6  
 Noise: 1.1

**Peak table for sample 10 : Hmmy**

Pea k	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	617	381.85	937.0		88.95
3	840	26.18	47.2		93.46
4	931	18.43	30.0		94.75
5	992	23.15	35.4		95.61
6	1,117	34.09	46.3		96.41
7	1,262	16.60	19.9		97.27
8	1,407	26.37	28.4		98.13
9	1,479	16.53	16.9		98.56
10	1,579	15.91	15.3		99.15
11	1,706	18.63	16.6		99.90
12	1,778	25.85	22.0		100.33
13	1,923	17.07	13.5		101.19
14	2,147	39.07	27.6		102.10
15	2,734	17.99	10.0		103.93
16	3,151	11.72	5.6		104.95
17	3,573	13.50	5.7		105.48
18	3,953	15.10	5.8		105.97
19	4,418	12.43	4.3		106.56
20	4,798	14.27	4.5		107.04
21	5,558	24.87	6.8		108.01
22	5,938	19.11	4.9		108.49

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 10 :**

Hmmy

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
23	6,698	19.57	4.4		109.46
24	7,107	16.73	3.6		109.94
25	7,911	22.50	4.3		110.69
26	8,542	21.84	3.9		111.28
27	10,380	75.00	10.9	Upper Marker	113.00
28	12,907	0.00	0.0		115.36
29	13,596	0.00	0.0		116.01
30	14,859	0.00	0.0		117.19
31	15,778	0.00	0.0		118.05
32	16,640	0.00	0.0		118.85
33	17,386	0.00	0.0		119.55
34	18,592	0.00	0.0		120.68
35	19,109	0.00	0.0		121.16
36	19,913	0.00	0.0		121.91
37	20,602	0.00	0.0		122.56
38	21,636	0.00	0.0		123.52
39	22,612	0.00	0.0		124.43
40	23,244	0.00	0.0		125.02
41	24,565	0.00	0.0		126.26
42	28,987	0.00	0.0		130.39
43	31,055	0.00	0.0		132.33
44	32,720	0.00	0.0		133.88
45	33,869	0.00	0.0		134.96
46	34,902	0.00	0.0		135.92
47	35,419	0.00	0.0		136.40
48	36,223	0.00	0.0		137.16
49	37,027	0.00	0.0		137.91
50	37,946	0.00	0.0		138.77
51	38,635	0.00	0.0		139.41
52	39,841	0.00	0.0		140.54
53	41,047	0.00	0.0		141.67
54	41,794	0.00	0.0		142.36
55	42,540	0.00	0.0		143.06

**Region table for sample 10 :**

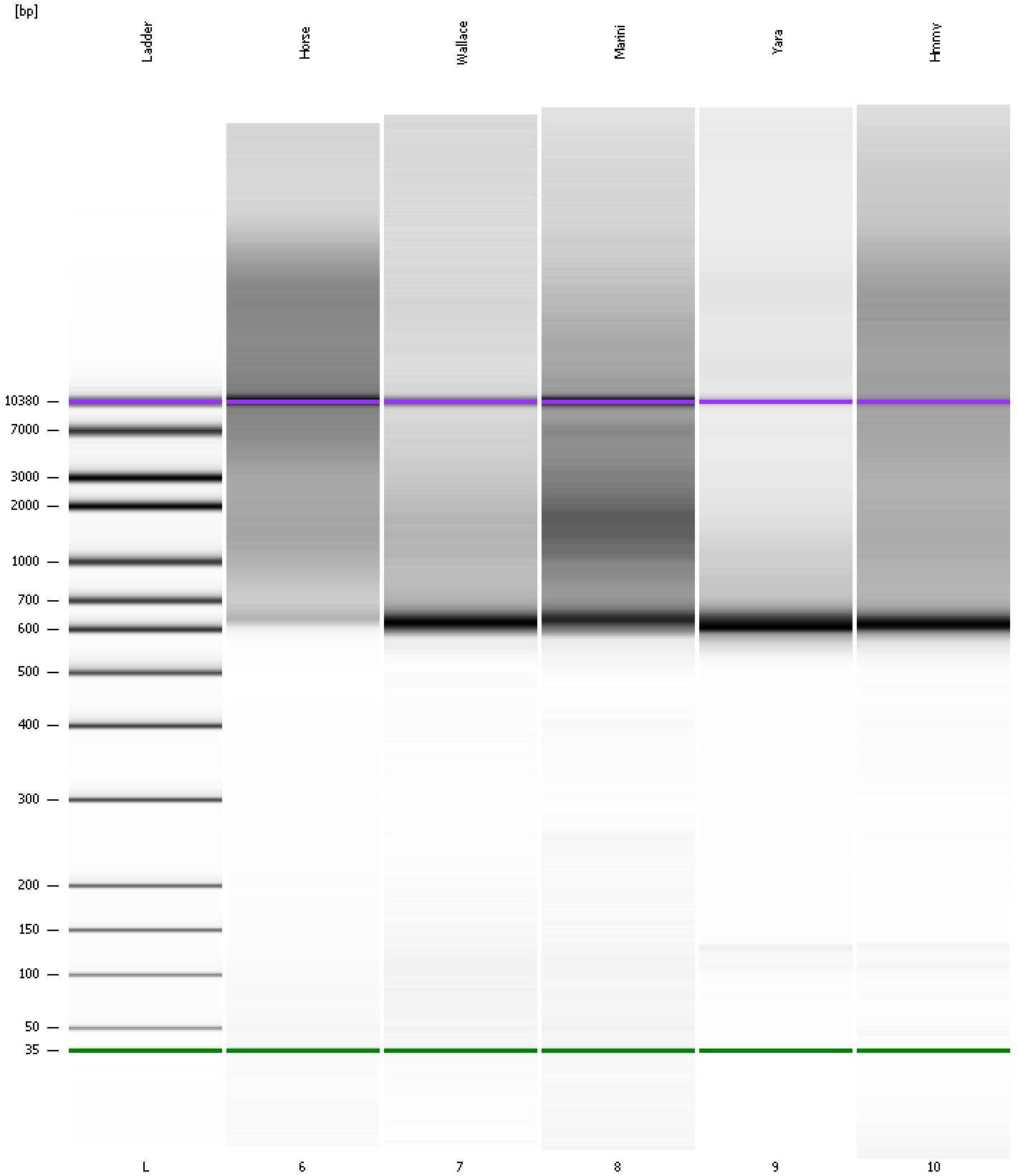
Hmmy

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	696	787.6	1,109.6	496.78	30	16.5

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
Modified: 10/20/2016 4:01:12 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...alyzer\2100 expert\data\2016-10-20\2016-10-20\_003\_QC129.xad

Created: 10/20/2016 12:52:10 PM  
 Modified: 10/20/2016 4:01:12 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		10/20/2016 1:32:37 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\2016-10-20\2016-10-20_003.xad)		Instrument	Run		10/20/2016 12:52:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/20/2016 12:52:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/20/2016 12:52:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/20/2016 12:52:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/20/2016 12:52:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/20/2016 12:52:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/20/2016 12:52:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1