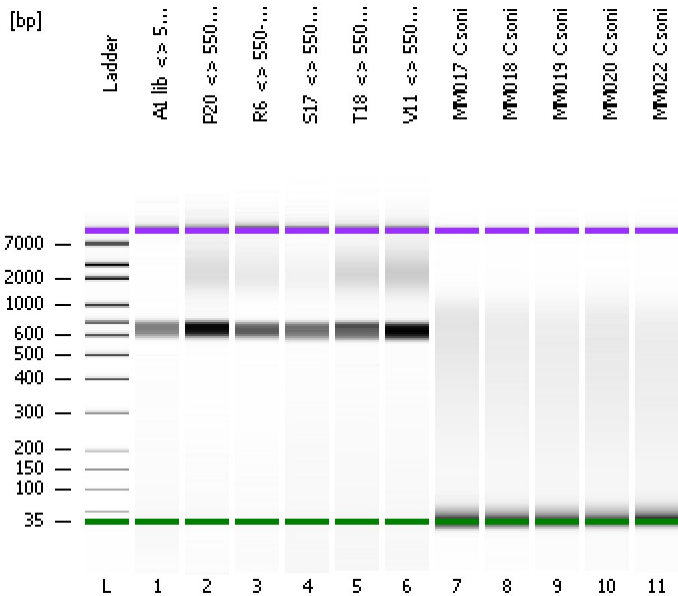


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
Modified: 10/2/2014 1:09:47 PM

**Electrophoresis File Run Summary**



Instrument Information:

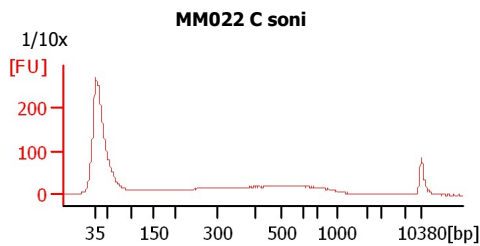
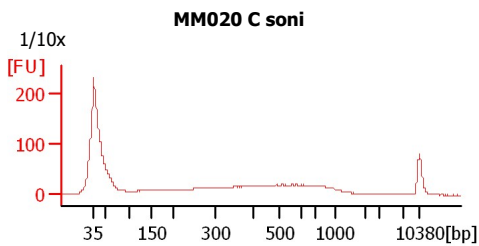
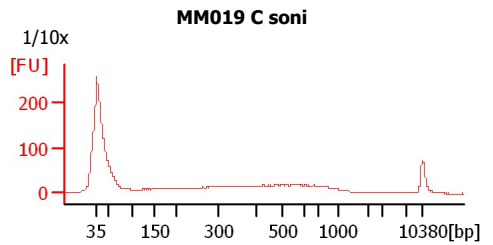
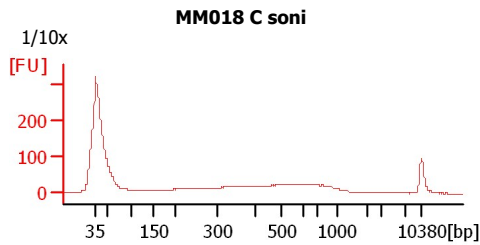
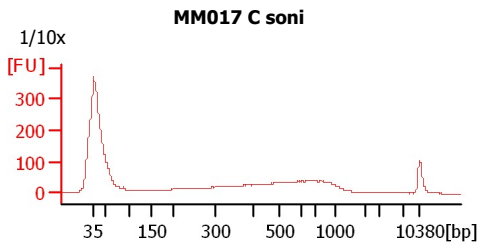
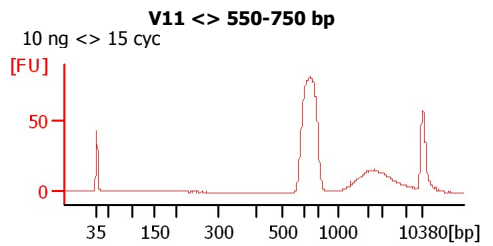
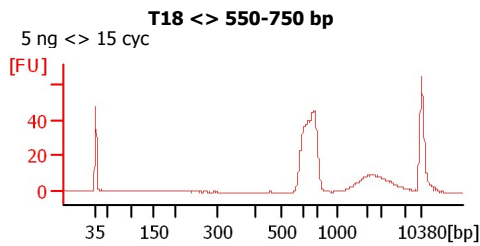
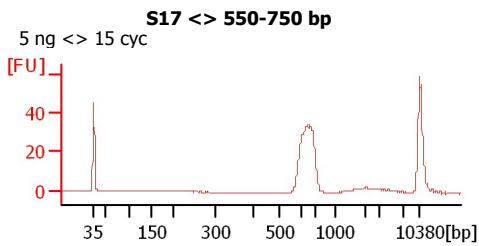
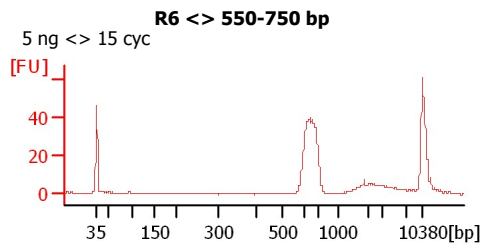
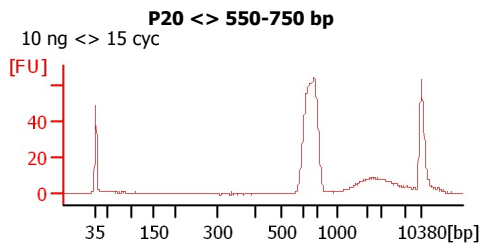
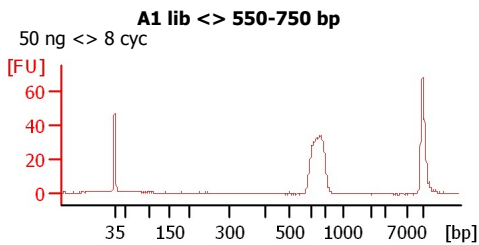
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
Modified: 10/2/2014 1:09:47 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
A1 lib <> 550-750 bp	50 ng <> 8 cyc	<input type="checkbox"/>	✓			
P20 <> 550-750 bp	10 ng <> 15 cyc	<input type="checkbox"/>	✓			
R6 <> 550-750 bp	5 ng <> 15 cyc	<input type="checkbox"/>	✓			
S17 <> 550-750 bp	5 ng <> 15 cyc	<input type="checkbox"/>	✓			
T18 <> 550-750 bp	5 ng <> 15 cyc	<input type="checkbox"/>	✓			
V11 <> 550-750 bp	10 ng <> 15 cyc	<input type="checkbox"/>	✓			
MM017 C soni	1/10x	<input type="checkbox"/>	✓			
MM018 C soni	1/10x	<input type="checkbox"/>	✓			
MM019 C soni	1/10x	<input type="checkbox"/>	✓			
MM020 C soni	1/10x	<input type="checkbox"/>	✓			
MM022 C soni	1/10x	<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\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
Modified: 10/2/2014 1:09:47 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

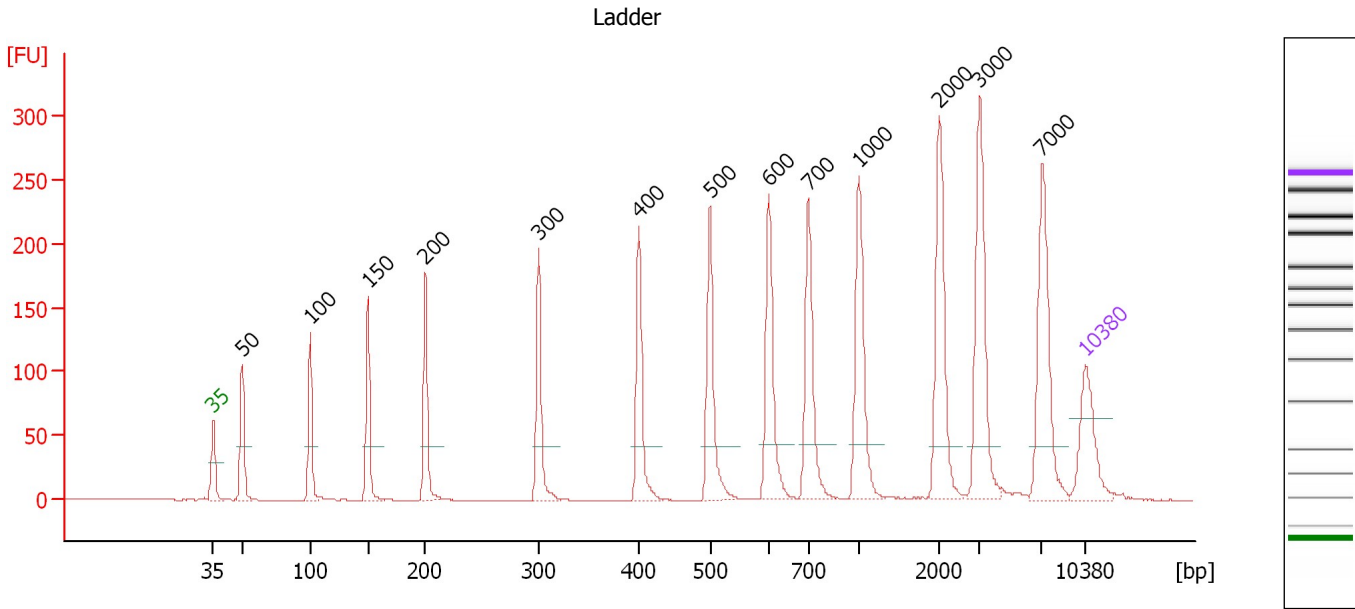
**Ladder**

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\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

**Peak table for Ladder**

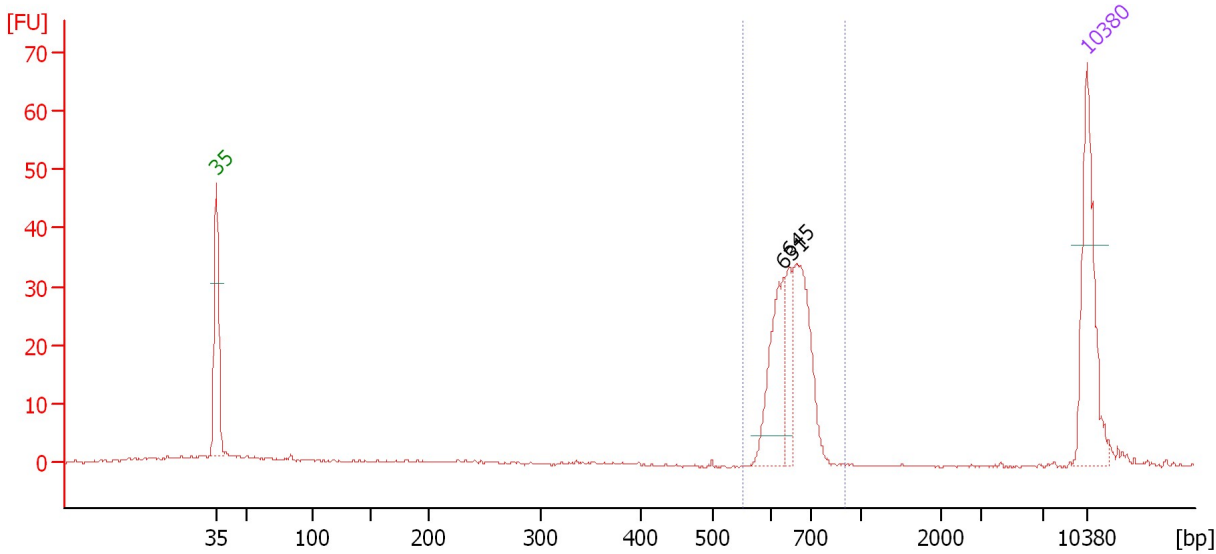
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	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:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**

A1 lib <> 550-750 bp [ 50 ng <> 8 cyc ]



**Overall Results for sample 1 : A1 lib <> 550-750 bp**

Number of peaks found: 2                      Corr. Area 1: 139.8  
 Noise: 0.2

**Peak table for sample 1 : A1 lib <> 550-750 bp**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	631	76.17	182.9	
3	645	30.94	72.7	
4	10,380	75.00	10.9	Upper Marker

**Region table for sample 1 : A1 lib <> 550-750 bp**

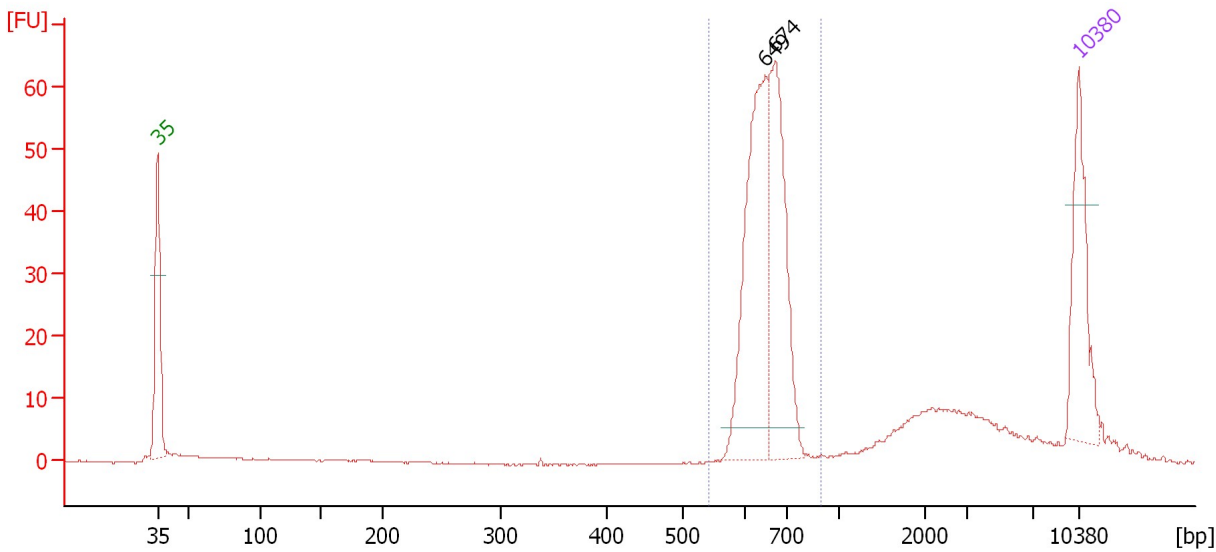
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
554	652	903	139.8	84	6.1	201.10	468.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**

P20 <> 550-750 bp [ 10 ng <> 15 cyc ]



**Overall Results for sample 2 : P20 <> 550-750 bp**

Number of peaks found: 2                      Corr. Area 1: 252.6  
 Noise: 0.1

**Peak table for sample 2 : P20 <> 550-750 bp**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	649	218.16	509.0	
3	674	177.96	400.1	
4	10,380	75.00	10.9	Upper Marker

**Region table for sample 2 : P20 <> 550-750 bp**

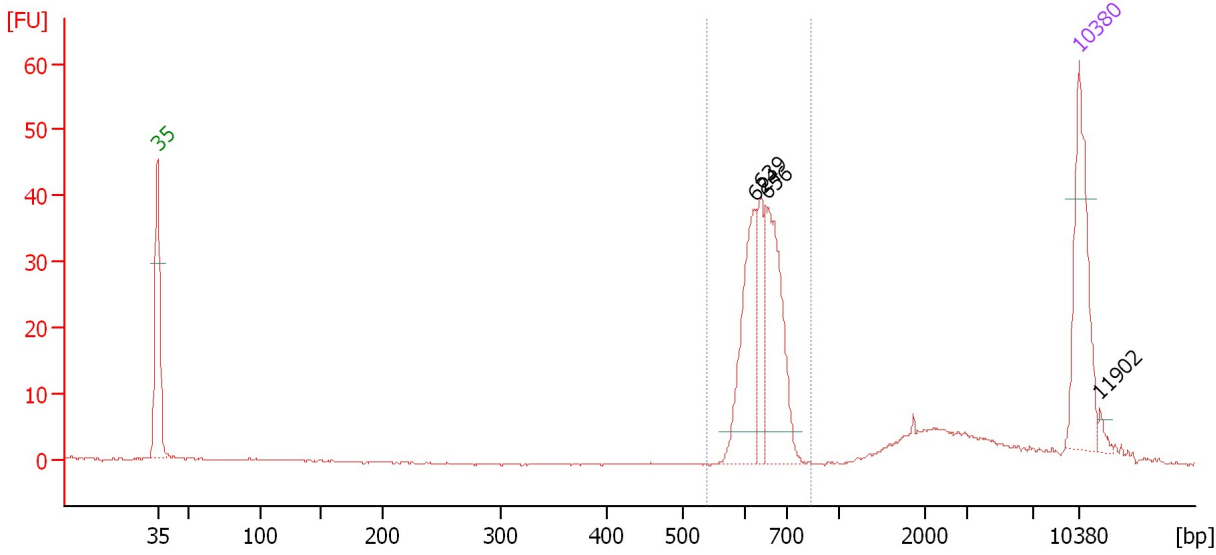
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
543	652	892	252.6	72	6.2	399.20	929.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**

R6 <> 550-750 bp [ 5 ng <> 15 cyc ]



**Overall Results for sample 3 : R6 <> 550-750 bp**

Number of peaks found: 4                      Corr. Area 1: 153.4  
 Noise: 0.1

**Peak table for sample 3 : R6 <> 550-750 bp**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	624	90.56	220.0	
3	639	44.69	106.0	
4	656	105.08	242.8	
5	10,380	75.00	10.9	Upper Marker
6	11,902	0.00	0.0	

**Region table for sample 3 : R6 <> 550-750 bp**

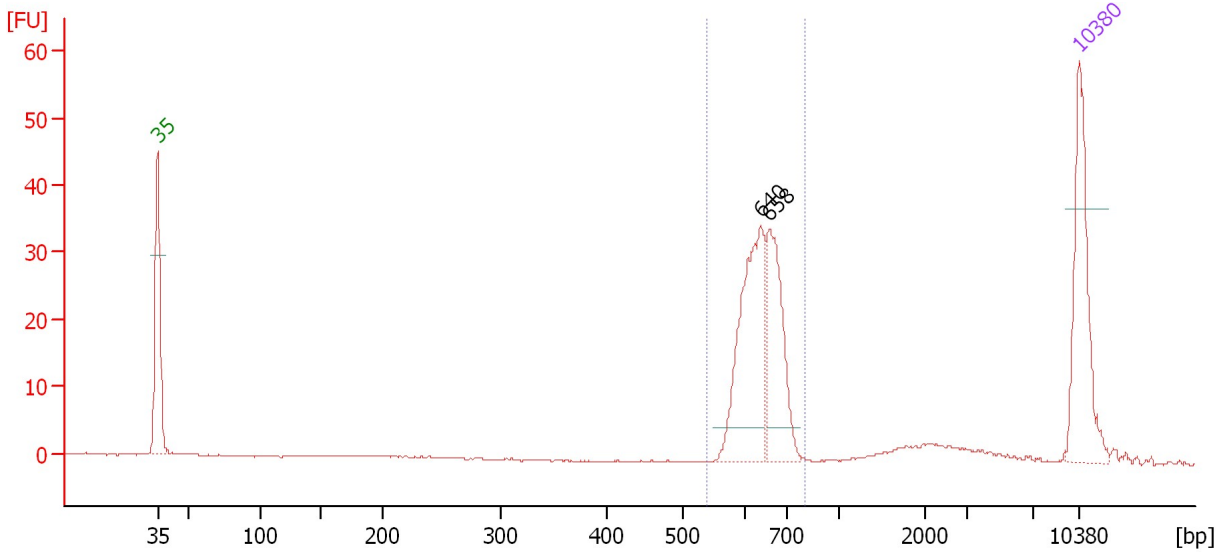
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
541	643	839	153.4	64	5.6	246.91	582.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**

S17 <> 550-750 bp [ 5 ng <> 15 cyc ]



**Overall Results for sample 4 : S17 <> 550-750 bp**

Number of peaks found: 2                      Corr. Area 1: 144.9  
 Noise: 0.1

**Peak table for sample 4 : S17 <> 550-750 bp**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	640	132.08	312.8	
3	658	89.66	206.4	
4	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : S17 <> 550-750 bp**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
540	640	808	144.9	82	6.0	223.63	530.6	Blue

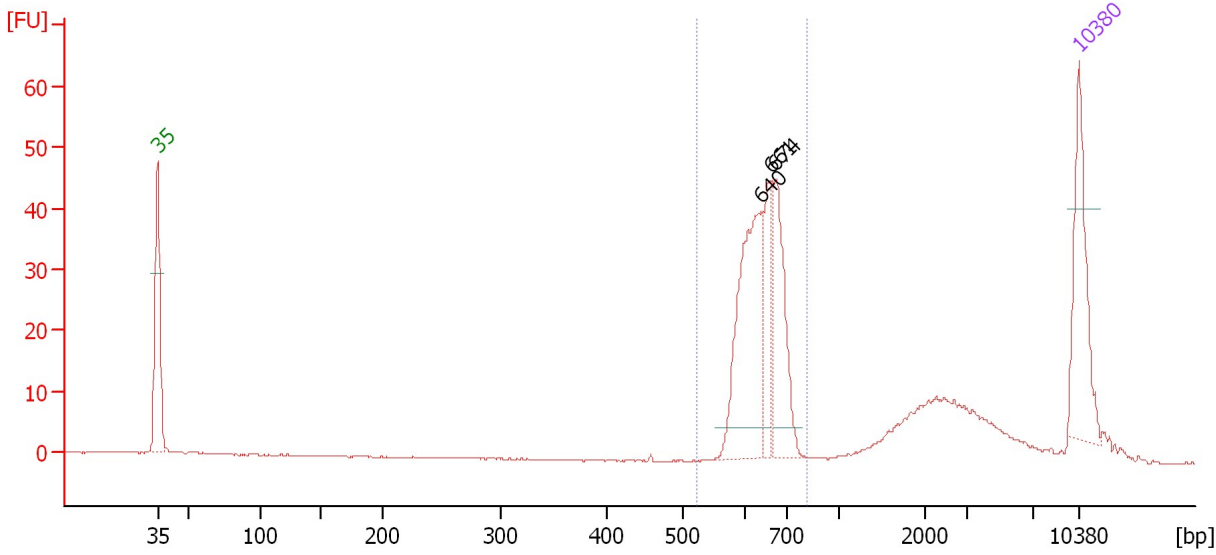


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**

T18 <> 550-750 bp [ 5 ng <> 15 cyc ]



**Overall Results for sample 5 : T18 <> 550-750 bp**

Number of peaks found: 3                      Corr. Area 1: 191.5  
 Noise: 0.1

**Peak table for sample 5 : T18 <> 550-750 bp**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	640	168.15	398.1	
3	661	54.67	125.2	
4	674	87.84	197.4	
5	10,380	75.00	10.9	Upper Marker

**Region table for sample 5 : T18 <> 550-750 bp**

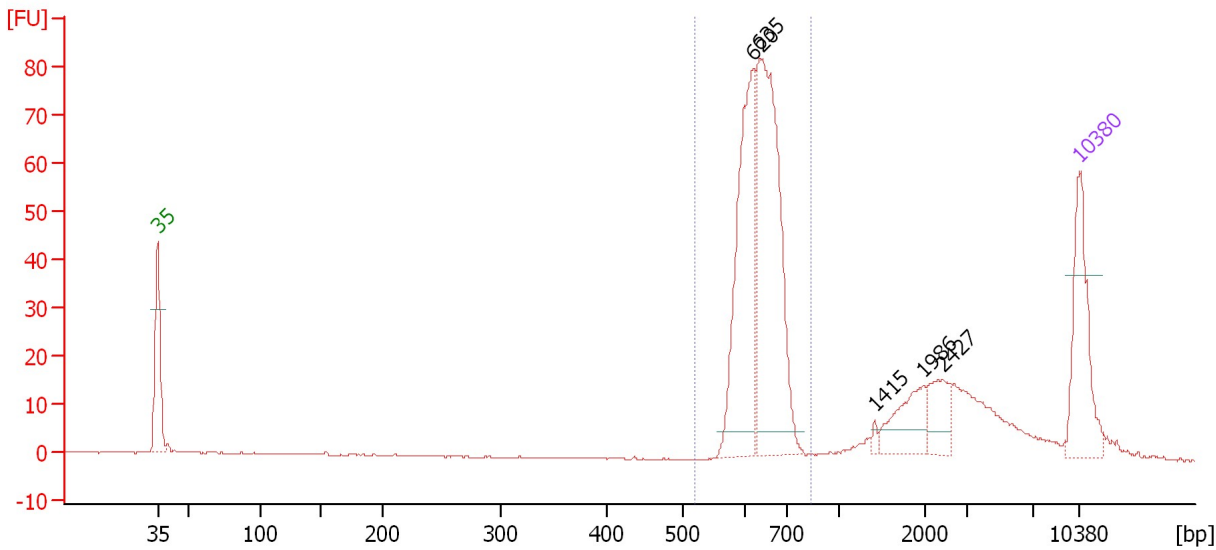
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
523	643	820	191.5	65	6.2	328.72	777.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**

V11 <> 550-750 bp [ 10 ng <> 15 cyc ]



**Overall Results for sample 6 : V11 <> 550-750 bp**

Number of peaks found: 5                      Corr. Area 1: 346.9  
 Noise: 0.1

**Peak table for sample 6 : V11 <> 550-750 bp**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	620	202.10	493.8	
3	635	271.71	648.7	
4	1,415	3.77	4.0	
5	1,986	40.84	31.2	
6	2,427	31.18	19.5	
7	10,380	75.00	10.9	Upper Marker

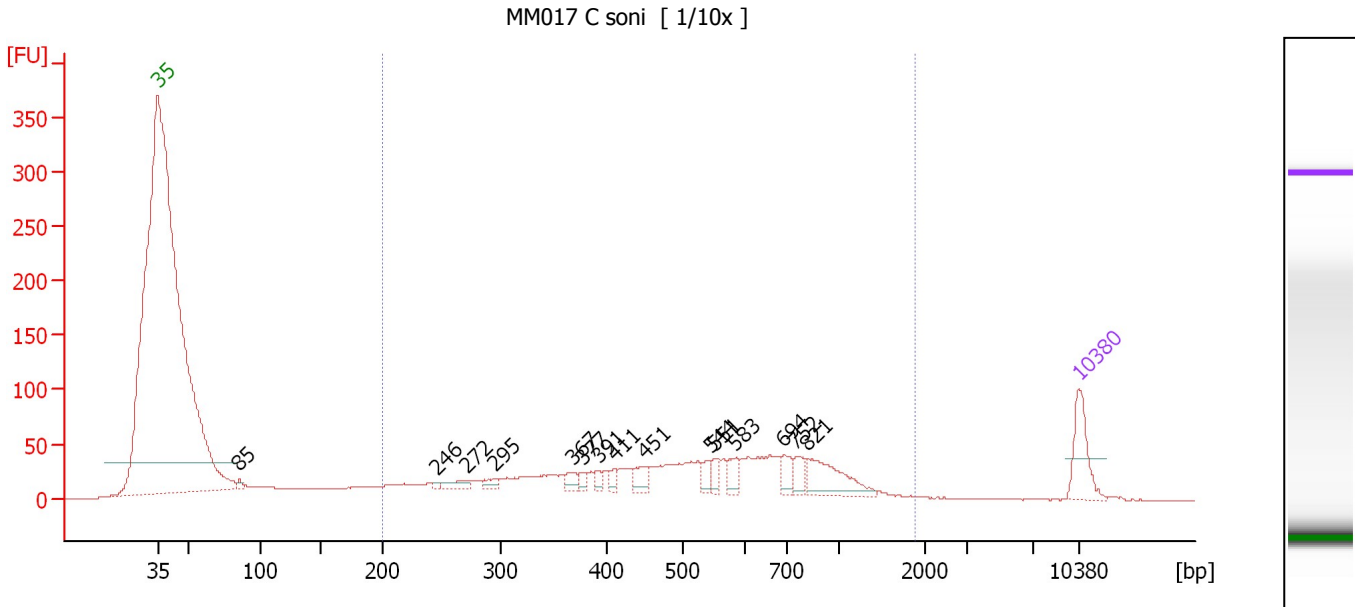
**Region table for sample 6 : V11 <> 550-750 bp**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
520	637	839	346.9	66	6.0	487.53	1,162.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : MM017 C soni**

Number of peaks found: 15      Corr. Area 1: 1,250.3  
 Noise: 0.2

**Peak table for sample 7 : MM017 C soni**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	85	10.82	191.8	
3	246	5.81	35.8	
4	272	24.65	137.5	
5	295	18.79	96.5	
6	367	24.29	100.3	
7	377	14.28	57.4	
8	391	14.91	57.7	
9	411	17.16	63.3	
10	451	34.72	116.6	
11	544	23.36	65.0	
12	551	21.16	58.2	
13	583	30.50	79.2	
14	694	34.42	75.1	
15	752	31.32	63.1	
16	821	107.09	197.5	
17	10,380	75.00	10.9	Upper Marker

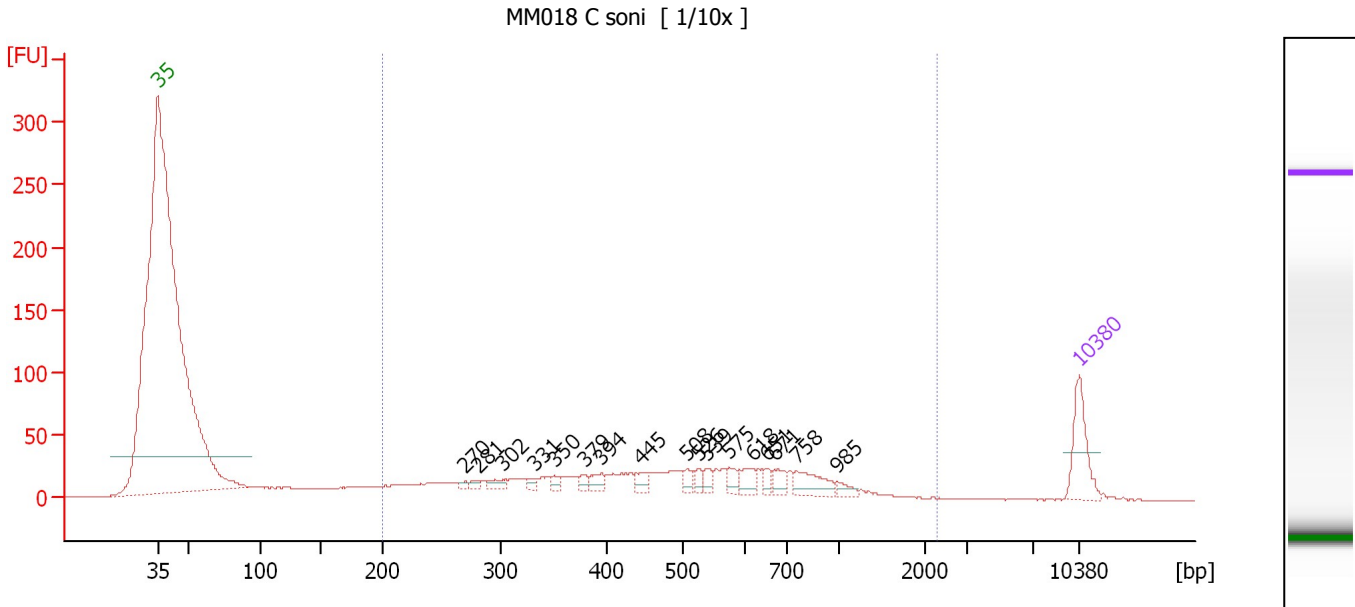
**Region table for sample 7 : MM017 C soni**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	555	1,875	1,250.3	83	48.4	1,232.14	4,478.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : MM018 C soni**

Number of peaks found: 17                      Corr. Area 1: 858.3  
 Noise: 0.2

**Peak table for sample 8 : MM018 C soni**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	270	6.83	38.4	
3	281	9.78	52.8	
4	302	17.65	88.6	
5	331	13.05	59.6	
6	350	13.83	59.8	
7	379	13.27	53.0	
8	394	21.24	81.6	
9	445	21.59	73.5	
10	508	18.55	55.4	
11	526	15.10	43.5	
12	539	17.44	49.0	
13	575	23.39	61.6	
14	618	26.96	66.1	
15	651	14.64	34.1	
16	671	24.41	55.1	
17	758	52.40	104.8	
18	985	13.33	20.5	
19	10,380	75.00	10.9	Upper Marker

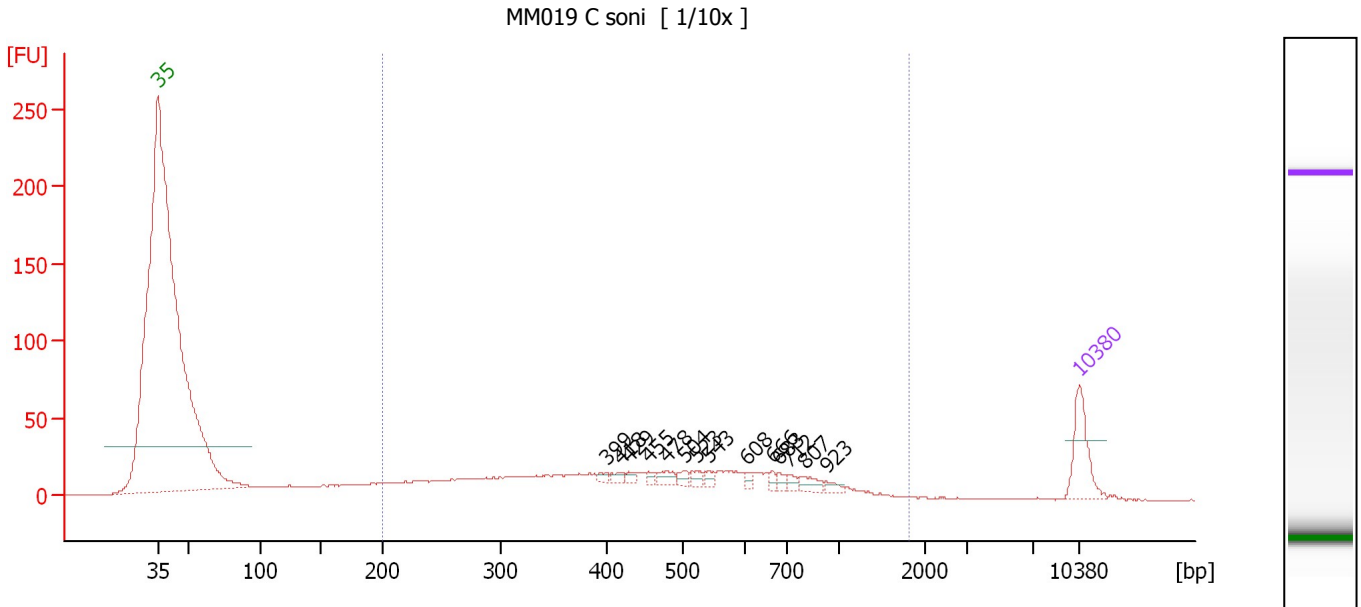
**Region table for sample 8 : MM018 C soni**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	527	2,288	858.3	84	51.9	916.88	3,505.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : MM019 C soni**

Number of peaks found: 14                      Corr. Area 1: 667.7  
 Noise: 0.2

**Peak table for sample 9 : MM019 C soni**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	399	8.00	30.4	
3	418	11.90	43.1	
4	429	10.13	35.8	
5	455	8.99	30.0	
6	478	19.05	60.4	
7	504	14.07	42.3	
8	523	13.73	39.7	
9	543	11.02	30.8	
10	608	10.74	26.8	
11	666	10.03	22.8	
12	683	11.56	25.7	
13	712	11.91	25.3	
14	807	20.20	37.9	
15	923	11.57	19.0	
16	10,380	75.00	10.9	Upper Marker

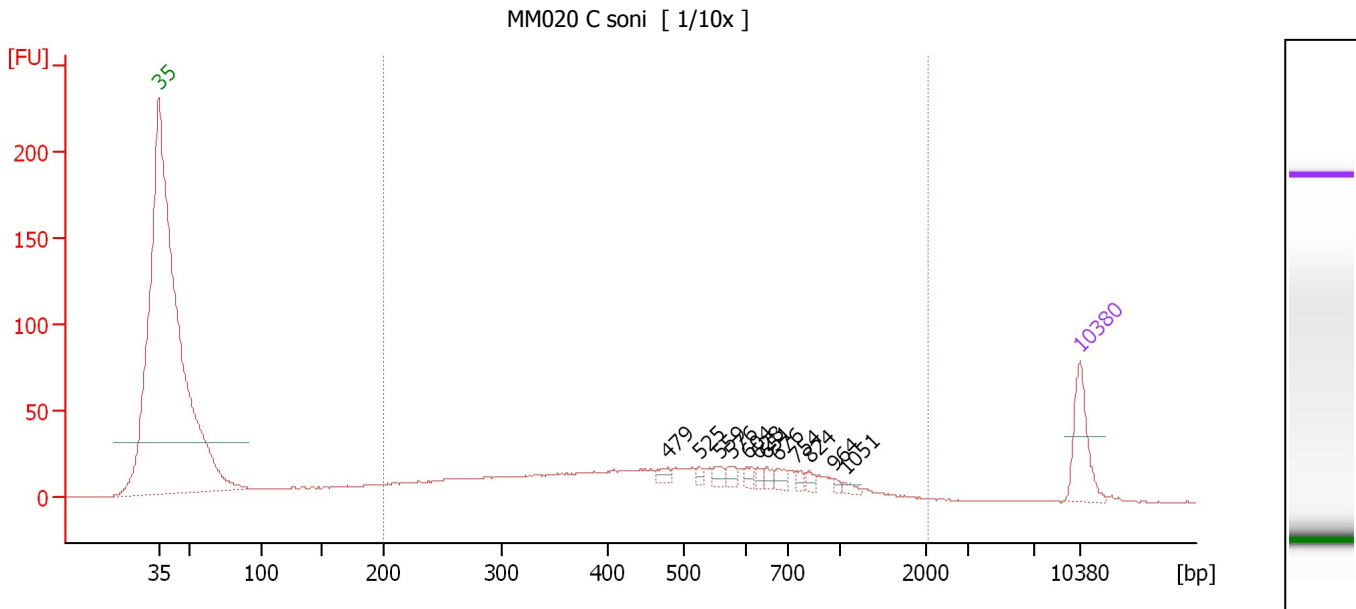
**Region table for sample 9 : MM019 C soni**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	500	1,806	667.7	82	49.0	921.99	3,653.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : MM020 C soni**

Number of peaks found: 12                      Corr. Area 1: 706.8  
 Noise: 0.2

**Peak table for sample 10 : MM020 C soni**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	479	14.97	47.4	
3	525	8.92	25.7	
4	559	14.29	38.7	
5	576	14.54	38.2	
6	604	13.59	34.1	
7	628	9.31	22.5	
8	651	12.14	28.3	
9	676	14.52	32.5	
10	754	8.52	17.1	
11	824	11.42	21.0	
12	964	5.48	8.6	
13	1,051	7.75	11.2	
14	10,380	75.00	10.9	Upper Marker

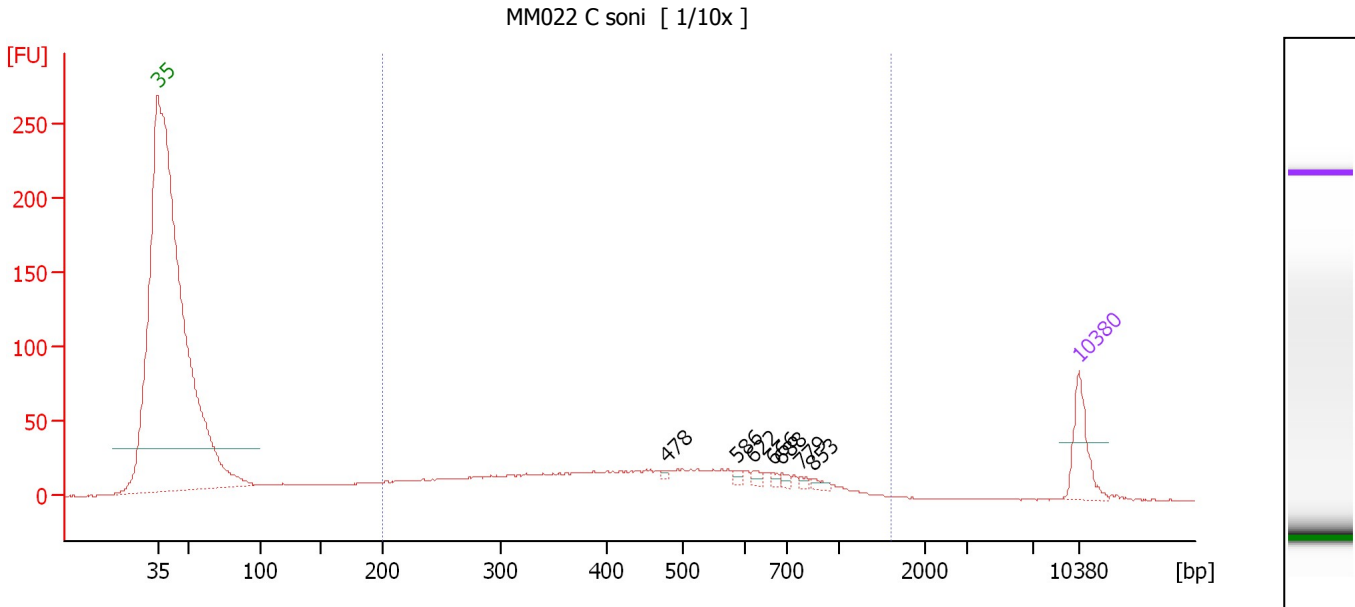
**Region table for sample 10 : MM020 C soni**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	528	2,040	706.8	84	53.3	888.41	3,423.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : MM022 C soni**

Number of peaks found: 7                      Corr. Area 1: 727.2  
 Noise: 0.1

**Peak table for sample 11 : MM022 C soni**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	478	5.15	16.3	
3	586	9.46	24.4	
4	622	9.92	24.2	
5	666	8.16	18.6	
6	688	9.06	19.9	
7	779	7.72	15.0	
8	853	10.33	18.3	
9	10,380	75.00	10.9	Upper Marker

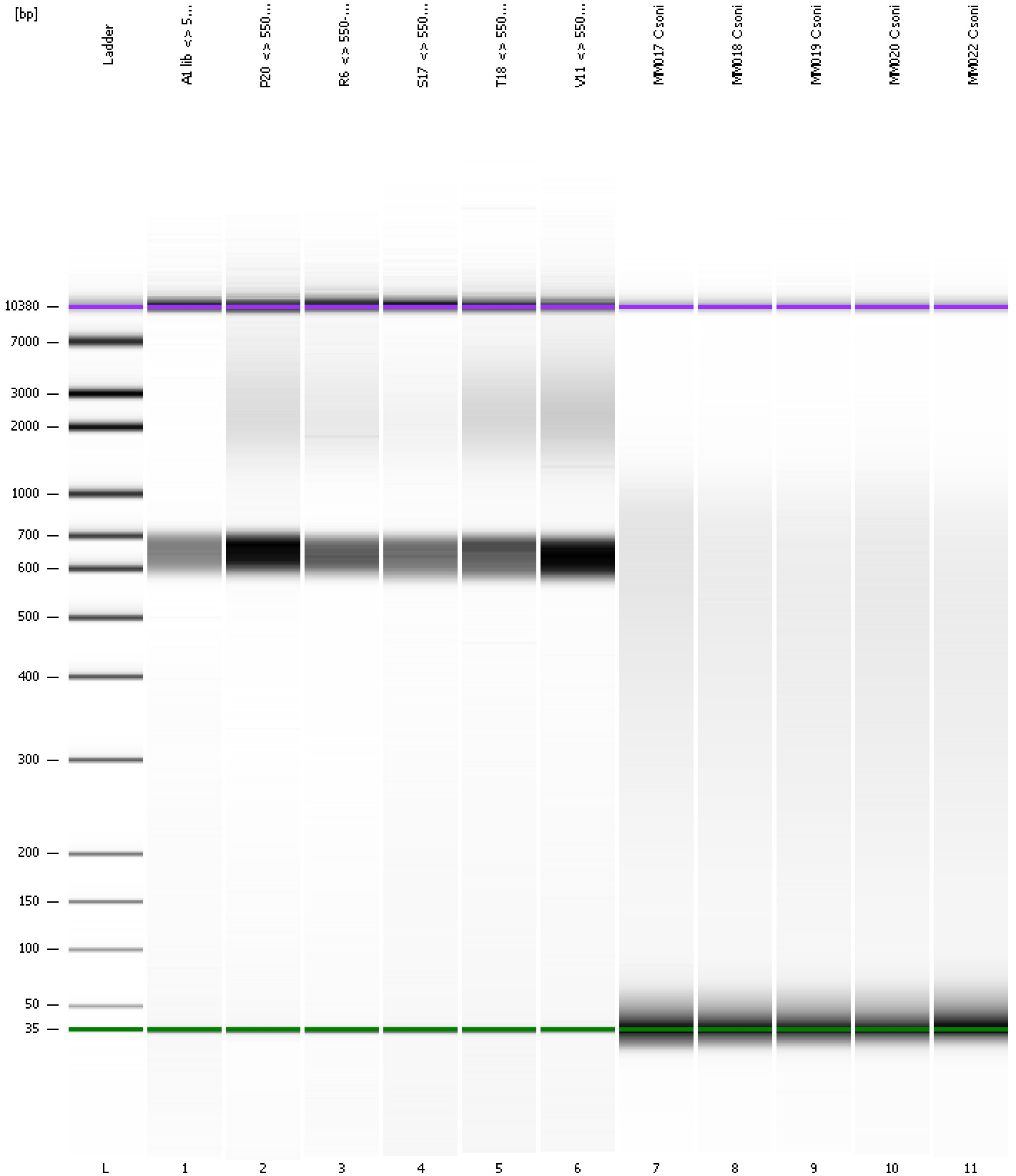
**Region table for sample 11 : MM022 C soni**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	482	1,604	727.2	82	45.7	878.72	3,537.0	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
Modified: 10/2/2014 1:09:47 PM

Gel Image



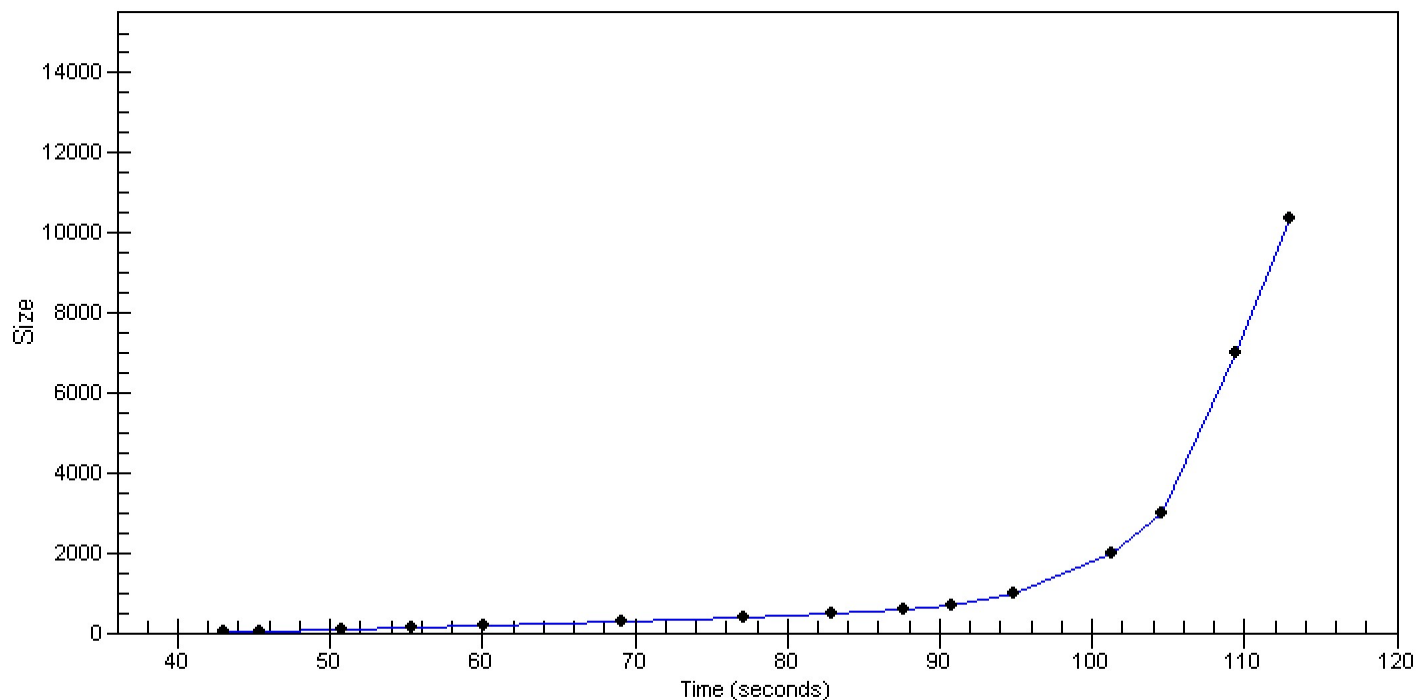


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
Modified: 10/2/2014 1:09:47 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02\_001.xad

Created: 10/2/2014 12:25:21 PM  
 Modified: 10/2/2014 1:09:47 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		10/2/2014 1:06:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-10-02\2014-10-02_001.xad)		Instrument	Run		10/2/2014 12:25:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/2/2014 12:25:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/2/2014 12:25:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/2/2014 12:25:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/2/2014 12:25:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/2/2014 12:25:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/2/2014 12:25:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1