

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
Modified: 8/1/2014 9:11:37 AM

**Electrophoresis File Run Summary**

Instrument Information:

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

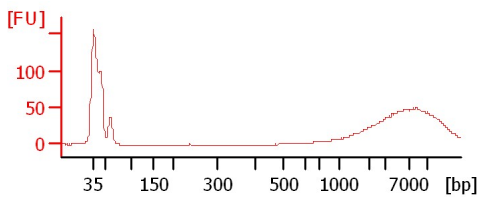
Assay Information:

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

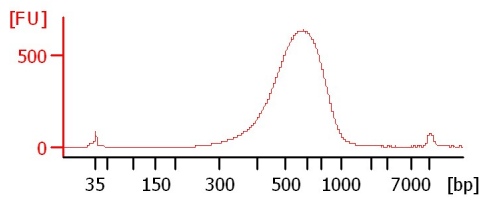
Chip Information:

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

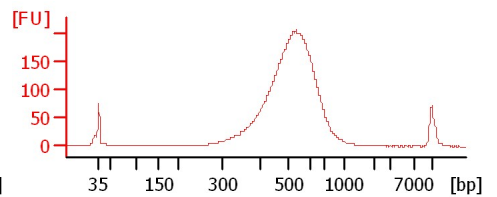
**JMS 21 LIB pre-clean up**



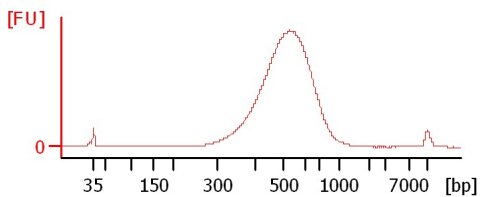
**JMS 21 LIB**



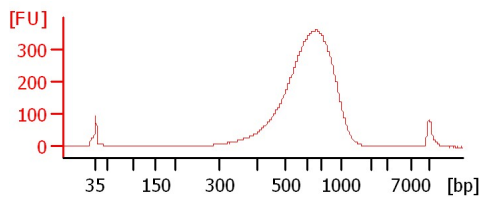
**JMS 22 LIB**



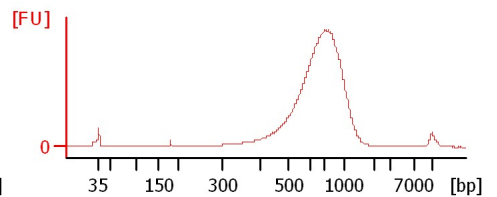
**JMS 23 LIB**



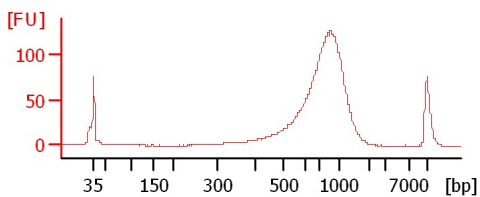
**JMS 24 LIB**



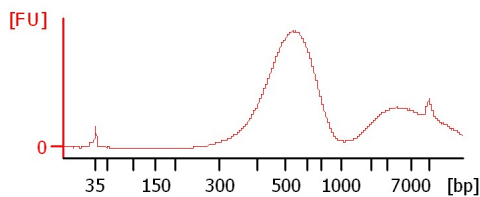
**JMS 25 LIB**



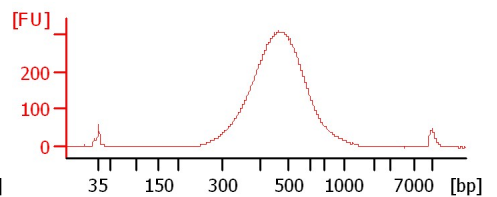
**JMS 26 LIB**



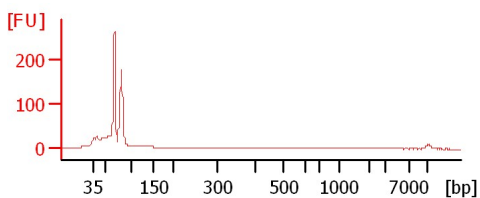
**JMS 27 LIB**



**JMS 28 LIB**



**24-3 lib pre-cleanup**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
JMS 21 LIB pre-clean up		<input type="checkbox"/>	✓			
JMS 21 LIB		<input type="checkbox"/>	✓			
JMS 22 LIB		<input type="checkbox"/>	✓			
JMS 23 LIB		<input type="checkbox"/>	✓			
JMS 24 LIB		<input type="checkbox"/>	✓			
JMS 25 LIB		<input type="checkbox"/>	✓			
JMS 26 LIB		<input type="checkbox"/>	✓			
JMS 27 LIB		<input type="checkbox"/>	✓			
JMS 28 LIB		<input type="checkbox"/>	✓			
24-3 lib pre-cleanup		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
Modified: 8/1/2014 9:11:37 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/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] : 20  
Area Threshold : 0.1  
Width Threshold [s] : 0.6  
Baseline Plateau [s] : 0.5

**Filter Settings**

Filter Width [s] : 0.5  
Polynomial Order : 4

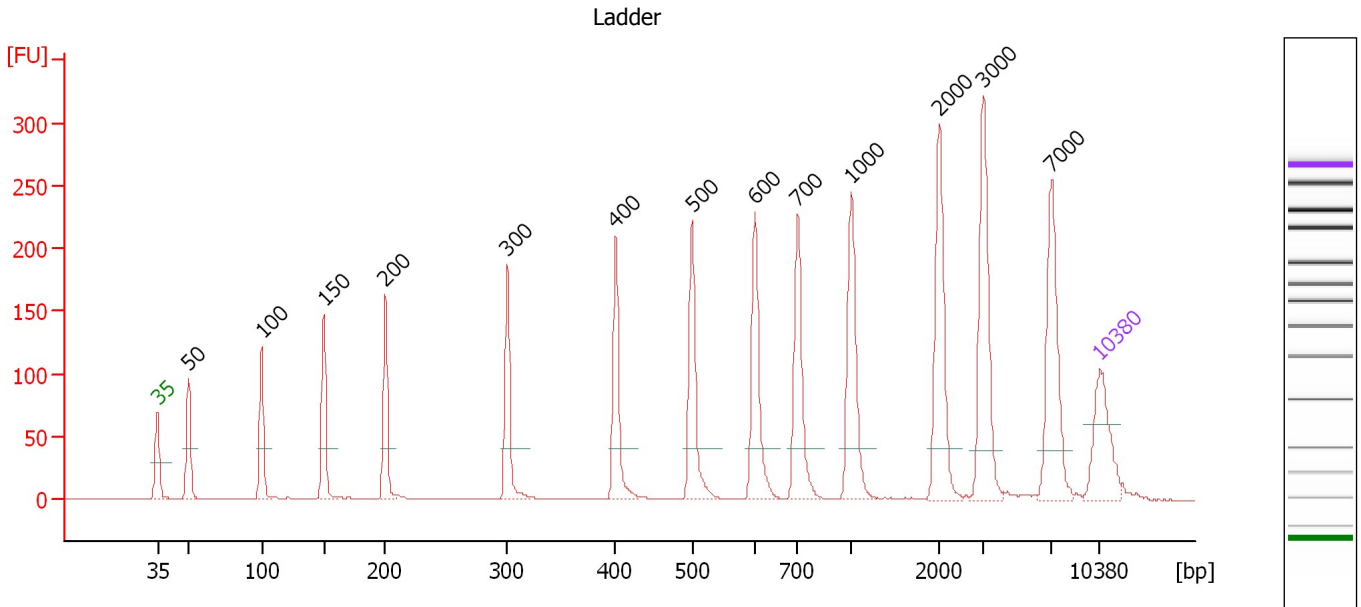
**Ladder**

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\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

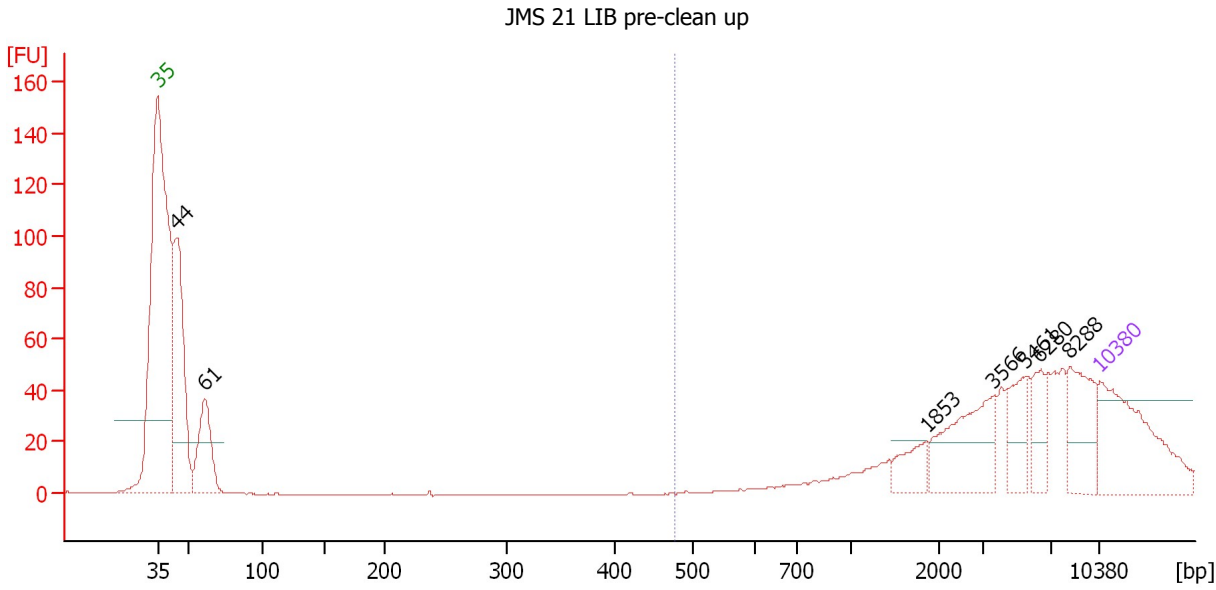
**Peak table for Ladder**

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\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : JMS 21 LIB pre-clean up**

Number of peaks found: 7                      Corr. Area 1: 550.0  
 Noise: 0.2

**Peak table for sample 1 : JMS 21 LIB pre-clean up**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	147.39	5,028.9	
3	61	66.16	1,634.1	
4	1,853	19.53	16.0	
5	3,566	60.48	25.7	
6	5,461	27.59	7.7	
7	6,280	24.73	6.0	
8	8,288	42.07	7.7	
9	10,380	75.00	10.9	Upper Marker

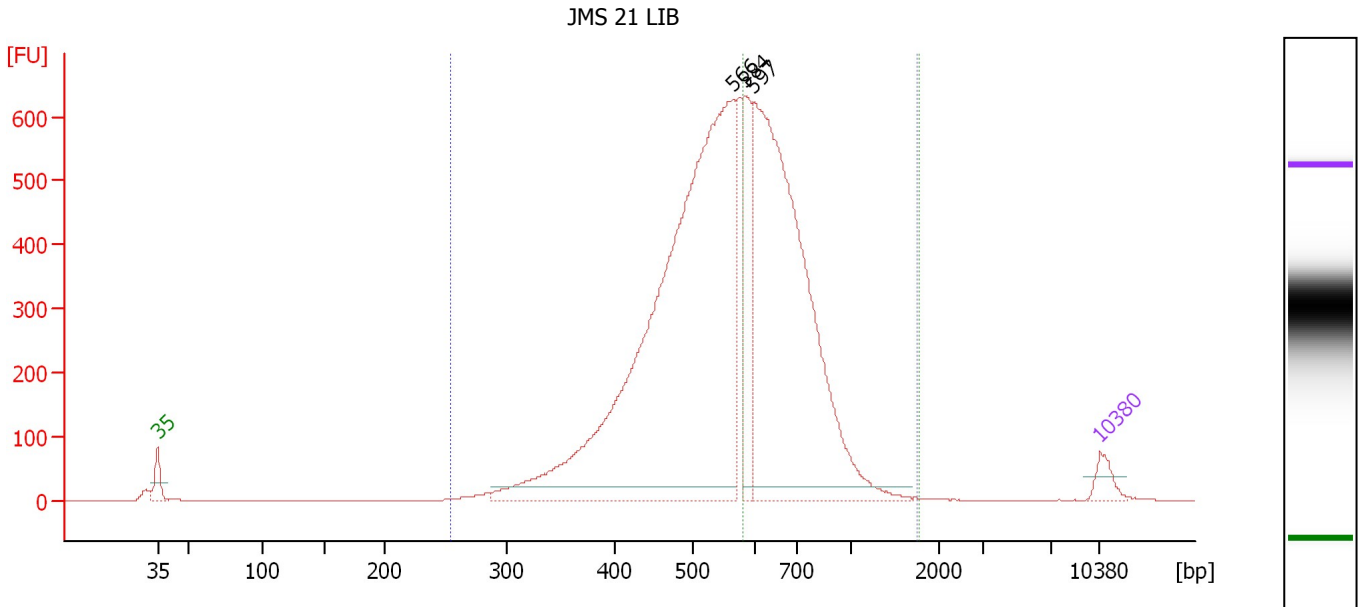
**Region table for sample 1 : JMS 21 LIB pre-clean up**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
478	22,821	7,033	176.8	292.14	550.0	67	68.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : JMS 21 LIB**

Number of peaks found:	3	Corr. Area 2:	5,741.9
Noise:	0.2	Corr. Area 3:	3,783.9
Corr. Area 1:	9,525.4		

**Peak table for sample 2 : JMS 21 LIB**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	566	5,283.82	14,145.5	
3	584	603.67	1,567.1	
4	597	3,366.27	8,547.3	
5	10,380	75.00	10.9	Upper Marker

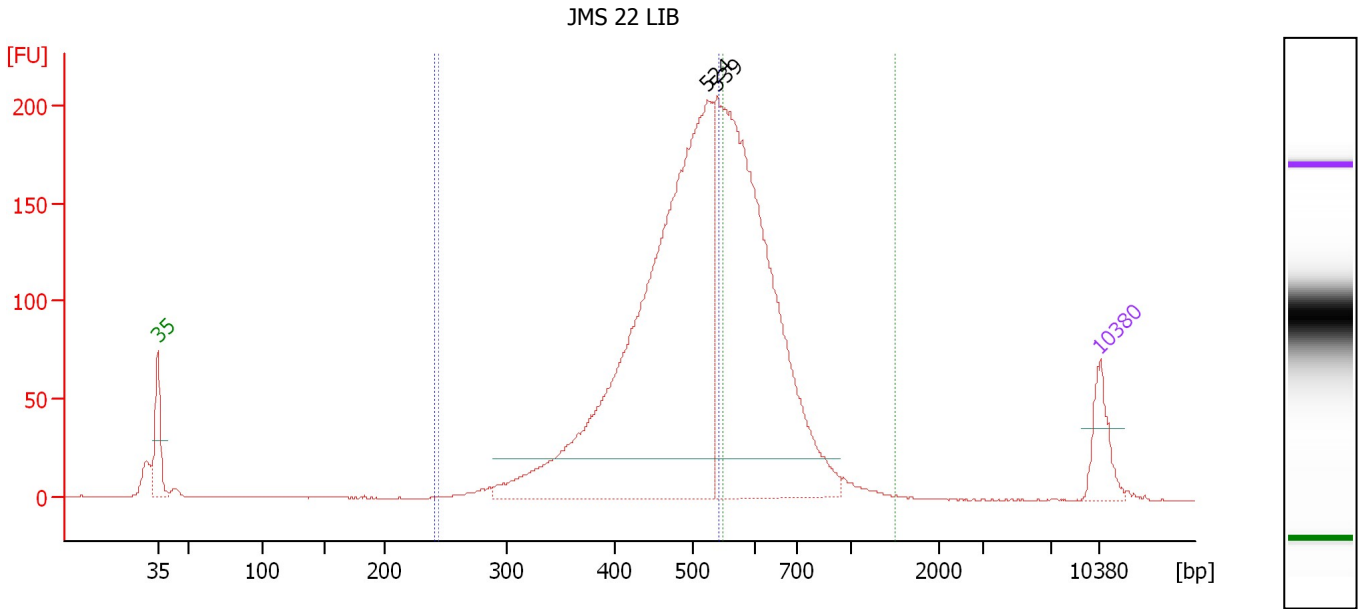
**Region table for sample 2 : JMS 21 LIB**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
253	1,752	575	28,900.1	10,165.32	9,525.4	99	25.2
254	581	487	20,267.4	6,306.21	5,741.9	60	13.8
581	1,775	697	8,631.7	3,859.29	3,783.9	39	19.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : JMS 22 LIB**

Number of peaks found:	2	Corr. Area 2:	1,716.7
Noise:	0.2	Corr. Area 3:	1,047.4
Corr. Area 1:	2,807.1		

**Peak table for sample 3 : JMS 22 LIB**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	524	1,856.34	5,362.9	
3	539	1,444.18	4,063.4	
4	10,380	75.00	10.9	Upper Marker

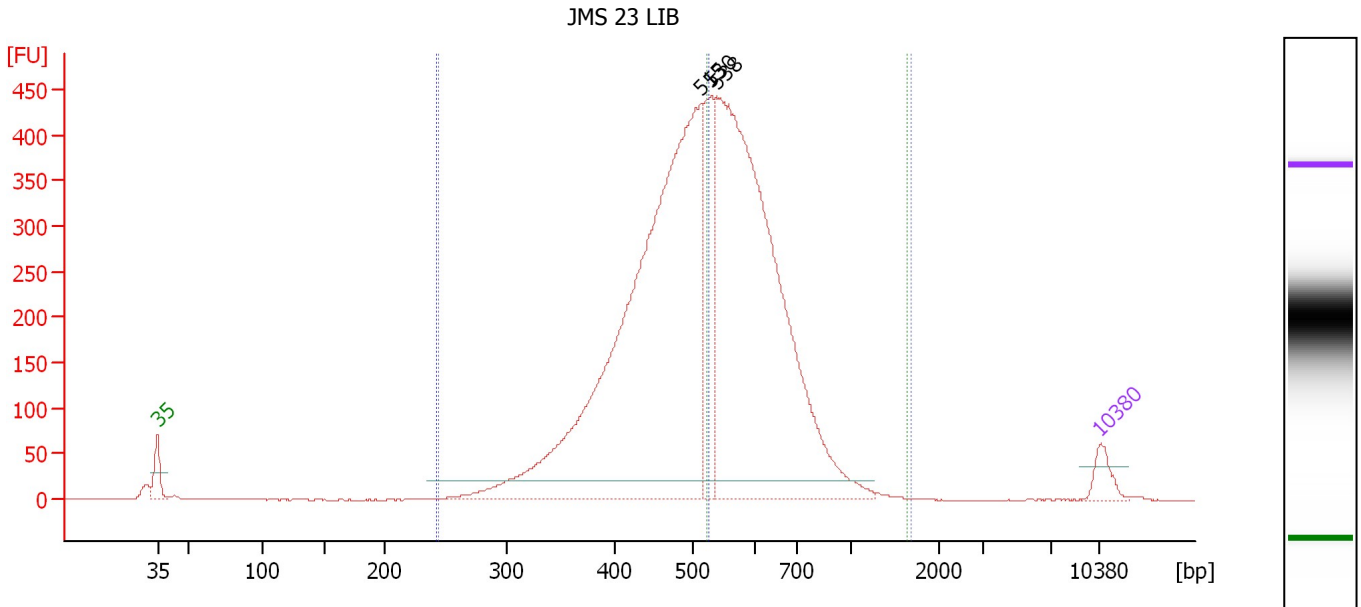
**Region table for sample 3 : JMS 22 LIB**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
241	544	460	7,323.5	2,162.17	1,716.7	60	13.1
244	1,504	529	10,449.5	3,430.78	2,807.1	98	22.0
548	1,490	631	2,984.0	1,217.20	1,047.4	37	16.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : JMS 23 LIB**

Number of peaks found: 3      Corr. Area 2: 3,789.8  
 Noise: 0.2      Corr. Area 3: 3,082.3  
 Corr. Area 1: 6,776.3

**Peak table for sample 4 : JMS 23 LIB**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	515	4,333.73	12,747.3	
3	530	582.33	1,663.7	
4	538	3,581.11	10,086.4	
5	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : JMS 23 LIB**

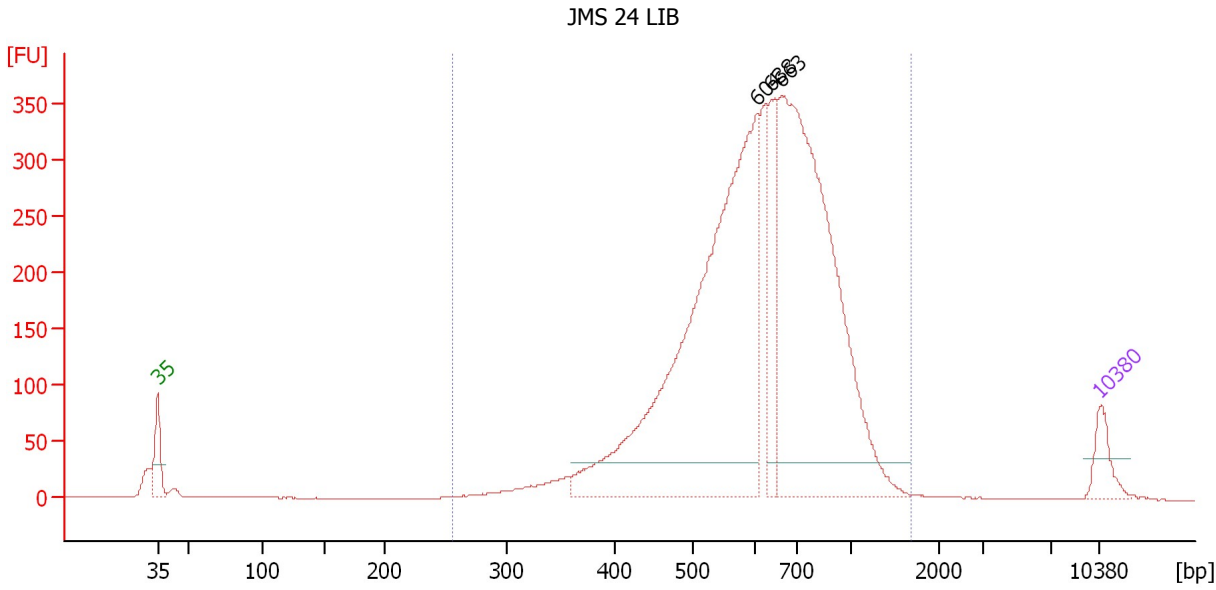
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
241	528	447	17,505.2	5,033.18	3,789.8	55	12.8
243	1,679	530	26,611.8	8,692.71	6,776.3	99	23.6
525	1,638	621	9,463.8	3,782.51	3,082.3	45	18.0



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 5 : JMS 24 LIB**

Height Threshold [FU] : 30

**Overall Results for sample 5 : JMS 24 LIB**

Number of peaks found: 3                      Corr. Area 1: 4,934.6  
 Noise: 0.1

**Peak table for sample 5 : JMS 24 LIB**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	604	2,090.86	5,245.4	
3	638	262.30	622.6	
4	663	1,870.98	4,278.3	
5	10,380	75.00	10.9	Upper Marker

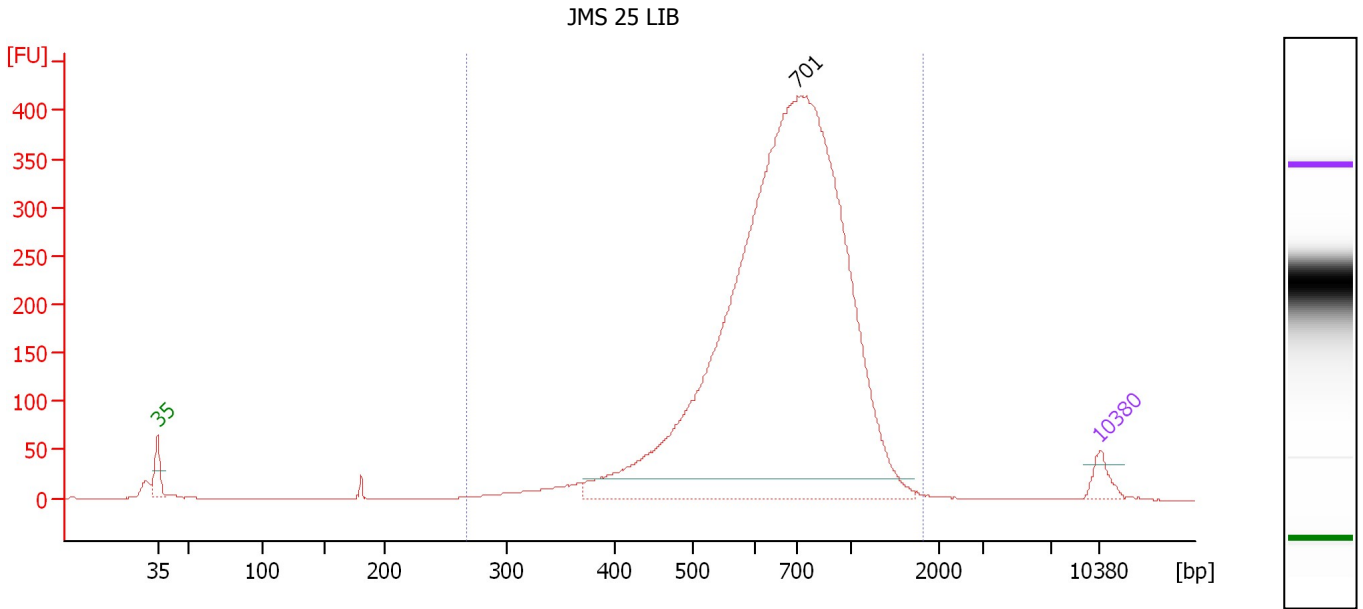
**Region table for sample 5 : JMS 24 LIB**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
254	1,686	653	12,183.9	4,777.37	4,934.6	98	28.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : JMS 25 LIB**

Number of peaks found: 1                      Corr. Area 1: 4,927.5  
 Noise: 0.2

**Peak table for sample 6 : JMS 25 LIB**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	701	7,466.10	16,133.7	
3	10,380	75.00	10.9	Upper Marker

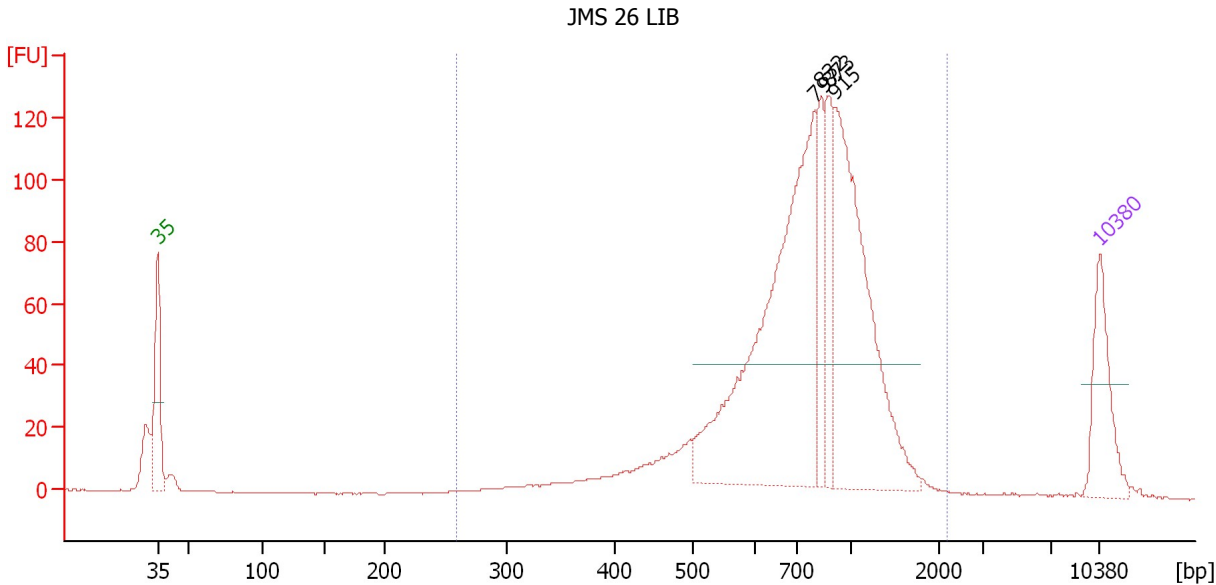
**Region table for sample 6 : JMS 25 LIB**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
266	1,813	720	17,733.0	7,584.88	4,927.5	98	29.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 7 : JMS 26 LIB**

Height Threshold [FU] : 40

**Overall Results for sample 7 : JMS 26 LIB**

Number of peaks found: 4      Corr. Area 1: 1,326.5  
 Noise: 0.1

**Peak table for sample 7 : JMS 26 LIB**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	797	549.23	1,044.0	
3	832	78.21	142.5	
4	873	83.23	144.4	
5	915	361.59	599.1	
6	10,380	75.00	10.9	Upper Marker

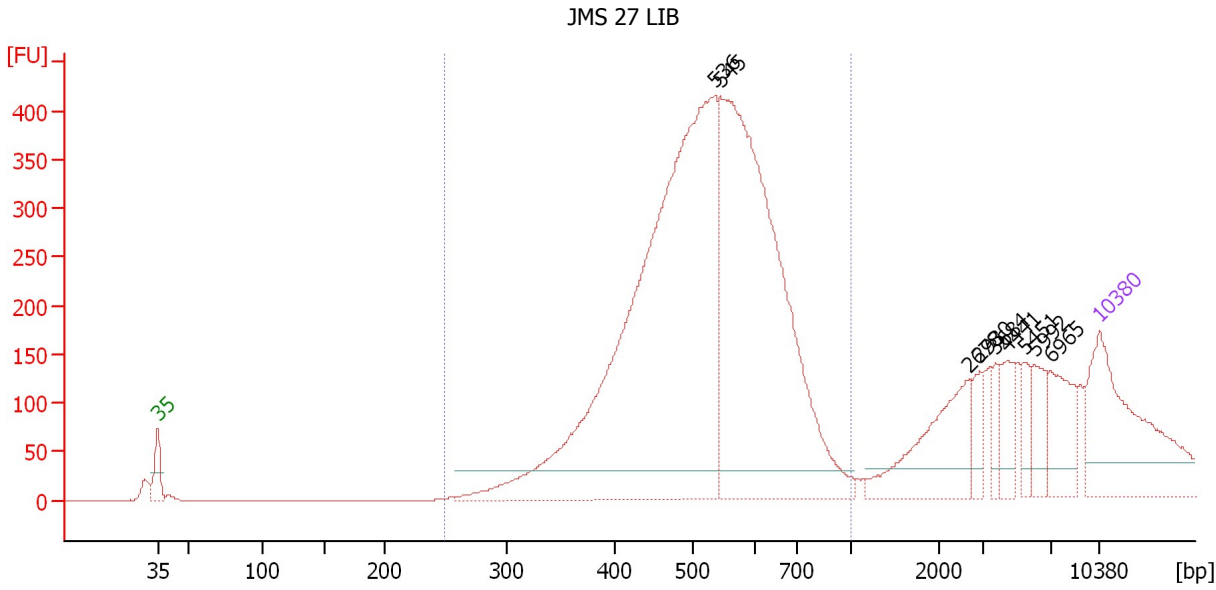
**Region table for sample 7 : JMS 26 LIB**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
258	2,170	818	2,769.1	1,292.41	1,326.5	95	33.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 8 : JMS 27 LIB**

Height Threshold [FU] : 30

**Overall Results for sample 8 : JMS 27 LIB**

Number of peaks found: 9                      Corr. Area 1: 6,145.4  
 Noise: 0.1

**Peak table for sample 8 : JMS 27 LIB**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	536	488.20	1,379.8	
3	545	356.73	992.0	
4	2,678	52.89	29.9	
5	2,930	12.19	6.3	
6	3,684	9.15	3.8	
7	4,441	16.55	5.6	
8	5,451	9.80	2.7	
9	5,992	17.70	4.5	
10	6,965	27.04	5.9	
11	10,380	75.00	10.9	Upper Marker

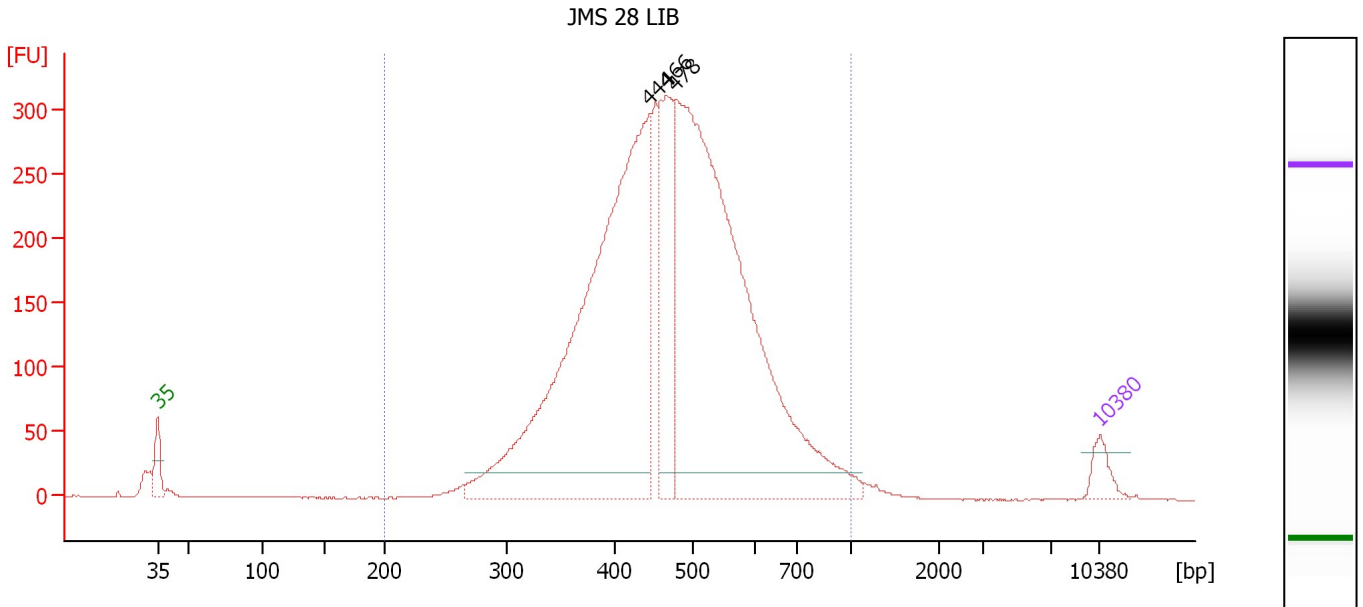
**Region table for sample 8 : JMS 27 LIB**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
249	1,000	530	2,639.3	869.97	6,145.4	79	20.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : JMS 28 LIB**

Number of peaks found: 3                      Corr. Area 1: 5,165.3  
 Noise: 0.2

**Peak table for sample 9 : JMS 28 LIB**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	444	3,447.83	11,768.4	
3	466	745.35	2,422.9	
4	478	3,717.85	11,774.1	
5	10,380	75.00	10.9	Upper Marker

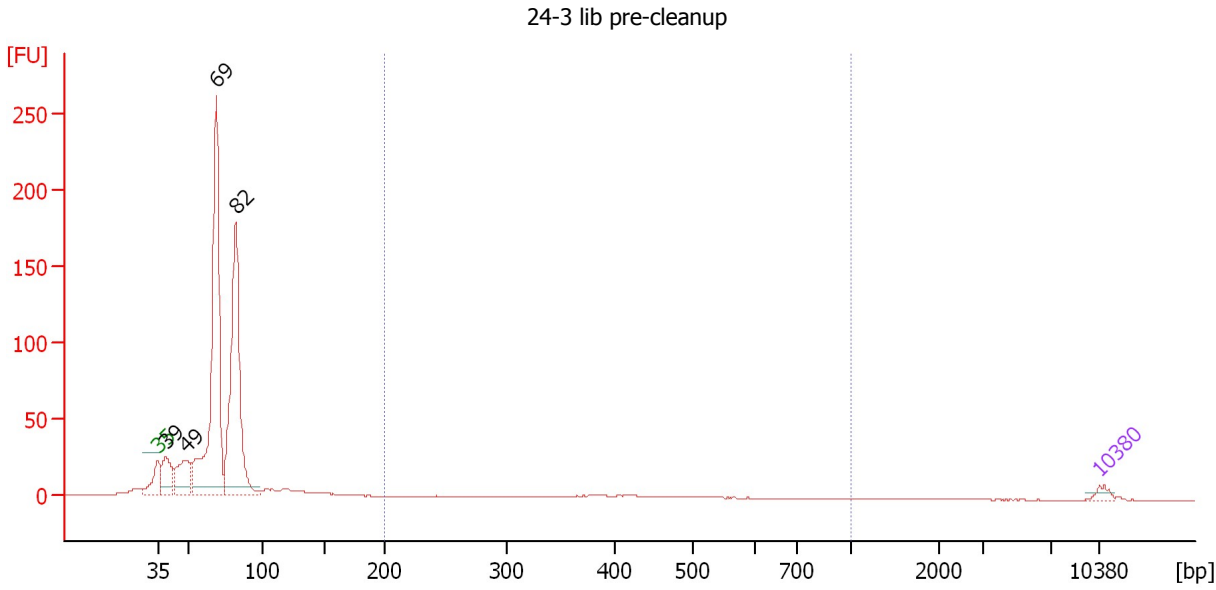
**Region table for sample 9 : JMS 28 LIB**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
200	1,000	478	27,843.5	8,226.89	5,165.3	98	22.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
 Modified: 8/1/2014 9:11:37 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 10 : 24-3 lib pre-cleanup**

Height Threshold [FU] : 5

**Overall Results for sample 10 : 24-3 lib pre-cleanup**

Number of peaks found: 4                      Corr. Area 1: 28.9  
 Noise: 0.1

**Peak table for sample 10 : 24-3 lib pre-cleanup**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	743.57	28,674.2	
3	49	940.45	29,204.9	
4	69	6,092.80	133,926.0	
5	82	4,573.38	84,247.0	
6	10,380	75.00	10.9	Upper Marker

**Region table for sample 10 : 24-3 lib pre-cleanup**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	407	1,394.2	334.38	28.9	3	29.2

---

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
Modified: 8/1/2014 9:11:37 AM

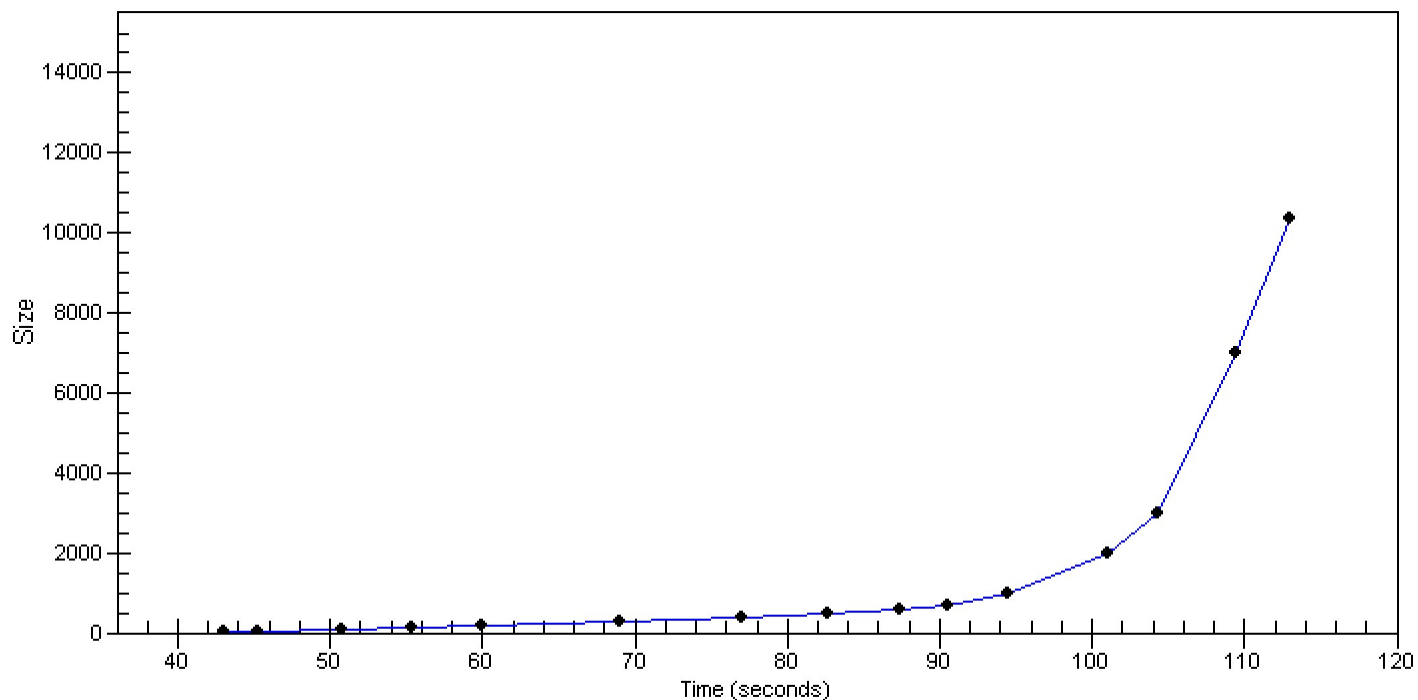
**Gel Image**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
Modified: 8/1/2014 9:11:37 AM

**Curves**

**Standard Curve**





---

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad

Created: 8/1/2014 8:32:02 AM  
Modified: 8/1/2014 9:11:37 AM

**Invalid Samples**

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay Created: 8/1/2014 8:32:02 AM  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01\_001.xad Modified: 8/1/2014 9:11:37 AM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		8/1/2014 9:10:30 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_001.xad)		Instrument	Run		8/1/2014 8:32:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/1/2014 8:32:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/1/2014 8:32:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/1/2014 8:32:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/1/2014 8:32:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/1/2014 8:32:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/1/2014 8:32:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1