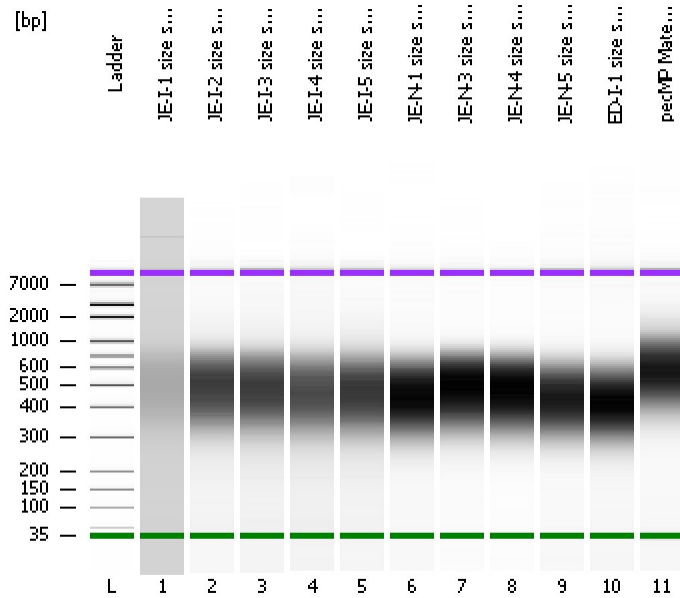


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
Modified: 6/22/2015 10:31:57 AM

**Electrophoresis File Run Summary**



Instrument Information:

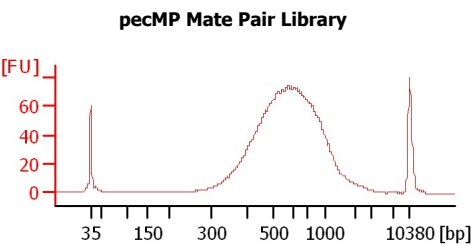
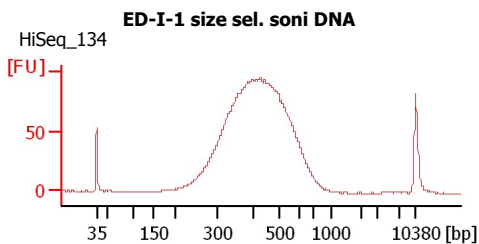
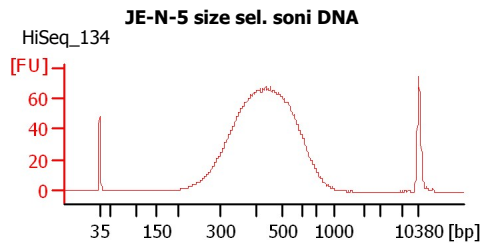
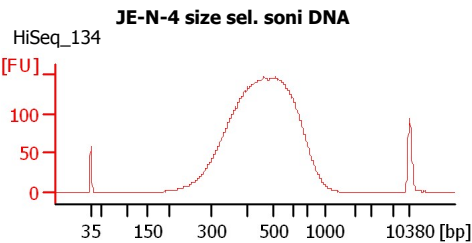
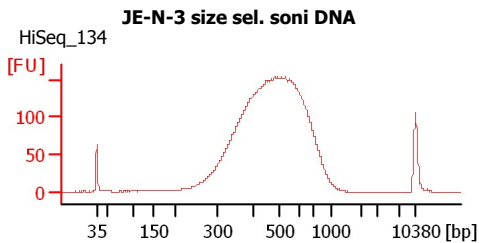
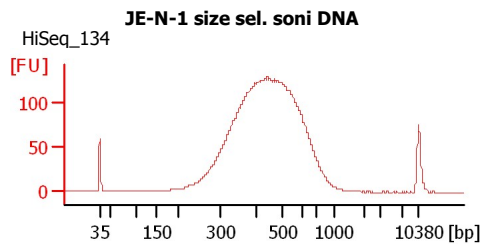
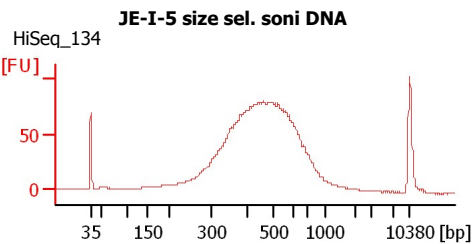
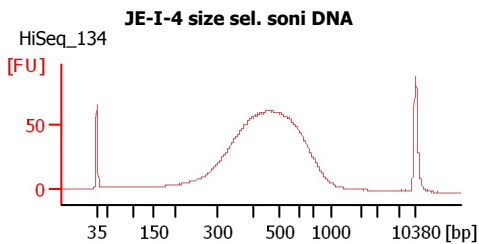
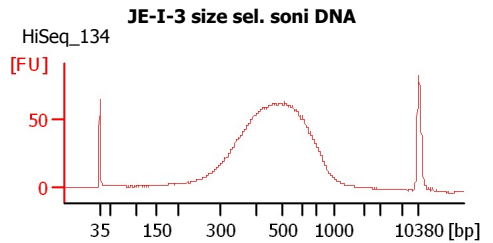
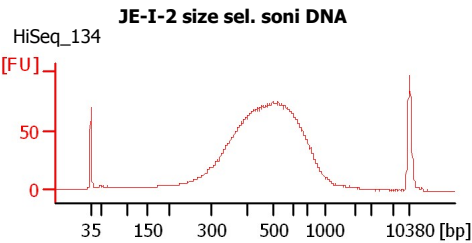
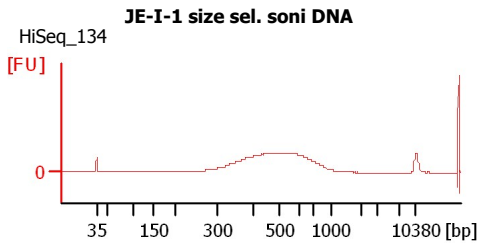
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
Modified: 6/22/2015 10:31:57 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
JE-I-1 size sel. soni DNA	HiSeq_134	<input type="checkbox"/>	✓			
JE-I-2 size sel. soni DNA	HiSeq_134	<input type="checkbox"/>	✓			
JE-I-3 size sel. soni DNA	HiSeq_134	<input type="checkbox"/>	✓			
JE-I-4 size sel. soni DNA	HiSeq_134	<input type="checkbox"/>	✓			
JE-I-5 size sel. soni DNA	HiSeq_134	<input type="checkbox"/>	✓			
JE-N-1 size sel. soni DNA	HiSeq_134	<input type="checkbox"/>	✓			
JE-N-3 size sel. soni DNA	HiSeq_134	<input type="checkbox"/>	✓			
JE-N-4 size sel. soni DNA	HiSeq_134	<input type="checkbox"/>	✓			
JE-N-5 size sel. soni DNA	HiSeq_134	<input type="checkbox"/>	✓			
ED-I-1 size sel. soni DNA	HiSeq_134	<input type="checkbox"/>	✓			
pecMP Mate Pair Library		<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\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
Modified: 6/22/2015 10:31:57 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] : 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

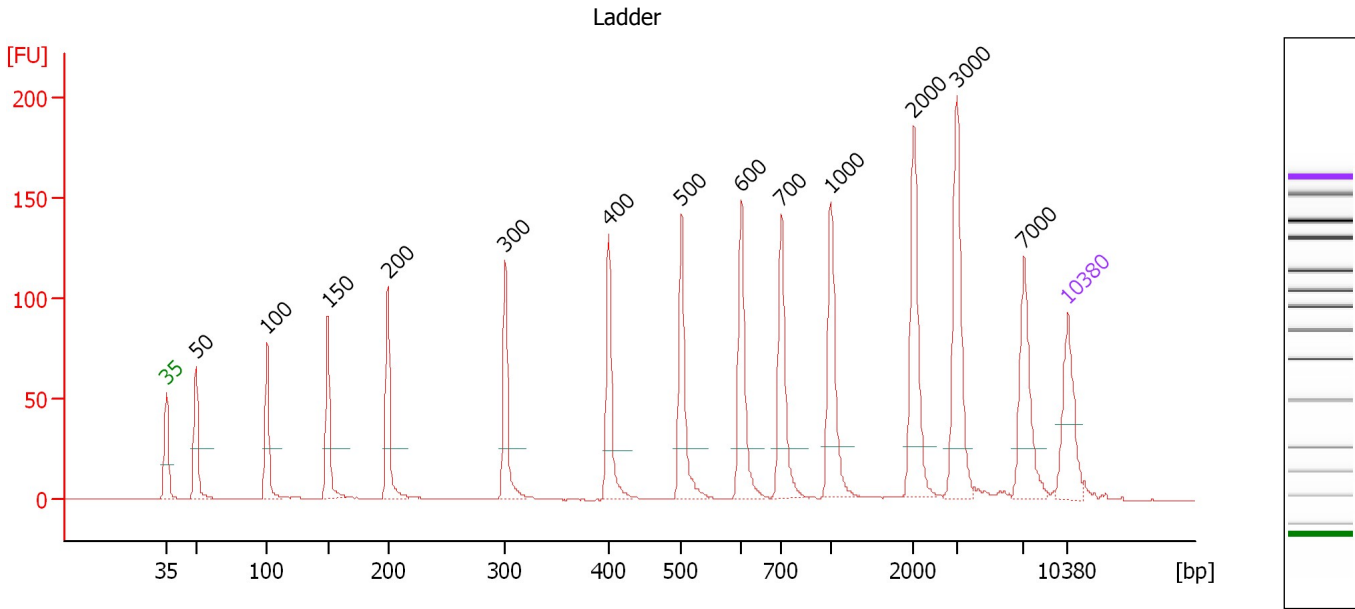
**Ladder**

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\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

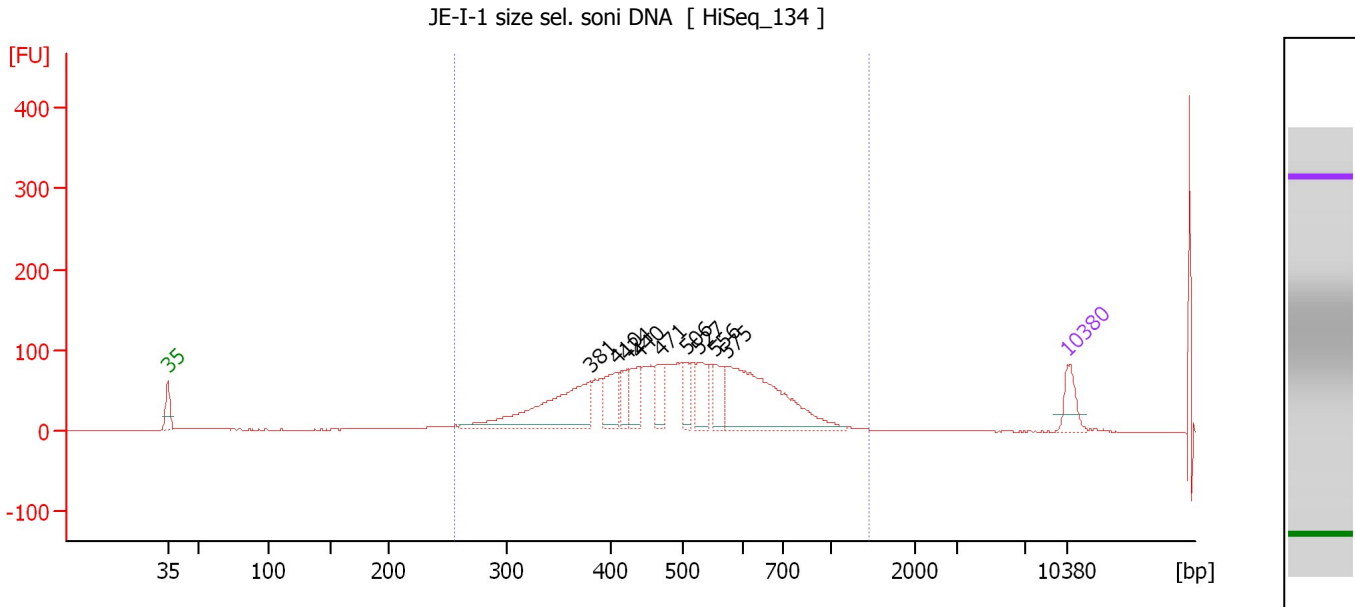
**Peak table for Ladder**

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	45.28
3	100	150.00	2,272.7	Ladder Peak	50.81
4	150	150.00	1,515.2	Ladder Peak	55.56
5	200	150.00	1,136.4	Ladder Peak	60.21
6	300	150.00	757.6	Ladder Peak	69.33
7	400	150.00	568.2	Ladder Peak	77.37
8	500	150.00	454.5	Ladder Peak	83.00
9	600	150.00	378.8	Ladder Peak	87.65
10	700	150.00	324.7	Ladder Peak	90.77
11	1,000	150.00	227.3	Ladder Peak	94.63
12	2,000	150.00	113.6	Ladder Peak	101.05
13	3,000	150.00	75.8	Ladder Peak	104.40
14	7,000	150.00	32.5	Ladder Peak	109.60
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : JE-I-1 size sel. soni DNA**

Number of peaks found: 9                      Corr. Area 1: 1,982.7  
 Noise: 0.2

**Peak table for sample 1 : JE-I-1 size sel. soni DNA**

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	381	511.68	2,034.7		75.84
3	410	154.64	571.0		77.95
4	424	91.82	328.4		78.70
5	440	119.83	412.4		79.64
6	471	117.30	377.2		81.37
7	506	97.51	291.8		83.29
8	527	149.72	430.1		84.28
9	556	109.62	298.9		85.59
10	575	594.10	1,565.9		86.48
11	10,380	75.00	10.9	Upper Marker	113.00

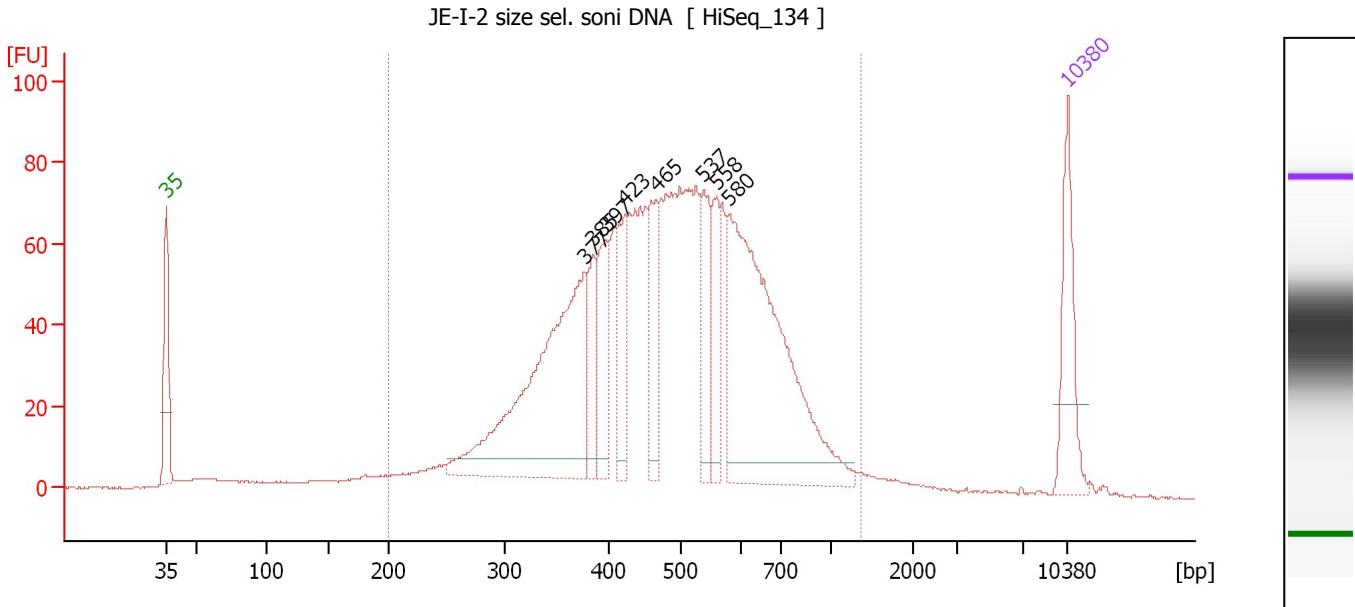
**Region table for sample 1 : JE-I-1 size sel. soni DNA**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
255	508	1,452	1,982.7	8,749.5	92	29.7	2,638.72

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : JE-I-2 size sel. soni DNA**

Number of peaks found: 8                      Corr. Area 1: 1,809.1  
 Noise: 0.2

**Peak table for sample 2 : JE-I-2 size sel. soni DNA**

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	377	411.81	1,655.9		75.51
3	385	64.69	254.5		76.17
4	397	85.21	324.8		77.17
5	423	82.60	296.2		78.64
6	465	86.04	280.5		81.02
7	537	81.27	229.3		84.72
8	558	64.06	174.1		85.67
9	580	433.09	1,131.4		86.72
10	10,380	75.00	10.9	Upper Marker	113.00

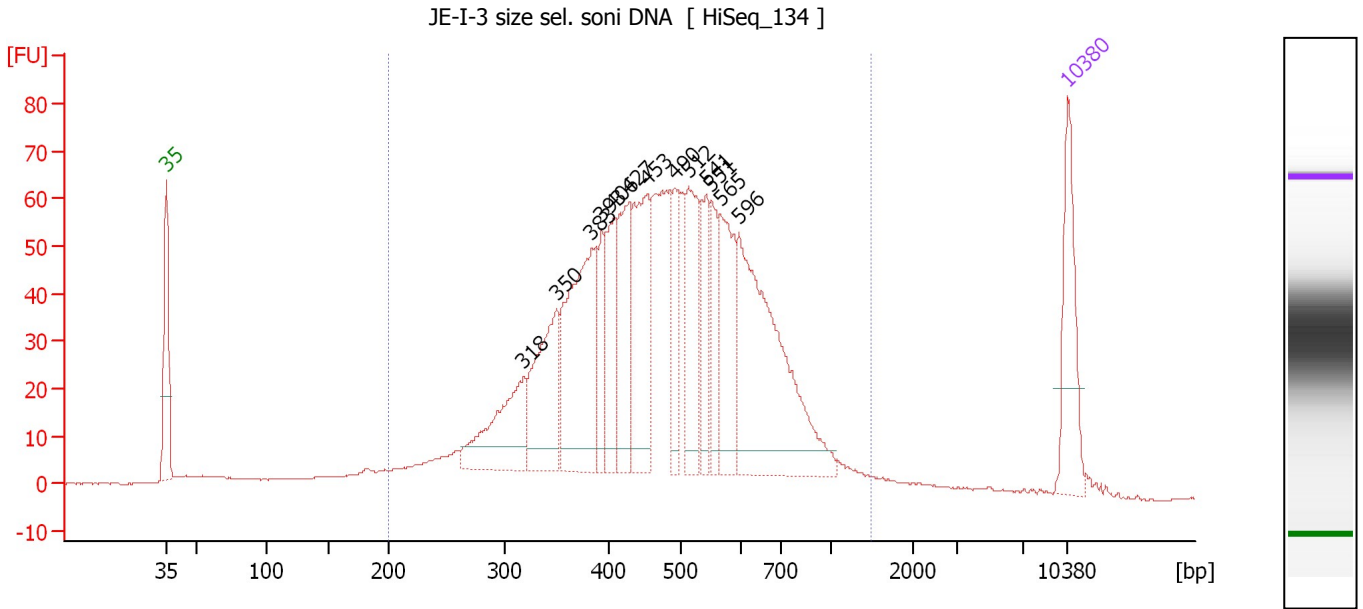
**Region table for sample 2 : JE-I-2 size sel. soni DNA**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	498	1,358	1,809.1	7,593.2	94	31.5	2,198.17

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : JE-I-3 size sel. soni DNA**

Number of peaks found: 13                      Corr. Area 1: 1,544.5  
 Noise: 0.2

**Peak table for sample 3 : JE-I-3 size sel. soni DNA**

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	318	126.26	602.2		70.75
3	350	137.51	595.9		73.32
4	383	224.03	885.4		76.04
5	393	56.84	219.1		76.81
6	406	81.74	304.7		77.73
7	427	104.27	369.9		78.90
8	453	143.63	480.4		80.35
9	490	68.02	210.3		82.44
10	512	107.78	319.0		83.55
11	541	57.00	159.6		84.91
12	551	54.58	150.2		85.35
13	565	103.57	277.7		86.03
14	596	281.09	714.1		87.48
15	10,380	75.00	10.9	Upper Marker	113.00

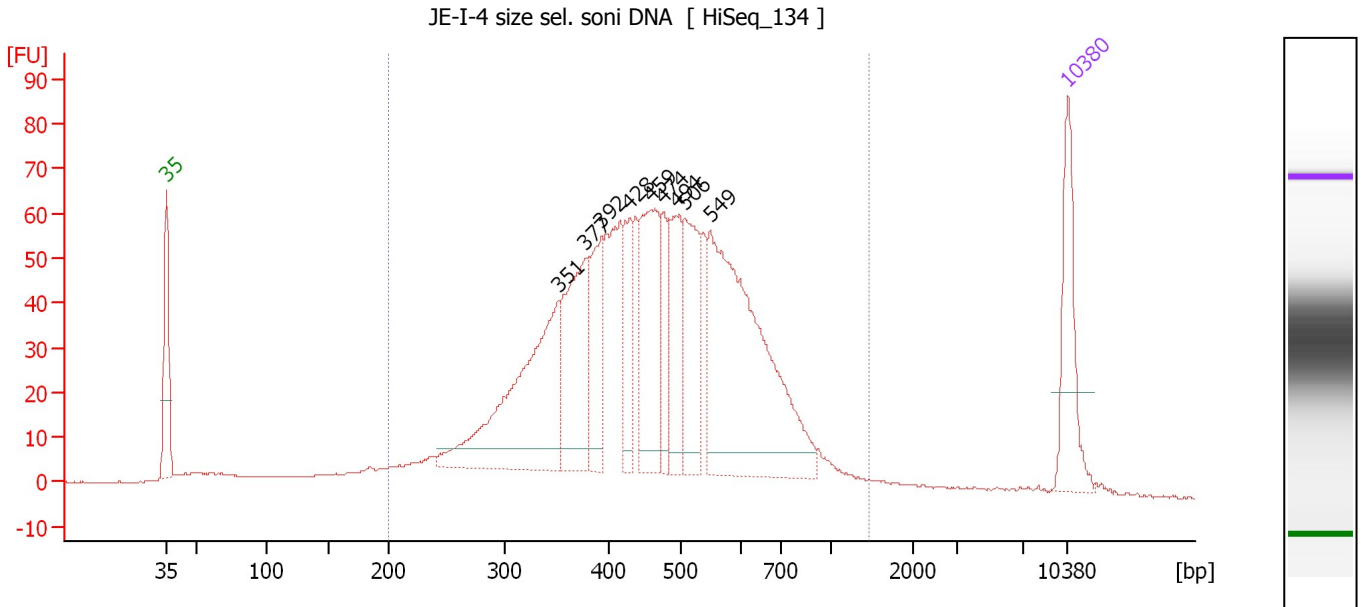
**Region table for sample 3 : JE-I-3 size sel. soni DNA**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	492	1,481	1,544.5	7,293.3	94	32.6	2,079.03

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : JE-I-4 size sel. soni DNA**

Number of peaks found: 9                      Corr. Area 1: 1,510.9  
 Noise: 0.1

**Peak table for sample 4 : JE-I-4 size sel. soni DNA**

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	351	280.87	1,211.2		73.46
3	377	166.01	667.0		75.53
4	392	91.64	353.8		76.77
5	428	62.88	222.7		78.94
6	459	153.78	508.2		80.67
7	474	57.50	183.7		81.55
8	494	91.07	279.5		82.64
9	506	108.00	323.3		83.28
10	549	376.24	1,039.3		85.26
11	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : JE-I-4 size sel. soni DNA**

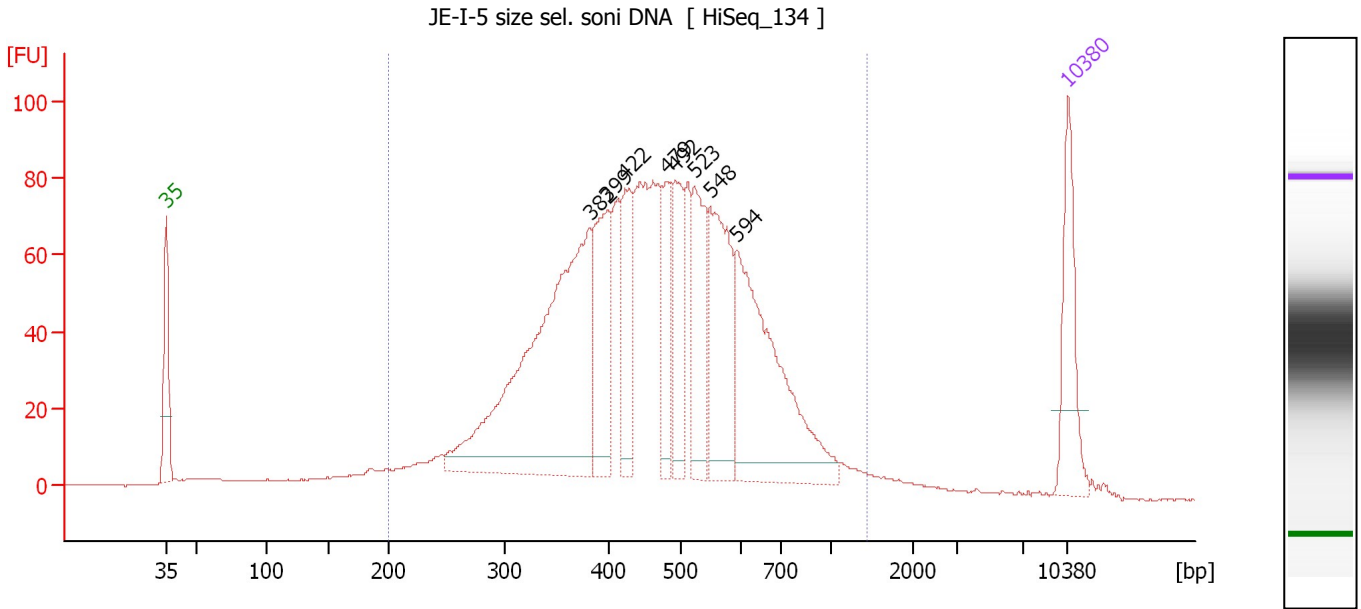
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	475	1,448	1,510.9	6,820.6	94	31.3	1,889.07



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : JE-I-5 size sel. soni DNA**

Number of peaks found: 8                      Corr. Area 1: 1,969.5  
 Noise: 0.1

**Peak table for sample 5 : JE-I-5 size sel. soni DNA**

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	382	526.16	2,087.5		75.91
3	399	137.99	524.3		77.27
4	422	100.88	361.9		78.63
5	479	84.27	266.8		81.79
6	492	88.51	272.6		82.55
7	523	114.52	332.0		84.06
8	548	166.11	459.7		85.21
9	594	271.15	691.7		87.37
10	10,380	75.00	10.9	Upper Marker	113.00

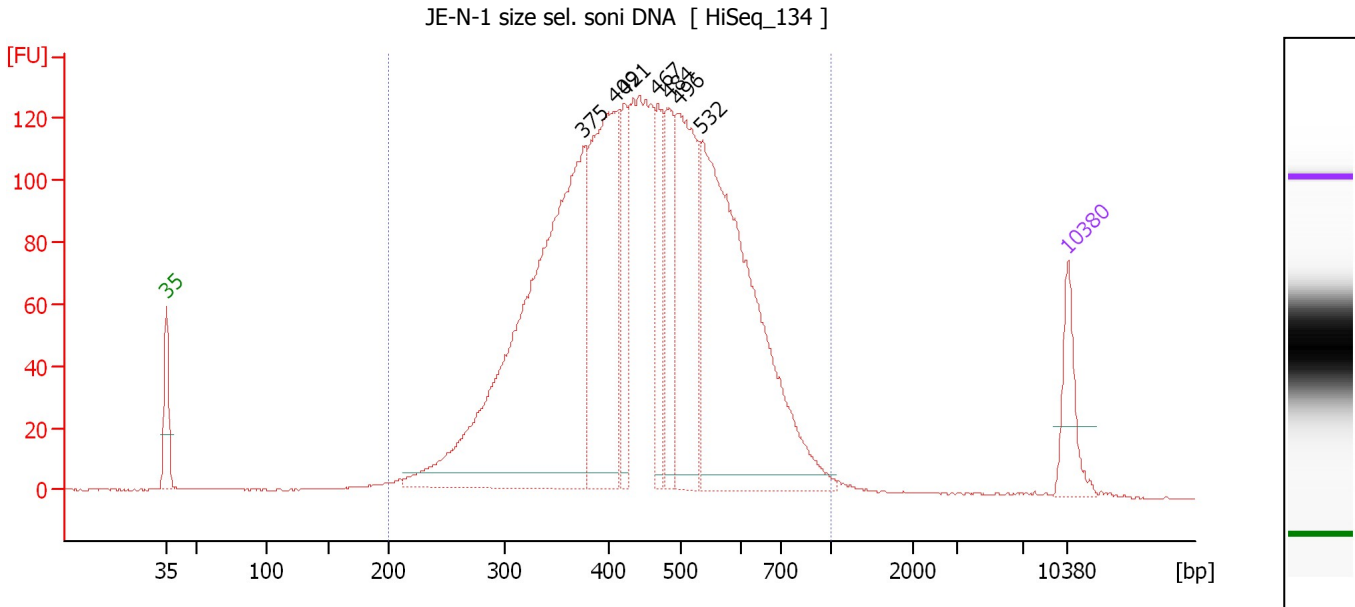
**Region table for sample 5 : JE-I-5 size sel. soni DNA**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	480	1,433	1,969.5	7,777.3	95	32.6	2,169.03

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : JE-N-1 size sel. soni DNA**

Number of peaks found: 7                      Corr. Area 1: 2,958.8  
 Noise: 0.1

**Peak table for sample 6 : JE-N-1 size sel. soni DNA**

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	375	1,262.76	5,096.5		75.39
3	409	540.89	2,004.2		77.87
4	421	164.27	591.8		78.53
5	467	157.87	511.8		81.16
6	484	155.04	485.8		82.07
7	496	380.06	1,160.6		82.78
8	532	922.75	2,626.4		84.50
9	10,380	75.00	10.9	Upper Marker	113.00

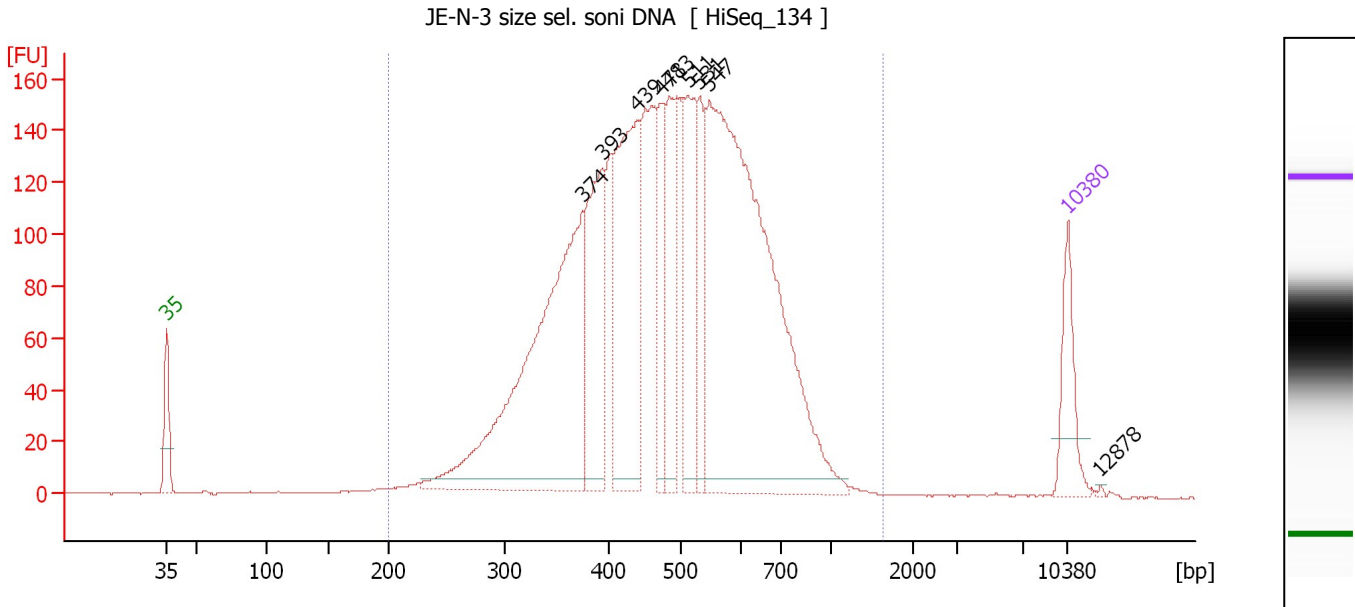
**Region table for sample 6 : JE-N-1 size sel. soni DNA**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	456	1,000	2,958.8	15,752.5	98	26.1	4,311.56

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : JE-N-3 size sel. soni DNA**

Number of peaks found: 9                      Corr. Area 1: 3,517.1  
 Noise: 0.1

**Peak table for sample 7 : JE-N-3 size sel. soni DNA**

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	374	769.41	3,119.1		75.26
3	393	268.27	1,033.0		76.85
4	439	397.15	1,371.0		79.56
5	471	133.22	428.8		81.35
6	483	164.76	516.3		82.07
7	511	210.88	625.4		83.50
8	531	125.13	357.3		84.43
9	547	1,061.77	2,940.0		85.19
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,878	0.00	0.0		115.51

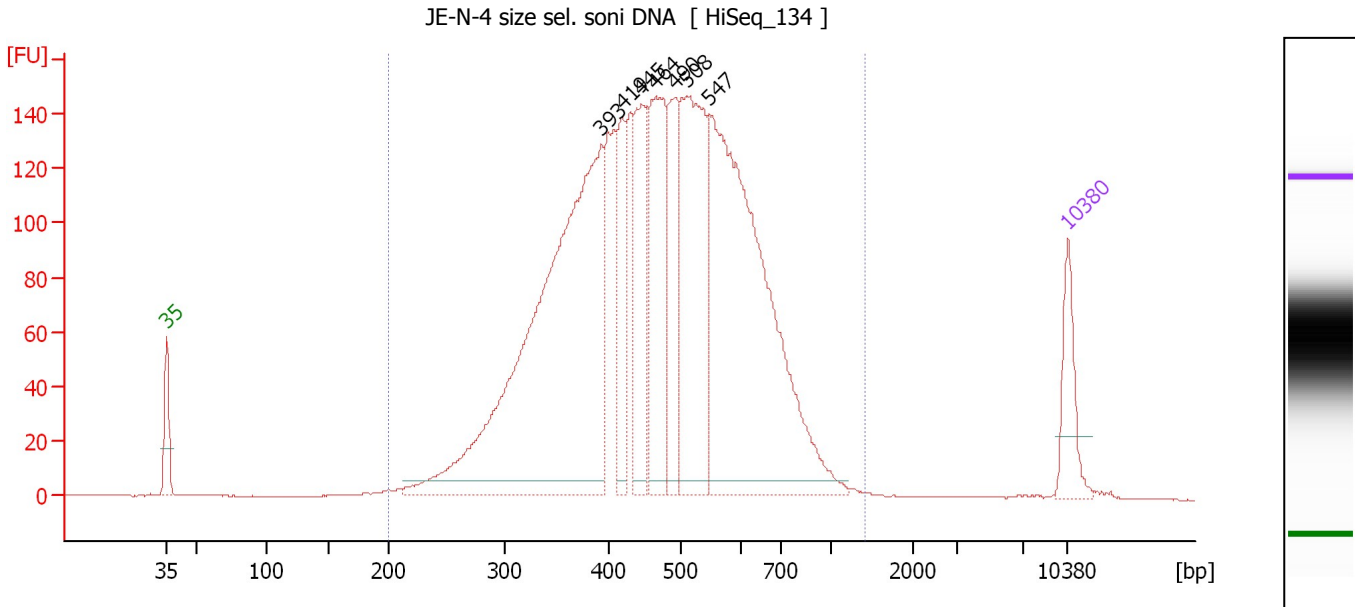
**Region table for sample 7 : JE-N-3 size sel. soni DNA**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	493	1,621	3,517.1	12,828.2	98	28.6	3,757.10

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : JE-N-4 size sel. soni DNA**

Number of peaks found: 7                      Corr. Area 1: 3,378.4  
 Noise: 0.1

**Peak table for sample 8 : JE-N-4 size sel. soni DNA**

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	393	1,230.84	4,745.0		76.81
3	419	152.51	552.1		78.41
4	445	232.92	792.8		79.91
5	464	323.18	1,056.4		80.95
6	490	185.99	574.9		82.45
7	508	457.31	1,363.7		83.38
8	547	962.80	2,666.9		85.19
9	10,380	75.00	10.9	Upper Marker	113.00

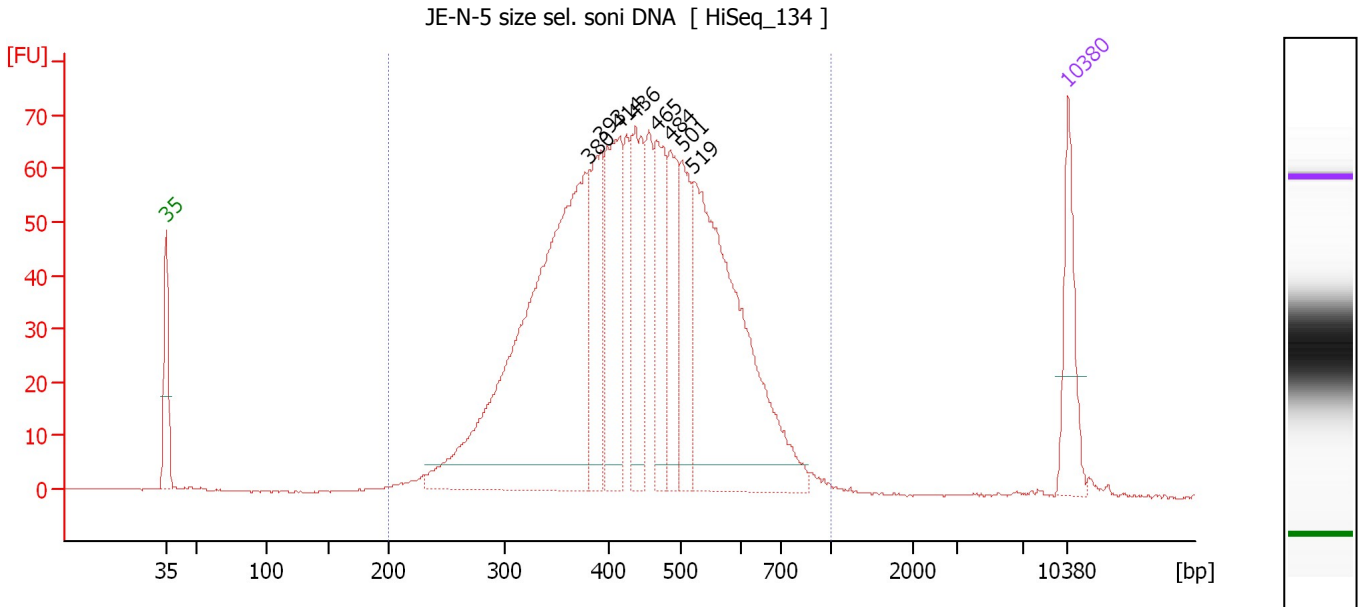
**Region table for sample 8 : JE-N-4 size sel. soni DNA**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	478	1,402	3,378.4	14,098.6	99	27.5	4,028.07

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : JE-N-5 size sel. soni DNA**

Number of peaks found: 8                      Corr. Area 1: 1,474.8  
 Noise: 0.1

**Peak table for sample 9 : JE-N-5 size sel. soni DNA**

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	380	803.87	3,204.8		75.77
3	393	145.96	562.8		76.81
4	414	216.37	792.0		78.16
5	436	164.86	572.8		79.40
6	465	142.55	464.8		81.01
7	484	122.74	384.2		82.10
8	501	122.41	370.4		83.04
9	519	533.92	1,559.7		83.87
10	10,380	75.00	10.9	Upper Marker	113.00

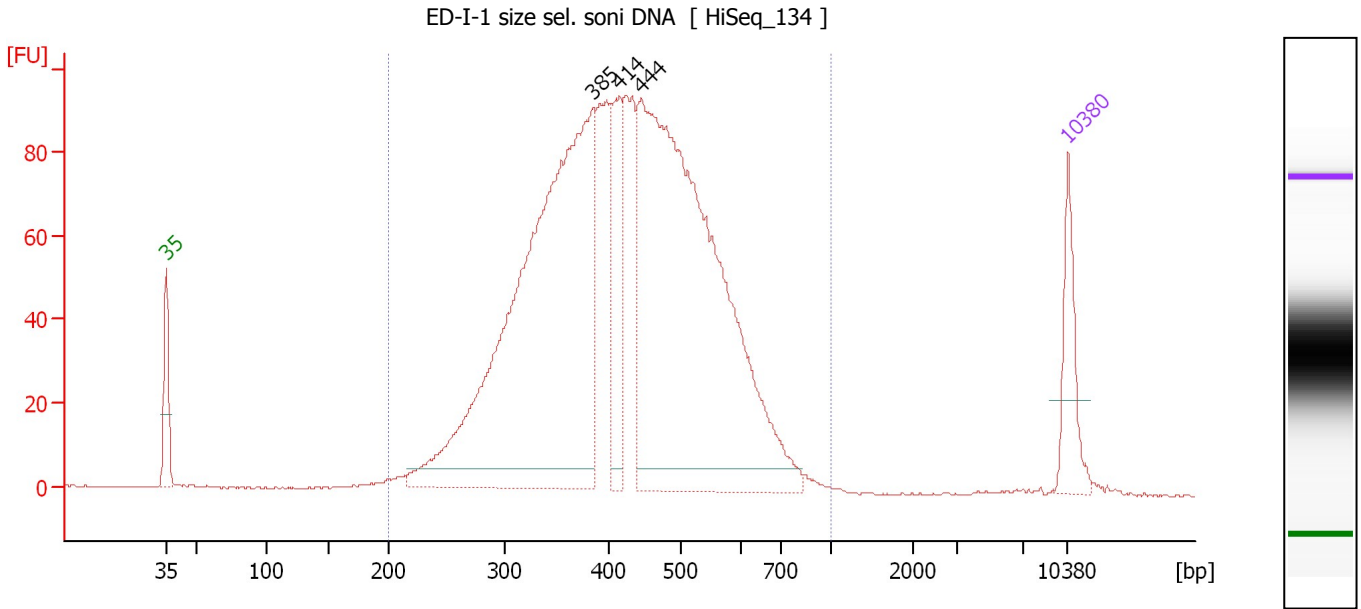
**Region table for sample 9 : JE-N-5 size sel. soni DNA**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	445	1,000	1,474.8	9,461.2	99	24.7	2,556.16

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : ED-I-1 size sel. soni DNA**

Number of peaks found: 3                      Corr. Area 1: 2,068.2  
 Noise: 0.3

**Peak table for sample 10 : ED-I-1 size sel. soni DNA**

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	385	1,194.40	4,699.9		76.17
3	414	147.25	539.0		78.16
4	444	1,231.55	4,205.6		79.83
5	10,380	75.00	10.9	Upper Marker	113.00

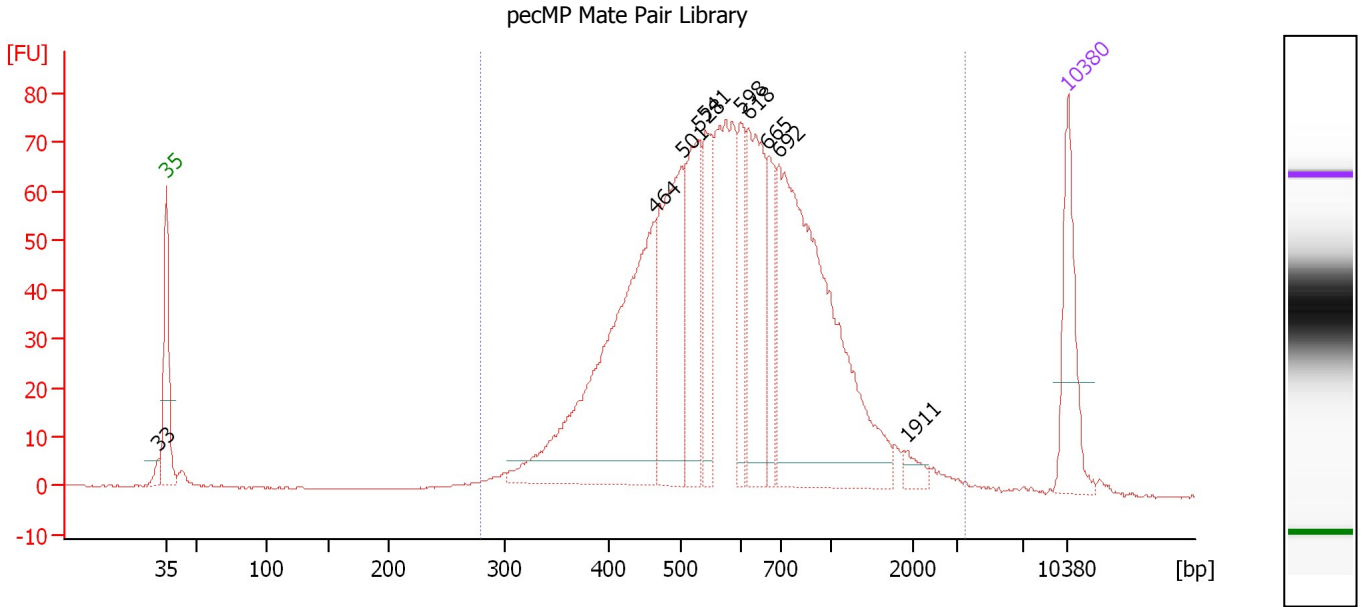
**Region table for sample 10 : ED-I-1 size sel. soni DNA**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	430	1,000	2,068.2	11,841.2	99	24.3	3,094.86

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
 Modified: 6/22/2015 10:31:57 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : pecMP Mate Pair Library**

Number of peaks found: 10                      Corr. Area 1: 1,495.6  
 Noise: 0.2

**Peak table for sample 11 : pecMP Mate Pair Library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.32
2	35	125.00	5,411.3	Lower Marker	43.00
3	464	427.12	1,393.3		81.00
4	501	213.10	644.3		83.05
5	528	147.50	423.0		84.32
6	541	87.06	243.9		84.89
7	598	71.23	180.3		87.58
8	618	152.89	374.9		88.21
9	665	69.94	159.3		89.68
10	692	466.29	1,020.6		90.53
11	1,911	11.88	9.4		100.47
12	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : pecMP Mate Pair Library**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
279	673	3,479	1,495.6	5,239.8	98	51.5	1,924.35

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-22\2015-06-22\_001.xad

Created: 6/22/2015 9:41:25 AM  
Modified: 6/22/2015 10:31:57 AM

**Gel Image**

