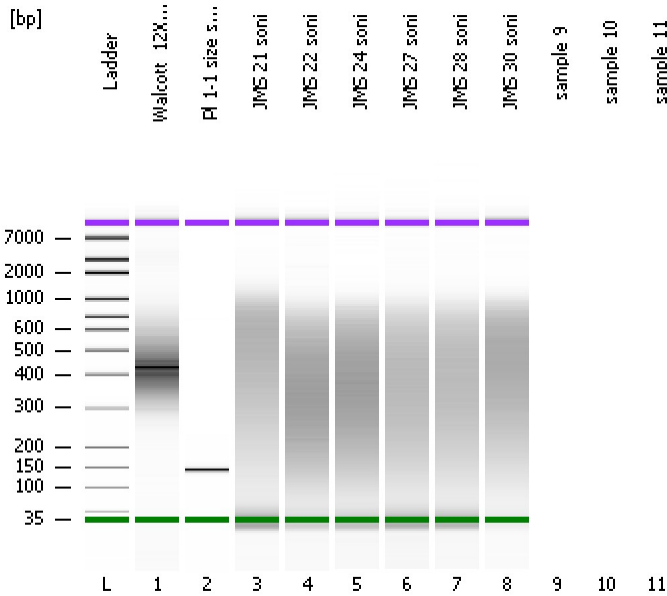


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
Modified: 8/6/2014 9:16:39 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

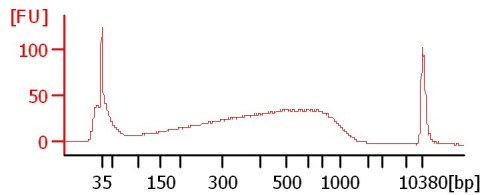
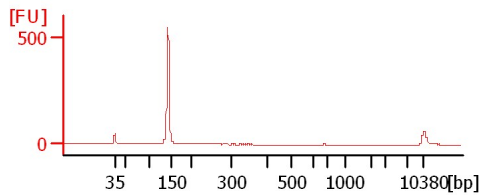
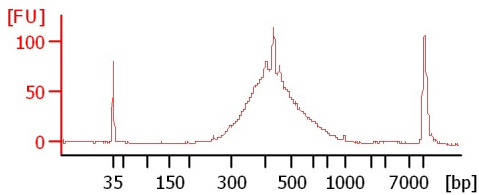
Chip Information:

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

Walcott_12X pooled lib

PI 1-1 size selec.

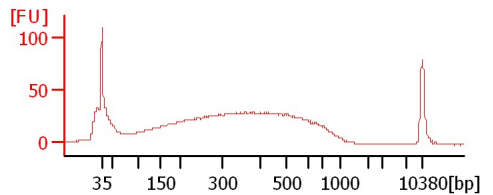
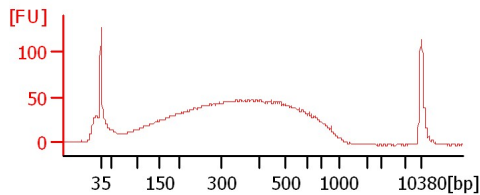
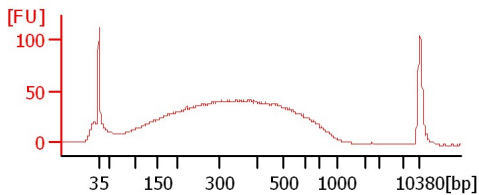
JMS 21 soni



JMS 22 soni

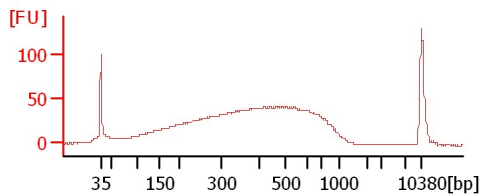
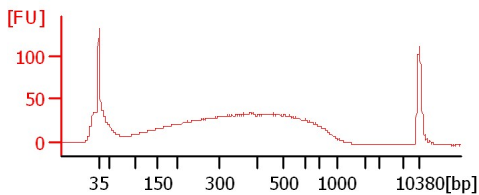
JMS 24 soni

JMS 27 soni



JMS 28 soni

JMS 30 soni



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Walcott_12X pooled lib		<input type="checkbox"/>	✓			
PI 1-1 size selec.		<input type="checkbox"/>	✓			
JMS 21 soni		<input type="checkbox"/>	✓			
JMS 22 soni		<input type="checkbox"/>	✓			
JMS 24 soni		<input type="checkbox"/>	✓			
JMS 27 soni		<input type="checkbox"/>	✓			
JMS 28 soni		<input type="checkbox"/>	✓			
JMS 30 soni		<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<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\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
Modified: 8/6/2014 9:16:39 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

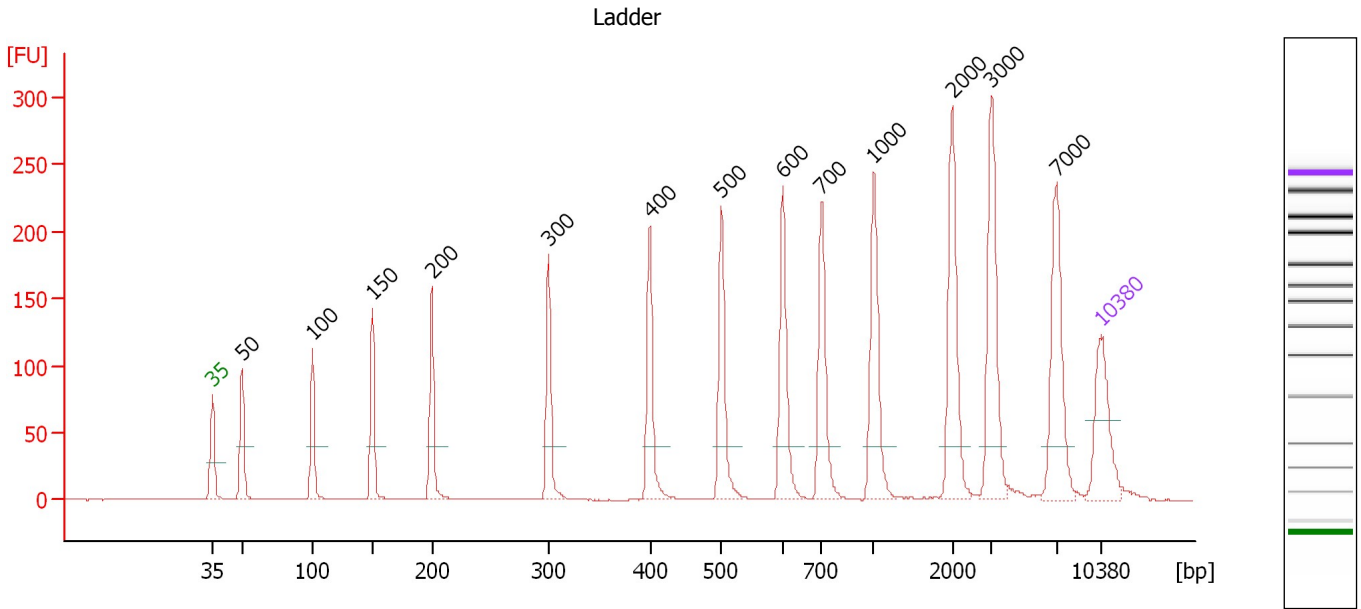
Ladder

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:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

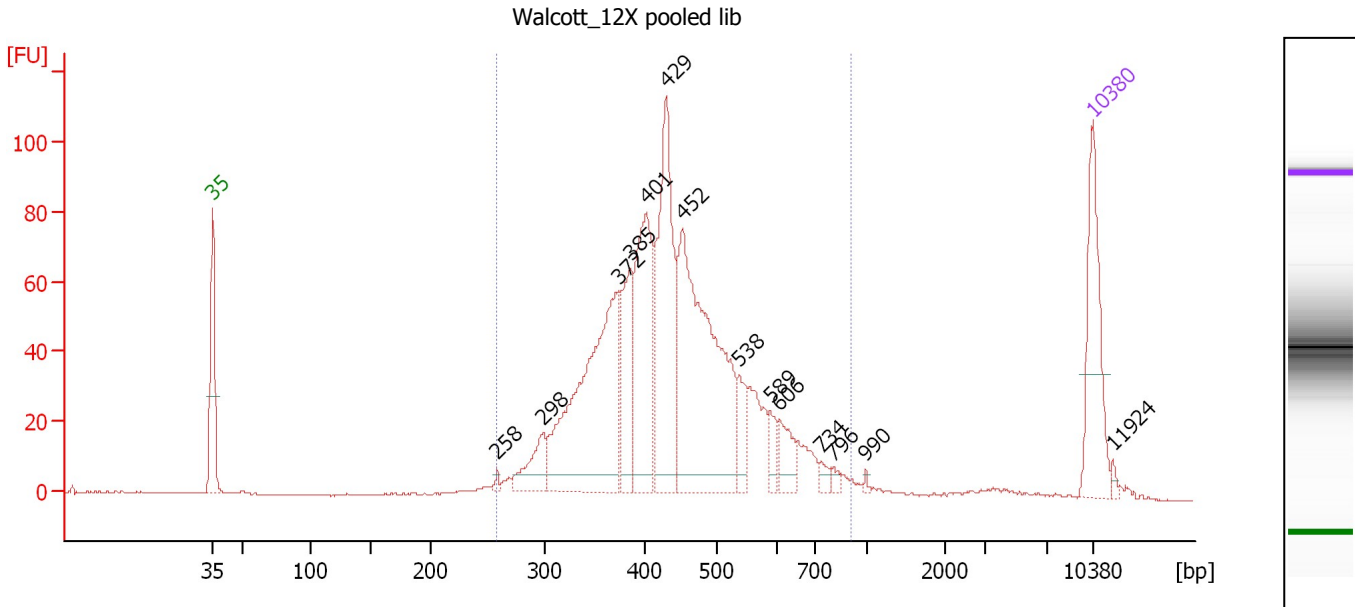
Peak table for Ladder

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\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Walcott_12X pooled lib

Number of peaks found: 14 Corr. Area 1: 1,342.1
 Noise: 0.2

Peak table for sample 1 : Walcott_12X pooled lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	258	3.97	23.3	
3	298	44.86	228.3	
4	372	271.50	1,104.9	
5	385	73.87	291.1	
6	401	158.07	596.7	
7	429	195.05	688.4	
8	452	304.29	1,020.3	
9	538	30.91	87.1	
10	589	16.76	43.1	
11	606	26.12	65.3	
12	734	6.86	14.2	
13	796	4.87	9.3	
14	990	1.86	2.8	
15	10,380	75.00	10.9	Upper Marker
16	11,924	0.00	0.0	

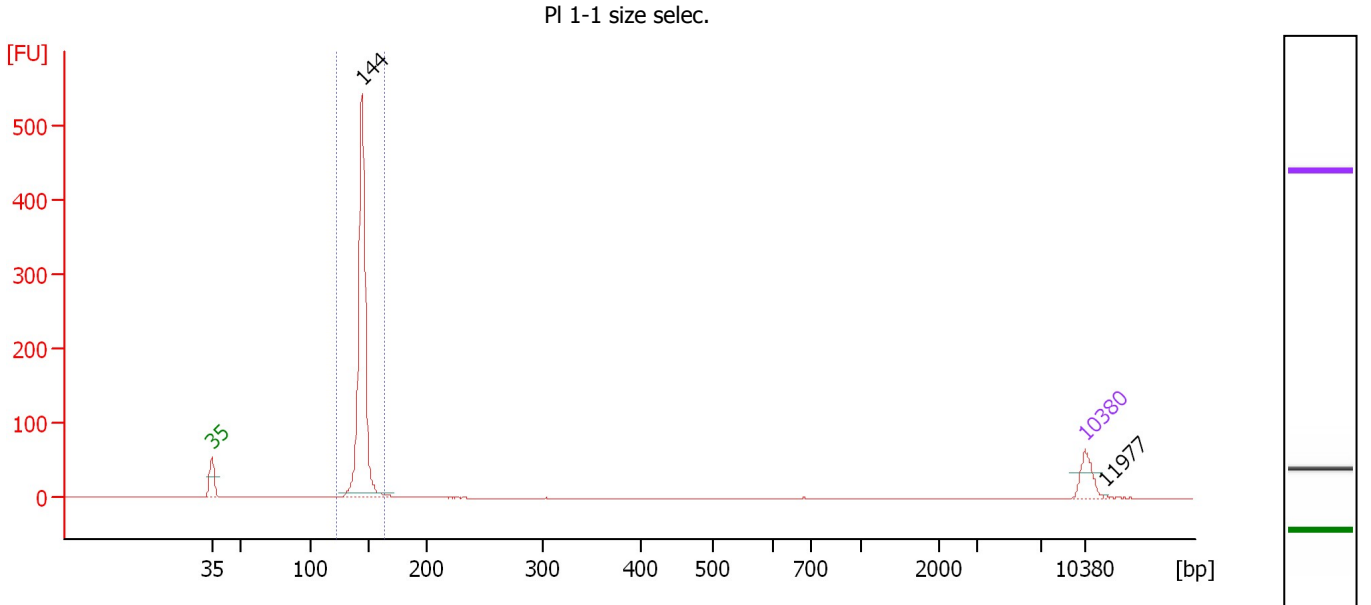
Region table for sample 1 : Walcott_12X pooled lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
259	904	444	4,748.9	1,306.56	1,342.1	95	22.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : PI 1-1 size selec.

Number of peaks found: 2 Corr. Area 1: 685.8
 Noise: 0.1

Peak table for sample 2 : PI 1-1 size selec.

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	144	1,511.54	15,926.8	
3	10,380	75.00	10.9	Upper Marker
4	11,977	0.00	0.0	

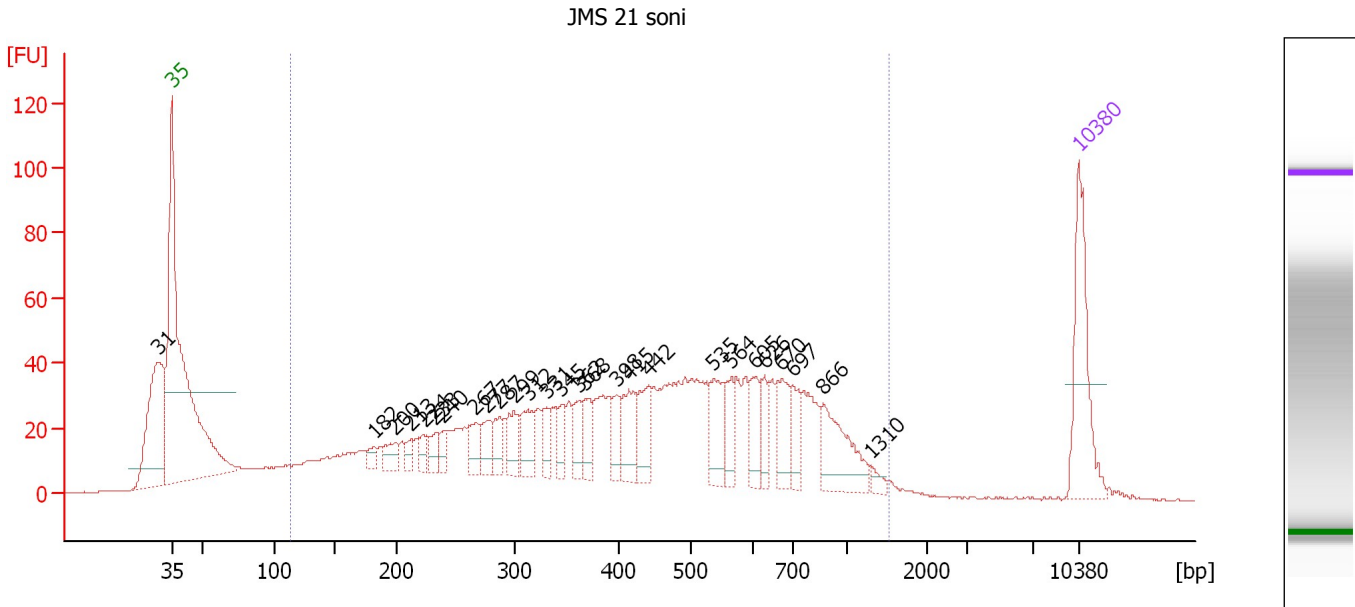
Region table for sample 2 : PI 1-1 size selec.

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
122	163	144	15,911.4	1,510.97	685.8	95	2.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : JMS 21 soni

Number of peaks found: 27 Corr. Area 1: 1,552.2
 Noise: 0.2

Peak table for sample 3 : JMS 21 soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	182	11.61	96.6	
4	200	20.28	153.8	
5	213	12.64	89.9	
6	224	13.54	91.8	
7	233	18.12	117.6	
8	240	13.81	87.1	
9	267	25.31	143.8	
10	277	26.27	143.9	
11	287	21.98	116.0	
12	299	30.12	152.4	
13	312	35.02	169.8	
14	331	20.00	91.5	
15	345	23.23	101.9	
16	362	25.27	105.9	
17	368	27.24	112.1	
18	398	25.59	97.3	
19	415	41.42	151.3	
20	442	41.11	141.0	
21	535	41.83	118.4	
22	564	28.10	75.5	
23	605	28.99	72.6	
24	626	21.30	51.5	
25	670	39.17	88.5	
26	697	27.10	58.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...**... Peak table for sample 3 : JMS 21 soni**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	866	63.33	110.8	
28	1,310	6.04	7.0	
29	▶ 10,380	75.00	10.9	Upper Marker

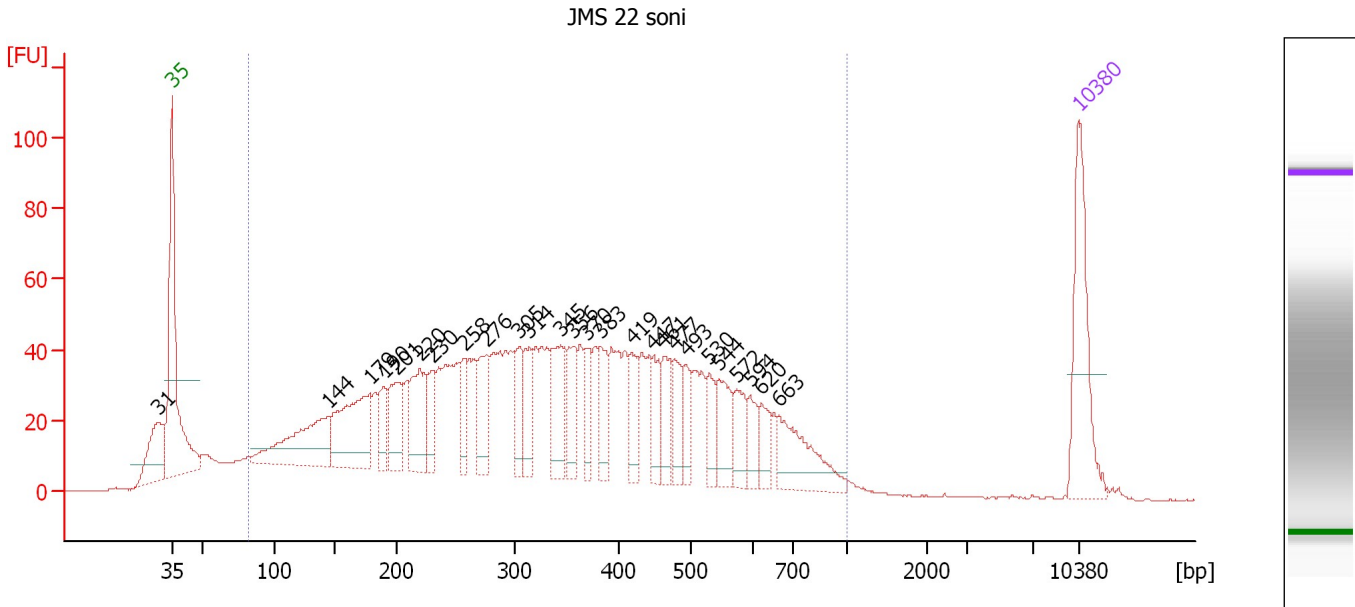
Region table for sample 3 : JMS 21 soni

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
114	1,533	470	7,715.2	1,608.02	■ 1,552.2	86	50.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : JMS 22 soni

Number of peaks found: 26 Corr. Area 1: 2,068.0
 Noise: 0.2

Peak table for sample 4 : JMS 22 soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	144	123.03	1,296.4	
4	179	124.77	1,059.1	
5	190	31.99	255.2	
6	201	56.87	428.9	
7	220	72.64	499.7	
8	230	33.15	218.0	
9	258	32.36	190.4	
10	276	49.48	271.2	
11	305	37.22	185.1	
12	314	39.04	188.4	
13	345	60.41	265.5	
14	356	43.10	183.2	
15	370	28.49	116.7	
16	383	36.17	143.2	
17	419	31.32	113.3	
18	447	29.81	101.0	
19	461	33.51	110.0	
20	477	32.21	102.3	
21	493	23.97	73.7	
22	530	25.32	72.4	
23	544	40.01	111.3	
24	572	29.34	77.7	
25	594	21.85	55.7	
26	620	22.03	53.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...**... Peak table for sample 4 : JMS 22 soni**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	663	64.01	146.2	
28	10,380	75.00	10.9	Upper Marker

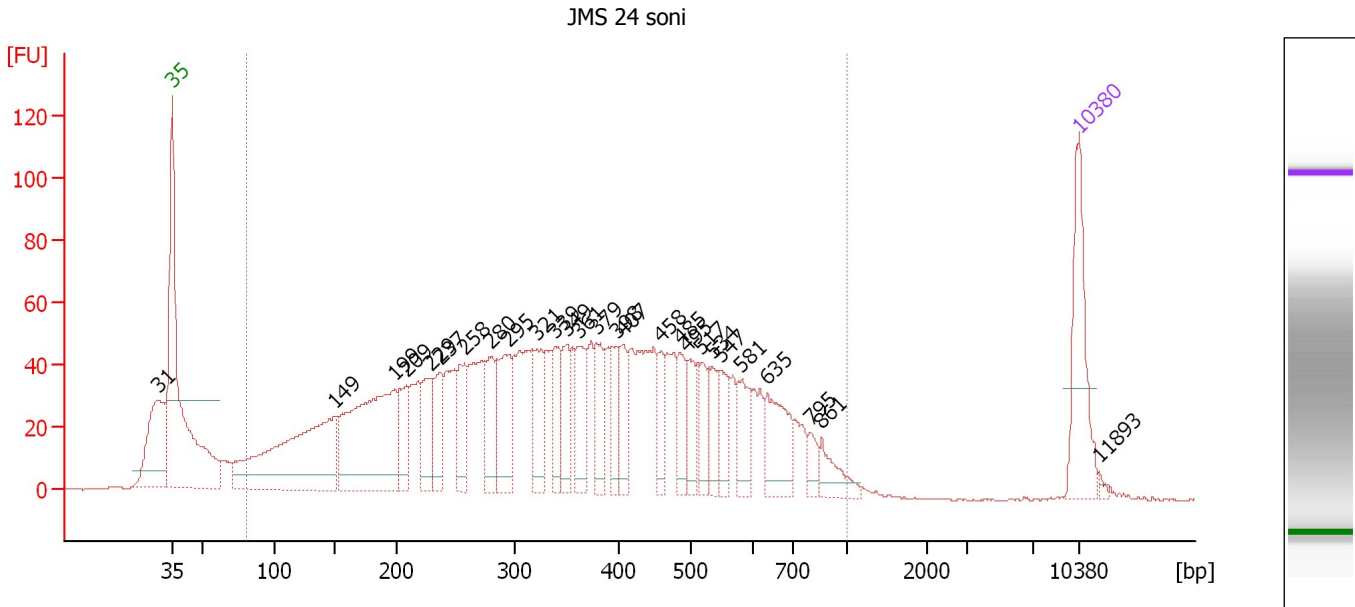
Region table for sample 4 : JMS 22 soni

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
83	1,000	361	13,288.6	2,161.03	2,068.0	92	46.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : JMS 24 soni

Number of peaks found: 27 Corr. Area 1: 2,325.5
 Noise: 0.1

Peak table for sample 5 : JMS 24 soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	149	290.91	2,960.0	
4	199	258.65	1,967.2	
5	209	49.18	356.5	
6	229	59.68	395.5	
7	237	51.68	329.7	
8	258	55.88	328.7	
9	280	59.26	320.5	
10	295	79.41	408.1	
11	321	57.27	270.2	
12	339	44.11	197.3	
13	349	43.43	188.3	
14	361	50.54	211.9	
15	379	49.22	196.8	
16	398	33.86	128.9	
17	407	36.03	134.2	
18	458	31.12	102.9	
19	485	36.76	114.9	
20	495	37.15	113.7	
21	517	28.98	85.0	
22	534	31.34	88.9	
23	547	37.04	102.5	
24	581	40.12	104.6	
25	635	63.34	151.1	
26	795	15.04	28.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...

... Peak table for sample 5 : JMS 24 soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	861	26.99	47.5	
28	10,380	75.00	10.9	Upper Marker
29	11,893	0.00	0.0	

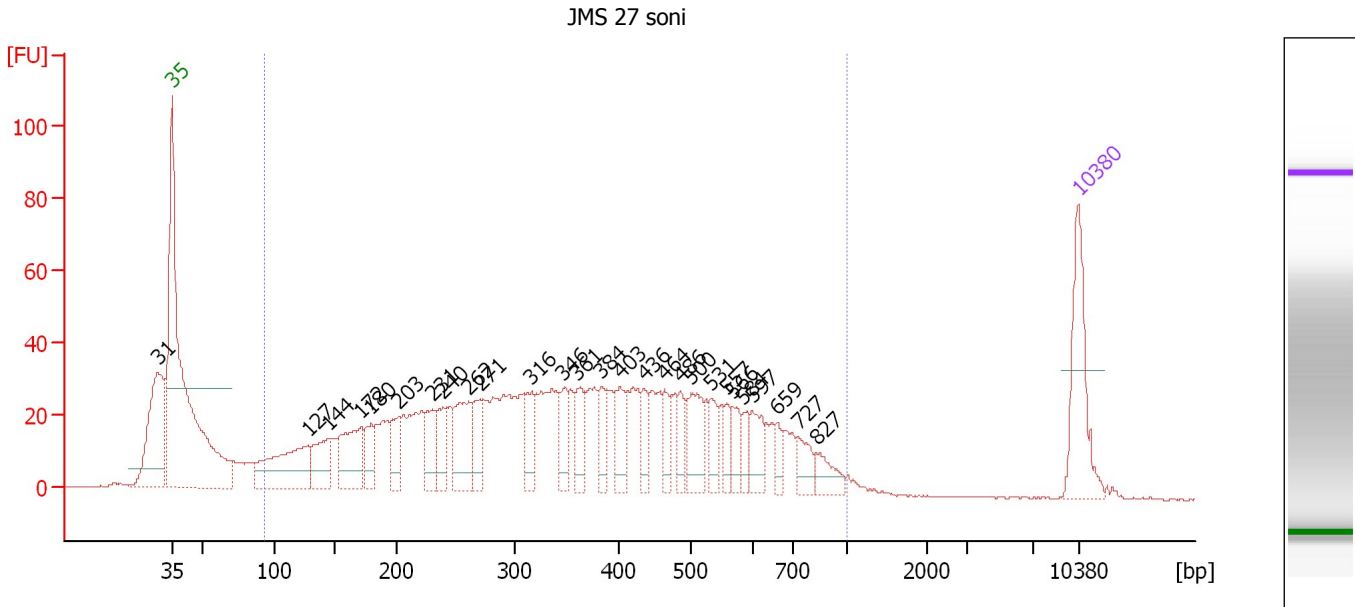
Region table for sample 5 : JMS 24 soni

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
81	1,000	372	14,282.1	2,374.24	2,325.5	93	46.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : JMS 27 soni

Number of peaks found: 27 Corr. Area 1: 1,403.0
 Noise: 0.2

Peak table for sample 6 : JMS 27 soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	127	140.05	1,666.0	
4	144	63.39	666.1	
5	172	91.87	811.6	
6	180	36.81	310.2	
7	203	38.13	284.7	
8	231	44.44	291.3	
9	240	42.03	265.2	
10	262	77.20	446.5	
11	271	45.52	254.6	
12	316	44.23	211.9	
13	346	35.75	156.3	
14	361	39.39	165.4	
15	384	31.19	123.2	
16	403	46.54	175.1	
17	436	26.64	92.5	
18	464	27.53	90.0	
19	486	24.64	76.9	
20	500	59.08	179.0	
21	531	26.72	76.2	
22	557	20.00	54.4	
23	566	24.72	66.1	
24	584	17.70	45.9	
25	597	34.53	87.6	
26	659	14.72	33.9	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...**... Peak table for sample 6 : JMS 27 soni**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	727	22.90	47.7	
28	827	24.66	45.2	
29	10,380	75.00	10.9	Upper Marker

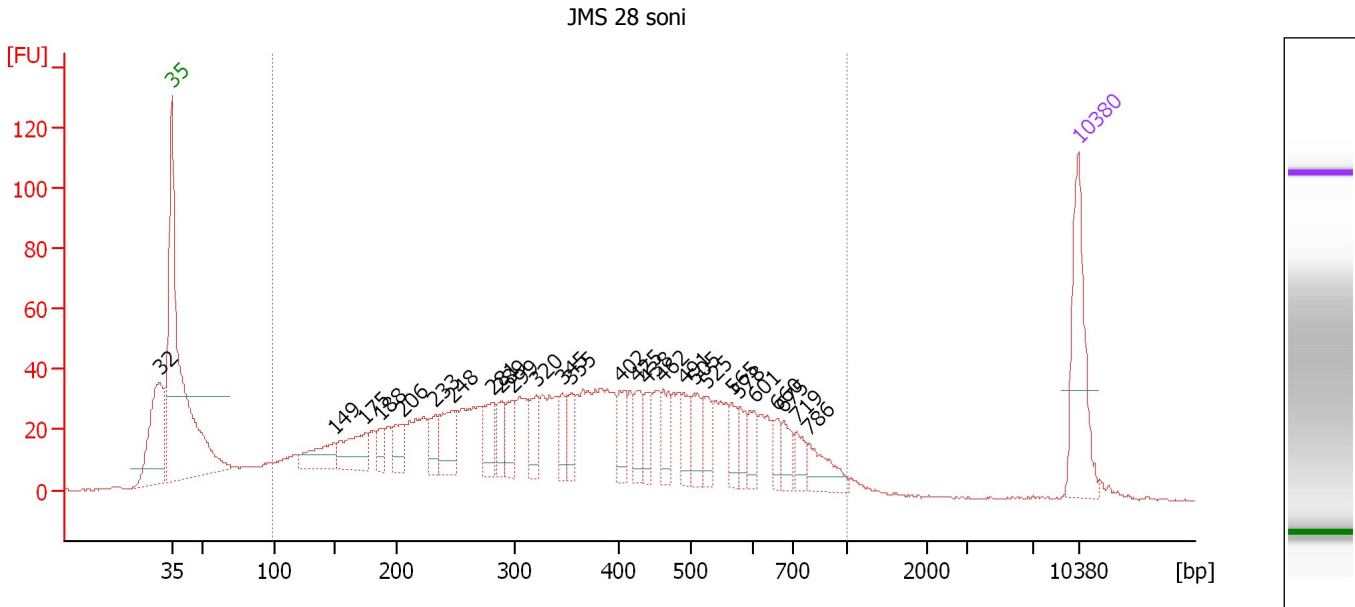
Region table for sample 6 : JMS 27 soni

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
94	1,000	380	11,040.2	1,915.44	 1,403.0	89	45.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : JMS 28 soni

Number of peaks found: 27 Corr. Area 1: 1,632.0
 Noise: 0.2

Peak table for sample 7 : JMS 28 soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	149	46.66	474.8	
4	175	56.54	490.4	
5	188	19.00	153.0	
6	206	27.30	201.2	
7	233	28.94	188.0	
8	248	45.34	277.2	
9	281	37.52	202.3	
10	289	23.72	124.5	
11	299	30.77	156.1	
12	320	29.29	138.5	
13	345	23.49	103.1	
14	355	26.81	114.5	
15	402	30.63	115.4	
16	425	27.07	96.6	
17	438	21.72	75.1	
18	462	29.77	97.7	
19	491	23.84	73.5	
20	505	28.25	84.8	
21	525	26.86	77.5	
22	565	18.20	48.8	
23	578	18.12	47.5	
24	601	19.44	49.0	
25	660	13.61	31.2	
26	675	20.10	45.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...

... Peak table for sample 7 : JMS 28 soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	719	15.45	32.6	
28	786	31.85	61.4	
29	10,380	75.00	10.9	Upper Marker

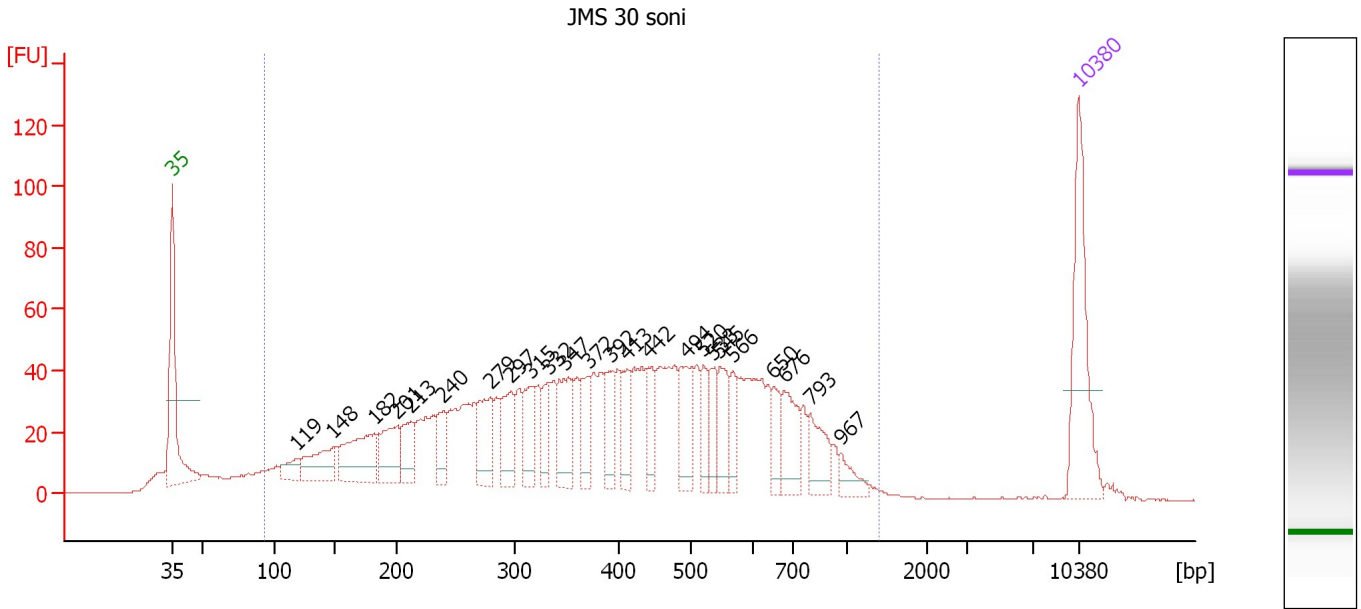
Region table for sample 7 : JMS 28 soni

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
99	1,000	389	9,338.5	1,673.10	1,632.0	88	45.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
 Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : JMS 30 soni

Number of peaks found: 24 Corr. Area 1: 1,896.4
 Noise: 0.2

Peak table for sample 8 : JMS 30 soni


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	119	19.30	246.7	
3	148	50.12	512.9	
4	182	73.08	608.1	
5	201	49.15	370.2	
6	213	34.78	247.0	
7	240	30.54	193.1	
8	279	49.54	268.8	
9	297	45.09	230.4	
10	315	38.90	186.9	
11	332	27.18	124.0	
12	347	47.26	206.1	
13	372	30.67	124.9	
14	392	29.05	112.3	
15	413	30.58	112.3	
16	442	28.63	98.0	
17	494	41.15	126.2	
18	520	23.33	68.0	
19	533	26.24	74.5	
20	545	34.16	95.0	
21	566	20.84	55.7	
22	650	20.26	47.2	
23	676	38.43	86.1	
24	793	31.94	61.0	
25	967	13.79	21.6	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
Modified: 8/6/2014 9:16:39 AM

Electropherogram Summary Continued ...

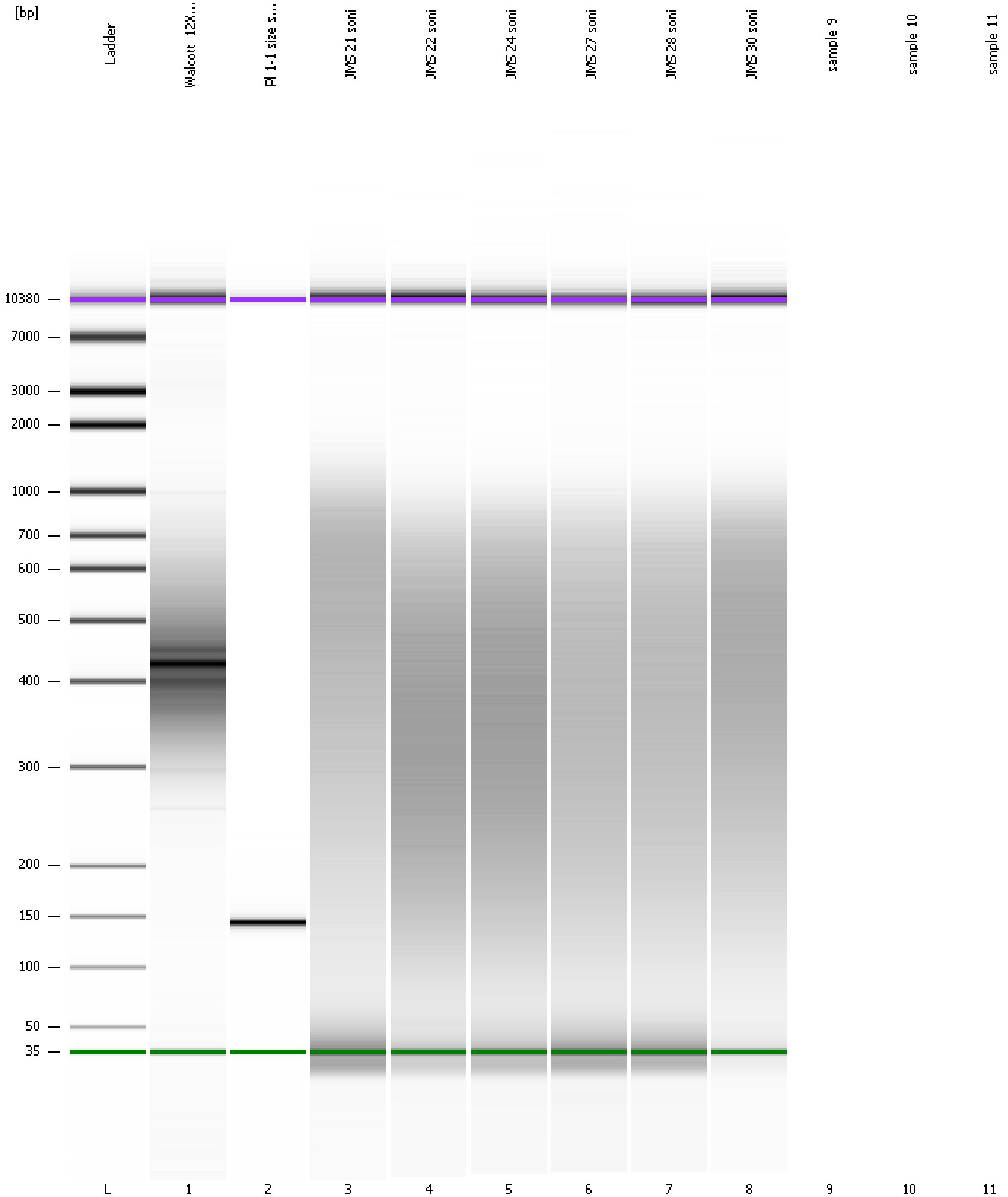
... Region table for sample 8 : JMS 30 soni

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
93	1,404	421	8,755.6	1,656.21	 1,896.4	95	47.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
Modified: 8/6/2014 9:16:39 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad

Created: 8/6/2014 8:40:42 AM
Modified: 8/6/2014 9:16:39 AM

Invalid Samples

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 Created: 8/6/2014 8:40:42 AM
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-06\2014-08-06_001.xad Modified: 8/6/2014 9:16:39 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		8/6/2014 9:13:26 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\2014-08-06\2014-08-06_001.xad)		Instrument	Run		8/6/2014 8:40:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/6/2014 8:40:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/6/2014 8:40:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/6/2014 8:40:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/6/2014 8:40:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/6/2014 8:40:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/6/2014 8:40:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1