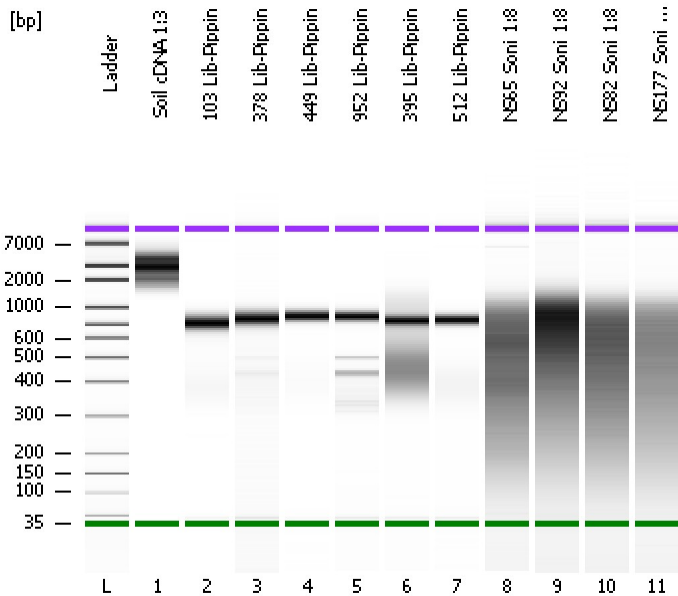


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 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

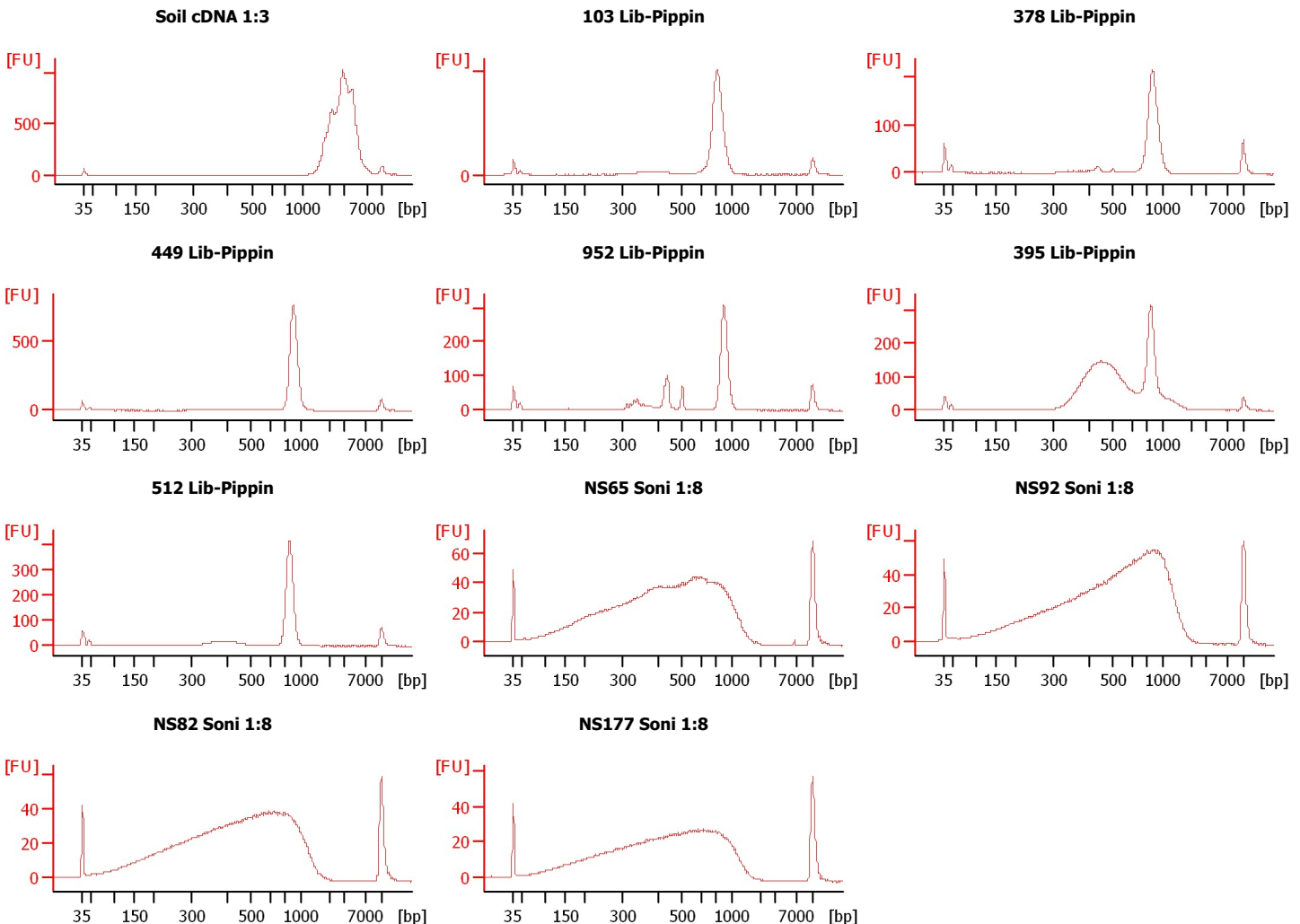
Assay Comments: Copyright © 2003-2010 Agilent Technologies

Chip Information:

Chip Lot #:

Reagent Kit Lot #:

Chip Comments:



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
Modified: 1/28/2013 3:10:49 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Soil cDNA 1:3		<input type="checkbox"/>	✓			
103 Lib-Pippin		<input type="checkbox"/>	✓			
378 Lib-Pippin		<input type="checkbox"/>	✓			
449 Lib-Pippin		<input type="checkbox"/>	✓			
952 Lib-Pippin		<input type="checkbox"/>	✓			
395 Lib-Pippin		<input type="checkbox"/>	✓			
512 Lib-Pippin		<input type="checkbox"/>	✓			
NS65 Soni 1:8		<input type="checkbox"/>	✓			
NS92 Soni 1:8		<input type="checkbox"/>	✓			
NS82 Soni 1:8		<input type="checkbox"/>	✓			
NS177 Soni 1:8		<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\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
Modified: 1/28/2013 3:10:49 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

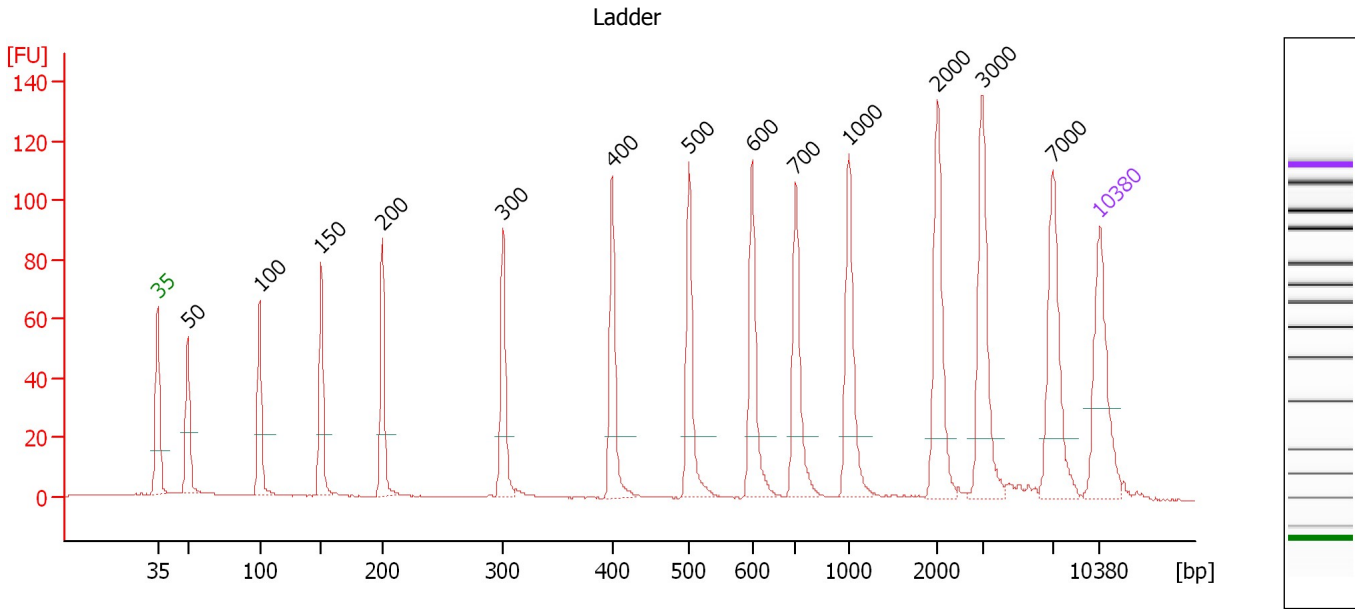
Ladder

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\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

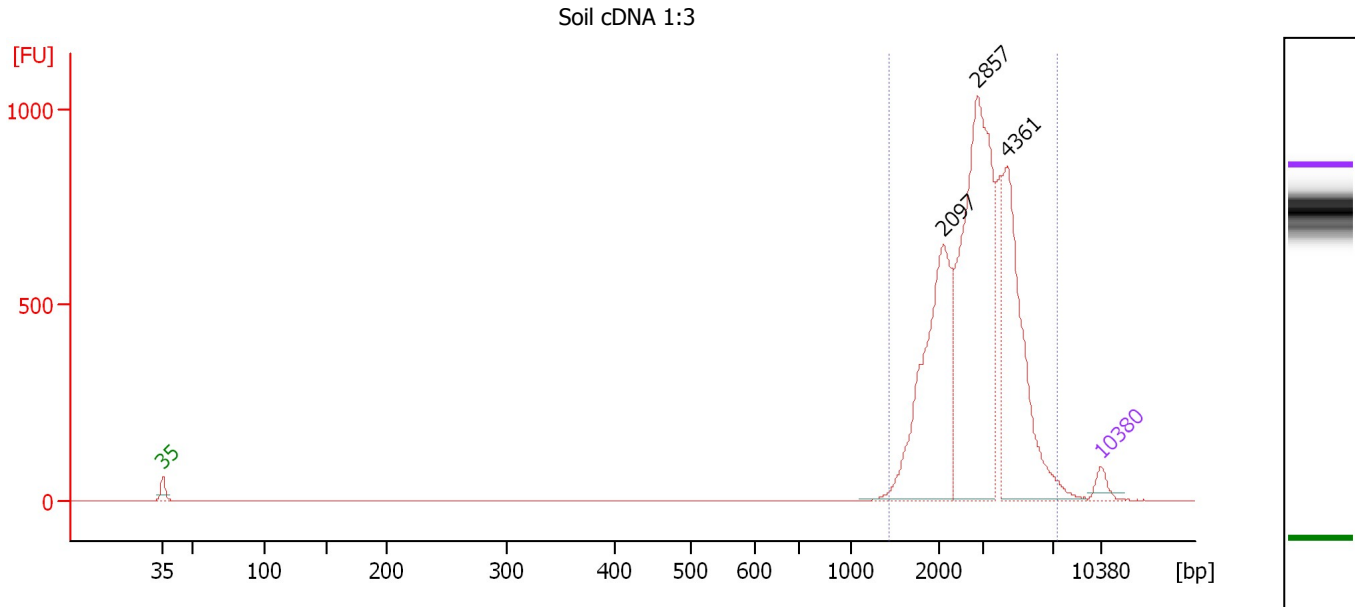
Peak table for Ladder

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\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Soil cDNA 1:3

Number of peaks found: 3 Corr. Area 1: 6,177.0
 Noise: 0.1

Peak table for sample 1 : Soil cDNA 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	2,097	1,538.86	1,111.7	
3	2,857	2,403.79	1,274.6	
4	4,361	1,376.81	478.4	
5	10,380	75.00	10.9	Upper Marker

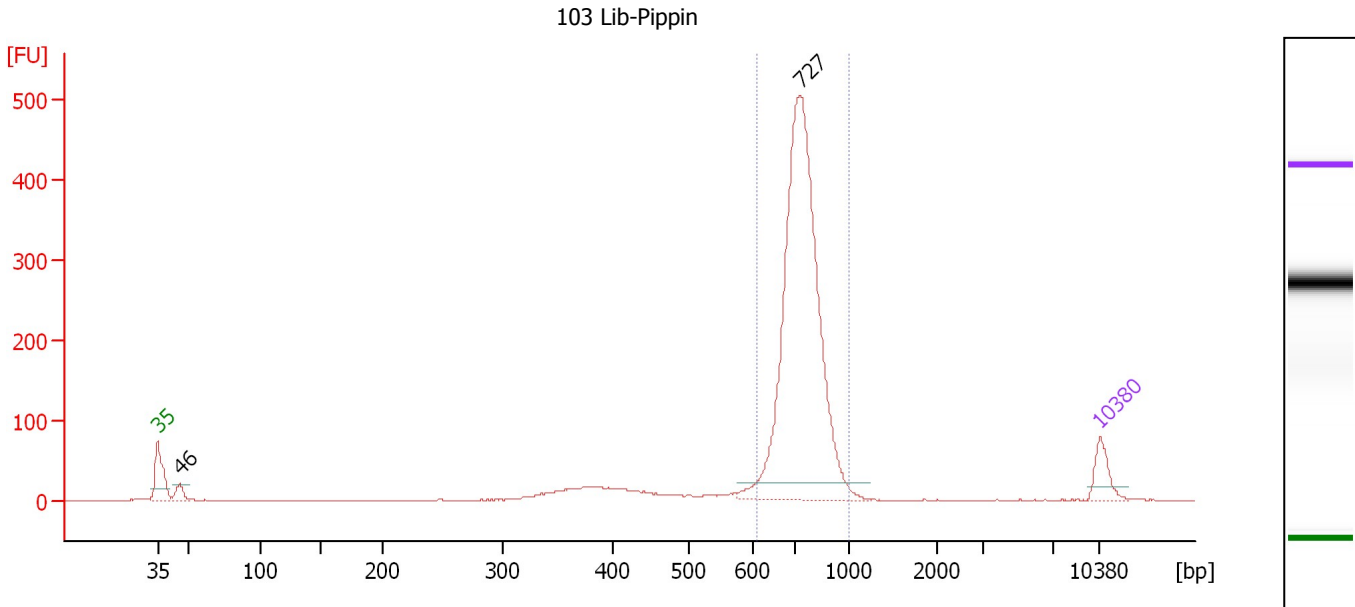
Region table for sample 1 : Soil cDNA 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
1,436	7,198	3,203	2,992.5	5,648.30	6,177.0	99	36.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : 103 Lib-Pippin

Height Threshold [FU] : 20

Overall Results for sample 2 : 103 Lib-Pippin

Number of peaks found: 2 Corr. Area 1: 1,667.5
 Noise: 0.3

Peak table for sample 2 : 103 Lib-Pippin

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	58.66	1,934.5	
3	727	1,985.90	4,138.6	
4	10,380	75.00	10.9	Upper Marker

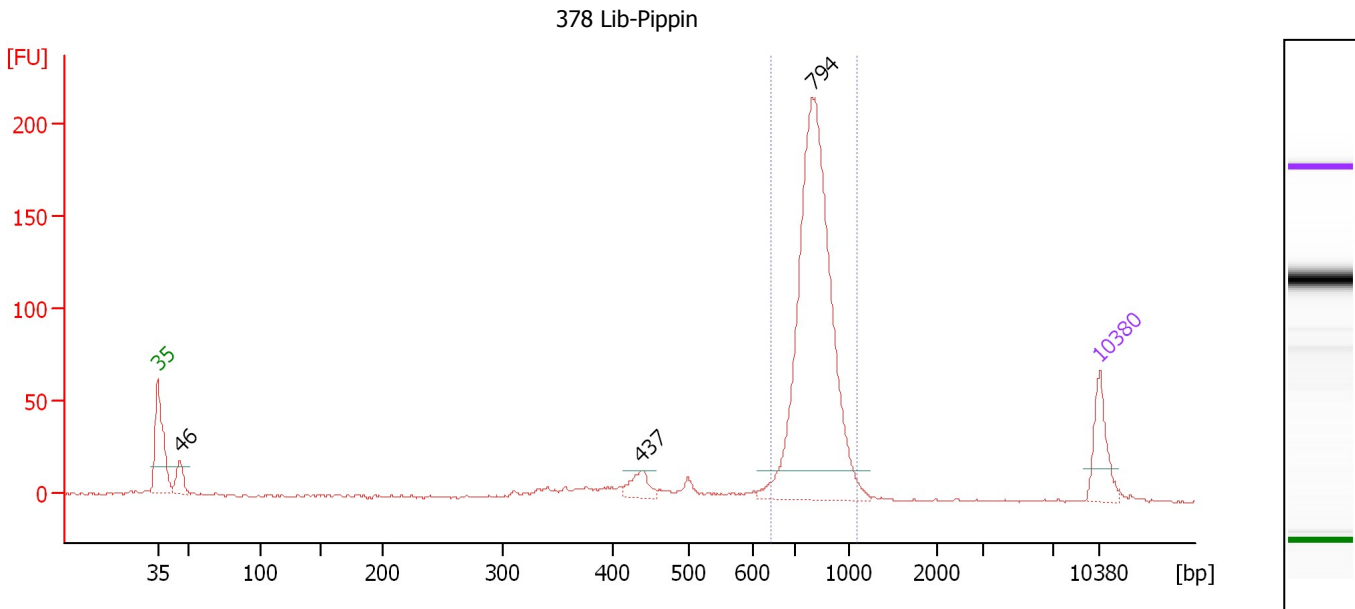
Region table for sample 2 : 103 Lib-Pippin

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
611	1,000	745	3,954.8	1,930.99	1,667.5	83	10.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : 378 Lib-Pippin

Height Threshold [FU] : 15

Overall Results for sample 3 : 378 Lib-Pippin

Number of peaks found: 3 Corr. Area 1: 675.6
 Noise: 0.6

Peak table for sample 3 : 378 Lib-Pippin

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	60.05	1,972.6	
3	437	48.31	167.3	
4	794	967.40	1,845.7	
5	10,380	75.00	10.9	Upper Marker

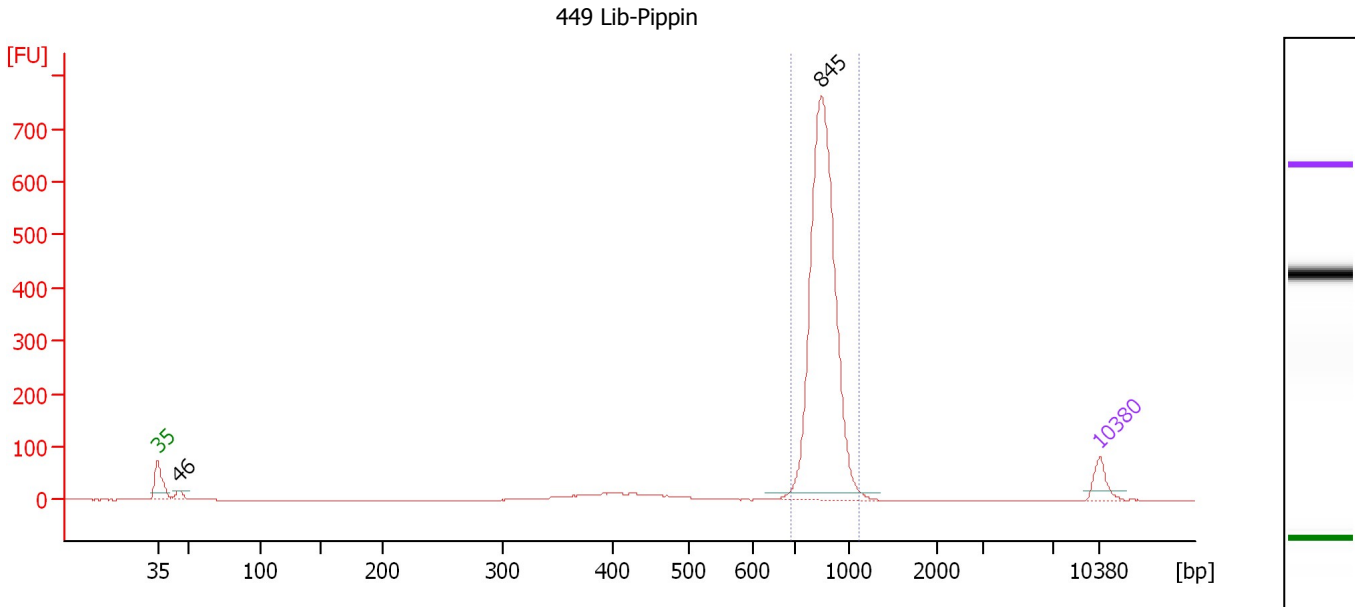
Region table for sample 3 : 378 Lib-Pippin

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
644	1,089	810	1,761.4	936.56	675.6	81	10.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : 449 Lib-Pippin

Height Threshold [FU] : 15

Overall Results for sample 4 : 449 Lib-Pippin

Number of peaks found: 2 Corr. Area 1: 1,823.0
 Noise: 0.2

Peak table for sample 4 : 449 Lib-Pippin

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	55.05	1,822.2	
3	845	2,107.17	3,776.8	
4	10,380	75.00	10.9	Upper Marker

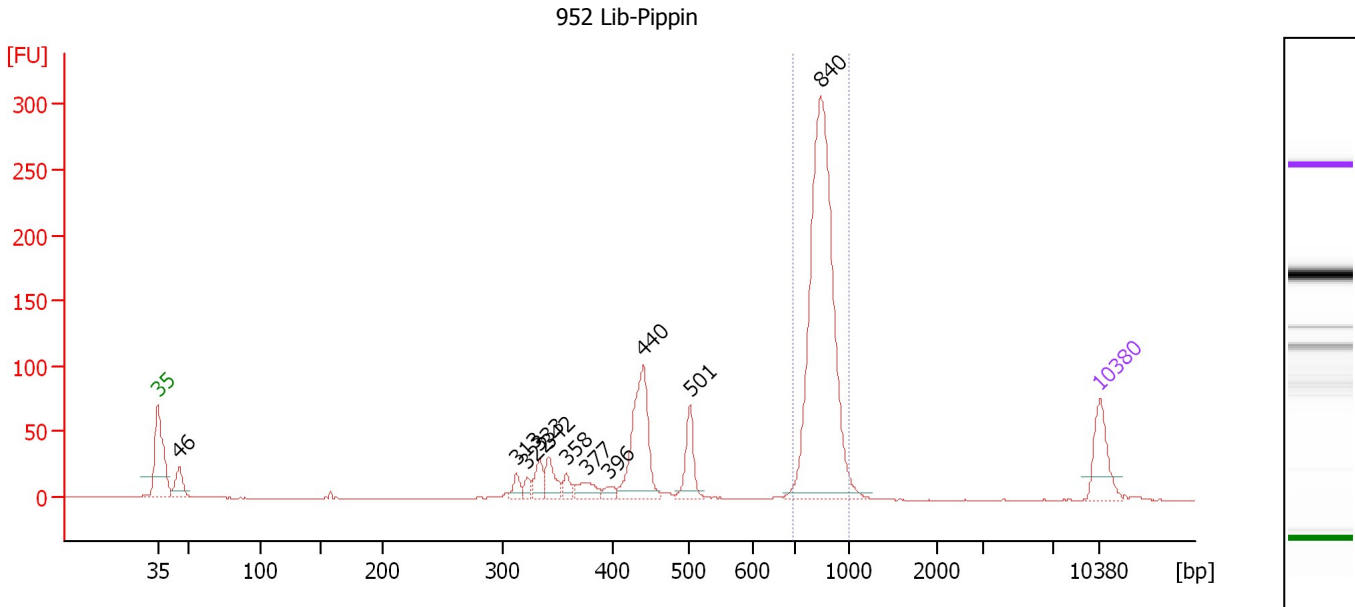
Region table for sample 4 : 449 Lib-Pippin

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
686	1,109	855	3,689.5	2,079.36	1,823.0	88	7.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 952 Lib-Pippin

Number of peaks found: 11 Corr. Area 1: 668.0
 Noise: 0.1

Peak table for sample 5 : 952 Lib-Pippin

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	66.59	2,211.6	
3	313	25.08	121.6	
4	322	18.12	85.2	
5	333	42.57	193.6	
6	342	51.72	229.3	
7	358	22.96	97.2	
8	377	38.35	154.3	
9	396	16.53	63.2	
10	440	233.81	804.8	
11	501	78.99	238.7	
12	840	793.40	1,431.0	
13	10,380	75.00	10.9	Upper Marker

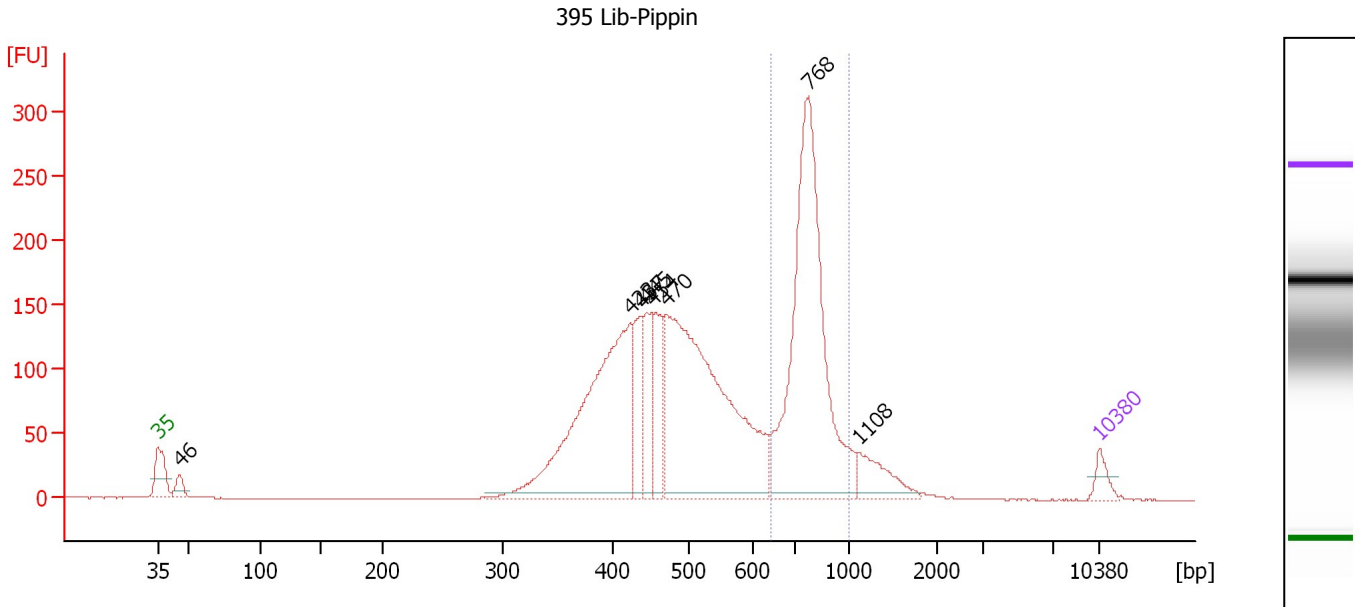
Region table for sample 5 : 952 Lib-Pippin

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
693	996	845	1,390.1	775.28	668.0	58	6.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 395 Lib-Pippin

Number of peaks found: 8 Corr. Area 1: 879.5
 Noise: 0.1

Peak table for sample 6 : 395 Lib-Pippin

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	112.95	3,715.8	
3	423	2,163.86	7,741.9	
4	437	392.56	1,362.1	
5	445	350.67	1,194.3	
6	454	420.98	1,405.1	
7	470	2,672.39	8,607.2	
8	768	2,387.51	4,707.3	
9	1,108	247.13	338.0	
10	10,380	75.00	10.9	Upper Marker

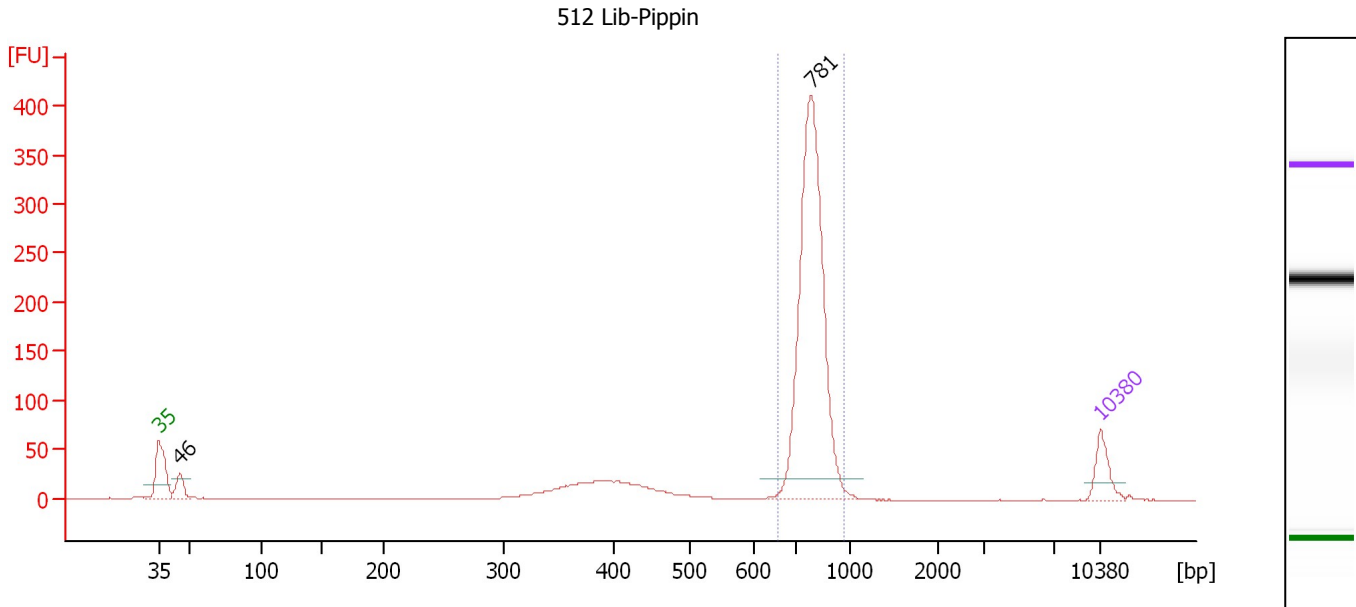
Region table for sample 6 : 395 Lib-Pippin

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
644	1,000	776	4,519.1	2,301.04	879.5	28	10.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : 512 Lib-Pippin

Height Threshold [FU] : 20

Overall Results for sample 7 : 512 Lib-Pippin

Number of peaks found: 2 Corr. Area 1: 929.7
 Noise: 0.2

Peak table for sample 7 : 512 Lib-Pippin

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	83.24	2,756.3	
3	781	1,251.43	2,429.1	
4	10,380	75.00	10.9	Upper Marker

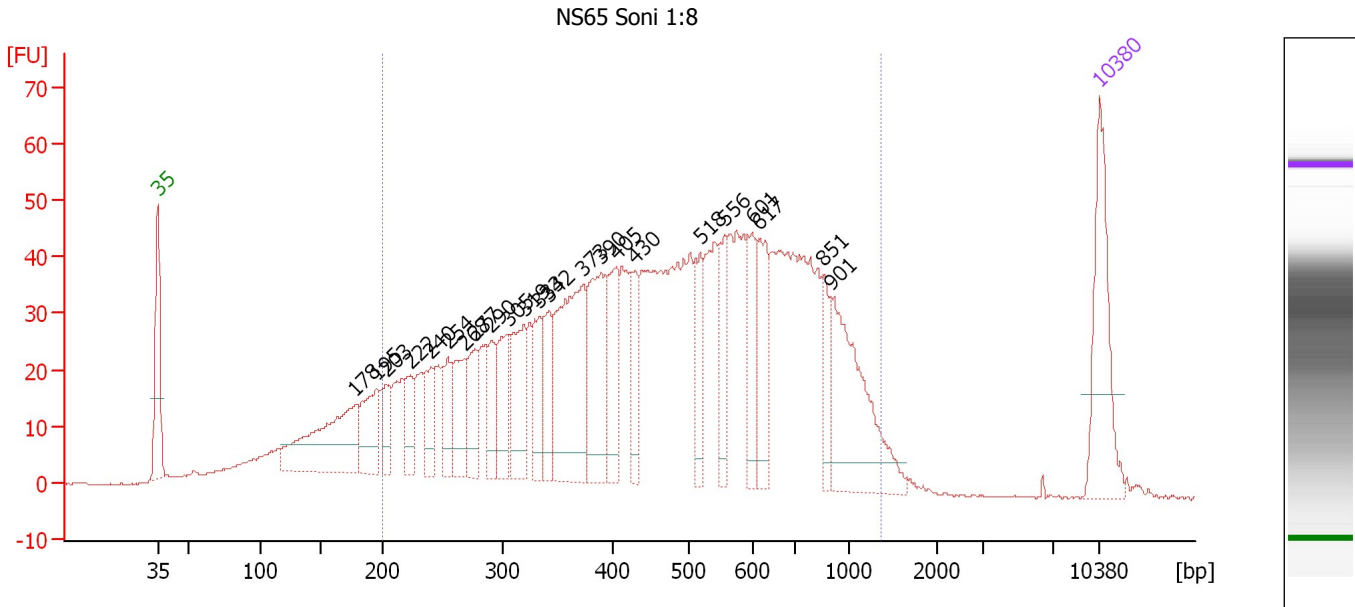
Region table for sample 7 : 512 Lib-Pippin

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
658	971	785	2,402.3	1,241.56	929.7	76	7.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : NS65 Soni 1:8

Number of peaks found: 23 Corr. Area 1: 1,590.4
 Noise: 0.2

Peak table for sample 8 : NS65 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	178	144.28	1,231.2	
3	195	62.30	483.7	
4	203	30.45	226.7	
5	222	32.43	221.0	
6	240	31.04	195.8	
7	254	34.78	207.5	
8	268	53.67	303.9	
9	277	43.43	237.6	
10	290	34.82	181.8	
11	305	51.26	254.9	
12	319	65.89	312.7	
13	333	45.64	207.5	
14	342	43.53	192.9	
15	373	154.42	627.8	
16	390	98.85	384.5	
17	405	64.24	240.4	
18	430	40.99	144.6	
19	518	43.80	128.1	
20	556	41.87	114.1	
21	601	48.93	123.4	
22	617	56.56	139.0	
23	851	30.03	53.5	
24	901	128.41	215.9	
25	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...

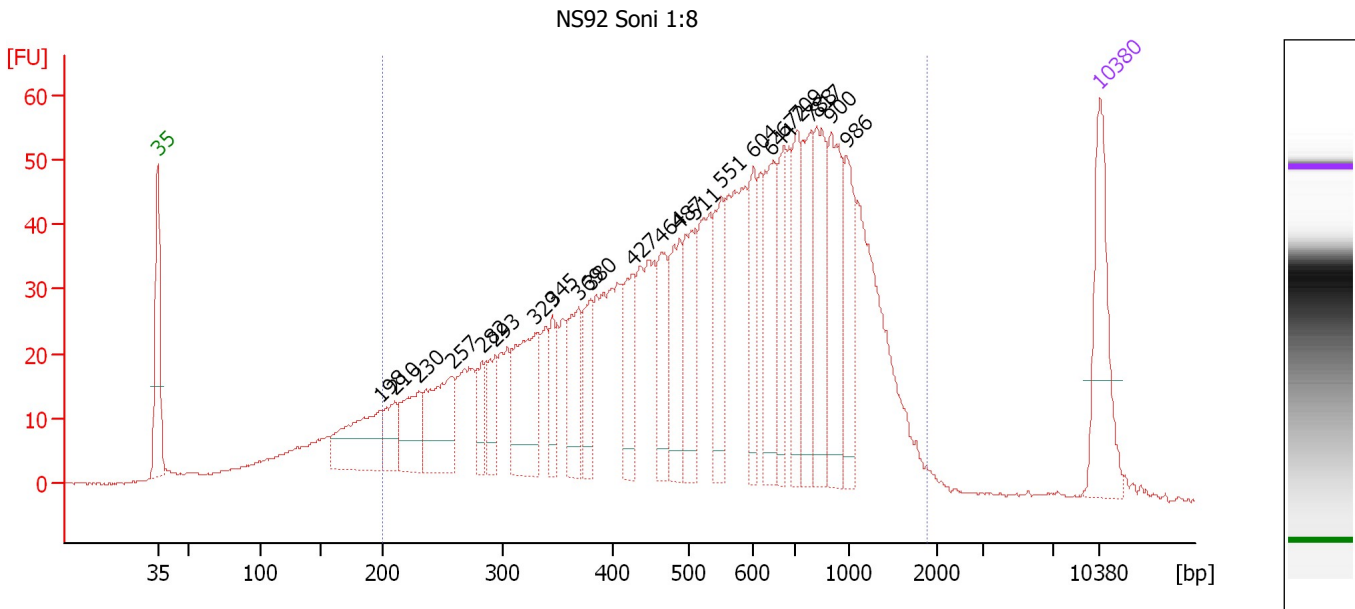
... Region table for sample 8 : NS65 Soni 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,355	509	8,520.7	2,226.68	1,590.4	87	43.5	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : NS92 Soni 1:8

Number of peaks found: 23 Corr. Area 1: 1,624.5
 Noise: 0.1

Peak table for sample 9 : NS92 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	198	96.13	736.2	
3	210	36.09	259.8	
4	230	63.32	416.3	
5	257	97.84	576.0	
6	282	28.75	154.4	
7	293	40.94	211.6	
8	329	102.09	469.9	
9	345	34.74	152.6	
10	369	61.94	254.5	
11	380	44.76	178.3	
12	427	57.30	203.4	
13	464	55.74	182.0	
14	487	70.55	219.4	
15	511	72.71	215.7	
16	551	69.02	189.8	
17	604	52.59	132.0	
18	644	85.54	201.2	
19	672	52.90	119.3	
20	709	63.74	136.2	
21	788	69.32	133.2	
22	817	89.13	165.3	
23	900	93.57	157.6	
24	986	59.20	91.0	
25	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...

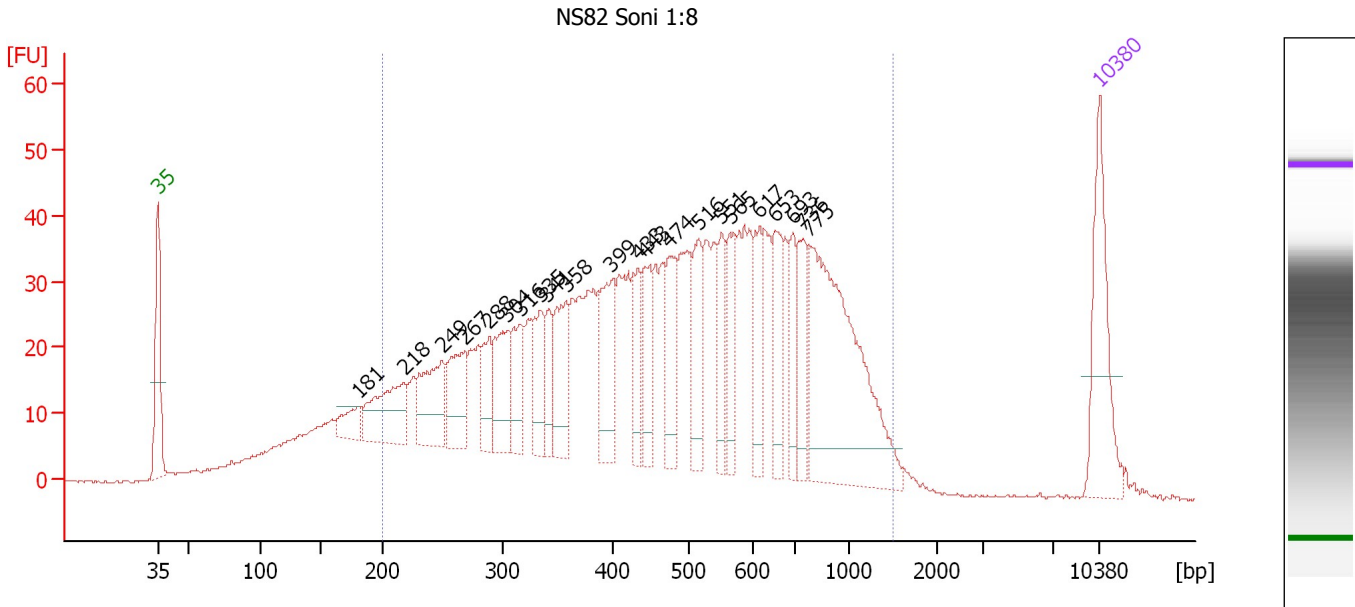
... Region table for sample 9 : NS92 Soni 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,885	614	8,551.7	2,507.12	1,624.5	90	50.9	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NS82 Soni 1:8

Number of peaks found: 22 Corr. Area 1: 1,380.2
 Noise: 0.1

Peak table for sample 10 : NS82 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	181	28.28	236.9	
3	218	80.43	560.1	
4	249	78.05	474.5	
5	267	61.21	347.2	
6	288	39.86	209.5	
7	304	62.69	312.5	
8	316	48.15	231.1	
9	335	50.99	230.7	
10	341	33.71	149.9	
11	358	62.49	264.8	
12	399	74.79	284.0	
13	433	41.15	143.8	
14	443	47.92	164.1	
15	474	55.80	178.3	
16	516	57.12	167.8	
17	551	40.77	112.1	
18	565	43.77	117.3	
19	617	39.74	97.6	
20	653	48.90	113.4	
21	693	39.41	86.2	
22	736	41.18	84.8	
23	775	248.34	485.3	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...

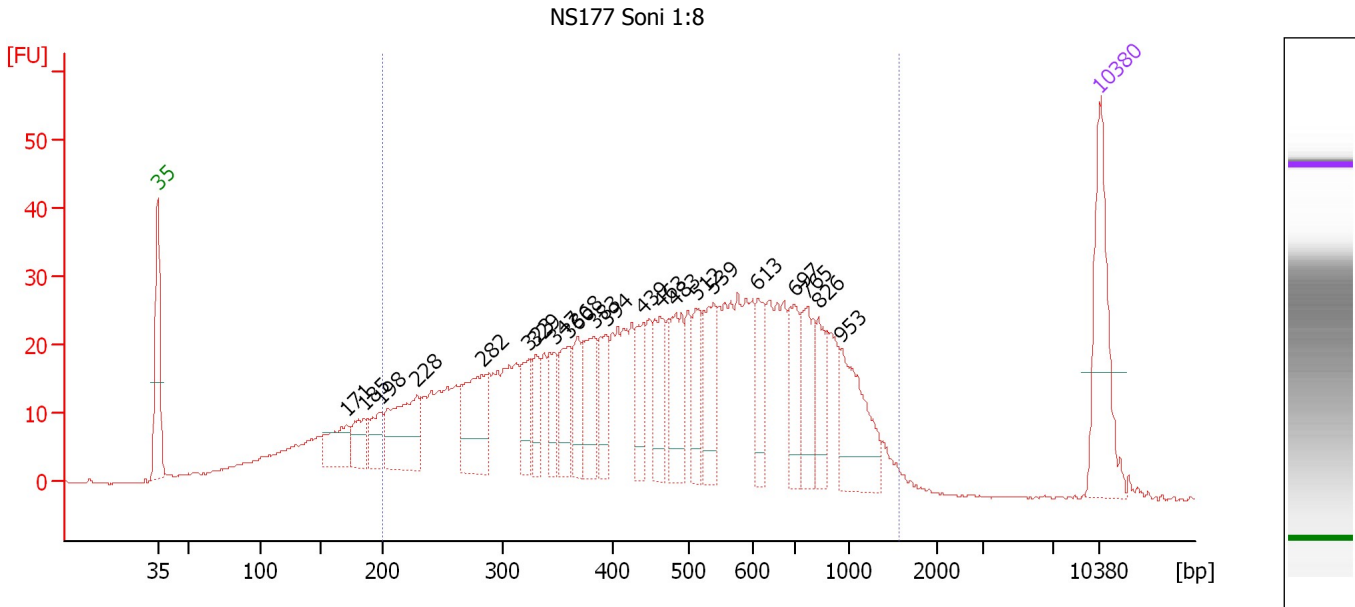
... Region table for sample 10 : **NS82 Soni 1:8**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,502	526	8,644.6	2,299.33	1,380.2	87	45.9	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : NS177 Soni 1:8

Number of peaks found: 22 Corr. Area 1: 1,006.4
 Noise: 0.2

Peak table for sample 11 : NS177 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	171	42.04	373.4	
3	185	32.31	265.0	
4	198	29.71	227.6	
5	228	87.38	579.5	
6	282	85.76	460.0	
7	323	34.34	160.9	
8	329	28.48	131.1	
9	347	30.70	134.1	
10	360	44.22	186.3	
11	368	32.38	133.3	
12	383	52.26	206.7	
13	394	40.78	156.7	
14	439	37.95	130.9	
15	463	48.67	159.4	
16	483	60.81	190.9	
17	512	36.86	109.0	
18	539	50.77	142.8	
19	613	34.79	86.0	
20	697	45.55	99.0	
21	765	46.98	93.1	
22	826	32.51	59.6	
23	953	70.30	111.8	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
Modified: 1/28/2013 3:10:49 PM

Electropherogram Summary Continued ...

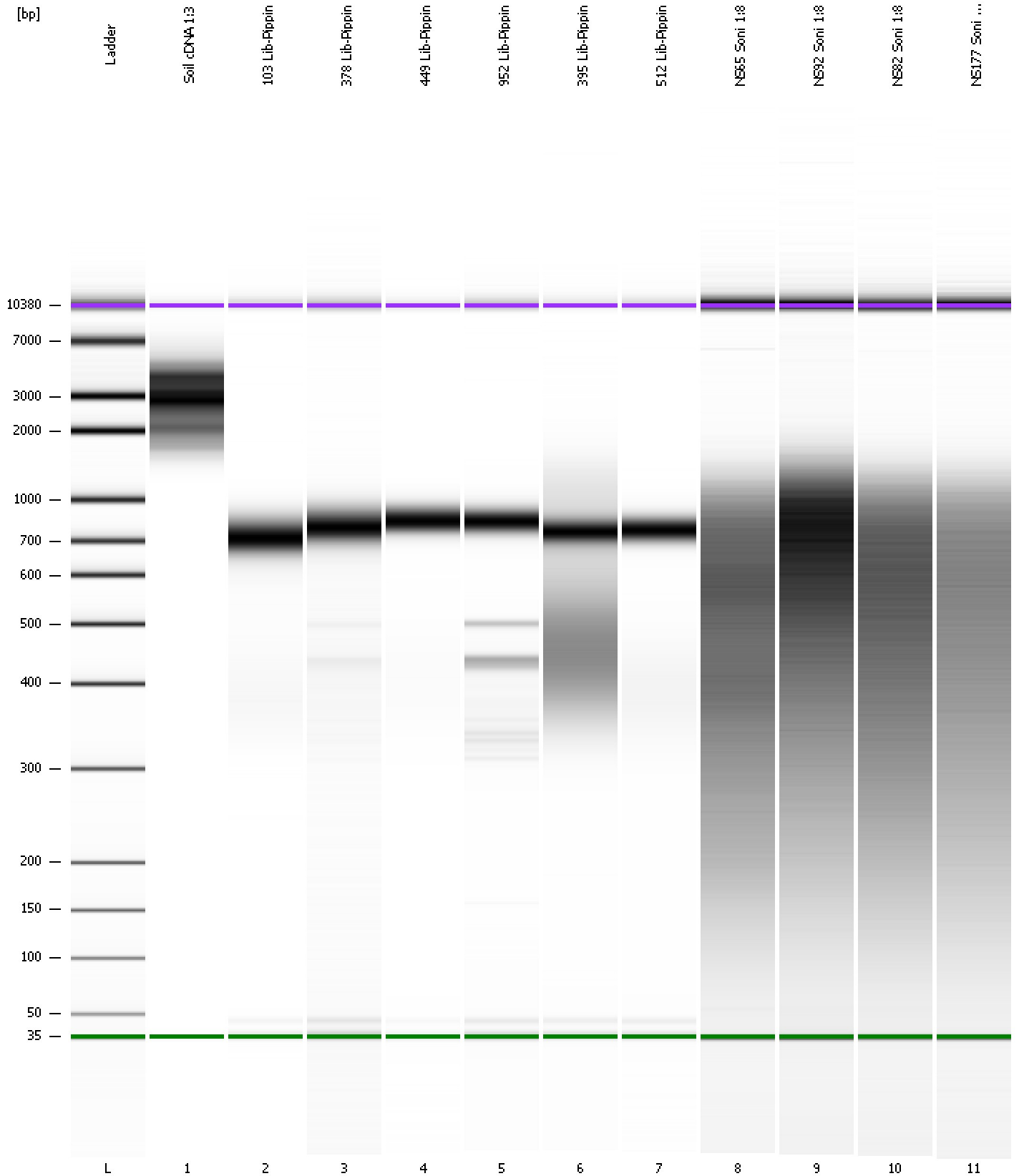
... Region table for sample 11 : **NS177 Soni 1:8**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,562	522	6,646.7	1,748.02	1,006.4	87	46.7	■

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
Modified: 1/28/2013 3:10:49 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad

Created: 1/28/2013 2:24:37 PM
 Modified: 1/28/2013 3:10:49 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		1/28/2013 3:05:55 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-01-28\2013-01-28_001.xad)		Instrument	Run		1/28/2013 2:24:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/28/2013 2:24:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/28/2013 2:24:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/28/2013 2:24:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/28/2013 2:24:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/28/2013 2:24:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/28/2013 2:24:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1