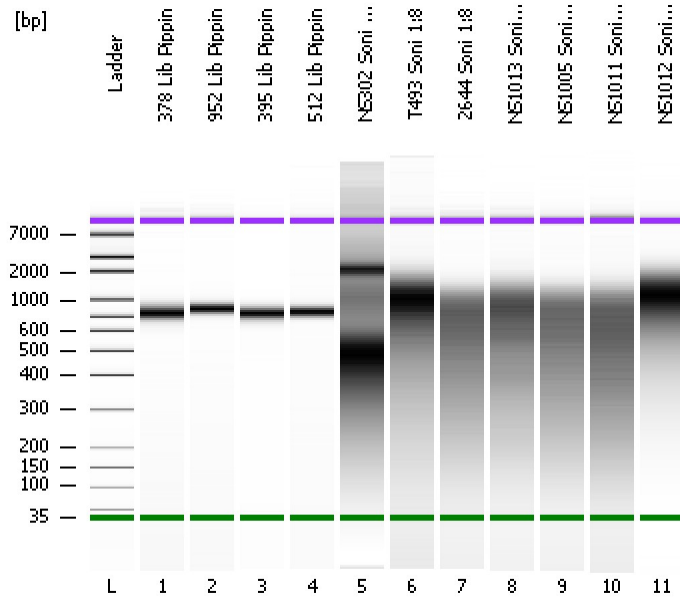


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
Modified: 1/29/2013 11:46:36 AM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

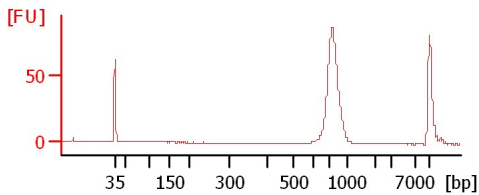
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

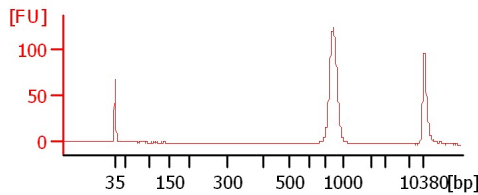
Chip Information:

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

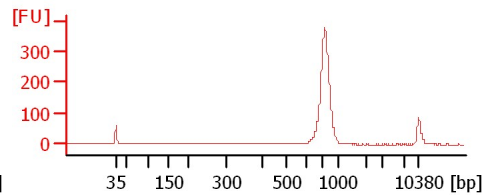
378 Lib Pippin



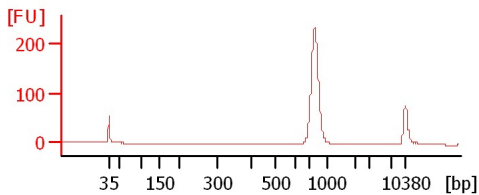
952 Lib Pippin



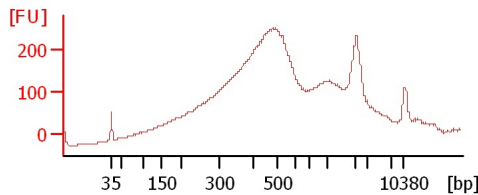
395 Lib Pippin



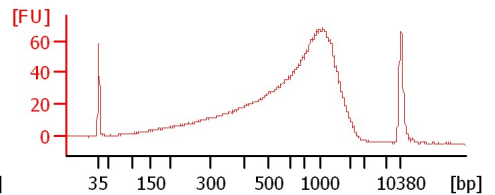
512 Lib Pippin



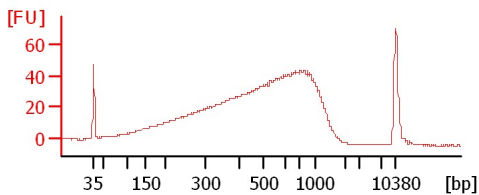
NS302 Soni 1:8



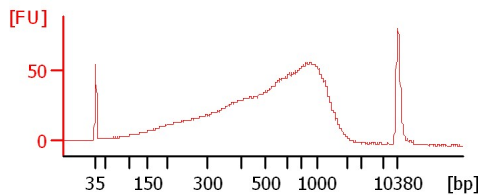
T493 Soni 1:8



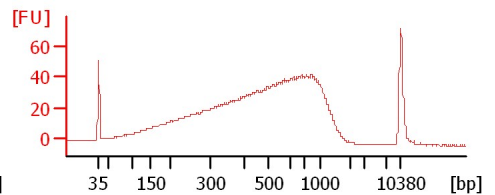
2644 Soni 1:8



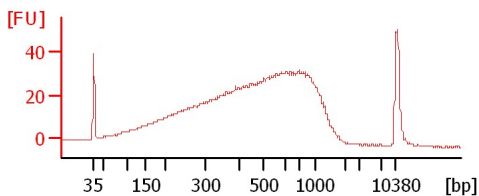
NS1013 Soni 1:8



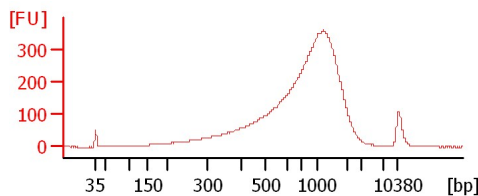
NS1005 Soni 1:8



NS1011 Soni 1:8



NS1012 Soni 1:8



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
378 Lib Pippin		<input type="checkbox"/>	✓			
952 Lib Pippin		<input type="checkbox"/>	✓			
395 Lib Pippin		<input type="checkbox"/>	✓			
512 Lib Pippin		<input type="checkbox"/>	✓			
NS302 Soni 1:8		<input type="checkbox"/>	✓			
T493 Soni 1:8		<input type="checkbox"/>	✓			
2644 Soni 1:8		<input type="checkbox"/>	✓			
NS1013 Soni 1:8		<input type="checkbox"/>	✓			
NS1005 Soni 1:8		<input type="checkbox"/>	✓			
NS1011 Soni 1:8		<input type="checkbox"/>	✓			
NS1012 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\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
Modified: 1/29/2013 11:46:36 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

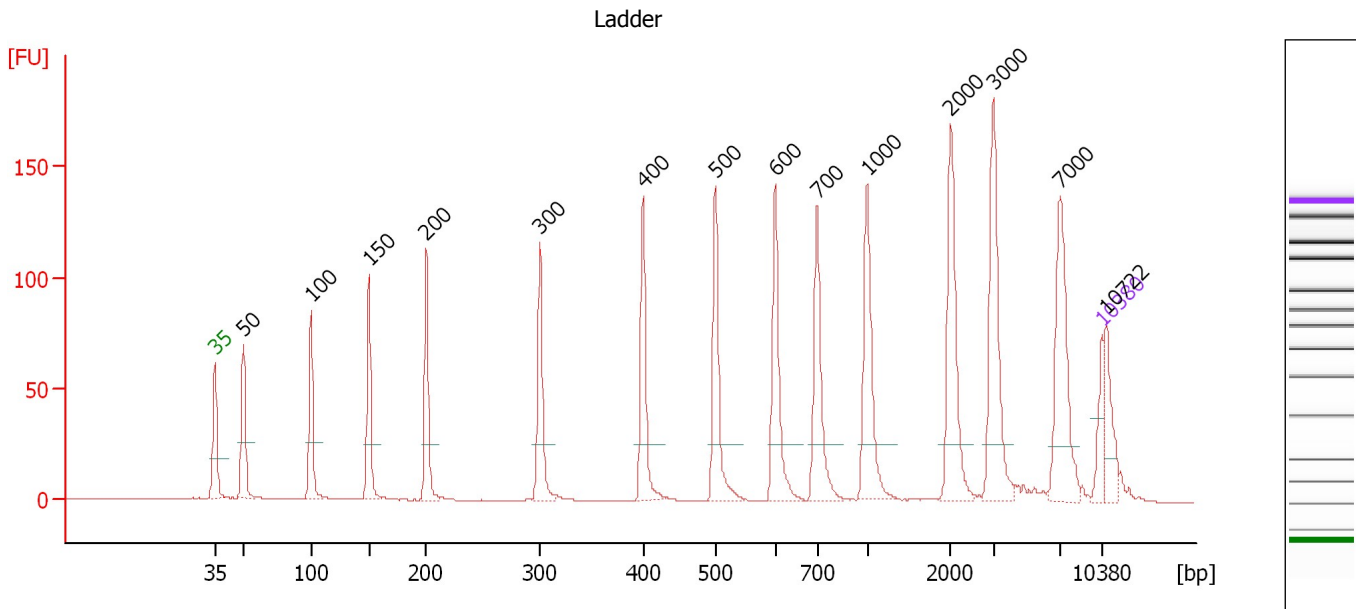
Ladder

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\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

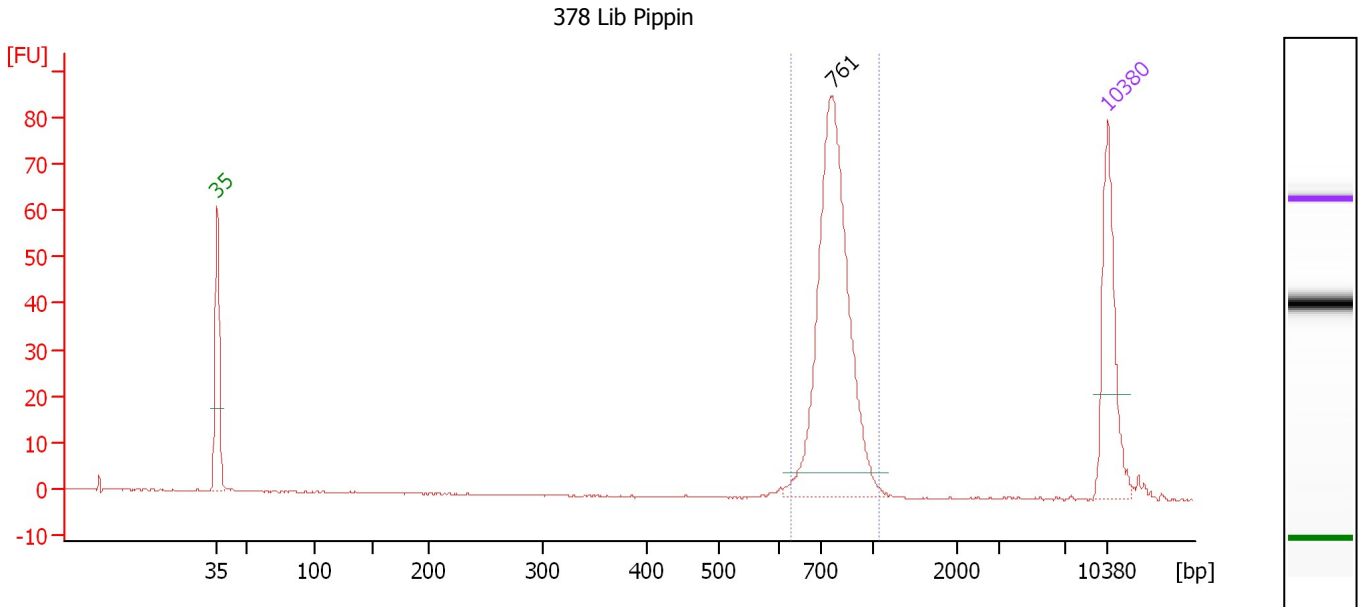
Peak table for Ladder

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
16	10,722	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 378 Lib Pippin

Number of peaks found: 1 Corr. Area 1: 268.9
 Noise: 0.1

Peak table for sample 1 : 378 Lib Pippin

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	761	322.54	642.0	
3	10,380	75.00	10.9	Upper Marker

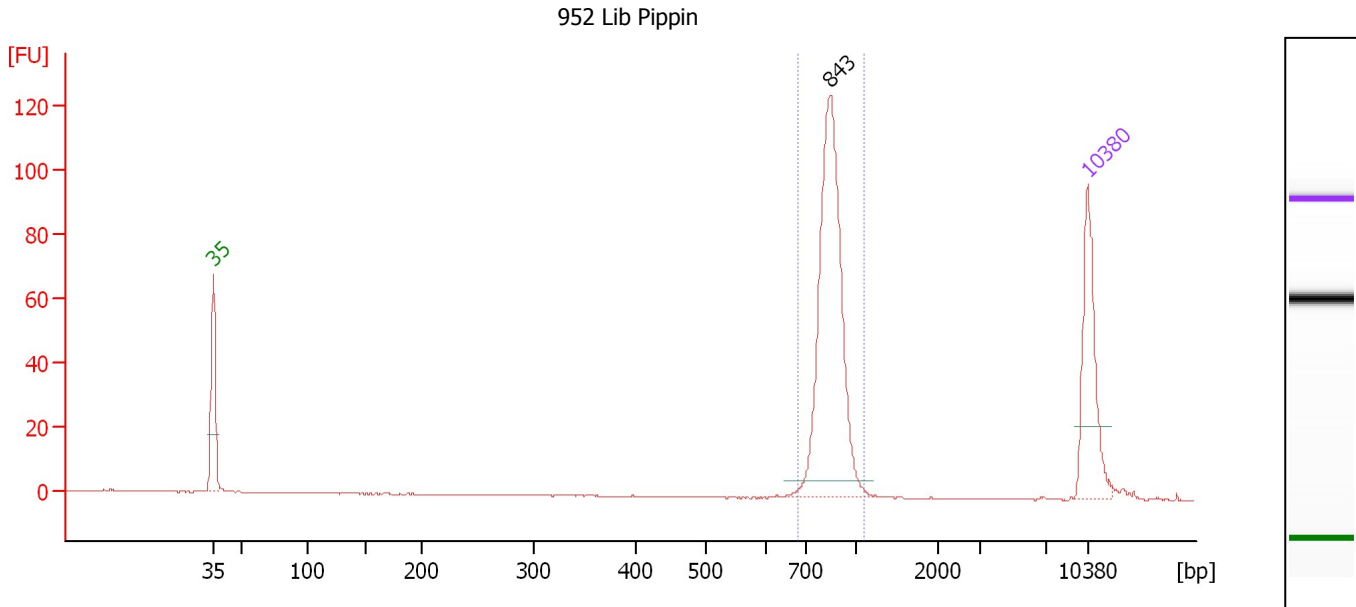
Region table for sample 1 : 378 Lib Pippin

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
626	1,069	777	617.5	314.46	268.9	96	10.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 952 Lib Pippin

Number of peaks found: 1 Corr. Area 1: 288.2
 Noise: 0.1

Peak table for sample 2 : 952 Lib Pippin

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	843	270.77	486.4	
3	10,380	75.00	10.9	Upper Marker

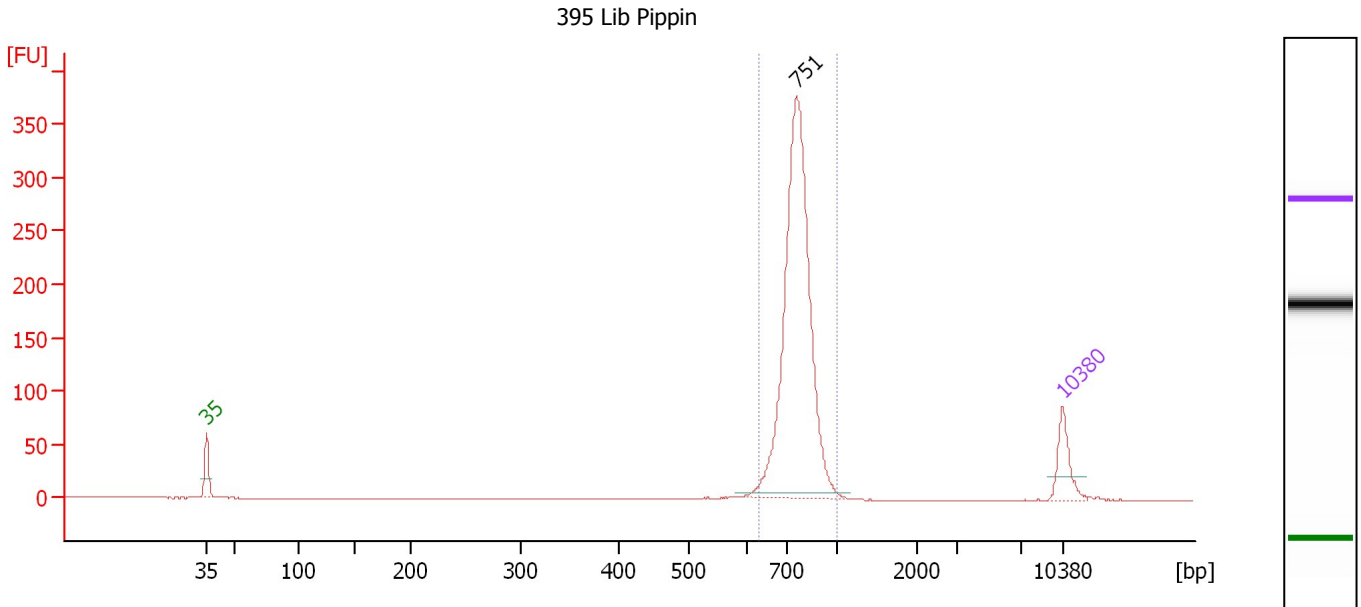
Region table for sample 2 : 952 Lib Pippin

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
678	1,087	843	485.0	269.52	288.2	95	7.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 395 Lib Pippin

Number of peaks found: 1 Corr. Area 1: 1,021.1
 Noise: 0.1

Peak table for sample 3 : 395 Lib Pippin

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	751	1,169.13	2,359.2	
3	10,380	75.00	10.9	Upper Marker

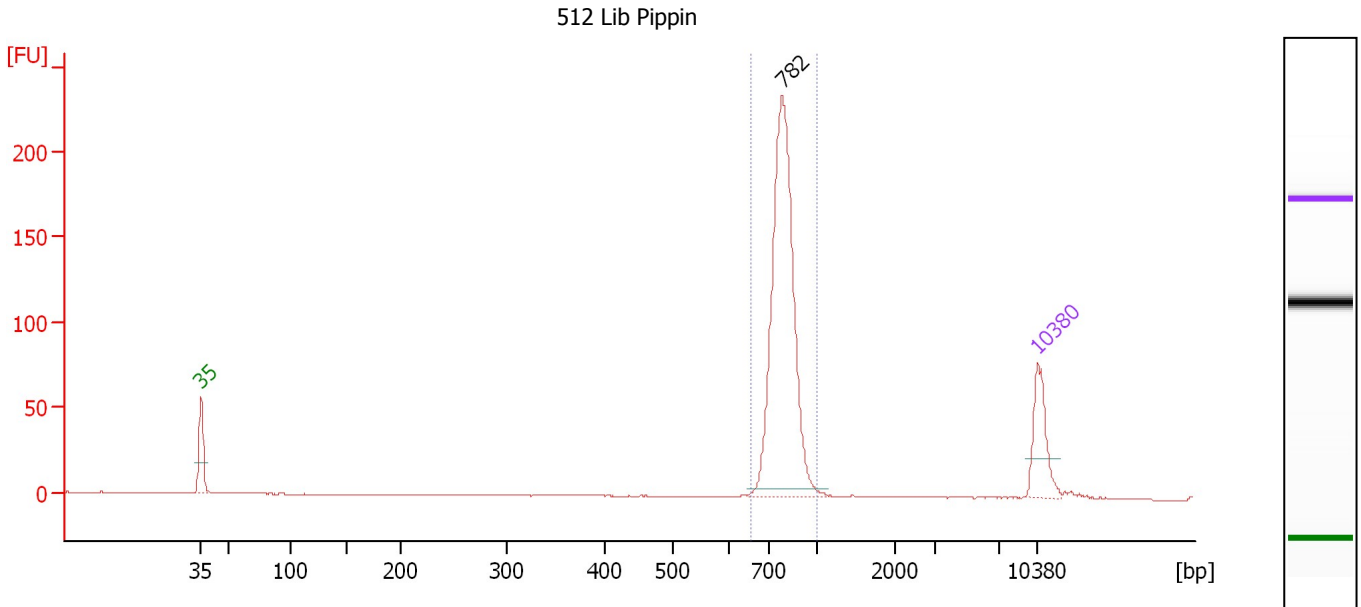
Region table for sample 3 : 395 Lib Pippin

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
627	1,000	764	2,300.1	1,153.65	1,021.1	96	9.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 512 Lib Pippin

Number of peaks found: 1 Corr. Area 1: 549.4
 Noise: 0.1

Peak table for sample 4 : 512 Lib Pippin

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	782	606.50	1,175.7	
3	10,380	75.00	10.9	Upper Marker

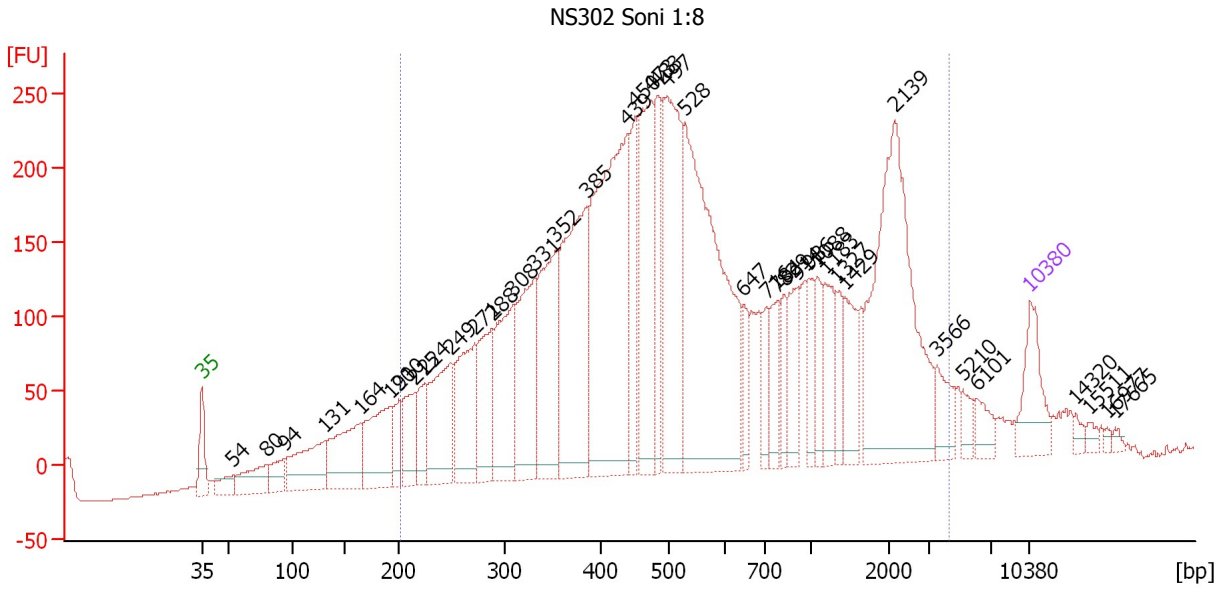
Region table for sample 4 : 512 Lib Pippin

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
652	997	789	1,163.3	604.07	549.4	94	7.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
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Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : NS302 Soni 1:8

Height Threshold [FU] : 10

Overall Results for sample 5 : NS302 Soni 1:8

Number of peaks found: 40 Corr. Area 1: 7,842.3
 Noise: 0.2

Peak table for sample 5 : NS302 Soni 1:8


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	54	40.51	1,145.4	
3	80	92.91	1,756.4	
4	94	56.24	910.0	
5	131	173.09	1,999.1	
6	164	183.29	1,694.3	
7	191	186.91	1,481.4	
8	200	58.31	442.6	
9	215	102.51	721.8	
10	224	72.95	492.9	
11	249	209.55	1,275.8	
12	271	199.09	1,113.2	
13	288	159.38	839.7	
14	308	213.60	1,051.0	
15	331	250.05	1,145.7	
16	352	264.65	1,138.2	
17	385	390.01	1,534.7	
18	439	592.54	2,046.8	
19	450	153.40	516.9	
20	473	277.93	889.8	
21	483	131.89	414.0	
22	497	354.66	1,081.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad


Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...

... Peak table for sample 5 : NS302 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
23	528	643.83	1,848.3	
24	647	44.78	104.9	
25	716	50.77	107.4	
26	784	63.77	123.2	
27	829	44.06	80.6	
28	914	76.69	127.1	
29	986	54.44	83.7	
30	1,088	49.47	68.9	
31	1,183	77.69	99.5	
32	1,327	37.80	43.2	
33	1,429	74.57	79.1	
34	2,139	404.29	286.3	
35	3,566	45.71	19.4	
36	5,210	20.78	6.0	
37	6,101	28.65	7.1	
38	 10,380	75.00	10.9	Upper Marker
39	14,320	0.00	0.0	
40	15,511	0.00	0.0	
41	16,977	0.00	0.0	
42	17,665	0.00	0.0	

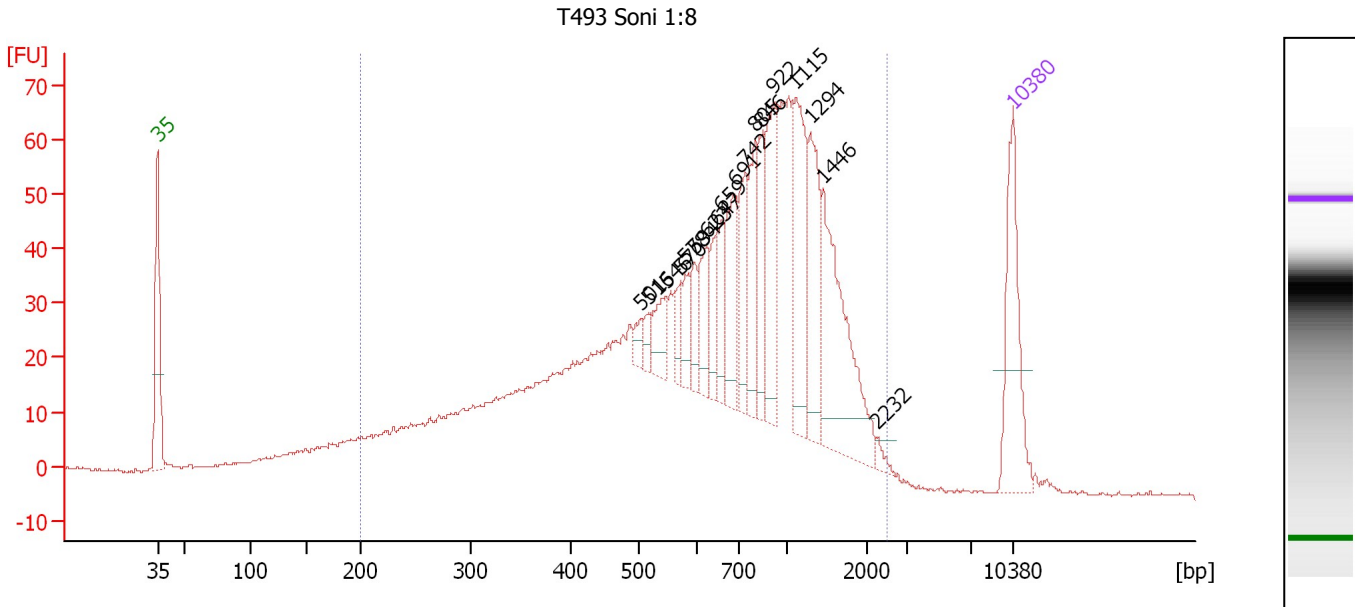
Region table for sample 5 : NS302 Soni 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
202	4,339	802	17,095.9	5,021.89	7,842.3	90	89.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : T493 Soni 1:8

Number of peaks found: 18 Corr. Area 1: 1,497.0
 Noise: 0.3

Peak table for sample 6 : T493 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	501	11.70	35.4	
3	516	10.50	30.8	
4	546	26.85	74.5	
5	570	16.82	44.7	
6	578	23.33	61.2	
7	594	20.85	53.2	
8	623	35.74	86.9	
9	647	26.58	62.3	
10	659	29.47	67.7	
11	691	59.78	131.1	
12	742	46.06	94.0	
13	805	52.99	99.8	
14	846	43.55	78.0	
15	922	69.86	114.7	
16	1,115	88.76	120.6	
17	1,294	67.93	79.5	
18	1,446	127.11	133.2	
19	2,232	4.83	3.3	
20	10,380	75.00	10.9	Upper Marker

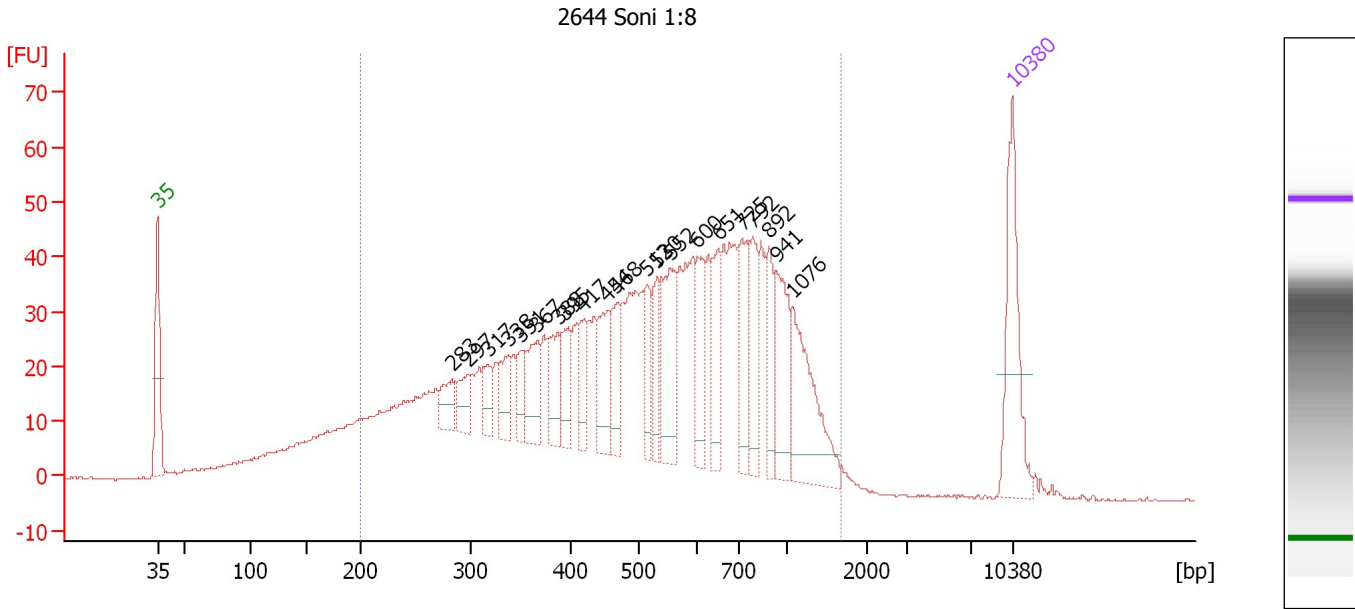
Region table for sample 6 : T493 Soni 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,499	801	5,737.3	2,008.72	1,497.0	94	54.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 7 : 2644 Soni 1:8

Number of peaks found: 21 Corr. Area 1: 1,413.5
 Noise: 0.2

Peak table for sample 7 : 2644 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	283	28.94	154.9	
3	297	28.45	145.0	
4	317	23.62	112.7	
5	338	33.20	148.7	
6	351	21.38	92.4	
7	367	49.67	205.1	
8	388	42.69	166.8	
9	395	35.24	135.3	
10	417	29.25	106.2	
11	454	50.43	168.2	
12	468	39.51	128.0	
13	512	33.36	98.7	
14	530	33.67	96.3	
15	552	74.41	204.2	
16	600	43.95	111.0	
17	651	42.64	99.3	
18	725	60.24	125.8	
19	792	46.60	89.2	
20	892	38.67	65.7	
21	941	64.54	103.9	
22	1,076	87.96	123.8	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...

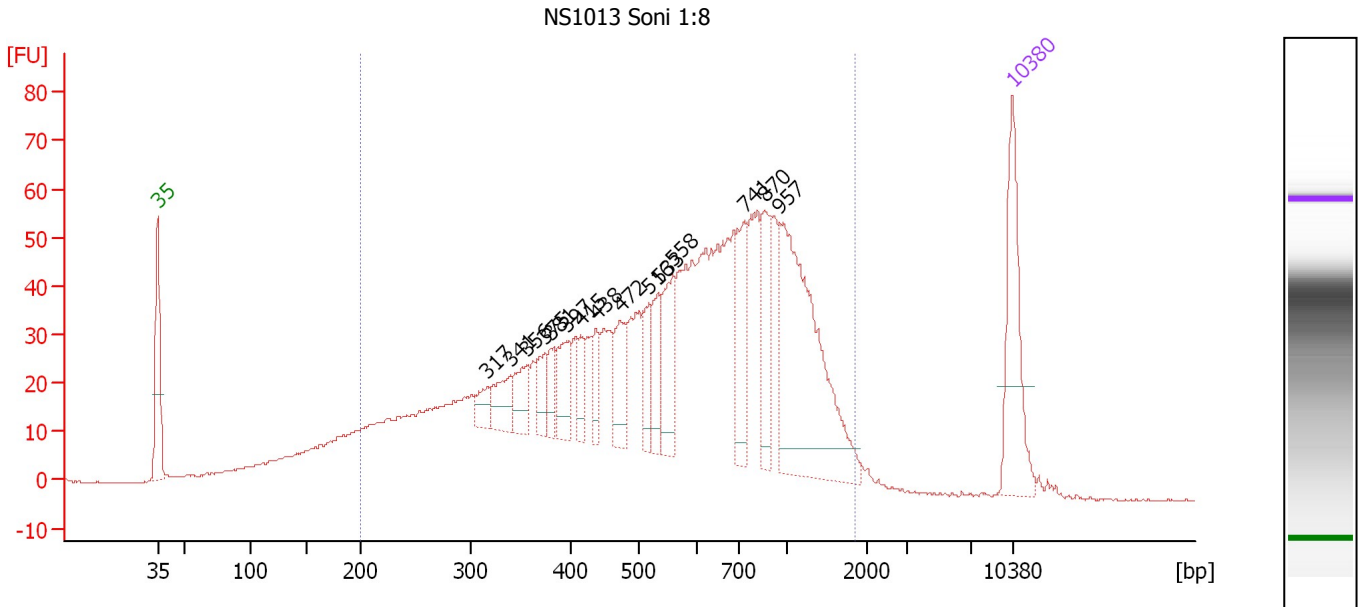
... Region table for sample 7 : 2644 Soni 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,667	574	7,327.9	2,067.87	1,413.5	89	47.8	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : NS1013 Soni 1:8

Number of peaks found: 15 Corr. Area 1: 1,601.6
 Noise: 0.2

Peak table for sample 8 : NS1013 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	317	17.73	84.8	
3	341	33.25	147.9	
4	356	32.00	136.0	
5	375	24.64	99.5	
6	381	18.31	72.8	
7	397	38.27	146.2	
8	415	20.67	75.4	
9	438	21.61	74.8	
10	472	44.62	143.4	
11	516	32.04	94.1	
12	533	37.96	108.0	
13	558	55.80	151.5	
14	741	60.49	123.7	
15	870	54.37	94.7	
16	957	212.07	335.7	
17	10,380	75.00	10.9	Upper Marker

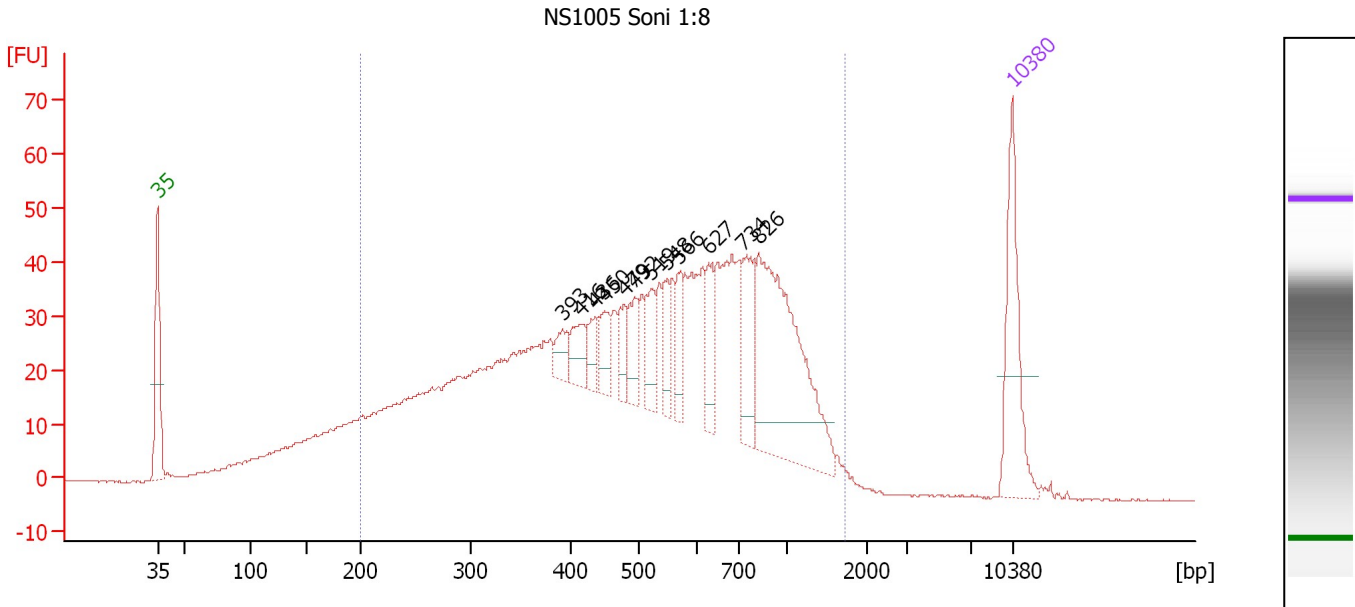
Region table for sample 8 : NS1013 Soni 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,859	642	6,349.7	1,906.34	1,601.6	90	52.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : NS1005 Soni 1:8

Number of peaks found: 12 Corr. Area 1: 1,398.5
 Noise: 0.1

Peak table for sample 9 : NS1005 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	393	21.20	81.8	
3	416	27.91	101.7	
4	436	21.55	74.9	
5	450	24.58	82.7	
6	479	24.80	78.5	
7	492	30.19	92.9	
8	519	33.75	98.5	
9	548	26.91	74.4	
10	566	30.43	81.4	
11	627	35.11	84.8	
12	734	60.83	125.5	
13	826	219.04	401.9	
14	10,380	75.00	10.9	Upper Marker

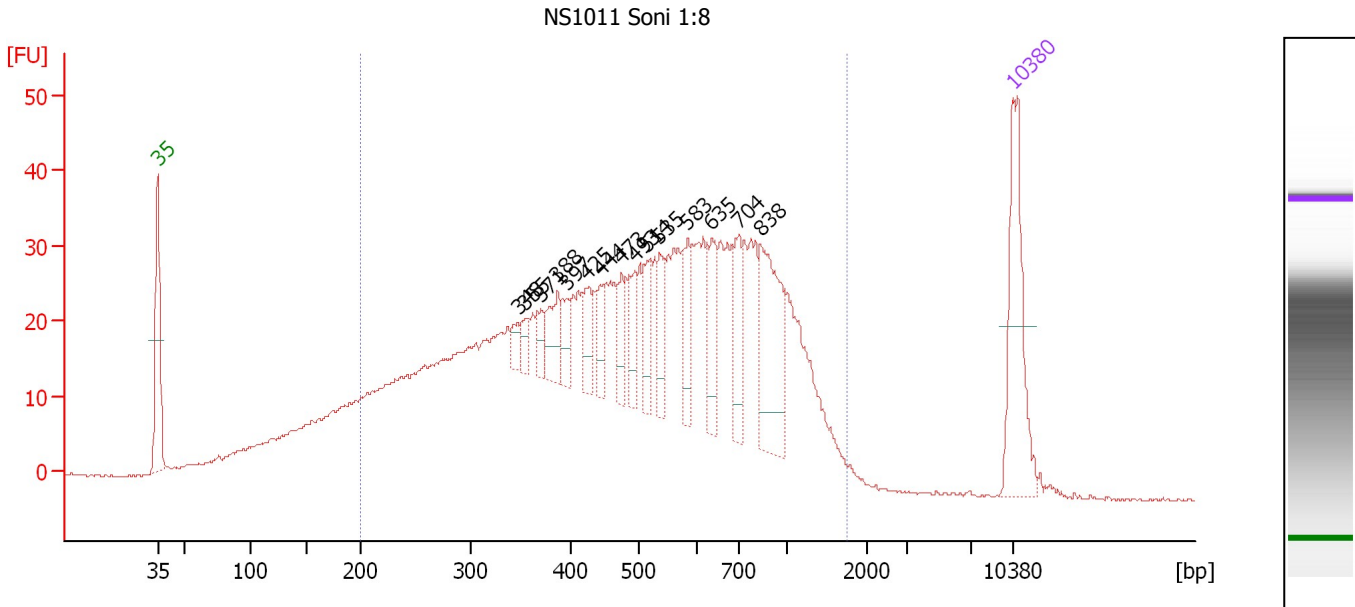
Region table for sample 9 : NS1005 Soni 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,715	571	7,343.7	2,048.74	1,398.5	89	49.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NS1011 Soni 1:8

Number of peaks found: 15 Corr. Area 1: 1,140.0
 Noise: 0.1

Peak table for sample 10 : NS1011 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	348	11.89	51.8	
3	355	11.55	49.2	
4	371	14.83	60.6	
5	388	33.21	129.8	
6	397	18.29	69.7	
7	425	26.74	95.4	
8	444	19.48	66.5	
9	473	21.46	68.7	
10	493	24.29	74.7	
11	514	28.65	84.5	
12	535	25.60	72.5	
13	583	34.87	90.6	
14	635	36.31	86.6	
15	704	38.37	82.6	
16	838	87.45	158.1	
17	10,380	75.00	10.9	Upper Marker

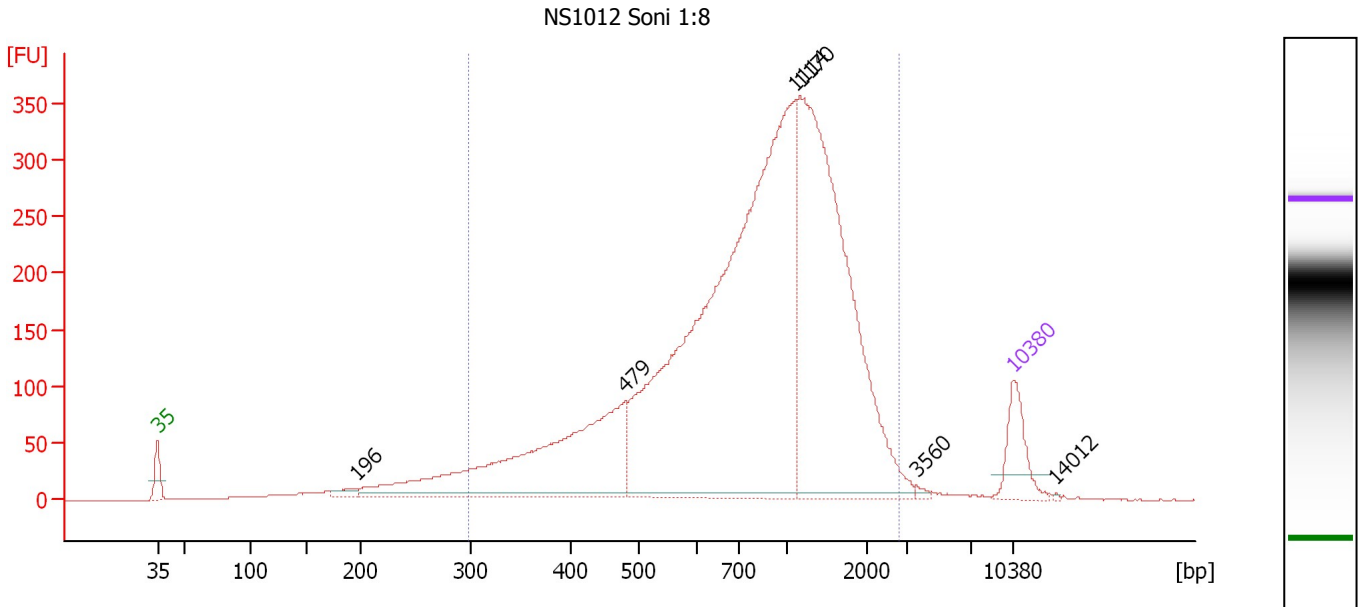
Region table for sample 10 : NS1011 Soni 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,752	559	7,176.8	1,961.52	1,140.0	88	50.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : NS1012 Soni 1:8

Number of peaks found: 6 Corr. Area 1: 5,653.1
 Noise: 0.1

Peak table for sample 11 : NS1012 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	196	17.38	134.7	
3	479	611.71	1,935.9	
4	1,114	1,548.95	2,107.6	
5	1,170	977.63	1,265.5	
6	3,560	5.28	2.2	
7	10,380	75.00	10.9	Upper Marker
8	14,012	0.00	0.0	

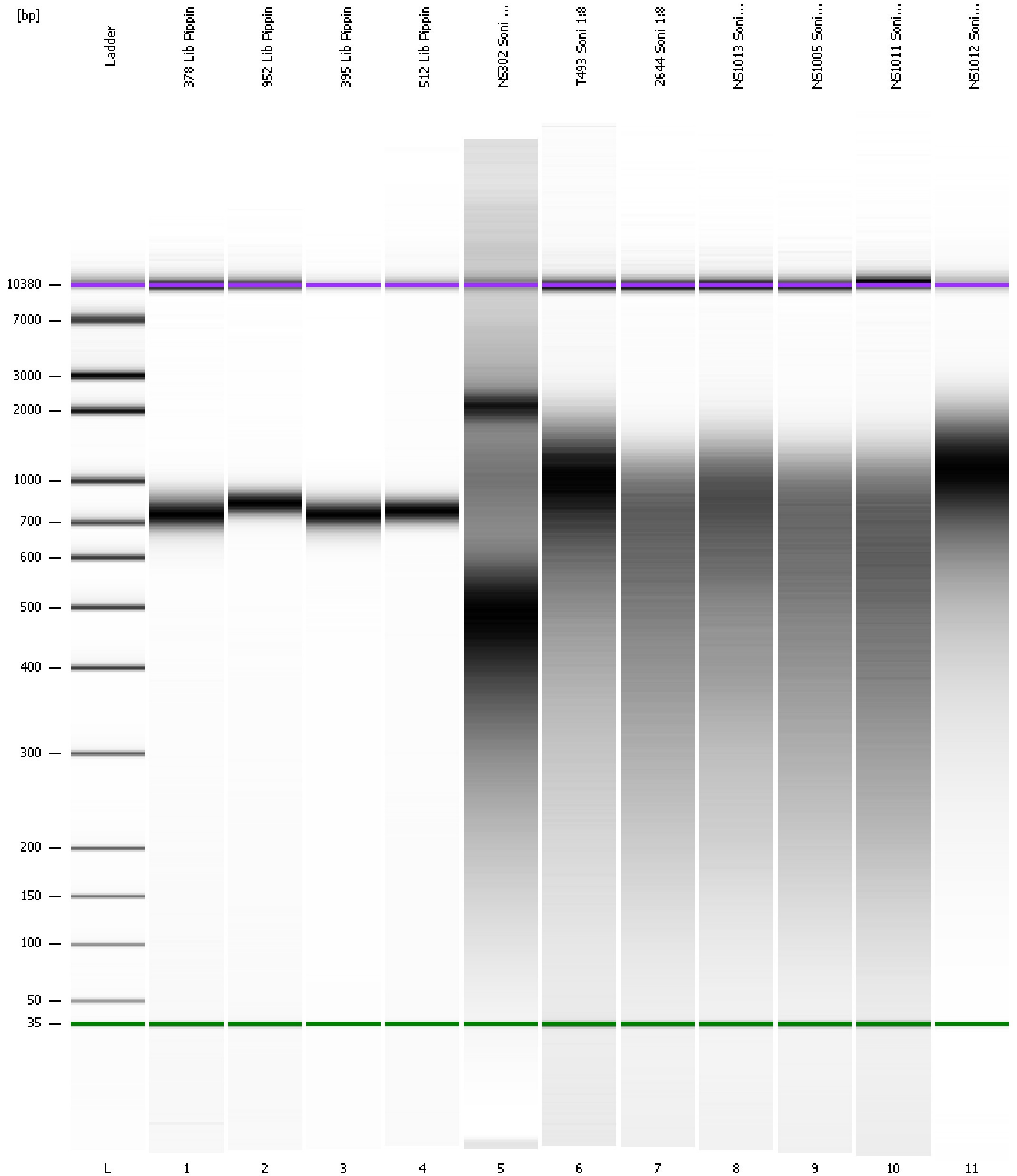
Region table for sample 11 : NS1012 Soni 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
299	2,769	981	7,090.6	3,322.31	5,653.1	93	50.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
Modified: 1/29/2013 11:46:36 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad

Created: 1/29/2013 10:59:14 AM
 Modified: 1/29/2013 11:46:36 AM

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		1/29/2013 11:40:34 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-01-29\2013-01-29_001.xad)		Instrument	Run		1/29/2013 10:59:19 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/29/2013 10:59:19 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/29/2013 10:59:19 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/29/2013 10:59:19 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/29/2013 10:59:19 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/29/2013 10:59:19 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/29/2013 10:59:19 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1