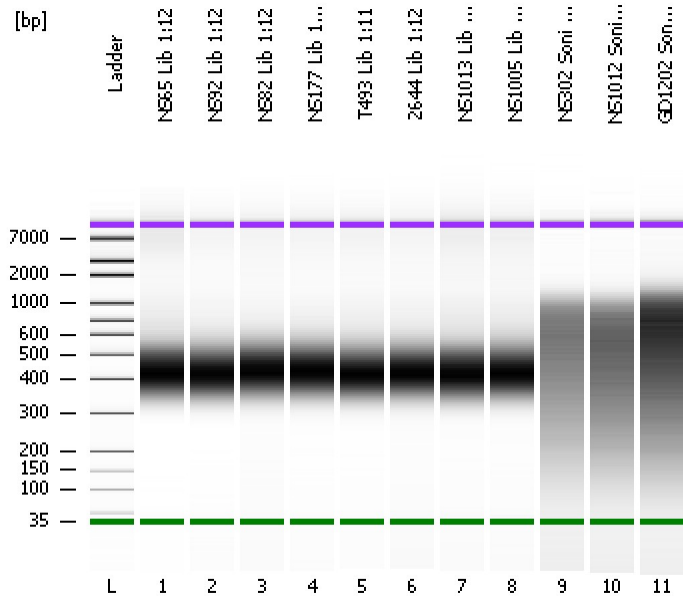


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
Modified: 1/30/2013 5:31:33 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

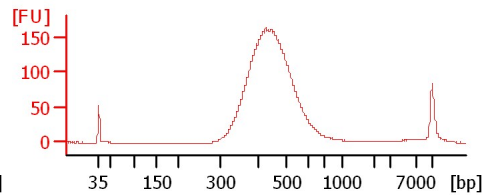
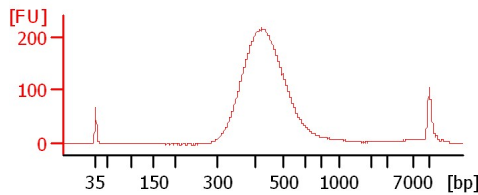
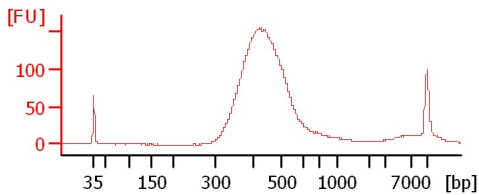
Chip Information:

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

NS65 Lib 1:12

NS92 Lib 1:12

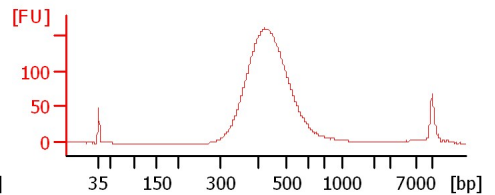
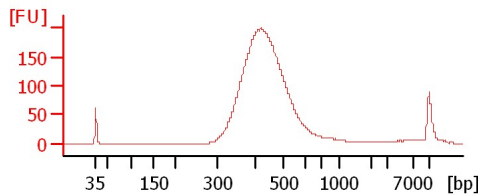
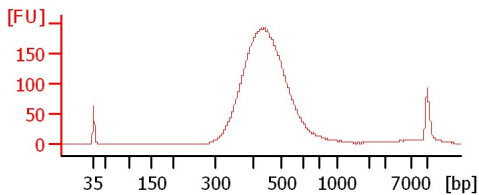
NS82 Lib 1:12



NS177 Lib 1:12

T493 Lib 1:11

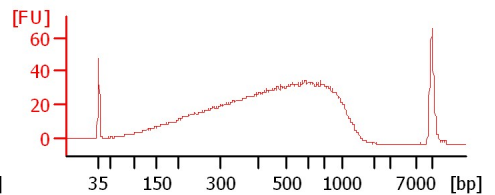
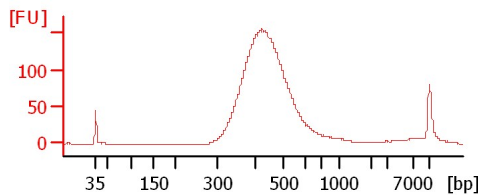
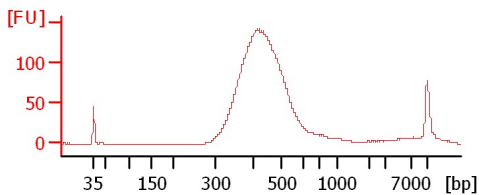
2644 Lib 1:12



NS1013 Lib 1:11

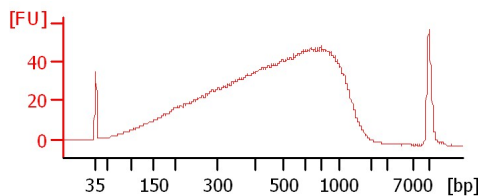
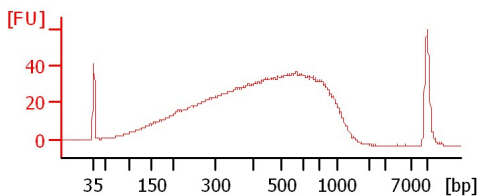
NS1005 Lib 1:12

NS302 Soni 1:9



NS1012 Soni 1:9

GD1202 Soni 1:2



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
Modified: 1/30/2013 5:31:33 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NS65 Lib 1:12		<input type="checkbox"/>	✓			
NS92 Lib 1:12		<input type="checkbox"/>	✓			
NS82 Lib 1:12		<input type="checkbox"/>	✓			
NS177 Lib 1:12		<input type="checkbox"/>	✓			
T493 Lib 1:11		<input type="checkbox"/>	✓			
2644 Lib 1:12		<input type="checkbox"/>	✓			
NS1013 Lib 1:11		<input type="checkbox"/>	✓			
NS1005 Lib 1:12		<input type="checkbox"/>	✓			
NS302 Soni 1:9		<input type="checkbox"/>	✓			
NS1012 Soni 1:9		<input type="checkbox"/>	✓			
GD1202 Soni 1:2		<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\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 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

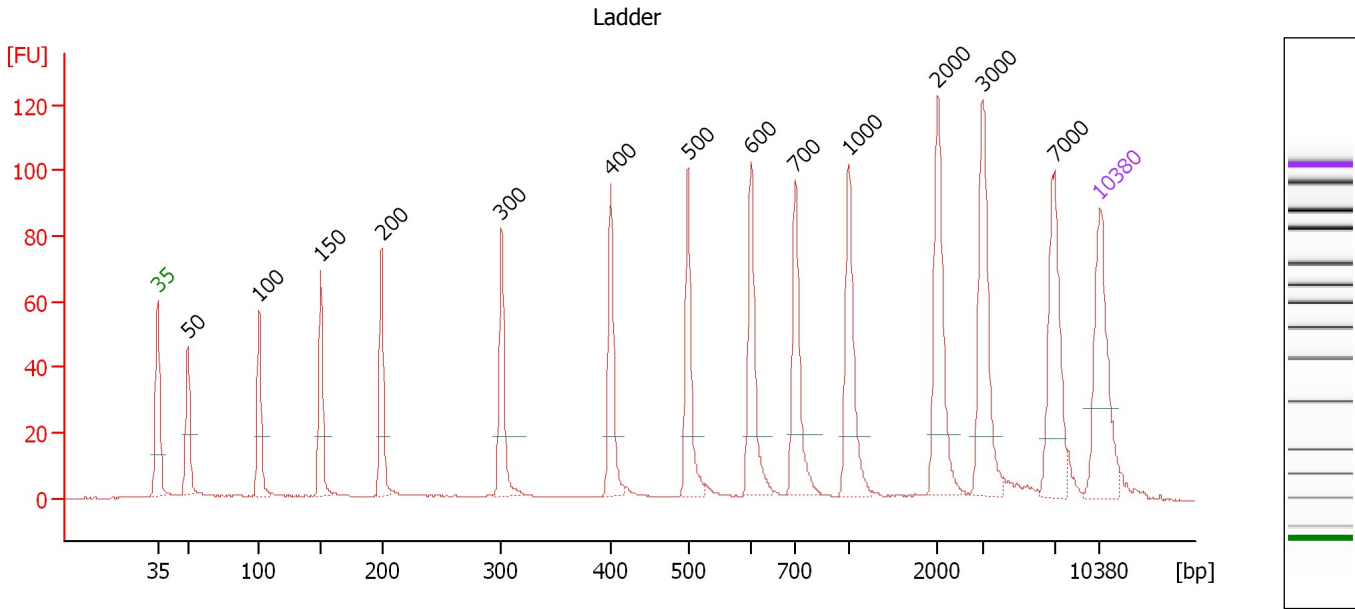
Ladder

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\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

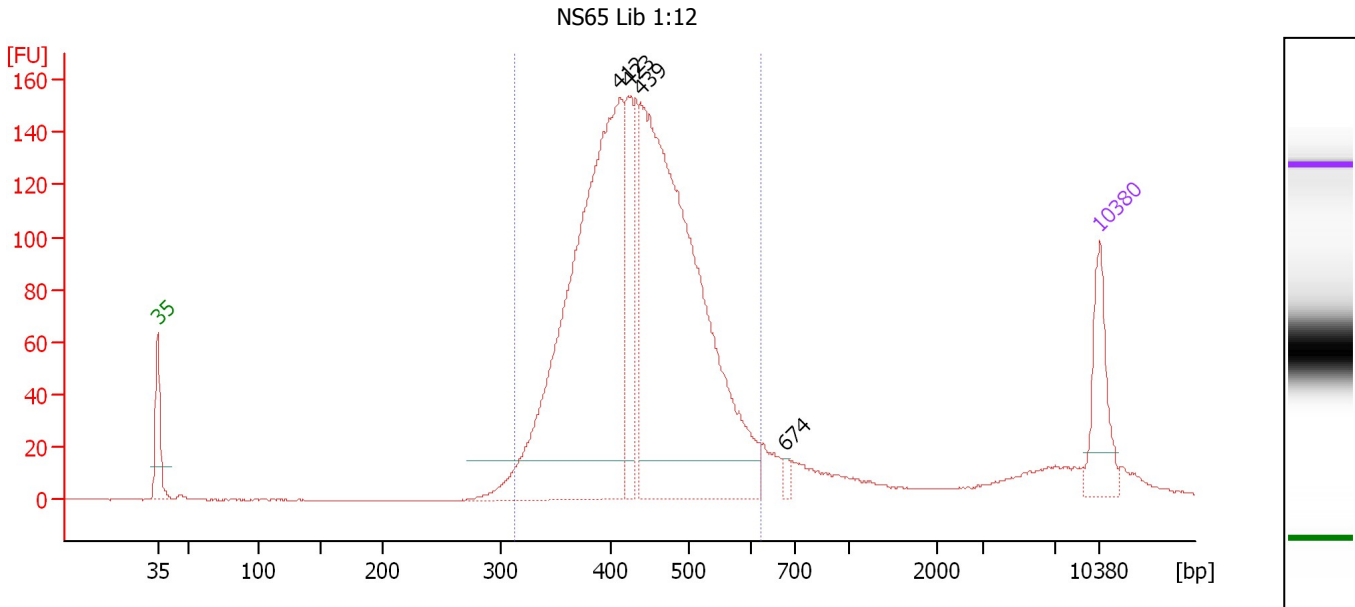
Peak table for Ladder

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\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : NS65 Lib 1:12

Height Threshold [FU] : 15

Overall Results for sample 1 : NS65 Lib 1:12

Number of peaks found: 4 Corr. Area 1: 2,140.2
 Noise: 0.2

Peak table for sample 1 : NS65 Lib 1:12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	412	933.15	3,434.0	
3	423	138.29	495.6	
4	439	989.03	3,413.3	
5	674	9.65	21.7	
6	10,380	75.00	10.9	Upper Marker

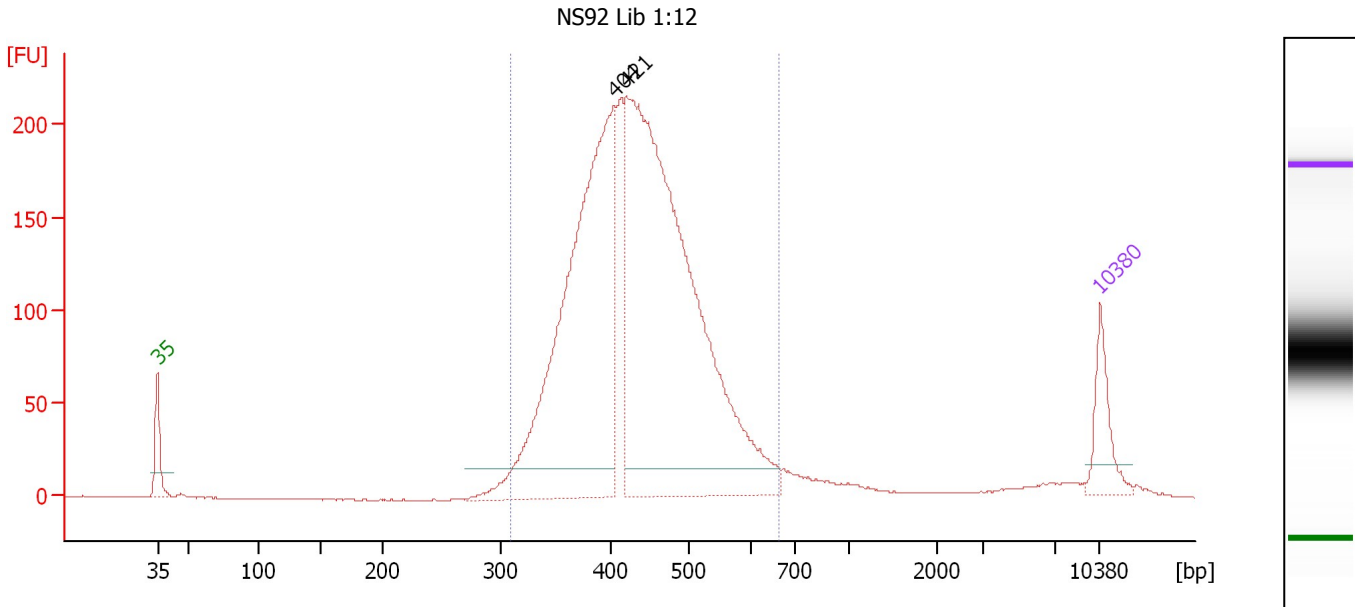
Region table for sample 1 : NS65 Lib 1:12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
311	621	438	7,493.3	2,110.82	2,140.2	90	14.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : NS92 Lib 1:12

Height Threshold [FU] : 15

Overall Results for sample 2 : NS92 Lib 1:12

Number of peaks found: 2 Corr. Area 1: 2,988.5
 Noise: 0.2

Peak table for sample 2 : NS92 Lib 1:12

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	404	1,149.25	4,307.1	
3	421	1,622.92	5,842.3	
4	10,380	75.00	10.9	Upper Marker

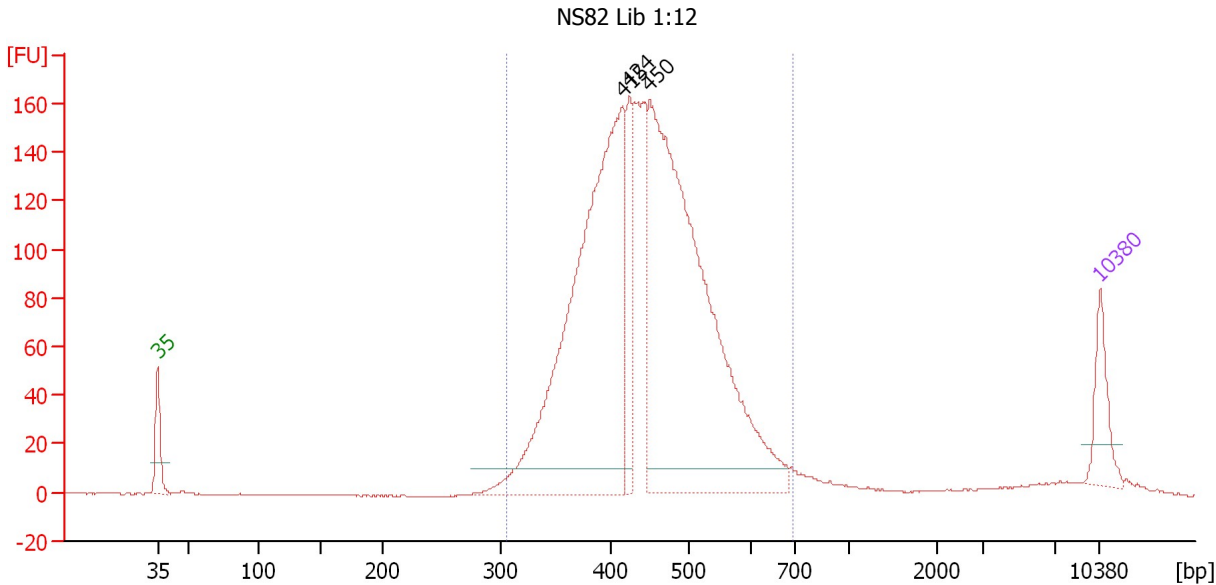
Region table for sample 2 : NS92 Lib 1:12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
308	662	437	10,452.6	2,928.86	2,988.5	94	15.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : NS82 Lib 1:12

Height Threshold [FU] : 10

Overall Results for sample 3 : NS82 Lib 1:12

Number of peaks found: 3 Corr. Area 1: 2,330.8
 Noise: 0.2

Peak table for sample 3 : NS82 Lib 1:12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	415	1,267.87	4,623.7	
3	424	169.06	604.3	
4	450	1,420.92	4,784.2	
5	10,380	75.00	10.9	Upper Marker

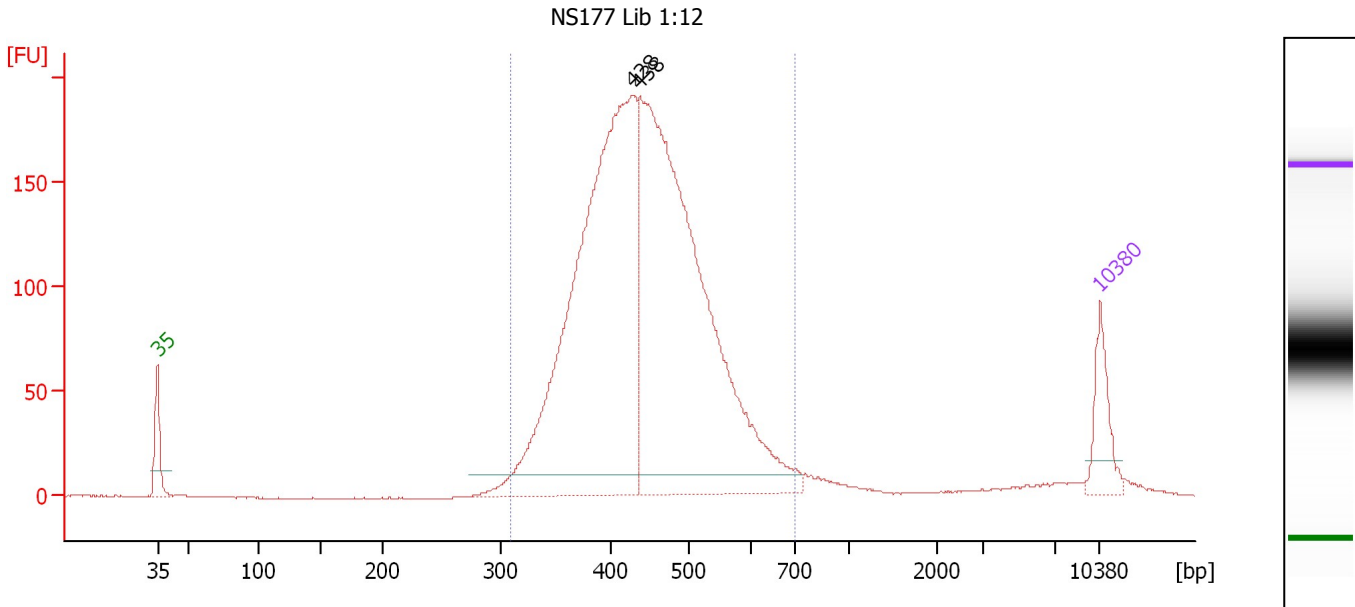
Region table for sample 3 : NS82 Lib 1:12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
304	693	448	11,116.0	3,185.37	2,330.8	94	16.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : NS177 Lib 1:12

Height Threshold [FU] : 10

Overall Results for sample 4 : NS177 Lib 1:12

Number of peaks found: 2 Corr. Area 1: 2,704.8
Noise: 0.2

Peak table for sample 4 : NS177 Lib 1:12

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	428	1,427.83	5,051.8	
3	438	1,483.47	5,135.7	
4	10,380	75.00	10.9	Upper Marker

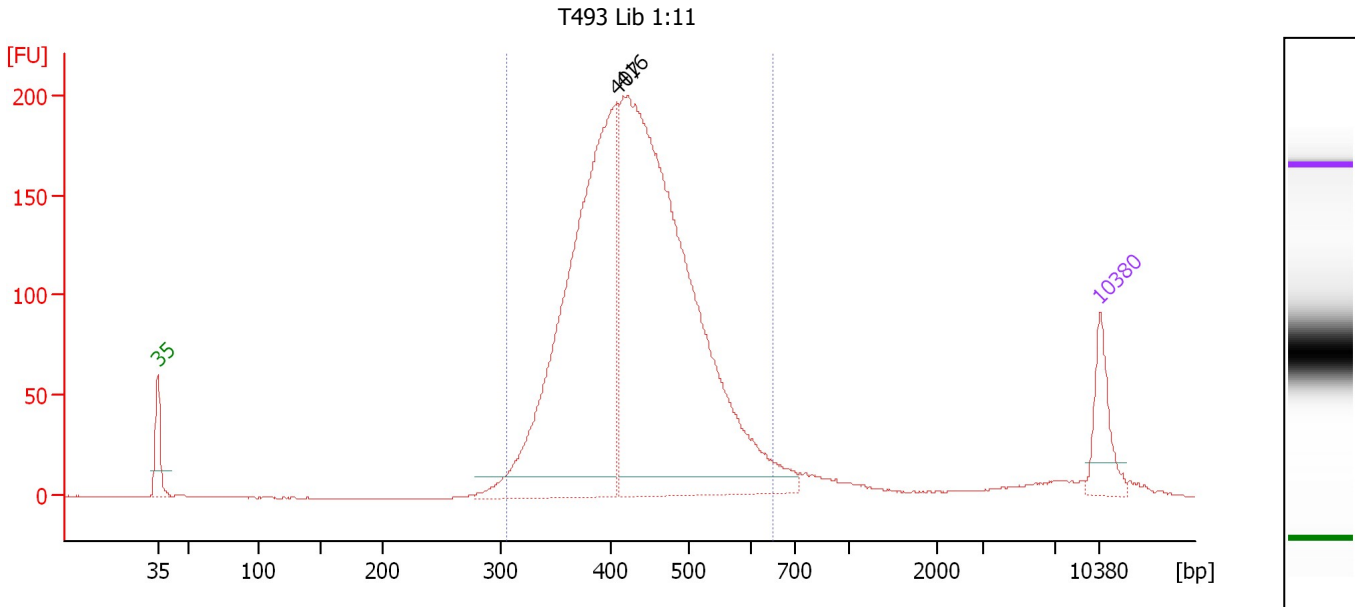
Region table for sample 4 : NS177 Lib 1:12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
308	701	448	10,235.0	2,928.22	2,704.8	94	16.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : T493 Lib 1:11

Height Threshold [FU] : 10

Overall Results for sample 5 : T493 Lib 1:11

Number of peaks found: 2 Corr. Area 1: 2,714.8
 Noise: 0.2

Peak table for sample 5 : T493 Lib 1:11

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	407	1,154.25	4,298.7	
3	416	1,655.79	6,025.3	
4	10,380	75.00	10.9	Upper Marker

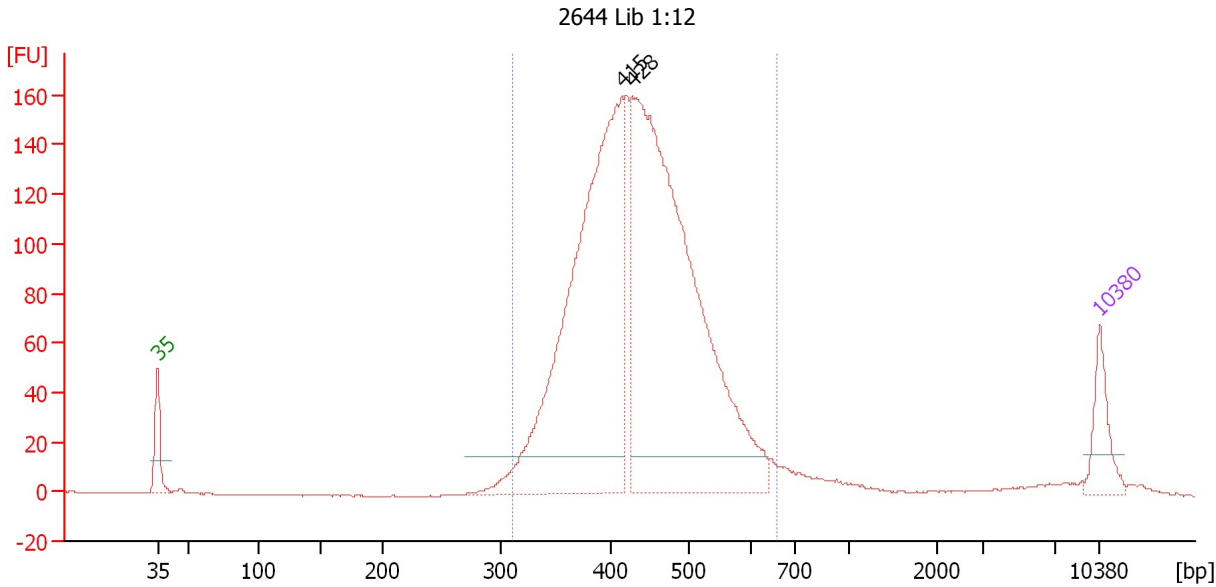
Region table for sample 5 : T493 Lib 1:11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
305	648	435	10,095.7	2,820.43	2,714.8	92	15.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : 2644 Lib 1:12

Height Threshold [FU] : 15

Overall Results for sample 6 : 2644 Lib 1:12

Number of peaks found: 2 Corr. Area 1: 2,169.7
 Noise: 0.2

Peak table for sample 6 : 2644 Lib 1:12

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	415	1,324.50	4,838.7	
3	428	1,607.76	5,697.9	
4	10,380	75.00	10.9	Upper Marker

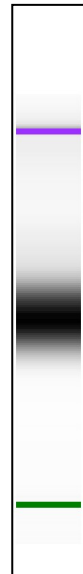
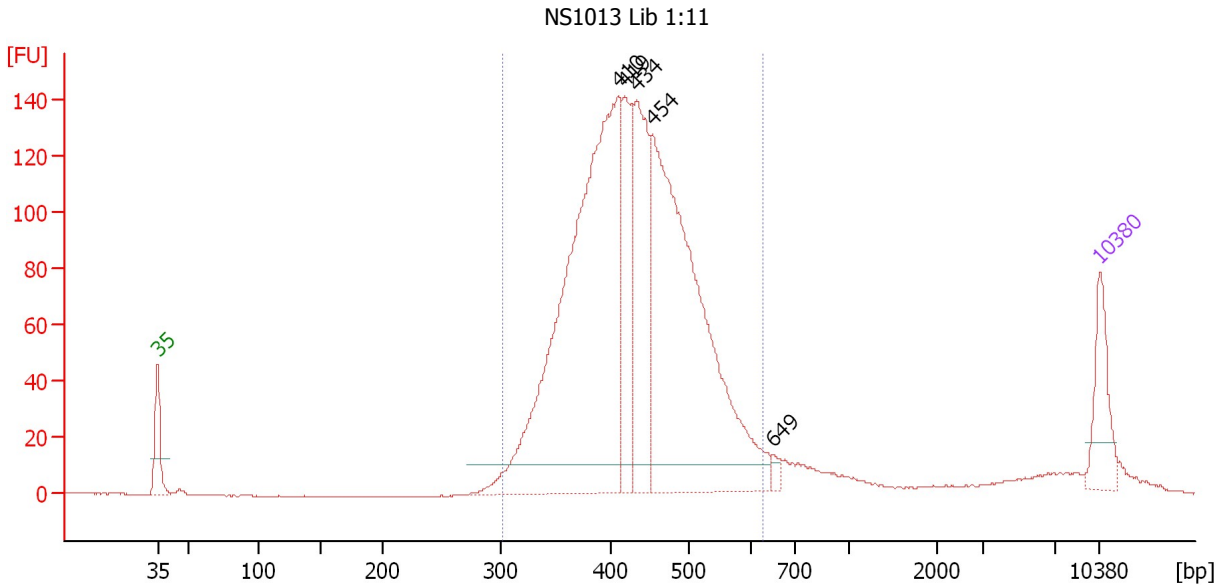
Region table for sample 6 : 2644 Lib 1:12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
310	656	440	10,994.4	3,103.97	2,169.7	93	15.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : NS1013 Lib 1:11

Height Threshold [FU] : 10

Overall Results for sample 7 : NS1013 Lib 1:11

Number of peaks found: 5 Corr. Area 1: 1,975.9
 Noise: 0.2

Peak table for sample 7 : NS1013 Lib 1:11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	410	1,134.14	4,192.5	
3	419	212.33	768.3	
4	434	287.21	1,002.7	
5	454	914.38	3,051.2	
6	649	12.16	28.4	
7	10,380	75.00	10.9	Upper Marker

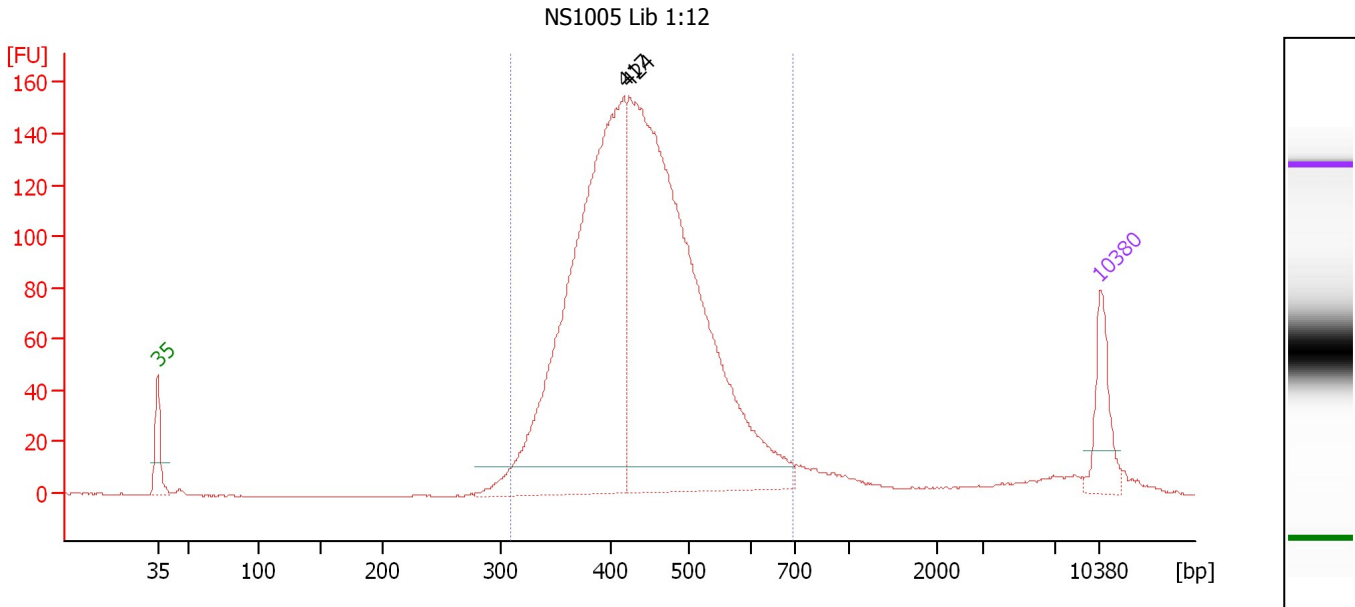
Region table for sample 7 : NS1013 Lib 1:11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
302	628	434	9,336.7	2,601.36	1,975.9	90	15.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : NS1005 Lib 1:12

Height Threshold [FU] : 10

Overall Results for sample 8 : NS1005 Lib 1:12

Number of peaks found: 2 Corr. Area 1: 2,159.6
 Noise: 0.2

Peak table for sample 8 : NS1005 Lib 1:12

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	417	1,213.63	4,408.8	
3	424	1,473.65	5,271.9	
4	10,380	75.00	10.9	Upper Marker

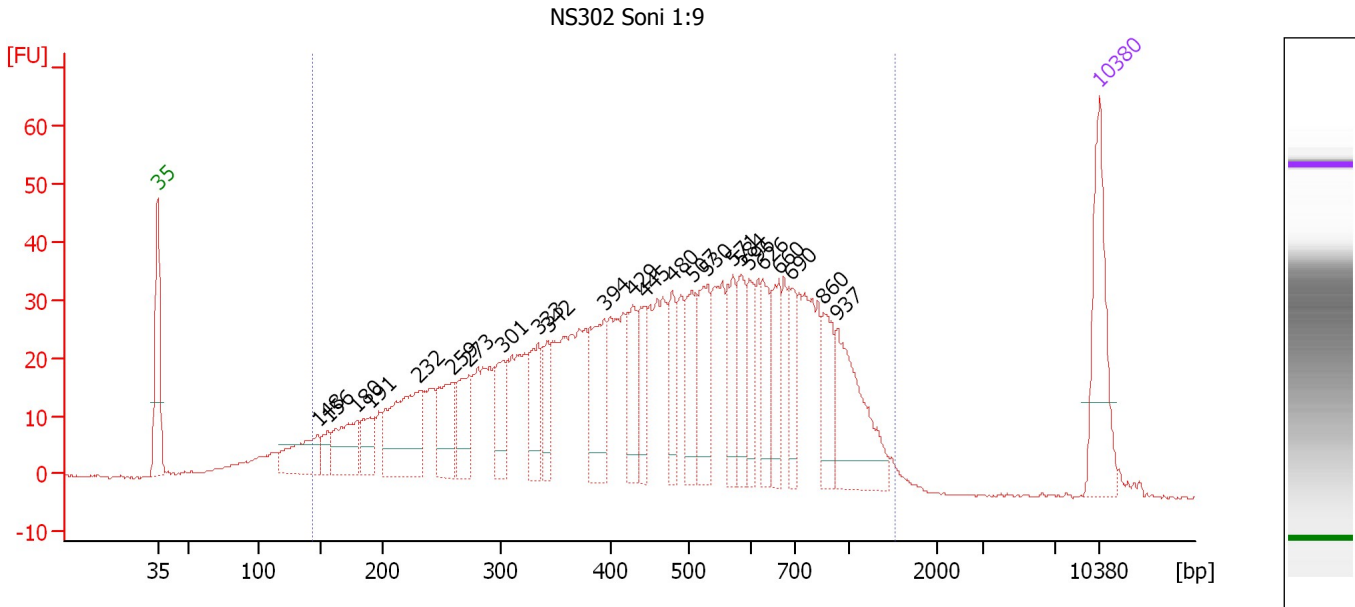
Region table for sample 8 : NS1005 Lib 1:12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
308	693	443	9,603.0	2,718.60	2,159.6	92	16.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : NS302 Soni 1:9

Number of peaks found: 24 Corr. Area 1: 1,336.5
 Noise: 0.2

Peak table for sample 9 : NS302 Soni 1:9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	64.52	662.7	
3	156	20.52	199.7	
4	180	62.28	525.0	
5	191	34.92	277.0	
6	232	121.84	797.1	
7	259	60.45	353.3	
8	273	54.17	300.8	
9	301	51.65	259.9	
10	333	53.81	244.6	
11	342	33.95	150.2	
12	394	82.34	316.6	
13	429	48.24	170.5	
14	445	36.80	125.3	
15	480	40.83	129.0	
16	507	52.55	157.2	
17	530	63.63	181.8	
18	571	47.91	127.2	
19	584	42.39	110.1	
20	596	38.22	97.1	
21	626	42.87	103.7	
22	660	42.96	98.6	
23	690	34.55	75.8	
24	860	43.36	76.4	
25	937	95.48	154.3	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...

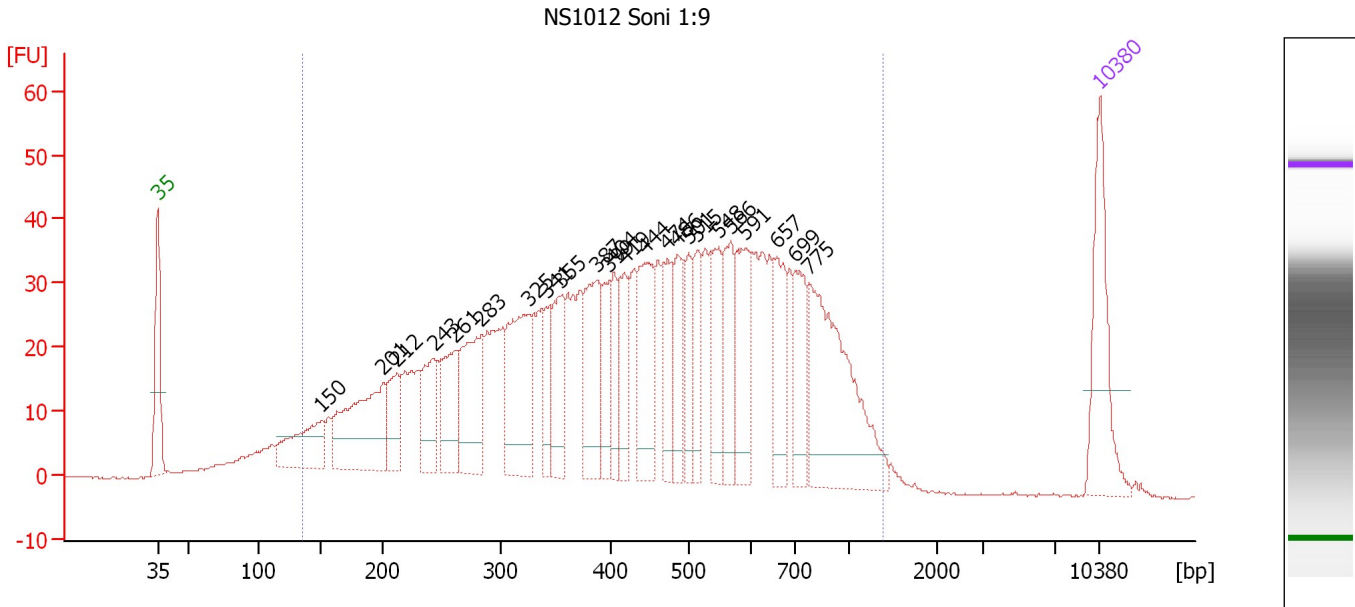
... Region table for sample 9 : NS302 Soni 1:9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
143	1,531	506	9,007.2	2,156.97	1,336.5	95	47.8	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NS1012 Soni 1:9

Number of peaks found: 24 Corr. Area 1: 1,473.5
 Noise: 0.2

Peak table for sample 10 : NS1012 Soni 1:9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	150	79.90	805.2	
3	201	146.12	1,099.4	
4	212	50.47	360.0	
5	243	64.44	401.1	
6	261	74.33	431.9	
7	283	105.95	566.7	
8	325	128.32	598.3	
9	341	39.45	175.5	
10	355	67.46	287.9	
11	387	90.18	352.8	
12	399	39.83	151.3	
13	404	40.80	153.0	
14	419	46.99	170.1	
15	444	87.73	299.5	
16	474	48.53	155.2	
17	486	55.46	172.9	
18	501	42.32	128.1	
19	515	42.13	124.0	
20	548	62.53	172.8	
21	566	55.56	148.7	
22	591	76.65	196.5	
23	657	58.50	134.8	
24	699	61.08	132.4	
25	775	185.79	363.0	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...

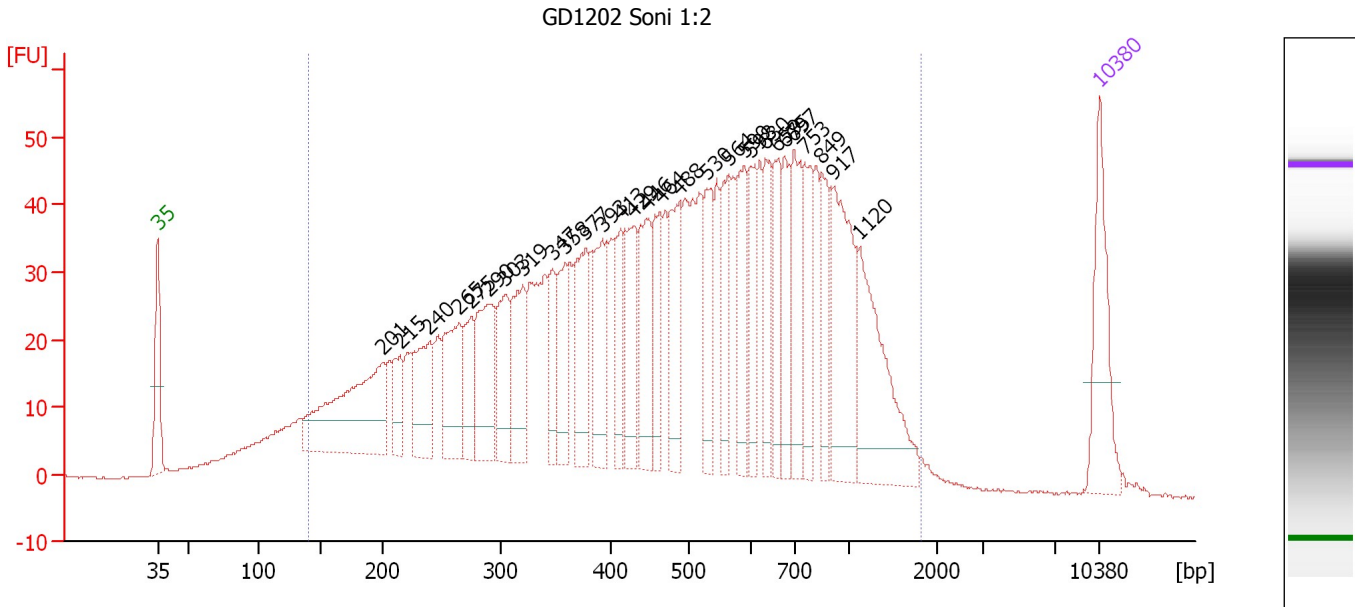
... Region table for sample 10 : NS1012 Soni 1:9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
135	1,379	478	10,887.5	2,480.72	1,473.5	95	46.2	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : GD1202 Soni 1:2

Number of peaks found: 29 Corr. Area 1: 1,832.5
 Noise: 0.1

Peak table for sample 11 : GD1202 Soni 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	201	213.86	1,614.8	
3	215	43.44	306.2	
4	240	89.23	563.8	
5	265	98.90	566.1	
6	275	53.14	293.1	
7	290	106.44	557.0	
8	303	75.52	377.6	
9	319	86.32	409.6	
10	347	47.65	207.9	
11	358	62.48	264.7	
12	377	89.65	360.4	
13	393	76.04	293.4	
14	413	54.84	201.0	
15	429	75.40	266.4	
16	446	88.20	299.6	
17	464	61.15	199.7	
18	488	78.91	244.8	
19	530	67.30	192.4	
20	564	58.24	156.5	
21	590	70.64	181.4	
22	598	54.23	137.4	
23	630	55.19	132.7	
24	659	55.42	127.4	
25	675	55.50	124.6	
26	697	86.14	187.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
Modified: 1/30/2013 5:31:33 PM

Electropherogram Summary Continued ...

... Peak table for sample 11 : GD1202 Soni 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	753	61.74	124.3	
28	849	52.21	93.1	
29	917	127.84	211.1	
30	1,120	132.27	178.9	
31	10,380	75.00	10.9	Upper Marker

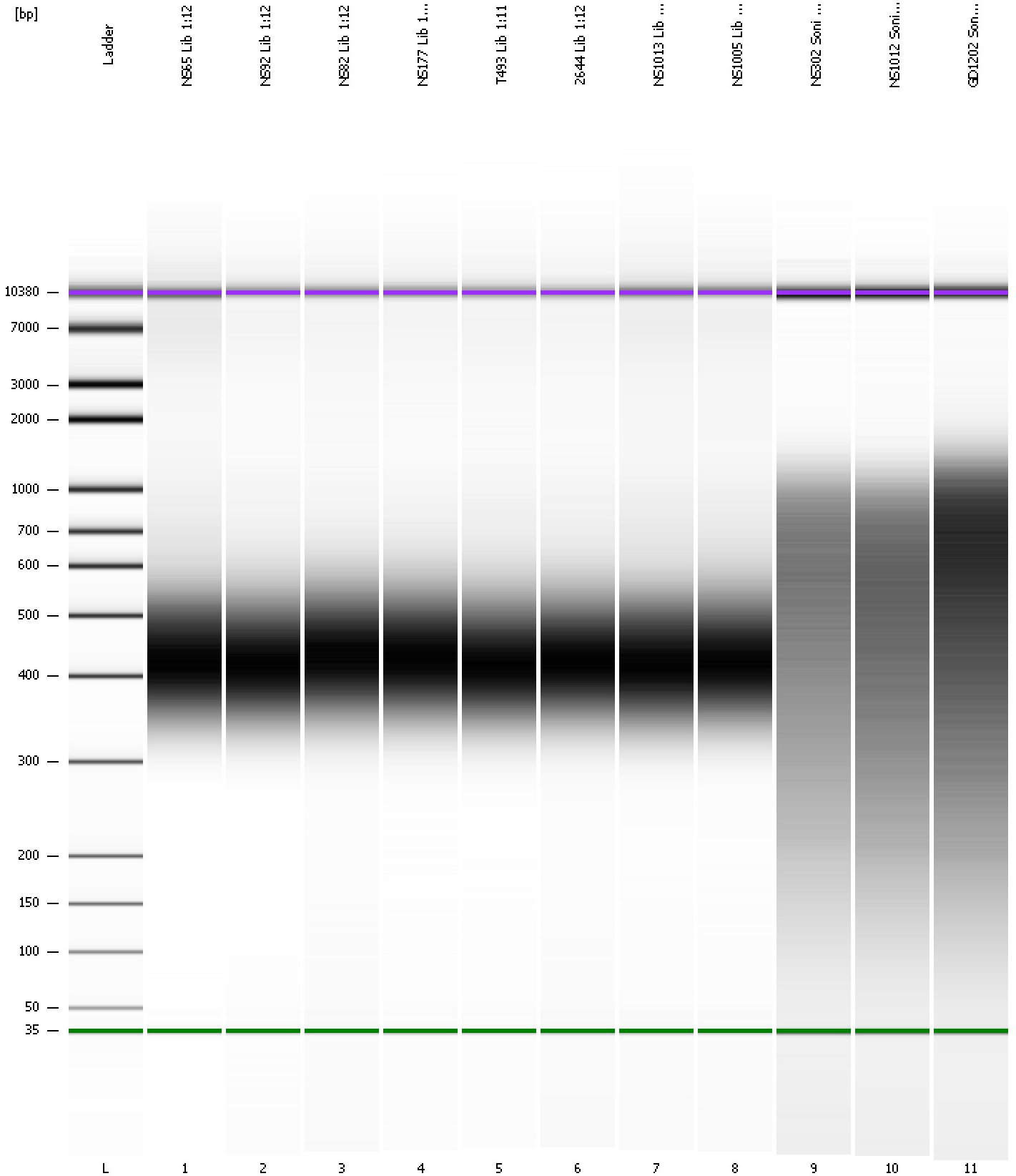
Region table for sample 11 : GD1202 Soni 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
139	1,810	546	14,210.4	3,443.30	1,832.5	94	54.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
Modified: 1/30/2013 5:31:33 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad

Created: 1/30/2013 4:46:56 PM
 Modified: 1/30/2013 5:31:33 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		1/30/2013 5:28:15 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-01-30\2013-01-30_001.xad)		Instrument	Run		1/30/2013 4:47:01 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/30/2013 4:47:01 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/30/2013 4:47:01 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/30/2013 4:47:01 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/30/2013 4:47:01 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/30/2013 4:47:01 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/30/2013 4:47:01 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1