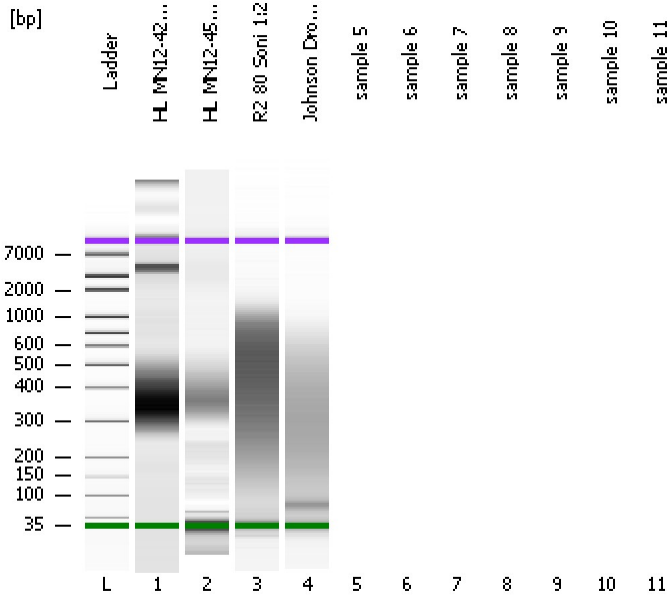


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
Modified: 3/14/2013 3:16:12 PM

Electrophoresis File Run Summary



Instrument Information:

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

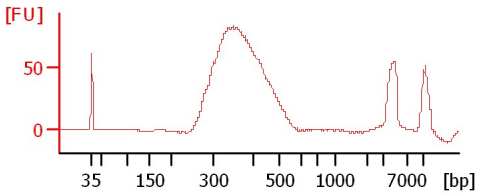
Assay Information:

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

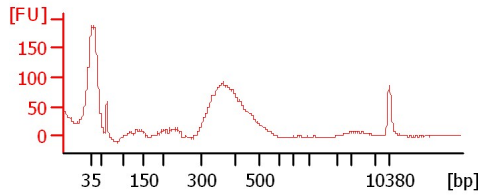
Chip Information:

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

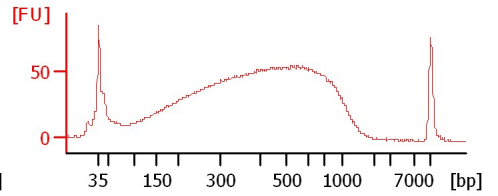
HL MN12-42 mRNA Lib



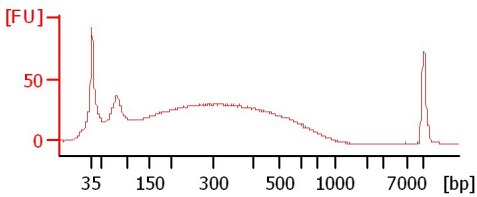
HL MN12-45 mRNA Lib



R2 80 Soni 1:2



Johnson Drone Soni 1:2



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
Modified: 3/14/2013 3:16:12 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HL MN12-42 mRNA Lib		<input type="checkbox"/>	✓			
HL MN12-45 mRNA Lib		<input type="checkbox"/>	✓			
R2 80 Soni 1:2		<input type="checkbox"/>	✓			
Johnson Drone Soni 1:2		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>				
sample 6		<input type="checkbox"/>				
sample 7		<input type="checkbox"/>				
sample 8		<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:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
Modified: 3/14/2013 3:16:12 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

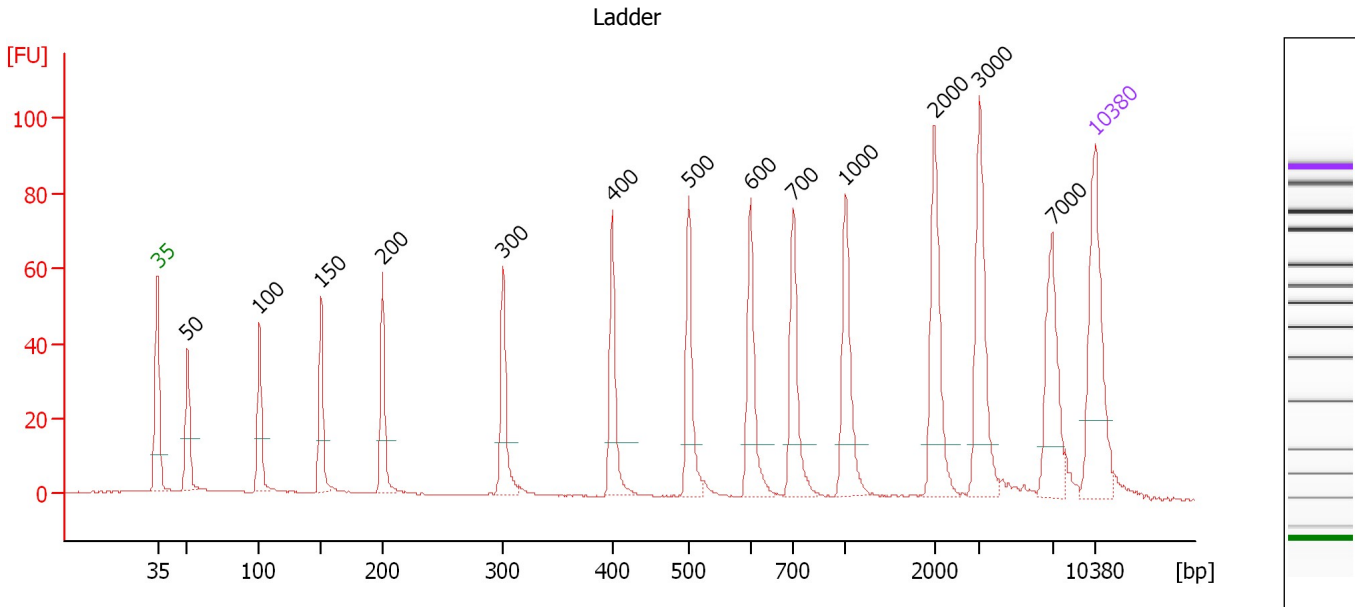
Ladder

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\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
 Modified: 3/14/2013 3:16:12 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

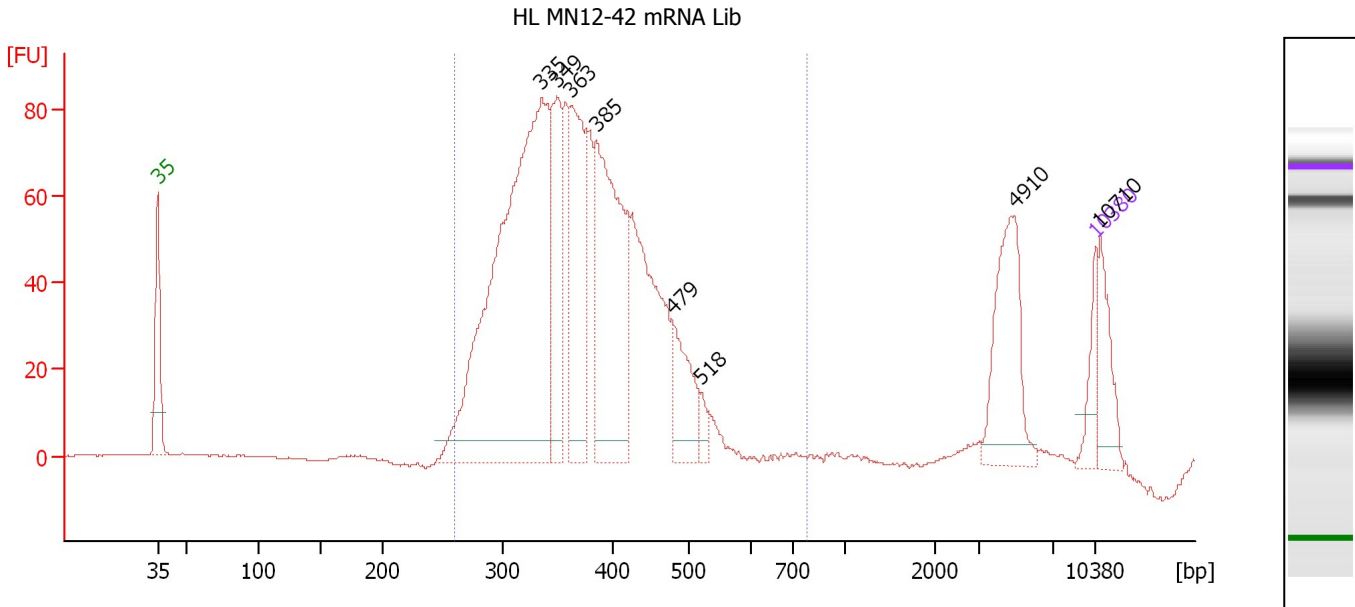
Peak table for Ladder

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\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
 Modified: 3/14/2013 3:16:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : HL MN12-42 mRNA Lib

Number of peaks found: 8 Corr. Area 1: 1,008.6
 Noise: 0.2

Peak table for sample 1 : HL MN12-42 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	335	1,987.19	8,998.6	
3	349	369.78	1,607.4	
4	363	505.62	2,113.3	
5	385	795.75	3,132.8	
6	479	215.02	680.3	
7	518	37.68	110.1	
8	4,910	308.61	95.2	
9	10,380	75.00	10.9	Upper Marker
10	10,710	0.00	0.0	

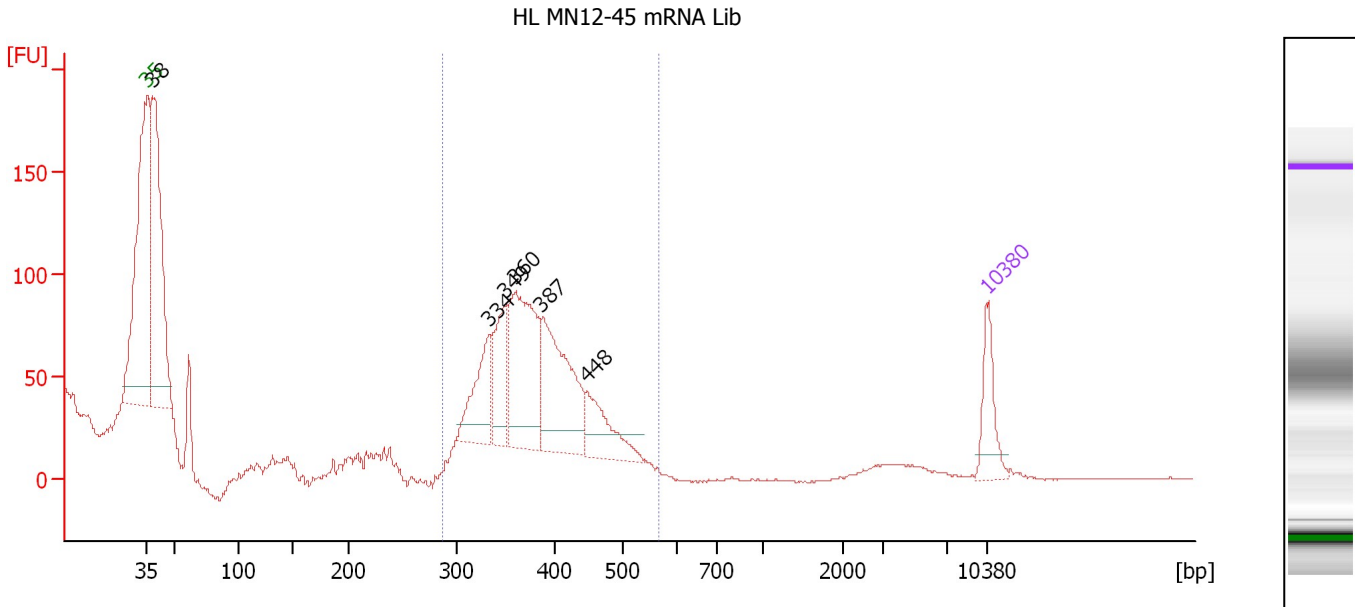
Region table for sample 1 : HL MN12-42 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
260	782	363	15,386.4	3,606.81	1,008.6	94	13.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
 Modified: 3/14/2013 3:16:12 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : HL MN12-45 mRNA Lib

Height Threshold [FU] : 10

Overall Results for sample 2 : HL MN12-45 mRNA Lib

Number of peaks found: 6 Corr. Area 1: 714.9
 Noise: 0.2

Peak table for sample 2 : HL MN12-45 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	38	777.49	31,239.2	
3	334	168.72	766.4	
4	349	150.14	651.1	
5	360	367.96	1,547.3	
6	387	311.77	1,220.3	
7	448	124.34	420.6	
8	10,380	75.00	10.9	Upper Marker

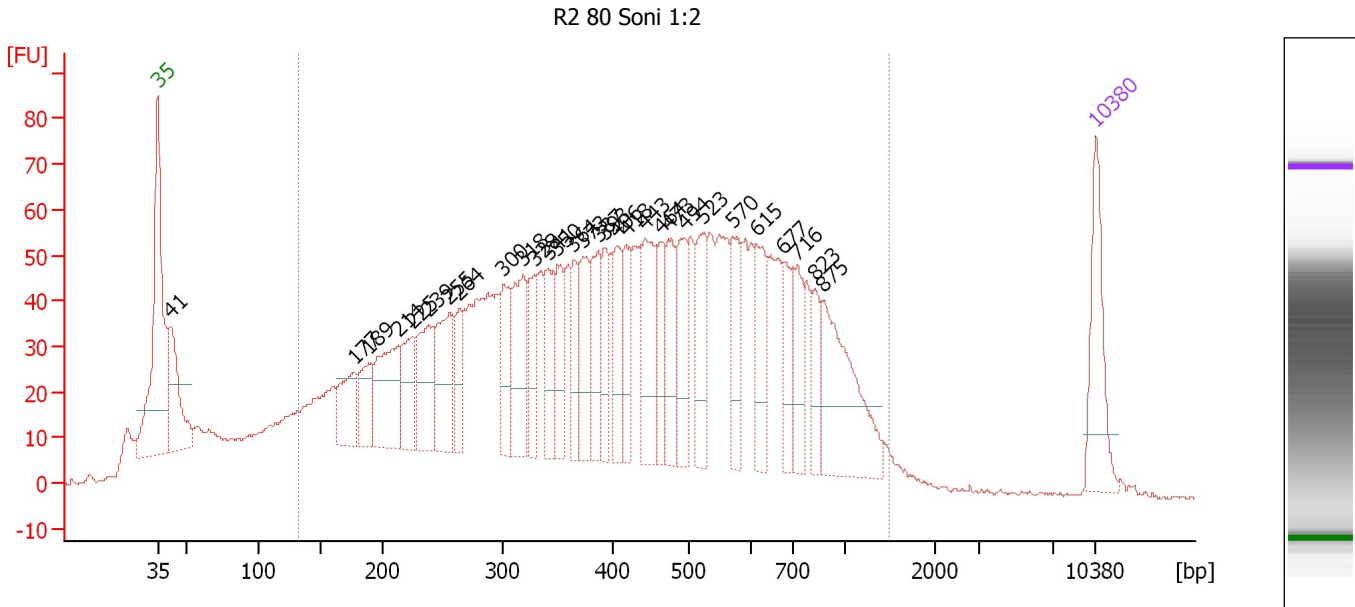
Region table for sample 2 : HL MN12-45 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
288	567	378	3,576.8	883.19	714.9	62	10.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
 Modified: 3/14/2013 3:16:12 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : R2 80 Soni 1:2

Height Threshold [FU] : 15

Overall Results for sample 3 : R2 80 Soni 1:2

Number of peaks found: 30 Corr. Area 1: 2,484.8
 Noise: 0.3

Peak table for sample 3 : R2 80 Soni 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	132.70	4,847.1	
3	177	77.52	664.6	
4	189	63.60	510.5	
5	214	129.15	916.3	
6	225	78.53	528.3	
7	239	102.25	648.3	
8	255	111.07	659.0	
9	264	52.00	298.6	
10	300	78.60	397.2	
11	318	108.73	517.9	
12	328	61.40	283.6	
13	341	66.14	293.9	
14	350	70.10	303.6	
15	364	61.47	255.9	
16	373	74.54	302.5	
17	387	73.78	289.0	
18	393	57.18	220.2	
19	406	65.40	243.8	
20	418	61.06	221.2	
21	443	110.04	376.0	
22	464	56.34	184.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
 Modified: 3/14/2013 3:16:12 PM

Electropherogram Summary Continued ...

... Peak table for sample 3 : R2 80 Soni 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
23	473	77.86	249.5	
24	494	77.73	238.5	
25	523	76.33	221.3	
26	570	70.97	188.6	
27	615	69.27	170.5	
28	677	58.12	130.2	
29	716	55.68	117.9	
30	823	41.62	76.6	
31	875	152.69	264.5	
32	▶ 10,380	75.00	10.9	Upper Marker

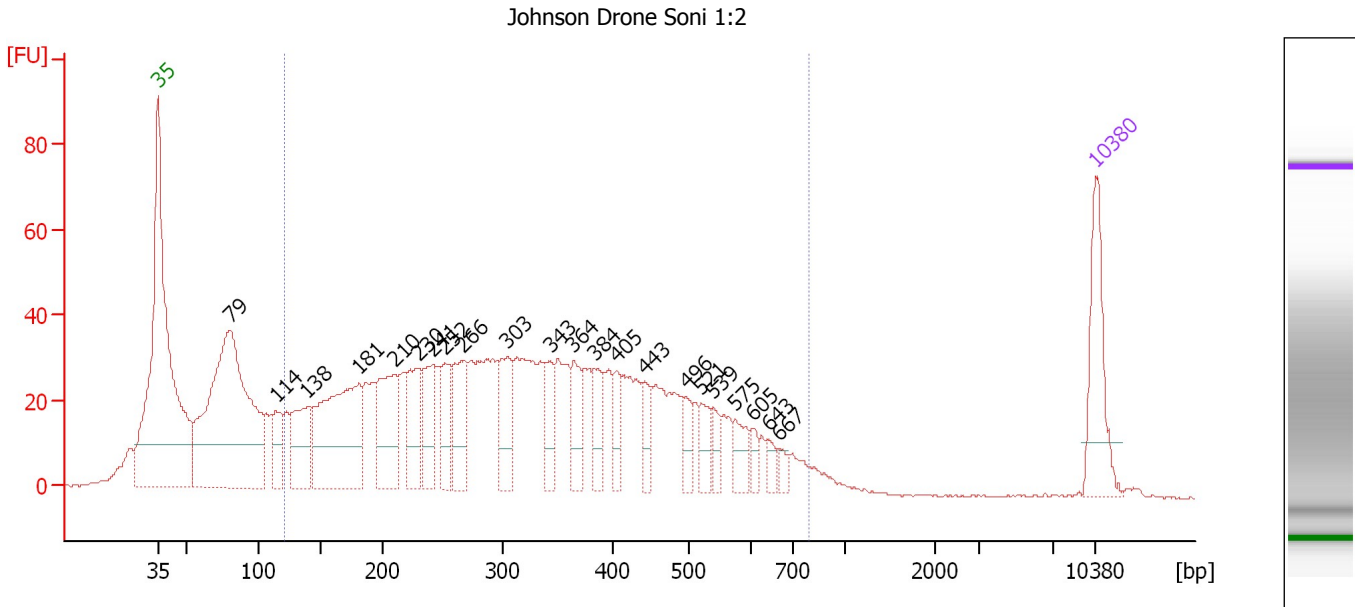
Region table for sample 3 : R2 80 Soni 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
131	1,484	463	18,230.5	3,893.96	2,484.8	87	50.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
 Modified: 3/14/2013 3:16:12 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : Johnson Drone Soni 1:2

Height Threshold [FU] : 10

Overall Results for sample 4 : Johnson Drone Soni 1:2

Number of peaks found: 22 Corr. Area 1: 1,385.1
 Noise: 0.2

Peak table for sample 4 : Johnson Drone Soni 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	79	554.48	10,584.6	
3	114	51.59	688.3	
4	138	103.59	1,133.6	
5	181	262.06	2,191.8	
6	210	131.47	947.9	
7	230	80.39	530.5	
8	241	68.76	431.4	
9	252	56.95	342.7	
10	266	81.83	466.4	
11	303	80.58	403.1	
12	343	43.71	193.0	
13	364	49.19	204.7	
14	384	40.19	158.6	
15	405	32.65	122.0	
16	443	31.14	106.5	
17	496	27.62	84.3	
18	521	26.57	77.3	
19	539	19.54	54.9	
20	575	29.97	79.0	
21	605	14.58	36.5	
22	643	13.55	31.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
Modified: 3/14/2013 3:16:12 PM

Electropherogram Summary Continued ...**... Peak table for sample 4 : Johnson Drone Soni 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
23	667	10.16	23.1	
24	▶ 10,380	75.00	10.9	Upper Marker

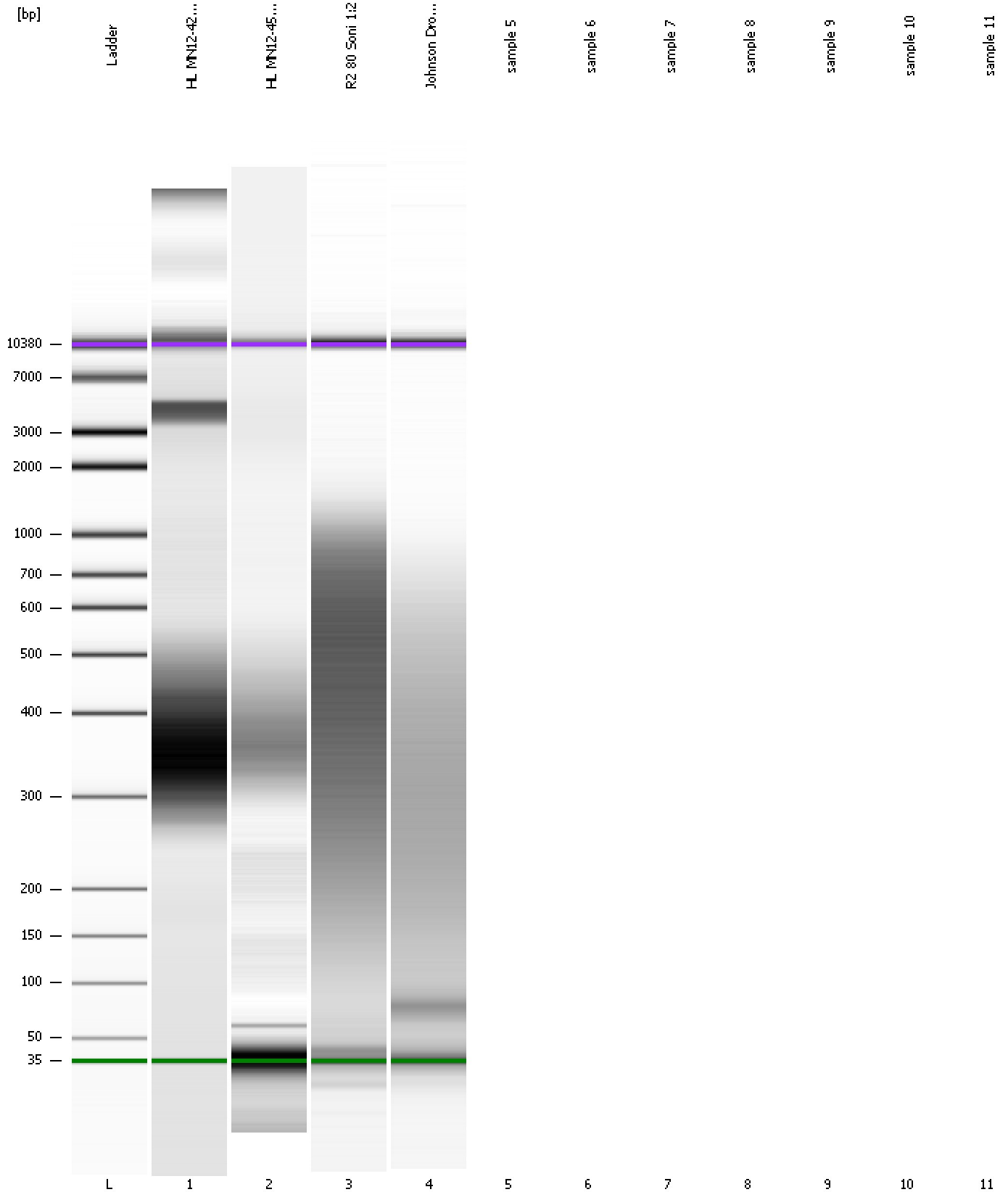
Region table for sample 4 : Johnson Drone Soni 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
120	792	339	13,008.0	2,210.05	1,385.1	78	41.1	■

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
Modified: 3/14/2013 3:16:12 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
Modified: 3/14/2013 3:16:12 PM

Invalid Samples

- Sample 5 has not been run, no results available.
- Sample 6 has not been run, no results available.
- Sample 7 has not been run, no results available.
- Sample 8 has not been run, no results available.
- 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
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad

Created: 3/14/2013 2:41:02 PM
 Modified: 3/14/2013 3:16:12 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 5)		Instrument	Run		3/14/2013 3:02:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-03-14\2013-03-14_001.xad)		Instrument	Run		3/14/2013 2:41:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/14/2013 2:41:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/14/2013 2:41:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/14/2013 2:41:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/14/2013 2:41:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/14/2013 2:41:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/14/2013 2:41:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1