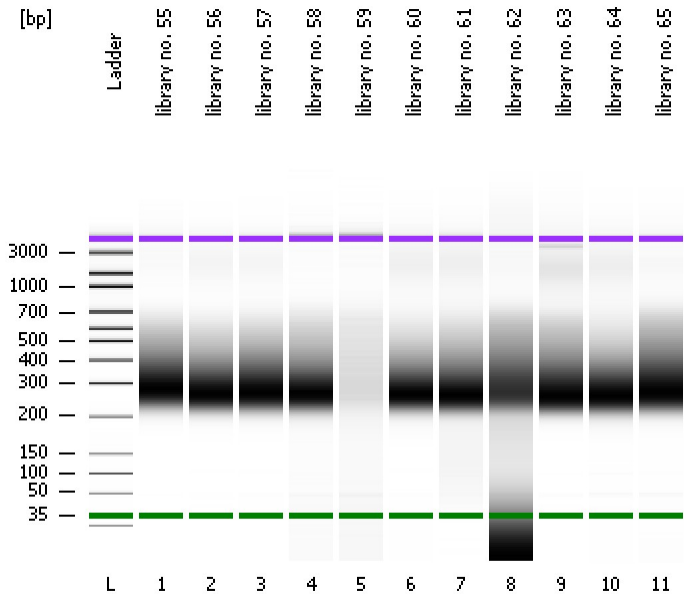


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
Modified: 8/27/2013 12:42:30 PM

Electrophoresis File Run Summary



Instrument Information:

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

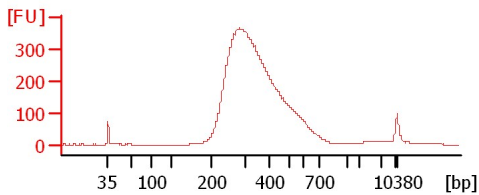
Assay Information:

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

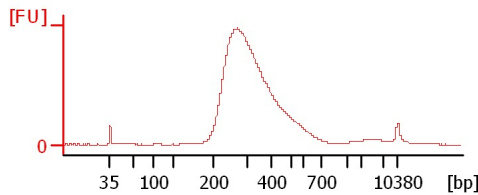
Chip Information:

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

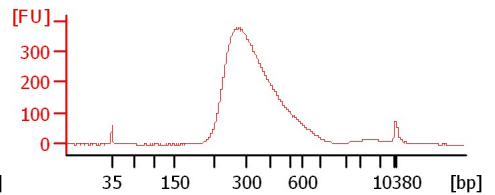
library no. 55



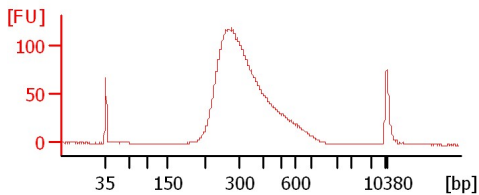
library no. 56



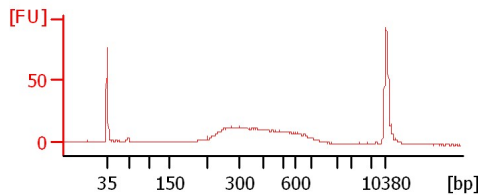
library no. 57



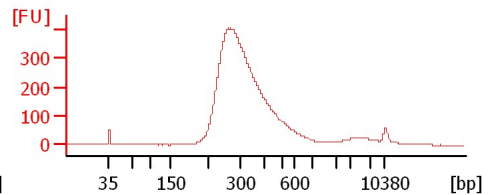
library no. 58



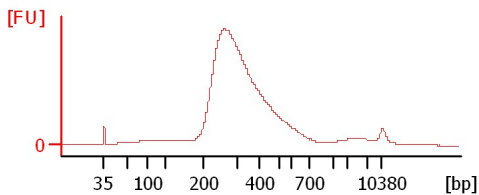
library no. 59



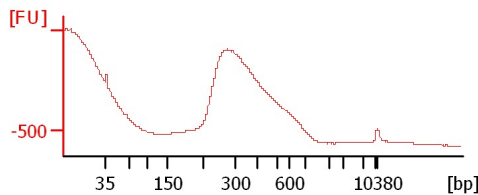
library no. 60



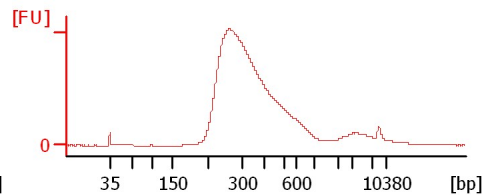
library no. 61



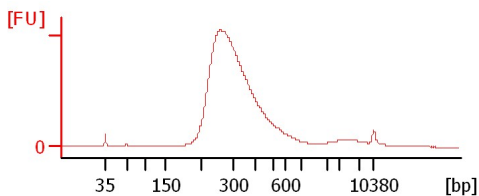
library no. 62



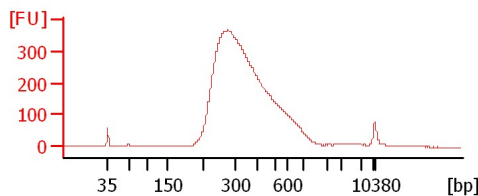
library no. 63



library no. 64



library no. 65



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
library no. 55		<input type="checkbox"/>	✓			
library no. 56		<input type="checkbox"/>	✓			
library no. 57		<input type="checkbox"/>	✓			
library no. 58		<input type="checkbox"/>	✓			
library no. 59		<input type="checkbox"/>	✓			
library no. 60		<input type="checkbox"/>	✓			
library no. 61		<input type="checkbox"/>	✓			
library no. 62		<input type="checkbox"/>	✓			
library no. 63		<input type="checkbox"/>	✓			
library no. 64		<input type="checkbox"/>	✓			
library no. 65		<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\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
Modified: 8/27/2013 12:42:30 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

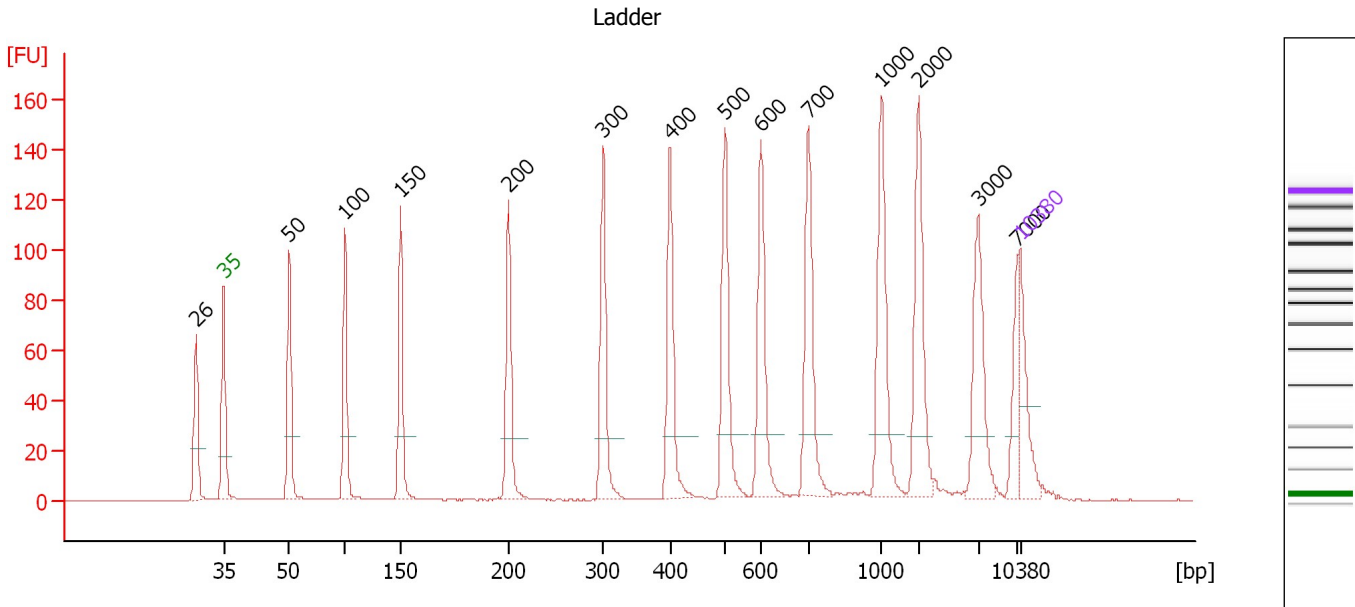
Ladder

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\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

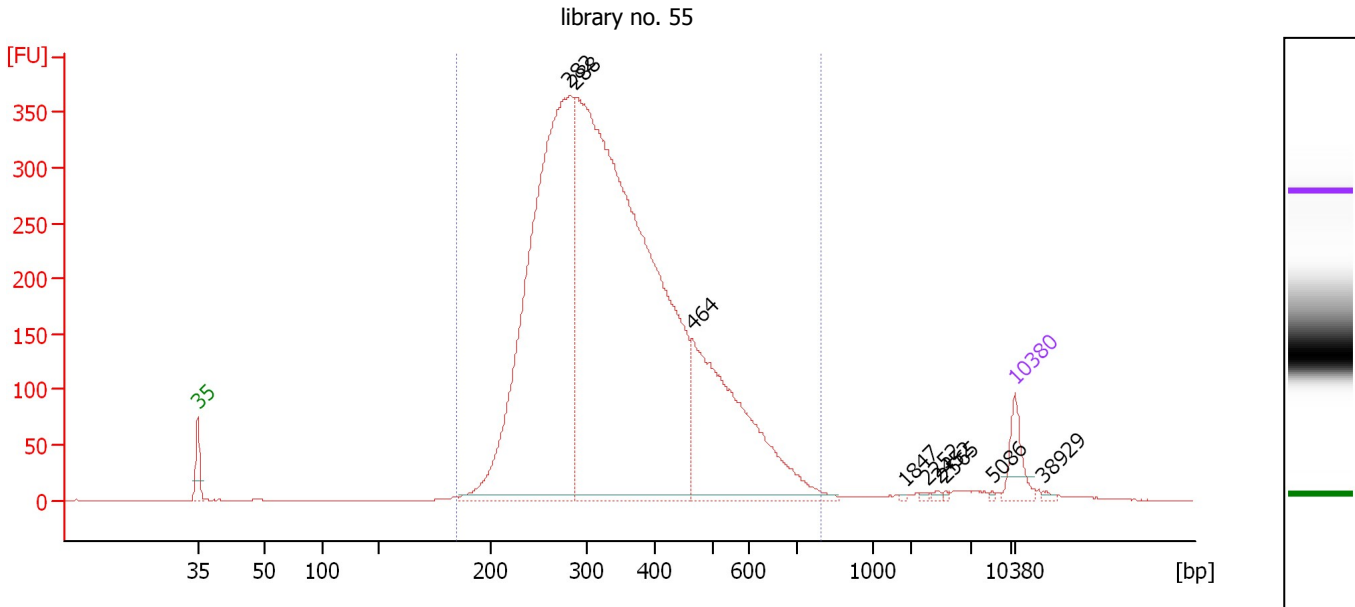
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	26	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	50	150.00	4,545.5	Ladder Peak
4	100	150.00	2,272.7	Ladder Peak
5	150	150.00	1,515.2	Ladder Peak
6	200	150.00	1,136.4	Ladder Peak
7	300	150.00	757.6	Ladder Peak
8	400	150.00	568.2	Ladder Peak
9	500	150.00	454.5	Ladder Peak
10	600	150.00	378.8	Ladder Peak
11	700	150.00	324.7	Ladder Peak
12	1,000	150.00	227.3	Ladder Peak
13	2,000	150.00	113.6	Ladder Peak
14	3,000	150.00	75.8	Ladder Peak
15	7,000	150.00	32.5	Ladder Peak
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : library no. 55

Number of peaks found: 9 Corr. Area 1: 6,577.6
 Noise: 0.1

Peak table for sample 1 : library no. 55

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	282	2,688.22	14,439.7	
3	288	4,217.76	22,179.4	
4	464	985.50	3,214.7	
5	1,847	2.29	1.9	
6	2,252	4.18	2.8	
7	2,452	5.74	3.5	
8	2,565	3.45	2.0	
9	5,086	3.51	1.0	
10	10,380	75.00	10.9	Upper Marker
11	38,929	0.00	0.0	

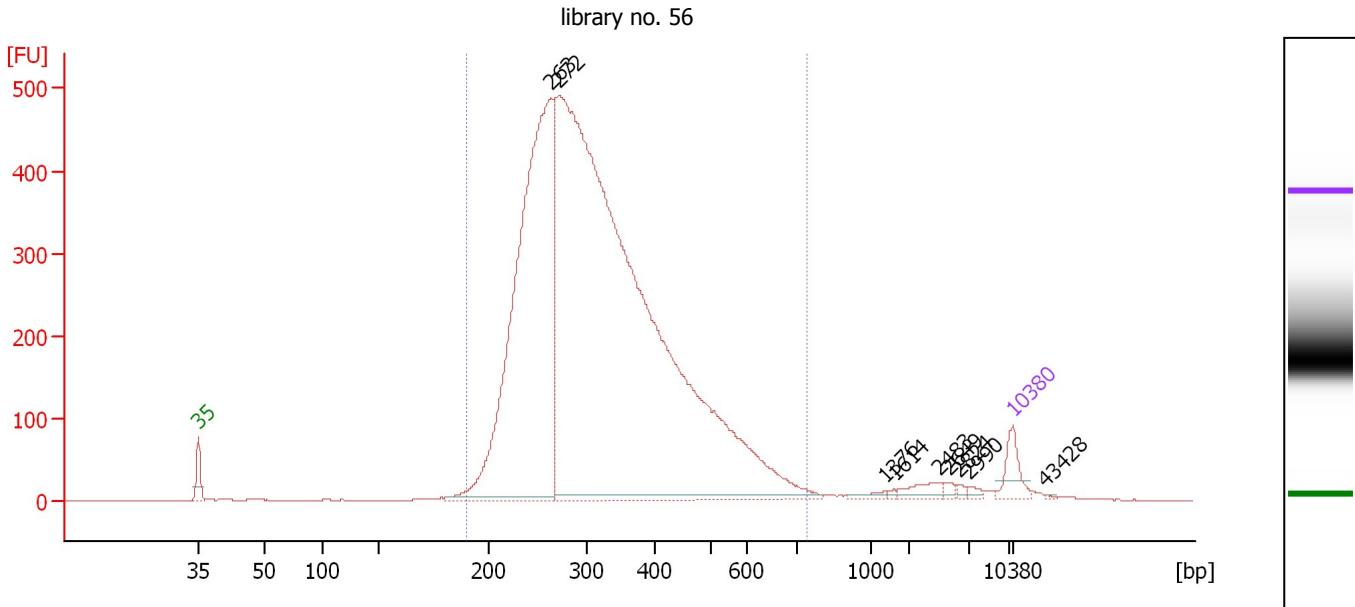
Region table for sample 1 : library no. 55

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
185	789	354	35,591.0	7,476.77	6,577.6	98	30.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : library no. 56

Number of peaks found: 9 Corr. Area 1: 8,215.9
 Noise: 0.2

Peak table for sample 2 : library no. 56

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	263	2,919.33	16,790.1	
3	272	6,938.39	38,688.4	
4	1,376	19.50	21.5	
5	1,614	6.23	5.8	
6	2,483	47.19	28.8	
7	2,649	15.22	8.7	
8	2,824	11.63	6.2	
9	2,990	13.29	6.7	
10	10,380	75.00	10.9	Upper Marker
11	43,428	0.00	0.0	

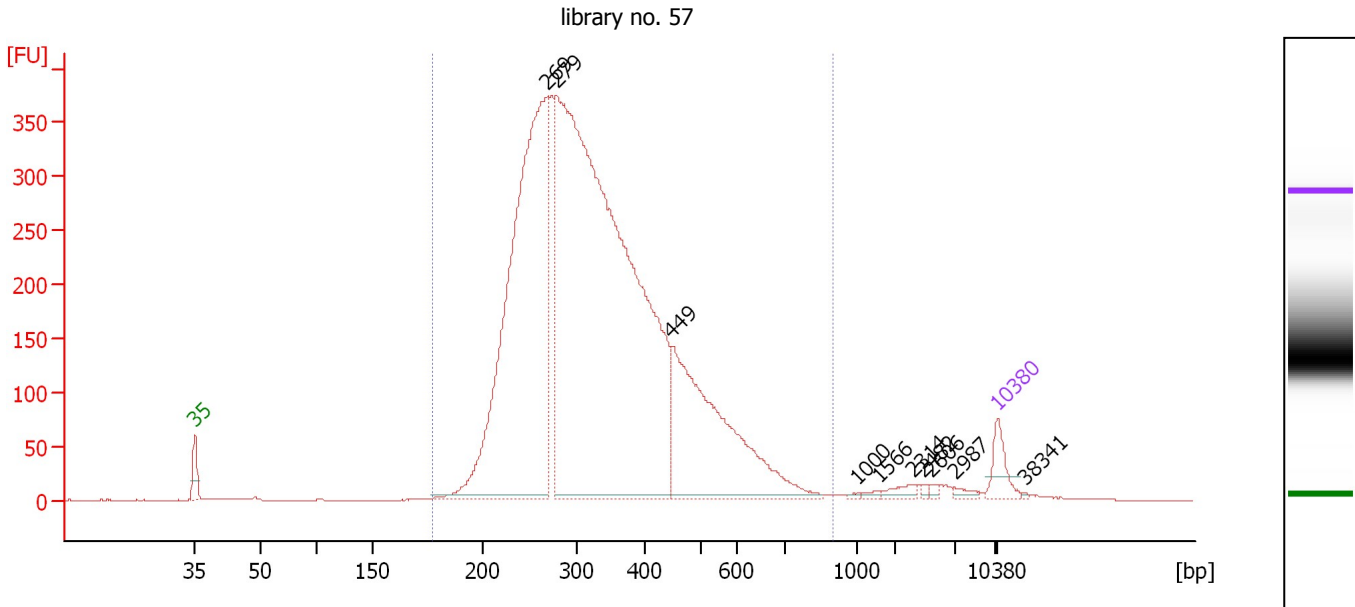
Region table for sample 2 : library no. 56

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
189	746	331	45,272.3	8,996.37	8,215.9	97	30.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : library no. 57

Number of peaks found: 10 Corr. Area 1: 6,709.3
 Noise: 0.3

Peak table for sample 3 : library no. 57

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	269	2,794.69	15,739.9	
3	279	5,133.58	27,923.1	
4	449	1,106.09	3,732.5	
5	1,000	5.98	9.1	
6	1,566	11.06	10.7	
7	2,314	28.64	18.8	
8	2,482	7.75	4.7	
9	2,606	9.98	5.8	
10	2,987	17.01	8.6	
11	10,380	75.00	10.9	Upper Marker
12	38,341	0.00	0.0	

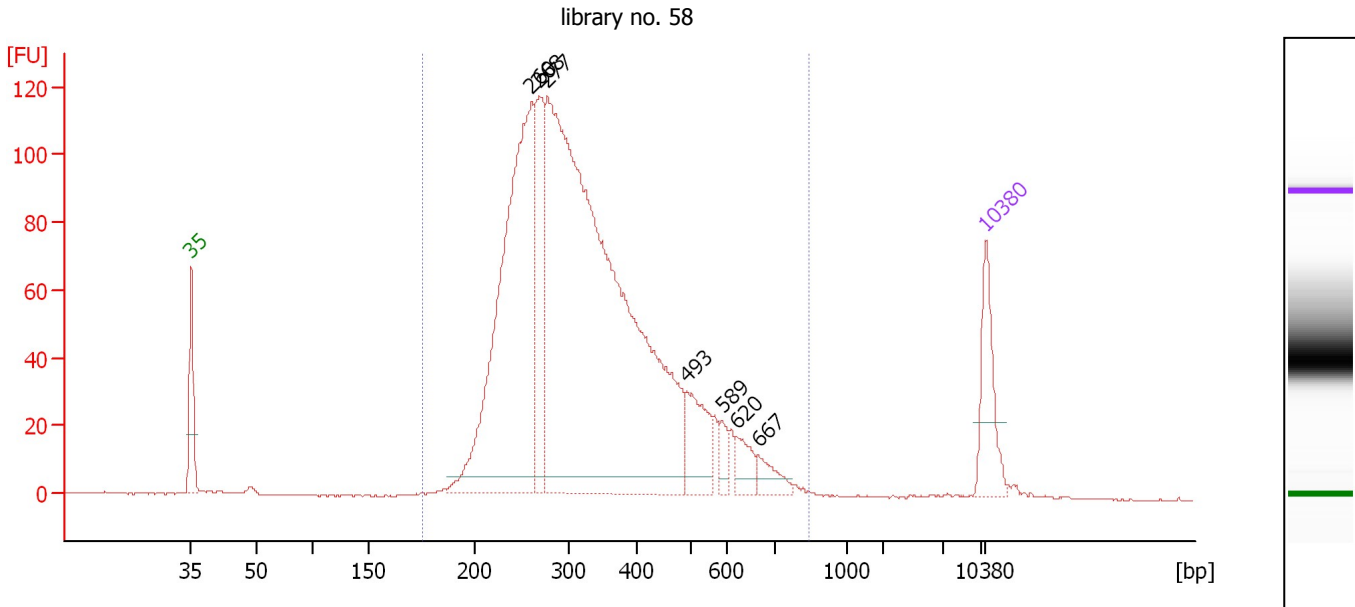
Region table for sample 3 : library no. 57

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
178	896	342	44,552.5	9,017.46	6,709.3	98	32.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : library no. 58

Number of peaks found: 7 Corr. Area 1: 2,021.8
 Noise: 0.2

Peak table for sample 4 : library no. 58

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	260	815.63	4,753.7	
3	268	228.73	1,290.9	
4	277	1,741.85	9,528.6	
5	493	98.15	301.5	
6	589	22.20	57.2	
7	620	36.39	88.9	
8	667	32.39	73.5	
9	10,380	75.00	10.9	Upper Marker

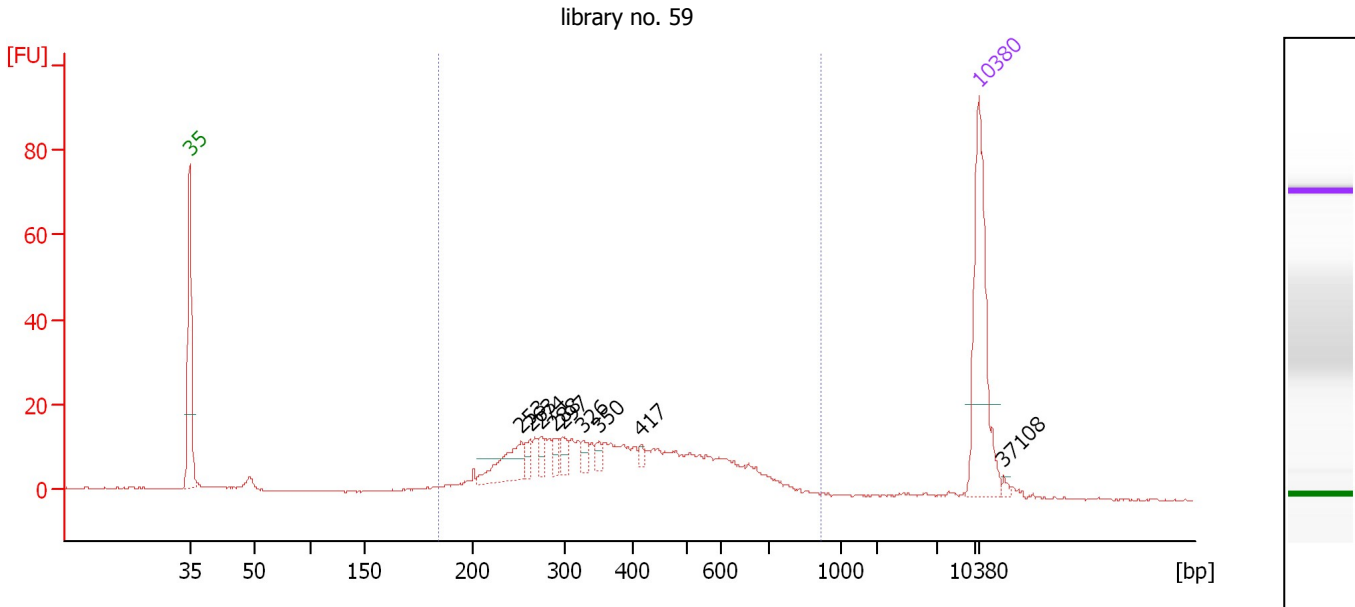
Region table for sample 4 : library no. 58

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
176	848	341	14,432.0	2,894.77	2,021.8	98	33.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : library no. 59

Number of peaks found: 9 Corr. Area 1: 350.7
 Noise: 0.2

Peak table for sample 5 : library no. 59

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	253	36.24	217.0	
3	263	8.98	51.8	
4	274	9.36	51.7	
5	288	8.63	45.5	
6	297	10.81	55.2	
7	326	7.51	34.9	
8	350	5.79	25.0	
9	417	3.55	12.9	
10	10,380	75.00	10.9	Upper Marker
11	37,108	0.00	0.0	

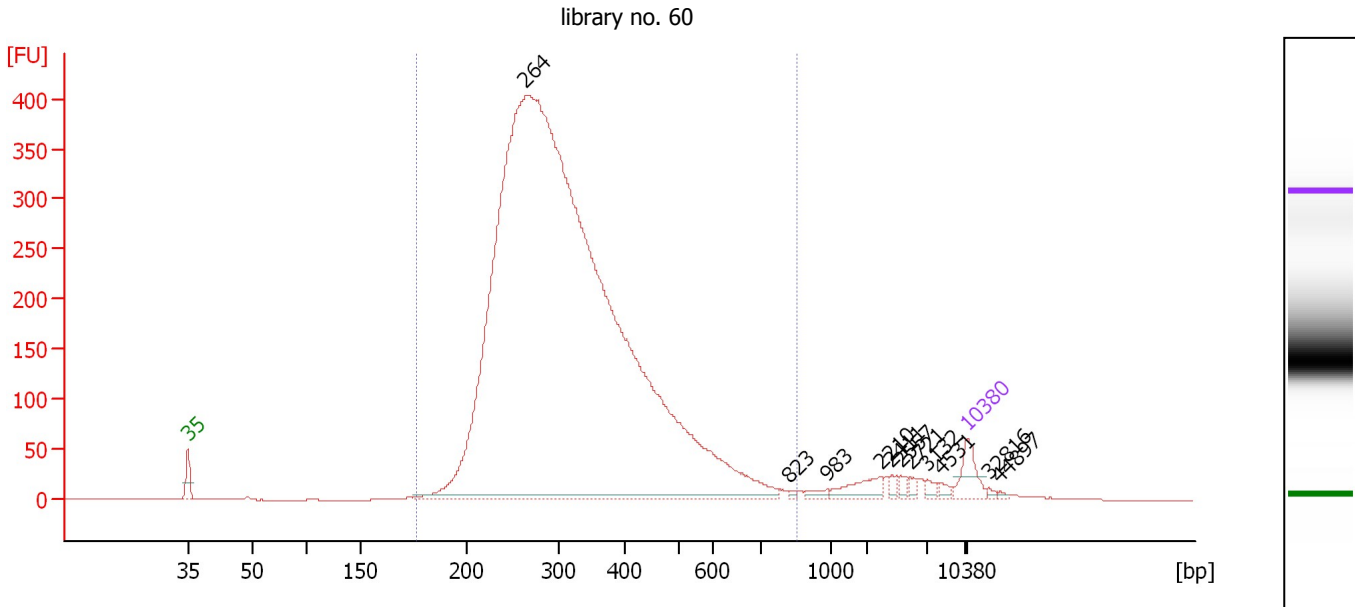
Region table for sample 5 : library no. 59

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
185	912	404	1,718.4	383.63	350.7	90	36.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : library no. 60

Number of peaks found: 11 Corr. Area 1: 6,486.4
 Noise: 0.1

Peak table for sample 6 : library no. 60

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	264	10,037.84	57,590.3	
3	823	6.07	11.2	
4	983	20.30	31.3	
5	2,210	69.99	48.0	
6	2,411	15.04	9.5	
7	2,557	17.43	10.3	
8	2,721	15.21	8.5	
9	3,132	17.51	8.5	
10	4,531	15.02	5.0	
11	10,380	75.00	10.9	Upper Marker
12	32,816	0.00	0.0	
13	44,897	0.00	0.0	

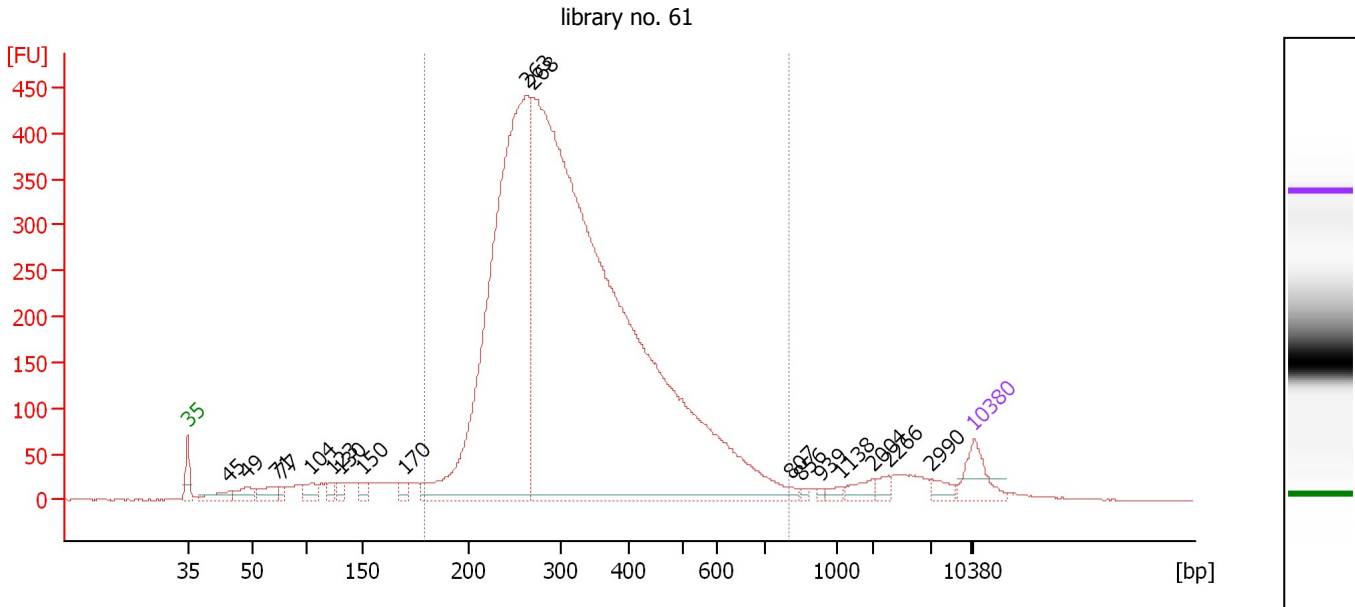
Region table for sample 6 : library no. 60

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
177	858	330	46,569.4	9,163.38	6,486.4	96	31.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : library no. 61

Number of peaks found: 18 Corr. Area 1: 7,726.2
 Noise: 0.3

Peak table for sample 7 : library no. 61

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	54.03	1,833.8	
3	49	59.73	1,857.5	
4	71	61.42	1,305.8	
5	77	22.01	432.5	
6	104	59.31	865.1	
7	123	31.79	391.0	
8	130	24.15	280.6	
9	150	32.73	331.2	
10	170	27.03	240.6	
11	263	2,473.38	14,276.2	
12	268	5,457.33	30,826.9	
13	807	9.48	17.8	
14	856	6.92	12.3	
15	939	6.61	10.7	
16	1,138	15.18	20.2	
17	2,004	31.03	23.5	
18	2,266	20.30	13.6	
19	2,990	25.00	12.7	
20	10,380	75.00	10.9	Upper Marker

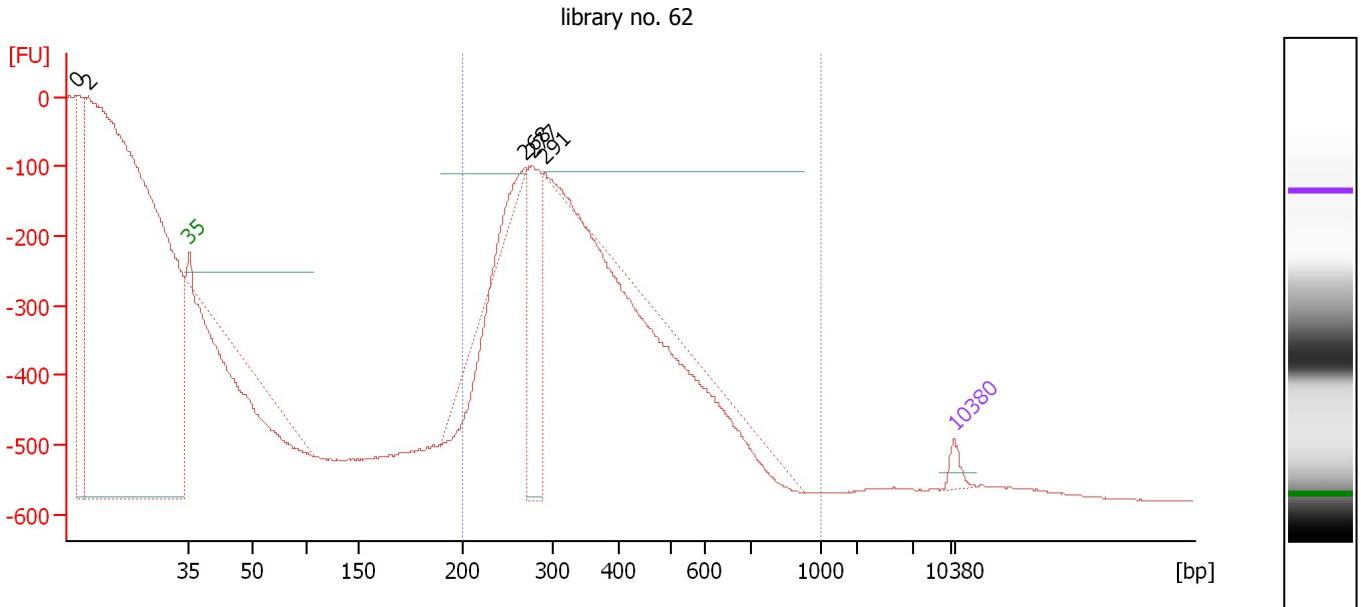
Region table for sample 7 : library no. 61

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
180	805	335	36,806.2	7,246.13	7,726.2	90	32.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : library no. 62

Number of peaks found: 5 Corr. Area 1: 1,338.7
 Noise: 0.6

Peak table for sample 8 : library no. 62

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	2	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	268	248.22	1,401.5	
5	277	1,546.31	8,471.0	
6	291	38.87	202.6	
7	10,380	75.00	10.9	Upper Marker

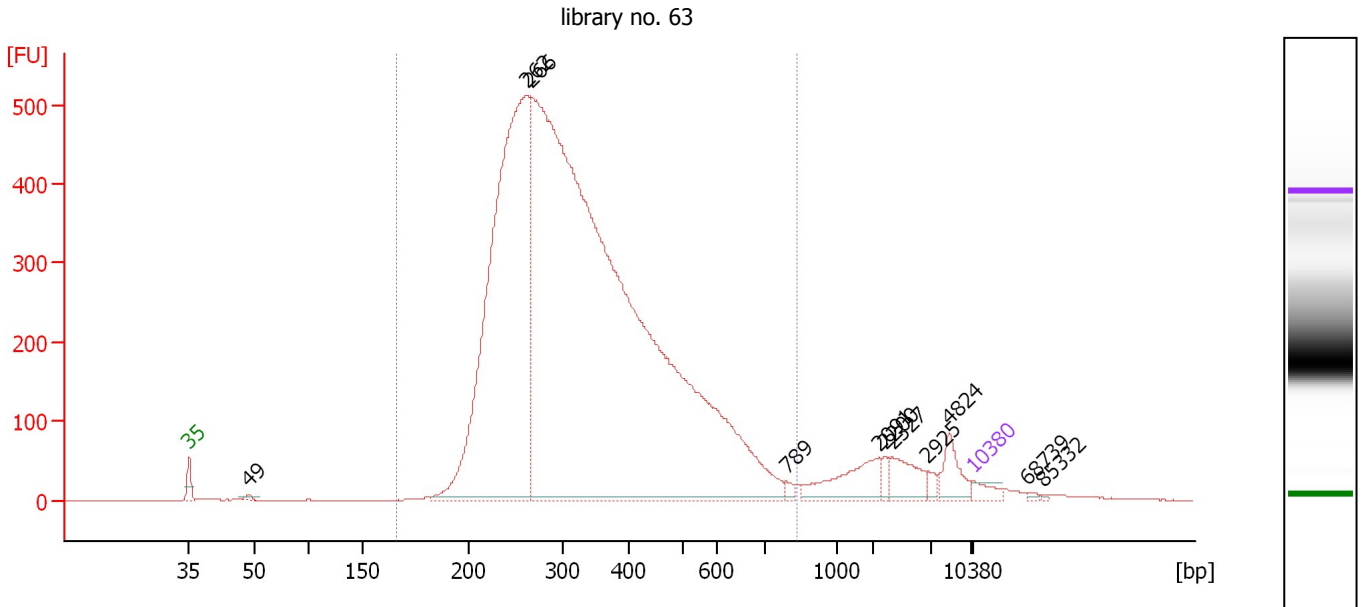
Region table for sample 8 : library no. 62

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	303	11,244.4	2,207.57	1,338.7	100	12.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : library no. 63

Number of peaks found: 11 Corr. Area 1: 9,574.2
 Noise: 0.3

Peak table for sample 9 : library no. 63

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	43.05	1,338.1	
3	262	7,805.38	45,220.8	
4	266	19,706.35	112,442.6	
5	789	43.17	82.9	
6	2,091	408.08	295.7	
7	2,200	60.12	41.4	
8	2,327	252.09	164.1	
9	2,925	47.76	24.7	
10	4,824	213.71	67.1	
11	10,380	75.00	10.9	Upper Marker
12	68,739	0.00	0.0	
13	85,332	0.00	0.0	

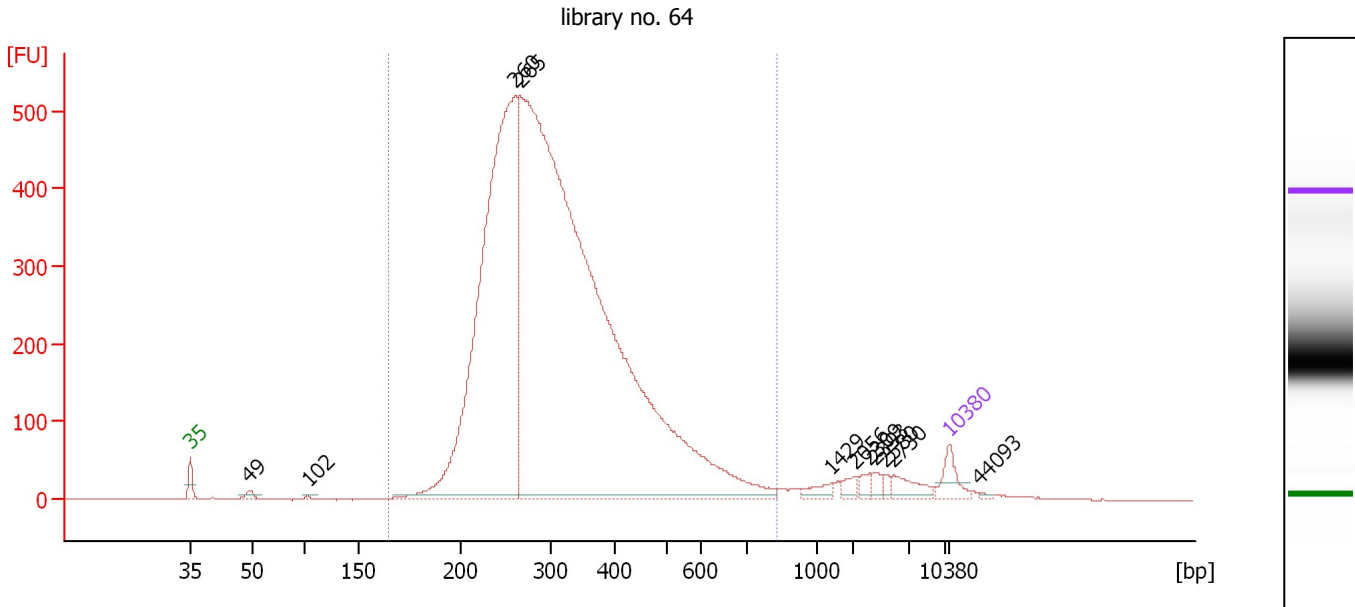
Region table for sample 9 : library no. 63

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
166	838	345	122,496.1	24,598.55	9,574.2	93	34.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : library no. 64

Number of peaks found: 11 Corr. Area 1: 8,597.9
 Noise: 0.3

Peak table for sample 10 : library no. 64

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	32.15	989.9	
3	102	10.16	151.1	
4	260	3,681.08	21,440.5	
5	265	8,028.79	45,926.0	
6	1,429	43.67	46.3	
7	2,056	32.45	23.9	
8	2,309	27.34	17.9	
9	2,393	26.96	17.1	
10	2,580	16.86	9.9	
11	2,730	69.60	38.6	
12	10,380	75.00	10.9	Upper Marker
13	44,093	0.00	0.0	

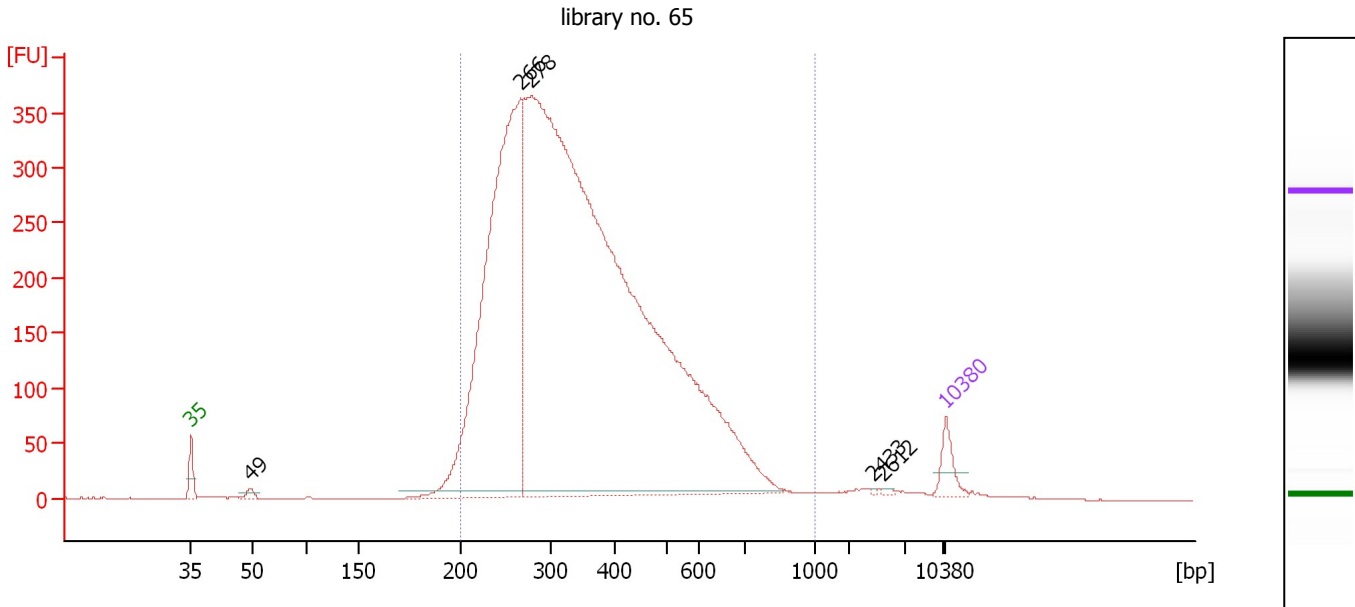
Region table for sample 10 : library no. 64

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
164	825	324	56,100.8	10,829.35	8,597.9	95	31.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad

Created: 8/27/2013 12:02:01 PM
 Modified: 8/27/2013 12:42:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : library no. 65

Number of peaks found: 5 Corr. Area 1: 7,083.4
 Noise: 0.3

Peak table for sample 11 : library no. 65

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	31.96	985.0	
3	266	3,138.21	17,851.6	
4	278	8,702.10	47,379.5	
5	2,433	3.22	2.0	
6	2,612	5.83	3.4	
7	10,380	75.00	10.9	Upper Marker

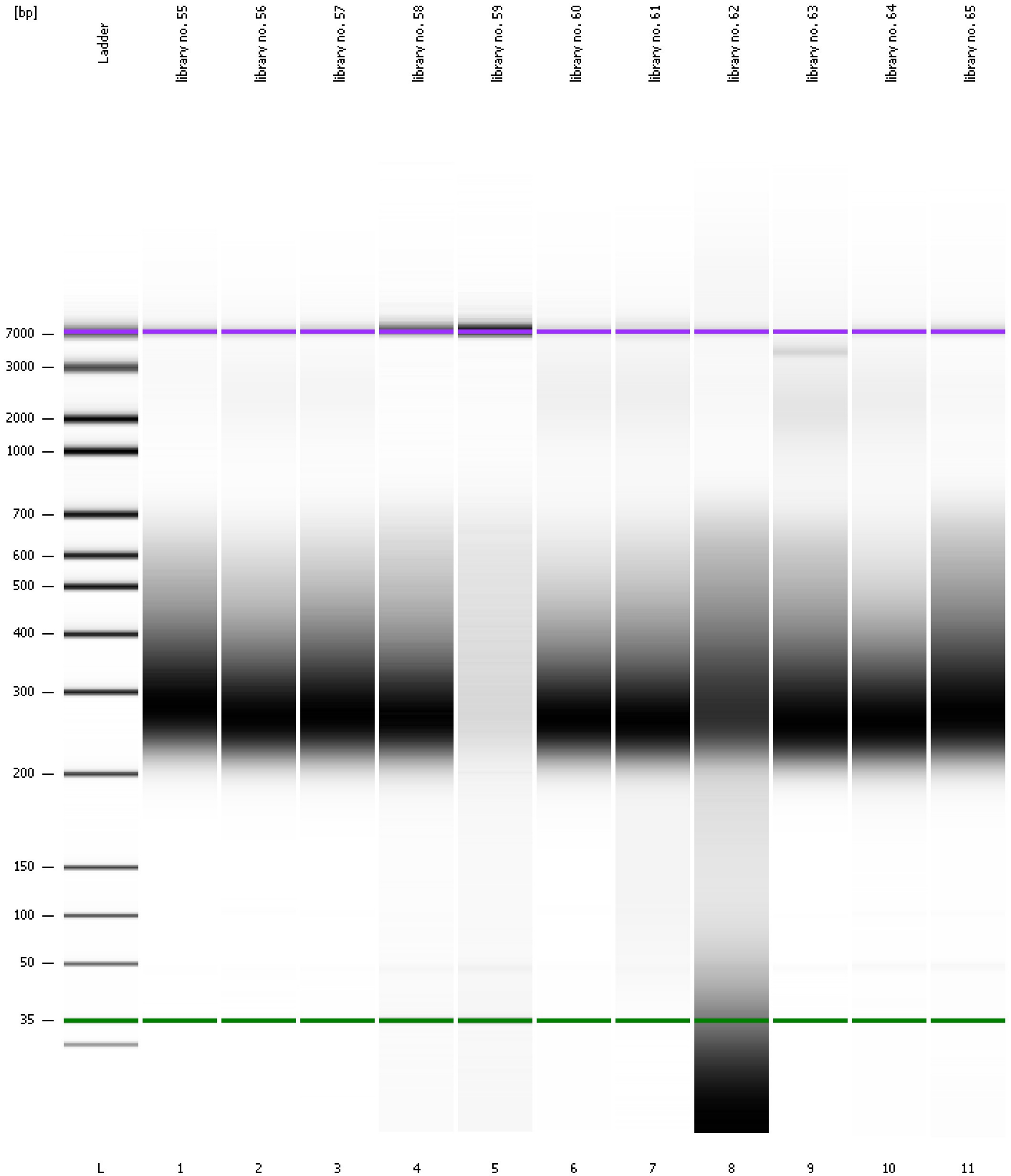
Region table for sample 11 : library no. 65

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	365	50,572.2	10,660.17	7,083.4	97	35.2	Blue

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Gel Image



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 Modified: 8/27/2013 12:42:30 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		8/27/2013 12:42:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-27\2013-08-27_003.xad)		Instrument	Run		8/27/2013 12:02:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/27/2013 12:02:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/27/2013 12:02:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/27/2013 12:02:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/27/2013 12:02:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/27/2013 12:02:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/27/2013 12:02:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1