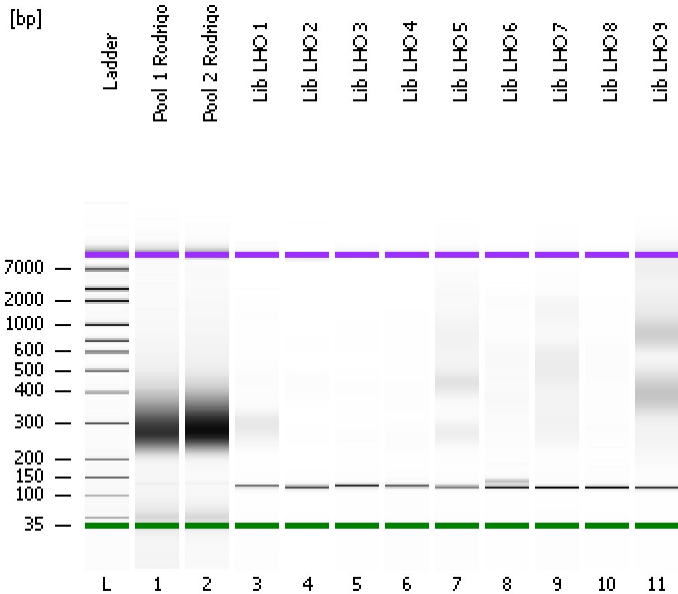


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
Modified: 7/5/2013 3:05:16 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

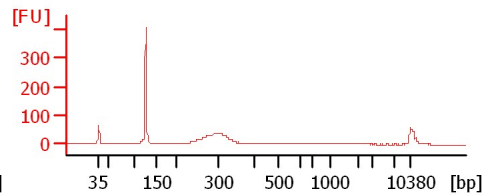
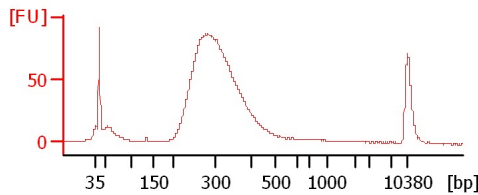
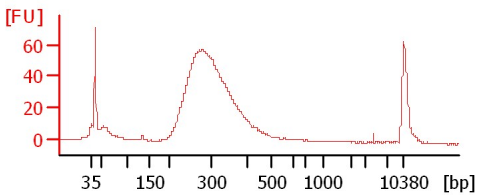
Chip Information:

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

Pool 1 Rodrigo

Pool 2 Rodrigo

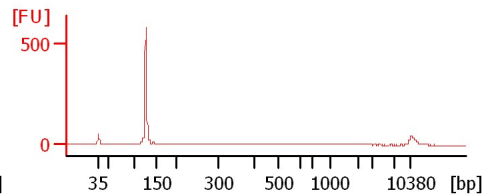
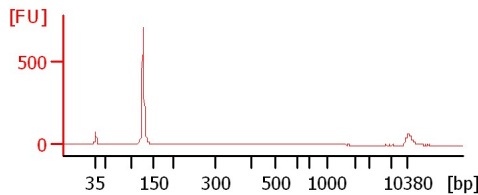
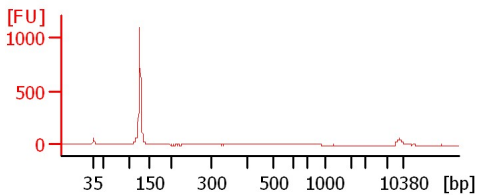
Lib LHO 1



Lib LHO 2

Lib LHO 3

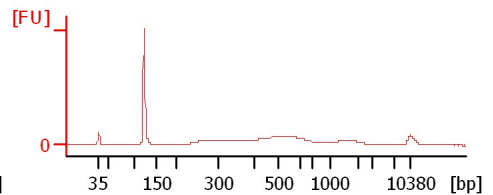
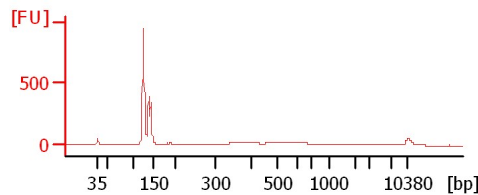
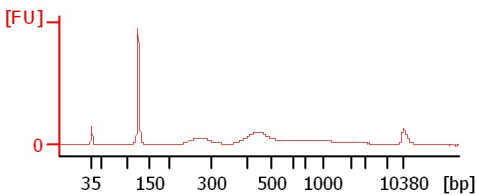
Lib LHO 4



Lib LHO 5

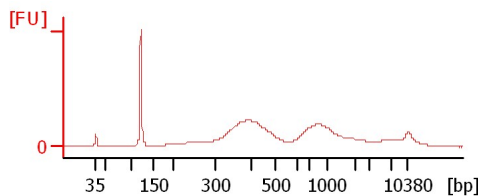
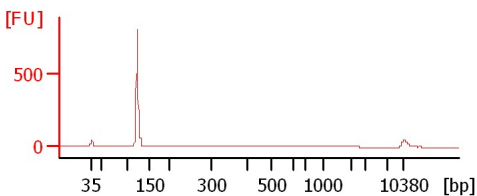
Lib LHO 6

Lib LHO 7



Lib LHO 8

Lib LHO 9



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Pool 1 Rodrigo		<input type="checkbox"/>	✓			
Pool 2 Rodrigo		<input type="checkbox"/>	✓			
Lib LHO 1		<input type="checkbox"/>	✓			
Lib LHO 2		<input type="checkbox"/>	✓			
Lib LHO 3		<input type="checkbox"/>	✓			
Lib LHO 4		<input type="checkbox"/>	✓			
Lib LHO 5		<input type="checkbox"/>	✓			
Lib LHO 6		<input type="checkbox"/>	✓			
Lib LHO 7		<input type="checkbox"/>	✓			
Lib LHO 8		<input type="checkbox"/>	✓			
Lib LHO 9		<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\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
Modified: 7/5/2013 3:05:16 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

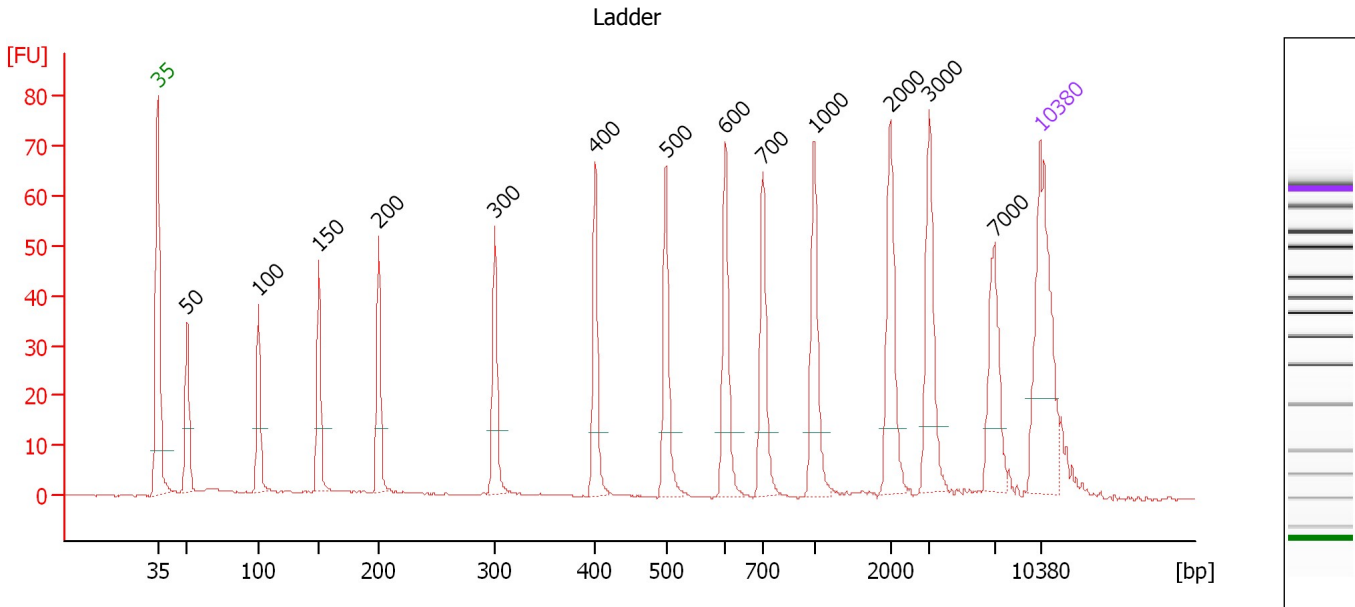
Ladder

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\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

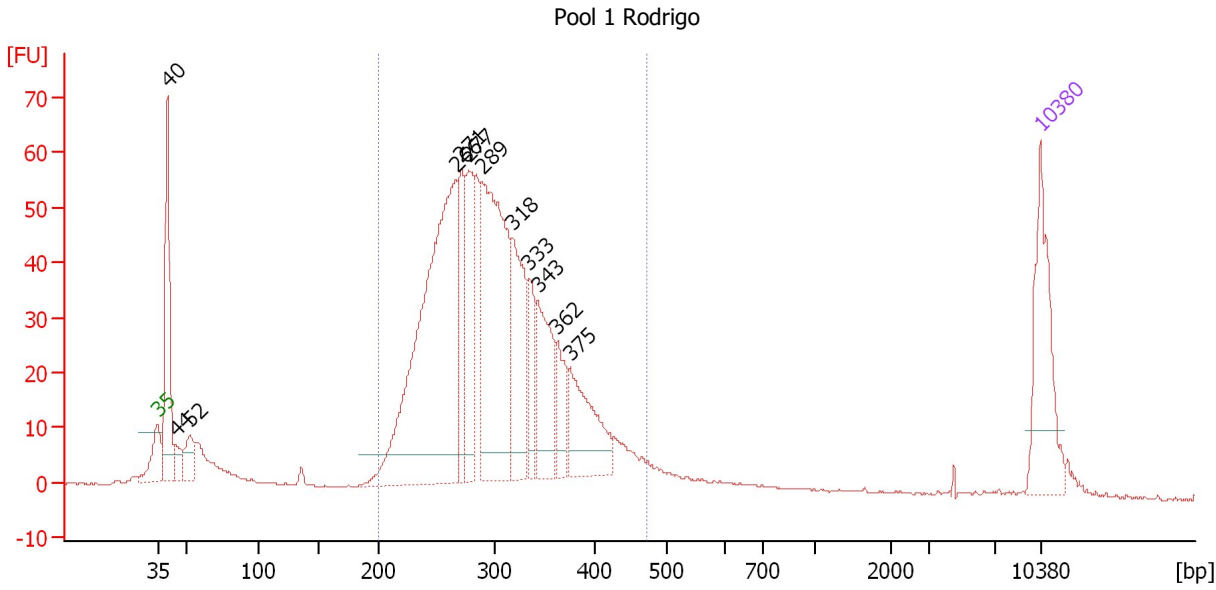
Peak table for Ladder

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\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Pool 1 Rodrigo

Number of peaks found: 12 Corr. Area 1: 986.3
 Noise: 0.2

Peak table for sample 1 : Pool 1 Rodrigo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	151.29	5,712.3	
3	44	20.31	697.5	
4	52	31.46	914.8	
5	266	454.33	2,586.5	
6	271	78.75	440.3	
7	277	95.86	523.9	
8	289	273.88	1,436.9	
9	318	108.70	518.4	
10	333	45.49	206.8	
11	343	88.86	392.7	
12	362	38.23	159.9	
13	375	87.58	354.2	
14	10,380	75.00	10.9	Upper Marker

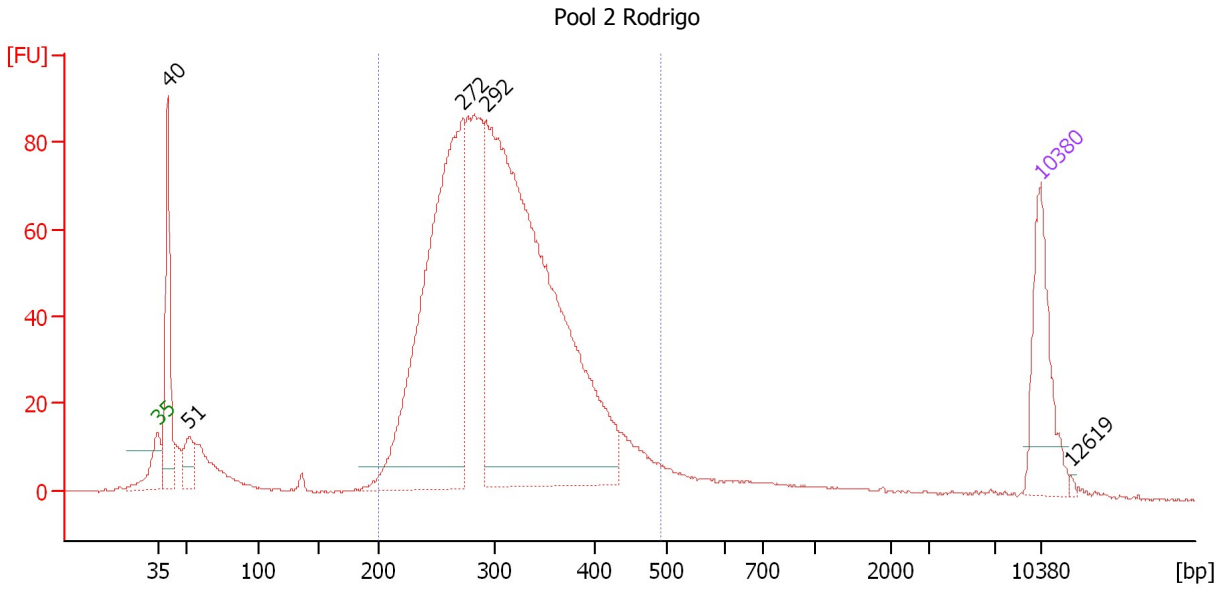
Region table for sample 1 : Pool 1 Rodrigo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	474	303	7,641.8	1,472.31	986.3	82	17.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Pool 2 Rodrigo

Number of peaks found: 5 Corr. Area 1: 1,527.3
 Noise: 0.2

Peak table for sample 2 : Pool 2 Rodrigo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	159.78	6,028.4	
3	51	40.29	1,186.7	
4	272	584.98	3,258.9	
5	292	900.58	4,667.7	
6	10,380	75.00	10.9	Upper Marker
7	12,619	0.00	0.0	

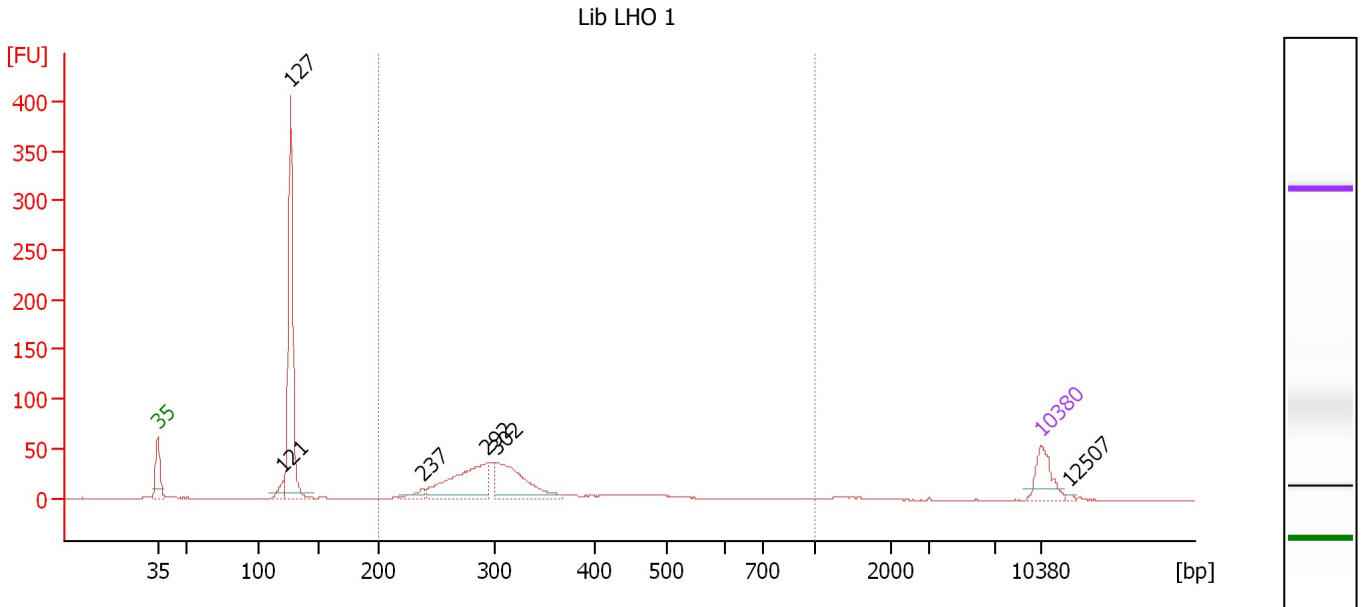
Region table for sample 2 : Pool 2 Rodrigo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	493	308	9,036.3	1,766.45	1,527.3	84	18.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Lib LHO 1

Number of peaks found: 6 Corr. Area 1: 446.3
 Noise: 0.1

Peak table for sample 3 : Lib LHO 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	121	40.00	502.1	
3	127	688.31	8,219.2	
4	237	32.49	207.6	
5	292	291.74	1,512.4	
6	302	245.74	1,232.9	
7	10,380	75.00	10.9	Upper Marker
8	12,507	0.00	0.0	

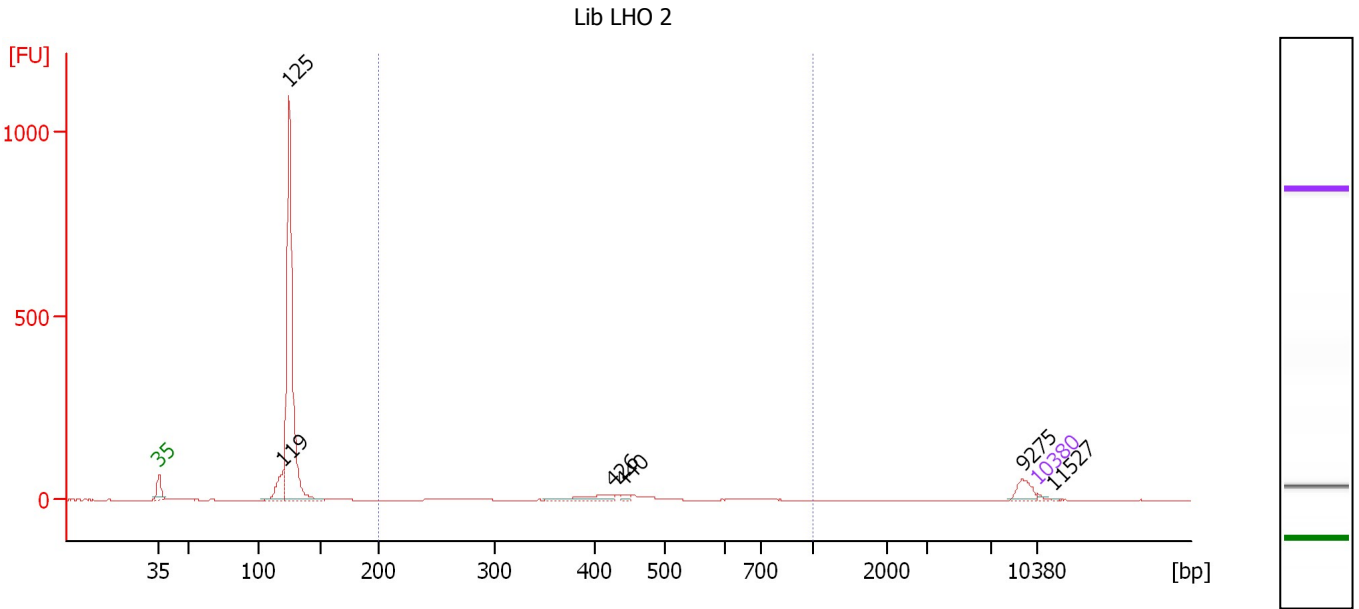
Region table for sample 3 : Lib LHO 1

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	329	3,595.1	724.33	446.3	53	30.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Lib LHO 2

Number of peaks found: 6 Corr. Area 1: 184.5
 Noise: 0.2

Peak table for sample 4 : Lib LHO 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	119	1,274.72	16,277.9	
3	125	15,479.80	187,878.5	
4	426	536.60	1,908.6	
5	440	136.08	468.8	
6	9,275	505.29	82.5	
7	10,380	75.00	10.9	Upper Marker
8	11,527	0.00	0.0	

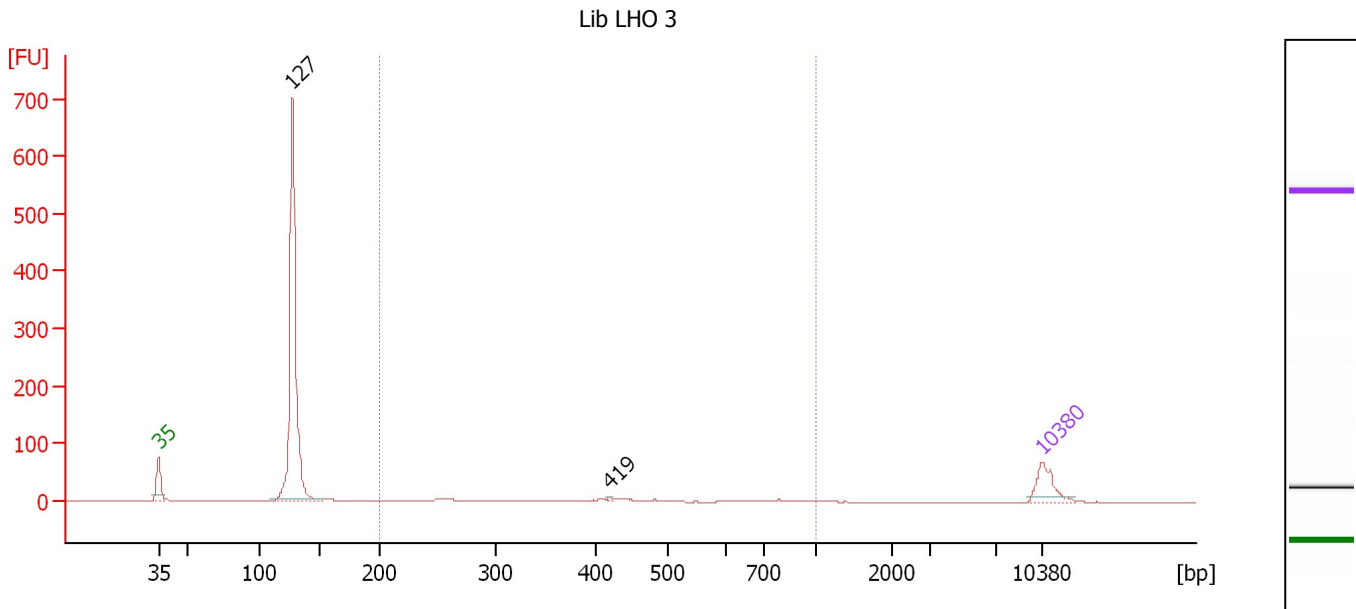
Region table for sample 4 : Lib LHO 2

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	453	6,937.8	1,841.21	184.5	12	30.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Lib LHO 3

Number of peaks found: 2 Corr. Area 1: 67.7
 Noise: 0.1

Peak table for sample 5 : Lib LHO 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	1,118.27	13,327.9	
3	419	3.30	11.9	
4	10,380	75.00	10.9	Upper Marker

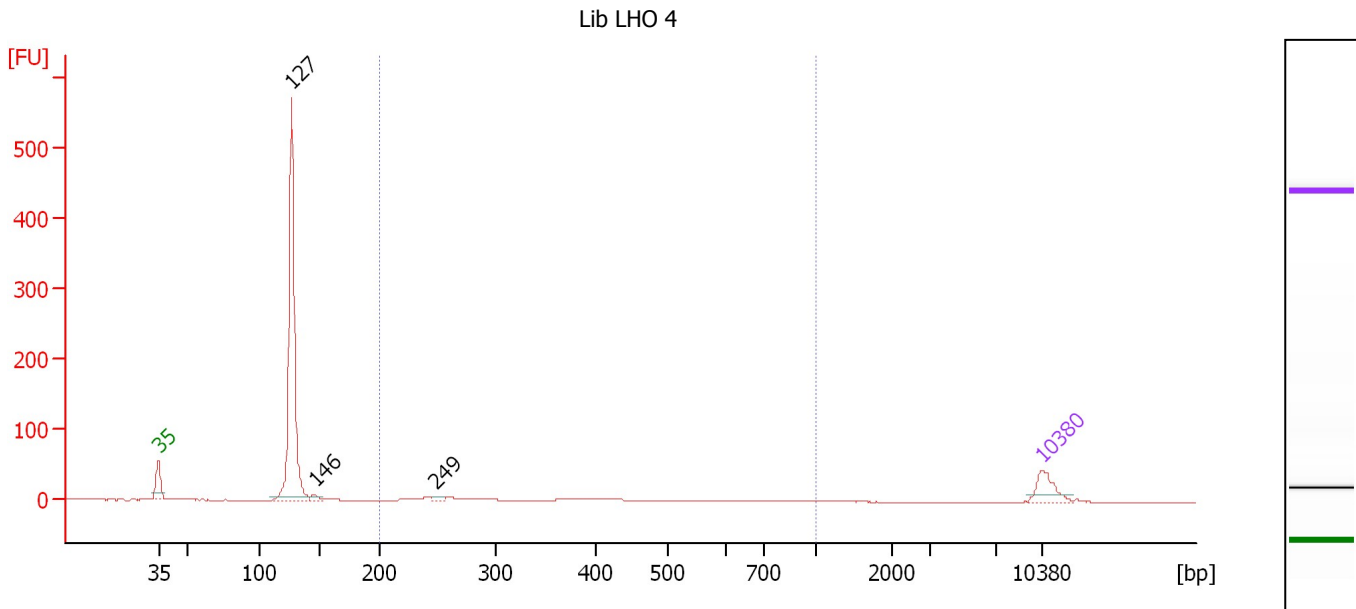
Region table for sample 5 : Lib LHO 3

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	445	317.8	75.83	67.7	8	42.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Lib LHO 4

Number of peaks found: 3 Corr. Area 1: 90.1
 Noise: 0.2

Peak table for sample 6 : Lib LHO 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	1,271.18	15,190.1	
3	146	20.95	217.8	
4	249	15.27	93.0	
5	10,380	75.00	10.9	Upper Marker

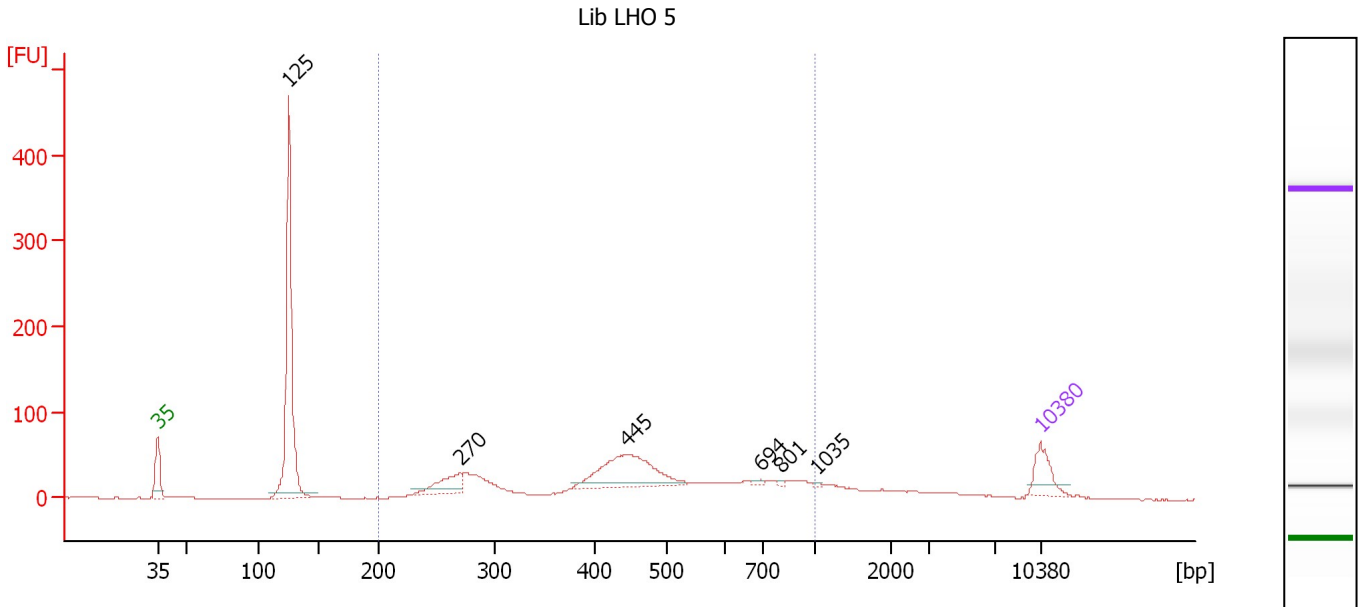
Region table for sample 6 : Lib LHO 4

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	411	725.0	154.13	90.1	13	47.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Lib LHO 5

Number of peaks found: 6 Corr. Area 1: 916.3
 Noise: 0.2

Peak table for sample 7 : Lib LHO 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	125	881.59	10,672.1	
3	270	120.70	676.5	
4	445	321.80	1,096.6	
5	694	8.45	18.5	
6	801	5.55	10.5	
7	1,035	3.76	5.5	
8	10,380	75.00	10.9	Upper Marker

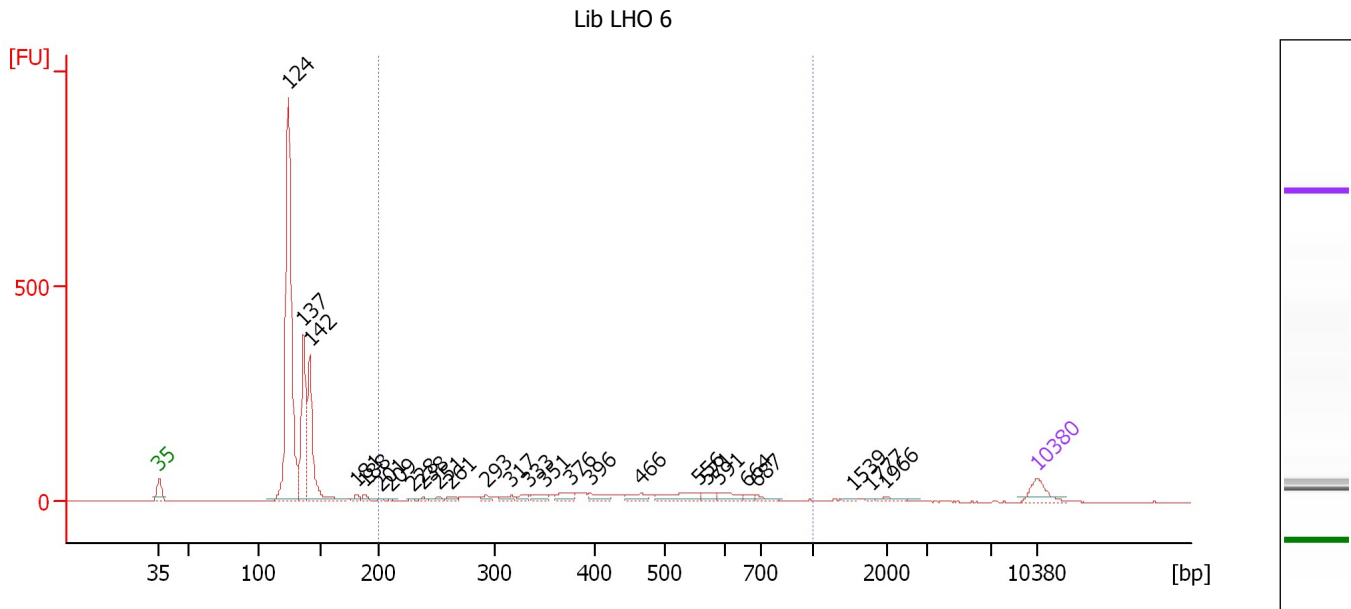
Region table for sample 7 : Lib LHO 5

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	482	4,924.3	1,292.00	916.3	59	37.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Lib LHO 6

Number of peaks found: 26 Corr. Area 1: 626.1
 Noise: 0.2

Peak table for sample 8 : Lib LHO 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	124	1,885.59	22,989.3	
3	137	626.41	6,947.4	
4	142	626.04	6,691.6	
5	181	26.47	221.5	
6	188	26.82	215.7	
7	201	13.20	99.3	
8	209	11.22	81.2	
9	228	9.82	65.2	
10	238	16.49	105.0	
11	251	27.23	164.2	
12	261	25.09	145.6	
13	293	27.36	141.4	
14	317	39.80	190.2	
15	333	27.24	123.9	
16	351	44.63	192.6	
17	376	55.35	223.0	
18	396	53.77	205.8	
19	466	55.54	180.4	
20	556	102.27	278.5	
21	571	37.74	100.1	
22	591	56.51	144.9	
23	664	20.37	46.5	
24	687	27.14	59.8	
25	1,539	8.11	8.0	
26	1,777	5.82	5.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...**... Peak table for sample 8 : Lib LHO 6**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	1,966	24.85	19.2	
28	10,380	75.00	10.9	Upper Marker

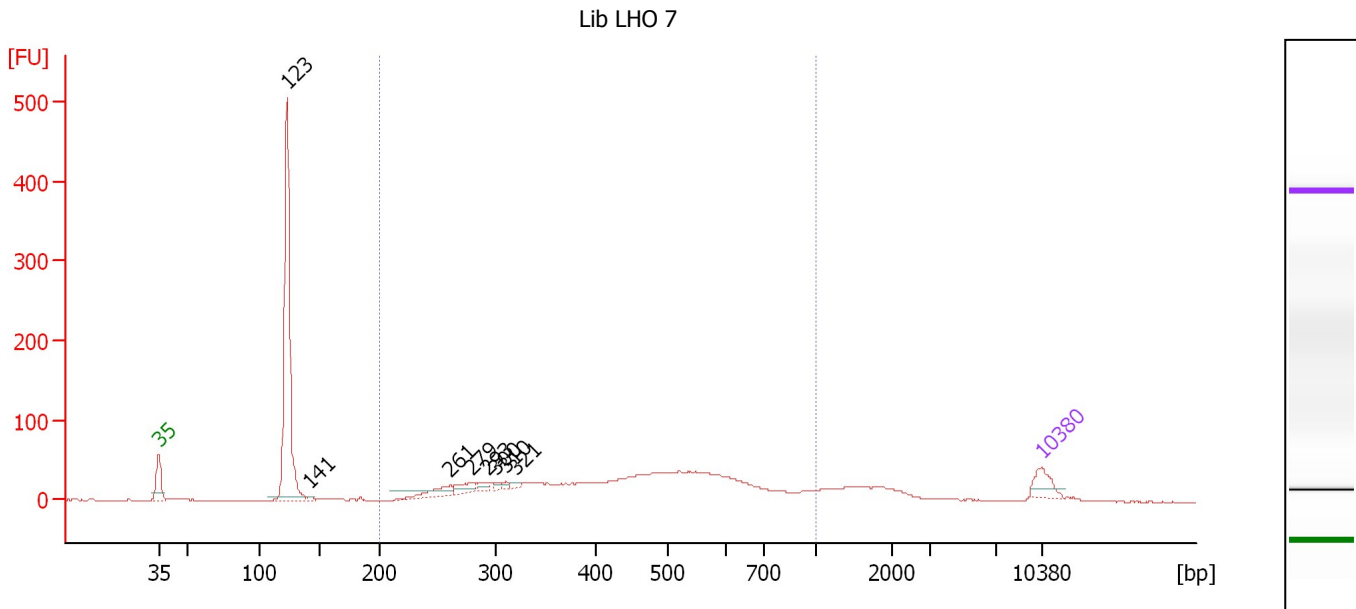
Region table for sample 8 : Lib LHO 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	456	3,517.8	898.12	626.1	27	33.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
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Electropherogram Summary Continued ...



Overall Results for sample 9 : Lib LHO 7

Number of peaks found: 8 Corr. Area 1: 959.4
 Noise: 0.1

Peak table for sample 9 : Lib LHO 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	123	1,415.90	17,497.4	
3	141	17.11	184.1	
4	261	89.37	519.6	
5	279	68.08	370.4	
6	293	31.90	165.1	
7	300	19.86	100.4	
8	310	17.10	83.5	
9	321	19.32	91.3	
10	10,380	75.00	10.9	Upper Marker

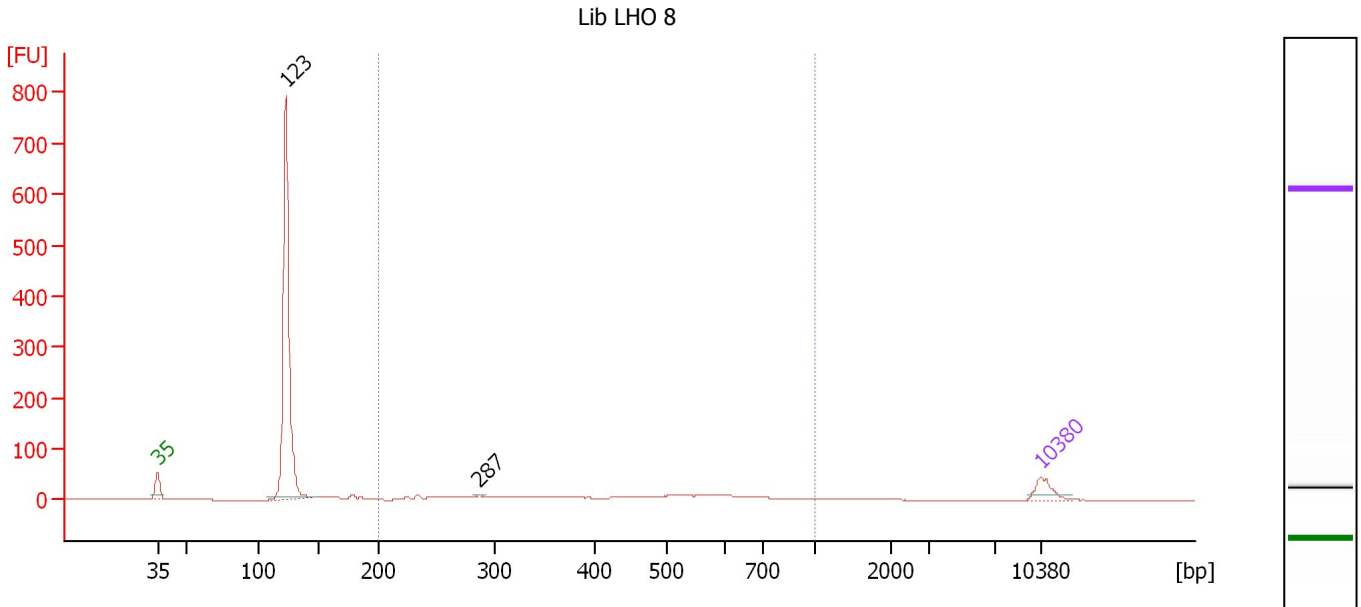
Region table for sample 9 : Lib LHO 7

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	466	7,969.0	2,081.06	959.4	59	34.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

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 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Lib LHO 8

Number of peaks found: 2 Corr. Area 1: 277.1
 Noise: 0.2

Peak table for sample 10 : Lib LHO 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	123	1,840.46	22,724.9	
3	287	7.65	40.4	
4	10,380	75.00	10.9	Upper Marker

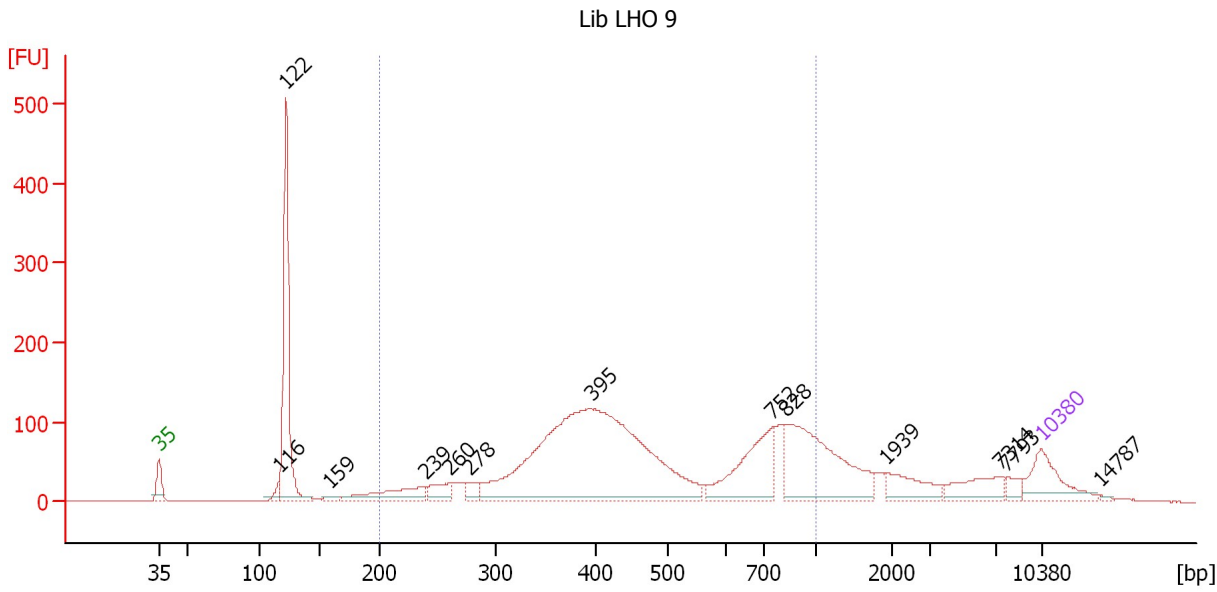
Region table for sample 10 : Lib LHO 8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	456	1,945.2	484.72	277.1	24	35.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
 Modified: 7/5/2013 3:05:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Lib LHO 9

Number of peaks found: 13 Corr. Area 1: 2,400.6
 Noise: 0.2

Peak table for sample 11 : Lib LHO 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	116	18.57	242.4	
3	122	437.31	5,432.5	
4	159	11.62	111.0	
5	239	96.69	613.3	
6	260	46.96	273.5	
7	278	28.37	154.9	
8	395	1,011.64	3,878.1	
9	752	188.15	378.9	
10	828	304.81	557.8	
11	1,939	61.09	47.7	
12	7,314	58.51	12.1	
13	7,793	17.62	3.4	
14	10,380	75.00	10.9	Upper Marker
15	14,787	0.00	0.0	

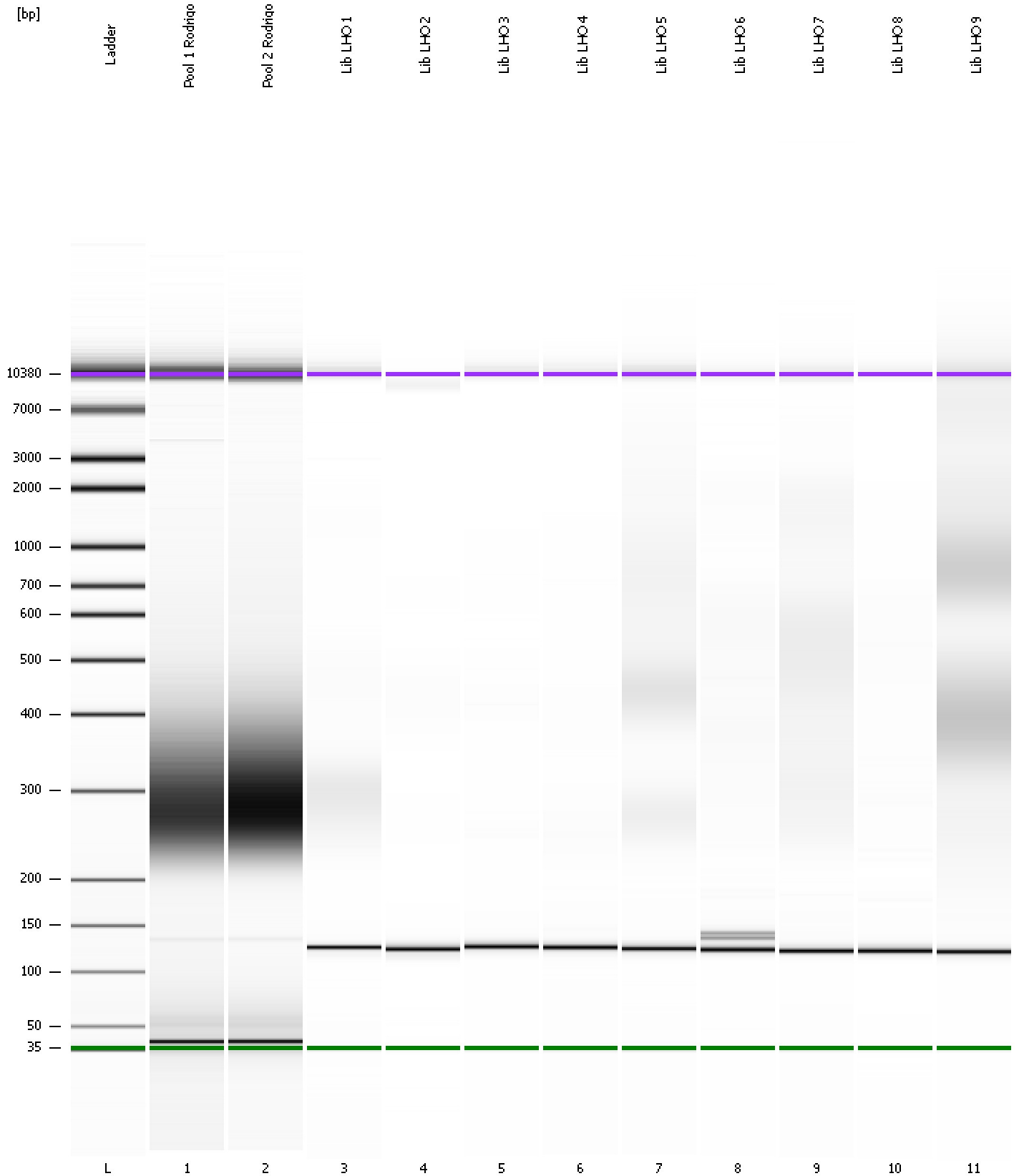
Region table for sample 11 : Lib LHO 9

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	503	5,901.5	1,608.77	2,400.6	67	39.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad

Created: 7/5/2013 2:23:54 PM
Modified: 7/5/2013 3:05:16 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 7/5/2013 2:23:54 PM
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad Modified: 7/5/2013 3:05:16 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		7/5/2013 3:05:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-05\2013-07-05_001.xad)		Instrument	Run		7/5/2013 2:24:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/5/2013 2:24:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/5/2013 2:24:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/5/2013 2:24:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/5/2013 2:24:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/5/2013 2:24:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/5/2013 2:24:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1