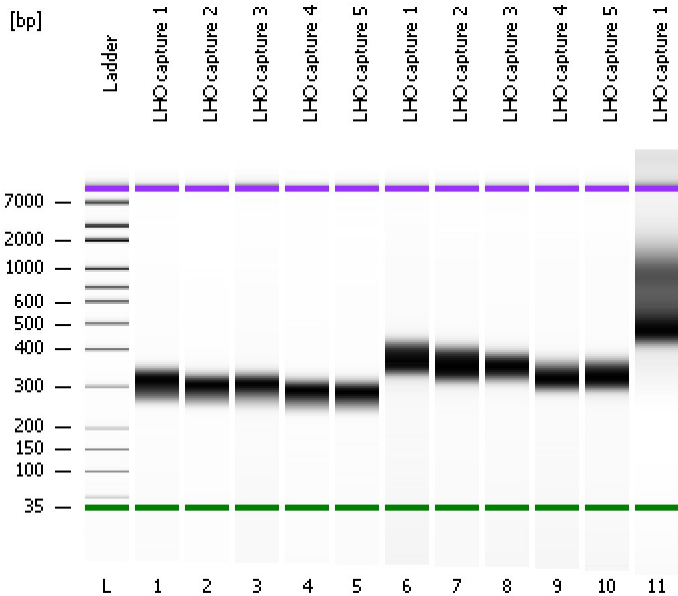


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
Modified: 3/24/2014 2:55:25 PM

Electrophoresis File Run Summary



Instrument Information:

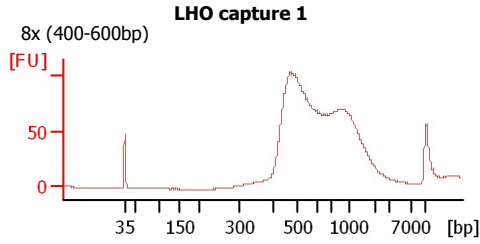
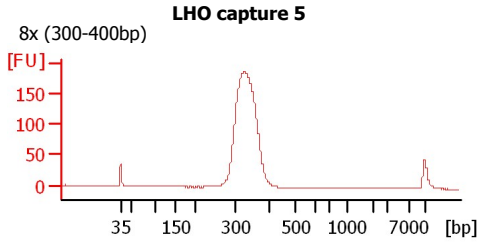
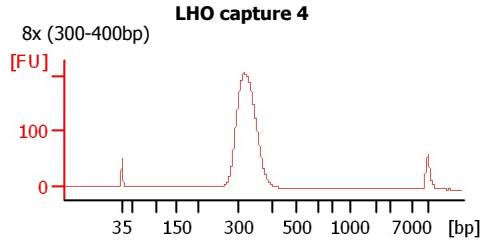
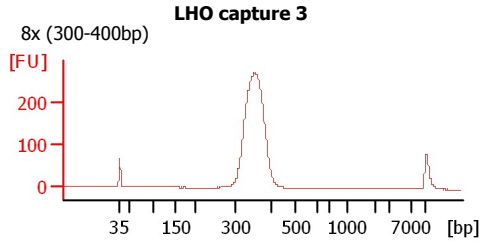
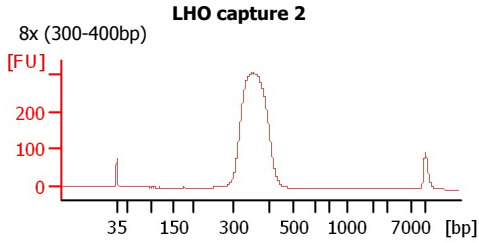
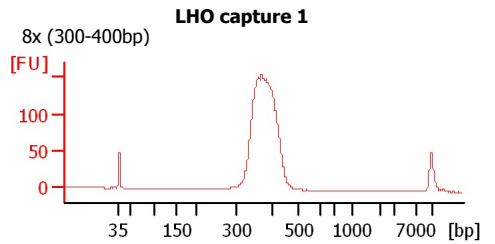
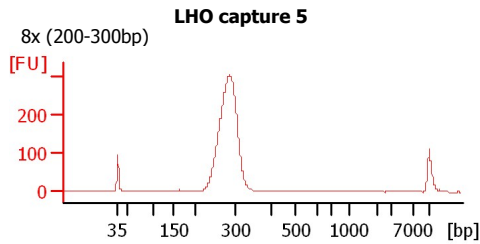
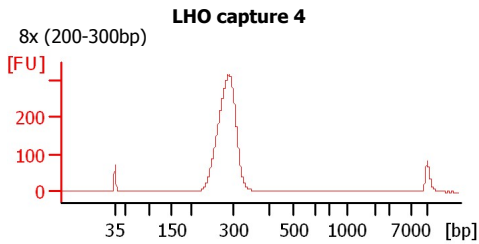
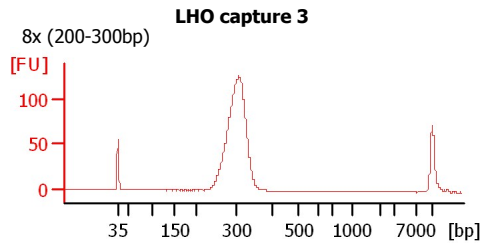
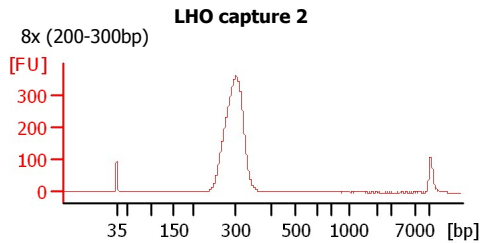
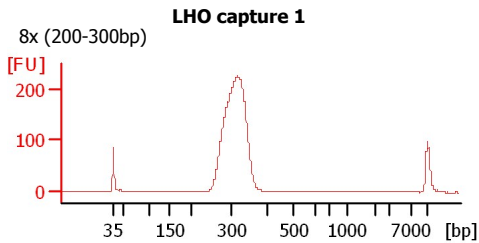
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
LHO capture 1	8x (200-300bp)	<input type="checkbox"/>	✓			
LHO capture 2	8x (200-300bp)	<input type="checkbox"/>	✓			
LHO capture 3	8x (200-300bp)	<input type="checkbox"/>	✓			
LHO capture 4	8x (200-300bp)	<input type="checkbox"/>	✓			
LHO capture 5	8x (200-300bp)	<input type="checkbox"/>	✓			
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LHO capture 2	8x (300-400bp)	<input type="checkbox"/>	✓			
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LHO capture 4	8x (300-400bp)	<input type="checkbox"/>	✓			
LHO capture 5	8x (300-400bp)	<input type="checkbox"/>	✓			
LHO capture 1	8x (400-600bp)	<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\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
Modified: 3/24/2014 2:55:25 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

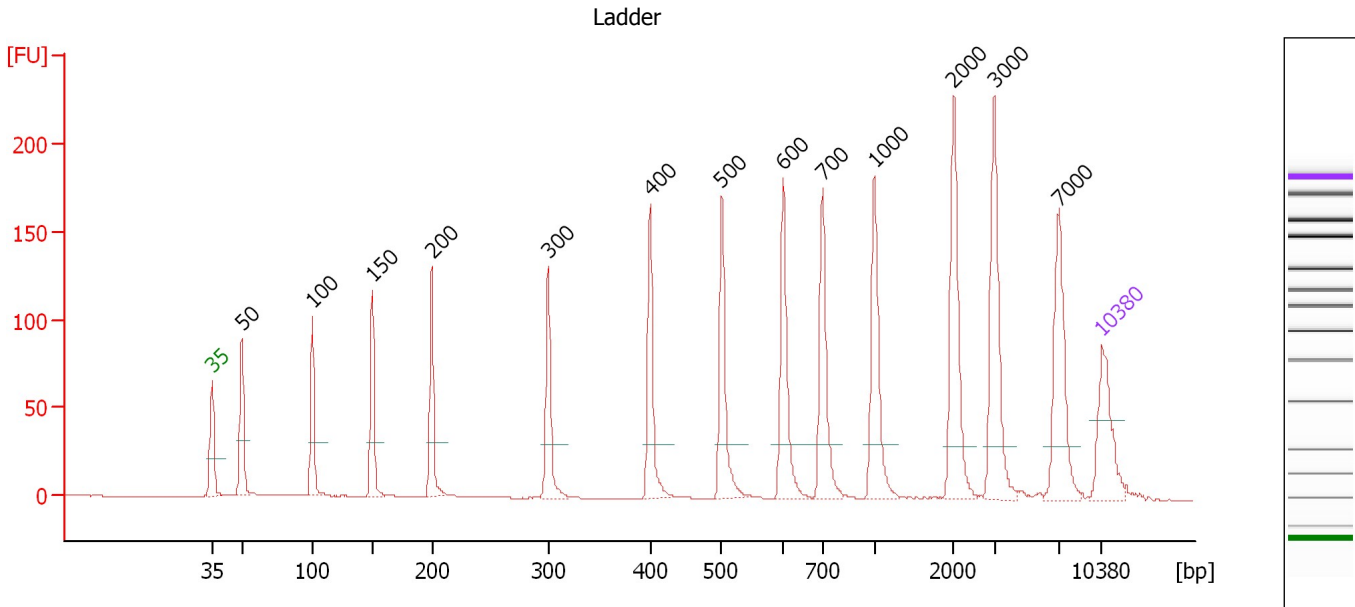
Ladder

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\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

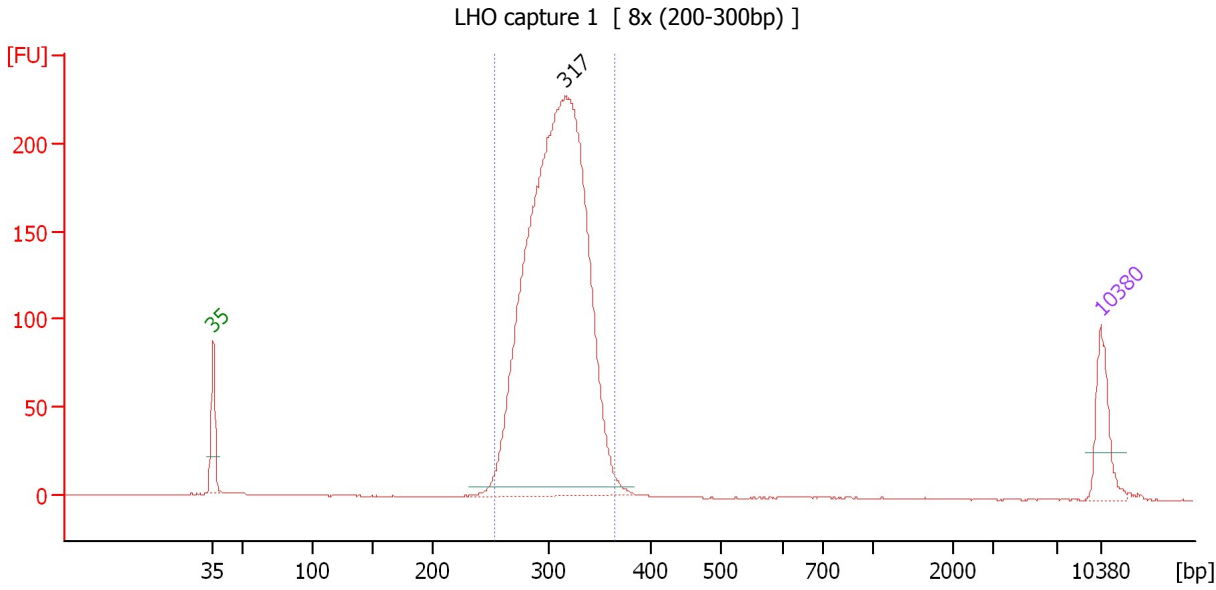
Peak table for Ladder

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.35	50	150.00	4,545.5	Ladder Peak
3	50.88	100	150.00	2,272.7	Ladder Peak
4	55.62	150	150.00	1,515.2	Ladder Peak
5	60.28	200	150.00	1,136.4	Ladder Peak
6	69.42	300	150.00	757.6	Ladder Peak
7	77.43	400	150.00	568.2	Ladder Peak
8	83.10	500	150.00	454.5	Ladder Peak
9	87.92	600	150.00	378.8	Ladder Peak
10	91.02	700	150.00	324.7	Ladder Peak
11	95.09	1,000	150.00	227.3	Ladder Peak
12	101.34	2,000	150.00	113.6	Ladder Peak
13	104.53	3,000	150.00	75.8	Ladder Peak
14	109.60	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : LHO capture 1

Number of peaks found: 1 Corr. Area 1: 1,958.3
 Noise: 0.2

Peak table for sample 1 : LHO capture 1

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	70.79	317	2,173.40	10,386.1	
3	113.00	10,380	75.00	10.9	Upper Marker

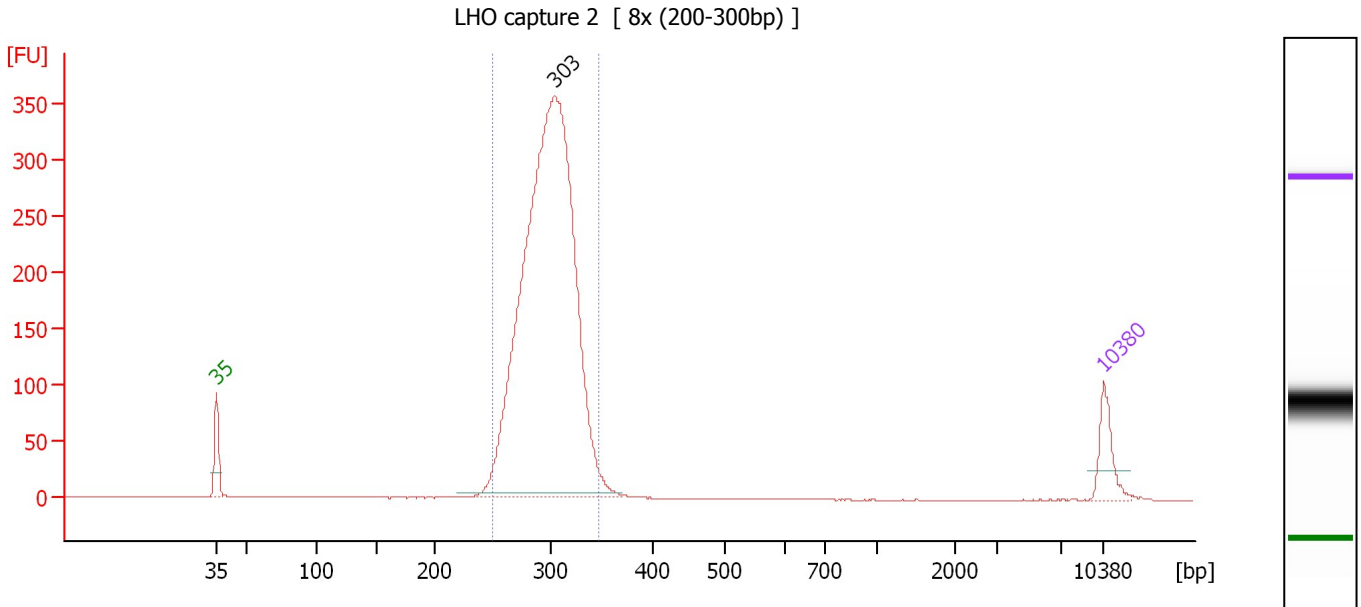
Region table for sample 1 : LHO capture 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
253	365	309	10,971.1	2,217.67	1,958.3	96	7.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : LHO capture 2

Number of peaks found: 1 Corr. Area 1: 2,591.9
 Noise: 0.2

Peak table for sample 2 : LHO capture 2

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	69.67	303	2,862.82	14,311.2	
3	113.00	10,380	75.00	10.9	Upper Marker

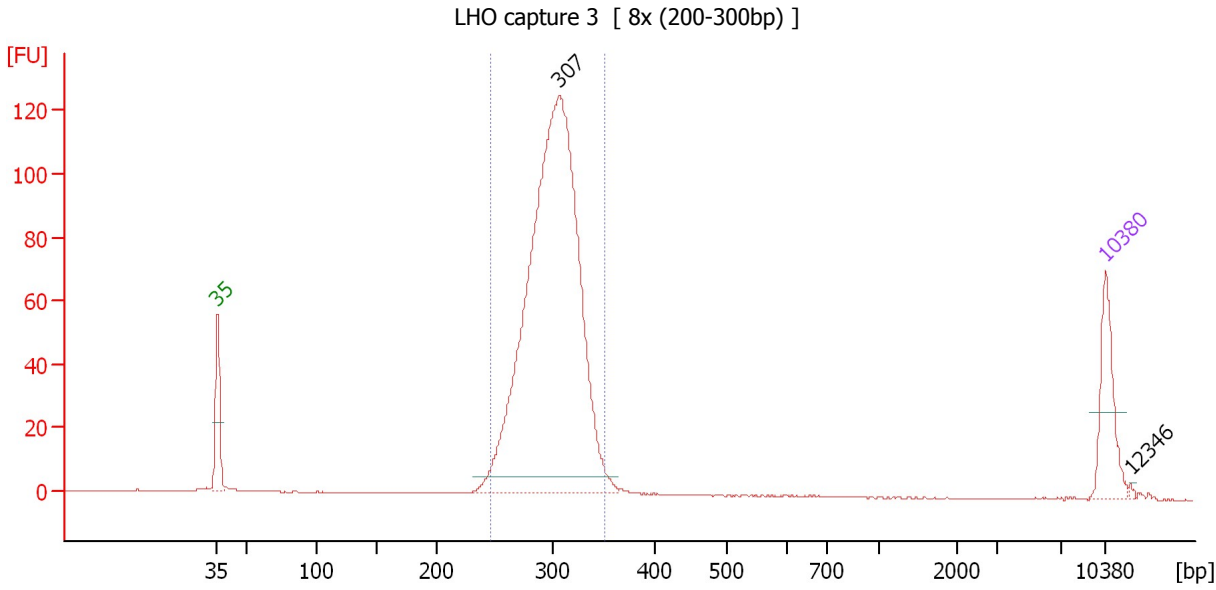
Region table for sample 2 : LHO capture 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
249	347	298	14,666.7	2,866.75	2,591.9	97	6.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : LHO capture 3

Number of peaks found: 2 Corr. Area 1: 897.9
 Noise: 0.2

Peak table for sample 3 : LHO capture 3

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	69.95	307	1,393.96	6,889.4	
3	113.00	10,380	75.00	10.9	Upper Marker
4	114.98	12,346	0.00	0.0	

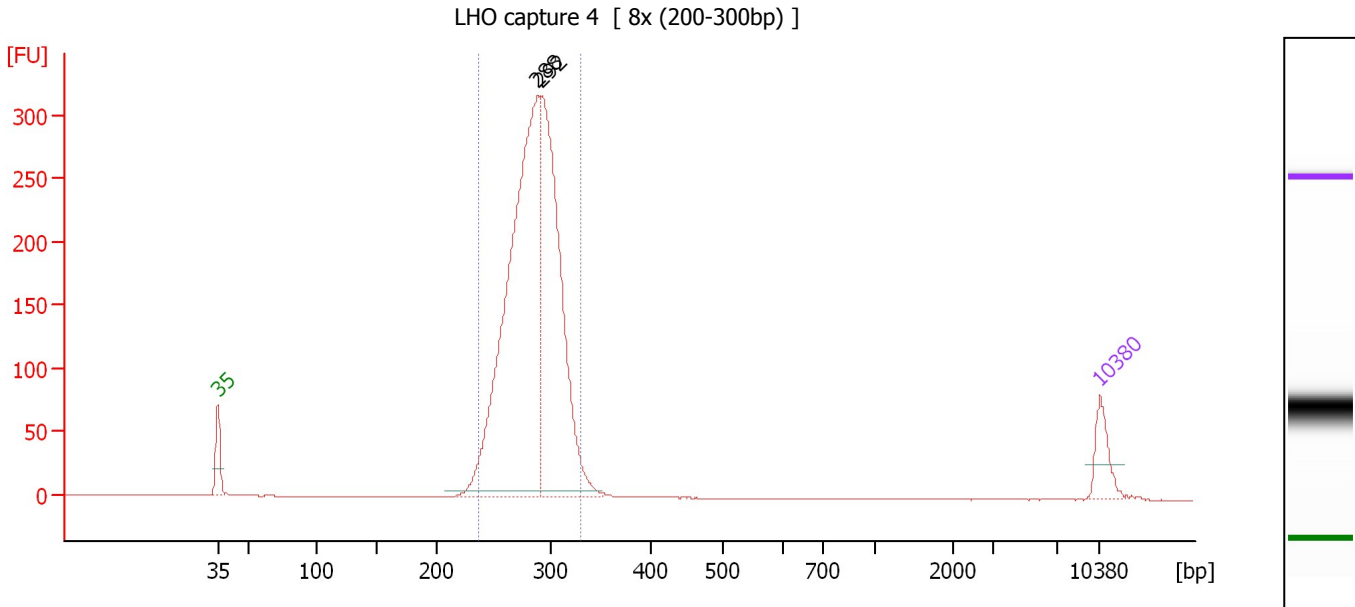
Region table for sample 3 : LHO capture 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
246	351	300	7,197.7	1,418.34	897.9	94	7.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : LHO capture 4

Number of peaks found: 2 Corr. Area 1: 2,282.4
 Noise: 0.2

Peak table for sample 4 : LHO capture 4

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	68.35	288	1,900.90	9,991.1	
3	68.69	292	1,245.36	6,462.6	
4	113.00	10,380	75.00	10.9	Upper Marker

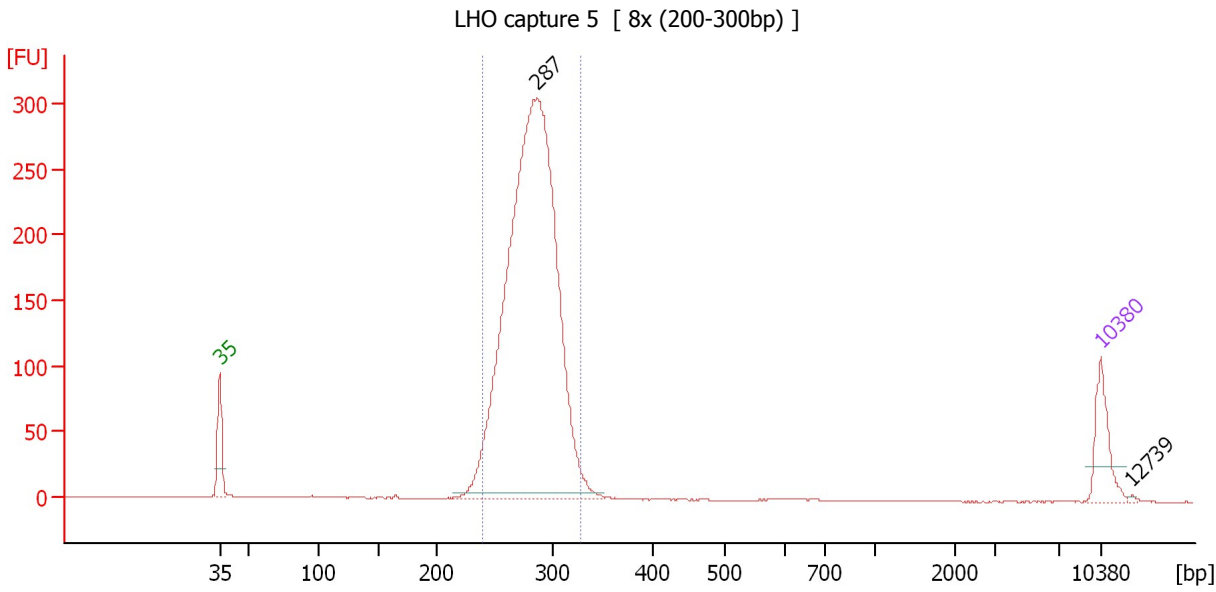
Region table for sample 4 : LHO capture 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
237	329	284	16,837.1	3,148.67	2,282.4	97	6.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : LHO capture 5

Number of peaks found: 2 Corr. Area 1: 2,156.1
 Noise: 0.2

Peak table for sample 5 : LHO capture 5

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	68.24	287	2,266.07	11,961.1	
3	113.00	10,380	75.00	10.9	Upper Marker
4	115.37	12,739	0.00	0.0	

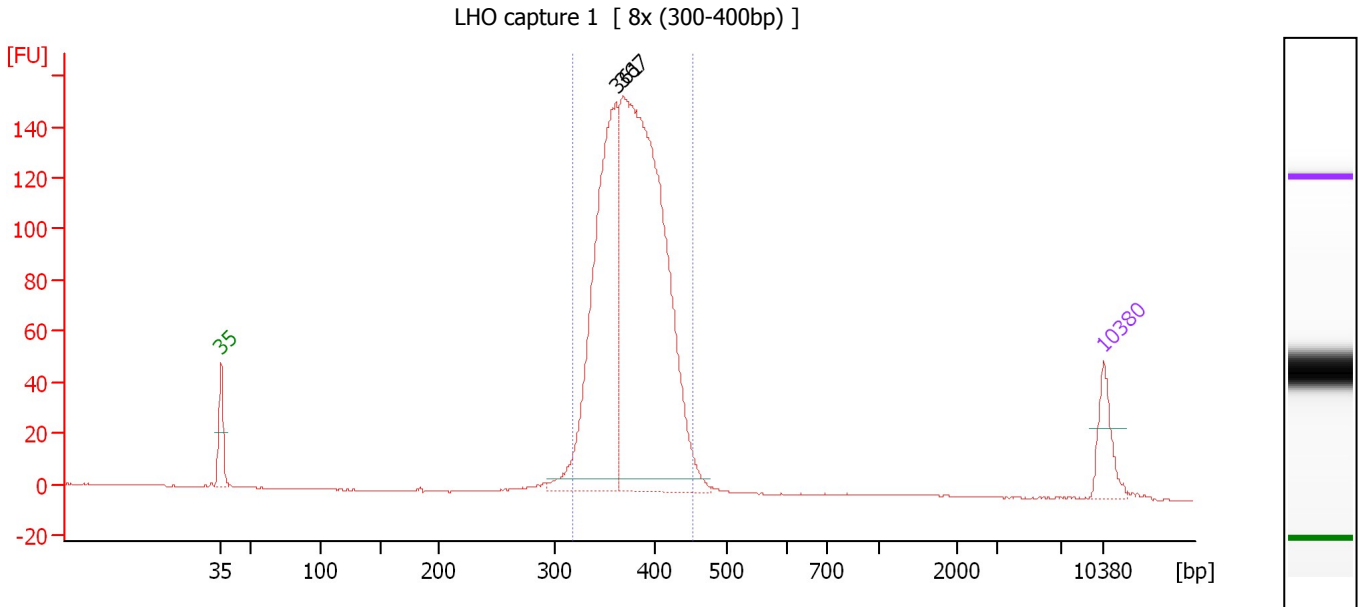
Region table for sample 5 : LHO capture 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
239	328	282	12,055.3	2,237.20	2,156.1	96	6.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : LHO capture 1

Number of peaks found: 2 Corr. Area 1: 1,349.4
 Noise: 0.2

Peak table for sample 6 : LHO capture 1

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	74.32	361	950.11	3,985.9	
3	74.83	367	1,687.42	6,957.1	
4	113.00	10,380	75.00	10.9	Upper Marker

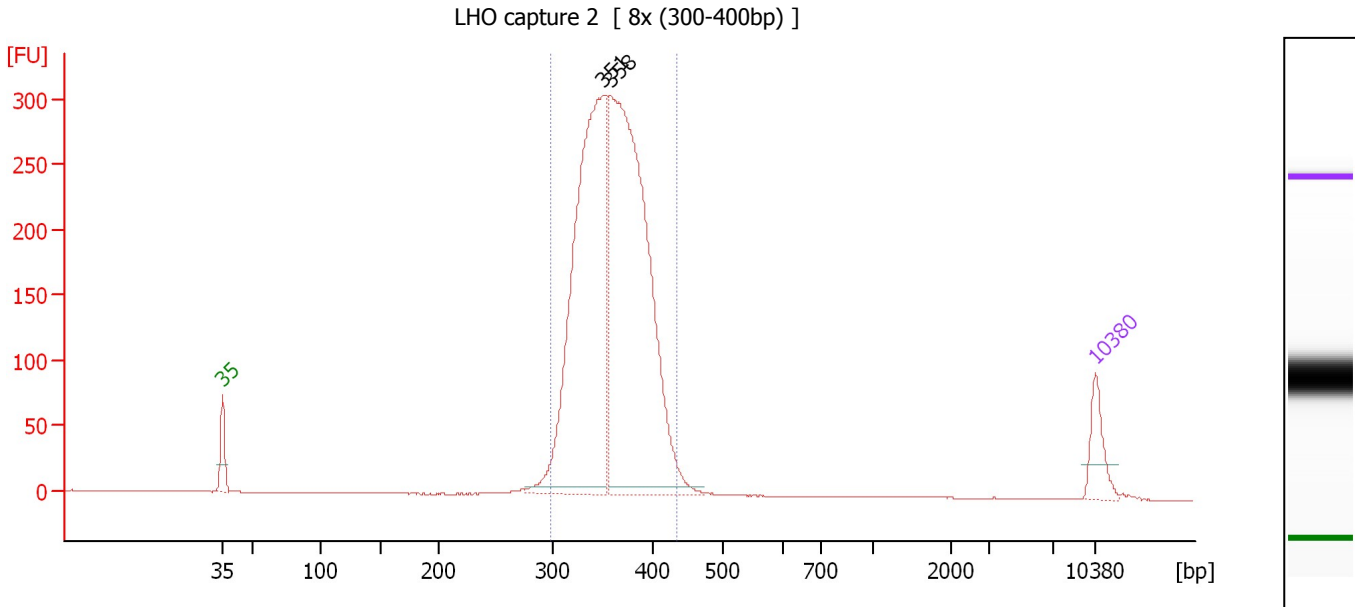
Region table for sample 6 : LHO capture 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
318	453	377	10,315.2	2,557.35	1,349.4	95	7.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : LHO capture 2

Number of peaks found: 2 Corr. Area 1: 2,859.3
 Noise: 0.1

Peak table for sample 7 : LHO capture 2

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	73.53	351	1,456.83	6,283.5	
3	74.09	358	1,687.83	7,138.8	
4	113.00	10,380	75.00	10.9	Upper Marker

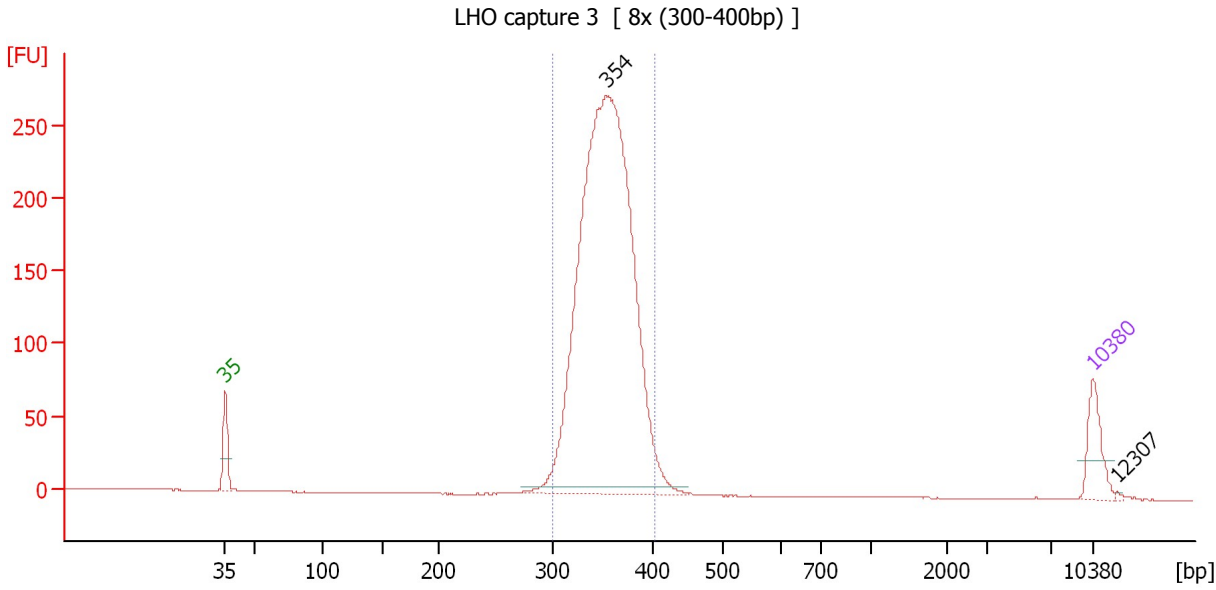
Region table for sample 7 : LHO capture 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
298	435	360	13,271.1	3,143.99	2,859.3	96	7.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : LHO capture 3

Number of peaks found: 2 Corr. Area 1: 1,935.4
 Noise: 0.1

Peak table for sample 8 : LHO capture 3

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	73.74	354	2,352.30	10,071.9	
3	113.00	10,380	75.00	10.9	Upper Marker
4	114.94	12,307	0.00	0.0	

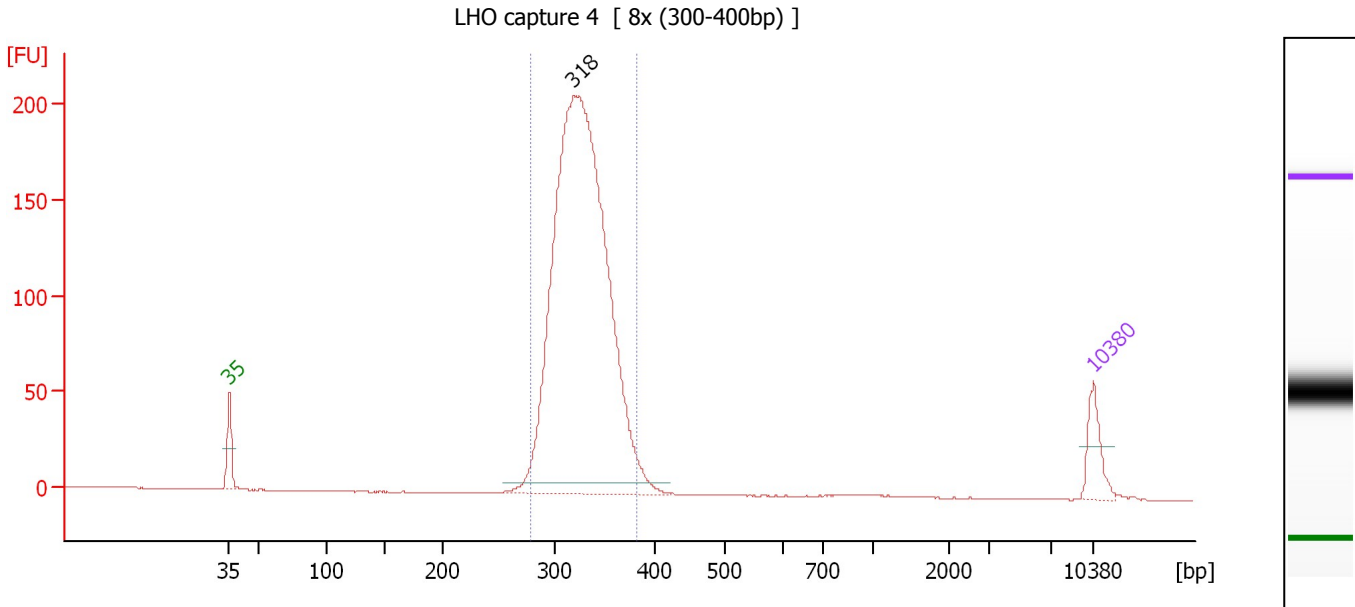
Region table for sample 8 : LHO capture 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
300	404	353	9,853.0	2,298.20	1,935.4	96	6.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : LHO capture 4

Number of peaks found: 1 Corr. Area 1: 1,510.4
 Noise: 0.1

Peak table for sample 9 : LHO capture 4

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	70.85	318	2,809.69	13,393.3	
3	113.00	10,380	75.00	10.9	Upper Marker

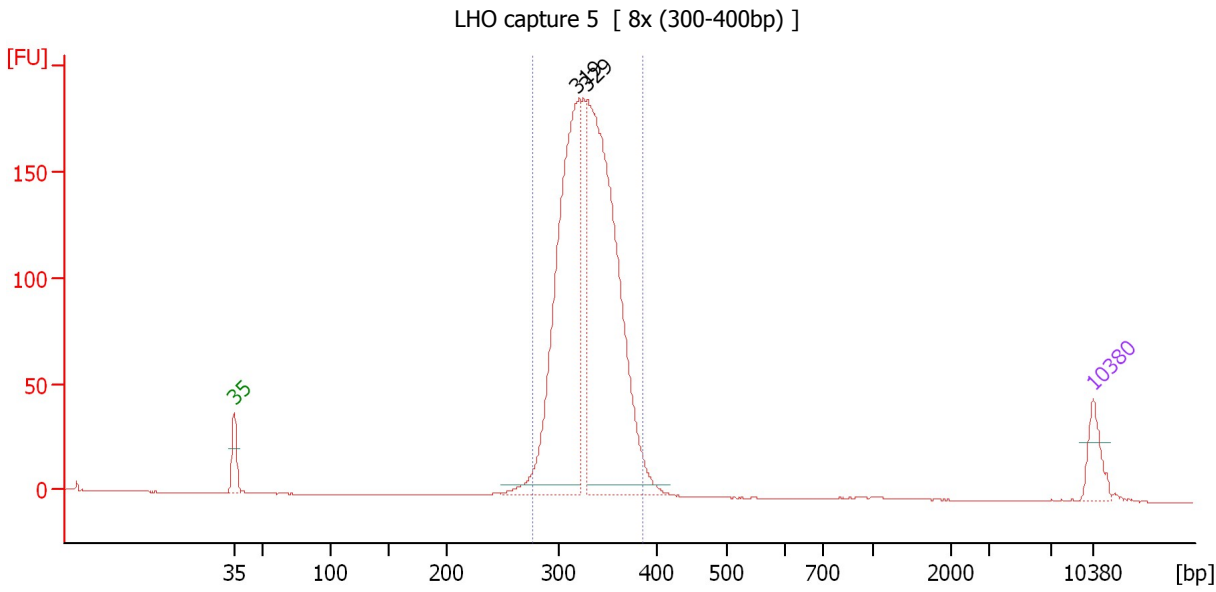
Region table for sample 9 : LHO capture 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
278	382	326	12,553.0	2,694.49	1,510.4	97	6.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : LHO capture 5

Number of peaks found: 2 Corr. Area 1: 1,464.7
 Noise: 0.1

Peak table for sample 10 : LHO capture 5

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	70.94	319	1,344.03	6,385.2	
3	71.76	329	1,695.34	7,802.1	
4	113.00	10,380	75.00	10.9	Upper Marker

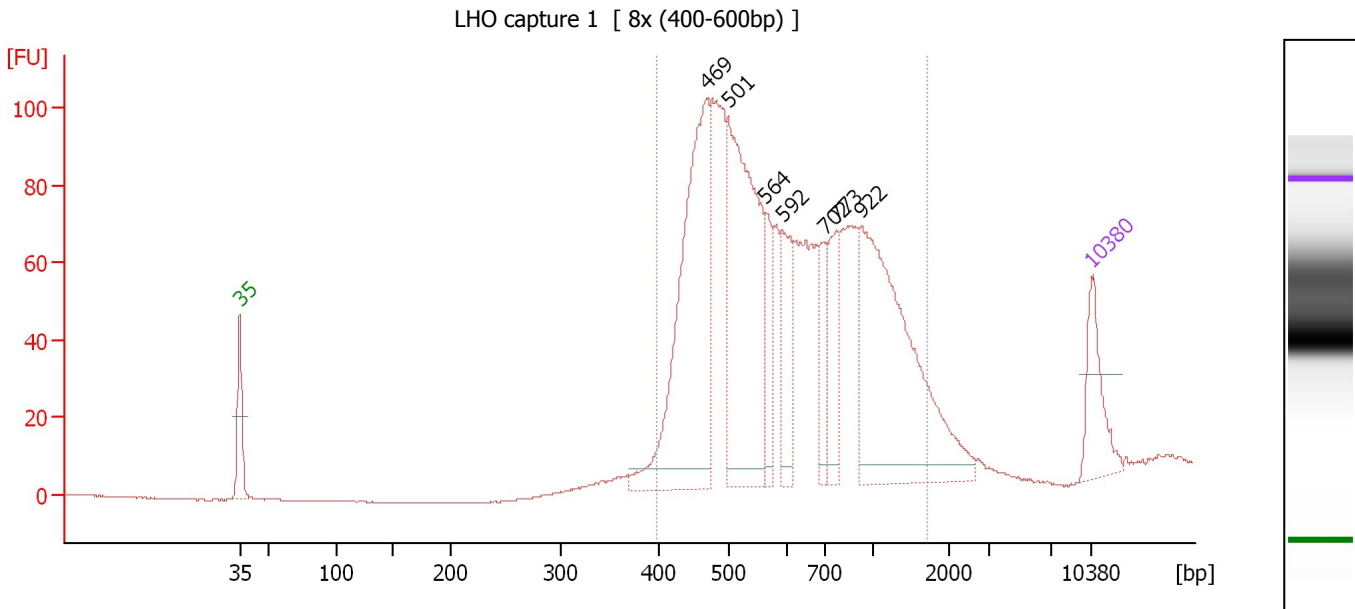
Region table for sample 10 : LHO capture 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
276	386	330	15,120.6	3,279.75	1,464.7	97	7.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : LHO capture 1

Number of peaks found: 7 Corr. Area 1: 1,564.6
 Noise: 0.1

Peak table for sample 11 : LHO capture 1

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	81.33	469	548.18	1,771.7	
3	83.13	501	503.17	1,522.9	
4	86.19	564	79.61	213.8	
5	87.55	592	109.81	280.9	
6	91.05	702	64.55	139.3	
7	92.02	773	90.72	177.7	
8	94.03	922	482.44	792.9	
9	113.00	10,380	75.00	10.9	Upper Marker

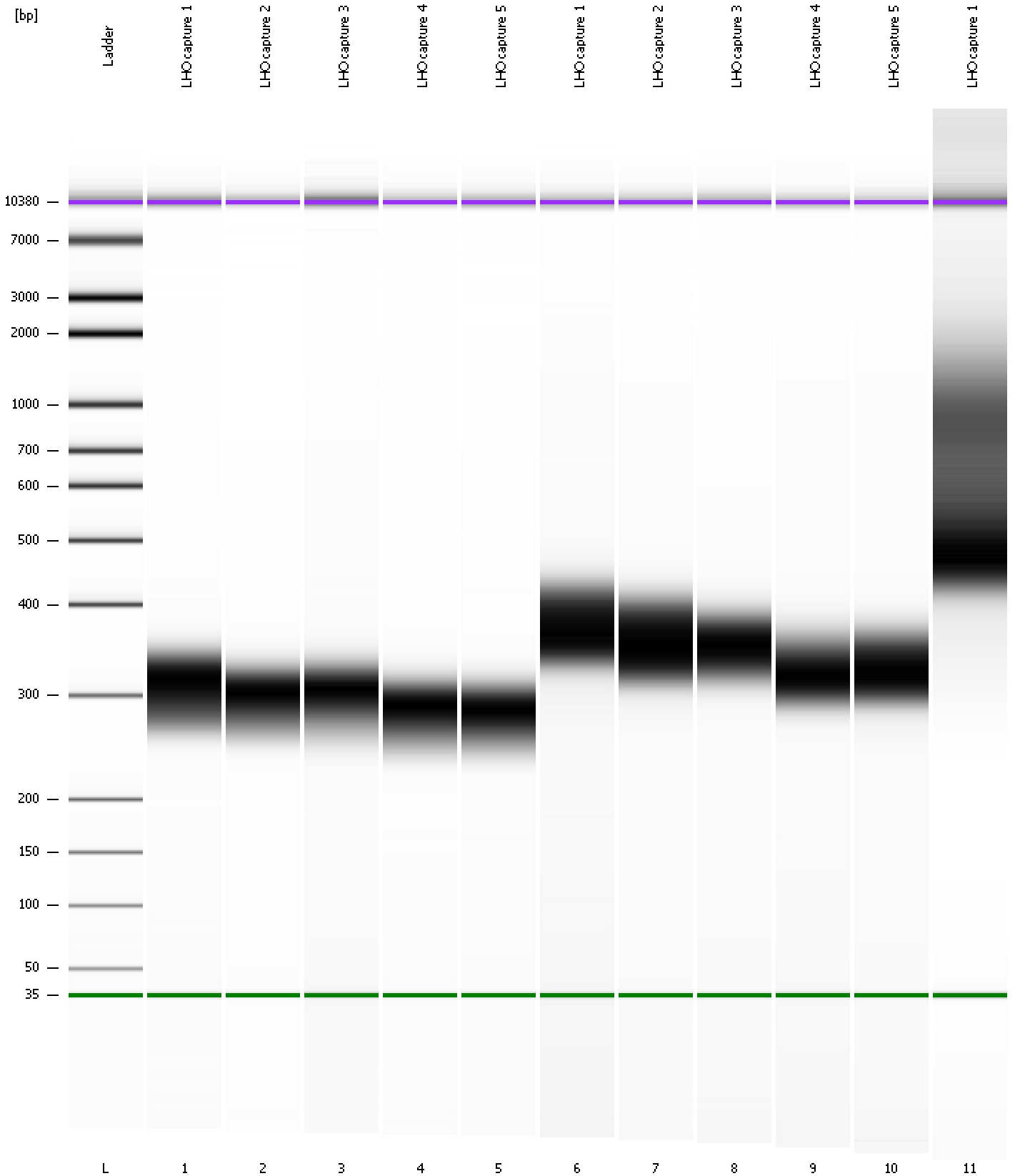
Region table for sample 11 : LHO capture 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
398	1,693	690	5,998.9	2,344.69	1,564.6	97	40.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
Modified: 3/24/2014 2:55:25 PM

Gel Image

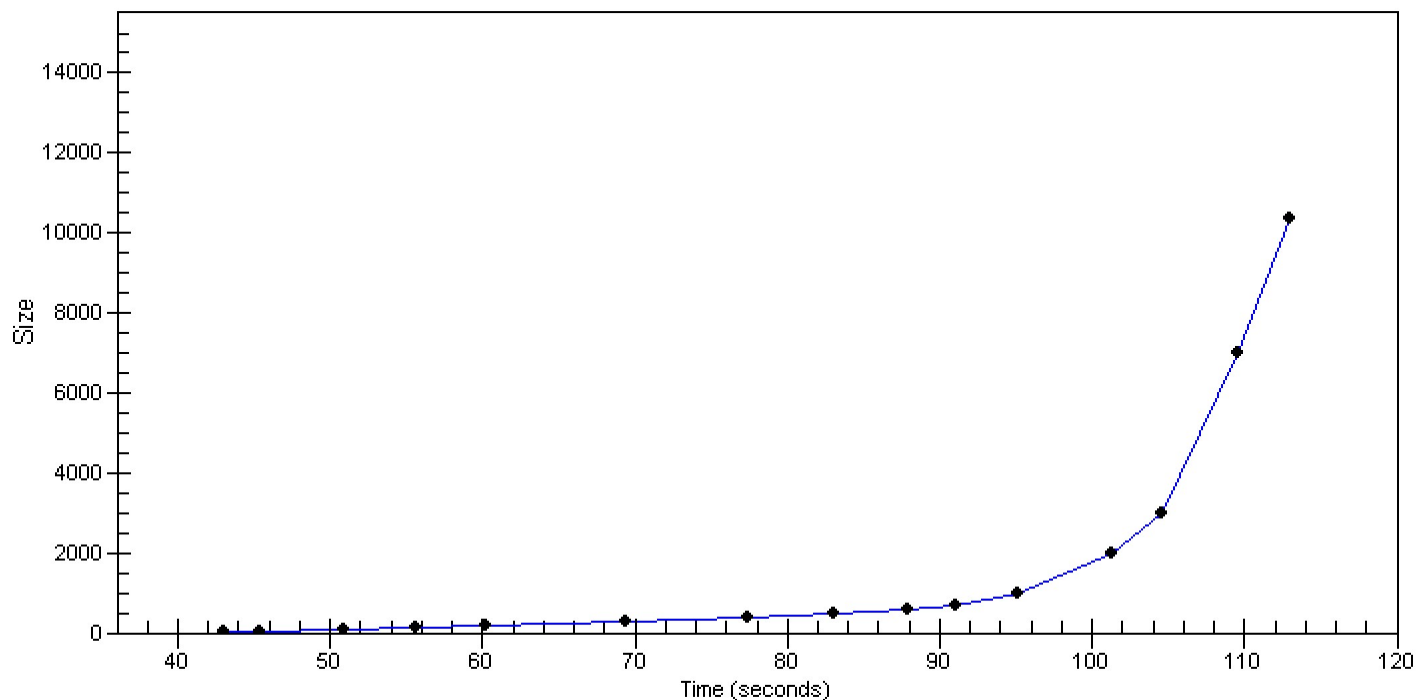


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
Modified: 3/24/2014 2:55:25 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad

Created: 3/24/2014 1:39:00 PM
 Modified: 3/24/2014 2:55:25 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		3/24/2014 2:20:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-03-24\2014-03-24_005.xad)		Instrument	Run		3/24/2014 1:39:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/24/2014 1:39:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/24/2014 1:39:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/24/2014 1:39:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/24/2014 1:39:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/24/2014 1:39:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/24/2014 1:39:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1