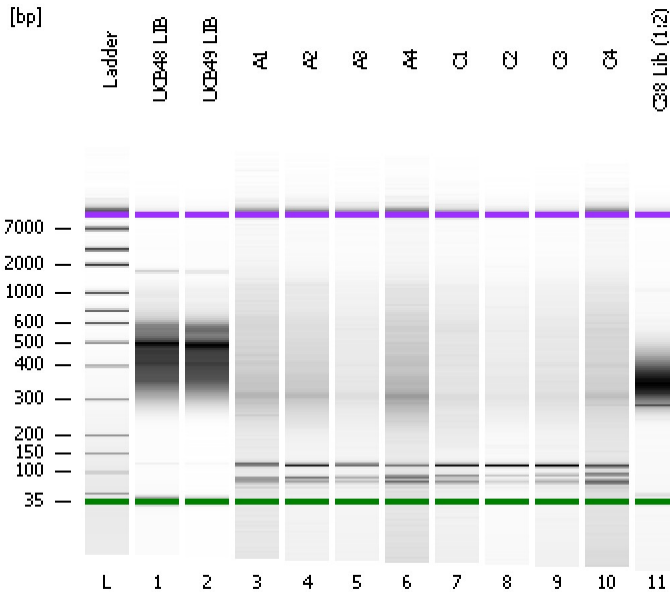


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
Modified: 3/2/2012 2:16:32 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

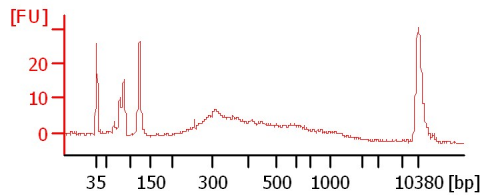
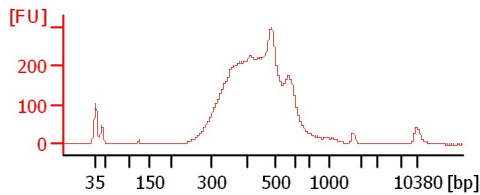
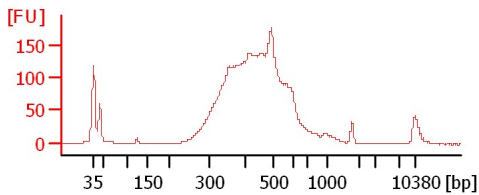
Chip Information:

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

UCB48 LIB

UCB49 LIB

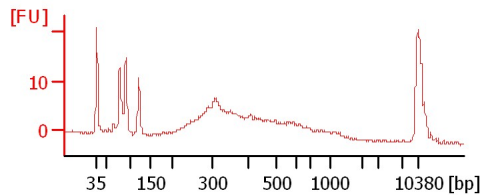
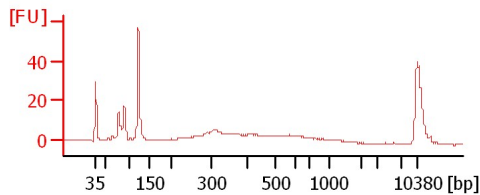
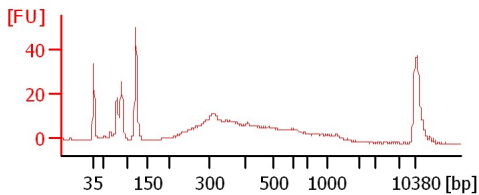
A1



A2

A3

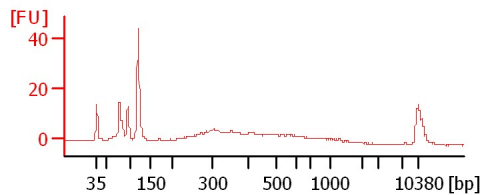
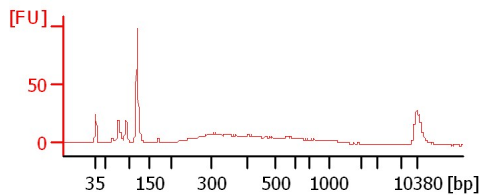
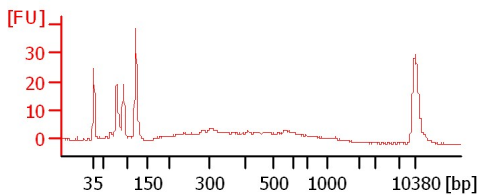
A4



C1

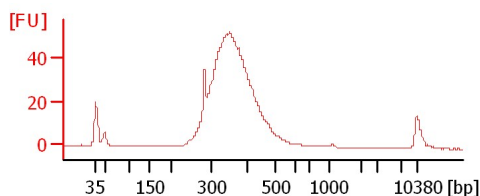
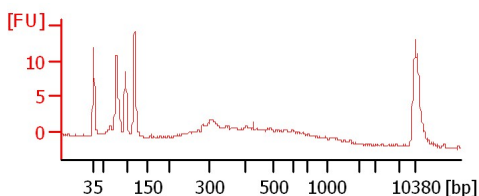
C2

C3



C4

C38 Lib (1:2)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
Modified: 3/2/2012 2:16:32 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
UCB48 LIB		<input type="checkbox"/>	✓			
UCB49 LIB		<input type="checkbox"/>	✓			
A1		<input type="checkbox"/>	✓			
A2		<input type="checkbox"/>	✓			
A3		<input type="checkbox"/>	✓			
A4		<input type="checkbox"/>	✓			
C1		<input type="checkbox"/>	✓			
C2		<input type="checkbox"/>	✓			
C3		<input type="checkbox"/>	✓			
C4		<input type="checkbox"/>	✓			
C38 Lib (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\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 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

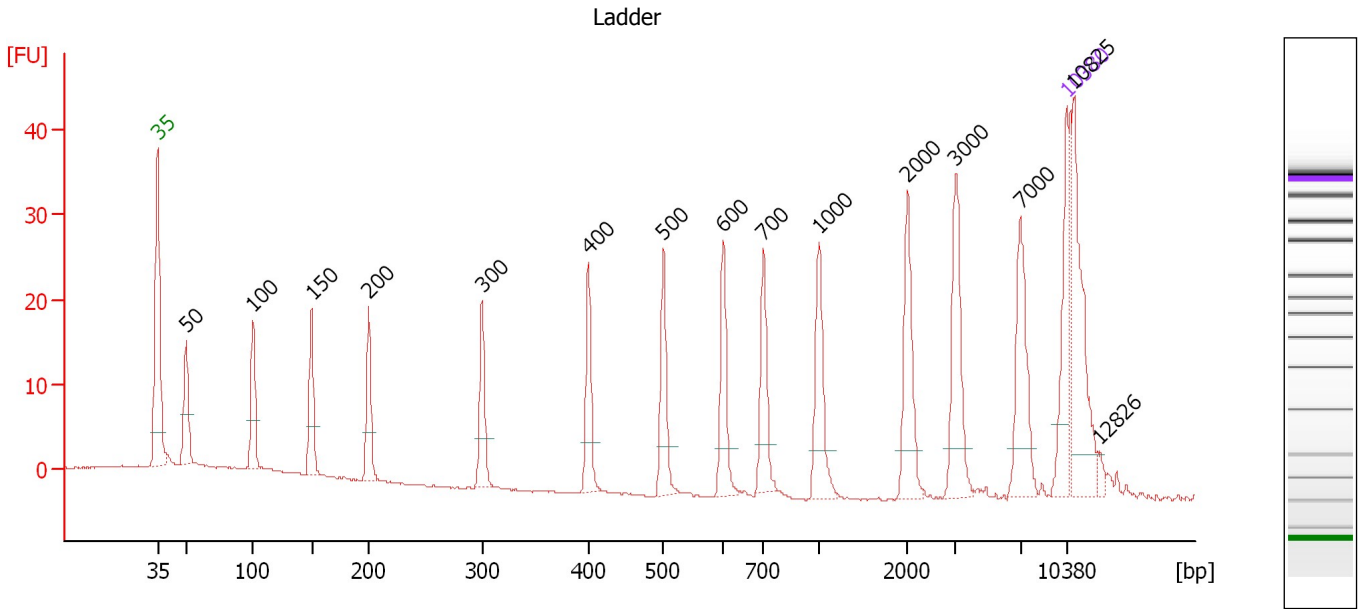
Ladder

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\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

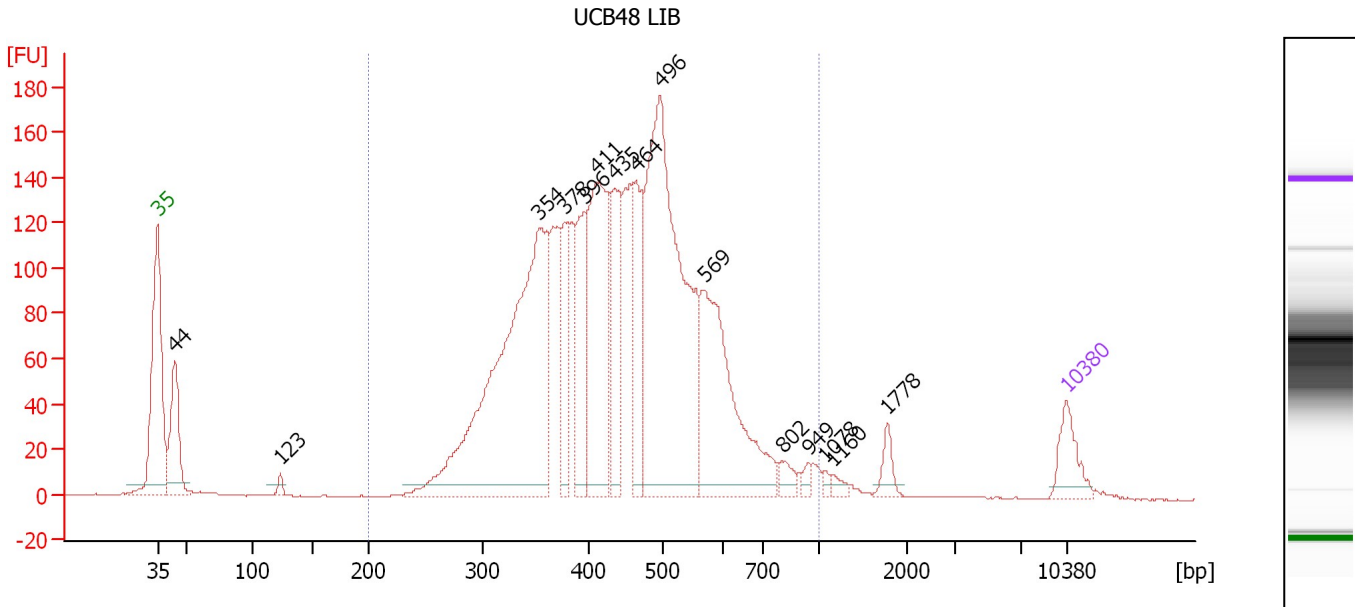
Peak table for Ladder

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
16	10,825	0.00	0.0	
17	12,826	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : UCB48 LIB

Number of peaks found: 15 Corr. Area 1: 3,034.8
 Noise: 0.2

Peak table for sample 1 : UCB48 LIB

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	271.18	9,301.1	
3	123	20.90	257.4	
4	354	1,351.97	5,790.5	
5	378	191.56	768.5	
6	396	229.63	878.8	
7	411	534.25	1,968.8	
8	435	255.76	891.8	
9	464	253.68	829.2	
10	496	1,163.63	3,556.2	
11	569	552.89	1,473.4	
12	802	32.63	61.6	
13	949	17.13	27.3	
14	1,078	10.18	14.3	
15	1,160	15.91	20.8	
16	1,778	36.63	31.2	
17	10,380	75.00	10.9	Upper Marker

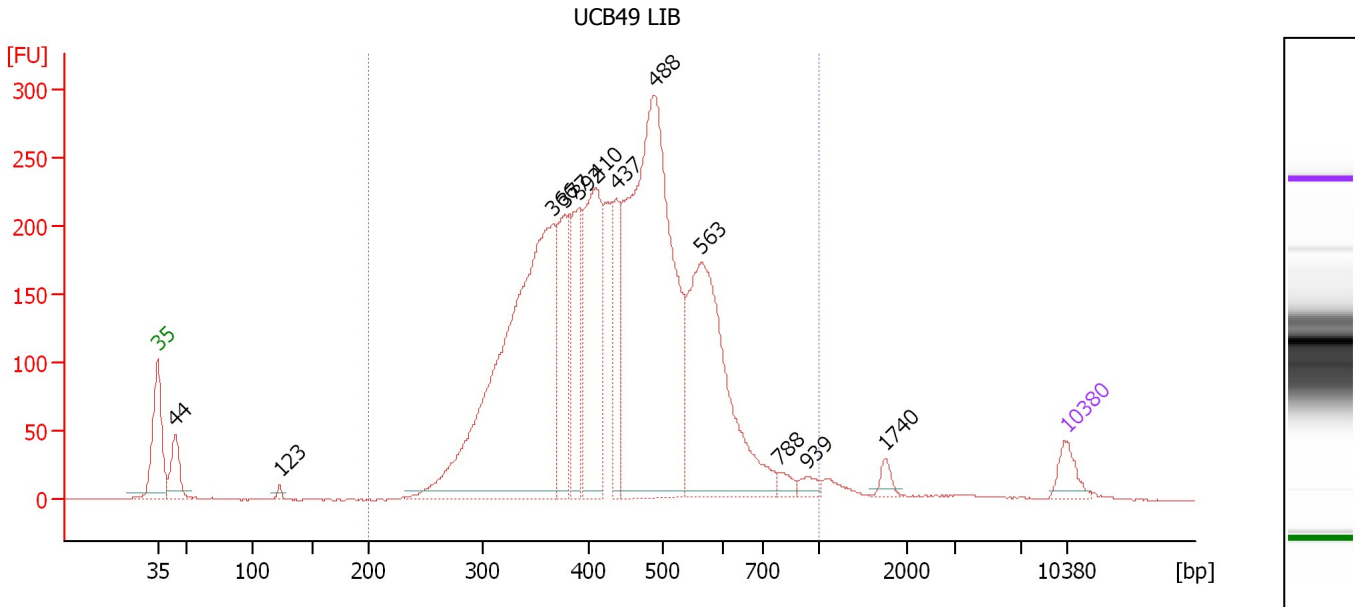
Region table for sample 1 : UCB48 LIB

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	19,572.8	451	5,394.03	1,000	3,034.8	94	25.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : UCB49 LIB

Number of peaks found: 12 Corr. Area 1: 4,981.1
 Noise: 0.3

Peak table for sample 2 : UCB49 LIB

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	217.16	7,440.0	
3	123	22.55	278.8	
4	366	2,475.90	10,249.8	
5	377	479.72	1,925.7	
6	392	381.09	1,473.9	
7	410	800.70	2,957.3	
8	437	305.68	1,059.9	
9	488	2,517.31	7,815.4	
10	563	1,229.98	3,308.5	
11	788	41.49	79.8	
12	939	42.12	68.0	
13	1,740	37.17	32.4	
14	10,380	75.00	10.9	Upper Marker

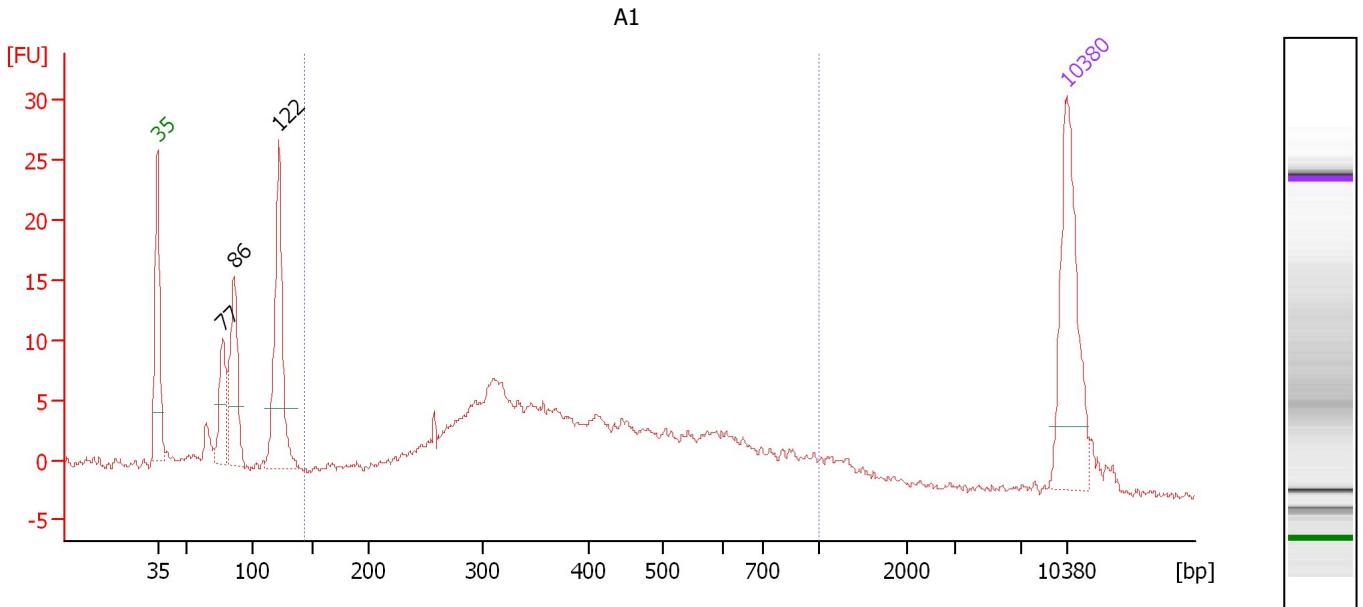
Region table for sample 2 : UCB49 LIB

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	33,177.4	447	9,114.97	1,000	4,981.1	96	23.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : A1

Number of peaks found: 3 Corr. Area 1: 185.1
 Noise: 0.4

Peak table for sample 3 : A1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	47.56	935.7	
3	86	78.21	1,384.3	
4	122	123.71	1,538.4	
5	10,380	75.00	10.9	Upper Marker

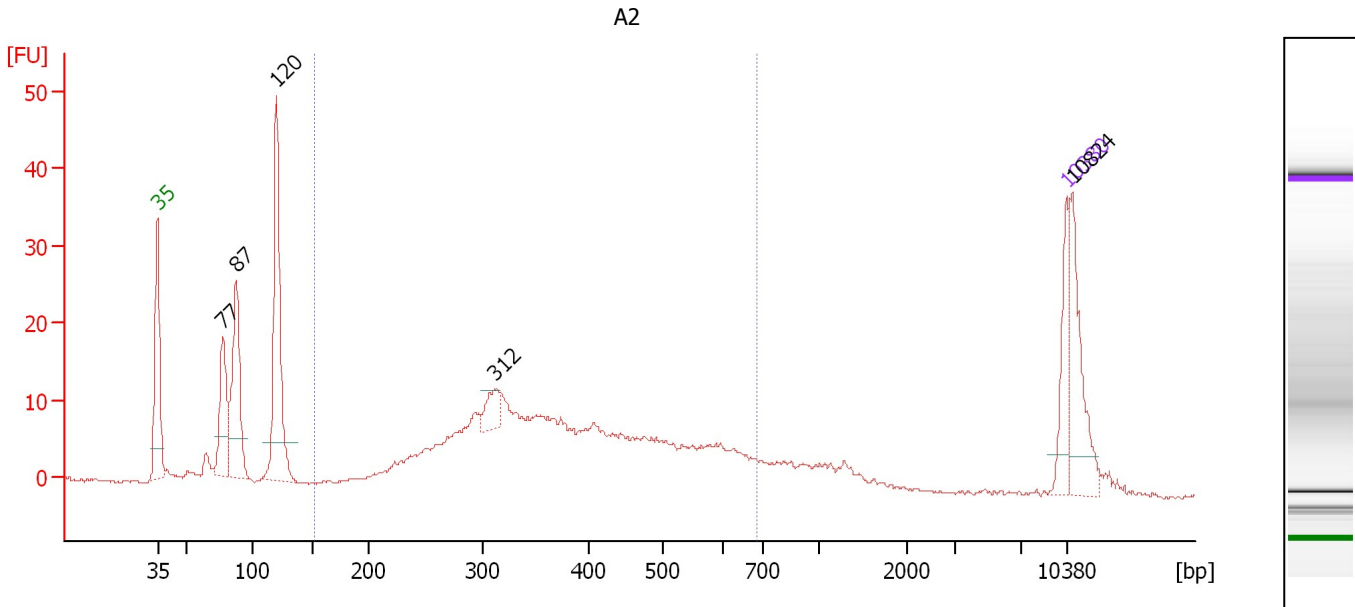
Region table for sample 3 : A1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
144	1,973.7	437	475.85	1,000	185.1	63	38.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : A2

Number of peaks found: 5 Corr. Area 1: 265.2
 Noise: 0.2

Peak table for sample 4 : A2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	170.27	3,344.3	
3	87	248.39	4,320.2	
4	120	377.23	4,761.4	
5	312	49.06	238.4	
6	10,380	75.00	10.9	Upper Marker
7	10,824	0.00	0.0	

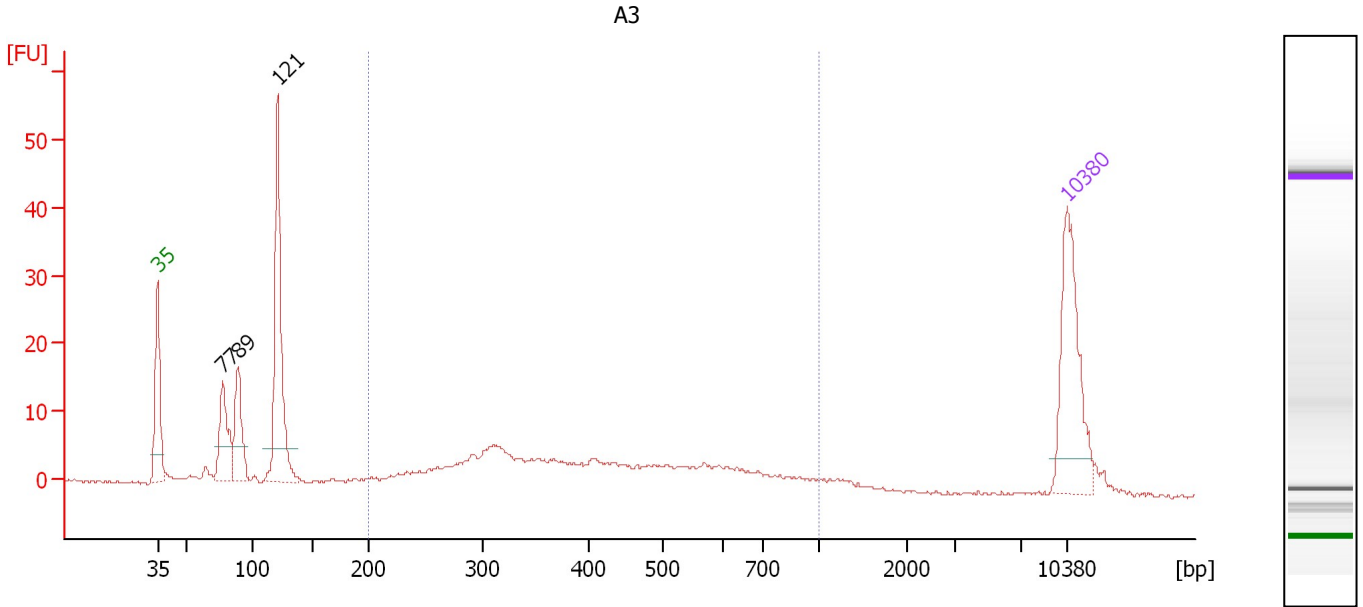
Region table for sample 4 : A2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
152	6,047.0	394	1,390.15	686	265.2	56	29.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : A3

Number of peaks found: 3 Corr. Area 1: 141.2
 Noise: 0.3

Peak table for sample 5 : A3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	59.09	1,158.7	
3	89	56.36	964.5	
4	121	156.30	1,958.6	
5	10,380	75.00	10.9	Upper Marker

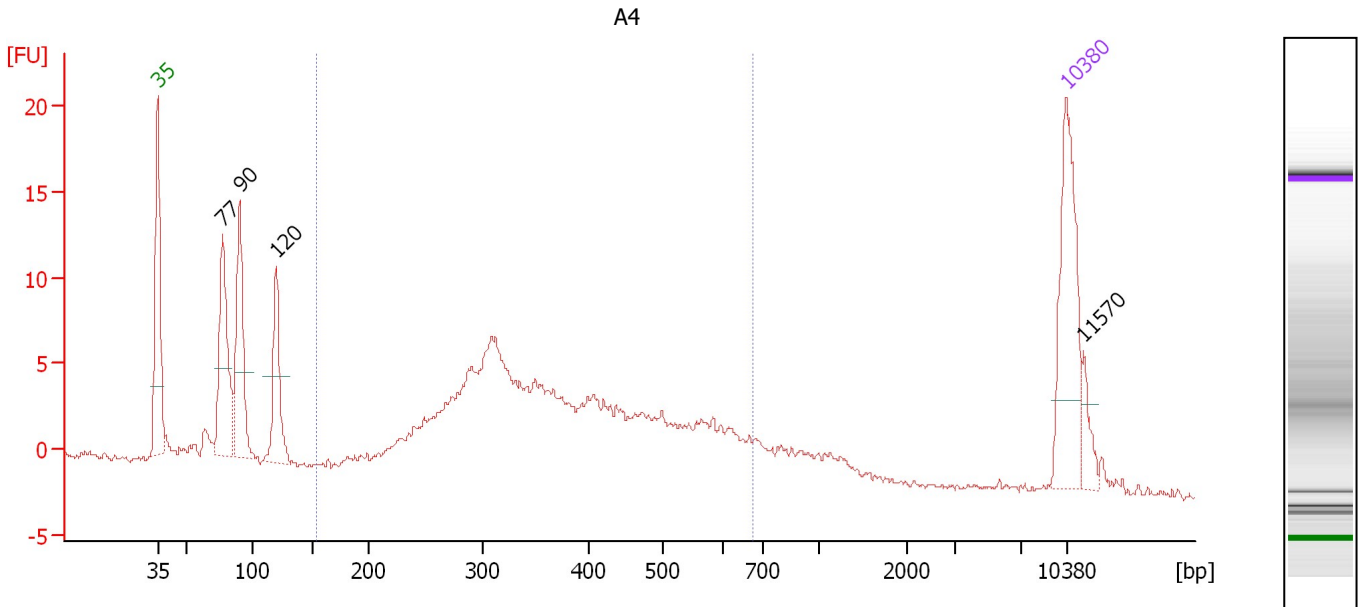
Region table for sample 5 : A3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,108.1	439	269.49	1,000	141.2	51	37.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : A4

Number of peaks found: 4 Corr. Area 1: 140.0
 Noise: 0.2

Peak table for sample 6 : A4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	105.07	2,060.2	
3	90	97.32	1,640.6	
4	120	66.60	841.8	
5	10,380	75.00	10.9	Upper Marker
6	11,570	0.00	0.0	

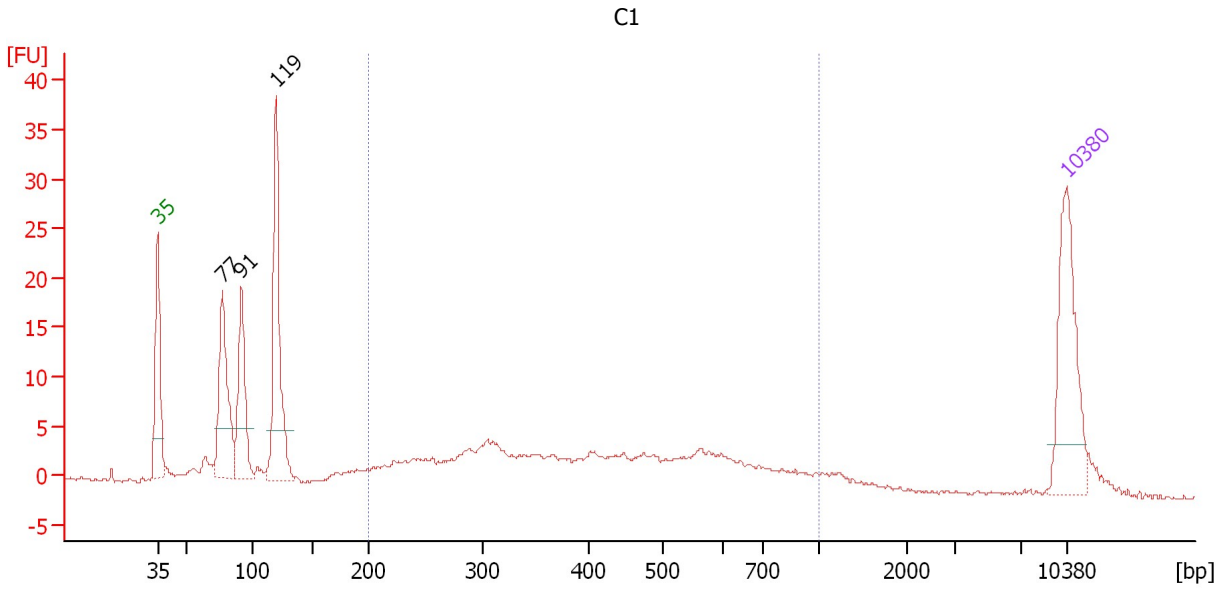
Region table for sample 6 : A4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
154	2,393.0	389	549.59	675	140.0	65	28.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : C1

Number of peaks found: 3 Corr. Area 1: 129.1
 Noise: 0.2

Peak table for sample 7 : C1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	108.51	2,140.2	
3	91	84.33	1,400.6	
4	119	148.79	1,888.7	
5	10,380	75.00	10.9	Upper Marker

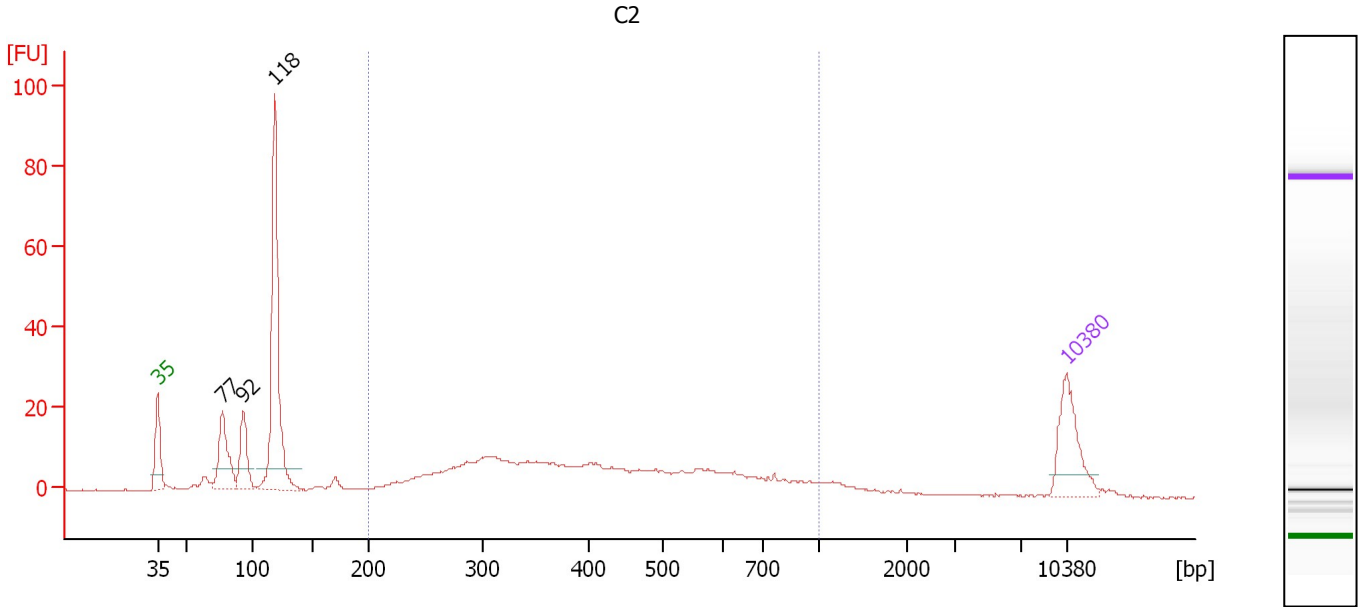
Region table for sample 7 : C1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,407.4	446	339.03	1,000	129.1	50	39.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : C2

Number of peaks found: 3 Corr. Area 1: 243.6
 Noise: 0.2

Peak table for sample 8 : C2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	109.80	2,167.5	
3	92	82.56	1,352.3	
4	118	352.66	4,520.6	
5	10,380	75.00	10.9	Upper Marker

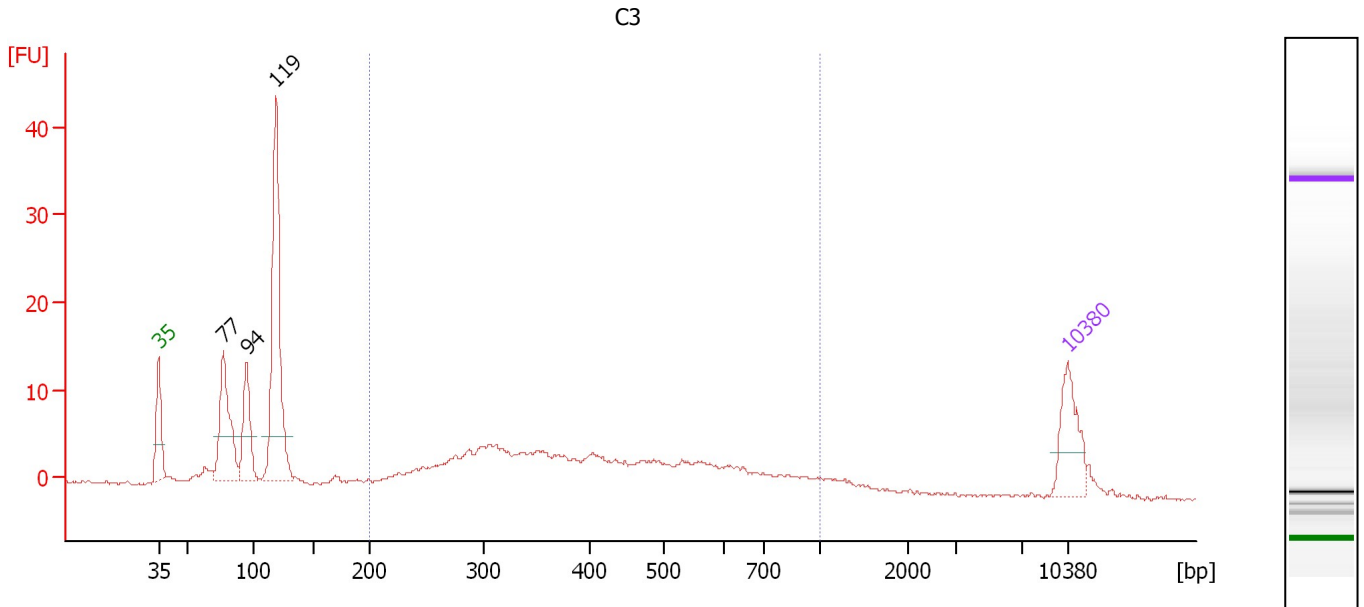
Region table for sample 8 : C2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,481.9	441	607.73	1,000	243.6	55	37.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : C3

Number of peaks found: 3 Corr. Area 1: 124.7
 Noise: 0.2

Peak table for sample 9 : C3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	196.61	3,881.0	
3	94	124.87	2,006.5	
4	119	404.67	5,164.8	
5	10,380	75.00	10.9	Upper Marker

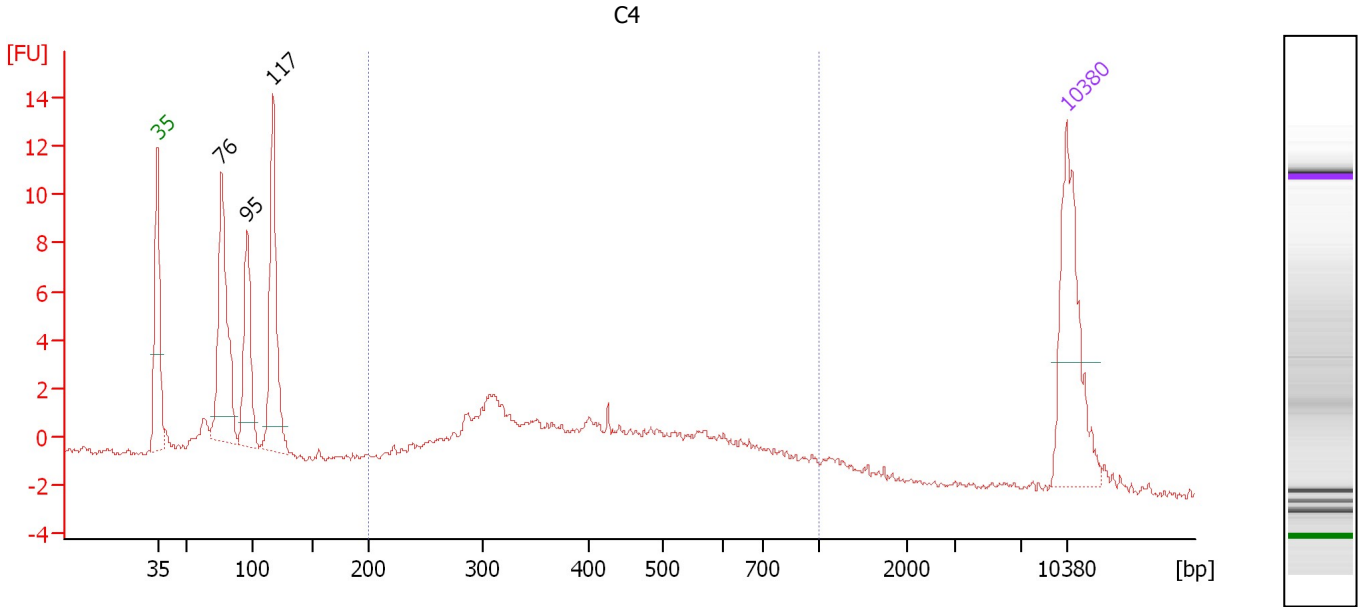
Region table for sample 9 : C3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,755.3	441	675.06	1,000	124.7	52	37.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : C4

Height Threshold [FU] : 1 Width Threshold [s] : 0.2

Overall Results for sample 10 : C4

Number of peaks found: 3 Corr. Area 1: 59.9
 Noise: 0.2

Peak table for sample 10 : C4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	76	129.95	2,584.5	
3	95	78.10	1,239.5	
4	117	115.73	1,499.9	
5	10,380	75.00	10.9	Upper Marker

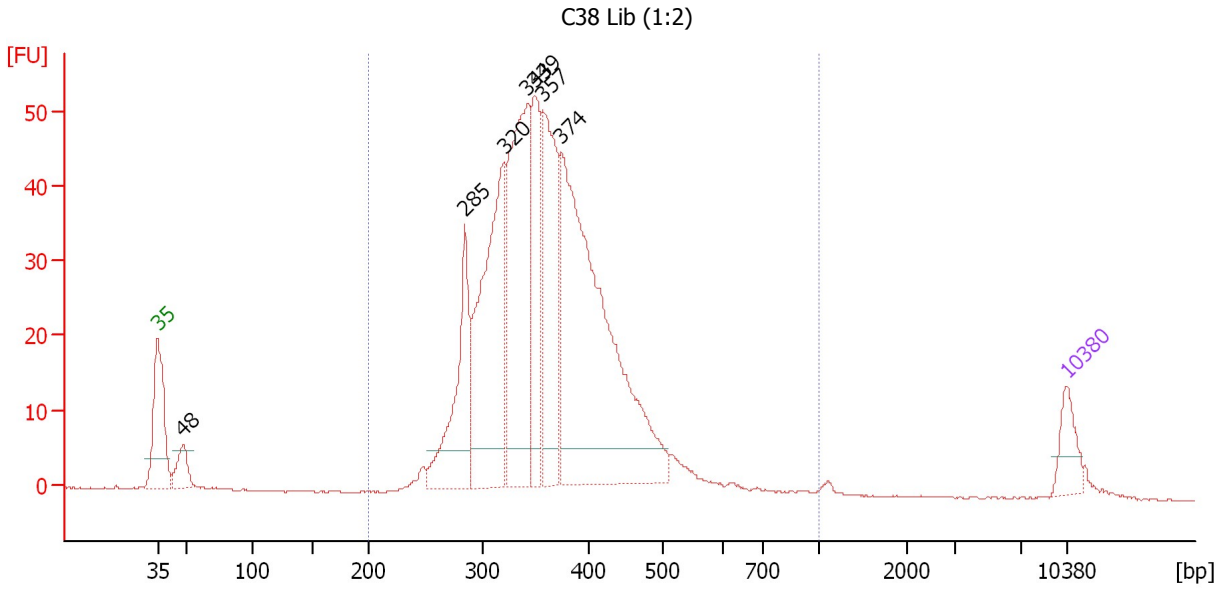
Region table for sample 10 : C4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,228.7	451	311.05	1,000	59.9	51	36.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
 Modified: 3/2/2012 2:16:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : C38 Lib (1:2)

Number of peaks found: 7 Corr. Area 1: 715.4
 Noise: 0.1

Peak table for sample 11 : C38 Lib (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	101.98	3,189.4	
3	285	415.78	2,212.8	
4	320	787.12	3,724.2	
5	343	786.22	3,475.6	
6	349	363.31	1,577.6	
7	357	514.43	2,180.9	
8	374	1,406.11	5,692.2	
9	10,380	75.00	10.9	Upper Marker

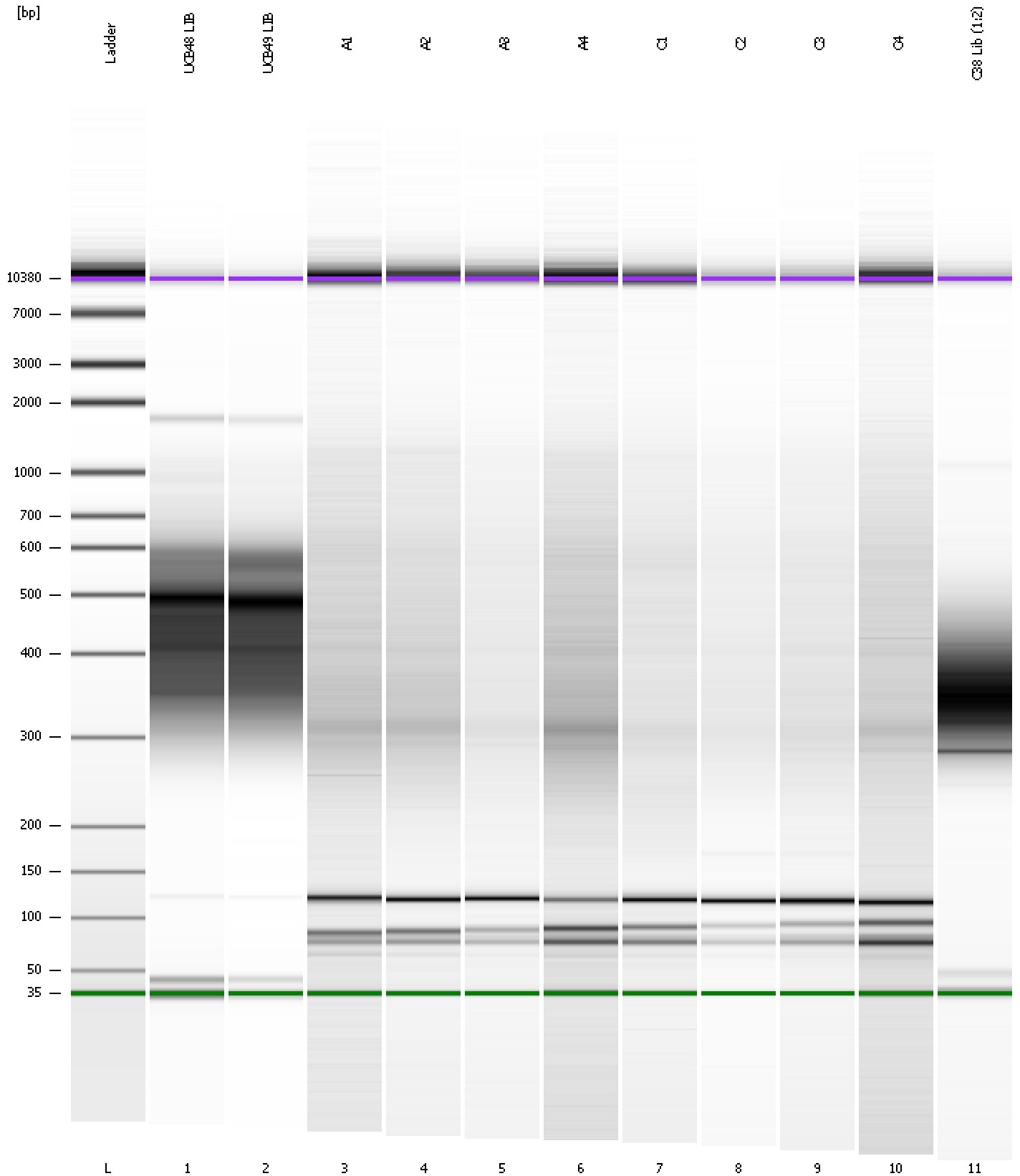
Region table for sample 11 : C38 Lib (1:2)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	19,638.1	366	4,568.69	1,000	715.4	98	18.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
Modified: 3/2/2012 2:16:32 PM

Gel Image

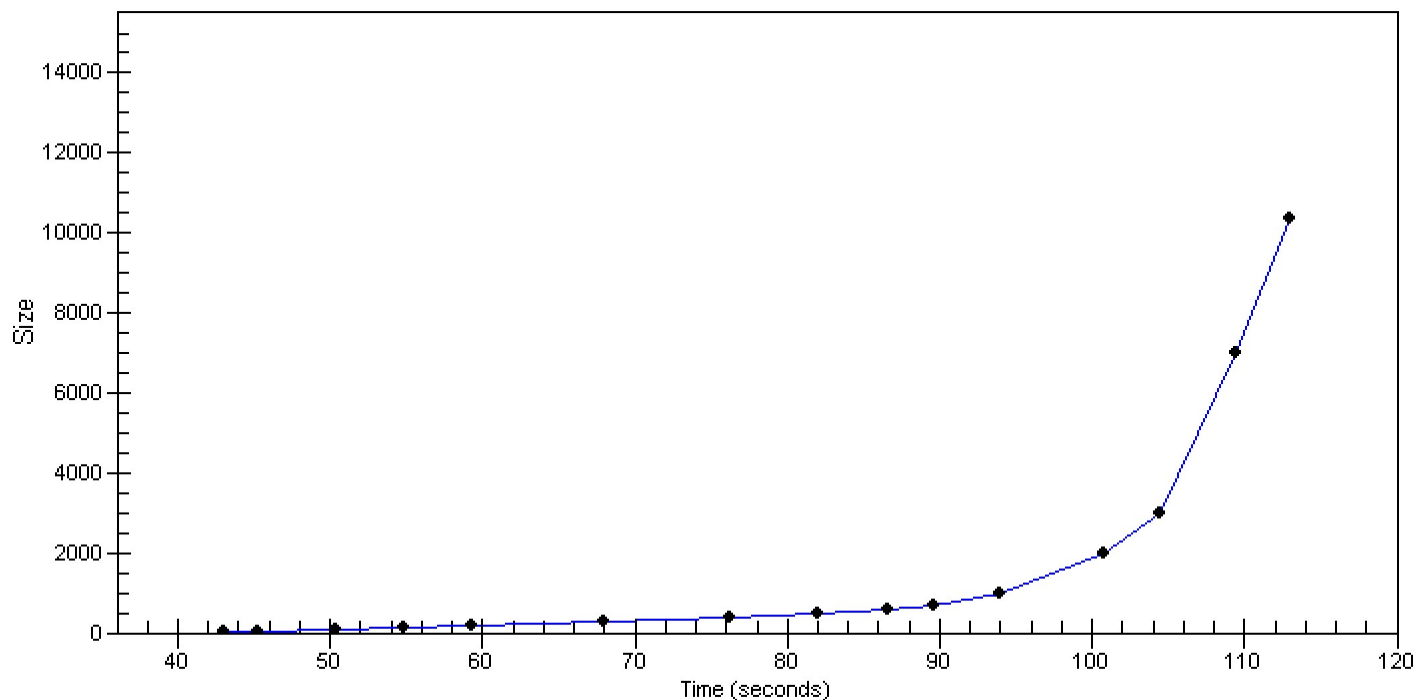


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad

Created: 3/2/2012 1:18:31 PM
Modified: 3/2/2012 2:16:32 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay Created: 3/2/2012 1:18:31 PM
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad Modified: 3/2/2012 2:16:32 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		3/2/2012 1:59:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-02\2012-03-02_006.xad)		Instrument	Run		3/2/2012 1:18:31 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/2/2012 1:18:31 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/2/2012 1:18:31 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/2/2012 1:18:31 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/2/2012 1:18:31 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/2/2012 1:18:31 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/2/2012 1:18:31 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1