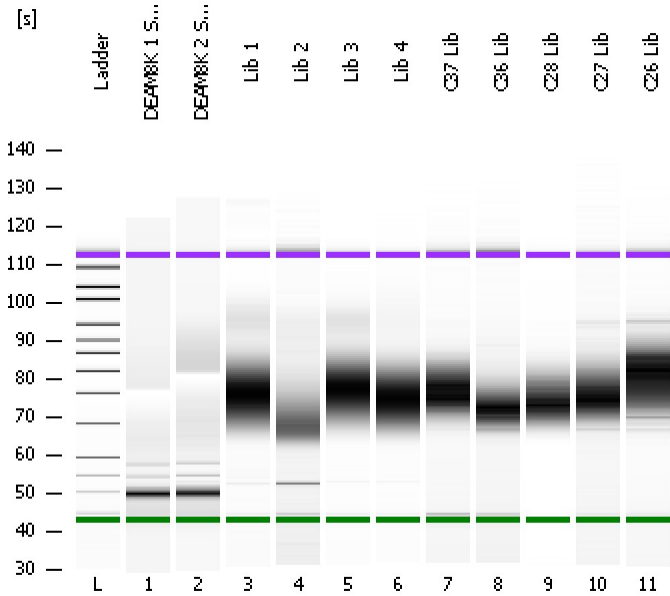


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
Modified: 3/6/2012 12:33:52 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

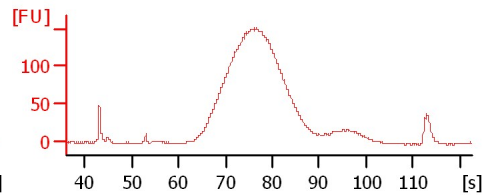
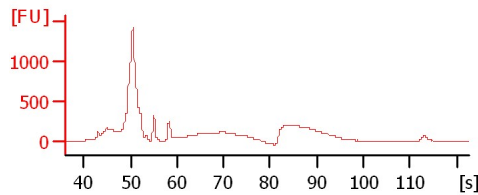
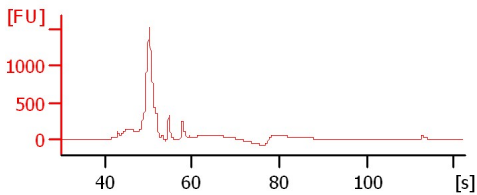
Chip Information:

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

DEAM8K 1 Soni

DEAM8K 2 Soni

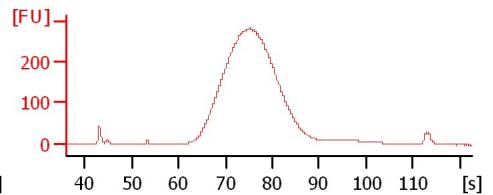
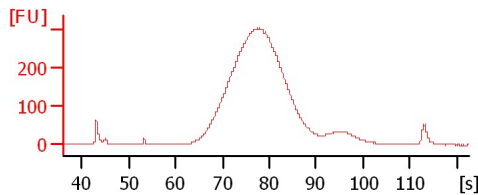
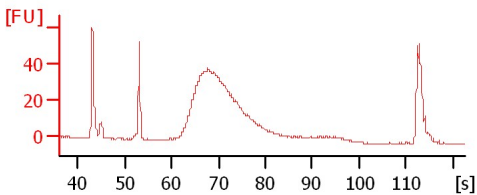
Lib 1



Lib 2

Lib 3

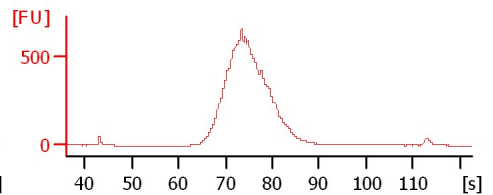
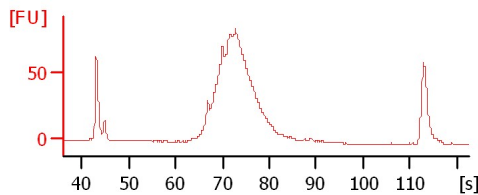
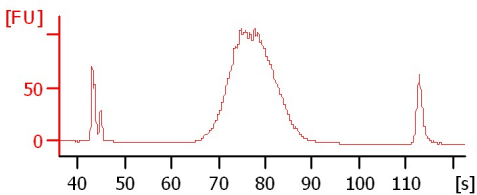
Lib 4



C37 Lib

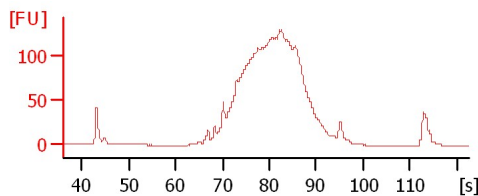
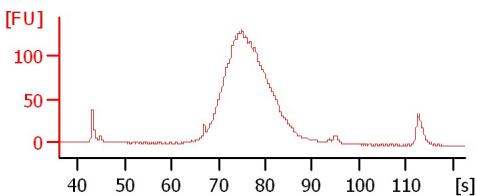
C36 Lib

C28 Lib



C27 Lib

C26 Lib



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
Modified: 3/6/2012 12:33:52 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
DEAM8K 1 Soni		<input type="checkbox"/>	✓			
DEAM8K 2 Soni		<input type="checkbox"/>	✓			
Lib 1		<input type="checkbox"/>	✓			
Lib 2		<input type="checkbox"/>	✓			
Lib 3		<input type="checkbox"/>	✓			
Lib 4		<input type="checkbox"/>	✓			
C37 Lib		<input type="checkbox"/>	✓			
C36 Lib		<input type="checkbox"/>	✓			
C28 Lib		<input type="checkbox"/>	✓			
C27 Lib		<input type="checkbox"/>	✓			
C26 Lib		<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\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 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

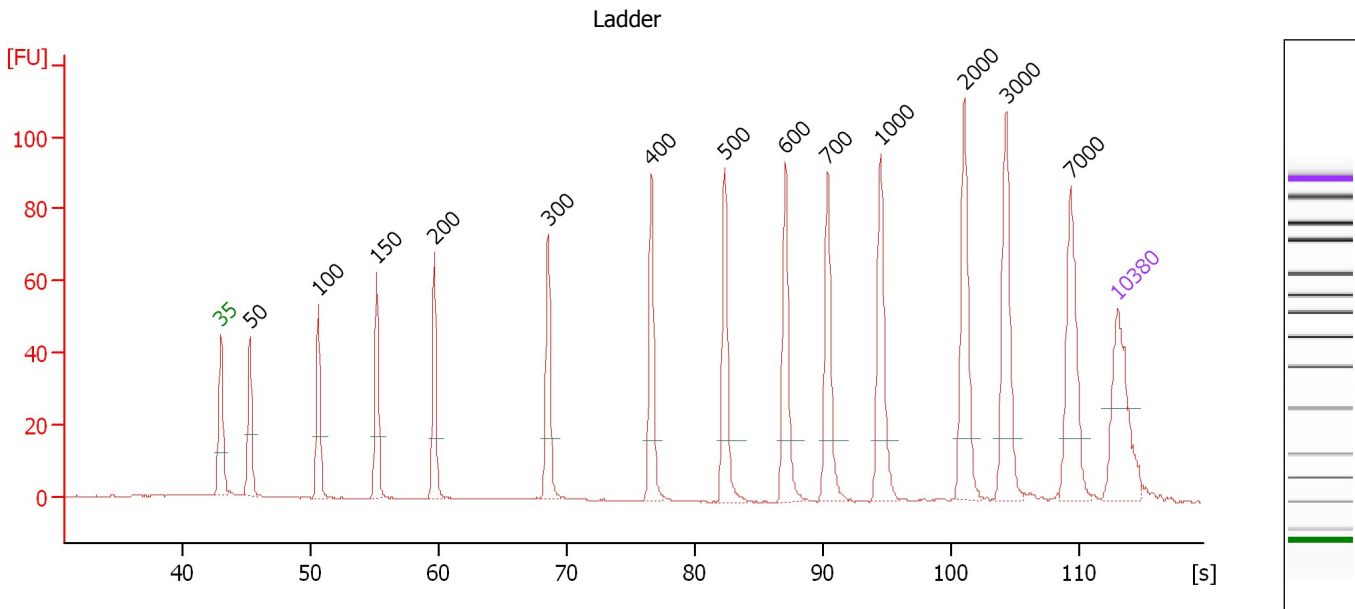
Ladder

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\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

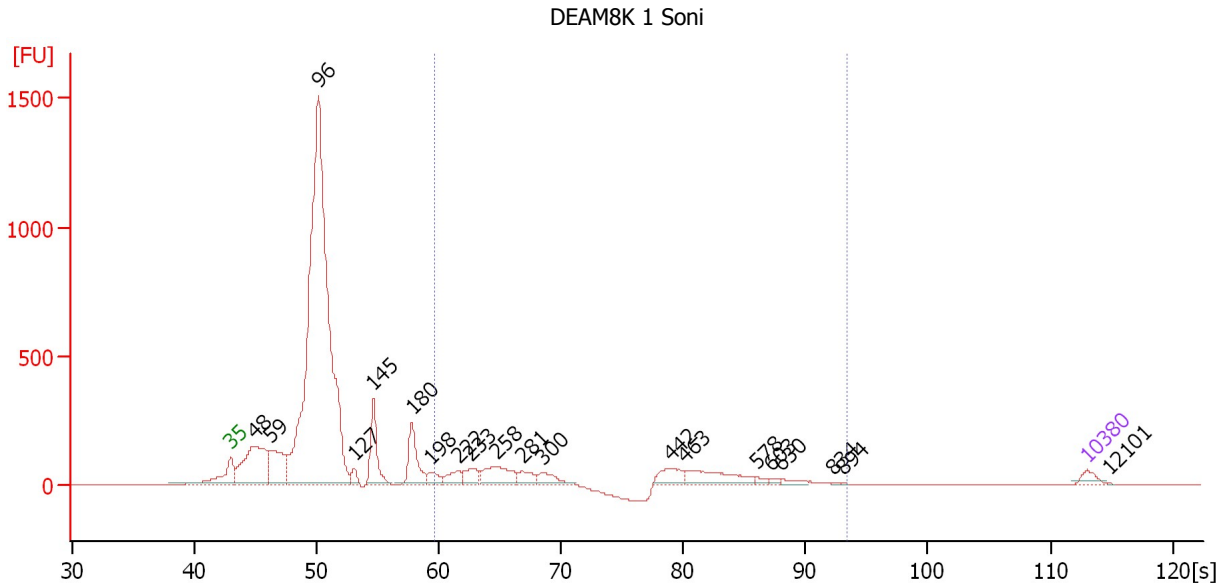
Peak table for Ladder

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\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : DEAM8K 1 Soni

Number of peaks found: 20 Corr. Area 1: 1,513.6
 Noise: 0.2

Peak table for sample 1 : DEAM8K 1 Soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	1,471.86	46,773.6	
3	59	867.26	22,270.1	
4	96	11,505.95	181,526.3	
5	127	125.68	1,495.1	
6	145	733.09	7,683.2	
7	180	627.26	5,294.1	
8	198	162.38	1,245.5	
9	222	197.88	1,353.1	
10	233	227.34	1,475.9	
11	258	479.64	2,817.3	
12	281	182.58	984.3	
13	300	206.98	1,046.3	
14	442	249.23	854.5	
15	463	435.47	1,424.4	
16	578	46.42	121.7	
17	603	29.68	74.6	
18	630	55.01	132.4	
19	834	7.57	13.8	
20	894	4.74	8.0	
21	10,380	75.00	10.9	Upper Marker
22	12,101	0.00	0.0	

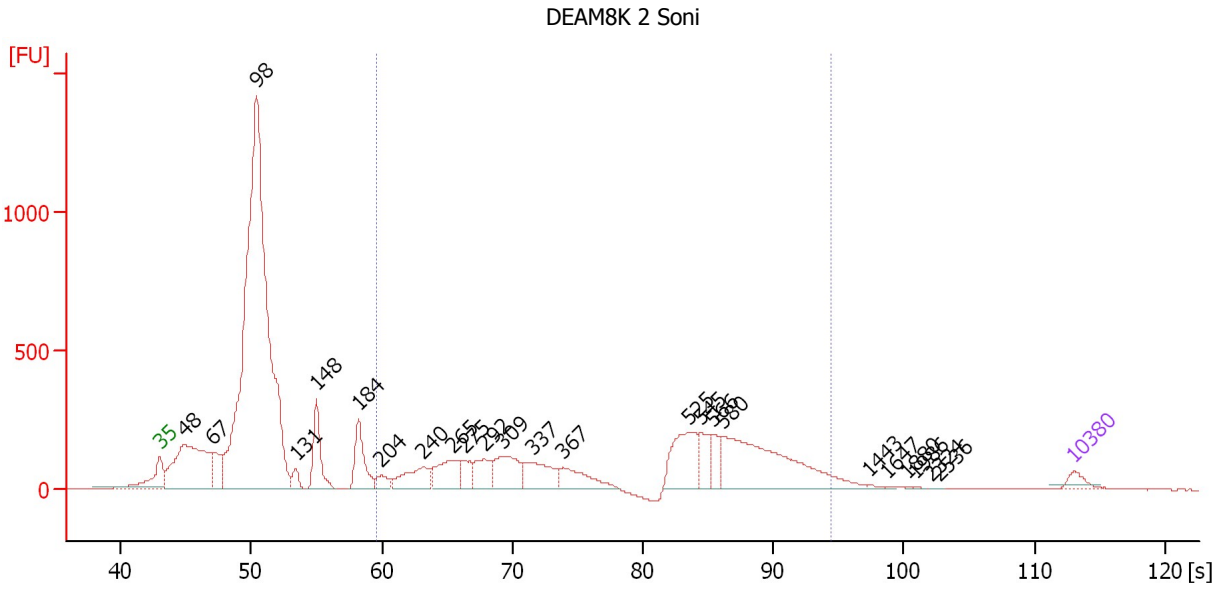
Region table for sample 1 : DEAM8K 1 Soni

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.64	10,796.8	391	2,253.03	93.44	1,513.6	16	38.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : DEAM8K 2 Soni

Number of peaks found: 24 Corr. Area 1: 4,262.9
 Noise: 0.2

Peak table for sample 2 : DEAM8K 2 Soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	1,672.57	53,054.6	
3	67	322.69	7,285.0	
4	98	9,011.69	138,641.2	
5	131	123.15	1,424.1	
6	148	562.51	5,751.7	
7	184	505.08	4,156.1	
8	204	125.66	934.7	
9	240	389.13	2,456.4	
10	265	416.72	2,383.2	
11	275	187.42	1,031.4	
12	292	277.31	1,436.8	
13	309	462.12	2,262.9	
14	337	400.45	1,800.9	
15	367	319.41	1,319.7	
16	525	575.54	1,662.0	
17	545	252.49	701.8	
18	566	184.16	493.3	
19	580	1,358.31	3,547.1	
20	1,443	16.36	17.2	
21	1,647	8.70	8.0	
22	1,880	4.12	3.3	
23	1,986	6.60	5.0	
24	2,324	3.20	2.1	
25	2,536	2.75	1.6	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...

... Region table for sample 2 :

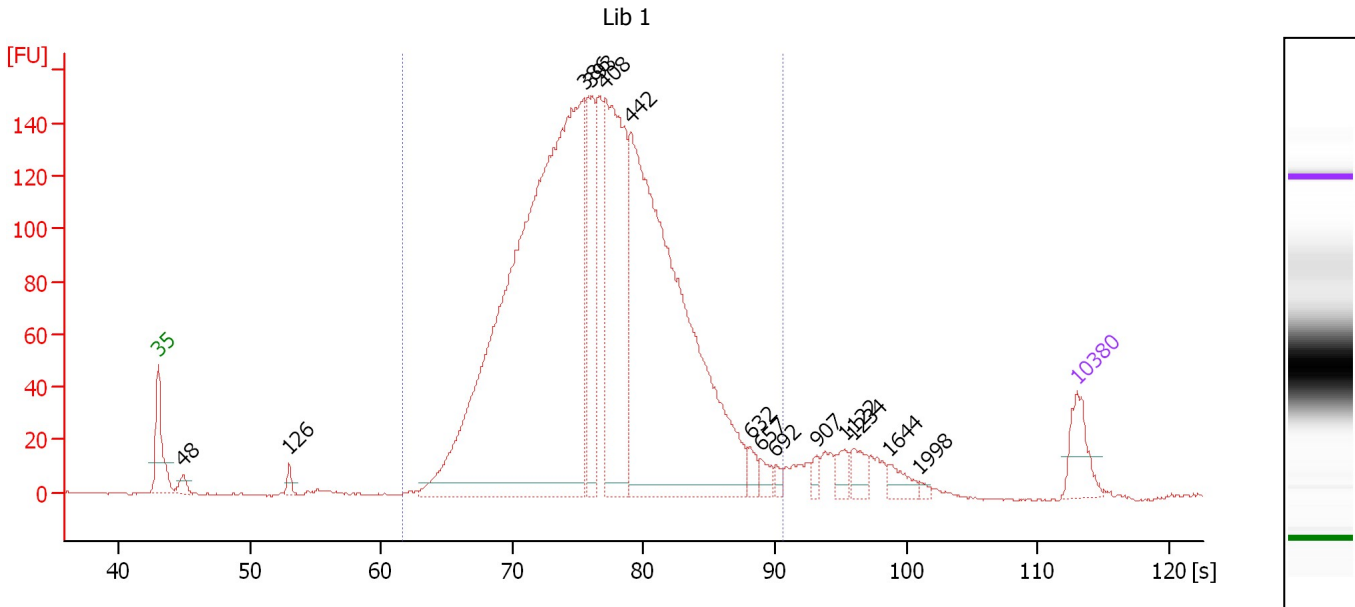
DEAM8K 2 Soni

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Co lor
59.64	18,975.2	488	4,796.38	94.47	4,262.9	35	38.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Lib 1

Number of peaks found: 14 Corr. Area 1: 2,788.1
 Noise: 0.3

Peak table for sample 3 : Lib 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	31.74	1,004.2	
3	126	25.34	303.7	
4	386	2,554.27	10,024.1	
5	393	255.04	983.6	
6	408	698.51	2,592.7	
7	442	1,661.08	5,691.1	
8	632	32.74	78.5	
9	657	28.15	64.9	
10	692	15.25	33.4	
11	907	18.91	31.6	
12	1,122	30.01	40.5	
13	1,234	39.67	48.7	
14	1,644	34.77	32.0	
15	1,998	6.77	5.1	
16	10,380	75.00	10.9	Upper Marker

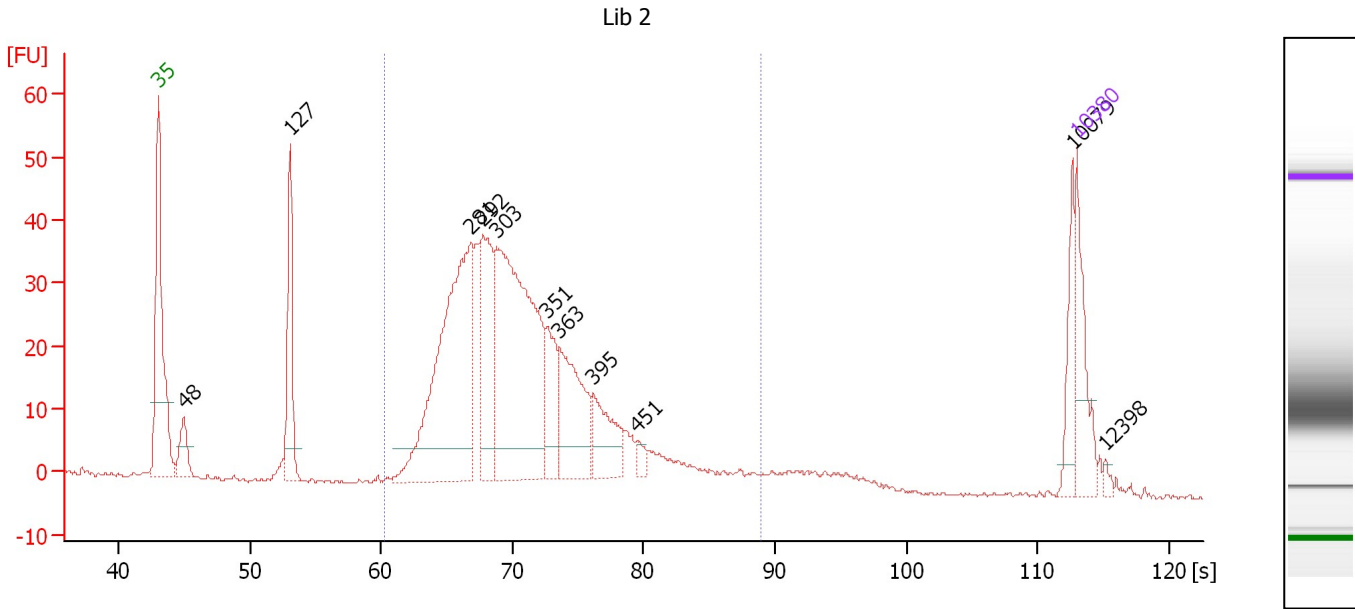
Region table for sample 3 : Lib 1

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.68	21,823.5	409	5,592.32	90.66	2,788.1	95	19.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Lib 2

Number of peaks found: 11 Corr. Area 1: 624.4
 Noise: 0.3

Peak table for sample 4 : Lib 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	55.35	1,748.3	
3	127	155.70	1,854.5	
4	281	496.73	2,677.3	
5	292	178.84	929.1	
6	303	500.73	2,503.8	
7	351	80.34	346.5	
8	363	151.26	631.4	
9	395	81.62	313.1	
10	451	14.08	47.3	
11	10,079	46.72	7.0	
12	10,380	75.00	10.9	Upper Marker
13	12,398	0.00	0.0	

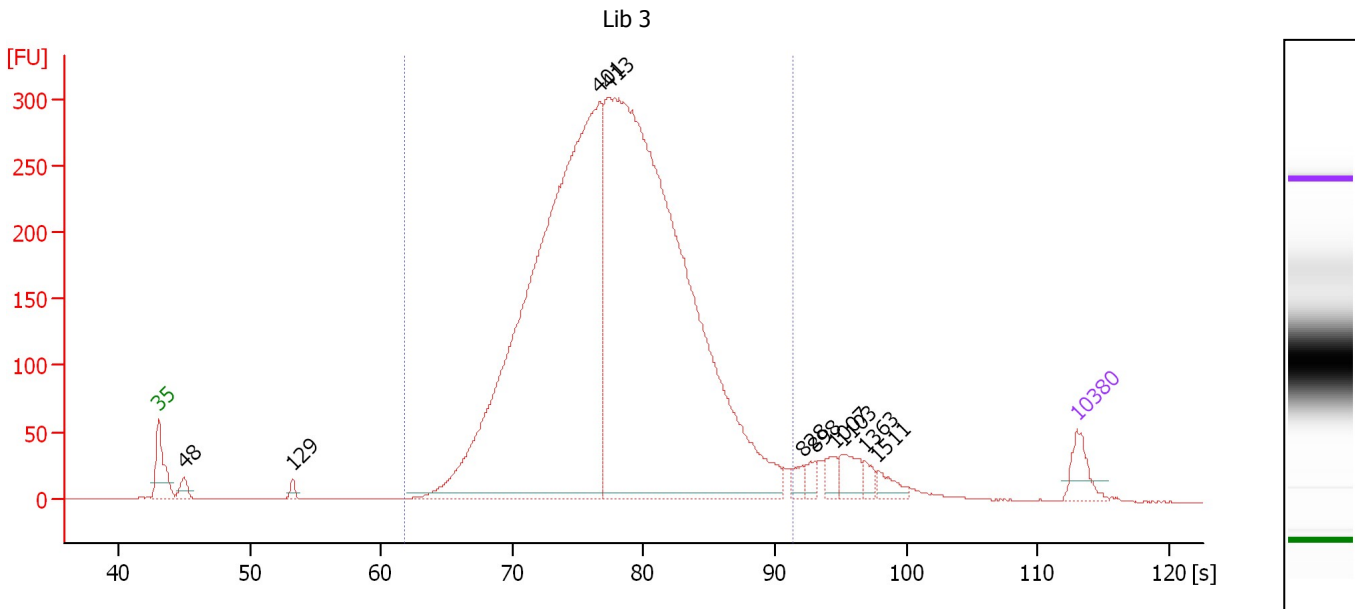
Region table for sample 4 : Lib 2

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Color	
60.23	8,385.1	334	1,747.56	88.89	624.4	84	22.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Lib 3

Number of peaks found: 10 Corr. Area 1: 5,366.9
 Noise: 0.2

Peak table for sample 5 : Lib 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	52.49	1,653.3	
3	129	24.54	288.3	
4	401	3,700.33	13,990.4	
5	413	4,379.12	16,049.4	
6	828	38.97	71.3	
7	898	36.84	62.2	
8	1,007	45.69	68.8	
9	1,103	80.48	110.5	
10	1,363	30.16	33.5	
11	1,511	44.44	44.6	
12	10,380	75.00	10.9	Upper Marker

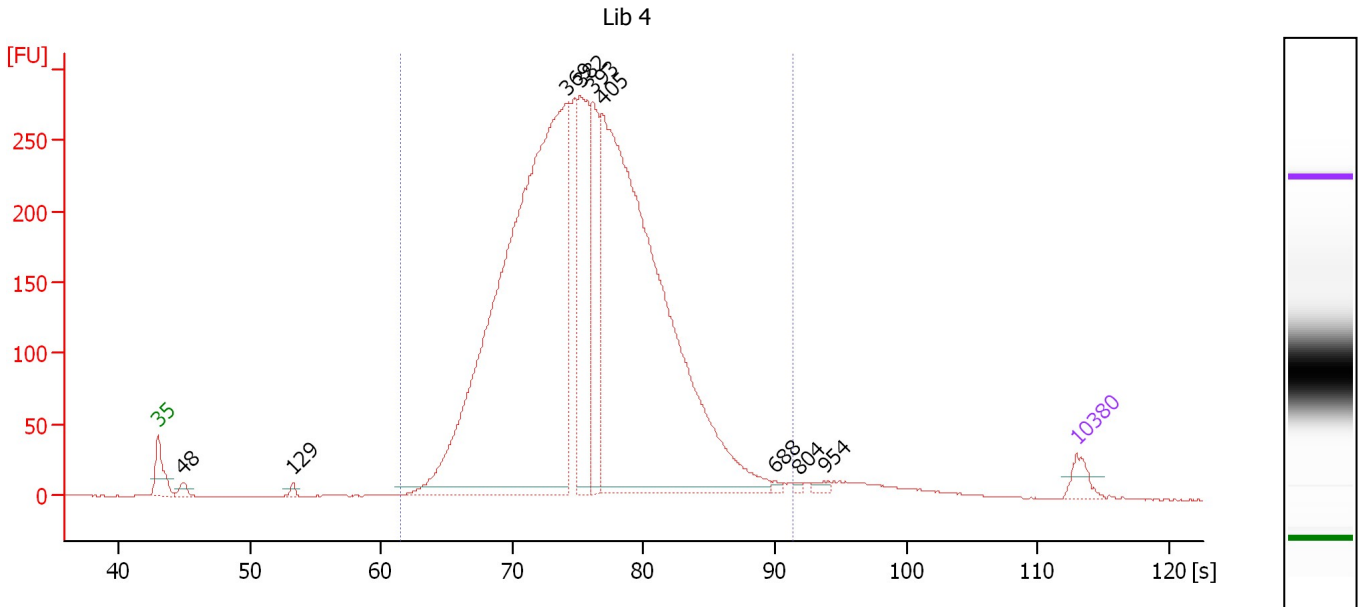
Region table for sample 5 : Lib 3

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Color
61.75	31,094.4	428	8,326.45	91.42	5,366.9 94	20.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Lib 4

Number of peaks found: 9 Corr. Area 1: 5,070.2
 Noise: 0.2

Peak table for sample 6 : Lib 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	57.20	1,817.8	
3	129	29.79	348.8	
4	369	5,710.40	23,453.2	
5	382	960.89	3,807.1	
6	393	733.48	2,824.5	
7	405	4,870.15	18,199.0	
8	688	18.76	41.3	
9	804	13.39	25.2	
10	954	24.03	38.2	
11	10,380	75.00	10.9	Upper Marker

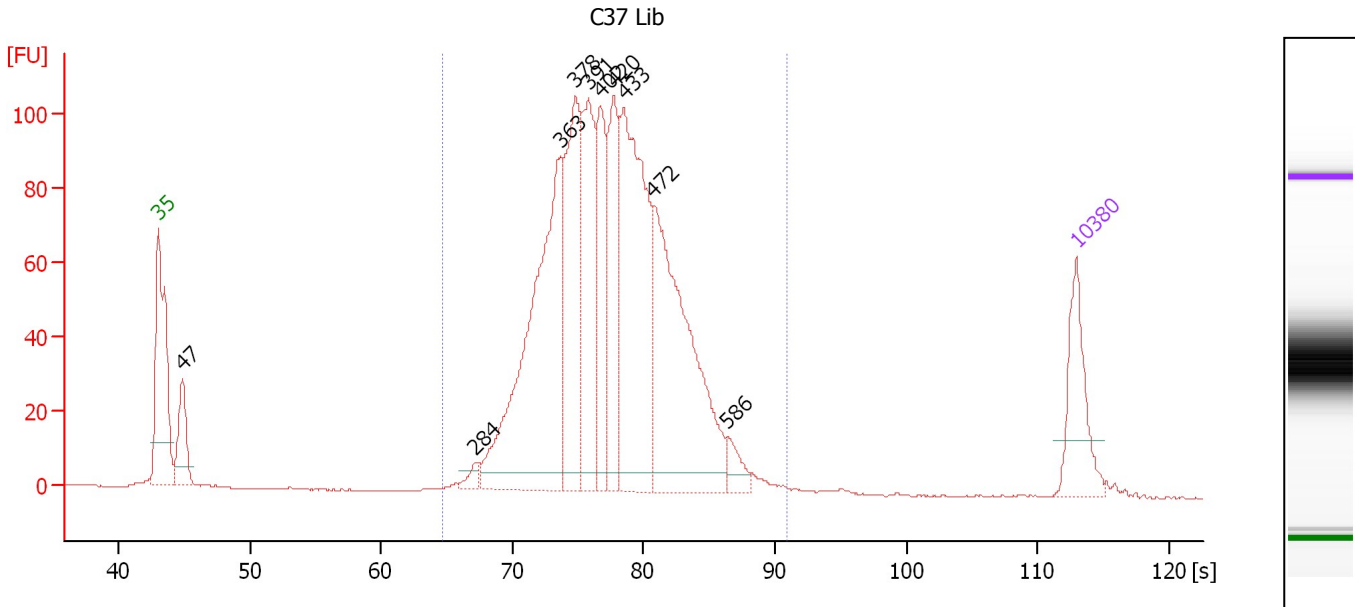
Region table for sample 6 : Lib 4

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.50	54,282.8	396	13,487.33	91.36	5,070.2	97	20.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : C37 Lib

Number of peaks found: 10 Corr. Area 1: 1,573.2
 Noise: 0.1

Peak table for sample 7 : C37 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	84.33	2,695.4	
3	284	15.11	80.5	
4	363	458.11	1,909.9	
5	378	231.90	930.5	
6	391	190.49	739.0	
7	402	140.71	529.9	
8	420	157.65	568.1	
9	433	368.29	1,287.3	
10	472	388.90	1,247.4	
11	586	25.78	66.7	
12	10,380	75.00	10.9	Upper Marker

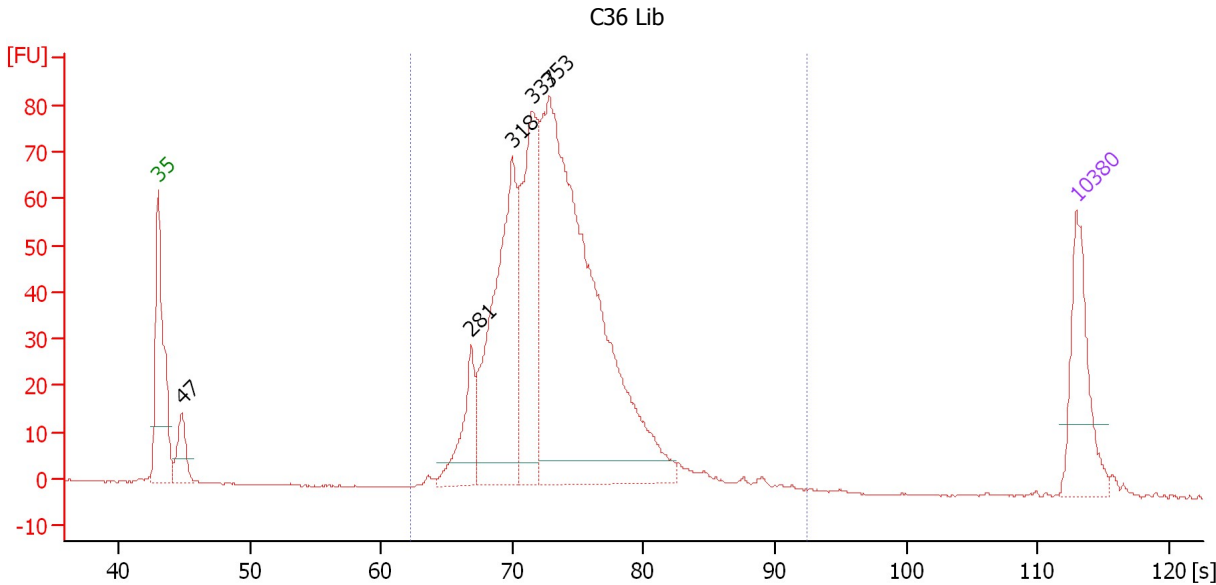
Region table for sample 7 : C37 Lib

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Color	
64.68	7,558.2	422	2,031.37	90.87	1,573.2	96	16.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : C36 Lib

Number of peaks found: 5 Corr. Area 1: 985.3
 Noise: 0.2

Peak table for sample 8 : C36 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	45.77	1,470.2	
3	281	76.54	412.8	
4	318	291.65	1,388.9	
5	337	216.69	972.9	
6	353	719.08	3,086.4	
7	10,380	75.00	10.9	Upper Marker

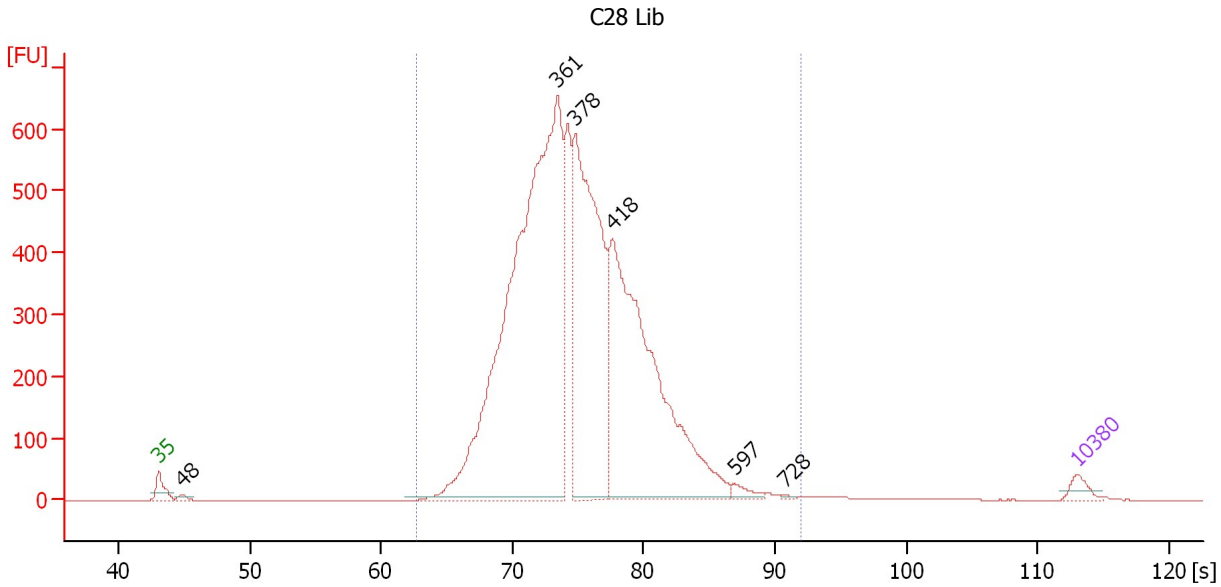
Region table for sample 8 : C36 Lib

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
62.20	5,743.4	362	1,332.45	92.46	985.3	97	17.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : C28 Lib

Number of peaks found: 6 Corr. Area 1: 8,434.2
 Noise: 0.2

Peak table for sample 9 : C28 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	42.57	1,352.6	
3	361	7,452.21	31,310.0	
4	378	3,443.73	13,816.2	
5	418	4,048.91	14,669.7	
6	597	76.48	194.1	
7	728	12.85	26.7	
8	10,380	75.00	10.9	Upper Marker

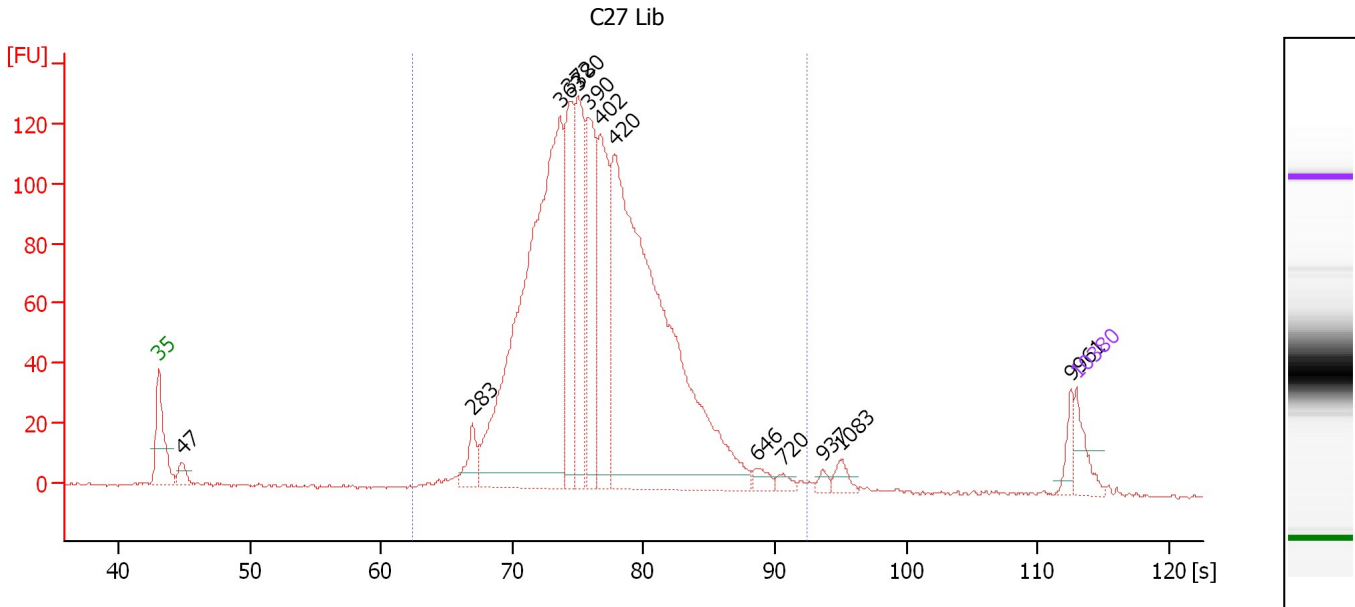
Region table for sample 9 : C28 Lib

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
62.73	66,281.2	386	16,311.90	91.93	8,434.2	99	17.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : C27 Lib

Number of peaks found: 13 Corr. Area 1: 1,871.7
 Noise: 0.5

Peak table for sample 10 : C27 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	60.54	1,951.3	
3	283	103.87	557.0	
4	363	2,041.97	8,513.1	
5	372	450.35	1,833.0	
6	380	475.14	1,892.2	
7	390	470.73	1,829.1	
8	402	482.52	1,819.5	
9	420	2,296.83	8,278.0	
10	646	38.36	89.9	
11	720	27.62	58.1	
12	937	20.78	33.6	
13	1,083	38.16	53.4	
14	9,961	47.57	7.2	
15	10,380	75.00	10.9	Upper Marker

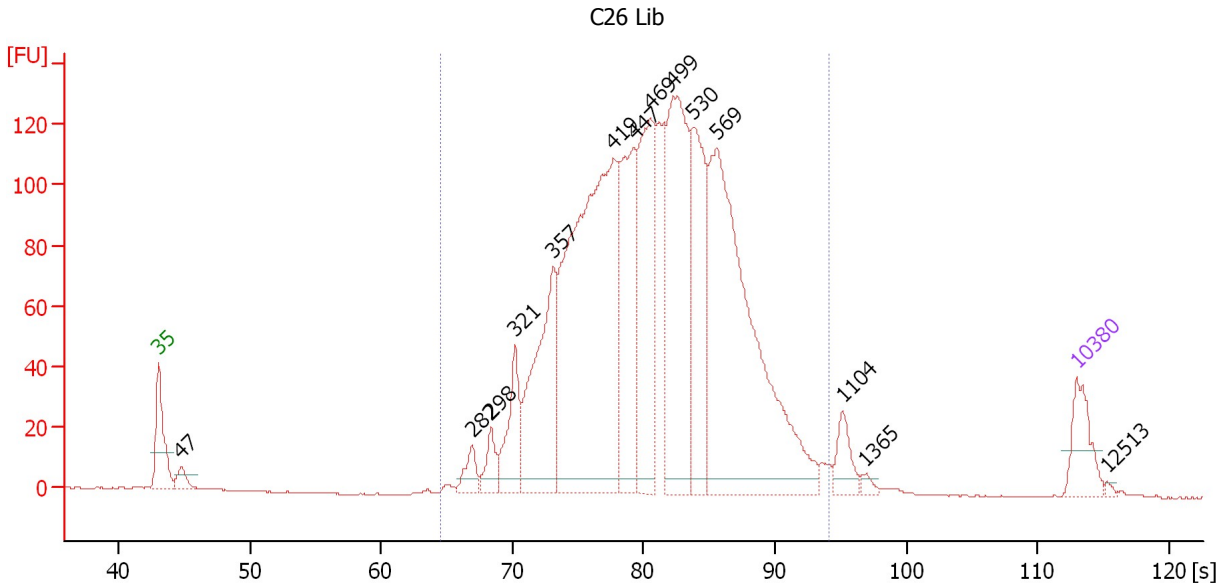
Region table for sample 10 : C27 Lib

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
62.46	25,140.0	409	6,515.16	92.42	1,871.7	96	18.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : C26 Lib

Number of peaks found: 14 Corr. Area 1: 2,354.4
 Noise: 0.1

Peak table for sample 11 : C26 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	37.92	1,225.6	
3	282	50.59	272.1	
4	298	55.85	283.9	
5	321	148.00	698.7	
6	357	384.23	1,630.9	
7	419	1,082.35	3,914.3	
8	447	360.79	1,223.2	
9	469	394.85	1,276.9	
10	499	587.64	1,783.8	
11	530	317.39	908.1	
12	569	934.72	2,489.6	
13	1,104	51.98	71.4	
14	1,365	9.82	10.9	
15	10,380	75.00	10.9	Upper Marker
16	12,513	0.00	0.0	

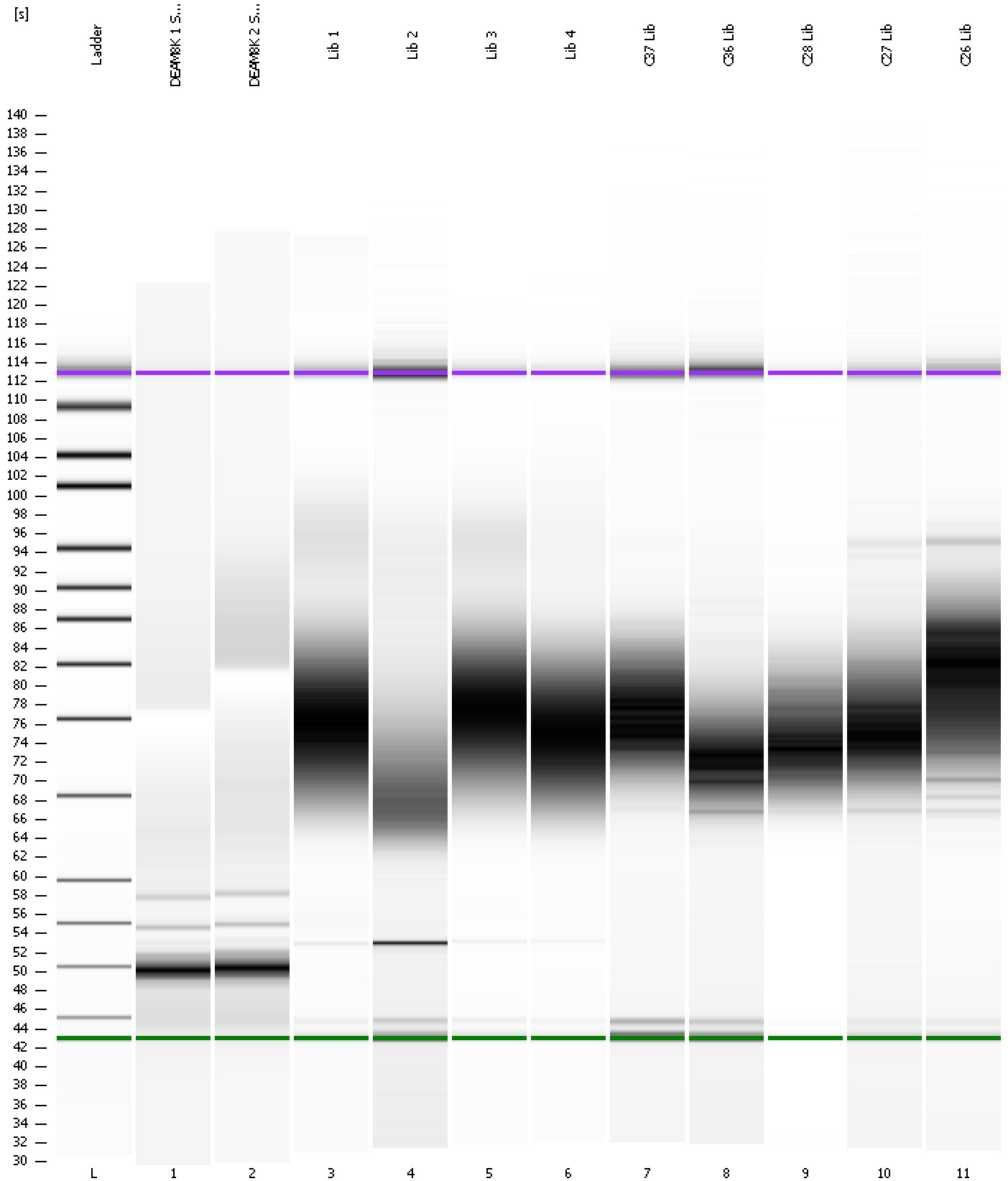
Region table for sample 11 : C26 Lib

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
64.56	15,239.5	483	4,537.38	94.13	2,354.4	97	22.8	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
Modified: 3/6/2012 12:33:52 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad

Created: 3/6/2012 11:26:50 AM
 Modified: 3/6/2012 12:33:52 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		3/6/2012 12:08:04 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-06\2012-03-06_003.xad)		Instrument	Run		3/6/2012 11:26:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/6/2012 11:26:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/6/2012 11:26:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/6/2012 11:26:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/6/2012 11:26:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/6/2012 11:26:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/6/2012 11:26:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1