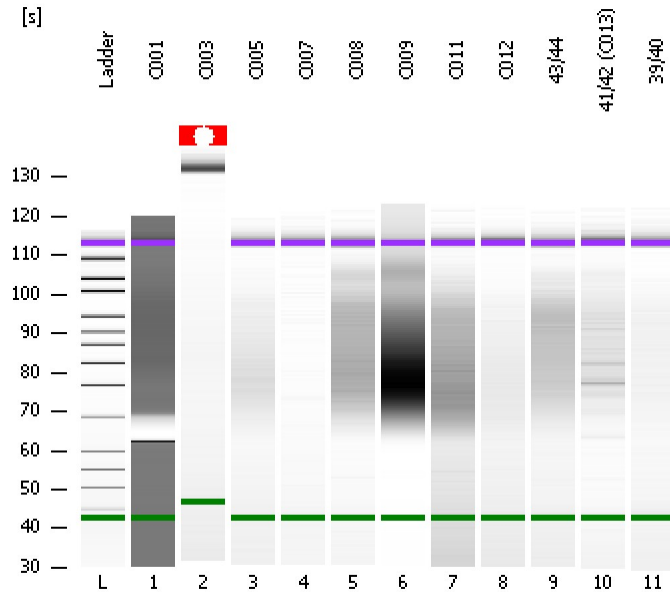


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
Modified: 2/24/2012 3:08:24 PM

Electrophoresis File Run Summary



Instrument Information:

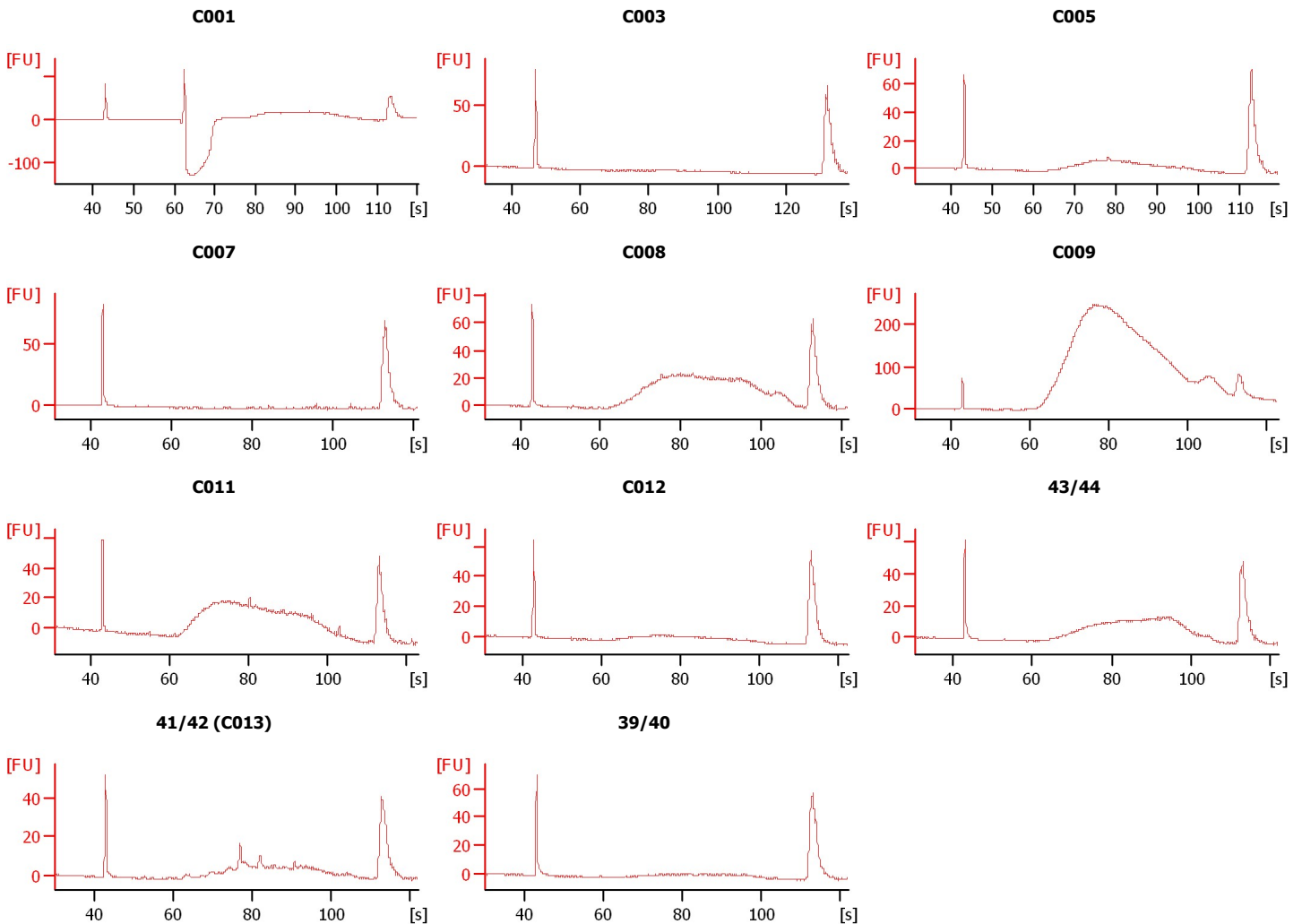
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
Modified: 2/24/2012 3:08:24 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
C001		<input type="checkbox"/>	✓			
C003		<input type="checkbox"/>	✓			
C005		<input type="checkbox"/>	✓			
C007		<input type="checkbox"/>	✓			
C008		<input type="checkbox"/>	✓			
C009		<input type="checkbox"/>	✓			
C011		<input type="checkbox"/>	✓			
C012		<input type="checkbox"/>	✓			
43/44		<input type="checkbox"/>	✓			
41/42 (C013)		<input type="checkbox"/>	✓			
39/40		<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\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
Modified: 2/24/2012 3:08:24 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

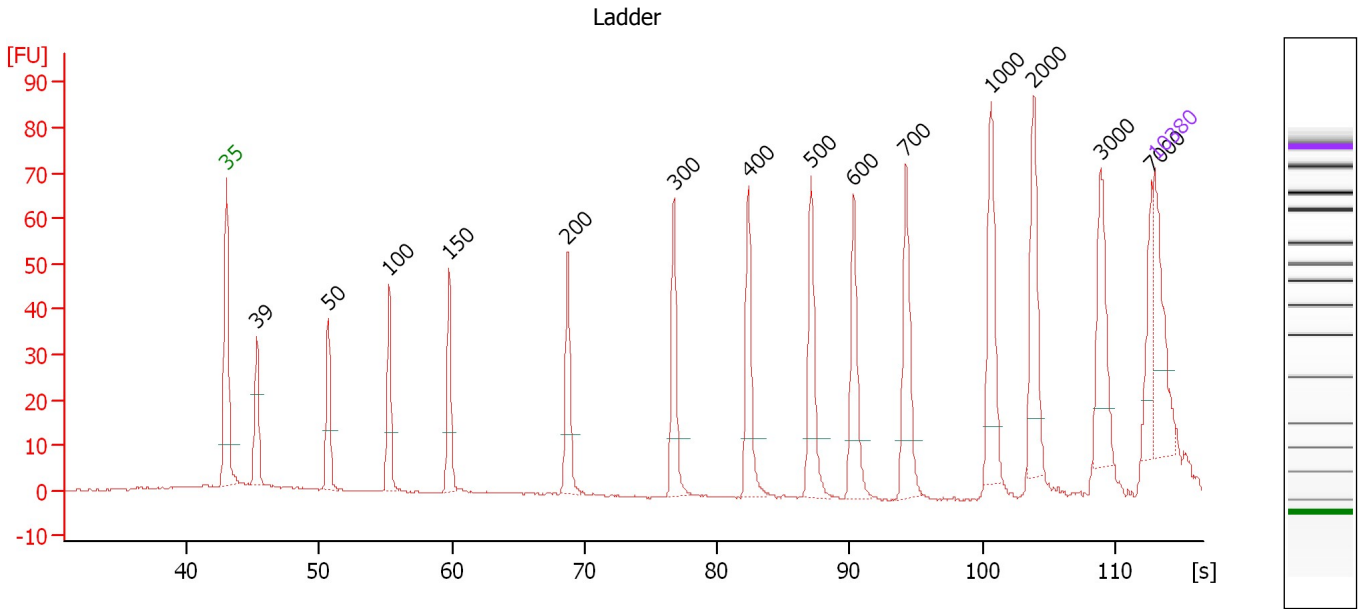
Ladder

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\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

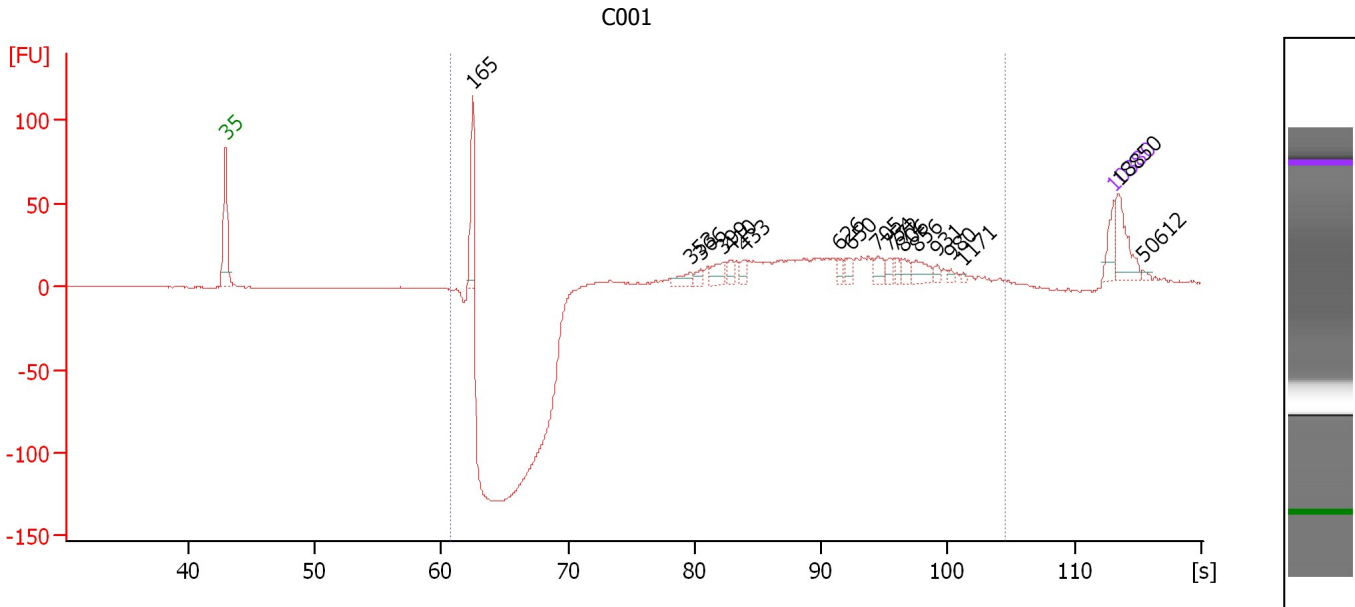
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	0.00	0.0	
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\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : C001

Number of peaks found: 18 Corr. Area 1: 399.7
 Noise: 0.2

Peak table for sample 1 : C001

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	165	282.89	2,594.0	
3	353	49.83	213.6	
4	366	32.83	135.8	
5	399	74.55	283.4	
6	410	42.51	157.2	
7	433	42.12	147.4	
8	626	31.53	76.3	
9	650	44.11	102.8	
10	705	54.30	116.7	
11	754	33.03	66.3	
12	772	29.70	58.3	
13	806	37.25	70.0	
14	856	70.31	124.5	
15	931	19.01	30.9	
16	980	12.64	19.5	
17	1,171	8.41	10.9	
18	10,380	75.00	10.9	Upper Marker
19	18,850	0.00	0.0	
20	50,612	0.00	0.0	

Region table for sample 1 : C001

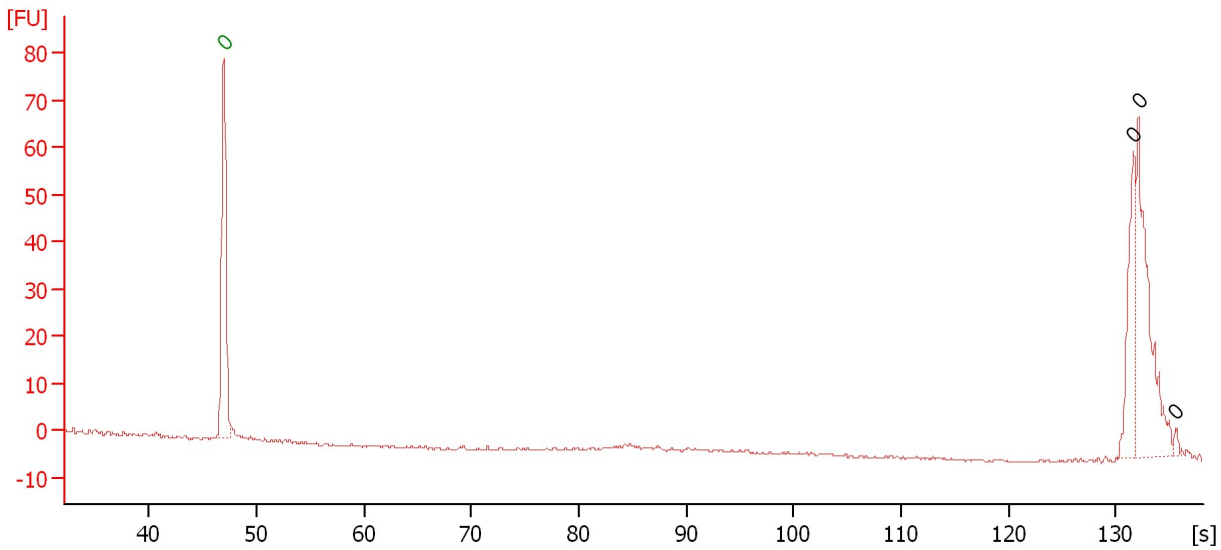
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
156	6,006.4	583	1,498.57	2,116	399.7	86	47.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...

C003



Overall Results for sample 2 : C003

Number of peaks found: 3 Noise: 0.3

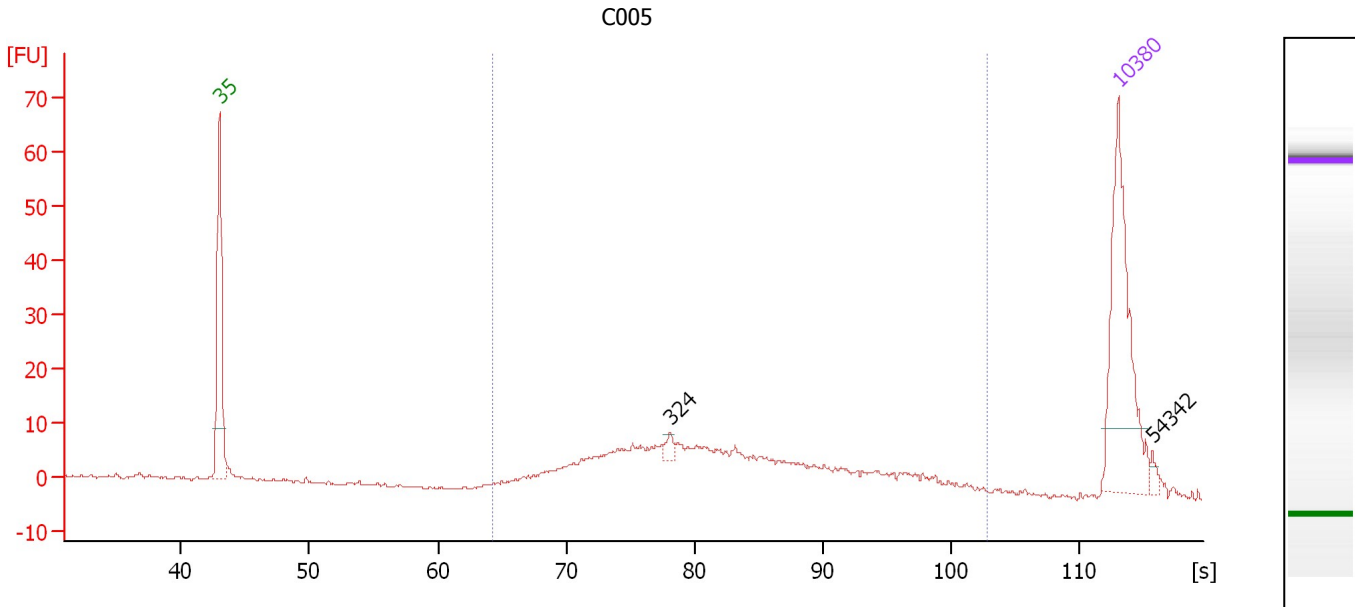
Peak table for sample 2 : C003

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	Lower Marker
2	0	0.00	0.0	
3	0	0.00	0.0	
4	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : C005

Number of peaks found: 2 Corr. Area 1: 231.1
 Noise: 0.3

Peak table for sample 3 : C005

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	324	5.75	26.9	
3	10,380	75.00	10.9	Upper Marker
4	54,342	0.00	0.0	

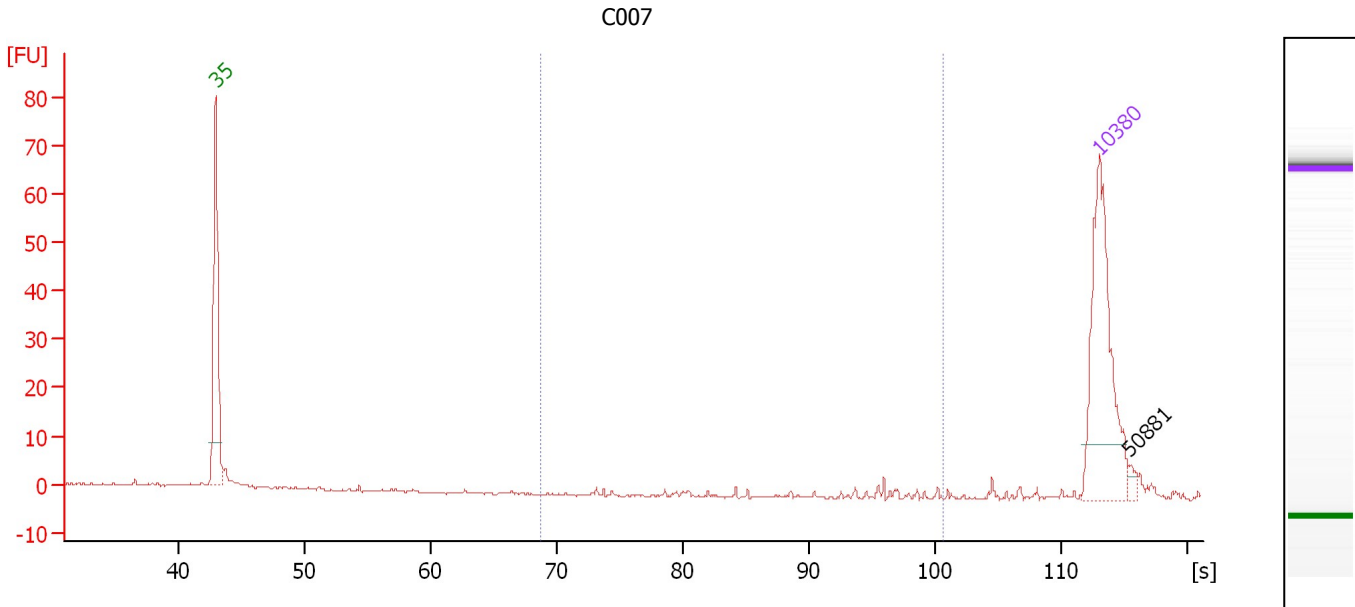
Region table for sample 3 : C005

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
175	1,105.3	448	251.07	1,653	231.1	91	48.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : C007

Number of peaks found: 1 Corr. Area 1: 3.0
 Noise: 0.2

Peak table for sample 4 : C007

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	50,881	0.00	0.0	

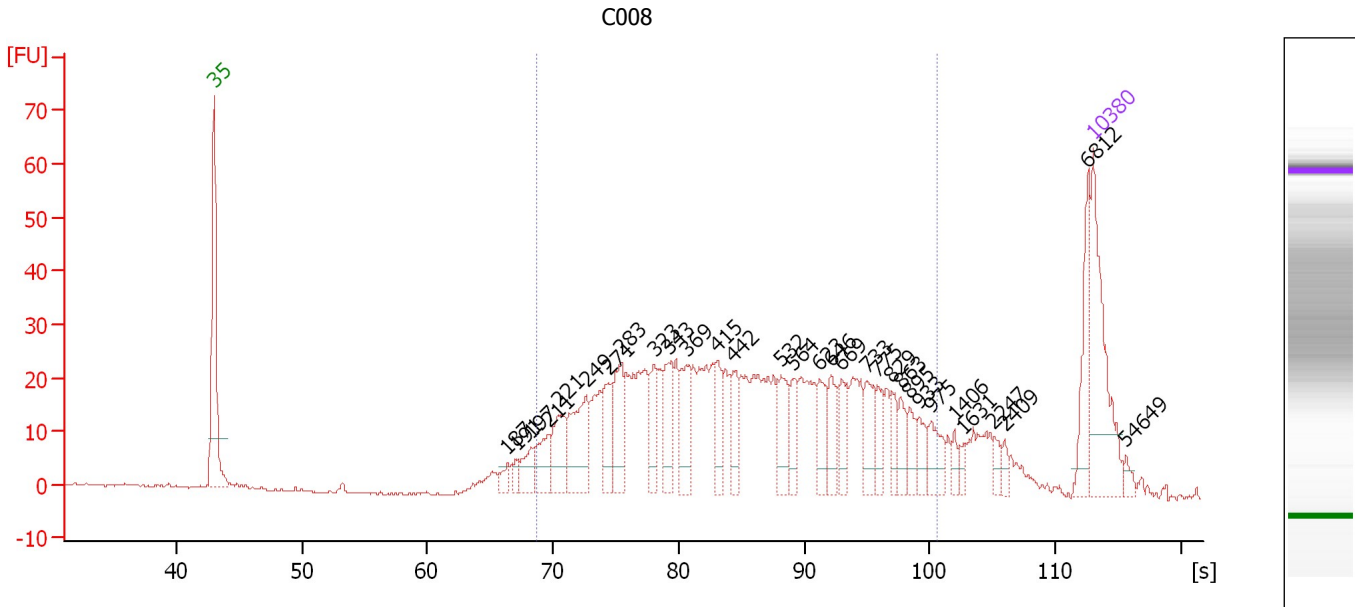
Region table for sample 4 : C007

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	6.6	724	2.65	1,000	3.0	11	26.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : C008

Number of peaks found: 31 Corr. Area 1: 743.7
 Noise: 0.2

Peak table for sample 5 : C008

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	187	10.91	88.4	
3	191	10.46	83.0	
4	197	24.03	184.8	
5	211	33.83	242.8	
6	221	47.19	324.0	
7	249	73.02	444.4	
8	271	39.80	222.2	
9	283	55.15	295.1	
10	323	34.77	163.1	
11	343	36.80	162.6	
12	369	42.15	172.9	
13	415	24.97	91.1	
14	442	26.41	90.5	
15	532	32.46	92.4	
16	564	20.62	55.4	
17	623	26.22	63.8	
18	646	23.77	55.7	
19	669	23.40	53.0	
20	733	26.67	55.1	
21	775	19.79	38.7	
22	829	15.48	28.3	
23	863	16.06	28.2	
24	895	14.19	24.0	
25	933	15.49	25.1	
26	975	20.60	32.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad


Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...

... Peak table for sample 5 : C008

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	1,406	7.39	8.0	
28	1,631	6.48	6.0	
29	2,247	7.05	4.8	
30	2,409	5.45	3.4	
31	6,812	40.58	9.0	
32	10,380	75.00	10.9	Upper Marker
33	54,649	0.00	0.0	

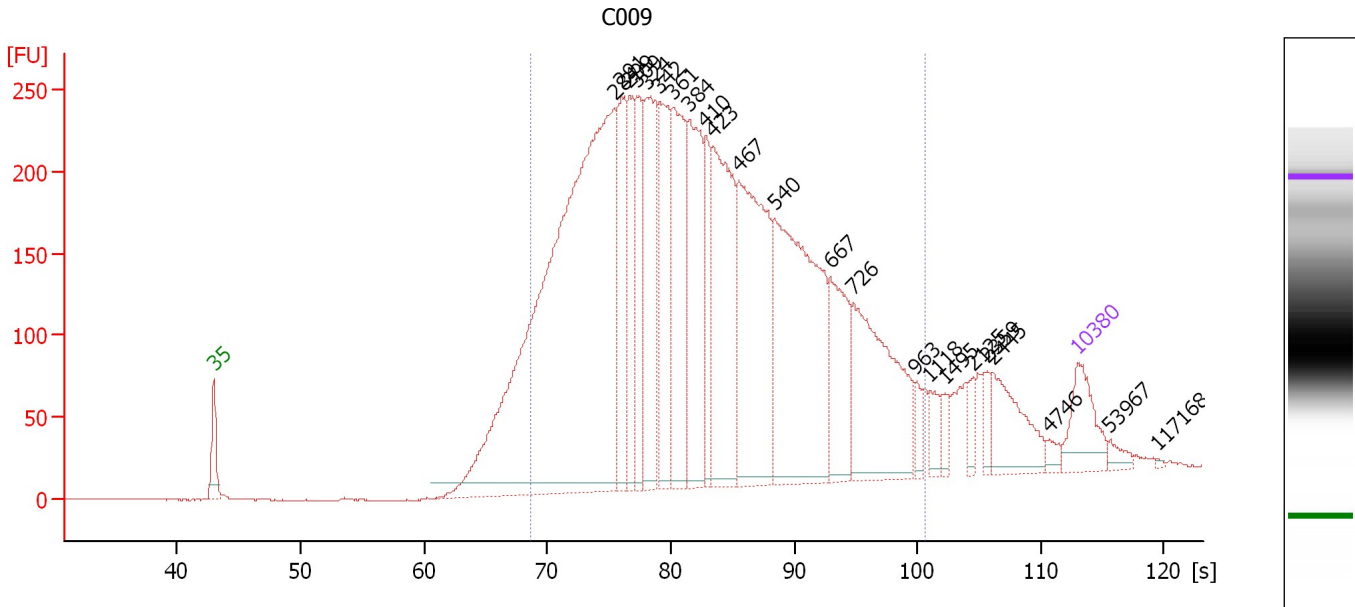
Region table for sample 5 : C008

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	4,448.5	490	1,130.64	1,000	743.7	85	41.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : C009

Number of peaks found: 23 Corr. Area 1: 6,557.8
 Noise: 0.3

Peak table for sample 6 : C009

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	284	1,935.85	10,341.1	
3	291	241.84	1,260.5	
4	299	213.89	1,084.5	
5	309	160.36	785.9	
6	324	321.29	1,503.2	
7	342	282.53	1,253.0	
8	361	297.25	1,247.7	
9	384	301.97	1,191.0	
10	410	117.99	436.4	
11	423	394.32	1,414.1	
12	467	484.92	1,574.7	
13	540	575.05	1,612.6	
14	667	178.92	406.7	
15	726	336.23	701.5	
16	963	23.77	37.4	
17	1,118	35.29	47.8	
18	1,495	21.77	22.1	
19	2,125	20.52	14.6	
20	2,359	23.18	14.9	
21	2,445	103.03	63.8	
22	4,746	12.32	3.9	
23	10,380	75.00	10.9	Upper Marker
24	53,967	0.00	0.0	
25	117,168	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...

... Region table for sample 6 :

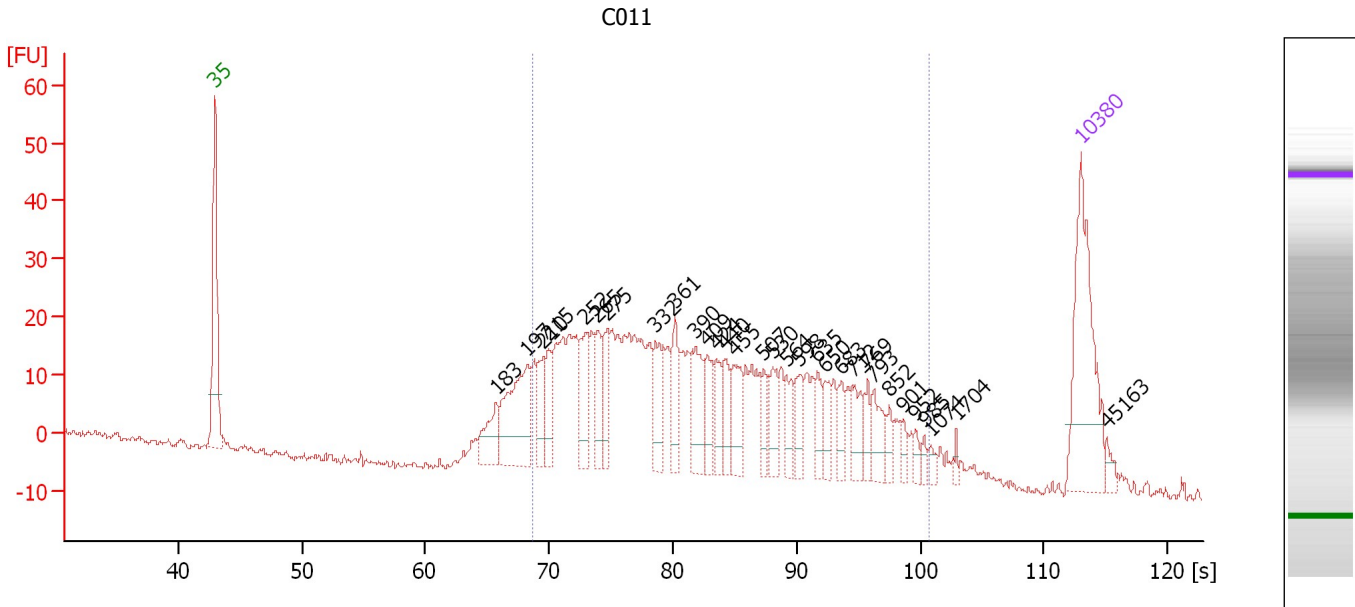
C009

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	23,454.7	434	5,446.22	1,000	6,557.8	88	42.0	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : C011

Number of peaks found: 31 Corr. Area 1: 706.5
 Noise: 0.7

Peak table for sample 7 : C011

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	183	32.26	266.9	
3	197	85.38	656.7	
4	210	24.41	176.0	
5	215	25.79	181.3	
6	252	35.92	215.7	
7	265	27.25	155.9	
8	275	29.02	160.2	
9	332	28.73	131.0	
10	361	25.97	109.0	
11	390	37.74	146.6	
12	409	21.73	80.4	
13	424	17.05	60.9	
14	440	19.28	66.5	
15	455	25.87	86.1	
16	507	14.74	44.1	
17	530	18.00	51.5	
18	564	16.92	45.5	
19	598	17.78	45.1	
20	635	12.84	30.7	
21	650	14.21	33.1	
22	683	12.86	28.5	
23	712	17.45	37.1	
24	769	10.86	21.4	
25	793	19.76	37.7	
26	852	8.36	14.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad


Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...

... Peak table for sample 7 : C011

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	901	6.30	10.6	
28	952	4.90	7.8	
29	985	4.51	6.9	
30	1,074	3.98	5.6	
31	1,704	3.13	2.8	
32	10,380	75.00	10.9	Upper Marker
33	45,163	0.00	0.0	

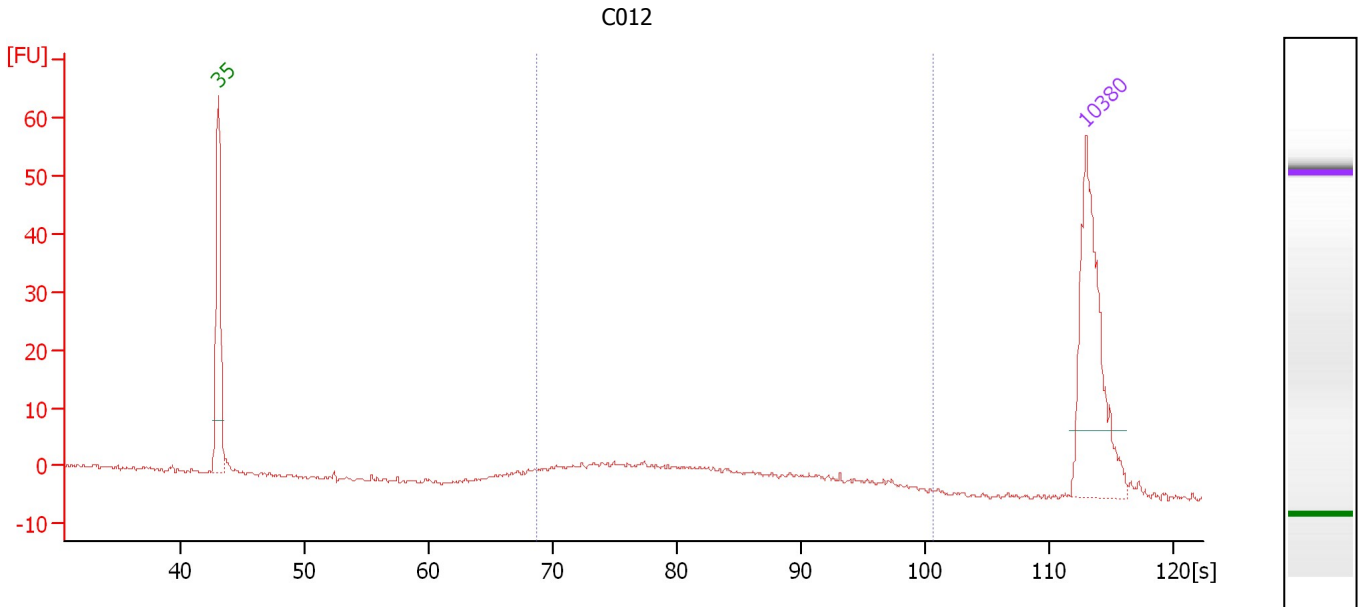
Region table for sample 7 : C011

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	4,016.5	450	931.50	1,000	706.5	87	44.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : C012

Number of peaks found: 0 Corr. Area 1: 78.1
 Noise: 0.3

Peak table for sample 8 : C012

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

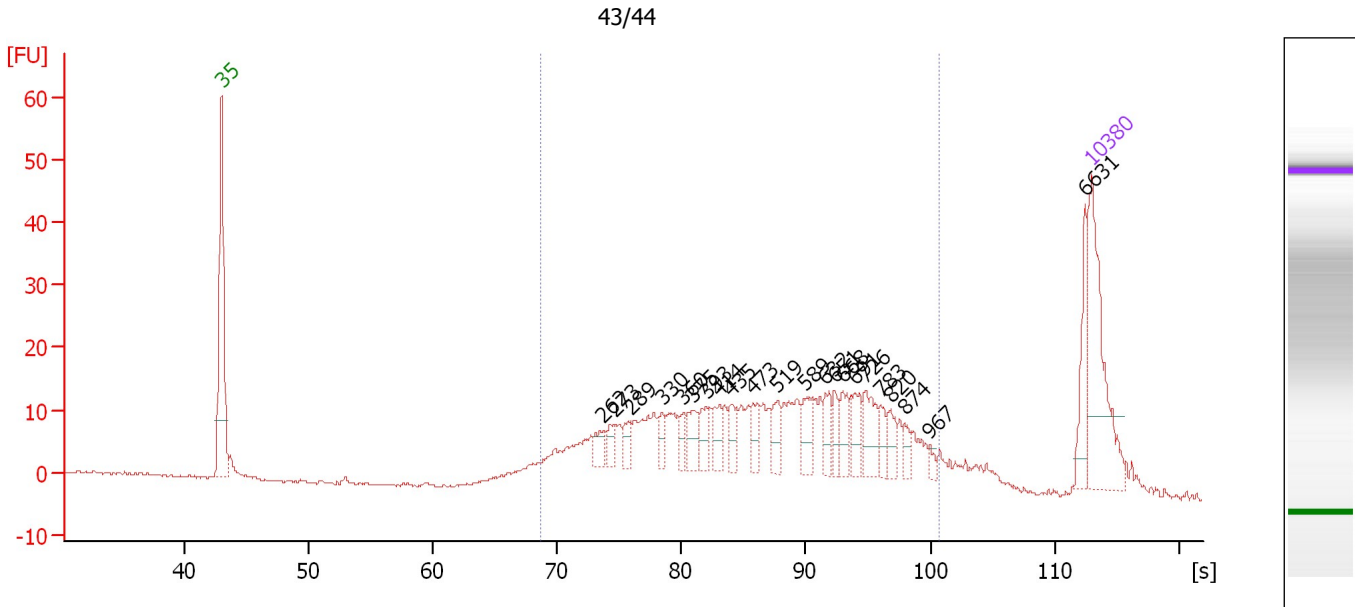
Region table for sample 8 : C012

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	379.2	418	85.62	1,000	78.1	90	40.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 43/44

Number of peaks found: 22 Corr. Area 1: 429.4
 Noise: 0.2


Peak table for sample 9 : 43/44

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	262	14.97	86.6	
3	273	13.70	76.0	
4	289	14.36	75.3	
5	330	13.32	61.2	
6	360	12.76	53.7	
7	375	20.57	83.1	
8	393	17.14	66.1	
9	414	17.65	64.5	
10	435	16.53	57.5	
11	473	15.84	50.8	
12	519	18.39	53.7	
13	589	21.18	54.5	
14	632	16.91	40.5	
15	651	13.11	30.5	
16	668	19.26	43.7	
17	691	21.44	47.0	
18	726	28.97	60.4	
19	783	11.46	22.2	
20	820	13.77	25.5	
21	874	8.08	14.0	
22	967	3.97	6.2	
23	6,631	32.59	7.4	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
Modified: 2/24/2012 3:08:24 PM

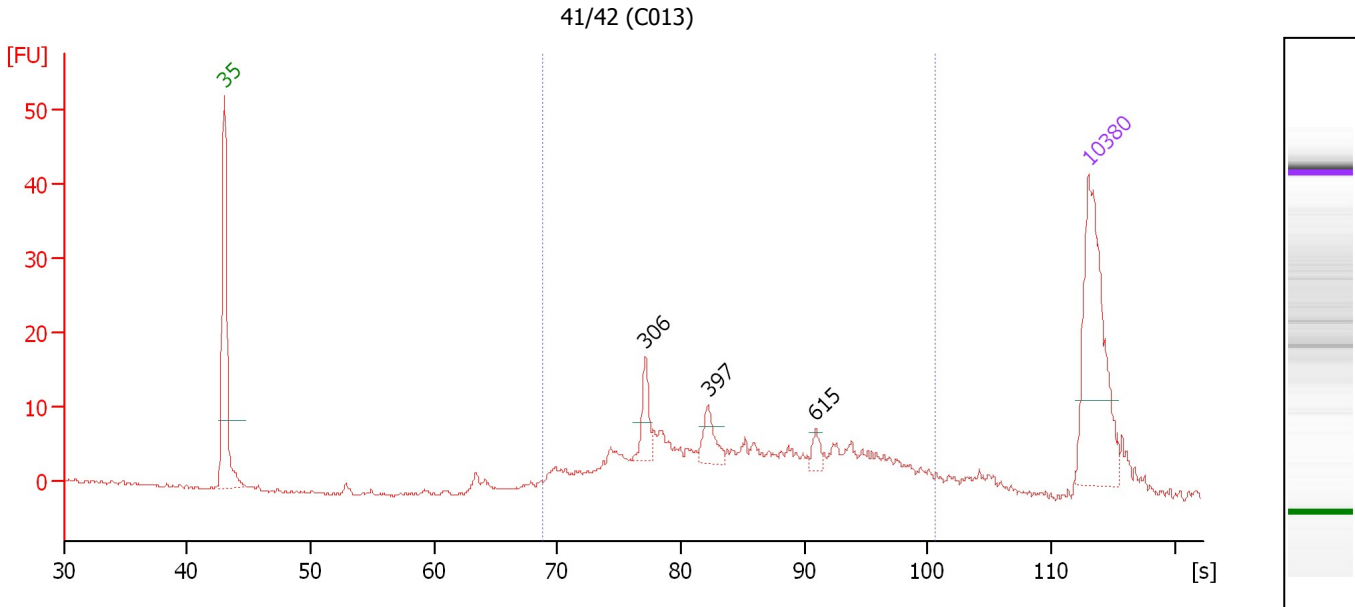
Electropherogram Summary Continued ...**... Region table for sample 9 : 43/44**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	2,819.6	519	764.85	1,000	429.4	86	38.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 41/42 (C013)

Number of peaks found: 3 Corr. Area 1: 172.8
 Noise: 0.2

Peak table for sample 10 : 41/42 (C013)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	306	20.37	100.7	
3	397	16.34	62.4	
4	615	6.41	15.8	
5	10,380	75.00	10.9	Upper Marker

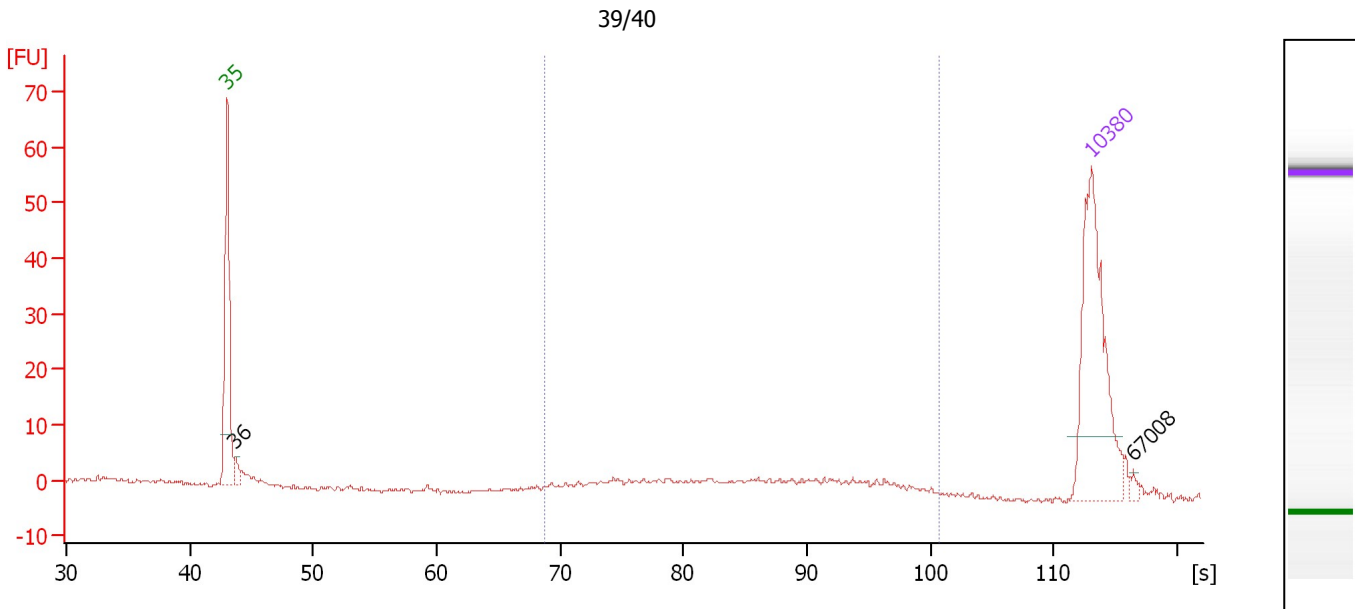
Region table for sample 10 : 41/42 (C013)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,006.0	487	263.51	1,000	172.8	92	39.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 39/40

Number of peaks found: 2 Corr. Area 1: 51.5
 Noise: 0.4

Peak table for sample 11 : 39/40

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	36	8.93	373.0	
3	10,380	75.00	10.9	Upper Marker
4	67,008	0.00	0.0	

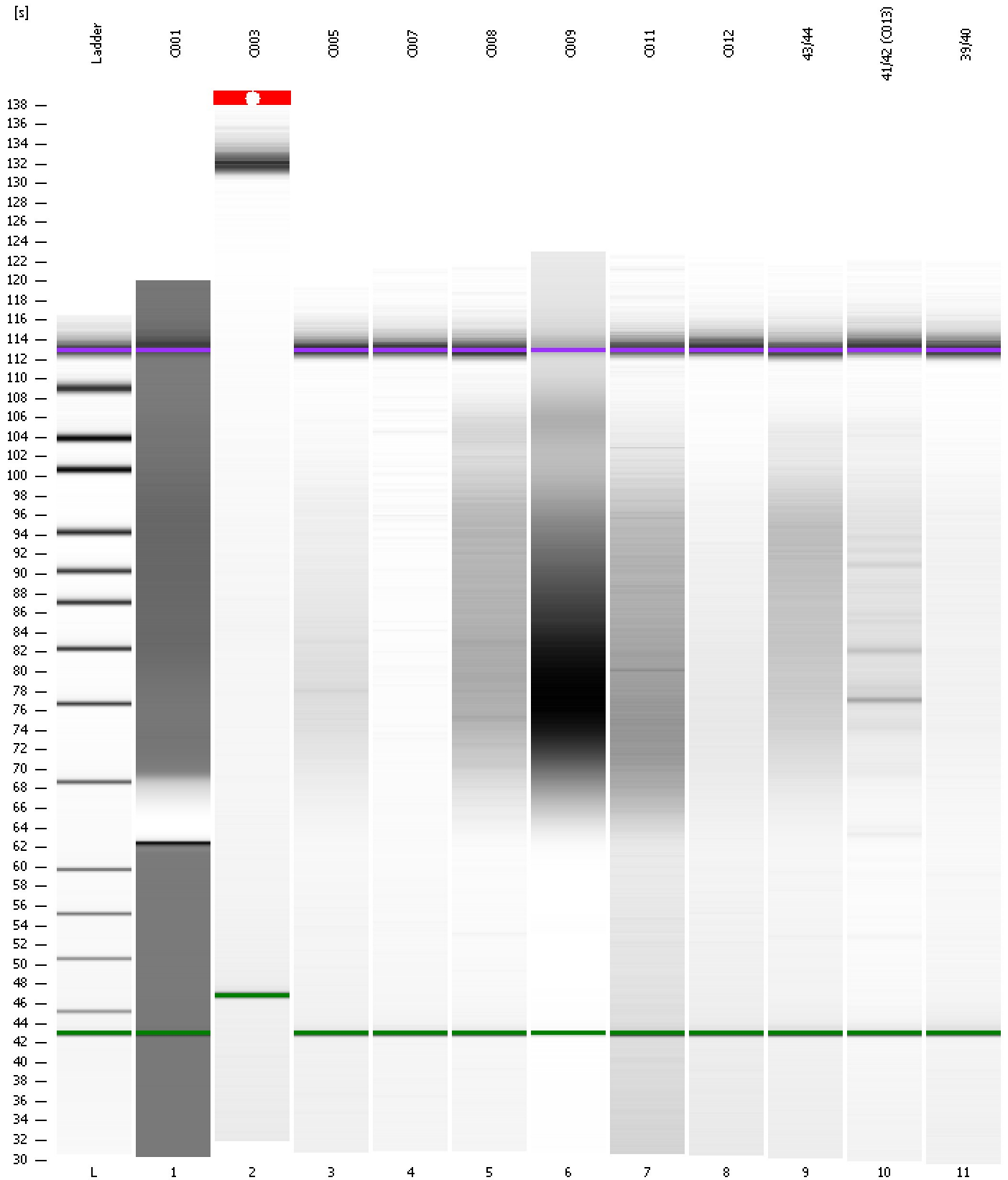
Region table for sample 11 : 39/40

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	185.4	510	50.70	1,000	51.5	72	37.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
Modified: 2/24/2012 3:08:24 PM

Gel Image

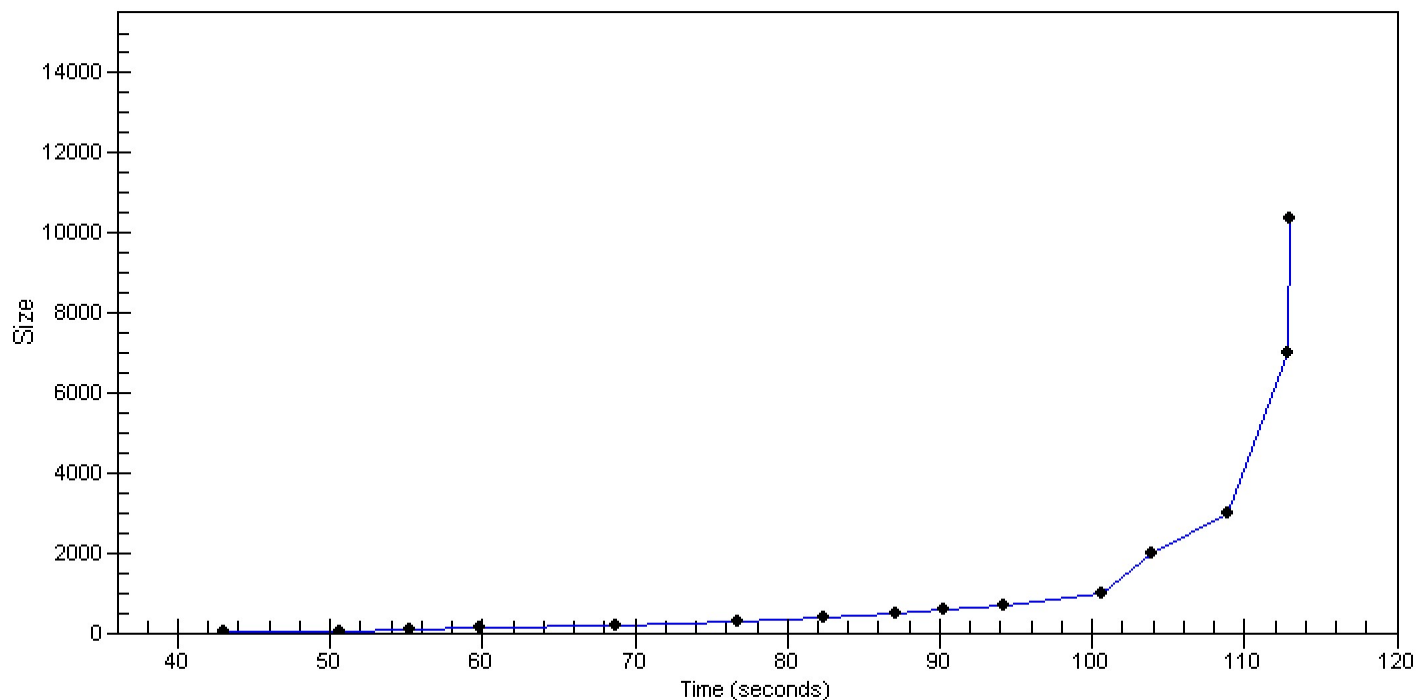


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
Modified: 2/24/2012 3:08:24 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad

Created: 2/24/2012 2:17:41 PM
 Modified: 2/24/2012 3:08:24 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		2/24/2012 2:58:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-02-24\2012-02-24_005.xad)		Instrument	Run		2/24/2012 2:17:46 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/24/2012 2:17:46 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/24/2012 2:17:46 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/24/2012 2:17:46 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/24/2012 2:17:46 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/24/2012 2:17:46 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/24/2012 2:17:46 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1