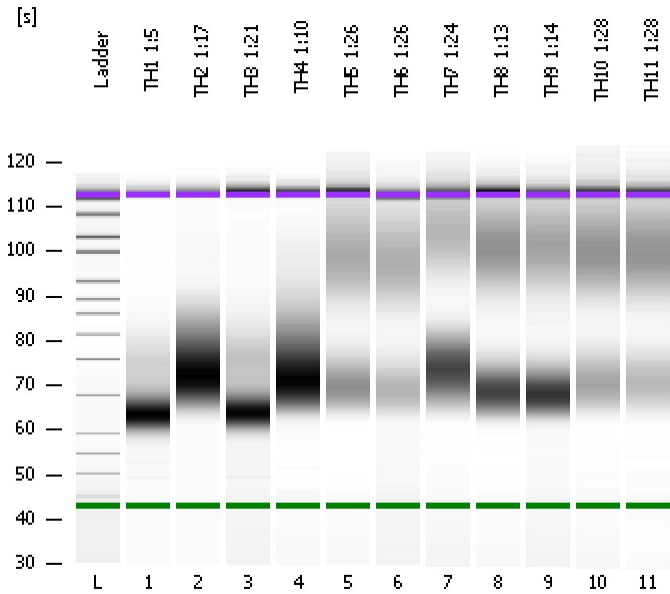


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
Modified: 3/1/2012 11:05:01 AM

Electrophoresis File Run Summary



Instrument Information:

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

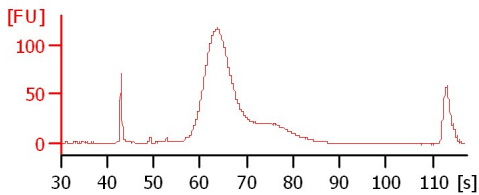
Assay Information:

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

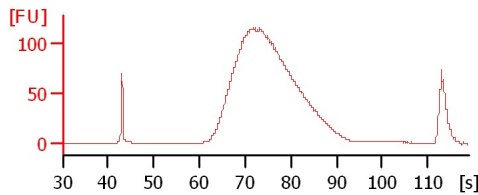
Chip Information:

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

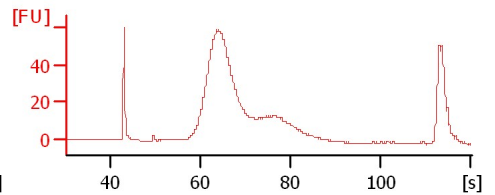
TH1 1:5



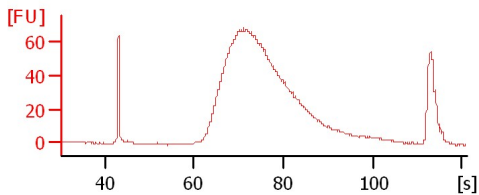
TH2 1:17



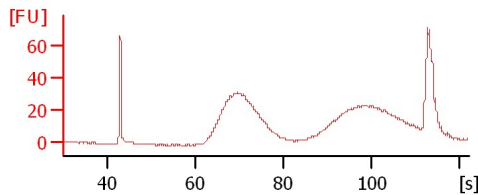
TH3 1:21



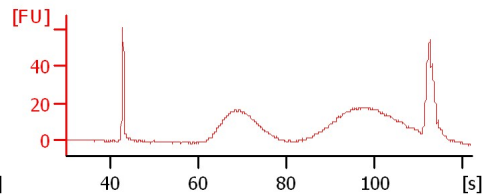
TH4 1:10



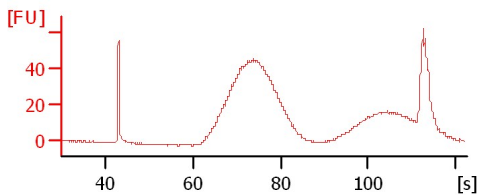
TH5 1:26



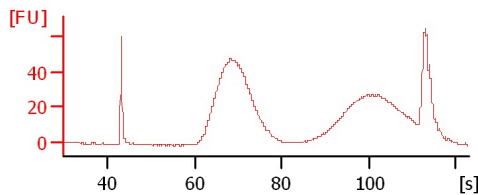
TH6 1:26



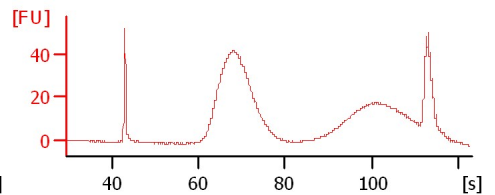
TH7 1:24



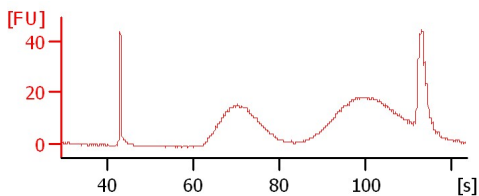
TH8 1:13



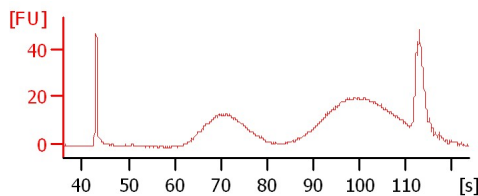
TH9 1:14



TH10 1:28



TH11 1:28



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
Modified: 3/1/2012 11:05:01 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
TH1 1:5		<input type="checkbox"/>	✓			
TH2 1:17		<input type="checkbox"/>	✓			
TH3 1:21		<input type="checkbox"/>	✓			
TH4 1:10		<input type="checkbox"/>	✓			
TH5 1:26		<input type="checkbox"/>	✓			
TH6 1:26		<input type="checkbox"/>	✓			
TH7 1:24		<input type="checkbox"/>	✓			
TH8 1:13		<input type="checkbox"/>	✓			
TH9 1:14		<input type="checkbox"/>	✓			
TH10 1:28		<input type="checkbox"/>	✓			
TH11 1:28		<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\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
Modified: 3/1/2012 11:05:01 AM

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

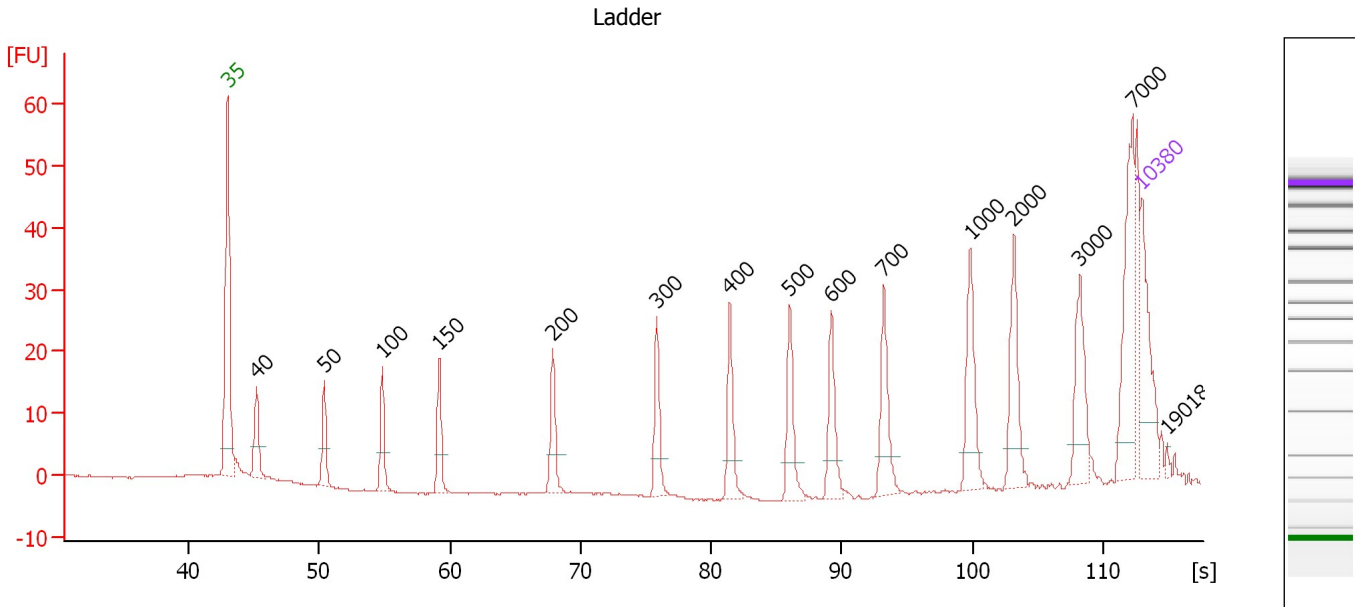
Ladder

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\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

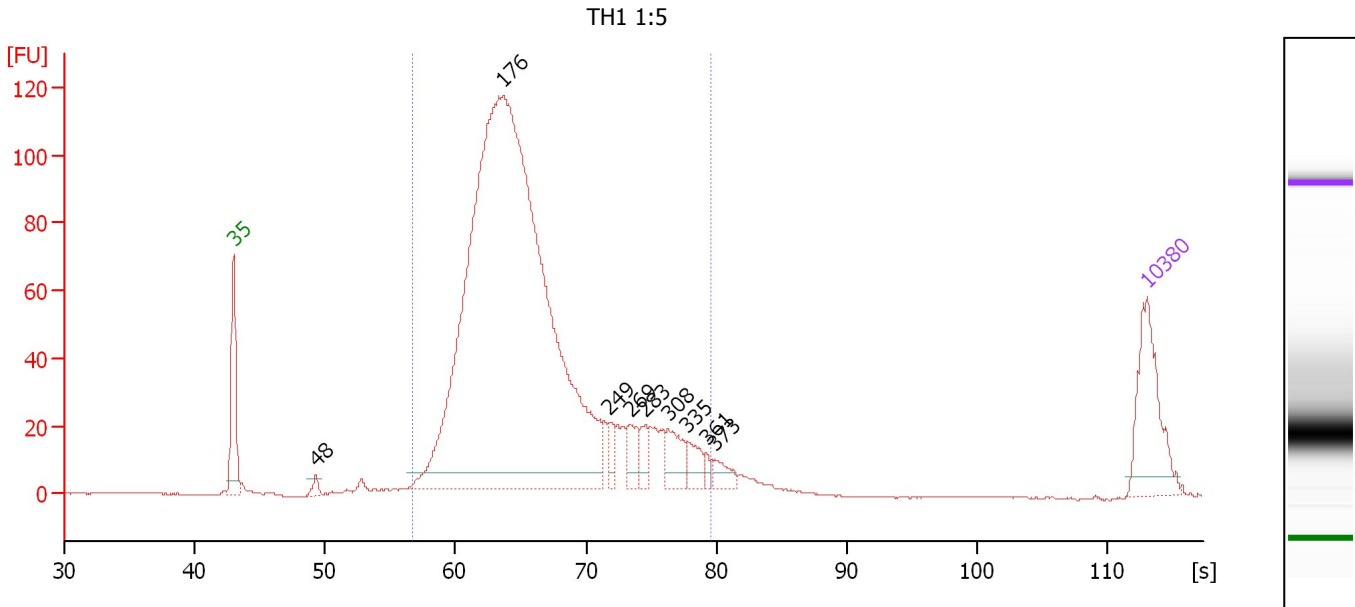
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	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
17	19,018	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : TH1 1:5

Number of peaks found: 9 Corr. Area 1: 1,595.8
 Noise: 0.2

Peak table for sample 1 : TH1 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	10.51	333.4	
3	176	1,869.21	16,127.3	
4	249	19.07	116.0	
5	269	32.10	180.9	
6	283	20.61	110.2	
7	308	39.91	196.3	
8	335	25.84	116.8	
9	361	7.61	31.9	
10	373	18.50	75.2	
11	10,380	75.00	10.9	Upper Marker

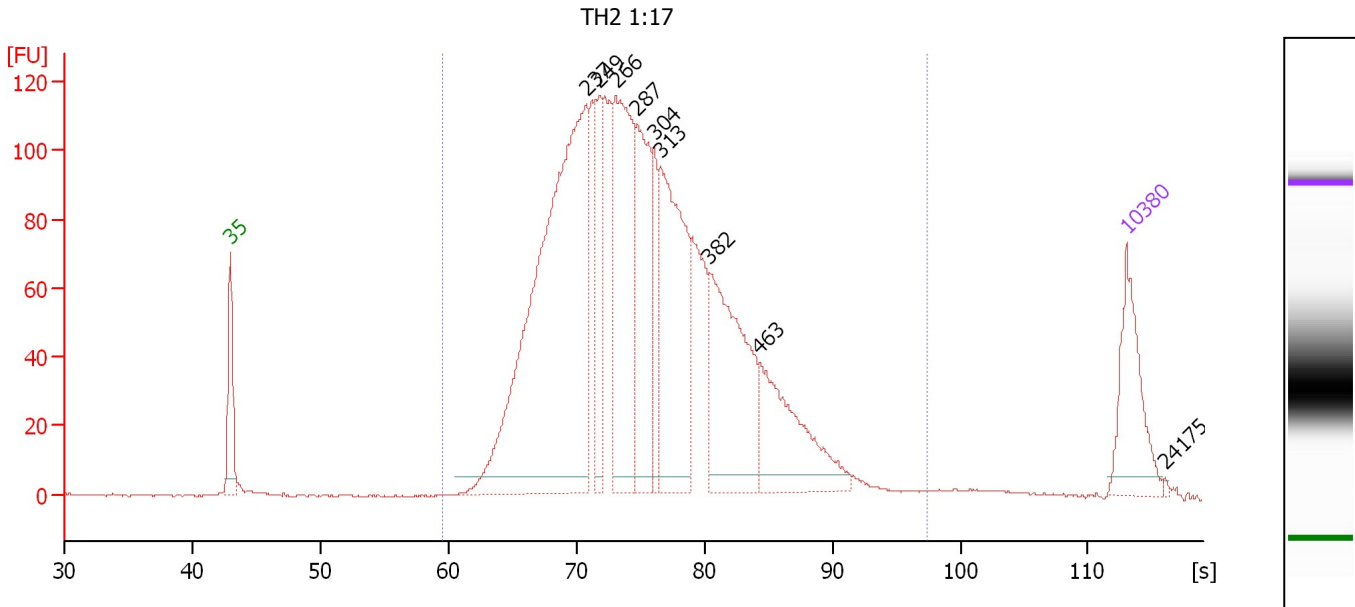
Region table for sample 1 : TH1 1:5

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
56.67	17,535.9	197	2,159.83	79.58	1,595.8	95	23.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : TH2 1:17

Number of peaks found: 9 Corr. Area 1: 2,535.2
 Noise: 0.2

Peak table for sample 2 : TH2 1:17

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	237	848.77	5,436.9	
3	249	99.74	606.4	
4	266	302.11	1,723.4	
5	287	197.10	1,041.4	
6	304	75.03	373.4	
7	313	290.25	1,402.9	
8	382	235.11	931.3	
9	463	155.79	509.3	
10	10,380	75.00	10.9	Upper Marker
11	24,175	0.00	0.0	

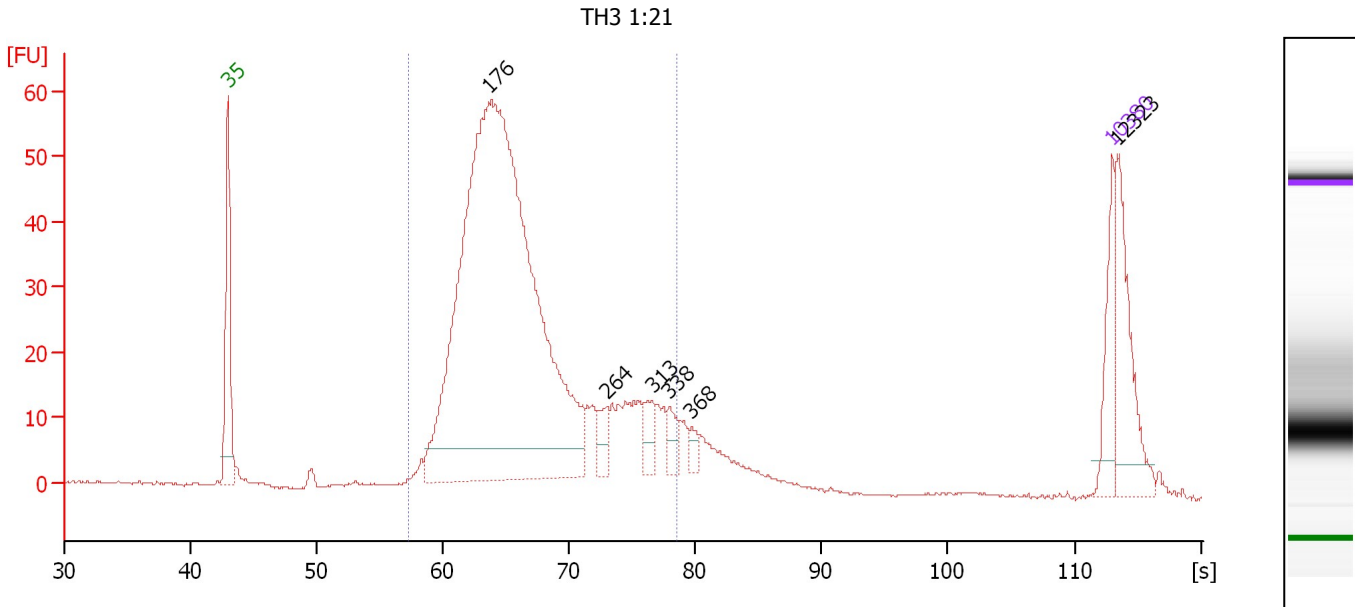
Region table for sample 2 : TH2 1:17

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.52	14,879.5	308	2,654.55	97.39	2,535.2	99	34.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : TH3 1:21

Number of peaks found: 6 Corr. Area 1: 808.8
 Noise: 0.2

Peak table for sample 3 : TH3 1:21

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	176	2,403.61	20,731.4	
3	264	45.67	262.2	
4	313	42.42	205.5	
5	338	38.07	170.8	
6	368	19.09	78.5	
7	10,380	75.00	10.9	Upper Marker
8	12,323	0.00	0.0	

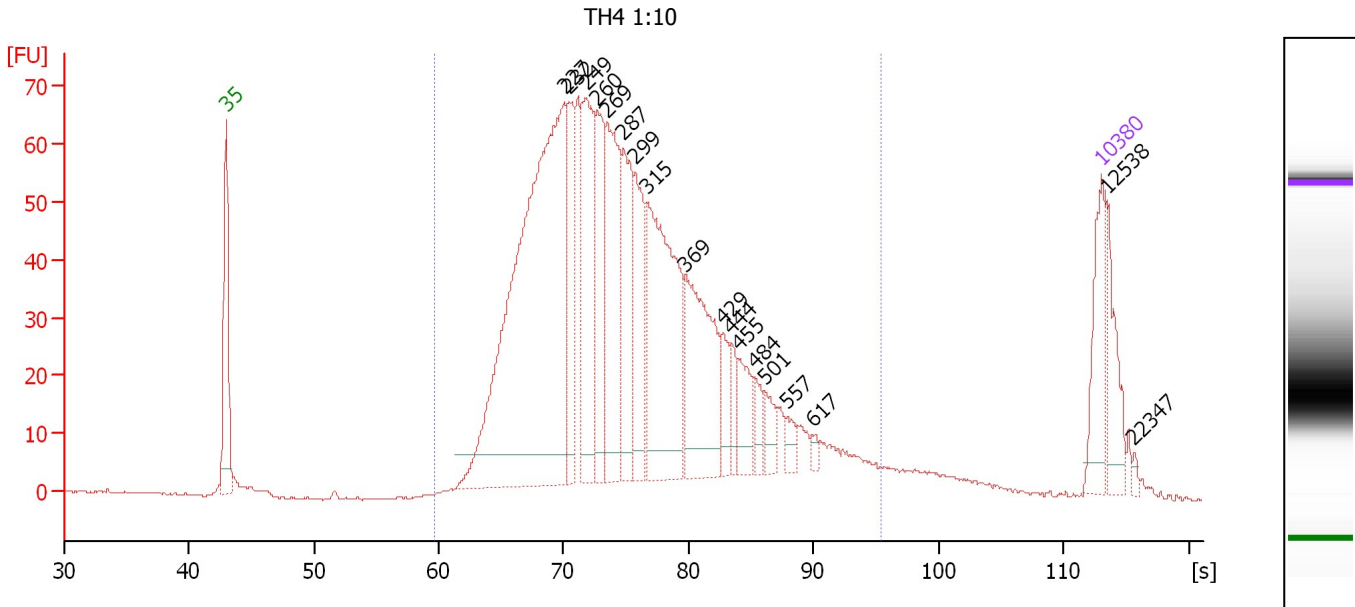
Region table for sample 3 : TH3 1:21

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
57.29	23,011.1	203	2,907.96	78.59	808.8	83	23.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : TH4 1:10

Number of peaks found: 18 Corr. Area 1: 1,552.4
 Noise: 0.2

Peak table for sample 4 : TH4 1:10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	227	1,111.21	7,432.9	
3	232	145.89	950.9	
4	249	249.91	1,519.2	
5	260	170.00	992.4	
6	269	261.46	1,471.2	
7	287	171.86	908.5	
8	299	152.72	775.2	
9	315	386.43	1,860.0	
10	369	239.58	984.9	
11	429	44.50	157.2	
12	444	31.03	105.9	
13	455	58.49	194.7	
14	484	28.18	88.2	
15	501	32.35	97.8	
16	557	20.12	54.7	
17	617	8.25	20.3	
18	10,380	75.00	10.9	Upper Marker
19	12,538	0.00	0.0	
20	22,347	0.00	0.0	

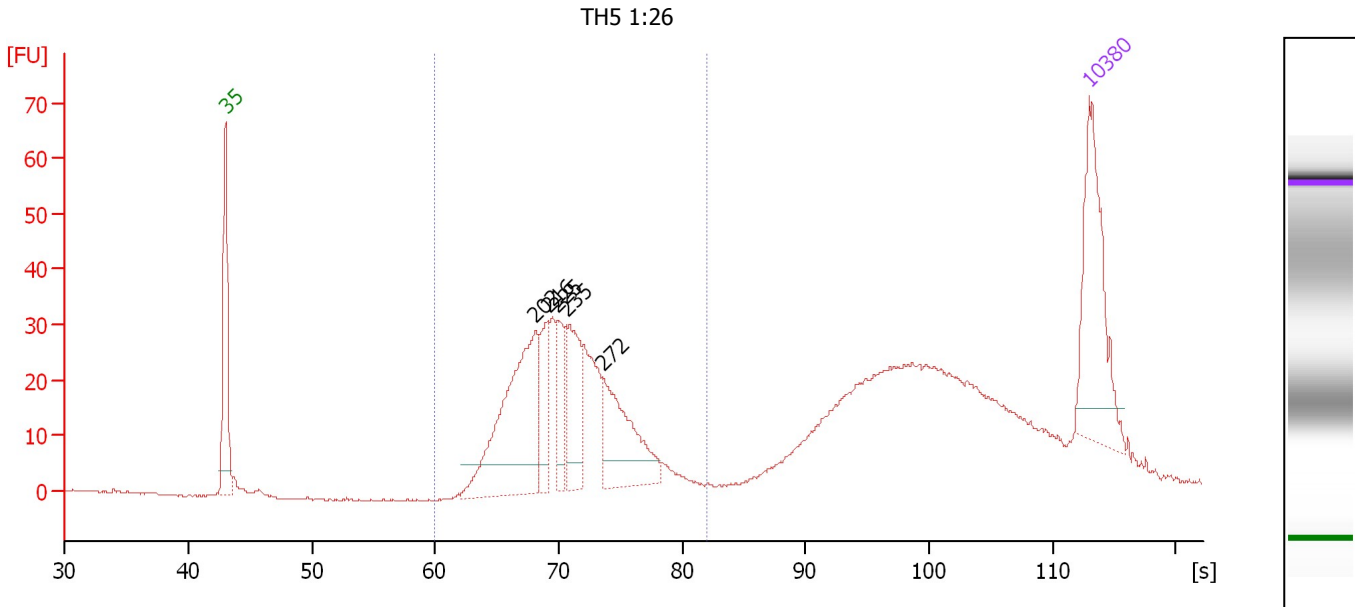
Region table for sample 4 : TH4 1:10

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.73	21,020.3	312	3,684.46	95.31	1,552.4	93	39.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : TH5 1:26

Number of peaks found: 5 Corr. Area 1: 413.9
 Noise: 0.2

Peak table for sample 5 : TH5 1:26

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	202	187.91	1,410.2	
3	216	47.34	332.7	
4	225	34.63	233.3	
5	235	65.26	421.1	
6	272	90.21	503.4	
7	10,380	75.00	10.9	Upper Marker

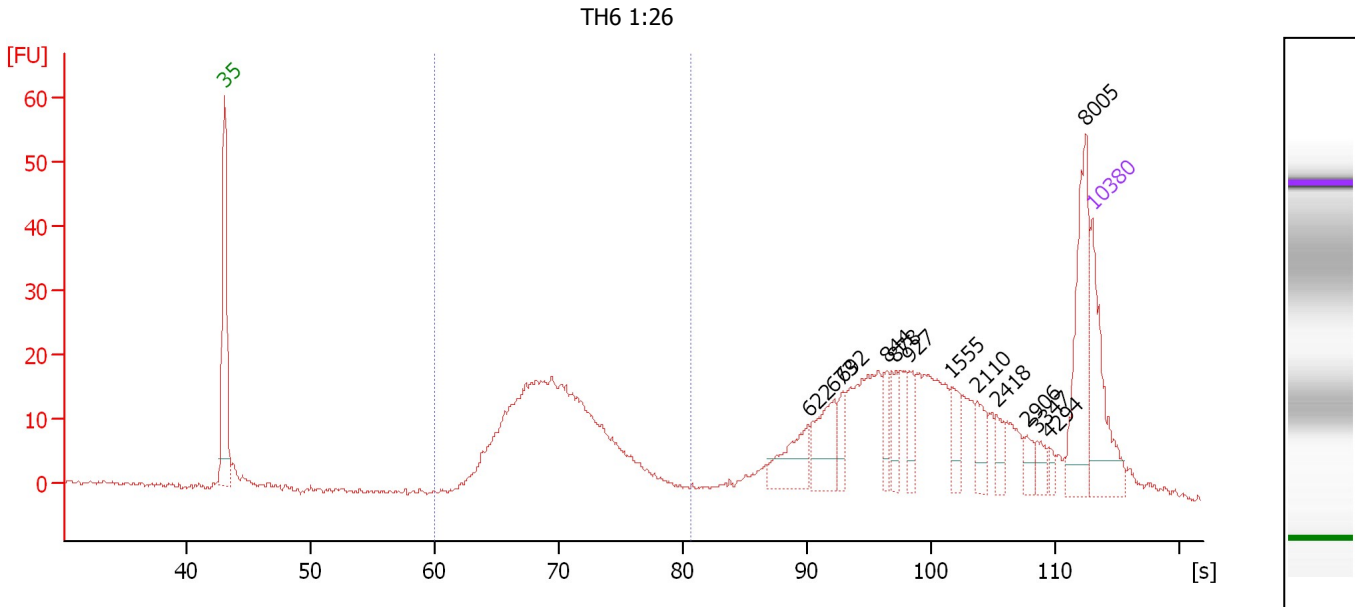
Region table for sample 5 : TH5 1:26

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.99	3,440.3	237	520.37	82.05	413.9	52	18.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : TH6 1:26

Number of peaks found: 13 Corr. Area 1: 244.9
 Noise: 0.4

Peak table for sample 6 : TH6 1:26

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	622	53.78	131.0	
3	673	61.78	139.2	
4	692	22.98	50.3	
5	844	22.63	40.6	
6	878	24.00	41.4	
7	927	21.61	35.3	
8	1,555	24.90	24.3	
9	2,110	23.46	16.8	
10	2,418	14.28	9.0	
11	2,906	11.58	6.0	
12	3,347	12.74	5.8	
13	4,294	6.78	2.4	
14	8,005	105.15	19.9	
15	10,380	75.00	10.9	Upper Marker

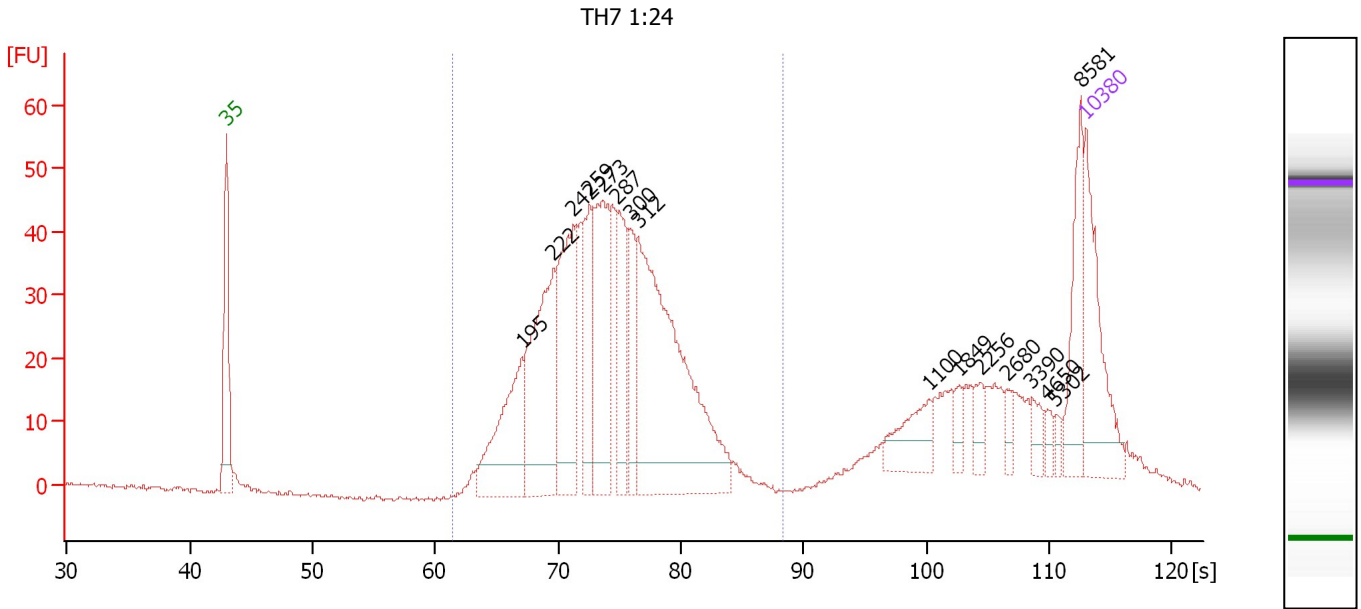
Region table for sample 6 : TH6 1:26

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.00	4,665.0	231	684.96	80.63	244.9	36	18.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : TH7 1:24

Number of peaks found: 16 Corr. Area 1: 765.8
 Noise: 0.4

Peak table for sample 7 : TH7 1:24

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	195	146.01	1,132.2	
3	222	211.13	1,441.8	
4	242	167.82	1,049.5	
5	259	87.97	515.0	
6	273	161.16	895.7	
7	287	85.77	452.0	
8	300	62.53	315.6	
9	312	375.21	1,822.2	
10	1,100	41.94	57.8	
11	1,849	10.67	8.7	
12	2,256	12.72	8.5	
13	2,680	9.39	5.3	
14	3,390	12.60	5.6	
15	4,650	7.47	2.4	
16	5,302	5.70	1.6	
17	8,581	60.64	10.7	
18	10,380	75.00	10.9	Upper Marker

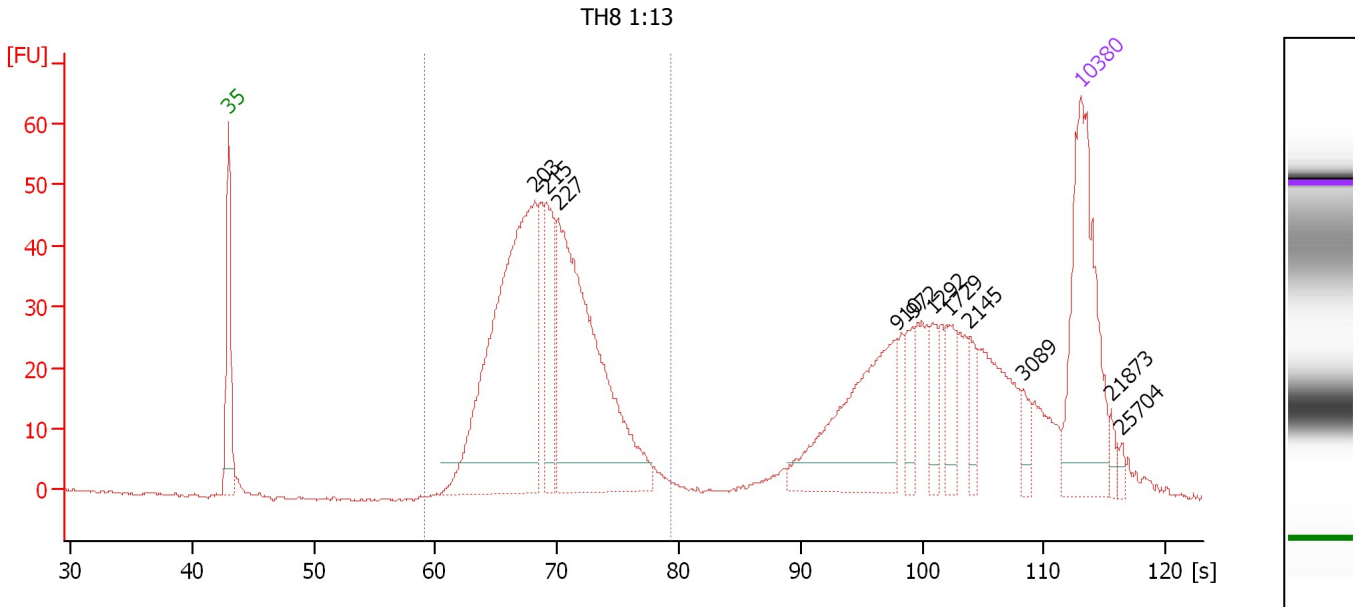
Region table for sample 7 : TH7 1:24

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.35	7,724.0	281	1,342.31	88.41	765.8	74	22.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : TH8 1:13

Number of peaks found: 11 Corr. Area 1: 660.2
 Noise: 0.3

Peak table for sample 8 : TH8 1:13

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	203	292.65	2,182.9	
3	215	59.28	417.0	
4	227	245.76	1,640.0	
5	910	93.87	156.3	
6	972	14.62	22.8	
7	1,292	12.59	14.8	
8	1,729	15.96	14.0	
9	2,145	10.73	7.6	
10	3,089	7.13	3.5	
11	10,380	75.00	10.9	Upper Marker
12	21,873	0.00	0.0	
13	25,704	0.00	0.0	

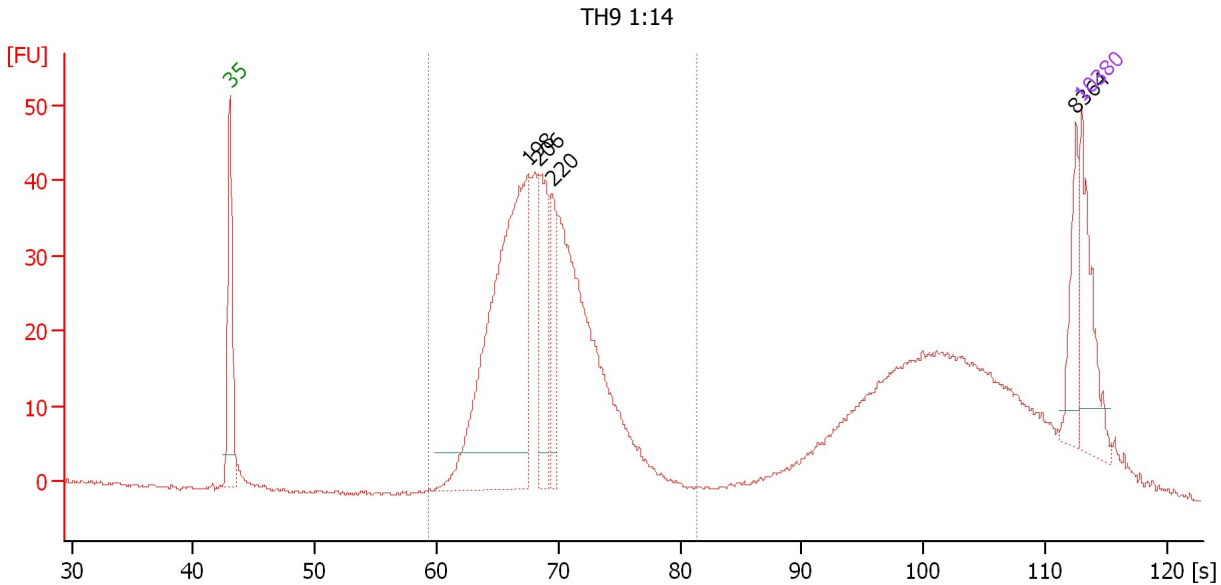
Region table for sample 8 : TH8 1:13

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Color	
59.15	4,552.8	223	648.46	79.35	660.2	58	17.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : TH9 1:14

Number of peaks found: 4 Corr. Area 1: 557.4
 Noise: 0.3

Peak table for sample 9 : TH9 1:14

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	198	631.06	4,838.1	
3	206	148.99	1,093.3	
4	220	94.60	652.1	
5	8,364	47.94	8.7	
6	10,380	75.00	10.9	Upper Marker

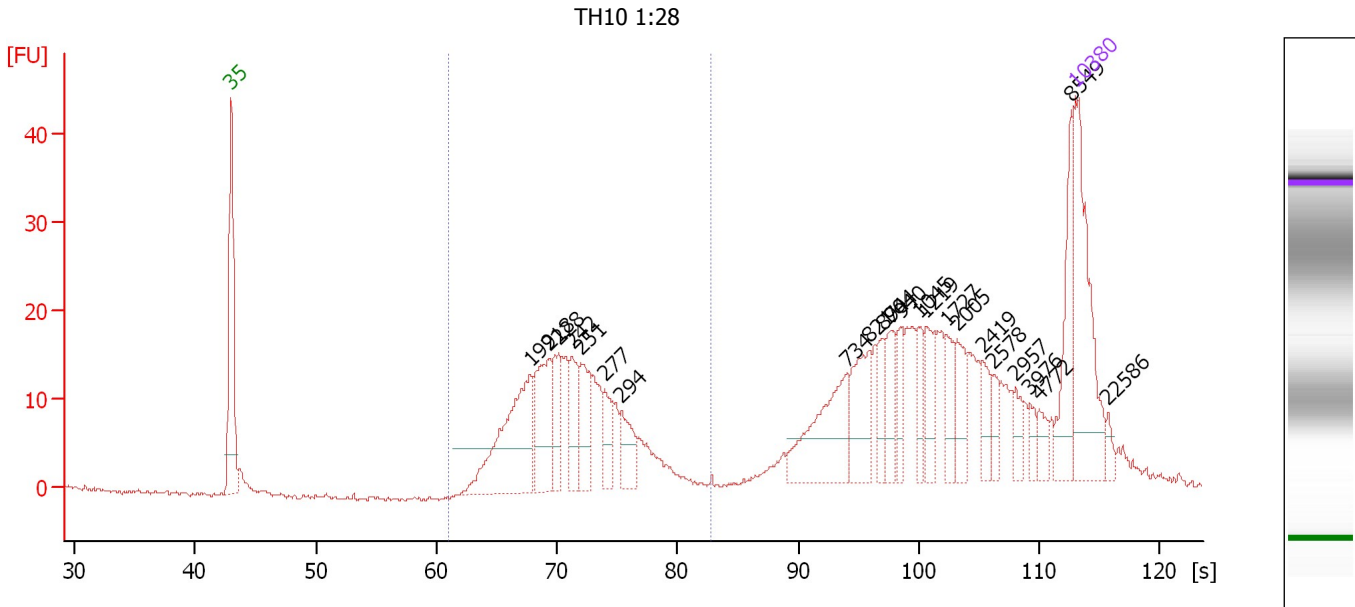
Region table for sample 9 : TH9 1:14

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.34	10,956.9	220	1,538.80	81.45	557.4	60	17.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : TH10 1:28

Number of peaks found: 23 Corr. Area 1: 212.2
 Noise: 0.3

Peak table for sample 10 : TH10 1:28


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	199	126.78	964.6	
3	218	69.94	485.4	
4	228	38.61	256.1	
5	242	34.06	212.9	
6	251	38.90	234.4	
7	277	23.97	131.3	
8	294	27.12	140.0	
9	734	70.98	146.5	
10	821	43.19	79.7	
11	874	15.34	26.6	
12	904	20.78	34.8	
13	940	16.96	27.3	
14	1,045	15.20	22.0	
15	1,219	21.40	26.6	
16	1,727	15.67	13.7	
17	2,005	18.71	14.1	
18	2,419	13.99	8.8	
19	2,578	9.35	5.5	
20	2,957	9.18	4.7	
21	3,976	7.26	2.8	
22	4,772	9.03	2.9	
23	8,549	38.80	6.9	
24	10,380	75.00	10.9	Upper Marker
25	22,586	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...

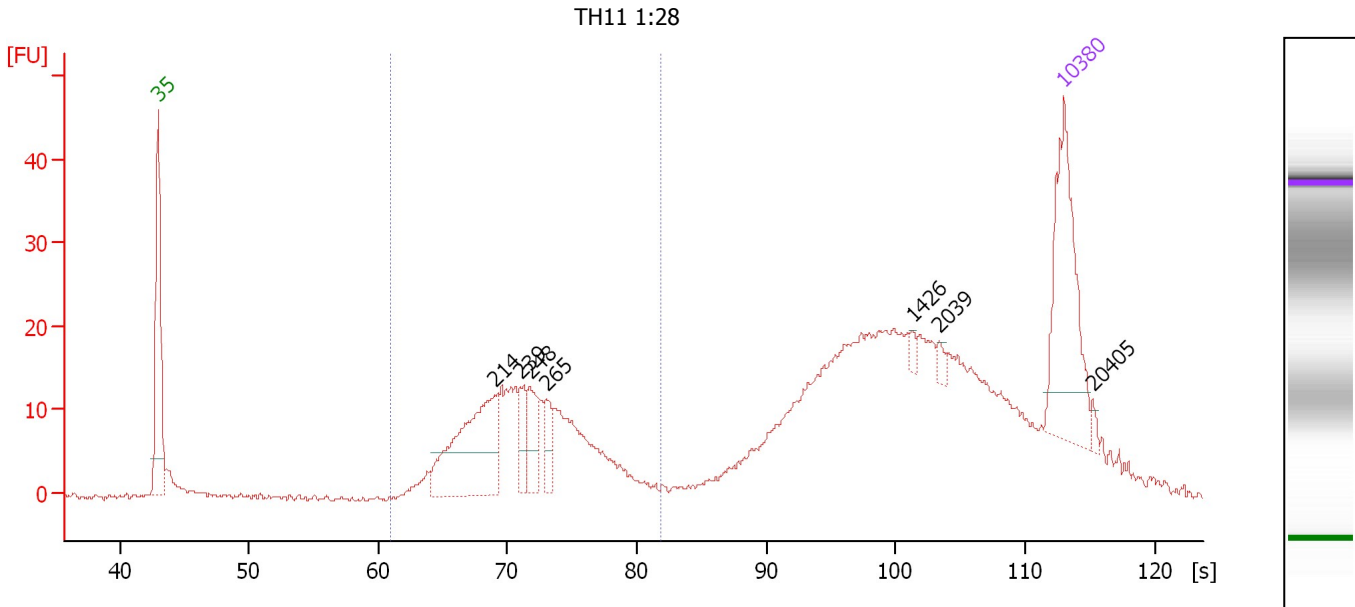
... Region table for sample 10 : TH10 1:28

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Color	
61.00	2,975.6	244	461.58	82.76	212.2	39	19.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : TH11 1:28

Number of peaks found: 7 Corr. Area 1: 193.4
 Noise: 0.3

Peak table for sample 11 : TH11 1:28

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	214	120.14	850.6	
3	239	21.54	136.7	
4	248	28.76	175.4	
5	265	18.53	106.0	
6	1,426	3.44	3.7	
7	2,039	3.98	3.0	
8	10,380	75.00	10.9	Upper Marker
9	20,405	0.00	0.0	

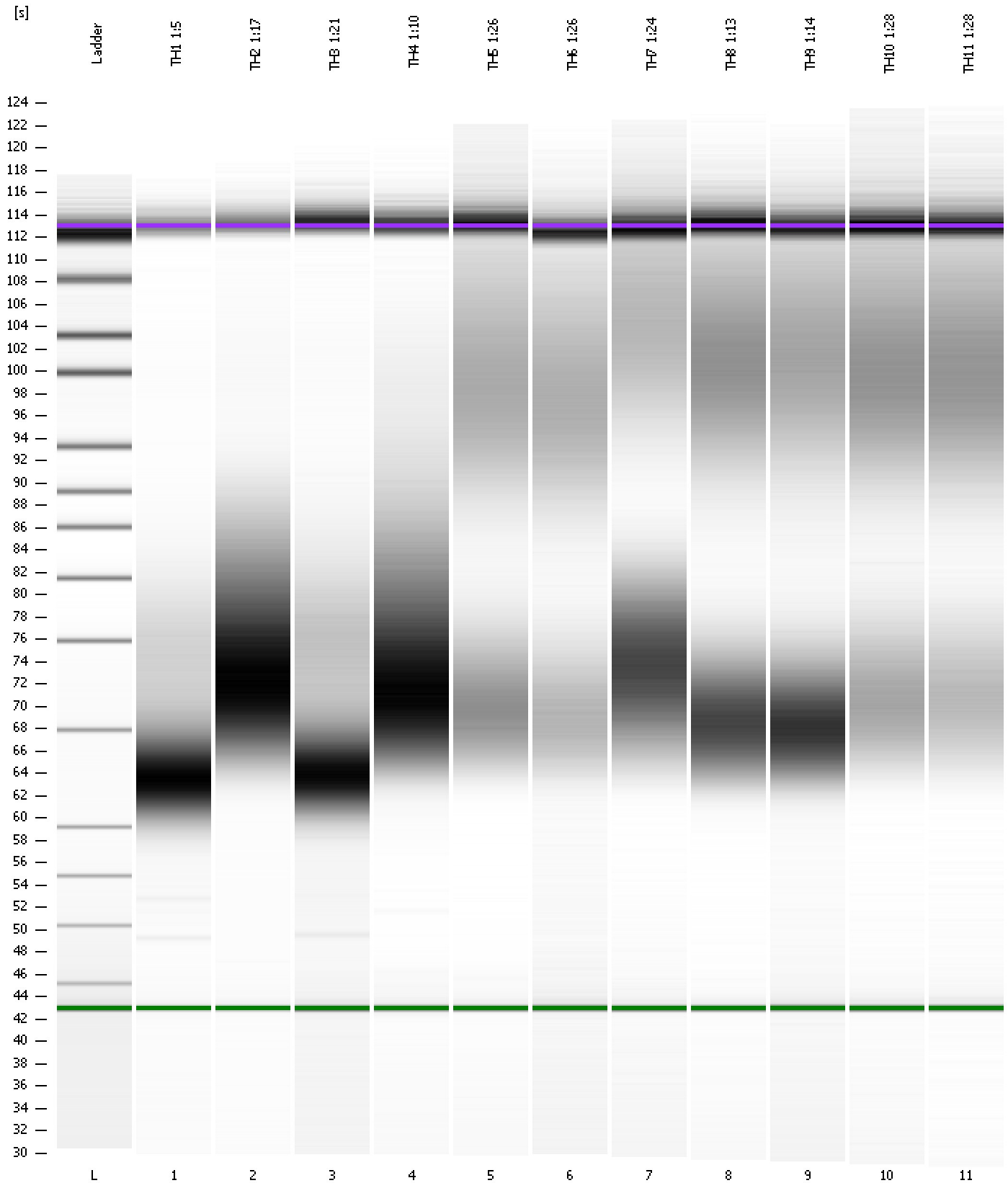
Region table for sample 11 : TH11 1:28

From [s]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.96	2,374.5	248	371.13	81.91	193.4	34	20.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
Modified: 3/1/2012 11:05:01 AM

Gel Image

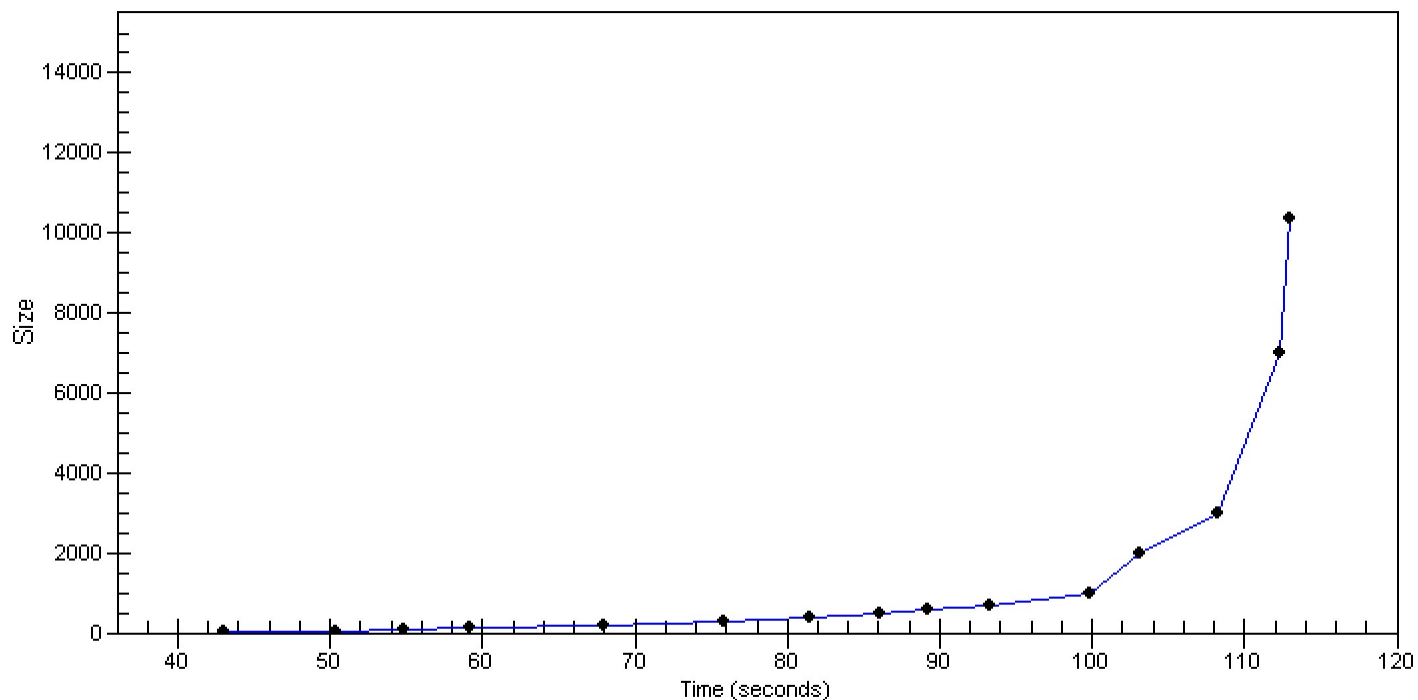


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
Modified: 3/1/2012 11:05:01 AM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad

Created: 3/1/2012 10:10:06 AM
 Modified: 3/1/2012 11:05:01 AM

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		3/1/2012 10:51:25 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-01\2012-03-01_001.xad)		Instrument	Run		3/1/2012 10:10:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/1/2012 10:10:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/1/2012 10:10:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/1/2012 10:10:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/1/2012 10:10:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/1/2012 10:10:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/1/2012 10:10:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1