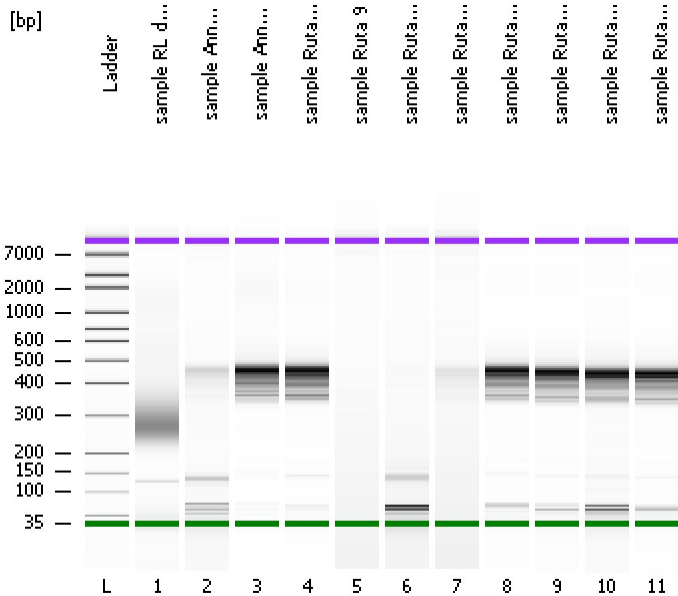


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
Modified: 8/5/2013 1:55:05 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

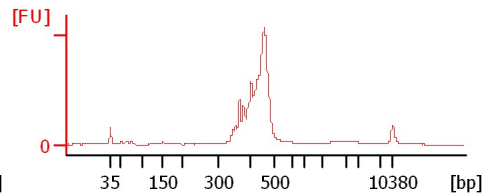
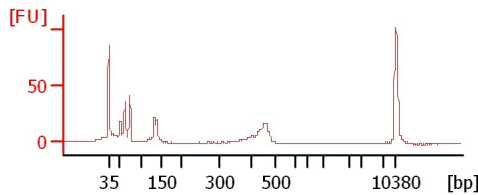
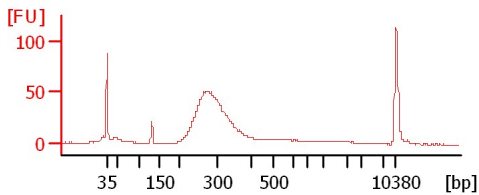
Chip Information:

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

sample RL dil 1:1

sample Anna M 46

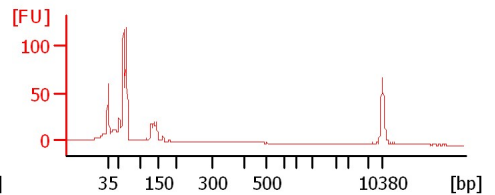
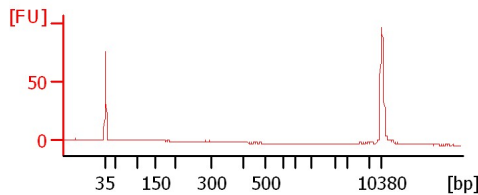
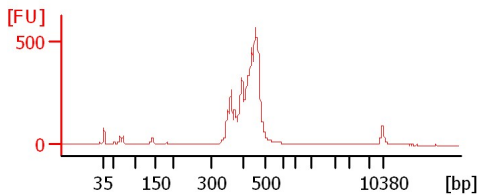
sample Anna M 47



sample Ruta 29

sample Ruta 9

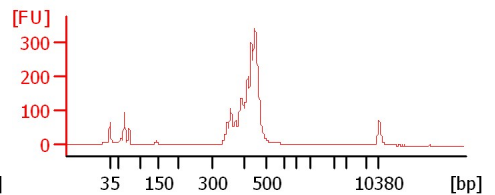
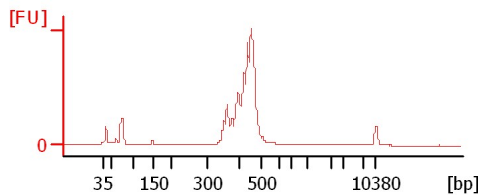
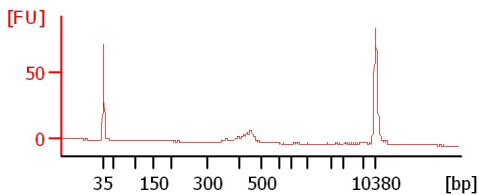
sample Ruta 18



sample Ruta 22

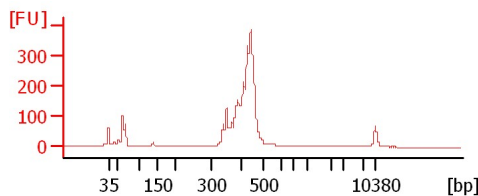
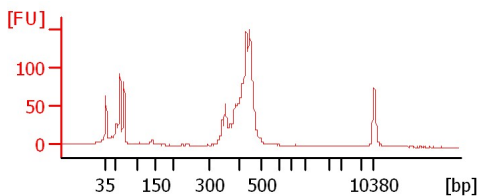
sample Ruta 23

sample Ruta 29



sample Ruta 46

sample Ruta 47



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample RL dil 1:1		<input type="checkbox"/>	✓			
sample Anna M 46		<input type="checkbox"/>	✓			
sample Anna M 47		<input type="checkbox"/>	✓			
sample Ruta 29		<input type="checkbox"/>	✓			
sample Ruta 9		<input type="checkbox"/>	✓			
sample Ruta 18		<input type="checkbox"/>	✓			
sample Ruta 22		<input type="checkbox"/>	✓			
sample Ruta 23		<input type="checkbox"/>	✓			
sample Ruta 29		<input type="checkbox"/>	✓			
sample Ruta 46		<input type="checkbox"/>	✓			
sample Ruta 47		<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\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
Modified: 8/5/2013 1:55:05 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

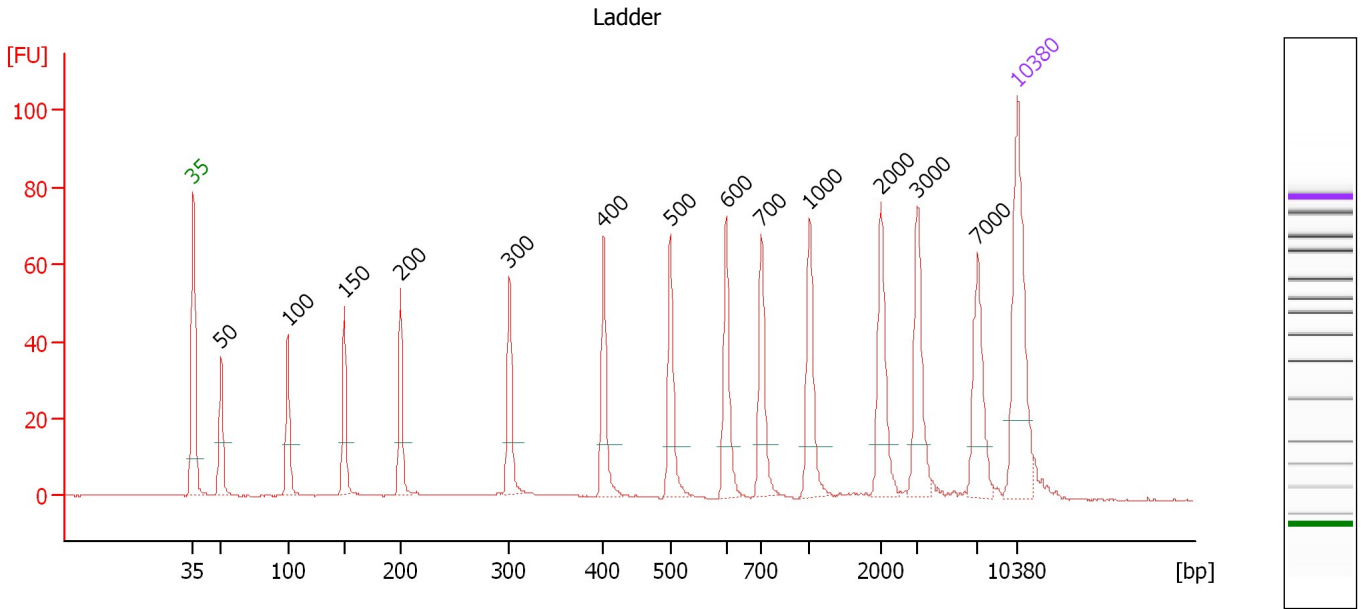
Ladder

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\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

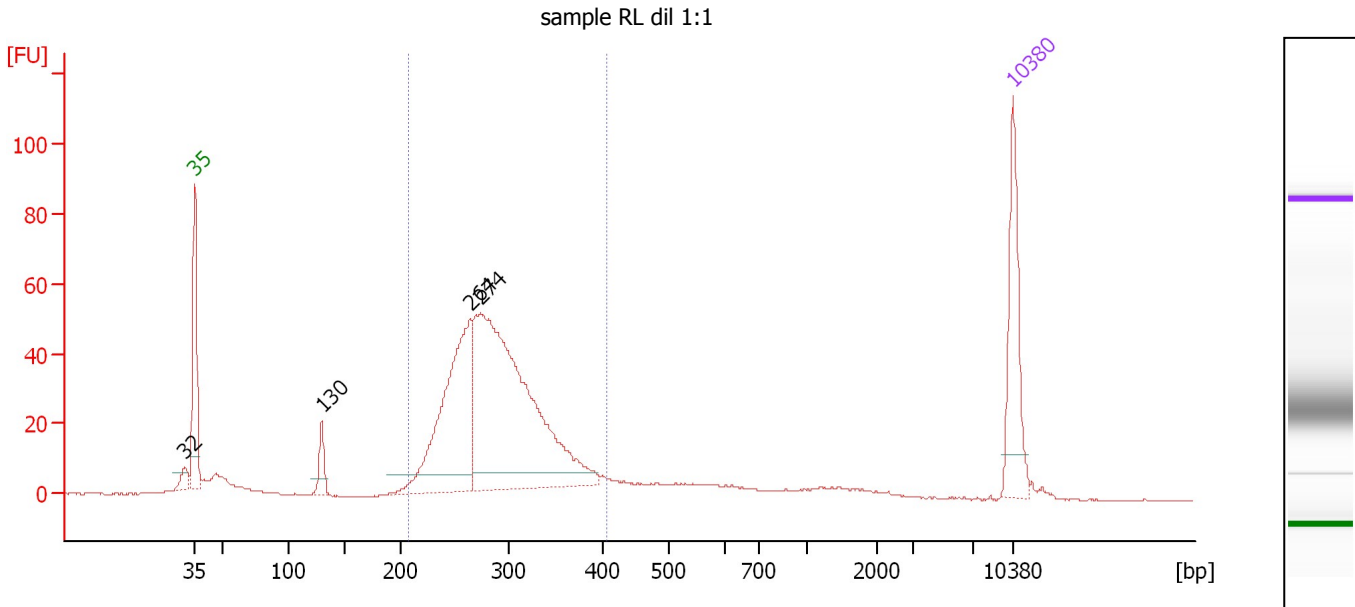
Peak table for Ladder

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

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample RL dil 1:1

Number of peaks found: 4 Corr. Area 1: 677.2
 Noise: 0.2

Peak table for sample 1 : sample RL dil 1:1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	130	30.79	360.0	
4	264	271.64	1,557.6	
5	274	531.73	2,939.6	
6	10,380	75.00	10.9	Upper Marker

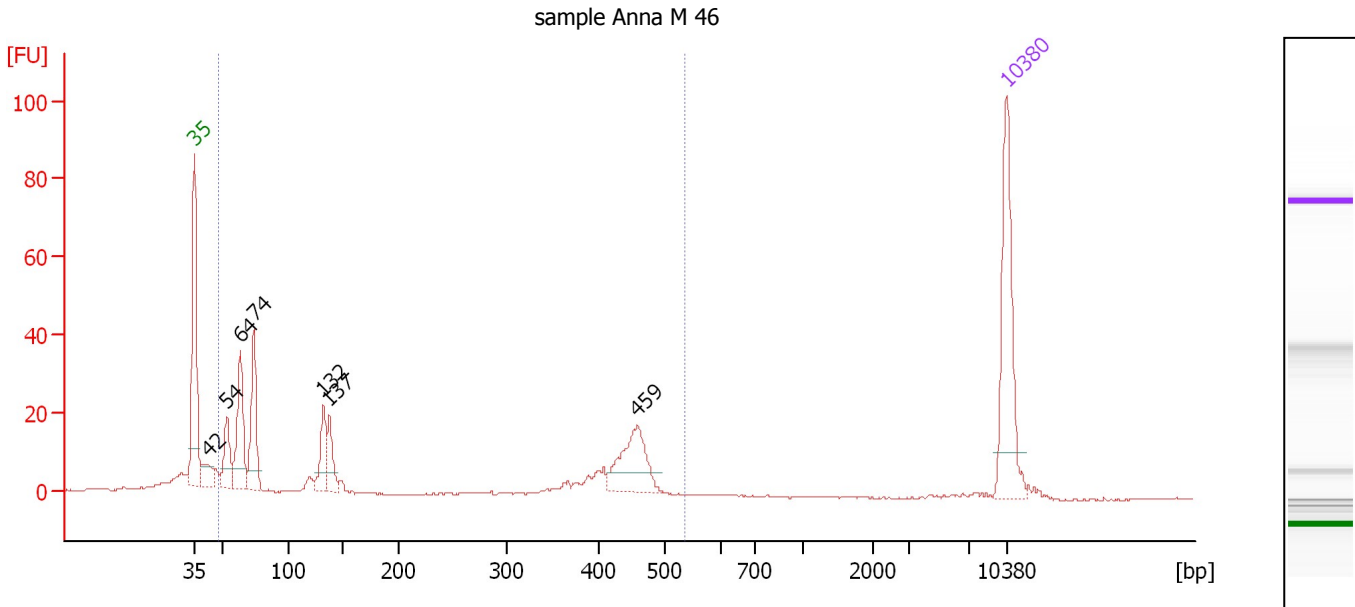
Region table for sample 1 : sample RL dil 1:1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
207	408	290	4,428.1	829.61	677.2	79	14.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample Anna M 46

Number of peaks found: 7 Corr. Area 1: 263.5
 Noise: 0.1

Peak table for sample 2 : sample Anna M 46

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	23.53	842.6	
3	54	39.25	1,102.6	
4	64	78.03	1,845.1	
5	74	76.67	1,565.2	
6	132	38.88	445.5	
7	137	29.92	329.7	
8	459	59.23	195.6	
9	10,380	75.00	10.9	Upper Marker

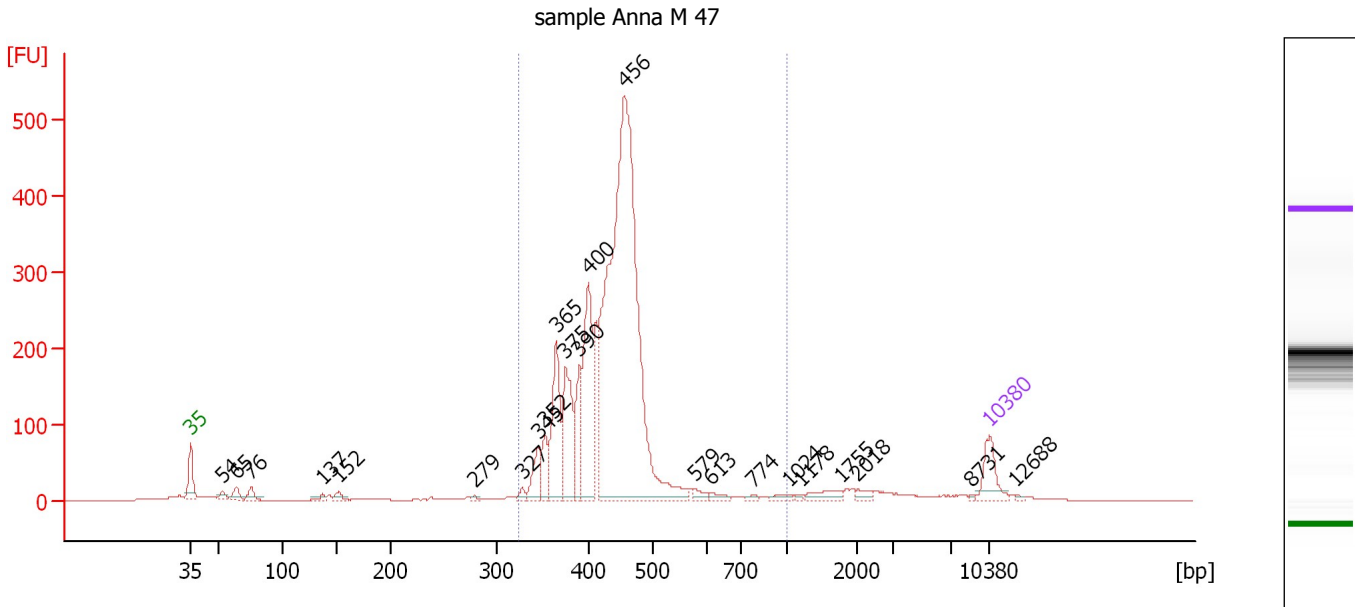
Region table for sample 2 : sample Anna M 46

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
49	537	235	6,037.5	381.97	263.5	82	74.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample Anna M 47

Number of peaks found: 23 Corr. Area 1: 3,212.8
 Noise: 0.2

Peak table for sample 3 : sample Anna M 47

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	54	25.57	718.2	
3	65	40.81	956.0	
4	76	36.64	732.2	
5	137	12.32	136.1	
6	152	22.66	226.2	
7	279	7.25	39.4	
8	327	17.57	81.4	
9	345	94.25	413.8	
10	352	84.16	362.1	
11	365	265.92	1,103.7	
12	375	250.02	1,010.1	
13	390	153.55	596.1	
14	400	382.87	1,449.1	
15	456	2,197.22	7,307.0	
16	579	19.70	51.6	
17	613	16.04	39.6	
18	774	8.06	15.8	
19	1,024	12.43	18.4	
20	1,178	4.86	6.3	
21	1,755	32.27	27.9	
22	2,018	16.16	12.1	
23	8,731	3.02	0.5	
24	10,380	75.00	10.9	Upper Marker
25	12,688	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...

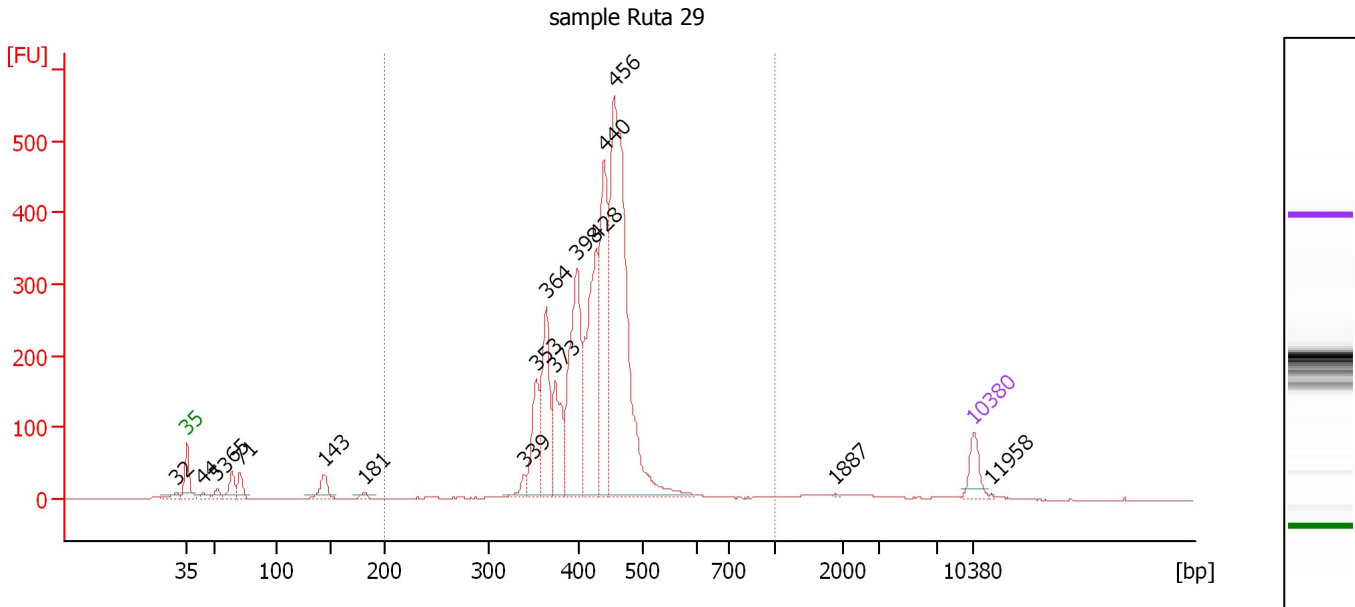
... Region table for sample 3 : sample Anna M 47

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
323	1,000	437	13,019.0	3,674.84	3,212.8	89	15.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample Ruta 29

Number of peaks found: 17 Corr. Area 1: 3,605.3
 Noise: 0.2

Peak table for sample 4 : sample Ruta 29

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	44	28.95	995.7	
4	53	36.97	1,064.1	
5	65	97.99	2,291.5	
6	71	76.70	1,635.1	
7	143	90.85	959.9	
8	181	17.08	142.8	
9	339	42.18	188.5	
10	353	241.44	1,037.4	
11	364	378.78	1,577.0	
12	373	272.08	1,103.9	
13	398	646.08	2,460.7	
14	428	636.97	2,255.3	
15	440	611.84	2,108.6	
16	456	1,588.46	5,273.4	
17	1,887	3.07	2.5	
18	10,380	75.00	10.9	Upper Marker
19	11,958	0.00	0.0	

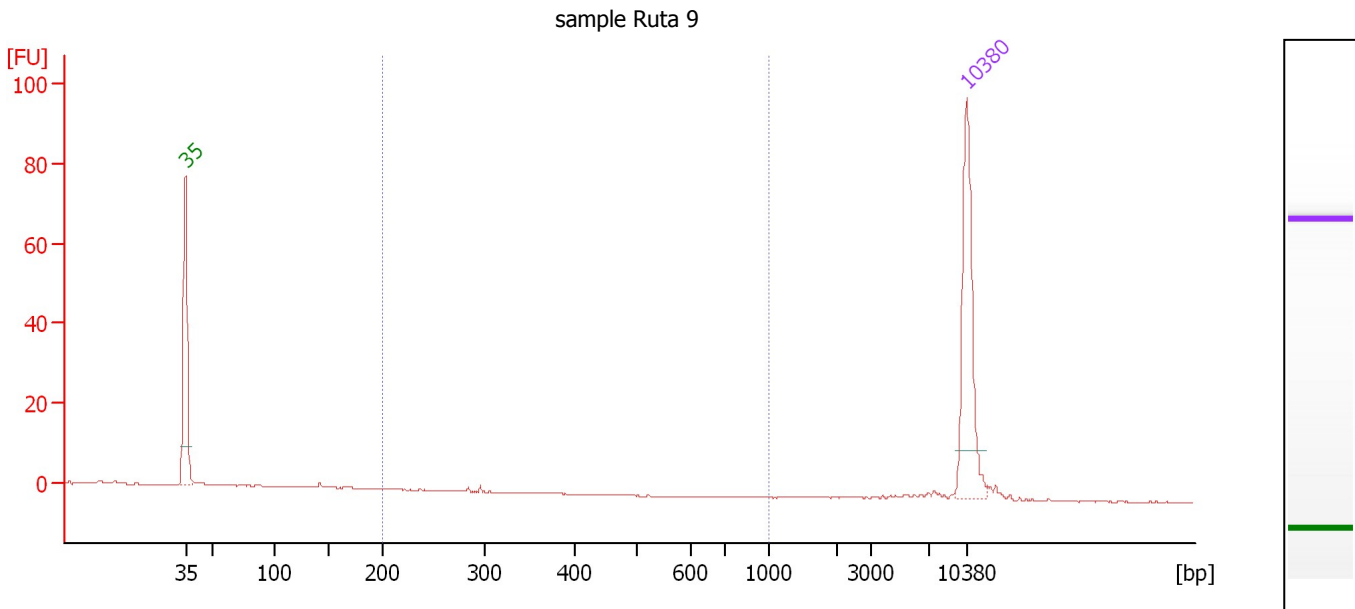
Region table for sample 4 : sample Ruta 29

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	429	16,625.7	4,606.16	3,605.3	90	13.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample Ruta 9

Number of peaks found: 0 Corr. Area 1: 0.5
 Noise: 0.1

Peak table for sample 5 : sample Ruta 9

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

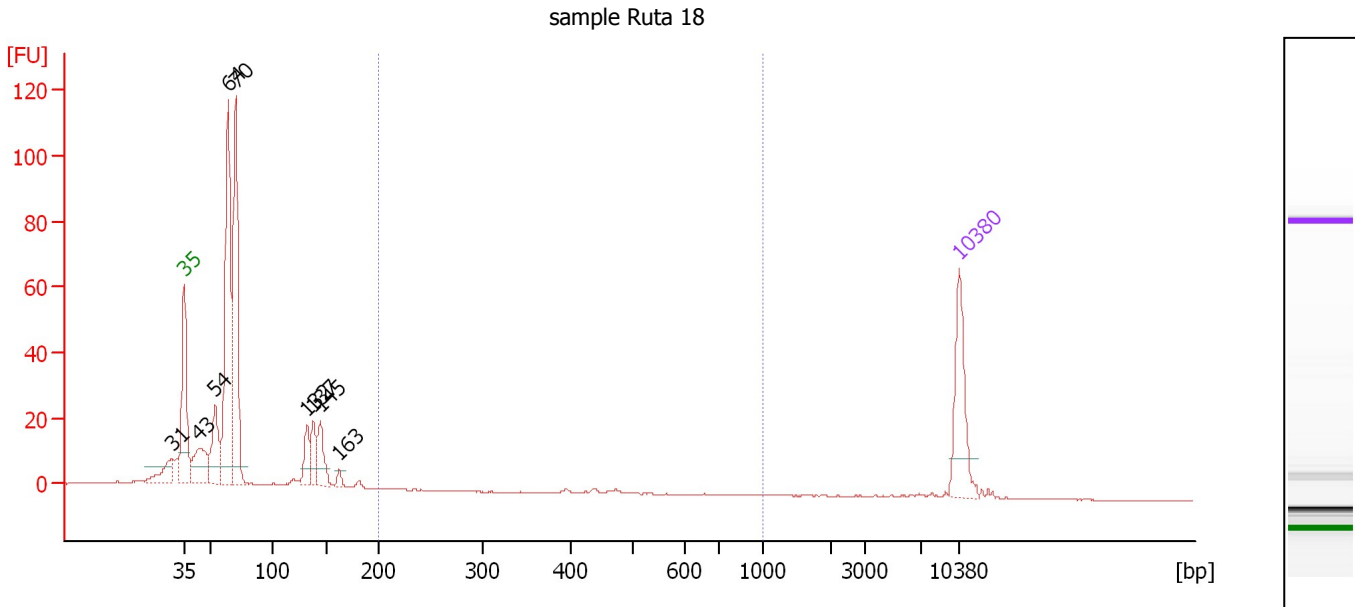
Region table for sample 5 : sample Ruta 9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	279	3.8	0.70	0.5	2	11.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample Ruta 18

Number of peaks found: 9 Corr. Area 1: 1.5
 Noise: 0.1

Peak table for sample 6 : sample Ruta 18

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	43	92.22	3,228.5	
4	54	92.34	2,597.3	
5	64	362.04	8,560.6	
6	70	301.26	6,517.9	
7	132	43.75	502.6	
8	137	46.49	512.7	
9	145	54.70	571.9	
10	163	8.93	83.2	
11	10,380	75.00	10.9	Upper Marker

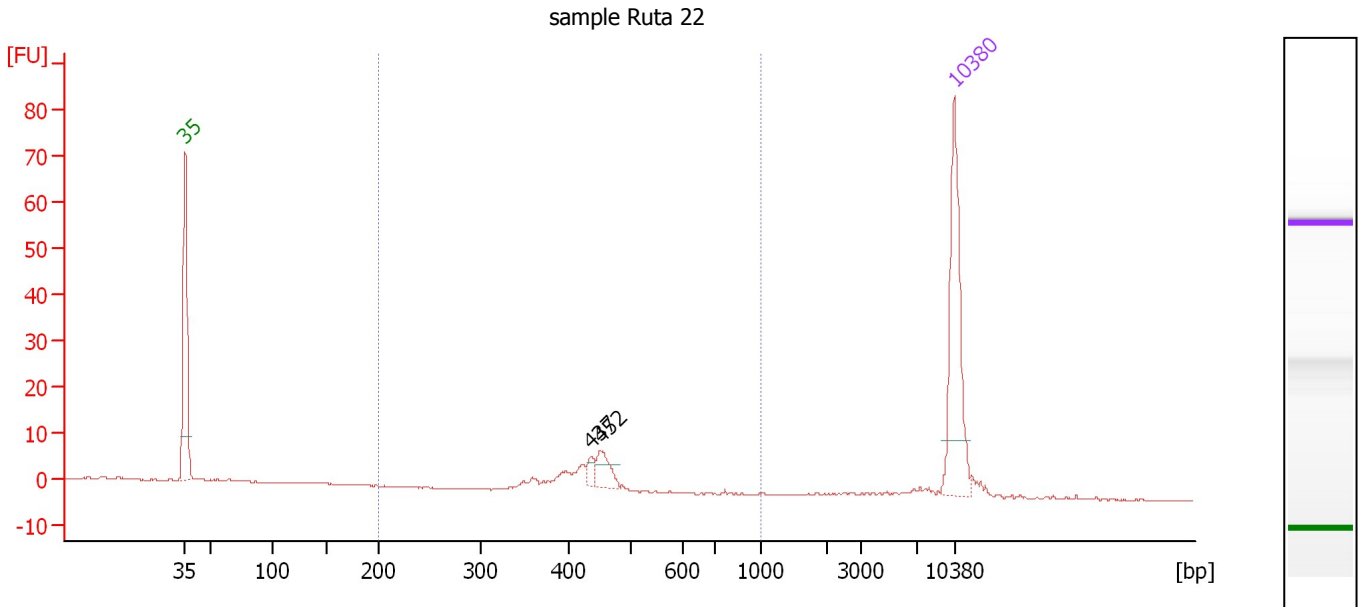
Region table for sample 6 : sample Ruta 18

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	441	9.0	2.60	1.5	0	7.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample Ruta 22

Number of peaks found: 2 Corr. Area 1: 42.3
 Noise: 0.1

Peak table for sample 7 : sample Ruta 22

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	437	7.25	25.2	
3	452	18.21	61.0	
4	10,380	75.00	10.9	Upper Marker

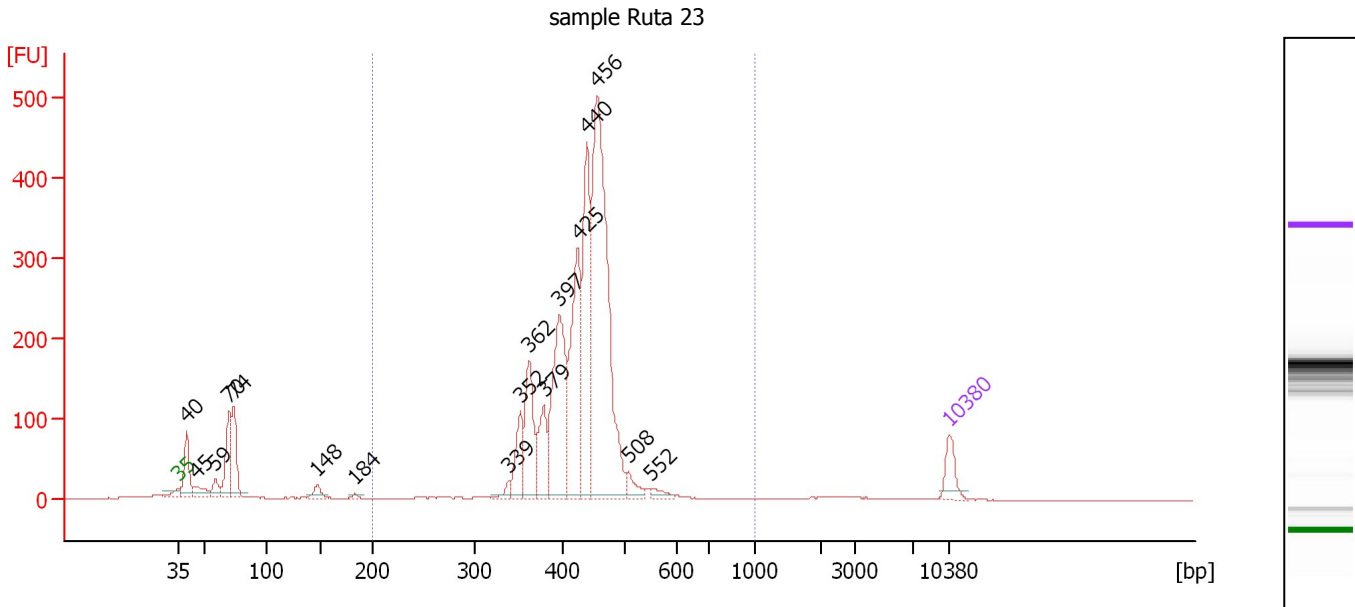
Region table for sample 7 : sample Ruta 22

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	427	200.3	55.93	42.3	67	8.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample Ruta 23

Number of peaks found: 17 Corr. Area 1: 2,894.3
 Noise: 0.2

Peak table for sample 8 : sample Ruta 23

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	225.61	8,626.3	
3	45	86.31	2,875.0	
4	59	72.46	1,870.0	
5	70	266.06	5,772.9	
6	74	254.58	5,235.2	
7	148	45.65	468.5	
8	184	9.93	81.8	
9	339	30.66	137.0	
10	352	170.34	732.2	
11	362	302.85	1,266.9	
12	379	199.00	795.1	
13	397	584.60	2,232.1	
14	425	551.50	1,964.0	
15	440	597.20	2,056.4	
16	456	1,458.36	4,842.9	
17	508	58.77	175.3	
18	552	32.00	87.9	
19	10,380	75.00	10.9	Upper Marker

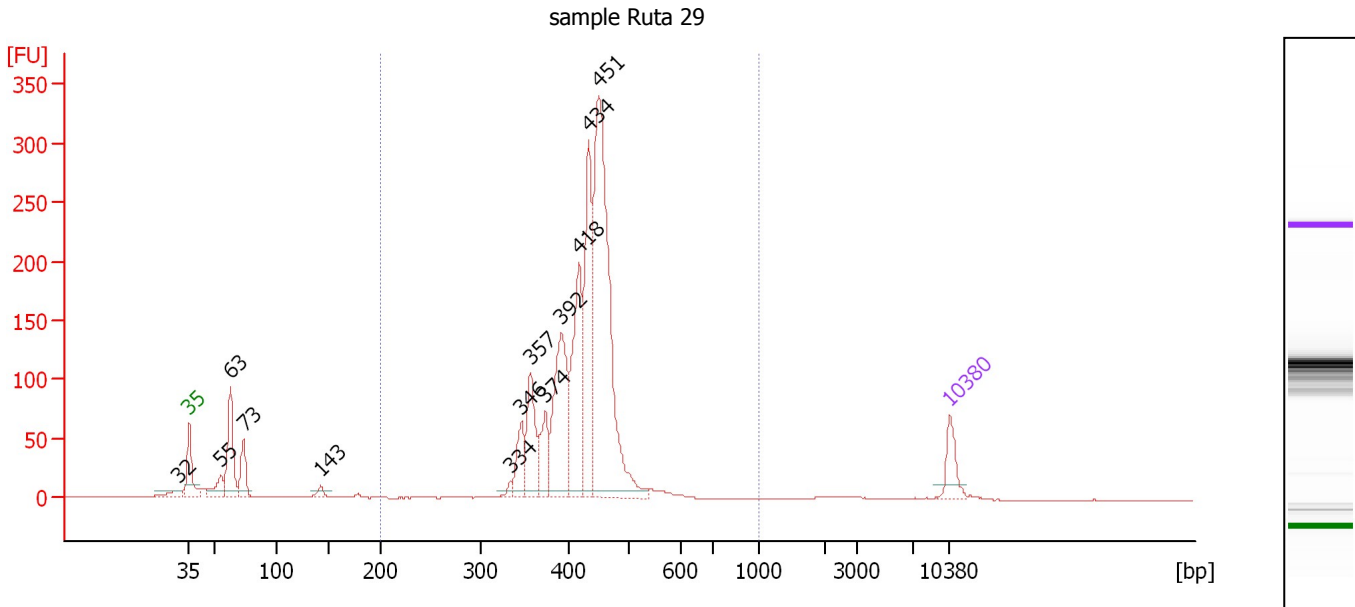
Region table for sample 8 : sample Ruta 23

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	431	14,726.1	4,121.50	2,894.3	84	11.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample Ruta 29

Number of peaks found: 13 Corr. Area 1: 1,841.3
 Noise: 0.2

Peak table for sample 9 : sample Ruta 29

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	55	88.63	2,452.8	
4	63	286.32	6,936.0	
5	73	134.95	2,786.6	
6	143	28.07	298.1	
7	334	15.70	71.2	
8	346	124.49	544.6	
9	357	215.70	916.0	
10	374	145.94	591.2	
11	392	435.67	1,684.6	
12	418	423.75	1,536.1	
13	434	464.76	1,621.0	
14	451	1,179.10	3,962.4	
15	10,380	75.00	10.9	Upper Marker

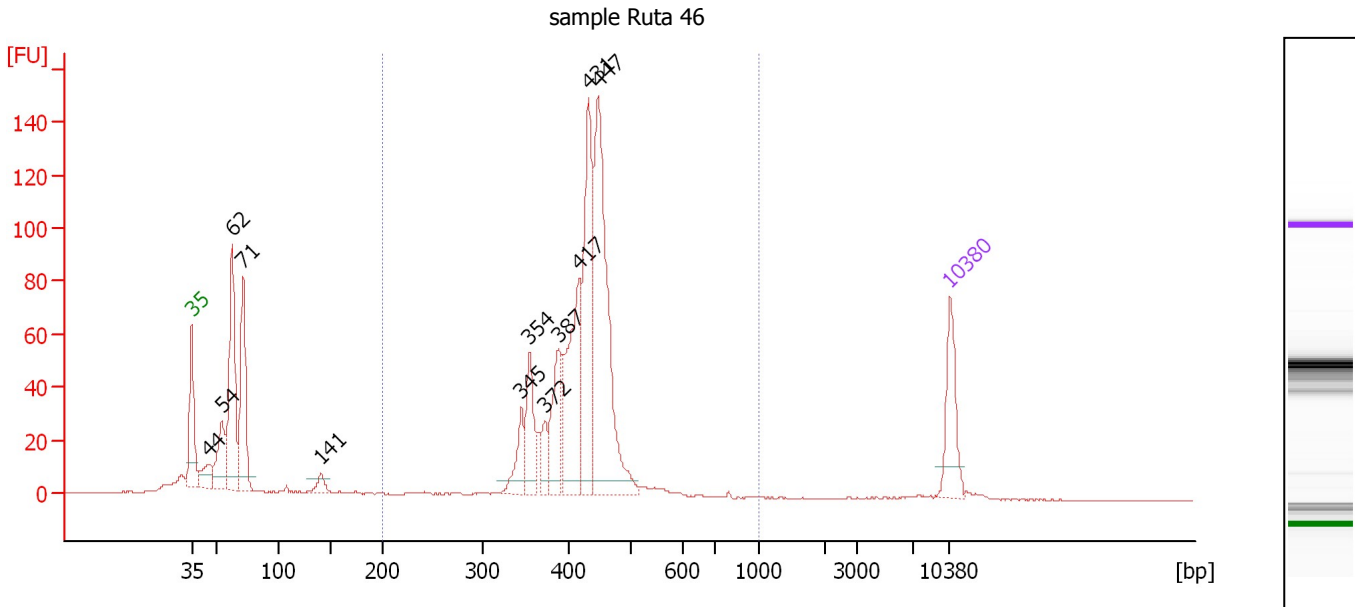
Region table for sample 9 : sample Ruta 29

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	426	11,185.8	3,099.67	1,841.3	86	11.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample Ruta 46

Number of peaks found: 12 Corr. Area 1: 821.8
 Noise: 0.1

Peak table for sample 10 : sample Ruta 46

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	53.60	1,829.0	
3	54	105.33	2,981.0	
4	62	283.06	6,891.8	
5	71	216.23	4,619.5	
6	141	22.84	246.3	
7	345	60.73	267.0	
8	354	95.81	410.3	
9	372	37.94	154.6	
10	387	108.97	426.4	
11	417	228.53	830.9	
12	431	259.30	910.5	
13	447	430.64	1,459.3	
14	10,380	75.00	10.9	Upper Marker

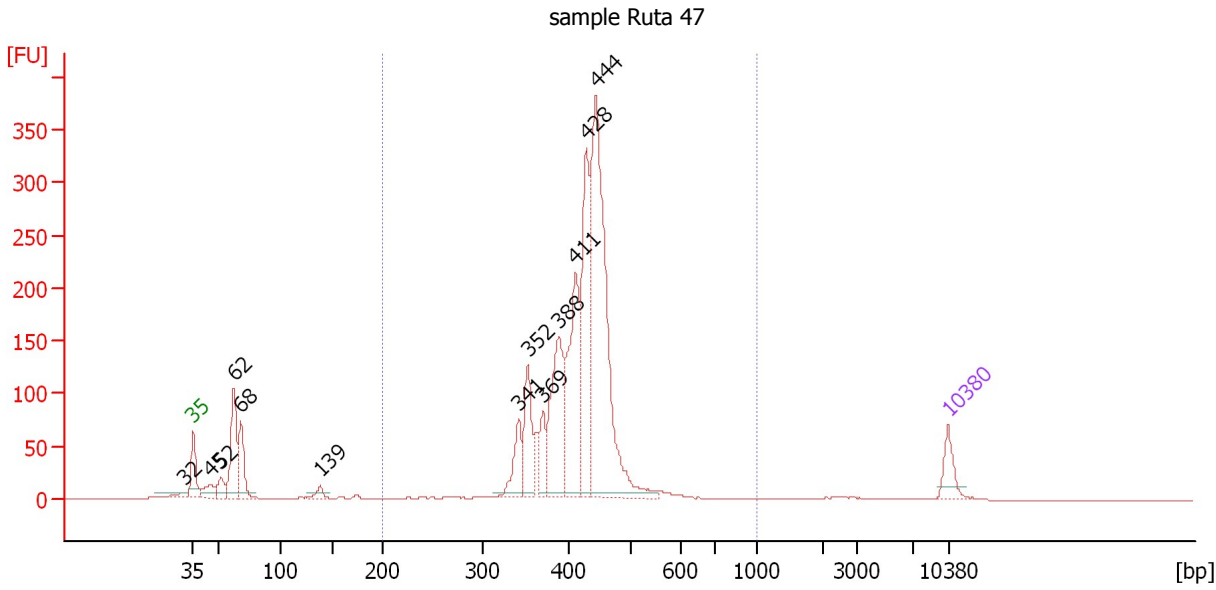
Region table for sample 10 : sample Ruta 46

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	421	4,831.2	1,318.06	821.8	68	11.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
 Modified: 8/5/2013 1:55:05 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample Ruta 47

Number of peaks found: 13 Corr. Area 1: 2,083.2
 Noise: 0.1

Peak table for sample 11 : sample Ruta 47

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	45	83.40	2,803.8	
4	52	73.95	2,159.0	
5	62	332.05	8,066.6	
6	68	201.31	4,482.7	
7	139	36.15	394.0	
8	341	156.77	696.1	
9	352	230.25	991.7	
10	369	111.50	457.7	
11	388	456.83	1,785.2	
12	411	498.66	1,839.9	
13	428	544.54	1,927.2	
14	444	1,304.28	4,452.6	
15	10,380	75.00	10.9	Upper Marker

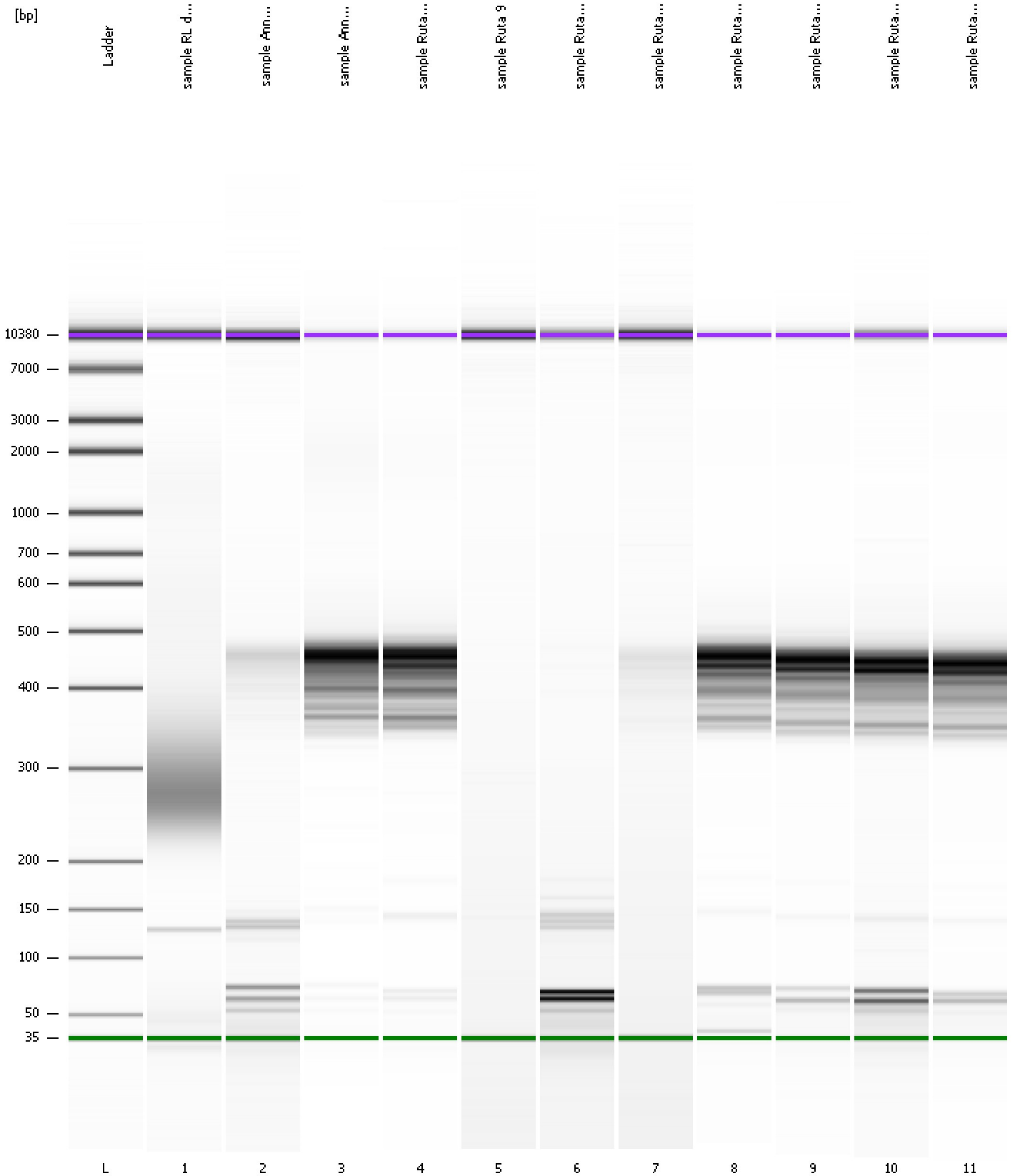
Region table for sample 11 : sample Ruta 47

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	420	12,874.7	3,505.85	2,083.2	84	12.3	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad

Created: 8/5/2013 1:14:33 PM
Modified: 8/5/2013 1:55:05 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 8/5/2013 1:14:33 PM
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad Modified: 8/5/2013 1:55:05 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		8/5/2013 1:55:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-05\2013-08-05_003.xad)		Instrument	Run		8/5/2013 1:14:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/5/2013 1:14:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/5/2013 1:14:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/5/2013 1:14:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/5/2013 1:14:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/5/2013 1:14:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/5/2013 1:14:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1