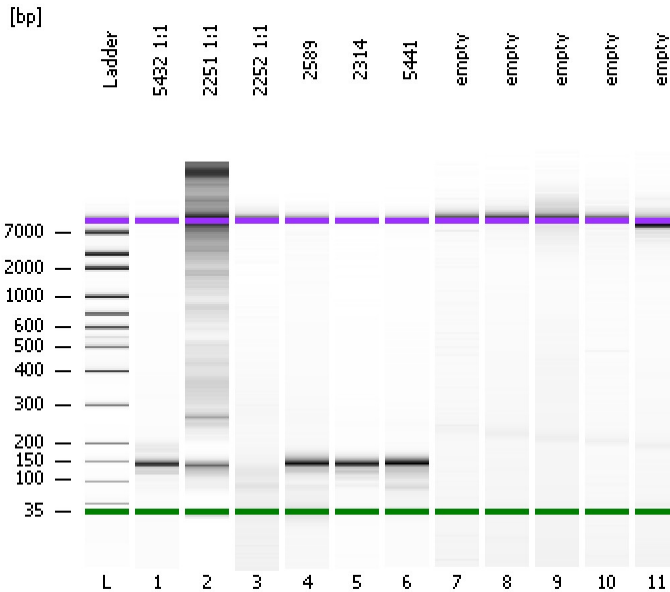


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
Modified: 3/6/2014 2:18:02 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

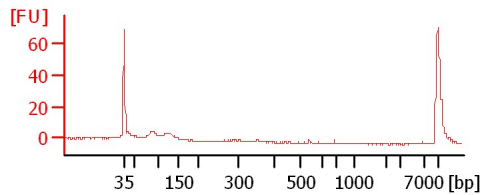
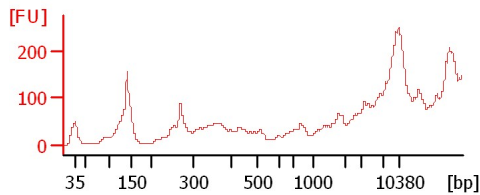
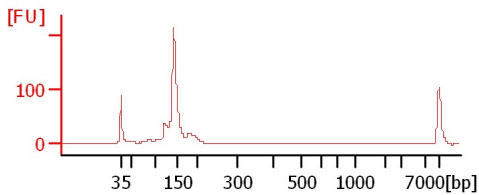
Chip Information:

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

5432 1:1

2251 1:1

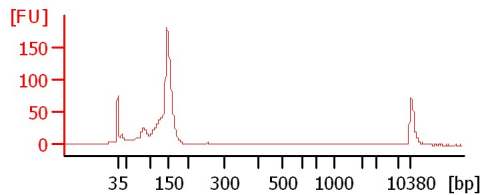
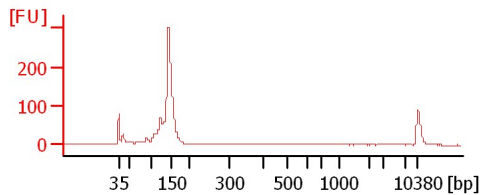
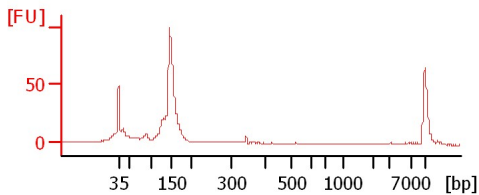
2252 1:1



2589

2314

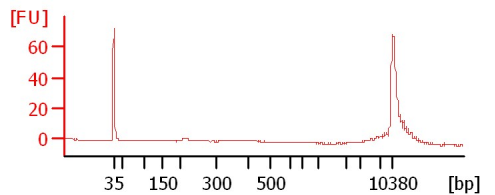
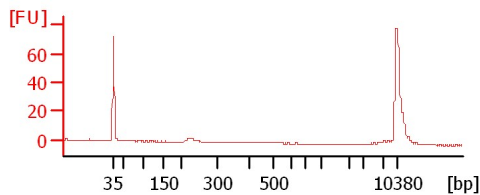
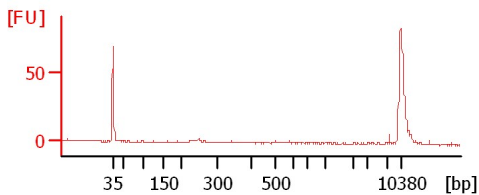
5441



empty

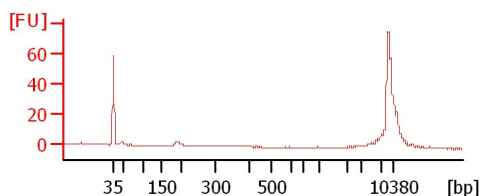
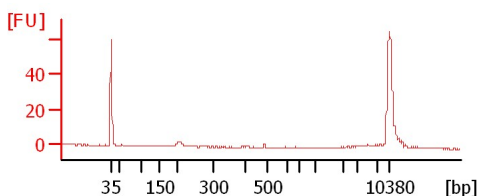
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empty



empty

empty



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
Modified: 3/6/2014 2:18:02 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
5432 1:1		<input type="checkbox"/>	✓			
2251 1:1		<input type="checkbox"/>	✓			
2252 1:1		<input type="checkbox"/>	✓			
2589		<input type="checkbox"/>	✓			
2314		<input type="checkbox"/>	✓			
5441		<input type="checkbox"/>	✓			
empty		<input type="checkbox"/>	✓			
empty		<input type="checkbox"/>	✓			
empty		<input type="checkbox"/>	✓			
empty		<input type="checkbox"/>	✓			
empty		<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\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
Modified: 3/6/2014 2:18:02 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

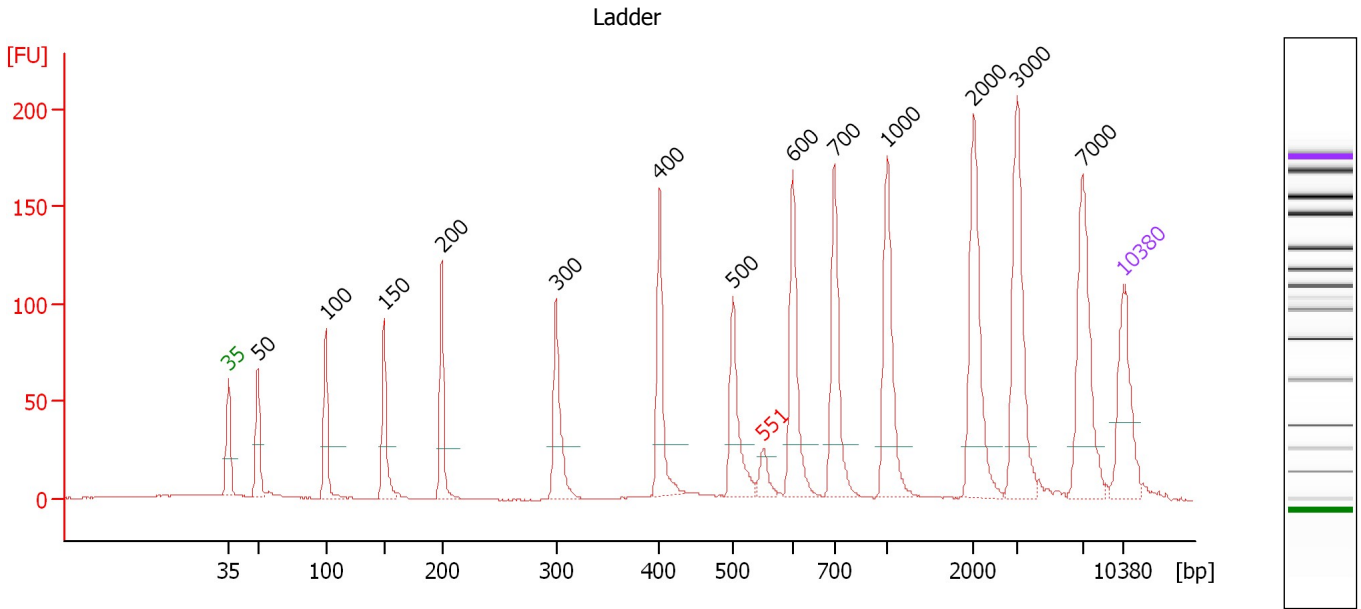
Ladder

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\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

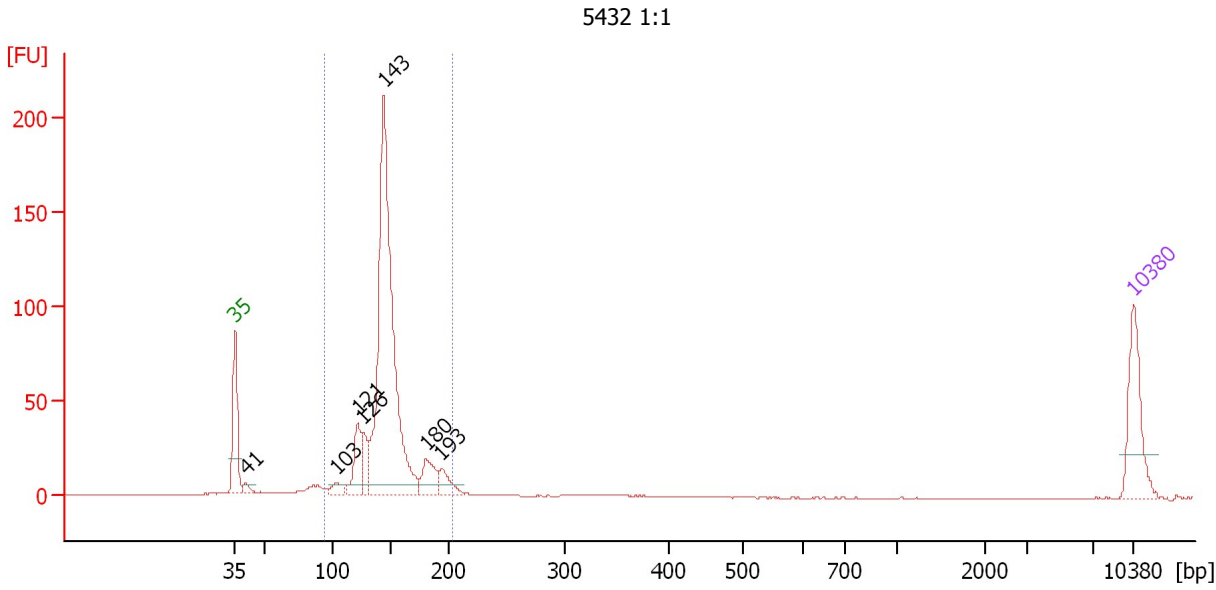
Peak table for Ladder

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.30	50	150.00	4,545.5	Ladder Peak
3	50.60	100	150.00	2,272.7	Ladder Peak
4	55.19	150	150.00	1,515.2	Ladder Peak
5	59.70	200	150.00	1,136.4	Ladder Peak
6	68.63	300	150.00	757.6	Ladder Peak
7	76.73	400	150.00	568.2	Ladder Peak
8	82.49	500	150.00	454.5	Ladder Peak
9	84.87	551	0.00	0.0	excluded peak
10	87.16	600	150.00	378.8	Ladder Peak
11	90.42	700	150.00	324.7	Ladder Peak
12	94.55	1,000	150.00	227.3	Ladder Peak
13	101.35	2,000	150.00	113.6	Ladder Peak
14	104.74	3,000	150.00	75.8	Ladder Peak
15	109.83	7,000	150.00	32.5	Ladder Peak
16	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 5432 1:1

Number of peaks found: 7 Corr. Area 1: 688.0
 Noise: 0.1

Peak table for sample 1 : 5432 1:1

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	43.87	41	13.51	503.0	
3	50.89	103	17.98	264.0	
4	52.55	121	72.85	910.2	
5	53.01	126	52.47	629.8	
6	54.58	143	743.27	7,852.6	
7	57.91	180	52.80	444.1	
8	59.07	193	33.42	262.3	
9	113.00	10,380	75.00	10.9	Upper Marker

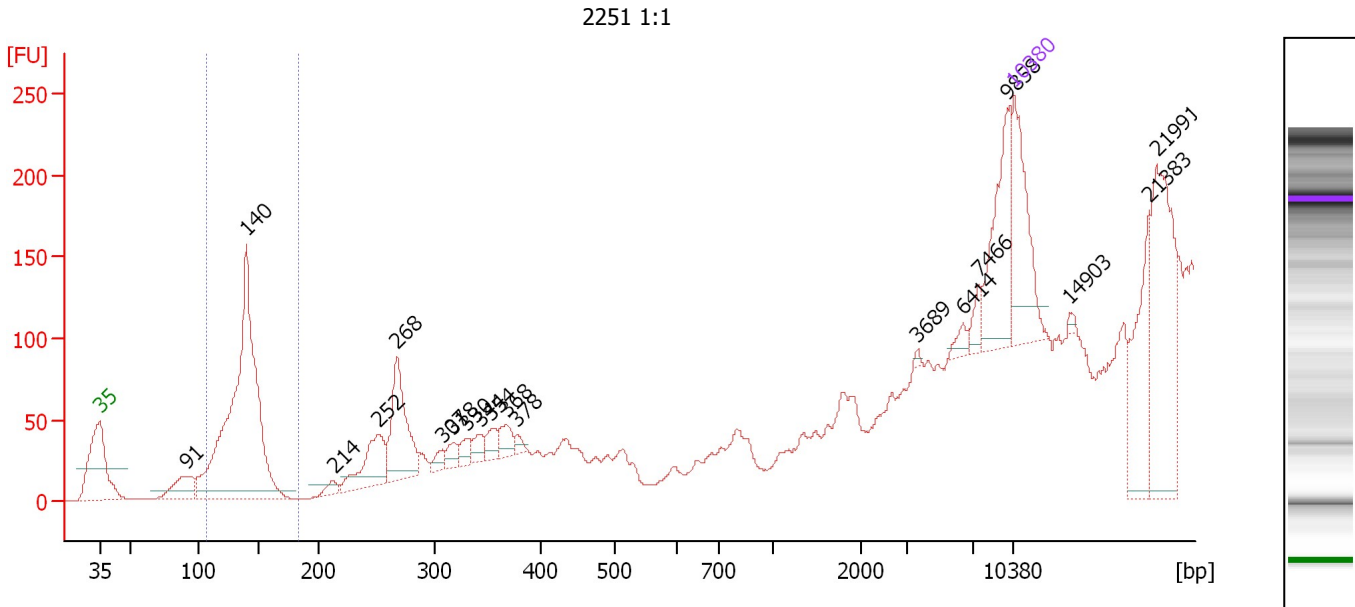
Region table for sample 1 : 5432 1:1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
95	203	147	10,290.2	985.12	688.0	92	12.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2251 1:1

Number of peaks found: 19 Corr. Area 1: 497.2
 Noise: 0.5

Peak table for sample 2 : 2251 1:1

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	49.61	91	53.77	898.1	
3	54.22	140	546.00	5,930.1	
4	60.92	214	11.46	81.2	
5	64.35	252	70.67	424.8	
6	65.78	268	110.21	623.0	
7	69.20	307	11.28	55.6	
8	70.06	318	13.95	66.6	
9	71.04	330	12.28	56.4	
10	72.18	344	14.87	65.5	
11	73.00	354	15.38	65.8	
12	74.14	368	18.35	75.5	
13	74.96	378	6.68	26.8	
14	105.61	3,689	1.89	0.8	
15	109.08	6,414	8.06	1.9	
16	110.27	7,466	12.54	2.5	
17	112.51	9,858	75.71	11.6	
18	113.00	10,380	75.00	10.9	Upper Marker
19	117.24	14,903	0.00	0.0	
20	123.33	21,383	0.00	0.0	
21	123.90	21,991	0.00	0.0	

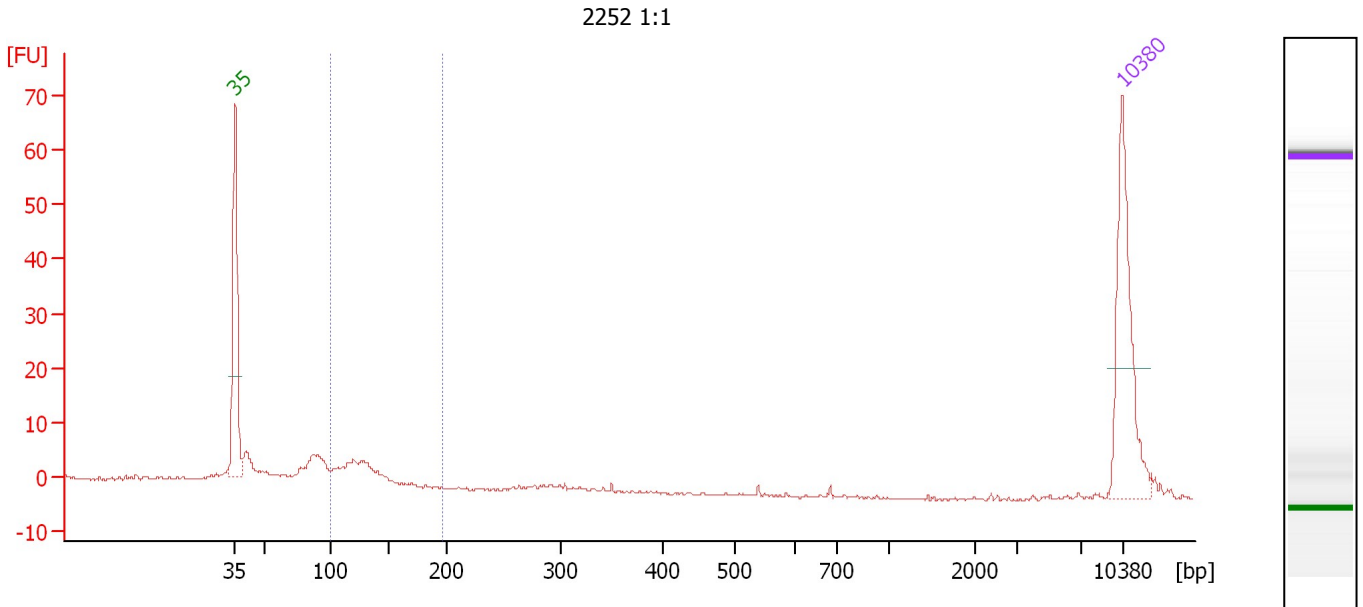
Region table for sample 2 : 2251 1:1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
107	184	136	3,841.7	345.40	497.2	60	7.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 2252 1:1

Number of peaks found: 0 Corr. Area 1: 27.9
 Noise: 0.3

Peak table for sample 3 : 2252 1:1

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	113.00	10,380	75.00	10.9	Upper Marker

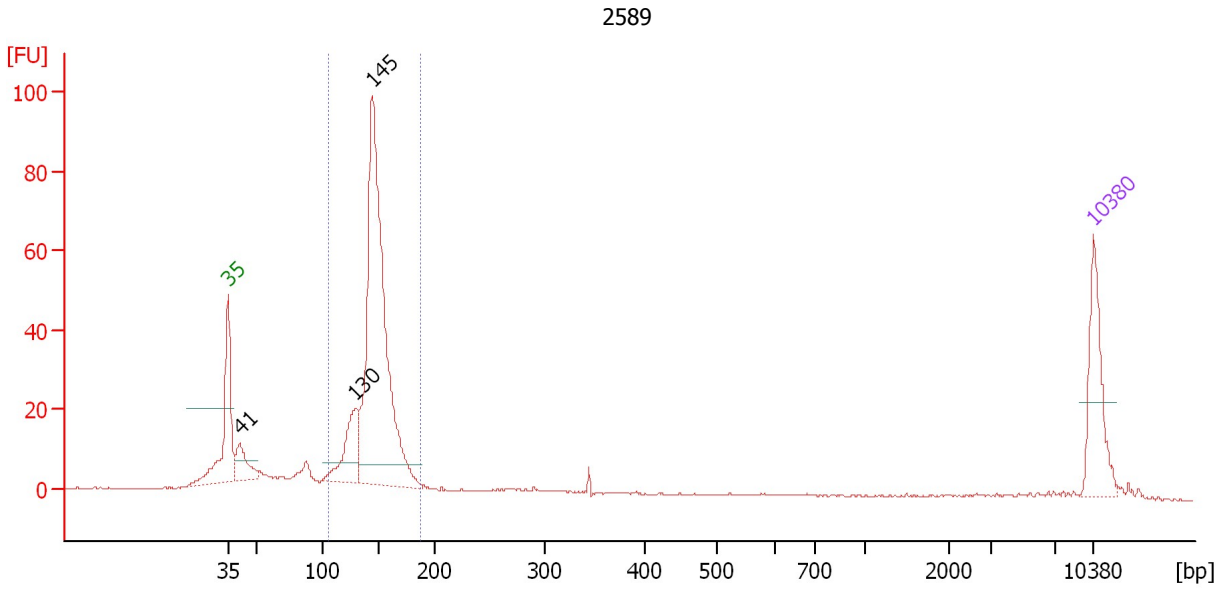
Region table for sample 3 : 2252 1:1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
99	196	123	635.3	51.38	27.9	33	11.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 2589

Number of peaks found: 3 Corr. Area 1: 372.2
 Noise: 0.2

Peak table for sample 4 : 2589

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	43.95	41	57.73	2,123.1	
3	53.31	130	104.63	1,224.0	
4	54.69	145	651.86	6,832.5	
5	113.00	10,380	75.00	10.9	Upper Marker

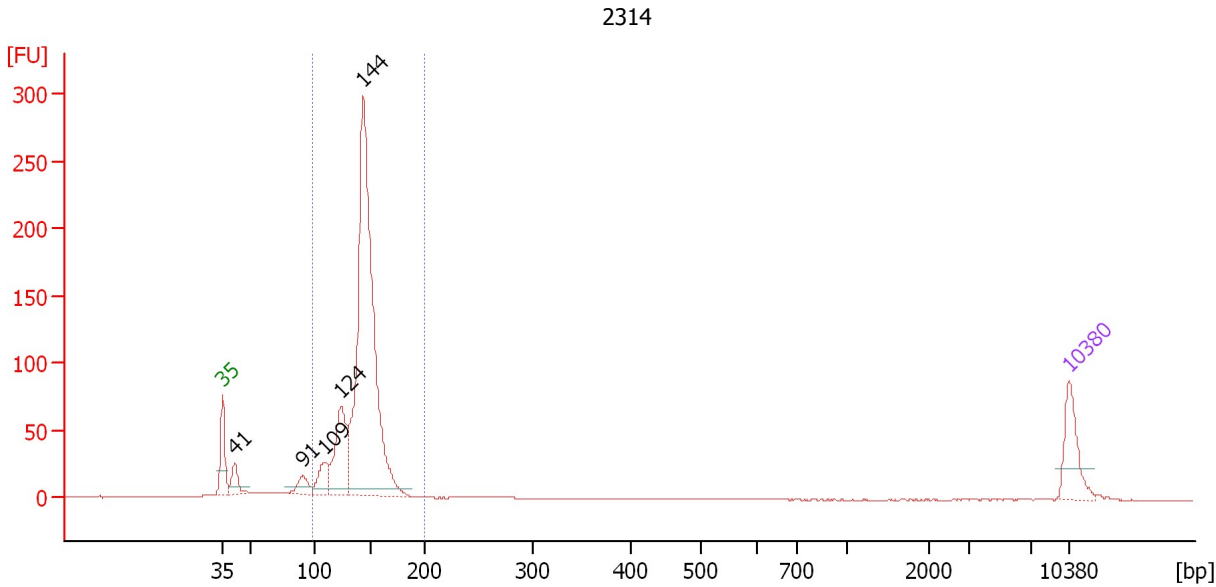
Region table for sample 4 : 2589

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
105	188	146	8,416.4	805.85	372.2	72	9.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 2314

Number of peaks found: 5 Corr. Area 1: 1,043.4
 Noise: 0.2

Peak table for sample 5 : 2314

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	43.97	41	58.35	2,138.9	
3	49.66	91	47.49	789.6	
4	51.46	109	76.86	1,064.2	
5	52.79	124	217.98	2,666.9	
6	54.59	144	1,230.04	12,985.8	
7	113.00	10,380	75.00	10.9	Upper Marker

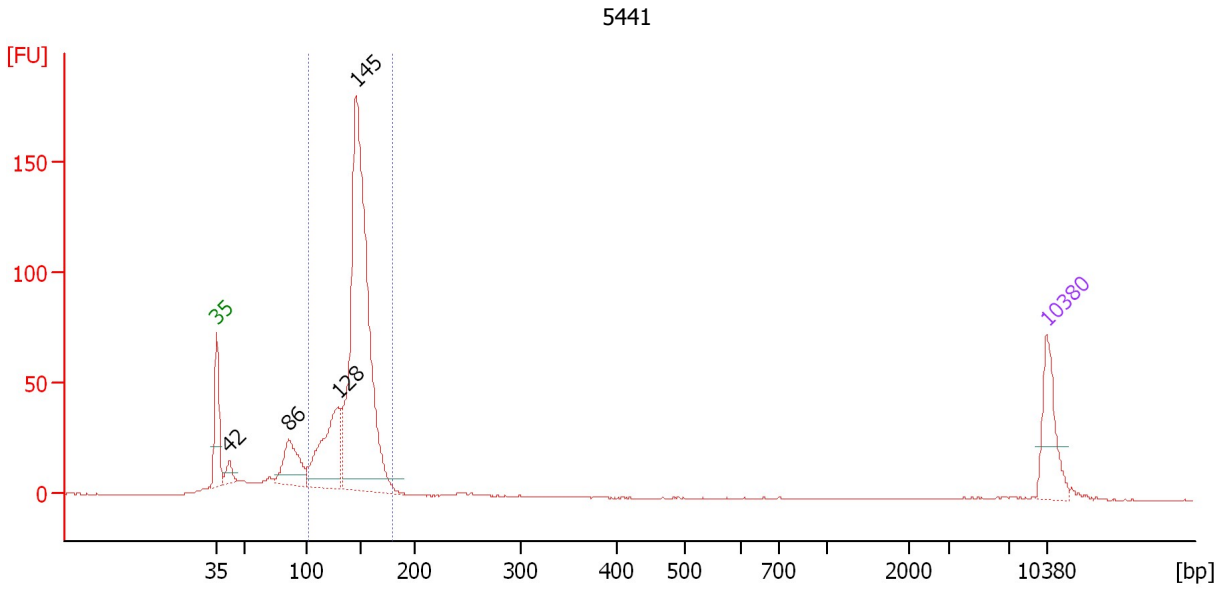
Region table for sample 5 : 2314

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
98	200	142	16,708.3	1,556.65	1,043.4	87	10.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 5441

Number of peaks found: 4 Corr. Area 1: 721.4
 Noise: 0.2

Peak table for sample 6 : 5441

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	44.03	42	31.49	1,142.5	
3	49.07	86	125.38	2,218.5	
4	53.21	128	235.00	2,771.4	
5	54.74	145	988.39	10,318.4	
6	113.00	10,380	75.00	10.9	Upper Marker

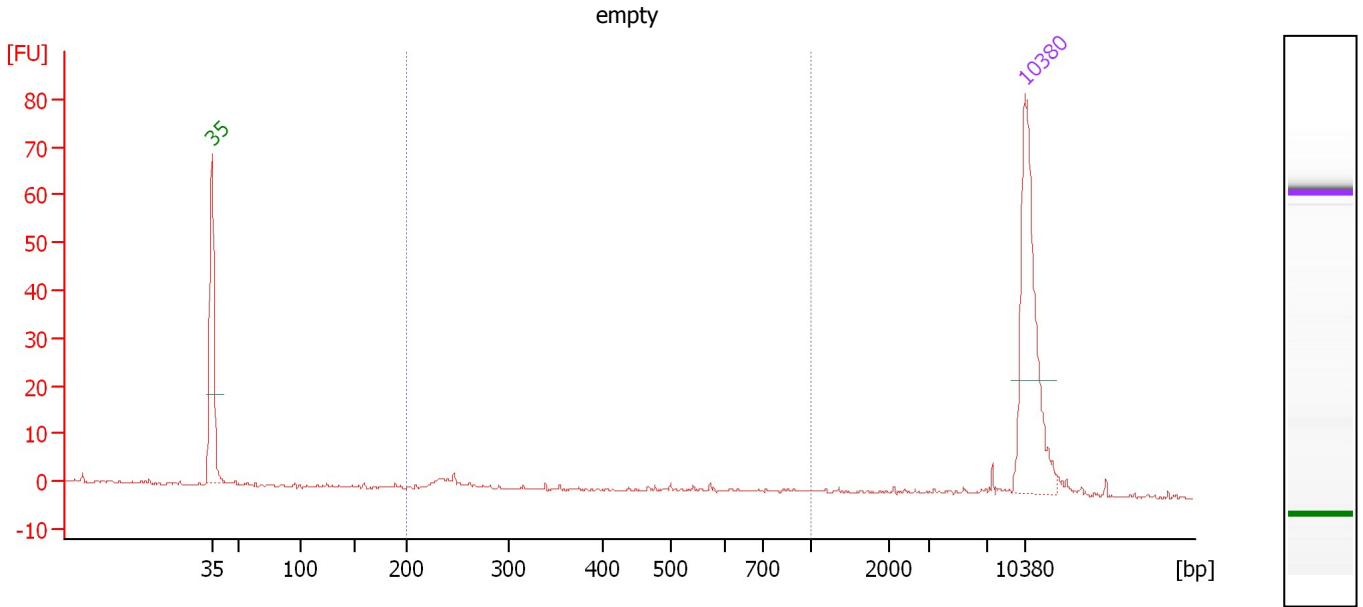
Region table for sample 6 : 5441

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
101	179	143	13,624.2	1,279.61	721.4	78	10.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : empty

Number of peaks found: 0 Corr. Area 1: 8.7
 Noise: 0.2

Peak table for sample 7 : empty

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	113.00	10,380	75.00	10.9	Upper Marker

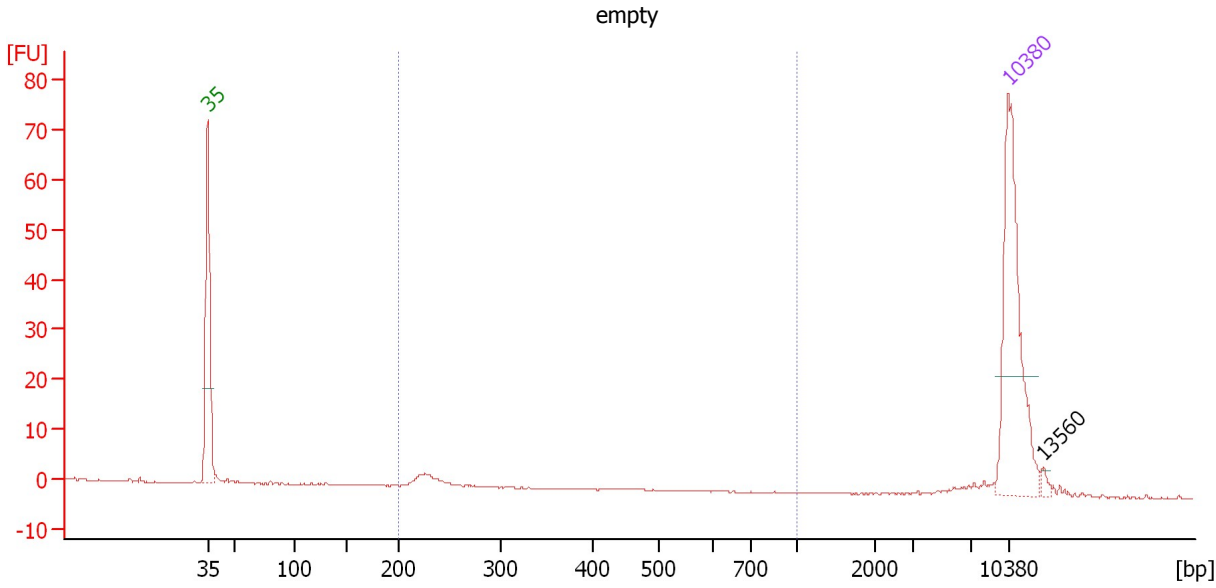
Region table for sample 7 : empty

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	424	48.3	9.45	8.7	33	55.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : empty

Number of peaks found: 1 Corr. Area 1: 6.7
 Noise: 0.1

Peak table for sample 8 : empty

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	113.00	10,380	75.00	10.9	Upper Marker
3	115.98	13,560	0.00	0.0	

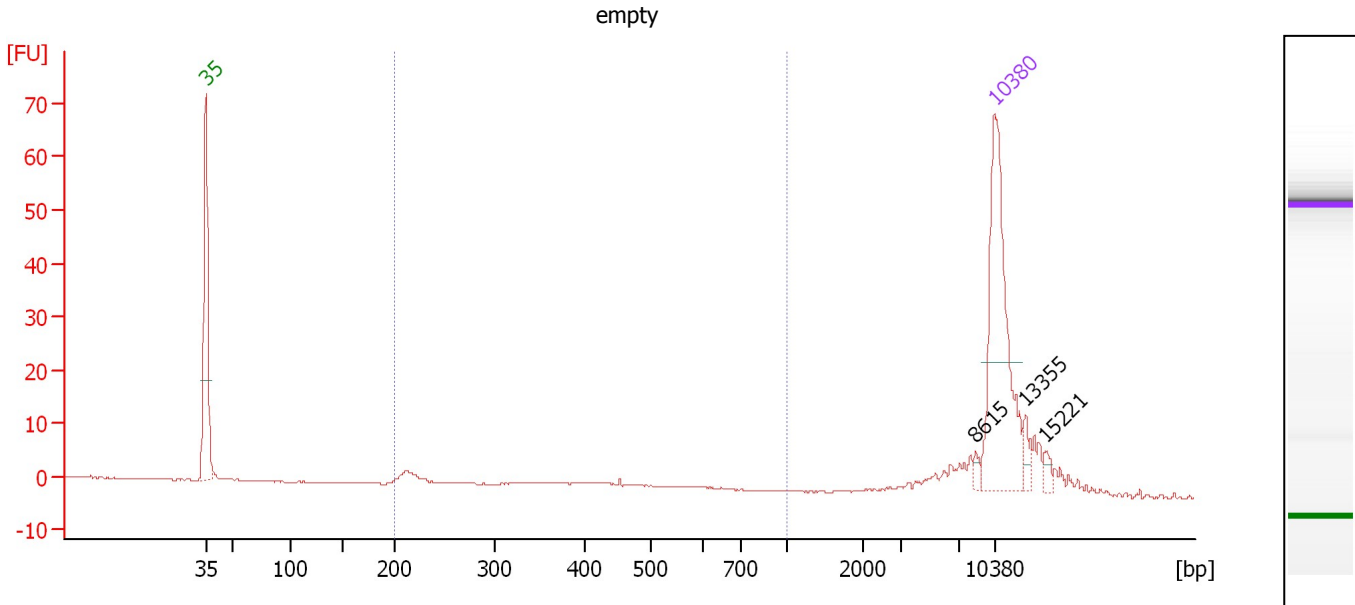
Region table for sample 8 : empty

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	228	49.6	7.47	6.7	34	3.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : empty

Number of peaks found: 3 Corr. Area 1: 21.3
 Noise: 0.1

Peak table for sample 9 : empty

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	111.34	8,615	2.34	0.4	
3	113.00	10,380	75.00	10.9	Upper Marker
4	115.79	13,355	0.00	0.0	
5	117.54	15,221	0.00	0.0	

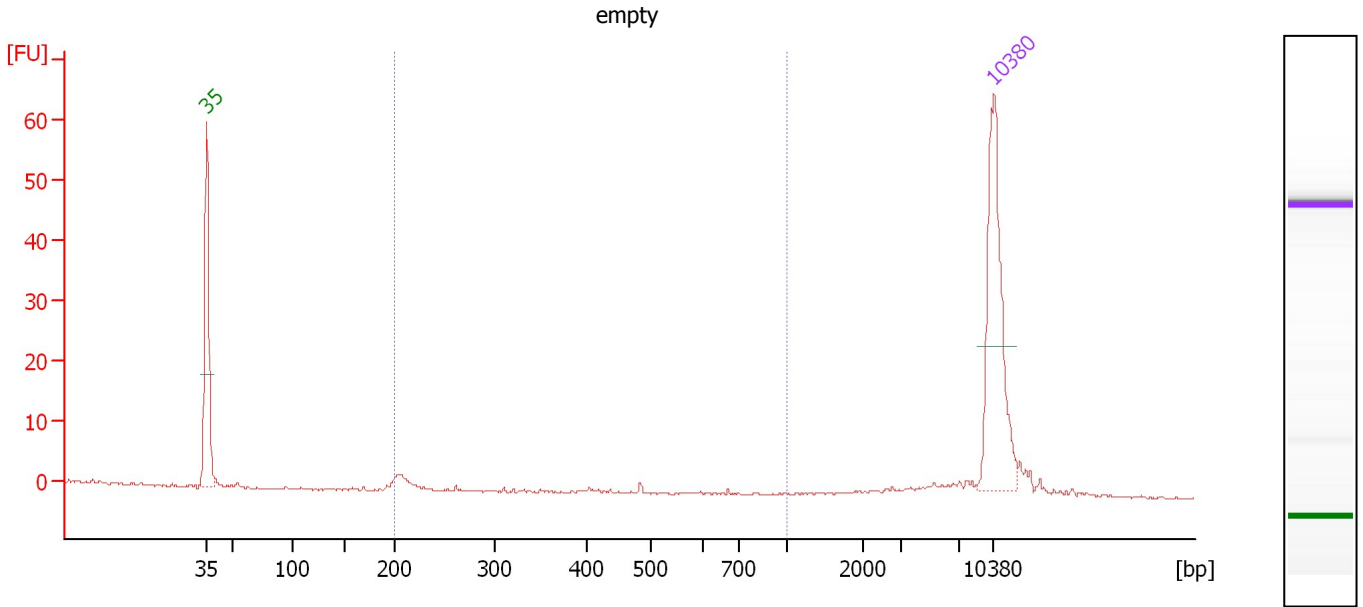
Region table for sample 9 : empty

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	358	114.5	22.55	21.3	26	34.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : empty

Number of peaks found: 0 Corr. Area 1: 4.3
 Noise: 0.1

Peak table for sample 10 : empty

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	113.00	10,380	75.00	10.9	Upper Marker

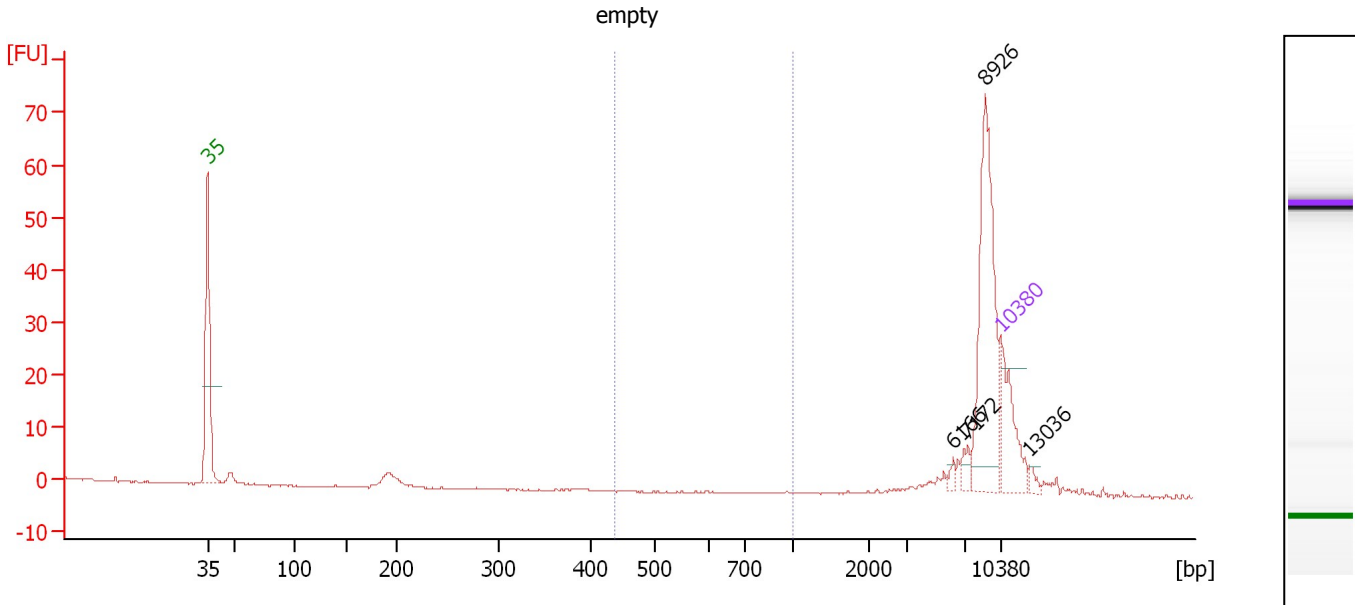
Region table for sample 10 : empty

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	243	45.2	6.49	4.3	17	39.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
 Modified: 3/6/2014 2:18:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : empty

Number of peaks found: 4 Corr. Area 1: 0.0
 Noise: 0.1

Peak table for sample 11 : empty

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	108.77	6,166	7.73	1.9	
3	109.99	7,172	14.19	3.0	
4	111.64	8,926	235.49	40.0	
5	113.00	10,380	75.00	10.9	Upper Marker
6	115.49	13,036	0.00	0.0	

Region table for sample 11 : empty

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
439	1,000	0	0.0	0.00	0.0	0	0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-06\2014-03-06_005.xad

Created: 3/6/2014 1:31:58 PM
Modified: 3/6/2014 2:18:02 PM

Gel Image

