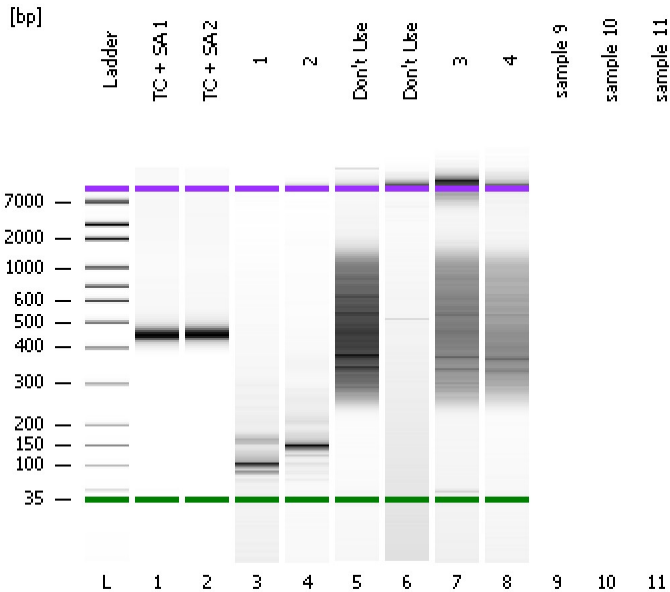


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electrophoresis File Run Summary



Instrument Information:

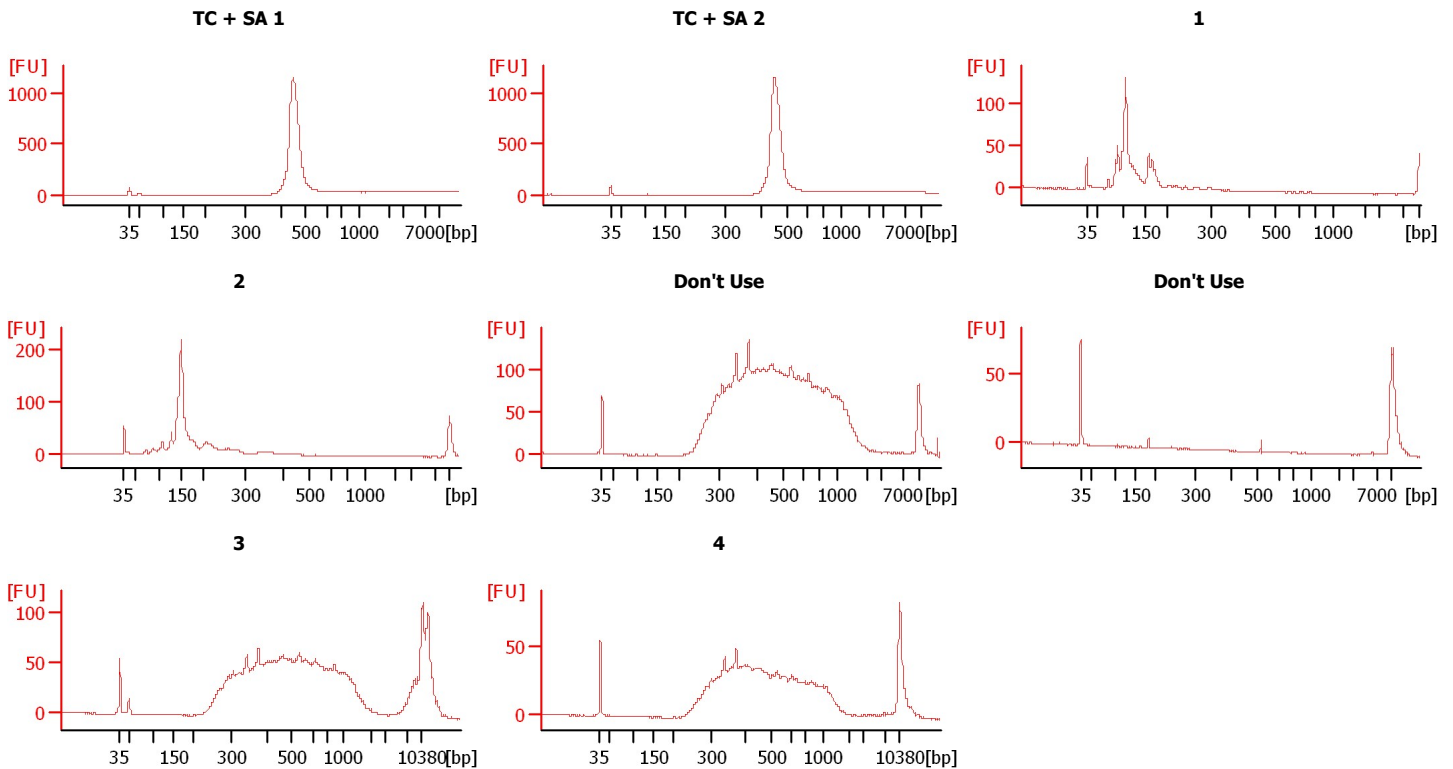
Instrument Name: DE13701086 Firmware: C.01.069
 Serial#: DE13701086 Type: G2938B

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\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
Modified: 1/16/2014 12:01:38 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
TC + SA 1		<input type="checkbox"/>	✓			
TC + SA 2		<input type="checkbox"/>	✓			
1		<input type="checkbox"/>	✓			
2		<input type="checkbox"/>	✓			
Don't Use		<input type="checkbox"/>	✓			
Don't Use		<input type="checkbox"/>	✓			
3		<input type="checkbox"/>	✓			
4		<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>	✗			
sample 10		<input type="checkbox"/>	✗			
sample 11		<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\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 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

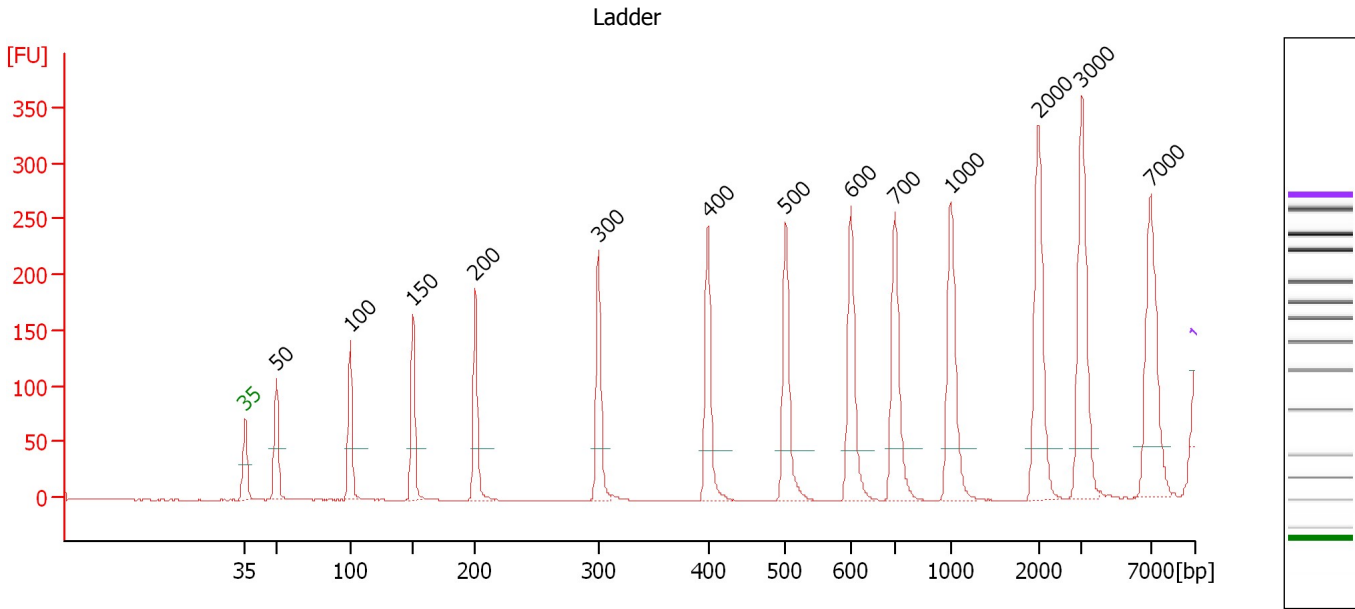
Ladder

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\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

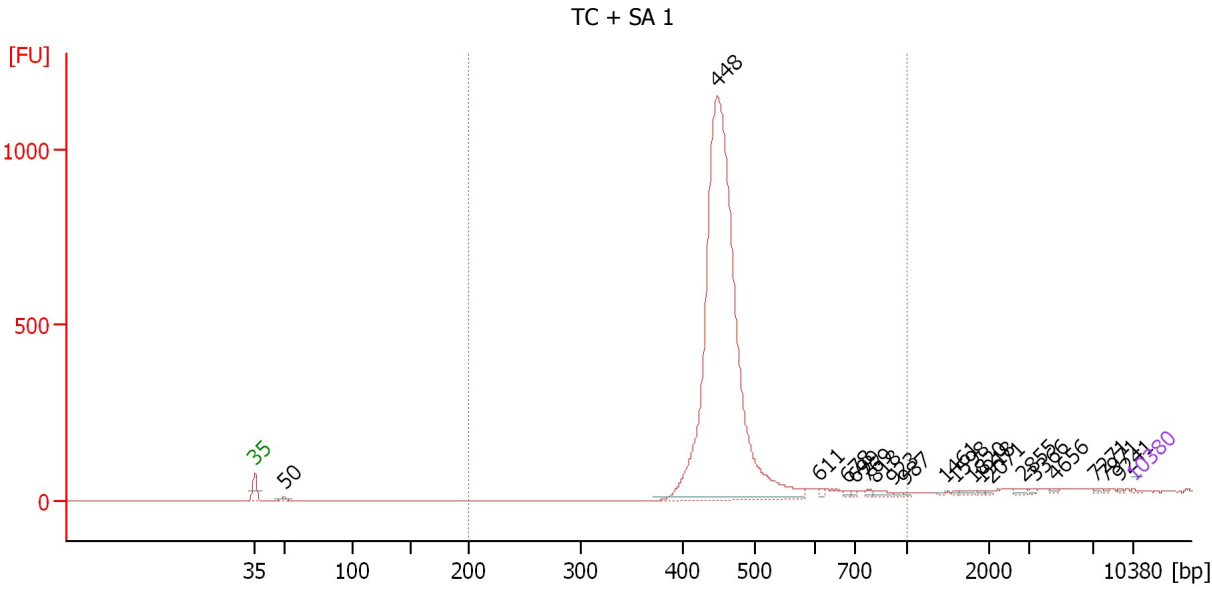
Peak table for Ladder

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	45.32	50	150.00	4,545.5	Ladder Peak
3	50.74	100	150.00	2,272.7	Ladder Peak
4	55.37	150	150.00	1,515.2	Ladder Peak
5	59.97	200	150.00	1,136.4	Ladder Peak
6	69.04	300	150.00	757.6	Ladder Peak
7	77.10	400	150.00	568.2	Ladder Peak
8	82.83	500	150.00	454.5	Ladder Peak
9	87.62	600	150.00	378.8	Ladder Peak
10	90.85	700	150.00	324.7	Ladder Peak
11	94.97	1,000	150.00	227.3	Ladder Peak
12	101.45	2,000	150.00	113.6	Ladder Peak
13	104.63	3,000	150.00	75.8	Ladder Peak
14	109.74	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : TC + SA 1

Number of peaks found: 22 Corr. Area 1: 3,958.7
 Noise: 0.2


Peak table for sample 1 : TC + SA 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	45.37	50	470.94	14,145.4	
3	79.84	448	83,073.92	281,086.8	
4	87.99	611	279.02	691.5	
5	90.15	678	273.74	611.5	
6	90.82	699	241.32	522.9	
7	91.79	769	289.39	570.2	
8	92.47	818	442.24	819.0	
9	93.91	923	156.31	256.7	
10	94.79	987	119.04	182.7	
11	97.96	1,461	115.59	119.8	
12	98.85	1,598	98.66	93.5	
13	100.28	1,820	239.38	199.3	
14	100.92	1,918	116.30	91.9	
15	101.68	2,071	129.01	94.4	
16	104.17	2,855	240.90	127.9	
17	105.10	3,366	135.14	60.8	
18	106.75	4,656	160.89	52.4	
19	110.00	7,271	106.43	22.2	
20	110.68	7,971	82.50	15.7	
21	111.90	9,241	63.97	10.5	
22	113.00	10,380	75.00	10.9	Upper Marker
23	118.79	16,380	0.00	0.0	
24	118.91	16,511	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
Modified: 1/16/2014 12:01:38 PM

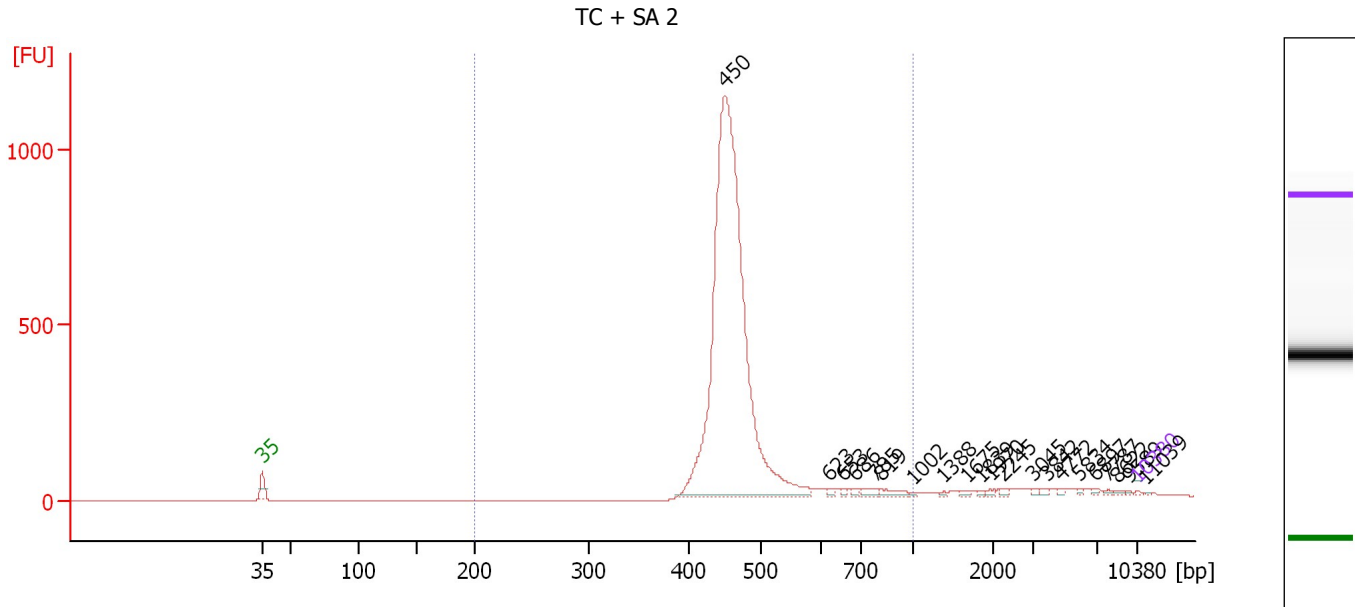
Electropherogram Summary Continued ...**... Region table for sample 1 : TC + SA 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	1,000	462	266,975.0	80,720.68	3,958.7	97	10.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : TC + SA 2

Number of peaks found: 21 Corr. Area 1: 4,250.6
 Noise: 0.6

Peak table for sample 2 : TC + SA 2


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	79.97	450	63,823.65	214,832.2	
3	88.37	623	206.47	502.1	
4	89.34	653	229.43	532.1	
5	90.40	686	221.35	488.7	
6	92.01	785	479.11	924.8	
7	92.48	819	628.75	1,163.4	
8	94.98	1,002	100.53	152.1	
9	97.48	1,388	84.70	92.5	
10	99.35	1,675	168.46	152.3	
11	100.41	1,839	110.14	90.7	
12	101.26	1,970	171.06	131.6	
13	102.23	2,245	166.52	112.4	
14	104.69	3,045	127.00	63.2	
15	105.71	3,842	177.46	70.0	
16	106.89	4,772	132.02	41.9	
17	108.25	5,834	115.91	30.1	
18	109.61	6,897	120.82	26.5	
19	110.50	7,787	128.81	25.1	
20	111.30	8,622	123.47	21.7	
21	112.24	9,589	66.64	10.5	
22	113.00	10,380	75.00	10.9	Upper Marker
23	113.64	11,039	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...

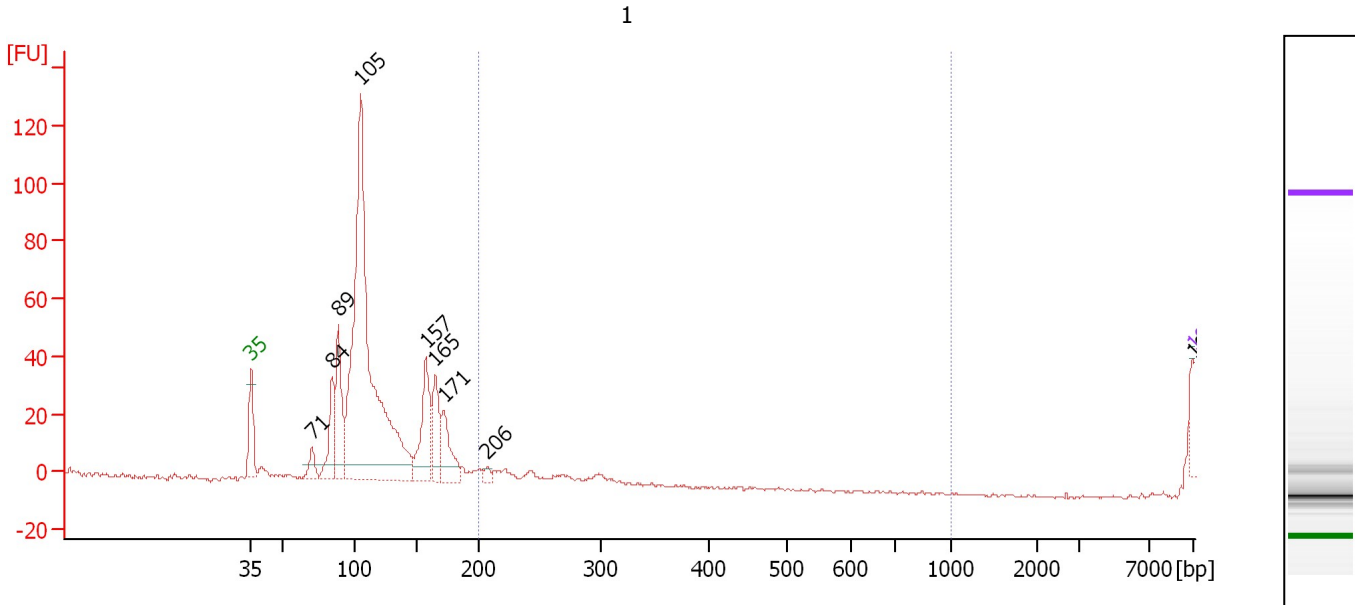
... Region table for sample 2 : TC + SA 2

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	473	215,542.0	66,210.25	4,250.6	93	14.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 1

Number of peaks found: 9 Corr. Area 1: 0.0
 Noise: 0.5

Peak table for sample 3 : 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	47.56	71	76.94	1,649.7	
3	49.02	84	214.55	3,861.0	
4	49.50	89	335.49	5,738.4	
5	51.17	105	2,374.27	34,390.3	
6	56.00	157	328.67	3,175.4	
7	56.71	165	207.63	1,911.3	
8	57.35	171	205.34	1,814.2	
9	60.52	206	30.75	226.1	
10	113.00	10,380	75.00	10.9	Upper Marker
11	113.12	10,503	0.00	0.0	

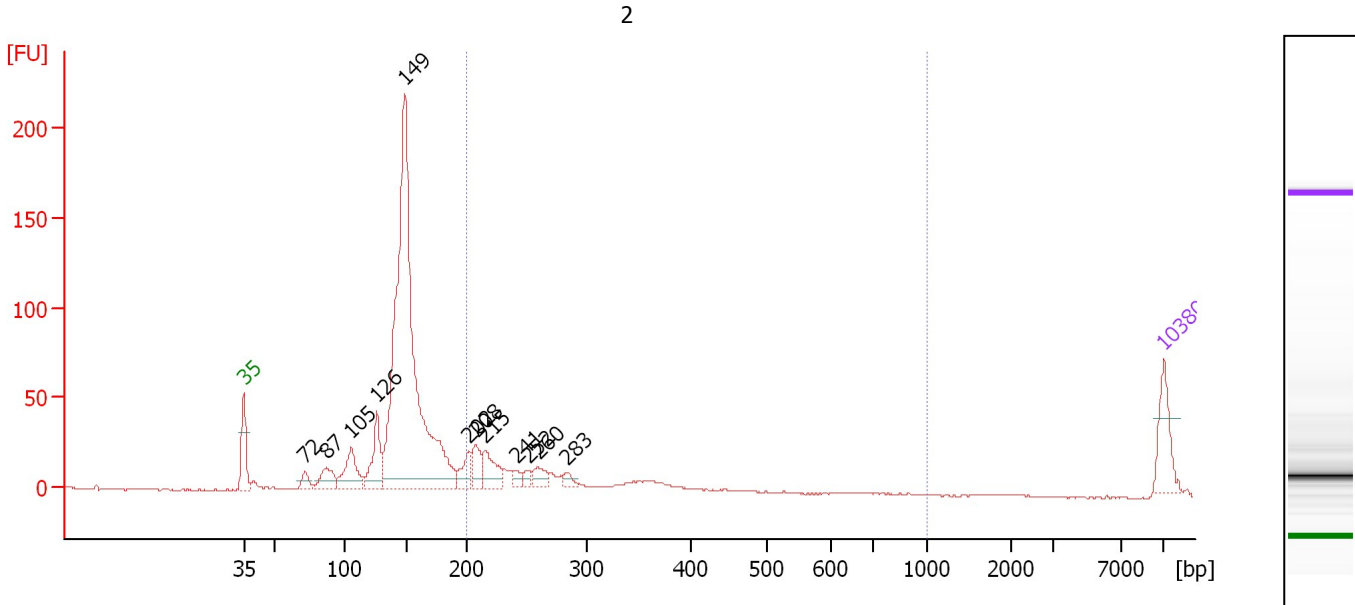
Region table for sample 3 : 1

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	0	0.0	0.00	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 2

Number of peaks found: 12 Corr. Area 1: 193.7
 Noise: 0.3

Peak table for sample 4 : 2

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	47.66	72	35.79	756.9	
3	49.29	87	74.58	1,304.7	
4	51.19	105	126.80	1,831.5	
5	53.14	126	137.55	1,655.4	
6	55.25	149	1,599.28	16,301.7	
7	60.16	202	60.28	452.0	
8	60.68	208	63.18	460.5	
9	61.37	215	88.61	623.2	
10	63.72	241	21.21	133.1	
11	64.66	252	19.80	119.2	
12	65.39	260	41.04	239.4	
13	67.54	283	21.12	112.9	
14	113.00	10,380	75.00	10.9	Upper Marker

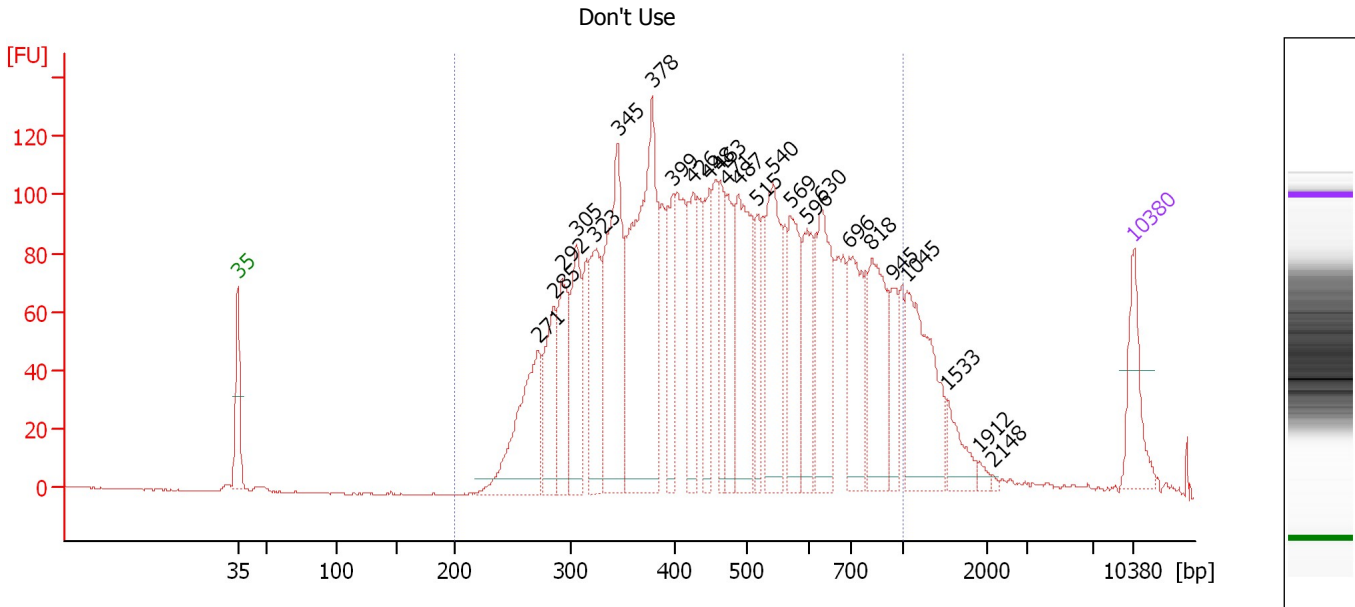
Region table for sample 4 : 2

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	252	2,455.1	397.31	193.7	19	18.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Don't Use

Number of peaks found: 25 Corr. Area 1: 3,029.6
 Noise: 0.2


Peak table for sample 5 : Don't Use

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	66.44	271	255.77	1,428.2	
3	67.69	285	148.41	788.7	
4	68.32	292	152.64	792.0	
5	69.44	305	170.27	846.0	
6	70.90	323	173.84	815.3	
7	72.69	345	352.27	1,545.8	
8	75.36	378	507.73	2,033.1	
9	77.02	399	125.45	476.3	
10	78.56	426	138.70	493.8	
11	79.85	448	101.48	343.2	
12	80.69	463	95.62	313.2	
13	81.19	471	118.82	382.0	
14	82.10	487	241.64	751.4	
15	83.56	515	81.73	240.4	
16	84.77	540	208.23	583.8	
17	86.14	569	140.24	373.4	
18	87.43	596	114.56	291.2	
19	88.60	630	182.39	438.5	
20	90.72	696	151.17	329.0	
21	92.47	818	157.25	291.2	
22	94.22	945	60.01	96.2	
23	95.26	1,045	196.17	284.5	
24	98.43	1,533	47.38	46.8	
25	100.88	1,912	7.77	6.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...**... Peak table for sample 5 : Don't Use**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
26	101.92	2,148	2.47	1.7	
27	 113.00	10,380	75.00	10.9	Upper Marker

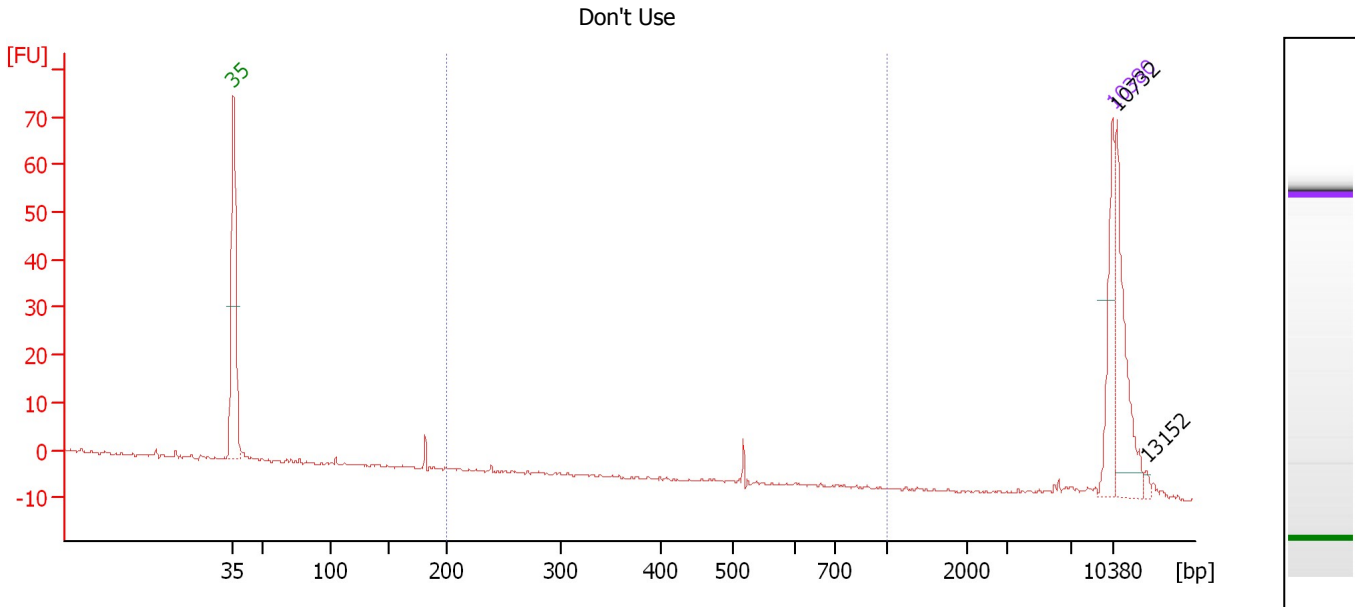
Region table for sample 5 : Don't Use

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	488	14,531.4	4,023.08	3,029.6	95	34.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Don't Use

Number of peaks found: 2 Corr. Area 1: 2.2
 Noise: 0.2

Peak table for sample 6 : Don't Use

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	113.34	10,732	0.00	0.0	
4	115.67	13,152	0.00	0.0	

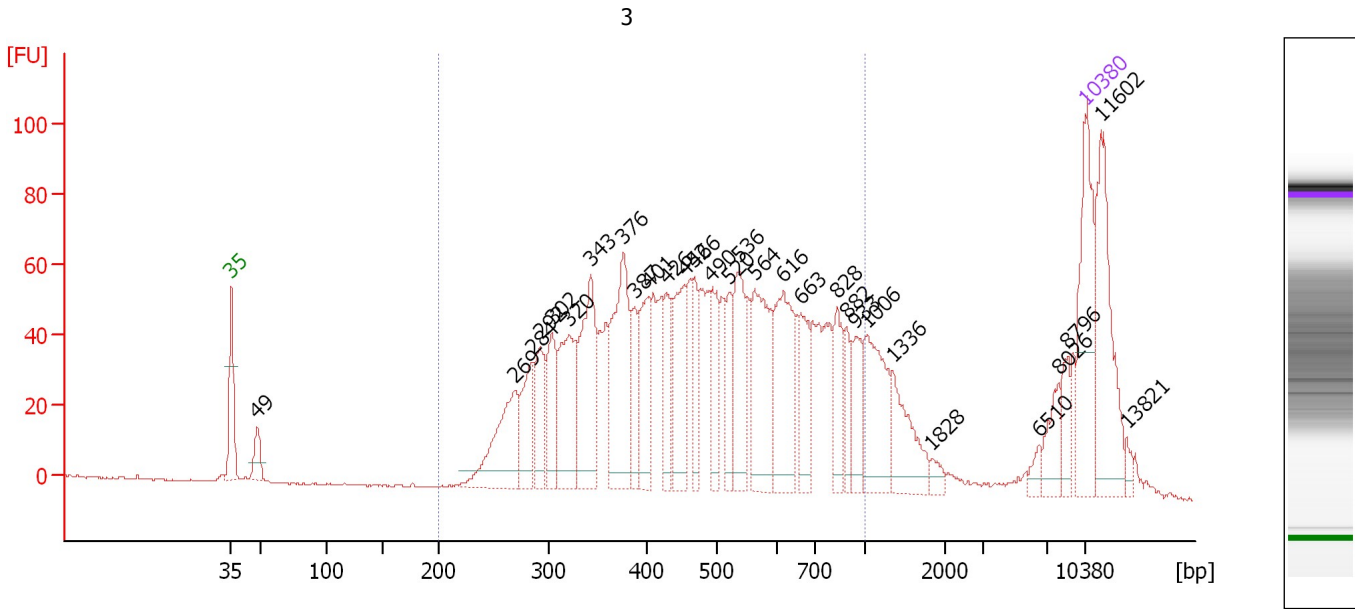
Region table for sample 6 : Don't Use

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	498	19.2	5.61	2.2	3	20.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 3

Number of peaks found: 30 Corr. Area 1: 1,882.0
 Noise: 0.2

Peak table for sample 7 : 3

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	45.14	49	26.14	810.9	
3	66.28	269	99.63	560.2	
4	67.63	284	52.80	281.3	
5	68.28	292	53.39	277.4	
6	69.24	302	55.80	279.5	
7	70.69	320	91.48	432.6	
8	72.48	343	113.96	504.0	
9	75.14	376	124.03	500.2	
10	76.01	387	38.33	150.3	
11	77.15	401	60.77	229.7	
12	78.59	426	39.29	139.7	
13	80.07	452	73.25	245.6	
14	80.90	466	37.70	122.5	
15	82.26	490	48.86	151.1	
16	83.79	520	33.75	98.3	
17	84.57	536	69.99	197.7	
18	85.88	564	92.36	248.3	
19	88.15	616	95.44	234.6	
20	89.64	663	46.96	107.4	
21	92.61	828	37.62	68.8	
22	93.35	882	23.69	40.7	
23	94.05	933	31.82	51.7	
24	95.01	1,006	72.98	109.9	
25	97.15	1,336	49.50	56.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad


Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...

... Peak table for sample 7 : 3

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	100.34	1,828	7.48	6.2	
27	109.11	6,510	7.55	1.8	
28	110.73	8,026	22.57	4.3	
29	111.47	8,796	18.34	3.2	
30	113.00	10,380	75.00	10.9	Upper Marker
31	114.18	11,602	0.00	0.0	
32	116.32	13,821	0.00	0.0	

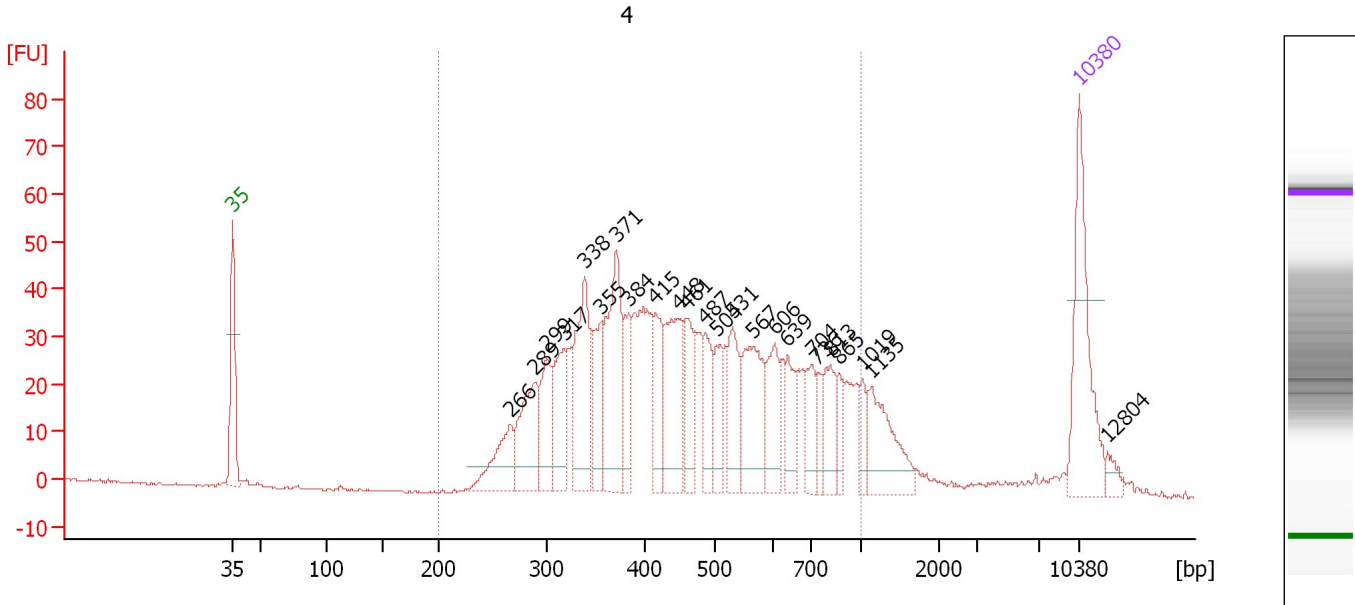
Region table for sample 7 : 3

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	499	6,116.9	1,705.24	1,882.0	80	35.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
 Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 4

Number of peaks found: 24 Corr. Area 1: 1,125.1
 Noise: 0.3

Peak table for sample 8 : 4

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	65.98	266	48.56	276.4	
3	68.01	289	71.60	375.9	
4	68.94	299	47.05	238.6	
5	70.39	317	58.34	279.1	
6	72.11	338	95.70	428.9	
7	73.43	355	43.48	185.8	
8	74.76	371	104.35	426.2	
9	75.77	384	36.22	143.1	
10	77.93	415	40.90	149.5	
11	79.83	448	80.61	272.8	
12	80.58	461	42.39	139.4	
13	82.08	487	35.67	111.0	
14	83.01	504	31.95	96.1	
15	84.33	531	47.75	136.2	
16	86.05	567	69.77	186.4	
17	87.81	606	39.69	99.2	
18	88.87	639	27.08	64.2	
19	90.90	704	27.77	59.8	
20	91.34	736	16.27	33.5	
21	92.40	813	30.69	57.2	
22	93.11	865	14.64	25.7	
23	95.09	1,019	13.65	20.3	
24	95.84	1,135	51.18	68.4	
25	113.00	10,380	75.00	10.9	Upper Marker


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
Modified: 1/16/2014 12:01:38 PM

Electropherogram Summary Continued ...**... Peak table for sample 8 : 4**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
26	115.34	12,804	0.00	0.0	

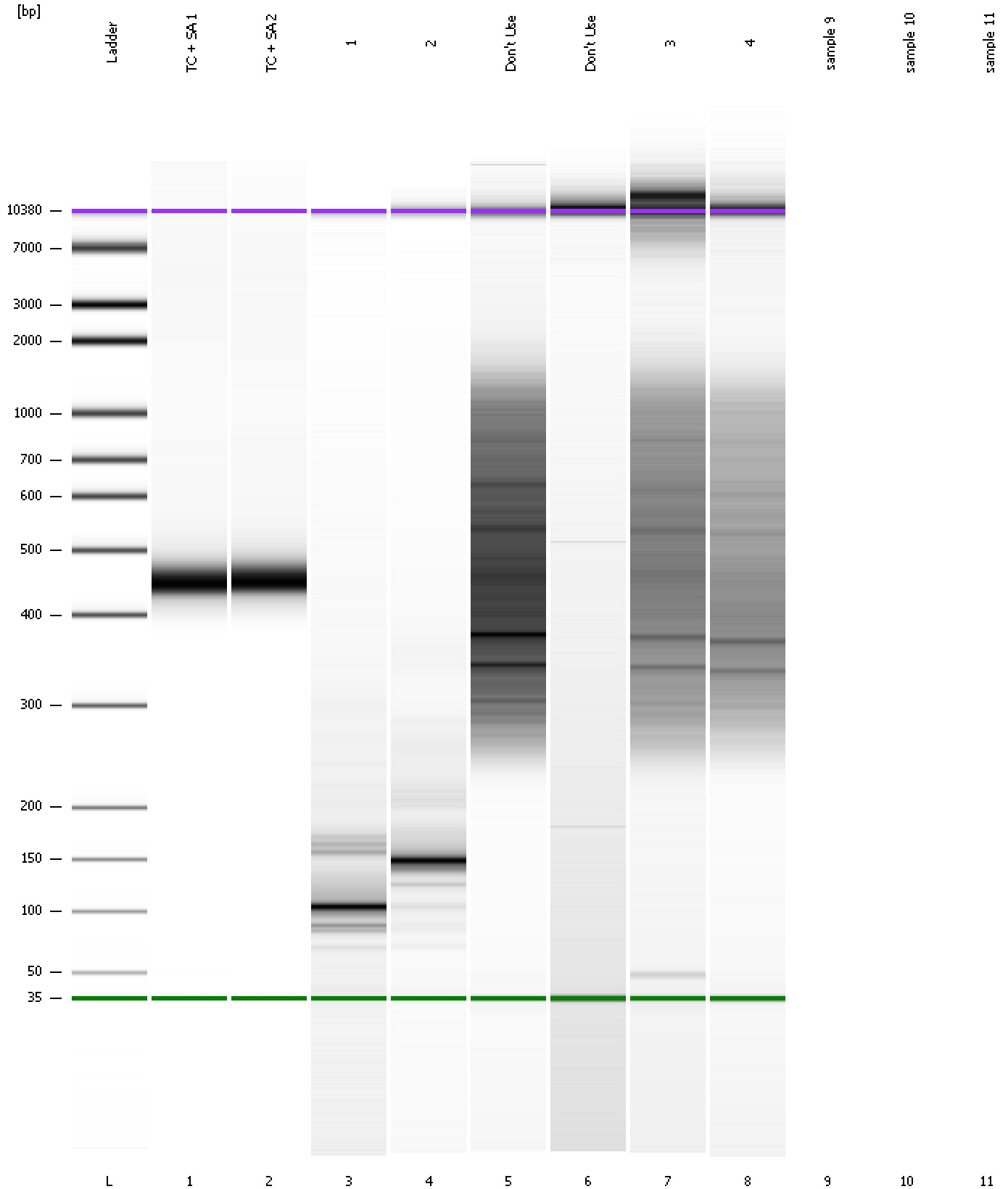
Region table for sample 8 : 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	484	4,492.7	1,234.17	1,125.1	91	35.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
Modified: 1/16/2014 12:01:38 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-16\2014-01-16_002.xad

Created: 1/16/2014 11:22:27 AM
Modified: 1/16/2014 12:01:38 PM

Invalid Samples

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.