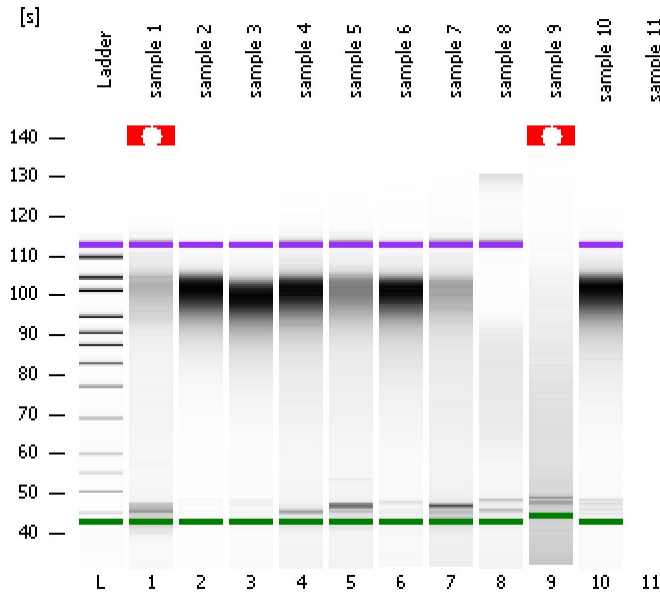


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
Modified: 2/10/2014 3:14:29 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

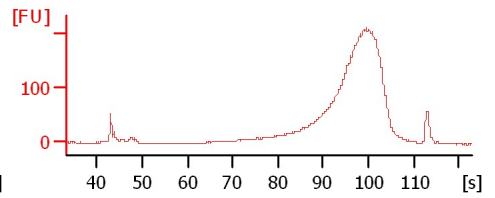
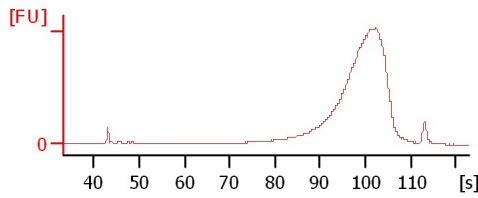
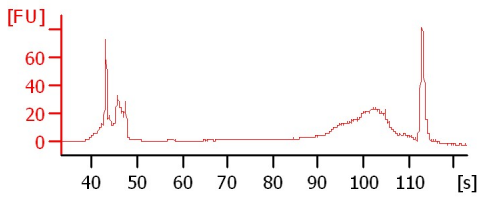
Chip Information:

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

sample 1

sample 2

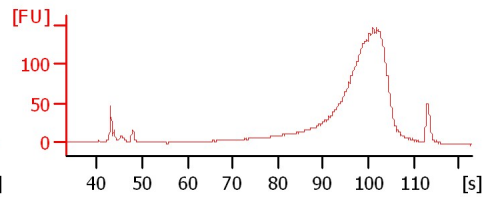
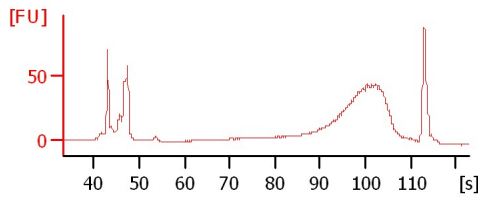
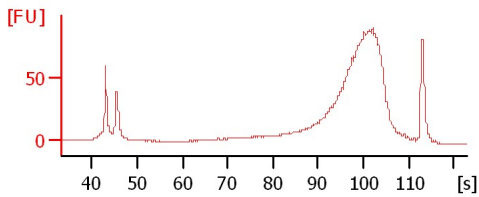
sample 3



sample 4

sample 5

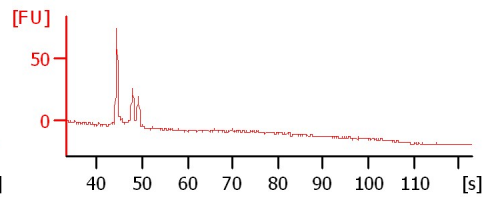
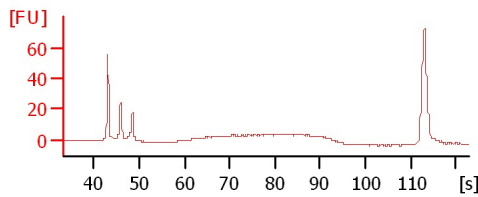
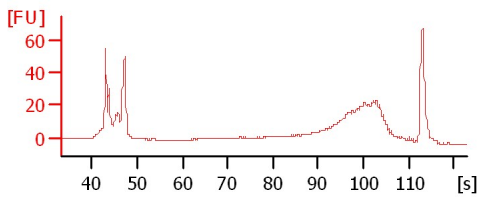
sample 6



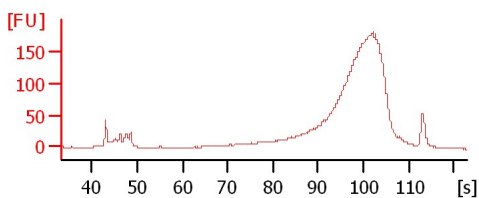
sample 7

sample 8

sample 9



sample 10



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
 Modified: 2/10/2014 3:14:29 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>	✓			
sample 8		<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\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
Modified: 2/10/2014 3:14:29 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

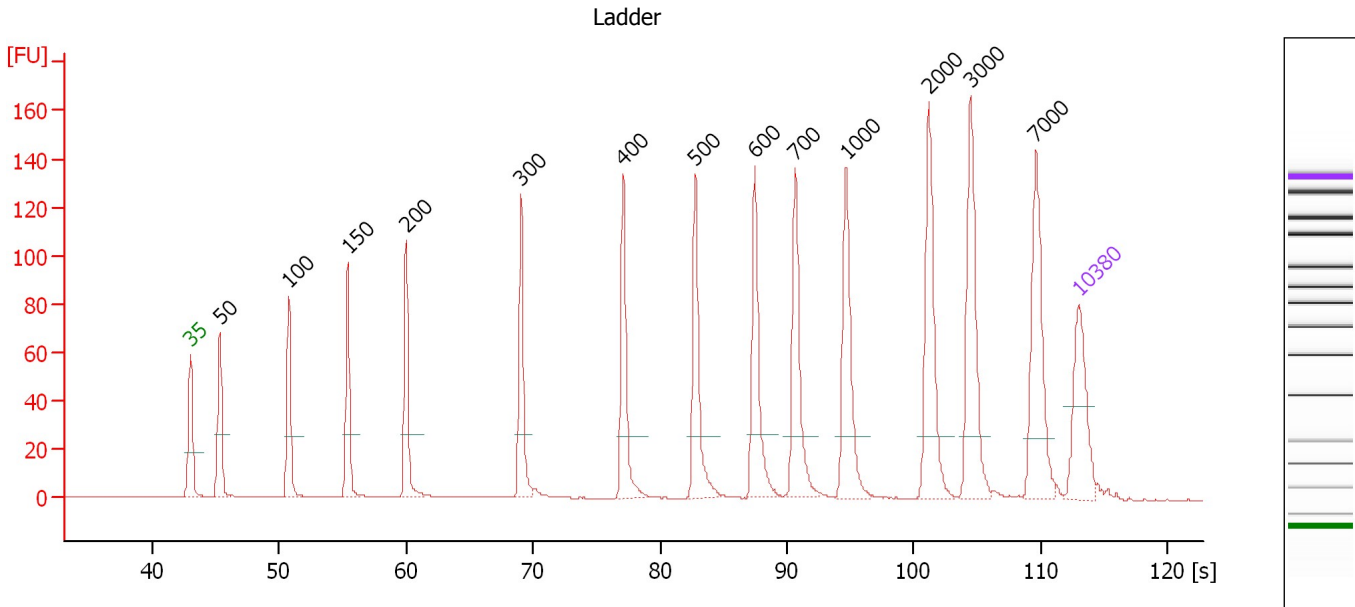
Ladder

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\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
 Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

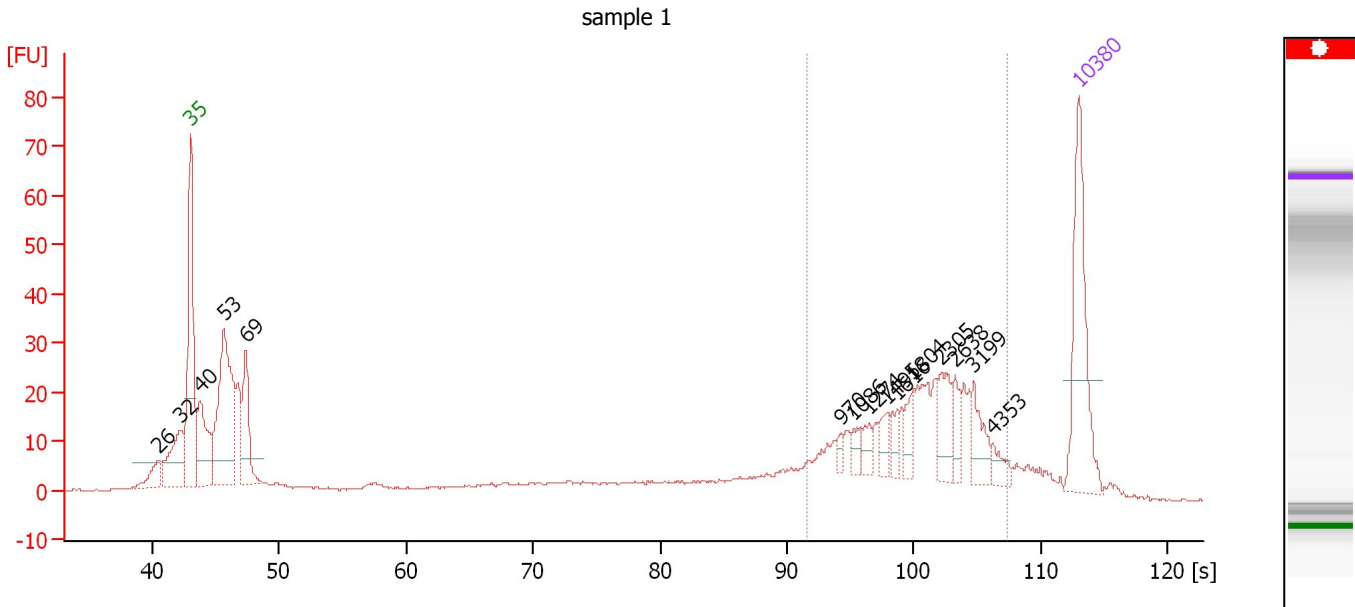
Peak table for Ladder

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	50.78	100	150.00	2,272.7	Ladder Peak
4	55.41	150	150.00	1,515.2	Ladder Peak
5	60.00	200	150.00	1,136.4	Ladder Peak
6	69.04	300	150.00	757.6	Ladder Peak
7	77.13	400	150.00	568.2	Ladder Peak
8	82.81	500	150.00	454.5	Ladder Peak
9	87.48	600	150.00	378.8	Ladder Peak
10	90.67	700	150.00	324.7	Ladder Peak
11	94.69	1,000	150.00	227.3	Ladder Peak
12	101.20	2,000	150.00	113.6	Ladder Peak
13	104.48	3,000	150.00	75.8	Ladder Peak
14	109.64	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\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
 Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 15 Corr. Area 1: 267.7
 Noise: 0.2

Peak table for sample 1 : sample 1

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	40.46	26	0.00	0.0	
2	42.21	32	0.00	0.0	
3	43.00	35	125.00	5,411.3	Lower Marker
4	43.74	40	81.18	3,089.2	
5	45.62	53	182.68	5,240.7	
6	47.37	69	68.67	1,511.7	
7	94.29	970	5.27	8.2	
8	95.25	1,086	8.51	11.9	
9	96.47	1,274	9.47	11.3	
10	97.92	1,495	11.31	11.5	
11	98.70	1,616	10.05	9.4	
12	99.93	1,804	13.82	11.6	
13	102.20	2,305	24.07	15.8	
14	103.29	2,638	12.97	7.4	
15	104.74	3,199	20.95	9.9	
16	106.22	4,353	9.74	3.4	
17	113.00	10,380	75.00	10.9	Upper Marker

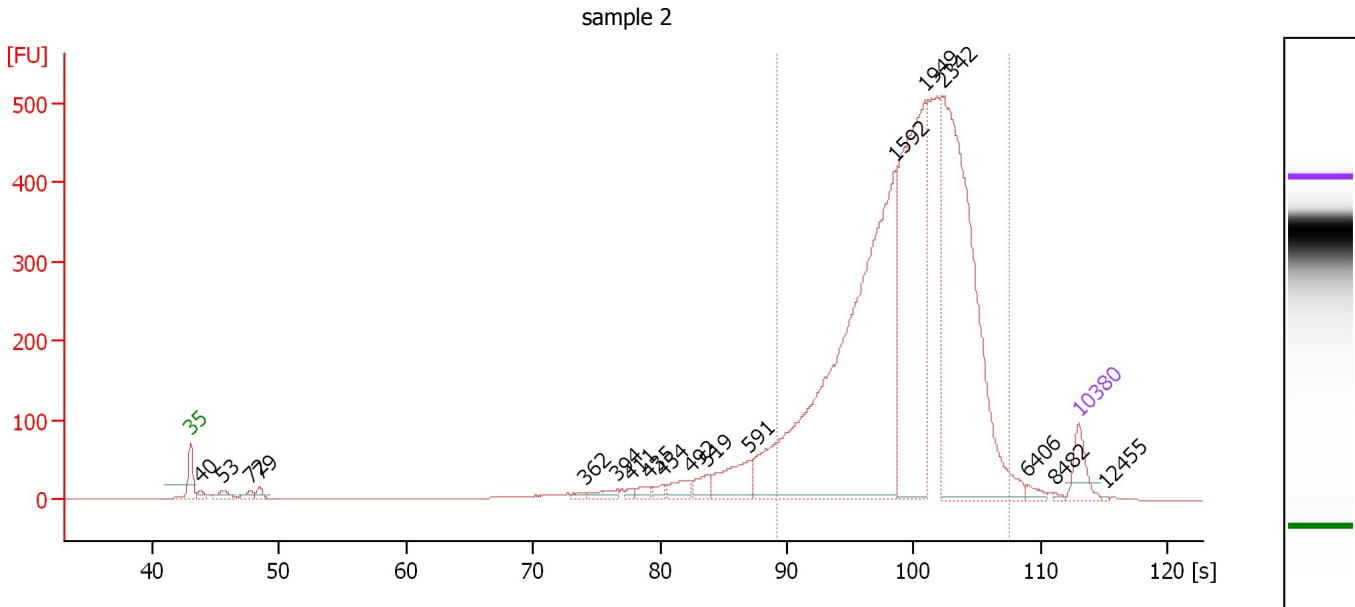
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
766	5,201	2,087	249.8	276.30	267.7	37	46.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
 Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 18 Corr. Area 1: 5,324.4
 Noise: 0.2

Peak table for sample 2 : sample 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	43.79	40	26.04	983.3	
3	45.59	53	45.03	1,298.8	
4	47.75	72	30.83	646.6	
5	48.49	79	29.01	555.8	
6	74.07	362	12.31	51.5	
7	76.66	394	32.73	125.8	
8	77.76	411	12.92	47.6	
9	79.12	435	26.84	93.4	
10	80.22	454	24.47	81.6	
11	82.37	492	58.23	179.2	
12	83.69	519	46.82	136.7	
13	87.07	591	152.95	391.9	
14	98.54	1,592	1,796.95	1,710.7	
15	100.87	1,949	931.42	724.0	
16	102.32	2,342	1,217.20	787.6	
17	108.87	6,406	18.22	4.3	
18	111.11	8,482	5.27	0.9	
19	113.00	10,380	75.00	10.9	Upper Marker
20	115.07	12,455	0.00	0.0	

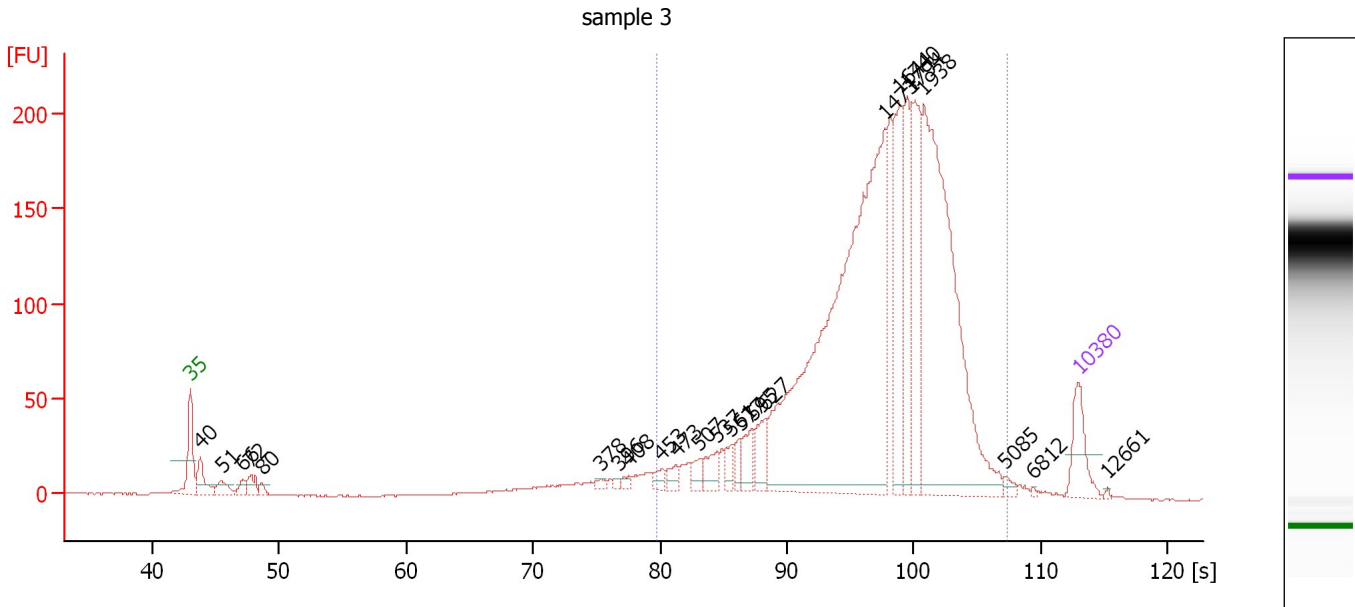
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
652	5,383	1,923	4,344.0	4,454.13	5,324.4	87	43.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
 Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 24 Corr. Area 1: 2,526.4
 Noise: 0.2

Peak table for sample 3 : sample 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	43.76	40	80.50	3,056.7	
3	45.45	51	40.76	1,205.8	
4	47.10	66	24.48	559.4	
5	47.72	72	42.63	897.0	
6	48.61	80	16.42	310.3	
7	75.37	378	10.38	41.6	
8	76.80	396	7.00	26.8	
9	77.55	408	11.52	42.8	
10	80.14	453	21.28	71.2	
11	81.30	473	25.70	82.3	
12	83.12	507	27.73	82.9	
13	84.55	537	45.54	128.4	
14	85.66	561	29.94	80.9	
15	86.42	577	28.71	75.4	
16	87.26	595	51.24	130.4	
17	88.33	627	69.54	168.1	
18	97.77	1,473	1,326.25	1,364.2	
19	98.88	1,644	229.50	211.5	
20	99.51	1,740	170.06	148.1	
21	99.86	1,794	214.81	181.4	
22	100.80	1,938	768.09	600.5	
23	107.17	5,085	11.55	3.4	
24	109.39	6,812	2.91	0.6	
25	113.00	10,380	75.00	10.9	Upper Marker


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary Continued ...**... Peak table for sample 3 : sample 3**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
26	115.27	12,661	0.00	0.0	

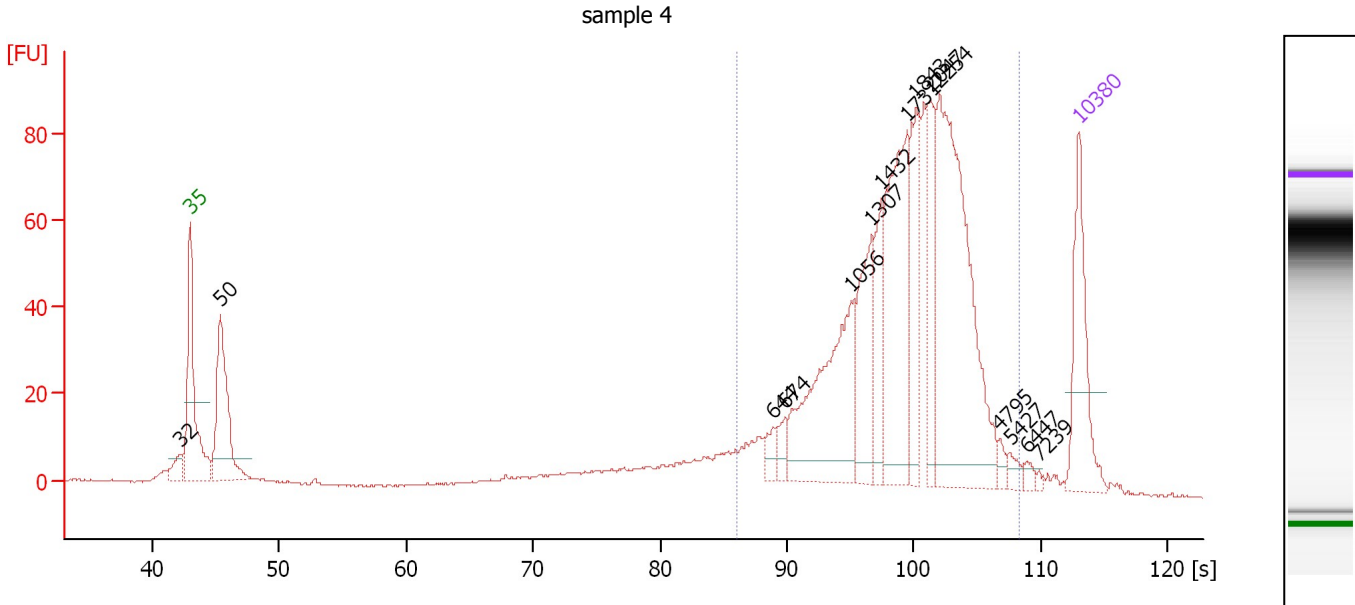
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
446	5,222	1,528	4,602.9	3,446.71	2,526.4	91	47.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
 Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 15 Corr. Area 1: 996.5
 Noise: 0.2

Peak table for sample 4 : sample 4

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	42.18	32	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	45.36	50	158.11	4,756.3	
4	88.90	644	14.24	33.5	
5	89.85	674	14.96	33.6	
6	95.06	1,056	158.57	227.5	
7	96.69	1,307	81.05	94.0	
8	97.50	1,432	49.89	52.8	
9	99.45	1,731	147.09	128.7	
10	100.18	1,843	70.88	58.3	
11	101.36	2,047	56.83	42.1	
12	102.04	2,254	252.51	169.7	
13	106.79	4,795	6.17	1.9	
14	107.61	5,427	7.51	2.1	
15	108.92	6,447	5.63	1.3	
16	109.87	7,239	2.25	0.5	
17	113.00	10,380	75.00	10.9	Upper Marker

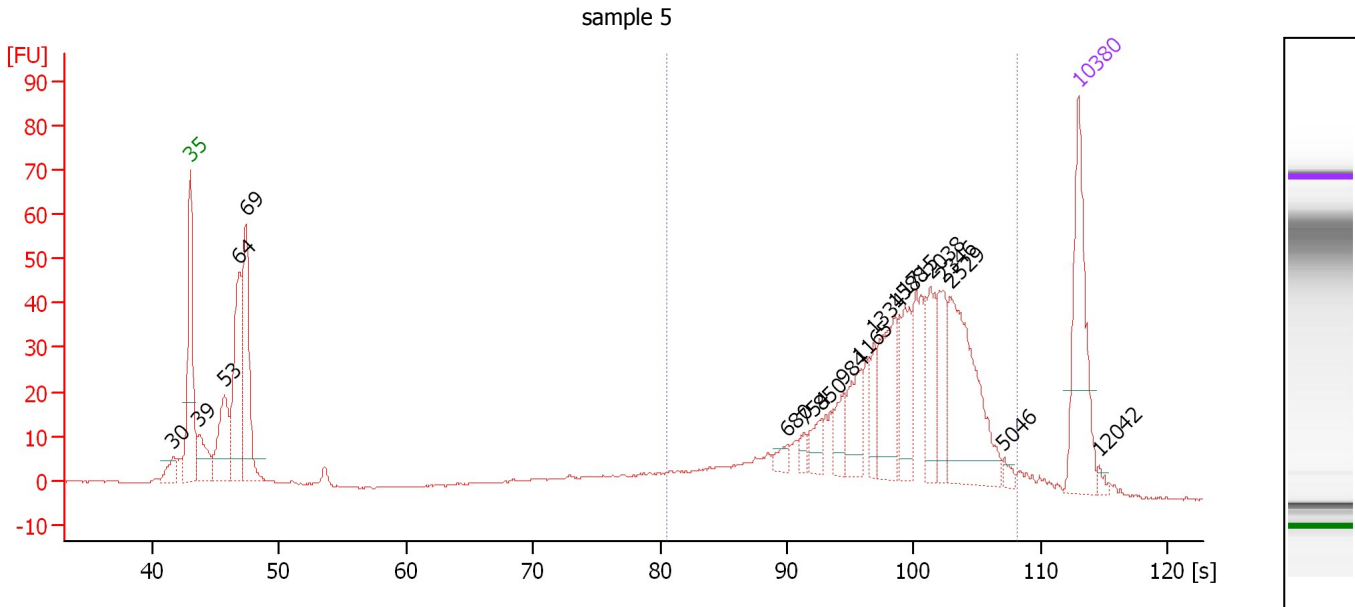
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
568	5,967	1,859	1,067.7	997.66	996.5	79	48.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
 Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 18 Corr. Area 1: 582.7
 Noise: 0.2

Peak table for sample 5 : sample 5

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	41.62	30	0.00	0.0	
2	43.00	35	125.00	5,411.3	Lower Marker
3	43.69	39	43.65	1,675.7	
4	45.67	53	75.70	2,155.9	
5	46.86	64	127.24	3,005.6	
6	47.37	69	138.80	3,058.1	
7	90.02	680	8.12	18.1	
8	91.40	754	6.64	13.3	
9	92.68	850	14.66	26.1	
10	94.48	984	16.03	24.7	
11	95.76	1,165	30.35	39.5	
12	96.87	1,334	17.42	19.8	
13	98.52	1,588	49.18	46.9	
14	99.35	1,715	39.76	35.1	
15	101.33	2,038	33.32	24.8	
16	102.34	2,346	31.37	20.3	
17	102.93	2,529	98.27	58.9	
18	107.12	5,046	4.58	1.4	
19	113.00	10,380	75.00	10.9	Upper Marker
20	114.65	12,042	0.00	0.0	

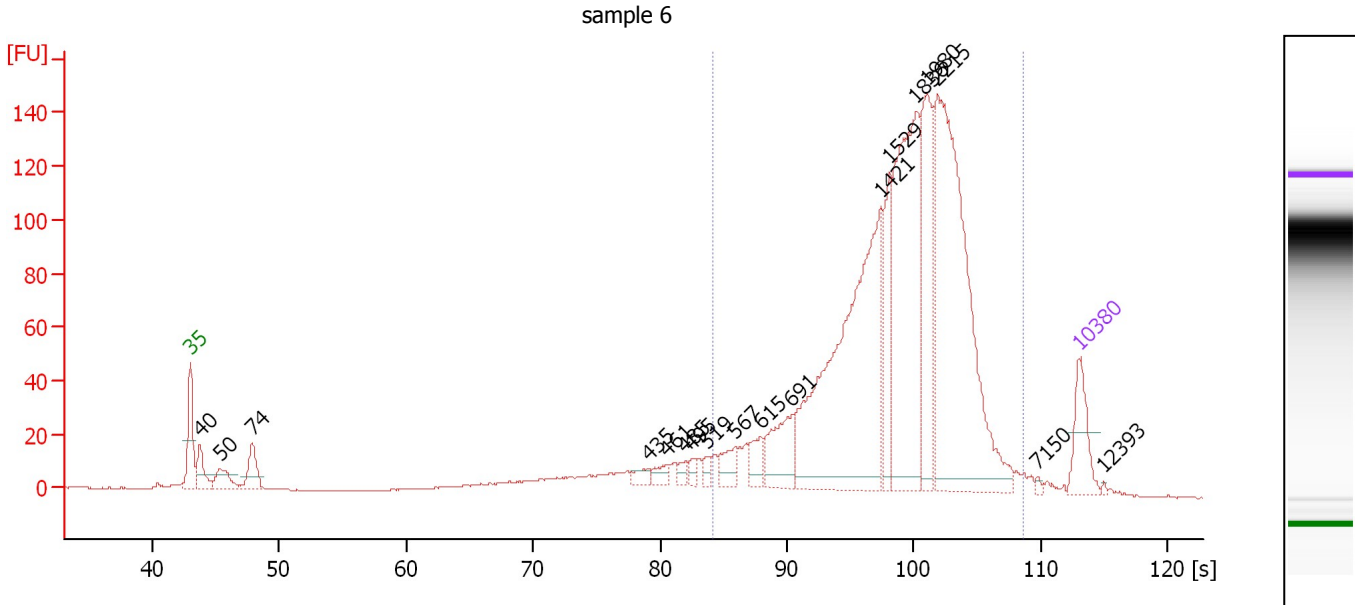
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
461	5,909	1,830	681.5	564.44	582.7	64	54.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
 Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 18 Corr. Area 1: 1,611.4
 Noise: 0.2

Peak table for sample 6 : sample 6

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	43.75	40	74.71	2,842.2	
3	45.33	50	63.86	1,929.9	
4	47.89	74	81.75	1,682.9	
5	79.12	435	21.26	74.0	
6	80.61	461	23.07	75.8	
7	81.96	485	16.31	50.9	
8	82.52	495	14.13	43.2	
9	83.69	519	14.90	43.5	
10	85.92	567	39.92	106.8	
11	87.97	615	40.50	99.7	
12	90.40	691	117.34	257.1	
13	97.43	1,421	652.51	695.6	
14	98.13	1,529	115.42	114.4	
15	100.14	1,836	437.14	360.7	
16	101.07	1,980	224.76	172.0	
17	101.91	2,215	634.12	433.7	
18	109.78	7,150	4.54	1.0	
19	113.00	10,380	75.00	10.9	Upper Marker
20	115.00	12,393	0.00	0.0	

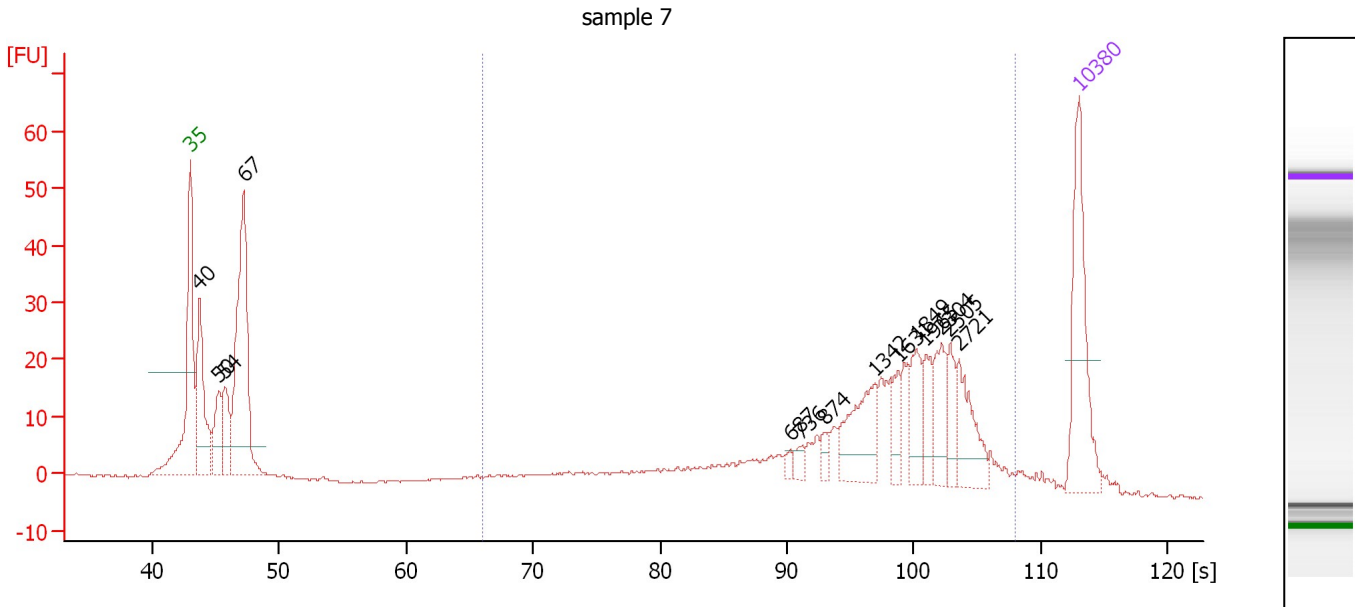
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
531	6,237	1,799	2,787.3	2,481.72	1,611.4	85	48.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
 Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 14 Corr. Area 1: 352.8
 Noise: 0.2

Peak table for sample 7 : sample 7

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	43.71	40	111.30	4,260.3	
3	45.26	50	44.89	1,369.4	
4	45.74	54	46.48	1,308.0	
5	47.20	67	225.61	5,084.4	
6	90.26	687	5.63	12.4	
7	91.16	736	7.34	15.1	
8	93.00	874	7.23	12.5	
9	96.92	1,342	51.93	58.6	
10	98.80	1,631	17.93	16.7	
11	100.22	1,849	27.63	22.6	
12	100.97	1,965	19.85	15.3	
13	102.20	2,304	26.74	17.6	
14	102.86	2,505	18.98	11.5	
15	103.57	2,721	36.73	20.5	
16	113.00	10,380	75.00	10.9	Upper Marker

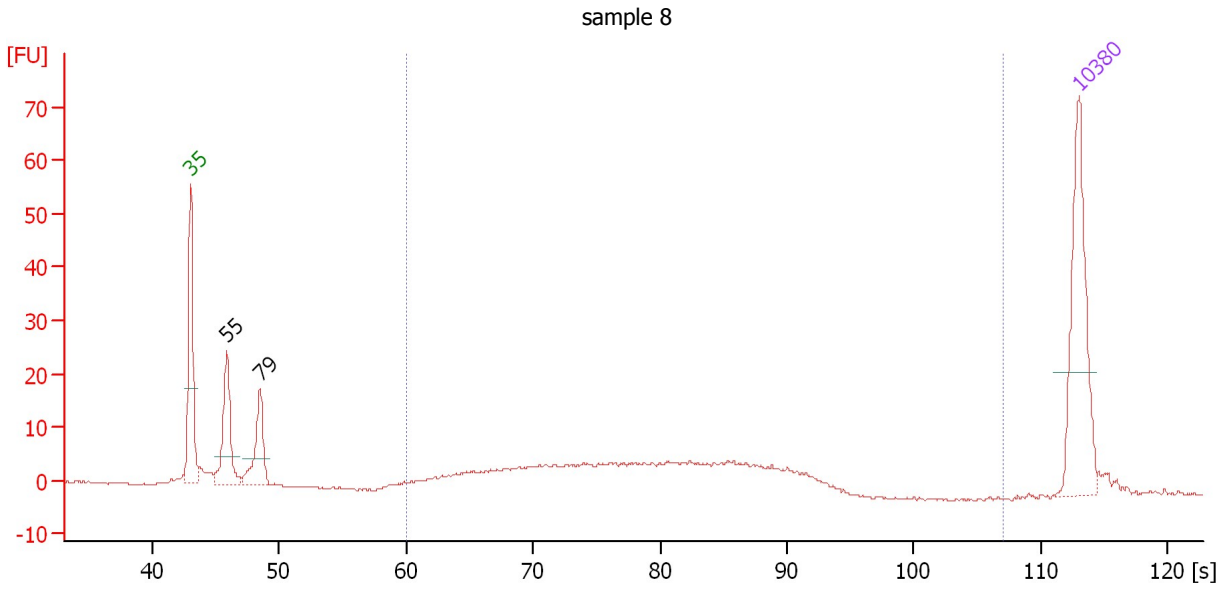
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
266	5,793	1,640	733.3	439.95	352.8	61	61.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

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Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 2 Corr. Area 1: 11.2
 Noise: 0.2

Peak table for sample 8 : sample 8

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	45.86	55	67.35	1,857.3	
3	48.48	79	51.33	985.0	
4	113.00	10,380	75.00	10.9	Upper Marker

Region table for sample 8 : sample 8

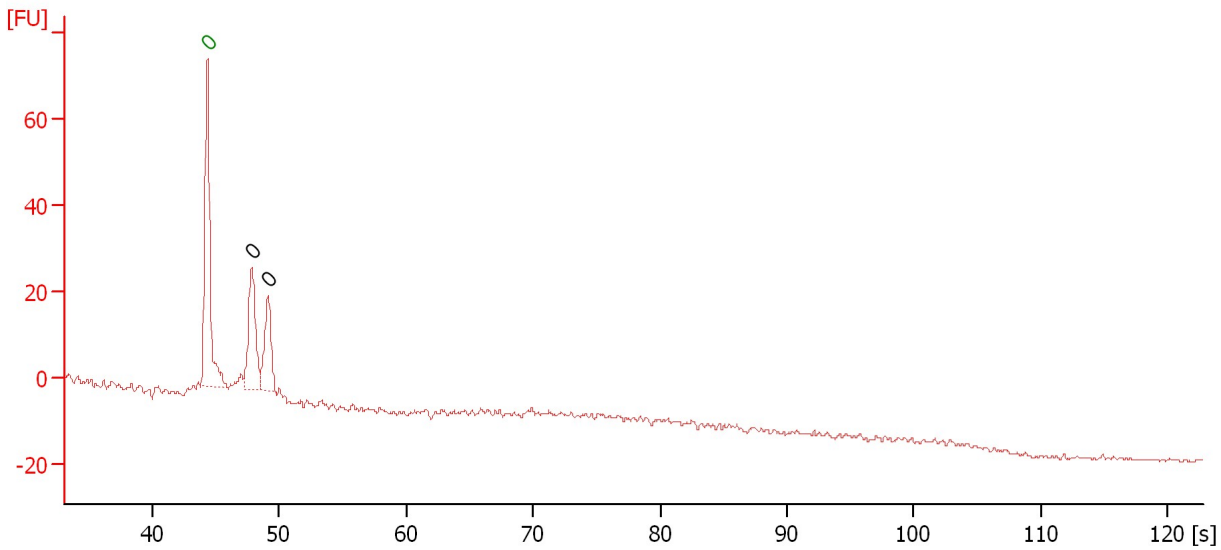
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	5,030	405	55.5	14.21	11.2	17	18.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary Continued ...

sample 9



Overall Results for sample 9 : sample 9

Number of peaks found: 2 Noise: 0.2

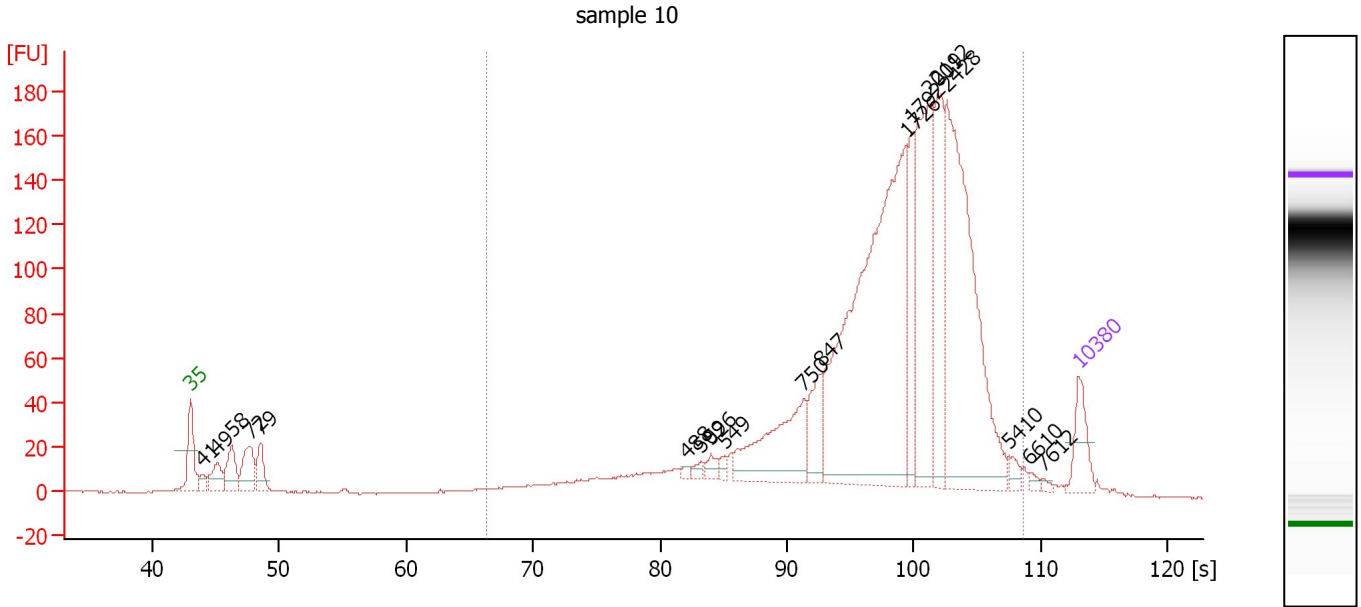
Peak table for sample 9 : sample 9

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	44.35	0	0.00	0.0	Lower Marker
2	47.85	0	0.00	0.0	
3	49.10	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
 Modified: 2/10/2014 3:14:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 19 Corr. Area 1: 2,161.4
 Noise: 0.2

Peak table for sample 10 : sample 10

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	32.04	1,176.6	
3	45.13	49	79.89	2,481.6	
4	46.24	58	108.56	2,814.1	
5	47.69	72	129.05	2,726.1	
6	48.51	79	80.88	1,546.4	
7	82.11	488	10.24	31.8	
8	83.22	509	15.66	46.6	
9	84.04	526	24.52	70.6	
10	85.11	549	14.86	41.0	
11	91.34	750	278.84	563.3	
12	92.65	847	109.76	196.2	
13	99.42	1,726	1,043.98	916.7	
14	99.85	1,792	154.57	130.7	
15	101.20	2,001	366.39	277.5	
16	101.83	2,192	239.37	165.4	
17	102.61	2,428	666.15	415.6	
18	107.59	5,410	17.87	5.0	
19	109.13	6,610	9.82	2.3	
20	110.24	7,612	6.39	1.3	
21	113.00	10,380	75.00	10.9	Upper Marker

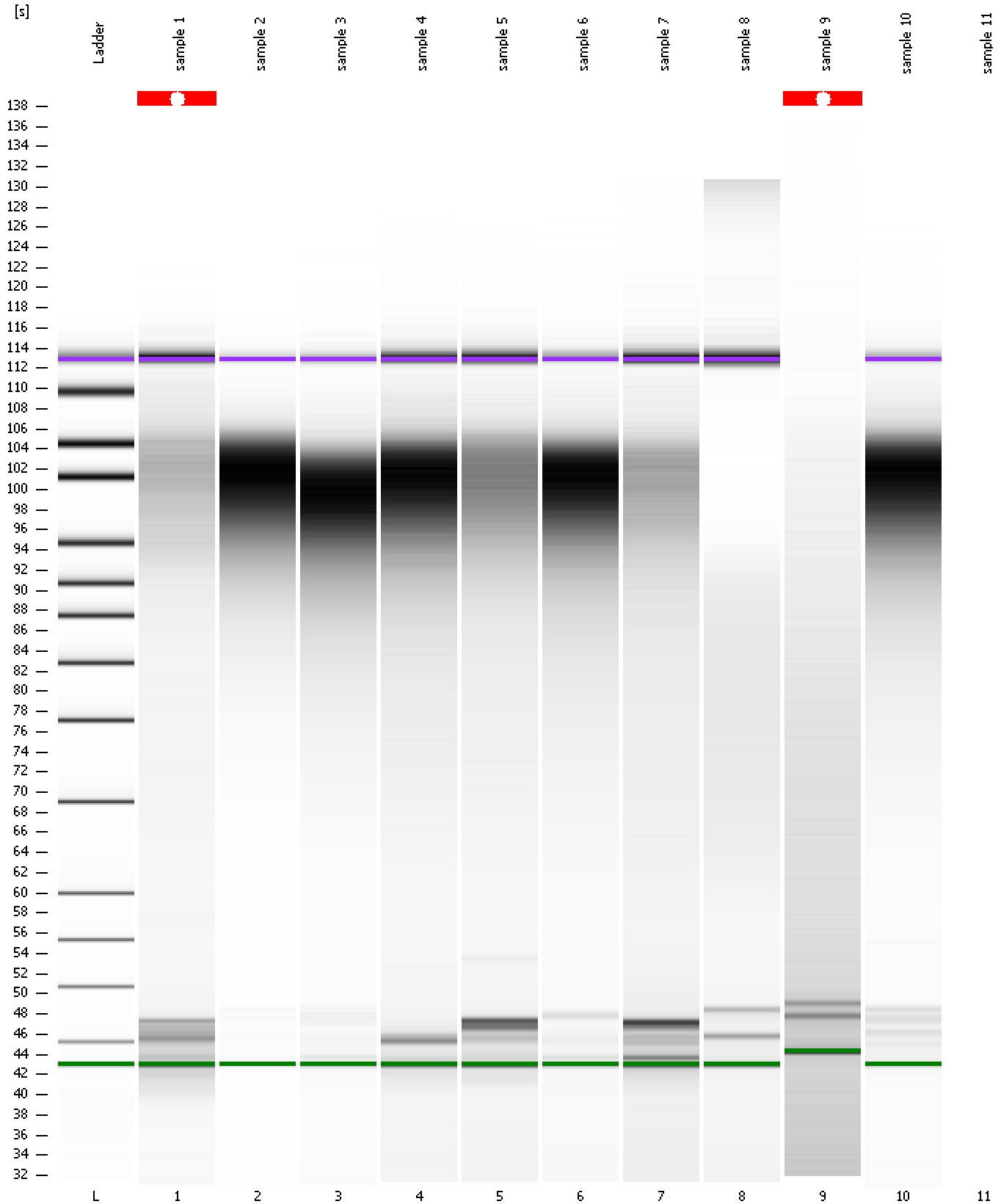
Region table for sample 10 : sample 10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
270	6,279	1,781	4,947.6	3,609.45	2,161.4	91	55.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
Modified: 2/10/2014 3:14:29 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-10\2014-02-10_004.xad

Created: 2/10/2014 2:32:59 PM
Modified: 2/10/2014 3:14:29 PM

Invalid Samples

Sample 11 has not been run, no results available.