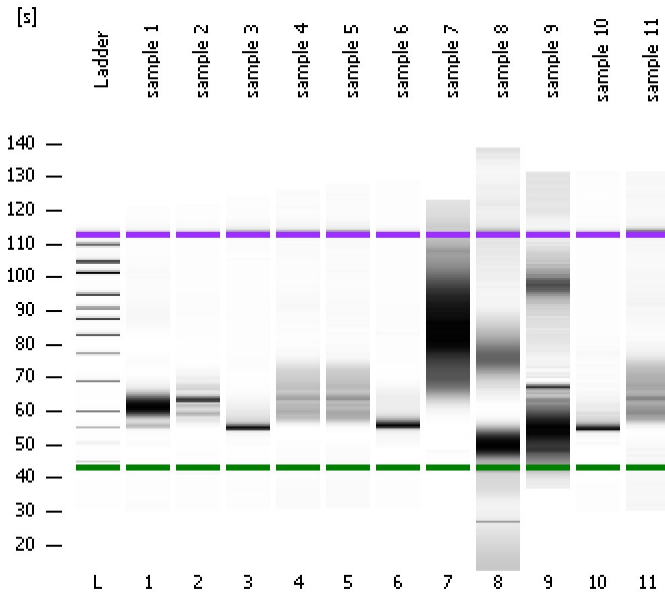


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
Modified: 11/3/2014 10:56:10 AM

### Electrophoresis File Run Summary



#### Instrument Information:

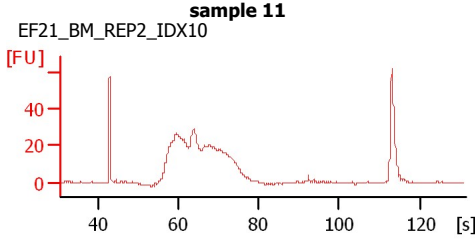
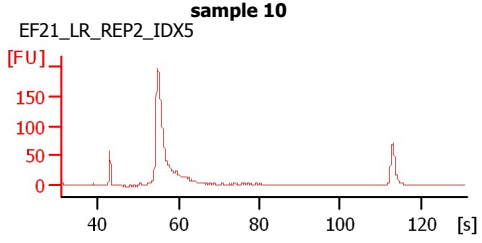
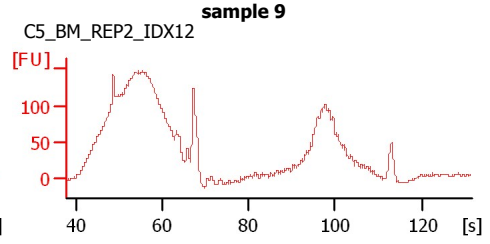
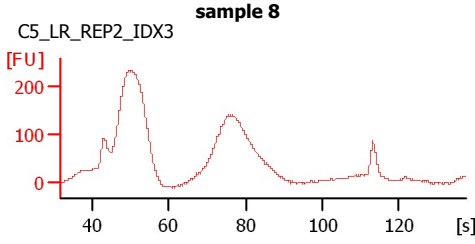
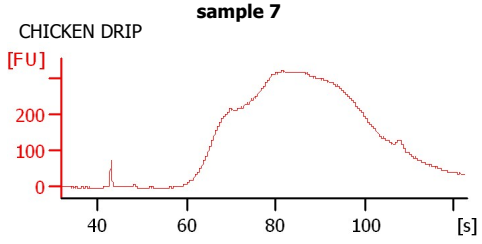
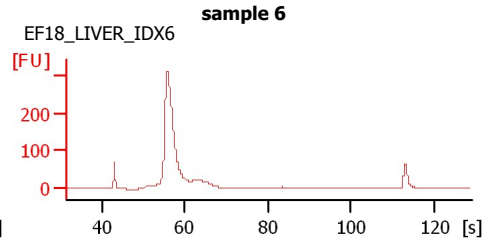
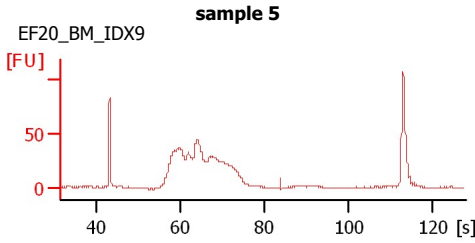
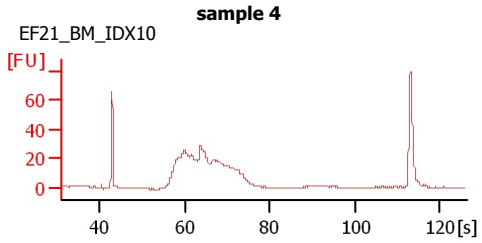
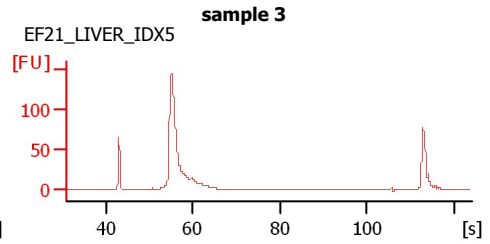
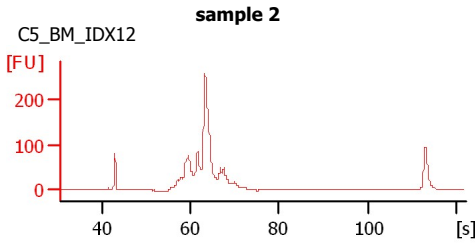
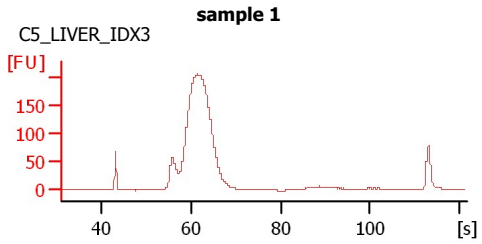
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### 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:



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
Modified: 11/3/2014 10:56:10 AM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1	C5_LIVER_IDX3	<input type="checkbox"/>	✓			
sample 2	C5_BM_IDX12	<input type="checkbox"/>	✓			
sample 3	EF21_LIVER_IDX5	<input type="checkbox"/>	✓			
sample 4	EF21_BM_IDX10	<input type="checkbox"/>	✓			
sample 5	EF20_BM_IDX9	<input type="checkbox"/>	✓			
sample 6	EF18_LIVER_IDX6	<input type="checkbox"/>	✓			
sample 7	CHICKEN DRIP	<input type="checkbox"/>	✓			
sample 8	C5_LR_REP2_IDX3	<input type="checkbox"/>	✓			
sample 9	C5_BM_REP2_IDX12	<input type="checkbox"/>	✓			
sample 10	EF21_LR_REP2_IDX5	<input type="checkbox"/>	✓			
sample 11	EF21_BM_REP2_IDX1	<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\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
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**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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ l] : 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

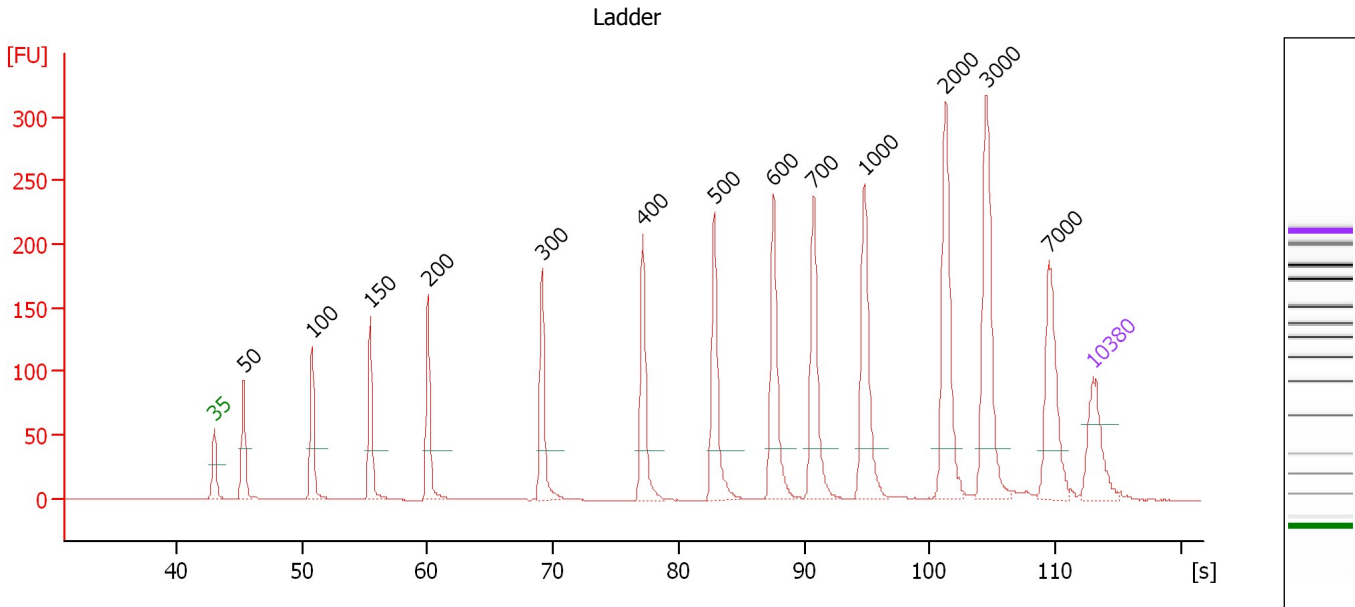
**Ladder**

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\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

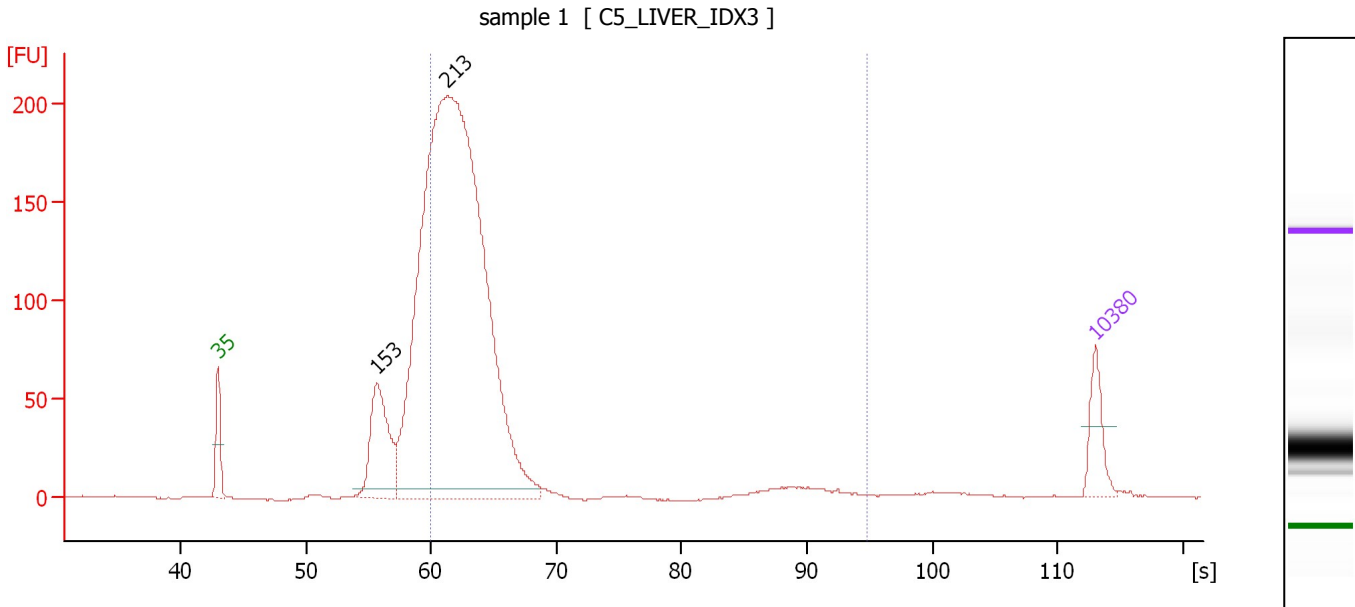
**Peak table for Ladder**

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\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 1**

Number of peaks found: 2                      Corr. Area 1: 1,662.1  
 Noise: 0.2

**Peak table for sample 1 : sample 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	153	352.93	3,506.4	
3	213	3,613.41	25,713.2	
4	10,380	75.00	10.9	Upper Marker

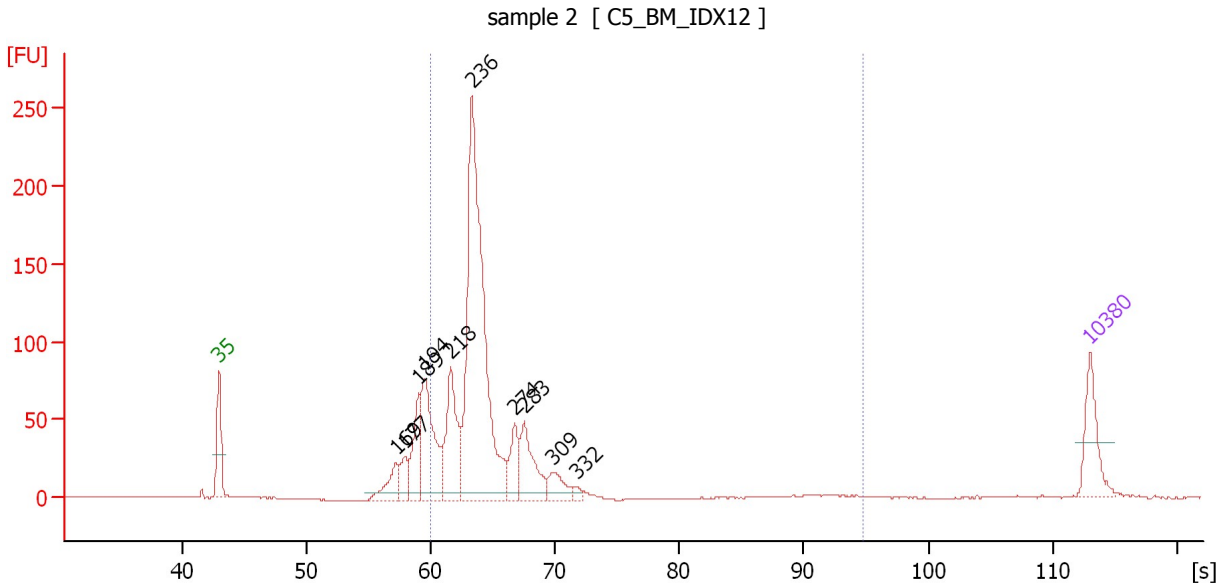
**Region table for sample 1 : sample 1**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
60.03	244	94.82	1,662.1	71	35.3	2,752.56	17,996.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
 Modified: 11/3/2014 10:56:10 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 2**

Number of peaks found: 10                      Corr. Area 1: 1,032.0  
 Noise: 0.2

**Peak table for sample 2 : sample 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	169	75.56	677.1	
3	177	53.22	455.3	
4	189	117.83	942.8	
5	194	244.58	1,909.5	
6	218	210.30	1,463.6	
7	236	903.18	5,794.1	
8	274	79.34	438.6	
9	283	129.73	695.6	
10	309	53.10	260.1	
11	332	11.04	50.3	
12	10,380	75.00	10.9	Upper Marker

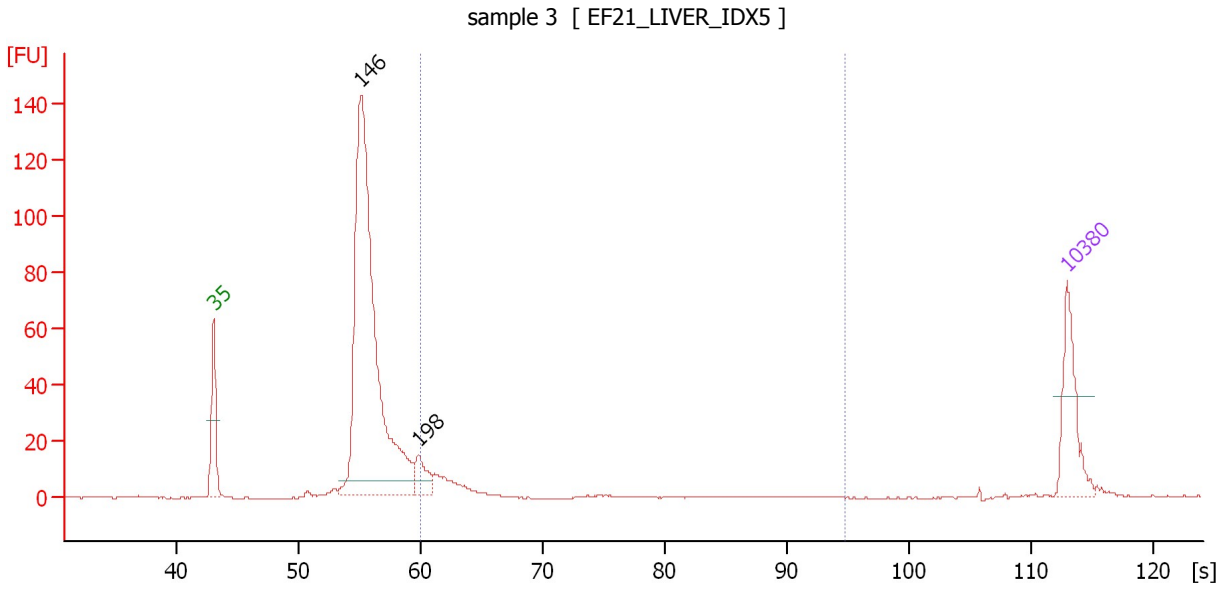
**Region table for sample 2 : sample 2**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
60.03	252	94.82	1,032.0	80	23.9	1,427.19	8,802.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 3**

Number of peaks found: 2                      Corr. Area 1: 53.9  
 Noise: 0.1

**Peak table for sample 3 : sample 3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	146	933.41	9,660.8	
3	198	44.63	341.8	
4	10,380	75.00	10.9	Upper Marker

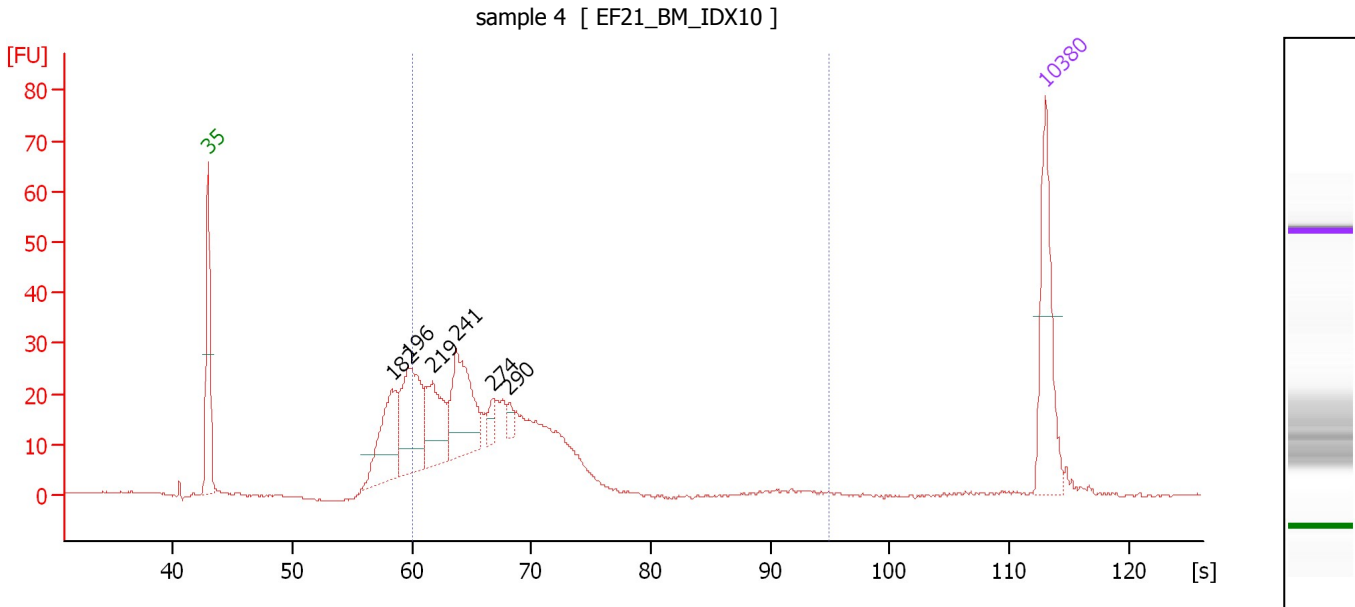
**Region table for sample 3 : sample 3**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
60.03	234	94.82	53.9	9	23.8	84.74	567.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
 Modified: 11/3/2014 10:56:10 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 4**

Number of peaks found: 6                      Corr. Area 1: 396.8  
 Noise: 0.1

**Peak table for sample 4 : sample 4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	182	100.43	837.4	
3	196	128.20	988.8	
4	219	79.11	547.1	
5	241	111.94	704.4	
6	274	14.26	78.9	
7	290	8.98	47.0	
8	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : sample 4**

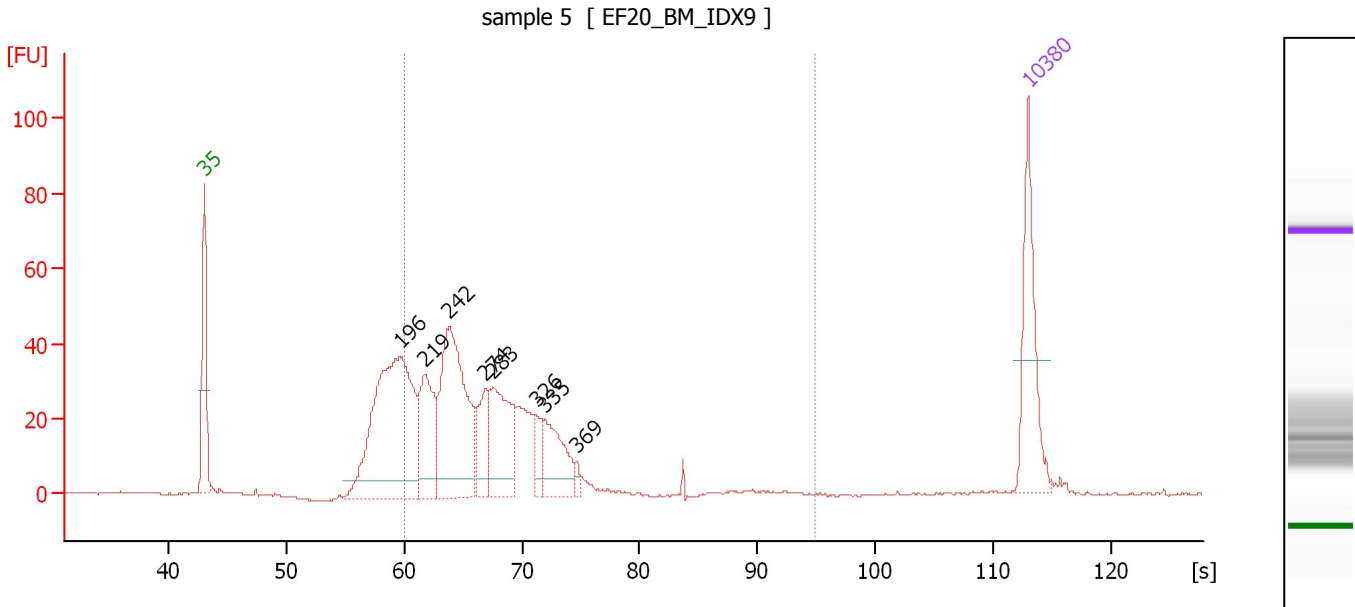
From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
60.03	276	94.82	396.8	77	25.8	669.10	3,842.8	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
 Modified: 11/3/2014 10:56:10 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 5**

Number of peaks found: 8                      Corr. Area 1: 593.2  
 Noise: 0.2

**Peak table for sample 5 : sample 5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	196	344.34	2,664.5	
3	219	106.29	734.4	
4	242	224.67	1,407.7	
5	274	46.20	255.2	
6	283	113.06	605.6	
7	326	24.40	113.4	
8	335	65.73	297.1	
9	369	6.93	28.5	
10	10,380	75.00	10.9	Upper Marker

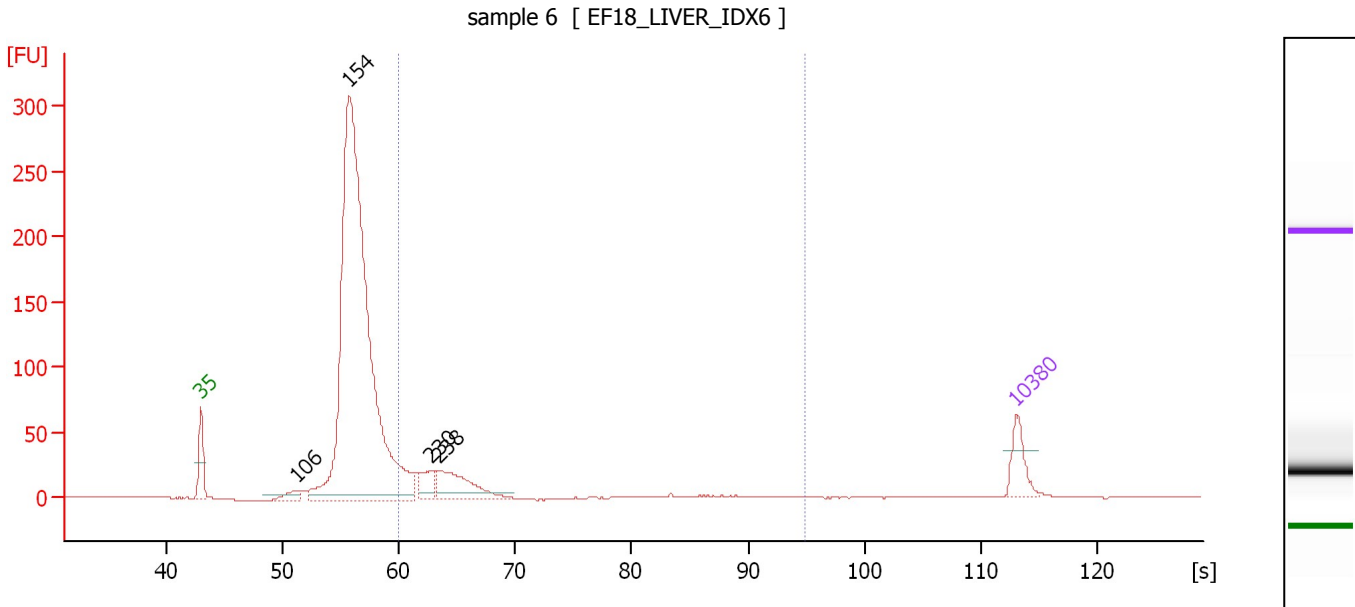
**Region table for sample 5 : sample 5**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
60.03	276	94.82	593.2	75	23.1	727.87	4,159.6	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
 Modified: 11/3/2014 10:56:10 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 6**

Number of peaks found: 4                      Corr. Area 1: 224.5  
 Noise: 0.1

**Peak table for sample 6 : sample 6**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	106	58.87	845.4	
3	154	3,144.26	31,032.0	
4	230	91.54	602.5	
5	238	220.61	1,405.6	
6	10,380	75.00	10.9	Upper Marker

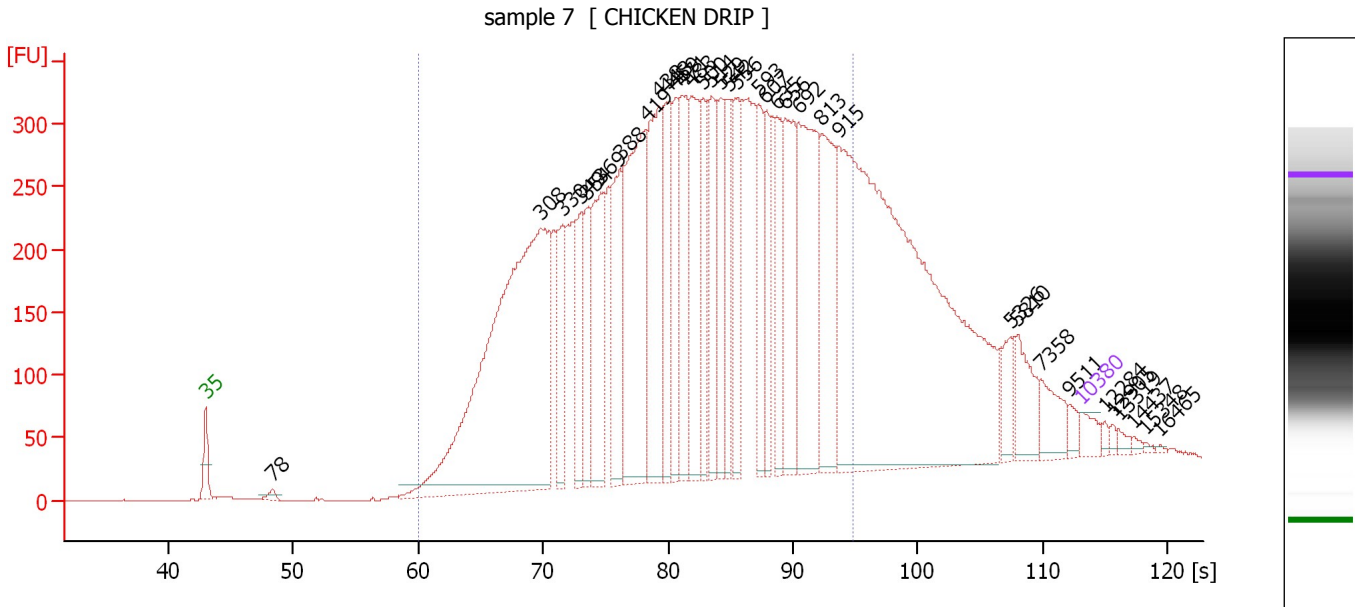
**Region table for sample 6 : sample 6**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
60.03	264	94.82	224.5	13	39.5	403.50	2,519.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
 Modified: 11/3/2014 10:56:10 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 7**

Number of peaks found: 35                      Corr. Area 1: 9,936.9  
 Noise: 0.1

**Peak table for sample 7 : sample 7**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	78	44.41	865.3	
3	308	4,226.07	20,799.6	
4	330	483.66	2,217.9	
5	349	450.91	1,956.4	
6	354	426.02	1,823.2	
7	369	791.13	3,252.6	
8	388	593.22	2,317.3	
9	419	1,493.99	5,400.0	
10	438	980.94	3,392.8	
11	448	609.93	2,063.3	
12	459	467.00	1,540.8	
13	471	679.27	2,183.8	
14	483	775.34	2,434.1	
15	500	449.25	1,361.4	
16	514	541.51	1,597.6	
17	529	462.29	1,324.2	
18	542	452.66	1,266.3	
19	556	442.24	1,205.0	
20	593	378.32	966.3	
21	607	368.79	919.9	
22	635	420.05	1,003.0	
23	656	694.11	1,602.5	
24	692	1,168.36	2,559.8	
25	813	734.39	1,367.9	
26	915	4,486.23	7,429.2	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad


Created: 11/3/2014 10:13:13 AM  
 Modified: 11/3/2014 10:56:10 AM

**Electropherogram Summary Continued ...**

**... Peak table for sample 7 : sample 7**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	5,326	139.17	39.6	
28	5,810	242.27	63.2	
29	7,358	180.59	37.2	
30	9,511	45.68	7.3	
31	10,380	75.00	10.9	Upper Marker
32	12,284	0.00	0.0	
33	12,905	0.00	0.0	
34	13,319	0.00	0.0	
35	14,437	0.00	0.0	
36	15,348	0.00	0.0	
37	16,465	0.00	0.0	

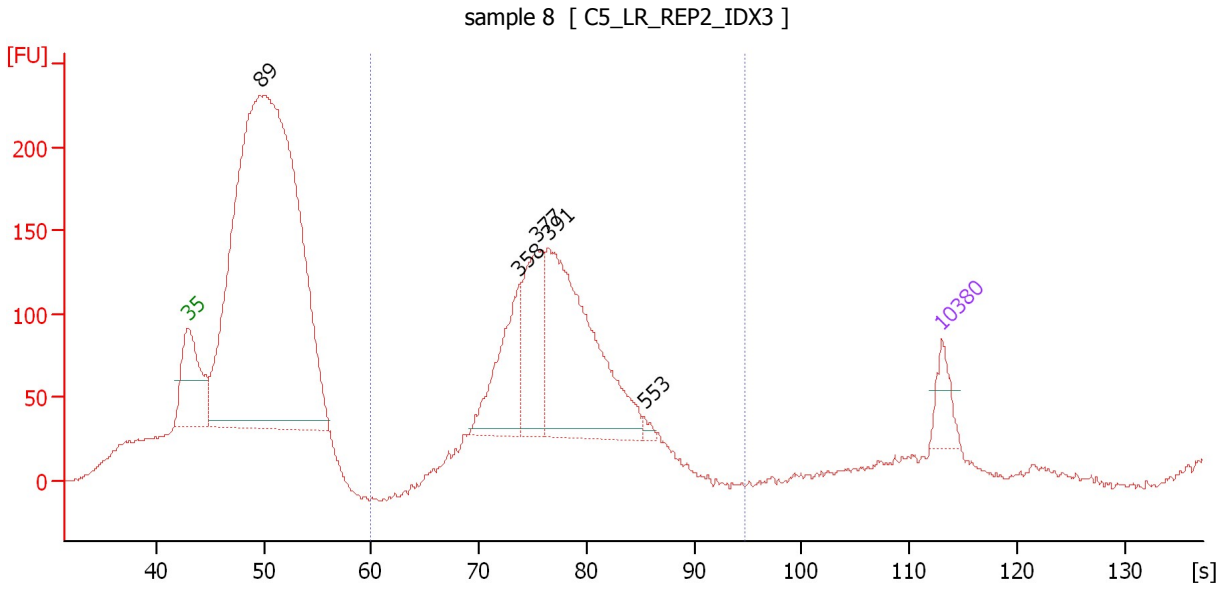
**Region table for sample 7 : sample 7**

From [s]	Average Size [bp]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
60.03	507	94.82	9,936.9	80	20,965.39	74,913.1	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

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 Modified: 11/3/2014 10:56:10 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 8**

Number of peaks found: 5                      Corr. Area 1: 1,018.6  
 Noise: 1.0

**Peak table for sample 8 : sample 8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	89	4,135.35	70,207.9	
3	358	337.94	1,431.1	
4	377	356.26	1,431.2	
5	391	848.75	3,286.3	
6	553	16.62	45.6	
7	10,380	75.00	10.9	Upper Marker

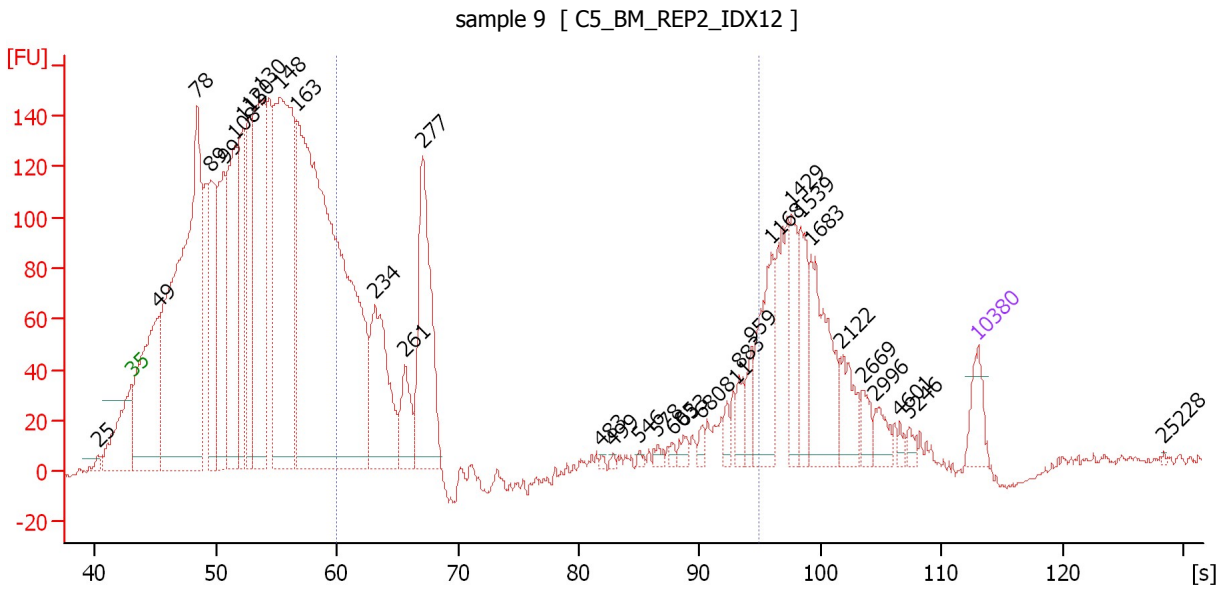
**Region table for sample 8 : sample 8**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
60.03	407	94.82	1,018.6	35	13.6	1,548.04	5,880.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample 9**

Number of peaks found: 34                      Corr. Area 1: 1,145.8  
 Noise: 1.0

**Peak table for sample 9 : sample 9**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	25	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	49	916.34	28,083.0	
4	78	2,543.32	49,273.5	
5	89	616.28	10,511.5	
6	99	650.24	9,987.9	
7	108	878.75	12,335.0	
8	115	543.66	7,187.5	
9	120	555.48	6,994.9	
10	130	1,075.30	12,501.8	
11	148	1,705.34	17,465.6	
12	163	3,474.80	32,216.0	
13	234	521.31	3,376.7	
14	261	173.74	1,007.8	
15	277	632.12	3,454.0	
16	483	6.97	21.9	
17	499	7.49	22.7	
18	546	9.16	25.4	
19	578	18.38	48.2	
20	605	11.70	29.3	
21	633	27.20	65.2	
22	680	22.80	50.8	
23	811	30.64	57.2	
24	883	58.59	100.5	
25	959	57.81	91.4	
26	1,168	238.94	310.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad


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 Modified: 11/3/2014 10:56:10 AM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 9 : sample 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	1,429	138.42	146.8	
28	1,539	154.69	152.3	
29	1,683	272.66	245.4	
30	2,122	100.16	71.5	
31	2,669	44.35	25.2	
32	2,996	50.68	25.6	
33	4,601	15.56	5.1	
34	5,246	18.46	5.3	
35	10,380	75.00	10.9	Upper Marker
36	25,228	0.00	0.0	

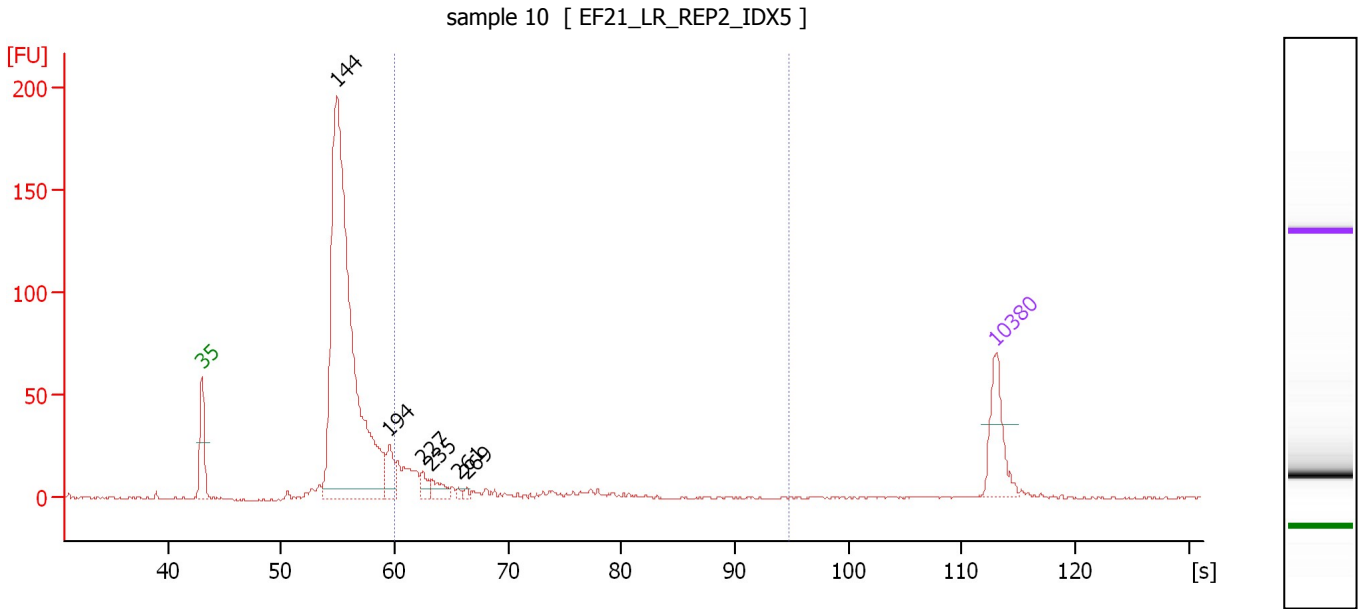
#### Region table for sample 9 : sample 9

From [s]	Average Size [bp]	To [s]	Corr. Area % of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color	
60.03	388	94.82	1,145.8	18	64.9	2,790.83	15,538.7	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
 Modified: 11/3/2014 10:56:10 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sample 10**

Number of peaks found: 6                      Corr. Area 1: 144.8  
 Noise: 0.4

**Peak table for sample 10 : sample 10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	144	1,366.51	14,390.9	
3	194	55.55	432.9	
4	227	24.25	162.1	
5	235	30.20	194.8	
6	261	6.17	35.8	
7	269	5.54	31.2	
8	10,380	75.00	10.9	Upper Marker

**Region table for sample 10 : sample 10**

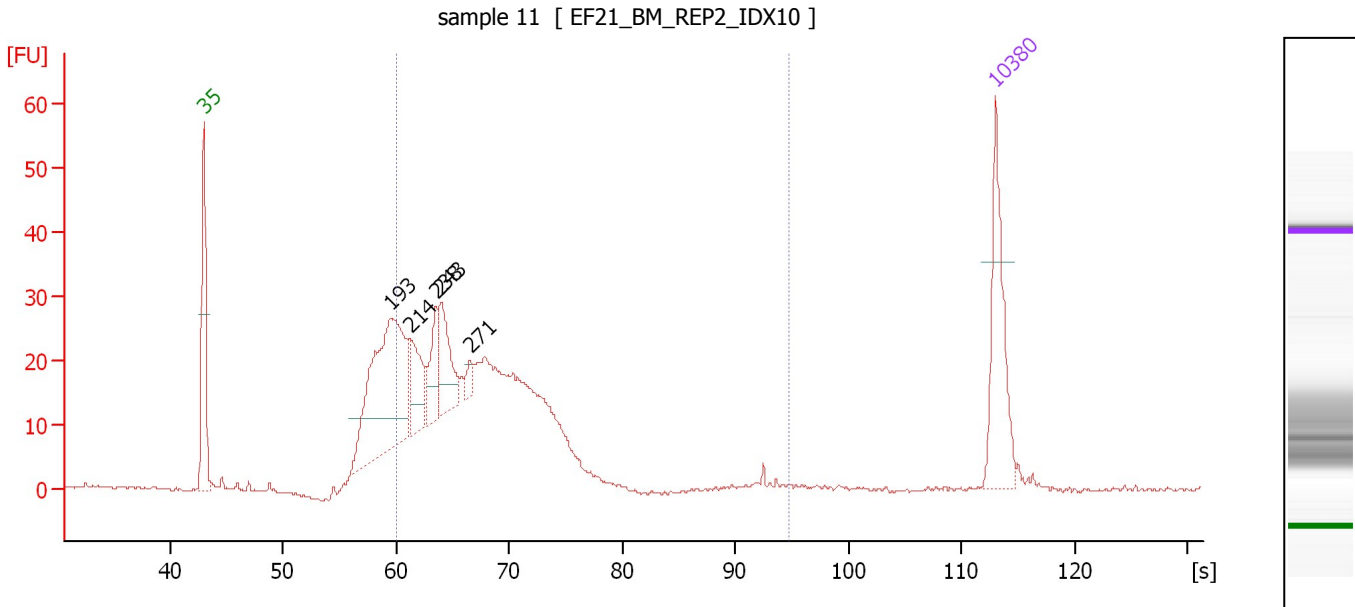
From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
60.03	280	94.82	144.8	15	33.7	221.32	1,321.8	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
 Modified: 11/3/2014 10:56:10 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : sample 11**

Number of peaks found: 5                      Corr. Area 1: 446.3  
 Noise: 0.2

**Peak table for sample 11 : sample 11**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	193	268.66	2,104.0	
3	214	56.87	403.1	
4	238	46.39	295.0	
5	243	63.26	393.7	
6	271	11.14	62.2	
7	10,380	75.00	10.9	Upper Marker

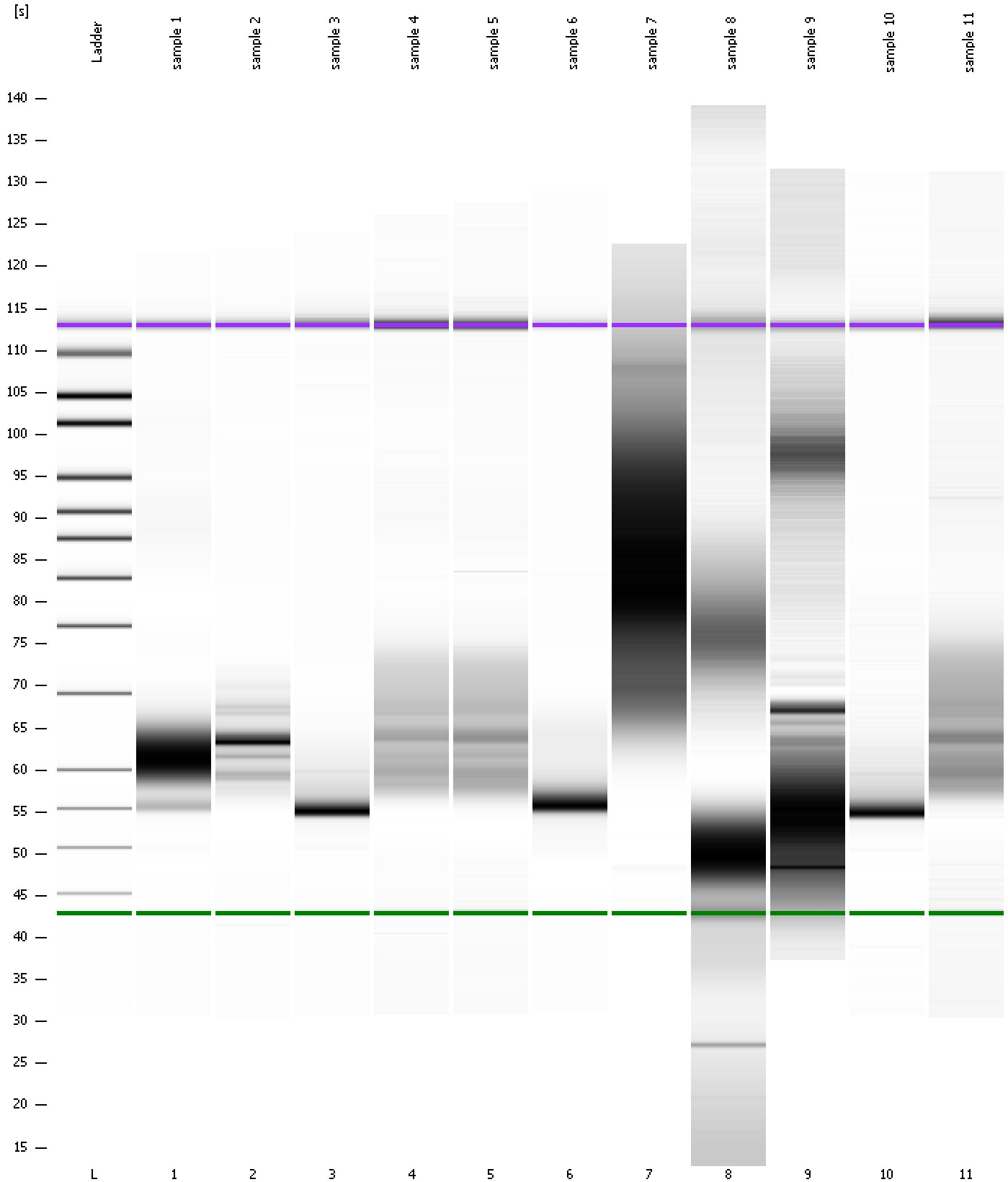
**Region table for sample 11 : sample 11**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
60.03	286	94.82	446.3	77	28.6	884.24	4,965.4	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
Modified: 11/3/2014 10:56:10 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-03\2014-11-03\_001.xad

Created: 11/3/2014 10:13:13 AM  
 Modified: 11/3/2014 10:56:10 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		11/3/2014 10:54:31 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-11-03\2014-11-03_001.xad)		Instrument	Run		11/3/2014 10:13:18 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/3/2014 10:13:18 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/3/2014 10:13:18 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/3/2014 10:13:18 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/3/2014 10:13:18 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/3/2014 10:13:18 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/3/2014 10:13:18 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1