

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-04\2014-11-04\_003.xad

Created: 11/4/2014 3:30:37 PM  
Modified: 11/4/2014 4:12:44 PM

**Electrophoresis File Run Summary**

Instrument Information:

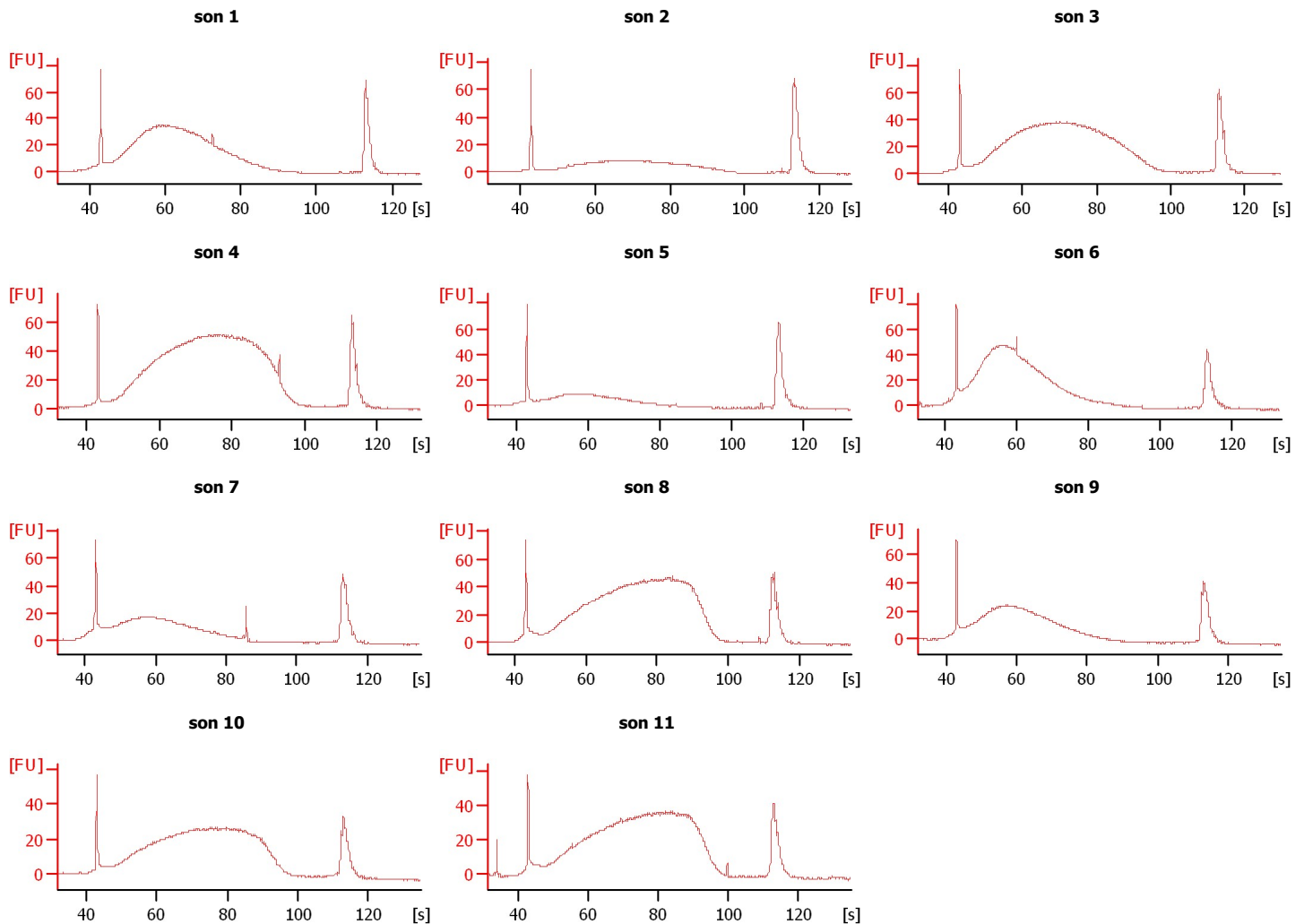
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
son 1		<input type="checkbox"/>	✓			
son 2		<input type="checkbox"/>	✓			
son 3		<input type="checkbox"/>	✓			
son 4		<input type="checkbox"/>	✓			
son 5		<input type="checkbox"/>	✓			
son 6		<input type="checkbox"/>	✓			
son 7		<input type="checkbox"/>	✓			
son 8		<input type="checkbox"/>	✓			
son 9		<input type="checkbox"/>	✓			
son 10		<input type="checkbox"/>	✓			
son 11		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

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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/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

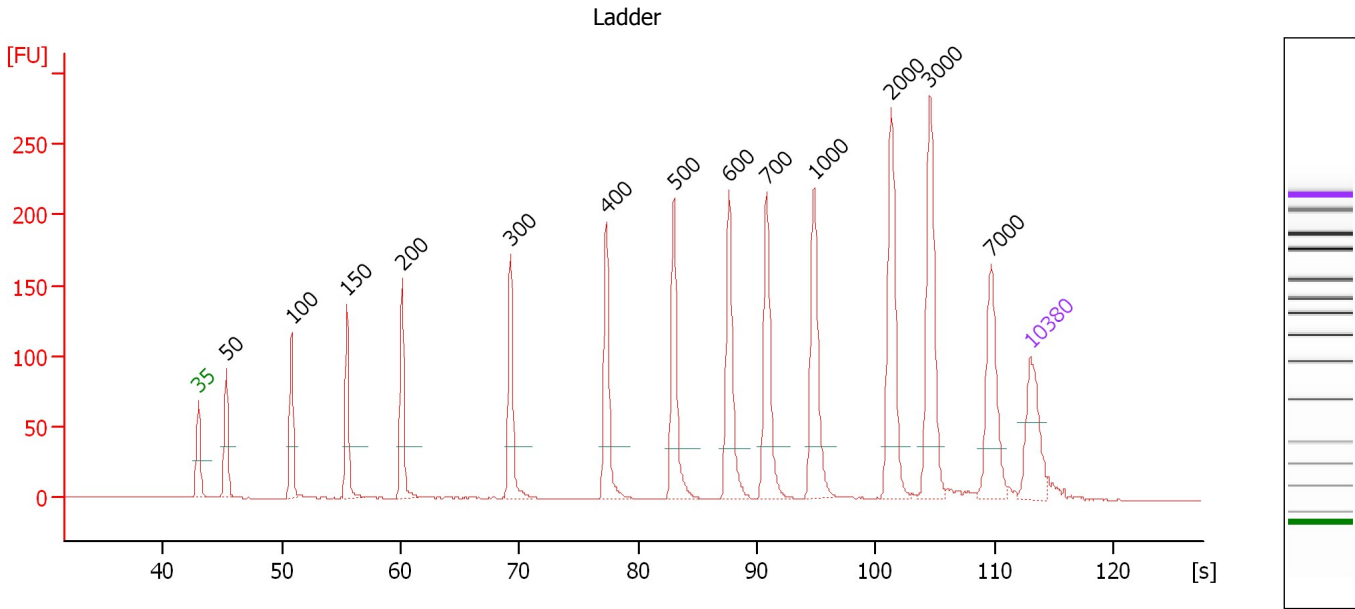
**Ladder**

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

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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

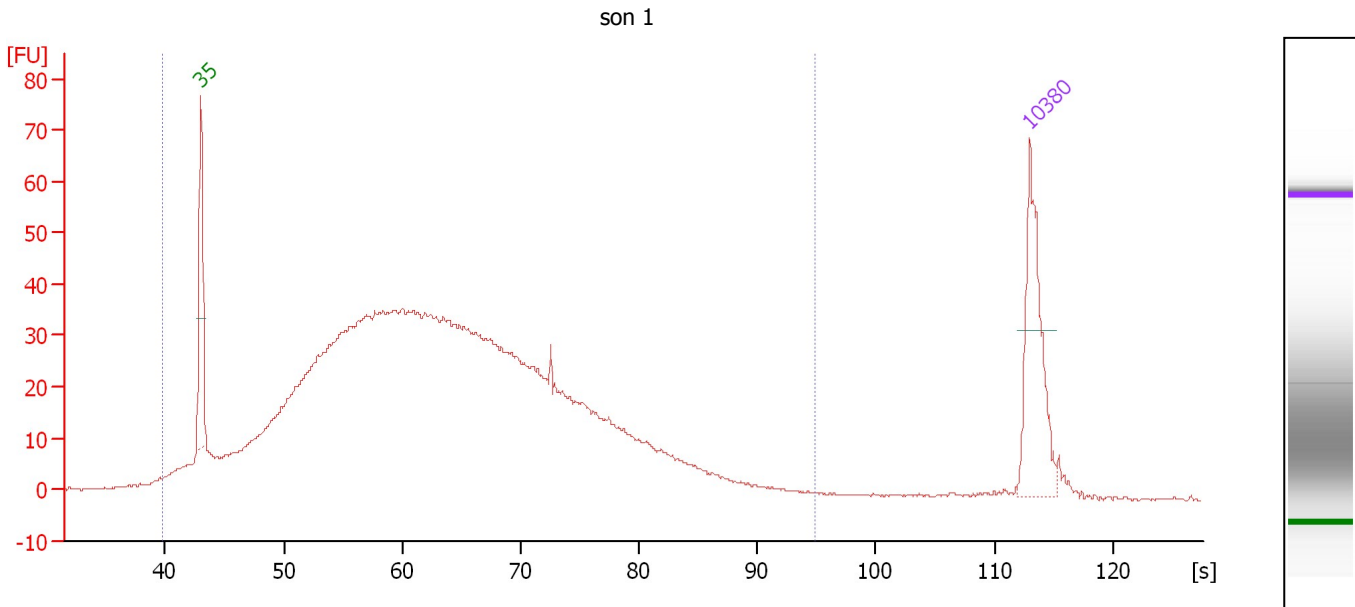
**Peak table for Ladder**

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

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 1,559.1  
 Noise: 0.2

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

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

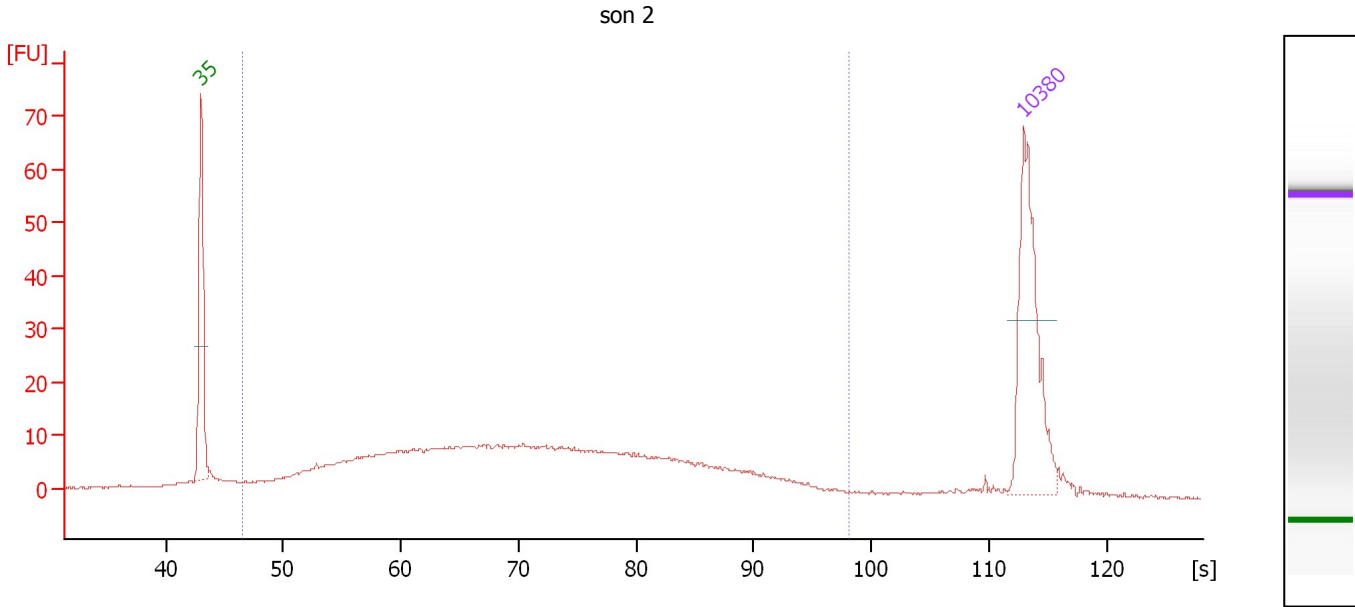
**Region table for sample 1 : son 1**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
39.68	237	94.79	1,559.1	98	54.3	2,281.91	24,091.0	Blue

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 432.8  
 Noise: 0.2

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

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

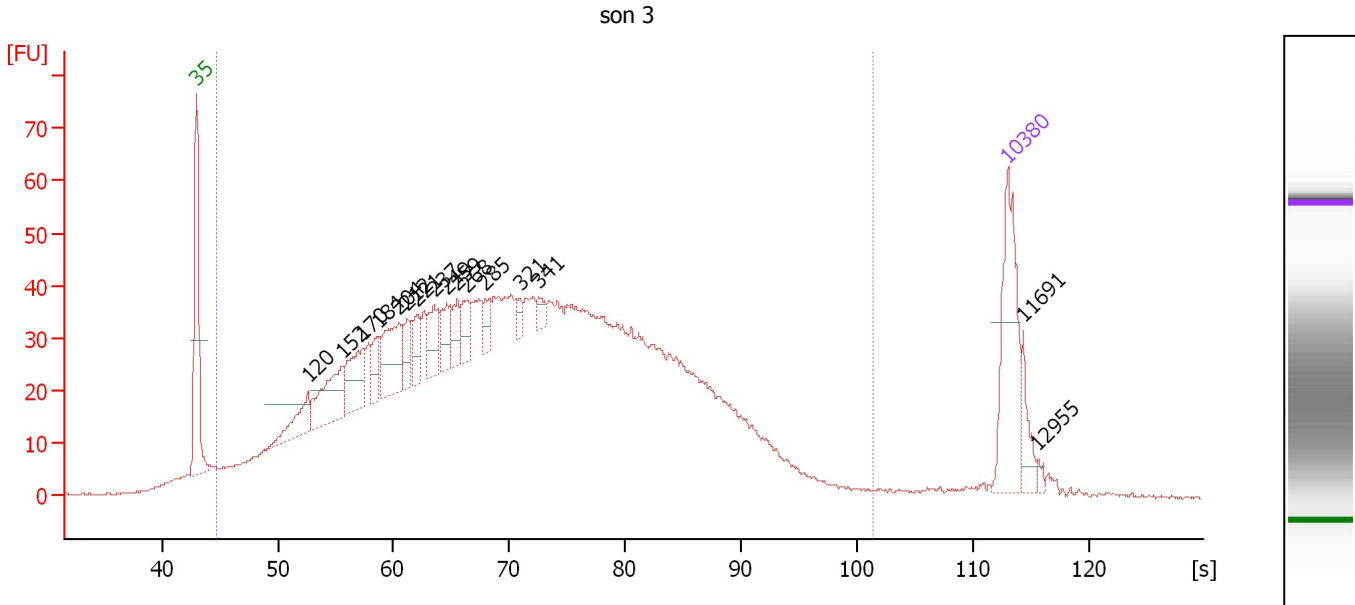
**Region table for sample 2 : son 2**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
46.55	356	98.05	432.8	91	54.5	483.74	3,184.8	Blue

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 16                      Corr. Area 1: 1,919.6  
 Noise: 0.1

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	120	43.47	551.0	
3	152	71.09	709.2	
4	170	56.69	505.9	
5	184	24.81	204.1	
6	204	62.35	463.8	
7	212	22.58	161.5	
8	221	25.16	172.5	
9	237	30.27	193.7	
10	249	25.18	153.3	
11	259	23.87	139.6	
12	268	22.97	130.1	
13	285	16.91	89.8	
14	321	9.34	44.0	
15	341	9.14	40.6	
16	10,380	75.00	10.9	Upper Marker
17	11,691	0.00	0.0	
18	12,955	0.00	0.0	

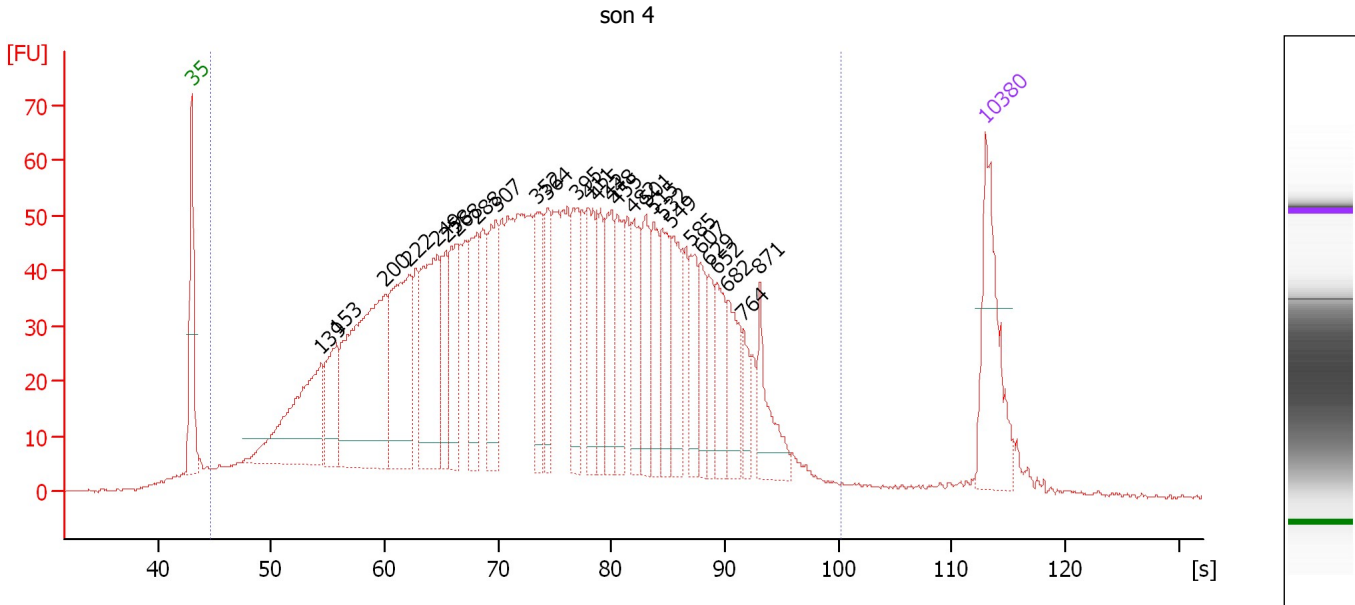
**Region table for sample 3 : son 3**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
44.76	351	101.43	1,919.6	96	57.8	2,912.27	20,264.8	Blue

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 28                      Corr. Area 1: 2,572.5  
 Noise: 0.3

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	139	184.09	2,013.2	
3	153	80.32	793.9	
4	200	280.74	2,131.5	
5	222	164.01	1,117.6	
6	249	148.14	900.3	
7	258	58.18	342.2	
8	268	70.43	398.2	
9	288	82.01	431.1	
10	307	89.77	442.7	
11	352	67.03	288.6	
12	364	51.15	213.1	
13	395	61.79	236.7	
14	411	63.59	234.4	
15	425	45.87	163.5	
16	448	64.33	217.7	
17	455	56.82	189.2	
18	482	57.60	181.2	
19	501	48.19	145.7	
20	515	51.89	152.6	
21	532	52.61	150.0	
22	549	59.61	164.6	
23	585	39.25	101.6	
24	607	34.39	85.8	
25	629	26.61	64.1	
26	652	42.56	98.9	



Assay Class: High Sensitivity DNA Assay  
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**Electropherogram Summary Continued ...****... Peak table for sample 4 : son 4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	682	47.61	105.8	
28	764	21.73	43.1	
29	871	43.12	75.0	
30	▶ 10,380	75.00	10.9	Upper Marker

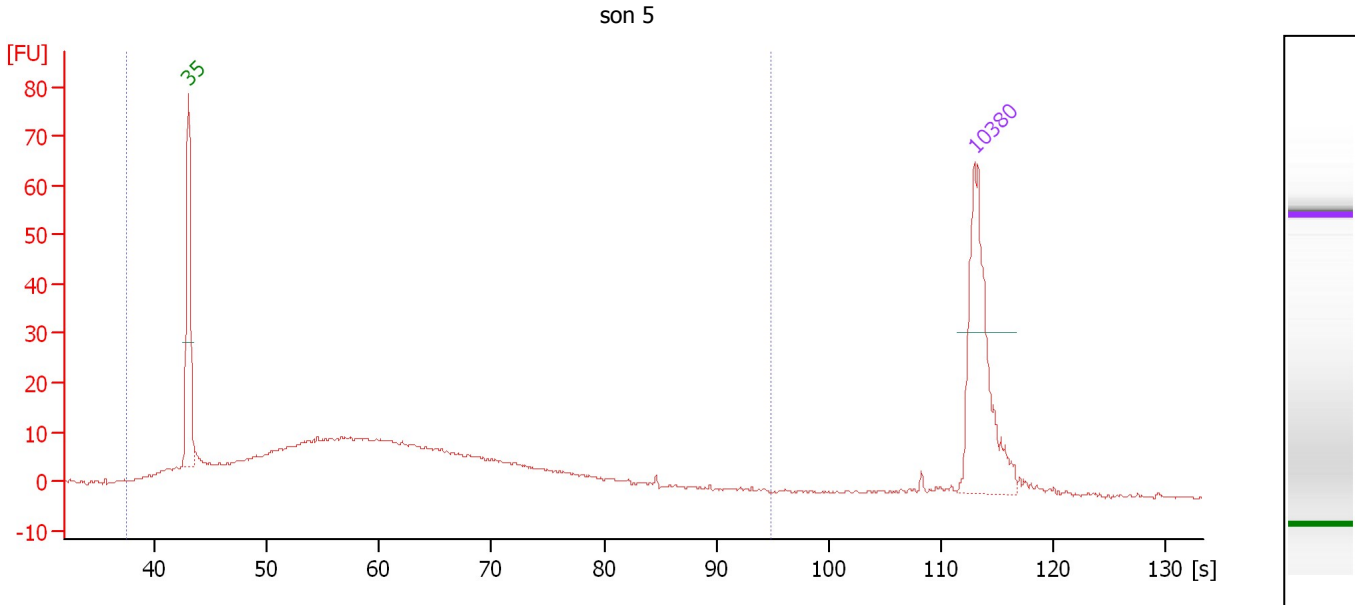
**Region table for sample 4 : son 4**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
44.66	396	100.30	2,572.5	97	53.9	3,276.28	20,138.3	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-04\2014-11-04\_003.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 435.1  
 Noise: 0.3

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

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

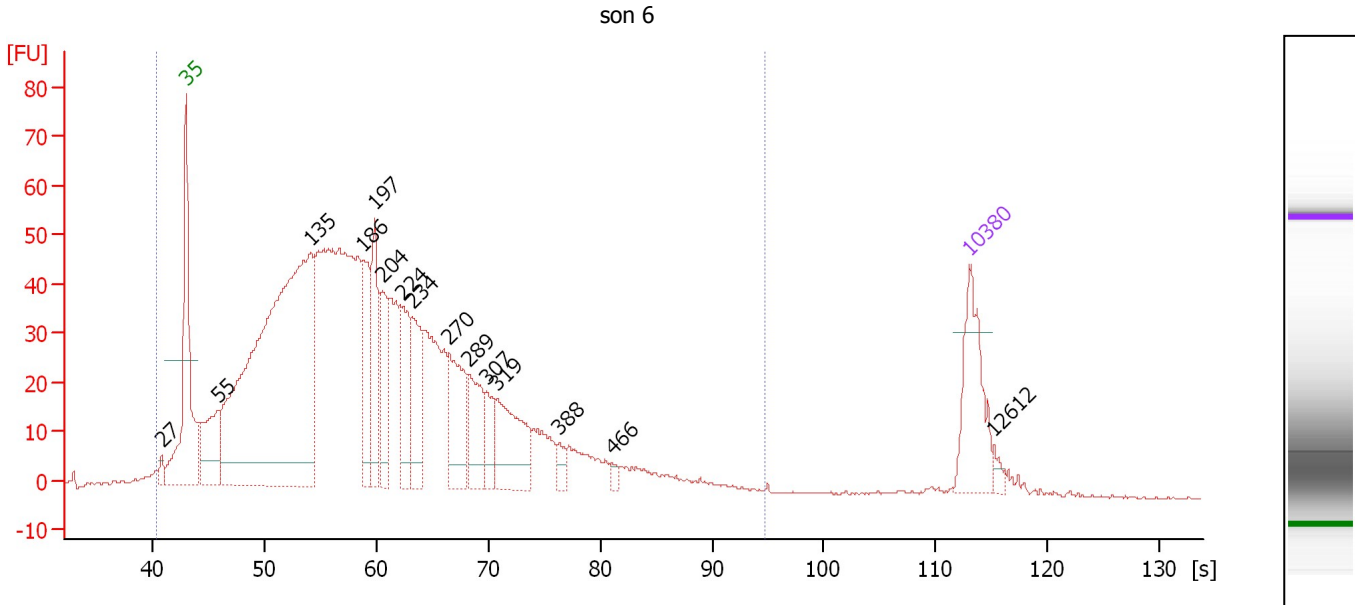
**Region table for sample 5 : son 5**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
37.56	198	94.79	435.1	96	70.9	517.90	7,109.9	Blue

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 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-04\2014-11-04\_003.xad

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 15                      Corr. Area 1: 1,650.2  
 Noise: 0.2

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

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	27	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	55	104.06	2,877.8	
4	135	1,003.57	11,250.6	
5	186	115.05	938.7	
6	197	100.75	774.7	
7	204	88.01	652.6	
8	224	90.48	612.5	
9	234	95.18	615.4	
10	270	107.12	600.9	
11	289	73.13	383.4	
12	307	36.98	182.4	
13	319	107.42	510.9	
14	388	13.67	53.3	
15	466	7.03	22.8	
16	10,380	75.00	10.9	Upper Marker
17	12,612	0.00	0.0	

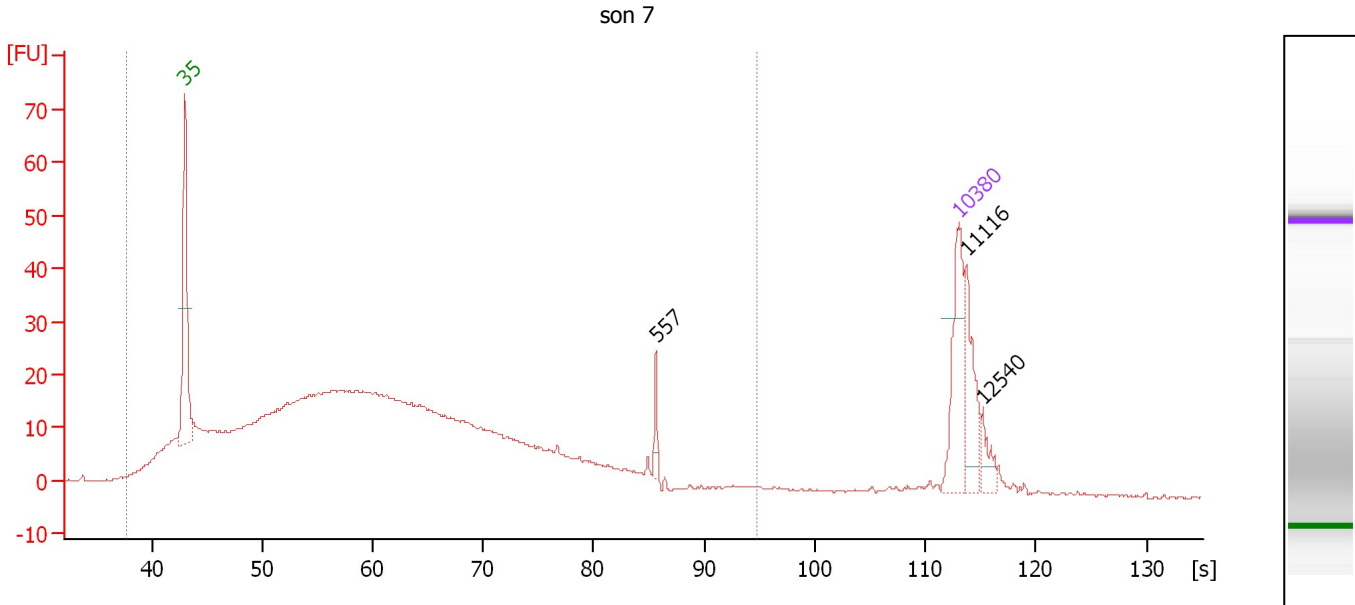
**Region table for sample 6 : son 6**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
40.40	193	94.79	1,650.1	99	54.3	2,956.05	32,595.9	Blue

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 3                      Corr. Area 1: 865.6  
 Noise: 0.2

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	557	17.07	46.4	
3	10,380	75.00	10.9	Upper Marker
4	11,116	0.00	0.0	
5	12,540	0.00	0.0	

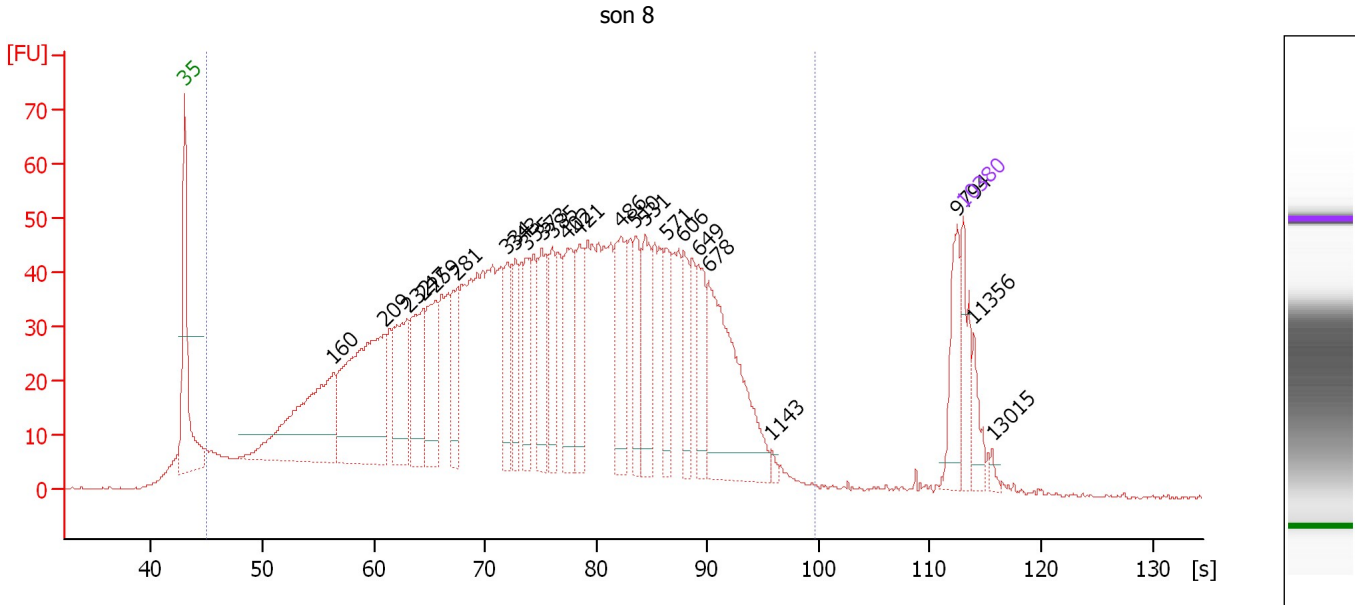
**Region table for sample 7 : son 7**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
37.67	206	94.79	865.6	93	67.7	2,339.01	35,819.3	■

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 24                      Corr. Area 1: 2,238.8  
 Noise: 0.2

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


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	160	470.43	4,464.1	
3	209	548.33	3,973.1	
4	232	203.91	1,329.5	
5	247	197.28	1,209.3	
6	259	181.86	1,064.6	
7	281	101.54	547.5	
8	334	111.42	505.0	
9	343	102.64	453.0	
10	355	109.19	465.6	
11	373	146.30	594.8	
12	385	98.96	389.8	
13	402	162.65	612.9	
14	421	133.33	480.1	
15	486	175.77	547.9	
16	510	107.05	318.1	
17	531	130.26	371.9	
18	571	94.64	251.1	
19	606	88.54	221.2	
20	649	105.61	246.5	
21	678	362.66	810.4	
22	1,143	8.41	11.1	
23	9,794	86.60	13.4	
24	10,380	75.00	10.9	Upper Marker
25	11,356	0.00	0.0	
26	13,015	0.00	0.0	

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**Electropherogram Summary Continued ...**

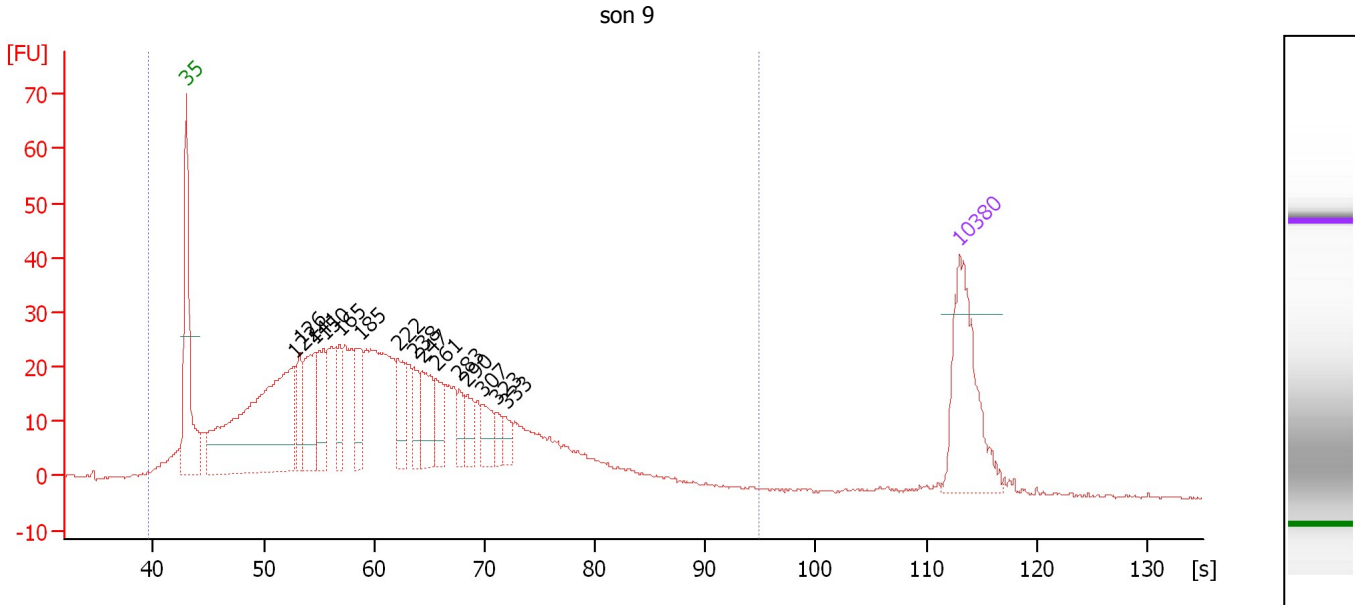
... Region table for sample 8 : son 8

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Color
44.94	410	99.58	2,238.8	95	51.6	7,047.03	42,884.4	

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 15                      Corr. Area 1: 1,036.7  
 Noise: 0.3

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

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	122	317.37	3,957.8	
3	126	39.36	472.6	
4	141	74.89	805.7	
5	150	51.54	521.6	
6	165	38.42	352.0	
7	185	48.62	397.7	
8	222	34.23	233.4	
9	238	24.57	156.3	
10	247	41.98	257.8	
11	261	28.07	163.2	
12	283	16.60	88.8	
13	290	22.00	114.8	
14	307	22.53	111.1	
15	323	10.38	48.7	
16	333	12.02	54.6	
17	10,380	75.00	10.9	Upper Marker

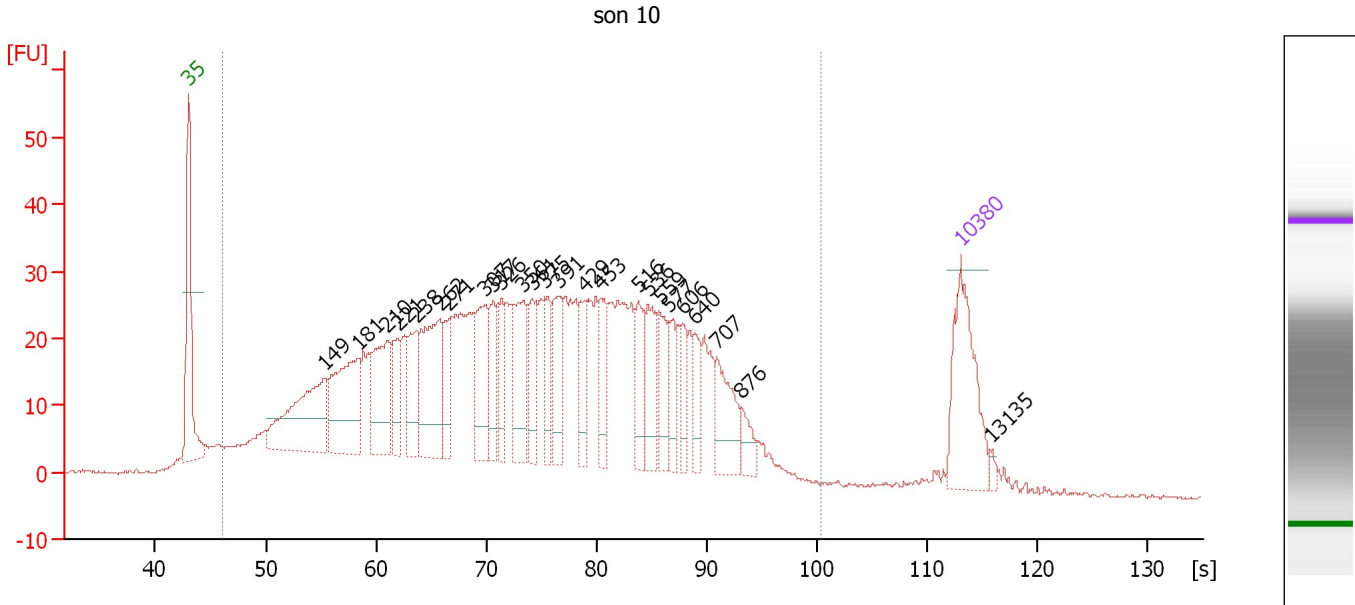
**Region table for sample 9 : son 9**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
39.59	208	94.79	1,036.7	98	59.0	1,497.85	17,312.2	Blue

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 25                      Corr. Area 1: 1,402.5  
 Noise: 0.3

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	149	151.99	1,547.2	
3	181	133.75	1,121.3	
4	210	91.96	664.5	
5	221	39.53	271.2	
6	238	53.95	342.8	
7	262	116.39	673.2	
8	271	44.68	249.8	
9	307	76.07	375.4	
10	317	36.65	175.0	
11	326	36.64	170.1	
12	350	74.44	322.3	
13	361	39.46	165.7	
14	375	36.53	147.4	
15	391	50.75	196.6	
16	429	36.12	127.5	
17	453	38.24	127.8	
18	516	39.49	115.9	
19	536	46.27	130.8	
20	559	33.00	89.4	
21	577	25.76	67.7	
22	606	22.52	56.3	
23	640	24.35	57.7	
24	707	50.05	107.3	
25	876	16.08	27.8	
26	10,380	75.00	10.9	Upper Marker




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**Electropherogram Summary Continued ...****... Peak table for sample 10 : son 10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	13,135	0.00	0.0	

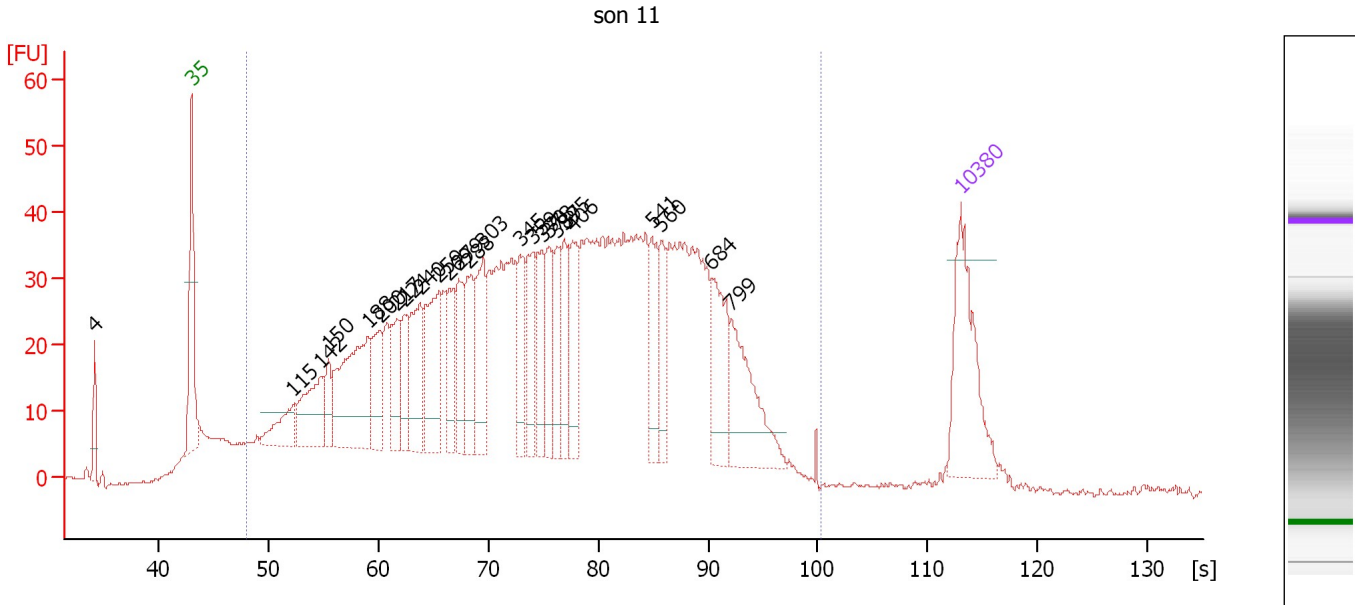
**Region table for sample 10 : son 10**

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
46.16	396	100.30	1,402.5	96	54.5	2,472.55	15,338.5	

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**Electropherogram Summary Continued ...**



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

Number of peaks found: 25                      Corr. Area 1: 1,779.3  
 Noise: 0.3

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	4	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	115	43.88	576.8	
4	142	78.63	838.7	
5	150	27.75	280.4	
6	188	151.84	1,222.1	
7	200	50.32	381.6	
8	217	50.37	350.9	
9	224	35.56	240.1	
10	240	74.28	469.0	
11	259	93.14	544.3	
12	269	44.21	248.6	
13	279	48.23	261.9	
14	288	51.79	272.8	
15	303	67.60	338.1	
16	345	44.96	197.5	
17	359	47.36	199.6	
18	370	46.75	191.5	
19	378	40.79	163.4	
20	387	37.47	146.7	
21	395	37.60	144.3	
22	406	51.47	191.9	
23	541	43.45	121.7	
24	560	34.61	93.7	
25	684	64.69	143.2	
26	799	78.28	148.4	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-04\2014-11-04\_003.xad

Created: 11/4/2014 3:30:37 PM  
Modified: 11/4/2014 4:12:44 PM

**Electropherogram Summary Continued ...****... Peak table for sample 11 : son 11**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	10,380	75.00	10.9	Upper Marker

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

From [s]	Average Size [bp]	To [s]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
48.01	424	100.24	1,779.3	94	53.8	2,727.61	15,316.6	■

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Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-04\2014-11-04\_003.xad

Created: 11/4/2014 3:30:37 PM  
Modified: 11/4/2014 4:12:44 PM

**Gel Image**

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-04\2014-11-04\_003.xad

Created: 11/4/2014 3:30:37 PM  
 Modified: 11/4/2014 4:12:44 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		11/4/2014 4:11:54 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-11-04\2014-11-04_003.xad)		Instrument	Run		11/4/2014 3:30:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/4/2014 3:30:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/4/2014 3:30:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/4/2014 3:30:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/4/2014 3:30:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/4/2014 3:30:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/4/2014 3:30:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1