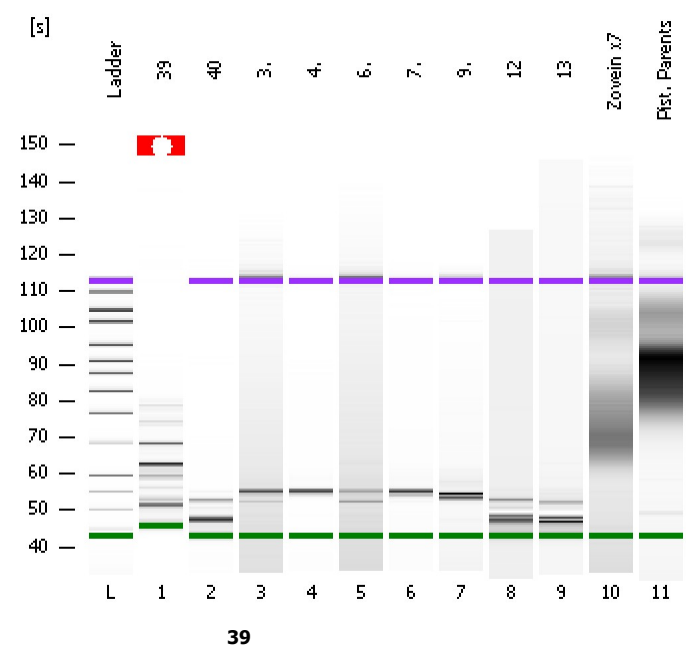


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
Modified: 2/6/2015 12:53:18 PM

**Electrophoresis File Run Summary**



Instrument Information:

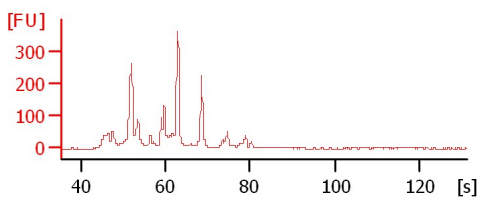
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

Assay Information:

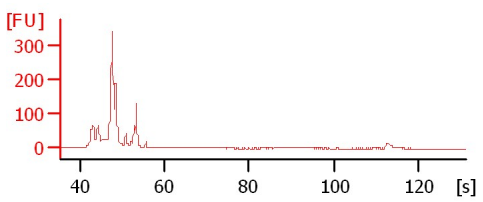
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy  
Assay Class: High Sensitivity DNA Assay  
Version: 1.03  
Assay Comments: Copyright © 2003-2010 Agilent Technologies

Chip Information:

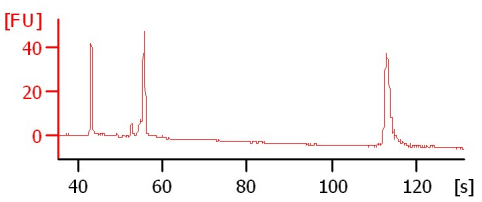
Chip Lot #:        
Reagent Kit Lot #:        
Chip Comments:



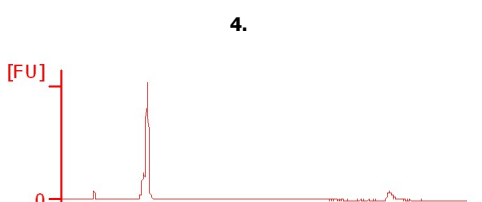
39



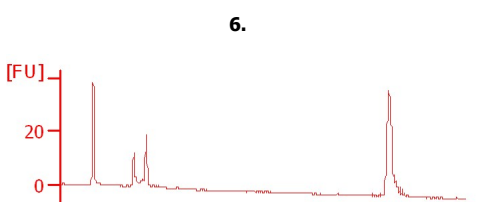
40



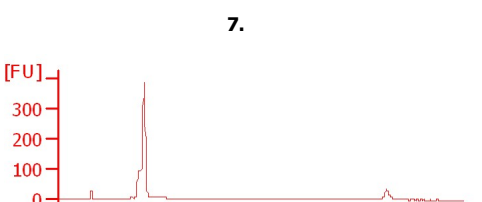
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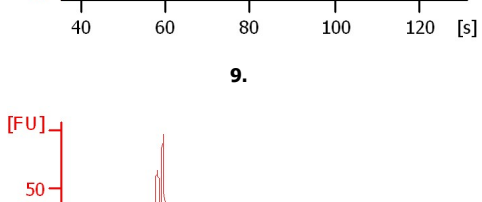
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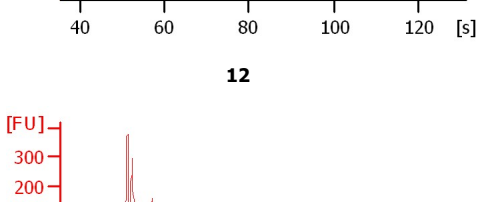
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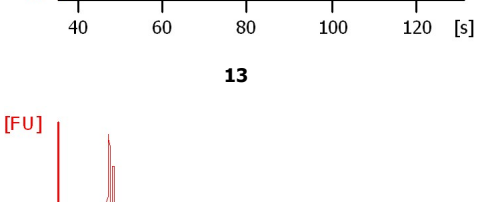
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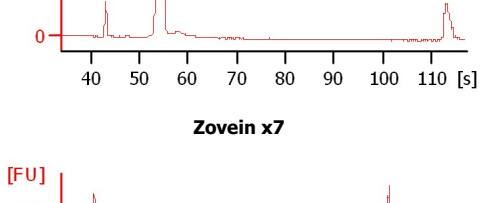
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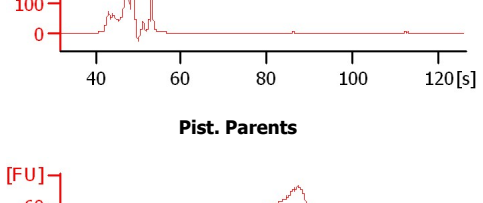
12



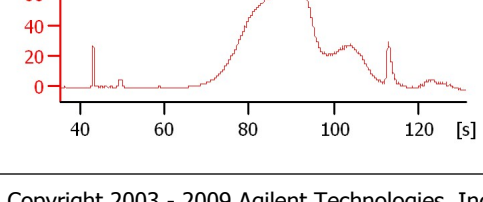
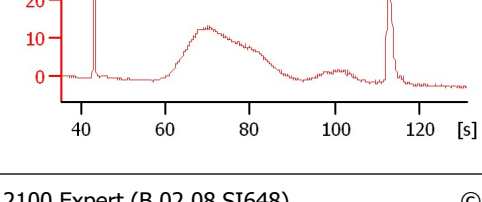
13



Zovain x7



Pist. Parents



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
Modified: 2/6/2015 12:53:18 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
39		<input type="checkbox"/>	✓			
40		<input type="checkbox"/>	✓			
3.		<input type="checkbox"/>	✓			
4.		<input type="checkbox"/>	✓			
6.		<input type="checkbox"/>	✓			
7.		<input type="checkbox"/>	✓			
9.		<input type="checkbox"/>	✓			
12		<input type="checkbox"/>	✓			
13		<input type="checkbox"/>	✓			
Zovein x7		<input type="checkbox"/>	✓			
Pist. Parents		<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\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
Modified: 2/6/2015 12:53:18 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

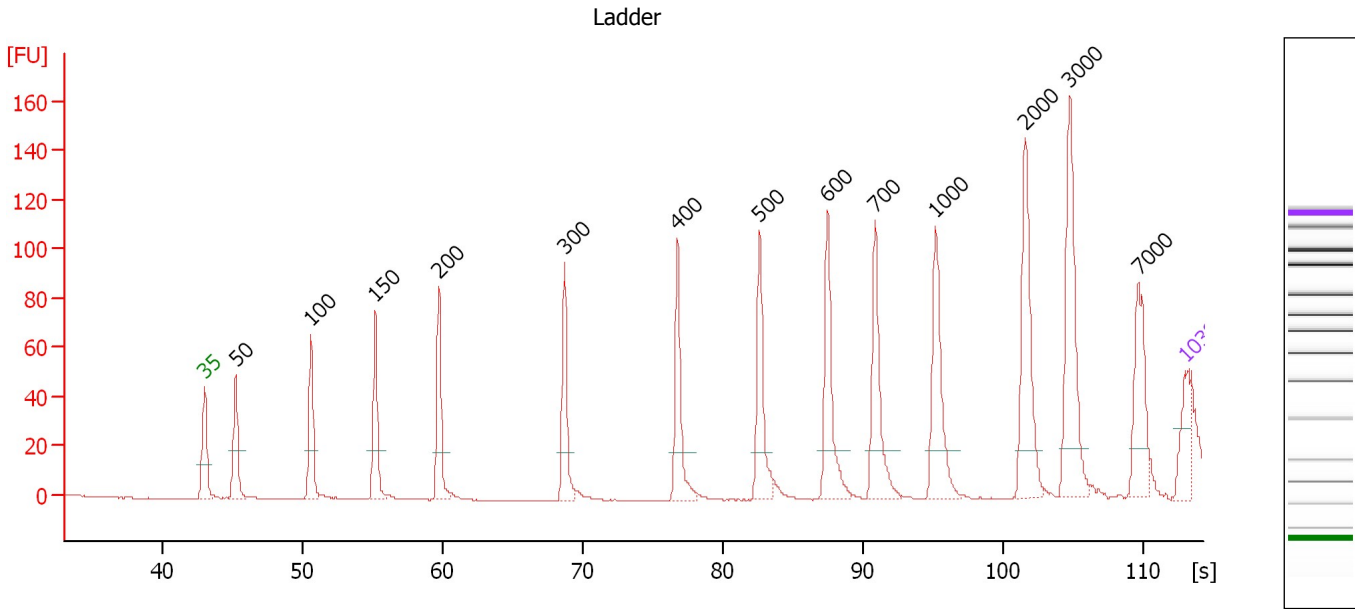
**Ladder**

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\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

**Peak table for Ladder**

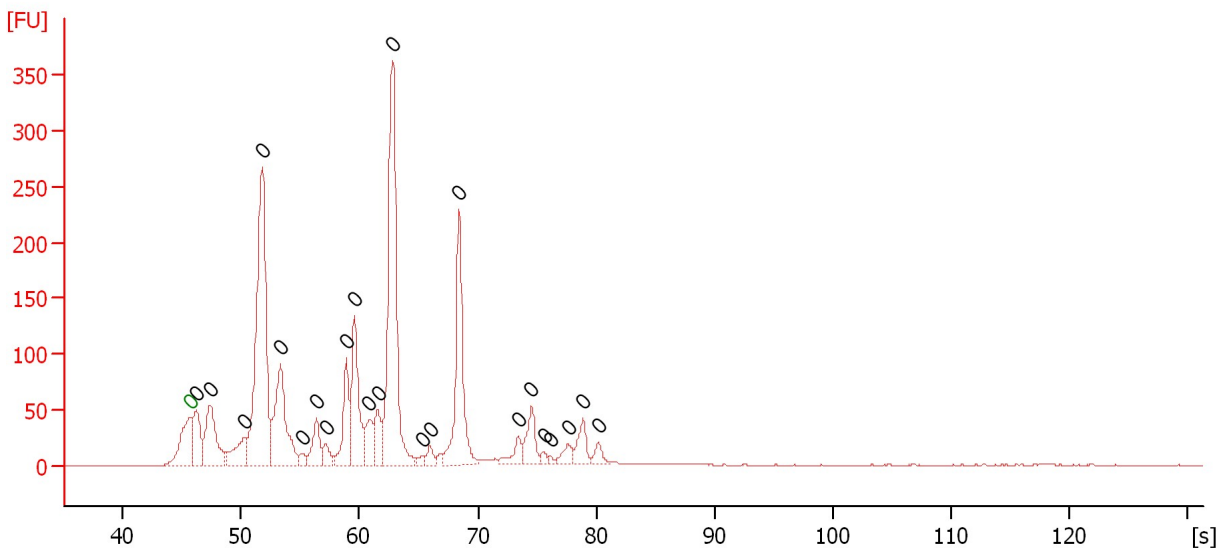
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.22
3	100	150.00	2,272.7	Ladder Peak	50.59
4	150	150.00	1,515.2	Ladder Peak	55.19
5	200	150.00	1,136.4	Ladder Peak	59.75
6	300	150.00	757.6	Ladder Peak	68.68
7	400	150.00	568.2	Ladder Peak	76.77
8	500	150.00	454.5	Ladder Peak	82.64
9	600	150.00	378.8	Ladder Peak	87.47
10	700	150.00	324.7	Ladder Peak	90.88
11	1,000	150.00	227.3	Ladder Peak	95.17
12	2,000	150.00	113.6	Ladder Peak	101.58
13	3,000	150.00	75.8	Ladder Peak	104.76
14	7,000	150.00	32.5	Ladder Peak	109.66
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**

39



**Overall Results for sample 1 : 39**

Number of peaks found: 23                      Noise: 0.3

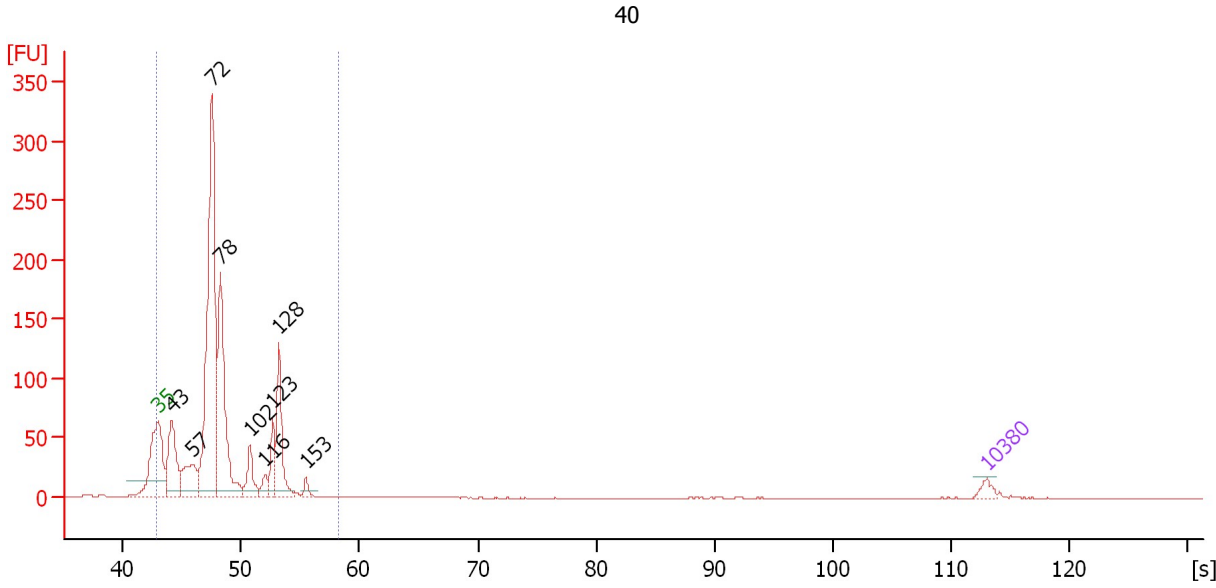
**Peak table for sample 1 : 39**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	45.70
2	0	0.00	0.0		46.25
3	0	0.00	0.0		47.35
4	0	0.00	0.0		50.30
5	0	0.00	0.0		51.80
6	0	0.00	0.0		53.35
7	0	0.00	0.0		55.15
8	0	0.00	0.0		56.35
9	0	0.00	0.0		57.15
10	0	0.00	0.0		58.90
11	0	0.00	0.0		59.60
12	0	0.00	0.0		60.85
13	0	0.00	0.0		61.55
14	0	0.00	0.0		62.80
15	0	0.00	0.0		65.40
16	0	0.00	0.0		66.00
17	0	0.00	0.0		68.45
18	0	0.00	0.0		73.45
19	0	0.00	0.0		74.55
20	0	0.00	0.0		75.60
21	0	0.00	0.0		76.15
22	0	0.00	0.0		77.65
23	0	0.00	0.0		78.90
24	0	0.00	0.0		80.20

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 40**

Number of peaks found: 9                      Corr. Area 1: 1,338.9  
 Noise: 0.2

**Peak table for sample 2 : 40**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	43	1,241.92	44,206.5		44.12
3	57	757.31	20,232.5		45.94
4	72	5,232.20	110,853.4		47.53
5	78	2,575.77	50,006.1		48.23
6	102	489.61	7,286.4		50.76
7	116	190.84	2,503.0		52.02
8	123	468.24	5,785.0		52.67
9	128	1,113.61	13,159.1		53.19
10	153	123.55	1,222.4		55.48
11	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 2 : 40**

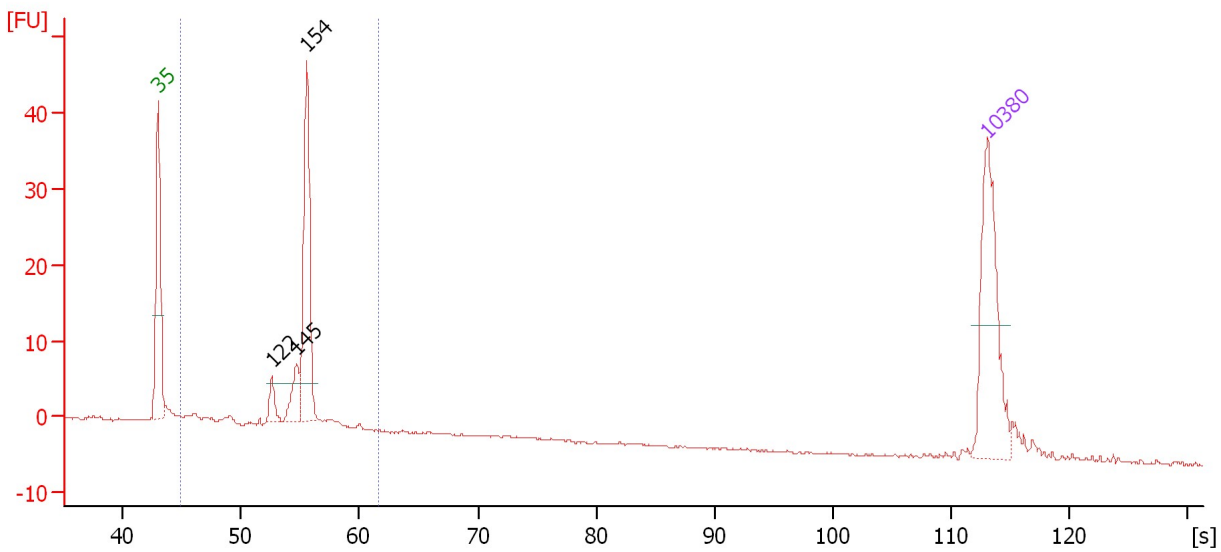
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
34	78	183	1,338.9	99	34.5	12,219.00	257,225.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**

3.



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

Number of peaks found: 3                      Corr. Area 1: 85.5  
 Noise: 0.1

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	122	15.41	191.9		52.58
3	145	26.52	278.0		54.69
4	154	130.86	1,287.7		55.55
5	10,380	75.00	10.9	Upper Marker	113.00

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

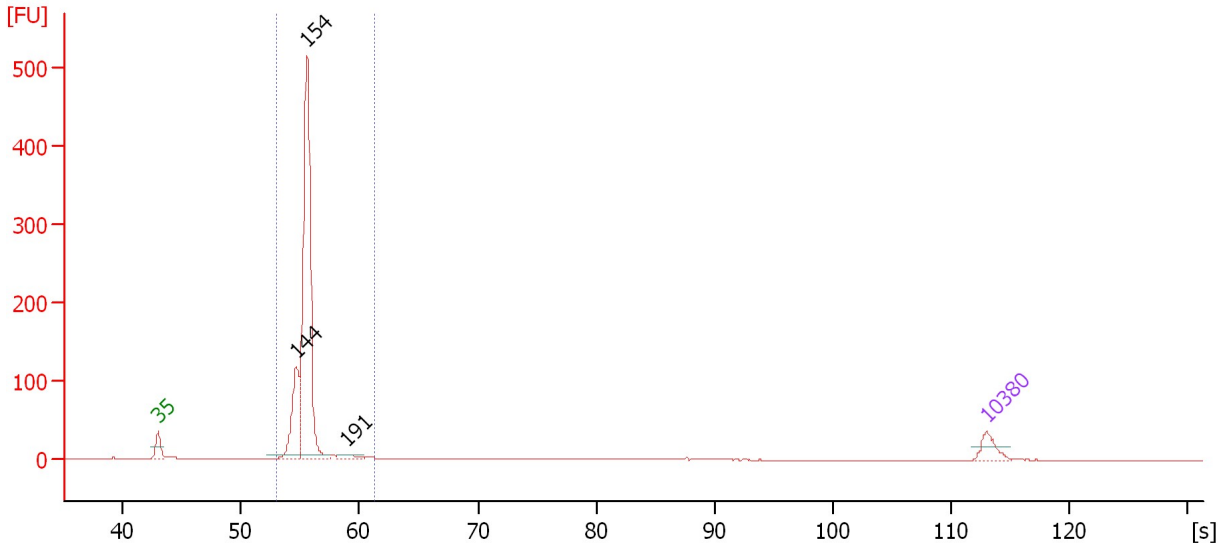
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
47	145	222	85.5	89	16.3	211.18	2,342.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**

4.



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

Number of peaks found: 3                      Corr. Area 1: 900.9  
 Noise: 0.1

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	144	505.58	5,314.9		54.65
3	154	2,209.77	21,702.7		55.58
4	191	53.88	428.0		58.91
5	10,380	75.00	10.9	Upper Marker	113.00

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

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
126	153	218	900.9	99	5.8	2,764.28	27,360.4	Blue

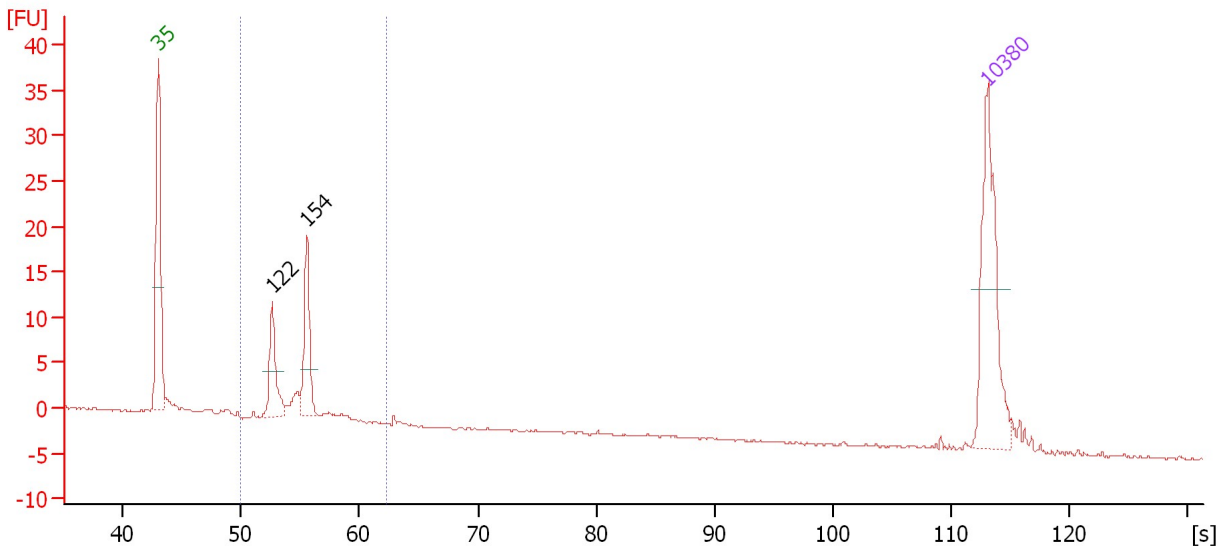


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**

6.



**Overall Results for sample 5 : 6.**

Number of peaks found: 2                      Corr. Area 1: 45.9  
 Noise: 0.1

**Peak table for sample 5 : 6.**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	122	47.24	585.6		52.64
3	154	57.58	565.4		55.58
4	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 5 : 6.**

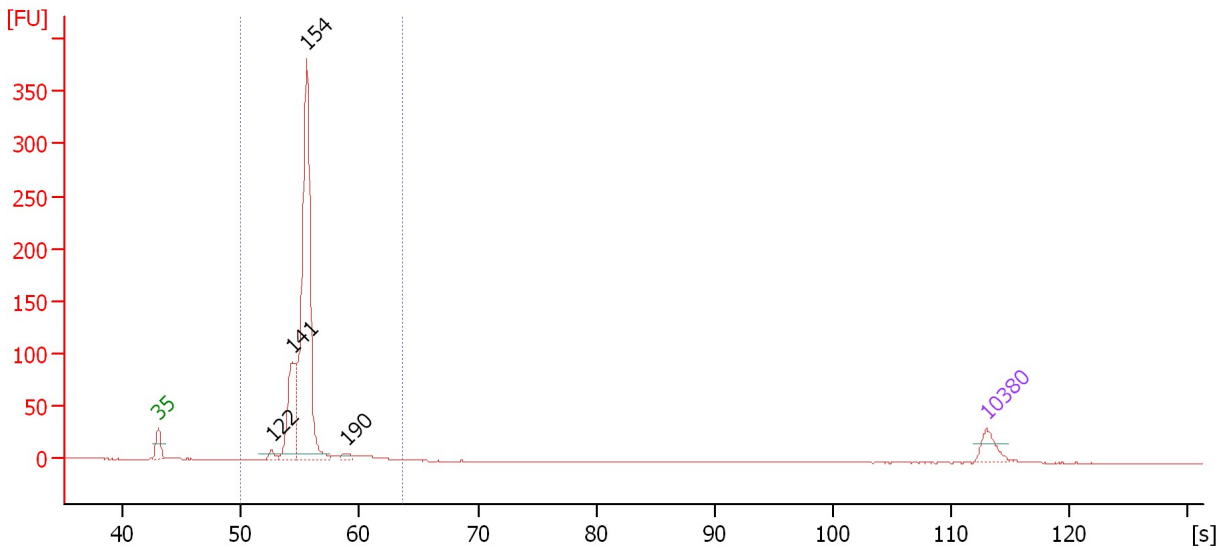
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
94	144	228	45.9	78	12.3	133.46	1,422.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**

7.



**Overall Results for sample 6 : 7.**

Number of peaks found: 4                      Corr. Area 1: 762.4  
 Noise: 0.1

**Peak table for sample 6 : 7.**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	122	38.99	486.0		52.57
3	141	524.20	5,640.1		54.35
4	154	1,959.27	19,268.4		55.56
5	190	33.53	267.1		58.85
6	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 6 : 7.**

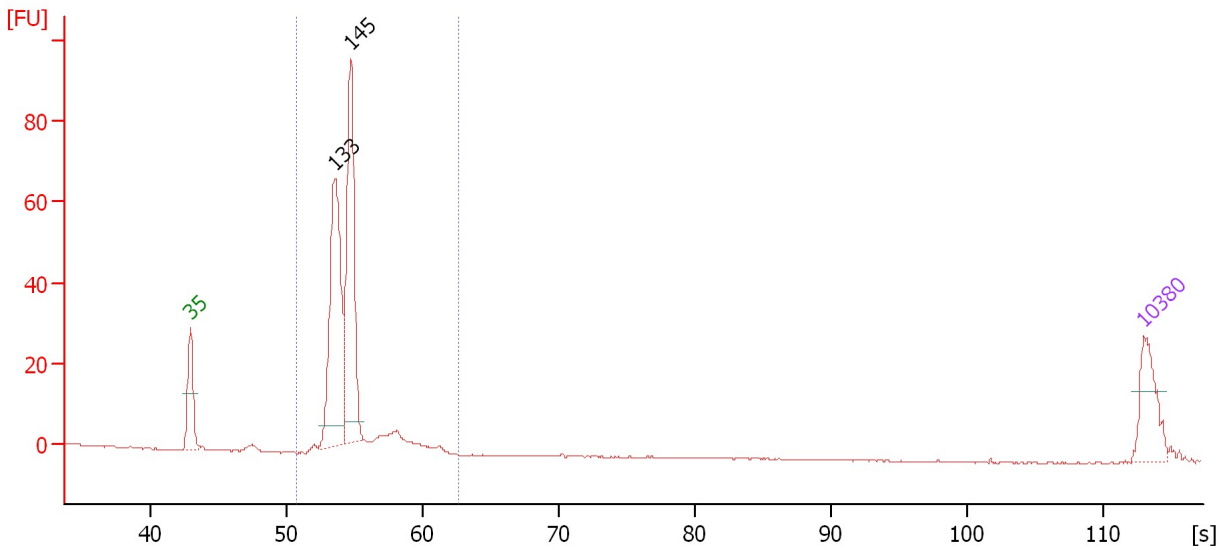
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
94	153	244	762.4	99	8.7	2,650.79	26,460.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**

9.



**Overall Results for sample 7 : 9.**

Number of peaks found: 2                      Corr. Area 1: 304.0  
 Noise: 0.1

**Peak table for sample 7 : 9.**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	133	495.85	5,657.1		53.61
3	145	473.55	4,940.3		54.75
4	10,380	75.00	10.9	Upper Marker	113.00

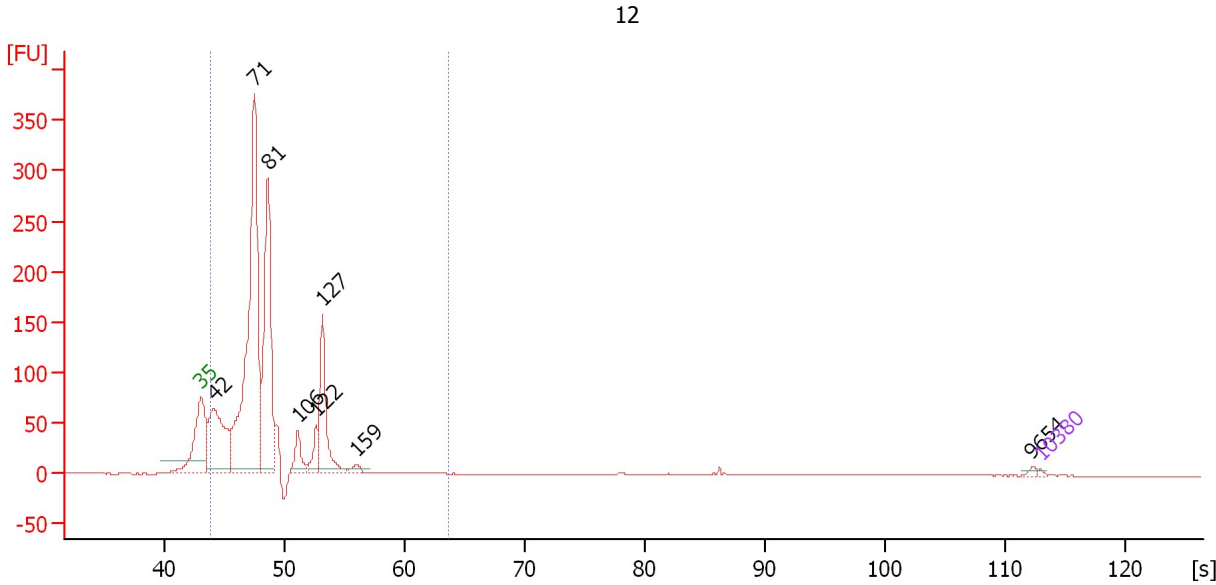
**Region table for sample 7 : 9.**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
103	143	232	304.0	99	9.9	1,072.57	11,478.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 12**

Number of peaks found: 8                      Corr. Area 1: 1,823.1  
 Noise: 0.1

**Peak table for sample 8 : 12**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	42	12,700.07	455,479.7		44.07
3	71	41,071.66	876,686.9		47.48
4	81	20,868.40	388,403.0		48.59
5	106	2,689.08	38,601.1		51.10
6	122	2,122.60	26,341.6		52.62
7	127	9,258.29	110,071.7		53.12
8	159	711.16	6,791.9		55.98
9	9,654	157.56	24.7		112.28
10	10,380	75.00	10.9	Upper Marker	113.00

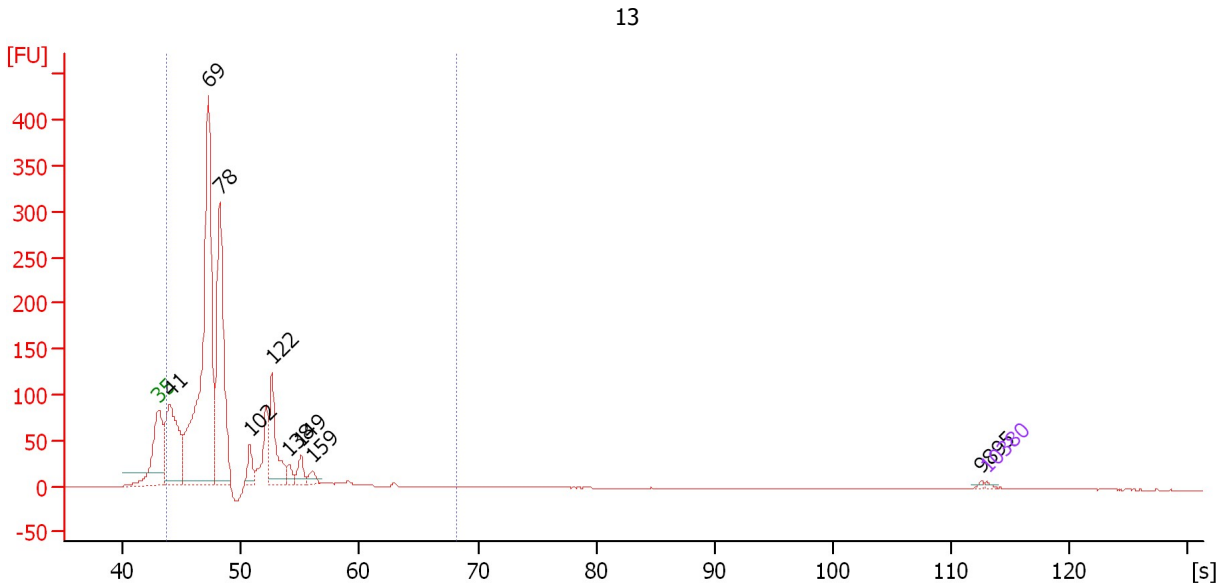
**Region table for sample 8 : 12**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
41	81	244	1,823.1	94	34.6	90,430.73	1,865,884.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 13**

Number of peaks found: 9                      Corr. Area 1: 1,925.6  
 Noise: 0.1

**Peak table for sample 9 : 13**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	41	8,429.78	308,107.0		43.96
3	69	27,484.02	604,393.1		47.25
4	78	13,966.53	271,952.9		48.21
5	102	1,346.15	20,026.7		50.76
6	122	4,755.41	59,027.7		52.62
7	138	633.35	6,970.9		54.06
8	149	987.96	10,070.8		55.07
9	159	527.24	5,020.7		56.02
10	9,895	69.12	10.6		112.52
11	10,380	75.00	10.9	Upper Marker	113.00

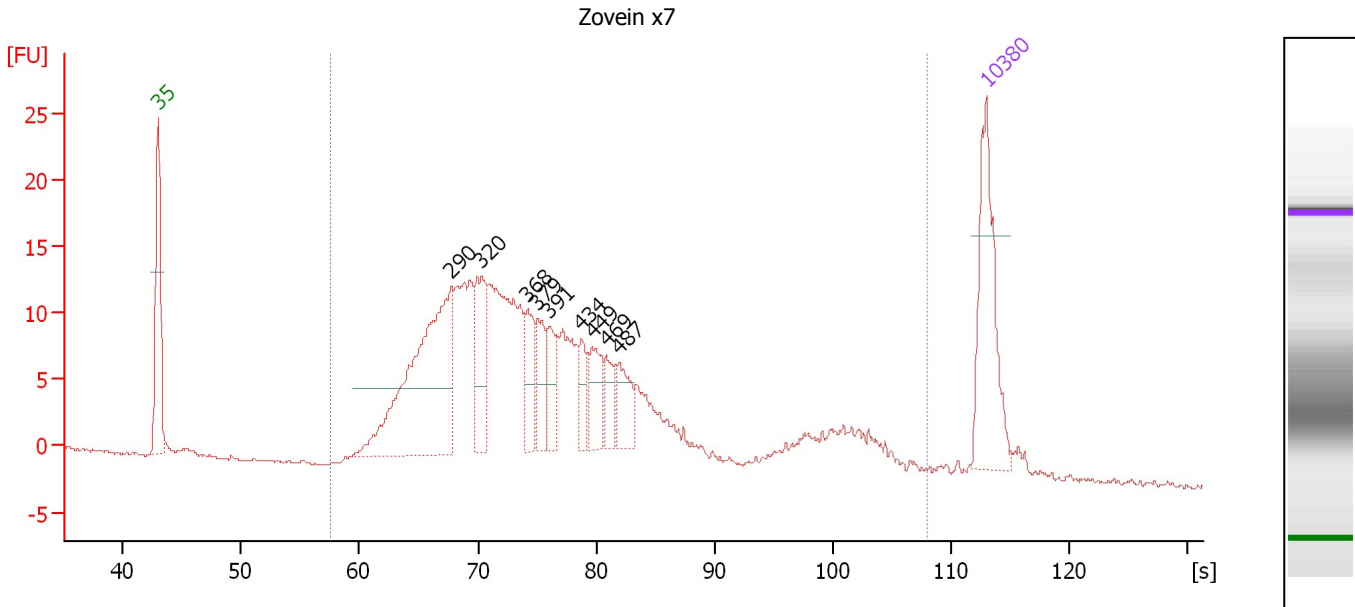
**Region table for sample 9 : 13**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
40	82	294	1,925.6	97	41.4	62,780.06	1,332,284.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Zovein x7**

Number of peaks found: 9                      Corr. Area 1: 360.3  
 Noise: 0.1

**Peak table for sample 10 : Zovein x7**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	290	234.30	1,226.1		67.75
3	320	58.70	277.6		70.33
4	368	35.02	144.1		74.21
5	379	30.14	120.5		75.07
6	391	31.20	120.9		76.04
7	434	19.68	68.7		78.78
8	449	32.13	108.5		79.64
9	469	19.85	64.1		80.82
10	487	29.13	90.5		81.90
11	10,380	75.00	10.9	Upper Marker	113.00

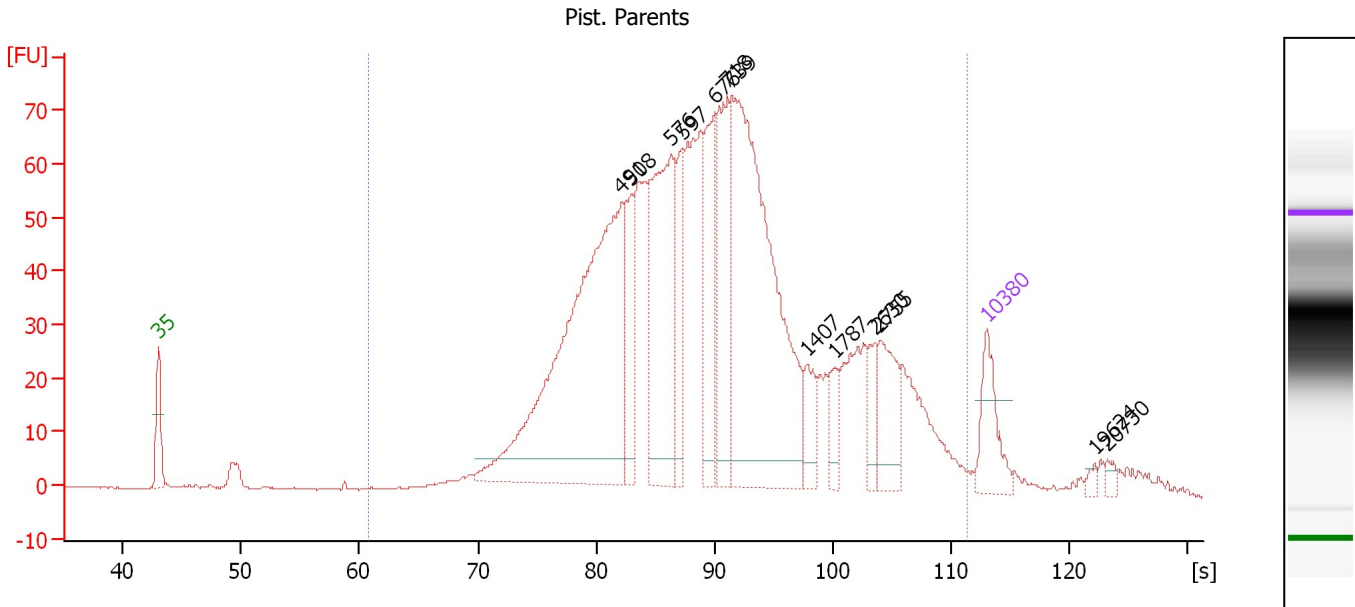
**Region table for sample 10 : Zovein x7**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
176	594	5,685	360.3	95	100.0	1,079.99	4,505.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : Pist. Parents**

Number of peaks found: 13                      Corr. Area 1: 1,661.5  
 Noise: 0.1

**Peak table for sample 11 : Pist. Parents**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	491	923.84	2,850.4		82.11
3	508	130.60	389.8		83.01
4	576	372.83	980.0		86.33
5	597	116.05	294.6		87.32
6	676	181.42	406.9		90.05
7	718	235.49	497.0		91.14
8	739	780.64	1,601.1		91.43
9	1,407	55.13	59.4		97.78
10	1,787	39.16	33.2		100.21
11	2,630	39.88	23.0		103.58
12	2,755	92.76	51.0		103.98
13	10,380	75.00	10.9	Upper Marker	113.00
14	19,624	0.00	0.0		122.12
15	20,730	0.00	0.0		123.21

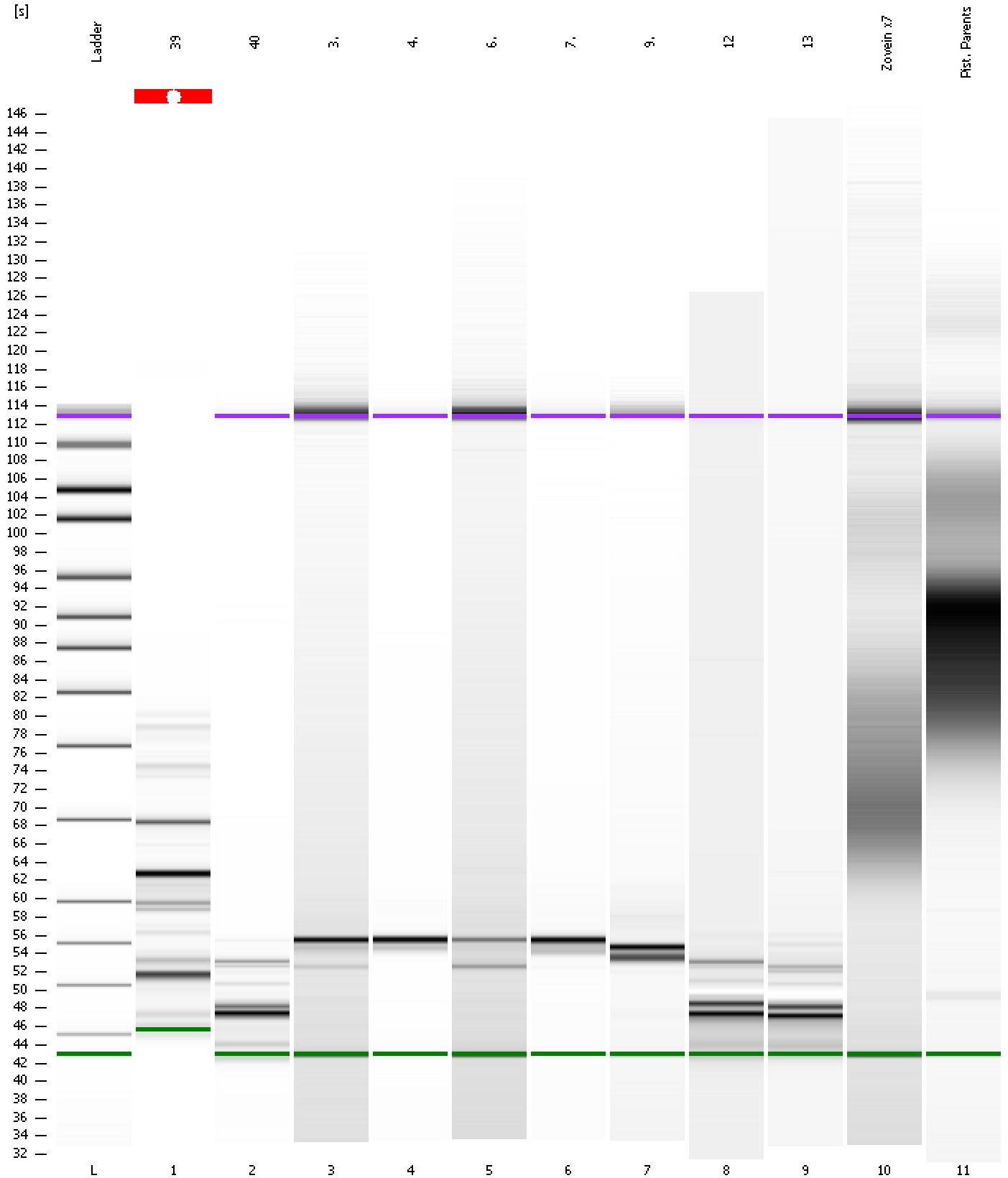
**Region table for sample 11 : Pist. Parents**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
212	1,108	8,658	1,661.5	97	100.0	3,942.26	9,504.5	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
Modified: 2/6/2015 12:53:18 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_004.xad

Created: 2/6/2015 12:08:03 PM  
 Modified: 2/6/2015 12:53:18 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		2/6/2015 12:49:20 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-02-06\2015-02-06_004.xad)		Instrument	Run		2/6/2015 12:08:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/6/2015 12:08:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/6/2015 12:08:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/6/2015 12:08:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/6/2015 12:08:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/6/2015 12:08:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/6/2015 12:08:09 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1