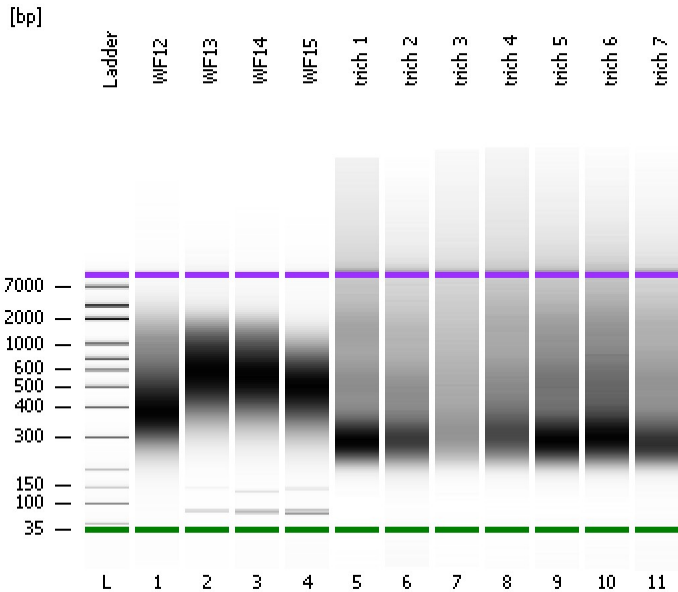


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
Modified: 6/16/2015 4:23:36 PM

### Electrophoresis File Run Summary



#### Instrument Information:

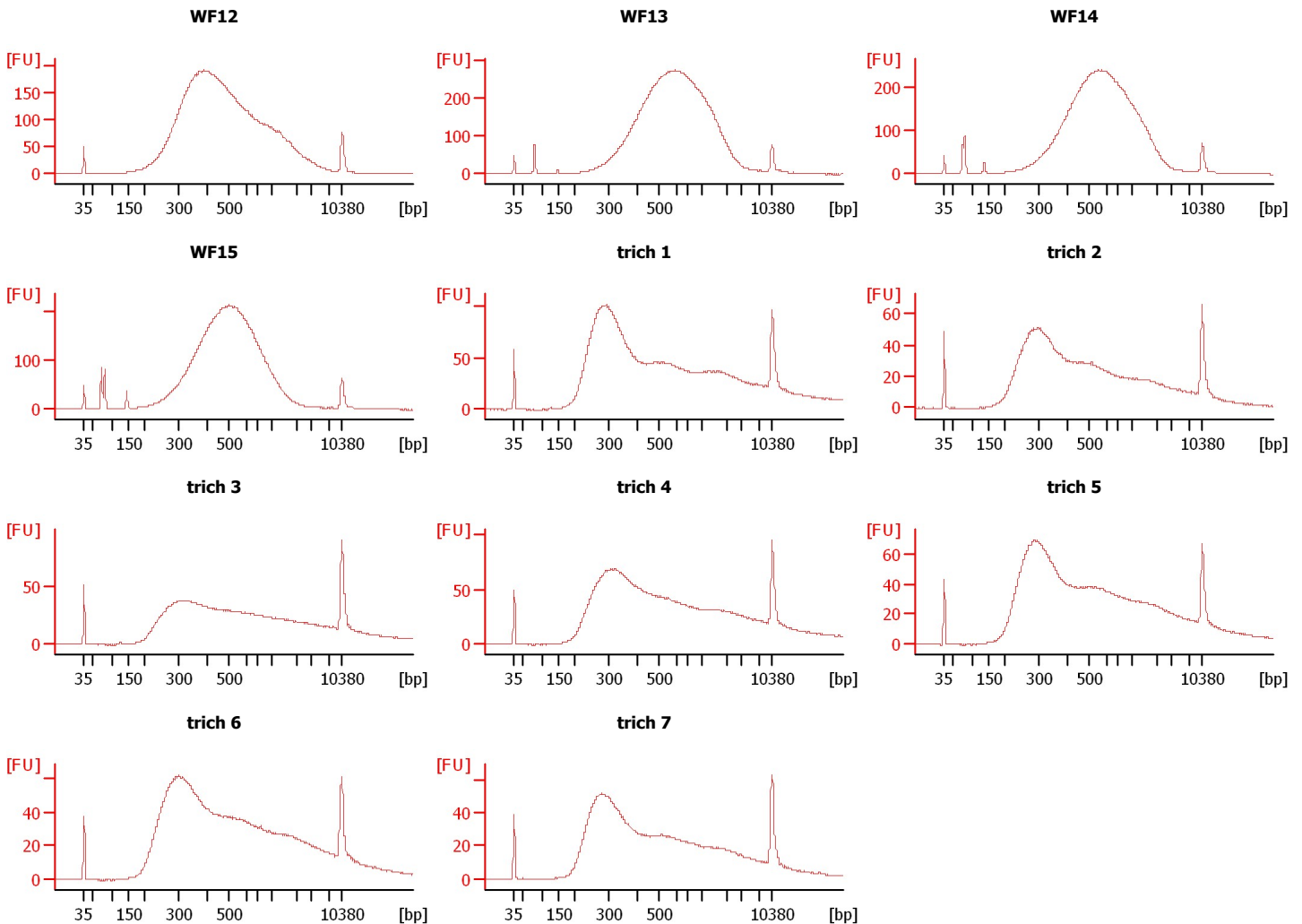
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### 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\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WF12		<input type="checkbox"/>	✓			
WF13		<input type="checkbox"/>	✓			
WF14		<input type="checkbox"/>	✓			
WF15		<input type="checkbox"/>	✓			
trich 1		<input type="checkbox"/>	✓			
trich 2		<input type="checkbox"/>	✓			
trich 3		<input type="checkbox"/>	✓			
trich 4		<input type="checkbox"/>	✓			
trich 5		<input type="checkbox"/>	✓			
trich 6		<input type="checkbox"/>	✓			
trich 7		<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\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
Modified: 6/16/2015 4:23:36 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

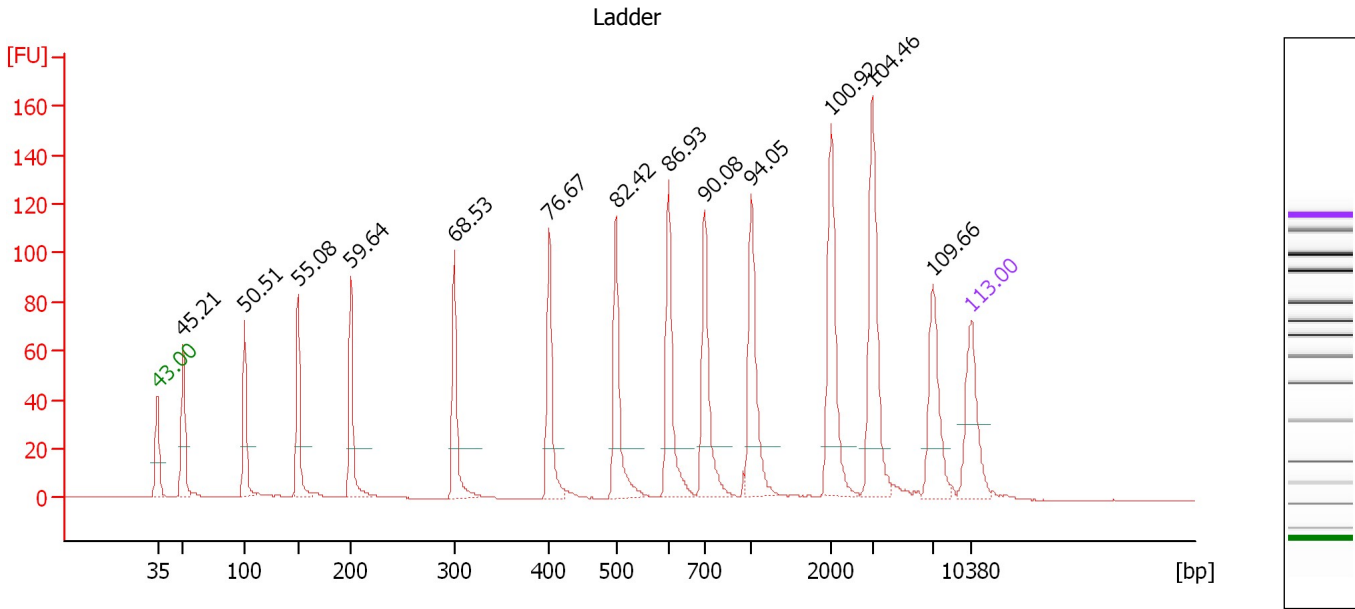
**Ladder**

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\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

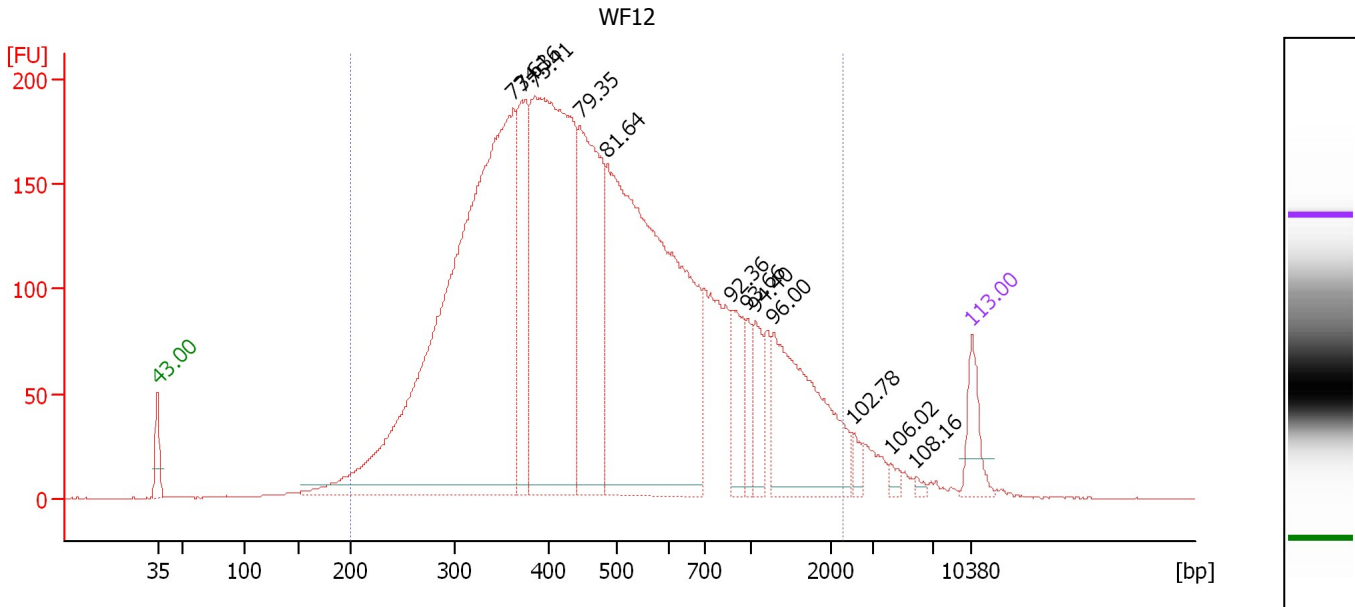
**Peak table for Ladder**

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	45.21
3	100	150.00	2,272.7	Ladder Peak	50.51
4	150	150.00	1,515.2	Ladder Peak	55.08
5	200	150.00	1,136.4	Ladder Peak	59.64
6	300	150.00	757.6	Ladder Peak	68.53
7	400	150.00	568.2	Ladder Peak	76.67
8	500	150.00	454.5	Ladder Peak	82.42
9	600	150.00	378.8	Ladder Peak	86.93
10	700	150.00	324.7	Ladder Peak	90.08
11	1,000	150.00	227.3	Ladder Peak	94.05
12	2,000	150.00	113.6	Ladder Peak	100.92
13	3,000	150.00	75.8	Ladder Peak	104.46
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\2015-06-16\2015-06-16\_004.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : WF12**

Number of peaks found: 12                      Corr. Area 1: 5,833.1  
 Noise: 0.2

**Peak table for sample 1 : WF12**

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	362	2,429.02	10,154.8		73.61
3	372	368.85	1,503.9		74.36
4	384	1,403.31	5,530.6		75.41
5	447	683.84	2,320.5		79.35
6	486	1,731.44	5,392.9		81.64
7	872	140.07	243.3		92.36
8	970	66.29	103.5		93.66
9	1,051	95.28	137.3		94.40
10	1,283	417.77	493.3		96.00
11	2,525	25.27	15.2		102.78
12	4,200	15.95	5.8		106.02
13	5,848	7.92	2.1		108.16
14	10,380	75.00	10.9	Upper Marker	113.00

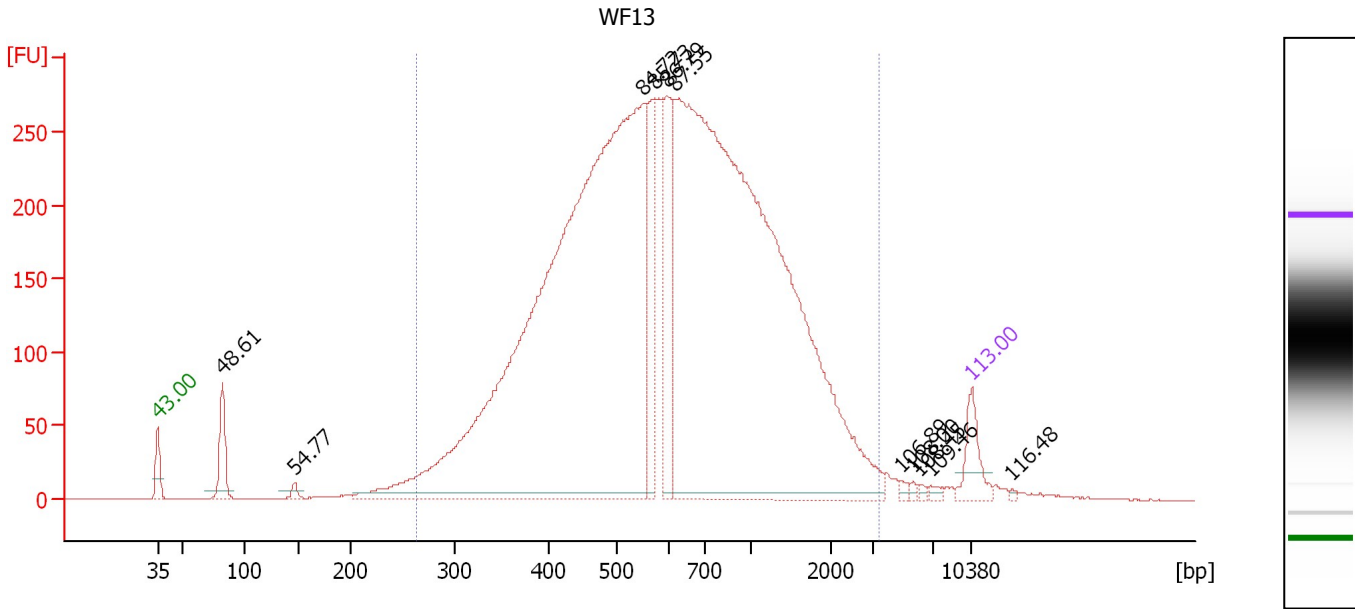
**Region table for sample 1 : WF12**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	576	2,313	5,833.1	28,275.8	96	64.9	7,851.12

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : WF13**

Number of peaks found: 11                      Corr. Area 1: 7,202.6  
 Noise: 0.3

**Peak table for sample 2 : WF13**

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	82	162.14	2,994.5		48.61
3	147	21.78	225.1		54.77
4	551	3,613.37	9,937.7		84.72
5	573	247.74	654.8		85.73
6	597	292.97	743.8		86.79
7	619	3,526.91	8,626.5		87.55
8	4,868	9.39	2.9		106.89
9	5,722	6.35	1.7		108.00
10	6,072	6.81	1.7		108.45
11	6,848	9.06	2.0		109.46
12	10,380	75.00	10.9	Upper Marker	113.00
13	13,909	0.00	0.0		116.48

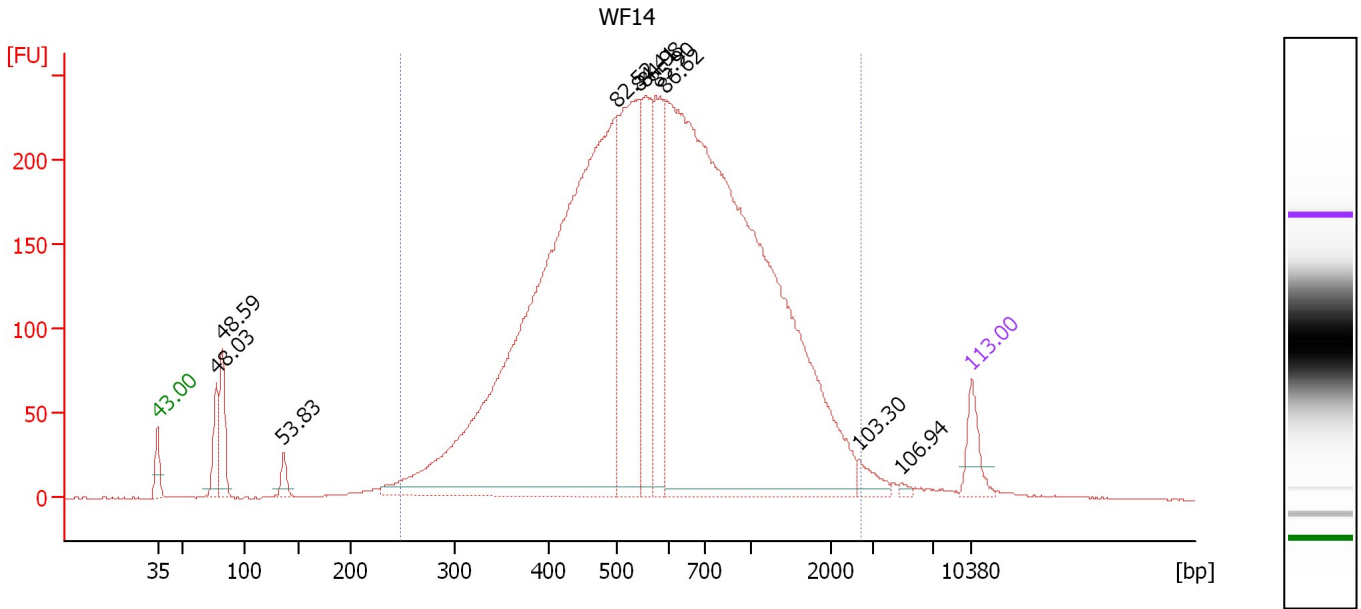
**Region table for sample 2 : WF13**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
264	761	3,441	7,202.6	21,836.2	96	61.9	8,017.87

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : WF14**

Number of peaks found: 10                      Corr. Area 1: 6,090.4  
 Noise: 0.3

**Peak table for sample 3 : WF14**

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	77	146.60	2,899.8		48.03
3	82	216.51	4,004.3		48.59
4	136	54.16	601.9		53.83
5	502	3,281.00	9,899.4		82.52
6	544	773.35	2,153.1		84.41
7	557	396.77	1,079.8		84.98
8	577	365.74	960.1		85.90
9	593	3,602.23	9,202.6		86.62
10	2,672	42.63	24.2		103.30
11	4,911	8.52	2.6		106.94
12	10,380	75.00	10.9	Upper Marker	113.00

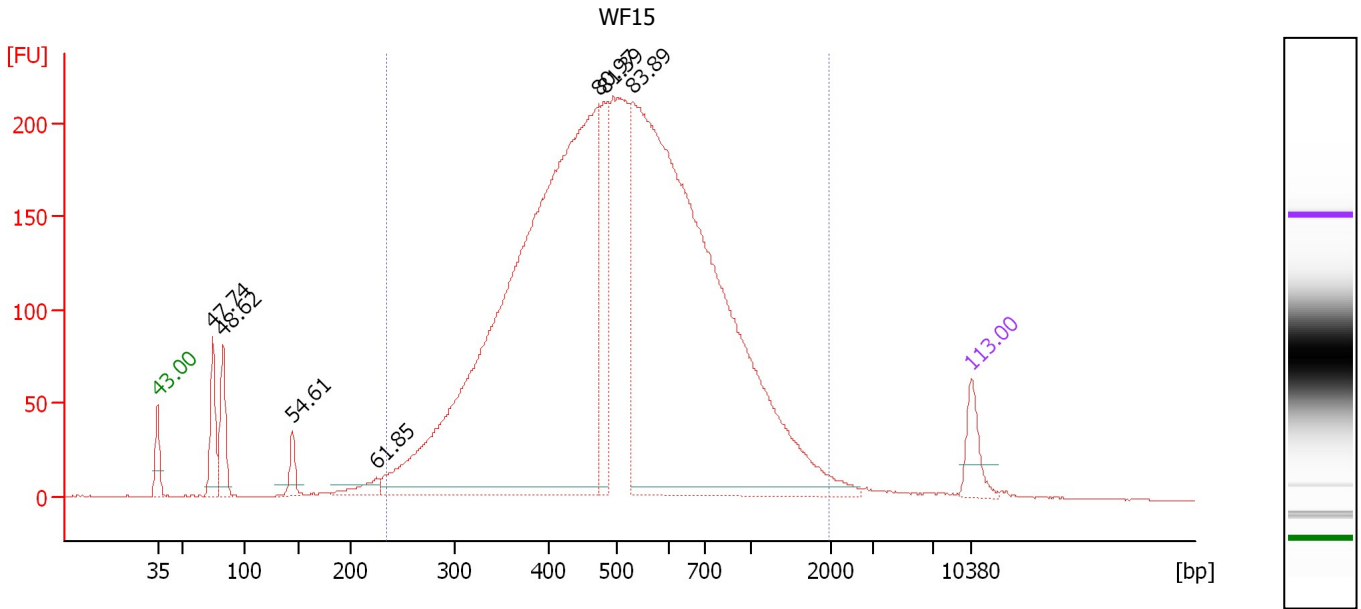
**Region table for sample 3 : WF14**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
248	711	2,716	6,090.4	24,044.5	94	57.9	8,507.86

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : WF15**

Number of peaks found: 7                      Corr. Area 1: 5,195.1  
 Noise: 0.2

**Peak table for sample 4 : WF15**

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	74	198.05	4,062.5		47.74
3	82	199.13	3,669.7		48.63
4	145	68.47	715.7		54.61
5	225	49.31	332.2		61.85
6	475	3,381.99	10,793.1		80.97
7	482	319.63	1,004.7		81.39
8	532	3,141.26	8,938.1		83.89
9	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : WF15**

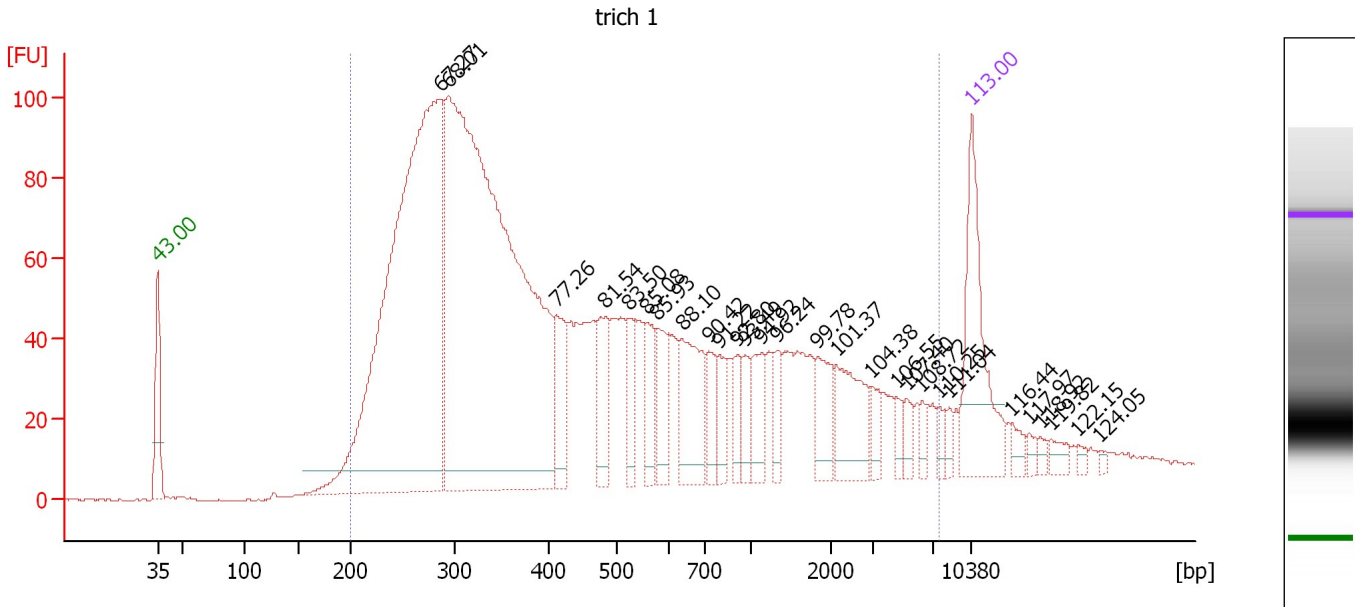
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
234	560	1,975	5,195.1	24,806.2	94	45.4	7,637.12



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : trich 1**

Number of peaks found: 28                      Corr. Area 1: 2,897.3  
 Noise: 0.2

**Peak table for sample 5 : trich 1**

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	286	666.79	3,534.5		67.27
3	294	867.11	4,466.2		68.01
4	410	47.68	176.1		77.26
5	485	44.90	140.3		81.54
6	524	26.25	75.9		83.50
7	559	31.34	84.9		85.08
8	578	32.78	86.0		85.93
9	637	64.70	153.9		88.10
10	726	23.89	49.8		90.42
11	786	22.33	43.0		91.22
12	906	15.99	26.7		92.80
13	958	16.71	26.4		93.49
14	1,126	25.27	34.0		94.92
15	1,318	14.64	16.8		96.24
16	1,834	27.29	22.5		99.78
17	2,126	44.03	31.4		101.37
18	2,978	12.69	6.5		104.38
19	4,608	8.82	2.9		106.55
20	5,258	8.41	2.4		107.40
21	6,274	7.10	1.7		108.72
22	7,596	6.47	1.3		110.25
23	8,399	6.60	1.2		111.04
24	10,380	75.00	10.9	Upper Marker	113.00
25	13,860	0.00	0.0		116.44

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 5 : trich 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	15,412	0.00	0.0		117.97
27	16,376	0.00	0.0		118.92
28	17,286	0.00	0.0		119.82
29	19,642	0.00	0.0		122.15
30	21,569	0.00	0.0		124.05

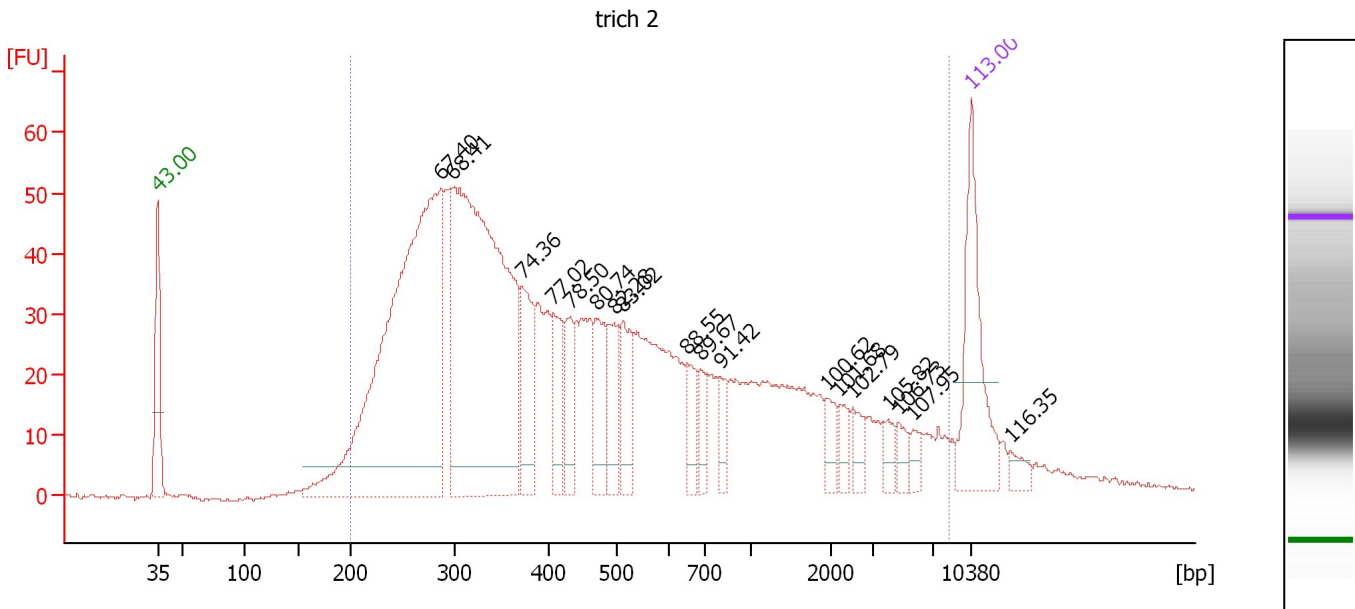
#### Region table for sample 5 : trich 1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	859	7,550	2,897.3	9,599.7	94	100.0	2,362.05

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : trich 2**

Number of peaks found: 18                      Corr. Area 1: 1,669.5  
 Noise: 0.4

**Peak table for sample 6 : trich 2**

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	287	554.72	2,925.6		67.40
3	299	525.17	2,664.3		68.41
4	372	71.19	290.3		74.36
5	406	44.28	165.3		77.02
6	432	38.11	133.7		78.50
7	471	50.02	161.0		80.74
8	498	41.65	126.8		82.28
9	513	46.17	136.2		83.02
10	651	25.66	59.7		88.55
11	687	19.23	42.4		89.67
12	801	15.88	30.0		91.42
13	1,955	14.42	11.2		100.62
14	2,213	12.76	8.7		101.68
15	2,529	11.59	6.9		102.79
16	4,050	11.01	4.1		105.82
17	4,745	9.68	3.1		106.73
18	5,684	7.68	2.0		107.95
19	10,380	75.00	10.9	Upper Marker	113.00
20	13,771	0.00	0.0		116.35

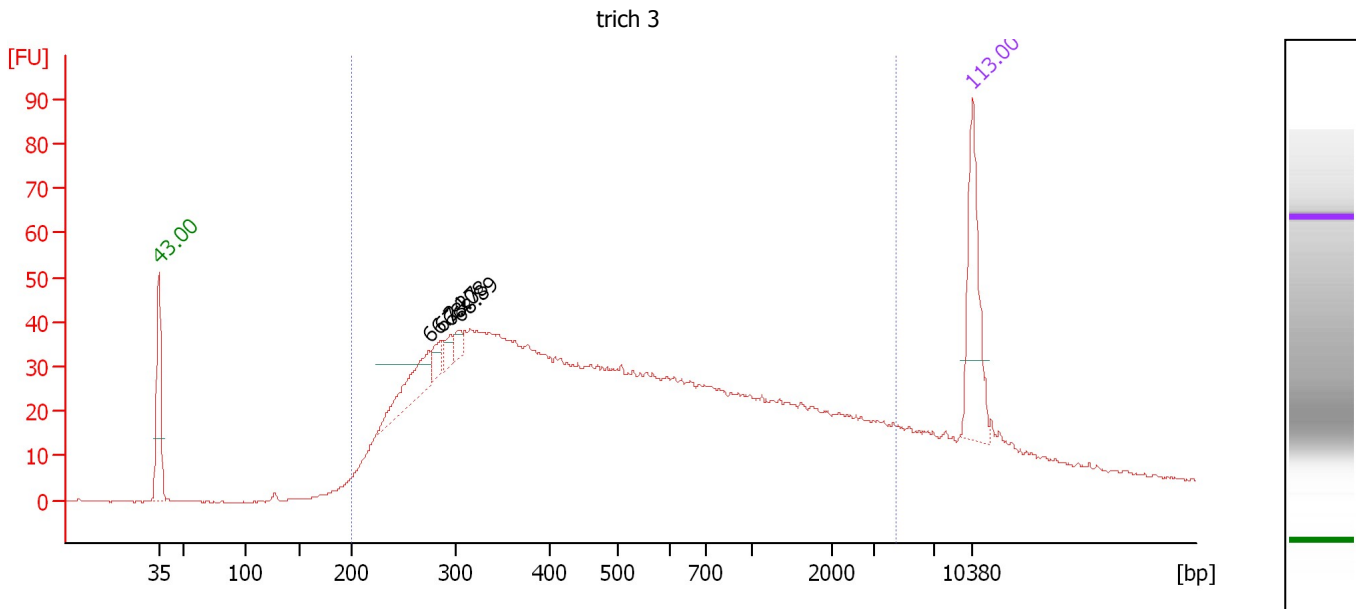
**Region table for sample 6 : trich 2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	882	8,366	1,669.5	8,316.1	95	100.0	2,084.25

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : trich 3**

Number of peaks found: 4                      Corr. Area 1: 1,477.1  
 Noise: 0.2

**Peak table for sample 7 : trich 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	274	58.83	325.0		66.24
3	286	15.80	83.7		67.27
4	295	12.74	65.4		68.08
5	304	10.29	51.2		68.89
6	10,380	75.00	10.9	Upper Marker	113.00

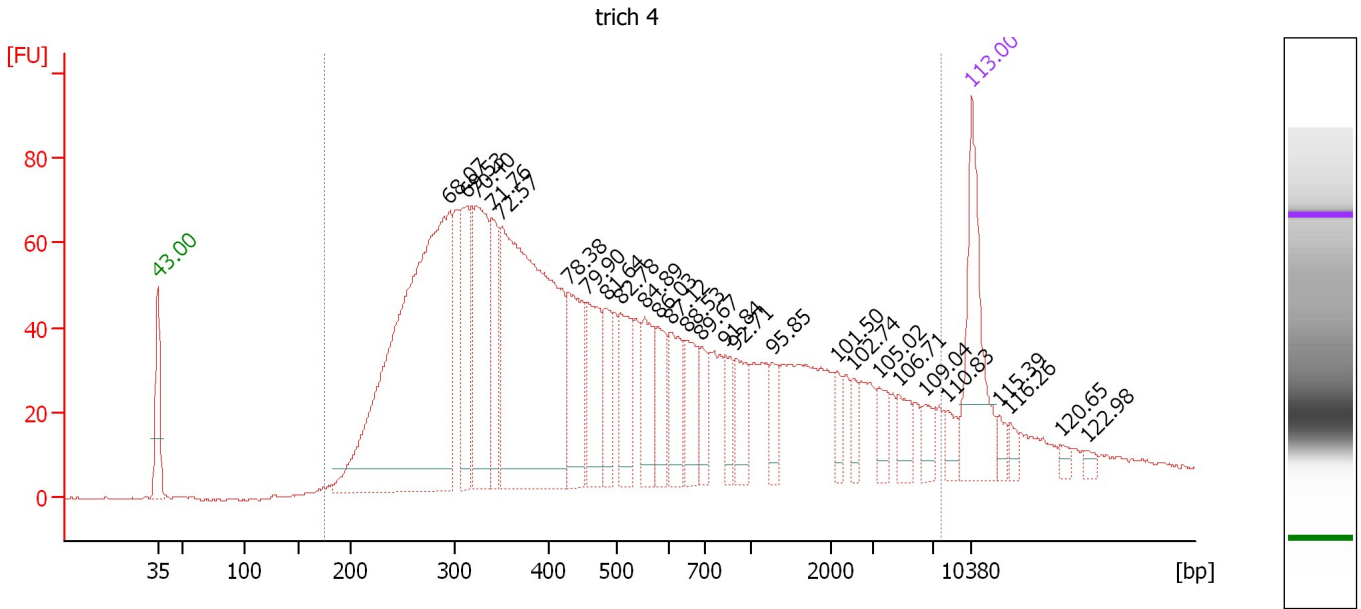
**Region table for sample 7 : trich 3**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	757	4,447	1,477.1	8,017.0	88	99.1	2,144.36

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

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 Modified: 6/16/2015 4:23:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : trich 4**

Number of peaks found: 27                      Corr. Area 1: 2,441.0  
 Noise: 0.3

**Peak table for sample 8 : trich 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	295	554.67	2,850.1		68.07
3	312	84.96	412.1		69.53
4	323	147.95	693.9		70.40
5	340	65.97	294.2		71.76
6	350	405.74	1,758.1		72.57
7	430	85.90	302.9		78.38
8	456	66.99	222.5		79.90
9	486	35.89	111.8		81.64
10	508	57.90	172.7		82.78
11	555	45.33	123.8		84.89
12	580	37.77	98.7		86.03
13	606	44.51	111.3		87.12
14	651	39.08	91.0		88.53
15	687	23.76	52.4		89.67
16	833	22.12	40.2		91.84
17	898	32.87	55.4		92.71
18	1,262	16.86	20.2		95.85
19	2,162	12.37	8.7		101.50
20	2,515	12.32	7.4		102.74
21	3,434	16.35	7.2		105.02
22	4,727	17.39	5.6		106.71
23	6,521	13.77	3.2		109.04
24	8,182	11.82	2.2		110.83
25	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad


Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 8 : trich 4

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	12,798	0.00	0.0		115.39
27	13,677	0.00	0.0		116.26
28	18,127	0.00	0.0		120.65
29	20,490	0.00	0.0		122.98

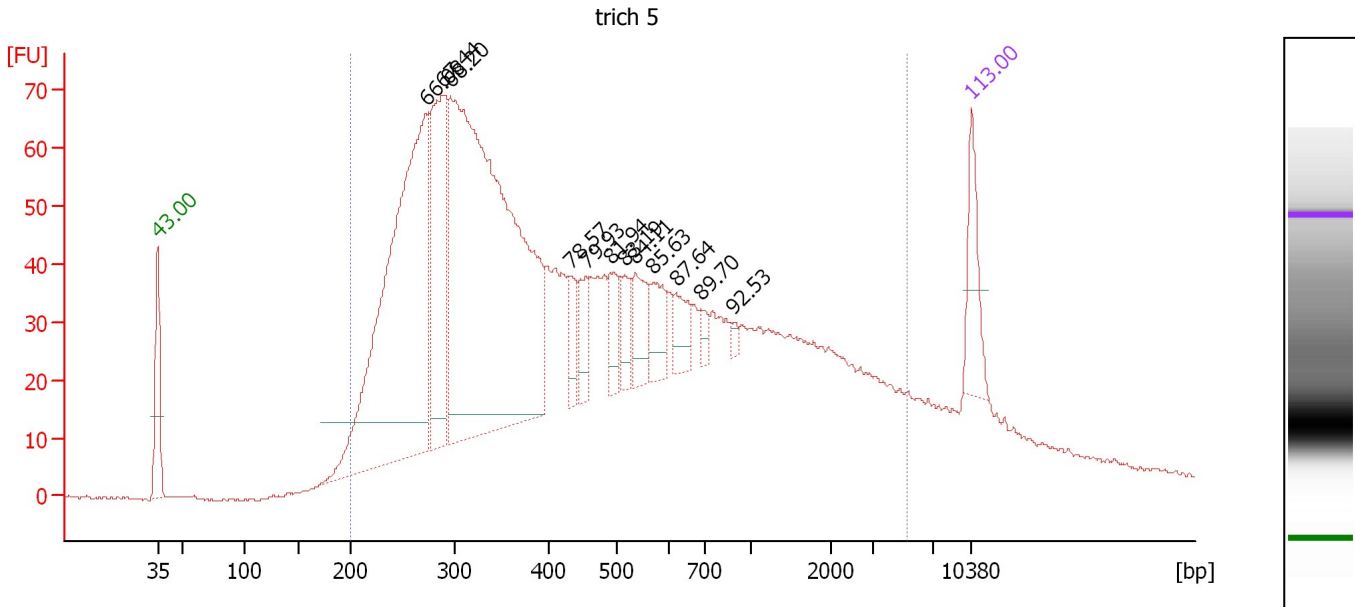
#### Region table for sample 8 : trich 4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/ $\mu$ l]
174	938	7,728	2,441.0	8,889.9	 93	100.0	2,325.92

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : trich 5**

Number of peaks found: 12                      Corr. Area 1: 2,226.9  
 Noise: 0.3

**Peak table for sample 9 : trich 5**

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	272	1,024.90	5,699.2		66.08
3	288	372.12	1,959.4		67.44
4	296	1,432.11	7,323.0		68.20
5	433	55.74	195.0		78.57
6	457	56.47	187.4		79.93
7	492	53.02	163.4		81.94
8	517	45.49	133.3		83.19
9	537	74.29	209.4		84.11
10	571	63.49	168.4		85.63
11	622	49.38	120.2		87.64
12	688	18.40	40.5		89.70
13	885	9.19	15.7		92.53
14	10,380	75.00	10.9	Upper Marker	113.00

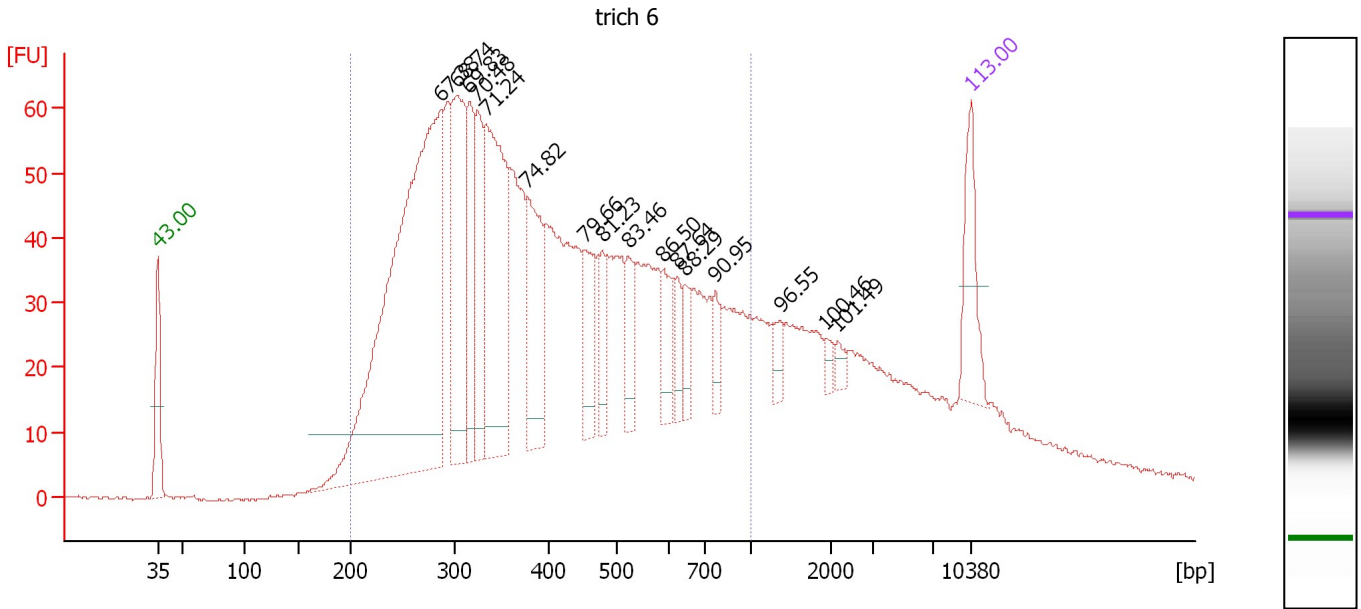
**Region table for sample 9 : trich 5**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	740	5,278	2,226.9	22,552.1	91	100.0	5,649.67

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : trich 6**

Number of peaks found: 16                      Corr. Area 1: 1,793.4  
 Noise: 0.2

**Peak table for sample 10 : trich 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	287	1,066.83	5,629.4		67.38
3	303	267.60	1,339.7		68.74
4	316	136.51	654.6		69.83
5	324	139.85	654.0		70.48
6	333	346.96	1,577.3		71.24
7	377	165.51	664.7		74.82
8	452	79.22	265.6		79.66
9	479	54.72	173.0		81.23
10	523	52.76	152.9		83.46
11	590	53.56	137.5		86.50
12	622	36.22	88.2		87.64
13	643	34.25	80.7		88.29
14	766	31.17	61.7		90.95
15	1,363	22.62	25.1		96.55
16	1,932	10.26	8.0		100.46
17	2,159	10.30	7.2		101.49
18	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 10 : trich 6**

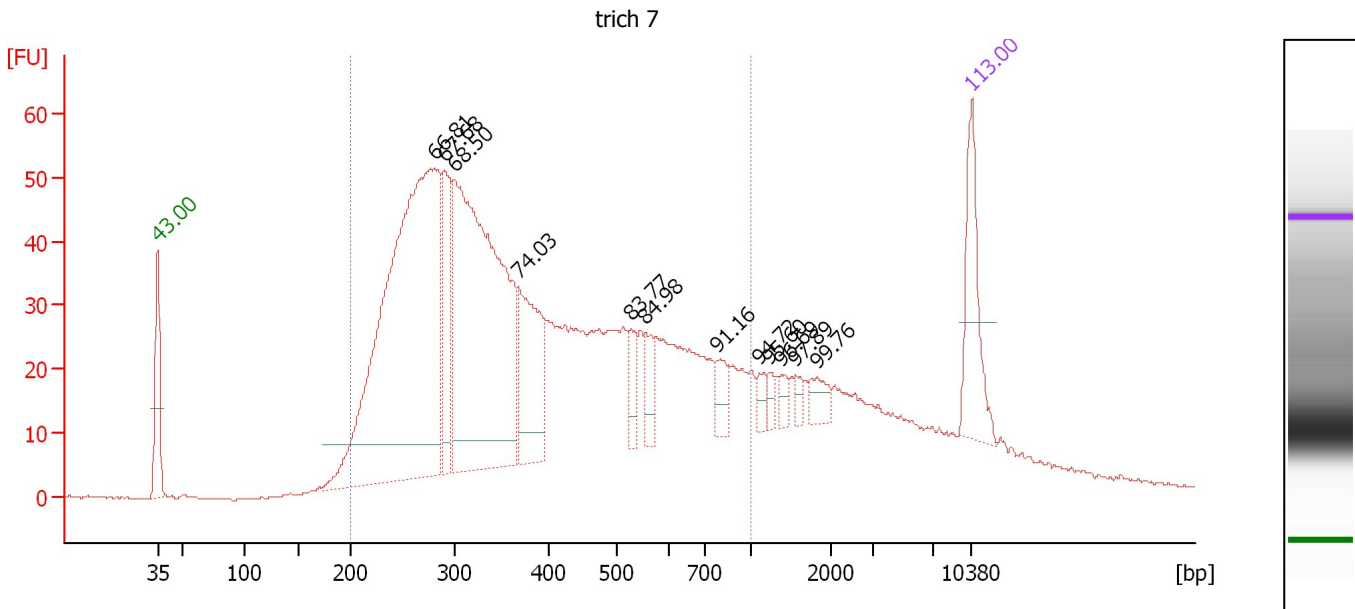
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	429	1,000	1,793.4	18,667.7	78	40.7	4,356.35



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
 Modified: 6/16/2015 4:23:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : trich 7**

Number of peaks found: 12                      Corr. Area 1: 1,389.3  
 Noise: 0.2

**Peak table for sample 11 : trich 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	281	831.89	4,491.0		66.81
3	291	117.61	613.4		67.68
4	300	604.45	3,055.3		68.50
5	368	148.91	613.8		74.03
6	530	27.58	78.9		83.77
7	557	27.03	73.6		84.98
8	782	24.81	48.1		91.16
9	1,097	12.40	17.1		94.72
10	1,225	9.69	12.0		95.60
11	1,384	10.81	11.8		96.69
12	1,559	7.88	7.7		97.89
13	1,830	17.39	14.4		99.76
14	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : trich 7**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	415	1,000	1,389.3	12,430.9	80	42.2	2,790.79

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16\_004.xad

Created: 6/16/2015 3:43:09 PM  
Modified: 6/16/2015 4:23:36 PM

**Gel Image**

