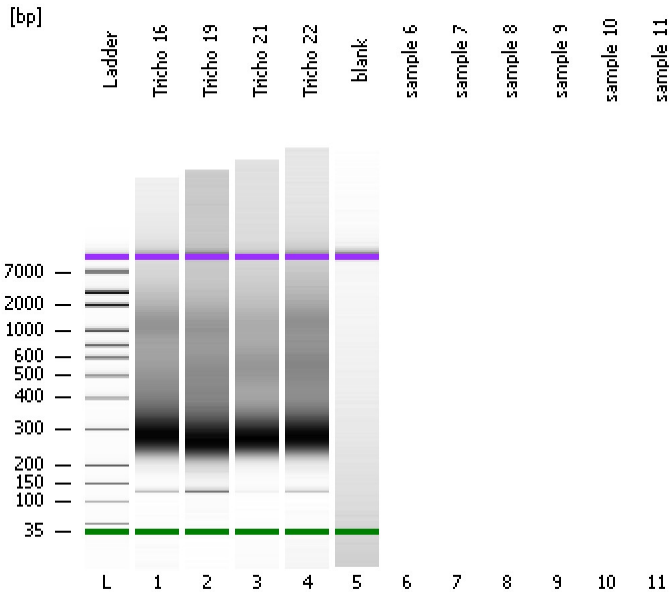


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad

Created: 2/6/2015 4:35:40 PM  
Modified: 2/6/2015 4:59:51 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

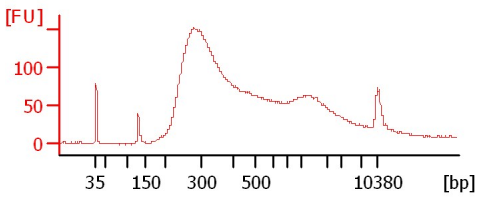
Assay Information:

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

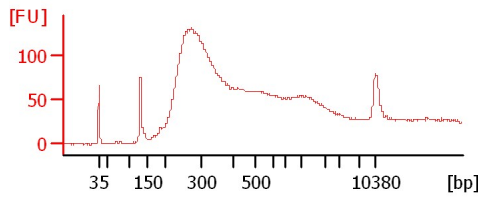
Chip Information:

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

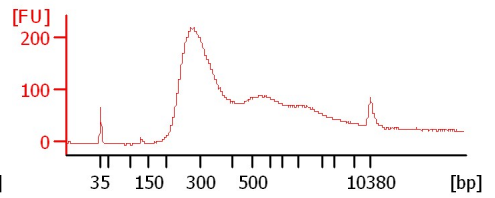
**Tricho 16**



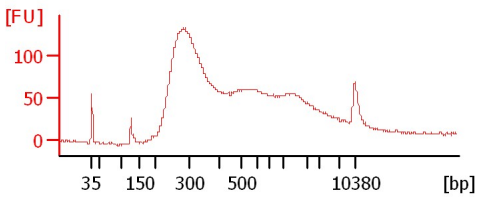
**Tricho 19**



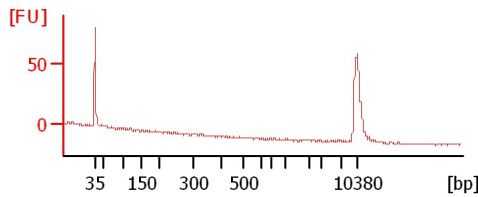
**Tricho 21**



**Tricho 22**



**blank**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad

Created: 2/6/2015 4:35:40 PM  
Modified: 2/6/2015 4:59:51 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Tricho 16		<input type="checkbox"/>	✓			
Tricho 19		<input type="checkbox"/>	✓			
Tricho 21		<input type="checkbox"/>	✓			
Tricho 22		<input type="checkbox"/>	✓			
blank		<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\2015-02-06\2015-02-06\_008.xad

Created: 2/6/2015 4:35:40 PM  
Modified: 2/6/2015 4:59:51 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

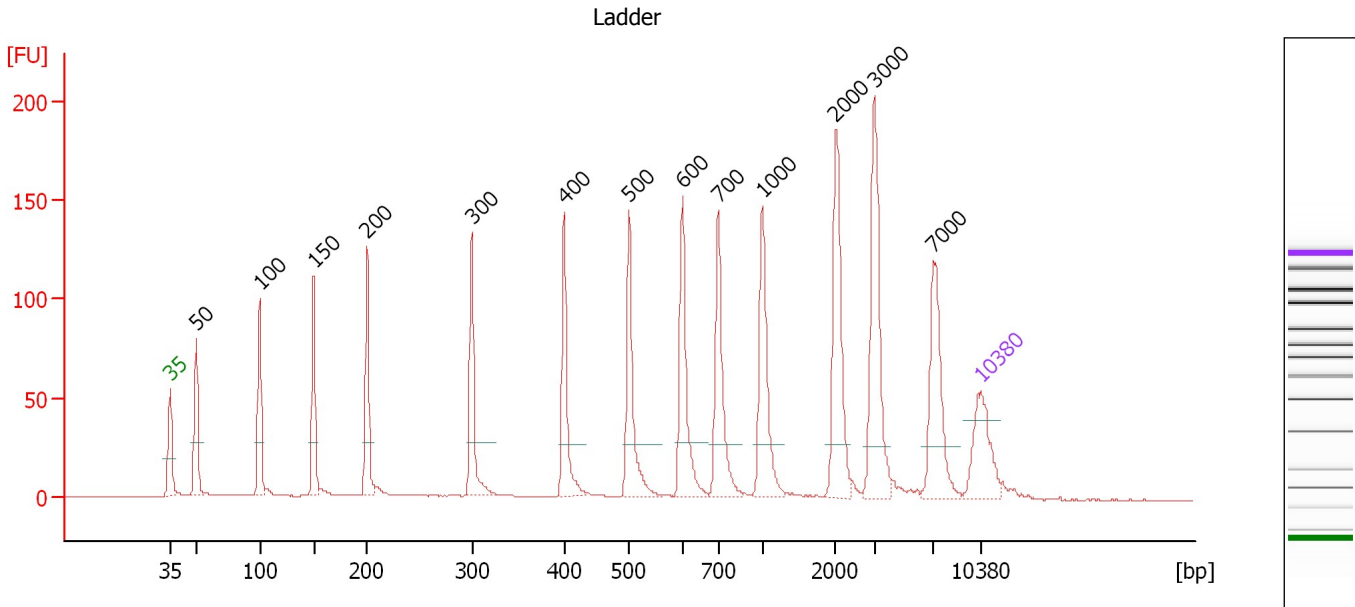
**Ladder**

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\_008.xad

Created: 2/6/2015 4:35:40 PM  
 Modified: 2/6/2015 4:59:51 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

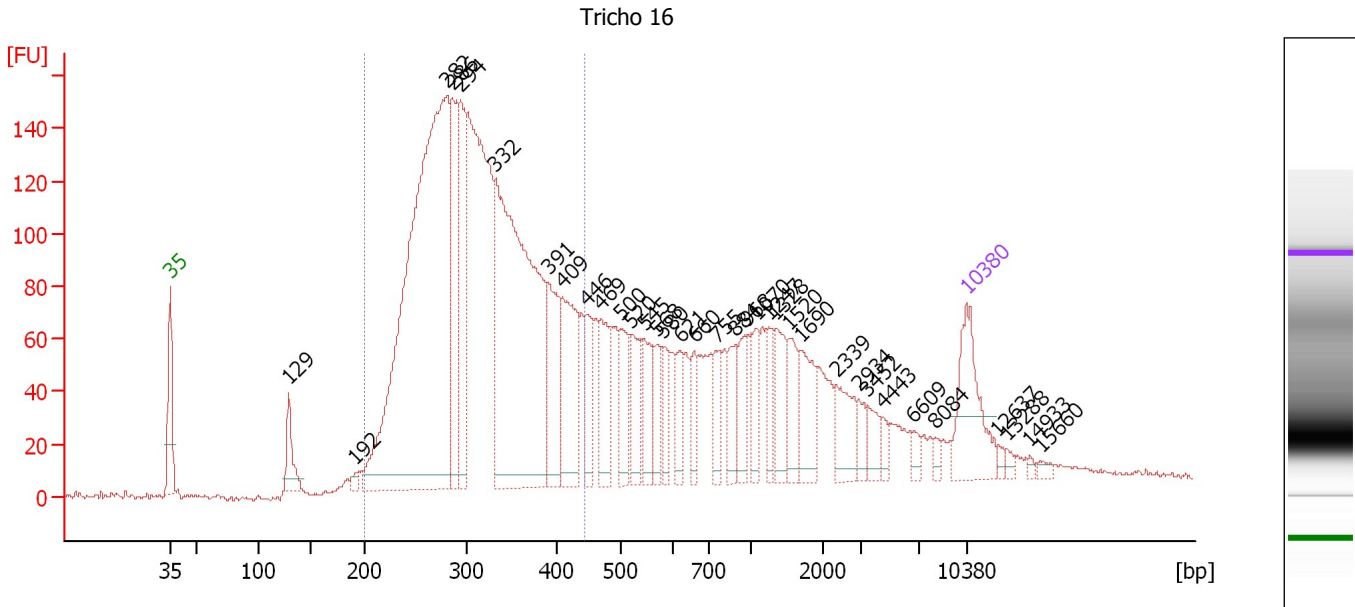
**Peak table for Ladder**

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	45.25
3	100	150.00	2,272.7	Ladder Peak	50.73
4	150	150.00	1,515.2	Ladder Peak	55.42
5	200	150.00	1,136.4	Ladder Peak	60.02
6	300	150.00	757.6	Ladder Peak	69.03
7	400	150.00	568.2	Ladder Peak	76.99
8	500	150.00	454.5	Ladder Peak	82.60
9	600	150.00	378.8	Ladder Peak	87.20
10	700	150.00	324.7	Ladder Peak	90.28
11	1,000	150.00	227.3	Ladder Peak	94.10
12	2,000	150.00	113.6	Ladder Peak	100.44
13	3,000	150.00	75.8	Ladder Peak	103.76
14	7,000	150.00	32.5	Ladder Peak	108.86
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\_008.xad

Created: 2/6/2015 4:35:40 PM  
 Modified: 2/6/2015 4:59:51 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Tricho 16**

Number of peaks found: 35                      Corr. Area 1: 2,786.9  
 Noise: 0.8

**Peak table for sample 1 : Tricho 16**

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	129	50.30	590.7		53.45
3	192	7.47	59.1		59.26
4	282	940.58	5,062.6		67.36
5	286	144.53	765.2		67.79
6	294	139.45	717.4		68.54
7	332	573.22	2,615.7		71.58
8	391	97.39	377.5		76.27
9	409	132.00	489.2		77.48
10	446	53.28	180.8		79.59
11	469	65.86	212.8		80.86
12	500	52.24	158.3		82.59
13	520	53.85	156.8		83.53
14	545	50.06	139.3		84.65
15	568	35.28	94.1		85.73
16	580	31.72	82.8		86.29
17	621	32.06	78.2		87.84
18	660	29.41	67.5		89.06
19	755	33.34	66.9		90.98
20	884	38.09	65.3		92.62
21	968	38.37	60.0		93.70
22	1,070	33.02	46.8		94.54
23	1,247	26.33	32.0		95.66
24	1,328	46.39	52.9		96.18
25	1,520	38.20	38.1		97.40

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad


Created: 2/6/2015 4:35:40 PM  
 Modified: 2/6/2015 4:59:51 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 1 : Tricho 16**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,690	47.73	42.8		98.48
27	2,339	41.93	27.2		101.57
28	2,934	15.57	8.0		103.54
29	3,452	19.31	8.5		104.33
30	4,443	8.67	3.0		105.60
31	6,609	8.71	2.0		108.36
32	8,084	6.50	1.2		110.19
33	10,380	75.00	10.9	Upper Marker	113.00
34	12,637	0.00	0.0		115.76
35	13,288	0.00	0.0		116.56
36	14,933	0.00	0.0		118.58
37	15,660	0.00	0.0		119.47

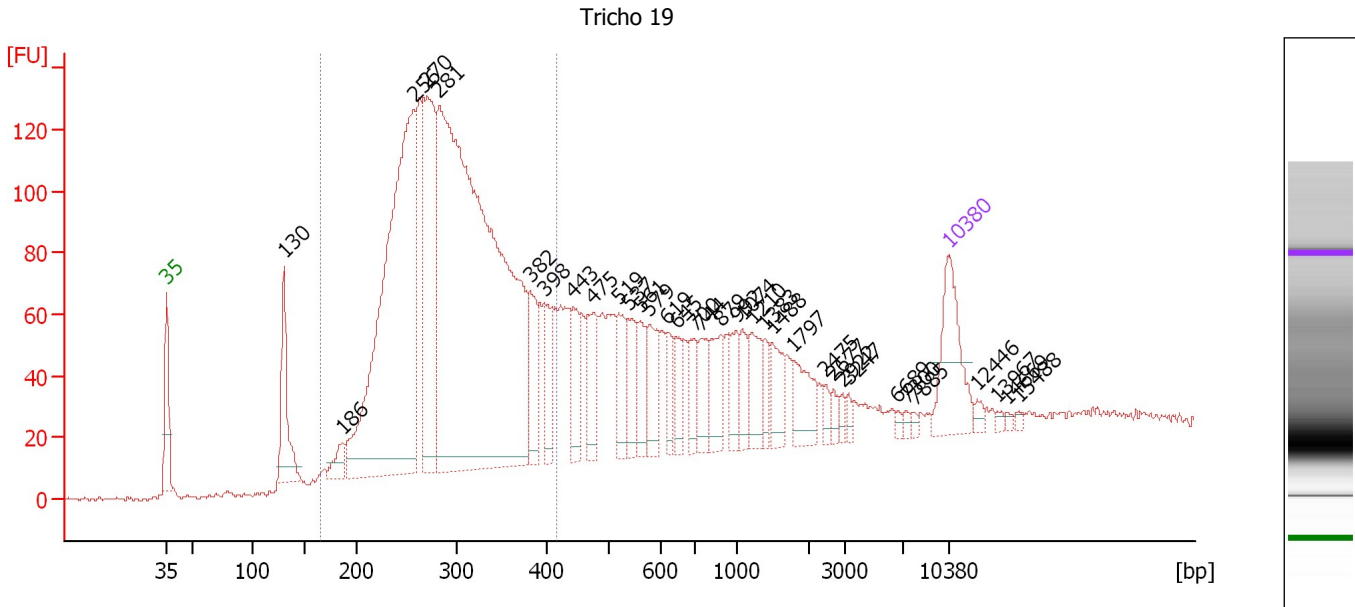
**Region table for sample 1 : Tricho 16**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	315	444	2,786.9	61	17.9	2,589.60	12,974.7	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad

Created: 2/6/2015 4:35:40 PM  
 Modified: 2/6/2015 4:59:51 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Tricho 19**

Number of peaks found: 35                      Corr. Area 1: 2,251.7  
 Noise: 0.6

**Peak table for sample 2 : Tricho 19**

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	130	118.95	1,390.5		53.50
3	186	29.90	243.2		58.76
4	256	737.76	4,358.4		65.11
5	270	257.85	1,448.5		66.30
6	281	1,265.20	6,813.0		67.35
7	382	71.09	282.3		75.52
8	398	50.69	193.1		76.81
9	443	56.24	192.5		79.38
10	475	61.48	196.1		81.20
11	519	49.06	143.1		83.49
12	537	48.66	137.3		84.30
13	561	38.21	103.2		85.40
14	579	51.46	134.8		86.21
15	619	28.73	70.3		87.79
16	645	31.78	74.6		88.60
17	700	34.79	75.3		90.27
18	744	41.53	84.5		90.84
19	879	45.80	78.9		92.56
20	992	32.21	49.2		94.00
21	1,074	29.69	41.9		94.57
22	1,210	38.89	48.7		95.43
23	1,383	20.09	22.0		96.53
24	1,488	34.66	35.3		97.20
25	1,797	41.56	35.1		99.15

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad


Created: 2/6/2015 4:35:40 PM  
 Modified: 2/6/2015 4:59:51 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 2 : Tricho 19**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,475	9.20	5.6		102.02
27	2,677	8.30	4.7		102.69
28	2,922	7.13	3.7		103.50
29	3,247	6.72	3.1		104.07
30	6,689	4.24	1.0		108.46
31	7,300	4.07	0.8		109.23
32	7,885	3.48	0.7		109.94
33	10,380	75.00	10.9	Upper Marker	113.00
34	12,446	0.00	0.0		115.53
35	13,967	0.00	0.0		117.39
36	14,669	0.00	0.0		118.25
37	15,488	0.00	0.0		119.26

**Region table for sample 2 : Tricho 19**

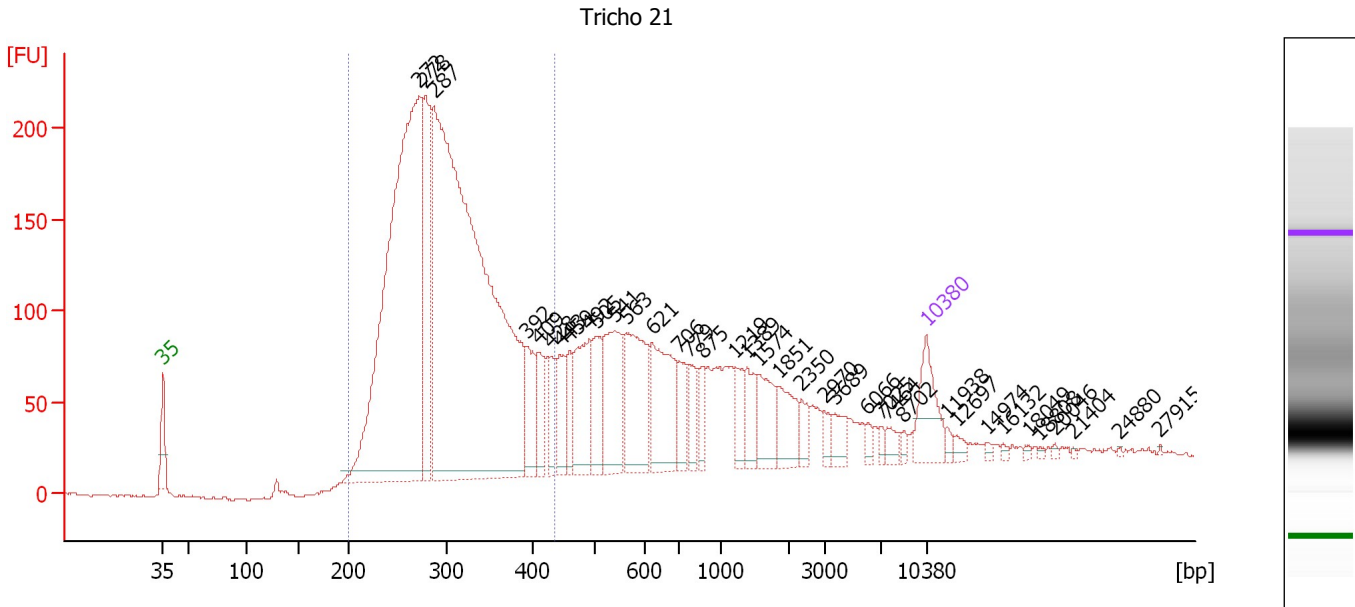
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
165	296	417	2,251.7	62	18.3	2,579.85	13,775.5	



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad

Created: 2/6/2015 4:35:40 PM  
 Modified: 2/6/2015 4:59:51 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Tricho 21**

Number of peaks found: 37                      Corr. Area 1: 3,370.5  
 Noise: 1.0

**Peak table for sample 3 : Tricho 21**

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	1,342.81	7,473.4		66.53
3	278	263.74	1,436.4		67.07
4	287	1,901.66	10,043.2		67.85
5	392	89.90	347.9		76.31
6	409	63.37	234.8		77.49
7	428	56.40	199.6		78.56
8	443	76.20	260.7		79.39
9	459	52.96	175.0		80.27
10	492	146.87	452.6		82.13
11	505	83.30	250.0		82.82
12	541	170.31	477.0		84.48
13	563	186.10	500.6		85.51
14	621	173.13	422.2		87.86
15	706	57.74	124.0		90.35
16	779	45.09	87.7		91.28
17	875	34.09	59.0		92.50
18	1,219	41.14	51.1		95.49
19	1,389	53.00	57.8		96.56
20	1,574	65.39	63.0		97.74
21	1,851	62.79	51.4		99.50
22	2,350	23.62	15.2		101.60
23	2,970	18.38	9.4		103.66
24	3,689	28.53	11.7		104.64
25	6,066	9.79	2.4		107.67

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad


Created: 2/6/2015 4:35:40 PM  
 Modified: 2/6/2015 4:59:51 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 3 : Tricho 21**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	7,025	8.93	1.9		108.89
27	7,464	15.80	3.2		109.43
28	8,702	7.11	1.2		110.95
29	10,380	75.00	10.9	Upper Marker	113.00
30	11,938	0.00	0.0		114.91
31	12,697	0.00	0.0		115.84
32	14,974	0.00	0.0		118.63
33	16,132	0.00	0.0		120.04
34	18,049	0.00	0.0		122.39
35	18,808	0.00	0.0		123.32
36	20,046	0.00	0.0		124.84
37	21,404	0.00	0.0		126.50
38	24,880	0.00	0.0		130.76
39	27,915	0.00	0.0		134.47

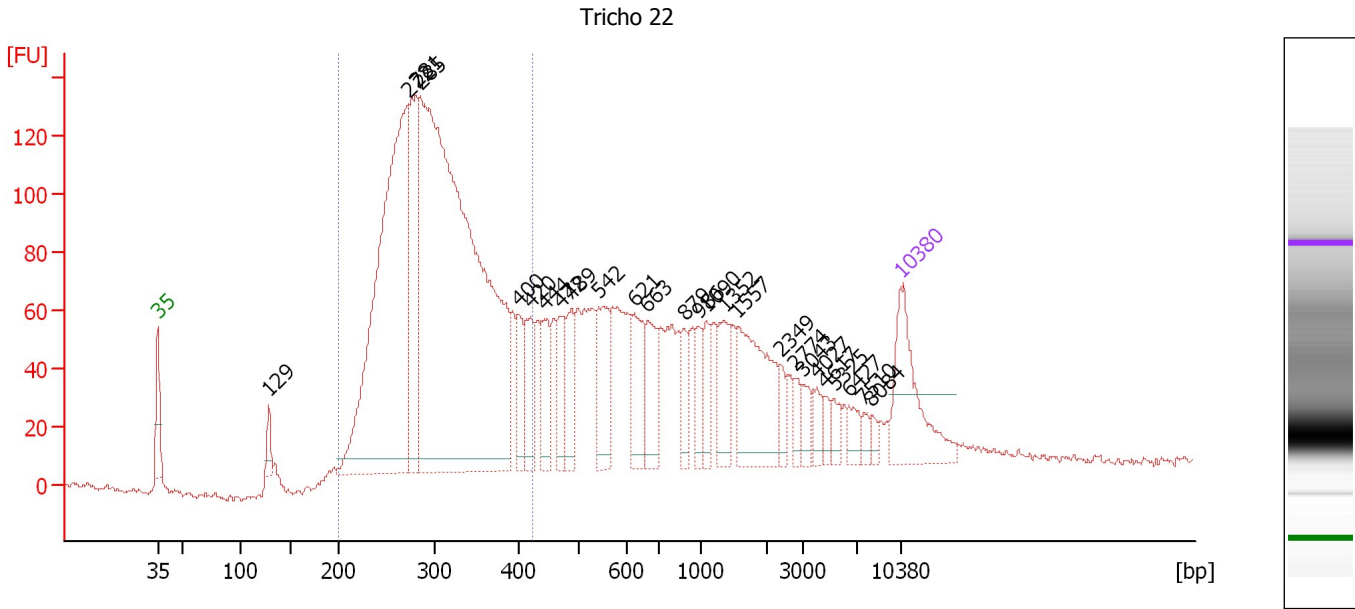
**Region table for sample 3 : Tricho 21**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	304	435	3,370.5	63	17.0	3,677.30	18,960.1	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad

Created: 2/6/2015 4:35:40 PM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Tricho 22**

Number of peaks found: 26                      Corr. Area 1: 2,154.4  
 Noise: 1.0

**Peak table for sample 4 : Tricho 22**

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	129	21.38	251.1		53.44
3	272	578.57	3,217.2		66.55
4	281	160.07	861.9		67.35
5	285	1,055.81	5,607.2		67.71
6	400	41.57	157.4		77.00
7	420	50.91	183.7		78.10
8	444	44.39	151.5		79.46
9	472	41.93	134.7		81.01
10	489	45.00	139.5		81.97
11	542	65.83	184.0		84.53
12	621	54.30	132.5		87.84
13	663	48.10	109.9		89.15
14	879	25.20	43.4		92.56
15	986	25.98	39.9		93.92
16	1,090	22.40	31.1		94.67
17	1,352	39.64	44.4		96.33
18	1,557	103.21	100.4		97.63
19	2,349	12.69	8.2		101.60
20	2,774	13.59	7.4		103.01
21	3,043	14.03	7.0		103.81
22	4,027	15.81	5.9		105.07
23	4,617	9.93	3.3		105.82
24	5,325	11.62	3.3		106.72
25	6,427	14.43	3.4		108.13

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad


Created: 2/6/2015 4:35:40 PM  
 Modified: 2/6/2015 4:59:51 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 4 : Tricho 22

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	7,510	7.62	1.5		109.48
27	8,084	6.57	1.2		110.19
28	10,380	75.00	10.9	Upper Marker	113.00

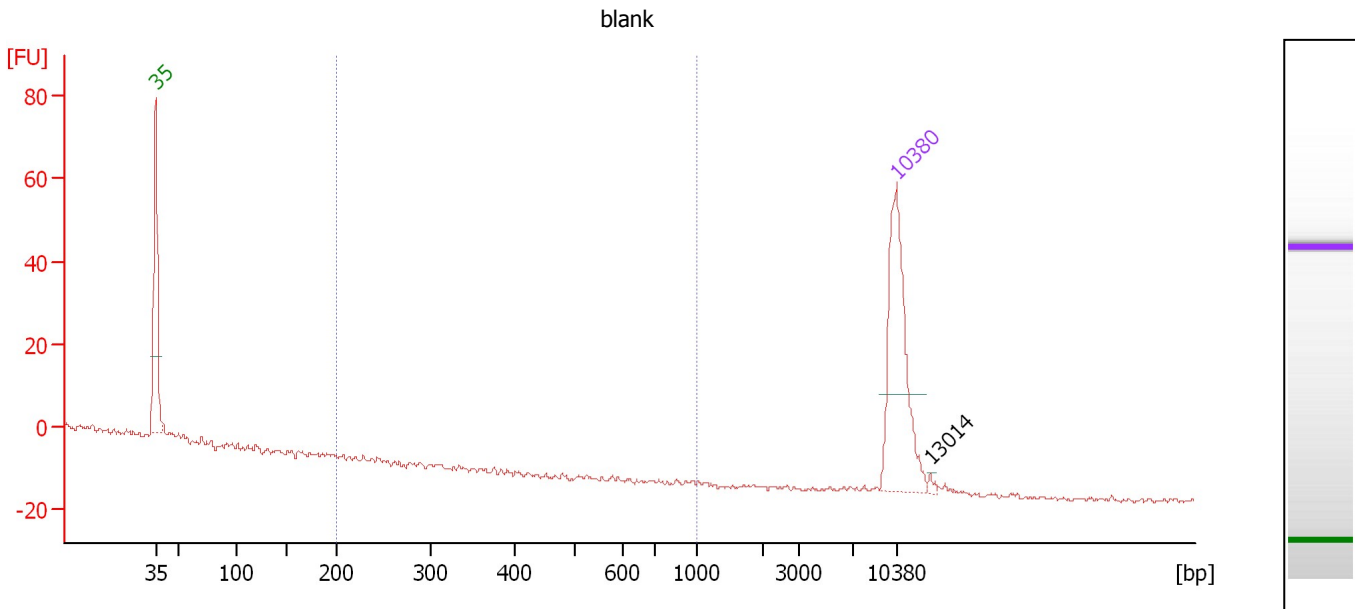
#### Region table for sample 4 : Tricho 22

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	308	425	2,154.4	57	16.6	1,893.27	9,651.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad

Created: 2/6/2015 4:35:40 PM  
 Modified: 2/6/2015 4:59:51 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : blank**

Number of peaks found: 1                      Corr. Area 1: 0.0  
 Noise: 0.5

**Peak table for sample 5 : blank**

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	10,380	75.00	10.9	Upper Marker	113.00
3	13,014	0.00	0.0		116.23

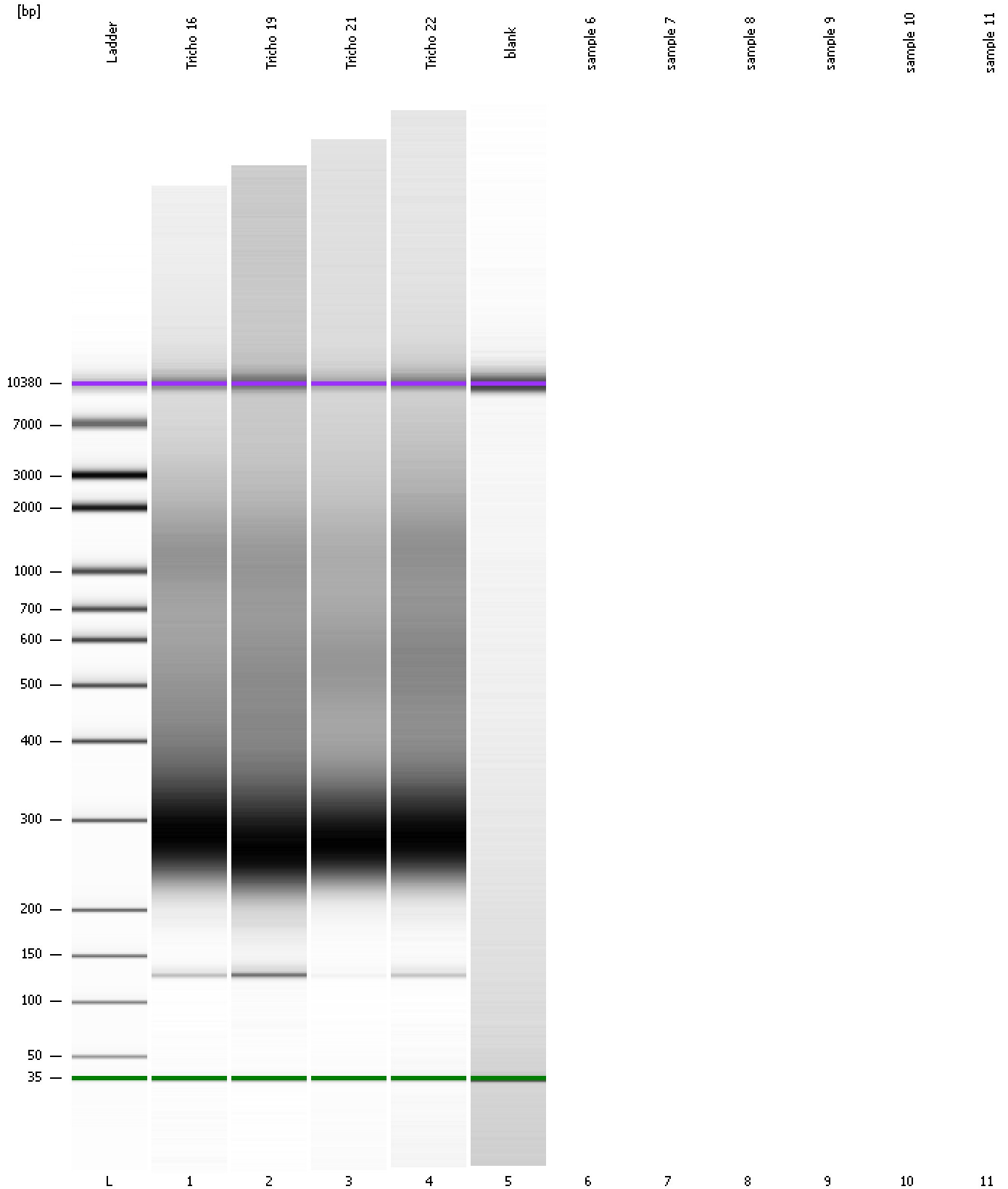
**Region table for sample 5 : blank**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	0	1,000	0.0	0	0.0	0.00	0.0	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad

Created: 2/6/2015 4:35:40 PM  
Modified: 2/6/2015 4:59:51 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad

Created: 2/6/2015 4:35:40 PM  
Modified: 2/6/2015 4:59:51 PM

**Invalid Samples**

Sample 6 has not been run, no results available.

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-06\2015-02-06\_008.xad

Created: 2/6/2015 4:35:40 PM  
 Modified: 2/6/2015 4:59:51 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 6)		Instrument	Run		2/6/2015 4:59:49 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_008.xad)		Instrument	Run		2/6/2015 4:35:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/6/2015 4:35:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/6/2015 4:35:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/6/2015 4:35:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/6/2015 4:35:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/6/2015 4:35:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/6/2015 4:35:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1