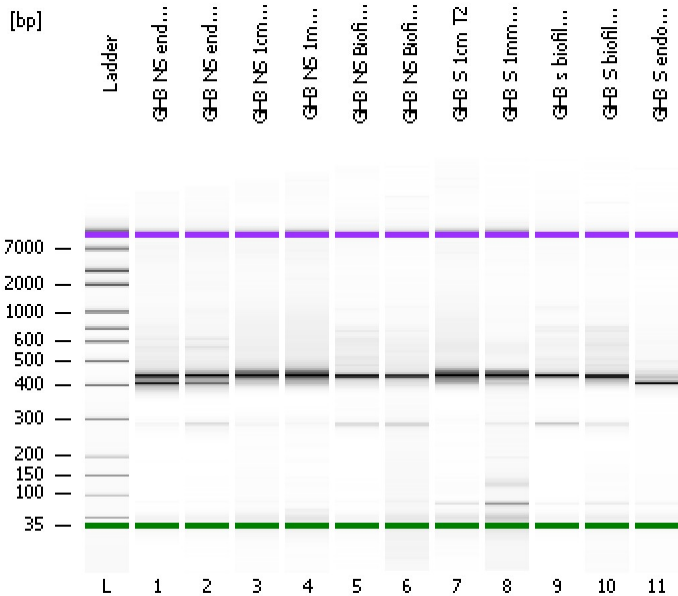


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
Modified: 4/10/2012 2:39:21 PM

Electrophoresis File Run Summary



Instrument Information:

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

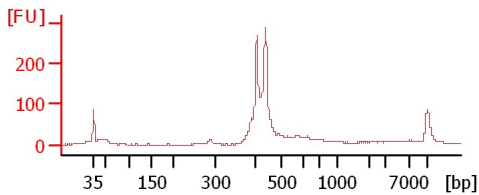
Assay Information:

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

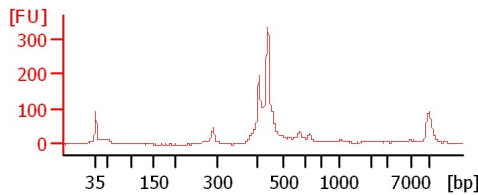
Chip Information:

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

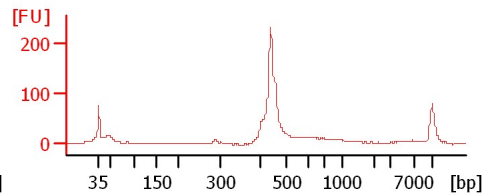
GH3 NS endophyte E13



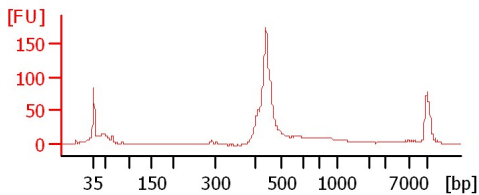
GH3 NS endophyte E14



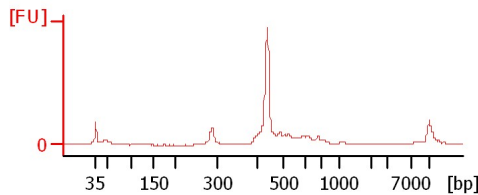
GH3 NS 1cm T17



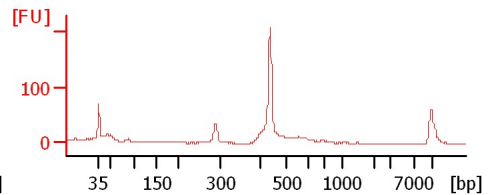
GH3 NS 1mm T19



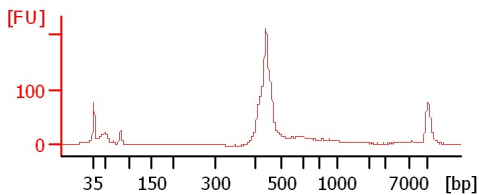
GH3 NS Biofilm T21



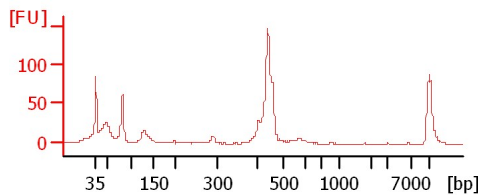
GH3 NS Biofilm2 T22



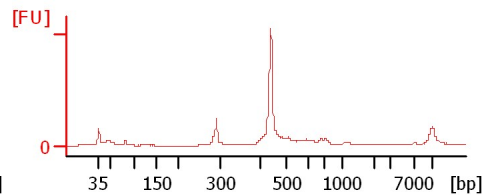
GH3 S 1cm T2



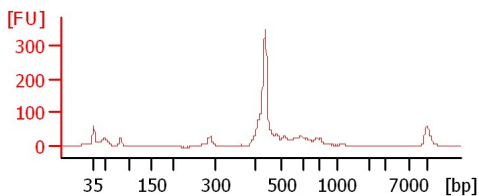
GH3 S 1mm T4



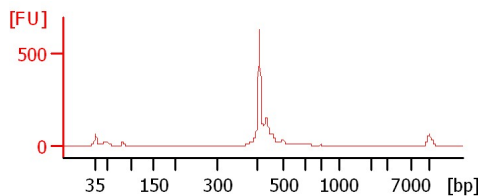
GH3 s biofilm T7



GH3 S biofilm2 T8



GH3 S endophyte T33



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
GH3 NS endophyte E13		<input type="checkbox"/>	✓			
GH3 NS endophyte E14		<input type="checkbox"/>	✓			
GH3 NS 1cm T17		<input type="checkbox"/>	✓			
GH3 NS 1mm T19		<input type="checkbox"/>	✓			
GH3 NS Biofilm T21		<input type="checkbox"/>	✓			
GH3 NS Biofilm2 T22		<input type="checkbox"/>	✓			
GH3 S 1cm T2		<input type="checkbox"/>	✓			
GH3 S 1mm T4		<input type="checkbox"/>	✓			
GH3 s biofilm T7		<input type="checkbox"/>	✓			
GH3 S biofilm2 T8		<input type="checkbox"/>	✓			
GH3 S endophyte T33		<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\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
Modified: 4/10/2012 2:39:21 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] : 20
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

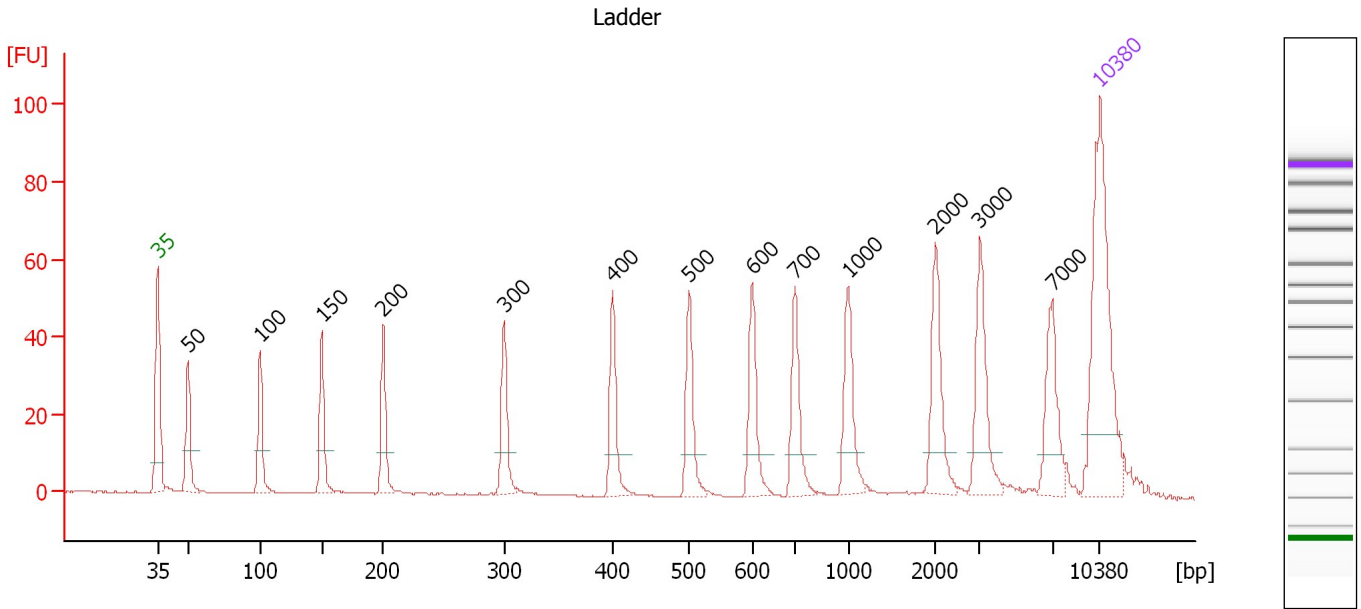
Ladder

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\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

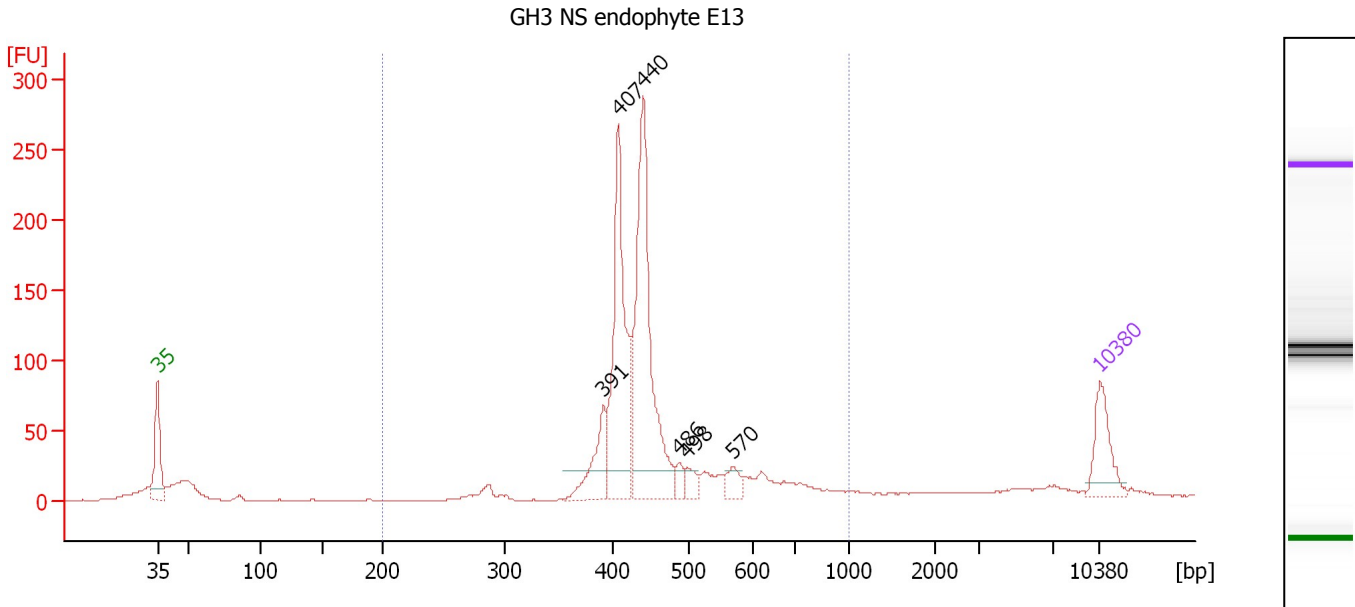
Peak table for Ladder

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\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : GH3 NS endophyte E13

Number of peaks found: 6 Corr. Area 1: 1,139.3
 Noise: 0.2

Peak table for sample 1 : GH3 NS endophyte E13

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	391	110.19	426.7	
3	407	388.26	1,444.4	
4	440	510.77	1,759.6	
5	486	22.73	70.9	
6	498	29.63	90.1	
7	570	30.25	80.4	
8	10,380	75.00	10.9	Upper Marker

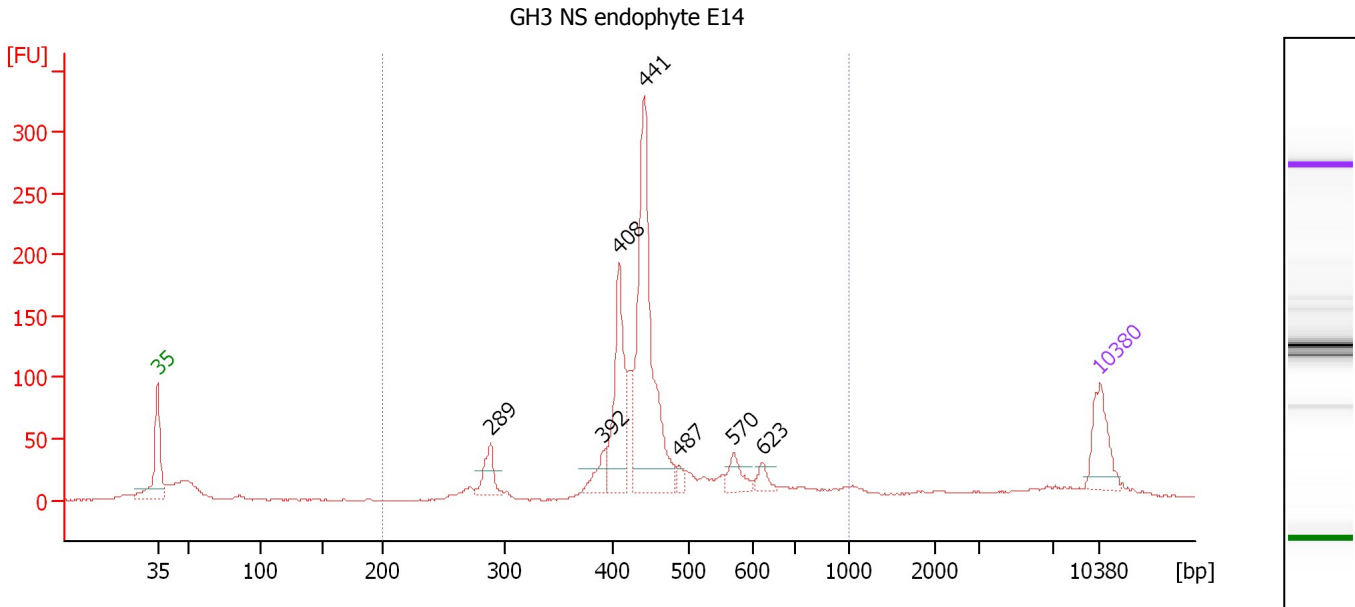
Region table for sample 1 : GH3 NS endophyte E13

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	4,190.8	456	1,216.21	1,000	1,139.3	87	19.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : GH3 NS endophyte E14

Number of peaks found: 7 Corr. Area 1: 1,194.9
 Noise: 0.5

Peak table for sample 2 : GH3 NS endophyte E14

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	289	63.14	331.3	
3	392	44.78	173.2	
4	408	229.37	851.3	
5	441	517.65	1,777.7	
6	487	17.01	52.9	
7	570	42.46	112.8	
8	623	23.73	57.7	
9	10,380	75.00	10.9	Upper Marker

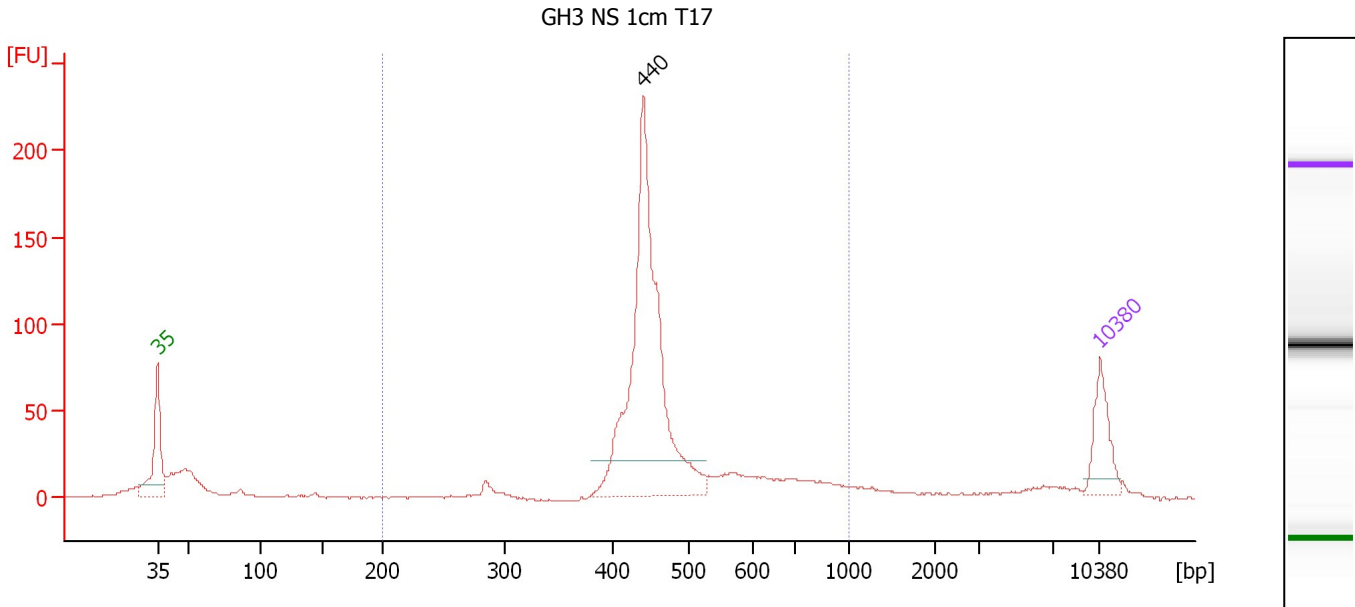
Region table for sample 2 : GH3 NS endophyte E14

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	4,263.9	459	1,215.61	1,000	1,194.9	84	22.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : GH3 NS 1cm T17

Number of peaks found: 1 Corr. Area 1: 794.1
 Noise: 0.5

Peak table for sample 3 : GH3 NS 1cm T17

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	440	777.42	2,675.2	
3	10,380	75.00	10.9	Upper Marker

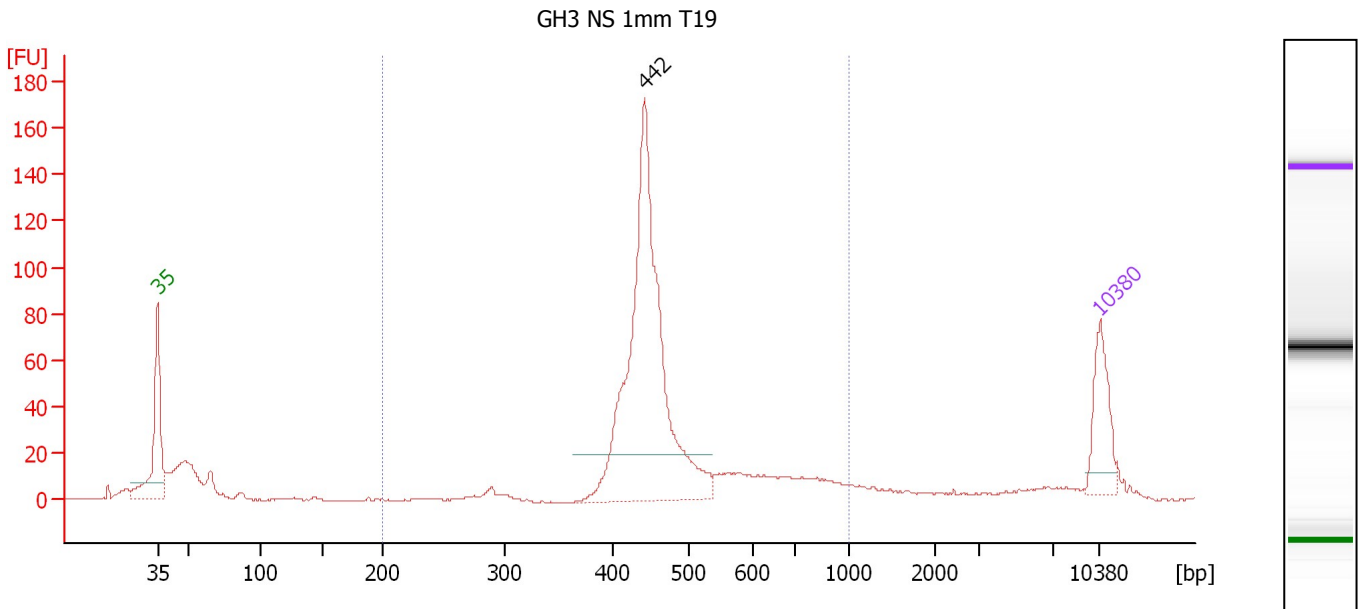
Region table for sample 3 : GH3 NS 1cm T17

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	3,079.0	482	935.92	1,000	794.1	80	21.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : GH3 NS 1mm T19

Number of peaks found: 1 Corr. Area 1: 688.5
 Noise: 0.3

Peak table for sample 4 : GH3 NS 1mm T19

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	442	700.63	2,402.8	
3	10,380	75.00	10.9	Upper Marker

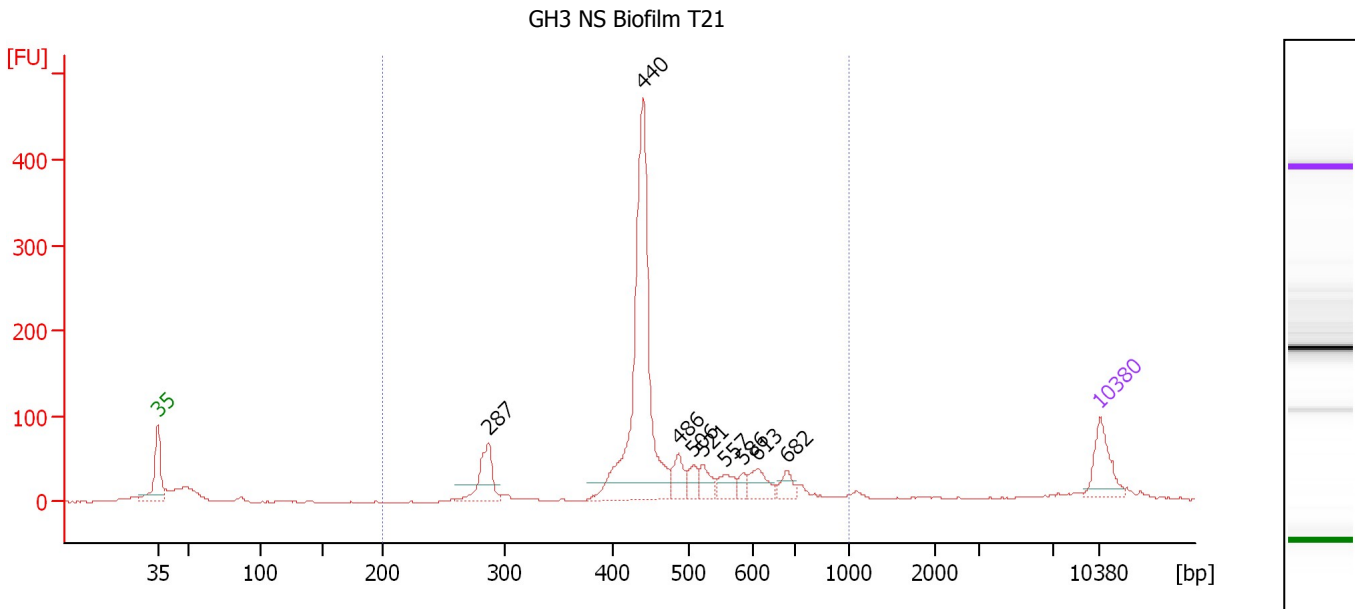
Region table for sample 4 : GH3 NS 1mm T19

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,700.4	487	825.04	1,000	688.5	76	22.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : GH3 NS Biofilm T21

Number of peaks found: 9 Corr. Area 1: 1,344.8
 Noise: 0.3

Peak table for sample 5 : GH3 NS Biofilm T21

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	287	132.23	697.4	
3	440	777.62	2,674.9	
4	486	61.98	193.2	
5	506	40.31	120.6	
6	521	46.62	135.6	
7	557	45.80	124.6	
8	586	21.96	56.7	
9	613	57.45	142.0	
10	682	36.09	80.2	
11	10,380	75.00	10.9	Upper Marker

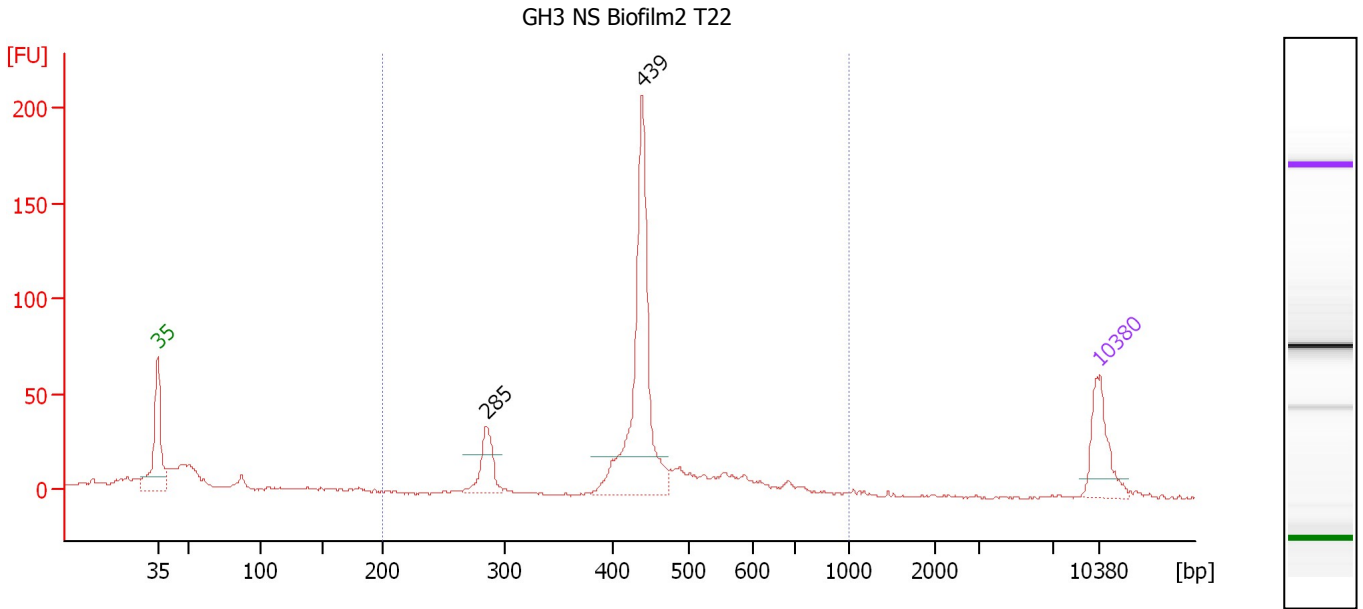
Region table for sample 5 : GH3 NS Biofilm T21

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	4,489.3	471	1,298.95	1,000	1,344.8	87	22.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : GH3 NS Biofilm2 T22

Number of peaks found: 2 Corr. Area 1: 512.6
 Noise: 0.7

Peak table for sample 6 : GH3 NS Biofilm2 T22

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	285	86.41	459.2	
3	439	424.68	1,465.8	
4	10,380	75.00	10.9	Upper Marker

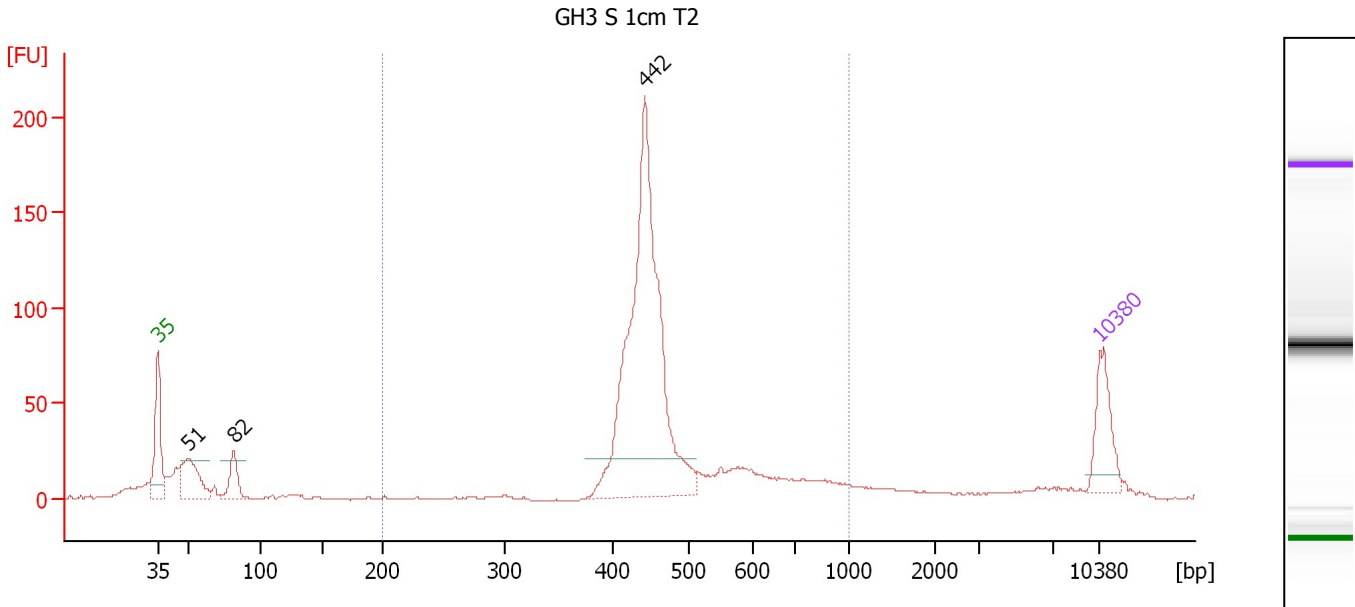
Region table for sample 6 : GH3 NS Biofilm2 T22

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,387.3	456	668.34	1,000	512.6	69	22.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : GH3 S 1cm T2

Number of peaks found: 3 Corr. Area 1: 815.2
 Noise: 0.3

Peak table for sample 7 : GH3 S 1cm T2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	51	131.14	3,921.6	
3	82	65.52	1,212.0	
4	442	780.91	2,678.9	
5	10,380	75.00	10.9	Upper Marker

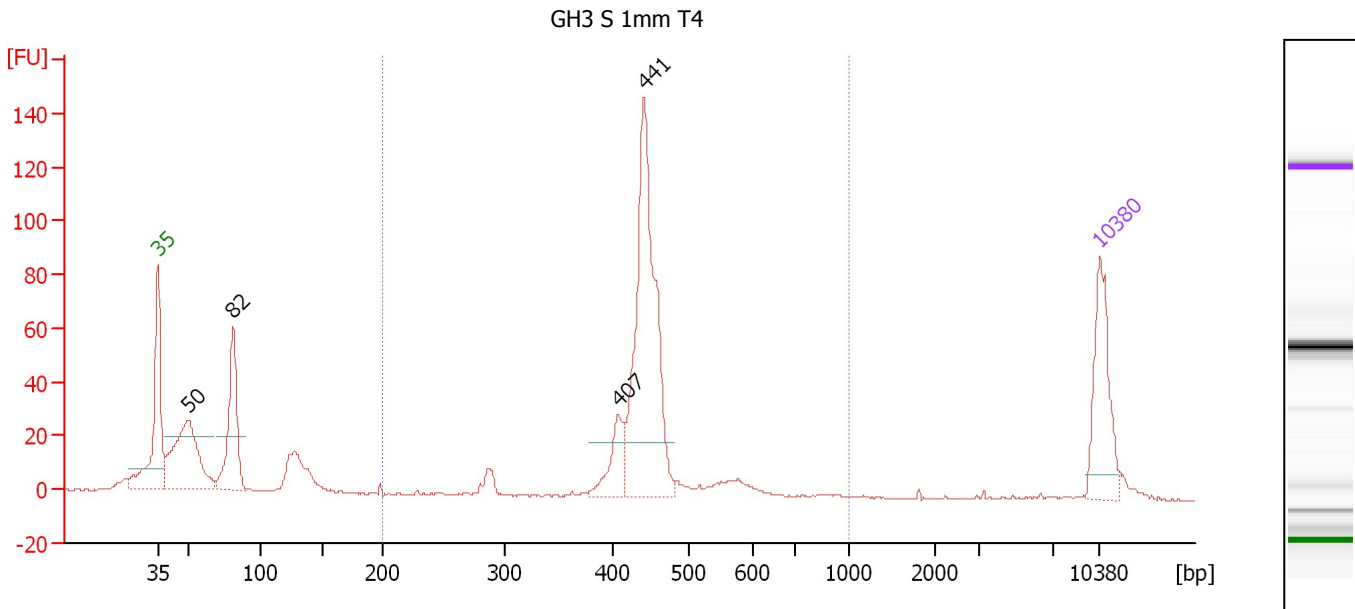
Region table for sample 7 : GH3 S 1cm T2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	3,126.8	485	959.02	1,000	815.2	74	22.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : GH3 S 1mm T4

Number of peaks found: 4 Corr. Area 1: 415.4
 Noise: 0.2

Peak table for sample 8 : GH3 S 1mm T4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	188.40	5,724.4	
3	82	139.63	2,595.3	
4	407	46.42	172.8	
5	441	313.13	1,075.1	
6	10,380	75.00	10.9	Upper Marker

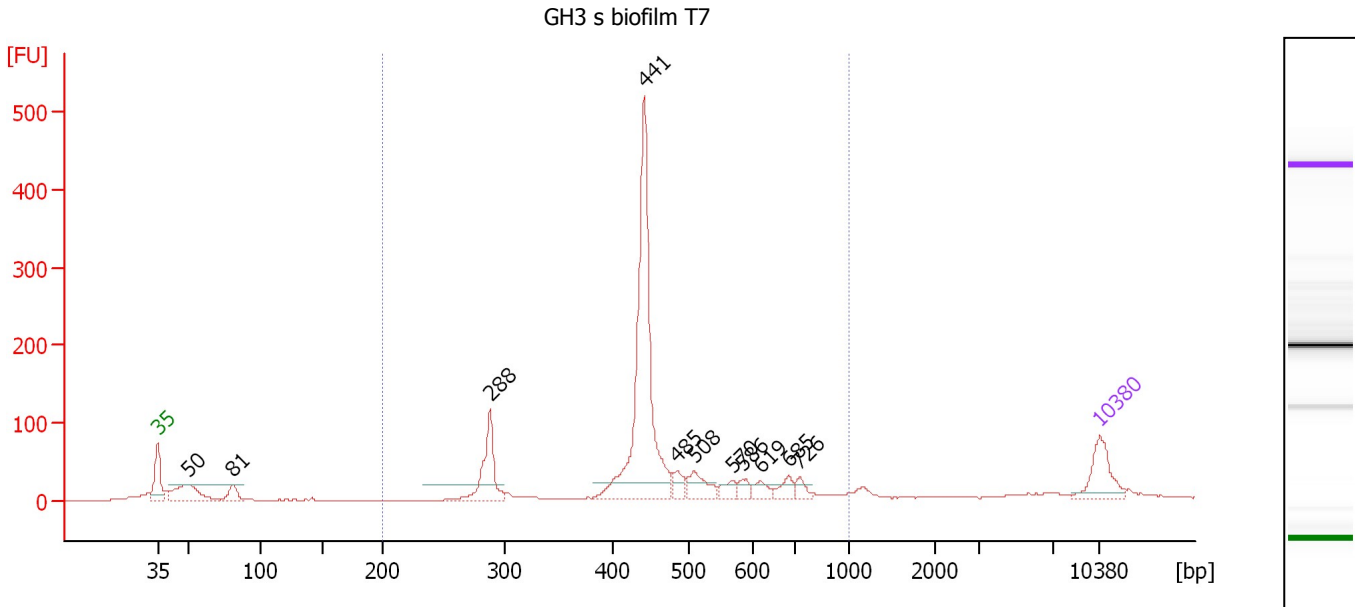
Region table for sample 8 : GH3 S 1mm T4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,444.7	448	416.76	1,000	415.4	55	14.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : GH3 s biofilm T7

Number of peaks found: 11 Corr. Area 1: 1,262.8
 Noise: 0.2

Peak table for sample 9 : GH3 s biofilm T7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	129.80	3,937.6	
3	81	41.00	763.6	
4	288	157.50	828.1	
5	441	661.60	2,271.1	
6	485	36.80	115.0	
7	508	61.03	182.2	
8	570	27.67	73.6	
9	586	24.37	63.1	
10	619	27.80	68.1	
11	685	31.09	68.8	
12	726	23.00	48.0	
13	10,380	75.00	10.9	Upper Marker

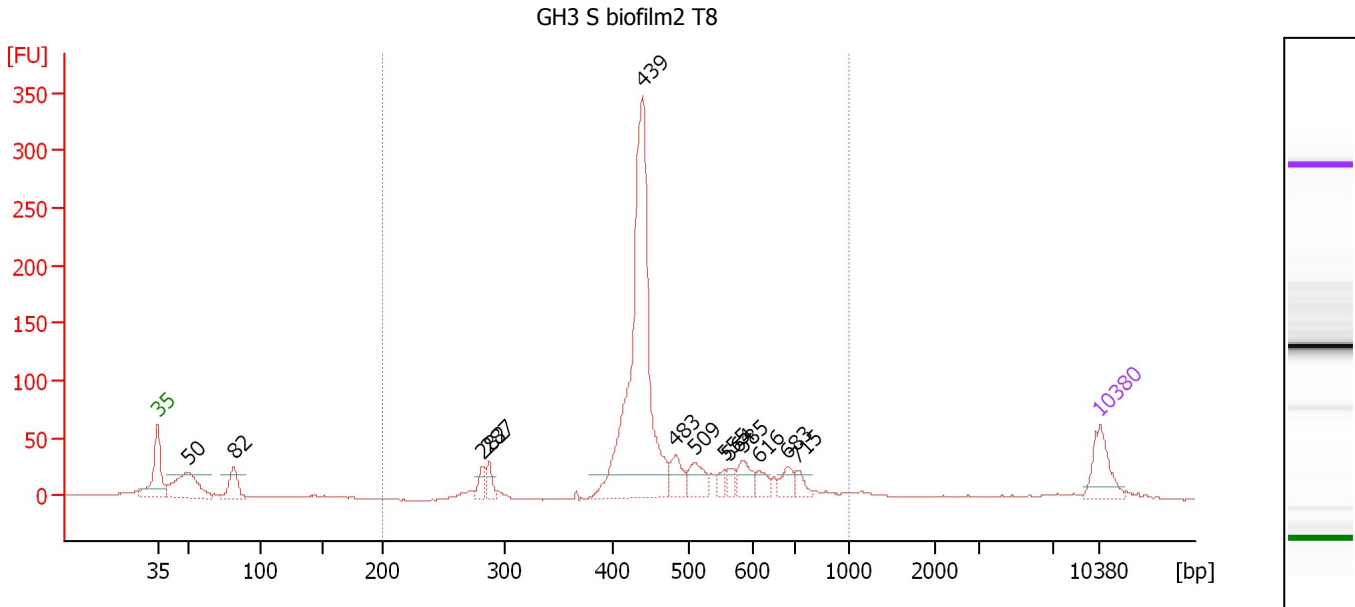
Region table for sample 9 : GH3 s biofilm T7

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	3,905.7	467	1,107.65	1,000	1,262.8	80	24.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : GH3 S biofilm2 T8

Number of peaks found: 13 Corr. Area 1: 1,050.6
 Noise: 0.5

Peak table for sample 10 : GH3 S biofilm2 T8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	198.96	6,016.2	
3	82	85.05	1,575.1	
4	282	34.69	186.3	
5	287	38.53	203.1	
6	439	897.53	3,094.3	
7	483	61.09	191.8	
8	509	67.75	201.7	
9	555	20.04	54.7	
10	564	25.63	68.9	
11	585	56.27	145.8	
12	616	31.30	77.0	
13	683	38.70	85.9	
14	715	28.18	59.7	
15	10,380	75.00	10.9	Upper Marker

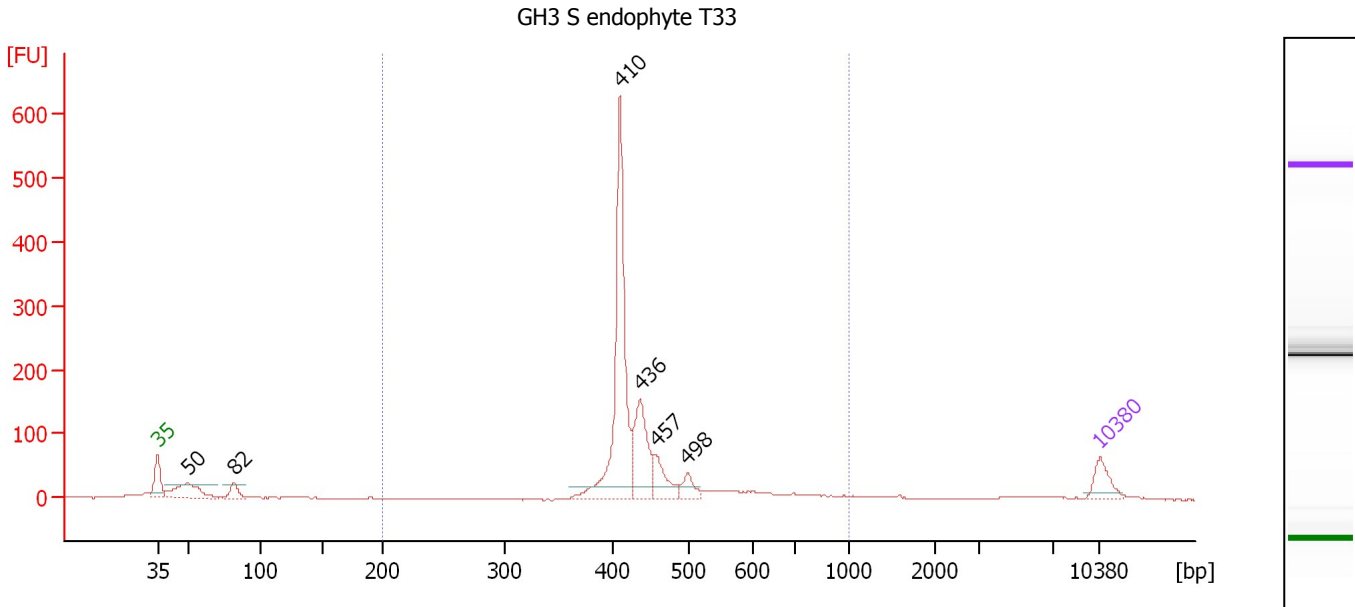
Region table for sample 10 : GH3 S biofilm2 T8

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	4,561.8	478	1,357.12	1,000	1,050.6	85	21.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : GH3 S endophyte T33

Number of peaks found: 6 Corr. Area 1: 1,159.1
 Noise: 0.5

Peak table for sample 11 : GH3 S endophyte T33

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	227.95	6,916.8	
3	82	69.33	1,281.3	
4	410	906.04	3,348.6	
5	436	314.34	1,092.6	
6	457	126.02	417.9	
7	498	66.22	201.5	
8	10,380	75.00	10.9	Upper Marker

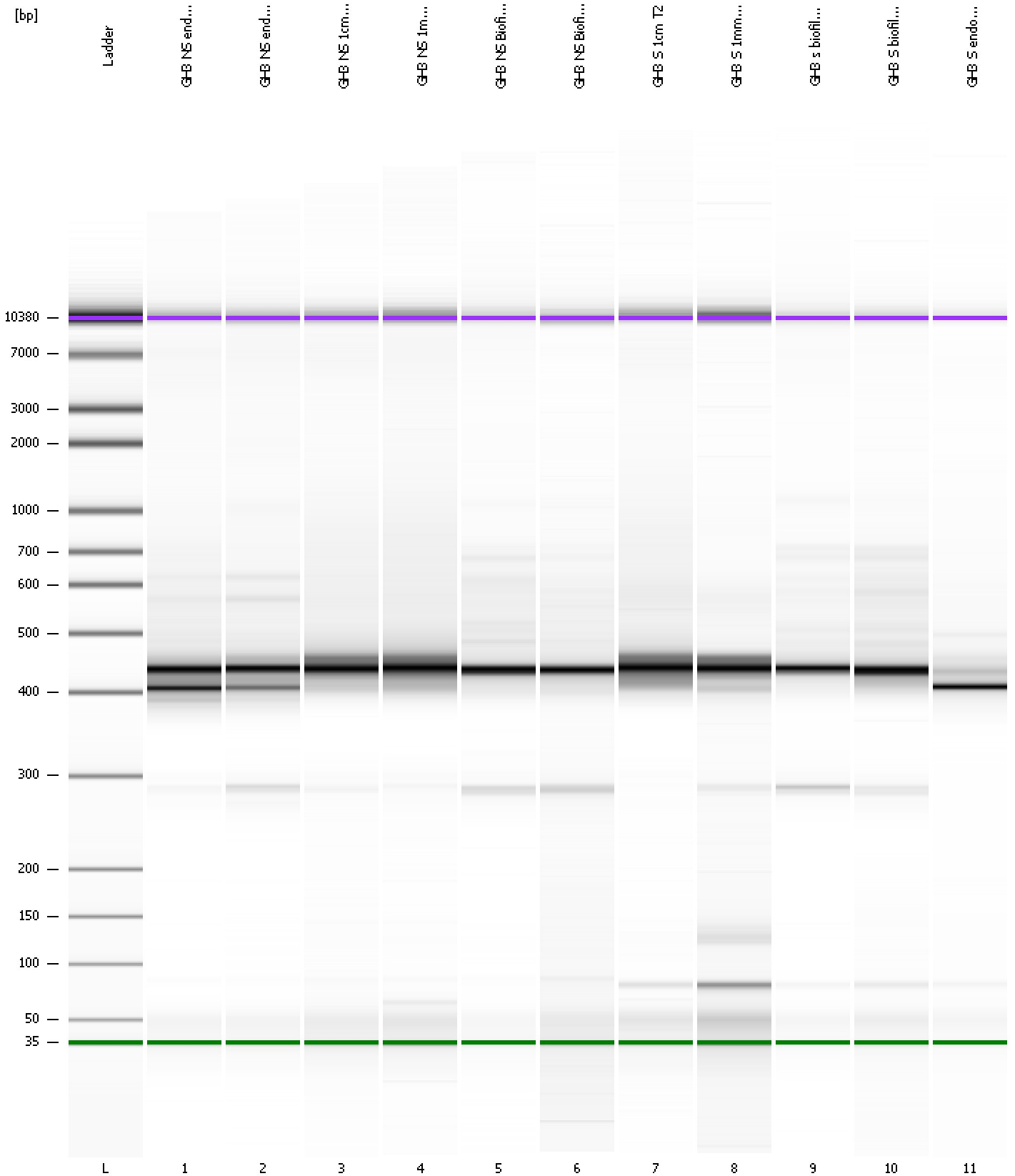
Region table for sample 11 : GH3 S endophyte T33

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	5,442.8	451	1,573.88	1,000	1,159.1	80	19.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
Modified: 4/10/2012 2:39:21 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad

Created: 4/10/2012 1:58:00 PM
 Modified: 4/10/2012 2:39:21 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		4/10/2012 2:39:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-04-10\2012-04-10_005.xad)		Instrument	Run		4/10/2012 1:58:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/10/2012 1:58:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/10/2012 1:58:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/10/2012 1:58:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/10/2012 1:58:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/10/2012 1:58:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/10/2012 1:58:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1