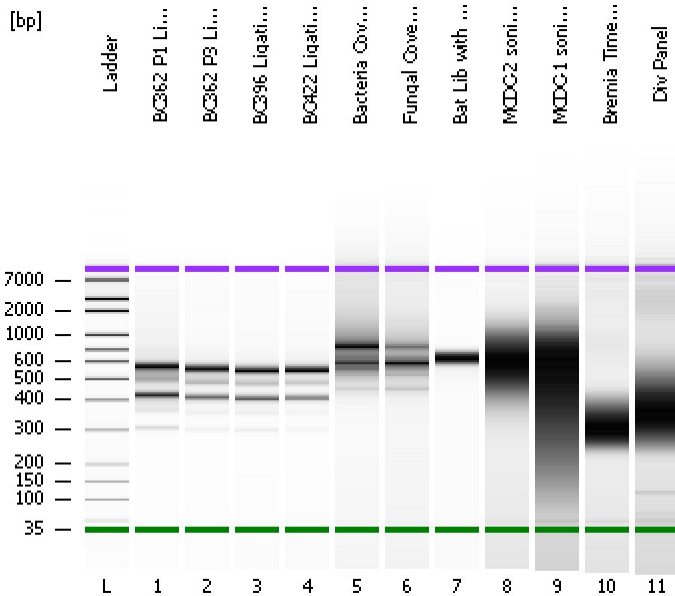


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
Modified: 2/26/2016 4:58:46 PM

Electrophoresis File Run Summary



Instrument Information:

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

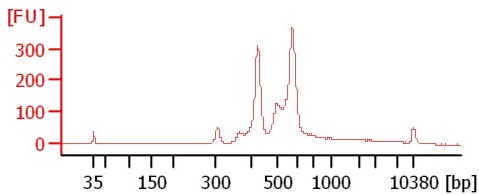
Assay Information:

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

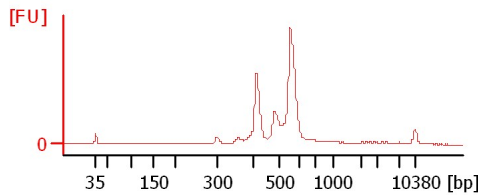
Chip Information:

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

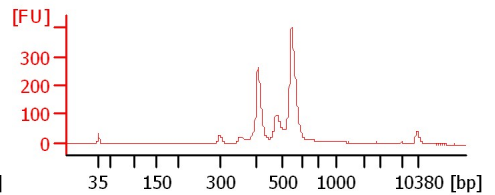
BC362 P1 Ligation (1:2)



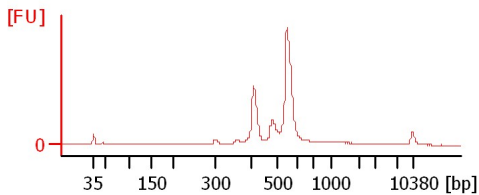
BC362 P3 Ligation (1:2)



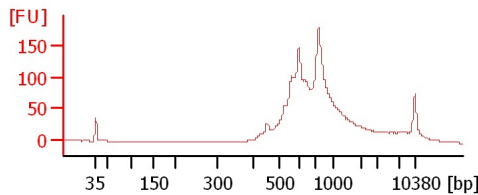
BC396 Ligation (1:2)



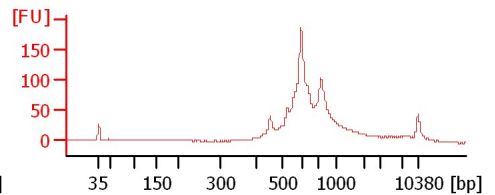
BC422 Ligation (1:2)



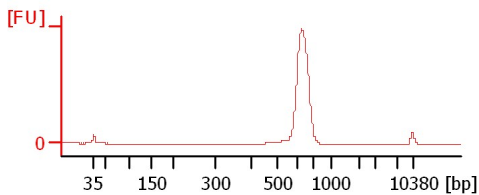
Bacteria Cover Crop Ligation



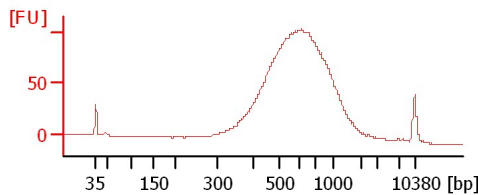
Fungal Cover Crop Ligation



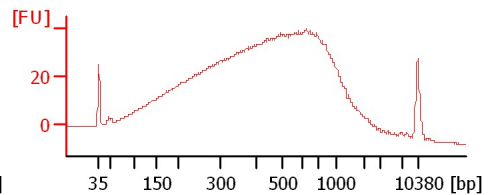
Bat Lib with 4 PCR Cycles (1:4)



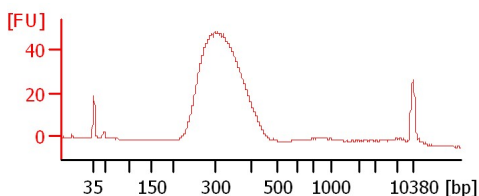
MDC-2 soni gDNA with 0.4XR/0.6XL (1:4)



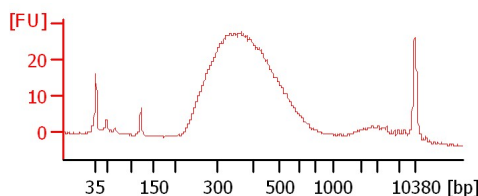
MDC-1 soni gDNA 35sec



Bremia TimeCourse



Div Panel



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
BC362 P1 Ligation (1:2)		<input type="checkbox"/>	✓			
BC362 P3 Ligation (1:2)		<input type="checkbox"/>	✓			
BC396 Ligation (1:2)		<input type="checkbox"/>	✓			
BC422 Ligation (1:2)		<input type="checkbox"/>	✓			
Bacteria Cover Crop Ligation		<input type="checkbox"/>	✓			
Fungal Cover Crop Ligation		<input type="checkbox"/>	✓			
Bat Lib with 4 PCR Cycles (1:4)		<input type="checkbox"/>	✓			
MCDC-2 soni gDNA with 0.4XR/0.6XL (1:4)		<input type="checkbox"/>	✓			
MCDC-1 soni gDNA 35sec		<input type="checkbox"/>	✓			
Bremia TimeCourse		<input type="checkbox"/>	✓			
Div Panel		<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\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
Modified: 2/26/2016 4:58:46 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

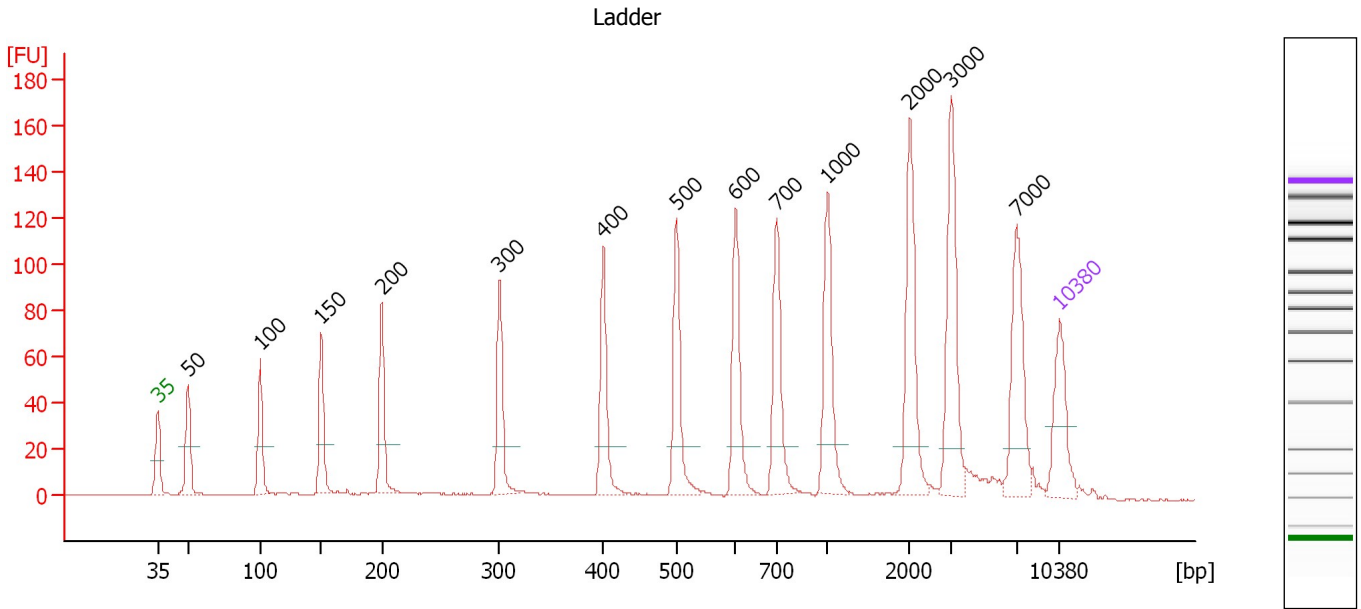
**Ladder**

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\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

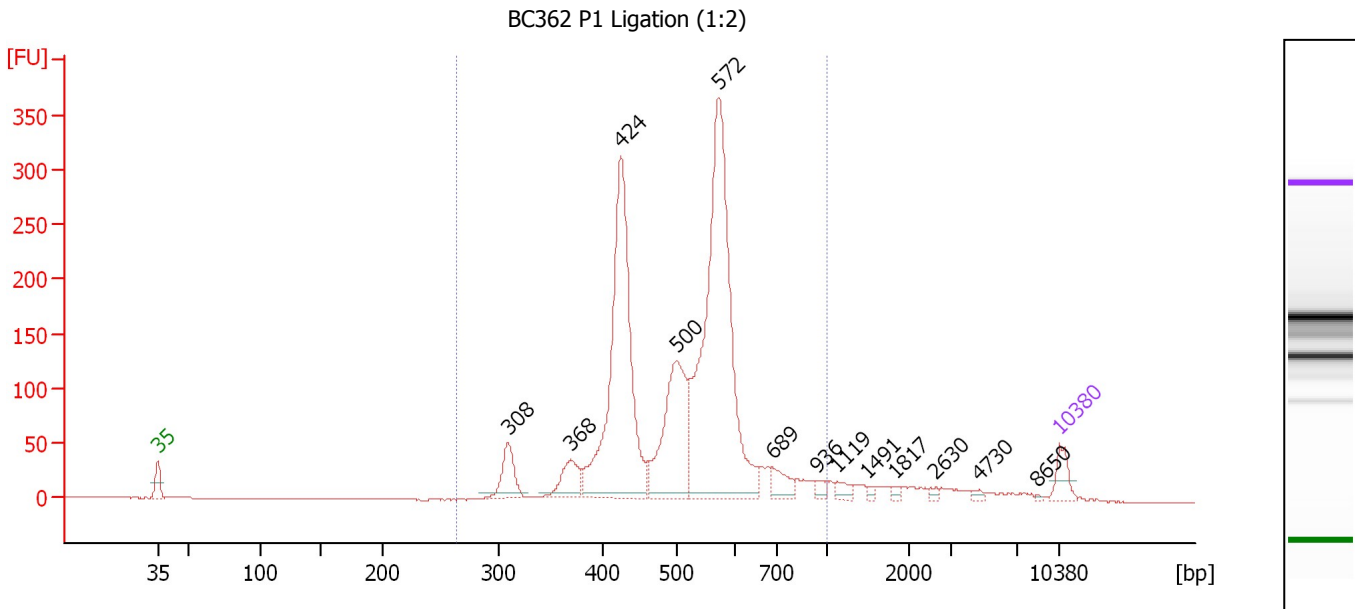
**Peak table for Ladder**

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	45.35
3	100	150.00	2,272.7	Ladder Peak	50.96
4	150	150.00	1,515.2	Ladder Peak	55.71
5	200	150.00	1,136.4	Ladder Peak	60.42
6	300	150.00	757.6	Ladder Peak	69.53
7	400	150.00	568.2	Ladder Peak	77.59
8	500	150.00	454.5	Ladder Peak	83.25
9	600	150.00	378.8	Ladder Peak	87.86
10	700	150.00	324.7	Ladder Peak	91.07
11	1,000	150.00	227.3	Ladder Peak	95.01
12	2,000	150.00	113.6	Ladder Peak	101.39
13	3,000	150.00	75.8	Ladder Peak	104.60
14	7,000	150.00	32.5	Ladder Peak	109.69
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : BC362 P1 Ligation (1:2)**

Number of peaks found: 13                      Corr. Area 1: 2,349.0  
 Noise: 0.2

**Peak table for sample 1 : BC362 P1 Ligation (1:2)**

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	308	188.28	925.1		70.21
3	368	165.27	679.7		75.05
4	424	1,469.71	5,248.2		78.97
5	500	669.36	2,026.3		83.28
6	572	1,903.53	5,042.4		86.57
7	689	95.12	209.1		90.73
8	936	28.50	46.1		94.17
9	1,119	38.93	52.7		95.77
10	1,491	13.42	13.6		98.14
11	1,817	14.02	11.7		100.22
12	2,630	13.66	7.9		103.41
13	4,730	14.39	4.6		106.80
14	8,650	4.68	0.8		111.31
15	10,380	75.00	10.9	Upper Marker	113.00

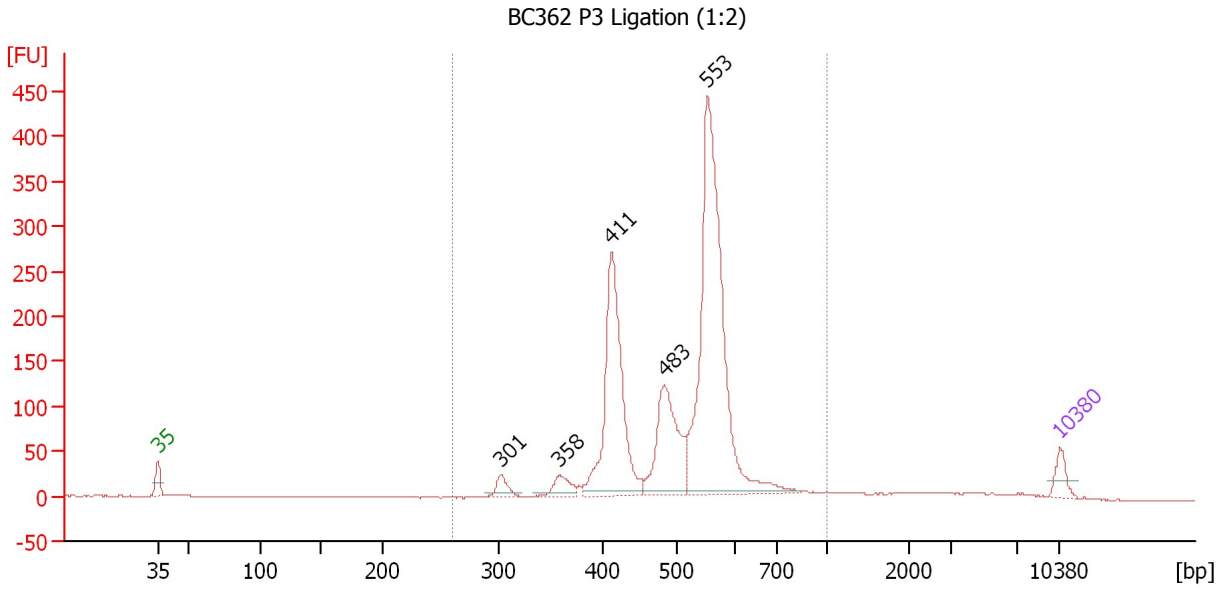
**Region table for sample 1 : BC362 P1 Ligation (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
264	1,000	515	2,349.0	14,849.6	4,770.70	92	20.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : BC362 P3 Ligation (1:2)**

Number of peaks found: 5                      Corr. Area 1: 2,057.2  
 Noise: 0.2

**Peak table for sample 2 : BC362 P3 Ligation (1:2)**

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	301	95.16	478.7		69.63
3	358	115.36	488.1		74.21
4	411	1,189.68	4,385.4		78.22
5	483	641.41	2,010.1		82.32
6	553	2,143.98	5,874.2		85.69
7	10,380	75.00	10.9	Upper Marker	113.00

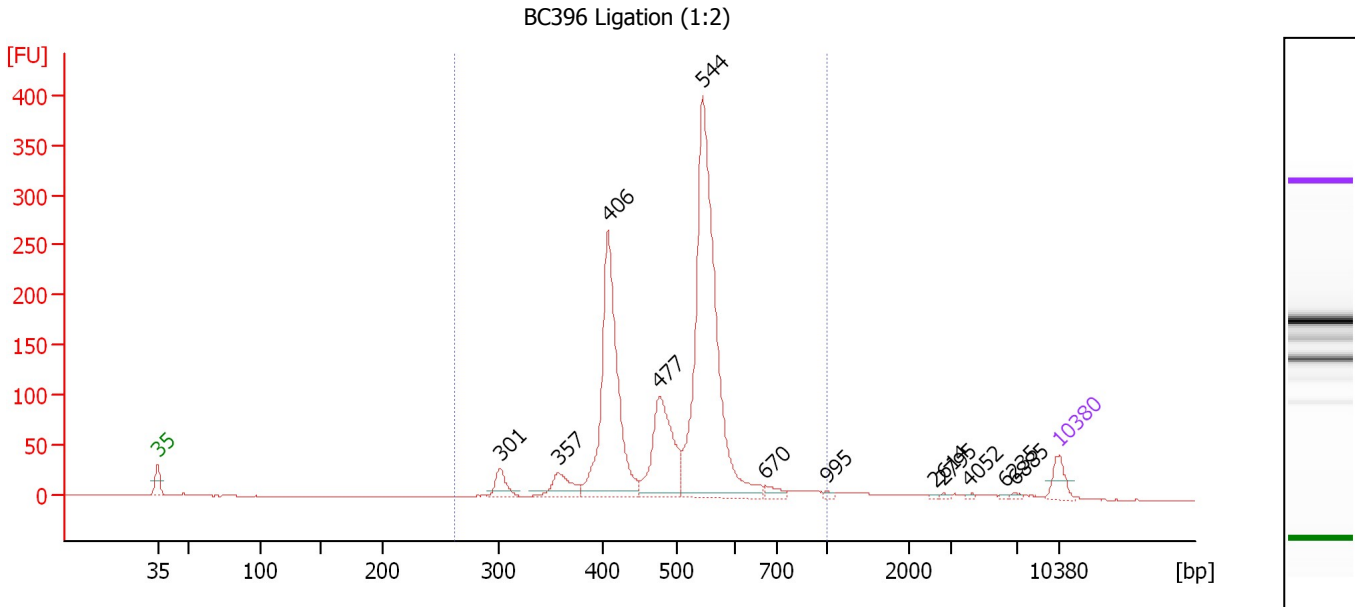
**Region table for sample 2 : BC362 P3 Ligation (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
261	1,000	511	2,057.2	13,741.4	4,436.93	94	18.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : BC396 Ligation (1:2)**

Number of peaks found: 12                      Corr. Area 1: 1,741.6  
 Noise: 0.2

**Peak table for sample 3 : BC396 Ligation (1:2)**

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	301	110.26	555.8		69.58
3	357	144.56	614.0		74.11
4	406	1,166.47	4,349.5		77.95
5	477	557.12	1,770.2		81.94
6	544	1,925.03	5,357.0		85.30
7	670	42.69	96.5		90.12
8	995	11.29	17.2		94.94
9	2,614	6.72	3.9		103.36
10	2,795	7.28	3.9		103.95
11	4,052	6.02	2.3		105.94
12	6,235	6.66	1.6		108.72
13	6,885	9.56	2.1		109.54
14	10,380	75.00	10.9	Upper Marker	113.00

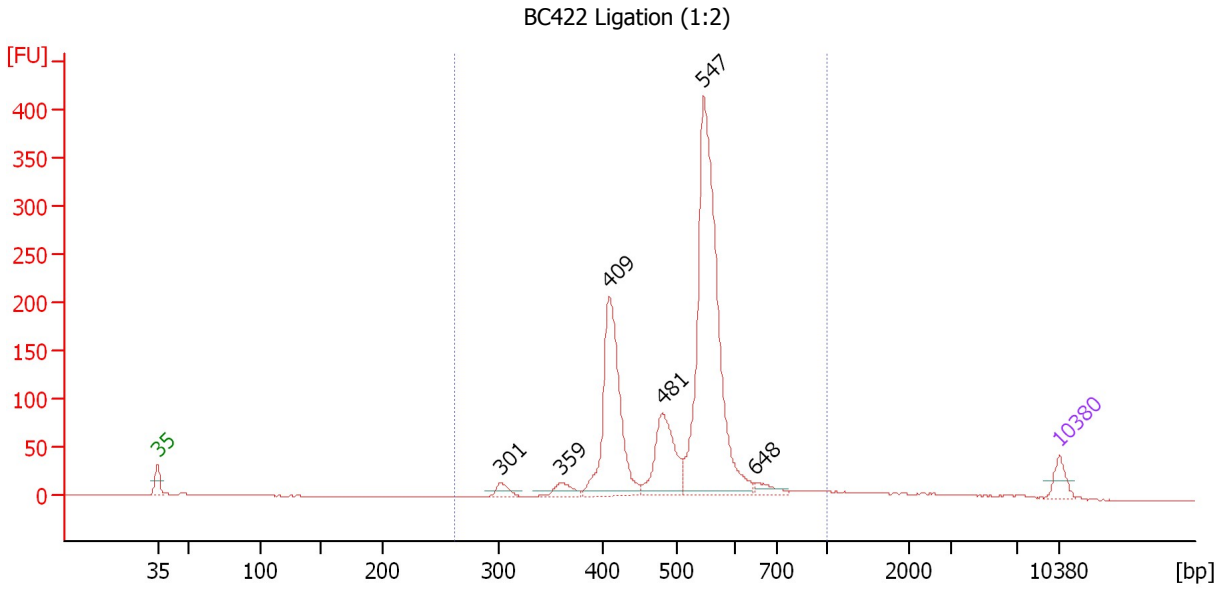
**Region table for sample 3 : BC396 Ligation (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
261	1,000	501	1,741.6	12,790.1	4,039.46	94	18.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : BC422 Ligation (1:2)**

Number of peaks found: 6                      Corr. Area 1: 1,624.0  
 Noise: 0.2

**Peak table for sample 4 : BC422 Ligation (1:2)**

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	301	66.97	337.1		69.61
3	359	86.76	366.4		74.27
4	409	1,028.33	3,814.0		78.07
5	481	489.50	1,541.8		82.18
6	547	2,125.07	5,891.6		85.40
7	648	55.16	129.0		89.40
8	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : BC422 Ligation (1:2)**

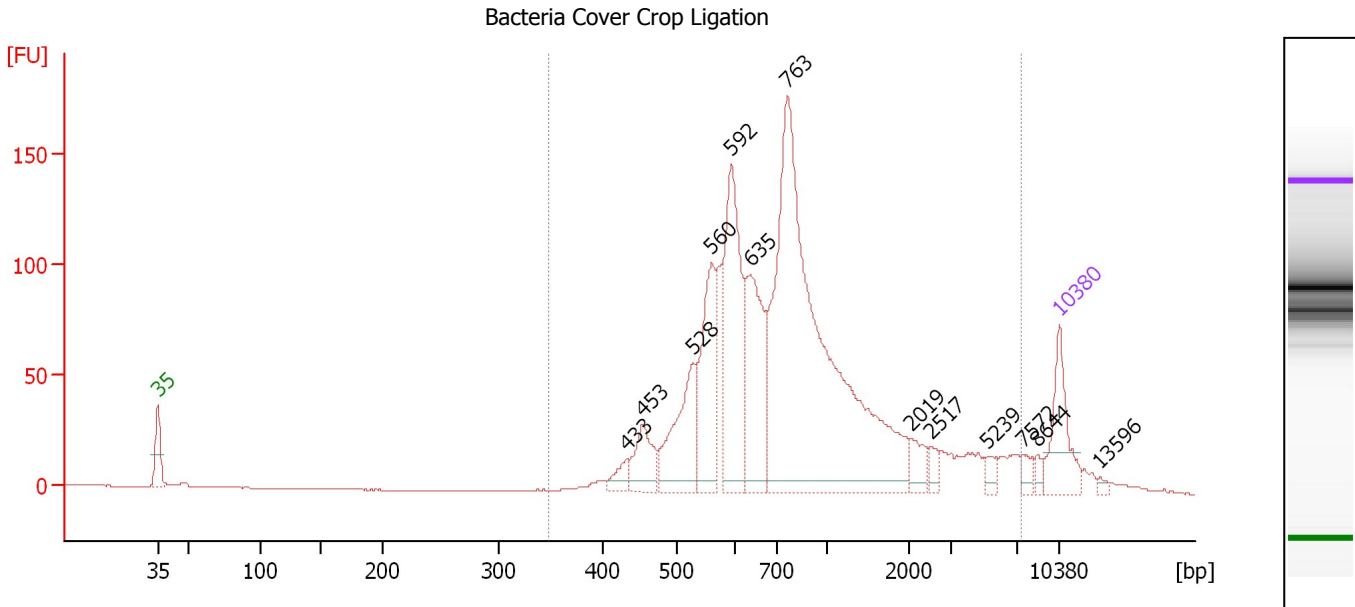
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
261	1,000	515	1,624.0	12,274.7	4,010.84	95	17.3



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Bacteria Cover Crop Ligation**

Number of peaks found: 13                      Corr. Area 1: 1,840.2  
 Noise: 0.2

**Peak table for sample 5 : Bacteria Cover Crop Ligation**

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	433	26.00	91.0		79.45
3	453	70.63	236.2		80.60
4	528	145.52	417.5		84.55
5	560	165.71	448.7		86.00
6	592	268.95	688.1		87.50
7	635	186.34	444.3		89.00
8	763	911.09	1,809.3		91.90
9	2,019	28.64	21.5		101.45
10	2,517	14.78	8.9		103.05
11	5,239	13.93	4.0		107.45
12	7,572	13.24	2.6		110.25
13	8,644	8.73	1.5		111.30
14	10,380	75.00	10.9	Upper Marker	113.00
15	13,596	0.00	0.0		116.15

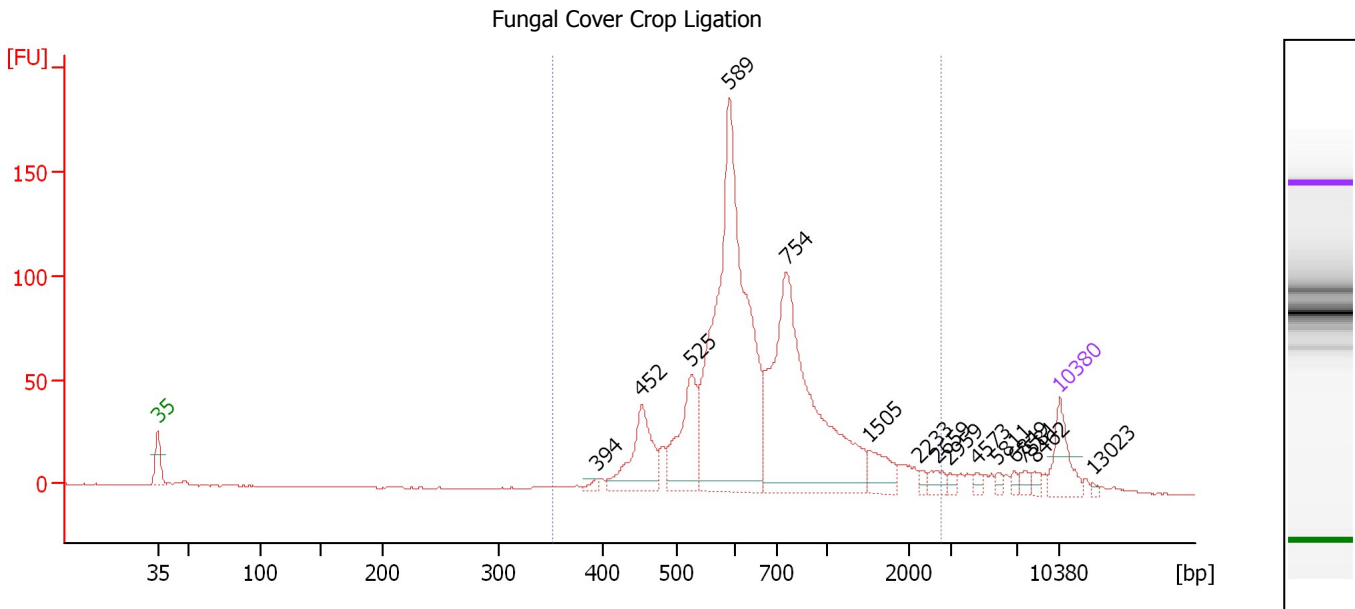
**Region table for sample 5 : Bacteria Cover Crop Ligation**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
348	7,402	1,123	1,840.2	4,029.2	1,935.69	96	100.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Fungal Cover Crop Ligation**

Number of peaks found: 15                      Corr. Area 1: 1,346.4  
 Noise: 0.3

**Peak table for sample 6 : Fungal Cover Crop Ligation**

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	394	12.33	47.4		77.11
3	452	182.57	611.3		80.56
4	525	203.20	586.0		84.42
5	589	1,017.61	2,616.5		87.37
6	754	769.67	1,546.7		91.78
7	1,505	61.65	62.1		98.23
8	2,233	11.24	7.6		102.14
9	2,659	21.48	12.2		103.51
10	2,959	9.48	4.9		104.47
11	4,573	9.87	3.3		106.60
12	5,811	9.02	2.4		108.18
13	6,849	9.60	2.1		109.50
14	7,581	14.44	2.9		110.26
15	8,462	10.92	2.0		111.12
16	10,380	75.00	10.9	Upper Marker	113.00
17	13,023	0.00	0.0		115.59

**Region table for sample 6 : Fungal Cover Crop Ligation**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
351	2,743	771	1,346.4	5,569.1	2,376.36	89	50.9

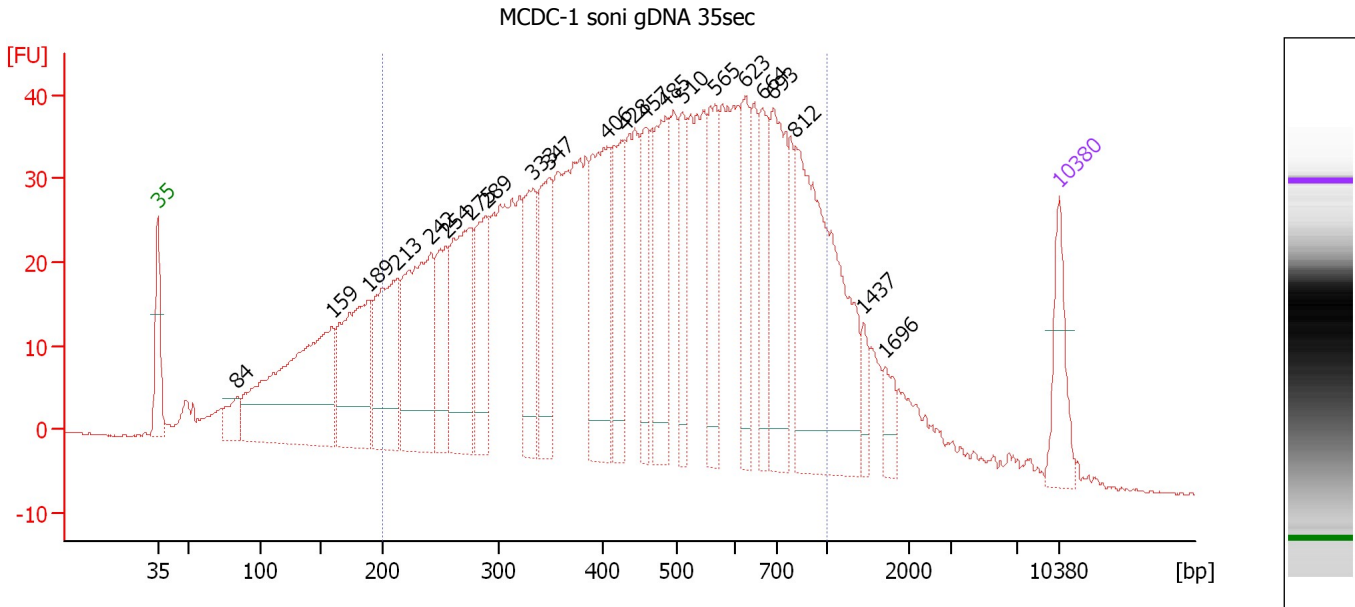




Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : MCDC-1 soni gDNA 35sec**

Number of peaks found: 22                      Corr. Area 1: 1,463.2  
 Noise: 0.2

**Peak table for sample 9 : MCDC-1 soni gDNA 35sec**

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	84	57.39	1,041.3		49.11
3	159	548.39	5,228.2		56.55
4	189	314.89	2,526.0		59.37
5	213	263.55	1,874.5		61.60
6	242	345.16	2,159.5		64.26
7	254	145.32	865.4		65.38
8	275	258.54	1,425.4		67.24
9	289	170.40	893.9		68.51
10	333	174.23	793.1		72.18
11	347	167.13	730.4		73.30
12	406	249.17	930.4		77.92
13	428	143.09	506.2		79.20
14	457	112.09	371.3		80.84
15	485	199.44	623.5		82.38
16	510	112.35	333.8		83.71
17	565	139.01	372.5		86.26
18	623	119.66	290.9		88.60
19	664	109.33	249.3		89.93
20	693	212.11	464.0		90.84
21	812	474.50	885.9		92.54
22	1,437	31.32	33.0		97.80
23	1,696	35.96	32.1		99.45
24	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary Continued ...**

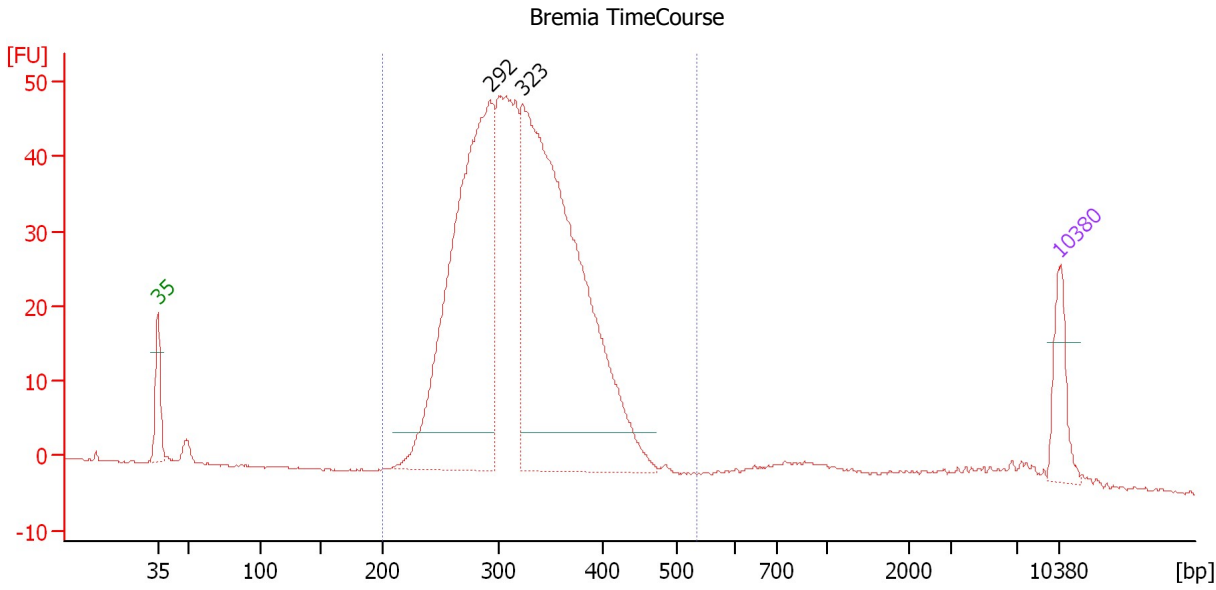
... Region table for sample 9 : MCDC-1 soni gDNA 35sec

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ $\mu$ l]	% of Total	Size distribution in CV [%]
200	1,000	477	1,463.2	20,094.5	5,085.89	78	38.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Bremia TimeCourse**

Number of peaks found: 2                      Corr. Area 1: 741.3  
 Noise: 0.1

**Peak table for sample 10 : Bremia TimeCourse**

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	292	1,117.38	5,800.8		68.79
3	323	1,444.95	6,772.9		71.41
4	10,380	75.00	10.9	Upper Marker	113.00

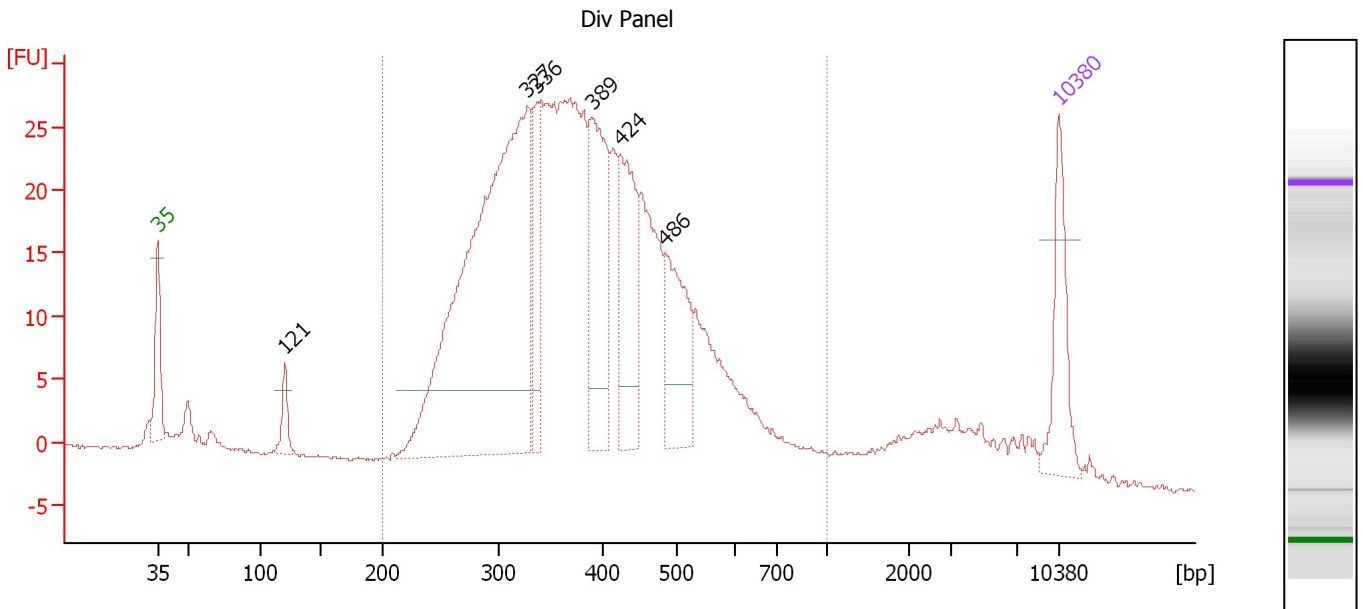
**Region table for sample 10 : Bremia TimeCourse**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	536	322	741.3	14,912.5	3,082.30	93	15.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : Div Panel**

Number of peaks found: 6                      Corr. Area 1: 642.4  
 Noise: 0.2

**Peak table for sample 11 : Div Panel**

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	121	37.51	471.5		52.92
3	327	866.26	4,010.6		71.73
4	336	110.61	498.9		72.43
5	389	207.49	808.0		76.71
6	424	162.21	579.3		78.96
7	486	133.46	416.3		82.45
8	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : Div Panel**

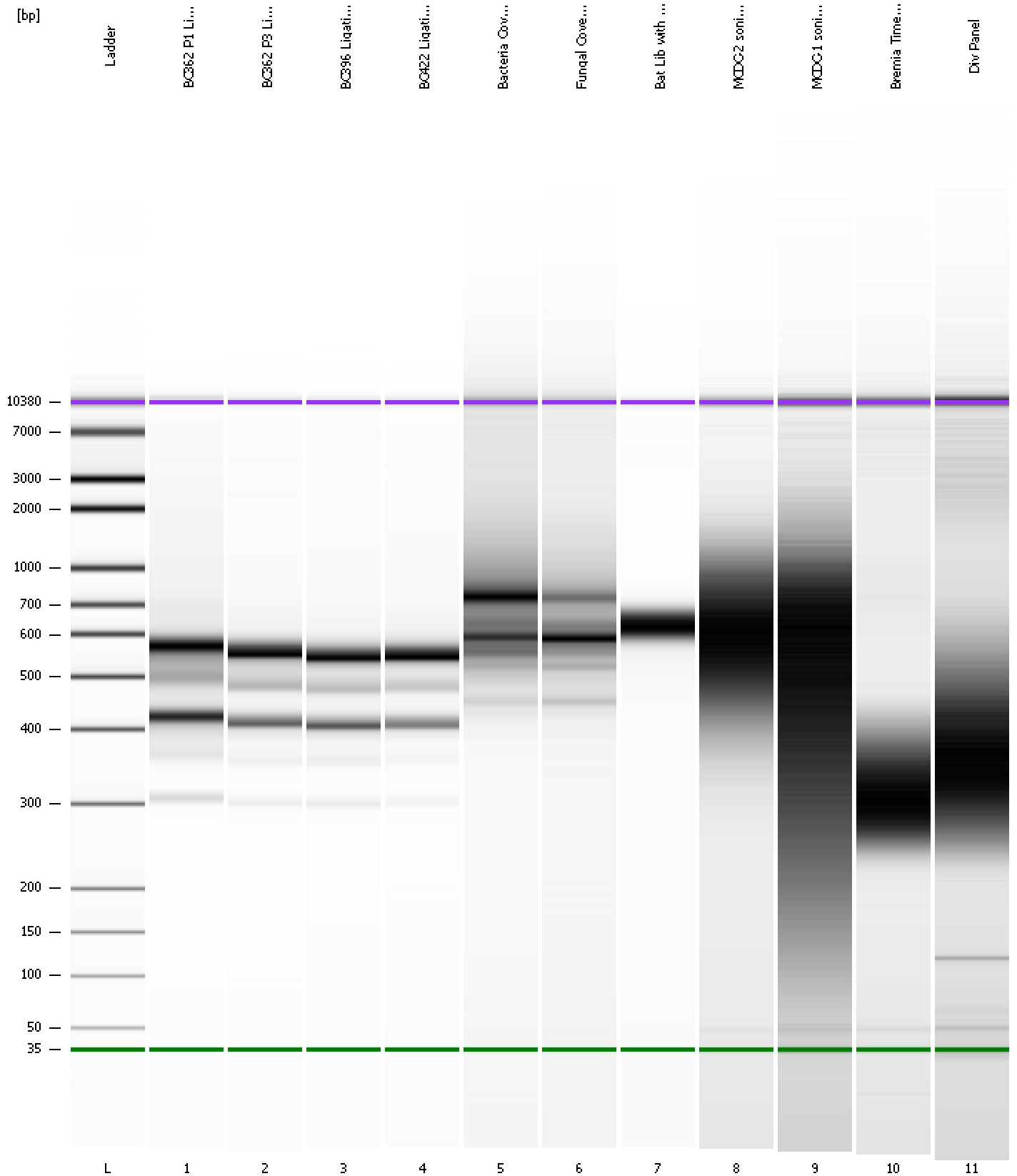
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	395	642.4	11,371.1	2,708.87	90	27.9



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
Modified: 2/26/2016 4:58:46 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-26\2016-02-26\_001.xad

Created: 2/26/2016 4:17:29 PM  
 Modified: 2/26/2016 4:58:46 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		2/26/2016 4:58:46 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2016-02-26\2016-02-26_001.xad)		Instrument	Run		2/26/2016 4:17:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/26/2016 4:17:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/26/2016 4:17:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/26/2016 4:17:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/26/2016 4:17:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/26/2016 4:17:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/26/2016 4:17:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1