

## SAE J661 (STABILIZED NOV 2012) Brake Lining Quality Control Test Procedure

Client	Indubal Camino a Melipilla 10750 Santiago Chile	Work Order No.	144485
Formulation	AF2031	Test No.	M22-433-19
Sample	A	Date	12 May 14
		Technician	M. Richey
		Prepared By	A. Vernatter

	Sample Mass	Sample Thickness			Indicator	Sample Size		
	grams	inches	inches	average	inches	inches		
Initial	8.1793	0.246	0.246	0.245	0.000		<u>min</u>	<u>max</u>
Final	7.6666	0.235	0.233	0.234	-0.012	Length	0.978	0.981
Loss	0.5127	0.011	0.013	0.011	0.012	Width	0.980	0.990
Loss %	6.27%				4.75%			

Total Work = 6.254 MJ

Wear Rate = 0.082 g/MJ

FIRST BASELINE			SAE J866 FRICTION CLASSIFICATION			SECOND FADE				
Cycle	Temp °F	μ	Sum	Mean	Class	Minutes	Temp °F	μ		
1	190	0.30	Normal	2.01	0.501	G	0.0	200	0.45	N
5	198	0.31					0.7	250	0.47	N
10	199	0.35	Hot	5.01	0.501	G	1.3	300	0.53	N
15	199	0.39					1.7	350	0.56	
20	198	0.43	<u>Pre-Wear Indicator (inches)</u>			2.2	400	0.56	N	
			0.001			2.8	450	0.54	H	
FIRST FADE			WEAR TEST			SECOND RECOVERY				
Minutes	Temp °F	μ	Cycle	Temp °F	μ	<u>Temp °F</u>		<u>μ</u>		
0.0	200	0.38	1	390	0.54	600	0.49			
0.6	250	0.43	10	402	0.53	500	0.51	H		
1.1	300	0.46	20	401	0.50	400	0.52	H		
1.8	350	0.49	30	400	0.51	300	0.51	H		
2.4	400	0.45	40	400	0.52	200	0.48			
3.0	450	0.47	50	401	0.52					
3.7	500	0.44	60	400	0.49	SECOND BASELINE				
4.5	550	0.42	70	399	0.51	Cycle	Temp °F	μ		
			80	402	0.51	1	199	0.48		
FIRST RECOVERY			90	401	0.51	5	198	0.51		
Temp °F	μ		100	401	0.51	10	196	0.52		
500	0.51		<u>Post-Wear Indicator (inches)</u>			15	198	0.53		
400	0.52	H	-0.010			20	191	0.52		
300	0.54	H	<u>Wear Sequence Loss (inches)</u>							
200	0.53		0.011							

Comments: No unusual noise or performance characteristics observed.

Test Speed = 417 r/min  
 Test Load = 150 lbf  
 μ = Friction Coefficient  
 \* = Temperature not achieved  
 Temperatures reported at onset of application

Signature Ann Vernatter  
 Ann Vernatter, Data Supervisor  
 for Greening Testing Laboratories, Inc.

### Greening Testing Laboratories, Inc.

19465 Mt. Elliott Avenue  
 Detroit, MI USA 48234-2742  
 Phone: +1 313 366 7160 • Fax: +1 313 366 5415  
 Email: [info@greeninginc.com](mailto:info@greeninginc.com) • Web: [www.greeninginc.com](http://www.greeninginc.com)



This report may not be duplicated or otherwise distributed except in whole without prior written permission of Greening Testing Laboratories, Inc., specific to each instance.  
 The results depicted in this report are valid only for the samples submitted and may not reflect the performance of these materials in general.  
 The layout, composition and organization of this test report is a trademark of Greening Testing Laboratories, Inc.  
 Copyright ©2014 Greening Testing Laboratories, Inc. All rights reserved. Uncertainty data available upon request.

# SAE J661 (STABILIZED NOV 2012) Brake Lining Quality Control Test Procedure

Client Indubal  
Formulation AF2031

Work Order No. 144485  
Test No. M22-433-19

