

**TEST METHOD D8165  
L-37-1 Load Evaluation**

**VERSION**

**CONDUCTED FOR:**

	<b>V</b> = Valid
	<b>I</b> = Invalid
	<b>N</b> = Results cannot be interpreted (Refer to comment section)

	<b>NR</b> = Non-Reference Test Oil
	<b>RO</b> = Reference Oil Result

Test Number			
Test Stand:		Stand Run Number:	
Date Completed:		Time Completed:	
Oil Code:			
Formulation/Stand Code:			
Alternate Codes:			
Test Hardware <sup>A</sup> :		Test Version <sup>B</sup> :	

In my opinion this test \_\_\_\_\_ been conducted in a valid manner in accordance with Test Method D8165 and the appropriate amendments through the information letter system. The remarks included in this report describe the anomalies associated with this test.

<sup>A</sup> MnP Coated or Uncoated

<sup>B</sup> Standard or Canadian

Submitted By: \_\_\_\_\_

\_\_\_\_\_ Testing Laboratory

\_\_\_\_\_ Signature

\_\_\_\_\_ Typed Name

\_\_\_\_\_ Title

\_\_\_\_\_ Section

**TEST METHOD D8165**  
**L-37-1**  
**Form 1**  
**Test Result Summary Sheet**

<b>Oil Test</b>			
Lab:	Stand:	Stand Run :	
Start Date:	Date Completed:	EOT Time:	Test Length:
TMC Oil Code:	Laboratory Oil Code:	Viscosity Grade:	
Oil Code:			
Formulation Stand Code:			
Latest Information Letter Test Was Run Under:			
Test Hardware:		Test Version:	
Batch:	Pinion Batch:	Ring Batch:	

<b>Last Reference Oil Calibrating Stand Information - Fill Out For Non-reference Oil Tests Only</b>			
Stand:	Stand Run:	TMC Oil Code:	Date Completed:
Batch:	Pinion Batch:	Ring Batch:	
Test Hardware:		Test Version:	

	<b>Ring Gear Results</b>				
	<b>Wear</b>	<b>Rippling</b>	<b>Ridging</b>	<b>Pitting/Spalling</b>	<b>Scoring</b>
Original Merit Results <sup>C</sup>					
Transformed Results					
Correction Factor					
Corrected Transformed Results					
Severity Adjustment <sup>A</sup>					
Final Transformed Results					
Final Merit Results					

	<b>Pinion Gear Results</b>				
	<b>Wear</b>	<b>Rippling</b>	<b>Ridging</b>	<b>Pitting/Spalling</b>	<b>Scoring</b>
Original Merit Results <sup>B,C</sup>					
Transformed Results					
Correction Factor					
Corrected Transformed Results					
Severity Adjustment <sup>A</sup>					
Final Transformed Results					
Final Merit Results					

<sup>A</sup> At the present time there are no severity adjustments  
<sup>B</sup> With any applicable exclusions applied  
<sup>C</sup> If tooth breakage occurs, leave results blank and report in comment section



**TEST METHOD D8165**

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**Form 3**

**Operational Summary Sheet**

Lab:	Stand :	Stand Run:
Oil Code:	Test Version:	

<b>Pinion Torque Checks – Full Axle Assembly</b>		
	<b>Break</b>	<b>Turn</b>
Before Test (N·m)		
After Test - hot (N·m)		
After Test - cool (N·m)		

<b>Backlash Measurements</b>							
<b>Laboratory's Position Measurements</b>							
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Average</b>
Before Test (mm)							
After Test (mm)							
Difference (mm)							

<b>General Operating Conditions</b>				
<b>Gear Conditioning Phase:</b>	<b>Start</b>	<b>Finish</b>	<b>Average</b>	<b>Total</b>
1. Time (hh:mm)				
Time (mmmmmm)				
	<b>Maximum</b>	<b>Minimum</b>	<b>Average</b>	
2. Gear-lubricant Temperature (°C)				
3. Dyno Torque 1 (N·m)				
Dyno Torque 2 (N·m)				
4. Dyno Speed 1 (r/min)				
Dyno Speed 2 (r/min)				
<b>Gear Testing Phase:</b>	<b>Start</b>	<b>Finish</b>	<b>Average</b>	<b>Total</b>
1. Time (hh:mm)				
Time (mmmmmm)				
	<b>Maximum</b>	<b>Minimum</b>	<b>Average</b>	
2. Gear-lubricant Temperature (°C)				
3. Dyno Torque 1 (N·m)				
Dyno Torque 2 (N·m)				
4. Dyno Speed 1 (r/min)				
Dyno Speed 2 (r/min)				







**TEST METHOD D8165**  
**L-37-1**  
**Form 5**  
**Operational Validity Summary**

Lab:	Stand:	Stand Run:
Oil Code:		
Test Hardware:		Test Version:

<b>Controlled Parameter</b>	<b>Gear Conditioning</b>			<b>Gear Testing</b>		
	<b>Allowable % Out</b>	<b>This Test % Out</b>	<b>Actual Time Out min:s</b>	<b>Allowable % Out</b>	<b>This Test % Out</b>	<b>Actual Time Out min:s</b>
Gear Oil Temperature	5			5		
Wheel Speed	5			5		
Wheel Speed 2	5			5		
Dyno Load	5			5		
Dyno Load 2	5			5		

**TEST METHOD D8165**

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**Form 6**

**Drive-side & Coast-side Pattern Photos**

Lab:	Stand:	Stand Run:
Oil Code:	Test Version:	