# **TEST METHOD D6121** L-37 Load Evaluation

### VERSION

### **CONDUCTED FOR:**

		$\mathbf{V} = \mathbf{Valid}$					
		I = Invalid					
		N = Results cannot be interpreted(Refer to comment section)					
			Non-Reference Test Oil Reference Oil Result				
		Tes	t Number				
Test Stand:			Stand Run Number:				
Date Completed:			Time Completed:				
Oil Cod	e:						
Formula	ntion/Stand Code:						
Alternat	e Codes:						
Test Ha	rdware <sup>A</sup> :		Test Version B:				
D6121 a			cted in a valid manner in accordant in accordant formation letter system. The remarks				
	l or Lubrited			_			
Standard of	r Canadian	Submitted By:					
			Testing La	aboratory			
			Signa	iture			
			Typed	Name			
			Tit	le			
			Sect	ion			

#### **TEST METHOD D6121**

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#### Form 1

### **Test Result Summary Sheet**

Oil Test				
Lab:	Stand:	Stand: Stand I		
Start Date:	Date Completed:		EOT Time:	Test Length:
TMC Oil Code:	Laboratory Oil Code: Viscosity Grade			
Oil Code:				
Formulation Stand Code:				
Latest Information Letter	Гest Was Run Under	r:		
Test Hardware:		Test Version:		
Pinion Batch: Ring Batch:				
_	_	-	_	

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

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

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

 $<sup>^{\</sup>rm A}$  AT THE PRESENT TIME THERE ARE NO SEVERITY ADJUSTMENTS  $^{\rm B}$  WITH ANY APPLICABLE EXCLUSIONS APPLIED  $^{\rm C}$  IF TOOTH BREAKAGE OCCURS, LEAVE RESULTS BLANK AND REPORT IN COMMENT SECTION

#### **TEST METHOD D6121** L-37 Form 2

#### **Gear Tooth Surface Condition**

Stand:			S	Stand Run:	
Oil Code:			Test Version:		
			•		
(	Gear Batc	h Identifica	ation		
Test Hardware: Pinion Batch:				Ring Batch:	
		Assembly	Date:	· -	
ength Rating:		Pattern Co	ntact F	Flank Rating:	
				-	
Test Phase – After Com	pletion of	Pinion and	l Ring	<b>Gear Drive Side Inspection</b>	
				-	
Original Ring	g Rating			Original Pinion Rating	
Original Ring Rating	Origina	al Pinion Ra	ating	Pinion Rating With Exclusion Applied If Applicable	
<b>Test Method Defined</b>	Rating Ex	xclusion Co	mmen	its (See Annex A12)	
	ength Rating:  Test Phase – After Com  Original Ring  Original Ring Rating	Gear Bate Pinion  Pinion  Test Phase – After Completion of  Original Ring Rating  Original Ring Rating  Original Ring Rating  Test Method Defined Rating Ex	Gear Batch Identifics Pinion Batch: Assembly Pattern Co  Test Phase – After Completion of Pinion and  Original Ring Rating  Original Ring Rating  Test Method Defined Rating Exclusion Co	Gear Batch Identification Pinion Batch: Assembly Date: Pattern Contact F  Test Phase – After Completion of Pinion and Ring  Original Ring Rating  Original Ring Rating  Test Method Defined Rating Exclusion Commen	

#### TEST METHOD D6121 L-37 Form 3

## **Operational Summary Sheet**

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

	Pinion Torque Checks – Full Axle A	assembly
	Break	Turn
Before Test (lbf-in.)		
After Test - hot (lbf-in.)		
After Test - cool (lbf-in.)		

Back Lash Measurements				
	Maximum	Minimum	Average	
Before Test (in.)				
After Test (in.)				
Difference (in.)				

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

### **TEST METHOD D6121**

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#### Form 4

### **Lost Time and Comments Sheet**

Lab: Stand:		Stand:	Stand Run:
Oil Code:		- Contract	O WATE TOWN
Test Hardy	vare:		Test Version:
	e: shutdown, tim	ne off test conditio	ns, early inspections/termination with reason and
		Occurrences	
Test Hours	Date	Downtime	
			Total Downtime (hours)
Oth	er Comme	nts	
	of Commen		
2 1 0 1 2 2 2 2			

#### TEST METHOD D6121 L-37 Form 4A

#### **Lost Time and Comments Sheet**

Lab:		Stand:	Stand Run:
Oil Code:			·
Test Hardwa	ire:		Test Version:
Test Lost Time: Record the time sl minimum oil tem	hutdown, time of perature in degree	f test conditions, e	early inspections/termination with reason and
Number of I			
Test Hours	Date	Downtime	Reasons
L			Total Downtime (hours)
			Total Downsmic (Hours)
Other	Comments		
Number of	Comment L	ines	

#### TEST METHOD D6121 L-37 Form 4B

#### **Lost Time and Comments Sheet**

Lab:		Stand:	Stand Run:					
Oil Code:		Starra.	Swite Item					
Test Hardwa	are:		Test Version:					
Test Lost Time:	hutdown, time o	ff test conditions, e	early inspections/termination with reason and					
Number of Downtime Occurrences								
Test Hours	Date	Downtime	Reasons					
			Total Downtime (hours)					
			Total Downtline (notifs)					
Other	Comments	;						
Number of	Comment I	Lines						

### **TEST METHOD D6121**

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# Form 5 Operational Validity Summary

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

	Gea	ar Condition	ing	Gear Testing		
Controlled Parameter	Allowable % Out	This Test % Out	Actual Time Out min:s	Allowable % Out	This Test % Out	Actual Time Out min:s
Gear Oil Temperature	5			5		
Wheel Speed	5			5		
Wheel Speed 2	5			5		
Dyno Load	5			5		
Dyno Load 2	5			5		