# **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 Sta	nd:		Stand Run Number:				
Date Co	ompleted:		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**

#### L-37

#### Form 1

### **Test Result Summary Sheet**

Oil Test					
Lab:	Stand:			Stand Run:	
Start Date:	Date Completed:		EOT Time:	Test Length:	
TMC Oil Code:	Laboratory Oil Cod	le:		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:			Stand Run:			
Oil Code:			Test Version:			
			•			
Gear Batch Identification						
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 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 Run:
Oil Code:			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:	[5	Stand Run:
Oil Code:		•		
Test Hardwa	are:			Test Version:
Test Lost Time:				
Record the time s minimum oil tem	hutdown, time of perature in degree	f test conditions, e es °F.	arly inspections/termination with reason	and
Number of I	Number of Downtime Occurrences			
Test Hours	Date	Downtime		Reasons
			Total	l Downtime (hours)
Other	Comments			
	f Comment L	ines		
<del>                                     </del>				

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

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

Lab:		Stand:	Stand Run:					
Oil Code:			NATE INTO					
Test Hardwa	ire:		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)					
Other	· Comments	;						
	Comment I							

### **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		