

Report Forms  
**L-33**  
**VERSION 20020503**

CONDUCTED FOR

	V = VALID
	I = INVALID
	N = RESULTS CANNOT BE INTERPRETED (See Comment Section)

	NR = Non-Reference Test Oil
	RO = Reference Oil Result

Test Number			
Motoring Stand	Storage Box #:	Storage Box Run Number:	
Date Completed:		EOT Time:	
Oil Code :			
Formulation/Stand Code:			
Alternate Codes:			

In my opinion this test \_\_\_\_\_ been conducted in a valid manner in accordance with the STP 512A ASTM Test Method and the appropriate amendments through the information letter system. The remarks included in this report describe the anomalies associated with this test.

SUBMITTED BY: \_\_\_\_\_ Testing Laboratory

\_\_\_\_\_  
Signature

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

\_\_\_\_\_  
Title

\_\_\_\_\_  
Section

**L-33  
FORM 1**

**TEST RESULT SUMMARY**

OIL TEST			
LAB	MOTORING STAND	STORAGE BOX #	STORAGE BOX RUN #
START DATE	DATE COMPLETED	END OF TEST TIME	TEST LENGTH
TMC OIL CODE	OILCODE		VISCOSITY GRADE
LABORATORY OIL CODE:			
FORMULATION STAND CODE:			
LATEST INFORMATION LETTER TEST WAS RUN UNDER:			
GEAR VERSION:			
PINION BATCH:		RING BATCH:	

Last Reference Oil Calibrating Storage Box Information - Fill Out For Non-reference Oil Tests Only			
MOTORING STAND:	STORAGE BOX #	TMC OIL CODE:	DATE COMPLETED:
GEAR VERSION:	PINION BATCH:	RING BATCH:	

RUST/CORROSION PASS/FAIL PARAMETERS			
	FINAL	AREA 4	Lowest o f Areas 1-3,5-10
Orginal Merit Results			
Transformed Results <sup>A</sup>			
Correction Factor <sup>A</sup>			
Corrected Transformed Results <sup>A</sup>			
Severity Adjustments <sup>A</sup>			
Final Transformed Results <sup>A</sup>			
Final Merit Results			

<sup>A</sup>AT THE PRESENT TIME THERE ARE NO TRANSFORMATIONS( I.E. MULTIPLY ORIGINAL RESULT \* 1.0), NO CORRECTION FACTORS OR SEVERITY ADJUSTMENTS

**L-33  
FORM 2**

**RATING SUMMARY**

LAB	MOTORING STAND
OIL CODE	STORAGE BOX NO.
	STORAGE BOX RUN NO.

**RATER'S INITIALS (AFTER TEST)**

**RUST/CORROSION**

LOCATION			
DIFFERENTIAL CASE:	RUST <sup>A</sup>	WEIGHTING FACTOR	WEIGHTED RUST
1. At Pinion Contact		* .06	
2. Diff. Gear Contact		* .16	
3. Diff. Gears (Side)		* .11	
4. Axle Hsg. Cover		* .34	
5. Drive Gear (Ring)		* .05	
6. Drive Pinion		* .05	
<b>BEARING:</b>			
7. Drive Pinion Roller		* .06	
8. Drive Pinion Cups		* .07	
9. Diff. Case Roller		* .03	
10. Diff. Case Cups		* .07	
<b>Final Rust/Corrosion Merit Rating</b>			<b>B</b>

<sup>A</sup> Rust Level (Enter 10, 9, 8, 5 or 0):

None	=	10	
Trace	=	9	= not more than six spots of 1mm in diameter or less
Light	=	8	= in excess of specifications for Trace rating and up to 1% of considered surface
Moderate	=	5	= in excess of specification for Light rating and up to 5% of considered surface
Heavy	=	0	= covering more than 5% of considered surface

<sup>B</sup> Caution: The Final Merit rating for non-reference oil tests are not to be judged against category pass/fail limits.

REMARKS: Note presence, location and amount of additional deposit-stain, sludge, etc.

**L-33  
FORM 3**

**OPERATIONAL VALIDITY SUMMARY**

LAB	MOTORING STAND
OIL CODE	STORAGE BOX NO.
	STORAGE BOX RUN NO.

OPERATOR'S INITIALS

TURNING TORQUES:		
Pinion, lbf-in.	Break	Turn
Full Assembly, lbf-in.	Break	Turn

WARM-UP:		
Time (h)	Start	Finish
Temperature °F	Start	Finish

MOTORING PHASE:			
Time (h)	Start		Finish
Pinion Speed, r/min	Avg.	Max.	Min.
Oil Temperature, °F	Avg.	Max.	Min.

STORAGE PHASE:			
Time (h)	Start		Finish
Oil Temperature, °F	Avg.	Max.	Min.

PERCENT DEVIATION						
CONTROLLED PARAMETER	MOTORING PHASE			STORAGE PHASE		
	Allowable % Out	This Test % Out	Actual Time Out min:s	Allowable % Out	This Test % Out	Actual Time Out min:s
OIL TEMPERATURE	5			4		

**L-33  
FORM 4  
PRE TEST RATING<sup>A</sup>**

LAB	MOTORING STAND
OIL CODE	STORAGE BOX NO.
	STORAGE BOX RUN NO.

**Match No.:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Rated By:** \_\_\_\_\_

**Differential Case**

**Area 1. At Pinion Contact:** \_\_\_\_\_

\_\_\_\_\_

**Area 2. At Differential Gear Contact:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Area 3. Differential Gears (Side Gears):** \_\_\_\_\_

\_\_\_\_\_

**Area 4. Axle Housing Cover:** \_\_\_\_\_

\_\_\_\_\_

**Area 5. Drive Gears (Ring):** \_\_\_\_\_

\_\_\_\_\_

**Area 6. Drive Pinion:** \_\_\_\_\_

\_\_\_\_\_

**Area 7. Drive Pinion Rollers:** \_\_\_\_\_

\_\_\_\_\_

**Area 8. Drive Pinion Cups:** \_\_\_\_\_

\_\_\_\_\_

**Area 9. Differential Case Rollers:** \_\_\_\_\_

\_\_\_\_\_

**Area 10. Differential Case Cups:** \_\_\_\_\_

\_\_\_\_\_

<sup>A</sup> AFTER ABRASIVE BLASTING

