

**Report Forms**  
**L-42-1**

**Version:** L421 VERSION 20050712 BETA

Conducted For:

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC  
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

C	V = Valid
	I = Invalid
	N = Results Cannot Be Interpreted (See Comment Section)

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

<b>Test Number</b>			
Test Stand:	CCCCC	Stand Run Number:	CCCC
Date Completed:	YYYYMMDD	EOT Time:	HH:MM
Oil Code:	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC		
Formulation/Stand Code:	CC-CCCCCCCC-C-C-CCCCC-CC-CC-CCCC		
Alternate Codes:	CCCCCCCCCCCCCCC	CCCCCCCCCCCCCCC	CCCCCCCCCCCCCCC
Test Version <sup>A</sup> :	CCCCCC		

In my opinion this test CCCCCCCC been conducted in a valid manner in accordance with the ASTM RR: 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> Standard or Canadian

Submitted By: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC  
Testing Laboratory

Signature Image

Signature

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

Typed Name

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

Title

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

Section

# L-42-1 Form 1 Test Result Summary

Lab: CC	Stand No.: ccccc	Stand Run No.: cccc
Oil Code:cccccccccccccccccccccccccccc		Lab Oil Code: cccccccccccccccc

CCCCCCCC							
Test Date Started	Test Date Completed	End Of Test Time	Total Test Minutes	Drive Side Scoring (%)		Coast Side Scoring (%)	Coast Side Torque (lbf-ft)
				EOT Pinion	EOT Ring	EOT Pinion	EOT Ring
YYYYMMDD	YYYYMMDD	HH:MM	S1234	S123	S123	S123	S1234.1
Ring Batch:	CCCCCCCC	Pinion Batch:	CCCCCCCC	Latest Information Letter Run Against: CCCCCCCC			

Stand Reference Oil Test History In Chronological Order											
	Test Date Started	Test Date Completed	Stand Run No.	CMIR No.	TMC Oil No.	Drive Side Scoring (%)		Coast Side Scoring (%)		Coast Side Torque (lbf-ft)	
						EOT Pinion	EOT Ring	EOT Pinion	EOT Ring	Shock Series 1 (Average)	Shock Series 1 (Average)
Discrimination <sup>A</sup>	YYYYMMDD	YYYYMMDD	CCCC	CCCCCC	CCCCCC	S123	S123	S123	S123	S1234.1	S1234.1
Calibration Sequence Passing Tests Only <sup>B</sup>	YYYYMMDD	YYYYMMDD	CCCC	CCCCCC	CCCCCC	S123	S123	S123	S123	S1234.1	S1234.1
	YYYYMMDD	YYYYMMDD	CCCC	CCCCCC	CCCCCC	S123	S123	S123	S123	S1234.1	S1234.1
	YYYYMMDD	YYYYMMDD	CCCC	CCCCCC	CCCCCC	S123	S123	S123	S123	S1234.1	S1234.1
Passing Reference Oil Test Average								S123	S123	S1234.1	S1234.1

<sup>A</sup>Only for non-reference tests.

**B**For non-reference and discrimination tests only.

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**Form 2**  
**Conditioning Phase Operational Data Summary**

Lab: CC	Stand No.: CCCCC	Stand Run No.: CCCC
Oil Code: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC		

Operational Data				
	Conditioning 1		Conditioning 3	
	Wheel Speed (r/min)	Torques (lbf-ft)	Wheel Speed (r/min)	Torques (lbf-ft)
Average	S12345	S12345	S12345	S12345

Operational Data					
		Conditioning 2		Conditioning 4	
		Wheel Speed (r/min)	Torques (lbf-ft)	Wheel Speed (r/min)	Torques (lbf-ft)
Drive Side	Maximum	S12345	S12345	S12345	S12345
	Minimum	S12345	S12345	S12345	S12345
	Average	S12345	S12345	S12345	S12345
Coast Side	Maximum	S12345	S12345	S12345	S12345
	Minimum	S12345	S12345	S12345	S12345
	Average	S12345	S12345	S12345	S12345

Lubricant Temperature Data				
Phase	Specification	Average	Minimum	Maximum
Gear Conditioning (After reaching 225 °F)	225 ± 5 °F	S123.1	S1234	S1234

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**Form 3**  
**Shock Series Operational Summary**

Lab: CC	Stand No.: CCCCC	Stand Run No: CCCC
Oilcode: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC		

Stand Set-up				
	Shock Series 1		Shock Series 2	
Parameter	Acceleration	Deceleration	Acceleration	Deceleration
Potentiometer Setting	S12.12	S12.12	S123.1	S123.1
Stand Set-up Version	CCCCCCCCCCCC			

Gear Loading Data						
Gear Side		Shock Series 1			Shock Series 2	
		Wheel Speed (r/min)	Torques (lbf-ft)	Cycle Time (Seconds)	Wheel Speed (r/min)	Torques (lbf-ft)
Drive	Maximum	S12345	S12345	S12.12	S12345	S12345
	Minimum	S12345	S12345	S12.12	S12345	S12345
	Average	S12345	S12345	S12.12	S12345	S12345
Coast	Maximum	S12345	S12345	S12.12	S12345	S12345
	Minimum	S12345	S12345	S12.12	S12345	S12345
	Average	S12345	S1234.1	S12.12	S12345	S1234.1

Phase	Specification	Start Value	Maximum
Shock Series 1	200 ± 5 °F	S1234	S1234
Shock Series 2	< 280 °F	S1234	S1234

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**Form 4**  
**Measurement Summary**

Lab:	CC	Stand No.:	CCCCC	Stand Run No.:	CCCC
Oil Code:	CC				

**Axle Codes**

Assembly Date	Match No.	Pinion Batch	Ring Batch
CCCCCC	CCCCCC	CCCCCC	CCCCCC

**Contact Pattern Measurements**

		Drive Side	Coast -Side
Length Rating	As Received	CC	CC
	As Tested	CC	CC
Flank Rating	As Received	CC	CC
	As Tested	CC	CC
Contact Pattern Rater Initials		CCC	

**Test Axle Build Data**

Backlash (in.)	Specification	Average	Position Measurements				Minimum	Maximum
			1	2	3	4		
Initial	.004 -.009 in.	S1.1234	S1.123	S1.123	S1.123	S1.123	S1.123	S1.123
Final		S1.1234	S1.123	S1.123	S1.123	S1.123	S1.123	S1.123
Increase		S1.1234	Break			Turn		
Initial Pinion Torque (lbf -in)			S123.1			S123.1		

Inspection	Ring% Scoring		Pinion % Scoring	
	Drive Side	Coast Side	Drive Side	Coast Side
Inspection 1	S123	S123		
Inspection 2	S123	S123		
EOT	S123	S123	S123	S123
EOT Rating Date			EOT Rater Initials	
YYYYMMDD			CCC	

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**Form 5**

**Downtime and Comments**

Lab:	CC	Stand No.:	CCCCC	Stand Run No.:	CCC
Oil Code:	CC				

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Form 5A

## Downtime and Comments

Lab:	CC	Stand No.:	CCCCC	Stand Run No.:	CCC
Oilcode:	CC				

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**Form 6**

**Conditioning Phase 1 & 2 - Wheel Speed vs. Time**

Lab:	CC	Stand No.:	CCCC	Stand Run No.:	CCCC
Oilcode:	cc				

cc

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**Form 7**

**Conditioning Phase 3 & 4 – Wheel Speed vs. Time**

Lab:	CC	Stand No.:	CCCCC	Stand Run No.:	CCCC
Oilcode:		CC			

CC

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**Form 8**

**Shock Series 1 – Wheel Speed vs. Time**

Lab:	CC	Stand No.:	CCCCC	Stand Run No.:	CCCC
Oilcode:		CC			

CC

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**Form 9**

**Shock Series 2 – Wheel Speed vs. Time**

Lab:	CC	Stand No.:	CCCC	Stand Run No.:	CCCC
Oilcode:	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC				

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

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**Form 10**

**Conditioning Phase 1 & 2 – Pinion Torque vs. Time**

Lab:	CC	Stand No.:	CCCCC	Stand Run No.:	CCCC
Oilcode:	CC				

CC

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**Form 11**

**Conditioning Phase 3 & 4 – Pinion Torque vs. Time**

Lab:	CC	Stand No.:	CCCC	Stand Run No.:	CCCC
Oilcode:	CC				

CC

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**Form 12**

**Conditioning Phase 2 – Pinion Torque vs. Time**

Lab:	CC	Stand No.:	CCCCC	Stand Run No.:	CCCC
Oilcode:	cc				

cc

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Form 13

**Conditioning Phase 4 – Pinion Torque vs. Time**

Lab:	CC	Stand No.:	CCCCC	Stand Run No.:	CCCC
Oilcode:	CC				

CC

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Form 14

**Shock Series 1 – Pinion Torque vs. Time (5 shocks)**

Lab:	CC	Stand No.:	CCCCC	Stand Run No.:	CCCC
Oilcode:	CCCCCCCCCCCCCCCCCCCCCCCC				

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

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Form 15

## Shock Series 2 – Pinion Torque vs. Time (10 shocks)

Lab:	CC	Stand No.:	CCCC	Stand Run No.:	CCCC
Oilcode:	CCCCCCCCCCCCCCCCCCCCCCCC				