

**General Motors RNT – Valvetrain Wear Test
For dexos®
Final Report Cover Sheet**

Form 1

Version:

Conducted For

	V = Valid
	I = Invalid

	NR = Non-reference oil
	RO = Reference oil

Test Number			
Test Stand		Stand Run	
Oil Code			
Formulation Stand Code			
SAE Viscosity Grade			
Date Started		Time Started	
Date Completed		Time Completed	
Test Length		Total Downtime	
Alternate Codes:			

<p>In my opinion this test _____ has been conducted in a valid manner in accordance with the OPEL GMPTE-T test procedure and the appropriate amendments. The remarks included in this report describe anomalies associated with this test.</p>
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Submitted By:

_____ Testing Laboratory

_____ Signature

_____ Typed Name

_____ Title

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Form 2

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Introduction

- The activation has been done on all tappets as well as on the inlet camshaft (cam 2, 5 and 7) using different nuclides.
- The wear speed was calculated based on condition that the wear-rate is constant over the whole surface of activation.
- The engine has been operated under the different test conditions until constant wear rate was observed (15 h break-in + 35 h reference 1).

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**Form 3
Results Summary**

Lab:		Oil Code:	
Stand:		Test No:	
Laboratory Oil Code:			
Formulation/Stand Code:			

Test Engine		Engine Number	
Test Fuel			

	Max. Cam Wear (nm/h)	Max. Tappet Wear (nm/h)
1. Function of speed (n= 1200....6400 rpm)		
2. 'Saw tooth' (1000-6000 rpm)		
3. Pitting Test (LL-VL)		
4. Function of oil temperature (T _{OIL} = 130....140 °C)		

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**Form 4
Function of Speed**

Lab:		Oil Code:	
Stand:		Test No:	
Laboratory Oil Code:			
Formulation/Stand Code:			

Wear Rate ‘Camshaft’

Wear Rate ‘Tappets’

Parameter	Units	Min	Max	Average
Wear Rate Camshaft	nm/h			
Wear Rate Tappets	nm/h			

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**Form 5
Function of Oil Temperature**

Lab:		Oil Code:	
Stand:		Test No:	
Laboratory Oil Code:			
Formulation/Stand Code:			

Wear Rate ‘Camshaft’

Wear Rate ‘Tappets’

Parameter	Units	Min	Max	Average
Wear Rate Camshaft	nm/h			
Wear Rate Tappets	nm/h			

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**Form 6
Test parts: Reference/ ‘Saw tooth’/Pitting**

Lab:		Oil Code:	
Stand:		Test No:	
Laboratory Oil Code:			
Formulation/Stand Code:			

Wear Rate ‘Camshaft’

Wear Rate ‘Tappets’

Ref 1: Reference run (part of the run-in procedure)
SA: Alternating speed (1000 and 6000 rpm; 1 minute frequency), part load
PI: Alternating: idle – 5000 rpm/WOT
Ref 2: Reference run after test

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**Form 7
Downtime Occurences**

Lab:		Oil Code:	
Stand:		Test No:	
Laboratory Oil Code:			
Formulation/Stand Code:			

Number of Downtime Occurences			
Test Hours	Date	Downtime	Reasons
			Total Downtime (hours)

