



OIL REPORT

LAB NUMBER: F35252
 REPORT DATE: 1/2/2013
 CODE: 20/501

UNIT ID: MAZDA 5
 CLIENT ID: 60572
 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Mazda 2.5L 4-cyl (MZR)	OIL TYPE & GRADE: Mobil 1 0W/20
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 5,000 Miles
	ADDITIONAL INFO: 2012 Mazda 5	

CLIENT	CULLEN HALL	PHONE: (563) 599-7931
	14017 KIPLING AVE S	FAX:
	SAVAGE, MN 55378	ALT PHONE:
		EMAIL: hall.cullen@gmail.com

COMMENTS CULLEN: This first sample for your 2.5L looks okay. Aluminum is from pistons and iron is from cylinders/steel parts. Both are slightly elevated when compared to universal averages, which are based on ~6,600 miles, but they aren't high enough to consider an issue. The flashpoint was affected by the presence of fuel in this sample. 1.0% isn't enough to consider a problem and wear wasn't affected much so we aren't too concerned about it. TBN read strong at 3.3, indicating plenty of active additive remaining. Try 6,000-7,000 miles next. Check back for trends.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	5,000	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	15,266						
	Sample Date	12/05/12						
	Make Up Oil Added							
ALUMINUM	4	4					3	
CHROMIUM	0	0					0	
IRON	18	18					13	
COPPER	4	4					7	
LEAD	0	0					1	
TIN	1	1					1	
MOLYBDENUM	83	83					95	
NICKEL	1	1					0	
MANGANESE	1	1					1	
SILVER	0	0					0	
TITANIUM	0	0					0	
POTASSIUM	0	0					2	
BORON	47	47					68	
SILICON	2	2					9	
SODIUM	5	5					39	
CALCIUM	973	973					1899	
MAGNESIUM	665	665					275	
PHOSPHORUS	531	531					669	
ZINC	636	636					784	
BARIUM	0	0					0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	51.0	46-56				
	cSt Viscosity @ 100°C	7.56	6.0-9.4				
	Flashpoint in °F	365	>385				
	Fuel %	1.0	<2.0				
	Antifreeze %	0.0	0.0				
	Water %	0.0	<0.1				
	Insolubles %	0.4	<0.6				
	TBN	3.3	>1.0				
	TAN						
	ISO Code						

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com