



OIL REPORT

REPORT DATE: 3/28/2016

UNIT ID: 07 RX-8

UNIT	MAKE/MODEL: Mazda 1.3L Renesis (Rotary)	OIL TYPE & GRADE: Shell Rotella T6 5W/40
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 6,029 Miles
	ADDITIONAL INFO:	

COMMENTS It's unusual to see a Renesis engine with no make-up oil after 6,000 miles, but maybe it's not all that surprising considering how nicely this engine is wearing. Universal averages show typical wear levels for this type of engine after about 2,900 miles on the oil. This was obviously a longer run, but aside from a little more iron, you really wouldn't know it. The TBN is strong at 3.6, showing plenty of active additive left since it's not considered low until it reaches 1.0 or less. The viscosity is in the 5W/30 range, but it still got the job done. Try 8,000 miles on the next oil.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	6,029	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	65,979						
	Sample Date	3/19/2016						
	Make Up Oil Added	0 qts						
	ALUMINUM	1	1					2
	CHROMIUM	4	4					7
	IRON	35	35					22
	COPPER	1	1					2
	LEAD	2	2					3
	TIN	6	6					1
	MOLYBDENUM	52	52					96
	NICKEL	1	1					0
	MANGANESE	0	0					0
	SILVER	0	0					0
	TITANIUM	0	0					0
	POTASSIUM	0	0					2
	BORON	24	24					58
	SILICON	8	8					10
	SODIUM	6	6					66
	CALCIUM	592	592					2041
	MAGNESIUM	878	878					111
	PHOSPHORUS	953	953					738
	ZINC	877	877					874
	BARIUM	0	0					0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	58.0	65-78				
	cSt Viscosity @ 100°C	9.65	11.6-15.3				
	Flashpoint in °F	380	>375				
	Fuel %	<0.5	<2.0				
	Antifreeze %	0.0	0.0				
	Water %	0.0	0.0				
	Insolubles %	0.2	<0.6				
	TBN	3.6	>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