



OIL REPORT

LAB NUMBER: H92532

UNIT ID: 2014 RAM CUMMINS

REPORT DATE: 11/18/2016

CLIENT ID: 71227

CODE: 44/685

PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Cummins ISB 6.7L (Pickup)	OIL TYPE & GRADE: Shell Rotella T 15W/40
	FUEL TYPE: Diesel	OIL USE INTERVAL: 6,850 Miles
	ADDITIONAL INFO: 3500	

CLIENT		

COMMENTS	CHAD: It's fine to take the sample from the filter. There is some excess metal here. Aluminum typically shows piston wear and iron is from steel parts. Copper shows brass/bronze wear. Potassium can show coolant, but we sometimes see potassium and aluminum in new diesels, probably from the intercooler or maybe emissions systems. That's not going to explain the iron and copper though. Even though the TBN is fine at 5.3, a shorter run is recommended until we get some idea of which direction these metals are heading. Check back in 5,000 miles or so.
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ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	6,850	UNIT / LOCATION AVERAGES					
	MI/HR on Unit							
	Sample Date	8/24/2016						
	Make Up Oil Added	0 qts						
	ALUMINUM	9	9					3
	CHROMIUM	1	1					1
	IRON	65	65					24
	COPPER	20	20					7
	LEAD	0	0					1
TIN	0	0					1	
MOLYBDENUM	60	60					34	
NICKEL	0	0					0	
MANGANESE	1	1					0	
SILVER	0	0					0	
TITANIUM	0	0					2	
POTASSIUM	26	26					8	
BORON	106	106					50	
SILICON	10	10					5	
SODIUM	5	5					6	
CALCIUM	1591	1591					1657	
MAGNESIUM	433	433					584	
PHOSPHORUS	935	935					1027	
ZINC	1166	1166					1219	
BARIUM	0	0						

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	74.8	69-80				
	cSt Viscosity @ 100°C	14.20	12.7-15.8				
	Flashpoint in °F	430	>410				
	Fuel %	<0.5	<2.0				
	Antifreeze %	?	0				
	Water %	0.0	0.0				
	Insolubles %	0.3	<0.6				
	TBN	5.3	>1.0				
	TAN						
	ISO Code						

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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