



# OIL REPORT

LAB NUMBER: K28696  
 REPORT DATE: 6/18/2018  
 CODE: 20/32

UNIT ID: 2014 JEEP  
 CLIENT ID:  
 PAYMENT: CC: Visa

<b>UNIT</b>	MAKE/MODEL: Jeep 4.0L Inline 6 cyl	OIL TYPE & GRADE: 5W/30
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 1,000 Miles
	ADDITIONAL INFO:	

<b>CLIENT</b>	
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**COMMENTS** This is a cautionary report. The high levels of potassium and sodium show an excessive amount of coolant in the oil, and that is probably responsible for the excessive wear metal levels. Potassium, silicon, and sodium show the coolant, and that caused the high insolubles and viscosity. The engine is wearing heavily throughout, though iron, copper, and lead are notable, suggesting an excessive amount of bearing wear. Change this oil, assess the engine for a coolant problem, and use extremely short intervals to flush. Caution!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	1,000	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	195,000						
	Sample Date	6/5/2018						
	Make Up Oil Added	1 qt						
	ALUMINUM	52						4
	CHROMIUM	8						1
	IRON	500						25
	COPPER	23						4
	LEAD	437						2
	TIN	6						1
	MOLYBDENUM	40						71
	NICKEL	5						1
	MANGANESE	5						1
	SILVER	0						0
	TITANIUM	1						1
	POTASSIUM	5644						4
	BORON	10						49
	SILICON	218						14
	SODIUM	1819						51
	CALCIUM	1412						1944
	MAGNESIUM	12						173
	PHOSPHORUS	629						738
	ZINC	614						872
	BARIUM	1						0

Values Should Be\*

PROPERTIES	Value	Should Be*					
	SUS Viscosity @ 210°	72.4					
cSt Viscosity @ 100°C	13.59	9.1-11.3					
Flashpoint in °F	345	>385					
Fuel %	1.0	<2.0					
Antifreeze %	3.64	0.0					
Water %	0.0	0.0					
Insolubles %	10.0	<0.6					
TBN							
TAN							
ISO Code							

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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