



OIL REPORT

LAB NUMBER:
 REPORT DATE: 4/17/2018
 CODE: 44/32

UNIT ID: 01 CHEROKEE
 CLIENT ID:
 PAYMENT: Prepaid

UNIT	MAKE/MODEL: Jeep 4.0L Inline 6 cyl	OIL TYPE & GRADE: Pennzoil 5W/30
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 3,534 Miles
	ADDITIONAL INFO:	

CLIENT	
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COMMENTS

Thanks for the notes. The coolant that's disappearing from the reservoir is making its way into the engine oil, as seen by the high potassium and sodium. That might explain the extra aluminum, which is typically from the pistons. Universal averages show typical wear after about 4,000 miles of oil use. The slightly low viscosity and 1.0% fuel aren't problematic, so they aren't concerning. It's best to use 3,000 miles or less until you can fix the leak. That'll help keep coolant and metals from accumulating too much. Check back after repairs to start building wear trends.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	3,534	UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
	MI/HR on Unit	150,919							
	Sample Date	4/7/2018							
	Make Up Oil Added	0 qts							
ALUMINUM	12								4
CHROMIUM	1								1
IRON	42								25
COPPER	4								4
LEAD	2								2
TIN	0								1
MOLYBDENUM	171								71
NICKEL	1								1
MANGANESE	0								1
SILVER	0								0
TITANIUM	2								1
POTASSIUM	79								4
BORON	39								48
SILICON	15								14
SODIUM	230								51
CALCIUM	1941								1973
MAGNESIUM	50								160
PHOSPHORUS	804								735
ZINC	917								874
BARIUM	0								0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	52.6	54-62						
	cSt Viscosity @ 100°C	8.07	8.5-11.1						
	Flashpoint in °F	345	>365						
	Fuel %	1.0	<2.0						
	Antifreeze %	0.46	0.0						
	Water %	0.0	<0.1						
	Insolubles %	0.3	<0.6						
	TBN								
	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