OIL REPORT

LAB NUMBER: R45131 **UNIT ID:** 95YJ
REPORT DATE: 8/17/2023 **CLIENT ID:** 95673
CODE: 20/88 **PAYMENT:** CC: Visa

UNIT

MAKE/MODEL: Jeep 2.5L 4-cyl
FUEL TYPE: Gasoline (Unleaded)
ADDITIONAL INFO: 1995 Wrangler yj
OIL TYPE & GRADE: Shell Rotella T4 10W/30
OIL USE INTERVAL: 1,000 Minutes

CLIENT

JOSHUA DOWNS
1990 COUNTY RD 1032
GREENVILLE, TX 75401
PHONE: (940) 452-1721
FAX:
ALT PHONE:
EMAIL: joshua.d.downs@gmail.com, jeepinbanditrider@gmail.com

COMMENTS

JOSHUA: Thanks for noting this engine went unused for 5 years, and sounds rattly. The sound probably relates to the excess wear that turned up in this sample. Most of it seems to be from the upper end, with aluminum from pistons, chromium from rings, and iron from steel parts. If dirt contamination (a possible reason for high silicon) is what spurred this extra wear, fixing an air filtration issue might bring progress. Lead shows some extra bearing wear as well, compared to universal averages, based on ~3,300 miles. The viscosity is a little low too. Check back to monitor.

ELEMENTS IN PARTS PER MILLION

		UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
MI/HR on Oil	1,000							
MI/HR on Unit	205,000							
Sample Date	7/26/2023							
Make Up Oil Added	0 qts							
ALUMINUM	**27**	27						5
CHROMIUM	**5**	5						1
IRON	**67**	67						24
COPPER	10	10						5
LEAD	**10**	10						3
TIN	1	1						1
MOLYBDENUM	79	79						67
NICKEL	2	2						1
MANGANESE	2	2						0
SILVER	0	0						0
TITANIUM	0	0						2
POTASSIUM	0	0						2
BORON	11	11						52
SILICON	**45**	45						11
SODIUM	23	23						41
CALCIUM	1103	1103						1836
MAGNESIUM	745	745						246
PHOSPHORUS	910	910						747
ZINC	1047	1047						880
BARIUM	1	1						2

PROPERTIES

		Values Should Be*					
SUS Viscosity @ 210°F	**56.4**	58-65					
cSt Viscosity @ 100°C	**9.18**	9.7-11.9					
Flashpoint in °F	400	>385					
Fuel %	<0.5	<2.0					
Antifreeze %	0.0	0.0					
Water %	0.0	0.0					
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