



OIL REPORT

LAB NUMBER:
 REPORT DATE: 2/19/2024
 CODE: 20/88

UNIT ID:
 CLIENT ID:
 PAYMENT:

UNIT	EQUIP. MAKE/MODEL: Jeep 3.6L V-6 Pentastar	OIL TYPE & GRADE: Mobil 1 AFE 0W/20
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 5,029 Miles
	ADDITIONAL INFO:	

CLIENT	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

COMMENTS No issues stand out in your Gladiator's latest oil sample. Aluminum bumped up to 5 ppm, showing a little more piston and/or bearing wear took place, but it's not a concern since this level is still within a good wear range. The other metals are within good wear ranges, too, so this engine still appears to be wearing in a healthy fashion at 29,957 miles. Molybdenum and boron's changes are likely just due to the switch to Mobil 1 AFE, so no worries there. Coolant, dirt, and fuel are absent, and insolubles are well below the 0.6% max. Good results all around!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	5,029	UNIT / LOCATION AVERAGES	4,600	5,403	5,316	3,079	2,949	UNIVERSAL AVERAGES
	MI/HR on Unit	29,957		24,928	20,328	14,925	6,028	2,949	
	Sample Date	1/27/2024		11/5/2023	8/11/2023	5/21/2023	11/4/2022	9/11/2022	
	Make Up Oil Added	0 qts		0 qts	0 qts	0 qts	0 qts	0 qts	
ALUMINUM	5	3	2	3	4	4	6	4	
CHROMIUM	1	1	0	1	1	1	1	1	
IRON	12	12	7	16	17	19	36	18	
COPPER	2	3	1	4	4	8	27	15	
LEAD	0	0	0	0	0	0	1	0	
TIN	0	0	0	0	1	0	1	0	
MOLYBDENUM	159	93	83	72	85	161	161	105	
NICKEL	0	0	0	0	0	0	1	0	
MANGANESE	1	1	0	2	2	5	21	2	
SILVER	0	0	0	0	0	0	0	0	
TITANIUM	0	1	0	0	3	17	0	3	
POTASSIUM	0	1	0	2	1	1	5	3	
BORON	42	28	26	40	11	63	53	50	
SILICON	7	7	5	6	8	26	111	14	
SODIUM	5	4	2	5	4	5	14	18	
CALCIUM	1299	1295	1088	979	1157	1838	1308	1401	
MAGNESIUM	485	414	436	651	420	186	462	493	
PHOSPHORUS	673	653	633	617	609	730	677	669	
ZINC	803	754	698	709	712	827	773	761	
BARIUM	0	0	0	0	0	0	1	0	

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	51.3	46-57	51.5	57.4	51.5	51.6	50.6
	cSt Viscosity @ 100°C	7.68	6.0-9.7	7.73	9.48	7.72	7.77	7.46
	Flashpoint in °F	415	>385	410	425	385	420	450
	Fuel %	<0.5	<2.0	<0.5	<0.5	TR	<0.5	<0.5
	Antifreeze %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Water %	0.0	<0.1	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.2	<0.6	0.1	0.1	0.2	0.1	0.2
	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