



# OIL REPORT

LAB NUMBER:  
REPORT DATE: 12/3/2024  
CODE: 20/88

UNIT ID:  
CLIENT ID:  
PAYMENT:

UNIT	EQUIP. MAKE/MODEL: Ford 2.3L 4-cyl EcoBoost	OIL TYPE & GRADE: Valvoline High Mileage Synblend 10W/30
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 3,106 Miles
	ADDITIONAL INFO:	

CLIENT	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

COMMENTS	Copper is in the average range so it looks like most of the wear-in material is out of the engine. Maybe copper will drop a bit more if there's any lingering wear-in material in the system, but we won't complain if it holds steady. Other metals are in good shape and low silicon shows excellent air filtration. The viscosity is a little low for 10W/30 oil, maybe due to mild fuel dilution. A trace of fuel is harmless and from normal use like idling or short trips, not a problem. We didn't find any coolant or water contamination. Nice report. Your Ranger's engine is maturing nicely!
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ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	3,106	UNIT / LOCATION AVERAGES	2,656	1,661	608			UNIVERSAL AVERAGES
	MI/HR on Unit	8,031		4,925	2,269	608			
	Sample Date	11/8/2024		9/21/2024	7/12/2024	6/16/2024			
	Make Up Oil Added	0 qts		0 qts	0 qts	0 qts			
	ALUMINUM	4	4	4	5	9			4
	CHROMIUM	0	0	0	0	0			0
	IRON	3	4	4	5	6			10
	COPPER	4	6	7	18	28			3
	LEAD	0	1	1	0	1			0
	TIN	0	0	0	0	0			0
	MOLYBDENUM	118	123	127	133	144			102
	NICKEL	0	0	0	0	0			0
	MANGANESE	0	0	0	1	2			2
	SILVER	0	0	0	0	0			0
	TITANIUM	0	0	0	0	0			2
	POTASSIUM	0	1	2	2	0			5
	BORON	77	60	43	79	166			90
	SILICON	14	15	15	25	65			18
	SODIUM	4	4	3	3	7			9
	CALCIUM	972	1034	1096	978	1354			1458
	MAGNESIUM	506	462	417	484	422			431
	PHOSPHORUS	663	594	524	546	784			695
	ZINC	719	696	672	707	822			781
	BARIUM	0	0	0	0	2			1

Values  
Should Be\*

PROPERTIES	SUS Viscosity @ 210°F	54.6	58-65	51.8	51.7	53.6		
	cSt Viscosity @ 100°C	8.66	9.7-11.9	7.83	7.78	8.37		
	Flashpoint in °F	380	>385	365	360	390		
	Fuel %	TR	<2.0	1.0	1.3	<0.5		
	Antifreeze %	0.0	0.0	0.0	0.0	0.0		
	Water %	0.0	0.0	0.0	0.0	0.0		
	Insolubles %	0.1	<0.6	0.1	0.2	0.1		
	TBN							
	TAN							
	ISO Code							

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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