



OIL REPORT

LAB NUMBER: M00068

UNIT ID: DA RANGER

REPORT DATE: 2/7/2020

CLIENT ID: 156629

CODE: 20/32

PAYMENT: CC: Visa

UNIT

MAKE/MODEL: Ford 2.3L 4-cyl EcoBoost
FUEL TYPE: Gasoline (Unleaded)
ADDITIONAL INFO: 2019

OIL TYPE & GRADE: 5W/30
OIL USE INTERVAL: 5,579 Miles

CLIENT

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COMMENTS

CYNTHIA: Don't sweat the highlights on this first report for your Ranger. High copper and silicon are perfectly normal at this point, just from wear-in and sealer material washing out. After a couple more oil changes, this engine should start to resemble universal averages for the engine type. For reference, those are based on other 2.3L EcoBoost engines after about 5,400 miles of oil use. Fuel might have impacted the viscosity (which read in the 5W/20 range), but these aren't cautionary finds. Less than 2.0% fuel usually ends up being from normal use. So far, so good.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	5,579	UNIT / LOCATION AVERAGES							UNIVERSAL AVERAGES
	MI/HR on Unit	5,579								
	Sample Date	1/27/2020								
	Make Up Oil Added	0 qts								
	ALUMINUM	6		6						
	CHROMIUM	0		0						
	IRON	11		11						
	COPPER	42		42						
	LEAD	2		2						
	TIN	0		0						
	MOLYBDENUM	14		14						
	NICKEL	0		0						
	MANGANESE	2		2						
	SILVER	0		0						
	TITANIUM	0		0						
	POTASSIUM	4		4						
	BORON	57		57						
	SILICON	58		58						
	SODIUM	10		10						
	CALCIUM	1246		1246						
	MAGNESIUM	650		650						
	PHOSPHORUS	708		708						
	ZINC	804		804						
	BARIUM	2		2						

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	51.2	56-63					
	cSt Viscosity @ 100°C	7.63	9.1-11.3					
	Flashpoint in °F	350	>385					
	Fuel %	1.8	<2.0					
	Antifreeze %	0.0	0.0					
	Water %	0.0	0.0					
	Insolubles %	0.2	<0.6					
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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