



# OIL REPORT

LAB NUMBER: N37275

UNIT ID: 19 RANGER

REPORT DATE: 5/3/2021

CLIENT ID: 180316

CODE: 20/698

PAYMENT: Prepaid

**UNIT**

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

OIL TYPE & GRADE: Synthetic 5W/30  
OIL USE INTERVAL: 9,800 Miles

**CLIENT**

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**COMMENTS**

MARK: This is a pretty good sample, all things considered. The only thing that's out of line is potassium, which can be a marker for coolant. But this engine is so young, we're wondering if maybe potassium is just left over from when the engine was new. It's certainly not high enough to worry about, so let's just see where it goes next time. You've done a good job maxing out this oil's useful additives: the TBN is on the low side at 1.6, so ~10K is a good oil change interval. The engine is wearing well on this interval. Fuel is an area to watch, but 1.5% can be from normal use.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	9,800	UNIT / LOCATION AVERAGES							UNIVERSAL AVERAGES
	MI/HR on Unit	37,467								
	Sample Date	4/22/2021								
	Make Up Oil Added	0 qts								
	ALUMINUM	4		4						
	CHROMIUM	0		0						
	IRON	10		10						
	COPPER	2		2						
	LEAD	0		0						
	TIN	0		0						
	MOLYBDENUM	154		154						
	NICKEL	0		0						
	MANGANESE	1		1						
	SILVER	0		0						
	TITANIUM	0		0						
	POTASSIUM	17		17						
	BORON	23		23						
	SILICON	16		16						
	SODIUM	5		5						
	CALCIUM	1356		1356						
	MAGNESIUM	555		555						1791
	PHOSPHORUS	724		724						288
	ZINC	868		868						728
	BARIUM	0		0						811
										2

Values  
Should Be\*

PROPERTIES	SUS Viscosity @ 210°F	53.4	56-63					
	cSt Viscosity @ 100°C	8.30	9.1-11.3					
	Flashpoint in °F	355	>385					
	Fuel %	1.5	<2.0					
	Antifreeze %	?	0.0					
	Water %	0.0	0.0					
	Insolubles %	0.4	<0.6					
	TBN	1.6	>1.0					
	TAN							
	ISO Code							

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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