



# OIL REPORT

LAB NUMBER: N12893

UNIT ID: DANS RANGER 2019

REPORT DATE: 2/18/2021

CLIENT ID: 164153

CODE: 20/68

PAYMENT: CC: MC

<b>UNIT</b>	MAKE/MODEL: Ford 2.3L 4-cyl EcoBoost	OIL TYPE & GRADE: Motorcraft Synthetic Blend 5W/30
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 2,500 Miles
	ADDITIONAL INFO:	

<b>CLIENT</b>	PHONE: [REDACTED]
	FAX: [REDACTED]
	ALT PHONE: [REDACTED]
	EMAIL: [REDACTED]

**COMMENTS** DAN: Fuel dilution is still an ongoing concern for your Ford. Fuel tested at 3.0% this time -- the highest value to date. The viscosity is still thin, likely because of the fuel. The good news is that the wear metals look more or less okay. Iron is up a little, though that might be a function of the longer oil run, and even if it isn't a 3 ppm increase for iron is well within the normal variation we expect from healthy engines. Other metals tested low. Continue to monitor this engine for signs of a fuel system problem (like a rising oil level). Keep oil changes short while fuel is excessive.

	MI/HR on Oil	2,500	UNIT / LOCATION AVERAGES	1,600	1,100	1,000	UNIVERSAL AVERAGES
	MI/HR on Unit	6,950		4,600	3,200	2,000	
	Sample Date	2/12/2021		10/23/2020	8/21/2020	7/3/2020	
	Make Up Oil Added				0 qts	0 qts	
<b>ELEMENTS IN PARTS PER MILLION</b>	ALUMINUM	2	2	2	3	2	4
	CHROMIUM	0	0	0	0	0	0
	IRON	6	4	3	4	4	12
	COPPER	2	4	3	5	7	4
	LEAD	0	0	0	1	0	0
	TIN	0	1	1	1	2	0
	MOLYBDENUM	133	118	127	119	92	92
	NICKEL	0	0	0	0	0	0
	MANGANESE	0	0	0	1	0	1
	SILVER	0	0	0	0	0	0
	TITANIUM	0	0	0	1	0	3
	POTASSIUM	3	2	1	3	1	4
	BORON	117	133	127	137	151	116
	SILICON	11	14	13	13	17	24
	SODIUM	5	5	5	7	4	12
	CALCIUM	1232	1271	1161	1251	1440	1825
	MAGNESIUM	383	441	373	435	572	273
	PHOSPHORUS	693	716	687	713	769	730
ZINC	790	809	745	789	912	812	
BARIUM	15	15	15	16	13	2	

Values Should Be\*

<b>PROPERTIES</b>	SUS Viscosity @ 210°F	47.6	54-63	47.6	46.4	47.5
	cSt Viscosity @ 100°C	6.53	8.5-11.3	6.52	6.17	6.51
	Flashpoint in °F	315	>375	325	325	330
	Fuel %	3.0	<2.0	2.5	2.5	2.8
	Antifreeze %	0.0	0.0	0.0	0.0	0.0
	Water %	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.2	<0.6	0.4	0.2	0.2
	TBN					
	TAN					
	ISO Code					

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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