



OIL REPORT

LAB NUMBER: Q56501 UNIT ID: YODA
 REPORT DATE: 12/29/2022 CLIENT ID: 187508
 CODE: 20/75 PAYMENT: CC Online (Bulk)

UNIT	MAKE/MODEL: Ford 2.3L 4-cyl EcoBoost	OIL TYPE & GRADE: Mobil 1 5W/30
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 5,355 Miles
	ADDITIONAL INFO: 2021 Ranger	

CLIENT	PHONE: [REDACTED]
	FAX: [REDACTED]
	ALT PHONE: [REDACTED]
	EMAIL: [REDACTED]

COMMENTS RANDAL: Your EcoBoost didn't mind the longer trip and extra towing at all. Metals were nearly identical to your last sample, with iron only increasing 2 ppm. Iron most closely tracks with miles on the oil, so an increase is generally expected with a longer run. Fuel dilution made an appearance but only at a harmless 0.5%. The viscosity was thin again, too, but we're thinking this may be a regular pattern for your Ranger--definitely nothing to be too concerned about. There wasn't any coolant, and your oil filter did a good job at keeping solids (insolubles) low. Great report!

	UNIT / LOCATION AVERAGES		SAMPLES				UNIVERSAL AVERAGES
	MI/HR on Oil	MI/HR on Unit	10/8/2022	5/3/2022	3/4/2022	11/10/2021	
Sample Date	12/2/2022						
Make Up Oil Added	0 qts		0 qts	0 qts	0 qts	0 qts	
ELEMENTS IN PARTS PER MILLION							
ALUMINUM	4	5	4	7	6	6	4
CHROMIUM	0	0	0	0	0	0	0
IRON	6	7	4	8	8	7	11
COPPER	2	4	2	3	7	33	3
LEAD	0	0	0	0	0	1	0
TIN	0	0	0	0	0	1	0
MOLYBDENUM	89	78	66	73	85	156	99
NICKEL	0	0	0	0	0	0	0
MANGANESE	0	0	0	0	1	2	2
SILVER	0	0	0	0	0	0	0
TITANIUM	0	0	0	0	0	0	2
POTASSIUM	0	7	1	12	16	0	4
BORON	39	48	52	34	65	145	103
SILICON	10	16	10	19	23	78	20
SODIUM	4	4	3	4	4	8	9
CALCIUM	801	954	911	1026	1077	1457	1611
MAGNESIUM	693	673	633	697	667	438	376
PHOSPHORUS	667	647	603	644	673	779	719
ZINC	749	729	667	744	757	871	806
BARIUM	0	0	0	0	0	2	2

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	52.1	55-63	53.6	53.8	52.7	54.0
	cSt Viscosity @ 100°C	7.92	8.8-11.3	8.36	8.43	8.09	8.47
	Flashpoint in °F	375	>385	405	350	400	395
	Fuel %	0.5	<2.0	<0.5	1.8	<0.5	<0.5
	Antifreeze %	0.0	0.0	0.0	0.0	0.0	0.0
	Water %	0.0	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.2	<0.6	0.1	0.2	0.1	0.2
	TBN						
	TAN						
	ISO Code						

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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