



OIL REPORT

LAB NUMBER: Q27982

UNIT ID: RED LC

REPORT DATE: 10/11/2022

CLIENT ID: 208421

CODE: 20/68

PAYMENT: CC Online

UNIT

MAKE/MODEL: Toyota 4.5L 6-cyl (1FZ-FE)
FUEL TYPE: Gasoline (Unleaded)
ADDITIONAL INFO: 1994 Land Cruiser

OIL TYPE & GRADE: 10W/30
OIL USE INTERVAL: Miles

CLIENT

DALTON SHOOKS

COMMENTS

DALTON: This sample was contaminated with enough water to prevent us from checking the flashpoint for fuel, so we'd recommend an oil change. Moisture contamination can lead to rapid oxidation, which may explain the thick viscosity and the insolubles being on the higher end of acceptable. Contamination could be a factor in the extra aluminum, copper, and lead too (pistons, brass/bronze, bearings, respectively). Averages are based on 4,600 miles. Silicon is also high, potentially showing dirt. Metals/silicon could show wear-in/sealers, if repairs were made recently.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil		UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
	MI/HR on Unit	169,900							
	Sample Date	9/21/2022							
	Make Up Oil Added	0 qts							
	ALUMINUM	15	15						2
	CHROMIUM	0	0						0
	IRON	9	9						6
	COPPER	11	11						2
	LEAD	5	5						2
	TIN	2	2						0
	MOLYBDENUM	15	15						65
	NICKEL	0	0						0
	MANGANESE	0	0						1
	SILVER	1	1						0
	TITANIUM	0	0						1
	POTASSIUM	3	3						4
	BORON	62	62						64
	SILICON	100	100						12
	SODIUM	15	15						33
	CALCIUM	1003	1003						1831
	MAGNESIUM	612	612						308
	PHOSPHORUS	633	633						797
	ZINC	703	703						941
	BARIUM	0	0						0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	95.5	58-65					
	cSt Viscosity @ 100°C	19.30	9.7-11.9					
	Flashpoint in °F	BOIL	>385					
	Fuel %	-	<2.0					
	Antifreeze %	0.0	0.0					
	Water %	POS	0.0					
	Insolubles %	0.5	<0.6					
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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