



OIL
REPORT

LAB NUMBER: G67870 UNIT ID: LX470
REPORT DATE: 3/28/2015 CLIENT ID: 58482
CODE: 20/501 PAYMENT: Prepaid

UNIT	MAKE/MODEL:	Toyota 4.7L V-8 (2UZ-FE)	OIL TYPE & GRADE:	Mobil 1 High Mileage 5W/30
	FUEL TYPE:	Gasoline (Unleaded)	OIL USE INTERVAL:	11,000 Miles
	ADDITIONAL INFO:			

CLIENT	
--------	--

COMMENTS	JEFF: Taking the sample from the filter is perfectly fine. Overall, this is a pretty impressive report for 11,000 miles on the oil. Iron is just 1 ppm higher than it was in 2012 and that's a metal that usually tracks with miles on the oil. The only metal on the high side is copper. 8 ppm does show a little more wear at brass/bronze parts than averages, but this still isn't a lot of metal, so it's hard to complain too much. After all, this isn't exactly a new engine anymore. The TBN is 3.8 showing active additive left, but stick with 11,000 miles for now just to see where copper goes.
----------	--

	MI/HR on Oil	11,000	UNIT / LOCATION AVERAGES	4,500					UNIVERSAL AVERAGES
	MI/HR on Unit	198,000		155,000					
	Sample Date	03/22/15		09/23/12					
	Make Up Oil Added	0 qts		0 qts					
ELEMENTS IN PARTS PER MILLION	ALUMINUM	2	2	2					2
	CHROMIUM	0	0	0					0
	IRON	7	7	6					7
	COPPER	8	6	4					3
	LEAD	1	1	0					2
	TIN	0	0	0					0
	MOLYBDENUM	73	73	73					74
	NICKEL	0	0	0					0
	MANGANESE	0	0	0					0
	SILVER	0	0	0					0
	TITANIUM	0	0	0					1
	POTASSIUM	3	2	0					2
	BORON	37	44	51					49
	SILICON	9	9	9					14
	SODIUM	4	5	5					35
	CALCIUM	1041	1019	997					2107
	MAGNESIUM	739	739	738					199
	PHOSPHORUS	775	777	779					677
	ZINC	1005	965	924					800
	BARIUM	0	0	0					0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	63.8	56-63	61.6				
	cSt Viscosity @ 100°C	11.29	9.1-11.3	10.67				
	Flashpoint in °F	390	>365	415				
	Fuel %	<0.5	<2.0	<0.5				
	Antifreeze %	0.0	0.0	0.0				
	Water %	0.0	<0.1	0.0				
	Insolubles %	0.1	<0.6	0.3				
	TBN	3.8	>1.0	2.8				
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com