



OIL REPORT

LAB NUMBER:
 REPORT DATE: 12/20/2016
 CODE: 44/37

UNIT ID:
 CLIENT ID:
 PAYMENT:

UNIT	EQUIP. MAKE/MODEL: Toyota 4.6L V-8 (1UR-FSE)	OIL TYPE & GRADE: 0W/20
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 10,439 Miles
	ADDITIONAL INFO:	

CLIENT	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

COMMENTS The small increase in iron shows the extra miles on this oil, but iron's wear rate is still below average so steel parts are doing just fine. Other metals really haven't changed, and the viscosity is within spec for a 0W/20 oil. If you wanted to run 10,000-mile intervals on this engine from here on out, that should be just fine. No problems to mention for your LS460 as of the 11/4/16 sample date!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	10,439	UNIT / LOCATION AVERAGES	9,800	6,373	UNIVERSAL AVERAGES
	MI/HR on Unit	79,991		69,500	66,243	
	Sample Date	11/4/2016		9/11/2015	4/27/2015	
	Make Up Oil Added	0 qts			0 qts	
ALUMINUM	3	3	3	2	2	
CHROMIUM	0	0	1	0	0	
IRON	15	11	12	7	9	
COPPER	1	1	1	1	4	
LEAD	0	0	0	0	0	
TIN	0	0	0	0	1	
MOLYBDENUM	78	87	92	91	92	
NICKEL	0	0	1	0	0	
MANGANESE	0	0	0	0	0	
SILVER	0	0	0	0	0	
TITANIUM	0	0	0	0	4	
POTASSIUM	1	1	1	0	1	
BORON	11	16	17	20	29	
SILICON	15	14	16	11	10	
SODIUM	4	4	4	3	61	
CALCIUM	2153	2398	2469	2572	1913	
MAGNESIUM	19	17	18	15	249	
PHOSPHORUS	586	668	672	746	680	
ZINC	704	775	816	806	795	
BARIUM	0	0	0	0	0	

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	54.2	46-56	55.3	52.6
	cSt Viscosity @ 100°C	8.54	6.0-9.4	8.87	8.07
	Flashpoint in °F	430	>385	405	415
	Fuel %	<0.5	<2.0	<0.5	<0.5
	Antifreeze %	0.0	0.0	0.0	0.0
	Water %	0.0	<0.1	0.0	0.0
	Insolubles %	0.3	<0.6	0.3	0.3
	TBN			2.6	4.6
	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