



# OIL REPORT

LAB NUMBER: L03278

UNIT ID: A0241409

REPORT DATE: 3/25/2019

CLIENT ID: 140013

CODE: 20/685

PAYMENT: CC: MC

<b>UNIT</b>	MAKE/MODEL: Toyota 1.8L 4-cyl (2ZR-FXE)	OIL TYPE & GRADE: Mobil 1 0W/20
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 5,200 Miles
	ADDITIONAL INFO: 2010 Prius, 2016 Eng	

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

**COMMENTS** DONALD: This engine hasn't been in service for all that long, and we'd like to see some trends before making much of anything in this report. The extra aluminum and iron could be leftover break-in material, with silicon from sealers used during the install. Checking the intake system for leaks still wouldn't hurt, just to be sure silicon isn't dirt. Other metals are okay compared to universal averages, which are based on oil run about 9,400 miles. Insolubles are high as well, so the oil filter struggled to keep up during this run. TBN is 2.4 (1 is too low). Check back in 5k miles.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	5,200	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	20,000						
	Sample Date	3/14/2019						
	Make Up Oil Added	0 qts						
	ALUMINUM	12	12					5
	CHROMIUM	1	1					0
	IRON	26	26					10
	COPPER	3	3					1
	LEAD	0	0					0
	TIN	1	1					0
	MOLYBDENUM	154	154					93
	NICKEL	0	0					0
	MANGANESE	0	0					0
	SILVER	0	0					0
	TITANIUM	0	0					2
	POTASSIUM	15	15					1
	BORON	59	59					38
	SILICON	27	27					11
	SODIUM	11	11					24
	CALCIUM	1322	1322					1792
	MAGNESIUM	486	486					302
	PHOSPHORUS	734	734					650
	ZINC	838	838					752
	BARIUM	0	0					0

Values Should Be\*

<b>PROPERTIES</b>	SUS Viscosity @ 210°F	47.5	46-56				
	cSt Viscosity @ 100°C	6.50	6.0-9.4				
	Flashpoint in °F	355	>375				
	Fuel %	1.0	<2.0				
	Antifreeze %	0.0	0.0				
	Water %	0.0	0.0				
	Insolubles %	0.6	<0.6				
	TBN	2.4	>1.0				
	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