

UNIT	MAKE/MODEL: Transaxle	OIL TYPE & GRADE: Toyota WS Transaxle
	FUEL TYPE:	OIL USE INTERVAL: 60,400 Miles
	ADDITIONAL INFO:	

CLIENT	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

COMMENTS

We think it was a good idea to change out this oil. The high wear and silicon are likely from break-in but both make the oil abrasive. The viscosity was a little lower than we expected it to be but we doubt it's a problem. Insolubles (oil oxidation due to heat, use, and blow-by) were at limits and may show sludge in the system. The low viscosity coupled with the high insolubles show the oil was overrun. No moisture was found. We suggest resampling in 25,000 miles for another look at wear.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	60,400	UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
	MI/HR on Unit								
	Sample Date	09/04/07							
	Make Up Oil Added								
ALUMINUM	69	69							6
CHROMIUM	4	4							2
IRON	285	285							129
COPPER	27	27							103
LEAD	2	2							20
TIN	2	2							3
MOLYBDENUM	0	0							18
NICKEL	11	11							1
MANGANESE	5	5							3
SILVER	0	0							0
TITANIUM	0	0							0
POTASSIUM	0	0							0
BORON	40	40							85
SILICON	172	172							16
SODIUM	5	5							6
CALCIUM	116	116							861
MAGNESIUM	4	4							108
PHOSPHORUS	251	251							1019
ZINC	10	10							473
BARIUM	24	24							2

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	41.4	43-51						
	cSt Viscosity @ 100°C	4.60	5.1-7.9						
	Flashpoint in °F	365	>335						
	Fuel %	-							
	Antifreeze %	-							
	Water %	0.0	<0.1						
	Insolubles %	0.1	<0.1						
	TBN								
	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