



OIL REPORT

LAB NUMBER: F44646

UNIT ID: 94 XT350

REPORT DATE: 3/8/2013

CLIENT ID: 41026

CODE: 20/75

PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Yamaha XT350	OIL TYPE & GRADE: Shell Rotella 10W/40
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 709 Miles
	ADDITIONAL INFO:	

CLIENT	RICHARD BESSEY	PHONE:
	133 WINNEBAGO	FAX:
	WALLA WALLA, WA 99362	ALT PHONE:
		EMAIL: richard@richardbessey.com

COMMENTS RICHARD: Based on what we're seeing in the spectral exam, we'd say you're right -- a problem with a gear is causing the slipping you've noticed. We actually have not seen any samples from this particular Yamaha engine, but we had a good file built for a Yamaha XT 250, so we based our average file on that. Even if we didn't have the XT 225 to look at, we'd be able to tell aluminum is too high. Iron and copper are also high. Maybe part of the problem is dirt, since silicon is high, but not all of it. Are the gears steel? An aluminum part seems to be wearing the worst.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	709	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	4,735						
	Sample Date	02/24/13						
	Make Up Oil Added	0 qts						
ALUMINUM	67	67						13
CHROMIUM	2	2						1
IRON	44	44						11
COPPER	22	22						6
LEAD	1	1						2
TIN	1	1						0
MOLYBDENUM	1	1						33
NICKEL	0	0						4
MANGANESE	1	1						0
SILVER	0	0						0
TITANIUM	0	0						0
POTASSIUM	7	7						2
BORON	36	36						16
SILICON	34	34						12
SODIUM	5	5						12
CALCIUM	3014	3014						2995
MAGNESIUM	17	17						83
PHOSPHORUS	936	936						1118
ZINC	1217	1217						1340
BARIUM	0	0						0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	88.3	65-76					
	cSt Viscosity @ 100°C	17.58	11.6-14.8					
	Flashpoint in °F	425	>375					
	Fuel %	<0.5	<2.0					
	Antifreeze %	0.0	0.0					
	Water %	0.0	<0.1					
	Insolubles %	0.4	<0.6					
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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