



OIL REPORT

LAB NUMBER: F39139
 REPORT DATE: 1/29/2013
 CODE: 20/75

UNIT ID: 07 34 PILOT
 CLIENT ID: 61174
 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Yanmar 6LYA-STP	OIL TYPE & GRADE: Shell Rotella T 15W/40
	FUEL TYPE: Diesel	OIL USE INTERVAL: Hours
	ADDITIONAL INFO:	

CLIENT	DAVID MARCHAND	PHONE: (252) 249-0651
	5527 SANDPIPER	FAX:
	ORIENTAL, NC 28571	ALT PHONE:
		EMAIL: dmfeelingroovy@gmail.com

COMMENTS
 DAVID: The potassium and sodium in this sample show the presence of coolant or cooling water in the oil. As a result of the contamination, you can see that wear metals are elevated compared to universal averages, which show typical wear for this type of Yanmar engine after about 100 hours on the oil. We're not sure how long this oil was run, so it's hard to say how "bad" metals are compared to averages. Aluminum shows piston wear, iron is from steel parts, and lead is from bearings. Look into the possible coolant/cooling water issue and use short oil runs to monitor.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil		UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	800						
	Sample Date	01/16/13						
	Make Up Oil Added							
ALUMINUM	32							3
CHROMIUM	3							1
IRON	82							28
COPPER	20							11
LEAD	5							2
TIN	0							0
MOLYBDENUM	7							6
NICKEL	1							0
MANGANESE	1							1
SILVER	0							0
TITANIUM	0							0
POTASSIUM	25							3
BORON	27							31
SILICON	4							5
SODIUM	722							4
CALCIUM	2478							2511
MAGNESIUM	95							95
PHOSPHORUS	972							1041
ZINC	1102							1152
BARIUM	0							0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	70.6	68-79				
	cSt Viscosity @ 100°C	13.11	12.4-15.5				
	Flashpoint in °F	430	>410				
	Fuel %	<0.5	<3.0				
	Antifreeze %	1.44	0.0				
	Water %	0.0	0.0				
	Insolubles %	0.4	<0.6				
	TBN						
	TAN						
	ISO Code						

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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