



OIL REPORT

LAB NUMBER: D23664 UNIT ID: C320 HULL 690
 REPORT DATE: 11/20/2007 CLIENT ID: 20662
 CODE: 20/37 PAYMENT: Prepaid

UNIT	MAKE/MODEL: Yanmar 3GM30F	OIL TYPE & GRADE: Mobil Delvac 15W/40
	FUEL TYPE: Diesel	OIL USE INTERVAL: 91 Hours
	ADDITIONAL INFO:	

CLIENT	KARL MIELENHAUSEN	PHONE: (252) 638-1433
	2042 ROYAL PINES DR	FAX:
	NEW BERN, NC 28560	ALT PHONE:
		EMAIL: kmielen@suddenlink.net

COMMENTS KARL: Everything looks good in the latest sample from your Yanmar. Wear generally improved with the shorter oil run and we see no obvious mechanical problems developing at 745 hours. Fuel dilution improved to 1.0% in this sample. Fuel is likely from taking the sample without getting the oil up to temps or from low rpm idling/trolling. This level isn't a problem and no other harmful contaminants were found. Both silicon and insolubles read normally, which shows good air and oil filtration. We have no problems to report.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	91	UNIT / LOCATION AVERAGES	106	48				UNIVERSAL AVERAGES
	MI/HR on Unit	745		654	548				
	Sample Date	11/12/07		11/27/06	11/01/05				
	Make Up Oil Added	0 qts		0 qts					
ALUMINUM	6	6	7	4				6	
CHROMIUM	2	2	2	2				3	
IRON	21	23	30	19				33	
COPPER	4	4	7	2				6	
LEAD	7	4	4	2				4	
TIN	0	1	1	1				1	
MOLYBDENUM	60	112	199	76				40	
NICKEL	0	0	0	0				0	
MANGANESE	0	0	0	0				0	
SILVER	0	0	0	0				0	
TITANIUM	0	0	0	0				0	
POTASSIUM	1	1	0	1				1	
BORON	52	87	106	104				73	
SILICON	6	5	5	5				12	
SODIUM	2	2	2	3				6	
CALCIUM	2621	2949	3147	3078				2974	
MAGNESIUM	464	170	12	33				133	
PHOSPHORUS	1224	1188	1116	1224				1078	
ZINC	1531	1424	1335	1405				1254	
BARIUM	0	0	0	0				0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	71.7	69-78	71.2	62.6			
	cSt Viscosity @ 100°C	13.39	12.7-15.3	13.26	10.94			
Flashpoint in °F	405	>415	390	430				
Fuel %	1.0	<2.0	1.5	<0.5				
Antifreeze %	0.0	0.0	0.0	0.0				
Water %	0.0	<0.1	0.0	0.0				
Insolubles %	0.4	<0.8	0.4	0.5				
TBN								
TAN								
ISO Code								

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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