BLACKSTONE LABORATORIES

OIL REPORT

UNIT

MAKE/MODEL: Yanmar 3GM30F	OIL TYPE & GRADE: Mobil Delvac 15W/40
FUEL TYPE: Diesel	OIL USE INTERVAL: 173 Hours
ADDITIONAL INFO:	

CLIENT

KARL MIELENHAUSEN
2042 ROYAL PINES DR
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COMMENTS

KARL: Things are still looking great with your C320 Hull 690 diesel engine. Wear metals continue to read low, which shows that the engine is running fine. Iron read a bit higher, and that is from the longer oil run. It is still in line with what we would expect; you mentioned the 150 hrs on the oil in the last 60 days. The flashpoint has managed come back to normal; your lower fuel dilution rate (<0.5%) is the reason. Some soot (unburned diesel fuel) was found in the oil, but at completely acceptable (not harmful) levels. We love working with this engine's oil!

		UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
MI/HR on Oil	173		91	106	48			
MI/HR on Unit	918		745	654	548			
Sample Date	07/01/08		11/12/07	11/27/06	11/01/05			
Make Up Oil Added	1 qt		0 qts	0 qts				

ELEMENTS IN PARTS PER MILLION

		UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
ALUMINUM	6	6	6	7	4			6
CHROMIUM	3	2	2	2	2			3
IRON	29	25	21	30	19			31
COPPER	3	4	4	7	2			6
LEAD	3	4	7	4	2			4
TIN	1	1	0	1	1			1
MOLYBDENUM	80	104	60	199	76			40
NICKEL	0	0	0	0	0			0
MANGANESE	0	0	0	0	0			0
SILVER	0	0	0	0	0			0
TITANIUM	0	0	0	0	0			0
POTASSIUM	3	1	1	0	1			1
BORON	45	77	52	106	104			67
SILICON	6	6	6	5	5			11
SODIUM	2	2	2	2	3			6
CALCIUM	3424	3068	2621	3147	3078			2944
MAGNESIUM	270	195	464	12	33			134
PHOSPHORUS	1279	1211	1224	1116	1224			1065
ZINC	1505	1444	1531	1335	1405			1240
BARIUM	0	0	0	0	0			0

PROPERTIES

		Values Should Be*					
SUS Viscosity @ 210°F	72.5	69-78	71.7	71.2	**62.6**		
cSt Viscosity @ 100°C	13.62	12.7-15.3	13.39	13.26	**10.94**		
Flashpoint in °F	420	>415	**405**	**390**	430		
Fuel %	<0.5	<2.0	1.0	1.5	<0.5		
Antifreeze %	0.0	0.0	0.0	0.0	0.0		
Water %	0.0	<0.1	0.0	0.0	0.0		
Insolubles %	0.5	<0.8	0.4	0.4	0.5		
TBN							
TAN							
ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE