

UNIT

EQUIP. MAKE/MODEL: Virgin 20W/50
 FUEL TYPE:
 ADDITIONAL INFO:

OIL TYPE & GRADE: Mobil 1 20W/50
 OIL USE INTERVAL: 0

COMMENTS

WILLIAM: Two wear metals were found in this sample at very low levels. The 1 ppm of aluminum and lead we found likely came from the distribution chain through which this oil was transported. Calcium was the dominant additive and it is a detergent/dispersant additive along with boron and magnesium. Phosphorus and zinc are from the anti-wear compound. No moisture or insolubles were present. The TBN read 10.4, showing abundant active additive in the oil. We consider 1.0 to be too low for extended use. We think this oil should serve your engine(s) well.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	0	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit							
	Sample Date	11/11/06						
	Make Up Oil Added							
	ALUMINUM	1	1					0
	CHROMIUM	0	0					0
	IRON	0	1					1
	COPPER	0	0					0
	LEAD	1	1					0
	TIN	0	0					0
	MOLYBDENUM	86	45					117
	NICKEL	0	0					0
	MANGANESE	0	0					0
	SILVER	0	0					0
	TITANIUM	0	0					0
	POTASSIUM	0	0					1
	BORON	192	102					46
	SILICON	5	4					4
	SODIUM	5	4					18
	CALCIUM	2239	2905					1636
	MAGNESIUM	10	12					117
	PHOSPHORUS	1441	1266					853
	ZINC	1629	1465					901
	BARIUM	0	0					0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	102.7	81-102				
	cSt Viscosity @ 100°C	20.98	15.8-21.1				
	Flashpoint in °F	450	>420				
	Fuel %	-	<2.0				
	Antifreeze %	-	0.0				
	Water %	0.0	<0.1				
	Insolubles %	0.0	<0.7				
	TBN	10.4					
	TAN						
	ISO Code						