



# OIL REPORT

LAB NUMBER:  
 REPORT DATE: 5/4/2009  
 CODE: 20/286

UNIT ID: VALVOLINE PREM BL  
 CLIENT ID:  
 PAYMENT:

<b>UNIT</b>	MAKE/MODEL: Virgin 15W/40	OIL TYPE & GRADE: Valvoline Premium Blue 15W/40
	FUEL TYPE:	OIL USE INTERVAL: 0
	ADDITIONAL INFO:	

<b>CLIENT</b>	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

**COMMENTS** JOHN: The oil's viscosity measured in the proper range for a 15W/40-grade product. No moisture or any insolubles (solids) were present in the sample. The anti-wear additives include moly, phosphorus and zinc. The detergent/dispersant additives are sodium, calcium and magnesium. We found 5 ppm of silicon, which is an anti-foaming additive in this brand and type of oil. The starting TBN was 9.4 so keep that in mind when you see the TBN numbers for the used oil. When that number gets down to 1.0 then the active additive is almost all used up.

<b>ELEMENTS IN PARTS PER MILLION</b>	MI/HR on Oil	0	<b>UNIT / LOCATION AVERAGES</b>					<b>UNIVERSAL AVERAGES</b>
	MI/HR on Unit							
	Sample Date	04/25/09						
	Make Up Oil Added							
ALUMINUM	0	0						0
CHROMIUM	0	0						0
IRON	0	0						1
COPPER	0	0						0
LEAD	0	0						0
TIN	0	0						0
MOLYBDENUM	34	34						23
NICKEL	0	0						0
MANGANESE	0	0						0
SILVER	0	0						0
TITANIUM	0	0						0
POTASSIUM	0	0						0
BORON	0	0						55
SILICON	5	5						4
SODIUM	2	2						2
CALCIUM	810	810						2377
MAGNESIUM	759	759						181
PHOSPHORUS	895	895						965
ZINC	1169	1169						1127
BARIUM	0	0						0

Values Should Be\*

<b>PROPERTIES</b>	SUS Viscosity @ 210°F	78.2	69-78				
	cSt Viscosity @ 100°C	15.08	12.7-15.3				
	Flashpoint in °F	430	>390				
	Fuel %	-	<2.0				
	Antifreeze %	-	0.0				
	Water %	0.0	<0.1				
	Insolubles %	0.0	<0.8				
	TBN	9.4					
	TAN						
	ISO Code						

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com