



OIL REPORT

LAB NUMBER: D31084 UNIT ID: 07 5301
 REPORT DATE: 2/14/2008
 CODE: 44/286

UNIT
 EQUIP. MAKE/MODEL: BMW 3.0L 6-Cylinder OIL TYPE & GRADE: BMW Synthetic 5W/30
 FUEL TYPE: Gasoline (Unleaded) OIL USE INTERVAL: 5,000 Miles
 ADDITIONAL INFO:

CLIENT

COMMENTS
 NICK: Aluminum (pistons) read fairly high in the initial sample from your BMW. All wear other than that looks normal, so we don't suspect it is coming from a problem. It may even be from a little lingering wear-in since this is only the third oil change. Universal averages show typical wear from this type of engine after about 6,000 miles oil use. No fuel or anti-freeze was found and the viscosity was normal. Silicon was low at 4 PPM, showing good air filtration. The TBN was strong at 3.0, so the oil has a lot of active additive left. 1.0 is low. We look for lower aluminum next time.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	5,000	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	23,000						
	Sample Date	02/08/08						
	Make Up Oil Added	0 qts						
ALUMINUM	10	10					4	
CHROMIUM	0	0					0	
IRON	13	13					12	
COPPER	8	8					7	
LEAD	1	1					2	
TIN	0	0					1	
MOLYBDENUM	128	128					101	
NICKEL	0	0					0	
MANGANESE	6	6					1	
SILVER	0	0					0	
TITANIUM	0	0					0	
POTASSIUM	1	1					1	
BORON	44	44					54	
SILICON	4	4					6	
SODIUM	12	12					6	
CALCIUM	2094	2094					2635	
MAGNESIUM	88	88					105	
PHOSPHORUS	799	799					826	
ZINC	1006	1006					998	
BARIUM	0	0					0	

Values Should Be*

PROPERTIES	Value	Target				
SUS Viscosity @ 210°F	64.1	59-66				
cSt Viscosity @ 100°C	11.36	9.9-12.2				
Flashpoint in °F	405	>365				
Fuel %	<0.5	<2.0				
Antifreeze %	0.0	0.0				
Water %	0.0	<0.1				
Insolubles %	0.3	<0.6				
TBN	3.0					
TAN						
ISO Code						

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE