



OIL REPORT

LAB NUMBER:
 REPORT DATE: 9/30/2018
 CODE: 20/34

UNIT ID: 76 R90S
 CLIENT ID:
 PAYMENT: CC: MC (Bulk)

UNIT	MAKE/MODEL: BMW Motorcycle R-90/6	OIL TYPE & GRADE: 20W/50
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 475 Miles
	ADDITIONAL INFO:	

CLIENT	
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COMMENTS Well, we wouldn't necessarily call this first sample a doozy, but there is a lot of metal here. A lot of this can be explained by wear-in. New parts breaking in always generate a fair amount of metal, as you probably know. What's making us a little nervous is all that lead -- we don't typically see a lot of bearing wear as a result of wear-in, so that's something we'll be keeping an eye on. Silicon is from sealer and sand-casted parts. This engine is new enough to give it the benefit of the doubt. Do 475 hours again next time to check for improvements.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	475	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	475						
	Sample Date	9/23/2018						
	Make Up Oil Added	0 qts						
ALUMINUM	11	11					4	
CHROMIUM	5	5					1	
IRON	80	80					18	
COPPER	16	16					8	
LEAD	49	49					14	
TIN	3	3					2	
MOLYBDENUM	3	3					6	
NICKEL	1	1					2	
MANGANESE	1	1					1	
SILVER	0	0					0	
TITANIUM	0	0					0	
POTASSIUM	2	2					0	
BORON	3	3					90	
SILICON	57	57					8	
SODIUM	32	32					5	
CALCIUM	2615	2615					1336	
MAGNESIUM	17	17					1163	
PHOSPHORUS	769	769					977	
ZINC	901	901					1136	
BARIUM	1	1					0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°	78.2	75-94				
	cSt Viscosity @ 100°C	15.06	14.3-19.2				
Flashpoint in °F	415	>385					
Fuel %	<0.5	<2.0					
Antifreeze %	-	0.0					
Water %	0.0	<0.1					
Insolubles %	0.2	<0.6					
TBN							
TAN							
ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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