



# 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  
FUEL TYPE: Gasoline (Unleaded)  
ADDITIONAL INFO:

OIL TYPE & GRADE: 20W/50  
OIL USE INTERVAL: 475 Miles

CLIENT

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

416 E. PETTIT AVE.

FORT WAYNE, IN 46806

(260) 744-2380