



Lubricant Analysis Report

North America: +1-877-808-3750
 Latin America: +1-317-808-3750 / +502-3093-6466 (WhatsApp)
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0	1	2	3	4
NORMAL		ABNORMAL		CRITICAL

Overall report severity based on comments.

Account Information		Component Information		Sample Information	
Account Number: 122750-0001-0000 Company Name: ARCH OIL COMMENTS Contact: Address: Phone Number:		Component ID: #WK-LM 4T Secondary ID: BMW R100 GS 1.1L 1988R. Component Type: UNLEADED GASOLINE ENGINE Manufacturer: BMW Model: GS Application: AUTOMOTIVE Sump Capacity:		Tracking Number: 00009612029 Lab Number: Z-156678 Lab Location: Poznan Data Analyst: EAD Sampled: 19-Sep-2020 Received: 30-Sep-2020 Completed: 01-Oct-2020	
Filter Information		Miscellaneous Information		Product Information	
Filter Type: Information Requested Micron Rating: 0				Product Manufacturer: LIQUI MOLY Product Name: Information Requested Viscosity Grade: SAE 20W50	
Comments		Suggest INSPECTING COOLING SYSTEM (head gasket, heads, seals, EGR gaskets, etc.) for leaks. Coolant indicators (Sodium and/or Potassium) are at a SIGNIFICANT LEVEL. LUBRICANT and FILTER CHANGE is suggested if not done at sampling time. Nickel is at a MODERATE LEVEL; Possible valve train (valves, stems, guides etc.) metal; Suggest taking a coolant sample to help with overall diagnostic assessment. Silicon is at a MINOR LEVEL; SILICON sources can be abrasives (dirt, Alumina Silica), seals and gasket material, lube additive or lube supplement, and/or environmental contaminant; TITANIUM SOURCES may be alloy metal from rolling element type BEARINGS, SHAFTS, as a contaminant from coatings/paint, or as a lubricant additive. Resample at half interval. Your note was taken into consideration.			

Sample #	Wear Metals (ppm)										Contaminant Metals (ppm)			Multi-Source Metals (ppm)					Additive Metals (ppm)					
	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
1	29	1	3	4	4	5	1	1	0	0	21	323	24	38	5	0	0	0	8	99	1481	0	786	907

Sample #	Sample Information								Contaminants			Fluid Properties					
	Date Sampled	Date Received	Lube Time	Unit Time	Lube Change	Lube Added	Filter Change	Fuel Dilution	Soot	Water	Viscosity 40°C	Viscosity 100 °C	Acid Number	Base No. D4739	Oxidation	Nitration	
			km	km	Lube Change	gal	Filter Change	% Vol	% Vol	% Vol	cSt	cSt	mg KOH/g	mg KOH/g	abs/cm	abs/0.1 mm	
1	19-Sep-2020	30-Sep-2020	3600	97500	Unk	0	Unk	<1 - Estimate	<.1	<.1 - FTIR		18.4		5.66	7	6	

Sample #	Particle Count (particles/mL)										Additional Testing	
	ISO Code Based On 4/6/14	> 4 µm	> 6 µm	> 10 µm	> 14 µm	> 21 µm	> 38 µm	> 70 µm	> 100 µm	Test Method		
1	//											

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Results relate only to the items tested. Missing fluid or component information limits the evaluation. No warranty is expressed or implied. Measurement uncertainty available upon request.

Historical Comments