WEAR CONTAMINATION FLUID CONDITION

NORMAL

ABNORMAL

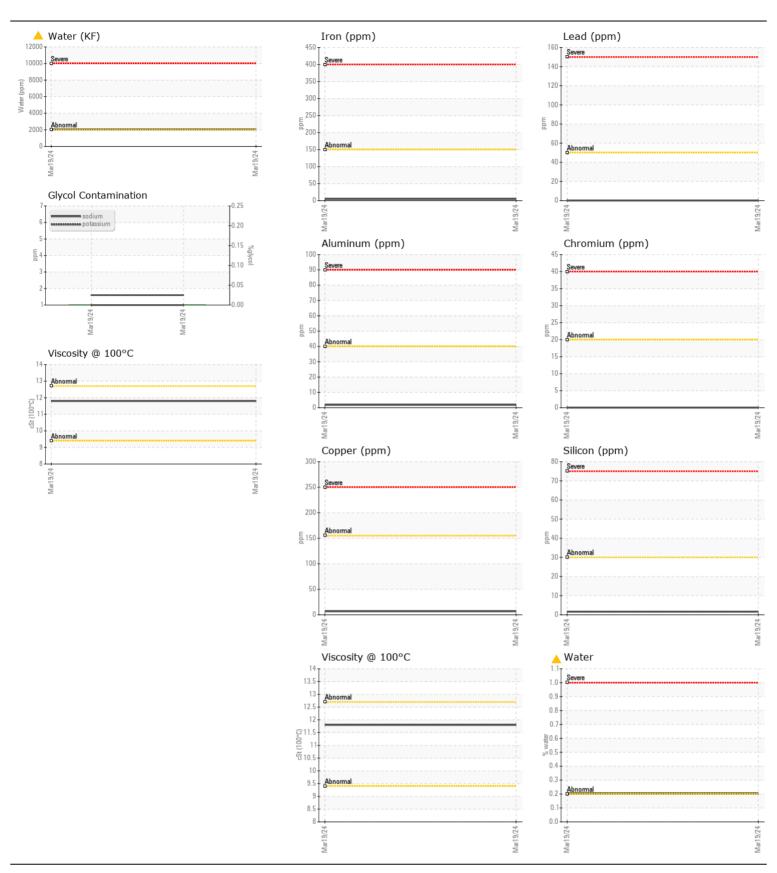
NORMAL

Machine Id

BMW 2002 BMW

Component
Gasoline Engine

Gasoline Engine							
{not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		CU0019707		
	Sample Date		Client Info		19 Mar 2024		
	Machine Age	kms	Client Info		115		
	Oil Age	kms	Client Info		0		
	Filter Age	kms	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>150	4		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	0		
	Nickel	ppm	ASTM D5185(m)	>5	0		
	Titanium	ppm	ASTM D5185(m)		16		
	Silver	ppm	ASTM D5185(m)	>2	<1		
	Aluminum	ppm	ASTM D5185(m)	>40	2		
	Lead	ppm	ASTM D5185(m)	>50	0		
	Copper	ppm	ASTM D5185(m)	>155	7		
	Tin	ppm	ASTM D5185(m)	>10	0		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>30	2		
There is a moderate concentration of water present in the oil. Test for glycol is negative.	Potassium	ppm	ASTM D5185(m)	>20	1		
	Fuel		WC Method	>4.0	<1.0		
	Water	%	ASTM D6304*	>0.2	△ 0.203		
	ppm Water	ppm	ASTM D6304*	>2000	2032		
	Glycol	%	ASTM D7922*		0.0		
	Soot %	%	ASTM D7844*		0		
	Nitration	Abs/cm	ASTM D7624*	>20	9.6		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	14.3		
	Emulsified Water	scalar	Visual*	>0.2	<u>^</u> .2%		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>400	2		
The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185(m)		67		
	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		20		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		76		
	Calcium	ppm	ASTM D5185(m)		2293		
	Phosphorus	ppm	ASTM D5185(m)		792		
	Zinc	ppm	ASTM D5185(m)		914		
	Sulfur	ppm	ASTM D5185(m)		1804		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	10.4		
	Visc @ 100°C	cSt	ASTM D7279(m)		11.8		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02625189 Unique Number : 5750308

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : CU0019707

Received : 28 Mar 2024 **Tested** Diagnosed

: 28 Mar 2024 Test Package : MOB 1 (Additional Tests: Glycol, KF)

: 01 Apr 2024 - Kevin Marson

Contact: Mario Babin ilmb@telus.net

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

T:

F:

MARIO BABIN

40 RTE DION

CAPLAN, QC

CA G8C 1H0