

# WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION NORMAL

## Machine Id **2311** Component **Diesel Engine** {not provided} (--- GAL)

### RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

#### **WEAR**

All component wear rates are normal.

## CONTAMINATION

There is a moderate amount of fuel present in the oil. There is a light concentration of water present in the oil. Test for glycol is negative. Tests confirm the presence of fuel in the oil.

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The oil is no longer serviceable due to the presence of contaminants.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915511		
Sample Date		Client Info		04 Apr 2024		
Machine Age	kms	Client Info		361354		
Oil Age	kms	Client Info		11732		
Filter Age	kms	Client Info		11732		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				ABNORMAL		
Iron	ppm	ASTM D5185(m)	>100	8		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>4	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	2		
Lead	ppm	ASTM D5185(m)	>40	0		
Copper	ppm	ASTM D5185(m)	>330	1		
Tin	ppm	ASTM D5185(m)	>15	0		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)	>25	10		
Potassium	ppm	ASTM D5185(m)	>20	<1		
Fuel	%	ASTM D7593*	>5	A 7.8		
Water	%	ASTM D6304*	>0.2	A 0.285		
ppm Water	ppm	ASTM D6304*	>2000	A 2852		
Glycol	%	ASTM D7922*	0	0.0		
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	12.7		
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.5		
Silt	scalar	Visual*	NONE	VLITE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.2	<b>.2%</b>		
Sodium	ppm	ASTM D5185(m)		4		
Boron	ppm	ASTM D5185(m)		40		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		73		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)		464		
Calcium	ppm	ASTM D5185(m)		1101		
Phosphorus	ppm	ASTM D5185(m)		544		
Zinc	ppm	ASTM D5185(m)		602		
Sulfur	ppm	ASTM D5185(m)		2236		
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.8		
Visc @ 100°C	cSt	ASTM D7279(m)		8.4		
	501			0.7		



MANITOULIN TRANSPORT Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received 75 MUMFORD ROAD : WC0915511 : 30 Apr 2024 Lab Number LIVELY, ON : 02632298 Tested :01 May 2024 ISO 17025:2017 Accredited CA P3Y 1L1 Unique Number : 5773451 Diagnosed : 01 May 2024 - Kevin Marson Laboratory Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, KF, PercentFuel, Visual) Contact: Todd Smith To discuss this sample report, contact Customer Service at 1-800-268-2131. tosmith@manitoulintransport.com T: (705)562-3302 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: x: Validity of results and interpretation are based on the sample and information as supplied.