

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id LIEBHERR 151293-1216 Component

Front Left Wheel Hub

{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) NOT GIVEN. Please confirm. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 80W90 Gear Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.

**WEAR** 

All component wear rates are normal.

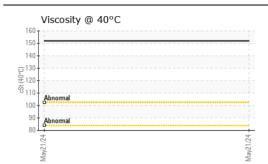
## CONTAMINATION

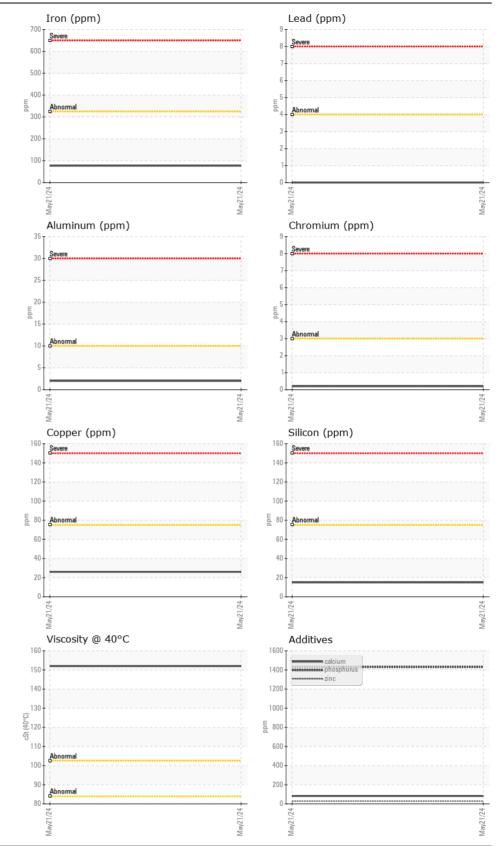
There is no indication of any contamination in the oil.

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0290914		
Sample Date		Client Info		21 May 2024		
Machine Age	hrs	Client Info		1496		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
			005			
Iron	ppm	ASTM D5185(m)	>325	77		
Chromium	ppm	ASTM D5185(m)	>3	<1		
Nickel	ppm	ASTM D5185(m)	>2	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	. 10	0		
Aluminum	ppm	ASTM D5185(m)	>10	2		
Lead	ppm	ASTM D5185(m)	>4	0		
Copper	ppm	ASTM D5185(m)	>75	26		
Tin	ppm	ASTM D5185(m)	>3	0		
Vanadium White Metal	ppm	ASTM D5185(m)				
	scalar	Visual*	NONE	VLITE		
Yellow Metal	scalar	Visual*	NONE	VLITE		
Silicon	scalar ppm	ASTM D5185(m)	>75	VLITE 15		
Silicon	ppm	ASTM D5185(m)	>75	15		  
Silicon Potassium	ppm	ASTM D5185(m) ASTM D5185(m)	>75 >20	15 2		  
Silicon Potassium Water	ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method	>75 >20 >0.2	15 2 NEG		   
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual*	>75 >20 >0.2 NONE	15 2 NEG VLITE		
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual*	>75 >20 >0.2 NONE NONE	15 2 NEG VLITE NONE		    
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual*	>75 >20 >0.2 NONE NONE NONE	15 2 NEG VLITE NONE NONE		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual*	>75 >20 >0.2 NONE NONE NONE NORML	15 2 NEG VLITE NONE NONE NORML		 
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORE NORML NORML NEG		    
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* Visual*	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORML NORML NEG 3		 
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar gppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORML NORML NEG 3 8		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORML NORML NEG 3 8 <1		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORML NORML NEG 3 8 <1 0		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar gpm ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORML NORML NEG 3 8 <1 0 3		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORML NORML NEG 3 8 <1 0 3 1		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORML NORML NEG 3 8 <1 0 3 1 82		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORML NORML NEG 3 8 <1 0 3 8 <1 0 3 1 82 1430		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORML NORML NEG 3 8 <1 0 3 1 8 2 1 430 29		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>75 >20 >0.2 NONE NONE NONE NORML NORML	15 2 NEG VLITE NONE NORML NORML NEG 3 8 <1 0 3 8 <1 0 3 1 82 1430		





1625066 ONTARIO LTD. Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received 870 MACKAY RD : LH0290914 : 22 May 2024 Ø Lab Number : 02636990 Tested PICKERING, ON : 22 May 2024 ISO 17025:2017 Accredited Laboratory Unique Number : 5786152 Diagnosed : 22 May 2024 - Kevin Marson CA L1W 2Y4 Test Package : MOB 1 Contact: Service Manager 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.

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