

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id LIEBHERR LH40M 156305-1215

Front Left Wheel Hub

GEAR OIL SAE 80W90 (--- 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) GEAR OIL SAE 80W90. Please confirm.

WEAR

All component wear rates are normal.

CONTAMINATION

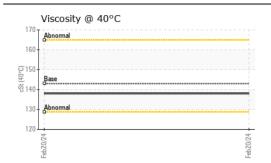
There is no indication of any contamination in the oil.

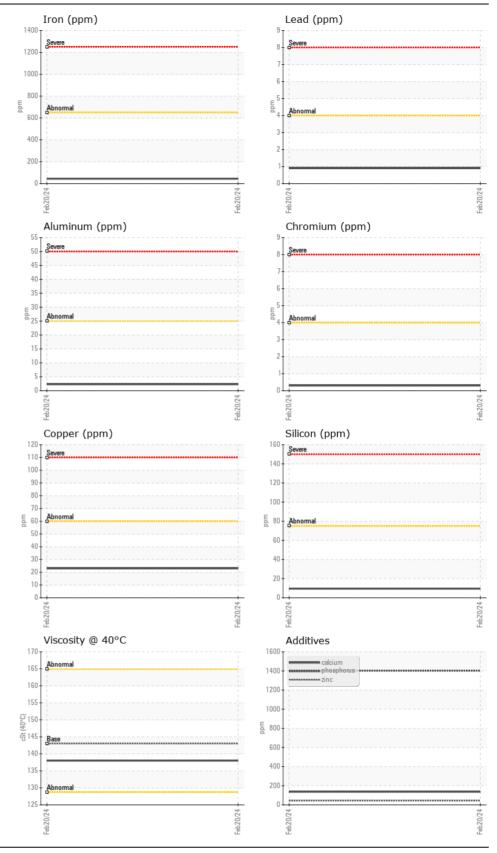
FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0278475		
Sample Date		Client Info		20 Feb 2024		
Machine Age	hrs	Client Info		536		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		None		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185(m)	>650	44		
Chromium	ppm	ASTM D5185(m)	>4	<1		
Nickel	ppm	ASTM D5185(m)	>4	<1		
Titanium	ppm	ASTM D5185(m)	>4	0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>25	2		
Lead	ppm	ASTM D5185(m)	>4	<1		
Copper	ppm	ASTM D5185(m)	>60	23		
Tin	ppm	ASTM D5185(m)	>4	0		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	VLITE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)	>75	10		
Potassium	ppm	ASTM D5185(m)	>20	2		
Water		WC Mathad	>0.2	NEG		
		WC Method				
Silt	scalar	Visual*	NONE	NONE		
Silt Debris	scalar scalar		NONE NONE	NONE NONE		
		Visual*				
Debris	scalar	Visual* Visual*	NONE	NONE		
Debris Sand/Dirt	scalar scalar	Visual* Visual* Visual*	NONE	NONE		
Debris Sand/Dirt Appearance	scalar scalar scalar	Visual* Visual* Visual* Visual*	NONE NONE NORML	NONE NONE NORML		
Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar	Visual* Visual* Visual* Visual* Visual*	NONE NORML NORML	NONE NONE NORML NORML		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar	Visual* Visual* Visual* Visual* Visual* Visual*	NONE NORML NORML >0.2 >170	NONE NORML NORML NEG 5		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	NONE NORML NORML >0.2 >170 400	NONE NORE NORML NORML NEG		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	NONE NORML NORML >0.2 >170 400 200	NONE NORML NORML NEG 5 4 <1		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NORML NORML >0.2 >170 400	NONE NORML NORML NEG 5 4 <1 <1		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NORML >0.2 >170 400 200 12	NONE NORML NORML NEG 5 4 <1 <1 <1 2		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NORML NORML >0.2 >170 400 200	NONE NORML NORML NEG 5 4 <1 <1 <1 2 2		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NORML >0.2 >170 400 200 12 12 12	NONE NORML NORML NEG 5 4 <1 <1 <1 2 2 2 137		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar ppm ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NORML >0.2 >170 400 200 12 12 12 150 1650	NONE NORML NORML NEG 5 4 <1 <1 2 2 2 137 1403		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	Visual* 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)	NONE NORML NORML >0.2 >170 400 200 12 12 12 150 1650 125	NONE NORML NORML NEG 5 4 <1 <1 <1 2 2 137 1403 43		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Malybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NORML >0.2 >170 400 200 12 12 12 150 1650	NONE NORML NORML NEG 5 4 <1 <1 2 2 2 137 1403		

Submitted By: Vincent Blanchette





Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received : 22 Feb 2024 : LH0278475 团 Lab Number : 02617502 Tested : 22 Feb 2024 ISO 17025:2017 Accredited Laboratory Diagnosed Unique Number : 5734612 : 22 Feb 2024 - Wes Davis Test Package : MOB 1 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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Urban Mine

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