

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL



Machine Id LIEBHERR L550 076577-1825

Rear Left Wheel Hub

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

Metal levels are typical for a new component breaking in.

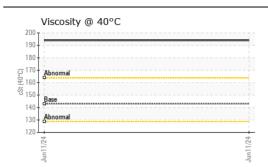
CONTAMINATION

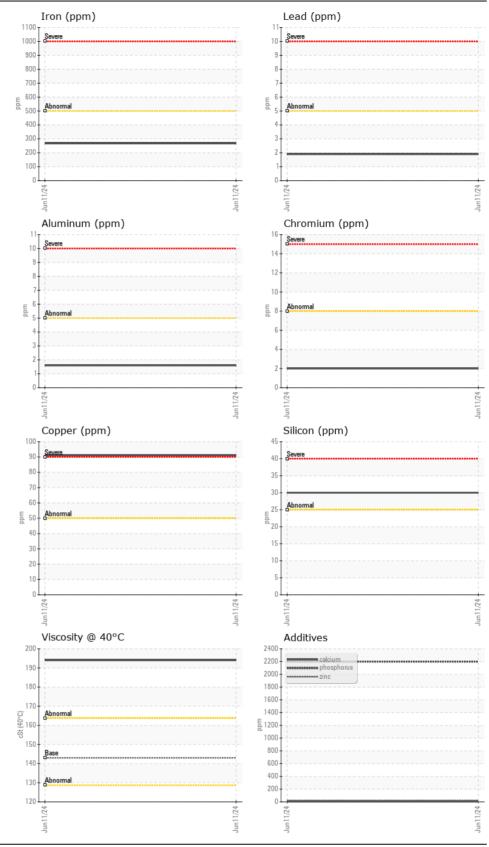
There is no indication of any contamination in the oil.

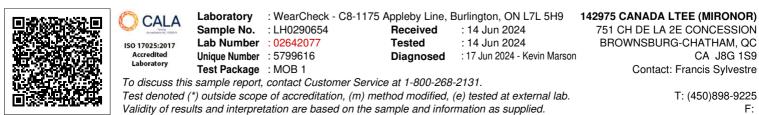
FLUID CONDITION

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

<u>/</u>						
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0290654		
Sample Date		Client Info		11 Jun 2024		
Machine Age	hrs	Client Info		541		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185(m)	>500	267		
Chromium	ppm	ASTM D5185(m)	>8	2		
Nickel	ppm	ASTM D5185(m)	>5	4		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	_	0		
Aluminum	ppm	ASTM D5185(m)	>5	2		
Lead	ppm	ASTM D5185(m)	>5	2		
Copper	ppm	ASTM D5185(m)	>50	91		
Tin	ppm	ASTM D5185(m)		7		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Yellow Metal Silicon			NONE	NONE 30		
	ppm	Visual* ASTM D5185(m) ASTM D5185(m)				
Silicon		ASTM D5185(m)	>25	30		
Silicon Potassium	ppm	ASTM D5185(m) ASTM D5185(m)	>25 >20	30 0		
Silicon Potassium Water	ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method	>25 >20 >0.2	30 0 NEG		
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual*	>25 >20 >0.2 NONE	30 0 NEG NONE		
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual*	>25 >20 >0.2 NONE NONE	30 0 NEG NONE NONE		
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual*	>25 >20 >0.2 NONE NONE NONE	30 0 NEG NONE NONE VLITE		
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*	>25 >20 >0.2 NONE NONE NONE NORML	30 0 NEG NONE NONE VLITE NORML		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>25 >20 >0.2 NONE NONE NONE NORML NORML >0.2	30 0 NEG NONE NONE VLITE NORML NORML NEG		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* Visual*	>25 >20 >0.2 NONE NONE NORML NORML >0.2	30 0 NEG NONE NONE VLITE NORML NORML NEG 6		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>25 >20 >0.2 NONE NONE NORML >0.2 >170 400	30 0 NEG NONE VLITE NORML NORML NEG 6 2		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>25 >20 >0.2 NONE NONE NORML NORML >0.2 >170 400 200	30 0 NEG NONE VLITE NORML NORML NEG 6 2 <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	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>25 >20 >0.2 NONE NONE NORML >0.2 >170 400	30 0 NEG NONE VLITE NORML NORML NEG 6 2 <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 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) ASTM D5185(m)	>25 >20 >0.2 NONE NORME NORML >0.2 >170 400 200	30 0 NEG NONE VLITE NORML NORML NEG 6 2 <1 0 21		
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) ASTM D5185(m)	>25 >20 >0.2 NONE NONE NORML NORML >0.2 >170 400 200 12	30 0 NEG NONE VLITE NORML NORML NEG 6 2 <1 0 21 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) ASTM D5185(m) ASTM D5185(m)	>25 >20 >0.2 NONE NORML NORML >0.2 >170 400 200 12	30 0 NEG NONE VLITE NORML NORML NEG 6 2 <1 0 21 3 6		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	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* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	 >25 >20 >0.2 NONE NORML >0.2 >170 400 200 12 12 150 1650 	30 0 NEG NONE VLITE NORML NORML NEG 6 2 <1 0 21 3 6 21 3 6 2199		
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	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)	 >25 >20 >0.2 NONE NORML >0.2 >170 400 200 12 12 150 1650 125 	30 0 NEG NONE VLITE NORML NORML NEG 6 2 <1 0 21 3 6 21 3 6 2199 24		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron 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)	 >25 >20 >0.2 NONE NORML >0.2 >170 400 200 12 12 150 1650 	30 0 NEG NONE VLITE NORML NORML NEG 6 2 <1 0 21 3 6 21 3 6 2199		







Submitted By: Eric Leblond Page 2 of 2