



## Machine Id LIEBHERR L566 071183-1758

Component Rear Right Wheel Hub

LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

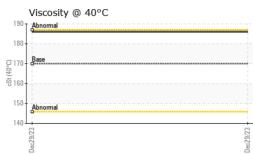
## CONTAMINATION

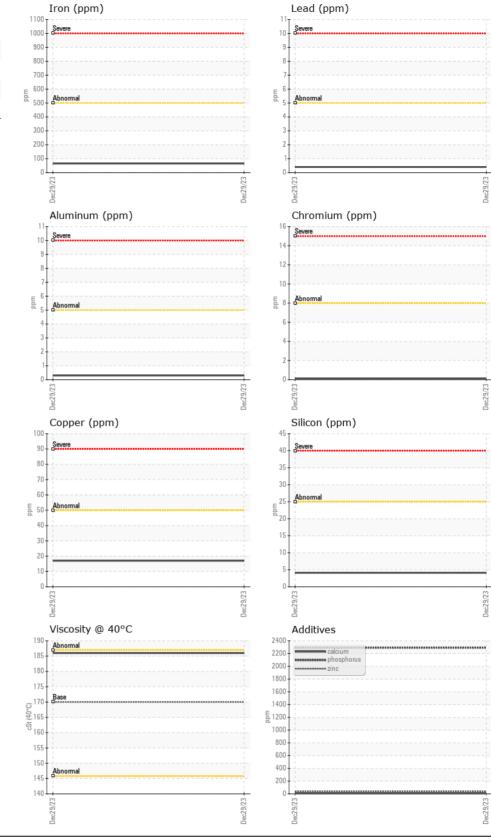
There is no indication of any contamination in the oil.

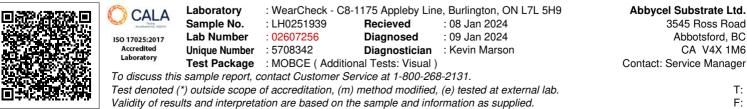
## FLUID CONDITION

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

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0251939		
Sample Date		Client Info		29 Dec 2023		
Machine Age	hrs	Client Info		3102		
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)	>500	65		
Chromium	ppm	ASTM D5185(m)	>8	<1		
Nickel	ppm	ASTM D5185(m)	>5	1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>5	<1		
Lead	ppm	ASTM D5185(m)	>5	<1		
Copper	ppm	ASTM D5185(m)	>50	17		
Tin	ppm	ASTM D5185(m)		<1		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	VLITE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	nom	ASTM D5185(m)	>25	4		
Silicon Potassium	ppm	ASTM D5185(m) ASTM D5185(m)	>25 >20	4 <1		
Potassium	ppm ppm	ASTM D5185(m)	>20	<1		
Potassium Water	ppm	ASTM D5185(m) WC Method	>20 >0.2	<1 NEG		
Potassium Water Silt	ppm scalar	ASTM D5185(m) WC Method Visual*	>20 >0.2 NONE	<1 NEG NONE		
Potassium Water Silt Debris	ppm scalar scalar	ASTM D5185(m) WC Method Visual* Visual*	>20 >0.2 NONE NONE	<1 NEG NONE NONE		
Potassium Water Silt Debris Sand/Dirt	ppm scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual*	>20 >0.2 NONE NONE NONE	<1 NEG NONE NONE NONE	 	  
Potassium Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NONE	<1 NEG NONE NONE NONE NORML	   	  
Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NORML NORML	<pre>&lt;1 NEG NONE NONE NONE NORE NORML NORML</pre>	 	  
Potassium Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NONE	<1 NEG NONE NONE NONE NORML	   	  
Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NORML NORML	<pre>&lt;1 NEG NONE NONE NONE NORE NORML NORML</pre>	   	  
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NORML NORML	<1 NEG NONE NONE NORE NORML NEG		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2	<1 NEG NONE NONE NORML NORML NEG		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2	<1 NEG NONE NONE NORML NORML NEG 1 <1		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2	<1 NEG NONE NONE NORML NORML NEG 1 <1 <1 0		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NORME NORML >0.2	<1 NEG NONE NONE NORML NORML NEG 1 <1 0 <1		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML >0.2	<1 NEG NONE NONE NORML NORML NEG 1 <1 0 <1 4		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2 0 0 0 0 0 0 0	<1 NEG NONE NONE NORML NORML NEG 1 <1 <1 0 <1 4 <1		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	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)	>20 >0.2 NONE NONE NORML NORML >0.2 0 0 0 0 0 0 0 1 0 2 1	<1 NEG NONE NONE NORML NORML NEG 1 <1 <1 0 <1 4 <1 8		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Malybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	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)	>20 >0.2 NONE NONE NORML >0.2 0 0 0 0 0 1 0 1 1 2143	<1 NEG NONE NONE NORML NORML NEG 1 <1 <1 0 <1 4 <1 8 2292		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	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) ASTM D5185(m)	>20 >0.2 NONE NONE NORML >0.2 0 0 0 0 0 0 1 2 1 2143 <1	<1 NONE NONE NONE NORML NORML NORML NORML 1 <1 <1 <4 <1 <21 <8 <2292 <36		







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