

## WEAR ABNORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL



## LIEBHERR R954B MH-4 (S/N 015630-629)

Right Final Drive

DURALENE Posi-Traction 80W90 (--- GAL)

RECOMMENDATION
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No corrective action is recommended at this time. Resample at the next service interval to monitor.

V	V	Ε	A	F	R
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Bearing and/or bushing wear is indicated. All other component wear rates are normal.

## CONTAMINATION

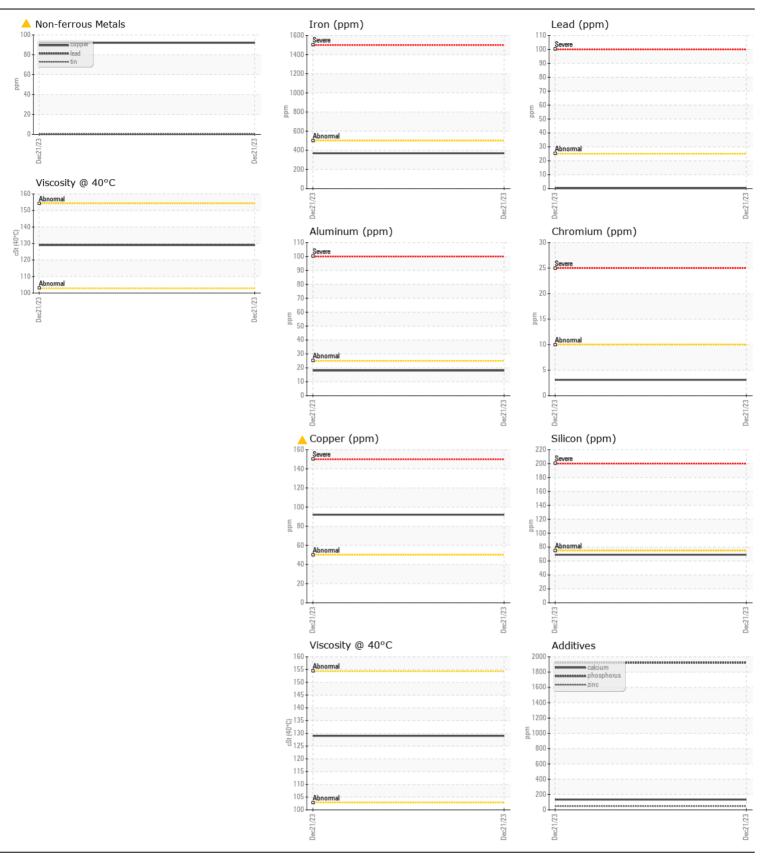
There is no indication of any contamination in the oil.

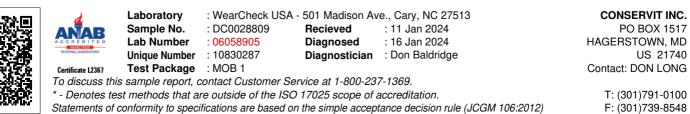
## FLUID CONDITION

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

0 ( GAL)				~~~~		
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0028809		
Sample Date		Client Info		21 Dec 2023		
Machine Age	hrs	Client Info		12300		
Oil Age	hrs	Client Info		2000		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		N/A		
Sample Status		ABNORMAL				
			500	000		
Iron	ppm	ASTM D5185m	>500	369		
Chromium	ppm	ASTM D5185m	>10	3		
Nickel	ppm	ASTM D5185m	>10	2		
Titanium	ppm	ASTM D5185m		3		
Silver	ppm	ASTM D5185m	0.5	0		
Aluminum	ppm	ASTM D5185m	>25	18		
Lead	ppm	ASTM D5185m	>25	<1		
Copper	ppm	ASTM D5185m	>50	<mark>/</mark> 92		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>75	69		
Potassium	ppm	ASTM D5185m	>20	7		
Water		WC Method	>0.2	NEG		
Silt		43 /l 1	NONE	NONE		
Siit	scalar	*Visual	NONE	NONE		
Debris	scalar scalar	*Visual *Visual	NONE	NONE		
				-		
Debris	scalar	*Visual	NONE	NONE		
Debris Sand/Dirt	scalar scalar	*Visual *Visual	NONE NONE	NONE		
Debris Sand/Dirt Appearance	scalar scalar scalar	*Visual *Visual *Visual	NONE NONE NORML	NONE NONE NORML		
Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual	NONE NORML NORML	NONE NORE NORML NORML NEG		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 0		  
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 0 96		    
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 0 96 0		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 0 96 0 <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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 0 96 0 <1 2		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 0 96 0 <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 ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 0 96 0 <1 2 2 23 134		
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 0 96 0 4 2 23 134 1922		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 0 96 0 <1 2 23 134 1922 49		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 0 96 0 4 2 23 134 1922		

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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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