

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL



Machine Id LIEBHERR L566 1484-60217

Component Rear Right Wheel Hub

{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

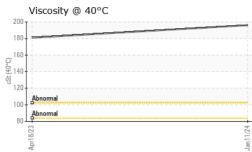
CONTAMINATION

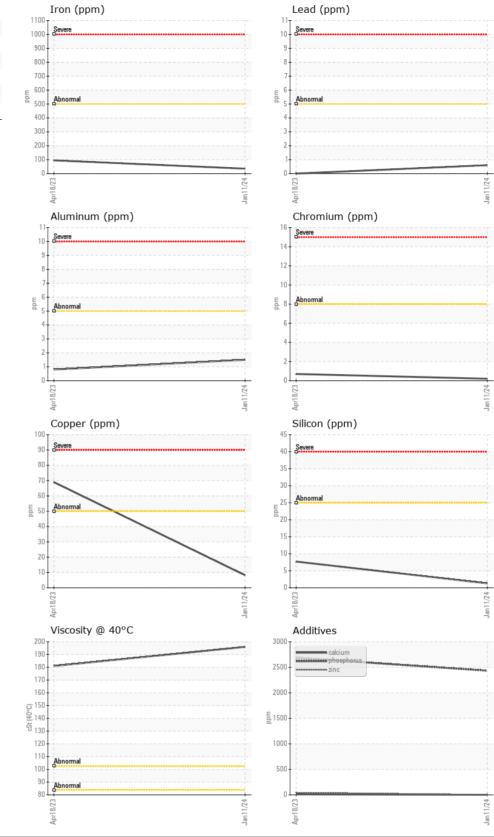
There is no indication of any contamination in the oil.

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		LH0263753	LH0263731	
Sample Date		Client Info		11 Jan 2024	18 Apr 2023	
Machine Age	hrs	Client Info		5070	3000	
Oil Age	hrs	Client Info		0	0	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Filter Changed		Client Info		N/A	N/A	
Sample Status			NORMAL	ABNORMAL		
Iron			. 500	95	05	
Iron	ppm	ASTM D5185m	>500	35	95	
Chromium	ppm	ASTM D5185m	>8	<1	<1	
Nickel	ppm	ASTM D5185m	>5	<1	<1	
Titanium Silver	ppm	ASTM D5185m		<1	0	
	ppm	ASTM D5185m ASTM D5185m	× F	0 2	0	
Aluminum	ppm		>5	_	<1	
Lead	ppm	ASTM D5185m	>5	<1	0	
Copper	ppm	ASTM D5185m	>50	8	▲ 69	
Tin	ppm	ASTM D5185m		<1	1	
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	MODER	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Silicon	ppm	ASTM D5185m	>25	1	8	
Silicon Potassium	ppm ppm	ASTM D5185m ASTM D5185m	>25 >20	1	8 <1	
				-	-	
Potassium		ASTM D5185m	>20	1	<1	
Potassium Water	ppm	ASTM D5185m WC Method	>20 >0.2	1 NEG	<1 NEG	
Potassium Water Silt	ppm scalar	ASTM D5185m WC Method *Visual	>20 >0.2 NONE	1 NEG NONE	<1 NEG MODER	
Potassium Water Silt Debris	ppm scalar scalar	ASTM D5185m WC Method *Visual *Visual	>20 >0.2 NONE NONE	1 NEG NONE NONE	<1 NEG MODER NONE	
Potassium Water Silt Debris Sand/Dirt	ppm scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual	>20 >0.2 NONE NONE NONE	1 NEG NONE NONE	<1 NEG MODER NONE NONE	
Potassium Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NONE	1 NEG NONE NONE NONE NORML	<1 NEG MODER NONE NONE NORML	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG	<1 NEG MODER NONE NONE NORML NORML NEG	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG 0	<1 NEG MODER NONE NORML NORML NEG 2	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG 0 0	<1 NEG MODER NONE NORML NORML NEG 2 0	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG 0 0 2	<1 NEG MODER NONE NORML NORML NEG 2 0 0	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG 0 0 2 5	<1 NEG MODER NONE NORML NORML NEG 2 0 0 0 4	
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 D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG 0 0 2 5 5 1	<1 NEG NONE NONE NORML NORML NEG 2 0 0 0 4 13	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG 0 0 2 5 1 1 0	<1 NEG NONE NONE NORML NORML NEG 2 0 0 0 4 13 2	
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 D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG 0 2 5 1 1 0 1	<1 NEG NONE NONE NORML NORML NEG 2 0 0 0 4 13 2 14	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG 0 0 2 5 1 1 0 1 2434	<1 NEG NONE NORML NORML NORML NORML NORML 0 2 0 0 4 13 2 14 2687	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium Calcium Phosphorus	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG 0 0 2 5 1 0 0 2 5 1 1 0 1 2 434	<1 NEG NONE NONE NORML NORML NORML NORML 0 2 0 0 4 13 2 14 2687 44	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	1 NEG NONE NONE NORML NORML NEG 0 0 2 5 1 1 0 1 2434	<1 NEG NONE NORML NORML NORML NORML 0 2 0 0 4 13 2 14 2687	





MR BULTS INC Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : LH0263753 Recieved : 12 Jan 2024 2627 E 139TH ST Lab Number : 06059653 : 14 Jan 2024 BURNHAM, IL Diagnosed Unique Number : 10831035 Diagnostician : Wes Davis US 60633 Test Package : MOBCE Contact: SERVICE MANAGER Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (708)868-0059 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Submitted By: ? Page 2 of 2