

Machine Id LIEBHERR LTR1100 HC 1110 (S/N 97351) Component Right Track Drive Fluid GEAR OIL ISO 220 (--- 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

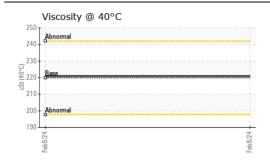
There is no indication of any contamination in the oil.

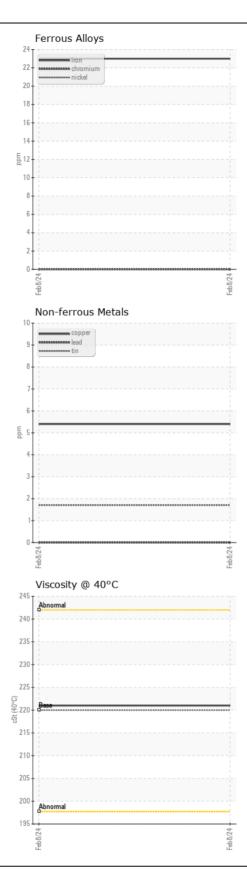
FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0873437		
Sample Date		Client Info		08 Feb 2024		
Machine Age	hrs	Client Info		11988		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				NORMAL		
			1000			
Iron	ppm	ASTM D5185m	>1000	23		
Chromium	ppm	ASTM D5185m	>30	0		
Nickel	ppm	ASTM D5185m	>7	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	. 05	0		
Aluminum	ppm	ASTM D5185m	>25	<1 0		
Lead	ppm	ASTM D5185m	>50	0		
Copper	ppm		>100	5		
Tin	ppm	ASTM D5185m	>5	2		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Mallans Martal		*) /: 1	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Yellow Metal Silicon	scalar ppm	*Visual ASTM D5185m	NONE >150	NONE 6		
Silicon	ppm	ASTM D5185m	>150	6		
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>150 >20	6 <1		
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>150 >20 >0.2	6 <1 NEG		
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>150 >20 >0.2 NONE	6 <1 NEG NONE		
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>150 >20 >0.2 NONE NONE	6 <1 NEG NONE NONE		
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual	>150 >20 >0.2 NONE NONE NONE	6 <1 NEG NONE NONE NONE		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>150 >20 >0.2 NONE NONE NONE NORML	6 <1 NEG NONE NONE NONE NORML		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>150 >20 >0.2 NONE NONE NONE NORML	6 <1 NEG NONE NONE NORE NORML NEG		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>150 >20 >0.2 NONE NONE NORML NORML >0.2	6 <1 NEG NONE NONE NORML NORML NEG 0		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar gppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>150 >20 >0.2 NONE NONE NORML >0.2	6 <1 NEG NONE NONE NORML NORML NEG 0 4		
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 D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>150 >20 >0.2 NONE NONE NORML NORML >0.2	6 <1 NEG NONE NONE NORML NORML NEG 0 4		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>150 >20 >0.2 NONE NONE NORML >0.2	6 <1 NEG NONE NONE NORML NORML NEG 0 4 0 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 D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>150 >20 >0.2 NONE NORME NORML >0.2 50 15 15	6 <1 NEG NONE NONE NORML NORML NEG 0 4 0 0 4 0 2		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>150 >20 >0.2 NONE NONE NORML >0.2 50 15 15	6 <1 NEG NONE NONE NORML NORML NEG 0 4 0 4 0 0 <1 0		
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 scalar ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>150 >20 >0.2 NONE NORML NORML >0.2 50 15 15 50 50	6 <1 NEG NONE NONE NORML NORML NEG 0 4 0 4 0 0 <1 0 0		
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 D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >150 >20 >0.2 NONE NORME NORML >0.2 50 50 50 50 50 350 	6 <1 NEG NONE NONE NORML NORML NEG 0 4 0 4 0 0 <1 0 0 <1 0 0 371		
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 ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>150 >20 >0.2 NONE NONE NORML >0.2 50 15 15 50 50 50 350 100	6 <1 NEG NONE NONE NORML NORML NEG 0 4 0 0 4 0 0 4 0 0 371 0		
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 D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >150 >20 >0.2 NONE NORME NORML >0.2 50 50 50 50 50 350 	6 <1 NEG NONE NONE NORML NORML NEG 0 4 0 4 0 0 <1 0 0 <1 0 0 371		

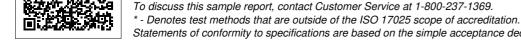
Contact/Location: MICHAEL LAWSON - BUCGRA





Tested

BUCKNER HEAVY LIFT : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 12 Feb 2024 4732 NC 54 EAST : 13 Feb 2024 GRAHAM, NC Diagnosed : 13 Feb 2024 - Wes Davis US 27253-9215 Contact: MICHAEL LAWSON michaell@bucknercompanies.com T: (336)376-8888 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (336)376-4090



Certificate L2367

Laboratory

Sample No.

Lab Number : 06086769

Unique Number : 10874214

Test Package : CONST

: WC0873437

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