

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

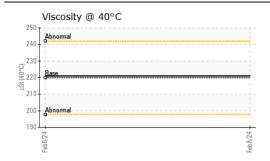
There is no indication of any contamination in the oil.

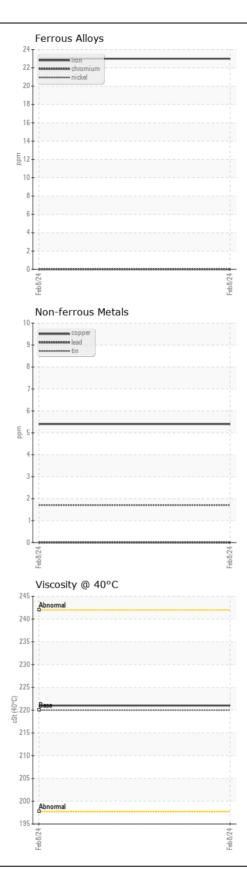
FLUID CONDITION

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 | | |

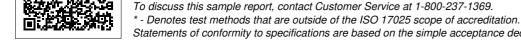
Contact/Location: MICHAEL LAWSON - BUCGRA





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

Page 2 of 2