

WEARSEVERECONTAMINATIONNORMALFLUID CONDITIONNORMAL

Machine Id HC2215 Component 2 Winch Fluid GEAR OIL ISO 220 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

CONTAMINATION

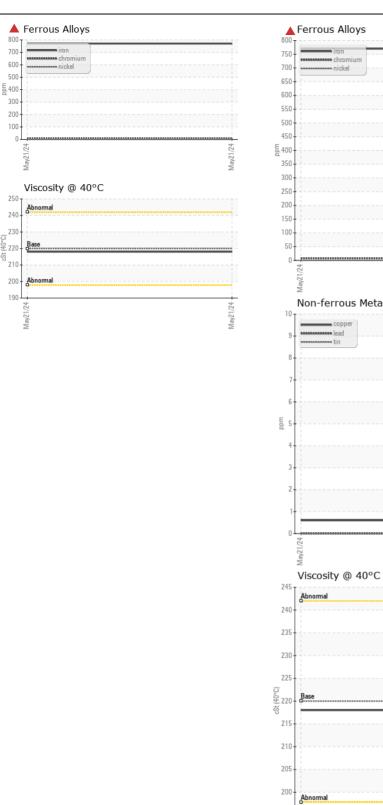
There is no indication of any contamination in the oil.

FLUID CONDITION

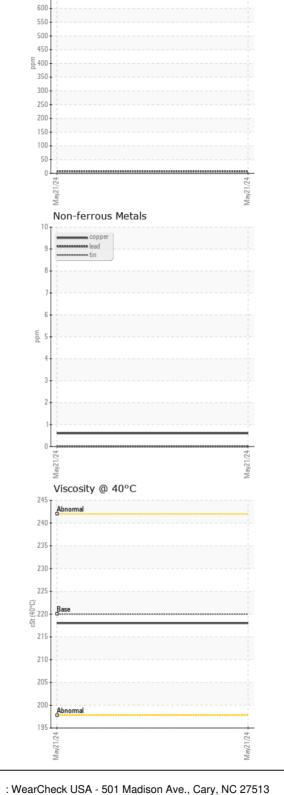
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|------------------|--------|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | WC0935883 | | |
| Sample Date | | Client Info | | 21 May 2024 | | |
| Machine Age | hrs | Client Info | | 12325 | | |
| Oil Age | hrs | Client Info | | 1802 | | |
| Filter Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | Changed | | |
| Filter Changed | | Client Info | | Not Changd | | |
| Sample Status | | | | SEVERE | | |
| | | | | | | |
| Iron | ppm | ASTM D5185m | >150 | 770 | | |
| Chromium | ppm | ASTM D5185m | >10 | 8 | | |
| Nickel | ppm | ASTM D5185m | >10 | <1 | | |
| Titanium | ppm | ASTM D5185m | | 0 | | |
| Silver | ppm | ASTM D5185m | | 0 | | |
| Aluminum | ppm | ASTM D5185m | >5 | 5 | | |
| Lead | ppm | ASTM D5185m | >15 | 0 | | |
| Copper | ppm | ASTM D5185m | >80 | <1 | | |
| Tin | ppm | ASTM D5185m | | 0 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| White Metal | scalar | *Visual | NONE | NONE | | |
| Yellow Metal | scalar | *Visual | NONE | NONE | | |
| Silicon | ppm | ASTM D5185m | >25 | 8 | | |
| Potassium | ppm | ASTM D5185m | >20 | 0 | | |
| Water | | WC Method | >0.2 | NEG | | |
| Silt | scalar | *Visual | NONE | MODER | | |
| Debris | scalar | *Visual | NONE | NONE | | |
| Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| Appearance | scalar | *Visual | NORML | HAZY | | |
| Odor | scalar | *Visual | NORML | NORML | | |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | | |
| | | | | | | |
| Sodium | ppm | ASTM D5185m | | 0 | | |
| Boron | ppm | ASTM D5185m | 50 | 0 | | |
| Barium | ppm | ASTM D5185m | 15 | 0 | | |
| Molybdenum | ppm | ASTM D5185m | 15 | 2 | | |
| Manganese | ppm | ASTM D5185m | | 7 | | |
| Magnesium | ppm | ASTM D5185m | 50 | 0 | | |
| Calcium | ppm | ASTM D5185m | 50 | <1 | | |
| Phosphorus | ppm | ASTM D5185m | 350 | 323 | | |
| Zinc | ppm | ASTM D5185m | 100 | 15 | | |
| Sulfur | ppm | ASTM D5185m | 12500 | 5618 | | |
| Visc @ 40°C | cSt | ASTM D445 | 220 | 218 | | |

Contact/Location: MICHAEL LAWSON - BUCGRA



cSt (40°C)

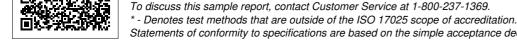


Received

Diagnosed

Tested

BUCKNER HEAVY LIFT : 24 May 2024 4732 NC 54 EAST GRAHAM, NC : 28 May 2024 : 29 May 2024 - Sean Felton 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 : 06191375

Unique Number : 11048127

Test Package : CONST

: WC0935883

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