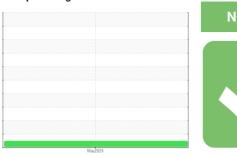


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



590 H01

Machine Id

Component
Hoisting Gearbox

GEAR OIL LS 80W90 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL LS 80W90. Please confirm.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

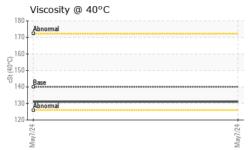
Fluid Condition

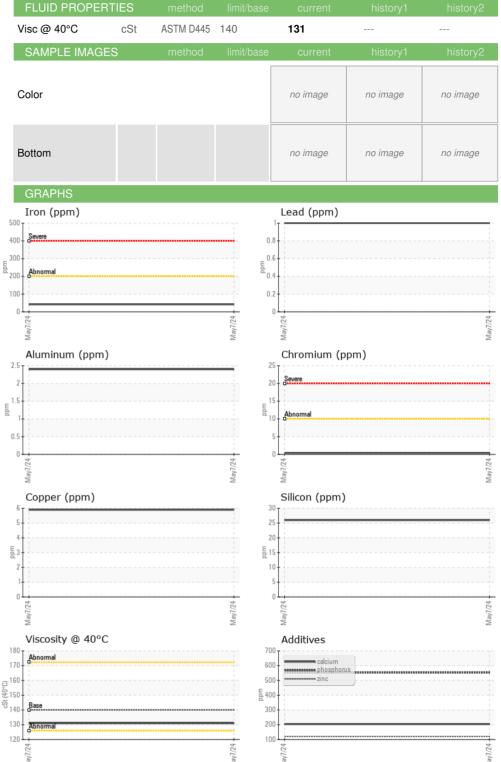
The condition of the oil is acceptable for the time in service.

| Sample Number Client Info DC0036861 Sample Date Client Info 07 May 2024 Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info N/A Sample Status NORMAL CONTAMINATION method limit/base current history1 Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 Iron ppm ASTM D5185m >200 42 Nickel ppm ASTM D5185m >10 <1 Nickel ppm ASTM D5185m >10 <1 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 2 Aluminum ppm ASTM D5185m 2 Lead ppm ASTM D5185m 1 Copper ppm ASTM D5185m 5 6 Tin ppm ASTM D5185m <1 Vanadium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 Boron ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 Barium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 Barium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 Barium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 Barium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 Barium ppm ASTM D5185m <0 121 Phosphorus ppm ASTM D5185m 20000 17254 CONTAMINANTS method limit/base current history1 CONTAMINANTS method limit | |
|--|-------------------|
| Sample Number | history2 history2 |
| Sample Date Client Info 07 May 2024 | history2 |
| Sample Date Client Info 07 May 2024 | history2 |
| Oil Age hrs Client Info N/A | history2 |
| Oil Changed Sample Status Client Info N/A | history2 |
| Sample Status | history2 |
| Sample Status | history2 |
| Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 Iron ppm ASTM D5185m >200 42 Chromium ppm ASTM D5185m >10 <1 Nickel ppm ASTM D5185m >10 <1 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 2 Lead ppm ASTM D5185m 1 Copper ppm ASTM D5185m 1 Vanadium ppm ASTM D5185m <1 Vanadium ppm ASTM D5185m <1 <th>history2</th> | history2 |
| WEAR METALS | |
| Iron | |
| Chromium ppm ASTM D5185m >10 <1 | |
| Chromium ppm ASTM D5185m >10 <1 | |
| Nickel ppm ASTM D5185m >10 <1 | |
| Titanium | |
| Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 2 Lead ppm ASTM D5185m 1 Copper ppm ASTM D5185m <1 Tin ppm ASTM D5185m <1 Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 Boron ppm ASTM D5185m <1 Barium ppm ASTM D5185m 28 Molybdenum ppm ASTM D5185m <1 Magnaese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m 200 553 | |
| Aluminum ppm ASTM D5185m 2 Lead ppm ASTM D5185m 1 Copper ppm ASTM D5185m <1 Tin ppm ASTM D5185m <1 Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 Boron ppm ASTM D5185m 150 17 Barium ppm ASTM D5185m 28 Molybdenum ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m <1 Calcium ppm ASTM D5185m 2000 553 Phosphorus ppm ASTM D51 | |
| Lead | |
| Copper ppm ASTM D5185m 6 Tin ppm ASTM D5185m <1 Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 Boron ppm ASTM D5185m 150 17 Barium ppm ASTM D5185m 28 Molybdenum ppm ASTM D5185m 21 Magnesium ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m 10 9 Calcium ppm ASTM D5185m 2000 553 Phosphorus ppm ASTM D5185m 20 121 | |
| Tin ppm ASTM D5185m <1 | |
| Vanadium ppm ASTM D5185m <1 | - |
| Cadmium ppm ASTM D5185m <1 | |
| Boron | |
| Barium ppm ASTM D5185m 28 Molybdenum ppm ASTM D5185m <1 Manganese ppm ASTM D5185m 10 9 Magnesium ppm ASTM D5185m 70 204 Calcium ppm ASTM D5185m 2000 553 Phosphorus ppm ASTM D5185m 50 121 Sulfur ppm ASTM D5185m 20000 17254 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m 26 Sodium ppm ASTM D5185m 9 Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 White Metal <t< th=""><th>history2</th></t<> | history2 |
| Barium | |
| Molybdenum ppm ASTM D5185m <1 | |
| Manganese ppm ASTM D5185m <1 | |
| Magnesium ppm ASTM D5185m 10 9 Calcium ppm ASTM D5185m 70 204 Phosphorus ppm ASTM D5185m 2000 553 Zinc ppm ASTM D5185m 50 121 Sulfur ppm ASTM D5185m 20000 17254 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m 26 Sodium ppm ASTM D5185m 9 Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 White Metal scalar *Visual NONE NONE | |
| Calcium ppm ASTM D5185m 70 204 Phosphorus ppm ASTM D5185m 2000 553 Zinc ppm ASTM D5185m 50 121 Sulfur ppm ASTM D5185m 20000 17254 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m 26 Sodium ppm ASTM D5185m 9 Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 White Metal scalar *Visual NONE NONE | |
| Zinc ppm ASTM D5185m 50 121 Sulfur ppm ASTM D5185m 20000 17254 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m 26 Sodium ppm ASTM D5185m 9 Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 White Metal scalar *Visual NONE NONE | |
| Zinc ppm ASTM D5185m 50 121 Sulfur ppm ASTM D5185m 20000 17254 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m 26 Sodium ppm ASTM D5185m 9 Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 White Metal scalar *Visual NONE NONE | |
| CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m 26 Sodium ppm ASTM D5185m 9 Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 White Metal scalar *Visual NONE NONE | |
| Silicon ppm ASTM D5185m 26 Sodium ppm ASTM D5185m 9 Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 White Metal scalar *Visual NONE NONE | |
| Sodium ppm ASTM D5185m 9 Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 White Metal scalar *Visual NONE NONE | history2 |
| Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 White Metal scalar *Visual NONE NONE | |
| VISUAL method limit/base current history1 White Metal scalar *Visual NONE NONE | |
| White Metal scalar *Visual NONE NONE | |
| | history2 |
| Yellow Metal scalar *Visual NONE NONE | |
| | |
| Precipitate scalar *Visual NONE NONE | |
| Silt scalar *Visual NONE NONE | |
| Debris scalar *Visual NONE NONE | |
| Sand/Dirt scalar *Visual NONE NONE | |
| Appearance scalar *Visual NORML NORML | |
| Odor scalar *Visual NORML NORML | |
| Emulsified Water scalar *Visual >0.2 NEG | |
| Free Water scalar *Visual NEG | |



OIL ANALYSIS REPORT









Certificate 12367

Laboratory Sample No.

: DC0036861 **Lab Number** : 06179576

Unique Number : 11030902 Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 14 May 2024

Tested : 15 May 2024 Diagnosed

: 15 May 2024 - Wes Davis

11089 LEADBETTER ROAD ASHLAND, VA US 23005

CRANEWORKS INC - MID-ATLANTIC

Contact/Location: JASON WILDE - CRAASHMA

Contact: JASON WILDE jcwilde@vacraneworks.com

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.

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

T:

F: