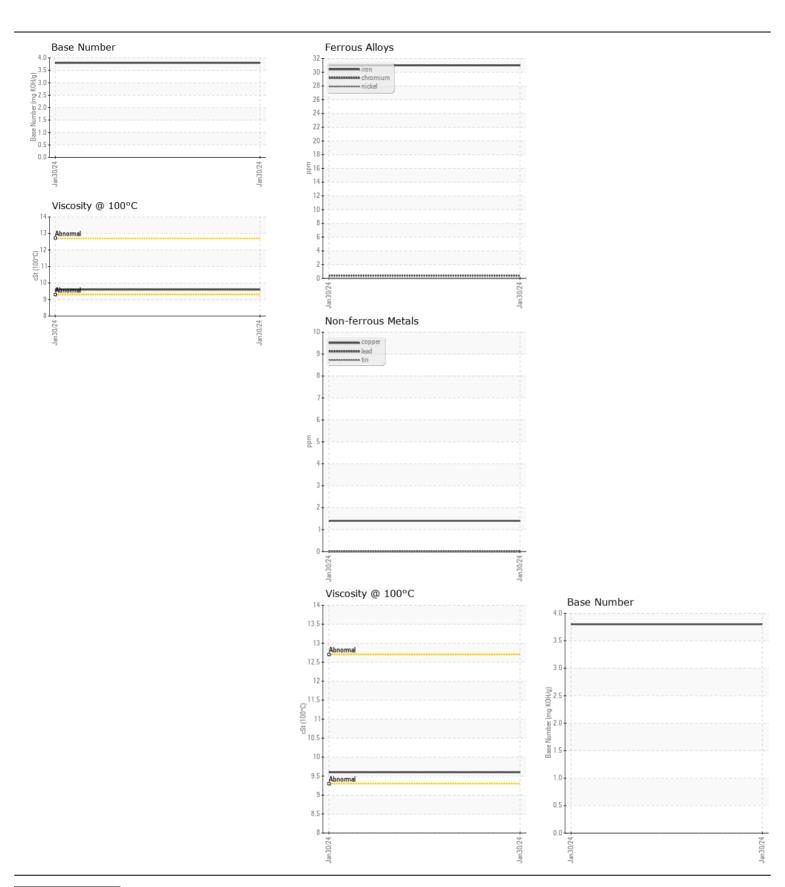
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id **356089**

| Component | | | | | | | |
|---|------------------|----------|-------------|-----------|-------------|----------|----------|
| Gasoline Engine | | | | | | | |
| {not provided} (GAL) | | | | | | | |
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| | Sample Number | | Client Info | | GFL0108297 | | |
| Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample. | Sample Date | | Client Info | | 30 Jan 2024 | | |
| | Machine Age | hrs | Client Info | | 124851 | | |
| | Oil Age | hrs | Client Info | | 124851 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Changed | | |
| | Filter Changed | | Client Info | | Changed | | |
| | Sample Status | | | | NORMAL | | |
| WEAR | Iron | ppm | ASTM D5185m | >150 | 31 | | |
| WEATT | Chromium | ppm | ASTM D5185m | | <1 | | |
| All component wear rates are normal. | Nickel | ppm | ASTM D5185m | | 0 | | |
| | Titanium | ppm | ASTM D5185m | | <1 | | |
| | Silver | ppm | ASTM D5185m | >2 | 0 | | |
| | Aluminum | ppm | ASTM D5185m | | 5 | | |
| | Lead | ppm | ASTM D5185m | | 0 | | |
| | Copper | ppm | ASTM D5185m | | 1 | | |
| | Tin | ppm | ASTM D5185m | >100 | 0 | | |
| | Vanadium | ppm | ASTM D5185m | >10 | <1 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >30 | 11 | | |
| Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | >20 | 18 | | |
| | Fuel | | WC Method | >4.0 | <1.0 | | |
| | Water | | WC Method | >0.2 | NEG | | |
| | Glycol | | WC Method | | NEG | | |
| | Soot % | % | *ASTM D7844 | | 0.1 | | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 13.5 | | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 23.4 | | |
| | 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 | | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | >400 | 4 | | |
| | Boron | ppm | ASTM D5185m | | 16 | | |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Barium | ppm | ASTM D5185m | | 1 | | |
| | Molybdenum | ppm | ASTM D5185m | | 278 | | |
| | Manganese | ppm | ASTM D5185m | | <1 | | |
| | Magnesium | ppm | ASTM D5185m | | 466 | | |
| | Calcium | ppm | ASTM D5185m | | 1287 | | |
| | Phosphorus | ppm | ASTM D5185m | | 659 | | |
| | Zinc | ppm | ASTM D5185m | | 791 | | |
| | Sulfur | ppm | ASTM D5185m | | 2100 | | |
| | Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 20.1 | | |
| | Base Number (BN) | mg KOH/g | ASTM D2896 | | 3.8 | | |
| | Visc @ 100°C | cSt | ASTM D445 | | 9.6 | | |
| | 0 | | =0 | | | • | |







Certificate L2367

Laboratory Sample No.

: GFL0108297 Lab Number : 06077582 Unique Number: 10859673 Test Package : FLEET

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 01 Feb 2024 **Tested** : 02 Feb 2024 Diagnosed

: 02 Feb 2024 - Wes Davis

GFL Environmental - 652 - Fredericksburg Hauling

10954 Houser Drive Fredericksburg, VA US 22408

Contact: WILLIAM MILO wmilo@gflenv.com

T:

* - 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)

F: