WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Area GFL007 Machine Id NOT GIVEN GFL0050723

| omponent Diesel Engine | | | | | | | |
|--|------------------------|------------------|----------------------------|----------------|---------------|----------|----------|
| not provided} (GAL) | | | | | | | |
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| | Sample Number | | Client Info | | GFL0050723 | | |
| 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 | | 07 Feb 2024 | | |
| | Machine Age | hrs | Client Info | | 0 | | |
| | Oil Age | hrs | Client Info | | 0 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | N/A | | |
| | Filter Changed | | Client Info | | N/A | | |
| | Sample Status | | | | NORMAL | | |
| WEAR | Iron | ppm | ASTM D5185m | >100 | 29 | | |
| WEAR | Chromium | ppm | ASTM D5185m | | 1 | | |
| All component wear rates are normal. | Nickel | ppm | ASTM D5185m | | 0 | | |
| | Titanium | ppm | ASTM D5185m | 24 | 0 | | |
| | Silver | | ASTM D5185m | ~3 | 0 | | |
| | Aluminum | ppm | ASTM D5185m | | 2 | | |
| | Lead | | ASTM D5185m | | <1 | | |
| | Copper | ppm | ASTM D5185m | | 1 | | |
| | Tin | ppm | ASTM D5185m | | 1 | | |
| | Vanadium | ppm | ASTM D5185m | 713 | 0 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| ONTARINATION | 0:1: | | AOTA DE LOS | 05 | | | |
| ONTAMINATION | Silicon | ppm | | >25 | 8 | | |
| There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | | 1 | | |
| | Fuel | | WC Method | >5 | <1.0 | | |
| | Water | | WC Method | >0.2 | NEG | | |
| | Glycol | 0/ | WC Method | 0 | NEG | | |
| | Soot % | % | *ASTM D7844 | | 1.9 | | |
| | Nitration Sulfation | Abs/tmm | *ASTM D7624 *ASTM D7415 | >20 | 12.7 25.1 | | |
| | Silt | Abs/.1mm | *Visual | | NONE | | |
| | | scalar | | NONE | | | |
| | Debris Sand/Dirt | scalar | *Visual *Visual | NONE | NONE | | |
| | | scalar | | | NONE NORML | | |
| | Appearance Odor | scalar scalar | *Visual *Visual | NORML NORML | NORML | | |
| | Emulsified Water | | *Visual | >0.2 | NEG | | |
| <u> </u> | Littuisilled Water | | Visuai | 70.2 | | | |
| LUID CONDITION | Sodium | ppm | ASTM D5185m | | 5 | | |
| | Boron | ppm | ASTM D5185m | | 0 | | |
| 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 | | 64 | | |
| | Manganese | ppm | ASTM D5185m | | <1 | | |
| | Magnesium | ppm | ASTM D5185m | | 957 | | |
| | Calcium | ppm | ASTM D5185m | | 1085 | | |
| | Phosphorus | ppm | ASTM D5185m | | 1076 | | |
| | Zinc | ppm | ASTM D5185m | | 1279 | | |
| | Sulfur | ppm | ASTM D5185m | | 2949 | | |
| | Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 20.4 | | |
| | | | | | | | |
| | Base Number (BN) | mg KOH/g | ASTM D2896 | | 7.2 | | |







Certificate L2367

Laboratory Sample No.

: GFL0050723 Lab Number : 06083458

Unique Number : 10870903 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 08 Feb 2024 **Tested** : 09 Feb 2024

Diagnosed : 09 Feb 2024 - Wes Davis **GFL Environmental - SIF Number**

Contact: Service Manager

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)

US

T:

F: