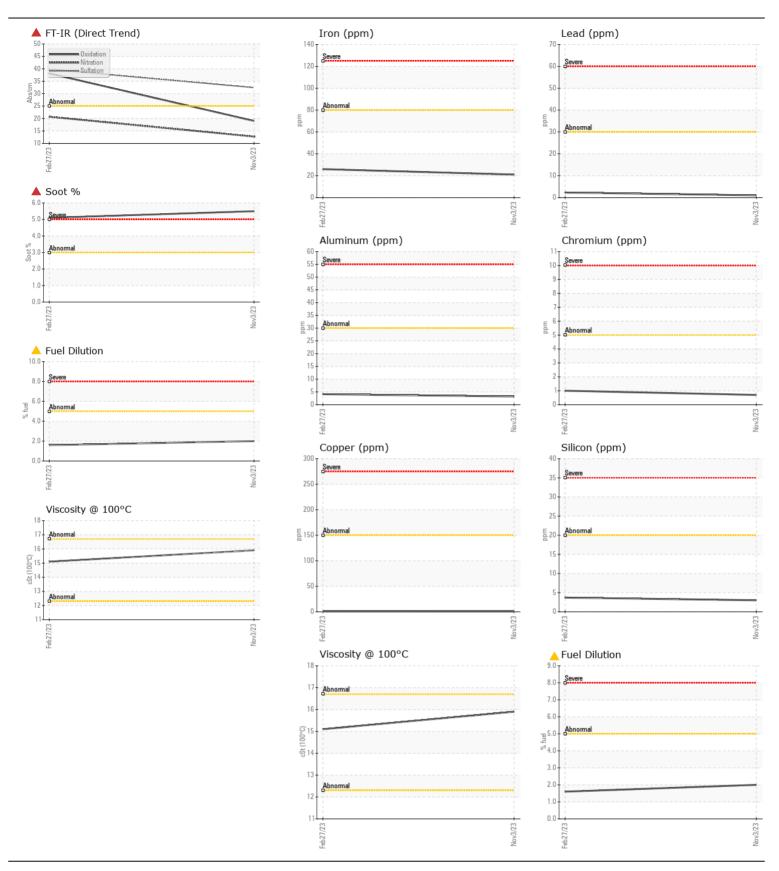
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL SEVERE NORMAL

Freightliner T184 (S/N 3ALXA7BG7GDGT7720) Diesel Engine

| INVENTORY EXPRESS 15W40 (44 LTR) | | | | | | | |
|--|------------------|----------|---------------|-------------|-------------|---------------|----------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| We advise that you check for faulty combustion, plugged air filters, or aftercoolers. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time. | Sample Number | UOIVI | Client Info | LIIIII/ADII | WC0806841 | WC0790248 | |
| | Sample Date | | Client Info | | 03 Nov 2023 | 27 Feb 2023 | |
| | Machine Age | hrs | Client Info | | 1017567 | 963585 | |
| | Oil Age | hrs | Client Info | | 0 | 0 | |
| | Filter Age | hrs | Client Info | | 0 | 0 | |
| | Oil Changed | 1110 | Client Info | | Changed | Changed | |
| | Filter Changed | | Client Info | | Changed | Changed | |
| | Sample Status | | Olichi illio | | SEVERE | SEVERE | |
| | | | | | | | |
| WEAR | Iron | ppm | ASTM D5185(m) | >80 | 21 | 26 | |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185(m) | >5 | <1 | 1 | |
| | Nickel | ppm | ASTM D5185(m) | >2 | 0 | <1 | |
| | Titanium | ppm | ASTM D5185(m) | | 0 | <1 | |
| | Silver | ppm | ASTM D5185(m) | >3 | 0 | 0 | |
| | Aluminum | ppm | ASTM D5185(m) | >30 | 3 | 4 | |
| | Lead | ppm | ASTM D5185(m) | >30 | 1 | 2 | |
| | Copper | ppm | ASTM D5185(m) | >150 | <1 | <1 | |
| | Tin | ppm | ASTM D5185(m) | >5 | <1 | <1 | |
| | Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | |
| CONTAMINATION | Silicon | ppm | ASTM D5185(m) | >20 | 3 | 4 | |
| Light fuel dilution occurring. There is an abnormal amount of solids and carbon present in the oil. No other contaminants were detected in the oil. | Potassium | ppm | ASTM D5185(m) | >20 | <1 | 2 | |
| | Fuel | % | ASTM D7593* | >5 | <u>^</u> 2 | 1.6 | |
| | Water | | WC Method | >0.2 | NEG | NEG | |
| | Glycol | | WC Method | | NEG | NEG | |
| | Soot % | % | ASTM D7844* | >3 | ▲ 5.5 | ▲ 5.1 | |
| | Nitration | Abs/cm | ASTM D7624* | >20 | 12.7 | 20.7 | |
| | Sulfation | Abs/.1mm | ASTM D7415* | >30 | 32.4 | 39.8 | |
| | Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185(m) | | 2 | 2 | |
| The oil is no longer serviceable due to the presence of contaminants. | Boron | ppm | ASTM D5185(m) | | 30 | 22 | |
| | Barium | ppm | ASTM D5185(m) | | <1 | 0 | |
| | Molybdenum | ppm | ASTM D5185(m) | | 65 | 58 | |
| | Manganese | ppm | ASTM D5185(m) | | 0 | <1 | |
| | Magnesium | ppm | ASTM D5185(m) | | 261 | 69 | |
| | Calcium | ppm | ASTM D5185(m) | | 1847 | 2174 | |
| | Phosphorus | ppm | ASTM D5185(m) | | 963 | 986 | |
| | Zinc | ppm | ASTM D5185(m) | | 1129 | 1088 | |
| | Sulfur | ppm | ASTM D5185(m) | | 2702 | 2968 | |
| | Oxidation | Abs/.1mm | ASTM D7414* | >25 | 19.0 | 38.1 | |
| | Visc @ 100°C | cSt | ASTM D7279(m) | | 15.9 | <u>▲</u> 15.1 | |





CALA ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Sample No. : WC0806841

Lab Number : 02595530 Unique Number : 5672609

Received

Tested : 13 Nov 2023 Diagnosed

: 13 Nov 2023 - Wes Davis

: 10 Nov 2023

Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Zavcor Trucking Limited

3650 Eagle Street Stevensville, ON CA L0S 1S0 Contact: Stephanie Wackett

stephw@zavcor.com

T: x: F: (905)382-2555