

WEAR CONTAMINATION FLUID CONDITION

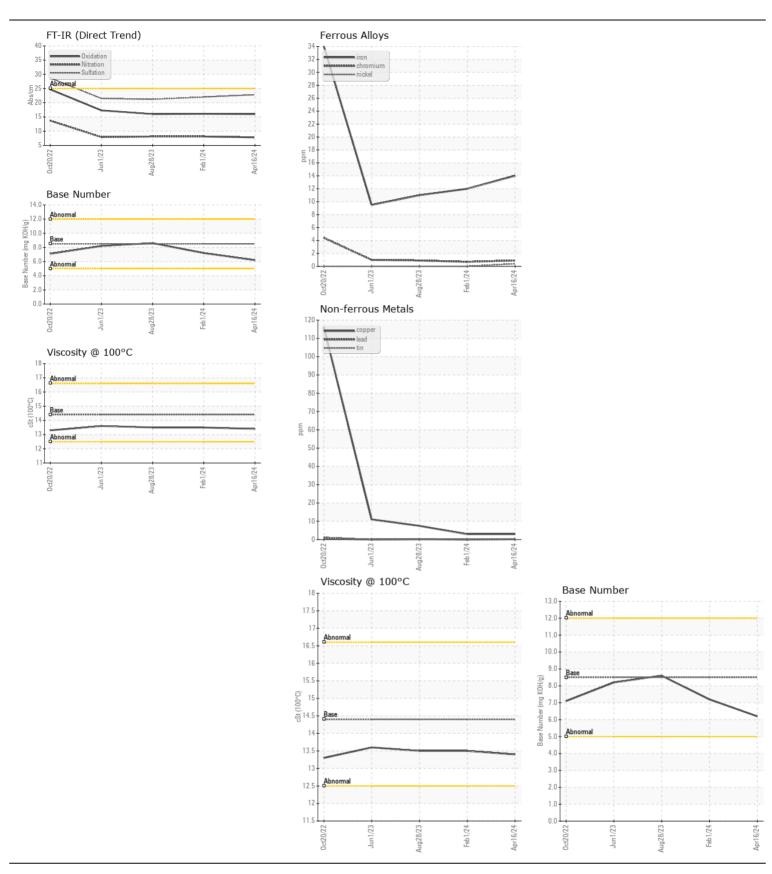
NORMAL NORMAL NORMAL

Machine Id

11868

Component Diesel Engine

| DIESEL ENGINE OIL SAE 15W40 (QTS) | | | | | | | |
|---|----------------------------------|----------------|---------------------------|-------------|-------------|-------------|-------------|
| 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. | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| | Sample Number | UOIVI | Client Info | LIIIII/ADII | WC0883243 | WC0883265 | WC0795918 |
| | Sample Date | | Client Info | | 16 Apr 2024 | 01 Feb 2024 | 28 Aug 2023 |
| | Machine Age | mls | Client Info | | 288765 | 201021 | 148961 |
| | Oil Age | mls | Client Info | | 25000 | 0 | 25000 |
| | Filter Age | mls | Client Info | | 25000 | 25000 | 0 |
| | Oil Changed | 11113 | Client Info | | N/A | Changed | Changed |
| | Filter Changed | | Client Info | | N/A | Changed | Changed |
| | Sample Status | | Olione illio | | NORMAL | NORMAL | NORMAL |
| WEAR | Iron | ppm | ASTM D5185m | >100 | 14 | 12 | 11 |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| | Nickel | ppm | ASTM D5185m | >4 | <1 | 0 | 0 |
| | Titanium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| | Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| | Aluminum | ppm | ASTM D5185m | >20 | 8 | 9 | 13 |
| | Lead | ppm | ASTM D5185m | >40 | <1 | 0 | <1 |
| | Copper | ppm | ASTM D5185m | >330 | 3 | 3 | 8 |
| | Tin | ppm | ASTM D5185m | >15 | <1 | <1 | 0 |
| | Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >25 | 7 | 5 | 4 |
| Elevated aluminum (Al) 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 | 11 | 8 | 26 |
| | Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| | Water | | WC Method | >0.2 | NEG | NEG | NEG |
| | Glycol | | WC Method | | NEG | NEG | NEG |
| | Soot % | % | *ASTM D7844 | >3 | 0.7 | 0.7 | 0.7 |
| | Nitration | Abs/cm | | >20 | 7.8 | 8.1 | 8.1 |
| | Sulfation | Abs/.1mm | | | 22.8 | 22.0 | 21.2 |
| | Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| | Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| | Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | <1 | 2 | 1 |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Boron | ppm | ASTM D5185m | | 195 | 124 | 0 |
| | Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Molybdenum | ppm | ASTM D5185m | 100 | 92 | 72 | 62 |
| | Manganese | ppm | ASTM D5185m | 450 | <1 | <1 | <1 |
| | Magnesium | ppm | ASTM D5185m | | 453 | 563 | 1029 |
| | Calcium | ppm | ASTM D5185m | | 1391 | 1215 | 1146 |
| | Phosphorus | ppm | ASTM D5185m | | 1100 | 908 | 986 |
| | Zinc | ppm | ASTM D5185m | | 1271 | 1001 | 1283 |
| | Sulfur | ppm Abs/1mm | ASTM D5185m | | 3385 | 2649 | 3512 |
| | Oxidation | Abs/.1mm | *ASTM D7414 ASTM D2896 | | 16.0 6.2 | 16.1 7.2 | 16.0 |
| | Base Number (BN) Visc @ 100°C | cSt | ASTM D2696 ASTM D445 | | 13.4 | 13.5 | 13.5 |
| | visc @ 100 C | COL | ASTIVI D443 | 14.4 | 13.4 | 13.3 | 13.3 |







Certificate L2367

Laboratory Sample No.

Lab Number : 06155127

: WC0883243 Unique Number: 10990550 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Apr 2024 **Tested** : 22 Apr 2024 Diagnosed

: 22 Apr 2024 - Wes Davis

SALEM NATIONALEASE CORPORATION

198 PARK PLAZA DRIVE WINSTON SALEM, NC US 27105

Contact: Audrey Hopkins

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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)

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