



WEAR CONTAMINATION FLUID CONDITION

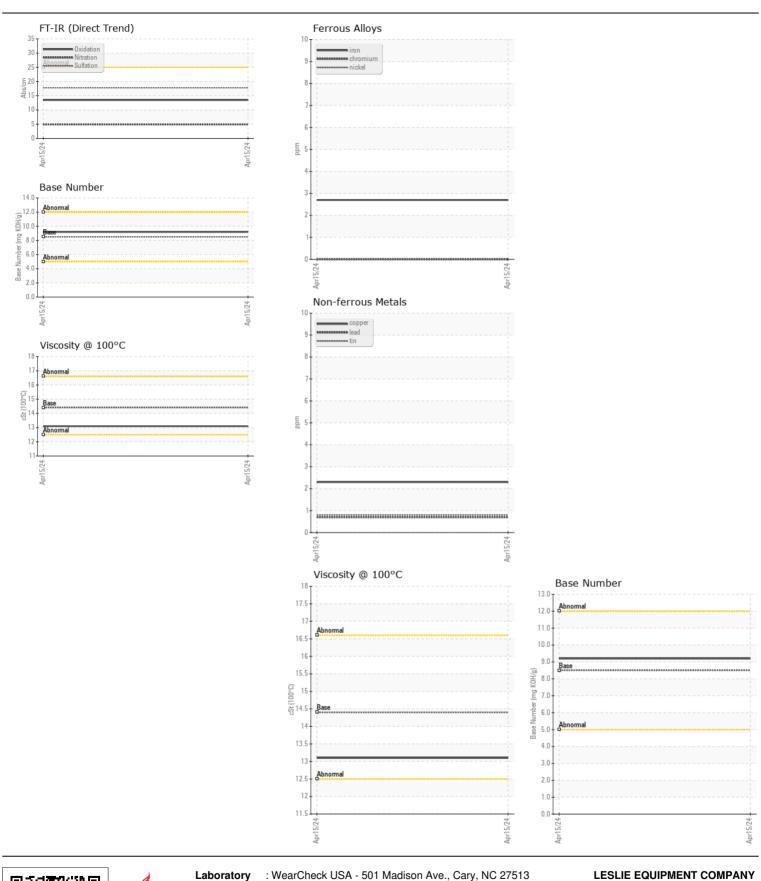
NORMAL NORMAL

Store 2 - Beaver [American Elec]
CATERPILLAR 250KW 33CFMGL0013

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (6 QTS)

| DIESEL ENGINE OIL SAE 15W40 (6 QTS) | | | | | | | |
|---|------------------|----------|-----------------|-----------|-------------|----------|----------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. | Sample Number | | Client Info | | LEC0048850 | | |
| | Sample Date | | Client Info | | 15 Apr 2024 | | |
| | Machine Age | hrs | Client Info | | 293 | | |
| | Oil Age | hrs | Client Info | | 293 | | |
| | Filter Age | hrs | Client Info | | 293 | | |
| | Oil Changed | | Client Info | | Changed | | |
| | Filter Changed | | Client Info | | Changed | | |
| | Sample Status | | | | NORMAL | | |
| · · · · · · · | | | | | | | |
| WEAR Metal levels are typical for a components first oil change. | Iron | ppm | ASTM D5185m | | 3 | | |
| | Chromium | ppm | ASTM D5185m | >20 | 0 | | |
| | Nickel | ppm | ASTM D5185m | | 0 | | |
| | Titanium | ppm | ASTM D5185m | >2 | 0 | | |
| | Silver | ppm | ASTM D5185m | >2 | 0 | | |
| | Aluminum | ppm | ASTM D5185m | >25 | 1 | | |
| | Lead | ppm | ASTM D5185m | >40 | <1 | | |
| | Copper | ppm | ASTM D5185m | >330 | 2 | | |
| | Tin | ppm | ASTM D5185m | >15 | <1 | | |
| | Vanadium | ppm | ASTM D5185m | | <1 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| CONTAMINATION | 0.00 | | AOTM DEADE | 100 | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | | 4 | | |
| 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 | | 0.1 | | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 4.9 | | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | | 17.8 | | |
| | 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 | >158 | 1 | | |
| | Boron | ppm | ASTM D5185m | | 29 | | |
| 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 | | 0 | | |
| | Molybdenum | ppm | ASTM D5185m | | 79 | | |
| | Manganese | ppm | ASTM D5185m | | <1 | | |
| | Magnesium | ppm | ASTM D5185m | 450 | 489 | | |
| | Calcium | ppm | ASTM D5185m | | 1756 | | |
| | Phosphorus | ppm | ASTM D5185m | | 1041 | | |
| | Zinc | ppm | ASTM D5185m | | 1188 | | |
| | Sulfur | ppm | ASTM D5185m | | 3974 | | |
| | Oxidation | Abs/.1mm | *ASTM D7414 | | 13.5 | | |
| | Base Number (BN) | | ASTM D2896 | - | 9.2 | | |
| | Visc @ 100°C | cSt | ASTM D445 | | 13.1 | | |
| | 1.00 @ 100 0 | 551 | . 10 1111 0 170 | | | | |







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Lab Number : 06154130 Unique Number: 10989553

: LEC0048850

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

Received **Tested** Diagnosed Test Package : CONST (Additional Tests: TBN)

: 19 Apr 2024 : 22 Apr 2024

: 22 Apr 2024 - Wes Davis

Contact: LEANNE KENDALL KendalLeanne@lec1.com

105 TENNIS CENTER DR.

MARIETTA, OH

US 45750-9765

* - 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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