

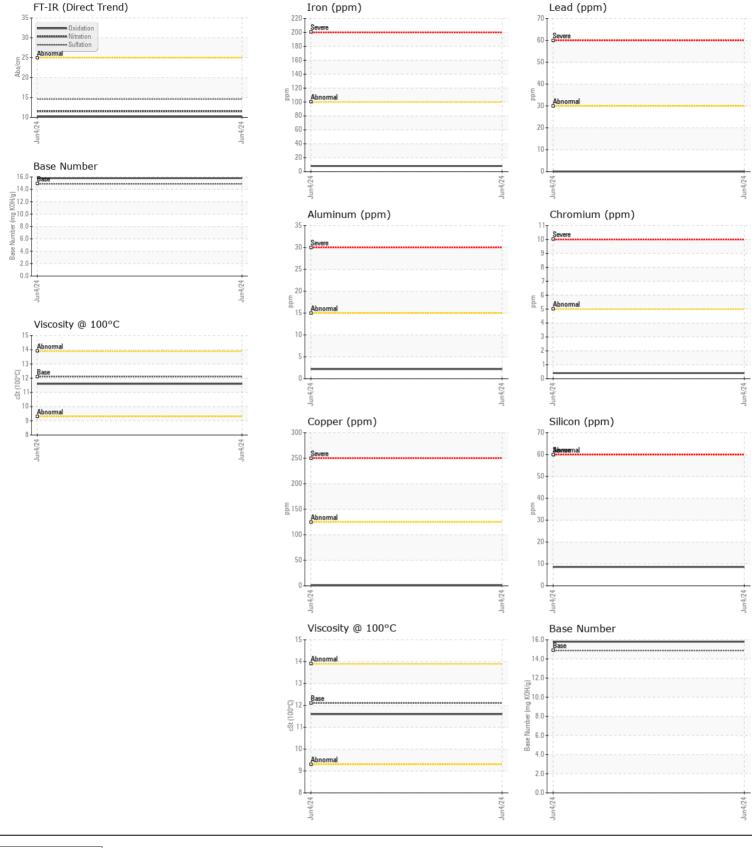


LIEBHERR L566 1758-71605 omponen

Diesel Engine

LIEBHERR MOTOROIL 5W30 (--- GAL)

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|------------------|------------|-------------|-----------|---------------|----------|----------|
| Resample at the next service interval to monitor. | Sample Number | | Client Info | | LH0277182 | | |
| | Sample Date | | Client Info | | 04 Jun 2024 | | |
| | Machine Age | hrs | Client Info | | 2244 | | |
| | Oil Age | hrs | Client Info | | 0 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Changed | | |
| | Filter Changed | | Client Info | | Changed | | |
| | Sample Status | | | | NORMAL | | |
| WEAR | Iron | nnm | ASTM D5185m | × 100 | 0 | | |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185m | | 8 <1 | | |
| | Nickel | ppm | ASTM D5185m | | 0 | | |
| | Titanium | ppm ppm | ASTM D5185m | >5 | 0 | | |
| | Silver | | ASTM D5185m | -3 | 0 | | |
| | Aluminum | ppm ppm | ASTM D5185m | | 2 | | |
| | Lead | ppm | ASTM D5185m | | 0 | | |
| | Copper | ppm | ASTM D5185m | | <1 | | |
| | Tin | ppm | ASTM D5185m | | <1 | | |
| | Vanadium | ppm | ASTM D5185m | | 0 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >60 | 9 | | |
| There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | >20 | 0 | | |
| | Fuel | | WC Method | >5 | <1.0 | | |
| | Water | | WC Method | >0.2 | NEG | | |
| | Glycol | | WC Method | | NEG | | |
| | Soot % | % | *ASTM D7844 | >3 | 0.1 | | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 11.5 | | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | | 14.6 | | |
| | 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 | | 3 | | |
| | Boron | ppm | ASTM D5185m | 236 | 249 | | |
| 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 | | 0 | | |
| | Manganese | ppm | ASTM D5185m | | <1 | | |
| | Magnesium | ppm | ASTM D5185m | | 34 | | |
| | Calcium | ppm | ASTM D5185m | | 4424 | | |
| | Phosphorus | ppm | ASTM D5185m | 1020 | 1096 | | |
| | Zinc | ppm | ASTM D5185m | 1164 | 1208 | | |
| | Sulfur | ppm | ASTM D5185m | | 3285 | | |
| | Oxidation | Abs/.1mm | *ASTM D7414 | | 10.2 | | |
| | Base Number (BN) | mg KOH/g | ASTM D2896 | | 15.8 | | |
| | Visc @ 100°C | cSt | ASTM D445 | 12.1 | 11.6 | | |
| | | | | | $\overline{}$ | | |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **BARRETT/COLAS** Sample No. : LH0277182 Received 4800 SOLVAY RD : 15 Jul 2024 Lab Number : 06237302 Tested JAMESVILLE, NY : 17 Jul 2024 Unique Number : 11126136 Diagnosed : 17 Jul 2024 - Wes Davis US 13078 Test Package : MOBCE (Additional Tests: TBN) Contact: Service Manager Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. ſ, * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

