LIEBHERR



LIEBHERR A944CHD 063266 - Front Left Wheel Hub

Sample No: LH0274446

Oil Type: KENDALL NS-MP HYPOID GEAR 75W90

| SAM | PLE INFO | RMATION | | | |
|---------------|---------------|-----------------|-------------|-------------|-------------|
| Sample Number | | LH0274446 | LH | LH0130340 | LH0123987 |
| Sample Date | | 04 Aug 2023 | 21 Mar 2019 | 13 Jul 2018 | 28 Feb 2018 |
| Machine Hours | | 19020 | 12983 | 11950 | 11203 |
| Oil Hours | | 0 | 0 | 0 | 0 |
| Oil Changed | | Changed | Changed | Changed | Changed |
| Sample Status | | ABNORMAL | NORMAL | NORMAL | NORMAL |
| A Status | | 715110111111111 | | | |
| OILC | ONDITIO | N | | | |
| Visc @ 40°C | cSt | 95.5 | O 98.5 | O 94.3 | O 99.6 |
| V13C @ +0 C | COL | 0 33.3 | 0 30.3 | O 54.0 | 0 55.0 |
| | | | | | |
| CON | TAMINA | TION | | | |
| Silicon | ppm | 3 | O 2 | O 2 | 3 |
| Sodium | ppm | 3 | O <1 | <1 | O 1 |
| Potassium | ppm | <1 | O <1 | O | O <1 |
| ◎ WEA | | | | | |
| WEA | R META | LS | | | |
| Iron | ppm | 36 | O 28 | 1 3 | O 25 |
| Copper | ppm | 0 77 | ○ 35 | O 31 | O 42 |
| Lead | ppm | 2 | O 1 | O 1 | O 1 |
| Tin | ppm | 0 | O 0 | O | 0 |
| Aluminum | ppm | 2 | O 1 | O <1 | 1 |
| Chromium | ppm | ○ <1 | 0 | O 0 | O <1 |
| Molybdenum | ppm | 0 | O <1 | O <1 | 0 |
| Nickel | ppm | ○ <1 | O <1 | O <1 | O <1 |
| Titanium | ppm | 0 | O 0 | O | 0 |
| Silver | ppm | 0 | 6 | 0 | 0 |
| Manganese | ppm | 3 | O 2 | 1 | 02 |
| Vanadium | ppm | 0 | <1 | 0 | 0 |
| ADDI | ITIVES | | | | |
| Calcium | ppm | 2 | O 7 | O 7 | 0 0 |
| Magnesium | ppm | ○ <1 | 0 3 | 03 | 0 <1 |
| Zinc | ppm | O 45 | O 24 | O 23 | O 25 |
| Phosphorus | ppm | O 1532 | O 1235 | O 1314 | O 1481 |
| Barium | ppm | O <1 | 0 <1 | 0 0 | 0 0 |
| | - - · · · | <u> </u> | 0 | | 0 - |

317

303



Posner Metals 610 Beach Rd. Hamilton, ON CA L8H 3L1 Contact: Oscar Riano oscar@posner.ca T: (905)971-6754 F: (905)549-6044

Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Copper ppm levels are abnormal. Bearing and/or bushing wear is indicated. The water content is negligible. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot:POSHAMUnique No:5619972Signed:Kevin MarsonReport Date:10 Aug 2023

251

ppm

Boron

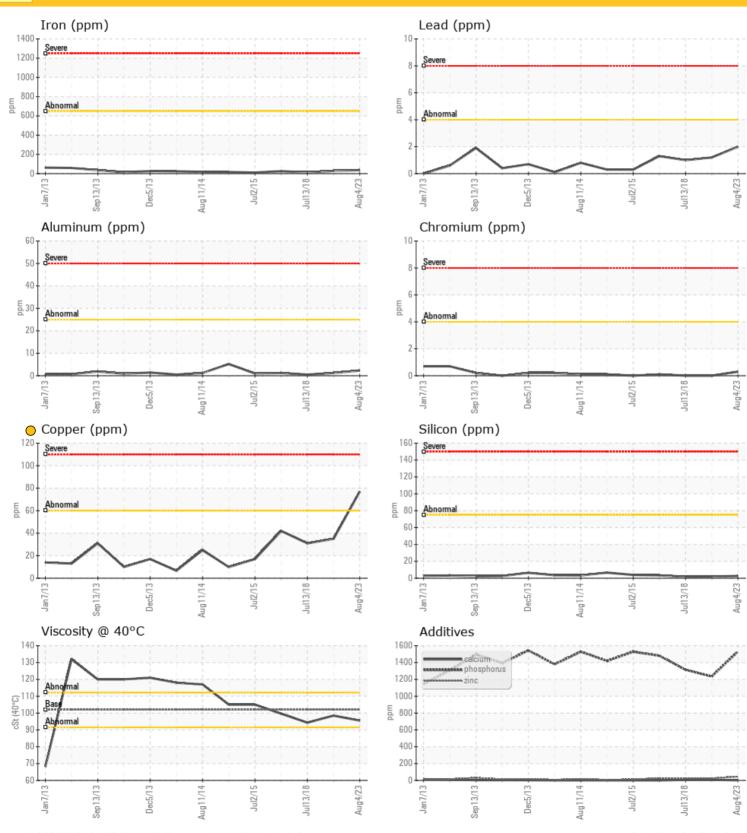
LIEBHERR

CONSTRUCTION EQUIPMENT





GRAPHS



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Submitted By: Rick Cule