CONSTRUCTION EQUIPMENT



Sample No: LH0291144 **Oil Type:** {unknown}

Sample Information

| Sample Number | LH0291144 | | |
|---------------|-------------|------|--|
| Sample Date | 09 May 2024 | | |
| Machine Hours | 2719 | | |
| Oil Hours | 0 | | |
| Oil Changed | Changed | | |
| Sample Status | NORMAL | | |

11.8

47

Oil Condition Visc @ 100°C

cSt Oxidation (PA) %

-

| Contamination | | | | | | |
|----------------|-----|------|--|--|--|--|
| Water | % | NEG | | | | |
| Soot % | % | 0 | | | | |
| Nitration (PA) | % | 63 | | | | |
| Sulfation (PA) | % | 51 | | | | |
| Glycol | % | NEG | | | | |
| Fuel | % | 0.4 | | | | |
| Silicon | ppm | 02 | | | | |
| Sodium | ppm | 02 | | | | |
| Potassium | ppm | 0 11 | | | | |

oan Motale

| | Wear merals | | | | | |
|------------|-------------|----------|--|--|--|--|
| Iron | ppm | 6 | | | | |
| Copper | ppm | 0 2 | | | | |
| Lead | ppm | 0 🔘 | | | | |
| Tin | ppm | 0 () | | | | |
| Aluminum | ppm | 3 | | | | |
| Chromium | ppm | 0 () | | | | |
| Molybdenum | ppm | 06 | | | | |
| Nickel | ppm | 0 () | | | | |
| Titanium | ppm | 0 | | | | |
| Silver | ppm | 0 () | | | | |
| Manganese | ppm | 0 | | | | |
| Vanadium | ppm | 0 | | | | |

| Add 1 | Additives | | | | | | |
|------------|-----------|--------------|--|--|--|--|--|
| Calcium | ppm | 2169 | | | | | |
| Magnesium | ppm | 0 126 | | | | | |
| Zinc | ppm | 0 1047 | | | | | |
| Phosphorus | ppm | 0 888 | | | | | |
| Barium | ppm | ○ <1 | | | | | |
| Boron | ppm | 0 20 | | | | | |
| | | | | | | | |



LIEBHERR CANADA LTD. 1015 SUTTON DRIVE

BURLINGTON, ON CA L7L 5Z8 Contact: Steve Lehto steve.lehto@liebherr.com T: (905)319-9222 F: (905)319-6617

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.All component wear rates are normal. Fuel content negligible. Elevated aluminum (AI) 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. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

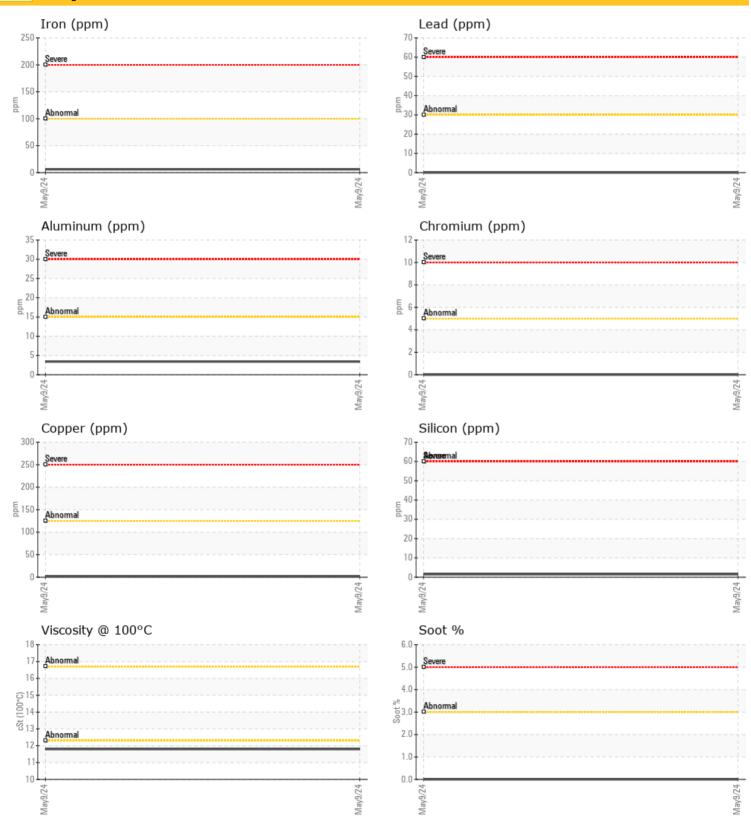
Depot: LIEMIS Unique No: 5775647 Kevin Marson Signed: **Report Date:** 13 May 2024

Contact/Location: Steve Lehto - LIEMIS

CONSTRUCTION EQUIPMENT



Graphs



Report Id: LIEMIS [WCAMIS] 02634494 (Generated: 05/13/2024 09:17:49) Rev: 1

Contact/Location: Steve Lehto - LIEMIS