

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR HS8100 184976 - 2 Winch

Sample No: LH0277515

Oil Type: {unknown}



**Tillsonburg Ready-Mix Inc.**  
 10 Elm Street  
 Tillsonburg, ON  
 CA N4G 0A7  
 Contact: Service Manager



#### SAMPLE INFORMATION

|               |             |     |     |     |
|---------------|-------------|-----|-----|-----|
| Sample Number | LH0277515   | --- | --- | --- |
| Sample Date   | 15 Nov 2023 | --- | --- | --- |
| Machine Hours | 7967        | --- | --- | --- |
| Oil Hours     | 0           | --- | --- | --- |
| Oil Changed   | Changed     | --- | --- | --- |
| Sample Status | SEVERE      | --- | --- | --- |



#### OIL CONDITION

|             |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|
| Visc @ 40°C | cSt | 102 | --- | --- | --- |
|-------------|-----|-----|-----|-----|-----|

T:  
F:



#### CONTAMINATION

|           |     |     |     |     |     |
|-----------|-----|-----|-----|-----|-----|
| Water     | %   | NEG | --- | --- | --- |
| Silicon   | ppm | 9   | --- | --- | --- |
| Sodium    | ppm | 2   | --- | --- | --- |
| Potassium | ppm | <1  | --- | --- | --- |

#### Diagnosis

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 40 Gear Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample. Iron ppm levels are severe. PQ levels are abnormal. The high ferrous density (PQ) index indicates that abnormal wear is occurring. There is a moderate concentration of water present in the oil. Free water present. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



#### WEAR METALS

|            |     |     |     |     |     |
|------------|-----|-----|-----|-----|-----|
| PQ         |     | 96  | --- | --- | --- |
| Iron       | ppm | 818 | --- | --- | --- |
| Copper     | ppm | 18  | --- | --- | --- |
| Lead       | ppm | 2   | --- | --- | --- |
| Tin        | ppm | 0   | --- | --- | --- |
| Aluminum   | ppm | <1  | --- | --- | --- |
| Chromium   | ppm | 8   | --- | --- | --- |
| Molybdenum | ppm | <1  | --- | --- | --- |
| Nickel     | ppm | 3   | --- | --- | --- |
| Titanium   | ppm | 0   | --- | --- | --- |
| Silver     | ppm | <1  | --- | --- | --- |
| Manganese  | ppm | 5   | --- | --- | --- |
| Vanadium   | ppm | 0   | --- | --- | --- |



#### ADDITIVES

|            |     |      |     |     |     |
|------------|-----|------|-----|-----|-----|
| Calcium    | ppm | 16   | --- | --- | --- |
| Magnesium  | ppm | 4    | --- | --- | --- |
| Zinc       | ppm | 42   | --- | --- | --- |
| Phosphorus | ppm | 1336 | --- | --- | --- |
| Barium     | ppm | <1   | --- | --- | --- |
| Boron      | ppm | 232  | --- | --- | --- |

**Depot:** TIL10TIL  
**Unique No:** 5682260  
**Signed:** Kevin Marson  
**Report Date:** 20 Nov 2023



### GRAPHS

