

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### 2018.04.2455 - Coolant

Sample No: LH0281564

Oil Type: HYBRID (HOAT) COOLANT



#### SAMPLE INFORMATION

|               |             |     |     |     |
|---------------|-------------|-----|-----|-----|
| Sample Number | LH0281564   | --- | --- | --- |
| Sample Date   | 13 Dec 2023 | --- | --- | --- |
| Machine Hours | 0           | --- | --- | --- |
| Sample Status | NORMAL      | --- | --- | --- |

**LIEBHERR CANADA LTD. - REMAN**  
 1015 SUTTON DRIVE  
 BURLINGTON, ON  
 CA L7L 5Z8  
 Contact: Morteza Mahmoudi  
 morteza.mahmoudi@liebherr.com  
 T: (905)319-9222  
 F: (905)319-6622



#### COOLANT CONDITION

|                    |            |       |     |     |     |
|--------------------|------------|-------|-----|-----|-----|
| Boron              | ppm        | 2     | --- | --- | --- |
| Phosphorus         | ppm        | 27    | --- | --- | --- |
| Sodium             | ppm        | 11147 | --- | --- | --- |
| Potassium          | ppm        | 1419  | --- | --- | --- |
| Silicon            | ppm        | 10    | --- | --- | --- |
| pH                 | Scale 0-14 | 7.57  | --- | --- | --- |
| Reserve Alkalinity | Scale 0-20 | 6.1   | --- | --- | --- |
| Molybdenum         | ppm        | 1     | --- | --- | --- |
| Nitrites           | ppm        | 680   | --- | --- | --- |
| Percentage Glycol  | %          | 62.9  | --- | --- | --- |
| Freezing Point     | °C         | -61   | --- | --- | --- |

#### Diagnosis

The fluid is suitable for further service. Resample at the next service interval to monitor. All metal levels are normal indicating no corrosion in the cooling system. There is no indication of any contamination in the coolant. The nitrite level is acceptable. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable.



#### CONTAMINATION

|                    |        |       |     |     |     |
|--------------------|--------|-------|-----|-----|-----|
| Magnesium          | ppm    | 2     | --- | --- | --- |
| Calcium            | ppm    | 15    | --- | --- | --- |
| Coolant Appearance |        | Clear | --- | --- | --- |
| Coolant Color      |        | Pink  | --- | --- | --- |
| Sand/Dirt          | scalar | NONE  | --- | --- | --- |
| Debris             | scalar | NONE  | --- | --- | --- |
| Precipitate        | scalar | NONE  | --- | --- | --- |
| Silt               | scalar | NONE  | --- | --- | --- |



#### CORROSION

|          |     |    |     |     |     |
|----------|-----|----|-----|-----|-----|
| Iron     | ppm | 0  | --- | --- | --- |
| Aluminum | ppm | <1 | --- | --- | --- |
| Copper   | ppm | 3  | --- | --- | --- |
| Lead     | ppm | 0  | --- | --- | --- |
| Tin      | ppm | 0  | --- | --- | --- |

Depot: REMAN  
 Unique No: 5696431  
 Signed: Kevin Marson  
 Report Date: 18 Dec 2023



### GRAPHS

