

LIEBHERR

CONSTRUCTION EQUIPMENT



20159 - Coolant

Sample No: LH0284899

Oil Type: EXTENDED LIFE COOLANT



SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-----|-----|-----|
| Sample Number | LH0284899 | --- | --- | --- |
| Sample Date | 08 Feb 2024 | --- | --- | --- |
| Machine Hours | 0 | --- | --- | --- |
| Sample Status | ABNORMAL | --- | --- | --- |

LIEBHERR CANADA LTD.

1015 SUTTON DRIVE

BURLINGTON, ON

CA L7L 5Z8

Contact: Joseph Rodgers

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COOLANT CONDITION

| | | | | | |
|--------------------|------------|-------|-----|-----|-----|
| Boron | ppm | 10 | --- | --- | --- |
| Phosphorus | ppm | 22 | --- | --- | --- |
| Sodium | ppm | 10307 | --- | --- | --- |
| Potassium | ppm | 2311 | --- | --- | --- |
| Silicon | ppm | 30 | --- | --- | --- |
| pH | Scale 0-14 | 7.25 | --- | --- | --- |
| Reserve Alkalinity | Scale 0-20 | 1.4 | --- | --- | --- |
| Molybdenum | ppm | 683 | --- | --- | --- |
| Nitrites | ppm | 560 | --- | --- | --- |
| Percentage Glycol | % | 66.6 | --- | --- | --- |
| Freezing Point | °C | -54 | --- | --- | --- |

Diagnosis

We recommend that you perform a partial drain and top off with straight water to decrease abnormal level of overconcentrated antifreeze. 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 glycol level is too high which leads to overheating and additive drop-out. The pH level of this fluid is within the acceptable limits.



CONTAMINATION

| | | | | | |
|--------------------|--------|-------|-----|-----|-----|
| Magnesium | ppm | 2 | --- | --- | --- |
| Calcium | ppm | 6 | --- | --- | --- |
| Coolant Appearance | | Clear | --- | --- | --- |
| Coolant Color | | Red | --- | --- | --- |
| Sand/Dirt | scalar | NONE | --- | --- | --- |
| Debris | scalar | NONE | --- | --- | --- |
| Precipitate | scalar | NONE | --- | --- | --- |
| Silt | scalar | VLITE | --- | --- | --- |



CORROSION

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

Depot: LIEMIS

Unique No: 5723929

Signed: Kevin Marson

Report Date: 13 Feb 2024

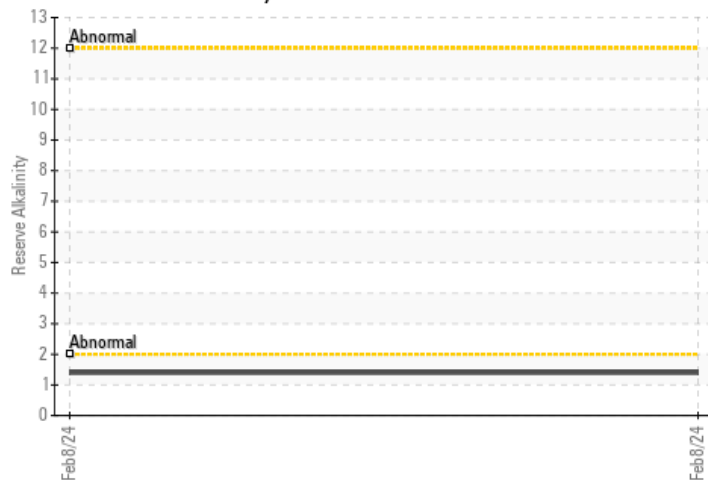


GRAPHS

Iron/Tin/Silver



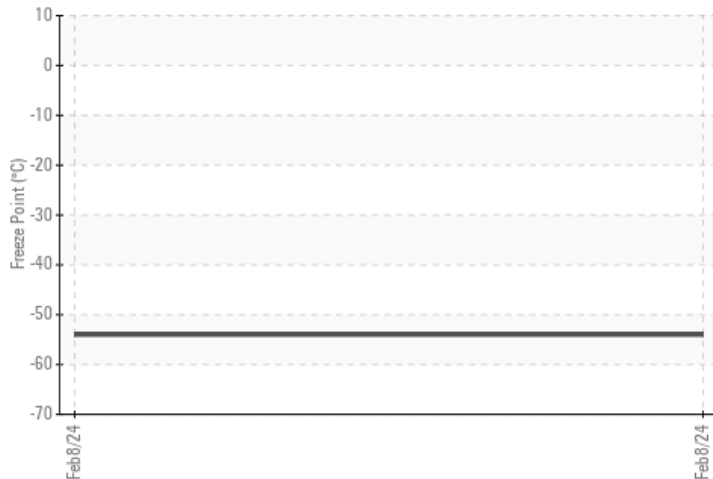
Reserve Alkalinity



Copper/Aluminum/Lead



Freeze Point



pH



Nitrites

