

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR 24459 - Coolant

Sample No: LH0220497

Oil Type: LIEBHERR ANTIFREEZE OS



#### SAMPLE INFORMATION

|               |             |             |     |     |
|---------------|-------------|-------------|-----|-----|
| Sample Number | LH0220497   | LH0220487   | --- | --- |
| Sample Date   | 19 Jun 2023 | 28 Apr 2023 | --- | --- |
| Machine Hours | 1526        | 936         | --- | --- |
| Sample Status | NORMAL      | NORMAL      | --- | --- |

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#### COOLANT CONDITION

|                    |            |      |      |     |     |
|--------------------|------------|------|------|-----|-----|
| Boron              | ppm        | 0    | 10   | --- | --- |
| Phosphorus         | ppm        | 0    | 0    | --- | --- |
| Sodium             | ppm        | 7121 | 6495 | --- | --- |
| Potassium          | ppm        | 1999 | 2449 | --- | --- |
| Silicon            | ppm        | 0    | 7    | --- | --- |
| pH                 | Scale 0-14 | 8.21 | 8.27 | --- | --- |
| Reserve Alkalinity | Scale 0-20 | ---  | ---  | --- | --- |
| Molybdenum         | ppm        | 0    | 5    | --- | --- |
| Nitrites           | ppm        | 300  | 300  | --- | --- |
| Percentage Glycol  | %          | 62.0 | 60.3 | --- | --- |
| Freezing Point     | °C         | -61  | -57  | --- | --- |

#### Diagnosis

The fluid is suitable for further service. All metal levels are normal indicating no corrosion in the cooling system. There is no indication of any contamination in the coolant. The carboxylate level of this fluid is acceptable. Glycol and nitrite levels are acceptable. The pH level of this fluid is within the acceptable limits.



#### CONTAMINATION

|                    |     |        |        |     |     |
|--------------------|-----|--------|--------|-----|-----|
| Magnesium          | ppm | 2      | 2      | --- | --- |
| Calcium            | ppm | 10     | 9      | --- | --- |
| Coolant Appearance |     | normal | normal | --- | --- |
| Coolant Color      |     | Pink   | Pink   | --- | --- |



#### CORROSION

|          |     |   |    |     |     |
|----------|-----|---|----|-----|-----|
| Iron     | ppm | 2 | 2  | --- | --- |
| Aluminum | ppm | 4 | 4  | --- | --- |
| Copper   | ppm | 0 | 1  | --- | --- |
| Lead     | ppm | 0 | <1 | --- | --- |
| Tin      | ppm | 0 | 0  | --- | --- |

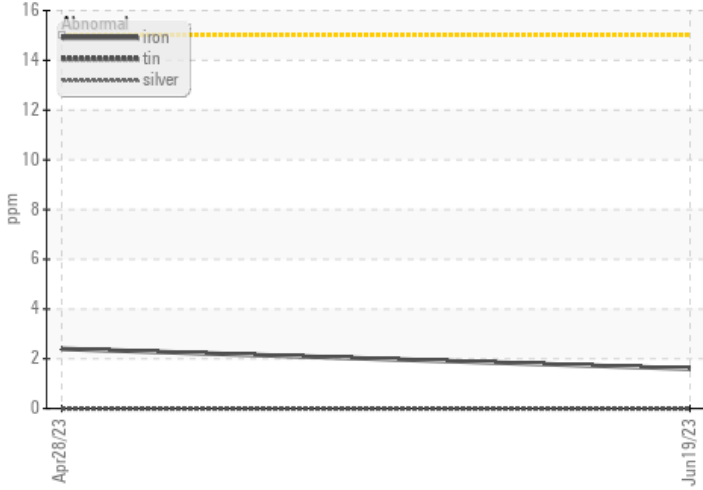
Depot: LIEGIL  
 Unique No: 10545630  
 Signed: Jonathan Hester  
 Report Date: 07 Jul 2023

Contact/Location: TED PILZ - LIEGIL

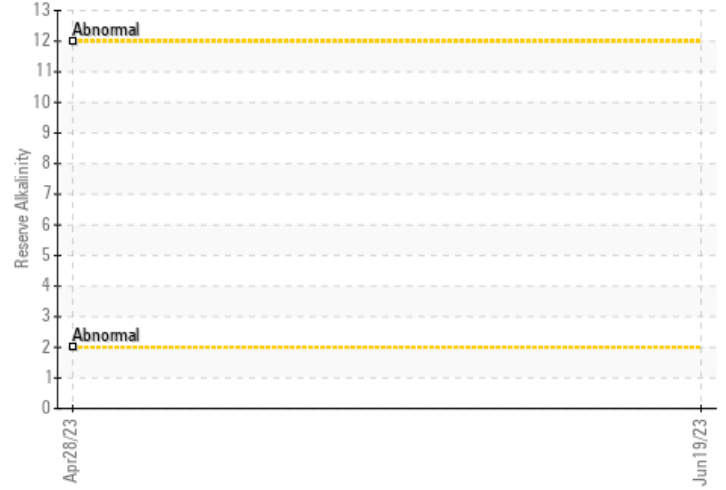


### GRAPHS

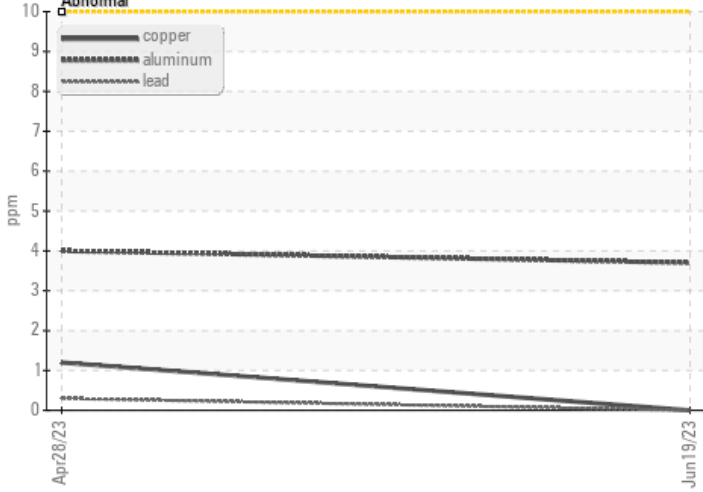
Iron/Tin/Silver



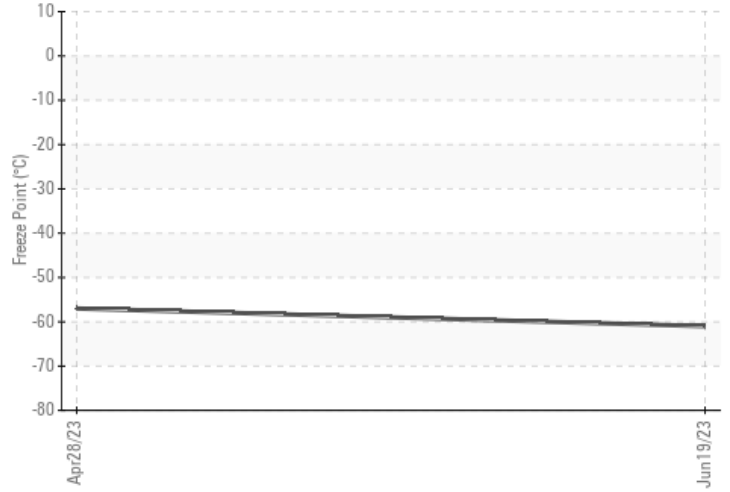
Reserve Alkalinity



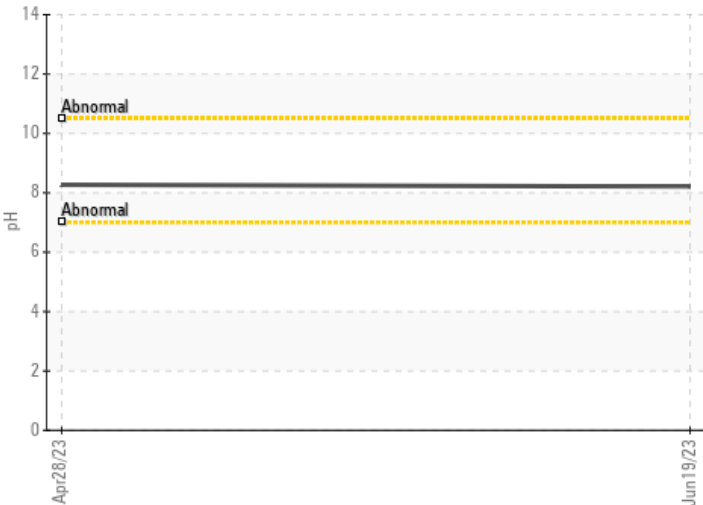
Copper/Aluminum/Lead



Freeze Point



pH



Nitrites

