

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR L586 032994-461-Transmission (Auto)

Sample No: LH0264105

Oil Type: LIEBHERR HYDRAULIC-GEAR ATF



#### SAMPLE INFORMATION

|               |             |             |             |             |
|---------------|-------------|-------------|-------------|-------------|
| Sample Number | LH0264105   | LH0220139   | LH0229349   | LH0217500   |
| Sample Date   | 06 Jul 2023 | 28 Feb 2023 | 12 Jul 2022 | 20 Mar 2022 |
| Machine Hours | 10350       | 9819        | 8606        | 8007        |
| Oil Hours     | 500         | 1000        | 500         | 1000        |
| Oil Changed   | Changed     | Changed     | Changed     | Changed     |
| Sample Status | NORMAL      | ABNORMAL    | ABNORMAL    | ABNORMAL    |

#### TT & E IRON

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F:



#### OIL CONDITION

|             |     |      |      |      |      |
|-------------|-----|------|------|------|------|
| Visc @ 40°C | cSt | 30.0 | 29.4 | 29.8 | 29.1 |
|-------------|-----|------|------|------|------|



#### CONTAMINATION

|           |     |     |     |       |     |
|-----------|-----|-----|-----|-------|-----|
| Water     | %   | --- | --- | 0.168 | --- |
| Silicon   | ppm | 2   | 3   | 8     | 2   |
| Sodium    | ppm | 0   | 3   | 4     | 4   |
| Potassium | ppm | 1   | <1  | 0     | 0   |

#### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



#### WEAR METALS

|            |     |    |    |    |    |
|------------|-----|----|----|----|----|
| Iron       | ppm | 7  | 10 | 14 | 10 |
| Copper     | ppm | <1 | 0  | <1 | <1 |
| Lead       | ppm | <1 | <1 | <1 | <1 |
| Tin        | ppm | 0  | 0  | <1 | <1 |
| Aluminum   | ppm | <1 | <1 | 4  | 1  |
| Chromium   | ppm | 0  | <1 | 0  | 0  |
| Molybdenum | ppm | <1 | <1 | <1 | 0  |
| Nickel     | ppm | <1 | 0  | 0  | 0  |
| Titanium   | ppm | 0  | <1 | <1 | 0  |
| Silver     | ppm | 0  | 0  | <1 | <1 |
| Manganese  | ppm | 0  | 1  | <1 | <1 |
| Vanadium   | ppm | 0  | 0  | 0  | 0  |



#### ADDITIVES

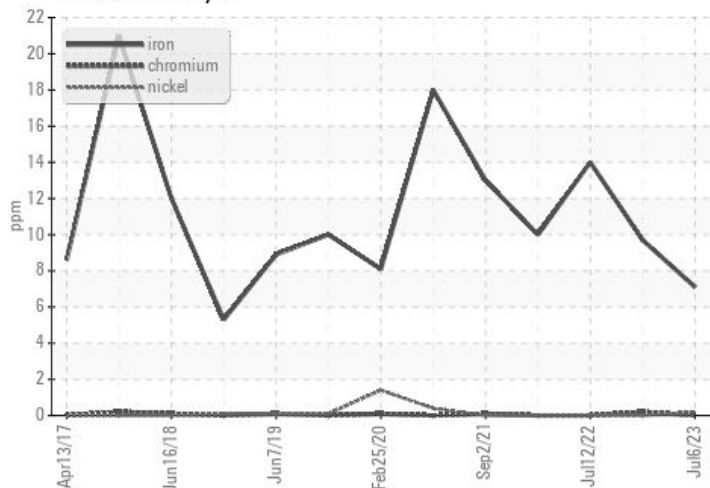
|            |     |     |     |     |     |
|------------|-----|-----|-----|-----|-----|
| Calcium    | ppm | 852 | 808 | 854 | 905 |
| Magnesium  | ppm | 1   | 10  | 5   | 5   |
| Zinc       | ppm | 2   | 30  | 9   | 2   |
| Phosphorus | ppm | 178 | 150 | 181 | 185 |
| Barium     | ppm | 0   | 0   | 0   | 0   |
| Boron      | ppm | 230 | 200 | 202 | 216 |

Depot: TTENEW  
Unique No: 10561701  
Signed: Don Baldrige  
Report Date: 19 Jul 2023

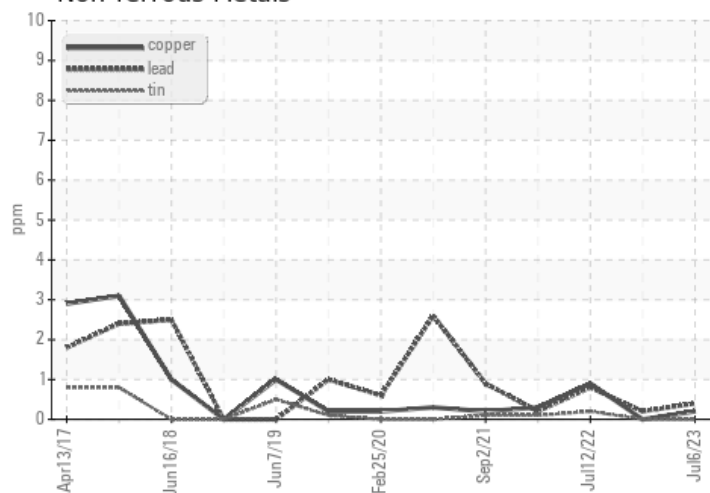


### GRAPHS

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

