

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 1216-108671- Splitter Box

Sample No: LH0272711

Oil Type: CHEVRON DELO GEAR ESI OIL 80W90



#### SAMPLE INFORMATION

| Sample Number | LH0272711   | LH0203912   | LH0217677   | LH0217744   |
|---------------|-------------|-------------|-------------|-------------|
| Sample Date   | 17 Jan 2024 | 17 Jun 2022 | 10 May 2022 | 08 Apr 2022 |
| Machine Hours | 19562       | 14203       | 13649       | 13138       |
| Oil Hours     | 0           | 0           | 0           | 0           |
| Oil Changed   | Changed     | N/A         | Changed     | Changed     |
| Sample Status | NORMAL      | NORMAL      | NORMAL      | NORMAL      |

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#### OIL CONDITION

| Visc @ 40°C | cSt | 106 | 114 | 118 | 121 |
|-------------|-----|-----|-----|-----|-----|
|             |     | ●   | ●   | ●   | ●   |



#### CONTAMINATION

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

#### 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 | ● 14 | ● 6  | ● 6  | ● 10 |
| Copper     | ppm | ● <1 | ● <1 | ● <1 | ● <1 |
| Lead       | ppm | ● <1 | ● <1 | ● 0  | ● 0  |
| Tin        | ppm | ● <1 | ● <1 | ● 0  | ● 0  |
| Aluminum   | ppm | ● <1 | ● <1 | ● <1 | ● <1 |
| Chromium   | ppm | ● <1 | ● 0  | ● 0  | ● 0  |
| Molybdenum | ppm | ● 0  | ● 2  | ● 2  | ● 2  |
| Nickel     | ppm | ● 0  | ● <1 | ● 0  | ● 0  |
| Titanium   | ppm | <1   | 0    | 0    | 0    |
| Silver     | ppm | 0    | <1   | <1   | <1   |
| Manganese  | ppm | ● <1 | ● <1 | ● 0  | ● 0  |
| Vanadium   | ppm | <1   | 0    | 0    | 0    |



#### ADDITIVES

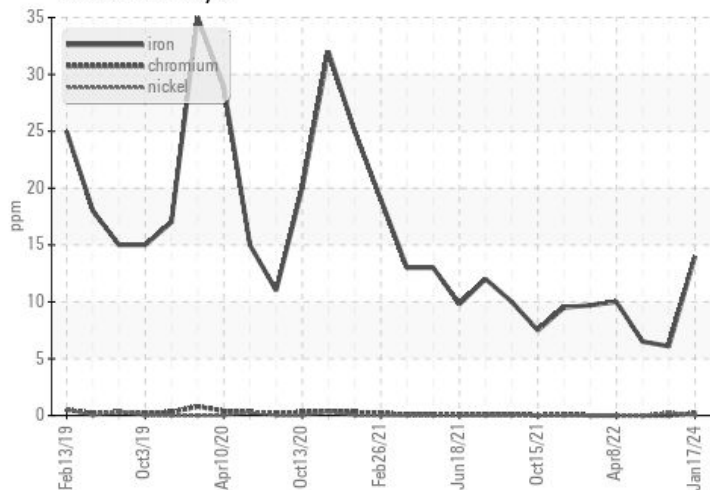
|            |     |       |       |       |       |
|------------|-----|-------|-------|-------|-------|
| Calcium    | ppm | ● 101 | ● 194 | ● 213 | ● 187 |
| Magnesium  | ppm | ● 3   | ● 20  | ● 25  | ● 42  |
| Zinc       | ppm | ● 89  | ● 119 | ● 121 | ● 99  |
| Phosphorus | ppm | ● 826 | ● 869 | ● 978 | ● 858 |
| Barium     | ppm | ● 0   | ● 0   | ● 0   | ● 0   |
| Boron      | ppm | ● 0   | ● 29  | ● 28  | ● 31  |

Depot: LEC0008  
 Unique No: 10858551  
 Signed: Don Baldrige  
 Report Date: 02 Feb 2024

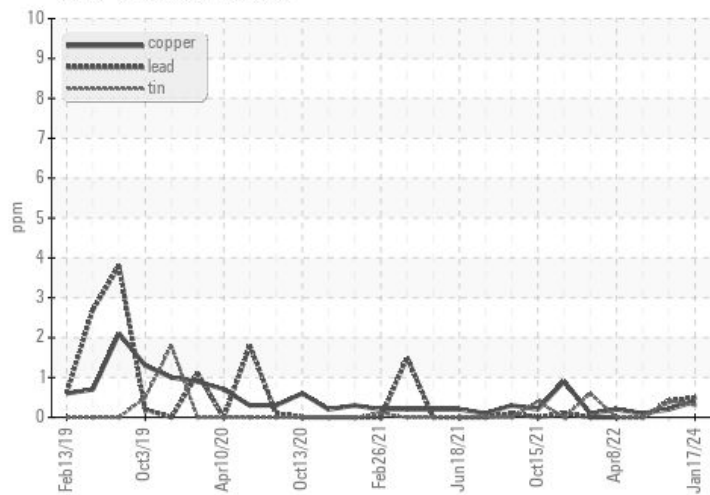


### GRAPHS

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

