

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1216-130391 - Front Right Wheel Hub

Sample No: LH0264359

Oil Type: CHEVRON DELO GEAR ESI OIL 80W90



VERSO CORP
7100 COUNTY 426 M.5 RD
ESCANABA, MI
US 49837
Contact: Service Manager



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | LH0264359 | LH0236055 | LH0220819 | LH0203922 |
| Sample Date | 25 Jul 2023 | 01 Mar 2023 | 31 Aug 2022 | 12 Apr 2022 |
| Machine Hours | 3023 | 2059 | 1273 | 807 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |



OIL CONDITION

| | | | | | |
|-------------|-----|------------|-----|-----|-----|
| Visc @ 40°C | cSt | 138 | 176 | 131 | 159 |
|-------------|-----|------------|-----|-----|-----|

T:
F:



CONTAMINATION

| | | | | | |
|-----------|-----|----------|---|---|----|
| Silicon | ppm | 5 | 7 | 9 | 37 |
| Sodium | ppm | 4 | 6 | 3 | 6 |
| Potassium | ppm | 1 | 2 | 0 | 2 |

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 | 69 | 67 | 56 | 119 |
| Copper | ppm | 12 | 5 | 13 | 16 |
| Lead | ppm | <1 | <1 | 0 | <1 |
| Tin | ppm | 0 | 0 | 0 | <1 |
| Aluminum | ppm | 1 | <1 | 2 | 4 |
| Chromium | ppm | <1 | <1 | 0 | <1 |
| Molybdenum | ppm | <1 | <1 | 2 | 4 |
| Nickel | ppm | 0 | 0 | 0 | 0 |
| Titanium | ppm | <1 | <1 | 0 | <1 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | 1 | 2 | <1 | 2 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

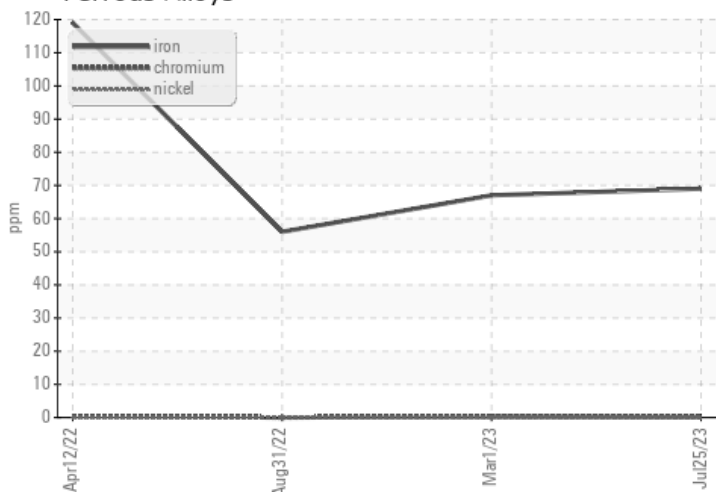
| | | | | | |
|------------|-----|-------------|------|-----|------|
| Calcium | ppm | 66 | 90 | 147 | 193 |
| Magnesium | ppm | 8 | 6 | 9 | 2 |
| Zinc | ppm | 39 | 52 | 63 | 67 |
| Phosphorus | ppm | 1109 | 1848 | 954 | 1524 |
| Barium | ppm | 0 | 0 | 0 | 0 |
| Boron | ppm | 2 | 3 | 13 | 4 |

Depot: VERESC
Unique No: 10604509
Signed: Sean Felton
Report Date: 16 Aug 2023

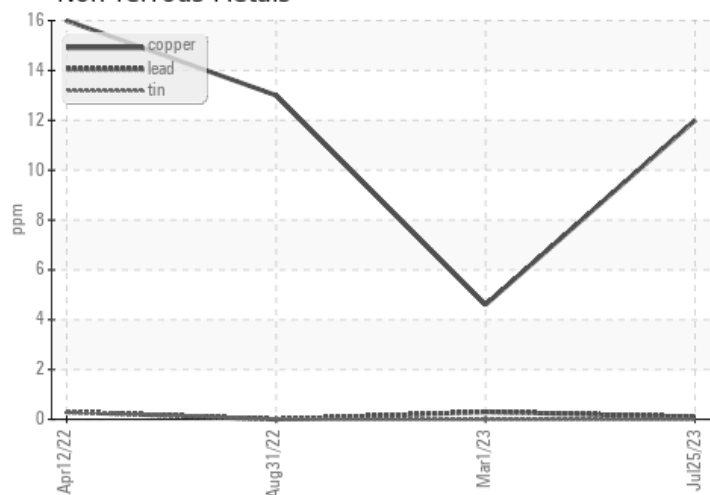


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

