

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR A918 097283-1184 - Rear Differential

Sample No: LHMC166747

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-------------|-------------|-------------|
| Sample Number | LHMC166747 | LHMC130110 | LHMC131288 | LHMC131350 |
| Sample Date | 23 Sep 2023 | 11 Sep 2020 | 10 Dec 2019 | 10 Dec 2019 |
| Machine Hours | 12345 | 4400 | 1919 | 1919 |
| Oil Hours | 0 | 0 | 1919 | 1919 |
| Oil Changed | Not Chngd | Changed | Changed | Changed |
| Sample Status | ABNORMAL | NORMAL | NORMAL | NORMAL |

UNITED SCRAP
1545 S CICERO AVE
CHICAGO, IL
US 60804
Contact:



OIL CONDITION

| | | | | | |
|-------------|-----|-----|-----|------|------|
| Visc @ 40°C | cSt | 139 | 175 | 55.8 | 54.4 |
|-------------|-----|-----|-----|------|------|

T:
F:



CONTAMINATION

| | | | | | |
|-----------|-----|---|----|----|----|
| Silicon | ppm | 3 | 5 | 14 | 8 |
| Sodium | ppm | 4 | 2 | 22 | 22 |
| Potassium | ppm | 1 | <1 | 3 | <1 |

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The condition of the oil is acceptable for the time in service.



WEAR METALS

| | | | | | |
|------------|-----|----|----|----|----|
| Iron | ppm | 39 | 30 | 10 | 10 |
| Copper | ppm | 1 | 3 | 2 | 7 |
| Lead | ppm | 0 | <1 | <1 | 0 |
| Tin | ppm | 0 | 0 | 0 | 0 |
| Aluminum | ppm | 0 | 0 | 1 | <1 |
| Chromium | ppm | <1 | <1 | <1 | <1 |
| Molybdenum | ppm | 1 | <1 | 0 | 0 |
| Nickel | ppm | <1 | 0 | 0 | <1 |
| Titanium | ppm | 0 | <1 | <1 | 0 |
| Silver | ppm | 0 | <1 | 0 | 0 |
| Manganese | ppm | 2 | 2 | 5 | 2 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|------|------|------|------|
| Calcium | ppm | 138 | 310 | 3724 | 3385 |
| Magnesium | ppm | 10 | 2 | 13 | 10 |
| Zinc | ppm | 59 | 111 | 1418 | 1308 |
| Phosphorus | ppm | 1920 | 2028 | 1058 | 1087 |
| Barium | ppm | 0 | 0 | <1 | 0 |
| Boron | ppm | 347 | 12 | 98 | 104 |

Depot: UNICHILH
Unique No: 10682941
Signed: Don Baldrige
Report Date: 10 Oct 2023



GRAPHS

