

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR TA230 Sullivan TA230 149809 - Front Axle

Sample No: LH0268746

Oil Type: LIEBHERR GEAR MF 80W



LIEBHERR EQUIPMENT SOURCE
 8200 FAYETTEVILLE ROAD
 RALEIGH, NC
 US 27603
 Contact: TAYLOR BLALOCK
 taylor.blalock@liebherr.com
 T: (757)718-0491
 F: (919)329-0084



Sample Information

| | | | | |
|---------------|-------------|-------------|-----|-----|
| Sample Number | LH0268746 | LH0264574 | --- | --- |
| Sample Date | 03 Jul 2024 | 01 Apr 2024 | --- | --- |
| Machine Hours | 1169 | 650 | --- | --- |
| Oil Hours | 1169 | 650 | --- | --- |
| Oil Changed | Not Chngd | Not Chngd | --- | --- |
| Sample Status | ABNORMAL | ABNORMAL | --- | --- |



Oil Condition

| | | | | | |
|-------------|-----|------|------|-----|-----|
| Visc @ 40°C | cSt | 63.8 | 64.5 | --- | --- |
|-------------|-----|------|------|-----|-----|



Contamination

| | | | | | |
|-----------|-----|-----|-----|-----|-----|
| Water | % | NEG | NEG | --- | --- |
| Silicon | ppm | 17 | 16 | --- | --- |
| Sodium | ppm | 22 | 22 | --- | --- |
| Potassium | ppm | 1 | 0 | --- | --- |



Wear Metals

| | | | | | |
|------------|-----|-----|-----|-----|-----|
| Iron | ppm | 150 | 165 | --- | --- |
| Copper | ppm | 71 | 56 | --- | --- |
| Lead | ppm | <1 | 0 | --- | --- |
| Tin | ppm | 4 | 4 | --- | --- |
| Aluminum | ppm | 4 | 4 | --- | --- |
| Chromium | ppm | 2 | 2 | --- | --- |
| Molybdenum | ppm | 0 | 0 | --- | --- |
| Nickel | ppm | 7 | 5 | --- | --- |
| Titanium | ppm | <1 | 0 | --- | --- |
| Silver | ppm | 0 | 0 | --- | --- |
| Manganese | ppm | 17 | 19 | --- | --- |
| Vanadium | ppm | 0 | 0 | --- | --- |



Additives

| | | | | | |
|------------|-----|------|------|-----|-----|
| Calcium | ppm | 3640 | 3417 | --- | --- |
| Magnesium | ppm | 12 | 3 | --- | --- |
| Zinc | ppm | 1520 | 1443 | --- | --- |
| Phosphorus | ppm | 1330 | 1229 | --- | --- |
| Barium | ppm | 0 | 0 | --- | --- |
| Boron | ppm | 113 | 112 | --- | --- |

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other 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.

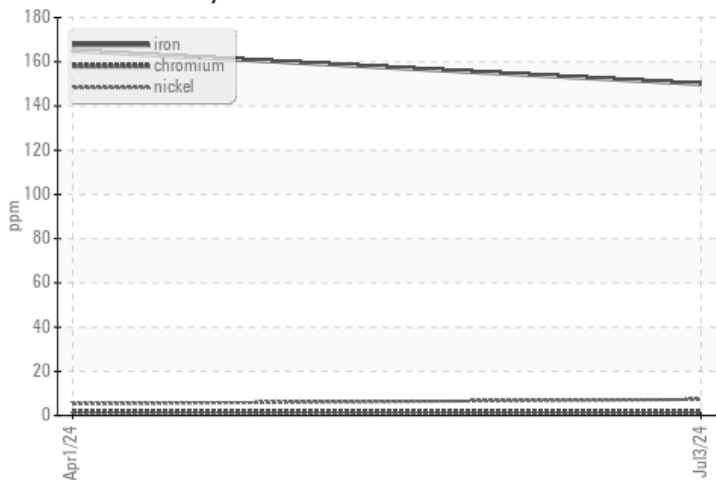
Depot: LIEBHERRNC
 Unique No: 11114096
 Signed: Sean Felton
 Report Date: 10 Jul 2024

Submitted By: SHERWOOD LUCAS

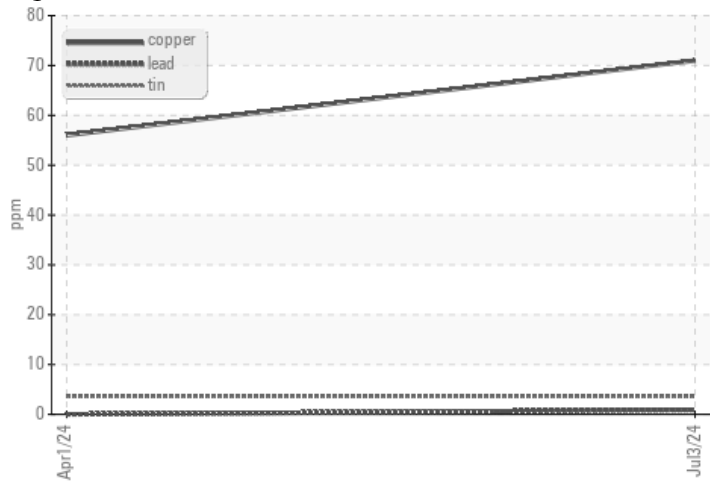


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

