

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R966 31602 (S/N 1783-53867) - Slewing Gearbox

Sample No: LH0293224

Oil Type: LIEBHERR GEAR BASIC 90 LS



LIEBHERR EQUIPMENT SOURCE
 8200 FAYETTEVILLE ROAD
 RALEIGH, NC
 US 27603
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 T:
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Sample Information

| | | | | |
|---------------|-------------|-----|-----|-----|
| Sample Number | LH0293224 | --- | --- | --- |
| Sample Date | 26 Jun 2024 | --- | --- | --- |
| Machine Hours | 955 | --- | --- | --- |
| Oil Hours | 955 | --- | --- | --- |
| Oil Changed | Changed | --- | --- | --- |
| Sample Status | NORMAL | --- | --- | --- |



Oil Condition

| | | | | | |
|-------------|-----|-------|-----|-----|-----|
| Visc @ 40°C | cSt | ● 190 | --- | --- | --- |
|-------------|-----|-------|-----|-----|-----|



Contamination

| | | | | | |
|-----------|-----|-----|-----|-----|-----|
| Water | % | NEG | --- | --- | --- |
| Silicon | ppm | ● 2 | --- | --- | --- |
| Sodium | ppm | ● 5 | --- | --- | --- |
| Potassium | ppm | ● 3 | --- | --- | --- |



Wear Metals

| | | | | | |
|------------|-----|-------|-----|-----|-----|
| Iron | ppm | ● 167 | --- | --- | --- |
| Copper | ppm | ● 23 | --- | --- | --- |
| Lead | ppm | ● 0 | --- | --- | --- |
| Tin | ppm | ● 14 | --- | --- | --- |
| Aluminum | ppm | 0 | --- | --- | --- |
| Chromium | ppm | ● 1 | --- | --- | --- |
| Molybdenum | ppm | ● 0 | --- | --- | --- |
| Nickel | ppm | ● 0 | --- | --- | --- |
| Titanium | ppm | <1 | --- | --- | --- |
| Silver | ppm | 0 | --- | --- | --- |
| Manganese | ppm | ● 2 | --- | --- | --- |
| Vanadium | ppm | <1 | --- | --- | --- |



Additives

| | | | | | |
|------------|-----|--------|-----|-----|-----|
| Calcium | ppm | ● 10 | --- | --- | --- |
| Magnesium | ppm | ● <1 | --- | --- | --- |
| Zinc | ppm | ● 45 | --- | --- | --- |
| Phosphorus | ppm | ● 2146 | --- | --- | --- |
| Barium | ppm | ● <1 | --- | --- | --- |
| Boron | ppm | ● 4 | --- | --- | --- |

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.

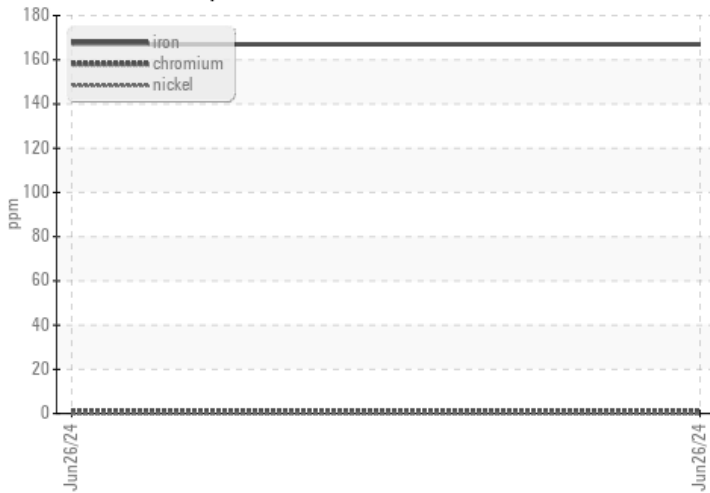
Depot: LIEBHERRNC
 Unique No: 11102048
 Signed: Don Baldrige
 Report Date: 01 Jul 2024

Submitted By: SHERWOOD LUCAS

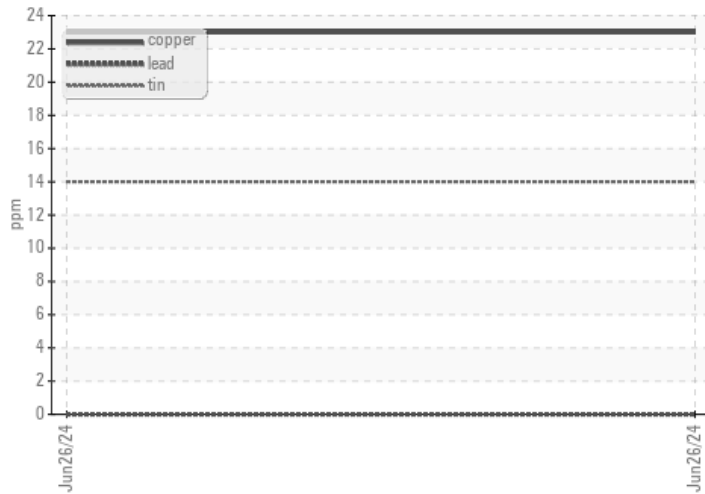


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

