

LIEBHERR

CONSTRUCTION EQUIPMENT



[[TERRAHA WK]] LIEBHERR R920 047896-1705 - Left Final Dr

Sample No: LH0244610
 Oil Type: LIEBHERR GEAR BASIC 90 LS



LIEBHERR EQUIPMENT SOURCE
 8200 FAYETTEVILLE ROAD
 RALEIGH, NC
 US 27603
 Contact: Timothy Bailey
 timothy.bailey@liebherr.com
 T:
 F: (919)329-0084



SAMPLE INFORMATION

Sample Number	LH0244610	---	---	---
Sample Date	24 Jan 2024	---	---	---
Machine Hours	900	---	---	---
Oil Hours	900	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	SEVERE	---	---	---



OIL CONDITION

Visc @ 40°C	cSt	● 269	---	---	---
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CONTAMINATION

Water	%	● 0.152	---	---	---
Silicon	ppm	● 84	---	---	---
Sodium	ppm	● 9	---	---	---
Potassium	ppm	● 15	---	---	---



WEAR METALS

Iron	ppm	● 1668	---	---	---
Copper	ppm	● <1	---	---	---
Lead	ppm	● 0	---	---	---
Tin	ppm	● <1	---	---	---
Aluminum	ppm	● 17	---	---	---
Chromium	ppm	● 14	---	---	---
Molybdenum	ppm	● 0	---	---	---
Nickel	ppm	● 2	---	---	---
Titanium	ppm	● 2	---	---	---
Silver	ppm	● 0	---	---	---
Manganese	ppm	● 13	---	---	---
Vanadium	ppm	● <1	---	---	---



ADDITIVES

Calcium	ppm	● 68	---	---	---
Magnesium	ppm	● 4	---	---	---
Zinc	ppm	● 30	---	---	---
Phosphorus	ppm	● 1807	---	---	---
Barium	ppm	● 13	---	---	---
Boron	ppm	● <1	---	---	---

Diagnosis

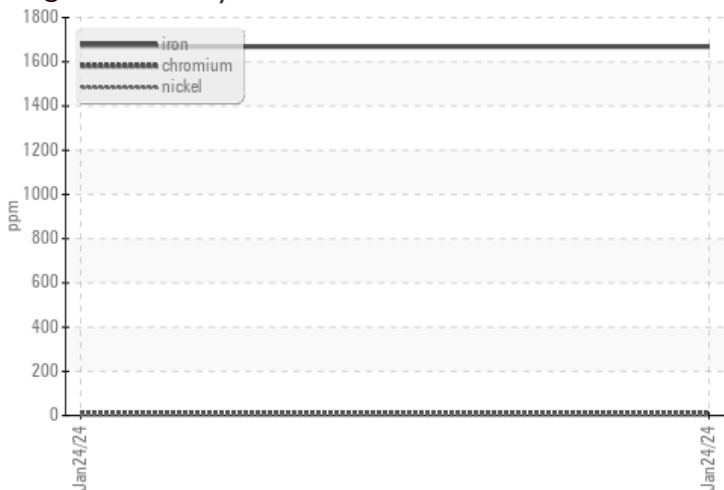
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The water content is negligible. The oil viscosity is higher than normal. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: LIEBHERRNC
 Unique No: 10848679
 Signed: Sean Felton
 Report Date: 30 Jan 2024

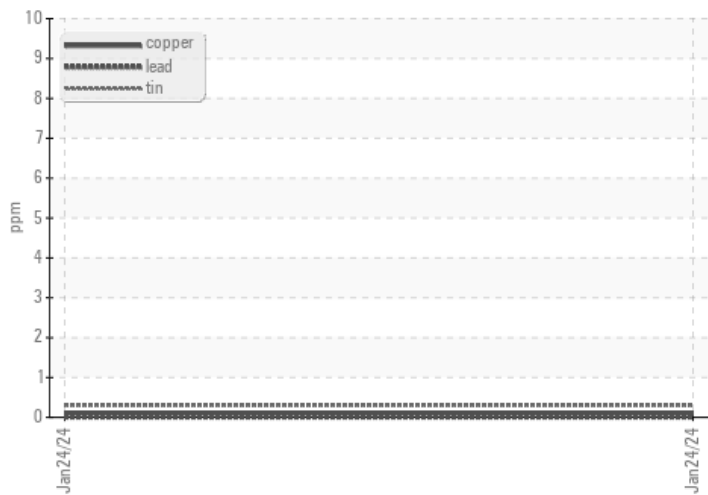


GRAPHS

● Ferrous Alloys



Non-ferrous Metals



● Viscosity @ 40°C

