

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR716LGP 019319-1423 - Right Final Drive

Sample No: LH0258401

Oil Type: CHEVRON DELO GEAR ESI OIL 80W90



SAMPLE INFORMATION

Sample Number	LH0258401	---	---	---
Sample Date	21 Feb 2024	---	---	---
Machine Hours	1477	---	---	---
Oil Hours	1000	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

HEAVY MACHINES INC
 7651 THEODORE DAWES RD
 THEODORE, AL
 US 36582
 Contact: DAVID MIANO
 dmiano@heavymachinesinc.com
 T: x:
 F: x:



OIL CONDITION

Visc @ 40°C	cSt	314	---	---	---
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CONTAMINATION

Water	%	NEG	---	---	---
Silicon	ppm	4	---	---	---
Sodium	ppm	3	---	---	---
Potassium	ppm	5	---	---	---



WEAR METALS

Iron	ppm	97	---	---	---
Copper	ppm	166	---	---	---
Lead	ppm	<1	---	---	---
Tin	ppm	3	---	---	---
Aluminum	ppm	3	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	<1	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	2	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	33	---	---	---
Magnesium	ppm	3	---	---	---
Zinc	ppm	56	---	---	---
Phosphorus	ppm	1247	---	---	---
Barium	ppm	63	---	---	---
Boron	ppm	4	---	---	---

Diagnosis

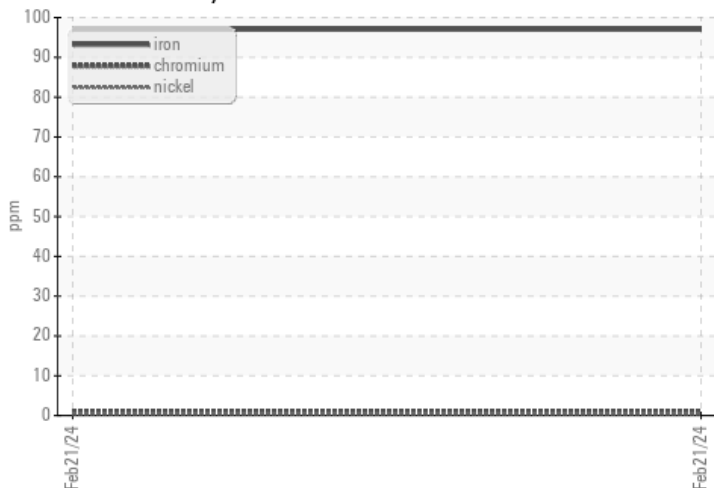
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is higher than normal. Confirm oil type.

Depot: HEATHE
 Unique No: 10913210
 Signed: Jonathan Hester
 Report Date: 08 Mar 2024

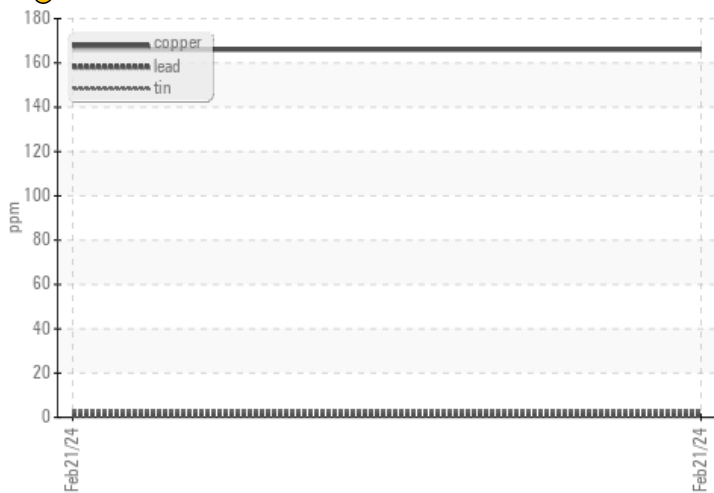


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

