

LIEBHERR

CONSTRUCTION EQUIPMENT



[[S20230514033953]] LIEBHERR TA230 4162 - Rear Axle

Sample No: LH06059588

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH06059588	---	---	---
Sample Date	10 Nov 2023	---	---	---
Machine Hours	3503	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

HEAVY MACHINES INC.

3930 EAST RAINES RD
MEMPHIS, TN
US 38118
Contact: J. DAVIS
JDAVIS@HEAVY.LLC.COM
T:
F: (901)260-2245



OIL CONDITION

Visc @ 40°C	cSt	62.7	---	---	---
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CONTAMINATION

Water	%	NEG	---	---	---
Silicon	ppm	9	---	---	---
Sodium	ppm	12	---	---	---
Potassium	ppm	2	---	---	---



WEAR METALS

Iron	ppm	112	---	---	---
Copper	ppm	62	---	---	---
Lead	ppm	1	---	---	---
Tin	ppm	2	---	---	---
Aluminum	ppm	2	---	---	---
Chromium	ppm	1	---	---	---
Molybdenum	ppm	<1	---	---	---
Nickel	ppm	3	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	17	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	3937	---	---	---
Magnesium	ppm	11	---	---	---
Zinc	ppm	1729	---	---	---
Phosphorus	ppm	1386	---	---	---
Barium	ppm	3	---	---	---
Boron	ppm	136	---	---	---

Diagnosis

No corrective action is recommended at this time. 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 lower than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.

Depot: LEC0051
Unique No: 10830970
Signed: Jonathan Hester
Report Date: 16 Jan 2024



GRAPHS

