

LIEBHERR

CONSTRUCTION EQUIPMENT



[[S20230809040252]] LIEBHERR TA230 4161 - Front Rear A

Sample No: LH06059591

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH06059591	---	---	---
Sample Date	30 Dec 2023	---	---	---
Machine Hours	2804	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
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	63.6	---	---	---
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CONTAMINATION

Water	%	NEG	---	---	---
Silicon	ppm	10	---	---	---
Sodium	ppm	13	---	---	---
Potassium	ppm	2	---	---	---



WEAR METALS

Iron	ppm	186	---	---	---
Copper	ppm	91	---	---	---
Lead	ppm	1	---	---	---
Tin	ppm	4	---	---	---
Aluminum	ppm	2	---	---	---
Chromium	ppm	2	---	---	---
Molybdenum	ppm	<1	---	---	---
Nickel	ppm	9	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	30	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	3561	---	---	---
Magnesium	ppm	10	---	---	---
Zinc	ppm	1506	---	---	---
Phosphorus	ppm	1268	---	---	---
Barium	ppm	3	---	---	---
Boron	ppm	127	---	---	---

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. 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: 10830973
Signed: Jonathan Hester
Report Date: 16 Jan 2024



GRAPHS

