

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [[SUNBECK]] C17391 (S/N 68573) - Diesel Engine

Sample No: LH0217129

Oil Type: DIESEL ENGINE OIL 10W40



#### SAMPLE INFORMATION

Sample Number	LH0217129	---	---	---
Sample Date	07 Mar 2024	---	---	---
Machine Hours	986	---	---	---
Oil Hours	986	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

#### NUECES POWER EQUIPMENT

7333 MONROE RD

HOUSTON, TX

US 77061

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#### OIL CONDITION

Visc @ 100°C	cSt	10.8	---	---	---
Base Number (BN)	mg KOH/g	6.9	---	---	---
Oxidation (PA)	%	104	---	---	---



#### CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0.5	---	---	---
Nitration (PA)	%	109	---	---	---
Sulfation (PA)	%	73	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	1.0	---	---	---
Silicon	ppm	15	---	---	---
Sodium	ppm	7	---	---	---
Potassium	ppm	4	---	---	---



#### WEAR METALS

Iron	ppm	88	---	---	---
Copper	ppm	561	---	---	---
Lead	ppm	4	---	---	---
Tin	ppm	4	---	---	---
Aluminum	ppm	6	---	---	---
Chromium	ppm	2	---	---	---
Molybdenum	ppm	258	---	---	---
Nickel	ppm	6	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	6	---	---	---
Vanadium	ppm	<1	---	---	---



#### ADDITIVES

Calcium	ppm	1517	---	---	---
Magnesium	ppm	833	---	---	---
Zinc	ppm	1208	---	---	---
Phosphorus	ppm	1058	---	---	---
Barium	ppm	2	---	---	---
Boron	ppm	26	---	---	---

#### Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Depot: LIEBHERRTX

Unique No: 10939633

Signed: Jonathan Hester

Report Date: 26 Mar 2024



### GRAPHS

