

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR766 027906-1681 - Diesel Engine

Sample No: LH0254476

Oil Type: LIEBHERR MOTOROIL 5W30



Sample Information

Sample Number	LH0254476	LH0254550	LH0254257	---
Sample Date	01 May 2024	03 Apr 2024	07 Mar 2024	---
Machine Hours	2148	1518	882	---
Oil Hours	629	635	535	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

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 @ 100°C	cSt	11.2	11.1	11.5	---
Base Number (BN)	mg KOH/g	6.9	6.7	7.0	---
Oxidation (PA)	%	54	59	82	---



Contamination

Water	%	NEG	NEG	NEG	---
Soot %	%	0.1	0.1	0.1	---
Nitration (PA)	%	70	72	73	---
Sulfation (PA)	%	50	52	62	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	5	3	6	---
Sodium	ppm	2	2	2	---
Potassium	ppm	3	3	2	---



Wear Metals

Iron	ppm	4	2	4	---
Copper	ppm	39	41	29	---
Lead	ppm	2	0	2	---
Tin	ppm	1	0	<1	---
Aluminum	ppm	<1	0	<1	---
Chromium	ppm	0	0	0	---
Molybdenum	ppm	9	<1	9	---
Nickel	ppm	0	0	0	---
Titanium	ppm	<1	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	<1	0	<1	---
Vanadium	ppm	0	0	0	---



Additives

Calcium	ppm	1318	1412	1364	---
Magnesium	ppm	689	752	767	---
Zinc	ppm	782	816	877	---
Phosphorus	ppm	714	792	782	---
Barium	ppm	1	0	4	---
Boron	ppm	74	68	77	---

Diagnosis

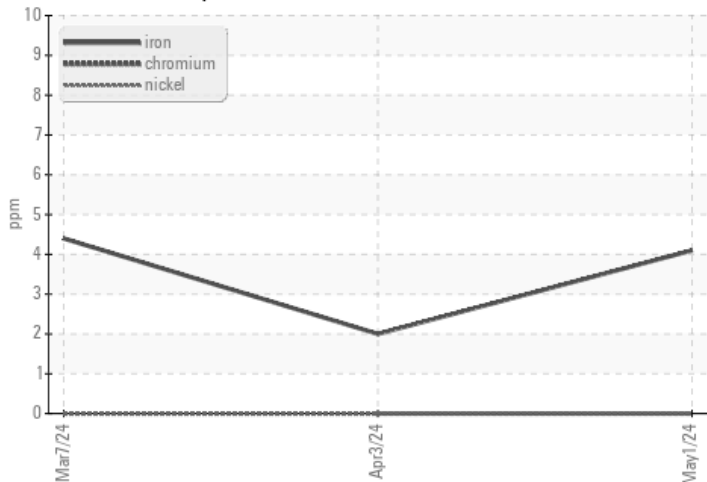
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0051
Unique No: 11021203
Signed: Sean Felton
Report Date: 13 May 2024

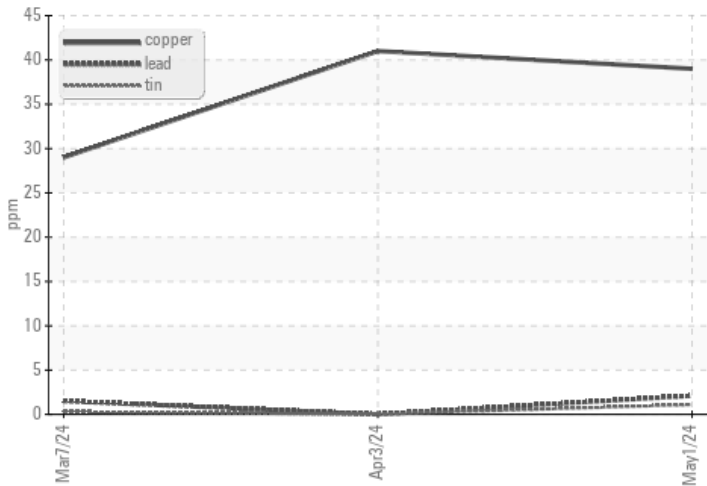


Graphs

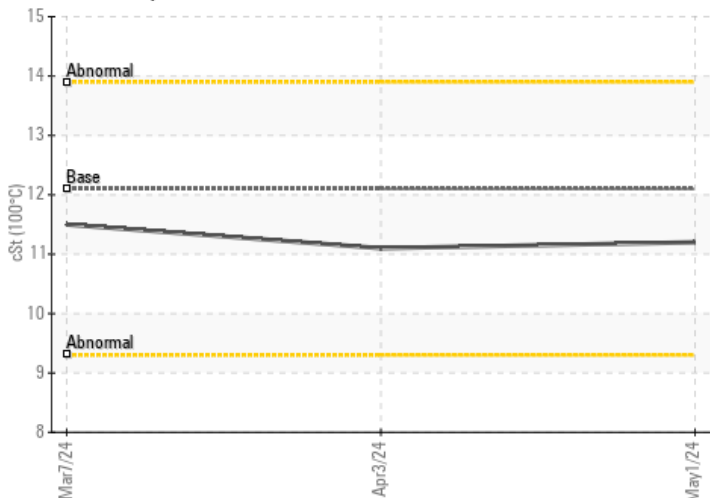
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

