

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH60M 146314-1217 - Diesel Engine

Sample No: LH0244765

Oil Type: LIEBHERR MOTOROIL 5W30



**NUCOR GALATIN STEEL CO**  
 4831 US HWY 42 WEST  
 GHENT, KY  
 US 41045  
 Contact: KEITH ARMSTRONG  
 keith.armstrong@nucor.com  
 T: (857)567-3226  
 F:



#### SAMPLE INFORMATION

Sample Number	LH0244765	LH0243278	---	---
Sample Date	21 Oct 2023	21 Jun 2023	---	---
Machine Hours	1500	463	---	---
Oil Hours	500	463	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---



#### OIL CONDITION

Visc @ 100°C	cSt	11.7	12.4	---	---
Base Number (BN)	mg KOH/g	10.7	6.0	---	---
Oxidation (PA)	%	86	172	---	---



#### CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.1	0.1	---	---
Nitration (PA)	%	143	95	---	---
Sulfation (PA)	%	60	97	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	8	8	---	---
Sodium	ppm	0	2	---	---
Potassium	ppm	13	3	---	---



#### WEAR METALS

Iron	ppm	21	9	---	---
Copper	ppm	37	172	---	---
Lead	ppm	3	2	---	---
Tin	ppm	2	1	---	---
Aluminum	ppm	4	3	---	---
Chromium	ppm	2	<1	---	---
Molybdenum	ppm	7	51	---	---
Nickel	ppm	<1	0	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	1	---	---
Vanadium	ppm	0	0	---	---



#### ADDITIVES

Calcium	ppm	3829	1344	---	---
Magnesium	ppm	124	979	---	---
Zinc	ppm	1143	1071	---	---
Phosphorus	ppm	1035	879	---	---
Barium	ppm	4	28	---	---
Boron	ppm	197	92	---	---

#### Diagnosis

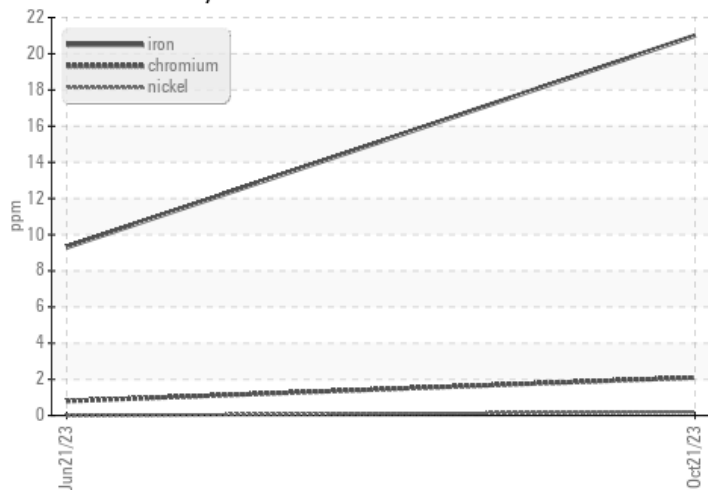
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: NUCGHE  
 Unique No: 10829992  
 Signed: Wes Davis  
 Report Date: 12 Jan 2024

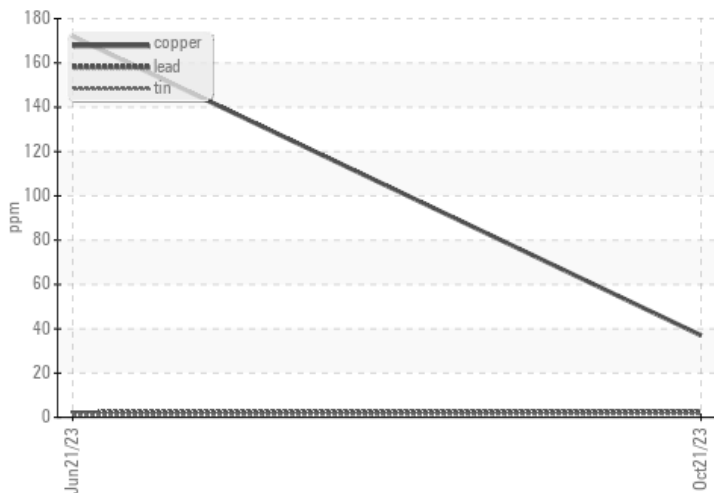


### GRAPHS

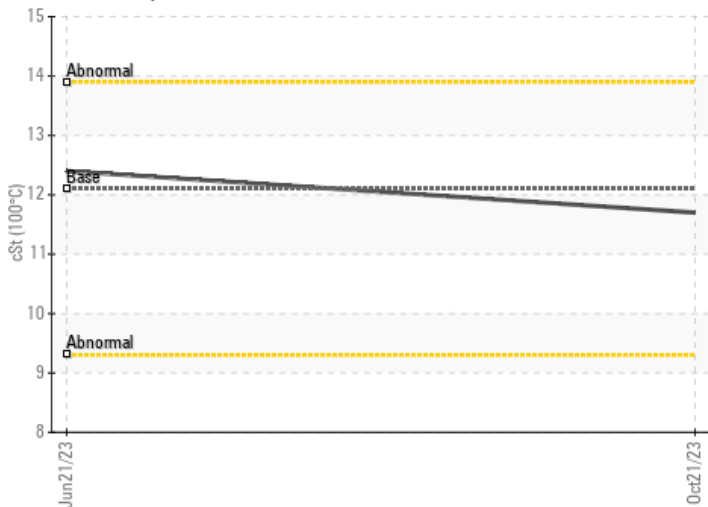
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

